City of Arvada
Housing Authority Agenda
NOVEMBER 4, 2024
SPECIAL MEETING

Councilmembers:
Lauren Simpson, Mayor
Randy Moorman, Mayor Pro-Tem
Shawna Ambrose, District 2
Sharon Davis, At large
Lisa Feret, At large
Bob Fifer, District 4
John Marriott, District 3

Staff Members Usually Present:
Linda Haley, Acting City Manager
Don Wick, Deputy City Manager
Rachel Morris, City Attorney
Jacqueline Rhoades, Director of Public Works
Sharon Israel, Director of Utilities
Jessica Garner, Director of Community & Econ. Dev.
Bryan Archer, Director of Finance
Gabriella Bommer, Director of Human Resources
Rachael Kuroiwa, Director of Communications & Engagement
Kristen Rush, City Clerk

Info: 720-898-7550

CITY COUNCIL CHAMBERS
6:00 PM

I. Call to Order

II. Roll Call

III. Approval of Minutes of Regular Meeting
   1. July 1, 2024 Housing Authority Meeting

IV. Public Comment

V. New Business
   1. R-HA-24-04, A Resolution Authorizing the Arvada Housing Authority to Enter Into a Housing Assistance Payments Contract for the Marshall Pointe Affordable Housing Development
   2. R-HA-24-05, A Resolution Authorizing A Subordination Agreement Between the Arvada Housing Authority and the State of Colorado for Loans to Legacy-Arvada Partners, LP for the Legacy Senior Residences Development and Authorizing the First Amendment to the Deed of Trust, Promissory Note and Loan Agreement Recognizing the State of Colorado's Senior Encumbrance

VI. Adjourn

SUMMARY OF THE MINUTES OF THE ANNUAL MEETING OF THE ARVADA HOUSING AUTHORITY HELD JULY 1, 2024

I. CALL TO ORDER - by Chairperson Simpson at 6:10 p.m.

II. ROLL CALL OF MEMBERS

Those present: Chairperson Lauren Simpson, Chair Pro Tem Randy Moorman, Commissioner Shawna Ambrose, Commissioner Sharon Davis, Commissioner Lisa Feret, Commissioner Fifer Commissioner John Marriott

Also present: Lorie Gillis, City Manager; Linda Haley, Deputy City Manager; Don Wick, Deputy City Manager; Rachel Morris, City Attorney; Carrie Espinoza, Housing and Homelessness Program Manager; Katie Patterson, Communications Manager, Infrastructure and Kristen Rush, City Clerk

III. APPROVAL OF MINUTES – March 18, 2024

The minutes stand approved.

IV. PUBLIC COMMENT – none

V. REPORTS OF THE SECRETARY - none

VI. REPORTS OF COMMITTEES – none

VII. UNFINISHED BUSINESS – none

VIII. NEW BUSINESS

1. Arvada Housing Authority Annual Report

Carrie Espinosa, Secretary for the Arvada Housing Authority, reviewed the 2023-2024 Annual Report included in tonight's packet.

Commissioner Fifer moved that the Arvada Housing Authority Annual Report, be approved.

The following votes were cast on the Motion:

Those voting Yes: Jones, Simpson, Moorman, Ambrose, Davis, Feret, Fifer, Marriott

The motion was Approved.

2. Arvada Housing Authority Annual 5 Year Plan

Carrie Espinosa, Secretary for the Arvada Housing Authority, reviewed the 2023 Arvada Housing Authority Annual Plan included in tonight's packet.

Commissioner Feret moved that the Arvada Housing Authority 5 Year Plan, be approved.

The following votes were cast on the Motion:

Those voting Yes: Jones, Simpson, Moorman, Ambrose, Davis, Feret, Fifer, Marriott

The motion was Approved.

3. Arvada Housing Authority 2024 Administrative Plan Updates

Carrie Espinosa, Secretary for the Arvada Housing Authority, reviewed the Arvada Housing Authority 2024 Administrative Plan Updates.

Commissioner Davis moved that Arvada Housing Authority 2024 Administrative Plan Updates, be approved.

The following votes were cast on the Motion:

Those voting Yes: Jones, Simpson, Moorman, Ambrose, Davis, Feret, Fifer, Marriott

The motion was Approved.

4. R-HA-24-02, A Resolution Approving an Agreement By and Between The Arvada Housing Authority and Robert Gowins Home Inspections for Inspection Services for the Housing Choice Voucher Program in an Amount Not to Exceed $20,000 in the First Year.

Commissioner Moorman moved that R-HA-24-02, A Resolution Approving an Agreement By and Between The Arvada Housing Authority and Robert Gowins Home Inspections for Inspection Services for the Housing Choice Voucher Program in an Amount Not to Exceed $20,000 in the First Year, be approved.

The following votes were cast on the Motion:

Those voting Yes: Jones, Simpson, Moorman, Ambrose, Davis, Feret, Fifer, Marriott

The motion was Approved.

5. R-HA-24-03, A Resolution Authorizing the Arvada Housing Authority to Enter into the First Amendment to Amended and Restated Limited Liability Limited Partnership Agreement for the Vance Street Flats Development.

Commissioner Ambrose moved that R-HA-24-03, A Resolution Authorizing the Arvada Housing Authority to Enter into the First Amendment to Amended and Restated Limited Liability Limited Partnership Agreement for the Vance Street Flats Development, be approved.

The following votes were cast on the Motion:

Those voting Yes: Jones, Simpson, Moorman, Ambrose, Davis, Feret, Fifer, Marriott

The motion was Approved.

IX. ADJOURN at 6:30 p.m.

_____

Lauren Simpson, Chairperson

_____

Carrie Espinosa, Secretary, Housing Authority

CITY OF ARVADA

REPORT TO HOUSING AUTHORITY

AGENDA ITEM V.1.

TO: THE HONORABLE CITY COUNCIL DATE: November 4, 2024

SUBJECT: R-HA-24-04, A Resolution Authorizing the Arvada Housing Authority to Enter Into a Housing Assistance Payments Contract for the Marshall Pointe Affordable Housing Development

Report in Brief

Presenter: Carrie Espinosa

The Marshall Pointe Apartments development will provide 260 affordable housing units at 5190 Marshall Street, Arvada, Colorado. The Arvada Housing Authority committed eight Housing Choice Project-Based Vouchers to the project. The project owner, Lincoln Avenue Communities, is scheduled to close on its construction loan in January 2025. The Agreement to Enter Into a Housing Assistance Payments (AHAP) Contract must be executed before closing.

The execution of the AHAP aligns with the City's 2024-2030 Strategic Plan and the Arvada Housing Strategic Plan by financially supporting the development of affordable housing in the community.

The Arvada team recommends approval of R-HA-24-04, A Resolution Authorizing the Arvada Housing Authority to Enter Into A Housing Assistance Payments Contract for the Marshall Pointe Affordable Housing Development.

Financial Impact

The eight Project-Based Vouchers will total approximately $160,000 annually in housing assistance payments. The Arvada Housing Authority Housing Choice Voucher Program budget will be the funding source.

Background

Marshall Pointe Apartments is a tax credit approved affordable housing development that will provide 260 units of affordable housing located at 5190 Marshall St, Arvada, Colorado. The unit mix consists of 149 one-bedroom units, 84 two-bedroom units and 27 three-bedroom units. As part of the low-income housing tax credit (LIHTC) application, the Arvada Housing Authority committed eight (8) Housing Choice Vouchers to this site with a preference that the vouchers be used for households experiencing homelessness. Family Tree will provide supportive services for these vouchers.

Marshall Pointe Apartments will provide affordable housing for the community as follows:

- The Authority will provide 8 Housing Choice Vouchers. As long as the vouchers are awarded, no less than 8 of the units at the property shall be restricted to households not exceeding 30% of area median income (AMI) as established by the U.S. Department of Housing and Urban Development (HUD)
- Lincoln Avenue Communities will dedicate an additional 5 units at 30% area median income
- The remaining units will be set at 60% and 70% of area median income

Lincoln Avenue Communities is scheduled to close on its construction loan in January 2025. Prior to closing, an Agreement to Enter into a Housing Assistance Payments Contract must be executed.

Discussion

The Arvada City Council identified affordable housing as a priority area in the 2024-2030 City of Arvada Strategic Plan. Additionally, the 2024 City of Arvada Housing Needs Assessment and Housing Strategic Plan identified the following top three housing needs:

1. Need for additional affordable rentals
2. Starter homes and family homes priced near $450,000
3. Increased diversity in housing stock with a focus on missing middle ownership options and the need for housing stability options

Marshall Pointe Apartments will provide 260 units of much-needed affordable housing in Arvada and address the priority area and needs identified in the Arvada Housing Strategic Plan.

Public Contact

Posting of the City Council Agenda

Commission Recommendation

N/A

Strategic Alignment

This item supports the following City of Arvada 2024-2030 Strategic Plan by supporting the City Council Housing Strategic Result-

Improve access to diverse, safe and affordable housing options and programs, providing residents with opportunities to obtain housing that meets their needs in all phases of life.

Alternative Courses of Action

N/A

Recommendation for Action

The Arvada team recommends that the City Council approve R-HA-24-04, A Resolution Authorizing the Arvada Housing Authority to Enter Into A Housing Assistance Payments Contract for the Marshall Pointe Affordable Housing Development.

Suggested Motion:

I move that R-HA-24-04, A Resolution Authorizing the Arvada Housing Authority to Enter Into A Housing Assistance Payments Contract for the Marshall Pointe Affordable Housing Development, be (approved) (rejected).

Prepared by:
Carrie Espinosa, Manager of Housing Preservation and Resources

Reviewed by:

Approved by:

Carrie Espinosa, Manager of Housing Preservation and Resources 10/16/2024

Jessica Garner, Director of Community and Economic Development	10/16/2024
Bryan Archer, Director of Finance	10/16/2024
Gail Walker, Legal Specialist-Contracts	10/23/2024
Emily Grogg, Senior Assistant City Attorney	10/23/2024
Rachel Morris, City Attorney	10/24/2024
Linda Haley, Acting City Manager	10/24/2024

Enclosure, exhibits & attachments required to support the report

R-HA-24-04

A RESOLUTION AUTHORIZING THE ARVADA HOUSING AUTHORITY TO ENTER INTO A HOUSING ASSISTANCE PAYMENTS CONTRACT FOR THE MARSHALL POINTE AFFORDABLE HOUSING DEVELOPMENT

WHEREAS, the Arvada Housing Authority ("Authority") seeks to increase affordable housing options in the Arvada community; and

WHEREAS, Marshall Pointe is an affordable housing development located at 5170 Marshall Street, Arvada, Colorado 80002 ("the Property"); and

WHEREAS, the Authority will provide eight housing choice vouchers such that no less than eight of the units at the Property will be restricted to households not exceeding the 30% of area median income ("AMI") as established by the U.S. Department of Housing and Urban Development ("HUD"); and

WHEREAS, the Authority must enter into an Agreement for Housing Assistance Payments with Marshall Pointe Apartments, LP in order to provide the eight vouchers; and

WHEREAS, the Authority finds that it is beneficial to support the Property through the award of vouchers.

NOW, THEREFORE, BE IT RESOLVED BY THE ARVADA HOUSING AUTHORITY:

Section 1. The Arvada Housing Authority hereby authorizes the Chairperson and Mayor, or Vice Chairperson and Mayor Pro Tem, to execute the Housing Assistance Payment Contract, which is in substantially the same form as attached hereto.

Section 2. This Resolution shall be effective upon its approval by the Arvada Housing Authority.

ADOPTED AND APPROVED this 4th day of November, 2024.

_____

Lauren Simpson, Chairperson

ATTEST:

_____

City Clerk

APPROVED AS TO FORM:
Rachel A. Morris, City Attorney

By: _____

U.S. Department of Housing and Urban Development
Office of Public and Indian Housing

SECTION 8 PROJECT-BASED VOUCHER PROGRAM

AGREEMENT TO ENTER INTO A HOUSING ASSISTANCE PAYMENTS CONTRACT

NEW CONSTRUCTION OR REHABILITATION

PART I

OMB Burden Statement. The public reporting burden for this collection of information is estimated to average 0.25 hours, including the time for collecting, reviewing and reporting the data. The information is required to establish terms between the PHA and the owner prior to execution of a HAP contract for PBV assistance as provided in §983.152. Assurances of confidentiality are not provided under this collection. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions to reduce this burden, to the Office of Public and Indian Housing, US. Department of Housing and Urban Development, Washington, DC 20410. HUD may not conduct and sponsor, and a person is not required to respond to, a collection of information unless the collection displays a valid control number.

Privacy Notice. The Department of Housing and Urban Development (HUD) is authorized to collect the information required on this form by 24 CFR § 983.152. The information is being collected to establish the agreement between the PHA and owner prior to execution of a HAP contract for PBV assistance as provided in §983.153. The Personally Identifiable Information (PII) data collected on this form are not stored or retrieved within a system of record.

1.1 Parties

This Agreement to Enter into Housing Assistance Payments Contract ("Agreement") is between:

The Housing Authority of the City of Arvada, Colorado ("PHA") and

Marshall Pointe Apartments, LP ("owner").

1.2 Purpose

The owner agrees to develop the Housing Assistance Payments Contract ("HAP Contract") units to in accordance with Exhibit B and to comply with Housing Quality Standards ("HQS"), and the PHA agrees that, upon timely completion of such development in accordance with the terms of the Agreement, the PHA will enter into a HAP Contract with the owner of the Contract units.

1.3 Contents of Agreement

This Agreement consists of Part I, Part II, and the following Exhibits:

EXHIBIT A: The approved owner's PBV proposal. (Selection of proposals must be in accordance with 24 CFR 983.51.)

EXHIBIT B: Description of work to be performed under this Agreement, including:

- if the Agreement is for rehabilitation of units, this exhibit must include the rehabilitation work write-up and, where the PHA has determined necessary, specifications and plans.
- if the Agreement is for new construction of units, the work description must include the working drawings and specifications.
- any additional requirements beyond HQS relating to quality, design and architecture that the PHA requires.
- work items resulting from compliance with the design and construction requirements of the Fair Housing Act and implementing regulations at 24 CFR 100.205, the accessibility requirements under section 504 of the Rehabilitation Act of 1973 and implementing regulations at 24 CFR 8.22 and 8.23, and accessibility requirements under Titles II and III of the Americans with Disabilities Act at 28 CFR parts 35 and 36, as applicable.

EXHIBIT C: Description of housing, including:

- project site.
- total number of units in project covered by this Agreement.
- locations of contract units on site.
- number of contract units by area (size) and number of bedrooms and bathrooms.
- services, maintenance, or equipment to be supplied by the owner without charges in addition to the rent to owner.
- utilities available to the contract units, including a specification of utility services to be paid by the owner (without charges in addition to rent) and utility services to be paid by the tenant.
- estimated initial rent to owner for the contract units.

EXHIBIT D: The HAP contract.

1.4 Significant Dates

A. Effective Date of the Agreement: The Agreement must be executed promptly after PHA notice of proposal selection to the owner has been given. The PHA may not enter this Agreement with the owner until a subsidy layering review has been performed and an environmental review has been satisfactorily completed in accordance with HUD requirements.

B. A project may either be a single-stage or multi-stage project. A single-stage project will have the same Agreement effective date for all contract units. A multi-stage project will separate effective dates for each stage.

☑ **Single-stage project**

i. Effective Date for all contract units: 11/6/2024

ii. Date of Commencement of the Work: The date for commencement of work is not later than 30 days calendar days after the effective date of this Agreement.

iii. Time for Completion of Work: The date for completion of the work is not later than 915 calendar days after the effective date of this Agreement.

☐ **Multi-Stage Project**

Enter the information for each stage upon execution of the Agreement for the corresponding stage.

STAGE	NUMBER OF UNITS	EFFECTIVE DATE	DATE OF COMMENCEMENT OF WORK	TIME FOR COMPLETION OF WORK

1.5 Nature of the Work

☑ This Agreement is for **New Construction** of units to be assisted by the project-based Voucher program.

☐ This Agreement is for **Rehabilitation** of units to be assisted by the project-based Voucher program.

1.6 Schedule of Completion

A. Timely Performance of Work: The owner agrees to begin work no later than the date for commencement of work as stated in Section 1.4. In the event the work is not commenced, diligently continued and completed as required under this Agreement, the PHA may terminate this Agreement or take other appropriate action. The owner agrees to report promptly to the PHA the date work is commenced and furnish the PHA with progress reports as required by the PHA.

B. Time for Completion: All work must be completed no later than the end of the period stated in Section 1.4. Where completion in stages is provided for, work related to units included in each stage shall be completed by the stage completion date and all work on all stages must be completed no later than the end of the period stated in Section 1.4.

C. Delays: If there is a delay in the completion due to unforeseen factors beyond the owner's control as determined by the PHA, the PHA agrees to extend the time for completion for an appropriate period as determined by the PHA in accordance with HUD requirements.

1.7 Changes in Work

A. The owner must obtain prior PHA approval for any change from the work specific in Exhibit B which would alter the design or quality of the rehabilitation or construction. The PHA is not required to approve any changes requested by the owner. PHA approval of any change may be conditioned on establishment of a lower initial rent to owner at the amounts determined by PHA.

B. If the owner makes any changes in the work without prior PHA approval, the PHA may establish lower initial rents to owner at the amounts determined by PHA in accordance with HUD requirements.

C. The PHA (or HUD in the case of insured or coinsured mortgages) may inspect the work during rehabilitation or construction to ensure that work is proceeding on schedule, is being accomplished in accordance with the terms of the Agreement, meets the level of material described in Exhibit B and meets typical levels of workmanship for the area.

1.8 Work completion

A. Conformance with Exhibit B: The work must be completed in accordance with Exhibit B. The owner is solely responsible for completion of the work.

B. Evidence of Completion: When the work in completed, the owner must provide the PHA with the following:

1. A certification by the owner that the work has been completed in accordance with the HQS and all requirements of this Agreement.

2. A certification by the owner that the owner has complied with labor standards and equal opportunity requirements in the development of the housing. (See 24 CFR 983.155(b)(1)(ii).)

3. Additional Evidence of Completion: At the discretion of the PHA, or as required by HUD, this Agreement may specify additional documentation that must be submitted by owner as evidence of completion of the housing. Check the following that apply:

☑ A certificate of occupancy or other evidence that the contract units comply with local requirements.

☑ An architect's or developer's certification that the housing complies with:

☑ the HQS;

☑ State, local, or other building codes;

☑ Zoning;

☐ The rehabilitation work write-up for rehabilitated housing;

☑ The work description for newly constructed housing; or

☑ Any additional design or quality requirements pursuant to this Agreement.

1.9 Inspection and Acceptance by the PHA of Completed Contract Units

A. Completion of Contract Units: Upon receipt of owner notice of completion of Contract units, the PHA shall take the following steps:

1. Review all evidence of completion submitted by owner.

2. Inspect the units to determine if the housing has been completed in accordance with this Agreement, including compliance with the HQS and any additional requirements imposed by the PHA under this Agreement.

B. Non-Acceptance: If the PHA determines the work has not been completed in accordance with this Agreement, including non-compliance with the HQS, the PHA shall promptly notify the owner of this decision and the reasons for the non-acceptance. The parties must not enter into the HAP contract.

C. Acceptance: If the PHA determines housing has been completed in accordance with this Agreement, and that the owner has submitted all required evidence of completion, the PHA must submit the HAP contract for execution by the owner and must then execute the HAP contract.

1.10 Acceptance where defects or deficiencies are reported:

A. If other defects or deficiencies exist, the PHA shall determine whether and to what extent the defects or deficiencies are correctable, whether the units will be accepted after correction of defects or deficiencies, and the requirements and procedures for such correction and acceptance.

B. Completion in Stages: Where completion in stages is provided for, the procedures of this paragraph shall apply to each stage.

1.11. Execution of HAP Contract

A. Time and Execution: Upon acceptance of the units by the PHA, the owner and the PHA execute the HAP contract.

B. Completion in Stages: Where completion in stages is provided for the number and types of units in each stage, and the initial rents to owner for such units, shall be separately shown in Exhibit C of the contract for each stage. Upon acceptance of the first stage, the owner shall execute the contract and the signature block provided in the contract for that stage. Upon acceptance of each subsequent stage, the owner shall execute the signature block provided in the contract for such stage.

C. Form of Contract: The terms of the contract shall be provided in Exhibit D of this Agreement. There shall be no change in the terms of the contract unless such change is approved by HUD headquarters. Prior to execution by the owner, all blank spaces in the contract shall be completed by the PHA.

D. Survival of owner Obligations: Even after execution of the contract, the owner shall continue to be bound by all owner obligations under the Agreement.

1.12 Initial determination of rents

A. The estimated amount of initial rent to owner shall be established in Exhibit C of this Agreement.

B. The initial amount of rent to owner is established at the beginning of the HAP contract term.

C. The estimated and initial contract rent for each units may in no event exceed the amount authorized in accordance with HUD regulations and requirements. Where the estimated initial rent to owner exceeds the amount authorized in accordance with HUD regulations, the PHA shall establish a lower initial rent tow owner, in accordance with HUD regulations and requirements.

1.13 Uniform Relocation Act

A. A displaced person must be provided relocation assistance at the levels described in and in accordance with the requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970

(URA) (42 U.S.C. 4201-4655) and implementing regulations at 49 CFR part 24.

B. The cost of required relocation assistance may be paid with funds provided by the owner, or with local public funds, or with funds available from other sources. Payment of relocation assistance must be paid in accordance with HUD requirements.

C. The acquisition of real property for a project to be assisted under the program is subject to the URA and 49 CFR part 24, subpart B.

D. The PHA must require the owner to comply with the URA and 49 CFR part 24.

E. In computing a replacement housing payment to a residential tenant displaced as a direct result of privately undertaken rehabilitation or demolition of the real property, the term "initiation of negotiations" means the execution of the Agreement between the owner and the PHA.

1.14 Protection of In-Place Families

A. In order to minimize displacement of in-place families, if a unit to be placed under Contract is occupied by an eligible family on the proposal selection date, the in-place family must be placed on the PHA's waiting list (if they are not already on the list) and, once their continued eligibility is determined, given an absolute selection preference and referred to the project owner for an appropriately sized unit in the project.

B. This protection does not apply to families that are not eligible to participate in the program on the proposal selection date.

C. The term "in-place family" means an eligible family residing in a proposed contract unit on the proposal selection date.

D. Assistance to in-place families may only be provided in accordance with the program regulations and other HUD requirements.

1.15 Termination of Agreement and Contract

The Agreement or HAP contract may be terminated upon at least 30 days notice to the owner by the PHA or HUD if the PHA or HUD determines that the contract units were not eligible for selection in conformity with HUD requirements.

1.16 Rights of HUD if PHA Defaults Under Agreement

If HUD determines that the PHA has failed to comply with this Agreement or has failed to take appropriate action to HUD's satisfaction or as directed by HUD, for enforcement of the PHA's rights under this Agreement, HUD may assume the PHA's rights and obligations under the Agreement, and may perform the obligations and enforce the rights of the PHA under the Agreement. HUD will, if it determines that the owner is not in default, pay Annual Contributions for the purpose of providing housing assistance payments with respect to the dwelling unit(s) under this Agreement for the duration of the HAP contract.

1.17 Owner Default and PHA Remedies

A. Owner Default

Any of the following is a default by the owner under the Agreement:

1. The owner has failed to comply with any obligation under the Agreement.

2. The owner has violated any obligation under any other housing assistance payments contract under Section 8 of the United States Housing Act of 1937 (42 U.S.C. 1437f).

3. The owner has committed any fraud or made any false statement to the PHA or HUD in connection with the Agreement.

4. The owner has committed fraud, bribery, or any other corrupt or criminal act in connection with any Federal housing assistance program.

5. If the property where the contract units are located is subject to a lien or security interest securing a HUD loan or mortgage insured by HUD and:

    a. The owner has failed to comply with the regulations for the applicable HUD loan or mortgage insurance program, with the mortgage or mortgage note, or with the regulatory agreement; or

    b. The owner has committed fraud, bribery, or any other corrupt or criminal act in connection with the HUD loan or HUD-insured mortgage.

6. The owner has engaged in any drug-related criminal activity or any violent criminal activity.

B. PHA Remedies

1. If the PHA determines that a breach has occurred, the PHA may exercise any of its rights or remedies under the Agreement.

2. The PHA must notify the owner in writing of such determination. The notice by the PHA to the owner may require the owner to take corrective action (as verified by the PHA) by a time prescribed in the notice.

3. The PHA's rights and remedies under the Agreement include but are not limited to: (i) terminating the Agreement; and (ii) declining to execute the HAP contract for some or all of the units.

C. PHA Remedy is not Waived

The PHA's exercise or non-exercise of any remedy for owner breach of the Agreement is not a waiver of the right to exercise that remedy or any other right or remedy at any time.

1.18 PHA and Owner Relation to Third Parties

A. Selection and Performance of Contractor

1. The PHA has not assumed any responsibility or liability to the owner, or any other party for performance of any contractor, subcontractor or supplier, whether or not listed by the PHA as a qualified contractor or supplier under the program. The selection of a contractor, subcontractor or supplier is the sole responsibility of the owner and the PHA is not involved in any relationship between the owner and any contractor, subcontractor or supplier.

2. The owner must select a competent contractor to undertake rehabilitation or construction. The owner agrees to require from each prospective contractor a certification that neither the contractor nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in contract by the Comptroller General or any federal Department or agency. The owner agrees not to award contracts to, otherwise engage in the service of, or fund any contractor that does not provide this certification.

B. Injury Resulting from Work under the Agreement: The PHA has not assumed any responsibility for or liability to any person, including a worker or a resident of the unit undergoing work pursuant to this Agreement, injured as a result of the work or as a result of any other action or failure to act by the owner, or any contractor, subcontractor or supplier.

C. Legal Relationship: The owner is not the agent of the PHA and this Agreement does not create or affect any relationship between the PHA and any lender to the owner or any suppliers, employees, contractor or subcontractors used by the owner in the implementation of the Agreement.

D. Exclusion of Third Party Claims: Nothing in this Agreement shall be construed as creating any right of any third party (other than HUD) to enforce any provision of this Agreement or the Contract, or to assert any claim against HUD, the PHA or the owner under the Agreement or the Contract.

E. Exclusion of owner Claims against HUD: Nothing in this Agreement shall be construed as creating any right of the owner to assert any claim against HUD.

1.19 PHA-Owned Units

Notwithstanding Section 1.18 of this Agreement, a PHA may own units assisted under the project-based voucher program, subject to the special requirements in 24 CFR 983.59 regarding PHA-owned units.

1.20 Conflict of Interest

A. Interest of Members, Officers, or Employees of PHA, Members of Local Governing Body, or Other Public Officials

1. No present or former member or officer of the PHA (except tenant-commissioners), no employee of the PHA who formulates policy or influences decisions with respect to the housing choice voucher program or project-based voucher program, and no public official or member of a governing body or State or local legislator who exercises functions or responsibilities with respect to these programs, shall have any direct or indirect interest, during his or her tenure or for one year thereafter, in the Agreement or HAP contract.

2. HUD may waive this provision for good cause.

B. Disclosure

The owner has disclosed to the PHA any interest that would be a violation of the Agreement or HAP contract. The owner must fully and promptly update such disclosures.

1.21 Interest of Member or Delegate to Congress

No member of or delegate to the Congress of the United States of America or resident-commissioner shall be admitted to any share or part of the Agreement or HAP contract or to any benefits arising from the Agreement of HAP contract.

1.22 Transfer of the Agreement, HAP Contract, or Property

A. PHA Consent to Transfer

The owner agrees that the owner has not made and will not make any transfer in any form, including any sale or assignment, of the Agreement, HAP contract, or the property without the prior written consent of the PHA. A change in ownership in the owner, such as a stock transfer or transfer of the interest of a limited partner, is not subject to the provisions of this section. Transfer of the interest of a general partner is subject to the provisions of this section.

B. Procedure for PHA Acceptance of Transferee

Where the owner requests the consent of the PHA for a transfer in any form, including any sale or assignment, of the Agreement, the HAP contract, or the property, the PHA must consent to a transfer of the Agreement or HAP contract if the transferee agrees in writing (in a form acceptable to the PHA) to comply with all the terms of the Agreement and HAP contract, if the transferee is acceptable to the PHA. The PHA's criteria for acceptance of the transferee must be in accordance with HUD requirements.

C. When Transfer is Prohibited

The PHA will not consent to the transfer if any transferee, or any principal or interested party, is debarred, suspended, subject to a limited denial of participation, or otherwise excluded under 2 CFR part 2424, or is listed on the U.S. General Services Administration list of parties excluded from Federal procurement or nonprocurement programs.

1.23 Exclusion from Federal Programs

A. Federal Requirements

The owner must comply with and is subject to requirements of 2 CFR part 2424.

B. Disclosure

The owner certifies that:

1. The owner has disclosed to the PHA the identity of the owner and any principal or interested party.

2. Neither the owner nor any principal or interested party is listed on the U.S. General Services Administration list of parties excluded from Federal procurement and nonprocurement programs; and none of such parties are debarred, suspended, subject to a limited denial of participation, or otherwise excluded under 2 CFR part 2424.

1.24 Lobbying Certifications

A. The owner certifies, to the best of the owner's knowledge and belief, that:

1. No Federally appropriated funds have been paid or will be paid, by or on behalf of the owner, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of the Agreement or HAP contract, or the extension, continuation, renewal, amendment, or modification of the HAP contract.

2. If any funds other than Federally appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the Agreement or HAP contract, the owner must complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

B. This certification by the owner is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352.

1.25 Subsidy Layering

A. Owner Disclosure

The owner must disclose to the PHA, in accordance with HUD requirements, information regarding any related assistance from the Federal government, a State, or a unit of general local government, or any agency or instrumentality thereof, that is made available or is expected to be made available with respect to the contract units. Such related assistance includes, but is not limited to, any loan, grant, guarantee, insurance, payment, rebate, subsidy, credit, tax benefit, or any other form of direct or indirect assistance.

B. Limit of Payments

Housing assistance payments under the HAP contract must not be more than is necessary, as determined in accordance with HUD requirements, to provide affordable housing after taking account of such related assistance. The PHA will adjust in accordance with HUD requirements the amount of the housing assistance payments to the owner to compensate in whole or in part for such related assistance.

1.26 Prohibition of Discrimination

A. The owner may not refuse to lease contract units to, or otherwise discriminate against, any person or family in leasing of a contract unit, because of race, color, religion, sex (including sexual orientation and gender identity), national origin, disability, age, or familial status.

B. The owner must comply with the following requirements:

1. The Fair Housing Act (42 U.S.C. 3601–19) and implementing regulations at 24 CFR part 100 *et seq.*;

2. Executive Order 11063, as amended by Executive Order 12259 (3 CFR 1959–1963 Comp., p. 652, and 3 CFR, 1980 Comp., p. 307) (Equal Opportunity in Housing Programs) and implementing regulations at 24 CFR part 107;

3. Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d–2000d–4) (Nondiscrimination in Federally Assisted Programs) and implementing regulations at 24 CFR part 1;

4. The Age Discrimination Act of 1975 (42 U.S.C. 6101–6107) and implementing regulations at 24 CFR part 146;

5. Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and implementing regulations at 24 CFR part 8;

6. Title II of the Americans with Disabilities Act, 42 U.S.C. 12101 *et seq.*; 28 CFR part 35

7. Executive Order 11246, as amended by Executive Orders 11375, 11478, 12086, and 12107 (3 CFR, 1964–1965 Comp., p. 339; 3 CFR, 1966–1970 Comp., p. 684; 3 CFR, 1966–1970 Comp., p. 803; 3 CFR, 1978 Comp., p. 230; and 3 CFR, 1978 Comp., p. 264, respectively) (Equal Employment Opportunity Programs) and implementing regulations at 41 CFR chapter 60;

8. Executive Order 11625, as amended by Executive Order 12007 (3 C FR, 1971–1975 Comp.., p. 616 and 3 CFR, 1977 Comp., p. 139) (Minority Business Enterprise Development); and

9. Executive Order 12138, as amended by Executive Order 12608 (3 CFR, 1977 Comp., p. 393, and 3 CFR, 1987 Comp., p. 245) (Women's Business Enterprise).

10. HUD's Equal Access Rule at 24 CFR 5.105.

The PHA and the owner must cooperate with HUD in the conducting of compliance reviews and complaint investigations pursuant to all applicable civil rights statutes, Executive Orders, and all related rules and regulations.

1.27 Owner Duty to Provide Information and Access to HUD and PHA

A. The owner must furnish any information pertinent to this Agreement as may be reasonably required from time to time by the PHA or HUD. The owner shall furnish such information in the form and manner required by the PHA or HUD.

B. The owner must permit the PHA or HUD or any of their authorized representatives to have access to the premises during normal business hours and, for the purpose of audit and examination, to have access to any books, documents, papers, and records of the owner to the extent necessary to determine compliance with this Agreement.

1.28 Notices and Owner Certifications

A. Where the owner is required to give any notice to the PHA pursuant to this Agreement, such notice shall be in writing and shall be given in the manner designated by the PHA.

B. Any certification or warranty by the owner pursuant to the Agreement shall be deemed a material representation of fact upon which reliance was placed when this transaction was entered into.

1.29 HUD Requirements

A. The Agreement and the HAP contract shall be interpreted and implemented in accordance with all statutory requirements, and will all HUD requirements, including amendments or changes in HUD requirements. The owner agrees to comply with all such laws and HUD requirements.

B. HUD requirements are requirements that apply to the project-based voucher program. HUD requirements are issued by HUD Headquarters as regulations, *Federal Register* notices, or other binding program directives.

1.30 Applicability of Part II Provisions — Check All that Apply

☑ Equal Employment Opportunity
Section 2.1 applies only to construction contracts of more than $10,000.

☐ Labor Standards Requirements

Sections 2.3, 2,7, and 2.9 apply only when this Agreement covers nine or more units.

☐ Flood Insurance

Section 2.10 applies if units are located in areas having special flood hazards and in which flood insurance is available under the National Flood Insurance Program.

EXECUTION OF THE AGREEMENT

I/We, the undersigned, certify under penalty of perjury that the information provided above is true and correct. WARNING: Anyone who knowingly submits a false claim or makes a false statement is subject to criminal and/or civil penalties, including confinement for up to 5 years, fines, and civil and administrative penalties. (18 U.S.C. §§ 287, 1001, 1010, 1012; 31 U.S.C. §3729, 3802).

PUBLIC HOUSING AGENCY (PHA) **Name of PHA (Print)** Arvada Housing Authority
By:
Signature of authorized representative
Lauren Simpson; Chair Arvada Housing Authority
Name and official title (Print)
Date
OWNER **Name of Owner (Print)** Marshall Pointe Apartments, LP
By:
Signature of authorized representative
Name and official title (Print)
Date

U.S. Department of Housing and Urban Development
Office of Public and Indian Housing

SECTION 8 PROJECT-BASED VOUCHER PROGRAM

AGREEMENT TO ENTER INTO A HOUSING ASSISTANCE PAYMENTS CONTRACT

NEW CONSTRUCTION OR REHABILITATION

PART II

OMB Burden Statement. The public reporting burden for this collection of information is estimated to average 0.25 hours, including the time for collecting, reviewing and reporting the data. This form is required to establish terms between a PHA and owner to provide housing assistance. Assurances of confidentiality are not provided under this collection. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions to reduce this burden, to the Office of Public and Indian Housing, US. Department of Housing and Urban Development, Washington, DC 20410. HUD may not conduct and sponsor, and a person is not required to respond to, a collection of information unless the collection displays a valid control number.

2.1 Equal Employment Opportunity

A. The owner shall incorporate or cause to be incorporated into any contract in excess of $10,000 for construction work, or modification thereof, as defined in the regulations of the Secretary of Labor at 41 CFR chapter 60, which is to be performed pursuant to this Agreement, the following nondiscrimination clause:

During the performance of this contract, the contractor agrees as follows:

1. The contractor will not discriminate against any employee or applicant for employment because of race, color, creed, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, creed, sex, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoffs or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided

by the contracting officer setting forth the provisions of this nondiscrimination clause.

2. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, creed, sex, or national origin.

3. The contractor will send to each labor union or representative of workers with which the contractor has a collective bargaining agreement or other contract or understanding, a notice to be provided by or at the direction of the Government advising the labor union or workers representative of the contractor's commitments under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

4. The contractor of will comply with all provisions of Executive Order No. 11246 of September 24, 1965, and with the rules, regulations, and relevant orders of the Secretary of Labor.

5. The contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to its books, records, and accounts by HUD and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.

6. In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the rules, regulations, or orders, the contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further contracts in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, and such other sanctions as may be imported and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor or as otherwise provided by law.

7. The contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by the rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order

as the Government may direct as a means of enforcing such provisions including sanctions for noncompliance; provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Government, the contractor may request the United States to enter into such litigation to protect the interest of the United States.

B. The owner agrees to be bound by the above nondiscrimination clause with respect to his or her own employment practices when participating in federally assisted construction work.

C. The owner agrees to assist and cooperate actively with HUD and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the nondiscrimination clause and the rules, regulations, and relevant orders of the Secretary of Labor, to furnish HUD and the Secretary of Labor such information as they may require for the supervision of such compliance, and to otherwise assist HUD in the discharge of HUD's primary responsibility for securing compliance.

D. The owner further agrees to refrain from entering into any contract or contract modification subject to Executive Order No. 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the nondiscrimination clause as may be imposed upon contractors and subcontractors by HUD or the Secretary of Labor pursuant to the Executive Order. In addition, if the owner fails or refuses to comply with these undertakings, HUD may take any or all of the following actions; cancel, terminate, or suspend in whole or in part this Agreement; refrain from extending any further assistance to the owner under the program with respect to which the failure or refusal occurred until satisfactory assurance of future compliance has been received from the owner, and refer the case to the Department of Justice for appropriate legal proceedings.

2.2 Reserved

2.3 HUD—Federal Labor Standards Provisions

The owner is responsible for inserting the entire text of section 2.3 of this Agreement in all construction contracts and, if the owner performs any rehabilitation work on the project, the owner must comply with all provisions of section 2.3. (Note: Sections 2.3(b) and (c) apply only when the amount of the prime contract exceeds $100,000.)

(a)(1) Minimum Wages. (i) All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project) will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made part hereof regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under section l(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321)) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii)(A) Any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination;

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, U.S. Department of Labor, Washington, D. C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(B) or (C) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determinations or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program: Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(2) Withholding. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractors under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due.

(3)(i) Payrolls and Basic Records. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section l(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the

Secretary of Labor has found under 29 CFR 5.5 (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section l(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD the PHA. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included in weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g. the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division Web site at: http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit them to the applicant, sponsor, or owner, as the case may be, for transmission to HUD, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, sponsor, or owner).

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his

or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5(a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5 (a)(3)(i) and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of Title 18 and section 231 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(4) Apprentices and Trainees.(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and

individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employee and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) <u>Trainees</u>. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and

individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal Employment Opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

(5) Compliance with Copeland Act Requirements. The contractor shall comply with the requirements of 29 CFR part 3 which are incorporated by reference in this Agreement.

(6) Subcontracts. The contractor or subcontractor will insert in any subcontracts the clauses contained in section 2.3(a)(1) through (11) and such other clauses as HUD or its designee may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the

compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section 2.3(a).

(7) Contract Terminations; Debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

(8) Compliance with Davis-Bacon and Related Act Requirements. All rulings and interpretations of the Davis-Bacon and related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

(9) Disputes Concerning Labor Standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the PHA, HUD, the U. S. Department of Labor, or the employees or their representatives.

(10) Certification of Eligibility. (i) By entering into this Agreement, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR part 24.

(ii) No part of this Agreement shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR part 24.

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, section 1010, Title 18, U.S.C., "Federal Housing Administration transactions, provides in part: "Whoever, for the purpose of ...influencing in any way the action of such Administration...makes, utters or publishes any statement, knowing the same to be false... shall be fined not more than $5,000 or imprisoned not more than two years, or both."

11. Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic to whom the wage, salary, or other labor

standards provisions of this Agreement are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Agreement to his employer.

(b) Contract Work Hours and Safety Standards Act. The provisions of this paragraph (b) are applicable only where the amount of the prime contract exceeds $100,000. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

(1) Overtime Requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; Liability for Unpaid Wages; Liquidated Damages. In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of $25 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in subparagraph (1) of this paragraph.

(3) Withholding for Unpaid Wages and Liquidated Damages. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by

the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph.

(4) Subcontractors. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

(c) Health and Safety. The provisions of this paragraph (c) are applicable only where the amount of the prime contract exceeds $100,000.

(1) No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous to his health and safety as established under construction safety and health standards promulgated by the Secretary of Labor by regulation.

(2) The contractor shall comply with all regulations issue by the Secretary of Labor pursuant to Title 29 part 1926 and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, 40 USC 3701 et seq.

(3) The contractor shall include the provisions of this paragraph in every subcontract so that such provisions will be binding on each subcontractor. The contractor shall take such action with respect to any subcontract as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

2.4 Reserved

2.5 Reserved

2.6 Reserved

2.7 Wage and Claims Adjustments

The owner shall be responsible for the correction of all violations under section 2.3, including violations committed by other contractors. In cases where there is evidence of underpayment of salaries or wages to any laborers or mechanics (including apprentices and trainees) by the owner or other contractor or a failure by the owner or other contractor to submit payrolls and related reports, the owner shall be required to place an amount in escrow, as determined by HUD sufficient to pay persons employed on the work covered by the Agreement the difference between the salaries or wages actually paid such employees for the total number of hours worked and the full amount of wages required under this Agreement, as well as an amount determined by HUD to be sufficient to satisfy any liability of the owner or other contractor for liquidated damages pursuant to section 2.3. The amounts withheld may be disbursed by HUD for and on account of the owner or other contractor to the respective employees to whom they are due, and to the Federal Government in satisfaction of liquidated damages under section 2.3.

2.8 Reserved

2.9 Evidence of Unit(s) Completion; Escrow

A. The owner shall evidence the completion of the unit(s) by furnishing the PHA, in addition to the requirements listed in Part I of this Agreement, a certification of compliance with the provisions of sections 2.3 and 2.7 of this Agreement, and that to the best of the owner's knowledge and belief there are no claims of underpayment to laborers or mechanics in alleged violation of these provisions of the Agreement. In the event there are any such pending claims to the knowledge of the owner, the PHA, or HUD, the owner will place a sufficient amount in escrow, as directed by the PHA or HUD, to assure such payments.

B. The escrows required under this section and section 2.7 of shall be paid to HUD, as escrowee, or to an escrowee designated by HUD, and the conditions and manner of releasing such escrows shall be designated and approved by HUD.

2.10 Flood Insurance

If the project is located in an area that has been identified by the Federal Emergency Management Agency as an area having special flood hazards and if

the sale of flood insurance has been made available under the National Flood Insurance Program, the owner agrees that: (1) the project will be covered, during the life of the property, by flood insurance in an amount at least equal to its development or project cost (less estimated land cost) or to the limit of coverage made available with respect to the particular type of property under the National Flood Insurance Act of 1968, whichever is less; and (2) that it will advise any prospective purchaser or transferee of the property in writing of the continuing statutory requirement to maintain such flood insurance during the life of the property.

Housing Authority of the City of Arvada
Agreement to Enter Into Housing Assistance Payments Contract
HUD 52531A

Exhibit A – The Approved Owner's PBV Proposal

Marshall Pointe Apartments, LP

Owner's PBV proposal is on file and selected in accordance with 24 CFR 983.51 (b)(2)

- Letter of Approval from HUD dated
- AHA Award Letter dated July 23, 2024

Arvada
Housing Authority

July 23, 2024

Ben Taylor
Lincoln Avenue Companies
401 Whilshire Blvd Ste 1100
Santa Monica, CA 90401

Re: Marshall Pointe Apartments, LP

Dear Mr. Taylor:

We are pleased to announce that the Arvada Housing Authority has selected the Marshall Pointe Apartments project for eight (8) HCV/Section 8 project-based vouchers, funding at 120% of FMR, pursuant to your submitted proposal.

We will be able to finalize this award by the execution of the AHAP after completion of an environmental review and subsidy layering review.

If you have any questions, please contact Dena Kothe at dkothe@arvada.org or at 720-898-7476,

Sincerely,

Carrie Espinosa
Executive Director

Cc: Dena Kothe
Sam Bradley

Housing Authority of the City of Arvada
Agreement to Enter Into Housing Assistance Payments Contract
HUD 52531A

Marshall Pointe Apartments, LP

Exhibit B – Description of Work to be Performed Under this Agreement

Attachment:

- Work Drawings and Specifications
- The Construction Documents prepared by Kephart
- Architect's Statement dated 10/9/2024

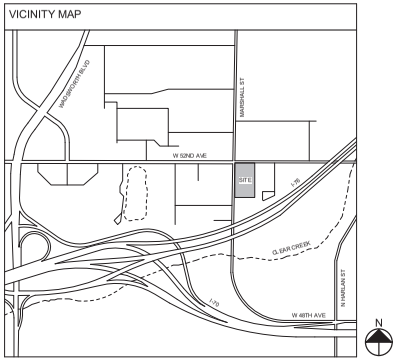
MARSHALL POINTE

APARTMENT SET

5170 MARSHALL ST - ARVADA, CO 80002



VICINITY MAP



PROJECT TEAM:

OWNER

MARSHALL POINTE LAND AQUISITION, LLC
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GENERAL CONTRACTOR

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MARSHALL POINTE

MARSHALL POINTE LAND AQUISITION, LLC
5170 MARSHALL ST - ARVADA, CO 80002

ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Title:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: COVER SHEET
Sheet Number: **A0-0.0**

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SHEET NO	SHEET NAME	PERMIT SET - 7.30.2023	PC1 RESPONSE - 10.09.2023	PC2 RESPONSE - 10.31.2023	REVISION 4 (PRICING SET) - 05.10.2024
GENERAL					
AX.000	COVER SHEET	X	X	X	X
AX.001	AXONOMETRIC VIEWS		X	X	X
AX.002	PERSPECTIVES		X	X	X
AX.003	SITE PLAN W/ BUILDING FOOTPRINTS		X	X	X
AX.004	POSSIBILITY AREA UTILITIES PLAN		X	X	X
AX.005	POSSIBILITY AREA UTILITIES PLAN		X	X	X
AX.006	POSSIBILITY AREA UTILITIES PLAN		X	X	X
AX.007	POSSIBILITY AREA UTILITIES PLAN		X	X	X
AX.008	POSSIBILITY AREA UTILITIES PLAN		X	X	X
AX.009	OVERALL SITE PLAN		X	X	X
AX.010	OVERALL SITE PLAN		X	X	X
CIVIL					
C0.0	COVER SHEET				
C0.1	GENERAL NOTES				
C0.2	EXISTING CONDITIONS - SITE PLAN				
C0.3	OVERALL LEVEL 1 CONDITIONS PLAN				
C0.4	OVERALL LEVEL 2 CONDITIONS PLAN				
C0.5	OVERALL LEVEL 3 CONDITIONS PLAN				
C0.6	EXISTING SPATIAL PLAN				
C0.7	EXISTING SPATIAL PLAN				
C0.8	EXISTING SPATIAL PLAN				
C0.9	EXISTING SPATIAL PLAN				
C0.10	EXISTING SPATIAL PLAN				
C0.11	EXISTING SPATIAL PLAN				
C0.12	EXISTING SPATIAL PLAN				

ABBREVIATIONS

AB	ANCHOR BOLT	EQ	EQUAL	K	KIP	RESIL	RESILIENT
ABV	ABOVE	EQUIP	EQUIPMENT	KIT	KITCHEN	REV	REVISION(S), REVISED
AC	AIR CONDITIONING	ES	EACH SIDE	KO	KNOCKOUT	REFL	REFLECTED
ACOUS	ACOUSTICAL	EST	ESTIMATE	KVA	KILO VOLT-AMPERES	RH	RIGHT HAND
ACT	ACOUSTICAL CEILING TILE	EW	EACH WAY	KW	KILOWATT	RM	ROOM
AD	AREA DRAIN, ACCESS DOOR	EWC	ELECTRICAL WATER COOLER			RO	ROUGH OPENING
ADD	ADDENDUM	EWH	ELECTRIC WATER HEATER	L	LENGTH	ROW	RIGHT OF WAY
ADJ	ADJACENT, ADJUSTABLE	EXG	EXISTING	LAM	LAMINATE	RPM	REVOLUTIONS PER MINUTE
AFF	ABOVE FINISHED FLOOR	EXH	EXHAUST	LAV	LAVATORY	RVS	REVERSE (SIDE)
ALUM	ALUMINUM	EXP	EXPANSION, EXPOSED	LDR	LEADER		
ALT	ALTERNATE	EXT	EXTERIOR	LH	LEFT HAND	SC	SOLID CORE
ANOD	ANODIZED			LIN	LINEAR	SD	SOAP DISPENSER
APPROX	APPROXIMATE	F	FAHRENHEIT	LL	LIVE LOAD	SEC	SECTION
ARCH	ARCHITECTURAL	FA	FIRE ALARM	LP	LIGHTING PANEL, LIGHT PROOF	SF	STORE FRONT
ASP	ABOVE SUB FLOOR	FAC	FIRE ALARM CABINET	LT	LIGHT	SF	SQUARE FOOT
ASPH	ASPHALT	FBO	FURNISHED BY OTHERS			SF	SUB FLOOR
AUTO	AUTOMATIC	FCL	FLOOR CHANGE LINE	MACH	MACHINERY	SHT	SHEET
AUX	AUXILIARY	FD	FLOOR DRAIN, FIRE DAMPER	MAG	MAGNETIC	SHTH	SHEATHING
A/V	AUDIO/VISUAL	FDN	FOUNDATION	MAS	MASONRY	SIM	SIMILAR
AVE	AVENUE	FE	FIRE EXTINGUISHER	MATL	MATERIAL	SND	SANITARY NAPKIN DISPENSER
AVG	AVERAGE	FEC	FIRE EXTINGUISHER CABINET	MAX	MAXIMUM	SNR	SANITARY NAPKIN RECEPTACLE
		FHC	FIRE HOSE CABINET	MECH	MECHANICAL	SNT	SEALANT
BATH	BATHROOM	FH	FIRE HYDRANT	MED	MEDIUM	SOFF	SOFFIT
BD	BOARD	FHMS	FLAT HEAD MACHINE SCREW	MEMB	MEMBRANE	SPCG	SPACING
BET	BETWEEN	FHWS	FLAT HEAD WOOD SCREW	MEZZ	MEZZANINE	SPRT	SUPPORT
BF	BOARD FEET	FIG	FIGURE	MFG	MANUFACTURER	SPECS	SPECIFICATIONS
BITUM	BITUMINOUS	FIN	FINISH	MH	MAN HOLE	SPKL	SPRINKLER
BLDG	BUILDING	FIX	FIXTURE	MI	MILE	SPKR	SPEAKER
BLKG	BLOCKING	FL	FLOW LINE	MIN	MINIMUM, MINUTE	SQ	SQUARE
BM	BENCHMARK, BEAM	FLG	FLASHING	MISC	MISCELLANEOUS	SS	STAINLESS STEEL
BOD	BASIS OF DESIGN	FLR	FLOOR	MM	MILLIMETERS	STA	STATION
BOT	BOTTOM	FLOUR	FLUORESCENT	MO	MASONRY OPENING	STD	STANDARD
BRG	BEARING	FLEX	FLEXIBLE	MTD	MOUNTED	STL	STEEL
BSMT	BASEMENT	FOC	FACE OF CONCRETE	MTL	METAL	STOR	STORAGE
BUR	BUILT-UP ROOF	FOF	FACE OF FINISH	MUL	MULLION	STRUCT	STRUCTURAL
		FOM	FACE OF MASONRY			SUSP	SUSPENDED
CAB	CABINET	FOS	FACE OF STUD	N	NORTH	SYM	SYMMETRICAL
CAP	CAPACITY	FPM	FEET PER MINUTE	NIC	NOT IN CONTRACT		
CEM	CEMENTITIOUS	FR	FIRE RATED	NO	NUMBER	T	THREAD
CER	CERAMIC	FT	FOOT (FEET)	NOM	NOMINAL	TB	TOWEL BAR
CFM	CUBIC FEET PER MINUTE	FTG	FOOTING	NRC	NOISE REDUCTION COEFFICIENT	T&B	TOP AND BOTTOM
CIP	CAST IN PLACE	FURN	FURNISHED)	NTS	NOT TO SCALE	TBC	TOP OF BACK OF CURB
CIRC	CIRCUMFERENCE	FURN	FURNISHING)			TEL	TELEPHONE
CJ	CONTROL JOINT	FUT	FUTURE	OWT	OPEN WEB TRUSS	TEM	TEMPERED
CK	CAULKING	FVC	FIRE VALVE CABINET			TEMP	TEMPERATURE
CL	COLUMN LINE			P	PAINT	T&G	TONGUE AND GROOVE
CL, C.L.	CENTER LINE	G	GAS	PAR	PARALLEL	THERM	THERMOSTAT
CLG	CEILING	GA	GAUGE	PBO	PROVIDED BY OTHERS	THK	THICK
CLOS	CLOSET	GAL	GALLON	PC	PRECAST	THLD	THRESHOLD
CM	CENTIMETERS	GALV	GALVANIZED	PCF	POUNDS PER CUBIC FOOT	TO	TOP OF
CMU	CONCRETE MASONRY UNIT	GB	GRAB BAR	PEN	PENETRATION	TOC	TOP OF CONCRETE
CO	CLEAN OUT	GC	GENERAL CONTRACTOR	PERF	PERFORATED	TOS	TOP OF STEEL
COL	COLUMN	GEN	GENERATOR	PERIM	PERIMETER	TOSL	TOP OF SLAB
COMB	COMBINATION	GI	GALVANIZED IRON	PH	PHASE	TOW	TOP OF WALL
CONC	CONCRETE	GL	GLASS	PKG	PARKING	TPD	TOILET PAPER DISPENSER
CONF	CONFERENCE	GLA	GROSS LEASABLE AREA	PL	PLATE LINE, PROPERTY LINE	TRANS	TRANSLUCENT
CONSTR	CONSTRUCTION	GPM	GALLONS PER MINUTE	PLAM	PLASTIC LAMINATE	TS	TUBE STEEL
CONT	CONTINUOUS	GWB	GYPSUM WALL BOARD	PLAS	PLASTER	TV	TELEVISION
CONTR	CONTRACTOR	GYP	GYPSUM	PLBG	PLUMBING	TYP	TYPICAL
CORR	CORRIDOR, CORRUGATED			PLYWD	PLYWOOD		
CPT	CARPET	HAS	HEADED ANCHOR STUD	PNEU	PNEUMATIC	UNFIN	UNFINISHED
CT	CERAMIC TILE	HDAS	HEADED DEFORMED ANCHOR STUD	POL	POLISHED	UNO	UNLESS NOTED OTHERWISE
CTR	COUNTER	HB	HOSE BIBB	PR	PAIR	UON	UNLESS OTHERWISE NOTED
CU	CUBIC	HC	HOLLOW CORE, ACCESSIBLEPED	PREFAB	PREFABRICATED	UR	URINAL
CW	COLD WATER	HDR	HEADER	PREFIN	PREFINISHED	USG	U.S. GAUGE
		HDWR	HARDWARE	PRESTR	PRESTRESSED		
DAMP	DAMPPROOFING	HD	HIGH DENSITY DISCHARGE	PRIM	PRIMARY	V	VOLT
DAS	DEFORMED ANCHOR STUD	HM	HOLLOW METAL	PSF	POUNDS PER SQUARE FOOT	VAR	VARIES
DBL	DOUBLE	HORIZ	HORIZONTAL	PSI	POUNDS PER SQUARE INCH	VCT	VINYL COMPOSITION TILE
DEG	DEGREE	HP	HORSE POWER	PTD	PAPER TOWEL DISPENSER	VENT	VENTILATION
DEMO	DEMOLISH, DEMOLITION	HR	HOUR	PTR	PAPER TOWEL RECEPTACLE	VERT	VERTICAL
DEPT	DEPARTMENT	HT	HEIGHT	PT	POINT	VEST	VESTIBULE
DF	DRINKING FOUNTAIN	HTR	HEATER	PTEN	POST TENSIONED	VIN	SHEET VINYL
DIA	DIAMETER	HVAC	HEATING, VENTILATING AND COOLING	PTN	PARTITION	VOL	VOLUME
DIAG	DIAGONAL	HW	HOT WATER	PVC	POLYVINYL CHLORIDE	VTR	VENT THRU ROOF
DIM	DIMENSIONS	HWH	HOT WATER HEATER	PVMT	PAVEMENT	VWC	VINYL WALL COVERING
DIV	DIVISIONS	HWS	HOT WATER SUPPLY				
DL	DEAD LOAD	HWY	HIGHWAY	QT	QUARRY TILE	W	WEST, WIDE
DN	DOWN			QTY	QUANTITY	W	WITH
DR	DOOR	IBC	INTERNATIONAL BUILDING CODE			WC	WATER CLOSET
DS	DOWNSPOUT	ID	INSIDE DIAMETER	R	(STAIR) RISER	WD	WOOD
DTL	DETAIL	ILLUM	ILLUMINATOR	RAD	RADIUS	WDO	WINDOW
DWG	DRAWING	IN	INCHES	RBC	RUBBER BASE COVE	WGL	WIREGLASS
		INCAN	INCANDESCENT	RBS	RUBBER BASE STRAIGHT	WH	WATER HEATER
(E)	EXISTING	INCL	INCLUDE(D)	RBT	RUBBER TILE	WHH	WINDOW HEAD HEIGHT
EA	EACH	INSUL	INSULATION	RD	ROOF DRAIN, RD AD	WO	WHERE OCCURS
EB	EXPANSION BOLT	INT	INTERIOR	RE	REFERENCE, REFER	WO	WITHOUT
EF	EACH FACE	INTEG	INTEGRAL	RECPT	RECEPTACLE	WP	WATERPROOFING
EJ	EXPANSION JOINT	INTMED	INTERMEDIATE	REFR	REFRIGERATOR	WR	WATER RESISTANT
EL	ELEVATION	INV	INVERT	REG	REGISTER	WSCT	WAINSCOT
ELEC	ELECTRICAL			REINF	REINFORCED	WT	WEIGHT
ELEV	ELEVATOR, ELEVATION	JAN	JANITOR	REM	REMOVE	WWF	WELDED WIRE FABRIC
EMER	EMERGENCY	JST	JOIST	REQ'D	REQUIRED		
		JT	JOINT			YD	YARD

SYMBOLS LEGEND

(RC: ROOF CEILING)
(FC: FLOOR/CEILING)
(WE: WALL EXTERIOR)
(WI: WALL INTERIOR)

WE/E/60 — WALL & FLOOR/CEILING TYPE INDICATOR

DETAIL NUMBER

KEYNOTE INDICATOR

CEILING TYPE HEIGHT

CEILING MATERIAL HEIGHT

A — WINDOW/STOREFRONT TYPE INDICATOR

101 — DOOR TYPE INDICATOR

1'-0" — ELEVATION MARKER

GRID IDENTIFICATION AND LINE

ROOM TAG

ROOM NAME
ROOM NUMBER

UNIT TAG

A1.0 / 101 / TYPE 'B' — BASE UNIT - EDGE CONDITION; UNIT ADDRESS; AND/S A117, 1 UNIT TYPE

THIS IS A NOTE — TEXT NOTE

REVISION TAG AND CLOUD

1 / A2.1 (U) — 1 / A2.1 (U) — BUILDING SECTION MARKER

SIM — 1 / A101 — WALL SECTION MARKER

1 / A101 — DETAIL SECTION MARKER

Ref — 1 / A101 — Ref — INTERIOR ELEVATION MARKER (ALL ARROWS MAY NOT APPEAR ON ALL MARKERS)

1 / A101 — 1 / A101 — EXTERIOR ELEVATION MARKER (ALL ARROWS MAY NOT APPEAR ON ALL MARKERS)

SIM — 1 / A2.1 (U) — DETAIL BUBBLE

MAT CHLINE

PROPERTY LINE

CENTERLINE

OBJECT ABOVE

OBJECT BELOW (HIDDEN)

MATERIALS LEGEND

(SECTION)

RIGID INSULATION

BATT INSULATION
ROCK WOOL

SPRAY-APPLIED INSULATION

GYPSUM MATERIAL

STEEL

CONCRETE

EARTH

PLYWOOD

MATERIAL LEGEND

	CEMENTITIOUS PANEL - SW 6258 TRICORN BLACK
	CEMENTITIOUS SIdB (A) 6" SPACING SW 7674 PEPPERCORN
	CEMENTITIOUS SIdB (B) 1'-6" SPACING SW 7138 LAVENDER WISP
	CEMENTITIOUS SHAKE SIDING - SW 6254 LAZY GRAY
	WOOD LOOK PANEL - SAGPER - CHERRY ZEBRAWOOD OR SIM.
	OMJ - BASALITE 63WR - GROUND FACE

GENERAL NOTES

GENERAL

A. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS ON SITE PRIOR TO CONSTRUCTION.
B. INFORMATION REGARDING EACH CONSTRUCTION TRADE MAY BE LOCATED ON MANY SHEET IN THIS SET OF DRAWINGS. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT EACH SUBCONTRACTOR HAS A COMPLETE SET OF DRAWINGS FROM WHICH TO REVIEW, BID AND CONSTRUCT.
C. DIMENSIONS SHALL TAKE PRECEDENCE OVER DRAWINGS. DO NOT SCALE THE DRAWINGS.
D. ALL DIMENSIONS ARE TO FACE OF CONCRETE, FACE OF CONCRETE MASONRY UNITS, CENTERLINE OF COLUMNS AND BEAMS, OR FACE OF STUDS, UNLESS OTHERWISE NOTED.
E. ALL WORK SHALL BE PERFORMED IN COMPLIANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES AND AMENDMENTS. SECURE ALL REQUIRED PERMITS AND APPROVALS PRIOR TO ANY CONSTRUCTION.
F. THE TERM 'ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES' AS WELL AS ALL APPLICABLE STATUTES, REGULATIONS, ORDINANCES AND LAWS' IS INTENDED TO BE BROAD AND TO ENCOMPASS ANY AND ALL CODES, STATUTES, REGULATIONS, ORDINANCES AND LAWS, AS AMENDED, APPLICABLE TO SOME OR ALL ASPECTS OF THIS PROJECT, IN WHOLE OR IN PART. ANY REFERENCE TO A SPECIFIC CODE, STATUTE, REGULATION, ORDINANCE OR LAW IS NOT INTENDED AS ANY EXCLUSIVE IDENTIFICATION OF THE APPLICABLE CONSTRUCTION STANDARD, UNLESS OTHERWISE EXPRESSLY NOTED. OTHER CODES, STATUTES, REGULATIONS, ORDINANCES AND LAWS MAY ALSO APPLY UNDER THE CIRCUMSTANCES.
G. ALL WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER AND TO THE HIGHEST STANDARDS.
H. GENERAL CONTRACTOR SHALL COORDINATE THE CONSTRUCTION OF AN EXTERIOR FINISH MOCKUP WALL FOR OWNER/ARCHITECT APPROVAL PRIOR TO FINISH INSTALLATION. THE MOCKUP WALL SHALL INCLUDE A REPRESENTATION OF EACH OF THE EXTERIOR FINISH MATERIALS ALONG WITH ASSOCIATED WEATHER RESISTIVE ASSEMBLIES AND BUILDING ENVELOPE, INCLUDING BUT NOT LIMITED TO FLASHING SYSTEMS.
I. THE CIVIL, STRUCTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS ARE SUPPLEMENTARY TO THE ARCHITECTURAL DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK WITH THE ARCHITECTURAL DRAWINGS BEFORE PROCEEDING WITH INSTALLATION OF CIVIL, STRUCTURAL, MECHANICAL, PLUMBING AND ELECTRICAL WORK. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THE ARCHITECT'S AND THE CONSULTING ENGINEER'S DRAWINGS AND SPECIFICATIONS, IT SHALL BE BROUGHT TO THE ARCHITECTS ATTENTION FOR CLARIFICATION PRIOR TO THE INSTALLATION OF SAID WORK.
J. DOT ALS MARKED TYPICAL "SHALL APPLY WALL CASES UNLESS SPECIFICALLY INDICATED OTHERWISE.
K. FLOOR ELEVATIONS ARE TO TOP OF CONCRETE SLAB OR TOP OF FLOOR SHEATHING, UNLESS NOTED OTHERWISE.
L. CONTRACTOR SHALL INSTALL ALL MATERIALS AND EQUIPMENT IN STRICT ACCORDANCE WITH ALL APPLICABLE MANUFACTURER GUIDELINES, INSTRUCTIONS AND RECOMMENDATIONS. ANY APPARENT CONFLICTS SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION PRIOR TO INSTALLATION.
M. ANY REFERENCES IN WHICH CONTRACTOR REQUIRES ADDITIONAL DETAILS FROM MANUFACTURER IN ORDER TO CONSTRUCT THIS PROJECT, CONTRACTOR SHALL REQUEST THE SAME, IN WRITING, FROM THE ARCHITECT.
N. IF ANY AMBIGUITIES SHOULD APPEAR IN THE CONTRACT DOCUMENTS, REQUEST CLARIFICATION FROM THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK. IF THE CONTRACTOR FAILS TO MAKE SUCH A REQUEST, NO EXCUSE WILL BE ENTERTAINED FOR THE FAILURE TO CARRY OUT THE WORK IN A MANNER SATISFACTORY TO THE ARCHITECT/ENGINEER.
O. INSTALL ALL PRODUCTS ACCORDING TO MANUFACTURER GUIDELINES. IN THE EVENT OF A DISCREPANCY BETWEEN MANUFACTURER INSTALLATION GUIDELINES AND DETAILS IN THE CONSTRUCTION DOCUMENTS, THE CONTRACTOR SHALL CONTACT THE ARCHITECT/ENGINEER FOR CLARIFICATION PRIOR TO PROCEEDING WITH WORK.
P. IN THE EVENT OF DISCREPANCIES BETWEEN PROJECT SPECIFICATIONS, GENERAL NOTES, PLANS AND DETAILS, THE MOST STRINGENT REQUIRED SHALL APPLY, UNLESS APPROVED IN WRITING BY ARCHITECT/ENGINEER.

ACCESSIBILITY:

A. ACCESSIBILITY DETAILS ON SHEETS *A-1.0 - A-5.5* INDICATE GENERAL ACCESSIBILITY REQUIREMENTS ASSOCIATED WITH THIS PROJECT AND ARE NOT EXHAUSTIVE. PROJECT IS REQUIRED TO COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL ACCESSIBILITY REQUIREMENTS.

FOUNDATION:

A. ALL FOUNDATION WALLS AND SLABS ON GRADE ARE SUBJECT TO DRAINAGE DETAILS. SEE GEOTECHNICAL REPORT. SHOULD BUILDING CONDITIONS OR SITE CONDITIONS NOT MATCH THE FINAL SOILS REPORT, CONTACT THE ARCHITECT.
B. SLOPE ALL CONCRETE AWAY FROM EXTERIOR WALLS. MAXIMUM SLOPE OF LANDINGS AT ALL EXTERIOR DOORS SHALL NOT EXCEED 1/4" PER FOOT.

FRAMING / TRUSSES:

A. GENERAL CONTRACTOR SHALL PROVIDE BLOCKING FOR ALL CABINETS, CEILING FANS, TV LOCATIONS (AS INDICATED ON PLANS), AND BATH ACCESSORIES INCLUDING BLOCKING FOR GRAB BAR LOCATIONS AT ALL ACCESSIBLE UNITS. REFER TO UNIT ACCESSIBILITY PLANS FOR BLOCKING LOCATIONS FOR THE FUTURE INSTALLATION OF BLOCKING LOCATIONS.

STAIRS AND RAILINGS:

A. PREFABRICATED STEEL STAIRS ALONG WITH ASSOCIATED HANDRAILS AND GUARDRAILS SHALL BE A DEFERRED SUBMITTAL.
B. GENERAL CONTRACTOR SHALL COORDINATE FLOOR OPENINGS AND STAIR CONSTRUCTION WITH SUBCONTRACTOR AND ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN. FIELD VERIFY ALL DIMENSIONS.

DOORS / WINDOWS / GLAZING:

A. ALL DOORS TO HAVE A 4" JAMB ORBE CENTERED ON WALL, UNLESS NOTED OTHERWISE.
B. ALL WINDOWS SHALL BE LOW-E WITH ARGON FILLED AND DOUBLE GLAZED. RE: WINDOW SCHEDULE FOR ANY UPGRADED STC LOCATIONS.
C. OPERABLE WINDOWS WITHIN THE DWELLING UNIT SHALL HAVE A FINISHED SILL HEIGHT OF 3'6" MIN AFF OR THE WINDOW SHALL BE PROVIDED WITH A FALL PREVENTION DEVICE.
D. CONTRACTOR SHALL VERIFY ALL ROUGH OPENING DIMENSIONS OF DOOR AND WINDOW UNITS WITH MANUFACTURER BEFORE FRAMING AND SHALL PROVIDE R.O. AS REQUIRED TO ACCOMMODATE LOCATIONS OF WINDOWS AS DIMENSIONED ON DRAWINGS.
E. PROVIDE SAFETY GLAZING AT ALL HAZARDOUS LOCATIONS AS LISTED PER IBC.
F. ALL EXTERIOR DOORS LEADING TO UNHEATED AREAS TO BE WEATHERSTRIPPED.
G. EXTERIOR OPENINGS AND PENETRATIONS IN THE WALL PENETRATIONS SHALL BE FLASHED IN SUCH A MANNER AS TO MAKE THEM WEATHERPROOF AND SHALL BE TESTED ON THE APPROVED MOCK-UP WALL FOR WATER PENETRATION PER ASTM E1105-15.

EXTERIOR:

A. PROVIDE WATER AND ICE PROTECTION EXTENDING A MINIMUM OF TWO (2) FEET INSIDE THE EXTERIOR WALL LINE AT EAVES OF CONDITIONED AREA AT SLOPED ROOFS.
B. PROVIDE POSITIVE SLOPE AWAY DOWN & OPE TERMINATIONS OF ROOF SURFACE WHERE EGRESS OR PATH OF TRAVEL OCCURS BELOW EAVE IN CLIMATES SUBJECT TO SNOW.
C. ALL MISCELLANEOUS SUB ROOF PENETRATIONS SUCH AS FLASHING, CONVECTORS, DRAIN LINES, SCUPPERS, DOWNSPOUTS, SIDEWALL VENTS, ETC. SHALL BE PAINTED TO MATCH THE ADJACENT FINISH MATERIALS UNLESS NOTED OTHERWISE.
D. WOOD LESS THAN 8" ABOVE GRADE OR IN CONTACT WITH CONCRETE SHALL BE TREATED OR WOOD OF NATURAL RESISTANCE TO DECAY.
E. ALL MECHANICAL, ELECTRICAL, PLUMBING, AND SIMILAR PENETRATIONS IN THE EXTERIOR WALL SHALL BE PROTECTED WITH ONE PIECE, PREMANUFACTURED FLASHING PANELS; QUICKFLASH OR EQUAL.

INTERIOR SPACES & DWELLING UNITS:

A. ALL OCCUPIABLE INTERIOR SPACES SHALL HAVE BASE BOARD TRIM AT ALL FLOORS UNLESS NOTED OTHERWISE.
B. CABINET LAYOUTS ARE CONCEPTUAL. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR FINAL CONFIGURATION FOR APPROVAL BY OWNER AND ARCHITECT. ELECTRICAL AND PLUMBING TRADES SHALL COORDINATE WITH FINAL APPROVED LAYOUTS.
C. INTERIOR FINISH SHALL COMPLY ENTIRELY WITH REQUIREMENTS OF IBC.

SIGNAGE

A. SIGNAGE SHALL MEET LOCAL CODE REQUIREMENTS AND BE PROVIDED BY G.C. SIGNAGE SHALL BE A DEFERRED SUBMITTAL AS DESCRIBED BELOW.
   a. EXIT SIGNS SHALL BE PROVIDED AT THE PATH OF TRAVEL TO AND WITH EXITS IN A BUILDING. THEY SHALL BE READILY VISIBLE FROM ANY DIRECTION OF APPROACH.
   b. EXIT SIGNS SHALL BE LOCATED AS NECESSARY TO CLEARLY INDICATE THE DIRECTION OF EGRESS. TRAVEL NO POINT SHALL BE MORE THAN 100 FEET FROM THE NEAREST VISIBLE SIGN, PER IBC.
   c. ADDRESS IDENTIFICATION MUST BE INSTALLED PER IBC AND IFC; CONTRASTING 4" NUMBERS OR LETTERS WITH 1/2" STROKE.
   d. REQUIRED ACCESSIBLE ELEMENTS SHALL BE IDENTIFIED BY THE INTERNATIONAL SYMBOL OF ACCESSIBILITY PER IBC.
   e. DIRECTIONAL SIGNAGE INDICATING ROUTE TO ACCESSIBLE ELEMENTS SHALL BE PROVIDED PER IBC.
   f. PROVIDE ROOM SIGNAGE AT ALL ROOMS OR EXIT PASSAGEWAYS.

GYPSUM WALL BOARD, SEPARATIONS AND FIRE BLOCKING

A. ALL GWB TO BE INSTALLED PER IEBC.
B. AT SLAB FOUNDATION, ALL INTERIOR GYPSUM WALL BOARD TO BE HELD OFF CONCRETE BY 1/4". IN FIRE RATED ASSEMBLIES, SEAL 1/4" GAP WITH FIRE CAULK.
C. ALL TUBS AND SHOWER ENCLOSURES TO BE FINISHED WITH A HARD, NON-ABSORBENT SURFACE TO A MINIMUM HEIGHT OF 84 INCHES ABOVE THE DRAIN INLET. MAINTAIN FIRE RATED WALL ASSEMBLIES AT PLUMBING FIXTURES. PRE ROCK WALLS WITH 5/8" FIRE RATED GWB AS REQUIRED.
D. PROVIDE FIRE BLOCKING BETWEEN FLOORS EQUIVALENT TO THE RAWBER BY USG AND AT ALL LOCATIONS REQUIRING FIRE BLOCKING PER IBC.
E. PENETRATIONS THROUGH RATED FLOOR CEILING ASSEMBLIES REQUIRE PROTECTION. PROVIDE FIRE DAMPERS OR APPROVED EQUAL AT HVAC PENETRATIONS IN RATED FLOOR CEILING ASSEMBLIES.
F. FIRESTOP ALL PENETRATIONS IN THE FIRE-RATED ASSEMBLIES INCLUDING (BUT NOT EXCLUSIVELY) PIPES, PLUMBING AND VENT LINES W/ APPROVED FIRESTOPPING MATERIALS AND METHODS. ALL FIRESTOPPING MATERIALS SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS AND INSTALLED IN A MANNER THAT IS CONFORM TO UL LISTINGS FOR THROUGH PENETRATION FIRE STOP SYSTEMS. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FURNISHED BY THE MANUFACTURER OF THE FIRE STOP MATERIAL WHICH SHOW COMPLETE CONFORMANCE TO THE UL LISTING. SHOP DRAWINGS TO BE SUBMITTED TO THE ARCHITECT AND SHALL BE AVAILABLE TO THE CITY INSPECTORS. THE DRAWINGS SHALL BE SPECIFIC FOR EACH PENETRATION, WITH ALL VARIABLES DEFINED.
G. THE INTERIOR WALL AND CEILING FINISHES IN THE UNITS AND CORRIDORS SHALL BE FINISH TESTED IN ACCORDANCE WITH WITH THE IBC.
H. PROVIDE FIRE BLOCKING AND DRAFT STOP AT ALL CONCEALED SPACES AT WALLS, STAIR STRINGERS, FLOOR & CEILING OPENINGS AND SOFFITS PER IBC. ATTIC DRAFT STOPS TO BE CONTINUOUS TO UNDERSIDE OF ROOF SHEATHING, TO FACE OF EXTERIOR WALLS AS REQUIRED BY THE IBC.
I. MEMBRANE PENETRATIONS: OF FIRE-RESISTIVE WALLS SHALL COMPLY WITH IBC. THE ANNULAR SPACE CREATED BY THE PENETRATION OF A FIRE SPRINKLER SHALL BE PERMITTED TO BE UNPROTECTED, PROVIDED SUCH SPACE IS COVERED BY A METAL ESCUTCHEON PLATE.
J. SCREW NAILING PATTERNS SHALL BE THE MORE STRINGENT OF THE FOLLOWING: AS REQUIRED BY THE FIRE RATED ASSEMBLY OR SHEAR REQUIREMENTS BY THE STRUCTURAL ENGINEER (PE: STRUCTURAL).

MECHANICAL / ELECTRICAL / PLUMBING:

A. PROVIDE COMBUSTION AIR TO GAS WATER HEATER PER LOCAL CODES.
B. LOCATIONS OF UTILITIES METERS, UTILITIES AND/AND/OR APPLIANCES (I.E. HVAC EQUIPMENT ETC.) ARE APPROXIMATE. GENERAL CONTRACTOR TO FIELD VERIFY. FINAL LOCATIONS WITH ARCHITECT/ENGINEER PRIOR TO INSTALLATION.
C. CONTRACTOR SHALL COORDINATE AND VERIFY ALL PLUMBING ROUGH-IN LOCATIONS.
D. VENT ALL DRYERS TO THE OUTSIDE. REFER TO MECH DRAWINGS FOR RECOMMENDED MAX. LENGTHS OF DUCTS.
E. SOIL, WASTE, AND DRAIN PIPES RUNNING IN CHASSIS AND CEILING PLENUMS OF UNITS ARE RECOMMENDED TO BE CAST IRON FOR ACOUSTIC PERFORMANCE. IF PVC PIPING IS USED, THE PIPING SHALL BE LOCATED AWAY FROM ACOUSTICALLY SENSITIVE AREAS OR IN AN ISOLATED MECHANICAL CHASE.
F. GENERAL CONTRACTOR SHALL SCHEDULE AN ELECTRICAL BOX-WALK WITH THE OWNER, ELECTRICAL SUBCONTRACTOR, ELECTRICAL ENGINEER, AND ARCHITECT PRIOR TO ROUGH-IN OF ELECTRICAL.
G. GENERAL CONTRACTOR SHALL ENSURE THOROUGH TESTING SO THAT EACH PIECE OF ELECTRICAL, MECHANICAL, AND PLUMBING EQUIPMENT FUNCTIONS PROPERLY PRIOR TO BUILDING OCCUPANCY.
H. WHERE INDIVIDUAL BOXES (TELEPHONE, ELECTRICAL ETC.) ARE INSTALLED ON EITHER SIDE OF A PARTITION SEPARATING DWELLING UNITS OR DWELLING UNIT & CORRIDOR, STAGGER BOXES A MINIMUM OF 24". THESE BOXES SHALL ALSO BE COVERED WITH EITHER A FIRE OR SOUND PUTTY PAD. ENSURE ELECTRICAL BOXES AND FIXTURES ARE INSTALLED PER IBC FOR MINIMUM MEMBRANE PENETRATION PROTECTION REQUIREMENTS.

FIRE DAMPERS & FIRE SAFETY:

A. FIRE ALARM SYSTEMS AND AUTOMATIC SPRINKLERS SHALL BE A DEFERRED SUBMITTAL AS DESCRIBED BELOW.
B. AN APPROVED FIRE ALARM SYSTEM SHALL BE INSTALLED IN CONFORMANCE WITH BUILDING AND FIRE CODES. ALARM DRAWINGS SHALL BE SUBMITTED TO FIRE DEPARTMENT FOR REVIEW AND APPROVAL.
C. AUTOMATIC SPRINKLER SYSTEM PLANS SHALL BE SUBMITTED TO DETERMINE COMPLIANCE WITH APPLICABLE BUILDING, PLUMBING, AND FIRE CODES TO THE FIRE DEPARTMENT FOR REVIEW AND APPROVAL.
D. ALL APPROVED ALARMS SHALL BE INTERCONNECTED AND ZONED PER IBC.
E. AN APPROVED AUDIBLE SPRINKLER FLOW ALARM SHALL BE PROVIDED IN ACCORDANCE WITH IBC.

SOUND MITIGATION:

A. REFER TO ASSEMBLY SHEETS FOR DOCUMENTATION OF PROJECT'S STC REQUIREMENTS.
B. INSTALL ACOUSTICAL SEALANT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS WHERE GYPSUM BOARD JOINS OTHER WALLS OR SURFACES AT SOUND CONTROL PARTITIONS.
C. RESILIENT CHANNELS MUST BE INSTALLED PROPERLY TO ACHIEVE THE FULL STC PERFORMANCE RATINGS LISTED ON THE PLANS. INSTALL RESILIENT CHANNELS PER MANUFACTURER'S REQUIREMENTS.

SPECIAL INSPECTION REPORTS:

ALL SPECIAL INSPECTION REPORTS SHALL BE SUBMITTED TO THE CITY INSPECTOR

DEFERRED / SEPARATE SUBMITTALS

ITEMS BEING PROVIDED AS A DEFERRED SUBMITTAL ARE AS FOLLOWS:
- PREFABRICATED WOOD TRUSSES
- PREFABRICATED STEEL STAIRS
- PRE-ENGINEERED STEEL HAND RAILS/GUARDRAILS
- PRE-ENGINEERED ROOFTOP MECHANICAL SCREENS

NOTE: SHALL NOT BE INSTALLED UNTIL APPROVED. RE: IBC 107.3.4.1 — 1

ITEMS BEING PROVIDED AS A SEPARATE SUBMITTAL ARE AS FOLLOWS:
- FIRE PROTECTION PLANS
  - SPRINKLER SYSTEM
  - FIRE ALARMS
  - EMERGENCY RESPONSE COMMUNICATION SYSTEM
- SIGNAGE SIGN AND BUILDING AND SITE SIGNAGE REQUIRED BY IBC - SECTION 1110
- ELEVATOR CONTROL PANELS
- TRASH CHUTE DESIGN
- ACCESS CONTROL PERMIT
- SPECIAL INSPECTIONS
- ROOFTOP SOLAR SYSTEM — 2

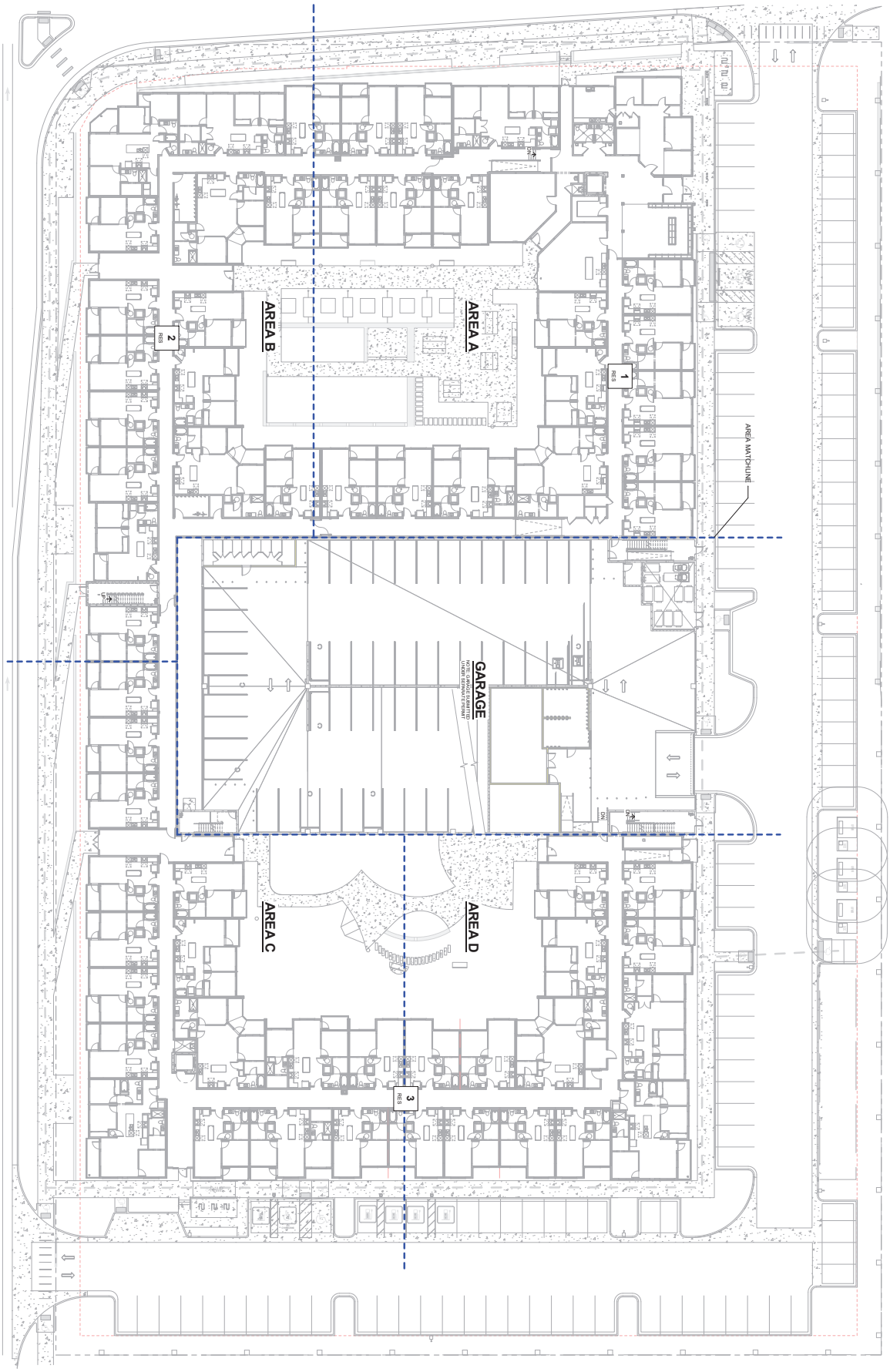
SHOP DRAWINGS AND CALCULATIONS AS NECESSARY FOR ITEMS LISTED ABOVE SHALL BE STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF COLORADO.

THE ARCHITECT SHALL REVIEW DEFERRED SUBMITTAL DRAWINGS AND CALCULATIONS FOR GENERAL CONFORMANCE WITH THE DESIGN INTENT OF THE PROJECT AND COMPLIANCE WITH THE INFORMATION PROVIDED IN THE CONSTRUCTION DOCUMENTS ONLY. RESPONSIBILITY FOR THE DESIGN SHOWN ON THE DOCUMENTS RESTS SOLELY ON THE INDIVIDUAL WHOSE PROFESSIONAL SEAL APPEARS THEREON.

DEFERRED SUBMITTAL SUBCONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING DRAWINGS AND CALCULATIONS TO THE GENERAL CONTRACTOR FOR REVIEW AND APPROVAL. THE GENERAL CONTRACTOR SHALL REVIEW THE DOCUMENTS PRIOR TO SUBMITTAL TO THE ARCHITECT.

THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING THE DEFERRED SUBMITTAL DOCUMENTS TO THE ARCHITECT FOR REVIEW AND APPROVAL. THE ARCHITECT SHALL REVIEW THE DOCUMENTS PRIOR TO SUBMITTAL TO THE REGULATING AUTHORITIES.

THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING THE DEFERRED SUBMITTAL DOCUMENTS TO THE REGULATING AUTHORITIES FOR REVIEW AND APPROVAL. FABRICATION AND INST



1 OVERALL BUILDING SHEET AREAS
1/16" = 1'-0"

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ISSUE FOR CONSTRUCTION
08.07.2024

No.	Date	Issue

Project number: 22201
Drawn by: CG / CB / TT / NV
Checked by: JD
Title: BUILDING SHEET AREAS
Project director: DR
Signature/date: DV

Sheet number: A0-2.1

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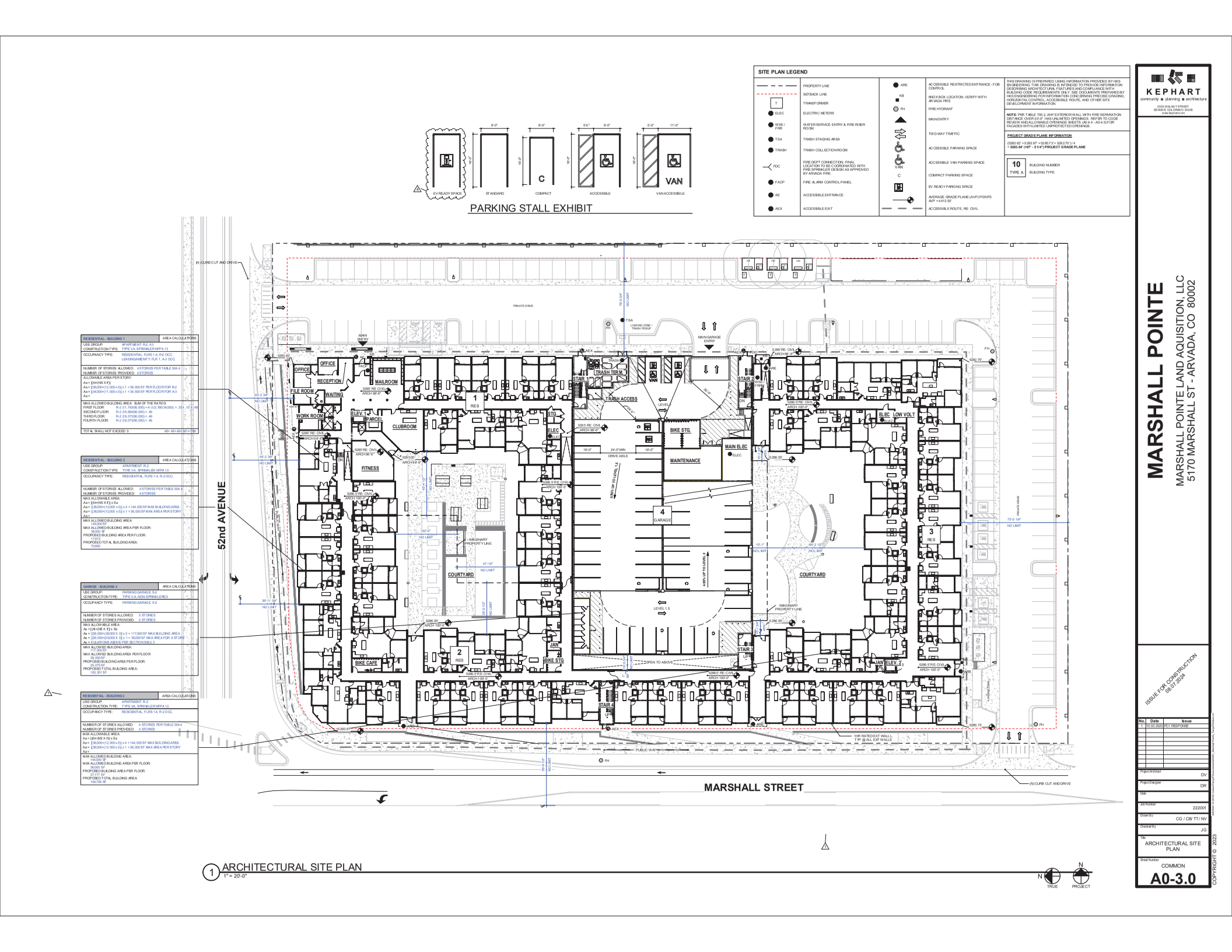

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ISSUE FOR CONSTRUCTION
06.01.2023

No.	Date	Issue
1	10.03.2023	RCI RESPONSE

Project Architect: DV
Project Designer: DR
Title:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: ARCHITECTURAL SITE PLAN
Sheet Number: COMMON
A0-3.0

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ACCESSIBLE DWELLING UNITS:
REQUIRED: " ALL UNITS (280 UNITS) SHALL MEET ICC ANSI 117.1 (2009) TYPE B UNITS MINIMUM AND 5% OF ALL UNITS (13 UNITS) SHALL BE TYPE A UNITS (5% TYPE A UNITS AS REQUIRED BY UFAS REGULATIONS)

PROVIDED: (13) TYPE A UNITS
(7) 1 BED / 1 BATH
(5) 2 BED / 2 BATH
(1) 3 BED / 2 BATH

1BR/1BA UNIT #'S (7 UNITS)
219 273
319 391
373 442
491

2BR/2BA UNIT #'S (5 UNITS)
202 264
316 364
416

3BR/2BA UNIT #'S (1 UNITS)
491

VISUAL / HEARING IMPAIRED UNITS:
REQUIRED: 2% OF ALL DWELLING UNITS PROVIDED IN ADDITION TO THE TYPE A UNITS MUST BE ACCESSIBLE FOR HEARING/VISON IMPAIRED. PER UFAS REQUIREMENTS

PROVIDED: (19) VISION/HEARING IMPAIRED UNITS PROVIDED
(13) LOCATED IN TYPE A UNITS,
(6) UNITS AS INDICATED BELOW

1BR/1BA UNIT #'S (3 UNITS)
281 357
497

2BR/2BA UNIT #'S (2 UNITS)
244 306

3BR/2BA UNIT #'S (1 UNIT)
- 427

TITLE 9 - COLORADO STATE STATUTE

- POINTS REQUIRED FOR 280 UNITS - 114 POINTS
- POINTS PROVIDED FOR ALL UNITS: 1,068 POINTS - 247 TYPE B (x 4 POINTS) + 13 TYPE A (x 6 POINTS)

UNIT MATRIX - UNIT NO.

UNIT #	UNIT NAME	UNIT TYPE	LEVEL	UNIT ANSI TYPE	V/H IMPAIRED UNIT
104	UNIT C1 E1	3BD/3BA	LEVEL 1	TYPE B	
105	UNIT A1 E1	1BD/1BA	LEVEL 1	TYPE B	
106	UNIT A1 E1	1BD/1BA	LEVEL 1	TYPE B	
107	UNIT A1 E1	1BD/1BA	LEVEL 1	TYPE B	
108	UNIT A1 E1	1BD/1BA	LEVEL 1	TYPE B	
109	UNIT A1 E1	1BD/1BA	LEVEL 1	TYPE B	
110	UNIT A1 E1	1BD/1BA	LEVEL 1	TYPE B	
111	UNIT A1 E1	1BD/1BA	LEVEL 1	TYPE B	
112	UNIT C1 E1	3BD/3BA	LEVEL 1	TYPE B	
113	UNIT B3 E1	2BD/2BA	LEVEL 1	TYPE B	
114	UNIT C3 E1	3BD/3BA	LEVEL 1	TYPE B	
115	UNIT A1 E1	1BD/1BA	LEVEL 1	TYPE B	
117	UNIT A1 E1	1BD/1BA	LEVEL 1	TYPE B	
118	UNIT A1 E1	1BD/1BA	LEVEL 1	TYPE B	
119	UNIT B1 E1	2BD/1BA	LEVEL 1	TYPE B	
120	UNIT A1 E3	1BD/1BA	LEVEL 1	TYPE B	
121	UNIT B3 E1	2BD/2BA	LEVEL 1	TYPE B	
122	UNIT A1 E3	1BD/1BA	LEVEL 1	TYPE B	
123	UNIT A1 E3	1BD/1BA	LEVEL 1	TYPE B	
124	UNIT A1 E3	1BD/1BA	LEVEL 1	TYPE B	
125	UNIT A1 E3	1BD/1BA	LEVEL 1	TYPE B	

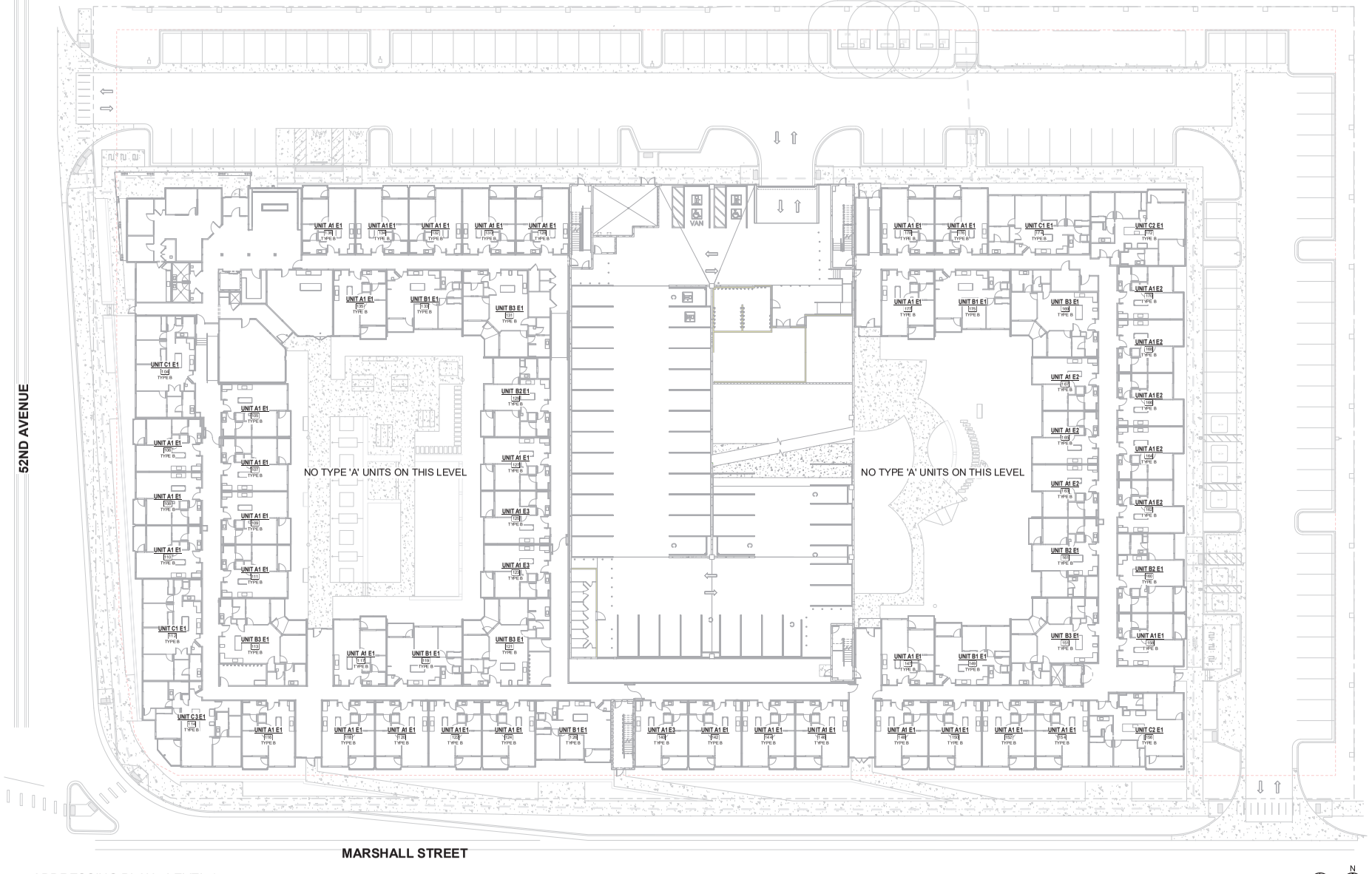
UNIT MATRIX - UNIT NO.

UNIT #	UNIT NAME	UNIT TYPE	LEVEL	UNIT ANSI TYPE	V/H IMPAIRED UNIT
126	UNIT B1 E1	2BD/1BA	LEVEL 1	TYPE B	
127	UNIT A1 E1	1BD/1BA	LEVEL 1	TYPE B	
128	UNIT A1 E1	1BD/1BA	LEVEL 1	TYPE B	
129	UNIT B2 E1	2BD/2BA	LEVEL 1	TYPE B	
130	UNIT A1 E1	1BD/1BA	LEVEL 1	TYPE B	
131	UNIT B3 E1	2BD/2BA	LEVEL 1	TYPE B	
132	UNIT A1 E2	1BD/1BA	LEVEL 1	TYPE B	
133	UNIT B1 E1	2BD/1BA	LEVEL 1	TYPE B	
134	UNIT A1 E1	1BD/1BA	LEVEL 1	TYPE B	
135	UNIT A1 E1	1BD/1BA	LEVEL 1	TYPE B	
136	UNIT A1 E1	1BD/1BA	LEVEL 1	TYPE B	
140	UNIT A1 E3	1BD/1BA	LEVEL 1	TYPE B	
142	UNIT A1 E1	1BD/1BA	LEVEL 1	TYPE B	
144	UNIT A1 E1	1BD/1BA	LEVEL 1	TYPE B	
146	UNIT A1 E1	1BD/1BA	LEVEL 1	TYPE B	
147	UNIT A1 E1	1BD/1BA	LEVEL 1	TYPE B	
148	UNIT A1 E1	1BD/1BA	LEVEL 1	TYPE B	
149	UNIT B1 E1	2BD/1BA	LEVEL 1	TYPE B	
150	UNIT A1 E1	1BD/1BA	LEVEL 1	TYPE B	
151	UNIT B3 E1	2BD/2BA	LEVEL 1	TYPE B	
152	UNIT A1 E1	1BD/1BA	LEVEL 1	TYPE B	

UNIT MATRIX - UNIT NO.

UNIT #	UNIT NAME	UNIT TYPE	LEVEL	UNIT ANSI TYPE	V/H IMPAIRED UNIT
154	UNIT A1 E1	1BD/1BA	LEVEL 1	TYPE B	
156	UNIT C2 E1	3BD/2BA	LEVEL 1	TYPE B	
159	UNIT A1 E1	1BD/1BA	LEVEL 1	TYPE B	
160	UNIT B2 E1	2BD/2BA	LEVEL 1	TYPE B	
161	UNIT B2 E1	2BD/2BA	LEVEL 1	TYPE B	
162	UNIT A1 E2	1BD/1BA	LEVEL 1	TYPE B	
163	UNIT A1 E2	1BD/1BA	LEVEL 1	TYPE B	
164	UNIT A1 E2	1BD/1BA	LEVEL 1	TYPE B	
165	UNIT A1 E2	1BD/1BA	LEVEL 1	TYPE B	
166	UNIT A1 E2	1BD/1BA	LEVEL 1	TYPE B	
167	UNIT A1 E2	1BD/1BA	LEVEL 1	TYPE B	
168	UNIT A1 E2	1BD/1BA	LEVEL 1	TYPE B	
169	UNIT B3 E1	2BD/2BA	LEVEL 1	TYPE B	
170	UNIT A1 E1	1BD/1BA	LEVEL 1	TYPE B	
172	UNIT C2 E1	3BD/2BA	LEVEL 1	TYPE B	
174	UNIT C1 E1	3BD/2BA	LEVEL 1	TYPE B	
175	UNIT B1 E1	2BD/1BA	LEVEL 1	TYPE B	
176	UNIT A1 E1	1BD/1BA	LEVEL 1	TYPE B	
177	UNIT A1 E1	1BD/1BA	LEVEL 1	TYPE B	
178	UNIT A1 E1	1BD/1BA	LEVEL 1	TYPE B	

LEVEL 1 - 82



1 ADDRESSING PLAN - LEVEL 1
1/16" = 1'-0"

N TRUE N PROJECT

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ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT/ NV
Checked By: JG
Title: ADDRESSING & ACCESSIBILITY
Sheet Number: A0-3.1

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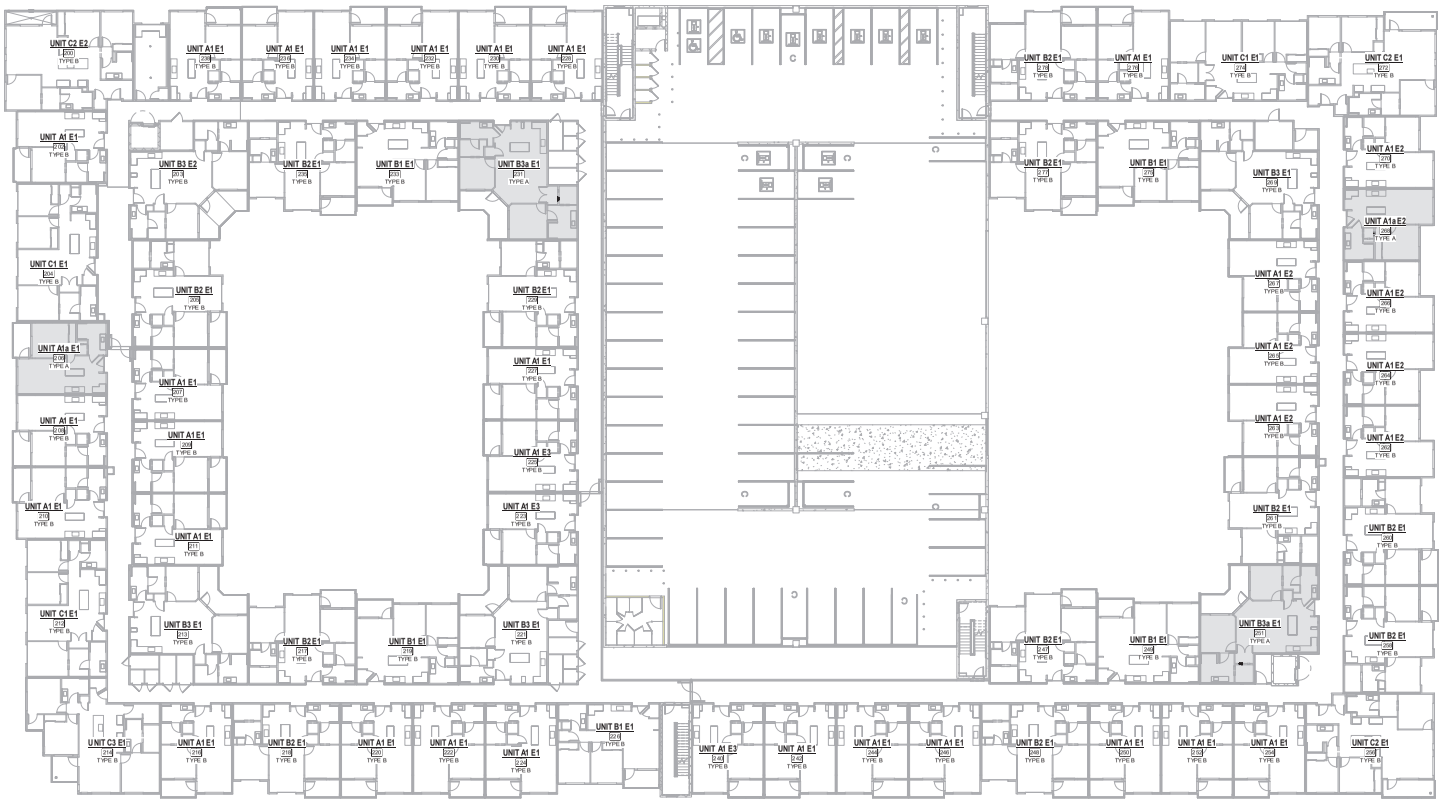
UNIT MATRIX - UNIT NO.

UNIT #	UNIT NAME	UNIT TYPE	LEVEL	UNIT ANSI TYPE	V/H/IMPAIRED UNIT
200	UNIT C2 E2	2BD/2BA	LEVEL 2	TYPE B	
202	UNIT A1 E1	1BD/1BA	LEVEL 2	TYPE B	
203	UNIT B3 E2	2BD/2BA	LEVEL 2	TYPE B	
204	UNIT C1 E1	2BD/2BA	LEVEL 2	TYPE B	
205	UNIT B2 E1	2BD/2BA	LEVEL 2	TYPE B	
206	UNIT A1a E1	1BD/1BA	LEVEL 2	TYPE A	V/H
207	UNIT A1 E1	1BD/1BA	LEVEL 2	TYPE B	
208	UNIT A1 E1	1BD/1BA	LEVEL 2	TYPE B	
209	UNIT A1 E1	1BD/1BA	LEVEL 2	TYPE B	
210	UNIT A1 E1	1BD/1BA	LEVEL 2	TYPE B	
211	UNIT A1 E1	1BD/1BA	LEVEL 2	TYPE B	
212	UNIT C1 E1	2BD/2BA	LEVEL 2	TYPE B	
213	UNIT B1 E1	2BD/2BA	LEVEL 2	TYPE B	
214	UNIT C3 E1	2BD/2BA	LEVEL 2	TYPE B	
216	UNIT A1 E1	1BD/1BA	LEVEL 2	TYPE B	
217	UNIT B2 E1	2BD/2BA	LEVEL 2	TYPE B	
218	UNIT B2 E1	2BD/2BA	LEVEL 2	TYPE B	
219	UNIT B1 E1	2BD/1BA	LEVEL 2	TYPE B	
220	UNIT A1 E1	1BD/1BA	LEVEL 2	TYPE B	
221	UNIT B3 E1	2BD/2BA	LEVEL 2	TYPE B	
222	UNIT A1 E1	1BD/1BA	LEVEL 2	TYPE B	
223	UNIT A1 E3	1BD/1BA	LEVEL 2	TYPE B	
224	UNIT A1 E1	1BD/1BA	LEVEL 2	TYPE B	
225	UNIT A1 E3	1BD/1BA	LEVEL 2	TYPE B	
226	UNIT B1 E1	2BD/1BA	LEVEL 2	TYPE B	
227	UNIT A1 E1	1BD/1BA	LEVEL 2	TYPE B	
228	UNIT A1 E1	1BD/1BA	LEVEL 2	TYPE B	
229	UNIT B2 E1	2BD/2BA	LEVEL 2	TYPE B	V/H
230	UNIT A1 E1	1BD/1BA	LEVEL 2	TYPE B	
231	UNIT B3a E1	2BD/2BA	LEVEL 2	TYPE A	V/H
232	UNIT A1 E1	1BD/1BA	LEVEL 2	TYPE B	
233	UNIT B1 E1	2BD/1BA	LEVEL 2	TYPE B	
234	UNIT A1 E1	1BD/1BA	LEVEL 2	TYPE B	

UNIT MATRIX - UNIT NO.

UNIT #	UNIT NAME	UNIT TYPE	LEVEL	UNIT ANSI TYPE	V/H IMPAIRED UNIT
235	UNIT B2 E1	2BD/2BA	LEVEL 2	TYPE B	
236	UNIT A1 E1	1BD/1BA	LEVEL 2	TYPE B	
238	UNIT A1 E1	1BD/1BA	LEVEL 2	TYPE B	
240	UNIT A1 E3	1BD/1BA	LEVEL 2	TYPE B	
242	UNIT A1 E1	1BD/1BA	LEVEL 2	TYPE B	
244	UNIT A1 E1	1BD/1BA	LEVEL 2	TYPE B	
246	UNIT A1 E1	1BD/1BA	LEVEL 2	TYPE B	
247	UNIT B2 E1	2BD/2BA	LEVEL 2	TYPE B	
248	UNIT B2 E1	2BD/2BA	LEVEL 2	TYPE B	
249	UNIT B1 E1	2BD/1BA	LEVEL 2	TYPE B	
250	UNIT A1 E1	1BD/1BA	LEVEL 2	TYPE B	
251	UNIT B3a E1	2BD/2BA	LEVEL 2	TYPE A	V/H
252	UNIT A1 E1	1BD/1BA	LEVEL 2	TYPE B	
254	UNIT A1 E1	1BD/1BA	LEVEL 2	TYPE B	
256	UNIT C2 E1	3BD/2BA	LEVEL 2	TYPE B	
258	UNIT B2 E1	2BD/2BA	LEVEL 2	TYPE B	
260	UNIT B2 E1	2BD/2BA	LEVEL 2	TYPE B	
261	UNIT B2 E1	2BD/2BA	LEVEL 2	TYPE B	
262	UNIT A1 E2	1BD/1BA	LEVEL 2	TYPE B	
263	UNIT A1 E2	1BD/1BA	LEVEL 2	TYPE B	
264	UNIT A1 E2	1BD/1BA	LEVEL 2	TYPE B	
265	UNIT A1 E2	1BD/1BA	LEVEL 2	TYPE B	
266	UNIT A1 E2	1BD/1BA	LEVEL 2	TYPE B	
267	UNIT A1 E2	1BD/1BA	LEVEL 2	TYPE B	
268	UNIT A1a E2	1BD/1BA	LEVEL 2	TYPE A	V/H
269	UNIT B3 E1	2BD/2BA	LEVEL 2	TYPE B	
270	UNIT A1 E2	1BD/1BA	LEVEL 2	TYPE B	
272	UNIT C2 E1	3BD/2BA	LEVEL 2	TYPE B	
274	UNIT C1 E1	3BD/2BA	LEVEL 2	TYPE B	
275	UNIT B1 E1	2BD/1BA	LEVEL 2	TYPE B	
276	UNIT A1 E1	1BD/1BA	LEVEL 2	TYPE B	V/H
277	UNIT B2 E1	2BD/2BA	LEVEL 2	TYPE B	
278	UNIT B2 E1	2BD/2BA	LEVEL 2	TYPE B	

LEVEL 2: 66



1 ADDRESSING PLAN - LEVEL 2
1/16" = 1'-0"

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5170 MARSHALL ST - ARVADA, CO 80002

ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: ADDRESSING & ACCESSIBILITY
Sheet Number: A0-3.2

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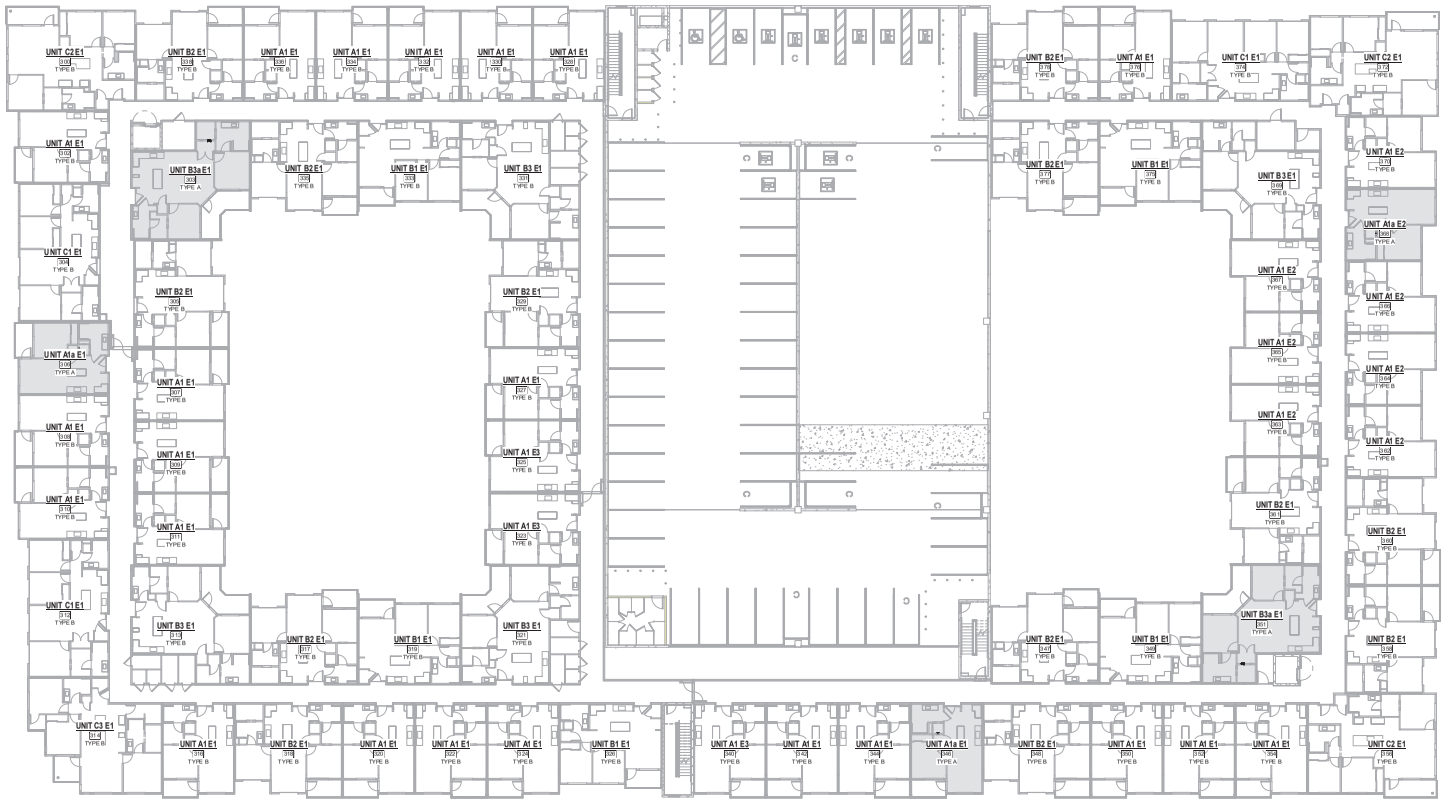
UNIT MATRIX - UNIT NO.					
UNIT #	UNIT NAME	UNIT TYPE	LEVEL	UNIT ANSI TYPE	V/H/IMPAIRED UNIT
300	UNIT C2 E1	2BD/2BA	LEVEL 3	TYPE B	
302	UNIT A1 E1	1BD/1BA	LEVEL 3	TYPE B	
303	UNIT B3a E1	2BD/2BA	LEVEL 3	TYPE A	V/H
304	UNIT C1 E1	2BD/2BA	LEVEL 3	TYPE B	
305	UNIT B2 E1	2BD/2BA	LEVEL 3	TYPE B	
306	UNIT A1a E1	1BD/1BA	LEVEL 3	TYPE A	V/H
307	UNIT A1 E1	1BD/1BA	LEVEL 3	TYPE B	
308	UNIT A1 E1	1BD/1BA	LEVEL 3	TYPE B	
309	UNIT A1 E1	1BD/1BA	LEVEL 3	TYPE B	
310	UNIT A1 E1	1BD/1BA	LEVEL 3	TYPE B	
311	UNIT A1 E1	1BD/1BA	LEVEL 3	TYPE B	
312	UNIT C1 E1	2BD/2BA	LEVEL 3	TYPE B	
313	UNIT B1E1	2BD/2BA	LEVEL 3	TYPE B	
314	UNIT C3 E1	2BD/2BA	LEVEL 3	TYPE B	
316	UNIT A1 E1	1BD/1BA	LEVEL 3	TYPE B	
317	UNIT B2E1	2BD/2BA	LEVEL 3	TYPE B	
318	UNIT B2E1	2BD/2BA	LEVEL 3	TYPE B	
319	UNIT B1E1	2BD/1BA	LEVEL 3	TYPE B	
320	UNIT A1E1	1BD/1BA	LEVEL 3	TYPE B	
321	UNIT B3E1	2BD/2BA	LEVEL 3	TYPE B	
322	UNIT A1E1	1BD/1BA	LEVEL 3	TYPE B	
323	UNIT A1E3	1BD/1BA	LEVEL 3	TYPE B	
324	UNIT A1E1	1BD/1BA	LEVEL 3	TYPE B	
325	UNIT A1E3	1BD/1BA	LEVEL 3	TYPE B	
326	UNIT B1E1	2BD/1BA	LEVEL 3	TYPE B	
327	UNIT A1E1	1BD/1BA	LEVEL 3	TYPE B	
328	UNIT A1E1	1BD/1BA	LEVEL 3	TYPE B	
329	UNIT B2E1	2BD/2BA	LEVEL 3	TYPE B	
330	UNIT A1E1	1BD/1BA	LEVEL 3	TYPE B	
331	UNIT B3E1	2BD/2BA	LEVEL 3	TYPE B	
332	UNIT A1E1	1BD/1BA	LEVEL 3	TYPE B	
333	UNIT B1E1	2BD/1BA	LEVEL 3	TYPE B	V/H
334	UNIT A1E1	1BD/1BA	LEVEL 3	TYPE B	

UNIT MATRIX - UNIT NO.					
UNIT #	UNIT NAME	UNIT TYPE	LEVEL	UNIT ANSI TYPE	V/H IMPAIRED UNIT
335	UNIT B2E1	2BD/2BA	LEVEL 3	TYPE B	
336	UNIT A1 E1	1BD/1BA	LEVEL 3	TYPE B	
338	UNIT B2E1	2BD/2BA	LEVEL 3	TYPE B	
340	UNIT A1E3	1BD/1BA	LEVEL 3	TYPE B	
342	UNIT A1E1	1BD/1BA	LEVEL 3	TYPE B	
344	UNIT A1E1	1BD/1BA	LEVEL 3	TYPE B	
346	UNIT A1a1E1	1BD/1BA	LEVEL 3	TYPE A	V/H
347	UNIT B2E1	2BD/2BA	LEVEL 3	TYPE B	
348	UNIT B2E1	2BD/2BA	LEVEL 3	TYPE B	
349	UNIT B1E1	2BD/1BA	LEVEL 3	TYPE B	
350	UNIT A1E1	1BD/1BA	LEVEL 3	TYPE B	
351	UNIT B3a1E1	2BD/2BA	LEVEL 3	TYPE A	V/H
352	UNIT A1E1	1BD/1BA	LEVEL 3	TYPE B	V/H
354	UNIT A1E1	1BD/1BA	LEVEL 3	TYPE B	
356	UNIT C2E1	3BD/2BA	LEVEL 3	TYPE B	
358	UNIT B2E1	2BD/2BA	LEVEL 3	TYPE B	
360	UNIT B2E1	2BD/2BA	LEVEL 3	TYPE B	
361	UNIT B2E1	2BD/2BA	LEVEL 3	TYPE B	
362	UNIT A1E2	1BD/1BA	LEVEL 3	TYPE B	
363	UNIT A1E2	1BD/1BA	LEVEL 3	TYPE B	
364	UNIT A1E2	1BD/1BA	LEVEL 3	TYPE B	
365	UNIT A1E2	1BD/1BA	LEVEL 3	TYPE B	
366	UNIT A1E2	1BD/1BA	LEVEL 3	TYPE B	
367	UNIT A1E2	1BD/1BA	LEVEL 3	TYPE B	
368	UNIT A1a1E2	1BD/1BA	LEVEL 3	TYPE A	V/H
369	UNIT B3E1	2BD/2BA	LEVEL 3	TYPE B	
370	UNIT A1E2	1BD/1BA	LEVEL 3	TYPE B	
372	UNIT C2E1	3BD/2BA	LEVEL 3	TYPE B	
374	UNIT C1E1	2BD/2BA	LEVEL 3	TYPE B	
375	UNIT B1E1	2BD/1BA	LEVEL 3	TYPE B	
376	UNIT A1E1	1BD/1BA	LEVEL 3	TYPE B	
377	UNIT B2E1	2BD/2BA	LEVEL 3	TYPE B	
378	UNIT B2E1	2BD/2BA	LEVEL 3	TYPE B	

LEVEL 3 86



1 ADDRESSING PLAN - LEVEL 3
1/16" = 1'-0"

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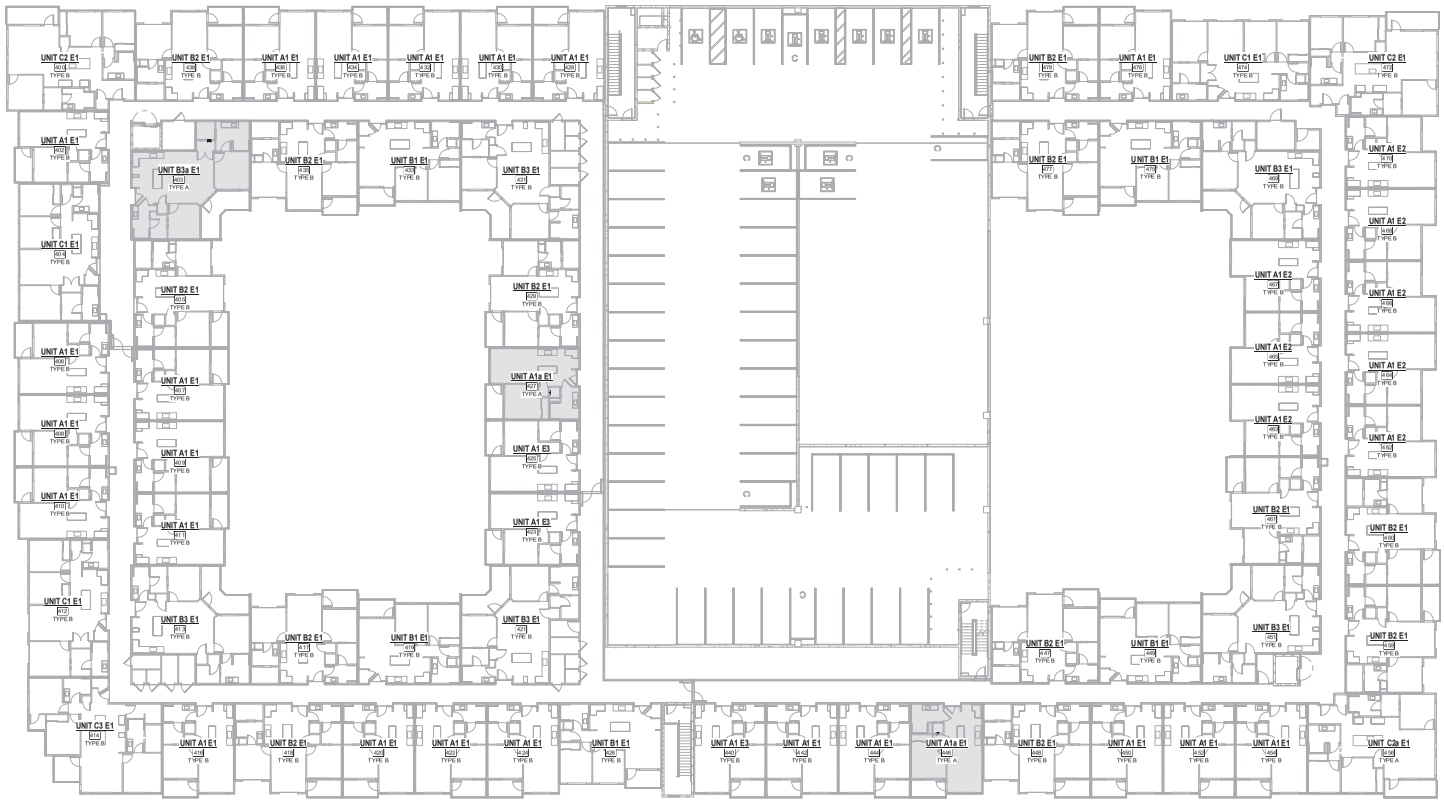
UNIT MATRIX - UNIT NO.					
UNIT #	UNIT NAME	UNIT TYPE	LEVEL	UNIT ANSI TYPE	VI/HI/IMPAIRED UNIT
400	UNIT C2 E1	2BD/2BA	LEVEL 4	TYPE B	
402	UNIT A1 E1	1BD/1BA	LEVEL 4	TYPE B	
403	UNIT B3a E1	2BD/2BA	LEVEL 4	TYPE A	VH
404	UNIT C1 E1	2BD/2BA	LEVEL 4	TYPE B	
405	UNIT B2 E1	2BD/2BA	LEVEL 4	TYPE B	
406	UNIT A1 E1	1BD/1BA	LEVEL 4	TYPE B	
407	UNIT A1 E1	1BD/1BA	LEVEL 4	TYPE B	
408	UNIT A1 E1	1BD/1BA	LEVEL 4	TYPE B	
409	UNIT A1 E1	1BD/1BA	LEVEL 4	TYPE B	
410	UNIT A1 E1	1BD/1BA	LEVEL 4	TYPE B	
411	UNIT A1 E1	1BD/1BA	LEVEL 4	TYPE B	
412	UNIT C1 E1	2BD/2BA	LEVEL 4	TYPE B	
413	UNIT B3 E1	2BD/2BA	LEVEL 4	TYPE B	
414	UNIT C3 E1	2BD/2BA	LEVEL 4	TYPE B	VH
416	UNIT A1 E1	1BD/1BA	LEVEL 4	TYPE B	
417	UNIT B2 E1	2BD/2BA	LEVEL 4	TYPE B	
418	UNIT B2 E1	2BD/2BA	LEVEL 4	TYPE B	
419	UNIT B1 E1	2BD/1BA	LEVEL 4	TYPE B	
420	UNIT A1 E1	1BD/1BA	LEVEL 4	TYPE B	
421	UNIT B3 E1	2BD/2BA	LEVEL 4	TYPE B	
422	UNIT A1 E1	1BD/1BA	LEVEL 4	TYPE B	
423	UNIT A1 E3	1BD/1BA	LEVEL 4	TYPE B	
424	UNIT A1 E1	1BD/1BA	LEVEL 4	TYPE B	
425	UNIT A1 E3	1BD/1BA	LEVEL 4	TYPE B	
426	UNIT B1 E1	2BD/1BA	LEVEL 4	TYPE B	
427	UNIT A1a E1	1BD/1BA	LEVEL 4	TYPE A	VH
428	UNIT A1 E1	1BD/1BA	LEVEL 4	TYPE B	
429	UNIT B2 E1	2BD/2BA	LEVEL 4	TYPE B	
430	UNIT A1 E1	1BD/1BA	LEVEL 4	TYPE B	
431	UNIT B3 E1	2BD/2BA	LEVEL 4	TYPE B	
432	UNIT A1 E1	1BD/1BA	LEVEL 4	TYPE B	
433	UNIT B1 E1	2BD/1BA	LEVEL 4	TYPE B	
434	UNIT A1 E1	1BD/1BA	LEVEL 4	TYPE B	VH

UNIT MATRIX - UNIT NO.					
UNIT #	UNIT NAME	UNIT TYPE	LEVEL	UNIT ANSI TYPE	VI/HI/IMPAIRED UNIT
435	UNIT B2 E1	2BD/2BA	LEVEL 4	TYPE B	
436	UNIT A1 E1	1BD/1BA	LEVEL 4	TYPE B	
438	UNIT B2 E1	2BD/2BA	LEVEL 4	TYPE B	
440	UNIT A1 E3	1BD/1BA	LEVEL 4	TYPE B	
442	UNIT A1 E1	1BD/1BA	LEVEL 4	TYPE B	
444	UNIT A1 E1	1BD/1BA	LEVEL 4	TYPE B	
446	UNIT A1a E1	1BD/1BA	LEVEL 4	TYPE A	VH
447	UNIT B2 E1	2BD/2BA	LEVEL 4	TYPE B	
448	UNIT B2 E1	2BD/2BA	LEVEL 4	TYPE B	
449	UNIT B1 E1	2BD/1BA	LEVEL 4	TYPE B	
450	UNIT A1 E1	1BD/1BA	LEVEL 4	TYPE B	
451	UNIT B3 E1	2BD/2BA	LEVEL 4	TYPE B	
452	UNIT A1 E1	1BD/1BA	LEVEL 4	TYPE B	
454	UNIT A1 E1	1BD/1BA	LEVEL 4	TYPE B	
456	UNIT C2a E1	3BD/2BA	LEVEL 4	TYPE A	VH
458	UNIT B2 E1	2BD/2BA	LEVEL 4	TYPE B	
460	UNIT B2 E1	2BD/2BA	LEVEL 4	TYPE B	
461	UNIT B2 E1	2BD/2BA	LEVEL 4	TYPE B	
462	UNIT A1 E2	1BD/1BA	LEVEL 4	TYPE B	
463	UNIT A1 E2	1BD/1BA	LEVEL 4	TYPE B	
464	UNIT A1 E2	1BD/1BA	LEVEL 4	TYPE B	
465	UNIT A1 E2	1BD/1BA	LEVEL 4	TYPE B	
466	UNIT A1 E2	1BD/1BA	LEVEL 4	TYPE B	
467	UNIT A1 E2	1BD/1BA	LEVEL 4	TYPE B	
468	UNIT A1 E2	1BD/1BA	LEVEL 4	TYPE B	
469	UNIT B2 E1	2BD/2BA	LEVEL 4	TYPE B	
470	UNIT A1 E2	1BD/1BA	LEVEL 4	TYPE B	
472	UNIT C2 E1	3BD/2BA	LEVEL 4	TYPE B	
474	UNIT C1 E1	2BD/2BA	LEVEL 4	TYPE B	
475	UNIT B1 E1	2BD/1BA	LEVEL 4	TYPE B	
476	UNIT A1 E1	1BD/1BA	LEVEL 4	TYPE B	
477	UNIT B2 E1	2BD/2BA	LEVEL 4	TYPE B	
478	UNIT B2 E1	2BD/2BA	LEVEL 4	TYPE B	

LEVEL 4: 66



1 ADDRESSING PLAN - LEVEL 4
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CODE ANALYSIS

Codes - Apartment Building

2018 INTERNATIONAL BUILDING CODE
2018 INTERNATIONAL RESIDENTIAL CODE
2018 INTERNATIONAL MECHANICAL CODE
2018 INTERNATIONAL PLUMBING CODE
2018 INTERNATIONAL ENERGY CONSERVATION CODE
2018 INTERNATIONAL FIRE CODE
2023 NATIONAL ELECTRICAL CODE
NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
ASME A17.1/CSA B44-2016
2019 ANSI A117.1

THE 1999 FAIR HOUSING DESIGN MANUAL IS EMPLOYED AS "SAFE HARBOR" FOR THE FEDERAL FAIR HOUSING ACT

Project Description

THE PROPOSED PROJECT CONSISTS OF A FOUR-STORY RESIDENTIAL BUILDING OF TYPE VA CONSTRUCTION FOR A TOTAL OF 260 RESIDENTIAL DWELLING UNITS AND ALSO INCLUDES LEASING OFFICE AND AMENITY SPACES. LEASING INCLUDES A RECEPTION AREA, OFFICE SPACE, WORKROOM AND STORAGE. PROJECT AMENITIES INCLUDE A CLUB ROOM, MAIL AND PARCEL ROOMS, GREAT ROOM WITH KITCHENETTE, AND A FITNESS CENTER. LEASING OFFICE AND AMENITY TO TALL TO BE ON THE GROUND LEVEL, THEREFORE YER HOOKUPS ARE PROVIDED IS SHOWN WITH A COMMON ENTRY AT THE NORTHWEST CORNER OF THE BUILDING. THE PROJECT IS SITED ON THE CORNER OF MARSHALL STREET AND 53RD AVENUE IN ARVADA, CO.

TWO INTERIOR COURTYARDS ARE PROVIDED FOR RESIDENT USE AND INCLUDE PLAYGROUND, GRILLES AND OTHER RECREATIONAL AMENITIES.

ALL RESIDENTIAL BUILDINGS ARE FULLY SPRINKLERED IN ACCORDANCE WITH 903.3.1.1 FOR AN NFPA 13 SYSTEM.

PROJECT IS AN AFFORDABLE HOUSING PROJECT ADMINISTERED THROUGH THE LIHTC PROGRAM AND FALLS UNDER IVAS REGULATIONS FOR ACCESSIBILITY. THE PROJECT IS PURSUING NGBS BRONZE CERTIFICATION. THIS SET INCLUDES THE APARTMENT BUILDING ONLY.

Use and Occupancy Classification - Chapter 3

OCCUPANCY CLASSIFICATION INFORMATION					
CATEGORY	LOCATION	OCCUPANCY	CONSTRUCTION TYPE	FIRE SPRINKLER	CODE REFERENCE
APARTMENTS	LEVELS 1-4	R-2	TYPE VA	NFPA 13	SECTION 310.3
LEASING/AMENITY	LEVEL 1	A-3	TYPE VA	NFPA 13	SECTION 303.4

Special Detailed Requirements Based on Use and Occupancy - Chapter 4

SECTION 420 OCCUPANCIES IN GROUPS R-2 SHALL COMPLY WITH THE PROVISIONS OF SECTIONS 420.1 THROUGH 420.10 AND OTHER APPLICABLE PROVISIONS OF THIS CODE

- **SECTION 420.2:** WALLS SEPARATING DWELLING UNITS AND WALLS SEPARATING DWELLING FROM OTHER OCCUPANCIES CONTIGUOUS TO THEM SHALL BE CONSTRUCTED AS HORIZONTAL ASSEMBLIES IN ACCORDANCE WITH SECTION 711
  - # **HOUR REQUIRED** PER 711.2.4.3.1 **# HOUR PROVIDED**
  - DWELLING UNIT TO DWELLING UNIT REQUIRES 1 HOUR PER 711.2.4.3.1 **# HOUR PROVIDED**
- **SECTION 420.4:** GROUP R OCCUPANCIES SHALL BE EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH SECTION 903.2.8
  - **NFPA 13 SPRINKLER IN ACCORDANCE WITH SECTION 9 03.3.1.1 PROVIDED**

General Building Heights and Areas - Chapter 5

BUILDING HEIGHT - SECTION 504

REFER TO SHEET A03.0 FOR GRADE PLANE POINTS ON SITE

BUILDING 1
- AVERAGE GRADE PLANE = 5,283.94
- HEIGHT OF BUILDING (48' 5 1/4") = 5,330.38'

BUILDING 2
- AVERAGE GRADE PLANE =5,283.94
- HEIGHT OF BUILDING (48' 5 1/4") =5,330.38'

BUILDING 3
- AVERAGE GRADE PLANE =5,283.94
- HEIGHT OF BUILDING (48' 5 1/4") =5,330.38'

THE MAXIMUM HEIGHT, IN FEET, OF A BUILDING SHALL NOT EXCEED THE LIMITS SPECIFIED IN TABLE 504.3

ALLOWABLE BUILDING HEIGHT		
BUILDING 1 - (OCCUPANCY A-3, R-2) TYPE OF CONSTRUCTION VA		
	ALLOWABLE	ACTUAL
HEIGHT	70'-0" (INCREASE FOR SPRINKLER SYSTEM PER 903.3.1.1)	48'-6"
STORIES	4 STORIES	4 STORIES
BUILDING 2 - (OCCUPANCY R-2) TYPE OF CONSTRUCTION VA		
	ALLOWABLE	ACTUAL
HEIGHT	70'-0" (INCREASE FOR SPRINKLER SYSTEM PER 903.3.1.1)	48'-6"
STORIES	4 STORIES	4 STORIES
BUILDING 3 - (OCCUPANCY R-2) TYPE OF CONSTRUCTION VA		
	ALLOWABLE	ACTUAL
HEIGHT	70'-0" (INCREASE FOR SPRINKLER SYSTEM PER 903.3.1.1)	48'-6"
STORIES	4 STORIES	4 STORIES

BUILDINGS 1, 2, AND 3 ARE EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH SECTION 903.3.1.1

SECTION 506 BUILDING AREA

THE ALLOWABLE AREA OF A BUILDING SHALL BE DETERMINED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF SECTIONS 506.2.1 THROUGH 506.2.4 AND SECTION 506.3

- **SECTION 506.2.1:** THE ALLOWABLE AREA OF A SINGLE-OCCUPANCY BUILDING WITH MORE THAN ONE STORY ABOVE GRADE PLANE SHALL BE DETERMINED IN ACCORDANCE WITH EQUATION 5-2.

  $A_a = [A_t + (NS \times S_i)] \times S_s$

  A_a =ALLOWABLE AREA (SQUARE FEET)
  A_t =TABULAR ALLOWABLE AREA FACTOR (NS, S1SR, S1SD, OR SM VALUE, AS APPLICABLE) PER TABLE 506.2
  NS =TABULAR ALLOWABLE AREA FACTOR IN ACCORDANCE WITH TABLE 506.2 FOR A NONSPRINKLERED BUILDING (REGARDLESS OF WHETHER THE BUILDING IS SPRINKLERED)
  I_f =AREA FACTOR INCREASE DUE TO FRONTAGE (PERCENT) AS CALCULATED IN ACCORDANCE WITH SECTION 506.3
  S_s =ACTUAL NUMBER OF BUILDING STORIES ABOVE GRADE PLANE, NOT TO EXCEED THREE.
  NONOVERLOAL STORY SHALL EXCEED THE ALLOWABLE AREA (A) AS DETERMINED BY EQUATION 5-2 USING THE VALUE OF S_s = 1.

RESIDENTIAL - BUILDING 2	AREA CALCULATIONS
USE GROUP:	APARTMENT: R-2
CONSTRUCTION TYPE:	TYPE VA, SPRINKLER NFPA 13
OCCUPANCY TYPE:	RESIDENTIAL FLRS 1-4, R-2 OCC.
NUMBER OF STORIES ALLOWED:	4 STORIES PER TABLE 504.4
NUMBER OF STORIES PROVIDED:	4 STORIES
MAX ALLOWABLE AREA:	
Aa= [(At+NS X If) x Sa	
Aa= (136,000+(12,000 x 0)) x 4 = 144,000 SF MAX BUILDING AREA	
Aa= (136,000+(12,000 x 1)) x 1 = 36,000 SF MAX AREA PER STORY	
Aa=	
MAX ALLOWED BUILDING AREA	
144,000 SF	
MAX ALLOWED BUILDING AREA PER FLOOR:	
36,000 SF	
PROPOSED BUILDING AREA PER FLOOR:	
11,673	
PROPOSED TOTAL BUILDING AREA:	
70,692	

RESIDENTIAL - BUILDING 3	AREA CALCULATIONS
USE GROUP:	APARTMENT: R-2
CONSTRUCTION TYPE:	TYPE VA, SPRINKLER NFPA 13
OCCUPANCY TYPE:	RESIDENTIAL FLRS 1-4, R-2 OCC.
NUMBER OF STORIES ALLOWED:	4 STORIES PER TABLE 504.4
NUMBER OF STORIES PROVIDED:	4 STORIES
MAX ALLOWABLE AREA:	
Aa= [(At+NS X If) x Sa	
Aa= (26,000+(12,000 x 0)) x 4 = 144,000 SF MAX BUILDING AREA	
Aa= (26,000+(12,000 x 0)) x 1 = 36,000 SF MAX AREA PER STORY	
Aa=	
MAX ALLOWED BUILDING AREA	
144,000 SF	
MAX ALLOWED BUILDING AREA PER FLOOR:	
36,000 SF	
PROPOSED BUILDING AREA PER FLOOR:	
27,177 SF	
PROPOSED TOTAL BUILDING AREA	
108,708 SF	

General Building Heights and Areas - Chapter 5 (CONT)

- **SECTION 506.2** EACH STORY OF A MIXED-OCCUPANCY BUILDING WITH MORE THAN ONE STORY ABOVE GRADE PLANE SHALL INDIVIDUALLY COMPLY WITH THE APPLICABLE REQUIREMENTS OF SECTION 508.1. FOR BUILDINGS WITH MORE THAN THREE STORIES ABOVE GRADE PLANE, THE TOT AL BUILDING AREA SHALL BE SUCH THAT THE AGGREGATE SUM OF THE RATIOS OF THE ACTUAL AREA OF EACH STORY DIVIDED BY THE ALLOWABLE AREA OF SUCH STORIES, DETERMINED IN ACCORDANCE WITH EQUATION 5-3 BASED ON THE APPLICABLE PROVISIONS OF SECTION 508.1, SHALL NOT EXCEED THREE:

  $\frac{A_1}{A_{a1}} + \frac{A_2}{A_{a2}} + \frac{A_3}{A_{a3}} \le 1$

  WHERE:
  A_1 = ALLOWABLE AREA (SQUARE FEET)
  A_1 = TABULAR ALLOWABLE AREA FACTOR (NS, S1SR, S1SD, OR SM VALUE, AS APPLICABLE) PER TABLE 506.2
  NS = TABULAR ALLOWABLE AREA FACTOR IN ACCORDANCE WITH TABLE 506.2 FOR A NONSPRINKLERED BUILDING (REGARDLESS OF WHETHER THE BUILDING IS SPRINKLERED)
  I_f = AREA FACTOR INCREASE DUE TO FRONTAGE (PERCENT) AS CALCULATED IN ACCORDANCE WITH SECTION 506.3
  S_s = ACTUAL NUMBER OF BUILDING STORIES ABOVE GRADE PLANE, NOT TO EXCEED THREE.
  NONOVERLOAL STORY SHALL EXCEED THE ALLOWABLE AREA (A) AS DETERMINED BY EQUATION 5-2 USING THE VALUE OF S_s = 1.

RESIDENTIAL - BUILDING	AREA CALCULATIONS
USE GROUP:	APARTMENT: R-2
CONSTRUCTION TYPE:	TYPE VA, SPRINKLER NFPA 13
OCCUPANCY TYPE:	RESIDENTIAL FLRS 1-4, R-2 OCC.
NUMBER OF STORIES ALLOWED:	4 STORIES PER TABLE 504.4
NUMBER OF STORIES PROVIDED:	4 STORIES
MAX ALLOWABLE AREA:	
Aa= [(At+NS X If) x Sa	
Aa= (26,000+(12,000 x 0)) x 4 = 144,000 SF MAX BUILDING AREA	
Aa= (26,000+(12,000 x 0)) x 1 = 36,000 SF MAX AREA PER STORY	
Aa=	
MAX ALLOWED BUILDING AREA	
144,000 SF	
MAX ALLOWED BUILDING AREA PER FLOOR:	
36,000 SF	
PROPOSED BUILDING AREA PER FLOOR:	
27,177 SF	
PROPOSED TOTAL BUILDING AREA	
108,708 SF	

RESIDENTIAL BUILDING AREAS - GROSS SF			
BUILDING	LEVEL	CONSTRUCTION TYPE	AREA
BUILDING 1	LEVEL 1	TYPE VA	16,983.15 SF
BUILDING 1	LEVEL 2	TYPE VA	16,664.39 SF
BUILDING 1	LEVEL 3	TYPE VA	16,664.39 SF
BUILDING 1	LEVEL 4	TYPE VA	16,664.39 SF
BUILDING 1			66,975.7 SF
BUILDING 2	LEVEL 1	TYPE VA	17,672.72 SF
BUILDING 2	LEVEL 2	TYPE VA	17,672.72 SF
BUILDING 2	LEVEL 3	TYPE VA	17,672.72 SF
BUILDING 2	LEVEL 4	TYPE VA	17,672.72 SF
BUILDING 2			70,690.89 SF
BUILDING 3	LEVEL 1	TYPE VA	27,176.88 SF
BUILDING 3	LEVEL 2	TYPE VA	27,176.94 SF
BUILDING 3	LEVEL 3	TYPE VA	27,176.94 SF
BUILDING 3	LEVEL 4	TYPE VA	27,176.94 SF
BUILDING 3			108,713.81 SF
TOTAL GROSS SF			246,380.39 SF

SECTION 508 MIXED USE AND OCCUPANCY

- **SECTION 508.1** EACH PORTION OF A BUILDING SHALL BE INDIVIDUALLY CLASSIFIED IN ACCORDANCE WITH SECTION 302.1. WHERE A BUILDING CONTAINS MORE THAN ONE OCCUPANCY GROUP, THE BUILDING OR PORTION THEREOF SHALL COMPLY WITH THE APPLICABLE PROVISIONS OF SECTION 508.1.1 THROUGH 508.1.8.
  - **SECTION 508.1.1:** ACCESSORY OCCUPANCIES ARE THOSE OCCUPANCIES THAT ARE ANCILLARY TO THE MAIN OCCUPANCY (IES) OF THE BUILDING OR PORTION THEREOF.
  - **ELECTRICAL/MECHANICAL/TENANT STORAGE/JANITOR/BIKE CAFE/BIKE STORAGE. RE: A0-4.3 FOR CALCS.**
- **SECTION 508.4** BUILDINGS OR PORTIONS OF BUILDINGS THAT COMPLY WITH THE PROVISIONS OF THIS SECTION SHALL BE CONSIDERED AS SEPARATED OCCUPANCIES.
- **SECTION 508.4.4:** INDIVIDUAL OCCUPANCIES SHALL BE SEPARATED FROM ADJACENT OCCUPANCIES IN ACCORDANCE WITH TABLE 508.4.
  - **RESIDENTIAL USE (R-2) AND AMENITY USE (A-3) AT BUILDING 1 ARE SEPARATED BY A 1 HOUR FIRE BARRIER AND HORIZONTAL ASSEMBLY PER SECTION 508.4.4.1.**

SECTION 509 INCIDENTAL USE

- **SECTION 509.2:** INCIDENTAL USES SHALL NOT BE INDIVIDUALLY CLASSIFIED IN ACCORDANCE WITH SECTION 302.1. INCIDENTAL USES SHALL BE INCLUDED IN THE BUILDING OCCUPANCIES WITH WHICH THEY ARE LOCATED.
- **SECTION 509.3:** INCIDENTAL USES SHALL NOT OCCUPY MORE THAN 10 PERCENT OF THE BUILDING AREA OF THE STORY IN WHICH THEY ARE LOCATED.
- **SECTION 509.4:** THE INCIDENTAL USES LISTED IN TABLE 509 SHALL BE SEPARATED FROM THE REMAINDER OF THE BUILDING OR EQUIPPED WITH AN AUTOMATIC SPRINKLER SYSTEM, OR BOTH, IN ACCORDANCE WITH THE PROVISIONS OF THAT TABLE.
  - **LAUNDRY ROOM AT BUILDING 1 IS AN INCIDENTAL USE PROVIDED WITH AN NFPA13 SPRINKLER SYSTEM PER TABLE 509.**

Types of Construction - Chapter 6

SECTION 602 CONSTRUCTION CLASSIFICATION

- **SECTION 602.2** TYPE I CONSTRUCTION ARE THOSE TYPES OF CONSTRUCTION IN WHICH THE BUILDING ELEMENTS LISTED IN TABLE 601 ARE OF NONCOMBUSTIBLE MATERIALS, EXCEPT AS PERMITTED IN SECTION 603 AND ELSEWHERE IN THE CODE.
- **SECTION 602.5** TYPE V CONSTRUCTION IS THAT TYPE OF CONSTRUCTION IN WHICH THE STRUCTURAL ELEMENTS, EXTERIOR WALLS AND INTERIOR WALLS ARE OF ANY MATERIALS PERMITTED BY THIS CODE.

FIRE-RESISTANCE REQUIREMENTS FOR BUILDING ELEMENTS PER TABLE 601	
	TYPE V
BUILDING ELEMENT	A
PRIMARY STRUCTURAL FRAME (SEE SECTION 202)	1
BEARING WALLS EXTERIOR/ INTERIOR	1 / 1
NONBEARING WALLS AND PARTITIONS EXTERIOR	SEE TABLE 602
NONBEARING WALLS AND PARTITIONS INTERIOR	0
FLOOR CONSTRUCTION AND ASSOCIATED SECONDARY MEMBERS (SEE SECTION 202)	1
ROOF CONSTRUCTION AND ASSOCIATED SECONDARY MEMBERS (SEE SECTION 202)	1

FIRE RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE PER TABLE 602		
FIRE SEPARATION DISTANCE = X (FEET)	**TYPE OF CONSTRUCTION**	**OCCUPANCY GROUP - A/B,E,F-2,R,S-2,U**
X < 5	ALL	1
5 ≤ X < 10	IA	
	OTHERS	1
10 ≤ X < 30	IA,IB	
	IIB, VB	
	OTHERS	1
X ≥ 30	ALL	0

*SEE SHEET A0.4-4 FOR FIRE SEPARATION DISTANCES

a. LOAD-BEARING EXTERIOR WALLS SHALL ALSO COMPLY WITH THE FIRE-RESISTANCE RATING REQUIREMENTS OF TABLE 601.
b. SEE SECTION 706.1.1 FOR PARTY WALLS.

Fire Resistance Rated Construction - Chapter 7

**** REFER TO A0-6 SERIES SHEETS FOR ASSEMBLY DESIGN INFORMATION ****

FIRE RATED ASSEMBLIES				
BUILDING ELEMENT	REQUIRED RATING	ASSEMBLY CLASS	ASSEMBLY DESIGN	PER SECTION
TYPE V-A				
EXTERIOR WALL - BEARING	1 HR	EXTERIOR WALL	UL U356 & GA WP 8105	1601 / 705
DWT ENCLOSURE STAIRWAY - SHAFT	2 HR	FIRE BARRIER	BCI 7721.1(2) ITEM 3-1.4	707.3.1 / 713.4
SHAFT WALL	2 HR	FIRE BARRIER	BCI 7721.1(2) ITEM 3-1.4	707.3.1 / 713.4
OCCUPANCY SEPARATION	1 HR	FIRE BARRIER	GA WP 3605	1508.4 / 707
UNIT DEMISING WALL	0.5 HRS 1 HR PROVIDED	FIRE PARTITION	GA WP 5269	1601 / 705
CORRIDOR WALL	0.5 HRS 1 HR PROVIDED	FIRE PARTITION	GA WP 3243 & GA WP 3605	1T020.1
INTERIOR WALL - BEARING	1 HR	FIRE RATED WALL	GA WP 3605	1601
INTERIOR WALL - NON BEARING	NR	NA	NA	1601
FLOOR CEILING - UNITS	1 HR	HORIZONTAL ASSEMBLY	UL L528	1601 / 711
FLOOR CEILING - UNITS	1 HR	HORIZONTAL ASSEMBLY	UL L529	1601 / 4203.3 / 711
ROOF CEILING - UNITS	1 HR	HORIZONTAL ASSEMBLY	UL L529	1601 / 709.4
BALCONIES - GYM / CONDITIONED SPACE	1 HR	HORIZONTAL ASSEMBLY	UL L529	1601 / 709.4
BALCONIES - TYPICAL	NR	EXTERIOR BAL CONY	NA	705.2.3 / 1406.3 EX 3
INTERIOR WALL - EXIT ACCESS CORRIDOR	2 HR	FIRE BARRIER	GA WP 4135	1026
INTERIOR WALL - EXIT ACCESS CORRIDOR	2 HR	FIRE BARRIER	GA WP 3809	1026
FLOOR CEILING - EXIT ACCESS CORRIDOR	2 HR	HORIZONTAL ASSEMBLY	GA FC 5751	1026
FIRE WALL - SHAFT LINER	2 HR	FIRE WALL	GA WW 0811	1706.4 / 706
FIRE WALL - TYPICAL	2 HR	FIRE WALL	BCT 721.1(2) ITEM 3-1.4	1706.4 / 706
SHAFT WALL - STANDPIPES	2 HR	FIRE BARRIER	UL U341	1706.4 / 706
STEEL BEAMS AND COLUMNS	1 HR	PRIMARY STRUCTURE	UL X014/X950	1601
STEEL COLUMNS	3HR	PRIMARY STRUCTURE	UL X950	1601
FLOOR CEILING - OCCUPANARION	1 HR	HORIZONTAL ASSEMBLY	UL L528	1601 / 4203 / 711
ROOF CEILING - SHAFT	1 HR	HORIZONTAL ASSEMBLY	GA RC 2610	1601

SECTION 703 FIRE-RESISTANCE RATINGS AND FIRE TESTS

- **SECTION 703.7** WHERE THERE IS AN ACCESSIBLE CONCEALED FLOOR, FLOOR/CEILING OR ATTIC SPACE, FIRE WALLS, FIRE BARRIERS, FIRE PARTITIONS, SMOKE BARRIERS AND SMOKE PARTITIONS OR ANY OTHER WALL REQUIRED TO HAVE PROTECTED OPENINGS OR PENETRATIONS SHALL BE PERMANENTLY IDENTIFIED IN THE CONCEALED SPACE. SUCH IDENTIFICATION SHALL BE LOCATED WITHIN 15 FEET OF THE END OF EACH WALL AND AT INTERVALS NOT EXCEEDING 30 FEET AND SHALL INCLUDE LETTERING NOT LESS THAN 3 INCHES IN HEIGHT WITH A MINIMUM 3/8 INCH STROKE.

Fire Resistance Rated Construction - Chapter 7 (CONT)

SECTION 704 FIRE-RESISTANCE RATINGS OF STRUCTURAL MEMBERS

- **SECTION 704.1:** THE FIRE-RESISTANCE RATING OF STRUCTURAL MEMBERS AND ASSEMBLIES SHALL COMPLY WITH THIS SECTION AND THE REQUIREMENTS FOR THE TYPE OF CONSTRUCTION AS SPECIFIED IN TABLE 601. THE FIRE RESISTANCE RATING SHALL BE NOT LESS THAN THE RATINGS REQUIRED FOR THE FIRE-RESISTANCE RATED ASSEMBLIES SUPPORTED BY THE STRUCTURAL MEMBERS.
  - **1 HR INTERIOR BEARING WALLS WITH PENETRATIONS NOT REQUIRED TO BE RATED**
- **SECTION 704.2:** WHERE COLUMNS ARE REQUIRED TO HAVE PROTECTION TO ACHIEVE A FIRE-RESISTANCE RATING, THE ENTIRE COLUMN SHALL BE PROVIDED INDIVIDUAL ENCASEMENT PROTECTION BY PROTECTING IT ON ALL SIDES FOR THE FULL COLUMN HEIGHT, INCLUDING CONNECTIONS TO OTHER STRUCTURAL MEMBERS. WITH MATERIALS HAVING THE REQUIRED FIRE-RESISTANCE RATING. WHERE THE COLUMN EXTENDS THROUGH A CEILING, THE ENCASEMENT PROTECTION SHALL BE CONTINUOUS FROM THE TOP OF THE FOUNDATION OR FLOOR/CEILING ASSEMBLY BELOW THROUGH THE CEILING SPACE TO THE TOP OF THE COLUMN.
  - **COLUMNS PROVIDED WITH 1 HR PROTECTION**
- **SECTION 704.3:** MEMBERS OF THE PRIMARY STRUCTURAL FRAME OTHER THAN COLUMNS THAT ARE REQUIRED TO HAVE PROTECTION TO ACHIEVE A FIRE RESISTANCE RATING AND SUPPORT MORE THAN TWO FLOORS OR ONE FLOOR AND ROOF SHALL SUPPORT ALL CASCADING FLOORS AND ROOF WHEN ONE OF THE SUPPORTED FLOORS OR ROOF IS REMOVED. BUILDINGS OF TWO STORIES HIGH, SHALL BE PROVIDED INDIVIDUAL ENCASEMENT PROTECTION BY PROTECTING THEM ON ALL SIDES FOR THE FULL LENGTH, INCLUDING CONNECTIONS TO OTHER STRUCTURAL MEMBERS, WITH MATERIALS HAVING THE REQUIRED FIRE-RESISTANCE RATING.
  - EXCEPTION TAKEN: INDIVIDUAL ENCASEMENT PROTECTION ON ALL SIDES SHALL BE PERMITTED ON ALL EXPOSED SIDES PROVIDED THE EXTENT OF PROTECTION IS IN ACCORDANCE WITH THE REQUIRED FIRE-RESISTANCE RATING, AS DETERMINED IN SECTION 703
  - **1 HR PROTECTION PROVIDED**

**** REFER TO SHEET A0-5.2 FOR STRUCTURAL MEMBER FIRE PROTECTION EXHIBIT ****

SECTION 705 EXTERIOR WALLS

- **SECTION 705.2.2:** PROJECTIONS FROM WALLS OF TYPE V CONSTRUCTION SHALL BE OF ANY APPROVED MATERIAL
- **SECTION 705.3: EXCEPTION 2:** WHERE AN S-2 PARKING GARAGE OF CONSTRUCTION TYPE II A IS ERECTED ON THE SAME LOT AS A GROUP R-2 BUILDING, AND THERE IS NO FIRE SEPARATION DISTANCE BETWEEN THESE BUILDINGS, THEN THE ADJOINING EXTERIOR WALLS BETWEEN THE BUILDINGS ARE PERMITTED TO HAVE OCCUPANT USE OPENINGS IN ACCORDANCE WITH SECTION 705.8. HOWEVER, OPENING PROTECTIVES IN SUCH OPENINGS SHALL ONLY BE REQUIRED IN THE EXTERIOR WALL OF THE S-2 PARKING GARAGE, NOT IN THE EXTERIOR WALL OPENINGS IN THE R-2 BUILDING, AND THESE OPENING PROTECTIVES IN THE EXTERIOR WALL OF THE S-2 PARKING GARAGE SHALL BE NOT LESS THAN 1 1/2-HOUR FIRE PROTECTION RATING.
- **SECTION 705.8:** OPENINGS IN EXTERIOR WALLS SHALL COMPLY WITH SECTIONS 705.8.1 THROUGH 705.8.6
  - **SECTION 705.8.1:** THE MAXIMUM AREA OF UNPROTECTED AND PROTECTED OPENINGS PERMITTED IN A NEXTERIOR WALL IN ANY STORY OF A BUILDING SHALL NOT EXCEED THE PERCENTAGES SPECIFIED IN TABLE 705.8.
- **SECTION 705.11 ROOFS**
  - **EXCEPTION 5:** IN GROUP R-2 AND R-3 BUILDINGS WHERE THE ENTIRE BUILDING IS PROVIDED WITH A CLASS C ROOF COVERING, THE EXTERIOR WALL SHALL BE PERMITTED TO TERMINATE AT THE UNDERSIDE OF THE ROOF SHEATHING OR DECK IN TYPES III, IV AND V CONSTRUCTION, PROVIDED THAT ONE OR BOTH OF THE FOLLOWING CONDITIONS EXISTS:
    - **5.1. THE ROOF SHEATHING OR DECK IS CONSTRUCTED OF APPROVED NONCOMBUSTIBLE MATERIALS OR OF FIRE-RETARDANT-TREATED WOOD FOR A DISTANCE OF 4' FEET AT A BUILDING SIDEWALL RATION WHERE FSD = 4'-0"**
    - **EXCEPTION 6:** A PARAPET NEED NOT BE PROVIDED ON AN EXTERIOR WALL WHERE THE WALL IS PERMITTED TO HAVE NOT LESS THAN 25 PERCENT OF THE EXTERIOR WALL AREA CONTAINING UNPROTECTED OPENINGS.
    - **PROVIDED AT ALL OTHER EXTERIOR WALLS**

**** REFER TO A0-4.4 THROUGH A0-4.5 FOR ALLOWABLE OPENINGS EXHIBIT ****

SECTION 706 FIRE WALLS

- **SECTION 706.4:** FIRE WALLS SHALL HAVE A FIRE-RESISTANCE RATING OF NOT LESS THAN THAT REQUIRED BY TABLE 706.4.
  - FIRE WALLS IN TYPE I AND TYPE V CONSTRUCTION, WITH OCCUPANCY GROUPS A-3 AND/OR R-2 SHALL HAVE A FIRE-RESISTANCE RATING OF 2 HOURS.
    - **2 HOUR PROVIDED**
- **SECTION 706.5, EXCEPTION 1:** FIRE WALLS SHALL BE PERMITTED TO TERMINATE AT THE INTERIOR SURFACE OF COMBUSTIBLE EXTERIOR SHEATHING PROVIDED THAT THE EXTERIOR WALL HAS A FIRE RESISTANCE RATING OF NOT LESS THAN 1 HOUR FOR A HORIZONTAL DISTANCE OF 4' FEET (1,219 MM) ON EITHER SIDE OF THE FIRE WALL. **SEE SHEET A0-5.2 FOR EXHIBITS**
- **SECTION 706.5.1, EXCEPTION 2:** BUILDINGS OR SPACES ON BOTH SIDES OF THE INTERSECTING FIRE WALL SHALL BE ASSUMED TO HAVE AN OCCUPANCY WITH THE GREATEST FIRE SEPARATION DISTANCE. THE LOCATION OF THE FIRE WALL SHALL NOT BE THE ASSUMED LINE IN RELATION TO THE EXTERIOR WALLS WHERE THE WALL IS BUILT THAT HAS EXTERIOR WALL AND OPENING PROTECTIVES MEET THE REQUIREMENTS SET FORTH IN SECTIONS 705.5 AND 705.8. SUCH PROTECTION IS NOT REQUIRED FOR EXTERIOR WALLS TERMINATING AT FIRE WALLS THAT FORM AN ANGLE EQUAL TO OR GREATER THAN 90 DEGREES. **SEE SHEET A0-5.2 FOR EXHIBITS**
- **SECTION 706.5.2, EXCEPTION 1:** HORIZONTAL PROJECTING ELEMENTS WITH FIRE CONCEALED SPACES, PROVIDED THE EXTERIOR WALL BEHIND AND BELOW THE PROJECTING ELEMENT HAS NOT LESS THAN 1 HOUR FIRE RESISTANCE CONSTRUCTION FOR A DISTANCE NOT LESS THAN THE DEPTH OF THE PROJECTING ELEMENT ON BOTH SIDES OF THE FIRE WALL. OPENINGS WITHIN SUCH EXTERIOR WALLS SHALL BE PROTECTED BY OPENING PROTECTIVES HAVING A FIRE PROTECTION RATING OF NOT LESS THAN 3/4 HOUR. **SEE SHEET A0-5.2 FOR EXHIBITS**
- **SECTION 706.6 EXCEPTION 4:** IN BUILDINGS OF TYPE V CONSTRUCTION, FIRE WALLS SHALL BE PERMITTED TO TERMINATE AT THE UNDERSIDE OF COMBUSTIBLE ROOF SHEATHING OR DECK WHERE ALL OF THE FOLLOWING REQUIREMENTS ARE MET:
  1. ROOF OPENINGS ARE NOT LESS THAN 4 FEET FROM THE FIRE WALL.
  2. THE ROOF CONSTRUCTION, EXCEPT FOR THE MINIMUM CLASS B ROOF COVERING.
  3. THE ROOF SHEATHING IS CONSTRUCTED OF FIRE-RETARDANT-TREATED WOOD FOR A DISTANCE OF 4 FEET ON BOTH SIDES OF THE FIRE WALL.
    - **SEE SHEET A0-5.2**
- **SECTION 706.5, EXCEPTION 2:** OPENINGS SHALL NOT BE LIMITED TO 156 SQUARE FEET WHERE BOTH BUILDINGS ARE EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH SECTION 903.3.1.1
  - **NFPA 13 SPRINKLER PROVIDED.**
  - **SECTION 706.6 PENETRATIONS OF FIRE WALLS SHALL COMPLY WITH SECTION 714**

**** REFER TO DETAILS INCLUDED ON SHEET A0-4.4 - A0-4.9** ****

SECTION 713 SHAFT ENCLOSURES

- **SECTION 713.4** SHAFT ENCLOSURES SHALL HAVE A FIRE-RESISTANCE RATING OF NOT LESS THAN 2 HOURS WHERE CONNECTING FOUR OR MORE STORIES.
  - **SHAFT ENCLOSURES INCLUDE STAIR AND ELEVATOR CORES, TRASH CHUTES AND MECHANICAL SHAFTS AND ARE PROVIDED WITH A 2 HOUR FIRE BARRIER AND 90 MINUTE SELF-CLOSING DOORS.**

SECTION 714 PENETRATIONS

**** REFER TO A0-6.13 - A0-6.14 SERIES SHEETS FOR ASSEMBLY DESIGN INFORMATION! ****

- **SECTION 714.2** ALISTED PENETRATION FIRESTOP SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS INSTALLATION INSTRUCTIONS AND LISTING CRITERIA.
- **SECTION 714.4.1.2** THROUGH PENETRATIONS SHALL BE PROTECTED BY AN APPROVED PENETRATION FIRESTOP SYSTEM INSTALLED AS TESTED IN ACCORDANCE WITH ASTM E814 OR UL 1479.
- **SECTION 714.4.2 EXCEPTION 1, 4 AND 5.2** MEMBRANE PENETRATIONS SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF NOT LESS THAN 24 INCHES AND BE A HORIZONTAL ASSEMBLY HAVING NOT LESS THAN THE FIRE-RESISTANCE RATING OF THE WALL CAVITY IS FILLED WITH CELLULOSE LOOSE-FILL INSULATION.
  - **PENETRATIONS THROUGH RATED FLOOR/CEILING ASSEMBLIES REQUIRE PROTECTION BY MEANS OF PROPER MATERIALS AND SEALANT. PROVIDE FIRE DAMPERS OR APPROVED EQUIVALENT AT HVAC OUTLETS WITHIN FLOOR/CEILING ASSEMBLIES. PROVIDE FIRE ROCK AROUND ALL LIGHTING RECESSED IN THE FLOOR/CEILING ASSEMBLY.**

SECTION 716 OPENING PROTECTIVES

- **SECTION 716.1** OPENING PROTECTIVES REQUIRED BY OTHER SECTIONS OF THIS CODE SHALL COMPLY WITH THE PROVISIONS OF THIS SECTION AND SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 80.

OPENING PROTECTIVE RATINGS		
TYPE OF ASSEMBLY	ASSEMBLY RATING	DOOR/SHUTTER RATING
FIRE BARRIER	2 HOUR	90 MINUTE
OTHER FIRE BARRIERS	1 HOUR	45 MINUTE
FIRE PARTITION (CORRIDOR)	1/2 HOUR (1 HOUR PROVIDED)	20 MINUTE
FIRE PARTITION (OTHER)	1 HOUR	45

CODE ANALYSIS

Means of Egress - Chapter 10 (cont.)

SECTION 1026 HORIZONTAL EXITS

- **SECTION 1026.1:** A HORIZONTAL EXIT SHALL NOT SERVE AS THE ONLY EXIT FROM A PORTION OF A BUILDING, AND WHERE TWO OR MORE EXITS ARE REQUIRED, NOT MORE THAN ONE-HALF OF THE TOTAL NUMBER OF EXITS OR TOTAL EXIT MINIMUM WIDTH OR REQUIRED CAPACITY SHALL BE HORIZONTAL EXITS.
- **SECTION 1026.2:** THE SEPARATION BETWEEN BUILDINGS CONNECTED BY A HORIZONTAL EXIT SHALL BE PROVIDED BY A FIRE WALL COMPLYING WITH SECTION 706. THE MINIMUM FIRE-RESISTANCE RATING OF THE SEPARATION SHALL BE 2 HOURS. THE HORIZONTAL EXIT SEPARATION SHALL EXTEND VERTICALLY THROUGH ALL LEVELS OF THE BUILDING.
- **SECTION1026.3:** FIRE DOORS IN HORIZONTAL EXITS SHALL BE SELF-CLOSING OR AUTOMATIC CLOSING WHEN ACTIVATED BY A SMOKE DETECTOR IN ACCORDANCE WITH SECTION 716.5.9.3. DOORS, WHERE LOCATED IN A CROSS-CORRIDOR CONDITION, SHALL BE AUTOMATIC-CLOSING BY ACTIVATION OF A SMOKE DETECTOR INSTALLED IN ACCORDANCE WITH SECTION 716.5.9.3.

NOTE: BUILDINGS 1,2 AND 3 HAVE HORIZONTAL EXITS

Accessibility - Chapter 11

SECTION 1104 ACCESSIBLE ROUTE

- **SECTION 1104.1**: AT LEAST ONE ACCESSIBLE ROUTE WITHIN THE SITE SHALL BE PROVIDED FROM PUBLIC TRANSPORTATION STOPS, ACCESSIBLE PARKING, ACCESSIBLE PASSENGER LOADING ZONES AND PUBLIC STREETS OR SIDEWALKS TO THE ACCESSIBLE BUILDING ENTRANCE SERVED. **REFER TO CIVIL DOCUMENTS PROVIDED BY HARRIS-KOCHER SMITH. UNDER SEPARATE PERMIT**

SECTION 1105 ACCESSIBLE ENTRANCES

- **SECTION 1105.1**: IN ADDITION TO ACCESSIBLE ENTRANCES REQUIRED BY SECTIONS 1105.1.1 THROUGH 1105.1.7, AT LEAST 60 PERCENT OF ALL PUBLIC ENTRANCES SHALL BE ACCESSIBLE. **THE MAIN ENTRY AT THE INTERNAL ROAD TO THE LEASING OFFICE IS THE ONLY PUBLIC ENTRANCE TO THE PROJECT.**

SECTION 1107 DWELLING UNITS AND SLEEPING UNITS

ALL DWELLING UNITS ARE REQUIRED TO BE ACCESSIBLE, TYPE A OR TYPE B, DUE TO THE PROJECT BEING AN ELEVATORED BUILDING.

- **SECTION 1107.6.2**: ACCESSIBLE UNITS, TYPE A UNITS AND TYPE B UNITS SHALL BE PROVIDED IN GROUP R-2 OCCUPANCIES IN ACCORDANCE WITH SECTIONS 1107.6.2.1 THROUGH 1107.6.2.3 AND SHALL COMPLY WITH CHAPTER 10 OF ICC A117.1-09.
- **SECTION 1107.6.2.2.1**: IN GROUP R-2 OCCUPANCIES CONTAINING MORE THAN 20 DWELLING UNITS, AT LEAST 2 PERCENT BUT NOT LESS THAN ONE OF THE UNITS SHALL BE A TYPE A UNIT.
- **PER ICC A117.1-09, SECTION 1006.5.2**: A MEANS OF VISUALLY IDENTIFYING A VISITOR WITHOUT OPENING THE UNIT ENTRY DOOR SHALL BE PROVIDED. PEEPHOLES SHALL PROVIDE A MINIMUM 180-DEGREE RANGE OF VIEW.

**********************************REFER TO SHEET A0-4.2 AND PROJECT UNIT REQUIREMENTS FOR DWELLING UNIT COUNTS**********************************

SECTION 1110 RECREATIONAL FACILITIES

- **SECTION 1110.2.2**: IN GROUP R-2 OCCUPANCIES WHERE RECREATIONAL FACILITIES SERVE A SINGLE BUILDING CONTAINING TYPE A AND TYPE B UNITS, 25 PERCENT, BUT NOT LESS THAN ONE, OF EACH TYPE OF RECREATIONAL FACILITY SHALL BE ACCESSIBLE.

SECTION 1111 SIGNAGE

- **SECTION 1111.1**: REQUIRED ACCESSIBLE ELEMENTS SHALL BE IDENTIFIED BY THE INTERNATIONAL SYMBOL OF ACCESSIBILITY AT THE LOCATIONS IDENTIFIED IN THIS SECTION.
- **SECTION 1111.2**: DIRECTIONAL SIGNAGE INDICATING THE ROUTE TO THE NEAREST LIKE ACCESSIBLE ELEMENT SHALL BE PROVIED AT THE LOCATIONS IDENTIFIED IN THIS SECTION. THESE DIRECTION SIGNS SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY AND SIGN CHARACTERS SHALL MEET THE VISUAL CHARACTER REQUIREMENTS OF ICC A117.1.
- **SECTION 1111.3**: SIGNAGE INDICATING SPECIAL ACCESSIBILITY PROVISIONS SHALL BE PROVIDED AT THE LOCATIONS IDENTIFIED IN THIS SECTION.

GENERAL ACCESSIBILITY NOTES

THE DETAILS AND NOTES PROVIDED ON THE ACCESSIBILITY SHEETS REPRESENT ONLY A PORTION OF THE REQUIREMENTS SET FORTH BY FEDERAL LAW, STATE LAW, CITY AND COUNTY LAW AND THE BUILDING CODE FOR ACCESSIBILITY REQUIREMENTS.

REFERENCE CODES: 2018 IBC, ICC A117.1-2009, FHA DESIGN MANUAL 1998, 2010 ADA STANDARD (FOR PUBLIC SPACES), UNIFORM FEDERAL ACCESSSIBILITY STANDARDS (UFAS)

CONTRACTORS MUST REVIEW ALL ACCESSIBILITY REQUIREMENTS AS PRESENTED IN THESE CONSTRUCTION DOCUMENTS AND THE REFERENCES HEREIN PRIOR TO STARTING AN CONSTRUCTION. 2018 INTERNATIONAL BUILDING CODES AND ANSI STANDARDS MAY BE OBTAINED BY CALLING THE ICC AT (526) 699-0541 OR WRITE TO ICBO AT 5360 WORKMAN MILL ROAD, WHITTIER, CA 90601-2298. FOR A COPY OF THE FEDERAL FAIR HOUSING GUIDELINES, CONTACT THE U.S. DEPT. OF HOUSING AND URBAN DEVELOPMENT IN DENVER AT (303) 844-4513. PHONE NUMBERS AND ADDRESSES MAY BE SUBJECT TO CHANGE.

FOR SITE ACCESSIBILITY REQUIREMENTS AND ALL SITE ACCESSIBILITY DETAILING, REFER TO CIVIL ENGINEERING DOCUMENTS PREPARED BY HARRIS KOCHER SMITH. UNDER SEPARATE PERMIT.

Interior Environment - Chapter 12

SECTION 1202 VENTILATION

- **SECTION 1202.3 UNVENTED ATTIC**: WHERE BOTH AIR-IMPERMEABLE AND AIR-PERMEABLE INSULATION ARE PROVIDED, THE AIR-IMPERMEABLE INSULATION SHALL BE APPLIED IN DIRECT CONTACT WITH THE UNDERSIDE OF THE STRUCTURAL ROOF SHEATHING IN ACCORDANCE WITH ITEM 5.1.1 AND SHALL BE IN ACCORDANCE WITH THE R-VALUES IN TABLE 1202.3 FOR CONDENSATION CONTROL. THE AIR-PERMEABLE INSULATION SHALL BE INSTALLED DIRECTLY UNDER THE AIR-IMPERMEABLE INSULATION.
  - **R-20 CLOSED CELL FOAM APPLIED PER TABLE 1202.3. REMAINING ATTIC SPACE FILLED WITH BLOWN-IN INSULATION. RE: ASSEMBLIES**
- **SECTION 1202.5**: NATURAL VENTILATION OF AN OCCUPIED SPACE SHALL BE THROUGH WINDOWS, DOORS, LOUVERS OR OTHER OPENINGS TO THE OUTDOORS.
- **SECTION 1202.5.1**: THE OPENABLE AREA OF THE OPENINGS TO THE OUTDOORS SHALL BE NOT LESS THAN 4 PERCENT OF THE FLOOR AREA BEING SERVED.
- **SECTION 1202.5.1.1**: WHERE ROOMS AND SPACES WITHOUT OPENINGS TO THE OUTDOORS ARE VENTILATED THROUGH AN ADJOINING ROOM, THE OPENING TO THE ADJOINING ROOM SHALL BE UNOBSTRUCTED AND SHALL HAVE AN AREA NOT LESS THAN 8 PERCENT OF THE FLOOR AREA OF THE INTERIOR SPACE, BUT NOT LESS THAN 25 SQUARE FEET.
  - **ALL UNITS ARE MECHANICALLY VENTILATED**

SECTION 1205

- **1205.1 GENERAL.** THIS SECTION SHALL APPLY TO YARDS AND COURTS ADJACENT TO EXTERIOR OPENINGS THAT PROVIDE NATURAL LIGHT OR VENTILATION. SUCH YARDS AND COURTS SHALL BE ON THE SAME LOT AS THE BUILDING.
- **BUILDING IS PROVIDED WITH ARTIFICIAL LIGHT AND MECHANICAL VENTILATION PER 1202.1 AND 1204.1.**

SECTION 1206 SOUND TRANSMISSION

- **AIRBORNE SOUND - SECTION 1206.2**: WALLS, PARTITIONS AND FLOOR-CEILING ASSEMBLIES SEPARATING DWELLING UNITS FROM EACH OTHER OR FROM PUBLIC OR SERVICE AREAS SHALL HAVE A SOUND TRANSMISSION CLASS OF NOT LESS THAN 50, OR NOT LESS THAN 45 IF FIELD TESTED, FOR AIRBORNE NOISE WHERE TESTED IN ACCORDANCE WITH ASTM E90.
- **STRUCTURE-BORNE SOUND - SECTION 1206.3**: FLOOR-CEILING ASSEMBLIES BETWEEN DWELLING UNITS OR BETWEEN A DWELLING UNIT AND A PUBLIC OR SERVICE AREA WITHIN THE STRUCTURE SHALL HAVE AN IMPACT INSULATION CLASS RATING OF NOT LESS THAN 50, OR NOT LESS THAT 45 IF FIELD TESTED, WHERE TESTED IN ACCORDANCE WITH ASTM E492.
- **SEE SHEETS A0-6.2 - A0-6.4 FOR STC/IIC RATINGS**

Plumbing Fixtures - Chapter 29

SECTION 2902 MINIMUM PLUMBING FACILITIES

- **SECTION 2902.1**: PLUMBING FIXTURES SHALL BE PROVIDED IN THE MINIMUM NUMBER AS SHOWN IN TABLE 2902.1 BASED ON THE ACTUAL USE OF THE BUILDING OR SPACE.

PLUMBING FIXTURE CALCULATIONS

TOTAL OCCUPANT LOAD:	71 OCCUPANTS
LEVEL 1 - LEASING/CLUBHOUSE/FITNESS/MAIL:	71 OCCUPANTS

PLUMBING FIXTURES REQUIRED PER TABLE 2902.1

36 MEN = 1 WATER CLOSET PROVIDED (1/125 REQUIRED), 1 LAVATORY PROVIDED (1/200 REQUIRED)
36 WOMEN = 1 WATER CLOSET PROVIDED (1/65 REQUIRED), 1 LAVATORY PROVIDED (1/200 REQUIRED)

71 OCCUPANTS = 1 DRINKING FOUNTAIN (1/500 REQUIRED)

1 SERVICE SINK REQUIRED

Elevators - Chapter 30

SECTION 3002 HOISTWAY ENCLOSURES

- **SECTION 3002.4**: WHERE ELEVATORS ARE PROVIDED IN BUILDINGS FOUR OR MORE STORIES ABOVE OR BELOW GRADE PLANE, NOT FEWER THAN ONE ELEVATOR SHALL BE PROVIDED FOR FIRE DEPARTMENT EMERGENCY ACCESS TO ALL FLOORS. THE ELEVATOR CAR SHALL BE OF SUCH A SIZE AND ARRANGEMENT TO ACCOMMODATE AN AMBULANCE STRETCHER 24 INCHES BY 84 INCHES WITH NOT LESS THAN 5 INCH RADIUS CORNERS, IN THE HORIZONTAL, OPEN POSITION AND SHALL BE INDENTIFIED BY THE INTERNATIONAL SYMBOL FOR EMERGENCY MEDICAL SERVICES. ALL PROJECT ELEVATORS ARE COMPLIANT.
  - **BOD: SCHINDLER 3300 MRL, 3500#, FRONT OPENING.**

SECTION 3003 EMERGENCY OPERATIONS

- EMERGENCY POWER IS NOT REQUIRED AS ELEVATORS ARE NOT REQUIRED TO BE AN ACCESSIBLE MEANS OF EGRESS PER 1009.2.1, EXCEPTION 1.
  - **BUILDINGS 1, 2, AND 3 ARE PROVIDED WITH A HORIZONTAL EXIT AND AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH 903.3.1.1**

SECTION 3006 ELEVATOR LOBBIES AND HOISTWAY PROTECTION

- ELEVATOR HOISTWAYS AT BUILDING 1 IS PROTECTED WITH A SMOKE DOOR ON LEVELS 2-4. ELEVATOR HOISTWAY AT BUIDLING 3 IS PROTECTED WITH A SMOKE DOOR ON LEVELS 1-4.
  1. VISION WINDOW TO BE PROVIDED IN ELEVATOR SMOKE DOOR WITHIN 1/4 OF ELEVATOR OPENING PER ASME A17.1 SECTION 2.11.6.3 (D).
- SMOKE DOOR IS NOT REQUIRED AT BUILDING 1 LEVEL 1 , PER 3006.2, EXCEPTION 2

Project Unit Requirements

ACCESSIBLE UNIT CALCULATIONS

TOTAL UNITS: 260 UNITS

FEDERAL FAIR HOUSING ACT REQUIREMENTS

REQUIRED: 260 UNITS (ALL UNITS) TO MEET FHA REQUIREMENTS AS TYPE 'A' OR TYPE 'B' UNITS.

2018 INTERNATIONAL BUILDING CODE

ACCESSIBLE UNITS

REQUIRED: ALL UNITS (260 UNITS) SHALL MEET ICC/ANSI 117.1 (2009) TYPE B UNITS MINIMUM AND 5% OF ALL UNITS (13 UNITS) SHALL BE TYPE A UNITS (5% TYPE A UNITS AS REQUIRED BY UFAS REGULATIONS)

PROVIDED: (247) TYPE B UNITS
(13) TYPE A UNITS
(7) 1 BED / 1 BATH
(5) 2 BED / 2 BATH
(1) 3 BED / 2 BATH

VISUAL / HEARING IMPAIRED UNITS

REQUIRED: 2% OF ALL DWELLING UNITS PROVIDED IN ADDITION TO THE TYPE A UNITS MUST BE ACCESSIBLE FOR HEARING/VISION IMPAIRED. PER UFAS REQUIREMENTS

PROVIDED: (19) TOTAL VISION/HEARING IMPAIRED UNITS PROVIDED
(13) LOCATED IN TYPE A UNITS PER IBC
(6) UNITS. RE: ADDRESSING PLANS

ACCESSIBLE PARKING

REQUIRED: 1 ACCESSIBLE PARKING SPOT FOR EACH TYPE A UNIT PER IBC 1106.2, #3

PROVIDED: 13 REQUIRED ACCESSSIBLE PARKING SPACES (13 TYPE A UNITS)
(13) ACCESSIBLE PARKING SPACES PROVIDED
(3) VAN ACCESSIBLE PARKING SPACES INCLUDED (1 PER 6 ACCESSIBLE SPACES IBC 1106.5)

TITLE 9 - COLORADO STATE STATUTE

- POINTS REQUIRED FOR 260 UNITS - 114 POINTS
- POINTS PROVIDED FOR ALL UNITS: 1,066 POINTS - 247 TYPE B (x 4 POINTS) + 13 TYPE A (x 6 POINTS)

THE 1998 FAIR HOUSING DESIGN MANUAL IS EMPLOYED AS "SAFE HARBOR" FOR THE FEDERAL FAIR HOUSING ACT

IECC Compliance

REFER TO ENERGY CODE COMPLIANCE REPORT PREPARED BY GROUP 14. **SEE SHEETS A0-7.10 THRU A0-7.12**

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MARSHALL POINTE LAND AQUISITION, LLC
5170 MARSHALL ST - ARVADA, CO 80002

ISSUE FOR CONSTRUCTION
08.07.2024

No.	Date	Issue
1	10.03.2023	PC1 RESPONSE
2	10.31.2023	PC2 RESPONSE

Project Architect	DV
Project Designer	DR
Date	
Job Number	222001
Drawn By	CG / CB/ TT/ NV
Checked By	JG
Title	APARTMENT CODE REVIEW
Sheet Number	A0-4.1

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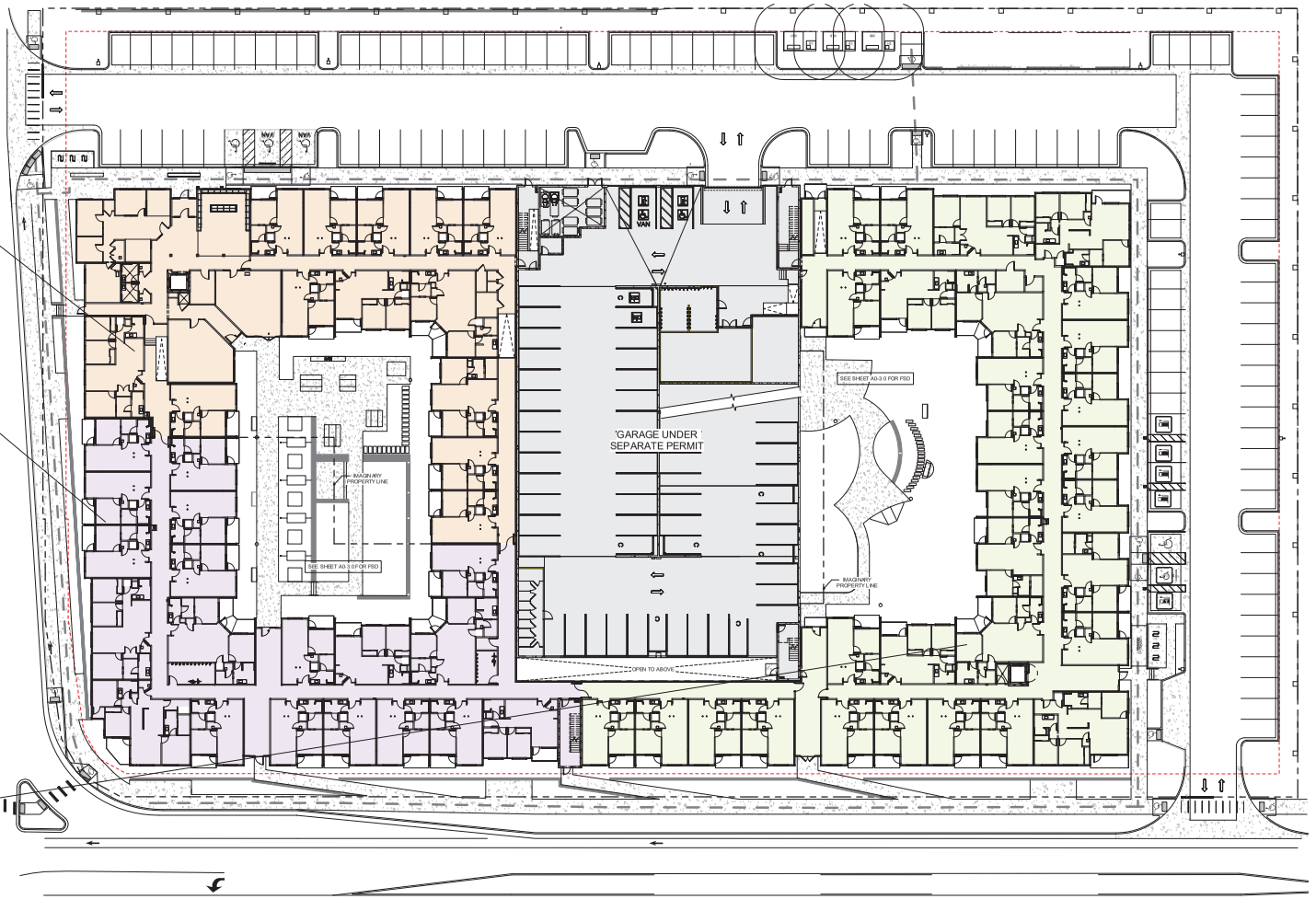

RESIDENTIAL - BUILDING 1	AREA CALCULATIONS
USE GROUP:	APARTMENT: R-2, A-3
CONSTRUCTION TYPE:	TYPE VA, SPRINKLER NFPA 13
OCCUPANCY TYPE:	RESIDENTIAL- FLRS 1-4, R-2 OCC. LEASING/AMENITY: FLR 1, A-3 OCC.
NUMBER OF STORIES ALLOWED:	4 STORIES PER TABLE 504.4
NUMBER OF STORIES PROVIDED:	4 STORIES
ALLOWABLE AREA PER STORY:	
Aa = [(At+Ns X If)]	
Aa = [(36,000+(12,000 x 0)] x 1 =	36,000 SF PER FLOOR FOR R-2
Aa = [(34,000+(11,500 x 0)] x 1 =	34,000 SF PER FLOOR FOR A-3
Aa =	
MAX ALLOWED BUILDING AREA: SUM OF THE RATIOS	
FIRST FLOOR:	R-2 (11,783/36,000) + A-3 (5,160/34,000) = .33 + .15 = .48
SECOND FLOOR:	R-2 (16,664/36,000) = .46
THIRD FLOOR:	R-2 (16,073/36,000) = .46
FOURTH FLOOR:	R-2 (16,073/36,000) = .46
TOTAL SHALL NOT EXCEED 3	.48+.46+.46+.46 = 1.86

RESIDENTIAL - BUILDING 2	AREA CALCULATIONS
USE GROUP:	APARTMENT: R-2
CONSTRUCTION TYPE:	TYPE VA, SPRINKLER NFPA 13
OCCUPANCY TYPE:	RESIDENTIAL, FLRS 1-4, R-2 OCC.
NUMBER OF STORIES ALLOWED:	4 STORIES PER TABLE 504.4
NUMBER OF STORIES PROVIDED:	4 STORIES
MAX ALLOWABLE AREA:	
Aa = [(At+(Ns X If)] x Sa	
Aa = [(36,000+(12,000 x 0)] x 4 =	144,000 SF MAX BUILDING AREA
Aa = [(36,000+(12,000 x 0)] x 1 =	36,000 SF MAX AREA PER STORY
Aa =	
MAX ALLOWED BUILDING AREA:	144,000 SF
MAX ALLOWED BUILDING AREA PER FLOOR:	36,000 SF
PROPOSED BUILDING AREA PER FLOOR:	17,511 SF
PROPOSED TOTAL BUILDING AREA:	70,652

RESIDENTIAL - BUILDING 3	AREA CALCULATIONS
USE GROUP:	APARTMENT: R-2
CONSTRUCTION TYPE:	TYPE VA, SPRINKLER NFPA 13
OCCUPANCY TYPE:	RESIDENTIAL, FLRS 1-4, R-2 OCC.
NUMBER OF STORIES ALLOWED:	4 STORIES PER TABLE 504.4
NUMBER OF STORIES PROVIDED:	4 STORIES
MAX ALLOWABLE AREA:	
Aa = [(At+(Ns X If)] x Sa	
Aa = [(36,000+(12,000 x 0)] x 4 =	144,000 SF MAX BUILDING AREA
Aa = [(36,000+(12,000 x 0)] x 1 =	36,000 SF MAX AREA PER STORY
Aa =	
MAX ALLOWED BUILDING AREA:	144,000 SF
MAX ALLOWED BUILDING AREA PER FLOOR:	36,000 SF
PROPOSED BUILDING AREA PER FLOOR:	27,177 SF
PROPOSED TOTAL BUILDING AREA	108,708 SF

1 BUILDING AREAS
1" = 20'-0"

N TRUE

N PROJECT

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MARSHALL POINTE

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ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue
1	10.03.2023	PC1 RESPONSE

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: BUILDING AREAS AND DATA
Sheet Number: A0-4.2

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GARAGE PARKING: 264
SITE PARKING: 113
TOTAL PARKING: 377 SPACES

TOTAL PARKING RATIO: 377/260 = 1.45

ACCESSIBLE PARKING REQUIRED:
- 1 ACCESSIBLE PARKING SPOT FOR EACH TYPE A UNIT PER IBC 1106.2, #3

ACCESSIBLE PARKING PROVIDED:
- 19 REQUIRED ACCESSIBLE PARKING SPACES (1.3 TYPE A UNITS)
- (13) ACCESSIBLE PARKING SPACES PROVIDED
  - (2) VAN ACCESSIBLE PARKING SPACES INCLUDED (1 PER 6 ACCESSIBLE SPACES - PER IBC 1106.5)

ELECTRICAL VEHICLE READY PARKING
- 38 EV READY SPACES REQUIRED (10% REQUIRED PER CHFA)
- 41 EV READY SPACES PROVIDED

BIKE PARKING REQUIRED:
- 1 PER EVERY 4 DWELLING UNITS. 20% MUST BE LONG-TERM (65 BIKE PARKING SPACES REQUIRED, 13 MUST BE LONG-TERM)
- 54 LONG-TERM SPACES PROVIDED
- REMAINING REQUIRED BIKE SPACES PROVIDED ON SITE, RE: CIVIL

BIKE PARKING SCHEDULE

DESCRIPTION	COUNT	LEVEL	BUILDING
BIKE HOOK SOLO	38	AMENITY ENTRY	GARAGE
BIKE HOOK SOLO	16	LEVEL 1	BUILDING 2
GRAND TOTAL: 54	54		

ACCESSORY OCCUPANCIES CALCULATION S PER SECTION 508.2:

BUILDING 1
- LEVEL 1
  - TOTAL FLOOR AREA: 16,983.15 SF
  - ACCESSORY OCCUPANCIES TOTAL AREA: 179.28 SF
  - PERCENTAGE OF TOTAL FLOOR AREA: 1% < 10%
- LEVEL 2 - 4
  - TOTAL FLOOR AREA: 16,664.39 SF
  - ACCESSORY OCCUPANCIES TOTAL AREA: 272.79 SF
  - PERCENTAGE OF TOTAL FLOOR AREA: 2% < 10%

BUILDING 2
- LEVEL 1
  - TOTAL FLOOR AREA: 17,672.72 SF
  - ACCESSORY OCCUPANCIES TOTAL AREA: 357.61 SF
  - PERCENTAGE OF TOTAL FLOOR AREA: 2% < 10%
- LEVEL 2 - 4
  - TOTAL FLOOR AREA: 17,672.72 SF
  - ACCESSORY OCCUPANCIES TOTAL AREA: 359.21 SF
  - PERCENTAGE OF TOTAL FLOOR AREA: 2% < 10%

BUILDING 3
- LEVEL 1
  - TOTAL FLOOR AREA: 27,176.98 SF
  - ACCESSORY OCCUPANCIES TOTAL AREA: 200.78 SF
  - PERCENTAGE OF TOTAL FLOOR AREA: 1% < 10%
- LEVEL 2 - 4
  - TOTAL FLOOR AREA: 27,178.94 SF
  - ACCESSORY OCCUPANCIES TOTAL AREA: 203.21 SF
  - PERCENTAGE OF TOTAL FLOOR AREA: 1% < 10%

PROJECT UNIT MATRIX - BY LEVEL

UNIT NAME	UNIT TYPE	UNIT AREA	QTY	TOTAL NET LEASABLE AREA	UNIT MIX
LEVEL 1					
UNIT A1	1BD/1BA	612 SF	43	26,316 SF	16.5%
UNIT B1	2BD/1BA	792 SF	5	3,960 SF	1.9%
UNIT B2	2BD/2BA	895 SF	3	2,685 SF	1.2%
UNIT B3	3BD/2BA	1,013 SF	5	5,065 SF	1.9%
UNIT C1	3BD/2BA	1,139 SF	3	3,417 SF	1.2%
UNIT C2	3BD/2BA	1,211 SF	2	2,422 SF	0.8%
UNIT C3	3BD/2BA	1,208 SF	1	1,208 SF	0.4%
			62	45,073 SF	23.8%
LEVEL 2					
UNIT A1	1BD/1BA	612 SF	34	20,808 SF	13.1%
UNIT A1a	1BD/1BA	612 SF	2	1,224 SF	0.8%
UNIT B1	2BD/1BA	792 SF	5	3,960 SF	1.9%
UNIT B2	2BD/2BA	895 SF	12	10,740 SF	4.6%
UNIT B3	2BD/2BA	1,013 SF	4	4,052 SF	1.5%
UNIT B3a	2BD/2BA	1,013 SF	2	2,026 SF	0.8%
UNIT C1	3BD/2BA	1,139 SF	3	3,417 SF	1.2%
UNIT C2	3BD/2BA	1,211 SF	2	2,422 SF	0.8%
UNIT C3	3BD/2BA	1,208 SF	1	1,208 SF	0.4%
			66	51,088 SF	25.8%
LEVEL 3					
UNIT A1	1BD/1BA	612 SF	32	19,584 SF	12.3%
UNIT A1a	1BD/1BA	612 SF	3	1,836 SF	1.2%
UNIT B1	2BD/1BA	792 SF	5	3,960 SF	1.9%
UNIT B2	2BD/2BA	895 SF	13	11,635 SF	5.0%
UNIT B3	2BD/2BA	1,013 SF	4	4,052 SF	1.5%
UNIT B3a	2BD/2BA	1,013 SF	2	2,026 SF	0.8%
UNIT C1	3BD/2BA	1,139 SF	3	3,417 SF	1.2%
UNIT C2	3BD/2BA	1,211 SF	2	2,422 SF	0.8%
UNIT C2a	3BD/2BA	1,211 SF	1	1,211 SF	0.4%
UNIT C3	3BD/2BA	1,208 SF	1	1,208 SF	0.4%
			66	51,391 SF	25.8%
LEVEL 4					
UNIT A1	1BD/1BA	612 SF	33	20,196 SF	12.7%
UNIT A1a	1BD/1BA	612 SF	2	1,224 SF	0.8%
UNIT B1	2BD/1BA	792 SF	5	3,960 SF	1.9%
UNIT B2	2BD/2BA	895 SF	13	11,635 SF	5.0%
UNIT B3	2BD/2BA	1,013 SF	5	5,065 SF	1.9%
UNIT B3a	2BD/2BA	1,013 SF	1	1,013 SF	0.4%
UNIT C1	3BD/2BA	1,139 SF	3	3,417 SF	1.2%
UNIT C2	3BD/2BA	1,211 SF	2	2,422 SF	0.8%
UNIT C2a	3BD/2BA	1,211 SF	1	1,211 SF	0.4%
UNIT C3	3BD/2BA	1,208 SF	1	1,208 SF	0.4%
			66	51,391 SF	25.8%
PROJECT TOTAL			260	198,943 SF	100.0%

PROJECT UNIT MATRIX

UNIT NAME	UNIT TYPE	UNIT AREA	QTY	TOTAL NET LEASABLE AREA	UNIT MIX
1BD/1BA					
UNIT A1	1BD/1BA	612 SF	142	86,904 SF	54.6%
UNIT A1a	1BD/1BA	612 SF	7	4,284 SF	2.7%
			149	91,188 SF	57.3%
2BD/1BA					
UNIT B1	2BD/1BA	792 SF	20	15,840 SF	7.7%
			20	15,840 SF	7.7%
2BD/2BA					
UNIT B2	2BD/2BA	895 SF	41	36,695 SF	15.8%
UNIT B3	2BD/2BA	1,013 SF	18	18,234 SF	6.9%
UNIT B3a	2BD/2BA	1,013 SF	5	5,065 SF	1.9%
			64	59,994 SF	24.6%
3BD/2BA					
UNIT C1	3BD/2BA	1,139 SF	12	13,668 SF	4.6%
UNIT C2	3BD/2BA	1,211 SF	10	12,110 SF	3.8%
UNIT C2a	3BD/2BA	1,211 SF	1	1,211 SF	0.4%
UNIT C3	3BD/2BA	1,208 SF	4	4,832 SF	1.5%
			27	31,821 SF	10.4%
PROJECT TOTAL			260	198,843 SF	100.0%

AVERAGE UNIT AREA
764.78 SF

PROJECT UNIT MATRIX - BALCONIES

UNIT NAME	UNIT TYPE	UNIT AREA	QTY	TOTAL NET LEASABLE AREA	UNIT MIX	BALCONY AREA	BALCONY QTY	BALCONY MIX
1BD/1BA								
UNIT A1 E1	1BD/1BA	612 SF	100	61,200 SF	38.5%	60 SF	100	3.8%
UNIT A1 E2	1BD/1BA	612 SF	30	18,360 SF	11.5%	0 SF	0	0.0%
UNIT A1 E3	1BD/1BA	612 SF	12	7,344 SF	4.6%	60 SF	12	4.6%
UNIT A1a E3	1BD/1BA	612 SF	5	3,060 SF	1.9%	60 SF	5	1.9%
UNIT A1a E2	1BD/1BA	612 SF	2	1,224 SF	0.8%	0 SF	0	0.0%
			149	91,188 SF	57.3%		117	45.0%
2BD/1BA								
UNIT B1 E1	2BD/1BA	792 SF	20	15,840 SF	7.7%	61 SF	20	7.7%
			20	15,840 SF	7.7%		20	7.7%
2BD/2BA								
UNIT B2 E1	2BD/2BA	895 SF	41	36,695 SF	15.9%	60 SF	41	15.8%
UNIT B3 E1	2BD/2BA	1,013 SF	17	17,221 SF	6.5%	135 SF	17	6.5%
UNIT B2 E2	2BD/2BA	1,013 SF	1	1,013 SF	0.4%	135 SF	1	0.4%
UNIT B3a E1	2BD/2BA	1,013 SF	5	5,065 SF	1.9%	135 SF	5	1.9%
			64	59,994 SF	24.6%		64	24.6%
3BD/2BA								
UNIT C1 E1	3BD/2BA	1,139 SF	12	13,668 SF	4.6%	0 SF	0	0.0%
UNIT C2 E1	3BD/2BA	1,211 SF	9	10,899 SF	3.5%	91 SF	9	3.5%
UNIT C2 E2	3BD/2BA	1,211 SF	1	1,211 SF	0.4%	65 SF	1	0.4%
UNIT C2 a E1	3BD/2BA	1,211 SF	1	1,211 SF	0.4%	91 SF	1	0.4%
UNIT C3 E1	3BD/2BA	1,208 SF	4	4,832 SF	1.5%	66 SF	4	1.5%
			27	31,821 SF	10.4%		15	5.8%
PROJECT TOTAL			260	198,843 SF	100.0%		216	83.1%

PROJECT INFORMATION:

5190 MARSHALL ST., ARVADA, CO 80002

ZONING: MX-S: MIXED USE - SUBURBAN

SITE SF ESTIMATE: 4.36 ACRES

RESIDENTIAL BUILDING AREAS - GROSS SF

BUILDING	LEVEL	CONSTRUCTION TYPE	AREA
BUILDING 1	LEVEL 1	TYPE VA	16,983.15 SF
BUILDING 1	LEVEL 2	TYPE VA	16,664.39 SF
BUILDING 1	LEVEL 3	TYPE VA	16,664.39 SF
BUILDING 1	LEVEL 4	TYPE VA	16,664.39 SF
BUILDING 1			66,975.7 SF
BUILDING 2	LEVEL 1	TYPE VA	17,672.72 SF
BUILDING 2	LEVEL 2	TYPE VA	17,672.72 SF
BUILDING 2	LEVEL 3	TYPE VA	17,672.72 SF
BUILDING 2	LEVEL 4	TYPE VA	17,672.7 SF
BUILDING 2			70,690.85 SF
BUILDING 3	LEVEL 1	TYPE VA	27,176.98 SF
BUILDING 3	LEVEL 2	TYPE VA	27,178.94 SF
BUILDING 3	LEVEL 3	TYPE VA	27,178.94 SF
BUILDING 3	LEVEL 4	TYPE VA	27,178.94 SF
BUILDING 3			109,713.81 SF
TOTAL GROSS SF			246,380.36 SF

ROOM SCHEDULE - TENANT STORAGE

NAME	NUMBER	AREA	LEVEL	BUILDING
STG	C119	17.7 SF	LEVEL 1	BUILDING 1
STG	C120	17.36 SF	LEVEL 1	BUILDING 1
STG	C121	39.92 SF	LEVEL 1	BUILDING 1
STG	C219	44.46 SF	LEVEL 2	BUILDING 1
STG	C220	17.7 SF	LEVEL 2	BUILDING 1
STG	C221	17.36 SF	LEVEL 2	BUILDING 1
STG	C222	39.92 SF	LEVEL 2	BUILDING 1
ACC/STG	C318	45.19 SF	LEVEL 3	BUILDING 1
STG	C319	44.46 SF	LEVEL 3	BUILDING 1
STG	C320	17.7 SF	LEVEL 3	BUILDING 1
STG	C321	17.36 SF	LEVEL 3	BUILDING 1
STG	C322	39.92 SF	LEVEL 3	BUILDING 1
STG	C419	44.46 SF	LEVEL 4	BUILDING 1
STG	C420	17.7 SF	LEVEL 4	BUILDING 1
STG	C421	17.36 SF	LEVEL 4	BUILDING 1
STG	C422	39.92 SF	LEVEL 4	BUILDING 1
BUILDING 1: 18		474.45 SF		
STG	C209	39.92 SF	LEVEL 2	BUILDING 2
STG	C209	17.40 SF	LEVEL 2	BUILDING 2
STG	C210	17.79 SF	LEVEL 2	BUILDING 2
STG	C211	44.56 SF	LEVEL 2	BUILDING 2
STG	C213	17.36 SF	LEVEL 2	BUILDING 2
STG	C214	39.92 SF	LEVEL 2	BUILDING 2
STG	C215	17.7 SF	LEVEL 2	BUILDING 2
STG	C216	44.46 SF	LEVEL 2	BUILDING 2
STG	C309	39.01 SF	LEVEL 3	BUILDING 2
STG	C309	17.53 SF	LEVEL 3	BUILDING 2
STG	C310	17.79 SF	LEVEL 3	BUILDING 2
STG	C311	44.56 SF	LEVEL 3	BUILDING 2
STG	C312	45.3 SF	LEVEL 3	BUILDING 2
STG	C313	17.36 SF	LEVEL 3	BUILDING 2
STG	C314	39.92 SF	LEVEL 3	BUILDING 2
STG	C315	17.7 SF	LEVEL 3	BUILDING 2
STG	C316	44.46 SF	LEVEL 3	BUILDING 2
STG	C408	39.01 SF	LEVEL 4	BUILDING 2
STG	C409	17.53 SF	LEVEL 4	BUILDING 2
STG	C410	17.79 SF	LEVEL 4	BUILDING 2
STG	C411	44.56 SF	LEVEL 4	BUILDING 2
STG	C413	17.36 SF	LEVEL 4	BUILDING 2
STG	C414	39.92 SF	LEVEL 4	BUILDING 2
STG	C415	17.7 SF	LEVEL 4	BUILDING 2
STG	C416	44.46 SF	LEVEL 4	BUILDING 2
BUILDING 2: 25		797.06 SF		
STG	G123a	22.39 SF	LEVEL P1.5	GARAGE
STG	G123c	22.39 SF	LEVEL P1.5	GARAGE
STG	G123d	90.72 SF	LEVEL P1.5	GARAGE
STG	G124a	20.34 SF	LEVEL P1.5	GARAGE
STG	G124b	20.87 SF	LEVEL P1.5	GARAGE
STG	G124c	19.81 SF	LEVEL P1.5	GARAGE
STG	G124d	20.87 SF	LEVEL P1.5	GARAGE
STG	G124e	20.87 SF	LEVEL P1.5	GARAGE
STG	G124f	42.46 SF	LEVEL P1.5	GARAGE
STG	G206	19.72 SF	LEVEL 2	GARAGE
STG	G207	16.88 SF	LEVEL 2	GARAGE
STG	G208	16.88 SF	LEVEL 2	GARAGE
STG	G209	16.88 SF	LEVEL 2	GARAGE
STG	G222a	26.16 SF	LEVEL P2.5	GARAGE
STG	G222b	25.26 SF	LEVEL P2.5	GARAGE
STG	G222c	25.26 SF	LEVEL P2.5	GARAGE
STG	G222d	26.24 SF	LEVEL P2.5	GARAGE
STG	G222e	26.2 SF	LEVEL P2.5	GARAGE
STG	G222f	18.22 SF	LEVEL P2.5	GARAGE
STG	G222g	19.13 SF	LEVEL P2.5	GARAGE
STG	G406	19.72 SF	LEVEL 4	GARAGE
STG	G407	16.88 SF	LEVEL 4	GARAGE
STG	G408	16.88 SF	LEVEL 4	GARAGE
STG	G409	16.88 SF	LEVEL 4	GARAGE
GARAGE: 34		762.9 SF		
TOTAL: 79		1,994.41 SF		

ROOM SCHEDULE - AMENITY

ROOM NAME	NUMBER	AREA	LEVEL	BUILDING
MAILROOM	C101a	58.0 SF	LEVEL 1	BUILDING1
CLUBROOM	C101b	69.3 SF	LEVEL 1	BUILDING1
FITNESS	C101c	67.0 SF	LEVEL 1	BUILDING1
FWC/EL	C102	14.9 SF	LEVEL 1	BUILDING1
MECH	C103	1.5 SF	LEVEL 1	BUILDING1
FAMILY RR	C104	5.8 SF	LEVEL 1	BUILDING1
FAMILY RR	C105	6.0 SF	LEVEL 1	BUILDING1
MECH	C106	1.6 SF	LEVEL 1	BUILDING1
LAN	C107	2.0 SF	LEVEL 1	BUILDING1
LOBBY	L000	860.8 SF	LEVEL 1	BUILDING1
COURTYARD ACCESS	L000a	22.4 SF	LEVEL 1	BUILDING1
VESTIBULE	L000b	7.9 SF	LEVEL 1	BUILDING1
LEASING	L001	324 SF	LEVEL 1	BUILDING1
WORK ROOM	L001a	24.0 SF	LEVEL 1	BUILDING1
WAITING	L001b	10.2 SF	LEVEL 1	BUILDING1
RECEPTION	L001c	111 SF	LEVEL 1	BUILDING1
OFFICE	L001d	14.3 SF	LEVEL 1	BUILDING1
FILE ROOM	L002	11.7 SF	LEVEL 1	BUILDING1
MECH	L003	3.6 SF	LEVEL 1	BUILDING1
DATA	L005	21.0 SF	LEVEL 1	BUILDING1
OFFICE	L006	16.8 SF	LEVEL 1	BUILDING1
LEVEL 1: 21		4,694 SF		

ROOM SCHEDULE - COMMON

NAME	NUMBER	AREA	LEVEL	BUILDING
ELEC	C118	93.15 SF	LEVEL 1	BUILDING1
ELEC	C201	93.1 SF	LEVEL 2	BUILDING1
LAUNDRY	C202	222.41 SF	LEVEL 2	BUILDING1
ELEC	C301	93.1 SF	LEVEL 3	BUILDING1
ELEC	C401	92.67 SF	LEVEL 4	BUILDING1
BUILDING 1: 5		594.43 SF		
BIKE CAFE	C109	175.79 SF	LEVEL 1	BUILDING2
BIKE STG	C113	125.62 SF	LEVEL 1	BUILDING2
JAN	C116	45.19 SF	LEVEL 1	BUILDING2
JAN	C217	45.19 SF	LEVEL 2	BUILDING2
JAN	C317	45.19 SF	LEVEL 3	BUILDING2
JAN	C417	45.19 SF	LEVEL 4	BUILDING2
BUILDING 2: 6		482.18 SF		
ELEC	C123	104.96 SF	LEVEL 1	BUILDING3
LOW VOLT	C124	46.02 SF	LEVEL 1	BUILDING3
JAN	C125	43.16 SF	LEVEL 1	BUILDING3
ELEC	C223	104.96 SF	LEVEL 2	BUILDING3
JAN	C224	45.76 SF	LEVEL 2	BUILDING3
LOW VOLT	C225	46.21 SF	LEVEL 2	BUILDING3
ELEC	C323	104.96 SF	LEVEL 3	BUILDING3
LOW VOLT	C324	45.76 SF	LEVEL 3	BUILDING3
JAN	C325	46.21 SF	LEVEL 3	BUILDING3
ELEC	C423	104.96 SF	LEVEL 4	BUILDING3
JAN	C424	45.76 SF	LEVEL 4	BUILDING3
LOW VOLT	C425	46.21 SF	LEVEL 4	BUILDING3
BUILDING 3: 12		784.92 SF		
BIKE STG	G109	447.51 SF	AMENITY ENTRY	GARAGE
TRASH/TERM	G102	546.78 SF	LEVEL 1	GARAGE
TRASH ACCESS	G106	62.72 SF	LEVEL 1	GARAGE
MAINTENANCE	G107	850.88 SF	LEVEL 1	GARAGE
MAIN ELEC	G108	571.32 SF	LEVEL 1	GARAGE
TRASH ACCESS	G205	61.02 SF	LEVEL 2	GARAGE
TRASH ACCESS	G305	64.75 SF	LEVEL 3	GARAGE
TRASH ACCESS	G405	64.75 SF	LEVEL 4	GARAGE
GARAGE: 8		2,670.23 SF		

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MARSHALL POINTE

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5170 MARSHALL ST - ARVADA, CO 80002

ISSUE FOR CONSTRUCTION
06.01.2024

No.	Date	Issue
1	10.03.2023	PC1 RESPONSE

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: BUILDING AREAS AND DATA
Sheet Number: A0-4.3

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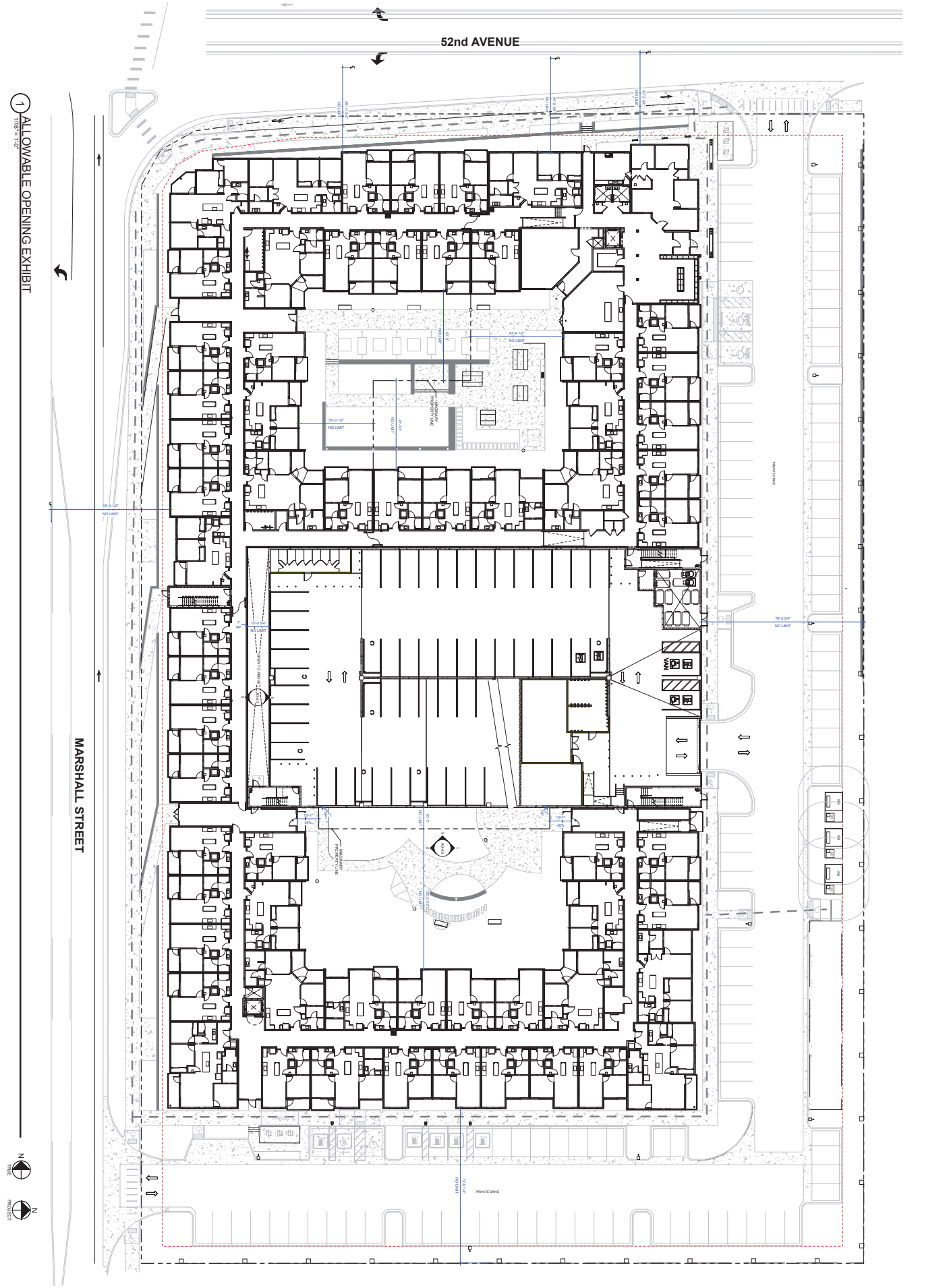
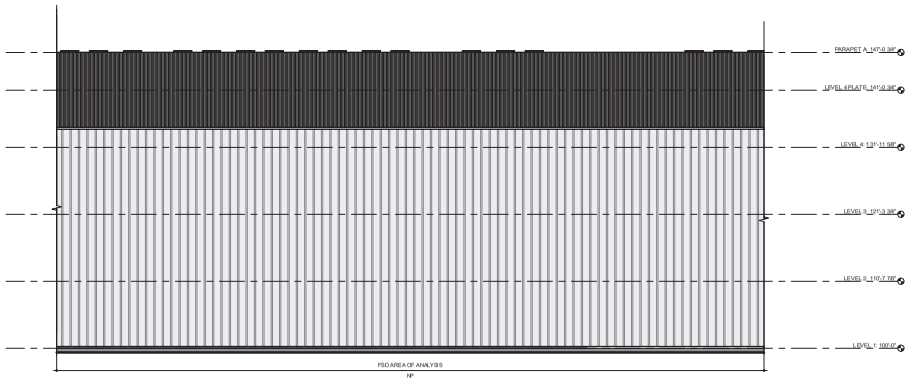
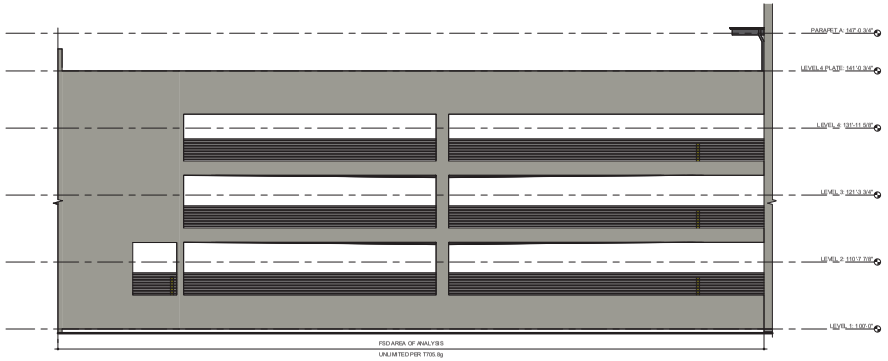

52nd AVENUE
MARSHALL STREET
PRIVATE DRIVE
IMAGINARY PROPERTY LINE
NO LIMIT
NO LIMIT
NO LIMIT



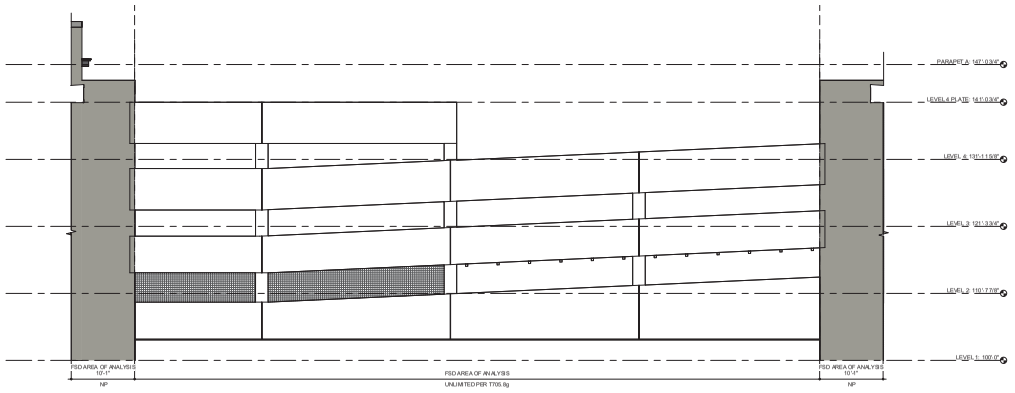
5 ALLOWABLE OPENING - EAST ELEVATION AT GARAGE WELL
1/8" = 1'-0"



4 ALLOWABLE OPENING - GARAGE WEST ELEVATION
1/8" = 1'-0"



2 ALLOWABLE OPENING - AREA C - WEST COURTYARD ELEVATION
1/8" = 1'-0"



3 ALLOWABLE OPENING - GARAGE SOUTH ELEVATION
1/8" = 1'-0"



1 ALLOWABLE OPENING - AREA D - EAST COURTYARD ELEVATION
1/8" = 1'-0"

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ISSUE FOR CONSTRUCTION
06.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
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Title: ALLOWABLE OPENING ELEVATIONS
Sheet Number: COMMON
A0-4.5

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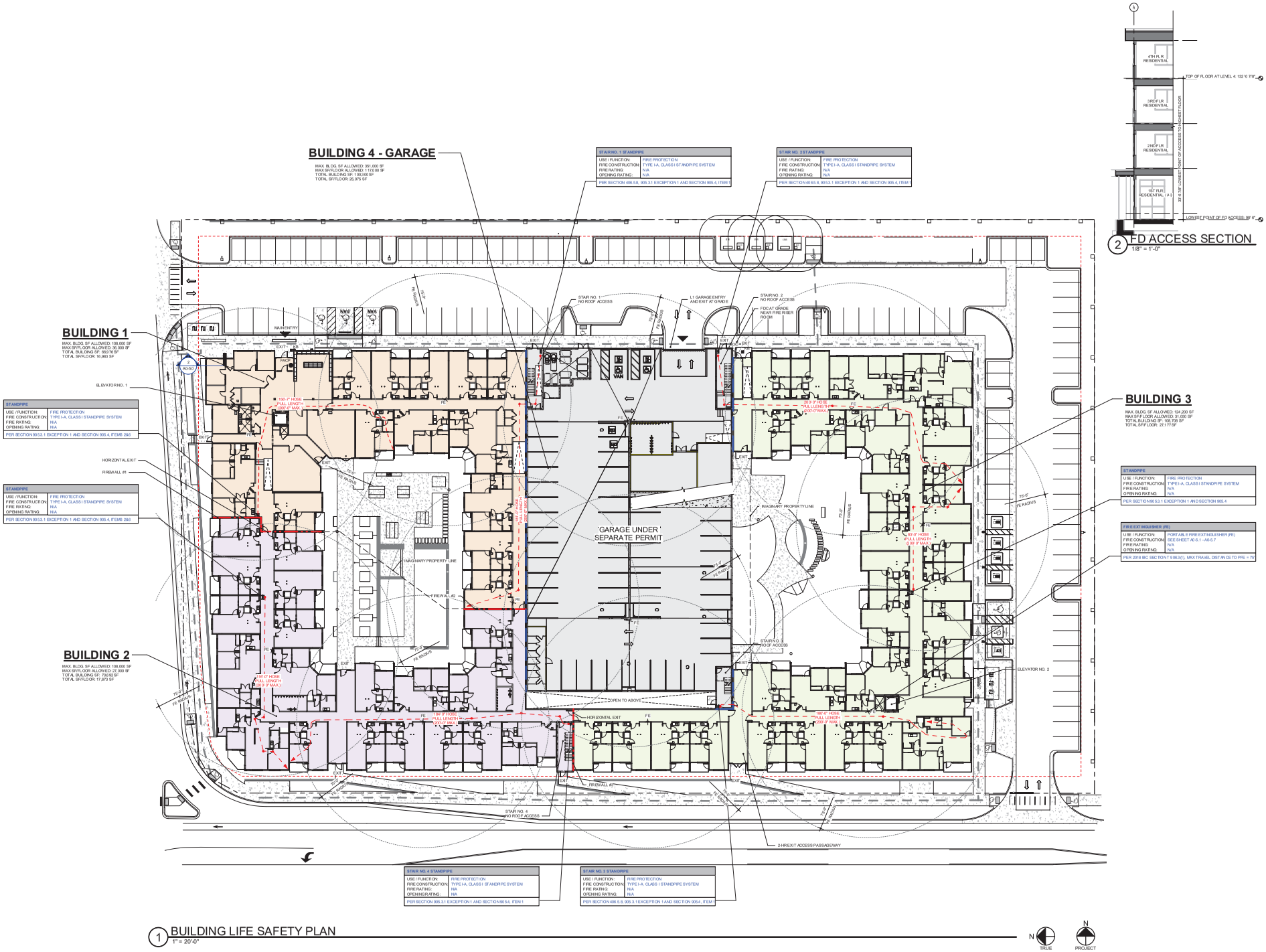

1 BUILDING LIFE SAFETY PLAN
1" = 20'-0"

2 FD ACCESS SECTION
1/8" = 1'-0"

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ISSUE FOR CONSTRUCTION
06.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: BUILDING LIFE SAFETY PLAN
Sheet Number: A0-5.0

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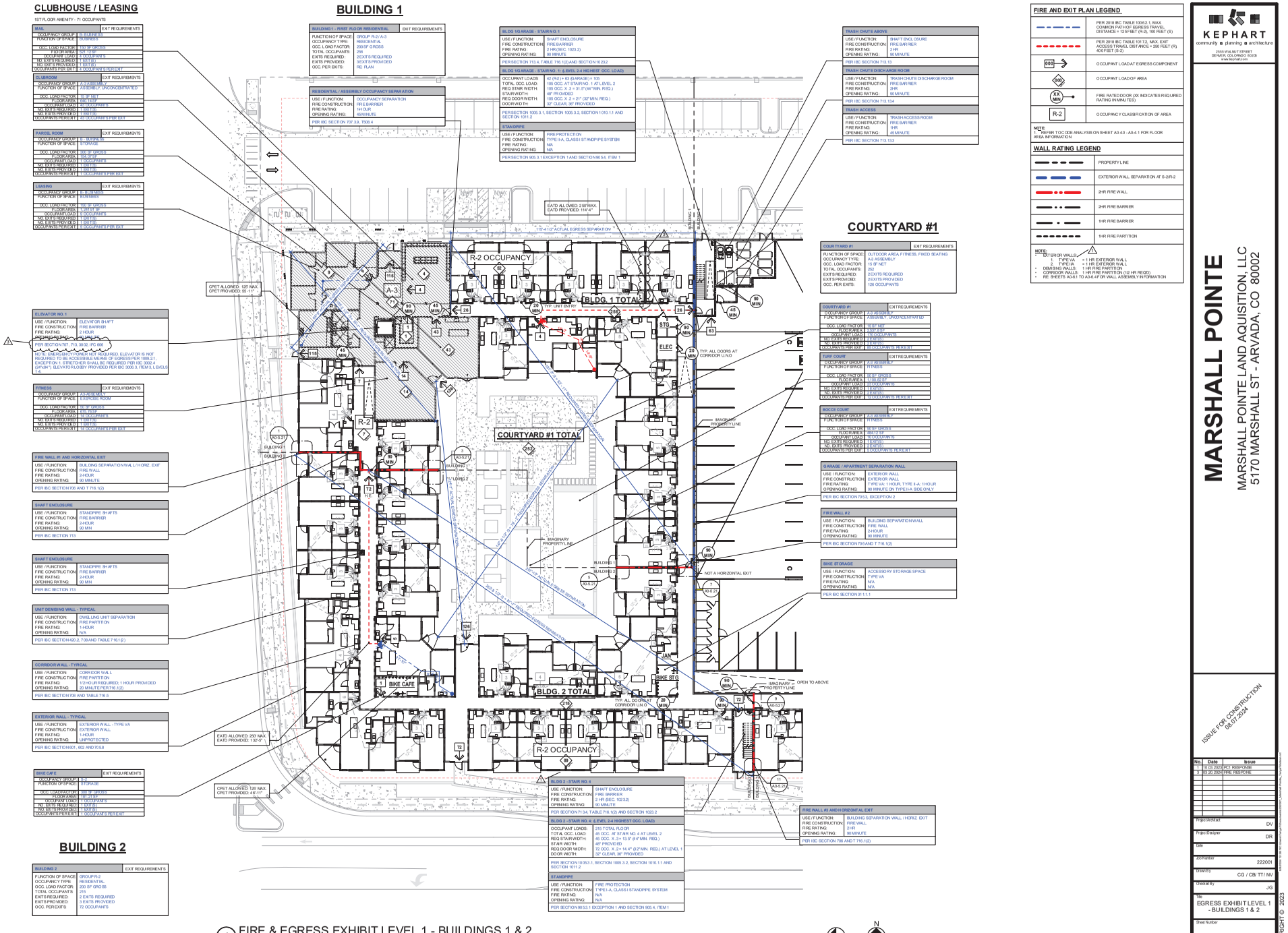
BUILDING 1
CLUBHOUSE / LEASING
1ST FLOOR AMENITY - 71 OCCUPANTS
MAIL
OCCUPANCY GROUP: B - BUSINESS
FUNCTION OF SPACE: BUSINESS
OCC. LOAD FACTOR: 100 SF GROSS
FLOOR AREA: 527 SF
OCCUPANT LOAD: 6 OCCUPANTS
NO. EXITS REQUIRED: 1 EXIT
NO. EXITS PROVIDED: 1 EXIT
OCCUPANTS PER EXIT: 6 OCCUPANTS PER EXIT
CLUBROOM
OCCUPANCY GROUP: A-3 ASSEMBLY
FUNCTION OF SPACE: ASSEMBLY, UNCONCENTRATED
OCC. LOAD FACTOR: 15 SF NET
FLOOR AREA: 1061 NET
OCCUPANT LOAD: 71 OCCUPANTS
NO. EXITS REQUIRED: 1 EXIT(S)
NO. EXITS PROVIDED: 1 EXIT(S)
OCCUPANTS PER EXIT: 71 OCCUPANTS PER EXIT
PARCEL ROOM
OCCUPANCY GROUP: B - BUSINESS
FUNCTION OF SPACE: STORAGE
OCC. LOAD FACTOR: 300 SF GROSS
FLOOR AREA: 155.07 SF
OCCUPANT LOAD: 1 OCCUPANTS
NO. EXITS REQUIRED: 1 EXIT(S)
NO. EXITS PROVIDED: 1 EXIT(S)
OCCUPANTS PER EXIT: 1 OCCUPANTS PER EXIT
LEASING
OCCUPANCY GROUP: B - BUSINESS
FUNCTION OF SPACE: BUSINESS
OCC. LOAD FACTOR: 150 SF GROSS
FLOOR AREA: 1,201.91 SF
OCCUPANT LOAD: 8 OCCUPANTS
NO. EXITS REQUIRED: 1 EXIT(S)
NO. EXITS PROVIDED: 1 EXIT(S)
OCCUPANTS PER EXIT: 8 OCCUPANTS PER EXIT
ELEVATOR NO. 1
USE / FUNCTION: ELEVATOR SHAFT
FIRE CONSTRUCTION: FIRE BARRIER
FIRE RATING: 2 HOUR
OPENING RATING: N/A
PER SECTION 707, 713, 1030, IFC 606
NOTE: EMERGENCY POWER NOT REQUIRED. ELEVATOR IS NOT REQUIRED TO BE ACCESSIBLE MEANS OF EGRESS PER 1009.2.1, EXCEPTION 1. STRETCHER SHALL BE REQUIRED PER IBC 3002.4 (24"x96"). ELEVATOR LOBBY PROVIDED PER IBC 3008.3, ITEM 3, LEVELS 1-4.
FITNESS
OCCUPANCY GROUP: A-3 ASSEMBLY
FUNCTION OF SPACE: EXERCISE ROOM
OCC. LOAD FACTOR: 50 SF GROSS
FLOOR AREA: 875.76 SF
OCCUPANT LOAD: 18 OCCUPANTS
NO. EXITS REQUIRED: 1 EXIT(S)
NO. EXITS PROVIDED: 1 EXIT(S)
OCCUPANTS PER EXIT: 18 OCCUPANTS PER EXIT
FIRE WALL #1 AND HORIZONTAL EXIT
USE / FUNCTION: BUILDING SEPARATION WALL / HORIZ. EXIT
FIRE CONSTRUCTION: FIRE WALL
FIRE RATING: 2-HOUR
OPENING RATING: 90 MINUTE
PER IBC SECTION 706 AND T 716.1(2)
SHAFT ENCLOSURE
USE / FUNCTION: STANDPIPE SHAFTS
FIRE CONSTRUCTION: FIRE BARRIER
FIRE RATING: 2-HOUR
OPENING RATING: 90 MIN
PER IBC SECTION 713
SHAFT ENCLOSURE
USE / FUNCTION: STANDPIPE SHAFTS
FIRE CONSTRUCTION: FIRE BARRIER
FIRE RATING: 2-HOUR
OPENING RATING: 90 MIN
PER IBC SECTION 713
UNIT DEMISING WALL - TYPICAL
USE / FUNCTION: DWELLING UNIT SEPARATION
FIRE CONSTRUCTION: FIRE PARTITION
FIRE RATING: 1-HOUR
OPENING RATING: N/A
PER IBC SECTION 420.2, 708 AND TABLE T 716.1 (2)
CORRIDOR WALL - TYPICAL
USE / FUNCTION: CORRIDOR WALL
FIRE CONSTRUCTION: FIRE PARTITION
FIRE RATING: 1/2 HOUR REQUIRED, 1 HOUR PROVIDED
OPENING RATING: 20 MINUTE PER T716.1(2)
PER IBC SECTION 708 AND TABLE 716.5
EXTERIOR WALL - TYPICAL
USE / FUNCTION: EXTERIOR WALL - TYPE VA
FIRE CONSTRUCTION: EXTERIOR WALL
FIRE RATING: 1-HOUR
OPENING RATING: UNPROTECTED
PER IBC SECTION 601, 602 AND 705.8
BIKE CAFE
OCCUPANCY GROUP: S-1
FUNCTION OF SPACE: STORAGE
OCC. LOAD FACTOR: 300 SF GROSS
FLOOR AREA: 1,161 SF
OCCUPANT LOAD: 1 OCCUPANTS
NO. EXITS REQUIRED: 1 EXIT (S)
NO. EXITS PROVIDED: 1 EXIT (S)
OCCUPANTS PER EXIT: 1 OCCUPANT PER EXIT
BUILDING 2
BUILDING 2
FUNCTION OF SPACE: GROUP R-2
OCCUPANCY TYPE: RESIDENTIAL
OCC. LOAD FACTOR: 200 SF GROSS
TOTAL OCCUPANTS: 215
EXITS REQUIRED: 2 EXITS REQUIRED
EXITS PROVIDED: 3 EXITS PROVIDED
OCC. PER EXITS: 72 OCCUPANTS
BUILDING 1 - FIRST FLOOR RESIDENTIAL
FUNCTION OF SPACE: GROUP R-2 / A-3
OCCUPANCY TYPE: RESIDENTIAL
OCC. LOAD FACTOR: 200 SF GROSS
TOTAL OCCUPANTS: 256
EXITS REQUIRED: 3 EXITS REQUIRED
EXITS PROVIDED: 3 EXITS PROVIDED
OCC. PER EXITS: RE: PLAN
RESIDENTIAL / ASSEMBLY OCCUPANCY SEPARATION
USE / FUNCTION: OCCUPANCY SEPARATION
FIRE CONSTRUCTION: FIRE BARRIER
FIRE RATING: 1-HOUR
OPENING RATING: 45 MINUTE
PER IBC SECTION 707.3.9 , T508.4
BLDG 1/2 GARAGE - STAIR NO. 1
USE / FUNCTION: SHAFT ENCLOSURE
FIRE CONSTRUCTION: FIRE BARRIER
FIRE RATING: 2 HR (SEC. 1023.2)
OPENING RATING: 90 MINUTE
PER SECTION 713.4, TABLE 716.1(2) AND SECTION 1023.2
BLDG 1/2 GARAGE - STAIR NO. 1 (LEVEL 2-4 HIGHEST OCC. LOAD)
OCCUPANT LOADS: 62 (R2) + 43 (GARAGE) = 105
TOTAL OCC. LOAD: 105 OCC. AT STAIR NO. 1 AT LEVEL 2
REQ STAIR WIDTH: 105 OCC. X .3 = 31.5" (44" MIN. REQ.)
STAIR WIDTH: 48" PROVIDED
REQ DOOR WIDTH: 105 OCC. X .2 = 21" (32" MIN. REQ.)
DOOR WIDTH: 32" CLEAR, 36" PROVIDED
PER SECTION 1005.3.1, SECTION 1005.3.2, SECTION 1010.1.1 AND SECTION 1011.2
STANDPIPE
USE / FUNCTION: FIRE PROTECTION
FIRE CONSTRUCTION: TYPE I-A, CLASS I STANDPIPE SYSTEM
FIRE RATING: N/A
OPENING RATING: N/A
PER SECTION 905.3.1 EXCEPTION 1 AND SECTION 90.5.4, ITEM 1
BLDG 2 - STAIR NO. 4
USE / FUNCTION: SHAFT ENCLOSURE
FIRE CONSTRUCTION: FIRE BARRIER
FIRE RATING: 2 HR (SEC. 102.32)
OPENING RATING: 90 MINUTE
PER SECTION 713.4, TABLE 716.1(2) AND SECTION 1023.2
BLDG 2 - STAIR NO. 4 (LEVEL 2-4 HIGHEST OCC. LOAD)
OCCUPANT LOADS: 215 TOTAL FLOOR
TOTAL OCC. LOAD: 45 OCC. AT STAIR NO. 4 AT LEVEL 2
REQ STAIR WIDTH: 45 OCC. X .3 = 13.5" (44" MIN. REQ.)
STAIR WIDTH: 48" PROVIDED
REQ DOOR WIDTH: 72 OCC. X .2 = 14.4" (32" MIN. REQ.) AT LEVEL 1
DOOR WIDTH: 32" CLEAR, 36" PROVIDED
PER SECTION 1009.3.1, SECTION 1005.3.2, SECTION 1010.1.1 AND SECTION 1011.2
STANDPIPE
USE / FUNCTION: FIRE PROTECTION
FIRE CONSTRUCTION: TYPE I-A, CLASS I STANDPIPE SYSTEM
FIRE RATING: N/A
OPENING RATING: N/A
PER SECTION 905.3.1 EXCEPTION 1 AND SECTION 905.4, ITEM 1
TRASH CHUTE ABOVE
USE / FUNCTION: SHAFT ENCLOSURE
FIRE CONSTRUCTION: FIRE BARRIER
FIRE RATING: 2 HR
OPENING RATING: 90 MINUTE
PER IBC SECTION 713.13
TRASH CHUTE DISCHARGE ROOM
USE / FUNCTION: TRASH CHUTE DISCHARGE ROOM
FIRE CONSTRUCTION: FIRE BARRIER
FIRE RATING: 2HR
OPENING RATING: 90 MINUTE
PER IBC SECTION 713.13.4
TRASH ACCESS
USE / FUNCTION: TRASH ACCESS ROOM
FIRE CONSTRUCTION: FIRE BARRIER
FIRE RATING: 1HR
OPENING RATING: 45 MINUTE
PER IBC SECTION 713.13.3
COURTYARD #1
COURTYARD #1
FUNCTION OF SPACE: OUTDOOR AREA, FITNESS, FIXED SEATING
OCCUPANCY TYPE: A-3 ASSEMBLY
OCC. LOAD FACTOR: 15 SF NET
TOTAL OCCUPANTS: 252
EXITS REQUIRED: 2 EXITS REQUIRED
EXITS PROVIDED: 2 EXITS PROVIDED
OCC. PER EXITS: 126 OCCUPANTS
COURTYARD #1
OCCUPANCY GROUP: A-3 ASSEMBLY
FUNCTION OF SPACE: ASSEMBLY, UNCONCENTRATED
OCC. LOAD FACTOR: 15 SF NET
FLOOR AREA: 2,837 SF
OCCUPANT LOAD: 189 OCCUPANTS
NO. EXITS REQUIRED: 1 EXIT(S)
NO. EXITS PROVIDED: 2 EXIT(S)
OCCUPANTS PER EXIT: 95 OCCUPANTS PER EXIT
TURF COURT
OCCUPANCY GROUP: A-3 ASSEMBLY
FUNCTION OF SPACE: FITNESS
OCC. LOAD FACTOR: 50 SF GROSS
FLOOR AREA: 1,701 SF
OCCUPANT LOAD: 34 OCCUPANTS
NO. EXITS REQUIRED: 1 EXIT(S)
NO. EXITS PROVIDED: 1 EXIT(S)
OCCUPANTS PER EXIT: 34 OCCUPANTS PER EXIT
BOCCE COURT
OCCUPANCY GROUP: A-3 ASSEMBLY
FUNCTION OF SPACE: FITNESS
OCC. LOAD FACTOR: 50 SF GROSS
FLOOR AREA: 884.12 SF
OCCUPANT LOAD: 18 OCCUPANTS
NO. EXITS REQUIRED: 1 EXIT(S)
NO. EXITS PROVIDED: 2 EXIT(S)
OCCUPANTS PER EXIT: 9 OCCUPANTS PER EXIT
GARAGE / APARTMENT SEPARATION WALL
USE / FUNCTION: EXTERIOR WALL
FIRE CONSTRUCTION: EXTERIOR WALL
FIRE RATING: TYPE VA: 1 HOUR, TYPE II-A: 1 HOUR
OPENING RATING: 90 MINUTE ON TYPE II-A SIDE ONLY
PER IBC SECTION 705.3, EXCEPTION 2
FIRE WALL #2
USE / FUNCTION: BUILDING SEPARATION WALL
FIRE CONSTRUCTION: FIRE WALL
FIRE RATING: 2-HOUR
OPENING RATING: 90 MINUTE
PER IBC SECTION 706 AND T 716.1(2)
BIKE STORAGE
USE / FUNCTION: ACCESSORY STORAGE SPACE
FIRE CONSTRUCTION: TYPE VA
FIRE RATING: N/A
OPENING RATING: N/A
PER IBC SECTION 311.1.1
FIRE WALL #3 AND HORIZONTAL EXIT
USE / FUNCTION: BUILDING SEPARATION WALL / HORIZ. EXIT
FIRE CONSTRUCTION: FIRE WALL
FIRE RATING: 2-HR
OPENING RATING: 90 MINUTE
PER IBC SECTION 706 AND T 716.1(2)
FIRE AND EXIT PLAN LEGEND
PER 2018 IBC TABLE 1018.2, 1, MAX. COMMON PATH OF EGRESS TRAVEL DISTANCE = 125 FEET (A-2), 100 FEET (S)
PER 2018 IBC TABLE 1017.2, MAX. EXIT ACCESS TRAVEL DIST ANCE = 250 FEET (R) 400 FEET (S-2)
OCCUPANT LOAD AT EGRESS COMPONENT
OCCUPANT LOAD OF AREA
FIRE RATED DOOR (XX INDICATES REQUIRED RATING IN MINUTES)
OCCUPANCY CLASSIFICATION OF AREA
NOTE:
1. "REFER TO CODE ANALYSIS ON SHEET A0.4.0 - A0.4.1 FOR FLOOR AREA INFORMATION
WALL RATING LEGEND
PROPERTY LINE
EXTERIOR WALL SEPARATION AT S-2/R-2
2HR FIRE WALL
2HR FIRE BARRIER
1HR FIRE BARRIER
1HR FIRE PARTITION
NOTE:
* EXTERIOR WALLS:
1 TYPE VA = 1 HR EXTERIOR WALL
2 TYPE IIA = 1 HR EXTERIOR WALL
* DEMISING WALLS = 1 HR FIRE PARTITION
* CORRIDOR WALLS = 1 HR FIRE PARTITION (1/2 HR REQ'D)
* RE: SHEETS A0.4.1 TO A0.4.4 FOR WALL ASSEMBLY INFORMATION
BUILDING 2
1 FIRE & EGRESS EXHIBIT LEVEL 1 - BUILDINGS 1 & 2
1/16" = 1'-0"
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ISSUE FOR CONSTRUCTION
06.01.2024
No. Date Issue
1 10.03.2023 PC1 RESPONSE
3 03.20.2024 FIRE RESPONSE
Project Architect: DV
Project Designer: DR
Title:
Job Number: 222001
Drawn By: CG / CB/ TT/ NV
Checked By: JG
Title: EGRESS EXHIBIT LEVEL 1 - BUILDINGS 1 & 2
Sheet Number: A0-5.1
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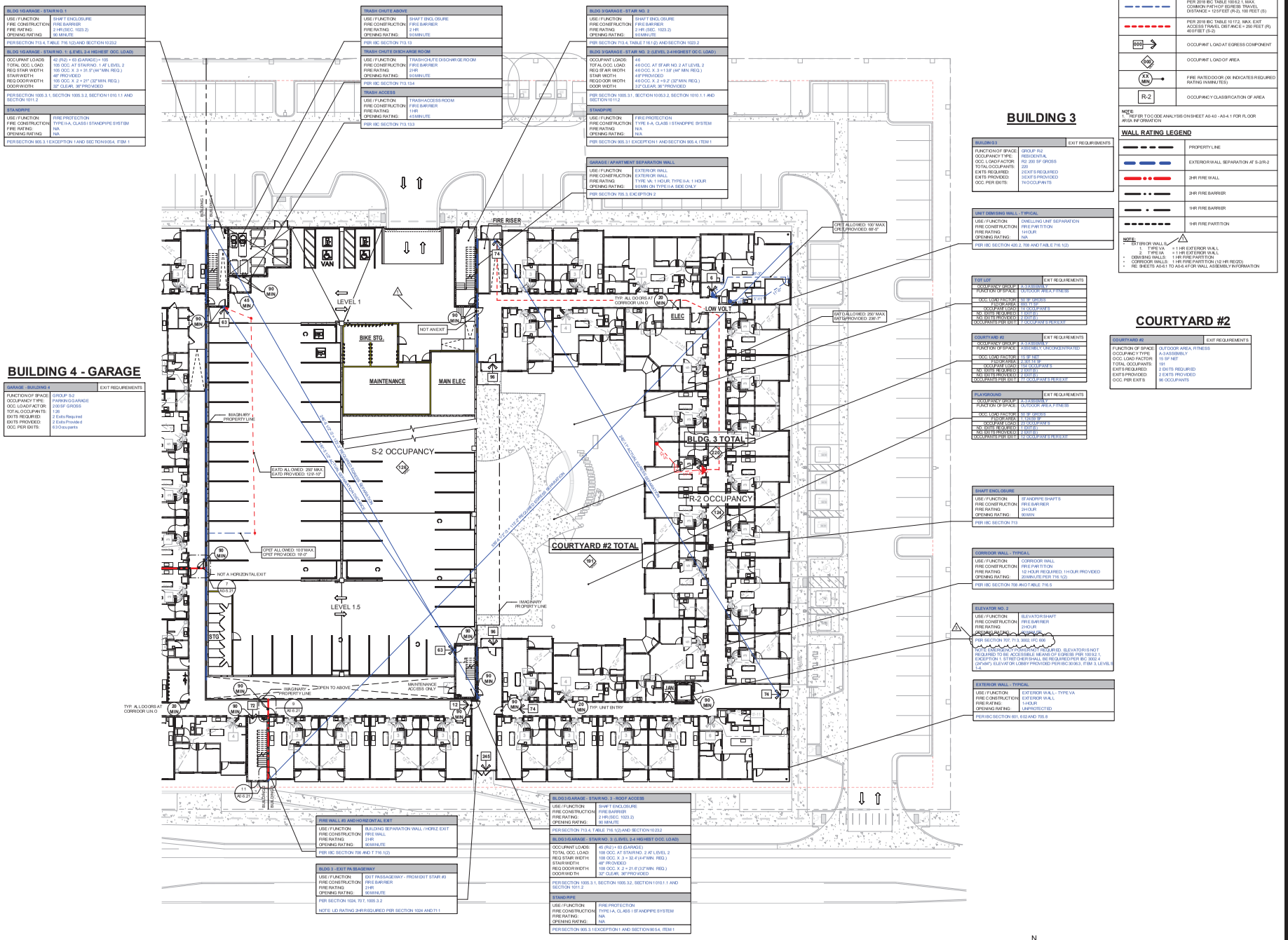

BUILDING 4 - GARAGE

GARAGE - BUILDING 4	EXIT REQUIREMENTS
FUNCTION OF SPACE:	GROUP S-2
OCCUPANCY TYPE:	PARKING GARAGE
OCC. LOAD FACTOR:	200 SF GROSS
TOTAL OCCUPANTS:	126
EXITS REQUIRED:	2 Exits Required
EXITS PROVIDED:	2 Exits Provided
OCC. PER EXITS:	63 Occupants

BUILDING 3

BUILDING 3	EXIT REQUIREMENTS
FUNCTION OF SPACE:	GROUP R-2
OCCUPANCY TYPE:	RESIDENTIAL
OCC. LOAD FACTOR:	R2: 200 SF GROSS
TOTAL OCCUPANTS:	220
EXITS REQUIRED:	2 EXITS REQUIRED
EXITS PROVIDED:	3 EXITS PROVIDED
OCC. PER EXITS:	74 OCCUPANTS

UNIT DEMISING WALL - TYPICAL	
USE / FUNCTION:	DWELLING UNIT SEPARATION
FIRE CONSTRUCTION:	FIRE PARTITION
FIRE RATING:	1 HOUR
OPENING RATING:	N/A
PER IBC SECTION 420.2, 708 AND TABLE 716.1(2)	

TOT LOT	EXIT REQUIREMENTS
OCCUPANCY GROUP:	A-3 ASSEMBLY
FUNCTION OF SPACE:	OUTDOOR AREA, FITNESS
OCC. LOAD FACTOR:	50 SF GROSS
FITOP AREA:	669.71 SF
OCCUPANT LOAD:	14 OCCUPANTS
NO. EXITS REQUIRED:	1 EXIT (S)
NO. EXITS PROVIDED:	2 EXIT (S)
OCCUPANTS PER EXIT:	7 OCCUPANTS PER EXIT

COURTYARD #2	EXIT REQUIREMENTS
OCCUPANCY GROUP:	A-3 ASSEMBLY
FUNCTION OF SPACE:	ASSEMBLY, UNCONCENTRATED
OCC. LOAD FACTOR:	15 SF NET
FITOP AREA:	2,807.16 SF
OCCUPANT LOAD:	188 OCCUPANTS
NO. EXITS REQUIRED:	2 EXIT (S)
NO. EXITS PROVIDED:	2 EXIT (S)
OCCUPANTS PER EXIT:	94 OCCUPANTS PER EXIT

PLAYGROUND	EXIT REQUIREMENTS
OCCUPANCY GROUP:	A-3 ASSEMBLY
FUNCTION OF SPACE:	OUTDOOR AREA, FITNESS
OCC. LOAD FACTOR:	50 SF GROSS
FITOP AREA:	1,126.09 SF
OCCUPANT LOAD:	23 OCCUPANTS
NO. EXITS REQUIRED:	1 EXIT (S)
NO. EXITS PROVIDED:	2 EXIT (S)
OCCUPANTS PER EXIT:	12 OCCUPANTS PER EXIT

SHAFT ENCLOSURE	
USE / FUNCTION:	STANDPIPE SHAFTS
FIRE CONSTRUCTION:	FIRE BARRIER
FIRE RATING:	2 HOUR
OPENING RATING:	90 MIN
PER IBC SECTION 713	

CORRIDOR WALL - TYPICAL	
USE / FUNCTION:	CORRIDOR WALL
FIRE CONSTRUCTION:	FIRE PARTITION
FIRE RATING:	1/2 HOUR REQUIRED; 1 HOUR PROVIDED
OPENING RATING:	20 MINUTE PER 716.1(2)
PER IBC SECTION 709 AND TABLE 716.5	

ELEVATOR NO. 2	
USE / FUNCTION:	ELEVATOR SHAFT
FIRE CONSTRUCTION:	FIRE BARRIER
FIRE RATING:	2 HOUR
OPENING RATING:	90 MIN
PER SECTION 707, 713, 3003, IPC 606	

NOTE: ELEVATOR FOUND: ELEVATOR IS NOT REQUIRED TO BE ACCESSIBLE MEANS OF EGRESS PER 1009.2.1, EXCEPTION 1. STRETCHER SHALL BE REQUIRED PER IBC 3002.4 (24"x84"), ELEVATOR LOBBY PROVIDED PER IBC 30.063, ITEM 3, LEVELS 1-4

EXTERIOR WALL - TYPICAL	
USE / FUNCTION:	EXTERIOR WALL - TYPE VA
FIRE CONSTRUCTION:	EXTERIOR WALL
FIRE RATING:	1-HOUR
OPENING RATING:	UNPROTECTED
PER IBC SECTION 601, 602 AND 705.8	

COURTYARD #2

COURTYARD #2	EXIT REQUIREMENTS
FUNCTION OF SPACE:	OUTDOOR AREA, FITNESS
OCCUPANCY TYPE:	A-3 ASSEMBLY
OCC. LOAD FACTOR:	15 SF NET
TOTAL OCCUPANTS:	191
EXITS REQUIRED:	2 EXITS REQUIRED
EXITS PROVIDED:	2 EXITS PROVIDED
OCC. PER EXITS:	96 OCCUPANTS

FIRE AND EXIT PLAN LEGEND

	PER 2018 IBC TABLE 1018.2.1, MAX. COMMON PATH OF EGRESS TRAVEL DISTANCE = 125 FEET (R-2), 100 FEET (S)
	PER 2018 IBC TABLE 1017.2, MAX. EXIT ACCESS TRAVEL DIST ANCE = 250 FEET (R) 400 FEET (S-2)
900	OCCUPANT L OAD AT EGRESS COMPONENT
OCC	OCCUPANT L OAD OF AREA
XX MIN.	FIRE RATED DOOR (XX INDICATES REQUIRED RATING IN MINUTES)
R-2	OCCUPANCY CLASSIFICATION OF AREA

NOTE: 1. REFER TO CODE ANALYSIS ON SHEET A0.4.0 - A0.4.1 FOR FL OOR AREA INFORMATION

WALL RATING LEGEND

	PROPERTY LINE
	EXTERIOR WALL SEPARATION AT S-2/R-2
	2HR FIRE WALL
	2HR FIRE BARRIER
	1HR FIRE BARRIER
	1HR FIRE PARTITION

NOTE:
1. EXTERIOR WALL S:
   - TYPE VA = 1 HR EXTERIOR WALL
   - TYPE IIA = 1 HR EXTERIOR WALL
   - DEMISING WALLS = 1 HR FIRE PARTITION
   - CORRIDOR WALLS = 1 HR FIRE PARTITION (1/2 HR REQ'D)
2. RE: SHEETS A0.4.1 TO A0.4.4 FOR WALL ASSEMBLY INFORMATION

1 FIRE & EGRESS EXHIBIT LEVEL 1 - BUILDINGS 3 & 4
1/16" = 1'-0"

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MARSHALL POINTE

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5170 MARSHALL ST - ARVADA, CO 80002

ISSUE FOR CONSTRUCTION
06.07.2024

No.	Date	Issue
1	10.03.2023	PC1 RESPONSE
3	03.20.2024	PRE RESPONSE

Project Architect: DV
Project Designer: DR
Title:
Job Number: 222001
Drawn By: CG / CB/ TT/ NV
Checked By: JG
Title: EGRESS EXHIBIT LEVEL 1 - BUILDINGS 3 & 4
Sheet Number: COMMON
A0-5.2

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BUILDING 1

BUILDING 1	EXIT REQUIREMENTS
FUNCTION OF SPACE:	GROUP R-2
OCCUPANCY TYPE:	RESIDENTIAL
OCC. LOAD FACTOR:	200 SF GROSS
TOTAL OCCUPANTS:	84
EXITS REQUIRED:	2 EXITS REQUIRED
EXITS PROVIDED:	2 EXITS PROVIDED
OCC. PER EXITS:	42 OCCUPANTS

COMMUNITY LAUNDRY ROOM	EXIT REQUIREMENTS
FUNCTION OF SPACE:	INCIDENTAL USE - GROUP R-2
OCCUPANCY TYPE:	RESIDENTIAL
OCC. LOAD FACTOR:	200 GROSS
TOTAL OCCUPANTS:	3
EXITS REQUIRED:	1 EXITS REQUIRED
EXITS PROVIDED:	1 EXITS PROVIDED
OCC. PER EXITS:	3 OCCUPANTS
PER IBC SECTION 509.2	

ELEVATOR NO. 1	
USE / FUNCTION:	ELEVATOR SHAFT
FIRE CONSTRUCTION:	FIRE BARRIER
FIRE RATING:	2-HOUR
OPENING RATING:	-
PER SECTION 707, 713, 3030, IFC 606	

NOTE: EMERGENCY POWER NOT REQUIRED. ELEVATOR IS NOT REQUIRED TO BE ACCESSIBLE MEANS OF EGRESS PER 1009.2.1, EXCEPTION 1. STRETCHER SHALL BE REQUIRED PER IBC 3002.4 (ANSI/A17.1) ELEVATOR LOBBY PROVIDED PER IBC 3006.3, ITEM 3, LEVELS 1-2.
PROVIDE TWO-WAY COMMUNICATION SYSTEM PER 1009.8

SHAFT ENCLOSURE	
USE / FUNCTION:	STANDPIPE SHAFTS
FIRE CONSTRUCTION:	FIRE BARRIER
FIRE RATING:	2-HOUR
OPENING RATING:	90 MIN
PER IBC SECTION 713	

FIRE WALL #1 AND HORIZONTAL EXIT	
USE / FUNCTION:	BUILDING SEPARATION WALL / HORIZ. EXIT
FIRE CONSTRUCTION:	FIRE WALL
FIRE RATING:	2-HOUR
OPENING RATING:	90 MINUTE
PER IBC SECTION 706 AND T 716.1(2)	

FLOOR/CEILING - TYPICAL	
USE / FUNCTION:	FLOOR/CEILING - TYPE VA
FIRE CONSTRUCTION:	HORIZONTAL ASSEMBLY
FIRE RATING:	1-HOUR
OPENING RATING:	-
PER IBC SECTION 711.2.4.3	

SHAFT ENCLOSURE	
USE / FUNCTION:	STANDPIPE SHAFTS
FIRE CONSTRUCTION:	FIRE BARRIER
FIRE RATING:	2-HOUR
OPENING RATING:	90 MIN
PER IBC SECTION 713	

UNIT DEMISING WALL - TYPICAL	
USE / FUNCTION:	DWELLING UNIT SEPARATION
FIRE CONSTRUCTION:	FIRE PARTITION
FIRE RATING:	1-HOUR
OPENING RATING:	N/A
PER IBC SECTION 420.2, 708 AND TABLE 716.1 (2)	

BUILDING 2

BUILDING 2	EXIT REQUIREMENTS
FUNCTION OF SPACE:	GROUP R-2
OCCUPANCY TYPE:	RESIDENTIAL
OCC. LOAD FACTOR:	200 SF GROSS
TOTAL OCCUPANTS:	89
EXITS REQUIRED:	2 EXITS REQUIRED
EXITS PROVIDED:	2 EXITS PROVIDED
OCC. PER EXITS:	45 OCCUPANTS

CORRIDOR WALL - TYPICAL	
USE / FUNCTION:	CORRIDOR WALL
FIRE CONSTRUCTION:	FIRE PARTITION
FIRE RATING:	1/2 HOUR, 1 HOUR PROVIDED
OPENING RATING:	20 MINUTE PER T 716.1 (2)
PER IBC SECTION 708 AND TABLE 716.5	

EXTERIOR WALL - TYPICAL	
USE / FUNCTION:	EXTERIOR WALL - TYPE VA
FIRE CONSTRUCTION:	EXTERIOR WALL
FIRE RATING:	1-HOUR
OPENING RATING:	UNPROTECTED
PER IBC SECTION 601, 602 AND T 705.8	

BLDG 1/2 GARAGE - STAIR NO. 1	
USE / FUNCTION:	SHAFT ENCLOSURE
FIRE CONSTRUCTION:	FIRE BARRIER
FIRE RATING:	2 HR (SEC. 1023.2)
OPENING RATING:	90 MINUTE
PER SECTION 713.4, T.ABLE 716.1(2) AND SECTION 1023.2	

BLDG 1/2 GARAGE - STAIR NO. 1 (LEVEL 2-4 HIGHEST OCC. LOAD)	
OCCUPANT LOADS:	62 (R2) + 65 (GARAGE) = 105 OCC.
TOTAL OCC. LOAD:	105 OCC. AT STAIR NO. 1 AT LEVEL 2
REQ STAIR WIDTH:	105 OCC. X .3 = 31.5" (44" MIN. REQ.)
STAIR WIDTH:	48" PROVIDED
REQ DOOR WIDTH:	105 OCC. X .2 = 21" (32" MIN. REQ.)
DOOR WIDTH:	32" CLEAR, 36" PROVIDED
PER SECTION 1005.3.1, SECTION 1005.3.2, SECTION 1 1010.1.1 AND SECTION 1011.2	

STANDPIPE	
USE / FUNCTION:	FIRE PROTECTION
FIRE CONSTRUCTION:	TYPE I-A, CLASS I STANDPIPE SYSTEM
FIRE RATING:	N/A
OPENING RATING:	N/A
PER SECTION 905.3.1 EXCEPTION 1 AND SECTION 90 9.4, ITEM 1	

TRASH CHUTE	
USE / FUNCTION:	SHAFT ENCLOSURE
FIRE CONSTRUCTION:	FIRE BARRIER
FIRE RATING:	2 HR
OPENING RATING:	90 MINUTE

TRASH ACCESS	
USE / FUNCTION:	TRASH ACCESS ROOM
FIRE CONSTRUCTION:	FIRE BARRIER
FIRE RATING:	1 HR
OPENING RATING:	45 MINUTE
PER IBC SECTION 713.13.3	

GARAGE / APARTMENT SEPARATION WALL	
USE / FUNCTION:	EXTERIOR WALL
FIRE CONSTRUCTION:	EXTERIOR WALL
FIRE RATING:	TYPE VA: 1 HOUR, TYPE II-A: 1 HOUR
OPENING RATING:	90 MINUTE ON TYPE II-A SIDE ONLY
PER IBC SECTION 70 5.3, EXCEPTION 2	

FIRE WALL #2	
USE / FUNCTION:	BUILDING SEPARATION WALL
FIRE CONSTRUCTION:	FIRE WALL
FIRE RATING:	2-HOUR
OPENING RATING:	90 MINUTE
PER IBC SECTION 706 AND T 716.1(2)	

BLDG 2 - STAIR NO. 4	
USE / FUNCTION:	SHAFT ENCLOSURE
FIRE CONSTRUCTION:	FIRE BARRIER
FIRE RATING:	2 HR (SEC. 1023.2)
OPENING RATING:	90 MINUTE
PER SECTION 713.4, TABLE 716.1(2) AND SECTION 102 3.2	

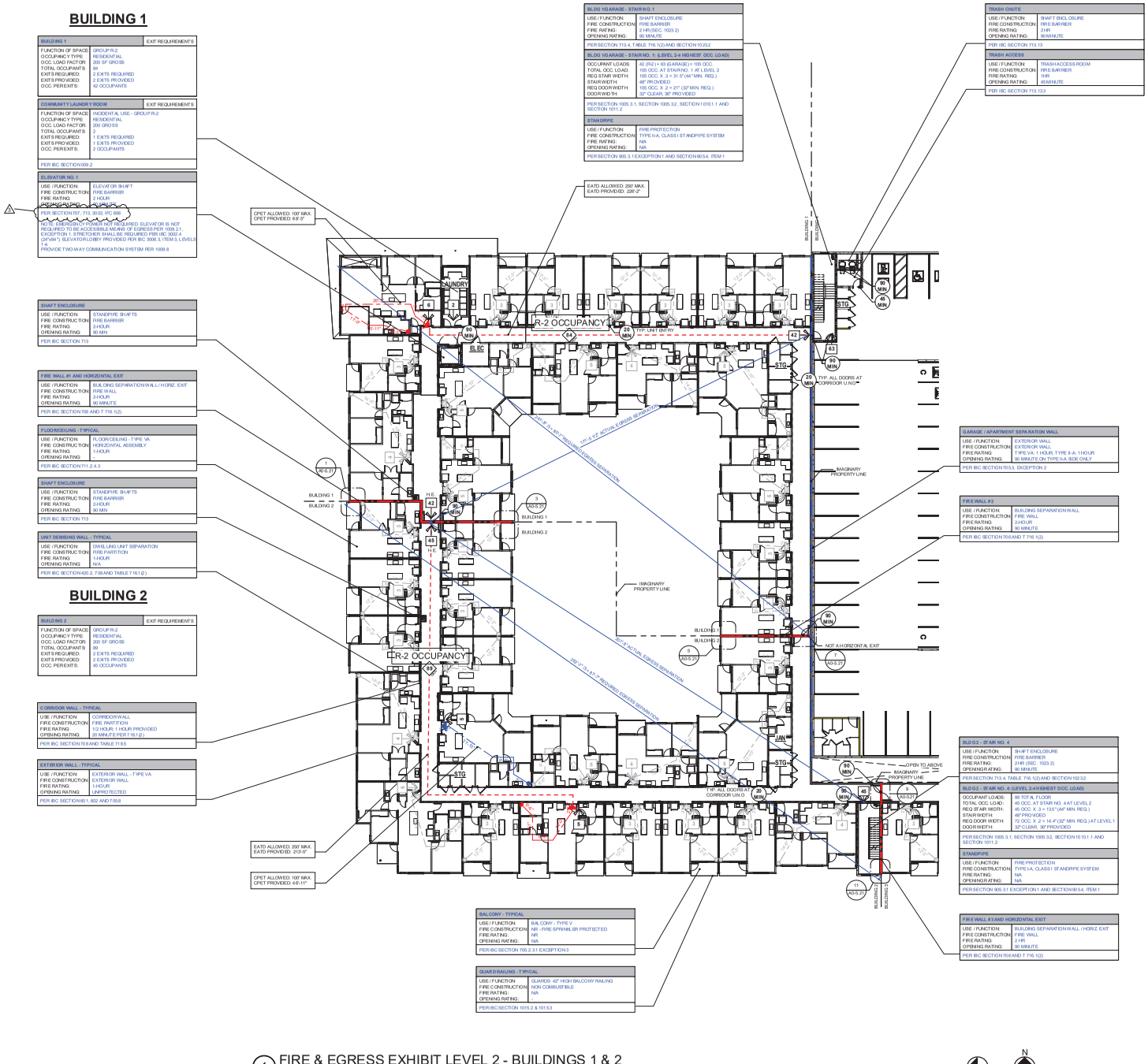
BLDG 2 - STAIR NO. 4 (LEVEL 2-4 HIGHEST OCC. LOAD)	
OCCUPANT LOADS:	89 TOTAL FLOOR
TOTAL OCC. LOAD:	45 OCC. AT STAIR NO. 4 AT LEVEL 2
REQ STAIR WIDTH:	45 OCC. X .3 = 13.5 " (44" MIN. REQ.)
STAIR WIDTH:	48" PROVIDED
REQ DOOR WIDTH:	72 OCC. X .2 = 14.4" (32" MIN. REQ.) AT LEVEL 1
DOOR WIDTH:	32" CLEAR, 36" PROVIDED
PER SECTION 1005.3.1, SECTION 1005.3.2, SECTION 10 101.1.1 AND SECTION 1011.2	

STANDPIPE	
USE / FUNCTION:	FIRE PROTECTION
FIRE CONSTRUCTION:	TYPE I-A, CLASS I ST ANDPIPE SYSTEM
FIRE RATING:	N/A
OPENING RATING:	N/A
PER SECTION 905.3.1 EXCEPTION 1 AND SECTION 90 9.4, ITEM 1	

FIRE WALL #3 AND HORIZONTAL EXIT	
USE / FUNCTION:	BUILDING SEPARATION WALL / HORIZ. EXIT
FIRE CONSTRUCTION:	FIRE WALL
FIRE RATING:	2 HR
OPENING RATING:	90 MINUTE
PER IBC SECTION 706 AND T 716.1(2)	

BALCONY - TYPICAL	
USE / FUNCTION:	BAL CONY - TYPE V
FIRE CONSTRUCTION:	NR - FIRE SPRINKLER PROTECTED
FIRE RATING:	NR
OPENING RATING:	N/A
PER IBC SECTION 705.2.3.1 EXCEPTION 3	

GUARD RAILING - TYPICAL	
USE / FUNCTION:	GUARDS: 42" HIGH BALCONY RAILING
FIRE CONSTRUCTION:	NON COMBUSTIBLE
FIRE RATING:	N/A
OPENING RATING:	-
PER IBC SECTION 1015.2 & 1015.3	



1 FIRE & EGRESS EXHIBIT LEVEL 2 - BUILDINGS 1 & 2
1/16" = 1'-0"

N TRUE N PROJECT

FIRE AND EXIT PLAN LEGEND

	PER 2018 IBC TABLE 1018.2.1, MAX. COMMON PATH OF EGRESS TRAVEL DISTANCE = 125 FEET (R-2), 100 FEET (S)
	PER 2018 IBC TABLE 1017.2, MAX. EXIT ACCESS TRAVEL DIST ANCE = 250 FEET (R) 400 FEET (S-2)
000	OCCUPANT L OAD AT EGRESS COMPONENT
OCC	OCCUPANT L OAD OF AREA
XX MIN	FIRE RATED DOOR (XX INDICATES REQUIRED RATING IN MINUTES)
R-2	OCCUPANCY CLASSIFICATION OF AREA

NOTE:
1. REFER TO CODE ANALYSIS ON SHEET A0.4.0 - A0.4.1 FOR FLOOR AREA INFORMATION

WALL RATING LEGEND

	PROPERTY LINE
	EXTERIOR WALL SEPARATION AT S-2/R-2
	2HR FIRE WALL
	2HR FIRE BARRIER
	1HR FIRE BARRIER
	1HR FIRE PARTITION

NOTE:
1
* EXTERIOR WALLS:
1 TYPE VA = 1 HR EXTERIOR WALL
2 TYPE II-A = 1 HR EXTERIOR WALL
* DEMISING WALLS: 1 HR FIRE PARTITION
* CORRIDOR WALLS: 1 HR FIRE PARTITION (1/2 HR RE QD)
* RE: SHEETS A0.4.1 TO A0.4.4 FOR WALL ASSEMBLY INFORMATION

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ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue
1	10.20.2024	PRE RESPONE

Project Architect: DV
Project Designer: DR
Title:
Job Number: 222001
Drawn By: CG / CB/ TT/ NV
Checked By: JG
Title: EGRESS EXHIBIT LEVEL 2 - BUILDINGS 1 & 2
Sheet Number: A0-5.3

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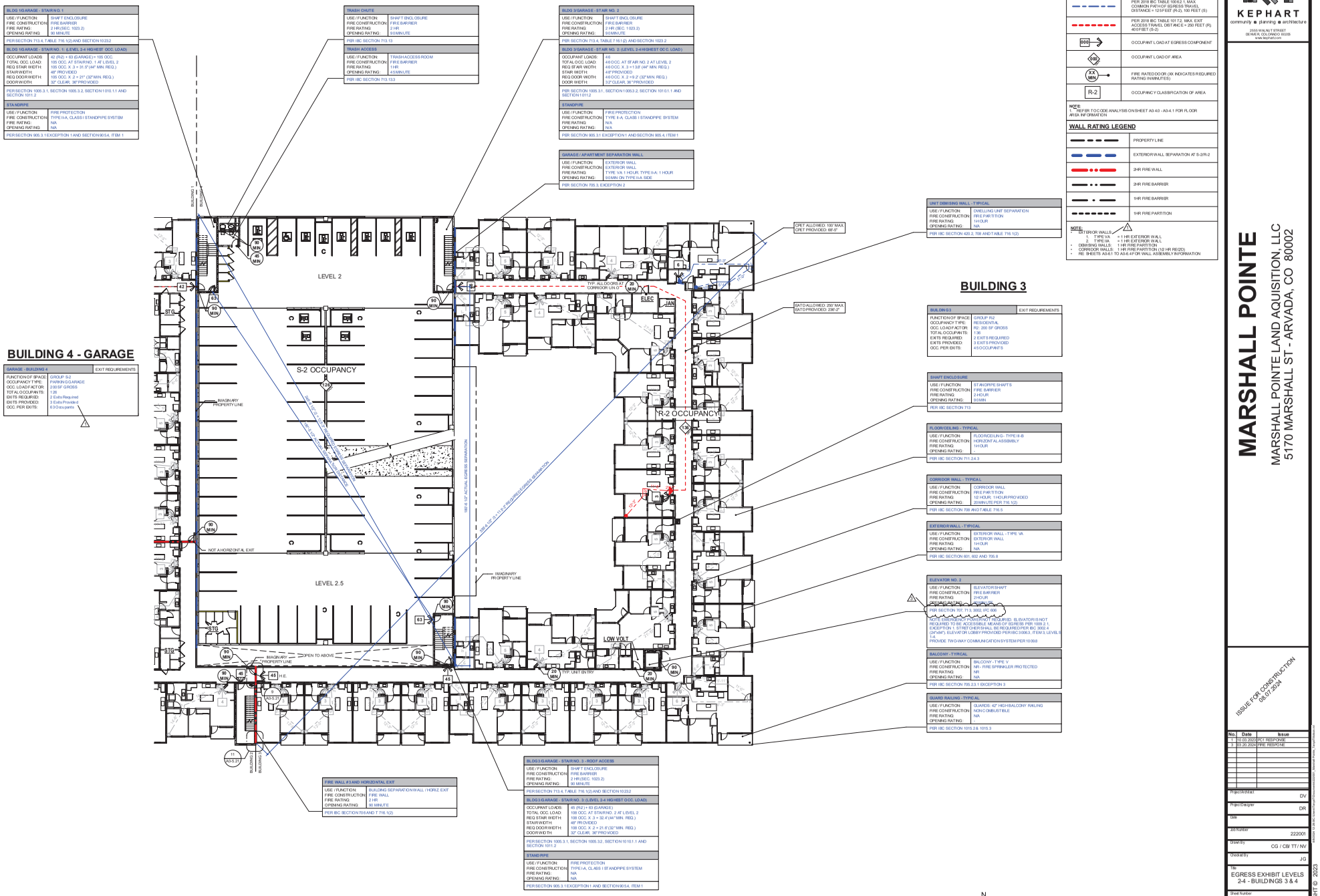

FIRE AND EXIT PLAN LEGEND

	PER 2018 IBC TABLE 1018.2.1, MAX. COMMON PATH OF EGRESS TRAVEL DISTANCE = 125 FEET (R-2), 100 FEET (S)
	PER 2018 IBC TABLE 1017.2, MAX. EXIT ACCESS TRAVEL DIST ANCE = 250 FEET (R) 400 FEET (S-2)
900	OCCUPANT LOAD AT EGRESS COMPONENT
GND	OCCUPANT LOAD OF AREA
XX MIN	FIRE RATED DOOR (XX INDICATES REQUIRED RATING IN MINUTES)
R-2	OCCUPANCY CLASSIFICATION OF AREA

NOTE:
1. REFER TO CODE ANALYSIS ON SHEET A0.4.0 - A0.4.1 FOR FLOOR AREA INFORMATION

WALL RATING LEGEND

	PROPERTY LINE
	EXTERIOR WALL SEPARATION AT S-2/R-2
	2HR FIRE WALL
	2HR FIRE BARRIER
	1HR FIRE BARRIER
	1HR FIRE PARTITION

NOTE:
1. EXTERIOR WALLS:
   1. TYPE VA = 1 HR EXTERIOR WALL
   2. TYPE IIA = 1 HR EXTERIOR WALL
2. DEMISING WALLS: 1 HR FIRE PARTITION
3. CORRIDOR WALLS: 1 HR FIRE PARTITION (1/2 HR RESTD)
4. RE: SHEETS A0.4.1 TO A0.4.4 FOR WALL ASSEMBLY INFORMATION

1 FIRE & EGRESS EXHIBIT LEVELS 2-4 - BUILDINGS 3 & 4
1/16" = 1'-0"

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ISSUE FOR CONSTRUCTION
06.01.2024

No.	Date	Issue
1	10.03.2023	PC1 RESPONSE
3	03.20.2024	PRE RESPONSE

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: EGRESS EXHIBIT LEVELS 2-4 - BUILDINGS 3 & 4
Sheet Number: COMMON
A0-5.4

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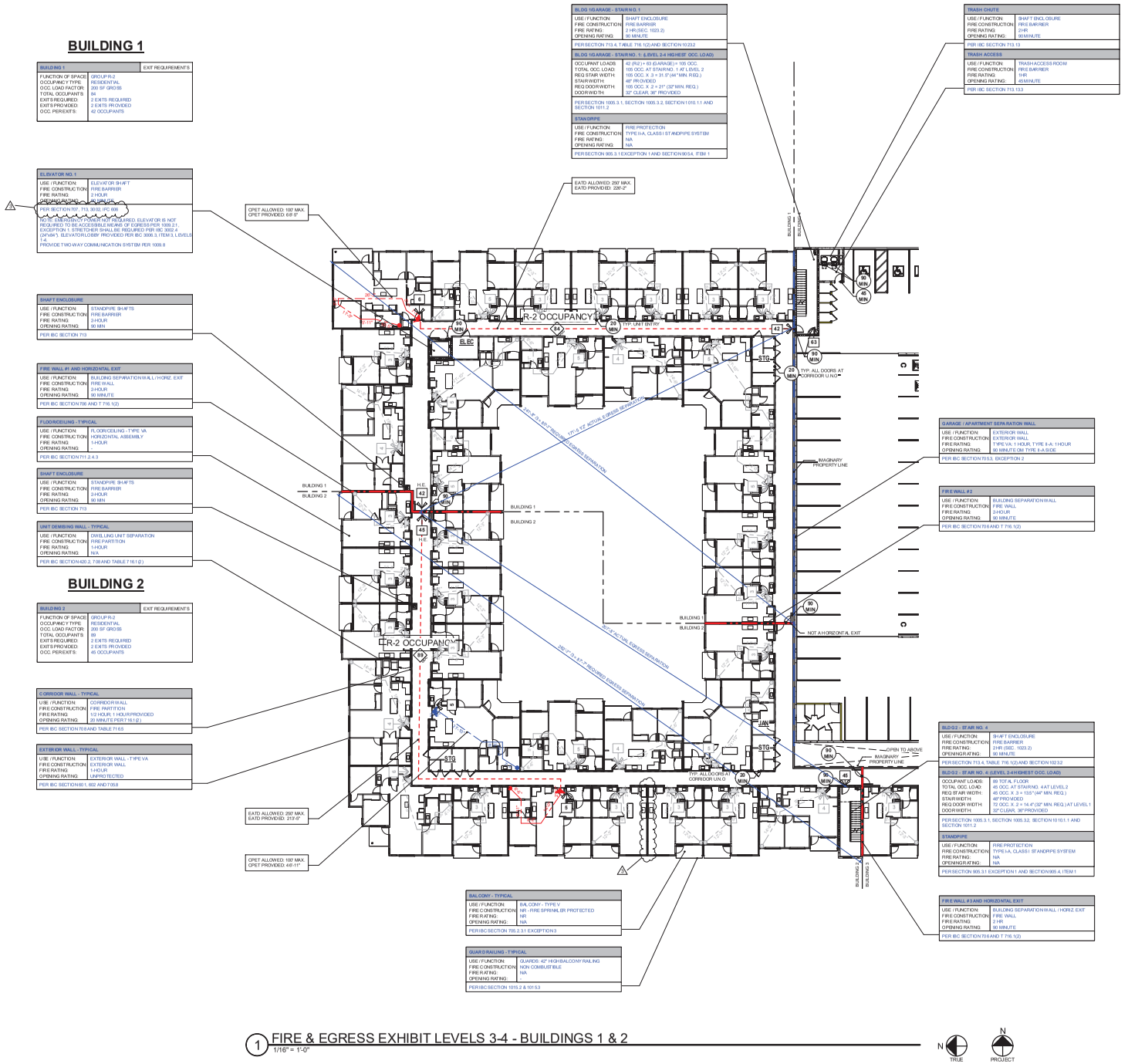
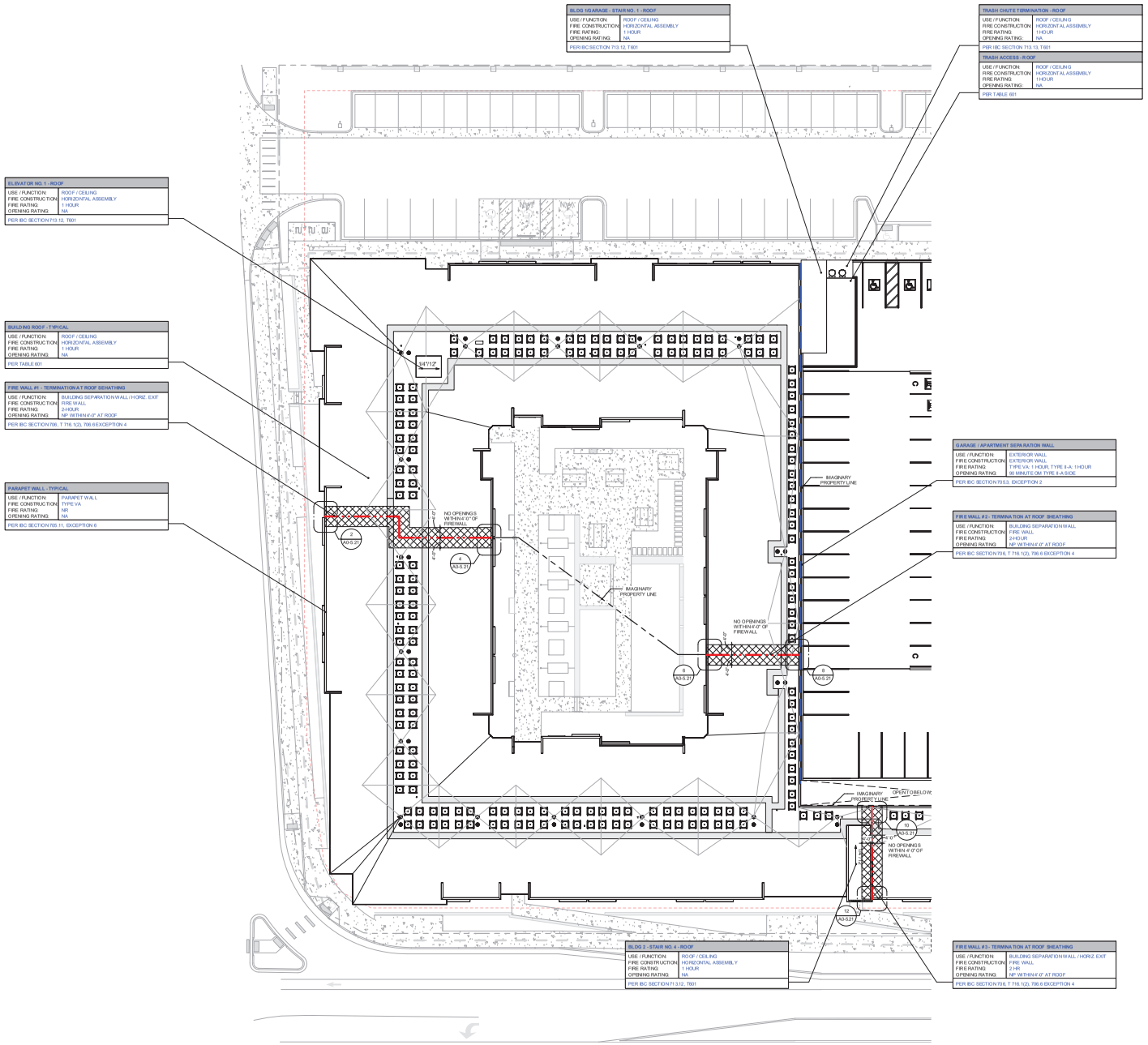

BUILDING 1
BUILDING 1
EXIT REQUIREMENTS
FUNCTION OF SPACE: GROUP R-2
OCCUPANCY TYPE: RESIDENTIAL
OCC. LOAD FACTOR: 200 SF GROSS
TOTAL OCCUPANTS: 84
EXITS REQUIRED: 2 EXITS REQUIRED
EXITS PROVIDED: 2 EXITS PROVIDED
OCC. PER EXITS: 42 OCCUPANTS
ELEVATOR NO. 1
USE / FUNCTION: ELEVATOR SHAFT
FIRE CONSTRUCTION: FIRE BARRIER
FIRE RATING: 2-HOUR
OPENING RATING: 90 MIN
PER SECTION 707, 713, 3030, IFC 606
NOTE: EMERGENCY POWER NOT REQUIRED. ELEVATOR IS NOT REQUIRED TO BE ACCESSIBLE MEANS OF EGRESS PER 1009.2.1, EXCEPTION 1. STRETCHER SHALL BE REQUIRED PER IBC 3002.4 (JAPAN'S). ELEVATOR LOBBY PROVIDED PER IBC 3006.3, ITEM 3, LEVELS 1-2.
PROVIDE TWO-WAY COMMUNICATION SYSTEM PER 1009.8
SHAFT ENCLOSURE
USE / FUNCTION: STANDPIPE SHAFTS
FIRE CONSTRUCTION: FIRE BARRIER
FIRE RATING: 2-HOUR
OPENING RATING: 90 MIN
PER IBC SECTION 713
FIRE WALL #1 AND HORIZONTAL EXIT
USE / FUNCTION: BUILDING SEPARATION WALL / HORIZ. EXIT
FIRE CONSTRUCTION: FIRE WALL
FIRE RATING: 2-HOUR
OPENING RATING: 90 MINUTE
PER IBC SECTION 706 AND T 716.1(2)
FLOOR/CEILING - TYPICAL
USE / FUNCTION: FLOOR/CEILING - TYPE VA
FIRE CONSTRUCTION: HORIZONTAL ASSEMBLY
FIRE RATING: 1-HOUR
OPENING RATING: -
PER IBC SECTION 711.2.4.3
SHAFT ENCLOSURE
USE / FUNCTION: STANDPIPE SHAFTS
FIRE CONSTRUCTION: FIRE BARRIER
FIRE RATING: 2-HOUR
OPENING RATING: 90 MIN
PER IBC SECTION 713
UNIT DEMISING WALL - TYPICAL
USE / FUNCTION: DWELLING UNIT SEPARATION
FIRE CONSTRUCTION: FIRE PARTITION
FIRE RATING: 1-HOUR
OPENING RATING: N/A
PER IBC SECTION 420.2, 708 AND TABLE 716.1 (2)
BUILDING 2
BUILDING 2
EXIT REQUIREMENTS
FUNCTION OF SPACE: GROUP R-2
OCCUPANCY TYPE: RESIDENTIAL
OCC. LOAD FACTOR: 200 SF GROSS
TOTAL OCCUPANTS: 89
EXITS REQUIRED: 2 EXITS REQUIRED
EXITS PROVIDED: 2 EXITS PROVIDED
OCC. PER EXITS: 45 OCCUPANTS
CORRIDOR WALL - TYPICAL
USE / FUNCTION: CORRIDOR WALL
FIRE CONSTRUCTION: FIRE PARTITION
FIRE RATING: 1/2 HOUR, 1 HOUR PROVIDED
OPENING RATING: 20 MINUTE PER T 161.2
PER IBC SECTION 708 AND TABLE 716.5
EXTERIOR WALL - TYPICAL
USE / FUNCTION: EXTERIOR WALL - TYPE VA
FIRE CONSTRUCTION: EXTERIOR WALL
FIRE RATING: 1-HOUR
OPENING RATING: UNPROTECTED
PER IBC SECTION 601, 602 AND 705.8
BLDG 1/2 GARAGE - STAIR NO. 1
USE / FUNCTION: SHAFT ENCLOSURE
FIRE CONSTRUCTION: FIRE BARRIER
FIRE RATING: 2 HR (SEC. 1023.2)
OPENING RATING: 90 MINUTE
PER SECTION 713.4, T.ABLE 716.1(2) AND SECTION 1023.2
BLDG 1/2 GARAGE - STAIR NO. 1 (LEVEL 3-4 HIGHEST OCC. LOAD)
OCCUPANT LOADS: 42 (R2) + 63 (GARAGE) = 105 OCC.
TOTAL OCC. LOAD: 105 OCC. AT STAIRNO. 1 AT LEVEL 2
REQ STAIR WIDTH: 105 OCC. X .3 = 31.5" (44" MIN. REQ.)
STAIR WIDTH: 48" PROVIDED
REQ DOOR WIDTH: 105 OCC. X .2 = 21" (32" MIN. REQ.)
DOOR WIDTH: 32" CLEAR, 36" PROVIDED
PER SECTION 1005.3.1, SECTION 1005.3.2, SECTION 1010.1.1 AND SECTION 1011.2
STANDPIPE
USE / FUNCTION: FIRE PROTECTION
FIRE CONSTRUCTION: TYPE I-A, CLASS I STANDPIPE SYSTEM
FIRE RATING: N/A
OPENING RATING: N/A
PER SECTION 905.3.1 EXCEPTION 1 AND SECTION 905.4, ITEM 1
TRASH CHUTE
USE / FUNCTION: SHAFT ENCLOSURE
FIRE CONSTRUCTION: FIRE BARRIER
FIRE RATING: 2 HR
OPENING RATING: 90 MINUTE
PER IBC SECTION 713.13
TRASH ACCESS
USE / FUNCTION: TRASH ACCESS ROOM
FIRE CONSTRUCTION: FIRE BARRIER
FIRE RATING: 1 HR
OPENING RATING: 45 MINUTE
PER IBC SECTION 713.13.3
EATD ALLOWED: 250' MAX.
EATD PROVIDED: 226'-2"
CPET ALLOWED: 100' MAX.
CPET PROVIDED: 6'8"-3"
R-2 OCCUPANCY
TYP. UNIT ENTRY
SLEC
STG
TYP. ALL DOORS AT CORRIDOR U.N.O.
IMAGINARY PROPERTY LINE
BUILDING 1
BUILDING 2
H.E.
NOT A HORIZONTAL EXIT
R-2 OCCUPANCY
TYP. ALL DOORS AT CORRIDOR U.N.O.
OPEN TO ABOVE
IMAGINARY PROPERTY LINE
BUILDING 1
BUILDING 2
EATD ALLOWED: 250' MAX.
EATD PROVIDED: 213'-0"
CPET ALLOWED: 100' MAX.
CPET PROVIDED: 4'6"-11"
GARAGE / APARTMENT SEPARATION WALL
USE / FUNCTION: EXTERIOR WALL
FIRE CONSTRUCTION: EXTERIOR WALL
FIRE RATING: TYPE VA: 1 HOUR, TYPE I-A: 1 HOUR
OPENING RATING: 30 MINUTE OR TYPE II-A SIDE
PER IBC SECTION 705.3, EXCEPTION 2
FIRE WALL #2
USE / FUNCTION: BUILDING SEPARATION WALL
FIRE CONSTRUCTION: FIRE WALL
FIRE RATING: 2-HOUR
OPENING RATING: 90 MINUTE
PER IBC SECTION 706 AND T 716.1(2)
BLDG 2 - STAIR NO. 4
USE / FUNCTION: SHAFT ENCLOSURE
FIRE CONSTRUCTION: FIRE BARRIER
FIRE RATING: 2 HR (SEC. 1023.2)
OPENING RATING: 90 MINUTE
PER SECTION 713.4, TABLE 716.1(2) AND SECTION 1023.2
BLDG 2 - STAIR NO. 4 (LEVEL 3-4 HIGHEST OCC. LOAD)
OCCUPANT LOADS: 89 TOTAL FLOOR
TOTAL OCC. LOAD: 45 OCC. AT STAIRNO. 4 AT LEVEL 2
REQ STAIR WIDTH: 45 OCC. X .3 = 13.5" (44" MIN. REQ.)
STAIR WIDTH: 48" PROVIDED
REQ DOOR WIDTH: 72 OCC. X .2 = 14.4" (32" MIN. REQ.) AT LEVEL 1
DOOR WIDTH: 32" CLEAR, 36" PROVIDED
PER SECTION 1005.3.1, SECTION 1005.3.2, SECTION 10 101.1 AND SECTION 1011.2
STANDPIPE
USE / FUNCTION: FIRE PROTECTION
FIRE CONSTRUCTION: TYPE I-A, CLASS I STANDPIPE SYSTEM
FIRE RATING: N/A
OPENING RATING: N/A
PER SECTION 905.3.1 EXCEPTION 1 AND SECTION 905.4, ITEM 1
FIRE WALL #3 AND HORIZONTAL EXIT
USE / FUNCTION: BUILDING SEPARATION WALL / HORIZ. EXIT
FIRE CONSTRUCTION: FIRE WALL
FIRE RATING: 2 HR
OPENING RATING: 90 MINUTE
PER IBC SECTION 706 AND T 716.1(2)
BALCONY - TYPICAL
USE / FUNCTION: BAL CONY - TYPE V
FIRE CONSTRUCTION: NR - FIRE SPRINKLER PROTECTED
FIRE RATING: NR
OPENING RATING: N/A
PER IBC SECTION 705.2.3.1 EXCEPTION 3
GUARD RAILING - TYPICAL
USE / FUNCTION: GUARDS: 42" HIGH BALCONY RAILING
FIRE CONSTRUCTION: NON COMBUSTIBLE
FIRE RATING: N/A
OPENING RATING: -
PER IBC SECTION 1015.2 & 1015.3
BUILDING 1
BUILDING 2
BUILDING 2
BUILDING 1



1 ROOF PLAN - BUILDINGS 1 & 2
1/16" = 1'-0"

N TRUE

N PROJECT

FIRE AND EXIT PLAN LEGEND

	PER 2018 IBC TABLE 1018.2, 1, MAX. COMMON PATH OF EGRESS TRAVEL DISTANCE = 125 FEET (R-2), 100 FEET (S)
	PER 2018 IBC TABLE 1017.2, MAX. EXIT ACCESS TRAVEL DIST ANCE = 250 FEET (R) 400 FEET (S-2)
900	OCCUPANT LOAD AT EGRESS COMPONENT
GROSS	OCCUPANT LOAD OF AREA
XX MIN.	FIRE RATED DOOR (XX INDICATES REQUIRED RATING IN MINUTES)
R-2	OCCUPANCY CLASSIFICATION OF AREA

NOTE:
1. REFER TO CODE ANALYSIS ON SHEET A0 4.0 - A0-4.1 FOR FLOOR AREA INFORMATION

WALL RATING LEGEND

	PROPERTY LINE
	EXTERIOR WALL SEPARATION AT S-2/R-2
	3HR FIRE WALL
	2HR FIRE BARRIER
	1HR FIRE BARRIER
	1HR FIRE PARTITION

NOTE:
- EXTERIOR WALLS:
  - 1 TYPE VA = 1 HR EXTERIOR WALL
  - 1 TYPE I/A = 1 HR EXTERIOR WALL
- DRIVING WALLS: 1 HR FIRE PARTITION
- CORRIDOR WALLS: 1 HR FIRE PARTITION (1/2 HR REQ'D)
- RE SHEETS A0-6.1 TO A0-6.4 FOR WALL ASSEMBLY INFORMATION

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ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: EGRESS EXHIBIT LEVEL ROOF - BUILDINGS 1 & 2
Sheet Number: A0-5.6

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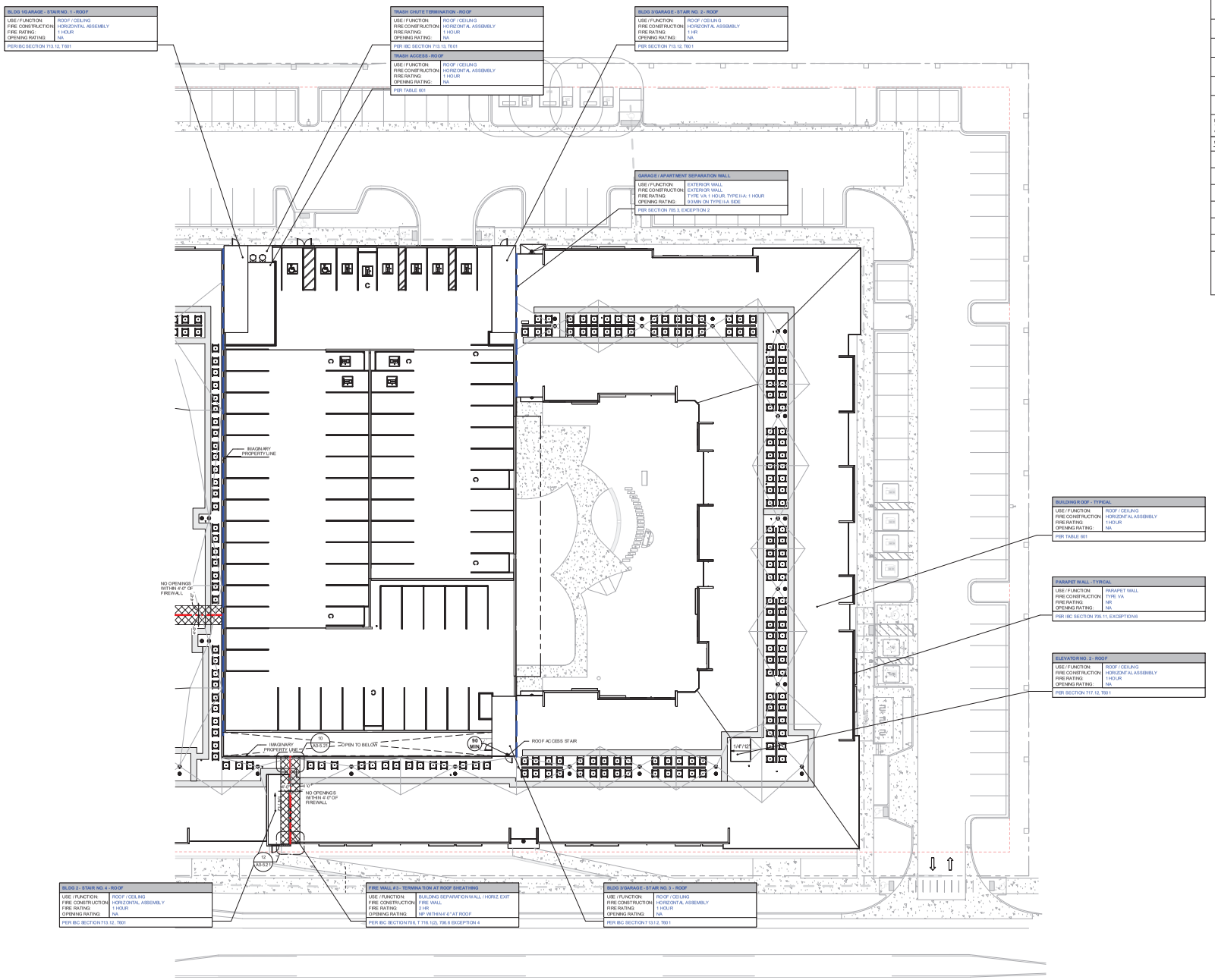

1 ROOF PLAN - BUILDINGS 3 & 4
1/16" = 1'-0"

N TRUE

N PROJECT

FIRE AND EXIT PLAN LEGEND

	PER 2018 IBC TABLE 1018.2.1, MAX. COMMON PATH OF EGRESS TRAVEL DISTANCE = 125 FEET (R-2), 100 FEET (S)
	PER 2018 IBC TABLE 1017.2, MAX. EXIT ACCESS TRAVEL DIST ANCE = 250 FEET (R) 400 FEET (S-2)
900	OCCUPANT LOAD AT EGRESS COMPONENT
1000 SQ FT	OCCUPANT LOAD OF AREA
XX MIN	FIRE RATED DOOR (XX INDICATES REQUIRED RATING IN MINUTES)
R-2	OCCUPANCY CLASSIFICATION OF AREA

NOTE:
1. REFER TO CODE ANALYSIS ON SHEET A0.4.0 - A0.4.1 FOR FLOOR AREA INFORMATION

WALL RATING LEGEND

	PROPERTY LINE
	EXTERIOR WALL SEPARATION AT S-2/R-2
	2HR FIRE WALL
	2HR FIRE BARRIER
	1HR FIRE BARRIER
	1HR FIRE PARTITION

NOTE:
- EXTERIOR WALLS:
  1 TYPE VA = 1 HR EXTERIOR WALL
  2 TYPE IIA = 1 HR EXTERIOR WALL
- DEMISING WALLS: 1 HR FIRE PARTITION
- CORRIDOR WALLS: 1 HR FIRE PARTITION (1/2 HR RE/QD)
- RE: SHEETS A0-4.1 TO A0-4.4 FOR WALL ASSEMBLY INFORMATION

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ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: EGRESS EXHIBIT LEVEL ROOF - BUILDINGS 3 & 4
Sheet Number: COMMON
A0-5.7

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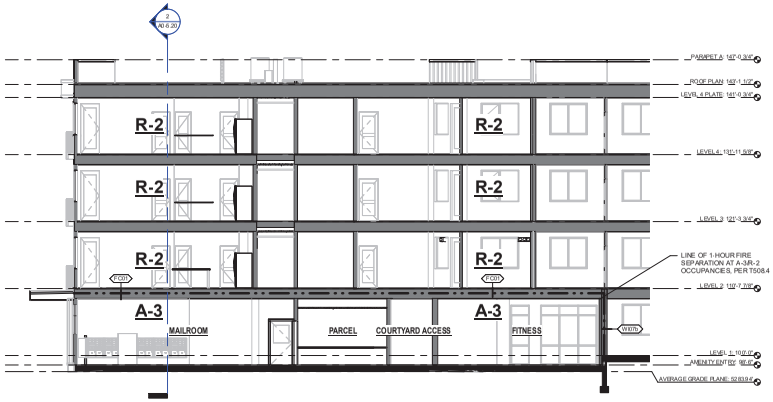
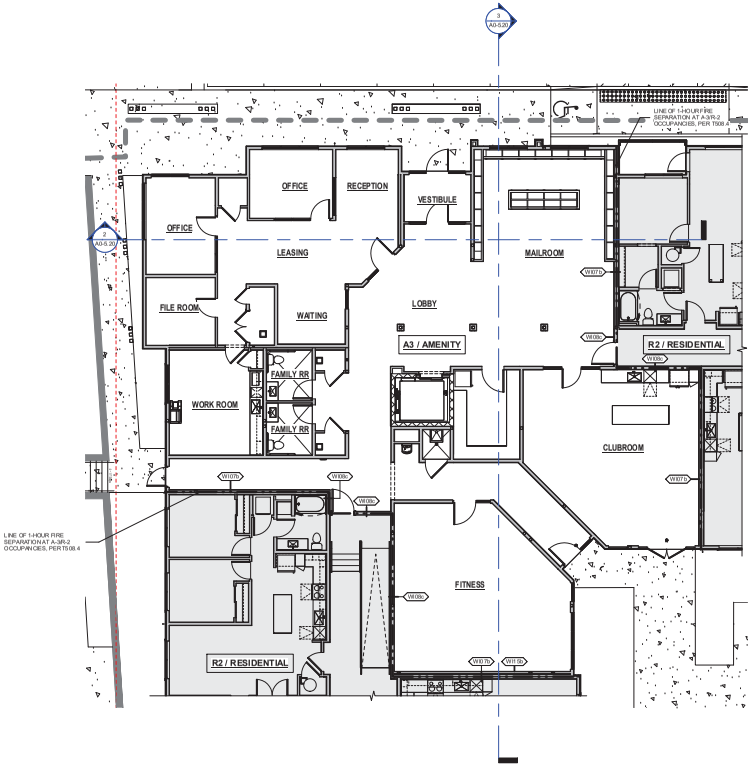


3 OCCUPANCY SEPARATION - SECTION 2
1/8" = 1'-0"



2 OCCUPANCY SEPARATION - SECTION 1
1/8" = 1'-0"



1 OCCUPANCY SEPARATION - LEVEL 1
1/8" = 1'-0"

N TRUE N PROJECT

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
W001c	1 HR	TYP. EXTERIOR WALL
W002c	2 HR	9" CONCRETE SHAFT WALL
W003c	1 HR	9" CONCRETE WALL
W003e	1 HR	GARAGE, 12" CONCRETE WALL
W003c	1 HR	9" CONCRETE WALL
W004c	2 HR	9" CMU - 2HR FIRE BARRIER
W005c	1 HR	9" CMU - 1 HR
W006b	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
W006c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
W007c	NR	2x6 PARAPET WALL - NR
W008c	NR	2x6 WALL - NR@ CONDENSERS
W009b	NR	2x4 EXTERIOR FURR WALL - NON RATED
W009c	NR	2x4 EXTERIOR FURR WALL - NON RATED
W010b	1 HR	9" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
W011c	2 HR	9" CMU - 2HR FIRE WALL
W002c	2 HR	9" CMU - 2HR FIRE BARRIER
W03	2 HR	FIRE WALL - 2HR
W003b	2 HR	FIRE WALL, 2-HR, (2) 2X4 WITH (2) 1" SHAFTLINER
W003h	2HR	FIRE WALL, 2-HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
W004b	2 HR	FIRE BARRIER, 2-HR, 2x WITH (2) 5/8" TYPE 'X' GYP
W004c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
W005c	2 HR	FIRE BARRIER, 2-HR EXIT ACCESS
W006b	2-HR	2X4 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W006c	2-HR	2X6 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W007c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W008c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W009b	1 HR	3 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W009c	1 HR	9" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W010b	1 HR	TYP. UNIT DEMISING - 1-HR FIRE PARTITION
W010c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
W011b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
W011c	1 HR	Invensys
W012b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
W013b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR NO RC
W013b	1 HR	2X4, 1HR - BEARING
W013c	1 HR	2X6, 1HR - BEARING
W014b	NR	2X4 INTERIOR WALL - NR
W014c	NR	2X6 INTERIOR WALL - NR
W015b	NR	2x4 INTERIOR NON BEARING WALL, GWB ON 1 SIDE
W015c	NR	2x6 INTERIOR NON BEARING WALL, GWB ON 1 SIDE
W016	NR	P/P METAL HAT CHANNEL FURRING WALL
W017b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
W018b	NR	9" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

FLOOR/CEILING TYPE SCHEDULE - DO NOT USE

Type Mark	Fire Rating	Description
FC01	1 HR	TYP. UNIT FLOOR/CEILING ASSEMBLY
FC02	1 HR	TYP. CORRIDOR FLOOR/CEILING ASSEMBLY
FC05	NR	TYP. BALCONY ASSEMBLY - DRIP - THRU
FC06	NR	POST-TENSIONED SLAB
FC07	Invensys	Invensys
FC08	1HR	BALCONY ASSEMBLY - CONDITIONED SPACE
FC09	1HR	BALCONY ASSEMBLY
FC10	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC12	NR	SLAB ON GRADE

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ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: OCCUPANCY SEPARATION EXHIBIT
Sheet Number: A0-5.20

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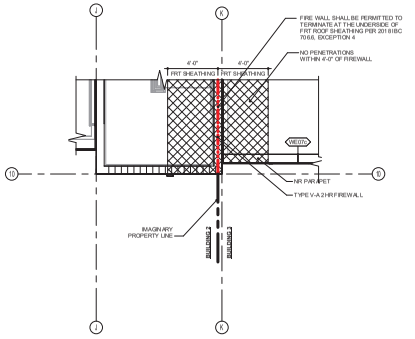
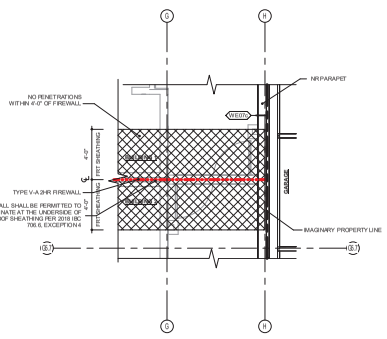
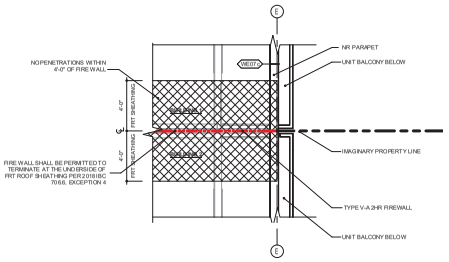


12 FIRE WALL #3 - EXHIBIT F ROOF
1/4" = 1'-0"



8 FIRE WALL #2 - EXHIBIT D ROOF
1/4" = 1'-0"



4 FIRE WALL #1 - EXHIBIT B ROOF
1/4" = 1'-0"

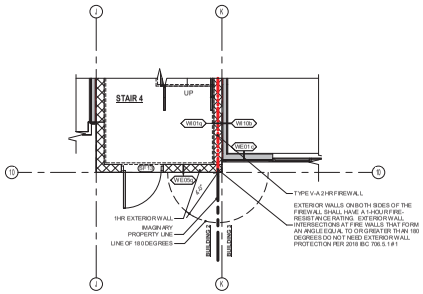
WALL RATING LEGEND

	PROPERTY LINE
	EXTERIOR WALL SEPARATION AT S-2/R-2
	2HR FIRE WALL
	2HR FIRE BARRIER
	1HR FIRE BARRIER
	1HR FIRE PARTITION

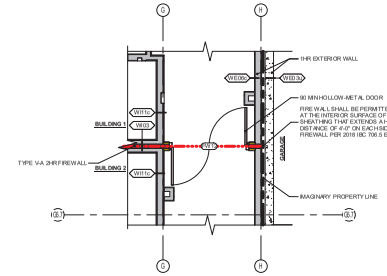
NOTE:
EXTERIOR WALLS:
1. TYPE V-A = 1 HR EXTERIOR WALL
2. TYPE V-B = 1 HR EXTERIOR WALL
- DEMISING WALLS: 1 HR FIRE PARTITION
- CORRIDOR WALLS: 1 HR FIRE PARTITION (1/2 HR RE/2D)
- RE SHEETS A0-6.1 TO A0-6.4 FOR WALL ASSEMBLY INFORMATION

WALL TYPE SCHEDULE

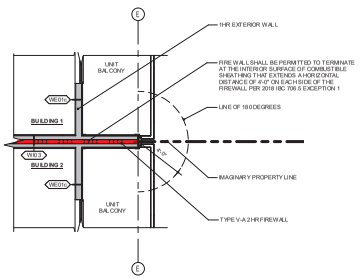
MARK	FIRE RATING	DESCRIPTION
WE01c	1 HR	TYP. EXTERIOR WALL
WE02c	2 HR	8" CONCRETE SHAFT WALL
WE03c	1 HR	8" CONCRETE WALL
WE03e	1 HR	GARAGE 12" CONCRETE WALL
WE03c	1 HR	8" CONCRETE WALL
WE04c	2 HR	8" CMU - 2HR FIRE BARRIER
WE05c	1 HR	8" CMU - 1 HR
WE06c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE06c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE07c	NR	2x6 PARAPET WALL - NR
WE08c	NR	2x6 W ALL - NR @ CONDENSERS
WE09c	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE09c	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE10c	1 HR	3" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
WE01c	2 HR	8" CMU - 2HR FIRE WALL
WE02c	2 HR	8" CMU - 2HR FIRE BARRIER
WI1B	2 HR	FIRE WALL - 2HR
WI03c	2 HR	FIRE WALL - 2 HR, (2)12x6 WITH (2) 1" SHAFTLINER
WI03c	2 HR	FIRE WALL - 2 HR, (2) 1 5/8" W STUD (2) 1" SHAFTLINER
WI04c	2 HR	FIRE BARRIER, 2 HR, 2x W/ (2) 5/8" TYPE 'X' GYP
WI04c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
WI05c	2 HR	FIRE BARRIER, 2 HR EXIT ACCESS
WI06c	2 HR	2X6 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
WI06c	2 HR	2X6 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
WI07c	1 HR	OCCUPANCY SEPARATION - 1 HR FIRE BARRIER
WI08c	1 HR	OCCUPANCY SEPARATION - 1 HR FIRE BARRIER
WI09	1 HR	3 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
WI09c	1 HR	3" STEEL STUD WALL WITH TYPE 'X' GYB BOTH SIDES
WI10c	1 HR	TYP. UNIT DEMISING - 1 HR FIRE PARTITION
WI10c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
WI11c	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
WI11c	1 HR	2x4 NON-RATED PARTITION
WI12c	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
WI12c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
WI13c	1 HR	2X4, 1HR - BEARING
WI13c	1 HR	2X6, 1HR - BEARING
WI14c	NR	2X4 INTERIOR WALL - NR
WI14c	NR	2X6 INTERIOR WALL - NR
WI15c	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
WI15c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
WI16	NR	7/8" METAL HAT CHANNEL FURRING WALL
WI17c	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
WI18c	NR	6" STEEL STUD WALL WITH TYPE 'X' GYB ONE SIDE



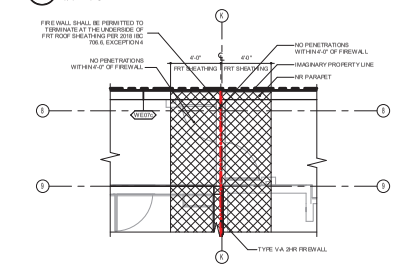
11 FIRE WALL #3 - EXHIBIT F
1/4" = 1'-0"



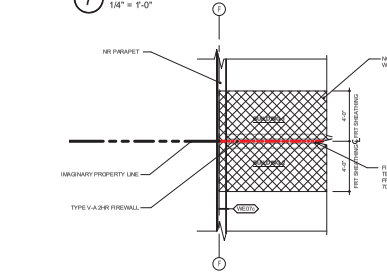
7 FIRE WALL #2 - EXHIBIT D
1/4" = 1'-0"



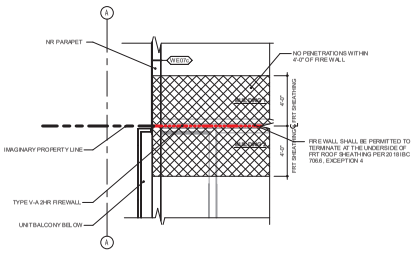
3 FIRE WALL #1 - EXHIBIT B
1/4" = 1'-0"



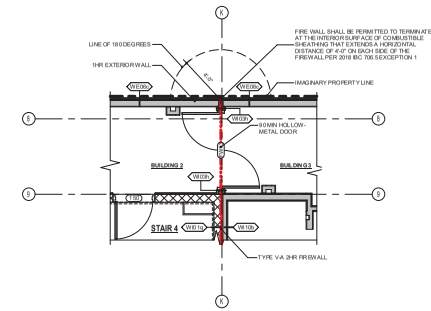
10 FIRE WALL #3 - EXHIBIT E ROOF
1/4" = 1'-0"



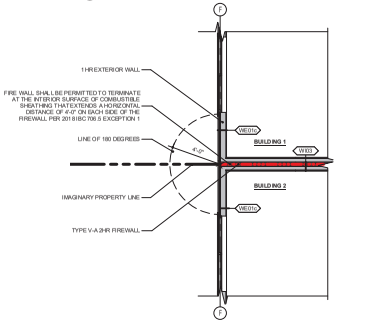
6 FIRE WALL #2 - EXHIBIT C ROOF
1/4" = 1'-0"



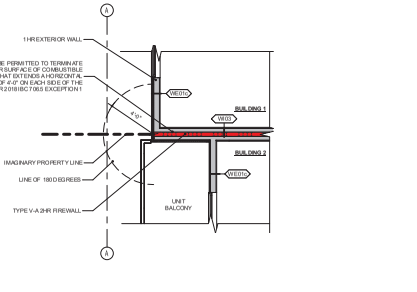
2 FIRE WALL #1 - EXHIBIT A ROOF
1/4" = 1'-0"



9 FIRE WALL #3 - EXHIBIT E
1/4" = 1'-0"



5 FIRE WALL #2 - EXHIBIT C
1/4" = 1'-0"



1 FIRE WALL #1 - EXHIBIT A
1/4" = 1'-0"

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5170 MARSHALL ST - ARVADA, CO 80002

ISSUE FOR CONSTRUCTION
06.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: FIRE WALL EXHIBIT
Sheet Number: **A0-5.21**

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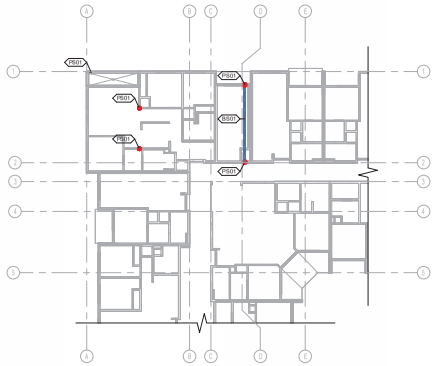
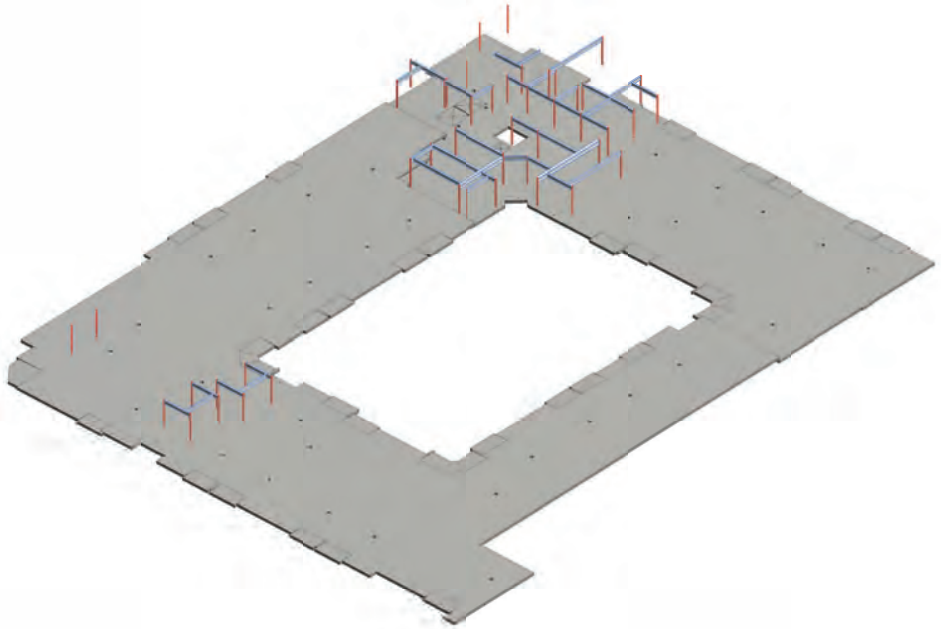


3 FIRE PROTECTION PLAN - AREA A LVL 2
1/16" = 1'-0"



ALL STRUCTURAL STEEL SIZES AND CALLOUTS ARE FOR REFERENCE AND COORDINATION OF FIRE-RESISTANCE TREATMENT OF STRUCTURAL MEMBERS ONLY

2 FIRE PROTECTION PLAN - AREA A/B LVL 1
1/16" = 1'-0"



1 FIRE PROTECTION ISOMETRIC - AREA A/B

INDIVIDUAL POST AND BEAM PROTECTION LEGEND:
RE: A0-6.3 FOR FIRE RATED ASSEMBLIES

BS01	1HR BEAM- INTUMESCENT PAINT FIRERPROOFING PER ASSEMBLY FOR 1HR (BS01)
PS01	1HR POST- INTUMESCENT PAINT FIREPROOFING PER ASSEMBLY FOR 1HR (PS01)
PS02	2HR POST- INTUMESCENT PAINT FIREPROOFING PER ASSEMBLY FOR 2HR (PS02)
NR	NR POST - POST DOES NOT SUPPORT RATED CONSTRUCTION

GENERAL NOTES:

1. ALL STEEL ATTACHMENTS TO BEAMS AND COLUMNS TO HAVE INTUMESCENT PAINT APPLIED AT THE SAME TIME AS THE COATING IS APPLIED TO THOSE BEAMS AND COLUMN.

STEEL FIRE PROTECTION

IBC 2018, SECTION 202. DEFINITIONS:

PRIMARY STRUCTURAL FRAME: THE PRIMARY STRUCTURAL FRAME SHALL INCLUDE ALL OF THE FOLLOWING STRUCTURAL MEMBERS:

1. THE COLUMNS.
2. STRUCTURAL MEMBERS HAVING DIRECT CONNECTION TO THE COLUMNS, INCLUDING GIRDERS, BEAMS, TRUSSES, AND SPANDRELS.
3. MEMBERS OF THE FLOOR CONSTRUCTION AND ROOF CONSTRUCTION HAVING DIRECT CONNECTIONS TO THE COLUMNS.
4. BRACING MEMBERS THAT ARE ESSENTIAL TO THE VERTICAL STABILITY OF THE PRIMARY STRUCTURAL FRAME UNDER GRAVITY LOADING SHALL BE CONSIDERED PART OF THE PRIMARY STRUCTURAL FRAME WHETHER OR NOT THE BRACING MEMBER CARRIES GRAVITY LOADS.

SECONDARY MEMBERS: THE FOLLOWING STRUCTURAL MEMBERS SHALL BE CONSIDERED SECONDARY MEMBERS AND NOT PART OF THE PRIMARY STRUCTURAL FRAME:

1. STRUCTURAL MEMBERS NOT HAVING DIRECT CONNECTIONS TO THE COLUMNS
2. MEMBERS OF THE FLOOR CONSTRUCTION AND ROOF CONSTRUCTION NOT HAVING DIRECT CONNECTIONS TO THE COLUMNS; AND
3. BRACING MEMBERS OTHER THAN THOSE THAT ARE PART OF THE PRIMARY STRUCTURAL FRAME.

IBC 2018, SECTION 704. FIRE-RESISTANCE RATING OF STRUCTURAL MEMBERS

SECTION 704.2, COLUMN PROTECTION: WHERE COLUMNS ARE REQUIRED TO HAVE PROTECTION TO ACHIEVE A FIRE-RESISTANCE RATING, THE ENTIRE COLUMN SHALL BE PROVIDED INDIVIDUAL ENCASEMENT PROTECTION BY PROTECTING IT ON ALL SIDES FOR THE FULL COLUMN HEIGHT, INCLUDING CONNECTIONS TO OTHER STRUCTURAL MEMBERS, WITH MATERIALS HAVING THE REQUIRED FIRE-RESISTANCE RATING. WHERE THE COLUMN EXTENDS THROUGH A CEILING, THE ENCASEMENT PROTECTIONS SHALL BE CONTINUOUS FROM THE TOP OF THE FOUNDATION OR FLOOR/CEILING ASSEMBLY BELOW THROUGH THE CEILING SPACE TO THE TOP OF THE COLUMN.

SECTION 704.3, PROTECTION OF THE PRIMARY STRUCTURAL FRAME OTHER THAN COLUMNS: MEMBERS OF THE PRIMARY STRUCTURAL FRAME OTHER THAN COLUMNS THAT ARE REQUIRED TO HAVE PROTECTION TO ACHIEVE A FIRE-RESISTANCE RATING AND SUPPORT MORE THAN TWO FLOORS OR ONE FLOOR AND ROOF, OR SUPPORT A LOAD BEARING WALL OR A NONLOAD-BEARING WALL MORE THAN TWO STORIES HIGH, SHALL BE PROVIDED INDIVIDUAL ENCASEMENT BY PROTECTING THEM ON ALL SIDES FOR THE FULL LENGTH, INCLUDING CONNECTIONS TO OTHER STRUCTURAL MEMBERS, WITH MATERIALS HAVING THE REQUIRED FIRE-RESISTANCE RATING.

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ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	
Job Number	222001
Drawn By	CG / CB/ TT / NV
Checked By	JG
Title	STEEL FIRE PROTECTION
Sheet Number	A0-5.22

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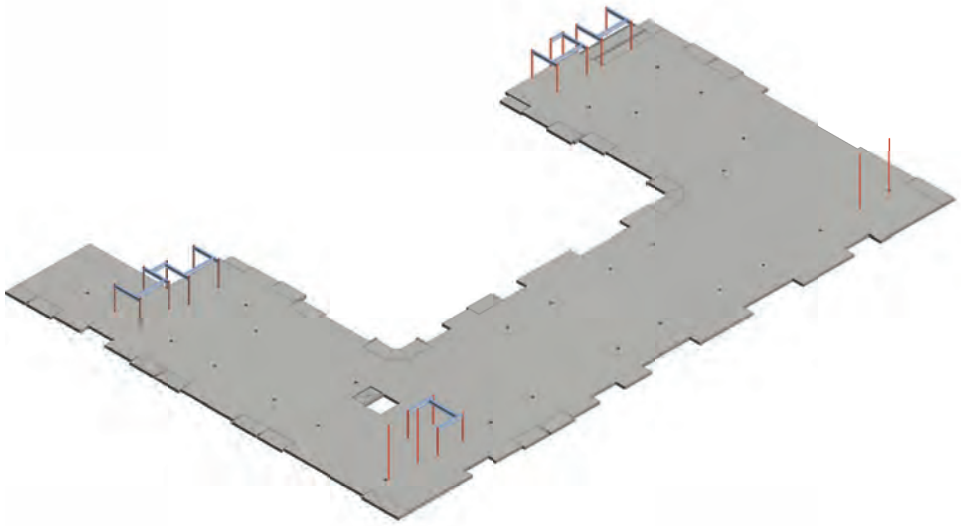
3 FIRE PROTECTION PLAN - AREA C/D LVL 2
1/16" = 1'-0"



ALL STRUCTURAL STEEL SIZES AND CALL OUTS ARE FOR REFERENCE AND COORDINATION OF FIRE-RESISTANCE TREATMENT OF STRUCTURAL MEMBERS ONLY

2 FIRE PROTECTION PLAN - AREA C/D LVL 1
1/16" = 1'-0"



1 FIRE PROTECTION ISOMETRIC - AREA C/D

INDIVIDUAL POST AND BEAM PROTECTION LEGEND:
RE: A0-6.3 FOR FIRE RATED ASSEMBLIES

BS01	1HR BEAM- INTUMESCENT PAINT FIREPROOFING PER ASSEMBLY FOR 1HR (BS01)
PS01	1HR POST- INTUMESCENT PAINT FIREPROOFING PER ASSEMBLY FOR 1HR (PS01)
PS02	2HR POST- INTUMESCENT PAINT FIREPROOFING PER ASSEMBLY FOR 2HR (PS02)
NR	NR POST - POST DOES NOT SUPPORT RATED CONSTRUCTION

GENERAL NOTES:

1. ALL STEEL ATTACHMENTS TO BEAMS AND COLUMNS TO HAVE INTUMESCENT PAINT APPLIED AT THE SAME TIME AS THE COATING IS APPLIED TO THOSE BEAMS AND COLUMN.

STEEL FIRE PROTECTION

IBC 2018, SECTION 202, DEFINITIONS:

PRIMARY STRUCTURAL FRAME: THE PRIMARY STRUCTURAL FRAME SHALL INCLUDE ALL OF THE FOLLOWING STRUCTURAL MEMBERS:

1. THE COLUMNS.
2. STRUCTURAL MEMBERS HAVING DIRECT CONNECTION TO THE COLUMNS, INCLUDING GIRDERS, BEAMS, TRUSSES, AND SPANDRELS.
3. MEMBERS OF THE FLOOR CONSTRUCTION AND ROOF CONSTRUCTION HAVING DIRECT CONNECTIONS TO THE COLUMNS.
4. BRACING MEMBERS THAT ARE ESSENTIAL TO THE VERTICAL STABILITY OF THE PRIMARY STRUCTURAL FRAME UNDER GRAVITY LOADING SHALL BE CONSIDERED PART OF THE PRIMARY STRUCTURAL FRAME WHETHER OR NOT THE BRACING MEMBER CARRIES GRAVITY LOADS.

SECONDARY MEMBERS: THE FOLLOWING STRUCTURAL MEMBERS SHALL BE CONSIDERED SECONDARY MEMBERS AND NOT PART OF THE PRIMARY STRUCTURAL FRAME:

1. STRUCTURAL MEMBERS NOT HAVING DIRECT CONNECTIONS TO THE COLUMNS
2. MEMBERS OF THE FLOOR CONSTRUCTION AND ROOF CONSTRUCTION NOT HAVING DIRECT CONNECTIONS TO THE COLUMNS; AND
3. BRACING MEMBERS OTHER THAN THOSE THAT ARE PART OF THE PRIMARY STRUCTURAL FRAME.

IBC 2018, SECTION 704, FIRE-RESISTANCE RATING OF STRUCTURAL MEMBERS

SECTION 704.3, COLUMN PROTECTION: WHERE COLUMNS ARE REQUIRED TO HAVE PROTECTION TO ACHIEVE A FIRE-RESISTANCE RATING, THE ENTIRE COLUMN SHALL BE PROVIDED INDIVIDUAL ENCASEMENT PROTECTION BY PROTECTING IT ON ALL SIDES FOR THE FULL COLUMN HEIGHT, INCLUDING CONNECTIONS TO OTHER STRUCTURAL MEMBERS, WITH MATERIALS HAVING THE REQUIRED FIRE-RESISTANCE RATING. WHERE THE COLUMN EXTENDS THROUGH A CEILING, THE ENCASEMENT PROTECTIONS SHALL BE CONTINUOUS FROM THE TOP OF THE FOUNDATION OR FLOOR/CEILING ASSEMBLY BELOW THROUGH THE CEILING SPACE TO THE TOP OF THE COLUMN.

SECTION 704.3, PROTECTION OF THE PRIMARY STRUCTURAL FRAME OTHER THAN COLUMNS: MEMBERS OF THE PRIMARY STRUCTURAL FRAME OTHER THAN COLUMNS THAT ARE REQUIRED TO HAVE PROTECTION TO ACHIEVE A FIRE-RESISTANCE RATING AND SUPPORT MORE THAN TWO FLOORS OR ONE FLOOR AND ROOF, OR SUPPORT A LOAD BEARING WALL OR A NONLOAD-BEARING WALL MORE THAN TWO STORIES HIGH, SHALL BE PROVIDED INDIVIDUAL ENCASEMENT BY PROTECTING THEM ON ALL SIDES FOR THE FULL LENGTH, INCLUDING CONNECTIONS TO OTHER STRUCTURAL MEMBERS, WITH MATERIALS HAVING THE REQUIRED FIRE-RESISTANCE RATING.

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08.01.2024

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Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: STEEL FIRE PROTECTION
Sheet Number: A0-5.23

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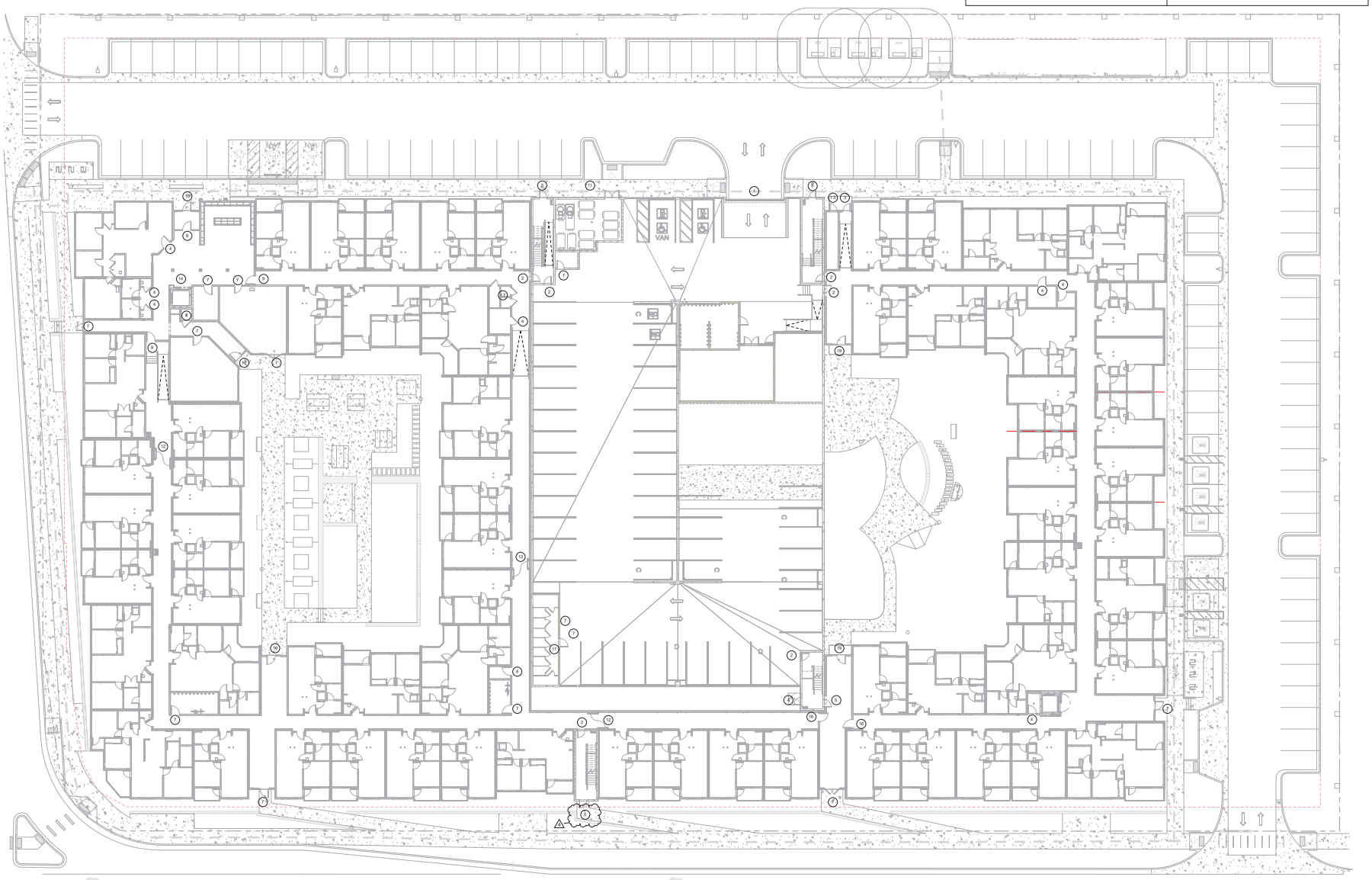
ACCESS CONTROL NOTES

1. VEHICLE GATE: TRANSPONDER AND FOB CONTROL.
2. EGRESS DOOR: UNLOCKED FROM SIDE OF EGRESS, UNLOCKED FROM STAIR SIDE.
3. EGRESS DOOR - UNLOCKED FROM INTERIOR, LOCKED FROM EXTERIOR
4. DOOR LOCKED - OPERATIONS ACCESS ONLY.
5. STAIR DISCHARGE DOOR UNLOCKED STAIR SIDE, FOB CONTROL OPPOSITE SIDE.
6. STAIR DISCHARGE DOOR: UNLOCKED STAIR SIDE, LOCKED FROM EXTERIOR.
7. DOORS UNLOCKED FROM INTERIOR, FOB CONTROL EXTERIOR.
8. DOORS UNLOCKED BOTH SIDES DURING BUSINESS HOURS, FOB CONTROL FROM EXTERIOR AFTER HOURS. TIE TO EMMUNICATION DEVICE FOR GUEST ENTRY.
9. DOOR UNLOCKED CORRIDOR SIDE AT ALL TIMES, FOB CONTROLLED ON OPPOSITE SIDE.
10. NOT USED
11. DOOR LOCKED - OPERATIONS ACCESS W/ CYPHER LOCK FOR UTILITY PROVIDER OR TRASH SERVICE PROVIDER.
12. DOOR UNLOCKED AT ALL TIMES ON MAGNETIC HOLD OPEN. MAGNETIC HOLD SHALL BE DEACTIVATED BY FIRE ALARM.
13. DOOR UNLOCKED FROM INTERIOR, CYPHER LOCK FOR UTILITY PROVIDER EXTERIOR, KNOX BOX FOR FIRE ACCESS FROM STREET.
14. ELEVATOR CALL BUTTONS FOB ACTIVATED, ALL LEVELS.
15. ROOF ACCESS: DOOR LOCKED FROM INTERIOR, UNLOCKED FROM EXTERIOR, PROVIDE KNOX BOX FOR FIRE ACCESS.
16. PASSAGE DOOR - UNLOCKED BOTH SIDES.
17. RESIDENT KEY ACCESS - STORAGE CLOSETS
18. COURTYARD EGRESS DOOR - UNLOCKED EXTERIOR SIDE, FOB CONTROLLED FROM INTERIOR
19. COURTYARD EGRESS DOOR - UNLOCKED BOTH SIDES



1 ACCESS CONTROL EXHIBIT - LEVEL 1
1/16" = 1'-0"

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ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue
1	30.07.2024	IFC

Project Architect: DV
Project Designer: DR
Title:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: ACCESS CONTROL EXHIBIT
Sheet Number: COMMON
A0-5.30

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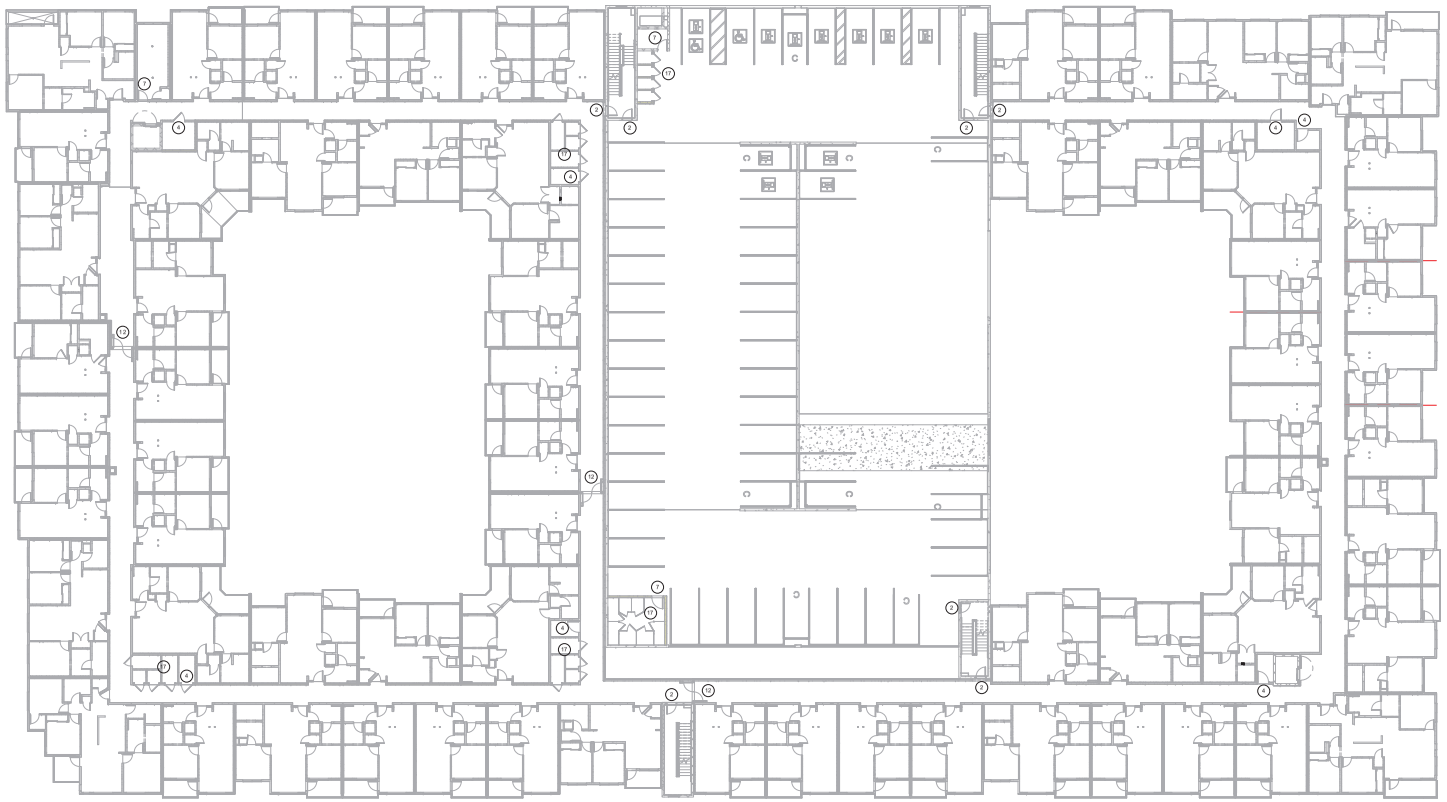
ACCESS CONTROL NOTES

1. VEHICLE GATE: TRANSPONDER AND FOB CONTROL.
2. EGRESS DOOR: UNLOCKED FROM SIDE OF EGRESS, UNLOCKED FROM STAIR SIDE.
3. EGRESS DOOR - UNLOCKED FROM INTERIOR, LOCKED FROM EXTERIOR
4. DOOR LOCKED - OPERATIONS ACCESS ONLY.
5. STAIR DISCHARGE DOOR UNLOCKED STAIR SIDE, FOB CONTROL OPPOSITE SIDE.
6. STAIR DISCHARGE DOOR, UNLOCKED STAIR SIDE, LOCKED FROM EXTERIOR.
7. DOORS UNLOCKED FROM INTERIOR, FOB CONTROL EXTERIOR.
8. DOORS UNLOCKED BOTH SIDES DURING BUSINESS HOURS, FOB CONTROL FROM EXTERIOR AFTER HOURS. TIE ECOMMUNICATION DEVICE FOR GUEST ENTRY.
9. DOOR UNLOCKED CORRIDOR SIDE AT ALL TIMES, FOB CONTROLLED ON OPPOSITE SIDE.
10. NOT USED
11. DOOR LOCKED - OPERATIONS ACCESS W/ CYPHER LOCK FOR UTILITY PROVIDER OR TRASH SERVICE PROVIDER.
12. DOOR UNLOCKED AT ALL TIMES ON MAGNETIC HOLD OPEN. MAGNETIC HOLD SHALL BE DEACTIVATED BY FIRE ALARM.
13. DOOR UNLOCKED FROM INTERIOR, CYPHER LOCK FOR UTILITY PROVIDER EXTERIOR, KNOX BOX FOR FIRE ACCESS FROM STREET.
14. ELEVATOR CALL BUTTONS FOB ACTIVATED, ALL LEVELS.
15. ROOF ACCESS: DOOR LOCKED FROM INTERIOR, UNLOCKED FROM EXTERIOR, PROVIDE KNOX BOX FOR FIRE ACCESS.
16. PASSAGE DOOR - UNLOCKED BOTH SIDES.
17. RESIDENT KEY ACCESS - STORAGE CLOSETS
18. COURTYARD EGRESS DOOR - UNLOCKED EXTERIOR SIDE, FOB CONTROLLED FROM INTERIOR
19. COURTYARD EGRESS DOOR - UNLOCKED BOTH SIDES



1 ACCESS CONTROL EXHIBIT - LEVEL 2
1/16" = 1'-0"

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5170 MARSHALL ST - ARVADA, CO 80002

ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: ACCESS CONTROL EXHIBIT
Sheet Number: COMMON
A0-5.31

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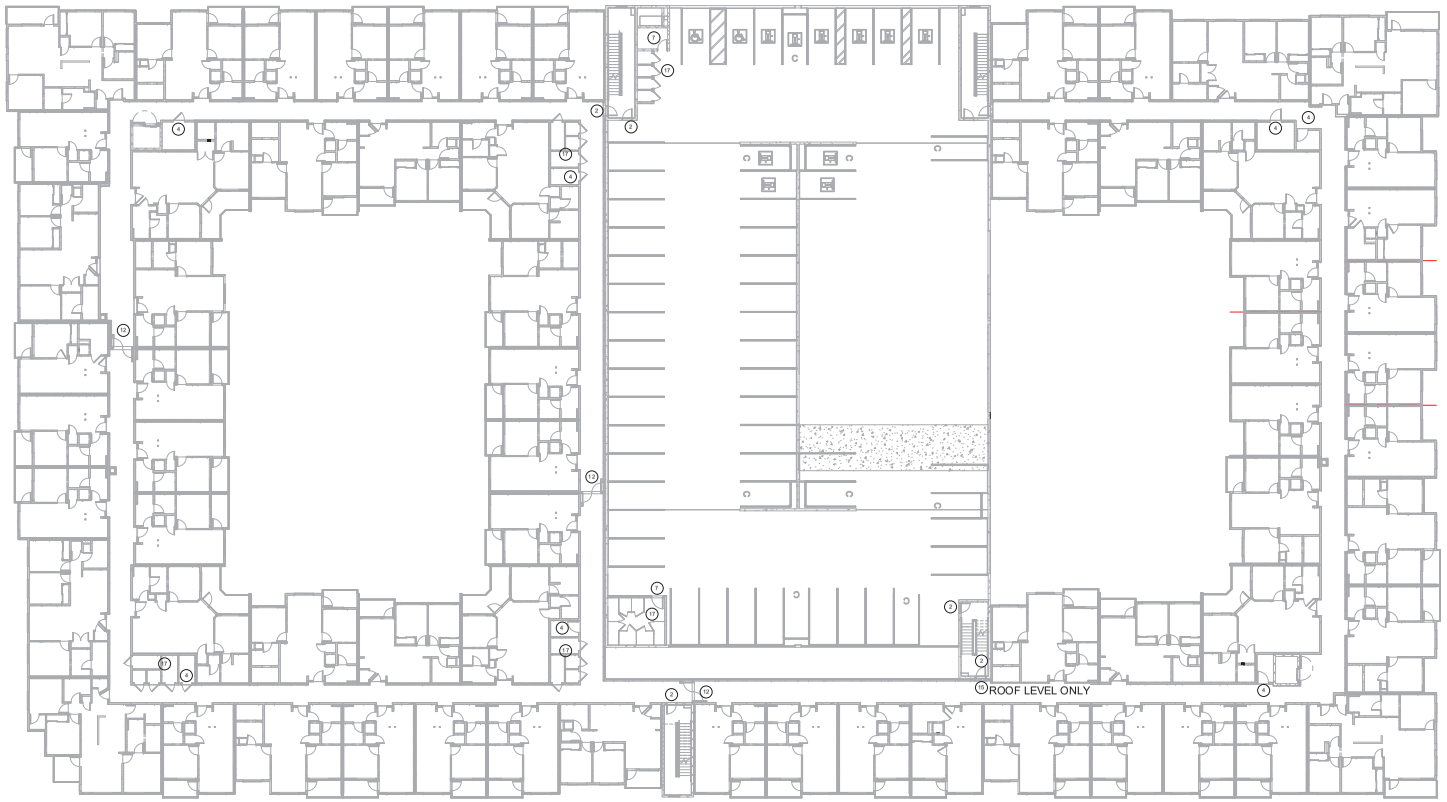
ACCESS CONTROL NOTES

1. VEHICLE GATE: TRANSPONDER AND FOB CONTROL.
2. EGRESS DOOR: UNLOCKED FROM SIDE OF EGRESS, UNLOCKED FROM STAIR SIDE.
3. EGRESS DOOR - UNLOCKED FROM INTERIOR, LOCKED FROM EXTERIOR
4. DOOR LOCKED - OPERATIONS ACCESS ONLY.
5. STAIR DISCHARGE DOOR UNLOCKED STAIR SIDE, FOB CONTROL OPPOSITE SIDE.
6. STAIR DISCHARGE DOOR, UNLOCKED STAIR SIDE, LOCKED FROM EXTERIOR.
7. DOORS UNLOCKED FROM INTERIOR, FOB CONTROL EXTERIOR.
8. DOORS UNLOCKED BOTH SIDES DURING BUSINESS HOURS, FOB CONTROL FROM EXTERIOR AFTER HOURS. TEL ECOMMUNICATION DEVICE FOR GUEST ENTRY.
9. DOOR UNLOCKED CORRIDOR SIDE AT ALL TIMES, FOB CONTROLLED ON OPPOSITE SIDE.
10. NOT USED
11. DOOR LOCKED - OPERATIONS ACCESS W/ CYPHER LOCK FOR UTILITY PROVIDER OR TRASH SERVICE PROVIDER.
12. DOOR UNLOCKED AT ALL TIMES ON MAGNETIC HOLD OPEN. MAGNETIC HOLD SHALL BE DEACTIVATED BY FIRE ALARM.
13. DOOR UNLOCKED FROM INTERIOR, CYPHER LOCK FOR UTILITY PROVIDER EXTERIOR, KNOX BOX FOR FIRE ACCESS FROM STREET.
14. ELEVATOR CALL BUTTONS FOB ACTIVATED, ALL LEVELS.
15. ROOF ACCESS: DOOR LOCKED FROM INTERIOR, UNLOCKED FROM EXTERIOR, PROVIDE KNOX BOX FOR FIRE ACCESS.
16. PASSAGE DOOR - UNLOCKED BOTH SIDES.
17. RESIDENT KEY ACCESS - STORAGE CLOSETS
18. COURTYARD EGRESS DOOR - UNLOCKED EXTERIOR SIDE, FOB CONTROLLED FROM INTERIOR
19. COURTYARD EGRESS DOOR - UNLOCKED BOTH SIDES



1 ACCESS CONTROL EXHIBIT - LEVELS 3-4
1/16" = 1'-0"

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ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: ACCESS CONTROL EXHIBIT
Sheet Number: COMMON
A0-5.32

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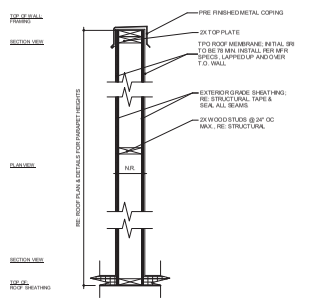
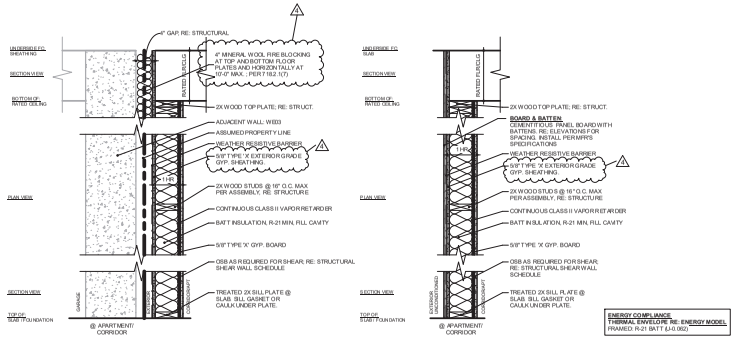
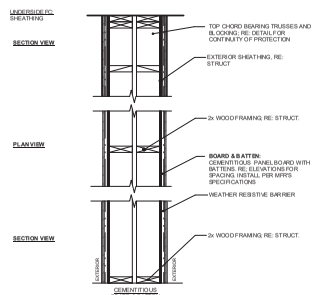


WE08 TYPE VA - EXT. WALL - NR CONDENSER WALL
1" = 1'-0"

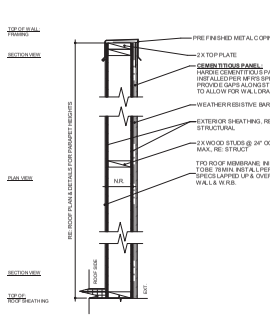


WE06 TYPE VA - 1 HR - SYMMETRICAL EXTERIOR WALL
1" = 1'-0"

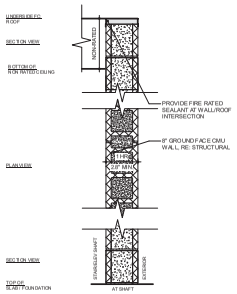
ASSEMBLY: GA FILE NO. WP 8105



WE09 TYPE VA - NR EXTERIOR WALL BUMP OUTS
1" = 1'-0"

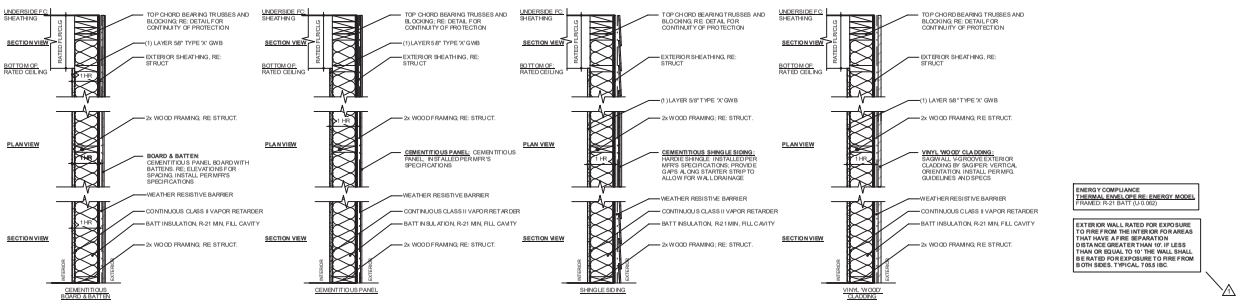


WE07 TYPE VA - EXT. WALL - NR PARAPET
1" = 1'-0"



WE05 TYPE VA - EXT. WALL - 1HR CMU WALL - STAIR
1" = 1'-0"

ASSEMBLY: IBC TABLE 721.1(2) ITEM 3.1-4



WE01 TYPE VA - 1HR - EXTERIOR WALL
1" = 1'-0"

ASSEMBLY: UL DESIGN NO. U356

WALL ASSEMBLY NOTES AND INFORMATION

EXTERIOR WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
WE01	1 HR	TYP. EXTERIOR WALL
WE06	1 HR	8" CMU - 1 HR
WE08	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE06	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE07	NR	2x6 PARAPET WALL - NR
WE09	NR	2x6 WALL - NR @ CONDENSERS
WE08	NR	2x6 EXTERIOR PURP. WALL - NON RATED
WE06	NR	2x6 EXTERIOR PURP. WALL - NON RATED

GENERAL NOTES:

1. REFER TO REFERENCED IBC, UL, OR GA ASSEMBLIES (LISTED ASSEMBLIES) FOR CONFIRMATION OF ALL RATED COMPONENTS WITHIN EACH WALL TYPE.
2. INFORMATION SHOWN IN WALL/DOOR TYPES (SHEETS A0-6.1 THROUGH A0-6.4) IS INTENDED TO MATCH THE REQUIREMENTS OF THE LISTED ASSEMBLIES (SHEETS A0-6.6 THROUGH A0-6.15). IN THE EVENT OF ANY DISCREPANCIES BETWEEN THE LISTED ASSEMBLIES AND THE WALL/FLOOR TYPES DRAWN, THE LISTED ASSEMBLY SHALL TAKE PRECEDENCE.
3. SOME WALL/FLOOR ASSEMBLIES SHOWN ALSO RELY ON INFORMATION PROVIDED WITH THE UL GENERAL NOTES, OR GA EXPLANATORY NOTES AND ITEMIZED ACCEPTABLE MFR'S. ALL ASSEMBLIES SHALL BE INSTALLED AS PER SPECS SHALL BE PERMITTED, UNLESS NOTED OTHERWISE STUD SPACINGS ARE MAXIMUMS.
4. REFER TO STRUCTURAL SPECIFICATIONS FOR ALL CAST-IN-PLACE, PT, AND CMU WALLS CONSTRUCTION.
5. FIRE WALLS, BARRIERS, PARTITIONS, AND ANY OTHER WALLS REQUIRED TO HAVE PROTECTED OPENINGS OR PENETRATIONS SHALL BE PERMANENTLY IDENTIFIED WITH SIGNS OR STENCILING THAT MEET THE FOLLOWING REQUIREMENTS:
   - A. LOCATED IN ACCESSIBLE CONCEALED FLOOR, FLOOR/CEILING SPACE OR ATTIC SPACE.
   - B. REPEATED A MAXIMUM OF EVERY 30'-0" FEET MEASURED HORIZONTALLY ALONG THE WALL BARRIER.
   - C. LETTERING MUST BE MIN. ½" IN HEIGHT. INCORPORATING THE SUGGESTED WORDING "FIRE AND/OR SMOKE BARRIER-PROTECT ALL OPENINGS"
7. WALL ASSEMBLIES ARE SHOWN TO DEMONSTRATE GENERAL COMPLIANCE WITH 2018 IBC. REFER TO AP SERIES FOR ADDITIONAL INFORMATION SPECIFIC TO DETAILS OF CONSTRUCTION.
8. WALLS WITH MODIFIERS ADD FURRING LAYERS BEYOND THE LISTED ASSEMBLY REQUIREMENTS.
9. SHEAR LOCATIONS VARY AND ARE TO BE COORDINATED WITH STRUCTURAL BY GC

WALL TAG INFORMATION:



WE: INTERIOR WALLS
WE: EXTERIOR WALLS
LOWER CASE LETTER: SIZE OF WALL (see below)
03: WALL TYPE

WALL SIZE LEGEND

WOOD FRAMING:

a	2 x FTM	WOOD STUDS
b	2 x 4	WOOD STUDS
c	2 x 6	WOOD STUDS
d	2 x 8	WOOD STUDS
e	2 x 10	WOOD STUDS
f	2 x 12	WOOD STUDS

METAL FRAMING:

g	1-5/8"	METAL STUDS
h	3-5/8"	METAL STUDS
i	4"	METAL STUDS
k	6"	METAL STUDS
m	"	METAL STUDS

MASONRY:

n	4"	CMU
o	6"	CMU
p	8"	CMU
r	10"	CMU
s	"	CMU

CONCRETE:

t	6"	CONCRETE
u	8"	CONCRETE
v	10"	CONCRETE
w	12"	CONCRETE
x	9"	CONCRETE

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ISSUE FOR CONSTRUCTION
06.07.2024

No.	Date	Issue
1	10.03.2023	PC1 RESPONSE
4	09.07.2024	IFC

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: EXTERIOR WALL ASSEMBLIES
Sheet Number: **A0-6.1**

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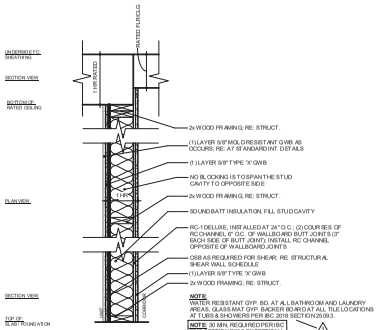
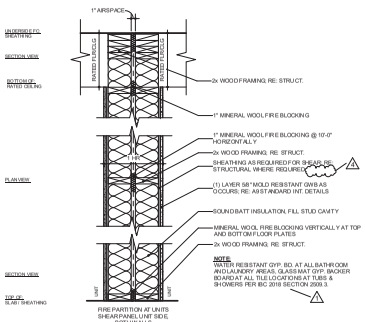
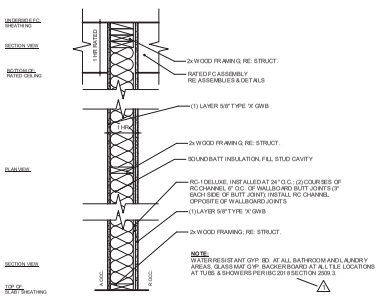


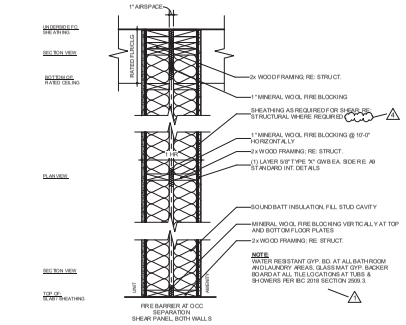
W111 TYPE VA - FIRE PARTITION - 1 HR 2X CORRIDOR WALL
1" = 1'-0" EST: 50-54 STC
ASSEMBLY: GA FILE NO. WP 3243



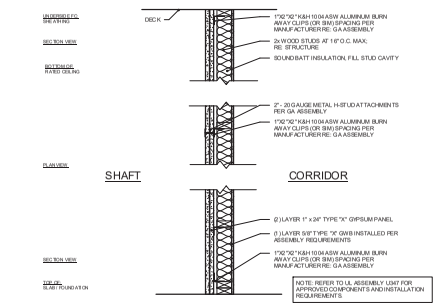
W110 TYPE VA - FIRE PARTITION - 1 HR 2X UNIT DEMISING WALL
1" = 1'-0" 50-54 STC
ASSEMBLY: GA DESIGN NO. WP 3269



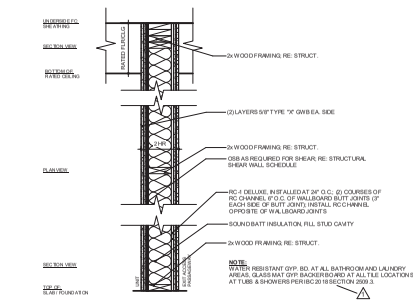
W108 TYPE VA - FIRE BARRIER - 1 HR OCCUPANCY SEPARATION
1" = 1'-0" 50-54 STC
ASSEMBLY: GA DESIGN NO. WP 3243



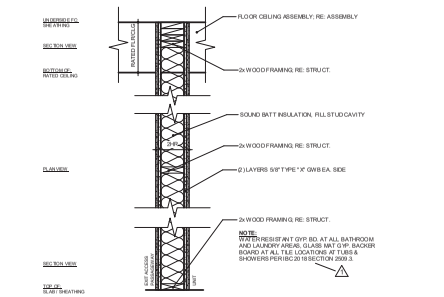
W107 TYPE VA - FIRE BARRIER - 1 HR 2X OCC SEPARATION
1" = 1'-0" 50-54 STC
ASSEMBLY: GA DESIGN NO. WP 3269



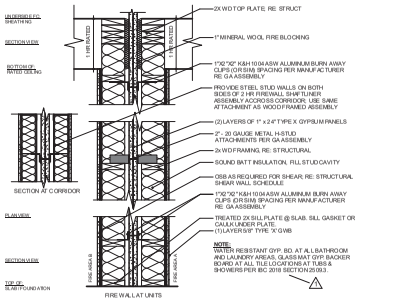
W106 TYPE VA - FIRE BARRIER - 2 HR SHAFT WALL
1" = 1'-0" ASSEMBLY: UL DESIGN NO. U347



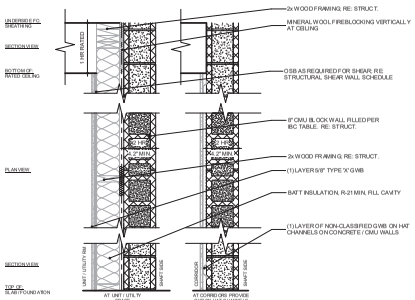
W105 TYPE VA - FIRE BARRIER - 2 HR 2X CORRIDOR WALL
1" = 1'-0" EST: 55-59 STC
ASSEMBLY: GA DESIGN NO. WP 3809



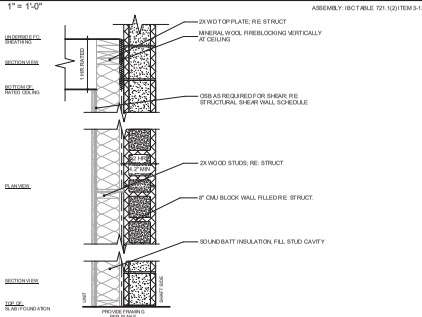
W104 TYPE VA - FIRE BARRIER - 2HR 2X EXIT ACCESS CORR
1" = 1'-0" ESTIMATED STC: 40-44
ASSEMBLY: GA File No. WP 4135



W103 TYPE VA - FIREWALL - 2 HR 2X BLDG SEPARATION WALL
1" = 1'-0" EST: 65-69 STC
ASSEMBLY: GA DESIGN NO. ASW 691.1



W102 TYPE VA - FIRE BARRIER - 2 HR CMU SHAFT WALL
1" = 1'-0" ASSEMBLY: IBC TABLE 721.1(2) ITEM 3-1.4



W101 TYPE VA - FIREWALL - 2 HR CMU FIREWALL @ STAIR
1" = 1'-0" ASSEMBLY: IBC TABLE 721.1(2) ITEM 3-1.4

WALL ASSEMBLY NOTES AND INFORMATION

INTERIOR WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
W101g	2 HR	8" CMU - 2HR FIRE WALL
W102g	2 HR	8" CMU - 2HR FIRE BARRIER
W103	2 HR	FIRE WALL - 2HR
W103b	2 HR	FIRE WALL, 2 HR, (2) 2X4 WITH (2) 1" SHAFTLINER
W103h	2HR	FIRE WALL, 2-HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
W104b	2 HR	FIRE BARRIER, 2HR, 2x WITH (2) 5/8" TYPE "X" GYP
W106c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
W106h	2 HR	FIRE BARRIER 2 HR EXIT ACCESS
W108b	2-HR	2X4 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W108c	2-HR	2X6 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W107b	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W108c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W110b	1 HR	1HR - UNIT DEMISING - 1-HR FIRE PARTITION
W110c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
W111b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
W111c	1 HR	1-Hr exterior
W112b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NORC
W112c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
W113b	1 HR	2X4, 1HR - BEARING
W113c	1 HR	2X6, 1HR - BEARING
W114b	NR	2X4 INTERIOR WALL - NR
W114c	NR	2X6 INTERIOR WALL - NR
W115b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W115c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W116	NR	7/8" METAL HAT CHANNEL FURRING WALL
W117b	2 HR	2X4 FIRE BARRIER, 2-HR - UNIT DEMISING

GENERAL NOTES:

1. REFER TO REFERENCED IBC, UL, OR GA ASSEMBLIES & INTERNATIONAL CODES FOR COMPARTION OF ALL RATED COMPONENTS WITHIN EACH WALL TYPE.
2. INFORMATION SHOWN IN WALL/FLOOR TYPES (SHEETS A0-6.1 THROUGH A0-6.4) IS INTENDED TO MATCH THE REQUIREMENTS OF THE LISTED ASSEMBLIES (SHEETS A0-6.6 THROUGH A0-6.15). IN THE EVENT OF ANY DISCREPANCIES BETWEEN THE LISTED ASSEMBLIES AND THE WALL/FLOOR TYPES DRAWN, THE LISTED ASSEMBLY SHALL TAKE PRECEDENCE.
3. SOME WALL/FLOOR ASSEMBLIES SHOWN ALSO RELY ON INFORMATION PROVIDED IN THE UL GENERAL NOTES, OR GA EXPLANATORY NOTES AND STITCHED ACCROSS BREAK LINES. ANY OMISSIONS OR CONFLICTS IN THE NOTES SHALL BE PERMITTED, UNLESS NOTED OTHERWISE STUD SPACINGS ARE MAXIMUMS.
4. REFER TO STRUCTURAL SPECIFICATIONS FOR ALL CAST-IN-PLACE, PT, AND CMU WALLS CONSTRUCTION.
5. FIRE WALLS & BARRIERS, PARTITIONS, AND ANY OTHER WALLS REQUIRED TO HAVE PROTECTED OPENINGS OR PENETRATIONS SHALL BE PERMANENTLY IDENTIFIED WITH SIGNS OR STENCILING THAT MEET THE F OLLOWING REQUIREMENTS:
   A. LOCATED IN ACCESSIBLE CONCEALED FLOOR, FLOOR/CEILING SPACE OR ATTIC.
   B. REPEATED A MAXIMUM OF EVERY 30 FEET MEASURED HORIZONTALLY ALONG THE WALL, BARRIER, PARTITION, ETC.
   C. LETTERING MUST BE MIN. ½" IN HEIGHT, INCORPORATING THE SUGGESTED WORDING "FIRE AND/OR SMOKE BARRIER-PROTECT ALL OPENINGS"
7. WALL ASSEMBLIES ARE SHOWN TO DEMONSTRATE GENERAL COMPLIANCE WITH 2018 IBC. REFER TO AT SERIES FOR ADDITIONAL INFORMATION SPECIFIC TO DETAILS OF CONSTRUCTION.
8. WALLS WITH MODIFIERS ADD FURRING LAYERS BEYOND THE LISTED ASSEMBLY REQUIREMENTS.
9. WEAR LOCATIONS VARY AND ARE TO BE COORDINATED WITH STRUCTURAL BY GC

WALL TAG INFORMATION:



WE: INTERIOR/VAULTS
WE: EXTERIOR/WALLS
LOWER CASE LETTER: SIZE OF WALL (see below)
03: WALL TYPE

WALL SIZE LEGEND

WOOD FRAMING:

a	2 x FTM	WOOD STUDS
b	2 x 4	WOOD STUDS
c	2 x 6	WOOD STUDS
d	2 x 8	WOOD STUDS
e	2 x 10	WOOD STUDS
f	2 x 12	WOOD STUDS

METAL FRAMING:

g	1-5/8"	METAL STUDS
h	3-5/8"	METAL STUDS
i	4"	METAL STUDS
k	6"	METAL STUDS
m	"	METAL STUDS

MASONRY:

n	4"	CMU
o	6"	CMU
p	8"	CMU
r	10"	CMU
s	"	CMU

CONCRETE:

t	6"	CONCRETE
u	8"	CONCRETE
v	10"	CONCRETE
w	12"	CONCRETE
x	9"	CONCRETE

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MARSHALL POINTE

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5170 MARSHALL ST - ARVADA, CO 80002

ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue
1	10.03.2023	PC1 RESPONSE
4	08.07.2024	IFC

Project Architect: DV
Project Designer: DR
Title:
Job Number: 222001
Drawn By: CG / CB/ TT/ NV
Checked By: JG
Title: INTERIOR WALL ASSEMBLIES
Sheet Number: **A0-6.2**

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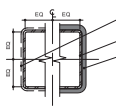
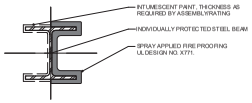


PS02 COLUMN PROTECT. - 2HR

1" = 1'-0"

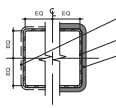
SPRAY - UL DESIGN NO. X693
ASSEMBLY: INTUMESCENT PAINT - ALB CLAD TF
ALTERNATE GYP WRAP ASSEMBLY - GA NO. CM 1451



BS01 BEAM PROTECT. - 1HR

1" = 1'-0"

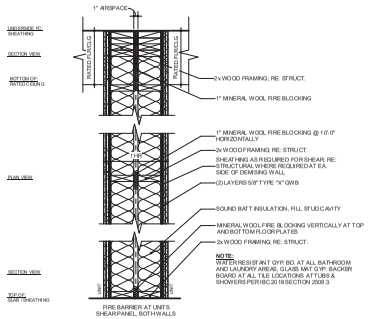
SPRAY - UL DESIGN NO. X614
ASSEMBLY: INTUMESCENT PAINT - ALB CLAD TF
ALTERNATE GYP WRAP ASSEMBLY - UL DESIGN NO. X528



PS01 COLUMN PROTECT. - 1HR

1" = 1'-0"

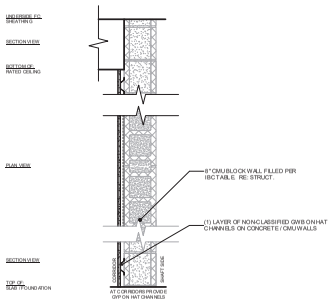
SPRAY - UL DESIGN NO. X693
ASSEMBLY: INTUMESCENT PAINT - ALB CLAD TF
ALTERNATE E GYP WRAP ASSEMBLY - GA NO. CM 1451



W17 TYPE VA - FIRE BARRIER - 2 HR 2X UNIT DEMISING WALL

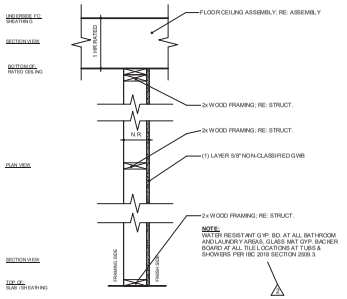
1" = 1'-0"

65-69 STC
ASSEMBLY: GA DESIGN NO. WP 3725



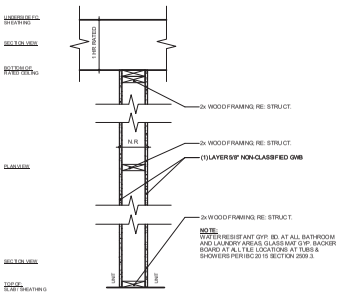
W16 GWB ON 7/8 HAT CHANNEL - NR

1" = 1'-0"



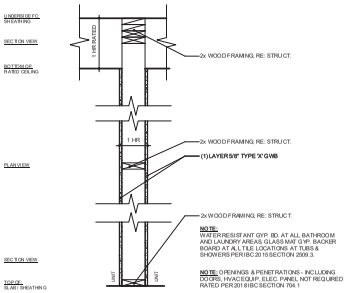
W15 TYPE VA - NR 2X FURRING WALL

1" = 1'-0"



W14 TYPE VA - NR 2X INTERIOR WALL

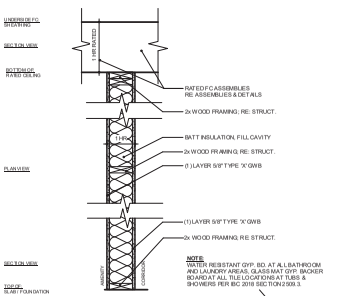
1" = 1'-0"



W13 TYPE VA - 1 HR 2X INTERIOR BEARING WALL

1" = 1'-0"

ASSEMBLY: GA DESIGN NO. WP 3605



W12 TYPE VA - FIRE PARTITION - 1 HR 2X CORRIDOR WALL (NO RC)

1" = 1'-0"

ASSEMBLY: GA DESIGN NO. WP 3605

WALL ASSEMBLY NOTES AND INFORMATION

INTERIOR WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
W01c	2 HR	8" CMU - 2HR FIRE WALL
W02c	2 HR	8" CMU - 2HR FIRE BARRIER
W03	2 HR	FIRE WALL - 2HR
W03B	2 HR	FIRE WALL - 2 HR, (2) 2X6 WITH (2) 1" SHAFTLINER
W03h	2HR	FIRE WALL - 2 HR, (1) 1 5/8" WITH (2) 1" SHAFTLINER
W04h	2 HR	FIRE BARRIER - 2 HR, 2x WITH (2) 5/8" TYPE "X" GYP
W04c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
W05c	2 HR	FIRE BARRIER, 2 HR EXIT ACCESS
W06h	2 HR	2X4 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W06c	2 HR	2X6 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W07h	1 HR	OCCUPANCY SEPARATION - 1 HR FIRE BARRIER
W08c	1 HR	OCCUPANCY SEPARATION - 1 HR FIRE BARRIER
W11h	1 HR	TYP. UNIT DEMISING - 1 HR FIRE PARTITION
W10c	1 HR	2X6 FIRE PARTITION, 1HR - UNIT DEMISING
W11c	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
W11c	1 HR	#VARIES
W12B	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
W12c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
W13c	1 HR	2X6, 1 HR - BEARING
W13c	1 HR	2X6, 1 HR - BEARING
W14c	NR	2X6 - INTERIOR WALL - NR
W14c	NR	2X6 - INTERIOR WALL - NR
W15h	NR	2x4 INTERIOR NONBEARING WALL - GWB ON 1 SIDE
W15c	NR	2x6 INTERIOR NONBEARING WALL - GWB ON 1 SIDE
W16	NR	7/8" METAL HAT CHANNEL FURRING WALL
W17h	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING

GENERAL NOTES:

1. REFER TO REFERENCED IBC, UL, OR GA ASSEMBLIES (LISTED ASSEMBLIES) FOR CONFIRMATION OF ALL RATED ASSEMBLY REQUIREMENTS FOR EACH USE.
2. INFORMATION SHOWN ON WALL/FLOOR TYPES (SHEETS A0-6.1 THROUGH A0-6.4) IS INTENDED TO MATCH THE REQUIREMENTS OF THE LISTED ASSEMBLIES (SHEETS A0-6.5 THROUGH A0-6.15). IN THE EVENT OF ANY DISCREPANCIES BETWEEN THE LISTED ASSEMBLIES AND THE WALL/FLOOR TYPES DRAWN, THE LISTED ASSEMBLY SHALL TAKE PRECEDENCE.
3. SOME WALL/FLOOR ASSEMBLIES SHOWN ALSO RELY ON INFORMATION PROVIDED IN THE UL GENERAL NOTES, OR GA EXPLANATORY NOTES AND IS NOTED ACCORDINGLY. PER UL & GA EXPLANATORY NOTES, GREATER STUD SIZES SHALL BE PERMITTED, UNLESS NOTED OTHERWISE STUD SIZES ARE MINIMUM SIZES.
4. REFER TO STRUCTURAL SPECIFICATIONS FOR ALL CAST-IN-PLACE, PT, AND CMU WALLS CONSTRUCTION.
5. FIRE WALLS, BARRIERS, PARTITIONS, AND ANY OTHER WALLS REQUIRED TO HAVE PROTECTED OPENINGS OR PENETRATIONS SHALL BE PERMANENTLY IDENTIFIED WITH SIGNS OR STENCILING THAT MEET THE FOLLOWING REQUIREMENTS:
   A. LOCATED IN ACCESSIBLE CONCEALED FLOOR, FLOOR/CEILING, OR ATTIC SPACES.
   B. REPEATED A MINIMUM OF EVERY 30 FEET MEASURED HORIZONTALLY ALONG THE WALL, BARRIER, PARTITION, ET.
   C. LETTERS SHALL BE MIN. ½" IN HEIGHT, INCORPORATING THE SUGGESTED WORDING "FIRE AND/OR SMOKE BARRIER-PROTECT ALL OPENINGS"
7. WALL ASSEMBLIES ARE SHOWN TO DEMONSTRATE GENERAL COMPLIANCE WITH 2018 IBC; REFER TO A7 SERIES FOR ADDITIONAL INFORMATION SPECIFIC TO DETAILS OF CONSTRUCTION.
8. WALLS WITH MODIFIERS ADD FURRING LAYERS BEYOND THE LISTED ASSEMBLY REQUIREMENTS
9. SHEAR LOCATIONS V.WRY AND ARE TO BE COORDINATED WITH STRUCTURAL BY GC

WALL TAG INFORMATION:



WALL SIZE LEGEND

WOOD FRAMING:

a	2 x FM	WOOD STUDS
b	2 x 4	WOOD STUDS
c	2 x 6	WOOD STUDS
d	2 x 8	WOOD STUDS
e	2 x 10	WOOD STUDS
f	2 x _	WOOD STUDS

METAL FRAMING:

g	1-5/8"	METAL STUDS
h	3-5/8"	METAL STUDS
j	4"	METAL STUDS
k	6"	METAL STUDS
m	_"	METAL STUDS

MASONRY:

n	4"	CMU
p	6"	CMU
q	8"	CMU
r	10"	CMU
s	_"	CMU

CONCRETE:

t	6"	CONCRETE
u	8"	CONCRETE
v	10"	CONCRETE
w	12"	CONCRETE
x	9"	CONCRETE

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ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue
2	10.31.2023	PC2 RESPONSE

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: INTERIOR WALL ASSEMBLIES
Sheet Number: **A0-6.3**

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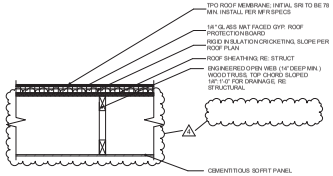
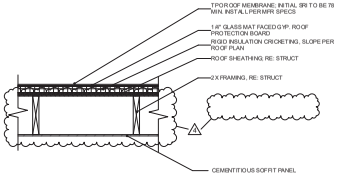
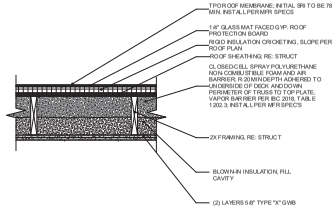


RC06 TYPE VA- NR ROOF/CEILING - MAIN ENTRY CANOPY
1" = 1'-0"

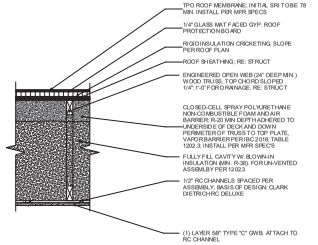


RC05 TYPE VA- NR ROOF/CEILING - ENTRY CANOPIES
1" = 1'-0"

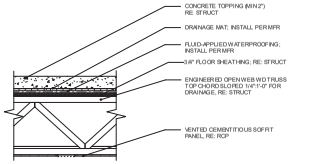
ROOF/CEILING ASSEMBLIES
FLOOR/CEILING ASSEMBLIES



RO02 TYPE VA- 1HR ROOF/CEILING - ELEV/STAIR ROOF
1" = 1'-0"
ASSEMBLY: GA FILE NO. RC 2601

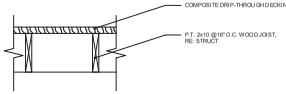


RC01 TYPE VA - 1HR -ROOF/CEILING - TYP.
1" = 1'-0"
ASSEMBLY: UL DESIGN NO. P522



NOTE: SPRINKLER PROTECTION TO BE EXTENDED TO BALCONY. BALCONY IS ALLOWED TO BE OF NR CONSTRUCTION PER IBC 705.2.3.1 EXCEPTION 3

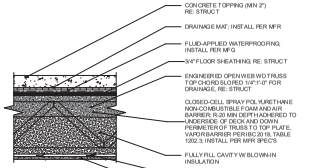
FC09 TYPE VA - NR BALCONY, EXTERIOR
1" = 1'-0"



NOTE: TYPE V CONSTRUCTION ALLOWED AT BALCONIES PER IBC 705.2.3.1, EXCEPTION 3

NOTE: SPRINKLER PROTECTION TO BE EXTENDED TO BALCONY. BALCONY IS ALLOWED TO BE OF NR CONSTRUCTION PER IBC 705.2.3.1 EXCEPTION 3

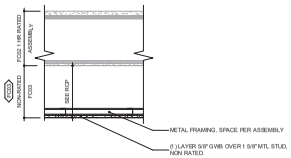
FC05 TYPE VA - NR FLOOR/CEILING - BALCONY, TYP.
1" = 1'-0"



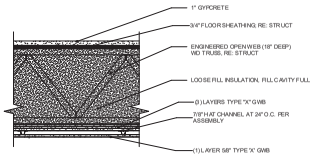
NOTE: FLOOD TEST PER ASTM D5907 AT LOCATIONS ABOVE FINISHED SPACES

NOTE: SPRINKLER PROTECTION TO BE EXTENDED TO BALCONY. BALCONY IS ALLOWED TO BE OF NR CONSTRUCTION PER IBC 705.2.3.1 EXCEPTION 3

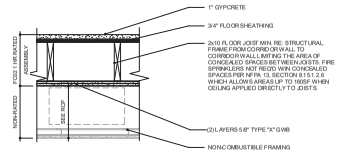
FC08 TYPE VA - 1HR BALCONY OVER CONDITIONED SPACE
1" = 1'-0"
ASSEMBLY: UL No. L528



FC03 TYPE VA - NR DROP CEILING
1" = 1'-0"



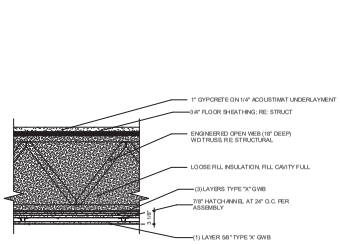
FC11 TYPE VA - 2HR HORIZONTAL ASSEMBLY - CORRIDOR
1" = 1'-0"
ASSEMBLY: GA FILE NO. FC 5751



MAINTAIN CONT. 1-HR RATING AT INTERSECTIONS BETWEEN HORIZONTAL F/C ASSEMBLY AND VERTICAL WALL ASSEMBLY

NOTE: AT NO POINT SHALL THE FINISHED FLOOR SYSTEM COME IN CONTACT WITH ANYTHING OTHER THAN THE IMPACT ISOLATION MATERIAL, FOAM GASKET, OR ACOUSTIC CAULK. THE FINISHED FLOOR SYSTEM MUST BE COMPLETELY ISOLATED FROM THE SUBFLOOR AND THE SURROUNDING CONSTRUCTIONS TO MAINTAIN ACOUSTIC PERFORMANCE.

FC02 TYPE VA - 1HR FLOOR/CEILING - CORRIDORS
1" = 1'-0"
ASSEMBLY: GA FCS 529

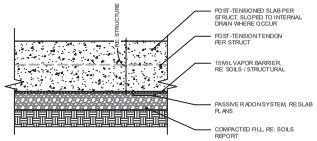


MAINTAIN CONT. 1-HR RATING AT INTERSECTIONS BETWEEN HORIZONTAL F/C ASSEMBLY AND VERTICAL WALL ASSEMBLY

NOTE: AT NO POINT SHALL THE FINISHED FLOOR SYSTEM COME IN CONTACT WITH ANYTHING OTHER THAN THE IMPACT ISOLATION MATERIAL, FOAM GASKET, OR ACOUSTIC CAULK. THE FINISHED FLOOR SYSTEM MUST BE COMPLETELY ISOLATED FROM THE SUBFLOOR AND THE SURROUNDING CONSTRUCTIONS TO MAINTAIN ACOUSTIC PERFORMANCE.

FC01 TYPE VA - 1HR FLOOR/CEILING - UNITS
1" = 1'-0"
ESTIMATED STC: 63 AND 58 IIC AT HARD SURFACES
ASSEMBLY: UL No. L528

FC10 TYPE VA - 2HR HORIZONTAL ASSEMBLY - UNITS
1" = 1'-0"
ESTIMATED STC: 63 AND 58 IIC AT HARD SURFACES
ASSEMBLY: GA FILE NO. FC 5751



FC06 TYPE VA - NR FLOOR- PT CONC. SLAB
1" = 1'-0"

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ISSUE FOR CONSTRUCTION
06.07.2024

No.	Date	Issue
1	06.07.2024	IFC

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: HORIZONTAL ASSEMBLIES
Sheet Number: A0-6.4

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UL DESIGN NO. U356

EXTERIOR TYPE VA - 1HR

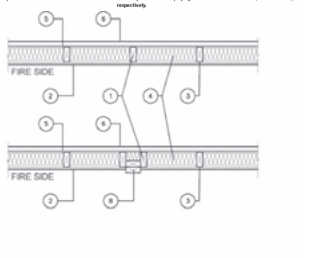
V903

Design No. **U356**

November 15, 2022

Bearing Wall Rating – 1 Hr Rating Exposed to Fire on Interior Face Only
Bearing Wall Rating — 1 hr Rating Exposed to Fire on Exterior Face (See Item 4E)
Finish Rating — 23 Min or 25 Min (See Item 2C)
This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUY7

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**



1. **Wood Studs** — Nom 2 by 4 in. spaced 16 in. OC with two 23g 4 in. top and one 23g 4 in. bottom plates. Studs laterally braced by wood structural panel sheathing (Item 5). When **Mineral and Fiber Boards*** (Item 5A) are considered as bracing for the studs, the load is restricted to 70% of allowable axial load. Walls effectively fire stopped at top and bottom of wall.

2. **Gypsum Board*** — **Any 5/8 in. thick UL Classified Gypsum Board that is eligible for use in Design Nos. U301, U312 or U305.** Nom 5/8 in. thick, 4 ft wide, applied vertically and nailed to studs and bearing plates 7 in. OC with 6d common coated nails, 1-7/8 in. long with 5/16 in. diam head. When item **Steel Framing Members*** (Item 7 or any alternate clips), is used, gypsum panels attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC.

When item 16 **Steel Framing Members*** is used, two layers of gypsum panels attached to furring channels. Base layer attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC. Face layer attached to furring channels with 1-5/8 in. long Type S bugle-head steel screws spaced 12 in. OC. All joints in face layers staggered with joints in base layers.

AMERICAN GYPSUM CO (View Classification) — CHNA R14196

BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO (View Classification) — CHNA R19374

CABOT MANUFACTURING ULC (View Classification) — CHNA R25370

CERTAINTEED GYPSUM INC (View Classification) — CHNA R3660

CGC INC (View Classification) — CHNA R19751

CERTAINTEED GYPSUM INC (View Classification) — CHNA R19482

GEORGIA-PACIFIC GYPSUM L L C (View Classification) — CHNA R27717

LOADMASTER SYSTEMS INC (View Classification) — CHNA R11808

NATIONAL GYPSUM CO (View Classification) — CHNA R3501

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM (View Classification) — CHNA R7094

PANEL REY S A (View Classification) — CHNA R21736

SAM GYPSUM INDUSTRY (ZARAGOZA) CO LTD (View Classification) — CHNA R19262

THAI GYPSUM PRODUCTS PCL (View Classification) — CHNA R27517

UNITED STATES GYPSUM CO (View Classification) — CHNA R1318

USG BORAL DRYWALL SPZ LLC (View Classification) — CHNA R19438

USG MEXICO S A DE C V (View Classification) — CHNA R16089

2A. **Gypsum Board*** — (As an alternate to Item 2, Not Shown) — Any 5/8 in. thick 4 ft wide gypsum panels that are eligible for use in Design Nos. U301, U312 or U305, supplied by the Classified Companies listed below shown in the **Gypsum Board*** (CKNX) category. Applied vertically and attached to studs and bearing plates with 1-1/4 in. long Type W coarse-thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board.
CGC INC
UNITED STATES GYPSUM CO
USG BORAL DRYWALL SPZ LLC
USG MEXICO S A DE C V

2B. **Gypsum Board*** — (As an alternate to Item 2, Not Shown) — 5/8 in. thick 4 ft wide gypsum panels applied vertically and attached to studs and bearing plates with 1-1/4 in. long Type W coarse-thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board.
AMERICAN GYPSUM CO — Types AGX-1, M Glass, AG-C, Glyroc

CABOT MANUFACTURING ULC — Type X, 5/8 Type A, Type Brycplex Exterior Sheathing

CERTAINTEED GYPSUM INC — Type C, Type X-1, Exo Ure Type X-2

GEORGIA PACIFIC GYPSUM L L C — Types X, Veneer Plaster Base Type X, Water-Rated Type X, Sheathing Type X, Soffit Type X, Type X ForticimSound Sheathing Gypsum Board

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Types RG-11, RGS-WRG, RGS

THAI GYPSUM PRODUCTS PCL — Type C or Type X

2C. **Gypsum Board*** — (As an alternate to Item 2, Not Shown) — For Use with Item 5A only - 5/8 in. thick 4 ft wide gypsum panels applied horizontally and attached to studs and bearing plates with 1-1/4 in. long Type W coarse-thread gypsum panel steel screws spaced a max 8 in. OC, with last screws 1 in and 4 in. from edges of board. Finish Rating is 25 min.
CABOT MANUFACTURING ULC — 5/8 Type X, Type Brycplex Exterior Sheathing

GEORGIA-PACIFIC GYPSUM L L C — Type X, Veneer Plaster Base Type X, Water Rated Type X, Sheathing Type X, Soffit Type X

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Types RG-11, RGS-WRG, RGS

2D. **Gypsum Board*** — (As an alternate to Item 2) — Not to be used with Item 7. 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically only and fastened to the studs and plates with 6d cement coated nails 1-7/8 in. long, 0.095 in. shank diam and 1/4 in. diam heads, 7 in. OC.
NATIONAL GYPSUM CO — Type SHX®

2E. **Gypsum Board*** — (As an alternate to Items 2 through 2D) — Nominal 5/8 in. thick, 4 ft wide panels, secured as described in Item 2.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock 510

2F. **Gypsum Board*** — (As an alternate to Item 2) — Not to be used with Item 7. 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically or horizontally and fastened to the studs and plates with 1-1/4 in. long Type W coarse-thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board.
CERTAINTEED GYPSUM INC — Type SilentFX

2G. **Wall and Partition Facings and Accessories*** — (As an alternate to Items 2 through 2F) — Nominal 5/8 in. thick, 4 ft wide panels, secured as described in Item 2.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock 527

2H. **Gypsum Board*** — (As an alternate to Item 2) — 5/8 in. thick gypsum panels, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse-thread gypsum panel steel screws spaced a maximum 16 in. OC with the last two screws 4 and 1 in. from the edges of the board. When used in widths other than 48 in., gypsum panels are to be installed horizontally.
CERTAINTEED GYPSUM INC — Type GREENGUARD Gold rating 21 min), Type GEORGIA-PACIFIC GYPSUM L L C, Type GEORGIA-PACIFIC GYPSUM L L C, Type GEORGIA-PACIFIC GYPSUM L L C,

UL DESIGN NO. U347 (cont.)

INTERIOR TYPE VA - 2HR FIRE BARRIER WI06

the enclosed cavity in accordance with the application instructions supplied with the product with a nominal dry density of 2.7 lb/ft³. Alternate Application Method: The fiber is applied without water or adhesive at a nominal dry density of 3.5 lb/ft³, in accordance with the application instructions supplied with the product.
U S GREENFIBER L L C — SANCTUARY, FRM, INS735, INS745 and INS750LD for use with wet or dry application. INS515LD, INS541LD, INS510LD, INS765LD and INS773LD are to be used for dry application only.

7. **Aluminum Clips** — Aluminum angle, 0.049 in. thick, 2 in. wide with 2 in. and 2-1/2 in. legs. Clips secured with Type S screws 3/8 in. long to "H" studs and with 1-1/4 in. long screws to wood framing or steel framing through holes provided in clip.

7A. Clip placement for separation walls up to 23 ft high: Space clips a max of 10 ft OC vertically between wood or steel framing and "H" studs.

7B. Clip placement for separation walls up to 54 ft high: Space clips as described in Item 6A for upper 24 ft. Remaining wall area below requires clips spaced a max of 5 ft OC vertically between wood or steel framing and "H" studs.

7C. Clip placement for separation walls up to 66 ft high: Space clips as described in Item 6A for upper 24 ft, space clips as described in Item 6B for middle 30 ft. Remaining wall area below requires clips spaced a max of 39 in. OC vertically between wood or steel framing and "H" studs.

8. **STC Rating** — The STC Rating of the wall assembly is 61 when it is constructed as described by Items 1 through 6, except:
A. Item 5, above — Wood Studs — Shall be spaced 16 in. OC.

B. Item 6, above — Gypsum Board — Min. weight 1.5 psf. Shall be applied vertically and attached to studs with 1-1/4 in. long steel drywall screws spaced 16 in. OC. Joints and screwheads shall be covered with paper tape and joint compound.

C. Item 7, above — Aluminum Clips — Spaced a max of 10 ft OC vertically.

D. Batts and Blankets* - The cavities formed by the wood studs shall be friction fit with 3-1/2 in. thick fiberglass insulation batts, min. 0.80 pcf. See Batts and Blankets (BKNV) category in the Building Materials Directory and Batts and Blankets (BZJZ) category in the Fire Resistance Directory for name of Classified Companies.

E. Max Height of Separation Wall is 23 ft.

F. The STC rating applies to Configuration B only.

G. Steel Studs (Items 5A, 5B), Plywood Sheathing or OSB (Item 5A and Item 9) and Batts and Blankets (Items 6B) not evaluated as alternatives for obtaining STC rating.

8A. **STC Rating** — The STC Rating of the wall assembly is 69 when it is constructed as described by Items 1 through 6, except:
A. Item 5, above — Wood Studs — Shall be spaced 16 in. OC.

B. Item 6C, above — Wall and Partition Facings and Accessories* — Type QuietRock QR-510 panels shall be installed.

C. Item 7, above — Aluminum Clips — Spaced a max of 10 ft OC vertically.

D. Batts and Blankets* - The cavities formed by the wood studs shall be friction fit with 3-1/2 in. thick fiberglass insulation batts, min. 1.0 pcf. See Batts and Blankets (BKNV) category in the Building Materials Directory and Batts and Blankets (BZJZ) category in the Fire Resistance Directory for name of Classified Companies.

E. Max Height of Separation Wall is 23 ft.

F. The STC rating applies to Configuration B only.

G. Steel Studs (Items 5A, 5B), Plywood Sheathing or OSB (Item 6A and Item 10) and Batts and Blankets (Items 6B) not evaluated as alternatives for obtaining STC rating.

8B. **STC Rating** — The STC Rating of the wall assembly is 70 when it is constructed as described by Items 1 through 7, except:
A. Item 5, above - Wood Studs - Shall be spaced 16 in. OC.

B. Item 6C, above - Wall and Partition Facings and Accessories* - Type QuietRock QR-525 panels shall be installed as described in Item 5C.

C. Item 7, above — Aluminum Clips - Spaced a max of 10 ft OC vertically.

D. Batts and Blankets* — The cavities formed by the wood studs shall be friction fit with 3-1/2 in. thick fiberglass insulation batts, min. 1.0 pcf. See Batts and Blankets (BKNV) category in the Building Materials Directory and Batts and Blankets (BZJZ) category in the Fire Resistance Directory for name of Classified Companies.

E. Max Height of Separation Wall is 23 ft.

F. The STC rating applies to Configuration B only.

G. Steel Studs (Items 5A, 5B), Plywood Sheathing or OSB (Item 6A and Item 10) and Batts and Blankets (Items 6B) not evaluated as alternatives for obtaining STC rating.

9. **Non-Bearing Wall Partition Intersection** — (Optional) Wall system consisting of nominal 2 by 4 in. stud or nominal 2 by 6 in. stud. Maximum one non bearing wall partition intersection per stud cavity.

10. **Plywood Sheathing or OSB** — (Optional) — Min 1/2 in. thick plywood or OSB applied horizontally or vertically to "H" studs on area separation wall side of Configuration A or Configuration C. Vertical joints located over studs. Fastened to "H" studs with screws of sufficient length, spaced a maximum of 12 in. OC.

11. **Caulking and Sealants*** — (Optional - Intended for use as an air barrier - Not evaluated as fireblocking) - A bead of sealant applied around the partition perimeter in the 3/4 in. air space between wood framing (Item 5) and shaftliner panels (Item 3) to create an air barrier.
DUPONT DE NEMOURS, INC. — Great Stuff Gaps & Cracks, Great Stuff Pro Gaps & Cracks, Great Stuff Pro Window & Door

ICP CONSTRUCTION INC — Fireblock, Window & Door, Insulating Foam Sealant, Multi-Purpose, HC Sealants, Black Foam Sealant, Extreme, Window & Door Extreme, Fast Foam, Gun Foam, and Straw Foam

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

Last Updated on 2022-02-16

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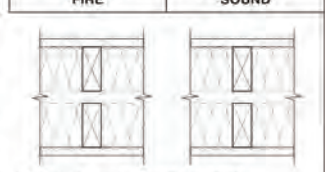
GA DESIGN NO. WP 3269 - 2021

FIRE BARRIER - 1 HR 2X OCC SEPARATION WALL WI07
FIRE PARTITION - 1 HR 2X UNIT DEMISING WALL WI10

GA FILE NO. WP 3269	GENERIC	1 HOUR FIRE	50 to 54 STC SOUND

GYPSUM WALLBOARD, WOOD STUDS, INSULATION

Fire Design:
One layer 5/8" type X gypsum wallboard or gypsum veneer base applied parallel or at right angles to each side of double row of 2 × 4 wood studs 16" o.c. on separate plates 1" apart with 2" Type W screws 7" o.c. Two layers 3.5" unfaced glass fiber insulation friction fit on both sides of cavity.
Joints staggered 16" on opposite sides. Horizontal bracing required at mid-height. **(LOAD-BEARING)**
Sound Design:
Sound tested as constructed for fire.



Thickness: 9-1/2" (Fire and Sound)
Approx. Weight: 8.5 psf (Fire and Sound)
Fire Test: UL R4024, 10-31-68
UL Design U341,
Sound Test: NOAL 17-0837, 8-25-17

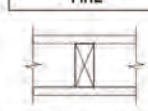
GA DESIGN NO. WP 3605 - 2021

FIRE PARTITION - 1 HR CORRIDOR WALL WI12
FIRE PARTITION - 1 HR 2X INTERIOR BEARING WALL WI13

GA FILE NO. WP 3605	GENERIC	1 HOUR FIRE	

GYPSUM WALLBOARD, WOOD STUDS

Fire Design:
One layer 5/8" type X plain or predecorated gypsum wallboard, water-resistant gypsum backing board, or gypsum veneer base applied parallel or at right angles to each side of 2 × 4 wood studs 16" o.c. with 6d coated nails, 1-7/8" long, 0.0915" shank, 1/4" heads, 7" o.c. Joints of square edge, bevel edge or predecorated wallboard may be left exposed.
Joints staggered 16" on opposite sides. **(LOAD-BEARING)**



Thickness: 4-7/8" (Fire)
Approx. Weight: 7 psf (Fire)
Fire Test: UL R1319-4, -6, 6-17-52,
UL R2717-39, 1-20-66,
UL R3501-52, 3-15-66,
UL Design U305,
ULC Design W301

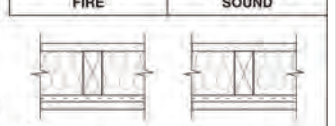
GA DESIGN NO. WP 3243 - 2021

FIRE BARRIER - 1 HR 2X OCCUPANCY SEPARATION WALL WI08
FIRE PARTITION - 1 HR 2X CORRIDOR WALL WI11

GA FILE NO. WP 3243	GENERIC	1 HOUR FIRE	50 to 54 STC SOUND

GYPSUM WALLBOARD, RESILIENT CHANNELS, INSULATION, WOOD STUDS

Fire Design:
Resilient channels 24" o.c. attached at right angles to ONE SIDE of 2 × 4 wood studs 24" o.c. with 1-1/4" Type S screws. **One** layer 5/8" type X gypsum wallboard or gypsum veneer base applied at right angles to channels with 1" Type S screws 8" o.c. with vertical joints located midway between studs. 3" mineral or glass fiber insulation in stud cavity.
OPPOSITE SIDE: **One** layer 5/8" type X gypsum wallboard or gypsum veneer base applied parallel or at right angles to studs with 6d cement coated nails, 1-7/8" long, 0.0915" shank, 15/64" heads, 7" o.c.
Vertical joints staggered 24" on opposite side. **(LOAD-BEARING)**
Sound Design:
Sound tested as constructed for fire.



Thickness: 5-3/8" (Fire and Sound)
Approx. Weight: 7 psf (Fire and Sound)
Fire Test: Based on UL R14196, 05NK05371, 2-15-05,
UL Design U309
Sound Test: NRCC TL-93-103,
IRC-IR-761, 3-98

GA DESIGN NO. WP 3725 - 2021

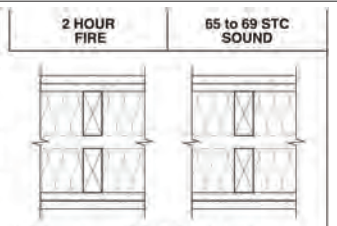
FIRE BARRIER - 2 HR 2X UNIT DEMISING WALL WI17

GA FILE NO. WP 3725	GENERIC	2 HOUR FIRE	65 to 69 STC SOUND

GYPSUM WALLBOARD, WOOD STUDS, INSULATION

Fire Design:
Base layer 5/8" type X gypsum wallboard or gypsum veneer base applied at right angles to each side of double row of 2 × 4 wood studs 16" o.c. on separate plates 1" apart with 2" Type W screws 24" o.c. **Face** layer 5/8" type X gypsum wallboard or gypsum veneer base applied at right angles to each side with 2-1/2" Type W screws, 8" o.c. Two layers 3.5" unfaced glass fiber insulation friction fit between stud, one per side.
Joints staggered 16" each layer and side. Horizontal bracing required at mid-height. **(LOAD-BEARING)**

Sound Design:
A: Sound tested without bracing
B: Sound tested with bracing



Thickness: 10-3/4" (Fire and Sound)
Approx. Weight: 11.5 psf (System A Fire and Sound)
12 psf (System B Fire and Sound)
Fire Test: UL R4024, 10-31-68
Sound Test: A: NOAL 17-0842, 8-28-17
B: NOAL 17-0843, 8-29-17

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5170 MARSHALL ST - ARVADA, CO 80002

ISSUE FOR CONSTRUCTION
08.07.2024

No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	
Job Number	222001
Drawn By	CG / CB/ TT/ NV
Checked By	JG
Title	FIRE RATED ASSEMBLIES - WALL
Sheet Number	A0-6.7

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UL DESIGN NO. L528

UNIT FLOOR/CEILING ASSEMBLY
BALCONY OVER CONDITIONED

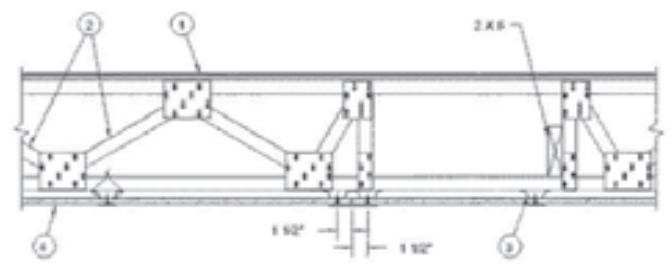
FC01 FC08

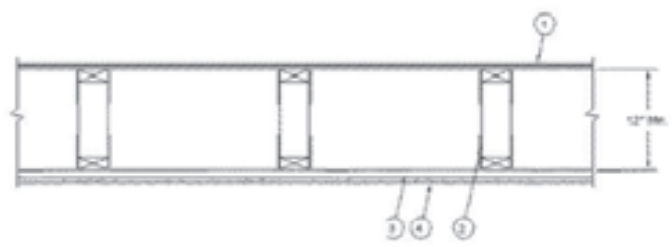
Design No. L528

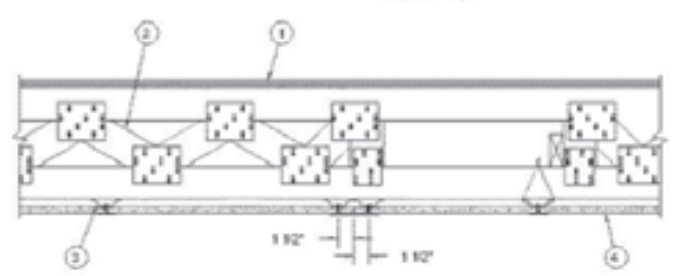
September 15, 2021

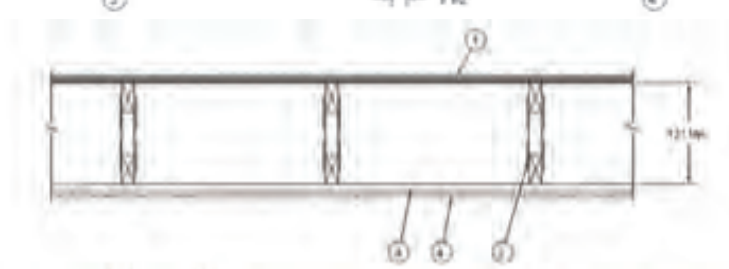
Unrestrained Assembly Rating - 1 Hr.
Finish Rating - 22 Min.
This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

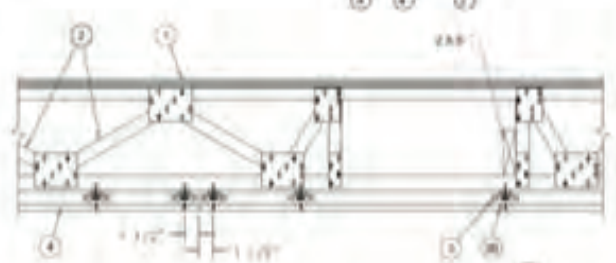
*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**













1. **Flooring System** — The flooring system shall consist of one of the following:

System No. 1

Subflooring — Min 23/32 in. thick T & G wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with end joints staggered 4 ft. Panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

System No. 2

Subflooring — Min 23/32 in. thick T & G wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with end joints staggered 4 ft. Panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Vapor Barrier — (Optional) — Commercial asphalt saturated felt, 0.030 in. thick.

Vapor Barrier — (Optional) — Nom 0.010 in. thick commercial rosin-sized building paper.

Finish Flooring — Min 3/4 in. thickness of lightweight insulating concrete with **Perlite Aggregate*** or **Vermiculite Aggregate***, or gypsum concrete.

See **Perlite Aggregate** (CFFX) and **Vermiculite Aggregate** (CJZZ) categories for names of manufacturers.

System No. 3

Subflooring — Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with joints staggered.

Vapor Barrier — (Optional) — Commercial asphalt saturated felt, 0.030 in. thick.

Floor Mat Materials* — (Optional)— Floor mat material nom 5/64 in. (2 mm) thick adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1 in. of floor-topping mixture.

HACKER INDUSTRIES INC — Type Hacker Sound-Mat.

Alternate Floor Mat Materials — (Optional) — Floor mat material nom 1/4 in. (6 mm) thick adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1-1/4 in. (32 mm) of floor-topping mixture.

HACKER INDUSTRIES INC — Type Hacker Sound-Mat II.

Alternate Floor Mat Materials — (Optional) — Floor mat material nom 1/8 in. (3 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 3/4 in. (19 mm)

HACKER INDUSTRIES INC — FIRM-FILL SCM 125

Alternate Floor Mat Materials — (Optional) — Floor mat material nom 1/4 in. (6 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1 in. (25 mm)

HACKER INDUSTRIES INC — Type FIRM-FILL SCM 250, Quiet Qurl 55/025

Alternate Floor Mat Materials — (Optional) — Floor mat material nom 3/8 in. (10 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/4 in. (32 mm)

HACKER INDUSTRIES INC — FIRM-FILL SCM 400, Quiet Qurl 60/040

Alternate Floor Mat Materials — (Optional) — Floor mat material nom 3/4 in. (19 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/2 in. (38 mm)

HACKER INDUSTRIES INC — Type FIRM-FILL SCM 750, Quiet Qurl 65/075

Metal Lath — (Optional) — For use with 3/8 in. (10 mm) floor mat materials, 3/8 in. expanded steel diamond mesh, 3.4 lbs/sq yd placed over the floor mat material. Hacker Floor Primer to be applied prior to the placement of the metal lath. When metal lath is used, floor topping thickness a nom 1-1/4 in. over the floor mat.

Finish Flooring — Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1100 psi. Mixture shall consist of 6.8 gal of water to 80 lbs of floor topping mixture to 1.9 cu ft of sand.

HACKER INDUSTRIES INC — Firm-Fill Gypsum Concrete, Firm-Fill 2010, Firm-Fill 3310, Firm-Fill 4010, Firm-Fill High Strength, Gyp-Span Radiant

System No. 4

Subflooring — Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with joints staggered.

Vapor Barrier — (Optional) — Commercial asphalt saturated felt, 0.010 in. thick.

Finish Flooring — Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1800 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

UNITED STATES GYPSUM CO — Types LRK, HSLRK, CSD

LATICRETE SUPERCAP L L C — Types LRK, HSLRK

USG MEXICO S A DE C V — Types LRK, HSLRK, CSD

Floor Mat Materials* — (Optional) — Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

UNITED STATES GYPSUM CO — Types SAM, LEVELROCK® Brand Sound Reduction Board, LEVELROCK® Brand Floor Underlayment SRM-25

Alternate Floor Mat Materials* — (Optional) — Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding minimum thickness of floor topping over floor mat.

GRASSWORX L L C — SC Types

Alternate Floor Mat Material* — (Optional) - Floor mat material nominal 3/8 in. thick loose laid over the subfloor. Floor topping shall be a min 3/4 in. thick.

System No. 5

Subflooring — Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with joints staggered.

Vapor Barrier — (Optional) — Commercial asphalt saturated felt, 0.030 in. thick.

Finish Flooring — Floor Topping Mixture* — Min 1-1/2 in. thickness of floor topping mixture having a min compressive strength of 1000 psi and a cast density of 100 plus or minus 5 pcf. Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mixture shall consist of 1.4 cu feet of preformed foam concentrate to 94 lbs Type I Portland cement, 300 lbs of sand with 5-1/2 gal of water.

ELASTIZELL CORP OF AMERICA — Type FF

System No. 6

Subflooring — Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with joints staggered.

Vapor Barrier — (Optional) — Commercial asphalt saturated felt, 0.030 in. thick.

Finish Flooring — Floor Topping Mixture* — Min 1-1/2 in. thickness of floor topping mixture having a min compressive strength of 1000 psi and a cast density of 100 plus or minus 5 pcf. Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mixture shall consist of 1.2 cu feet of preformed foam concentrate to 94 lbs Type I Portland cement, 300 lbs of sand with 5-1/2 gal of water.

AERIX INDUSTRIES — Floor Topping Mixture

System No. 7

Deleted.

System No. 8

Subflooring — Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with joints staggered.

Vapor Barrier — (Optional) — Commercial asphalt saturated felt, 0.030 in. thick.

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1500 psi. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

MAXXON CORP — Types Maxxon Standard and Maxxon High Strength

Floor Mat Materials* — (Optional) - Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

MAXXON CORP — Type Encapsulated Sound Mat.

Floor Mat Reinforcement — (Optional) - Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat reinforcement.

Metal Lath — (Optional) - 3/8 in. expanded galvanized steel diamond mesh, 3.4 lbs/sq yd loose laid over the floor mat material.

Fiber Glass Reinforcement - (Optional, Not Shown) - 0.015 in. thick PVC coated non-woven fiberglass mesh, 0.368 lbs/sq yd loose laid over the floor mat material.

System No. 9

Subflooring — Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with joints staggered.

Vapor Barrier — (Optional) — Commercial asphalt saturated felt, 0.030 in. thick.

Finish Flooring — Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1000 psi. Mixture shall consist of 5 to 8 gal of water to 80 lbs of floor topping mixture to 2.1 cu ft of sand.

ULTRA QUIET FLOORS — UQF-A, UQF-Super Blend, UQF-Plus 200

System No. 10

Subflooring — Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with joints staggered.

Vapor Barrier — (Optional) Commercial asphalt saturated felt, 0.030 in. thick.

Finish Flooring — Floor Topping Mixture* — Min 3/4 in. thickness of floor topping having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

FORMULATED MATERIALS LLC — Types FR-25, FR-30, and SiteMix

Alternate Floor Mat Material* — (Optional) Floor mat material nominal 2 - 9.5 mm thick loose laid over the subfloor. Floor topping shall be a min of 3/4 in.

FORMULATED MATERIALS LLC — Types M1, M2, M3, Elite, Duo, R1, and R2

System No. 11

Subflooring — Min 1 by 6 in. T & G lumber fastened diagonally to trusses, or min 15/32 in. thick plywood or min 7/16 in. thick oriented strand board (OSB) wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panel to be perpendicular to trusses with joints staggered.

Finish Floor - Mineral and Fiber Board* — Min 1/2 in. thick, supplied in sizes ranging from 3 ft by 4 ft to 8 ft by 12 ft. All joints to be staggered a min of 12 in. with adjacent sub-floor joints.

HOMASOTE CO — Type 440-32 Mineral and Fiber Board

System No. 12

Subflooring — Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with joints staggered.

Vapor Barrier — (Optional) — Commercial asphalt saturated felt, 0.030 in. thick.

Finish Flooring — Floor Topping Mixture* — Min 3/4 in. thickness of floor topping having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

ARCOSA SPECIALTY MATERIALS — AccuCrete® Types NexGen, Green, Prime and PrePour, AccuRadiant®, AccuLevel® Types G40, G50 and SD30

Alternate Floor Mat Material* — (Optional) — Floor mat material nominal 2 - 9.5 mm thick loose laid over the subfloor. Floor topping shall be a min of 3/4 in.

ARCOSA SPECIALTY MATERIALS — AccuQuiet® Types D13, D-18, D25, DX38, EM.125, EM.125S, EM.250, EM.250S, EM.375, EM.375S, EM.750, and EM.750S.

System No. 13

Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier — (Optional) — Commercial asphalt saturated felt, 0.030 in. thick.

Vapor Barrier — (Optional) — Nom 0.010 in. thick commercial rosin-sized building paper.

Finish Flooring* — Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. See **Floor- and Roof-Topping Mixtures** (CCOX) category for names of Classified Companies.

Floor Mat Materials* — (Optional) — Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 55/025 and Quiet Qurl 55/025 N

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 60/040 and Quiet Qurl 60/040 N

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 65/075, Quiet Qurl 65/075 N

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 52/013 and Quiet Qurl 52/013 N

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 1/4 in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC — Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT

System No. 14

Subflooring — Min 23/32 in. thick T&G wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with end joints staggered 4 ft. Panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Gypsum Board* — One layer of nom 5/8 in. thick, 4 ft wide gypsum board, installed with long dimension perpendicular to joists. Gypsum board secured with 1 in. long No. 6 Type W bugle head steel screws spaced 12 in. OC and located a min of 1-1/2 in. from side and end joints. The joints of the gypsum board are to be staggered a minimum of 12 inches from the joints of the subfloor.

GEORGIA-PACIFIC GYPSUM L L C — Type DS

Floor Mat Materials* — (As an alternate to the single layer gypsum board) — Floor mat material loose laid over the subfloor.

MAXXON CORP — Type Encapsulated Sound Mat.

Gypsum Board* — (For use when floor mat is used) Two layers of nom 5/8 in. thick, 4 ft wide gypsum board, installed with long dimension perpendicular to joists on top of the floor mat material. Gypsum board secured to each other with 1 in. long No. 6 Type G bugle head steel screws spaced 12 in. OC and located a min of 1-1/2 in. from side and end joints. The joints of the gypsum board are to be staggered a minimum of 12 inches in between layers and from the joints of the subfloor.

GEORGIA-PACIFIC GYPSUM L L C — Type DS

System No. 15

Subflooring — Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with joints staggered.

Vapor Barrier — (Optional) — Commercial asphalt saturated felt, 0.030 in. thick.

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

DEPENDABLE LLC — GSL M3.4, GSL K2.6, GSL-CSD, GSL RH and SKIMFLOW

Floor Mat Materials* — (Optional) — Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 55/025 and Quiet Qurl 55/025 N

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 60/040 and Quiet Qurl 60/040 N

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 65/075, Quiet Qurl 65/075 N

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 52/013 and Quiet Qurl 52/013 N

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 1/4 in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC — Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT

System No. 16

Subflooring — Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier — (Optional) — Commercial asphalt saturated felt, 0.030 in. thick.

Vapor Barrier — (Optional) — Nom 0.010 in. thick commercial rosin-sized building paper.

Finish Flooring* — Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. See **Floor- and Roof-Topping Mixtures** (CCOX) category for names of Classified Companies.

Floor Mat Materials* — (Optional) — Nom 3/32 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

PLITEQ INC — Type GenieMat RST02

Floor Mat Materials* — (Optional) — Nom 3/16 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

PLITEQ INC — Type GenieMat FF05NP

Floor Mat Materials* — (Optional) — Nom 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

PLITEQ INC — Type GenieMat FF06

Floor Mat Materials* — (Optional) — Nom 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

PLITEQ INC — Type GenieMat FF10

Floor Mat Materials* — (Optional) — Nom 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.

PLITEQ INC — Type GenieMat FF17

Floor Mat Materials* — (Optional) — Nom 1 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.

PLITEQ INC — Type GenieMat FF25

System No. 17

Subflooring — Nom. 1-1/2 in. thick T & G laminated composite plywood sub-floor panels to be perpendicular to the trusses with end joints staggered 4 ft. End joints centered over top chord of trusses. Subfloor panels secured to trusses with construction adhesive and #8 by 3 in. wood screws spaced 12 in. OC in the field and 6 in. OC at the end joints.

RSP INDUSTRIES INC — SAP board

System No. 18

Subflooring — Min 15/32 in. thick wood structural panels, min grade "Underlayment" or "Single-Floor". Panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss.

Wall and Partition Facings and Accessories* - Sound Barrier (Optional) — Acoustic Sleeper pads stapled to the top of the subfloor, the bottom of the finish floor, or to 5/16 in. thick by 1-1/2 in. wide wood strips and centered over wood trusses. Acoustic Sleeper pads are to be spaced appropriately so that the finish floor panels are fastened through Acoustic Sleeper pads to the trusses.

STC ARCHITECTURAL PRODUCTS L L C DBA STC SOUND CONTROL — Acoustic Sleeper

Finish Floor — Min 23/32 in. thick T & G wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with end joints staggered 4 ft. Butt joints of panels have the option of being sealed with any UL Classified caulk or sealant found under - Fill, Void or Cavity Materials* (XHHW).

System No. 19

Structural Cement-Fiber Units* — For use with **UNITED STATES GYPSUM CO** Types C, IP-X2, IPC-AR and ULIX or AMERICAN GYPSUM CO Type AG-C gypsum boards only. Nom 3/4 in. thick, with long edges tongue and grooved. Long dimension of panels to be perpendicular to wood trusses with end joints staggered a min of 2 ft and centered over the trusses. Panels secured to wood trusses with 1-5/8 in. long, No. 8, self- countersinking wood screw spaced a max of 12 in. OC in the field with a screw located 1 in. and 2 in. from each edge, and 8 in. OC on the perimeter with a screw located 2 in. from each edge, located 1/2 in. from the end edges of the panel.

UNITED STATES GYPSUM CO — Types STRUCTO-CRETE, USGSP

System No. 20

Subflooring — Min 23/32 in. thick T & G wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with end joints staggered 4 ft. Panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Finish Flooring - Floor Topping Mixture* — Min 1 in. thickness of floor topping mixture having a min compressive strength of 4500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

SIKA DEUTSCHLAND GMBH — Type SCHONOX AP Rapid Plus

System No. 21

Subflooring — Min 23/32 in. thick T & G wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with end joints staggered 4 ft. Panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Vapor Barrier — (Optional) - Commercial asphalt saturated felt, 0.030 in. thick.

Vapor Barrier — (Optional) - Nom 0.010 in. thick commercial rosin-sized building paper.

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. See Floor- and Roof-Topping Mixtures (CCOX) category for names of Classified Companies.

Floor Mat Materials* — (Optional, Not Shown) - Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

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MARSHALL POINTE

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ISSUE FOR CONSTRUCTION
08.07.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT/ NV
Checked By: JG
Title: FIRE RATED ASSEMBLIES - FLOOR/CEILING
Sheet Number: A0-6.8

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UL DESIGN NO. L528 (Cont.)

UNIT FLOOR/CEILING ASSEMBLY (CONT)

LOW & BONAR INC — EnkaSonic® by Colbond a member of the Low & Bonar group Types 125, 250, 250 Plus, 400, 400 Plus, 750, and 750 Plus.

Floor Mat Reinforcement — (Optional) - Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat reinforcement.

Metal Lath — (Optional) — Expanded steel diamond mesh, 2.5 lb / sq yd loose laid over floor mat material.

Fiberglass Mesh Reinforcement — (Optional) — Coated non-woven glass fiber mesh grid loose laid over floor mat material.

System No. 22

Subflooring — Min 23/32 in. thick T & G wood structural panels described and installed as shown in System No. 1.

Finish Floor - Building Units* — Min 1/2 in. thick magnesium oxide panels installed parallel, perpendicular, or diagonally to trusses with panel edges offset a min of 4 in. between subfloor and magnesium oxide panels. Panels secured to subfloor with construction adhesive and corrosion resistant fasteners, spaced 12 in. OC around the perimeter and in the field of the panel. Fasteners must be placed no closer than 1/2 in. from all panel edges and no closer than 2 in. from panel corners
HUBER ENGINEERED WOODS L L C — Type 1/2 in. Square Edge Exacor™ Board

System No. 23

Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with joints staggered. Fastened with 8d ringed shank nails spaced 12 in. OC along each truss.

Finish Floor - Building Units* — Min 1/2 in. thick, supplied in 4 by 8 ft panels, fastened to trusses through subfloor with 8d ringed shank nails spaced a max of 12 in. OC. All joints to be staggered a min of 12 in. with adjacent sub-floor joints.
ECTEK INTERNATIONAL INC — Type MegaBoard, 1/2 in. thick

System No. 24

Subflooring — Building Units* — Nom 3/4 in. thick, tongue and grooved boards. Long dimension of boards to be perpendicular to wood trusses with end joints staggered a min of 4 ft. and centered over the trusses. Boards secured to trusses with min 1-1/4 in. long screws or 2 in. x 0.113 in. Ring Shank nails spaced a max of 12 in. OC in the field with screws/nails located 1 in. from long edge, and max 8 in. OC along the end joints with screws/nails located 1/2 in. from end joint.
ECTEK INTERNATIONAL INC — Type MegaBoard, 3/4 in. thick

Finish Floor (optional) — Building Units* — Min 1/2 in. thick, supplied in 4 by 8 ft panels, fastened to trusses through subfloor with 2-3/8 in. long. 8d ringed shank nails spaced a max of 12 in. OC. All joints to be staggered a min of 12 in. with adjacent sub-floor joints.
ECTEK INTERNATIONAL INC — Type MegaBoard, 1/2 in. thick

2. **Trusses** — Parallel chord trusses, spaced a max 24 in. OC, fabricated from nom 2 by 4 in. lumber with lumber oriented vertically or horizontally. Min truss depth is 12 in. when item 9 is not employed. Min truss depth is 18 in. when item 9 is employed. Truss members secured together with min No. 20 MSG galv steel truss plates. Plates have 5/16 in. long teeth projecting perpendicular to the plane of the plate. The teeth are in pairs facing each other (made by the same punch), forming a split-tooth type plate. Each tooth has a chisel point on its outside edge. These points are diagonally opposite each other for each pair. The top half of each tooth has a twist for stiffness. The pairs are repeated on approx 7/8 in. centers with four rows of teeth per in. of plate width.

3. **Furring Channels** — Hat channels, 7/8 in. deep by 2-9/16 in. or 2-11/16 in. or 2-23/32 in. wide at the base and 1-7/16 in. wide at the face, formed from No. 25 ga galv steel, spaced 24 in. OC perpendicular to trusses. Channels secured to trusses with double strand of No. 18 SWG galv steel wire spaced 48 in. OC. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. Two furring channels used at end joints of gypsum board (item 4), each extending a min of 6 in. beyond both side edges of the board.

3A. **Resilient Channels** — (Not Shown) — As an alternate to item 3, resilient channel formed from No. 26 MSG galv steel, spaced 16 in. OC perpendicular to trusses. Channels secured to each truss with 1-1/4 in. long No. 6 Type S bugle head steel screw. Channels overlapped at splices 4 in. Two resilient channels used at end joints of gypsum board (item 4), each extending a min of 6 in. beyond both side edges of the board.

3B. **Steel Framing Members*** — (Optional) — Used as an alternate method to attach furring channels to trusses (item 2). Clips spaced 48 in. OC. RSIC-1 and RSIC-1 (2.75) clips secured to the bottom chord of alternating trusses with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. RSIC-V and RSIC-V (2.75) clips secured to the bottom chord of alternating trusses with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips. RSIC-1 and RSIC-V clips for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) and RSIC-V (2.75) clips for use with 2-23/32 in. wide furring channels. Adjoining channels are overlapped as described in item 3. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two min 7/16 in. long No. 6 self-tapping framing screws, at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 4. When Fiber, Sprayed (item 6) is used, furring channel spacing reduced to 16 in. OC and two layers of nom 5/8 in. thick, 4 ft wide gypsum board shall be installed as described in Item 4.
PAC INTERNATIONAL L L C — Types RSIC-1, RSIC-V, RSIC-1 (2.75), RSIC-V (2.75).

3C. **Steel Framing Members*** — (Optional, Not Shown) — Used as an alternate method to attach furring channels to trusses. Clips spaced 48 in. OC., and secured to the bottom chord to alternating trusses with two No. 8 x 2-1/2 in. coarse drywall screws, one through the hole at each end of the clip. Furring channels are friction fitted into clips. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 4. Two layers of gypsum board required as described in Item 4. Not evaluated for use with Item 6. When Item 3C is used and Batts and Blankets* are added per Section III Item 18 Blanket Insulation in the General Information of this Directory (BKUV), clips spaced 48 in. OC, furring channels spaced 16 in. OC max, 3-1/2 in. max. Batts and Blankets* secured to plywood subfloor with staples spaced 12 in. OC or to the trusses with 0.090 in. diam galv steel wires spaced 12 in. OC, and two layers of gypsum board required as described in Item 4A. When the Batts and Blankets* are draped over the furring channel/gypsum panel ceiling membrane, the clip spacing shall be reduced to 24 in. OC and secured to consecutive trusses, the furring channel spacing shall be reduced to 12 in. OC, and two layers of gypsum board required as described in Item 4A.
KINETICS NOISE CONTROL INC — Type Isomax.

3D. **Steel Framing Members*** — (Optional, Not Shown) — Used as an alternate method to attach furring channels to trusses. Clips spaced 48 in. OC. and secured to the bottom chord to alternating trusses with one No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 4. Not evaluated for use with Item 6.
PLITEQ INC — Type Genie Clip

3E. **Steel Framing Members*** — (Optional, Not Shown) — For use with Item 7B - Used as an alternate method to attach furring channels to trusses. Clips spaced at 48" OC and secured to the bottom of the trusses with one 2 in. Coarse Drywall Screw with 1 in. diam. washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire. Additional clips are required to hold the Gypsum Butt joints as described in Item 4. Not evaluated for use with Item 6.
STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237 or A237R

3F. **Resilient Channels** — For use with Item 4B and 7A - Resilient channels, formed from No. 25 MSG galv steel and shaped as shown, spaced 12 in. OC perpendicular to joist. Channels overlapped 4 in. at splices and secured to each joist with 1-1/4 in. Type S screws. Min end clearance of channels to wall to be 1/2 in. Additional resilient channels positioned so as to coincide with end joints of gypsum board.

3G. **Resilient Channels** — For Use With Item 4C and 7C, Formed from min 25 MSG galv steel installed perpendicular to trusses and spaced 16 in. OC. Channels secured to each truss with 1-5/8 in. long Type S bugle head steel screws. Channels overlapped 4 in. at splices. Two channels, spaced 6 in. OC, oriented opposite each gypsum panel end joint. Additional channels shall extend min 6 in. beyond each side edge of panel. Insulation, Item 7C is applied over the resilient channel/gypsum panel ceiling membrane.

3H. **Steel Framing Members*** — (Optional, Not Shown) — Used as an alternate method to attach furring channels to trusses. Clips spaced at 48" OC and secured to the bottom of the trusses with one 2-1/2 in. Coarse Drywall Screw with 1 in. diam. washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire. Additional clips are required to hold the Gypsum Butt joints as described in Item 4. Not evaluated for use with Item 6.
REGUPOL AMERICA — Type SonusClip

3I. **Steel Framing Members** — (Not Shown) — As an alternate to Item 3, main runners, cross tees, cross channels and wall angle as listed below.

a. **Main Runners** — Nom 10 or 12 ft long, 15/16 in. or 1-1/2 in. wide face, spaced 4 ft. OC. Main runners suspended by min 12 SWG galv. steel hanger wires spaced 48 in. OC. Hanger wires to be located adjacent to main runner/cross tee intersections. Hanger wires wrapped and twist-tied on 16d nails driven in to side of trusses at least 5 in. above the bottom face.

b. **Cross Tees or Channels** — Nom 4 ft long cross tees, with 15/16 in. or 1-1/2 in. wide face, or nom 4 ft long cross channels, with 1-1/2 in. wide face, spaced 16 in. OC, installed perpendicular to the main runners. Additional cross tees or channels used 8 in. from each side of butted gypsum board end joints. The cross tees or channels may be riveted or screw-attached to the wall angle or channel to facilitate the ceiling installation.

c. **Wall Angle or Channel** — Painted or galv. steel angle with 1 in. legs or channel with 1 in. legs, 1-9/16 in. deep attached to walls at perimeter of ceiling with fasteners 16 in. OC. To support steel framing member ends and for screw-attachment of the gypsum panel.
USG INTERIORS LLC — Type DGL or RX

3J. **Steel Framing Members*** — (Optional, Not Shown) — Used to attach resilient channels (Item 3A) to trusses (Item 2). Clips spaced 48 in. OC on adjacent trusses, and secured to trusses with one No. 8 x 2-1/2 in. coarse drywall screw through center grommet hole. Channels secured to clips with one #10 x 1/2 in. pan-head self-drilling screw. Ends of adjoining channels overlapped 6 in. and secured together with two #8 15 x 1/2 in. Philips Modified Truss screws spaced 2-1/2 in. from the center of the overlap. Gypsum board butt joints require additional resilient channels spaced 1-1/2 in. from the butt joint on either side. One edge of the extra channels will extend to an adjacent truss where it is secured with a clip.
KEENE BUILDING PRODUCTS CO INC — Type RC+ Assurance Clip

3K. **Resilient Channels** — For use with Items 3L, 4F, and 7G — Formed from min 26 MSG galv steel installed perpendicular to trusses. When Item 7G is draped over channels, channels spaced a maximum 12 in. OC. Channels secured to each truss as described in Item 3L. Channel ends butted and centered under the joists and attached to the joists with one screw at each end. Additional resilient channels positioned so as to coincide with end joints of gypsum board as shown in the above illustration. Additional channels shall extend min 3 in. beyond each side edge of board.

3L. **Steel Framing Members*** — (Optional, Not Shown) — Used as an alternate method to attach resilient channels to joists (Item 2). For use with Items 3K, 4F and 7G. A resilient sound isolation accessory shall be used at each attachment point of the resilient channels and spaced max 24 in. O.C. Channel ends butted and centered under the joists and attached to the joists with one accessory at each end. Additional accessories used to hold resilient channels that support the gypsum board end joints, as described in Item 3K. The accessory envelops the mounting edge of the resilient channel. The accessory and resilient channel are fastened to the joists with the screws supplied with the accessory per the accessory manufacturer's installation instructions.
PAC INTERNATIONAL L L C — Types RC-1 Boost

3M. **Steel Framing Members*** — (Optional, Not Shown) — As an alternate to Item 3.
a. **Furring Channels** — Formed of No. 25 MSG galv steel, nominal 2-1/2 in. wide by 7/8 in. deep, spaced 24 in. OC, perpendicular to trusses. Channels secured to Cold Rolled Channels at every intersection with a 3/4 in. TEK screw through each furring channel leg. Ends of adjoining channels overlapped 12 in. and fastened together with two double strand No. 18 SWG galv steel wire ties, one at each end of overlap, or with two 3/4 in. TEK screws in each leg of the overlap section. Two furring channels used at end joints of gypsum board (Item 4), each extending a min of 6 in. beyond both side edges of the board.

b. **Cold Rolled Channels** — 1-1/2 in. by 1/2 in., formed from No. 16 ga. galv steel, positioned vertically and parallel to trusses, friction-fitted into the channel caddy on the Steel Framing Members (Item 3MA) and secured with two 3/4 in. TEK screws. Adjoining lengths of cold rolled channels lapped min. 12 in. and secured along bottom legs with four 3/4 in. TEK screws and wire-tied together with two double strand 18 SWG galv steel wire ties, one at each end of overlap.

c. **Blocking** — Where truss design does not permit direct, full contact of the hanger bracket, a piece of nominal 2 by 4 in. lumber (blocking), min. 12 in. long to permit full contact of the hanger bracket, to be secured vertically to the side of the trusses at the top and bottom of the blocking at each Steel Framing Member (Item 3MA) location with 16d nails or minimum 2-1/2 in. screws.

d. **Steel Framing Members*** — Spaced 48 in. OC. max along truss, and secured to the truss on alternating trusses with two, #10 x 1-1/2 in. screws through mounting holes on the hanger bracket.
PAC INTERNATIONAL L L C — Type RSIC-5i CRC EZ Clip

3N. **Steel Framing Members*** — (Optional, Not Shown) — As an alternate to Item 3.
a. **Furring Channels** — Formed of No. 25 MSG galv steel, nominal 2-1/2 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to trusses and friction fit into Steel Framing Members (Item 3No). Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap or with two TEK screws along each leg of the 6 in. overlap. Two furring channels used at end joints of gypsum board (Item 4). Butt joint channels held in place by strong back channels placed upside down, on top of, and running perpendicular to primary furring channels, extending 6 in. longer than length of gypsum side joint. Strong back channels spaced maximum 48 in. OC. Strong back channels secured to every intersection of primary furring channels with four 7/16 in. pan head screws, two along each of the legs at intersections. Butt joint channels run perpendicular to strong back channels and shall be minimum 6 in. longer than length of joint, secured to strong back channels with 7/16 in. pan head screws, two along each of the legs at intersection with strong back channels.

b. **Blocking** — Where truss design does not permit direct, full contact of the hanger bracket, a piece of nominal 2 by 4 in. lumber (blocking), min. 12 in. long to permit full contact of the hanger bracket, to be secured vertically to the side of the trusses at the top and bottom of the blocking at each Steel Framing Member (Item 3No) location with 16d nails or minimum 2-1/2 in. screws.

c. **Steel Framing Members*** — Used to attach furring channels (Item 3No) to trusses. Clips spaced 48 in. OC and secured along truss webs at each furring channel intersection with min. 3/4 in. long self-drilling #10 x 1-1/2 in. screws through each of the provided hole locations. Furring channels are friction fitted into clips.
PAC INTERNATIONAL L L C — Type RSIC-5T-1 Ultra

3O. **Resilient Channels** — For Use With Item 4G and 7C. Formed from min 25 MSG galv steel installed perpendicular to trusses and spaced 16 in. OC. Channels secured to each truss with 1-1/4 in. long Type S bugle head steel screws. Channels overlapped 4 in. at splices. Two channels, spaced 6 in. OC, oriented opposite each gypsum panel end joint. Additional channels shall extend min 6 in. beyond each side edge of panel. Insulation, Item 7C is applied over the resilient channel/gypsum panel ceiling membrane.

4. **Gypsum Board*** — One layer of nom 5/8 in. thick, 4 ft wide gypsum board, installed with long dimension perpendicular to furring or resilient channels. Gypsum board secured with 1 in. long No. 6 Type S bugle head steel screws spaced 12 in. OC and located a min of 1-1/2 in. from side and end joints. End joints secured to both resilient channels as shown in the end joint detail. When **Steel Framing Members** (Item 3B) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimension perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long No. 6 Type S bugle head screws spaced 12 in. OC in the field of the board. Gypsum board butt joints shall be staggered 2 ft within the assembly, and shall occur between the main furring channels. At the gypsum board butt joints, each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 6 in. on each end. The two furring channels at each butt joint shall be spaced approximately 3-1/2 in. OC, and be attached to the bottom chord of the truss with one RSIC-1 clip at each end of the channel. Screw spacing along the gypsum board butt joint shall be 8 in. OC. When both **Steel Framing Members** (Item 3B) and **Fiber, Sprayed** (Items 6 or 6A) are used, furring channel spacing reduced to 16 in. OC and two layers of nom 5/8 in. thick, 4 ft wide gypsum board are installed with long dimension perpendicular to furring channels. Base layer secured to furring channels with nom 1 in. long No. 6 Type S bugle head screws spaced 12 in. OC in the field of the board. Gypsum board butt joints shall be staggered 2 ft within the assembly, and shall occur between the main furring channels. At the gypsum board butt joints, each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 6 in. on each end. The two furring channels at each butt joint shall be spaced approximately 3-1/2 in. OC, and be attached to the bottom chord of the truss with one RSIC-1 clip at each end of the channel. Screw spacing along the gypsum board butt joint shall be 8 in. OC. Outer layer secured to furring channels using 1-5/8 in. long No. 6 Type S screws spaced 8 in. OC and 1-1/2 in. from the end joint. Butted end joints to be offset a min. of 8 in. from base layer end joints. Butted side joints of outer layer to be offset min. 18 in. from butted side joints of base layer. When **Steel Framing Members** (Item 3C) are used, two layers of nom 5/8 in. thick, 4 ft wide are installed with long dimensions perpendicular to furring channels. Base layer attached to the furring channels using 1 in. long No. 6 Type S bugle-head steel screws spaced 12 in. OC in the field of the board. Butted end joints shall be staggered min 2 ft. within the assembly, and occur midway between the continuous furring channels. Each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 6 in. on each end. The two furring channels at each butt joint shall be spaced approximately 3-1/2 in. OC, and be attached to the bottom chord of the truss with one hanger tab at each end of the channel. Screw spacing along the gypsum board butt joint shall be 8 in. OC. When both **Steel Framing Members** (Item 3D) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long No. 6 Type S bugle-head steel screws spaced 12 in. OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 16 in. within the assembly. At the gypsum board butt joints, each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 6 in. on each end. These additional furring channels shall be attached to underside of the truss with Genie clips as described in Item 3D. Screw spacing along the gypsum board butt joint shall be 6 in. OC. When **Steel Framing Members** (Item 3E) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 12 in. OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 48 in. and centered over main furring channels. At the gypsum board butt joints, each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 3 in. on each end. The two support furring channels shall be spaced approximately 3 in. in from joint. Screw spacing along the gypsum board butt joint and along both additional channels shall be 8 in. OC. Additional screws shall be placed in the adjacent section of gypsum board into the aforementioned 3 in. extension of the extra butt joint channels as well as into the main channel that runs between . Butt joint furring channels shall be attached with one RESILMOUNT Sound Isolation Clip at each end of the channel. When **Fiber, Sprayed** (Items 6 or 6A) is used, two layers of nom 5/8 in. thick, 4 ft wide gypsum board are installed with long dimensions perpendicular to furring channels. Base layer gypsum board secured with 1 in. long No. 6 Type S bugle head steel screws spaced 12 in. OC and located a min of 1-1/2 in. from side and end joints. End joints secured to both resilient channels as shown in the end joint detail. Outer layer gypsum board secured with 1-5/8 in. long No. 6 Type S bugle head steel screws spaced 12 in. OC and located a min of 1-1/2 in. from side and end joints. Outer layer shall be finished as described in Item 5. When **Foamed Plastic** insulation (Item 7E) is applied to the underside of the subflooring, screw spacing shall be reduced to 8 in. OC with minimum 1-1/4 in. long Type S screws to install gypsum to the resilient channels (Item 3A). Resilient channels (Item 3A) to be spaced maximum 12 in. OC. Butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. End joints secured to both resilient channels as shown in end joint detail.
When **Steel Framing Members** (Item 3E) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 48 in. and centered over main furring channels. At the gypsum board butt joints, an additional single length of furring channel shall be installed and be spaced approximately 3 in. from the butt joint (6 in. from the continuous furring channels) to support the floating end of the gypsum board. Each of these shorter sections of furring channel shall extend one truss beyond the width of the gypsum panel and be attached to the adjacent trusses with one SonusClip at every truss involved with the butt joint.
When **Steel Framing Members*** (Item 3I) are used, one layer of 5/8 in. thick, 48 in. wide gypsum board, installed with long dimension perpendicular to cross channels with side joints centered along main runners. Gypsum board fastened to cross channels with 1 in. long No. 6 Type S bugle head steel screws located 1/2 in. from end joints and 1-3/4 in. from side joints and spaced 8 in. OC along the end joints and in the field. Panels fastened to cross tees with 1 in. long, Type S bugle head screws spaced in the field and 8 in. OC along end joints. Panels fastened to main runners with 1 in. long, Type S bugle head screws spaced midway between cross tees. Screws along sides and ends of panels spaced 3/8 to 1/2 in. from panel edge. Gypsum board sheets screw attached to leg of wall angle with 1 in. long No. 6 Type S bugle head steel screws spaced 12 in. OC. End joints of panels shall be staggered with spacing between joints on adjacent panels not less than 4 ft OC.
When **Steel Framing Members** (Item 3J) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to resilient channels. Gypsum board secured to resilient channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board and located 3/4 in. from side joints and 1-1/2 in. from end joints. Gypsum board joints are to be staggered by a minimum of 24 in.
When **Steel Framing Members** (Item 3M) are used, nom 5/8 in. thick, 4 ft wide gypsum board, installed as described in Item 4. Adjacent butt joints staggered minimum 48 in. OC.
When **Steel Framing Members** (Item 3N) are used, nom 5/8 in. thick, 4 ft wide gypsum board, installed as described in Item 4. Butt joints staggered minimum 24 in. OC.
AMERICAN GYPSUM CO — Type AG-C

CERTAINTEED GYPSUM INC — Type C

CGC INC — Types C, IP-X2, IPC-AR

CERTAINTEED GYPSUM INC — Type USFC-C/A

GEORGIA-PACIFIC GYPSUM L L C — Types S, DAPC, TG-C

NATIONAL GYPSUM CO — Types eXP-C, FSK-C, FSW-C, FSW-G

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type C

THAI GYPSUM PRODUCTS PCL — Type C

UNITED STATES GYPSUM CO — Types C, IP-X2, IPC-AR

USG BORAL DRYWALL SFZ LLC — Type C

USG MEXICO S A DE C V — Types C, IP-X2, IPC-AR

4A. **Gypsum Board** — For use when Item 3C is used and **Batts and Blankets*** are secured to the plywood subfloor, to the trusses or draped over the furring channel/gypsum panel ceiling membrane as described in Item 3C. For method of gypsum board installation, see Item 4.
CGC INC — Types C, IP-X2, IPC-AR

UNITED STATES GYPSUM CO — Types C, IP-X2, IPC-AR

USG BORAL DRYWALL SFZ LLC — Type C

USG MEXICO S A DE C V — Types C, IP-X2, IPC-AR

4B. **Gypsum Board*** — For use when **Batts and Blankets*** (Item 7A) and Resilient Channels (Item 3F) are used. Nom 5/8 in. thick, 4 ft wide gypsum board installed with long dimension perpendicular to resilient channels. Nom 1 in. long No. Type S bugle head screws are driven through channel spaced 8 in. OC. End joints of gypsum board similarly fastened to additional resilient channels positioned at end joint locations.
AMERICAN GYPSUM CO — Type AG-C

CERTAINTEED GYPSUM INC — Type LGFC-C/A

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type C

4C. **Gypsum Board*** — For use with Items 3G and 7C or 3I and 7F, and 7C. Nom 5/8 in. thick, 48 in. wide gypsum panels installed with long dimension perpendicular to resilient channels. Gypsum panels secured with 1 in. long Type S bugle head steel screws spaced 8 in. OC and located a min of 1/2 in. from side joints and 3 in. from the end joints. Finish Rating with this ceiling system is 20 min.
CGC INC — Type ULIX

UNITED STATES GYPSUM CO — Type ULIX

4D. **Gypsum Board*** — For use when Flooring System (Item 1) consists of both System No. 1 and min 15/32 in. plywood, min grade "Underlayment" or "Sturd-I-Floor" with T & G edges and conforming with PS1-83 specifications, or min 3/4 in. thickness of any Floor Topping Mixture (CCOR) bearing the UL Classification Marking as to Fire Resistance, min Truss depth (Item 2) is 18 in. and **Batts and Blankets** (Item 7D) and Resilient Channels (Item 3A) are used. One layer of nom 5/8 in. thick, 48 in. wide gypsum board installed with long dimension perpendicular to resilient channels. Gypsum board secured with 1 in. long Type S bugle head steel screws. Screws spaced 1 in. from side joints, and 12 in. OC in the rest of the field. Screws spaced 1-1/2 in. from the end joints. End joints secured to both resilient channels as shown in end joint detail. When batt insulation (Item 7D) is draped over the resilient channel/gypsum board ceiling membrane, the resilient channel (Item 3A) spacing shall be reduced to 12 in. OC., and gypsum board screws spaced 1 in. from side joints, and 8 in. OC in the rest of the field. For use only with Ceiling Damper described in Item 9R.
PANEL REY S A — Type PRC2

4F. **Gypsum Board*** — For use with Items 3K, 3L, and 7G— One layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to resilient channels. Gypsum board secured to resilient channels with min nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board and located 3/4 in. from side joints and 1-1/2 in. from end joints. Gypsum board butt joints are to be staggered by a minimum of 24 in.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type C

4G. **Gypsum Board*** — For use with Items 3G and 7C. Nom 5/8 in. thick, 48 in. wide gypsum panels installed with long dimension perpendicular to resilient channels. Gypsum panels secured with 1 in. long Type S bugle head steel screws spaced 8 in. OC and located a min of 1/2 in. from side joints and 3 in. from the end joints.
AMERICAN GYPSUM CO — Type AG-C

5. **Finishing System** — (Not Shown) — Vinyl, dry or premixed joint compound, applied in two coats to joints and screw heads. Nom 2 in. wide paper tape embedded in first layer of compound over all joints. As an alternate, nom 3/32 in. thick veneer plaster may be applied to the entire surface of gypsum board.

6. **Fiber, Sprayed*** — (Dry Dense Packed 100% Borate Formulation) — (Not Shown, Optional) — The fiber is applied without water or adhesive at a nominal dry density of 3.5 lb/ft³, in accordance with the application instructions supplied with the product. When Item 6 (Fiber, Sprayed, Dry Dense Packed) is used, Furring Channels (Item 3F) or Resilient Channels (Item 3A) spacing shall be reduced to 12 in. OC. When Item 6 (Fiber, Sprayed, Dry Dense Packed) is used, two layers of gypsum board required as described in Item 4. Not evaluated for use with Item 3C.
U S GREENFIBER L L C — (N5735, IN5745, IN5750LD, IN5765LD, IN5771LD, and SANCTUARY to be used with dry application only.

6A. **Fiber, Sprayed*** — (Loose Fill 100% Borate Formulation) — (Not Shown, Optional) — The finished rating when Fiber, Sprayed is used has not been determined. The fiber is applied without water or adhesive at a minimum dry density of 0.5 lb/ft³ and at a max thickness of 3-1/2 in, in accordance with the application instructions supplied with the product. When Item 6A (Fiber, Sprayed, Loose Fill) is used, Furring Channels (Item 3F) or Resilient Channels (Item 3A) spacing shall be reduced to 12 in. OC. When Item 6A (Fiber Sprayed, Loose Fill) is used, two layers of gypsum board required as described in Item 4. Not evaluated for use with Item 3C.
U S GREENFIBER L L C — (N5735, IN5745, IN5750LD, IN5765LD, IN5771LD, & SANCTUARY to be used with dry application only.

7. **Batts and Blankets*** — (Not Shown) — For use with Item 3D — Nom 3 in. thick mineral wool insulation held suspended in the concealed space with 0.090 in. diam galv steel wires attached to the wood trusses at 18 in. OC.

7A. **Batts and Blankets*** — For Use With Items 3F and 4B — Glass fiber insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance having a min. density of 0.5 pcf, draped over the resilient channel/gypsum panel ceiling membrane. No limit on overall thickness.

7B. **Batts and Blankets*** — (Not Shown) — For use with Item 3E — Nom 3- 1/2 in. thick, min. 2 pcf fiber glass insulation held suspended in the concealed space with nominal 0.090 in. diam galv steel wires attached to the wood trusses at nominally 16 in. OC.

7C. **Batts and Blankets* or Fiber, Sprayed*** — For Use with Item 4C (Not Shown) — Min. 3-1/2 in thick with no limit on maximum thickness fitted in the concealed space, draped over the resilient channel (Item 3G)/gypsum board (Item 4C or 4G) ceiling membrane.

7D. **Batts and Blankets*** — For Use With Item 4D — Insulation may be secured to plywood subfloor with staples spaced 12 in. OC or to the trusses with 0.090 in. diam galv steel wires spaced 12 in. OC. Insulation may alternately be draped over the resilient channels and gypsum board ceiling membrane, and the resilient channels and gypsum board attachment shall be modified as specified in Item 4D. Any glass fiber insulation bearing the UL Classification Marking for Surface Burning Characteristics and/or Fire Resistance, and having a min density of 0.5 pcf and max thickness of 3-1/2 in. may be used.

7E. **Foamed Plastic*** — (As alternate to Item 6 and 6A, Not Shown) — Spray foam insulation applied directly to the underside of the plywood subflooring. Spray foam insulation installed to a maximum thickness of 10 in. at a nominal 0.5 lb/ft³ or 2.0 lb/ft³ density, depending on the product installed. Spray foam insulation is limited to use with minimum 18 in. deep trusses (Item 2). When spray foam insulation is installed, resilient channels (Item 3A) shall be installed maximum 12 in. OC, with channels adjacent to butt joints of gypsum board (Item 4) spaced maximum 3 in. away from gypsum butt joints. Gypsum board (Item 4) to be installed using minimum 1-1/4 in. long Type S screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a ceiling damper (Item 9) in the concealed space, minimum 1 in. clearance to be maintained between damper housing and spray foam insulation. Not evaluated for use with Items 3, 3B through 3F, 3G, 6, 6A, 7 through 7D. Not evaluated with Flooring System (Item 1) Configuration No. 1.
BASF CORP — Enertite® NM, Enertite® G, FE178® , Spraytite® 178, Spraytite® 81206, Wallnite® 200, Wallnite® US, Wallnite® US-N, and Wallnite® HP+

7F. **Batts and Blankets*** — (Not Shown) For Use with Item 3I and 4C — Glass fiber or mineral wool insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. There is no limit in the overall thickness of insulation, and the insulation can be secured against the subflooring, held suspended in the concealed space or draped over the Steel Framing Members and gypsum panel membrane.

7G. **Batts and Blankets*** — (Not Shown) For Use with Item 3L, 3K, and 4F — Glass fiber or mineral wool insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. There is no limit in the overall thickness of insulation, and the insulation can be secured against the subflooring, held suspended in the concealed space or draped over the Steel Framing Members and gypsum panel membrane.

7H. **Foamed Plastic*** — (As alternate to Items 6 and 7 - not to be used in combination with any alternates to Items 6 and 7) — Spray foam insulation applied directly to the underside of the plywood subflooring. Spray foam insulation installed to a maximum thickness of 11 in. at a nominal 1.0 lb/ft³ - 2.5 lb/ft³ density, while maintaining a minimum 7 in. clearance between the spray foam insulation and the gypsum board (Item 4). Spray foam insulation is limited for use with minimum 18 in. deep trusses (Item 2). When spray foam insulation is installed, resilient channels (Item 3A) shall be installed maximum 12 in. OC, with channels adjacent to butt joints of gypsum board spaced maximum 3 in. away from gypsum butt joints. Gypsum board to be installed using minimum 1-1/4 in. long Type S screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a ceiling damper (Item 9) in the concealed space, no clearance is necessary between damper housing and spray foam insulation. Only for use with Item 3A not evaluated for use with Items 3, 3B through 3F, 3G, 6, 6A, 7 through 7D. Not evaluated with Flooring System (Item 1) Configuration No. 1.
CARLISLE SPRAY FOAM INSULATION — Types SealTite Pro Closed Cell (CC), SealTite Pro Open Cell (OC), SealTite Pro OCX, SealTite Pro No Iron 21, SealTite Pro One Zero, Foamulate Closed Cell, Foamulate OCX, Foamulate 70, and Foamulate HFO.

8. **Air Duct*** — (Optional) — Any UL Class 0 or Class 1 flexible air duct installed in accordance with the instructions provided by the damper manufacturer.

9. **Ceiling Damper*** — (Optional. To be used with Air Duct Item 8.) — For use with min. 18 in. deep trusses. Not for use with flooring system 1 or 17. Max. nom area shall be 349 sq in. Max. overall length and width shall not exceed 18-11/16 in. by 18-11/16 in. with max. 16 in. by 16 in. register opening. Aggregate damper openings shall not exceed 175 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. An aluminum or steel grille (Item 10) shall be installed in accordance with installation instructions.
MIAMI-TECH INC — Model Series RuCRD, RuCRDS or RuCRPD

9A. **Alternate Ceiling Damper*** — (Optional. To be used with Air Duct Item 8.) — For use with min. 18 in. deep trusses. Not for use with flooring system 1 or 17. Max damper assembly size nom 18 in. long by 18 in. wide and 4-1/4 in. high, or 8 in. diam. fabricated from galv steel. Aggregate damper openings shall not exceed 162 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper.
RUSKIN COMPANY — Model CFD7T, CFD7T-END-BT, CFD7T-90-BT, CFD7T-ST-BT, CFD7T

UL DESIGN NO. L528 (Cont.)

UNIT FLOOR/CEILING ASSEMBLY (FC01)

9E. Alternate Ceiling Damper* — (Optional. To be used with Air Duct Item 8.) — For use with min. 18 in. deep trusses. Not for use with flooring system 1 or 17. Max 14 in. long by 14 in.wide by rectangular damper with 90° boot. The maximum size of damper/boot assembly is 14 in. long by 14 in. wide and 18 in. high fabricated from galv steel. The aggregate area of the register opening(s) through the ceiling membrane shall not exceed 98 sq in. per 100 sq ft ceiling area. Damper assembly installed in accordance with the manufacturers installation instructions.
AIRE TECHNOLOGIES INC — Models 50 w/ Boot, 50EA w/ Boot, 51 w/Boot, 50 w/ Box, 50EA w/ Box or 51 w/Box

9F. Alternate Ceiling Damper* — (Optional. To be used with Air Duct Item 8). — For use with min 18 in. deep trusses Not for use with flooring system 1 or 17. Max plenum box size nom 19 in. long by 19 in. wide and 11-7/8 in. high fabricated from galv steel. Aggregate damper openings shall not exceed 128 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper.
LLOYD INDUSTRIES INC — Model CRD 50-BT, CRD 50-EA-BT, CRD 55-BT, CRD 55 EA-BT

UNITED ENERTECH CORP — Model C-S/R-WT-L, C-S/R-EA-L, C-S/R-BT, C-S/R-EA-BL

9G. Alternate Ceiling Damper* — (Optional. To be used with Air Duct Item 8). For use with min 18 in. deep trusses Not for use with flooring system 1 or 17. Max plenum box size nom 13 in. long by 13 in. wide and 11-7/8 in. high fabricated from galv steel. Aggregate damper openings shall not exceed 50 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper.
LLOYD INDUSTRIES INC — Model CRD 50-BT-6, CRD 50-EA-BT-6, CRD 55-BT-6, CRD 55 EA-BT-6

9H. Alternate Ceiling Damper* — (Optional. To be used with Air Duct Item 8). Ceiling damper & fan assembly for use with min 18 in. deep trusses. Not for use with flooring system 1 or 17. Max nom area shall be 103 sq in. with the length not to exceed 10-1/8 in. and the width not to exceed 10-1/8 in. Aggregate damper openings shall not exceed 52 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille (Item 10) shall be installed in accordance with installation instructions.
PANASONIC CORPORATION, PANASONIC CORPORATION OF NORTH AMERICA — Model FC-RD05CS

9I. Alternate Ceiling Damper* — (Optional. To be used with Air Duct Item 8). Ceiling damper & fan assembly for use with min 18 in. deep trusses. Not for use with flooring system 1 or 17. Max nom area shall be 113 sq in. with the length not to exceed 10-1/8 in. and the width not to exceed 11-1/8 in. Aggregate damper openings shall not exceed 57 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille (Item 10) shall be installed in accordance with installation instructions.
BROAN-NUTONE L L C — Model RDFUWT

9J. Alternate Ceiling Damper* — (Optional. To be used with Air Duct Item 8). Ceiling damper & fan assembly for use with min 18 in. deep trusses. Not for use with flooring system 1 or 17. Max nom area shall be 79 sq in. with the length not to exceed 10 in. and the width not to exceed 7-15/16 in. Aggregate damper openings shall not exceed 40 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A metallic grille (Item 10) shall be installed in accordance with installation instructions.
BROAN-NUTONE L L C — Models RDI1 and RDH

9K. Alternate Ceiling Damper* — (Optional. To be used with Air Duct Item 8). For use with min 18 in. deep trusses. Not for use with flooring system 1 or 17. Max plenum box size nom 19 in. long by 19 in. wide and 11-7/8 in. high fabricated from galv steel. Aggregate damper openings shall not exceed 128 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper.
METAL-FAB INC — Models MSCD HC and MRCD HC

9L. Alternate Ceiling Damper* — (Optional. To be used with Air Duct Item 8). Ceiling damper & fan assembly for use with min 18 in. deep trusses. Not for use with flooring system 1 or 17. Max nom area shall be 87 sq in. with the length not to exceed 9 in. and the width not to exceed 9-11/16 in. Aggregate damper openings shall not exceed 44 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille (Item 10) shall be installed in accordance with installation instructions.
BROAN-NUTONE L L C — Model RDMWT

9M. Alternate Ceiling Damper* — Ceiling damper & fan assembly for use with min 18 in. deep trusses. Max nom area shall be 87 sq in. with the length not to exceed 9 in. and the width not to exceed 9-11/16 in. Aggregate damper openings shall not exceed 44 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille (Item 10) shall be installed in accordance with installation instructions.
BROAN-NUTONE L L C — Model RDMWT2

9N. Alternate Ceiling Damper* — (Optional. To be used with Air Duct Item 8) — For use with min 18 in. deep trusses. Not for use with flooring system 1 or 17. Max nom 21 in. long by 18 in. wide by 14 in. high (inner dimension) fabricated from either galvanized steel or min 1 in. thick Listed Duct Board bearing the UL Listing Marking having a min R-Value of 4.3. Installed in accordance with the instructions provided by the manufacturer. Max damper openings not to exceed 180 sq in. per 100 sq ft of ceiling area.
GREENHECK FAN CORP — Model CRD-1WT

9O. Alternate Ceiling Damper* — (Optional. To be used with Air Duct Item 8) — For use with min 18 in. deep trusses. Not for use with flooring system 1 or 17. Max nom 12 in. long by 12 in. wide with an 8 in. diameter damper, fabricated from galvanized steel. Installed in accordance with the instructions provided by the manufacturer. Max damper openings not to exceed 72 sq in. per 100 sq ft of ceiling area.
GREENHECK FAN CORP — Model CRD-2WT

9P. Alternate Ceiling Damper* — For use with min 18 in. deep trusses. Not for use with flooring system 1 or 17. Max nom area shall be 324 sq in. with the length not to exceed 24 in. and the width not to exceed 20 in. Max height of damper shall be 14 in. Aggregate damper openings shall not exceed 162 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. A steel grille (Item 10) shall be installed in accordance with installation instructions.
C&S AIR PRODUCTS — Model RD-521

POTTORFF — Model CFD-521

9Q. Alternate Ceiling Damper* — For use with min 18 in. deep trusses. Not for use with flooring system 1 or 17. Max nom area shall be 196 sq in. with the length not to exceed 26 in. and the width not to exceed 14 in. Max height of damper shall be 7 in. Aggregate damper openings shall not exceed 98 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. A steel grille (Item 10) not to exceed 144 in.^{2} shall be installed in accordance with installation instructions.
C&S AIR PRODUCTS — Model RD-521-BT

POTTORFF — Model CFD-521-BT

9R. Alternate Ceiling Damper* — For use with min 18 in. deep trusses. Not for use with flooring system 1 or 17. Max nom area shall be 256 sq in. with the length not to exceed 24 in. and the width not to exceed 20 in. Max height of damper shall be 17 in. Aggregate damper openings shall not exceed 128 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. A steel grille (Item 10) shall be installed in accordance with installation instructions.
C&S AIR PRODUCTS — Models RD-521-IP, RD-521-NP

POTTORFF — Models CFD-521-IP, CFD-521-NP

9S. Alternate Ceiling Damper* — For use with min 18 in. deep trusses. Not for use with flooring system 1 or 17. Max nom area shall be 144 sq in. with the length not to exceed 14 in. and the width not to exceed 12 in. Max height of damper shall be 17-7/8 in. Aggregate damper openings shall not exceed 74 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. A steel grille (Item 10) shall be installed in accordance with installation instructions.
C&S AIR PRODUCTS — Models RD-521-90, RD-521-NP90

POTTORFF — Models CFD-521-90, CFD-521-90NP

9T. Alternate Ceiling Damper* — (Optional. To be used with Air Duct Item 8.) — For use with Item 4D only. Not for use with flooring system 1. Max nom 8 in. diameter by 3-1/8 in. high, fabricated from galvanized steel. Plenum box max size nom 12 in. long by 12 in. wide by 3 in. high fabricated from galvanized steel. Installed in accordance with the instructions provided by the manufacturer. Max damper openings not to exceed 72 sq in. per 100 sq ft of ceiling area.
NAILOR INDUSTRIES INC — Types 0755, 0755A

SAFE AIR DOWCO — Types 0455, 0455A

9U. Alternate Ceiling Damper* — (Optional, to be used with Air Duct Item 8) For use with min 18 in. deep trusses. Max nom 11-1/8 in. long by 13-5/8 in. wide, fabricated from galvanized steel. Installed in accordance with the instructions provided by the manufacturer. Max damper openings not to exceed 76 sq in. per 100 sq ft of ceiling area.
GREENHECK FAN CORP — Model CRD-310WT

9V. Alternate Ceiling Damper* — (Optional, to be used with Air Duct Item 8) For use with min 18 in. deep trusses. Max nom 12-3/8 in. long by 14-1/2 in. wide, fabricated from galvanized steel. Installed in accordance with the instructions provided by the manufacturer. Max damper openings not to exceed 90 sq in. per 100 sq ft of ceiling area.
GREENHECK FAN CORP — Model CRD-320WT

9W. Alternate Ceiling Damper* — — (Optional, to be used with Air Duct Item 8) For use with min. 18 in. deep trusses. Not for use with flooring system 1 or 17. Max 12 in. diameter damper within max 15 in. by 15 in. register box with max 12 in. by 12 in. register opening fabricated from galvanized steel. Aggregate area of the register opening(s) through the ceiling membrane shall not exceed 72 sq. in. per 100 sq. ft. of ceiling area. Damper assembly installed in accordance with the manufacturer's installation instructions.
RUSKIN COMPANY — Model CFD7T-SR

9X Ceiling Damper* — Max 12 in. diameter damper and insulated register box assembly. The maximum size of the register box assembly is nom. 20 in. long by 20 in. wide and 4 in. high fabricated from galv steel. The aggregate area of the register opening(s) through the ceiling membrane shall not exceed 128 sq in. per 100 sq ft of ceiling area. Damper assembly installed in accordance with the manufacturers installation instructions.
SOUTHWARK METAL MFG CO — Model 800 w/Box

9Y Alternate Ceiling Damper* — Max 20 in. long by 16 in. wide by 4 in. high rectangular damper with plenum box assembly. The maximum outer dimensions of the plenum box assembly are 23-1/2 in. long by 19-1/2 in. wide and 17 in. high fabricated from 6pcf, 1-1/2 to 2 in. thick Knauf Air Duct Board M*. The aggregate area of the register opening(s) through the ceiling membrane shall not exceed 160 sq in. per 100 sq ft ceiling area. Damper assembly installed in accordance with the manufacturers installation instructions.
SOUTHWARK METAL MFG CO — CRD w/DB Box

9Z Alternate Ceiling Damper* — Max 14 in. long by 14 in. wide and 18 in. high ceiling damper with boot or box assembly, fabricated from galv steel. The aggregate area of the register opening(s) through the ceiling membrane shall not exceed 98 sq in. per 100 sq ft of ceiling area. Damper assembly installed in accordance with the manufacturers installation instructions.
SOUTHWARK METAL MFG CO — Model 500 w/Boot, 510 w/Boot, 500 w/Box or 510 w/Box

10. Grille — Aluminum or Steel grille, installed in accordance with the installation instructions provided with the ceiling damper.

11. Discrete Products Installed in Air-handling Spaces* — Automatic Balancing Valve/Damper — (Not Shown - Optional) — For use with item 9A, Ruskin Company's Model CFD7T damper (CAB5). Ceiling damper to be provided with plenum box per damper manufacturer's instructions with side outlet only. Entire assembly to be installed into any UL Class 0 or Class 1 flexible air duct in accordance with the instructions provided by the automatic balancing valve/damper manufacturer.
NAILOR INDUSTRIES INC — Model ABV-4, ABV-5, ABV-6

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

GA FILE NO. FC 5529 - 2021

1HR CORRIDOR CEILING (FC01)

GA FILE NO. FC 5529	GENERIC	1 HOUR FIRE

WOOD JOISTS, GYPSUM WALLBOARD

Fire Design:
Base layer 5/8" type X gypsum wallboard applied at right angles to 2 x 10 wood joists 24" o.c. with 1-1/4" Type W or S screws 24" o.c. **Face** layer 5/8" type X gypsum wallboard or gypsum veneer base applied at right angles to joists with 1-7/8" Type W or S screws 12" o.c. at joints and intermediate joists and 1-1/2" Type G screws 12" o.c. placed 2" back on either side of end joints. Wood joists supporting 1/2" plywood with exterior glue applied at right angles to joists with 8d nails.
Joints offset 24" from **base** layer joints.



Approx. Ceiling Weight: 5 psf (Fire)
Fire Test: FM FC 172, 2-25-72; ITS, 8-6-98

GA FILE NO. FC 5751 - 2021

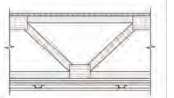
2HR HORIZONTAL ASSEMBLY (FC10) (FC11)

FLOOR-CEILING SYSTEMS, WOOD FRAMED

GA FILE NO. FC 5751	GENERIC	2 HOUR FIRE

WOOD FLOOR, WOOD TRUSSES, GYPSUM WALLBOARD, METAL CHANNELS

Fire Design:
Base layer 5/8" type X gypsum wallboard applied at right angles to 18" deep parallel chord wood trusses 24" o.c. with 1-1/4" Type W screws 12" o.c. **Second** layer 5/8" type X gypsum wallboard applied at right angles to trusses with 2" Type W screws 12" o.c. **Third** layer 5/8" type X gypsum wallboard applied at right angles to trusses with 2-1/2" Type W screws 12" o.c. Hat-shaped 7/8" rigid furring channels 24" o.c. applied at right angles to trusses over third layer with two 2-1/2" long Type W screws at each truss. **Face** layer 5/8" type X gypsum wallboard applied at right angles to furring channels with 1-1/8" Type S screws 12" o.c. Wood trusses supporting 3/4" T&G edge plywood floor applied at right angles to trusses with 8d nails 6" o.c. at joints and 12" at intermediate trusses.
Second layer joints offset 24" from **base** layer joints. **Third** layer joints offset 12" from second layer joints.



Approx. Ceiling Weight: 12 psf (Fire)
Fire Test: UL R4024, 00NK26545, 4-27-01; UL Design L556; ULC Design M514

GA FILE NO. RC 2601 - 2021

2 1R HORIZONTAL ASSEMBLY (RC02)

GA FILE NO. RC 2601	GENERIC	1 HOUR FIRE

GYPSUM WALLBOARD, WOOD JOISTS, ROOF COVERING.

Fire Design:
Base layer 5/8" type X gypsum wallboard applied at right angles to 2 x 10 wood joists 24" o.c. with 1-1/4" Type W or S screws 24" o.c., **Face** layer 5/8" type X gypsum wallboard or gypsum veneer base applied at right angles to joists with 1-7/8" Type W or S screws 12" o.c. at joints and intermediate joists and 1-1/2" Type G screws 12" o.c. placed 2" back on either side of end joints. Wood joists supporting 1/2" plywood with exterior glue applied at right angles to joists with 8d nails. Appropriate roof covering.
Joints offset 24" from **base** layer joints.



Approx. Ceiling Weight: 5 psf (Fire)
Fire Test: FM FC 172, 2-25-72 ITS, 8-6-98

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MARSHALL POINTE

MARSHALL POINTE LAND AQUISITION, LLC
5170 MARSHALL ST - ARVADA, CO 80002

ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT/ NV
Checked By: JG
Title: FIRE RATED ASSEMBLIES - FLOOR/ROOF/CEILING
Sheet Number: **A0-6.10**

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Design No. P522

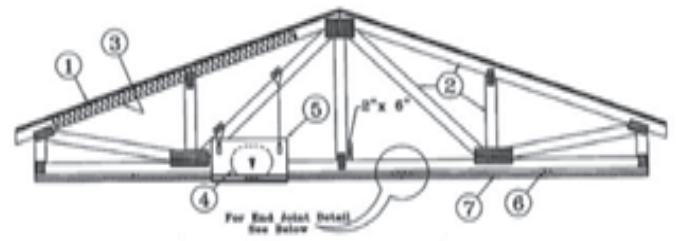
May 22, 2021

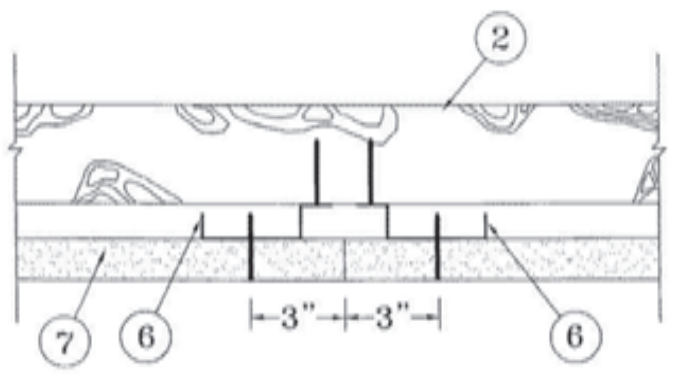
Unrestrained Assembly Rating — 1 Hr

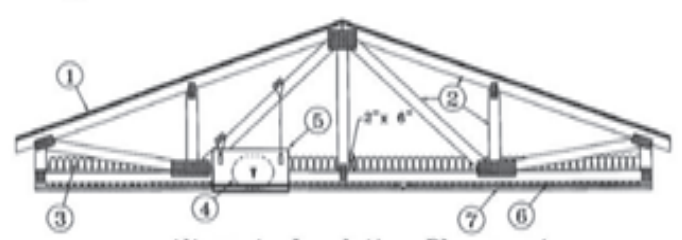
Finish Rating — 25 Min (See Items 3 or 3A)

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**







Alternate Insulation Placement

1. **Roofing System*** — Any UL Class A, B or C Roofing System (TGFU) or Prepared Roof Covering (TFWZ) acceptable for use over nom 15/32 in. thick wood structural panels, min. grade "C-D" or "Sheathing". Nom 15/32 in. thick wood structural panels secured to trusses with No. 6d ringed shank nails spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Construction adhesive may be used with either the nails or staples.

2. **Trusses** — Pitched or parallel chord wood trusses, spaced a max of 24 in. OC, fabricated from nom 2 by 4 lumber, with lumber oriented vertically or horizontally. Truss members secured together with min. 0.0356 in. thick galv steel plates. Plates have 5/16 in. long teeth projecting perpendicular to the plane of the plate. The teeth are in pairs facing each other (made by the same punch), forming a split tooth type plate. Each tooth has a chisel point on its outside edge. These points are diagonally opposite each other for each pair. The top half of each tooth has a twist for stiffness. The pairs are repeated on approximately 7/8 in. centers with four rows of teeth per inch of plate width. Minimum parallel chord truss depth shall be 18 in. Where the truss intersects with the interior face of the exterior walls, the min truss depth shall be 5-1/4 in. with a min roof slope of 3/12 and a min. area in the plane of the truss of 21 sq/ft. Where the truss intersects with the interior face of the exterior walls, the min truss depth may be reduced to 3 in. if the batts and blankets (Item 3) are used as shown in the above illustration (Alternate Insulation Placement) and are firmly packed against the intersection of the bottom chords and the plywood sheathing.

3. **Batts and Blankets*** — (Optional) — Required when Item 6B is used — Glass fiber insulation, secured to the wood structural panels with staples spaced 12 in. OC or to the trusses with 0.090 in. diam galv steel wires spaced 12 in. OC. Any glass fiber insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance, having a min density of 0.5 pcf. As an option, the insulation may be fitted in the concealed space, draped over the resilient channel/gypsum board ceiling membrane when resilient channels and gypsum board attachment is modified as specified in Items 6 and 7. When **Steel Framing Members** (Item 6B) are used, max 3-1/2 in. thick insulation shall be draped over the furring channels (Item 6Ba) and gypsum board ceiling membrane, and friction-fitted between trusses and Steel Framing Members (Item 6Bd). The finished rating has only been determined when the insulation is secured to the decking.

3A. **Fiber, Sprayed*** — As an alternate to Item 3 (not evaluated for use with Item 6B) — Any thickness of spray-applied cellulose insulation material, having a min density of 0.5 lb/ft³, applied with water, over the resilient channel/gypsum board ceiling membrane when resilient channels and gypsum board attachment is modified as specified in Items 6 and 7. Fiber, Sprayed is applied with moisture in accordance with the application instructions supplied with the product. The finish rating when Fiber Sprayed is used has not been determined. Alternate application method: The fiber is applied without water or adhesive in accordance with the application instructions supplied with a minimum density of 0.5 lb/ft³ over the resilient channel/gypsum board ceiling membrane when resilient channels and gypsum board attachment is modified as specified in Items 6 and 7. Alternate application method: The fiber is applied without water or adhesive to a nominal density of 3.5 lb/ft³ behind netting (Item 9) stapled to the rafters. The netting is stapled at both lower edges of the rafters creating a cavity to accept the cellulose fiber.
U S GREENFIBER L L C — INS735, INS745, INS750LD, and SANCTUARY for use with wet or dry application. INS510LD, INS515LD, INS541LD, INS735, INS765LD, and INS773LD are to be used for dry application only.

3B. **Foamed Plastic*** — (As an alternate to Item 3 or 3A, Not Shown) — Spray foam insulation applied directly to the underside of the underside of the roofing system (Item 1). Spray foam insulation installed to a maximum thickness of 10 in. at a nominal 0.5 lb/ft³ density, while maintaining a minimum 8-1/2 in. clearance between the spray foam insulation and the gypsum board (Item 7). When spray foam insulation is used, resilient channels (Item 6) shall be installed maximum 12 in. OC, with channels adjacent to butt joints of gypsum board (Item 7) installed at 6 in. OC to allow for maximum 3 in. spacing off ends of the gypsum board joints. Gypsum board (Item 7) to be installed using 1-1/4 in. long Type S screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a fire damper (Items 5 through 5K) in the concealed space, minimum 1 in. clearance to be maintained between damper housing and spray foam insulation. Not evaluated for use with Items 6A through 6F.
SES FOAM INC — Sucraseal

3C. **Cavity Insulation - Batts and Blankets* or Fiber, Sprayed*** — (As described above) in Items 3 and 3A — (For Use with Item 7B, Not Shown) — Min. 3-1/2 in thick with no limit on maximum thickness fitted in the concealed space, draped over the resilient channel (Item 6G)/gypsum board (Item 7B) ceiling membrane.

3D. **Foamed Plastic*** — (As alternate to Item 3, 3A, or 3B, Not Shown) — Spray foam insulation applied directly to the underside of the roofing system (Item 1). Spray foam insulation installed to a maximum thickness of 10 in. at a nominal 0.5 lb/ft³ or 2.0 lb/ft³ density, depending on the product installed. When spray foam insulation is installed, resilient channels (Item 6) shall be installed maximum 12 in. OC, with channels adjacent to butt joints of gypsum board (Item 7) spaced maximum 3 in. away from gypsum butt joints. Gypsum board (Item 7) to be installed using minimum 1-1/4 in. long Type S screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a fire damper (Items 5 through 5H) in the concealed space, minimum 1 in. clearance to be maintained between damper housing and spray foam insulation. Not evaluated for use with Items 6A through 6F.
BASF CORP — Enertite® NM, Enertite® G, FE178®, Spraytite® 178, Spraytite® 81206, Walltite® 200, Walltite® US, Walltite® US-N, and Walltite® HP+

3E. **Foamed Plastic*** — (As an alternate to Item 3, 3A, 3B, 3C, or 3D, Not Shown) — Spray foam insulation applied directly to the underside of the underside of the roofing system (Item 1). Spray foam insulation installed to a maximum thickness of 17 in. at a nominal 0.5 lb/ft³ density, while maintaining a minimum 1-1/2 in. clearance between the spray foam insulation and the gypsum board (Item 7). When spray foam insulation is used, resilient channels (Item 6) shall be installed maximum 12 in. OC, with channels adjacent to butt joints of gypsum board (Item 7) installed at 6 in. OC to allow for maximum 3 in. spacing off ends of the gypsum board joints. Gypsum board (Item 7) to be installed using 1-1/4 in. long Type S screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a fire damper (Items 5 through 5K) in the concealed space, no clearance is necessary between damper housing and spray foam insulation. Not evaluated for use with Items 6A through 6F.
SES FOAM INC — EasySeal.5

3F. **Foamed Plastic*** — (As alternate to Item 3 - not to be used in combination with any alternates to item 3) — Spray foam insulation applied directly to the underside of the roofing system (Item 1). Spray foam insulation installed to a maximum thickness of 11 in. at a nominal 1.0 lb/ft³ - 2.5 lb/ft³ density, while maintaining a minimum 7 in. clearance between the spray foam insulation and the gypsum board (Item 7). When spray foam insulation is installed, resilient channels (Item 6) shall be installed maximum 12 in. OC, with channels adjacent to butt joints of gypsum board spaced maximum 3 in. away from gypsum butt joints. Gypsum board to be installed using minimum 1-1/4 in. long Type S screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a fire damper (Items 5 through 5K) in the concealed space, no clearance is necessary between damper housing and spray foam insulation. Only for use with item 6 not evaluated for use with alternates to item 6.
CARLISLE SPRAY FOAM INSULATION — Types SealTite Pro Closed Cell (CC), SealTite Pro Open Cell (OC), SealTite Pro OCX, SealTite Pro No Trim 21, SealTite Pro One Zero, Foamsulate Closed Cell, Foamsulate OCX, Foamsulate 70, and Foamsulate HFO.

4. **Air Duct*** — Any UL Class 0 or Class 1 flexible air duct installed in accordance with the instructions provided by the damper manufacturer.

5. **Ceiling Damper*** — Max nom area, 324 sq in. Max square size, 18 in. by 18 in. rectangular sizes not to exceed 324 sq in. with a max width of 18 in. Max damper height is 14 in. Installed in accordance with manufacturers installation instructions provided with the damper. Max damper openings not to exceed 162 sq in. per 100 sq ft of ceiling area.
C&S AIR PRODUCTS — Model RD-521

POTTORFF — Model CFD-521

5A. **Alternate Ceiling Damper*** — Max nom area, 196 sq in. Max square size, 14 in. by 14 in. Rectangular sizes not to exceed 196 sq in. with a max width of 26 in. Max overall damper height is 7 in. Installed in accordance with the manufacturers installation instructions provided with the damper. Max damper openings not to exceed 98 sq in. per 100 sq ft of ceiling area.
C&S AIR PRODUCTS — Model RD-521-BT

POTTORFF — Model CFD-521-BT.

5B. **Alternate Ceiling Damper*** — Max nom area shall be 256 sq in. with the length not to exceed 24 in. and the width not to exceed 20 in. Max height of damper shall be 17 in. Aggregate damper openings shall not exceed 128 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. A steel grille shall be installed in accordance with installation instructions.
C&S AIR PRODUCTS — Model RD 521-IP, RD-521-NP

POTTORFF — Models CFD-521-IP, CFD-521-NP

5C. **Alternate Ceiling Damper*** — Ceiling damper & fan assembly. Max nom area shall be 75 sq in. with the length not to exceed 8-9/16 in. and the width not to exceed 8-3/4 in. Max height of damper shall be 9-7/8 in. Aggregate damper openings shall not exceed 38 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturers installation instructions provided with the damper. A plastic grille shall be installed in accordance with installation instructions.
DELTA ELECTRONICS INC — Models CRD2, GBR-CRD, ITG-CRD

5D. **Alternate Ceiling Damper*** — Ceiling damper & fan. Max nom area shall be 75 sq in. with the length not to exceed 9-1/4 in. and the width not to exceed 9-3/4 in. Max height of damper shall be 9-7/8 in. Aggregate damper openings shall not exceed 45 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille shall be installed in accordance with installation instructions.
DELTA ELECTRONICS INC — Model SIG-CRD

5E. **Alternate Ceiling Damper*** — Max nom area shall be 144 sq in. with the length not to exceed 14 in. and the width not to exceed 12 in. Max height of damper shall be 17-7/8 in. Aggregate damper openings shall not exceed 74 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. A steel grille shall be installed in accordance with installation instructions.
C&S AIR PRODUCTS — Model RD-521-90, RD-521-NP90

POTTORFF — Models CFD-521-90, CFD-521-90NP

5F. **Alternate Ceiling Damper*** — Ceiling damper & fan assembly. Max nom area shall be 131 sq in. with the length not to exceed 11-1/16 in. and the width not to exceed 11-7/8 in. Aggregate damper openings shall not exceed 66 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille shall be installed in accordance with installation instructions.
DELTA ELECTRONICS INC — Model SMT-CRD

5G. **Alternate Ceiling Damper*** — Ceiling damper & fan assembly. Max nom area shall be 103 sq in. with the length not to exceed 10-1/8 in. and the width not to exceed 10-1/8 in. Aggregate damper openings shall not exceed 52 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille shall be installed in accordance with installation instructions.
PANASONIC CORPORATION, PANASONIC CORPORATION OF NORTH AMERICA — Model PC-RD05C5

5H. **Alternate Ceiling Damper*** — Ceiling damper & fan assembly. Max nom area shall be 113 sq in. with the length not to exceed 10-1/8 in. and the width not to exceed 11-1/8 in. Aggregate damper openings shall not exceed 57 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille shall be installed in accordance with installation instructions.
BROAN-NUTONE L L C — Model RDFUWT

5I. **Alternate Ceiling Damper*** — Ceiling damper & fan. Max nom area shall be 79 sq in. with the length not to exceed 10 in. and the width not to exceed 7-15/16 in. Aggregate damper openings shall not exceed 40 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A metallic grille shall be installed in accordance with installation instructions.
BROAN-NUTONE L L C — Models RD/1 and RDH

5J. **Alternate Ceiling Damper*** — Ceiling damper & fan assembly. Max nom area shall be 87 sq in. with the length not to exceed 9 in. and the width not to exceed 9-11/16 in. Aggregate damper openings shall not exceed 44 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille shall be installed in accordance with installation instructions.
BROAN-NUTONE L L C — Model RDMWT

5K. **Alternate Ceiling Damper*** — Ceiling damper & fan assembly. Max nom area shall be 87 sq in. with the length not to exceed 9 in. and the width not to exceed 9-11/16 in. Aggregate damper openings shall not exceed 44 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille shall be installed in accordance with installation instructions.
BROAN-NUTONE L L C — Model RDMWT2

6. **Furring Channels** — Resilient channels formed of 25 MSG thick galv steel. Installed perpendicular to the trusses (Item 2), spaced a max of 16 in. OC when no insulation (Item 3 or 3A) is fitted in the concealed spaced, or a max of 12 in. OC when insulation (Item 3 or 3A) is fitted in the concealed space, draped over the resilient channel/gypsum board ceiling membrane, or when insulation (Item 3B, 3D or 3E) is applied to the underside of the roofing system (Item 1). Two courses of resilient channel positioned 6 in. OC at wallboard butt-joints (3 in. from each end of wallboard). Channels oriented opposite at wallboard butt-joints. Channel splices overlapped 4 in. beneath wood trusses. Channels secured to each truss with 1-1/4 in. long Type S screws.

6A. **Steel Framing Members*** — (Not Shown) — As an alternate to Item 6, furring channels and Steel Framing Members as described below:
a. **Furring Channels** — Formed of No. 25 MSG galv steel, 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 16 in. OC perpendicular to trusses when no insulation (Items 3 or 3A) is fitted in the concealed space or 12 in. OC when insulation (Items 3 or 3A) is fitted in the concealed space, draped over the furring channel/gypsum board ceiling membrane or 24 in. OC when insulation (Items 3 or 3A) is fitted in the concealed space, draped over the furring channel/gypsum board ceiling membrane and a second layer of gypsum board is attached as described in Item 7 for steel framing members. Channels secured to trusses as described in Item 6Ab. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap.

b. **Steel Framing Members** — Used to attach furring channels (Item a) to trusses (Item 2). Clips spaced 48 in. OC. RSIC-1 and RSIC-1 (2.75) clips secured to alternating trusses with No. 8 by 2-1/2 in. coarse drywall screw through the center grommet. RSIC-V and RSIC-V (2.75) clips secured to alternating trusses with No. 8 by 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips. RSIC-1 and RSIC-V clips for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) and RSIC-V (2.75) clips for use with 2-23/32 in. wide furring channels. Adjoining channels are overlapped as described in Item 6Aa. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping No. 6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 7.
PAC INTERNATIONAL L L C — Types RSIC-1, RSIC-V, RSIC-1 (2.75), RSIC-V (2.75).

6B. **Steel Framing Members*** — (Not Shown) — As an alternate to Items 6 and 6A.
a. **Furring Channels** — Hat-shaped furring channels, 7/8 in. deep by 2-5/8 in. wide at the base and 1-1/4 in. wide at the face, formed from No. 25 ga. galv steel, spaced max 16 in. OC perpendicular to trusses and Cold Rolled Channels (Item 6Bb). Furring channels secured to Cold Rolled Channels at every intersection with a 1/2 in. pan head self-drilling screw through each furring channel leg. Ends of adjoining channels overlapped 4 in. and tied together with two double strand No. 18 SWG galv steel wire ties, one at each end of overlap. Supplemental furring channels at base layer and outer layer gypsum board butt joints are not required. Batts and Blankets draped over furring channels as described in Item 3. Two layers of gypsum board attached to furring channels as described in Item 7.

b. **Cold Rolled Channels** — 1-1/2 in. by 1/2 in., formed from No. 16 ga. galv steel, positioned vertically and parallel to trusses, friction-fitted into the channel caddy on the Steel Framing Members (Item 6Bd). Adjoining lengths of cold rolled channels lapped min. 6 in. and wire-tied together with two double strand 18 SWG galv steel wire ties, one at each end of overlap.

c. **Blocking** — Where truss design does not permit direct, full contact of the hanger bracket, a piece of nominal 2 by 4 in. lumber (blocking), min. 6 in. long to permit full contact of the hanger bracket, to be secured vertically to the side of the truss (Item 2) at the top and bottom of the blocking at each Steel Framing Member (Item 6Bd) location.

d. **Steel Framing Members*** — Hangers spaced 48 in. OC. max along truss, and secured to the Blocking (Item 6Bc) on alternating trusses with a single 5/16 in. by 2 in. hex head lag bolt or four #6 1-1/4 in. drywall screws through mounting hole(s) on the hanger bracket. The two 1/4 in. long steel teeth on the hanger are embedded in the side of the blocking. Hanger positioned on blocking and leveling bolt height adjusted such that furring channels are flush with bottom of trusses before gypsum board installation. Spring gauge of hanger chosen per manufacturer's instructions.
KINETICS NOISE CONTROL INC — Type ICW.

6C. **Steel Framing Members*** — (Not Shown) — As an alternate to Items 6, 6A and 6B.
a. **Furring Channels** — Formed of No. 25 MSG galv steel, 2-3/8 in. wide by 7/8 in. deep installed perpendicular to wood structural members. Channels spaced a max of 16 in. OC when no insulation (Item 3 or 3A) is fitted in the concealed space or a max of 12 in. OC when insulation (Item 3 or 3A) is fitted in the concealed space. Channels secured to trusses as described in Item 6Cb. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire near each end of overlap.

b. **Steel Framing Members*** — Used to attach furring channels (Item 6Ca) to trusses (Item 2). Clips secured to the bottom chord of each truss (48 in. OC) with one No. 8 by 2-1/2 in. long coarse drywall screw through center grommet. Furring channels are friction fitted into clips. Adjoining channels are overlapped as described in Item 6Ca. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping No. 6 framing screws, min 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 7.
PLITEQ INC — Type Genie Clip

6D. **Steel Framing Members*** — (Not Shown) — As an alternate to Items 6, 6A, 6B and 6C.
a. **Main runners** — Installed perpendicular to trusses — Nom 10 or 12 ft long, 15/16 in. or 1-1/2 in. wide face, spaced 4 ft OC. Main runners hung a min of 2 in. from bottom chord of trusses with 12 SWG galv steel wire. Wires located a max of 48 in. OC.

b. **Cross tees or channels** — Nom 4 ft long, 15/16 in. or 1-1/2 in. wide face or cross channels, nom 4 ft long, 1-1/2 wide face, installed perpendicular to the main runners, spaced 16 in. OC. Additional cross tees or channels used at 8 in. from each side of butted gypsum board end joints. The cross tees or channels may be riveted or screw-attached to the wall angle or channel to facilitate the ceiling installation.

c. **Wall angles or channels** — Used to support steel framing member ends and for screw-attachment of the gypsum wallboard — Min 0.016 in. thick painted or galvanized steel angle with 1 in. legs or min. 0.016 in. thick painted or galvanized steel channel with a 1 by 1-1/2 by 1 in. profile, attached to walls at perimeter of ceiling with fasteners 16 in. OC.
CGC INC — Type DGL or RX

USG INTERIORS LLC — Type DGL or RX

6E. **Alternate Steel Framing Members*** — (Not Shown) — As an alternate to items 6, 6A, 6B, and 6C, furring channels and Steel Framing Members as described below.
a. **Furring Channels** — Formed of No. 25 MSG galv steel, 2-5/8 in. wide by 7/8 in deep, spaced 16 in OC, perpendicular to trusses. When insulation, Items 3 or 3A is used, the furring channel spacing shall be reduced to 12 in. OC. Channels secured to joists as described in Item b.

b. **Steel Framing Members*** — Used to attach furring channels (Item a) to the wood trusses (Item 2). Clips spaced at 48" OC and secured to the bottom of the trusses with one 2 in. Coarse Drywall Screw with 1 in. diam washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6" and tied together with double strand of No. 18 AWG galvanized steel wire. Additional clips are required to hold the Gypsum Butt joints as described in Item 7.
STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237 or A237R

6F. **Steel Framing Members*** — (Not Shown) — As an alternate to Items 6 through 6E - Not for use with Items 3 or 3A. Main runners nom 12 ft long, spaced 72 in. OC. Main runners suspended by min 12 SWG galv steel hanger wires spaced 48 in. OC. Cross tees, nom 6 ft long, installed perpendicular to main runners and spaced 24 in. OC. Additional 6 ft long cross tees required at each gypsum board end joint with butted gypsum board end joints centered between cross tees spaced 8 in. OC. The main runners and cross tees may be riveted or screw attached to the wall angle or channel to facilitate the ceiling installation.
USG INTERIORS LLC — Type DGL or RX

6G. **Resilient Channels** — For Use With Item 7B - Formed from min 25 MSG galv steel installed perpendicular to trusses and spaced 16 in. OC. Channels secured to each truss with 1-5/8 in. long Type S bugle head steel screws. Channels overlapped 4 in. at splices. Two channels, spaced 6 in. OC, oriented opposite each gypsum panel end joint. Additional channels shall extend min 6 in. beyond each side edge of panel. Insulation, Item 3C is applied over the resilient channel/gypsum panel ceiling membrane.

6H. **Alternate Steel Framing Members*** — (Not Shown) — As an alternate to items 6 through 6G, furring channels and Steel Framing Members as described below.
a. **Furring Channels** — Formed of No. 25 MSG galv steel, 2-1/2 in. wide by 7/8 in deep, spaced 16 in OC, perpendicular to trusses. When insulation, Items 3 or 3A is used, the furring channel spacing shall be reduced to 12 in. OC. Channels secured to joists as described in Item b.

b. **Steel Framing Members*** — Used to attach furring channels (Item a) to the wood trusses (Item 2). Clips spaced at 48" OC and secured to the bottom of the trusses with one 2-1/2 in. Coarse Drywall Screw with 1 in. diam washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6" and tied together with double strand of No. 18 AWG galvanized steel wire. Additional clips are required to hold the Gypsum Butt joints as described in Item 7.
REGUPOL AMERICA — Type SonusClip

7. **Gypsum Board*** — One layer of nom 5/8 in. thick by 48 in. wide boards, installed with long dimension parallel to trusses. Attached to the resilient channels using 1 in. long Type S bugle-head screws. Screws spaced a max of 12 in. OC along butted end-joints and in the field when no insulation (Item 3 or 3A) is fitted in the concealed spaced, or a max of 8 in. OC along butted end-joints and in the field when insulation (Item 3 or 3A) is fitted in the concealed space, draped over the resilient channel/gypsum board ceiling membrane. When insulation (Item 3B, 3D or 3E) is installed in the concealed space, spray-applied to the underside of the roofing system (Item 1), screws are spaced a max of 8 in. OC along resilient channels, fasteners are increased in length to 1-1/4 in. and gypsum board butt joints shall be staggered min. 2 ft within the assembly, and occur between the main furring channels.
When **Steel Framing Members*** (Item 6A or 6C) are used, sheets installed with long dimension perpendicular to furring channels and side joints of sheet located beneath trusses. Gypsum board screws are driven through channel spaced 12 in. OC in the field when no insulation (Item 3 or 3A) is fitted in the concealed space, or 8 in. OC in the field when insulation (Item 3 or 3A) is fitted in the concealed space, draped over the furring channel/gypsum board ceiling membrane. Gypsum board butt joints shall be staggered min. 2 ft within the assembly, and occur between the main furring channels. At the gypsum board butt joints, each end of the gypsum board shall be supported by a single length of furring channel equal to the width of the wallboard plus 6 in. on each end. The furring channels shall be spaced approximately 3-1/2 in. OC, and be attached to the trusses with one clip at each end of the channel. Screw spacing along the butt joint to attach the gypsum board to the furring channels shall be 8 in. OC. Second (outer) layer of gypsum board required when furring channels (Item 6A, a) are spaced 24 in. OC and insulation is fitted in the concealed space, draped over the furring channel/gypsum board ceiling membrane. Outer layer of gypsum board attached to the furring channels using 1-5/8 in. long Type S bugle-head screws spaced 8 in. OC at butted end joints and 12 in. OC in the field. Butted end joints of outer layer to be offset a minimum of 8 in. from base layer end joints. Butted side joints of outer layer to be offset minimum 18 in. from butted side joints of base layer.

When **Steel Framing Members** (Item 6B) are used, two layers of nom 5/8 in. thick, 4 ft wide gypsum board are installed with long dimensions perpendicular to furring channels (Item 6Ba). Base layer attached to the furring channels using 1 in. long Type S bugle-head steel screws spaced 8 in. OC along butted end joints and 12 in. OC in the field of the board. Butted end joints centered on the continuous furring channels. Butted base layer end joints to be offset a min of 16 in. in adjacent courses. Outer layer attached to the furring channels using 1-5/8 in. long Type S bugle head steel screws spaced 8 in. OC at butted end joints and 12 in. OC in the field. Butted end joints centered on the continuous furring channels and offset a min of 16 in. from butted end joints of base layer. Butted side joints of outer layer to be offset min 16 in. from butted side joints of base layer.

When **Steel Framing Members** (Item 6C) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 72 in. At the gypsum board butt joints, each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 3 in. on each end, spaced approximately 2 in. in from joint. Screw spacing along the gypsum board butt joint shall be 8 in. OC. Butt joint furring channels shall be attached with a RESILMOUNT Sound Isolation Clip secured to underside of every truss that is located over the butt joint. Over all Gypsum Board side joints, approximately 20 in. lengths of furring channel shall be installed parallel to trusses (Item 2) between main furring channels. Side joint furring channels shall be attached to underside of the joist with RESILMOUNT Sound Isolation Clips - located approximately 2 in. from each end of the approximate 20 in. length of channel. Both Gypsum Boards at side joints fastened into channel with screws spaced 8 in. OC, approximately 1/2 in. from joint edge.

When **Steel Framing Members** (Item 6E) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 48 in. and centered over main furring channels. At the gypsum board butt joints, each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 3 in. on each end. The two support furring channels shall be spaced approximately 3 in. in from end joint. Screw spacing along the gypsum board butt joint and along both additional channels shall be 8 in. OC. Additional screws shall be placed in the adjacent section of gypsum board into the aforementioned 3 in. extension of the extra butt joint channels as well as into the main channel that runs between. Butt joint furring channels shall be attached with one RESILMOUNT Sound Isolation Clip at each end of the channel.

When alternate **Steel Framing Members*** (Item 6F) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board sheets installed with long dimension (side joints) perpendicular to the 6 ft long cross tees with the end joints staggered min 4 ft and centered between cross tees which are spaced 8 in. OC. Gypsum board side joints may occur beneath or between main runners. Prior to installation of the gypsum board sheets, backer strips consisting of nom 7-3/4 in. wide pieces of gypsum board are to be laid atop the cross tee flanges and centered over each butted end joint location. The backer strips are to be secured to the flanges of the cross tees at opposite corners of the backer strip with hold down clips to prevent the backer strips from being uplifted during screw-attachment of the gypsum board sheets. Gypsum board fastened to cross tees with 1 in. drywall screws spaced 1 in. and 4 in. from the side joints and max 8 in. OC in the field of the board. The butted end joints are to be secured to the backer strip with No. 10 by 1-1/2 in. long Type G laminating screws located 1 in. from each side of the butted end joint and spaced 1 in. and 4 in. from the side joints and max 8 in. OC in the field of the board.

When **Steel Framing Members** (Item 6H) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 48 in. and centered over main furring channels. At the gypsum board butt joints, an additional single length of furring channel shall be installed and be spaced approximately 3 in. from the butt joint (6 in. from the continuous furring channels) to support the floating end of the gypsum board. Each of these shorter sections of furring channel shall extend one truss beyond the width of the gypsum panel and be attached to the adjacent trusses with one SonusClip at every truss involved with the butt joint.

CGC INC — Types C, IP-X2, IPC-AR

UNITED STATES GYPSUM CO — Types C, IP-X2, IPC-AR

USG BORAL DRYWALL SFZ LLC — Type C

USG MEXICO S A DE C V — Types C, IP-X2, IPC-AR

7A. **Gypsum Board*** — For use with Steel Framing Members (Item 6D) when Batts and Blankets* (Item 3) are not used - One layer of nom 5/8 in. thick by 48 in. wide boards, installed with long dimension parallel to the main runners. Gypsum board fastened to each cross tee or channel with five wallboard screws, with one screw located at the midspan of the cross tee or channel, one screw located 12 in. from and on each side of the cross tee or channel mid span and one screw located 1-1/2 in. from each gypsum board side joint. Except at wallboard end joints, wallboard screws shall be located on alternating sides of cross tee flange. At gypsum board end joints, gypsum board screws shall be located 1/2 in. from the joint. Gypsum board fastened to main runners with wallboard screws 1/2 in. from side joints, midway between intersections with cross tees or channels (16 in. OC). End joints of adjacent gypsum board sheets shall be staggered not less than 32 in. Gypsum board sheets screw attached to leg of wall angle with wallboard screws spaced 12 in. OC. Joints treated as described in Item 7. For use with **Steel Framing Members*** (Item 6D) when **Batts and Blankets*** (Item 3) are used - Ratings limited to 1 Hour - 5/8 in. thick, 4 ft wide; installed with long dimension perpendicular to cross tees with side joints centered along main runners and end joints centered along cross tees. Fastened to cross tees with 1 in. long steel gypsum board screws spaced 8 in. OC in the field and 8 in. OC along end joints. Fastened to main runners with 1 in. long gypsum board screws spaced midway between cross tees. Screws along sides and ends of boards spaced 3/8 to 1/2 in. from board edge. End joints of the sheets shall be staggered with spacing between joints on adjacent boards not less than 4 ft OC.
CGC INC — Type C or IP-X2

UNITED STATES GYPSUM CO — Type C or IP-X2

USG BORAL DRYWALL SFZ LLC — Type C

USG MEXICO S A DE C V — Type C or IP-X2

7B. **Gypsum Board*** — For use with Items 3C and 6G. Nom 5/8 in. thick, 48 in. wide gypsum panels installed with long dimension perpendicular to resilient channels. Gypsum panels secured with 1 in. long Type S bugle head steel screws spaced 8 in. OC and located a min of 1/2 in. from side joints and 3 in. from the end joints. Finish Rating with this ceiling system is 20 min.
CGC INC — Type ULIX

UNITED STATES GYPSUM CO — Type ULIX

8. **Finishing System** — (Not Shown) — Vinyl, dry or premixed joint compound, applied in two coats to joints and screw-heads; paper tape, 2 in. wide, embedded in first layer of compound over all joints. As an alternate, nom 3/32 in. thick veneer plaster may be applied to the entire surface of gypsum board. **Alternate Ceiling Membrane** — Not Shown.

9. **Netting** — Fibrous, woven netting material fastened to underside of each joist with staples, with side joints overlapped.

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

Last Updated on 2021-05-22

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MARSHALL POINTE

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ISSUE FOR CONSTRUCTION
08.07.2024

No.	Date	Issue

Project Architect: DV

Project Designer: DR

Date:

Job Number: 222001

Drawn By: CG / CB/ TT/ NV

Checked By: JG

Title: FIRE RATED ASSEMBLIES - ROOF/CEILING

Sheet Number: A0-6.11

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UL DESIGN NO. X650

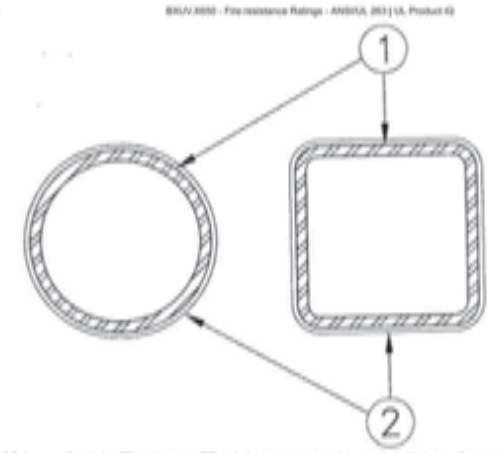
1 HR COLUMN PROTECTION, PRIMARY FRAME — BS01 / PS01

Design No. X650

November 09, 2020

Ratings - 1, 1-1/2, 2 and 3 Hr. (See Item 2)

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**



1. **Steel Column** — Steel tube (ST) or steel pipe (SP) with the minimum sizes shown in the table below. Columns shall be free of dirt, loose scale and oil. Columns shall be primed with a phenolic modified alkyd resin primer.

2. **Intumescent Fire-resistive Materials*** — Coating spray, brush or trowel applied directly from containers to desired thickness. See table below for appropriate final dry thickness and applicable rating.

FOR STEEL PIPE

Steel Size	A/P	Hp/A	1 Hr in.	1 Hr mm	1-1/2 Hr in.	1-1/2 Hr mm	2 Hr in.	2 Hr mm	3 Hr in.	3 Hr mm
SP 6.5 x 0.313	0.29	135	0.117	2.99	—	—	—	—	—	—
SP 8 x 0.875	0.79	49	0.097	2.46	0.097	2.46	0.120	3.05	0.216	5.50
SP 8.625 x 0.5	0.47	85	0.097	2.46	0.138	3.50	0.202	5.14	0.364	9.25
SP 16 x 0.625	0.60	65	—	—	—	—	—	—	0.285	7.25

FOR SQUARE AND RECTANGULAR STEEL TUBE

Steel Size	A/P	Hp/A	1 Hr in.	1 Hr mm	1-1/2 Hr in.	1-1/2 Hr mm	2 Hr in.	2 Hr mm	3 Hr in.	3 Hr mm
ST3.5x3.5x3/16	0.18	224	0.165	4.18	—	—	—	—	—	—
ST5x3x1/4	0.23	169	0.104	2.65	0.252	6.39	0.400	10.15	—	—
ST5x3x5/16	0.29	135	0.084	2.13	0.218	5.54	0.353	8.96	—	—
ST6x6x3/8	0.35	114	0.074	1.87	0.170	4.40	0.280	7.12	—	—
ST6x6x7/16	0.41	100	0.074	1.87	0.151	3.84	0.244	6.21	—	—
ST6x3x1/2	0.44	93	0.074	1.87	0.127	3.23	0.207	5.27	—	—
ST6x6x1/2	0.47	85	0.074	1.87	0.095	2.41	0.164	4.17	0.327	8.31

BERLIN CO LTD — Type WB 3. Investigated for Interior General Purpose. Type WB 4. Investigated for Interior General Purpose. Type WB 4. Investigated for Exterior Use with top coat as described in Item 3.

GREENTECH ASIA PACIFIC SDN BDH — Type WB 3. Investigated for Interior General Purpose. Type WB 4. Investigated for Interior General Purpose. Type WB 4. Investigated for Exterior Use with top coat as described in Item 3.

GREENTECH THERMAL INSULATION PRODUCTS MFG CO L L C — Type WB 3. Investigated for Interior General Purpose. Type WB 4. Investigated for Interior General Purpose. Type WB 4. Investigated for Exterior Use with top coat as described in Item 3.

ISOLATEK INTERNATIONAL — Type SprayFilm WB 3 and Type WB 3. Investigated for Interior General Purpose. Type SprayFilm WB 4 and Type WB 4. Investigated for Interior General Purpose. Type SprayFilm WB 4 and Type WB 4. Investigated for Exterior Use with top coat as described in Item 3.

NEWKEM PRODUCTS CORP — Type WB 3. Investigated for Interior General Purpose. Type WB 4. Investigated for Interior General Purpose. Type WB 4. Investigated for Exterior Use with top coat as described in Item 3.

3. **Top Coat** — Type SprayFilm — TOPSEAL and Type TOPSEAL required for Exterior Use, applied at a minimum dry thickness of 14 mils (0.34 mm) over the intumescent material.
See Classification information in the **Mastic and Intumescent Coating** (CDWZ) category, Isolatek International, for mixing requirements.

Investigated for Interior General Purpose.

* **Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

Last Updated on 2020-11-09

UL DESIGN NO. N614

1 HR BEAM PROTECTION, PRIMARY FRAME — BS01 / PS01

Design No. N614

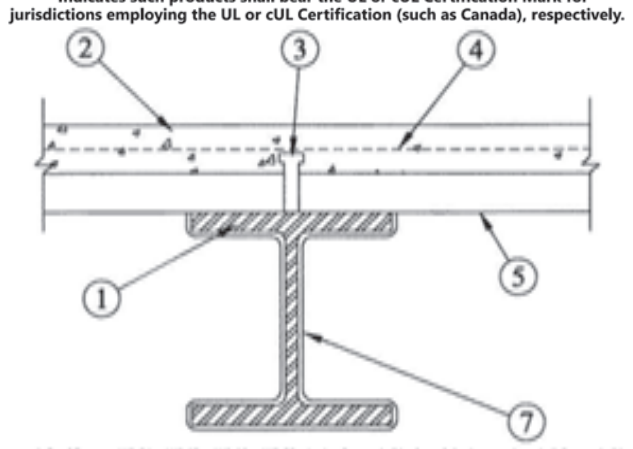
November 09, 2020

Restrained Beam Ratings - 1, 1-1/2, 2 and 3 Hr. (See Item 7)

Unrestrained Beam Ratings - 1, 1-1/2 and 2 Hr. (See Item 7)

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**



1. **Steel Beam** — W8x24 or W6x12 or W8x16 or W8x28 min size. Beams shall be free of dirt, loose scale and oil. Beams shall be primed with a phenolic modified alkyd resin primer, a metal alkyd primer, an acrylic primer or an epoxy primer at a nominal thickness of 2 mil.

2. **Normal Weight or Lightweight Concrete** — Compressive strength 3500 psi. For normal weight concrete either carbonate or siliceous aggregate may be used. Unit weight 146 lbs/cu ft. for normal weight concrete and 116 lbs/cu ft. for lightweight concrete. Min concrete thickness, as measured from top plane of steel floor and form units is 2-1/2 in.

3. **Shear Connector** — (Optional) — Studs, 3/4 in. diam headed type or equivalent per AISC specifications welded to the top flange of beam through the steel floor units.

4. **Welded Wire Fabric** — 6x6-10/10 SWG

5. **Steel Floor or Form Units** — 1-1/2, 2 or 3 in. deep fluted units, welded to beam.

6. **Mineral Wool Insulation** — (Not Shown) — For the W6x12, W8x28 and W8x24 beams, min 4 pcf mineral wool insulation cut into pieces and firmly packed into, and completely filling the spaces between the flutes of the steel floor and form units and the top flange of the beam. For the W8x16 beam, min 4 pcf mineral wool insulation cut into pieces and firmly packed into, and completely filling the spaces between the flutes of the steel floor and form units and the top flange of the beam. Mineral wool is not required when the top flange of the beam is protected with intumescent coating at the same thickness shown in the table in Item 7.

7. **Intumescent Fire-resistive Materials*** — Coating spray or brush applied in accordance with the manufacturer's instructions at the min dry thickness as shown in the table below. The thickness shown below includes the primer thickness. When mineral wool (Item 6) is used, the top surface of the beam need not be protected with coating.

Beam Size	Beam W/D	Unrestrained Beam Rating, Hr.	Minimum Dry Thickness mils	Minimum Dry Thickness mm
W8x16	0.58	1	39*	0.99*
W8x28	0.81	1	43	1.10
W8x24	0.70	1	53	1.34
W8x24	0.70	1-1/2	66	1.67
W8x24	0.70	2	115	2.92
W6x12	0.52	1	73	1.83
W6x12	0.52	1-1/2	99	2.50
W6x12	0.52	2	171	4.34

* NW concrete only (See Item 2).

Beam Size	Beam W/D	Restrained Beam Rating, Hr.	Minimum Dry Thickness mils	Minimum Dry Thickness mm
W8x16	0.58	1	39*	0.99*
W8x24	0.70	1	53	1.34
W8x28	0.81	1	43	1.10
W8x24	0.70	1-1/2	53	1.34
W8x24	0.70	2	71	1.78
W8x24	0.70	3	158	4.00
W6x12	0.52	1	73	1.83
W6x12	0.52	1-1/2	73	1.83
W6x12	0.52	2	101	2.56

* NW concrete only (See Item 2).

BERLIN CO LTD — Type WB3. Investigated for Interior General Purpose. Type WB4. Investigated for Interior General Purpose. Type WB4. Investigated for Exterior Use with top coat as described in Item 8

GREENTECH ASIA PACIFIC SDN BDH — Type WB3. Investigated for Interior General Purpose. Type WB4. Investigated for Interior General Purpose. Type WB4. Investigated for Exterior Use with top coat as described in Item 8

GREENTECH THERMAL INSULATION PRODUCTS MFG CO L L C — Type WB3. Investigated for Interior General Purpose. Type WB4. Investigated for Interior General Purpose. Type WB4. Investigated for Exterior Use with top coat as described in Item 8

ISOLATEK INTERNATIONAL — Type SprayFilm WB 3 and Type WB3. Investigated for Interior General Purpose. Type SprayFilm WB 4 and Type WB4. Investigated for Interior General Purpose. Type SprayFilm WB 4 and Type WB4. Investigated for Exterior Use with top coat as described in Item 8

NEWKEM PRODUCTS CORP — Type WB3. Investigated for Interior General Purpose. Type WB4. Investigated for Interior General Purpose. Type WB4. Investigated for Exterior Use with top coat as described in Item 8

8. **Top Coat** — Type SprayFilm — TOPSEAL and Type TOPSEAL required for Exterior Use, applied at a minimum dry thickness of 14 mils (0.34 mm) over the intumescent material.
See Classification information in the **Mastic and Intumescent Coating** (CDWZ) category, Isolatek International, for mixing requirements.

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

Last Updated on 2020-11-09

ALBI PROTECTIVE COATINGS - INTUMESCENT PAINT

1 HR COLUMN & BEAM PROTECTION, PRIMARY FRAME — BS01 / PS01

Albi Protective Coatings

Albi Clad TF

WATER-BASED THIN-FILM INTUMESCENT FIREPROOFING

Product Data Sheet

RECOMMENDED USES:

FEATURES:

APPLICATION:

PHYSICAL PROPERTIES:

PROPERTY	TEST METHOD	VALUE
[illegible]	[illegible]	[illegible]

SUGGESTED SPECIFICATION

Albi — **ALBI CLAD TF**

Underwriters' Laboratories Listings

COLUMNS: Wide Flange (Contour Application) — FIRE TEST: ASTM E-119

COLUMNS: Hollow Sections — FIRE TEST: ASTM E-119

BEAMS: Wide Flange — FIRE TEST: ASTM E-119

COLUMN SIZE	U.L. DESIGN NO.	HOURLY RATING	MATERIAL THICKNESS	REINFORCEMENT
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

WARRANTY

UL DESIGN NO. X528

1 HR BEAM PROTECTION, PRIMARY FRAME — BS01 / PS01

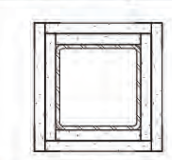
GA FILE NO. CM 1451 - 2021

1 HR COLUMN PROTECTION, PRIMARY FRAME — BS01 / PS01

GA FILE NO. CM 1451	GENERIC	1 HOUR FIRE

GYPSUM WALLBOARD, STEEL COLUMN COVER

Fire Design:
Base layer 1/2" type X gypsum wallboard applied around TS4 × 4 × 0.188 tube steel column and held in place with paper masking tape. **Second** layer either 24 ga. galvanized steel column cover consisting of two L-shaped sections with snap-lock sheet steel joints or 22 ga. galvanized steel column covers consisting of two L-shaped sections with lap joints fastened with No. 8 × 1/2" sheet metal screws 12" o.c. **Face** layer 1/2" type X gypsum wallboard applied without horizontal joints to column cover with 1" Type S screws 8" o.c. spaced 1" from vertical edges. Metal cornerbead applied to all corners with 1" Type S screws 12" o.c. in each flange.



Fire Test: UL NC505-(1-6), 71NK2639, 12-23-75, UL NC505, 77NK1518, UL Design X526

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community ▪ planning ▪ architecture
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MARSHALL POINTE

MARSHALL POINTE LAND AQUISITION, LLC
5170 MARSHALL ST - ARVADA, CO 80002

ISSUE FOR CONSTRUCTION
08.07.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT/ NV
Checked By: JG
Title: FIRE RATED STEEL ASSEMBLIES
Sheet Number: A0-6.12

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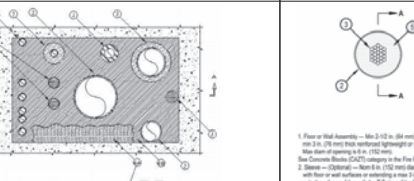
UL System No. C-AJ-8143

F Rating = 2 HR
T Rating = 0 HR



1. **Floor or Wall Assembly** — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m^3) concrete floor. Min 5 in. (127 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m^3) concrete wall. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max size of opening is 1440 in.2 (9,290 cm^2) with a max dimension of 48 in. (1219 mm).

See **Concrete Blocks** (CAZT) category in the Fire Resistance Directory for names of manufacturers.

2. **Through-Penetrant** — One cable tray and one or more pipes, tubes or cable bundles may be installed within the opening. The total number of through-penetrants is dependent on the size of the opening and the types and sizes of the penetrants. Any combination of the penetrants described below may be installed within the opening. The annular space between the cable tray and the periphery of the opening shall be min 1 in. (25 mm). Other penetrants shall be min 3 in. (76 mm). The annular space between individual cables and cable bundles shall be a min 1/2 in. (13 mm). The annular space between individual cables and cable bundles and other penetrants shall be a min 1/2 in. (13 mm) except that a min 2 in. (51 mm) shall be maintained between the cables and copper pipes and tubes greater than a nom 3 in. (76 mm) diam and steel and iron pipes and conduits greater than a nom 4 in. (102 mm) diam. The annular space between metallic pipes, conduit and tubes and insulated pipes and tubes shall be a min 2 in. (51 mm). The annular space between the cable tray and the periphery of the opening shall be min 1/2 in. (13 mm). The annular space between steel and iron pipes and conduits shall be min 1/2 in. (13 mm). The annular space between nom 2 in. (51 mm) diam (and smaller) metallic pipes and conduits shall be min 0 in. (point contact). The annular space between insulated penetrants or the cable tray and the periphery of opening shall be min 1/2 in. (13 mm). The annular space between all other penetrants and the periphery of opening shall be min 0 in. (point contact). A max annular space in the system shall be 12 in. (305 mm). Penetrants to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of penetrants may be used.

A. **Metallic Pipes** — The following types of metallic pipes, tubes or conduits may be used:

1. **Copper Tubing** — Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tube.
2. **Copper Pipe** — Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.
3. **Steel Pipe** — Nom 24 in. (610 mm) diam (or smaller) Schedule 40 (or heavier) steel pipe.
4. **Iron Pipe** — Nom 24 in. (610 mm) diam (or smaller) cast or ductile iron pipe.
5. **Conduit** — Nom 4 in. (102 mm) diam (or smaller) electric metallic tubing (EMT) or nom 6 in. (152 mm) diam (or smaller) rigid steel conduit.

B. **Cables Bundles** — Max 4 in. (102 mm) diam tightly bunded cables. Any combination of the following types and sizes of cables may be used:

1. Max 500 kcmil single copper or aluminum conductor power cable with thermoplastic insulation and polyvinyl chloride (PVC) jacket.
2. Max 350 per No. 24 AWG copper conductor telecommunication cables with PVC insulation and jacket material.
3. Max 7/C copper conductor No. 12 AWG multi-conductor power and control cables with PVC or cross-linked polyethylene (XLPE) insulation and PVC jacket.
4. Multiple fiber optical communication cables jacketed with PVC and having a max outside diam of 1/2 in.
5. Max 3/C No. 12 AWG steel clad cable with copper conductors and PVC insulation material.

C. **Individual Cables** — Any of the following types and sizes of individual (non-bundled) cables may be used:

1. Max 3/C No. 2/0 AWG (or smaller) copper conductor PVC jacketed aluminum clad or steel clad TECK 90 cable.
2. **Through Penetrating Product**** — Any cables, **Armored Cable*** or **Metal-Clad Cable*** currently Classified under the **Through Penetrating Product** category.

See **Through Penetrating Product** (XHUY) category in the Fire Resistance Directory for names of manufacturers.

3. Max 500 kcmil single copper or aluminum conductor power cable with thermoplastic insulation and polyvinyl chloride (PVC) jacket.
4. Max 350 per No. 24 AWG copper conductor telecommunication cables with PVC insulation and jacket material.
5. Max 7/C copper conductor No. 12 AWG multi-conductor power and control cables with PVC or cross-linked polyethylene (XLPE) insulation and PVC jacket.
6. Multiple fiber optical communication cables jacketed with PVC and having a max outside diam of 1/2 in.
7. Max 3/C No. 12 AWG steel clad cable with copper conductors and PVC insulation material.
8. Max 4C/750 kcmil (or smaller) aluminum or copper conductor metal clad cable with aluminum or steel armor, with or without PVC jacket.

D. **Cable Tray*** — (Not Shown) — Max 24 in. (610 mm) wide by 6 in. (152 mm) deep open-ladder steel or aluminum cable tray. Aggregate cross-sectional area of cable tray to be max 40 percent of the cross-sectional area of the cable tray based on a max 3 in. cable loading depth. Any combination of the types and sizes of cables described in Item 2B may be used. Cable tray to be rigidly supported on both sides of floor or wall assembly.

3. **Pipe Insulation** — (Optional) - Pipes and tubes of the sizes noted below may be provided with one of the following types of pipe insulations :

A. **Pipe Covering*** — Nom 1-1/2 in. (38 mm) thick (or thinner) hollow cylindrical heavy density glass fiber units jacketed on the outside with an all service jacket for pipes with a nom diam of 8 in. (203 mm) (or smaller) or tubes with a nom diam of 4 in. (102 mm) (or smaller). Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product.

See **Pipe and Equipment Covering - Materials** (SMGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.

B. **Pipe Covering*** — Nom 2 in. (51 mm) thick (or thinner) hollow cylindrical heavy density glass fiber units jacketed on the outside with an all service jacket for pipes or tubes with a nom diam of 2 in. (51 mm) (or smaller). Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product.

See **Pipe and Equipment Covering - Materials** (SMGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.

C. **Tube Insulation-Plastics+** — Nom 1 in. (25 mm) thick (or thinner) acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing for pipes or tubes with a nom diam of 2 in. (51 mm) (or smaller).

See **Plastics** (QMFZ) category in the Plastics Recognized Component Directory for names of manufacturers. Any Recognized Component tube insulation material meeting the above specifications and having a UL 94 Flammability Classification of 94-5VA may be used.

4. **Firestop System** — The firestop system shall consist of the following:

A. **Packing Material** — Min 4 in. (102 mm) thickness of 4 pcf (64 kg/m^3) mineral wool batt insulation tightly packed into the opening as a permanent form. Packing material to be recessed from top surface of floor or both surfaces of wall to accommodate the required thickness of fill material.

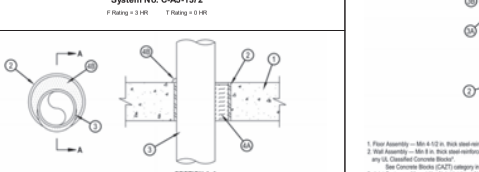
B. **Fill, Void or Cavity Material – Sealant*** — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus flush with the top surface of the floor or both surfaces of the wall.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE Sealant

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

System No. C-AJ-1372

F Rating = 3 HR
T Rating = 0 HR



1. Floor or Wall Assembly — Min 4-1/2 in. (floor) or 4-3/4 in. thick (walls) reinforced lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 10-1/2 in.
See Concrete Blocks (CAZT) in the Fire Resistance Directory for names of manufacturers.
2. Metallic Sleeve — (Optional) Nom 10 in. diam (or smaller) Schedule 40 (or heavier) steel sleeve cast or grouted into floor or wall assembly, flush with both surfaces of floor or wall.
3. Through-Penetrant — One metallic pipe or conduit to be installed either concentrically or eccentrically within the firestop system. The annular space between pipe or conduit and periphery of opening shall be min 0 in. (point contact) to max 1-7/8. Pipe or conduit to be rigidly supported on both sides of floor assembly. The following types and sizes of metallic pipes or conduits may be used:
A. Steel Pipe — Nom 8 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.
B. Cast Iron Pipe — Nom 8 in. diam (or smaller) cast or ductile iron pipe.
C. Copper Pipe — Nom 4 in. diam (or smaller) Regular (or heavier) copper pipe.
D. Copper Tubing — Nom 4 in. diam (or smaller) Type L (or heavier) copper tubing.
E. Conduit — Nom 4 in. diam (or smaller) steel conduit.
F. Conduit — Nom 4 in. (or smaller) steel electrical metallic tubing (EMT).
4. Firestop System — The firestop system shall consist of the following:
A. Packing Materials — Min 4-1/4 in. thickness of min 4 pcf mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or both surfaces of wall to accommodate the required thickness of fill material.
B. Fill Void or Cavity Materials* - Sealant — Min 1/4 in. thickness of fill material applied within annulus, flush with top surface of floor or both surfaces of wall. At point contact location between pipe and concrete, a min 1/4 in. diam bead of fill material shall be applied at the concrete/pipe interface on the top surface of the floor or both surfaces of wall.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 606 Flexible Firestop Sealant
* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

UL System No. C-AJ-3095

F Ratings = 3 HR
T Ratings = 0, 1/2 and 3/4 HR (See Item 3)

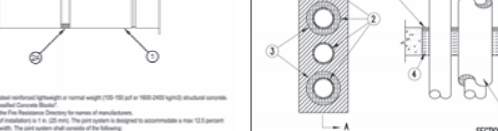


1. Floor or Wall Assembly — Min 2-1/2 in. (64 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete floor or min 2-in. (76 mm) thick reinforced lightweight or normal weight concrete wall. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 6 in. (152 mm).
See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Sleeve — (Optional) — Nom 6 in. (152 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe cast or grouted into floor or wall assembly, flush with floor or wall surfaces or extending a max 3 in. (76 mm) above the floor or both surfaces of the wall. If the steel sleeve extends above the floor or both surfaces of the wall, the T Rating of the firestop system is 0 hr.
3. Cables — Aggregate cross-sectional area of cables in opening to be min 25 percent to max 45 percent of the aggregate cross-sectional area of the opening. Cables to be rigidly supported on both sides of floor or wall assembly. Any combination of the following types and sizes of metallic conductor or fiber optic cable may be used:
A. Max 500 kcmil single copper conductor power cable with thermoplastic insulation and polyvinyl chloride (PVC) jacket. When single copper conductor power cable is used, T, FT and FTH Rating is 0 hr.
B. Max 350 kcmil single conductor power cables with either aluminum or copper conductors and cross-linked polyethylene (XPLE) insulation. When single aluminum conductor power cable is used, T Rating is 0 hr. When single copper conductor power cable is used, T, FT and FTH Rating is 1/2 hr.
C. Max 300 pair No. 24 AWG copper conductor telecommunication cables with polyvinyl chloride (PVC) insulation and jacket material. When telecommunication cable is used, T, FT and FTH Rating is 0 hr.
D. Max three copper connector No. 6 AWG cable with polyvinyl chloride (PVC) insulation and jacket material. When multi-connector power cable is used, T Rating is 0 hr.
E. Max 7/C copper conductor No. 12 AWG multiconductor power and control cables with PVC or cross-linked polyethylene (XLPE) insulation and PVC jacket. When multiconductor power and control cable is used, T, FT and FTH Rating is 3/4 hr.
F. Multiple fiber optical communication cables jacketed with PVC and having a max outside diam of 1/2 in. When fiber optic cable is used, T, FT and FTH Rating is 3/4 hr.
G. Max 3/C copper conductor No. 12 AWG with fiber aluminum ground, polyvinyl chloride (PVC) insulated steel, Metal-clad cable+. When MC cable is used, T, FT and FTH Rating is 0 hr.
MC CABLE SYSTEMS INC
4. Max 3/C with ground 2/0 AWG copper conductor SER cable with cross-linked polyethylene (XLPE) insulation and polyvinyl chloride (PVC) jacket. When SER cable is used, T, FT and FTH Rating is 0 hr.
Max RG/U coaxial cable with polyethylene (PE) insulation and polyvinyl chloride (PVC) jacket having a max outside diameter of ½ in. When coaxial cable is used, T Rating is 0 hr.
I. Fire Resistive Cables* - Max 1-1/4 in. (32 mm) diam single conductor or multi conductor Type MI cable. A min 1/8 in. (3 mm) separation shall be maintained between MI cables and any other type of cable. When Fire Resistive Cables *are used, T, FT and FTH Rating is 0 hr.
L. Through Penetrating Product** — Any Cables, Metal-Clad Cable+ or Armored Cable+ currently Classified under the Through Penetrating Products category.
See Through Penetrating Product (XHUY) category in the Fire Resistance Directory for names of manufacturers.
sckring Material — Min 2 in. (51 mm) thickness of min 4 pcf (64 kg/m3) mineral wool batt insulation firmly packed into opening as a permanent
m. Packing material to be recessed 1/2 in. (13 mm) from top surface of floor or from both surfaces of wall to accommodate the fill material. If the
et sleeve (Item 2) extends above the top of the floor, the packing material shall be flush with the bottom surface of the floor.
I, Void or Cavity Material* — Sealant — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with top surface of floor or
h both surfaces of wall.
I CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-One Sealant or FS-ONE MAX Intumescent Sealant

icates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL (such as Canada), pectively.

UL System No. WW-D-0032

F Rating = 2 HR Normal Joint Width = 1 in.
Class II Movement Capabilities - 15.5% Compression and Extension



fall Assembly — Min 8 in. (203 mm) thick steel reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) structural concrete. Mill may also be constructed of any UL Classified Concrete Blocks*.
See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
oint System — Max width of joint (at time of installation) is 1 in. (25 mm). The joint system is designed to accommodate a max 12.5 percent mpression or extension from its installed width. The joint system shall consists of the following:
A. Fill, Void or Cavity Material* - Sealant — A min 1/4 in. (6 mm) or min 1/2 in. (13 mm) thickness of fill material installed within the joint, flush with each surface of the wall. When min 1/4 in. (6 mm) thickness is used, the hourly ratings of the system are 1 hr.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC —CP606 Flexible Firestop Sealant
B. Forming Material — (Optional, Not Shown) - Mineral wool insulation or polyurethane foam backer rod. Forming material to be recessed from both surfaces of the wall as required to accommodate the required thickness of fill material.

ilcates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), spectively.

UL System No. HW-D-0097

Assembly Rating = 2 HR
Normal Joint Width = 2 in.
Class II Movement Capabilities - 12.5 % Compression or Extension



1. Floor Assembly — Min 4-1/2 in. thick steel-reinforced lightweight or normal weight (100-150 pcf) structural concrete.
2. Wall Assembly — Min 8 in. thick steel-reinforced lightweight or normal weight (100-150 pcf) structural concrete. Wall may also be constructed of any UL Classified Concrete Blocks*.
See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
3. Joint System — Max width of joint (at time of installation of joint system) is 2 in. The joint system is designed to accommodate a max 14 percent compression or extension from its installed width. The joint system shall consist of the following:
A. Forming Material — Min 4.0 pcf mineral wool batt insulation installed in joint opening as a permanent form. Batt cut to min width of 8 in. and installed cut edge-first into joint opening, parallel with joint direction, such that batt sections are compressed min 50 percent in thickness and such that the compressed batt sections are flush with both surfaces of wall. Adjoining lengths of batt to be tightly butted with butted seams spaced min 48 in. apart along the lengths of the joint.
ROCK WOOL MANUFACTURING CO — Delta Board
B. Fill, Void or Cavity Material* — Min 1/8 in. wet thickness of fill material sprayed or troweled on each side of wall to completely cover mineral wool forming material and to overlap a min 1/2 in. onto concrete floor and concrete wall.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP672 Firestop Spray or CFS-SP WB Firestop Joint Spray
*Bearing the UL Classification Mark

UL System No. F-A-2053

F Rating = 2 HR
T Rating = 0 HR



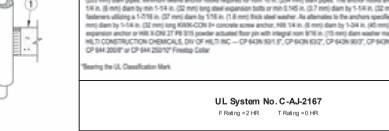
1. Floor Assembly — Min 2-1/2 in. (64 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete.
1A. Floor Assembly - (Optional - Not Shown) — The fire rated unprotected concrete and steel floor assembly shall be constructed of the materials and in the manner specified in the individual D900 Series designs in the UL Fire Resistance Directory and as summarized below:
A. Concrete — Min 2-1/2 in (64 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete.
B. Steel Floor and Form Units* — Composite or non-composite max 3 in. (76 mm) deep galv steel fluted units as specified in the individual Floor-Ceiling Design.
2. Firestop Device* — Cast in place firestop device permanently embedded during concrete placement or grouted in concrete assembly in accordance with accompanying installation instructions. The 3, 4 and 6 in. devices may extend a max 2 in. (51 mm) above the top surface of the concrete. The max extension above the slab for the 2 and 2.5 in. devices is not restricted.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 680-75/2.5"N, CP 680-110/4"N, CP 680-160/6"N, CP 680-P 2", CP 680-P 3", CP 680-P 4", CP 680-P 6"
3. Through Penetrants — One nonmetallic pipe or conduit to be installed within the firestop system. Pipe or conduit to be rigidly supported on both sides of floor assembly. The following types and sizes of nonmetallic pipes or conduits may be used:
A. Polyvinyl Chloride (PVC) Pipe — Nom 6 in. (152 mm) diam (or smaller) Schedule 40 solid or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
B. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 6 in. (152 mm) diam (or smaller) SDR11 or SDR13.5 CPVC pipe for use in closed (process or supply) piping systems.
C. Rigid Nonmetallic Conduit+ — Nom 6 in. (152 mm) diam (or smaller) Schedule 40 PVC conduit installed in accordance with the National Electrical Code (NFPA No. 70).
The firestop devices and nonmetallic penetrants shall be sized as follows:

Nom Pipe Diameter	Firestop Device
3/4 in. to 2 in. (19 mm to 51 mm)	CP 680-75/2.5"N CP 680-P 2"
3 in. (76 mm)	CP 680-P 3"
3 in. to 4 in. (76 mm to 102 mm)	CP 680-110/4"N CP 680-P 4"
6 in. (152 mm)	CP 680-160/6"N CP 680-P 6"

4. Firestop Device* — (Not shown) -Top seal plug for use with CP 680-75/2.5"N devices and nom pipe or conduit sizes 3/4 in. (19 mm) to 2 in. (51 mm), installed in accordance with the manufacturer's instructions. The top seal plug is optional for nom 1-1/2 in. (38 mm) pipes and conduits. Top seal plugs are required for all pipes and conduits less than nom 1-1/2 in. (38 mm). W Rating applies only when the CPS or IPS Top Seal Plugs are used.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CPS and IPS Top Seal Plugs
4A. Firestop Device* - Water Barrier Modules — (Optional, Not Shown) - Applies to nom 2", 3" and 4" water barrier modules used in combination with the CP 680-P 2", CP 680-P 3" and CP 680-P 4" devices, respectively, and supplied by device manufacturer. Module is threaded onto top of device. W Rating applies only when water barrier module is used.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — Water Barrier Module
*Bearing the UL Classification Mark
+Bearing the UL Listing Mark

UL System No. C-AJ-8041

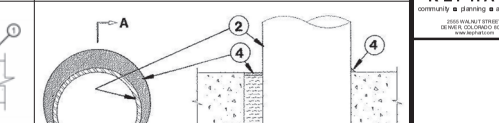
F Rating =3 HR
T Rating =0 and 1 HR



1. Floor or Wall Assembly — Min 4-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete floor or min 5 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete wall. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max area of opening is 1440 in.2 (9,290 cm^2) with a max dimension of 24 in.
See **Concrete Blocks** (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Through Penetrants — A max of 4 pipes, conduits or tubing to be installed within the opening. The space between pipes, conduits or tubing shall be 1-1/2 in. The space between pipes, conduits or tubing and periphery of opening shall be min 1-5/8 in. to max 2-1/2 in. Pipe, conduit or tubing to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
A. **Steel Pipe** — Nom 3 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.
B. **Copper Tubing** — Nom 3 in. diam (or smaller) Type L (or heavier) copper tubing.
C. **Copper Pipe** — Nom 3 in. diam (or smaller) Regular (or heavier) copper pipe.
D. **Conduit** — Nom 3 in. diam (or smaller) electrical metallic tubing or steel conduit.
3. **Pipe Covering*** — (Optional) – Max 1 in. thick hollow cylindrical heavy density (min 3.5 pcf) glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt strip tape supplied with the product. A nom annular space of 1-1/2 in. is required within the firestop system. **The T Rating is 1 hr when 1 in. thick pipe covering is used. The T Rating is 0 hr. when pipe covering is less than 1 in. or is omitted.**
See **Pipe and Equipment Covering – Materials** (SMGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.
4. Packing Material – Min 4 in. thickness of min 4.0 pcf mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of wall as required to accommodate the required thickness of fill material.
5. Fill, Void or Cavity Material* – Sealant – Min 1/2 in. thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI, INC. – FS-ONE Sealant
*Bearing the UL Classification Marking

UL System No. C-AJ-2109

F Ratings = 2 and 3 HR (See Item 3)
T Ratings = 0, 2 and 3 HR (See Items 2 and 3)



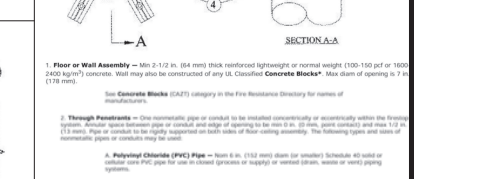
1. Floor or Wall Assembly — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 12 in. (305 mm).
See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Steel Sleeve — (Optional) - Nom 12 in. (305 mm) diam (or smaller) Schedule 40 (or heavier) steel pipe cast or grouted into floor or wall assembly, flush with floor or wall surfaces a max of 3 in. (76 mm) above the floor. If the steel sleeve extends above the floor, the T Rating of the firestop system is 0 Hr and a min 1/2 in. (13 mm) annular space is required between the through penetrant (Item 3) and the periphery of the opening. The W Rating does not apply when the steel sleeve is used.
3. Through Penetrants — One nonmetallic pipe to be installed either concentrically or eccentrically within the firestop system. For max 6 in. (152 mm) diam pipes, the annular space between the pipe and the periphery of opening shall be min 0 in. (0 mm, point contact) to max 1/2 in. (13 mm). For nom 8 in. (203 mm) and 10 in. (254 mm) diam pipes, the annular space between the pipe and the periphery of opening shall be min 0 in. (0 mm, point contact) to max 1-1/4 in. (32 mm). If the steel sleeve extends above the floor (Item 2), a min 1/2 in. (13 mm) annular space is required between the through penetrant (Item 3) and the periphery of the opening. Pipe to be rigidly supported on both sides of floor or wall assembly. For systems with a W Rating, the max annular space is 1/2 in. (13 mm). The T Ratings are dependent on the size and/or type of pipe as shown in the table below. The following types and sizes of nonmetallic pipes may be used:
A. Polyvinyl Chloride (PVC) Pipe — Nom 10 in. (254 mm) diam (or smaller) Schedule 40 solid core or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems. For systems with a W Rating, the nom diam of pipe shall not exceed 6 in. (152 mm).
B. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 10 in. (254 mm) diam (or smaller) SDR13.5 CPVC pipe for use in closed (process or supply) piping systems. For systems with a W Rating, the nom diam of pipe shall not exceed 6 in. (152 mm).
C. Acrylonitrile Butadiene Styrene (ABS) Pipe — Nom 6 in. (152 mm) diam (or smaller) Schedule 40 solid-core or cellular core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
D. Flame Retardant Polypropylene (FRPP) Pipe — Nom 6 in. (152 mm) diam (or smaller) Schedule 40 FRPP pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

Pipe Type	Nom Pipe Diam, In. (mm)	F Rating Hr
PVC, CPVC	Greater than 6 (152)	2
PVC, CPVC, ABS, FRPP	6 (152) or smaller	3
Pipe Type	Nom Pipe Diam, In. (mm)	T Rating Hr
PVC, CPVC, ABS, FRPP	1-1/2, 2, 3 (38, 51, 76)	2
PVC, CPVC, ABS, FRPP	4 (102)	3
PVC, CPVC, ABS+, FRPP	6 (152)	3
PVC, CPVC	Greater than 6 (152)	0
ABS++	6 (152)	0

+ - Indicates solid core ABS only.
++ - Indicates cellular core ABS only.
4. Fill, Void or Cavity Material* — Sealant — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with top or bottom surface of floor or both surfaces of wall. Sealant is optional for pipes having a max diam of 6 in. (152 mm) in unsleeved openings. For systems with W Rating, min 1/2 in. (13 mm) thickness of CP 601S or CP 604 Sealant shall be applied within the annulus, flush with top or bottom surface of floor. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE Sealant, CP 601S Sealant or CP 604 Sealant
4A. Packing Material (not shown) — Min 1/2 in. (13 mm) thickness of 4 pcf (64 kg/m3) mineral wool batt insulation firmly packed into annular space and recessed from the top surface of floor to accommodate the required thickness of fill material. Required only when CP 604 Sealant is used.
5. Firestop Device* — Firestop Collar — Firestop collar shall be installed in accordance with the accompanying installation instructions. Collar to be installed and latched around the pipe and secured to underside of floor or both sides of wall using the anchor hooks provided with the collar. Minimum two anchor hooks for nom 1-1/2 and 2 in. (38 and 51 mm) diam pipes. Minimum three anchor hooks required for nom 3 and 4 in. (76 and 102 mm) diam pipes. Minimum four anchor hooks required for nom 6 in. (152 mm) diam pipes. Minimum ten anchor hooks required for nom 8 in. (203 mm) diam pipes. Minimum twelve anchor hooks required for nom 10 in. (254 mm) diam pipes. The anchor hooks are to be secured with min 1/4 in. (6 mm) diam by min 1-1/4 in. (32 mm) long steel expansion bolts or min 0.145 in. (3.7 mm) diam by 1-1/4 in. (32 mm) long powder actuated fasteners utilizing a 1-7/16 in. (37 mm) diam by 9/16 in. (1.6 mm) thick steel washer. As alternates to the anchors specified above, Hilti 1/4 in. (6 mm) diam by 1-3/4 in. (32 mm) long KWIK-CON+ concrete screw anchor, Hilti 1/4 in. (6 mm) diam by 1-3/4 in. (45 mm) long KWIK-BOLT 3 steel expansion anchor or Hilti X-ONI 2T P8 S15 powder actuated floor pin with integral nom 9/16 in. (15 mm) diam washer may be used.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI, INC — CP 642N 50/1.5", CP 642N 93/3", CP 642N 160/6", CP 642N 110/4", CP 643 160/6", CP 644 200/8" or CP 644 250/10" Firestop Collar
*Bearing the UL Classification Mark

UL System No. C-AJ-2167

F Rating = 2 HR
T Rating =0 HR



1. **Floor or Wall Assembly** — Min 4-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks***. Floor may also be constructed of any min 6 in. thick UL Classified hollow core Precast Concrete Units*, having a min 2 in. concrete thickness below the core. Max diam of opening is 3 in.

See **Concrete Blocks** (CAZT) and Precast Concrete Units (CFTV) categories in the Fire Resistance Directory for names of manufacturers.

2. **Through Penetrants** — One nonmetallic pipe to be installed concentrically or eccentrically within the firestop system. Annular space between pipe and edge of opening to be min 0 in. (point contact) and max 5/8 in. Pipe to be rigidly supported on both sides of floor-ceiling assembly. The following types and sizes of nonmetallic pipes may be used.

A. **Polyvinyl Chloride (PVC) Pipe** — Nom 2 in. diam (or smaller) Schedule 40 solid or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

B. **Chlorinated Polyvinyl Chloride (CPVC) Pipe** — Nom 2 in. diam (or smaller) SDR13.5 CPVC pipe for use in closed (process or supply) piping systems.

3. **Fill, Void or Cavity Material* — Sealant** — Min 2 in. thickness of fill material applied within the annulus, flush with bottom surface of floor or with both surfaces of wall. At point contact location, min 1/2 in. diam bead of sealant applied at pipe/concrete interface on bottom surface of floor or both surfaces of wall.

HILTI CONSTRUCTION CHEMICALS, DIV OF

HILTI INC — FS-ONE Sealant

*Bearing the UL Classification Mark

UL System No. C-AJ-1149

F Rating = 2 HR
T Rating = 0 HR



SECTION A-A

1. **Floor or Wall Assembly** — Min 4-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks** *. Max diam of opening is 12 in.

See **Concrete Blocks** (CAZT) category in the Fire Resistance Directory for names of manufacturers.

2. **Through Penetrants** — One metallic pipe, conduit or tubing to be installed within the firestop system. Pipe, conduit or tubing to be rigidly supported on both sides of floor or wall assembly. The annular space shall be 0 in. (point contact) to max 1-1/4 in. The following types and sizes of metallic pipes, conduits or tubing may be used.

A. **Steel Pipe —** Nom 10 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.

B. **Iron Pipe —** Nom 10 in. diam (or smaller) cast or ductile iron pipe.

C. **Conduit —** Nom 4 in. diam (or smaller) steel electrical metallic tubing or steel conduit.

D. **Copper Tubing —** Nom 4 in. diam (or smaller) Type L (or heavier) copper tubing.

E. **Copper Pipe —** Nom 4 in. diam (or smaller) Regular (or heavier) copper pipe.

3. **Packing Material —** Min 3 in. thickness of min 4 pcf mineral wool batt insulation for nom 4 in. diam (and smaller) pipes, conduits or tubings and a min 4 in. thickness of min 4 pcf mineral wool batt insulation for pipe greater than nom 4 in. diam, firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of wall as required to accommodate the required thickness of fill material.

4. **Fill, Void or Cavity Material* — Sealant —** Min 1/2 in. thickness of fill material applied within the annulus, flush with the top surface of floor or both surfaces of wall. At the point of contact location between pipe and concrete, a min 1/2 in. diam bead of fill material shall be applied at the concrete/pipe interface on the top surface of floor and on both surfaces of wall. W Rating applies only when CP6015 or CP604 sealant is used.

HILTI CONSTRUCTION CHEMICALS, DIV OF

HILTI INC — CP601S, CP604, CP606 or FS-ONE Sealant

Bearing the UL Classification Mark

UL System No. C-AJ-2271

F Rating = 2 HR
T Rating = 1 HR



SECTION A-A

1. **Floor or Wall Assembly —** Min 2-1/2 in. (64 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m^3) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max diam of opening is 7 in. (178 mm).

See **Concrete Blocks** (CAZT) category in the Fire Resistance Directory for names of manufacturers.

2. **Through Penetrants** — One nonmetallic pipe or conduit to be installed concentrically or eccentrically within the firestop system. Annular space between pipe or conduit and edge of opening to be min 0 in. (0 mm, point contact) and max 1/2 in. (13 mm). Pipe or conduit to be rigidly supported on both sides of floor-ceiling assembly. The following types and sizes of nonmetallic pipes or conduits may be used.

A. **Polyvinyl Chloride (PVC) Pipe —** Nom 6 in. (152 mm) diam (or smaller) Schedule 40 solid or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

B. **Chlorinated Polyvinyl Chloride (CPVC) Pipe —** Nom 6 in. (152 mm) diam (or smaller) SDR13.5 CPVC pipe for use in closed (process or supply) piping systems.

C. **Acrylonitrile Butadiene Styrene (ABS) Pipe —** Nom 6 in. (152 mm) diam (or smaller) Schedule 40 solid or cellular core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

D. **Flame Retardant Polypropylene (FRPP) Pipe —** Nom 6 in. (152 mm) diam (or smaller) Schedule 40 FRPP pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

3. **Fill, Void or Cavity Materials* — Sealant** — Required for systems with W Rating, but otherwise optional. Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with top or bottom surface of floor. **W Rating applies only when CP601S or CP 604 Sealant is used.**

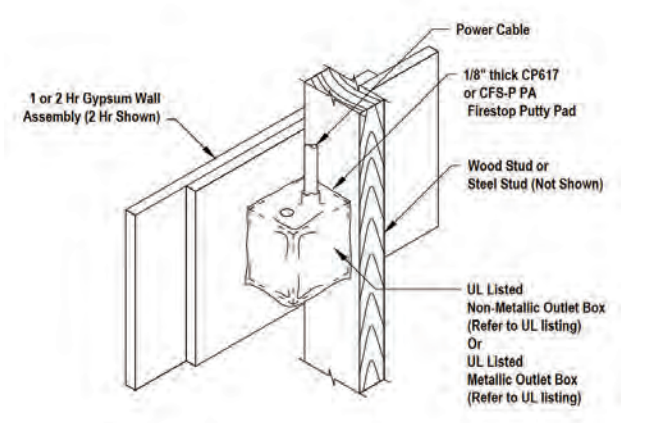
HILTI CONSTRUCTION CHEMICALS, DIV OF

HILTI INC — FS-ONE Sealant, CP 601S Sealant or CP 604 Sealant

3A. **Packing Material (not shown) —** Min 1/2 in. (13 mm) thickness of 4 pcf (64 kg/m^3) mineral wool batt insulation firmly packed into annular space and recessed from the top surface of floor to accommodate the required thickness of fill material. Required only when CP 604 Sealant is used.

4. **Firestop Device*–Firestop Collar —** Firestop collar shall be installed in accordance with the accompanying installation instructions. Collar to be installed and latched around the pipe and secured to underside of floor or both sides of wall using anchor hooks provided with the collar.

Wall Opening Protective Materials (CLIV)
as Tested to ANSI/UL 263
1 or 2 Hr Rating



CP 617 Firestop Putty Pads, for use with max 4 by 4 in. flush device UL Listed Metallic Outlet Boxes installed with steel cover plates in 1 and 2 hr. fire rated gypsum wallboard wall assemblies framed with min 3-1/2 in. deep wood or steel studs and constructed as specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory. Min 1/8 in. thick moldable putty pads are to be installed to completely cover the exterior surfaces of the outlet box (except for the side of the outlet box against the stud) and completely seal against the stud within the stud cavity. When moldable putty pad outlet box protective material is used on boxes on both sides of wall as directed, the horizontal separation between outlet boxes on opposite sides of the wall may be less than 24 in. provided that the boxes are not installed back to back.

CP 617 Firestop Putty Pads , for use with max 4-11/16 by 4-11/16 in. flush device UL Listed Metallic Outlet Boxes installed with steel cover plates for use in 1 hr fire rated configuration of Wall and Partition Design No. V446 in the Fire Resistance Directory. Min 1/8 in. thick moldable putty pads are to be installed to completely cover the exterior surfaces of the outlet box (except for the side of the outlet box against the stud) and to completely seal against the box within the stud cavity. When moldable putty pad outlet box protective material is used on boxes on both sides of wall as directed, the horizontal separation between outlet boxes on opposite sides of the wall may be less than 24 in. and the boxes may be installed back-to-back.

CP 617 Firestop Putty Pads , for use with max 4-11/16 by 4-11/16 in. flush device UL Listed Metallic Outlet Boxes installed with steel cover plates for use in 1 and 2 hr fire rated gypsum board wall assemblies framed with min 3-1/2 in. deep steel studs and constructed of the materials and in the manner specified in the individual U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory. Min 0.8 pcf density fiberglass batt insulation is to be installed within the wall cavity required for 1 hr fire rated gypsum board wall assemblies and optional in 2 hr fire rated gypsum wallboard assemblies. Min 1/8 in. thick moldable putty pads are to be installed to completely cover the exterior surfaces of the outlet box (except for the side of the outlet box against the stud) and to completely seal against the box within the stud cavity. When moldable putty pad outlet box protective material is used on boxes on both sides of wall as directed, the horizontal separation between outlet boxes on opposite sides of the wall may be less than 24 in. provided that the boxes are not installed back-to-back.

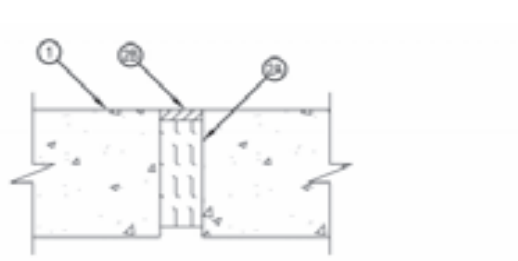
CP 617 Firestop Putty Pads, for use with max 4 by 3-3/4 by 3 in. deep UL Listed Nonmetallic Outlet Boxes manufactured by Carlon Electrical Products, made from polyvinyl chloride, and bearing a 2 hr rating under the "Outlet Boxes and Fittings Classification for Fire Resistance" category in the Fire Resistance Directory. Putty pads and boxes for use in 1 and 2 hr fire rated gypsum wallboard assemblies, framed with min 3-1/2 in. deep wood studs and constructed as specified in the individual U300 Series Wall and Partition Designs in the Fire Resistance Directory. Outlet box secured to wood stud by means of two nailing tabs supplied with the outlet box. Min 1/8 in. thick moldable putty pads are to be installed to completely cover the exterior surfaces of the outlet box (except for the side of the outlet box against the stud) including the nailing tab and completely seal against the stud within the stud cavity. Outlet boxes installed with steel or plastic cover plates. When moldable putty pad outlet box protective material is used on boxes on both sides of wall as directed, the horizontal separation between boxes on opposite sides of the wall may be less than 24 in. provided that the boxes are not installed back-to-back.

CP 617 Firestop Putty Pads , for use with max 4 by 4 by 2-7/8 in. deep UL Listed Nonmetallic Outlet Boxes manufactured by Carlon Electrical Products, made from polyvinyl chloride, and bearing a 2 hr rating under the "Outlet Boxes and Fittings Classification for Fire Resistance" category in the Fire Resistance Directory. Putty pads and boxes for use in the 1 hr fire rated V446 gypsum board/steel stud Wall and Partition Design in the Fire Resistance Directory. Outlet box secured to steel stud by means of fastening tab supplied with the outlet box. Min 1/8 in. thick moldable putty pads are to be installed to completely cover the exterior surfaces of the outlet box (except for the side of the outlet box against the stud) including the tab and completely seal against the stud within the stud cavity. Outlet boxes installed with steel or plastic cover plates. When moldable putty pad outlet box protective material is used on boxes on both sides of wall as directed, the horizontal separation between boxes on opposite sides of the wall may be less than 24 in. and the boxes may be installed back to back.

CP 617 Firestop Putty Pads, for use with max 2-1/4 by 3-3/4 by 2-3/4 in. deep UL Listed Nonmetallic Outlet Boxes manufactured by Pass and Seymore, Inc., and bearing a 2 hr rating under the "Outlet Boxes and Fittings Classification for Fire Resistance" category in the Fire Resistance Directory. Putty pads and boxes for use in 1 and 2 hr fire rated gypsum wallboard assemblies, framed with min 3-1/2 in. deep wood studs and constructed as specified in the individual U300 Series Wall and Partition Designs in the Fire Resistance Directory. Outlet box secured to wood stud by means of two nailing tabs supplied with the outlet box. Min 1/8 in. thick moldable putty pads are to be installed to completely cover the exterior surfaces of the outlet box (except for the side of the outlet box against the stud) including the nailing tab and completely seal against the stud within the stud cavity. Outlet boxes installed with steel or plastic cover plates. When moldable putty pad outlet box protective material is used on boxes on both sides of wall as directed, the horizontal separation between boxes on opposite sides of the wall may be less than 24 in. provided that the boxes are not installed back to back .

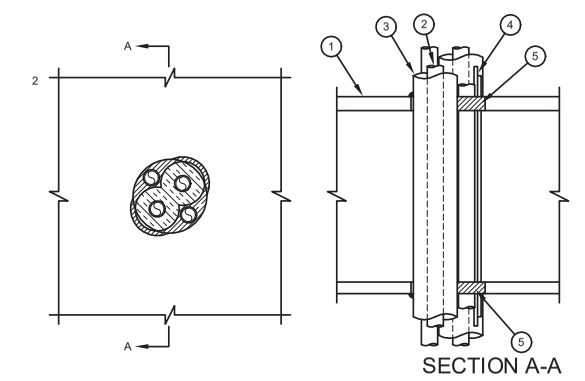
CP 617 Firestop Putty Pads, for use with max 4 by 3-3/4 by 3 in. deep UL Listed Nonmetallic Outlet Boxes manufactured by Allied Molded Products, Inc., made from fiber reinforced thermoplastic and bearing a 2 hr rating under the "Outlet Boxes and Fittings Classification for Fire Resistance" category in the Fire Resistance Directory. Putty pads and boxes for use in 1 hr fire rated gypsum wallboard assemblies, framed with min 3-1/2 in. deep wood studs and constructed as specified in the individual U300 Series Wall and Partition Designs in the Fire Resistance Directory. Outlet box secured to wood stud by means of two nailing tabs supplied with the outlet box. Min 1/8 in. thick moldable putty pads are to be installed to completely cover the exterior surfaces of the outlet box (except for the side of the outlet box against the stud) including the nailing tab and completely seal against the stud within the stud cavity. Outlet boxes installed with plastic cover plates. When moldable putty pad outlet box protective material is used on boxes on both sides of wall as directed, the horizontal separation between boxes on opposite sides of the wall may be less than 24 in. provided that the boxes are not installed back to back .

System No. F-C-2242
F Rating - 1 Hr T Rating - 3/4 Hr



1. Floor Assembly — Min 6 in. (152 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) structural concrete.
2. Joint System — Max width of joint (at time of installation of joint system) is 2 in. (51 mm). The joint system is designed to accommodate a max 6 percent compression or extension from its installed width. The joint system shall consist of the following:
A. Forming Material — Min 4 pcf (64 kg/m3) mineral wool batt insulation installed in joint opening as a permanent form. Pieces of batt cut to min width of 5 in. (127 mm) and installed edge-first into joint opening, parallel with joint direction, such that batt sections are compressed min 50 percent in thickness and such that the compressed batt sections are recessed from the top surface of the floor as required to accommodate the required thickness of fill material. Adjoining lengths of batt to be tightly-butted with butted seams spaced min 24 in. (610 mm) apart along the length of the joint.
FIBREX INSULATIONS INC — FBX Safing Insulation
B. Fill, Void or Cavity Material* — Sealant — Min 1/2 in. (13 mm) thickness of fill material applied within the joint, flush with top surface of floor.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP606 Flexible Firestop Sealant
*Bearing the UL Classification Mark

System No. F-C-8032
F Rating - 1 Hr T Rating - 1/4 Hr



1. Floor-Ceiling Assembly - The 1 hr fire-rated solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory. The general construction features of the floor-ceiling assembly are summarized below:

A. Flooring System - Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping Mixture* as specified in the individual Floor-Ceiling Design. Max diam of opening shall be 5 in.
B. Wood Joists* - Nom 10 in. deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or Structural Wood Members* with bridging as required and with ends firestopped.
C. Gypsum Board* - Nom 4 ft wide by 5/8 in. thick as specified in the individual Floor-Ceiling Design. Gypsum board secured to wood joists or furring channels as specified in the individual Floor-Ceiling Design.

1A. Chase Wall - (Optional, Not Shown) - The through penetrants (Item 2) may be routed through a 1 hr fire rated single, double or staggered wood stud/gypsum board chase wall. Depth of chase wall stud cavity to be min 1/2 in. greater than diameter of opening cut in sole and top plates to accommodate the through penetrant (Item 2). The chase wall shall be constructed of the materials and in the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. Studs - Nom 2 by 4 in., 2 by 6 in. or double nom 2 by 4 in. lumber studs.
B. Sole Plate - Nom 2 by 4 in., 2 by 6 in. or parallel 2 by 4 in. lumber plates, tightly butted. Max diam of opening is 5 in.
C. Top Plate - The double top plate shall consist of two nom 2 by 4 in., two nom 2 by 6 in. or two sets of parallel 2 by 4 in. lumber plates, tightly butted. Max diam of opening is 5 in.
D. Gypsum Board* - Thickness, type, number of layers and fasteners shall be as specified in the individual Wall and Partition Design.

2. Through Penetrants - One or more pipes, conduits, tubing and cables to be installed concentrically or eccentrically within the opening. The space between any penetrant to be min 0 in. (point contact) to max 1 in. The space between any penetrant and the periphery of the opening shall be min 0 in. (point contact) to max 1 in. Pipes, conduits, tubing and cables to be rigidly supported on both sides of floor-ceiling assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:

A. Copper Tube - Nom 3/4 in. diam (or smaller) Type L (or heavier) copper tube.
B. Copper Pipe - Nom 3/4 in. diam (or smaller) Regular (or heavier) copper pipe.
C. Steel Pipe - Nom 3/4 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.
D. Iron Pipe - Nom 3/4 in. diam (or smaller) cast or ductile iron pipe.
E. Conduit - Nom 3/4 in. diam (or smaller) steel electrical metallic tubing (EMT) or steel conduit.

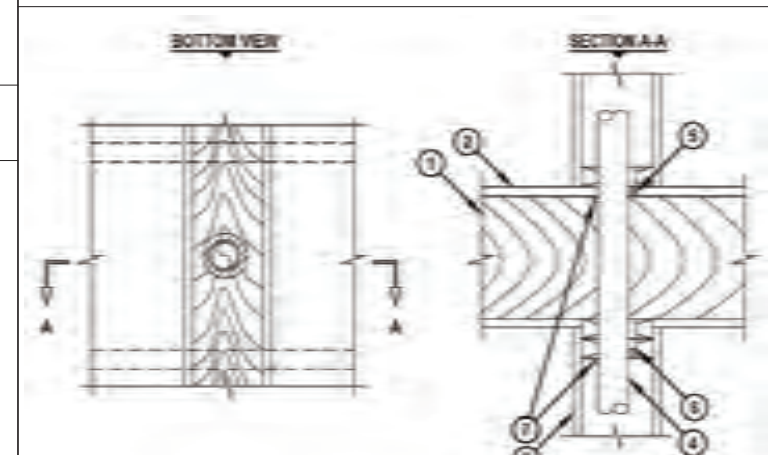
3. Tube Insulation - Plastics+ - Nom 3/4 in. thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing. Tube insulation to be installed on one or more of the metallic pipes or tubes.
See Plastics+ (QMFZ2) category in the Plastics Recognized Component Directory for names of manufacturers. Any Recognized Component tube insulation material meeting the above specifications and having a UL 94 Flammability Classification of 94-5VA may be used.

4. Cables - Max of two 4 pair No. 18 AWG (or smaller) cable with PVC insulation and jacket materials.

5. Fill, Void or Cavity Materials* -Sealant - Min 3/4 in. thickness of sealant applied within the annulus flush with the top surface of the floor or sole plate and min 5/8 in. thickness of sealant applied within the annulus flush with the bottom surface of gypsum board or lower top plate. A min 1/2 in. diameter bead of sealant applied at the penetrant/subflooring or sole plate interface and the penetrant/gypsum board or top plateinterface at point contact locations.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC - CP 606 Flexible Firestop Sealant
*Bearing the UL Classification Mark

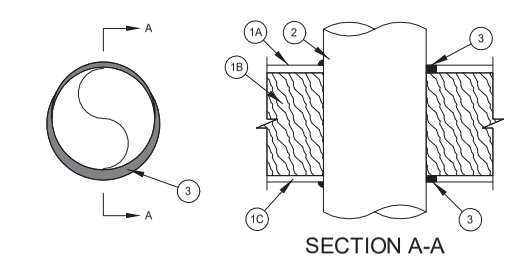
System No. F-C-2142
F Rating - 1 Hr T Rating - 3/4 Hr



1. WOOD FLOOR/CEILING ASSEMBLY (UL CLASSIFIED L500 SERIES) (1-HR. FIRE-RATING).
2. LUMBER OR PLYWOOD SUBFLOOR WITH FINISH FLOOR OF LUMBER, PLYWOOD, OR FLOOR TOPPING MIXTURE.
3. WOOD TOP PLATE.
4. GYPSUM WALL ASSEMBLY (1-HR. FIRE-RATING).
5. PENETRATING ITEM TO BE ONE OF THE FOLLOWING (ALSO SEE NOTE NO. 6 BELOW):
A. MAXIMUM 4" NOMINAL DIAMETER PVC PLASTIC PIPE (CLOSED OR VENTED PIPING SYSTEM).
B. MAXIMUM 4" NOMINAL DIAMETER ABS PLASTIC PIPE (CLOSED OR VENTED PIPING SYSTEM).
C. MAXIMUM 4" NOMINAL DIAMETER CPVC PLASTIC PIPE (CLOSED PIPING SYSTEM).
6. MINIMUM 1/2" DEPTH HILTI CP 606 FLEXIBLE FIRESTOP SEALANT.
7. MINIMUM 1/2" BEAD CP 606 FLEXIBLE FIRESTOP SEALANT AT POINT OF CONTACT. (ALSO SEE NOTE NO. 4 BELOW).

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 5-1/2".
2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 1".
3. PLASTIC PIPE MAY BE INSTALLED WITH CONTINUOUS POINT OF CONTACT.
4. WHEN ANNULAR SPACE IS 1/4" (OR LESS), ONLY A MINIMUM 1/2" BEAD OF HILTI CP 606 FLEXIBLE FIRESTOP SEALANT IS REQUIRED AT TOP PLATE AND SUBFLOOR, COVERING ANNULAR SPACE.
5. HILTI CP 606 FLEXIBLE FIRESTOP SEALANT MAY BE INSTALLED WITHIN THE SUBFLOOR OR WITHIN THE ANNULAR SPACE OF THE SOLE PLATE.
6. PVC AND ABS PIPE = SCHEDULE 40, CELLULAR OR SOLID CORE. CPVC PIPE = SDR 13.5.

System No. F-C-7025
F Rating -- 1 Hr T Rating -- 0 Hr



1. Floor-Ceiling Assembly -- The 1 hr fire-rated solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory. The general construction features of the floor-ceiling assembly are summarized below:

A. Flooring System -- Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping Mixture* as specified in the individual Floor-Ceiling Design. Max diam of opening shall be 11 in. (279 mm).
B. Wood Joists* -- Nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or Structural Wood Members* with bridging as required and with ends firestopped.
C. Gypsum Board* -- Nom 4 ft (1.22 m) wide by 5/8 in. (16 mm) thick as specified in the individual Floor-Ceiling Design. Gypsum board secured to wood joists or furring channels as specified in the individual Floor-Ceiling Design. Max diam of opening shall be 11 in. (279 mm).

1A. Chase Wall -- (Optional, Not Shown) -- The through penetrants (Item 2) may be routed through a 1 hr fire rated single, double or staggered wood stud/gypsum board chase wall. Depth of chase wall stud cavity to be min 1/2 in. (13 mm) greater than diameter of opening cut in sole and top plates to accommodate the through penetrant (Item 2). The chase wall shall be constructed of the materials and in the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. Studs -- Nom 2 by 4 in. (51 by 102 mm), 2 by 6 in. (51 by 152 mm), 2 by 10 in. (51 by 254 mm) or 2 by 12 in. (51 by 305 mm) lumber studs or double min 2 by 4 in. lumber studs.
B. Sole Plate -- Nom 2 by 4 in. (51 by102 mm), 2 by 6 in. (51 by152 mm) 2 by 10 in. (51 by 254 mm) or 2 by 12 in. (51 by 305 mm) lumber plates or parallel min 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Max diam of opening is 11 in. (279 mm).
C. Top Plate -- The double top plate shall consist of two nom 2 by 4 in. (51 by 102 mm), two nom 2 by 6 in. (51 by 152 mm), two nom 2 by 10 in. (51 by 254 mm) or two nom 2 by 12 in. (51 by 305 mm) lumber plates or two sets of parallel min 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Max diam of opening is 11 in. (279 mm).
D. Gypsum Board* -- Thickness, type, number of layers and fasteners shall be as specified in the individual Wall and Partition Design.

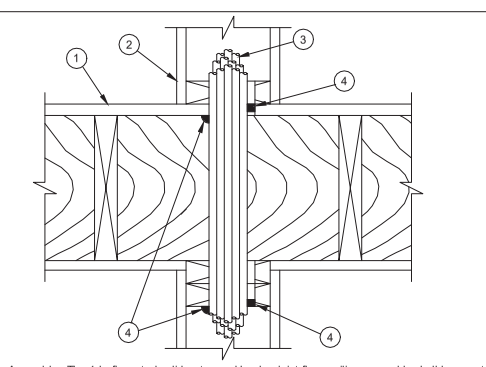
2. Steel Duct -- One steel duct to be installed concentrically or eccentrically within the opening. The annular space between the steel duct and the periphery of opening shall be min 0 in. (0 mm, point contact) to max 1 in. (25 mm). Steel duct to be rigidly supported on both sides of floor-ceiling assembly. The following sizes of steel ducts may be used:

A. Max 10 in. (254 mm) diam by min 0.019 in. (0.50 mm) thick steel duct.
B. Max 4 in. (102 mm) diam by min 0.016 in. (0.40 mm) thick steel duct.

3. Fill, Void or Cavity Materials*-Sealant -- Min 3/4 in. (19 mm) thickness of sealant applied within the annulus flush with the top surface of the floor or sole plate. Min 5/8 in. (16 mm) thickness of sealant applied within the annulus flush with the bottom surface of gypsum board or lower top plate. A min 1/2 in. (13 mm) diam bead of sealant to be applied at the duct/subflooring or sole plate interface and the duct/gypsum board or top plate interface.

HILTI CONSTRUCTION CHEMCIALS, DIV OF HILTI INC -- CP 606 Flexible Firestop Sealant.
*Bearing the UL Classification Mark

System No. F-C-3071
F Rating - 1 Hr T Rating - 1 Hr



1. Floor-Ceiling Assembly - The 1 hr fire-rated solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory. The general construction features of the floor-ceiling assembly are summarized below:

A. Flooring System - Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping Mixture* as specified in the individual Floor-Ceiling Design. Max diam of opening shall be 3 in.
B. Wood Joists* - Nom 10 in. deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or Structural Wood Members* with bridging as required and with ends firestopped.
C. Gypsum Board* - Nom 4 ft wide by 5/8 in. thick as specified in the individual Floor-Ceiling Design. Gypsum board secured to wood joists or furring channels as specified in the individual Floor-Ceiling Design.

2. Chase Wall - The through penetrants shall be routed through 1 hr fire-rated single, double or staggered wood stud/gypsum board chase wall constructed of the materials and in the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. Studs - Nom 2 by 6 in. lumber studs.
B. Sole Plate - Nom 2 by 6 in. lumber plates. Max diam of opening is 3 in.
C. Top Plate - The double top plate shall consist of two nom 2 by 6 in. lumber plates. Max diam of opening is 3 in. D.
D. Gypsum Board* - Thickness, type, number of layers and fasteners shall be as specified in individual Wall and Partition Design.

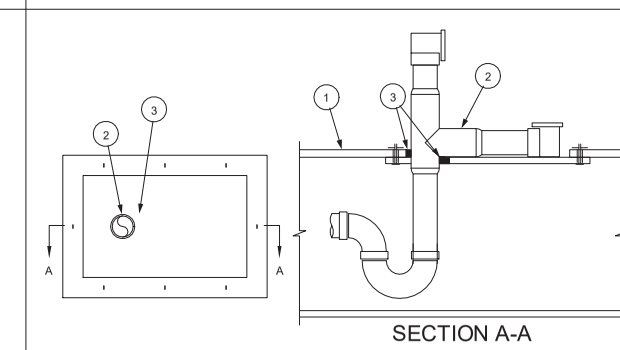
3. Cables - Aggregate cross-sectional area of cable in opening to be max 45 percent of the cross-sectional area of the opening. The annular space between the cable bundle and the periphery of the opening to be min 0 in. (point contact) to max 1 in. Cables to be rigidly supported on both sides of the wall assembly. Any combination of the following types and sizes of copper conductor cables may be used:

A. Max 25 pair No. 24 AWG telephone cable with PVC insulation and jacket.
B. Type RG 59/U coaxial cable with polyethylene (PE) insulation and PVC jacket.
C. Max 3/C with ground 2/0 AWG aluminum conductor SER cable with PVC insulation and jacket.
D. Max 3/C No. 8 AWG copper conductor steel clad cable.
E. Max 3/C No. 10 with ground Type NM nonmetallic sheathed (Romex) cable with PVC insulation and jacket.
F. Max 1 in. diam metal clad TEK cable with PVC jacket.

4. Fill, Void or Cavity Materials*-Sealant - Min 1/2 in. thickness of fill material applied around through penetrant within the annulus on top surface of floor or sole plate of chase wall. Min 1/2 in. thickness of fill material applied within the annulus of the top plate flush with the bottom surface of the lower top plate. Min 1/2 in. bead of fill material applied at the penetrant/lumber interfaces at point contact locations on bottom surface of plywood or top surface of sole plate, and bottom surface of lower top plate.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC - CP 606 Flexible Firestop Sealant
*Bearing the UL Classification Mark

System No. F-C-2262
F Rating - 1 Hr T Rating - 1 Hr



1. Floor-Ceiling Assembly - The 1 hr fire-rated solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory. The general construction features of the floor-ceiling assembly are summarized below:

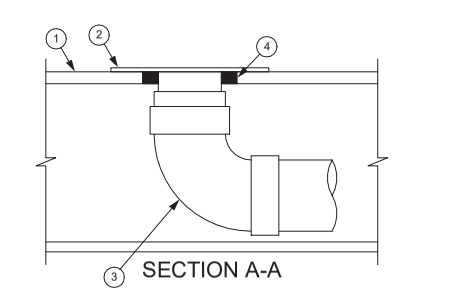
A. Flooring System - Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping Mixture* as specified in the individual Floor-Ceiling Design. Rectangular cutout in flooring to accommodate the bathtub drain piping (Item 2) to be max 8 in. by 12 in. Cutout to be patched on underside of subfloor using one layer of min 3/4 in. thick plywood or min 5/8 in. thick gypsum board (Item 1C) sized to lap min 2 in. beyond each edge of rectangular cutout. Patch split into two pieces at opening and hole-sawed for bathtub drain piping. Diam of opening hole sawed through patch to accommodate drain piping (Item 2) to be 1 in. larger than outside diam of drain piping and positioned such that the annular space between drain piping and periphery of opening is min 0 in. (point contact) to max 1 in. Two pieces positioned around drain piping, with cut edges tightly butted, and screw-attached to underside of subfloor with 1-1/4 in long steel screws spaced max 6 in. OC.
B. Wood Joists* - Nom 10 in. deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or Structural Wood Members* with bridging as required and with ends firestopped.
C. Gypsum Board* - Nom 5/8 in. thick, 4 ft wide as specified in the individual Floor-Ceiling Design.

2. Drain Piping - Nom 1-1/2 in. (or smaller) diam Schedule 40 acrylonitrile butadiene styrene (ABS) or polyvinyl chloride (PVC) pipe and drain fittings cemented together and provided with ABS or PVC bathtub waste/overflow fittings. Annular space shall be min 0 in. (point contact) to max 1 in.

3. Fill, Void or Cavity Materials* - Min 5/8 in. depth of fill material applied within the annulus, flush with both surfaces of plywood or gypsum board patch. A min 1/2 in. diameter bead of sealant applied at the pipe/plywood or pipe/gypsum board interface at point contact location on the bottom side of patch.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC - CP 606 Flexible Firestop Sealant
*Bearing the UL Classification Mark

System No. F-C-2263
F Rating - 1 Hr T Rating - 1 Hr



1. Floor-Ceiling Assembly - The 1 hr fire-rated solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory. The general construction features of the floor-ceiling assembly are summarized below:

A. Flooring System - Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping Mixture* as specified in the individual Floor-Ceiling Design. Max diam of opening shall be 5 in.
B. Wood Joists* - Nom 10 in. deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or Structural Wood Members* with bridging as required and with ends firestopped.
C. Gypsum Board* - Nom 5/8 in. thick, 4 ft wide as specified in the individual Floor-Ceiling Design.

2. Closet Flange - Acrylonitrile butadiene styrene (ABS) or polyvinyl chloride (PVC) closet stub sized to accommodate drain pipe. Closet flange installed over drain piping within floor opening with flange secured to plywood floor with steel screws. Annular space between closet flange and periphery of opening shall be 1/4 in.

3. Drain Piping - Nom 4 in. diam Schedule 40 acrylonitrile butadiene styrene (ABS) or polyvinyl chloride (PVC) drain pipe and 90 degree elbow for use in vented (drain, waste or vent) piping systems. Pipe installed concentrically within firestop system.

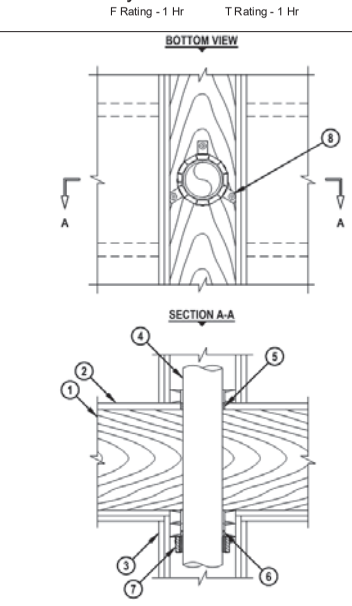
4. Fill, Void or Cavity Materials* - Sealant - Min 3/4 in. thickness of fill material applied within the annulus, flush with the bottom surface of floor.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC - CP 606 Flexible Firestop Sealant or FS-ONE Sealant

5. Water Closet - (Not Shown) - Floor mounted vitreous china water closet.

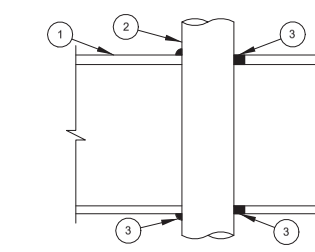
*Bearing the UL Classification Mark

System No. F-C-2030
F Rating - 1 Hr T Rating - 1 Hr



4

System No. F-C-1106
F Rating -- 1 Hr T Rating -- 1/4 Hr



1. Floor-Ceiling Assembly -- The 1 hr fire-rated solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory. The general construction features of the floor-ceiling assembly are summarized below:

A. Flooring System -- Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping Mixture* as specified in the individual Floor-Ceiling Design. Max diam of opening shall be 5 in.
B. Wood Joists* -- Nom 10 in. deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or Structural Wood Members* with bridging as required and with ends firestopped.
C. Gypsum Board* -- Nom 4 ft wide by 5/8 in. thick as specified in the individual Floor-Ceiling Design. Gypsum board secured to wood joists or furring channels as specified in the individual Floor-Ceiling Design.

1A. Chase Wall -- (Optional, Not Shown) -- The through penetrants (Item 2) may be routed through a 1hr fire rated single, double or staggered wood stud/gypsum board chase wall. Depth of chase wall stud cavity to be min 1/2 in. greater than diameter of opening cut in sole and top plates to accommodate the through penetrant (Item 2). The chase wall shall be constructed of the materials and in the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. Studs -- Nom 2 by 4 in., 2 by 6 in. or double nom 2 by 4 in. lumber studs.
B. Sole Plate -- Nom 2 by 4 in., 2 by 6 in. or parallel 2 by 4 in. lumber plates, tightly butted. Max diam of opening is 5 in.
C. Top Plate -- The double top plate shall consist of two nom 2 by 4 in., two nom 2 by 6 in. or two sets of parallel 2 by 4 in. lumber plates, tightly butted. Max diam of opening is 5 in.
D. Gypsum Board* -- Thickness, type, number of layers and fasteners shall be as specified in the individual Wall and Partition Design.

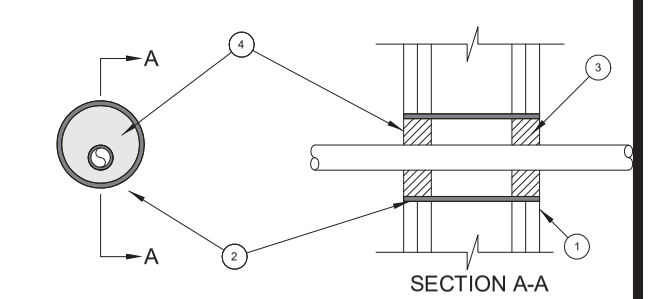
2. Through Penetrants -- One metallic pipe, conduit or tubing, to be installed concentrically or eccentrically within the opening. The diam of the opening shall be 1 in. larger than the nom diam of the penetrant. The annular space between the pipe, conduit or tubing and the periphery of opening shall be min 0 in. (point contact) to max 7/8 in. Tube or pipe to be rigidly supported on both sides of floor-ceiling assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:

A. Copper Tube -- Nom 4 in. diam (or smaller) Type L (or heavier) copper tube.
B. Copper Pipe -- Nom 4 in. diam (or smaller) Regular (or heavier) copper pipe.
C. Steel Pipe -- Nom 4 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.
D. Iron Pipe -- Nom 4 in. diam (or smaller) cast or ductile iron pipe.
E. Conduit -- Nom 4 in. diam (or smaller) steel electrical metallic tubing (EMT) or steel conduit.

3. Fill, Void or Cavity Materials*-Sealant -- Min 3/4 in. thickness of sealant applied within the annulus flush with the top surface of the floor or sole plate and min 5/8 in. thickness of sealant applied within the annulus flush with the bottom surface of gypsum board or lower top plate. A min 1/2 in. diameter bead of sealant applied at the penetrant/subflooring or sole plate interface and the penetrant/gypsum board or top plateinterface at point contact locations.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC -- CP 606 Flexible Firestop Sealant
*Bearing the UL Classification Mark. RE: IBC Section 713.7.1.2 Penetration aticipates exception in this section.

System No. W-L-2186
F Ratings -- 1 and 2 Hr T Ratings -- 1/2 and 1 Hr
L Rating at Ambient - Less Than 1 CFM/sq ft
L Rating at 400 F - 2 CFM/sq ft



1. Wall Assembly -- The 1 or 2 hr fire rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. Studs -- Wall framing shall consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced max 16 in. (406 mm) . Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC.
B. Gypsum Board* -- For 1 hr assembly, one layer of min 5/8 in. (16 mm) thick gypsum board as required in the individual Wall and Partition Design. For 2 hr assembly, two layers of min 5/8 in. (16 mm) thick gypsum board as required in the individual Wall and Partition Design. Max diam of opening is 3 in. (76 mm).

The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.

2. Steel Sleeve -- Max 3 in. (76 mm) diam Schedule 40 (or heavier) steel pipe sleeve friction-fit into circular opening core drilled through wall. Length of steel sleeve to be equal to thickness of wall.

3. Through Penetrant -- One nom 1 in. (25 mm) diam (or smaller) SDR 9 cross-linked polyethylene (PEX) tubing for use in closed (process or supply) piping systems. The tubing installed concentrically or eccentrically within the steel sleeve. The annular space between the tube and the steel sleeve shall be min 1/2 in. (13 mm) to max 1-3/8 in. (35 mm). Tube to be rigidly supported on both sides of wall assembly.

The hourly T Rating is 1/2 Hr and 1 Hr for 1 Hr and 2 Hr fire rated wall assemblies, respectively.

4. Fill, Void or Cavity Material*-Sealant -- Min 5/8 in. (16 mm) and 1-1/4 in. (32 mm) thickness of fill material applied within annulus, flush with both surfaces of wall assembly for 1 and 2 hr rated walls, respectively. When a steel sleeve (Item 2) is provided for assemblies with L Ratings, sealant shall be applied around periphery of opening to cover the exposed ends of the sleeve and to lap min 1/4 in. (6 mm) onto gypsum board on each side of wall.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC -- FS-ONE Sealant
*Bearing the UL Classification Mark

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5170 MARSHALL ST - ARVADA, CO 80002

ISSUE FOR CONSTRUCTION
08.07.2024

No.	Date	Issue
4	08.07.2024	IFC

Project Architect	DV
Project Designer	DR
Date	
Job Number	222001
Drawn By	CG / CB/ TT/ NV
Checked By	JG
Title	FIRE PENETRATION DETAILS
Sheet Number	COMMON

A0-6.14

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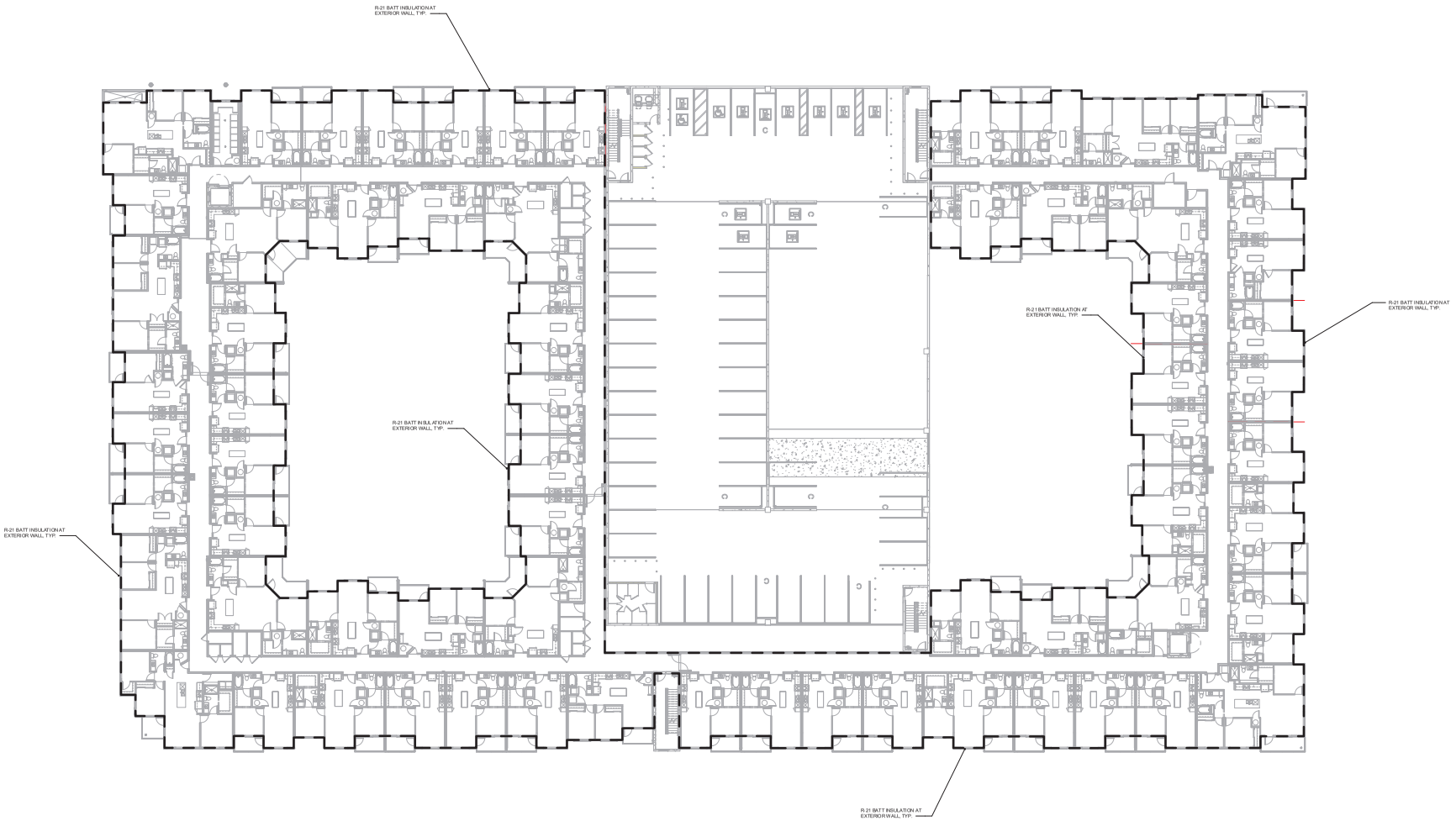
THERMAL ENVELOPE NOTES
>REFER TO GENERAL NOTES FOR ADDITIONAL INFORMATION NOT SHOWN OR NOTED.
>REFER TO ALL ENERGY REPORTS FOR ADDITIONAL REQUIREMENTS NOT SHOWN OR NOTED FOR MINIMUM INSULATION REQUIREMENTS.
>ACTUAL ENERGY REPORT VALUES SHALL SUPERSEDE ANY INSULATION VALUES LISTED HERE.
>ALL INSULATION SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND DETAILS PER IECC AND ENERGY MODEL REQUIREMENTS.
>PROVIDE WATERPROOFING AT ALL FOUNDATION PENETRATIONS. REPORT AND/OR WC.
>ALL EXTERIOR WALLS SHALL BE CONSIDERED ABOVE GRADE WALLS IN ZONES. THE FOLLOWING SHALL BE DEEMED TO MEET THE CLASS SPECIFIED:
1. CLASS I: SHEET POLYETHYLENE, UNPERFORATED ALUMINUM FOIL
2. CLASS II: KRAFT-FACED FIBERGLASS BATTS
3. CLASS III: EXTRUDED POLYSTYRENE, EXPANDED POLYSTYRENE, FOAMED-IN-PLACE POLYURETHANE, AND OTHER CLASS III MATERIALS
>PROVIDE AIR BARRIER AND INSULATION COVERAGE FOR ALL OPAQUE BUILDING ENVELOPE AREAS AS SHOWN ON THE DRAWINGS. AIR BARRIER AND INSULATION SHALL BE CONTINUOUS AS REQUIRED BY THE CODE TO ENCLOSE ALL CONDITIONED SPACES. THE AIR BARRIER SHALL BE CONTINUOUS ACROSS ALL DISSIMILAR MATERIALS AND ASSEMBLIES. THE AIR BARRIER SHALL BE CONTINUOUS ACROSS CONSTRUCTION, EXPANSION, AND CONTROL JOINTS. ALL PENETRATIONS OF THE AIR BARRIER SHALL BE CAULKED, GASKETED, OR SEALED IN A MANNER COMPATIBLE WITH THE AIR BARRIER AND THE BUILDING CONSTRUCTION. ALL PENETRATIONS OF THE THERMAL ENVELOPE SHALL BE SEALED TO LIMIT INFILTRATION. THE SEALING METHODS BETWEEN DISSIMILAR MATERIALS SHALL ALLOW FOR THERMAL EXPANSION AND CONTRACTION.
>ALL EXTERIOR JOINTS, SEAMS, AND OPENINGS IN THE BUILDING ENVELOPE SHALL BE SEALED WITH CAULKING, GASKETS, WEATHERSTRIPPING, OR WATERPROOF TAPE TO LIMIT INFILTRATION. ALL SUCH JOINTS AND SEAMS SHALL BE CAULKED, GASKETED, WEATHERSTRIPPED, OR TAPED IN A MANNER COMPLEMENTARY WITH THE MATERIALS BEING SEALED. ALL OPENINGS BETWEEN WINDOW AND DOOR ASSEMBLIES AND THE SUPPORTING STRUCTURE SHALL BE SEALED, SHIMMED, OR INSULATED. ALL EXTERIOR WINDOWS AND DOORS SHALL BE GASKETED OR CAULKED IN AN APPROVED MANNER. ALL EXTERIOR WINDOWS AND DOORS SHALL BE RATED FOR AIR LEAKAGE IN ACCORDANCE WITH THE APPLICABLE ENERGY CODE.
>ALL PENETRATIONS OF THE BUILDING ENVELOPE FOR MECHANICAL AND ELECTRICAL SERVICES SHALL BE SEALED, INCLUDING BUT NOT LIMITED TO, PENETRATIONS FOR REFRIGERANT TUBING, DUCTS, AND PIPES; TV, TELEPHONE, AND COMMUNICATION SYSTEMS; AND LOW VOLTAGE WIRING FOR ELECTRIC AND PNEUMATIC CONTROLS. SEALING MATERIALS SHALL BE APPROPRIATE FOR THE SIZE OF THE OPENING, THE PENETRATING MATERIAL, AND THE CONDITIONS TO WHICH THE MATERIAL IS SUBJECTED, SUCH AS TEMPERATURE AND MOISTURE. SEALING MATERIALS SHALL BE COMPATIBLE WITH ADJOINING MATERIALS AND SHALL RETAIN ADHESIVE AND SEALING PROPERTIES UNDER THE TEMPERATURE AND MOISTURE CONDITIONS TO WHICH THEY ARE EXPOSED.
>ALL JOINTS, PENETRATIONS, AND OTHER OPENINGS IN THE BUILDING ENVELOPE SHALL BE SEALED WITH A SEALANT MEETING THE FOLLOWING REQUIREMENTS:
1. FOR JOINTS AND SEAMS ASSOCIATED WITH DELIVERY TRADE OR FIELD-ASSEMBLED MECHANICAL EQUIPMENT, SEALANTS SHALL BE CAPABLE OF SEALING DURING NORMAL SYSTEM OPERATING PROCESSES, TO THE PRESSURE DIFFERENTIAL WITH WHICH THEY ARE ASSOCIATED.
2. FOR JOINTS AND SEAMS ASSOCIATED WITH DUCTWORK, SEALANTS SHALL BE CAPABLE OF SEALING DURING NORMAL SYSTEM OPERATING PROCESSES, TO A POSITIVE AND NEGATIVE 1 INCH OF WATER COLUMN (249 PA) PRESSURE DIFFERENTIAL.
3. FOR OTHER JOINTS, SEAMS, AND PENETRATIONS, SEALANTS SHALL BE CAPABLE OF SEALING DURING NORMAL SYSTEM OPERATING PROCESSES, TO A POSITIVE AND NEGATIVE 1 INCH OF WATER COLUMN (249 PA) PRESSURE DIFFERENTIAL.
>

THERMAL ENVELOPE NOTES

- REFER TO GENERAL NOTES FOR ADDITIONAL INFORMATION NOT SHOWN OR NOTED.
- INSULATION VALUES: REFER TO ASSEMBLIES SHEETS & ENERGY MODELING REPORTS FOR MINIMUM INSULATION REQUIREMENTS.
- ACTUAL ENERGY REPORT VALUES SHALL SUPERCEDE ANY INSULATION VALUES LISTED HERE.
- OPENINGS: ALL WINDOWS ARE TO BE WEATHER-STRIPPED AND DOUBLE-GLAZED. FRAME MATERIAL PER QC AND ENERGY MODEL REQUIREMENTS.
- PROVIDE WATERPROOFING AT ALL FOUNDATIONS PER INTERTEK REPORT AND/OR IBC.
- CLASS I OR II VAPOR RETARDERS ARE REQUIRED ON THE INTERIOR SIDE OF FRAME WALLS IN ZONE 5. THE FOLLOWING SHALL BE DEEMED TO MEET THE CLASS SPECIFIED:
  1. CLASS I: SHEET POLYETHYLENE, UNPERFORATED ALUMINUM FOIL
  2. CLASS II: KRAFT-FACED FIBERGLASS BATTS.
- THE BUILDING THERMAL ENVELOPE SHALL BE DURABLY SEALED TO LIMIT INFILTRATION. THE SEALING METHODS BETWEEN DISSIMILAR MATERIALS SHALL ALLOW FOR DIFFERENTIAL EXPANSION / CONTRACTION.
- WHERE NECESSARY, OR AS DIRECTED BY CONTRACTOR, PROVIDE EXTRUDED POLYSTYRENE INLIEU OF BATT INSULATION, BEHIND, BENEATH OR ADJACENT TO PLUMBING, MECHANICAL AND ELECTRICAL RUNS TO ENSURE THE MINIMUM INSULATION VALUES ARE STRICTLY ADHERED TO IN ALL LOCATIONS. IN ALL INACCESSIBLE OR ENCLOSED AREAS OR AREAS THAT MAY BE INACCESSIBLE OR MAY BE ENCLOSED, PLACE EXTRUDED POLYSTRENE INSULATION IMMEDIATELY PRIOR TO PLACING
  THE PLUMBING, MECHANICAL AND ELECTRICAL RUNS.
- WHERE APPLICABLE, INSULATE ALL CANTILEVERED FLOORS WITH BATT INSULATION, SUFFICIENT TO FILL THE FRAMING CAVITY AND PROVIDE CLASS I OR CLASS II VAPOR RETARDERS ON THE INTERIOR SIDE OF FRAME
- ALL ELECTRICAL BOXES, LIGHT CANS, AND OTHER PENETRATIONS AT THE CEILING ADJACENT TO UNCONDITIONED ATTIC SPACE SHALL BE FULLY GASKETED AND SEALED.



1 THERMAL ENVELOPE - LEVEL 2-4
1/16" = 1'-0"

N TRUE N PROJECT

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ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: AIR BARRIER AND THERMAL ENVELOPE DIAGRAMS
Sheet Number: A0-7.1

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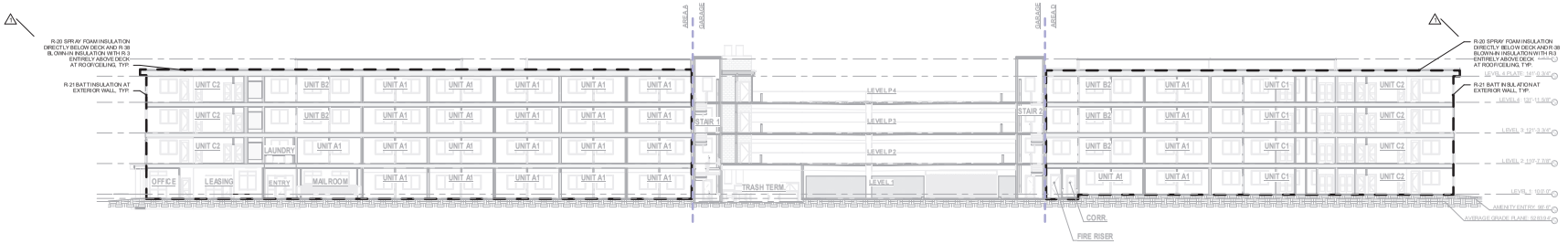
THERMAL ENVELOPE NOTES

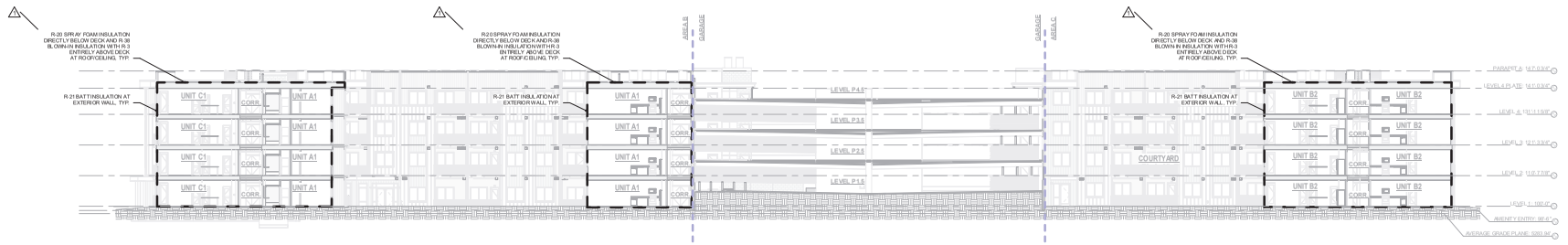
- REFER TO GENERAL NOTES FOR ADDITIONAL INFORMATION NOT SHOWN OR NOTED.
- INSULATION VALUES REFER TO ASSEMBLIES SHEET & ENERGY MODELING REPORTS FOR MINIMUM IN BUILDUP REQUIREMENTS.
- ACTUAL ENERGY REPORT VALUES SHALL SUPERCEDE ANY INSULATION VALUES LISTED HERE.
- OPENINGS: ALL WINDOWS ARE TO BE WEATHER-STRIPPED AND DOUBLE-GLAZED. FRAME MATERIAL PER QC AND ENERGY MODEL REQUIREMENTS.
- PROVIDE WATERPROOFING AT ALL FOUNDATIONS PER INTERTEK REPORT AND/OR IBC.
- CLASS I OR II VAPOR RETARDERS ARE REQUIRED ON THE INTERIOR SIDE OF ALL WALLS IN CLIMATE ZONE 5. THE FOLLOWING SHALL BE DEEMED TO MEET THE CLASS SPECIFIED:
  1. CLASS I: SHEET POLYETHYLENE, UNPERFORATED ALUMINUM FOIL
  2. CLASS II: KRAFT-FACED FIBERGLASS BATTS.
- THE BUILDING THERMAL ENVELOPE SHALL BE DURABLY SEALED TO LIMIT INFILTRATION. THE SEALING METHODS BETWEEN DISSIMILAR MATERIALS SHALL ALLOW FOR DIFFERENTIAL EXPANSION / CONTRACTION.
- WHEN NECESSARY, OR AS DIRECTED BY CONTRACTOR, PROVIDE EXTRUDED POLYSTIRENE IN LIEU OF BATT INSULATION, BEHIND, BENEATH OR ADJACENT TO PLUMBING, MECHANICAL, AND ELECTRICAL SUPPLIES, RETURNS AND OTHER DISTRIBUTION LINES AND FIXTURES TO ENSURE THE MINIMUM INSULATION VALUES ARE STRICTLY ADHERED TO IN ALL CONDITIONS. INSULATION SHALL BE STRICTLY ADHERED TO AREAS THAT MAY BE INACCESSIBLE OR MAY BE ENCLOSED. PLACE EXTRUDED POLYSTIRENE INSULATION IMMEDIATELY PRIOR TO PLACING THE PLUMBING, MECHANICAL AND ELECTRICAL RUNS.
- WHERE APPLICABLE, INSULATE ALL CANTILEVERED FLOORS WITH BATT INSULATION, SUFFICIENT TO FILL THE FRAMING CAVITY AND PROVIDE CLASS I OR CLASS II VAPOR RETARDERS ON THE INTERIOR SIDE OF FRAME.
- ALL ELECTRICAL BOXES, LIGHT CANS, AND OTHER PENETRATIONS AT THE CEILING ADJACENT TO UNCONDITIONED ATTIC SPACE SHALL BE FULLY GASKETED AND SEALED.



3 THERMAL ENVELOPE SECTION 1
1/16" = 1'-0"



2 THERMAL ENVELOPE SECTION 2
1/16" = 1'-0"



1 THERMAL ENVELOPE SECTION 3
1/16" = 1'-0"

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ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue
1	10.03.2023	PC1 RESPONSE

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: AIR BARRIER AND THERMAL ENVELOPE DIAGRAMS
Sheet Number: A0-7.2

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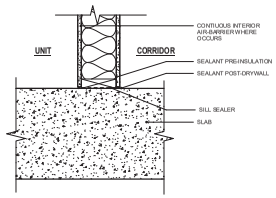
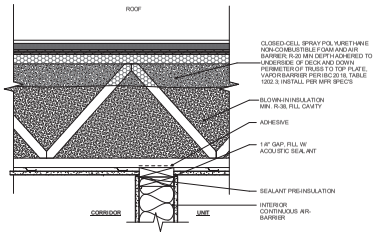
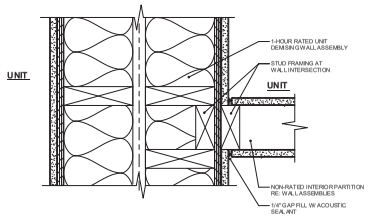


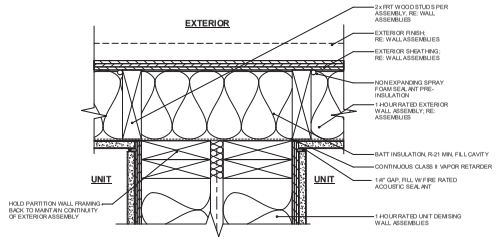
10 FRAMING AT CONC. SLAB
1 1/2" = 1'-0"



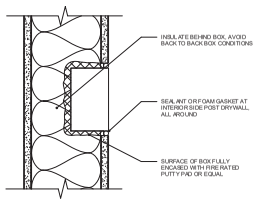
6 INT. FRAMING AT ROOF
1 1/2" = 1'-0"



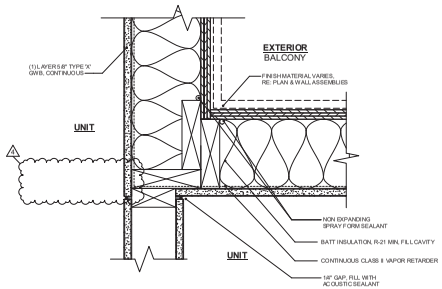
13 NR INT. PARTITION AT 1-HR UNIT DEMISING
3" = 1'-0"



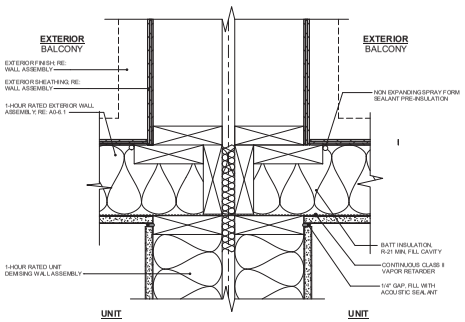
9 1-HR UNIT DEMISING WALL AT 1-HR EXT. WALL
3" = 1'-0"



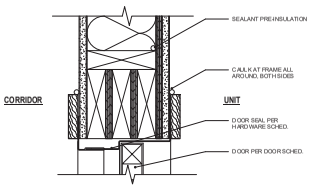
5 RECESSED ELEC. BOX AT DEMISING AND EXT WALL
3" = 1'-0"



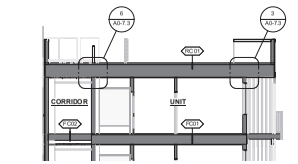
12 NR AT 1-HR EXT. WALL (INSIDE CORNER)
3" = 1'-0"



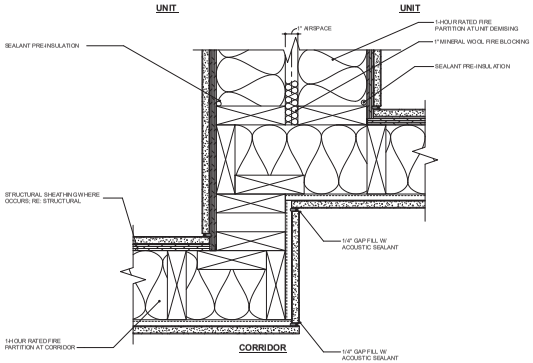
8 1HR UNIT DEMISING EXTENDED AT 1HR EXT. WALL
3" = 1'-0"



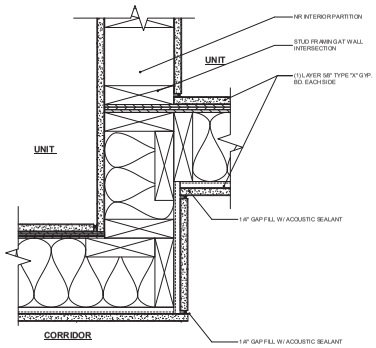
4 UNIT DOOR HEAD
3" = 1'-0"



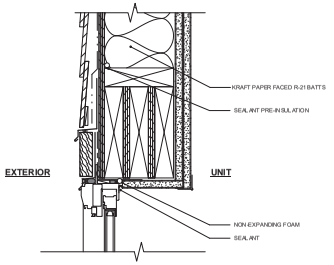
2 TYPICAL UNIT SECTION
1/8" = 1'-0"



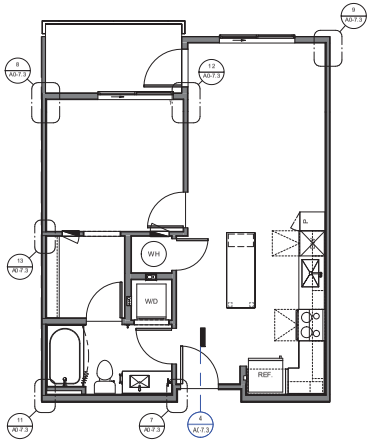
11 DEMISING WALL AT CORRIDOR WALL
3" = 1'-0"



7 NR INTERIOR PARTITION AT CORRIDOR WALL
3" = 1'-0"



3 WINDOW HEAD
3" = 1'-0"



1 TYPICAL UNIT PLAN (AIR BARRIER)
1/4" = 1'-0"

GENERAL NOTES

- AIR BARRIER COMPARTMENTALIZATION DETAILS APPLY TO BOTH WOOD AND METAL FRAMING; RE: PLAN AND DETAIL SHEETS FOR ADDITIONAL INFORMATION
- COORDINATE ALL SEALANTS AND INSULATION WITH WALL CONSTRUCTION TYPE AND REQUIRED FIRE RATING

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ISSUE FOR CONSTRUCTION
06.07.2024

No.	Date	Issue
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Project Architect: DV
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Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: AIR BARRIER UNIT COMPARTMENTALIZATION
Sheet Number: **A0-7.3**

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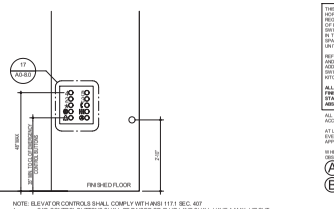
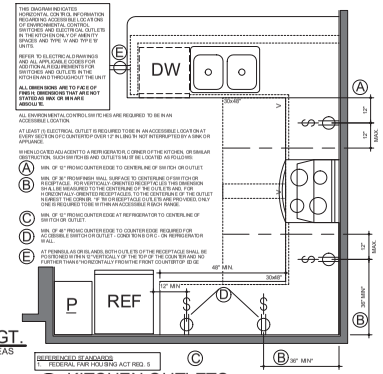


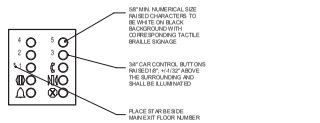
NOTE: ELEVATOR CONTROLS SHALL COMPLY WITH ANSI 117.1 SEC. 407.
1. CAR CONTROL BUTTONS SHALL BE RAISED OR FLUSH AND SHALL HAVE A MAX. HEIGHT OF 48" AFF TO THE CENTER OF THE TOP CALL BUTTON AND A MIN. HEIGHT OF 35" AFF TO THE CENTER OF THE EMERGENCY CONTROL BUTTONS WHICH SHALL BE GROUPED AT THE BOTTOM OF THE PANEL PER SEC. 407.4.6.4.2.
2. CAR CONTROL BUTTONS SHALL BE A MIN. 3/4" DIA. CAR CONTROL BUTTONS SHALL BE IDENTIFIED BY TACTILE CHARACTERS COMPLYING WITH ANSI 117.1 SECTION 703.3
3. AUDIBLE AND VISIBLE CAR POSITION INDICATORS SHALL BE PROVIDED ABOVE THE CAR CONTROL PANEL, OR ABOVE THE DOOR AND COMPLY WITH ANSI 117.1 SEC 407.4.9
4. TWO WAY EMERGENCY COMMUNICATIONS SHALL BE PROVIDED PER ANSI 117.1 SECTION 407.4.10 AND ASME/ANSI A17.1. THE MAX. HEIGHT OF THE EMERGENCY COMMUNICATION DEVICE SHALL BE 48" AND SHALL BE IDENTIFIED WITH TACTILE CHARACTERS.

18 ELEV. CAB EQUIP. INSTALLATION HGT.
1/2" = 1'-0" — COMMON AREAS



REFERENCED STANDARDS
1. FEDERAL FAIR HOUSING ACT REG. 5

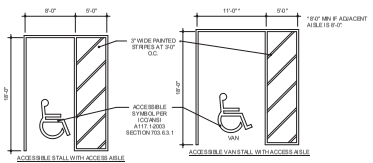
14 KITCHEN OUTLETS
NTS — COMMON AREAS, TYPE 'A' & 'B' UNITS



NOTE: LETTERS AND NUMERALS SHALL BE RAISED 1/32", UPPER CASE, SANS SERIF OR SIMPLE SERIF TYPE AND SHALL BE ACCOMPANIED BY TACTILE BRAILLE SIGNAGE. RAISED CHARACTERS SHALL BE AT LEAST 5/8" TALL BUT NOT ALLER THAN 2".

NOTE: HALL CALL BUTTONS CENTERED 42" AFF ABSOLUTE.

17 CAB CONTROL BUTTONS
1" = 1'-0"

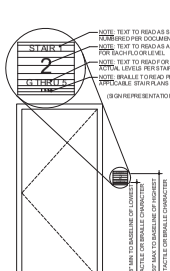


NOTE: RE PLAN FOR ACTUAL PARKING STALL SIZES.

REFERENCED STANDARDS
1. INFORMATION BASED ON ICC/ANSI A117.1-2009, SECTION 502

16 ACCESSIBLE PARKING SPACE STRIPING
1/8" = 1'-0" — PUBLIC PARKING FACILITIES

SIGN NOTES:
1. A SIGN SHALL BE PROVIDED AT EACH FLOOR LANDING IN EXIT ENCLOSURES CONNECTING MORE THAN THREE STORIES. AT EACH FLOOR LEVEL, TERMINUS OF THE TOP AND BOTTOM OF THE EXIT ENCLOSURE AND IDENTIFICATION OF THE STAIR OR RAMP. SIGNAGE SHALL ALSO STATE STORY OF AND DIRECTION TO THE EXIT DISCHARGE AND AVAILABILITY OF ROOF ACCESS FROM THE ENCLOSURE FOR THE FIRE DEPARTMENT. SIGN SHALL BE LOCATED 5-FT. ABOVE FLOOR LANDING IN A POSITION READILY VISIBLE WHEN DOORS ARE IN THE OPEN AND CLOSED POSITIONS. (IBC SECTION 1022.8)
2. FLOOR LEVEL SIGNAGE SHALL BE IN ACCORDANCE WITH ICC/ANSI A117.1-2009 CHAPTER 11 SHALL BE LOCATED AT EACH FLOOR LEVEL LANDING ADJACENT TO THE DOOR LEADING FROM THE ENCLOSURE INTO THE CORRIDOR TO IDENTIFY THE FLOOR LEVEL. PER IBC SECTION 1022.8.
3. STAIR LEVEL IDENTIFICATION SIGNS SHALL BE PROVIDED AS REQUIRED BY ANSI SECTION 504.9
4. SIGNS CONTAINING TACTILE CHARACTERS SHALL BE LOCATED SO THAT A CLEAR FLOOR SPACE OF 18" MIN. X 18" MIN. IDENTIFIED BY THE TACTILE CHARACTERS IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND 45 DEGREE OPEN POSITION.
5. TACTILE CHARACTER HEIGHT SHALL BE 5/8" MIN. AND 2" MAX.
6. TACTILE CHARACTERS SHALL BE RAISED 1/32", BRAILLE DOTS SHALL BE RAISED 1/40".

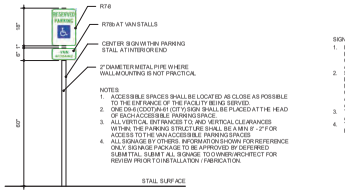


INFORMATION SHOWN IS FOR REFERENCE ONLY. SIGNAGE PACKAGE TO BE APPROVED BY DEFERRED SUBMITTAL. SUBMIT ALL SIGNAGE TO OWNER/ARCHITECT FOR REVIEW PRIOR TO INSTALL/FABRICATION.

NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

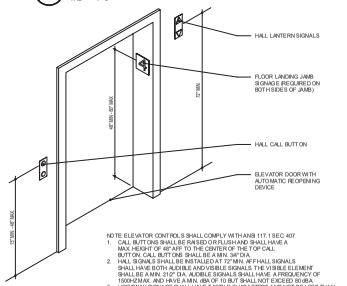
REFERENCED STANDARDS
1. INTERNATIONAL BUILDING CODE SECTIONS 1023.9 AND 1111
2. ICC/ANSI A117.1-2009 SECTION 703

13 ENCLOSED STAIR SIGNAGE
1/2" = 1'-0" — COMMON AREAS



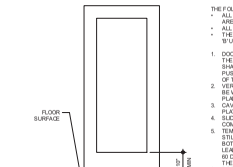
NOTES:
1. ACCESSIBLE SPACES SHALL BE LOCATED AS CLOSE AS POSSIBLE TO THE ENTRANCE OF THE FACILITY BEING SERVED.
2. ONE DRIVEWAY/ENTRY CITY SIGN SHALL BE PLACED AT THE HEAD OF EACH ACCESSIBLE PARKING SPACE.
3. ALL VERTICAL CLEARANCES WITHIN THE PARKING STRUCTURE SHALL BE A MIN 9' - 2" FOR ACCESS TO THE VAN ACCESSIBLE PARKING SPACES
4. ALL SIGNAGE BY OTHERS. INFORMATION SHOWN FOR REFERENCE ONLY. SIGNAGE PACKAGE TO BE APPROVED BY DEFERRED SUBMITTAL. SUBMIT ALL SIGNAGE TO OWNER/ARCHITECT FOR REVIEW PRIOR TO INSTALLATION / FABRICATION.

12 ACCESSIBLE PARKING SIGNAGE
1/2" = 1'-0" — PUBLIC PARKING FACILITIES



NOTE: ELEVATOR CONTROLS SHALL COMPLY WITH ANSI 117.1 SEC 407
1. CALL BUTTONS SHALL BE RAISED OR FLUSH AND SHALL HAVE A MAX. HEIGHT OF 48" AFF TO THE CENTER OF THE TOP CALL BUTTON. CALL BUTTONS SHALL BE A MIN. 3/4" DIA.
2. HALL SIGNALS SHALL BE INSTALLED AT 72" MIN. AFF HALL SIGNALS SHALL HAVE BOTH AUDIBLE AND VISIBLE SIGNALS. THE VISIBLE ELEMENT SHALL BE A MIN. 2½" DIA. AUDIBLE SIGNALS SHALL HAVE A FREQUENCY OF 1500HZ MAX. AND HAVE A MIN. dBA OF 10 BUT SHALL NOT EXCEED 60 dBA
3. HOISTWAY SIGNAGE SHALL HAVE TACTILE CHARACTERS AND NOT BE LESS THAN 2" IN HEIGHT. A TACTILE STAR SHALL BE USED TO INDICATE THE GROUND LEVEL.

11 ELEVATOR CALL BUTTON DETAIL
1/2" = 1'-0" — COMMON AREAS



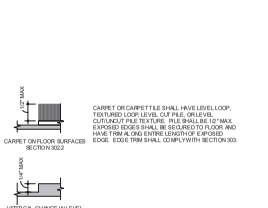
THE FOLLOWING REQUIREMENTS APPLY TO:
- ALL DOORS IN AMENITY AND COMMON AREAS
- ALL DOORS IN TYPE 'A' UNITS
- THE PRIMARY ENTRANCE DOOR IN TYPE 'B' UNITS

1. DOOR SURFACES WITHIN 10 INCHES OF THE FLOOR, MEASURED VERTICALLY, SHALL BE A SMOOTH SURFACE ON THE PUSH SIDE EXTENDING THE FULL WIDTH OF THE DOOR.
2. VERTICAL JOINTS IN THE SURFACE SHALL BE WITHIN 1/16 INCH OF THE SAME PLANE.
3. CAVITIES CREATED BY ADDED KICK PLATES SHALL BE CAPPED.
4. SLIDING DOORS ARE NOT REQUIRED TO COMPLY WITH THIS REQUIREMENT.
5. TEMPERED GLASS DOORS WITHOUT A FRAME ARE PERMITTED TO HAVE A BOTTOM RAIL OR SHOE WITH THE TOP LEADING EDGE TAPERED NO LESS THAN 60 DEGREES FROM HORIZONTAL BELOW THE 10 INCH REQUIREMENT.
6. DOORS THAT DO NOT EXTEND TO WITHIN 10 INCHES OF THE FLOOR ARE NOT REQUIRED TO COMPLY WITH THIS REQUIREMENT.

NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS
1. ICC/ANSI A117.1-2009 SECTION 404

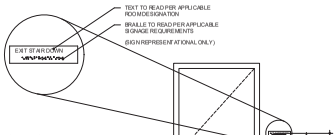
15 DOOR SURFACES
1/2" = 1'-0" — COMMON AREAS, TYPE 'A' & 'B' UNITS



CARPET OR CARPET TILE SHALL HAVE LEVEL LOOP, TEXTURED LOOP LEVEL CUT PILE, OR LEVEL CUT/UNCUT PILE TEXTURE. PILE SHALL BE 1/2" MAX. EXPOSED EDGES SHALL BE SECURED TO FLOOR AND HAVE TRIM ALONG ENTIRE LENGTH OF EXPOSED EDGE. EDGE TRIM SHALL COMPLY WITH SECTION 303.

CHANGES IN LEVEL IN FLOOR SURFACE GREATER THAN 1/2" IN HEIGHT SHALL BE RAMPED AND SHALL COMPLY WITH ANSI A117.1-2009 SECTION 405.0 OR 406.

10 CARPET & CHANGES IN LEVEL
NTS — COMMON AREAS, TYPE 'A' & 'B' UNITS

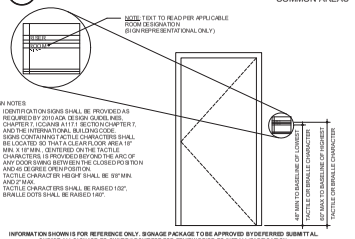


SIGN NOTES:
1. TACTILE EXIT SIGNS SHALL BE PROVIDED AS REQUIRED BY IBC SECTION 1013.4.
2. SIGNS CONTAINING TACTILE CHARACTERS SHALL BE LOCATED SO THAT A CLEAR FLOOR AREA 18" MIN. X 18" MIN., CENTERED ON THE TACTILE CHARACTERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND 45 DEGREE OPEN POSITION.
3. TACTILE CHARACTER HEIGHT SHALL BE 5/8" MIN. AND 2" MAX.
4. TACTILE CHARACTERS SHALL BE RAISED 1/32", BRAILLE DOTS SHALL BE RAISED 1/40".

INFORMATION SHOWN IS FOR REFERENCE ONLY. SIGNAGE PACKAGE TO BE APPROVED BY DEFERRED SUBMITTAL. SUBMIT ALL SIGNAGE TO OWNER/ARCHITECT FOR REVIEW PRIOR TO INSTALL/FABRICATION.

REFERENCED STANDARDS
1. INTERNATIONAL BUILDING CODE SECTIONS 1013 AND 1111

9 TACTILE EXIT SIGNAGE
NTS — COMMON AREAS



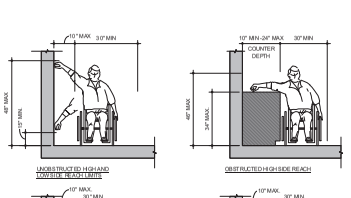
SIGN NOTES
1. IDENTIFICATION SIGNS SHALL BE PROVIDED AS REQUIRED BY 2010 ADA DESIGN GUIDELINES, CHAPTER 7, ICC/ANSI A117.1 SECTION CHAPTER 7, AND THE INTERNATIONAL BUILDING CODE.
2. SIGNS CONTAINING TACTILE CHARACTERS SHALL BE LOCATED SO THAT A CLEAR FLOOR AREA 18" MIN. X 18" MIN., CENTERED ON THE TACTILE CHARACTERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND 45 DEGREE OPEN POSITION.
3. TACTILE CHARACTER HEIGHT SHALL BE 5/8" MIN. AND 2" MAX.
4. TACTILE CHARACTERS SHALL BE RAISED 1/32", BRAILLE DOTS SHALL BE RAISED 1/40".

INFORMATION SHOWN IS FOR REFERENCE ONLY. SIGNAGE PACKAGE TO BE APPROVED BY DEFERRED SUBMITTAL. SUBMIT ALL SIGNAGE TO OWNER/ARCHITECT FOR REVIEW PRIOR TO INSTALL/FABRICATION.

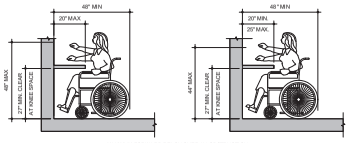
NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

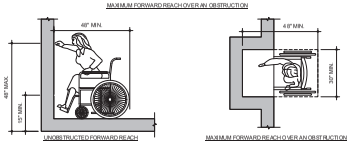
REFERENCED STANDARDS
1. ICC/ANSI A117.1-2009 SECTION 703
2. 2010 ADA DESIGN GUIDELINES CHAPTER 7

8 MISCELLANEOUS ROOM SIGNAGE
NTS — COMMON AREAS



SIDE REACH RANGES





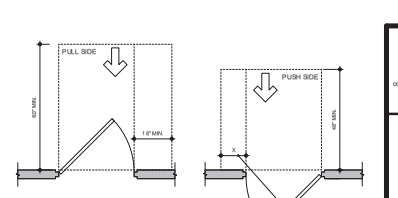
FORWARD REACH RANGES

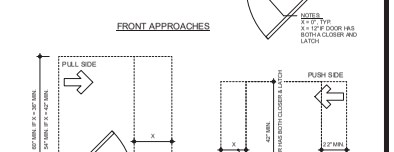
NOTE: WHERE A HIGH FORWARD REACH IS OVER AN OBSTRUCTION, A CLEAR FLOOR SPACE COMPLYING WITH ANSI SECTION 308.3 SHALL EXTEND BENEATH THE OBSTRUCTING ELEMENT FOR A DISTANCE NOT LESS THAN THE REQUIRED REACH DEPTH OVER THE OBSTRUCTION.

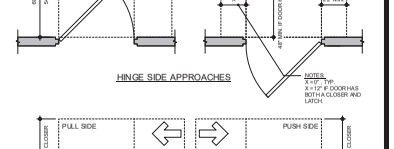
NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS
1. ICC/ANSI A117.1-2009 SECTION 308
2. FEDERAL FAIR HOUSING ACT REG 5

6 REACH RANGES
NTS — COMMON AREAS, TYPE 'A' & 'B' UNITS





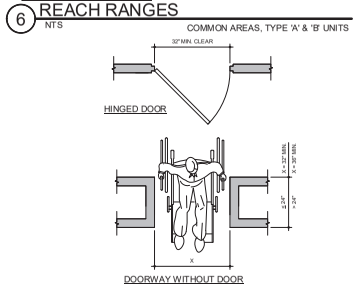


NOTES:
CLEARANCES ARE REQUIRED AT ALL DOORS IN COMMON AREAS, ANSI TYPE 'A' UNITS, AND THE PRIMARY ENTRANCE DOOR AT PARA AND TYPE 'B' UNITS

NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS
1. FEDERAL FAIR HOUSING ACT REG. 3
2. ICC/ANSI A117.1-2009 SECTION 404

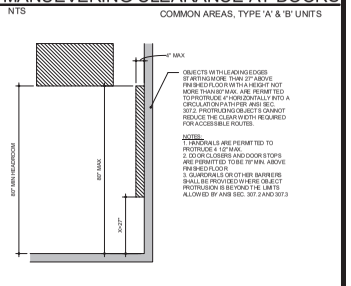
3 MANUEVERING CLEARANCE AT DOORS
NTS — COMMON AREAS, TYPE 'A' & 'B' UNITS



NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS
1. FEDERAL FAIR HOUSING ACT REG. 3
2. ICC/ANSI A117.1-2009 SECTION 404

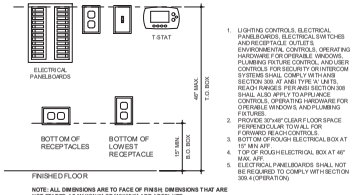
5 DOOR WIDTH & DEPTH
NTS — COMMON AREAS, TYPE 'A' & 'B' UNITS



NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS
1. FEDERAL FAIR HOUSING ACT REG. 2
2. ICC/ANSI A117.1-2009 SECTION 307

2 PROTRUDING OBJECTS
NTS — COMMON AREAS, TYPE 'A' & 'B' UNITS

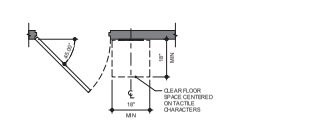


1. LIGHTING CONTROLS, ELECTRICAL PANELBOARDS, ELECTRICAL SWITCHES AND RECEPTACLE OUTLETS, ENVIRONMENTAL CONTROLS, OPERATING HARDWARE FOR DOORS, AND PLUMBING FIXTURE CONTROLS AND USER CONTROLS FOR SECURITY OR INTERCOM SYSTEMS SHALL COMPLY WITH ANSI SECTION 309. AT ANSI TYPE 'A' UNITS, REACH RANGES PER ANSI SECTION 308 SHALL ALSO APPLY TO APPLIANCE CONTROLS, OPERATING HARDWARE FOR OPERABLE WINDOWS, AND PLUMBING FIXTURES.
2. PROVIDE 30"x48" CLEAR FLOOR SPACE PERPENDICULAR TO WALL FOR FORWARD REACH CONTROLS.
3. BOTTOM OF DOOR BELL/CHIME ELECTRICAL BOX AT 15" MIN. AFF.
4. TOP OF ROUGH ELECTRICAL BOX AT 46" MAX. AFF.
5. ELECTRICAL PANELBOARDS SHALL NOT BE REQUIRED TO COMPLY WITH SECTION 309.4 (OPERATION)

NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS
1. ADAAG 4.13.7 (7)
2. FEDERAL FAIR HOUSING ACT REG. 3
3. ICC/ANSI A117.1-2009 SECTIONS 1003.9 & 100.49

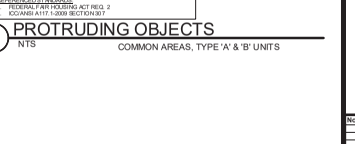
4 OUTLET/SWITCHES/CONTROLS
NTS — COMMON AREAS, TYPE 'A' & 'B' UNITS



LOCATION:
1. SINGLE DOOR - ALONGSIDE DOOR ON LATCH SIDE
2. DOUBLE DOOR WITH ONE ACTIVE LEAF - ON INACTIVE LEAF
3. DOUBLE DOOR WITH TWO ACTIVE LEAVES - TO THE RIGHT OF THE RIGHT-HAND DOOR.
4. WHERE THERE IS NO WALL SPACE AVAILABLE IN THE LOCATIONS ABOVE, SIGNAGE SHALL BE MOUNTED TO THE NEAREST ADJACENT WALL.
5. SIGNS WITH TACTILE CHARACTERS SHALL BE PERMITTED ON THE PUSH SIDE OF DOORS WITH CLOSERS AND WITHOUT HOLD-OPEN DEVICES

NOTE:
INFORMATION BASED ON ICC/ANSI A117.1-2009, SECTION 703.3.11

7 LOCATION OF TACTILE SIGNS AT DOORS
NTS — COMMON AREAS



NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS
1. FEDERAL FAIR HOUSING ACT REG. 2
2. ICC/ANSI A117.1-2009 SECTION 307

GUARDRAILS OR OTHER BARRIERS MUST BE PROVIDED WHERE VERTICAL CLEARANCE IS LESS THAN 80" ABOVE THE FLOOR. THE LEADING EDGE OF SUCH GUARDRAIL SHALL BE 27" MAX. ABOVE FINISHED FLOOR PER ANSI SEC. 307.4

NOTE: GUARDRAILS OR OTHER BARRIERS SHALL BE PROVIDED WHERE OBJECT PROTRUSION IS BEYOND THE LIMITS ALLOWED BY ANSI SEC. 307.2 AND 307.3

1 REDUCED VERTICAL CLEARANCE
NTS — COMMON AREAS, TYPE 'A' & 'B' UNITS

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ISSUE FOR CONSTRUCTION
06.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Title:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG

GENERAL ACCESSIBILITY DETAILS - COMMON AREAS/ TYPE 'A'/TYPE 'B'

Sheet Number: COMMON
A0-8.0

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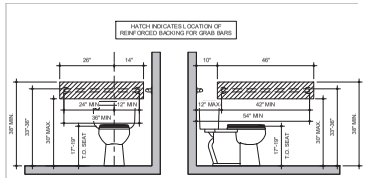
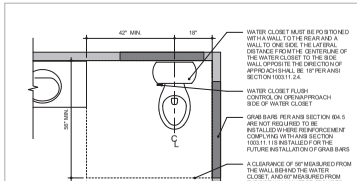


1. GRAB BARS ARE NOT REQUIRED TO BE INSTALLED WHEN REINFORCEMENT COMPLYING WITH THE FEDERAL FAIR HOUSING ACT AND ICC/ANSI A117.1-2009 SECTION 1003.11.1 IS INSTALLED FOR THE FUTURE INSTALLATION OF GRAB BARS. DIMENSIONS SHOWN ARE BASED ON FHA DH 1998 REQ. 6 PAGES 5.3 - 5.4.
2. WHERE THE LAVATORY OVERLAPS THE WATER CLOSET IN ACCORDANCE WITH THE EXCEPTION TO SECTION 1003.11.2, THE REAR GRAB BAR SHALL BE PERMITTED TO BE 24" MINIMUM IN LENGTH, CENTERED ON THE WATER CLOSET. PER SECTION 1003.11.1, EXCEPTION A.
3. ALLOWABLE STRESSES SHALL NOT BE EXCEEDED FOR MATERIALS USED WHERE A VERTICAL OR HORIZONTAL FORCE OF 250 POUNDS IS APPLIED AT ANY POINT ON THE GRAB BAR, FASTENER MOUNTING DEVICE, OR SUPPORTING STRUCTURE PER ICC/ANSI A117.1-2009 SECTION 609.8.
4. ALL GRAB BAR REINFORCEMENT SHALL EXTEND A MIN. OF 2" TO BOTH SIDES OF THE GRAB BAR.

NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. ICC/ANSI A117.1-2009 SECTIONS 609.8 AND 1003.11.1
2. FEDERAL FAIR HOUSING ACT REQ. 6

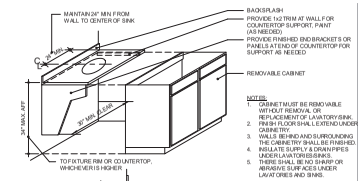
9 WC GRAB BAR REINFORCEMENT
NTS — ANSI TYPE 'A'



NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. ICC/ANSI A117.1-2009 SECTION 1003.11.2.4
2. FEDERAL FAIR HOUSING ACT REQ. 7b

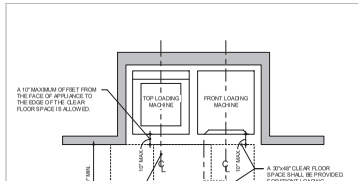
6 WC NO FIXTURE OVERLAP
NTS — ANSI TYPE 'A'



NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. ICC/ANSI A117.1-2009 SECTIONS 1003.11.2.2 AND 1003.12.4.1
2. FEDERAL FAIR HOUSING ACT REQ. 7a AND 7b

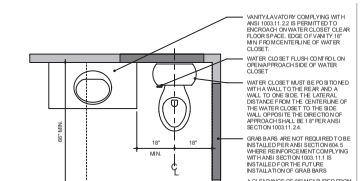
3 REMOVEABLE BASE CABINET
NTS — ANSI TYPE 'A'



NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. ICC/ANSI A117.1-2009 SECTIONS 611 AND 1003.10

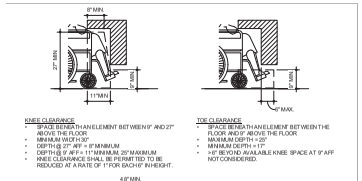
8 WASHER/DRYER CLEARANCES
NTS — ANSI TYPE 'A'



NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. ICC/ANSI A117.1-2009 SECTION 1003.11.2.4
2. FEDERAL FAIR HOUSING ACT REQ. 7b

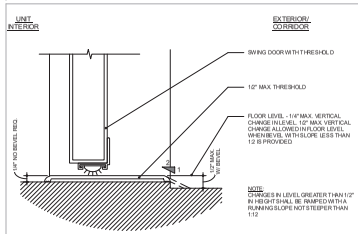
5 WC W/ FIXTURE OVERLAP
NTS — ANSI TYPE 'A'



NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. ICC/ANSI A117.1-2009 SECTION 306
2. FEDERAL FAIR HOUSING ACT REQ. 7a AND 7b

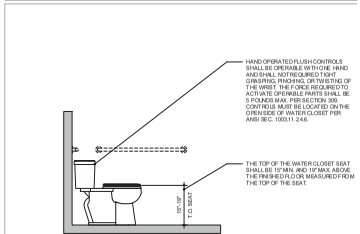
2 KNEE & TOE CLEARANCES
NTS — ANSI TYPE 'A'



NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH. DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 4
2. ICC/ANSI A117.1-2009 SECTIONS 1004.2 AND 1004.5

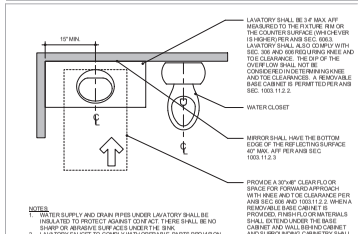
7 THRESHOLD AT ALL DOORS
NTS — ANSI TYPE 'A'



NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. ICC/ANSI A117.1-2009 SECTION 1003.11.2.4
2. FEDERAL FAIR HOUSING ACT REQ. 5 AND 7b

4 WATER CLOSET CONTROLS
NTS — ANSI TYPE 'A'



NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. ICC/ANSI A117.1-2009 SECTION 1003.11.2.2

1 LAVATORY CLEARANCES
NTS — ANSI TYPE 'A'

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ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: ACCESSIBILITY ANSI A117.1 TYPE A DETAILS
Sheet Number: **A0-8.1**

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ISSUE FOR CONSTRUCTION
08.07.2024

No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	
Job Number	222001
Drawn By	CG / CB/ TT/ NV
Checked By	JG
Title	ACCESSIBILITY ANSI A117.1 TYPE A DETAILS
Sheet Number	A0-8.2

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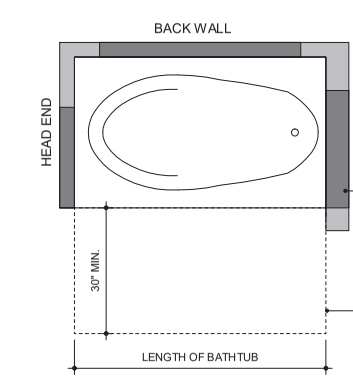


NOTES:
1. A BATHTUBS SHALL DELIVER WATER THAT IS 120° F MAX.
2. A REMOVABLE IN-TUB SEAT IS NOT REQUIRED.

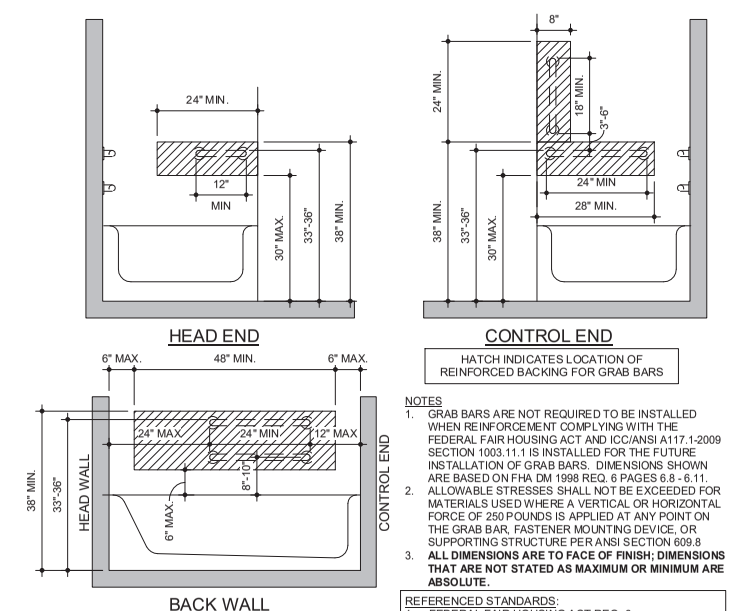
GRAB BAR REINFORCEMENT IS REQUIRED PER SECTION 609. GRAB BARS ARE NOT REQUIRED TO BE INSTALLED PER SECTION 607.4 WHERE REINFORCEMENT COMPLYING WITH SECTION 1003.11.1 IS INSTALLED FOR THE FUTURE INSTALLATION OF GRAB BARS.

30" MIN. CLEARANCE EXTENDING THE LENGTH OF THE BATHTUB MUST BE PROVIDED PER ANSI SEC. 607.2. COUNTERTOPS AND CABINETRY SHALL BE PERMITTED AT THE CONTROL END OF THE CLEARANCE PROVIDED THE CABINETS ARE REMOVABLE AND THE FLOOR FINISH EXTENDS UNDER SUCH CABINETRY

NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. ICC/ANSI A117.1-2009 SECTION 1003.11.2.5
2. FEDERAL FAIR HOUSING ACT REQ. 7b

1 BATHTUB CLEARANCES
NTS — ANSI TYPE 'A'

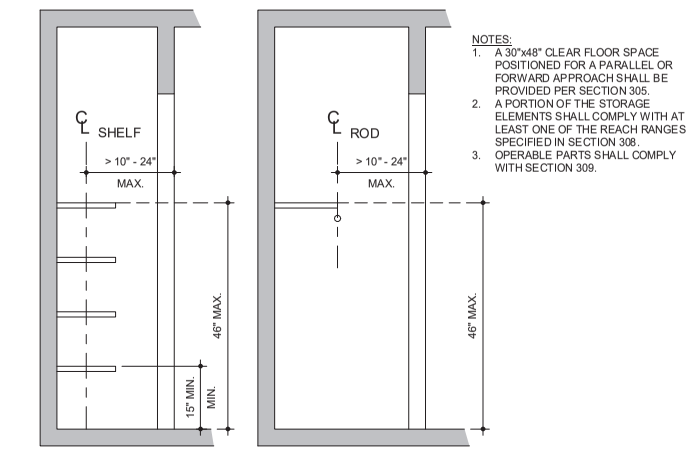


HATCH INDICATES LOCATION OF REINFORCED BACKING FOR GRAB BARS

NOTES
1. GRAB BARS ARE NOT REQUIRED TO BE INSTALLED WHEN REINFORCEMENT COMPLYING WITH THE FEDERAL FAIR HOUSING ACT AND ICC/ANSI A117.1-2009 SECTION 1003.11.1 IS INSTALLED FOR THE FUTURE INSTALLATION OF GRAB BARS. DIMENSIONS SHOWN ARE BASED ON FHA DM 1998 REQ. 6 PAGES 6.8 - 6.11.
2. ALLOWABLE STRESSES SHALL NOT BE EXCEEDED FOR MATERIALS USED WHERE A VERTICAL OR HORIZONTAL FORCE OF 250 POUNDS IS APPLIED AT ANY POINT ON THE GRAB BAR, FASTENER MOUNTING DEVICE, OR SUPPORTING STRUCTURE PER ANSI SECTION 609.8
3. **ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.**

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 6
2. ICC/ANSI A117.1-2009 SECTIONS 609.8 AND 1003.11.1

2 GRAB BAR REINFORCEMENT
NTS — ANSI TYPE 'A', BATHTUB

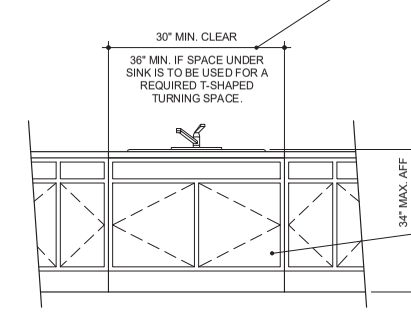


NOTES:
1. A 30"x48" CLEAR FLOOR SPACE POSITIONED FOR A PARALLEL OR FORWARD APPROACH SHALL BE PROVIDED PER SECTION 305.
2. A PORTION OF THE STORAGE ELEMENTS SHALL COMPLY WITH AT LEAST ONE OF THE REACH RANGES SPECIFIED IN SECTION 308.
3. OPERABLE PARTS SHALL COMPLY WITH SECTION 309.

NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. ICC/ANSI A117.1-2009 SECTION 1003.14
2. FEDERAL FAIR HOUSING ACT REQ. 5

3 REACH IN CLOSET
NTS — ANSI TYPE 'A'



COUNTERTOP/BASE CABINET WIDTH MUST BE 30" MIN. TO ALLOW A 30" x 48" CLEAR FLOOR SPACE POSITIONED FOR FORWARD APPROACH WITH KNEE AND TOE CLEARANCE PER ANSI SEC. 1003.12.4.1. COUNTERTOP MUST BE 36" MIN. TO ALLOW 36" CLEAR FLOOR SPACE IF SPACE IS USED IN CONJUNCTION WITH A T-SHAPED TURNING SPACE.

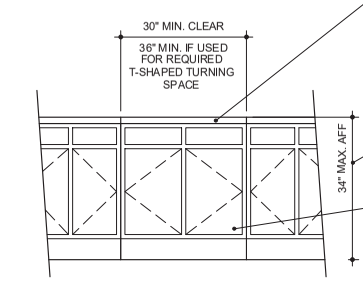
SINK SHALL BE A MAX. OF 34" AFF MEASURED TO THE RIM OR COUNTER TOP (WHICHEVER IS HIGHER) PER ANSI SEC. 1003.12.4.2

CABINETRY SHALL BE PERMITTED UNDER THE SINK PROVIDED THE FOLLOWING CRITERIA ARE MET:
1. CABINET MUST BE REMOVABLE WITHOUT REMOVAL OR REPLACEMENT OF SINK/LAVATORY.
2. FINISH FLOOR SHALL EXTEND UNDER CABINETRY.
3. WALLS BEHIND AND SURROUNDING THE CABINETRY SHALL BE FINISHED.
4. ALL EXPOSED PIPING UNDER SINKS MUST BE INSULATED OR CONFIGURED TO PROTECT AGAINST CONTACT, AND HAVE NO SHARP OR ABRASIVE SURFACES.

NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. ICC/ANSI A117.1-2009 SECTION 1003.12.4

4 KITCHEN SINK/LAVATORY
NTS — ANSI TYPE 'A'



COUNTERTOP/BASE CABINET WIDTH MUST BE 30" MIN. TO ALLOW A 30" x 48" CLEAR FLOOR SPACE POSITIONED FOR FORWARD APPROACH WITH KNEE AND TOE CLEARANCE PER ANSI SEC. 1003.12.4.1. COUNTERTOP MUST BE 36" MIN. TO ALLOW 36" CLEAR FLOOR SPACE IF SPACE IS USED IN CONJUNCTION WITH A T-SHAPED TURNING SPACE.

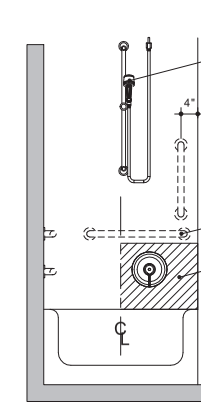
WORK SURFACE SHALL BE A MAX. OF 34" AFF MEASURED TO TOP OF COUNTER PER ANSI SEC. 1003.12.3.2

CABINETRY SHALL BE PERMITTED UNDER THE WORK SURFACE PROVIDED THE FOLLOWING CRITERIA ARE MET:
1. CABINET MUST BE REMOVABLE WITHOUT REMOVAL OR REPLACEMENT OF THE WORK SURFACE.
2. FINISH FLOOR SHALL EXTEND UNDER CABINETRY.
3. WALLS BEHIND AND SURROUNDING THE CABINETRY SHALL BE FINISHED.
4. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER THE EXPOSED PORTIONS OF WORK SURFACE COUNTERS.

NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. ICC/ANSI A117.1-2009 SECTION 1003.12.3

5 KITCHEN WORK SURFACE
NTS — ANSI TYPE 'A'



A HAND SHOWER WITH A HOSE 59" MIN. IN LENGTH, THAT CAN BE USED AS BOTH A FIXED SHOWER HEAD AS WELL AS A HAND SHOWER SHALL BE PROVIDED. THE HAND SHOWER SHALL HAVE A CONTROL WITH A NON-POSITIVE SHUT-OFF FEATURE. AN ADJUSTABLE HEIGHT HAND SHOWER MOUNTED ON A VERTICAL BAR SHALL BE INSTALLED SO AS NOT TO OBSTRUCT THE USE OF GRAB BARS.

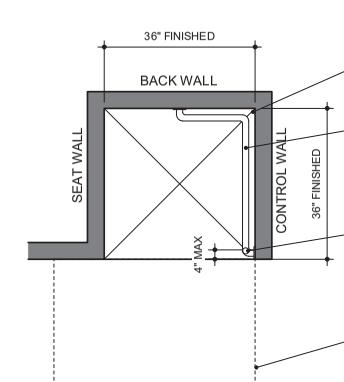
FUTURE GRAB BAR AS NEEDED

CONTROLS EXCLUDING DRAIN STOPPERS MUST BE PROVIDED ON AN END WALL, LOCATED BETWEEN THE BATHTUB RIM AND FUTURE GRAB BAR LOCATION. IT MUST ALSO BE LOCATED BETWEEN THE OPEN SIDE OF THE TUB AND THE CENTERLINE OF THE WIDTH OF THE TUB. CONTROLS MUST MEET REQUIREMENTS SPECIFIED BY SECTION 309.4

NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. ICC/ANSI A117.1-2009 SECTIONS 309, 607 AND 1003.11.2.5
2. FEDERAL FAIR HOUSING ACT REQ. 5

6 BATHTUB/SHOWER CONTROLS
NTS — ANSI TYPE 'A'



GRAB BARS ARE NOT REQUIRED WHERE REINFORCING COMPLYING WITH SEC. 1003.11.1 IS INSTALLED FOR THE FUTURE INSTALLATION OF GRAB BARS

TRANSFER TYPE SHOWERS SHALL HAVE A CLEAR INSIDE DIMENSION OF 36"W x 36"D. AN ENTRY 36" IN WIDTH SHALL BE PROVIDED

HORIZONTAL GRAB BARS SHALL BE PROVIDED ACROSS THE CONTROL WALL AND ON THE BACK WALL TO A POINT 18" FROM THE CONTROL WALL. BARS MAY BE SEPARATE BARS OR A SINGLE PIECE BAR.

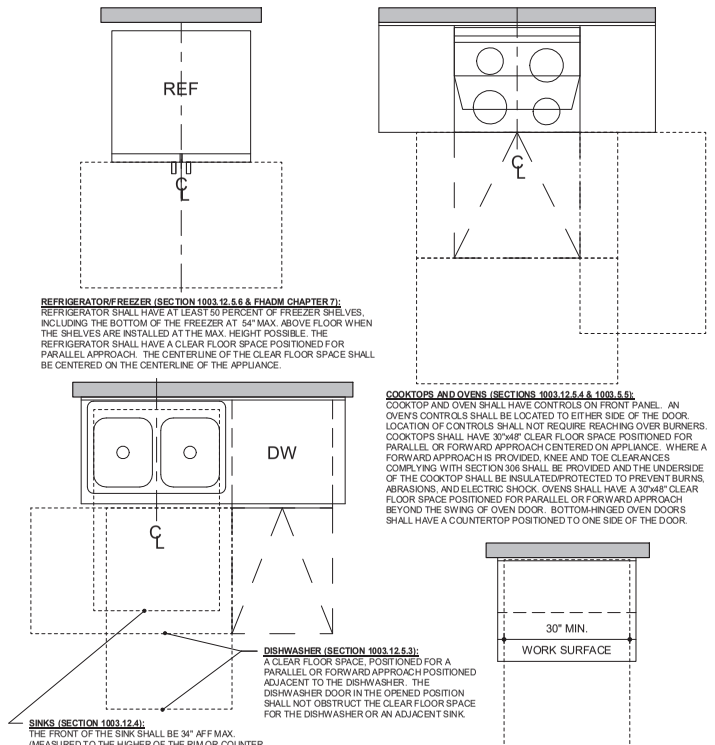
A VERTICAL GRAB BAR 18" MIN. IN LENGTH SHALL BE PROVIDED ON THE CONTROL END OF THE WALL 3" TO 6" ABOVE THE HORIZONTAL GRAB BAR AND 4" MAX. INWARD FROM THE FRONT EDGE OF SHOWER.

A CLEARANCE OF 48" MIN IN LENGTH MEASURED PERPENDICULAR TO THE CONTROL WALL AND 36" IN DEPTH SHALL BE PROVIDED ADJACENT TO THE OPEN FACE OF THE COMPARTMENT. COUNTERTOPS AND CABINETRY SHALL BE PERMITTED AT THE CONTROL END OF THE CLEARANCE PROVIDED SUCH COUNTERTOPS AND CABINETRY CAN BE REMOVED AND THE FLOOR FINISH EXTENDS UNDER THE CABINETRY.

NOTE:
1. A SEAT IS NOT REQUIRED TO BE INSTALLED WHERE REINFORCING COMPLYING WITH 1003.11.9 IS PROVIDED. HEIGHT OF SEAT TO BE 17"-19" MAX. ABOVE BATHROOM FLOOR.
2. SHOWERS SHALL DELIVER WATER THAT IS 120°F MAX.
3. THRESHOLDS 1/2" MAX. IN HEIGHT SHALL BE BEVELED AT A 1:2 SLOPE.
4. **ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.**

REFERENCED STANDARDS:
1. ICC/ANSI A117.1-2009 SECTION 1003.11.2.5.
2. FEDERAL FAIR HOUSING ACT REQ. 7b.

7 TRANSFER SHOWER
NTS — ANSI TYPE 'A'



REFRIGERATOR/FREEZER (SECTION 1003.12.5.6 & FHADM CHAPTER 7): REFRIGERATOR SHALL HAVE AT LEAST 50 PERCENT OF FREEZER SHELVES, INCLUDING THE BOTTOM OF THE FREEZER AT 54" MAX. ABOVE FLOOR WHEN THE SHELVES ARE INSTALLED AT THE MAX. HEIGHT POSSIBLE. THE REFRIGERATOR SHALL HAVE A CLEAR FLOOR SPACE POSITIONED FOR PARALLEL APPROACH. THE CENTERLINE OF THE CLEAR FLOOR SPACE SHALL BE CENTERED ON THE CENTERLINE OF THE APPLIANCE.

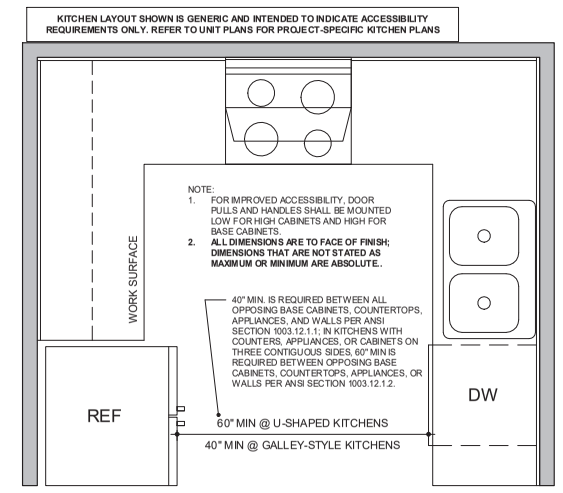
COOKTOPS AND OVENS (SECTIONS 1003.12.5.4 & 1003.6.5): COOKTOP AND OVEN SHALL HAVE CONTROLS ON FRONT PANEL. AN OVEN'S CONTROLS SHALL BE LOCATED TO EITHER SIDE OF THE DOOR. LOCATION OF CONTROLS SHALL NOT REQUIRE REACHING OVER BURNERS. COOKTOPS SHALL HAVE 30"x48" CLEAR FLOOR SPACE POSITIONED FOR PARALLEL OR FORWARD APPROACH CENTERED ON APPLIANCE. WHERE A FORWARD APPROACH IS PROVIDED, KNEE AND TOE CLEARANCES COMPLYING WITH SECTION 306 SHALL BE PROVIDED AND THE UNDERSIDE OF THE COOKTOP SHALL BE INSULATED/PROTECTED TO PREVENT BURNS, ABRASIONS, AND ELECTRIC SHOCK. OVENS SHALL HAVE A 30"x48" CLEAR FLOOR SPACE POSITIONED FOR PARALLEL OR FORWARD APPROACH BEYOND THE SWING OF OVEN DOOR. BOTTOM-HINGED OVEN DOORS SHALL HAVE A COUNTERTOP POSITIONED TO ONE SIDE OF THE DOOR.

DISHWASHER (SECTION 1003.12.5.3): A CLEAR FLOOR SPACE, POSITIONED FOR A PARALLEL OR FORWARD APPROACH POSITIONED ADJACENT TO THE DISHWASHER. THE DISHWASHER DOOR IN THE OPENED POSITION SHALL NOT OBSTRUCT THE CLEAR FLOOR SPACE FOR THE DISHWASHER OR AN ADJACENT SINK.

SINKS (SECTION 1003.12.4): THE FRONT OF THE SINK SHALL BE 34" AFF MAX. (MEASURED TO THE HIGHER OF THE RIM OR COUNTER SURFACE). A 30"x48" CLEAR FLOOR SPACE POSITIONED FOR FORWARD APPROACH SHALL BE PROVIDED WITH KNEE AND TOE CLEARANCE COMPLYING WITH SECTION 306. CABINETS ARE PERMITTED IF THEY ARE REMOVABLE W/O REMOVAL OR REPLACEMENT OF SINK. THE FLOOR FINISH EXTENDS UNDER CABINETRY, AND THE WALLS BEHIND AND SURROUNDING CABINETRY ARE FINISHED.

WORK SURFACE (SECTION 1003.12.3): WORK SURFACE SHALL BE A MIN. OF 30" IN LENGTH WITH A MAX. HEIGHT OF 34" AFF. A CLEAR FLOOR SPACE FOR FORWARD APPROACH CENTERED ON WORK SURFACE SHALL BE PROVIDED PER ANSI SEC. 1003.12.3.1 WITH KNEE AND TOE CLEARANCE PER SEC. 306

KITCHEN LAYOUT SHOWN IS GENERIC AND INTENDED TO INDICATE ACCESSIBILITY REQUIREMENTS ONLY. REFER TO UNIT PLANS FOR PROJECT-SPECIFIC KITCHEN PLANS



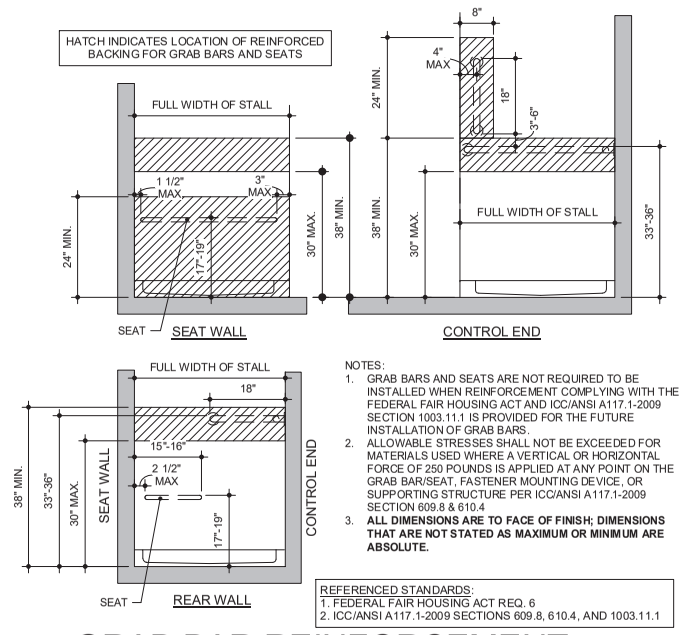
NOTE:
1. FOR IMPROVED ACCESSIBILITY, DOOR PULLS AND HANDLES SHALL BE MOUNTED LOW FOR HIGH CABINETS AND HIGH FOR BASE CABINETS.
2. **ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.**

40" MIN. IS REQUIRED BETWEEN ALL OPPOSING BASE CABINETS, COUNTERTOPS, APPLIANCES, AND WALLS PER ANSI SECTION 1003.12.1.1; IN KITCHENS WITH COUNTERS, APPLIANCES, OR CABINETS ON THREE CONTIGUOUS SIDES, 60" MIN IS REQUIRED BETWEEN OPPOSING BASE CABINETS, COUNTERTOPS, APPLIANCES, OR WALLS PER ANSI SECTION 1003.12.1.2.

60" MIN @ U-SHAPED KITCHENS
40" MIN @ GALLEY-STYLE KITCHENS

REFERENCED STANDARDS:
1. ICC/ANSI A117.1-2009 SECTION 1003.12
2. FEDERAL FAIR HOUSING ACT REQ. 7a

8 KITCHEN CLEARANCES
NTS — ANSI TYPE 'A'

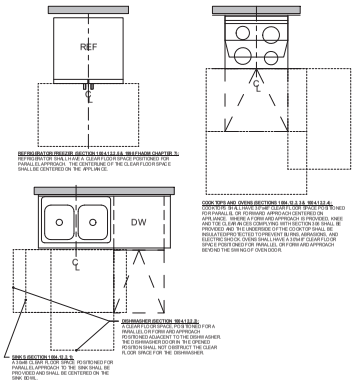


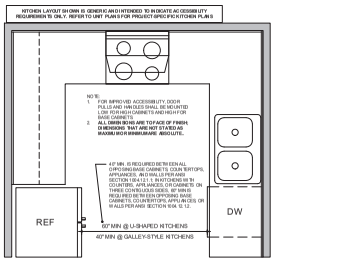
HATCH INDICATES LOCATION OF REINFORCED BACKING FOR GRAB BARS AND SEATS

NOTES:
1. GRAB BARS AND SEATS ARE NOT REQUIRED TO BE INSTALLED WHEN REINFORCEMENT COMPLYING WITH THE FEDERAL FAIR HOUSING ACT AND ICC/ANSI A117.1-2009 SECTION 1003.11.1 IS PROVIDED FOR THE FUTURE INSTALLATION OF GRAB BARS.
2. ALLOWABLE STRESSES SHALL NOT BE EXCEEDED FOR MATERIALS USED WHERE A VERTICAL OR HORIZONTAL FORCE OF 250 POUNDS IS APPLIED AT ANY POINT ON THE GRAB BAR/SEAT, FASTENER MOUNTING DEVICE, OR SUPPORTING STRUCTURE PER ICC/ANSI A117.1-2009 SECTION 609.8 & 610.4
3. **ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.**

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 6
2. ICC/ANSI A117.1-2009 SECTIONS 609.8, 610.4, AND 1003.11.1

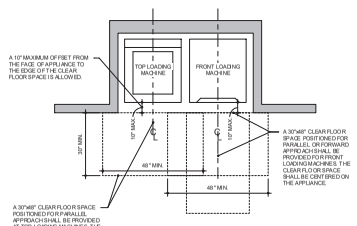
9 GRAB BAR REINFORCEMENT
NTS — ANSI TYPE 'A', TRANSFER SHOWER





REFERENCED STANDARDS:
1. ICC/ANSI A117.1-2009 SECTION 1004.12
2. FEDERAL FAIR HOUSING ACT REQ. 7a

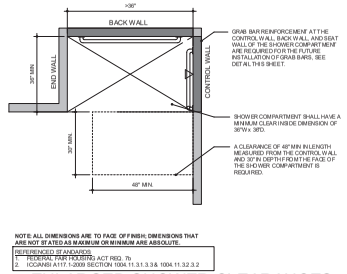
11 KITCHEN CLEARANCES
NTS — ANSI TYPE 'B'



NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. ICC/ANSI A117.1-2009 SECTION 1004.10

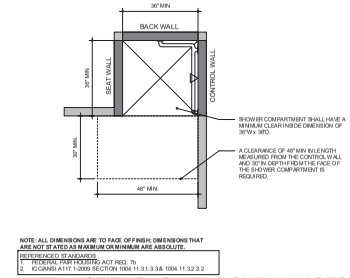
10 WASHER/DRYER CLEARANCES
NTS — ANSI TYPE 'B'



NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 7h
2. ICC/ANSI A117.1-2009 SECTION 1004.11.3.1.3 & 1004.11.3.2.3.2

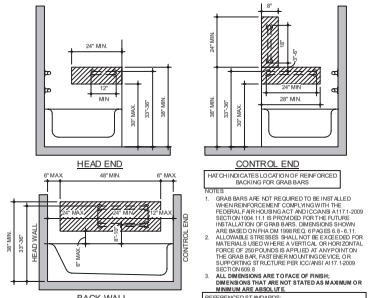
9 ENLARGED SHOWER CLEARANCES
NTS — ANSI TYPE 'B', OPTION A/B BATH



NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 7h
2. ICC/ANSI A117.1-2009 SECTION 1004.11.3.1.3 & 1004.11.3.2.3.2

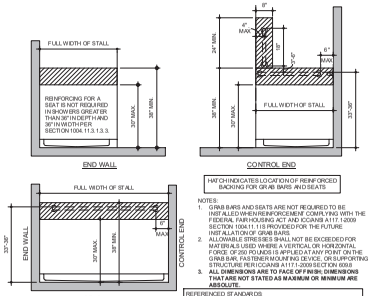
6 TRANSFER SHOWERS CLEARANCES
NTS — ANSI TYPE 'B', OPTION A/B BATH



NOTES:
1. GRAB BARS ARE NOT REQUIRED TO BE INSTALLED WHEN REINFORCEMENT COMPLYING WITH THE FEDERAL FAIR HOUSING ACT AND ICC/ANSI A117.1-2009 SECTION 1004.11.1 IS PROVIDED FOR THE FUTURE INSTALLATION OF GRAB BARS. DIMENSIONS SHOWN ARE BASED ON FHA DB 1998 REQ. 6 PAGES 6.6 - 6.11.
2. ALLOWABLE STRESSES SHALL NOT BE EXCEEDED FOR MATERIALS USED WHERE A VERTICAL OR HORIZONTAL FORCE OF 250 POUNDS IS APPLIED AT ANY POINT ON THE GRAB BAR, FASTENER MOUNTING DEVICE, OR SUPPORTING STRUCTURE PER ICC/ANSI A117.1-2009 SECTION 609.8.
3. ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 6
2. ICC/ANSI A117.1-2009 SECTIONS 609.6 AND 1004.11.1

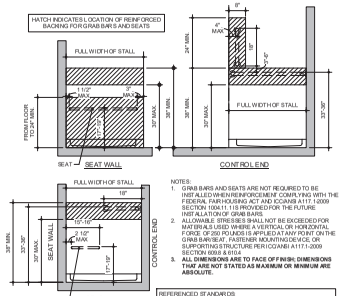
3 GRAB BAR REINFORCEMENT
NTS — ANSI TYPE 'B', OPTION A/B BATH, BATHTUB



NOTES:
1. GRAB BARS AND SEATS ARE NOT REQUIRED TO BE INSTALLED WHEN REINFORCEMENT COMPLYING WITH THE FEDERAL FAIR HOUSING ACT AND ICC/ANSI A117.1-2009 SECTION 1004.11.1 IS PROVIDED FOR THE FUTURE INSTALLATION OF GRAB BARS.
2. ALLOWABLE STRESSES SHALL NOT BE EXCEEDED FOR MATERIALS USED WHERE A VERTICAL OR HORIZONTAL FORCE OF 250 POUNDS IS APPLIED AT ANY POINT ON THE GRAB BAR, FASTENER MOUNTING DEVICE, OR SUPPORTING STRUCTURE PER ICC/ANSI A117.1-2009 SECTION 609.8.
3. ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 6
2. ICC/ANSI A117.1-2009 SECTIONS 609.6 AND 1004.11.1

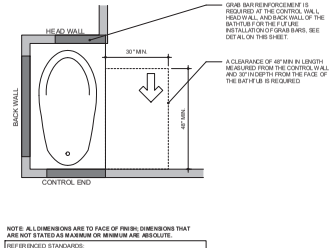
8 GRAB BAR REINFORCEMENT
NTS — ANSI TYPE 'B', OPTION A/B BATH, ENLARGED SHOWER



NOTES:
1. GRAB BARS AND SEATS ARE NOT REQUIRED TO BE INSTALLED WHEN REINFORCEMENT COMPLYING WITH THE FEDERAL FAIR HOUSING ACT AND ICC/ANSI A117.1-2009 SECTION 1004.11.1 IS PROVIDED FOR THE FUTURE INSTALLATION OF GRAB BARS.
2. ALLOWABLE STRESSES SHALL NOT BE EXCEEDED FOR MATERIALS USED WHERE A VERTICAL OR HORIZONTAL FORCE OF 250 POUNDS IS APPLIED AT ANY POINT ON THE GRAB BAR/SEAT, FASTENER MOUNTING DEVICE, OR SUPPORTING STRUCTURE PER ICC/ANSI A117.1-2009 SECTION 609.8, 610.4, AND 1004.11.1
3. ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 6
2. ICC/ANSI A117.1-2009 SECTIONS 609.6, 610.4, AND 1004.11.1

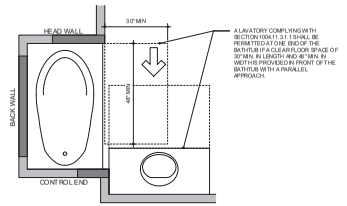
5 GRAB BAR REINFORCEMENT
NTS — ANSI TYPE 'B', OPTION A/B BATH, TRANSFER SHOWER



NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 7h
2. ICC/ANSI A117.1-2009 SECTIONS 1004.11.3.2.3.1

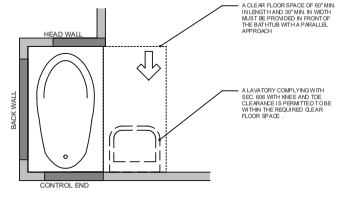
2 BATHTUB CLEARANCES
NTS — ANSI TYPE 'B', OPTION B BATH



NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 7h
2. ICC/ANSI A117.1-2009 SECTIONS 1004.11.3.1.3.1

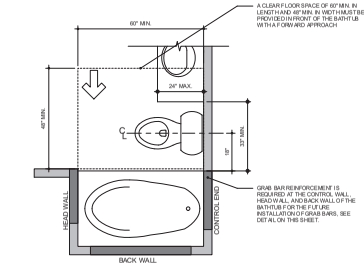
7 BATHTUB CLEARANCES
NTS — ANSI TYPE 'B', OPTION A BATH



NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 7h
2. ICC/ANSI A117.1-2009 SECTIONS 1004.11.3.1.3.1

4 BATHTUB CLEARANCES
NTS — ANSI TYPE 'B', OPTION A BATH



NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 7h
2. ICC/ANSI A117.1-2009 SECTION 1004.11.3.1.3.2

1 BATHTUB CLEARANCES
NTS — ANSI TYPE 'B', OPTION A BATH

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ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: ACCESSIBILITY ANSI A117.1 TYPE B DETAILS
Sheet Number: **A0-8.3**

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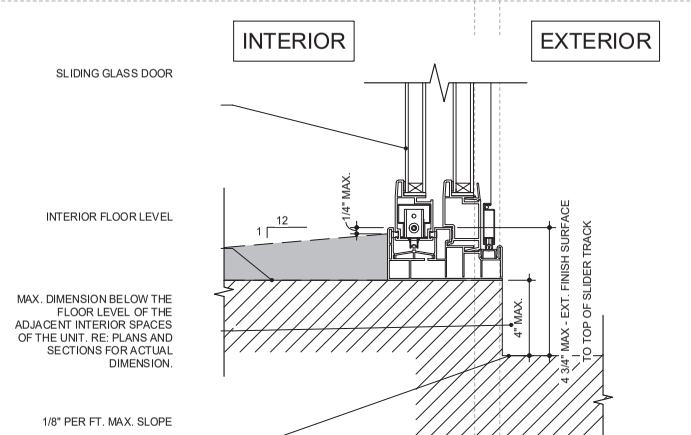
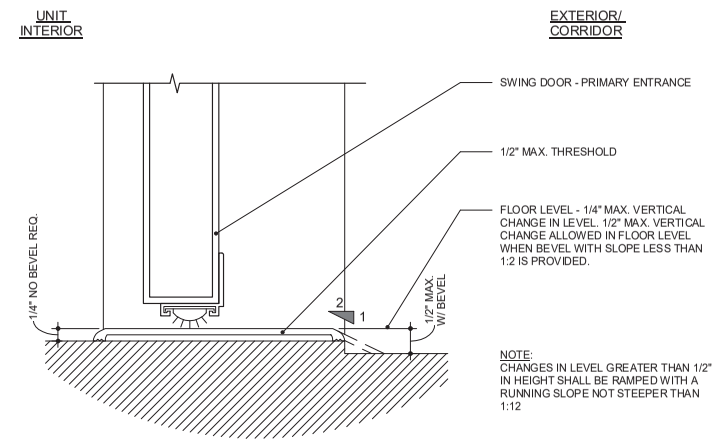


NOTE:
1. EXTERIOR/INTERIOR THRESHOLD AT ALL SLIDING DOORS WHEN EXTERIOR SURFACE IS IMPERVIOUS APPLICABLE AT FHA & ANSI TYPE 'B' UNITS @ SECONDARY DOORS.

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 4 (4.13)
2. ICC/ANSI A117.1-2009 SECTIONS 1004.4 AND 1004.5

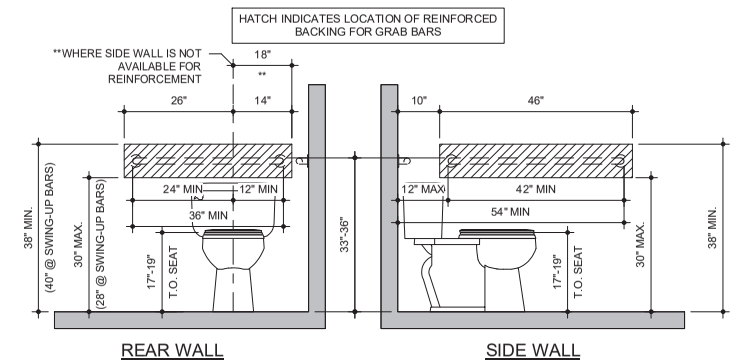
12 TYPE 'B' SGD THRESHOLD
NTS — ANSI TYPE 'B', IMPERVIOUS BALCONY



NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 4
2. ICC/ANSI A117.1-2009 SECTIONS 1004.2 AND 1004.5

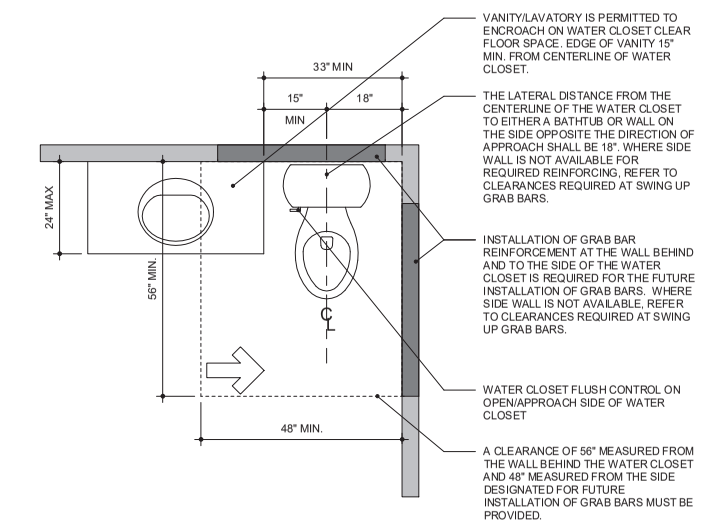
9 SWING DOOR THRESHOLD
NTS — ANSI TYPE 'B', PRIMARY ENTRANCE DOOR



1. GRAB BARS ARE NOT REQUIRED TO BE INSTALLED WHEN REINFORCEMENT COMPLYING WITH THE FEDERAL FAIR HOUSING ACT AND ICC/ANSI A117.1-2009 SECTION 1004.11.1 IS PROVIDED FOR THE FUTURE INSTALLATION OF GRAB BARS. DIMENSIONS SHOWN ARE BASED ON FHA DM 1998 REQ. 6 PAGES 6.3 - 6.8.
2. WHEN A SIDE WALL IS NOT AVAILABLE FOR A 42" GRAB BAR, THE SIDEWALL GRAB BAR SHALL BE PERMITTED TO BE 18" MIN. IN LENGTH, LOCATED 12" MAX. FROM REAR WALL AND EXTENDING 30" MIN. FROM THE REAR WALL PER SECTION 1004.11.1, EXCEPTION 4; OR A SWING-UP GRAB BAR COMPLYING WITH SECTION 1004.11.1.1 SHALL BE PERMITTED TO BE INSTALLED ON ONE OR BOTH SIDES OF THE WATER CLOSET PER SECTION 1004.11.1 EXCEPTIONS 5 & 6.
3. WHERE SPACE DOES NOT ALLOW A GRAB BAR 36" MIN. IN LENGTH, THE REAR GRAB BAR SHALL BE PERMITTED TO BE 24" MINIMUM IN LENGTH, CENTERED ON THE WATER CLOSET. PER SECTION 1004.11.1, EXCEPTION 3.
4. ALLOWABLE STRESSES SHALL NOT BE EXCEEDED FOR MATERIALS USED WHERE A VERTICAL OR HORIZONTAL FORCE OF 250 POUNDS IS APPLIED AT ANY POINT ON THE GRAB BAR, FASTENER MOUNTING DEVICE, OR SUPPORTING STRUCTURE PER ICC/ANSI A117.1-2009 SECTION 609.8.
5. **ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.**
6. ALL GRAB BAR REINFORCEMENT SHALL EXTEND A MIN. OF 2" TO BOTH SIDES OF THE GRAB BAR.

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 6
2. ICC/ANSI A117.1-2009 SECTIONS 609.8 AND 1004.11.1

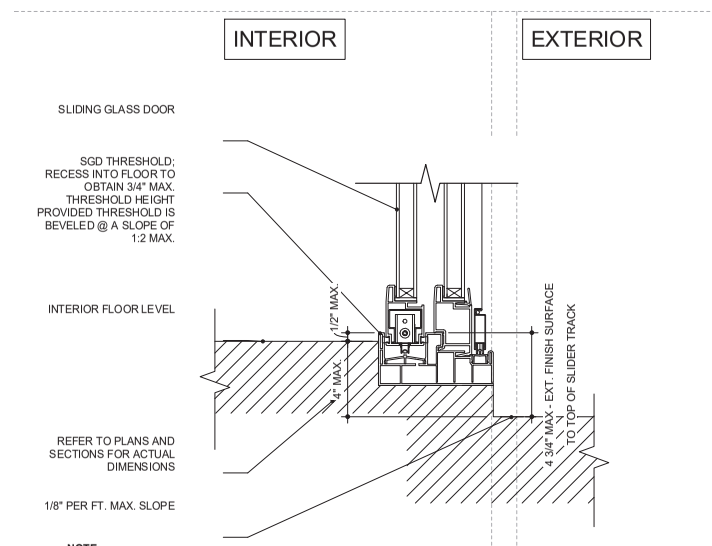
6 WC GRAB BAR REINFORCEMENT
NTS — ANSI TYPE 'B', OPTION A/B BATH



NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 7b
2. ICC/ANSI A117.1-2009 SECTIONS 1004.11.1, 1004.11.3.1.2.2

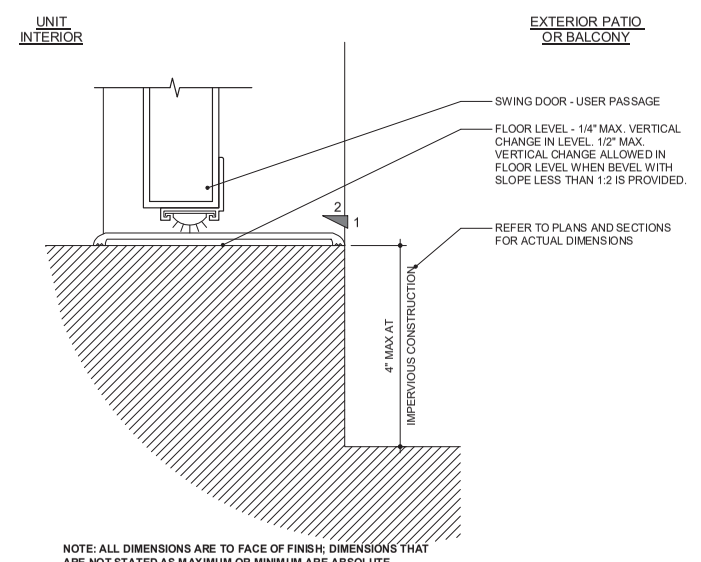
3 WC PARALLEL APPROACH
NTS — ANSI TYPE 'B', OPTION A/B BATH



NOTE:
1. EXTERIOR/INTERIOR THRESHOLD AT ALL SWING DOORS WHEN EXTERIOR SURFACE IS IMPERVIOUS APPLICABLE AT FHA & ANSI TYPE 'B' UNITS @ SECONDARY DOORS.

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 4
2. ICC/ANSI A117.1-2009 SECTIONS 1004.4 AND 1004.5

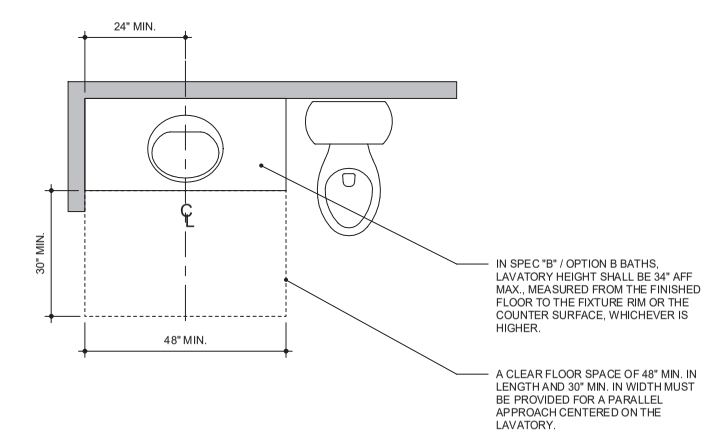
11 SGD THRESHOLD
NTS — ANSI TYPE 'B', RECESSED INSTALL, IMPERVIOUS BALCONY



NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 4
2. ICC/ANSI A117.1-2009 SECTIONS 1004.4 AND 1004.5

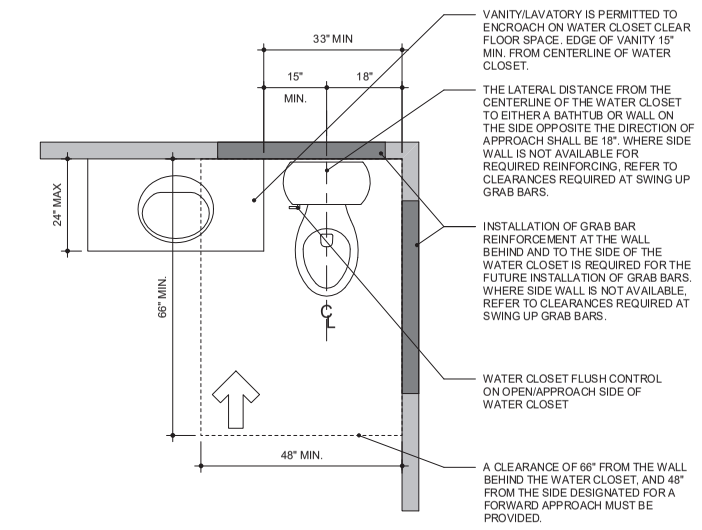
8 SWING DOOR THRESHOLD
NTS — ANSI TYPE 'B', IMPERVIOUS PATIO/BALCONY



NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 7b
2. ICC/ANSI A117.1-2009 SECTIONS 1004.11.3.1.1 AND 1004.11.3.2.1

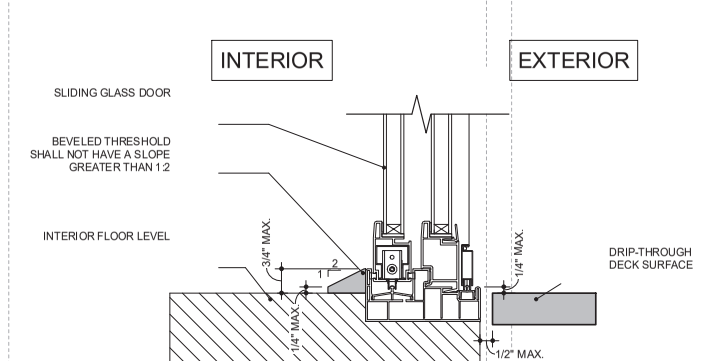
5 LAVATORY PARALELL APPROACH
NTS — ANSI TYPE 'B', OPTION A/B BATH



NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 7b
2. ICC/ANSI A117.1-2009 SECTIONS 1004.11.1 AND 1004.11.3.1.2.2.3

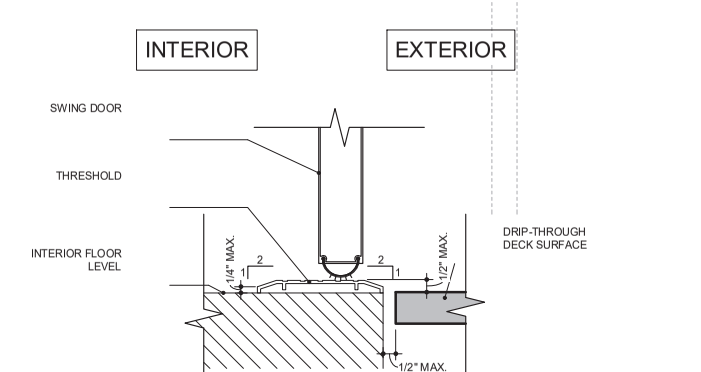
2 WC FORWARD APPROACH
NTS — ANSI TYPE 'B', OPTION A/B BATH



NOTE:
1. EXTERIOR THRESHOLD AT ALL SLIDING DOORS. APPLICABLE AT FHA & ANSI TYPE 'B' UNITS @ SECONDARY DOORS.
2. PER FHA AND ICC/ANSI A117.1-2003 SECTIONS 1004.4 AND 1004.5

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 4
2. ICC/ANSI A117.1-2009 SECTIONS 1004.4 AND 1004.5

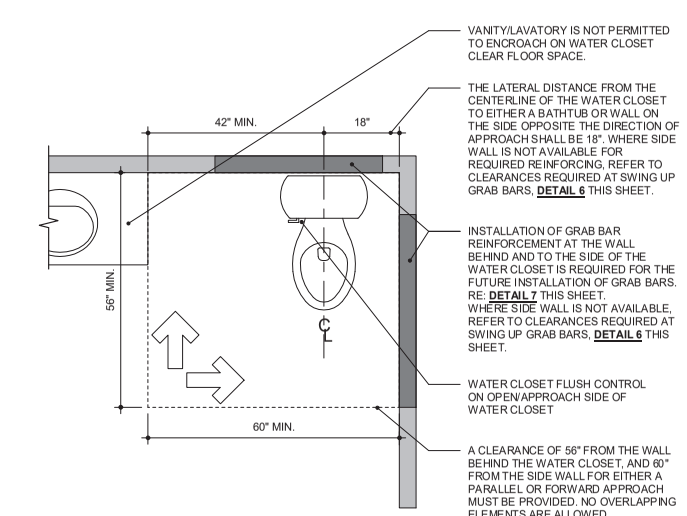
10 SGD THRESHOLD
NTS — ANSI TYPE 'B', RECESSED INSTALL, PERVIOUS BALCONY



NOTE:
1. EXTERIOR THRESHOLD AT ALL SWING DOORS. APPLICABLE AT FHA & ANSI TYPE 'B' UNITS @ SECONDARY DOORS.

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 4
2. ICC/ANSI A117.1-2009 SECTIONS 1004.4 & 1004.5

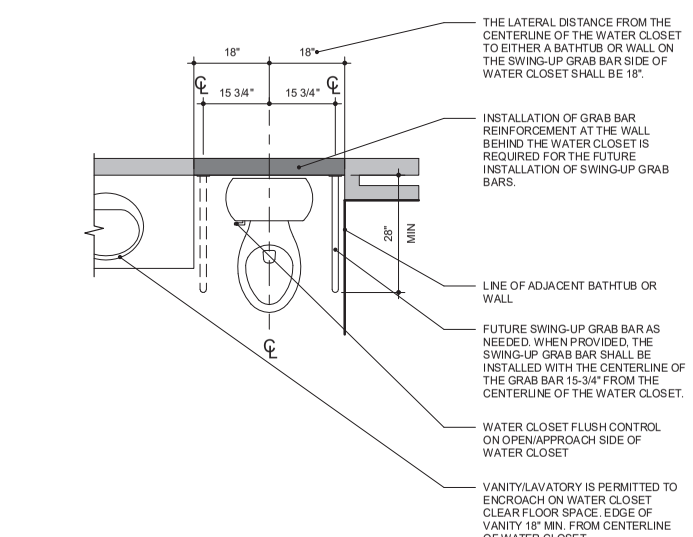
7 SWING DR THRESHOLD @ BALCONY
NTS — ANSI TYPE 'B', PERVIOUS BALCONY



NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 7b
2. ICC/ANSI A117.1-2009 SECTIONS 1004.11.1 AND 1004.11.3.1.2

4 WC PARALLEL/FORWARD APPROACH
NTS — ANSI TYPE 'B', OPTION A/B BATH



NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 6
2. ICC/ANSI A117.1-2009 SECTIONS 604.5 AND 1004.11.1

1 WC WITH SWING UP GRAB BAR
NTS — ANSI TYPE 'B', OPTION A/B BATH

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MARSHALL POINTE

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5170 MARSHALL ST - ARVADA, CO 80002

ISSUE FOR CONSTRUCTION 08.07.2024

No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	
Job Number	222001
Drawn By	CG / CB/ TT/ NV
Checked By	JG
Title	ACCESSIBILITY ANSI A117.1 TYPE B DETAILS
Sheet Number	A0-8.4

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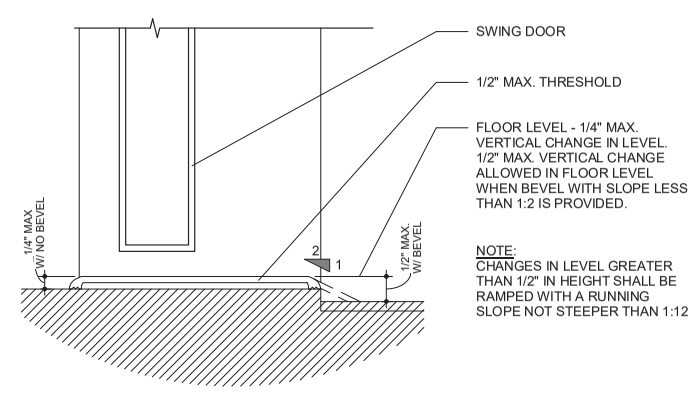
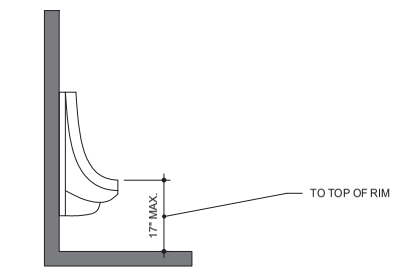


NOTE:
CHANGES IN LEVEL GREATER THAN 1/2" IN HEIGHT SHALL BE RAMPED WITH A RUNNING SLOPE NOT STEEPER THAN 1:12

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 4
2. ICC/ANSI A117.1-2009 SECTION 404
3. 2010 ADA STANDARDS (FOR PUBLIC ACCOMMODATIONS)

11 PUBLIC DOOR THRESHOLD
1/2" = 1'-0"
AMENITY SPACES

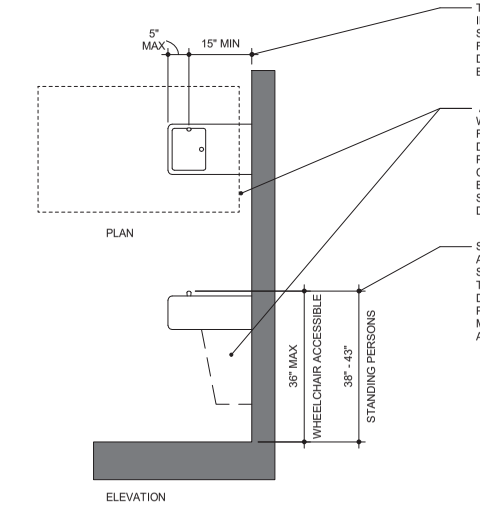


NOTE: FLUSH CONTROLS SHALL BE HAND OPERATED OR AUTOMATIC. HAND OPERATED FLUSH CONTROLS SHALL COMPLY WITH ANSI SECTION 309

NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 2
2. ICC/ANSI A117.1-2009 SECTIONS 309 AND 605
3. 2010 ADA STANDARDS (FOR PUBLIC ACCOMMODATIONS)

8 WALL HUNG URINAL
1/2" = 1'-0"
AMENITY SPACES



THE SPOUT SHALL BE LOCATED 15 INCHES MINIMUM FROM THE VERTICAL SUPPORT AND 5 INCHES MAXIMUM FROM THE FRONT EDGE OF THE DRINKING FOUNTAIN, INCLUDING BUMPERS.

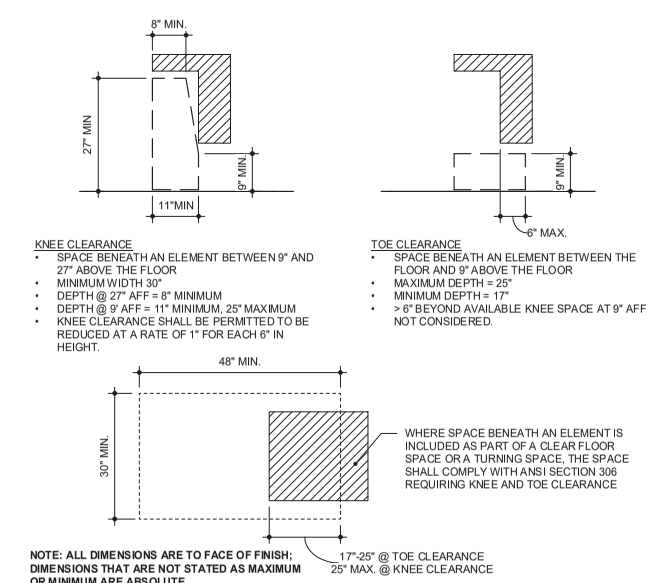
A CLEAR FLOOR SPACE COMPLYING WITH SECTION 305, POSITIONED FOR A FORWARD APPROACH TO THE DRINKING FOUNTAIN, SHALL BE PROVIDED. KNEE AND TOE SPACE COMPLYING WITH SECTION 306 SHALL BE PROVIDED. THE CLEAR FLOOR SPACE SHALL BE CENTERED ON THE DRINKING FOUNTAIN.

SPOUT OUTLETS OF WHEELCHAIR ACCESSIBLE DRINKING FOUNTAINS SHALL BE 36 INCHES MAXIMUM ABOVE THE FLOOR. SPOUT OUTLETS OF DRINKING FOUNTAINS FOR STANDING PERSONS SHALL BE 38 INCHES MINIMUM AND 43 INCHES MAXIMUM ABOVE THE FLOOR.

NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 2
2. ICC/ANSI A117.1-2009 SECTIONS 305, 306, AND 601
3. 2010 ADA STANDARDS (FOR PUBLIC ACCOMMODATIONS)

6 DRINKING FOUNTAINS
1/2" = 1'-0"
AMENITY SPACES



KNEE CLEARANCE
- SPACE BENEATH AN ELEMENT BETWEEN 9" AND 27" ABOVE THE FLOOR
- MINIMUM WIDTH 30"
- DEPTH @ 27" AFF = 8" MINIMUM
- DEPTH @ 9" AFF = 11" MINIMUM, 25" MAXIMUM
- KNEE CLEARANCE SHALL BE PERMITTED TO BE REDUCED AT A RATE OF 1" FOR EACH 6" IN HEIGHT.

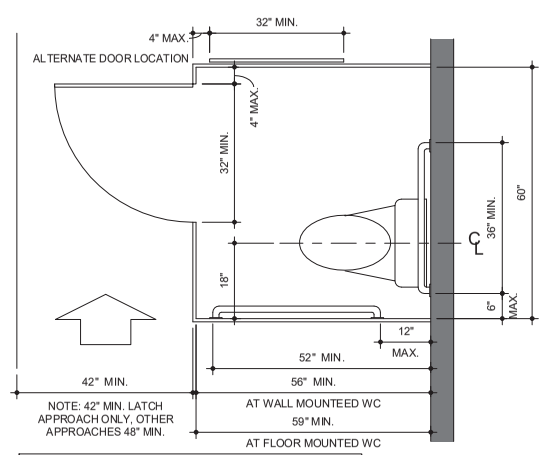
TOE CLEARANCE
- SPACE BENEATH AN ELEMENT BETWEEN THE FLOOR AND 9" ABOVE THE FLOOR
- MAXIMUM DEPTH = 25"
- MINIMUM DEPTH = 17"
- > 6" BEYOND AVAILABLE KNEE SPACE AT 9" AFF NOT CONSIDERED.

WHERE SPACE BENEATH AN ELEMENT IS INCLUDED AS PART OF A CLEAR FLOOR SPACE OR A TURNING SPACE, THE SPACE SHALL COMPLY WITH ANSI SECTION 306 REQUIRING KNEE AND TOE CLEARANCE

NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 2
2. ICC/ANSI A117.1-2009 SECTION 306

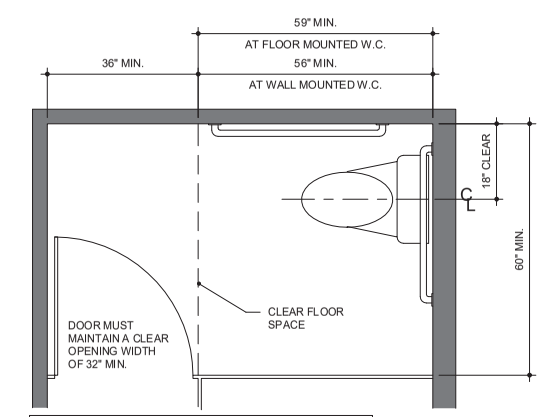
3 KNEE AND TOE CLEARANCES
1/2" = 1'-0"
AMENITY SPACES



NOTE: 42" MIN. LATCH APPROACH ONLY, OTHER APPROACHES 48" MIN.

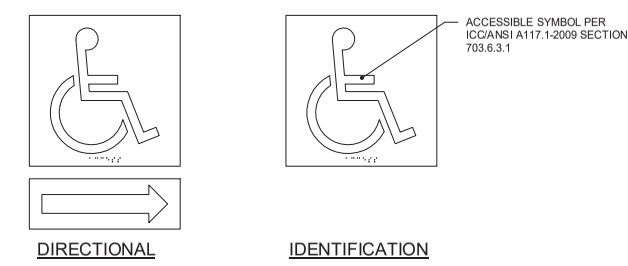
REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 2
2. ICC/ANSI A117.1-2009 SECTION 604
3. 2010 ADA STANDARDS (FOR PUBLIC ACCOMMODATIONS)

10 STANDARD TOILET STALL
1/2" = 1'-0"



REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 2
2. ICC/ANSI A117.1-2009 SECTION 604
3. 2010 ADA STANDARDS (FOR PUBLIC ACCOMMODATIONS)

7 STANDARD STALL (END OF ROW)
1/2" = 1'-0"

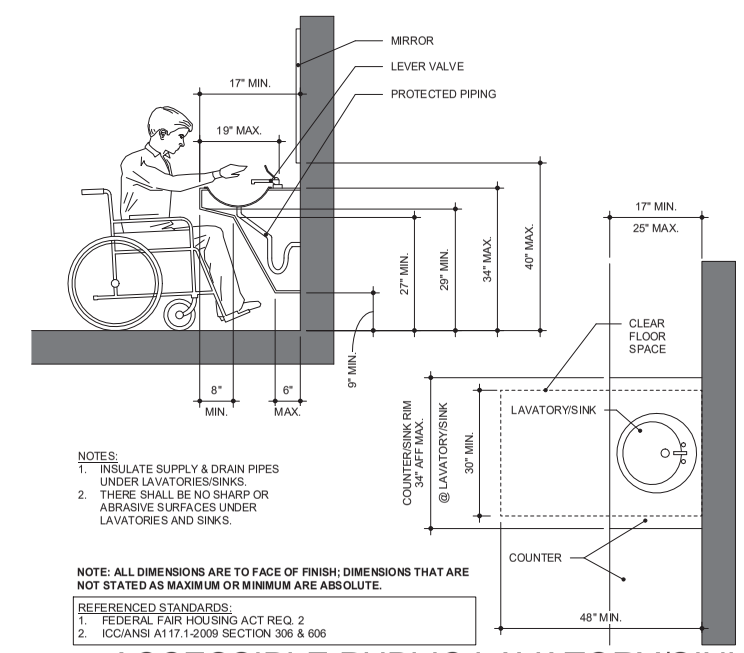


SIGN NOTES:
1. REQUIRED ACCESSIBLE ELEMENTS SHALL BE IDENTIFIED BY THE INTERNATIONAL SYMBOL OF ACCESSIBILITY PER IBC SECTION 1111 AND ANSI SECTION 703.6
2. DIRECTIONAL SIGNAGE INDICATING ROUTE TO ACCESSIBLE ELEMENTS SHALL BE PROVIDED PER IBC SECTION 1111.2

INFORMATION SHOWN FOR REFERENCE ONLY. SIGNAGE PACKAGE SHALL BE APPROVED BY DEFERRED SUBMITTAL. SUBMIT ALL SIGNAGE TO OWNER/ARCHITECT FOR REVIEW PRIOR TO INSTALL/FABRICATION.

REFERENCED STANDARDS:
1. INTERNATIONAL BUILDING CODE SECTION 1111
2. ICC/ANSI A117.1-2009 SECTION 703

5 ACCESSIBILITY SIGNAGE
1/2" = 1'-0"
AMENITY SPACES

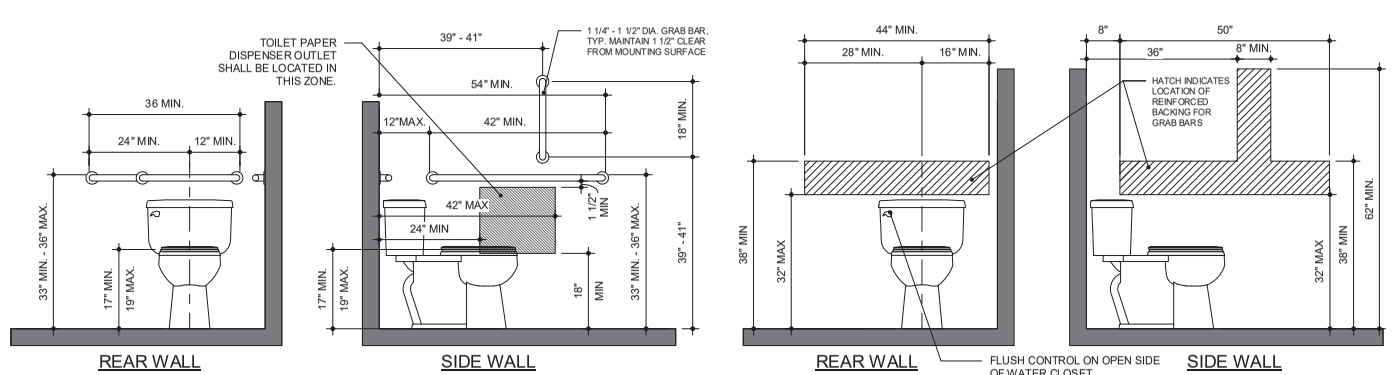


NOTES:
1. INSULATE SUPPLY & DRAIN PIPES UNDER LAVATORIES/SINKS.
2. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES AND SINKS.

NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 2
2. ICC/ANSI A117.1-2009 SECTION 306 & 606

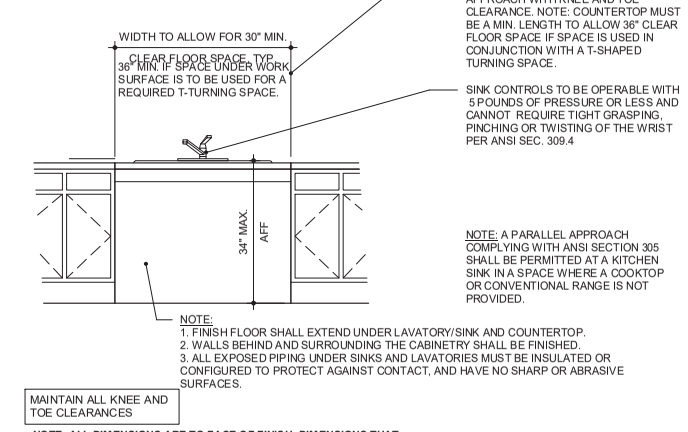
2 ACCESSIBLE PUBLIC LAVATORY/SINK
1/2" = 1'-0"
AMENITY SPACES



NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 2
2. ICC/ANSI A117.1-2009 SECTION 604 & 609
3. 2010 ADA STANDARDS (FOR PUBLIC ACCOMMODATIONS)

9 PUBLIC TOILET GRAB BAR PLACEMENT
1/2" = 1'-0"
AMENITY SPACES



COUNTERTOP MUST BE A MIN. LENGTH TO ALLOW A 30" x 48" CLEAR FLOOR SPACE POSITIONED FOR FORWARD APPROACH WITH KNEE AND TOE CLEARANCE. NOTE: COUNTERTOP MUST BE A MIN. LENGTH TO ALLOW 36" CLEAR FLOOR SPACE IF SPACE IS USED IN CONJUNCTION WITH A T-SHAPED TURNING SPACE.

SINK CONTROLS TO BE OPERABLE WITH 5 POUNDS OF PRESSURE OR LESS AND CANNOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST PER ANSI SEC. 309.4

NOTE: A PARALLEL APPROACH COMPLYING WITH ANSI SECTION 305 SHALL BE PERMITTED AT A KITCHEN SINK IN A SPACE WHERE A COOKTOP OR CONVENTIONAL RANGE IS NOT PROVIDED.

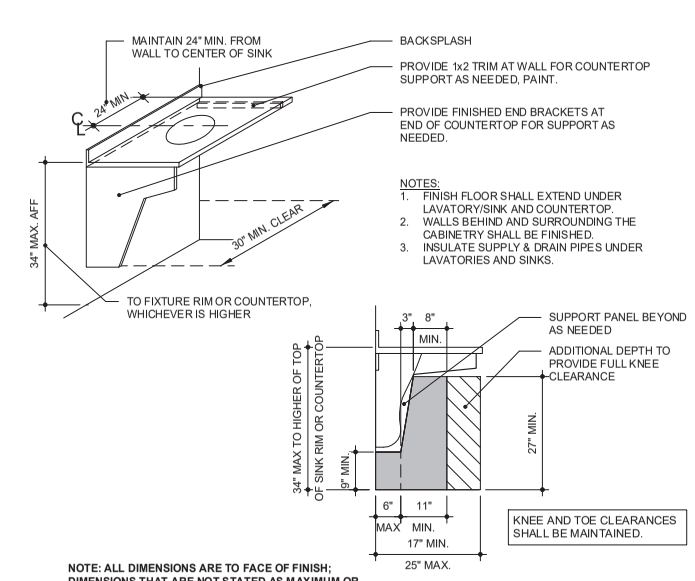
NOTE:
1. FINISH FLOOR SHALL EXTEND UNDER LAVATORY/SINK AND COUNTERTOP.
2. WALLS BEHIND AND SURROUNDING THE CABINETRY SHALL BE FINISHED.
3. ALL EXPOSED PIPING UNDER SINKS AND LAVATORIES MUST BE INSULATED OR CONFIGURED TO PROTECT AGAINST CONTACT, AND HAVE NO SHARP OR ABRASIVE SURFACES.

MAINTAIN ALL KNEE AND TOE CLEARANCES

NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE..

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 7a
2. ICC/ANSI A117.1-2009 SECTION 606

4 ACCESSIBLE PUBLIC LAVATORY/SINK
1/2" = 1'-0"
AMENITY SPACES



NOTES:
1. FINISH FLOOR SHALL EXTEND UNDER LAVATORY/SINK AND COUNTERTOP.
2. WALLS BEHIND AND SURROUNDING THE CABINETRY SHALL BE FINISHED.
3. INSULATE SUPPLY & DRAIN PIPES UNDER LAVATORIES AND SINKS.

NOTE: ALL DIMENSIONS ARE TO FACE OF FINISH; DIMENSIONS THAT ARE NOT STATED AS MAXIMUM OR MINIMUM ARE ABSOLUTE.

REFERENCED STANDARDS:
1. FEDERAL FAIR HOUSING ACT REQ. 2, 7a, AND 7b
2. ICC/ANSI A117.1-2009 SECTION 306 & 606

1 ACCESSIBLE LAVATORY/SINK
1/2" = 1'-0"
AMENITY SPACES

UNIFORM FEDERAL ACCESSIBILITY STANDARDS (UFAS)
PROJECT IS RECEIVING FEDRAL ASSSTANCE FROM THE HUD HOME FUNDS PROGRAM. AS SUCH, THE PROJECT FALLS UNDER THE REGULATIONS OF THE FEDERAL ACCESSIBILITY STANDARDS (UFAS). PROJECT HAS BEEN DESIGNED FOR COMPLIANCE WITH THE FAIR HOUSING ACT, THE 2018 IBC CODES, AS WELL AS UFAS REQUIREMENTS THAT EXTEND BEYOND FHA/IBC CODES. SEE BELOW FOR GUIDELINES FOR ACCESSIBLE DWELLING UNITS UNDER UFAS SECTION 4.34.

4.34.2 MINIMUM REQUIREMENTS

AN ACCESSIBLE DWELLING UNIT SHALL BE ON AN ACCESSIBLE ROUTE. AN ACCESSIBLE DWELLING UNIT SHALL HAVE THE FOLLOWING ACCESSIBLE ELEMENTS AND SPACES AS A MINIMUM:

(1) COMMON SPACES AND FACILITIES SERVING INDIVIDUAL ACCESSIBLE DWELLING UNITS (FOR EXAMPLE, ENTRY WALKS, TRASH DISPOSAL FACILITIES, AND MAIL BOXES) SHALL COMPLY WITH 4.2 THROUGH 4.33.
(2) ACCESSIBLE SPACES SHALL HAVE MANEUVERING SPACE COMPLYING WITH 4.2.2 AND 4.2.3 AND SURFACES COMPLYING WITH 4.5.
(3) AT LEAST ONE ACCESSIBLE ROUTE COMPLYING WITH 4.3 SHALL CONNECT THE ACCESSIBLE ENTRANCES WITH ALL ACCESSIBLE SPACES AND ELEMENTS WITHIN THE DWELLING UNITS.
(4) SEE 4.1.1(5)(D) --- PARKING.
(5) REMOVED AND RESERVED.
(6) DOORS TO AND IN ACCESSIBLE SPACES THAT ARE INTENDED FOR PASSAGE SHALL COMPLY WITH 4.13, EXCEPT THAT THE PROVISIONS OF 4.13.9 APPLY ONLY TO THE DOORS AT ACCESSIBLE ENTRANCES TO THE UNIT ITSELF.
(7) AT LEAST ONE ACCESSIBLE ENTRANCE TO THE DWELLING UNIT SHALL COMPLY WITH 4.14.
(8) STORAGE IN ACCESSIBLE SPACES IN DWELLING UNITS, INCLUDING CABINETS, SHELVES, CLOSETS, AND DRAWERS, SHALL COMPLY WITH 4.25.
(9) ALL CONTROLS IN ACCESSIBLE SPACES SHALL COMPLY WITH 4.27. THOSE PORTIONS OF HEATING, VENTILATING, AND AIR CONDITIONING EQUIPMENT REQUIRING REGULAR, PERIODIC MAINTENANCE AND ADJUSTMENT BY THE RESIDENT OF A DWELLING SHALL BE ACCESSIBLE TO PEOPLE IN WHEELCHAIRS. IF AIR DISTRIBUTION REGISTERS MUST BE PLACED IN OR CLOSE TO CEILINGS FOR PROPER AIR CIRCULATION, THIS SPECIFICATION SHALL NOT APPLY TO THE REGISTERS.
(10) EMERGENCY ALARMS AS REQUIRED BY 4.1 AND COMPLYING WITH 4.28.4 SHALL BE PROVIDED IN THE DWELLING UNIT.
(11) REMOVED AND RESERVED.
(12) AT LEAST ONE FULL BATHROOM SHALL COMPLY WITH 4.34.5. A FULL BATHROOM SHALL INCLUDE A WATER CLOSET, A LAVATORY, AND A BATHTUB OR A SHOWER.
(13) THE KITCHEN SHALL COMPLY WITH 4.34.6.
(14) IF LAUNDRY FACILITIES ARE PROVIDED, THEY SHALL COMPLY WITH 4.34.7.
(15) THE FOLLOWING SPACES SHALL BE ACCESSIBLE AND SHALL BE ON AN ACCESSIBLE ROUTE:
(A) THE LIVING AREA.
(B) THE DINING AREA.
(C) THE SLEEPING AREA, OR THE BEDROOM IN ONE BEDROOM DWELLING UNITS, OR AT LEAST TWO BEDROOMS OR SLEEPING SPACES IN DWELLING UNITS WITH TWO OR MORE BEDROOMS.
(D) PATIOS, TERRACES, BALCONIES, CARPORTS, AND GARAGES, IF PROVIDED WITH THE DWELLING UNIT.

4.34.4 CONSUMER INFORMATION

TO ENSURE THAT THE EXISTENCE OF ADAPTABLE FEATURES WILL BE KNOWN TO THE OWNER OR OCCUPANT OF A DWELLING, THE FOLLOWING CONSUMER INFORMATION SHALL BE PROVIDED IN EACH ADAPTABLE DWELLING UNIT AVAILABLE FOR OCCUPANCY:

(1) NOTIFICATION OF THE ALTERNATE HEIGHTS AVAILABLE FOR THE KITCHEN COUNTER AND SINK, AND THE EXISTENCE OF REMOVABLE CABINETS AND BASES, IF PROVIDED, UNDER COUNTERS, SINKS, AND LAVATORIES.
(2) NOTIFICATION OF THE PROVISIONS FOR THE INSTALLATION OF GRAB BARS AT TOILETS, BATHTUBS, AND SHOWERS.
(3) NOTIFICATION THAT THE DWELLING UNIT IS EQUIPPED TO HAVE A VISUAL EMERGENCY ALARM INSTALLED.
(4) IDENTIFICATION OF THE LOCATION WHERE INFORMATION AND INSTRUCTIONS ARE AVAILABLE FOR CHANGING THE HEIGHT OF COUNTERS, REMOVING CABINETS AND BASES, INSTALLING A VISUAL EMERGENCY ALARM SYSTEM, AND INSTALLING GRAB BARS.
(5) NOTIFICATION THAT THE DWELLING UNIT HAS BEEN DESIGNED IN ACCORDANCE WITH THIS UNIFORM FEDERAL ACCESSIBILITY STANDARDS.

IN ADDITION, THE PARTIES WHO WILL BE RESPONSIBLE FOR MAKING ADAPTATIONS SHALL BE PROVIDED WITH THE FOLLOWING INFORMATION:

(1) INSTRUCTIONS FOR ADJUSTING OR REPLACING KITCHEN COUNTER AND SINK HEIGHTS AND FOR REMOVING CABINETS.
(2) A SCALE DRAWING SHOWING METHODS AND LOCATIONS FOR THE INSTALLATION OF GRAB BARS.
(3) A SCALE DRAWING SHOWING THE LOCATION OF ADJUSTABLE OR REPLACEABLE COUNTER AREAS AND REMOVABLE CABINETS.
(4) IDENTIFICATION OF THE LOCATION OF ANY EQUIPMENT AND PARTS REQUIRED FOR ADJUSTING OR REPLACING COUNTER TOPS, CABINETS, AND SINKS.
(5) INSTRUCTIONS FOR INSTALLING A VISUAL EMERGENCY ALARM SYSTEM, IF THE DWELLING UNIT IS EQUIPPED FOR SUCH AN INSTALLATION.

ISSUE FOR CONSTRUCTION
08.07.2024

No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	
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Checked By	JG
Title	ACCESSIBILITY DETAILS - AMENITY AND UFAS
Sheet Number	A0-8.5

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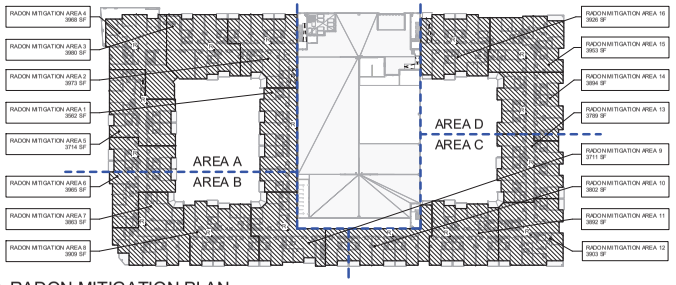
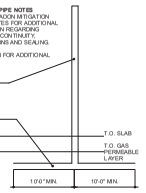


2 RADON MITIGATION PLAN
1" = 50'-0"

GENERAL VENT PIPE NOTES:
1. REFER TO RADON MITIGATION SYSTEM NOTES FOR ADDITIONAL INFORMATION REGARDING MATERIALS, CONTINUITY, PENETRATIONS AND SEALING.

SEE ROOF PLAN FOR ADDITIONAL NOTES



RADON-READY NEW CONSTRUCTION SYSTEM:

GENERAL
A. THIS PROJECT IS LOCATED IN A GEOGRAPHIC AREA KNOWN TO HAVE THE PRESENCE OF RADON IN THE GROUND. HOWEVER, IT IS UNKNOWN IF RADON IS ACTUALLY PRESENT AT THIS SITE. LOCATION OR IF THESE MITIGATION MEASURES ARE NECESSARY OR SUFFICIENT TO MITIGATE THE PRESENCE OF RADON.
B. THE MEASURES OUTLINED HERE ARE INTENDED TO AFFORD THE USER OF THE PROPERTY A SYSTEM TO MITIGATE POTENTIAL RADON GAS IF THE GAS IS FOUND TO BE PRESENT AT THE SITE AND WITHIN THE HABITABLE SPACES WITHOUT THE NEED FOR EXTENSIVE REMEDIATION MEASURES.
C. THE RADON MITIGATION SYSTEM SHALL INCLUDE MODERN RRNC METHODS FOR ACTIVE SOIL DEPRESSURIZATION.
D. POST CONSTRUCTION TESTING IS REQUIRED. IF TESTING RESULTS AT OR ABOVE THRESHOLD, CONVERSION FROM A PASSIVE SYSTEM TO AFAN-POWERED SYSTEM PURSUANT TO ANSI/AARST CC-1000 2018 OR MOST RECENT IS REQUIRED.
E. THE RADON SYSTEM IS A DEFERRED SUBMITTAL. SHOP DRAWINGS, CALULATIONS AND LAYOUT SHALL BE PRODUCED BY A RADON PROFESSIONAL CREDENTIALED BY THE NATIONAL RADON PROFICIENCY PROGRAM (NRPP).

DEFINITIONS
A. "RADON MITIGATION: SHALL INCLUDE MEANS AND METHODS AS REQUIRED TO REDUCE RADON IN HOMES AS FAR AS PRACTICABLE BELOW A PROCEDURES PER LITER OF INDOOR AIR.

REFERENCES
A. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (EPA) GUIDE ON HOW TO BUILD RADON-RESISTANT HOMES. ANSI/AARST CC-1000 2018 OR MOST RECENT
B. REFER TO THE EPA GUIDE FOR THE CURRENT GEOGRAPHICAL POTENTIAL RADON ZONE FOR THIS PROJECT AS DETERMINED BY THE US GEOLOGICAL SURVEY

EXECUTION: RADON PASSIVE VENT SYSTEM LAYOUT DESIGN, INSTALLATION, MITIGATION, AND TESTING SHALL BE CONDUCTED BY A RADON PROFESSIONAL CREDENTIALED BY THE NATIONAL RADON PROFICIENCY PROGRAM (NRPP) OR NATIONAL RADON SAFETY BOARD (NRSB). UPON COMPLETION OF THE PROJECT, A CERTIFICATE OF COMPLETION MUST BE ISSUED BY THE CREDENTIALED RADON PROFESSIONAL SUPERVISING THE PROJECT.

SUITABLE METHODS:
A. "GEOTEXTILE LAYER SOIL GAS COLLECTOR MAT OR "RADON MAT" (1" LOW-PROFILE MAT MATERIAL INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS)
a. CREATE PERIMETER "LOOP" OF MAT SYSTEM 12-36" WITHIN OUTSIDE FOUNDATION WALL.
b. GRID SYSTEM TO CREATE ~2,000-4,000 SQ FT SECTIONS WITH MAT "RUNNERS"
c. "VENT SUB SLAB GASSES WITH VERTICAL EXHAUST EVERY 2,000 SQ FT. EXHAUST MUST HAVE TWO MAT CONNECTIONS AND ONE VERTICAL RISER TO 4" SCHEDULE 40 PVC. PLACE ONE EXHAUST EVERY 2,000 SQ FT 4,000 SQ FT. SPREAD EXHAUSTS EVENLY THROUGHOUT BUILDING. BEST PLACEMENT IS IN WALL CAVITY.
d. TRENCHING IS NOT REQUIRED FOR LOW PROFILE MAT
e. VAPOR BARRIER IS NOT REQUIRED FOR LOW PROFILE MAT (WILL NOT AFFECT PERFORMANCE IF BARRIER IS PRESENT AS REQUIRED BY SOILS REPORT OR STRUCTURAL)
f. PERF PIPE IS NOT REQUIRED FOR LOW PROFILE MAT SYSTEM (WILL NOT AFFECT PERFORMANCE IF FULL IS PRESENT AS REQUIRED BY SOIL'S REPORT OR STRUCTURAL)
B. PIPE LOOP SOIL GAS COLLECTOR OR "PERF PIPE"
a. CREATE 2" OR 4" PERFORATED PIPE "LOOP" TRENCHED INTO GRAVEL EVEN WITH GRADE at " MIN DEPTH FILL: 2,000 SQ FT GRIDS FOR 3", UP TO 4,000 SQ FT GRIDS FOR 4". GRAVEL SHALL BE A UNIFORM LAYER OF CLEAN AGGREGATE, A MINIMUM OF 4 INCHES THICK. THE AGGREGATE SHALL CONSIST OF MATERIAL THAT WILL PASS THROUGH A 2 INCH SIEVE AND BE RETAINED BY A 1/4 INCH SIEVE. IN BUILDINGS WHERE INTERIOR FOOTINGS OR OTHER BARRIERS SEPARATE SUB-GRADE AREAS, PENETRATIONS THROUGH THE INTERIOR FOOTING OR BARRIER EQUAL TO A MINIMUM OF 1 2 SQUARE INCHES PER 10 FEET OF BARRIER LENGTH SHALL BE PROVIDED. A MINIMUM OF TWO PENETRATIONS SHALL BE PROVIDED PER SEPARATION AND SHALL BE VERTICALLY SPACED ALONG THE SEPARATION. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
b. PIPE SHALL BE SCHEDULE 40 PVC OR BETTER WITH FIRE RATING MUST BE PLACED ABOVE PIPE LOOP WB FORE CONCRETE POUR.
c. VERTICAL PVC TS 4" MIN SCHEDULE 40 PVC MUST BE SPREAD EVENLY THROUGHOUT THE SYSTEM. TWO INLETS AND ONE VERTICAL EXHAUST. PLACE EVERY 2,000 SQ FT FOR 3" PIPE, 4,000 SQ FT FOR 4" PIPE.
C. FOR ALTERNATIVE APPROVED METHODS REFERENCE THE ANSI/AARST CC-1000 2018, OR MOST RECENT
ABOVE SLAB CONSTRUCTION (ALL METHODS):
A. LABELS MUST BE PLACED ON EXHAUST PIPE ON EVERY FLOOR AND ATTIC OF BUILDING THAT READS, 'CAUTION RADON REDUCTION SYSTEM... TEST FOR RADON EVERY TWO YEARS'
B. PROVIDE ATTIC/ROOF SPACE FOR RADON FAN: A CYLINDRICAL SPACE NO LESS THAN 36" H X 21" W. LEAVE 120V OUTLET WITHIN 4 FT OF EXHAUST PIPE. IF NO ATTIC, LEAVE ROOM ON ROOF. RADON FANS MAY NOT BE INSTALLED WITHIN THE BUILDING'S INSULATED ENVELOPE DUE TO THE RISK OF EXHAUST FAILURES.

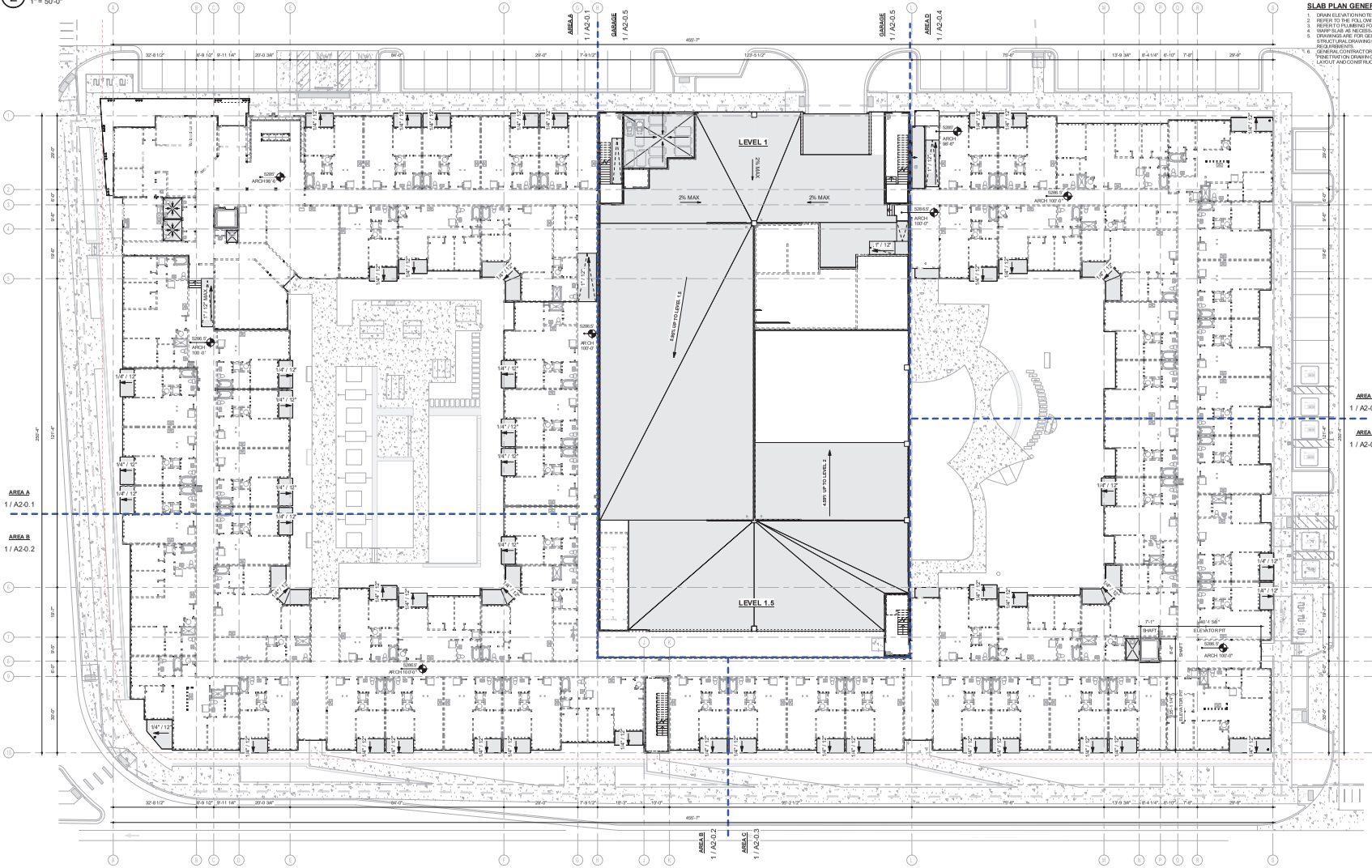
FINAL COUNT AND PLACEMENT OF VERTICAL RISERS TO BE DETERMINED BY RADON CONSULTANT. G.C TO NOTIFY ARCHITECT IF AN ADJUSTMENT TO THE PLANS IS REQUIRED.

SLAB PLAN LEGEND

(D2.1) / 2000	SPOT ELEVATION INDICATOR
	SLAB STEP CONDITION
	SLAB STEPPED SLOPE CONDITION
	SLAB SLOPE CONDITION
	SLAB SLOPE INDICATOR
	FLOOR DRAIN
	SL AB ON GRADE - NO SLOPE
	OPENING IN SLAB
	PT SLAB -NO SLOPE
	PT SLAB, SLOPED (AS INDICATED ON PLAN)
	PEDESTRAIN GRADE TRAFFIC COATING AT DECKS AND GARAGE SLAB
	CONCRETE CURB
	CONCRETE WALL
	CMU WALL

SLAB PLAN GENERAL NOTES

1. DRAIN ELEVATION NOTED AS T.O.D.
2. REFER TO THE FOLLOWING DETAIL FOR ADDITIONAL DRAIN DETAILS.
3. REFER TO PLUMBING FOR ADDITIONAL INFORMATION.
4. WARP SLAB AS NECESSARY TO PREVENT DRAINAGE OBSTRUCTION.
5. DRAWINGS ARE FOR GENERAL DESCRIPTION. VERIFY WITH STRUCTURAL DRAWINGS FOR ALL DIMENSIONS, LOCATIONS, & REQUIREMENTS.
6. GENERAL CONTRACTOR SHALL PROVIDE FULLY DIMENSIONED PENETRATION DRAWINGS FOR REVIEW PRIOR TO COMMENCING SLAB LAYOUT AND CONSTRUCTION.



1 OVERALL LEVEL 1 SLAB PLAN
1/16" = 1'-0"

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ISSUE FOR CONSTRUCTION
06.01.2024

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Title: OVERALL LEVEL 1 FLOOR SLAB PLAN
Sheet Number: A1-1.0

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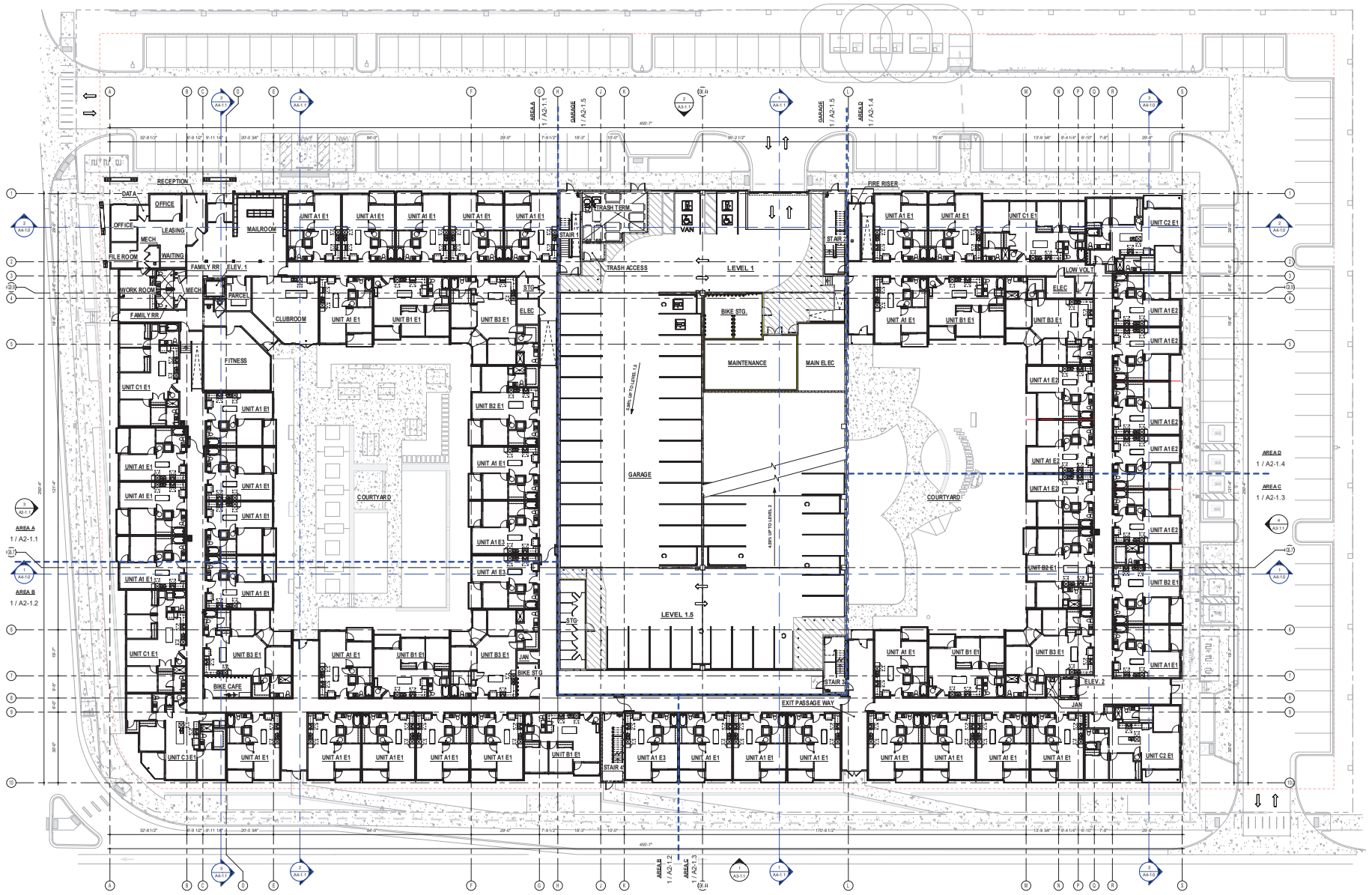

1 OVERALL LEVEL 1 COMPOSITE PLAN
1/16" = 1'-0"

GENERAL NOTES

- DIMENSIONS TAKE PRECEDENCE OVER DRAWINGS. DO NOT SCALE.
- DIMENSIONS ARE TAKEN TO FACE OF STUDS UNLESS OTHERWISE INDICATED ON THE PLANS.
- ACCESSIBILITY ELEMENTS INDICATED ARE REQUIRED. FIELD CONDITIONS OCCURRING WHICH IMPACT THE ACCESSIBILITY DESIGN SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.
- SEE INTERIOR DRAWINGS FOR ALL FINISH MATERIALS
- ELEVATION 100'-0" EQUALS CIVIL FF 5286.95' RE: CIVIL DRAWINGS

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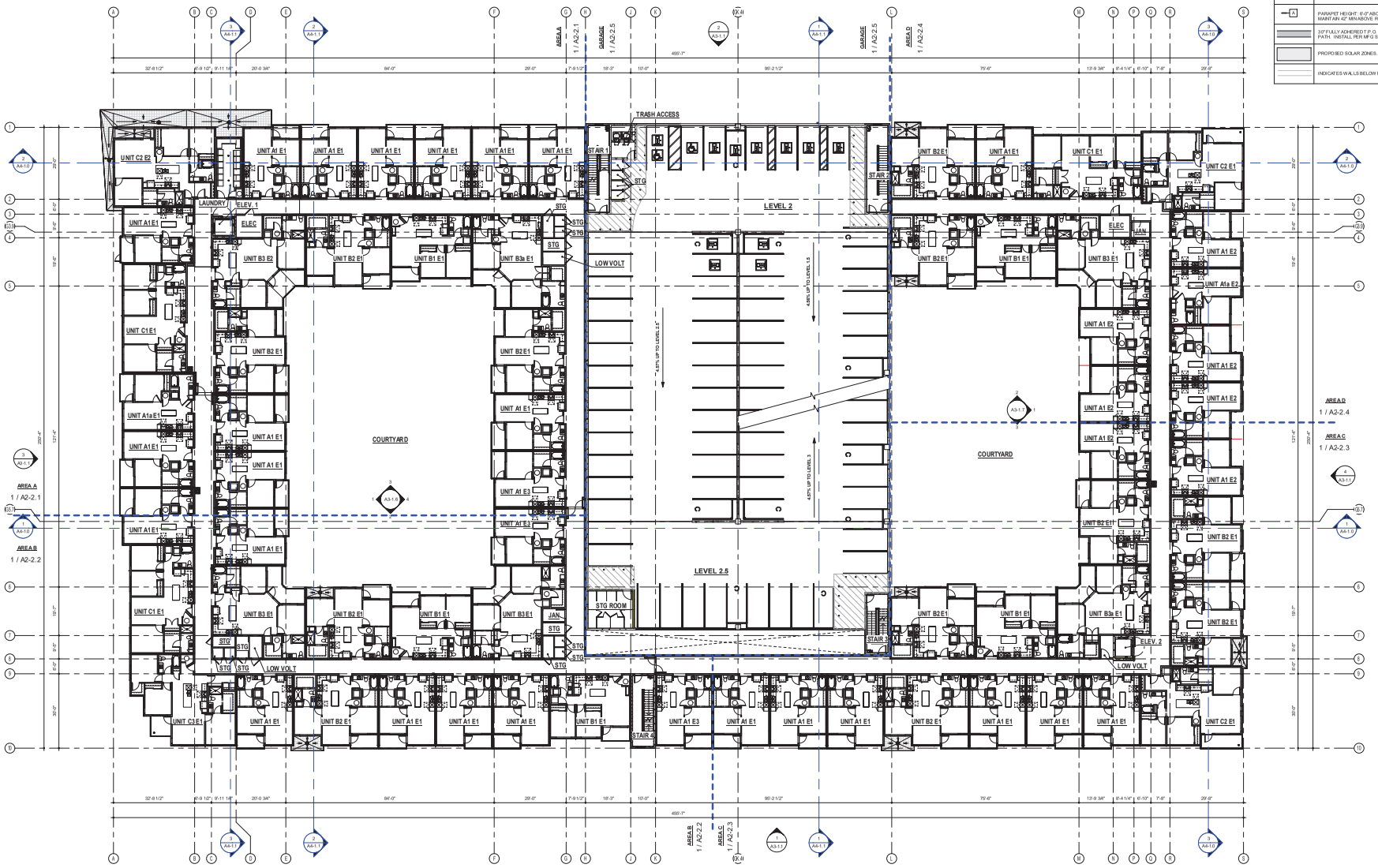

1 OVERALL LEVEL 2 COMPOSITE PLAN
1/16" = 1'-0"

GENERAL NOTES

- DIMENSIONS TAKE PRECEDENCE OVER DRAWINGS. DO NOT SCALE.
- DIMENSIONS GIVEN TO FACE OF STUDS UNLESS OTHERWISE INDICATED ON THE PLANS.
- ACCESSIBILITY ELEMENTS INDICATED ARE REQUIRED. FIELD CONDITIONS OCCURRING WHICH IMPACT THE ACCESSIBILITY DESIGN SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.
- SEE INTERIOR DRAWINGS FOR ALL FINISH MATERIALS
- ELEVATION 107'-0" EQUALS CIVIL FF 5286.50' RE: CIVIL DRAWINGS

SYMBOLS LEGEND

●	ROOF DRAIN. RE: PLUMBING
	NO OPENINGS WITHIN 4'-0" MIN. OF FIREWALL. NON-COMBUSTIBLE ROOF CONSTRUCTION. REQ'D BY IBC SECTION 7.066 EXCEPTION NO. 4. RE: ASSEMBLIES
→	INDICATES DIRECTION OF ROOF AND CRICKET SLOPES. ALL ROOF AREAS SHALL SLOPE TO DRAIN AT 1/4" PER FT. MINIMUM.
○○	TRASH & RECYCLE CHUTE VENTS; 4' - 0" ABOVE FIN. ROOF
A	PARAPET HEIGHT: 6'-0" ABOVE LEVEL 4 PLATE; MAINTAIN 42" MIN ABOVE ROOF
	3'-0" FULLY ADHERED T.P.O. ROOF MEMBRANE WALKING PATH. INSTALL PER MFG SPECS
	PROPOSED SOLAR ZONES. RE: SOLAR SHOPS
	INDICATES WALLS BELOW ROOF PLANE

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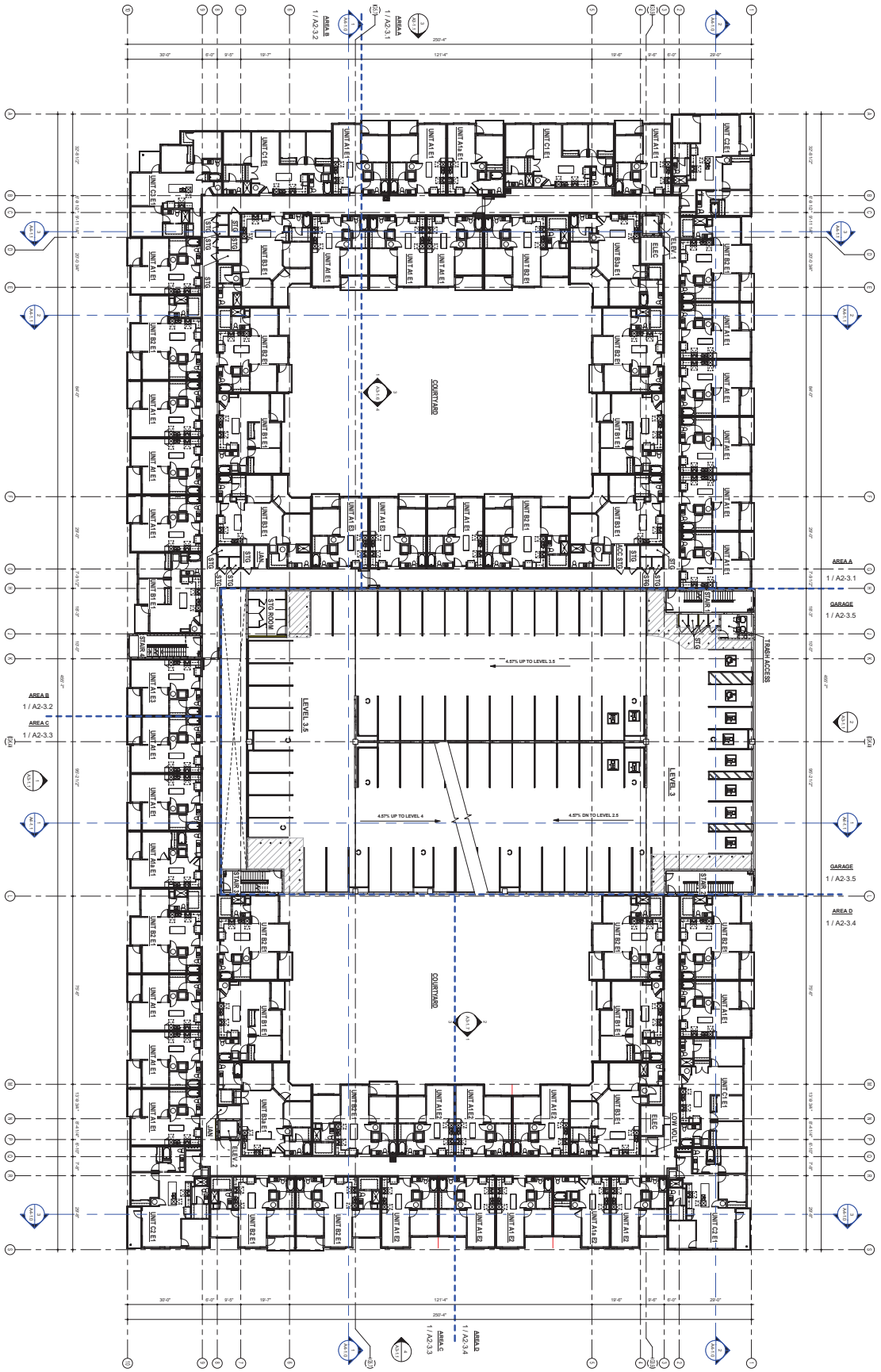
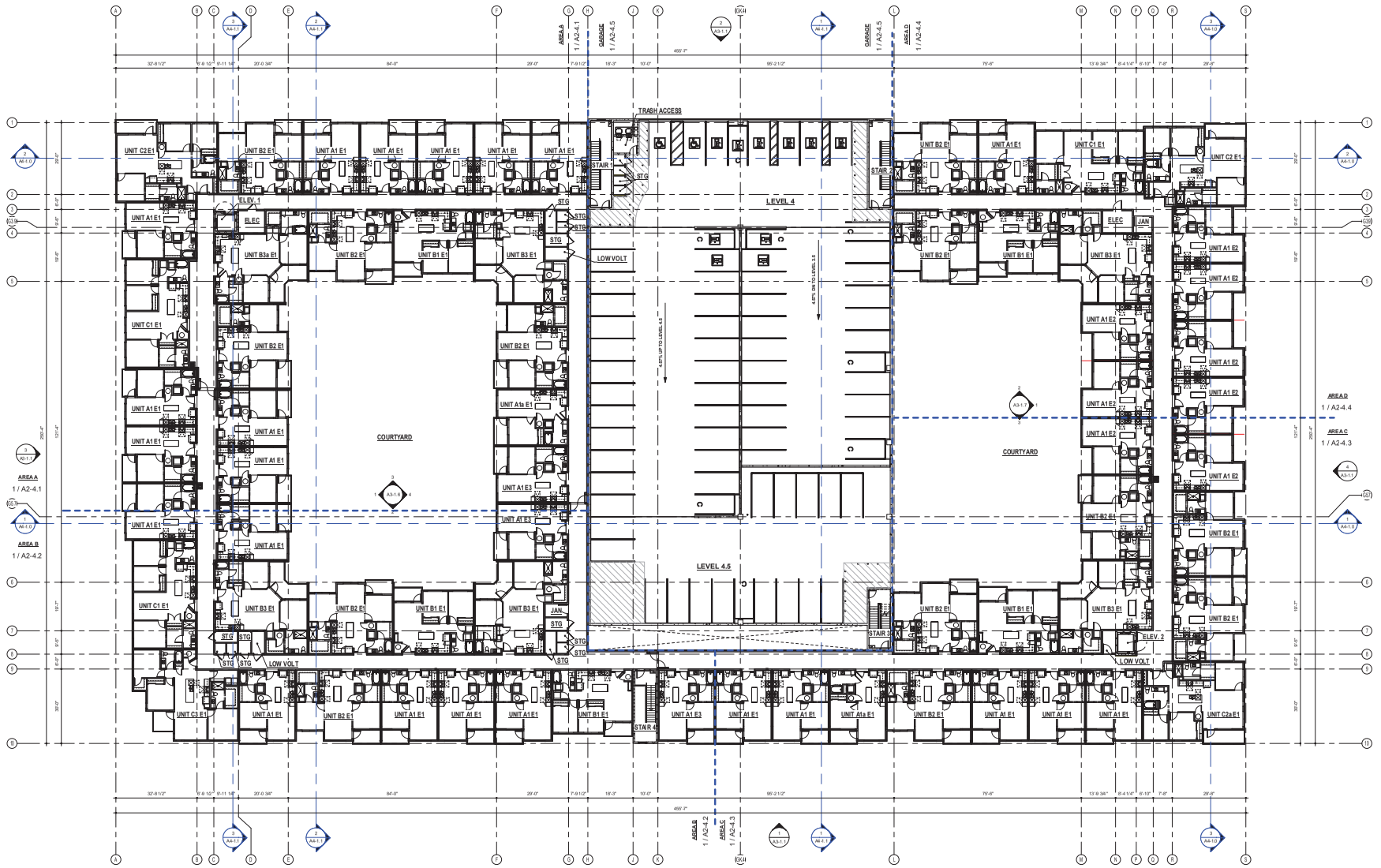


1 OVERALL LEVEL 3 COMPOSITE PLAN
1/16" = 1'-0"

GENERAL NOTES

- DIMENSIONS TAKES PRECEDENCE OVER DRAWINGS. DO NOT SCALE DRAWINGS.
- ALL DIMENSIONS ARE TO FACE OF STUD OR CONCRETE UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS INDICATED ARE REQUIRED. FIELD ADJUSTMENTS SHALL BE MADE AS NECESSARY TO MAINTAIN DIMENSIONAL INTENT. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.
- REFER TO FINISH SCHEDULE AND INTERIOR ELEVATIONS FOR ALL FINISH MATERIALS.
- REFER TO ENLARGED PLANS, ELEVATIONS AND SECTIONS FOR ADDITIONAL INFORMATION.
- REFER TO ENLARGED DRAWINGS FOR ALL FINISH MATERIALS



1 OVERALL LEVEL 4 COMPOSITE PLAN
1/16" = 1'-0"

GENERAL NOTES

- DIMENSIONS TAKE PRECEDENCE OVER DRAWINGS. DO NOT SCALE.
- DIMENSIONS ARE TO FACE OF STUDS UNLESS OTHERWISE INDICATED ON THE PLANS.
- ACCESSIBILITY ELEMENTS INDICATED ARE REQUIRED. FIELD CONDITIONS OCCURRING WHICH IMPACT THE ACCESSIBILITY DESIGN SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.
- SEE INTERIOR DRAWINGS FOR ALL FINISH MATERIALS
- ELEVATION 100'-0" EQUALS CIVIL FF 5286.95' RE: CIVIL DRAWINGS

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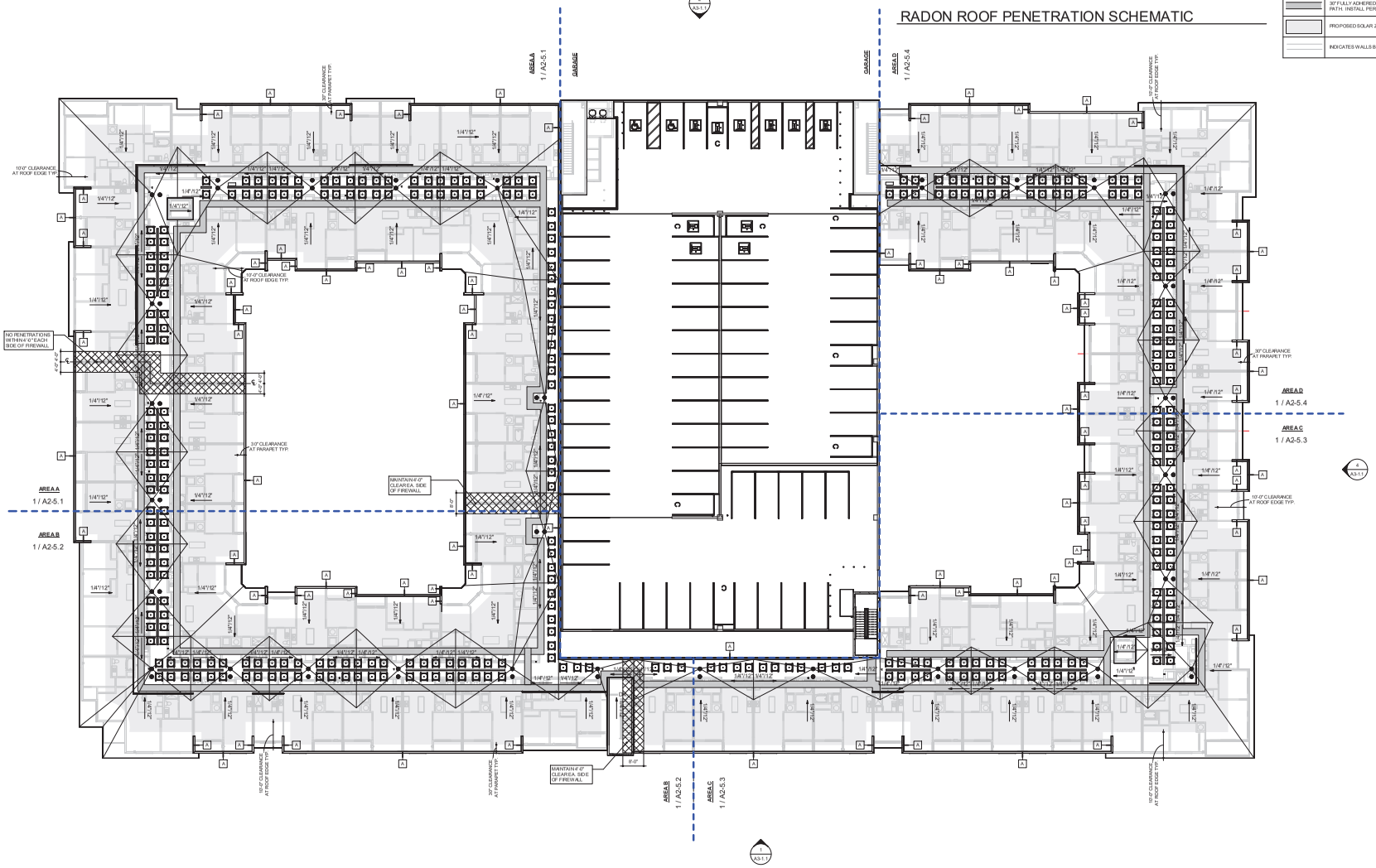
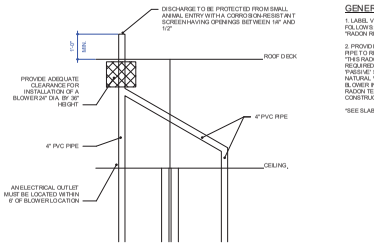


RADON ROOF PENETRATION SCHEMATIC



GENERAL VENT PIPE NOTES:

1. LABEL VENT PIPES IN ATTIC AS FOLLOWS "RADON REDUCTION SYSTEM"

2. PROVIDE PLACARD NEAR EACH VENT PIPE TO READ AS FOLLOWS: "THIS RADON REDUCTION SYSTEM IS IN OT REQUIRED TO BE TESTED AND IS A 'PASSIVE' SYSTEM, RELYING ENTIRELY ON NATURAL VENTILATION". REMOVE IF BLOWER IN ST ALLED AS REQUIRED PER RADON TESTING FOLLOWING CONSTRUCTION.

SEE SLAB PLAN FOR ADDITIONAL NOTES

GENERAL NOTES

- DIMENSIONS TAKE PRECEDENCE OVER DRAWINGS. DO NOT SCALE.
- DIMENSIONS ARE TO FACE OF STUDS UNLESS OTHERWISE INDICATED ON THE PLANS.
- ACCESSIBILITY ELEMENTS INDICATED ARE REQUIRED. FIELD CONDITIONS OCCURRING WHICH IMPACT THE ACCESSIBILITY DESIGN SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.
- SEE INTERIOR DRAWINGS FOR ALL FINISH MATERIALS
- ELEVATION 100'-0" EQUALS CIVIL FF. 5286.50' RE: CIVIL DRAWINGS

SYMBOLS LEGEND

●	ROOF DRAIN. R/E PLUMBING
▨	NO OPENINGS WITHIN 4'-0" MIN. OF FIREWALL, NOR. COMBUSTIBLE ROOF CONSTRUCTION. RECD BY IBC SECTION 706/6 EXCEPTION NO. 4. RE: ASSEMBLIES
→	INDICATES DIRECTION OF ROOF AND CRICKET SLOPES. ALL ROOF AREAS SHALL SLOPE TO DRAIN AT 1/4" PER FT. MINIMUM
○○	TRASH & RECYCLE CHUTE VENTS; 4' - 0 " ABOVE FIN. ROOF
A	PARAPET HEIGHT; 6'-0" ABOVE LEVEL 4 PLATE; MAINTAIN 42" MIN ABOVE ROOF
	30" FULLY ADHERED T.P.O. ROOF MEMBRANE WALKING PATH. INSTALL PER MFG SPECS
	PROPOSED SOLAR ZONES. RE: SOLAR SHOPS
	INDICATES WALLS BELOW ROOF PLANE

1 OVERALL ROOF COMPOSITE PLAN
1/16" = 1'-0"

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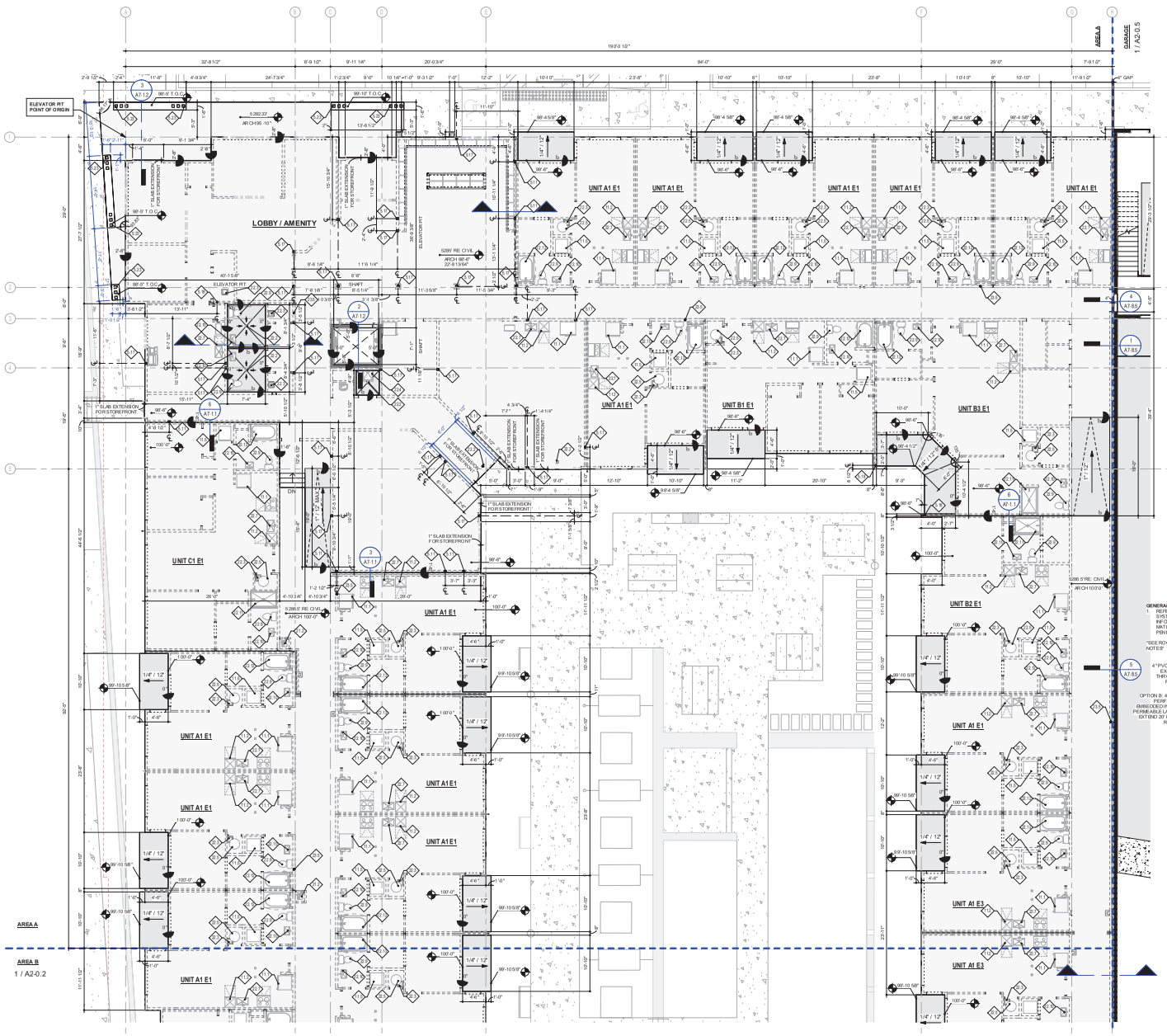


SLAB PLAN LEGEND

123.45 / 123.00	SPOT ELEVATION INDICATOR
	SLAB STEP CONDITION
	SLAB STEPPED SLOPE CONDITION
	SLAB SLOPE CONDITION
	SLAB SLOPE INDICATOR
	FLOOR DRAIN
	SLAB ON GRADE - NO SLOPE
	OPENING IN SLAB
	PT SLAB - NO SLOPE
	PT SLAB, SLOPED (AS INDICATED ON PLAN)
	PEDESTRIAN GRADE TRAFFIC COATING AT DECKS AND GARAGE SLAB
	CONCRETE CURB
	CONCRETE WALL
	CMU WALL

SLAB PLAN GENERAL NOTES

1. DRAIN ELEVATION NOTED AST.O.D.
2. REFER TO THE FOLLOWING DETAIL FOR ADDITIONAL DRAIN DETAILS:
3. REFER TO PLUMBING FOR ADDITIONAL INFORMATION.
4. WARP SLAB AS NECESSARY TO PREVENT DRAINAGE OBSTRUCTION.
5. DRAWINGS ARE FOR GENERAL DESCRIPTION. VERIFY WITH STRUCTURAL DRAWINGS FOR ALL DIMENSIONS, LOCATIONS, & REQUIREMENTS.
6. GENERAL CONTRACTOR SHALL PROVIDE FULLY DIMENSIONED PENETRATION DRAWINGS FOR REVIEW PRIOR TO COMMENCING SLAB LAYOUT AND CONSTRUCTION.

KEYNOTES

NO.	NOTE
5.11	RECTANGULAR HSS COLUMN. RE: STRUCTURAL
5.17	SQUARE HSS COLUMN. RE: STRUCTURAL
5.18	ROUND HSS COLUMN. RE: STRUCTURAL
5.23	SQUARE HSS COLUMN. RE: STRUCT. PAINTED BM 0045 ANTIQUARIAN BRONN
11.1	REFRIGERATOR / FREEZER
11.2	24" X 24" DISHWASHER. RE: PLUMBING
11.5	STACKABLE FRONT LOAD WASHER/DRYER. OPTIONAL TENANT LEASE BY OWNER.
21.2	CLASS 1 TANDIPIPE PER IBC 2018 SECTION 905. EXACT LOCATION SHALL BE PER FIRE SPRINKLER DESIGN-BUILD SUBCONTRACTOR & SHALL BE SUBMITTED TO FIRE DEPT FOR APPROVAL. PROVIDE ACCESSIBLE CANE DETECTION DEVICE AT FLOOR AS REQUIRED AT VALVE CONNECTIONS
22.2	FLOOR DRAIN. SLOPE SLAB TO DRAIN AS INDICATED. RE: PLUMBING
22.3	FLOOR SINK. RE: PLUMBING
22.4	MOP SINK. RE: PLUMBING
22.5	ELEC. WATER HEATER W / PAN. RE: PLUMBING
22.7	UNDERMOUNT KITCHEN SINK. RE: PLUMBING
22.9	FLOOR MOUNT WATER CLOSET. RE: PLUMBING
22.10	WET ROOM SINK. EMBLEM RIM OF SINK IS BELOW 36" MAX. A.F.F. SINK BOWL TO BE 6 1/2" DEEP. MAXIMUM PER UFAS GUIDELINES. RE: PLUMBING
22.11	60" X 36" SHOWER PAN WITH PREFABRICATED SURROUNDS. PROVIDE STRAIGHT SHOWER CURTAIN ROD. PROVIDE GLASS MAT GYPSUM BOARD AS REQUIRED PRE-ROCK AROUND TUB LOCATIONS ADJACENT TO RATED WALLS AS REQUIRED. INSTALL BLOCKING IN WALL FOR FUTURE GRAB BAR INSTALLATION. BOD: COMFORT DESIGNS SSB6036 40 ARB-R
22.12	60" X 60" X 36" SHOWER WITH PREFABRICATED SURROUNDS. PROVIDE CURVED SHOWER CURTAIN ROD. PROVIDE GLASS MAT GYPSUM BOARD AS REQUIRED PRE-ROCK AROUND TUB LOCATIONS ADJACENT TO RATED WALLS AS REQUIRED. INSTALL BLOCKING IN WALL FOR FUTURE GRAB BAR INSTALLATION.
23.5	RADON RISER VENT, 4" PVC TO PENETRATE ROOF.

RADON-READY NEW CONSTRUCTION SYSTEM:

GENERAL

A. THIS PROJECT IS LOCATED IN A GEOGRAPHIC AREA KNOWN TO HAVE THE PRESENCE OF RADON IN THE GROUND. HOWEVER, IT IS UNKNOWN IF RADON IS ACTUALLY PRESENT AT THIS SITE LOCATION ORIF THESE MITIGATION PROVISIONS ARE NECESSARY OR SUFFICIENT TO MITIGATE THE PRESENCE OF RADON.

B. THE MEASURES OUTLINED HERE ARE INTENDED TO AFFORD THE USER OF THE PROPERTY A SYSTEM TO MITIGATE POTENTIAL RADON AS IF THE GAS IS FOUND TO BE PRESENT AT THE SITE AND WITHIN THE HABITABLE SPACES WITHOUT THE NEED FOR EXTENSIVE REMEDIATION MEASURES.

C. THE RADON MITIGATION SYSTEM SHALL INCLUDE MODERN RRNC METHOD S FOR ACTIVE SOIL DEPRESSURIZATION.

D. POST CONSTRUCTION TESTING IS REQUIRED. IF TESTING RESULTS AT OR ABOVE THRESHOLD, CONVERSION FROM A PASSIVE SYSTEM TO A FAN-POWERED SYSTEM PURSUANT TO ANSI/AARST CC-1 000 2018 OR MOST RECENT IS REQUIRED.

E. THE RADON SYSTEM IS A DEFERRED SUBMITTAL. SHOP DRAWINGS, CALCULATIONS AND LAYOUT SHALL BE PRODUCED BY A RADON PROFESSIONAL CREDENTIALED BY THE NATIONAL RADON PROFICIENCY PROGRAM (NRPP).

DEFINITIONS

A. RADON MITIGATION: SHALL INCLUDE MEANS AND METHODS AS REQUIRED TO REDUCE RADON IN HOMES AS FAR AS PRACTICABLE BELOW 4 PICOCURIES PER LITER OF INDOOR AIR.

REFERENCES

A. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (EPA) GUIDE ON HOW TO BUILD RADON RESISTANT HOMES: ANSI-AARST CC-1000 2018 OR MOST RECENT

B. REFER TO THE EPA GUIDE FOR THE CURRENT GEOGRAPHICAL POTENTIAL RADON ZONE FOR THIS PROJECT AS DETERMINED BY THE US GEOLOGICAL SURVEY

EXECUTION: RADON PASSIVE VENT SYSTEM LA YOUT DESIGN, INSTALLATION, MITIGATION, AND TESTING SHALL BE CONDUCTED BY A RADON PROFESSIONAL CREDENTIALED BY THE NATIONAL RADON PROFICIENCY PROGRAM (NRPP) OR NATIONAL RADON SAFETY BOARD (NRSB). UPON COMPLETION OF THE PROJECT, A CERTIFICATE OF COMPLETION MUST BE ISSUED BY THE CREDENTIALED RADON PROFESSIONAL SUPERVISING THE PROJECT.

SUITABLE METHODS:

A. GEOTEXTILE LAYER SOIL GAS COLLECTOR MAT OR " RADON MAT" (1" LOW-PROFILE MAT MATERIAL INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS):

a. CREATE PERIMETER "LOOP" OF MAT SYSTEM 12-36" WITHIN OUTSIDE FOUNDATION WALL.
b. GRID SYSTEM TO CREATE ~2,000-4,000 SQ FT SECTIONS WITH MAT "RUNNERS"
c. VENT SUB SLAB GASSES WITH VERTICAL EXHAUSTS EVERY 2,000 SQ FT. EXHAUST MUST HAVE TWO MAT CONNECTIONS AND ONE VERTICAL RISER TO 4" SCHEDULE 40 PVC. PLACE ONE EXHAUST EVERY 2,000 SQ FT-4,000 SQ FT. SPREAD EXHAUSTS EVENLY THROUGHOUT BUILDING. BEST PLACEMENT IS IN WALL CAVITY.
d. TRENCHING IS NOT REQUIRED FOR LOW PROFILE MAT
e. VAPOR BARRIER IS NOT REQUIRED FOR LOW PROFILE MAT (WILL NOT AFFECT PERFORMANCE IF BARRIER IS PRESENT AS REQUIRED BY SOILS REPORT)
f. GRAVEL BACKFILL IS NOT REQUIRED FOR MAT SYSTEM (WILL NOT AFFECT PERFORMANCE IF FILL IS PRESENT AS REQUIRED BY SOILS REPORT OR STRUCTURAL)

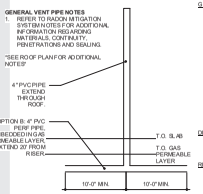
B. PIPE LOOP SOIL GAS COLLECTOR MAT OR " RISER PIPE":

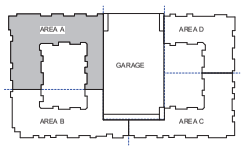
a. CREATE PERIMETER "LOOP" OF 4" PERFORATED PIPE "LOOP" TRENCHED INTO GRAVEL EVEN WITH GRADE 8" MIN DEPTH FILL). 2,000 SQ FT GRIDS FOR 2" LIF TO 4,000 SQ FT GRIDS FOR 4". GRAVEL SHALL BE A UNIFORM LAYER OF CLEAN AGGREGATE, A MINIMUM OF 4 INCHES THICK. THE AGGREGATE SHALL CONSIST OF MATERIAL THAT WILL PASS THROUGH A 2 INCH SIEVE AND BE RETAINED BY A 1/4 INCH SIEVE. IN BUILDINGS WHERE INTERIOR FOOTINGS DIRECTHER BARRIER SEPARATE SLAB GRADE AREAS, PENETRATIONS THROUGH THE INTERIOR FOOTING OR BARRIER EQUAL TO A MINIMUM OF 12 SQUARE INCHES PER 10 FEET OF BARRIER LENGTH SHALL BE PROVIDED. A MINIMUM OF TWO PENETRATIONS SHALL BE PROVIDED PER SEPARATION AND BE EVENLY SPACED ALONG THE SEPARATION. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
b. VAPOR BARRIER, CLASS A, NO LESS THAN 10 MIL RATING, MUST BE PLACED ABOVE PIPE LOOP BEFORE CONCRETE POUR.
c. VERTICAL PVC TS 4" MIN SCHEDULE 40 PVC MUST BE SPREAD EVENLY THROUGHOUT THE SYSTEM. TWO INLETS AND ONE VERTICAL EXHAUST. PLACE EVERY 2,000 SQ FT TO 4,000 SQ FT FOR 4" PIPE.
C. FOR ALTERNATIVE APPROVED METHODS REFERENCE THE ANSI/AARST CC-1 000-2018, OR MOST RECENT

AREAS OF RADON PROTECTION REQUIRED:

A. CARBON MEMBRANE PLACED ON ENTIRE FIRST FLOOR AND ATTIC OF BUILDING THAT READS "CAUTION RADON REDUCTION SYSTEM... TEST FOR RADON EVERY TWO YEARS"
B. PROVIDE ATTIC/ROOF SPACE FOR RADON FAN A CY UNDRICAL SPACE NO LESS THAN 36" H X 21" W. LEAVE 120 V OUTLET WITHIN 4 FT OF EXHAUST PIPE. IF NO ATTIC, LEAVE ROOM ON ROOF. RADON FANS MAY NOT BE INSTALLED WITHIN THE BUILDING'S INSULATED ENVELOPE DUE TO THE RISK OF EXHAUST FAILURES.

FINAL COUNT AND PLACEMENT OF VERTICAL RISERS TO BE DETERMINED BY RADON CONSULTANT. G.C TO NOTIFY ARCHITECT IF AN ADJUSTMENT TO THE PLANS IS REQUIRED.





BUILDING AREAS KEY PLAN

N TRUE N PROJECT

1 ENLARGED LEVEL 1 SLAB PLAN - AREA A
1/8" = 1'-0"

KEPHART
community ■ planning ■ architecture
2000 WALNUT STREET
DENVER, COLORADO 80205
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MARSHALL POINTE

MARSHALL POINTE LAND AQUISITION, LLC
5170 MARSHALL ST - ARVADA, CO 80002

ISSUE FOR CONSTRUCTION
06.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Title:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: ENLARGED LEVEL 1 SLAB PLAN - AREA A
Sheet Number: A2-0.1

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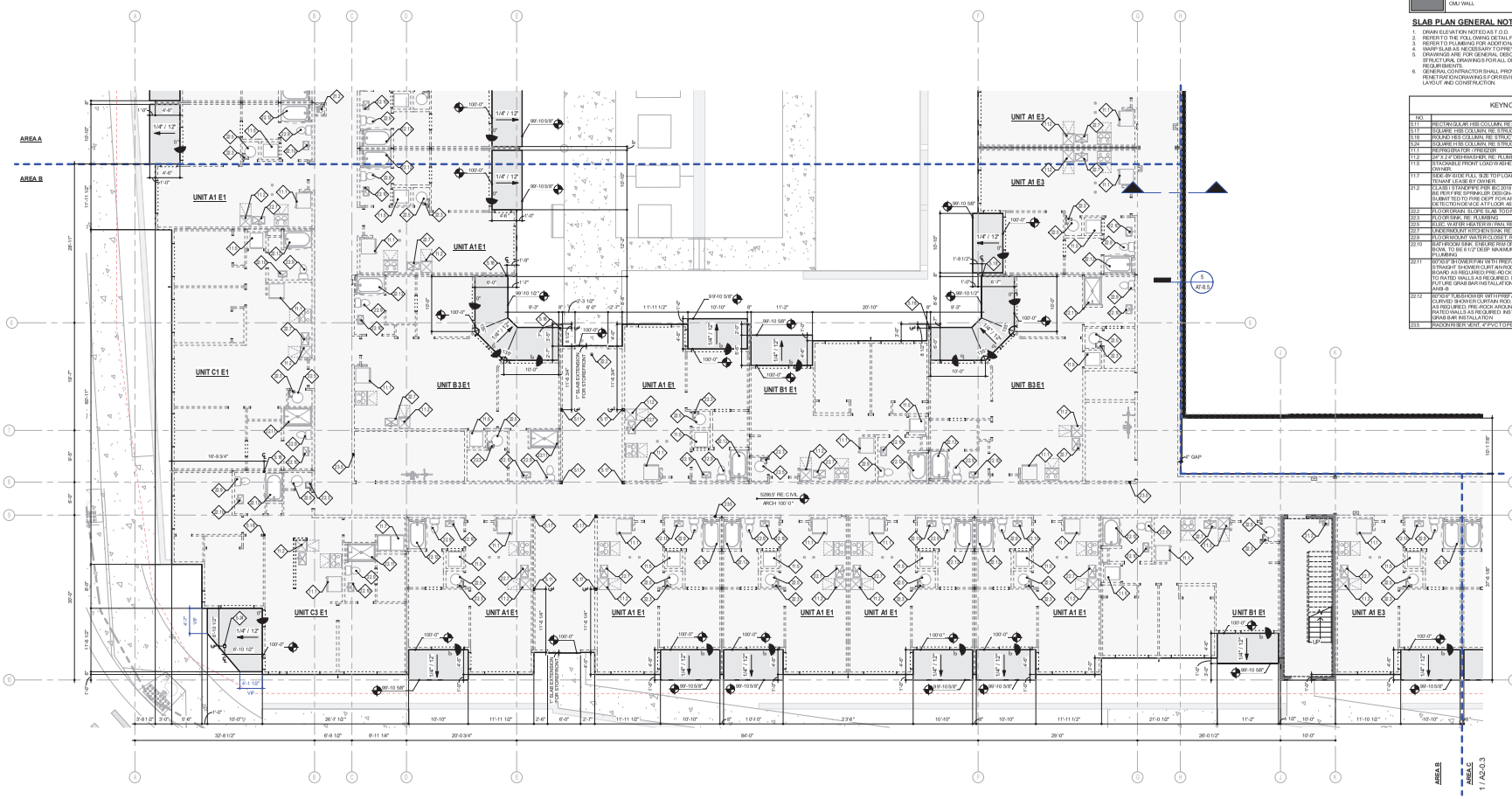
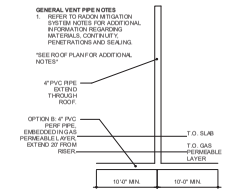


GENERAL VENT PIPE NOTES

1. REFER TO RADON MITIGATION SYSTEM NOTES FOR ADDITIONAL INFORMATION REGARDING MATERIALS, CONTINUITY, PENETRATIONS AND SEALING.

SEE ROOF PLAN FOR ADDITIONAL NOTES



RADON-READY NEW CONSTRUCTION SYSTEM:

GENERAL

A. THIS PROJECT IS LOCATED IN A GEOGRAPHIC AREA KNOWN TO HAVE THE PRESENCE OF RADON IN THE GROUND. HOWEVER, IT IS UNKNOWN IF RADON IS ACTUALLY PRESENT AT THIS SITE. LOCATION OR IF THESE MITIGATION MEASURES ARE NECESSARY ON A PROPERTY TO MITIGATE THE PRESENCE OF RADON.

B. THE MEASURES SUCH AS HEREIN ARE INTENDED TO AFFORD THE USER OF THE PROPERTY A SYSTEM TO REDUCE RADON LEVELS IN THE FUTURE, SHOULD THEY BE FOUND TO BE PRESENT AND WITHIN THE HABITABLE SPACES WITHOUT THE NEED FOR EXTENSIVE REMEDIATION MEASURES.

C. THE RADON MITIGATION SYSTEM SHALL INCLUDE MODERN RRNC METHODS FOR ACTIVE SOIL DEPRESSURIZATION.

D. POST CONSTRUCTION TESTING IS REQUIRED. IF TESTING RESULTS AT OR ABOVE THRESHOLD, CONVERSION FROM A PASSIVE SYSTEM TO A F-INA POWERED SYSTEM PURSUANT TO ANSI/AARST CC-1000 201 8 OR MOST RECENT IS REQUIRED.

E. THE RADON SYSTEM IS A DEFERRED SUBMITTAL. SHOP DRAWINGS, CALULATIONS AND LAYOUT SHALL BE PRODUCED BY A RADON PROFESSIONAL, CREDENTIALED BY THE NATIONAL RADON PROFICIENCY PROGRAM (NRPP).

DEFINITIONS

A. "RADON MITIGATION: SHALL INCLUDE MEANS AND METHODS AS REQUIRED TO REDUCE RADON IN HOMES AS FAR AS PRACTICABLE BELOW 4 PICOCURIES PER LITER OF INDOOR AIR.

REFERENCES

A. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (EPA) GUIDE ON HOW TO BUILD RADON-RESISTANT HOMES. ANSI/AARST CC-1000 2018 OR MOST RECENT

B. REFER TO THE EPA GUIDE FOR THE CURRENT GEOGRAPHICAL POTENTIAL RADON ZONE FOR THIS PROJECT AS DETERMINED BY THE US GEOLOGICAL SURVEY

EXECUTION: RADON PASSIVE VENT SYSTEM LAYOUT DESIGN, INSTALLATION, MITIGATION, AND TESTING SHALL BE CONDUCTED BY A RADON PROFESSIONAL CREDENTIALED BY THE NATIONAL RADON PROFICIENCY PROGRAM (NRPP) OR NATIONAL RADON SAFETY BOARD (NRSB), UPON COMPLETION OF THE PROJECT, A CERTIFICATE OF COMPLETION MUST BE ISSUED BY THE CREDENTIALED RADON PROFESSIONAL SUPERVISING THE PROJECT.

INSTALLATION METHODS:

A. **GEOTEXTILE LAYER SOIL GAS COLLECTOR MAT OR "RADON MAT" (1" LOW-PROFILE MAT MATERIAL INSTALLED A CCORDING TO MANUFAC TURER'S SPEC IFICATIONS)**
   a. CREATE PERIMETER "LOOP" OF MAT SYSTEM 12-36" WITHIN OUTSIDE FOUNDATION WALL.
   b. GRID SYSTEM TO CREATE ~2,000-4,000 SQ FT SECTIONS WITH MAT "RUNNERS"
   c. VENT SUB SLAB GASSES WITH VERTICAL EXHAUSTS EVERY 2,000 SQ FT. EXHAUST MUST HAVE TWO MAT CONNECTIONS AND ONE VERTICAL RISER TO 4" SCHEDULE 40 PVC. PLACE ONE EXHAUST EVERY 2,000 SQ FT-4,000 SQ FT. SPREAD EXHAUSTS EVENLY THROUGHOUT BUILDING. (BEST PLACEMENT IS IN WALL CAVITY)
   d. VENDING INSERTS TO BE PERFORATED ON ALL SIDES OF MAT UNIT
   e. HDPE MEMBRANE (NOT REQUIRED WITH LOW PROFILE MAT (WILL NOT AFFECT HDPE DRAINAGE IF BARRIER IS PRESENT AS REQUIRED BY SOILS REPORT OR STRUCTURAL)
   f. GRAVEL BACKFILL (IS NOT REQUIRED FOR MAT SYSTEM (WILL NOT AFFECT PERFORMANCE IF FILL IS PRESENT AS REQUIRED BY SOILS REPORT OR STRUCTURAL).

B. **PIPE LOOP SOIL GAS COLLECTOR OR "PERF PIPE"**
   a. CREATE 3" OR 4 " PERFORATED PIPE "LOOP" TRENCHED INTO GRAVEL EVEN WITH GRADE (4" MIN DEPTH FILL). 2,000 SQ FT GRIDS FOR 3", UP TO 4,000 SQ FT GRIDS FOR 4". GRAVEL SHALL BE A UNIFORM LAYER OF CLEAN AGGREGATE, A MINIMUM OF 4 INCHES THICK. THE AGGREGATE SHALL CONSIST OF MATERIAL THAT WILL PASS THROUGH A 2 INCH SIEVE AND BE RETAINED BY A 1/4 INCH SIEVE. IN BUILDINGS WHERE INTERIOR FOOTINGS OR OTHER BARRIERS SEPARATE SUB-GRADE AREAS, PENETRATIONS THROUGH THE INTERIOR FOOTINGS SHALL BE PROVIDED TO ENSURE GAS FLOW. A MINIMUM OF NINE INCHES PER 10 FEET OF BARRIER LENGTH SHALL BE PROVIDED. A MINIMUM OF TWO SUCH PENETRATIONS SHALL BE PROVIDED PER SEPARATION AND BE EVENLY SPACED ALONG THE SEPARATION. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
   b. VAPOR BARRIER, CLASS A, NO LESS THAN 10 MIL RATING, MUST BE PLACED ABOVE PIPE LOOP BEFORE CONCRETE POURS
   c. VERTICAL PVC TS 4" MIN SCHEDULE 40 PVC MUST BE SPREAD EVENLY THROUGHOUT THE SYSTEM. TWO HUETS AND ONE VERTICAL EXHAUST. PLACE EVERY 2,000 SQFT FOR 3" PIPE. 4,000 SQ FT FOR 4" PIPE.

C. FOR ALTERNATIVE APPROVED METHODS REFERENCE THE ANSI/AARST CC-1000 2018, OR MOST RECENT

ABOVE SLAB CONSTRUCTION (ALL METHODS):

A. ALL VENT PIPES CLOSED (SEALED) PIPES IN EVERY FLOOR AND ATTIC OF BUILDING THAT REQUIRE RADON REDUCTION SYSTEM. - TEST FOR RADON EVERY TWO YEARS*
B. PROVIDE ATTIC/ROOF SPACE FOR RADON FAN. A CYLINDRICAL SPACE NO LESS THAN 36" H X 21" W. LEAVE 120V OUTLET WITHIN 4 FT OF EXHAUST PIPE. IF NO ATTIC, LEAVE ROOM ON ROOF. RADON FANS MAY NOT BE INSTALLED WITHIN THE BUILDING'S INSULATED ENVELOPE DUE TO THE RISK OF EXHAUST FAILURES.

FINAL COUNT AND PLACEMENT OF VERTICAL RISERS TO BE DETERMINED BY RADON CONSULTANT, G C TO NOTIFY ARCHITECT IF AN ADJUSTMENT TO THE PLANS IS REQUIRED.

SLAB PLAN LEGEND

123.5 / 123.0	SPOT ELEVATION INDICATOR
8"	SLAB STEP CONDITION
8"	SLAB STEPPED SLOPE CONDITION
8"	SLAB SLOPE CONDITION
	SLAB SLOPE INDICATOR
	FLOOR DRAIN
	SLAB ON GRADE - NO SLOPE
	OPENING IN SLAB
	PT SLAB - NO SLOPE
	PT SLAB, SLOPED (AS INDICATED ON PLAN)
	PEDESTRAIN GRADE TRAFFIC COATING AT DECKS AND GARAGE SLAB
	CONCRETE CURB
	CONCRETE WALL
	CMU WALL

SLAB PLAN GENERAL NOTES

1. DRAIN ELEVATION NOTED AS T.O.D.
2. REFER TO THE FOLLOWING DETAIL FOR ADDITIONAL DRAIN DETAILS:
3. REFER TO PLUMBING FOR ADDITIONAL INFORMATION.
4. WARP SLAB AS NECESSARY TO PREVENT DRAINAGE OBSTRUCTION.
5. DRAWINGS ARE FOR GENERAL DESCRIPTION. VERIFY WITH STRUCTURAL DRAWINGS FOR ALL DIMENSIONS, LOCATIONS, & REQUIREMENTS.
6. GENERAL CONTRACTOR SHALL PROVIDE FULLY DIMENSIONED PENETRATION DRAWINGS FOR REVIEW PRIOR TO COMMENCING SLAB LAYOUT AND CONSTRUCTION.

KEYNOTES

NO.	NOTE
S.11	RECTANGULAR HSS COLUMN. RE: STRUCTURAL
S.17	SQUARE HSS COLUMN. RE: STRUCTURAL
S.18	ROUND HSS COLUMN. RE: STRUCTURAL
S.26	SQUARE HSS COLUMN. RE: STRUCT. PAINTED SW 7674 PEPPERCORN
11.1	REFRIGERATOR / FREEZER
11.2	24" X 24" DISHWASHER. RE: PLUMBING
11.5	STACKABLE FRONT LOAD WASHER/DRYER. OPTIONAL TENANT LEASE. BY OWNER.
11.7	SIDE-BY-SIDE FULL SIZE TOP LOAD WASHER & DRYER. OPTIONAL TENANT LEASE BY OWNER.
21.2	CLASS I STANDPIPE PER IBC 2018 SECTION 905. EXACT LOCATION SHALL BE PER FIRE SPRINKLER DESIGN-BUILD SUBCONTRACTOR & SHALL BE SUBMITTED TO FIRE DEPT FOR APPROVAL PROVIDE ACCESIBLE CANE DETECTION MEANS AT FLOOR AS REQUIRED AT VALVE CONNECTIONS
22.2	FLOOR DRAIN. SLOPE SLAB TO DRAIN AS INDICATED. RE: PLUMBING
22.3	FLOOR SINK. RE: PLUMBING
22.5	ELEC. WATER HEATER W / PAN. RE: PLUMBING
22.7	UNDERMOUNT KITCHEN SINK. RE: PLUMBING
22.9	FLOOR MOUNT WATER CLOSET. RE: PLUMBING
22.10	BAR / ROOM SINK. ENSURE RIM OF SINK IS BELOW 36" MAX. A.F.F. SINK BOWL TO BE 6 1/2" DEEP. MAXIMUM PER UFAS GUIDELINES. RE: PLUMBING
22.11	60" X 36" SHOWER PAN WITH PREFABRICATED SURROUNDS. PROVIDE STRAIGHT SHOWER CURTAIN ROD. PROVIDE GLASS MAT GYPSUM BOARD AS REQUIRED PRE-ROCK AROUND TUB LOCATIONS ADJACENT TO RATED WALLS AS REQUIRED. INSTALL BLOCKING IN WALL FOR FUTURE GRAB BAR INSTALLATION. BOD: COMFORT DESIGNS SSBB036 40 AMS-P
22.12	60" X 30" TUB WITH TILE SURROUND WITH PREFABRICATED SURROUND. PROVIDE STRAIGHT SHOWER CURTAIN ROD. PROVIDE GLASS MAT GYPSUM BOARD AS REQUIRED. PRE-ROCK AROUND TUB LOCATIONS ADJACENT TO RATED WALLS AS REQUIRED. INSTALL BLOCKING IN WALL FOR FUTURE GRAB BAR INSTALLATION.
23.5	RADON RISER VENT, 4" PVC TO PENETRATE ROOF.

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ISSUE FOR CONSTRUCTION
06.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: ENLARGED LEVEL 1 SLAB PLAN - AREA B
Sheet Number: **A2-0.2**

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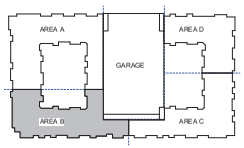
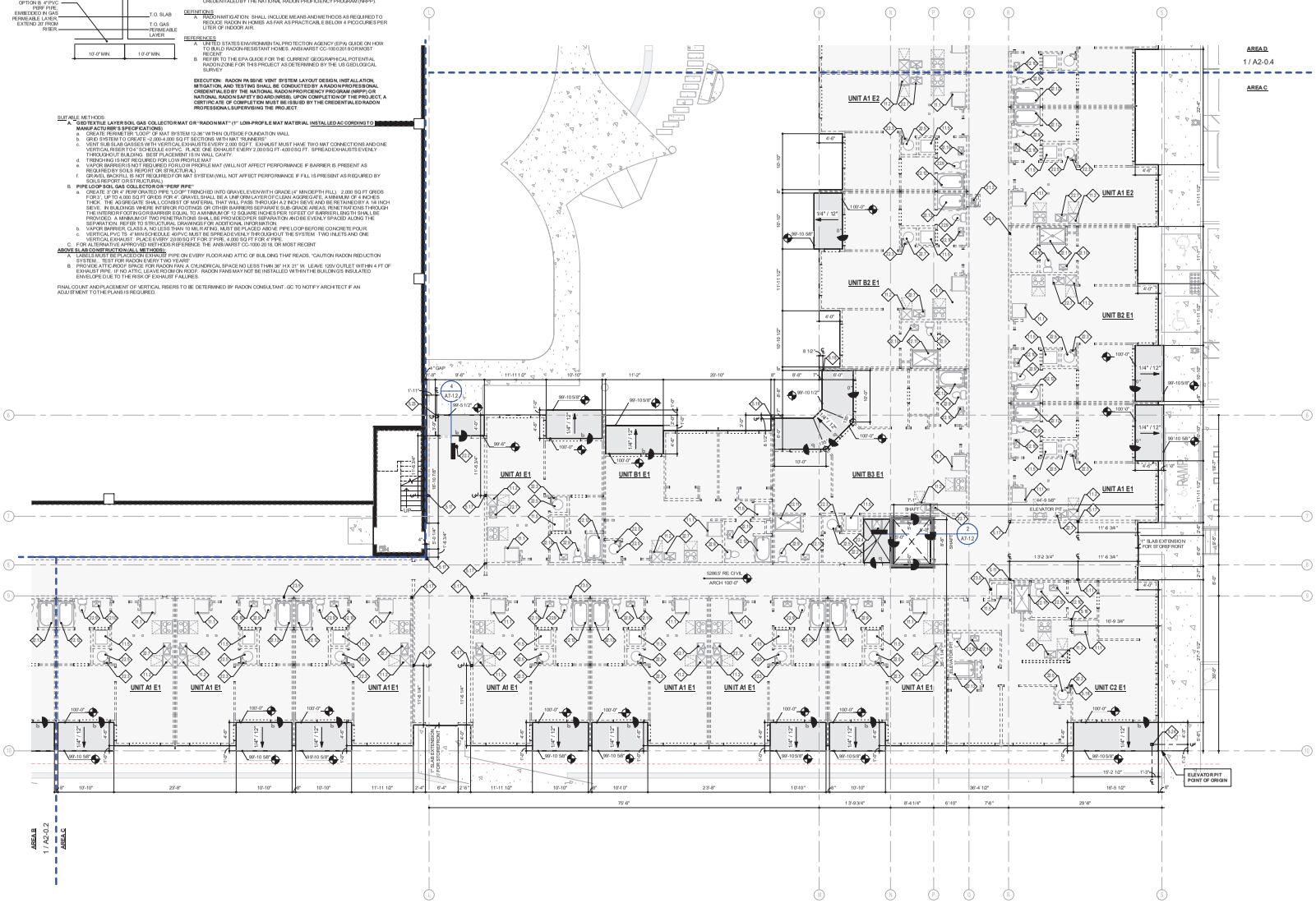
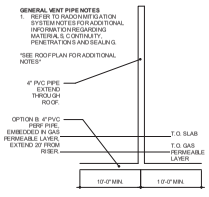


BUILDING AREAS KEY PLAN

N TRUE N PROJECT

1 ENLARGED LEVEL 1 SLAB PLAN - AREA B
1/8" = 1'-0"





RADON-READY NEW CONSTRUCTION SYSTEM:

GENERAL

A. THIS PROJECT IS LOCATED IN A GEOGRAPHIC AREA KNOWN TO HAVE THE PRESENCE OF RADON IN THE GROUND. HOWEVER, IT IS UNKNOWN IF RADON IS ACTUALLY PRESENT AT THIS SITE LOCATION OR IF THESE MITIGATION MEASURES ARE NECESSARY OR SUFFICIENT TO MITIGATE THE PRESENCE OF RADON.

B. THE MEASURES OUTLINED HERE ARE INTENDED TO AFFORD THE USER OF THE PROPERTY A SYSTEM TO MITIGATE POTENTIAL RADON GAS IF THE GAS IS FOUND TO BE PRESENT AT THE SITE AND WITHIN THE HABITABLE SPACES WITHOUT THE NEED FOR EXTENSIVE REMEDIATION MEASURES.

C. THE RADON MITIGATION SYSTEM SHALL INCLUDE MODERN RRNC METHODS FOR ACTIVE SOIL DEPRESSURIZATION.

D. POST-CONSTRUCTION TESTING IS REQUIRED. IF TESTING RESULTS AT OR ABOVE THRESHOLD, CONVERSION FROM A PASSIVE SYSTEM TO A FAN-POWERED SYSTEM PURSUANT TO ANSI/AARST CC-1000 2018 OR MOST RECENT IS REQUIRED.

E. THE RADON SYSTEM IS A DEFERRED SUBMITTAL. SHOP DRAWINGS, CALCULATIONS AND LAYOUT SHALL BE PRODUCED BY A RADON PROFESSIONAL CREDENTIALED BY THE NATIONAL RADON PROFICIENCY PROGRAM (NRPP).

DEFINITIONS

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REFERENCES

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SLAB RULE METHODS:

A. **"GEOTEXTILE LAYER SOIL GAS COLLECTOR MAT OR "RADON MAT" ("LOW-PROFILE MAT MATERIAL INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS)**
   a. CREATE PERIMETER "LOOP" OF MAT SYSTEM 12-36" WITHIN OUTSIDE FOUNDATION WALL
   b. GRID SYSTEM TO CREATE ~2,000-4,000 SQ FT SECTIONS WITH MAT "RUNNERS"
   c. VENT SUB SLAB GASSES WITH VERTICAL EXHAUSTS EVERY 2,000 SQ FT. EXHAUST MUST HAVE TWO MAT CONNECTIONS AND ONE VERTICAL RISER TO 4" SCHEDULE 40 PVC. PLACE ONE EXHAUST EVERY 2,000 SQ FT -4,000 SQ FT. SPREAD EXHAUSTS EVENLY THROUGHOUT BUILDING. BEST PLACEMENT IS IN WALL CAVITY.
   d. TRENCHING IS NOT REQUIRED FOR LOW PROFILE MAT
   e. GRAVEL BACKFILL IS NOT REQUIRED FOR LOW PROFILE MAT (WILL NOT AFFECT PERFORMANCE IF BARRIER IS PRESENT AS REQUIRED BY SOILS REPORT OR STRUCTURAL).
   f. GRAVEL BACKFILL IS NOT REQUIRED FOR MAT SYSTEM (WILL NOT AFFECT PERFORMANCE IF FILL IS PRESENT AS REQUIRED BY SOILS REPORT OR STRUCTURAL).

B. **PIPE LOOP SOIL GAS COLLECTOR OR "PERF PIPE"**
   a. CREATE 3" OR 4" PERFORATED PIPE "LOOP" TRENCHED INTO GRAVEL EVEN WITH GRADE (4" MIN DEPTH FILL). 2,000 SQ FT GRIDS FOR 3"; UP TO 4,000 SQ FT GRIDS FOR 4". GRAVEL SHALL BE A UNIFORM LAYER OF CLEAN AGGREGATE, A MINIMUM OF 4 INCHES THICK. THE AGGREGATE SHALL CONSIST OF MATERIAL THAT WILL PASS THROUGH A 2 INCH SIEVE AND BE RETAINED BY A 1/4 INCH SIEVE. IN BUILDINGS WHERE INTERIOR FOOTINGS OR OTHER BARRIERS SEPARATE SUB-GRADE AREAS, PENETRATIONS THROUGH THE INTERIOR FOOTING OR BARRIER EQUAL TO A MINIMUM OF 12 SQUARE INCHES PER 10 FEET OF BARRIER LENGTH SHALL BE PROVIDED. A MINIMUM OF TWO PENETRATIONS SHALL BE PROVIDED PER SEPARATION AND BE EVENLY SPACED ALONG THE SEPARATION. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
   b. VAPOR BARRIER, CLASS A, NO LESS THAN 10 MIL RATING, MUST BE PLACED ABOVE PIPE LOOP BEFORE CONCRETE POUR.
   c. VERTICAL EXHAUST. PLACE ONE EXHAUST PER SPREAD FOOTING OR PER SLAB SECTION AS DEFINED BY THE SYSTEM. TWO INLETS AND ONE VERTICAL EXHAUST. PLACE EVERY 2,000 SQ FT FOR 3" PIPE AND 4,000 SQ FT FOR 4" PIPE.
   C. FOR ALTERNATIVE APPROVED METHODS REFERENCE THE ANSI/AARST CC-1000 2018, OR MOST RECENT

ABOVE SLAB CONSTRUCTION (ALL METHODS):

A. LABELS MUST BE PLACED ON EXHAUST PIPE ON EVERY FLOOR AND ATTIC OF BUILDING THAT READS, "CAUTION RADON REDUCTION SYSTEM... TEST FOR RADON EVERY TWO YEARS"

B. PROVIDE ATTIC ROOF SPACE FOR RADON FAN. A CYLINDRICAL SPACE NO LESS THAN 36" H X 21" W. LEAVE 120V OUTLET WITHIN 4 FT OF EXHAUST PIPE. IF NO ATTIC, LEAVE ROOM ON ROOF. RADON FANS MAY NOT BE INSTALLED WITHIN THE BUILDING'S INSULATED ENVELOPE DUE TO THE RISK OF EXHAUST FAILURES.

FINAL COUNT AND PLACEMENT OF VERTICAL RISERS TO BE DETERMINED BY RADON CONSULTANT. GC TO NOTIFY ARCHITECT IF AN ADJUSTMENT TO THE PLANS IS REQUIRED.

SLAB PLAN LEGEND

D.O. 2000	SPOT ELEVATION INDICATOR
12"	SLAB STEP CONDITION
12"	SLAB STEPPED SLOPE CONDITION
12"	SLAB SLOPE CONDITION
	SLAB SLOPE INDICATOR
	FLOOR DRAIN
	SLAB ON GRADE - NO SLOPE
	OPENING IN SLAB
	PT SLAB - NO SLOPE
	PT SLAB, SLOPED (AS INDICATED ON PLAN)
	PEDESTRIAN GRADE TRAFFIC COATING AT DECKS AND GARAGE SLAB
	CONCRETE CURB
	CONCRETE WALL
	CMU WALL

SLAB PLAN GENERAL NOTES

1. DRAIN ELEVATION NOTED AS T.O.D.
2. REFER TO THE FOLLOWING DETAIL FOR ADDITIONAL DRAIN DETAILS:
3. REFER TO PLUMBING FOR ADDITIONAL INFORMATION.
4. WARP SLAB AS NECESSARY TO PREVENT DRAINAGE OBSTRUCTION.
5. DRAWINGS ARE FOR GENERAL DESCRIPTION. VERIFY WITH STRUCTURAL DRAWINGS FOR ALL DIMENSIONS, LOCATIONS, & REQUIREMENTS.
6. GENERAL CONTRACTOR SHALL PROVIDE FULLY DIMENSIONED PENETRATION DRAWINGS FOR REVIEW PRIOR TO COMMENCING SLAB LAYOUT AND CONSTRUCTION.

KEYNOTES

NO.	NOTE
5.11	RECTANGULAR HSS COLUMN, RE: STRUCTURAL
5.17	SQUARE HSS COLUMN, RE: STRUCTURAL
5.18	ROUND HSS COLUMN, RE: STRUCTURAL
5.23	SQUARE HSS COLUMN, RE: STRUCT, PAINTED SW 6048 ANTIQUARIAN BROWN
5.24	SQUARE HSS COLUMN, RE: STRUCT, PAINTED SW 7674 PEPPERCORN
11.1	REFRIGERATOR / FREEZER
11.2	24" X 24" DISHWASHER, RE: PLUMBING
11.5	STACKABLE FRONT LOAD WASHER/DRYER. OPTIONAL TENANT LEASE BY OWNER.
21.2	CLASS I STANDPIPE PER IBC 2018 SECTION 905. EXACT LOCATION SHALL BE PER FIRE SPRINKLER DESIGN-BUILD SUBCONTRACTOR & SHALL BE SUBMITTED TO FIRE DEPT FOR APPROVAL. PROVIDE ACCESIBLE CANE DETECTION DEVICE AT FLOOR AS REQUIRED. RE: VALVE CONNECTIONS
22.2	FLOOR DRAIN. SLOPE SLAB TO DRAIN AS INDICATED, RE: PLUMBING
22.3	FLOOR SINK, RE: PLUMBING
22.4	MOP SINK, RE: PLUMBING
22.5	ELEC. WATER HEATER W/ PAN, RE: PLUMBING
22.7	UNDERMOUNT KITCHEN SINK, RE: PLUMBING
22.9	FLOOR MOUNT WATER CLOSET, RE: PLUMBING
22.10	BATHROOM SINK, ENSURE RIM OF SINK IS BELOW 34" MAX. A.F.F. SINK BOWL TO BE 6 1/2" DEEP MAXIMUM PER ADA GUIDELINES, RE: PLUMBING
22.11	60"X30" SHOWER PAN WITH PREFABRICATED SURROUND. PROVIDE STRAIGHT SHOWER CURTAIN ROD. PROVIDE GLASS MAT GYPSUM BOARD AS REQUIRED. PRE-ROCK AROUND TUB LOCATIONS ADJACENT TO RATED WALLS AS REQUIRED. INSTALL BLOCKING IN WALL FOR FUTURE GRAB BAR INSTALLATION. BOD: COMFORT DESIGNS SSB6030 40 ANSI
22.12	60"X 30" TUB SHOWER WITH PREFABRICATED SURROUND. PROVIDE CURVED SHOWER CURTAIN ROD. PROVIDE GLASS MAT GYPSUM BOARD AS REQUIRED. PRE-ROCK AROUND TUB LOCATIONS ADJACENT TO RATED WALLS AS REQUIRED. INSTALL BLOCKING IN WALL FOR FUTURE GRAB BAR INSTALLATION
23.5	RADON RISER VENT, 4" PVC TO PENETRATE ROOF.

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ISSUE FOR CONSTRUCTION
06.07.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: ENLARGED LEVEL 1 SLAB PLAN - AREA C
Sheet Number: **A2-0.3**

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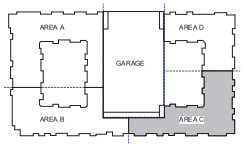
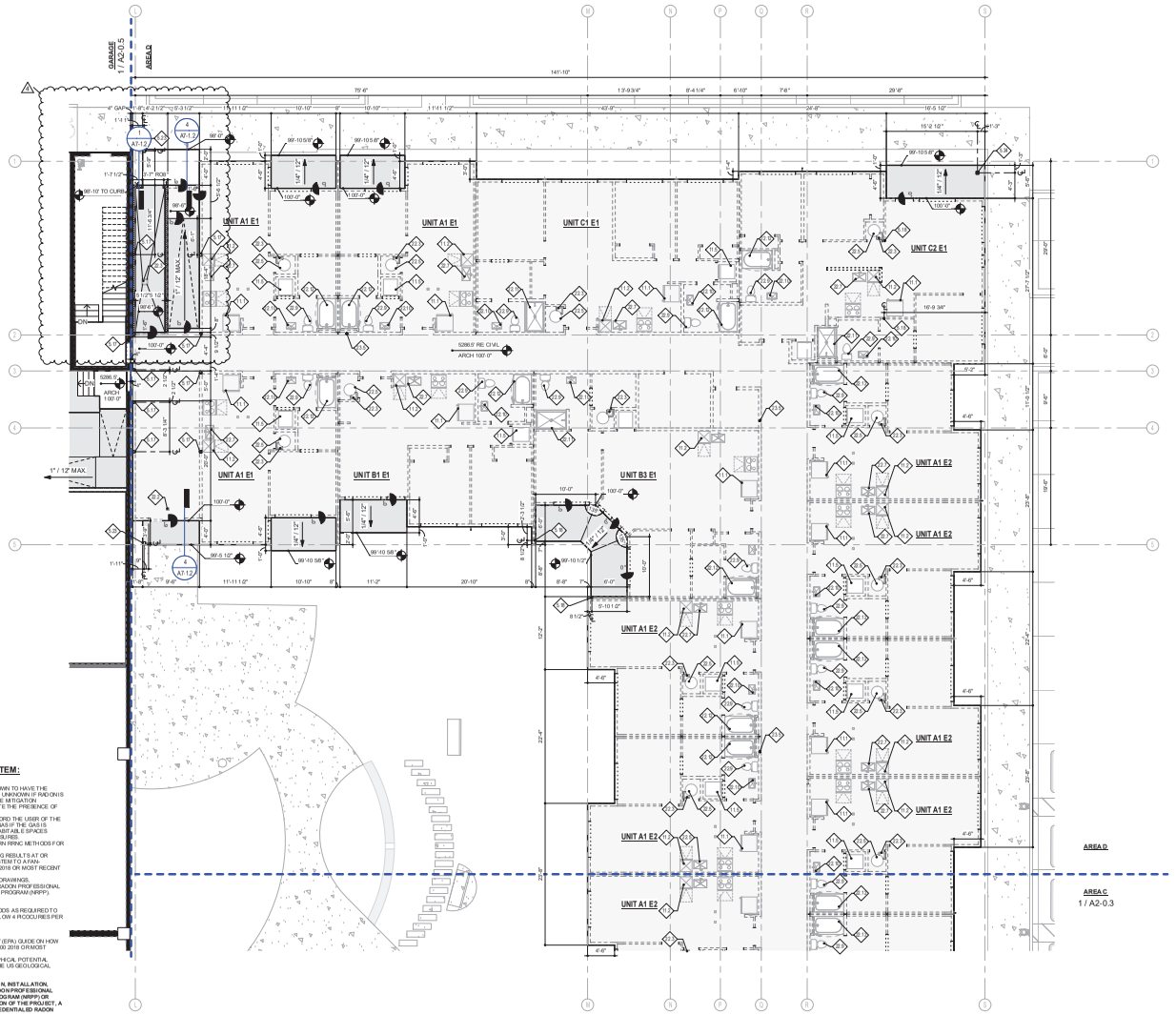


BUILDING AREAS KEY PLAN

N TRUE N PROJECT

1 ENLARGED LEVEL 1 SLAB PLAN - AREA C
1/8" = 1'-0"



SLAB PLAN LEGEND

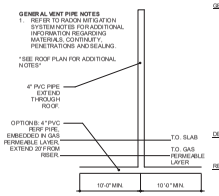
	SPOT ELEVATION INDICATOR
	SLAB STEP CONDITION
	SLAB STEPPED SLOPE CONDITION
	SLAB SLOPE CONDITION
	SLAB SLOPE INDICATOR
	FLOOR DRAIN
	SLAB ON GRADE - NO SLOPE
	OPENING IN SLAB
	PT SLAB - NO SLOPE
	PT SLAB, SLOPED (AS INDICATED ON PLAN)
	PEDESTRIAN GRADE TRAFFIC COATING AT DECKS AND GARAGE SLAB
	CONCRETE CURB
	CONCRETE WALL
	CMU WALL

SLAB PLAN GENERAL NOTES

1. DRAIN ELEVATION NOTED AS T.O.D.
2. REFER TO THE FOLLOWING DETAIL FOR ADDITIONAL DRAIN DETAILS:
3. REFER TO PLUMBING FOR ADDITIONAL INFORMATION.
4. WARP SLAB AS NECESSARY TO PREVENT DRAINAGE OBSTRUCTION.
5. DRAWINGS ARE FOR GENERAL DESCRIPTION. VERIFY WITH STRUCTURAL DRAWINGS FOR ALL DIMENSIONS, LOCATIONS, & REQUIREMENTS.
6. GENERAL CONTRACTOR SHALL PROVIDE FULLY DIMENSIONED PENETRATION DRAWINGS FOR REVIEW PRIOR TO COMMENCING SLAB LAYOUT AND CONSTRUCTION.

KEYNOTES

NO.	NOTE
5.17	SQUARE HSS COLUMN, RE: STRUCTURAL
5.18	ROUND HSS COLUMN, RE: STRUCTURAL
5.23	SQUARE HSS COLUMN, RE: STRUCT., PAINTED SW 0046 ANTIQUARIAN BROWN
5.24	SQUARE HSS COLUMN, RE: STRUCT., PAINTED SW 7674 PEPPERCORN
11.1	REFRIGERATOR / FREEZER
11.2	24" X 24" DISHWASHER, RE: PLUMBING
11.5	STACKABLE FRONT LOAD WASHER/DRYER, OPTIONAL TENANT LEASE BY OWNER.
22.2	FLOOR DRAIN, SLOPE SLAB TO DRAIN AS INDICATED, RE: PLUMBING
22.3	FLOOR SINK, RE: PLUMBING
22.5	ELEC. WATER HEATER W/ PAN, RE: PLUMBING
22.7	UNDERMOUNT KITCHEN SINK, RE: PLUMBING
22.9	FLOOR MOUNT WATER CLOSET, RE: PLUMBING
22.10	BATHROOM SINK, ENSURE RIM OF SINK IS BELOW 34" MAX. A.F.F. SINK IS A.D.A. TO BE 6 1/2" DEEP. MAXIMUM PER UPAS GUIDELINES, RE: PLUMBING
22.11	60"X30" SHOWER PAN WITH PREFABRICATED SURROUND. PROVIDE STRAIGHT SHOWER CURTAIN ROD. PROVIDE GLASS MAT GYPSUM BOARD AS REQUIRED PRE-ROCK WOLAND TUB LOCATIONS ADJACENT TO RATED WALLS AS REQUIRED. INSTALL BLOCKING IN WALL FOR FUTURE GRAB BAR INSTALLATION. ROC COMFORT DESIGNS SS38038 40 ANSI-A
22.12	60"X30" TUB/SHOWER WITH PREFABRICATED SURROUND. PROVIDE CURVED SHOWER CURTAIN ROD. PROVIDE GLASS MAT GYPSUM BOARD AS REQUIRED PRE-ROCK WOLAND TUB LOCATIONS ADJACENT TO RATED WALLS AS REQUIRED. INSTALL BLOCKING IN WALL FOR FUTURE GRAB BAR INSTALLATION
23.5	RADON RISER VENT, 4" PVC TO PENETRATE ROOF.



RADON-READY NEW CONSTRUCTION SYSTEM:

GENERAL

A. THIS PROJECT IS LOCATED IN A GEOGRAPHIC AREA KNOWN TO HAVE THE PRESENCE OF RADON IN THE GROUND. HOWEVER, IT IS UNKNOWN IF RADON IS ACTUALLY PRESENT AT THIS SITE/LOCATION OR IF THESE MITIGATION MEASURES ARE NECESSARY OR SUFFICIENT TO MITIGATE THE PRESENCE OF RADON.
B. THE MEASURES OUTLINED HERE ARE INTENDED TO AFFORD THE USER OF THE PROPERTY A SYSTEM TO MITIGATE POTENTIAL RADON GAS IF THE GAS IS FOUND TO BE PRESENT AT THE SITE AND WITHIN THE HABITABLE SPACES WITHOUT THE NEED FOR EXTENSIVE REMEDIATION MEASURES.
C. THE RADON MITIGATION SYSTEM SHALL INCLUDE MODERN RRNC METHODS FOR ACTIVE SOIL DEPRESSURIZATION.
D. POST CONSTRUCTION TESTING IS REQUIRED. IF TESTING RESULTS AT OR ABOVE THRESHOLD, CONVERSION FROM A PASSIVE SYSTEM TO A FAN-POWERED SYSTEM PURSUANT TO ANSI/ASHRAE CC-1000 2018 OR MOST RECENT IS REQUIRED.
E. THE RADON SYSTEM IS A DEFERRED SUBMITTAL. SHOP DRAWINGS, CALULATIONS AND LAYOUT SHALL BE PRODUCED BY A RADON PROFESSIONAL CREDENTIALED BY THE NATIONAL RADON PROFICIENCY PROGRAM (NRPP).

DEFINITIONS

A. "RADON MITIGATION: SHALL INCLUDE MEANS AND METHODS AS REQUIRED TO REDUCE RADON IN HOMES AS FAR AS PRACTICABLE, BELOW 4 PCCCURIES PER LITER OF INDOOR AIR.

REFERENCES

A. "UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (EPA) GUIDE ON HOW TO BUILD RADON RESISTANT HOMES. ANSI/ASHRAE CC-1000 2018 OR MOST RECENT
B. REFER TO THE EPA GUIDE FOR THE CURRENT GEOGRAPHICAL POTENTIAL RADON ZONE FOR THIS PROJECT AS DETERMINED BY THE US GEOLOGICAL SURVEY

EXECUTION: RADON PASSIVE VENT SYSTEM LAYOUT DESIGN, INSTALLATION, MITIGATION, AND TESTING SHALL BE CONDUCTED BY A RADON PROFESSIONAL CREDENTIALED BY THE NATIONAL RADON PROFICIENCY PROGRAM (NRPP) OR NATIONAL RADON SAFETY BOARD (NRSB). UPON COMPLETION OF THE PROJECT, A CERTIFICATE OF COMPLETION MUST BE ISSUED BY THE CREDENTIALED RADON PROFESSIONAL SUPERVISING THE PROJECT.

SUITABLE METHODS

A. GEOTEXTILE LAYER SOIL GAS COLLECTOR MAT OR "RADON MAT" (1" LOW-PROFILE MAT MATERIAL INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS)
a. CREATE PERIMETER "LOOP" OF MAT SYSTEM 12-36" WITHIN OUTSIDE FOUNDATION WALL.
b. GRID SYSTEM TO CREATE <2,000-4,000 SQ FT SECTIONS WITH MAT "RUNNERS"
c. VENT SUB SLAB GASSES WITH VERTICAL EXHAUST EVERY 2,000 SQ FT. EXHAUST MUST HAVE TWO MAT CONNECTIONS AND ONE VERTICAL RISER TO 4" SCHEDULE 40 PVC. PLACE ONE EXHAUST EVERY 2,000 SQ FT 4,000 SQ FT. SPREAD EXHAUST'S EVENLY THROUGHOUT BUILDING. BEST PLACEMENT IS IN WALL CAVITY
d. TRENCHING IS NOT REQUIRED FOR LOW PROFILE MAT
e. VAPOR BARRIER IS NOT REQUIRED FOR LOW PROFILE MAT (WILL NOT AFFECT PERFORMANCE IF BARRIER IS PRESENT AS REQUIRED BY SOILS REPORT, OR STRUCTURAL)
f. GRAVEL BACKFILL IS NOT REQUIRED FOR MAT SYSTEM (WILL NOT AFFECT PERFORMANCE IF FILL IS PRESENT AS REQUIRED BY SOILS REPORT OR STRUCTURAL)

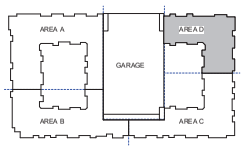
B. PIPE LOOP SOIL GAS COLLECTOR OR "PERF PIPE"
a. CREATE 3"-0" OC SQUARE PERF "LOOP" TRENCHED INTO GRAVEL EVEN WITH GRADE (4" MIN DEPTH FILL). 2,000 SQ FT GRIDS WITH 4" PVC (3,000 SQ FT GRIDS FOR 4" GRAVEL SHALL BE A UNIFORM LAYER OF CLEAN AGGREGATE A MINIMUM OF 4 INCHES THICK. THE AGGREGATE SHALL CONSIST OF MATERIAL THAT WILL PASS THROUGH A 2 INCH SIEVE AND BE RETAINED BY A 1/4 INCH SIEVE. IN BUILDINGS WHERE INTERIOR FOOTINGS OR OTHER BARRIERS SEPARATE SUB-GRADE AREAS, PENETRATIONS THROUGH THE INTERIOR FOOTING OR BARRIER EQUAL TO A MINIMUM OF 12 SQUARE INCHES PER 100 FEET OF BARRIER LENGTH SHALL BE PROVIDED. A MINIMUM OF TWO PENETRATIONS SHALL BE PROVIDED PER SEPARATION AND BE EVENLY SPACED ALONG THE SEPARATION. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
b. VAPOR BARRIER, CLASS A, NO LESS THAN 10 MIL RATING, MUST BE PLACED ABOVE PIPE LOOP BEFORE CONCRETE POUR.
c. VERTICAL PVC TS 4" MIN SCHEDULE 40 PVC MUST BE SPREAD EVENLY THROUGHOUT THE SYSTEM. TWO INLETS AND ONE VERTICAL EXHAUST. PLACE EVERY 2,000 SQ FT FOR 3" PIPE, 4,000 SQ FT FOR 4" PIPE.

C. FOR ALTERNATIVE APPROVED METHODS REFERENCE THE ANSI/ASHRAE CC-1000-2018, OR MOST RECENT

ABOVE SLAB CONSTRUCTION (ALL METHODS)
A. LABELS MUST BE PLACED ON EXPOSED PIPE ON EVERY FLOOR AND ATTIC OF BUILDING THAT READS, "CAUTION RADON REDUCTION SYSTEM IN PLACE. DO NOT REMOVE FOR TWO YEARS"
B. PROVIDE ATTIC DROP SPACE FOR RADON FAN. A C.Y. UNDER/CRL SPACE NO LESS THAN 36" HX 21"W. LEAVE 120V OUTLET WITHIN 4 FT OF EXHAUST PIPE. 9" MIN ATTIC LEAVE ROOM ON ROOF. RADON FANS MAY NOT BE INSTALLED WITHIN THE BUILDING'S INSULATED ENVELOPE DUE TO THE RISK OF EXHAUST FAILURES.

RINK, COUNT AND PLACEMENT OF VERTICAL RISERS TO BE DETERMINED BY RADON CONSULTANT. GC TO NOTIFY ARCHITECT IF AN ADJUSTMENT TO THE PLANS IS REQUIRED.

1 ENLARGED LEVEL 1 SLAB PLAN - AREA D
1/8" = 1'-0"



BUILDING AREAS KEY PLAN

N TRUE N PROJECT

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ISSUE FOR CONSTRUCTION
06.07.2024

No.	Date	Issue
1	06.07.2024	IFC

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: ENLARGED LEVEL 1 SLAB PLAN - AREA D
Sheet Number: A2-0.4

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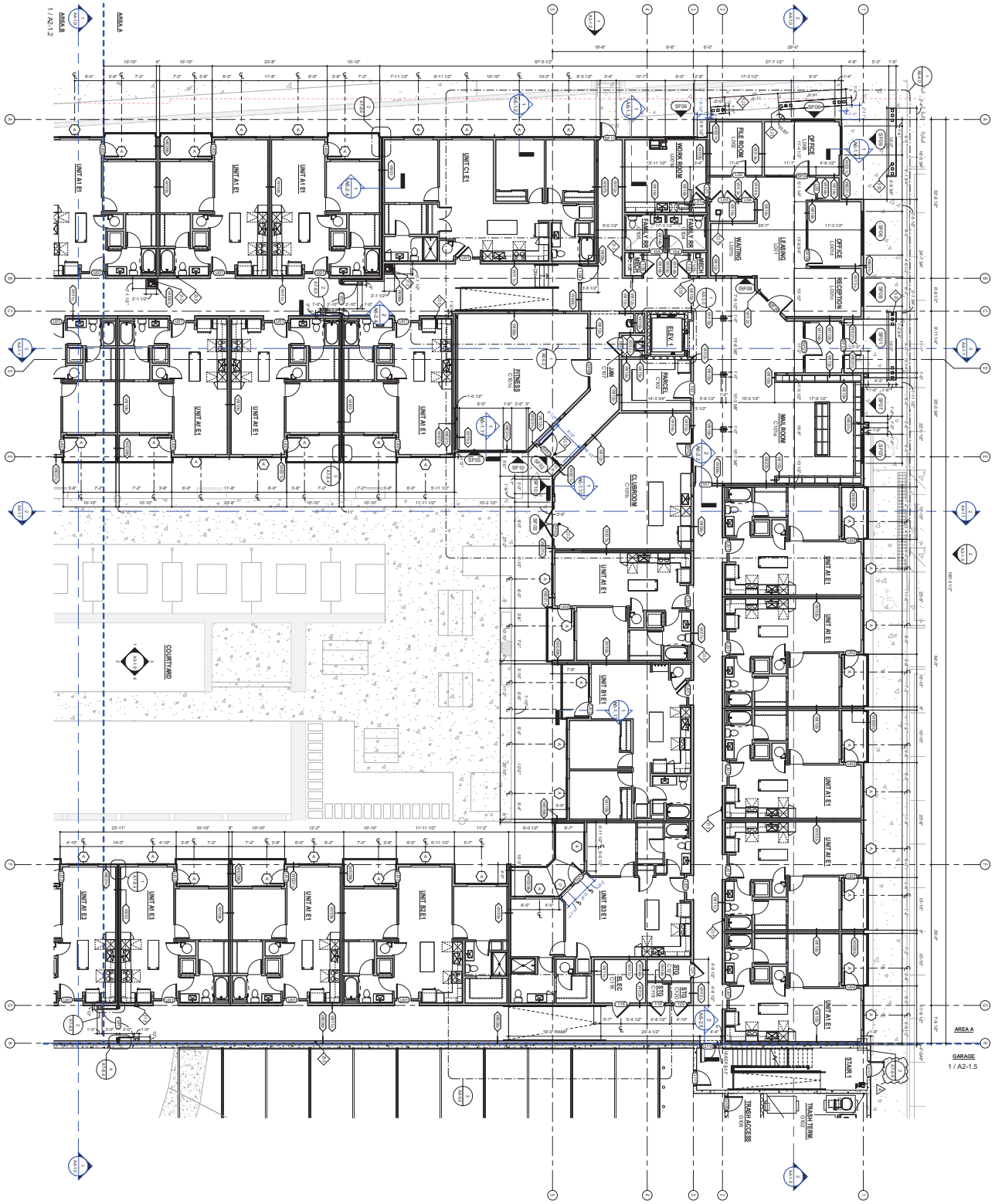
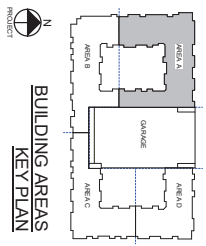


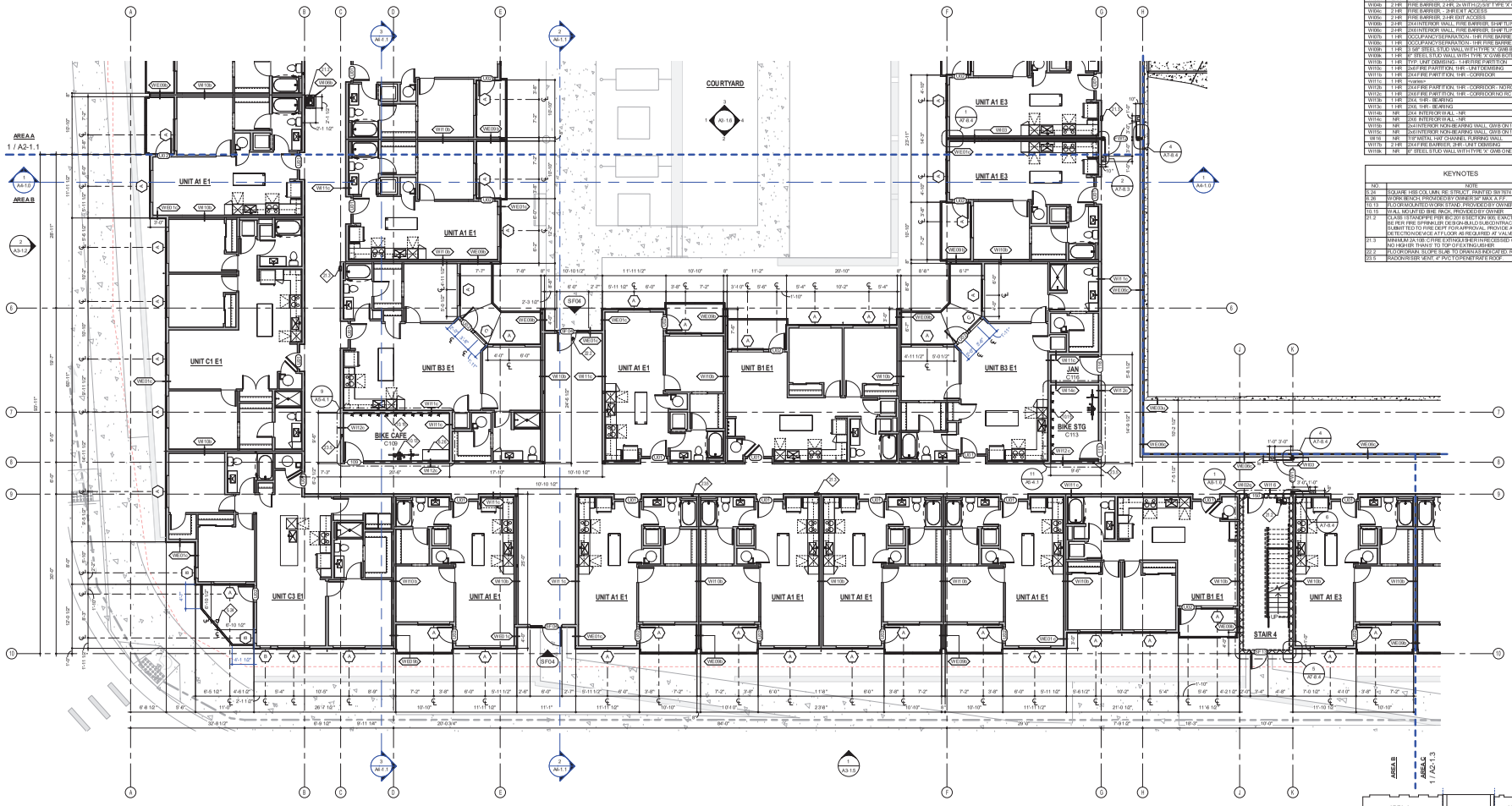
1 ENLARGED LEVEL 1 COMPOSITE PLAN - AREA A
1/8" = 1'-0"



BUILDING AREAS KEY PLAN

KEYNOTES

NO.	KEYNOTE TEXT
01	ROOFING PER ROOFING SPECIFICATION
02	BRICK
03	METAL PANEL PER ELEVATIONS AND SPECIFICATIONS
04	METAL PANEL PER ELEVATIONS AND SPECIFICATIONS
05	ROOFTOP AC UNITS
06	ROOFTOP EXHAUST FANS
07	ROOFTOP MAU UNITS
08	ROOFTOP EXHAUST FANS
09	ROOFTOP MAU UNITS
10	ROOFTOP EXHAUST FANS
11	ROOFTOP MAU UNITS



GENERAL NOTES

- DIMENSIONS TAKE PRECEDENCE OVER DRAWINGS. DO NOT SCALE.
- DIMENSIONS GIVEN TO FACE OF STUDS UNLESS OTHERWISE INDICATED, U.N.O. TYP.
- ACCESSIBILITY ELEMENTS INDICATED ARE REQUIRED. FIELD CONDITIONS OCCURRING WHICH IMPACT THE ACCESSIBILITY DESIGN SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.
- SEE INTERIOR DRAWINGS FOR ALL FINISH MATERIALS
- ELEVATION 100'-0" EQUALS CIVIL FF 5286.00' RE: CIVIL DRAWINGS

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
W001c	1 HR	TYP. EXTERIOR WALL
W002c	2 HR	8" CONCRETE SHAFT WALL
W003c	1 HR	8" CONCRETE WALL
W003w	1 HR	GARAGE 12" CONCRETE WALL
W003c	1 HR	8" CONCRETE WALL
W004c	2 HR	8" CMU - 3HR FIRE BARRIER
W005c	1 HR	8" CMU - 1 HR
W006c	1 HR	EXTERIOR WALL - 1 HR SYMMETRIC
W006c	1 HR	EXTERIOR WALL - 1 HR SYMMETRIC
W007c	NR	2x6 PARAPET WALL - NR
W008c	NR	2x6 WALL - NR @ CONDENSERS
W009c	NR	2x4 EXTERIOR FURR WALL - NON RATED
W009c	NR	2x4 EXTERIOR FURR WALL - NON RATED
W010w	1 HR	6" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
W001c	2 HR	8" CMU - 2HR FIRE WALL
W002c	2 HR	8" CMU - 3HR FIRE BARRIER
W003	2 HR	FIRE WALL, 2HR
W003b	2 HR	FIRE WALL, 2 HR, (2)2X4 WITH (2) 1" SHAFTLINER
W003h	3HR	FIRE WALL, 2 HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
W004b	2 HR	FIRE BARRIER, 2 HR, 2x WITH (2) 5/8" TYPE 'X' GYP
W004c	2 HR	FIRE BARRIER, - 2HR EXT ACCESS
W005c	2 HR	FIRE BARRIER, 2 HR EXT ACCESS
W006b	2 HR	2X4 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W006c	2 HR	2X6 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W007c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W008c	1 HR	OCCUPANCY SEPARATION - 1 HR FIRE BARRIER
W009h	1 HR	5 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W009k	1 HR	6" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W010b	1 HR	TYP. UNIT DEMISING - 1 HR FIRE PARTITION
W010c	1 HR	2x4 FIRE PARTITION, 1HR - UNIT DEMISING
W011c	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
W011c	1 HR	Overlap
W012b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
W012c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
W013b	1 HR	2X6, 1HR - BEARING
W013c	1 HR	2X6, 1HR - BEARING
W014c	NR	2X4 INTERIOR WALL - NR
W014c	NR	2X6 INTERIOR WALL - NR
W015b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W015c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W16	1 HR	7/8" METAL HAT CHANNEL FURRING WALL
W017b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
W018k	NR	6" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

KEYNOTES

NO.	NOTE
5.24	SQUARE HSS COLUMN, RE: STRUCT, PAINTED SW 7674 PEPPERCORN
6.26	TIMBER BENCH, PROVIDED BY OWNER/3.34" MAX A.F.F.
10.13	FLOOR MOUNTED WORK STAND, PROVIDED BY OWNER
10.19	WALL MOUNTED BIKE RACK, PROVIDED BY OWNER
21.1	KLAXS 10 STANDPIPE PER IBC 2018 EDITION 905; EXACT LOCATION SHALL BE PER FIRE SPRINKLER DESIGN-BUILD SUBCONTRACTOR & SHALL BE APPROVED BY THE FIRE MARSHAL PRIOR TO INSTALLATION. FIRE DEPARTMENT CONNECTION DEVICE AT FLOOR AS REQUIRED. 45° VALVE CONNECTIONS
21.3	MINIMUM 2A-10B:C FIRE EXTINGUISHER IN RECESSED CABINET MOUNTED NO HIGHER THAN 3' TO TOP OF EXTINGUISHER
22.2	FLOOR DRAIN. SLOPE SLAB TO DRAIN AS INDICATED. RE: PLUMBING
23.5	RADON RISER, VENT, 4" PVC TO PENETRATE ROOF.

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ISSUE FOR CONSTRUCTION
06.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: ENLARGED LEVEL 1 PLAN - AREA B
Sheet Number: **A2-1.2**

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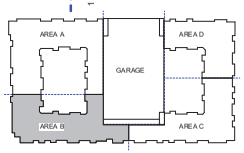
1 ENLARGED LEVEL 1 COMPOSITE PLAN - AREA B
1/8" = 1'-0"

BUILDING AREAS KEY PLAN



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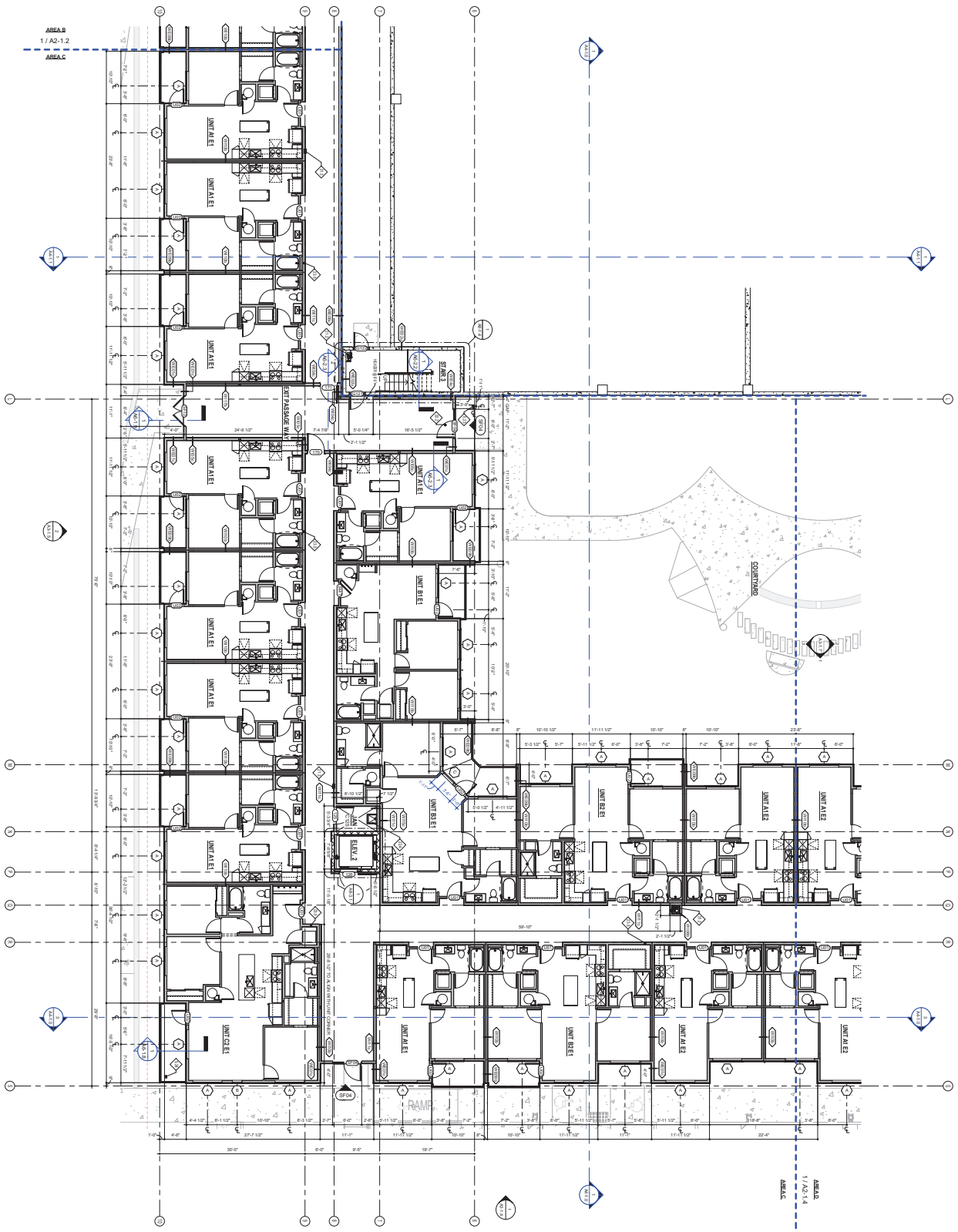

1 ENLARGED LEVEL 1 COMPOSITE PLAN - AREA C
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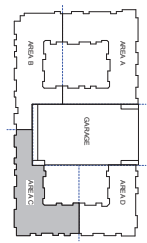
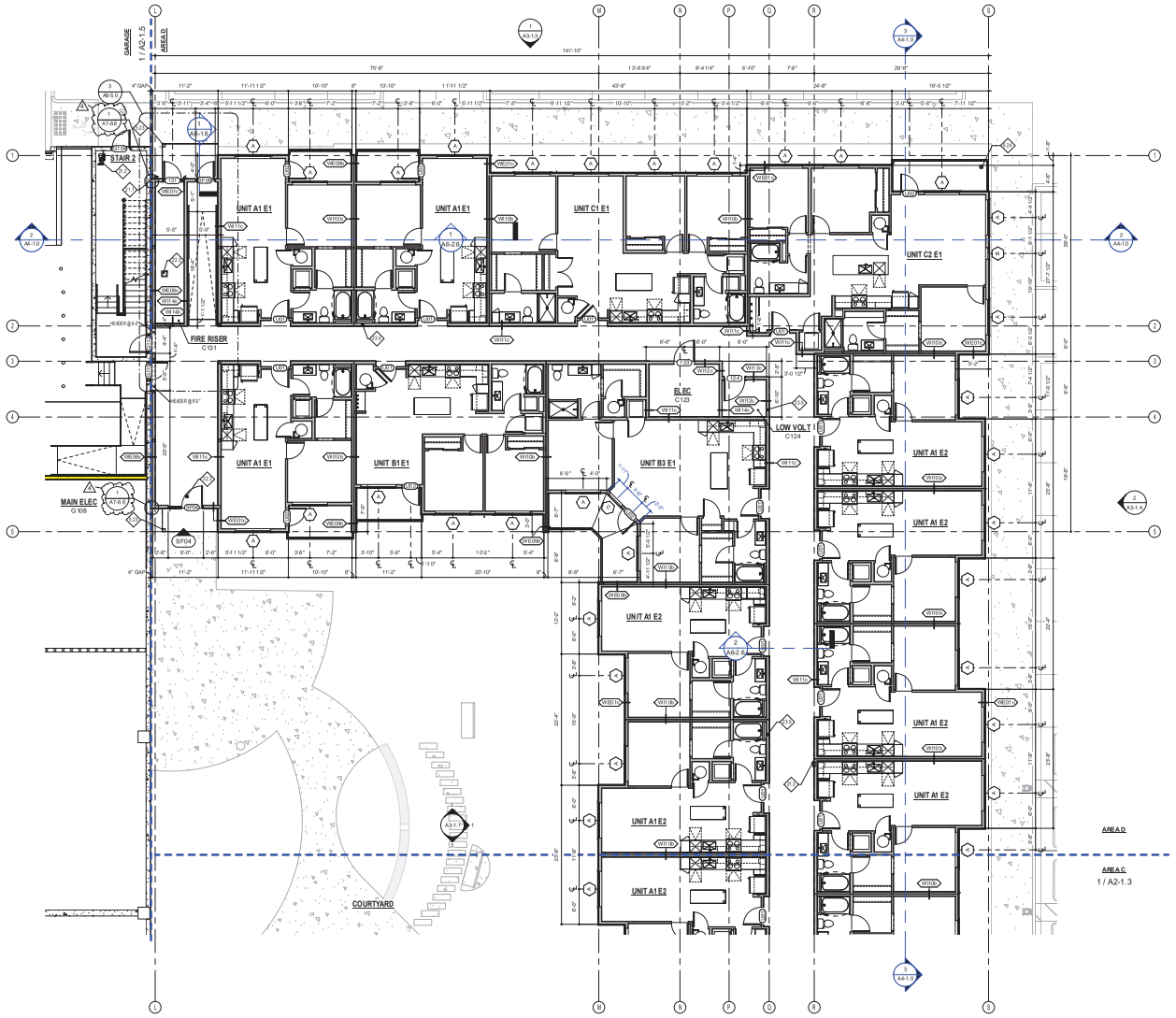


BUILDING AREAS KEY PLAN

GENERAL NOTES

- DIMENSIONS TAKE PRECEDENCE OVER DRAWINGS. DO NOT SCALE DRAWINGS FOR DIMENSIONS.
- ALL DIMENSIONS ARE TO FACE OF STUD UNLESS INDICATED ARE REQUIRED. REFER TO DETAILS FOR ADDITIONAL INFORMATION



GENERAL NOTES

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- DIMENSIONS GIVEN TO FACE OF STUDS UNLESS OTHERWISE INDICATED ON PLANS.
- ACCESSIBILITY ELEMENTS INDICATED ARE REQUIRED. FIELD CONDITIONS OCCURRING WHICH IMPACT THE ACCESSIBILITY DESIGN SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.
- SEE INTERIOR DRAWINGS FOR ALL FINISH MATERIALS
- ELEVATION 100'-0" EQUALS CIVIL FF 5286.00' RE: CIVIL DRAWINGS

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
W001c	1 HR	TYP. EXTERIOR WALL
W002c	2 HR	8" CONCRETE SHAFT WALL
W003c	1 HR	8" CONCRETE WALL
W003d	1 HR	GARAGE 12" CONCRETE WALL
W003c	1 HR	8" CONCRETE WALL
W004c	2 HR	8" CMU - 2HR FIRE BARRIER
W005c	1 HR	8" CMU - 1 HR
W006c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
W006c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
W007c	NR	2x6 PARAPET WALL - NR
W008c	NR	2x6 WALL - NR @ CONDENSERS
W009c	NR	2x4 EXTERIOR FURR WALL - NON RATED
W009c	NR	2x4 EXTERIOR FURR WALL - NON RATED
W010e	1 HR	6" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
W001c	2 HR	8" CMU - 2HR FIRE WALL
W002c	2 HR	8" CMU - 2HR FIRE BARRIER
W003	2 HR	FIRE WALL, 2HR,
W003b	2 HR	FIRE WALL, 2 HR, (2)2X4 WITH (2) 1" SHAFTLINER
W003h	3HR	FIRE WALL, 2 HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
W004b	2 HR	FIRE BARRIER, 2 HR, 2x WITH (2) 5/8" TYPE 'X' GYP
W004c	2 HR	FIRE BARRIER, - 2HR EXIT ACCESS
W005c	2 HR	FIRE BARRIER, 2 HR EXIT ACCESS
W006b	2 HR	2X4 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W006c	2 HR	2X6 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W007b	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W008c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W009h	1 HR	5 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W009k	1 HR	6" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W010b	1 HR	TYP. UNIT DEMISING - 1 HR FIRE PARTITION
W010c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
W011c	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
W011c	1 HR	Overlap
W012b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
W012c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
W013b	1 HR	2X6, 1HR - BEARING
W013c	1 HR	2X6, 1HR - BEARING
W014b	NR	2X4 INTERIOR WALL - NR
W014c	NR	2X6 INTERIOR WALL - NR
W015b	NR	2x4 INTERIOR NON BEARING WALL, GWB ON 1 SIDE
W015c	NR	2x6 INTERIOR NON BEARING WALL, GWB ON 1 SIDE
W16	NR	7/8" METAL HAT CHANNEL FURRING WALL
W017b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
W018b	NR	6" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

KEYNOTES

NO.	NOTE
5.23	SQUARE HSS COLUMN, RE: STRUCT, PAINTED SW 0046 ANTIQUARIAN BIRDWIN
5.24	SQUARE HSS COLUMN, RE: STRUCT, PAINTED SW 7674 PEPPERCORN
21.1	FIRE DEPARTMENT CONNECTION
21.2	CLASS I STANDPIPE PER IBC-2018 SECTION 905. EXACT LOCATION SHALL BE REVIEWED BY SPRINKLER DESIGN-BUILD SUBCONTRACTOR & SHALL BE SUBMITTED TO FIRE DEPT FOR APPROVAL PROVIDE ACCESSIBLE CANE DETECTION DEVICE AT FLOOR AS REQUIRED. AT VALVE CONNECTIONS
21.3	MINIMUM 2A:10BC FIRE EXTINGUISHER IN RECESSED CABINET MOUNTED NO HIGHER THAN 3' TO TOP OF EXT INSIDE/HBR
22.2	FLOOR DRAIN, SLOPE SLAB TO DRAIN AS INDICATED, RE: PLUMBING
23.1	FLOOR SINK, RE: PLUMBING
23.5	RADON RISER VENT, 4" PVC TO PENETRATE ROOF

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ISSUE FOR CONSTRUCTION
06.07.2024

No.	Date	Issue
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Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: ENLARGED LEVEL 1 PLAN - AREA D
Sheet Number: **A2-1.4**

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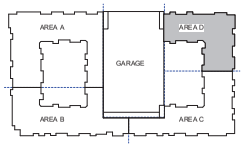

BUILDING AREAS KEY PLAN

N TRUE N PROJECT

1 ENLARGED LEVEL 1 COMPOSITE PLAN - AREA D
1/8" = 1'-0"



1 LEVEL 1 REFLECTED CEILING PLAN - AREA A
1/8" = 1'-0"

BALCONY VENTILATION CALCS												
	Total Balcony Area-Venting Required				Edge Soffit Vent Area Req	Building Side Soffit Vent Area Req	Vent Area at Edge - Provide (MIN.)			Vent Area at Bldg Side - Provided (MIN.)		
Balcony Area	Area Ft²	Area m²	Multiplier	Total Area Req			Vent Area per Lin. Ft	Lin Feet Req. Edge	Vent Area Provided @ Edge	Vent Area per Lin. Ft	Lin Feet Req. Bldg Side	Vent Area Provided @ Bldg Side
BALCONY 1	10 ft²	1.960 in²	1:50	10.39 in²	N/A	N/A	5 in²	3	15 in²			
BALCONY 2	74 ft²	10,638 in²	1:50	70.91 in²	36 in²	36 in²	5 in²	8	40 in²	5 in²	8	40 in²
BALCONY 3	10 ft²	1,960 in²	1:50	10.39 in²	N/A	N/A	5 in²	3	15 in²			
BALCONY 4	17 ft²	2,483 in²	1:50	16.55 in²	N/A	N/A	5 in²	4	20 in²			

RCP GENERAL NOTES

- SEE INTERIOR ELEV. & ELECTRICAL RCP FOR ACCENT LIGHTING CALL-OUTS/LOCATIONS; RE: INTERIORS & ELECTRICAL.
- SEE INTERIOR ELEV. FOR DROPPED SOFFITS AT MILLWORK; RE: INTERIORS
- SEE INTERIOR PLANS, ELEVATIONS, FURNITURE & COORDINATION DRAWINGS FOR LOCATIONS OF SPRINKLERS; RE: INTERIORS ARCH LIGHTING TO BE EQUALLY SPACED AND CENTERED WITHIN ROOMS/CORRIDORS. TYPICAL; RE: ELECTRICAL.
- PERIMETER SOFFITS TO BE EQUIVALL SIDES. TYP.
- ENSURE DIFFUSERS/ACCESS PANELS DO NOT CONFLICT W/ ACCENT LIGHTING, SOFFITS, & DECORATIVE FIXTURES ETC. TYP.
- MECHANICAL GRILLES AND WALL DIFFUSERS, ELECTRICAL PANELS, ACCESS PANELS, ETC. WHICH ARE EXPOSED IN FINISHED SPACES SHALL BE PAINTED IN PROPER PAINT FORMULATION TO MATCH THE SURFACE ON WHICH THEY OCCUPIE; INTERIORS

RCP LEGEND

FC01/ RC01		RATED GYP. BD CEILING, R/E ASSEMBLIES A0-6.4
FC01/ RC01		RATED GYP. BD CEILING, R/E ASSEMBLIES A0-6.4 ; UNIT ALTERNATE CEILING HEIGHT RE: A2-1.11
FC03		NON-RATED GYP. BD CEILING , RE: ASSEMBLIES A0-6.4
FC05		COMPOSITE DRIFT-THROUGH BALCONY
FC08		RATED BALCONY OVER CONDITIONED SPACE
FC10		2-HR RATED GYP. BD CEILING, R/E: ASSEMBLIES A0-6.4
FC11		2-HR RATED GYP. BD CEILING - CORRIDOR, RE: ASSEMBLIES A0-6.4
S01		CEMENTITIOUS SOFFIT BOARD, PEPPERCORN
S02		CEMENTITIOUS SOFFIT BOARD, TRICORN BLACK
RC02/ RC04		RATED G.YP. (2) LAYERS, R/E: ASSEMBLIES A0 6.4

KEYNOTES

NO.	NOTE
5.23	EQUIVRE HSS COLUMN; RE: STRUCT.; PAINTED (BM 0045 ANTIQUARIAN BROWN)
21.2	GYP BD STANDOFFS PER IBC 2018 TABLE 708.4.2 AND SECT. 1207.3.1 SHALL BE INSTALLED BY SPRINKLER DESIGN BUILD SUBCONTRACTOR & SHALL BE SUBMITTED TO FIRE DEPT FOR APPROVAL PRIOR TO ACCESS BUILDING. PROVIDE ACCESSIBLE CARBON MONOXIDE DETECTION DEVICE AT FLOOR AS REQUIRED AT V.A.V.E. CONNECTIONS
23.7	CONFIRM ROOF SOFFIT VENT, MIN. 0.5SQ.FT/LINEAL FT VENT FREE AREA PAINT TO MATCH SOFFIT COLOR. HARDIE OR EQUAL RE: VENTILATION CALCS

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ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: ENLARGED LEVEL 1 RCP - AREA A
Sheet Number: A2-1.6

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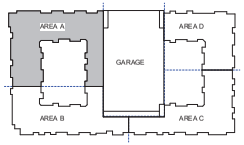
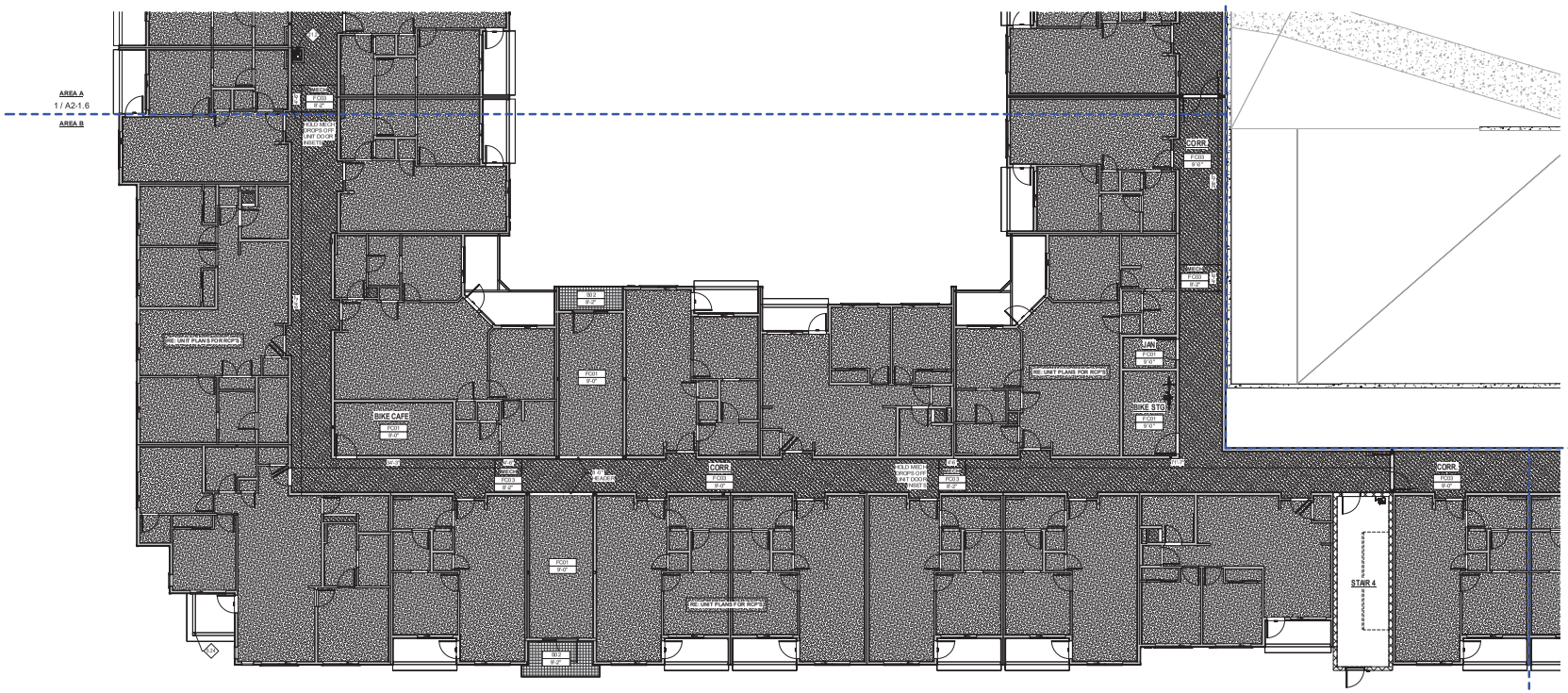


BUILDING AREAS KEY PLAN

N TRUE N PROJECT



RCP GENERAL NOTES

- SEE INTERIOR ELEV. & ELECTRICAL RCP FOR ACCENT LIGHTING CALL-OUTS/LOCATIONS. RE: INTERIORS & ELECTRICAL.
- SEE INTERIOR ELEV. FOR DROPPED SOFFITS AT MILLWORK. RE: INTERIORS
- SEE INTERIOR PLANS, ELEVATIONS, FURNITURE & COORDINATION DRAWINGS FOR LOCATIONS OF ACCENT LIGHTING. RE: INTERIORS ARCH LIGHTING TO BE EQUALLY SPACED AND CENTERED WITHIN ROOMS/CORRIDORS. TYPICAL RE: ELECTRICAL.
- PERIMETER SOFFITS TO BE 8D DRYALL SIDES. TYP.
- ENSURE DIFFUSERS/ACCESS PANELS DO NOT CONFLICT W/ ACCENT LIGHTING, SOFFITS, & DECORATIVE FIXTURES ETC. TYP.
- MECHANICAL GRILLES AND WALL DIFFUSERS, ELECTRICAL PANELS, ACCESS PANELS, ETC. WHICH ARE EXPOSED IN FINISHED SPACES SHALL BE PAINTED IN PROPER PAINT FORMULATION TO MATCH THE SURFACE ON WHICH THEY OCCUPY. RE: INTERIORS

RCP LEGEND

FC01/ RC01		RATED GYP. BD CEILING. RE: ASSEMBLIES A0-6.4
FC01/ RC01		RATED GYP. BD CEILING. RE: ASSEMBLIES A0-6.4 ; UNIT ALTERNATE CEILING HEIGHT RE: A2-1.11
FC03		NON-RATED GYP. BD CEILING . RE: ASSEMBLIES A0-6.4
FC05		COMPOSITE DRIFT-THROUGH BALCONY
FC08		RATED BALCONY OVER CONDITIONED SPACE
FC10		2-HR RATED GYP. BD CEILING. RE: ASSEMBLIES A0-6.4
FC11		2-HR RATED GYP. BD CEILING - CORRIDOR. RE: ASSEMBLIES A0-6.4
SD1		CEMENTITIOUS SOFFIT BOARD, PEPPERCORN
SD2		CEMENTITIOUS SOFFIT BOARD, TRICORN BLACK
RC02/ RC04		RATED GYP. (2) LAYERS. RE: ASSEMBLIES A0-6.4

KEYNOTES

NO.	NOTE
9.24	EQUIPMENT SUPPORT. RE: STRUCT. FASTENED IN TYP PEPPERCORN
21.2	PLANT LIT ANDPIPE PER IBC 903.3.1 SECTION 903. EXACT LOCATIONS SHALL BE VERIFIED BY SPRINKLER DESIGN-BUILD SUBCONTRACTOR. A SHALL BE SUBMITTED TO FIRE DEPT FOR APPROVAL PROVIDE ACCESIBILE CANE DETECTION DEVICE AT FLOOR AS REQUIRED AT VALVE CONNECTIONS

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Title	ENLARGED LEVEL 1 RCP - AREA B
Sheet Number	A2-1.7

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1 LEVEL 1 REFLECTED CEILING PLAN - AREA B
1/8" = 1'-0"

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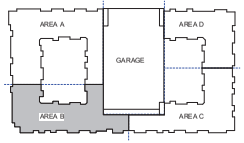
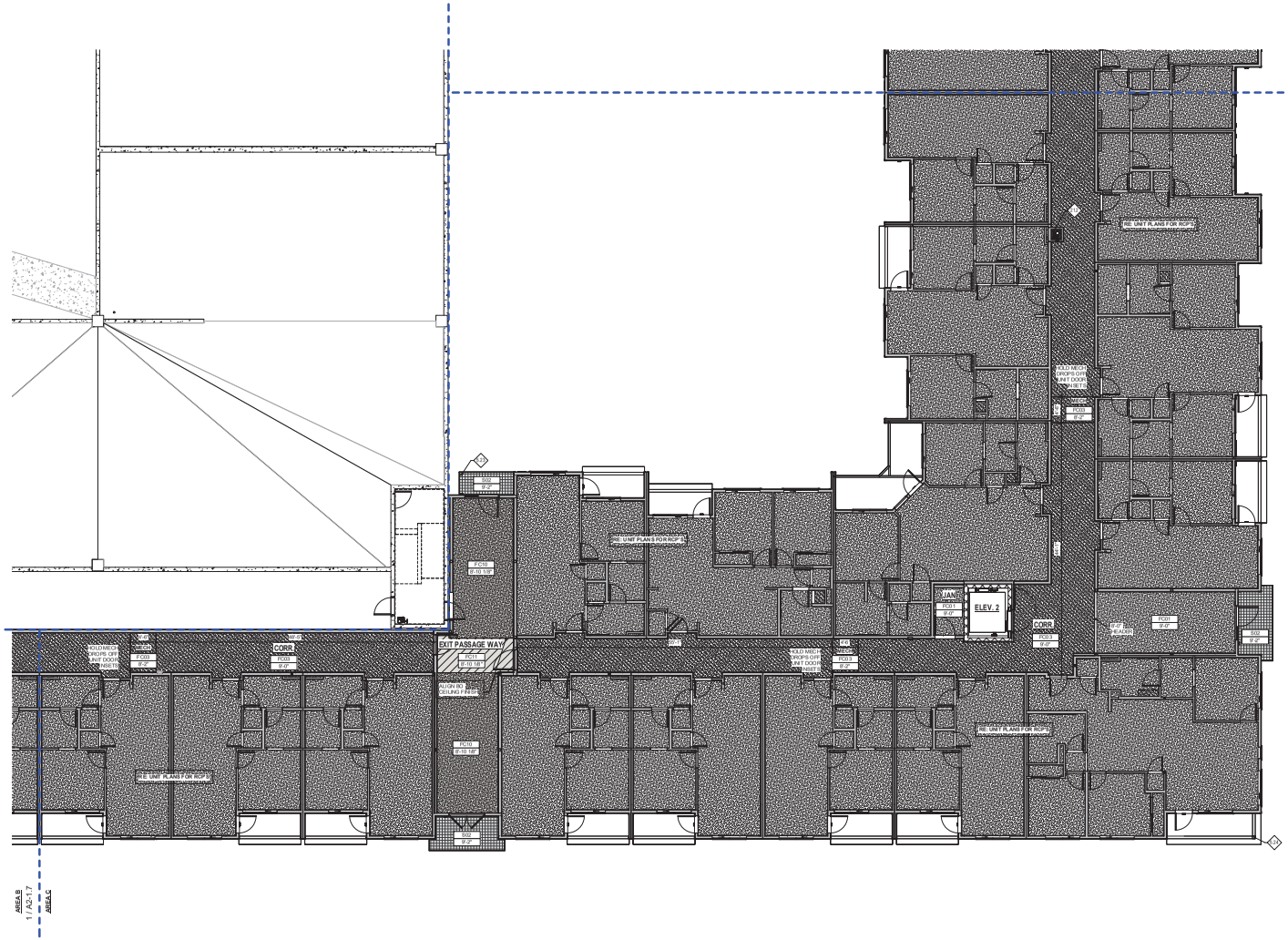
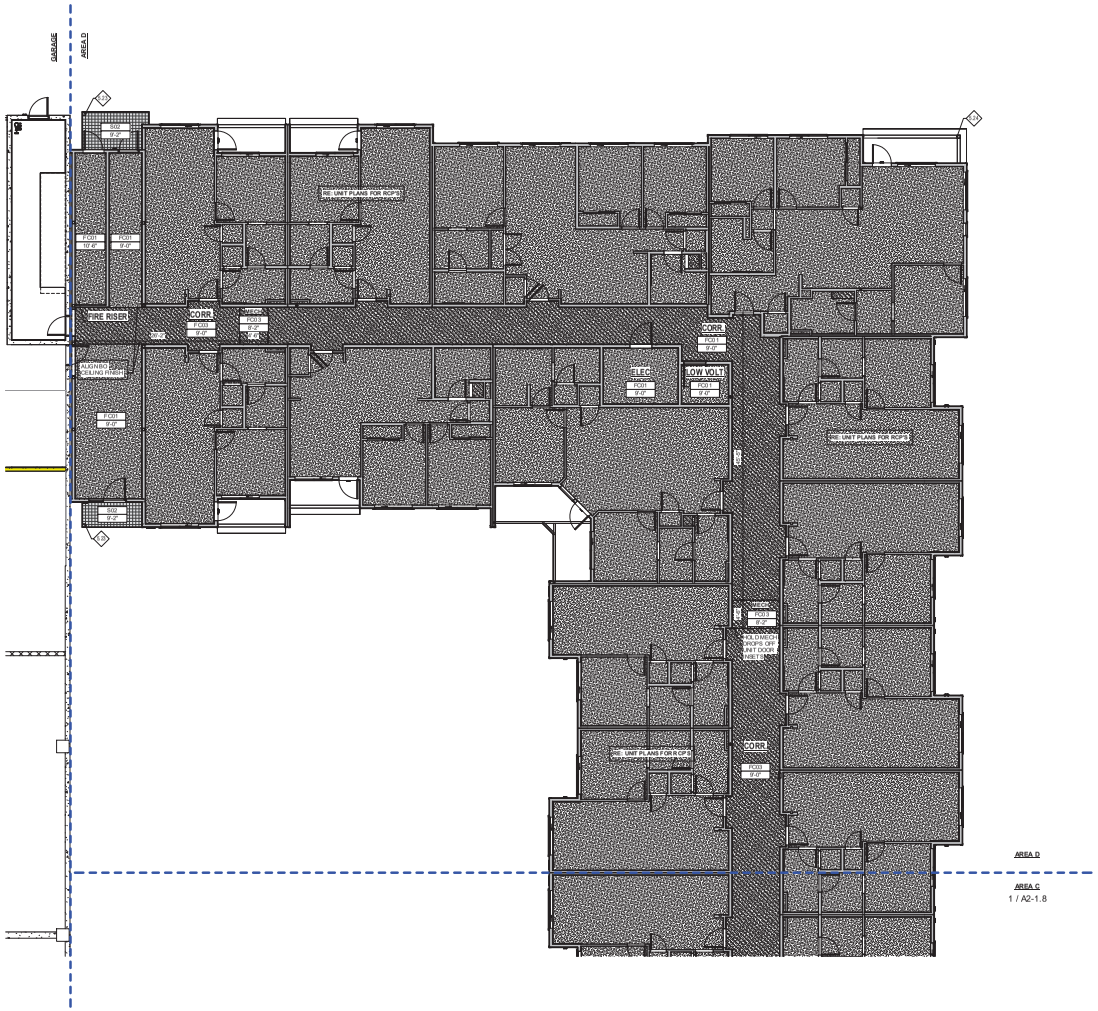
BUILDING AREAS KEY PLAN




AREA D
1 / A2-1.9
AREA C
AREA B
1 / A2-1.7
AREA C
RE: UNIT PLANS FOR RCP
RE: UNIT PLANS FOR RCP
RE: UNIT PLANS FOR RCP
RE: UNIT PLANS FOR RCP
EXIT PASSAGE WAY
ELEV. 2
CORR
JAN.
CLOSET
CORR
FC01
9'-0"
FC09
2'-10 1/2"
FC03
9'-0"
FC03
2'-10 1/2"
FC03
9'-0"
FC03
9'-0"
FC03
9'-0



RCP GENERAL NOTES

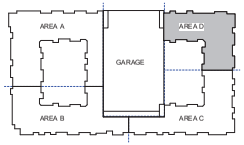
- SEE INTERIOR ELEV. & ELECTRICAL RCP FOR ACCENT LIGHTING CALL-OUTS/LOCATIONS, RE: INTERIORS & ELECTRICAL
- SEE INTERIOR ELEV. FOR DROPPED SOFFITS AT MILLWORK, RE: INTERIORS
- SEE INTERIOR PLANS, ELEVATIONS, FURNITURE & COORDINATION PLANS FOR DRAWING PROPER LOCATIONS, RE: INTERIORS ARCH LIGHTING TO BE EQUALLY SPACED AND CENTERED WITHIN ROOMS/CORRIDORS. TYPICAL, RE: ELECTRICAL
- PERIMETER SOFFITS TO BE 60 ON ALL SIDES. TYP.
- ENSURE DIFFUSERS/ACCESS PANELS DO NOT CONFLICT W/ ACCENT LIGHTING, SOFFITS, & DECORATIVE FIXTURES ETC. TYP.
- MECHANICAL, GRILLES AND WALL DIFFUSERS, ELECTRICAL PANELS, ACCESS PANELS, ETC. WHICH ARE EXPOSED IN FINISHED SPACES SHALL BE PAINTED IN PROPER PAINT FORMULATION TO MATCH THE SURFACE ON WHICH THEY OCCUR RE: INTERIORS

RCP LEGEND

FC01/ RC01	RATED GYP. BD CEILING, RE ASSEMBLIES A0-6.4
FC01/ RC01	RATED GYP. BD CEILING, RE ASSEMBLIES A0-6.4; UNIT ALTERNATE CEILING HEIGHT RE: A2-1.11
FC03	NON-RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4
FC05	COMPOSITE DRIP THROUGH BALCONY
FC08	RATED BALCONY OVER CONDITIONED SPACE
FC10	2-HR RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4
FC11	2-HR RATED GYP. BD CEILING - CORRIDOR, RE: ASSEMBLIES A0-6.4
S01	CEMENTITIOUS SOFFIT BOARD, PEPPERCORN
S02	CEMENTITIOUS SOFFIT BOARD, TRICORN BLACK
RC02/ RC04	RATED GYP. (2) LAYERS, RE: ASSEMBLIES A0-6.4

KEYNOTES

NO.	NOTE
5.23	SQUARE H.SS COLUMN, RE: STRUCT, PAINTED SW 0045 ANTIQUARIAN BROWN
5.24	SQUARE H.SS COLUMN, RE: STRUCT, PAINTED SW 7674 PEPPERCORN



BUILDING AREAS KEY PLAN

1 LEVEL 1 REFLECTED CEILING PLAN - AREA D
1/8" = 1'-0"

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ISSUE FOR CONSTRUCTION
08.07.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
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Title: ENLARGED LEVEL 1 RCP - AREA D
Sheet Number: A2-1.9

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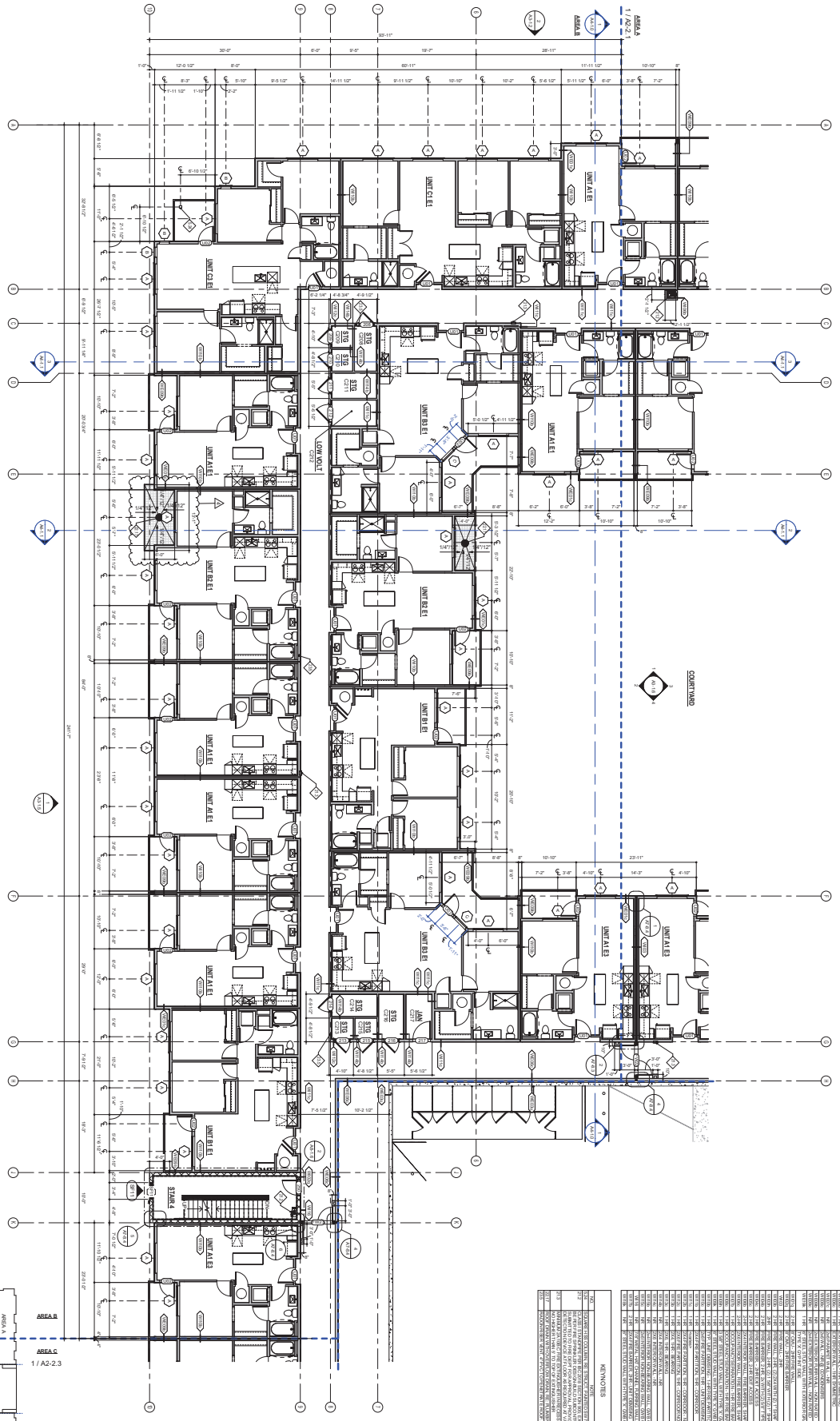
1 ENLARGED LEVEL 2 COMPOSITE PLAN - AREA A
1/8" = 1'-0"

GENERAL NOTES

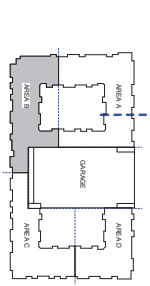
- DIMENSIONS TAKE PRECEDENCE OVER DRAWINGS. DO NOT SCALE DRAWINGS FOR DIMENSIONS.
- CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND CONDITIONS AND REPORT ANY DISCREPANCIES TO THE ARCHITECT PRIOR TO CONSTRUCTION.
- ALL DIMENSIONS ARE TO FACE OF STUD, CONCRETE OR MASONRY UNLESS NOTED OTHERWISE.
- REFERENCED DRAWINGS FOR ALL FINISH MATERIALS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO INSTALLATION.
- REFERENCED DRAWINGS FOR ALL FINISH MATERIALS ELEVATION DWG'S / SCALE: 3/16" = 1'-0" UNLESS NOTED OTHERWISE.

WALL TYPE SCHEDULE

MARK	RATING	DESCRIPTION
W1.00	1 HR	EXTERIOR WALL
W1.01	1 HR	EXTERIOR WALL
W1.02	1 HR	EXTERIOR WALL
W1.03	1 HR	EXTERIOR WALL



1 ENLARGED LEVEL 2 COMPOSITE PLAN - AREA B
1/8" = 1'-0"



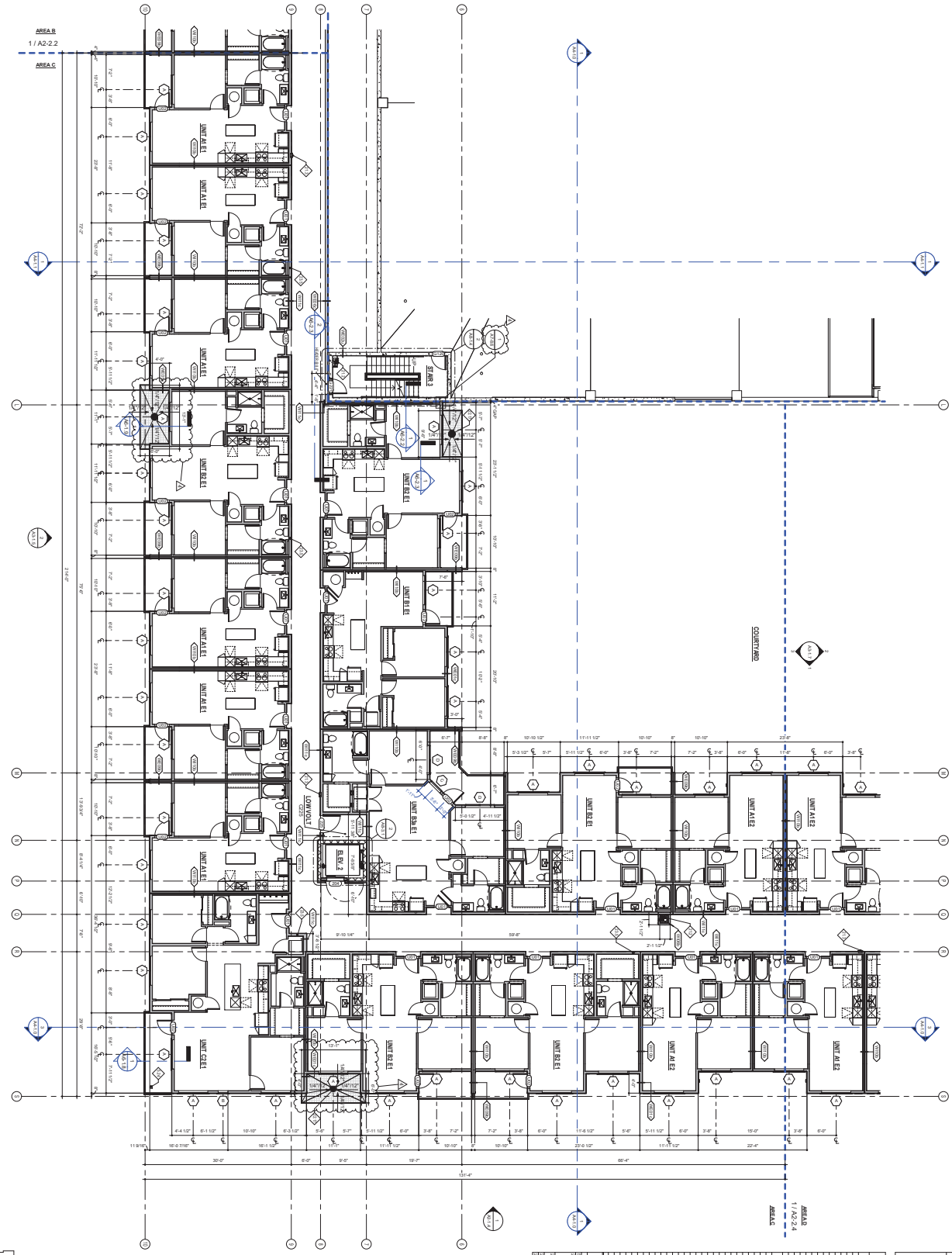
BUILDING AREAS KEY PLAN

GENERAL NOTES

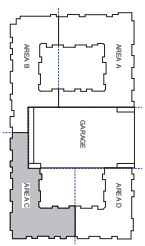
- DIMENSIONS TAKE PRECEDENCE OVER DRAWINGS. DO NOT SCALE DRAWINGS FOR DIMENSIONS.
- ALL DIMENSIONS ARE TO FACE OF STUD, FACE OF CONCRETE OR FACE OF CMU UNLESS INDICATED OTHERWISE.
- REFER TO ENLARGED PLANS FOR ADDITIONAL DIMENSIONAL INFORMATION.
- ALL WORK SHALL BE INSTALLED PLUMB AND LEVEL UNLESS INDICATED OTHERWISE.
- ALL EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
- REFER TO FINISH PLANS FOR ALL FINISH MATERIALS.
- ALL WORK SHALL BE COORDINATED WITH THE ARCHITECT PRIOR TO FABRICATION OR INSTALLATION.
- REFER TO ENLARGED DRAWINGS FOR ALL FINISH MATERIALS
- ALL WORK SHALL BE COORDINATED WITH THE ARCHITECT PRIOR TO FABRICATION OR INSTALLATION.
- ELEVATION 100'-0" EQUALS N.A.V.D. 1988 DATUM

WALL TYPE SCHEDULE

MARK	RATING	DESCRIPTION
W1000	1 HR	EXT. STUD WALL
W1001	1 HR	EXT. STUD WALL
W1002	1 HR	EXTERIOR WALL
W1003	1 HR	EXTERIOR WALL
W1004	1 HR	EXTERIOR WALL
W1005	1 HR	EXTERIOR WALL



1 ENLARGED LEVEL 2 COMPOSITE PLAN - AREA C
1/8" = 1'-0"



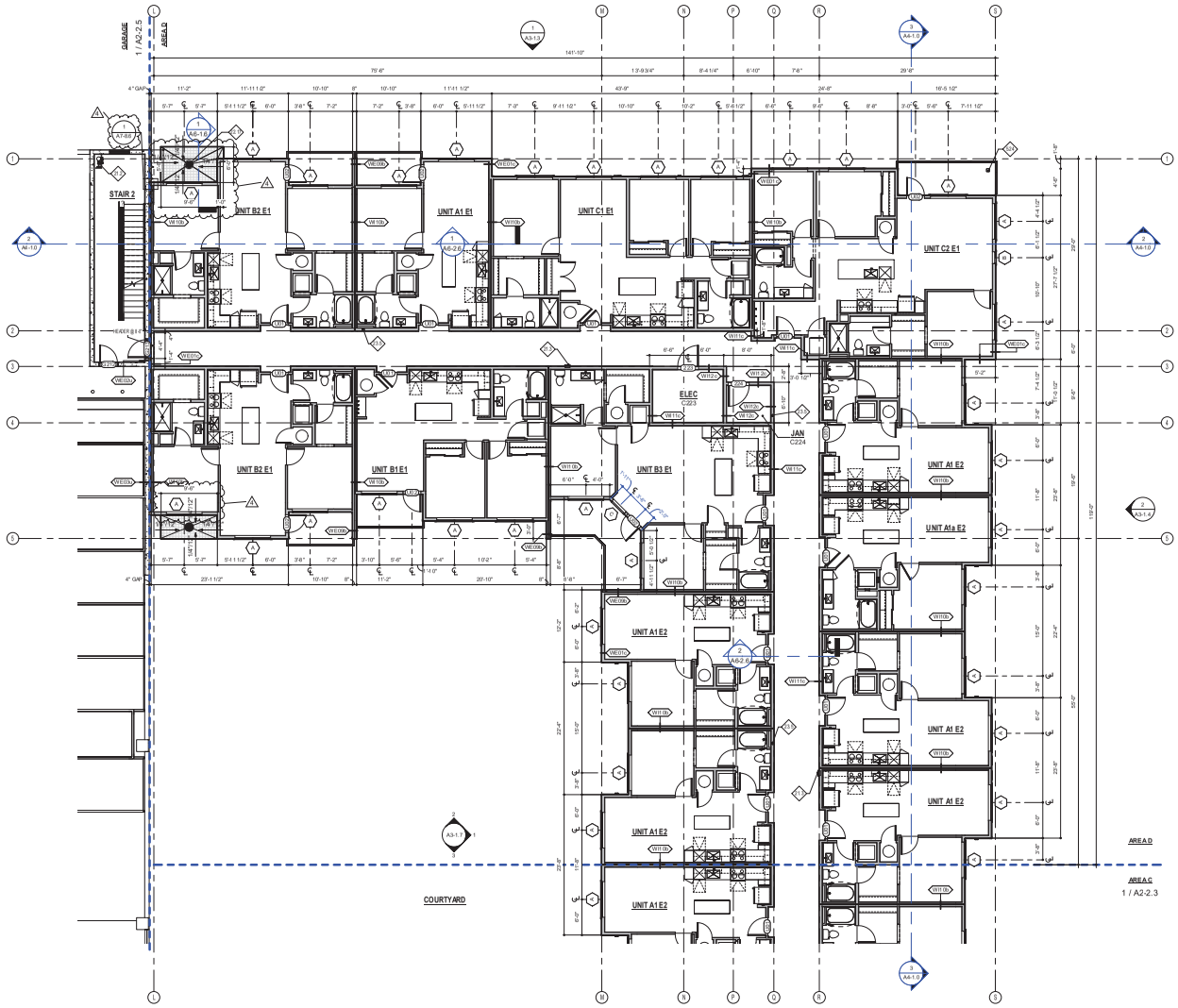
BUILDING AREAS KEY PLAN

GENERAL NOTES

1. DIMENSIONS TAKE PRECEDENCE OVER DRAWINGS. DO NOT SCALE DRAWINGS FOR DIMENSIONS.
2. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND CONDITIONS AT THE JOBSITE. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK.
3. REFER TO FINISH DRAWINGS FOR ALL FINISH MATERIALS.
4. ELEVATION 100'-0" EQUALS N.A.V.D. 1988 DATUM.

WALL TYPE SCHEDULE

MARK	RATING	DESCRIPTION
W1000	1 HR	EXTERIOR WALL
W1001	1 HR	EXTERIOR WALL
W1002	1 HR	EXTERIOR WALL
W1003	1 HR	EXTERIOR WALL



GENERAL NOTES

- DIMENSIONS TAKE PRECEDENCE OVER DRAWINGS. DO NOT SCALE.
- DIMENSIONS GIVEN TO FACE OF STUDS UNLESS OTHERWISE INDICATED ON PLANS.
- ACCESSIBILITY ELEMENTS INDICATED ARE REQUIRED. FIELD CONDITIONS OCCURRING WHICH MAY IMPACT THE ACCESSIBILITY DESIGN SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.
- SEE INTERIOR DRAWINGS FOR ALL FINISH MATERIALS
- ELEVATION 100'-0" EQUALS CIVIL FF 5286.00' RE: CIVIL DRAWINGS

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
W01c	1 HR	TYP. EXTERIOR WALL
W02c	2 HR	8" CONCRETE SHAFT WALL
W03c	1 HR	8" CONCRETE WALL
W03cw	1 HR	GARAGE 12" CONCRETE WALL
W03x	1 HR	8" CONCRETE WALL
W04c	2 HR	8" CMU - 2HR FIRE BARRIER
W05c	1 HR	8" CMU - 1HR
W06b	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
W06c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
W07c	NR	2x6 PARAPET WALL - NR
W08c	NR	2x6 WALL - NR @ CONDENSERS
W09b	NR	2x4 EXTERIOR FURR WALL - NON RATED
W09c	NR	2x4 EXTERIOR FURR WALL - NON RATED
W10b	1 HR	6" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
W01c	2 HR	8" CMU - 2HR FIRE WALL
W02c	2 HR	8" CMU - 2HR FIRE BARRIER
W03	2 HR	FIRE WALL, 2HR
W03b	2 HR	FIRE WALL, 2HR, (2)2X4 WITH (2) 1" SHAFTLINER
W03h	3HR	FIRE WALL, 2 HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
W04b	2 HR	FIRE BARRIER, 2 HR, 2x WITH (2) 5/8" TYPE 'X' GYP
W04c	2 HR	FIRE BARRIER, - 2HR EXIT ACCESS
W05c	2 HR	FIRE BARRIER, 2 HR EXIT ACCESS
W06b	2 HR	2X4 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W06c	2 HR	2X6 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W07b	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W08c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W09b	1 HR	5 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W09c	1 HR	6" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W10b	1 HR	TYP. UNIT DEMISING - 1 HR FIRE PARTITION
W11b	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
W11c	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
W11c1	1 HR	Overlap
W12b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
W12c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
W13b	1 HR	2X6, 1HR - BEARING
W13c	1 HR	2X6, 1HR - BEARING
W14b	NR	2X4 INTERIOR WALL - NR
W14c	NR	2X6 INTERIOR WALL - NR
W15b	NR	2x4 INTERIOR NON BEARING WALL, GWB ON 1 SIDE
W15c	NR	2x6 INTERIOR NON BEARING WALL, GWB ON 1 SIDE
W16	NR	7/8" METAL HAT CHANNEL FURRING WALL
W17b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
W18b	NR	6" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

KEYNOTES

NO.	NOTE
024	SQUARE HSS COLUMN, RE: STRUCT. PAINTED SW 7674 PEPPERCORN
212	CLASS I STANDPIPE PER IBC 2018, SECTION 905. EXACT LOCATION SHALL BE PER FIRE SPRINKLER DESIGN-BUILD SUBCONTRACTOR & SHALL BE SUBMITTED TO FIRE DEPT FOR APPROVAL PRIOR TO ACCESSIBLE CANE DETECTION DEVICE AT FLOOR AS REQUIRED AT VAL VE CONNECTIONS
213	MINIMUM 2A 10BC FIRE EXTINGUISHER WITH RECESSED CABINET MOUNTED NO HIGHER THAN 5' TO TOP OF EXTINGUISHER
2217	ROOF DRAIN WITH OVERFLOW DRAIN, RE: PLUMBING
235	RADON RISER VENT, 4" PVC TO PENETRATE ROOF

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ISSUE FOR CONSTRUCTION
06.07.2024

No.	Date	Issue
1	06.07.2024	IFC

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG

Title: ENLARGED LEVEL 2 PLAN - AREA D

Sheet Number: **A2-2.4**

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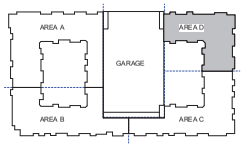
1 ENLARGED LEVEL 2 COMPOSITE PLAN - AREA D
1/8" = 1'-0"



BUILDING AREAS KEY PLAN

N TRUE N PROJECT



RCP GENERAL NOTES

- SEE INTERIOR ELEV. & ELECTRICAL RCP FOR ACCENT LIGHTING CALL-OUTS/LOCATIONS; RE: INTERIORS & ELECTRICAL
- SEE INTERIOR ELEV. FOR DROPPED SOFFITS AT MILLWORK; RE: INTERIORS
- SEE INTERIOR PLANS, ELEVATIONS, FURNITURE & COORDINATION PLANS FOR ALL FURNITURE, APPLIANCES, FURNISHINGS, INTERIORS ARCH LIGHTING TO BE EQUALLY SPACED AND CENTERED WITHIN ROOMS/CORRIDORS. TYPICAL; RE: ELECTRICAL
- PERIMETER SOFFITS TO BE EQUIVALL SIDES. TYP.
- ENSURE DIFFUSERS/ACCESS PANELS DO NOT CONFLICT W/ ACCENT LIGHTING, SOFFITS, & DECORATIVE FIXTURES. ETC. TYP.
- MECHANICAL GRILLES AND WALL DIFFUSERS, ELECTRICAL PANELS, ACCESS PANELS, ETC. WHICH ARE EXPOSED IN FINISHED SPACES SHALL BE PAINTED IN PROPER PAINT FORMULATION TO MATCH THE SURFACE ON WHICH THEY OCCUPIRE: INTERIORS

RCP LEGEND

FC01/ RC01	RATED GYP. BD CEILING, R/E ASSEMBLIES A0-6.4
FC01/ RC01	RATED GYP. BD CEILING, R/E ASSEMBLIES A0-6.4; UNIT ALTERNATE CEILING HEIGHT RE: A2-1.11
FC03	NON-RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4
FC05	COMPOSITE DRIFTPROUGH BALCONY
FC08	RATED BALCONY OVER CONDITIONED SPACE
FC10	2-HR RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4
FC11	2-HR RATED GYP. BD CEILING - CORRIDOR, RE: ASSEMBLIES A0-6.4
SO1	CEMENTITIOUS SOFFIT BOARD, PEPPERCORN
SO2	CEMENTITIOUS SOFFIT BOARD, TRICORN BLACK
RC02/ RC04	RATED GYP. (2) LAYERS, RE: ASSEMBLIES A0-6.4

KEYNOTES

NO.	NOTE
G.24	EQUIPMENT BY OTHERS
G.25	FLUSH CEILING ACCESS PANEL, RE: STRUCT. FRAMING IN TENANT SPACES
G.26	PLANS TO BE SUBMITTED TO FIRE DEPT FOR APPROVAL PRIOR TO CONSTRUCTION. SHALL BE PER NFPA 13R SPRINKLER DESIGN BUILT BY SUBCONTRACTOR. A WALL SHALL BE SUBMITTED TO FIRE DEPT FOR APPROVAL PROVIDE ACCESIBILE CANE DETECTION DEVICE AT FLOOR AS REQUIRED AT VALVE CONNECTIONS

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ISSUE FOR CONSTRUCTION
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No.	Date	Issue

Project Architect: DV
Project Designer: DR
Title:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: ENLARGED LEVEL 2 RCP - AREA A
Sheet Number: A2-2.6

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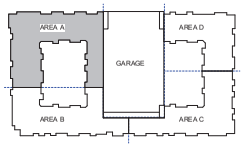

BUILDING AREAS KEY PLAN

1 LEVEL 2 REFLECTED CEILING PLAN - AREA A
1/8" = 1'-0"

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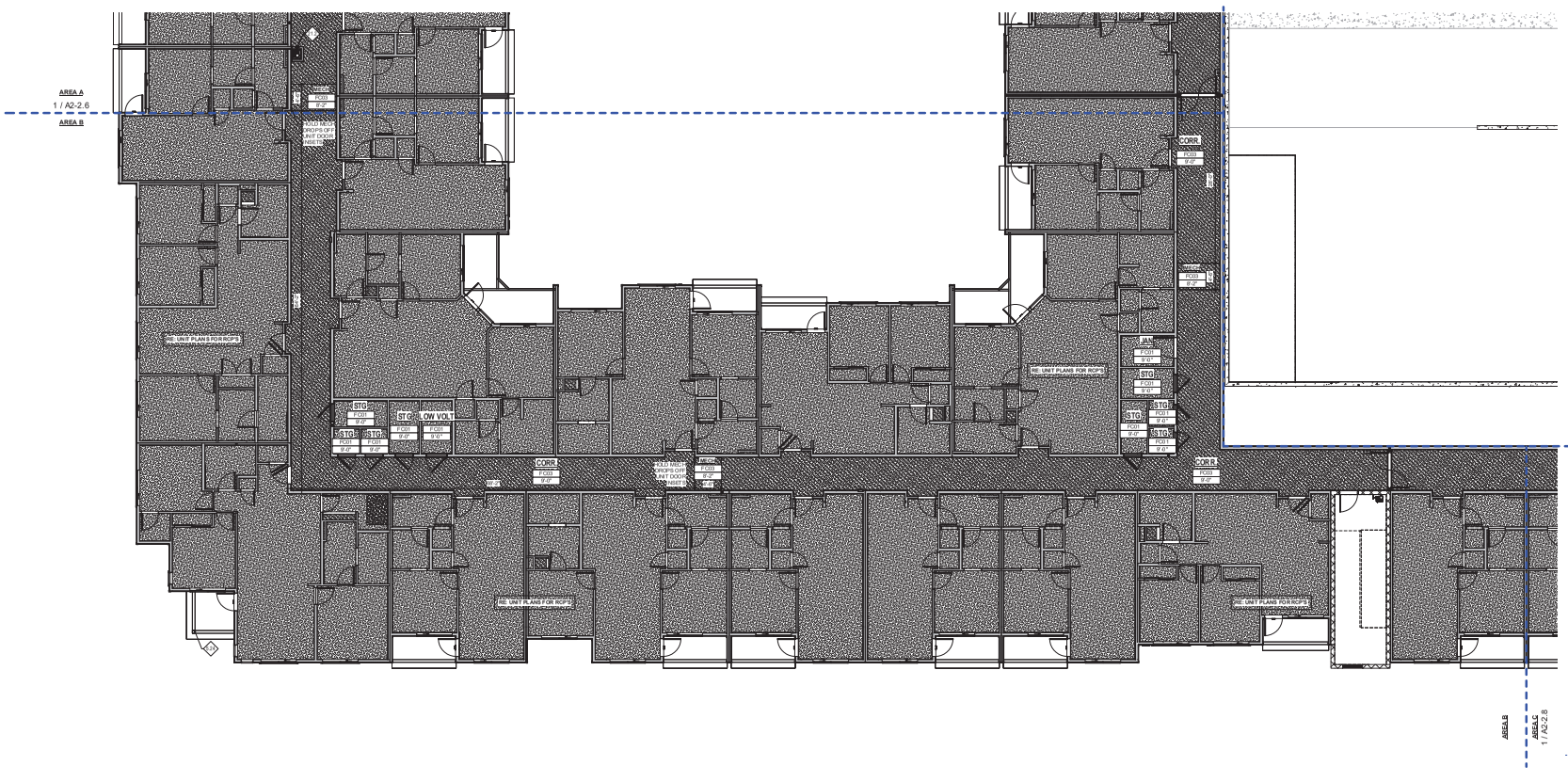

RCP GENERAL NOTES

- SEE INTERIOR ELEV. & ELECTRICAL RCP FOR ACCENT LIGHTING CALL-OUTS/LOCATIONS. RE: INTERIORS & ELECTRICAL.
- SEE INTERIOR ELEV. FOR DROPPED SOFFITS AT MILLWORK. RE: INTERIORS
- SEE INTERIOR PLANS, ELEVATIONS, FURNITURE & COORDINATION PLANS FOR ALL FURNITURE, MILLWORK. RE: INTERIORS ARCH LIGHTING TO BE EQUALLY SPACED AND CENTERED WITHIN ROOMS/CORRIDORS. TYPICAL. RE: ELECTRICAL.
- PERIMETER SOFFITS TO BE EQUIVALL SIDES. TYP.
- ENSURE DIFFUSERS/ACCESS PANELS DO NOT CONFLICT W/ ACCENT LIGHTING, SOFFITS, & DECORATIVE FIXTURES. ETC. TYP.
- MECHANICAL GRILLES AND WALL DIFFUSERS, ELECTRICAL PANELS, ACCESS PANELS, ETC. WHICH ARE EXPOSED IN FINISHED SPACES SHALL BE PAINTED IN PROPER PAINT FORMULATION TO MATCH THE SURFACE ON WHICH THEY OCCUR/RE INTERIORS

RCP LEGEND

FC01/ RC01		RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4
FC01/ RC01		RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4; UNIT ALTERNATE CEILING HEIGHT RE: A2-1.11
FC03		NON-RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4
FC05		COMPOSITE DRIFTHROUGH BALCONY
FC08		RATED BALCONY OVER CONDITIONED SPACE
FC10		2-HR RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4
FC11		2-HR RATED GYP. BD CEILING - CORRIDOR, RE: ASSEMBLIES A0-6.4
SD1		CEMENTITIOUS SOFFIT BOARD, PEPPERCORN
SD2		CEMENTITIOUS SOFFIT BOARD, TRICORN BLACK
RC02/ RC04		RATED GYP. (2) LAYERS, RE: ASSEMBLIES A0-6.4

KEYNOTES

NO.	NOTE
0.29	EQUIPMENT SUPPORT, RE: STRUCT. PLANS
21.2	SLOPE TO TANDRIP PER BID SOLUTION BID. EXACT LOAD TO BE SHALL BE VERIFIED BY SPRINKLER DESIGN-BUILD SUBCONTRACTOR. A SHALL BE SUBMITTED TO FIRE DEPT FOR APPROVAL PROVIDE ACCESSIBLE CANE DETECTION DEVICE AT FLOOR AS REQUIRED AT VALVE CONNECTIONS

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06.01.2024

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Project Architect	DV
Project Designer	DR
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Title	ENLARGED LEVEL 2 RCP - AREA B
Sheet Number	A2-2.7

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1 LEVEL 2 REFLECTED CEILING PLAN - AREA B
1/8" = 1'-0"

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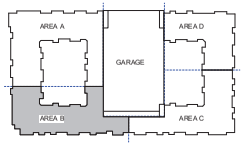
BUILDING AREAS KEY PLAN



RCP GENERAL NOTES

- SEE INTERIOR ELEV. & ELECTRICAL RCP FOR ACCENT LIGHTING CALLOUTS. RE: INTERIOR ELEV. FOR DROPPED SOFFITS AT MILLWORK. RE: INTERIOR ELEV. FOR ALL MILLWORK SHELVING & CLOSET CONFIGURATIONS
- PLANS FOR GRAVITY POCKET LOCATIONS. RE: INTERIOR ARCH RCP FOR ALL GYPSUM BOARD CEILING SOFFITS. RE: INTERIOR ARCH RCP FOR CORRIDORS, TYPICAL RE: ELECTRICAL
- ALL LIGHTING FIXTURES TO BE CENTERED IN TILE, TYP.
- ENSURE OPPOSED ACCESS PANELS DO NOT CONFLICT W/ ACCENT LIGHTING. RE: ELECTRICAL RCP FOR ALL ACCESS PANEL LOCATIONS
- MECHANICAL GRILLES AND WALL DIFFUSERS, ELECTRICAL PANELS, ACCESS PANELS, ETC. TO BE PAINTED TO MATCH ADJACENT FINISH. ALL RE: PAINT FINISHES SCHEDULE. PAINT FINISH TO MATCH THE ADJACENT WALL FINISH, U.O.N.

RCP LEGEND

FC01 FC02	RATED GYP. BD CEILING, RE: ASSEMBLIES A9.4.4
FC01 FC01	RATED GYP. BD CEILING, RE: ASSEMBLIES A9.4.4 OR ALTERNATE CEILING HEIGHT RE: A3.1.11
FC03	ADHERED GYP. BD CEILING. RE: ASSEMBLIES A9.4.4
FC05	COMPOSITE EXPRYT PROJ. STYRO BALCONY
FC08	RATED BALCONY OVER CONDITIONED SPACE
FC10	2-HR RATED GYP. BD CEILING, RE: ASSEMBLIES A9.4.4
FC11	2-HR RATED GYP. BD CEILING - CORRIDOR, RE: ASSEMBLIES A9.4.4
SB1	CEMENTITIOUS SOFFIT BOARD, PEPPER GRY.
SB2	CEMENTITIOUS SOFFIT BOARD, TROPIN BLACK
RC02 RC04	RATED GYP. CO LAM BRD, RE: ASSEMBLIES A9.4.4

KEYNOTES

KEY NO.	NOTE
2212	5/8" GYP. BD CEILING, RE: FINISH SCHEDULE FOR SPECIFICATION
2213	5/8" GYP. BD CEILING, RE: FINISH SCHEDULE FOR SPECIFICATION. CEILING HEIGHT TO BE 9'-0" ABOVE FINISH FLOOR, U.O.N.

BUILDING AREAS
KEY PLAN

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1 LEVEL 2 REFLECTED CEILING PLAN - AREA C
1/8" = 1'-0"

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No.	Date	Issue

drawn/checked	DV
submitted/approved	DR
date	2/20/24
scale/size	CG / GB TT / NV
drawing by	JG
title	ENLARGED LEVEL 2 RCP - AREA C
sheet number	A2-2.8

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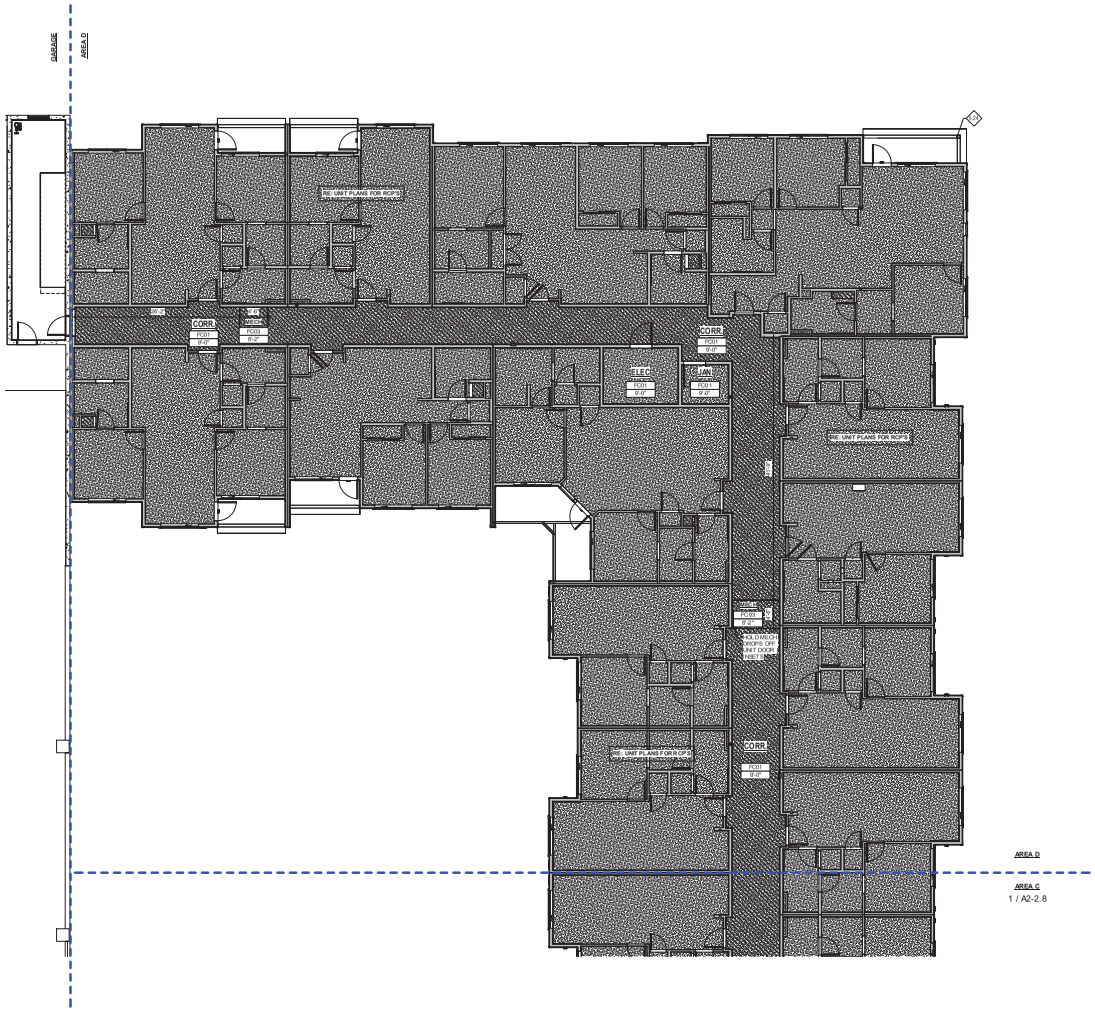


1 LEVEL 2 REFLECTED CEILING PLAN - AREA D
1/8" = 1'-0"

RCP GENERAL NOTES

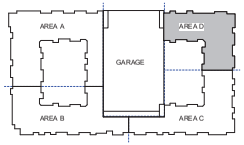
- SEE INTERIOR ELEV. & ELECTRICAL RCP FOR ACCENT LIGHTING CALL-OUTS/LOCATIONS, RE: INTERIORS & ELECTRICAL
- SEE INTERIOR ELEV. FOR DROPPED SOFFITS AT MILLWORK, RE: INTERIORS
- SEE INTERIOR PLANS, ELEVATIONS, FURNITURE & COORDINATION PLANS FOR DRAPERY POCKET LOCATIONS, RE: INTERIORS ARCH LIGHTING TO BE EQUALLY SPACED AND CENTERED WITHIN ROOMS/CORRIDORS. TYPICAL, RE: ELECTRICAL
- PERIMETER SOFFITS TO BE EQUIVALL SIDES. TYP.
- ENSURE DIFFUSERS/ACCESS PANELS DO NOT CONFLICT W/ ACCENT LIGHTING, SOFFITS, & DECORATIVE FIXTURES, ETC. TYP.
- MECHANICAL, GRILLES AND WALL DIFFUSERS, ELECTRICAL PANELS, ACCESS PANELS, ETC. WHICH ARE EXPOSED IN FINISHED SPACES SHALL BE PAINTED IN PROPER PAINT FORMULATION TO MATCH THE SURFACE ON WHICH THEY OCCUR RE: INTERIORS

RCP LEGEND

FC01/ RC01	RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4
FC01/ RC01	RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4; UNIT ALTERNATE CEILING HEIGHT RE: A2-1.11
FC03	NON-RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4
FC05	COMPOSITE DRIP THROUGH BALCONY
FC08	RATED BALCONY OVER CONDITIONED SPACE
FC10	2-HR RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4
FC11	2-HR RATED GYP. BD CEILING - CORRIDOR, RE: ASSEMBLIES A0-6.4
S01	CEMENTITIOUS SOFFIT BOARD, PEPPERCORN
S02	CEMENTITIOUS SOFFIT BOARD, TRICORN BLACK
RC02/ RC04	RATED GYP. (2) LAYERS, RE: ASSEMBLIES A0-6.4

KEYNOTES

NO.	NOTE
524	SQUARE HSS COLUMN, RE: STRUCT. PAINTED SW 7674 PEPPERCORN



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ISSUE FOR CONSTRUCTION
08.07.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
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Title: ENLARGED LEVEL 2 RCP - AREA D
Sheet Number: A2-2.9

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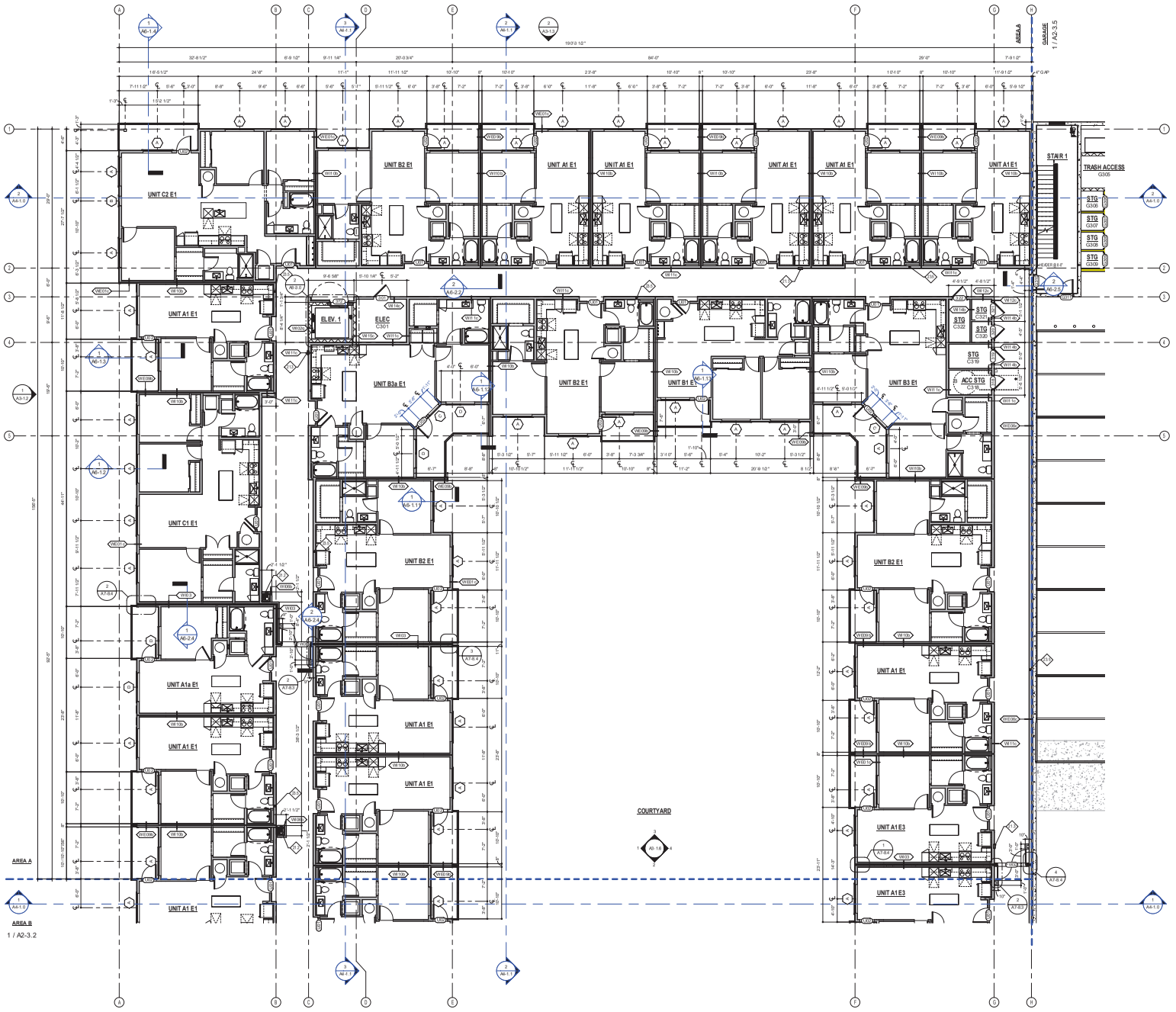

1 ENLARGED LEVEL 3 COMPOSITE PLAN - AREA A
1/8" = 1'-0"

GENERAL NOTES

- DIMENSIONS TAKE PRECEDENCE OVER SCALING. DO NOT SCALE.
- DIMENSIONS GIVEN TO FACE OF STUDS UNLESS OTHERWISE INDICATED (U.N.O.).
- ACCESSIBILITY ELEMENTS INDICATED ARE REQUIRED. FIELD CONDITIONS OCCURRING WHICH IMPACT THE ACCESSIBILITY DESIGN SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.
- SEE INTERIOR DRAWINGS FOR ALL FINISH MATERIALS
- ELEVATION 100'-0" EQUALS CIVIL FF 5286.00' RE: CIVIL DRAWINGS

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
W101c	1 HR	TYP. EXTERIOR WALL
W102c	2 HR	8" CONCRETE SHAFT WALL
W103c	1 HR	5" CONCRETE WALL
W103cx	1 HR	GARAGE 12" CONCRETE WALL
W103x	1 HR	5" CONCRETE WALL
W104c	2 HR	8" CMU - 3HR FIRE BARRIER
W105c	1 HR	8" CMU - 1 HR
W106c	1 HR	EXT EROR WALL - 1 HR SYMMETRIC
W106c	1 HR	EXTERIOR WALL - 1 HR SYMMETRIC
W107c	NR	2x6 PARAPET WALL - NR
W108c	NR	2x6 WALL - NR @ CONDENSERS
W109c	NR	2x4 EXTERIOR FURR WALL - NON RATED
W109c	NR	2x4 EXTERIOR FURR WALL - NON RATED
W110c	1 HR	5" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
W101x	2 HR	8" CMU - 2HR FIRE WALL
W102x	2 HR	8" CMU - 3HR FIRE BARRIER
W103	2 HR	FIRE WALL - 2HR
W103b	2 HR	FIRE WALL, 2-HR, (2)2X4 WITH (2) 1" SHAFTLINER
W103h	3HR	FIRE WALL, 2-HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
W104b	2 HR	FIRE BARRIER, 2-HR, 2x WITH (2) 5/8" TYPE 'X' GYP
W104c	2 HR	FIRE BARRIER - 3 HR EXIT ACCESS
W105c	2 HR	FIRE BARRIER, 2-HR EXIT ACCESS
W106b	2-HR	2X4 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W106c	2-HR	2X6 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W107c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W108c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W109h	1 HR	5 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W109k	1 HR	5" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W110b	1 HR	TYP. UNIT DEMISING - 1 HR FIRE PARTITION
W110c	1 HR	2x4 FIRE PARTITION, 1HR - UNIT DEMISING
W111c	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
W111c	1 HR	Overlap
W112b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
W112c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
W113b	1 HR	2X6, 1HR - BEARING
W113c	1 HR	2X6, 1HR - BEARING
W114c	NR	2X4 INTERIOR WALL - NR
W114c	NR	2X6 INTERIOR WALL - NR
W115b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W115c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W116	NR	7/8" METAL HAT CHANNEL FURRING WALL
W117b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
W118b	NR	5" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

KEYNOTES

NO.	NOTE
21.2	CLASS 1 STANDPIPE PER IBC 2018 SECTION 905; EXACT LOCATION SHALL BE REFERE SPRINKLER DESIGN-BUILD SUBCONTRACTOR & SHALL BE SUBMITTED TO FIRE DEPT FOR APPROVAL; PROVIDE ACCESSIBLE CANE DETECTION DEVICE AT FLOOR AS REQUIRED AT VALVE CONNECTIONS
21.3	MINIMUM 2A:10B:C FIRE EXTINGUISHER IN RECESSED CABINET MOUNTED NO HIGHER THAN 5' TO TOP OF EXTINGUISHER
23.5	RADON RISER VENT, 4" PVC TO PENETRATE ROOF

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ISSUE FOR CONSTRUCTION
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Job Number: 222001
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Sheet Number: **A2-3.1**

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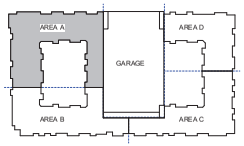

BUILDING AREAS KEY PLAN

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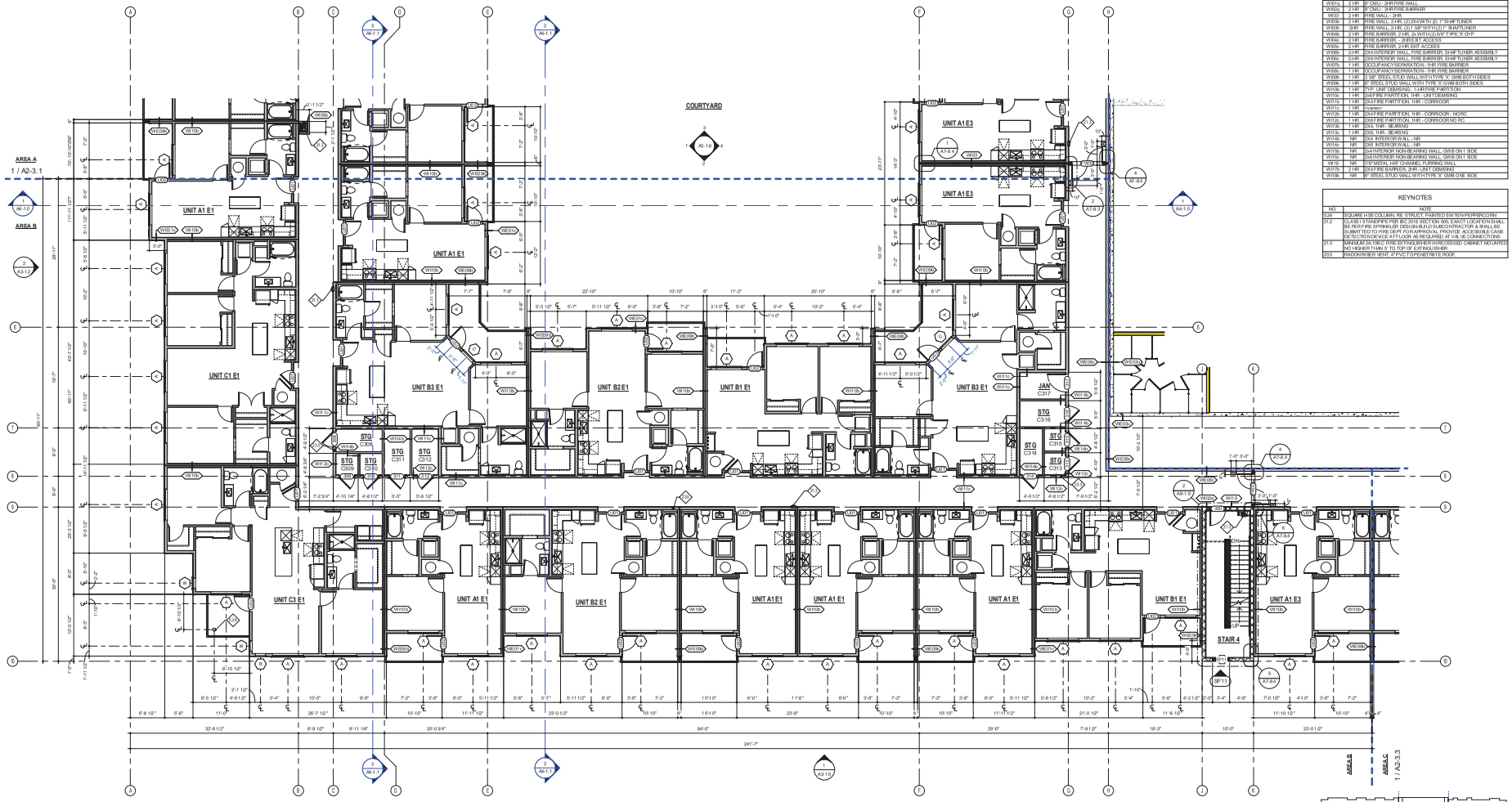

GENERAL NOTES

- DIMENSIONS TAKE PRECEDENCE OVER DRAWINGS. DO NOT SCALE.
- DIMENSIONS GIVEN TO FACE OF STUDS UNLESS OTHERWISE INDICATED ON PLANS.
- ACCESSIBILITY ELEMENTS INDICATED ARE REQUIRED. FIELD CONDITIONS OCCURRING WHICH IMPACT THE ACCESSIBILITY DESIGN SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.
- SEE INTERIOR DRAWINGS FOR ALL FINISH MATERIALS
- ELEVATION 100'-0" EQUALS CIVIL FF 5286.00' RE: CIVIL DRAWINGS

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
W001c	1 HR	TYP. EXTERIOR WALL
W002c	2 HR	8" CONCRETE SHAFT WALL
W003c	1 HR	8" CONCRETE WALL
W003w	1 HR	GARAGE 12" CONCRETE WALL
W003c	1 HR	8" CONCRETE WALL
W004c	2 HR	8" CMU - 3HR FIRE BARRIER
W005c	1 HR	8" CMU - 1 HR
W006c	1 HR	EXTERIOR WALL - 1 HR SYMMETRIC
W006c	1 HR	EXTERIOR WALL - 1 HR SYMMETRIC
W007c	NR	2x6 PARAPET WALL - NR
W008c	NR	2x6 WALL - NR @ CONDENSERS
W009c	NR	2x4 EXTERIOR FURR WALL - NON RATED
W009c	NR	2x4 EXTERIOR FURR WALL - NON RATED
W010w	1 HR	6" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
W001c	2 HR	8" CMU - 2HR FIRE WALL
W002c	2 HR	8" CMU - 3HR FIRE BARRIER
W003	2 HR	FIRE WALL, 2HR
W003b	2 HR	FIRE WALL, 2 HR, (2)2X4 WITH (2) 1" SHAFTLINER
W003h	3HR	FIRE WALL, 2 HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
W004b	2 HR	FIRE BARRIER, 2 HR, 2x WITH (2) 5/8" TYPE 'X' GYP
W004c	2 HR	FIRE BARRIER, - 2HR EXIT ACCESS
W005c	2 HR	FIRE BARRIER, 2 HR EXIT ACCESS
W006b	2 HR	2X4 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W006c	2 HR	2X6 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W007c	1 HR	OCCUPANCY SEPARATION - 1 HR FIRE BARRIER
W008c	1 HR	OCCUPANCY SEPARATION - 1 HR FIRE BARRIER
W009h	1 HR	5 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W009c	1 HR	6" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W010b	1 HR	TYP. UNIT DEMISING - 1 HR FIRE PARTITION
W010c	1 HR	2x4 FIRE PARTITION, 1HR - UNIT DEMISING
W011b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
W011c	1 HR	Overlap
W012b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
W012c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
W013b	1 HR	2X6, 1HR - BEARING
W013c	1 HR	2X6, 1HR - BEARING
W014b	NR	2X4 INTERIOR WALL - NR
W014c	NR	2X6 INTERIOR WALL - NR
W015b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W015c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W016	NR	7/8" METAL HAT CHANNEL FURRING WALL
W017b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
W018b	NR	6" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

KEYNOTES

NO.	NOTE
G24	SQUARE HSS COLUMN, REF. STRUCT. PAINTED SW 7674 PEPPERCORN
21.2	CLASS 1 STANDPIPE PER IBC 2018, SECTION 905. EXACT LOCATION SHALL BE PER FIRE SPRINKLER DESIGN-BUILD SUBCONTRACTOR & SHALL BE SUBMITTED TO FIRE DEPT FOR APPROVAL. PROVIDE ACCESSIBLE CAGE. DETECTION DEVICE AT FLOOR AS REQUIRED. AT VAL VE CONNECTIONS
27.3	MINIMUM 20 LB/EC FIRE EXTINGUISHER WITH RECESSED CABINET MOUNTED NO HIGHER THAN 5' TO TOP OF EXTINGUISHER
G33	RADON RISER VENT, 4" PVC TO PENETRATE ROOF

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ISSUE FOR CONSTRUCTION
06.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: ENLARGED LEVEL 3 PLAN - AREA B
Sheet Number: **A2-3.2**

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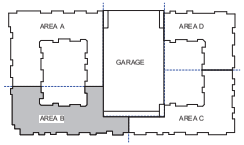
1 ENLARGED LEVEL 3 COMPOSITE PLAN - AREA B
1/8" = 1'-0"

BUILDING AREAS KEY PLAN



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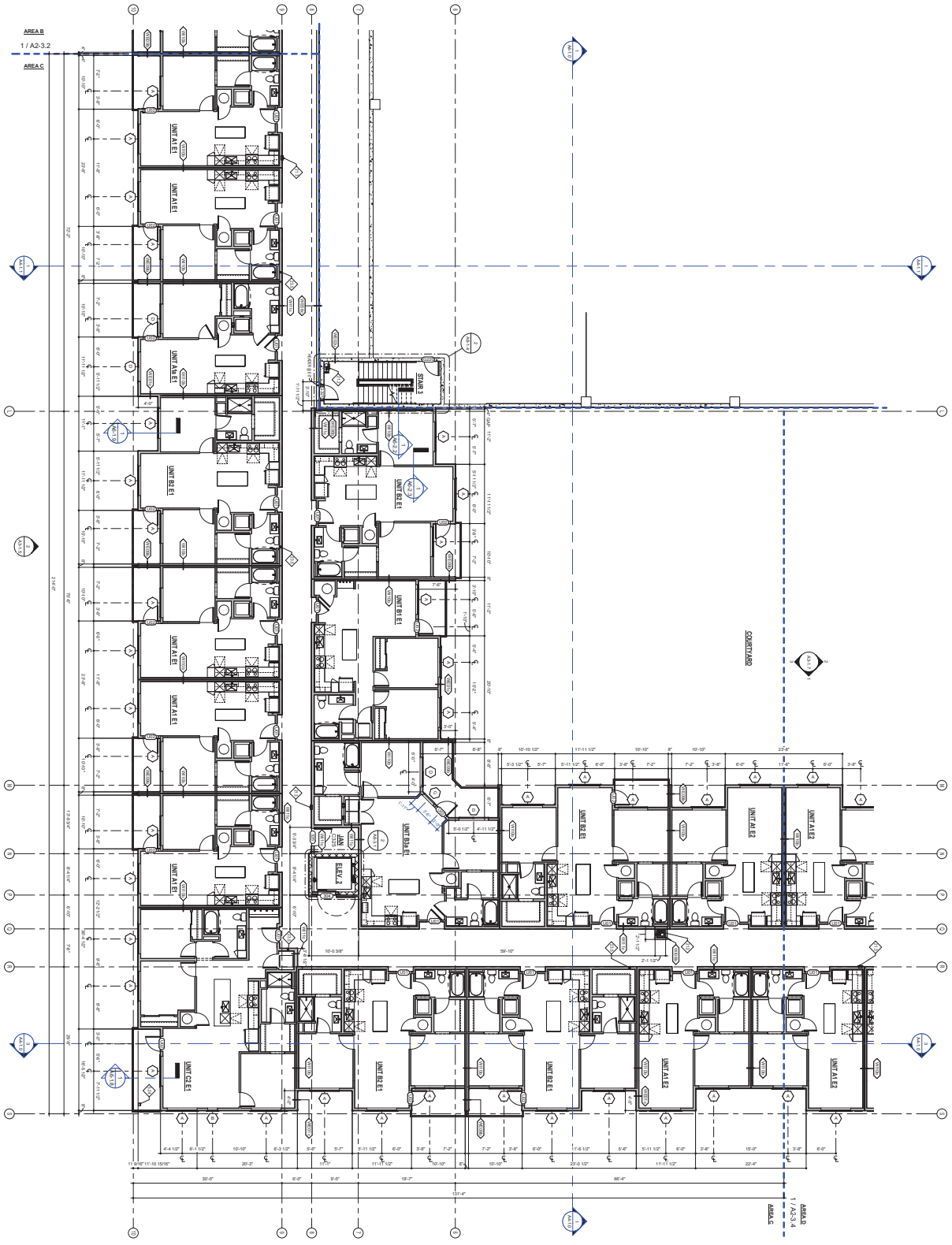
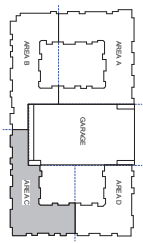


1 ENLARGED LEVEL 3 COMPOSITE PLAN - AREA C
1/8" = 1'-0"



BUILDING AREAS
KEY PLAN

GENERAL NOTES

- DIMENSIONS TAKE PRECEDENCE OVER DRAWINGS. DO NOT SCALE DRAWINGS.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK.
- REFERENCED DRAWINGS FOR ALL FINISH MATERIALS
- ELEVATION DATA IS BASED ON THE CIVIL DRAWINGS

WALL TYPE SCHEDULE

MARK	RATING	DESCRIPTION
W1000	1 HR	EXTERIOR WALL
W1001	1 HR	EXTERIOR WALL
W1002	1 HR	EXTERIOR WALL
W1003	1 HR	EXTERIOR WALL

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ISSUE FOR CONSTRUCTION
08.07.2025

No.	Date	Issue

Registration: DV
Submitted: DR
Date: 22001
Submitted: CG / CB / TT / NV
Drawn by: JG
Checked by:

title: ENLARGED LEVEL 3 PLAN - AREA D
Sheet Number: **A2-3.4**

GENERAL NOTES

- PROPERLY SIZE THAT PRESCRIBED DIMENSIONS. DO NOT SCALE.
- DIMENSIONS GIVEN TO FACE OF STUDS UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS ARE NOMINAL.
- ACCESSIBILITY ELEMENTS INDICATED ARE REQUIRED. FIELD CONDITIONS MAY REQUIRE ADJUSTMENTS. ANY DEVIATIONS FROM DESIGN SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO CONSTRUCTION OR INSTALLATION.
- SEE INTERIOR DRAWINGS FOR ALL FINISH MATERIALS.
- REFER TO ARCHITECTURAL SHEET A0-1.1 FOR GENERAL NOTES.

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
W1000	1 HR	EXT CMU FURRED WALL
W1001	1 HR	EXT CONCRETE SHEAR WALL
W1002	1 HR	EXT CONCRETE SHEAR WALL
W1003	1 HR	GARAGE TYP CONCRETE WALL
W1004	1 HR	EXT POST+ BEYOND
W1005	1 HR	EXT POST+ BEYOND
W1006	1 HR	EXT POST+ BEYOND
W1007	1 HR	EXT POST+ 1 HR DEMISING
W1008	1 HR	EXT WALL 1 HR @ GYP/SHEATHING
W1009	1 HR	EXT PERIMETER WALL - 1 HR DEMISING
W1010	1 HR	EXT PERIMETER WALL - 1 HR DEMISING
W1011	N/R	EXT WALL NOT @ GYP/SHEATHING
W1012	N/R	EXT WALL NOT @ GYP/SHEATHING
W1013	N/R	EXT INTERIOR WALL - NOT RATED
W1014	N/R	EXT INTERIOR WALL - NOT RATED
W1015	1 HR	EXT WALL 1 HR @ GYP/SHEATHING - EXTEND UPDECK/ROOF DECK, TYP 5/8" GYP INT SIDE
W1016	1 HR	EXT WALL 1 HR @ GYP/SHEATHING - EXTEND UPDECK/ROOF DECK
W1017	1 HR	2HR DEMISING WALL - 1 HR @ GARAGE
W1018	1 HR	2HR DEMISING WALL - 1 HR @ GARAGE
W1019	1 HR	2HR DEMISING WALL - 1 HR @ GARAGE

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RCP GENERAL NOTES

- SEE INTERIOR ELEV. & ELECTRICAL RCP FOR ACCENT LIGHTING CALL-OUTS/LOCATIONS, RE: INTERIORS & ELECTRICAL
- SEE INTERIOR ELEV. FOR DROPPED SOFFITS AT MILLWORK, RE: INTERIORS
- SEE INTERIOR PLANS, ELEVATIONS, FURNITURE & COORDINATION PLANS FOR DRAPERY POCKET LOCATIONS, RE: INTERIORS ARCH
- LIGHTING TO BE EQUALLY SPACED AND CENTERED WITHIN ROOMS/CORRIDORS. TYPICAL RE: ELECTRICAL
- PERIMETER SOFFITS TO BE EQ ON ALL SIDES. TYP.
- ENSURE DIFFUSERS/ACCESS PANELS DO NOT CONFLICT W/ ACCENT LIGHTING, SOFFITS, & DECORATIVE FIXTURES, ETC. TYP.
- MECHANICAL GRILLES AND WALL DIFFUSERS, ELECTRICAL PANELS, ACCESS PANELS, ETC. WHICH ARE EXPOSED IN FINISHED SPACES SHALL BE PAINTED IN PROPER PAINT FORMULATION TO MATCH THE SURFACE ON WHICH THEY OCCUR RE: INTERIORS

RCP LEGEND

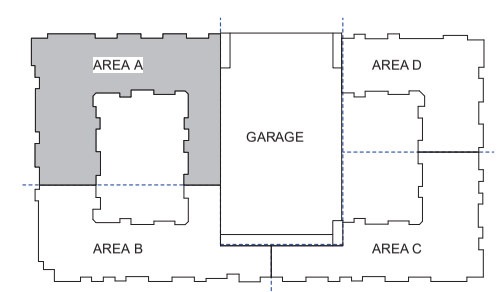
FC01/ RC01	RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4
FC01/ RC01	RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4; UNIT ALTERNATE CEILING HEIGHT RE: A2-1.11
FC03	NON-RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4
FC05	COMPOSITE DRIP-THROUGH BALCONY
FC08	RATED BALCONY OVER CONDITIONED SPACE
FC10	2-HR RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4
FC11	2-HR RATED GYP. BD CEILING - CORRIDOR, RE: ASSEMBLIES A0-6.4
S01	CEMENTITIOUS SOFFIT BOARD, PEPPERCORN
S02	CEMENTITIOUS SOFFIT BOARD, TRICORN BLACK
RC02/ RC04	RATED GYP. (2) LAYERS, RE: ASSEMBLIES A0-6.4

KEYNOTES

NO.	NOTE
5.24	SQUARE HSS COLUMN, RE: STRUCT, PAINTED SW7674 PEPPERCORN
21.2	CLASS I STANDPIPE PER IBC 2018 SECTION 905; EXACT LOCATION SHALL BE PER FIRE SPRINKLER DESIGN-BUILD SUBCONTRACTOR & SHALL BE SUBMITTED TO FIRE DEPT FOR APPROVAL. PROVIDE ACCESSIBLE CANE DETECTION DEVICE AT FLOOR AS REQUIRED AT VALVE CONNECTIONS



1 LEVEL 3 REFLECTED CEILING PLAN - AREA A
1/8" = 1'-0"



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BUILDING AREAS
KEY PLAN

ISSUE FOR CONSTRUCTION
08.07.2024

No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	
Job Number	222001
Drawn By	CG / CB/ TT/ NV
Checked By	JG
Title	ENLARGED LEVEL 3 RCP - AREA A
Sheet Number	A2-3.6

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RCP GENERAL NOTES

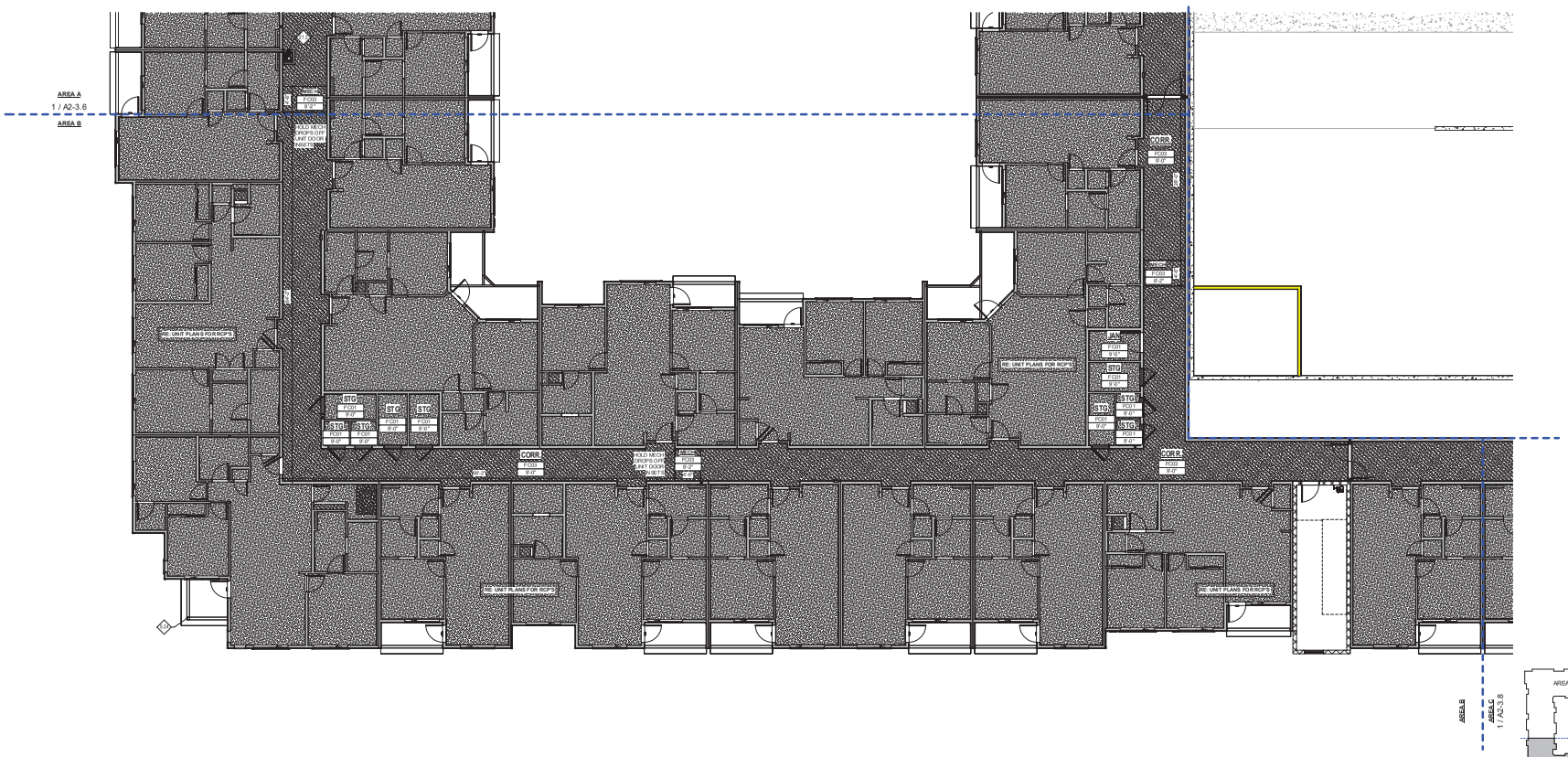
- SEE INTERIOR ELEV. & ELECTRICAL RCP FOR ACCENT LIGHTING CALL-OUTS/LOCATIONS, RE: INTERIORS & ELECTRICAL
- SEE INTERIOR ELEV. FOR DROPPED SOFFITS AT MILLWORK, RE: INTERIORS
- SEE INTERIOR PLANS, ELEVATIONS, FURNITURE & COORDINATION PLANS FOR DRAWER PANEL LOCATIONS, RE: INTERIORS ARCH LIGHTING TO BE EQUALLY SPACED AND CENTERED WITHIN ROOMS/CORRIDORS. TYPICAL RE: ELECTRICAL
- PERIMETER SOFFITS TO BE EQUIVALL SIDES, TYP.
- ENSURE DIFFUSERS/ACCESS PANELS DO NOT CONFLICT W/ ACCENT LIGHTING, SOFFITS, & DECORATIVE FIXTURES, ETC. TYP.
- MECHANICAL GRILLES AND WALL DIFFUSERS, ELECTRICAL PANELS, ACCESS PANELS, ETC. WHICH ARE EXPOSED IN FINISHED SPACES SHALL BE PAINTED IN PROPER PAINT FORMULATION TO MATCH THE SURFACE ON WHICH THEY OCCUR RE: INTERIORS

RCP LEGEND

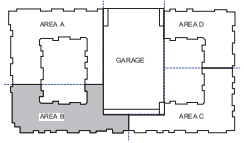
FC01/ RC01		RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4
FC01/ RC01		RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4; UNIT ALTERNATE CEILING HEIGHT RE: A2-1.11
FC03		NON-RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4
FC05		COMPOSITE DRIP-THROUGH BALCONY
FC08		RATED BALCONY OVER CONDITIONED SPACE
FC10		2-HR RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4
FC11		2-HR RATED GYP. BD CEILING - CORRIDOR, RE: ASSEMBLIES A0-6.4
S01		CEMENTITIOUS SOFFIT BOARD, PEPPERCORN
S02		CEMENTITIOUS SOFFIT BOARD, TRICORN BLACK
RC02/ RC04		RATED GYP. (2) LAYERS, RE: ASSEMBLIES A0-6.4

KEYNOTES

NO.	NOTE
524	SQUARE H-BS COLUMN, RE: STRUCT, PAINTED SW7674 PEPPERCORN
2112	CLASS I STANDPIPE PER IBC 2018 SECTION 905, EXACT LOCATION SHALL BE PER FIRE SPRINKLER DESIGN BUILD SUBCONTRACTOR & SHALL BE SUBMITTED TO FIRE DEPT FOR APPROVAL. PROVIDE ACCESSIBLE CANE DETECTION DEVICE AT FLOOR AS REQUIRED AT VALVE CONNECTIONS



1 LEVEL 3 REFLECTED CEILING PLAN - AREA B
1/8" = 1'-0"



BUILDING AREAS KEY PLAN

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ISSUE FOR CONSTRUCTION
08.07.2024

No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	
Job Number	222001
Drawn By	CG / CB/ TT / NV
Checked By	JG
Title	ENLARGED LEVEL 3 RCP - AREA B
Sheet Number	A2-3.7

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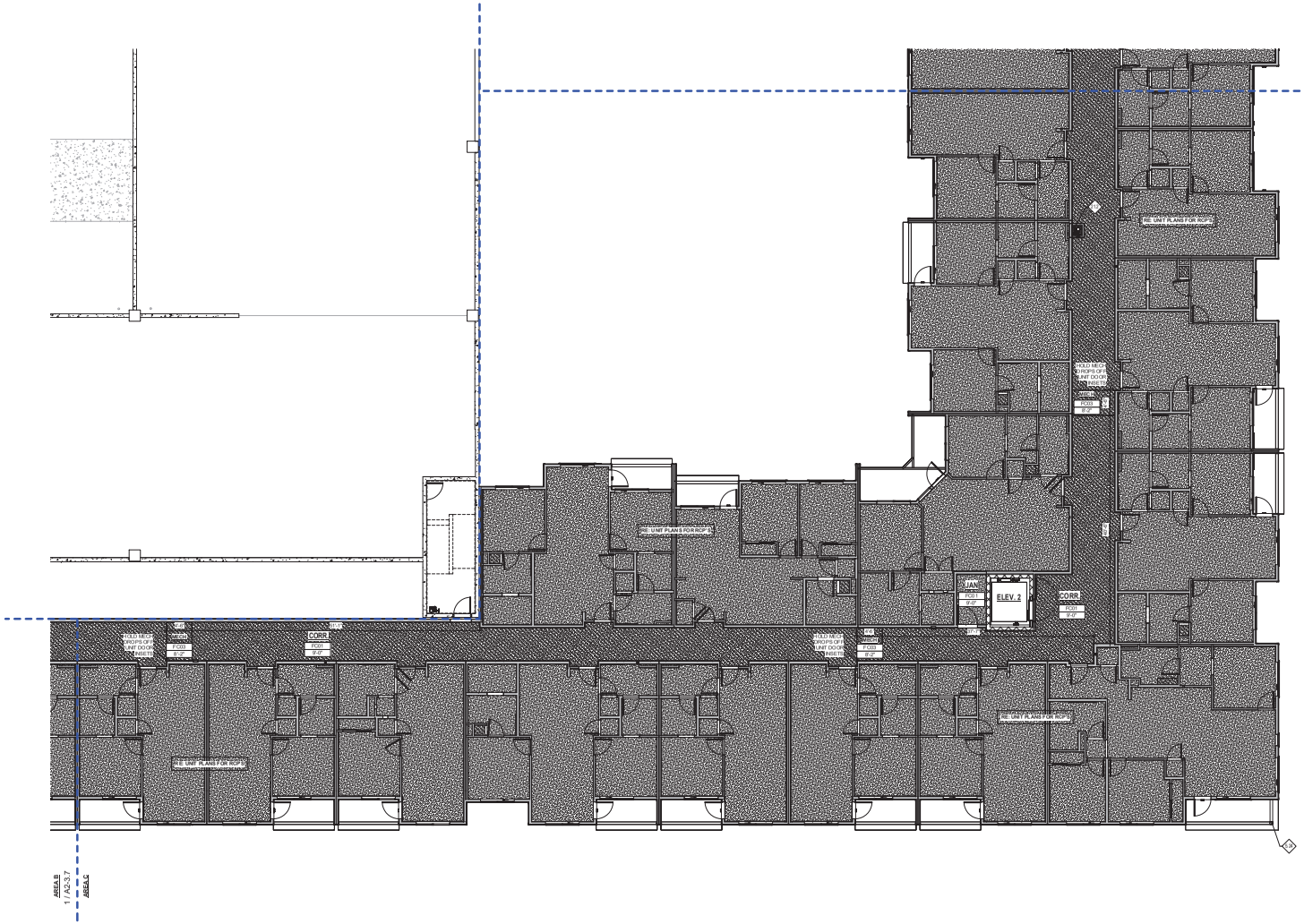


1 LEVEL 3 REFLECTED CEILING PLAN - AREA C
1/8" = 1'-0"

RCP GENERAL NOTES

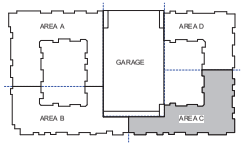
- SEE INTERIOR ELEV. & ELECTRICAL RCP FOR ACCENT LIGHTING CALL-OUTS/LOCATIONS, RE: INTERIORS & ELECTRICAL
- SEE INTERIOR ELEV. FOR DROPPED SOFFITS AT MILLWORK, RE: INTERIORS
- SEE INTERIOR PLANS, ELEVATIONS, FURNITURE & COORDINATION PLANS FOR DRAPERY POCKET LOCATIONS, RE: INTERIORS ARCH LIGHTING TO BE EQUALLY SPACED AND CENTERED WITHIN ROOMS/CORRIDORS. TYPICAL RE: ELECTRICAL
- PERIMETER SOFFITS TO BE EQUIVALL SIDES, TYP.
- ENSURE DIFFUSERS/ACCESS PANELS DO NOT CONFLICT W/ ACCENT LIGHTING, SOFFITS, & DECORATIVE FIXTURES, ETC. TYP.
- MECHANICAL GRILLES AND WALL DIFFUSERS, ELECTRICAL PANELS, ACCESS PANELS, ETC. WHICH ARE EXPOSED IN FINISHED SPACES SHALL BE PAINTED IN PROPER PAINT FORMULATION TO MATCH THE SURFACE ON WHICH THEY OCCUR RE: INTERIORS

RCP LEGEND

FC01/ RC01		RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4
FC01/ RC01		RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4; UNIT ALTERNATE CEILING HEIGHT RE: A2-1.11
FC03		NON-RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4
FC05		COMPOSITE DRIFT-THROUGH BALCONY
FC08		RATED BALCONY OVER CONDITIONED SPACE
FC10		2-HR RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4
FC11		2-HR RATED GYP. BD CEILING - CORRIDOR, RE: ASSEMBLIES A0-6.4
S01		CEMENTITIOUS SOFFIT BOARD, PEPPERCORN
S02		CEMENTITIOUS SOFFIT BOARD, TRICORN BLACK
RC02/ RC04		RATED GYP. (2) LAYERS, RE: ASSEMBLIES A0-6.4

KEYNOTES

NO.	NOTE
524	SQUARE H SS COLUMN, RE: STRUCT. PAINTED SW7674 PEPPERCORN
2112	CLASS I STANDPIPE PER IBC 2018 SECTION 905. EXACT LOCATION SHALL BE PER FIRE SPRINKLER DESIGN BUILD SUBCONTRACTOR & SHALL BE SUBMITTED TO FIRE DEPT FOR APPROVAL. PROVIDE ACCESSIBLE CANE DETECTION DEVICE AT FLOOR AS REQUIRED AT VALVE CONNECTIONS



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BUILDING AREAS KEY PLAN

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ISSUE FOR CONSTRUCTION
08.07.2024

No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	
Job Number	222001
Drawn By	CG / CB/ TT / NV
Checked By	JG
Title	ENLARGED LEVEL 3 RCP - AREA C
Sheet Number	A2-3.8

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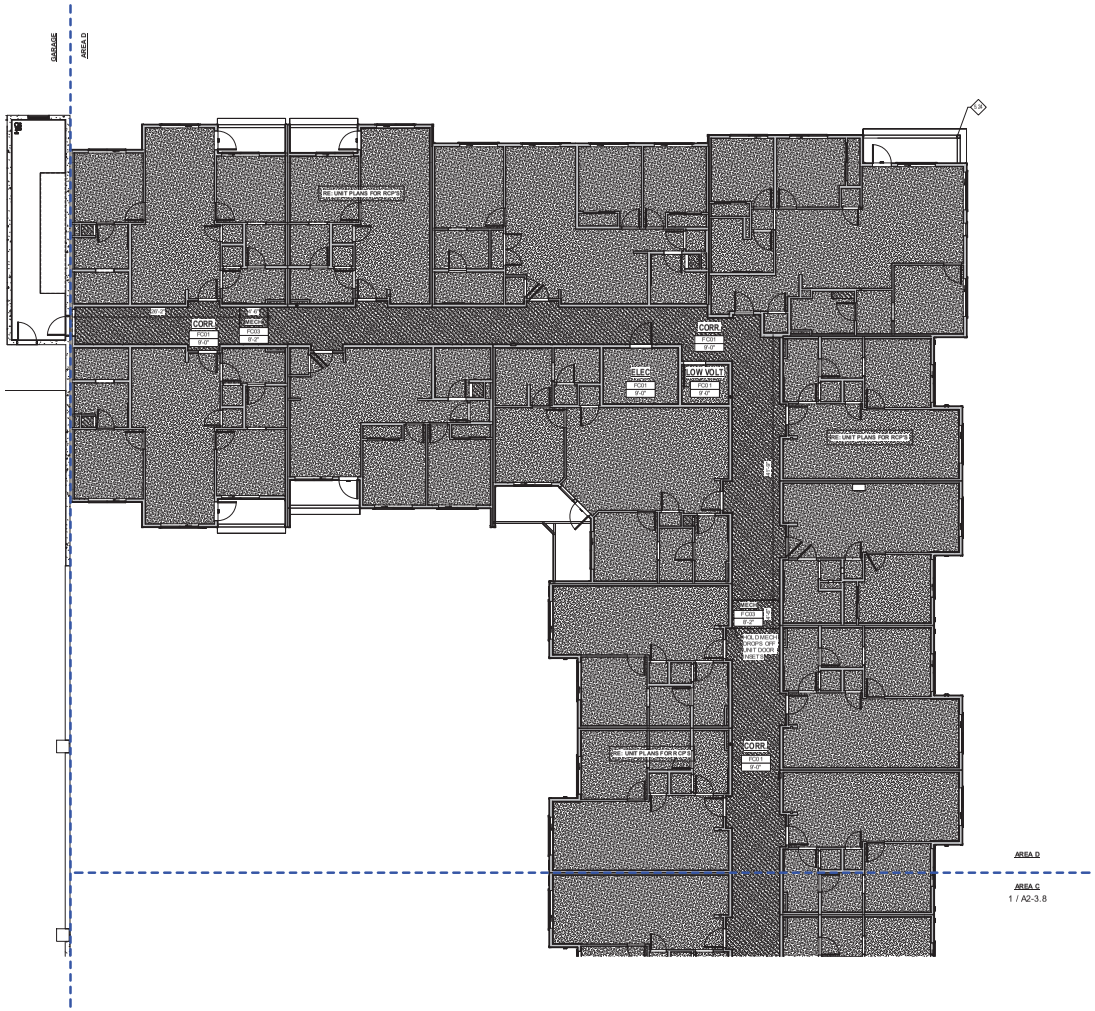


1 LEVEL 3 REFLECTED CEILING PLAN - AREA D
1/8" = 1'-0"

RCP GENERAL NOTES

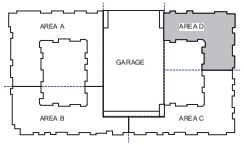
- SEE INTERIOR ELEV. & ELECTRICAL RCP FOR ACCENT LIGHTING CALL-OUTS/LOCATIONS, RE: INTERIORS & ELECTRICAL
- SEE INTERIOR ELEV. FOR DROPPED SOFFITS AT MILLWORK, RE: INTERIORS
- SEE INTERIOR PLANS, ELEVATIONS, FURNITURE & COORDINATION PLANS FOR DRAPERY POCKET LOCATIONS, RE: INTERIORS ARCH LIGHTING TO BE EQUALLY SPACED AND CENTERED WITHIN ROOMS/CORRIDORS TYPICAL, RE: ELECTRICAL
- PERIMETER SOFFITS TO BE EQUIVALL SIDES, TYP.
- ENSURE DIFFUSERS/ACCESS PANELS DO NOT CONFLICT W/ ACCENT LIGHTING, SOFFITS, & DECORATIVE FIXTURES, ETC. TYP.
- MECHANICAL GRILLES AND WALL DIFFUSERS, ELECTRICAL PANELS, ACCESS PANELS, ETC. WHICH ARE EXPOSED IN FINISHED SPACES SHALL BE PAINTED IN PROPER PAINT FORMULATION TO MATCH THE SURFACE ON WHICH THEY OCCUR RE: INTERIORS

RCP LEGEND

FC01/ RC01	RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4
FC01/ RC01	RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4; UNIT ALTERNATE CEILING HEIGHT RE: A2-1.11
FC03	NON-RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4
FC05	COMPOSITE DRIP THROUGH BALCONY
FC08	RATED BALCONY OVER CONDITIONED SPACE
FC10	2-HR RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4
FC11	2-HR RATED GYP. BD CEILING - CORRIDOR, RE: ASSEMBLIES A0-6.4
S01	CEMENTITIOUS SOFFIT BOARD, PEPPERCORN
S02	CEMENTITIOUS SOFFIT BOARD, TRICORN BLACK
RC02/ RC04	RATED GYP. (2) LAYERS, RE: ASSEMBLIES A0-6.4

KEYNOTES

NO.	NOTE
5.24	SQUARE H.SS COLUMN, RE: STRUCT. PAINTED SW 7674 PEPPERCORN



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BUILDING AREAS KEY PLAN

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ISSUE FOR CONSTRUCTION
08.07.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: ENLARGED LEVEL 3 RCP - AREA D
Sheet Number: A2-3.9

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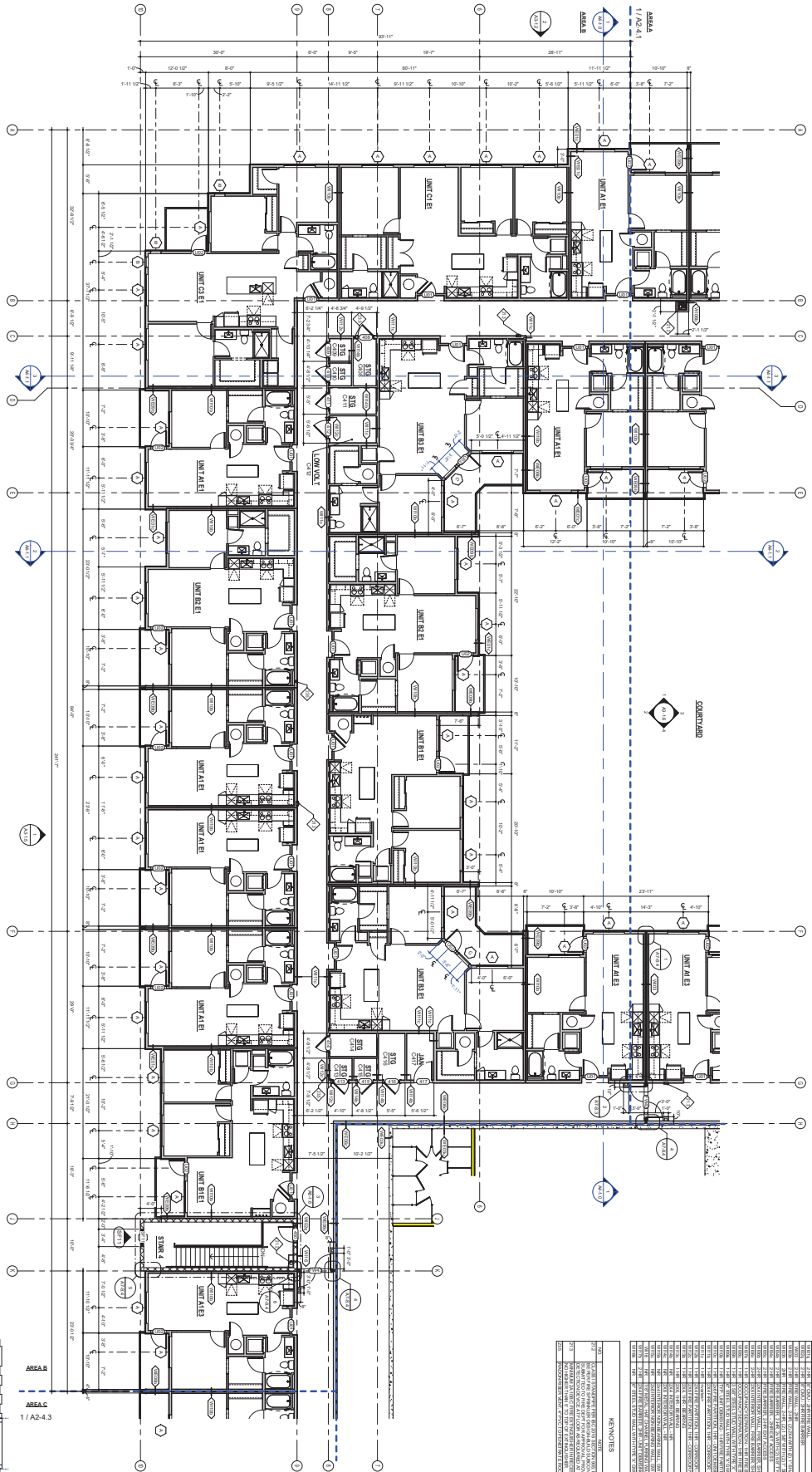
1 ENLARGED LEVEL 4 COMPOSITE PLAN - AREA A
1/8" = 1'-0"

GENERAL NOTES

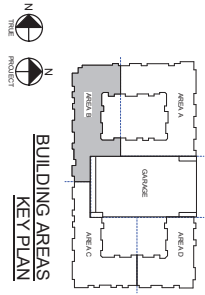
- DIMENSIONS TAKE PRECEDENCE OVER DRAWINGS. DO NOT SCALE DRAWINGS FOR DIMENSIONS.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD AND REPORT ANY DISCREPANCIES TO THE ARCHITECT PRIOR TO CONSTRUCTION. NO ALLOWANCES SHALL BE MADE FOR CONTRACTOR'S FAILURE TO DISCOVER ERRORS AND OMISSIONS THAT REASONABLY SHOULD HAVE BEEN DISCOVERED.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE CODES, ORDINANCES, AND REGULATIONS.
- ALL CONSTRUCTION SHALL BE PERFORMED IN A WORKMANLIKE MANNER. ALL FINISH MATERIALS SHALL BE APPLIED OR INSTALLED ACCORDING TO MANUFACTURER'S DIRECTIONS AND SPECIFICATIONS.
- ALL DRAWINGS, SPECIFICATIONS AND COPIES THEREOF FURNISHED BY THE ARCHITECT ARE AND SHALL REMAIN THE PROPERTY OF THE ARCHITECT. THEY ARE NOT TO BE USED BY THE OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ANY OTHER PROJECT WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT. THEY ARE NOT TO BE CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY, WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF THE ARCHITECT.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO CONSTRUCTION.
- REFER TO CIVIL DRAWINGS FOR ALL FINISH MATERIALS ELEVATION DATA. ELEVATION DATUM IS BASED ON THE CIVIL DRAWINGS.

WALL TYPE SCHEDULE

MARK	RATING	DESCRIPTION
W1000	1 HR	EXT 2X6 STUD WALL
W1001	1 HR	EXT 2X6 STUD WALL
W1002	1 HR	EXT 2X6 STUD WALL



1 ENLARGED LEVEL 4 COMPOSITE PLAN - AREA B
1/8" = 1'-0"



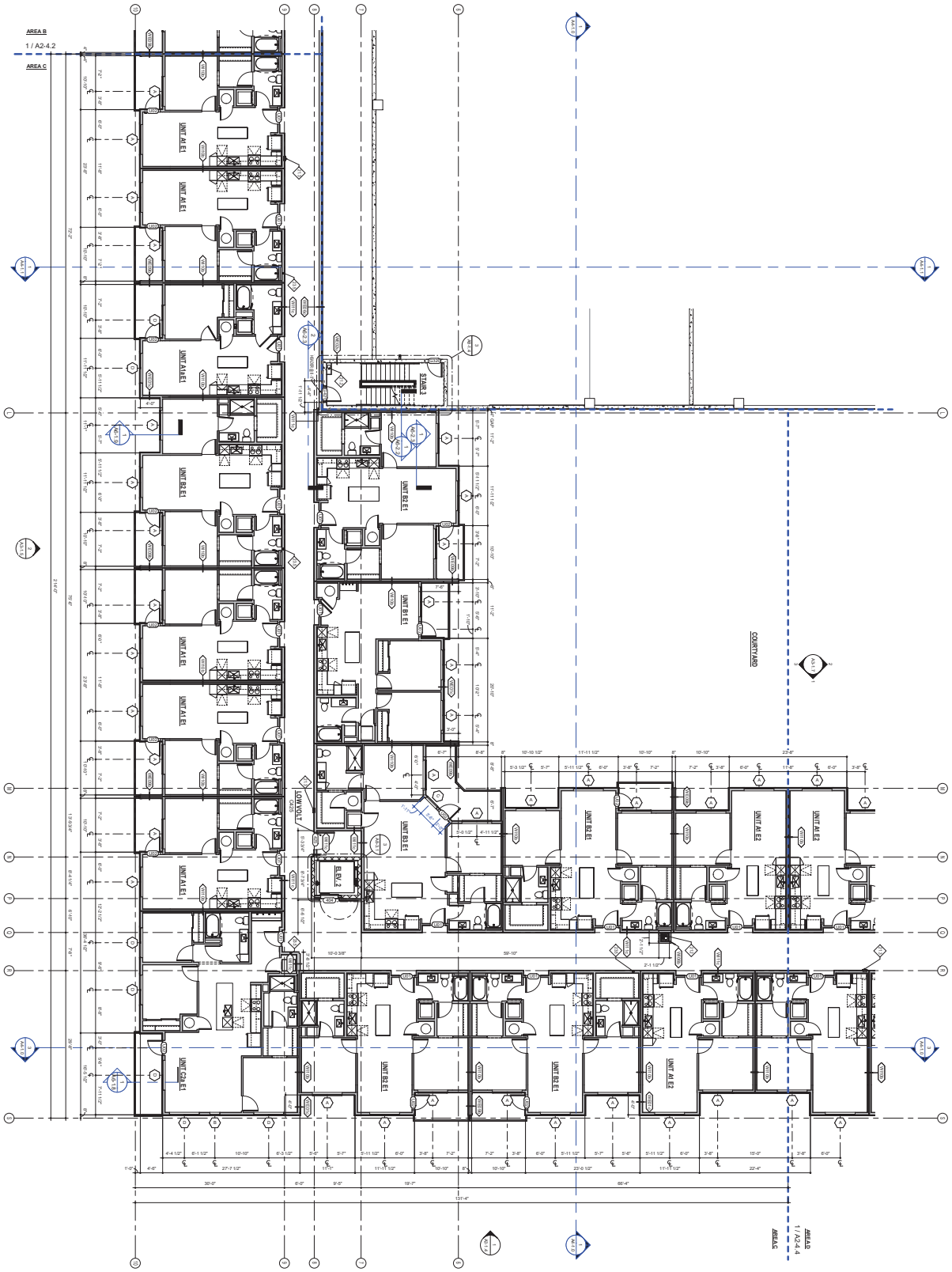
BUILDING AREAS
KEY PLAN

GENERAL NOTES

- DIMENSIONS TAKE PRECEDENCE OVER DRAWINGS. DO NOT SCALE DRAWINGS FOR DIMENSIONS.
- REFER NOTES TO PLANS INDICATED ARE REQUIRED. FIELD VERIFICATION OF ALL DIMENSIONS AND CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO BEGINNING WORK.
- ELEVATION 0'-0" EQUALS N.A.V.D. 88 DATUM.

WALL TYPE SCHEDULE

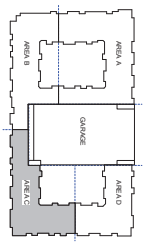
MARK	RATING	DESCRIPTION
W1000	1 HR	EXT 2X6 @ 16" O.C.
W1001	1 HR	EXT 2X6 @ 16" O.C.
W1002	1 HR	EXT 2X6 @ 16" O.C.



1 ENLARGED LEVEL 4 COMPOSITE PLAN - AREA C

1/8" = 1'-0"

BUILDING AREAS KEY PLAN



GENERAL NOTES

- DIMENSIONS TAKE PRECEDENCE OVER DRAWINGS. DO NOT SCALE DRAWINGS FOR DIMENSIONS.
- ALL CONSTRUCTION TO BE COORDINATED WITH ALL APPLICABLE REGULATIONS AND REQUIREMENTS OF THE LOCAL JURISDICTION.
- ALL DIMENSIONS ARE TO FACE OF FINISH, UNLESS NOTED OTHERWISE.
- ALL EXTERIOR DIMENSIONS ARE TO FACE OF EXTERIOR SHEATHING, UNLESS NOTED OTHERWISE.
- ALL INTERIOR DIMENSIONS ARE TO FACE OF FINISH, UNLESS NOTED OTHERWISE.
- ALL DIMENSIONS ARE TO BE VERIFIED IN THE FIELD BY CONTRACTOR PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.
- REFER TO FINISH DRAWINGS FOR ALL FINISH MATERIALS.
- ELEVATION 100'-0" EQUALS DATUM PER SURVEY. REFER TO CIVIL DRAWINGS.

WALL TYPE SCHEDULE

MARK	RATING	DESCRIPTION
W1000	1 HR	EXTERIOR WALL
W1001	1 HR	EXTERIOR WALL
W1002	1 HR	EXTERIOR WALL
W1003	1 HR	EXTERIOR WALL



GENERAL NOTES

- DIMENSIONS TAKE PRECEDENCE OVER DRAWINGS. DO NOT SCALE.
- DIMENSIONS GIVEN TO FACE OF STUDS UNLESS OTHERWISE INDICATED, U.N.O. TYP.
- ACCESSIBILITY ELEMENTS INDICATED ARE REQUIRED. FIELD CONDITIONS OCCURRING WHICH IMPACT THE ACCESSIBILITY DESIGN SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.
- SEE INTERIOR DRAWINGS FOR ALL FINISH MATERIALS
- ELEVATION 100'-0" EQUALS CIVIL FF 5286.00' RE: CIVIL DRAWINGS

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
W001c	1 HR	TYP. EXTERIOR WALL
W002c	2 HR	8" CONCRETE SHAFT WALL
W003c	1 HR	12" CONCRETE WALL
W003d	1 HR	GARAGE 12" CONCRETE WALL
W003c	1 HR	9" CONCRETE WALL
W004c	2 HR	8" CMU - 2HR FIRE BARRIER
W005c	1 HR	8" CMU - 1 HR
W006c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
W006c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
W007c	NR	2x6 PARAPET WALL - NR
W008c	NR	2x6 WALL - NR @ CONDENSERS
W009c	NR	2x4 EXTERIOR FURR WALL - NON RATED
W009c	NR	2x4 EXTERIOR FURR WALL - NON RATED
W010a	1 HR	6" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
W001c	2 HR	8" CMU - 2HR FIRE WALL
W002c	2 HR	8" CMU - 2HR FIRE BARRIER
W003	2 HR	FIRE WALL - 2HR
W003b	2 HR	FIRE WALL, 2-HR, (2)2X4 WITH (2) 1" SHAFTLINER
W003h	3HR	FIRE WALL, 2-HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
W004b	2 HR	FIRE BARRIER, 2-HR, 2x WITH (2) 5/8" TYPE 'X' GYP
W004c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
W005c	2 HR	FIRE BARRIER, 2-HR EXIT ACCESS
W006c	2-HR	2X4 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W006c	2-HR	2X6 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W007c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W008c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W009h	1 HR	3 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W009k	1 HR	6" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W010b	1 HR	TYP. UNIT DEMISING - 1-HR FIRE PARTITION
W010c	1 HR	2x4 FIRE PARTITION, 1HR - UNIT DEMISING
W011b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
W011c	1 HR	Scanner
W012b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
W012c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
W013b	1 HR	2X6, 1HR - BEARING
W013c	1 HR	2X6, 1HR - BEARING
W014b	NR	2X4 INTERIOR WALL - NR
W014c	NR	2X6 INTERIOR WALL - NR
W015b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W015c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W16	NR	7/8" METAL HAT CHANNEL FURRING WALL
W017b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
W018b	NR	6" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

KEYNOTES

NO.	NOTE
21.2	CLASS I STANDPIPE PER IBC 2018 SECTION 905; EXACT LOCATION SHALL BE REVIEW SPRINKLER DESIGN-BUILD SUBCONTRACTOR & SHALL BE SUBMITTED TO FIRE DEPT FOR APPROVAL; PROVIDE ACCESSIBLE CANE DETECTION DEVICE AT FLOOR AS REQUIRED AT VALVE CONNECTIONS
21.3	MINIMUM 2A:10B:C FIRE EXTINGUISHER IN RECESSED CABINET MOUNTED NO HIGHER THAN 5' TO TOP OF EXTINGUISHER
23.5	RADON RISER VENT, 4" PVC TO PENETRATE ROOF

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ISSUE FOR CONSTRUCTION
08.01.2024

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Project Architect	DV
Project Designer	DR
Date	
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Title	ENLARGED LEVEL 4 PLAN - AREA D
Sheet Number	A2-4.4

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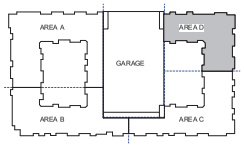

BUILDING AREAS KEY PLAN

N TRUE
N PROJECT

1 ENLARGED LEVEL 4 COMPOSITE PLAN - AREA D
1/8" = 1'-0"

1 LEVEL 4 REFLECTED CEILING PLAN - AREA A

1/8" = 1'-0"

BUILDING AREAS KEY PLAN

N PROJECT

N TRUE

RCP GENERAL NOTES

- SEE INTERIOR ELEV. & ELECTRICAL RCP FOR ACCENT LIGHTING CALLOUTS.
- ALL LIGHTING TO BE FULLY FOR DROPPED SOFFITS AT MILLWORK. RE: INTERIOR ELEV.
- ALL LIGHTING IN CORRIDORS TO BE CONTROLLED BY OCCUPANCY SENSORS
- PLANS FOR GRAHAM POCKET LOCATIONS. RE: INTERIORS ARCH
- ALL LIGHTING IN CORRIDORS TO BE CONTROLLED BY OCCUPANCY SENSORS
- ROOM/CORRIDORS TYPICAL RE: ELECTRICAL
- ALL LIGHTING IN CORRIDORS TO BE CONTROLLED BY OCCUPANCY SENSORS
- ENSURE OPTIGENERACCESS PANELS DO NOT CONFLICT W/ ACCENT LIGHTING, FIRE SPRINKLERS, SPEAKERS, ETC. RE: ELECTRICAL
- MECHANICAL GRILLES AND WALL DIFFUSERS, ELECTRICAL PANELS, FIRE ALARM PULL STATIONS AND SPEAKERS, ETC. ON FINISHED WALLS SHALL BE PAINTED/WRDED/PAINT FORMULA SET/TO MATCH THE ADJACENT FINISH. RE: INTERIOR ELEVATIONS
- ALL LIGHTING TO BE DIMMABLE

RCP LEGEND

FD31 / FD32 / FD33	RATED GYP. BD CEILING, RE: ASSEMBLIES A9A4
FD31 / FD33	RATED GYP. BD CEILING, RE: ASSEMBLIES A9A4 OR ALTERNATE CEILING HEIGHT RE: A3-1.11
FD33	ADVANTECH GYP. BD CEILING. RE: ASSEMBLIES A9A4
FD35	COMPOSITE EXPOSED FRAME
FD36	RATED BALCONY OVERHEAD CONDITIONED SPACE
FD10	2-HR RATED GYP. BD CEILING, RE: ASSEMBLIES A9A4
FD11	2-HR RATED GYP. BD CEILING - CORRIDOR, RE: ASSEMBLIES A9A4
SB1	CEMENTITIOUS SOFFIT BOARD, PEPPER/OPEN
SB2	CEMENTITIOUS SOFFIT BOARD, TROPEN BLACK
RD30 / RD34	RATED GYP. CO. LAYERS, RE: ASSEMBLIES A9 A14

KEYNOTES

NO.	NOTE
GC2	FLOOR STAGGERED BY 8" FROM SECTOR BOUNDARY FOR EXPECTED FUTURE DEMISING WALL LOCATION. REFER TO ARCHITECTURAL SHEETS A1.1 & A1.2 SUBMITTED TO PRE-SOFT FOR APPROVAL PRIOR TO ACCESSIBLE CASE

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No.	Date	Issue

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Technologist: DR
Date: 2/20/24
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Sheet Number: A2-4.6

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RCP GENERAL NOTES

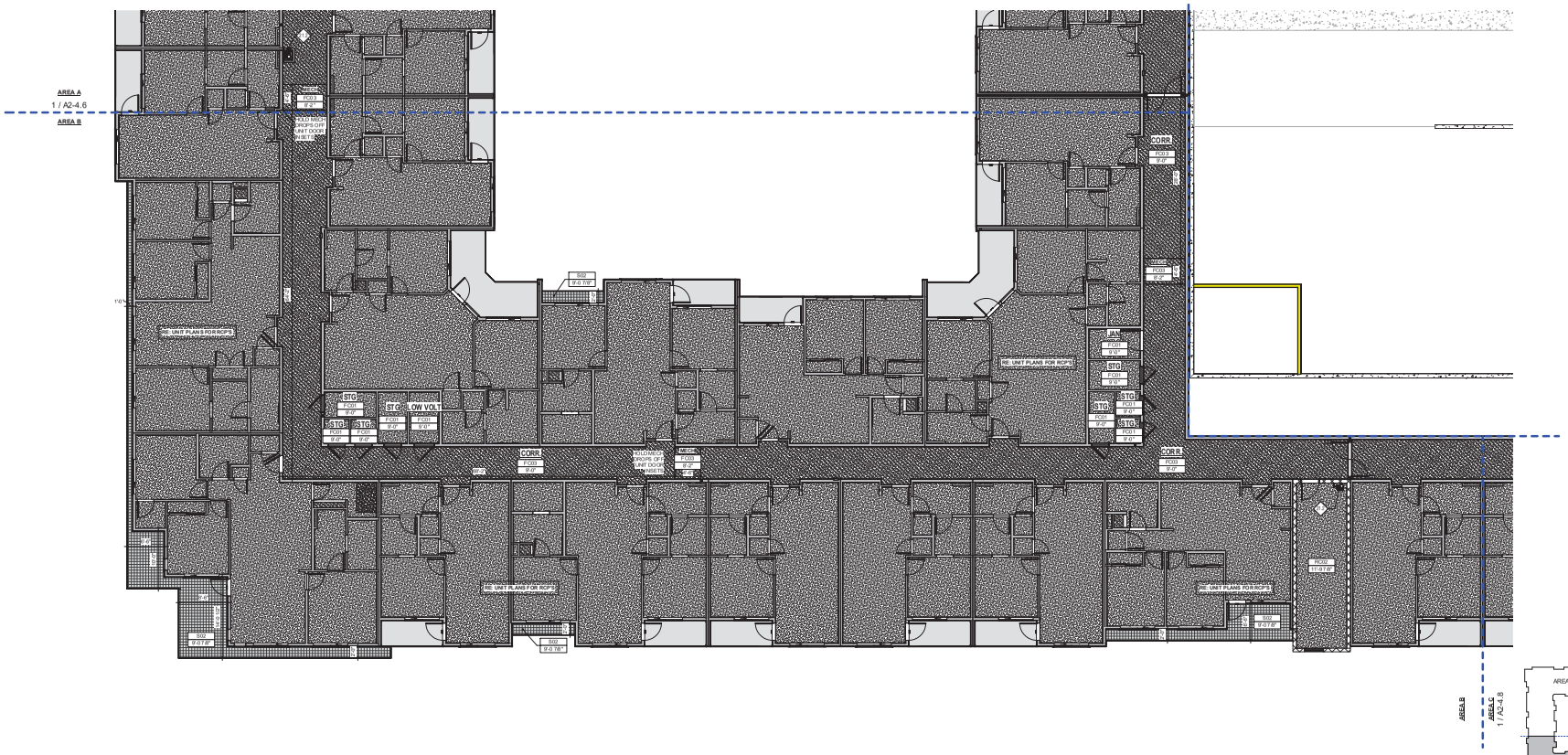
- SEE INTERIOR ELEV. & ELECTRICAL RCP FOR ACCENT LIGHTING CALL-OUTS/LOCATIONS, RE: INTERIORS & ELECTRICAL
- SEE INTERIOR ELEV. FOR DROPPED SOFFITS AT MILLWORK, RE: INTERIORS
- SEE INTERIOR PLANS, ELEVATIONS, FURNITURE & COORDINATION PLANS FOR DRAWER PROJECT LOCATIONS, RE: INTERIORS ARCH LIGHTING TO BE EQUALLY SPACED AND CENTERED WITHIN ROOMS/CORRIDORS. TYPICAL, RE: ELECTRICAL
- PERIMETER SOFFITS TO BE EQUIVALL SIDES, TYP.
- ENSURE DIFFUSERS/ACCESS PANELS DO NOT CONFLICT W/ ACCENT LIGHTING, SOFFITS, & DECORATIVE FIXTURES, ETC. TYP.
- MECHANICAL, GRILLES AND WALL DIFFUSERS, ELECTRICAL PANELS, ACCESS PANELS, ETC. WHICH ARE EXPOSED IN FINISHED SPACES SHALL BE PAINTED IN PROPER PAINT FORMULATION TO MATCH THE SURFACE ON WHICH THEY OCCUR RE: INTERIORS

RCP LEGEND

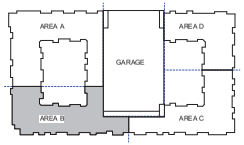
FC01/ RC01		RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4
FC01/ RC01		RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4; UNIT ALTERNATE CEILING HEIGHT RE: A2-1.11
FC03		NON-RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4
FC05		COMPOSITE DRIP-THROUGH BALCONY
FC08		RATED BALCONY OVER CONDITIONED SPACE
FC10		2-HR RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4
FC11		2-HR RATED GYP. BD CEILING - CORRIDOR, RE: ASSEMBLIES A0-6.4
S01		CEMENTITIOUS SOFFIT BOARD, PEPPERCORN
S02		CEMENTITIOUS SOFFIT BOARD, TRICORN BLACK
RC02/ RC04		RATED GYP. (2) LAYERS, RE: ASSEMBLIES A0-6.4

KEYNOTES

NO.	NOTE
21.2	CLASS I STANDPIPE PER IBC 2018 SECTION 905. EXACT LOCATION SHALL BE PER FIRE SPRINKLER DESIGN BUILD SUBCONTRACTOR & SHALL BE SUBMITTED TO FIRE DEPT FOR APPROVAL PROVIDE ACCESSIBLE CANE DETECTION DEVICE AT FLOOR AS REQUIRED AT VALVE CONNECTIONS



1 LEVEL 4 REFLECTED CEILING PLAN - AREA B
1/8" = 1'-0"



BUILDING AREAS KEY PLAN

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Project Architect	DV
Project Designer	DR
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Title	ENLARGED LEVEL 4 RCP - AREA B
Sheet Number	A2-4.7

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RCP GENERAL NOTES

- SEE INTERIOR ELEV. & ELECTRICAL RCP FOR ACCENT LIGHTING CALLOUTS.
- SEE INTERIOR ELEV. & ELECTRICAL RCP FOR RECESSED LIGHTING CALLOUTS.
- INSTALL ALL LIGHTING FIXTURES PER MANUFACTURER'S RECOMMENDATIONS.
- PLANS FOR GRAVITY POCKET LOCATIONS. RE: INTERIORS ARCH RCP/MECHANICAL RCP FOR EXHAUST FAN LOCATIONS. RE: INTERIORS ARCH RCP/MECHANICAL RCP FOR EXHAUST FAN LOCATIONS.
- MECHANICAL GRILLES AND WALL DIFFUSERS. ELECTRICAL PANELS. FIRE ALARM DEVICES. RE: MECHANICAL RCP & ELECTRICAL RCP (TYP.)
- ENSURE OPPOSEBACKSIDE PANELS DO NOT CONFLICT W/ ACCENT LIGHTING LOCATIONS. RE: INTERIOR ELEVATIONS (TYP.)
- ACCESS PANELS SHALL BE PAINTED/WOOD GRAIN FINISH, AT PATIO MATCH THE CEILING FINISH. RE: INTERIOR ELEVATIONS (TYP.)
- ALL CEILING FINISHES SHALL BE CLASS A.

RCP LEGEND

FC01 FC02	RATED O/P. BD CEILING, RE: ASSEMBLIES A9.4.4
FC01 FC01	RATED O/P. BD CEILING, RE: ASSEMBLIES A9.4.4 OR ALTERNATE CEILING HEIGHT RE: A3.1.11
FC03	ROUNDED O/P. BD CEILING. RE: ASSEMBLIES A9.4.4
FC05	COMPOSITE EXPRYT PINS AT BALCONY
FC08	RATED BALCONY OVER/CONDITIONED SPACE
FC10	2-HR RATED O/P. BD CEILING, RE: ASSEMBLIES A9.4.4
FC11	2-HR RATED O/P. BD CEILING - CORRIDOR, RE: ASSEMBLIES A9.4.4
SB1	CEMENTITIOUS SOFFIT BOARD, PEPPER/OPEN
SB2	CEMENTITIOUS SOFFIT BOARD, TROPEN BLACK
RC02 RC04	RATED O/P. CO. LAYERS, RE: ASSEMBLIES A9.4.4

KEYNOTES

KEY	NOTE
2.21	LED STRIP/PIPE RELIGHTING, RE: ELECTRICAL RCP, EXACT LOCATIONS TO BE REFERENCED BY INTERIOR DESIGN AND CONFIRMED BY GENERAL CONTRACTOR & INSTALLED BY ELECTRICAL CONTRACTOR. ALL LED STRIP/PIPE LIGHTING SHALL BE DIRECTION DEVICE ATTACHED AS REQUIRED. AT VIA, VE CONNECTIONS

BUILDING AREAS
KEY PLAN

1 LEVEL 4 REFLECTED CEILING PLAN - AREA C
1/8" = 1'-0"

ISSUE FOR CONSTRUCTION
08.07.2024

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Commission DR
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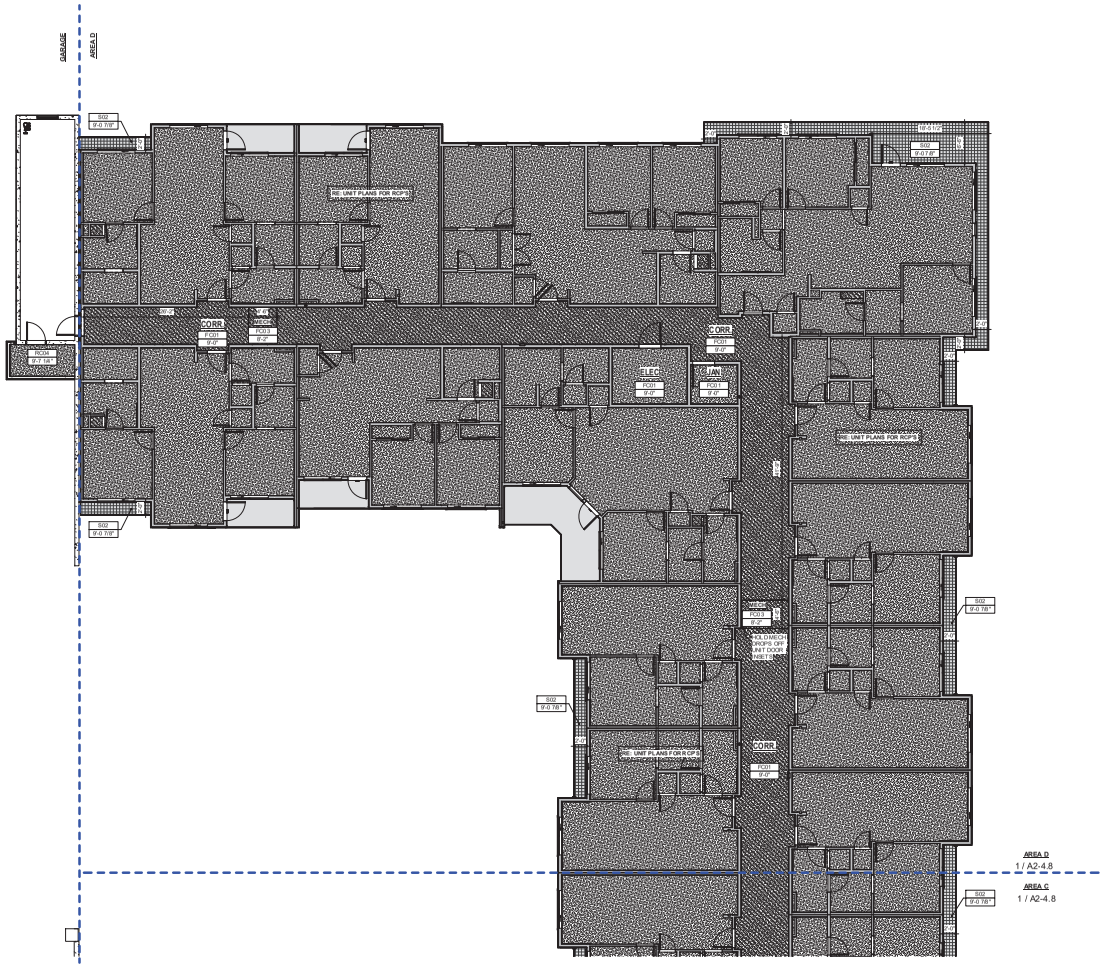


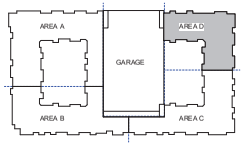
1 LEVEL 4 REFLECTED CEILING PLAN - AREA D
1/8" = 1'-0"

RCP GENERAL NOTES

- SEE INTERIOR ELEV. & ELECTRICAL RCP FOR ACCENT LIGHTING CALL-OUTS/LOCATIONS, RE: INTERIORS & ELECTRICAL
- SEE INTERIOR ELEV. FOR DROPPED SOFFITS AT MILLWORK, RE: INTERIORS
- SEE INTERIOR PLANS, ELEVATIONS, FURNITURE & COORDINATION PLANS FOR DRAWING PROJECT LOCATIONS, RE: INTERIORS ARCH LIGHTING TO BE EQUALLY SPACED AND CENTERED WITHIN ROOMS/CORRIDORS. TYPICAL RE: ELECTRICAL
- PERIMETER SOFFITS TO BE EQUIVALL SIDES. TYP.
- ENSURE DIFFUSERS/ACCESS PANELS DO NOT CONFLICT W/ ACCENT LIGHTING, SOFFITS, & DECORATIVE FIXTURES, ETC. TYP.
- MECHANICAL, GRILLES AND WALL DIFFUSERS, ELECTRICAL PANELS, ACCESS PANELS, ETC. WHICH ARE EXPOSED IN FINISHED SPACES SHALL BE PAINTED IN PROPER PAINT FORMULATION TO MATCH THE SURFACE ON WHICH THEY OCCUR RE: INTERIORS

RCP LEGEND

FC01/ RC01	RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4
FC01/ RC01	RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4; UNIT ALTERNATE CEILING HEIGHT RE: A2-1.11
FC03	NON-RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4
FC05	COMPOSITE DRIFT-THROUGH BALCONY
FC08	RATED BALCONY OVER CONDITIONED SPACE
FC10	2-HR RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.4
FC11	2-HR RATED GYP. BD CEILING - CORRIDOR, RE: ASSEMBLIES A0-6.4
S01	CEMENTITIOUS SOFFIT BOARD, PEPPERCORN
S02	CEMENTITIOUS SOFFIT BOARD, TRICORN BLACK
RC02/ RC04	RATED GYP. (2) LAYERS, RE: ASSEMBLIES A0-6.4



BUILDING AREAS
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Title: ENLARGED LEVEL 4 RCP - AREA D
Sheet Number: A2-4.9

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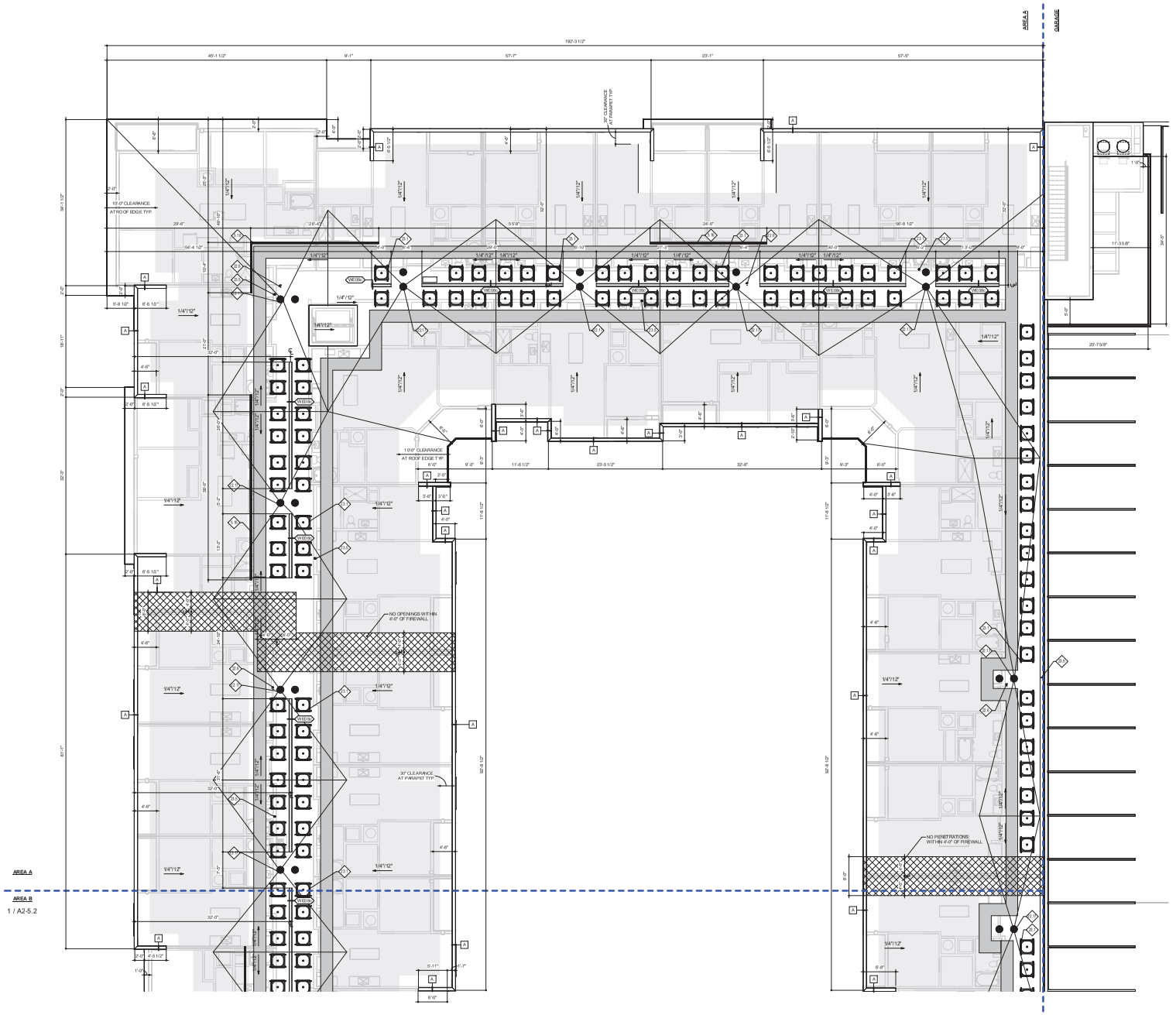

1 ENLARGED ROOF COMPOSITE PLAN - AREA A
1/8" = 1'-0"

SYMBOLS LEGEND

	ROOF DRAIN. R/E PLUMBING
	NO OPENINGS WITHIN 4'-0" MIN. OF FIREWALL. NON-COMBUSTIBLE ROOF CONSTRUCTION. REQ'D BY IBC SECTION 706/5 EXCEPTION NO. 4. RE: ASSEMBLIES
	INDICATES DIRECTION OF ROOF AND CRICKET SLOPES. ALL ROOF AREAS SHALL SLOPE TO DRAIN AT 1/4" PER FT. MINIMUM.
	TRASH & RECYCLE CHUTE VENTS; 4' - 0" ABOVE FIN. ROOF
A	PARAPET HEIGHT; 6'-0" ABOVE LEVEL 4 PLATE; MAINTAIN 42" MIN ABOVE ROOF
	30" FULLY ADHERED T.P.O. ROOF MEMBRANE WALKING PATH. INSTALL PER MFG SPECS
	PROPOSED SOLAR ZONES. RE: SOLAR SHOPS
	INDICATES WALLS BELOW ROOF PLANE

PARAPET HEIGHT KEY

A	6'-0" FROM LEVEL 4 PLATE

KEYNOTES

NO.	NOTE
5.10	42" HIGH PRE-FABRICATED MECHANICAL SCREEN, BOD: ROOFSCREEN SCI FRAME W L20 LOUVER SCREEN, FINISH TO MATCH SW7674 PEPPERCORN.
22.6	ROOF HYDRANT. RE: PLUMBING
22.17	ROOF DRAIN WITH OVERFLOW DRAIN. RE: PLUMBING
23.1	HVAC CONDENSER UNITS RE: MECHANICAL
23.5	RADON RISER VENT. 4" PVC TO PENETRATE ROOF.

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Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: ENLARGED ROOF PLAN - AREA A
Sheet Number: A2-5.1

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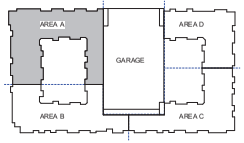

BUILDING AREAS KEY PLAN

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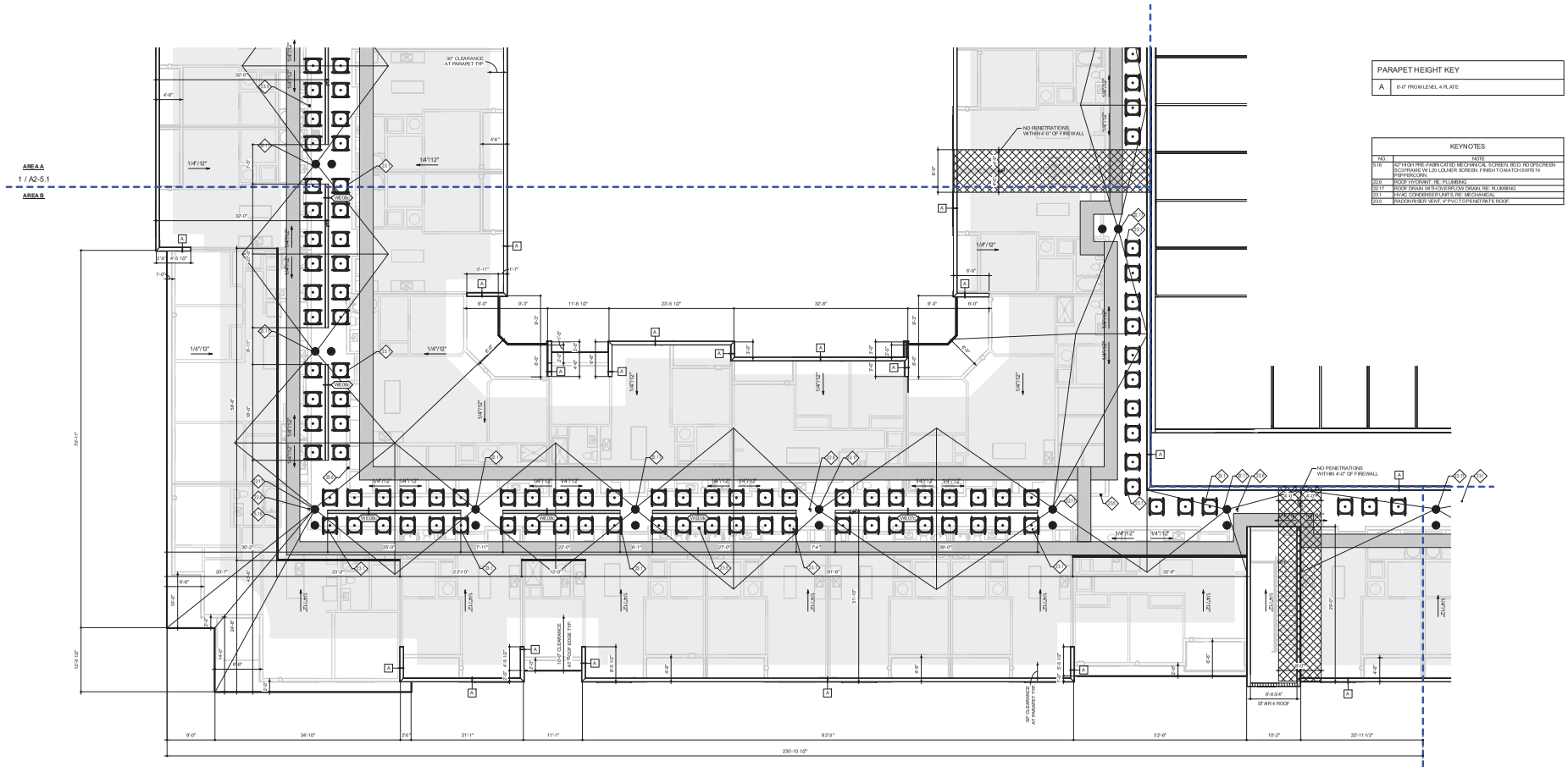


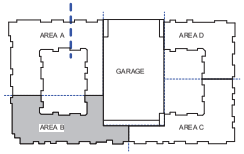
1 ENLARGED ROOF COMPOSITE PLAN - AREA B
1/8" = 1'-0"

SYMBOLS LEGEND

●	ROOF DRAIN. RE PLUMBING
	NO OPENINGS WITHIN 4'-0" MIN. OF FIREWALL. NON-COMBUSTIBLE ROOF CONSTRUCTION. REQ'D BY IBC SECTION 705/6 EXCEPTION NO. 4. RE: ASSEMBLIES
→	INDICATES DIRECTION OF ROOF AND CRICKET SLOPES. ALL ROOF AREAS SHALL SLOPE TO DRAIN AT 1/4" PER FT. MINIMUM.
○○	TRASH & RECYCLE CHUTE VENTS; 4' - 0" ABOVE FIN. ROOF
—A	PARAPET HEIGHT: 6'-0" ABOVE LEVEL 4 PLATE; MAINTAIN 42" MIN ABOVE ROOF
	30" FULLY ADHERED T.P.O. ROOF MEMBRANE WALKING PATH. INSTALL PER MFG SPECS
	PROPOSED SOLAR ZONES. RE: SOLAR SHOPS
	INDICATES WALLS BELOW ROOF PLANE

PARAPET HEIGHT KEY	
A	6'-0" FROM LEVEL 4 PLATE

KEYNOTES	
NO.	NOTE
5.16	42" HIGH PRE-FABRICATED MECHANICAL SCREEN. BOD. ROOFSCREEN SC3 FRAME W LED LOUVER SCREEN. FINISH TO MATCH SW7674 PEPPERCORN.
22.6	ROOF HYDRANT. RE: PLUMBING
22.17	ROOF DRAIN WITH OVERFLOW DRAIN. RE: PLUMBING
23.1	HVAC CONDENSER UNITS. RE: MECHANICAL
23.5	RADON RISER VENT. 4" PVC TO PENETRATE ROOF.



BUILDING AREAS KEY PLAN

N TRUE
N PROJECT

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5170 MARSHALL ST - ARVADA, CO 80002

ISSUE FOR CONSTRUCTION
08.07.2024

No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	
Job Number	222001
Drawn By	CG / CB/ TT / NV
Checked By	JG
Title	ENLARGED ROOF PLAN - AREA B
Sheet Number	A2-5.2

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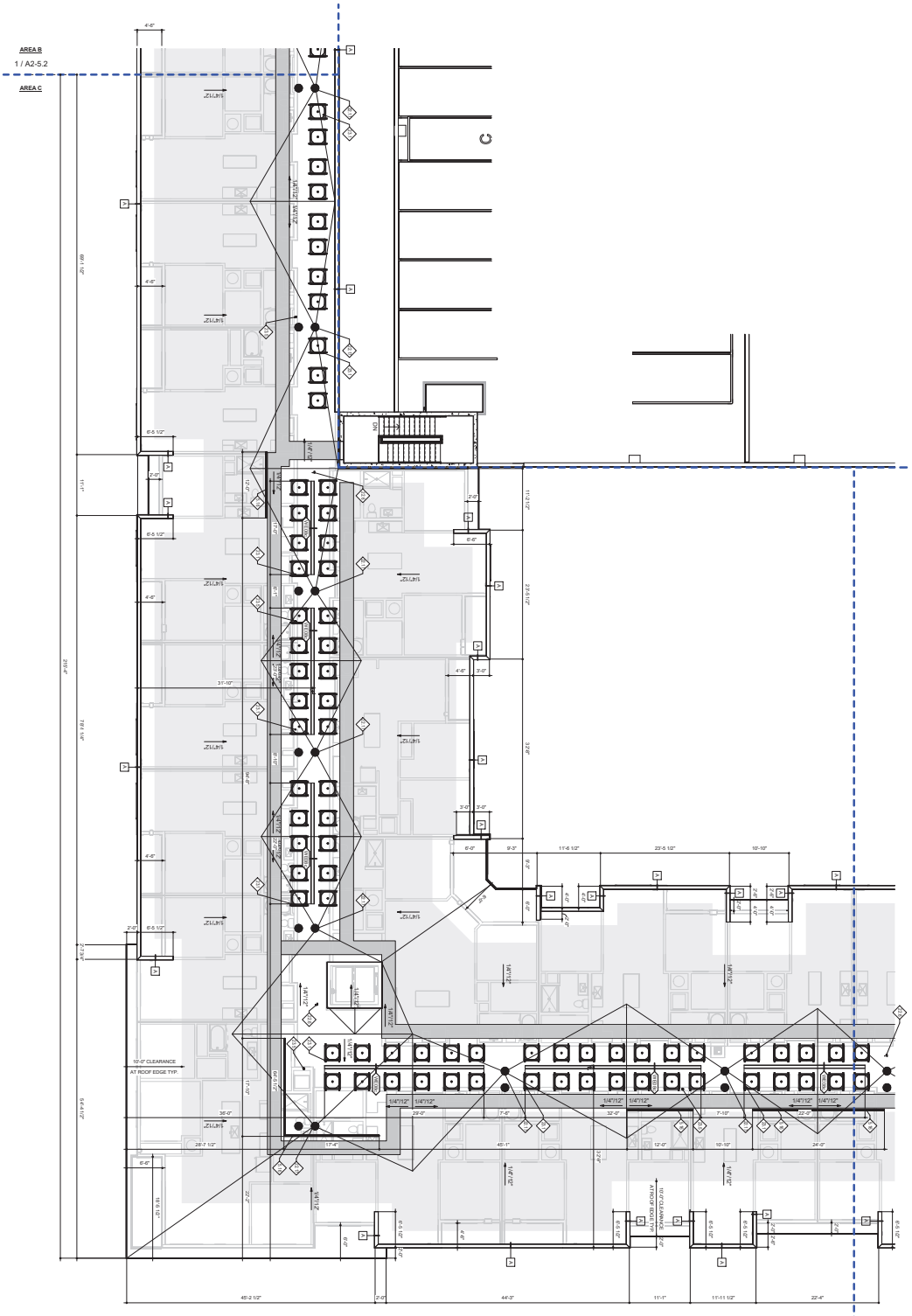
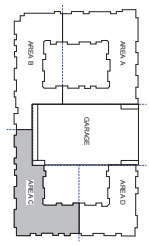


1 ENLARGED ROOF COMPOSITE PLAN - AREA C
1/8" = 1'-0"



BUILDING AREAS KEY PLAN

SYMBOL'S LEGEND

ROOF DRAIN, PER PLUMBING

ROOF DRAIN OVERFLOW SCUPPER, SIZE PER PLUMBING

INDICATOR DIRECTION OF ROOF AND GRADE SLOPES.
ALL ROOF SLOPES TO BE MIN. 1/4" PER FOOT UNLESS NOTED OTHERWISE.
MINIMUM ABSOLUTE SLOPE TO DRAIN AT 1/8" PER FT.

TRIMS 4 VINCYCLE CAP AT PERIM. 4" 1" MIN. PER FM. ROOF

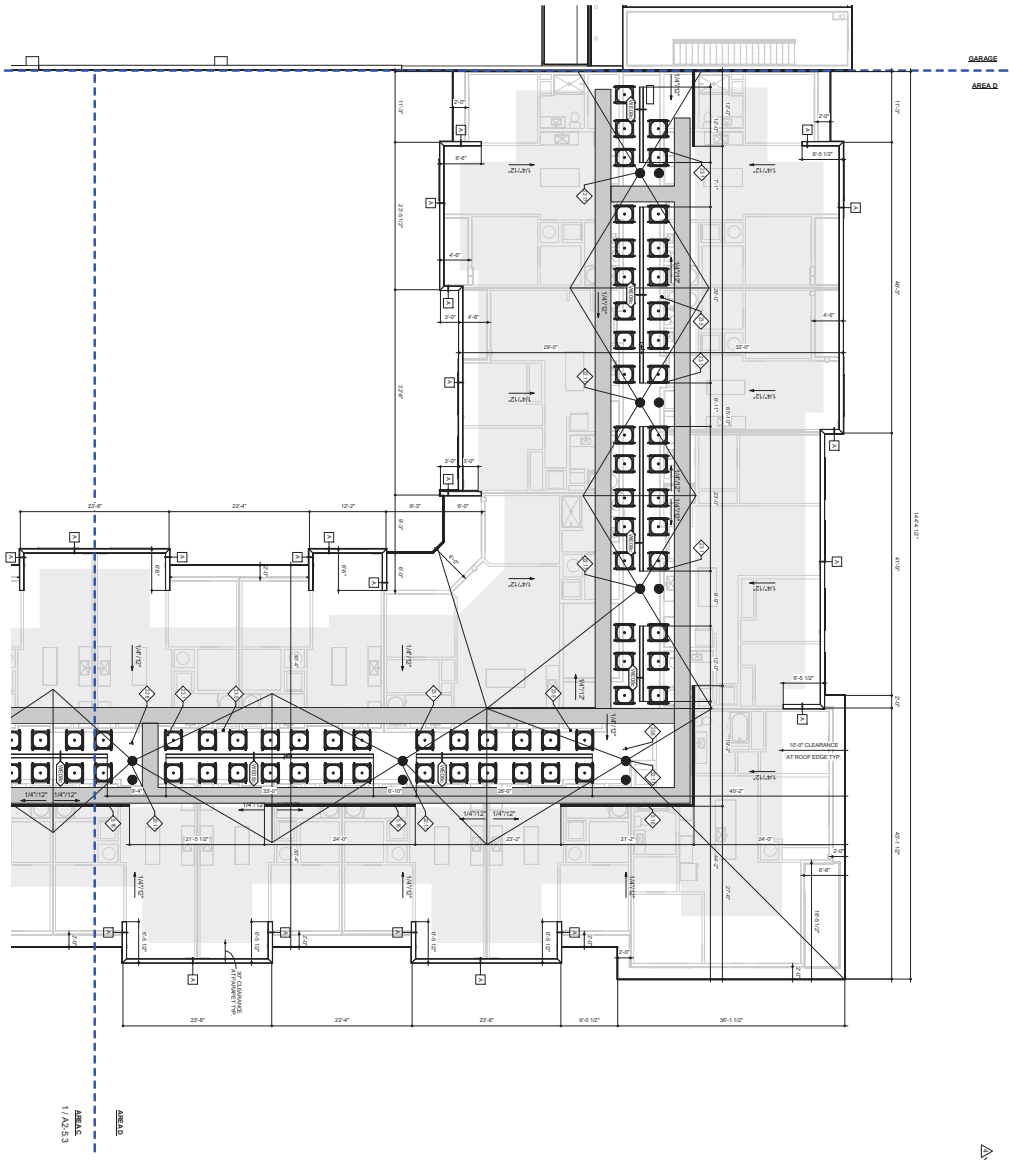
PARAPET HEIGHT: 42" ABOVE LEVEL 4 PLATE; MINIMUM 42" MIN. ABOVE ROOF

PAINT / INSTALL PER MFG. SPECS

PROPOSED SOLAR ZONES. RE: SOLAR SHOPS

ROOFTOP EQUIPMENT

ROOFTOP EQUIPMENT SCREENING



1 ENLARGED ROOF COMPOSITE PLAN - AREA D
1/8" = 1'-0"

SYMBOL'S LEGEND

ROOF DRAIN PER PLUMBING

OVERFLOW SCUPPER PER PLUMBING

INDICATOR DIRECTION OF ROOF AND CRICKET SLOPES.

ROOF SLOPE PER ARCHITECTURAL

TRIMS 4 MIN CYCLE CRAFT PER DETAIL 4 / 11 MIN ROOF

PARAPET HEIGHT 42" ABOVE LEVEL 4 PLATE; MINIMUM 42" MIN ABOVE ROOF

PATT 1 INSTALL PER MFG SPECS

PROPOSED SOLAR ZONES. RE: SOLAR SHOPS

ROOFTOP MOUNTED EQUIPMENT

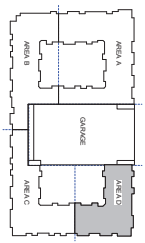
PARAPET HEIGHT KEY

A	6'-0" PARAPET & PLATE

KEYNOTES

NO.	NOTE
0210	6" STEP PER FIRE RATED WALL ASSEMBLY BELOW
0211	SCUPPER W/ 12" LOUVER SCREEN - FINISH TO MATCH WINTA
0212	ROOF OPENING - RE: PLUMBING
0213	ROOF OPENING - RE: ELECTRICAL
0214	PVC OVERFLOW SCUPPER PER PLUMBING
0215	ROOFTOP EQUIPMENT - RE: MECHANICAL

BUILDING AREAS KEY PLAN



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ISSUE FOR CONSTRUCTION
08.01.2024

NO.	Date	Issue

DRAWN BY: DV
CHECKED BY: DR
Project number: 22201
Phase: CD / CSE TI / NV
Job: J01
Title: ENLARGED ROOF PLAN - AREA D
Sheet number: A2-5.4

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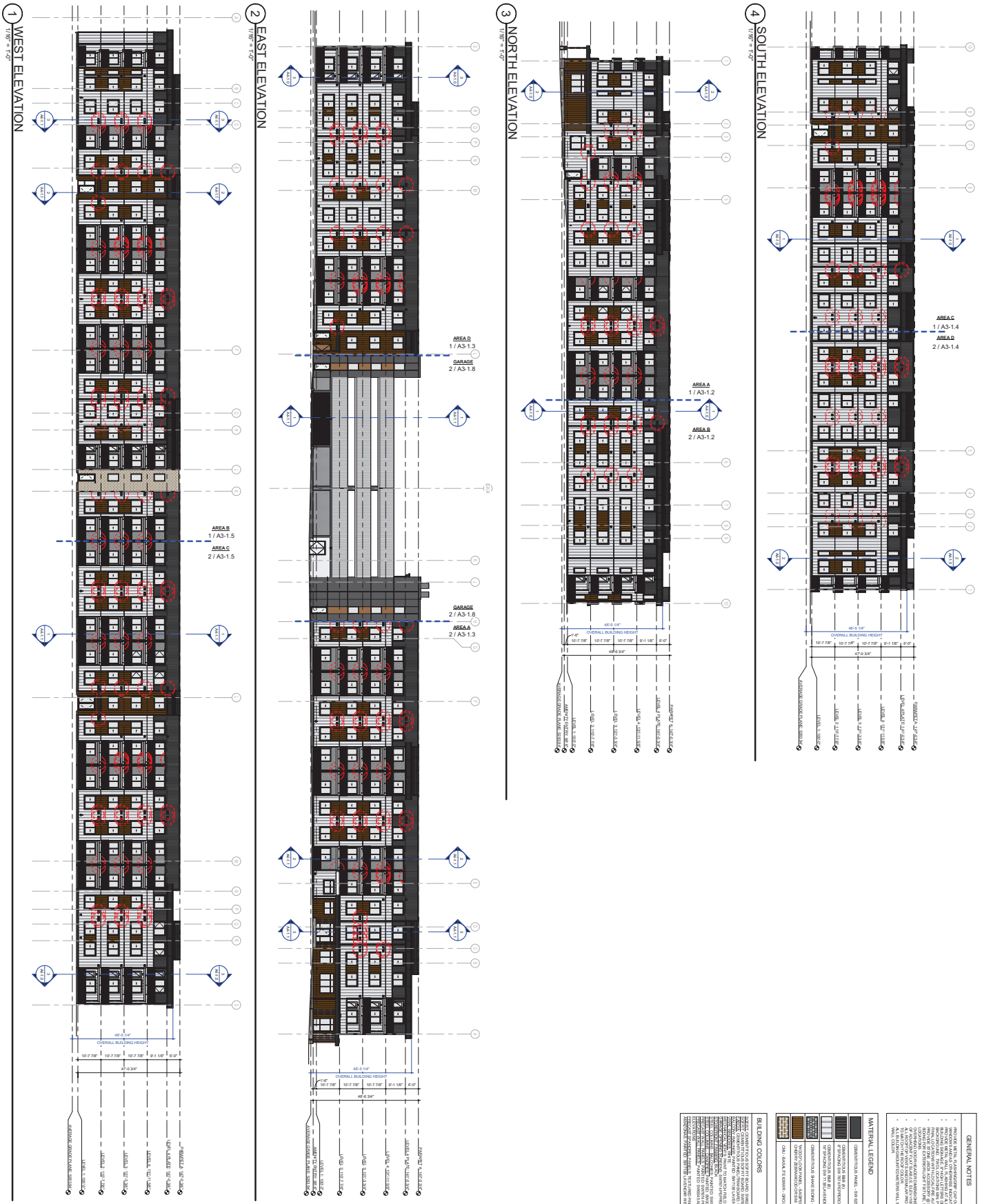


GENERAL NOTES

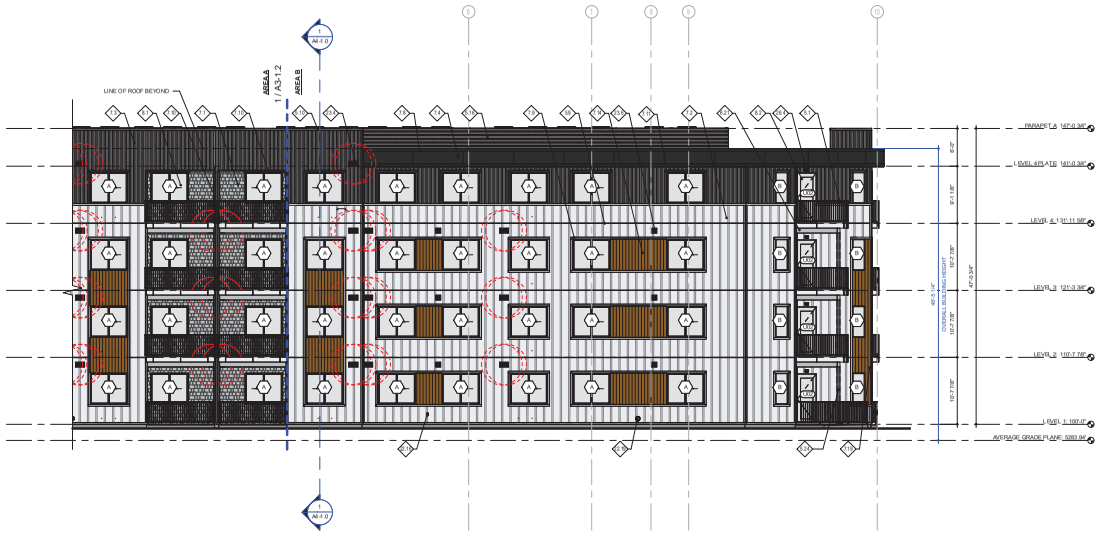
- PROVIDE METAL FLASHING/DRIP CAP OVER ALL DOORS AND WINDOWS
- PROVIDE METAL WALL FLASHING AT ALL ROOF/WALL TRANSITIONS
- PROVIDE METAL WALL FLASHING AT ALL CHANGES IN WALL MATERIALS
- BACKGROUND: TINTED CONCRETE MIX. REFER BUILDING COLOR/MATERIAL LEGEND
- PROVIDE SEALANT AT ALL CONTROL JOINTS
- PROVIDE SEALANT AT ALL DOOR, WINDOW, ACCESSORY, & SIDING PENETRATIONS
- OVERHEAD DOOR HEADER/MEMBRANE: RE: TYP. FROM THE TOP
- ALL EXCEPTIONS TO BE NOTED ON ELEVATIONS
- ALL BUILDING MATERIALS/METERS WILL BE PAINTED TO MATCH THE WALL COLOR

MATERIAL LEGEND

	CEMENTITIOUS PANEL - SW 6258 TRICORN BLACK
	CEMENTITIOUS BOARD & BATTEN - SW 7008 ALABASTER
	8" SPACING SW 7758 LAVENDERWARE
	CEMENTITIOUS SHAKE SIDING - SW 6004 LUCKY GRAY
	WOOD/T-GOR PANEL - SHAPER - CHERRY - BENJAMIN MOORE
	OAK / IKEA / TEEWINR - OPENSHOP-ICE

BUILDING COLORS

- FIELD: CEMENTITIOUS SOFFIT BOARD - SHERWIN WILLIAMS - PROPERTY MASTER - SW 7008 ALABASTER
- ACCENT: CEMENTITIOUS SOFFIT BOARD - SHERWIN WILLIAMS - PROPERTY MASTER - SW 6004 LUCKY GRAY
- ACCENT: CEMENTITIOUS BOARD & BATTEN - SHERWIN WILLIAMS - PROPERTY MASTER - SW 7758 LAVENDERWARE
- ACCENT: CEMENTITIOUS PANEL - SHERWIN WILLIAMS - PROPERTY MASTER - SW 6258 TRICORN BLACK
- ACCENT: CEMENTITIOUS SOFFIT BOARD - SHERWIN WILLIAMS - PROPERTY MASTER - SW 6258 TRICORN BLACK
- ACCENT: CEMENTITIOUS PANEL - PAINTED - SHERWIN WILLIAMS - PROPERTY MASTER - SW 6258 TRICORN BLACK
- ACCENT: CEMENTITIOUS BOARD & BATTEN - PAINTED - SHERWIN WILLIAMS - PROPERTY MASTER - SW 7758 LAVENDERWARE
- ACCENT: CEMENTITIOUS SOFFIT BOARD - PAINTED



2 ENLARGED NORTH ELEVATION - AREA B
1/8" = 1'-0"



1 ENLARGED NORTH ELEVATION - AREA A
1/8" = 1'-0"

GENERAL NOTES

- PROVIDE METAL FLASHING/DRIP CAP OVER ALL DOORS AND WINDOWS AND AS OTHERWISE INDICATED.
- PROVIDE METAL WALL FLASHING AT ALL ROOF/WALL TRANSITIONS.
- BUILDING SIGNAGE: 9" HIGH LETTERS ON A CONTRASTING BACKGROUND. TWO LOCATIONS MIN. PER BUILDING. COORDINATE ALL SIGNAGE LOCATIONS WITH LOCAL FIRE AUTHORITY.
- PROVIDE STONE, BRICK, AGGLESCRY @ STONE OR FLAT TRIM @ SIDING FOR EXTERIOR LIGHT FIXTURE. SEE ELEVATIONS FOR LOCATIONS.
- OVERHEAD DOOR HEADER DIMENSIONS ARE TAKEN FROM THE TOP OF AD/ASCRT FLAT SLAB I.E. ELEV.+100'-0"/ +1'-1 F.
- ALL ROOFTOP VENTS AND SIMILAR PROTRUSIONS WILL BE PAINTED TO MATCH THE ROOF COLOR.
- ALL BUILDING MOUNTED METERS WILL BE PAINTED TO MATCH THE WALL COLOR.

MATERIAL LEGEND

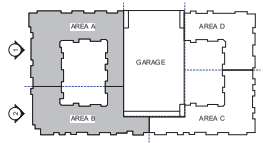
- CEMENTITIOUS PANEL - SW 6258 TRICORN BLACK
- CEMENTITIOUS B&B (A) 8" SPACING SW 7674 PEPPERCORN
- CEMENTITIOUS B&B (B) 16" SPACING SW 7138 LAVENDAR WISP
- CEMENTITIOUS SHAKE SIDING - SW 6254 LAZY GRAY
- WOOD LOOK PANEL - SAGIPER - CHERRY ZEBRAWOOD OR SIM.
- CMU - BASALITE 639WR - GROUNDFACE

BUILDING COLORS

SOFFIT: CEMENTITIOUS SOFFIT BOARD, SW6258 TRICORN BLACK. RE: RCP
SOFFIT: CEMENTITIOUS SOFFIT BOARD, SW7674 PEPPERCORN. RE: RCP
FASCIA: CEMENTITIOUS PANEL/TRIM BOARD, SW6258 TRICORN BLACK
BALCONY RAILINGS: PAINTED: SW7138 LAVENDAR WISP
RECESSED WALLS: TBD
GUARDRAIL/RAILINGS: PAINT TO MATCH FIELD
CANOPY/CANOPY FRAMES: PAINTED SW7674 PEPPERCORN
STOREFRONT FRAMING: BLACK
STEEL COLUMNS - BALCONIES: PAINTED: SW7674 PEPPERCORN
STEEL COLUMNS - CANOPIES: PAINTED: SW6048 ANTIQUARIAN BROWN
PRECAST WALL PANELS: PAINTED: SW7674 PEPPERCORN. RE: ELEVATIONS
PRECAST WALL PANELS: PAINTED: SW6048 ANTIQUARIAN BROWN. RE: ELEVATIONS
PRECAST SPANDREL PANELS: TEXTURED FINISH: FORMLINER 2/95 AMAZONAS, PAINTED: SW7138 LAVENDAR WISP. RE: ELEVATIONS

KEYNOTES

NO.	NOTE
5.1	STEEL BALCONY GUARDRAIL AT 42" AFF. SHOP PRIMED, PAINT IN FIELD
5.9	HORIZONTAL FLASHING AT BOARD/BATTEN. INSTALL PER MFG. SPECIFICATIONS
5.10	PREFINISHED METAL PARAPET COPING, COLOR TO MATCH FIELD
5.15	42" HIGH PRE-FABRICATED MECHANICAL SCREEN. BOD: ROOFSCREEN SC3 FRAME W L20 LOUVER SCREEN. FINISH TO MATCH SW7674 PEPPERCORN.
5.23	SQUARE HSS COLUMN, RE: STRUCT. PAINTED SW6048 ANTIQUARIAN BROWN
5.24	SQUARE HSS COLUMN, RE: STRUCT. PAINTED SW7674 PEPPERCORN
6.21	PRESSURE TREATED BEAM PAINTED SW6254 LAZY GRAY. RE: STRUCT
7.1	CEMENTITIOUS STRAIGHT EDGE SHAKE SIDING - LAZY GRAY - SW 6254. RE: ELEVATIONS
7.3	VERTICAL CEMENTITIOUS BOARD & BATTEN 16" EXPOSURE - LAVENDER WISP - SW 7138 RE: ELEVATIONS
7.3	VERTICAL CEMENTITIOUS BOARD & BATTEN 8" EXPOSURE - PEPPERCORN - SW7674. RE: ELEVATIONS
7.4	CEMENTITIOUS PANEL - SMOOTH FINISH - TRICORN BLACK - SW 6258 RE: ELEVATIONS
7.8	4-1/4" CEMENTITIOUS TRIM BOARD - SMOOTH FINISH - TRICORN BLACK - SW6258
7.9	5-1/4" CEMENTITIOUS TRIM BOARD - SMOOTH FINISH - LAVENDER WISP - SW7138
7.10	5-1/4" CEMENTITIOUS TRIM BOARD - SMOOTH FINISH - PEPPERCORN - SW7674
7.11	CEMENTITIOUS PANEL BUTT JOINT @ FASCIA
7.14	SAGWALL VGROOVE EXTERIOR CLADDING BY SAGIPER VERTICAL ORIENTATION. FINISH: REF #10. CHERRY ZEBRAWOOD. INSTALL PER MFG. GUIDELINES AND SPECIFICATIONS
7.19	SAGWALL VGROOVE EXTERIOR CLADDING BY SAGIPER VERTICAL ORIENTATION. CUSTOM LENGTH FROM LEVEL 2 - 4. FINISH: REF #10 CHERRY ZEBRAWOOD. INSTALL PER MFG. GUIDELINES AND SPECIFICATIONS
8.1	VINYL WINDOW W/ LOW E. GLAZING. RE: WINDOW SCHEDULE
8.2	VINYL DOOR FULL-LITE. RE: DOOR SCHEDULE
8.4	ALUMINUM STOREFRONT, BLACK FINISH. RE: STOREFRONT LEGEND
22.16	HOSE BIBB. RE: PLUMBING
22.19	OVERFLOW ROOF DRAIN OUTLET. RE: PLUMBING
23.6	WALL MOUNTED EXHAUST VENT. COLOR TO MATCH FIELD. RE: MECHANICAL
23.8	OUTSIDE AIR SUPPLY LOUVER. COLOR TO MATCH FIELD. RE: MECHANICAL
26.4	EXTERIOR SCONCE, MOUNTED AT 8'-0" AFF UNO. RE: ELEC



ELEVATION KEY PLAN

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ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: ENLARGED ELEVATIONS - NORTH
Sheet Number: A3-1.2

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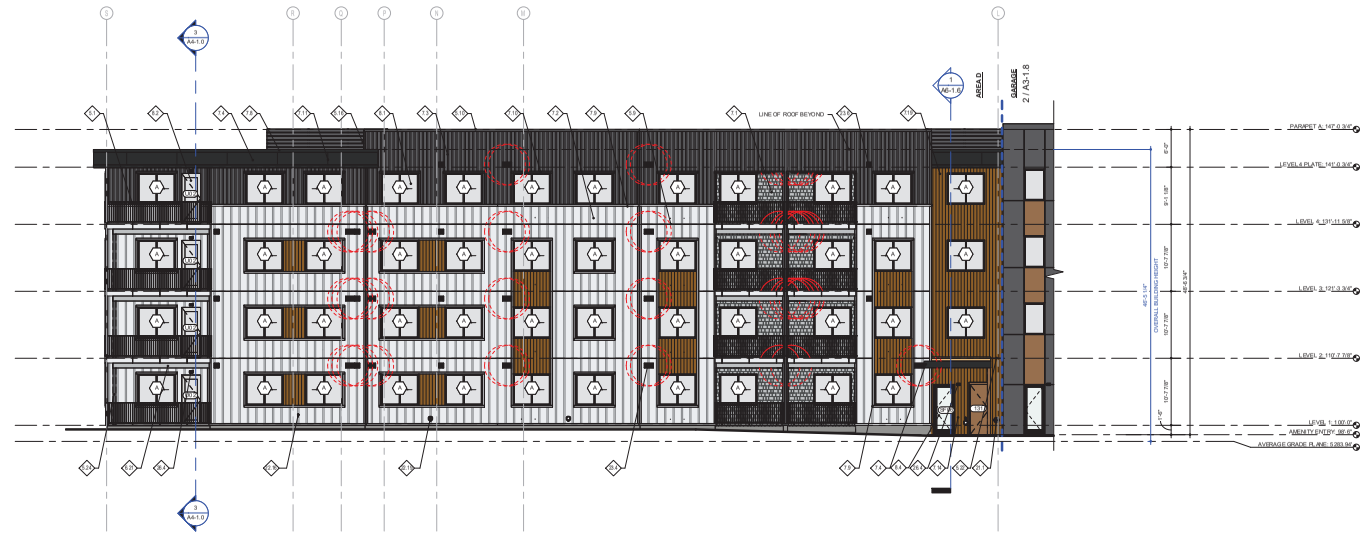
2 ENLARGED EAST ELEVATION - AREA A
1/8" = 1'-0"



1 ENLARGED EAST ELEVATION - AREA D
1/8" = 1'-0"

GENERAL NOTES

- PROVIDE METAL FLASHING/DRIP CAP OVER ALL DOORS AND WINDOWS AND AS OTHERWISE INDICATED.
- PROVIDE METAL WALL FLASHING AT ALL ROOF/WALL TRANSITIONS.
- BUILDING SIGNAGE: 8" HIGH LETTERS ON A CONTRASTING BACKGROUND. TWO LOCATIONS MIN. PER BUILDING. COORDINATE ALL SIGNAGE LOCATIONS WITH LOCAL FIRE AUTHORITY.
- PROVIDE STONE, BRICK, AGGREGATE @ STONE OR FLAT TRIM @ SIDING FOR EXTERIOR LIGHT FIXTURE. SEE ELEVATIONS FOR LOCATIONS.
- OVERHEAD DOOR HEADER DIMENSIONS ARE TAKEN FROM THE TOP OF ADJACENT FLAT SLAB (I.E. ELEV.+100'-0") - V.I.F.
- ALL ROOFTOP VENTS AND SIMILAR PROTRUSIONS WILL BE PAINTED TO MATCH THE ROOF COLOR.
- ALL BUILDING MOUNTED METERS WILL BE PAINTED TO MATCH THE WALL COLOR.

MATERIAL LEGEND

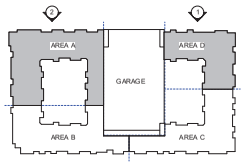
	CEMENTITIOUS PANEL - SW 6258 TRICORN BLACK
	CEMENTITIOUS B&B (A) 8" SPACING SW 7674 PEPPERCORN
	CEMENTITIOUS B&B (B) 16" SPACING SW 7138 LAVENDAR WISP
	CEMENTITIOUS SHAKE SIDING - SW 6254 LAZY GRAY
	"WOOD" LOOK PANEL - SAGIPER - CHERRY ZEBRAWOOD OR SIM.
	CMU - BASALITE 639WR - GROUNDFACE

BUILDING COLORS

SOFFIT: CEMENTITIOUS SOFFIT BOARD, SW6258 TRICORN BLACK. RE: RCP
SOFFIT: CEMENTITIOUS SOFFIT BOARD, SW7674 PEPPERCORN. RE: RCP
FASCIA: CEMENTITIOUS PANEL/TRIM BOARD, SW6258 TRICORN BLACK
BALCONY RAILINGS: PAINTED: SW7138 LAVENDAR WISP
RECESSED VENTS: SW 7674
MECHANICAL EQUIPMENT: PAINT TO MATCH FIELD
GARAGE DOOR AND PANEL: SW7674 PEPPERCORN
STAIR/RAIL FRAMES: BLACK
STEEL COLUMNS - BALCONIES: PAINTED: SW7674 PEPPERCORN
STEEL COLUMNS - CANOPIES: PAINTED: SW2845 ANTIQUARIAN BROWN
PRECAST WALL PANELS: PAINTED: SW7674 PEPPERCORN. RE: ELEVATIONS
PRECAST WALL PANELS: PAINTED: SW2845 ANTIQUARIAN BROWN. RE: ELEVATIONS
PRECAST SPANDREL PANELS: TEXTURED FINISH: FORMLINER 2/95 AMAZONAS, PAINTED: SW7138 LAVENDAR WISP. RE: ELEVATIONS

KEYNOTES

NO.	NOTE
3.4	CONCRETE COLUMN BASE. RE: STRUCT
5.1	STEEL BALCONY GUARDRAIL AT 42" AFF. SHOP PRIMED, PAINT IN FIELD
5.9	HORIZONTAL FLASH RIEAT BOARD/BATTEN. INSTALL PER MFG SPECIFICATIONS
6.10	PRESTAIN WOOD TRIM. RE: PARAPET COPING, COLOR TO MATCH FIELD
6.16	42" HIGH PRE-FABRICATED MECHANICAL SCREEN, BDD TO OPSCREEN SCHEDRAWN W/ 1.25" LOUVER SCREEN, FINISH TO MATCH SW7674 PEPPERCORN
6.22	HORIZONTAL FLASHING AT SAGIPER. INSTALL PER MFG. SPECIFICATIONS
5.23	SQUARE HSS COLUMN, RE: STRUCT, PAINTED SW2046 ANTIQUARIAN BROWN
5.24	SQUARE HSS COLUMN, RE: STRUCT, PAINTED SW7674 PEPPERCORN
6.21	PRESSURE TREATED BEAM, PAINTED SW6254 LAZY GRAY. RE: STRUCT
T.1	CEMENTITIOUS STRAIGHT EDGE SHAKE SIDING - LAZY GRAY - SW6254. RE: ELEVATIONS
T.2	VERTICAL CEMENTITIOUS BOARD & BATTEN 16" EXPOSURE - LAVENDER WISP - SW7138. RE ELEVATIONS
T.3	VERTICAL CEMENTITIOUS BOARD & BATTEN 8" EXPOSURE - PEPPERCORN - SW7674. RE: ELEVATIONS
T.4	CEMENTITIOUS PANEL - SMOOTH FINISH - TRICORN BLACK - SW6258 RE: ELEVATIONS
T.8	4-0/8 CEMENTITIOUS TRIM BOARD -SMOOTH FINISH - TRICORN BLACK - SW6258
T.9	5-4/4 CEMENTITIOUS TRIM BOARD -SMOOTH FINISH - LAVENDER WISP - SW7138
T.10	5-4/4 CEMENTITIOUS TRIM BOARD -SMOOTH FINISH - PEPPERCORN - SW7674
T.11	CEMENTITIOUS PANEL BUTT JOINT @ T.4/B3A
T.12	OVERFLOW SCUPPER
T.14	SADWALL V-GROOVE EXTERIOR CLADDING BY SAGIPER VERTICAL ORIENTATION. FINISH REF#10 CHERRY ZEBRAWOOD. INSTALL PER MFG GUIDELINES AND SPECIFICATIONS
T.19	SADWALL V-GROOVE EXTERIOR CLADDING BY SAGIPER VERTICAL ORIENTATION. CUSTOM LENGTH FROM LEVEL 2 - 4. FINISH REF#10 CHERRY ZEBRAWOOD. INSTALL PER MFG GUIDELINES AND SPECIFICATIONS
8.1	VINYL WINDOW W/ LOW E GLAZING. RE: WINDOW SCHEDULE
8.2	VINYL DOOR, FULL LITE. RE: DOOR SCHEDULE
8.4	ALUMINUM STOREFRONT, BLACK FINISH. RE: STOREFRONT LEGEND
21.1	FIRE DEPARTMENT CONNECTION
22.16	ROOF DRAIN. RE: PLUMBING
22.19	OVERFLOW ROOF DRAIN OUTLET. RE: PLUMBING
23.4	WALL MOUNTED EXHAUST VENT, COLOR TO MATCH FIELD. RE: MECHANICAL
23.8	OUTDOOR AIR SUPPLY LOUVER, COLOR TO MATCH FIELD. RE: MECHANICAL
26.4	EXTERIOR SCONCE, MOUNTED AT 9'-0" AFF/UNO. RE: ELEC



ELEVATION KEY PLAN

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ISSUE FOR CONSTRUCTION
06.01.2024

No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	
Job Number	222001
Drawn By	CG / CB/ TT / NV
Checked By	JG
Title	ENLARGED ELEVATIONS - EAST
Sheet Number	A3-1.3

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2 ENLARGED SOUTH ELEVATION - AREA D

1/8" = 1'-0"



1 ENLARGED SOUTH ELEVATION - AREA C

1/8" = 1'-0"

GENERAL NOTES

- PROVIDE METAL FLASHING/DRIP CAP OVER ALL DOORS AND WINDOWS AND AS OTHERWISE INDICATED.
- PROVIDE METAL WALL FLASHING AT ALL ROOF/WALL TRANSITIONS.
- BUILDING SIGNAGE: 9" HIGH LETTERS ON A CONTRASTING BACKGROUND. TWO LOCATIONS MIN. PER BUILDING. COORDINATE LOCATIONS WITH LOCAL FIRE AUTHORITY.
- PROVIDE STONE, BRICK, AGGREGATE @ STONE OR FLAT TRIM @ SIDING FOR EXTERIOR LIGHT FIXTURE. SEE ELEVATIONS FOR LOCATIONS.
- OVERHEAD DOOR HEADER DIMENSIONS ARE TAKEN FROM THE TOP OF ADJACENT FLAT SLAB (I.E. ELEV.+100'-0") - V.I.F.
- ALL ROOFTOP VENTS AND SIMILAR PROTRUSIONS WILL BE PAINTED TO MATCH THE ROOF COLOR.
- ALL BUILDING MOUNTED METERS WILL BE PAINTED TO MATCH THE WALL COLOR.

MATERIAL LEGEND

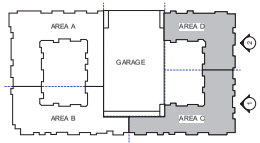
- CEMENTITIOUS PANEL - SW 6258 TRICORN BLACK
- CEMENTITIOUS B&B (A) 8" SPACING SW 7674 PEPPERCORN
- CEMENTITIOUS B&B (B) 16" SPACING SW 7138 LAVENDER WISP
- CEMENTITIOUS SHAKE SIDING - SW 6254 LAZY GRAY
- "W.O.O.D" LOOK PANEL - SAGIPER - CHERRY ZEBRAWOOD OR SIM.
- CMU - BASALITE 639WR - GROUND FACE

BUILDING COLORS

SOFFIT: CEMENTITIOUS SOFFIT BOARD, SW6258 TRICORN BLACK. RE: RCP
SOFFIT: CEMENTITIOUS SOFFIT BOARD, SW7674 PEPPERCORN. RE: RCP
FASCIA: CEMENTITIOUS PANEL/TRIM BOARD, SW6258 TRICORN BLACK
BALCONY RAILINGS: PAINTED: SW7138 LAVENDAR WISP
VINYL WINDOWS: White
MECHANICAL VENTS: PAINT TO MATCH FIELD
STOREFRONT FRAMING: PAINTED: SW7674 PEPPERCORN
STOREFRONT GLAZING: BLACK
STEEL COLUMNS - BALCONIES: PAINTED: SW7674 PEPPERCORN
STEEL COLUMNS - CANOPIES: PAINTED: SW9045 ANTIQUARIAN BROWN
PRECAST WALL PANELS: PAINTED: SW7674 PEPPERCORN. RE: ELEVATIONS
PRECAST WALL PANELS: PAINTED: SW9045 ANTIQUARIAN BROWN. RE: ELEVATIONS
PRECAST SPANDREL PANELS: TEXTURED FINISH: FORMLINER 2/95 AMAZONAS, PAINTED: SW7138 LAVENDAR WISP. RE: ELEVATIONS

KEYNOTES

NO.	NOTE
5.1	STEEL BALCONY GUARDRAIL AT 42" AFF. SHOP PRIMED. PAINT IN FIELD
5.9	HORIZONTAL FLASHING AT BOARD/BATTEN. INSTALL PER MFG. SPECIFICATIONS
5.10	PREFINISHED METAL PARAPET COPING, COLOR TO MATCH FIELD
5.16	42" HIGH PRE-FABRICATED MECHANICAL SCREEN. BOD: ROOFSCREEN SCI FRAME W L20 LOUVER SCREEN. FINISH TO MATCH SW7674 PEPPERCORN
5.24	SQUARE HSS COLUMN, RE: STRUCT. PAINTED SW7674 PEPPERCORN
6.21	PRESSURE TREATED BEAM, PAINTED SW6254 LAZY GRAY. RE: STRUCT
7.1	CEMENTITIOUS STRAIGHT EDGE SHAKE SIDING - LAZY GRAY - SW6254. RE: ELEVATIONS
7.2	VERTICAL CEMENTITIOUS BOARD & BATTEN 16" EXPOSURE - LAVENDER WISP - SW 7138. RE: ELEVATIONS
7.3	VERTICAL CEMENTITIOUS BOARD & BATTEN 8" EXPOSURE - PEPPERCORN - SW7674. RE: ELEVATIONS
7.4	CEMENTITIOUS PANEL - SMOOTH FINISH - TRICORN BLACK - SW6258 RE: ELEVATIONS
7.8	4/4X8 CEMENTITIOUS TRIM BOARD - SMOOTH FINISH - TRICORN BLACK - SW6258
7.9	5/4X6 CEMENTITIOUS TRIM BOARD - SMOOTH FINISH - LAVENDER WISP - SW7138
7.10	5/4X6 CEMENTITIOUS TRIM BOARD - SMOOTH FINISH - PEPPERCORN - SW7674
7.11	CEMENTITIOUS PANEL BUTT JOINT @ FASCIA
7.14	SAG WALL V-GROOVE EXTERIOR CLADDING BY SAGIPER VERTICAL ORIENTATION. FINISH: REF #10 CHERRY ZEBRAWOOD. INSTALL PER MFG. GUIDELINES AND SPECIFICATIONS
7.19	SAG WALL V-GROOVE EXTERIOR CLADDING BY SAGIPER VERTICAL ORIENTATION. CUSTOM LENGTH FROM LEVEL 2 - 4. FINISH: REF #10 CHERRY ZEBRAWOOD. INSTALL PER MFG. GUIDELINES AND SPECIFICATIONS
8.1	VINYL WINDOW W LOW E GLAZING. RE: WINDOW SCHEDULE
8.4	ALUMINUM STOREFRONT, BLACK FINISH. RE: STOREFRONT LEGEND
22.16	HOSE BIBB. RE: PLUMBING
22.19	OVERFLOW ROOF DRAIN OUTLET. RE: PLUMBING
23.4	WALL MOUNTED EXHAUST VENT, COLOR TO MATCH FIELD. RE: MECHANICAL
23.6	OUTSIDE AIR SUPPLY LOUVER, COLOR TO MATCH FIELD. RE: MECHANICAL
26.4	EXTERIOR SCONCE, MOUNTED AT 9'-0" AFF UNO. RE: ELEC



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ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: ENLARGED ELEVATIONS - SOUTH
Sheet Number: A3-1.4

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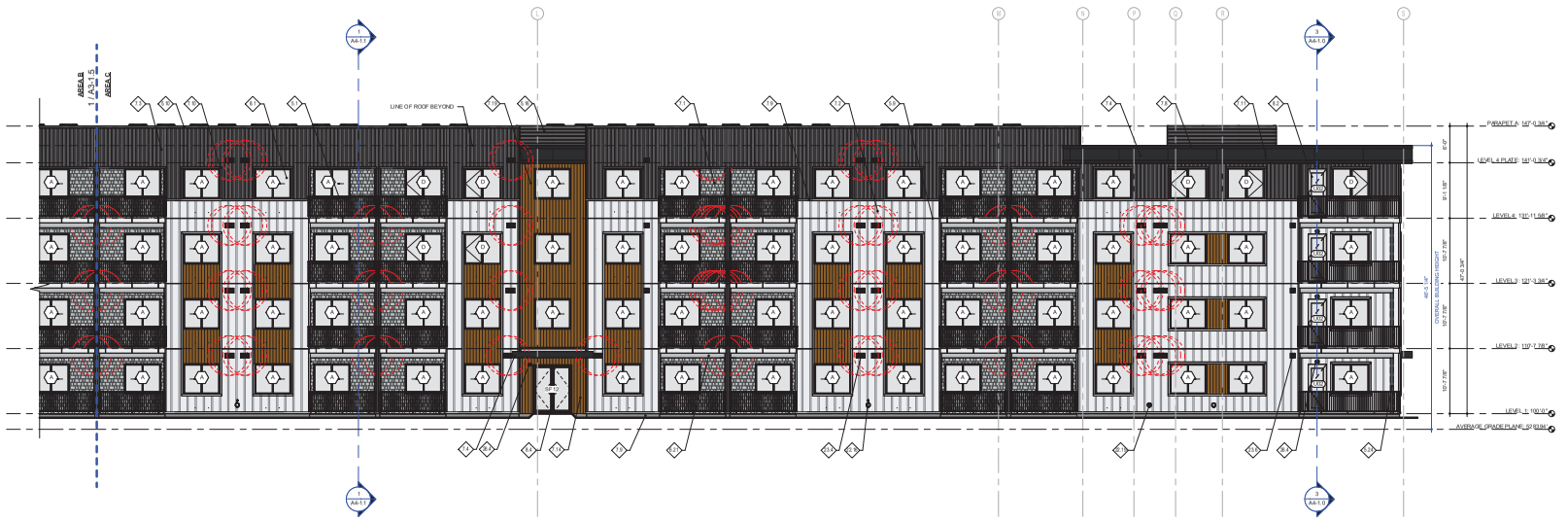


2 ENLARGED WEST ELEVATION - AREA C
1/8" = 1'-0"



1 ENLARGED WEST ELEVATION - AREA B
1/8" = 1'-0"

GENERAL NOTES

- PROVIDE METAL FLASHING/DRIP CAP OVER ALL DOORS AND WINDOWS AND AS OTHERWISE INDICATED.
- PROVIDE METAL WALL FLASHING AT ALL ROOF/WALL TRANSITIONS.
- BUILDING SIGNAGE: 8" HIGH LETTERS ON A CONTRASTING BACKGROUND. TWO LOCATIONS MIN. PER BUILDING. COORDINATE WITH ARCHITECT AND WITH LOCAL FIRE AUTHORITY.
- PROVIDE 18" DIAMETER, AGGREGATE @ STONE OR FLAT TRIM @ SIDING FOR EXTERIOR LIGHT FIXTURE. SEE ELEVATIONS FOR LOCATIONS.
- OVERHEAD DOOR HEADER DIMENSIONS ARE TAKEN FROM THE TOP OF ADJACENT FLAT SLAB I.E. ELEV.+100'-0"| -1'-1.1/2"
- ALL ROOFTOP VENTS AND SIMILAR PROTRUSIONS WILL BE PAINTED TO MATCH THE ROOF COLOR.
- ALL BUILDING MOUNTED METERS WILL BE PAINTED TO MATCH THE WALL COLOR.

MATERIAL LEGEND

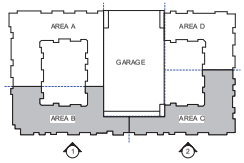
- CEMENTITIOUS PANEL - SW 6258 TRICORN BLACK
- CEMENTITIOUS B&B (A) 8" SPACING SW 7674 PEPPERCORN
- CEMENTITIOUS B&B (B) 16" SPACING SW 7138 LAVENDAR WISP
- CEMENTITIOUS SHAKE SIDING - SW 6254 LAZY GRAY
- "W.OOD" LOOK PANEL - SAGIPER - CHERRY ZEBRAWOOD OR SIM.
- CMU - BASALITE 639WR - GROUND FACE

BUILDING COLORS

SOFFIT: CEMENTITIOUS SOFFIT BOARD, SW6258 TRICORN BLACK. RE: RCP
SOFFIT: CEMENTITIOUS SOFFIT BOARD, SW7674 PEPPERCORN. RE: RCP
FASCIA: CEMENTITIOUS PANEL/TRIM BOARD, SW6258 TRICORN BLACK
BALCONY RAILINGS: PAINTED: SW7138 LAVENDAR WISP
GUARDRAILS: SW 7674
PRECAST SILLS: PAINT TO MATCH FIELD
CEMENTITIOUS PANEL: PAINTED SW7674 PEPPERCORN
STAIR STRINGER / RAILS: BLACK
STEEL COLUMNS - BALCONIES: PAINTED: SW7674 PEPPERCORN
STEEL COLUMNS - CANOPIES: PAINTED: SW7045 ANTIQUARIAN BROWN
PRECAST WALL PANELS: PAINTED: SW7674 PEPPERCORN. RE: ELEVATIONS
PRECAST WALL PANELS: PAINTED: SW7045 ANTIQUARIAN BROWN. RE: ELEVATIONS
PRECAST SPANDREL PANELS: TEXTURED FINISH: FORMLINER 2/95 AMAZONAS, PAINTED: SW7138 LAVENDAR WISP. RE: ELEVATIONS

KEYNOTES

NO.	NOTE
A3	GROUND FACE CONCRETE MASONRY UNITS AT EXT EXPOSED FACE ONLY. INSTALL AND SEAL PER MFG RECOMMENDATIONS
E1	STEEL BALCONY GUARDRAIL 42" AFF. SHOP FINISHED. PAINT IN FIELD
G9	HORIZONTAL FLASHING AT BOARD/BATTEN. INSTALL PER MFG. SPECIFICATIONS
G.10	PRE-FINISHED METAL PARAPET COPING, COLOR TO MATCH FIELD
G.16	42" HIGH PREFABRICATED MECHANICAL SCREEN. BOLT TO OPEN RIB SCI FRAME W/ L20 LOUVER SCREEN. FINISH TO MATCH SW7674 PEPPERCORN.
L24	SQUARE HSS COLUMN. RE: STRUCT. PAINTED SW 7674 PEPPERCORN
G21	PRESSURE TREATED BEAM, PAINTED SW6254 LAZY GRAY. RE: STRUCT
T.1	CEMENTITIOUS STRAIGHT EDGE SHAKE SIDING - LAZY GRAY - SW6254. RE: ELEVATIONS
T.2	VERTICAL CEMENTITIOUS BOARD & BATTEN 16" EXPOSURE - LAVENDER WISP - SW 7138 RE: ELEVATIONS
T.3	VERTICAL CEMENTITIOUS BOARD & BATTEN 8" EXPOSURE - PEPPERCORN - SW7674. RE: ELEVATIONS.
T.4	CEMENTITIOUS PANEL - SMOOTH FINISH - TRICORN BLACK - SW6258 RE: ELEVATIONS
T.8	4/4W CEMENTITIOUS TRIM BOARD - SMOOTH FINISH - TRICORN BLACK - SW6258
T.9	5/4W CEMENTITIOUS TRIM BOARD - SMOOTH FINISH - LAVENDER WISP - SW7138
T.10	5/4W CEMENTITIOUS TRIM BOARD - SMOOTH FINISH - PEPPERCORN - SW7674
T.11	CEMENTITIOUS PANEL BUTT JOINT @ FASCIA
T.14	SIDEWALL "V" GROOVE EXTERIOR CLADDING BY SAGIPER. VERTICAL ORIENTATION. FINISH: REF #10 CHERRY ZEBRAWOOD. INSTALL PER MFG. GUIDELINES AND SPECIFICATIONS
T.15	SIDEWALL "V" GROOVE EXTERIOR CLADDING BY SAGIPER. VERTICAL ORIENTATION. CUSTOM LENGTH FROM LEVEL 2 - 4. FINISH: REF #10 CHERRY ZEBRAWOOD. INSTALL PER MFG. GUIDELINES AND SPECIFICATIONS
E.1	VINYL WINDOW W/ LOW E GLAZING. RE: WINDOW SCHEDULE
E2	VINYL DOOR FULL LITE. RE: DOOR SCHEDULE
E4	ALUMINUM ST OREFRONT, BLACK FINISH. RE: STOREFRONT LEGEND
G.18	HOSE BIBB. RE: PLUMBING
G.19	OVERFLOW ROOF DRAIN OUTLET. RE: PLUMBING
S3.4	WALL MOUNTED EXHAUST VENT, COLOR TO MATCH FIELD. RE: MECHANICAL
S16	OUTSIDE AIR SUPPLY LOUVER, COLOR TO MATCH FIELD RE: MECHANICAL
S6.4	EXTERIOR SCONCE, MOUNTED AT 8'-0" AFF.UNO. RE ELEC.



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ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	
Job Number	222001
Drawn By	CG / CB/ TT / NV
Checked By	JG
Title	ENLARGED ELEVATIONS - WEST
Sheet Number	A3-1.5

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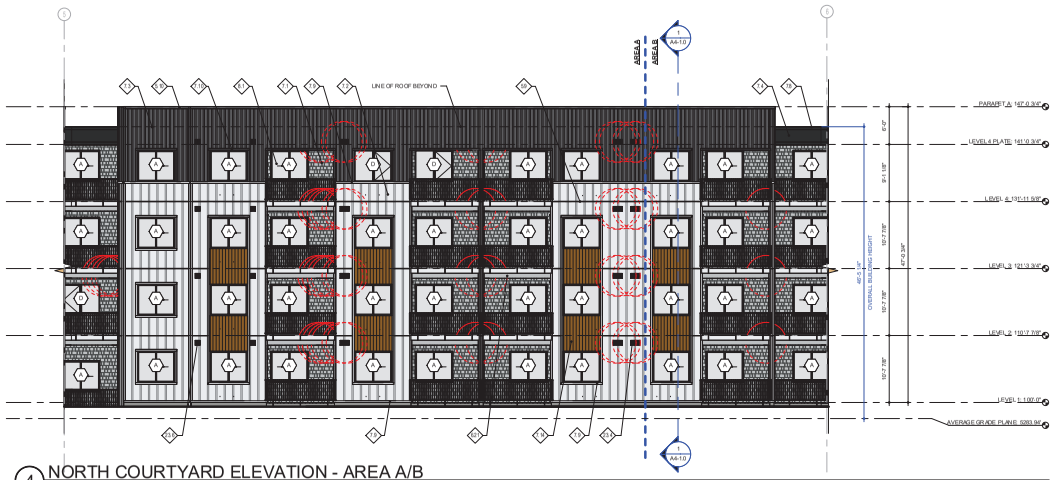
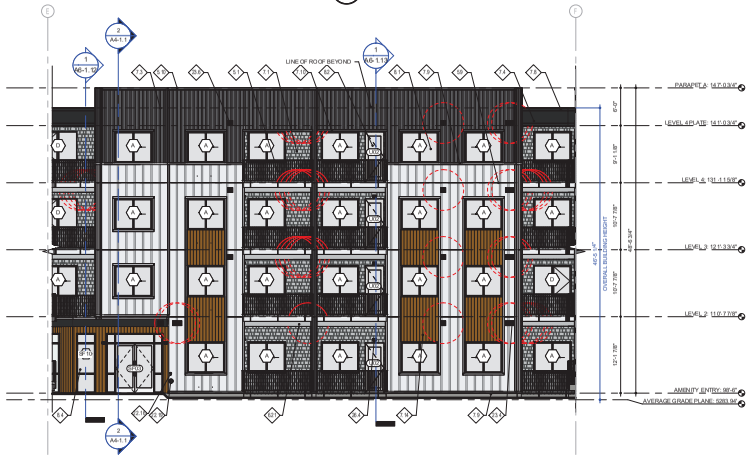
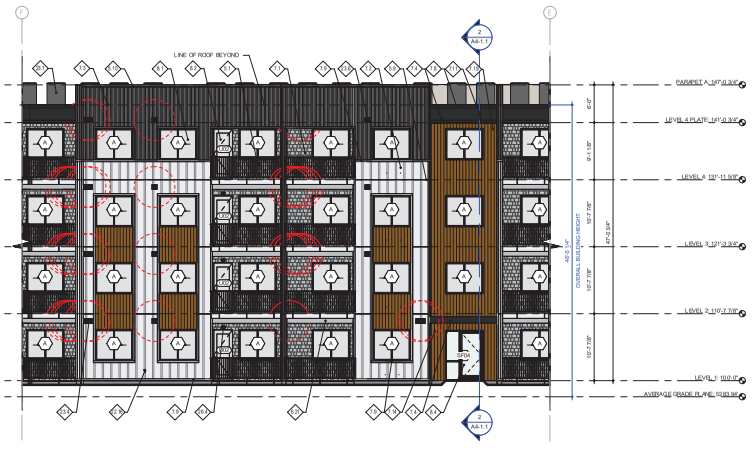


4 NORTH COURTYARD ELEVATION - AREA A/B
1/8" = 1'-0"



3 WEST COURTYARD ELEVATION - AREA A
1/8" = 1'-0"



2 EAST COURTYARD ELEVATION - AREA B
1/8" = 1'-0"



1 SOUTH COURTYARD ELEVATION - AREA A/B
1/8" = 1'-0"

GENERAL NOTES

- PROVIDE METAL FLASHING/DRIP CAP OVER ALL DOORS AND WINDOWS AND AS OTHERWISE INDICATED.
- PROVIDE METAL WALL FLASHING AT ALL ROOF/WALL TRANSITIONS.
- BUILDING SIGNAGE: 9" HIGH LETTERS ON A CONTRASTING BACKGROUND. TWO LOCATIONS MIN. PER BUILDING. COORDINATE WITH ARCHITECTURE WITH LOCAL FIRE AUTHORITY.
- PROVIDE STONE, BRICK, AGGLESTONE @ STONE OR FLAT TRIM @ SIDING FOR EXTERIOR LIGHT FIXTURE. SEE ELEVATIONS FOR LOCATIONS.
- OVERHEAD DOOR HEADER DIMENSIONS ARE TAKEN FROM THE TOP OF ADJACENT FLAT SLAB (I.E. ELEV.+100'-0") +/- 1'-0"
- ALL ROOFTOP VENTS AND SIMILAR PROTRUSIONS WILL BE PAINTED TO MATCH THE ROOF COLOR.
- ALL BUILDING MOUNTED METERS WILL BE PAINTED TO MATCH THE WALL COLOR.

MATERIAL LEGEND

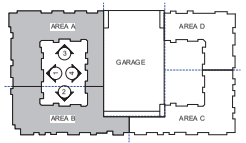
	CEMENTITIOUS PANEL - SW 6258 TRICORN BLACK
	CEMENTITIOUS B&B (A) 8" SPACING SW 7674 PEPPERCORN
	CEMENTITIOUS B&B (B) 16" SPACING SW 7138 LAVENDAR WISP
	CEMENTITIOUS SHAKE SIDING - SW 6254 LAZY GRAY
	"WOOD" LOOK PANEL - SAGIPER - CHERRY ZEBRAWOOD OR SIM.
	CMU - BASALITE 639WR - GROUNDFACE

BUILDING COLORS

SOFFIT: CEMENTITIOUS SOFFIT BOARD, SW6258 TRICORN BLACK. RE: RCP
SOFFIT: CEMENTITIOUS SOFFIT BOARD, SW7674 PEPPERCORN. RE: RCP
FASCIA: CEMENTITIOUS PANEL/TRIM BOARD, SW6258 TRICORN BLACK
BALCONY RAILINGS: PAINTED: SW7138 LAVENDAR WISP
MECHANICAL UNITS: SW 6258 TRICORN BLACK
MISC. MISCELLANEOUS: PAINT TO MATCH FIELD
CANOPY CEILING PANELS: SW7674 PEPPERCORN
STAIR/RAIL FRAMING: BLACK
STEEL COLUMNS - BALCONIES: PAINTED: SW7674 PEPPERCORN
STEEL COLUMNS - CANOPIES: PAINTED: SW3045 ANTIQUARIAN BROWN
PRECAST WALL PANELS: PAINTED: SW7674 PEPPERCORN. RE: ELEVATIONS
PRECAST WALL PANELS: PAINTED: SW3045 ANTIQUARIAN BROWN. RE: ELEVATIONS
PRECAST SPANDREL PANELS: TEXTURED FINISH: FORMLINER 2/16 AMAZONAS, PAINTED: SW7138 LAVENDAR WISP. RE: ELEVATIONS

KEYNOTES

NO.	NOTE
5.1	STEEL BALCONY GUARDRAIL AT 42" AFF. SHOP PRIMED. PAINT IN FIELD
5.9	HORIZONTAL FLASHING AT BOARD/BATTEN. INSTALL PER MFG. SPECIFICATIONS
5.10	PRE-FINISHED METAL PARAPET COPING, COLOR TO MATCH FIELD
6.21	PRESSURE TREATED BEAM, PAINTED SW6254 LAZY GRAY RE: STRUCT
7.1	CEMENTITIOUS STRAIGHT EDGE SHAKE SIDING - LAZY GRAY - SW6254. RE: ELEVATIONS
7.2	VERTICAL CEMENTITIOUS BOARD & BATTEN 16" EXPOSURE - LAVENDER WISP - SW 7138 RE: ELEVATIONS
7.3	VERTICAL CEMENTITIOUS BOARD & BATTEN 8" EXPOSURE - PEPPERCORN - SW7674. RE: ELEVATIONS
7.4	CEMENTITIOUS PANEL - SMOOTH FINISH - TRICORN BLACK - SW6258 RE: ELEVATIONS
7.8	4/-080 CEMENTITIOUS TRIM BOARD - SMOOTH FINISH - TRICORN BLACK - SW6258
7.9	5/-080 CEMENTITIOUS TRIM BOARD - SMOOTH FINISH - LAVENDER WISP - SW7138
7.10	5/-080 CEMENTITIOUS TRIM BOARD - SMOOTH FINISH - PEPPERCORN - SW7674
7.11	CEMENTITIOUS PANEL BUTT JOINT @ FASCIA
7.14	SAG WALL 'V' GROOVE EXTERIOR CLADDING BY SAGIPER VERTICAL ORIENTATION. FINISH: REF #10 CHERRY ZEBRAWOOD. INSTALL PER MFG. GUIDELINES AND SPECIFICATIONS
7.19	SAG WALL 'V' GROOVE EXTERIOR CLADDING BY SAGIPER VERTICAL ORIENTATION. CUSTOM LENGTH FROM LEVEL 2 - 4. FINISH: REF #10 CHERRY ZEBRAWOOD. INSTALL PER MFG. GUIDELINES AND SPECIFICATIONS
8.1	VINYL WINDOW W/ LOW E GLAZING. RE: WINDOW SCHEDULE
8.2	VINYL DOOR W/ FULL LITE. RE: DOOR SCHEDULE
8.4	ALUMINUM STOREFRONT, BLACK FINISH. RE: STOREFRONT LEGEND
22.16	HOSE BIBB. RE: PLUMBING
22.19	OVERFLOW ROOF DRAIN OUTLET. RE: PLUMBING
23.1	HVAC CONDENSER UNITS. RE: MECHANICAL
23.4	WALL MOUNTED EXHAUST VENT, COLOR TO MATCH FIELD. RE: MECHANICAL
23.6	OUTSIDE AIR SUPPLY LOUVER, COLOR TO MATCH FIELD. RE: MECHANICAL
26.4	EXTERIOR SCONCE, MOUNTED AT 6'-0" AFF UNO. RE: ELEC



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ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: ENLARGED ELEVATIONS - COURTYARD 1
Sheet Number: A3-1.6

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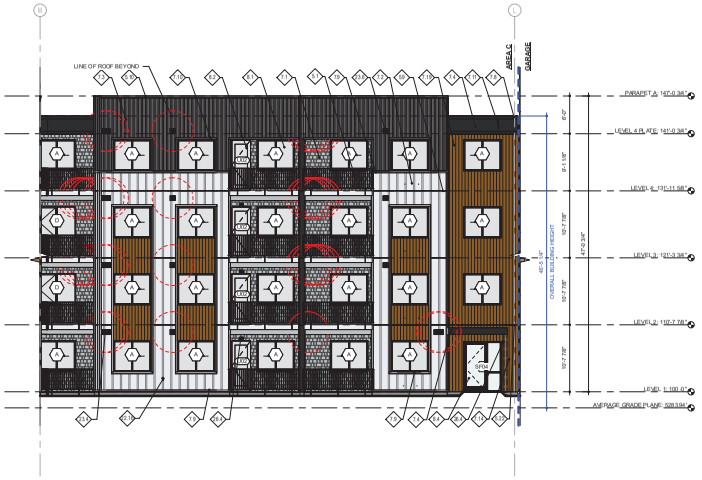
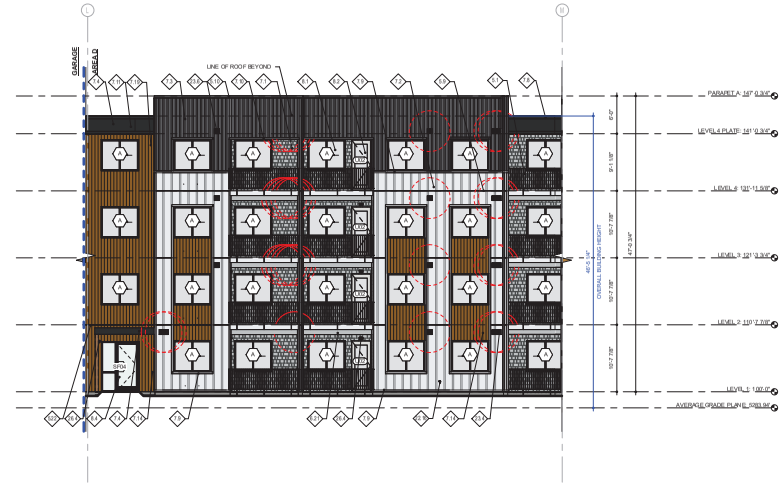
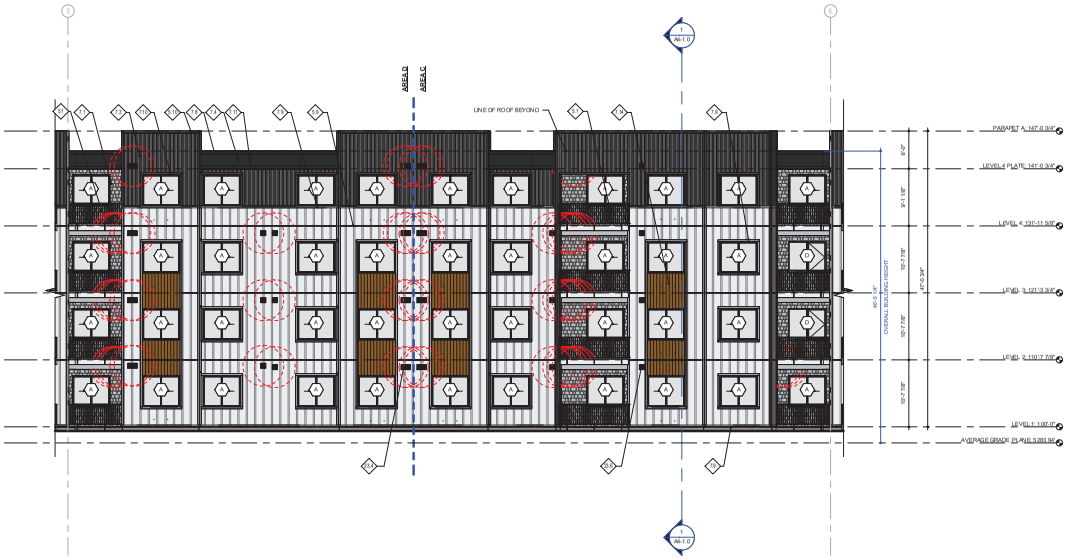


3 EAST COURTYARD ELEVATION - AREA C
1/8" = 1'-0"



2 WEST COURTYARD ELEVATION - AREA D
1/8" = 1'-0"



1 NORTH COURTYARD ELEVATION - AREA C/D
1/8" = 1'-0"

GENERAL NOTES

- PROVIDE METAL FLASHING/DRIP CAP OVER ALL DOORS AND WINDOWS AND AS OTHERWISE INDICATED.
- PROVIDE METAL WALL FLASHING AT ALL ROOF/WALL TRANSITIONS.
- BUILDING SIGNAGE: 8" HIGH LETTERS ON A CONTRASTING BACKGROUND. TWO LOCATIONS MIN. PER BUILDING. COORDINATE WITH ARCHITECT AND LOCAL FIRE AUTHORITY.
- PROVIDE 36" STONE, BRICK, AGGREGATE @ STONE OR FLAT TRIM @ SIDING FOR EXTERIOR LIGHT FIXTURE. SEE ELEVATIONS FOR LOCATIONS.
- OVERHEAD DOOR HEADER DIMENSIONS ARE TAKEN FROM THE TOP OF ADJACENT FLAT SLAB U.E. ELEV.+100'-0"= 11'-1 F.
- ALL ROOFTOP VENTS AND SIMILAR PROTRUSIONS WILL BE PAINTED TO MATCH THE ROOF COLOR.
- ALL BUILDING MOUNTED METERS WILL BE PAINTED TO MATCH THE WALL COLOR.

MATERIAL LEGEND

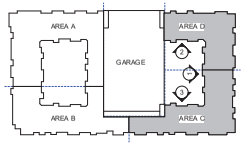
- CEMENTITIOUS PANEL - SW 6258 TRICORN BLACK
- CEMENTITIOUS B&B (A) 8" SPACING SW 7674 PEPPERCORN
- CEMENTITIOUS B&B (B) 16" SPACING SW 7138 LAVENDER WISP
- CEMENTITIOUS SHAKE SIDING - SW 6254 LAZY GRAY
- "WOOD" LOOK PANEL - SAGIPER - CHERRY ZEBRAWOOD OR SIM.
- CMU - BASALITE 639WR - GROUNDFACE

BUILDING COLORS

SOFFIT: CEMENTITIOUS SOFFIT BOARD, SW6258 TRICORN BLACK. RE: RCP
SOFFIT: CEMENTITIOUS SOFFIT BOARD, SW7674 PEPPERCORN. RE: RCP
FASCIA: CEMENTITIOUS PANEL/TRIM BOARD, SW6258 TRICORN BLACK
BALCONY RAILINGS: PAINTED: SW7138 LAVENDAR WISP
HIGH WINDOW SILLS: SW 7674
GARAGE CANOPIES: PAINT TO MATCH FIELD
PRIMARY ENTRY PANELS: SW7674 PEPPERCORN
STOVE FRONT FRAMING: BLACK
STEEL COLUMNS - BALCONIES: PAINTED: SW7674 PEPPERCORN
STEEL COLUMNS - CANOPIES: PAINTED: SW6045 ANTIQUARIAN BROWN
PRECAST WALL PANELS: PAINTED: SW7674 PEPPERCORN. RE: ELEVATIONS
PRECAST WALL PANELS: PAINTED: SW6045 ANTIQUARIAN BROWN. RE: ELEVATIONS
PRECAST SPANDREL PANELS: TEXTURED FINISH: FORMLINER 2/16 AMAZONAS, PAINTED: SW7138 LAVENDAR WISP. RE: ELEVATIONS

KEYNOTES

NO.	NOTE
5.1	STEEL BALCONY GUARDRAIL 42" 42" AFF - SHOP PRIMED, PAINT IN FIELD
5.9	HORIZONTAL FLASHING AT BOARD/BATTEN. INSTALL PER MFG. SPECIFICATIONS
5.10	PRE-FINISHED METAL PARAPET COPING, COLOR TO MATCH FIELD
5.12	HORIZONTAL FLASHING AT SAGIPER. INSTALL PER MFG. SPECIFICATIONS
6.21	PRESSURE TREATED BEAM, PAINTED SW6254 LAZY GRAY RE: STRUCT
7.1	CEMENTITIOUS STRAIGHT EDGE SHAKE SIDING - LAZY GRAY - SW6254. RE: ELEVATIONS
7.2	VERTICAL CEMENTITOUS BOARD & BATTEN 9" EXPOSURE - LAVENDER WISP - SW7138 RE ELEVATIONS
7.3	VERTICAL CEMENTITOUS BOARD & BATTEN 9" EXPOSURE - PEPPERCORN - SW7674 RE: ELEVATIONS
7.4	CEMENTITOUS PANEL - SMOOTH FINISH - TRICORN BLACK - SW6258 RE: ELEVATIONS
7.8	4"x6" CEMENTITOUS TRIM BOARD - SMOOTH FINISH - TRICORN BLACK - SW6258
7.9	5"x4" CEMENTITOUS TRIM BOARD - SMOOTH FINISH - LAVENDER WISP - SW7138
7.10	5"x4" CEMENTITOUS TRIM BOARD - SMOOTH FINISH - PEPPERCORN - SW7674
7.11	CEMENTITOUS PANEL BUTT JOINT @ T-REVEAL
7.14	5 AG WALL V-GROOVE EXTERIOR CLADDING BY SAGIPER VERTICAL ORIENTATION. FINISH: REF #10 CHERRY ZEBRAWOOD. INSTALL PER MFG GUIDELINES AND SPECIFICATIONS
7.19	5 AG WALL V-GROOVE EXTERIOR CLADDING BY SAGIPER VERTICAL ORIENTATION. CUSTOM LENGTH FROM LEVEL 2 - 4. FINISH: REF #1.0 CHERRY ZEBRAWOOD. INSTALL PER MFG. GUIDELINES AND SPECIFICATIONS
8.1	VINYL WINDOW W/ LOW E GLAZING RE: WINDOW SCHEDULE
8.2	VINYL DOOR, FULL-LITE. RE: DOOR SCHEDULE
8.4	ALUMINUM ST DRIP FOINT, BLACK FINISH. RE: STOREFRONT LEGEND
22.16	HOSE BIBB. RE: PLUMBING
23.4	WALL MOUNTED EXHAUST VENT, COLOR TO MATCH FIELD. RE: MECHANICAL
23.6	OUTSIDE AIR SUPPLY LOUVER, COLOR TO MATCH FIELD. RE: MECHANICAL
26.4	EXTERIOR SCONCE, MOUNTED AT 8'-0" AFF.UNO. RE ELEC



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ISSUE FOR CONSTRUCTION
06.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: ENLARGED ELEVATIONS - COURTYARD 2
Sheet Number: A3-1.7

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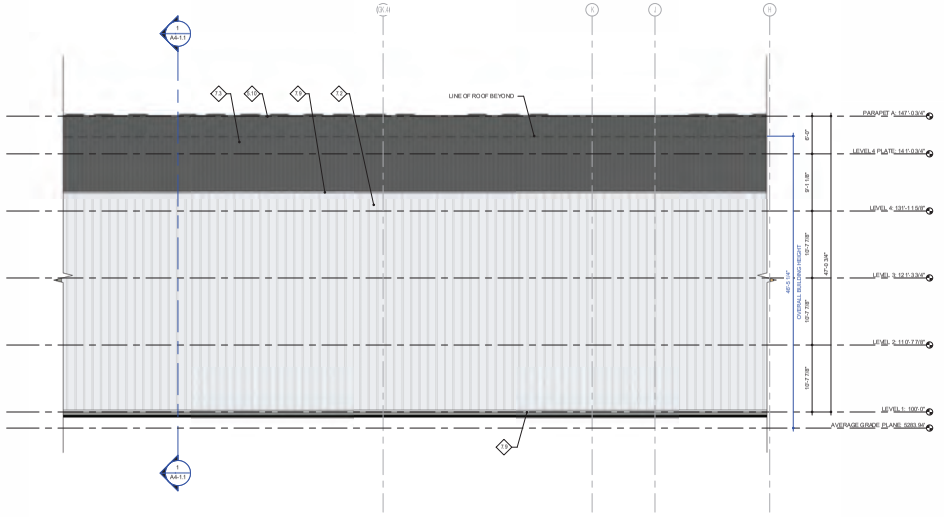
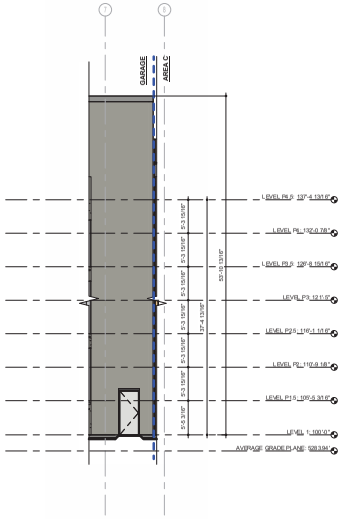
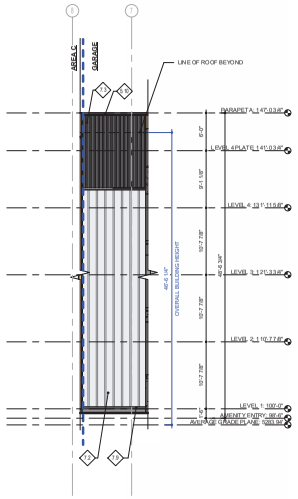


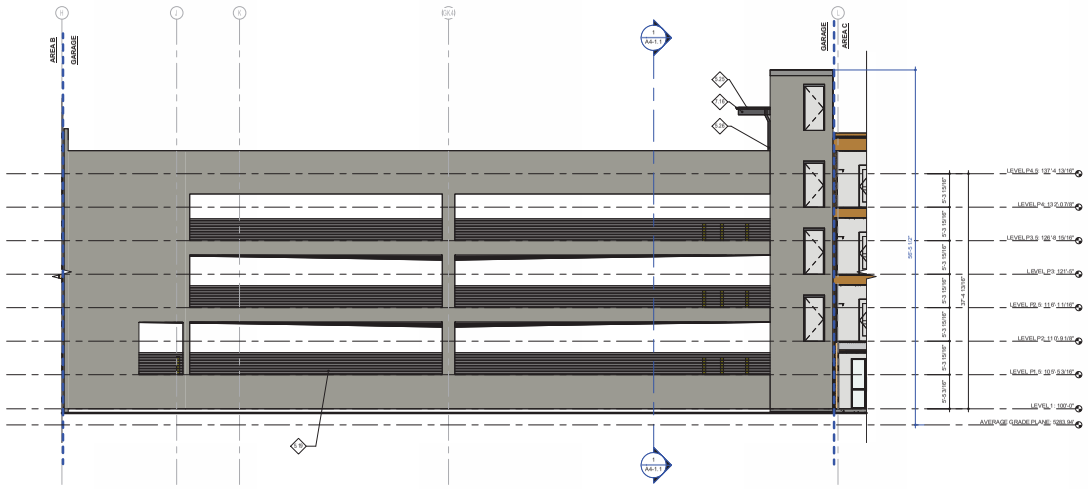
4 EAST ELEVATION AT GARAGE WELL
1/8" = 1'-0"



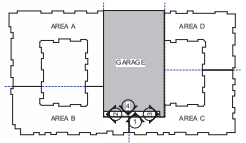
3 NORTH ELEVATION AT GARAGE WELL - STAIR 3
1/8" = 1'-0"



2 SOUTH ELEVATION AT GARAGE WELL
1/8" = 1'-0"



1 GARAGE WEST ELEVATION
1/8" = 1'-0"



ELEVATION KEY PLAN

GENERAL NOTES

- PROVIDE METAL FLASHING/DRIP CAP OVER ALL DOORS AND WINDOWS AND AS OTHERWISE INDICATED.
- PROVIDE METAL WALL FLASHING AT ALL ROOF/WALL TRANSITIONS.
- BUILDING SIGNAGE: 8" HIGH LETTERS ON A CONTRASTING BACKGROUND. TWO LOCATIONS MIN. PER BUILDING. COORDINATE FINAL LOCATIONS WITH LOCAL FIRE AUTHORITY.
- PROVIDE STONE, BRICK, AGGREGATE @ STONE OR FLAT TRIM @ SIDING FOR EXTERIOR LIGHT FIXTURE. SEE ELEVATIONS FOR LOCATIONS.
- OVERHEAD DOOR HEADER DIMENSIONS ARE TAKEN FROM THE TOP OF ADJACENT FLAT SLAB U.E. ELEV.+100'-0"/ +1'-1 F.
- ALL ROOFTOP VENTS AND SIMILAR PROTRUSIONS WILL BE PAINTED TO MATCH THE ROOF COLOR.
- ALL BUILDING MOUNTED METERS WILL BE PAINTED TO MATCH THE WALL COLOR.

MATERIAL LEGEND

	CEMENTITIOUS PANEL - SW 6258 TRICORN BLACK
	CEMENTITIOUS B&B (A) 8" SPACING SW 7674 PEPPERCORN
	CEMENTITIOUS B&B (B) 16" SPACING SW 7138 LAVENDER WISP
	CEMENTITIOUS SHAKE SIDING - SW 6254 LAZY GRAY
	"WOOD" LOOK PANEL - SAGIPER - CHERRY/ ZEBRAWOOD OR SIM.
	CMU - BASALITE 639WR - GROUNDFACE

BUILDING COLORS

SOFFIT: CEMENTITIOUS SOFFIT BOARD, SW6258 TRICORN BLACK. RE: RCP
SOFFIT: CEMENTITIOUS SOFFIT BOARD, SW7674 PEPPERCORN. RE: RCP
FASCIA: CEMENTITIOUS PANEL/TRIM BOARD, SW6258 TRICORN BLACK
BALCONY RAILINGS: PAINTED: SW7138 LAVENDAR WISP
VINYL WINDOWS: WHITE
MECHANICAL VENTS: PAINT TO MATCH FIELD
STOREFRONT FRAMING: PAINTED: SW7674 PEPPERCORN
STOREFRONT FRAMING BLACK
STEEL COLUMNS - BALCONIES: PAINTED: SW7674 PEPPERCORN
STEEL COLUMNS - CANOPIES: PAINTED: SW9045 ANTIQUARIAN BROWN
PRECAST WALL PANELS: PAINTED: SW7674 PEPPERCORN. RE: ELEVATIONS
PRECAST WALL PANELS: PAINTED: SW9045 ANTIQUARIAN BROWN. RE: ELEVATIONS
PRECAST SPANDREL PANELS: TEXTURED FINISH. FORMLINER 2/95 AMAZONAS. PAINTED: SW7138 LAVENDAR WISP. RE: ELEVATIONS

KEYNOTES

NO.	NOTE
5.15	PREFINISHED METAL PARAPET COPING, COLOR TO MATCH FIELD
5.19	STEEL HORIZONTAL CABLE GUARDRAIL/CRASH BARRIER AT GARAGE, 42" MIN. ABOVE FINISH FLOOR
5.25	METAL GUTTER, PAINTED SW7674 PEPPERCORN
5.26	METAL DOWNSPOUT, PAINTED SW 7674 PEPPERCORN
T.2	VERTICAL CEMENTITIOUS BOARD & BATTEN 10" EXPOSURE - LAVENDER WISP - SW7138 RE: ELEVATIONS
T.3	VERTICAL CEMENTITIOUS BOARD & BATTEN 9" EXPOSURE - PEPPERCORN - SW7674 RE: ELEVATIONS
T.9	9/4IN CEMENTITIOUS TRIM BOARD -SMOOTH FINISH - LAVENDER WISP - SW7138
T.16	CEMENTITIOUS FASCIA - PEPPERCORN - SW7674

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ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
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Title: ENLARGED ELEVATIONS - GARAGE WELL
Sheet Number: COMMON
A3-1.9

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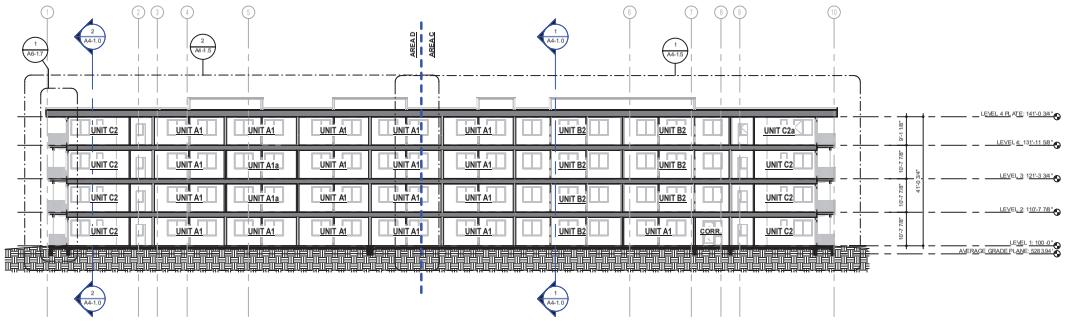
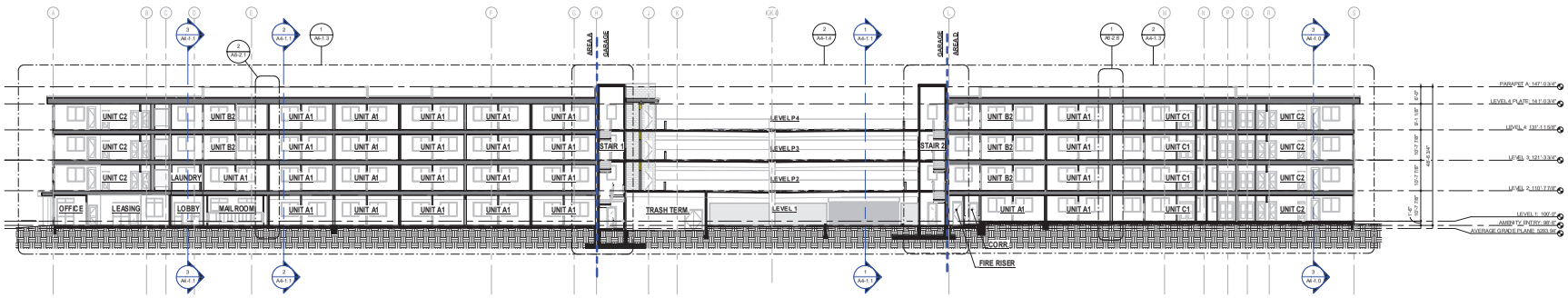
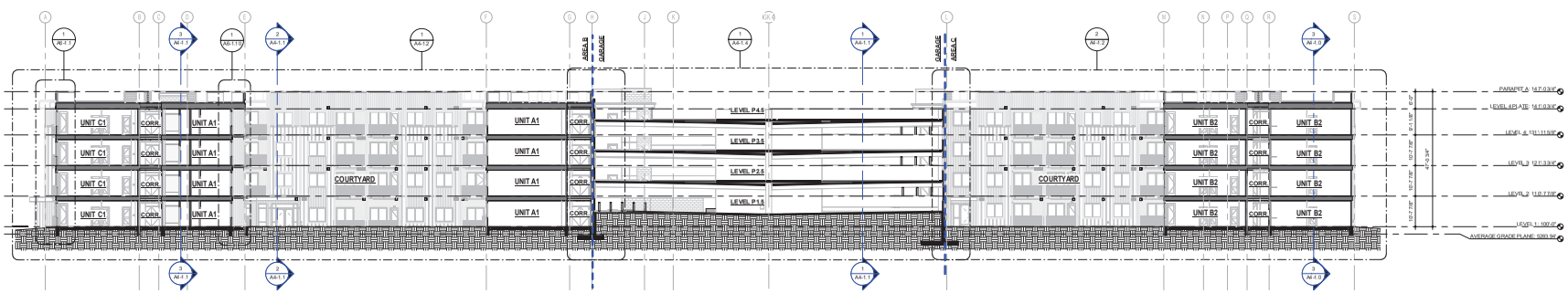


3 TRANSVERSE SECTION 1
1/16" = 1'-0"



2 LONGITUDINAL SECTION 2
1/16" = 1'-0"



1 LONGITUDINAL SECTION 1
1/16" = 1'-0"

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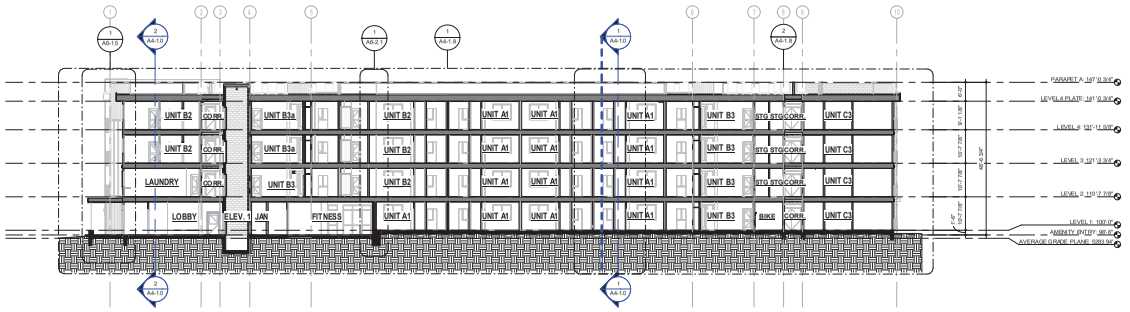
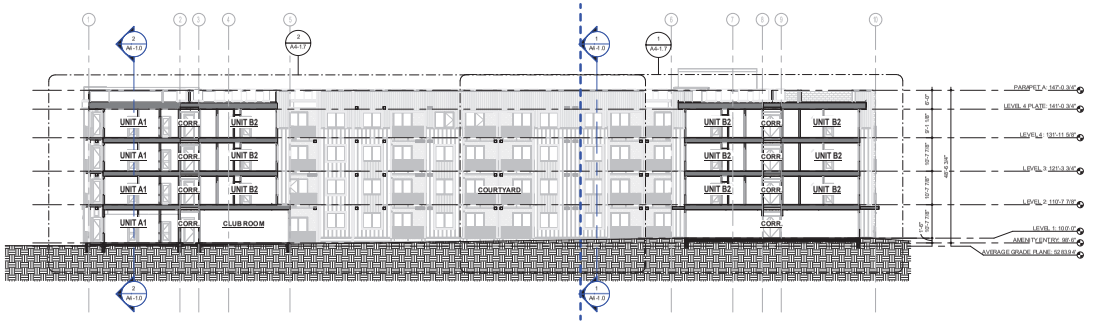
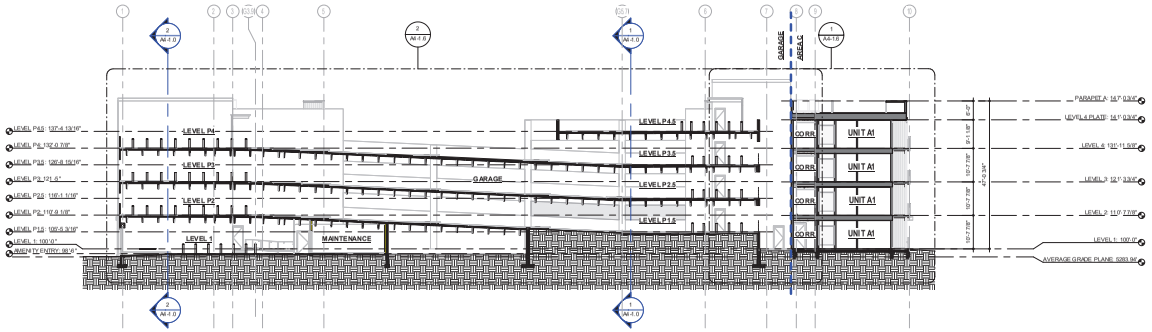


3 TRANSVERSE SECTION 4
1/16" = 1'-0"



2 TRANSVERSE SECTION 3
1/16" = 1'-0"



1 TRANSVERSE SECTION 2
1/16" = 1'-0"

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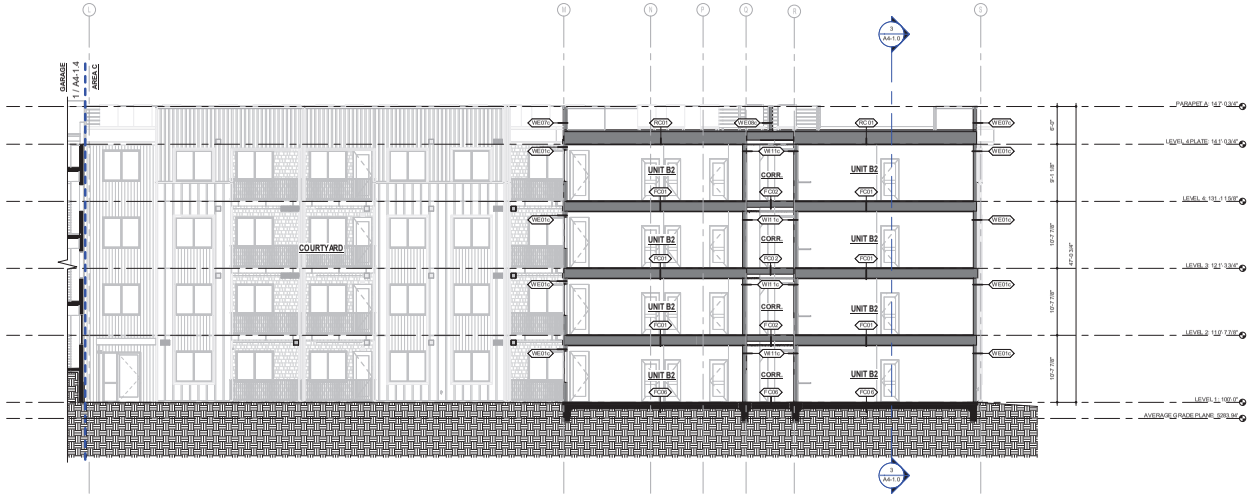
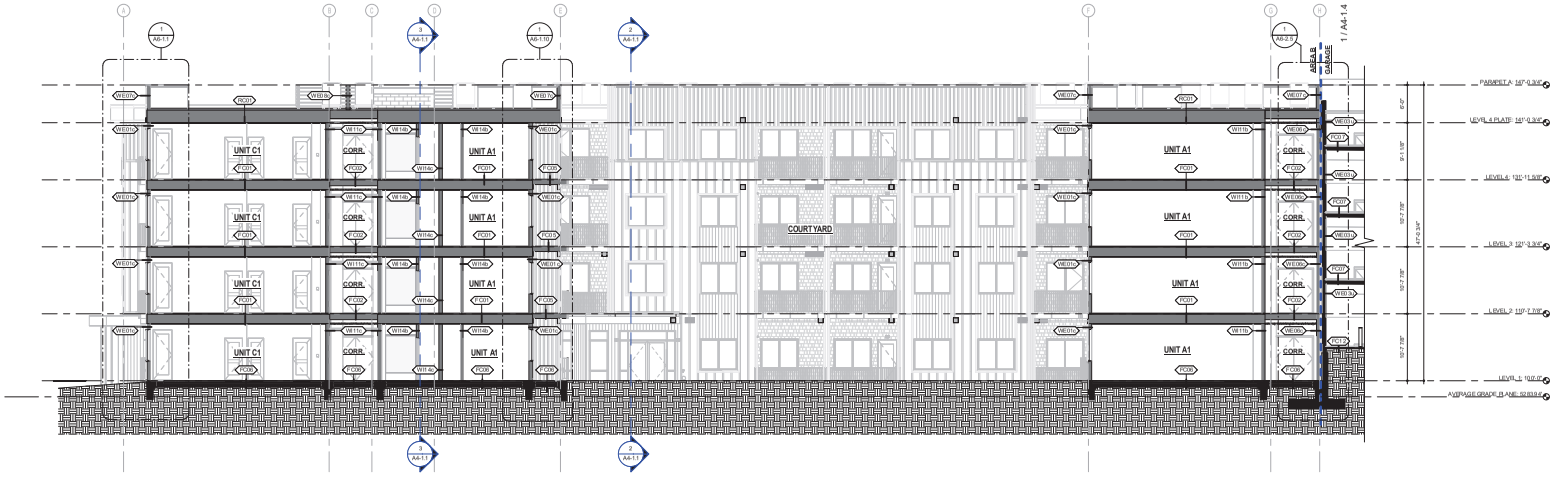


2 ENLARGED LONGITUDINAL SECTION 1 - AREA C
1/8" = 1'-0"



1 ENLARGED LONGITUDINAL SECTION 1 - AREA B
1/8" = 1'-0"

WALL TYPE SCHEDULE

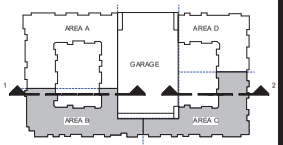
MARK	FIRE RATING	DESCRIPTION
WE01c	1 HR	TYP. EXTERIOR WALL
WE02c	2 HR	9" CONCRETE SHAFT WALL
WE03c	1 HR	9" CONCRETE WALL
WE03e	1 HR	GARAGE, 12" CONCRETE WALL
WE03c	1 HR	9" CONCRETE WALL
WE04c	2 HR	9" CMU - 2HR FIRE BARRIER
WE05c	1 HR	9" CMU - 1 HR
WE06c	1 HR	EXTERIOR WALL - 1 HR SYMMETRIC
WE06c	1 HR	EXTERIOR WALL - 1 HR SYMMETRIC
WE07c	NR	2x6 PARAPET WALL - NR
WE08c	NR	2x6 WALL - NR @ CONDENSERS
WE09c	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE09c	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE10c	1 HR	9" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
WE01c	2 HR	9" CMU - 2HR FIRE WALL
WE02c	2 HR	9" CMU - 2HR FIRE BARRIER
WI03	2 HR	FIRE WALL - 2HR
WI03b	2 HR	FIRE WALL, 2-HR, (2) 2X4 WITH (2) 1" SHAFTLINER
WI03h	2HR	FIRE WALL, 2-HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
WI04b	2 HR	FIRE BARRIER, 2-HR, 2x WITH (2) 5/8" TYPE 'X' GYP
WI04c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
WI05c	2 HR	FIRE BARRIER, 2-HR EXIT ACCESS
WI06b	2-HR	2X4 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
WI06c	2-HR	2X6 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
WI07c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
WI08c	1 HR	OCCUPANCY SEPARATION - 1 HR FIRE BARRIER
WI09h	1 HR	3 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
WI09k	1 HR	9" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
WI10b	1 HR	TYP. UNIT DEMISING - 1 HR FIRE PARTITION
WI10c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
WI11b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
WI11c	1 HR	Inversion
WI12b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
WI12c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
WI13b	1 HR	2X4, 1HR - BEARING
WI13c	1 HR	2X6, 1HR - BEARING
WI14b	NR	2X4 INTERIOR WALL - NR
WI14c	NR	2X6 INTERIOR WALL - NR
WI15b	NR	2x4 INTERIOR NON BEARING WALL, GWB ON 1 SIDE
WI15c	NR	2x6 INTERIOR NON BEARING WALL, GWB ON 1 SIDE
WI16	NR	P/P METAL HAT CHANNEL FURRING WALL
WI17b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
WI18b	NR	9" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

FLOOR/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
FC01	1 HR	TYP. UNIT FLOOR/CEILING ASSEMBLY
FC02	1 HR	TYP. CORRIDOR FLOOR/CEILING ASSEMBLY
FC03	NR	TYP. DROP CEILING
FC05	NR	TYP. BALCONY ASSEMBLY - DRIP - THRU
FC06	NR	POST-TENSIONED SLAB
FC07	NR	NON-RATED PT CONCRETE SLAB
FC07	1HR	PRECAST CONCRETE FLOOR/CEILING
FC07	1HR	TYP. GARAGE FLOOR/CEILING
FC08	1HR	BALCONY ASSEMBLY - CONDITIONED SPACE
FC09	1HR	BALCONY ASSEMBLY
FC10	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC11	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC12	NR	SLAB ON GRADE

ROOF/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
RC01	1HR	TYP. ROOF ASSEMBLY
RC02	1HR	TYP. ROOF ASSEMBLY
RC03	1HR	1 HR HORIZONTAL ASSEMBLY
RC04	1 HR	1 HR HORIZONTAL ASSEMBLY
RC05	NR	GYP ROOF ASSEMBLY
RC06	NR	GF TJI ROOF ASSEMBLY
RC07	NR	NR HORIZONTAL ASSEMBLY



BUILDING SECTION KEY PLAN

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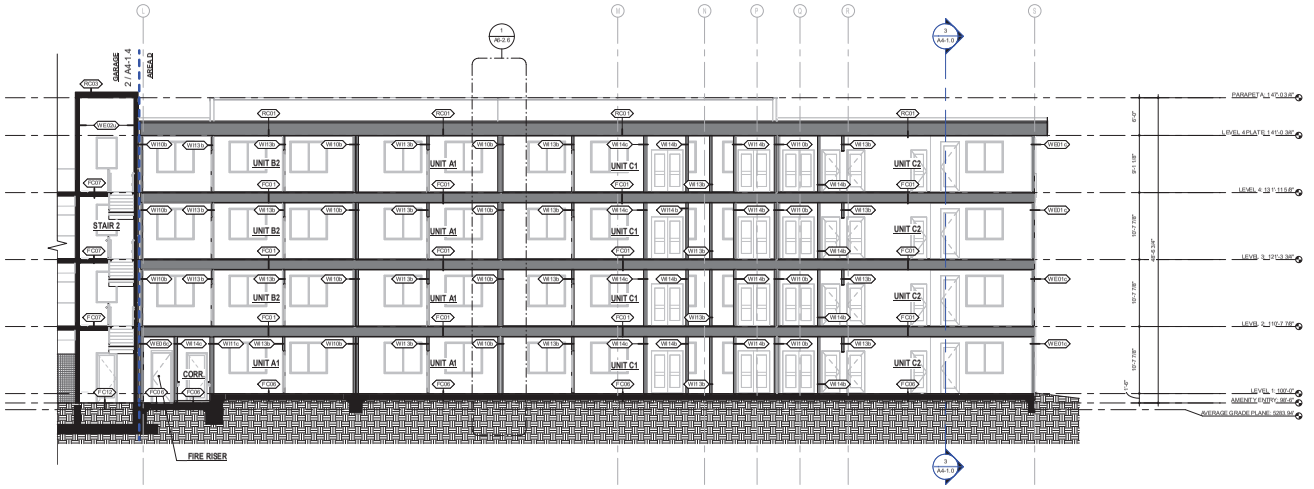
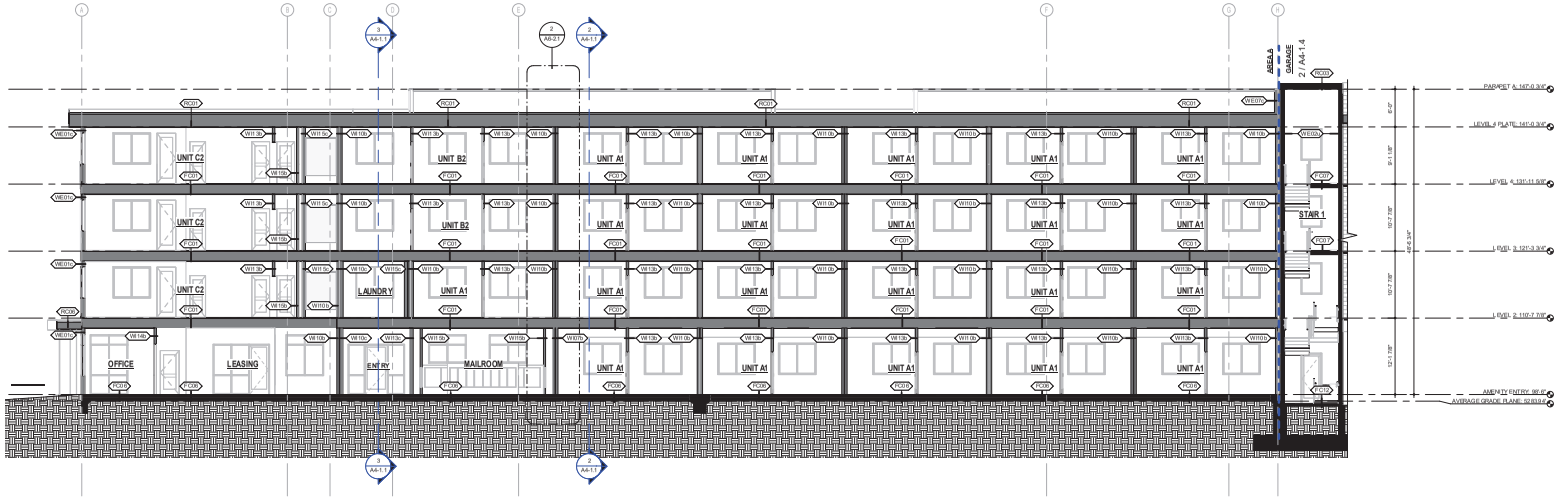


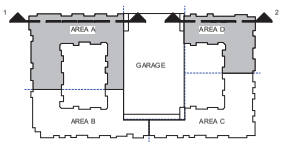
2 ENLARGED LONGITUDINAL SECTION 2 - AREA D

1/8" = 1'-0"



1 ENLARGED LONGITUDINAL SECTION 2 - AREA A

1/8" = 1'-0"



BUILDING SECTION KEY PLAN

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
W101c	1 HR	TYP. EXTERIOR WALL
W102c	2 HR	9" CONCRETE SHAFT WALL
W103c	1 HR	9" CONCRETE WALL
W103e	1 HR	GARAGE 12" CONCRETE WALL
W103c	1 HR	9" CONCRETE WALL
W104c	2 HR	9" CMU - 2HR FIRE BARRIER
W105c	1 HR	9" CMU - 1 HR
W106b	1 HR	EXTERIOR WALL - 1 HR SYMMETRIC
W106c	1 HR	EXTERIOR WALL - 1 HR SYMMETRIC
W107c	NR	2x6 PARAPET WALL - NR
W108c	NR	2x6 WALL - NR@ CONDENSERS
W109b	NR	2x4 EXTERIOR FURR WALL - NON RATED
W109c	NR	2x4 EXTERIOR FURR WALL - NON RATED
W110b	1 HR	9" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
W101c	2 HR	9" CMU - 2HR FIRE WALL
W102c	2 HR	9" CMU - 2HR FIRE BARRIER
W103	2 HR	FIRE WALL - 2HR
W103b	2 HR	FIRE WALL, 2-HR, (2) 2X4 WITH (2) 1" SHAFTLINER
W103h	2HR	FIRE WALL, 2-HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
W104b	2 HR	FIRE BARRIER, 2-HR, 2x WITH (2) 5/8" TYPE 'X' GYP
W104c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
W105c	2 HR	FIRE BARRIER, 2-HR EXIT ACCESS
W106b	2-HR	2X4 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W106c	2-HR	2X6 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W107c	1 HR	OCCUPANCY SEPARATION - 1 HR FIRE BARRIER
W108c	1 HR	OCCUPANCY SEPARATION - 1 HR FIRE BARRIER
W109h	1 HR	3 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W109k	1 HR	9" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W110b	1 HR	TYP. UNIT DEMISING - 1 HR FIRE PARTITION
W110c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
W111b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
W111c	1 HR	Inverted
W112b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
W112c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
W113b	1 HR	2X4, 1HR - BEARING
W113c	1 HR	2X6, 1HR - BEARING
W114b	NR	2X4 INTERIOR WALL - NR
W114c	NR	2X6 INTERIOR WALL - NR
W115b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W115c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W116	NR	P/P METAL HAT CHANNEL FURRING WALL
W117b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
W118b	NR	9" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

FLOOR/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
FC01	1 HR	TYP. UNIT FLOOR/CEILING ASSEMBLY
FC02	1 HR	TYP. CORRIDOR FLOOR/CEILING ASSEMBLY
FC03	NR	TYP. DROP CEILING
FC05	NR	TYP. BALCONY ASSEMBLY - DROP - THRU
FC06	NR	POST-TENSIONED SLAB
FC07	NR	NON-RATED PT CONCRETE SLAB
FC07	1HR	PRECAST CONCRETE FLOOR/CEILING
FC07	1HR	TYP. GARAGE FLOOR/CEILING
FC08	1HR	BALCONY ASSEMBLY - CONDITIONED SPACE
FC09	1HR	BALCONY ASSEMBLY
FC10	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC11	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC12	NR	SLAB ON GRADE

ROOF/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
RC01	1HR	TYP. ROOF ASSEMBLY
RC02	1HR	TYP. ROOF ASSEMBLY
RC03	1 HR	1 HR HORIZONTAL ASSEMBLY
RC04	1 HR	1 HR HORIZONTAL ASSEMBLY
RC05	NR	GV ROOF ASSEMBLY
RC06	NR	GF TJI ROOF ASSEMBLY
RC07	NR	NR HORIZONTAL ASSEMBLY

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Sheet Number: A4-1.3

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2 ENLARGED TRANSVERSE SECTION 1 - AREA D
1/8" = 1'-0"



1 ENLARGED TRANSVERSE SECTION 1 - AREA C
1/8" = 1'-0"

WALL TYPE SCHEDULE

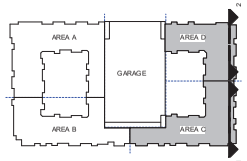
MARK	FIRE RATING	DESCRIPTION
W001c	1 HR	TYP. EXTERIOR WALL
W002c	2 HR	9" CONCRETE SHAFT WALL
W003c	1 HR	9" CONCRETE WALL
W003e	1 HR	GARAGE, 12" CONCRETE WALL
W003c	1 HR	9" CONCRETE WALL
W004c	2 HR	9" CMU - 2HR FIRE BARRIER
W005c	1 HR	9" CMU - 1 HR
W006c	1 HR	EXTERIOR WALL - 1 HR SYMMETRIC
W006c	1 HR	EXTERIOR WALL - 1 HR SYMMETRIC
W007c	NR	2x6 PARAPET WALL - NR
W008c	NR	2x6 WALL - NR@ CONDENSERS
W009c	NR	2x4 EXTERIOR FURR WALL - NON RATED
W009c	NR	2x4 EXTERIOR FURR WALL - NON RATED
W010k	1 HR	9" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
W01c	2 HR	9" CMU - 2HR FIRE WALL
W02c	2 HR	9" CMU - 2HR FIRE BARRIER
W03	2 HR	FIRE WALL - 2HR
W03b	2 HR	FIRE WALL, 2-HR, (2) 2X4 WITH (2) 1" SHAFTLINER
W03h	2HR	FIRE WALL, 2-HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
W04b	2 HR	FIRE BARRIER, 2-HR, 2x WITH (2) 5/8" TYPE 'X' GYP
W04c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
W05c	2 HR	FIRE BARRIER, 2-HR EXIT ACCESS
W006c	2-HR	2X4 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W006c	2-HR	2X6 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W007c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W008c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W009c	1 HR	3 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W009k	1 HR	9" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W010b	1 HR	TYP. UNIT DEMISING - 1 HR FIRE PARTITION
W010c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
W011b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
W011c	1 HR	Inverted
W012b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
W013b	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
W013b	1 HR	22x4, 1HR - BEARING
W013c	1 HR	2X6, 1HR - BEARING
W014b	NR	2X4 INTERIOR WALL - NR
W014c	NR	2X6 INTERIOR WALL - NR
W015b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W015c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W16	NR	P/P METAL HAT CHANNEL FURRING WALL
W017b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
W018k	NR	9" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

FLOOR/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
FC01	1 HR	TYP. UNIT FLOOR/CEILING ASSEMBLY
FC02	1 HR	TYP. CORRIDOR FLOOR/CEILING ASSEMBLY
FC03	NR	TYP. DROP CEILING
FC05	NR	TYP. BALCONY ASSEMBLY - DRIP - THRU
FC06	NR	POST-TENSIONED SLAB
FC07	NR	NON-RATED PT CONCRETE SLAB
FC07	1 HR	PRECAST CONCRETE FLOOR/CEILING
FC07	1HR	TYP. GARAGE FLOOR/CEILING
FC08	1 HR	BALCONY ASSEMBLY - CONDITIONED SPACE
FC09	1 HR	BALCONY ASSEMBLY
FC10	2HR	FL.CORCEILING ASSEMBLY - 2HR EXIT ACCESS
FC11	2HR	FL.CORCEILING ASSEMBLY - 2HR EXIT ACCESS
FC12	NR	SLAB ON GRADE

ROOF/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
RC01	1HR	TYP. ROOF ASSEMBLY
RC02	1HR	TYP. ROOF ASSEMBLY
RC03	1HR	1 HR HORIZONTAL ASSEMBLY
RC04	1 HR	1 HR HORIZONTAL ASSEMBLY
RC05	NR	2X ROOF ASSEMBLY
RC06	NR	12" TJI ROOF ASSEMBLY
RC07	NR	NR HORIZONTAL ASSEMBLY



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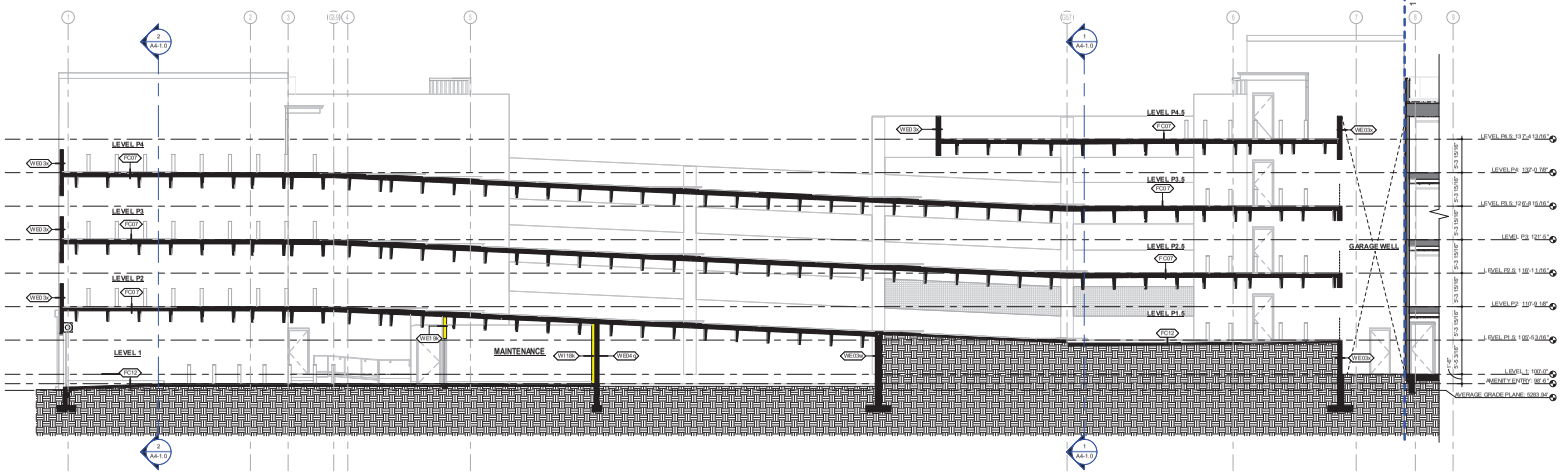
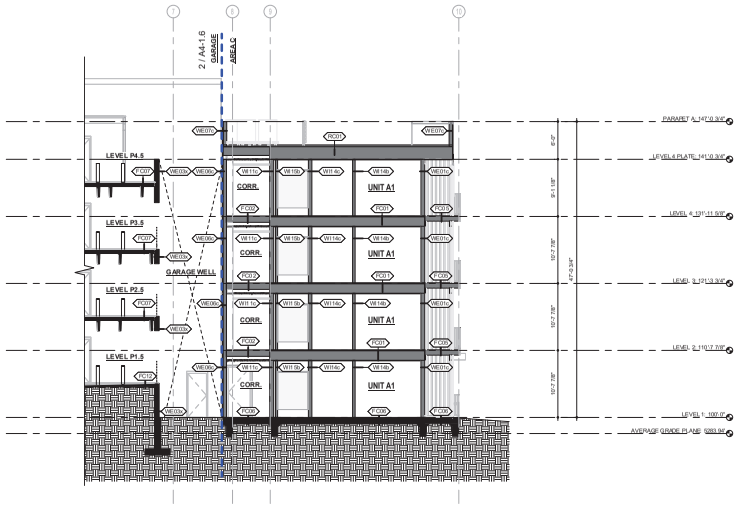


2 ENLARGED TRANSVERSE SECTION 2 - GARAGE

1/8" = 1'-0"



1 ENLARGED TRANSVERSE SECTION 2 - AREA C

1/8" = 1'-0"

WALL TYPE SCHEDULE

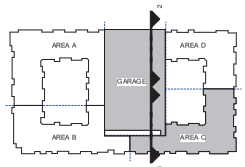
MARK	FIRE RATING	DESCRIPTION
W101c	1 HR	TYP. EXTERIOR WALL
W102c	2 HR	9" CONCRETE SHAFT WALL
W103c	1 HR	9" CONCRETE WALL
W103e	1 HR	GARAGE, 12" CONCRETE WALL
W103c	1 HR	9" CONCRETE WALL
W104c	2 HR	9" CMU - 2HR FIRE BARRIER
W105c	1 HR	9" CMU - 1 HR
W106b	1 HR	EXTERIOR WALL - 1 HR SYMMETRIC
W106c	1 HR	EXTERIOR WALL - 1 HR SYMMETRIC
W107c	NR	2x6 PARAPET WALL - NR
W108c	NR	2x6 WALL - NR @ CONDENSERS
W109b	NR	2x4 EXTERIOR FURR WALL - NON RATED
W109c	NR	2x4 EXTERIOR FURR WALL - NON RATED
W110b	1 HR	9" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
W101c	2 HR	9" CMU - 2HR FIRE WALL
W102c	2 HR	9" CMU - 2HR FIRE BARRIER
W103	2 HR	FIRE WALL - 2HR
W103b	2 HR	FIRE WALL, 2-HR, (2) 2X4 W/ TH (2) 1" SHAFTLINER
W103h	2HR	FIRE WALL, 2-HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
W104b	2 HR	FIRE BARRIER, 2-HR, 2x WITH (2) 5/8" TYPE 'X' GYP
W104c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
W105c	2 HR	FIRE BARRIER, 2-HR EXIT ACCESS
W106b	2-HR	2X4 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W106c	2-HR	2X6 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W107c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W108c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W109h	1 HR	9 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W109k	1 HR	9" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W110b	1 HR	TYP. UNIT DEMISING - 1 HR FIRE PARTITION
W110c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
W111b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
W111c	1 HR	inverse=
W112b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
W113c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
W113b	1 HR	2X4, 1HR - BEARING
W113c	1 HR	2X6, 1HR - BEARING
W114b	NR	2X4 INTERIOR WALL - NR
W114c	NR	2X6 INTERIOR WALL - NR
W115b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W115c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W116	NR	TYP METAL HAT CHANNEL FURRING WALL
W117b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
W118b	NR	9" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

FLOOR/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
FC01	1 HR	TYP. UNIT FLOOR/CEILING ASSEMBLY
FC02	1 HR	TYP. CORRIDOR FLOOR/CEILING ASSEMBLY
FC03	NR	TYP. DROP CEILING
FC05	NR	TYP. BALCONY ASSEMBLY - DRIP - THRU
FC06	NR	POST-TENSIONED SLAB
FC07	NR	NON-RATED PT CONCRETE SLAB
FC07	1HR	PRECAST CONCRETE FLOOR/CEILING
FC07	1HR	TYP. GARAGE FLOOR/CEILING
FC08	1HR	BALCONY ASSEMBLY - CONDITIONED SPACE
FC09	1HR	BALCONY ASSEMBLY
FC10	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC11	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC12	NR	SLAB ON GRADE

ROOF/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
RC01	1HR	TYP. ROOF ASSEMBLY
RC02	1HR	TYP. ROOF ASSEMBLY
RC03	1HR	1 HR HORIZONTAL ASSEMBLY
RC04	1 HR	1 HR HORIZONTAL ASSEMBLY
RC05	NR	2X ROOF ASSEMBLY
RC06	NR	1/2" TJI ROOF ASSEMBLY
RC07	NR	NR HORIZONTAL ASSEMBLY



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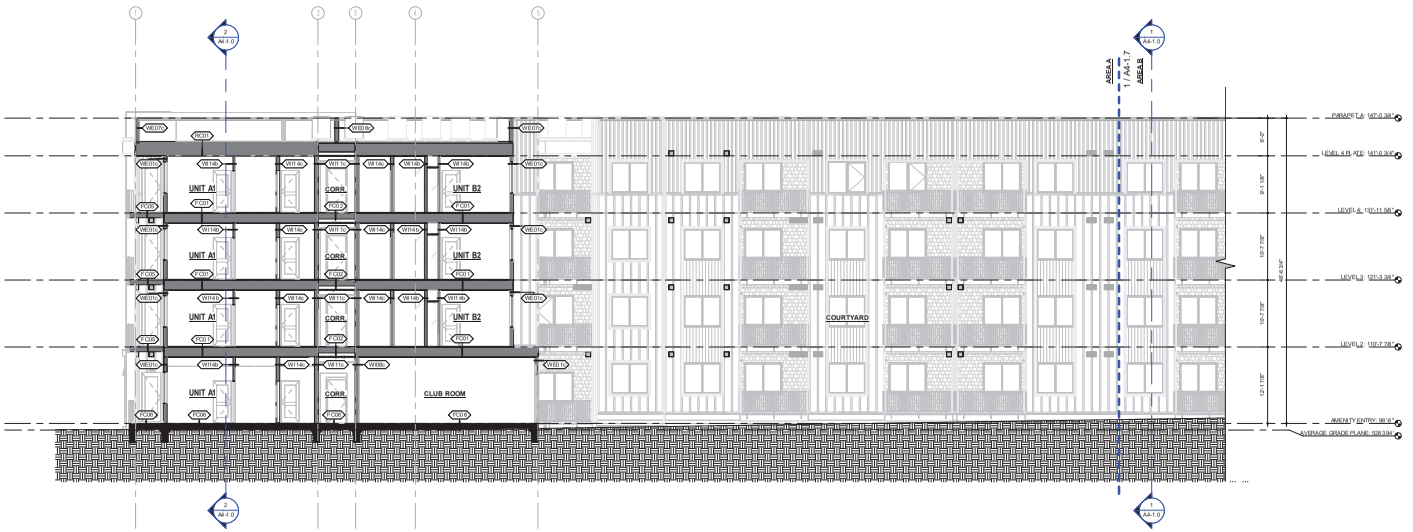
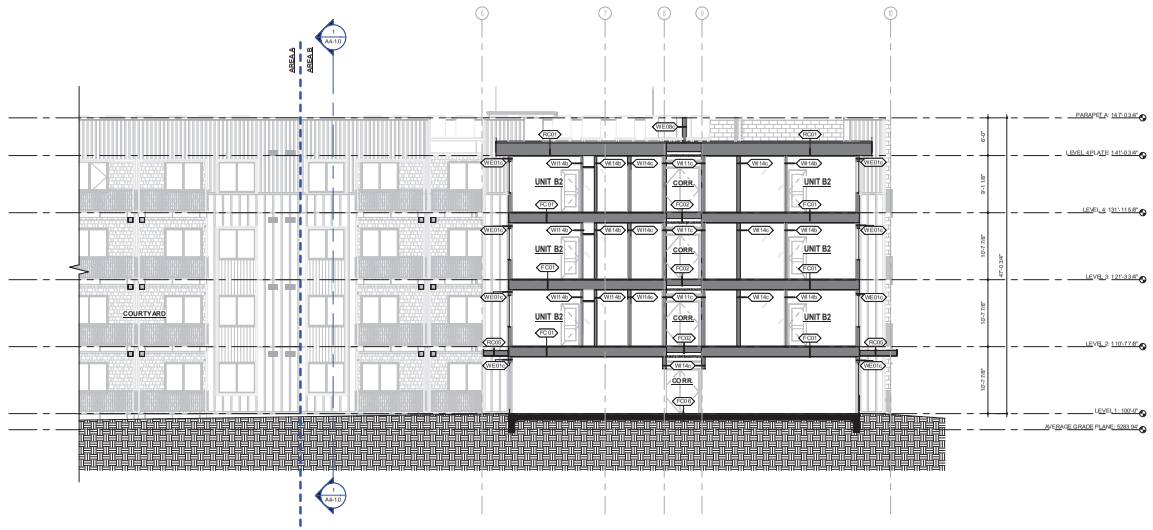


2 ENLARGED TRANSVERSE SECTION 3 - AREA A
1/8" = 1'-0"



1 ENLARGED TRANSVERSE SECTION 3 - AREA B
1/8" = 1'-0"

WALL TYPE SCHEDULE

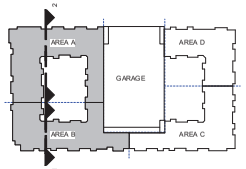
MARK	FIRE RATING	DESCRIPTION
WE01c	1 HR	TYP. EXTERIOR WALL
WE02c	2 HR	9" CONCRETE SHAFT WALL
WE03c	1 HR	9" CONCRETE WALL
WE03e	1 HR	GARAGE, 12" CONCRETE WALL
WE03c	1 HR	9" CONCRETE WALL
WE04c	2 HR	9" CMU - 2HR FIRE BARRIER
WE05c	1 HR	9" CMU - 1 HR
WE06c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE06c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE07c	NR	2x6 PARAPET WALL - NR
WE08c	NR	2x6 WALL - NR @ CONDENSERS
WE09c	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE09c	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE10c	1 HR	9" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
WE01c	2 HR	9" CMU - 2HR FIRE WALL
W02c	2 HR	9" CMU - 2HR FIRE BARRIER
W03	2 HR	FIRE WALL - 2HR
W03b	2 HR	FIRE WALL, 2-HR, (2) 2X4 WITH (2) 1" SHAFTLINER
W03h	2HR	FIRE WALL, 2-HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
W04b	2 HR	FIRE BARRIER, 2-HR, 2x WITH (2) 5/8" TYPE 'X' GYP
W04c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
W05c	2 HR	FIRE BARRIER, 2-HR EXIT ACCESS
W06b	2-HR	2X4 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W06c	2-HR	2X6 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W07c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W08c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W09h	1 HR	2 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W09k	1 HR	9" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W10b	1 HR	TYP. UNIT DEMISING - 1 HR FIRE PARTITION
W10c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
W11b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
W11c	1 HR	2x6 FIRE PARTITION, 1HR - CORRIDOR
W12b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
W12c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
W13b	1 HR	2X4, 1HR - BEARING
W13c	1 HR	2X6, 1HR - BEARING
W14b	NR	2X4 INTERIOR WALL - NR
W14c	NR	2X6 INTERIOR WALL - NR
W15b	NR	2X4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W15c	NR	2X6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W16	NR	FYP METAL HAT CHANNEL FURRING WALL
W17b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
W18b	NR	9" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

FLOOR/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
FC01	1 HR	TYP. UNIT FLOOR/CEILING ASSEMBLY
FC02	1 HR	TYP. CORRIDOR FLOOR/CEILING ASSEMBLY
FC03	NR	TYP. DROP CEILING
FC05	NR	TYP. BALCONY ASSEMBLY - DROP - THRU
FC06	NR	POST-TENSIONED SLAB
FC07	NR	NON-RATED PT CONCRETE SLAB
FC07	1HR	PRECAST CONCRETE FLOOR/CEILING
FC07	1HR	TYP. GARAGE FLOOR/CEILING
FC08	1HR	BALCONY ASSEMBLY - CONDITIONED SPACE
FC09	1HR	BALCONY ASSEMBLY
FC10	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC11	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC12	NR	SLAB ON GRADE

ROOF/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
RC01	1HR	TYP. ROOF ASSEMBLY
RC02	1HR	TYP. ROOF ASSEMBLY
RC03	1HR	1 HR HORIZONTAL ASSEMBLY
RC04	1 HR	1 HR HORIZONTAL ASSEMBLY
RC05	NR	2X ROOF ASSEMBLY
RC06	NR	12" TJI ROOF ASSEMBLY
RC07	NR	NR HORIZONTAL ASSEMBLY



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Job Number: 222001
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Checked By: JG
Title: ENLARGED BUILDING SECTIONS
Sheet Number: A4-1.7

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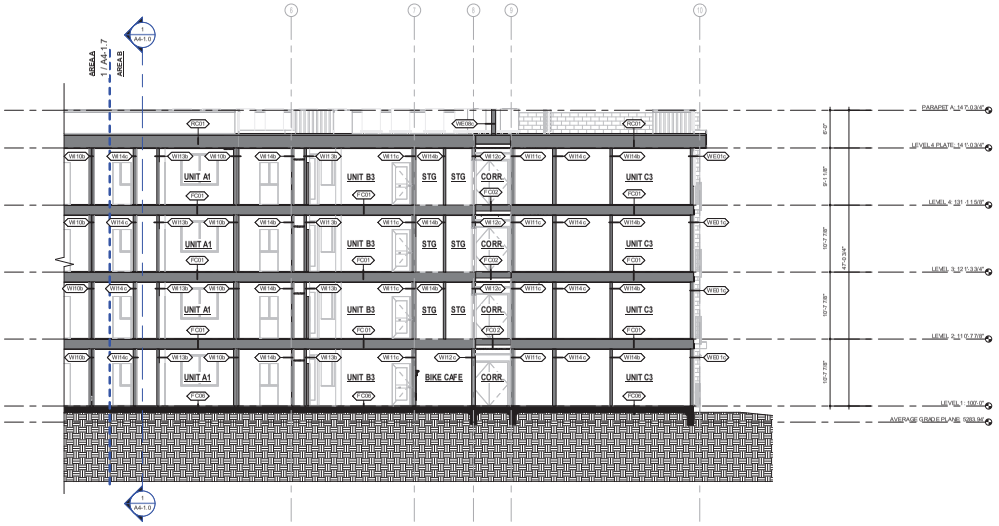
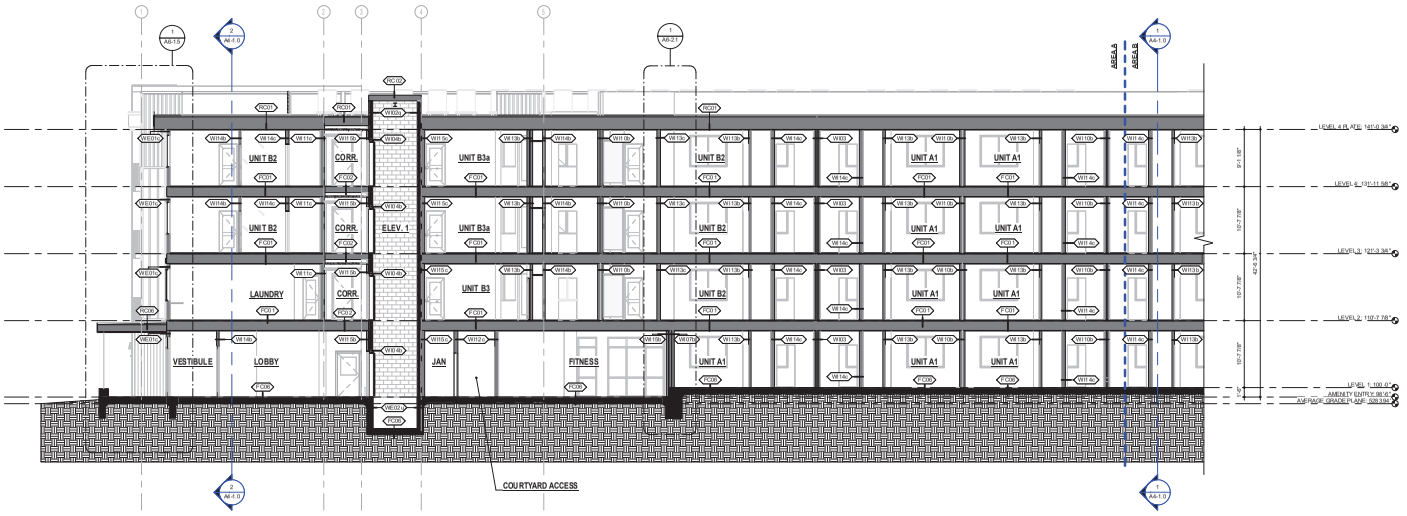


2 ENLARGED TRANSVERSE SECTION 4 - AREA B
1/8" = 1'-0"



1 ENLARGED TRANSVERSE SECTION 4 - AREA A
1/8" = 1'-0"

WALL TYPE SCHEDULE

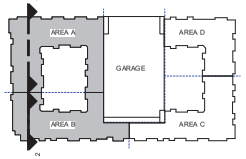
MARK	FIRE RATING	DESCRIPTION
WE01c	1 HR	TYP. EXTERIOR WALL
WE02c	2 HR	9" CONCRETE SHAFT WALL
WE03c	1 HR	9" CONCRETE WALL
WE03e	1 HR	GARAGE, 12" CONCRETE WALL
WE03f	1 HR	9" CONCRETE WALL
WE04c	2 HR	9" CMU - 2HR FIRE BARRIER
WE05c	1 HR	9" CMU - 1 HR
WE06b	1 HR	EXTERIOR WALL - 1 HR SYMMETRIC
WE06c	1 HR	EXTERIOR WALL - 1 HR SYMMETRIC
WE07c	NR	2x6 PARAPET WALL - NR
WE08c	NR	2x6 WALL - NR@ CONDENSERS
WE09b	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE09c	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE10b	1 HR	9" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
WE01d	2 HR	9" CMU - 2HR FIRE WALL
WE02c	2 HR	9" CMU - 2HR FIRE BARRIER
WE03	2 HR	FIRE WALL - 2HR
WE03b	2 HR	FIRE WALL, 2-HR, (2) 2X4 W/ TH (2) 1" SHAFTLINER
WE03h	2HR	FIRE WALL, 2-HR, (2) 1 5/8" W/TH (2) 1" SHAFTLINER
WE04b	2 HR	FIRE BARRIER, 2 HR, 2x W/TH (2) 5/8" TYPE 'X' GYP
WE04c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
WE05c	2 HR	FIRE BARRIER, 2 HR EXIT ACCESS
WE06b	2 HR	2X4 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
WE06c	2 HR	2X6 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
WE07c	1 HR	OCCUPANCY SEPARATION - 1 HR FIRE BARRIER
WE08c	1 HR	OCCUPANCY SEPARATION - 1 HR FIRE BARRIER
WW01	1 HR	5 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
WE09c	1 HR	9" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
WE09c	1 HR	9" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE
WE10b	1 HR	TYP. UNIT DEMISING - 1 HR FIRE PARTITION
WE10c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
WE11b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
WE11c	1 HR	Inverted
WE12b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
WE12c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
WE13b	1 HR	2X4, 1HR - BEARING
WE13c	1 HR	2X6, 1HR - BEARING
WE14b	NR	2X4 INTERIOR WALL - NR
WE14c	NR	2X6 INTERIOR WALL - NR
WE15b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
WE15c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
WE16	NR	P/P METAL HAT CHANNEL FURRING WALL
WE17b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
WE18b	NR	9" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

FLOOR/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
FC01	1 HR	TYP. UNIT FLOOR/CEILING ASSEMBLY
FC02	1 HR	TYP. CORRIDOR FLOOR/CEILING ASSEMBLY
FC03	NR	TYP. DROP CEILING
FC05	NR	TYP. BALCONY ASSEMBLY - DRIP - TYP.
FC06	NR	POST-TENSIONED SLAB
FC07	NR	NON-RATED PT CONCRETE SLAB
FC07	1HR	PRECAST CONCRETE FLOOR/CEILING
FC07	1HR	TYP. GARAGE FLOOR/CEILING
FC08	1HR	BALCONY ASSEMBLY - CONDITIONED SPACE
FC09	1HR	BALCONY ASSEMBLY
FC10	2HR	FL.CORE/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC11	2HR	FL.CORE/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC12	NR	SLAB ON GRADE

ROOF/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
RC01	1HR	TYP. ROOF ASSEMBLY
RC02	1HR	TYP. ROOF ASSEMBLY
RC03	1HR	1 HR HORIZONTAL ASSEMBLY
RC04	1 HR	1 HR HORIZONTAL ASSEMBLY
RC05	NR	2X ROOF ASSEMBLY
RC06	NR	12" TJI ROOF ASSEMBLY
RC07	NR	NR HORIZONTAL ASSEMBLY



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ACCESSIBILITY "TYPE B" PLAN NOTES

SOLUTION REFERENCES ARE TO ICC/ANSI A117.1-2009
NOT ALL NOTES MAY APPLY TO THIS SHEET

1. **PRIMARY ENTRANCE** PER SECTION 1004.2. PRIMARY ENTRANCE TO BE LOCATED ON ACCESSIBLE ROUTE.
2. **WALKING SURFACE WIDTH** PER SECTION 1004.4.1. CLEAR WIDTH OF AN ACCESSIBLE ROUTE SHALL COMPLY WITH SECTION 403.5.
3. **CHANGES IN LEVEL** PER SECTION 1004.4.2. WALKING SURFACES THAT ARE PART OF AN ACCESSIBLE ROUTE TO COMPLY WITH SECTION 303. WHERE PATIO SURFACE OR BALCONY MATERIAL IS IMPERVIOUS, THE IMPERVIOUS SURFACE SHALL BE 4" MAX. BELOW THE FLOOR LEVEL OF THE ADJACENT INTERIOR SPACE OF THE UNIT.
4. **DOORS AND DOORWAYS** PER SECTION 1004.5. PRIMARY DOOR TO COMPLY WITH SECTION 1004.5.1. & SECTION 404.
5. **USER PASSAGE DOORWAYS** PER SECTION 1004.5.2. PASSAGE DOOR TO HAVE A CLEAR OPENING OF 31-3/4" MIN. (2'-10" DOOR).
6. **RAMPS** PER SECTION 1004.6. RAMPS SHALL COMPLY WITH SECTION 405.
7. **LAUNDRY EQUIPMENT CLEARANCE** PER SECTION 1004.10.1. SHALL COMPLY WITH SECTION 305.3 & 611.2. PROVIDE A 30"X48" CLEAR FLOOR SPACE POSITION FOR PARALLEL APPROACH. FOR TOP LOADING MACHINES CLEAR FLOOR SPACE SHALL BE CENTERED ON THE APPLIANCE. A FORWARD OR PARALLEL APPROACH SHALL BE PROVIDED FOR A FRONT LOADING MACHINE. FOR FRONT LOADING MACHINES, THE CENTERLINE OF THE CLEAR FLOOR SPACE SHALL BE OFFSET 24" MAX. FROM CENTERLINE OF DOOR OPENING.
8. **GRAB BAR AND SHOWER SEAT REINFORCEMENT** PER SECTION 1004.11.1. REINFORCEMENT SHALL BE PROVIDED FOR THE FUTURE INSTALLATION OF GRAB BARS AND SHOWER SEATS AND TO COMPLY WITH 604.5, 607.4, 608.3, 608.2.1.3, 608.2.2.3 AND 608.2.3.2. GRAB BAR REINFORCEMENT MATERIAL FOR BLOCKING TO RESIST REQUIRED LOAD OF 250 LBS. APPLIED AT ANY POINT IN ANY DIRECTION. HEIGHT RANGE FROM 33" MIN. TO 36" MAX. A.F.F.
9. **DOOR SWING** PER SECTION 1004.11.2.1, EXCEPTION CLEAR FLOOR SPACE COMPLYING WITH 305.3, EXCLUDING KNEE AND TOE CLEARANCES UNDER ELEMENTS, PROVIDED WITHIN THE ROOM BEYOND THE ARC OF THE DOOR SWING
10. **OPTION A LAVATORY** PER SECTION 1004.11.3.1.1. A LAVATORY WITH CLEAR FLOOR SPACE TO COMPLY WITH SECTION 305.3 POSITIONED FOR PARALLEL APPROACH. THE CLEAR FLOOR SPACE SHALL BE CENTERED ON THE LAVATORY.
EXCEPTION: A LAVATORY COMPLYING WITH SECTION 606 SHALL BE PERMITTED. CABINETRY SHALL BE PERMITTED IF, 1) CABINETRY IS REMOVABLE, 2) FLOOR FINISH EXTENDS UNDER CABINETRY, AND 3) WALLS BEHIND AND SURROUNDING CABINETRY ARE FINISHED.
11. **OPTION A BATHING FACILITIES** PER SECTION 1004.11.3.1.3. PROVIDE CLEAR SPACE FOR PARALLEL OR FORWARD APPROACH.
12. **OPTION B LAVATORY** PER SECTION 1004.11.3.2.1. A LAVATORY WITH CLEAR FLOOR SPACE TO COMPLY WITH SECTION 305.3 POSITIONED FOR PARALLEL APPROACH. FRONT OF LAVATORY SHALL BE 34" MAX. A.F.F., MEASURED TO THE HIGHER OF THE RIM OR COUNTER SURFACE.
13. **OPTION B BATHING FACILITIES** PER SECTION 1004.11.3.2.3. BATHTUB CLEARANCE TO EXTEND 48" MIN. IN LENGTH AND 30" MIN. IN DEPTH PER SECTION 1004.11.3.2.3.1. SHOWER COMPARTMENT TO COMPLY WITH SECTION 1004.11.3.2.3.2.
14. **OPTION A & OPTION B WATER CLOSET** PER SECTIONS 1004.11.3.1.2 & 1004.11.3.2.2.
LOCATION: THE CENTERLINE OF THE WATER CLOSET SHALL BE 16"-18" CLEAR ON ONE SIDE OF REQUIRED CLEARANCE.
CLEARANCE WIDTH: SHALL BE 48" MIN.
CLEARANCE DEPTH: SHALL BE 56" MIN. FOR SIDE APPROACH AND 66" MIN. FOR FORWARD APPROACH.
CLEARANCE OVERLAP: A VANITY OR OTHER OBSTRUCTION 24" MAX. IN DEPTH SHALL BE PERMITTED TO OVERLAP THE REQUIRED CLEARANCE, PROVIDED THE WIDTH OF THE REMAINING WATER CLOSET CLEARANCE IS 33" MIN.
15. **KITCHEN MINIMUM CLEARANCE** PER SECTION 1004.12.1.1. CLEARANCE BETWEEN ALL OPPOSING BASE CABINETS, COUNTER TOPS, APPLIANCES OR WALLS WITHIN WORK AREAS SHALL BE 40" MIN.
16. **KITCHEN CLEARANCE AT U-SHAPED KITCHENS DESIGN** PER SECTION 1004.12.1.2. PROVIDE 60" MIN. CLEARANCE BETWEEN ALL OPPOSING BASE CABINETS, COUNTERTOPS, APPLIANCES OR WALLS WITHIN KITCHEN WORK AREAS.
17. **KITCHEN SINK CLEAR FLOOR SPACE** PER SECTION 1004.12.2.1. PROVIDE A 30"X48" CLEAR FLOOR SPACE POSITION FOR PARALLEL APPROACH. CENTER SPACE ON SINK BOWL. SINK WITH FORWARD APPROACH SHALL COMPLY WITH SECTION 1003.12.4.1.
18. **DISHWASHER** PER SECTION 1004.12.2.2. POSITION CLEAR FLOOR SPACE ADJACENT TO THE DISHWASHER DOOR FOR PARALLEL OR FORWARD APPROACH BEYOND THE SWING OF THE DISHWASHER DOOR.
19. **RANGE OR COOKTOP** PER SECTION 1004.12.2.3. CLEAR FLOOR SPACE POSITIONED FOR FORWARD APPROACH SHALL COMPLY WITH SECTION 1004.12.2.3.2. CLEAR FLOOR SPACE POSITIONED FOR PARALLEL APPROACH SHALL ALIGN WITH THE CENTERLINE OF THE RANGE/COOKTOP PER SECTION 1004.2.3.3.
20. **OVEN** PER SECTION 1004.12.2.4. A CLEAR FLOOR SPACE SHALL BE PROVIDED FOR PARALLEL OR FORWARD APPROACH.
21. **REFRIGERATOR/FREEZER** PER SECTION 1004.12.2.5. A CLEAR FLOOR SPACE SHALL BE PROVIDED FOR PARALLEL OR FORWARD APPROACH. THE CENTERLINE OF CLEAR FLOOR SPACE SHALL BE OFFSET 24" MAX. FROM THE CENTERLINE OF THE APPLIANCE.

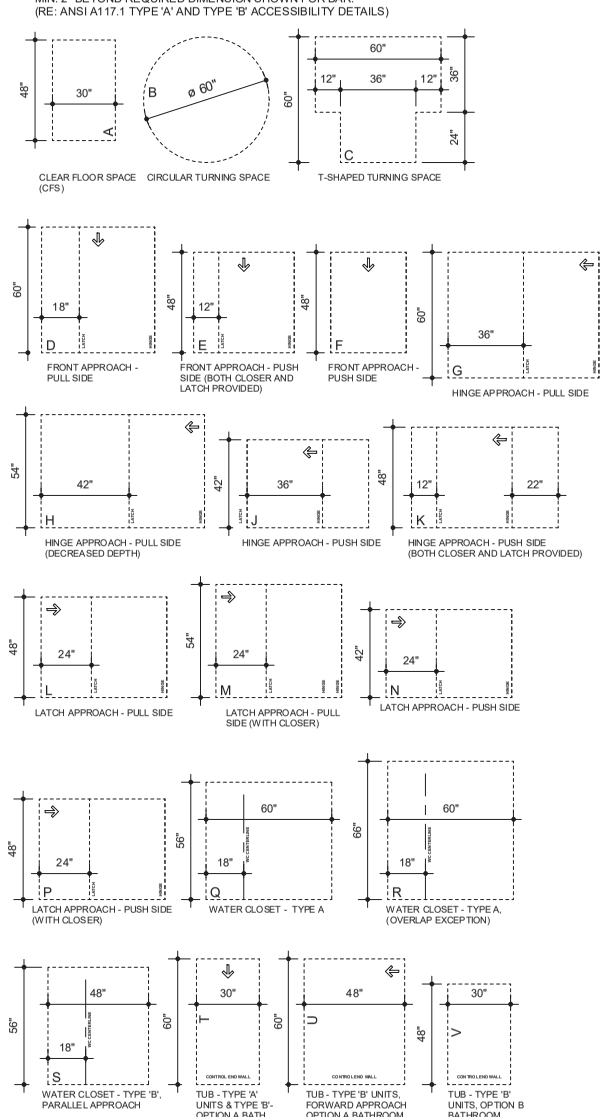
ACCESSIBILITY GENERAL NOTES

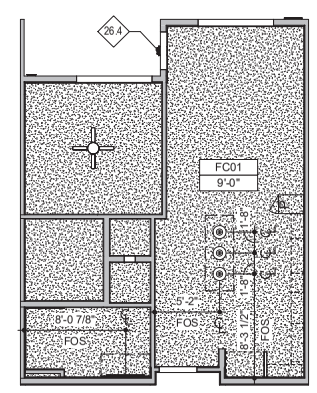
- REFER TO SHEET A0-6.0 FOR ACCESSIBILITY CALCULATIONS AND REQUIREMENTS.
- REFER TO SHEETS A0-6.0 THRU A0-6.3 FOR ACCESSIBILITY DETAILS.
- REFER TO ARCHITECTURAL SITE AND COMPOSITE PLANS FOR LOCATION OF ACCESSIBLE UNITS.
- DIMENSIONS ON THE ACCESSIBILITY PLAN REPRESENT DISTANCE FROM FINISHED WALL SURFACE.
- PROVIDE LEVER HARDWARE ON ALL SWING DOORS IN UNIT.
- BATH LAYOUTS COMPLY WITH OPTION A OR OPTION B FOR TYPE B DWELLING UNITS - OPTION USED NOTED ON ACCESSIBILITY PLAN.

ACCESSIBILITY LEGEND

PLAN

INDICATES REQUIRED REINFORCEMENT FOR FUTURE INSTALLATION OF GRAB BARS. EXTEND REINFORCEMENT A MIN. 2" BEYOND REQUIRED DIMENSION SHOWN FOR BAR.
(RE: ANSI A117.1 TYPE 'A' AND TYPE 'B' ACCESSIBILITY DETAILS)



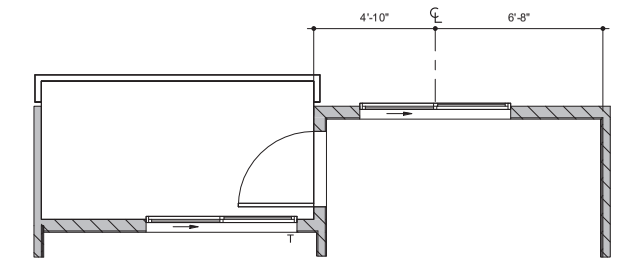


RE: LEVEL 1 AREA A RCP (1 / A2-1.11) FOR ALTERNATE CLG. HEIGHT

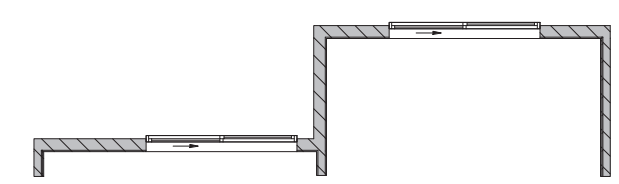
RCP LEGEND

FC01/ RC01		RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.5
FC03		NON-RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.5
		PENDANT LIGHT; RE: ELEC
		CEILING FAN - CENTERED IN ROOM; RE: ELEC
		SURFACE MOUNTED VANITY LIGHT; RE: ELEC

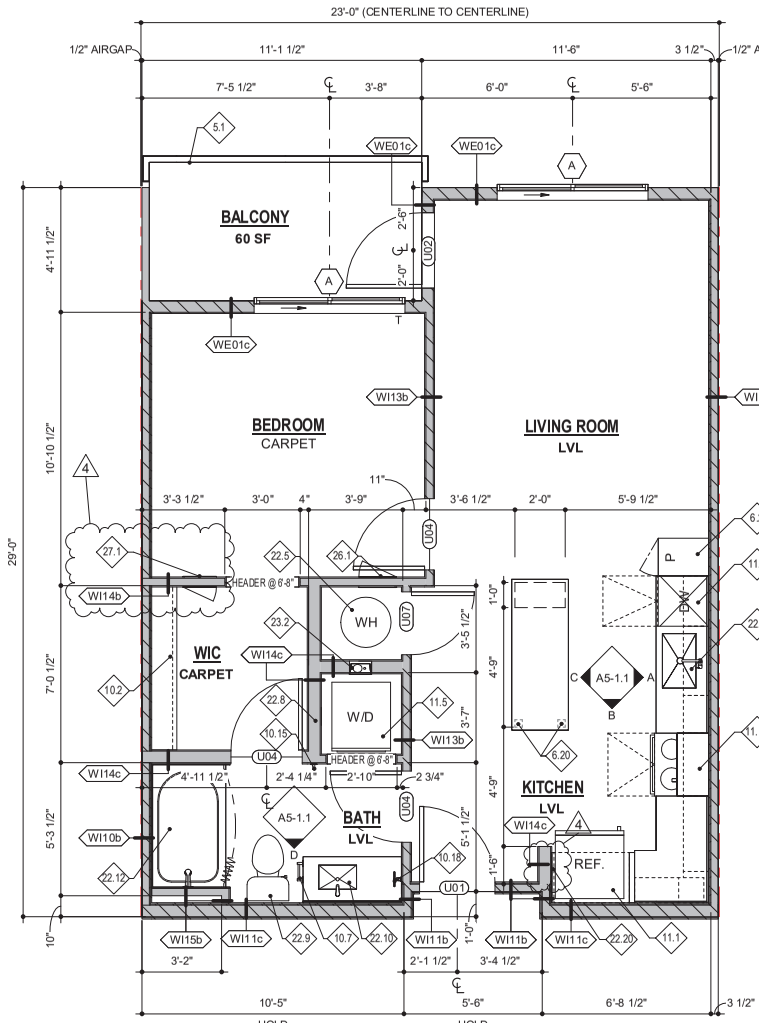
5 UNIT A1 RCP
1/8" = 1'-0"



3 UNIT A1 E3
1/4" = 1'-0"
NOTE: SAME AS A1 E1 U.N.O



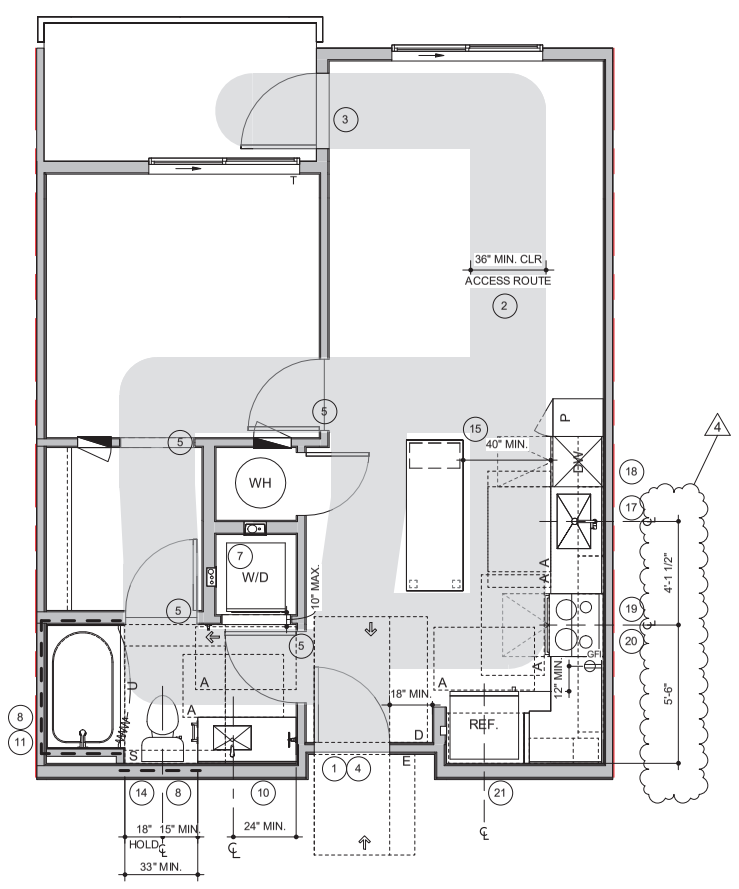
2 UNIT A1 E2
1/4" = 1'-0"
NOTE: SAME AS A1 E1 U.N.O



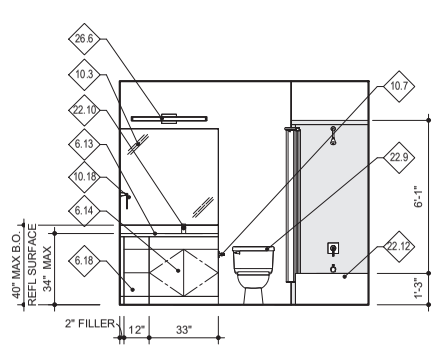
1 UNIT A1 E1 PLAN
1/4" = 1'-0"

UNIT A1 SUMMARY

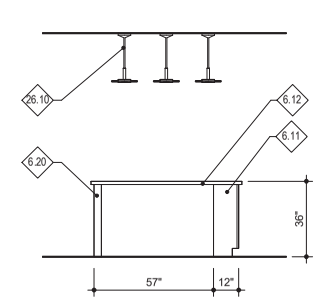
UNIT NAME	UNIT TYPE	UNIT AREA	QTY	TOTAL AREA
UNIT A1	1BD/1BA	612 SF	142	86,904 SF



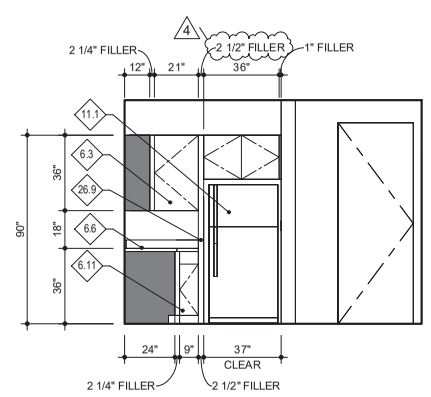
4 UNIT A1 ACC. PLAN
1/4" = 1'-0"
ICC/ANSI 117.1-2009 TYPE 'B' UNIT OPTION A BATH
NOTE: ALL ACCESSIBILITY PLAN DIMENSIONS GIVEN ARE TO WALL FINISH



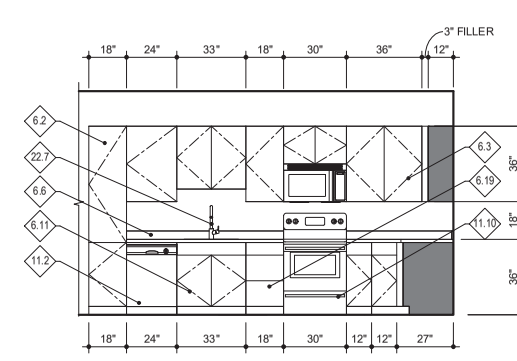
D A1 - BATH ELEV
1/4" = 1'-0"



C A1 - KITCHEN ELEV 3
1/4" = 1'-0"



B A1 - KITCHEN ELEV 2
1/4" = 1'-0"



A A1 - KITCHEN ELEV 1
1/4" = 1'-0"

UNIT PLAN GENERAL NOTES

UNIT BEARING WALLS; RE: STRUCTURE

T TEMPERED GLAZING; RE: A9-1.2 WINDOW SCHEDULE

- DIMENSIONS TAKE PRECEDENCE OVER DRAWINGS. DO NOT SCALE. DIMENSIONS GIVEN TO FACE OF STUDS UNLESS OTHERWISE INDICATED ON THE PLANS.
- INTERIOR DOORS TO BE HELD 4" OFF ADJACENT TO HINGE SIDE FRAMING, EXTERIOR AND CORRIDOR WALLS TO BE HELD OFF 6" ADJACENT TO HINGE SIDE FRAMING. U.N.O. ALL OTHER DOORS SHALL BE CENTERED
- ACCESSIBILITY ELEMENTS INDICATED ARE REQUIRED. FIELD CONDITIONS OCCURRING WHICH IMPACT THE ACCESSIBILITY DESIGN SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.
- NOTE: UNITS PROVIDED WITH MECHANICAL VENTILATION, RE: MECH. NATURAL VENTILATION CALCULATIONS SHOWN FOR REFEENCE ONLY.

INTERIOR ELEVATION GENERAL NOTES

- CASEWORK LAYOUT IS DIAGRAMMATIC. OWNER SHALL APPROVE FINAL LAYOUT PRIOR TO ORDERING/INSTALLATION.
- CASEWORK CONTRACTOR SHALL VERIFY APPLIANCE CLEARANCES
- CASEWORK CONTRACTOR SHALL VERIFY DRAWER PULL & DOOR HANDLE REQUIREMENTS
- CASEWORK CONTRACTOR SHALL INSTALL 4" FINISHED MATERIAL FOR FIELD APPLIED TOE KICK, MATERIAL TO MATCH CASEWORK
- PROVIDE MINIMUM 1" FILLER AT ADJACENT WALLS
- PROVIDE FINISHED END PANELS AT ALL EXPOSED CABINET ENDS
- PROVIDE SINK BASE CABINETS WITH OPEN BACKS FOR PLUMBING ACCESS
- ALL EXPOSED CASEWORK SHALL BE FINISHED WITH MATCHING PANELS

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
WE01c	1 HR	TYP. EXTERIOR WALL
WE02u	2 HR	8" CONCRETE SHAFT WALL
WE03u	1 HR	8" CONCRETE WALL
WE03w	1 HR	GARAGE, 12" CONCRETE WALL
WE03x	1 HR	9" CONCRETE WALL
WE04q	2 HR	8" CMU - 2HR FIRE BARRIER
WE05q	1 HR	8" CMU - 1 HR
WE06b	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE06c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE07c	NR	2x6 PARAPET WALL - NR
WE08c	NR	2x6 WALL - NR @ CONDENSERS
WE09b	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE09c	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE19k	1 HR	6" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
WI01q	2 HR	8" CMU - 2HR FIRE WALL
WI02q	2 HR	8" CMU - 2HR FIRE BARRIER
WI03	2 HR	FIRE WALL - 2HR
WI03b	2 HR	FIRE WALL, 2-HR, (2) 2X4 WITH (2) 1" SHAFTLINER
WI03h	2HR	FIRE WALL, 2-HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
WI04b	2 HR	FIRE BARRIER, 2-HR, 2x WITH (2) 5/8" TYPE 'X' GYP
WI04c	2 HR	FIRE BARRIER, - 2HR EXIT ACCESS
WI05c	2 HR	FIRE BARRIER, 2-HR EXIT ACCESS
WI06b	2-HR	2X4 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
WI06c	2-HR	2X6 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
WI07b	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
WI08c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
WI09h	1 HR	3 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
WI09k	1 HR	6" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
WI10b	1 HR	TYP. UNIT DEMISING - 1-HR FIRE PARTITION
WI10c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
WI11b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
WI11c	1 HR	<varies>
WI12b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
WI12c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
WI13b	1 HR	2X4, 1HR - BEARING
WI13c	1 HR	2X6, 1HR - BEARING
WI14b	NR	2X4 INTERIOR WALL - NR
WI14c	NR	2X6 INTERIOR WALL - NR
WI15b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
WI15c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
WI16	NR	7/8" METAL HAT CHANNEL FURRING WALL
WI17b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
WI18k	NR	6" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

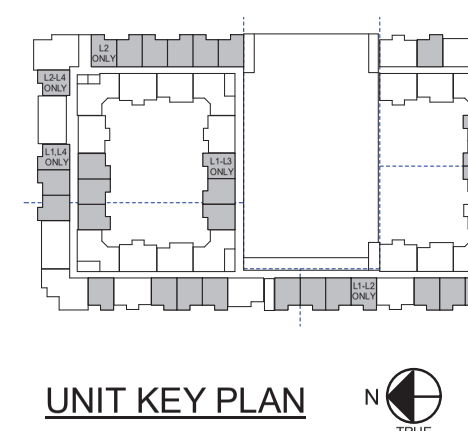
KEYNOTES

NO.	NOTE
5.1	STEEL BALCONY GUARDRAIL AT 42" AFF. SHOP PRIMED. PAINT IN FIELD
6.2	KITCHEN PANTRY CABINET
6.3	KITCHEN UPPER CABINET
6.6	KITCHEN SOLID SURFACE COUNTERTOP, RE: INTERIORS
6.11	KITCHEN BASE CABINET
6.12	KITCHEN ISLAND W/ SOLID SURFACE COUNTER-TOP
6.13	BATHROOM VANITY SOLID SURFACE COUNTER-TOP
6.14	BATHROOM VANITY CABINET
6.18	BATHROOM VANITY BASE CABINET DRAWERS
6.19	KITCHEN BASE CABINET DRAWERS
6.20	CABINET GRADE COUNTERTOP SUPPORT, RE: INTERIORS
10.2	SINGLE ROD AND SHELF
10.3	MIRROR, 40" TO BOTTOM REFLECTIVE SURFACE RE: INTERIORS
10.7	TOILET PAPER DISPENSER
10.15	WALL MOUNTED BIKE RACK, PROVIDED BY OWNER
10.18	TOWEL RING
11.1	REFRIGERATOR / FREEZER
11.2	24" X 24" DISHWASHER, RE: PLUMBING
11.5	STACKABLE FRONT LOAD WASHER DRYER. OPTIONAL TENANT LEASE BY OWNER.
11.10	OVEN/RANGE, WITH MICROWAVE HOOD AND RECIRCULATING EXHAUST FAN ABOVE - REPLACE WITH COUNTER DEPTH RANGE AS REASONABLE ACCOMMODATION WHEN NECESSARY FOR OUTLET ACCESSIBILITY
22.5	ELEC. WATER HEATER W/ PAN, RE: PLUMBING
22.7	UNDERMOUNT KITCHEN SINK, RE: PLUMBING
22.8	WASHER HOOK UP, RE: PLUMBING
22.9	FLOOR MOUNT WATER CLOSET, RE: PLUMBING
22.10	BATHROOM SINK. ENSURE RIM OF SINK IS BELOW 34" MAX. A.F.F. SINK BOWL TO BE 6 1/2" DEEP MAXIMUM PER UFAS GUIDELINES. RE: PLUMBING
22.12	60"X36" TUB/SHOWER WITH PREFABRICATED SURROUND; PROVIDE CURVED SHOWER CURTAIN ROD; PROVIDE GLASS MAT GYPSUM BOARD AS REQUIRED; PRE-ROCK AROUND TUB LOCATIONS ADJACENT TO RATED WALLS AS REQUIRED. INSTALL BLOCKING IN WALL FOR FUTURE GRAB BAR INSTALLATION
22.20	ICE MAKER BOX, RE: PLUMBING
23.2	DRYER HOOK UP, RE: MECHANICAL
26.1	ELECTRIC PANEL. TOP OF PANEL TO BE MAX. 48" ABOVE FINISH FLOOR, RE: ELEC
26.4	EXTERIOR SCONCE, MOUNTED AT 8'-0" AFF UNO, RE: ELEC
26.6	SURFACE MOUNTED VANITY LIGHT, RE: ELEC
26.9	REFRIGERATOR SIDE PANEL WITH OUTLET, RE: ELEC
26.10	PENDANT LIGHT FIXTURE. RE: ELEC. RE: INTERIORS FOR MOUNTING HEIGHT
27.1	TELECOM BOX. TOP OF PANEL TO BE MAX. 48" ABOVE FINISH FLOOR. RE: ELEC

APPLIANCE BASIS OF DESIGN

TYPE B:
TOP-FREEZER REFRIGERATOR -MODEL#: GIE22JTNRWW
ELECTRIC RANGE -MODEL#: GEJB258DMWW
OVER THE RANGE MICROWAVE -MODEL#: GEJMV3160DFWW
DISHWASHER -MODEL#: GDF511PGMWW
WASHER -FRONT LOAD STACKABLE -MODEL#: GFW55OSSNWW
DRYER -FRONT LOAD STACKABLE -MODEL#: GFD55ESSNWW

TYPE A:
TOP-FREEZER REFRIGERATOR -MODEL# GIE22JTNRWW
FRONT CONTROL ELECTRIC RANGE -MODEL#: WEE515S0LS
UNDER THE CABINET HOOD -MODEL#:
COUNTERTOP MICROWAVE OVEN -MODEL#: WMC30516H
DISHWASHER -MODEL: WDF550SAH
WASHER -FRONT LOAD -MODEL#: GFW55OSSNWW
DRYER -FRONT LOAD -MODEL#: GFD55ESSNWW
ALL-IN-ONE FRONT LOAD WASHER/CONDENSER DRYER -MODEL #: GFQ14ESSNWW



UNIT KEY PLAN

N TRUE
N PROJECT

KEPHART
community ■ planning ■ architecture
2555 WALNUT STREET
DENVER, COLORADO 80205
www.kephart.com

ISSUE FOR CONSTRUCTION
08.07.2024

No.	Date	Issue
4	08.07.2024	IFC

Project Architect	DV
Project Designer	DR
Date	
Job Number	222001
Drawn By	CG / CB/ TT/ NV
Checked By	JG
Title	UNIT PLAN A1
Sheet Number	A5-1.1

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SOLUTION REFERENCES ARE TO ICC/ANSI A117.1-2009
NOT ALL NOTES MAY APPLY TO THIS SHEET

1. **PRIMARY ENTRANCE** PER SECTION 1003.2. PRIMARY ENTRANCE TO BE LOCATED ON ACCESSIBLE ROUTE.
2. **ACCESSIBLE ROUTE** PER SECTION 1003.3. ACCESSIBLE ROUTE SHALL CONNECT ALL ELEMENTS AND SPACES THAT ARE PART OF THE UNIT.
3. **TURNING SPACES** PER SECTION 1003.3.2. ALL ROOMS SERVED BY AN ACCESSIBLE ROUTE SHALL PROVIDE A TURNING SPACE COMPLYING WITH SECTION 304. (EXCEPTION-CLOSETS AND TOILET ROOMS AND BATHROOMS THAT ARE NOT REQUIRED TO COMPLY WITH SECTION 1003.11.2).
4. **WALKING SURFACES** PER SECTION 1003.4. WALKING SURFACES THAT ARE PART OF AN ACCESSIBLE ROUTE SHALL COMPLY WITH SECTION 403.
5. **DOORS AND DOORWAYS** PER SECTION 1003.5. PRIMARY AND PASSAGE DOORS TO COMPLY WITH SECTION 404.
6. **RAMPS** PER SECTION 1003.6. RAMPS SHALL COMPLY WITH SECTION 405.
7. **OPERABLE PARTS** PER SECTION 1003.9. LIGHTING CONTROLS, ELECTRICAL SWITCHES AND RECEPTACLE OUTLETS, ENVIRONMENTAL CONTROLS, APPLIANCE CONTROLS, OPERATING HARDWARE FOR OPERABLE WINDOWS, PLUMBING FIXTURE CONTROLS, ETC. SHALL COMPLY WITH SECTION 309.
8. **LAUNDRY EQUIPMENT** PER SECTION 1003.10. WASHING MACHINES AND DRYERS TO COMPLY WITH SECTION 611.
9. **GRAB BAR AND SHOWER SEAT REINFORCEMENT** PER SECTION 1003.11.1. REINFORCEMENT SHALL BE PROVIDED FOR THE FUTURE INSTALLATION OF GRAB BARS AND SHOWER SEATS AND TO COMPLY WITH 604.5, 607.4, 608.3, 608.2.1.3, 608.2.2.3 AND 608.2.3.2. GRAB BAR REINFORCEMENT MATERIAL FOR BLOCKING TO RESIST REQUIRED LOAD OF 250 LBS. APPLIED AT ANY POINT IN ANY DIRECTION. HEIGHT RANGE FROM 33" MIN. TO 36" MAX. AFF.
10. **DOOR SWING** PER SECTION 1003.11.2.1, EXCEPTION CLEAR FLOOR SPACE COMPLYING WITH 305.3 PROVIDED WITHIN THE ROOM BEYOND THE ARC OF THE DOOR SWING.
11. **LAVATORY** PER SECTION 1003.11.2.2. A LAVATORY TO COMPLY WITH 606. PROVIDE A REMOVABLE BASE CABINET. FINISH FLOOR UNDER & WALL BEHIND REMOVABLE BASE CABINET. 34" MAX. AFF TO HIGHER OF T.O. RIM OR T.O. COUNTERTOP.
12. **MIRRORS** PER SECTION 1003.11.2.3. MIRRORS TO HAVE THE BOTTOM EDGE OF THE REFLECTED SURFACE 40" MAX ABOVE THE FLOOR.
13. **WATER CLOSET LOCATION** PER SECTION 1003.11.2.4.1. THE WATER CLOSET SHALL BE POSITIONED WITH A WALL TO THE REAR AND TO ONE SIDE. THE CENTERLINE OF THE WATER CLOSET SHALL BE 16" MIN AND 18" MAX FROM THE WALL.
14. **WATER CLOSET CLEARANCE/OVERLAP** PER SECTION 1003.11.2.4.4. PROVIDE A 60" WIDE X 66" DEEP CLEARANCE AROUND THE WATER CLOSET. A LAVATORY IS ALLOWED TO OVERLAP INTO THE 60"X66" CLEARANCE.
15. **WATER CLOSET HEIGHT** PER SECTION 1003.11.2.4.5. THE WATER CLOSET HEIGHT SHALL BE 15" MIN. AND 19" MAX. ABOVE THE FLOOR. MEASURED TO THE TOP OF THE SEAT.
16. **WATER CLOSET FLUSH CONTROLS** PER SECTION 1003.11.2.4.6. HAND OPERATED FLUSH CONTROLS SHALL COMPLY WITH SECTION 309. LOCATED CONTROLS ON OPEN SIDE OF WATER CLOSET.
17. **BATHTUB CLEARANCE** PER SECTION 1003.11.2.5.1/607 BATHTUB CLEARANCE TO EXTEND FULL LENGTH OF BATHTUB AND 30" IN DEPTH.
18. **BATHTUB CONTROLS** PER SECTION 1003.11.2.5.1/607.5. CONTROLS TO BE LOCATED OFF CENTER. CONTROLS TO BE PROVIDED ON END WALL, LOCATED BETWEEN THE BATHTUB RIM AND GRAB BAR AND BETWEEN THE OPEN SIDE OF THE BATH TUB AND THE MIDPOINT OF THE WIDTH OF THE BATH. CONTROLS TO COMPLY WITH SECTION 309.4. SEE ILLUSTRATION ON ACCESSIBLE DETAIL SHEETS.
19. **BATHTUB HAND SHOWER** PER SECTION 1003.11.2.5.1/607.6. A HAND SHOWER WITH A HOSE 59" MIN IN LENGTH THAT CAN BE USED AS A HAND SHOWER AND FIXED SHOWER HEAD SHALL BE PROVIDED. THE HAND SHOWER SHALL HAVE A CONTROL WITH A NONPOSITIVE SHUT OFF FEATURE. AN ADJUSTABLE-HEIGHT HAND SHOWER MOUNTED ON A VERTICAL BAR SHALL BE INSTALLED TO NOT OBSTRUCT THE USE OF GRAB BARS.
20. **REMOVABLE CABINET**. CABINET SHALL BE REMOVABLE W/O REMOVAL OR REPLACEMENT OF COUNTER TOP. THE RESULTANT SPACE SHALL MEET THE REQUIRED 30" MIN. WIDE CLEARANCE FOR FORWARD APPROACH. FLOOR FINISH SHALL EXTEND UNDER CABINET, WALL AND SURROUNDING CABINET SHALL BE FINISHED.
21. **TRANSFER-TYPE SHOWER SIZE AND CLEARANCES** PER SECTION 1003.11.2.5.2/608.2.1. TRANSFER-TYPE SHOWER COMPARTMENTS SHALL HAVE A CLEAR INSIDE DIMENSION OF 36"X36" MEASURED AT THE CENTER POINT OF OPPOSING SIDES. EN ENTRY 36" MIN. IN WIDTH SHALL BE PROVIDED. A CLEARANCE 48" IN LENGTH MEASURED PERPENDICULAR TO THE CONTROL WALL AND 36" IN WIDTH SHALL BE PROVIDED ADJACENT TO THE OPEN FACE OF THE COMPARTMENT.
22. **TRANSFER-TYPE SHOWER CONTROLS AND HAND SHOWER** PER SECTION 1003.11.2.5.2/608.4.3. CONTROLS AND HAND SHOWER TO BE LOCATED ON THE WALL OPPOSITE THE SEAT, 38" MIN. AND 48" MAX. ABOVE THE SHOWER FLOOR, WITHIN 15" LEFT OR RIGHT OF THE CENTERLINE OF THE SEAT.
23. **TRANSFER-TYPE SHOWER THRESHOLDS** PER SECTION 1003.11.2.5.2/608.6. THRESHOLD SHALL BE 1/2" MAX IN HEIGHT AND SHALL BE BEVELED, ROUNDED, OR VERTICAL.
24. **KITCHEN CLEARANCE** PER 1003.12.1.1. MINIMUM CLEARANCE BETWEEN ALL OPPOSING BASE CABINETS, COUNTER TOPS, APPLIANCES OR WALLS WITHIN KITCHEN WORK AREAS SHALL BE 40 INCHES.
25. **KITCHEN CLEARANCE AT U-SHAPED KITCHENS DESIGN** PER SECTION 1003.12.1.2 PROVIDE 60" MIN. CLEARANCE BETWEEN ALL OPPOSING BASE CABINETS, COUNTERTOPS, APPLIANCES OR WALLS WITHIN KITCHEN WORK AREAS.
26. **KITCHEN WORK SURFACE** PER SECTION 1003.12.3. AT LEAST ONE SECTION OF COUNTER SHALL PROVIDE A WORK SURFACE 30" MIN. IN LENGTH COMPLYING WITH SECTION 1003.12.3.1. PROVIDE A 30"X48" CLEAR FLOOR SPACE POSITION FOR FORWARD APPROACH. CENTER ON WORK SURFACE. KNEE AND TOE CLEARANCE TO COMPLY WITH 306. THE WORK SURFACE HEIGHT TO BE 34" MAX. ABOVE FINISH FLOOR. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES ON THE EXPOSED EDGES UNDER THE WORK SURFACE.
27. **KITCHEN SINK CLEAR SPACE** PER SECTION 1003.12.4.1, PROVIDE A 30"X48" CLEAR FLOOR SPACE POSITION FOR FORWARD APPROACH. CENTER SPACE ON SINK BOWL. PROVIDE A REMOVABLE BASE CABINET. FINISH FLOOR UNDER AND WALLS/CABINETS AROUND REMOVABLE BASE CABINET.
28. **KITCHEN SINK HEIGHT** PER SECTION 1003.12.4.2. THE FRONT OF THE SINK TO BE 34" MAX. ABOVE THE FLOOR. MEASURED TO HIGHER OF THE RIM OR COUNTER.
29. **KITCHEN FAUCETS** PER SECTION 1003.12.4.3. FAUCETS TO COMPLY WITH SECTION 309.
30. **EXPOSED PIPES AND SURFACES** PER SECTION 1003.12.4.4. WATER SUPPLY AND DRAIN PIPES UNDER SINKS SHALL BE INSULATED OR OTHERWISE CONFIGURED TO PROTECT AGAINST CONTACT. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES ON THE EXPOSED EDGES UNDER THE WORK SURFACE.
31. **APPLIANCES OPERABLE PARTS** PER SECTION 1003.12.5.1. ALL APPLIANCE CONTROLS SHALL COMPLY WITH SECTION 1003.9.
32. **APPLIANCES CLEAR FLOOR SPACE** PER SECTION 1003.12.5.2. PROVIDE A 30"X48" CLEAR FLOOR SPACE POSITIONED FOR FORWARD OR PARALLEL APPROACH.
33. **DISHWASHER** PER SECTION 1003.12.5.3. POSITION CLEAR FLOOR SPACE ADJACENT TO THE DISHWASHER DOOR.
34. **RANGE OR COOKTOP** PER SECTION 1003.12.5.4.
35. **OVEN** PER SECTION 1003.12.5.5. OVEN SHALL COMPLY WITH SECTION 1003.12.5.5. OVENS SHALL HAVE CONTROLS ON FRONT PANELS, ON EITHER SIDE OF THE DOOR.
36. **REFRIGERATOR/FREEZER** PER SECTION 1003.12.5.6.
37. **WINDOWS** PER SECTION 1003.13. AT LEAST ONE WINDOW IN EACH SLEEPING, LIVING, OR DINING SPACE SHALL HAVE OPERABLE PARTS COMPLYING WITH SECTION 1003.9.
38. **STORAGE FACILITIES CLEARANCE** PER SECTION 1003.14. PROVIDE A 30"X48" CLEAR FLOOR SPACE POSITION FOR FORWARD OR PARALLEL APPROACH.
39. **STORAGE FACILITIES HEIGHT** PER SECTION 1003.14. A PORTION OF THE STORAGE FACILITY TO COMPLY WITH AT LEAST ONE OF THE REACH RANGES SPECIFIED IN SECTION 308. LEADING EDGE OF CLOSET SHELF SHALL NOT BE MORE THAN 14" TO INSIDE FACE OF FINISH.
40. **STORAGE FACILITIES OPERABLE PARTS** PER SECTION 1003.14. OPERABLE PARTS ON STORAGE FACILITIES SHALL COMPLY WITH SECTION 309.
41. **BATHTUB SEAT** PER UFAS SECTION 4.34.5.2 #2. AN IN-TUB SEAT OR A SEAT AT THE HEAD END OF THE TUB SHALL BE PROVIDED. THE STRUCTURAL STRENGTH OF SEATS AND THEIR ATTACHMENTS SHALL COMPLY WITH UFAS 4.26.3. SEATS SHALL BE MOUNTED SECURELY AND SHALL NOT SLIP DURING USE. CLIENT TO PROVIDE TO TENANTS AS A REASONABLE ACCOMODATION UPON REQUEST.

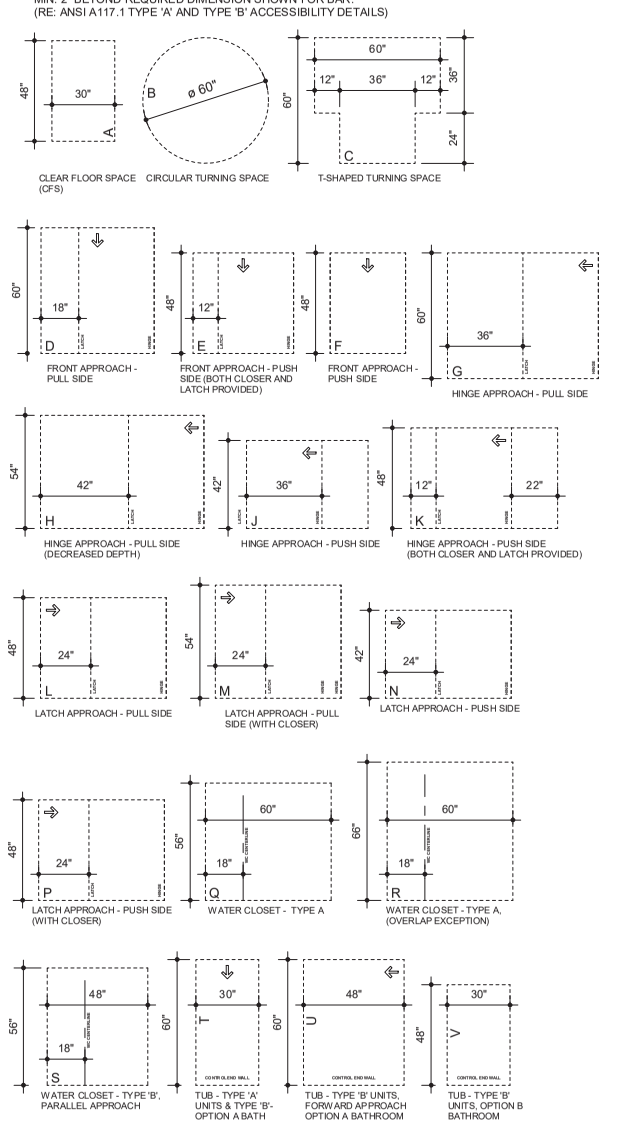
ACCESSIBILITY GENERAL NOTES

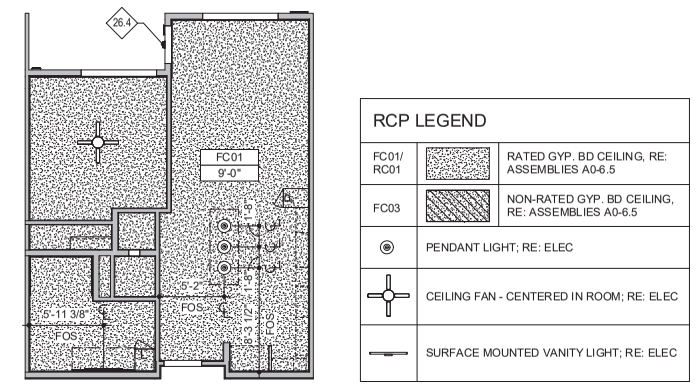
- REFER TO SHEET A0-6.0 FOR ACCESSIBILITY CALCULATIONS AND REQUIREMENTS.
- REFER TO SHEETS A0-6.0 THRU A0-6.3 FOR ACCESSIBILITY DETAILS.
- REFER TO ARCHITECTURAL SITE AND COMPOSITE PLANS FOR LOCATION OF ACCESSIBLE UNITS.
- DIMENSIONS ON THE ACCESSIBILITY PLAN REPRESENT DISTANCE FROM FINISHED WALL SURFACE.
- PROVIDE LEVER HARDWARE ON ALL SWING DOORS IN UNIT.

ACCESSIBILITY LEGEND

PLAN

INDICATES REQUIRED REINFORCEMENT FOR FUTURE INSTALLATION OF GRAB BARS. EXTEND REINFORCEMENT A MIN. 2" BEYOND REQUIRED DIMENSION SHOWN FOR BAR. (RE: ANSI A117.1 TYPE 'A' AND TYPE 'B' ACCESSIBILITY DETAILS)

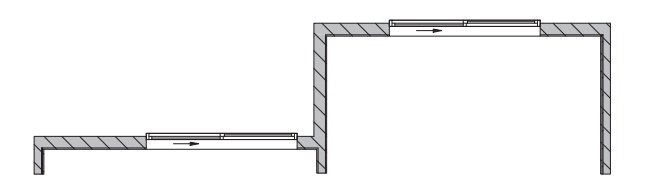




RCP LEGEND

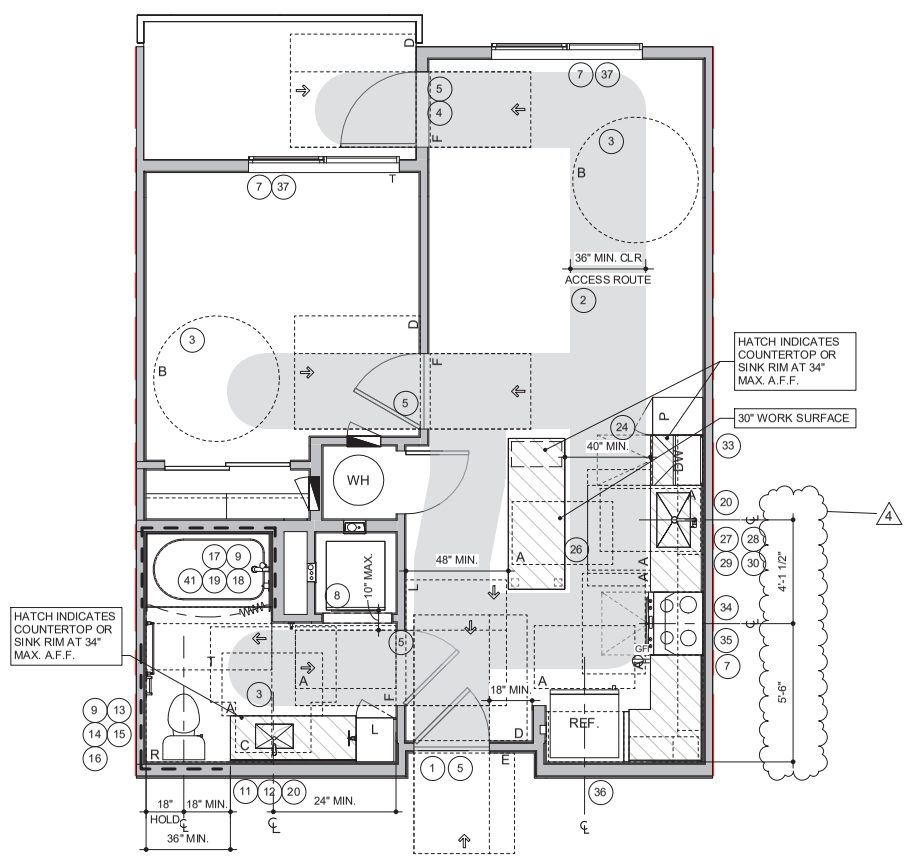
FC01/ RC01	RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.5
FC03	NON-RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.5
◉	PENDANT LIGHT; RE: ELEC
✛	CEILING FAN - CENTERED IN ROOM; RE: ELEC
⊢	SURFACE MOUNTED VANITY LIGHT; RE: ELEC

3 UNIT A1a RCP
1/8" = 1'-0"



4 UNIT A1a E2
1/4" = 1'-0"

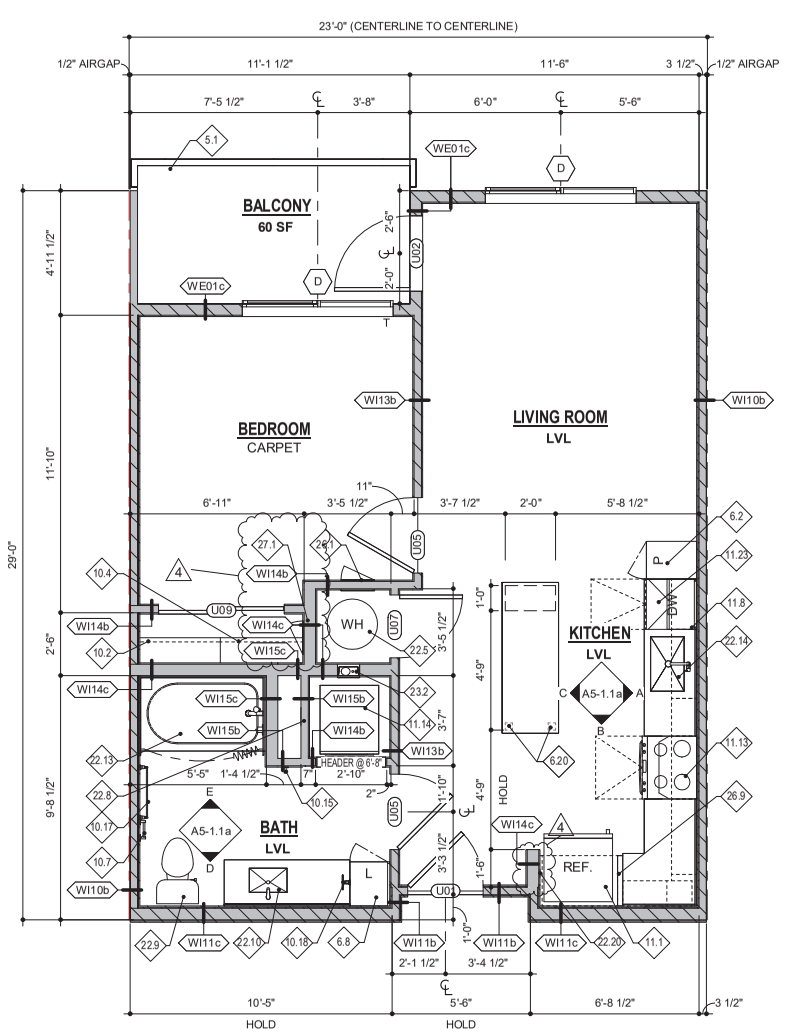
NOTE: SAME AS A1 E1 U.N.O



2 UNIT A1a ACC. PLAN (TYPE A)
1/4" = 1'-0"

ICC/ANSI 117.1-2009 TYPE 'A' UNIT

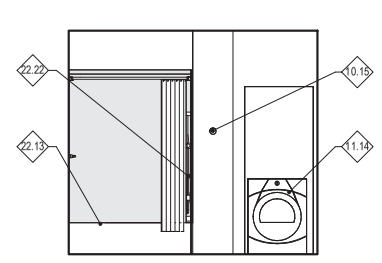
NOTE: ALL ACCESSIBILITY PLAN DIMENSIONS GIVEN ARE TO WALL FINISH



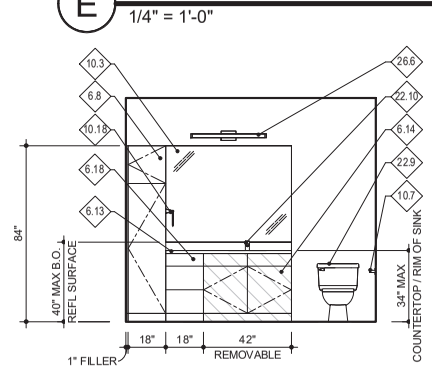
1 UNIT A1a E1 PLAN (TYPE A)
1/4" = 1'-0"

UNIT A1a SUMMARY

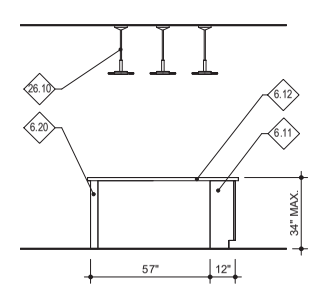
UNIT NAME	UNIT TYPE	UNIT AREA	QTY	TOTAL AREA
UNIT A1a	1BD/1BA	612 SF	7	4,284 SF



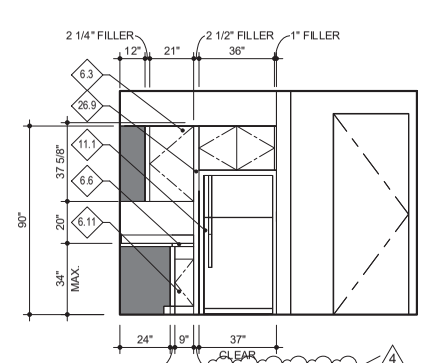
E A1a - BATH ELEV 2
1/4" = 1'-0"



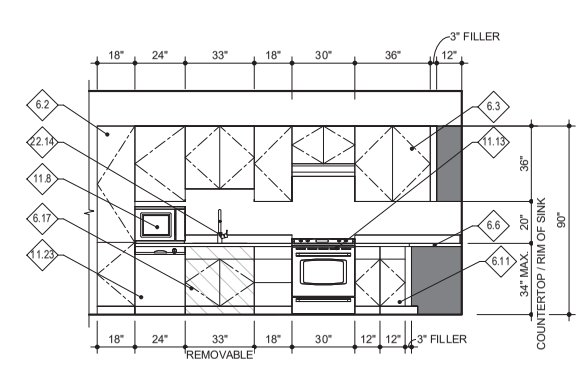
D A1a - BATH ELEV 1
1/4" = 1'-0"



C A1a - KITCHEN ELEV 3
1/4" = 1'-0"



B A1a - KITCHEN ELEV 2
1/4" = 1'-0"



A A1a - KITCHEN ELEV 1
1/4" = 1'-0"

APPLIANCE BASIS OF DESIGN

TYPE B:
TOP-FREEZER REFRIGERATOR -MODEL#: GIE22JTNRWW
ELECTRIC RANGE -MODEL#: GEJB258DMWW
OVER THE RANGE MICROWAVE -MODEL#: GEJMV3160DFWW
DISHWASHER -MODEL#: GDF511PGMWW
WASHER -FRONT LOAD STACKABLE -MODEL#: GFW55OSSNWW
DRYER -FRONT LOAD STACKABLE -MODEL#: GFD55ESSNWW

TYPE A:
TOP-FREEZER REFRIGERATOR -MODEL# GIE22JTNRWW
FRONT CONTROL ELECTRIC RANGE -MODEL#: WEE515S0LS
UNDER THE CABINET HOOD -MODEL#:
COUNTERTOP MICROWAVE OVEN -MODEL#: WMC30516H
DISHWASHER -MODEL: WDF550SAH
WASHER -FRONT LOAD -MODEL#: GFW55OSSNWW
DRYER -FRONT LOAD -MODEL#: GFD55ESSNWW
ALL-IN-ONE FRONT LOAD WASHER/CONDENSER DRYER -MODEL #: GFQ14ESSNWW

UNIT PLAN GENERAL NOTES

- UNIT BEARING WALLS; RE: STRUCTURE
- T — TEMPERED GLAZING; RE: A9-1.2 WINDOW SCHEDULE

- DIMENSIONS TAKE PRECEDENCE OVER DRAWINGS. DO NOT SCALE. DIMENSIONS GIVEN TO FACE OF STUDS UNLESS OTHERWISE INDICATED ON THE PLANS.
- INTERIOR DOORS TO BE HELD 4" OFF ADJACENT TO HINGE SIDE FRAMING, EXTERIOR AND CORRIDOR WALLS TO BE HELD OFF 6" ADJACENT TO HINGE SIDE FRAMING. U.N.O. ALL OTHER DOORS SHALL BE CENTERED
- ACCESSIBILITY ELEMENTS INDICATED ARE REQUIRED. FIELD CONDITIONS OCCURRING WHICH IMPACT THE ACCESSIBILITY DESIGN SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.
- NOTE: UNITS PROVIDED WITH MECHANICAL VENTILATION, RE: MECH. NATURAL VENTILATION CALCULATIONS SHOWN FOR REFEENCE ONLY.

INTERIOR ELEVATION GENERAL NOTES

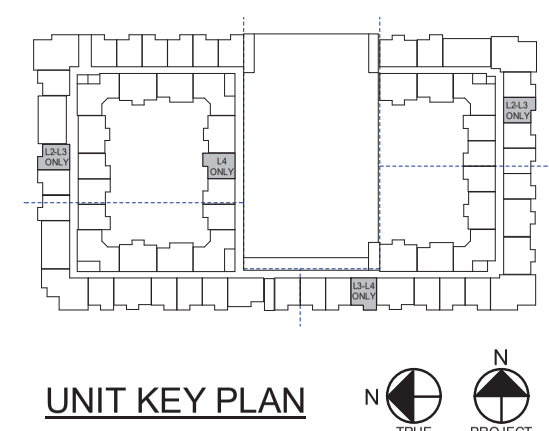
- CASEWORK LAYOUT IS DIAGRAMMATIC. OWNER SHALL APPROVE FINAL LAYOUT PRIOR TO ORDERING/INSTALLATION.
- CASEWORK CONTRACTOR SHALL VERIFY APPLIANCE CLEARANCES
- CASEWORK CONTRACTOR SHALL VERIFY DRAWER PULL & DOOR HANDLE REQUIREMENTS
- CASEWORK CONTRACTOR SHALL INSTALL 4" FINISHED MATERIAL FOR FIELD APPLIED TOE KICK, MATERIAL TO MATCH CASEWORK
- PROVIDE MINIMUM 1" FILLER AT ADJACENT WALLS
- PROVIDE FINISHED END PANELS AT ALL EXPOSED CABINET ENDS
- PROVIDE SINK BASE CABINETS WITH OPEN BACKS FOR PLUMBING ACCESS
- ALL EXPOSED CASEWORK SHALL BE FINISHED WITH MATCHING PANELS

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
WE01c	1 HR	TYP. EXTERIOR WALL
WE02u	2 HR	8" CONCRETE SHAFT WALL
WE03u	1 HR	8" CONCRETE WALL
WE03w	1 HR	GARAGE, 12" CONCRETE WALL
WE03x	1 HR	9" CONCRETE WALL
WE04q	2 HR	8" CMU - 2HR FIRE BARRIER
WE05q	1 HR	8" CMU - 1 HR
WE06b	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE06c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE07c	NR	2x6 PARAPET WALL - NR
WE08c	NR	2x6 WALL - NR @ CONDENSERS
WE09b	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE09c	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE19k	1 HR	6" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
WI01q	2 HR	8" CMU - 2HR FIRE WALL
WI02q	2 HR	8" CMU - 2HR FIRE BARRIER
WI03	2 HR	FIRE WALL - 2HR
WI03b	2 HR	FIRE WALL, 2-HR, (2) 2X4 WITH (2) 1" SHAFTLINER
WI03h	2HR	FIRE WALL, 2-HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
WI04b	2 HR	FIRE BARRIER, 2-HR, 2 x WITH (2) 5/8" TYPE 'X' GYP
WI04c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
WI05c	2 HR	FIRE BARRIER, 2-HR EXIT ACCESS
WI06b	2-HR	2X4 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
WI06c	2-HR	2X6 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
WI07b	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
WI08c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
WI09h	1 HR	3 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
WI09k	1 HR	6" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
WI10b	1 HR	TYP. UNIT DEMISING - 1-HR FIRE PARTITION
WI10c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
WI11b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
WI11c	1 HR	<varies>
WI12b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
WI12c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
WI13b	1 HR	2X4, 1HR - BEARING
WI13c	1 HR	2X6, 1HR - BEARING
WI14b	NR	2X4 INTERIOR WALL - NR
WI14c	NR	2X6 INTERIOR WALL - NR
WI15b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
WI15c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
WI16	NR	7/8" METAL HAT CHANNEL FURRING WALL
WI17b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
WI18k	NR	6" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

KEYNOTES

NO.	NOTE
5.1	STEEL BALCONY GUARDRAIL AT 42" AFF. SHOP PRIMED. PAINT IN FIELD
6.2	KITCHEN PANTRY CABINET
6.3	KITCHEN UPPER CABINET
6.6	KITCHEN SOLID SURFACE COUNTERTOP, RE: INTERIORS
6.8	BATHROOM LINEN CABINET
6.11	KITCHEN BASE CABINET
6.12	KITCHEN ISLAND W/ SOLID SURFACE COUNTER-TOP
6.13	BATHROOM VANITY SOLID SURFACE COUNTER-TOP
6.14	BATHROOM VANITY CABINET
6.17	REMOVABLE KITCHEN SINK BASE CABINET. BASE SHALL BE REMOVABLE WITHOUT REMOVAL OF SOLID SURFACE COUNTERTOP. EXTEND FLOOR AND WALL FINISHES UNDER REMOVABLE CABINET. RE: DETAILS
6.18	BATHROOM VANITY BASE CABINET DRAWERS
6.20	CABINET GRADE COUNTERTOP SUPPORT, RE: INTERIORS
10.2	SINGLE ROD AND SHELF
10.3	MIRROR, 40" TO BOTTOM REFLECTIVE SURFACE RE: INTERIORS
10.4	DOUBLE ROD AND SHELF. BOTTOM ROD/SHELF TO BE MOUNTED AT 46" MAX AFF.
10.7	TOILET PAPER DISPENSER
10.15	WALL MOUNTED BIKE RACK, PROVIDED BY OWNER
10.17	TOWEL BAR
10.18	TOWEL RING
11.1	REFRIGERATOR / FREEZER
11.8	ELECTRIC MICROWAVE WITH ACCESSIBLE CONTROLS
11.13	OVEN/RANGE WITH FRONT CONTROLS AT TYPE A UNITS
11.14	ALL-IN-ONE FRONT LOAD WASHER DRYER COMBO W/ ACCESSIBLE CONTROLS. OPTIONAL TENANT LEASE BY OWNER.
11.23	24" X 24" DISHWASHER, 34" COUNTER. RE: PLUMBING
22.5	ELEC. WATER HEATER W/ PAN, RE: PLUMBING
22.8	WASHER HOOK UP, RE: PLUMBING
22.9	FLOOR MOUNT WATER CLOSET, RE: PLUMBING
22.10	BATHROOM SINK. ENSURE RIM OF SINK IS BELOW 34" MAX. A.F.F. SINK BOWL TO BE 6 1/2" DEEP MAXIMUM PER UFAS GUIDELINES. RE: PLUMBING
22.13	60"X36" ACCESSIBLE TUB/SHOWER WITH PREFABRICATED SURROUND; PROVIDE CURVED SHOWER CURTAIN ROD; PROVIDE GLASS MAT GYPSUM BOARD AS REQUIRED; PRE-ROCK AROUND TUB LOCATIONS ADJACENT TO RATED WALLS AS REQUIRED. INSTALL BLOCKING IN WALL FOR FUTURE GRAB BAR INSTALLATION; OPERABLE PARTS TO COMPLY WITH TYPE A UNIT. OWNER TO PROVIDE SEAT PER UFAS SECTION 4.34.5.4 AS A REASONABLE ACCOMODATION UPON TENANT REQUEST.
22.14	DROP-IN KITCHEN SINK AT TYPE A UNITS, ENSURE RIM OF SINK IS BELOW 34" MAX. A.F.F. SINK BOWL TO BE 6 1/2" DEEP MAXIMUM PER UFAS GUIDELINES. RE: PLUMBING
22.20	ICE MAKER BOX, RE: PLUMBING
22.22	PROVIDE WALL MOUNTED HAND SHOWER UNIT IN ANSI TYPE A UNITS; RE: INTERIORS AND ACCESSIBILITY DETAILS
23.2	DRYER HOOK UP, RE: MECHANICAL
26.1	ELECTRIC PANEL. TOP OF PANEL TO BE MAX. 48" ABOVE FINISH FLOOR, RE: ELEC
26.4	EXTERIOR SCONCE, MOUNTED AT 8'-0" AFF UNO, RE: ELEC
26.6	SURFACE MOUNTED VANITY LIGHT, RE: ELEC
26.9	REFRIGERATOR SIDE PANEL WITH OUTLET. RE: ELEC
26.10	PENDANT LIGHT FIXTURE. RE: ELEC. RE: INTERIORS FOR MOUNTING HEIGHT
27.1	TELECOM BOX. TOP OF PANEL TO BE MAX. 48" ABOVE FINISH FLOOR. RE: ELEC



UNIT KEY PLAN

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ISSUE FOR CONSTRUCTION
08.07.2024

No.	Date	Issue
4	08.07.2024	IFC

Project Architect	DV
Project Designer	DR
Date	
Job Number	222001
Drawn By	CG / CB/ TT/ NV
Checked By	JG
Title	UNIT PLAN A1a
Sheet Number	A5-1.1a

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ACCESSIBILITY "TYPE B" PLAN NOTES

SOLUTION REFERENCES ARE TO ICC/ANSI A117.1-2009
NOT ALL NOTES MAY APPLY TO THIS SHEET

1. **PRIMARY ENTRANCE** PER SECTION 1004.2. PRIMARY ENTRANCE TO BE LOCATED ON ACCESSIBLE ROUTE.
2. **WALKING SURFACE WIDTH** PER SECTION 1004.4.1. CLEAR WIDTH OF AN ACCESSIBLE ROUTE SHALL COMPLY WITH SECTION 403.5.
3. **CHANGES IN LEVEL** PER SECTION 1004.4.2. WALKING SURFACES THAT ARE PART OF AN ACCESSIBLE ROUTE TO COMPLY WITH SECTION 303. WHERE PATIO SURFACE OR BALCONY MATERIAL IS IMPERVIOUS, THE IMPERVIOUS SURFACE SHALL BE 4" MAX. BELOW THE FLOOR LEVEL OF THE ADJACENT INTERIOR SPACE OF THE UNIT.
4. **DOORS AND DOORWAYS** PER SECTION 1004.5. PRIMARY DOOR TO COMPLY WITH SECTION 1004.5.1. & SECTION 404.
5. **USER PASSAGE DOORWAYS** PER SECTION 1004.5.2. PASSAGE DOOR TO HAVE A CLEAR OPENING OF 31-3/4" MIN. (2'-10" DOOR).
6. **RAMPS** PER SECTION 1004.6. RAMPS SHALL COMPLY WITH SECTION 405.
7. **LAUNDRY EQUIPMENT CLEARANCE** PER SECTION 1004.10.1. SHALL COMPLY WITH SECTION 305.3 & 611.2. PROVIDE A 30"X48" CLEAR FLOOR SPACE POSITION FOR PARALLEL APPROACH. FOR TOP LOADING MACHINES CLEAR FLOOR SPACE SHALL BE CENTERED ON THE APPLIANCE. A FORWARD OR PARALLEL APPROACH SHALL BE PROVIDED FOR A FRONT LOADING MACHINE. FOR FRONT LOADING MACHINES, THE CENTERLINE OF THE CLEAR FLOOR SPACE SHALL BE OFFSET 24" MAX. FROM CENTERLINE OF DOOR OPENING.
8. **GRAB BAR AND SHOWER SEAT REINFORCEMENT** PER SECTION 1004.11.1. REINFORCEMENT SHALL BE PROVIDED FOR THE FUTURE INSTALLATION OF GRAB BARS AND SHOWER SEATS AND TO COMPLY WITH 604.5, 607.4, 608.3, 608.2.1.3, 608.2.2.3 AND 608.2.3.2. GRAB BAR REINFORCEMENT MATERIAL FOR BLOCKING TO RESIST REQUIRED LOAD OF 250 LBS. APPLIED AT ANY POINT IN ANY DIRECTION. HEIGHT RANGE FROM 33" MIN. TO 36" MAX. A.F.F.
9. **DOOR SWING** PER SECTION 1004.11.2.1, EXCEPTION CLEAR FLOOR SPACE COMPLYING WITH 305.3, EXCLUDING KNEE AND TOE CLEARANCES UNDER ELEMENTS, PROVIDED WITHIN THE ROOM BEYOND THE ARC OF THE DOOR SWING
10. **OPTION A LAVATORY** PER SECTION 1004.11.3.1.1. A LAVATORY WITH CLEAR FLOOR SPACE TO COMPLY WITH SECTION 305.3 POSITIONED FOR PARALLEL APPROACH. THE CLEAR FLOOR SPACE SHALL BE CENTERED ON THE LAVATORY.
EXCEPTION: A LAVATORY COMPLYING WITH SECTION 606 SHALL BE PERMITTED. CABINETRY SHALL BE PERMITTED IF, 1) CABINETRY IS REMOVABLE, 2) FLOOR FINISH EXTENDS UNDER CABINETRY, AND 3) WALLS BEHIND AND SURROUNDING CABINETRY ARE FINISHED.
11. **OPTION A BATHING FACILITIES** PER SECTION 1004.11.3.1.3. PROVIDE CLEAR SPACE FOR PARALLEL OR FORWARD APPROACH.
12. **OPTION B LAVATORY** PER SECTION 1004.11.3.2.1. A LAVATORY WITH CLEAR FLOOR SPACE TO COMPLY WITH SECTION 305.3 POSITIONED FOR PARALLEL APPROACH. FRONT OF LAVATORY SHALL BE 34" MAX. A.F.F., MEASURED TO THE HIGHER OF THE RIM OR COUNTER SURFACE.
13. **OPTION B BATHING FACILITIES** PER SECTION 1004.11.3.2.3. BATHTUB CLEARANCE TO EXTEND 48" MIN. IN LENGTH AND 30" MIN. IN DEPTH PER SECTION 1004.11.3.2.3.1. SHOWER COMPARTMENT TO COMPLY WITH SECTION 1004.11.3.2.3.2.
14. **OPTION A & OPTION B WATER CLOSET** PER SECTIONS 1004.11.3.1.2 & 1004.11.3.2.2.
LOCATION: THE CENTERLINE OF THE WATER CLOSET SHALL BE 16"-18" CLEAR ON ONE SIDE OF REQUIRED CLEARANCE.
CLEARANCE WIDTH: SHALL BE 48" MIN.
CLEARANCE DEPTH: SHALL BE 56" MIN. FOR SIDE APPROACH AND 66" MIN. FOR FORWARD APPROACH.
CLEARANCE OVERLAP: A VANITY OR OTHER OBSTRUCTION 24" MAX. IN DEPTH SHALL BE PERMITTED TO OVERLAP THE REQUIRED CLEARANCE, PROVIDED THE WIDTH OF THE REMAINING WATER CLOSET CLEARANCE IS 33" MIN.
15. **KITCHEN MINIMUM CLEARANCE** PER SECTION 1004.12.1.1. CLEARANCE BETWEEN ALL OPPOSING BASE CABINETS, COUNTER TOPS, APPLIANCES OR WALLS WITHIN WORK AREAS SHALL BE 40" MIN.
16. **KITCHEN CLEARANCE AT U-SHAPED KITCHENS DESIGN** PER SECTION 1004.12.1.2. PROVIDE 60" MIN. CLEARANCE BETWEEN ALL OPPOSING BASE CABINETS, COUNTERTOPS, APPLIANCES OR WALLS WITHIN KITCHEN WORK AREAS.
17. **KITCHEN SINK CLEAR FLOOR SPACE** PER SECTION 1004.12.2.1. PROVIDE A 30"X48" CLEAR FLOOR SPACE POSITION FOR PARALLEL APPROACH. CENTER SPACE ON SINK BOWL. SINK WITH FORWARD APPROACH SHALL COMPLY WITH SECTION 1003.12.4.1.
18. **DISHWASHER** PER SECTION 1004.12.2.2. POSITION CLEAR FLOOR SPACE ADJACENT TO THE DISHWASHER DOOR FOR PARALLEL OR FORWARD APPROACH BEYOND THE SWING OF THE DISHWASHER DOOR.
19. **RANGE OR COOKTOP** PER SECTION 1004.12.2.3. CLEAR FLOOR SPACE POSITIONED FOR FORWARD APPROACH SHALL COMPLY WITH SECTION 1004.12.2.3.2. CLEAR FLOOR SPACE POSITIONED FOR PARALLEL APPROACH SHALL ALIGN WITH THE CENTERLINE OF THE RANGE/COOKTOP PER SECTION 1004.2.3.3.
20. **OVEN** PER SECTION 1004.12.2.4. A CLEAR FLOOR SPACE SHALL BE PROVIDED FOR PARALLEL OR FORWARD APPROACH.
21. **REFRIGERATOR/FREEZER** PER SECTION 1004.12.2.5. A CLEAR FLOOR SPACE SHALL BE PROVIDED FOR PARALLEL OR FORWARD APPROACH. THE CENTERLINE OF CLEAR FLOOR SPACE SHALL BE OFFSET 24" MAX. FROM THE CENTERLINE OF THE APPLIANCE.

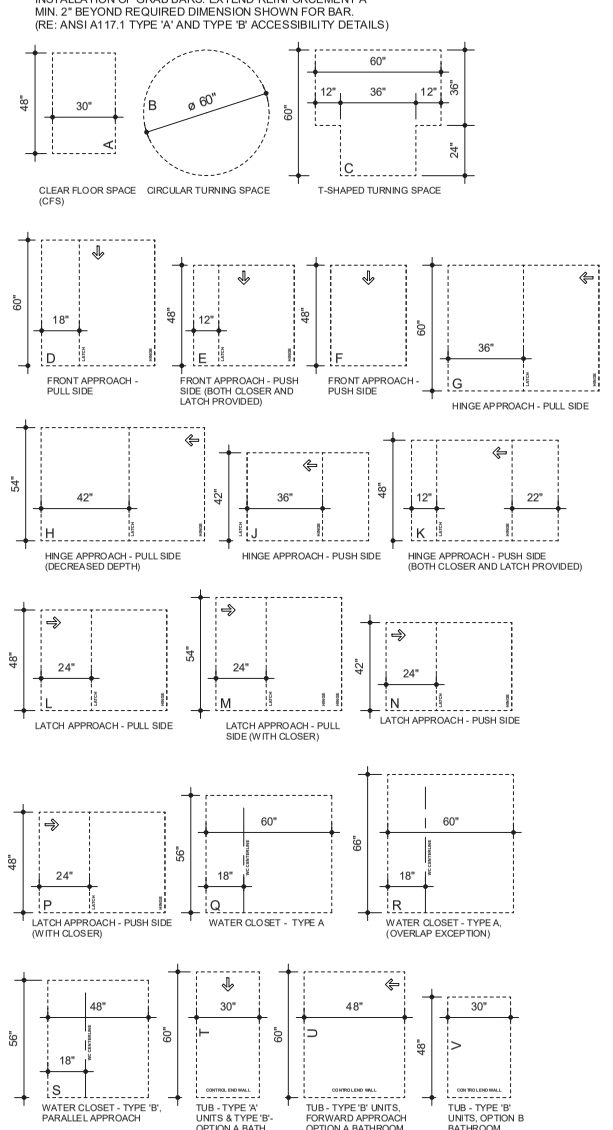
ACCESSIBILITY GENERAL NOTES

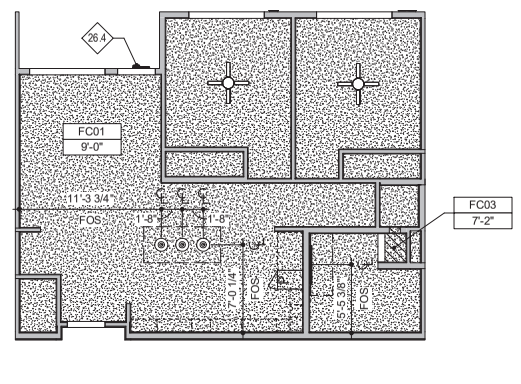
- REFER TO SHEET A0-6.0 FOR ACCESSIBILITY CALCULATIONS AND REQUIREMENTS.
- REFER TO SHEETS A0-6.0 THRU A0-6.3 FOR ACCESSIBILITY DETAILS.
- REFER TO ARCHITECTURAL SITE AND COMPOSITE PLANS FOR LOCATION OF ACCESSIBLE UNITS.
- DIMENSIONS ON THE ACCESSIBILITY PLAN REPRESENT DISTANCE FROM FINISHED WALL SURFACE.
- PROVIDE LEVER HARDWARE ON ALL SWING DOORS IN UNIT.
- BATH LAYOUTS COMPLY WITH OPTION A OR OPTION B FOR TYPE B DWELLING UNITS - OPTION USED NOTED ON ACCESSIBILITY PLAN.

ACCESSIBILITY LEGEND

PLAN

INDICATES REQUIRED REINFORCEMENT FOR FUTURE INSTALLATION OF GRAB BARS. EXTEND REINFORCEMENT A MIN. 2" BEYOND REQUIRED DIMENSION SHOWN FOR BAR.
(RE: ANSI A117.1 TYPE 'A' AND TYPE 'B' ACCESSIBILITY DETAILS)

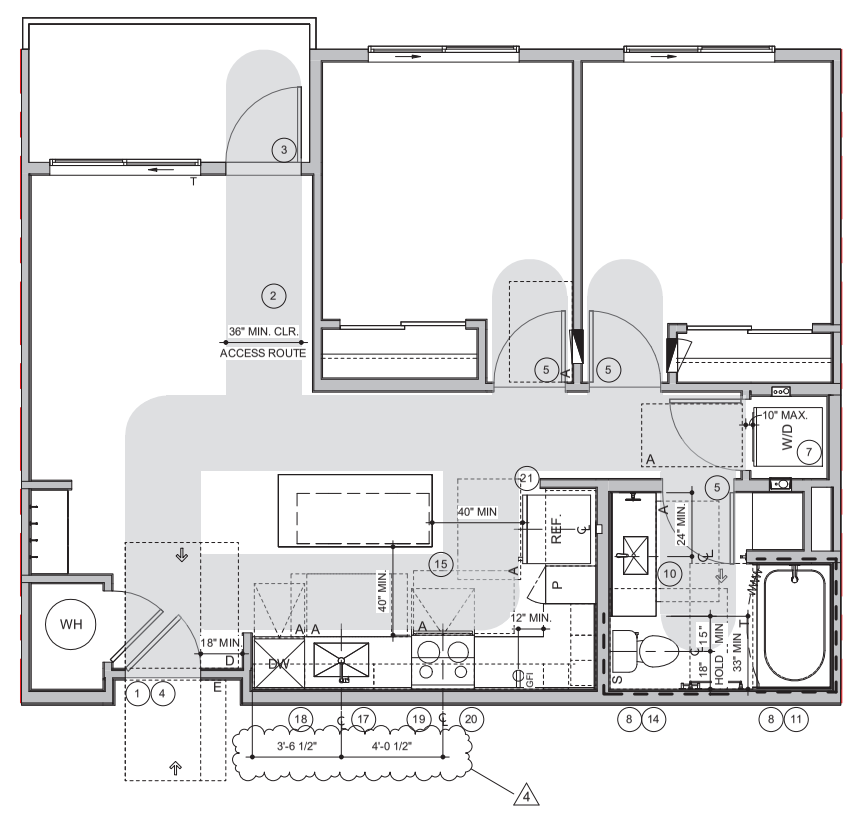




RE: LEVEL 1 AREA A RCP (1 / A2-1.11) FOR ALTERNATE CLG. HEIGHT

RCP LEGEND	
FC01/ RC01	RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.5
FC03	NON-RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.5
	PENDANT LIGHT; RE: ELEC
	CEILING FAN - CENTERED IN ROOM; RE: ELEC
	SURFACE MOUNTED VANITY LIGHT; RE: ELEC

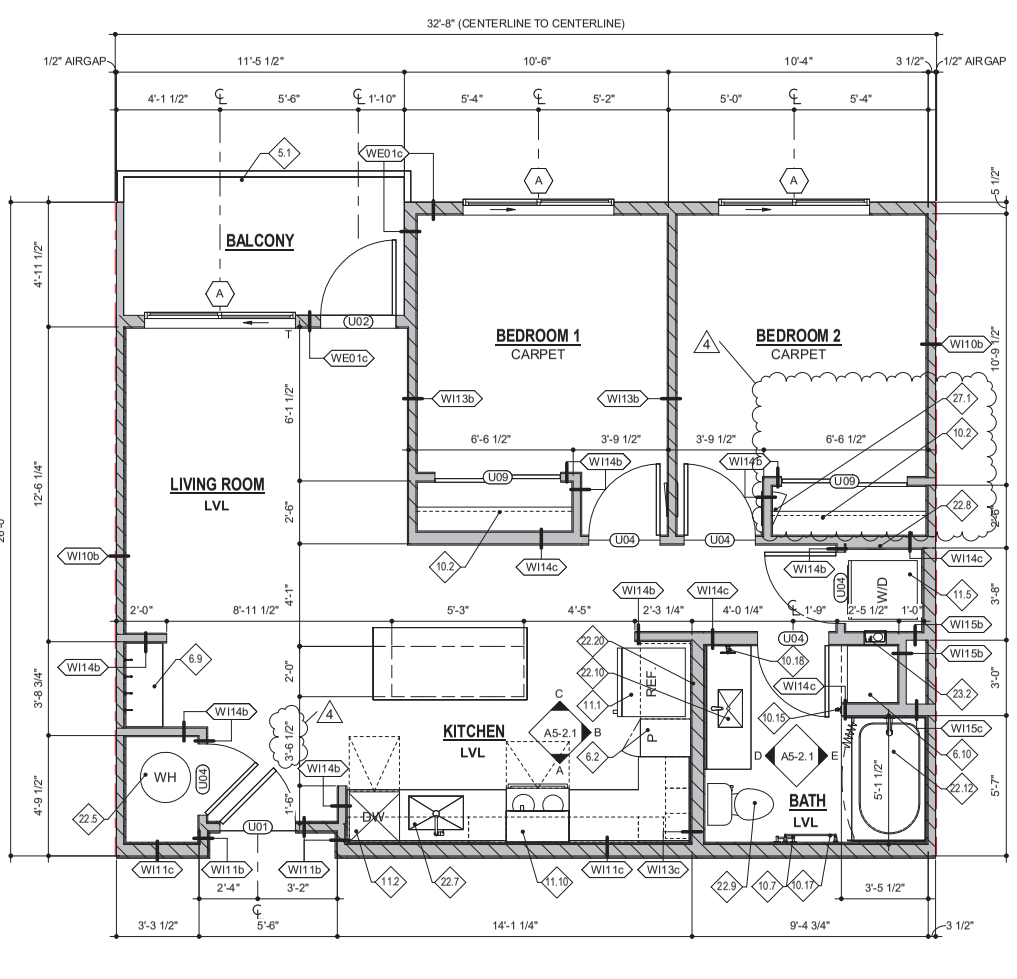
3 UNIT B1 RCP
1/8" = 1'-0"



2 UNIT B1 ACC. PLAN
1/4" = 1'-0"

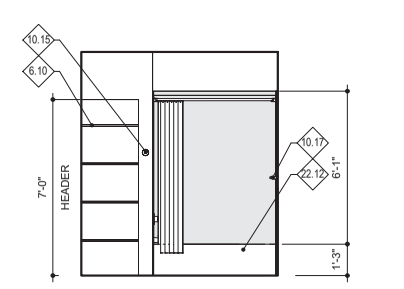
ICC/ANSI 117.1-2009 TYPE 'B' UNIT OPTION A BATH

NOTE: ALL ACCESSIBILITY PLAN DIMENSIONS GIVEN ARE TO WALL FINISH

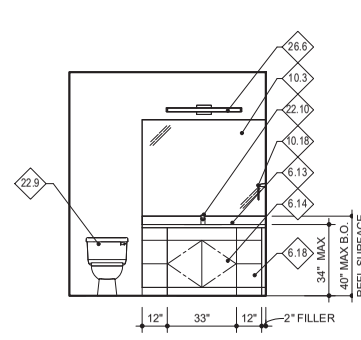


1 UNIT B1 PLAN
1/4" = 1'-0"

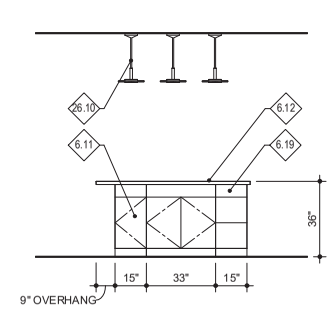
UNIT B1 SUMMARY				
UNIT NAME	UNIT TYPE	UNIT AREA	QTY	TOTAL AREA
UNIT B1	2BD/1BA	792 SF	20	15,840 SF



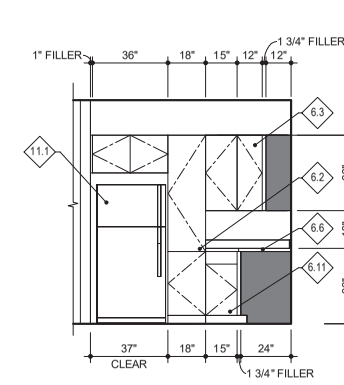
E B1 - BATH ELEV 2
1/4" = 1'-0"



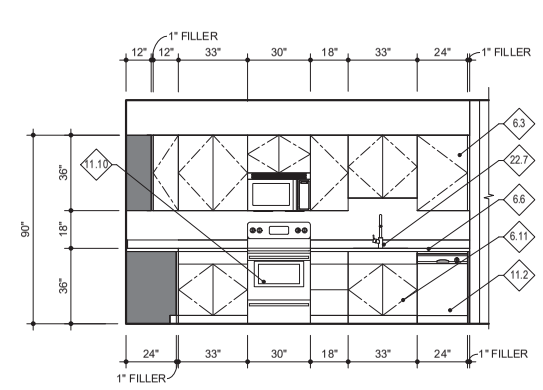
D B1 - BATH ELEV 1
1/4" = 1'-0"



C B1 - KITCHEN ELEV 3
1/4" = 1'-0"



B B1 - KITCHEN ELEV 2
1/4" = 1'-0"



A B1 - KITCHEN ELEV 1
1/4" = 1'-0"

UNIT PLAN GENERAL NOTES

UNIT BEARING WALLS; RE: STRUCTURE

T TEMPERED GLAZING; RE: A9-1.2 WINDOW SCHEDULE

- DIMENSIONS TAKE PRECEDENCE OVER DRAWINGS. DO NOT SCALE. DIMENSIONS GIVEN TO FACE OF STUDS UNLESS OTHERWISE INDICATED ON THE PLANS.
- INTERIOR DOORS TO BE HELD 4" OFF ADJACENT TO HINGE SIDE FRAMING, EXTERIOR AND CORRIDOR WALLS TO BE HELD OFF 6" ADJACENT TO HINGE SIDE FRAMING. U.N.O. ALL OTHER DOORS SHALL BE CENTERED
- ACCESSIBILITY ELEMENTS INDICATED ARE REQUIRED. FIELD CONDITIONS OCCURRING WHICH IMPACT THE ACCESSIBILITY DESIGN SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.
- NOTE: UNITS PROVIDED WITH MECHANICAL VENTILATION, RE: MECH. NATURAL VENTILATION CALCULATIONS SHOWN FOR REFEENCE ONLY.

INTERIOR ELEVATION GENERAL NOTES

- CASEWORK LAYOUT IS DIAGRAMMATIC. OWNER SHALL APPROVE FINAL LAYOUT PRIOR TO ORDERING/INSTALLATION.
- CASEWORK CONTRACTOR SHALL VERIFY APPLIANCE CLEARANCES
- CASEWORK CONTRACTOR SHALL VERIFY DRAWER PULL & DOOR HANDLE REQUIREMENTS
- CASEWORK CONTRACTOR SHALL INSTALL 4" FINISHED MATERIAL FOR FIELD APPLIED TOE KICK, MATERIAL TO MATCH CASEWORK
- PROVIDE MINIMUM 1" FILLER AT ADJACENT WALLS
- PROVIDE FINISHED END PANELS AT ALL EXPOSED CABINET ENDS
- PROVIDE SINK BASE CABINETS WITH OPEN BACKS FOR PLUMBING ACCESS
- ALL EXPOSED CASEWORK SHALL BE FINISHED WITH MATCHING PANELS

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
WE01c	1 HR	TYP. EXTERIOR WALL
WE02u	2 HR	8" CONCRETE SHAFT WALL
WE03u	1 HR	8" CONCRETE WALL
WE03w	1 HR	GARAGE, 12" CONCRETE WALL
WE03x	1 HR	9" CONCRETE WALL
WE04q	2 HR	8" CMU - 2HR FIRE BARRIER
WE05q	1 HR	8" CMU - 1 HR
WE06b	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE06c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE07c	NR	2x6 PARAPET WALL - NR
WE08c	NR	2x6 WALL - NR @ CONDENSERS
WE09b	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE09e	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE19k	1 HR	6" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
WI01q	2 HR	8" CMU - 2HR FIRE WALL
WI02q	2 HR	8" CMU - 2HR FIRE BARRIER
WI03	2 HR	FIRE WALL - 2HR
WI03b	2 HR	FIRE WALL, 2-HR, (2) 2X4 WITH (2) 1" SHAFTLINER
WI03h	2HR	FIRE WALL, 2-HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
WI04b	2 HR	FIRE BARRIER, 2-HR, 2x WITH (2) 5/8" TYPE 'X' GYP
WI04c	2 HR	FIRE BARRIER, - 2HR EXIT ACCESS
WI05c	2 HR	FIRE BARRIER, 2-HR EXIT ACCESS
WI06b	2-HR	2X4 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
WI06c	2-HR	2X6 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
WI07b	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
WI08c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
WI09h	1 HR	3 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
WI09k	1 HR	6" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
WI10b	1 HR	TYP. UNIT DEMISING - 1-HR FIRE PARTITION
WI10c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
WI11b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
WI11c	1 HR	<varies>
WI12b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
WI12c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
WI13b	1 HR	2X4, 1HR - BEARING
WI13c	1 HR	2X6, 1HR - BEARING
WI14b	NR	2X4 INTERIOR WALL - NR
WI14c	NR	2X6 INTERIOR WALL - NR
WI15b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
WI15c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
WI16	NR	7/8" METAL HAT CHANNEL FURRING WALL
WI17b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
WI18k	NR	6" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

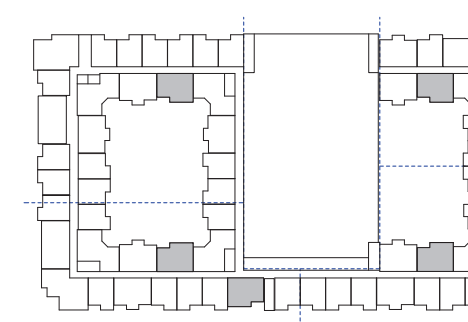
KEYNOTES

NO.	NOTE
5.1	STEEL BALCONY GUARDRAIL AT 42" AFF. SHOP PRIMED. PAINT IN FIELD
6.2	KITCHEN PANTRY CABINET
6.3	KITCHEN UPPER CABINET
6.6	KITCHEN SOLID SURFACE COUNTERTOP, RE: INTERIORS
6.9	BUILT IN MUD BENCH W/ SHELVES/HOOKS RE: INTERIORS
6.10	BUILT-IN WOOD SHELVES. (4) EQ. SPACED
6.11	KITCHEN BASE CABINET
6.12	KITCHEN ISLAND W/ SOLID SURFACE COUNTER-TOP
6.13	BATHROOM VANITY SOLID SURFACE COUNTER-TOP
6.14	BATHROOM VANITY CABINET
6.18	BATHROOM VANITY BASE CABINET DRAWERS
6.19	KITCHEN BASE CABINET DRAWERS
10.2	SINGLE ROD AND SHELF
10.3	MIRROR, 40" TO BOTTOM REFLECTIVE SURFACE RE: INTERIORS
10.7	TOILET PAPER DISPENSER
10.15	WALL MOUNTED BIKE RACK, PROVIDED BY OWNER
10.17	TOWEL BAR
10.18	TOWEL RING
11.1	REFRIGERATOR / FREEZER
11.2	24" X 24" DISHWASHER, RE: PLUMBING
11.5	STACKABLE FRONT LOAD WASHER DRYER. OPTIONAL TENANT LEASE BY OWNER.
11.10	OVEN/RANGE, WITH MICROWAVE HOOD AND RECIRCULATING EXHAUST FAN ABOVE - REPLACE WITH COUNTER DEPTH RANGE AS REASONABLE ACCOMMODATION WHEN NECESSARY FOR OUTLET ACCESSIBILITY
22.5	ELEC. WATER HEATER W/ PAN, RE: PLUMBING
22.7	UNDERMOUNT KITCHEN SINK, RE: PLUMBING
22.8	WASHER HOOK UP, RE: PLUMBING
22.9	FLOOR MOUNT WATER CLOSET, RE: PLUMBING
22.10	BATHROOM SINK. ENSURE RIM OF SINK IS BELOW 34" MAX. A.F.F. SINK BOWL TO BE 6 1/2" DEEP MAXIMUM PER UFAS GUIDELINES. RE: PLUMBING
22.12	60"X36" TUB/SHOWER WITH PREFABRICATED SURROUND; PROVIDE CURVED SHOWER CURTAIN ROD; PROVIDE GLASS MAT GYPSUM BOARD AS REQUIRED; PRE-ROCK AROUND TUB LOCATIONS ADJACENT TO RATED WALLS AS REQUIRED. INSTALL BLOCKING IN WALL FOR FUTURE GRAB BAR INSTALLATION
22.20	ICE MAKER BOX, RE: PLUMBING
23.2	DRYER HOOK UP, RE: MECHANICAL
26.4	EXTERIOR SCONCE, MOUNTED AT 8'-0" AFF UNO, RE: ELEC
26.6	SURFACE MOUNTED VANITY LIGHT, RE: ELEC
26.10	PENDANT LIGHT FIXTURE, RE: ELEC. RE: INTERIORS FOR MOUNTING HEIGHT
27.1	TELECOM BOX. TOP OF PANEL TO BE MAX. 48" ABOVE FINISH FLOOR. RE: ELEC

APPLIANCE BASIS OF DESIGN

TYPE B:
TOP-FREEZER REFRIGERATOR -MODEL#: GIE22JTNRWW
ELECTRIC RANGE -MODEL#: GEJB258DMWW
OVER THE RANGE MICROWAVE -MODEL#: GEJMV3160DFWW
DISHWASHER -MODEL#: GDF511PGMWW
WASHER -FRONT LOAD STACKABLE -MODEL#: GFW55OSSNWW
DRYER -FRONT LOAD STACKABLE -MODEL#: GFD55ESSNWW

TYPE A:
TOP-FREEZER REFRIGERATOR -MODEL# GIE22JTNRWW
FRONT CONTROL ELECTRIC RANGE -MODEL#: WEE515S0LS
UNDER THE CABINET HOOD -MODEL#:
COUNTERTOP MICROWAVE OVEN -MODEL#: WMC30516H
DISHWASHER -MODEL: WDF550SAH
WASHER -FRONT LOAD -MODEL#: GFW55OSSNWW
DRYER -FRONT LOAD -MODEL#: GFD55ESSNWW
ALL-IN-ONE FRONT LOAD WASHER/CONDENSER DRYER -MODEL #: GFQ14ESSNWW



UNIT KEY PLAN

N TRUE N PROJECT

MARSHALL POINTE

MARSHALL POINTE LAND AQUISITION, LLC
5170 MARSHALL ST - ARVADA, CO 80002

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2555 WALNUT STREET
DENVER, COLORADO 80205
www.kephart.com

ISSUE FOR CONSTRUCTION
08.07.2024

No.	Date	Issue
4	08.07.2024	IFC

Project Architect	DV
Project Designer	DR
Date	
Job Number	222001
Drawn By	CG / CB/ TT/ NV
Checked By	JG
Title	UNIT PLAN B1
Sheet Number	A5-2.1

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ACCESSIBILITY "TYPE B" PLAN NOTES

SOLUTION REFERENCES ARE TO ICC/ANSI A117.1-2009
NOT ALL NOTES MAY APPLY TO THIS SHEET

1. **PRIMARY ENTRANCE** PER SECTION 1004.2. PRIMARY EN TRANCE TO BE LOCATED ON ACCESSIBLE ROUTE.
2. **WALKING SURFACE WIDTH** PER SECTION 1004.4.1. CLEAR WIDTH OF AN ACCESSIBLE ROUTE SHALL COMPLY WITH SECTION 403.5.
3. **CHANGES IN LEVEL** PER SECTION 10044.2. WALKING SURFACES THAT ARE PART OF AN ACCESSIBLE ROUTE TO COMPLY WITH SEC TION 303. WHERE PATIO SURFACE OR BALCONY MATERIAL IS INTERFACIAL THE INTERVIOUS SURFACE SHALL BE 4" MAX BELOW THE FLOOR LEVEL OF THE ADJACENT INTERIOR SPACE OF THE UNIT.
4. **DOORS AND DOOR WAYS** PER SECTION 1004.5. PRIMARY DOOR TOC OMPLY WITH SECTION 1004.5.1. & SECTION 404.
5. **USER PASSAGE DOORWAYS** PER SECTION 1004.5.2. PASSAGE DOOR TOH AVE A CLEAR OPENING OF 31-5/8" MIN. (32- 5/8" ODOR).
6. **RAMPS** PER SECTION 10044. RAMPS SH ALL COMPLY WITH S ECTION 405.
7. **LAUNDRY EQUIPMENT CLEARANCE** PER SECTION 1004.10.1. SH ALL COMPLY WITH SECTION 305.3& 804.12. PROVIDE A 30"X48" CLEAR FLOOR SPACE POSITION FOR PARALLEL APPROACH. FOR TOP LOADING MACHINES, THE CENTERLINE OF THE CLEAR FLOOR SPACE SH ALL BE OFFSET 24" MAX. FROM CENTERLINE OF DOOR OPENING. FOR FRONT LOADING MACHINES, THE CENTERLINE OF THE CLEAR FLOOR SPACE SH ALL BE OFFSET 24" MAX. FROM CENTERLINE OF DOOR OPENING.
8. **GRAB BAR AND SHOWER SEAT REINFOR CEMENT** PER SECTION 1004.11.1. REINFORCEMENT S HALL BE PROVIDED FOR THE FUTURE INSTALLATION OF GRAB BARS AND SHOWER SEATS AND TO COMPLY WITH 804.5, 807.4, 808.3, 808.2.1.3, 808.2.2.3 AN D 808.2.3.2. GRAB BAR REINFORCEMENT MATERIA L FOR FUTURE GRAB BARS SHALL BE ABLE TO RESIST A LOAD APPLIED AT ANY POINT IN ANY DIRECTION. HEIGHT MIN DEPTH ONG 32" MIN, TO 34" MAX. AFF.
9. **DOOR SWING** PER SECTION 1004.11.2.1. EXCEPTION CLEAR FLOOR SPACE COMPLYING WITH 305.3, EXCLUDEN ON-EXE AND TOE CLEAR ANCES UNDER ELEMENTS, PROVIDED WITH IN THE ROOM BEYOND THE ARC OF THE DOOR SWING.
10. **OPTION A LAVATORY** PER SECTION 1004.11.3.1.1. A LAVATORY WITH CLEAR FLOOR SPACE TO COMPLY WITH SECTION 305 SPOSITIONED FOR PARALLEL APPROACH. THE CLEAR FLOOR SPACE SHALL BE CENTERED ON THE LAVATORY. EXCEPTION: A LAVATORY COMPLYING WITH SECTION 606 SH ALL BE PERMITTED. CABINETRY SH ALL BE PERMITTED IF 1) CABINETRY IS REMOVABLE, 2) FLOOR FINISH EXTENDS UNDER CABINETRY, AND 3) WALLS BEHIND AND SURROUNDING CABINETRY ARE FINISHED.
11. **OPTION A LAVATORY CLEARANCES** PER SECTION 1004.11.3.1.5. PROVIDE CLEAR SPACE FOR PARALLEL OR FORWARD APPROACH.
12. **OPTION B LAVATORY** PER SECTION 1004.11.3.2.1. A LAVATORY WITH CLEAR FLOOR SPACE TO COMPLY WITH SECTION 305 SPOSITIONED FOR PARALLEL APPROACH. FRONT OF LAVATORY SHALL BE 14" MAX. A FF. MEASURED TO THE HIGH ER OF THE RIM OR COUNTER SURFACE.
13. **OPTION B BATHING FACILITIES** PER SECTION 1004.11.3.2.3. BATHTUB CLEARANCE TO EXTEND 48"MIN. ALONG THE 60" MIN. IN DEPTH PER SECTION 1004.11.3.2.3.1. SHOWER COMPAN TMENT TO COMPLY WITH SECTION 1004.11.3.2.3.2.
14. **OPTION A & OPTION B: WATER CLOSET** PER SECTION S 1004.11.3.1.2 & 1004.11.3.2.2. **LOCATION**: THE CEN TERLINE OF THE WATER CLOSET SH ALL BE 16" - 18" CLEAR ON ONE SIDE OF REQUIRED CLEARANCE. **CLEARANCE MID TH**: SHALL BE 48" MIN. **CLEARANCE DEPTH**: SH ALL BE 56" MIN. FOR SIDE APPROACH AND 66" MIN. FOR FORWARD APPROACH. **CLEARANCE OVERLAP**: A VANITY OR OTHER OBSTRUCTION 36" MAX. IN DEPTH SH ALL BE PERMITTED TO OVERLAP THE REQUIRED CLEARANCE, PROVIDED THE WIDTH OF THE REMAINING WATER CLOSET CLEARANCE IS 57" MIN.
15. **KITCHEN KNEE SPACE CLEARANCE** PER SECTION 1004.12.1.1. CLEAR ANCE BETWEEN ALL OPPOSIN G BASE CABINETS, COUNTER TOPS, APPLIANCES OR WALLS W THIN KITCHEN AREAS SHALL BE 40" MIN.
16. **KITCHEN CLEARANCE AT U-SHAPED KITCHEN CONFIGURATION** PER SECTION 1004.12.1.2. PROVIDE 60" MIN. CLE ARANCE BETWEEN ALL OPPOSIN G BASE CABINETS, COUNTERTOPS, APPLIANCES OR WALLS W THIN KITCHEN WORK AREAS.
17. **KITCHEN SINK CLEAR FLOOR SPACE** PER SECTION 1004.12.2.1. PROVIDE A 30"X48" CLEAR FLOOR SPACE POSITION FOR PARALLEL APPROACH. CENTERSPACE ON SINK BOWL. SINK WITH FORWARD APPROACH SH ALL COMPLY WITH SECTION 1003.12.4.1.
18. **DISHWASHER** PER SECTION 1004.12.2.2. POSITION CLEAR FLOOR SPA CE ADJACENT TO THE DISH WASHER DOOR FOR PARALLEL OR FORWARD APPROACH BEYOND THE SWING OF THE DISH WASHER DOOR.
19. **RANGE OR COOK TOP** PER SECTION 1004.12.23. CLEAR FLOOR SPACE POSITIONED FOR FORWARD APPROACH SH ALL COMPLY WITH SECTION 1004.12.3.2. CLEAR FLOOR SPACE POSITIONED FOR PARALLEL APPROACH SHALL ALIGN WITH THE CENTERLINE OF THE RANGE COOKTOP PER SECTION 1004.2.3.5.
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- REFER TO ARCHITECTURAL SITE AN D COMPOSITE PLANS FOR LOCATION OF ACCESSIBLE UNITS.
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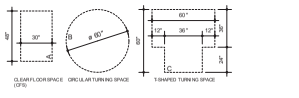
- PROVIDE LEVER HARDWARE ON ALL SWING DOORS IN UNIT.
- REFER TO SHEET A0-6.1 FOR UNIT CONFIGURATION & FOR TYPE B DWELLING UNITS - OPTION USED NOTED ON ACCESSIBILITY PLAN.

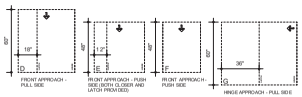
ACCESSIBILITY LEGEND

PLAN

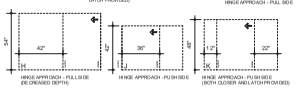
INDICATES REQUIRED REINFORCEMENT FOR FUTURE INSTALLATION OF GRAB BARS. EXTEND REINFORCEMENT A MIN. 2" BEYOND REQUIRED DIMENSION SHOWN FOR BAR. (RE: ANSI A117.1 TYPE 'A' AND TYPE 'B' ACCESSIBILITY DETAILS)



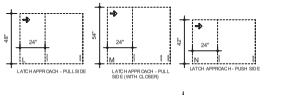
CLEAR FLOOR SPACE (CFS) | CIRCLE TURNING SPACE | T-SHAPED TURNING SPACE



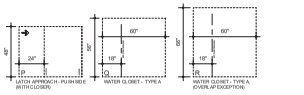
FRONT APPROACH - PULL SIDE | FRONT APPROACH - PUSH SIDE (BOTH CLOSER AND LATCH PROVIDED) | FRONT APPROACH - PUSH SIDE | HINGE APPROACH - PULL SIDE



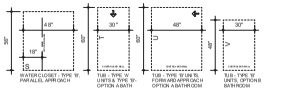
HINGE APPROACH - PULL SIDE (DE CREASED DEPTH) | HINGE APPROACH - PUSH SIDE | HINGE APPROACH - PUSH SIDE (BOTH CLOSER AND LATCH PROVIDED)



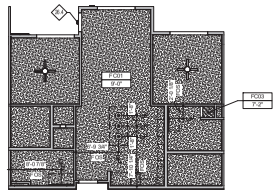
LATCH APPROACH - PULL SIDE | LATCH APPROACH - PULL SIDE (WITH CLOSER) | LATCH APPROACH - PUSH SIDE



LATCH APPROACH - PUSH SIDE (WITH CLOSER) | WATER CLOSET - TYPE A | WATER CLOSET - TYPE A (OVERLAP EXCEPTION)

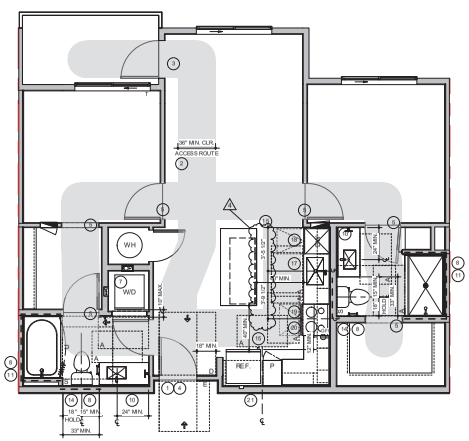


WATER CLOSET - TYPE 'B' PARALLEL APPROACH | 1(a) - TYPE 'A' UNITS & TYPE 'B' - OPTION A BATH | 1(a) - TYPE 'B' UNITS FORWARD APPROACH OPTION A BATHROOM | 1(b) - TYPE 'B' UNITS, OPTION B BATH ROOM



RCP LEGEND	
F-03 / RC01	RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.3
F-03	NON-RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.5
	PENDANT LIGHT; RE: ELEC
	CEILING FAN - CENTERED IN ROOM; RE: ELEC
	SURFACE MOUNTED VANITY LIGHT; RE: ELEC

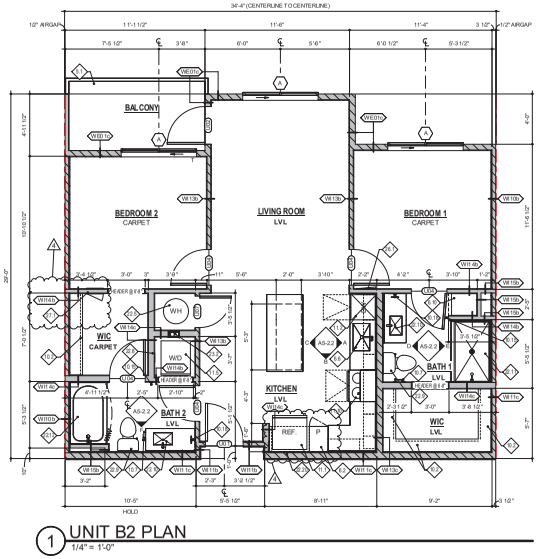
3 UNIT B2 RCP
1/8" = 1'-0"



2 UNIT B2 ACC. PLAN
1/4" = 1'-0"

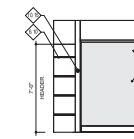
ICC/ANSI 117.1-2009 TYPE 'B' UNIT OPTION A BATHS

NOTE: ALL ACCESSIBILITY PLAN DIMENSIONS GIVEN ARE TO WALL FINISH

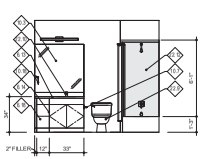


1 UNIT B2 PLAN
1/4" = 1'-0"

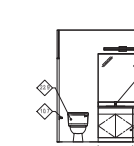
UNIT B2 SUMMARY				
UNIT NAME	UNIT TYPE	UNIT AREA	QTY	TOTAL AREA
UNIT B2	1BR/1BA	886 SQ FT	41	36,326 SF



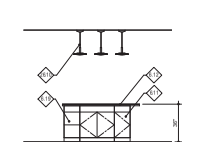
E B2 - BATH 1 ELEV 2
1/4" = 1'-0"



F B2 - BATH 2 ELEV 1
1/4" = 1'-0"



D B2 - BATH 1 ELEV 1
1/4" = 1'-0"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ACCESSIBILITY "TYPE B" PLAN NOTES

SOLUTION REFERENCES ARE TO ICC/ANSI A117.1-2009
NOT ALL NOTES MAY APPLY TO THIS SHEET

1. **PRIMARY ENTRANCE** PER SECTION 1004.2. PRIMARY EN TRANCE TO BE LOCATED ON ACCESSIBLE ROUTE.
2. **WALKING SURFACE WIDTH** PER SECTION 1004.4.1. CLEAR WIDTH OF AN ACCESSIBLE RO UTE SHALL COMPLY WITH SECTION 403.5.
3. **CHANGES IN LEVEL** PER SECTION 1004.5. WALKING SURFACES THAT ARE PART OF AN AC CESSIBLE ROUTE TO COMPLY WITH SEC TION 303. WHERE PATIO SURFACE OR BALCONY MATERIAL IS INTERFACIAL THE INTERVIOUS SURFACE SHALL BE 4" MAX BELOW THE FLOOR LEVEL OF THE ADJACENT INTERI OR SPACE OF THE UNIT.
4. **DOORS AND DOOR WAYS** PER SECTION 1004.6. PRIMARY DOOR TOC OMPLY WITH SECTION 1004.5.1. & SECTION 404.
5. **USER PASSAGE DOORWAYS** PER SECTION 1004.5.2. PASSAGE DOOR TOH AVE A CLEAR OPENING OF 31-5/8" MIN. (2- 5/8" MIN.)
6. **RAMPS** PER SECTION 1004.6. RAMPS SH ALL COMPLY WITH S ECTION 405.
7. **LAUNDRY EQUIPMENT CLEARANCE** PER SECTION 1004.10.1. SHALL COMPLY WITH SECTION 305.3& 812. PROVIDE A 30"X48" CLEAR FLOOR SPACE POSITION FOR PARALLEL APPROACH FOR TOP LOADING WASHER AND FRONT LOADING DRYER. PROVIDE A 30"X48" CLEAR FLOOR SPACE POSITION FOR PARALLEL APPROACH SHALL BE PR OVIDED FOR FA FRONT LOADING WASHERS. FOR FRONT LOADING MACHINES, THE CENTERLINE OF THE CLEAR FLOOR SPACE SH ALL BE OFFSET 24" MAX. FROM CENTERLINE OF DOOR OPENING.
8. **GRAB BAR AND SHOWER SEAT REINFOR CEMENT** PER SECTION 1004.11.1. REINFORCEMENT SHALL BE PROVIDED FOR THE FUTURE INSTALLATION OF GRAB BARS AND SHOWER SEATS AND TO COMPLY WITH 604.5, 607.4, 608.3, 608.2.1.3, 608.2.2.3 AN D 608.2.3.2. GRAB BAR REINFORCEMENT MATERIA L FOR WALLS SHALL BE 3/4" NOMINAL MIN. THICKNESS. APPLIED AT ANY POINT IN ANY DIRECTION. HEIGHT MIN DEPTH OR 33" MIN. TO 34" MAX. AFF.
9. **DOOR SWING** PER SECTION 1004.11.2.01. EXCEPTION CLEAR FLOOR SPACE COMPLYING WITH 305.3, EXCLUDEN OSWEEP, AND TOE CLEAR ANCES UNDER ELEMENTS, PROVIDED WITHIN THE ROOM BEYOND THE ARC OF THE DOOR SWING.
10. **OPTION A LAVATORY** PER SECTION 1004.11.3.1.1. A LAVATORY WITH CLEAR FLOOR SPACE TO COMPLY WITH SECTION 305 SPOSITIONED FOR PARALLEL APPROACH FOR THA LAVATORY SHALL BE CENTERED ON THE LAVATORY. EXCEPTION: A LAVATORY COMPLYING WITH SECTION 306 SH ALL BE PERMITTED. CABINETRY SH ALL BE PERMITTED IF 1/2 CABINETRY IS REMOVABLE, S FLOOR FINISH EXTENDS UNDER CABINETRY, AND S WALLS BEHIND AN D SURROUNDING CABINETRY ARE FINISHED.
11. **OPTION A LAVATORY CLEARANCES** PER SECTION 1004.11.3.1.1. PROVIDE CLEAR SPACE FOR PARALLEL OR FORWARD APPROACH.
12. **OPTION B LAVATORY** PER SECTION 1004.11.3.2.1. A LAVATORY WITH CLEAR FLOOR SPACE TO COMPLY WITH SECTION 305 SPOSITIONED FOR PARALLEL APPROACH FRONT OF LAVATORY SHALL BE 34" MAX. A FF. MEASURED TO THE HIGH ER OF THE RIM OR COUNTER SURFACE.
13. **OPTION B SEATING FACILITIES** PER SECTION 1004.11.3.2.3. BATHTUB CLEARANCE TO EXTEND 48"MIN. ALONG FRONT 30" MIN. IN DEPTH PER SECTION 1004.11.3.2.3.1. SHOWER COMPAR TMENT TO COMPLY WITH SECTION 1004.11.3.2.3.2.
14. **OPTION A.3. OPTION B. WATER CLOSET** PER SECTION S 1004.11.3.1.2 & 1004.11.3.2.2. **LOCATION** THE CEN TERLINE OF THE WATER CLOSET SH ALL BE 16" - 18" CLEAR ON ONE SIDE OF REQUIRED CLEARANCE. **CLEARANCE MID TH:** SHALL BE 48" MIN. **CLEARANCE DEPTH:** SH ALL BE 56" MIN. FOR SIDE APPROACH AN D 66" MIN. FOR FORWARD APPROACH. **CLEARANCE OVERLAP:** A VANITY OR OTHER OBSTRUCTION 20" MAX. IN DEPTH SH ALL BE PER MITTED TO OVERLAP THE REQUIRED CLEAR ANCE, PROVIDED THE WIDTH OF THE REMAINING WATER CLOSET CLEARANCE IS 57" MIN.
15. **KITCHEN ISLAND CLEARANCE** PER SECTION 1004.12.1.1. CLEAR ANCE BETWEEN ALL OPPOSIN G BASE CABINETS, COUNTER TOPS, APPLIANCES OR WALLS WI THIN KITCHEN AREAS SHALL BE 40" MIN.
16. **KITCHEN CLEARANCE AT U-SHAPED KITCHENS** PER SECTION 1004.12.1.2. PROVIDE 60" MIN. CLE ARANCE BETWEEN ALL OPPOSIN G BASE CABINETS, COUNTERTOPS, APPLIANCES OR WALLS WI THIN KITCHEN WORK AREAS.
17. **KITCHEN SINK CLEAR FLOOR SPACE** PER SECTION 1004.12.2.1. PROVIDE A 30"X48" CLEAR FLOOR SPACE POSITION FOR PARALLEL APPROACH. CENTER SPACE ON SINK. SINK WITH FORWARD APPROACH SH ALL COMPLY WITH SECTION 1003.12.4.1.
18. **DISHWASHER** PER SECTION 1004.12.2.2. POSITION CLEAR FLOOR SPA CE ADJACENT TO THE DISH WASHER DOOR FOR PARALLEL OR FOR WARD APPROACH BEYOND THE SWING OF THE DISH WASH ER DOOR.
19. **RANGE OR COOK TOP** PER SECTION 1004.12.23. CLEAR FLOOR SPACE POSITIONED FOR FORWARD APPROACH SH ALL COMPLY WITH SECTION 1004.12.3.2. CLEAR FLOOR SPACE POSITIONED FOR PARALLEL APPROACH SHALL ALIGN WITH THE CENTERLINE OF THE RANGE COOKTOP PER SECTION 1004.2.3.1.
20. **OVEN** PER SECTION 1004.12.2.4. A CLEAR FLOOR SPACE SHALL BE PROVIDED FOR PARALLEL OR FORWARD APPROACH.
21. **REFRIGERATION FREEZER** PER SECTION 1004.12.3.5. A CLEAR FLOOR SPACE SHALL BE PROVIDED FOR PARALLEL OR FORWARD APPROACH. THE CENTERLINE OF CLEAR FLOOR SPACE SHALL BE OFFSET 24" MAX. FROM THE CENTERLINE OF THE APPLIANCE.

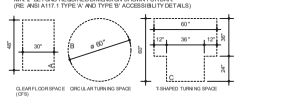
ACCESSIBILITY GENERAL NOTES

- REFER TO SHEET A0-6.2 FOR ACCESSIBILITY CALCULATIONS AND REQUIREMENTS.
- REFER TO SHEETS A0-6.2 THRU A0-6.5 FOR ACCESSIBILITY DETAILS.
- REFER TO ARCHITECTURAL SITE AN D COMPOSITE PLANS FOR LOCATION OF ACCESSIBLE UNITS.
- DIMENSIONS ON THIS ACCESSIBILITY PLAN REPRESENT DISTANCE FROM FINISHED WALL SURFACE.
- PROVIDE LEVER HARDWARE ON ALL SWING DOORS IN UNIT.
- REFER TO SHEET A0-6.1 FOR UNIT CONFORTION &FOR TYPE B DWELLING UNITS - OPTION USED NOTED ON ACCESSIBILITY PLAN.

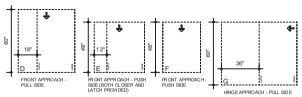
ACCESSIBILITY LEGEND

PLAN

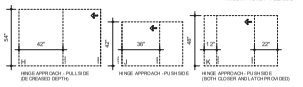
INDICATES REQUIRED REINFORCEMENT FOR FUTURE INSTALLATION OF GRAB BARS. EXTEND REINFORCEMENT A MIN. 2" BEYOND REQUIRED DIMENSION SHOWN FOR BAR. (RE: ANSI A117.1 TYPE 'A' AND TYPE 'B' ACCESSIBILITY DETAILS)



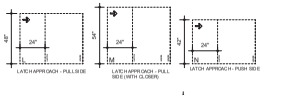
CLEAR FLOOR SPACE (CFS) | CIRCLE ATURNING SPACE | T-SHAPED TURNING SPACE



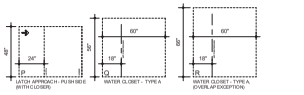
FRONT APPROACH - PULL SIDE | FRONT APPROACH - PUSH SIDE (BOTH CLOSER AND LATCH PROVIDED) | FRONT APPROACH - PUSH SIDE | HINGE APPROACH - PULL SIDE



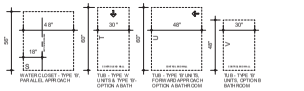
HINGE APPROACH - PULL SIDE (DE CRIBED DEPTH) | HINGE APPROACH - PUSH SIDE | HINGE APPROACH - PUSH SIDE (BOTH CLOSER AND LATCH PROVIDED)



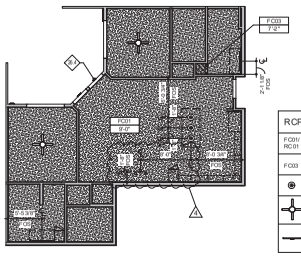
LATCH APPROACH - PULL SIDE | LATCH APPROACH - PULL SIDE (WITH CLOSER) | LATCH APPROACH - PUSH SIDE



LATCH APPROACH - PUSH SIDE WITH CLOSER) | WATER CLOSET - TYPE A | WATER CLOSET - TYPE A. (OVERLAP EXCEPTION)



WATER CLOSET - TYPE 'B'. PARALLEL APPROACH | 1'-0" - 1'-5" W UNITS & TYPE 'B' - OPTION A BATH | 1'-0" - 1'-5" W & TB - TYPE 'B' FORWARD APPROACH OPTION A BATHROOM | TB - TYPE 'B' UNITS, OPTION B BATHROOM



SOLUTION REFERENCES ARE TO ICC/ANSI A117.1-2009
NOT ALL NOTES MAY APPLY TO THIS SHEET

1. **PRIMARY ENTRANCE** PER SECTION 1003.2. PRIMARY ENTRANCE TO BE LOCATED ON ACCESSIBLE ROUTE.
2. **ACCESSIBLE ROUTE** PER SECTION 1003.3. ACCESSIBLE ROUTE SHALL CONNECT ALL ELEMENTS AND SPACES THAT ARE PART OF THE UNIT.
3. **TURNING SPACES** PER SECTION 1003.3.2. ALL ROOMS SERVED BY AN ACCESSIBLE ROUTE SHALL PROVIDE A TURNING SPACE COMPLYING WITH SECTION 304. (EXCEPTION-CLOSETS AND TOILET ROOMS AND BATHROOMS THAT ARE NOT REQUIRED TO COMPLY WITH SECTION 1003.11.2).
4. **WALKING SURFACES** PER SECTION 1003.4. WALKING SURFACES THAT ARE PART OF AN ACCESSIBLE ROUTE SHALL COMPLY WITH SECTION 403.
5. **DOORS AND DOORWAYS** PER SECTION 1003.5. PRIMARY AND PASSAGE DOORS TO COMPLY WITH SECTION 404.
6. **RAMPS** PER SECTION 1003.6. RAMPS SHALL COMPLY WITH SECTION 405.
7. **OPERABLE PARTS** PER SECTION 1003.9. LIGHTING CONTROLS, ELECTRICAL SWITCHES AND RECEPTACLE OUTLETS, ENVIRONMENTAL CONTROLS, APPLIANCE CONTROLS, OPERATING HARDWARE FOR OPERABLE WINDOWS, PLUMBING FIXTURE CONTROLS, ETC. SHALL COMPLY WITH SECTION 309.
8. **LAUNDRY EQUIPMENT** PER SECTION 1003.10. WASHING MACHINES AND DRYERS TO COMPLY WITH SECTION 611.
9. **GRAB BAR AND SHOWER SEAT REINFORCEMENT** PER SECTION 1003.11.1. REINFORCEMENT SHALL BE PROVIDED FOR THE FUTURE INSTALLATION OF GRAB BARS AND SHOWER SEATS AND TO COMPLY WITH 604.5, 607.4, 608.3, 608.2.1.3, 608.2.2.3 AND 608.2.3.2. GRAB BAR REINFORCEMENT MATERIAL FOR BLOCKING TO RESIST REQUIRED LOAD OF 250 LBS. APPLIED AT ANY POINT IN ANY DIRECTION. HEIGHT RANGE FROM 33" MIN. TO 36" MAX. AFF.
10. **DOOR SWING** PER SECTION 1003.11.2.1, EXCEPTION CLEAR FLOOR SPACE COMPLYING WITH 305.3 PROVIDED WITHIN THE ROOM BEYOND THE ARC OF THE DOOR SWING.
11. **LAVATORY** PER SECTION 1003.11.2.2. A LAVATORY TO COMPLY WITH 606. PROVIDE A REMOVABLE BASE CABINET. FINISH FLOOR UNDER & WALL BEHIND REMOVABLE BASE CABINET. 34" MAX. AFF TO HIGHER OF T.O. RIM OR T.O. COUNTERTOP.
12. **MIRRORS** PER SECTION 1003.11.2.3. MIRRORS TO HAVE THE BOTTOM EDGE OF THE REFLECTED SURFACE 40" MAX ABOVE THE FLOOR.
13. **WATER CLOSET LOCATION** PER SECTION 1003.11.2.4.1. THE WATER CLOSET SHALL BE POSITIONED WITH A WALL TO THE REAR AND TO ONE SIDE. THE CENTERLINE OF THE WATER CLOSET SHALL BE 16" MIN AND 18" MAX FROM THE WALL.
14. **WATER CLOSET CLEARANCE/OVERLAP** PER SECTION 1003.11.2.4.4. PROVIDE A 60" WIDE X 66" DEEP CLEARANCE AROUND THE WATER CLOSET. A LAVATORY IS ALLOWED TO OVERLAP INTO THE 60"X66" CLEARANCE.
15. **WATER CLOSET HEIGHT** PER SECTION 1003.11.2.4.5. THE WATER CLOSET HEIGHT SHALL BE 15" MIN. AND 19" MAX. ABOVE THE FLOOR. MEASURED TO THE TOP OF THE SEAT.
16. **WATER CLOSET FLUSH CONTROLS** PER SECTION 1003.11.2.4.6. HAND OPERATED FLUSH CONTROLS SHALL COMPLY WITH SECTION 309. LOCATED CONTROLS ON OPEN SIDE OF WATER CLOSET.
17. **BATHTUB CLEARANCE** PER SECTION 1003.11.2.5.1/607 BATHTUB CLEARANCE TO EXTEND FULL LENGTH OF BATHTUB AND 30" IN DEPTH.
18. **BATHTUB CONTROLS** PER SECTION 1003.11.2.5.1/607.5. CONTROLS TO BE LOCATED OFF CENTER. CONTROLS TO BE PROVIDED ON END WALL, LOCATED BETWEEN THE BATHTUB RIM AND GRAB BAR AND BETWEEN THE OPEN SIDE OF THE BATH TUB AND THE MIDPOINT OF THE WIDTH OF THE BATH. CONTROLS TO COMPLY WITH SECTION 309.4. SEE ILLUSTRATION ON ACCESSIBLE DETAIL SHEETS.
19. **BATHTUB HAND SHOWER** PER SECTION 1003.11.2.5.1/607.6. A HAND SHOWER WITH A HOSE 59" MIN IN LENGTH THAT CAN BE USED AS A HAND SHOWER AND FIXED SHOWER HEAD SHALL BE PROVIDED. THE HAND SHOWER SHALL HAVE A CONTROL WITH A NONPOSITIVE SHUT OFF FEATURE. AN ADJUSTABLE-HEIGHT HAND SHOWER MOUNTED ON A VERTICAL BAR SHALL BE INSTALLED TO NOT OBSTRUCT THE USE OF GRAB BARS.
20. **REMOVABLE CABINET**. CABINET SHALL BE REMOVABLE W/O REMOVAL OR REPLACEMENT OF COUNTER TOP. THE RESULTANT SPACE SHALL MEET THE REQUIRED 30" MIN. WIDE CLEARANCE FOR FORWARD APPROACH. FLOOR FINISH SHALL EXTEND UNDER CABINET, WALL AND SURROUNDING CABINET SHALL BE FINISHED.
21. **TRANSFER-TYPE SHOWER SIZE AND CLEARANCES** PER SECTION 1003.11.2.5.2/608.2.1. TRANSFER-TYPE SHOWER COMPARTMENTS SHALL HAVE A CLEAR INSIDE DIMENSION OF 36"X36" MEASURED AT THE CENTER POINT OF OPPOSING SIDES. EN ENTRY 36" MIN. IN WIDTH SHALL BE PROVIDED. A CLEARANCE 48" IN LENGTH MEASURED PERPENDICULAR TO THE CONTROL WALL AND 36" IN WIDTH SHALL BE PROVIDED ADJACENT TO THE OPEN FACE OF THE COMPARTMENT.
22. **TRANSFER-TYPE SHOWER CONTROLS AND HAND SHOWER** PER SECTION 1003.11.2.5.2/608.4.3. CONTROLS AND HAND SHOWER TO BE LOCATED ON THE WALL OPPOSITE THE SEAT, 38" MIN. AND 48" MAX. ABOVE THE SHOWER FLOOR, WITHIN 15" LEFT OR RIGHT OF THE CENTERLINE OF THE SEAT.
23. **TRANSFER-TYPE SHOWER THRESHOLDS** PER SECTION 1003.11.2.5.2/608.6. THRESHOLD SHALL BE 1/2" MAX IN HEIGHT AND SHALL BE BEVELED, ROUNDED, OR VERTICAL.
24. **KITCHEN CLEARANCE** PER 1003.12.1.1. MINIMUM CLEARANCE BETWEEN ALL OPPOSING BASE CABINETS, COUNTER TOPS, APPLIANCES OR WALLS WITHIN KITCHEN WORK AREAS SHALL BE 40 INCHES.
25. **KITCHEN CLEARANCE AT U-SHAPED KITCHENS DESIGN** PER SECTION 1003.12.1.2 PROVIDE 60" MIN. CLEARANCE BETWEEN ALL OPPOSING BASE CABINETS, COUNTERTOPS, APPLIANCES OR WALLS WITHIN KITCHEN WORK AREAS.
26. **KITCHEN WORK SURFACE** PER SECTION 1003.12.3. AT LEAST ONE SECTION OF COUNTER SHALL PROVIDE A WORK SURFACE 30" MIN. IN LENGTH COMPLYING WITH SECTION 1003.12.3.1. PROVIDE A 30"X48" CLEAR FLOOR SPACE POSITION FOR FORWARD APPROACH. CENTER ON WORK SURFACE. KNEE AND TOE CLEARANCE TO COMPLY WITH 306. THE WORK SURFACE HEIGHT TO BE 34" MAX. ABOVE FINISH FLOOR. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES ON THE EXPOSED EDGES UNDER THE WORK SURFACE.
27. **KITCHEN SINK CLEAR SPACE** PER SECTION 1003.12.4.1. PROVIDE A 30"X48" CLEAR FLOOR SPACE POSITION FOR FORWARD APPROACH. CENTER SPACE ON SINK BOWL. PROVIDE A REMOVABLE BASE CABINET. FINISH FLOOR UNDER AND WALLS/CABINETS AROUND REMOVABLE BASE CABINET.
28. **KITCHEN SINK HEIGHT** PER SECTION 1003.12.4.2. THE FRONT OF THE SINK TO BE 34" MAX. ABOVE THE FLOOR. MEASURED TO HIGHER OF THE RIM OR COUNTER.
29. **KITCHEN FAUCETS** PER SECTION 1003.12.4.3. FAUCETS TO COMPLY WITH SECTION 309.
30. **EXPOSED PIPES AND SURFACES** PER SECTION 1003.12.4.4. WATER SUPPLY AND DRAIN PIPES UNDER SINKS SHALL BE INSULATED OR OTHERWISE CONFIGURED TO PROTECT AGAINST CONTACT. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES ON THE EXPOSED EDGES UNDER THE WORK SURFACE.
31. **APPLIANCES OPERABLE PARTS** PER SECTION 1003.12.5.1. ALL APPLIANCE CONTROLS SHALL COMPLY WITH SECTION 1003.9.
32. **APPLIANCES CLEAR FLOOR SPACE** PER SECTION 1003.12.5.2. PROVIDE A 30"X48" CLEAR FLOOR SPACE POSITIONED FOR FORWARD OR PARALLEL APPROACH.
33. **DISHWASHER** PER SECTION 1003.12.5.3. POSITION CLEAR FLOOR SPACE ADJACENT TO THE DISHWASHER DOOR.
34. **RANGE OR COOKTOP** PER SECTION 1003.12.5.4.
35. **OVEN** PER SECTION 1003.12.5.5. OVEN SHALL COMPLY WITH SECTION 1003.12.5.5. OVENS SHALL HAVE CONTROLS ON FRONT PANELS, ON EITHER SIDE OF THE DOOR.
36. **REFRIGERATOR/FREEZER** PER SECTION 1003.12.5.6.
37. **WINDOWS** PER SECTION 1003.13. AT LEAST ONE WINDOW IN EACH SLEEPING, LIVING, OR DINING SPACE SHALL HAVE OPERABLE PARTS COMPLYING WITH SECTION 1003.9.
38. **STORAGE FACILITIES CLEARANCE** PER SECTION 1003.14. PROVIDE A 30"X48" CLEAR FLOOR SPACE POSITION FOR FORWARD OR PARALLEL APPROACH.
39. **STORAGE FACILITIES HEIGHT** PER SECTION 1003.14. A PORTION OF THE STORAGE FACILITY TO COMPLY WITH AT LEAST ONE OF THE REACH RANGES SPECIFIED IN SECTION 308. LEADING EDGE OF CLOSET SHELF SHALL NOT BE MORE THAN 14" TO INSIDE FACE OF FINISH.
40. **STORAGE FACILITIES OPERABLE PARTS** PER SECTION 1003.14. OPERABLE PARTS ON STORAGE FACILITIES SHALL COMPLY WITH SECTION 309.
41. **BATHTUB SEAT** PER UFAS SECTION 4.34.5.2 #2. AN IN-TUB SEAT OR A SEAT AT THE HEAD END OF THE TUB SHALL BE PROVIDED. THE STRUCTURAL STRENGTH OF SEATS AND THEIR ATTACHMENTS SHALL COMPLY WITH UFAS 4.26.3. SEATS SHALL BE MOUNTED SECURELY AND SHALL NOT SLIP DURING USE. CLIENT TO PROVIDE TO TENANTS AS A REASONABLE ACCOMODATION UPON REQUEST.

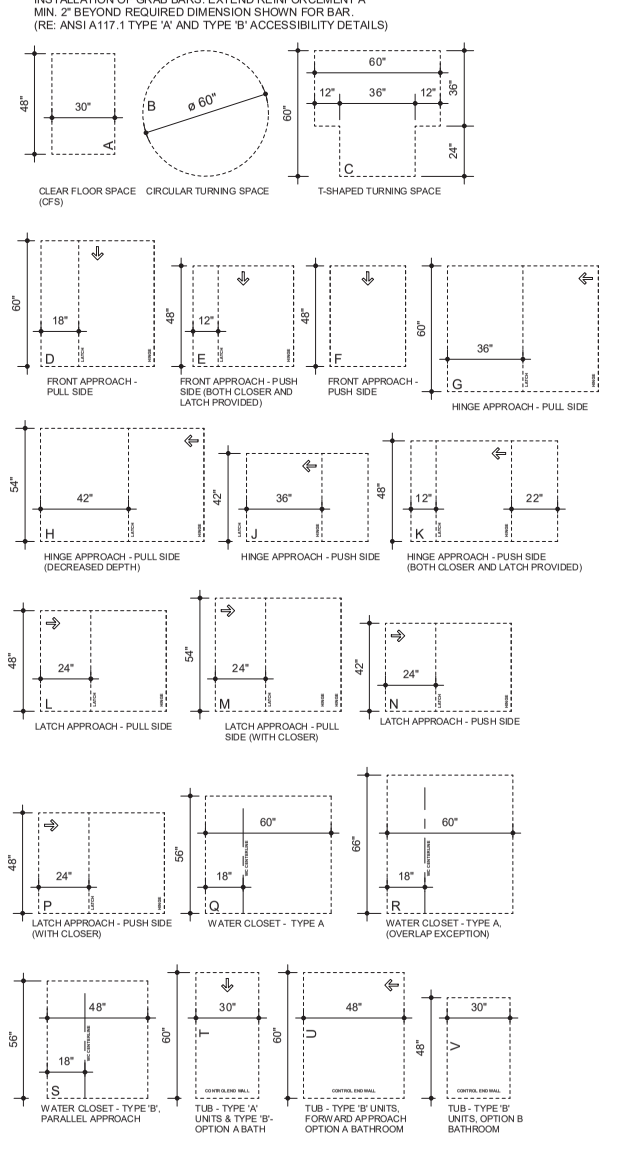
ACCESSIBILITY GENERAL NOTES

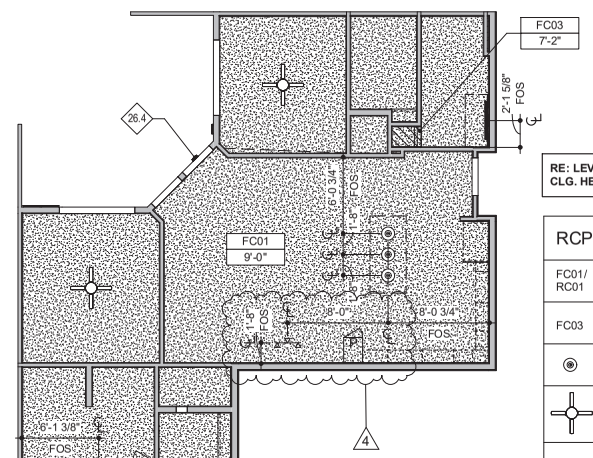
- REFER TO SHEET A0-6.0 FOR ACCESSIBILITY CALCULATIONS AND REQUIREMENTS.
- REFER TO SHEETS A0-6.0 THRU A0-6.3 FOR ACCESSIBILITY DETAILS.
- REFER TO ARCHITECTURAL SITE AND COMPOSITE PLANS FOR LOCATION OF ACCESSIBLE UNITS.
- DIMENSIONS ON THE ACCESSIBILITY PLAN REPRESENT DISTANCE FROM FINISHED WALL SURFACE.
- PROVIDE LEVER HARDWARE ON ALL SWING DOORS IN UNIT.

ACCESSIBILITY LEGEND

PLAN

INDICATES REQUIRED REINFORCEMENT FOR FUTURE INSTALLATION OF GRAB BARS. EXTEND REINFORCEMENT A MIN. 2" BEYOND REQUIRED DIMENSION SHOWN FOR BAR. (RE: ANSI A117.1 TYPE 'A' AND TYPE 'B' ACCESSIBILITY DETAILS)



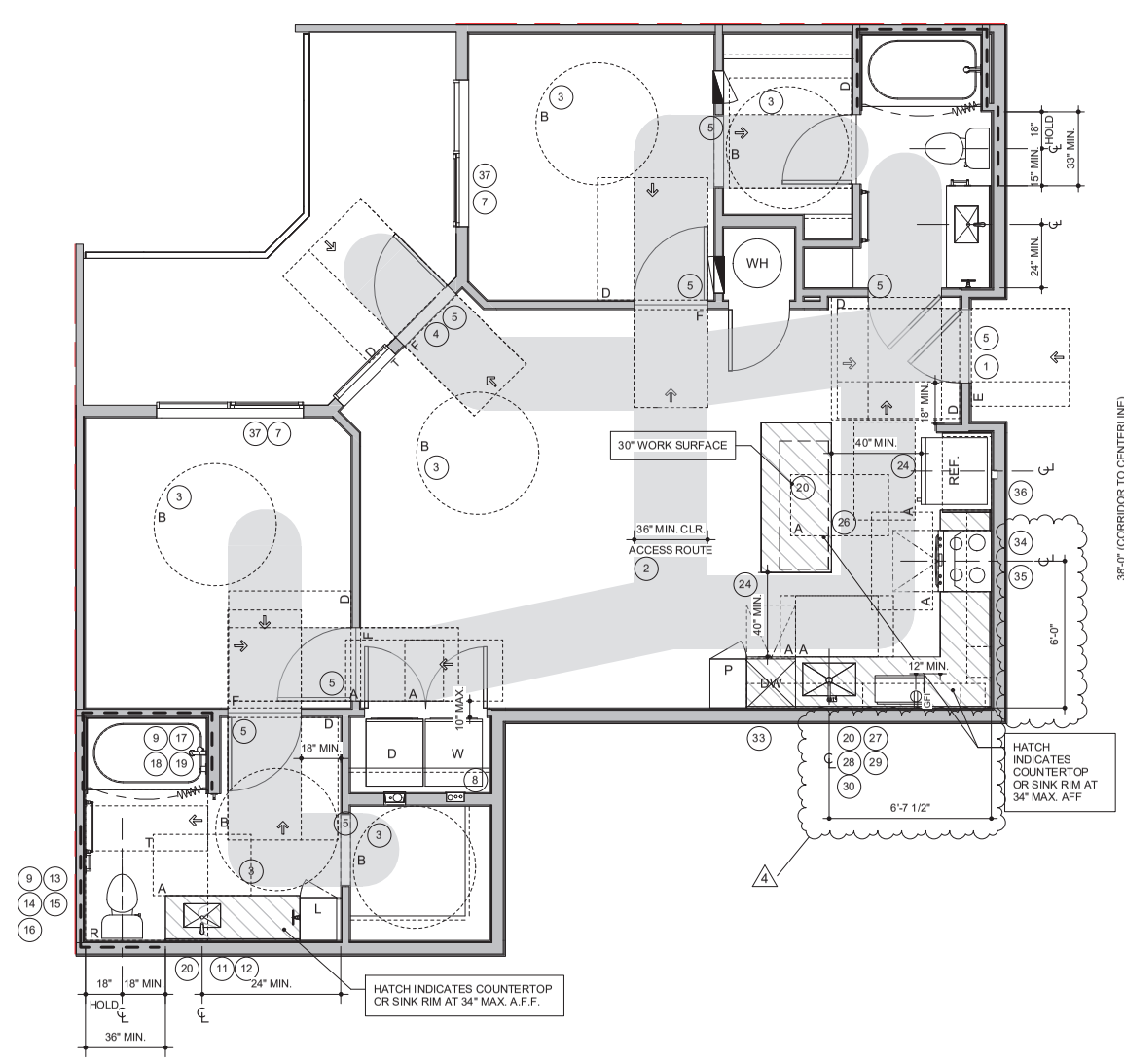


RE: LEVEL 1 AREA A RCP (1 / A2-1.11) FOR ALTERNATE CLG. HEIGHT

RCP LEGEND

FC01/ RC01	RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.5
FC03	NON-RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.5
	PENDANT LIGHT; RE: ELEC
	CEILING FAN - CENTERED IN ROOM; RE: ELEC
	SURFACE MOUNTED VANITY LIGHT; RE: ELEC

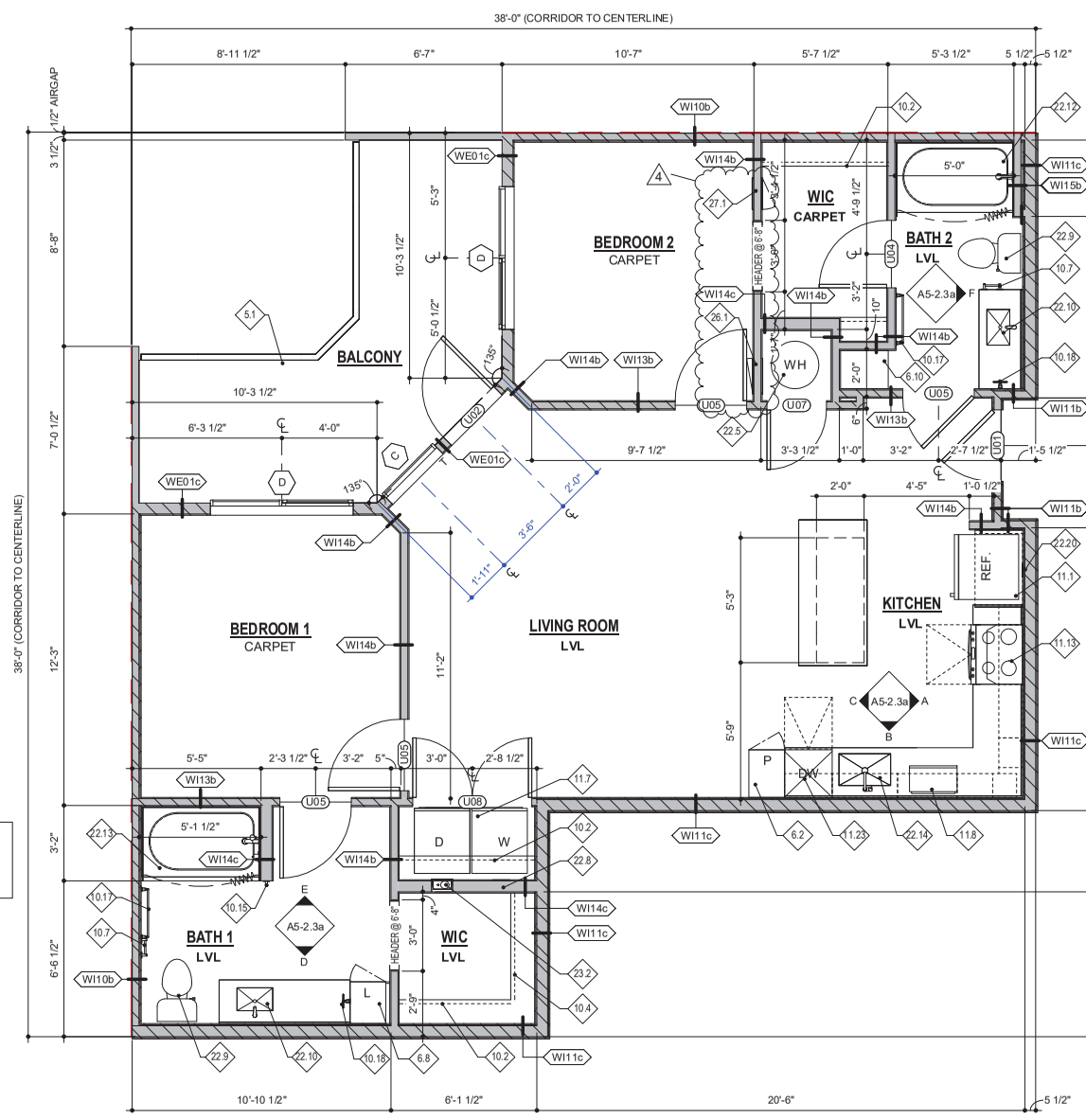
3 UNIT B3a RCP
1/8" = 1'-0"



ICC/ANSI 117.1-2009 TYPE 'A' UNIT

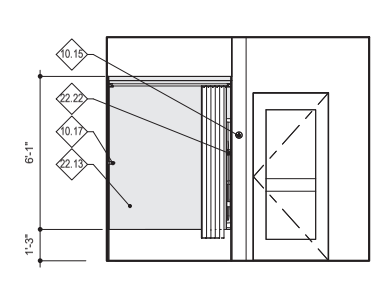
2 UNIT B3a ACC. PLAN (TYPE A)
1/4" = 1'-0"

NOTE: ALL ACCESSIBILITY PLAN DIMENSIONS GIVEN ARE TO WALL FINISH

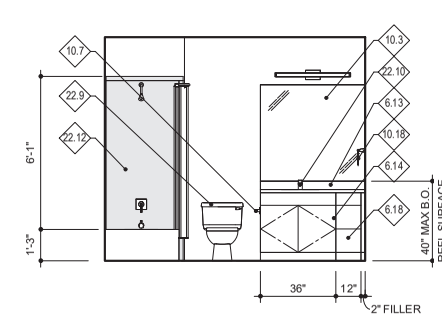


1 UNIT B3a E1 PLAN (TYPE A)
1/4" = 1'-0"

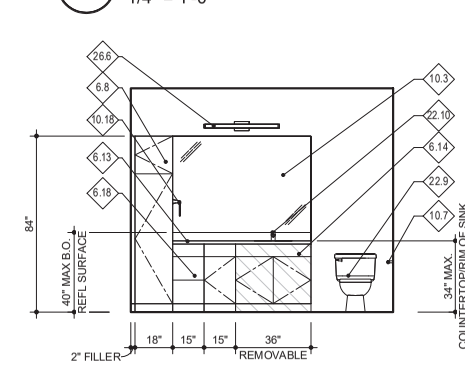
UNIT B3a SUMMARY				
UNIT NAME	UNIT TYPE	UNIT AREA	QTY	TOTAL AREA
UNIT B3a	2BD/2BA	1,013 SF	5	5,065 SF



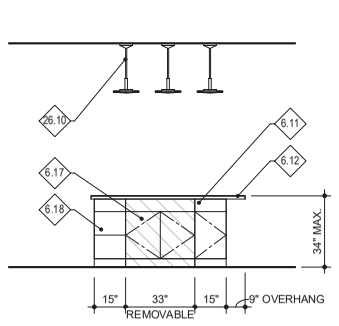
E B3a - BATH 1 ELEV 2
1/4" = 1'-0"



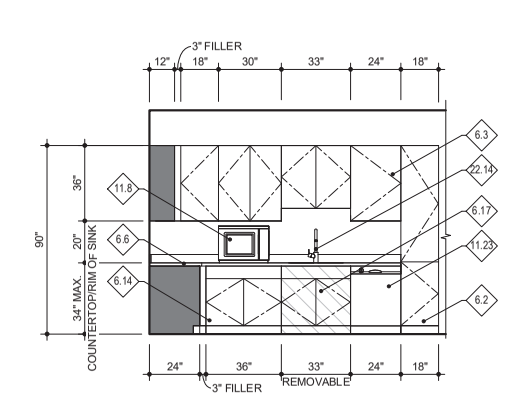
F B3a - BATH 2 ELEV 1
1/4" = 1'-0"



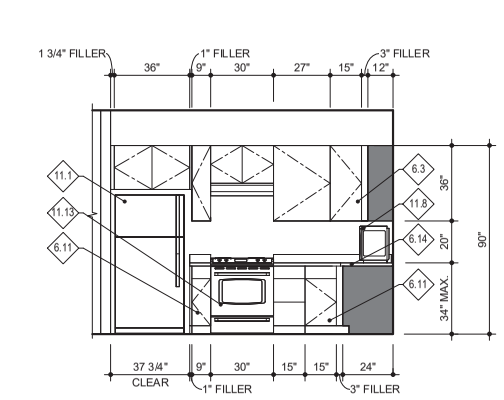
D B3a - BATH 1 ELEV 1
1/4" = 1'-0"



C B3a - KITCHEN ELEV 3
1/4" = 1'-0"



B B3a - KITCHEN ELEV 2
1/4" = 1'-0"



A B3a - KITCHEN ELEV 1
1/4" = 1'-0"

APPLIANCE BASIS OF DESIGN

TYPE B:
TOP-FREEZER REFRIGERATOR -MODEL#: GIE22JTNRWW
ELECTRIC RANGE -MODEL#: GEJB258DMWW
OVER THE RANGE MICROWAVE -MODEL#: GEJMV3160DFWW
DISHWASHER -MODEL#: GDF511PGMWW
WASHER -FRONT LOAD STACKABLE -MODEL#: GFW550SSNWW
DRYER -FRONT LOAD STACKABLE -MODEL#: GFD55ESSNWW

TYPE A:
TOP-FREEZER REFRIGERATOR -MODEL# GIE22JTNRWW
FRONT CONTROL ELECTRIC RANGE -MODEL#: WEE515S0LS
UNDER THE CABINET HOOD -MODEL#:
COUNTERTOP MICROWAVE OVEN -MODEL#: WMC30516H
DISHWASHER -MODEL: WDF550SAH
WASHER -FRONT LOAD -MODEL#: GFW550SSNWW
DRYER -FRONT LOAD -MODEL#: GFD55ESSNWW
ALL-IN-ONE FRONT LOAD WASHER/CONDENSER DRYER -MODEL #: GFQ14ESSNWW

UNIT PLAN GENERAL NOTES

UNIT BEARING WALLS; RE: STRUCTURE

T TEMPERED GLAZING; RE: A9-1.2 WINDOW SCHEDULE

- DIMENSIONS TAKE PRECEDENCE OVER DRAWINGS. DO NOT SCALE. DIMENSIONS GIVEN TO FACE OF STUDS UNLESS OTHERWISE INDICATED ON THE PLANS.
- INTERIOR DOORS TO BE HELD 4" OFF ADJACENT TO HINGE SIDE FRAMING, EXTERIOR AND CORRIDOR WALLS TO BE HELD OFF 6" ADJACENT TO HINGE SIDE FRAMING. U.N.O. ALL OTHER DOORS SHALL BE CENTERED
- ACCESSIBILITY ELEMENTS INDICATED ARE REQUIRED. FIELD CONDITIONS OCCURRING WHICH IMPACT THE ACCESSIBILITY DESIGN SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.
- NOTE: UNITS PROVIDED WITH MECHANICAL VENTILATION, RE: MECH. NATURAL VENTILATION CALCULATIONS SHOWN FOR REFEENCE ONLY.

INTERIOR ELEVATION GENERAL NOTES

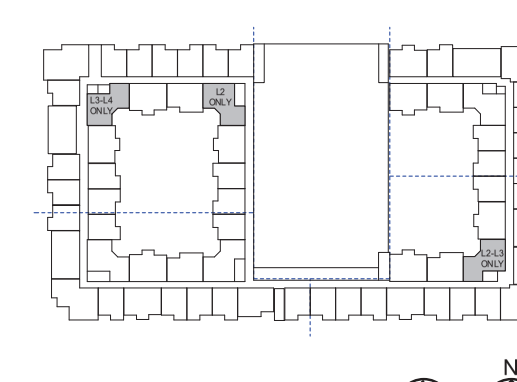
- CASEWORK LAYOUT IS DIAGRAMMATIC. OWNER SHALL APPROVE FINAL LAYOUT PRIOR TO ORDERING/INSTALLATION.
- CASEWORK CONTRACTOR SHALL VERIFY APPLIANCE CLEARANCES
- CASEWORK CONTRACTOR SHALL VERIFY DRAWER PULL & DOOR HANDLE REQUIREMENTS
- CASEWORK CONTRACTOR SHALL INSTALL 4" FINISHED MATERIAL FOR FIELD APPLIED TOE KICK, MATERIAL TO MATCH CASEWORK
- PROVIDE MINIMUM 1" FILLER AT ADJACENT WALLS
- PROVIDE FINISHED END PANELS AT ALL EXPOSED CABINET ENDS
- PROVIDE SINK BASE CABINETS WITH OPEN BACKS FOR PLUMBING ACCESS
- ALL EXPOSED CASEWORK SHALL BE FINISHED WITH MATCHING PANELS

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
WE01c	1 HR	TYP. EXTERIOR WALL
WE02u	2 HR	8" CONCRETE SHAFT WALL
WE03u	1 HR	8" CONCRETE WALL
WE03w	1 HR	GARAGE, 12" CONCRETE WALL
WE03x	1 HR	9" CONCRETE WALL
WE04q	2 HR	8" CMU - 2HR FIRE BARRIER
WE05q	1 HR	8" CMU - 1 HR
WE06b	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE06c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE07c	NR	2x6 PARAPET WALL - NR
WE08c	NR	2x6 WALL - NR @ CONDENSERS
WE09b	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE09c	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE19k	1 HR	6" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
WI01q	2 HR	8" CMU - 2HR FIRE WALL
WI02q	2 HR	8" CMU - 2HR FIRE BARRIER
WI03	2 HR	FIRE WALL - 2HR
WI03b	2 HR	FIRE WALL, 2-HR, (2) 2X4 WITH (2) 1" SHAFTLINER
WI03h	2HR	FIRE WALL, 2-HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
WI04b	2 HR	FIRE BARRIER, 2-HR, 2x WITH (2) 5/8" TYPE 'X' GYP
WI04c	2 HR	FIRE BARRIER, - 2HR EXIT ACCESS
WI05c	2 HR	FIRE BARRIER, 2-HR EXIT ACCESS
WI06b	2-HR	2X4 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
WI06c	2-HR	2X6 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
WI07b	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
WI08c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
WI09h	1 HR	3 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
WI09k	1 HR	6" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
WI10b	1 HR	TYP. UNIT DEMISING - 1-HR FIRE PARTITION
WI10c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
WI11b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
WI11c	1 HR	<varies>
WI12b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
WI12c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
WI13b	1 HR	2X4, 1HR - BEARING
WI13c	1 HR	2X6, 1HR - BEARING
WI14b	NR	2X4 INTERIOR WALL - NR
WI14c	NR	2X6 INTERIOR WALL - NR
WI15b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
WI15c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
WI16	NR	7/8" METAL HAT CHANNEL FURRING WALL
WI17b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
WI18k	NR	6" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

KEYNOTES

NO.	NOTE
5.1	STEEL BALCONY GUARDRAIL AT 42" AFF. SHOP PRIMED. PAINT IN FIELD
6.2	KITCHEN PANTRY CABINET
6.3	KITCHEN UPPER CABINET
6.6	KITCHEN SOLID SURFACE COUNTERTOP, RE: INTERIORS
6.8	BATHROOM LINEN CABINET
6.10	BUILT-IN WOOD SHELVES, (4) EQ. SPACED
6.11	KITCHEN BASE CABINET
6.12	KITCHEN ISLAND W/ SOLID SURFACE COUNTER-TOP
6.13	BATHROOM VANITY SOLID SURFACE COUNTER-TOP
6.14	BATHROOM VANITY CABINET
6.17	REMOVABLE KITCHEN SINK BASE CABINET. BASE SHALL BE REMOVABLE WITHOUT REMOVAL OF SOLID SURFACE COUNTERTOP. EXTEND FLOOR AND WALL FINISHES UNDER REMOVABLE CABINET. RE: DETAILS
6.18	BATHROOM VANITY BASE CABINET DRAWERS
10.2	SINGLE ROD AND SHELF
10.3	MIRROR, 40" TO BOTTOM REFLECTIVE SURFACE RE: INTERIORS
10.4	DOUBLE ROD AND SHELF. BOTTOM ROD/SHELF TO BE MOUNTED AT 46" MAX AFF.
10.7	TOILET PAPER DISPENSER
10.15	WALL MOUNTED BIKE RACK, PROVIDED BY OWNER
10.17	TOWEL BAR
10.18	TOWEL RING
11.1	REFRIGERATOR / FREEZER
11.7	SIDE-BY-SIDE FULL SIZE TOP LOAD WASHER & DRYER. OPTIONAL TENANT LEASE BY OWNER.
11.8	ELECTRIC MICROWAVE WITH ACCESSIBLE CONTROLS
11.13	OVEN/RANGE WITH FRONT CONTROLS AT TYPE A UNITS
11.23	24" X 24" DISHWASHER, 34" COUNTER. RE: PLUMBING
22.5	ELEC. WATER HEATER W/ PAN, RE: PLUMBING
22.8	WASHER HOOK UP, RE: PLUMBING
22.9	FLOOR MOUNT WATER CLOSET, RE: PLUMBING
22.10	BATHROOM SINK. ENSURE RIM OF SINK IS BELOW 34" MAX. A.F.F. SINK BOWL TO BE 6 1/2" DEEP MAXIMUM PER UFAS GUIDELINES. RE: PLUMBING
22.12	60"X36" TUB/SHOWER WITH PREFABRICATED SURROUND; PROVIDE CURVED SHOWER CURTAIN ROD; PROVIDE GLASS MAT GYPSUM BOARD AS REQUIRED; PRE-ROCK AROUND TUB LOCATIONS ADJACENT TO RATED WALLS AS REQUIRED. INSTALL BLOCKING IN WALL FOR FUTURE GRAB BAR INSTALLATION
22.13	60"X36" ACCESSIBLE TUB/SHOWER WITH PREFABRICATED SURROUND; PROVIDE CURVED SHOWER CURTAIN ROD; PROVIDE GLASS MAT GYPSUM BOARD AS REQUIRED; PRE-ROCK AROUND TUB LOCATIONS ADJACENT TO RATED WALLS AS REQUIRED. INSTALL BLOCKING IN WALL FOR FUTURE GRAB BAR INSTALLATION; OPERABLE PARTS TO COMPLY WITH TYPE A UNIT. OWNER TO PROVIDE SEAT PER UFAS SECTION 4.34.5.4 AS A REASONABLE ACCOMODATION UPON TENANT REQUEST.
22.14	DROP-IN KITCHEN SINK AT TYPE A UNITS. ENSURE RIM OF SINK IS BELOW 34" MAX. A.F.F. SINK BOWL TO BE 6 1/2" DEEP MAXIMUM PER UFAS GUIDELINES. RE: PLUMBING
22.20	ICE MAKER BOX. RE: PLUMBING
22.22	PROVIDE WALL MOUNTED HAND SHOWER UNIT IN ANSI TYPE A UNITS; RE: INTERIORS AND ACCESSIBILITY DETAILS
23.2	DRYER HOOK UP, RE: MECHANICAL
26.1	ELECTRIC PANEL. TOP OF PANEL TO BE MAX. 48" ABOVE FINISH FLOOR, RE: ELEC
26.4	EXTERIOR SCONCE, MOUNTED AT 8'-0" AFF UNO. RE: ELEC
26.6	SURFACE MOUNTED VANITY LIGHT, RE: ELEC
26.10	PENDANT LIGHT FIXTURE. RE: ELEC. RE: INTERIORS FOR MOUNTING HEIGHT
27.1	TELECOM BOX. TOP OF PANEL TO BE MAX. 48" ABOVE FINISH FLOOR. RE: ELEC



UNIT KEY PLAN

N TRUE
N PROJECT

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MARSHALL POINTE

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5170 MARSHALL ST - ARVADA, CO 80002

ISSUE FOR CONSTRUCTION
08.07.2024

No.	Date	Issue
4	08.07.2024	IFC

Project Architect	DV
Project Designer	DR
Date	
Job Number	222001
Drawn By	CG / CB/ TT/ NV
Checked By	JG
Title	UNIT PLAN B3a
Sheet Number	A5-2.3a

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ACCESSIBILITY "TYPE B" PLAN NOTES

SOLUTION REFERENCES ARE TO ICC/ANSI A117.1-2009
NOT ALL NOTES MAY APPLY TO THIS SHEET

1. **PRIMARY ENTRANCE** PER SECTION 1004.2. PRIMARY ENTRANCE TO BE LOCATED ON ACCESSIBLE ROUTE.
2. **WALKING SURFACE WIDTH** PER SECTION 1004.4.1. CLEAR WIDTH OF AN ACCESSIBLE ROUTE SHALL COMPLY WITH SECTION 403.5.
3. **CHANGES IN LEVEL** PER SECTION 1004.4.2. WALKING SURFACES THAT ARE PART OF AN ACCESSIBLE ROUTE TO COMPLY WITH SECTION 303. WHERE PATIO SURFACE OR BALCONY MATERIAL IS IMPERVIOUS, THE IMPERVIOUS SURFACE SHALL BE 4" MAX. BELOW THE FLOOR LEVEL OF THE ADJACENT INTERIOR SPACE OF THE UNIT.
4. **DOORS AND DOORWAYS** PER SECTION 1004.5. PRIMARY DOOR TO COMPLY WITH SECTION 1004.5.1. & SECTION 404.
5. **USER PASSAGE DOORWAYS** PER SECTION 1004.5.2. PASSAGE DOOR TO HAVE A CLEAR OPENING OF 31-3/4" MIN. (2'-10" DOOR).
6. **RAMPS** PER SECTION 1004.6. RAMPS SHALL COMPLY WITH SECTION 405.
7. **LAUNDRY EQUIPMENT CLEARANCE** PER SECTION 1004.10.1. SHALL COMPLY WITH SECTION 305.3 & 611.2. PROVIDE A 30"X48" CLEAR FLOOR SPACE POSITION FOR PARALLEL APPROACH. FOR TOP LOADING MACHINES CLEAR FLOOR SPACE SHALL BE CENTERED ON THE APPLIANCE. A FORWARD OR PARALLEL APPROACH SHALL BE PROVIDED FOR A FRONT LOADING MACHINE. FOR FRONT LOADING MACHINES, THE CENTERLINE OF THE CLEAR FLOOR SPACE SHALL BE OFFSET 24" MAX. FROM CENTERLINE OF DOOR OPENING.
8. **GRAB BAR AND SHOWER SEAT REINFORCEMENT** PER SECTION 1004.11.1. REINFORCEMENT SHALL BE PROVIDED FOR THE FUTURE INSTALLATION OF GRAB BARS AND SHOWER SEATS AND TO COMPLY WITH 604.5, 607.4, 608.3, 608.2.1.3, 608.2.2.3 AND 608.2.3.2. GRAB BAR REINFORCEMENT MATERIAL FOR BLOCKING TO RESIST REQUIRED LOAD OF 250 LBS. APPLIED AT ANY POINT IN ANY DIRECTION. HEIGHT RANGE FROM 33" MIN. TO 36" MAX. A.F.F.
9. **DOOR SWING** PER SECTION 1004.11.2.1. EXCEPTION CLEAR FLOOR SPACE COMPLYING WITH 305.3, EXCLUDING KNEE AND TOE CLEARANCES UNDER ELEMENTS, PROVIDED WITHIN THE ROOM BEYOND THE ARC OF THE DOOR SWING
10. **OPTION A LAVATORY** PER SECTION 1004.11.3.1.1. A LAVATORY WITH CLEAR FLOOR SPACE TO COMPLY WITH SECTION 305.3 POSITIONED FOR PARALLEL APPROACH. THE CLEAR FLOOR SPACE SHALL BE CENTERED ON THE LAVATORY. EXCEPTION: A LAVATORY COMPLYING WITH SECTION 606 SHALL BE PERMITTED. CABINETRY SHALL BE PERMITTED IF, 1) CABINETRY IS REMOVABLE, 2) FLOOR FINISH EXTENDS UNDER CABINETRY, AND 3) WALLS BEHIND AND SURROUNDING CABINETRY ARE FINISHED.
11. **OPTION A BATHING FACILITIES** PER SECTION 1004.11.3.1.3. PROVIDE CLEAR SPACE FOR PARALLEL OR FORWARD APPROACH.
12. **OPTION B LAVATORY** PER SECTION 1004.11.3.2.1. A LAVATORY WITH CLEAR FLOOR SPACE TO COMPLY WITH SECTION 305.3 POSITIONED FOR PARALLEL APPROACH. FRONT OF LAVATORY SHALL BE 34" MAX. A.F.F., MEASURED TO THE HIGHER OF THE RIM OR COUNTER SURFACE.
13. **OPTION B BATHING FACILITIES** PER SECTION 1004.11.3.2.3. BATHTUB CLEARANCE TO EXTEND 48" MIN. IN LENGTH AND 30" MIN. IN DEPTH PER SECTION 1004.11.3.2.3.1. SHOWER COMPARTMENT TO COMPLY WITH SECTION 1004.11.3.2.3.2.
14. **OPTION A & OPTION B WATER CLOSET** PER SECTIONS 1004.11.3.1.2 & 1004.11.3.2.2. **LOCATION**: THE CENTERLINE OF THE WATER CLOSET SHALL BE 16"-18" CLEAR ON ONE SIDE OF REQUIRED CLEARANCE. **CLEARANCE WIDTH**: SHALL BE 48" MIN. **CLEARANCE DEPTH**: SHALL BE 56" MIN. FOR SIDE APPROACH AND 66" MIN. FOR FORWARD APPROACH. **CLEARANCE OVERLAP**: A VANITY OR OTHER OBSTRUCTION 24" MAX. IN DEPTH SHALL BE PERMITTED TO OVERLAP THE REQUIRED CLEARANCE, PROVIDED THE WIDTH OF THE REMAINING WATER CLOSET CLEARANCE IS 33" MIN.
15. **KITCHEN MINIMUM CLEARANCE** PER SECTION 1004.12.1.1. CLEARANCE BETWEEN ALL OPPOSING BASE CABINETS, COUNTER TOPS, APPLIANCES OR WALLS WITHIN WORK AREAS SHALL BE 40" MIN.
16. **KITCHEN CLEARANCE AT U-SHAPED KITCHENS DESIGN** PER SECTION 1004.12.1.2. PROVIDE 60" MIN. CLEARANCE BETWEEN ALL OPPOSING BASE CABINETS, COUNTERTOPS, APPLIANCES OR WALLS WITHIN KITCHEN WORK AREAS.
17. **KITCHEN SINK CLEAR FLOOR SPACE** PER SECTION 1004.12.2.1. PROVIDE A 30"X48" CLEAR FLOOR SPACE POSITION FOR PARALLEL APPROACH. CENTER SPACE ON SINK BOWL. SINK WITH FORWARD APPROACH SHALL COMPLY WITH SECTION 1003.12.4.1.
18. **DISHWASHER** PER SECTION 1004.12.2.2. POSITION CLEAR FLOOR SPACE ADJACENT TO THE DISHWASHER DOOR FOR PARALLEL OR FORWARD APPROACH BEYOND THE SWING OF THE DISHWASHER DOOR.
19. **RANGE OR COOKTOP** PER SECTION 1004.12.2.3. CLEAR FLOOR SPACE POSITIONED FOR FORWARD APPROACH SHALL COMPLY WITH SECTION 1004.12.2.3.2. CLEAR FLOOR SPACE POSITIONED FOR PARALLEL APPROACH SHALL ALIGN WITH THE CENTERLINE OF THE RANGE/COOKTOP PER SECTION 1004.2.3.3.
20. **OVEN** PER SECTION 1004.12.2.4. A CLEAR FLOOR SPACE SHALL BE PROVIDED FOR PARALLEL OR FORWARD APPROACH.
21. **REFRIGERATOR/FREEZER** PER SECTION 1004.12.2.5. A CLEAR FLOOR SPACE SHALL BE PROVIDED FOR PARALLEL OR FORWARD APPROACH. THE CENTERLINE OF CLEAR FLOOR SPACE SHALL BE OFFSET 24" MAX. FROM THE CENTERLINE OF THE APPLIANCE.

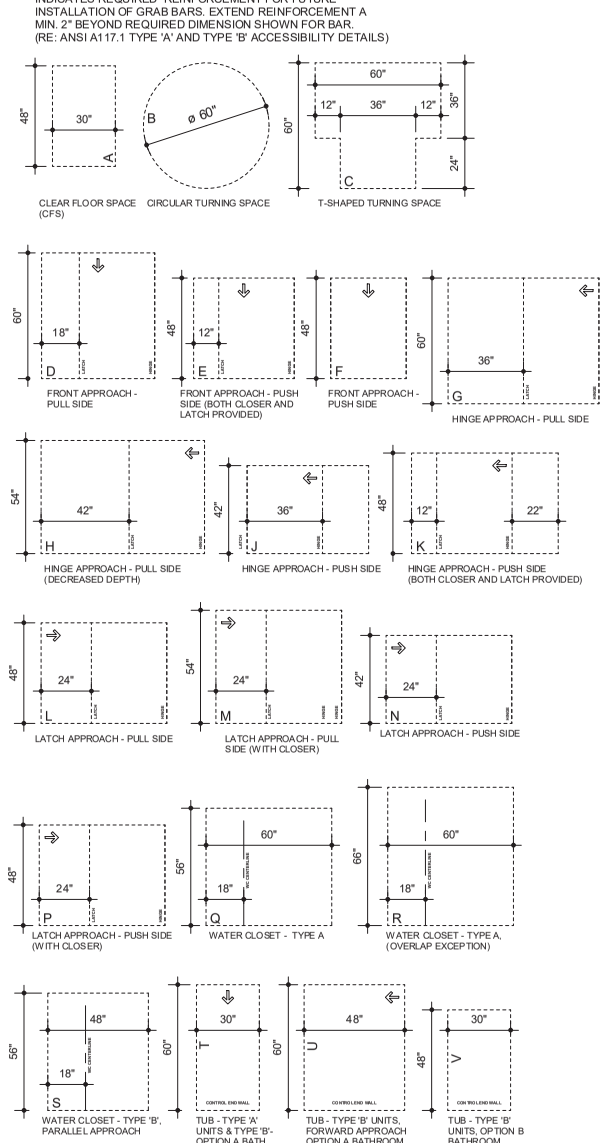
ACCESSIBILITY GENERAL NOTES

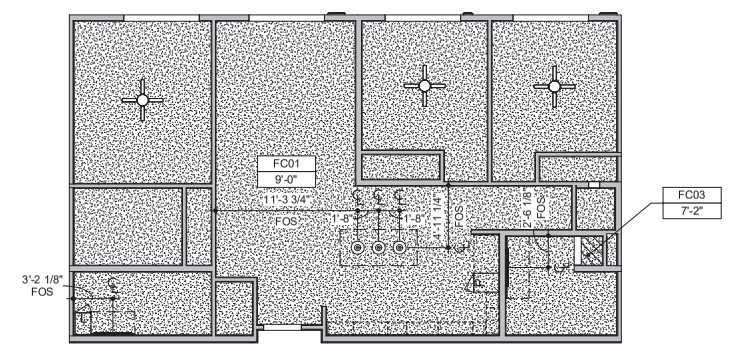
- REFER TO SHEET A0-6.0 FOR ACCESSIBILITY CALCULATIONS AND REQUIREMENTS.
- REFER TO SHEETS A0-6.0 THRU A0-6.3 FOR ACCESSIBILITY DETAILS.
- REFER TO ARCHITECTURAL SITE AND COMPOSITE PLANS FOR LOCATION OF ACCESSIBLE UNITS.
- DIMENSIONS ON THE ACCESSIBILITY PLAN REPRESENT DISTANCE FROM FINISHED WALL SURFACE.
- PROVIDE LEVER HARDWARE ON ALL SWING DOORS IN UNIT.
- BATH LAYOUTS COMPLY WITH OPTION A OR OPTION B FOR TYPE B DWELLING UNITS - OPTION USED NOTED ON ACCESSIBILITY PLAN.

ACCESSIBILITY LEGEND

PLAN

INDICATES REQUIRED REINFORCEMENT FOR FUTURE INSTALLATION OF GRAB BARS. EXTEND REINFORCEMENT A MIN. 2" BEYOND REQUIRED DIMENSION SHOWN FOR BAR. (RE: ANSI A117.1 TYPE 'A' AND TYPE 'B' ACCESSIBILITY DETAILS)

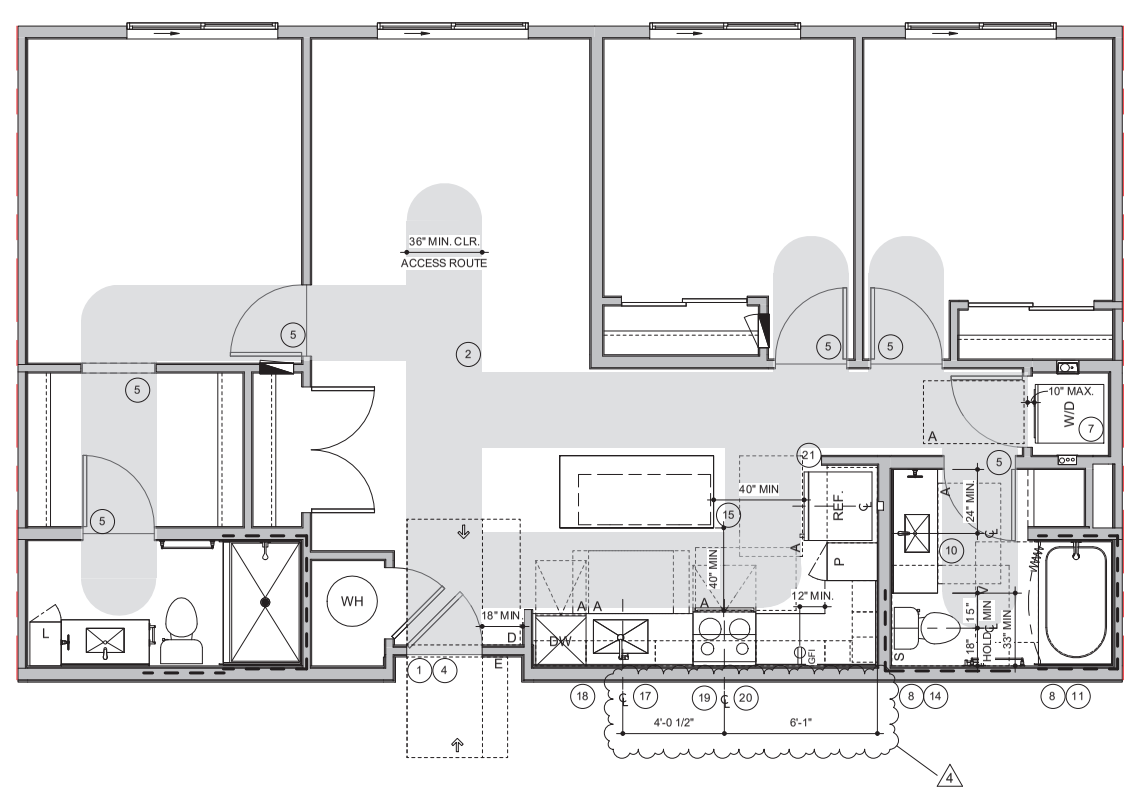




3 UNIT C1 RCP
1/8" = 1'-0"

RCP LEGEND

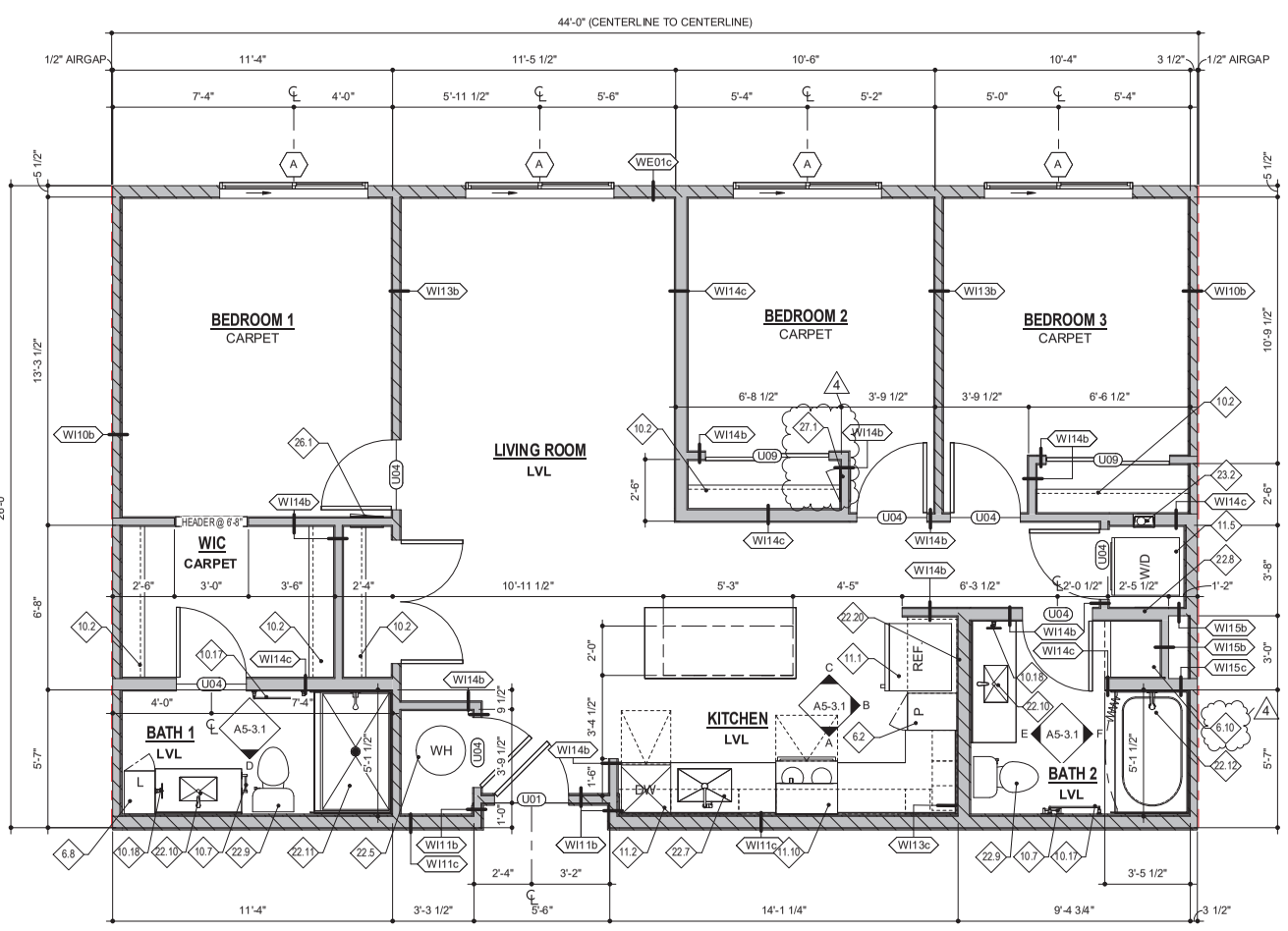
FC01/ RC01	RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.5
FC03	NON-RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.5
	PENDANT LIGHT; RE: ELEC
	CEILING FAN - CENTERED IN ROOM; RE: ELEC
	SURFACE MOUNTED VANITY LIGHT; RE: ELEC



2 UNIT C1 ACC. PLAN
1/4" = 1'-0"

ICC/ANSI 117.1-2009 TYPE 'B' UNIT OPTION B BATH

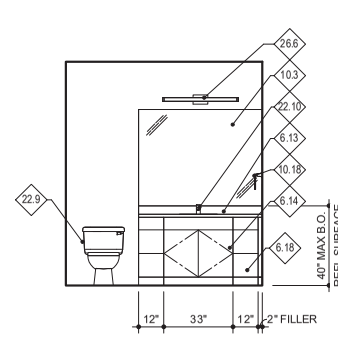
NOTE: ALL ACCESSIBILITY PLAN DIMENSIONS GIVEN ARE TO WALL FINISH



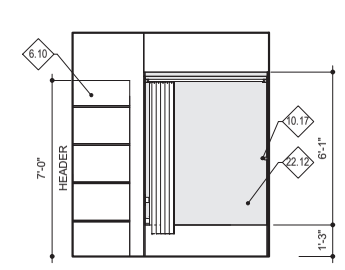
1 UNIT C1 PLAN
1/4" = 1'-0"

UNIT C1 SUMMARY

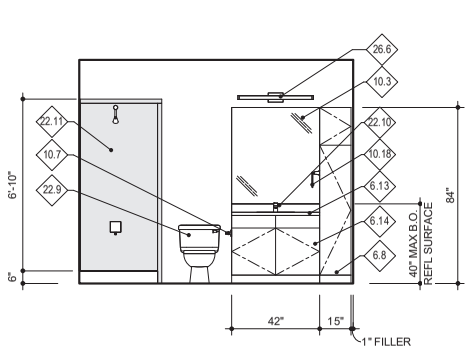
UNIT NAME	UNIT TYPE	UNIT AREA	QTY	TOTAL AREA
UNIT C1	3BD/2BA	1,139 SF	12	13,668 SF



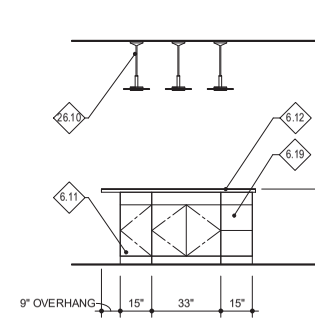
E C1 - BATH 2 ELEV 1
1/4" = 1'-0"



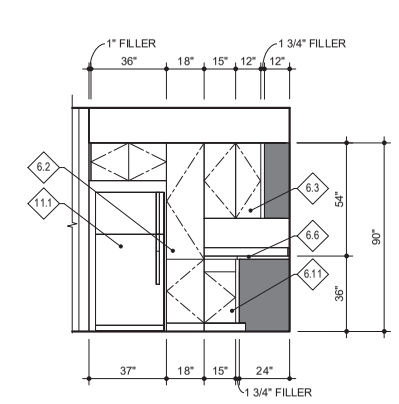
F C1 - BATH 2 ELEV 2
1/4" = 1'-0"



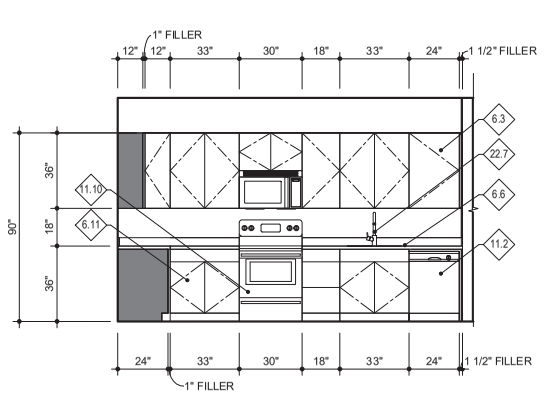
D C1 - BATH 1 ELEV 1
1/4" = 1'-0"



C C1 - KITCHEN ELEV 3
1/4" = 1'-0"



B C1 - KITCHEN ELEV 2
1/4" = 1'-0"



A C1 - KITCHEN ELEV 1
1/4" = 1'-0"

UNIT PLAN GENERAL NOTES

- UNIT BEARING WALLS; RE: STRUCTURE
- T TEMPERED GLAZING; RE: A9-1.2 WINDOW SCHEDULE

- DIMENSIONS TAKE PRECEDENCE OVER DRAWINGS. DO NOT SCALE. DIMENSIONS GIVEN TO FACE OF STUDS UNLESS OTHERWISE INDICATED ON THE PLANS.
- INTERIOR DOORS TO BE HELD 4" OFF ADJACENT TO HINGE SIDE FRAMING, EXTERIOR AND CORRIDOR WALLS TO BE HELD OFF 6" ADJACENT TO HINGE SIDE FRAMING. U.N.O. ALL OTHER DOORS SHALL BE CENTERED
- ACCESSIBILITY ELEMENTS INDICATED ARE REQUIRED. FIELD CONDITIONS OCCURRING WHICH IMPACT THE ACCESSIBILITY DESIGN SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.
- NOTE: UNITS PROVIDED WITH MECHANICAL VENTILATION, RE: MECH. NATURAL VENTILATION CALCULATIONS SHOWN FOR REFEENCE ONLY.

INTERIOR ELEVATION GENERAL NOTES

- CASEWORK LAYOUT IS DIAGRAMMATIC. OWNER SHALL APPROVE FINAL LAYOUT PRIOR TO ORDERING/INSTALLATION.
- CASEWORK CONTRACTOR SHALL VERIFY APPLIANCE CLEARANCES
- CASEWORK CONTRACTOR SHALL VERIFY DRAWER PULL & DOOR HANDLE REQUIREMENTS
- CASEWORK CONTRACTOR SHALL INSTALL 4" FINISHED MATERIAL FOR FIELD APPLIED TOE KICK, MATERIAL TO MATCH CASEWORK
- PROVIDE MINIMUM 1" FILLER AT ADJACENT WALLS
- PROVIDE FINISHED END PANELS AT ALL EXPOSED CABINET ENDS
- PROVIDE SINK BASE CABINETS WITH OPEN BACKS FOR PLUMBING ACCESS
- ALL EXPOSED CASEWORK SHALL BE FINISHED WITH MATCHING PANELS

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
WE01c	1 HR	TYP. EXTERIOR WALL
WE02u	2 HR	8" CONCRETE SHAFT WALL
WE03u	1 HR	8" CONCRETE WALL
WE03w	1 HR	GARAGE, 12" CONCRETE WALL
WE03x	1 HR	9" CONCRETE WALL
WE04q	2 HR	8" CMU - 2HR FIRE BARRIER
WE05q	1 HR	8" CMU - 1 HR
WE06b	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE06c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE07c	NR	2x6 PARAPET WALL - NR
WE08c	NR	2x6 WALL - NR @ CONDENSERS
WE09b	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE09c	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE19k	1 HR	6" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
WI01q	2 HR	8" CMU - 2HR FIRE WALL
WI02q	2 HR	8" CMU - 2HR FIRE BARRIER
WI03	2 HR	FIRE WALL - 2HR
WI03b	2 HR	FIRE WALL, 2-HR, (2) 2X4 WITH (2) 1" SHAFTLINER
WI03h	2HR	FIRE WALL, 2-HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
WI04b	2 HR	FIRE BARRIER, 2-HR, 2x WITH (2) 5/8" TYPE 'X' GYP
WI04c	2 HR	FIRE BARRIER, - 2HR EXIT ACCESS
WI05c	2 HR	FIRE BARRIER, 2-HR EXIT ACCESS
WI06b	2-HR	2X4 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
WI06c	2-HR	2X6 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
WI07b	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
WI08c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
WI09h	1 HR	3 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
WI09k	1 HR	6" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
WI10b	1 HR	TYP. UNIT DEMISING - 1-HR FIRE PARTITION
WI10c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
WI11b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
WI11c	1 HR	<varies>
WI12b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
WI12c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
WI13b	1 HR	2X4, 1HR - BEARING
WI13c	1 HR	2X6, 1HR - BEARING
WI14b	NR	2X4 INTERIOR WALL - NR
WI14c	NR	2X6 INTERIOR WALL - NR
WI15b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
WI15c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
WI16	NR	7/8" METAL HAT CHANNEL FURRING WALL
WI17b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
WI18k	NR	6" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

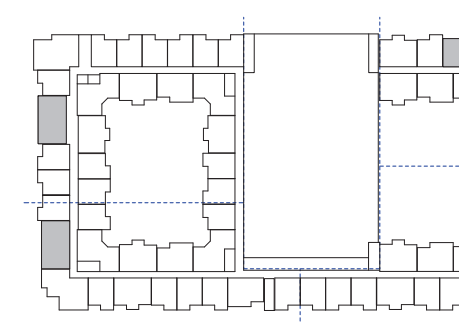
KEYNOTES

NO.	NOTE
6.2	KITCHEN PANTRY CABINET
6.3	KITCHEN UPPER CABINET
6.6	KITCHEN SOLID SURFACE COUNTERTOP, RE: INTERIORS
6.8	BATHROOM LINEN CABINET
6.10	BUILT-IN WOOD SHELVES, (4) EQ. SPACED
6.11	KITCHEN BASE CABINET
6.12	KITCHEN ISLAND W/ SOLID SURFACE COUNTER-TOP
6.13	BATHROOM VANITY SOLID SURFACE COUNTER-TOP
6.14	BATHROOM VANITY CABINET
6.18	BATHROOM VANITY BASE CABINET DRAWERS
6.19	KITCHEN BASE CABINET DRAWERS
10.2	SINGLE ROD AND SHELF
10.3	MIRROR, 40" TO BOTTOM REFLECTIVE SURFACE RE: INTERIORS
10.7	TOILET PAPER DISPENSER
10.17	TOWEL BAR
10.18	TOWEL RING
11.1	REFRIGERATOR / FREEZER
11.2	24" X 24" DISHWASHER, RE: PLUMBING
11.5	STACKABLE FRONT LOAD WASHER DRYER. OPTIONAL TENANT LEASE BY OWNER.
11.10	OVEN/RANGE, WITH MICROWAVE HOOD AND RECIRCULATING EXHAUST FAN ABOVE - REPLACE WITH COUNTER DEPTH RANGE AS REASONABLE ACCOMMODATION WHEN NECESSARY FOR OUTLET ACCESSIBILITY
22.5	ELEC. WATER HEATER W/ PAN, RE: PLUMBING
22.7	UNDERMOUNT KITCHEN SINK, RE: PLUMBING
22.8	WASHER HOOK UP, RE: PLUMBING
22.9	FLOOR MOUNT WATER CLOSET, RE: PLUMBING
22.10	BATHROOM SINK. ENSURE RIM OF SINK IS BELOW 34" MAX. A.F.F. SINK BOWL TO BE 6 1/2" DEEP MAXIMUM PER UFAS GUIDELINES. RE: PLUMBING
22.11	60"X38" SHOWER PAN WITH PREFABRICATED SURROUND; PROVIDE STRAIGHT SHOWER CURTAIN ROD; PROVIDE GLASS MAT GYPSUM BOARD AS REQUIRED; PRE-ROCK AROUND TUB LOCATIONS ADJACENT TO RATED WALLS AS REQUIRED. INSTALL BLOCKING IN WALL FOR FUTURE GRAB BAR INSTALLATION. BOD: COMFORT DESIGNS SSB6038 4.0 ANSI-B
22.12	60"X36" TUB/SHOWER WITH PREFABRICATED SURROUND; PROVIDE CURVED SHOWER CURTAIN ROD; PROVIDE GLASS MAT GYPSUM BOARD AS REQUIRED; PRE-ROCK AROUND TUB LOCATIONS ADJACENT TO RATED WALLS AS REQUIRED. INSTALL BLOCKING IN WALL FOR FUTURE GRAB BAR INSTALLATION
22.20	ICE MAKER BOX, RE: PLUMBING
23.2	DRYER HOOK UP, RE: MECHANICAL
26.1	ELECTRIC PANEL. TOP OF PANEL TO BE MAX. 48" ABOVE FINISH FLOOR, RE: ELEC
26.6	SURFACE MOUNTED VANITY LIGHT, RE: ELEC
26.10	PENDANT LIGHT FIXTURE, RE: ELEC. RE: INTERIORS FOR MOUNTING HEIGHT
27.1	TELECOM BOX. TOP OF PANEL TO BE MAX. 48" ABOVE FINISH FLOOR, RE: ELEC

APPLIANCE BASIS OF DESIGN

TYPE B:
TOP-FREEZER REFRIGERATOR -MODEL#: GIE22JTNRWW
ELECTRIC RANGE -MODEL#: GEJB258DMWW
OVER THE RANGE MICROWAVE -MODEL#: GEJMV3160DFWW
DISHWASHER -MODEL#: GDF511PGMWW
WASHER -FRONT LOAD STACKABLE -MODEL#: GFW55OSSNWW
DRYER -FRONT LOAD STACKABLE -MODEL#: GFD55ESSNWW

TYPE A:
TOP-FREEZER REFRIGERATOR -MODEL# GIE22JTNRWW
FRONT CONTROL ELECTRIC RANGE -MODEL#: WEE515S0LS
UNDER THE CABINET HOOD -MODEL#:
COUNTERTOP MICROWAVE OVEN -MODEL#: WMC30516H
DISHWASHER -MODEL: WDF550SAH
WASHER -FRONT LOAD -MODEL#: GFW55OSSNWW
DRYER -FRONT LOAD -MODEL#: GFD55ESSNWW
ALL-IN-ONE FRONT LOAD WASHER/CONDENSER DRYER -MODEL #: GFQ14ESSNWW



UNIT KEY PLAN

N TRUE   N PROJECT

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DENVER, COLORADO 80205
www.kephart.com

MARSHALL POINTE

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5170 MARSHALL ST - ARVADA, CO 80002

ISSUE FOR CONSTRUCTION
08.07.2024

No.	Date	Issue
4	08.07.2024	IFC

Project Architect	DV
Project Designer	DR
Date	
Job Number	222001
Drawn By	CG / CB/ TT/ NV
Checked By	JG
Title	UNIT PLAN C1
Sheet Number	A5-3.1

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ACCESSIBILITY "TYPE B" PLAN NOTES

SOLUTION REFERENCES ARE TO ICC/ANSI A117.1-2009
NOT ALL NOTES MAY APPLY TO THIS SHEET

1. **PRIMARY ENTRANCE** PER SECTION 1004.2. PRIMARY EN TRANCE TO BE LOCATED ON ACCESSIBLE ROUTE.
2. **WALKING SURFACE WIDTH** PER SECTION 1004.4.1. CLEAR WIDTH OF AN ACCESSIBLE ROU TE SHALL COMPLY WITH SECTION 403.5.
3. **CARPETED BUILDING** PER SECTION 1004.5. WALKING SURFACES THAT ARE PART OF AN AC CESSIBLE ROUTE TO COMPLY WITH SEC TION 303. WHERE PATIO SURFACE OR BALCONY MATERIAL IS IMPERVIOUS, THE IMPERVIOUS SURFACE SHALL BE 4" MAX. BELOW THE FLOOR LEVEL OF THE ADJACENT INTERIOR SPACE OF THE UNIT.
4. **DOORS AND DOOR WAYS** PER SECTION 1004.5. PRIMARY DOOR TOC OMPLY WITH SECTION 1004.5.1. & SECTION 404.
5. **USER PASSAGE DOORWAYS** PER SECTION 1004.5.2. PASSAGE DOOR TOH AVE A CLEAR OPENING OF 31 3/4" MIN. (2'-8" MIN.).
6. **RAMPS** PER SECTION 1004.6. RAMPS SH ALL COMPLY WITH S ECTION 405.
7. **LAUNDRY EQUIPMENT CLEARANCE** PER SECTION 1004.10.1. SHALL COMPLY WITH SECTION 305.3& 9.7.2. PROVIDE A 30"X48" CLEAR FLOOR SPACE POSITION FOR PARALLEL APPROACH. FOR TOP LOADING MACHINES, THE CENTERLINE OF THE CLEAR FLOOR SPACE SHALL BE OFFSET 24" MAX. FROM CENTERLINE OF DOOR OPENING. FOR FRONT LOADING MACHINES, THE CENTERLINE OF THE CLEAR FLOOR SPACE SHALL BE OFFSET 24" MAX. FROM CENTERLINE OF DOOR OPENING. FRONT LOADING WASHING MACHINE SHALL BE PROVIDED WITH A PEDESTAL OR PARALLEL APPROACH SHALL BE PROVIDED FOR A FRONT LOADING WASHING MACHINE. FOR FRONT LOADING MACHINES, THE CENTERLINE OF THE CLEAR FLOOR SPACE SHALL BE OFFSET 24" MAX. FROM CENTERLINE OF DOOR OPENING.
8. **GRAB BAR AND SHOWER SEAT REINFOR CEMENT** PER SECTION 1004.11.1. REINFORCEMENT SHALL BE PROVIDED FOR THE FUTURE INSTALLATION OF GRAB BARS AND SHOWER SEATS AND TO COMPLY WITH 804.5, 807.4, 809.5, 809.2.1.3, 609.2.2.3 AN D 609.2.3.2. GRAB BAR REINFORCEMENT MATERIAL FOR WOOD BLOCKING SHALL BE 2" NOMINAL LUMBER. APPLIED AT ANY POINT IN ANY DIRECTION. HEIGHT MIN DEPTH OR WIDTH 33" MIN. TO 34" MAX. AFF.
9. **DOOR SWING** PER SECTION 1004.11.2.1. EXCEPTION CLEAR FLOOR SPACE COMPLYING WITH 305.3, EXCLUDEN ON-EXIS TING DOOR CLEARANCES UNDER ELEMENTS, PROVIDED WITHIN THE ROOM BEYOND THE ARC OF THE DOOR SWING.
10. **OPTION A.1 LAVATORY** PER SECTION 1004.11.3.1.1. A LAVATORY WITH CLEAR FLOOR SPACE TO COMPLY WITH SECTION 305 SPOSITIONED FOR PARALLEL APPROACH. FRONT OF LAVATORY SHALL BE LAVATORY SHALL BE 34" MAX. AFF. MEASURED TO THE HIGH ER OF THE RIM OR COUNTER SURFACE. EXCEPTION: A LAVATORY COMPLYING WITH SECTION 606 SH ALL BE PERMITTED. CABINETRY SHALL BE PERMITTED IF 1/2 CABINETRY IS REMOVABLE, S FLOOR FINISH EXTENDS UNDER CABINETRY, AND S WALLS BEHIND AND SURROUNDING CABINETRY ARE FINISHED.
11. **OPTION A.2 KNEE FACTOR** PER SECTION 1004.11.3.1.5. PROVIDE CLEAR SPACE FOR PARALLEL OR FORWARD APPROACH.
12. **OPTION B LAVATORY** PER SECTION 1004.11.3.2.1. A LAVATORY WITH CLEAR FLOOR SPACE TO COMPLY WITH SECTION 305 SPOSITIONED FOR PARALLEL APPROACH. FRONT OF LAVATORY SHALL BE LAVATORY SHALL BE 34" MAX. AFF. MEASURED TO THE HIGH ER OF THE RIM OR COUNTER SURFACE.
13. **OPTION B BATHING FACILITIES** PER SECTION 1004.11.3.2.3. BATHTUB CLEARANCE TO EXTEND 48"MIN. ALONG THE 30" MIN. IN DEPTH PER SECTION 1004.11.3.2.3.1. SHOWER COMPAR TMENT TO COMPLY WITH SECTION 1004.11.3.2.3.2.
14. **OPTION A.3 OPTION B WATER CLOSET** PER SECTION S 1004.11.3.1.2 & 1004.11.3.2.2. **LOCATION** THE CEN TERLINE OF THE WATER CLOSET SH ALL BE 16" - 18" CLEAR ON ONE SIDE OF REQUIRED CLEARANCE. **CLEARANCE MID TH:** SHALL BE 48" MIN. **CLEARANCE DEPTH:** SHALL BE 66" MIN. FOR SIDE APPROACH AND 56" MIN. FOR FORWARD APPROACH. **CLEARANCE OVERLAP:** A VANITY OR OTHER OBSTRUCTION 36" MAX. IN DEPTH SH ALL BE PERMITTED TO OVERLAP THE REQUIRED CLEAR ANCE, PROVIDED THE WIDTH OF THE REMAINING WATER CLOSET CLEARANCE IS 57" MIN.
15. **KITCHEN SIDE-BY-SIDE CLEARANCE** PER SECTION 1004.12.1.1. CLEAR ANCE BETWEEN ALL OPPOSIN G BASE CABINETS, COUN TER TOPS, APPLIANCES OR WALLS WI THIN KITCHEN AREAS SHALL BE 40" MIN.
16. **KITCHEN ISLAND OR ATYPICAL KITCHEN DESIGN** PER SECTION 1004.12.1.2. PROVIDE 40" MIN. CLE ARANCE BETWEEN ALL OPPOSIN G BASE CABINETS, COUNTERTOPS, APPLIANCES OR WALLS WI THIN KITCHEN WORK AREAS.
17. **KITCHEN SIDE-BY-SIDE FLOOR SPACE** PER SECTION 1004.12.2.1. PROVIDE A 30"X48" CLEAR FLOOR SPACE POSITION FOR PARALLEL APPROACH. CENTER SPACE ON SINK/DISHWASHER. SINK WITH FORWARD APPROACH SH ALL COMPLY WITH SECTION 1063.12.4.1.
18. **DISHWASHER** PER SECTION 1004.12.2.2. POSITION CLEAR FLOOR SPA CE ADJACENT TO THE DISH WASHER DOOR FOR PARALLEL OR FORWARD APPROACH BEYOND THE SWING OF THE DISH WASHER DOOR.
19. **RANGE OR COOKTOP** PER SECTION 1004.12.2.3. CLEAR FLOOR SPACE POSITIONED FOR FORWARD APPROACH SH ALL COMPLY WITH SECTION 1004.12.3.2. CLEAR FLOOR SPACE POSITIONED FOR PARALLEL APPROACH SHALL ALIGN WITH THE CENTERLINE OF THE RANGE COOKTOP PER SECTION 1004.2.3.5.
20. **OVEN** PER SECTION 1004.12.2.4. A CLEAR FLOOR SPACE SHALL BE PROVIDED FOR PARALLEL OR FORWARD APPROACH.
21. **REFRIGERATOR/FREEZER** PER SECTION 1004.12.3.5. A CLEAR FLOOR SPACE SHALL BE PROVIDED FOR PARALLEL OR FORWARD APPROACH. THE CENTERLINE OF CLEAR FLOOR SPACE SHALL BE OFFSET 24" MAX. FROM THE CENTERLINE OF THE APPLIANCE.

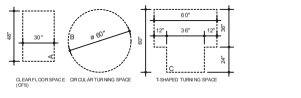
ACCESSIBILITY GENERAL NOTES

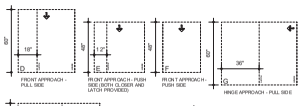
- REFER TO SHEET A4-6.2 FOR ACCESSIBILITY CALCULATIONS AND REQUIREMENTS.
- REFER TO SHEET A4-6.2 THRU A4-6.5 FOR ACCESSIBILITY DETAILS.
- REFER TO ARCHITECTURAL SITE AN D COMPOSITE PLANS FOR LOCATION OF ACCESSIBLE UNITS.
- DIMENSIONS ON THIS ACCESSIBILITY PLAN REPRESENT DISTANCE FROM FINISHED WALL SURFACE.
- PROVIDE LEVER HARDWARE ON ALL SWING DOORS IN UNIT.
- REFER TO SHEET A4-6.1 FOR UNIT DESCRIPTION IS FOR TYPE B DWELLING UNITS - OPTION USED NOTED ON ACCESSIBILITY PLAN.

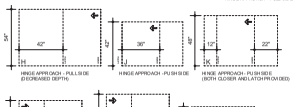
ACCESSIBILITY LEGEND

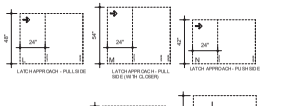
PLAN

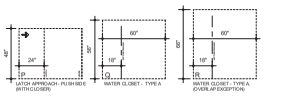
INDICATES REQUIRED REINFORCEMENT FOR FUTURE INSTALLATION OF GRAB BARS. EXTEND REINFOR CEMENT A MIN. 2" BEYOND REQUIRED DIMENSION SHOWN FOR BAR. (RE: ANSI A117.1 TYPE 'A' AND TYPE 'B' ACCESSIBILITY DETAILS)

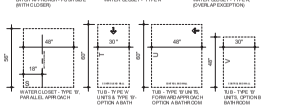


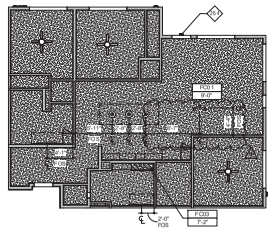








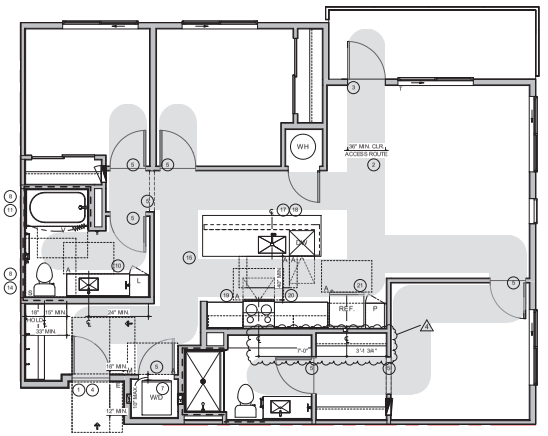




RCP LEGEND

FC01/ RC01	RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.0
FC03	NON-RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.0
	PENDANT LIGHT; RE: ELEC
	CEILING FAN - CENTERED IN ROOM; RE: ELEC
	SURFACE MOUNTED VANITY LIGHT; RE: ELEC

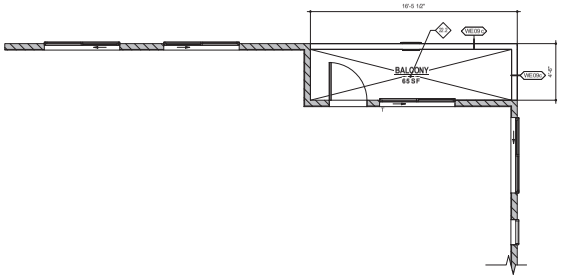
4 UNIT C2 RCP
1/8" = 1'-0"



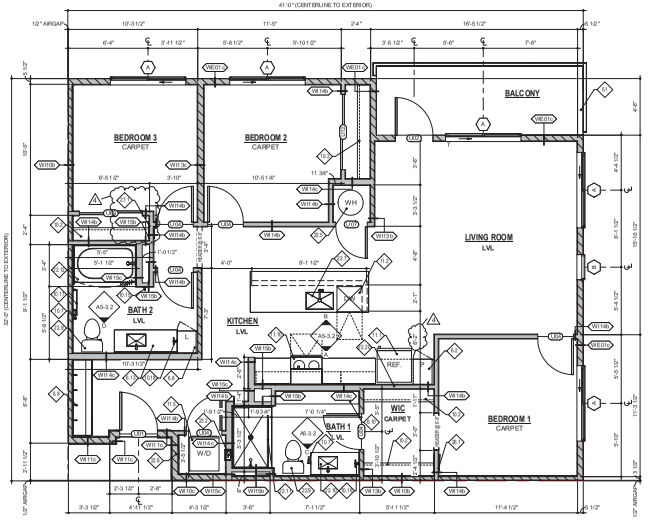
3 UNIT C2 ACC. PLAN
1/4" = 1'-0"

ICC/ANSI 117.1-2009 TYPE 'B' UNIT OPTION B/BATH

NOTE: ALL ACCESSIBILITY PLAN DIMMENSIONS GIVEN ARE TO WALL FINISH

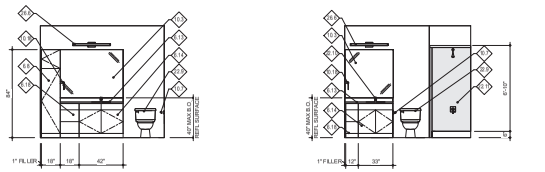


2 UNIT C2 E2 PLAN
1/4" = 1'-0"



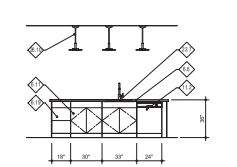
1 UNIT C2 E1 PLAN
1/4" = 1'-0"

UNIT C2 SUMMARY				
UNIT NAME	UNIT TYPE	UNIT AREA	QTY	TOTAL AREA
UNIT C2	3BD/2BA	1,211 SF	10	12,110 SF



D C2 - BATH 2 ELEV 1
1/4" = 1'-0"

C C2 - BATH 1 ELEV 1
1/4" = 1'-0"



SOLUTION REFERENCES ARE TO ICC/ANSI A117.1-2009
NOT ALL NOTES MAY APPLY TO THIS SHEET

1. **PRIMARY ENTRANCE** PER SECTION 1003.3: PRIMARY ENTRANCE TO BE LOCATED ON ACCESSIBLE ROUTE.
2. **ACCESSIBLE ROUTE** PER SECTION 1003.3: ACCESSIBLE ROUTE SHALL CONNECT ALL ELEMENTS AND SPACES THAT ARE PART OF THE UNIT.
3. **TURNING SPACE** PER SECTION 1003.3.2: ALL ROOMS SERVED BY AN ACCESSIBLE ROUTE SHALL PROVIDE A TURNING SPACE COMPLYING WITH SECTION 304. EXCEPTION: CLOSETS AND TOILET ROOMS AND BATHROOMS THAT ARE NOT REQUIRED TO COMPLY WITH SECTION 1003.11.2.3.
4. **WALKING SURFACES** PER SECTION 1003.4: WALKING SURFACES THAT ARE PART OF AN ACCESSIBLE ROUTE SHALL COMPLY WITH SECTION 403.
5. **DOORS AND DOORWAYS** PER SECTION 1003.5: PRIMARY AN PASSAGE DOORS TO COMPLY WITH SECTION 404.
6. **RAMPS** PER SECTION 1003.6: RAMPS SHALL COMPLY WITH SECTION 405.
7. **OPERABLE MEANS** PER SECTION 1003.9: LIGHTS ON TRUS, ELECTRICAL SWITCHES AND RECEPTACLE OUTLETS, ENVIRONMENTAL CONTROLS, APPLIANCE CONTROLS, OPERATING HARDWARE FOR OPERABLE WINDOWS, PLUMBING FIXTURE CONTROLS, ETC. SHALL COMPLY WITH SECTION 309.
8. **LAUNDRY EQUIPMENT** PER SECTION 1003.10: WASHING MACHINES AND DRYERS TO COMPLY WITH SECTION 611.
9. **GRAB BARS AND SHOWER SEAT REINFORCEMENT** PER SECTION 1003.11.1: REINFORCEMENT SHALL BE PROVIDED FOR THE FUTURE INSTALLATION OF GRAB BARS, SHOWER SEATS AND TO COMPLY WITH ISE 4.26.7 & 609.3, 609.3.1, 609.3.2, 609.3.3 & 610.3 & 2.3.5. GRAB BAR INSOFAR DESIGNED MATERIAL FOR ALLOWING TO RESIST REQUIRED LOAD OF 250 LBS. APPLIED AT ANY POINT IN ANY DIRECTION. HEIGHT MAY BE FROM 33" MIN. TO 36" MAX. AFF.
10. **DOOR SWING** PER SECTION 1003.11.2.1, EXCEPTION CLEAR FLOOR SPACE COMPLYING WITH 305.3 PROVIDED WITHIN THE ROOM BEYOND THE ARC OF THE DOOR SWING
11. **LAVATORY** PER SECTION 1003.11.2.2 - LAVATORY TO COMPLY WITH IBC. PROVIDE ARBOR/MABLE BASE CABINET, FINISH FLOOR UNDER & WALL BEHIND REMOVABLE BASE CABINET, 34" MAX. AFF TO FINISH DROP T.O. RIM OR T.O. COUNTERTOP.
12. **MIRRORS** PER SECTION 1003.11.2.3. MIRRORS TO HAVE THE BOTTOM EDGE OF THE REFLECTED SURFACE 40" MAX ABOVE THE FLOOR.
13. **WATER CLOSET LOCATION** PER SECTION 1003.11.2.4.1. THE WATER CLOSET SHALL BE POSITIONED WITH A WALL TO THE REAR AND TO ONE SIDE. TED TO CENTER OF THE WATER CLOSET SHALL BE 18" MIN AND 18" MAX FROM THE WALL.
14. **WATER CLOSET CLEARANCE/OVERLAP** PER SECTION 1003.11.2.4.4. PROVIDE A 60" WIDE X 48" DEEP CLEARANCE AROUND THE WATER CLOSET. A LAVATORY IS ALLOWED TO OVERLAP INTO THE 60"DEEP CLEARANCE.
15. **WATER CLOSET HEIGHT** PER SECTION 1003.11.2.4.5. THE WATER CLOSET HEIGHT SHALL BE 15" MIN. AND 19" MAX. ABOVE THE FLOOR. MEASURED TO THE TOP OF THE SEAT.
16. **GRAB BARS AT WATER CLOSETS** PER SECTION 1003.11.2.4.6. HAND OPERATED FLUSH CONTROLS SHALL COMPLY WITH SECTION 309. LOCATED CONTROLS ON OPEN SIDE OF WATER CLOSET.
17. **BATH TUB CLEARANCE** PER SECTION 1003.11.2.5.1 60" BATHTUB CLEARANCE TO EXTEND FULL LENGTH OF BATHTUB AND 30" IN DEPTH
18. **BATH TUB CONTROLS** PER SECTION 1003.11.2.5.1& 607.5. CONTROLS TO BE LOCATED OFF CENTER. CONTROLS TO BE PROVIDED ON END WALL LOCATED BETWEEN THE BATH TUB RIM AND DRAIN BEARING AND BETWEEN THE OPEN SIDE OF THE BATH TUB AND THE MIDPOINT OF THE WIDTH OF THE BATH. CONTROLS TO COMPLY WITH SECTION 309.4. SEE ILLUSTRATION ON ACCESSIBLE DETAIL SHEETS.
19. **BATH TUB AND SHOWER** PER SECTION 1003.11.2.5.1 &610.5. A HAND SHOWER WITH A HOSE 60" MIN. LENGTH THAT CAN BE USED AS A HAND SHOWER AND FIXED SHOWER HEAD SHALL BE PROVIDED. THE HAND SHOWER SHALL HAVE A CONTROL WITH A NON POSITIVE SHUT OFF FIXTURE. AN ADJUSTABLE HEIGHT HAND SHOWER MOUNTED ON A VERTICAL BAR SHALL BE INSTALLED TO NOT OBSTRUCT THE USE OF GRAB BARS.
20. **REMOVABLE CABINET** CABINET SHALL BE REMOVABLE W/ NO REMOVAL OR REPLACEMENT OF COUNTER TOP. THE RESULTANT SPACE SHALL MEET THE REQUIRED 30" MIN W/ECLEARANCE FOR FORWARD APPROACH. FLOOR FINISH SHALL EXTEND UNDER CABINET, WALL AND SURROUNDING CABINET SHALL BE FINISHED.
21. **TRANSFER TYPE SHOWER SIZE AND CLEARANCES** PER SECTION 1003.11.2.5.2 /608.2. TRANSFER TYPE SHOWER COMPARTMENTS SHALL HAVE A CLEAR IN SIDE DIMENSION OF 36" MIN MEASURED AT THE CENTER POINT OF OPPOSING SIDES. EN EN TRY 36" MIN. IN WIDTH SHALL BE PROVIDED. A CLEARANCE 48" IN LENGTH MEASURED PERPENDICULAR TO THE CONTROL WALL AND 36" IN WIDTH SHALL BE PROVIDED ADJACENT TO THE OPEN IN SIDE OF THE COMPARTMENT.
22. **TRANSFER TYPE SHOWER CONTROLS AND HAND SHOWER** PER SECTION 1003.11.2.5.2/606.4.3. CONTROLS AND HAND SHOWER TO BE LOCATED NO MORE THAN 39" FROM THE OPEN SIDE. MIN. 38" MIN. AND 48" MAX. ABOVE THE SHOWER FLOOR WITHIN 15" LEFT OR RIGHT OF THE CENTERLINE OF THE SEAT.
23. **TRANSFER TYPE SHOWER THRESH OLDS** PER SECTION 1003.11.2.5.2/606.6. THRESH OLDS HALL BE 1/2" MAX IN HEIGHT AND SHALL BE BEVELED, ROUNDED, OR VERTICAL.
24. **KITCHEN CLEARANCE** PER 1009.12.1.1. MINIMUM CLEARANCE BETWEEN ALL OPPOSING BASE CABINETS, COUNTER TOPS, APPLIANCES OR WALLS WITHIN KITCHEN WORK AREAS SHALL BE 40 INCHES.
25. **KITCHEN CLEARANCE AT U-SHAPED KITCHENS DESIGN** PER SECTION 1009.12.2 PROVIDE 60" MIN. CLEARANCE BETWEEN ALL OPPOSING BASE CABINETS, COUNTERTOPS, APPLIANCES OR WALLS WITHIN KITCHEN WORK AREAS.
26. **KITCHEN WORK SURFACE** PER SECTION 1003.12.3. AT LEAST ONE SECTION OF COUNTER SHALL PROVIDE A WORK SURFACE 30"MIN. IN LENGTH AND LOCATED 34" MAX. ABOVE THE FINISH FLOOR. A KNEE SPACE AT LEAST 27" HIGH, 30" WIDE AND 19" DEEP SHALL BE PROVIDED BELOW THE SURFACE TO ALLOW FOR CLEARANCE. TO COMPLY WITH 902.THE WORK SURFACE HEIGHT TO BE 34" MAX. ABOVE FINISH FLOOR. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES ON THE EXPOSED EDGES UNDER THE WORK SURFACE.
27. **KITCHEN SINK CLEAR SPACE** PER SECTION 1009.12.4.1. PROVIDE A 30"X48" CLEAR FLOOR SPACE POSITION FOR FORWARD APPROACH CENTER AND CENTERLINE WITH SINK. PROVIDE A REMOVABLE BASE CABINET FINISH FLOOR UNDER AND WALLS BEHINDS ARE ON REMOVABLE BASE CABINET.
28. **KITCHEN SINK HEIGHT** PER SECTION 1009.12.4.2. THE FRONT OF THE SINK TO BE 34" MAX. ABOVE THE FLOOR. MEASURED TO HIGHER OF THE RIM OR COUNTER.
29. **KITCHEN FAU CETS** PER SECTION 1009.12.4.3. FAU CETS TO COMPLY WITH SECTION 309.
30. **EXPOSED PIPES AND SURFACES** PER SECTION 1009.12.4.4. WATER SUPPLY AND DRAIN PIPES UNDER SINKS SHALL BE INSULATED OR OTHERWISE CONFIGURED TO PROTECT AGAINST CONTACT. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER THE EXPOSED EDGES UNDER THE WORK SURFACE.
31. **APPLIANCES OPERABLE PARTS** PER SECTION 1003.12.5.1. ALL APPLIANCE CONTROLS SHALL COMPLY WITH SECTION 1008.9.
32. **APPLIANCES CLEAR FLOOR SPACE** PER SECTION 1009.12.5.2. PROVIDE A 30"X48" CLEAR FLOOR SPACE POSITION FED FOR FORWARD OR PARALLEL APPROACH.
33. **DISHWASHER** PER SECTION 1009.12.5.3. POSITION CLEAR FLOOR SPACE ADJACENT TO THE DISHWASHER DOOR.
34. **RANGE OR COOKTOP** PER SECTION 1009.12.5.4.
35. **OVEN** PER SECTION 1003.12.5.5. OVEN SHALL COMPLY WITH SECTION 1009.12.5.5. OVENS SHALL HAVE CONTROLS ON FRONT PANELS, ON WITH SIDE OF THE DOOR.
36. **REFRIGERATOR/FREEZER** PER SECTION 1009.12.5.6.
37. **BEDROOMS** PER SECTION 1003.13. AT LEAST ONE WINDOW IN EACH SLEEPING, LIVING, OR DINING SPACE SHALL HAVE OPERABLE PARTS COMPLYING WITH SECTION 1003.9.
38. **STORAGE FACILITIES CLEARANCE** PER SECTION 1003.14. PROVIDE A 30"X48" CLEAR FLOOR SPACE POSITION FED FOR FORWARD OR PARALLEL APPROACH.
39. **STORAGE FACILITIES HEIGHT** PER SECTION 1003.14. A PORTION OF THE STORAGE FACILITY TO COMPLY WITH AT LEAST ONE OF THE REACH RANGES SPECIFIED IN SECTION 308.1.2 USING EDGE OF CLOSET SHELF SHALL NOT BE MORE THAN 4" TO INSIDE FACE OF FINISH.
40. **STORAGE FACILITIES OPERABLE PARTS** PER SECTION 1003.14. OPERABLE PARTS ON STORAGE FACILITIES SHALL COMPLY WITH SECTION 309.
41. **BATH TUB SEAT** PER UFAS SECTION 4.34.5.2 EI. AN IN TUB SEAT OR A SEAT AT THE HEAD END OF THE TUB SHALL BE PROVIDED. THE STRUCTURAL STRENGTH OF SEATS AND THEIR ATTACHMENTS SHALL COMPLY WITH UFAS 4.26.3. SEATS SHALL BE MOUNTED SECURELY AND SHALL NOT SLIP DURING USE. CLIENT TO PROVIDE TO TENANTS AS A REASONABLE ACCOMODATION UPON REQUEST.

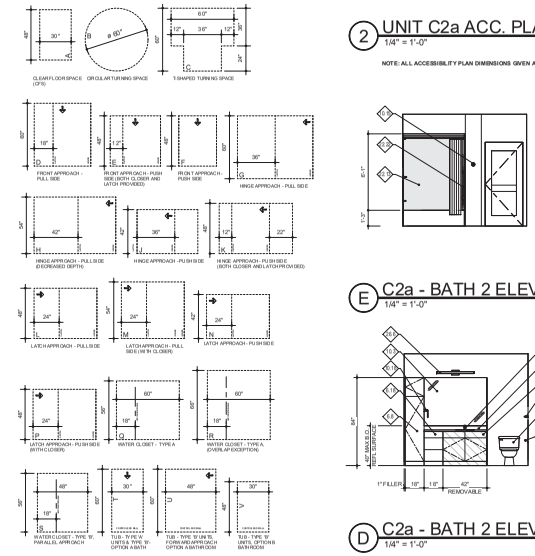
ACCESSIBILITY GENERAL NOTES

- REFER TO SHEET A0-6.0 FOR ACCESSIBILITY CALCULATIONS AND REQUIREMENTS.
- REFER TO SHEETS A0-6.0 THRU A0-6.3 FOR ACCESSIBILITY DETAILS.
- REFER TO ARCHITECTURAL SITE AND COMPOSITE PLANS FOR LOCATION OF ACCESSIBLE UNITS.
- DIMENSIONS ON THE ACCESSIBILITY PLAN REPRESENT DISTANCE FROM FINISHED WALL SURFACE.
- PROVIDE LEVER-HARDWARE ON ALL SWING DOORS IN UNIT.

ACCESSIBILITY LEGEND

PLAN

INDICATES REQUIRED REINFORCEMENT FOR FUTURE INSTALLATION OF GRAB BARS. EXTEND REINFORCEMENT A MIN. 2" BEYOND REQUIRED DIMENSION SHOWN FOR BAR. (RE: ANSI A117.1 TYPE 'A' AND TYPE 'B' ACCESSIBILITY DETAILS)

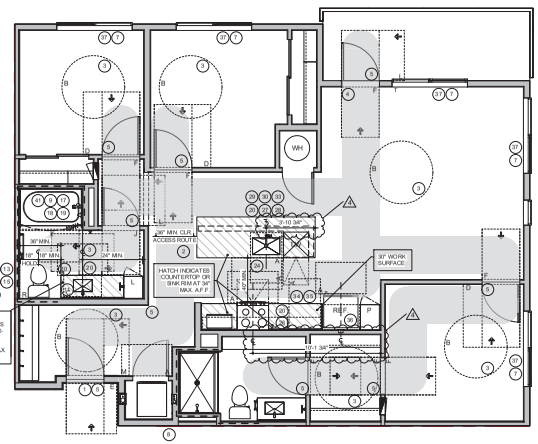




RCP LEGEND

FC03/ RC01	RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.5
FC03	NON-RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.5
	PENDANT LIGHT; RE: ELEC
	CEILING FAN - CENTERED IN ROOM; RE ELEC
	SURFACE MOUNTED VANITY LIGHT; RE: ELEC

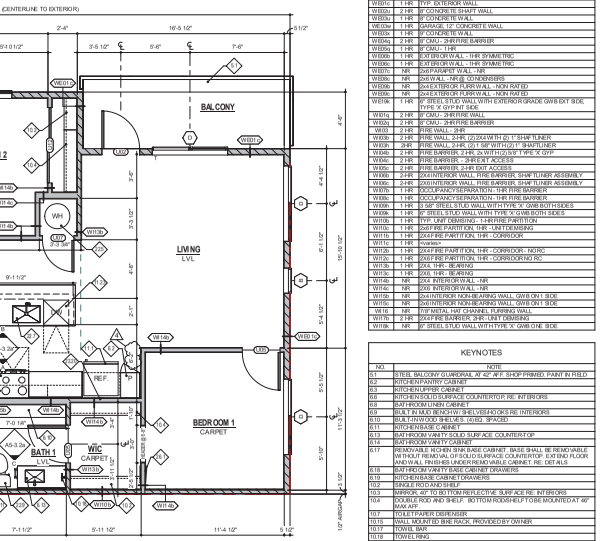
3 UNIT C2a RCP
1/8" = 1'-0"



2 UNIT C2a ACC. PLAN
1/4" = 1'-0"

ICC/ANSI 117.1-2009 TYPE 'A' UNIT

NOTE: ALL ACCESSIBILITY PLAN DIMINSIONS GIVEN ARE TO WALL FINISH



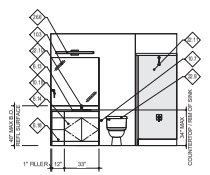
1 UNIT C2a PLAN
1/4" = 1'-0"

UNIT C2a SUMMARY

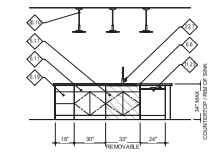
UNIT NAME	UNIT TYPE	UNIT AREA	Q.TY	TOTAL AREA
UNIT C2a	2BD/2BA	1,211 SF	1	1,211 SF

E C2a - BATH 2 ELEV 2
1/4" = 1'-0"

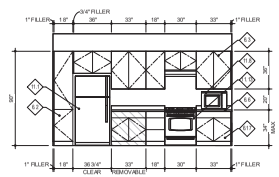
D C2a - BATH 2 ELEV 1
1/4" = 1'-0"



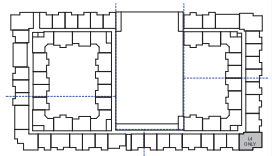
C C2a - BATH 1 ELEV
1/4" = 1'-0"



B C2a - KITCHEN ELEV 2
1/4" = 1'-0"



A C2a - KITCHEN ELEV 1
1/4" = 1'-0"



UNIT KEY PLAN

APPLIANCE BASIS OF DESIGN

TYPE B
TOP-FREEZER REFRIGERATOR -MODEL#: GIE22JTNRWW
ELECTRIC RANGE -MODEL#: GE JB250DMWW
OVER THE RANGE MICROWAVE -MODEL#: GE JVM3160DFWW
DISHWASHER-MODEL#: GDP511PGMWW
WASHER -FRONT LOAD STACKABLE -MODEL#: GFW350SSNWW
DRYER -FRONT LOAD STACKABLE -MODEL#: GFD55ESSNWW

TYPE A
TOP-FREEZER REFRIGERATOR -MODEL#: GIE22JTNRWW
FRONT CONTROL ELECTRIC RANGE -MODEL#: WEE01S0ALS
UNDER THE CABINET HOOD -MODEL#:
COUNTERTOP MICROWAVE OVEN -MODEL#: WMC30516H
DISHWASHER-MODEL#: WDF650SAH
WASHER -FRONT LOAD -MODEL#: GFW350SSNWW
DRYER -FRONT LOAD -MODEL#: GFD55ESSNWW
ALL-IN-ONE FRONT LOAD WASHER/CONDENSER/DRYER -MODEL #: GFQ24BSSNWW

UNIT PLAN GENERAL NOTES

- UNIT BEARING WALLS; RE: STRUCTURE
- T TEMPERED GLAZING; RE: A9-1.2 WINDOW SCHEDULE
- DIMENSIONS TAKE PRECEDENCE OVER DRAWINGS. DO NOT SCALE.
- ALL DIMENSIONS WITH TOP FACE OF STUDS UNLESS OTHERWISE INDICATED ON THE PLANS.
- INTERIOR DOORS TO BE HELD 4 " OFF ADJACENT TO HINGE SIDE FRAMING, EXTERIOR AND CORRIDOR WALLS TO BE HELD OFF 8" ADJACENT TO HINGE SIDE FRAMING. U.N.O. ALL OTHER DOORS SHALL BE CENTERED
- ACCESSIBILITY ELEMENTS INDICATED ARE REQUIRED. FIELD CONDITIONS OCCURRING WHICH IMPACT THE ACCESSIBILITY DESIGN SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.
- NOTE: UNIT S PROVIDED WITH MECHANICAL VENTILATION. RE: MECH - NATURAL VENTILATION CALCS WITH WINDOWS FOR REFERENCE ONLY.

INTERIOR ELEVATION GENERAL NOTES

- CASEWORK LAYOUT IS DIAGRAMMATIC. OWNER SHALL APPROVE FINAL LAYOUT PRIOR TO ORDERING/INSTALLATION.
- CASEWORK CONTRACTOR SHALL VERIFY APPLIANCE CLEARANCES
- CASEWORK CONTRACTOR SHALL VERIFY DRAWER PULL & DOOR HANDLE SELECTIONS.
- CASEWORK CONTRACTOR SHALL INSTALL 4" FINISH MATERIAL FOR FIELD APPLIED TOE KICK. MATERIAL TO MATCH CASEWORK
- PROVIDE MINIMUM 1 " FILLER AT ADJACENT WALLS
- PROVIDE FINISHED END PANELS AT ALL EXPOSED CABINET ENDS
- PROVIDE SINK BASE CABINETS WITH OPEN BACKS FOR PLUMBING ACCESS
- ALL EXPOSED CASEWORK SHALL BE FINISHED WITH MATCHING PANELS

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
W101c	1 HR	TYP. EXTERIOR WALL
W102c	2 HR	8" CONCRETE SHAFT WALL
W103c	1 HR	8" CONCRETE WALL
W103w	1 HR	GARAGE 12" CONCRETE WALL
W103x	1 HR	8" CONCRETE WALL
W106q	2 HR	8" CMU - 2HR FIRE BARRIER
W105q	1 HR	8" CMU - 1 HR
W106b	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
W106c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
W107c	NR	2x6 PARAPET WALL - NR
W108c	NR	2x6 WALL - NR @ CONDENSERS
W109c	NR	2x4 EXTERIOR FURR WALL - NON RATED
W109e	NR	2x4 EXTERIOR FURR WALL - NON RATED
W101e	1 HR	5" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' OPT INT SIDE
W101q	2 HR	8" CMU - 2HR FIRE WALL
W102q	2 HR	8" CMU - 2HR FIRE BARRIER
W103	2 HR	FIRE WALL - 2HR
W103b	2 HR	FIRE WALL - 2 HR, (2)2X4 WITH (2) 1" SHAFTLINER
W103f	2 HR	FIRE WALL - 2 HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
W104b	2 HR	FIRE BARRIER - 2 HR, 2x WITH (2) 5/8" TYPE 'X' GYP
W104c	2 HR	FIRE BARRIER - 2HR EXT ACCESS
W105c	2 HR	FIRE BARRIER - 2HR EXT ACCESS
W106b	2 HR	2X4 INTERIOR WALL - FIRE BARRIER, SHAFTLINER ASSEMBLY
W106c	2 HR	2X6 INTERIOR WALL - FIRE BARRIER, SHAFTLINER ASSEMBLY
W107c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W108c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W109h	1 HR	5 1/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W109k	1 HR	5" STEEL STUD WALL WITH TYPE 'X' G/WB BOTH SIDES
W110b	1 HR	TYP. UNIT DEMISING - 1-HR FIRE PARTITION
W110c	1 HR	2x6 FIRE PARTITION, 1HR - CORRIDOR DEMISING
W111b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
W111c	1 HR	2X6, 1HR - BEARING
W112b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NORC
W112c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
W113c	1 HR	2X6, 1HR - BEARING
W113c	1 HR	2X6, 1HR - BEARING
W114b	NR	2X4 INTERIOR WALL - NR
W114c	NR	2X6 INTERIOR WALL - NR
W115b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W115c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W116	NR	5/8" METAL HAT CHANNEL FURRING WALL
W117b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
W118c	NR	6" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

KEYNOTES

NO.	NOTE
5.1	STEEL BALCONY GUARDRAIL AT 42" AFF. SHOP PRIMED. PAINT IN FIELD
6.2	KITCHEN PANTRY CABINET
6.3	KITCHEN UPPER CABINET
6.6	KITCHEN SOLID SURFACE COUNTERTOP; RE: INTERIORS
6.8	BATHROOM LINEN CABINET
6.9	BUILT IN MUD BENCH W/ SHELVES/HOOKS RE: INTERIORS
6.10	BUILT IN WOOD SHELVES (4X20) SPACED
6.11	KITCHEN BASE CABINET
6.13	BATHROOM VANITY SOLID SURFACE COUNTERTOP
6.14	BATHROOM VANITY CABINET
6.17	REMOVABLE KITCHEN SINK BASE CABINET. BASE SHALL BE REMOVABLE WITHOUT REMOVAL OF SOLID SURFACE COUNTERTOP. EXTEND FLOOR AND WALL FINISH UNDER REMOVABLE CABINET. RE: DETAILS
6.19	BATHROOM VANITY BASE CABINET DRAWERS
6.20	KITCHEN BASE CABINET DRAWERS
10.2	SINGLE ROD AND SHELF
10.3	MIRROR, 40" TO BOTTOM REFLECTIVE SURFACE RE: INTERIORS
10.4	DOUBLE ROD AND SHELF. BOTTOM ROD SHELF TO BE MOUNTED AT 66" MAX AFF
10.7	TOILET PAPER DISPENSER
10.13	WALL MOUNTED BIKE RACK, PROVIDED BY OWNER
10.17	TOWEL BAR
10.18	TOWEL RING
11.1	REFRIGERATOR / FREEZER
11.8	ELECTRIC RANGE WITH ACCESSIBLE CONTROLS
11.13	OVEN RANGE WITH FRONT CONTROLS, AT TYPE A UNITS
11.14	ALL-IN-ONE FRONT LOAD WASHER/DRYER COMBO W/ ACCESSIBLE CONTROLS. OPTIONAL TENANT LEASE BY OWNER.
11.23	24" X 24" DISHWASHER; 34" COUNTER; RE: PLUMBING
22.5	ELEC. WATER HEATER W/ PAN; RE: PLUMBING
22.7	UNDERMOUNT KITCHEN SINK; RE: PLUMBING
22.8	WASHER HOOK UP; RE: PLUMBING
22.9	FLOOR MOUNT WATER CLOSET; RE: PLUMBING
22.10	BATHROOM SINK; EMBLEM RIM OF SINK IS BELOW 34" MAX. A.F.F. SINK BOWL TO BE 6 1/2" DEEP MAXIMUM PER UFAS GUIDELINES; RE: PLUMBING
22.11	60"X30" SHOWER PAN WITH PREFABRICATED SURROUND. PROVIDE STRAIGHT SHOWER CURTAIN ROD. PROVIDE GLASS MAT GYPSUM BOARD AS REQUIRED. PRE-ROCK AROUND TUB LOCATIONS ADJACENT TO RATED WALLS AS REQUIRED. INSTALL BLOCKING IN WALL FOR FUTURE GRAB BAR INSTALLATION. BOD. COMFORT DESIGNS: ES86608 4.0 ANSI #18
22.13	60"X30" ACCESSIBLE TUB/SHOWER WITH PREFABRICATED SURROUND. PROVIDE CURVED SHOWER CURTAIN ROD. PROVIDE GLASS MAT GYPSUM BOARD AS REQUIRED. PRE-ROCK AROUND TUB LOCATIONS ADJACENT TO RATED WALLS AS REQUIRED. INSTALL BLOCKING IN WALL FOR FUTURE GRAB BAR INSTALLATION. PROVIDE PARTS TO COMPLY WITH TYPE A UNIT. OWNER TO PROVIDE SEAT PER UFAS SECTION 4.34.5.4 AS A REASONABLE ACCOMODATION UPON TENANT REQUEST.
22.20	ICE MAKER BOX; RE: PLUMBING
22.22	PROVIDE WALL MOUNTED HAND SHOWER UNIT IN ANSI TYPE A UNITS. RE: INTERIORS AND ACCESSIBILITY DETAILS
23.2	DRYER HOOK UP; RE: MECHANICAL
26.1	ELECTRIC PANEL. TOP OF PANEL TO BE MAX 4'-9" ABOVE FINISH FLOOR. RE: ELEC
26.4	EXTERIOR SCONCE, MOUNTED AT 8'-0" AFF UNO. RE: ELEC
26.6	SURFACE MOUNTED VANITY LIGHT; RE: ELEC
26.10	PENDANT LIGHT FIXTURE; RE: ELEC. RE: INTERIORS FOR MOUNTING HEIGHT
27.1	TELECOM BOX. TOP OF PANEL TO BE MAX 4'-9" ABOVE FINISH FLOOR. RE: ELEC

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ISSUE FOR CONSTRUCTION
06.07.2024

No.	Date	Issue
1	06.07.2024	IFC

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: UNIT PLAN C2a
Sheet Number: A5-3.2a

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ACCESSIBILITY "TYPE B" PLAN NOTES

SOLUTION REFERENCES ARE TO ICC/ANSI A117.1-2009
NOT ALL NOTES MAY APPLY TO THIS SHEET

1. **PRIMARY ENTRANCE** PER SECTION 1009.2. PRIMARY EN TRANCE TO BE LOCATED ON ACCESSIBLE ROUTE.
2. **WALKING SURFACE WIDTH** PER SECTION 1004.4.1. CLEAR WIDTH OF AN ACCESSIBLE ROU TE SHALL COMPLY WITH SECTION 403.5.
3. **CHANGES IN LEVEL** PER SECTION 1004.5. WALKING SURFACES THAT ARE PART OF AN ACCESSIBLE ROUTE TO COMPLY WITH SEC TION 303. WHERE PATIO SURFACE OR BALCONY MATERIAL IS INTERFACIAL THE INTERVIOUS SURFACE SHALL BE 4" MAX BELOW THE FLOOR LEVEL OF THE ADJACENT INTERIOR SPACE OF THE UNIT.
4. **DOORS AND DOOR WAYS** PER SECTION 1004.5. PRIMARY DOOR TOC OMPLY WITH SECTION 1004.5.1. & SECTION 404.
5. **USER PASSAGE DOORWAYS** PER SECTION 1004.5.2. PASSAGE DOOR TOH AVE A CLEAR OPENING OF 32-5/8" MIN. (2'-10" MIN.).
6. **RAMPS** PER SECTION 1004.6. RAMPS SH ALL COMPLY WITH S ECTION 405.
7. **LAUNDRY EQUIPMENT CLEARANCE** PER SECTION 1004.10.1. SH ALL COMPLY WITH SECTION 305.3 & 911.2. PROVIDE A 30"X48" CLEAR FLOOR SPACE POSITION FOR PARALLEL APPROACH. FOR TOP LOADING MACHINES, THE CENTERLINE OF THE CLEAR FLOOR SPACE SH ALL BE OFFSET 24" MAX. FROM CENTERLINE OF DOOR OPENING. FOR FRONT LOADING MACHINES, THE CENTERLINE OF THE CLEAR FLOOR SPACE SH ALL BE OFFSET 24" MAX. FROM CENTERLINE OF DOOR OPENING.
8. **GRAB BAR AND SHOWER SEAT REINFOR CEMENT** PER SECTION 1004.11.1. REINFORCEMENT SHALL BE PROVIDED FOR THE FUTURE INSTALLATION OF GRAB BARS AND SHOWER SEATS AND TO COMPLY WITH 604.5, 607.4, 608.3, 608.2.1.3, 608.2.2.3 AN D 608.2.3.2. GRAB BAR REINFORCEMENT MATERIA L FOR GRAB BARS AND SHOWER SEATS SHALL BE CAPABLE OF RESISTING 250 LBF APPLIED AT ANY POINT IN ANY DIRECTION. HEIGHT MIN DEPTH ON SIZE MIN. TOUCH BAR, 4.2" DIA.
9. **DOOR SWING** PER SECTION 1004.11.2.1. EXCEPTION CLEAR FLOOR SPACE COMPLYING WITH 305.3, EXCLUDING ONE AND TOE CLEAR ANCES UNDER ELEMENTS, PROVIDED WITHIN THE ROOM BEYOND THE ARC OF THE DOOR SWING.
10. **OPTION A.1 LAVATORY** PER SECTION 1004.11.3.1.1. A LAVATORY WITH CLEAR FLOOR SPACE TO COMPLY WITH SECTION 305 SPOSITIONED FOR PARALLEL APPROACH. FRONT OF LAVATORY SHALL BE LOCATED A MAX. OF 1" MEASURED TO THE HIGH ER OF THE RIM OR COUNTER SURFACE. EXCEPTION: A LAVATORY COMPLYING WITH SECTION 606 SH ALL BE PERMITTED TO OVERLAP THE REQUIRED CLEAR ANCE, PROVIDED THE WIDTH OF THE REMAINING WATER CLOSET CLEARANCE IS 21" MIN.
11. **OPTION A.2 LAVATORY** PER SECTION 1004.11.3.1.2. A LAVATORY WITH CLEAR FLOOR SPACE TO COMPLY WITH SECTION 305 SPOSITIONED FOR FORWARD APPROACH. FRONT OF LAVATORY SHALL BE 34" MAX. A F.F., MEASURED TO THE HIGH ER OF THE RIM OR COUNTER SURFACE.
12. **OPTION B.1 WATER CLOSET** PER SECTION 1004.11.3.2.1. WATER CLOSET SHALL BE LOCATED WITH A MIN. OF 18" CLEAR ANCE ON ONE SIDE AND 42" MIN. IN FRONT. EXCEPTION: A WATER CLOSET LOCATED IN A TOILET COMPARTMENT THAT IS NOT LESS THAN 60" WIDE SHALL BE PERMITTED TO BE LOCATED WITH A MIN. OF 12" CLEAR ANCE ON ONE SIDE AND 42" MIN. IN FRONT.
13. **OPTION B.2 LAVATORY** PER SECTION 1004.11.3.2.2. A LAVATORY WITH CLEAR FLOOR SPACE TO COMPLY WITH SECTION 305 SPOSITIONED FOR FORWARD APPROACH. FRONT OF LAVATORY SHALL BE 34" MAX. A F.F., MEASURED TO THE HIGH ER OF THE RIM OR COUNTER SURFACE.
14. **OPTION B.3 BATHTUB** PER SECTION 1004.11.3.3.3. BATHTUB CLEARANCE TO EXTEND 48" MIN. ALONG THE 30" MIN. BATHTUB DEPTH PER SECTION 1004.11.3.2.3.1. SHOWER COMPAR TMENT TO COMPLY WITH SECTION 1004.11.3.2.3.2.
15. **OPTION B.4 OPTION B: WATER CLOSET** PER SECTION S 1004.11.3.1.2 & 1004.11.3.2.2. **LOCATION** THE CEN TERLINE OF THE WATER CLOSET SH ALL BE 16" - 18" CLEAR ON ONE SIDE OF REQUIRED CLEARANCE. **CLEARANCE WID TH** SHALL BE 48" MIN. **CLEARANCE DEPTH** SHALL BE 66" MIN. FOR SIDE APPROACH AND 56" MIN. FOR FORWARD APPROACH. **CLEARANCE OVERLAP** A VANITY OR OTHER OBSTRUCTION 34" MAX. IN DEPTH SH ALL BE PERMITTED TO OVERLAP THE REQUIRED CLEAR ANCE, PROVIDED THE WIDTH OF THE REMAINING WATER CLOSET CLEARANCE IS 21" MIN.
16. **KITCHEN OBSTRUCTION CLEARANCE** PER SECTION 1004.12.1.1. CLEAR ANCE BETWEEN ALL OPPOSING BASE CABINETS, COUNTER TOPS, APPLIANCES OR WALLS WITHIN KITCHEN AREAS SHALL BE 40" MIN.
17. **KITCHEN OBSTRUCTION CLEARANCE FLOOR SPACE** PER SECTION 1004.12.2.1. PROVIDE A 30"X48" CLEAR FLOOR SPACE POSITION FOR PARALLEL APPROACH. CENTER SPACE ON RANGE/OVEN, SINK WITH FORWARD APPROACH SH ALL COMPLY WITH SECTION 1003.12.4.1.
18. **DISHWASHER** PER SECTION 1004.12.2.2. POSITION CLEAR FLOOR SPA CE ADJACENT TO THE DISHWASHER DOOR FOR PARALLEL OR FORWARD APPROACH BEYOND THE SWING OF THE DISHWASHER DOOR.
19. **RANGE OR COOKTOP** PER SECTION 1004.12.23. CLEAR FLOOR SPACE POSITIONED FOR FORWARD APPROACH SH ALL COMPLY WITH SECTION 1004.12.3.2. CLEAR FLOOR SPACE POSITIONED FOR PARALLEL APPROACH SHALL ALIGN WITH THE CENTERLINE OF THE RANGE COOKTOP PER SECTION 1004.2.3.5.
20. **OVEN** PER SECTION 1004.12.2.4. A CLEAR FLOOR SPACE SHALL BE PROVIDED FOR PARALLEL OR FORWARD APPROACH.
21. **REFRIGERATION FREEZER** PER SECTION 1004.12.2.5. A CLEAR FLOOR SPACE SHALL BE PROVIDED FOR PARALLEL OR FORWARD APPROACH. THE CENTERLINE OF CLEAR FLOOR SPACE SHALL BE OFFSET 24" MAX. FROM THE CENTERLINE OF THE APPLIANCE.

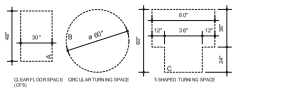
ACCESSIBILITY GENERAL NOTES

- REFER TO SHEET A4-6.0 FOR ACCESSIBILITY CALCULATIONS AND REQUIREMENTS.
- REFER TO SHEET A4-6.2 THRU A4-6.5 FOR ACCESSIBILITY DETAILS.
- REFER TO ARCHITECTURAL SITE AN D COMPOSITE PLANS FOR LOCATION OF ACCESSIBLE UNITS.
- DIMENSIONS ON THIS ACCESSIBILITY PLAN REPRESENT DISTANCE FROM FINISHED WALL SURFACE.
- PROVIDE LEVER HARDWARE ON ALL SWING DOORS IN UNIT.
- REFER TO SHEET A4-6.1 FOR UNIT CONFIGURATION IF FOR TYPE B DWELLING UNITS - OPTION USED NOTED ON ACCESSIBILITY PLAN.

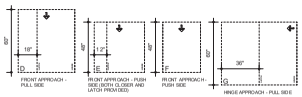
ACCESSIBILITY LEGEND

PLAN

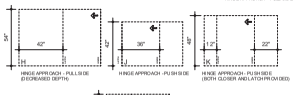
INDICATES REQUIRED REINFORCEMENT FOR FUTURE INSTALLATION OF GRAB BARS. EXTEND REINFORCEMENT A MIN. 2" BEYOND REQUIRED DIMENSION SHOWN FOR BAR. (RE: ANSI A117.1 TYPE 'A' AND TYPE 'B' ACCESSIBILITY DETAILS)



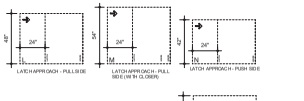
CLEAR FLOOR SPACE (CFS) | CIRCULAR TURNING SPACE | T-SHAPED TURNING SPACE



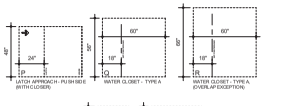
FRONT APPROACH - PULL SIDE | FRONT APPROACH - PUSH SIDE (BOTH CLOSER AND LATCH PROVIDED) | FRONT APPROACH - PUSH SIDE | HINGE APPROACH - PULL SIDE



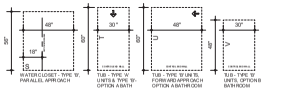
HINGE APPROACH - PULL SIDE (DEADBOLT/EPT) | HINGE APPROACH - PUSH SIDE | HINGE APPROACH - PUSH SIDE (BOTH CLOSER AND LATCH PROVIDED)



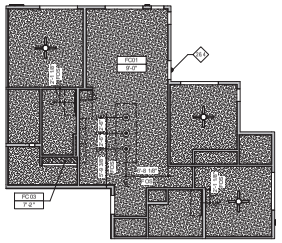
LATCH APPROACH - PULL SIDE | LATCH APPROACH - PULL SIDE (WITH CLOSER) | LATCH APPROACH - PUSH SIDE



LATCH APPROACH - PUSH SIDE WITH CLOSER | WATER CLOSET - TYPE A | WATER CLOSET - TYPE A (OVERLAP EXCEPTION)

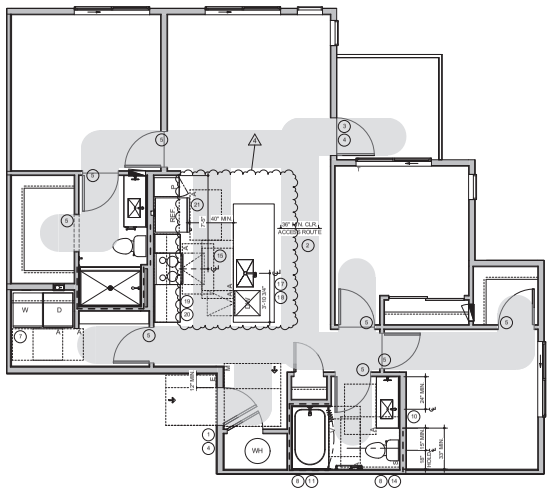


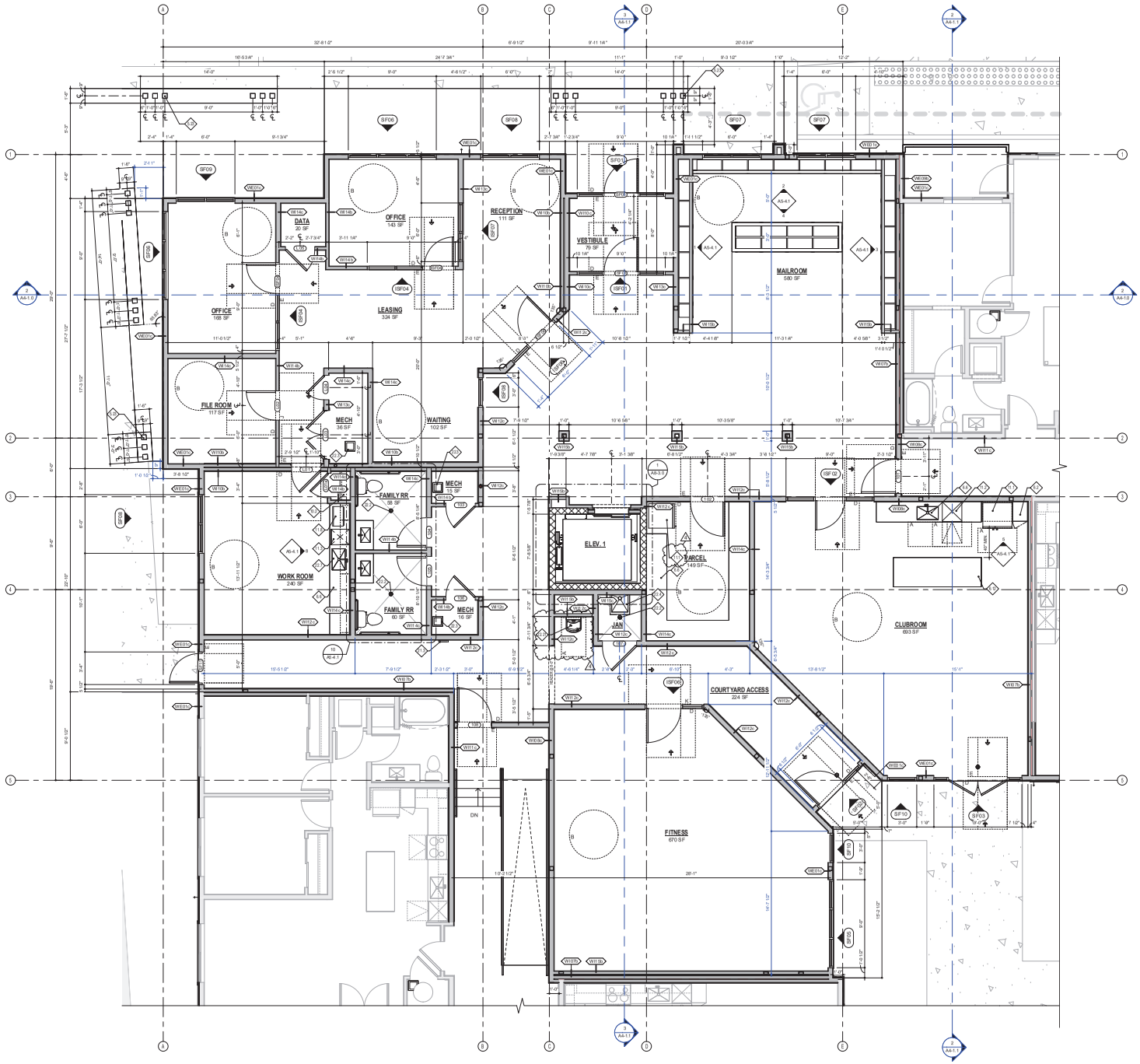
WATER CLOSET - TYPE 'B' PARALLEL APPROACH | TUB - TYPE 'B' UNITS & TYPE 'B' - OPTION A BATH | TUB - TYPE 'B' DETAIL FORWARD APPROACH OPTION A BATHROOM | TUB - TYPE 'B' UNITS, OPTION B BATHROOM



RCP LEGEND	
FC01/ RC01	RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.5
FC03	NON-RATED GYP. BD CEILING, RE: ASSEMBLIES A0-6.5
	PENDANT LIGHT; RE: ELEC
	CEILING FAN - CENTERED IN ROOM; RE: ELEC
	SURFACE MOUNTED VANITY LIGHT; RE: ELEC

8 UNIT C3 RCP
1/8" = 1'-0"


BEDROOM 1
CARPET
LIVING
LVL
BALCONY
BATH 1
LVL
WIC
LVL
KITCHEN
LVL
BEDROOM 2
CARPET
LAUNDRY
LVL
BATH 2
LVL
BEDROOM 3
CARPET
REF.
D/W
W
D
WH
42" MIN. CLR. ACCESS ROUTE
42" MIN. CLR. ACCESS ROUTE
30" MIN.
60" MIN.
36" MIN.
42" MIN.
42" MIN.
42



1 ENLARGED AMENITY PLAN
1/4" = 1'-0"

GENERAL NOTES

- DIMENSIONS TAKE PRECEDENCE OVER SCALE. DO NOT SCALE.
- DIMENSIONS ARE TO FACE OF STUDS UNLESS OTHERWISE INDICATED OUTHE PLANS.
- ACCESSIBILITY ELEMENTS INDICATED ARE REQUIRED. FIELD CONDITIONS OCCURRING WHICH IMPACT THE ACCESSIBILITY DESIGN SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.
- SEE INTERIOR DRAWINGS FOR ALL FINISH MATERIALS
- ELEVATION 100'-0" EQUALS CIVIL FF 5286.00' RE: CIVIL DRAWINGS

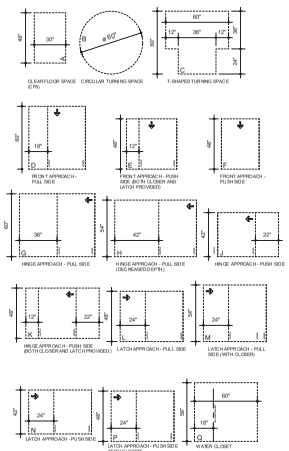
WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
W001c	1 HR	TYP. EXTERIOR WALL
W002c	2 HR	8" CONCRETE SHAFT WALL
W003c	1 HR	6" CONCRETE WALL
W003w	1 HR	GARAGE 12" CONCRETE WALL
W003c	1 HR	3" CONCRETE WALL
W004c	2 HR	8" CMU - 3HR FIRE BARRIER
W005c	1 HR	8" CMU - 1HR
W006c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
W006c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
W007c	NR	2x6 PARAPET WALL - NR
W008c	NR	2x6 WALL - NR @ CONDENSERS
W009c	NR	2x4 EXTERIOR FURR WALL - NON RATED
W009c	NR	2x4 EXTERIOR FURR WALL - NON RATED
W010e	1 HR	6" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
W001c	2 HR	8" CMU - 2HR FIRE WALL
W002c	2 HR	8" CMU - 2HR FIRE BARRIER
W003	2 HR	FIRE WALL - 2HR
W003b	2 HR	FIRE WALL 2-HR, (2)2X4 WITH (2) 1" SHAFTLINER
W003h	3HR	FIRE WALL 2-HR, (2)1 5/8" WITH (2) 1" SHAFTLINER
W004b	2 HR	FIRE BARRIER, 2 HR, 2x WITH (2) 5/8" TYPE 'X' GYP
W004c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
W005c	2 HR	FIRE BARRIER, 2-HR EXIT ACCESS
W006b	2-HR	2X4 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W006c	2-HR	2X6 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W007c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W008c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W008h	1 HR	5 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W009c	1 HR	6" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W010b	1 HR	TYP. UNIT DEMISING - 1-HR FIRE PARTITION
W010c	1 HR	2x4 FIRE PARTITION, 1HR - UNIT DEMISING
W011c	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
W011c	1 HR	Wainscot
W012b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
W012c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
W013b	1 HR	2X6, 1HR - BEARING
W013c	1 HR	2X6, 1HR - BEARING
W014b	NR	2X4 INTERIOR WALL - NR
W014c	NR	2X6 INTERIOR WALL - NR
W015b	NR	2x4 INTERIOR NON BEARING WALL, GWB ON 1 SIDE
W015c	NR	2x6 INTERIOR NON BEARING WALL, GWB ON 1 SIDE
W16	NR	2'0" METAL HAT CHANNEL FURRING WALL
W017c	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
W018b	NR	6" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

KEYNOTES

NO.	NOTE
5.23	SQUARE HSS COLUMN, RE: STRUCT, PAINTED SW 0046 ANTIQUARIAN BHDWN
6.2	KITCHEN PANTRY CABINET
6.6	KITCHEN SOLID SURFACE COUNTERTOP, RE: INTERIORS
6.12	KITCHEN ISLAND VS SOLID SURFACE COUNTERTOP
10.2	SINGLE ROD AND SHELF
11.1	REFRIGERATOR / FREEZER
11.2	24" X 2-4" DISHWASHER, RE: PLUMBING
11.3	UNDERCOUNTER REFRIGERATOR, RE: INTERIORS
11.8	ELECTRIC MICROWAVE WITH ACCESSIBLE CONTROLS
21.3	MINIMUM 2A10BC FIRE EXTINGUISHER IN RECESSED CABINET MOUNTED NO HIGHER THAN 5' TO TOP OF EXTINGUISHER
22.2	FLOOR DRAIN, SLOPE SLAB TO DRAIN AS INDICATED, RE: PLUMBING
22.3	FLOOR SINK, RE: PLUMBING
22.4	ROOF SINK, RE: PLUMBING
22.7	UNDERMOUNT KITCHEN SINK, RE: PLUMBING
22.21	WALL MOUNTED DRINKING FOUNTAIN AND BOTTLE REFILL, PROVIDE BIHROUD AT UNDERMOUNTAIN TO MEET ACCESSIBILITY

ACCESSIBILITY LEGEND - COMMON SPACE



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MARSHALL POINTE

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5170 MARSHALL ST - ARVADA, CO 80002

ISSUE FOR CONSTRUCTION
06.01.2024

No.	Date	Issue
1	06.07.2024	IFC

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: ENLARGED AMENITY PLANS
Sheet Number: **A5-4.0**

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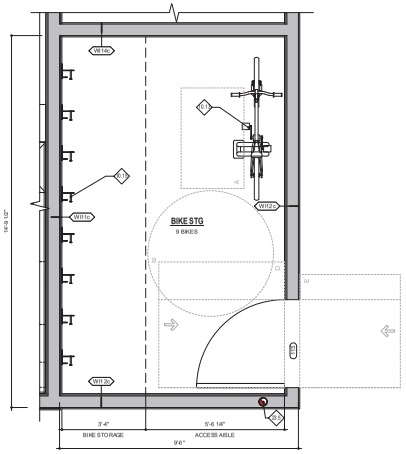
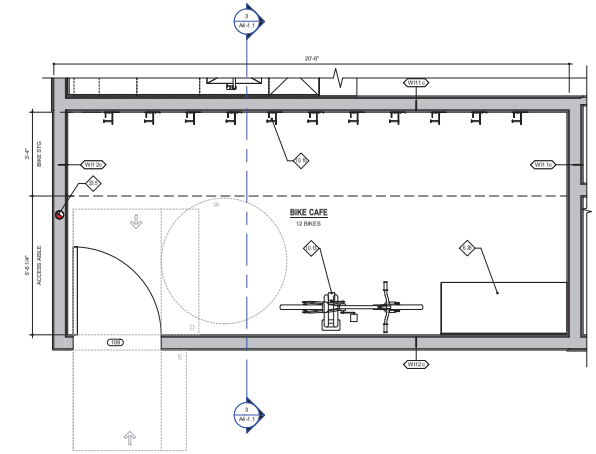
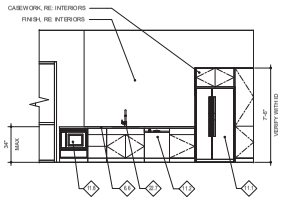


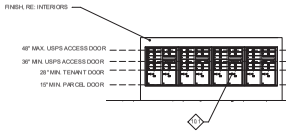
11 ENLARGED BIKE STORAGE
1/2" = 1'-0"



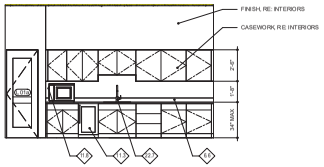
9 ENLARGED BIKE CAFE
1/2" = 1'-0"



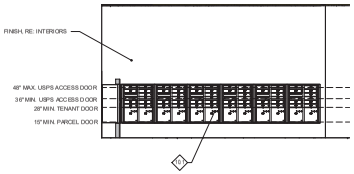
5 CLUB ROOM - KITCHENETTE
1/4" = 1'-0"



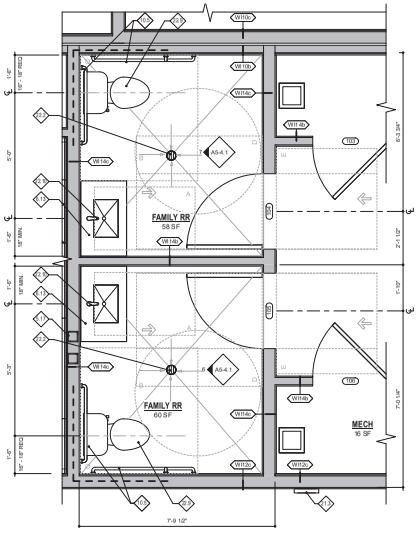
4 MAILROOM ISLAND - TYP.
1/4" = 1'-0"



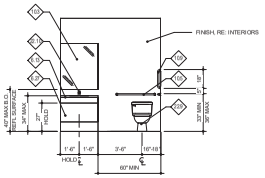
8 WORKROOM
1/4" = 1'-0"



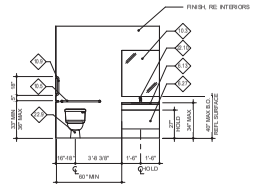
3 MAILROOM SOUTH
1/4" = 1'-0"



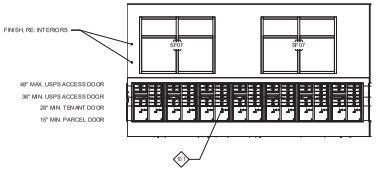
10 ENLARGED FAMILY RESTROOM
1/2" = 1'-0"



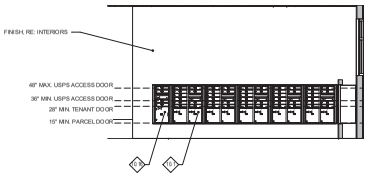
7 FAMILY RESTROOM 1
1/4" = 1'-0"



6 FAMILY RESTROOM 2
1/4" = 1'-0"

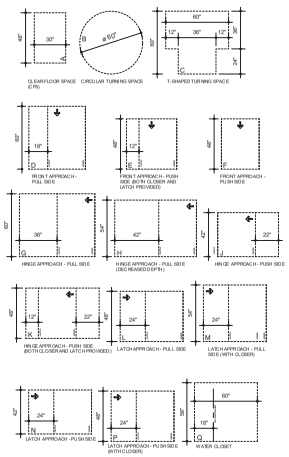


2 MAILROOM WEST
1/4" = 1'-0"



1 MAILROOM NORTH
1/4" = 1'-0"

ACCESSIBILITY LEGEND - COMMON SPACE



GENERAL NOTES

- DIMENSIONS TAKE PRECEDENCE OVER DRAWINGS. DO NOT SCALE.
- DIMENSIONS ARE TO FACE OF STUDS UNLESS OTHERWISE NOTED ON THE PLANS.
- ACCESSIBILITY ELEMENTS INDICATED ARE REQUIRED. FIELD CONDITIONS OCCURRING WHICH IMPACT THE ACCESSIBILITY DESIGN SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.
- SEE INTERIOR DRAWINGS FOR ALL FINISH MATERIALS
- ELEVATION 100'-0" EQUALS CIVIL F.F. 5018.67 RE: CIVIL DRAWINGS

KEYNOTES

KEYNOTE	NOTE
5.17	SQUARE HSS COLUMN, RE: STRUCTURAL
6.4	KITCHEN SOLID SURFACE COUNTERTOP RE: INTERIORS
6.13	BATHROOM VANITY SOLID SURFACE COUNTER-TOP
6.26	WORK BENCH, PROVIDED BY OWNER 3'-4" MAX. A.F.F.
6.27	PIPE PROTECTION SKIRT, RE: INTERIORS
10.1	TENANT MAILBOXES, TYP. BASED ON FLORENCE MODEL 4CADD-10. PROVIDE REQUIRED 300 MIN. MAILBOXES FOR APT UNITS, 300 MAILBOXES AND 60 PARCEL LOCKERS SHOWN.
10.3	MIRROR, 40" TO BOTTOM REFLECTIVE SURFACE, RE: INTERIORS
10.5	GRAB BAR, PROVIDE BLOCKING RE: DETAILS
10.9	78" VERTICAL GRAB BAR, PROVIDE BLOCKING RE: DETAILS
10.13	FLOOR MOUNTED WORK STAND, PROVIDED BY OWNER
10.15	WALL MOUNTED BIKE RACK, PROVIDED BY OWNER
10.18	LEASING/MAILBOX, BASED ON FLORENCE MODEL 4CADS-04. PROVIDE REQUIRED 1 MIN. MAILBOX FOR THE CLUBHOUSE, 4 MAILBOXES AND 1 PARCEL LOCKER SHOWN.
11.1	REFRIGERATOR/FREEZER
11.2	24" X 24" DISHWASHER, RE: PLUMBING
11.3	UNDER COUNTER REFRIGERATOR, RE: INTERIORS
11.8	ELECTRIC MICROWAVE WITH ACCESSIBLE CONTROLS
21.3	MINIMUM 34 1 SIN. C.F.RE. EXTINGUISHER IN FIRE CESBED CABINET MOUNTED NO HIGHER THAN 5' TO TOP OF EXTINGUISHER.
22.2	FLOOR DRAIN, SLOPE SLAB TO DRAIN AS INDICATED, RE: PLUMBING
22.7	UNDERMOUNT KITCHEN SINK, RE: PLUMBING
22.9	FLOOR MOUNT WATER CLOSET, RE: PLUMBING
22.10	BATHROOM SINK, ENSURE TOP OF SINK IS BELOW 34" MAX. A.F.F. SINK BOWL TO BE 6 1/2" DEEP MAXIMUM PER ADA GUIDELINES. RE: PLUMBING
23.5	RADON RISER, VENT, 4" PVC TO PENETRATE ROOF.

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ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Title:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: ENLARGED AMENITY PLANS/ELEVATIONS
Sheet Number: A5-4.1

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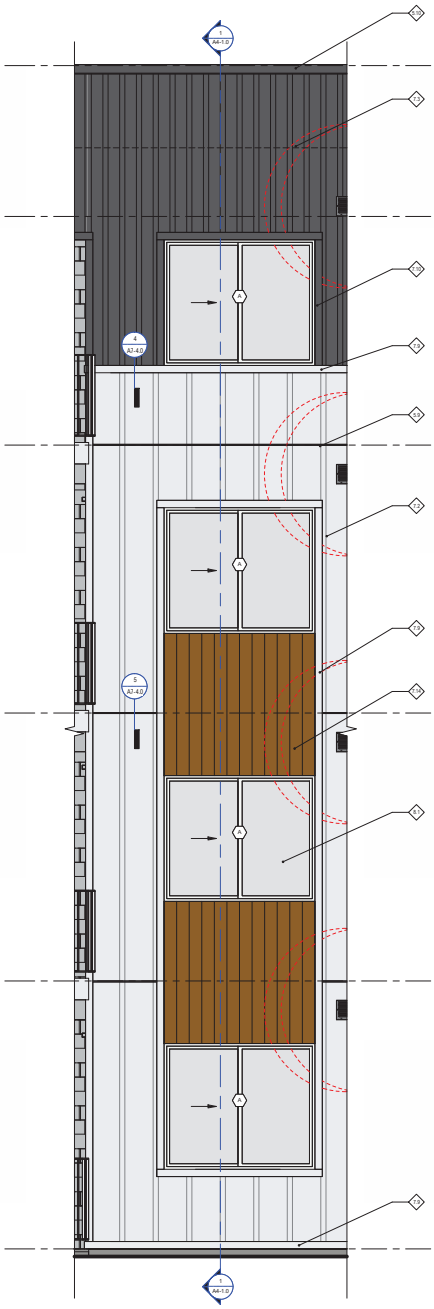
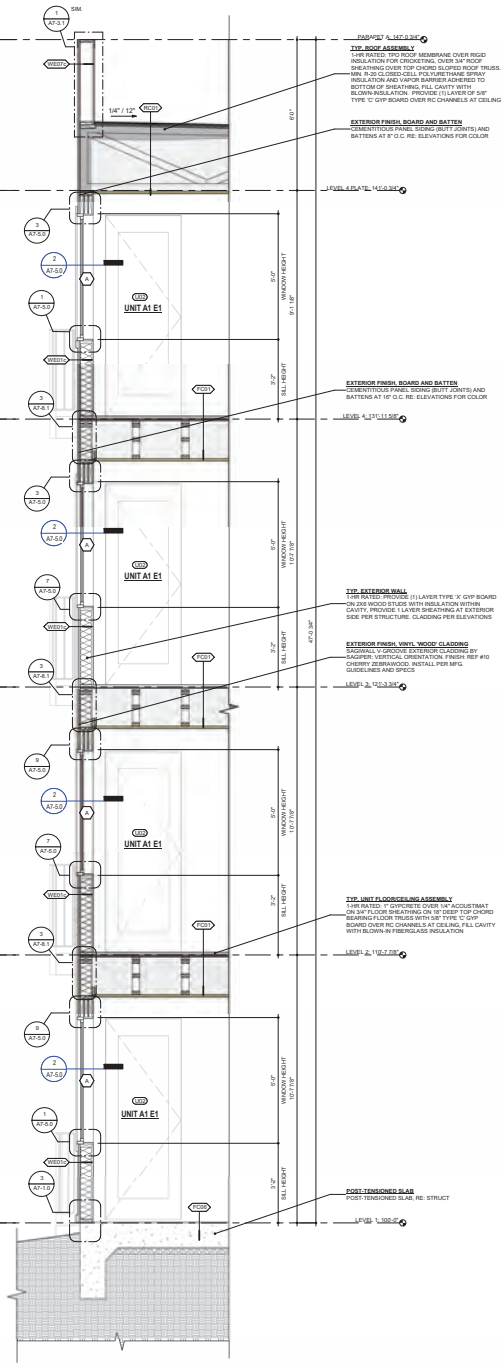




MATERIAL LEGEND

	CEMENTITIOUS PANEL - SW 6258 TRICORN BLACK
	CEMENTITIOUS B&B (A) 8" SPACING SW 7674 PEPPERCORN
	CEMENTITIOUS B&B (B) 16" SPACING SW 7138 LAVENDER WISP
	CEMENTITIOUS SHAKE SIDING - SW 6254 LAZY GRAY
	"WOOD" LOOK PANEL - SAGIPER - CHERRY ZEBRAWOOD OR SIM.
	CMU - BASALITE 635WR - GROUND FACE

BUILDING COLORS

SOFFIT: CEMENTITIOUS SOFFIT BOARD. SW6258 TRICORN BLACK. RE: RCP
SOFFIT: CEMENTITIOUS SOFFIT BOARD. SW7674 PEPPERCORN. RE: RCP
FASCIA: CEMENTITIOUS PANEL/TRIM BOARD. SW6258 TRICORN BLACK
BALCONY RAILINGS: PAINTED: SW7138 LAVENDAR WISP
GUTTERS: PAINTED: TBD
MECHANICAL LOUVERS: PAINT TO MATCH FIELD
GARAGE OPENING SCREENS: SW7674 PEPPERCORN
STOREFRONT FRAMING: BLACK
STEEL COLUMNS - BALCONIES: PAINTED: SW7674 PEPPERCORN
STEEL COLUMNS - CANOPIES: PAINTED: SW6049 ANTIQUARIAN BROWN
PRECAST WALL PANELS: PAINTED: SW7674 PEPPERCORN. RE: ELEVATIONS
PRECAST WALL PANELS: PAINTED: SW6049 ANTIQUARIAN BROWN. RE: ELEVATIONS
PRECAST SPANDREL PANELS: TEXTURED FINISH: FORMLINER 2195
AMAZORAS: PAINTED: SW7138 LAVENDAR WISP. RE: ELEVATIONS

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
W001c	1 HR	TYP. EXTERIOR WALL
W002c	2 HR	6" CONCRETE SHAFT WALL
W003c	1 HR	8" CONCRETE WALL
W012e	1 HR	GARAGE, 12" CONCRETE WALL
W007e	1 HR	8" CONCRETE WALL
W004c	2 HR	8" CMU - 2HR FIRE BARRIER
W005c	1 HR	8" CMU - 1 HR
WE006	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE004	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE007	NR	2x6 PARAPET WALL - NR
WE008	NR	2x6 WALL - NR @ CONDENSERS
WE009	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE009c	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE19b	1 HR	6" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
W001a	2 HR	8" CMU - 2HR FIRE WALL
W002a	2 HR	8" CMU - 2HR FIRE BARRIER
W003	2 HR	FIRE WALL - 2HR
W002b	2 HR	FIRE WALL, 2-HR, (2) 2X4 WITH (2) 1" SHAFTLINER
W003b	2HR	FIRE WALL, 2-HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
W004b	2 HR	FIRE BARRIER, 2-HR, 2x WITH (4) 5/8" TYPE 'X' GYP
W004c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
W005c	2 HR	FIRE BARRIER, 2-HR EXIT ACCESS
W006c	2HR	2X4 INTERIOR WALL - FIRE BARRIER, SHAFTLINER ASSEMBLY
W006d	2HR	2X6 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W007b	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W008c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W009b	1 HR	3-5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W009b	1 HR	6" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W010b	1 HR	TYP. UNIT DEMISING - 1-HR FIRE PARTITION
W010c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
W011b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
W011c	1 HR	<verify>
W012b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
W012c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
W013b	1 HR	2X4, 1HR - BEARING
W013c	1 HR	2X6, 1HR - BEARING
W014b	NR	2X4 INTERIOR WALL - NR
W014c	NR	2X6 INTERIOR WALL - NR
W015b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W015c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W016	NR	7/8" METAL HAT CHANNEL FURRING WALL
W017b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
W018b	NR	6" STEEL STUD WALL WITH TYPE 'X' GWB ONe side

FLOOR/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
FC01	1 HR	TYP. UNIT FLOOR/CEILING ASSEMBLY
FC02	1 HR	TYP. CORRIDOR FLOOR/CEILING ASSEMBLY
FC03	NR	TYP. DROP CEILING
FC05	NR	TYP. BALCONY ASSEMBLY - DRIP -THRU
FC06	NR	POST-TENSIONED SLAB
FC07	NR	NON-RATED PT CONCRETE SLAB
FC07	1HR	PRECAST CONCRETE FLOOR/CEILING
FC07	1HR	TYP. GARAGE FLOOR/CEILING
FC08	1HR	BALCONY ASSEMBLY - CONDITIONED SPACE
FC09	1HR	BALCONY ASSEMBLY
FC10	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC11	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC12	NR	SLAB ON GRADE

ROOF/CEILING TYPE SCHEDULE

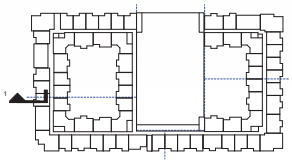
MARK	FIRE RATING	DESCRIPTION
RC01	1HR	TYP. ROOF ASSEMBLY
RC02	1HR	TYP. ROOF ASSEMBLY
RC03	1HR	1 HR HORIZONTAL ASSEMBLY
RC04	1 HR	1 HR HORIZONTAL ASSEMBLY
RC05	NR	2N ROOF ASSEMBLY
RC06	NR	1/4" TJI ROOF ASSEMBLY
RC07	NR	NR HORIZONTAL ASSEMBLY

KEYNOTES

NO.	NOTE
5.9	HORIZONTAL FLASHING AT BOARD/BATTEN. INSTALL PER MFG. SPECIFICATIONS
5.10	PRE-FINISHED METAL PARAPET COPING. COLOR TO MATCH FIELD
7.2	VERTICAL CEMENTITIOUS BOARD & BATTEN 16" EXPOSURE - LAVENDER WISP - SW7138 RE: ELEVATIONS
7.3	VERTICAL CEMENTITIOUS BOARD & BATTEN 8" EXPOSURE - PEPPERCORN - SW7674. RE: ELEVATIONS
7.9	SHX4 CEMENTITIOUS TRIM BOARD -SMOOTH FINISH - LAVENDER WISP - SW7138
7.10	SHX4 CEMENTITIOUS TRIM BOARD -SMOOTH FINISH - PEPPERCORN - SW7674
7.14	SAGWALL V-GROOVE EXTERIOR CLADDING BY SAGIPER; VERTICAL ORIENTATION. FINISH: REF #10 CHERRY ZEBRAWOOD. INSTALL PER MFG GUIDELINES AND SPECIFICATIONS
8.1	VINYL WINDOW W/ LOW E, GLAZING. RE: WINDOW SCHEDULE

2 WALL SECTION 1 ELEVATION
1/2" = 1'-0"

1 WALL SECTION 1
1/2" = 1'-0"



WALL SECTION KEY PLAN

A6-1.1

WALL SECTIONS

ISSUE FOR CONSTRUCTION 08.07.2024

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	CEMENTITIOUS SHAKE SIDING - SW 6254 LAZY GRAY
	"WOOD" LOOK PANEL - SAGIPER - CHERRY ZEBRAWOOD OR SIM.
	CMU - BASALITE 635WR - GROUND FACE

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SOFFIT: CEMENTITIOUS SOFFIT BOARD. SW7674 PEPPERCORN. RE: RCP
FASCIA: CEMENTITIOUS PANEL/TRIM BOARD. SW6258 TRICORN BLACK
BALCONY RAILINGS: PAINTED: SW7138 LAVENDAR WISP
GUTTERS: PAINTED: TBD
MECHANICAL VENTS: PAINT TO MATCH FIELD
GARAGE OPENING SCREENS: SW7674 PEPPERCORN
STOREFRONT FRAMING: BLACK
STEEL COLUMNS - BALCONIES: PAINTED: SW7674 PEPPERCORN
STEEL COLUMNS - CANOPIES: PAINTED: SW6048 ANTIQUARIAN BROWN
PRECAST WALL PANELS: PAINTED: SW7674 PEPPERCORN. RE: ELEVATIONS
PRECAST WALL PANELS: PAINTED: SW6048 ANTIQUARIAN BROWN. RE: ELEVATIONS
PRECAST SPANDREL PANELS: TEXTURED FINISH: FORMLINER 2/95
AMAZONAS: PAINTED: SW7138 LAVENDAR WISP. RE: ELEVATIONS

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
W01c	1 HR	TYP. EXTERIOR WALL
W02c	2 HR	6" CONCRETE SHAFT WALL
W03c	1 HR	8" CONCRETE WALL
W03e	1 HR	GARAGE, 12" CONCRETE WALL
W07e	1 HR	8" CONCRETE WALL
W04c	2 HR	8" CMU - 2HR FIRE BARRIER
W05c	1 HR	8" CMU - 1 HR
WE06	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE06c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE07c	NR	2x6 PARAPET WALL - NR
WE08	NR	2x6 WALL - NR @ CONDENSERS
WE09	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE09c	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE19b	1 HR	6" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
W01c	2 HR	8" CMU - 2HR FIRE WALL
W02c	2 HR	6" CMU - 2HR FIRE BARRIER
W03	2 HR	FIRE WALL - 2HR
W03b	2 HR	FIRE WALL, 2-HR, (2) 2X4 WITH (2) 1" SHAFTLINER
W03b	2HR	FIRE WALL, 2-HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
W04b	2 HR	FIRE BARRIER, 2-HR, (2) WITH (2) 5/8" TYPE 'X' GYP
W04c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
W05c	2 HR	FIRE BARRIER, 2-HR EXIT ACCESS
W06b	2HR	2X4 INTERIOR WALL - FIRE BARRIER, SHAFTLINER ASSEMBLY
W06c	2HR	2X6 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W07b	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W08c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W09b	1 HR	3-5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W09b	1 HR	6" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W10b	1 HR	TYP. UNIT DEMISING - 1-HR FIRE PARTITION
W10c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
W11b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
W11c	1 HR	<verify>
W12b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
W12c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
W13b	1 HR	2X4, 1HR - BEARING
W13c	1 HR	2X6, 1HR - BEARING
W14b	NR	2X4, INTERIOR WALL - NR
W14c	NR	2X6, INTERIOR WALL - NR
W15b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W15c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W16	NR	7/8" METAL HAT CHANNEL FURRING WALL
W17b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
W18b	NR	6" STEEL STUD WALL WITH TYPE 'X' GWB ONe side

FLOOR/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
FC01	1 HR	TYP. UNIT FLOOR/CEILING ASSEMBLY
FC02	1 HR	TYP. CORRIDOR FLOOR/CEILING ASSEMBLY
FC03	NR	TYP. DROP CEILING
FC05	NR	TYP. BALCONY ASSEMBLY - DRIP -THRU
FC06	NR	POST-TENSIONED SLAB
FC07	NR	NON-RATED PT CONCRETE SLAB
FC07	1HR	PRECAST CONCRETE FLOOR/CEILING
FC08	1HR	TYP. GARAGE FLOOR/CEILING
FC08	1HR	BALCONY ASSEMBLY - CONDITIONED SPACE
FC09	1HR	BALCONY ASSEMBLY
FC10	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC11	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC12	NR	SLAB ON GRADE

ROOF/CEILING TYPE SCHEDULE

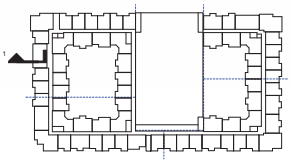
MARK	FIRE RATING	DESCRIPTION
RC01	1HR	TYP. ROOF ASSEMBLY
RC02	1HR	TYP. ROOF ASSEMBLY
RC03	1HR	1 HR HORIZONTAL ASSEMBLY
RC04	1 HR	1 HR HORIZONTAL ASSEMBLY
RC05	NR	2N ROOF ASSEMBLY
RC06	NR	4" TJI ROOF ASSEMBLY
RC07	NR	NR HORIZONTAL ASSEMBLY

KEYNOTES

NO.	NOTE
5.9	HORIZONTAL FLASHING AT BOARD/BATTEN. INSTALL PER MFG. SPECIFICATIONS
7.2	VERTICAL CEMENTITIOUS BOARD & BATTEN 16" EXPOSURE - LAVENDER WISP - SW7138 RE: ELEVATIONS
7.3	VERTICAL CEMENTITIOUS BOARD & BATTEN 8" EXPOSURE - PEPPERCORN - SW7674. RE: ELEVATIONS
7.4	CEMENTITIOUS PANEL - SMOOTH FINISH - TRICORN BLACK - SW6258 RE: ELEVATIONS
7.8	4/4/4/0 CEMENTITIOUS TRIM BOARD -SMOOTH FINISH - TRICORN BLACK - SW6258
7.9	5/4/4 CEMENTITIOUS TRIM BOARD -SMOOTH FINISH - LAVENDER WISP - SW7138
7.10	5/4/4 CEMENTITIOUS TRIM BOARD -SMOOTH FINISH - PEPPERCORN - SW7674
7.14	SAGWALL V-GROOVE EXTERIOR CLADDING BY SAGPER: VERTICAL ORIENTATION. FINISH: REF #10 CHERRY ZEBRAWOOD. INSTALL PER MFG. GUIDELINES AND SPECIFICATIONS
22.16	HOSE BIBB. RE: PLUMBING
23.6	OUTSIDE AIR SUPPLY LOUVER, COLOR TO MATCH FIELD RE: MECHANICAL

2 WALL SECTION 2 ELEVATION
1/2" = 1'-0"

1 WALL SECTION 2
1/2" = 1'-0"



WALL SECTION KEY PLAN

MARSHALL POINTE

MARSHALL POINTE LAND AQUISITION, LLC
5170 MARSHALL ST - ARVADA, CO 80002

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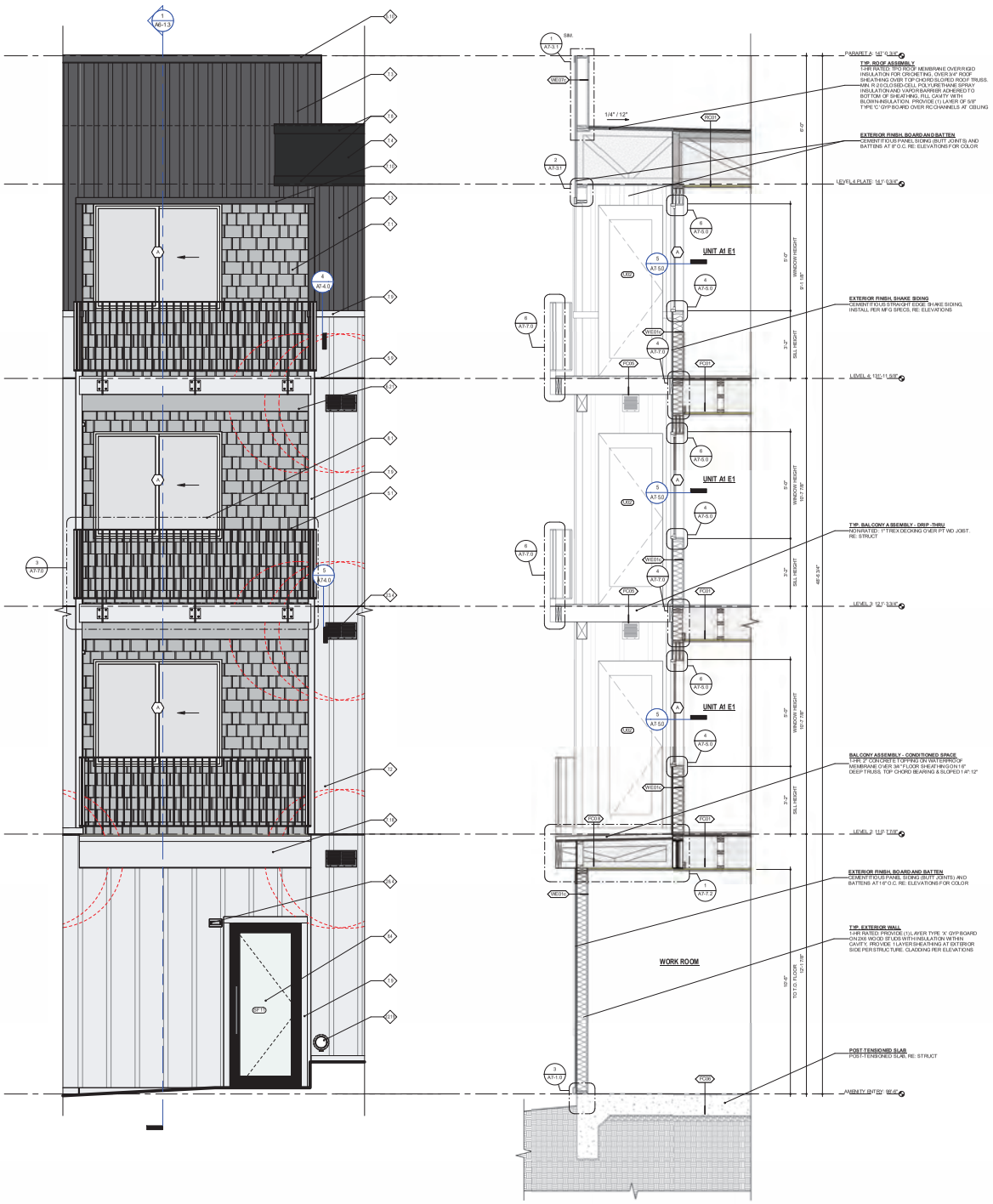
A6-1.2
WALL SECTIONS
ISSUE FOR CONSTRUCTION 08.01.2024



MATERIAL LEGEND

	CEMENTITIOUS PANEL - SW 6258 TRICORN BLACK
	CEMENTITIOUS B&B (A) 8" SPACING SW 7674 PEPPERCORN
	CEMENTITIOUS B&B (B) 16" SPACING SW 7138 LAVENDER WISP
	CEMENTITIOUS SHAKE SIDING - SW 6254 LAZY GRAY
	"WOOD" LOOK PANEL - SKAIPER - CHERRY ZEBRAWOOD OR SIM.
	ORU - BASALITE 6 35WR - GROUND FACE

BUILDING COLORS

SOFFIT: CEMENTITIOUS SOFFIT BOARD. SW6 258 TRICORN BLACK. RE: RCP
SOFFIT: CEMENTITIOUS SOFFIT BOARD. SW7 674 PEPPERCORN. RE: RCP
FASCIA: CEMENTITIOUS PANEL (T-RIM) BOARD. SW6258 TRICORN BLACK
BALCONY RAILINGS: PAINTED. SW7138 LAVENDAR WISP
GUTTER: PAINT TO MATCH
MECHANICAL UNITS: PAINT TO MATCH FIELD
GARAGE OPENING SCREENS: SW7 674 PEPPERCORN
STOREFRONT FRAMING: BLACK
STEEL COLUMNS - BALCONIES: PAINTED: SW7 674 PEPPERCORN
STEEL COLUMNS - CANOPIES: PAINTED: SW6 149 ANTIQUE BRASS BROWN
PRECAST WALL PANELS: PAINTED: SW7 674 PEPPERCORN. RE: ELEVATIONS
PRECAST WALL PANELS: PAINTED: SW6 149 ANTIQUARIAN BROWN. RE: ELEVATIONS
PRECAST SPANDREL PANELS: TEXTURED FINISH: FORMLINER 2 (16) AMAZONIAS: PAINTED: SW7138 LAVENDAR WISP. RE: ELEVATIONS

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
WE01a	1 HR	TYP. EXTERIOR WALL
WE02a	2 HR	8" CONCRETE SHAFT WALL
WE03a	1 HR	8" CONCRETE WALL
WE03e	1 HR	GARAGE, 12" CONCRETE WALL
WE03g	1 HR	8" CONCRETE WALL
WE04a	2 HR	8" CMU - 2HR FIRE BARRIER
WE05a	1 HR	8" CMU - 1 HR
WE06b	1 HR	EXTERIOR WALL - THRSYMMETRIC
WE06c	1 HR	EXTERIOR WALL - THRSYMMETRIC
WE07c	NR	2x6 PARAPET WALL - NR
WE08a	NR	2x6 WALL - RE: @ CONDENSERS
WE08b	NR	2x6 EXTERIOR FURR WALL - NONRATED
WE09c	NR	2x6 EXTERIOR FURR WALL - NONRATED
WE10b	1 HR	6" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE. TYPE 'X' GYP INT SIDE
W01-a	2 HR	8" CMU - 2HR FIRE WALL
W02c	2 HR	8" CMU - 2HR FIRE BARRIER
W03	2 HR	FIRE WALL - 2HR
W03b	2 HR	FIRE WALL, 2 HR, (2) 2X4 WITH (2) 1" SHAFTLINER
W03h	3HR	FIRE WALL, 2HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
W04b	2 HR	FIRE BARRIER, 2 HR, 2x WITH (2) SET TYPE 'X' GYP
W04c	2 HR	FIRE BARRIER - 2 HR EXIT ACCESS
W05c	2 HR	FIRE BARRIER, 2 HR EXIT ACCESS
W06b	2 HR	2X6 INTERIOR WALL - FIRE BARRIER, SHAFTLINER ASSEMBLY
W06c	2 HR	2X6 INTERIOR WALL - FIRE BARRIER, SHAFTLINER ASSEMBLY
W07b	1 HR	OCCUPANCY SEPARATION - 1 HR FIRE BARRIER
W08c	1 HR	OCCUPANCY SEPARATION - 1 HR FIRE BARRIER
W09h	1 HR	5 1/2" STEEL STUD WALL WITH 1 TYPE 'X' GWB BOTH SIDES
W09k	1 HR	6" STEEL STUD WALL WITH 1 TYPE 'X' GWB BOTH SIDES
W10b	1 HR	TYP. UNIT DEMISING - 1 HR FIRE PARTITION
W10c	1 HR	2x6 FIRE PARTITION, 1 HR - UNIT DEMISING
W11b	1 HR	2x6 FIRE PARTITION, 1 HR - CORRIDOR
W11c	1 HR	markup
W12b	1 HR	2X4 FIRE PARTITION, 1 HR - CORRIDOR, NO RC
W12c	1 HR	2x6 FIRE PARTITION, 1 HR - CORRIDOR NO RC
W13b	1 HR	2X4, 1 HR - BEARING
W13c	1 HR	2X6, 1 HR - BEARING
W14b	NR	2X4, INTERIOR WALL - NR
W14c	NR	2X6, INTERIOR WALL - NR
W16b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W16c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W16	NR	7/8 " METAL HAT CHANNEL FURRING WALL
W17b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
W18b	NR	6" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

FLOOR/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
FC01	1 HR	TYP. UNIT FLOOR/CEILING ASSEMBLY
FC02	1 HR	TYP. CORRIDOR FLOOR/CEILING ASSEMBLY
FC03	NR	TYP. DROP CEILING
FC05	NR	TYP. BALCONY ASSEMBLY - DRIP - THRU
FC06	NR	PO ST-TENSIONED SLAB
FC07	NR	NON-WATERPROOF CONCRETE SLAB
FC07	1 HR	PRECAST CONCRETE FLOOR/CEILING
FC07	1 HR	TYP. GARAGE FLOOR/CEILING
FC08	1 HR	BALCONY ASSEMBLY - CONDITIONED SPACE
FC09	1 HR	BALCONY ASSEMBLY
FC10	2 HR	FLOOR/CEILING ASSEMBLY - 2 HR EXIT ACCESS
FC11	2 HR	FLOOR/CEILING ASSEMBLY - 2 HR EXIT ACCESS
FC12	NR	SLAB ON GRADE

ROOF/CEILING TYPE SCHEDULE

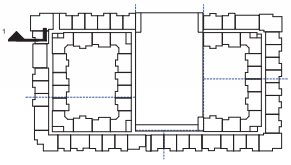
MARK	FIRE RATING	DESCRIPTION
RC01	1 HR	TYP. ROOF ASSEMBLY
RC02	1 HR	TYP. ROOF ASSEMBLY
RC03	1 HR	1 HR HORIZONTAL ASSEMBLY
RC04	1 HR	1 HR HORIZONTAL ASSEMBLY
RC05	NR	2A ROOF ASSEMBLY
RC06	NR	4" T/S ROOF ASSEMBLY
RC07	NR	NR HORIZONTAL ASSEMBLY

KEYNOTES

NO.	NOTE
5.1	STEEL BALCONY GUARDRAIL AT 42" AFF. SHOP PRIMED. PAINT IN FIELD
5.9	HORIZONTAL FLASHING AT BOARD&BATTEN. INSTALL PER MFG. SPECIFICATIONS
5.10	PRE-FINISHED METAL PARAPET COPING, COLOR TO MATCH FIELD
6.21	PRESSURE TREATED 6X4, PAINTED. SW6 24 LAZY GRAY. RE: STRUCT
7.1	CEMENTITIOUS STRAIGHT EDGE SHAKE SIDING - LAZY GRAY - SW6254. RE: ELEVATIONS
7.2	VERTICAL CEMENTITIOUS BOARD & BATTEN 16" EXPOSURE - LAVENDER WISP - SW7138. RE: ELEVATIONS
7.3	VERTICAL CEMENTITIOUS BOARD & BATTEN 8" EXPOSURE - PEPPERCORN - SW7674. RE: ELEVATIONS
7.4	CEMENTITIOUS PANEL - SMOOTH FINISH - TRICORN BLACK - SW6258 RE: ELEVATIONS
7.8	4 4X8 CEMENTITIOUS TRIM BOARD -SMOOTH FINISH - TRICORN BLACK - SW6258
7.9	5/4X4 CEMENTITIOUS TRIM BOARD -SMOOTH FINISH - LAVENDER WISP - SW7138
7.10	5/4X4 CEMENTITIOUS TRIM BOARD -SMOOTH FINISH - PEPPERCORN - SW7674
7.18	CEMENTITIOUS PANEL -SMOOTH FINISH - LAVENDER WISP - SW7138
8.1	VINYL WINDOW W/ LOW-E, GLAZING. RE: WINDOW SCHEDULE
8.4	ALUMINUM STOREFRONT, BLACK FINISH. RE: STOREFRONT LEGEND
9.19	COVERED ROOF DRAIN OUTLET. SEE PLUMBING
23.4	WALL MOUNTED EXHAUST VENT. COLOR TO MATCH FIELD. RE: MECHANICAL
26.4	EXTERIOR SCONCE, MOUNTED AT 6'-0" AFF UNO. RE: ELEC

2 WALL SECTION 3 ELEVATION
1/2" = 1'-0"

1 WALL SECTION 3
1/2" = 1'-0"



WALL SECTION KEY PLAN

MARSHALL POINTE

MARSHALL POINTE LAND AQUISITION, LLC
5170 MARSHALL ST - ARVADA, CO 80002

A6-1.3
WALL SECTIONS
Sheet Number
Sheet Name
DT
Drawn By
CG CB TT NV
Checked By
222301
Project Number
DR
Project Manager
DJ
Project Director

No.	Date	Issues
		ISSUE FOR CONSTRUCTION 06.07.2024

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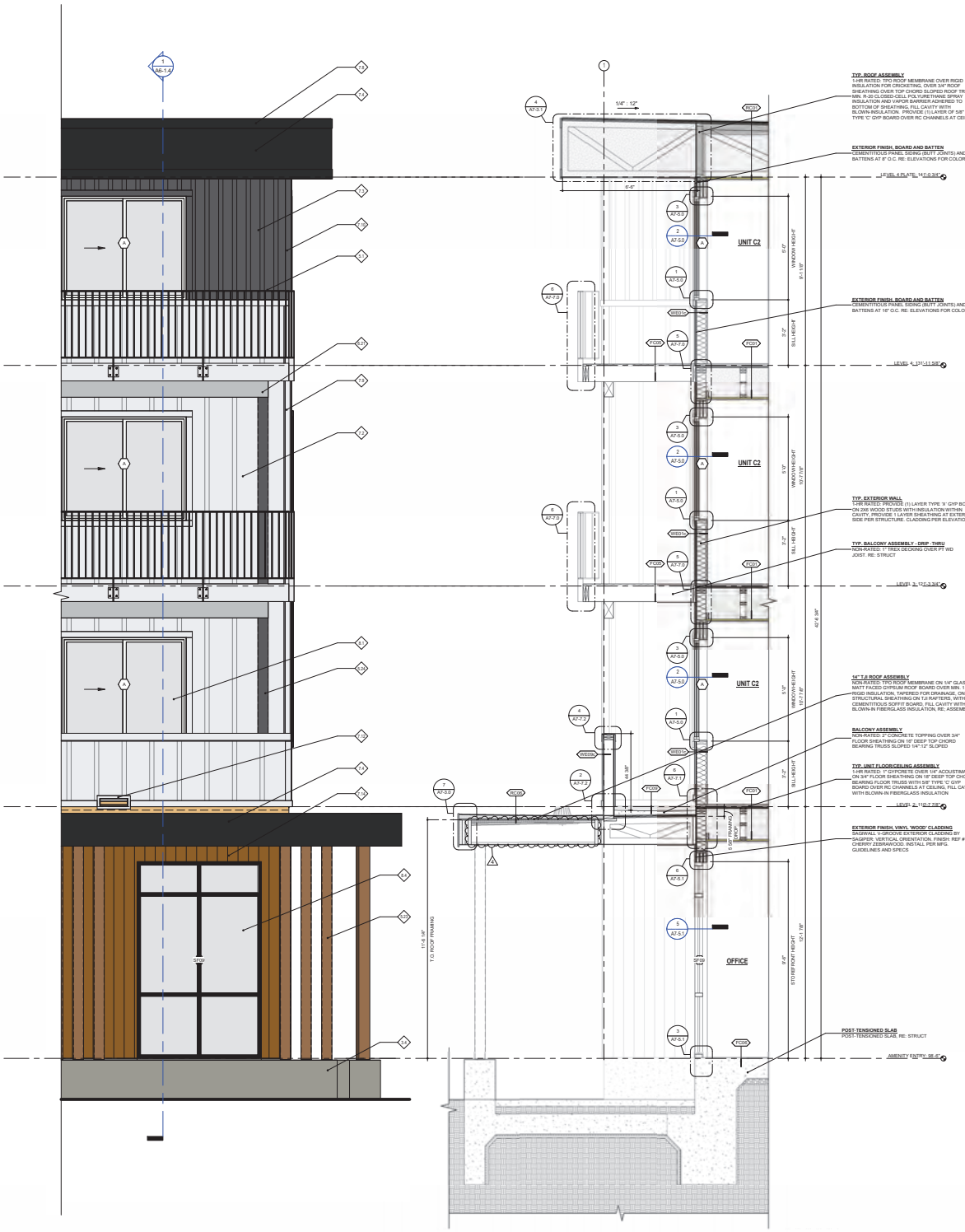


MATERIAL LEGEND

	CEMENTITIOUS PANEL - SW 6258 TRICORN BLACK
	CEMENTITIOUS B&B (A) 8" SPACING SW 7674 PEPPERCORN
	CEMENTITIOUS B&B (B) 16" SPACING SW 7138 LAVENDER WISP
	CEMENTITIOUS SHAKE SIDING - SW 6254 LAZY GRAY
	"WOOD" LOOK PANEL - SAGIPER - CHERRY ZEBRAWOOD OR SIM.
	CMU - BASALITE 635WR - GROUND FACE

BUILDING COLORS

SOFFIT: CEMENTITIOUS SOFFIT BOARD. SW6258 TRICORN BLACK. RE: RCP
SOFFIT: CEMENTITIOUS SOFFIT BOARD. SW7674 PEPPERCORN. RE: RCP
FASCIA: CEMENTITIOUS PANEL/TRIM BOARD. SW6258 TRICORN BLACK
BALCONY RAILINGS: PAINTED: SW7138 LAVENDAR WISP
RAILINGS: PAINTED: TBD
MECHANICAL LOUVERS: PAINT TO MATCH FIELD
GARAGE OPENING SURROUND: SW7674 PEPPERCORN
STOREFRONT FRAMING: BLACK
STEEL COLUMNS - BALCONIES: PAINTED: SW7674 PEPPERCORN
STEEL COLUMNS - CANOPIES: PAINTED: SW6049 ANTIQUARIAN BROWN
PRECAST WALL PANELS: PAINTED: SW7674 PEPPERCORN. RE: ELEVATIONS
PRECAST WALL PANELS: PAINTED: SW6049 ANTIQUARIAN BROWN. RE: ELEVATIONS
PRECAST SPANDREL PANELS: TEXTURED FINISH: FORMLINER 2195 AMAZONAS. PAINTED: SW7138 LAVENDAR WISP. RE: ELEVATIONS

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
WE01a	1 HR	TYP. EXTERIOR WALL
WE02a	2 HR	6" CONCRETE SHAFT WALL
WE03a	1 HR	8" CONCRETE WALL
WE03e	1 HR	GARAGE, 12" CONCRETE WALL
WE03a	1 HR	8" CONCRETE WALL
WE04a	2 HR	8" CMU - 2HR FIRE BARRIER
WE05a	1 HR	8" CMU - 1 HR
WE06b	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE06c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE07c	NR	2x6 PARAPET WALL - NR
WE08b	NR	2x6 WALL - NR @ CONDENSERS
WE09b	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE09c	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE10b	1 HR	6" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
WE01a	2 HR	8" CMU - 2HR FIRE WALL
WE02a	2 HR	8" CMU - 2HR FIRE BARRIER
W903	2 HR	FIRE WALL - 2HR
W03b	2 HR	FIRE WALL, 2-HR, (2) 2X4 WITH (2) 1" SHAFTLINER
W03b	2HR	FIRE WALL, 2-HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
W04b	2 HR	FIRE BARRIER, 2-HR, 2x WITH (2) 5/8" TYPE 'X' GYP
W04c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
W05c	2 HR	FIRE BARRIER, 2-HR EXIT ACCESS
W06b	2 HR	2X4 INTERIOR WALL - FIRE BARRIER, SHAFTLINER ASSEMBLY
W06c	2 HR	2X6 INTERIOR WALL - FIRE BARRIER, SHAFTLINER ASSEMBLY
W07b	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W08b	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W09b	1 HR	3-5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W09b	1 HR	6" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W10b	1 HR	TYP. UNIT DEMISING - 1-HR FIRE PARTITION
W10c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
W01b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
W01c	1 HR	<varies>
W12b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
W12c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
W13b	1 HR	2X4, 1HR - BEARING
W13c	1 HR	2X6, 1HR - BEARING
W14b	NR	2X4, INTERIOR WALL - NR
W14c	NR	2X6, INTERIOR WALL - NR
W15b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W15c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W16	NR	7/8" METAL HAT CHANNEL FURRING WALL
W17b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
W18b	NR	6" STEEL STUD WALL WITH TYPE 'X' GWB ONe side

FLOOR/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
FC01	1 HR	TYP. UNIT FLOOR/CEILING ASSEMBLY
FC02	1 HR	TYP. CORRIDOR FLOOR/CEILING ASSEMBLY
FC03	NR	TYP. DROP CEILING
FC05	NR	TYP. BALCONY ASSEMBLY - DRIP -THRU
FC06	NR	POST-TENSIONED SLAB
FC07	NR	NON-RATED PT CONCRETE SLAB
FC07	1HR	PRE-CAST CONCRETE FLOOR/CEILING
FC07	1HR	TYP. GARAGE FLOOR/CEILING
FC08	1HR	BALCONY ASSEMBLY - CONCRETONED SPACE
FC09	1HR	BALCONY ASSEMBLY
FC10	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC11	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC12	NR	SLAB ON GRADE

ROOF/CEILING TYPE SCHEDULE

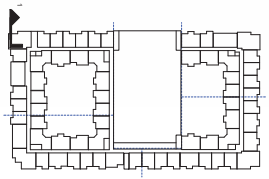
MARK	FIRE RATING	DESCRIPTION
RC01	1HR	TYP. ROOF ASSEMBLY
RC02	1HR	TYP. ROOF ASSEMBLY
RC03	1HR	1 HR HORIZONTAL ASSEMBLY
RC04	1 HR	1 HR HORIZONTAL ASSEMBLY
RC05	NR	2N ROOF ASSEMBLY
RC06	NR	14" TJI ROOF ASSEMBLY
RC07	NR	NR HORIZONTAL ASSEMBLY

KEYNOTES

NO.	NOTE
3.4	CONCRETE COLUMN BASE. RE: STRUCT
5.1	STEEL BALCONY GUARDRAIL AT 42" AFF. SHOP PRIMED. PAINT IN FIELD
5.23	SQUARE HSS COLUMN. RE: STRUCT. PAINTED SW6049 ANTIQUARIAN BROWN
5.24	SQUARE HSS COLUMN. RE: STRUCT. PAINTED SW7674 PEPPERCORN
6.21	PRESSURE TREATED BEAM. PAINTED SW6254 LAZY GRAY. RE: STRUCT
7.2	VERTICAL CEMENTITIOUS BOARD & BATTEN 16" EXPOSURE - LAVENDER WISP - SW7138 RE: ELEVATIONS
7.3	VERTICAL CEMENTITIOUS BOARD & BATTEN 8" EXPOSURE - PEPPERCORN - SW7674. RE: ELEVATIONS
7.4	CEMENTITIOUS PANEL - SMOOTH FINISH - TRICORN BLACK - SW6258 RE: ELEVATIONS
7.6	4x10 CEMENTITIOUS TRIM BOARD -SMOOTH FINISH - TRICORN BLACK - SW6258
7.9	5/4X4 CEMENTITIOUS TRIM BOARD -SMOOTH FINISH - LAVENDER WISP - SW7138
7.10	5/4X4 CEMENTITIOUS TRIM BOARD -SMOOTH FINISH - PEPPERCORN - SW7674
7.12	OVERFLOW SCUPPER
7.14	SAGWALL V-GROOVE EXTERIOR CLADDING BY SAGIPER. VERTICAL ORIENTATION. FINISH: REF #10 CHERRY ZEBRAWOOD. INSTALL PER MFG. GUIDELINES AND SPECIFICATIONS
8.1	VINYL WINDOW W/ LOW E, GLAZING. RE: WINDOW SCHEDULE
8.4	ALUMINUM STOREFRONT. BLACK FINISH. RE: STOREFRONT LEGEND

2 WALL SECTION 4 ELEVATION
1/2" = 1'-0"

1 WALL SECTION 4
1/2" = 1'-0"



WALL SECTION KEY PLAN

MARSHALL POINTE

MARSHALL POINTE LAND AQUISITION, LLC
5170 MARSHALL ST - ARVADA, CO 80002

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NO.	DATE	ISSUE
1	08.07.2024	ISSUE FOR CONSTRUCTION

Sheet Number: A6-1.4
Sheet Name: WALL SECTIONS
Project No: 22200
Drawn By: DO
Checked By: CG / CB / TT / NV
Plot Date: 8/8/2024
Plotted By: DO

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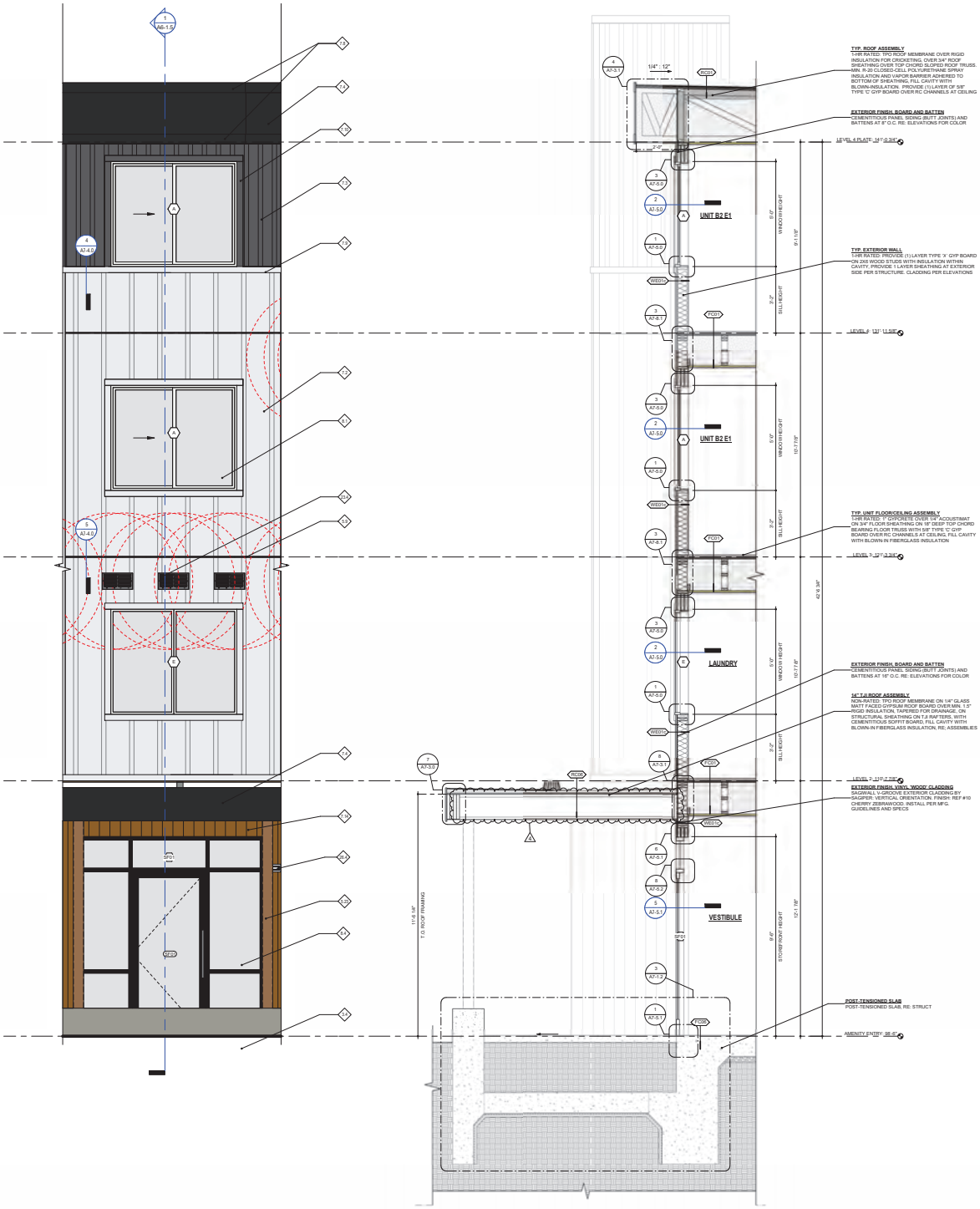


2 WALL SECTION 5 ELEVATION
1/2" = 1'-0"

1 WALL SECTION 5
1/2" = 1'-0"

MATERIAL LEGEND

	CEMENTITIOUS PANEL - SW 6258 TRICORN BLACK
	CEMENTITIOUS B&B (A) 8" SPACING SW 7674 PEPPERCORN
	CEMENTITIOUS B&B (B) 16" SPACING SW 7138 LAVENDER WISP
	CEMENTITIOUS SHAKE SIDING - SW 6254 LAZY GRAY
	"WOOD" LOOK PANEL - SAGIPER - CHERRY ZEBRAWOOD OR SIM.
	CMU - BASALITE 635WR - GROUND FACE

BUILDING COLORS

SOFFIT: CEMENTITIOUS SOFFIT BOARD. SW6258 TRICORN BLACK. RE: RCP
SOFFIT: CEMENTITIOUS SOFFIT BOARD. SW7674 PEPPERCORN. RE: RCP
FASCIA: CEMENTITIOUS PANEL/TRIM BOARD. SW6258 TRICORN BLACK
BALCONY RAILINGS: PAINTED: SW7138 LAVENDAR WISP
RAILINGS: PAINTED: TBD
MECHANICAL LOUVERS: PAINT TO MATCH FIELD
GARAGE OPENING SCREENS: SW7674 PEPPERCORN
STOREFRONT FRAMING: BLACK
STEEL COLUMNS - BALCONIES: PAINTED: SW7674 PEPPERCORN
STEEL COLUMNS - CANOPIES: PAINTED: SW6045 ANTIQUARIAN BROWN
PRECAST WALL PANELS: PAINTED: SW7674 PEPPERCORN. RE: ELEVATIONS
PRECAST WALL PANELS: PAINTED: SW6045 ANTIQUARIAN BROWN. RE: ELEVATIONS
PRECAST SPANDREL PANELS: TEXTURED FINISH: FORMLINER 2195 AMAZONAS. PAINTED: SW7138 LAVENDAR WISP. RE: ELEVATIONS

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
WE01a	1 HR	TYP. EXTERIOR WALL
WE02a	2 HR	6" CONCRETE SHAFT WALL
WE03a	1 HR	8" CONCRETE WALL
WE03e	1 HR	GARAGE, 12" CONCRETE WALL
WE03a	1 HR	8" CONCRETE WALL
WE04a	2 HR	8" CMU - 2HR FIRE BARRIER
WE05a	1 HR	8" CMU - 1 HR
WE06b	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE06c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE07c	NR	2x6 PARAPET WALL - NR
WE08b	NR	2x6 WALL - NR @ CONDENSERS
WE09b	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE09c	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE10b	1 HR	6" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
WE01a	2 HR	8" CMU - 2HR FIRE WALL
WE02a	2 HR	8" CMU - 2HR FIRE BARRIER
W903	2 HR	FIRE WALL - 2HR
W02b	2 HR	FIRE WALL, 2-1HR, (2) 2X4 WITH (2) 1" SHAFTLINER
W02b	2HR	FIRE WALL, 2-1HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
W04b	2 HR	FIRE BARRIER, 2-1HR, (2) WITH (2) 5/8" TYPE 'X' GYP
W04c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
W05c	2 HR	FIRE BARRIER, 2-1HR EXIT ACCESS
W06b	2 HR	2X4 INTERIOR WALL - FIRE BARRIER, SHAFTLINER ASSEMBLY
W06c	2 HR	2X6 INTERIOR WALL - FIRE BARRIER, SHAFTLINER ASSEMBLY
W07b	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W08b	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W09b	1 HR	3-5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W09b	1 HR	6" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W10b	1 HR	TYP. UNIT DEMISING - 1-HR FIRE PARTITION
W10c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
W01b	1 HR	2X4 FIRE BARRIER, 1HR - CORRIDOR
W01c	1 HR	<varies>
W12b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
W12c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
W13b	1 HR	2X4, 1HR - BEARING
W13c	1 HR	2X6, 1HR - BEARING
W14b	NR	2X4 INTERIOR WALL - NR
W14c	NR	2X6 INTERIOR WALL - NR
W15b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W15c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W16	NR	7/8" METAL HAT CHANNEL FURRING WALL
W17b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
W18b	NR	6" STEEL STUD WALL WITH TYPE 'X' GWB ONe side

FLOOR/CEILING TYPE SCHEDULE

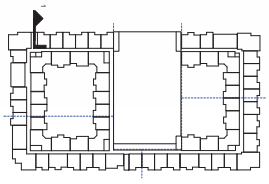
MARK	FIRE RATING	DESCRIPTION
FC01	1 HR	TYP. UNIT FLOOR/CEILING ASSEMBLY
FC02	1 HR	TYP. CORRIDOR FLOOR/CEILING ASSEMBLY
FC03	NR	TYP. DROP CEILING
FC05	NR	TYP. BALCONY ASSEMBLY - DRIP -THRU
FC06	NR	POST-TENSIONED SLAB
FC07	NR	NON-RATED PT CONCRETE SLAB
FC07	1HR	PRE-CAST CONCRETE FLOOR/CEILING
FC07	1HR	TYP. GARAGE FLOOR/CEILING
FC08	1HR	BALCONY ASSEMBLY - CONDITIONED SPACE
FC09	1HR	BALCONY ASSEMBLY
FC10	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC11	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC12	NR	SLAB ON GRADE

ROOF/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
RC01	1HR	TYP. ROOF ASSEMBLY
RC02	1HR	TYP. ROOF ASSEMBLY
RC03	1HR	1 HR HORIZONTAL ASSEMBLY
RC04	1 HR	1 HR HORIZONTAL ASSEMBLY
RC05	NR	2N ROOF ASSEMBLY
RC06	NR	14" TJI ROOF ASSEMBLY
RC07	NR	NR HORIZONTAL ASSEMBLY

KEYNOTES

NO.	NOTE
3.4	CONCRETE COLUMN BASE. RE: STRUCT
5.9	HORIZONTAL FLASHING AT BOARD/BATTEN. INSTALL PER MFG. SPECIFICATIONS
5.23	SQUARE HSS COLUMN. RE: STRUCT. PAINTED SW6045 ANTIQUARIAN BROWN
7.2	VERTICAL CEMENTITIOUS BOARD & BATTEN 16" EXPOSURE - LAVENDER WISP - SW7138 RE: ELEVATIONS
7.3	VERTICAL CEMENTITIOUS BOARD & BATTEN 8" EXPOSURE - PEPPERCORN - SW7674. RE: ELEVATIONS
7.4	CEMENTITIOUS PANEL - SMOOTH FINISH - TRICORN BLACK - SW6258 RE: ELEVATIONS
7.8	4/4X6 CEMENTITIOUS TRIM BOARD -SMOOTH FINISH - TRICORN BLACK - SW6258
7.9	5/4X4 CEMENTITIOUS TRIM BOARD -SMOOTH FINISH - LAVENDER WISP - SW7138
7.10	5/4X4 CEMENTITIOUS TRIM BOARD -SMOOTH FINISH - PEPPERCORN - SW7674
7.14	SAGIWALL V-GROOVE EXTERIOR CLADDING BY SAGPIER: VERTICAL ORIENTATION. FINISH: REF #10 CHERRY ZEBRAWOOD. INSTALL PER MFG. GUIDELINES AND SPECIFICATIONS
8.1	VINYL WINDOW W/ LOW-E GLAZING. RE: WINDOW SCHEDULE
8.4	ALUMINUM STOREFRONT, BLACK FINISH. RE: STOREFRONT LEGEND
23.4	WALL MOUNTED EXHAUST VENT, COLOR TO MATCH FIELD RE: MECHANICAL
26.4	EXTERIOR SCONCE, MOUNTED AT 6'-0" AFF UNO. RE: ELEC



WALL SECTION KEY PLAN

A6-1.5
WALL SECTIONS
Sheet Number / Title
DO
Drawn By
CG
CB
TT
NV
Project Number
22201
Project Number
DR
Title
Typical Interior
DO
Typical Exterior

No.	Date	Issue
1	07.03.2024	

ISSUE FOR CONSTRUCTION
08.07.2024

MARSHALL POINTE

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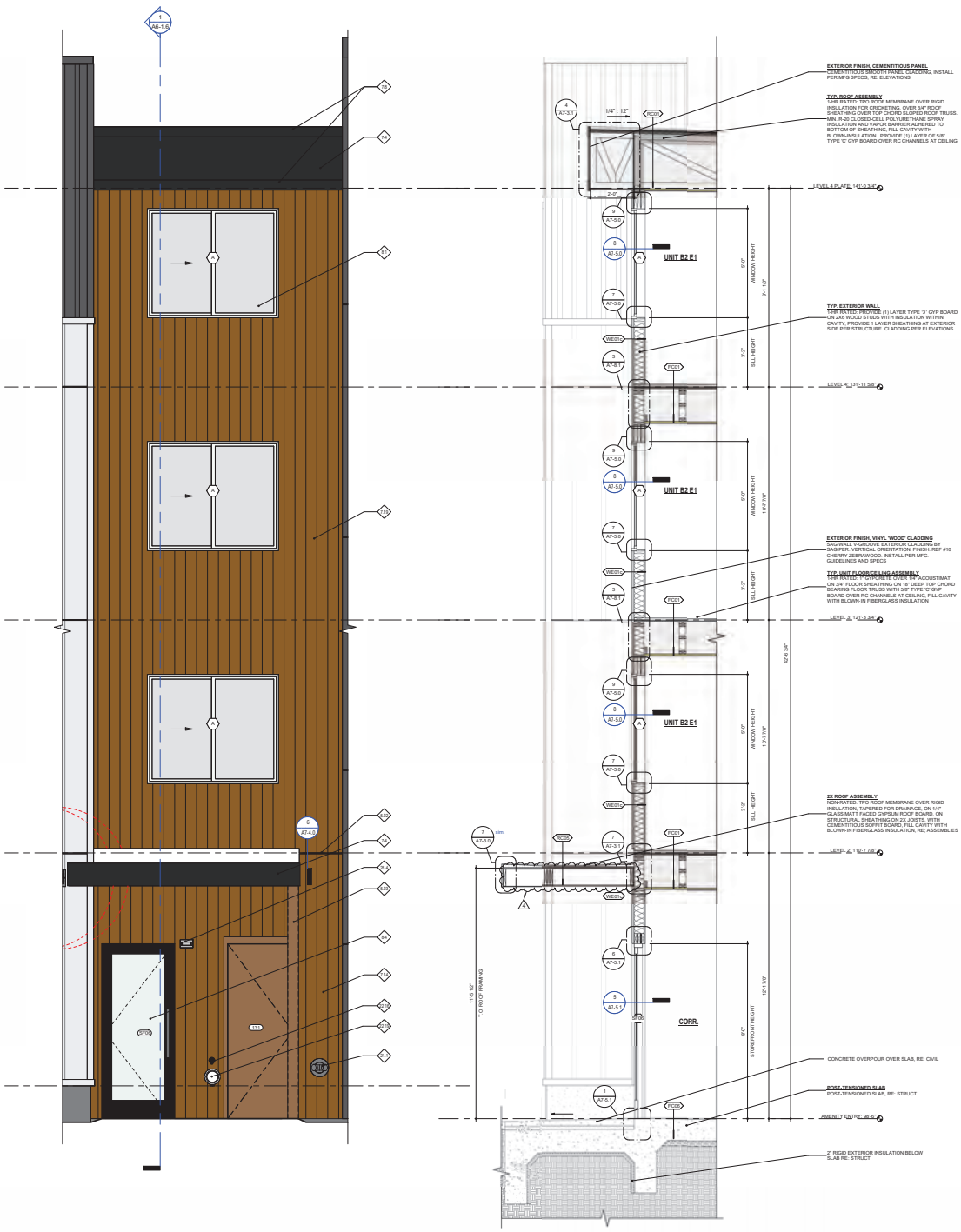


2 WALL SECTION 6 ELEVATION
1/2" = 1'-0"

1 WALL SECTION 6
1/2" = 1'-0"

MATERIAL LEGEND

	CEMENTITIOUS PANEL - SW 6258 TRICORN BLACK
	CEMENTITIOUS B&B (A) 8" SPACING SW 7674 PEPPERCORN
	CEMENTITIOUS B&B (B) 16" SPACING SW 7138 LAVENDER WISP
	CEMENTITIOUS SHAKE SIDING - SW 6254 LAZY GRAY
	"WOOD" LOOK PANEL - SAGIPER - CHERRY ZEBRAWOOD OR SIM.
	CMU - BASALITE 635WR - GROUND FACE

BUILDING COLORS

SOFFIT: CEMENTITIOUS SOFFIT BOARD. SW6258 TRICORN BLACK. RE: RCP
SOFFIT: CEMENTITIOUS SOFFIT BOARD. SW7674 PEPPERCORN. RE: RCP
FASCIA: CEMENTITIOUS PANEL/TRIM BOARD. SW6258 TRICORN BLACK
BALCONY RAILINGS: PAINTED: SW7138 LAVENDAR WISP
GUTTERS: PAINTED TO MATCH
MECHANICAL UNITS: PAINT TO MATCH FIELD
GARAGE OPENING & FRAMING: SW7674 PEPPERCORN
STOREFRONT FRAMING: BLACK
STEEL COLUMNS - BALCONIES: PAINTED: SW7674 PEPPERCORN
STEEL COLUMNS - CANOPIES: PAINTED: SW6045 ANTIQUARIAN BROWN
PRECAST WALL PANELS: PAINTED: SW7674 PEPPERCORN. RE: ELEVATIONS
PRECAST WALL PANELS: PAINTED: SW6045 ANTIQUARIAN BROWN. RE: ELEVATIONS
PRECAST SPANDREL PANELS: TEXTURED FINISH: FORMLINER 2/95 AMAZONAS. PAINTED: SW7138 LAVENDAR WISP. RE: ELEVATIONS

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
WB01a	1 HR	TYP. EXTERIOR WALL
WB02a	2 HR	8" CONCRETE SHAFT WALL
WB03a	1 HR	8" CONCRETE WALL
WB03e	1 HR	GARAGE, 12" CONCRETE WALL
WB03g	1 HR	8" CONCRETE WALL
WB04a	2 HR	8" CMU - 2HR FIRE BARRIER
WB05a	1 HR	8" CMU - 1 HR
WE06b	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE06c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE07c	NR	2x6 PARAPET WALL - NR
WE08b	NR	2x6 WALL - NR @ CONDENSERS
WE09b	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE09c	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE19b	1 HR	6" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
WI01a	2 HR	8" CMU - 2HR FIRE WALL
WI02a	2 HR	8" CMU - 2HR FIRE BARRIER
WI03	2 HR	FIRE WALL - 2HR
WI03b	2 HR	FIRE WALL - 2 HR, (2) 2X4 WITH (2) 1" SHAFTLINER
WI03c	2HR	FIRE WALL - 2 HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
WI04b	2 HR	FIRE BARRIER - 2 HR, 2x WITH (2) 5/8" TYPE 'X' GYP
WI04c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
WI05c	2 HR	FIRE BARRIER, 2 HR EXIT ACCESS
WI06b	2HR	2X4 INTERIOR WALL - FIRE BARRIER, SHAFTLINER ASSEMBLY
WI06c	2HR	2X6 INTERIOR WALL - FIRE BARRIER, SHAFTLINER ASSEMBLY
WI07b	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
WI08c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
WI09b	1 HR	3-5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
WI09c	1 HR	6" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
WI10b	1 HR	TYP. UNIT DEMISING - 1-HR FIRE PARTITION
WI10c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
WI11b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
WI11c	1 HR	<varies>
WI12b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
WI12c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
WI13b	1 HR	2X4, 1HR - BEARING
WI13c	1 HR	2X6, 1HR - BEARING
WI14b	NR	2X4 INTERIOR WALL - NR
WI14c	NR	2X6 INTERIOR WALL - NR
WI15b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
WI15c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
WI16	NR	7/8" METAL HAT CHANNEL FURRING WALL
WI17b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
WI18b	NR	6" STEEL STUD WALL WITH TYPE 'X' GWB ONe side

FLOOR/CEILING TYPE SCHEDULE

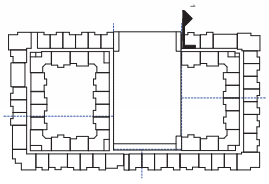
MARK	FIRE RATING	DESCRIPTION
FC01	1 HR	TYP. UNIT FLOOR/CEILING ASSEMBLY
FC02	1 HR	TYP. CORRIDOR FLOOR/CEILING ASSEMBLY
FC03	NR	TYP. DROP CEILING
FC05	NR	TYP. BALCONY ASSEMBLY - DRIP -THRU
FC06	NR	POST-TENSIONED SLAB
FC07	NR	NON-RATED PT CONCRETE SLAB
FC07	1HR	PRE-CAST CONCRETE FLOOR/CEILING
FC08	1HR	TYP. GARAGE FLOOR/CEILING
FC08	1HR	BALCONY ASSEMBLY - CONCRETE OVER SPACE
FC09	1HR	BALCONY ASSEMBLY
FC10	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC11	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC12	NR	SLAB ON GRADE

ROOF/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
RC01	1HR	TYP. ROOF ASSEMBLY
RC02	1HR	TYP. ROOF ASSEMBLY
RC03	1HR	1 HR HORIZONTAL ASSEMBLY
RC04	1 HR	1 HR HORIZONTAL ASSEMBLY
RC05	NR	2X ROOF ASSEMBLY
RC06	NR	1/4" TJI ROOF ASSEMBLY
RC07	NR	NR HORIZONTAL ASSEMBLY

KEYNOTES

NO	NOTE
5.22	HORIZONTAL FLASHING AT SAGPER, INSTALL PER MFG. SPECIFICATIONS
5.23	SQUARE HSS COLUMN, RE: STRUCT. PAINTED SW6045 ANTIQUARIAN BROWN
7.4	CEMENTITIOUS PANEL - SMOOTH FINISH - TRICORN BLACK - SW6258 RE: ELEVATIONS
7.6	4/4XS CEMENTITIOUS TRIM BOARD -SMOOTH FINISH - TRICORN BLACK - SW6258
7.14	SAGWALL V-GROOVE EXTERIOR CLADDING BY SAGPER: VERTICAL ORIENTATION. FINISH: REF #10 CHERRY ZEBRAWOOD. INSTALL PER MFG. GUIDELINES AND SPECIFICATIONS
7.19	SAGWALL V-GROOVE EXTERIOR CLADDING BY SAGPER: VERTICAL ORIENTATION. CUSTOM LENGTH FROM LEVEL 2 - 4. FINISH: REF #10 CHERRY ZEBRAWOOD. INSTALL PER MFG. GUIDELINES AND SPECIFICATIONS
8.1	VINYL WINDOW W/ LOW E GLAZING, RE: WINDOW SCHEDULE
8.4	ALUMINUM STOREFRONT, BLACK FINISH, RE: STOREFRONT LEGEND
21.1	FIRE DEPARTMENT CONNECTION
22.15	HOSE BIBB, RE: PLUMBING
22.19	OVERFLOW ROOF DRAIN OUTLET, RE: PLUMBING
26.4	EXTERIOR SCONCE, MOUNTED AT 8'-0" AFF UNO, RE: ELEC



WALL SECTION KEY PLAN

A6-1.6
WALL SECTIONS
Sheet Number / Title
ISSUE FOR CONSTRUCTION 08.07.2024
Issue Date
NO. Description Date
1 RFP 07.03.2024
Project Number: 222001
Drawn By: CG
Checked By: CB
Project Director: TN
Project Manager: DR
Project Architect: DO

MARSHALL POINTE

MARSHALL POINTE LAND AQUISITION, LLC
5170 MARSHALL ST - ARVADA, CO 80002

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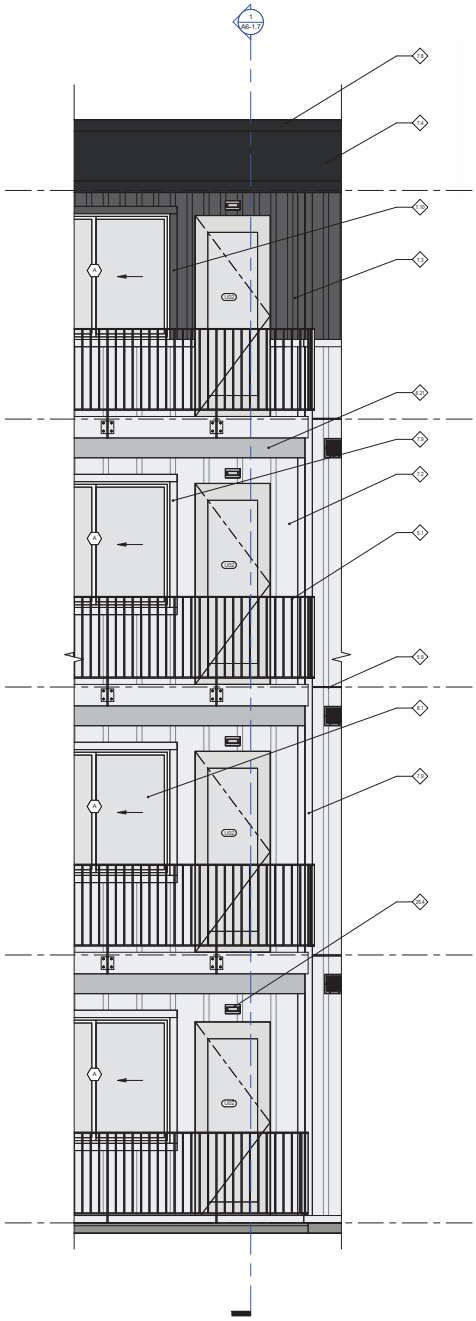
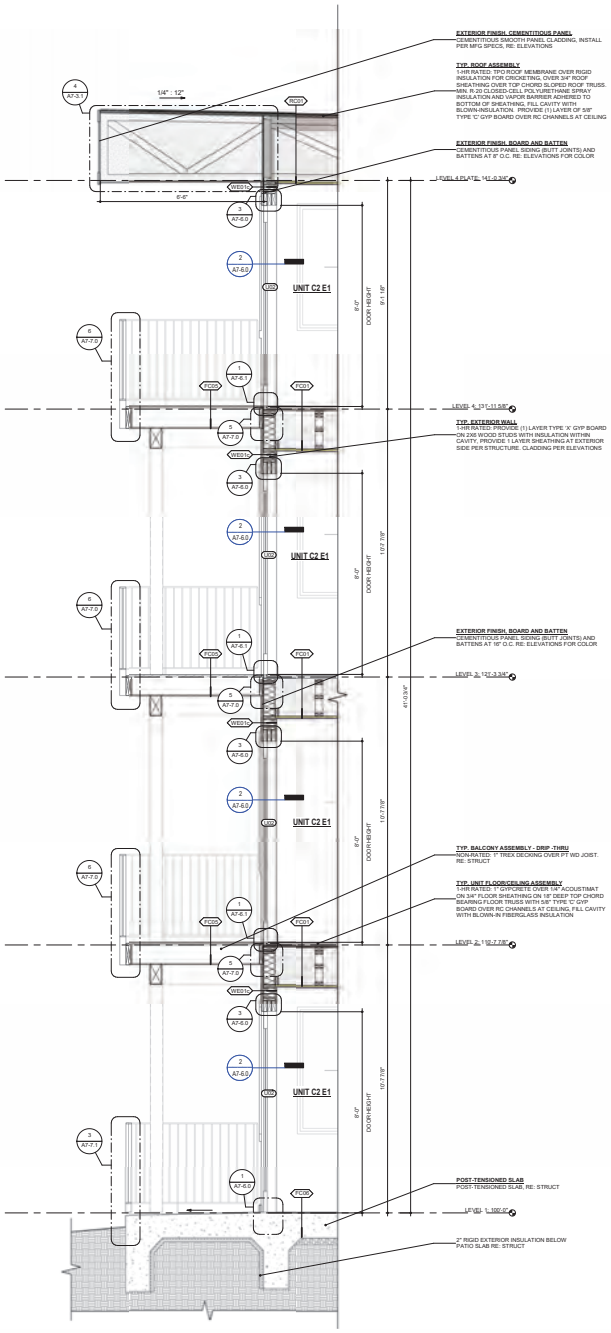




MATERIAL LEGEND

	CEMENTITIOUS PANEL - SW 6258 TRICORN BLACK
	CEMENTITIOUS B&B (A) 8" SPACING SW 7674 PEPPERCORN
	CEMENTITIOUS B&B (B) 16" SPACING SW 7138 LAVENDER WISP
	CEMENTITIOUS SHAKE SIDING - SW 6254 LAZY GRAY
	"WOOD" LOOK PANEL - SAGIPER - CHERRY ZEBRAWOOD OR SIM.
	CMU - BASALITE 635WR - GROUND FACE

BUILDING COLORS

SOFFIT: CEMENTITIOUS SOFFIT BOARD. SW6258 TRICORN BLACK. RE: RCP
SOFFIT: CEMENTITIOUS SOFFIT BOARD. SW7674 PEPPERCORN. RE: RCP
FASCIA: CEMENTITIOUS PANEL/TRIM BOARD. SW6258 TRICORN BLACK
BALCONY RAILINGS: PAINTED: SW7138 LAVENDAR WISP
GUTTERS: MATCH FIELD
MECHANICAL LOUVERS: PAINT TO MATCH FIELD
GARAGE OPENING SURROUND: SW7674 PEPPERCORN
STOREFRONT FRAMING: BLACK
STEEL COLUMNS - BALCONIES: PAINTED: SW7674 PEPPERCORN
STEEL COLUMNS - CANOPIES: PAINTED: SW6049 ANTIQUARIAN BROWN
PRECAST WALL PANELS: PAINTED: SW7674 PEPPERCORN. RE: ELEVATIONS
PRECAST WALL PANELS: PAINTED: SW6049 ANTIQUARIAN BROWN. RE: ELEVATIONS
PRECAST SPANDREL PANELS: TEXTURED FINISH: FORMLINER 2/95 AMAZONAS. PAINTED: SW7138 LAVENDAR WISP. RE: ELEVATIONS

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
WE01c	1 HR	TYP. EXTERIOR WALL
WE02c	2 HR	6" CONCRETE SHAFT WALL
WE03c	1 HR	8" CONCRETE WALL
WE03e	1 HR	GARAGE, 12" CONCRETE WALL
WE07c	1 HR	8" CONCRETE WALL
WE04c	2 HR	8" CMU - 2HR FIRE BARRIER
WE05c	1 HR	8" CMU - 1 HR
WE06c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE06c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE07c	NR	2nd PARAPET WALL - NR
WE08c	NR	2x6 WALL - NR @ CONDENSERS
WE09c	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE09c	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE19c	1 HR	6" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
WE01c	2 HR	8" CMU - 2HR FIRE WALL
WE02c	2 HR	8" CMU - 2HR FIRE BARRIER
W903	2 HR	FIRE WALL - 2HR
W02b	2 HR	FIRE WALL, 2-HR, (2) 2X4 WITH (2) 1" SHAFTLINER
W02b	2HR	FIRE WALL, 2-HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
W04b	2 HR	FIRE BARRIER, 2-HR, 2x WITH (2) 5/8" TYPE 'X' GYP
W04c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
W05c	2 HR	FIRE BARRIER, 2-HR EXIT ACCESS
W06b	2 HR	2X4 INTERIOR WALL - FIRE BARRIER, SHAFTLINER ASSEMBLY
W06c	2 HR	2X6 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W07b	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W08c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W09b	1 HR	3 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W09b	1 HR	6" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W10b	1 HR	TYP. UNIT DEMISING - 1-HR FIRE PARTITION
W10c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
W01b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
W01c	1 HR	<varies>
W12b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
W12c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
W13b	1 HR	2X4, 1HR - BEARING
W13c	1 HR	2X6, 1HR - BEARING
W14b	NR	2X4, INTERIOR WALL - NR
W14c	NR	2X6, INTERIOR WALL - NR
W15b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W15c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W16	NR	7/8" METAL HAT CHANNEL FURRING WALL
W17b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
W18b	NR	6" STEEL STUD WALL WITH TYPE 'X' GWB ONe side

FLOOR/CEILING TYPE SCHEDULE

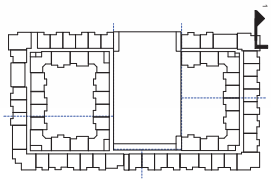
MARK	FIRE RATING	DESCRIPTION
FC01	1 HR	TYP. UNIT FLOOR/CEILING ASSEMBLY
FC02	1 HR	TYP. CORRIDOR FLOOR/CEILING ASSEMBLY
FC03	NR	TYP. DROP CEILING
FC05	NR	TYP. BALCONY ASSEMBLY - DRIP -THRU
FC06	NR	POST-TENSIONED SLAB
FC07	NR	NON-RATED PT CONCRETE SLAB
FC07	1HR	PRECAST CONCRETE FLOOR/CEILING
FC07	1HR	TYP. GARAGE FLOOR/CEILING
FC08	1HR	BALCONY ASSEMBLY - CONCRETE OVER CONDITIONED SPACE
FC09	1HR	BALCONY ASSEMBLY
FC10	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC11	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC12	NR	SLAB ON GRADE

ROOF/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
RC01	1HR	TYP. ROOF ASSEMBLY
RC02	1HR	TYP. ROOF ASSEMBLY
RC03	1HR	1 HR HORIZONTAL ASSEMBLY
RC04	1 HR	1 HR HORIZONTAL ASSEMBLY
RC05	NR	2N ROOF ASSEMBLY
RC06	NR	1/4" TJI ROOF ASSEMBLY
RC07	NR	NR HORIZONTAL ASSEMBLY

KEYNOTES

NO.	NOTE
5.1	STEEL BALCONY GUARDRAIL AT 42" AFF. SHOP PRIMED. PAINT IN FIELD
5.9	HORIZONTAL FLASHING AT BOARD/BATTEN. INSTALL PER MFG. SPECIFICATIONS
6.21	PRESSURE TREATED BEAM. PAINTED SW6254 LAZY GRAY RE: STRUCT
7.2	VERTICAL CEMENTITIOUS BOARD & BATTEN 16" EXPOSURE - LAVENDER WISP - SW7138 RE: ELEVATIONS
7.3	VERTICAL CEMENTITIOUS BOARD & BATTEN 8" EXPOSURE - PEPPERCORN - SW7674. RE: ELEVATIONS
7.4	CEMENTITIOUS PANEL - SMOOTH FINISH - TRICORN BLACK - SW6258 RE: ELEVATIONS
7.8	4/4/4/0 CEMENTITIOUS TRIM BOARD -SMOOTH FINISH - TRICORN BLACK - SW6258
7.9	5/4/4/4 CEMENTITIOUS TRIM BOARD -SMOOTH FINISH - LAVENDER WISP - SW7138
7.10	5/4/4/4 CEMENTITIOUS TRIM BOARD -SMOOTH FINISH - PEPPERCORN - SW7674
8.1	VINYL WINDOW W/ LOW E, GLAZING. RE: WINDOW SCHEDULE
26.4	EXTERIOR SCONCE, MOUNTED AT 8'-0" AFF UNO. RE: ELEC



WALL SECTION KEY PLAN

2 WALL SECTION 7 ELEVATION
1/2" = 1'-0"

1 WALL SECTION 7
1/2" = 1'-0"

A6-1.7
WALL SECTIONS
Sheet Number / Title
DO
Drawn By
CO, CB, TT, NV
222001
Project Number
DR
Checked By
DO
Approved By
No. Date
ISSUE FOR CONSTRUCTION 08.01.2024
Issue

MARSHALL POINTE

MARSHALL POINTE LAND AQUISITION, LLC
5170 MARSHALL ST - ARVADA, CO 80002

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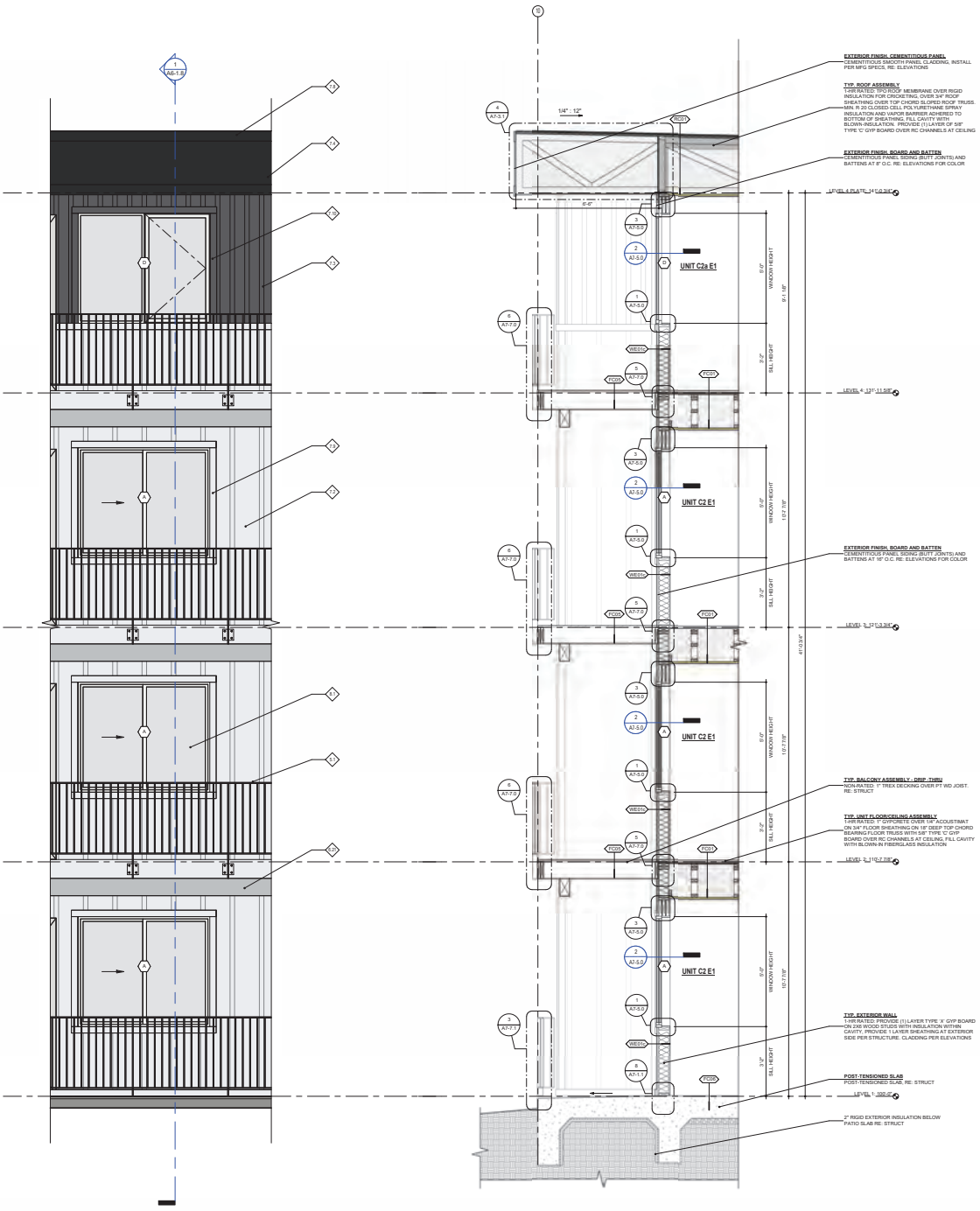


MATERIAL LEGEND

	CEMENTITIOUS PANEL - SW 6258 TRICORN BLACK
	CEMENTITIOUS B&B (A) 8" SPACING SW 7674 PEPPERCORN
	CEMENTITIOUS B&B (B) 16" SPACING SW 7138 LAVENDER WISP
	CEMENTITIOUS SHAKE SIDING - SW 6254 LAZY GRAY
	"WOOD" LOOK PANEL - SAGIPER - CHERRY ZEBRAWOOD OR SIM.
	CMU - BASALITE 635WR - GROUND FACE

BUILDING COLORS

SOFFIT: CEMENTITIOUS SOFFIT BOARD. SW6258 TRICORN BLACK. RE: RCP
SOFFIT: CEMENTITIOUS SOFFIT BOARD. SW7674 PEPPERCORN. RE: RCP
FASCIA: CEMENTITIOUS PANEL/TRIM BOARD. SW6258 TRICORN BLACK
BALCONY RAILINGS: PAINTED: SW7138 LAVENDAR WISP
GUTTERS: PAINTED: TBD
MECHANICAL VENTS: PAINT TO MATCH FIELD
GARAGE OPENING 8' PANEL: SW7674 PEPPERCORN
STOREFRONT FRAMING: BLACK
STEEL COLUMNS - BALCONIES: PAINTED: SW7674 PEPPERCORN
STEEL COLUMNS - CANOPIES: PAINTED: SW6049 ANTIQUARIAN BROWN
PRECAST WALL PANELS: PAINTED: SW7674 PEPPERCORN. RE: ELEVATIONS
PRECAST WALL PANELS: PAINTED: SW6049 ANTIQUARIAN BROWN. RE: ELEVATIONS
PRECAST SPANDREL PANELS: TEXTURED FINISH: FORMLINER 2/95 AMAZONAS. PAINTED: SW7138 LAVENDAR WISP. RE: ELEVATIONS

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
W01c	1 HR	TYP. EXTERIOR WALL
W02c	2 HR	6" CONCRETE SHAFT WALL
W03c	1 HR	8" CONCRETE WALL
W03e	1 HR	GARAGE, 12" CONCRETE WALL
W07e	1 HR	8" CONCRETE WALL
W04c	2 HR	8" CMU - 2HR FIRE BARRIER
W05c	1 HR	8" CMU - 1 HR
WE06	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE06c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE07c	NR	2nd PARAPET WALL - NR
WE08c	NR	2x6 WALL - NR @ CONDENSERS
WE09c	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE09c	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE19b	1 HR	6" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
W01a	2 HR	8" CMU - 2HR FIRE WALL
W02a	2 HR	8" CMU - 2HR FIRE BARRIER
W03	2 HR	FIRE WALL - 2HR
W02b	2 HR	FIRE WALL, 2-HR, (2) 2X4 WITH (2) 1" SHAFTLINER
W02b	2HR	FIRE WALL, 2-HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
W04b	2 HR	FIRE BARRIER, 2-HR, (2) WITH (2) 5/8" TYPE 'X' GYP
W04c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
W05c	2 HR	FIRE BARRIER, 2-HR EXIT ACCESS
W06b	2HR	2X4 INTERIOR WALL - FIRE BARRIER, SHAFTLINER ASSEMBLY
W06c	2HR	2X6 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W07b	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W08c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W09b	1 HR	3-5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W09b	1 HR	6" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W10b	1 HR	TYP. UNIT DEMISING - 1-HR FIRE PARTITION
W10c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
W01b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
W01c	1 HR	<varies>
W12b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
W12c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
W13b	1 HR	2X4, 1HR - BEARING
W13c	1 HR	2X6, 1HR - BEARING
W14b	NR	2X4, INTERIOR WALL - NR
W14c	NR	2X6, INTERIOR WALL - NR
W15b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W15c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W16	NR	7/8" METAL HAT CHANNEL FURRING WALL
W17b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
W18b	NR	6" STEEL STUD WALL WITH TYPE 'X' GWB ONe side

FLOOR/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
FC01	1 HR	TYP. UNIT FLOOR/CEILING ASSEMBLY
FC02	1 HR	TYP. CORRIDOR FLOOR/CEILING ASSEMBLY
FC03	NR	TYP. DROP CEILING
FC05	NR	TYP. BALCONY ASSEMBLY - DRIP -THRU
FC06	NR	POST-TENSIONED SLAB
FC07	NR	NON-RATED PT CONCRETE SLAB
FC07	1HR	PRE-CAST CONCRETE FLOOR/CEILING
FC07	1HR	TYP. GARAGE FLOOR/CEILING
FC08	1HR	BALCONY ASSEMBLY - OPEN/VENTED SPACE
FC09	1HR	BALCONY ASSEMBLY
FC10	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC11	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC12	NR	SLAB ON GRADE

ROOF/CEILING TYPE SCHEDULE

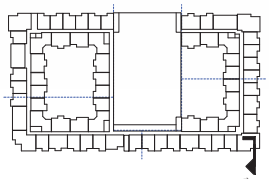
MARK	FIRE RATING	DESCRIPTION
RC01	1HR	TYP. ROOF ASSEMBLY
RC02	1HR	TYP. ROOF ASSEMBLY
RC03	1HR	1 HR HORIZONTAL ASSEMBLY
RC04	1 HR	1 HR HORIZONTAL ASSEMBLY
RC05	NR	2N ROOF ASSEMBLY
RC06	NR	4" 1H ROOF ASSEMBLY
RC07	NR	NR HORIZONTAL ASSEMBLY

KEYNOTES

NO.	NOTE
5.1	STEEL BALCONY GUARDRAIL AT 42" AFF, SHOP PRIMED, PAINT IN FIELD
6.21	PRESSURE TREATED BEAM, PAINTED SW6254 LAZY GRAY RE: STRUCT
7.2	VERTICAL CEMENTITIOUS BOARD & BATTEN 10" EXPOSURE - LAVENDER WISP - SW7138 RE: ELEVATIONS
7.3	VERTICAL CEMENTITIOUS BOARD & BATTEN 8" EXPOSURE - PEPPERCORN - SW7674 RE: ELEVATIONS
7.4	CEMENTITIOUS PANEL - SMOOTH FINISH - TRICORN BLACK - SW6258 RE: ELEVATIONS
7.8	4/4/4/2 CEMENTITIOUS TRIM BOARD -SMOOTH FINISH - TRICORN BLACK - SW6258
7.9	5/4/4 CEMENTITIOUS TRIM BOARD -SMOOTH FINISH - LAVENDER WISP - SW7138
7.10	5/4/4 CEMENTITIOUS TRIM BOARD -SMOOTH FINISH - PEPPERCORN - SW7674
8.1	VINYL WINDOW W LOW E, GLAZING, RE: WINDOW SCHEDULE

2 WALL SECTION 8 ELEVATION
1/2" = 1'-0"

1 WALL SECTION 8
1/2" = 1'-0"



WALL SECTION KEY PLAN

Sheet Number	A6-1.8
Sheet Name	WALL SECTIONS
Project No.	222001
Drawn By	CG / CB / TT / NV
Checked By	DR
Approved By	DO
No.	Date
	Issue
	ISSUE FOR CONSTRUCTION 08.07.2024

MARSHALL POINTE

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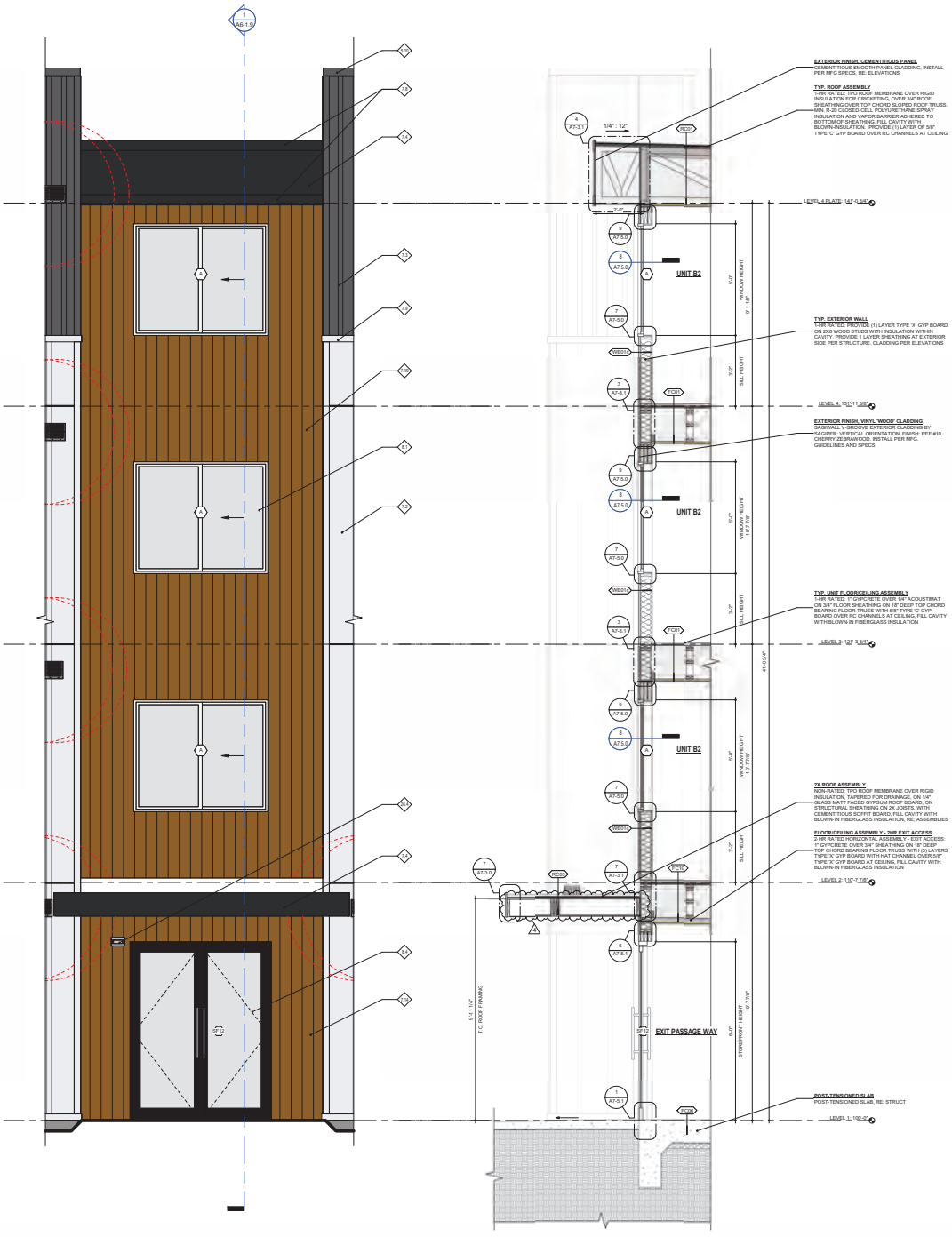


2 WALL SECTION 9 ELEVATION
1/2" = 1'-0"

1 WALL SECTION 9
1/2" = 1'-0"

MATERIAL LEGEND

	CEMENTITIOUS PANEL - SW 6258 TRICORN BLACK
	CEMENTITIOUS B&B (A) 8" SPACING SW 7674 PEPPERCORN
	CEMENTITIOUS B&B (B) 16" SPACING SW 7138 LAVENDER WISP
	CEMENTITIOUS SHAKE SIDING - SW 6254 LAZY GRAY
	"WOOD" LOOK PANEL - SAGIPER - CHERRY ZEBRAWOOD OR SIM.
	CMU - BASALITE 635WR - GROUND FACE

BUILDING COLORS

SOFFIT: CEMENTITIOUS SOFFIT BOARD. SW6258 TRICORN BLACK. RE: RCP
SOFFIT: CEMENTITIOUS SOFFIT BOARD. SW7674 PEPPERCORN. RE: RCP
FASCIA: CEMENTITIOUS PANEL/TRIM BOARD. SW6258 TRICORN BLACK
BALCONY RAILINGS: PAINTED: SW7138 LAVENDAR WISP
GUTTERS: PAINTED TO MATCH
MECHANICAL VENTS: PAINTED TO MATCH FIELD
GARAGE OPENING DOORS: SW7674 PEPPERCORN
STOREFRONT FRAMING: BLACK
STEEL COLUMNS - BALCONIES: PAINTED: SW7674 PEPPERCORN
STEEL COLUMNS - CANOPIES: PAINTED: SW6048 ANTIQUARIAN BROWN
PRECAST WALL PANELS: PAINTED: SW7674 PEPPERCORN. RE: ELEVATIONS
PRECAST WALL PANELS: PAINTED: SW6048 ANTIQUARIAN BROWN. RE: ELEVATIONS
PRECAST SPANDREL PANELS: TEXTURED FINISH: FORMLINER 2195 AMAZONAS. PAINTED: SW7138 LAVENDAR WISP. RE: ELEVATIONS

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
W001a	1 HR	TYP. EXTERIOR WALL
W002a	2 HR	8" CONCRETE SHAFT WALL
W003a	1 HR	8" CONCRETE WALL
W012a	1 HR	GARAGE, 12" CONCRETE WALL
W007a	1 HR	8" CONCRETE WALL
W004a	2 HR	8" CMU - 2HR FIRE BARRIER
W005a	1 HR	8" CMU - 1 HR
WE06b	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE06c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE07c	NR	2x6 PARAPET WALL - NR
WE08b	NR	2x6 WALL - NR @ CONDENSERS
WE09b	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE09c	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE19b	1 HR	6" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
W001a	2 HR	8" CMU - 2HR FIRE WALL
W002a	2 HR	8" CMU - 2HR FIRE BARRIER
W003	2 HR	FIRE WALL - 2HR
W002b	2 HR	FIRE WALL, 2-HR, (2) 2X4 WITH (2) 1" SHAFTLINER
W002b	2HR	FIRE WALL, 2-HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
W004b	2 HR	FIRE BARRIER, 2-HR, (2) WITH (2) 5/8" TYPE 'X' GYP
W004c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
W005c	2 HR	FIRE BARRIER, 2-HR EXIT ACCESS
W006b	2HR	2X4 INTERIOR WALL - FIRE BARRIER, SHAFTLINER ASSEMBLY
W006c	2-HR	2X6 INTERIOR WALL - FIRE BARRIER, SHAFTLINER ASSEMBLY
W007b	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W008c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W009b	1 HR	3-5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W009c	1 HR	6" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W010b	1 HR	TYP. UNIT DEMISING - 1-HR FIRE PARTITION
W010c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
W011b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
W011c	1 HR	<varies>
W012b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
W012c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
W013b	1 HR	2X4, 1HR - BEARING
W013c	1 HR	2X6, 1HR - BEARING
W014b	NR	2X4, INTERIOR WALL - NR
W014c	NR	2X6, INTERIOR WALL - NR
W015b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W015c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W016	NR	7/8" METAL HAT CHANNEL FURRING WALL
W017b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
W018b	NR	6" STEEL STUD WALL WITH TYPE 'X' GWB ONe side

FLOOR/CEILING TYPE SCHEDULE

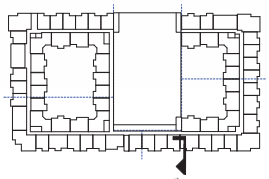
MARK	FIRE RATING	DESCRIPTION
FC01	1 HR	TYP. UNIT FLOOR/CEILING ASSEMBLY
FC02	1 HR	TYP. CORRIDOR FLOOR/CEILING ASSEMBLY
FC03	NR	TYP. DROP CEILING
FC05	NR	TYP. BALCONY ASSEMBLY - DRIP -THRU
FC06	NR	POST-TENSIONED SLAB
FC07	NR	NON-RATED PT CONCRETE SLAB
FC07	1HR	PRE-CAST CONCRETE FLOOR/CEILING
FC07	1HR	TYP. GARAGE FLOOR/CEILING
FC08	1HR	BALCONY ASSEMBLY - CONconfined SPACE
FC09	1HR	BALCONY ASSEMBLY
FC10	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC11	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC12	NR	SLAB ON GRADE

ROOF/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
RC01	1HR	TYP. ROOF ASSEMBLY
RC02	1HR	TYP. ROOF ASSEMBLY
RC03	1HR	1 HR HORIZONTAL ASSEMBLY
RC04	1 HR	1 HR HORIZONTAL ASSEMBLY
RC05	NR	2X ROOF ASSEMBLY
RC06	NR	1/4" TJI ROOF ASSEMBLY
RC07	NR	NR HORIZONTAL ASSEMBLY

KEYNOTES

NO	NOTE
5.10	PRE-FINISHED METAL PARAPET COPING. COLOR TO MATCH FIELD
7.2	VERTICAL CEMENTITIOUS BOARD & BATTEN 16" EXPOSURE - LAVENDER WISP - SW7138. RE: ELEVATIONS
7.3	VERTICAL CEMENTITIOUS BOARD & BATTEN 8" EXPOSURE - PEPPERCORN - SW7674. RE: ELEVATIONS
7.4	CEMENTITIOUS PANEL - SMOOTH FINISH - TRICORN BLACK - SW6258. RE: ELEVATIONS
7.8	4/4X5 CEMENTITIOUS TRIM BOARD -SMOOTH FINISH - TRICORN BLACK - SW6258
7.9	5/4X4 CEMENTITIOUS TRIM BOARD -SMOOTH FINISH - LAVENDER WISP - SW7138
7.14	SAGWALL V-GROOVE EXTERIOR CLADDING BY SAGPER: VERTICAL ORIENTATION. FINISH: REF #10 CHERRY ZEBRAWOOD. INSTALL PER MFG. GUIDELINES AND SPECIFICATIONS
7.19	SAGWALL V-GROOVE EXTERIOR CLADDING BY SAGPER: VERTICAL ORIENTATION. CUSTOM LENGTH FROM LEVEL 2 - 4. FINISH: REF #10 CHERRY ZEBRAWOOD. INSTALL PER MFG. GUIDELINES AND SPECIFICATIONS
A.1	VINYL WINDOW W/ LOW E, GLAZING. RE: WINDOW SCHEDULE
B.4	ALUMINUM STOREFRONT. BLACK FINISH. RE: STOREFRONT LEGEND
W.4	EXTERIOR SCONCE. MOUNTED AT 6'-0" AFF UNO. RE: ELEC



WALL SECTION KEY PLAN

MARSHALL POINTE

MARSHALL POINTE LAND AQUISITION, LLC
5170 MARSHALL ST - ARVADA, CO 80002

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Sheet Number	A6-1.9
Sheet Title	WALL SECTIONS
Drawn By	CG / CB / TT / NV
Project Number	222001
Reviewed By	DR
Issue Date	10

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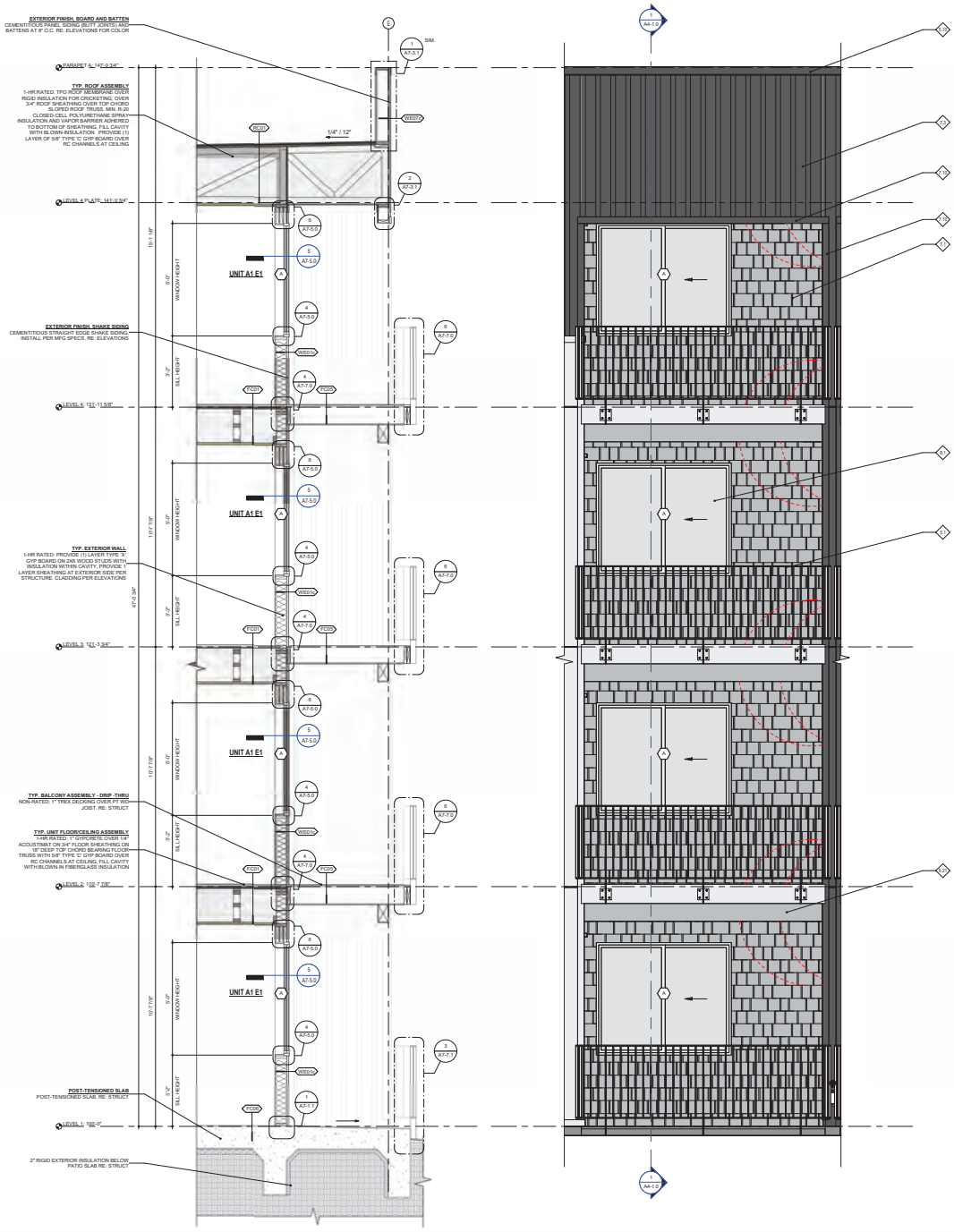


1 WALL SECTION 10
1/2" = 1'-0"

2 WALL SECTION 10 ELEVATION
1/2" = 1'-0"

MATERIAL LEGEND

	CEMENTITIOUS PANEL - SW 6258 TRICORN BLACK
	CEMENTITIOUS B&B (A) 8" SPACING SW 7674 PEPPERCORN
	CEMENTITIOUS B&B (B) 16" SPACING SW 7138 LAVENDER WISP
	CEMENTITIOUS SHAKE SIDING - SW 6254 LAZY GRAY
	"WOOD" LOOK PANEL - SAGIPER - CHERRY ZEBRAWOOD OR SIM.
	CMU - BASALITE 635WR - GROUND FACE

BUILDING COLORS

SOFFIT: CEMENTITIOUS SOFFIT BOARD. SW6258 TRICORN BLACK. RE: RCP
SOFFIT: CEMENTITIOUS SOFFIT BOARD. SW7674 PEPPERCORN. RE: RCP
FASCIA: CEMENTITIOUS PANEL/TRIM BOARD. SW6258 TRICORN BLACK
BALCONY RAILINGS: PAINTED: SW7138 LAVENDAR WISP
GUTTERS: PAINTED: TBD
MECHANICAL UNITS: PAINT TO MATCH FIELD
GARAGE OPENING SCREENS: SW7674 PEPPERCORN
STOREFRONT FRAMING: BLACK
STEEL COLUMNS - BALCONIES: PAINTED: SW7674 PEPPERCORN
STEEL COLUMNS - CANOPIES: PAINTED: SW6049 ANTIQUARIAN BROWN
PRECAST WALL PANELS: PAINTED: SW7674 PEPPERCORN. RE: ELEVATIONS
PRECAST WALL PANELS: PAINTED: SW6049 ANTIQUARIAN BROWN. RE: ELEVATIONS
PRECAST SPANDREL PANELS: TEXTURED FINISH: FORMLINER 2/95 AMAZONAS. PAINTED: SW7138 LAVENDAR WISP. RE: ELEVATIONS

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
WE01a	1 HR	TYP. EXTERIOR WALL
WE02a	2 HR	8" CONCRETE SHAFT WALL
WE03a	1 HR	8" CONCRETE WALL
WE03e	1 HR	GARAGE, 12" CONCRETE WALL
WE03a	1 HR	8" CONCRETE WALL
WE04a	2 HR	8" CMU - 2HR FIRE BARRIER
WE05a	1 HR	8" CMU - 1 HR
WE06b	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE06c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE07c	NR	2nd PARAPET WALL - NR
WE08b	NR	2nd WALL - NR @ CONDENSERS
WE09b	NR	2nd EXTERIOR FURR WALL - NON RATED
WE09c	NR	2nd EXTERIOR FURR WALL - NON RATED
WE19b	1 HR	8" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
WE01a	2 HR	8" CMU - 2HR FIRE WALL
WE02a	2 HR	8" CMU - 2HR FIRE BARRIER
W903	2 HR	FIRE WALL - 2HR
W903b	2 HR	FIRE WALL, 2-HR, (2) 2X4 WITH (2) 1" SHAFTLINER
W903c	2HR	FIRE WALL, 2-HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
W904b	2 HR	FIRE BARRIER, 2-HR, (2) WITH (4) 5/8" TYPE 'X' GYP
W904c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
W905c	2 HR	FIRE BARRIER, 2-HR EXIT ACCESS
W906b	2HR	2X4 INTERIOR WALL - FIRE BARRIER, SHAFTLINER ASSEMBLY
W906c	2HR	2X6 INTERIOR WALL - FIRE BARRIER, SHAFTLINER ASSEMBLY
W907b	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W908c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W909b	1 HR	3-5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W909b	1 HR	6" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W910b	1 HR	TYP. UNIT DEMISING - 1-HR FIRE PARTITION
W910c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
W911b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
W911c	1 HR	<delete>
W912b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
W912c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
W913b	1 HR	2X4, 1HR - BEARING
W913c	1 HR	2X6, 1HR - BEARING
W914b	NR	2X4, INTERIOR WALL - NR
W914c	NR	2X6, INTERIOR WALL - NR
W915b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W915c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W916	NR	7/8" METAL HAT CHANNEL FURRING WALL
W917b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
W918b	NR	6" STEEL STUD WALL WITH TYPE 'X' GWB ONe side

FLOOR/CEILING TYPE SCHEDULE

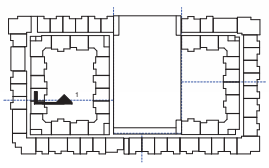
MARK	FIRE RATING	DESCRIPTION
FC01	1 HR	TYP. UNIT FLOOR/CEILING ASSEMBLY
FC02	1 HR	TYP. CORRIDOR FLOOR/CEILING ASSEMBLY
FC03	NR	TYP. DROP CEILING
FC05	NR	TYP. BALCONY ASSEMBLY - DRIP -THRU
FC06	NR	POST-TENSIONED SLAB
FC07	NR	NON-RATED PT CONCRETE SLAB
FC07	1HR	PRE-CAST CONCRETE FLOOR/CEILING
FC07	1HR	TYP. GARAGE FLOOR/CEILING
FC08	1HR	BALCONY ASSEMBLY - CONDITIONED SPACE
FC09	1HR	BALCONY ASSEMBLY
FC10	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC11	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC12	NR	SLAB ON GRADE

ROOF/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
RC01	1HR	TYP. ROOF ASSEMBLY
RC02	1HR	TYP. ROOF ASSEMBLY
RC03	1HR	1 HR HORIZONTAL ASSEMBLY
RC04	1 HR	1 HR HORIZONTAL ASSEMBLY
RC05	NR	2N ROOF ASSEMBLY
RC06	NR	4" TJI ROOF ASSEMBLY
RC07	NR	NR HORIZONTAL ASSEMBLY

KEYNOTES

NO.	NOTE
5.1	STEEL BALCONY GUARDRAIL AT 42" AFF. SHOP PRIMED. PAINT IN FIELD
5.10	PRE-FINISHED METAL PARAPET COPING, COLOR TO MATCH Fascia
6.01	PRESSURE TREATED BEAM, PAINTED SW6254 LAZY GRAY RE: STRUCT
7.1	CEMENTITICIOUS STRAIGHT EDGE SHAKE SIDING - LAZY GRAY - SW6254. RE: ELEVATIONS
7.3	VERTICAL CEMENTITICIOUS BOARD & BATTEN 8" EXPOSURE - PEPPERCORN - SW7674. RE: ELEVATIONS
7.10	5/4X4 CEMENTITIOUS TRIM BOARD -SMOOTH FINISH - PEPPERCORN - SW7674
8.1	VINYL WINDOW W/ LOW E, GLAZING. RE: WINDOW SCHEDULE



WALL SECTION KEY PLAN

A6-1.10

WALL SECTIONS

ISSUE FOR CONSTRUCTION
08.07.2024

MARSHALL POINTE

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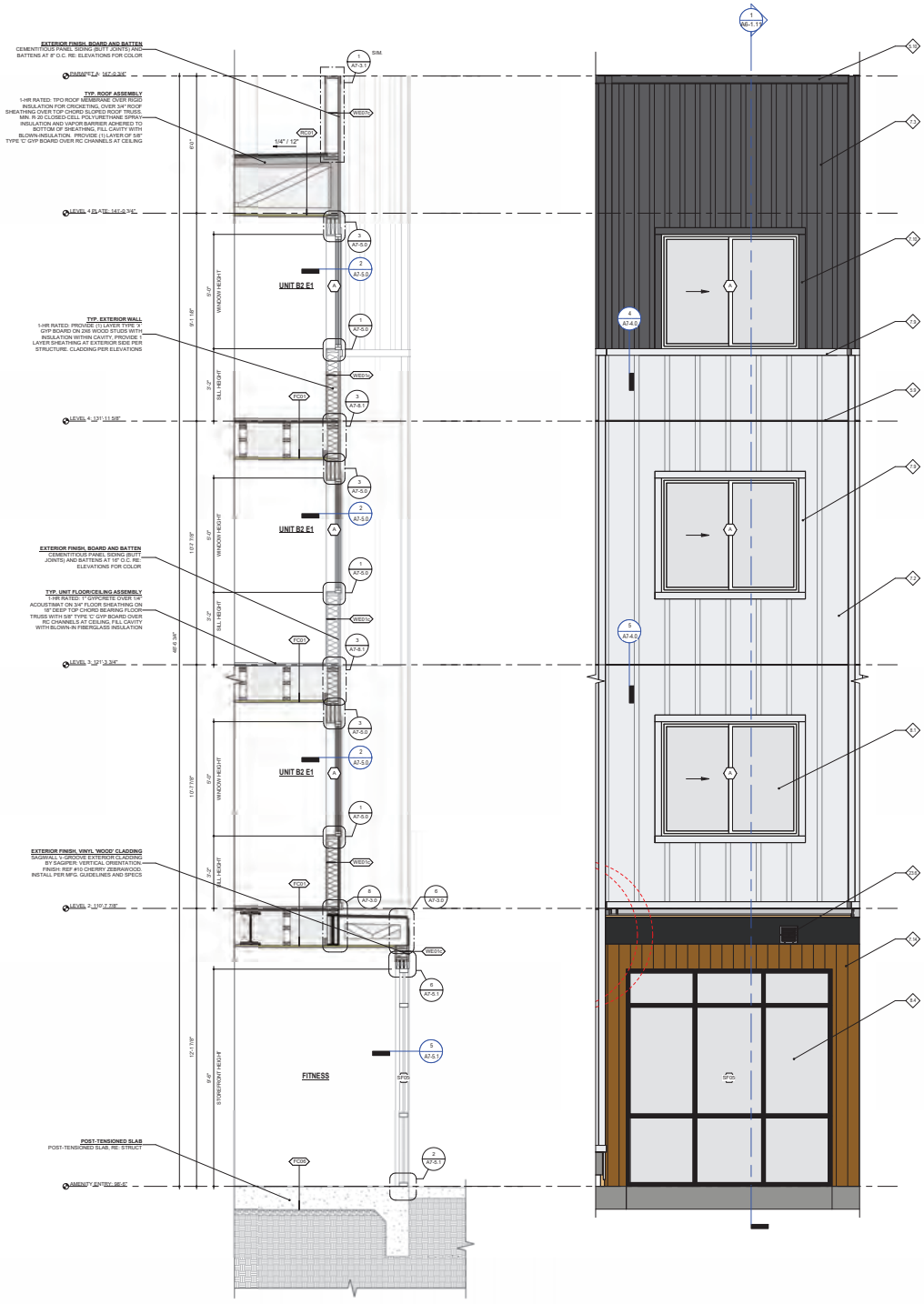
EXTERIOR FINISH, BOARD AND BATTEN
CEMENTITIOUS PANEL SIDING (BUTT JOINTS) AND BATTENS AT 8" O.C. RE: ELEVATIONS FOR COLOR
PARAPET 2 A 147'-0 3/4"
TYP. ROOF ASSEMBLY
1-HR RATED: TPO ROOF MEMBRANE OVER RIGID INSULATION FOR CROWN TRIM, OVER 3/4" ROOF SHEATHING ON TRUSSES WITH 5/8" TYPE 'C' GYP BOARD MIN. R-20 CLOSED CELL POLYURETHANE SPRAY INSULATION AND VAPOR BARRIER ADHERED TO BOTTOM OF SHEATHING, FILL CAVITY WITH BLOWN-INSULATION. PROVIDE (1) LAYER OF 5/8" TYPE 'C' GYP BOARD OVER RC CHANNELS AT CEILING
LEVEL 4 13'1" 141'-0 3/4"
TYP. EXTERIOR WALL
1-HR RATED: PROVIDE (1) LAYER TYPE 'X' GYP BOARD ON 2X6 WOOD STUDS WITH INSULATION WITHIN CAVITY. PROVIDE 1 LAYER SHEATHING AT EXTERIOR SIDE PER STRUCTURE. CLADDING PER ELEVATIONS
EXTERIOR FINISH, BOARD AND BATTEN
CEMENTITIOUS PANEL SIDING (BUTT JOINTS) AND BATTENS AT 16" O.C. RE: ELEVATIONS FOR COLOR
TYP. UNIT FLOOR/CEILING ASSEMBLY
1-HR RATED: 1" GYPCRETE OVER 1/4" ACOUSTIMAT ON 3/4" FLOOR SHEATHING ON 16" DEEP TOP CHORD BEARING FLOOR TRUSS WITH 5/8" TYPE 'C' GYP BOARD OVER RC CHANNELS AT CEILING, FILL CAVITY WITH BLOWN-IN FIBERGLASS INSULATION
LEVEL 3 13'1" 3 3/4"
EXTERIOR FINISH, VINYL 'WOOD' CLADDING
SAGIWALL V-GROOVE EXTERIOR CLADDING BY SAGIPER: VERTICAL ORIENTATION. FINISH: REF #10 CHERRY ZEBRAWOOD. INSTALL PER MFG. GUIDELINES AND SPECS
LEVEL 2 13'0" 7 7/8"
POST-TENSIONED SLAB
POST-TENSIONED SLAB, RE: STRUCT
AMENITY ENTRY 98'-6"
UNIT B2 E1
UNIT B2 E1
UNIT B2 E1
FITNESS
WINDOW HEIGHT
SILL HEIGHT
STOREFRONT HEIGHT
WE01a
WE01b
WE07c
FC01
FC05
SF02
SIM.
1/4" / 12"
8'-1 1/8"
13'1 7/8"
13'1 7/8"
13'1 7/8"
49'-6 3/4"
9'-0"
5'-0"
3'-2"
9'-0"
5'-0"
3'-2"
9'-0"
5'-0"
3'-2"
9'-0"
A7-3.1
A7-5.0
A7-6.0
A7-6.1
A7-3.2
A7-5.1
A7-4.0
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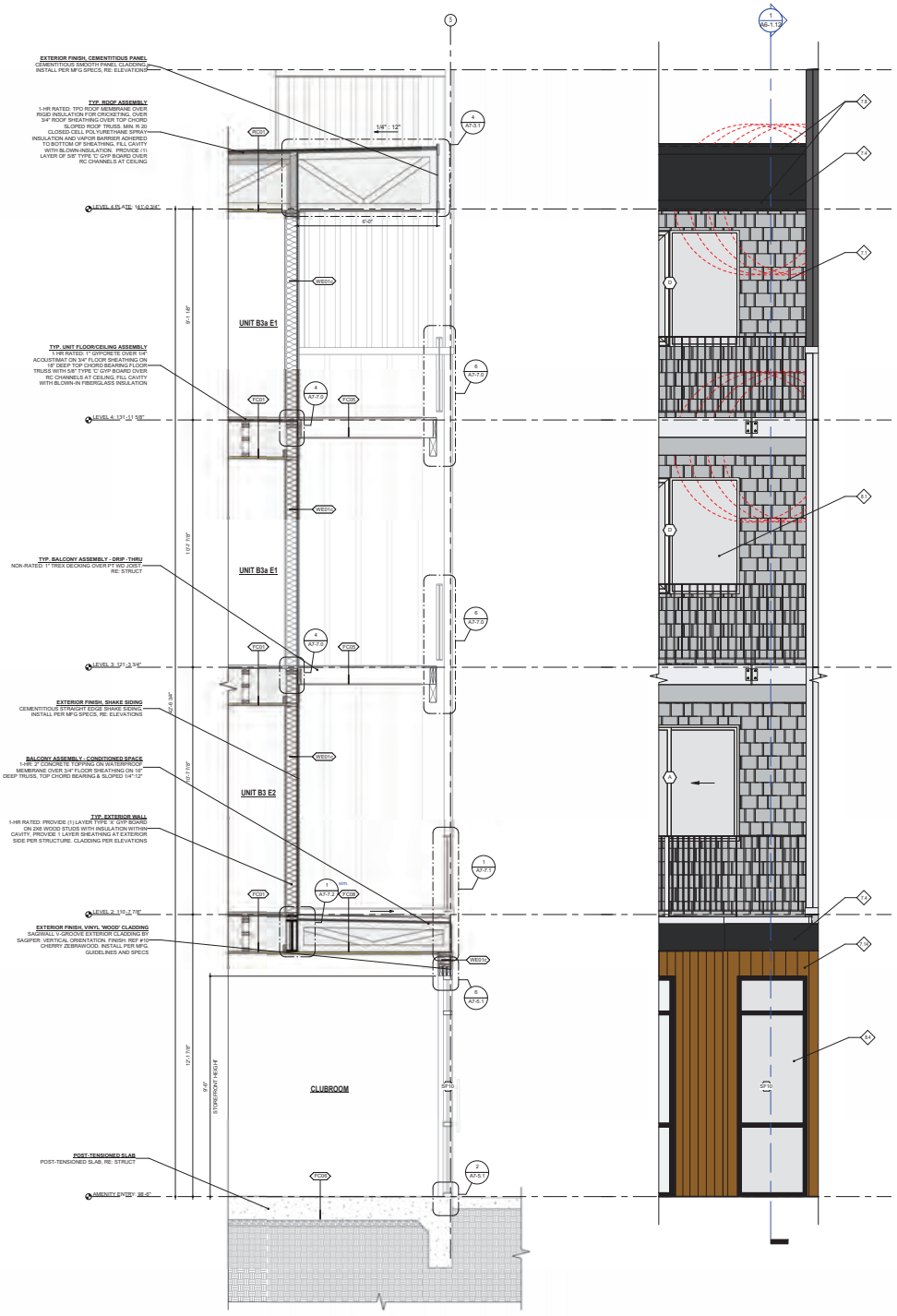
EXTERIOR FINISH, CEMENTITIOUS PANEL
CEMENTITIOUS SMOOTH PANEL CLADDING - INSTALL PER MFG SPECS, RE: ELEVATIONS
TYP. ROOF ASSEMBLY
1-HR RATED: TPO ROOF MEMBRANE OVER RIGID INSULATION FOR CROWNING, OVER 3/4" ROOF SHEATHING OVER TOP CHORD CLOSED CFCI ROOF TRUSS @ MIN. R-20 INSULATION AND VAPOR BARRIER ADHERED TO BOTTOM OF SHEATHING. FILL CAVITY WITH BLOWN-INSULATION. PROVIDE (1) LAYER OF 5/8" TYPE 'C' GYP BOARD OVER RC CHANNELS AT CEILING
TYP. UNIT FLOOR/CEILING ASSEMBLY
1-HR RATED: 1" GYPCRETE OVER 1/4" ACOUSTMAT ON 3/4" FLOOR SHEATHING ON 18" DEEP TOP CHORD BEARING FLOOR TRUSS WITH 5/8" TYPE 'C' GYP BOARD OVER RC CHANNELS AT CEILING. FILL CAVITY WITH BLOWN-IN FIBERGLASS INSULATION
TYP. BALCONY ASSEMBLY - DRIP - THRU
NON-RATED: 1" TREX DECKING OVER PT WD JOIST - RE: STRUCT
EXTERIOR FINISH, SHAKE SIDING
CEMENTITIOUS STRAIGHT EDGE SHAKE SIDING - INSTALL PER MFG SPECS, RE: ELEVATIONS
BALCONY ASSEMBLY - CONDITIONED SPACE
1-HR: 3" CONCRETE TOPPING ON WATERPROOF MEMBRANE OVER 3/4" FLOOR SHEATHING ON 18" DEEP TRUSS, TOP CHORD BEARING & SLOPED 1/4":12"
TYP. EXTERIOR WALL
1-HR RATED: PROVIDE (1) LAYER TYPE 'X' GYP BOARD ON 2X6 WOOD STUDS WITH INSULATION WITHIN CAVITY. PROVIDE 1 LAYER SHEATHING AT EXTERIOR SIDE PER STRUCTURE. CLADDING PER ELEVATIONS
EXTERIOR FINISH, VINYL 'WOOD' CLADDING
SAGWALL V-GROOVE EXTERIOR CLADDING BY SAGPERI - VERTICAL ORIENTATION. FINISH: REF #10 CHERRY ZEBRAWOOD. INSTALL PER MFG. GUIDELINES AND SPECS
POST-TENSIONED SLAB
POST-TENSIONED SLAB, RE: STRUCT
UNIT B3a E1
UNIT B3a E1
UNIT B3 E2
CLUBROOM
STOREFRONT HEIGHT
LEVEL 4 PLATE: 141'-0 3/4"
LEVEL 3: 131'-3 3/4"
LEVEL 2: 110'-7 7/8"
AMENITY ENTRY: 98'-6"
1/4" : 12"
6'1/2"
9'-1 1/8"
10'-7 7/8"
10'-7 7/8"
12'-1 1/8"
9'-6"
W601a
W603a
W603b
W604a
W604b
W605a
W605b
W605c
W607a
W607b
W607c
W608a
W608b
W608c
W608d
W608e
W608f
W608g
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W609v
W609w
W609x
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W610a
W610b
W610c
W610d
W610e
W610f
W610g
W610h
W610i
W610j
W610k
W610l
W610m
W610n
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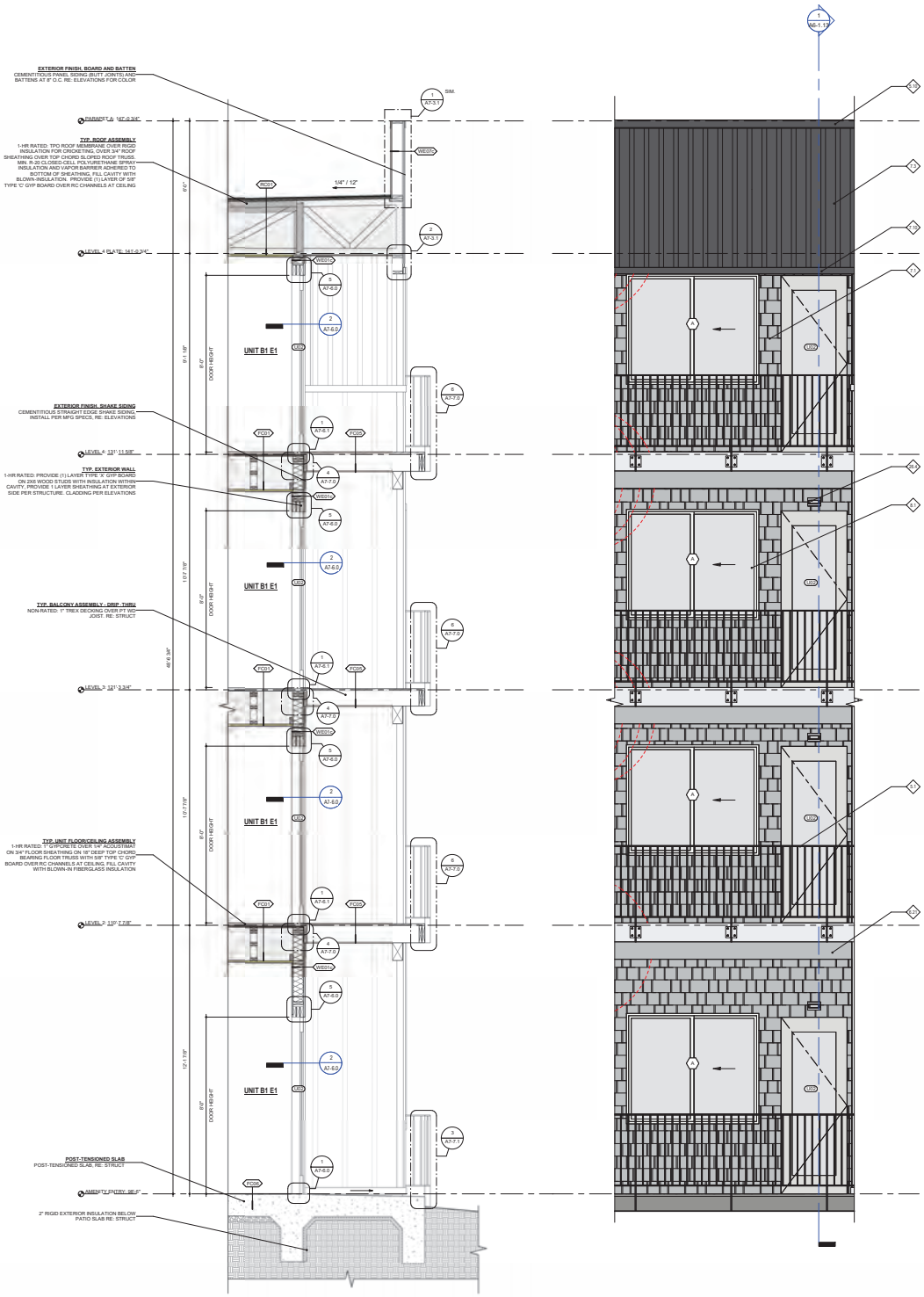


1 WALL SECTION 13
1/2" = 1'-0"

2 WALL SECTION 13 ELEVATION
1/2" = 1'-0"

MATERIAL LEGEND

	CEMENTITIOUS PANEL - SW 6258 TRICORN BLACK
	CEMENTITIOUS B&B (A) 8" SPACING SW 7674 PEPPERCORN
	CEMENTITIOUS B&B (B) 16" SPACING SW 7138 LAVENDER WISP
	CEMENTITIOUS SHAKE SIDING - SW 6254 LAZY GRAY
	"WOOD" LOOK PANEL - SAGIPER - CHERRY ZEBRAWOOD OR SIM.
	CMU - BASALITE 635WR - GROUND FACE

BUILDING COLORS

SOFFIT: CEMENTITIOUS SOFFIT BOARD. SW6258 TRICORN BLACK. RE: RCP
SOFFIT: CEMENTITIOUS SOFFIT BOARD. SW7674 PEPPERCORN. RE: RCP
FASCIA: CEMENTITIOUS PANEL/TRIM BOARD. SW6258 TRICORN BLACK
BALCONY RAILINGS: PAINTED: SW7138 LAVENDAR WISP
RAILINGS: PAINTED: TBD
MECHANICAL LOUVERS: PAINT TO MATCH FIELD
GARAGE OPENING SCREENS: SW7674 PEPPERCORN
STOREFRONT FRAMING: BLACK
STEEL COLUMNS - BALCONIES: PAINTED: SW7674 PEPPERCORN
STEEL COLUMNS - CANOPIES: PAINTED: SW6049 ANTIQUARIAN BROWN
PRECAST WALL PANELS: PAINTED: SW7674 PEPPERCORN. RE: ELEVATIONS
PRECAST WALL PANELS: PAINTED: SW6049 ANTIQUARIAN BROWN. RE: ELEVATIONS
PRECAST SPANDREL PANELS: TEXTURED FINISH: FORMLINER 2/95 AMAZONAS. PAINTED: SW7138 LAVENDAR WISP. RE: ELEVATIONS

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
WE01a	1 HR	TYP. EXTERIOR WALL
WE02a	2 HR	8" CONCRETE SHAFT WALL
WE03a	1 HR	8" CONCRETE WALL
WE03e	1 HR	GARAGE, 12" CONCRETE WALL
WE03a	1 HR	8" CONCRETE WALL
WE04a	2 HR	8" CMU - 2HR FIRE BARRIER
WE05a	1 HR	8" CMU - 1 HR
WE06b	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE06c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE07c	NR	2x6 PARAPET WALL - NR
WE08b	NR	2x6 WALL - NR @ CONDENSERS
WE09b	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE09c	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE10b	1 HR	6" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
WE01a	2 HR	8" CMU - 2HR FIRE WALL
WE02a	2 HR	8" CMU - 2HR FIRE BARRIER
W903	2 HR	FIRE WALL - 2HR
W02b	2 HR	FIRE WALL, 2-HR, (2) 2X4 WITH (2) 1" SHAFTLINER
W02b	2HR	FIRE WALL, 2-HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
W04b	2 HR	FIRE BARRIER, 2-HR, (2) WITH (2) 5/8" TYPE 'X' GYP
W04c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
W05c	2 HR	FIRE BARRIER, 2-HR EXIT ACCESS
W06b	2HR	2X4 INTERIOR WALL - FIRE BARRIER, SHAFTLINER ASSEMBLY
W06c	2HR	2X6 INTERIOR WALL - FIRE BARRIER, SHAFTLINER ASSEMBLY
W07b	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W08b	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W09b	1 HR	3-5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W09b	1 HR	6" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W10b	1 HR	TYP. UNIT DEMISING - 1-HR FIRE PARTITION
W10c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
W01b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
W01c	1 HR	<delete>
W12b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
W12c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
W13b	1 HR	2X4, 1HR - BEARING
W13c	1 HR	2X6, 1HR - BEARING
W14b	NR	2X4, INTERIOR WALL - NR
W14c	NR	2X6, INTERIOR WALL - NR
W15b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W15c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W16	NR	7/8" METAL HAT CHANNEL FURRING WALL
W17b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
W18b	NR	6" STEEL STUD WALL WITH TYPE 'X' GWB ONe side

FLOOR/CEILING TYPE SCHEDULE

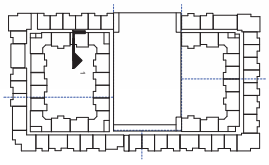
MARK	FIRE RATING	DESCRIPTION
FC01	1 HR	TYP. UNIT FLOOR/CEILING ASSEMBLY
FC02	1 HR	TYP. CORRIDOR FLOOR/CEILING ASSEMBLY
FC03	NR	TYP. DROP CEILING
FC05	NR	TYP. BALCONY ASSEMBLY - DRIP -THRU
FC06	NR	POST-TENSIONED SLAB
FC07	NR	NON-RATED PT CONCRETE SLAB
FC07	1HR	PRE-CAST CONCRETE FLOOR/CEILING
FC07	1HR	TYP. GARAGE FLOOR/CEILING
FC08	1HR	BALCONY ASSEMBLY - CONDITIONED SPACE
FC09	1HR	BALCONY ASSEMBLY
FC10	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC11	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC12	NR	SLAB ON GRADE

ROOF/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
RC01	1HR	TYP. ROOF ASSEMBLY
RC02	1HR	TYP. ROOF ASSEMBLY
RC03	1HR	1 HR HORIZONTAL ASSEMBLY
RC04	1 HR	1 HR HORIZONTAL ASSEMBLY
RC05	NR	2X ROOF ASSEMBLY
RC06	NR	4" TJI ROOF ASSEMBLY
RC07	NR	NR HORIZONTAL ASSEMBLY

KEYNOTES

NO.	NOTE
5.1	STEEL BALCONY GUARDRAIL AT 42" AFF. SHOP PRIMED. PAINT IN FIELD
5.10	PRE-FINISHED METAL PARAPET COPING, COLOR TO MATCH FIELD
6.21	PRESSURE TREATED BEAM, PAINTED SW6254 LAZY GRAY RE: STRUCT
7.1	CEMENTITIOUS STRAIGHT EDGE SHAKE SIDING - LAZY GRAY - SW6254. RE: ELEVATIONS
7.3	VERTICAL CEMENTITIOUS BOARD & BATTEN 8" EXPOSURE - PEPPERCORN - SW7674. RE: ELEVATIONS
7.10	5/4X4 CEMENTITIOUS TRIM BOARD -SMOOTH FINISH - PEPPERCORN - SW7674
8.1	VINYL WINDOW W/ LOW E GLAZING. RE: WINDOW SCHEDULE
26.4	EXTERIOR SCONCE. MOUNTED AT 8'-0" AFF UNO. RE: ELEC



WALL SECTION KEY PLAN

A6-1.13
WALL SECTIONS
22201
CO CSR TT NV
ISSUE FOR CONSTRUCTION 08.07.2024

MARSHALL POINTE

MARSHALL POINTE LAND AQUISITION, LLC
5170 MARSHALL ST - ARVADA, CO 80002

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COMMUNITY ■ INTERACTIVE ■ ARCHITECTURE

CO 80202 1512 LARIMER STREET SUITE 200 DENVER
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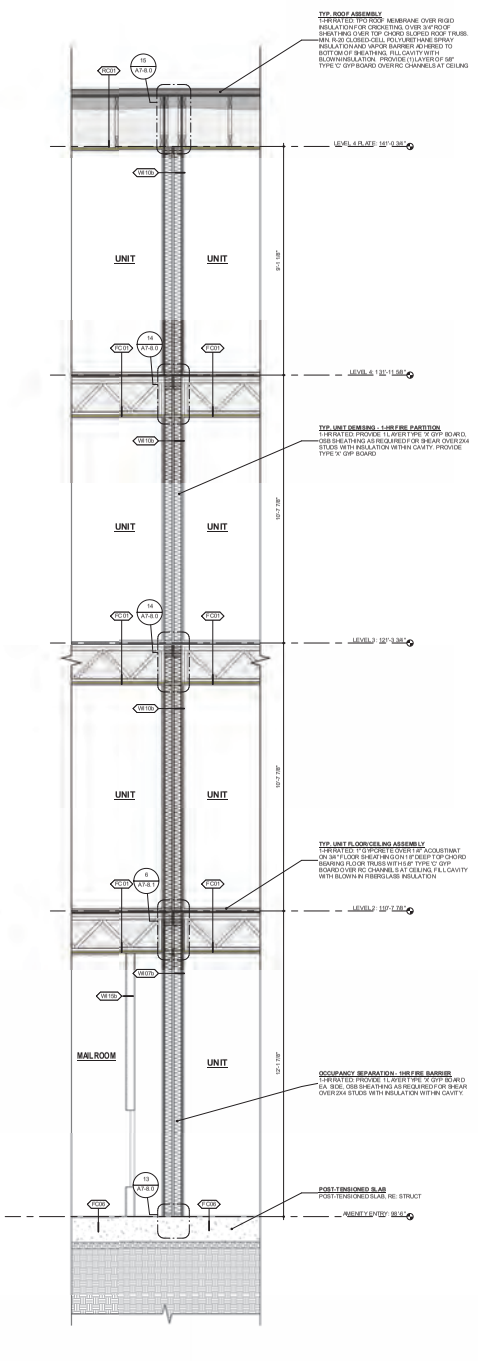
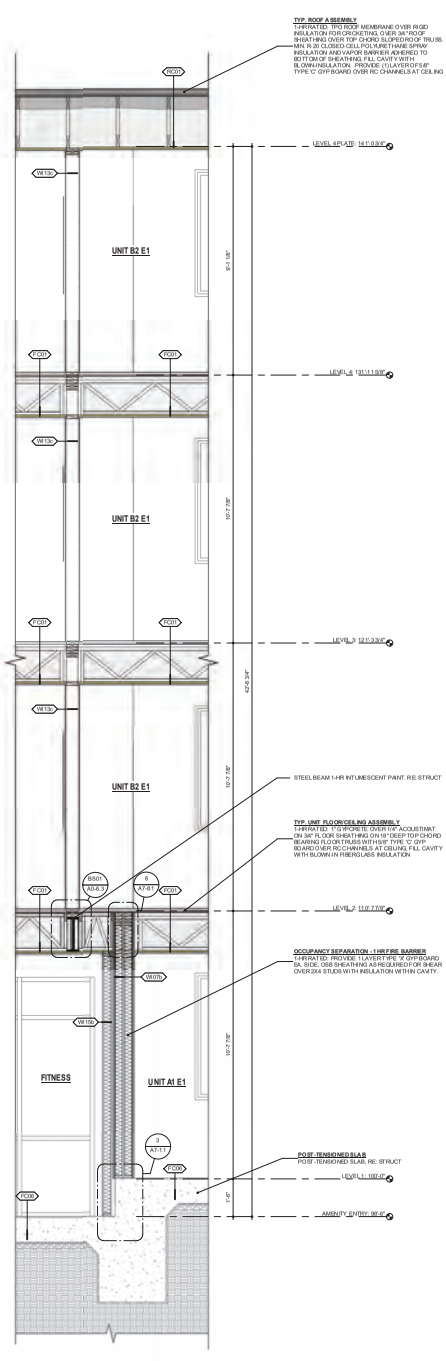


2 1HR OCCUPANCY SEPARATION
1/2" = 1'-0"

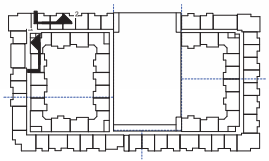


1 1HR OCCUPANCY SEPARATION AT SLAB DROP
1/2" = 1'-0"

WALL TYPE SCHEDULE		
MARK	FIRE RATING	DESCRIPTION
W101c	1 HR	TYP. EXTERIOR WALL
W102c	2 HR	8" CONCRETE SHAFT WALL
W103c	1 HR	8" CONCRETE WALL
W103w	1 HR	GARAGE - 12" CONCRETE WALL
W103c	1 HR	8" CONCRETE WALL
W104c	2 HR	8" CMU - 2HR FIRE BARRIER
W105c	1 HR	8" CMU - 1 HR
W106c	1 HR	EXTERIOR WALL - 1 HR SYMMETRIC
W106c	1 HR	EXTERIOR WALL - 1 HR SYMMETRIC
W107c	NR	2x6 PARAPET WALL - NR
W108c	NR	2x6 WALL - NR @ CONDENSERS
W109c	NR	2x4 EXTERIOR FURR WALL - NON RATED
W109c	NR	2x4 EXTERIOR FURR WALL - NON RATED
W10a	1 HR	6" 18 GEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
W101c	2 HR	8" CMU - 2HR FIRE WALL
W102c	2 HR	8" CMU - 2HR FIRE BARRIER
W103	2 HR	FIRE WALL - 2HR
W103h	2 HR	FIRE WALL - 2 HR, (2) 2X4 WITH (2) 1" SHAFTLINER
W103h	2HR	FIRE WALL 2 HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
W104h	2 HR	FIRE BARRIER 2HR, 2x WITH (2) 5/8" TYPE 'X' GYP
W04c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
W05c	2 HR	FIRE BARRIER 2HR EXIT ACCESS
W06b	2 HR	2X4 INTERIOR WALL - FIRE BARRIER, SHAFTLINER ASSEMBLY
W06c	2 HR	2X6 INTERIOR WALL - FIRE BARRIER, SHAFTLINER ASSEMBLY
W107b	1 HR	2 OCCUPANCY SEPARATION - 1 HR FIRE BARRIER
W08c	1 HR	2 OCCUPANCY SEPARATION - 1 HR FIRE BARRIER
W09h	1 HR	2 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W09 h	1 HR	6" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W10b	1 HR	TYP. UNIT DEMISING - 1 HR FIRE PARTITION
W10c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
W11b	1 HR	2x6 FIRE PARTITION, 1HR - CORRIDOR
W11c	1 HR	swamp
W12b	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR - NO RC
W12c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
W13b	1 HR	2X6, 1HR - BEARING
W13c	1 HR	2X6, 1HR - BEARING
W14b	NR	2X4 INTERIOR WALL - NR
W14c	NR	2X6 INTERIOR WALL - NR
W15b	NR	2x4 INTERIOR NON-BEARING WALL - GWB ON 1 SIDE
W15c	NR	2x6 INTERIOR NON-BEARING WALL - GWB ON 1 SIDE
W16	NR	1 5/8" METAL HAT CHANNEL FURRING WALL
W17b	2 HR	2X6 FIRE BARRIER, 2HR - UNIT DEMISING
W18b	NR	6" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

FLOOR/CEILING TYPE SCHEDULE		
MARK	FIRE RATING	DESCRIPTION
FC01	1 HR	TYP. UNIT FLOOR/CEILING ASSEMBLY
FC02	1 HR	TYP. CORRIDOR FLOOR/CEILING ASSEMBLY
FC03	NR	TYP. DROP CEILING
FC05	NR	TYP. BALCONY ASSEMBLY - DRIP - THRU
FC06	NR	POST-TENSIONED SLAB
FC07	NR	NON-RATED TOPPING CONCRETE SLAB
FC07	1HR	PRECAST CONCRETE FLOOR/CEILING
FC07	1HR	TYP. GARAGE FLOOR/CEILING
FC08	1HR	BALCONY ASSEMBLY - CONDITIONED SPACE
FC09	1HR	BALCONY ASSEMBLY
FC10	2HR	FLOOR/CEILING ASSEMBLY - 2 HR EXIT ACCESS
FC11	2HR	FLOOR/CEILING ASSEMBLY - 2 HR EXIT ACCESS
FC12	NR	SLAB ON GRADE

ROOF/CEILING TYPE SCHEDULE		
MARK	FIRE RATING	DESCRIPTION
RC01	1 HR	TYP. ROOF ASSEMBLY
RC02	1HR	TYP. ROOF ASSEMBLY
RC03	1 HR	1 HR HORIZONTAL ASSEMBLY
RC04	1 HR	1 HR HORIZONTAL ASSEMBLY
RC05	NR	SX ROOF ASSEMBLY
RC06	NR	5/P T&R ROOF ASSEMBLY
RC07	NR	NR HORIZONTAL ASSEMBLY



WALL SECTION KEY PLAN

A6-2.1	INTERIOR WALL SECTIONS	Issued for Construction	08.07.2024

MARSHALL POINTE

MARSHALL POINTE LAND AQUISITION, LLC
5170 MARSHALL ST - ARVADA, CO 80002

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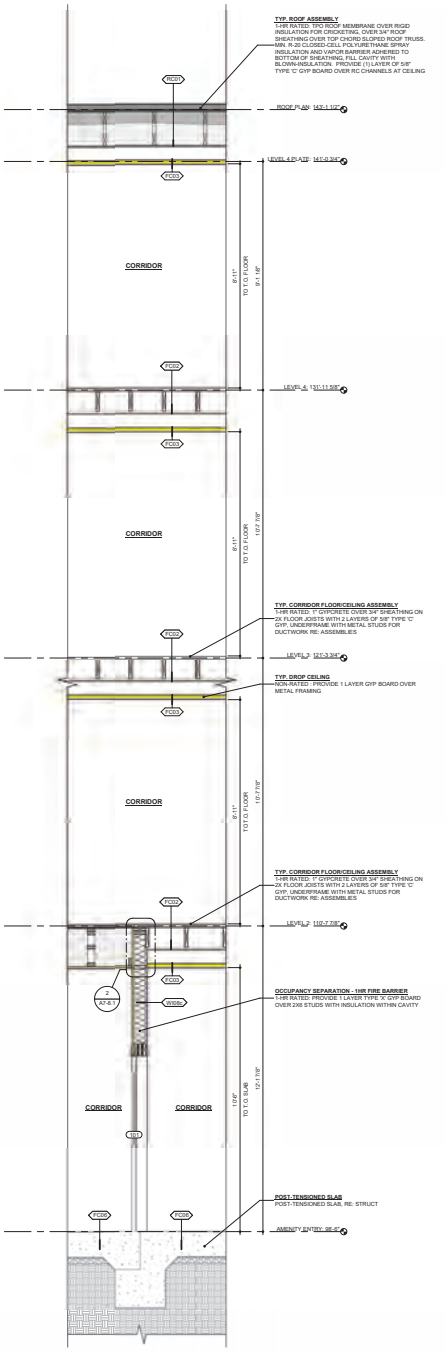
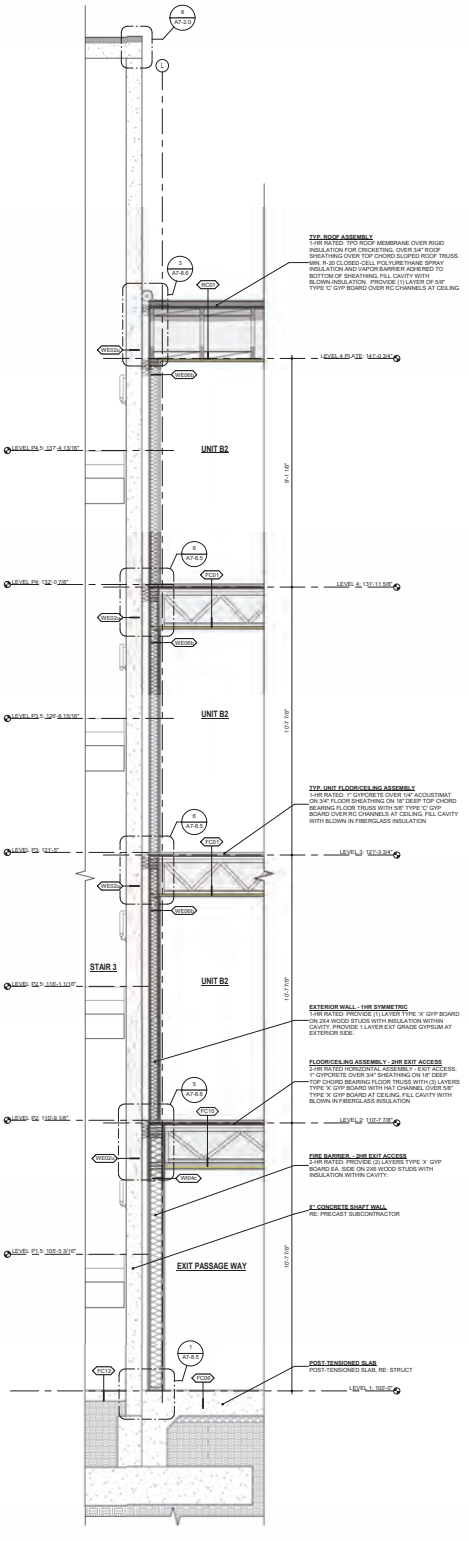


2 1HR OCCUPANCY SEPARATION
1/2" = 1'-0"



1 BLDG AND GARAGE SEPARATION - 2HR HORIZ. EXIT
1/2" = 1'-0"

WALL TYPE SCHEDULE

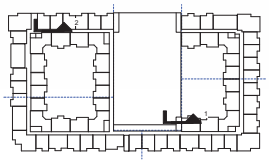
MARK	FIRE RATING	DESCRIPTION
W02A	1 HR	TYP. EXTERIOR WALL
W02Ga	2 HR	8" CONCRETE SHAFT WALL
W03Ga	1 HR	8" CONCRETE WALL
W03Ha	1 HR	GARAGE - 12" CONCRETE WALL
W03Ja	1 HR	6" CONCRETE WALL
W04Ha	2 HR	8" CMU - 2HR FIRE BARRIER
W05Ga	1 HR	8" CMU - 1 HR
W05Ha	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
W06c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
W07c	NR	2x6 PARAPET WALL - NR
W08c	NR	2x6 WALL - NR @ CONDENSERS
W09b	NR	2x4 EXTERIOR FURR WALL - NON RATED
W09c	NR	2x4 EXTERIOR FURR WALL - NON RATED
W19a	1 HR	6" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
W01a	2 HR	8" CMU - 2HR FIRE WALL
W02a	2 HR	8" CMU - 2HR FIRE BARRIER
W03	2 HR	FIRE WALL - 2HR
W03b	2 HR	FIRE WALL - 2 HR. (2) 2X4 WITH (2) 1" SHAFTLINER
W03h	2HR	FIRE WALL - 2 HR. (2) 1 5/8" WITH (2) 1" SHAFTLINER
W04b	2 HR	FIRE BARRIER - 2 HR. 2x WITH (2) 5/8" TYPE 'X' GYP
W04c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
W05c	2 HR	FIRE BARRIER - 2 HR EXIT ACCESS
W06b	2 HR	2X4 INTERIOR WALL - FIRE BARRIER - SHAFTLINER ASSEMBLY
W06c	2 HR	2X6 INTERIOR WALL - FIRE BARRIER - SHAFTLINER ASSEMBLY
W07b	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W08c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
W09b	1 HR	2 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W09b	1 HR	6" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W10b	1 HR	TYP. UNIT DEMISING - 1 HR FIRE PARTITION
W10c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
W11b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
W11c	1 HR	<delete>
W12b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
W12c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
W13b	1 HR	2X4, 1HR - BEARING
W13c	1 HR	2X6, 1HR - BEARING
W14b	NR	2X4, INTERIOR WALL - NR
W14c	NR	2X6, INTERIOR WALL - NR
W15b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W15c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W16	NR	7/8" METAL HAT CHANNEL FURRING WALL
W17b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
W18b	NR	6" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

FLOOR/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
FC01	1 HR	TYP. UNIT FLOOR/CEILING ASSEMBLY
FC02	1 HR	TYP. CORRIDOR FLOOR/CEILING ASSEMBLY
FC03	NR	TYP. DROP CEILING
FC04	NR	TYP. BALCONY ASSEMBLY - DRIP - THRU
FC05	NR	POST-TENSIONED SLAB
FC07	NR	NON-RATED PT CONCRETE SLAB
FC07	1HR	PRECAST CONCRETE FLOOR/CEILING
FC07	1HR	TYP. GARAGE FLOOR/CEILING
FC08	1HR	BALCONY ASSEMBLY - CONDITIONED SPACE
FC09	1HR	BALCONY ASSEMBLY
FC10	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC11	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC12	NR	SLAB ON GRADE

ROOF/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
RC01	1HR	TYP. ROOF ASSEMBLY
RC02	1HR	TYP. ROOF ASSEMBLY
RC03	1HR	1 HR HORIZONTAL ASSEMBLY
RC04	1 HR	1 HR HORIZONTAL ASSEMBLY
RC05	NR	2X ROOF ASSEMBLY
RC06	NR	14" TJI ROOF ASSEMBLY
RC07	NR	NR HORIZONTAL ASSEMBLY



WALL SECTION KEY PLAN

Sheet Number	A6-2.2
Sheet Name	COMMON
Title	INTERIOR WALL SECTIONS
Project #	22201
Author	CG / CB / TT / NV
Checked by	DR
Title	Typical Detail
Approved by	DV

No.	Date	Issue
		ISSUE FOR CONSTRUCTION 08.01.2024

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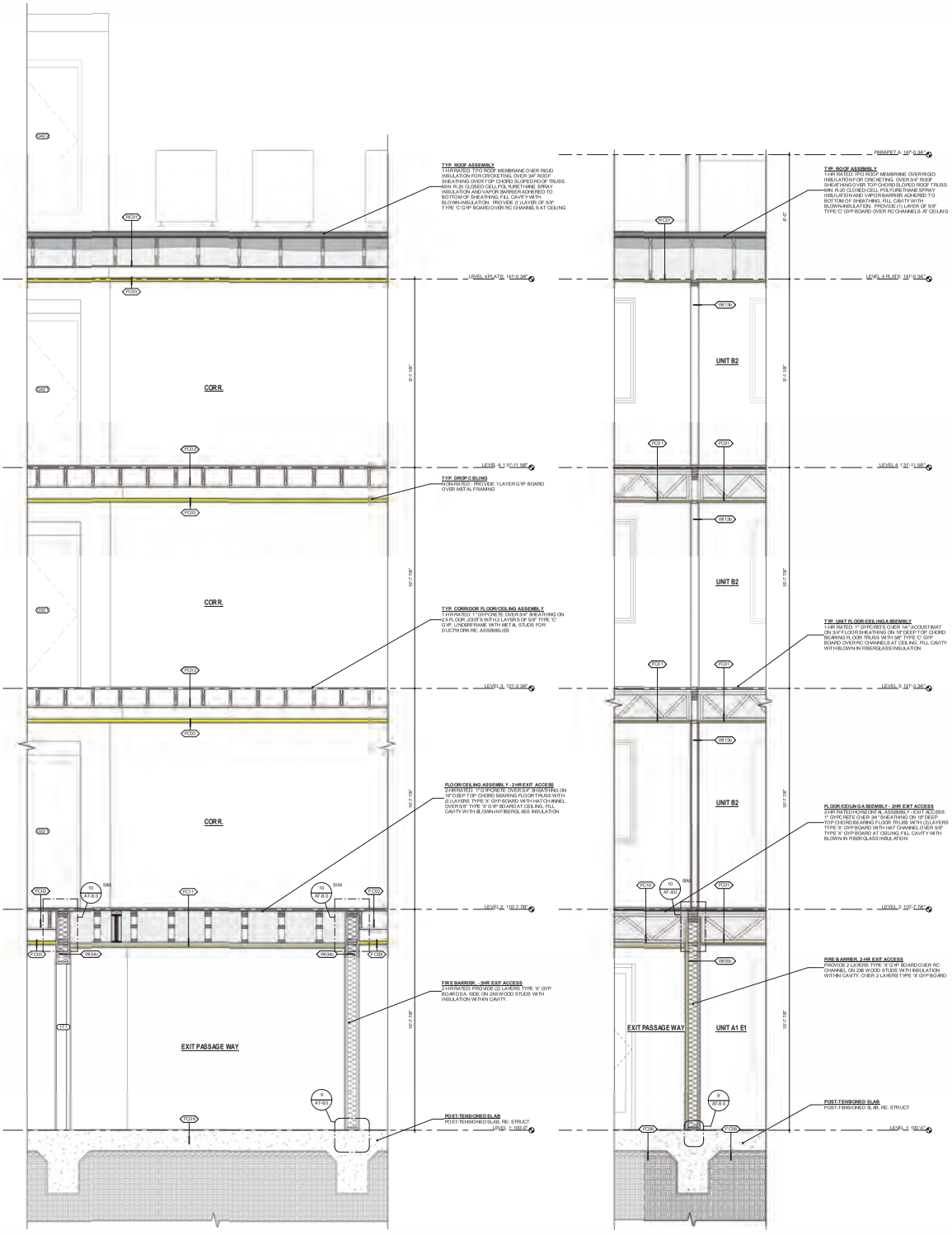


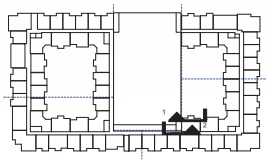
WALL TYPE SCHEDULE		
MARK	FIRE RATING	DESCRIPTION
W101c	1 HR	TYP. EXTERIOR WALL
W102c	2 HR	8" CONCRETE SHAFT WALL
W103c	1 HR	8" CONCRETE WALL
W103w	1 HR	GARAGE - 12" CONCRETE WALL
W103c	1 HR	12" CONCRETE WALL
W105c	2 HR	8" CMU - 2HR FIRE BARRIER
W105g	1 HR	8" CMU - 1 HR
W106c	1 HR	EXTERIOR WALL - 1 HR SYMMETRIC
W106c	1 HR	EXTERIOR WALL - 1 HR SYMMETRIC
W107c	NR	2x6 PARAPET WALL - NR
W108c	NR	2x6 WALL - NR @ CONDENSERS
W109c	NR	2x4 EXTERIOR FURR WALL - NON RATED
W109c	NR	2x4 EXTERIOR FURR WALL - NON RATED
W110c	1 HR	6" 18 GEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' G YP INT SIDE
W101c	2 HR	8" CMU - 2HR FIRE WALL
W102c	2 HR	8" CMU - 2HR FIRE BARRIER
W103	2 HR	FIRE WALL - 2HR
W103c	2 HR	FIRE WALL - 2 HR, (2) 2X4 WITH (2) 1" SHAFTLINER
W103c	2HR	FIRE WALL 2 HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
W104c	2 HR	FIRE BARRIER - 2HR, 2x WITH (2) 5/8" TYPE 'X' G YP
W04c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
W05c	2 HR	FIRE BARRIER, 2HR EXIT ACCESS
W106c	2 HR	2X4 INTERIOR WALL - FIRE BARRIER, SHAFTLINER ASSEMBLY
W06c	2 HR	2X6 INTERIOR WALL - FIRE BARRIER, SHAFTLINER ASSEMBLY
W107c	1 HR	OCCUPANCY SEPARATION - 1 HR FIRE BARRIER
W08c	1 HR	OCCUPANCY SEPARATION - 1 HR FIRE BARRIER
W09h	1 HR	5 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W09 h	1 HR	6" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W10h	1 HR	TYP. UNIT DEMISING - 1 HR FIRE PARTITION
W10c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
W11h	1 HR	2x6 FIRE PARTITION, 1HR - CORRIDOR
W11c	1 HR	SHAFT
W12h	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR - NO RC
W12c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
W13h	1 HR	2X6, 1HR - BEARING
W13c	1 HR	2X6, 1HR - BEARING
W14h	NR	2X6 INTERIOR WALL - NR
W14c	NR	2X6 INTERIOR WALL - NR
W15h	NR	2x4 INTERIOR NON-BEARING WALL - GWB ON 1 SIDE
W15c	NR	2x6 INTERIOR NON-BEARING WALL - GWB ON 1 SIDE
W16	NR	7/8" METAL HAT CHANNEL FURRING WALL
W17h	2 HR	2X6 FIRE BARRIER, 2HR - UNIT DEMISING
W18h	NR	6" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

FLOOR/CEILING TYPE SCHEDULE		
MARK	FIRE RATING	DESCRIPTION
FC01	1 HR	TYP. UNIT FLOOR CEILING ASSEMBLY
FC02	1 HR	TYP. CORRIDOR FLOOR CEILING ASSEMBLY
FC03	NR	TYP. DROP CEILING
FC05	NR	TYP. BALCONY ASSEMBLY - DRIP - THRU
FC06	NR	POST-TENSIONED SLAB
FC07	NR	NON-RATED TYP. CONCRETE SLAB
FC07	1HR	PRECAST CONCRETE FLOOR/CEILING
FC07	1HR	TYP. GARAGE FLOOR/CEILING
FC08	1HR	BALCONY ASSEMBLY - CONDITIONED SPACE
FC09	1HR	BALCONY ASSEMBLY
FC10	2HR	FLOOR/CEILING ASSEMBLY - 2 HR EXIT ACCESS
FC11	2HR	FLOOR/CEILING ASSEMBLY - 2 HR EXIT ACCESS
FC12	NR	SLAB ON GRADE

ROOF/CEILING TYPE SCHEDULE		
MARK	FIRE RATING	DESCRIPTION
RC01	1 HR	TYP. ROOF ASSEMBLY
RC02	1HR	TYP. ROOF ASSEMBLY
RC03	1 HR	1 HR HORIZONTAL ASSEMBLY
RC04	1 HR	1 HR HORIZONTAL ASSEMBLY
RC05	NR	SX ROOF ASSEMBLY
RC06	NR	1/2" TJI ROOF ASSEMBLY
RC07	NR	NR HORIZONTAL ASSEMBLY

2 2HR HORIZONTAL EXIT - CORRIDOR
1/2" = 1'-0"

1 2HR HORIZONTAL EXIT - COURTYARD ACCESS
1/2" = 1'-0"



WALL SECTION KEY PLAN

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ISSUE FOR CONSTRUCTION
08.07.2024

No.	Date	Issue

Project Number: 22201
Date: 08.07.2024
Drawn By: CG
Checked By: CB
Sheet Name: INTERIOR WALL SECTIONS
Sheet Number: A6-2.3

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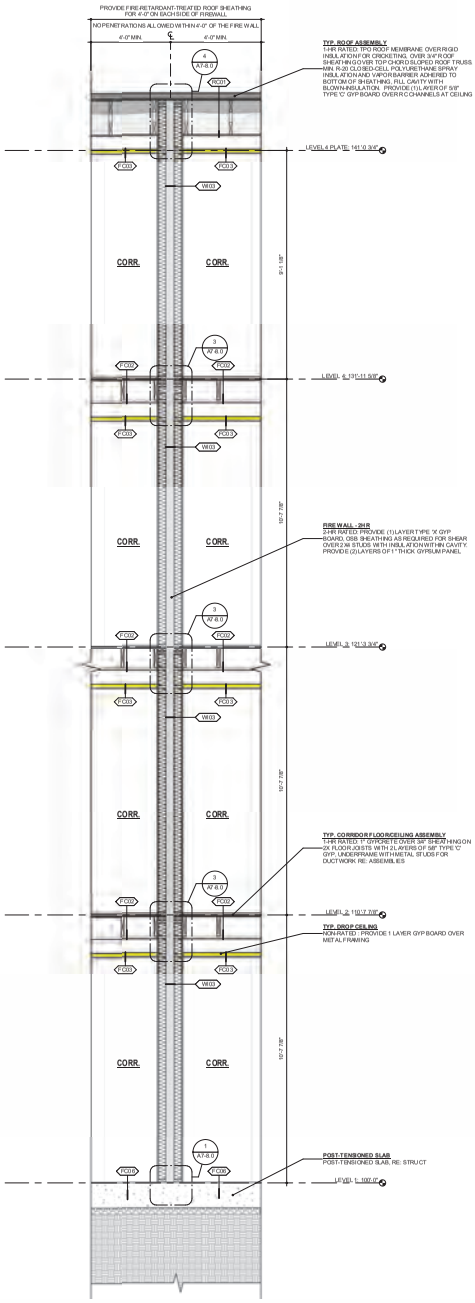
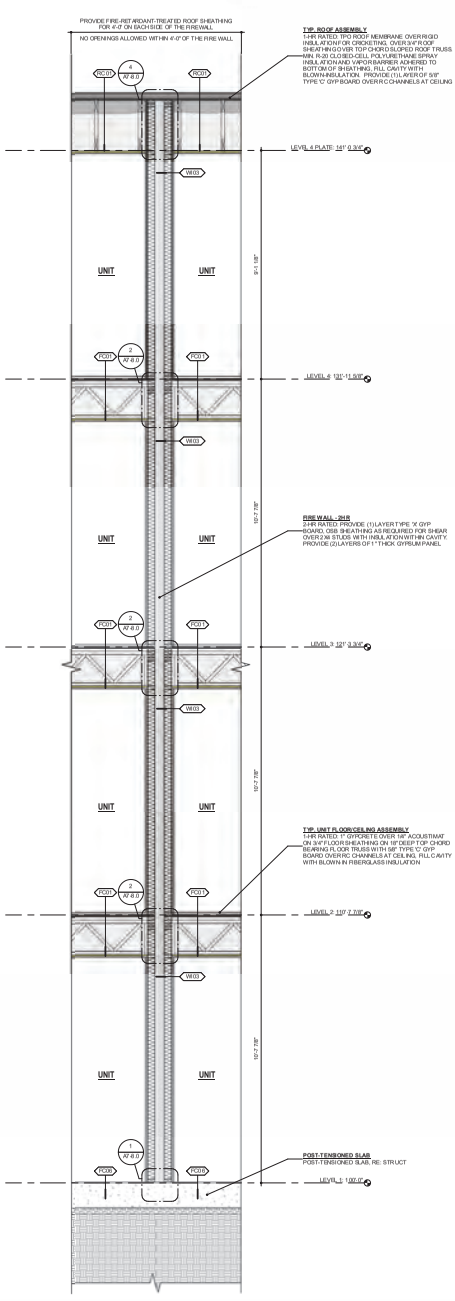


2 FIREWALL - CORRIDOR
1/2" = 1'-0"



1 FIREWALL - UNITS
1/2" = 1'-0"

WALL TYPE SCHEDULE

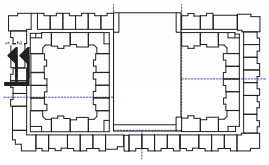
MARK	FIRE RATING	DESCRIPTION
W101c	1 HR	TYP. EXTERIOR WALL
W102c	2 HR	8" CONCRETE SHAFT WALL
W103c	1 HR	8" CONCRETE WALL
W103w	1 HR	GARAGE - 12" CONCRETE WALL
W103c	1 HR	8" CONCRETE WALL
W105c	2 HR	6" CMU - 2HR FIRE BARRIER
W106c	1 HR	8" CMU - 1 HR
W108c	1 HR	EXTERIOR WALL - 1 HR SYMMETRIC
W109c	1 HR	EXTERIOR WALL - 1 HR SYMMETRIC
W107c	NR	2x6 PARAPET WALL - NR
W108c	NR	2x6 WALL - NR @ CONDENSERS
W109c	NR	2x4 EXTERIOR FURR WALL - NON RATED
W105c	NR	2x4 EXTERIOR FURR WALL - NON RATED
W618k	1 HR	6" 18 GEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
W601c	2 HR	6" CMU - 2HR FIRE WALL
W602c	2 HR	8" CMU - 2HR FIRE BARRIER
W603	2 HR	FIRE WALL - 2HR
W603k	2 HR	FIRE WALL - 2-HR, (2) 2X4 WITH (2) 1" SHAFTLINER
W603l	2HR	FIRE WALL - 2-HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
W604k	2 HR	FIRE BARRIER - 2HR, 2x WITH (2) 5/8" TYPE 'X' GYP
W604c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
W605c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
W606k	2-HR	2X4 INTERIOR WALL - FIRE BARRIER - SHAFTLINER ASSEMBLY
W606c	2-HR	2X6 INTERIOR WALL - FIRE BARRIER - SHAFTLINER ASSEMBLY
W607c	1 HR	3 OCCUPANCY SEPARATION - 1 HR FIRE BARRIER
W608c	1 HR	3 OCCUPANCY SEPARATION - 1 HR FIRE BARRIER
W609	1 HR	3 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W609 1	1 HR	6" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W610c	1 HR	TYP. UNIT DEMISING - 1 HR FIRE PARTITION
W10c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
W11b	1 HR	2x6 FIRE PARTITION, 1HR - CORRIDOR
W11c	1 HR	swap w
W12b	1 HR	2x6 FIRE PARTITION, 1HR - CORRIDOR - NO RC
W12c	1 HR	2x6 FIRE PARTITION, 1HR - CORRIDOR NO RC
W13b	1 HR	2X6, 1HR - BEARING
W13c	1 HR	2X6, 1HR - BEARING
W14b	NR	2X6 INTERIOR WALL - NR
W14c	NR	2X6 INTERIOR WALL - NR
W15b	NR	2x6 INTERIOR NON-BEARING WALL - GWB ON 1 SIDE
W15c	NR	2x6 INTERIOR NON-BEARING WALL - GWB ON 1 SIDE
W16	NR	1 5/8" METAL HAT CHANNEL FURRING WALL
W17b	2 HR	2X6 FIRE BARRIER, 2HR - UNIT DEMISING
W18k	NR	6" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

FLOOR/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
FC01	1 HR	TYP. UNIT FLOOR/CEILING ASSEMBLY
FC02	1 HR	TYP. CORRIDOR FLOOR/CEILING ASSEMBLY
FC03	NR	TYP. DROP CEILING
FC05	NR	TYP. BALCONY ASSEMBLY - DRIP - THRU
FC06	NR	POST-TENSIONED SLAB
FC07	NR	NON-RATED PT CONCRETE SLAB
FC07	1HR	PRECAST CONCRETE FLOOR/CEILING
FC07	1HR	TYP. GARAGE FLOOR/CEILING
FC08	1HR	BALCONY ASSEMBLY - CONDITIONED SPACE
FC09	1HR	BALCONY ASSEMBLY
FC10	2HR	FLOOR/CEILING ASSEMBLY - 2 HR EXIT ACCESS
FC11	2HR	FLOOR/CEILING ASSEMBLY - 2 HR EXIT ACCESS
FC12	NR	SLAB ON GRADE

ROOF/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
RC01	1 HR	TYP. ROOF ASSEMBLY
RC02	1HR	TYP. ROOF ASSEMBLY
RC03	1 HR	1 HR HORIZONTAL ASSEMBLY
RC04	1 HR	1 HR HORIZONTAL ASSEMBLY
RC05	NR	SX ROOF ASSEMBLY
RC06	NR	1/2" TJI ROOF ASSEMBLY
RC07	NR	NR HORIZONTAL ASSEMBLY



WALL SECTION KEY PLAN

Sheet Number	A6-2.4
Title	INTERIOR WALL SECTIONS
Drawn By	DO
Checked By	CG / CB / TT / NV
Job Number	222001
Date	02/07/2024
Project Manager	DR
Project Architect	DU

No.	Date	Issue
		ISSUE FOR CONSTRUCTION 06.07.2024

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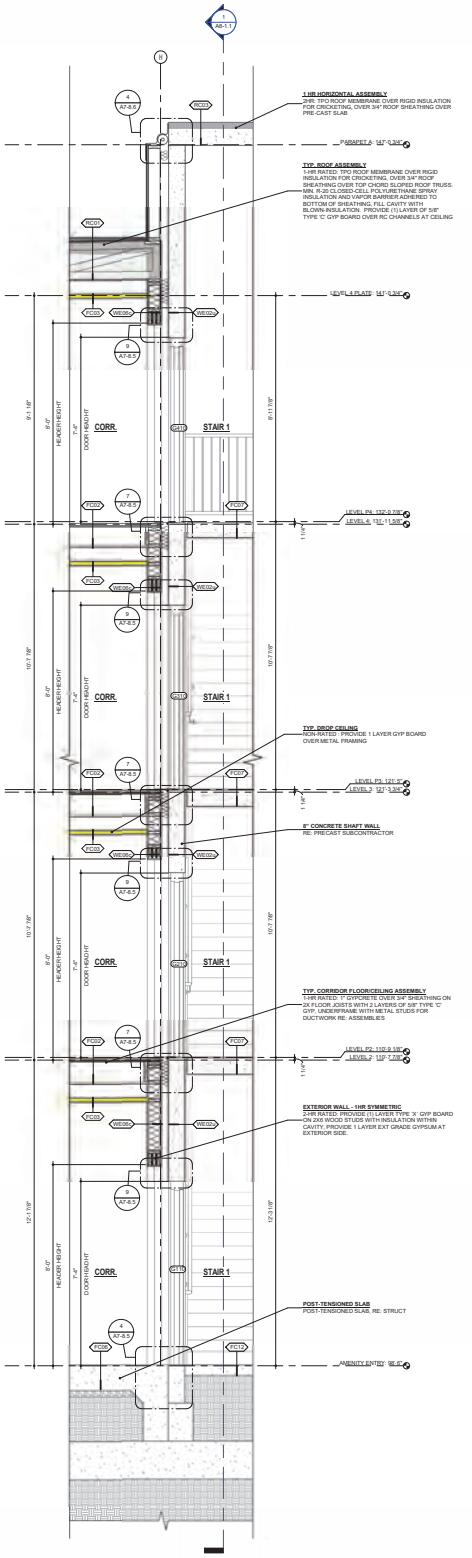
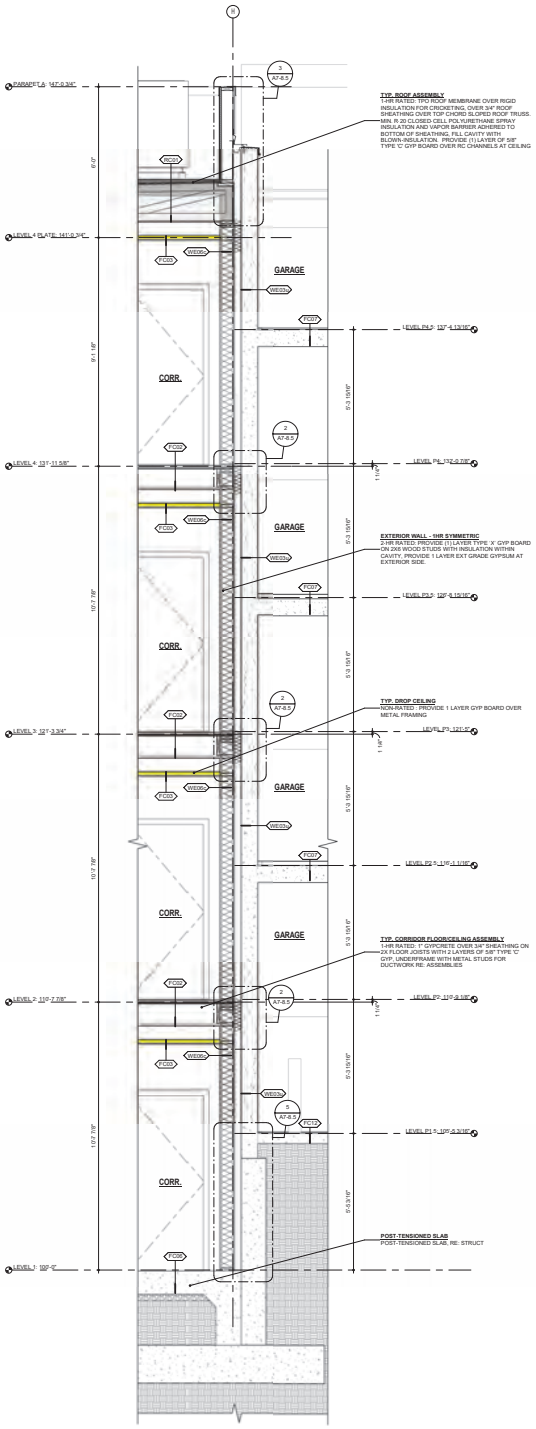


2 BLDG SEPARATION AT GARAGE - DOOR THRESHOLD
1/2" = 1'-0"

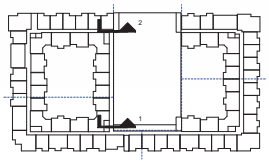


1 BLDG SEPARATION AT GARAGE
1/2" = 1'-0"

WALL TYPE SCHEDULE		
MARK	FIRE RATING	DESCRIPTION
WE02a	1 HR	TYP. EXTERIOR WALL
WE02b	2 HR	8" CONCRETE SHAFT WALL
WE03a	1 HR	8" CONCRETE WALL
WE03d	1 HR	GARAGE - 12" CONCRETE WALL
WE03c	1 HR	6" CONCRETE WALL
WE04d	2 HR	8" CMU - 2HR FIRE BARRIER
WE05a	1 HR	8" CMU - 1 HR
WE06b	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE06c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE07c	NR	2x6 PARAPET WALL - NR
WE08c	NR	2x6 WALL - NR @ CONDENSERS
WE09b	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE09c	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE19a	1 HR	6" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
WE01d	2 HR	8" CMU - 2HR FIRE WALL
WE02d	2 HR	8" CMU - 2HR FIRE BARRIER
WE03	2 HR	FIRE WALL - 2HR
WE03b	2 HR	FIRE WALL - 2-HR. (2) 2X4 WITH (2) 1" SHAFTLINER
WE03h	2HR	FIRE WALL 2-HR. (2) 1 5/8" WITH (2) 1" SHAFTLINER
WE04b	2 HR	FIRE BARRIER- 2-HR. 2x WITH (2) 5/8" TYPE 'X' GYP
WE04c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
WE05c	2 HR	FIRE BARRIER. 2-HR EXIT ACCESS
WE06b	2-HR	2X4 INTERIOR WALL - FIRE BARRIER - SHAFTLINER ASSEMBLY
WE06c	2-HR	2X6 INTERIOR WALL - FIRE BARRIER - SHAFTLINER ASSEMBLY
WE07b	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
WE08c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
WE09b	1 HR	2 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
WE09c	1 HR	6" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
WE09e	1 HR	TYP. UNIT DEMISING - 1-HR FIRE PARTITION
WE10c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
WE11b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
WE11c	1 HR	<delete>
WE12b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
WE12c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
WE13b	1 HR	2X4, 1HR - BEARING
WE13c	1 HR	2X6, 1HR - BEARING
WE14b	NR	2X4, INTERIOR WALL - NR
WE14c	NR	2X6, INTERIOR WALL - NR
WE15b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
WE15c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
WE16	NR	7/8" METAL HAT CHANNEL FURRING WALL
WE17b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
WE18b	NR	6" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

FLOOR/CEILING TYPE SCHEDULE		
MARK	FIRE RATING	DESCRIPTION
FC01	1 HR	TYP. UNIT FLOOR/CEILING ASSEMBLY
FC02	1 HR	TYP. CORRIDOR FLOOR/CEILING ASSEMBLY
FC03	NR	TYP. DROP CEILING
FC04	NR	TYP. BALCONY ASSEMBLY - DRIP - THRU
FC05	NR	POST-TENSIONED SLAB
FC07	NR	NON-RATED PT CONCRETE SLAB
FC07	1HR	PRECAST CONCRETE FLOOR/CEILING
FC07	1HR	TYP. GARAGE FLOOR/CEILING
FC08	1HR	BALCONY ASSEMBLY - CONDITIONED SPACE
FC09	1HR	BALCONY ASSEMBLY
FC10	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC11	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC12	NR	SLAB ON GRADE

ROOF/CEILING TYPE SCHEDULE		
MARK	FIRE RATING	DESCRIPTION
RC01	1HR	TYP. ROOF ASSEMBLY
RC02	1HR	TYP. ROOF ASSEMBLY
RC03	1HR	1 HR HORIZONTAL ASSEMBLY
RC04	1 HR	1 HR HORIZONTAL ASSEMBLY
RC05	NR	2X ROOF ASSEMBLY
RC06	NR	12" TJI ROOF ASSEMBLY
RC07	NR	NR HORIZONTAL ASSEMBLY



WALL SECTION KEY PLAN

Sheet Number	A6-2.5
Sheet Name	COMMON
Title	INTERIOR WALL SECTIONS
Project #	22001
Author	CG / CB / TT / NV
Checked by	DT
Title	Typical Detail
Drawn by	DR
Approved by	DV

No.	Date
	ISSUE FOR CONSTRUCTION 08.01.2024

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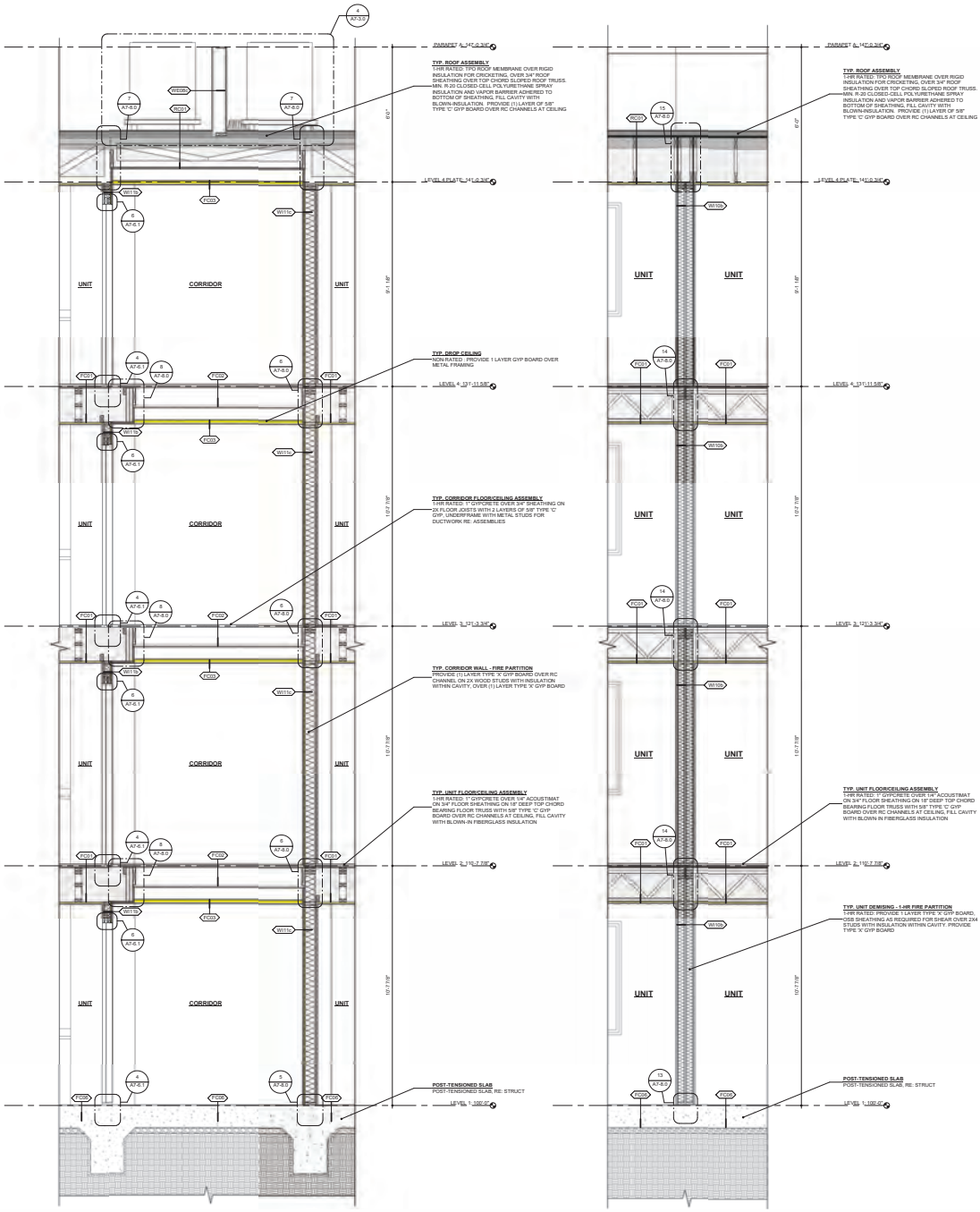
WALL TYPE SCHEDULE		
MARK	FIRE RATING	DESCRIPTION
WE02c	1 HR	TYP. EXTERIOR WALL
WE02d	2 HR	8" CONCRETE SHAFT WALL
WE03a	1 HR	8" CONCRETE WALL
WE03d	1 HR	GARAGE - 12" CONCRETE WALL
WE03i	1 HR	8" CONCRETE WALL
WE04d	2 HR	8" CMU - 2HR FIRE BARRIER
WE05a	1 HR	8" CMU - 1 HR
WE06b	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE06c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE07c	NR	2x6 PARAPET WALL - NR
WE08c	NR	2x6 WALL - NR @ CONDENSERS
WE09b	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE09c	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE19a	1 HR	6" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
WE01d	2 HR	8" CMU - 2HR FIRE WALL
WE02a	2 HR	8" CMU - 2HR FIRE BARRIER
WE03	2 HR	FIRE WALL - 2HR
WE03b	2 HR	FIRE WALL - 2 HR. (2) 2X4 WITH (2) 1" SHAFTLINER
WE03i	2HR	FIRE WALL - 2 HR. (2) 1 5/8" WITH (2) 1" SHAFTLINER
WE04b	2 HR	FIRE BARRIER - 2 HR. 2x WITH (2) 5/8" TYPE 'X' GYP
WE04c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
WE05c	2 HR	FIRE BARRIER - 2 HR EXIT ACCESS
WE06b	2 HR	2X4 INTERIOR WALL - FIRE BARRIER - SHAFTLINER ASSEMBLY
WE06c	2 HR	2X6 INTERIOR WALL - FIRE BARRIER - SHAFTLINER ASSEMBLY
WE07b	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
WE08c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
WE09b	1 HR	2 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
WE09c	1 HR	6" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
WE09d	1 HR	TYP. UNIT DEMISING - 1-HR FIRE PARTITION
WE10c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
WE11b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
WE11c	1 HR	<delete>
WE12b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
WE12c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
WE13b	1 HR	2X4, 1HR - BEARING
WE13c	1 HR	2X6, 1HR - BEARING
WE14b	NR	2X4, INTERIOR WALL - NR
WE14c	NR	2X6, INTERIOR WALL - NR
WE15b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
WE15c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
WE16	NR	7/8" METAL HAT CHANNEL FURRING WALL
WE17b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
WE18b	NR	6" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

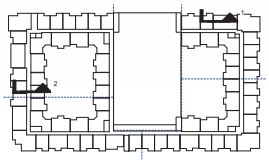
FLOOR/CEILING TYPE SCHEDULE		
MARK	FIRE RATING	DESCRIPTION
FC01	1 HR	TYP. UNIT FLOOR/CEILING ASSEMBLY
FC02	1 HR	TYP. CORRIDOR FLOOR/CEILING ASSEMBLY
FC03	NR	TYP. DROP CEILING
FC04	NR	TYP. BALCONY ASSEMBLY - DRIP - THRU
FC05	NR	POST-TENSIONED SLAB
FC07	NR	NON-RATED PT CONCRETE SLAB
FC07	1HR	PRECAST CONCRETE FLOOR/CEILING
FC07	1HR	TYP. GARAGE FLOOR/CEILING
FC08	1HR	BALCONY ASSEMBLY - CONDITIONED SPACE
FC09	1HR	BALCONY ASSEMBLY
FC10	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC11	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC12	NR	SLAB ON GRADE

ROOF/CEILING TYPE SCHEDULE		
MARK	FIRE RATING	DESCRIPTION
RC01	1HR	TYP. ROOF ASSEMBLY
RC02	1HR	TYP. ROOF ASSEMBLY
RC03	1HR	1 HR HORIZONTAL ASSEMBLY
RC04	1 HR	1 HR HORIZONTAL ASSEMBLY
RC05	NR	2X ROOF ASSEMBLY
RC06	NR	5/8" TJI ROOF ASSEMBLY
RC07	NR	NR HORIZONTAL ASSEMBLY



2 TYP. CORRIDOR WALL
1/2" = 1'-0"

1 TYP. UNIT DEMISING
1/2" = 1'-0"



WALL SECTION KEY PLAN

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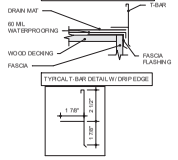
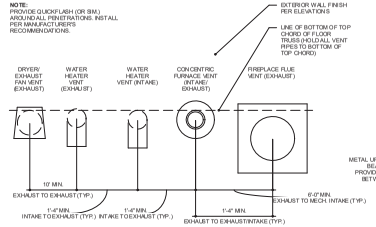
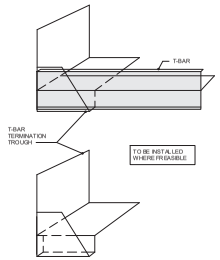


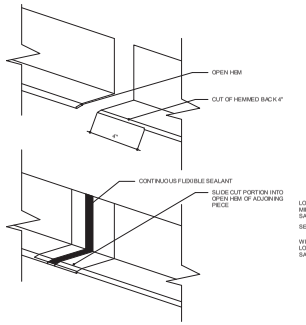
12 T-BAR DETAILING
3" = 1'-0"



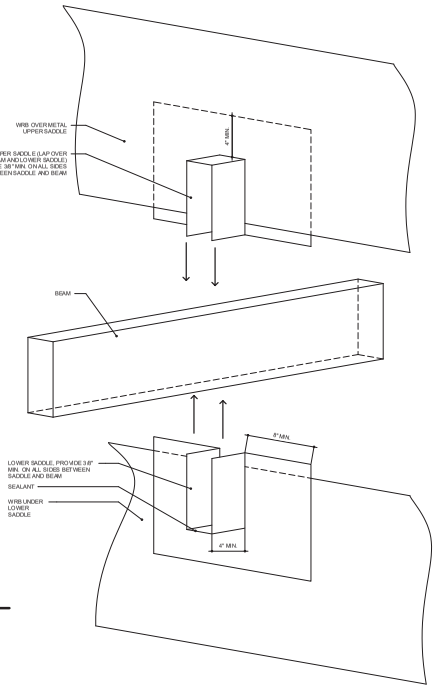
9 EXTERNAL PENETRATION DETAIL
1 1/2" = 1'-0"



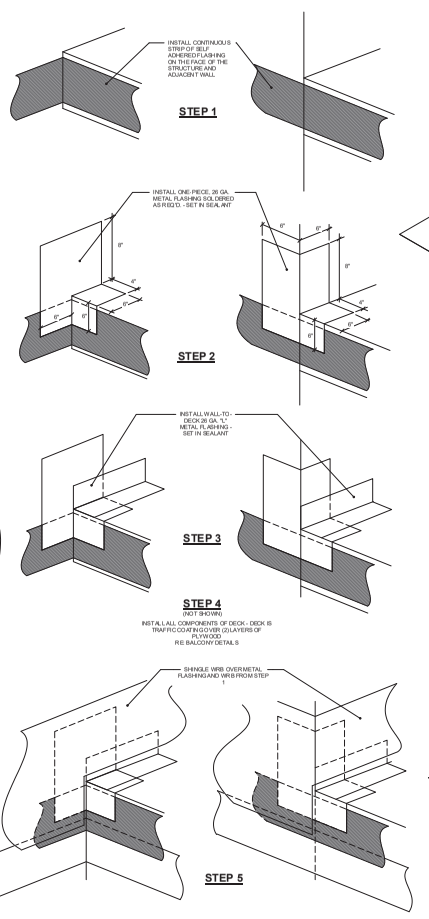
11 T-BAR DETAILING
1" = 1'-0"



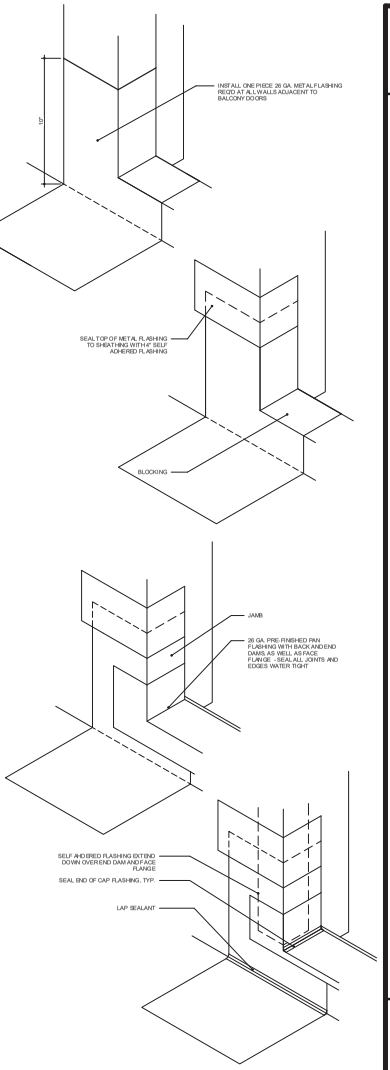
8 TYPICAL HEMMED FLASHING
3" = 1'-0"



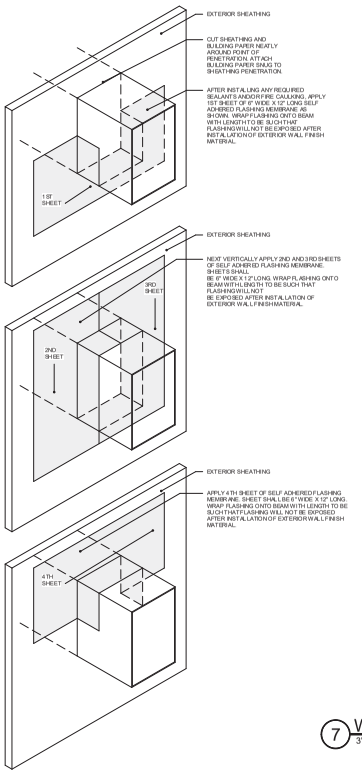
6 SADDLE FLASHING
1" = 1'-0"



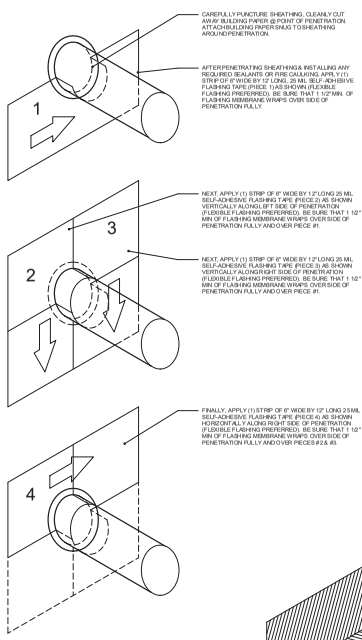
4 BALCONY AT WALL FLASHING DETAIL
3/4" = 1'-0"



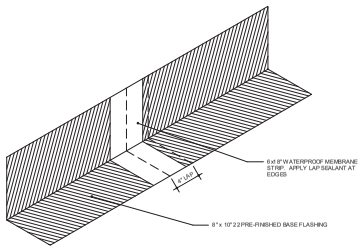
2 FLASHING AT DOOR OPENING
3" = 1'-0"



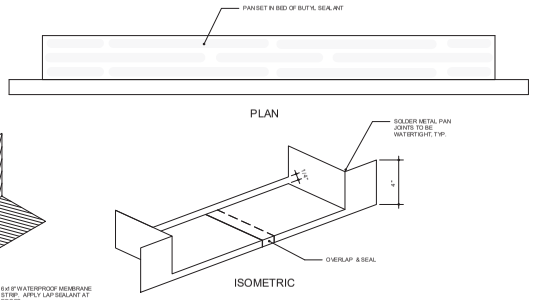
10 BEAM PENETRATION FLASHING DIAGRAM
3" = 1'-0"



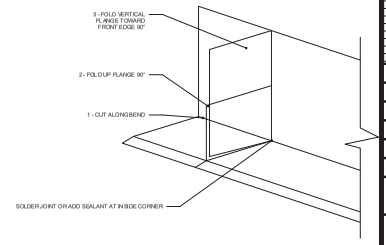
7 WALL PENETRATION DETAIL
3" = 1'-0"



5 TYPICAL LAPPED FLASHING
3" = 1'-0"



3 THRESHOLD PAN FLASHING
3" = 1'-0"



1 TYPICAL END DAM IN WALL FLASHING
3" = 1'-0"

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06.01.2024

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Project Designer: DR
Title:
Job Number: 222001
Drawn By: CG / CB/ TT/ NV
Checked By: JG
Title: WALL FLASHING DETAILS
Sheet Number: A7-0.1

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06.07.2024

No.	Date	Issue

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Technologist	DR
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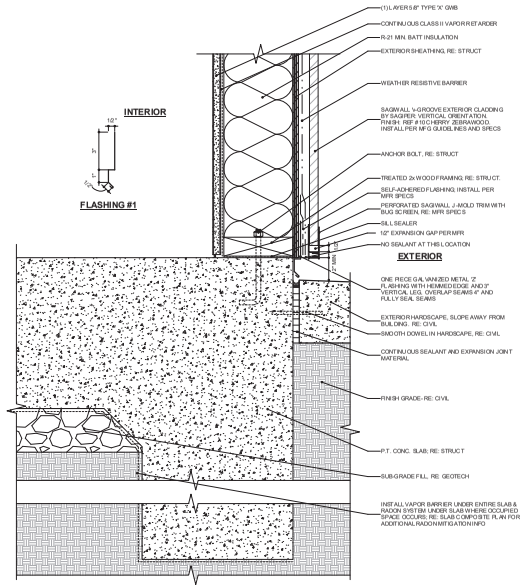
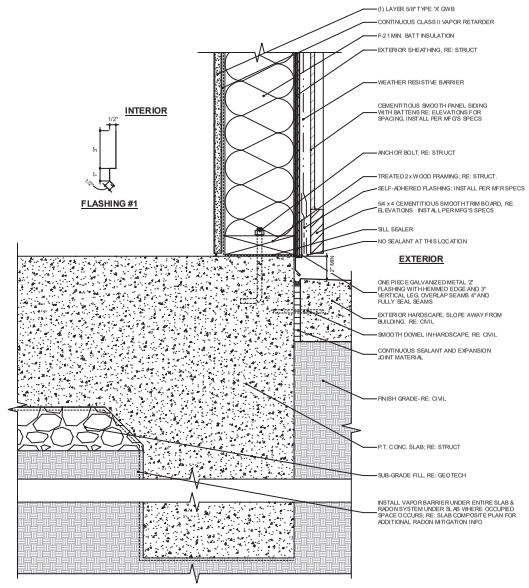
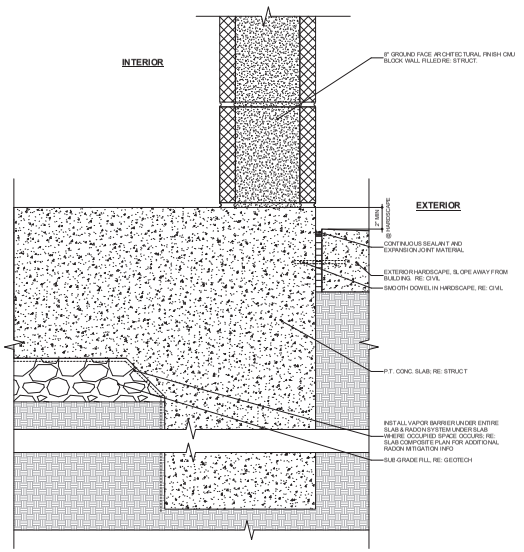
Submitted	22001
Issued to	CG / CB / TT / NV
Checked by	JG
Title	WINDOW FLASHING DETAILS
Sheet Number	A7-0.2



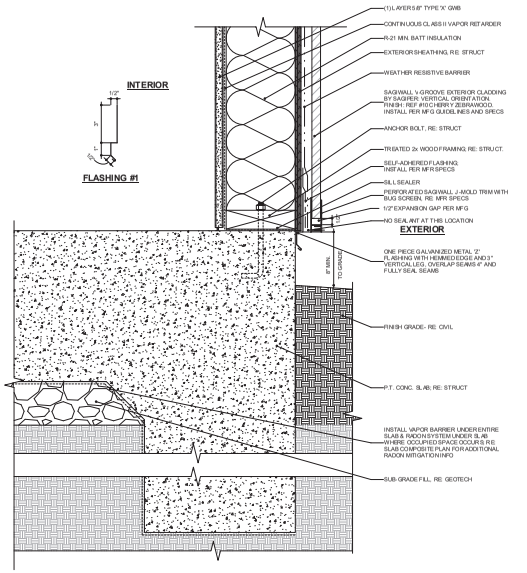
6 SAGIWALL TERMINATION, SITE WALK - PT SLAB
3" = 1'-0"



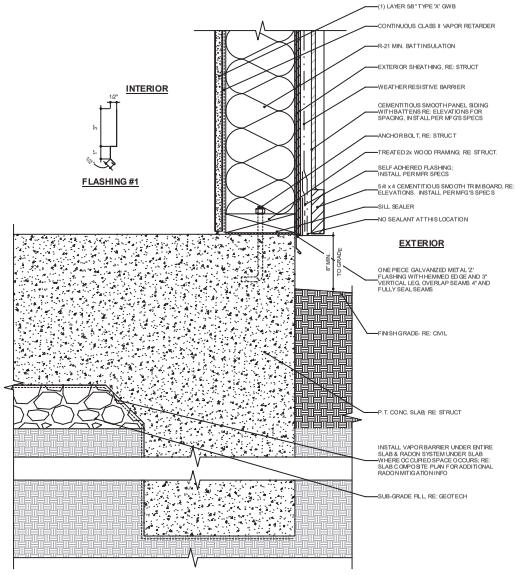
4 B&B TERMINATION, SITE WALK - PT SLAB
3" = 1'-0"



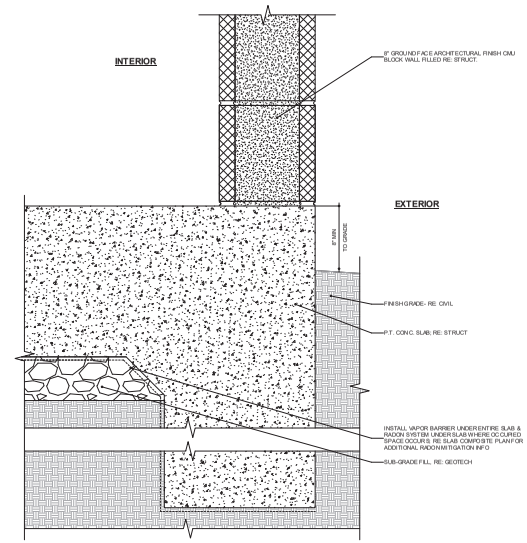
2 CMU TERMINATION, SITE WALK - PT SLAB
3" = 1'-0"



5 SAGIWALL TERMINATION, GRADE - PT SLAB
3" = 1'-0"



3 B&B TERMINATION, GRADE - PT SLAB
3" = 1'-0"



1 CMU TERMINATION, GRADE - PT SLAB
3" = 1'-0"

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08.01.2024

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Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: FOUNDATION DETAILS
Sheet Number: A7-1.0

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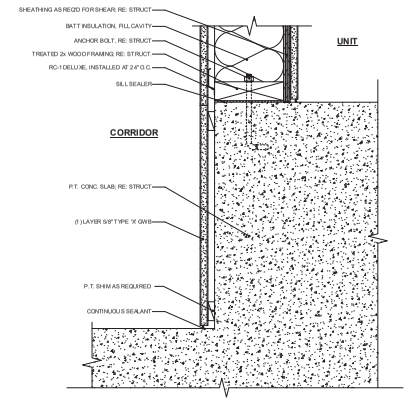
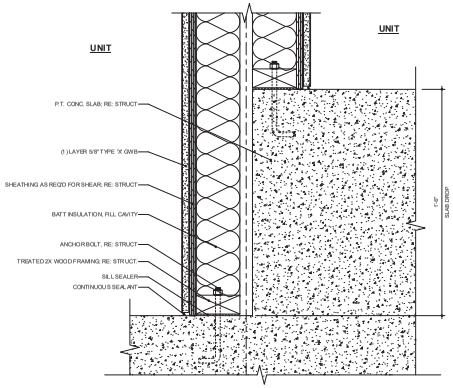
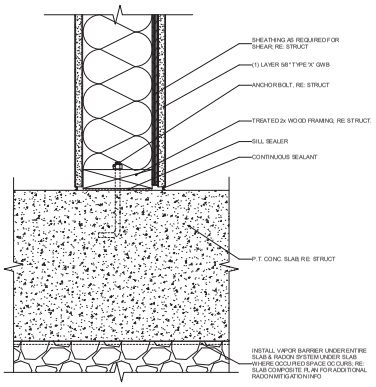


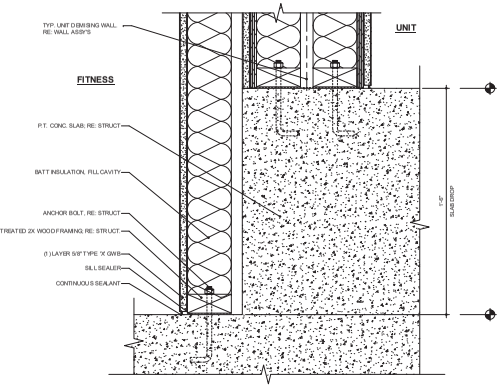
7 SLAB STEP AT CORRIDOR
3" = 1'-0"



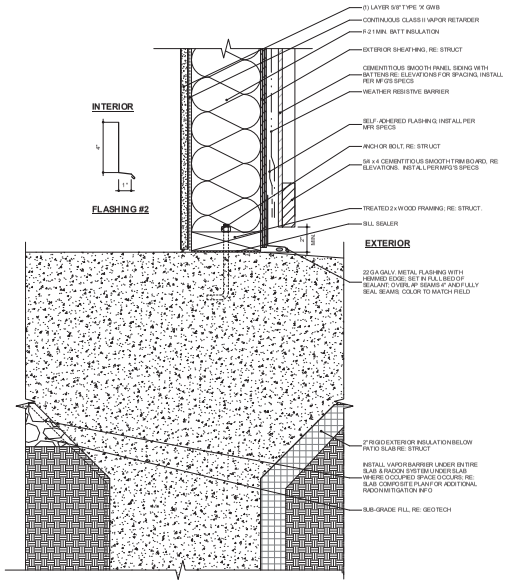
6 SLAB STEP AT DEMISING WALLS
3" = 1'-0"



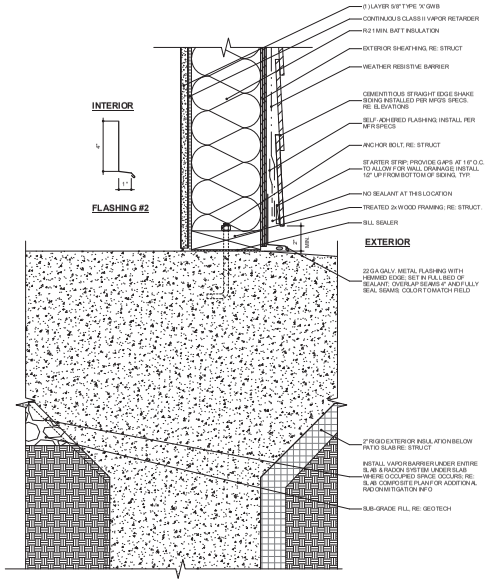
5 FOUNDATION AT INTERIOR WALL - TYP.
3" = 1'-0"



3 SLAB STEP AT FITNESS
3" = 1'-0"



8 B&B TERMINATION, PATIO - PT SLAB
3" = 1'-0"



1 SHAKE SIDING TERMINATION, PATIO - PT SLAB
3" = 1'-0"

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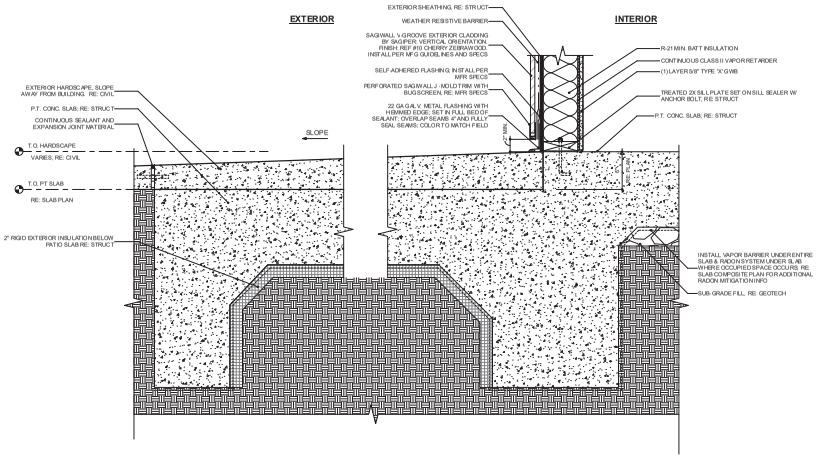
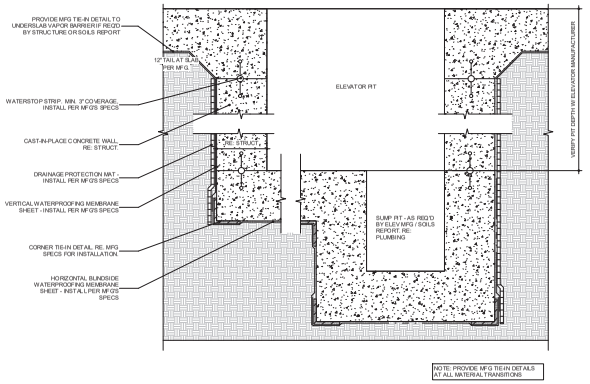
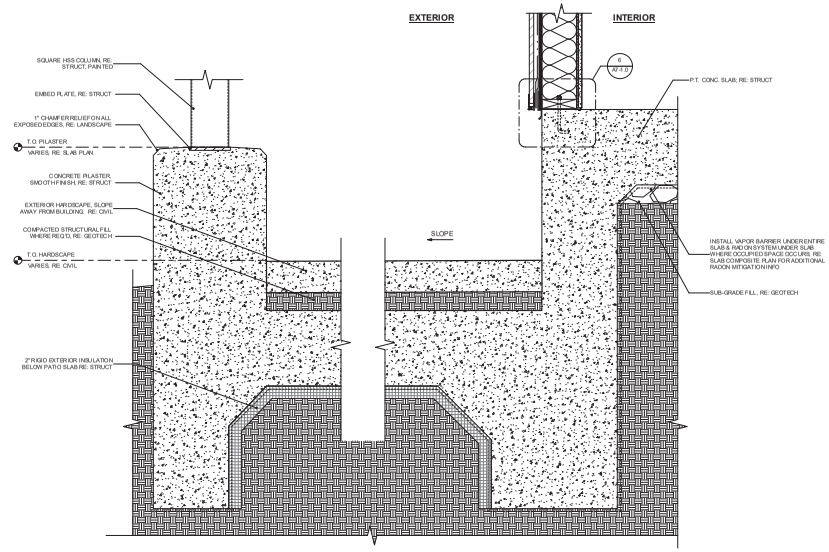


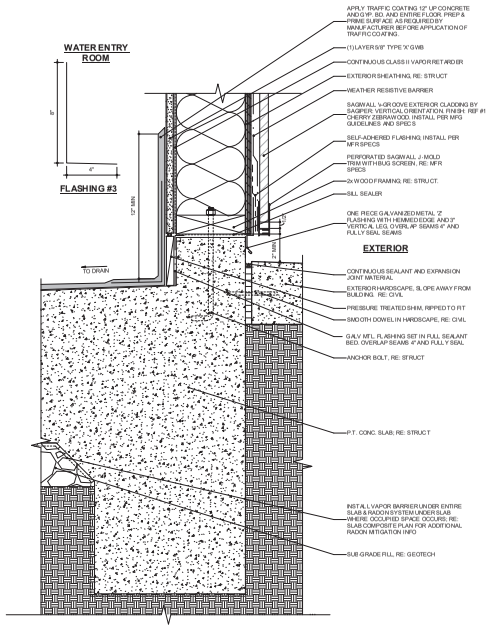
4 FOUNDATION AT ENTRY
1 1/2" = 1'-0"



2 ELEVATOR PIT WATERPROOFING
1 1/2" = 1'-0"



3 FOUNDATION AT CONCRETE PILASTERS
1 1/2" = 1'-0"



1 WATER ENTRY ROOM - PT SLAB
3" = 1'-0"

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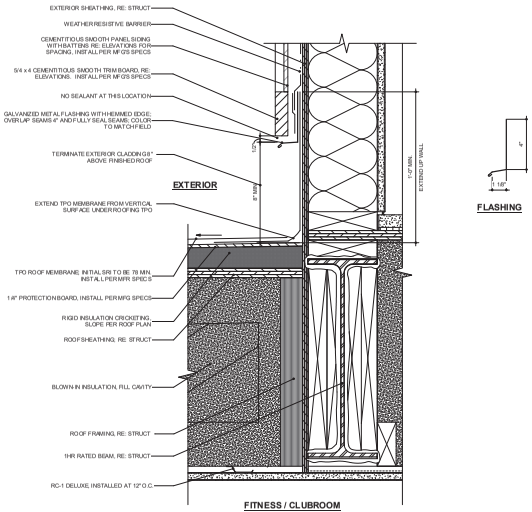
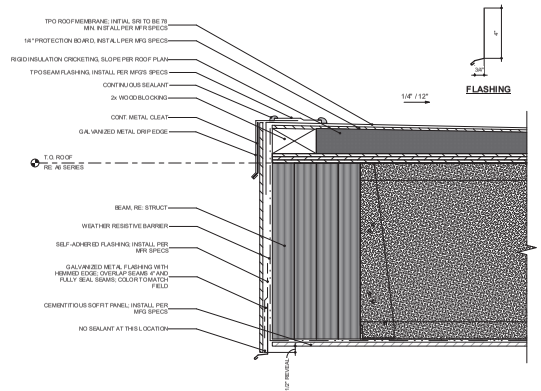
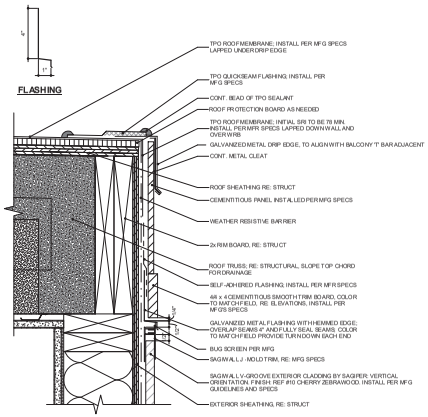


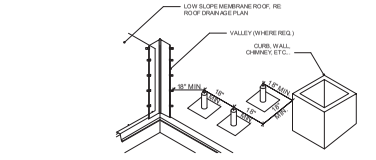
8 B&B AT CANOPY ROOF
3" = 1'-0"



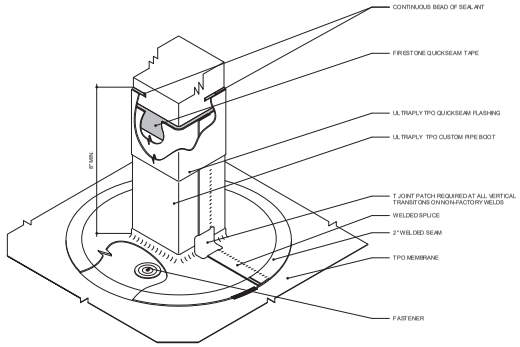
7 ENTRY CANOPY ROOF EDGE
3" = 1'-0"



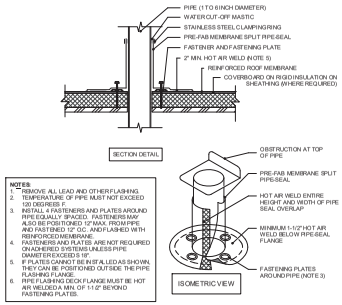
6 ROOF AT FLUSH WALL
3" = 1'-0"



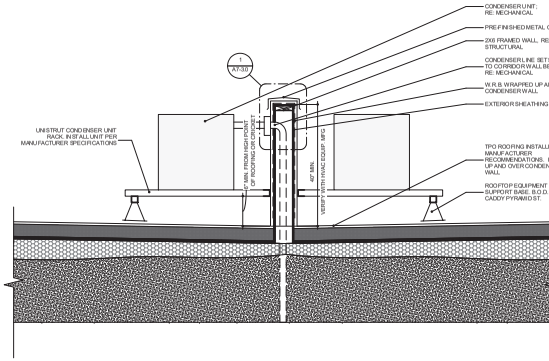
3 LOW SLOPED ROOF - PENETRATION CLEARANCES
1 1/2" = 1'-0"



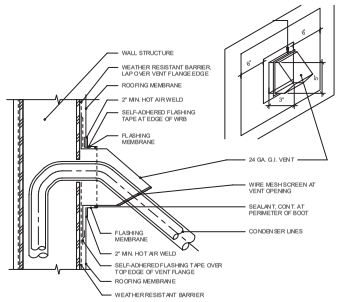
5 TYPICAL ROOF PENETRATION FLASHING
3" = 1'-0"



2 SPLIT SEAL PIPE PENETRATION
1 1/2" = 1'-0"



4 CONDENSER RACK DETAIL
3/4" = 1'-0"



1 MECHANICAL FLASHING PLATFORM DETAIL
1 1/2" = 1'-0"

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MARSHALL POINTE

MARSHALL POINTE LAND AQUISITION, LLC
5170 MARSHALL ST - ARVADA, CO 80002

ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	
Job Number	222001
Drawn By	CG / CB/ TT / NV
Checked By	JG
Title	ROOF DETAILS
Sheet Number	A7-3.0

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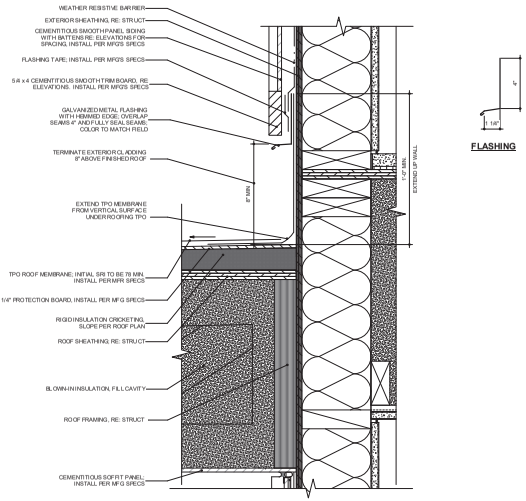
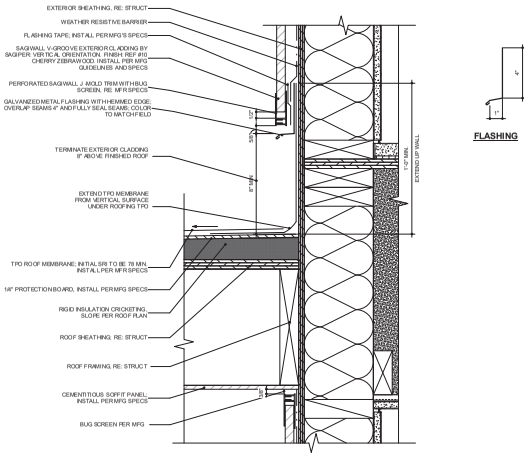
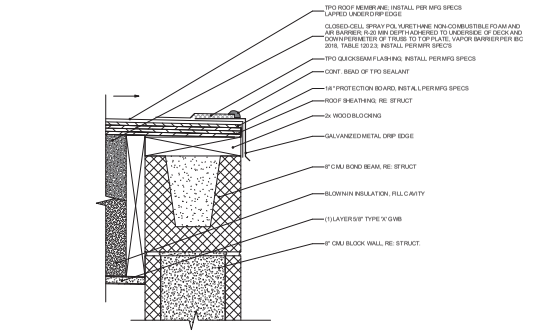


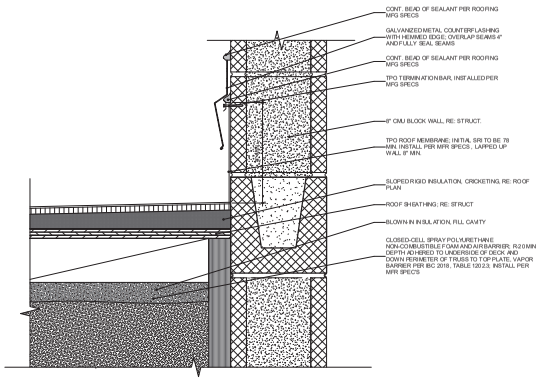
8 B&B AT MAIN ENTRY CANOPY ROOF
3" = 1'-0"



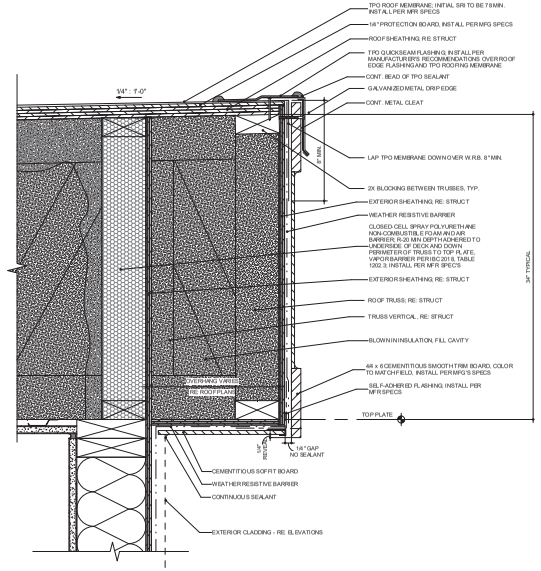
7 SAGIWALL AT ENTRY CANOPY ROOF
3" = 1'-0"



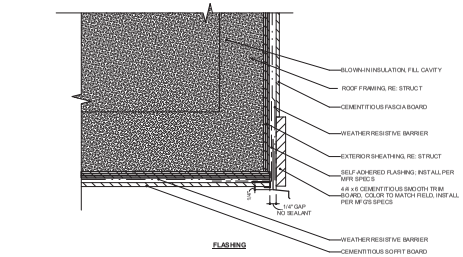
6 DRIP EDGE AT TPO, CMU
3" = 1'-0"



5 ROOF AT CMU PARAPET
3" = 1'-0"



4 ROOF PROJECTION - TYP.
3" = 1'-0"



3 ROOF EDGE AT CEMENTITIOUS SOFFIT
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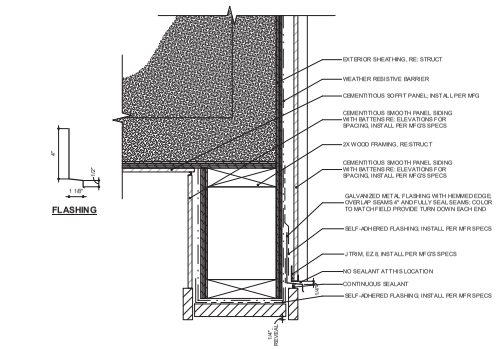
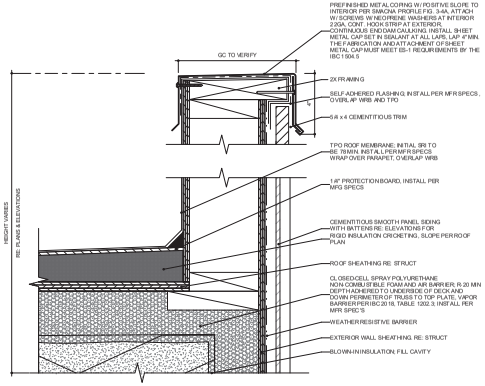


2 BULKHEAD AT BOARD AND BATTEN
3" = 1'-0"



1 ROOF PARAPET DETAIL - TYP.
3" = 1'-0"

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ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: ROOF DETAILS
Sheet Number: **A7-3.1**

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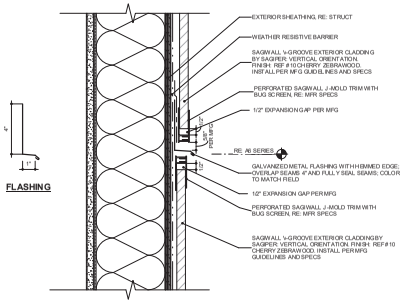
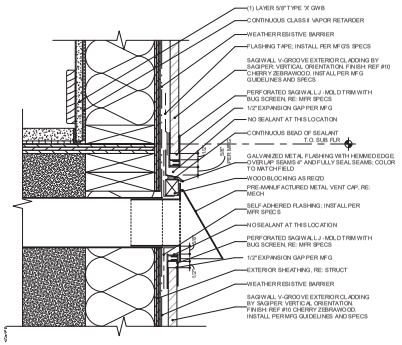
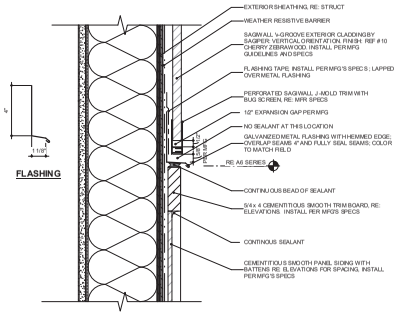


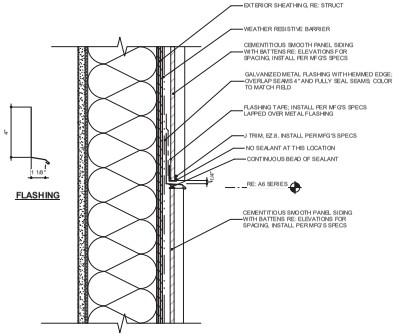
6 SAGIWALL AT HORIZONTAL FLASHING
3" = 1'-0"



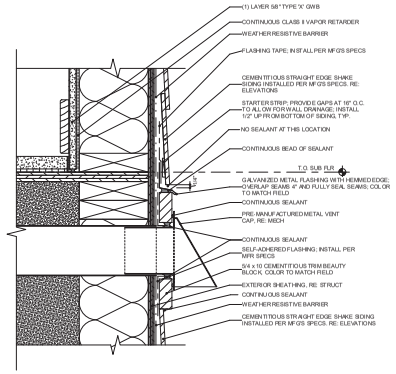
3 WALL VENT TERM, BEAUTY BLOCK, SAGIWALL
3" = 1'-0"



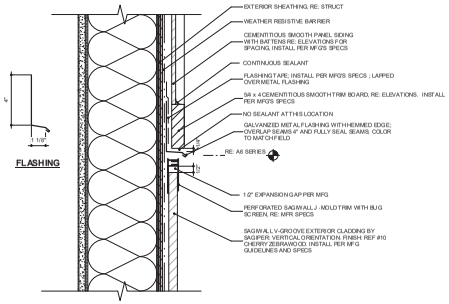
8 SAGIWALL TO B&B
3" = 1'-0"



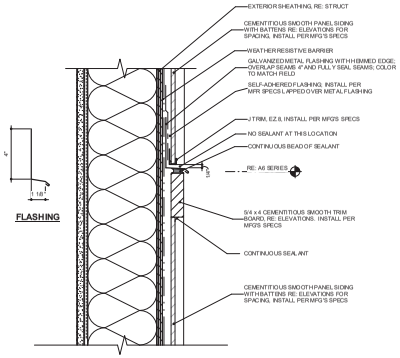
5 BOARD & BATTEN AT HORIZONTAL FLASHING
3" = 1'-0"



2 WALL VENT TERM, BEAUTY BLOCK, SHAKE SIDING
3" = 1'-0"



7 B&B TO SAGIWALL
3" = 1'-0"



4 BOARD & BATTEN AT BELLY BAND
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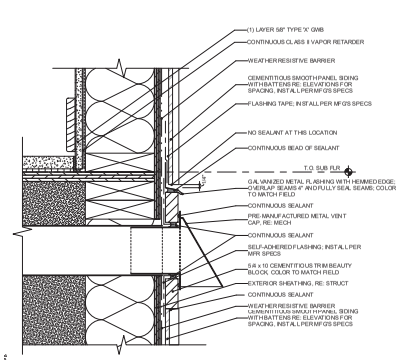

1 WALL VENT TERM, BEAUTY BLOCK, B&B
3" = 1'-0"

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Title: EXTERIOR WALL SECTION DETAILS
Sheet Number: A7-4.0

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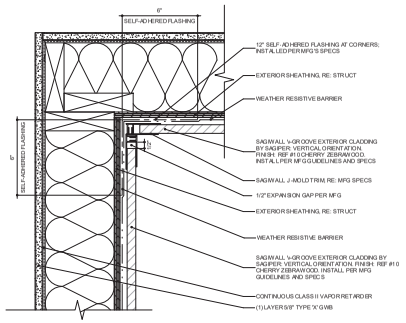
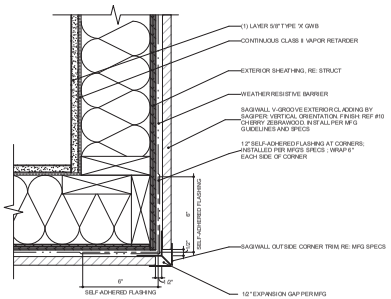
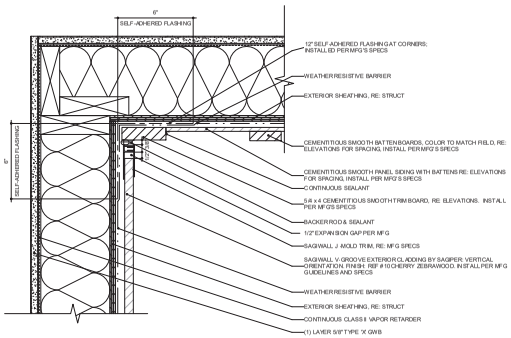


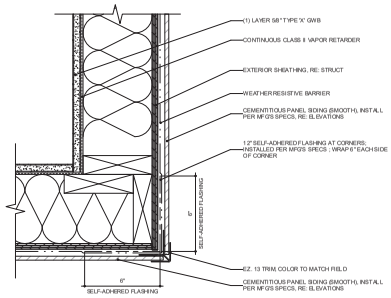
6 INSIDE CORNER, SAGIWALL
3" = 1'-0"



3 OUTSIDE CORNER, SAGIWALL
3" = 1'-0"



8 INSIDE CORNER, SAGIWALL TO B&B
3" = 1'-0"



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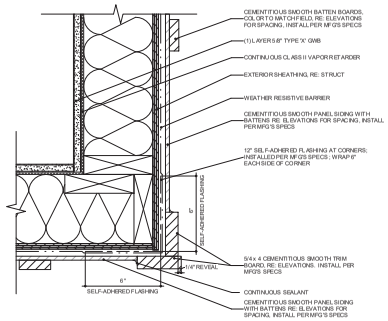
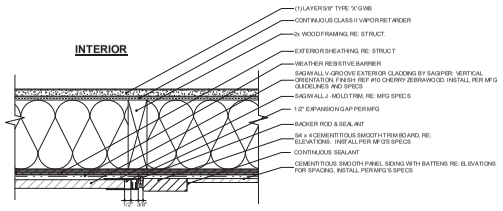
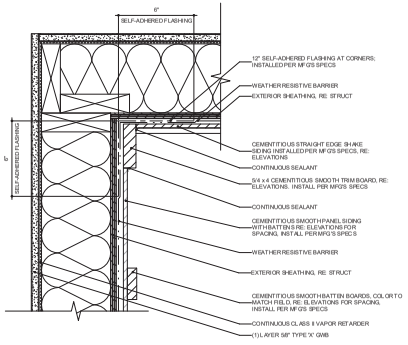


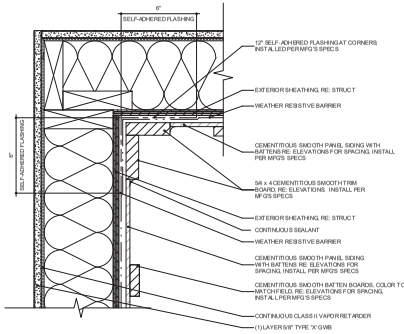
2 OUTSIDE CORNER, BOARD & BATTEN
3" = 1'-0"



7 SAGIWALL TO B&B PLAN
3" = 1'-0"



4 INSIDE CORNER, B&B TO SHAKE SIDING
3" = 1'-0"



1 INSIDE CORNER, BOARD & BATTEN
3" = 1'-0"

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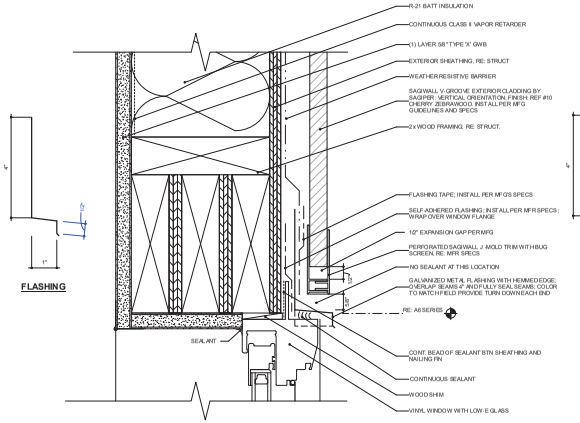
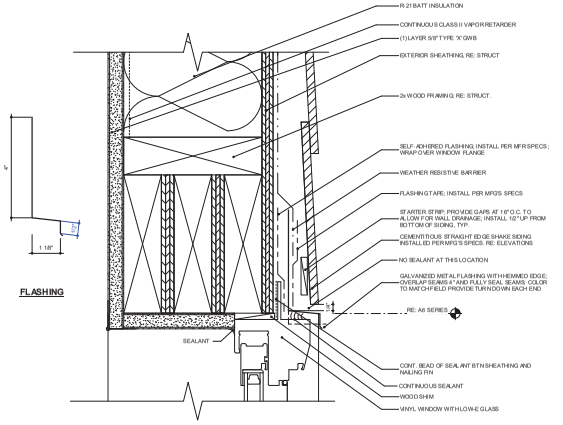
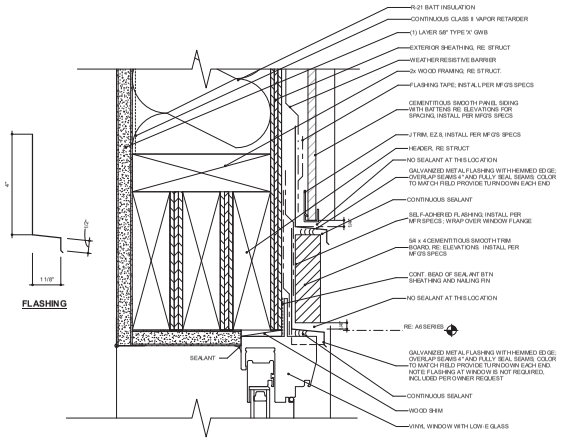


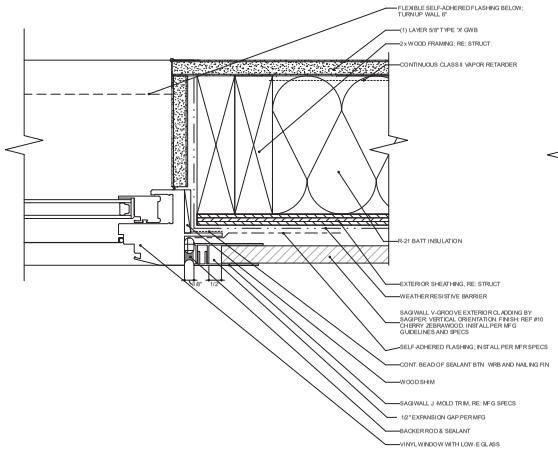
9 WINDOW HEAD, SAGIWALL
6" = 1'-0"



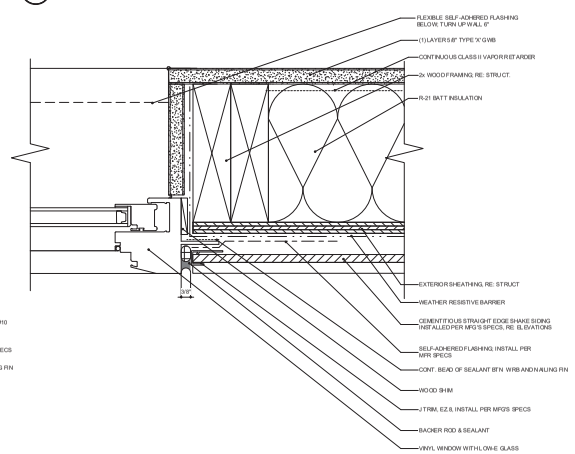
6 WINDOW HEAD, SHAKE SIDING
6" = 1'-0"



3 WINDOW HEAD, BOARD AND BATTEN
6" = 1'-0"



8 WINDOW JAMB, SAGIWALL
6" = 1'-0"



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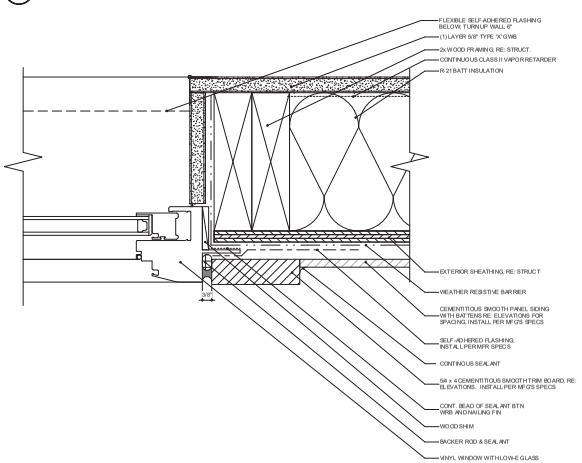
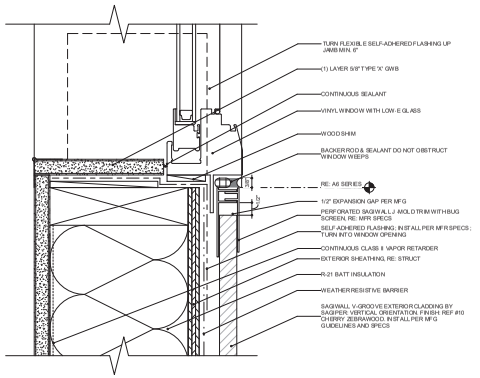
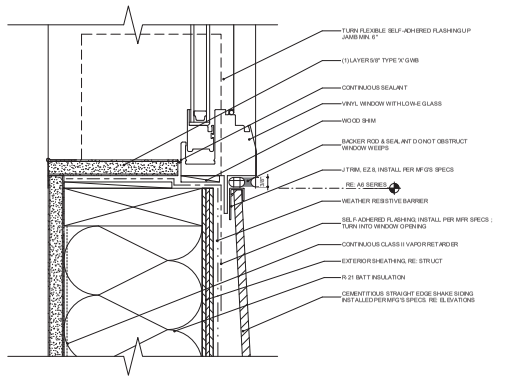
6" = 1'-0"



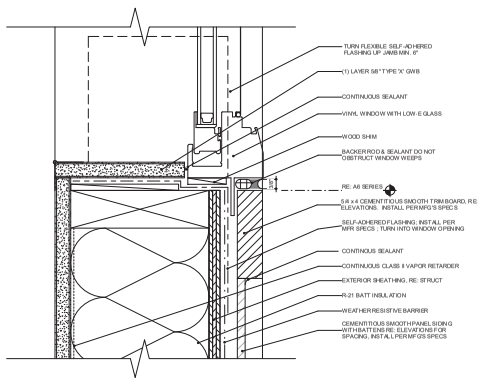
2 WINDOW JAMB, BOARD AND BATTEN
6" = 1'-0"



7 WINDOW SILL, SAGIWALL
6" = 1'-0"



4 WINDOW SILL, SHAKE SIDING
6" = 1'-0"



1 WINDOW SILL, BOARD AND BATTEN
6" = 1'-0"

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Title: WINDOW DETAILS
Sheet Number: A7-5.0

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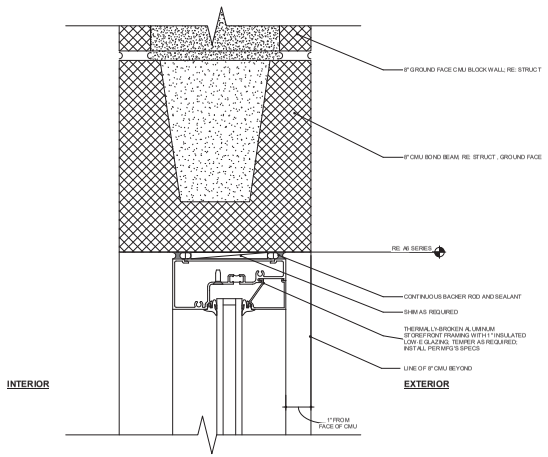
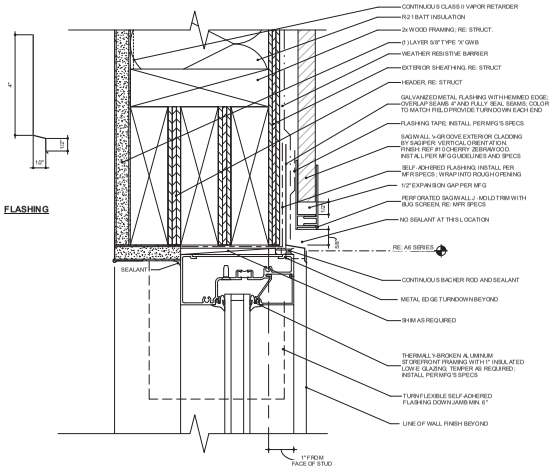
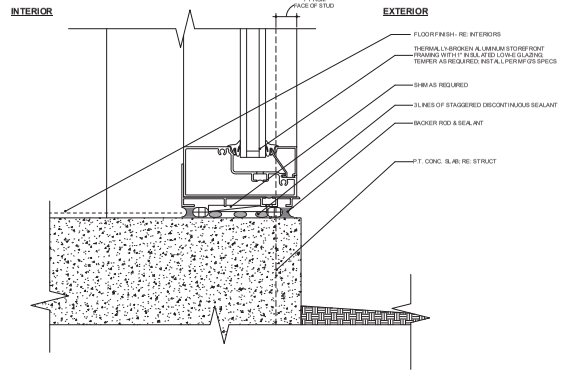


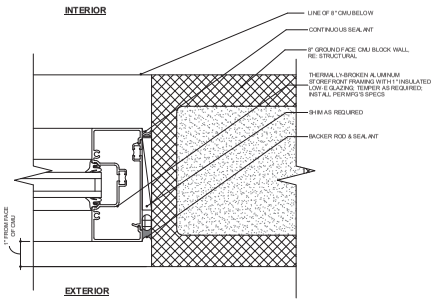
9 STOREFRONT HEAD, CMU
6" = 1'-0"



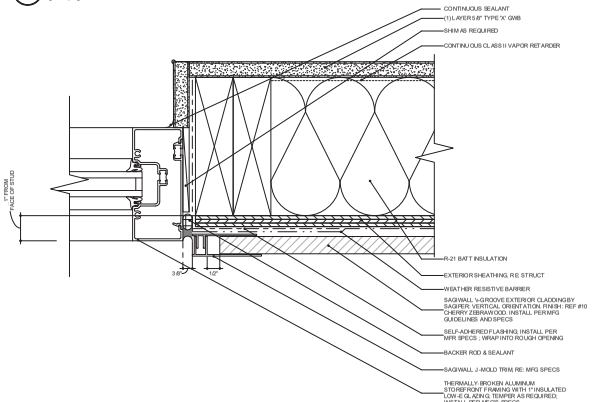
6 STOREFRONT HEAD, SAGIWALL
6" = 1'-0"



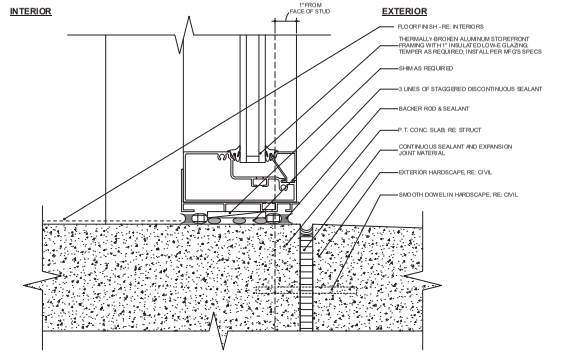
3 STOREFRONT SILL @ GRADE
6" = 1'-0"



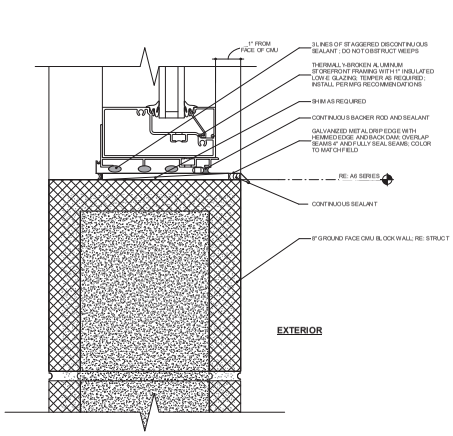
8 STOREFRONT JAMB, CMU
6" = 1'-0"



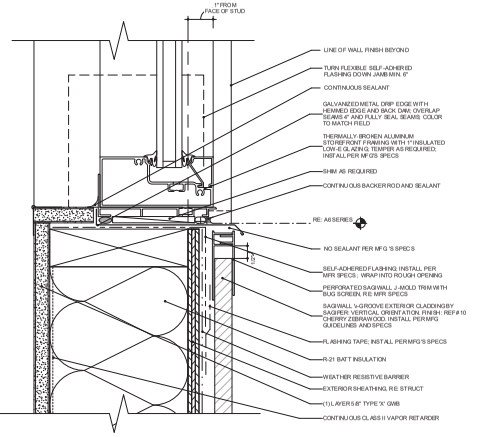
5 STOREFRONT JAMB, SAGIWALL
6" = 1'-0"



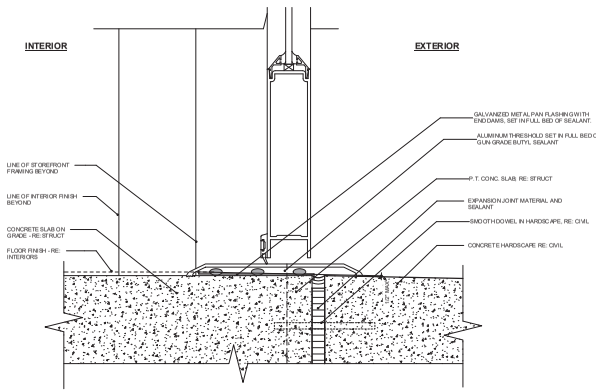
2 STOREFRONT SILL @ SITE WALK
6" = 1'-0"



7 STOREFRONT SILL, CMU
6" = 1'-0"



4 STOREFRONT SILL, SAGIWALL
6" = 1'-0"



1 STOREFRONT DOOR THRESHOLD AT ENTRY
6" = 1'-0"

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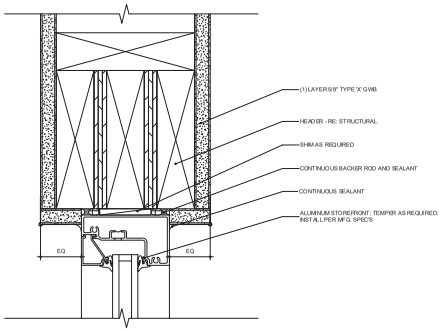
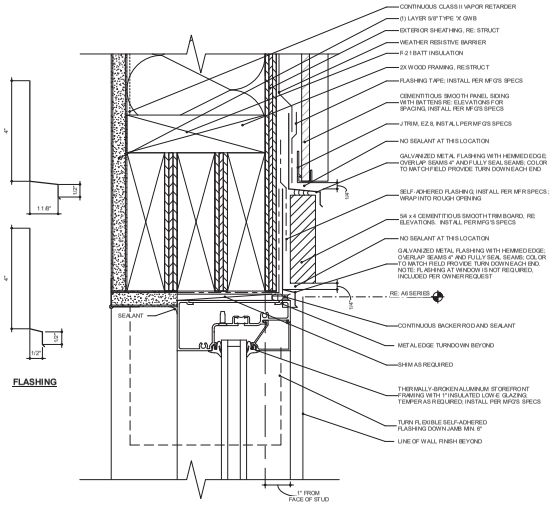
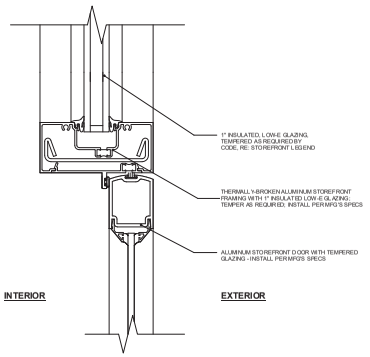


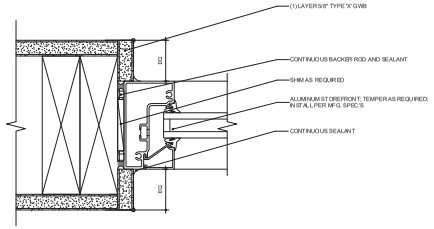
6 INTERIOR STOREFRONT HEAD
6" = 1'-0"



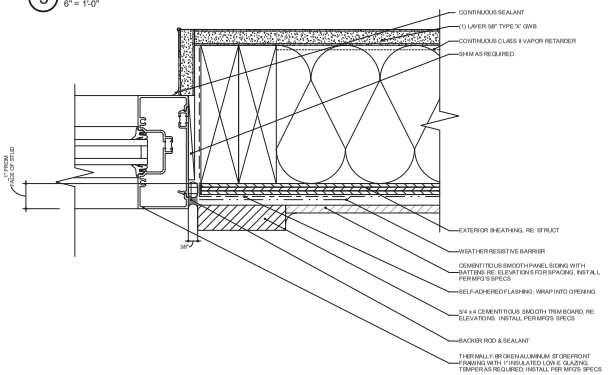
3 STOREFRONT HEAD, BOARD AND BATTEN
6" = 1'-0"



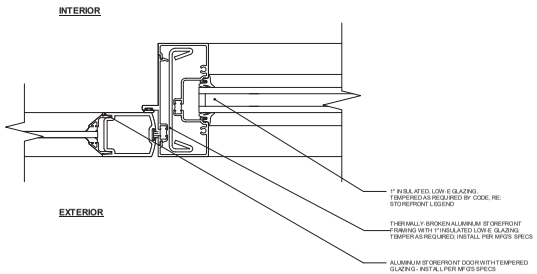
8 STOREFRONT DOOR HEAD AT TRANSOM
6" = 1'-0"



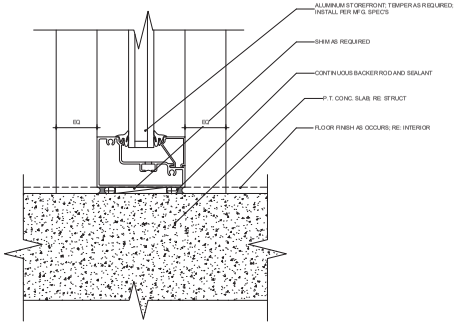
5 INTERIOR STOREFRONT JAMB
6" = 1'-0"



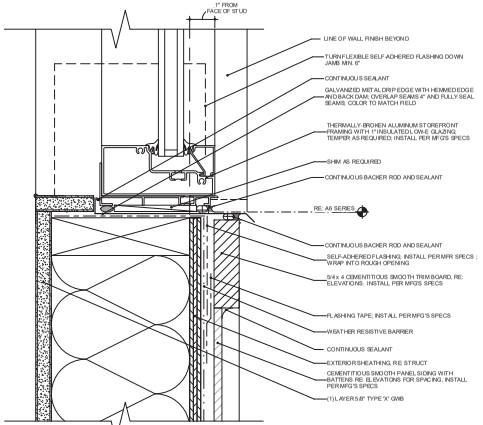
2 STOREFRONT JAMB, BOARD AND BATTEN
6" = 1'-0"



7 STOREFRONT DOOR JAMB AT SIDELIGHT
6" = 1'-0"



4 INTERIOR STOREFRONT SILL AT SLAB
6" = 1'-0"



1 STOREFRONT SILL, BOARD AND BATTEN
6" = 1'-0"

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ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: STOREFRONT DETAILS
Sheet Number: **A7-5.2**

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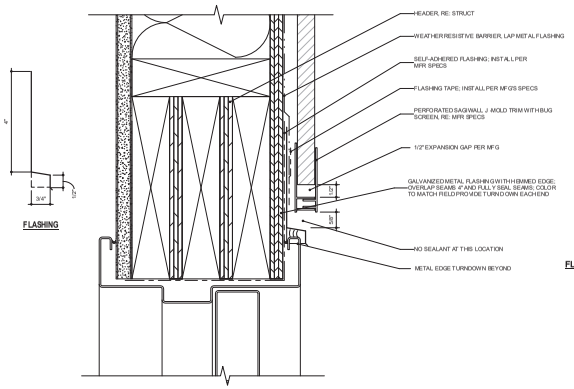
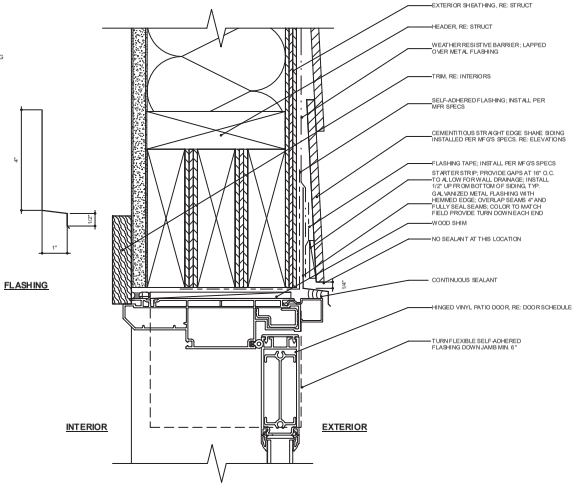
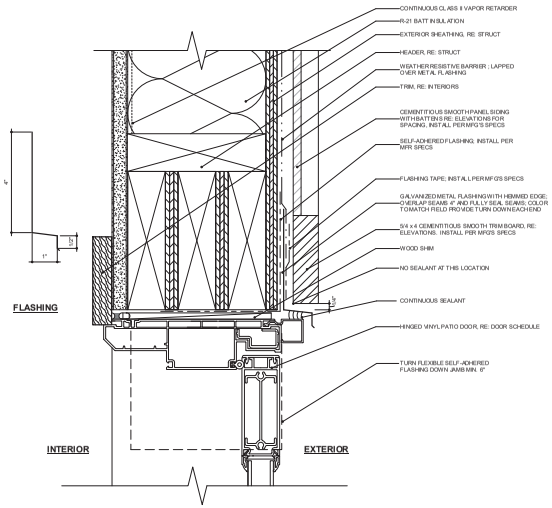


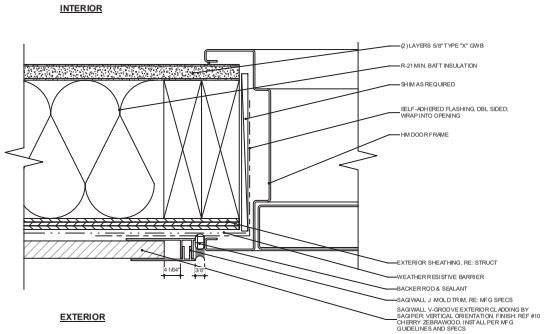
8 HM DOOR HEAD AT SAGIWALL
6" = 1'-0"



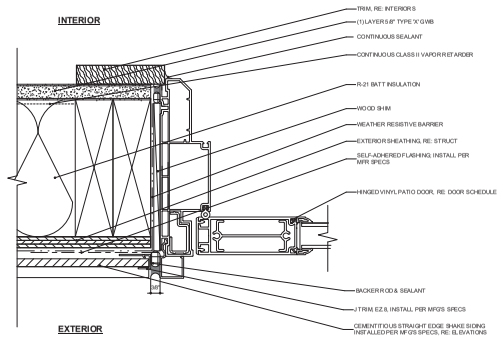
5 BALCONY DOOR HEAD, SHAKE SIDING
6" = 1'-0"



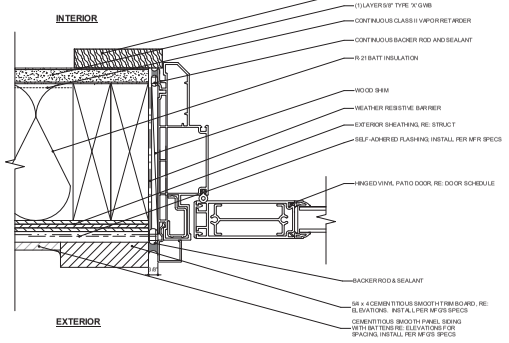
3 BALCONY DOOR HEAD, B&B
6" = 1'-0"



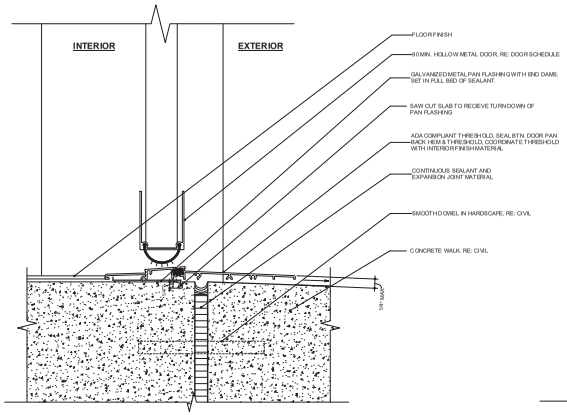
7 HM DOOR JAMB AT SAGIWALL
6" = 1'-0"



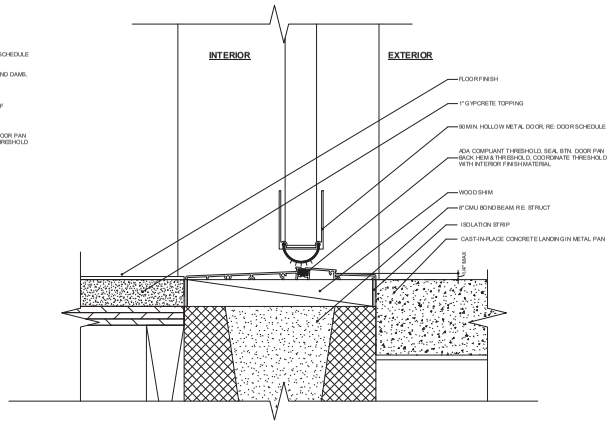
4 BALCONY DOOR JAMB, SHAKE SIDING
6" = 1'-0"



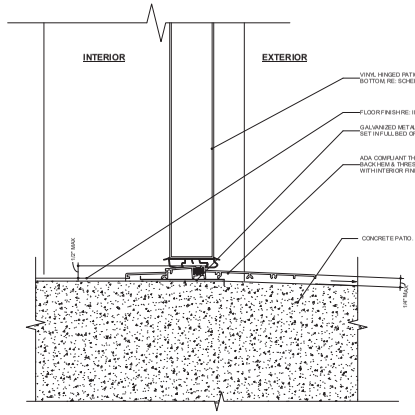
2 BALCONY DOOR JAMB, B&B
6" = 1'-0"



6 HM DOOR THRESHOLD AT SLAB
6" = 1'-0"



9 HM DOOR THRESHOLD AT CMU
6" = 1'-0"



1 UNIT BALCONY DOOR THRESHOLD @ SLAB
6" = 1'-0"

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ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Title:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: DOOR DETAILS
Sheet Number: A7-6.0

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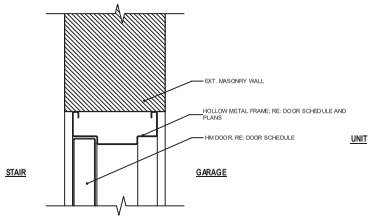
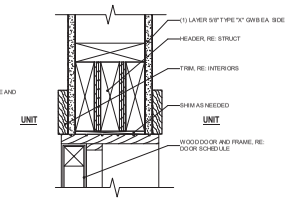
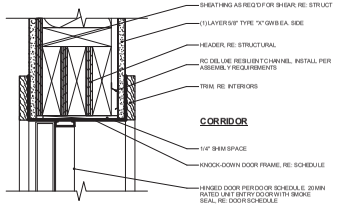


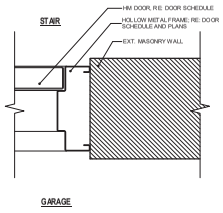
11 EXT. HM DOOR HEAD
3" = 1'-0"



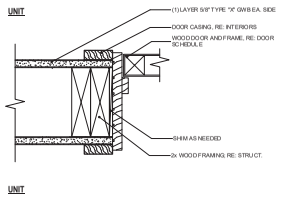
9 UNIT INTERIOR DOOR HEAD
3" = 1'-0"



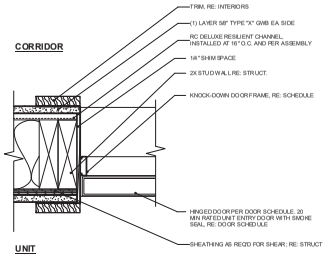
6 UNIT ENTRY DOOR HEAD
3" = 1'-0"



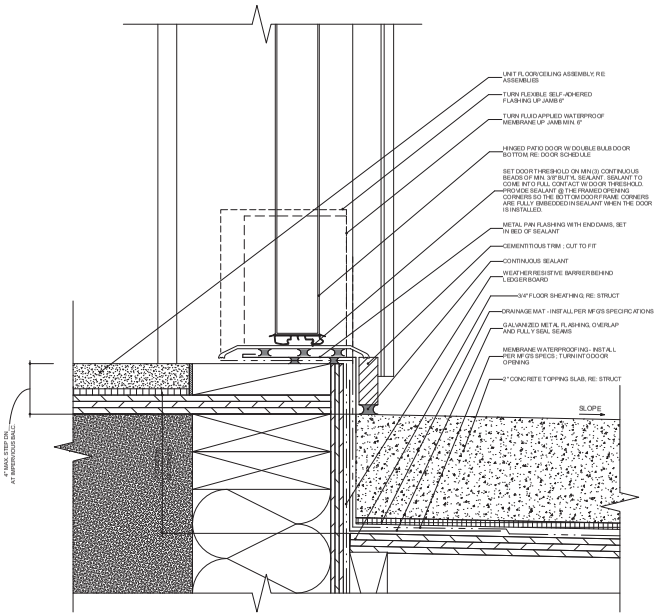
10 EXT. HM DOOR JAMB
3" = 1'-0"



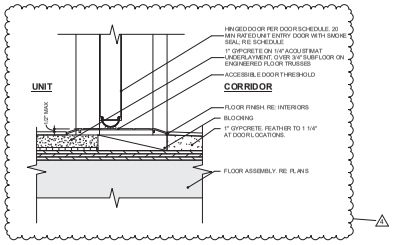
8 UNIT INTERIOR DOOR JAMB
3" = 1'-0"



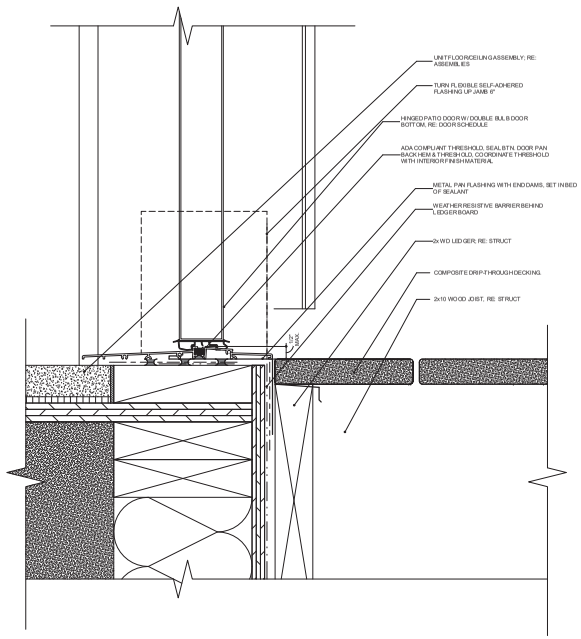
5 UNIT ENTRY DOOR JAMB
3" = 1'-0"



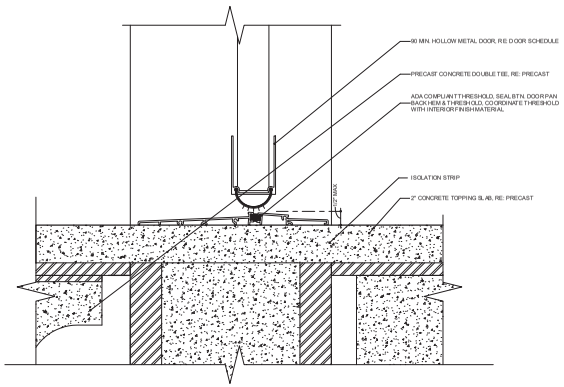
2 BALCONY DOOR THRESHOLD - IMPERVERIOUS
6" = 1'-0"



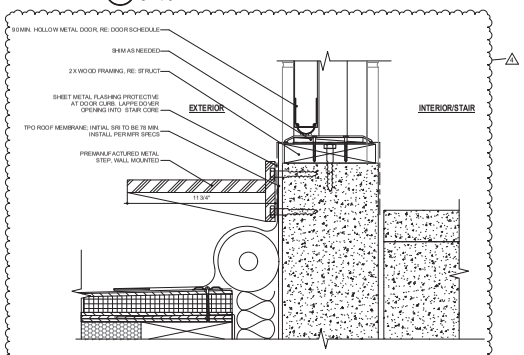
4 UNIT ENTRY THRESHOLD
3" = 1'-0"



1 BALCONY DOOR THRESHOLD - DRIP THROUGH
6" = 1'-0"



7 HM DOOR THRESHOLD AT PRECAST
6" = 1'-0"



3 HM DOOR ROOF CURB AT PRECAST
3" = 1'-0"

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ISSUE FOR CONSTRUCTION
06.07.2024

No.	Date	Issue
1	06.07.2024	IFC

Project Architect: DV
Project Designer: DR
Title:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: DOOR DETAILS
Sheet Number: A7-6.1

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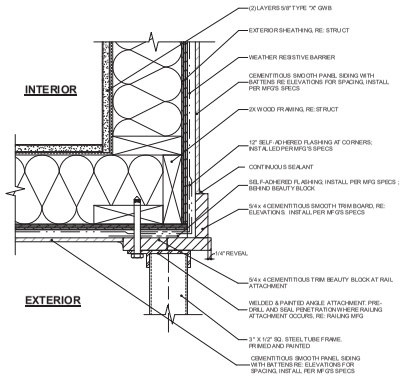
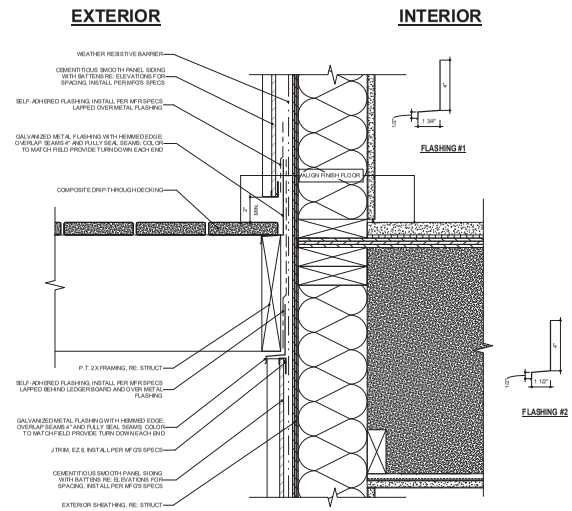
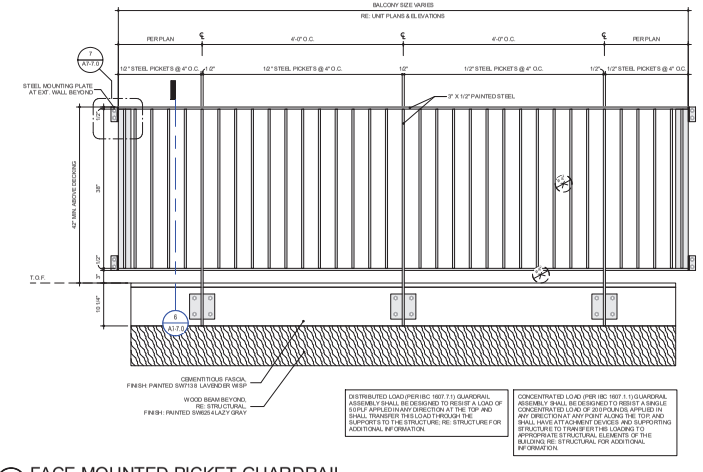


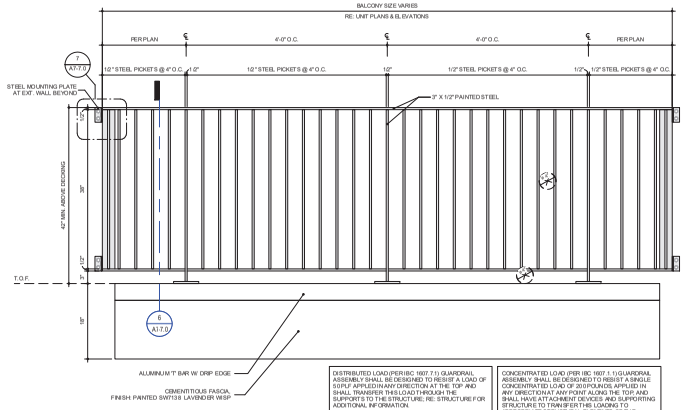
7 BALCONY RAILING @ B&B
3" = 1'-0"



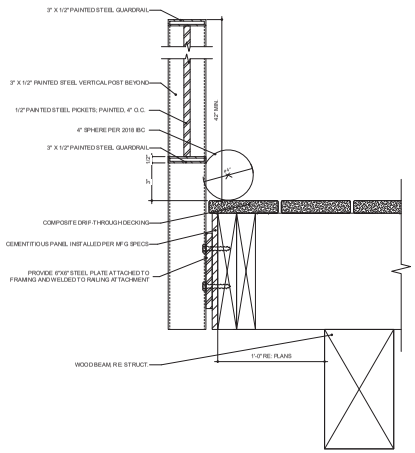
5 BOARD AND BATTEN AT DRIP-THROUGH BALCONY
3" = 1'-0"



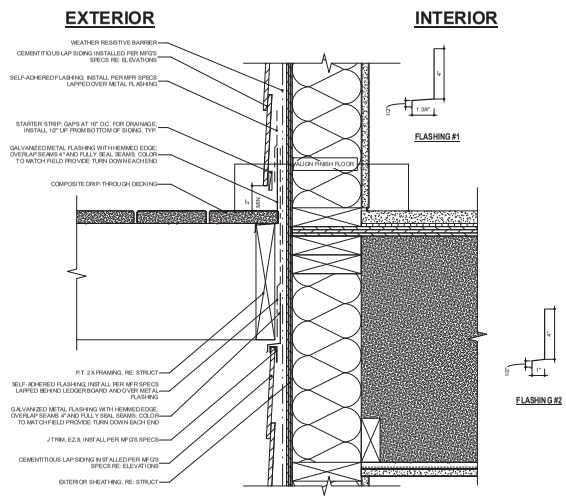
3 FACE MOUNTED PICKET GUARDRAIL
1" = 1'-0"



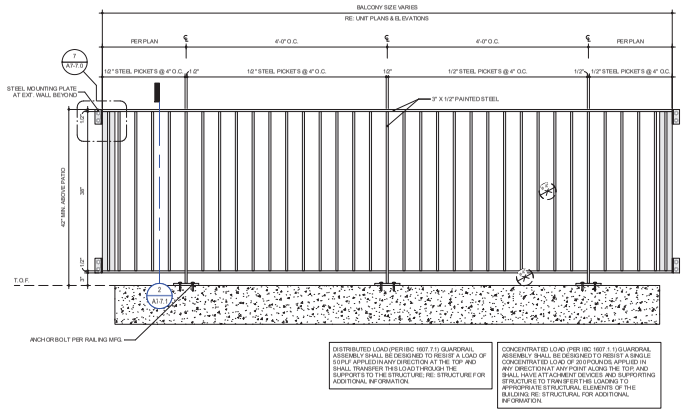
2 FLOOR MOUNTED PICKET GUARDRAIL AT IMPERVIOUS BALCONY
1" = 1'-0"



6 BALCONY EDGE SECTION - DRIP THROUGH
3" = 1'-0"



4 SHAKE AT DRIP-THROUGH BALCONY
3" = 1'-0"



1 FLOOR MOUNTED PICKET GUARDRAIL - AT PATIO
1" = 1'-0"

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ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: BALCONY DETAILS
Sheet Number: A7-7.0

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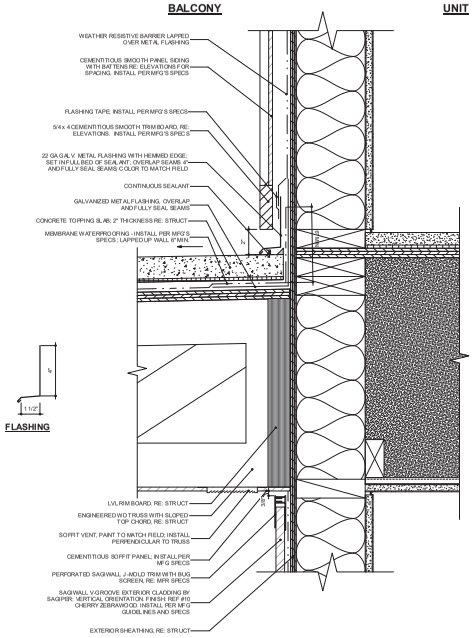
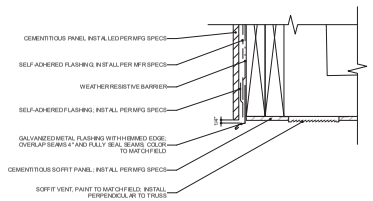
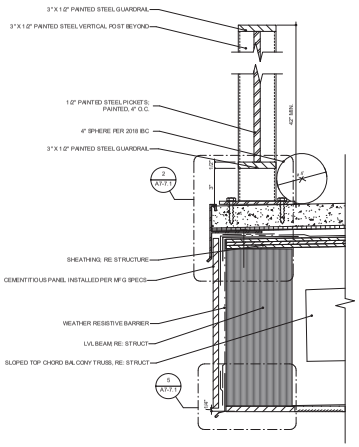


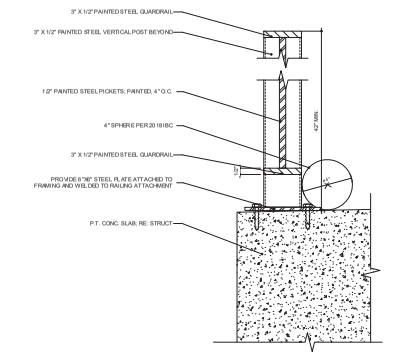
6 B&B AT IMPERVIOUS BALCONY
3" = 1'-0"



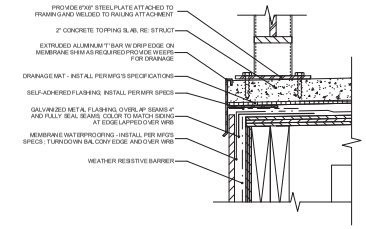
5 BALCONY EDGE - SOFFIT
3" = 1'-0"



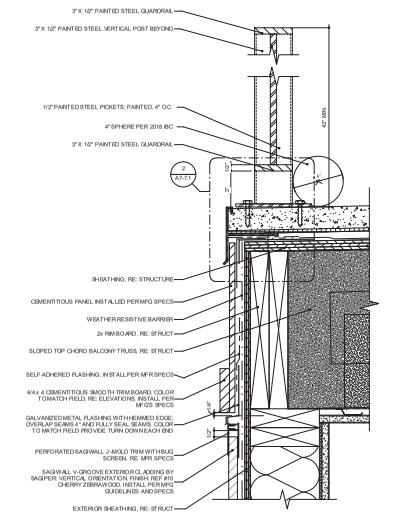
4 SURFACE MOUNTED GUARDRAIL
3" = 1'-0"



3 SURFACE MOUNTED GUARDRAIL - PATIO SLAB
3" = 1'-0"



2 BALCONY EDGE - SURFACE MOUNT
3" = 1'-0"



1 SURFACE MOUNTED GUARDRAIL - FLUSH WALL
3" = 1'-0"

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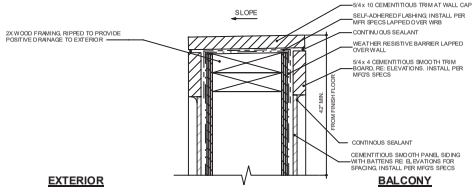
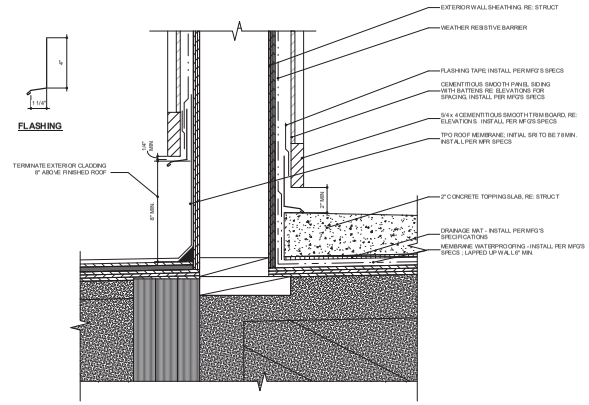
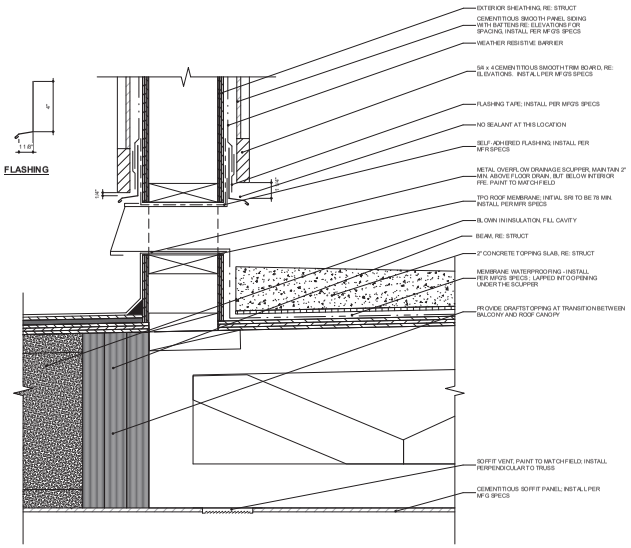


4 BALCONY WALL CAP DETAIL
3" = 1'-0"

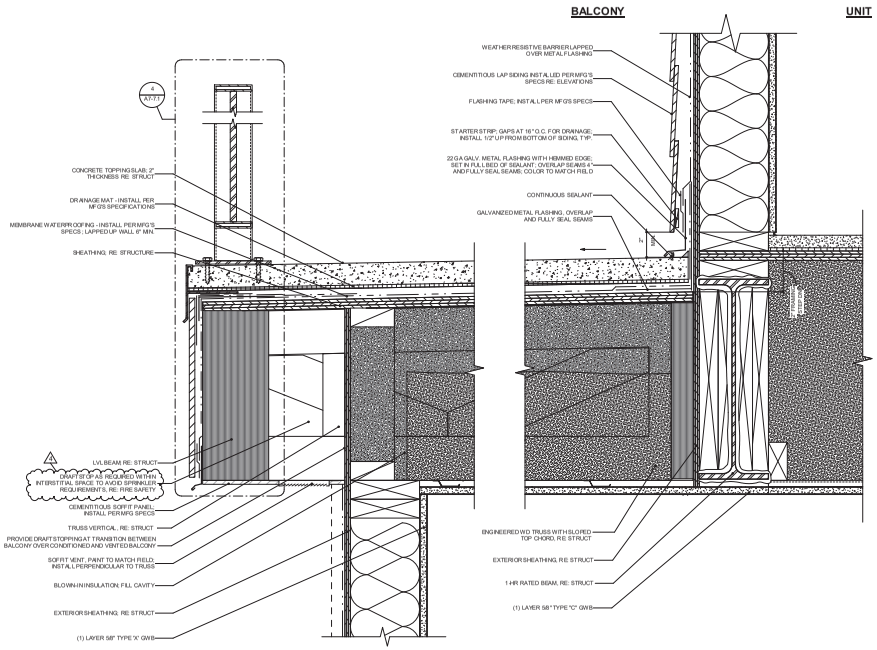


2 BALCONY WALL DETAIL
3" = 1'-0"



NOTES:
1. DET #LS MUST BE INSTALLED PER MANUFACTURERS INSTALL REQUIREMENTS. REFER TO SPECIFICATION FOR SUBSTITUTION PROCEDURES.
2. INSTALL WALL FLASHING PRIOR TO SCUPPER INSTALLATION.
3. DISCONTINUE FASTENING PLATES AT SCUPPER OPENING AS SHOWN.
4. METAL SCUPPER BOX MUST HAVE CONTINUOUS SIDES; METAL FLANGE MUST BE CONTINUOUS WITH ROUNDED CORNERS.
5. PRIOR TO APPLYING SPLICING CEMENT, CLEAN METAL SCUPPER SLEEVE WITH WEATHERED MEMBRANE CLEANER OR SPLICE CLEANER.
6. MASTIC UNDER SCUPPER FLANGE MUST BE UNDER CONSTANT COMPRESSION.
7. SEALANT IS REQUIRED AT SCUPPER TO WALL CONNECTION.
8. SEALANT IS REQUIRED AT FLASHING EDGE ON SCUPPER EDGE. PRIMER MUST BE USED TO PREPARE SURFACES PRIOR TO APPLYING SEALANT.

3 BALCONY OVERFLOW SCUPPER
3" = 1'-0"



1 SHAKE AT IMPERVIOUS BALCONY OVER CONDITIONED
3" = 1'-0"

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ISSUE FOR CONSTRUCTION
06.07.2024

No.	Date	Issue
1	06.07.2024	IFC

Project Architect: DV
Project Designer: DR
Title:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: BALCONY DETAILS
Sheet Number: **A7-7.2**

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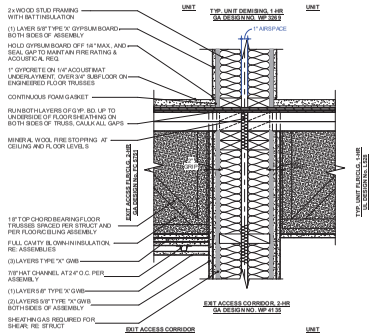
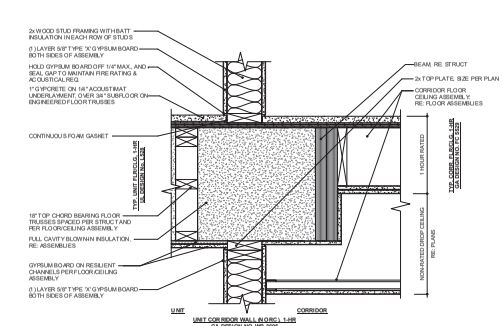
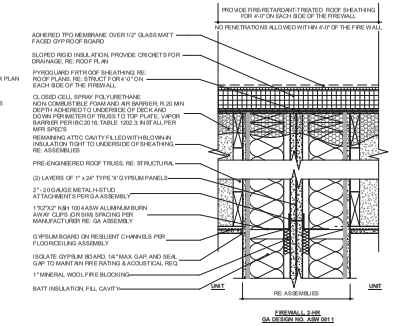


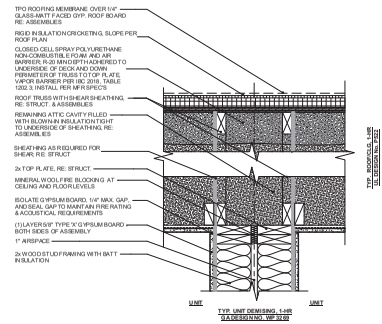
12 FLOOR TRUSS AT 2HR UNIT DEMISING WALL
1 1/2" = 1'-0"



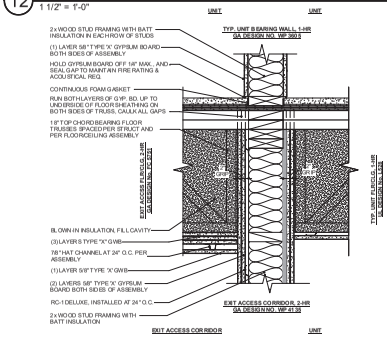
8 FLOOR TRUSS AT 1 HR FIRE PARTITION DOOR DROP
1 1/2" = 1'-0"



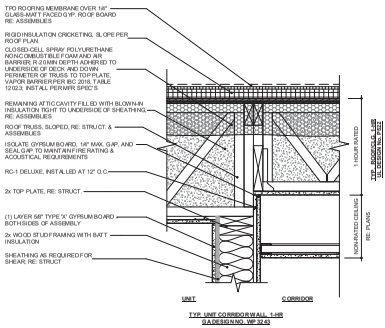
4 ROOF TRUSS AT 2 HR FIRE WALL
1 1/2" = 1'-0"



15 ROOF TRUSS AT TYP. UNIT DEMISING WALL
1 1/2" = 1'-0"

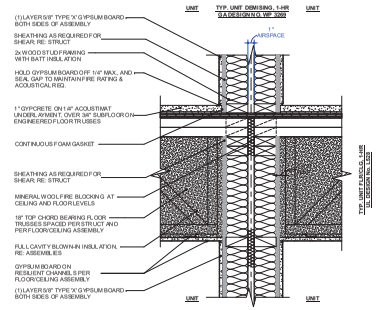


11 FLOOR TRUSS AT 2 HR FIRE BARRIER - UNIT
1 1/2" = 1'-0"

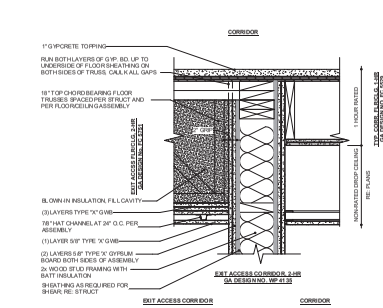


7 ROOF TRUSS AT 1 HR FIRE PARTITION
1 1/2" = 1'-0"

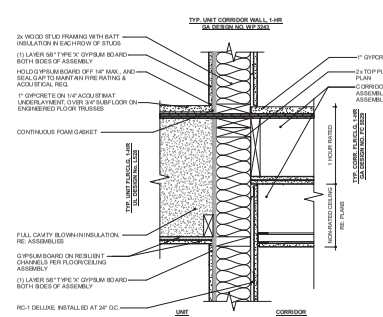
3 2 HR FIRE WALL AT CORRIDOR FLOOR
1 1/2" = 1'-0"



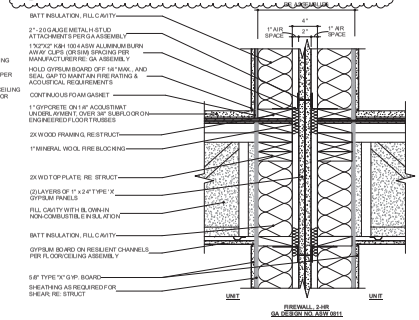
14 FLOOR TRUSS AT TYP. UNIT DEMISING WALL
1 1/2" = 1'-0"



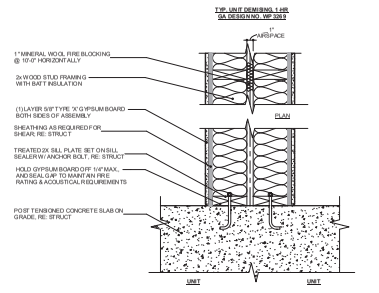
10 FLOOR TRUSS AT 2 HR FIRE BARRIER - CORRIDOR
1 1/2" = 1'-0"



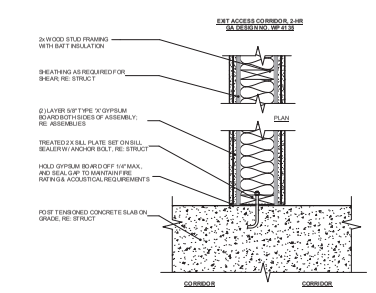
6 FLOOR TRUSS AT TYP. 1 HR FIRE PARTITION
1 1/2" = 1'-0"



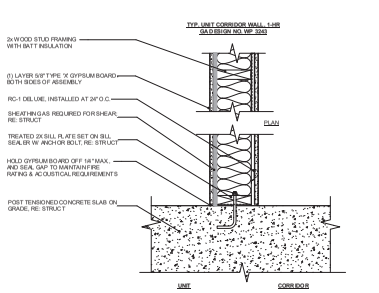
2 FLOOR TRUSS AT 2 HR FIRE WALL
1 1/2" = 1'-0"



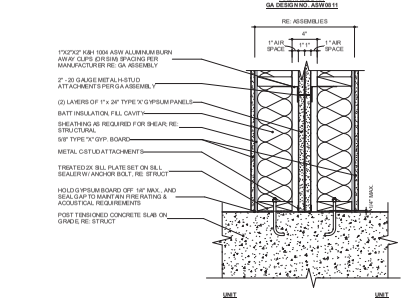
13 SLAB AT TYP. UNIT DEMISING WALL
1 1/2" = 1'-0"



9 SLAB AT 2-HR FIRE BARRIER
1 1/2" = 1'-0"



5 SLAB AT 1 HR FIRE PARTITION
1 1/2" = 1'-0"



1 SLAB AT 2 HR FIRE WALL
1 1/2" = 1'-0"

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ISSUE FOR CONSTRUCTION
06.07.2024

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Project Architect: DV
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Job Number: 222001
Drawn By: CG / CB/ TT/ NV
Checked By: JG
Title: FIRE PROTECTION DETAILS
Sheet Number: A7-8.0

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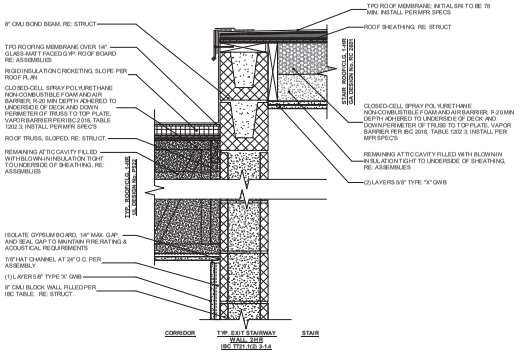
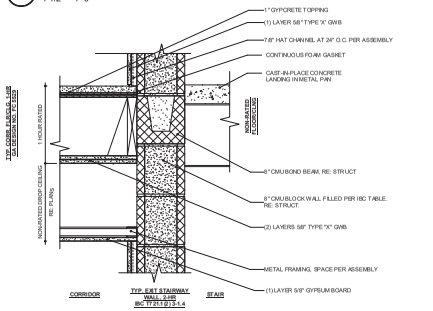
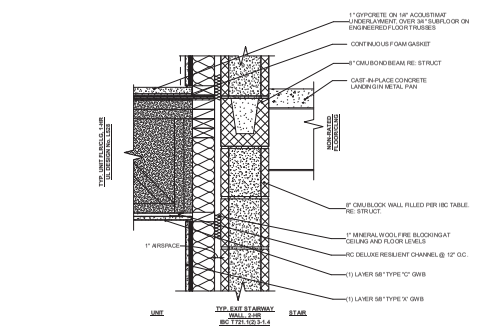


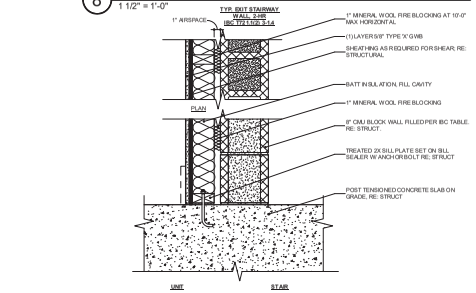
10 2-HR INT EXIT STAIRWAY, ROOF
1 1/2" = 1'-0"



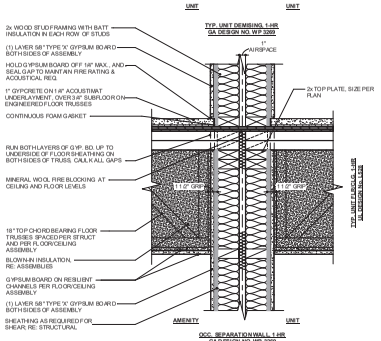
9 2-HR INT EXIT STAIRWAY, CORRIDOR
1 1/2" = 1'-0"



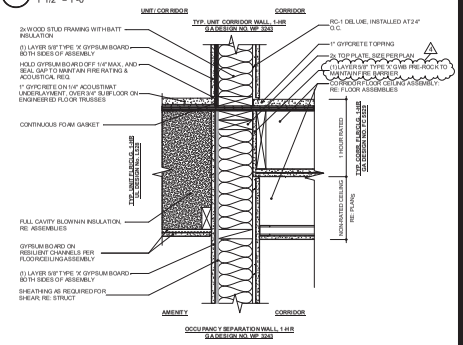
8 2-HR INT EXIT STAIRWAY, UNIT
1 1/2" = 1'-0"



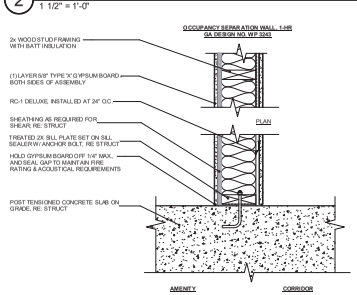
7 2-HR INT EXIT STAIRWAY, SLAB
1 1/2" = 1'-0"



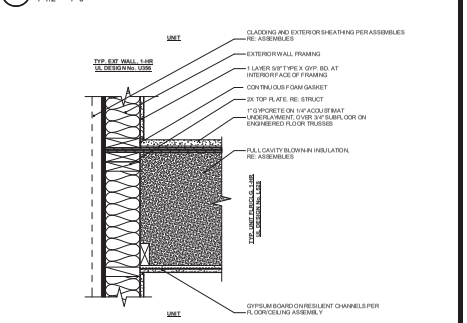
6 FLOOR TRUSS AT 1 HR OCC SEP - DEMISING
1 1/2" = 1'-0"



2 FLOOR TRUSS AT 1 HR OCC SEPARATION
1 1/2" = 1'-0"



4 TRUSS AT 1HR EXTERIOR WALL - PERP.
1 1/2" = 1'-0"



3 TRUSS AT 1HR EXTERIOR WALL - PARALLEL
1 1/2" = 1'-0"

1 SLAB AT 1 HR OCC SEPARATION - CORRIDOR
1 1/2" = 1'-0"

5 SLAB AT 1-HR OCC SEPARATION - DEMISING
1 1/2" = 1'-0"

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ISSUE FOR CONSTRUCTION
06.07.2024

No.	Date	Issue
1	06.07.2024	IFC

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT/ NV
Checked By: JG
Title: FIRE PROTECTION DETAILS
Sheet Number: **A7-8.1**

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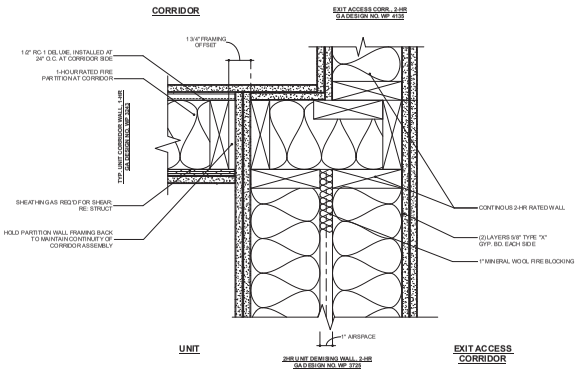
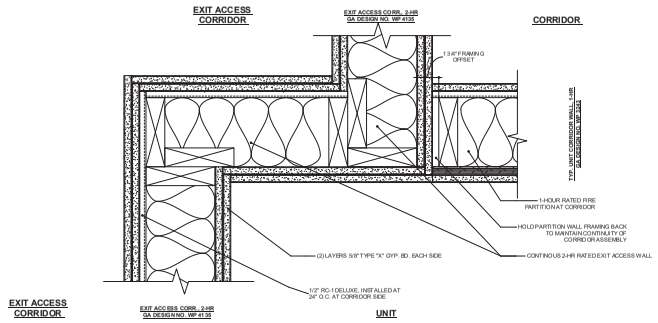
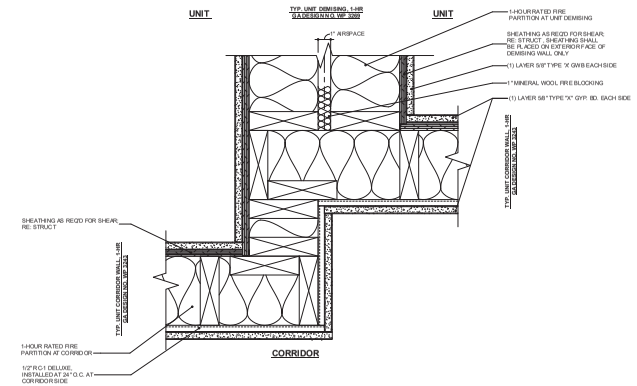


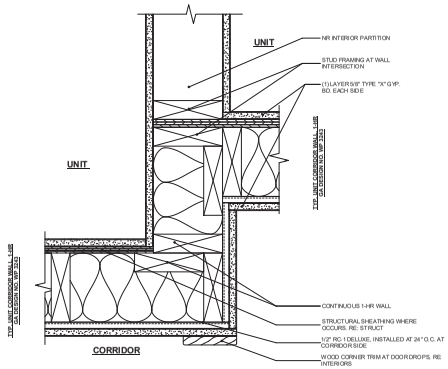
10 2-HR FIRE BARRIER DEMISING WALL AT 2-HR EXIT ACCESS
3" = 1'-0"



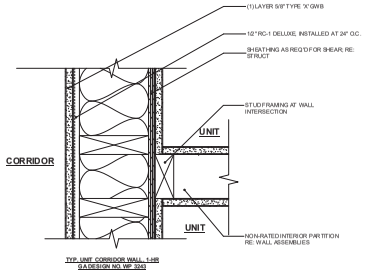
9 2-HR EXIT ACCESS AT CORRIDOR
3" = 1'-0"



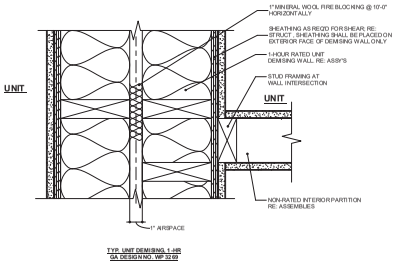
8 DEMISING WALL AT CORRIDOR WALL
3" = 1'-0"



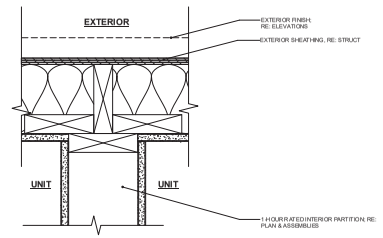
7 NR INTERIOR PARTITION AT CORRIDOR WALLS
3" = 1'-0"



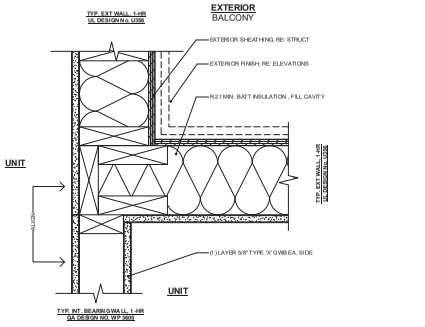
6 NR INTERIOR PARTITION AT 1-HR CORRIDOR WALL
3" = 1'-0"



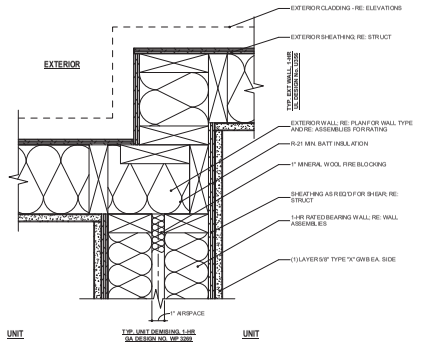
5 NR INTERIOR PARTITION AT 1-HR UNIT DEMISING WALL
3" = 1'-0"



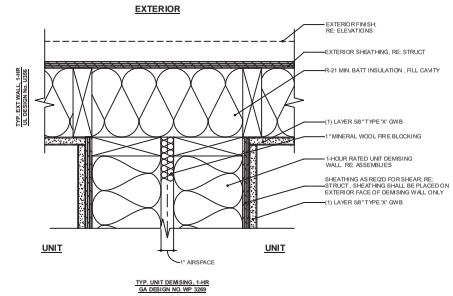
4 1-HR INT BEARING AT 1-HR EXT. WALL
3" = 1'-0"



3 1HR INT BEARING AT 1-HR EXT. WALL (CORNER)
3" = 1'-0"



2 1-HR UNIT DEM. WALL AT 1-HR EXT. WALL OFFSET
3" = 1'-0"



1 1-HR UNIT DEMISING WALL AT 1-HR EXT. WALL
3" = 1'-0"

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ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue
1	10.03.2024	PC1 RESPONSE

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: FIRE PROTECTION PLAN DETAILS
Sheet Number: A7-8.2

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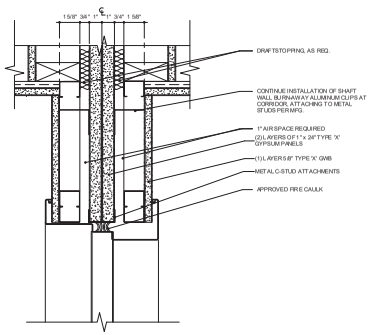
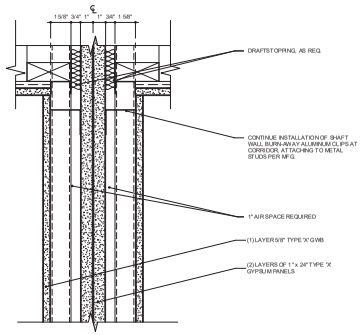
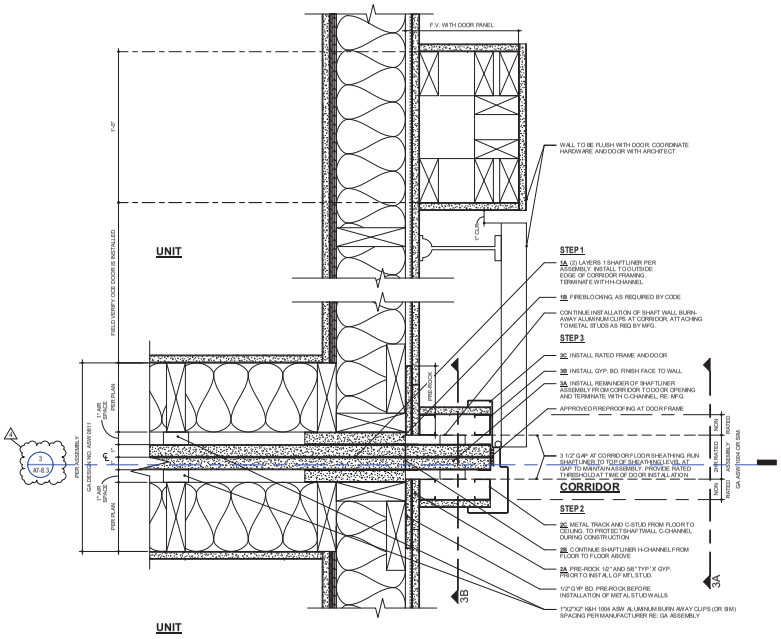


3A - SECTION AT CORRIDOR DOOR

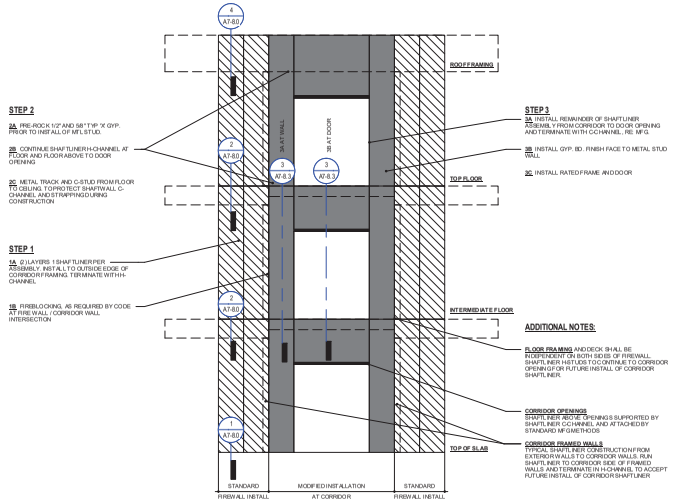


3B - SECTION AT CORRIDOR FIRE WALL

3 FIREWALL - SHAFTLINER @ CORRIDOR SECTION
3" = 1'-0"



2 FIREWALL SHAFTLINER @ CORRIDOR PLAN
3" = 1'-0"



1 FIREWALL SHAFTLINER @ CORRIDOR ELEVATION
1/4" = 1'-0"

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Project Architect: DV
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Title: FIREWALL DETAILS
Sheet Number: **A7-8.3**

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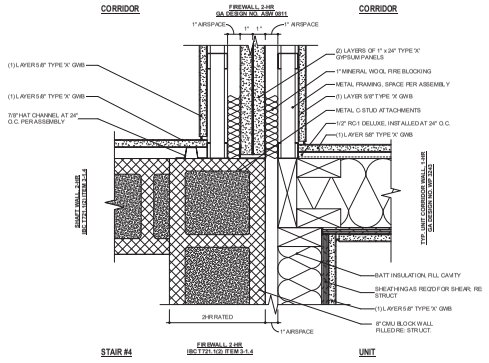
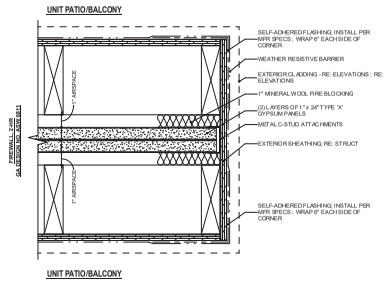
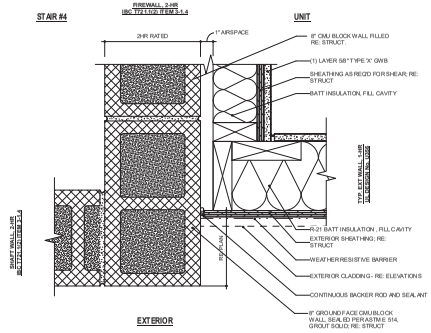


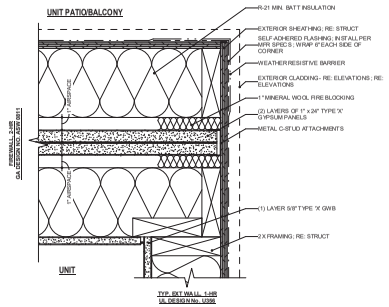
6 FIRE WALL - AT CMU
3" = 1'-0"



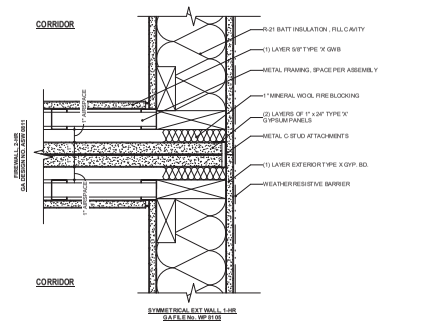
3 FIRE WALL - TERMINATION AT BALCONIES
3" = 1'-0"



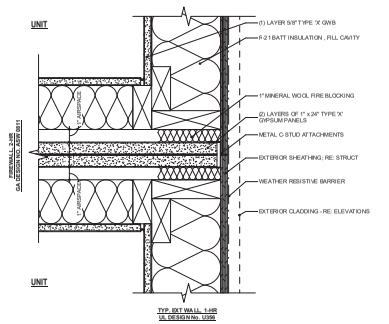
5 FIRE WALL - CMU AT EXTERIOR
3" = 1'-0"



2 FIRE WALL - TERMINATION
3" = 1'-0"



4 FIRE WALL - TERMINATION AT GARAGE SEPARATION
3" = 1'-0"



1 FIRE WALL - TERMINATION FLUSH
3" = 1'-0"

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ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: FIREWALL PLAN DETAILS
Sheet Number: A7-8.4

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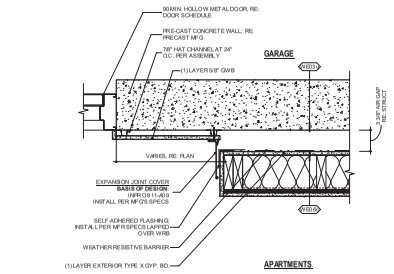
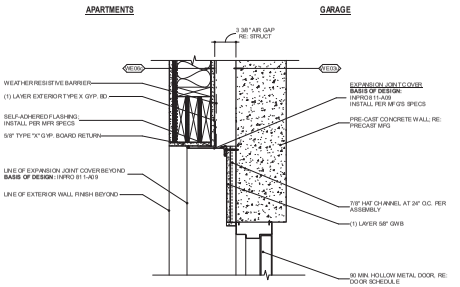
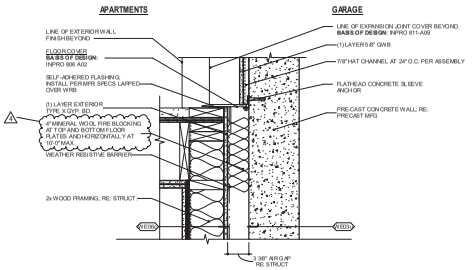


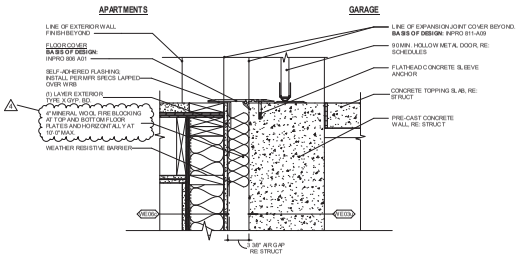
10 DOOR JAMB AT SEISMIC JOINT - PLAN
1 1/2" = 1'-0"



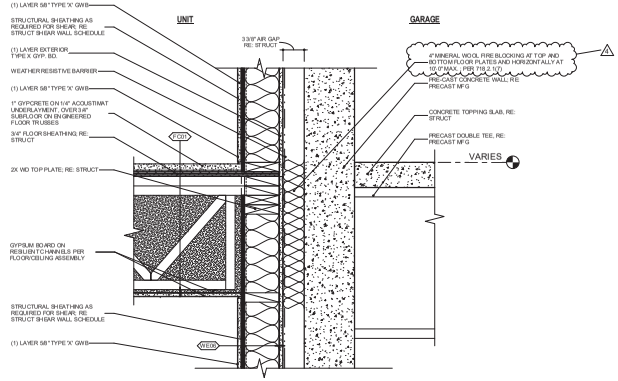
9 HEAD PLATE AT SEISMIC JOINT - SECTION
1 1/2" = 1'-0"



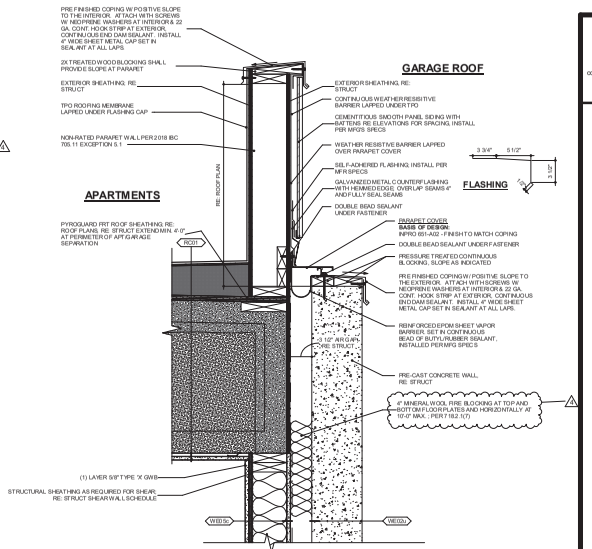
8 FLOOR PLATE AT WALL - SECTION
1 1/2" = 1'-0"



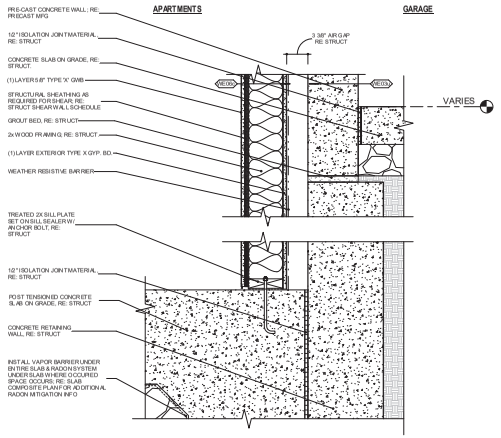
7 FLOOR PLATE AT DOOR THRESHOLD - SECTION
1 1/2" = 1'-0"



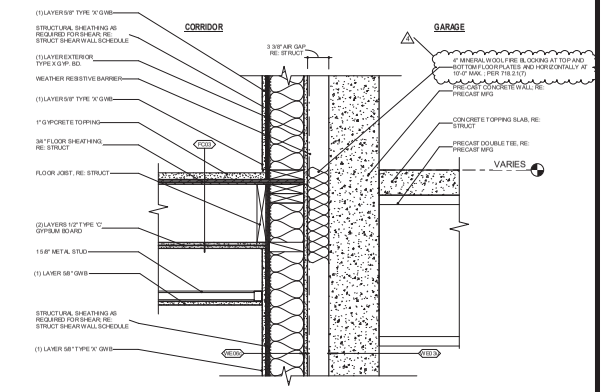
6 GARAGE SEPARATION WALL @ UNIT FLOOR
1 1/2" = 1'-0"



3 PARAPET SEISMIC COVER AT APARTMENTS AND GARAGE - B&B
1 1/2" = 1'-0"

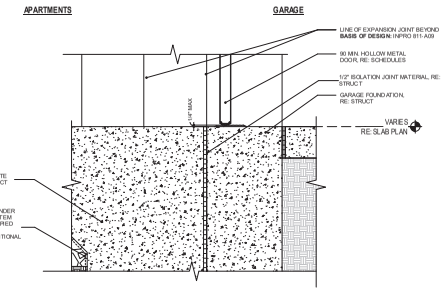


5 GARAGE SEPARATION WALL @ STEPPED FOUNDATION
1 1/2" = 1'-0"

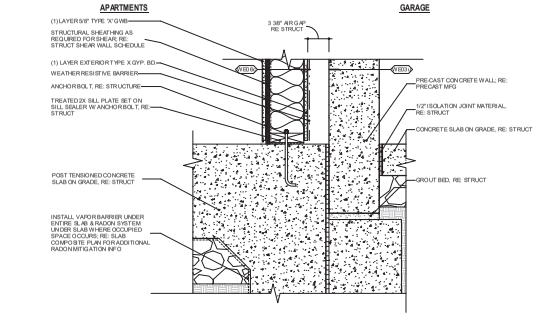


2 GARAGE SEPARATION WALL @ CORRIDOR FLOOR
1 1/2" = 1'-0"

7 FLOOR PLATE AT DOOR THRESHOLD - SECTION
1 1/2" = 1'-0"



4 DOOR THRESHOLD AT BUILDING SEPARATION AT SLAB ON GRADE
1 1/2" = 1'-0"



1 GARAGE SEPARATION WALL @ SLAB
1 1/2" = 1'-0"

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Title: GARAGE SEPARATION DETAILS
Sheet Number: COMMON
A7-8.5

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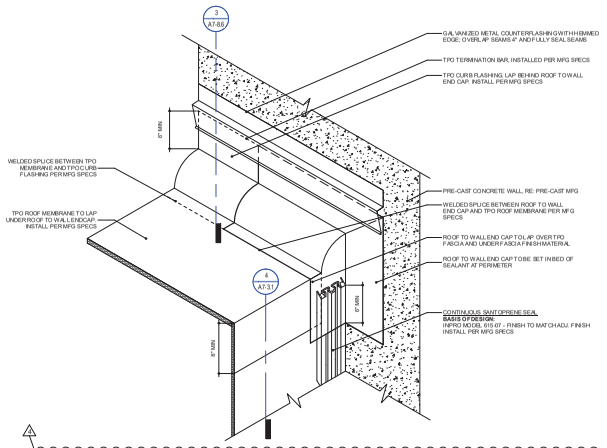
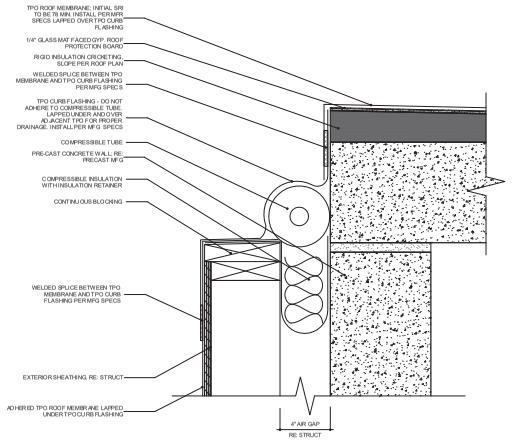
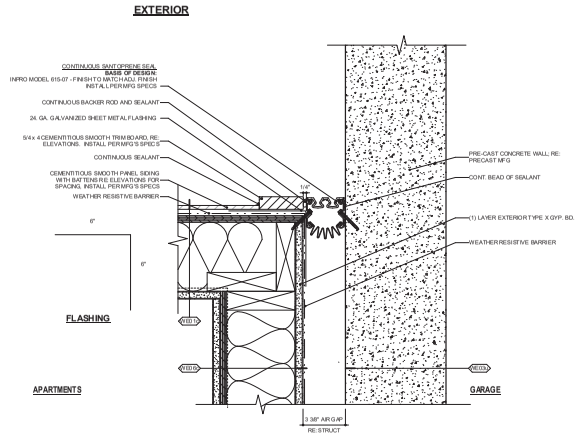


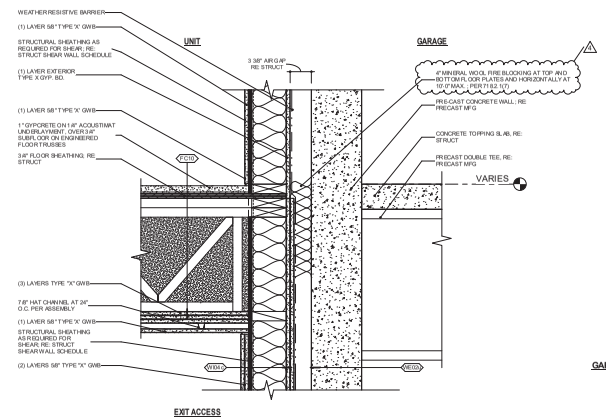
6 ROOF TO WALL END CAP SEISMIC JOINT
1 1/2" = 1'-0"



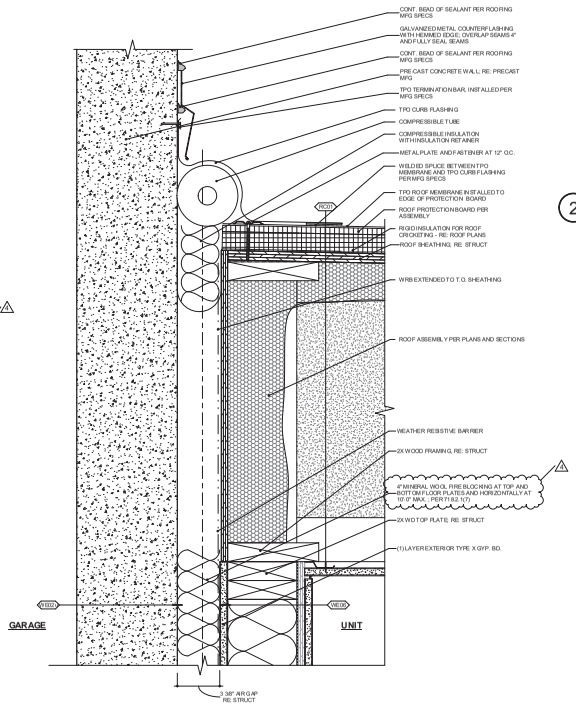
4 PARAPET AT PRE-CAST ROOF
3" = 1'-0"



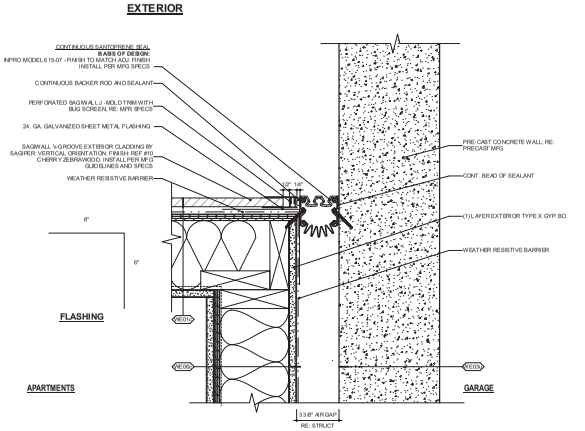
2 VERTICAL SEISMIC COVER AT B&B - PLAN
3" = 1'-0"



5 GARAGE SEPARATION WALL @ EXIT ACCESS CORR
1 1/2" = 1'-0"



3 GARAGE & APT SEPARATION, ROOF
3" = 1'-0"



1 VERTICAL SEISMIC COVER AT SAGIWALL - PLAN
3" = 1'-0"

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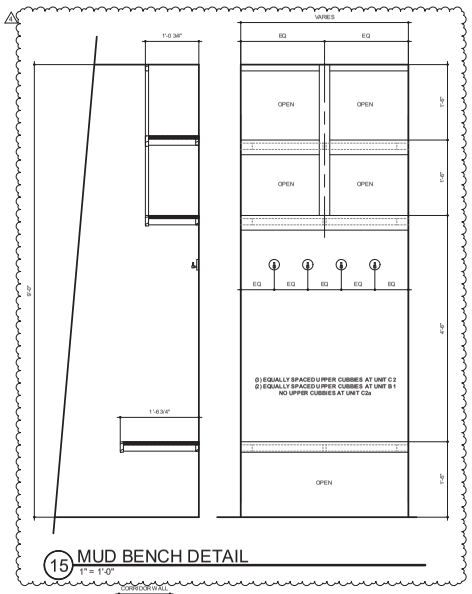
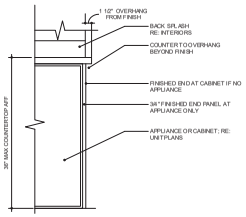
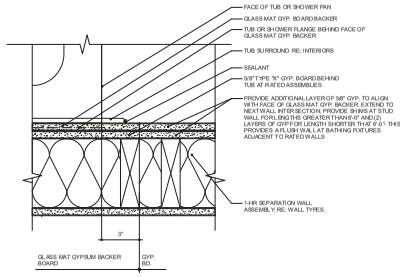


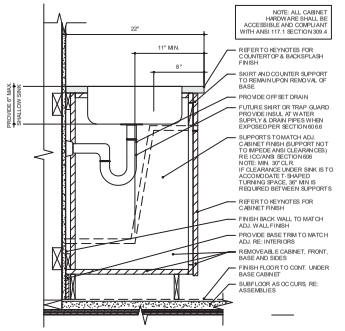
15 MUD BENCH DETAIL
1" = 1'-0"



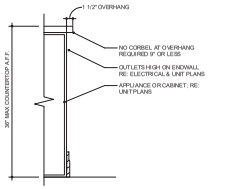
12 COUNTER AT END CABINET
1" = 1'-0"



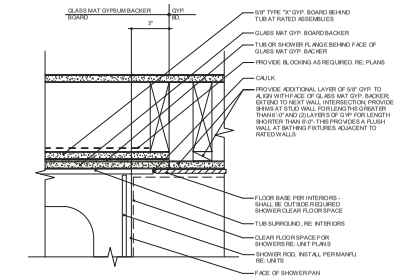
8 SHOWER/TUB DETAIL, FLUSH WALL
3" = 1'-0"



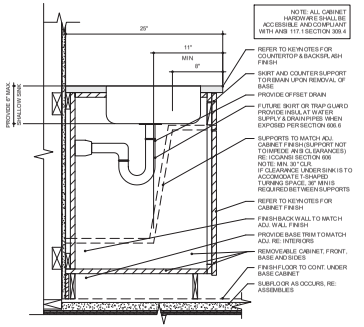
4 TYPE A - BATH RM SINK - REMOVABLE BASE
1 1/2" = 1'-0"



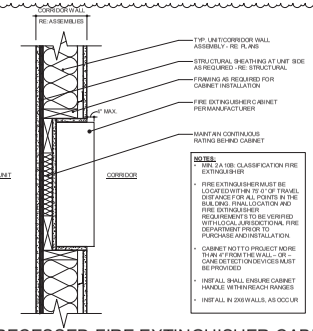
11 ISLAND OVERHANG - 1 1/2"
1" = 1'-0"



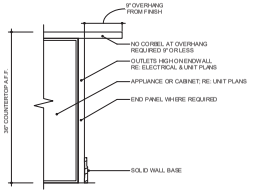
7 SHOWER/TUB, 1-HR WALL
3" = 1'-0"



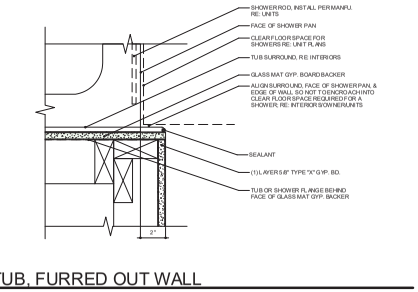
3 TYPE A - KITCHEN SINK - REMOVABLE BASE
1 1/2" = 1'-0"



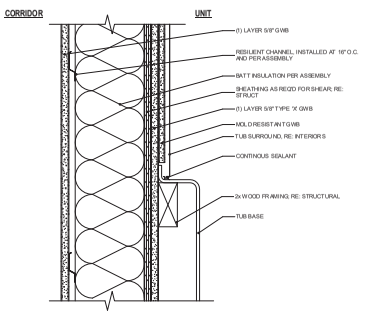
14 RECESSED FIRE EXTINGUISHER CABINET
1 1/2" = 1'-0"



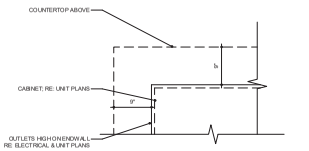
10 ISLAND OVERHANG - 9"
1" = 1'-0"



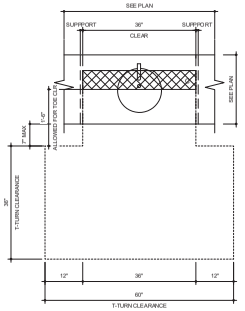
6 SHOWER/TUB, FURRED OUT WALL
3" = 1'-0"



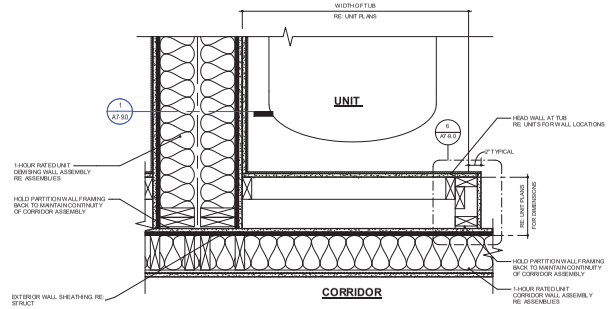
2 TUB/SHOWER FLANGE, RATED WALL
3" = 1'-0"



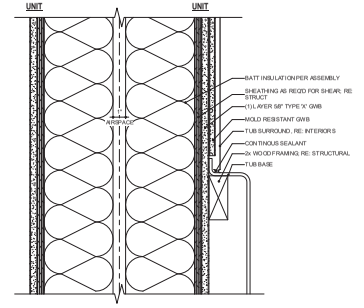
13 ISLAND - END CONDITION PLAN
1" = 1'-0"



9 T-TURN AT SINK
3/4" = 1'-0"



5 1HR CORRIDOR WALL TO NR PARTITION FURRED
1 1/2" = 1'-0"



1 TUB/SHOWER FLANGE, DEMISING WALL
3" = 1'-0"

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Checked By: JG
Title: INTERIOR DETAILS
Sheet Number: **A7-9.0**

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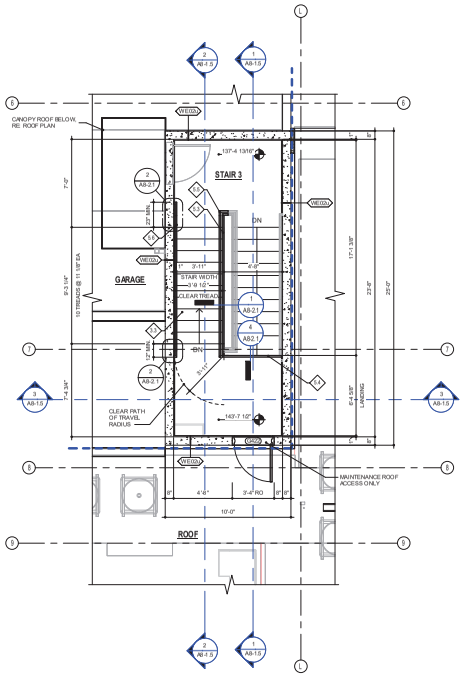
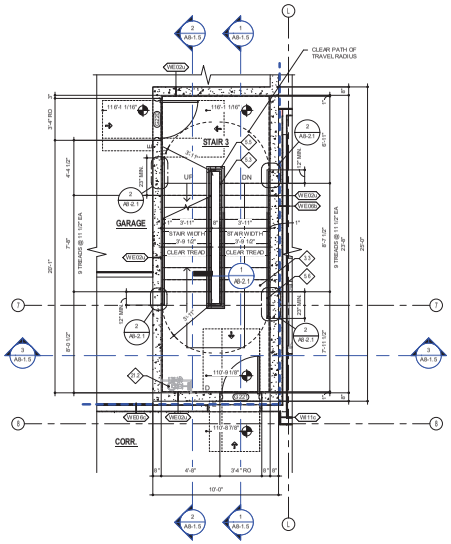
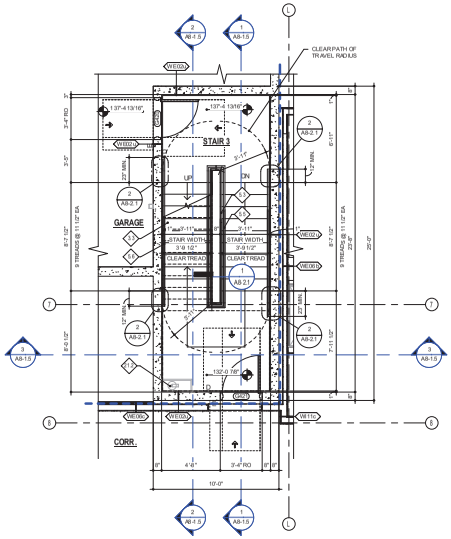


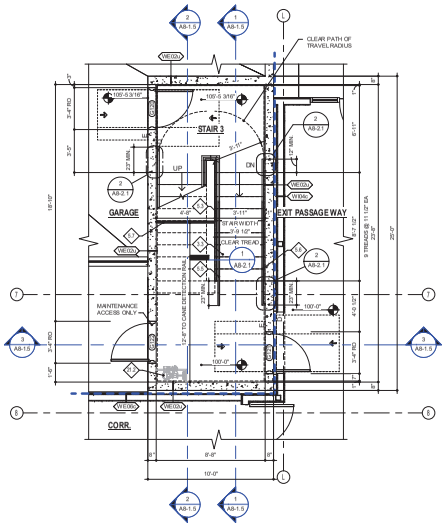
4 STAIR 3 - ROOF ACCESS PLAN
1/4" = 1'-0"



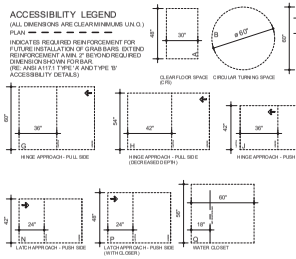
2 STAIR 3 - LEVEL 2-3 PLAN
1/4" = 1'-0"



3 STAIR 3 - LEVEL 4 PLAN
1/4" = 1'-0"



1 STAIR 3 - LEVEL 1 PLAN
1/4" = 1'-0"



VERTICAL CIRCULATION GENERAL NOTES

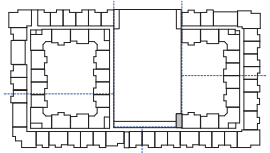
- DIMENSIONS TAKE PRECEDENCE OVER DRAWINGS. DO NOT SCALE. DIMENSIONS GIVEN TO FACE OF STUDS UNLESS OTHERWISE INDICATED ON THE PLANS.
- ACCESSIBILITY ELEMENTS INDICATED ARE REQUIRED. FIELD CONDITIONS OCCURRING WHICH IMPACT THE ACCESSIBILITY DESIGN SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.
- SEE INTERIOR DRAWINGS FOR ALL FINISH MATERIALS.
- CONSTRUCTION SHALL VERIFY EXISTING CONDITIONS ON SITE PRIOR TO CONSTRUCTION.
- INFORMATION REGARDING EACH CONSTRUCTION TRADE MAY BE LOCATED ON ANY SHEET IN THIS SET OF DRAWINGS. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT EACH SUBCONTRACTOR HAS A COMPLETE SET OF DRAWINGS FROM WHICH TO REVIEW, BID, AND CONSTRUCT.
- ALL WORK SHALL BE PERFORMED IN COMPLIANCE WITH ALL STATE AND LOCAL CODES. SECURE ALL REQUIRED PERMITS AND APPROVALS PRIOR TO ANY CONSTRUCTION.
- REFER TO ACCESSIBILITY DETAILS STARTING WITH SHEET A9.6.1.
- PREFABRICATED STEEL STAIRS ALONG WITH ASSOCIATED HANDRAILS AND GUARDRAILS SHALL BE A DEFERRED SUBMITTAL AS DESCRIBED BELOW:
- THE STAIR RISERS SHALL NOT BE LESS THAN 4 INCHES NOR MORE THAN 7 INCHES. THE LARGEST TREAD OR RISER WITHIN ANY FLIGHT OF STAIRS SHALL NOT EXCEED THE SMALLEST (TREAD OR RISER) BY MORE THAN 3/8".
- TOPS OF HANDRAILS SHOULD BE PLACED NOT LESS THAN 34 INCHES OR MORE THAN 38" INCHES ABOVE THE NOSING OF TREADS.
- HANDRAILS SHALL USE CONTINUOUS THE FULL LENGTH OF THE STAIRS AND SHALL EXTEND IN THE DIRECTION OF THE STAIR RUN NOT LESS THAN 12 INCHES BEYOND THE TOP RISER AND CONTINUE TO SLOPE FOR THE DEPTH OF ONE TREAD BEYOND THE BOTTOM RISER WHERE NOT OBSTRUCTED BY WALLS OR POSTS. ENDS SHALL BE RETURNED OR SHALL HAVE TERMINATIONS DIVERGING.
- GENERAL CONTRACT OR TO COORDINATE FLOOR OPENINGS AND STAIR CONSTRUCTION WITH SUBCONTRACTOR AN ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN. FIELD VERIFY ALL DIMENSIONS.

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
W02c	1 HR	TYP. EXTERIOR WALL
W02c	2 HR	8" CONCRETE SHAFT WALL
W02d	1 HR	8" CONCRETE WALL
W03e	1 HR	GARAGE 12" CONCRETE WALL
W03k	1 HR	8" CONCRETE WALL
W04q	2 HR	8" CMU - 2HR FIRE BARRIER
W05q	1 HR	8" CMU - 1 HR
W06b	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
W06c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
W07c	NR	2x6 PARAPET WALL - NR
W08e	NR	2x6 WALL - NR @ 12" OVER 6 RFS
W09e	NR	2x4 EXTERIOR FURR WALL - NON RATED
W09e	NR	2x4 EXTERIOR FURR WALL - NON RATED
W01m	1 HR	8" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
W01q	2 HR	8" CMU - 2HR FIRE WALL
W02q	2 HR	8" CMU - 2HR FIRE BARRIER
W03	2 HR	FIRE WALL - 2HR
W03b	2 HR	FIRE WALL, 2-HR, (2) 2X4 WITH (2) 1" SHAFTLINER
W03h	2 HR	FIRE WALL, 2-HR, (2) 1-5/8" WITH (2) 1" SHAFTLINER
W04b	2 HR	FIRE BARRIER, 2 HR, 2x WITH (2) 5/8" TYPE 'X' GYP.
W04c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
W05c	2 HR	FIRE BARRIER, 2 HR EXIT ACCESS
W06b	2 HR	2X4 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W06c	2 HR	2X6 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W07h	1 HR	OCCUPANCY SEPARATION - 1 HR FIRE BARRIER
W08e	1 HR	OCCUPANCY SEPARATION - 1 HR FIRE BARRIER
W09h	1 HR	(1) 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W09k	1 HR	8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W10b	1 HR	TYP. UNIT DEMISING - 1 HR FIRE PARTITION
W10c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
W11h	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
W11q	1 HR	Invision
W12b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NOTRC
W12c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
W13h	1 HR	2X4, 1HR - BEARING
W13c	1 HR	2X6, 1HR - BEARING
W14b	NR	2X4 INTERIOR WALL - NR
W14c	NR	2X6 INTERIOR WALL - NR
W15b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W15c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W16	NR	7/8" METAL HAT CHANNEL FURRING WALL
W17h	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
W18k	NR	8" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

KEYNOTES

NO.	NOTE
5.3	PRECAST CONCRETE STAIRS, RE: PRECAST CONTRACTOR SHOP DWGS.
5.3	STEEL GUARDRAIL AT ST A/R, 42" MIN ABOVE LEADING EDGE OF TREAD, POWDER COAT OR FIELD PAINT BLACK. RE: DET A/LS
5.4	STEEL GUARDRAIL AT LANDING, 42" MIN A/FF. PROVIDE BLOCKING IN WALL AS REQ'URED. FIELD PAINT BLACK, RE: DET A/LS
5.5	STEEL HANDRAIL AT GUARDRAIL, 36" ABOVE LEADING EDGE OF TREAD. FIELD PAINT BLACK. RE: DETAILS
5.6	STEEL HANDRAIL AT WALL, 36" ABOVE LEADING EDGE OF TREAD. FIELD PAINT BLACK, RE: DETAILS
5.7	STEEL ADA COMPLIANT CANE DETECTION RAIL, 27" MAX HT. TO MAINTAIN VERTICAL HEAD CLEARANCE. FIELD PAINT BLACK. RE: DETAIL 2
21.2	CLASS I STANDPIPE PER IBC 2015 SECTION 905.3 INSTALLED WITHIN SHALL BE MAY FIRE SPRINKLER COVERED ALARM SYSTEM. ALARM WILL BE ELECTRICALLY SUPERVISED AND AUDIBLE ALARM WITH ACCESSIBLE CANE DETECTION DEVICE AT FLOOR AS REQUIRED AT VALVE CONNECTIONS



VERTICAL CIRCULATION KEY PLAN

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MARSHALL POINTE

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ISSUE FOR CONSTRUCTION
06.01.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: STAIR 3 PLANS
Sheet Number: COMMON
A8-1.4

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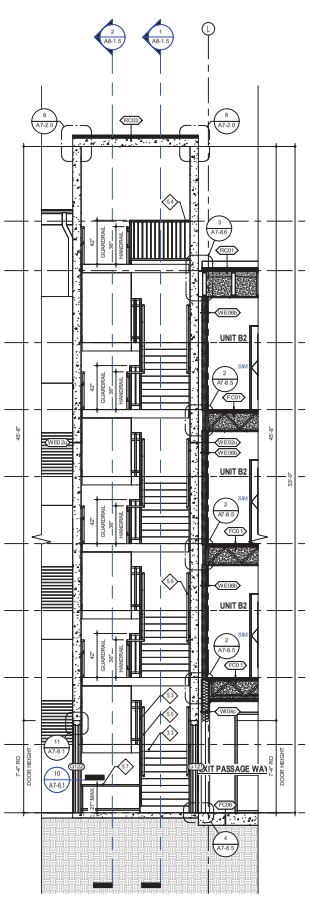
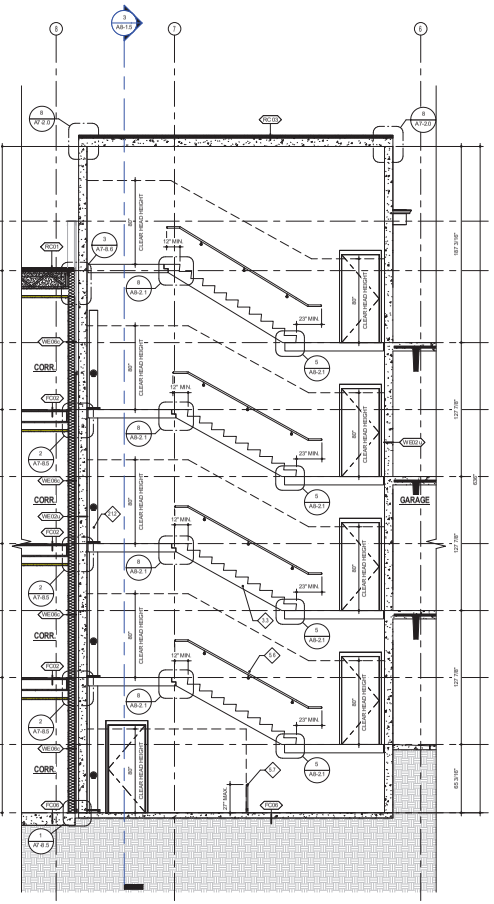
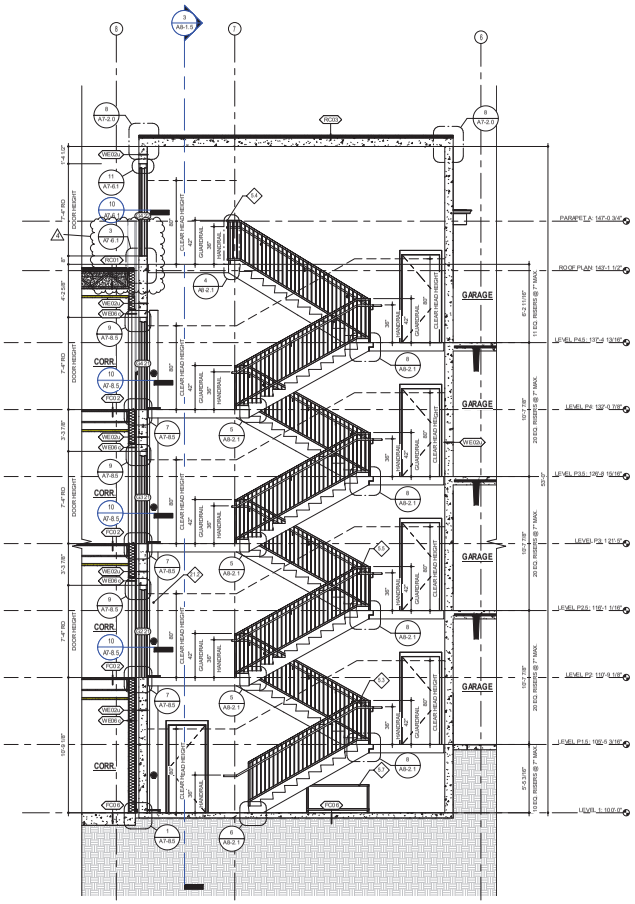


3 STAIR 3 - SECTION 3
1/4" = 1'-0"



2 STAIR 3 - SECTION 2
1/4" = 1'-0"



1 STAIR 3 - SECTION 1
1/4" = 1'-0"

VERTICAL CIRCULATION GENERAL NOTES

- DIMENSIONS TAKE PRECEDENCE OVER DRAWINGS. DO NOT SCALE. DIMENSIONS GIVEN TO FACE OF STUDS UNLESS OTHERWISE INDICATED ON THE PLANS.
- ACCESSIBILITY ELEMENTS INDICATED ARE REQUIRED. FIELD CONDITIONS OCCURRING WHICH IMPACT THE ACCESSIBILITY DESIGN SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.
- SEE INTERIOR DRAWINGS FOR ALL FINISH MATERIALS
- CONTRACTOR SHALL VERIFY EXISTING CONDITIONS ON SITE PRIOR TO CONSTRUCTION.
- INFORMATION REGARDING EACH CONSTRUCTION TRADE MAY BE LOCATED ON ANY SHEET IN THIS SET OF DRAWINGS. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT EACH SUBCONTRACTOR HAS A COMPLETE SET OF DRAWINGS FROM WHICH TO REVIEW, BID, AND CONSTRUCT.
- ALL WORK SHALL BE PERFORMED IN COMPLIANCE WITH ALL STATE AND LOCAL CODES. SECURE ALL REQUIRED PERMITS AND APPROVALS PRIOR TO ANY CONSTRUCTION.
- REFER TO ACCESSIBILITY DETAILS STARTING WITH SHEET A0.8.1
- PREFABRICATED STEEL STAIRS ALONG WITH ASSOCIATED HANDRAILS AND GUARDRAILS SHALL BE A DEFERRED SUBMITTAL AS DESCRIBED BELOW:
- THE STAIR RISERS SHALL NOT BE LESS THAN 4 INCHES NOR MORE THAN 7 INCHES. THE LARGEST TREAD OR RISER WITHIN ANY FLIGHT OF STAIRS SHALL NOT EXCEED THE SMALLEST (TREAD OR RISER) BY MORE THAN 3/8".
- TOPS OF HANDRAILS SHOULD BE PLACED NOT LESS THAN 34 INCHES OR MORE THAN 38" INCHES ABOVE THE NOSING OF TREADS.
- HANDRAILS SHALL BE CONTINUOUS THE FULL LENGTH OF THE STAIRS AND SHALL EXTEND IN THE DIRECTION OF THE STAIR RUN NOT LESS THAN 12 INCHES BEYOND THE TOP RISER AND CONTINUE TO SLOPE FOR THE DEPTH OF ONE TREAD BEYOND THE BOTTOM RISER WHERE NOT OBSTRUCTED BY WALLS OR OTHER BARRIERS. ENDS SHALL BE RETURNED OR SHALL HAVE TERMINATIONS DIMENSIONED.
- GENERAL CONTRACTOR TO COORDINATE FLOOR OPENINGS AND STAIR CONSTRUCTION WITH SUBCONTRACTOR AN ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN. FIELD VERIFY ALL DIMENSIONS.

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
WE01d	1 HR	TYP. EXTERIOR WALL
WE02c	2 HR	8" CONCRETE SHAFT WALL
WE03a	1 HR	8" CONCRETE WALL
WE03d	1 HR	GARAGE, 12" CONCRETE WALL
WE03c	1 HR	8" CONCRETE WALL
WE04g	2 HR	8" CMU - 2HR FIRE BARRIER
WE05g	1 HR	8" CMU - 1 HR
WE06b	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE06c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE07c	NR	2'-6t PARAPET WALL - NR
WE08a	NR	2'-6t WALL - NR @ CONDENSERS
WE08b	NR	2'-6t EXTERIOR FURR WALL - NON RATED
WE08c	NR	2'-6t EXTERIOR FURR WALL - NON RATED
WE10b	1 HR	8" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, 1" PIN X 9" PINT SIDE
WE01g	2 HR	8" CMU - 2HR FIRE WALL
WE02c	2 HR	8" CMU - 2HR FIRE BARRIER
WE03	2 HR	FIRE WALL - 2HR
WE03b	2 HR	FIRE WALL, 2-HR, (2) 2X4 WITH (2) 1" SHAFTLINER
WE03h	2 HR	FIRE WALL, 2-HR, (2) 1 5/8" STUDS WITH (2) 1" SHAFTLINER
WE04b	2 HR	FIRE BARRIER, 2-HR, 2x WITH (2) 5/8" TYPE 'X' GYP.
WE04c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
WE05c	2 HR	FIRE BARRIER, 2-HR EXIT ACCESS
WE06b	2 HR	2'-6t INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
WE06c	2 HR	2'-6t INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
WE07b	1 HR	2'-0 OCCUPANCY SEPARATION - 1HR FIRE BARRIER
WE08a	1 HR	2'-0 OCCUPANCY SEPARATION - 1HR FIRE BARRIER
WE09h	1 HR	3 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
WE09k	1 HR	3 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
WE10b	1 HR	TYP. UNIT DEMISING - 1 HR FIRE PARTITION
WE10c	1 HR	2'-6t FIRE PARTITION, 1HR - UNIT DEMISING
WE11b	1 HR	2'-6t FIRE PARTITION, 1HR - CORRIDOR
WE11c	1 HR	<varies>
WE12b	1 HR	2'-6t FIRE PARTITION, 1HR - CORRIDOR - NO RC
WE12c	1 HR	2'-6t FIRE PARTITION, 1HR - CORRIDOR NO RC
WE13b	1 HR	2'-6t, 1HR - BEARING
WE13c	1 HR	2'-6t, 1HR - BEARING
WE14b	NR	2'-6t INTERIOR WALL - NR
WE14c	NR	2'-6t INTERIOR WALL - NR
WE15b	NR	2'-6t INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
WE15c	NR	2'-6t INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
WE16	NR	2'-0" METAL HAT CHANNEL FURRING WALL
WE17b	2 HR	2'-6t FIRE BARRIER, 2HR - UNIT DEMISING
WE10b	NR	3" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

FLOOR/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
FC01	1 HR	TYP. UNIT FLOOR/CEILING ASSEMBLY
FC02	1 HR	TYP. CORRIDOR FLOOR/CEILING ASSEMBLY
FC03	NR	TYP. DROP CEILING
FC05	NR	TYP. BALCONY ASSEMBLY - DRIP - THRU
FC06	NR	POST-TENSIONED SLAB
FC07	NR	NON-RATED PT CONCRETE SLAB
FC07	1HR	PRECAST CONCRETE FLOOR/CEILING
FC07	1HR	TYP. GARAGE FLOOR/CEILING
FC08	1 HR	BALCONY ASSEMBLY - CONDITIONED SPACE
FC09	1HR	BALCONY ASSEMBLY
FC10	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC11	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC12	NR	SLAB ON GRADE

ROOF/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
RC01	1HR	TYP. ROOF ASSEMBLY
RC02	1HR	TYP. ROOF ASSEMBLY
RC03	1HR	1 HR HORIZONTAL ASSEMBLY
RC04	1 HR	1 HR HORIZONTAL ASSEMBLY
RC05	NR	2 X ROOF ASSEMBLY
RC06	NR	5 PT 2 ROOF ASSEMBLY
RC07	NR	NR HORIZONTAL ASSEMBLY

KEYNOTES

NO.	NOTE
3.3	PRECAST CONCRETE STAIRS, RE: PRECAST CONTRACTOR SHOP DWGS
5.3	STEEL GUARDRAIL AT STAIR, 42" MIN ABOVE LEADING EDGE OF TREAD. POWDER COAT OR FIELD PAINT BLACK. RE: DET A1.0
5.4	STEEL GUARDRAIL AT LANDING, 42" MIN HT. PROVIDE BLOCKING IN WALL AS REQUIRED. FIELD PAINT BLACK. RE: DETAILS
5.5	STEEL HANDRAIL AT GUARDRAIL, 34" ABOVE LEADING EDGE OF TREAD. FIELD PAINT BLACK. RE: DETAILS
5.6	STEEL HANDRAIL AT WALL, 36" ABOVE LEADING EDGE OF TREAD. FIELD PAINT BLACK. RE: DETAILS
5.7	STEEL LADDER COMPLIANT CAGE DETECTION RAIL, 27" MAX HT. TO MAINTAIN VERTICAL HEADS ELEVATIONS. FIELD PAINT BLACK. RE: DET A1.0
21.2	ELEVATOR SHAFT WALL CONSTRUCTION AND FIRE PROTECTION SHALL COMPLY WITH APPLICABLE DESIGN RULE. SUBCONTRACTOR SHALL BE SUBMITTED TO FIRE DEPT FOR APPROVAL. PROVIDE ACCESSIBLE CARBON DETECTION DEVICE AT FLOOR AS REQUIRED AT VALVE CONNECTIONS

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ISSUE FOR CONSTRUCTION
06.07.2024

No.	Date	Issue
1	06.07.2024	IFC

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: STAIR 3 SECTIONS
Sheet Number: COMMON
A8-1.5

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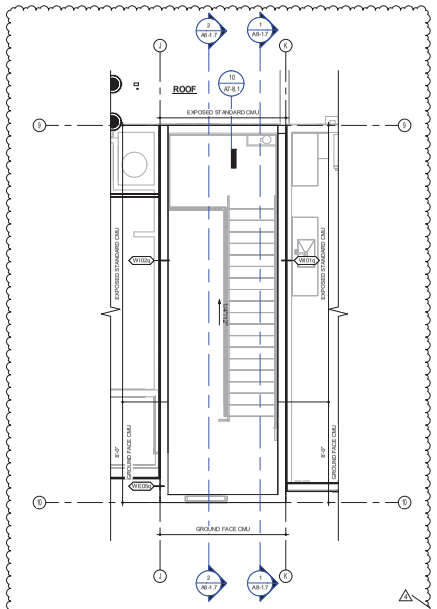
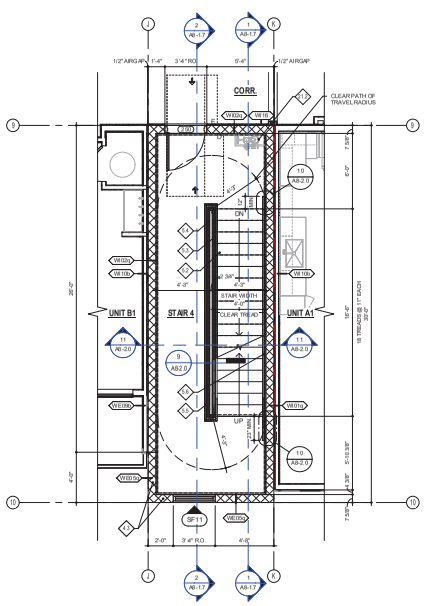
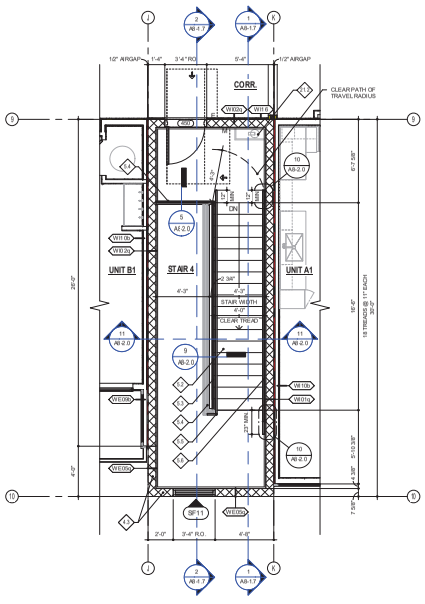


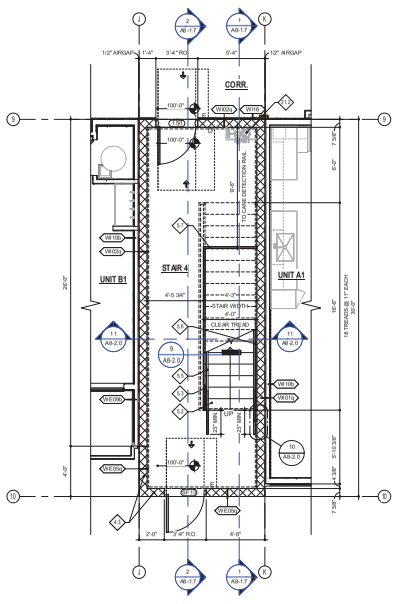
4 STAIR 4 - ROOF PLAN
1/4" = 1'-0"



2 STAIR 4 - LEVEL 2-3 PLAN
1/4" = 1'-0"



3 STAIR 4 - LEVEL 4 PLAN
1/4" = 1'-0"



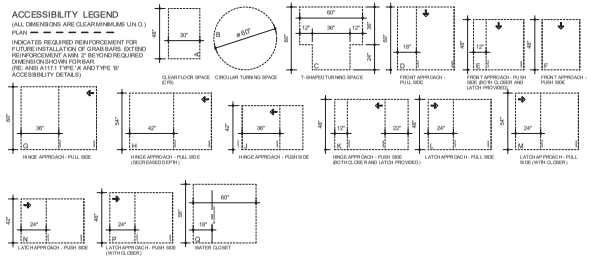
1 STAIR 4 - LEVEL 1 PLAN
1/4" = 1'-0"

ACCESSIBILITY LEGEND

(ALL DIMENSIONS ARE CLEAR/MINIMUMS U.N.O.)

PLAN

INDICATES REQUIRED REINFORCEMENT FOR FUTURE INSTALLATION OF GRAB BARS. EXTEND REINFORCEMENT A MIN. 2" BEYOND REQUIRED DIMENSION SHOWN FOR BAR. (RE: ANSI A117.1 TYPE 'A' AND TYPE 'B' ACCESSIBILITY DETAILS)



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- PREFABRICATED STEEL STAIRS ALONG WITH ASSOCIATED HANDRAILS AND GUARDRAILS SHALL BE A DEFERRED SUBMITTAL AS DESCRIBED BELOW:
- THE STAIR RISERS SHALL NOT BE LESS THAN 4 INCHES NOR MORE THAN 7 INCHES. THE LARGEST TREAD OR RISER WITHIN ANY FLIGHT OF STAIRS SHALL NOT EXCEED THE SMALLEST (TREAD OR RISER) BY MORE THAN 3/8".
- TOPS OF HANDRAILS SHOULD BE PLACED NOT LESS THAN 34 INCHES OR MORE THAN 38" INCHES ABOVE THE NOSING OF TREADS.
- HANDRAILS SHALL BE CONTINUOUS THE FULL LENGTH OF THE STAIRS AND SHALL EXTEND IN THE DIRECTION OF THE STAIR RUN NOT LESS THAN 12 INCHES BEYOND THE TOP RISER AND CONTINUE TO SLOPE FOR THE DEPTH OF ONE TREAD BEYOND THE BOTTOM RISER WHERE NOT OBSTRUCTED BY ADJACENT CONSTRUCTION. ENDS SHALL BE RETURNED OR SHALL HAVE TERMINATIONS DIVERGENCE.
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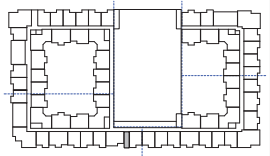
WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
W001c	1 HR	TYP. EXTERIOR WALL
W002c	2 HR	8" CONCRETE SHAFT WALL
W003c	1 HR	8" CONCRETE WALL
W003e	1 HR	GARAGE 12" CONCRETE WALL
W003c	1 HR	8" CONCRETE WALL
W004g	2 HR	8" CMU - 2HR FIRE BARRIER
W005c	1 HR	8" CMU - 1 HR
W006c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
W006c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
W007c	NR	2x6 PARAPET WALL - NR
W008c	NR	2x6 W ALL - NR @ 12" O/C EXPOSED
W009d	NR	2x4 EXTERIOR FURR WALL - NON RATED
W009c	NR	2x4 EXTERIOR FURR WALL - NON RATED
W010e	1 HR	8" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
W011g	2 HR	8" CMU - 2HR FIRE WALL
W002c	2 HR	8" CMU - 2HR FIRE BARRIER
W103	2 HR	FIRE WALL - 2HR
W003c	2 HR	FIRE WALL, 2-HR, (2)2X4 WITH (2) 1" SHAFTLINER
W003h	2HR	FIRE WALL, 2-HR, (2) 1-5/8" WITH (2) 1" SHAFTLINER
W004h	2 HR	FIRE BARRIER, 2 HR, 2x WITH (2) 5/8" TYPE 'X' GYP.
W004c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
W005c	2 HR	FIRE BARRIER, 2 HR EXIT ACCESS
W006h	2 HR	2X4 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W006c	2-HR	2X6 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
W007h	1 HR	OCCUPANCY/SEPARATION - 1HR FIRE BARRIER
W008c	1 HR	OCCUPANCY/SEPARATION - 1HR FIRE BARRIER
W009h	1 HR	3 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W009c	1 HR	8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
W010h	1 HR	TYP. UNIT DEMISING - 1 HR FIRE PARTITION
W010c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
W011h	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
W011c	1 HR	Invisible1
W012h	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NOTRC
W012c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
W013h	1 HR	2X4, 1HR - BEARING
W013c	1 HR	2X6, 1HR - BEARING
W014h	NR	2X4 INTERIOR WALL - NR
W014c	NR	2X6 INTERIOR WALL - NR
W015h	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W015c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
W016	NR	5/8" METAL HAT CHANNEL FURRING WALL
W017h	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
W018h	NR	8" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

KEYNOTES

NO.	NOTE
K3	GROUND FACE CONCRETE MASONRY UNITS AT EXTERIOR SIDE FACE ONLY. INSTALL AND SEAL PER MFG RECOMMENDATIONS.
K2	PREFABRICATED STEEL STAIRS WITH PRE-CAST CONCRETE TREADS: INSTALL PER STAIR MFG SPECIFICATIONS. FIELD PAINT BLACK.
K3	STEEL GUARDRAIL AT ST AIR, 42" MIN ABOVE LEADING EDGE OF TREAD. POWDER COAT OR FIELD PAINT BLACK. RE: DET A1.0
K4	STEEL GUARDRAIL AT LANDING, 42" MIN ABT. PROVIDE BLOCKING IN WALL AS REQUIRED. FIELD PAINT BLACK. RE: DET A1.0
K5	STEEL HANDRAIL AT GUARDRAIL, 36" ABOVE LEADING EDGE OF TREAD. FIELD PAINT BLACK. RE: DETAIL 8
K6	STEEL HANDRAIL AT 9 WALL 36" ABOVE LEADING EDGE OF TREAD. FIELD PAINT BLACK. RE: DETAIL 8
K7	TYPE ACCESSIBLE DOOR DETECTOR MAX 27" ABOVE FINISH MAINTAIN VERTICAL HEAD CLEARANCE. FIELD PAINT BLACK. RE: DETAIL 9
J1.2	CLASS 13 SPRINKLER PER SECTION 903.3.1.3 NFPA 13D. A CUT-SHEET SHALL BE PER FIRE SPRINKLER DESIGN-BUILD SUBCONTRACTOR & SHALL BE SUBMITTED TO FIRE DEPT FOR APPROVAL. PROVIDE ACCESSIBLE CAGE. DETECTION DEVICE AT FLOOR AS REQUIRED AT VAL VE CONNECTIONS.



N TRUE N PROJECT

VERTICAL CIRCULATION KEY PLAN

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ISSUE FOR CONSTRUCTION
06.01.2024

No.	Date	Issue
1	06.07.2024	IFC

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: STAIR 4 PLANS
Sheet Number: A8-1.6

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- THE STAIR RISERS SHALL NOT BE LESS THAN 4 INCHES NOR MORE THAN 7 INCHES. THE LARGEST TREAD OR RISER WITHIN ANY FLIGHT OF STAIRS SHALL NOT EXCEED THE SMALLEST (TREAD OR RISER) BY MORE THAN 3/8".
- TOPS OF HANDRAILS SHOULD BE PLACED NOT LESS THAN 34 INCHES OR MORE THAN 38" INCHES ABOVE THE NOSING OF TREADS.
- HANDRAILS SHALL BE CONTINUOUS THE FULL LENGTH OF THE STAIRS AND SHALL EXTEND IN THE DIRECTION OF THE STAIR RUN NOT LESS THAN 12 INCHES BEYOND THE TOP RISER AND CONTINUE TO SLOPE FOR THE DEPTH OF ONE TREAD BEYOND THE BOTTOM RISER WHERE NOT OBSTRUCTED BY ADJACENT CONSTRUCTION. HANDRAIL ENDS SHALL BE RETURNED OR SHALL HAVE TERMINATIONS DIMENSIONED.
- GENERAL CONTRACTOR TO COORDINATE FLOOR OPENINGS AND STAIR CONSTRUCTION WITH SUBCONTRACTOR AN ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN. FIELD VERIFY ALL DIMENSIONS.

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
WE01c	1 HR	TYP. EXTERIOR WALL
WE02c	2 HR	8" CONCRETE SHAFT WALL
WE03c	1 HR	8" CONCRETE WALL
WE03e	1 HR	GARAGE, 12" CONCRETE WALL
WE03c	1 HR	8" CONCRETE WALL
WE04c	2 HR	8" CMU - 2HR FIRE BARRIER
WE05c	1 HR	8" CMU - 1 HR
WE06c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE06c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE07c	NR	2:46 PARAPET WALL - NR
WE08c	NR	2:46 WALL - NR @ CONDENSERS
WE09c	NR	2:46 EXTERIOR FURR WALL - NON RATED
WE09c	NR	2:46 EXTERIOR FURR WALL - NON RATED
WE10c	1 HR	8" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
WB01c	2 HR	8" CMU - 2HR FIRE WALL
WB02c	2 HR	8" CMU - 2HR FIRE BARRIER
WB03	2 HR	FIRE WALL - 2HR
WB03b	2 HR	FIRE WALL, 2-HR, (2) 2X4 WITH (2) 1" SHAFTLINER
WB03b	2HR	FIRE WALL, 2 HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
WB04b	2 HR	FIRE BARRIER, 2-HR, 2x WITH (2) 5/8" TYPE 'X' GYP.
WB06c	2 HR	FIRE BARRIER - 2HR EXIT ACCESS
WB06c	2 HR	FIRE BARRIER, 2-HR EXIT ACCESS
WB09b	2-HR	2:46 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
WB06c	2-HR	2:46 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
WB07b	1 HR	2 OCCUPANCY SEPARATION - 1HR FIRE BARRIER
WB08b	1 HR	2 OCCUPANCY SEPARATION - 1HR FIRE BARRIER
WB09b	1 HR	3 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
WB09b	1 HR	8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
WB10b	1 HR	TYP. UNIT DEMISING - 1 HR FIRE PARTITION
WB10c	1 HR	2:46 FIRE PARTITION, 1HR - UNIT DEMISING
WB11b	1 HR	2:46 FIRE PARTITION, 1HR - CORRIDOR
WB11c	1 HR	4 series^
WB12b	1 HR	2:46 FIRE PARTITION, 1HR - CORRIDOR - NO RC
WB12c	1 HR	2:46 FIRE PARTITION, 1HR - CORRIDOR NO RC
WB13b	1 HR	2:46, 1HR - BEARING
WB13c	1 HR	2:46, 1HR - BEARING
WB14b	NR	2:46 INTERIOR WALL - NR
WB14c	NR	2:46 INTERIOR WALL - NR
WB15b	NR	2:46 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
WB15c	NR	2:46 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
WB16	NR	2:46 METAL HAT CHANNEL FURRING WALL
WB17b	2 HR	2:46 FIRE BARRIER, 2HR - UNIT DEMISING
WB18b	NR	8" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

FLOOR/CEILING TYPE SCHEDULE

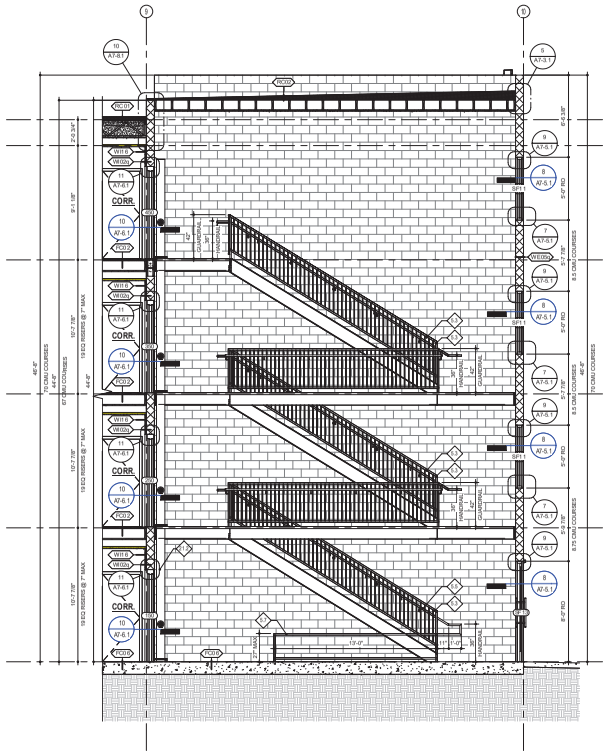
MARK	FIRE RATING	DESCRIPTION
FC01	1 HR	TYP. UNIT FLOOR/CEILING ASSEMBLY
FC02	1 HR	TYP. CORRIDOR FLOOR/CEILING ASSEMBLY
FC03	NR	TYP. DROP CEILING
FC05	NR	TYP. BALCONY ASSEMBLY - DRIP - THRU
FC06	NR	POST-TENSIONED SLAB
FC07	NR	NON-RATED PT CONCRETE SLAB
FC07	1HR	PRECAST CONCRETE FLOOR/CEILING
FC07	1HR	TYP. GARAGE FLOOR/CEILING
FC08	1HR	BALCONY ASSEMBLY - CONDITIONED SPACE
FC09	1HR	BALCONY ASSEMBLY
FC10	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC11	2HR	FLOOR/CEILING ASSEMBLY - 2 HR EXIT ACCESS
FC12	NR	SLAB ON GRADE

ROOF/CEILING TYPE SCHEDULE

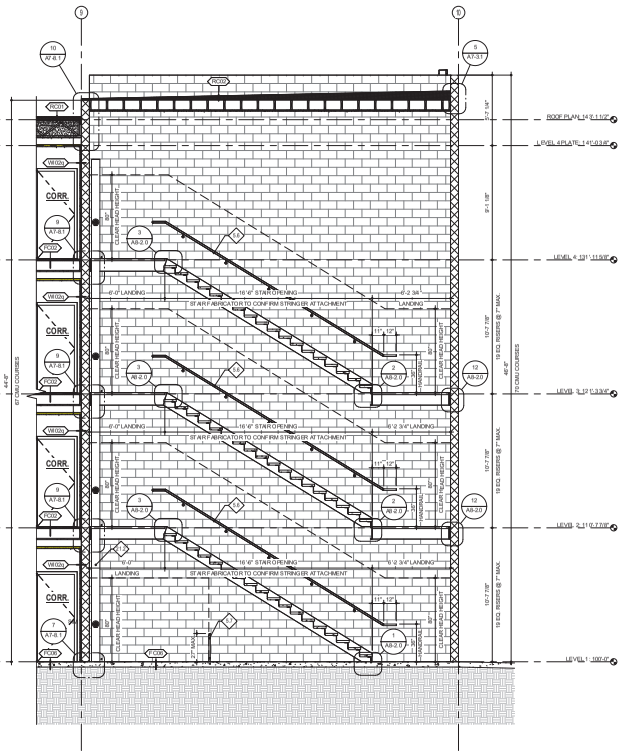
MARK	FIRE RATING	DESCRIPTION
RC01	1HR	TYP. ROOF ASSEMBLY
RC02	1HR	TYP. ROOF ASSEMBLY
RC03	1HR	1 HR HORIZONTAL ASSEMBLY
RC04	1 HR	1 HR HORIZONTAL ASSEMBLY
RC06	NR	2 X ROOF ASSEMBLY
RC06	NR	5 PT 2 ROOF ASSEMBLY
RC07	NR	NR HORIZONTAL ASSEMBLY

KEYNOTES

NO.	NOTE
5.3	STEEL GUARDRAIL AT STAIR, 42" MIN ABOVE LEADING EDGE OF TREAD, POWDER COAT OR FIELD PAINT BLACK, REF. DETAILS
5.5	STEEL HANDRAIL AT GUARDRAIL, 34" ABOVE LEADING EDGE OF TREAD, OPTIELD PAINT BLACK, REF. DETAILS
5.6	STEEL HANDRAIL AT WALL 36" ABOVE LEADING EDGE OF TREAD, FIELD PAINT BLACK, REF. DETAIL 5
5.7	STEEL ADA-COMPLIANT CANE DETECTION RAIL, 27" MAX HT., TO MAINTAIN VERTICAL HEAD CLEARANCE, FIELD PAINT BLACK, REF. DETAILS
21.2	CLASS I SPRINKLER PER IBC 2018 SECTION 903, EXACT LOCATION SHALL BE PER FINE SPRINKLER DESIGN-BUILD SUBCONTRACTOR & SHALL BE SUBMITTED TO FIRE DEPT FOR APPROVAL. PROVIDE ACCESSIBLE CANE DETECTION DEVICE AT FLOOR AS REQUIRED AT VALVE CONNECTIONS



2 STAIR 4 - SECTION 2
1/4" = 1'-0"



1 STAIR 4 - SECTION 1
1/4" = 1'-0"

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ISSUE FOR CONSTRUCTION
06.07.2024

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: STAIR 4 SECTIONS
Sheet Number: A8-1.7

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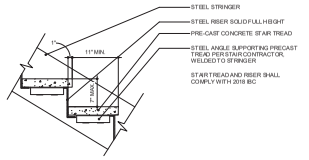
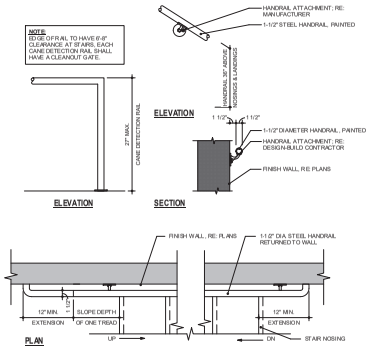
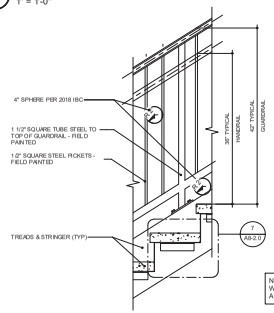


NOTE:
WELD ALL CONNECTIONS AND GRIND SMOOTH

7 STAIR TREAD/RISER - MIDDLE
1" = 1'-0"

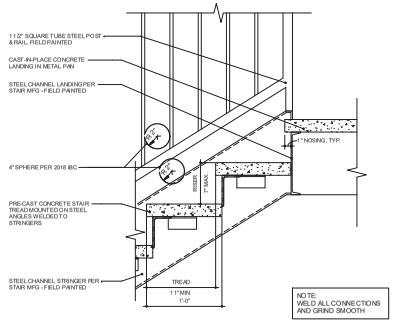


10 STAIR HANDRAIL DETAILS
1" = 1'-0"



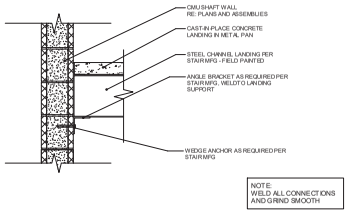
NOTE:
WELD ALL CONNECTIONS AND GRIND SMOOTH

6 STAIR GUARDRAIL - TREAD/RISER DETAIL
1" = 1'-0"



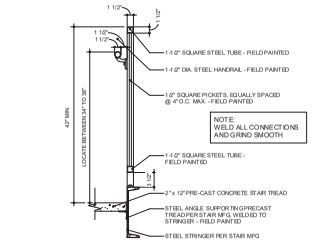
NOTE:
WELD ALL CONNECTIONS AND GRIND SMOOTH

3 STAIR LANDING DETAIL - TOP
1 1/2" = 1'-0"



NOTE:
WELD ALL CONNECTIONS AND GRIND SMOOTH

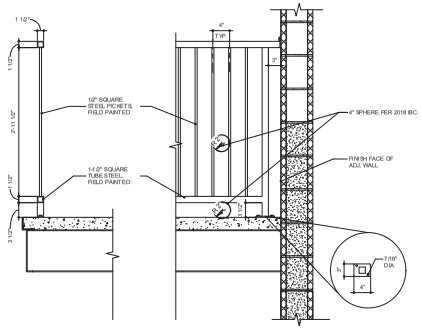
12 STAIR 4 SECTION AT STAIR LANDING
1" = 1'-0"



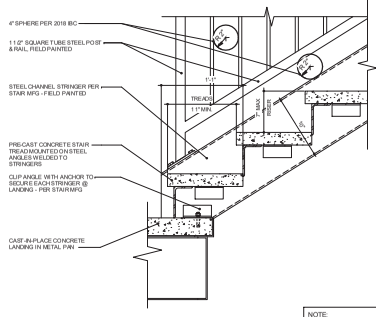
NOTE:
WELD ALL CONNECTIONS AND GRIND SMOOTH

NOTES:
1. HANDRAILS AND GUARDS SHALL BE DESIGNED TO RESIST A LINEAR LOAD OF 50 POUNDS PER LINEAR FOOT PER 2018 IBC SECTION 1607.8.1.
2. HANDRAILS AND GUARDS SHALL BE DESIGNED TO RESIST A CONCENTRATED LOAD OF 200 POUNDS PER 2018 IBC SECTION 1607.8.1.1.
3. INTERMEDIATE RAILS (ALL THOSE EXCEPT THE HANDRAIL), BALUSTERS AND PANEL FILLERS SHALL BE DESIGNED TO RESIST A CONCENTRATED LOAD OF 50 POUNDS PER 2018 IBC SECTION 1607.8.1.2.

9 STAIR GUARD/ HANDRAIL @ TREAD/RISER
1" = 1'-0"

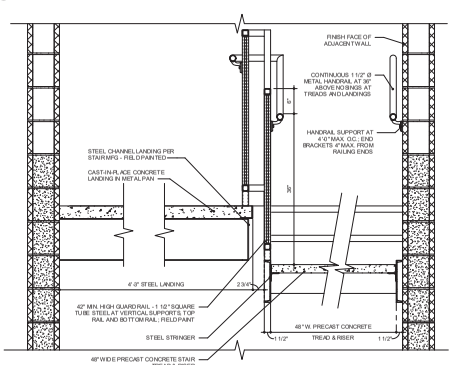


5 STAIR GUARDRAIL AT LANDING
1" = 1'-0"

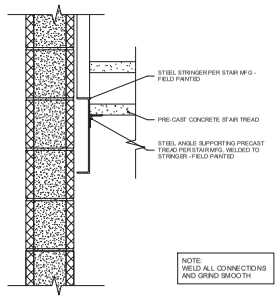


NOTE:
WELD ALL CONNECTIONS AND GRIND SMOOTH

2 STAIR LANDING DETAIL - BOTTOM
1 1/2" = 1'-0"

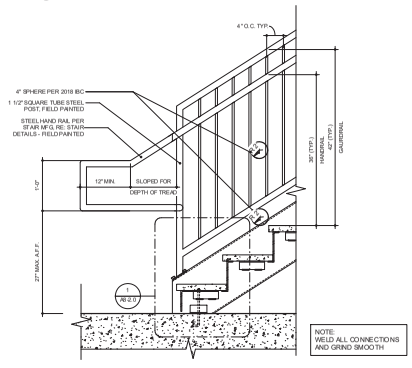


11 STAIR 4 SECTION - STEEL STRINGER
1" = 1'-0"



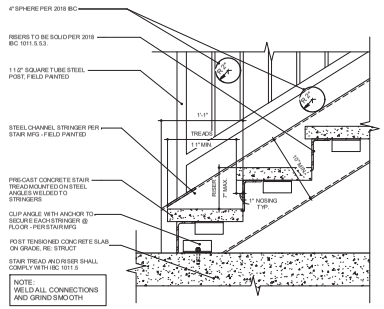
NOTE:
WELD ALL CONNECTIONS AND GRIND SMOOTH

8 STAIR STRINGER DETAIL
1 1/2" = 1'-0"



NOTE:
WELD ALL CONNECTIONS AND GRIND SMOOTH

4 STAIR GUARD ELEVATION
1" = 1'-0"



NOTE:
WELD ALL CONNECTIONS AND GRIND SMOOTH

1 FIRST FLOOR STAIR DETAIL
1 1/2" = 1'-0"

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ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue
1	10.03.2023	PC1 RESPONSE

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: STAIR 4 DETAILS
Sheet Number: **A8-2.0**

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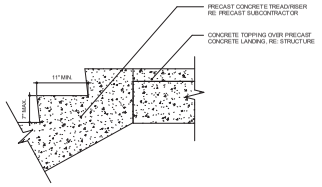
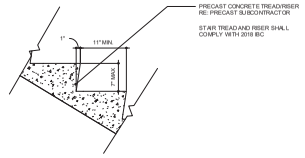
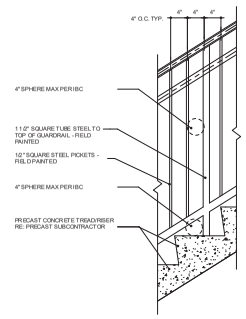


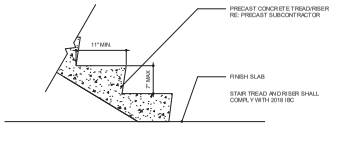
8 STAIR TREAD/RISER -TOP LANDING
1" = 1'-0"



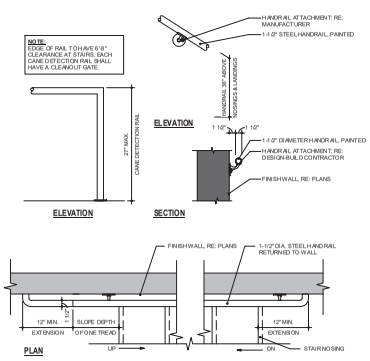
7 STAIR TREAD/RISER - MIDDLE
1" = 1'-0"

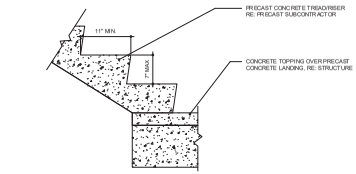


3 STAIR GUARDRAIL - TREAD/RISER DETAIL- PRECAST
1" = 1'-0"



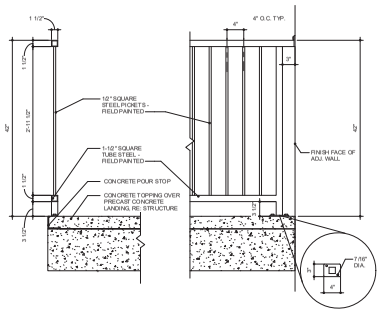
6 STAIR TREAD/RISER AT SLAB
1" = 1'-0"



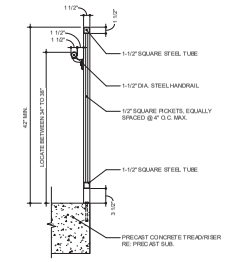


5 STAIR TREAD/RISER - BOTTOM LANDING
1" = 1'-0"

2 PRECAST STAIR HANDRAIL DETAILS
1" = 1'-0"



4 STAIR GUARDRAIL AT LANDING - PRECAST
1" = 1'-0"



1 STAIR GUARDRAIL/HANDRAIL @ TREAD/RISER
1" = 1'-0"

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ISSUE FOR CONSTRUCTION
08.01.2024

No.	Date	Issue
1	10.03.2024	PC1 RESPONSE

Project Architect: DV
Project Designer: DR
Title:
Job Number: 222001
Drawn By: CG / CB/ TT / NV
Checked By: JG
Title: STAIR DETAILS - PRECAST
Sheet Number: COMMON
A8-2.1

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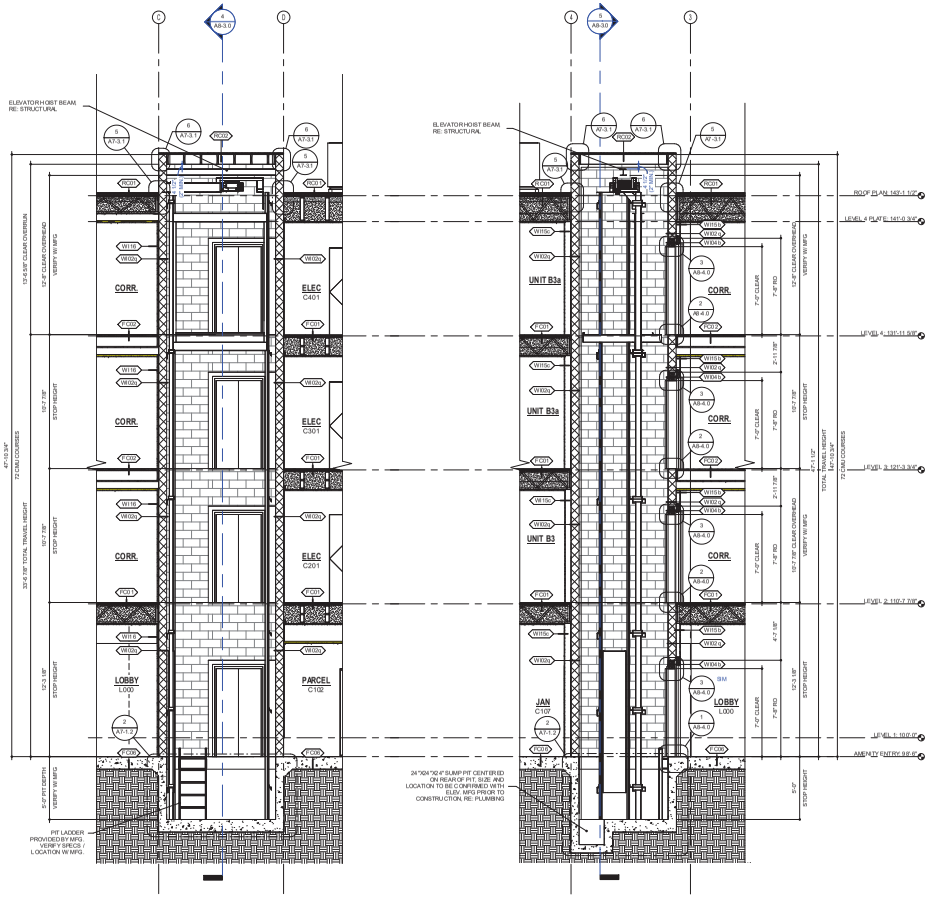
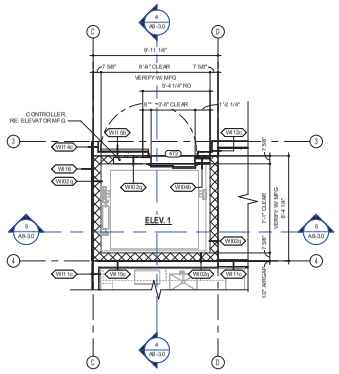
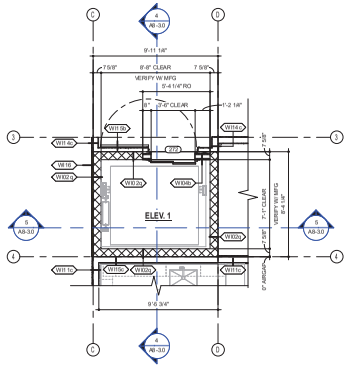


5 ELEVATOR 1 - SECTION 2
1/4" = 1'-0"

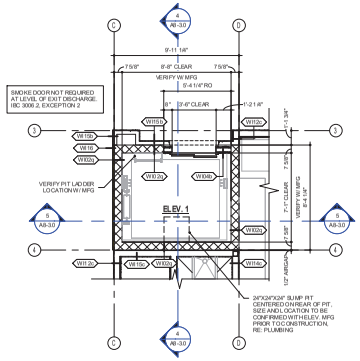
4 ELEVATOR 1 - SECTION 1
1/4" = 1'-0"



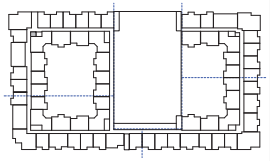
3 ELEVATOR 1 - LEVEL 4 PLAN
1/4" = 1'-0"



2 ELEVATOR 1 - LEVEL 2-3 PLAN
1/4" = 1'-0"



1 ELEVATOR 1 - LEVEL 1 PLAN
1/4" = 1'-0"



VERTICAL CIRCULATION KEY PLAN

N TRUE N PROJECT

BASIS OF DESIGN

BASIS OF DESIGN - SCHINDLER 3300 MRL 3900lb. 1.60 FPM. PROVIDE 8' 0" CAB HEIGHT W 7'-0" DOORS.

ELEVATOR SHALL ACCOMMODATE AMBULANCE STRETCHER PER 2018 IBC SECTION 3 002.4

NOTE:

PROVIDE SMOKE & DRAFT CONTROL DOORS ON MAGNETIC HOLDS AT ELEVATOR #1 AND ELEVATOR #2, RE: 5 A8-4.0

PROVIDE 2-WAY VISUAL COMMUNICATION SYSTEM PER IBC 2018 1009.8 & ASME A17.1-2019 SECTION 2.27.11.3 (d), (e), AND (k)

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
WB01c	1 HR	TYP. EXTERIOR WALL
WB02c	2 HR	8" CONCRETE SHAFT WALL
WB03c	1 HR	8" CONCRETE WALL
WB03w	1 HR	GARAGE, 12" CONCRETE WALL
WB03x	1 HR	8" CONCRETE WALL
WB04c	2 HR	8" CMU - 2HR FIRE BARRIER
WB05c	1 HR	8" CMU - 1 HR
WB06c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WB06x	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WB07c	NR	2-HR PARAPET WALL - NR
WB08c	NR	2-HR WALL - NR @ CONDENSERS
WB09c	NR	2-HR EXTERIOR FURR WALL - NON RATED
WB09x	NR	2-HR EXTERIOR FURR WALL - NON RATED
WB10c	1 HR	8" STEEL STUD WALL WITH EXT BRICK/GRADE GWB EXT SIDE, TYPE 'X' Q1P INT SIDE
WB01d	2 HR	8" CMU - 2HR FIRE WALL
WB02c	2 HR	8" CMU - 2HR FIRE BARRIER
WB03	2 HR	FIRE WALL - 2HR
WB03b	2 HR	FIRE WALL, 2-HR, (2) 2X4 WITH (2) 1" SHAFTLINER
WB03h	2HR	FIRE WALL, 2-HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
WB04b	2 HR	FIRE BARRIER, 2-HR, 2x WITH (2) 5/8" TYPE 'X' Q1P
WB04c	2 HR	FIRE BARRIER, 2-HR EXIT ACCESS
WB05c	2 HR	FIRE BARRIER, 2-HR EXIT ACCESS
WB06b	2-HR	2-Hr INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
WB06c	2-HR	2-Hr INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
WB07b	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
WB08c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
WB09h	1 HR	2 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
WB10b	1 HR	8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
WB10b	1 HR	TYP. UNIT DEMISING - 1-HR FIRE PARTITION
WB10c	1 HR	2-Hr FIRE PARTITION, 1HR - UNIT DEMISING
WB11b	1 HR	2-Hr FIRE PARTITION, 1HR - CORRIDOR
WB11c	1 HR	various
WB12b	1 HR	2-Hr FIRE PARTITION, 1HR - CORRIDOR - NO RC
WB13c	1 HR	2-Hr FIRE PARTITION, 1HR - CORRIDOR NO RC
WB13b	1 HR	2-Hr, 1HR - BEARING
WB13c	1 HR	2-Hr, 1HR - BEARING
WB14b	NR	2-Hr, 1HR BRICK WALL - NR
WB14c	NR	2-Hr, 1HR BRICK WALL - NR
WB15b	NR	2-Hr INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
WB15c	NR	2-Hr INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
WB16	NR	7/8" METAL HAT CHANNEL FURRING WALL
WB17b	2 HR	2-Hr FIRE BARRIER, 2HR - UNIT DEMISING
WB19b	NR	2" 18 GEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

FLOOR/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
FC01	1 HR	TYP. UNIT FLOOR/CEILING ASSEMBLY
FC02	1 HR	TYP. CORRIDOR FLOOR/CEILING ASSEMBLY
FC03	NR	TYP. DROP CEILING
FC05	NR	TYP. BALCONY ASSEMBLY - DRIP - THRU
FC06	NR	POST-TENSIONED SLAB
FC07	NR	NON-RATED PT CONCRETE SLAB
FC07	1HR	PRECAST CONCRETE FLOOR/CEILING
FC07	1 HR	TYP. GARAGE FLOOR/CEILING
FC08	1HR	BALCONY ASSEMBLY - CONDITIONED SPACE
FC09	1HR	BALCONY ASSEMBLY
FC10	2HR	FLOOR/CEILING ASSEMBLY - 2 HR EXIT ACCESS
FC11	2HR	FLOOR/CEILING ASSEMBLY - 2 HR EXIT ACCESS
FC12	NR	SLAB ON GRADE

ROOF/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
RC01	1HR	TYP. ROOF ASSEMBLY
RC02	1HR	TYP. ROOF ASSEMBLY
RC03	1 HR	1 HR HORIZONTAL ASSEMBLY
RC04	1 HR	1 HR HORIZONTAL ASSEMBLY
RC05	NR	2-X ROOF ASSEMBLY
RC06	NR	1-4"-3 ROOF ASSEMBLY
RC07	NR	NR HORIZONTAL ASSEMBLY

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Title: ELEVATOR 1 PLAN/SECTION
Sheet Number: **A8-3.0**

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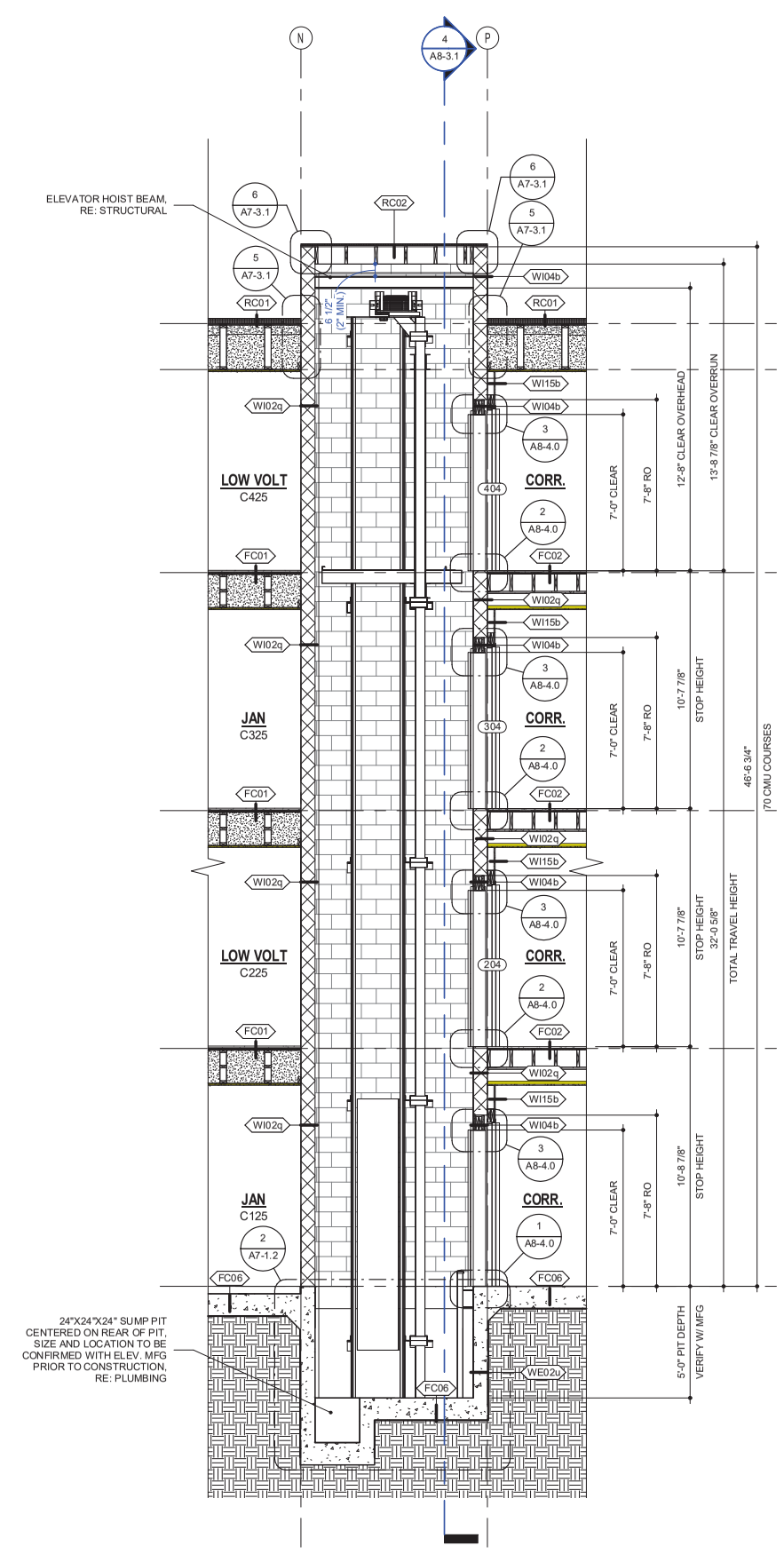
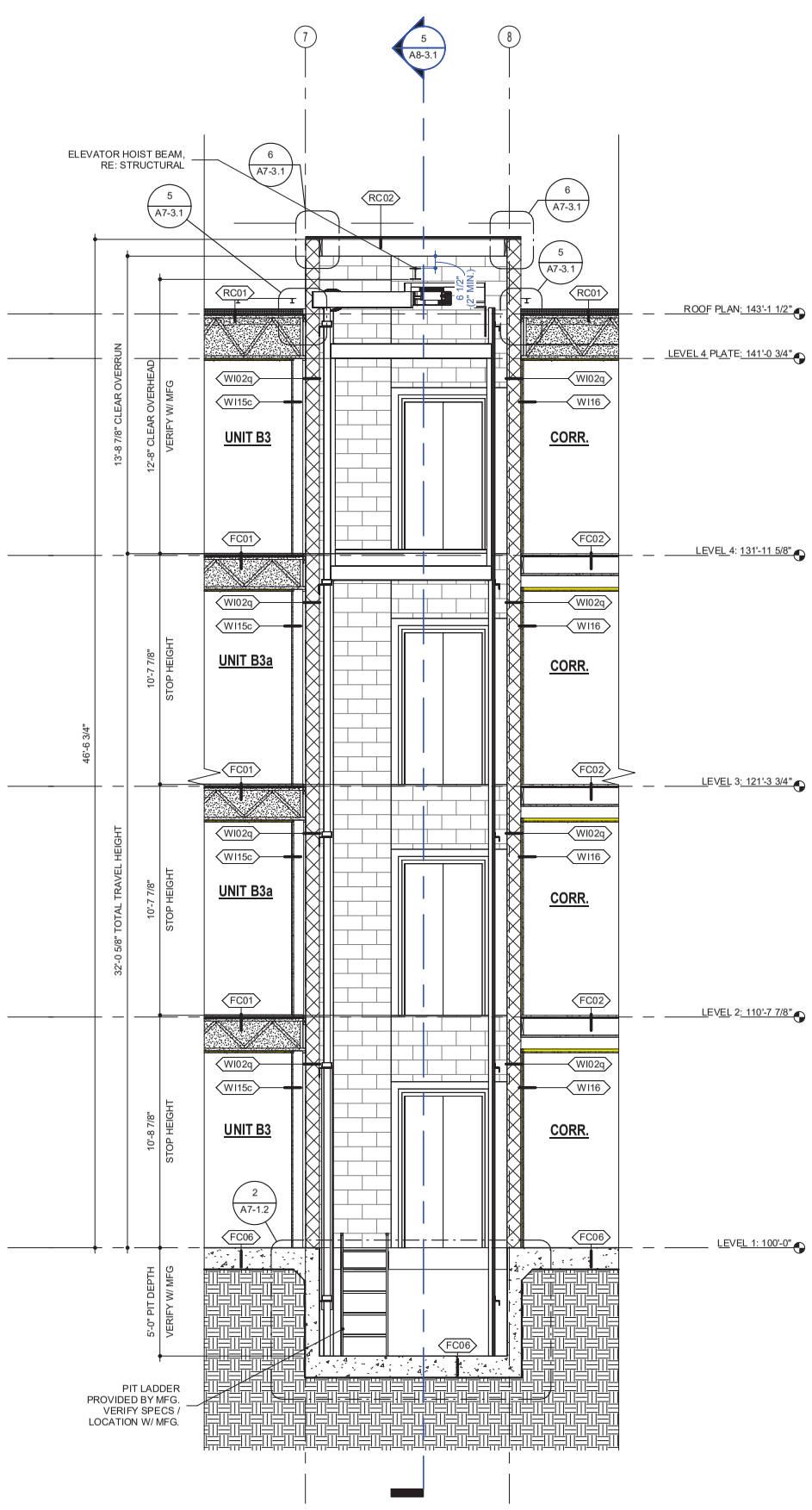
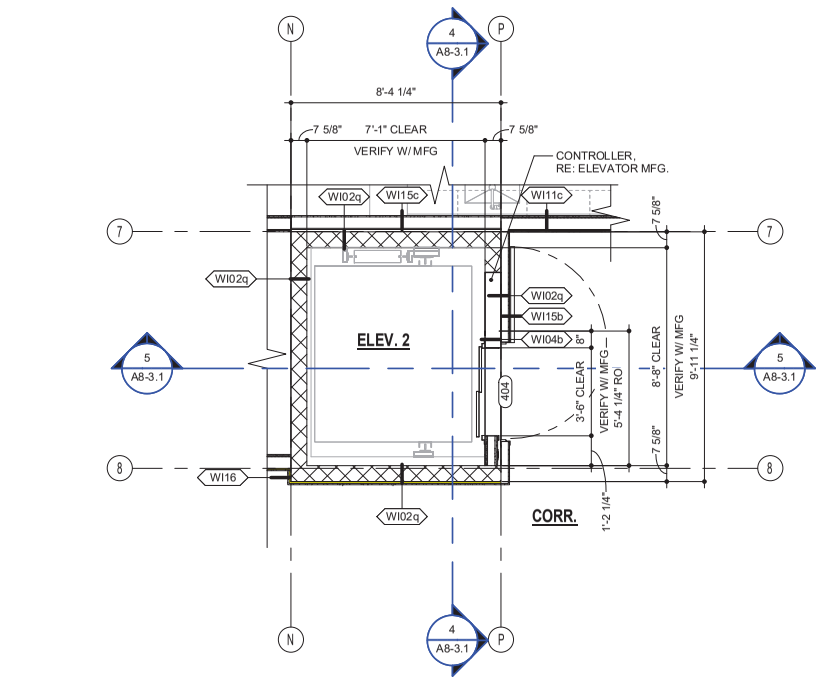


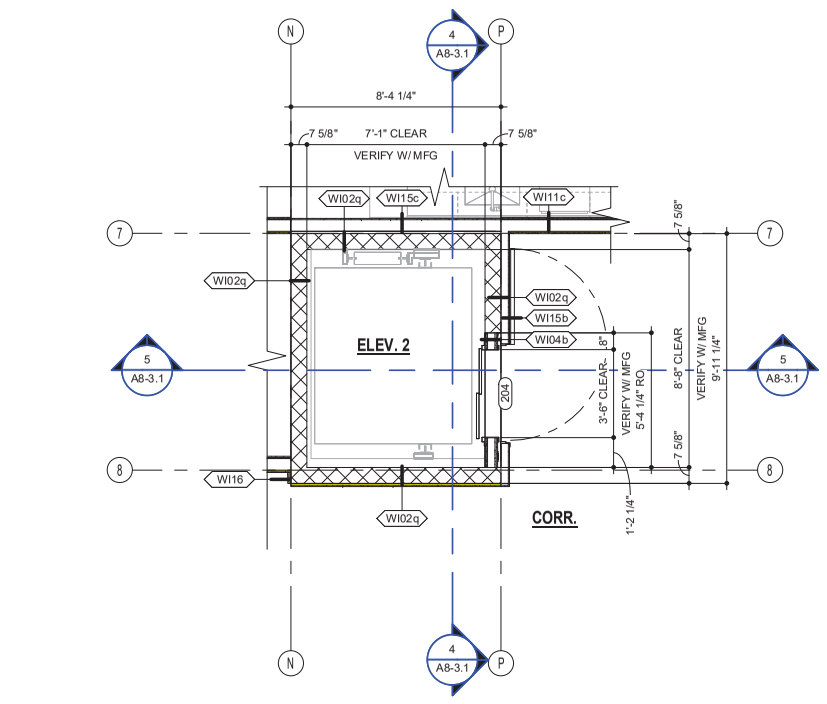
5 ELEVATOR 2 - SECTION 2
1/4" = 1'-0"



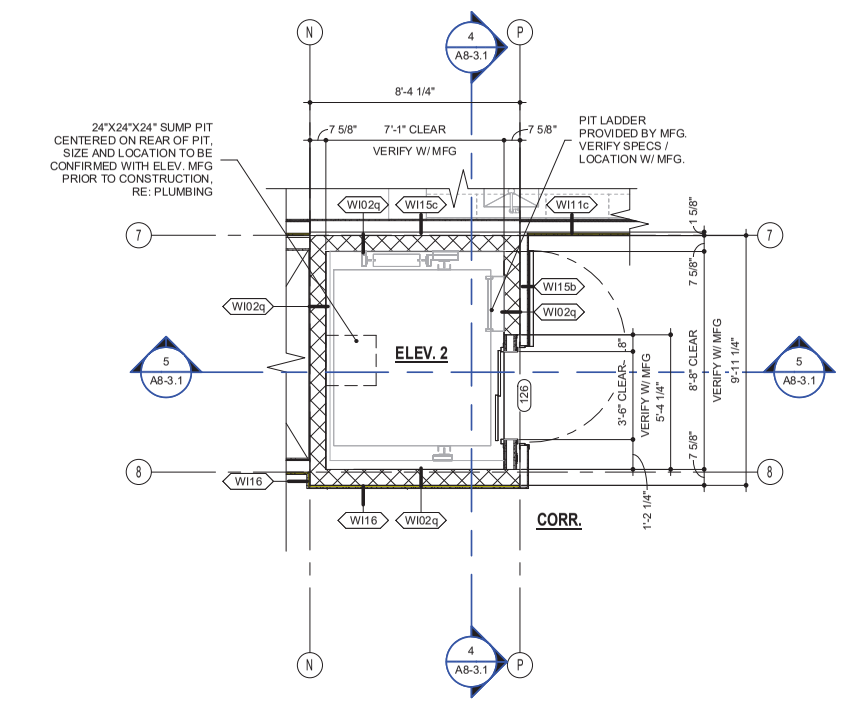
4 ELEVATOR 2 - SECTION 1
1/4" = 1'-0"



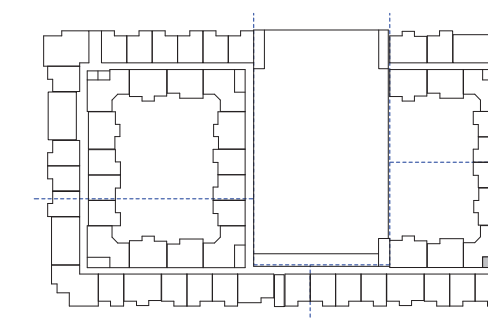
3 ELEVATOR 2 - LEVEL 4 PLAN
1/4" = 1'-0"



2 ELEVATOR 2 - LEVEL 2-3 PLAN
1/4" = 1'-0"



1 ELEVATOR 2 - LEVEL 1 PLAN
1/4" = 1'-0"



VERTICAL CIRCULATION KEY PLAN

BASIS OF DESIGN

BASIS OF DESIGN - SCHINDLER 3300 MRL 3500#, 150 FPM. PROVIDE 8'-0" CAB HEIGHT W/ 7'-0" DOOR.

ELEVATOR SHALL ACCOMMODATE AMBULANCE STRETCHER PER 2018 IBC SECTION 3002.4

NOTE:

PROVIDE SMOKE & DRAFT CONTROL DOORS ON MAGNETIC HOLDS AT ELEVATOR #1 AND ELEVATOR #2, RE: 5/A8-4.0

PROVIDE 2-WAY VISUAL COMMUNICATION SYSTEM PER IBC 2018 1009.8 & ASME A17.1-2019 SECTION 2.27.1.1.3 (d), (e), AND (k)

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
WE01c	1 HR	TYP. EXTERIOR WALL
WE02u	2 HR	8" CONCRETE SHAFT WALL
WE03u	1 HR	8" CONCRETE WALL
WE03w	1 HR	GARAGE, 12" CONCRETE WALL
WE03x	1 HR	9" CONCRETE WALL
WE04q	2 HR	8" CMU - 2HR FIRE BARRIER
WE05q	1 HR	8" CMU - 1 HR
WE06b	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE06c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE07c	NR	2x6 PARAPET WALL - NR
WE08c	NR	2x6 WALL - NR @ CONDENSERS
WE09b	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE09c	NR	2x4 EXTERIOR FURR WALL - NON RATED
WE19k	1 HR	6" STEEL STUD WALL WITH EXTERIOR GRADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
WI01q	2 HR	8" CMU - 2HR FIRE WALL
WI02q	2 HR	8" CMU - 2HR FIRE BARRIER
WI03	2 HR	FIRE WALL - 2HR
WI03b	2 HR	FIRE WALL, 2-HR, (2) 2X4 WITH (2) 1" SHAFTLINER
WI03h	2HR	FIRE WALL, 2-HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
WI04b	2 HR	FIRE BARRIER, 2-HR, 2x WITH (2) 5/8" TYPE 'X' GYP
WI04c	2 HR	FIRE BARRIER, - 2HR EXIT ACCESS
WI05c	2 HR	FIRE BARRIER, 2-HR EXIT ACCESS
WI06b	2-HR	2X4 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
WI06c	2-HR	2X6 INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
WI07b	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
WI08c	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
WI09h	1 HR	3 5/8" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
WI09k	1 HR	6" STEEL STUD WALL WITH TYPE 'X' GWB BOTH SIDES
WI10b	1 HR	TYP. UNIT DEMISING - 1-HR FIRE PARTITION
WI10c	1 HR	2x6 FIRE PARTITION, 1HR - UNIT DEMISING
WI11b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR
WI11c	1 HR	<varies>
WI12b	1 HR	2X4 FIRE PARTITION, 1HR - CORRIDOR - NO RC
WI12c	1 HR	2X6 FIRE PARTITION, 1HR - CORRIDOR NO RC
WI13b	1 HR	2X4, 1HR - BEARING
WI13c	1 HR	2X6, 1HR - BEARING
WI14b	NR	2X4 INTERIOR WALL - NR
WI14c	NR	2X6 INTERIOR WALL - NR
WI15b	NR	2x4 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
WI15c	NR	2x6 INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
WI16	NR	7/8" METAL HAT CHANNEL FURRING WALL
WI17b	2 HR	2X4 FIRE BARRIER, 2HR - UNIT DEMISING
WI18k	NR	6" STEEL STUD WALL WITH TYPE 'X' GWB ONE SIDE

FLOOR/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
FC01	1 HR	TYP. UNIT FLOOR/CEILING ASSEMBLY
FC02	1 HR	TYP. CORRIDOR FLOOR/CEILING ASSEMBLY
FC03	NR	TYP. DROP CEILING
FC05	NR	TYP. BALCONY ASSEMBLY - DRIP - THRU
FC06	NR	POST-TENSIONED SLAB
FC07	NR	NON-RATED PT CONCRETE SLAB
FC07	1HR	PRECAST CONCRETE FLOOR/CEILING
FC07	1HR	TYP. GARAGE FLOOR/CEILING
FC08	1HR	BALCONY ASSEMBLY - CONDITIONED SPACE
FC09	1HR	BALCONY ASSEMBLY
FC10	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC11	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC12	NR	SLAB ON GRADE

ROOF/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
RC01	1HR	TYP. ROOF ASSEMBLY
RC02	1HR	TYP. ROOF ASSEMBLY
RC03	1HR	1 HR HORIZONTAL ASSEMBLY
RC04	1 HR	1 HR HORIZONTAL ASSEMBLY
RC05	NR	2X ROOF ASSEMBLY
RC06	NR	14" TJI ROOF ASSEMBLY
RC07	NR	NR HORIZONTAL ASSEMBLY

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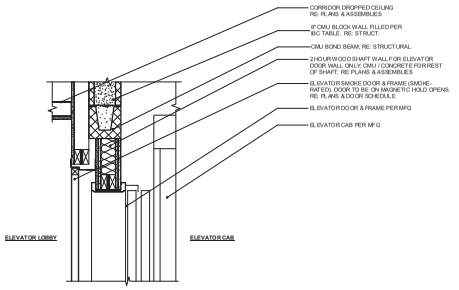
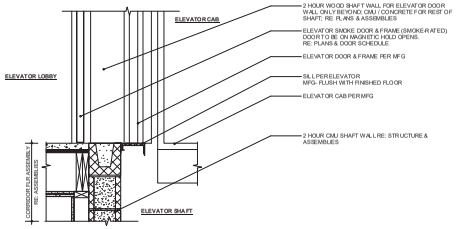
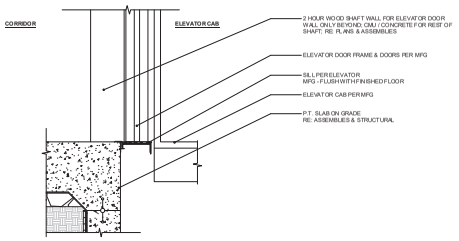


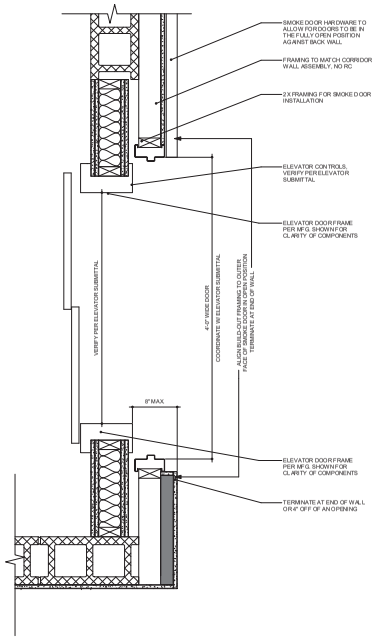
3 ELEVATOR DOOR HEAD - TYPICAL
1" = 1'-0"



2 ELEVATOR DOOR SILL
1" = 1'-0"



1 ELEVATOR DOOR SILL AT CONCRETE SLAB
1" = 1'-0"



4 ELEVATOR SMOKE DOOR CMU - TYPICAL
1 1/2" = 1'-0"

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Sheet Number: A8-4.0

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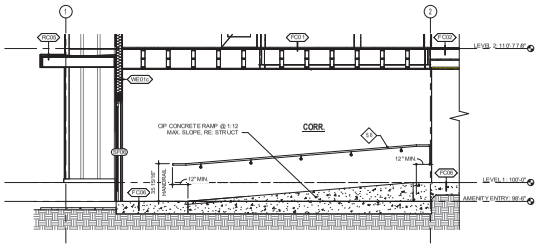
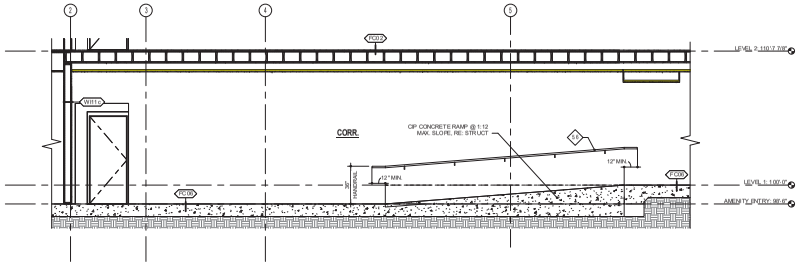
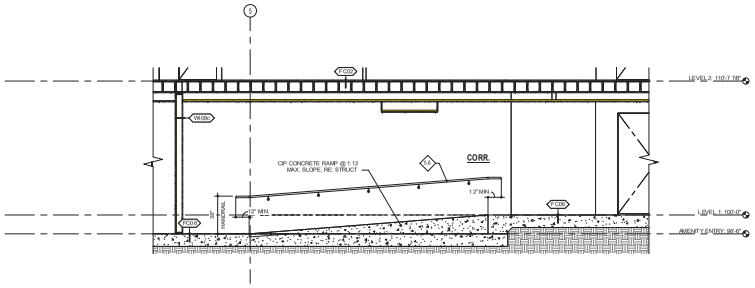


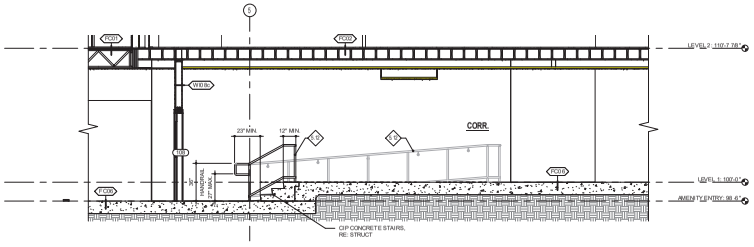
9 RAMP 4 SECTION 1 - AREA D
1/4" = 1'-0"



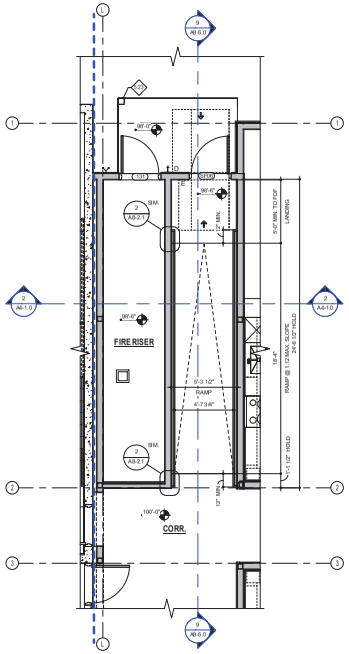
8 RAMP 2 SECTION 1 - AREA A
1/4" = 1'-0"



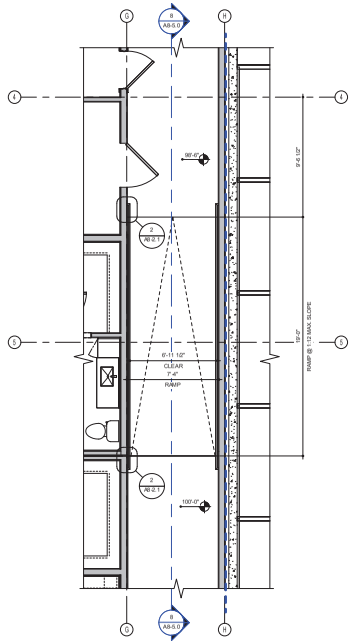
7 RAMP 1 SECTION 2 - AREA A
1/4" = 1'-0"



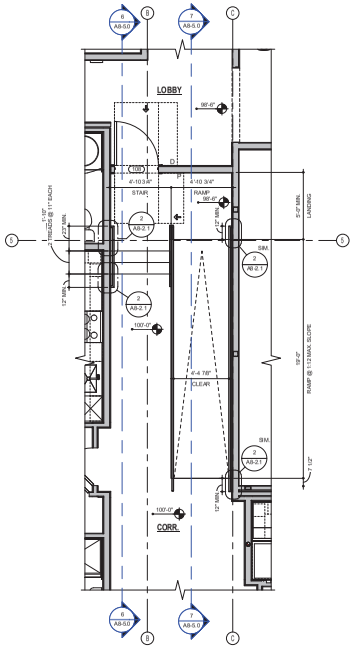
6 RAMP 1 SECTION 1 - AREA A
1/4" = 1'-0"



3 RAMP 4 PLAN - AREA D
1/4" = 1'-0"



2 RAMP 2 PLAN - AREA A
1/4" = 1'-0"



1 RAMP 1 PLAN - AREA A
1/4" = 1'-0"

VERTICAL CIRCULATION GENERAL NOTES

- DIMENSIONS TAKE PRECEDENCE OVER DRAWINGS. DO NOT SCALE. DIMENSIONS GIVEN TO FACE OF STUDS UNLESS OTHERWISE INDICATED ON THE PLANS.
- INTERIOR DOORS TO BE HELD 4" OFF ADJACENT TO HINGE SIDE FRAMING. EXTERIOR AND CORRIDOR WALLS TO BE HELD OFF IF ADJACENT TO HINGE SIDE FRAMING, U.N.O. ALL OTHER DOORS SHALL BE CENTERED.
- ACCESSIBILITY ELEMENTS INDICATED ARE REQUIRED. FIELD CONDITIONS OCCURRING WHICH IMPACT THE ACCESSIBILITY DESIGN SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.

INTERIOR ELEVATION GENERAL NOTES

- CASEWORK LAYOUT IS DIAGRAMMATIC. OWNER SHALL APPROVE FINAL LAYOUT PRIOR TO ORDERING/INSTALLATION.
- CASEWORK CONTRACTOR SHALL VERIFY APPLIANCE CLEARANCES
- CASEWORK CONTRACTOR SHALL VERIFY DRAWER PULL & DOOR HANDLE REQUIREMENTS
- CASEWORK CONTRACTOR SHALL INSTALL 4" FINISHED MATERIAL FOR TOE KICK. GENERAL CONTRACTOR SHALL FURRING AS REQUIRED FOR CASEWORK.
- PROVIDE MINIMUM 1" FILLER AT ADJACENT WALLS.
- PROVIDE FINISHED END PANELS AT ALL EXPOSED CABINET ENDS
- PROVIDE SINK BASE CABINETS WITH OPEN BACKS FOR PLUMBING ACCESS.
- ALL EXPOSED CASEWORK SHALL BE FINISHED WITH MATCHING PANELS

WALL TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
WE01c	1 HR	TYP. EXTERIOR WALL
WE02c	2 HR	8" CONCRETE SHAFT WALL
WE03c	1 HR	8" CONCRETE WALL
WE03w	1 HR	GARAGE, 12" CONCRETE WALL
WE03x	1 HR	8" CONCRETE WALL
WE04a	2 HR	8" CMU - 2 HR FIRE BARRIER
WE05a	1 HR	8" CMU - 1 HR
WE06b	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE06c	1 HR	EXTERIOR WALL - 1HR SYMMETRIC
WE07b	NR	2-W PARAPET WALL - NR
WE08c	NR	2-W WALL - NR @ CONDENSERS
WE09b	NR	2-W EXTERIOR FURR WALL - NON RATED
WE09c	NR	2-W EXTERIOR FURR WALL - NON RATED
WE10a	1 HR	8" STEEL STUD WALL WITH EARTH BROKS RADE GWB EXT SIDE, TYPE 'X' GYP INT SIDE
WE01a	2 HR	8" CMU - 2 HR FIRE WALL
WE02a	2 HR	8" CMU - 2 HR FIRE BARRIER
WI03	2 HR	FIRE WALL - 2 HR
WI03b	2 HR	FIRE WALL, 2 HR, (2) 2X4 WITH (2) 1" SHAFTLINER
WI03h	2HR	FIRE WALL, 2 HR, (2) 1 5/8" WITH (2) 1" SHAFTLINER
WI04b	2 HR	FIRE BARRIER, 2 HR, 2x W/ TH (2) 5/8" TYPE 'X' GYP
WI04c	2 HR	FIRE BARRIER, 2 HR EXIT ACCESS
WI05c	2 HR	FIRE BARRIER, 2 HR EXIT ACCESS
WI06b	2 HR	2-W INTERIOR WALL FIRE BARRIER, SHAFTLINER ASSEMBLY
WI06c	2 HR	2-W INTERIOR WALL, FIRE BARRIER, SHAFTLINER ASSEMBLY
WI07b	1 HR	OCCUPANCY SEPARATION - 1HR FIRE BARRIER
WI08c	1 HR	OCCUPANCY SEPARATION - 1 HR FIRE BARRIER
WI09b	1 HR	5 5/8" STEEL STUD WALL WITH 1 TYPE 'X' GYP BOTH SIDES
WI09c	1 HR	8" STEEL STUD WALL WITH 1 TYPE 'X' GWB BOTH SIDES
WI10b	1 HR	TYP. UNIT DEMISING - 1 HR FIRE PARTITION
WI10c	1 HR	2-W FIRE PARTITION, 1HR - UNIT DEMISING
WI11b	1 HR	2-W FIRE PARTITION, 1HR - CORRIDOR
WI11c	1 HR	<varies>
WI12b	1 HR	2-W FIRE PARTITION, 1HR - CORRIDOR - NO RC
WI12c	1 HR	2-W FIRE PARTITION, 1HR - CORRIDOR NORC
WI13b	1 HR	2-W, 1HR - BEARING
WI13c	1 HR	2-W, 1HR - BEARING
WI14b	NR	2-W INTERIOR WALL - NR
WI14c	NR	2-W, 1HR INTERIOR WALL - NR
WI15b	NR	2-W INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
WI15c	NR	2-W INTERIOR NON-BEARING WALL, GWB ON 1 SIDE
WI16	NR	2'-8" METAL HAT CHANNEL FURRING WALL
WI17b	2 HR	2-W FIRE BARRIER, 2HR - UNIT DEMISING
WI18b	1 HR	8" STEEL STUD WALL WITH 1 TYPE 'X' GWB ONE SIDE

FLOOR/CEILING TYPE SCHEDULE - DO NOT USE

Type Mark	Fire Rating	Description
FC01	1 HR	TYP. UNIT FLOOR/CEILING ASSEMBLY
FC02	1 HR	TYP. CORRIDOR FLOOR/CEILING ASSEMBLY
FC05	NR	TYP. BALCONY ASSEMBLY - DRIP - THRU
FC06	NR	POST-TENSIONED SLAB
FC07	<varies>	<varies>
FC08	1HR	BALCONY ASSEMBLY - CONDITIONED SPACE
FC09	1HR	BALCONY ASSEMBLY
FC10	2HR	FLOOR/CEILING ASSEMBLY - 2HR EXIT ACCESS
FC12	NR	SLAB ON GRADE

ROOF/CEILING TYPE SCHEDULE

MARK	FIRE RATING	DESCRIPTION
RC01	1HR	TYP. ROOF ASSEMBLY
RC02	1HR	TYP. ROOF ASSEMBLY
RC03	1HR	1 HR HORIZONTAL ASSEMBLY
RC04	1 HR	1 HR HORIZONTAL ASSEMBLY
RC05	NR	2-X ROOF ASSEMBLY
RC06	NR	1.4"/3 ROOF ASSEMBLY
RC07	NR	NR HORIZONTAL ASSEMBLY

KEYNOTES

NO.	NOTE
5.6	STEEL HANDRAIL AT WALL 36" ABOVE LEADING EDGE OF TREAD, FIELD PAINT BLACK, RE: DETAILS
5.12	STEEL HANDRAIL AT RAMP/STAIR, 36" ABOVE LEADING EDGE OF RAMP/TREAD, FIELD PAINT BLACK, RE: DETAILS
5.23	SQUARE HSS COLUMN, RE: STRUCT, PAINTED SW6049 ANTIQUARIAN BROWN

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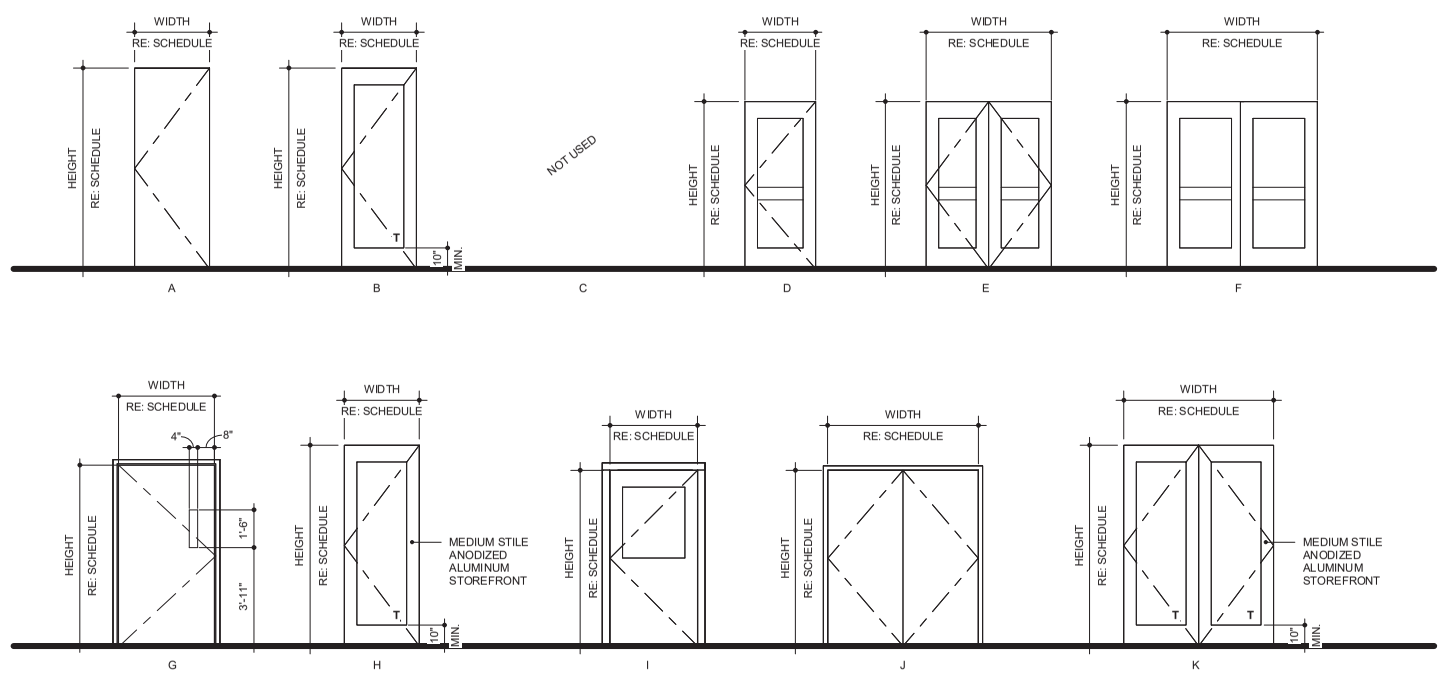

NOTE:
- REFER TO INTERIOR DESIGN DRAWINGS FOR FINISHES, DOOR PANEL STYLES, DIMENSIONS & HARDWARE STYLE/FINISH. ALL HARDWARE SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT, 2018 INTERNATIONAL BUILDING CODE AND RELATED STANDARDS
- DOOR SURFACES WITHIN 10" OF FLOOR SHALL HAVE A SMOOTH SURFACE FROM THE PUSH SIDE PER 1998 FHADM

DOOR SCHEDULE - COMMON AREAS APTS

MARK	LOCATION	ELEVATION TYPE	DOOR SIZE (W x H)	DOOR MATERIAL	FRAME MATERIAL	FIRE RATING	NOTES
101	LEASING SEPARATION	I	3'-6" x 7'-0"	WOOD/GLASS	METAL	45 MIN	SELF CLOSING, PROVIDE PANIC HARDWARE
102	PARCEL	A	3'-6" x 7'-0"	WOOD	METAL	--	SELF CLOSING
103	MECH CLOSET	A	3'-0" x 7'-0"	WOOD	METAL	20 MIN	SELF CLOSING
104	UNISEX	A	3'-0" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
105	UNISEX	A	3'-0" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
106	MECH CLOSET	A	3'-0" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
107	JANITOR	A	3'-6" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
108	LEASING SEPARATION	I	3'-6" x 7'-0"	WOOD/GLASS	METAL	45 MIN	SELF CLOSING, PROVIDE PANIC HARDWARE
118	ELEC	A	3'-6" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
119	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
120	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
121	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
131	FDC/WATER	A	3'-0" x 8'-0"	HM	HM	--	SELF CLOSING
L01	WORKROOM	A	3'-0" x 7'-0"	WOOD	METAL	--	SELF CLOSING
L01a	LEASING CLOSET	D	2'-6" x 7'-0"	WOOD	METAL	--	
L02	FILE STORAGE	D	5'-0" x 7'-0"	WOOD	METAL	--	
L03	MECH CLOSET	E	5'-0" x 7'-0"	WOOD	METAL	--	
L04	LEASING CLOSET	D	2'-6" x 7'-0"	WOOD	METAL	--	
L05	DATA ROOM	D	3'-0" x 7'-0"	WOOD	METAL	--	
109	BIKE STORAGE	A	3'-6" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
113	BIKE STORAGE	A	3'-6" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
116	JANITOR	A	3'-6" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
123	ELEC	A	3'-6" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
124	LOW VOLT	A	3'-6" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
125	JANITOR	A	3'-6" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
126	ELEVATOR SMOKE CONTROL	G	3'-10" x 7'-4"	METAL	METAL	S RATING	AUTOMATIC CLOSING ON MAGNETIC HOLD OPEN PER IBC 716.2.6.6. VISION WINDOW TO BE WITHIN 1/4 OF ELEVATOR OPENING PER ASME A17.1 SECTION 2.11.6.3 (D)
150	INT EXIT STAIR	A	3'-0" x 7'-0"	MTL	HM	90 MIN	SELF CLOSING
170	EXIT ACCESS	A	3'-6" x 8'-0"	HM	HM	90 MIN.	SELF CLOSING
171	EXIT ACCESS	A	3'-6" x 8'-0"	HM	HM	90 MIN.	SELF CLOSING
FW11	FIREWALL DOOR **	A	6'-0" x 7'-0"	HM	HM	90 MIN	SELF CLOSING ON MAGNETIC HOLD-OPEN. PER IBC 716. SEE FIRE DOOR NOTES A9-1.0
FW12	FIREWALL DOOR **	A	6'-0" x 7'-0"	HM	HM	90 MIN	SELF CLOSING ON MAGNETIC HOLD-OPEN. PER IBC 716. SEE FIRE DOOR NOTES A9-1.0
FW13	FIREWALL DOOR **	A	6'-0" x 7'-0"	HM	HM	90 MIN	SELF CLOSING ON MAGNETIC HOLD-OPEN. PER IBC 716. SEE FIRE DOOR NOTES A9-1.0
201	ELEC	A	3'-6" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
202	LAUNDRY	A	3'-0" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
203	WATER HEATER CLOSET	D	2'-6" x 7'-0"	WOOD	METAL	--	
204	ELEVATOR SMOKE CONTROL	G	3'-10" x 7'-4"	METAL	METAL	S RATING	AUTOMATIC CLOSING ON MAGNETIC HOLD OPEN PER IBC 716.2.6.6. VISION WINDOW TO BE WITHIN 1/4 OF ELEVATOR OPENING PER ASME A17.1 SECTION 2.11.6.3 (D)
208	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
209	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
210	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
211	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
212	LOW VOLT	A	3'-6" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
213	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
214	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
215	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
216	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
217	JANITOR	A	3'-6" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
218	LOW VOLT	A	3'-6" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
219	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
220	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
221	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
222	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
223	ELEC	A	3'-6" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
224	JANITOR	A	3'-6" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
225	LOW VOLT	A	3'-6" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
250	INT EXIT STAIR	A	3'-0" x 7'-0"	MTL	HM	90 MIN	SELF CLOSING
272	ELEVATOR SMOKE CONTROL	G	3'-10" x 7'-4"	METAL	METAL	S RATING	AUTOMATIC CLOSING ON MAGNETIC HOLD OPEN PER IBC 716.2.6.6. VISION WINDOW TO BE WITHIN 1/4 OF ELEVATOR OPENING PER ASME A17.1 SECTION 2.11.6.3 (D)
FW21	FIREWALL DOOR **	A	6'-0" x 7'-0"	HM	HM	90 MIN	SELF CLOSING ON MAGNETIC HOLD-OPEN. PER IBC 716. SEE FIRE DOOR NOTES A9-1.0
FW22	FIREWALL DOOR **	A	6'-0" x 7'-0"	HM	HM	90 MIN	SELF CLOSING ON MAGNETIC HOLD-OPEN. PER IBC 716. SEE FIRE DOOR NOTES A9-1.0
FW23	FIREWALL DOOR **	A	6'-0" x 7'-0"	HM	HM	90 MIN	SELF CLOSING ON MAGNETIC HOLD-OPEN. PER IBC 716. SEE FIRE DOOR NOTES A9-1.0
301	ELEC	A	3'-6" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
304	ELEVATOR SMOKE CONTROL	G	3'-10" x 7'-4"	METAL	METAL	S RATING	AUTOMATIC CLOSING ON MAGNETIC HOLD OPEN PER IBC 716.2.6.6. VISION WINDOW TO BE WITHIN 1/4 OF ELEVATOR OPENING PER ASME A17.1 SECTION 2.11.6.3 (D)
308	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
309	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
310	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
311	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
312	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
313	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
314	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
315	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
316	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
317	JANITOR	A	3'-6" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
318	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
319	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
320	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
321	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
322	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
323	ELEC	A	3'-6" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
324	JANITOR	A	3'-6" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
325	JANITOR	A	3'-6" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
350	INT EXIT STAIR	A	3'-0" x 7'-0"	MTL	HM	90 MIN	SELF CLOSING
372	ELEVATOR SMOKE CONTROL	G	3'-10" x 7'-4"	METAL	METAL	S RATING	AUTOMATIC CLOSING ON MAGNETIC HOLD OPEN PER IBC 716.2.6.6. VISION WINDOW TO BE WITHIN 1/4 OF ELEVATOR OPENING PER ASME A17.1 SECTION 2.11.6.3 (D)
FW31	FIREWALL DOOR **	A	6'-0" x 7'-0"	HM	HM	90 MIN	SELF CLOSING ON MAGNETIC HOLD-OPEN. PER IBC 716. SEE FIRE DOOR NOTES A9-1.0
FW32	FIREWALL DOOR **	A	6'-0" x 7'-0"	HM	HM	90 MIN	SELF CLOSING ON MAGNETIC HOLD-OPEN. PER IBC 716. SEE FIRE DOOR NOTES A9-1.0
FW33	FIREWALL DOOR **	A	6'-0" x 7'-0"	HM	HM	90 MIN	SELF CLOSING ON MAGNETIC HOLD-OPEN. PER IBC 716. SEE FIRE DOOR NOTES A9-1.0
401	ELEC	A	3'-6" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
404	ELEVATOR SMOKE CONTROL	G	3'-10" x 7'-4"	METAL	METAL	S RATING	AUTOMATIC CLOSING ON MAGNETIC HOLD OPEN PER IBC 716.2.6.6. VISION WINDOW TO BE WITHIN 1/4 OF ELEVATOR OPENING PER ASME A17.1 SECTION 2.11.6.3 (D)
408	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
409	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
410	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
411	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
412	LOW VOLT	A	3'-6" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
413	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
414	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
415	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
416	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
417	JANITOR	A	3'-6" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
418	LOW VOLT	A	3'-6" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
419	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
420	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
421	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
422	STORAGE	A	3'-0" x 7'-0"	MTL	MTL	20 MIN.	SELF CLOSING
423	ELEC	A	3'-6" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
424	JANITOR	A	3'-6" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
425	JANITOR	A	3'-6" x 7'-0"	WOOD	METAL	20 MIN.	SELF CLOSING
450	INT EXIT STAIR	A	3'-0" x 7'-0"	MTL	HM	90 MIN	SELF CLOSING
472	ELEVATOR SMOKE CONTROL	G	3'-10" x 7'-4"	METAL	METAL	S RATING	AUTOMATIC CLOSING ON MAGNETIC HOLD OPEN PER IBC 716.2.6.6. VISION WINDOW TO BE WITHIN 1/4 OF ELEVATOR OPENING PER ASME A17.1 SECTION 2.11.6.3 (D)
FW41	FIREWALL DOOR **	A	6'-0" x 7'-0"	HM	HM	90 MIN	SELF CLOSING ON MAGNETIC HOLD-OPEN. PER IBC 716. SEE FIRE DOOR NOTES A9-1.0
FW42	FIREWALL DOOR **	A	6'-0" x 7'-0"	HM	HM	90 MIN	SELF CLOSING ON MAGNETIC HOLD-OPEN. PER IBC 716. SEE FIRE DOOR NOTES A9-1.0
FW43	FIREWALL DOOR **	A	6'-0" x 7'-0"	HM	HM	90 MIN	SELF CLOSING ON MAGNETIC HOLD-OPEN. PER IBC 716. SEE FIRE DOOR NOTES A9-1.0

DOOR SCHEDULE - UNITS

MARK	LOCATION	ELEVATION TYPE	DOOR SIZE (W x H)	DOOR MATERIAL	FRAME MATERIAL	FIRE RATING	NOTES
U01	UNIT ENTRY	A	3'-0" x 8'-0"	WOOD	METAL	20 MIN	SELF CLOSING
U02	UNIT PATIO	B	3'-0" x 8'-0"	VINYL/GLASS	VINYL	--	EXTERIOR PATIO DOOR. EXTERIOR DOORS SHALL HAVE A SOUND TRANSMISSION CLASS (STC) RATING OF 28 OR GREATER WHEN TESTED FOR LABORATORY SOUND TRANSMISSION LOSS ACCORDING TO ASTM E 90 AND DETERMINED BY ASTM E 413 AND ENVIRONMENTAL CONSULTANT REPORT (PART 58)
U04	UNIT INTERIOR	D	2'-10" x 6'-8"	WOOD	WOOD	--	
U05	UNIT INTERIOR	D	3'-0" x 6'-8"	WOOD	WOOD	--	TYPE A UNITS
U06	UNIT CLOSET	D	2'-4" x 6'-8"	WOOD	WOOD	--	
U07	UNIT CLOSET	D	2'-6" x 6'-8"	WOOD	WOOD	--	
U08	W/D CLOSET	E	5'-0" x 6'-8"	WOOD	WOOD	--	(2) 2668 DOORS
U09	UNIT CLOSET	F	5'-0" x 6'-8"	WOOD	WOOD	--	BYPASS
U12	UNIT CLOSET	F	6'-0" x 6'-8"	WOOD	WOOD	--	BYPASS

DOOR SCHEDULE - STOREFRONT APTS

MARK	LOCATION	ELEVATION TYPE	DOOR SIZE (W x H)	DOOR MATERIAL	FRAME MATERIAL	FIRE RATING	NOTES
ISF01	BLDG - VESTIBULE	H	3'-6" x 7'-10"	ALUM/GLASS	ALUM	--	SELF-CLOSING, PANIC HARDWARE
ISF02	INT STOREFRONT	H	3'-0" x 7'-10"	ALUM/GLASS	ALUM	--	SELF-CLOSING
ISF04	INT STOREFRONT	H	3'-0" x 7'-10"	ALUM/GLASS	ALUM	--	SELF-CLOSING
ISF04	INT STOREFRONT	H	3'-0" x 7'-10"	ALUM/GLASS	ALUM	--	SELF-CLOSING
ISF06	INT STOREFRONT	H	3'-6" x 7'-10"	ALUM/GLASS	ALUM	--	SELF-CLOSING
ISF06	INT STOREFRONT	H	3'-6" x 7'-10"	ALUM/GLASS	ALUM	--	SELF-CLOSING
SF01	BLDG - MAIN ENTRY	H	3'-6" x 7'-10"	ALUM/GLASS	ALUM	--	SELF-CLOSING, PUSH/PULL BAR
SF02	EXT STOREFRONT	H	3'-6" x 7'-10"	ALUM/GLASS	ALUM	--	SELF-CLOSING, PANIC HARDWARE
SF03	EXT STOREFRONT	K	6'-0" x 7'-10"	ALUM/GLASS	ALUM	--	(2) 30710 DOORS
SF06	EXT STOREFRONT	H	3'-0" x 7'-10"	ALUM/GLASS	ALUM	--	SELF-CLOSING, PANIC HARDWARE
SF11	CH EGRESS	H	3'-0" x 7'-10"	ALUM/GLASS	ALUM	--	SELF-CLOSING, PANIC HARDWARE
SF04	EXT STOREFRONT	H	3'-6" x 7'-10"	ALUM/GLASS	ALUM	--	SELF-CLOSING, PANIC HARDWARE
SF04	EXT STOREFRONT	H	3'-6" x 7'-10"	ALUM/GLASS	ALUM	--	SELF-CLOSING, PANIC HARDWARE
SF04	EXT STOREFRONT	H	3'-6" x 7'-10"	ALUM/GLASS	ALUM	--	SELF-CLOSING, PANIC HARDWARE
SF04	EXT STOREFRONT	H	3'-6" x 7'-10"	ALUM/GLASS	ALUM	--	SELF-CLOSING, PANIC HARDWARE
SF04	EXT STOREFRONT	H	3'-6" x 7'-10"	ALUM/GLASS	ALUM	--	SELF-CLOSING, PANIC HARDWARE
SF12	EXIT ACCESS	K	6'-0" x 7'-10"	ALUM/GLASS	ALUM		(2) 30710 DOORS
SF13	EXT STAIR	H	3'-0" x 7'-10"	ALUM/GLASS	ALUM	--	SELF CLOSING - PANIC HARDWARE

NOTE:
- DOOR SURFACES WITHIN 10" OF FLOOR SHALL HAVE A SMOOTH SURFACE FROM THE PUSH SIDE PER 2010 ADA STANDARDS 404.2.10
- PROVIDE TEMPERED GLAZING AS INDICATED ('T') ON UNIT PLANS AND AS REQ'D BY CODE
- ALL GLAZING SHALL COMPLY WITH IBC CHAPTER 24
- ALL HARDWARE SHALL COMPLY W/ 2018 IBC, 1998 FHADM, AND RELATED STANDARDS
- GLAZING IN DOORS SHALL HAVE AN AIR INFILTRATION RATE NOT TO EXCEED 0.5 CFM/SF WHEN TESTED IN ACCORDANCE WITH NFRC 400 OR AAMA/WDMA/CSA 101/I.S.2/A440 BY AN ACCREDITED, INDEPENDENT LABORATORY AND LISTED AND LABELED
- ALL EXTERIOR DOORS SHALL HAVE A SOUND TRANSMISSION CLASS (STC) RATING OF 28 OR GREATER WHEN TESTED FOR LABORATORY SOUND TRANSMISSION LOSS ACCORDING TO ASTM E 90 AND DETERMINED BY ASTM E 413 AND ENVIRONMENTAL CONSULTANT REPORT (PART 58).

DOOR HARDWARE NOTES
- PROVIDE ACCESSIBLE THRESHOLD AT ALL UNITS.
- XX - PROVIDE PRIVACY LEVER SETS AT ALL BEDROOM AND BATHROOM DOOR; PROVIDE DUMMY LEVER SET, HINGE PIN STOP AND BALL CATCH AT ALL LAUNDRY, LINEN AND CLOSET DOORS; PROVIDE PASSAGE LEVER SET AT ALL OTHERS.
- LOCKS AND LATCHES SHALL BE CENTERED 34-44 INCHES ABOVE FLOOR PER IBC SECTION 1010.1.9.2
- LOCKS AND LATCHES SHALL COMPLY WITH SECTION 1010.1.9.4, EXCEPTION 4 FOR INDIVIDUAL DWELLING UNITS.
- DOORS SHALL HAVE A MAXIMUM OPERATING FORCE OF 5 LBS FOR INTERIOR SWINGING EGRESS DOORS, EXCLUDING FIRE DOORS, PER IBC 1010.1.3
- DOORS SHALL HAVE A MAXIMUM OPERATING FORCE OF 8.5 LBS FOR EXTERIOR SWINGING EGRESS DOORS, EXCLUDING FIRE DOORS. FIRE DOORS SHALL NOT EXCEED 15 LBS, PER ANSI 1117.1
- DOORBELLS SHALL HAVE A MAXIMIM MOUNTING HEIGHT OF 48" ABOVE FLOOR FOR THE OPERABLE MECHANISM PER ANSI 117.1

NOTE: RE: PROJECT MANUAL FOR SPECIFIC DOOR HARDWARE SPECS AND CRITERIA

**** FIRE DOOR NOTES**

716.2.3 FIRE DOORS. FIRE DOORS INSTALLED WITHIN A FIRE DOOR ASSEMBLY SHALL MEET THE FIRE RATING INDICATED IN TABLE 716.1(2).

716.2.6 FIRE DOOR HARDWARE AND CLOSURES. FIRE DOOR HARD-WARE AND CLOSURES SHALL BE INSTALLED ON FIRE DOOR ASSEMBLIES IN ACCORDANCE WITH THE REQUIREMENTS OF THIS SECTION.

716.2.6.1 DOOR CLOSING. FIRE DOORS SHALL BE LATCHING AND SELF-OR AUTOMATIC CLOSING IN ACCORDANCE WITH THIS SECTION.
EXCEPTIONS:
1. FIRE DOORS LOCATED IN COMMON WALLS SEPARATING SLEEPING UNITS IN GROUP R-1 SHALL BE PERMITTED WITHOUT AUTOMATIC- OR SELF-CLOSING DEVICES.
2.THE ELEVATOR CAR DOORS AND THE ASSOCIATED HOISTWAY ENCLOSURE DOORS AT THE FLOOR LEVEL DESIGNATED FOR RECALL IN ACCORDANCE WITH SECTION 3003.2 SHALL BE PERMITTED TO REMAIN OPEN DURING PHASE I EMERGENCY RECALL OPERATION.

716.2.6.2 LATCH REQUIRED. UNLESS OTHERWISE SPECIFICALLY PERMITTED, SINGLE SIDE-HINGED SWINGING FIRE DOORS AND BOTH LEAVES OF PAIRS OF SIDE-HINGED SWINGING FIRE DOORS SHALL BE PROVIDED WITH AN ACTIVE LATCH BOLT THAT WILL SECURE THE DOOR WHEN IT IS CLOSED.

716.2.6.3 CHUTE INTAKE DOOR LATCHING. CHUTE INTAKE DOORS SHALL BE POSITIVE LATCHING, REMAINING LATCHED AND CLOSED IN THE EVENT OF LATCH SPRING FAILURE DURING A FIRE EMERGENCY.

716.2.6.4 AUTOMATIC-CLOSING FIRE DOOR ASSEMBLIES. AUTO-MATIC-CLOSING FIRE DOOR ASSEMBLIES SHALL BE SELF-CLOSING IN ACCORDANCE WITH NFPA 80.

716.2.6.5 DELAYED-ACTION CLOSERS. DOORS REQUIRED TO BE SELF-CLOSING AND NOT REQUIRED TO BE AUTOMATIC CLOSING SHALL BE PERMITTED TO BE EQUIPPED WITH DELAYED-ACTION CLOSERS.

716.2.6.6 SMOKE-ACTIVATED DOORS. AUTOMATIC-CLOSING DOORS INSTALLED IN THE FOLLOWING LOCATIONS SHALL BE PERMITTED TO HAVE HOLD-OPEN DEVICES. DOORS SHALL AUTOMATICALLY CLOSE BY THE ACTUATION OF SMOKE DETECTORS INSTALLED IN ACCORDANCE WITH SECTION 907.3 OR BY LOSS OF POWER TO THE SMOKE DETECTOR OR HOLD-OPEN DEVICE. DOORS THAT ARE AUTOMATIC-CLOSING BY SMOKE DETECTION SHALL NOT HAVE MORE THAN A 10-SECOND DELAY BEFORE THE DOOR STARTS TO CLOSE AFTER THE SMOKE DETECTOR IS ACTUATED.
AUTOMATIC-CLOSING DOORS THAT PROTECT OPENINGS INSTALLED IN THE FOLLOWING LOCATIONS SHALL COMPLY WITH THIS SECTION:
1.IN WALLS THAT SEPARATE INCIDENTAL USES IN ACCORDANCE WITH SECTION 509.4.
2.IN FIRE WALLS IN ACCORDANCE WITH SECTION 706.8.
3.IN FIRE BARRIERS IN ACCORDANCE WITH SECTION 707.6.
4.IN FIRE PARTITIONS IN ACCORDANCE WITH SECTION 708.6.
5.IN SMOKE BARRIERS IN ACCORDANCE WITH SECTION 709.5.
6.IN SMOKE PARTITIONS IN ACCORDANCE WITH SECTION 710.5.2.3.
7.IN SHAFT ENCLOSURES IN ACCORDANCE WITH SECTION 713.7.
8.IN WASTE AND LINEN CHUTES, DISCHARGE OPENINGS AND ACCESS AND DISCHARGE ROOMS IN ACCORDANCE WITH SECTION 713.13. LOADING DOORS INSTALLED IN WASTE AND LINEN CHUTES SHALL MEET THE REQUIREMENTS OF SECTIONS 716.2.6.1 AND 716.2.6.3.

716.2.6.7 DOORS IN PEDESTRIAN WAYS. VERTICAL SLIDING OR VERTICAL ROLLING STEEL FIRE DOORS IN OPENINGS THROUGH WHICH PEDESTRIANS TRAVEL SHALL BE HEAT ACTIVATED OR ACTIVATED BY SMOKE DETECTORS WITH ALARM VERIFICATION.

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ISSUE FOR CONSTRUCTION
08.07.2024

No.	Date	Issue
1	10.03.2023	PC1 RESPONSE
4	08.07.2024	IFC

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: CG / CB/ TT/ NV
Checked By: JG
Title: DOOR SCHEDULES
Sheet Number: A9-1.0

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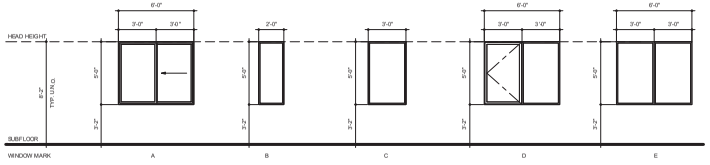
HEAD HEIGHT
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3'-0"
6'-0"
3

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.

MARSHALL POINTE

A PORTION OF THE SOUTHWEST 1/4 OF SECTION 13, TOWNSHIP 3 SOUTH, RANGE 69 WEST OF THE 6TH P.M. CITY OF ARVADA, JEFFERSON COUNTY, STATE OF COLORADO

CIVIL CONSTRUCTION PLANS

LEGAL DESCRIPTION

PARCEL A:

A TRACT OF LAND IN THE NW 1/4 OF THE SW 1/4 OF SECTION 13, TOWNSHIP 3 SOUTH, RANGE 69 WEST OF THE 6TH P.M., DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT 25 FEET SOUTH OF THE NORTHEAST CORNER OF SAID NW 1/4 OF THE SW 1/4 OF SECTION 13;
THENCE SOUTH ALONG THE EAST LINE OF SAID NW 1/4 OF THE SW 1/4, 548.3 FEET;
THENCE WEST AND PARALLEL TO THE NORTH LINE OF SAID NW 1/4 OF THE SW 1/4, 356.25 FEET TO A POINT ON THE EAST LINE OF MARSHALL STREET;
THENCE NORTHERLY ALONG THE EAST LINE OF MARSHALL STREET, 548.33 FEET;
THENCE EAST AND PARALLEL TO THE NORTH LINE OF SAID NW 1/4 OF THE SW 1/4, 350.00 FEET TO THE **TRUE POINT OF BEGINNING,**

EXCEPTING THEREFROM A TRACT OF LAND IN THE NW 1/4 OF THE SW 1/4 OF SECTION 13, TOWNSHIP 3 SOUTH, RANGE 69 WEST OF THE 6TH P.M., COUNTY OF JEFFERSON, STATE OF COLORADO, DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF SAID NW 1/4 OF THE SW 1/4 OF SECTION 13;
THENCE SOUTH ALONG THE EAST LINE OF SAID NW 1/4 OF THE SW 1/4, 25 FEET;
THENCE WEST AND PARALLEL TO THE NORTH LINE OF SAID NW 1/4 OF THE SW 1/4, 180.0 FEET TO THE **TRUE POINT OF BEGINNING;**
THENCE SOUTH AND PARALLEL TO THE EAST LINE OF SAID NW 1/4 OF THE SW 1/4, 126.0 FEET;
THENCE WEST AND PARALLEL TO THE NORTH LINE OF SAID NW 1/4 OF THE SW 1/4, 171.45 FEET TO A POINT ON THE EAST LINE OF MARSHALL STREET;
THENCE NORTHERLY ALONG THE EAST LINE OF MARSHALL STREET, 126.0 FEET;
THENCE EAST AND PARALLEL TO THE NORTH LINE OF SAID NW 1/4 OF THE SW 1/4, 170.0 FEET TO THE **TRUE POINT OF BEGINNING;**

AND

EXCEPT THAT PORTION CONVEYED TO THE CITY OF ARVADA IN DEED RECORDED APRIL 18, 1985 UNDER RECEPTION NO. 85036218, COUNTY OF JEFFERSON, STATE OF COLORADO.

PARCEL B:

A TRACT OF LAND IN THE NW 1/4 OF THE SW 1/4 OF SECTION 13, TOWNSHIP 3 SOUTH, RANGE 69 WEST OF THE 6TH P.M., COUNTY OF JEFFERSON, STATE OF COLORADO, DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF SAID NW 1/4 OF THE SW 1/4 OF SECTION 13;
THENCE SOUTH ALONG THE EAST LINE OF SAID NW 1/4 OF THE SW 1/4, 25 FEET;
THENCE WEST AND PARALLEL TO THE NORTH LINE OF SAID NW 1/4 OF THE SW 1/4, 180.0 FEET TO THE **TRUE POINT OF BEGINNING;**
THENCE SOUTH AND PARALLEL TO THE EAST LINE OF SAID NW 1/4 OF THE SW 1/4, 126.0 FEET;
THENCE WEST AND PARALLEL TO THE NORTH LINE OF SAID NW 1/4 OF THE SW 1/4, 171.45 FEET TO A POINT ON THE EAST LINE OF MARSHALL STREET;
THENCE NORTHERLY ALONG THE EAST LINE OF MARSHALL STREET, 126.0 FEET;
THENCE EAST AND PARALLEL TO THE NORTH LINE OF SAID NW 1/4 OF THE SW 1/4, 170.0 FEET TO THE **TRUE POINT OF BEGINNING;**

EXCEPT THAT PORTION DESCRIBED IN DEED RECORDED APRIL 18, 1985 UNDER RECEPTION NO. 85036220, COUNTY OF JEFFERSON, STATE OF COLORADO.

BASIS OF BEARINGS

BEARINGS ARE BASED ON THE NORTH LINE OF THE SOUTHWEST QUARTER OF SECTION 13, TOWNSHIP 3 SOUTH, RANGE 69 WEST OF THE 6TH PRINCIPAL MERIDIAN ASSUMED AS BEARING SOUTH 89°49'56" WEST, AND BEING MONUMENTED AT THE CENTER OF SAID SECTION BY A 3" BRASS CAP SET IN A BRIDGE WALL STAMPED "PLS 13212", AND MONUMENTED AT THE WEST QUARTER CORNER BY AN ILLEGIBLE 3.25" ALUMINUM CAP IN RANGE BOX.

BENCHMARK

THE SITE VERTICAL BENCHMARK IS CITY OF ARVADA BENCHMARK 990, BEING A 2" BRASS CAP SET IN THE CENTER OF A 5' TYPE R INLET ON THE EAST SIDE OF MARSHALL STREET ROUGHLY 110' SOUTH OF THE CURB RETURN AT THE SOUTHEAST CORNER OF WEST 54TH AVENUE, ELEVATION = 5,280.91.

SUMMARY OF APPROXIMATE EARTHWORK QUANTITIES

CUT VOLUME	837.6 CY
FILL VOLUME	13,282 CY
NET (IMPORT)	12,444.4 CY (FILL)
AREA OF DISTURBANCE	4.5 AC

NOTE: EARTHWORK VOLUMES ARE UNADJUSTED AND DO NOT ACCOUNT FOR UTILITY SPOILS, PAVEMENT SECTION, FOUNDATIONS, SOIL COMPACTION/SWELL, ETC.

FIRE FLOW DATA:

TOTAL FIRE FLOW REQUIRED FOR THIS SITE IS 4,000 GPM MINIMUM @ 20 PSI RESIDUAL PRESSURE.
THIS FLOW MUST BE PROVIDED FROM A MINIMUM OF 4 FIRE HYDRANTS.
EACH FIRE HYDRANT MUST SUPPLY A MINIMUM OF 1500 GPM @ 20 PSI RESIDUAL PRESSURE AT THE HYDRANT OUTLET TO BE ACCEPTABLE.

CODE USED FOR ANALYSIS: 2018 IFC

OCCUPANCY GROUP: RESIDENTIAL
CONSTRUCTION TYPES: TYPE V-A

FIRE FLOW CALCULATION AREA: 201,513 SF (TYPE V-A)

THIS BUILDING IS FULLY PROTECTED WITH AN AUTOMATIC SPRINKLER SYSTEM.

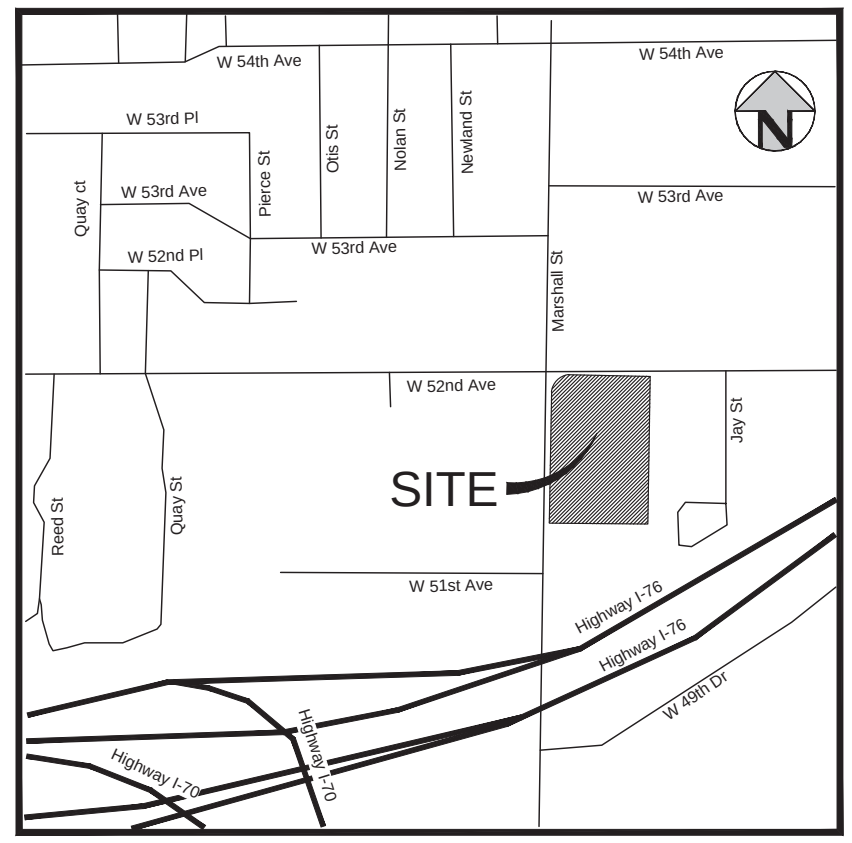
*NOTE: THE FIRE FLOW CALCULATION AREA APPLIES TO BUILDING CONSTRUCTIONS TYPES V-A PER IFC SECTION B104
**FOUR (4) HYDRANTS ARE BEING PROPOSED WITH THIS DEVELOPMENT. THERE IS AN EXISTING HYDRANT LOCATED AT THE NORTHEAST CORNER OF THE MARSHALL ST & W 52ND AVE INTERSECTION.

Filepath: P:\2022\220319\ENGINEERING\ROADWAY\CD - RP - COVER SHEET.DWG Layout: LAYOUT1
5 XREFs: city signature block, legal_basis_benchmark, quantities, stamp - cd, vicinity map
Plotted: TUE 04/30/24 3:46:28P By: Libbey Endersbe

811 Know what's **below.** **Call** before you dig.

QUANTITIES

	QTY.	UNIT
WATER		
PUBLIC WATER MAIN (8" PVC)	939	LF
PRIVATE SERVICE LINE (2" TYPE K COPPER)	33	LF
PRIVATE FIRE LINE (6" PVC)	48	LF
PRIVATE IRRIGATION LINE (1.25" TYPE K COPPER)	33	LF
SERVICE METER (2")	1	EA
IRRIGATION METER (1.25")	1	EA
PUBLIC 8" GATE VALVE	10	EA
PUBLIC 8" 22.5 DEG BENDS	10	EA
PUBLIC 8" 45 DEG BENDS	6	EA
PUBLIC 8"X8" TEE	1	EA
PUBLIC 8"X6" TEE	1	EA
PUBLIC 8"X12" TEE	1	EA
PUBLIC 8"X6" SWIVEL TEE	1	EA
PUBLIC FIRE HYDRANTS	4	EA
PUBLIC WET TAPS	2	EA
CLEAR CREEK VALLEY SANITATION DISTRICT		
PRIVATE SANITARY SEWER SERVICE LINE (8" PVC)	62	LF
PRIVATE SANITARY SEWER SERVICE LINE (10" PVC)	47	LF
PUBLIC SANITARY MANHOLES (4')	1	EA
PRIVATE CLEANOUTS	2	EA
STORM SEWER		
PRIVATE STORM LINE (8" PVC)	221	LF
PRIVATE STORM LINE (12" PVC)	9	LF
PRIVATE STORM LINE (15" PVC)	77	LF
PRIVATE STORM LINE (24" PVC)	19	LF
PRIVATE STORM LINE (24" RCP)	122	LF
PRIVATE LANDSCAPE DRAIN (12" PVC)	747	LF
PRIVATE LANDSCAPE DRAIN (6" PVC)	189	LF
PRIVATE LANDSCAPE DRAIN (4" HDPE)	232	LF
PRIVATE LANDSCAPE AREA DRAIN (12")	24	EA
PRIVATE LANDSCAPE BRASS GRATE DRAIN (4")	1	EA
PRIVATE STORM MANHOLE (4')	2	EA
PRIVATE STORM MANHOLE (5')	2	EA
PRIVATE STORMTECH CHAMBER	1	EA
PRIVATE TYPE C INLET	2	EA
PRIVATE TYPE R INLET	3	EA
STREETS		
CURB AND GUTTER (VERTICAL)	2350	LF
PUBLIC ATTACHED SIDEWALK (5')	413	SY
PRIVATE ATTACHED SIDEWALK (5')	1688	SY
PUBLIC ATTACHED SIDEWALK/BIKELANE (12')	353	SY
PUBLIC DETACHED SIDEWALK (6.5')	655	SY
PUBLIC CROSSPAN	2	EA
PRIVATE CROSSPAN	1	EA
PRIVATE STANDARD DUTY ASPHALT	1620	SY
PRIVATE HEAVY DUTY ASPHALT	2113	SY
PUBLIC HEAVY DUTY ASPHALT	40	SY
PRIVATE SUBGRADE	3733	SY
PUBLIC SUBGRADE	40	SY
MILLING	2634	SY
PRIVATE ADA RAMPS	10	EA
PUBLIC ADA RAMPS	4	EA
TRAFFIC		
PRIVATE SIGN R1-1	2	EA
PRIVATE SIGN R3-2	1	EA
PRIVATE SIGN R7-1	5	EA
PRIVATE SIGN R7-8	5	EA
PRIVATE SIGN R7-8A	2	EA
PRIVATE SIGN R7-165	2	EA
PRIVATE SIGN D9-11B	4	EA
PUBLIC SIGN R1-2	1	EA
PRIVATE SIGN R2-1	1	EA
PRIVATE STRIPING	1739	LF
PUBLIC STRIPING	3034	LF
PRIVATE STREET LIGHTS	8	EA
PUBLIC TRAFFIC SIGNAL	1	EA
PUBLIC PAVEMENT MARKING	470	SF
PUBLIC BIKE LANE PAVEMENT MARKING	4	SF



VICINITY MAP
SCALE: 1" = 500'

DEVELOPER:

LINCOLN AVENUE CAPITAL
1001 BANNOCK STREET , STE 210
DENVER, CO 80204
BTAYLOR@LINCOLNAVECAP.COM

CIVIL ENGINEER:

HKS HARRIS KOCHER SMITH
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com
JOROURKE@HKSENG.COM

NOTE:

APPLICATION DATE: 02/17/2023
THESE PLANS COMPLY WITH THE 2022 ENGINEERING CODE OF STANDARDS AND SPECIFICATIONS.

ISSUE DATE: 02-17-2023	PROJECT #: 220319
DATE	REVISION COMMENTS
04-28-2023	PER CITY COMMENTS
07-13-2023	PER CITY COMMENTS
09-01-2023	PER CITY COMMENTS
10-13-2023	ISSUED FOR CONSTRUCTION
03-25-2024	MINOR CITY COMMENTS
04-24-2024	ISSUED FOR CONSTRUCTION

CLEAR CREEK WATER AND SANITATION DISTRICT

REVIEW IS ONLY FOR GENERAL COMPLIANCE WITH CLEAR CREEK WATER AND SANITATION DISTRICT STANDARDS AND REQUIREMENTS. ALL RESPONSIBILITY FOR EXISTING CONDITIONS , CORRECTNESS OF DIMENSIONS, DETAILS, CONCEPTS, QUANTITIES AND SAFETY DURING CONSTRUCTION SHALL REMAIN WITH THOSE DESIGNING, DEVELOPING, AND CONSTRUCTING THE PROJECT. THIS REVIEW IS RELATED ONLY TO THE SANITARY SEWER SERVICE CONNECTION(S) TO THE DISTRICT MAIN. OWNER IS RESPONSIBLE FOR THE SANITARY SERVICE LINE FROM THE MAIN LINE TO THE BUILDING.

5/22/2024
APPROVED BY: DATE:

CITY OF ARVADA RESPONSIBILITY STATEMENT

THE CITY OF ARVADA IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN OR DIMENSIONS AND ELEVATIONS OF THE PLAN. THE CITY OF ARVADA'S REVIEW IS FOR GENERAL COMPLIANCE WITH THE CITY OF ARVADA'S "ENGINEERING CODE OF STANDARDS AND SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF PUBLIC IMPROVEMENTS". THE CITY OF ARVADA, THROUGH THE ACCEPTANCE OF THE CONSTRUCTION PLAN OR DRAINAGE REPORT, ASSUMES NO RESPONSIBILITY FOR THE COMPLETENESS AND/OR ACCURACY OF THE CONSTRUCTION PLAN OR DRAINAGE REPORT. THE CITY DOES NOT ACCEPT LIABILITY FOR FACILITIES DESIGNED BY OTHERS.

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ABBREVIATIONS

BOP	BOTTOM OF PIPE
BS	BOTTOM OF STEP
BW	BOTTOM OF WALL (FG)
CONC	CONCRETE
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DR	DOOR
DS	DOWNSPOUT
E	EAST, EASTING
EGL	ENERGY GRADE LINE
EL	ELEVATION
EOA	EDGE OF ASPHALT
EOC	EDGE OF CONCRETE
EOP	EDGE OF PAVEMENT
ESMT	EASEMENT
EX	EXISTING
FES	FLARED END SECTION
FF	FINISHED FLOOR
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
GB	GRADE BREAK
GV	GATE VALVE
HC	HANDICAP
HGL	HYDRAULIC GRADE LINE
HORZ	HORIZONTAL
HP	HIGH POINT
INV	INVERT
LP	LOW POINT
LSD	LANDSCAPE DRAIN
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
N	NORTH, NORTHING
PR	PROPOSED
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT OF WAY
SAN	SANITARY
SS	SANITARY SEWER
STA	STATION
STM	STORM
TB	THRUST BLOCK
TBC	TOP/BACK OF CURB
TOP	TOP OF PIPE
TS	TOP OF STEP
TW	TOP OF WALL (FG)
TYP	TYPICAL
VERT	VERTICAL
WAT	WATER

LEGEND:

PROPERTY BOUNDARY	
RIGHT-OF-WAY	
EXISTING CONTOURS	5280
PROPOSED CONTOURS	5280
PROPOSED STORM SEWER W/MANHOLE AND INLET	
PROPOSED SANITARY SEWER PIPE	SS
PROPOSED WATER PIPE W/ FIRE HYDRANT	W W
EXISTING STORM SEWER PIPE W/MANHOLE	ST
EXISTING SANITARY SEWER PIPE	SS
EXISTING WATER PIPE	W W
EXISTING STREET LIGHT	
PROPOSED STREET LIGHT	

"THESE CONSTRUCTION PLANS FOR MARSHALL POINTE WERE PREPARED BY ME (OR UNDER MY DIRECT SUPERVISION) IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF ARVADA 'ENGINEERING CODE OF STANDARDS AND SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF PUBLIC IMPROVEMENTS"

COLORADO LICENSED JOHN D. O'ROURKE 43327 05/08/2024 PROFESSIONAL ENGINEER

JOHN O'ROURKE, PE
43327
HARRIS KOCHER SMITH

APPROVED:

City Engineer	Date	Job Number
	6/10/24	DA2023-0019

Review is for general compliance with the City of Arvada "Engineering Code of Standards and Specifications for the Design and Construction of Public Improvements", latest edition. Sole responsibility for completeness and/or accuracy of these Documents shall remain with the Registered Professional Engineer sealing these plans. The City does not accept liability for facilities designed by others.

GENERAL NOTES

A. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF ARVADA 'ENGINEERING CODE OF STANDARDS AND SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF PUBLIC IMPROVEMENTS', LATEST EDITION, UNLESS OTHERWISE SPECIFIED HEREIN.
B. ALL CONTRACTORS AND SUBCONTRACTORS SHALL BE LICENSED WITH THE CITY OF ARVADA ENGINEERING DIVISION.
C. ALL WORK WILL REQUIRE A CITY OF ARVADA ENGINEERING DIVISION PUBLIC IMPROVEMENT PERMIT PRIOR TO THE START OF CONSTRUCTION. ALL CONTRACTORS AND SUBCONTRACTORS MUST OBTAIN A SEPARATE PERMIT FOR THE WORK BEING COMPLETED BY THE PARTICULAR CONTRACTOR OR SUBCONTRACTOR. ANY CONSTRUCTION WITHIN THE COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) RIGHT-OF-WAY WILL REQUIRE A CDOT CONSTRUCTION PERMIT PRIOR TO ANY WORK IN THEIR RIGHT-OF-WAY.
D. ALL CONTRACTORS AND SUBCONTRACTORS SHALL HAVE A SET OF APPROVED DRAWINGS SIGNED BY THE CITY ENGINEER OR DESIGNEE AND A PRINTED COPY OF THE CURRENT CITY OF ARVADA 'ENGINEERING CODE OF STANDARDS AND SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF PUBLIC IMPROVEMENTS" ON SITE AT ALL TIMES.
E. THE CITY OF ARVADA ENGINEERING DIVISION SHALL BE NOTIFIED (PHONE # 720-898- 7640) A MINIMUM OF 24 HOURS PRIOR TO THE START OF ANY CONSTRUCTION.
F. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR BURIED UTILITIES. THE CONTRACTOR IS RESPONSIBLE TO VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION AND TO PROTECT THEM DURING CONSTRUCTION.
G. THE CONTRACTOR IS RESPONSIBLE FOR ALL PROJECT SAFETY INCLUDING, BUT NOT LIMITED TO, TRENCH EXCAVATION AND SHORING, TRAFFIC CONTROL AND SECURITY.
H. BENCHMARK LOCATION, ELEVATION AND DATUM ARE AS NOTED.
I. AS-BUILT DRAWINGS SHOWING ALL CHANGES FROM THE APPROVED CONSTRUCTION DRAWINGS SHALL BE SUBMITTED TO THE CITY ENGINEER OR DESIGNEE PRIOR TO INITIATION OF THE REQUIRED TWO YEAR WARRANTY PERIOD. UTILITY AS-BUILTS SHALL INCLUDE STATIONING OF ALL FITTINGS, SERVICES AND PERTINENT ELEVATIONS. CERTIFICATES OF OCCUPANCY FOR ANY BUILDINGS OR STRUCTURES WITHIN THE DEVELOPMENT WILL NOT BE ISSUED UNTIL THE AS-BUILTS HAVE BEEN RECEIVED, REVIEWED AND APPROVED BY THE CITY OF ARVADA ENGINEERING DIVISION.
J. A CITY OF ARVADA TAX CERTIFICATION FORM MUST BE COMPLETED BY ALL CONTRACTORS AND SUBCONTRACTORS PERFORMING WORK ON THIS PROJECT. THIS FORM DETAILS ALL MATERIALS WHICH HAVE BEEN INCLUDED IN THE WORK BY CONTRACTORS AND SUBCONTRACTORS. COPIES OF ALL PAID INVOICES FOR MATERIALS SHALL BE ATTACHED TO THE FORM. CERTIFICATES OF OCCUPANCY FOR ANY BUILDINGS OR STRUCTURES WITHIN THE DEVELOPMENT WILL NOT BE ISSUED UNTIL THIS FORM HAS BEEN RECEIVED, REVIEWED AND APPROVED BY THE CITY OF ARVADA ENGINEERING DIVISION.
K. OWNER/DEVELOPER SHALL OBTAIN A STORMWATER CONSTRUCTION PERMIT FROM THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY CONTROL DIVISION, PRIOR TO CLEARING, GRADING, OR EXCAVATING A SITE OF ONE (1) ACRE OR MORE OR LESS THAN ONE ACRE AND PART OF A LARGER DEVELOPMENT. A COPY OF THE APPROVED PERMIT MUST BE SUBMITTED TO THE CITY OF ARVADA ENGINEERING DIVISION PRIOR TO THE START OF CLEARING, GRADING OR EXCAVATING OF THE SITE. A COPY OF THE APPROVED PERMIT MUST ALSO BE AVAILABLE ON THE PROJECT SITE AT ALL TIMES DURING CONSTRUCTION.
L. CONTRACTOR SHALL OBTAIN A COLORADO STATE CONSTRUCTION DEWATERING DISCHARGE PERMIT FROM THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT FOR ALL AREAS WHERE DEWATERING IS REQUIRED FROM AN EXCAVATION AND WATER IS DISCHARGED INTO A STORM SEWER, CHANNEL, IRRIGATION DITCH OR ANY WATERS OF THE UNITED STATES. A COPY OF THE APPROVED PERMIT MUST BE SUBMITTED TO THE CITY OF ARVADA ENGINEERING DIVISION PRIOR TO THE START OF ANY DEWATERING. A COPY OF THE APPROVED PERMIT MUST ALSO BE AVAILABLE ON THE PROJECT SITE AT ALL TIMES DURING CONSTRUCTION.
M. ALL CURB RAMPS SHALL COMPLY WITH THE LATEST ADA STANDARD. CONTRACTOR TO CHECK WITH THE CITY OF ARVADA ENGINEERING DIVISION TO VERIFY THE LATEST CURB RAMP STANDARD PRIOR TO CONSTRUCTION OF ANY RAMP.
N. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE CITY OF ARVADA ENGINEERING DIVISION. THE CITY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS 'ENGINEERING CODE OF STANDARDS AND SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF PUBLIC IMPROVEMENTS'.
O. A PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE SUBMITTED TO THE CITY OF ARVADA ENGINEERING DIVISION FOR ACCEPTANCE WITH THE PUBLIC IMPROVEMENTS PERMIT APPLICATION. A PUBLIC IMPROVEMENTS CONSTRUCTION PERMIT WILL NOT BE ISSUED WITHOUT AN APPROVED TRAFFIC CONTROL PLAN FOR TRAFFIC CONTROL ON EXISTING ROADS DURING CONSTRUCTION.

STREET

A. CONTRACTOR SHALL HAVE ON SITE A COPY OF THE CITY OF ARVADA APPROVED SUBGRADE SOILS AND PAVEMENT DESIGN REPORT SHOWING MINIMUM REQUIRED SUBGRADE PREPARATION REQUIREMENTS AND MINIMUM REQUIRED PAVEMENT THICKNESSES.
B. ALL TRENCH BACKFILL AND SUBGRADE PREPARATION SHALL BE TESTED TO ENSURE COMPLIANCE WITH CITY OF ARVADA STANDARDS AND SHALL BE TESTED AT CITY REQUIRED FREQUENCIES BY A CITY APPROVED PRIVATE SOILS TESTING FIRM. TEST RESULTS SHALL BE SUBMITTED TO, REVIEWED, AND APPROVED BY, THE CITY OF ARVADA ENGINEERING DIVISION PRIOR TO INSTALLING BASE COURSE, ASPHALT OR CONCRETE ON PREPARED SUBGRADE. ALL BASE COURSE DENSITY SHALL ALSO BE TESTED BY THE PRIVATE SOILS FIRM AT CITY REQUIRED FREQUENCIES TO ENSURE COMPLIANCE WITH CITY OF ARVADA REQUIREMENTS. BASE COURSE TEST RESULTS SHALL ALSO BE APPROVED BY THE CITY OF ARVADA ENGINEERING DIVISION PRIOR TO INSTALLING PAVEMENT. ALL CONCRETE AND ASPHALT PLACED SHALL BE TESTED IN ACCORDANCE WITH CITY OF ARVADA MINIMUM MATERIALS TESTING STANDARDS. TEST RESULTS SHALL BE REVIEWED AND APPROVED BY THE CITY OF ARVADA ENGINEERING DIVISION PRIOR TO INITIATION OF THE REQUIRED TWO YEAR WARRANTY PERIOD.
C. THE SUBGRADE MATERIAL SHALL BE REMOVED TO A DEPTH REQUIRED BY THE CITY OF ARVADA ACCORDING TO INFORMATION OBTAINED FROM LABORATORY TESTS AND/OR AS REQUIRED IN THE PAVEMENT DESIGN REPORT. ADDITIVES OR APPROVED MATERIAL MAY BE REQUIRED IF THE NATIVE MATERIAL IS UNSATISFACTORY. THE SUBGRADE SHALL BE COMPACTED TO A MINIMUM DENSITY DETERMINED IN ACCORDANCE WITH AASHTO DESIGNATION T180 OR T99 AND IN ACCORDANCE WITH CDOT STANDARD SPECIFICATIONS SECTION 203.07.
D. THE CONTRACTOR SHALL PROOF ROLL ALL SUBGRADE AND BASE COURSE IN A MANNER ACCEPTABLE TO THE CITY OF ARVADA IN ACCORDANCE WITH THE CITY OF ARVADA 'ENGINEERING CODE OF STANDARDS AND SPECIFICATIONS."PROOF ROLLING SHALL BE INSPECTED AND ACCEPTED BY THE CITY PRIOR TO INSTALLATION OF PAVEMENT AND/OR CONCRETE FLATWORK.
E. ALL CONCRETE CURB, GUTTER, SIDEWALK AND OTHER FLATWORK WITHIN THE CITY RIGHT OF WAY SHALL BE MINIMUM 6" THICKNESS. CROSSPANS SHALL BE MINIMUM 8"THICKNESS AND MINIMUM 8 FOOT WIDTH. ALL CONCRETE SHALL BE MINIMUM 4000 PSI DESIGN STRENGTH REINFORCED WITH 1.5 LBS/CY FIBERMESH IN ACCORDANCE WITH THE CITY OF ARVADA 'ENGINEERING CODE OF STANDARDS AND SPECIFICATIONS."

ARVADA STANDARD EROSION CONTROL NOTES:

A. THE CITY OF ARVADA STORMWATER INSPECTOR MUST BE MET ON SITE AND PROVIDED WITH A STORMWATER MANAGEMENT PLAN AFTER INSTALLATION OF TEMPORARY BEST MANAGEMENT PRACTICES (BMPS), BUT BEFORE CONSTRUCTION OR GRADING BEGINS.
B. THERE SHALL BE NO EARTH-DISTURBING ACTIVITY OUTSIDE THE LIMITS DESIGNATED IN THE ACCEPTED PLANS.
C. ALL REQUIRED PERIMETER SILT AND CONTRUCTION FENCING SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITY (STOCKPILING, STRIPPING, GRADING, ETC). ALL OTHER REQUIRED EROSION CONTROL MEASURES SHALL BE INSTALLED AT THE APPROPRIATE TIME IN THE CONSTRUCTION SEQUENCE AS INDICATED IN THE APPROVED PROJECT SCHEDULE, CONSTRUCTION PLANS, AND STORMWATER MANAGEMENT PLAN.
D. AT ALL TIMES DURING CONSTRUCTION, THE DEVELOPER SHALL BE RESPONSIBLE FOR PREVENTING AND CONTROLLING ON-SITE EROSION INCLUDING KEEPING THE PROPERTY SUFFICIENTLY WATERED SO AS TO MINIMIZE WINDBLOWN SEDIMENT. THE DEVELOPER SHALL ALSO BE RESPONSIBLE FOR INSTALLING AND MAINTAINING ALL EROSION CONTROL FACILITIES SHOWN HEREIN.
E. PRE-DISTURBANCE VEGETATION SHALL BE PROTECTED AND RETAINED WHEREVER POSSIBLE. REMOVAL OR DISTURBANCE OF EXISTING VEGETATION SHALL BE LIMITED TO THE AREA(S) REQUIRED FOR IMMEDIATE CONSTRUCTION OPERATIONS, AND FOR THE SHORTEST PRACTICAL PERIOD OF TIME.
F. ALL SOILS EXPOSED DURING LAND DISTURBING ACTIVITY (STRIPPING, GRADING, UTILITY INSTALLATIONS, STOCKPILING, FILLING, ETC.) SHALL BE KEPT IN A ROUGHENED CONDITIONED BY RIPPING OR DISKING ALONG LAND CONTOURS UNTIL MULCH, VEGETATION, OR OTHER PERMANENT EROSION CONTROL BMPS ARE INSTALLED. NO DISTURBED AREAS, EXCEPT THOSE WITHIN THE PROJECT STREET RIGHTS-OF-WAY, SHALL REMAIN EXPOSED FOR MORE THAN THIRTY (30) DAYS BEFORE TEMPORARY OR PERMANENT EROSION CONTROL (E.G. SEED/MULCH, LANDSCAPING, ETC.) IS INSTALLED, UNLESS OTHERWISE APPROVED BY THE CITY OF ARVADA STORMWATER INSPECTOR.
G. IN ORDER TO MINIMIZE EROSION POTENTIAL, ALL TEMPORARY (STRUCTURAL) EROSION CONTROL MEASURES SHALL:
1. BE INSPECTED AT A MINIMUM OF ONCE EVERY FOURTEEN (14) DAYS AND AFTER EACH SIGNIFICANT STORM EVENT AND REPAIRED OR RECONSTRUCTED AS NECESSARY IN ORDER TO ENSURE THE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION.
2. REMAIN IN PLACE UNTIL SUCH TIME AS ALL THE SURROUNDING DISTURBED AREAS ARE SUFFICIENTLY STABILIZED. THE CITY OF ARVADA STORMWATER INSPECTOR MUST BE NOTIFIED PRIOR TO REMOVAL.
3. BE REMOVED WHEN THEY ARE NO LONGER FUNCTIONAL OR AFTER THE SITE HAS BEEN SUFFICIENTLY STABILIZED AS DETERMINED BY THE STORMWATER INSPECTOR. THE CITY OF ARVADA STORMWATER INSPECTOR MUST BE NOTIFIED PRIOR TO REMOVAL.
H. WHEN TEMPORARY EROSION CONTROL MEASURES ARE REMOVED, THE DEVELOPER SHALL BE RESPONSIBLE FOR THE CLEAN UP AND REMOVAL OF ALL SEDIMENT AND DEBRIS FROM ALL DRAINAGE INFRASTRUCTURE AND OTHER PUBLIC FACILITIES.
I. THE CONTRACTOR SHALL IMMEDIATELY CLEAN UP ANY CONSTRUCTION MATERIALS INADVERTENTLY DEPOSITED ON EXISTING STREETS, SIDEWALKS, OR OTHER PUBLIC RIGHTS OF WAY, AND MAKE SURE STREETS AND WALKWAYS ARE CLEANED AT THE END OF EACH WORKING DAY.
J. ALL SOIL STOCKPILES SHALL NOT BE PLACED WITHIN ONE HUNDRED (100) FEET OF DRAINAGE, WHERE POSSIBLE, AND SHALL BE PROTECTED FROM SEDIMENT TRANSPORT BY APPROPRIATE EROSION CONTROL METHODS. ANY SOIL STOCKPILE THAT WILL BE DORMANT FOR OVER THIRTY (30) DAYS SHALL BE SEEDED.
K. THE STORMWATER VOLUME CAPACITY OF DETENTION PONDS WILL BE RESTORED AND STORM SEWER LINES WILL BE CLEANED UPON COMPLETION OF THE PROJECT AND BEFORE TURNING THE MAINTENANCE OVER TO THE PROPERTY OWNER OR HOMEOWNERS ASSOCIATION (HOA).
L. CITY ORDINANCE REQUIREMENTS MAKE IT UNLAWFUL TO DISCHARGE OR ALLOW THE DISCHARGE OF ANY POLLUTANT OR CONTAMINATED WATER FROM CONSTRUCTION SITES. POLLUTANTS INCLUDE, BUT ARE NOT LIMITED TO DISCARDED BUILDING MATERIALS, CONCRETE TRUCK WASHOUT, CHEMICALS, OIL AND GAS PRODUCTS, LITTER, AND SANITARY WASTE. THE DEVELOPER SHALL AT ALL TIMES TAKE WHATEVER MEASURES ARE NECESSARY TO ASSURE THE PROPER CONTAINMENT AND DISPOSAL OF POLLUTANTS ON THE SITE IN ACCORDANCE WITH ANY AND ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.
M. A DESIGNATED AREA SHALL BE PROVIDED ON SITE FOR CONCRETE TRUCK CHUTE WASHOUT. THE AREA SHALL BE CONSTRUCTED SO AS TO CONTAIN WASHOUT MATERIAL AND LOCATED AT LEAST FIFTY (50) FEET AWAY FROM ANY WATERWAY DURING CONSTRUCTION. UPON COMPLETION OF CONSTRUCTION ACTIVITIES THE CONCRETE WASHOUT MATERIAL WILL BE REMOVED AND PROPERLY DISPOSED OF PRIOR TO THE AREA BEING RESTORED.
N. MASONRY ACTIVITIES WILL BE CONTAINED WITH APPROPRIATE LOT-SPECIFIC BMPS, SUCH AS STOCKPILE PERIMETER CONTROL AND BERMED WASHOUT PITS. ALL WASTE PRODUCTS FROM MASONRY ACTIVITIES WILL BE REMOVED AND DISPOSED OF PROPERLY.
O. TO ENSURE THAT SEDIMENT DOES NOT MOVE OFF OF INDIVIDUAL LOTS SEDIMENT/EROSION CONTROL BMPS SHALL BE INSTALLED AND MAINTAINED AT ONE OR MORE OF THE FOLLOWING LOCATIONS UNTIL THE LOTS ARE LANDSCAPED.
1. BELOW ALL GUTTER DOWNSPOUTS.
2. OUT TO DRAINAGE SWALES.
3. ALONG LOT PERIMETER.
4. OTHER LOCATIONS, IF NEEDED.
P. A VEHICLE TRACKING PAD SHALL BE INSTALLED WHEREVER IT IS NECESSARY FOR CONSTRUCTION EQUIPMENT INCLUDING BUT NOT LIMITED TO PERSONAL VEHICLES EXITING EXISTING UNPAVED AREAS ONTO ROADWAYS. NO EARTHEN MATERIALS, I.E., STONE, DIRT, ETC., SHALL BE PLACED IN THE CURB & GUTTER OR ROADWAY AS A RAMP TO ACCESS TEMPORARY STOCKPILES, CONSTRUCTION MATERIALS AND/OR BUILDING SITES.
Q. CONDITIONS IN THE FIELD MAY WARRANT EROSION CONTROL MEASURES IN ADDITION TO WHAT IS SHOWN ON THESE PLANS. THE DEVELOPER SHALL IMPLEMENT WHATEVER MEASURES ARE DETERMINED NECESSARY, AS DIRECTED BY THE CITY OF ARVADA.

BMP MAINTENANCE NOTE:

ALL EROSION AND SEDIMENT CONTROL PRACTICES AND OTHER PROTECTIVE MEASURES IDENTIFIED IN THE CASMP MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION. PROPER SELECTION AND INSTALLATION OF BMPS AND IMPLEMENTATION OF COMPREHENSIVE INSPECTION AND MAINTENANCE PROCEDURES, IN ACCORDANCE WITH THE CASMP, SHOULD BE ADEQUATE TO MEET THIS CONDITION. BMPS THAT ARE NOT ADEQUATELY MAINTAINED IN ACCORDANCE WITH GOOD ENGINEERING, HYDROLOGIC AND POLLUTION CONTROL PRACTICES, INCLUDING REMOVAL OF COLLECTED SEDIMENT OUTSIDE THE ACCEPTABLE TOLERANCES OF THE BMPS, ARE CONSIDERED TO BE NO LONGER OPERATING EFFECTIVELY AND MUST BE ADDRESSED.

GENERAL SANITARY NOTES:

1. THE CONTRACTOR SHALL NOTIFY COLORADO 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE, AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE, AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
3. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO START OF CONSTRUCTION.
4. PIPE LENGTHS ARE MEASURED FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. ALL COORDINATES ARE AT THE CENTER OF THE STRUCTURE UNLESS OTHERWISE INDICATED.
5. ALL WORK, INCLUDING CORRECTION WORK, SHALL BE INSPECTED BY THE UTILITY PROVIDER'S REPRESENTATIVE WHO SHALL HAVE THE AUTHORITY TO HALT CONSTRUCTION WHEN THERE IS A LACK OF ADHERENCE TO STANDARD CONSTRUCTION PRACTICES.
6. MAINTAIN A MINIMUM OF TEN FEET OF HORIZONTAL SEPARATION BETWEEN ALL SANITARY SEWER AND DOMESTIC WATER MAINS AND SERVICES IN ACCORDANCE WITH STATE OF COLORADO AND JURISDICTIONAL UTILITY PROVIDER SPECIFICATIONS.
7. FOR ALL NON-CONCENTRIC MANHOLES, MANHOLE RINGS/COVERS AND STEPS LIDS SHALL BE ROTATED AS SHOWN IN PLAN VIEW.
8. CONTRACTOR SHALL ADJUST ALL EXISTING RIM ELEVATIONS TO MATCH THE PROPOSED GRADE.
9. ALL SANITARY SERVICE CLEANOUTS LOCATED ADJACENT TO A BUILDING SHALL BE TWO-WAY CLEANOUTS.
10. THE CONTRACTOR IS RESPONSIBLE FOR:
a. OBTAINING ALL APPLICABLE LICENSES, BONDS, PERMITS, STANDARDS AND SPECIFICATIONS FOR SEWER MAIN INSTALLATION.
b. VERIFYING THE LOCATION AND DEPTH OF EXISTING UTILITIES AND NOTIFYING THE ENGINEER OF ANY DISCREPANCIES.
c. RESTORING ALL DISTURBED AREAS TO ORIGINAL CONDITION, OR AS INDICATED ON THE PLANS.

GENERAL UTILITY NOTES

1. CONTRACTOR SHALL NOTIFY ALL AFFECTED PARTIES, CITY OF ARVADA UTILITY AND ENGINEERING DIVISIONS, A MINIMUM OF 24 HOURS PRIOR TO ANY WATER OR SEWER SERVICE INTERRUPTION.
2. CONTRACTOR IS TO COORDINATE THE OPERATION OF ALL WATER VALVES, FIRE HYDRANTS, AND OTHER APPURTENANCES WITH THE CITY'S WATER OPERATIONS DIVISION THROUGH THE CITY'S ENGINEERING INSPECTOR.
3. ALL FIRE HYDRANT BRANCH PIPE SHALL BE CLASS 200 AWWA C900 PVC OR CLASS 150 AWWA C909 PVC. ALL FIRE LINES TO BUILDINGS WITH INTERIOR SPRINKLER SYSTEMS SHALL BE CLASS 200 AWWA C900 PVC PIPE OR CLASS 200 AWWA C909 PVC PIPE ONLY.
4. ALL METALLIC FITTINGS SHALL BE WRAPPED WITH MINIMUM 8 MIL THICKNESS POLYETHYLENE ENCASEMENT.
5. ALL PVC WATER MAINS SHALL BE INSTALLED WITH WHITE #12 TYPE UF OR USE CABLE SINGLE COPPER CONDUCTOR AS A TRACER WIRE SPIRALLY WRAPPED AROUND THE PIPE. TRACER WIRE TO EXTEND FROM MAIN TO A CATHODIC PROTECTION BOX LOCATED ON THE RIGHT SIDE OF ALL FIRE HYDRANTS. TRACER WIRE SHALL BE CONNECTED TO EXISTING TRACER WIRE WHERE POSSIBLE. WHERE NO TRACER WIRE EXISTS, ENDS OF TRACER WIRE SHALL BE STRIPPED AND GROUNDED INTO NATIVE SOIL A MINIMUM OF 12"DEEP.
6. ALL METER PITS SHALL BE 24 INCH DIAMETER CONCRETE OR PLASTIC IN ACCORDANCE WITH SECTION 30 OF THE CITY OF ARVADA 'ENGINEERING CODE OF STANDARDS AND SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF PUBLIC IMPROVEMENTS"
7. STORM, SANITARY AND WATER MANHOLE COVERS SHALL SAY "CITY OF ARVADA STORM, WATER OR SANITARY" WHERE APPLICABLE IN ACCORDANCE WITH THE CITY'S STANDARD LID DETAIL.
8. BLOW-OFFS, BOTH PERMANENT AND TEMPORARY, SHALL BE IN ACCORDANCE WITH CITY OF ARVADA STANDARD DETAIL DRAWINGS.
9. ALL SANITARY SEWER MAINS INSTALLED SHALL BE HIGH PRESSURE JET CLEANED AFTER COMPLETION OF THE FINAL LIFT OF ASPHALT PLACEMENT AND PRIOR TO REQUIRED TELEVISION INSPECTION BY THE CITY'S WASTEWATER DIVISION.

IRRIGATION

F. CONTRACTOR IS TO NOTIFY AFFECTED IRRIGATION COMPANY A MINIMUM OF 24 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION IN IRRIGATION EASEMENTS OR ON IRRIGATION DITCHES.
G. ALL IRRIGATION PIPE JOINTS SHALL BE WATERTIGHT AND PASS A LOW AIR PRESSURE TEST.

APPROVED:
City Engineer — Date: 6/10/24 — Job Number: DA2023-0019

Review is for general compliance with the City of Arvada "Engineering Code of Standards and Specifications for the Design and Construction of Public Improvements", latest edition. Sole responsibility for completeness and/or accuracy of these Documents shall remain with the Registered Professional Engineer sealing these plans. The City does not accept liability for facilities designed by others.

COLORADO LICENSED PROFESSIONAL ENGINEER — JOHN D. O'ROURKE — 43327 — 05/08/2024

Know what's below. Call before you dig. 811

DESIGNED BY: LME
CHECKED BY: JDO
DRAWN BY: LME

ISSUE DATE: 02-17-2023

DATE	REVISION COMMENTS
04-28-2023	PER CITY COMMENTS
07-13-2023	PER CITY COMMENTS
09-01-2023	PER CITY COMMENTS
10-13-2023	ISSUED FOR CONSTRUCTION
03-25-2024	MINOR CITY COMMENTS
04-24-2024	ISSUED FOR CONSTRUCTION

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Denver, Colorado 80203
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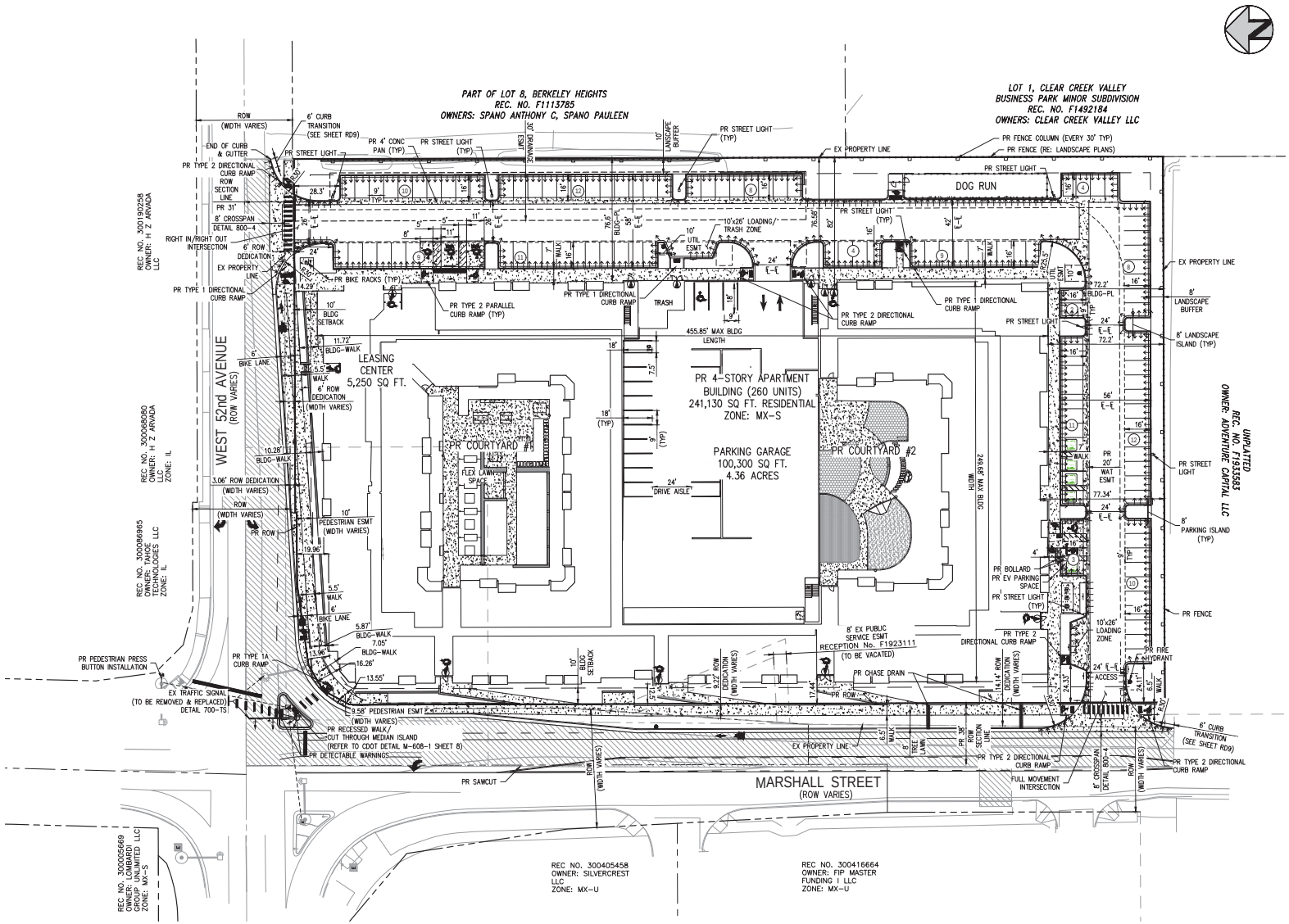
HarrisKocherSmith.com

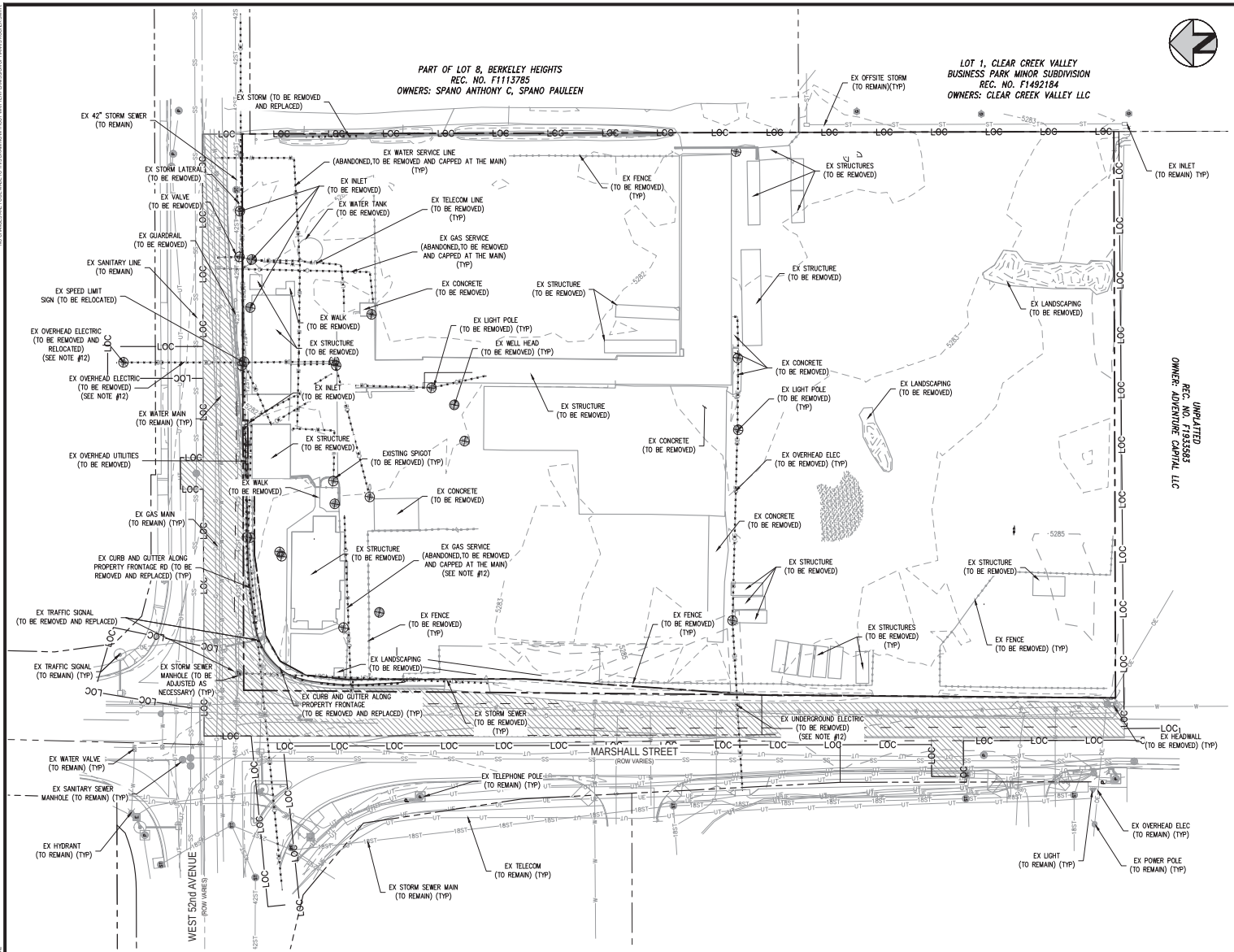
LINCOLN AVENUE CAPITAL

MARSHALL POINTE
GENERAL NOTES

PROJECT #: 220319
SHEET NUMBER
CD2
2 OF 44

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.


PART OF LOT 8, BERKELEY HEIGHTS
REC. NO. F1113785
OWNERS: SPANO ANTHONY C, SPANO PAULEEN
LOT 1, CLEAR CREEK VALLEY BUSINESS PARK MINOR SUBDIVISION
REC. NO. F1492184
OWNERS: CLEAR CREEK VALLEY LLC
WEST 52nd AVENUE
(ROW VARIES)
MARSHALL STREET
(ROW VARIES)
LEASING CENTER
5,250 SQ FT.
PR 4-STORY APARTMENT BUILDING (260 UNITS)
241,130 SQ FT. RESIDENTIAL
ZONE: MX-S
PARKING GARAGE
100,300 SQ FT.
4.36 ACRES
PR COURTYARD
PR COURTYARD #2
DOG RUN
455.85' MAX BLDG LENGTH
246.69' MAX BLDG WIDTH
REC. NO. 300190258
OWNER: H Z ARVADA LLC
REC. NO. 300086980
OWNER: H Z ARVADA LLC
ZONE: IL
REC. NO. 300086965
OWNER: TAHOE TECHNOLOGIES LLC
ZONE: IL
REC. NO. 300405669
OWNER: LOMBARDO GROUP UNLIMITED LLC
ZONE: MX-S
REC. NO. 300405458
OWNER: SILVERCREST LLC
ZONE: MX-U
REC. NO. 300416664
OWNER: FIP MASTER FUNDING I LLC
ZONE: MX-U
UNPLATTED
REC. NO. F1935583
OWNER: ADVENTURE CAPITAL LLC
EX PROPERTY LINE
PR STREET LIGHT
PR TYPE 1 DIRECTIONAL CURB RAMP
PR TYPE 2 DIRECTIONAL CURB RAMP
PR TYPE 2 PARALLEL CURB RAMP (TYP)
PR BIKE RACKS (TYP)
PR PEDESTRIAN PRESS BUTTON INSTALLATION
EX TRAFFIC SIGNAL (TO BE REMOVED & REPLACED) DETAIL 700-TS
PR RECESSED WALK/ CUT THROUGH MEDIAN ISLAND (REFER TO CDOT DETAIL M-608-1 SHEET 8)
PR DETECTABLE WARNINGS
PR SAWCUT
PR FENCE
PR BOLLARD
PR EV PARKING SPACE
PR FIRE HYDRANT
PR CHASE DRAIN
8' EX PUBLIC SERVICE ESMT RECEPTION No. F1923111 (TO BE VACATED)
FULL MOVEMENT INTERSECTION
8' LANDSCAPE BUFFER
8' LANDSCAPE ISLAND (TYP)
8' PARKING ISLAND (TYP)
10'x26' LOADING/ TRASH ZONE
10' UTIL ESMT
PR 20' WAT ESMT
PEDESTRIAN ESMT (WIDTH VARIES)
6' ROW DEDICATION (WIDTH VARIES)
3.06' ROW DEDICATION (WIDTH VARIES)
14.14' ROW DEDICATION (WIDTH VARIES)
6' CURB TRANSITION (SEE SHEET RD9)
8' CROSSPAN DETAIL 800-4
RIGHT IN/RIGHT OUT INTERSECTION
6' ROW DEDICATION
EX PROPERTY LINE
PR TYPE 1 DIRECTIONAL CURB RAMP
10' BLDG SETBACK
6' BIKE LANE
5.5' WALK
11.72' BLDG-WALK
10.28' BLDG-WALK
19.96'
5.87' BLDG-WALK
7.05' BLDG-WALK
16.26'
13.55'
9.58' PEDESTRIAN ESMT
PR 38' ROW
6.5' WALK
8' TREE LAWN
PR TYPE 2 DIRECTIONAL CURB RAMP
PR TYPE 2 DIRECTIONAL CURB RAMP
PR STREET LIGHT (TYP)
PR FENCE COLUMN (EVERY 30' TYP)
PR FENCE (RE: LANDSCAPE PLANS)
PR 4' CONC PAN (TYP)
PR 6' CURB TRANSITION (SEE SHEET RD9)
END OF CURB & GUTTER
PR TYPE 2 DIRECTIONAL CURB RAMP
ROW SECTION LINE
PR 31'
8' CROSSPAN DETAIL 800-4
PR TYPE 1 DIRECTIONAL CURB RAMP
TRASH
FLEX LAWN SPACE
24' DRIVE AISLE
18' (TYP)
7.5'
6' (TYP)
PR STREET LIGHT
PR 24' ACCESS
PR TYPE 2 DIRECTIONAL CURB RAMP
10'x26' LOADING ZONE
PR STREET LIGHT (TYP)
PR 24' WAT ESMT
PR STREET LIGHT
PR 16' UTIL ESMT
PR 42' E-E
PR 56' E-E
PR 76.5' BLDG-PL
PR 82' E-E
PR 72.2' BLDG-PL
PR 72.2' E-E
PR 77.34' E-E
PR 24' E-E
PR 16' E-E
PR 24.35'
PR 24.17'
PR 6.5' WALK
PR 8' TREE LAWN
PR 38' ROW
PR 24' E-E
PR 17' ROW DEDICATION (WIDTH VARIES)
PR 17.44'
PR ROW



NOTES:

1. THE LIMITS OF DEMOLITION SHOWN ON THIS PLAN ARE APPROXIMATE AND ARE INTENDED TO GIVE THE CONTRACTOR A GENERAL EXPECTATION OF WHAT MAY/MAY NOT NEED TO BE REMOVED AND DEMOLISHED PRIOR TO CONSTRUCTION. THE LIMITS AND AMOUNT OF DEMOLITION MAY NEED TO BE ADJUSTED BY THE CONTRACTOR BASED ON THE MEANS AND METHODS OF CONSTRUCTION. THE EXTENT OF DEMOLITION SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD PRIOR TO CONSTRUCTION.
2. EXISTING UTILITY MANHOLES/RIMS/BOXES/STRUCTURES/ETC. CALLED OUT TO REMAIN SHALL BE ADJUSTED TO FINAL GRADE. CONTRACTOR SHALL COORDINATE WITH UTILITY PROVIDES TO DETERMINE THE REQUIREMENTS FOR ADJUSTING EXISTING PULL BOXES/MANHOLES/STRUCTURES/ETC.
3. THIS DEMOLITION PLAN IS FOR INFORMATION ONLY AND SHOWS KNOWN INFORMATION PROVIDED BY UTILITY PROVIDER MAPS AND SURVEY DATA AND HAS NOT BEEN INDEPENDENTLY VERIFIED BY THE ENGINEER. THE CONTRACTOR SHALL CONDUCT ITS OWN SITE VISIT AND INVESTIGATION TO DETERMINE THE DEMOLITION REQUIREMENTS NECESSARY TO CONSTRUCT THE PROJECT PER THE APPROVED CONSTRUCTION DRAWINGS.
4. THIS DEMOLITION PLAN GENERALLY COVERS ALL KNOWN IMPROVEMENTS WITHIN THE SITE.
5. FINAL SCOPE AND LIMITS OF REMOVAL/ABANDONMENT /DEMOLITION OF EXISTING UTILITIES SHALL BE DETERMINED BY THE GENERAL CONTRACTOR AFTER COORDINATION WITH THE APPLICABLE UTILITY PROVIDERS/OWNERS.
6. CONTRACTOR SHALL OBTAIN ALL REQUIRED DEMOLITION PERMITS WITH THE APPLICABLE REVIEWING AUTHORITIES PRIOR TO STARTING DEMOLITION ACTIVITIES.
7. EXISTING ELECTRICAL UTILITIES TO BE REMOVED SHALL BE REMOVED IN ACCORDANCE WITH CURRENT XCEL ENERGY SPECIFICATIONS. ALL REQUIRED PERMITS SHALL BE OBTAINED FROM XCEL ENERGY PRIOR TO MODIFICATION TO THESE UTILITIES. IN SOME CASES XCEL ENERGY, NOT THE CONTRACTOR, WILL BE RESPONSIBLE FOR REMOVAL OF CERTAIN INFRASTRUCTURE. THE CONTRACTOR SHALL COORDINATE REMOVAL OF ALL INFRASTRUCTURE WITH THE UTILITY PROVIDER.
8. EXISTING TELECOMMUNICATION, CABLE TV, PHONE LINES TO BE REMOVED SHALL BE REMOVED IN ACCORDANCE WITH THE CURRENT APPLICABLE UTILITY PROVIDERS SPECIFICATIONS. ALL REQUIRED PERMITS SHALL BE OBTAINED FROM APPLICABLE INFRASTRUCTURE OWNERS PRIOR TO MODIFICATION. THE CONTRACTOR SHALL COORDINATE REMOVAL OF ALL INFRASTRUCTURE WITH THE UTILITY PROVIDER.
9. EXISTING WASTEWATER (STORM SEWER AND SANITARY SEWER) INFRASTRUCTURE TO BE REMOVED SHALL BE REMOVED IN ACCORDANCE WITH CURRENT CLEAR CREEK SANITATION DISTRICT, CITY OF ARVADA, AND STATE SPECIFICATIONS. SEE APPROVED SANITARY SEWER PLANS FOR MORE DETAILS.
10. THE EXISTING STRUCTURES, INCLUDING THE FOUNDATIONS, SHOULD BE COMPLETELY REMOVED FROM THE SITE. ANY OTHER BELOW GRADE APPURTENANCES ASSOCIATED WITH THE STRUCTURE SHOULD ALSO BE REMOVED. ANY WELLS ENCOUNTERED SHOULD BE ABANDONED IN ACCORDANCE WITH THE REGULATIONS OF THE COLORADO STATE ENGINEER. ALL CONCRETE PADS SHOULD BE REMOVED FROM THE SITE.
11. CONTRACTOR SHALL REFER TO THE GEOTECHNICAL SITE DEVELOPMENT STUDY FOR ADDITIONAL SITE DEVELOPMENT RECOMMENDATIONS.
12. THE GAS SERVICE FOR ADDRESS 5190 MARSHALL ST GATE 3, THE UNDERGROUND ELECTRIC ACROSS MARSHALL ST, THE OVERHEAD ELECTRIC ACROSS 52ND, AND THE POLE THAT IS CONNECTED TO THE OVERHEAD ELECTRIC ACROSS 52ND ARE ALL APPROXIMATE LOCATIONS. THESE APPROXIMATE LOCATIONS ARE BASED ON MAPS AND NOT ON SURVEY DATA.
13. SERVICE LINES BEING ABANDONED NEED TO BE REMOVED AND CAPPED AT THE MAIN.
14. ABANDONMENT OR REMOVAL OF ALL PIPES AND APPURTENANCES MUST COMPLY WITH SECTION 332 OF THE CITY CODE.
15. SECTIONS OF SIDEWALK SHALL BE REMOVED/REPLACED TO THE NEAREST JOINT.
16. REFER TO SIGNAGE AND STRIPING PLAN FOR REMOVAL OF EXISTING LANE STRIPING IN MARSHALL & 52ND AVENUE.
17. PER TAP CARDS RECEIVED FROM CLEAR CREEK VALLEY SANITATION ON MARCH 15TH 2024, THERE ARE TWO EXISTING FOUR-INCH SANITARY TAPS OFF THE SANITARY MAIN IN WEST 52ND AVENUE. THE EXACT LOCATION OF THE EXISTING SERVICES IS UNKNOWN AND THEY ARE NOT SHOWN WITHIN THE CIVIL CONSTRUCTION DOCUMENT SET. THE EXISTING SANITARY TAPS SHALL BE CUT OFF AND CAPPED AT THE EXISTING MAIN IN ACCORDANCE WITH CLEAR CREEK VALLEY DISTRICT (DISTRICT) CRITERIA. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATIONS DURING THE SITE DEMOLITION PHASE AND NOTIFY THE ENGINEER AND DISTRICT PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING AN ON-SITE PRE-CONSTRUCTION MEETING WITH THE DISTRICT PRIOR TO CUTTING THE EXISTING TAPS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING THE EXISTING TWO SERVICES BY CCTV OF THE SERVICES OR OTHER MEANS.

ABBREVIATIONS

BOP	BOTTOM OF PIPE
BS	BOTTOM OF STEP
BW	BOTTOM OF WALL (FG)
CONC	CONCRETE
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DR	DOOR
DS	DOWNSPOUT
E	EAST, EASTING
EGL	ENERGY GRADE LINE
EL	ELEVATION
EOA	EDGE OF ASPHALT
EOC	EDGE OF CONCRETE
EOP	EDGE OF PAVEMENT
ESMT	EASEMENT
EX	EXISTING
FES	FLARED END SECTION
FF	FINISHED FLOOR
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
GB	GRADE BREAK
GV	GATE VALVE
HC	HANDICAP
HGL	HYDRAULIC GRADE LINE
HORZ	HORIZONTAL
HP	HIGH POINT
INV	INVERT
LP	LOW POINT
LSD	LANDSCAPE DRAIN
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
N	NORTH, NORTHING
PHS	PHASE
PR	PROPOSED
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT-OF-WAY
SAN	SANITARY
SS	SANITARY SEWER
STA	STATION
STM	STORM
TB	THRUST BLOCK
TBC	TOP/BACK OF CURB
TOP	TOP OF PIPE
TS	TOP OF STEP
TW	TOP OF WALL (FG)
TYP	TYPICAL
UG	UNDERGROUND
VERT	VERTICAL
WAT	WATER

LEGEND:

- PROPERTY BOUNDARY
- EX OVERHEAD ELECTRIC
- EX UNDERGROUND TELECOM
- EX STORM SEWER LINE
- EX SANITARY SEWER LINE
- EX GAS LINE
- EX POWER POLE
- LIMITS OF CONSTRUCTION / LIMITS OF DISTURBANCE
- PROPOSED SAWCUT

APPROVED:

City Engineer — Date: 6/10/24 — Job Number: DA2023-0019

Review is for general compliance with the City of Arvada "Engineering Code of Standards and Specifications for the Design and Construction of Public Improvements", latest edition. Sole responsibility for completeness and/or accuracy of these Documents shall remain with the Registered Professional Engineer sealing these plans. The City does not accept liability for facilities designed by others.

Know what's below. Call before you dig.

30 0 30 60
SCALE: 1" = 30'

DESIGNED BY: LME
CHECKED BY: JDO
DRAWN BY: LME

ISSUE DATE: 02-17-2023

DATE	REVISION COMMENTS
04-28-2023	PER CITY COMMENTS
07-13-2023	PER CITY COMMENTS
09-01-2023	PER CITY COMMENTS
10-13-2023	ISSUED FOR CONSTRUCTION
03-25-2024	MINOR CITY COMMENTS
04-24-2024	ISSUED FOR CONSTRUCTION

HARRIS KOCHER SMITH
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
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HarrisKocherSmith.com

LINCOLN AVENUE CAPITAL

MARSHALL POINTE
DEMOLITION PLAN

COLORADO REGISTERED PROFESSIONAL ENGINEER — JOSEPH D. ODDO — 43327 — 05/08/2024

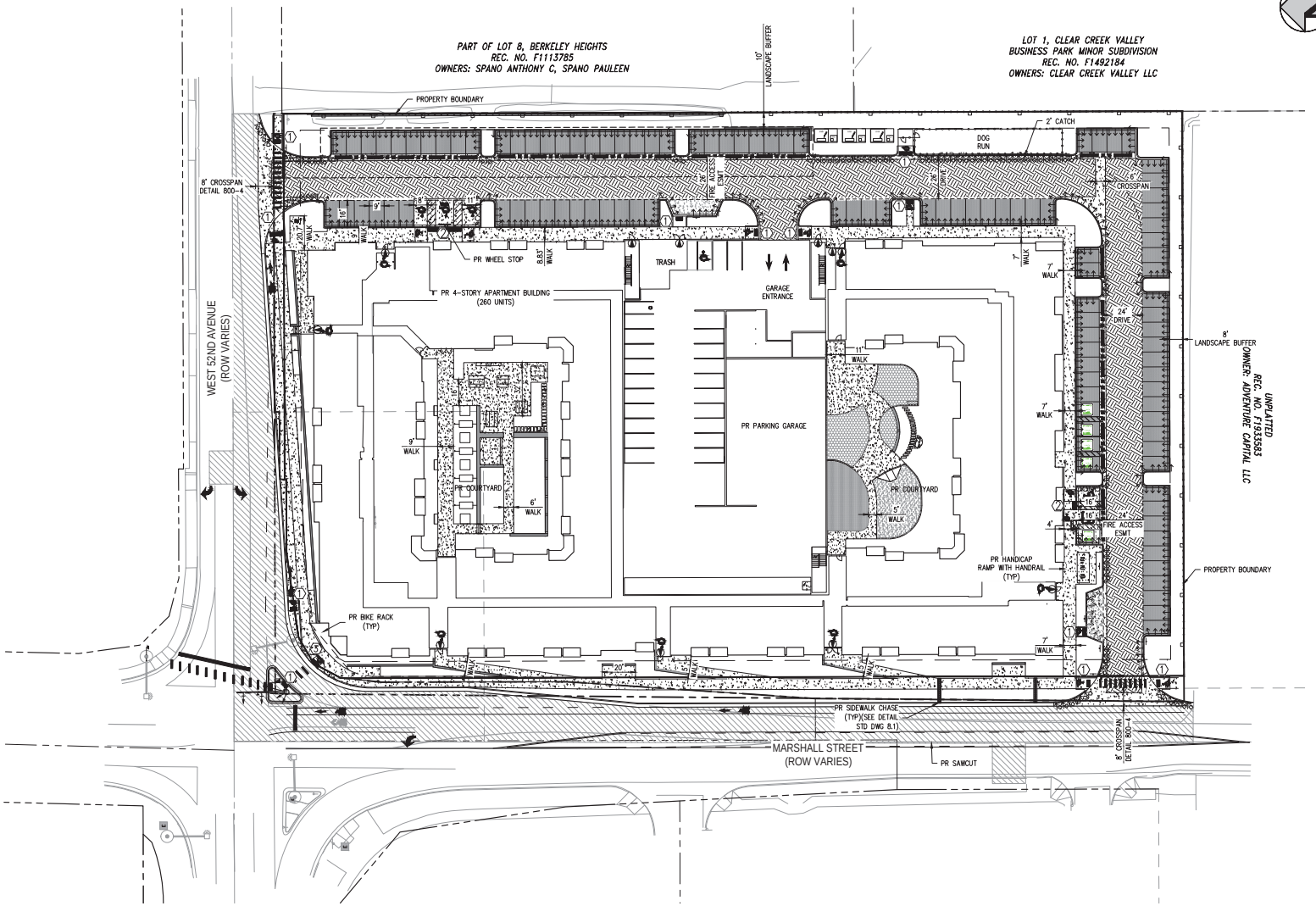
PROJECT #: 220319

SHEET NUMBER
CD4

4 OF 44

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH

FILEPATH: P:\2022\220319\ENGINEERING\CVCD_DEMO PLAN.DWG LAYOUT: LAYOUT1
© XREFs: city signature block, x-base, x-legal, x-alt, p-base, stamp - cd
PLOTTED: LME on 4/24/24 3:44 PM BY: LEBEL EINERSEN



LEGEND:

- PORTLAND CEMENT CONCRETE PAVEMENT –4" FOR WALKWAYS –6" FOR HEAVY DUTY PAVEMENT
- 4" STANDARD DUTY COMPOSITE ASPHALT PAVEMENT W/ 6" AGGREGATE BASE
- 5" HEAVY DUTY COMPOSITE ASPHALT PAVEMENT W/ 8" AGGREGATE BASE
- PROPOSED 4' VALLEY PAN
- DESIGNATED HANDICAP PARKING SPACE
- HANDICAP RAMP TYPE 1
- HANDICAP RAMP TYPE 2
- HANDICAP RAMP TYPE 3
- PROPOSED SAWCUT
- PROPOSED 6" VERTICAL CURB AND GUTTER (1' SPILL)
- PROPOSED 6" ADA CURB AND GUTTER (1' SPILL)
- PROPOSED 6" VERTICAL CURB AND GUTTER (2' CATCH)
- POURED IN PLACE PLAYGROUND SURFACING (SEE LANDSCAPE)
- ARTIFICIAL TURF
- ENGINEERED WOOD FIBAR SURFACING

NOTES:

1. PAVEMENT THICKNESSES ARE SHOWN FOR INFORMATION ONLY. REFER TO THE PRELIMINARY GEOTECHNICAL EVALUATION REPORT PREPARED BY BRAUN INTERTEC CORPORATION FOR PAVEMENT SECTION AND MATERIALS.
2. CONTRACTOR SHALL CONSTRUCT CONCRETE REINFORCEMENT PAVEMENT JOINTS, ETC. IN ACCORDANCE WITH THE COLORADO DEPARTMENT OF TRANSPORTATION, M&S STANDARDS, CURRENT EDITIONS, UNLESS OTHERWISE INDICATED IN PLANS.
3. SEE ARCHITECT, LANDSCAPE ARCHITECT & STRUCTURAL PLANS FOR MORE DETAILS REGARDING WALL TYPES FOR ALL SITE RETAINING WALLS.
4. 2' ADA VALLEY PAN SHALL BE USED ALONG ALL CONCRETE HANDICAP ADA SPACES AND HANDICAP ADA ACCESS AISLES.
5. FIRE APPARATUS ACCESS ROAD(S) SHALL BE PROVIDED WITH AN APPROVED PAVED SURFACE (ASPHALT OR CONCRETE), AND SHALL BE CAPABLE OF SUPPORTING AN IMPOSED LOAD OF 85,000 POUNDS.
6. THE PAVING DESIGN HAS BEEN PROVIDED BY THE GEOTECHNICAL ENGINEER AND IS CAPABLE OF SUPPORTING THE REQUIRED LOADING.
7. REFER TO LANDSCAPE PLANS FOR BIKE RACK DETAILS.

ABBREVIATIONS

BOP	BOTTOM OF PIPE
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BW	BOTTOM OF WALL (FG)
CONC	CONCRETE
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DR	DOOR
DS	DOWNSPOUT
E	EAST, EASTING
EGL	ENERGY GRADE LINE
EL	ELEVATION
EOA	EDGE OF ASPHALT
EOC	EDGE OF CONCRETE
EOP	EDGE OF PAVEMENT
ESMT	EASEMENT
EX	EXISTING
FES	FLARED END SECTION
FF	FINISHED FLOOR
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FH	FIRE HYDRANT
FL	FLOW LINE
GB	GRADE BREAK
GV	GATE VALVE
HC	HANDICAP
HGL	HYDRAULIC GRADE LINE
HORZ	HORIZONTAL

HP	HIGH POINT
INV	INVERT
LP	LOW POINT
LSD	LANDSCAPE DRAIN
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
N	NORTH, NORTHING
PHS	PHASE
PR	PROPOSED
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RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT-OF-WAY
SAN	SANITARY
SS	SANITARY SEWER
STA	STATION
STM	STORM
TB	THRUST BLOCK
TBC	TOP/BACK OF CURB
TOP	TOP OF PIPE
TS	TOP OF STEP
TW	TOP OF WALL (FG)
TYP	TYPICAL
UG	UNDERGROUND
VERT	VERTICAL
WAT	WATER

APPROVED:

City Engineer — Date: 6/10/24 — Job Number: DA2023-0019

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SCALE: 1" = 30'

DESIGNED BY: LME
CHECKED BY: JDO
DRAWN BY: LME

ISSUE DATE: 02-17-2023	
DATE	REVISION COMMENTS
04-28-2023	PER CITY COMMENTS
07-13-2023	PER CITY COMMENTS
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HARRIS KOCHER SMITH
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

LINCOLN AVENUE CAPITAL

MARSHALL POINTE
ON-SITE PAVING PLAN

COLORADO REGISTERED PROFESSIONAL ENGINEER 43327 05/08/2024

PROJECT #: 220319
SHEET NUMBER
CD5
5 OF 44

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION FROM HARRIS KOCHER SMITH

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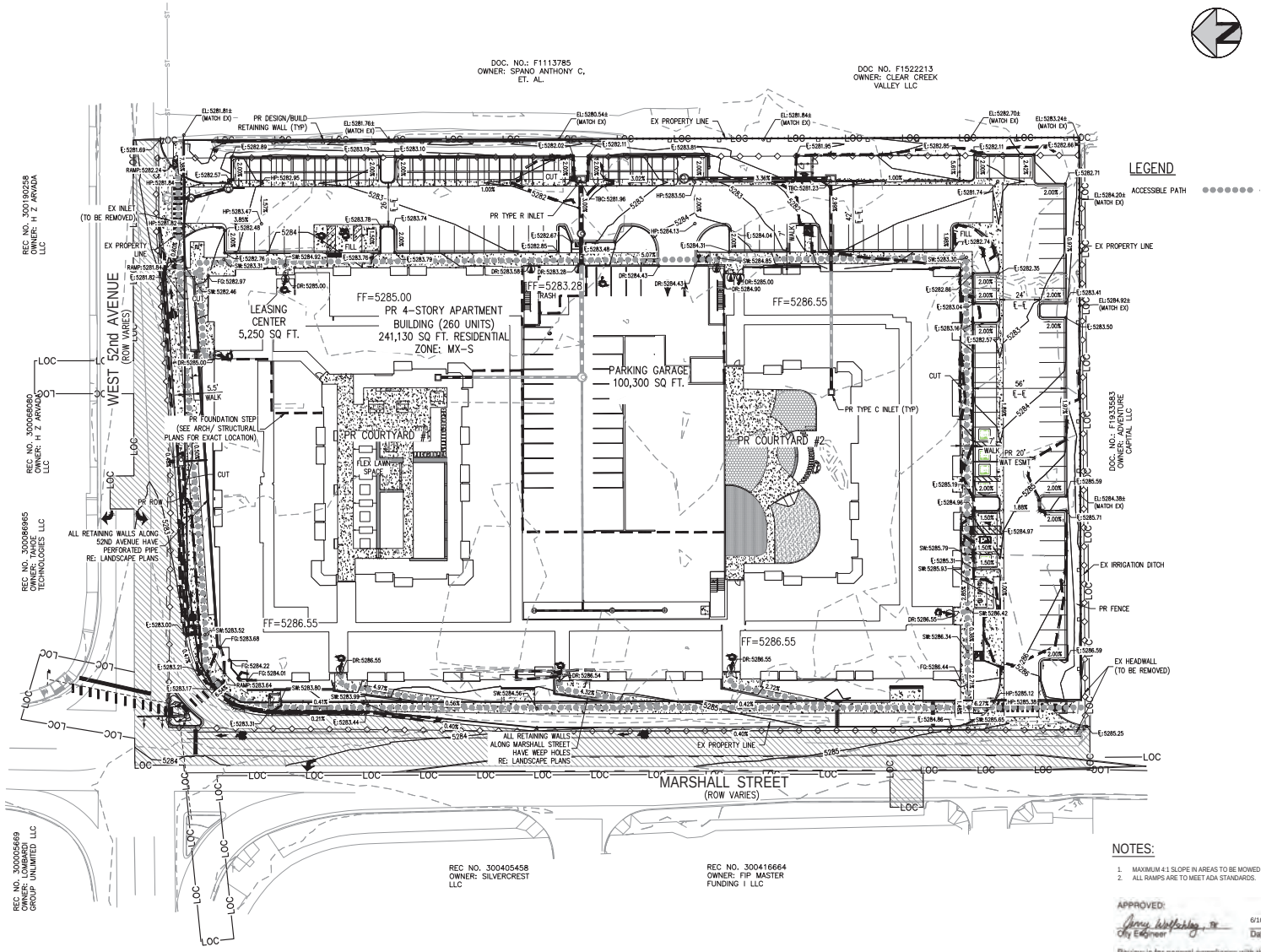

APPROVED:

City Engineer — Date: 6/10/24 — Job Number: DA2023-0019

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LINCOLN AVENUE CAPITAL

MARSHALL POINTE
OVERALL GRADING PLAN

PROJECT #: 220319

SHEET NUMBER
CD6
6 OF 44

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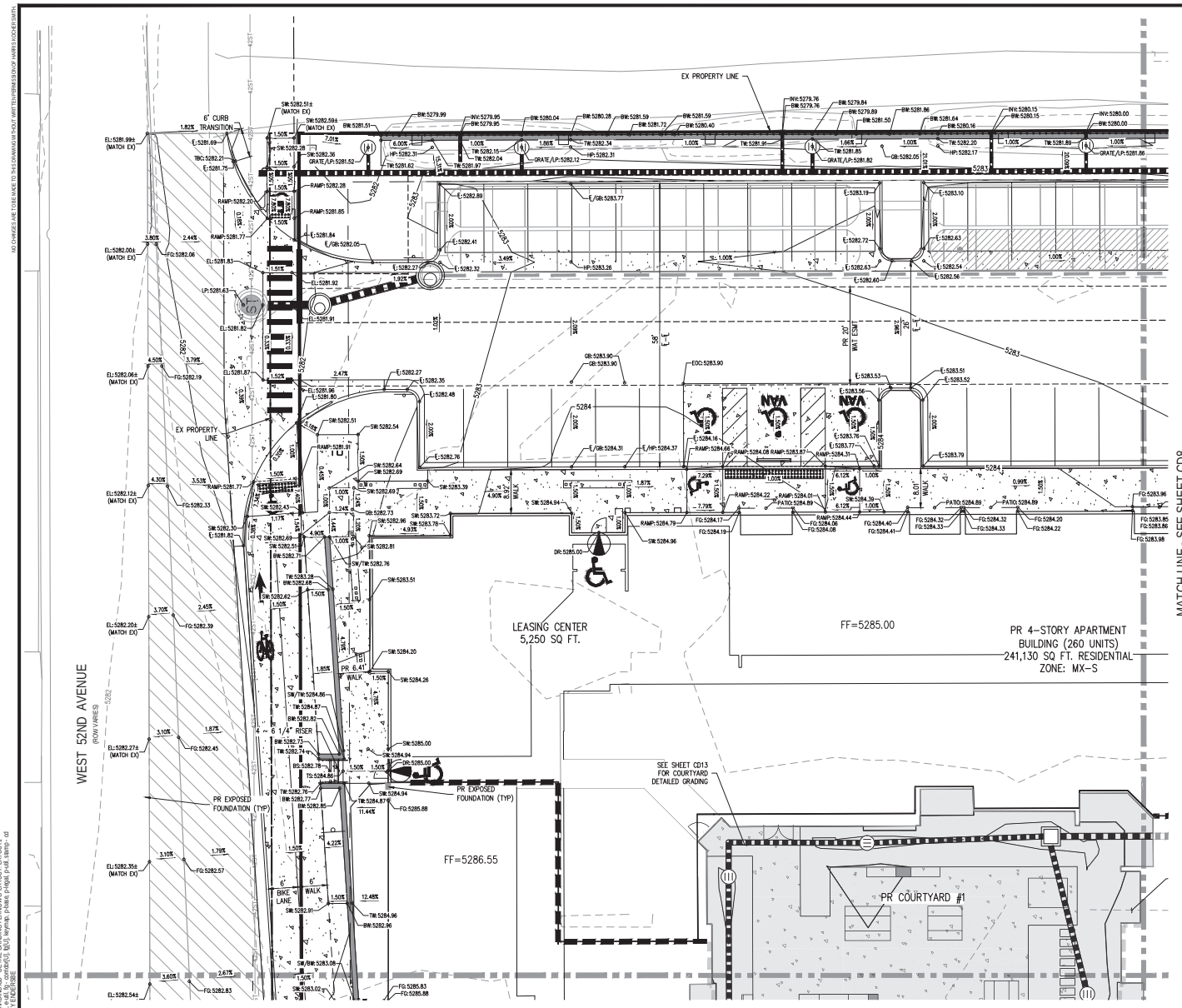

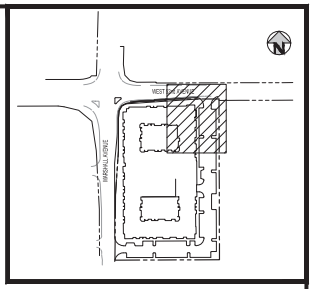

KEY MAP
SCALE: 1"=200'

ABBREVIATIONS

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2. CROSS SLOPES ALONG THE ACCESSIBLE ROUTE OR AT LANDINGS SHALL NOT EXCEED 2% IN ANY DIRECTION.
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6. ALL GRADES ARE FINISHED GRADE, UNLESS OTHERWISE NOTED.
7. ROCK MULCH, IF PLACED UPSTREAM OF CONCRETE FLATWORK OR GRASSED AREA, SHALL BE PLACED ON TOP OF FINISHED GRADE SHOWN ON THESE PLANS. ROCK MULCH AREAS SHALL BE DESIGNED AND CONSTRUCTED TO ADEQUATELY DRAIN AND NOT RETAIN WATER. ALL LANDSCAPE EDGE MATERIALS SHALL NOT PREVENT DRAINAGE TO PASS THROUGH.
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LEGEND:

- PR STEM WALL
- PR EXPOSED FOUNDATION
- PR FOUNDATION STEP

APPROVED:

City Engineer — 6/10/24 Date — DA2023-0019 Job Number

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LINCOLN AVENUE CAPITAL

MARSHALL POINTE
DETAILED GRADING PLAN

COLORADO LICENSED JOHN D. ODOM 43327 05/08/2024 PROFESSIONAL ENGINEER

PROJECT #: 220319

SHEET NUMBER
CD7

7 OF 44

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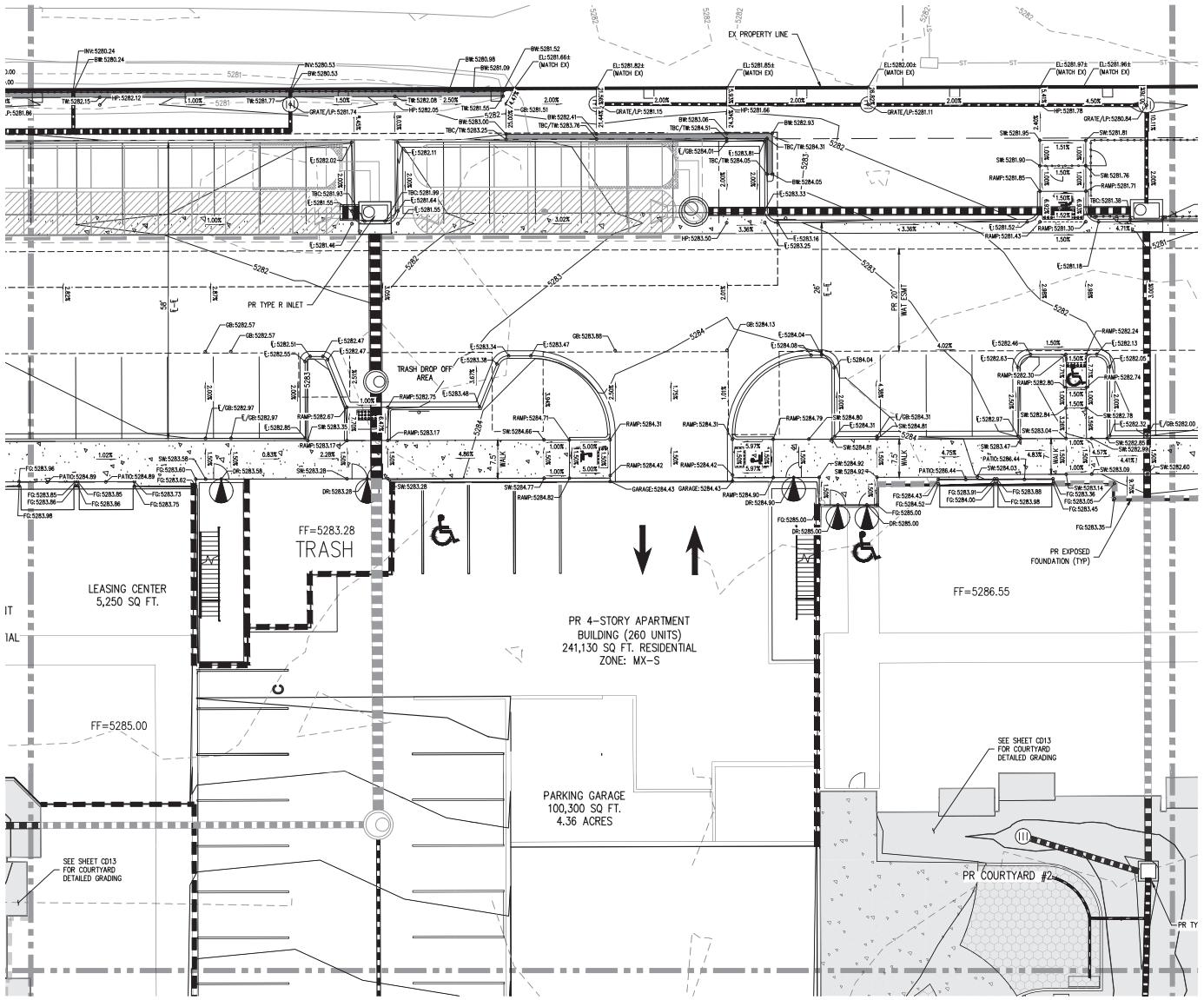

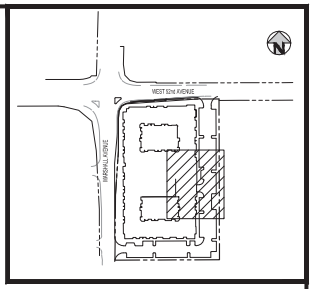

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- PR FOUNDATION STEP

APPROVED:

City Engineer — Date: 6/10/24 — Job Number: DA2023-0019

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LINCOLN AVENUE CAPITAL

MARSHALL POINTE
DETAILED GRADING PLAN

COLORADO LICENSED JOHN D. ODOM 43327 05/08/2024 PROFESSIONAL ENGINEER

PROJECT #: 220319

SHEET NUMBER
CD8

8 OF 44

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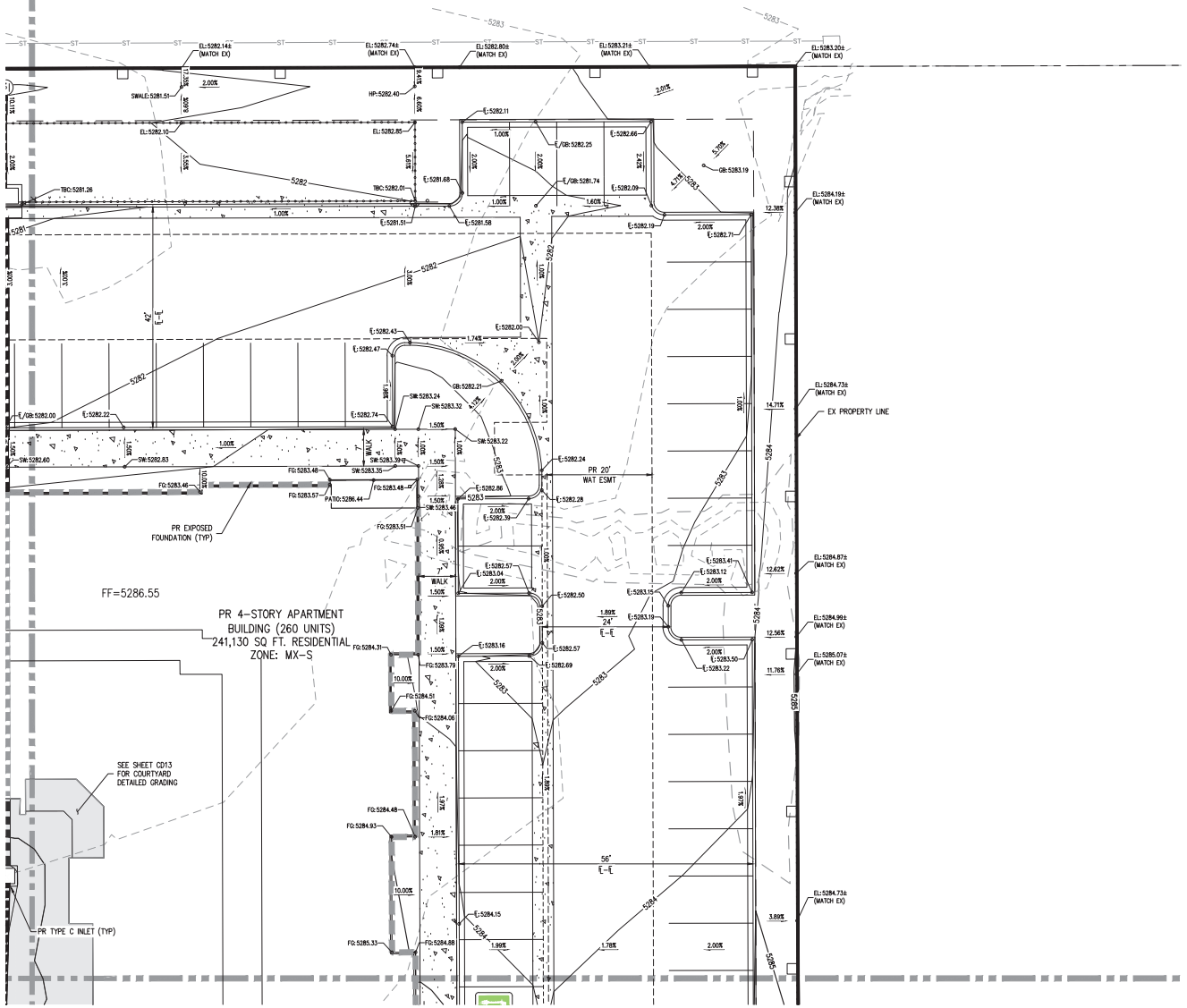

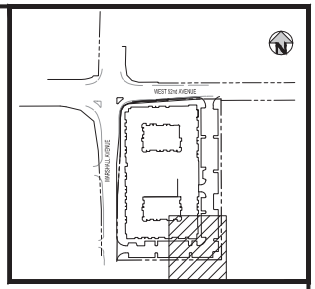

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LEGEND:

PR STEM WALL

PR EXPOSED FOUNDATION

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APPROVED:

City Engineer — Date: 6/10/24 — Job Number: DA2023-0019

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HarrisKocherSmith.com

LINCOLN AVENUE CAPITAL

MARSHALL POINTE
DETAILED GRADING PLAN

COLORADO LICENSED 43327 05/08/2024 PROFESSIONAL ENGINEER

PROJECT #: 220319

SHEET NUMBER
CD9

9 OF 44

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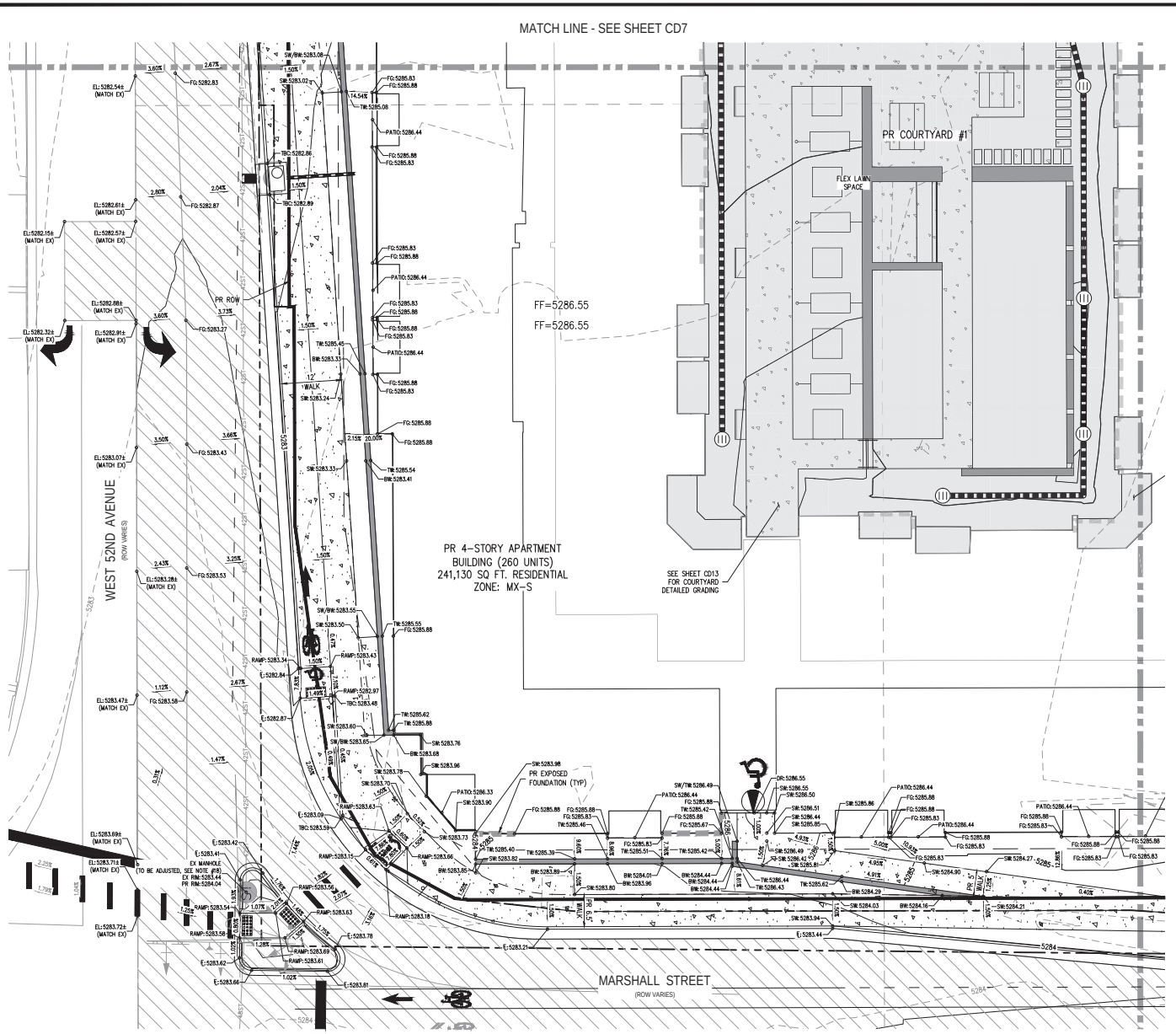

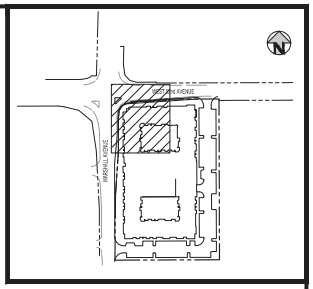

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PR EXPOSED FOUNDATION

PR FOUNDATION STEP

APPROVED:

City Engineer — Date: 6/10/24 — Job Number: DA2023-0019

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LINCOLN AVENUE CAPITAL

MARSHALL POINTE
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COLORADO LICENSED JOSEPH A. DIODATO 43327 05/08/2024 PROFESSIONAL ENGINEER

PROJECT #: 220319

SHEET NUMBER
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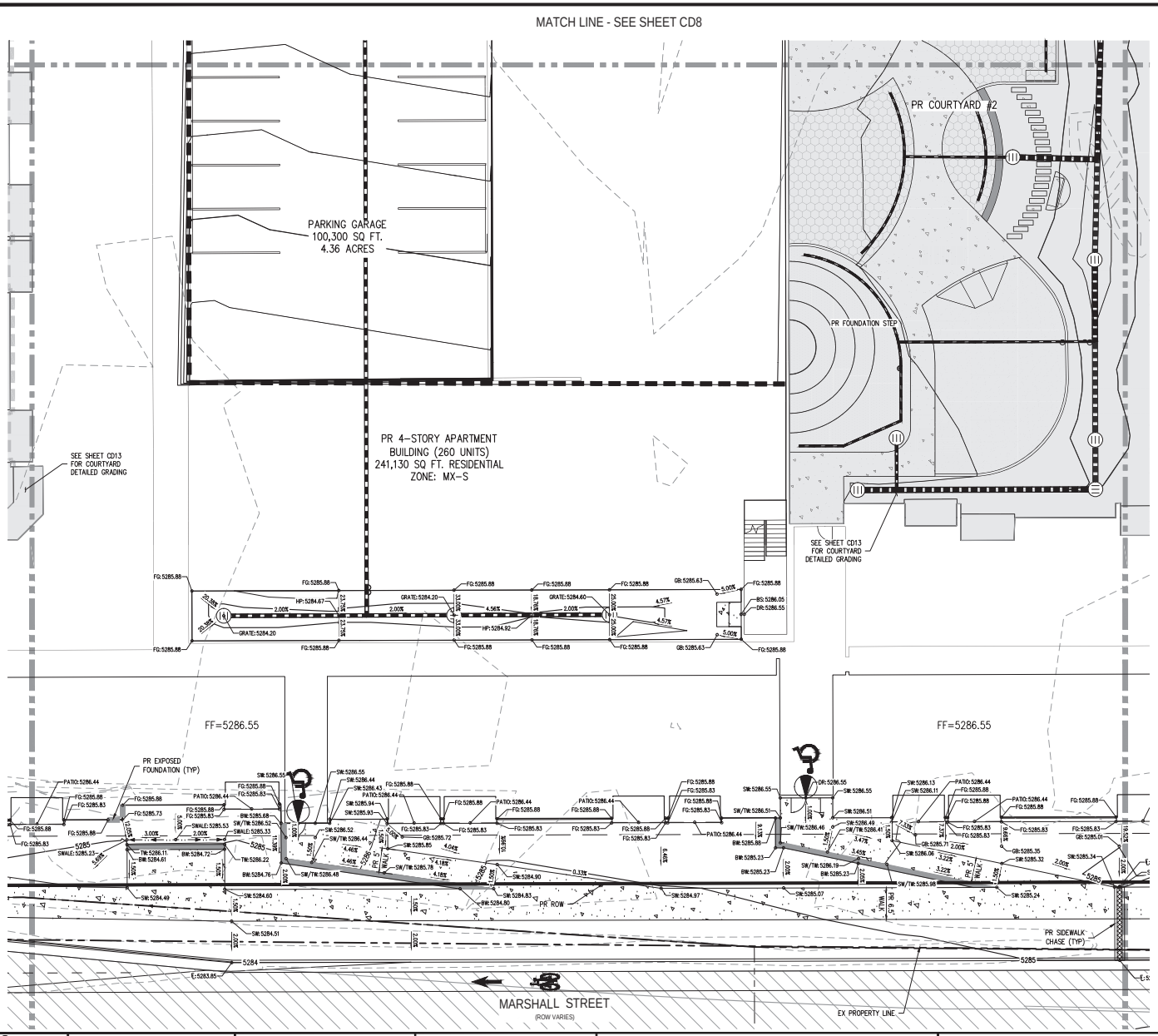

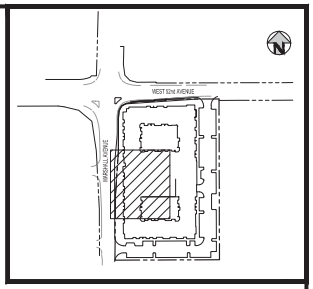

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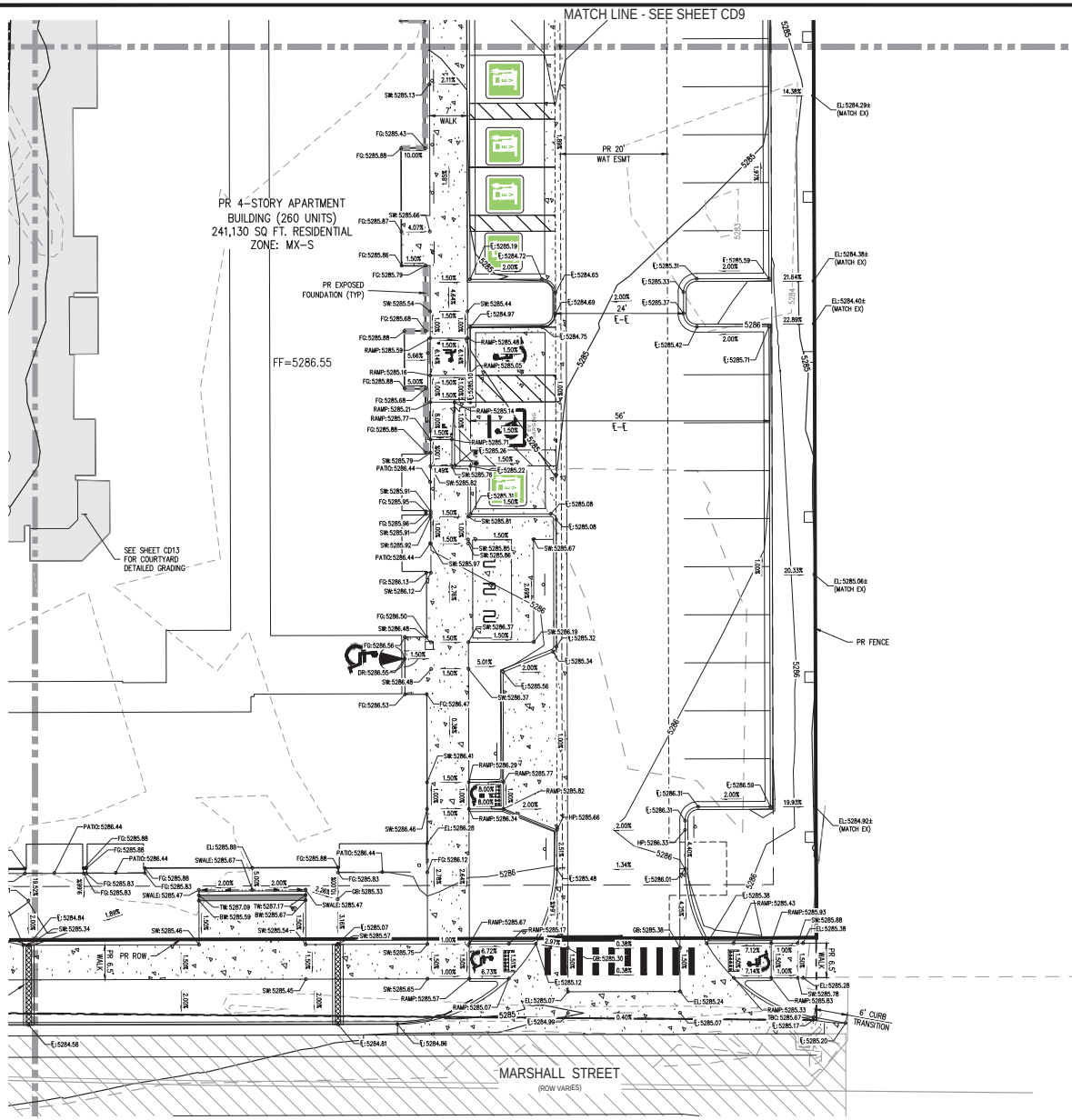

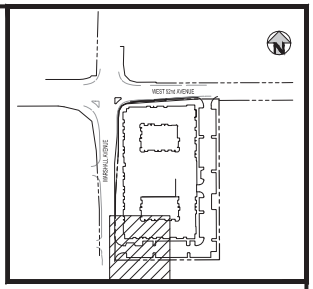

KEY MAP
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4. GUTTER SLOPES AT THE CURB RAMPS SHALL NOT EXCEED 5%.
5. GUTTER PANS SURROUNDING HANDICAP SPACES SHALL MATCH THE SLOPE OF THE ADJACENT PAVEMENT WITH A MAXIMUM 2% SLOPE IN ALL DIRECTIONS.
6. ALL GRADES ARE FINISHED GRADE, UNLESS OTHERWISE NOTED.
7. ROCK MULCH, IF PLACED UPSTREAM OF CONCRETE FLATWORK OR GRASSED AREA, SHALL BE PLACED ON TOP OF FINISHED GRADE SHOWN ON THESE PLANS. ROCK MULCH AREAS SHALL BE DESIGNED AND CONSTRUCTED TO ADEQUATELY DRAIN AND NOT RETAIN WATER. ALL LANDSCAPE EDGE MATERIALS SHALL NOT PREVENT DRAINAGE TO PASS THROUGH.
8. ALL GRADES ADJACENT TO THE BUILDINGS SHALL BE AT MINIMUM 8-INCHES BELOW FINISHED FLOOR ELEVATION, UNLESS OTHERWISE NOTED.
9. NON-PAVED GRADES ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM ALL BUILDINGS AT A MINIMUM OF 5% FOR 5-FT. ALL PAVED GRADES ATTACHED TO BUILDINGS SHALL SLOPE AWAY FROM ALL BUILDINGS AT A MINIMUM OF 1%, UNLESS OTHERWISE NOTED.
10. ALL GRADES FOR WALLS ARE FINISHED GRADE ELEVATIONS AT BOTTOM OF FRONT FACE (BW) AND TOP-BACK OF WALL (TW). THE WALL ELEVATIONS DO NOT INDICATE FOUNDATION DEPTHS OR ELEVATIONS. RETAINING WALL DETAILS SHALL BE PROVIDED BY OTHERS.
11. REFER TO STRUCTURAL PLANS FOR BUILDING FOUNDATION STEP LOCATIONS WHEN APPLICABLE.
12. PORTIONS OF STAIRS THAT DO NOT MEET THE MINIMUM 4-INCH RISER HEIGHT (DUE TO AN ADJACENT SLOPING PUBLIC WAY) SHALL HAVE A DISTINCTIVE MARKING STRIPE, 1-INCH TO 2-INCHES IN WIDTH, WITH A SLIP-RESISTANT SURFACE, IN ACCORDANCE WITH CURRENT INTERNATIONAL BUILDING CODE REGULATIONS.
13. SEE LANDSCAPE ARCHITECT PLANS FOR HEIGHT AND TOP OF COURTYARD AMENITIES (PLANTER CURBS, SEAT WALLS, BENCHES, FIRE WALL, MEDIA WALL, BARS, AND GRILLS).
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17. CONTRACTOR SHALL ENSURE ACCESSIBLE EXTERIOR DOORS AND GATES ARE CONSTRUCTED WITH ADEQUATE LANDING WIDTH AND DEPTH TO COMPLY WITH APPLICABLE AMERICANS WITH DISABILITIES ACT (ADA) AND AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) MANEUVERING CLEARANCES AT DOOR REQUIREMENTS (BASED ON THE DIRECTION OF APPROACH OF THE SIDEWALK).
18. CONTRACTOR SHALL ADJUST EX STORM MANHOLE AS NECESSARY TO AVOID PROPOSED CURB & GUTTER. CONTRACTOR SHALL INSTALL AN ECCENTRIC CONE AND ROTATE MANHOLE LID TO THE SOUTH. CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD AND CITY OF ANY CONFLICTS PRIOR TO CONSTRUCTION.

LEGEND:

- PR STEM WALL
- PR EXPOSED FOUNDATION
- PR FOUNDATION STEP

APPROVED:

City Engineer — Date: 6/10/24 — Job Number: DA2023-0019

Review is for general compliance with the City of Arvada "Engineering Code of Standards and Specifications for the Design and Construction of Public Improvements", latest edition. Sole responsibility for completeness and/or accuracy of these Documents shall remain with the Registered Professional Engineer sealing these plans. The City does not accept liability for facilities designed by others.

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH

FILEPATH: P:\2022\220319\ENGINEERING\GRADING\CD - DETAIL GRADING PLAN\DWG LAYOUT - LAYOUT1 (6)
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Know what's below. Call before you dig.

SCALE: 1" = 10'

DESIGNED BY: LME
CHECKED BY: JDO
DRAWN BY: LME

ISSUE DATE: 02-17-2023	
DATE	REVISION COMMENTS
04-28-2023	PER CITY COMMENTS
07-13-2023	PER CITY COMMENTS
09-01-2023	PER CITY COMMENTS
10-13-2023	ISSUED FOR CONSTRUCTION
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HARRIS KOCHER SMITH
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

LINCOLN AVENUE CAPITAL

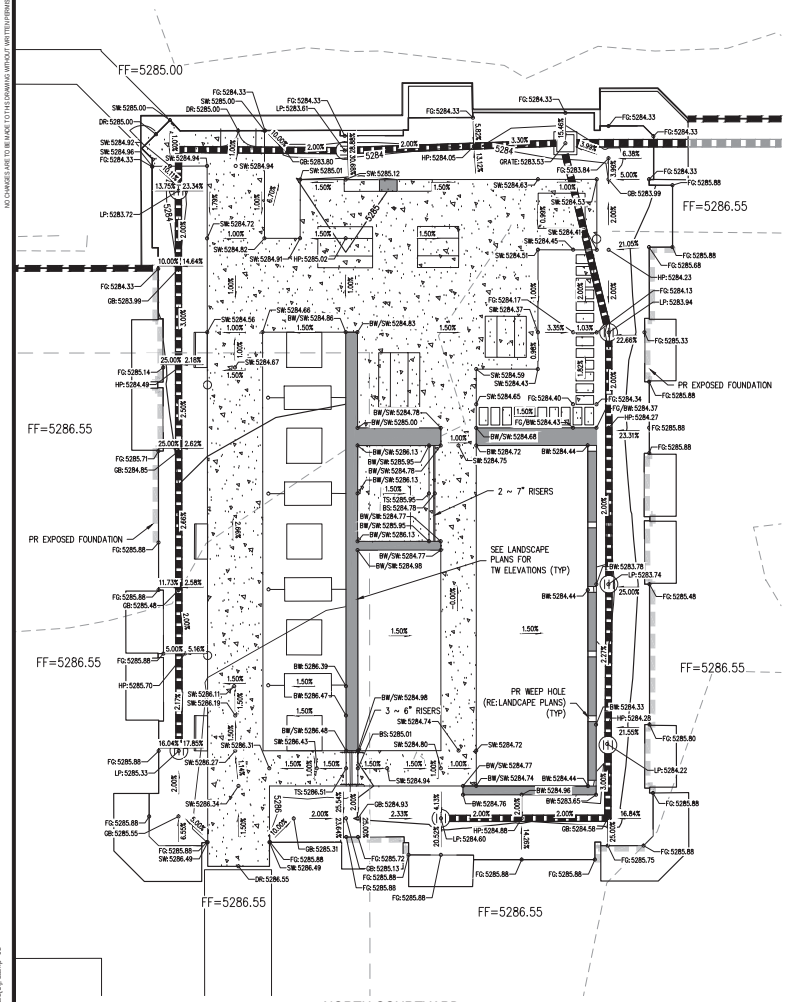
MARSHALL POINTE
DETAILED GRADING PLAN

COLORADO LICENSED PROFESSIONAL ENGINEER 43327 05/08/2024

PROJECT #: 220319

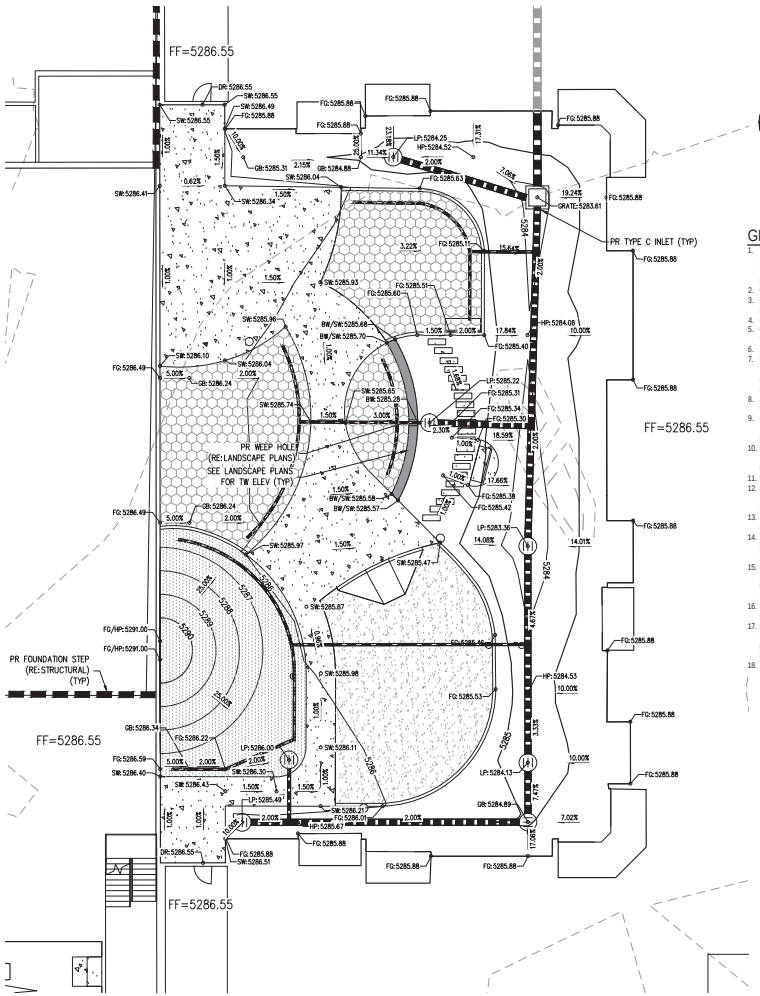
SHEET NUMBER
CD12

12 OF 44



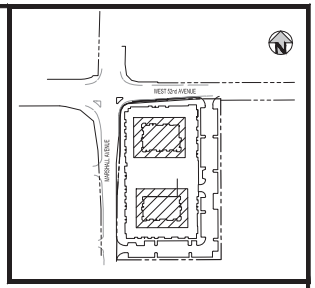
NORTH COURTYARD

SCALE: 1"=10'



SOUTH COURTYARD

SCALE: 1"=10'



KEY MAP

SCALE: 1"=200'

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18. ALL TYPE C INLETS SHALL HAVE CLOSE MESH GRATES.

ABBREVIATIONS

BOP	BOTTOM OF PIPE
BS	BOTTOM OF STEP
BW	BOTTOM OF WALL (FG)
CONC	CONCRETE
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DR	DOOR
DS	DOWNSPOUT
E	EAST, EASTING
EGL	ENERGY GRADE LINE
EL	ELEVATION
EOA	EDGE OF ASPHALT
EOC	EDGE OF CONCRETE
EOP	EDGE OF PAVEMENT
ESMT	EASEMENT
EX	EXISTING
FES	FLARED END SECTION
FF	FINISHED FLOOR
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
GB	GRADE BREAK
GV	GATE VALVE
HC	HANDICAP
HGL	HYDRAULIC GRADE LINE
HORZ	HORIZONTAL

HP	HIGH POINT
INV	INVERT
LP	LOW POINT
LSD	LANDSCAPE DRAIN
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
N	NORTH, NORTHING
PHS	PHASE
PR	PROPOSED
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT-OF-WAY
SAN	SANITARY
SS	SANITARY SEWER
STA	STATION
STM	STORM
TB	THRUST BLOCK
TBC	TOP/BACK OF CURB
TOP	TOP OF PIPE
TS	TOP OF STEP
TW	TOP OF WALL (FG)
TYP	TYPICAL
UG	UNDERGROUND
VERT	VERTICAL
WAT	WATER

LEGEND:

PR STEM WALL

PR EXPOSED FOUNDATION

PR FOUNDATION STEP

APPROVED:

City Engineer — Date: 6/10/24 — Job Number: DA2023-0019

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DESIGNED BY: LME
CHECKED BY: JDO
DRAWN BY: LME

ISSUE DATE: 02-17-2023

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LINCOLN AVENUE CAPITAL

MARSHALL POINTE
COURTYARD DETAILED GRADING PLAN

LOUIS M. DIPINTO — 43327 — 05/08/2024 — PROFESSIONAL ENGINEER

PROJECT #: 220319

SHEET NUMBER

CD13

13 OF 44

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION FROM HARRIS KOCHER SMITH

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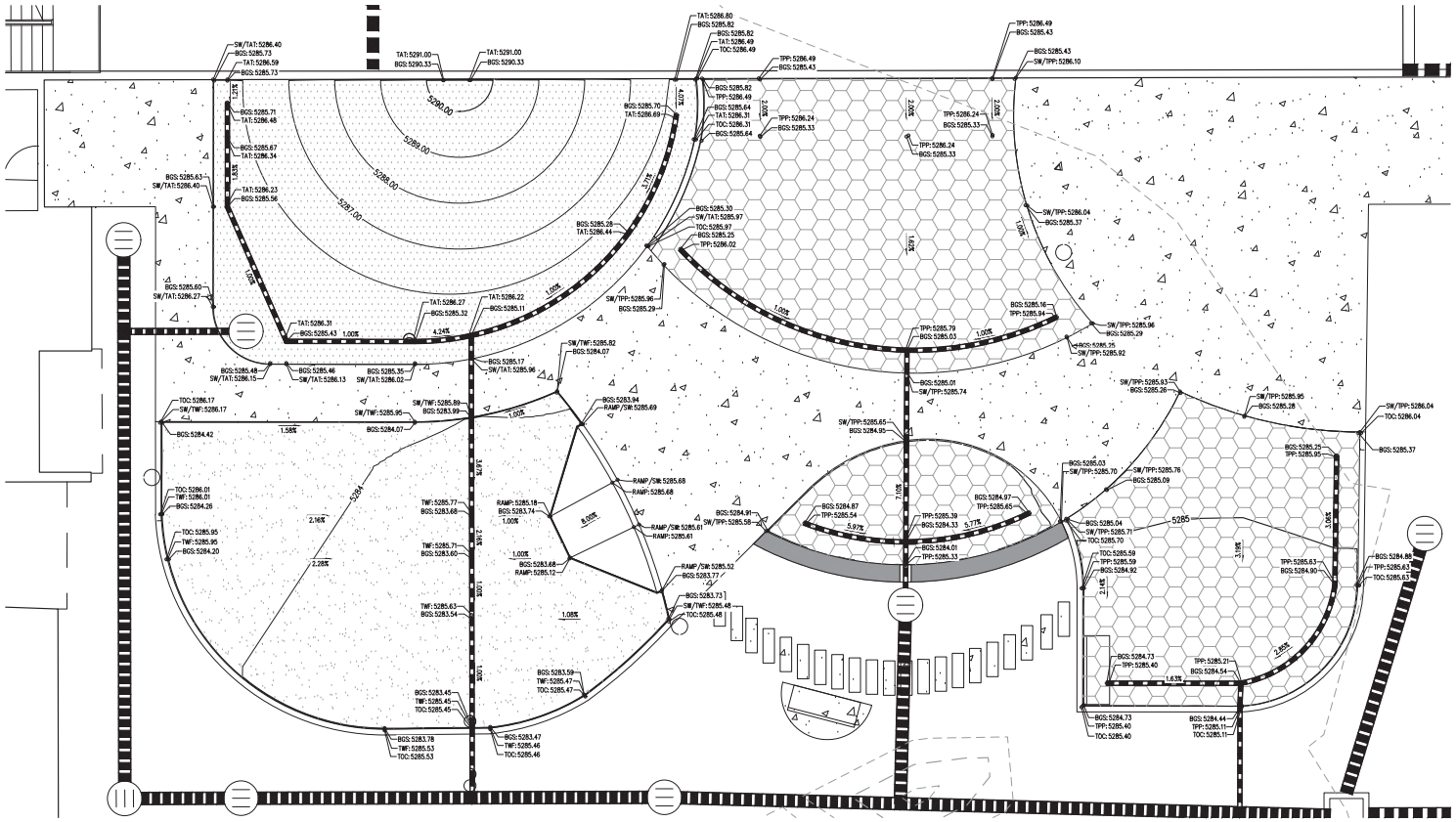

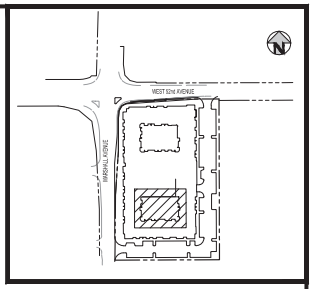

KEY MAP
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18. ALL TYPE C INLETS SHALL HAVE CLOSE MESH GRATES.

ABBREVIATIONS (SEE LANDSCAPE DETAILS)

TOC	TOP OF CONCRETE CURB (FG)
BGS	BOTTOM OF GRAVEL SUBBASE
TWF	TOP OF ENGINEERED WOOD FIBAR SURFACING
TAT	TOP OF ARTIFICIAL TURF
TPP	TOP OF POURED IN PLACE SURFACING
SW	SIDEWALK (FG)

APPROVED:
City Engineer — Date: 6/10/24 — Job Number: DA2023-0019

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CHECKED BY: JDO
DRAWN BY: LME

ISSUE DATE: 02-17-2023

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HarrisKocherSmith.com

LINCOLN AVENUE CAPITAL

MARSHALL POINTE
SOUTHERN COURTYARD SUBSURFACE GRADING PLAN

COLORADO LICENSED — JOHN C. DODDS — 43327 — 05/08/2024 — PROFESSIONAL ENGINEER

PROJECT #: 220319

SHEET NUMBER
CD14
14 OF 44

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH

FILEPATH: P:\2022\220319\ENGINEERING\DRAWINGS\ - SOUTHERN COURTYARD SUBSURFACE DET AILED GRADING PLAN\DWG LAYOUT\ LAYOUT2 (2)
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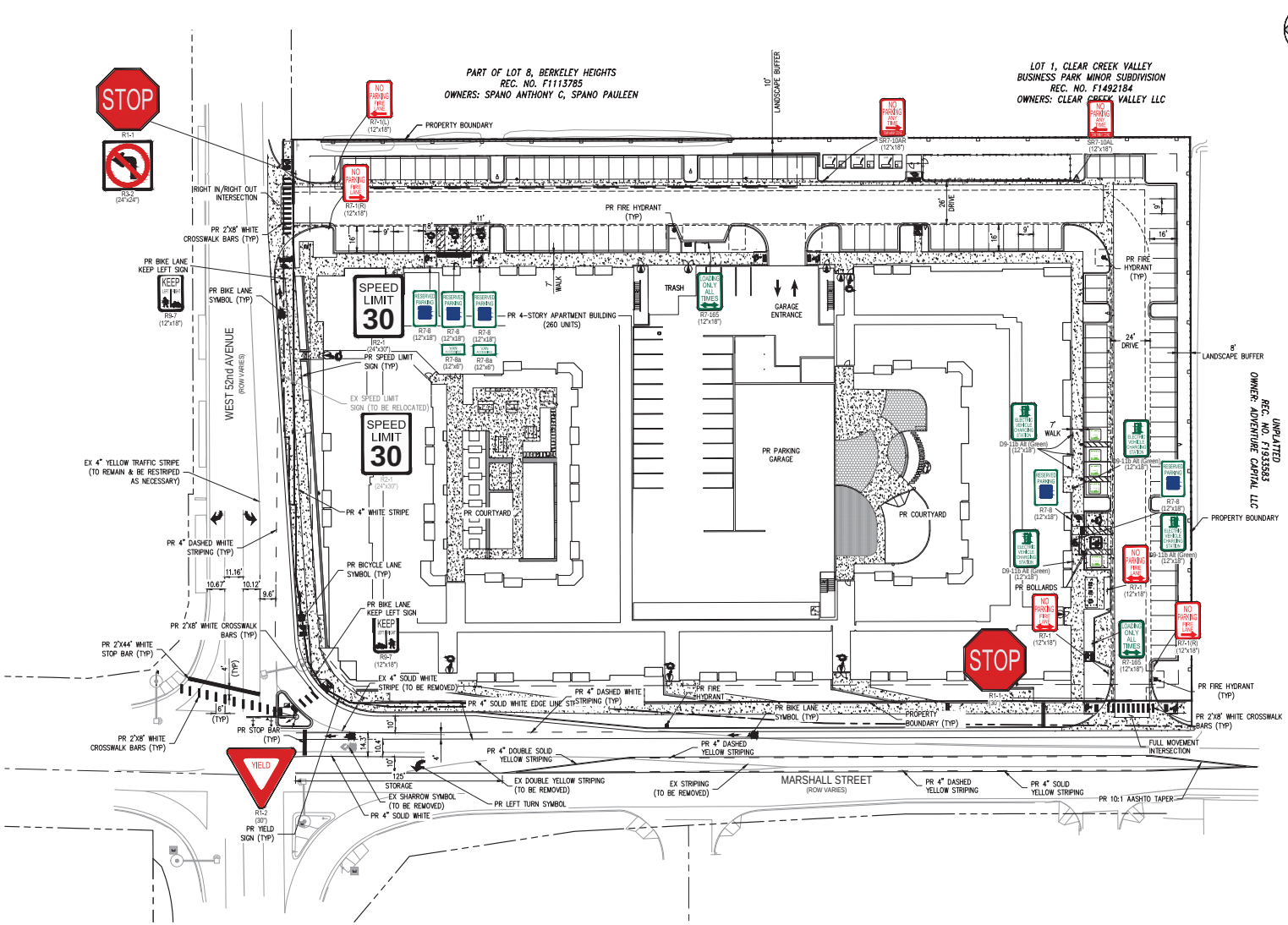

NOTES:

1. ALL SIGNAGE AND STRIPING FOR PUBLIC AND/OR PRIVATE ROADWAYS, WALKWAYS OR BICYCLE TRAILS OPEN TO PUBLIC TRAVEL SHALL CONFORM TO THE MOST RECENT VERSION OF THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE COLORADO SUPPLEMENTAL MUTCD, AND THE CITY OF ARVADA ENGINEERING CODE OF STANDARDS.
2. ALL PAVEMENT MARKINGS ARE SUBJECT TO MATERIAL CHANGES DUE TO SEASON AND/OR WEATHER. TEMPORARY MARKING MATERIALS MAY BE REQUIRED. SPECIFIED FINAL PAVEMENT MARKING MATERIALS SHALL BE INSTALLED WHEN SEASON / WEATHER ALLOW.
3. ALL SIGNING AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH SECTION 50.4.7 OF THE CITY OF ARVADA ENGINEERING CODE OF STANDARDS.
4. INTERNAL PARKING SIGNS TO BE MOUNTED ON PATIO AND BUILDING WALLS WHERE SPACE ALLOWS.
5. CONTRACTOR SHALL REPLACE ANY STRIPING THAT IS REMOVED DURING CONSTRUCTION OF UTILITIES.

SIGNS	
MUTCD CODE	QTY.
SIGN R1-1	2
SIGN R3-2	1
SIGN R7-1	8
SIGN R7-8	5
SIGN R7-8A	2
SIGN R7-16S	2
SIGN D9-11B	4
SIGN R1-2	1
SIGN R2-1	1
SIGN R9-7	2
SIGN SR7-10A	2

ABBREVIATIONS	
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BS	BOTTOM OF STEP
BW	BOTTOM OF WALL (FG)
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DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DR	DOOR
DS	DOWNSPOUT
E	EAST, EASTING
EGL	ENERGY GRADE LINE
EL	ELEVATION
EOA	EDGE OF ASPHALT
EOC	EDGE OF CONCRETE
EOP	EDGE OF PAVEMENT
ESMT	EASEMENT
EX	EXISTING
FES	FLARED END SECTION
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FH	FIRE HYDRANT
FL	FLOW LINE
GB	GRADE BREAK
GV	GATE VALVE
HC	HANDICAP
HGL	HYDRAULIC GRADE LINE
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HP	HIGH POINT
INV	INVERT
LP	LOW POINT
LSD	LANDSCAPE DRAIN
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
N	NORTH, NORTHING
PHS	PHASE
PR	PROPOSED
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT-OF-WAY
SAN	SANITARY
SS	SANITARY SEWER
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DRAWN BY: JTKR

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LINCOLN AVENUE CAPITAL

MARSHALL POINTE
SIGNAGE AND STRIPING PLAN

COLORADO LICENSED — JAMIE D. OSBORN — 43327 — 05/08/2024 — PROFESSIONAL ENGINEER

PROJECT #: 220319

SHEET NUMBER
RD1

15 OF 44

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION FROM HARRIS KOCHER SMITH

F:\ERA\Th-P (2022\2019\ENGINEERING\ROADWAY\CD - SIGNAGE AND STRIPING PLAN.DWG LAYOUT: LAYOUT 1
8 XREFs: o:\y signature\Nick, e-base, c-topo, c-util, p-base, p-legal, r-util, p-base, p-legal, p-util, stamp - cd
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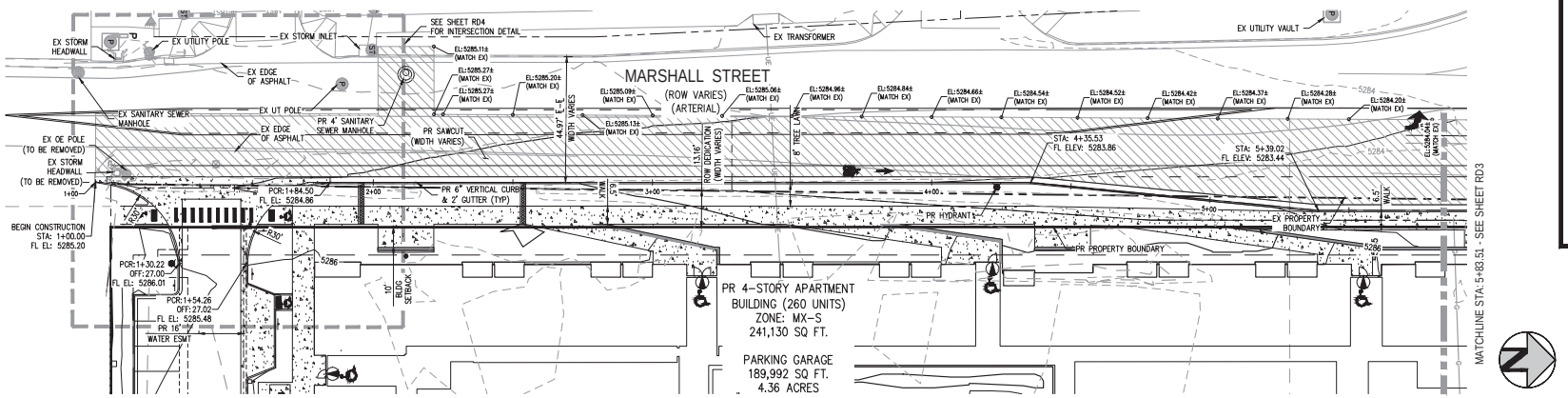
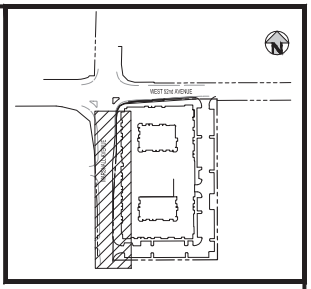
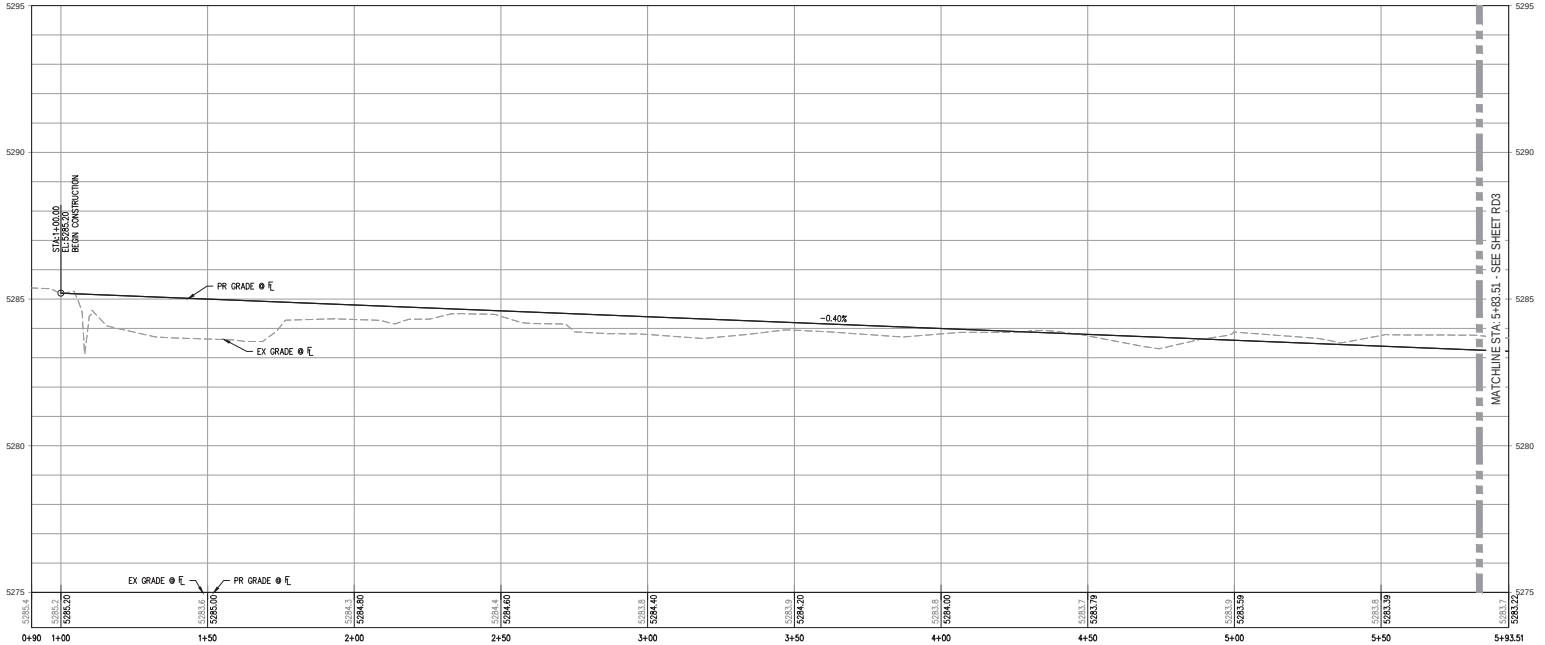


FLOWLINE PLAN

SCALE: 1"=20'





FLOWLINE ALIGNMENT PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 2'

ABBREVIATIONS	
BOP	BOTTOM OF PIPE
BS	BOTTOM OF STEP
BW	BOTTOM OF WALL (FG)
CONC	CONCRETE
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DR	DOOR
DS	DOWNSPOUT
E	EAST, EASTING
EGL	ENERGY GRADE LINE
EL	ELEVATION
EOA	EDGE OF ASPHALT
EOC	EDGE OF CONCRETE
EOP	EDGE OF PAVEMENT
ESMT	EASEMENT
EX	EXISTING
FES	FLARED END SECTION
FF	FINISHED FLOOR
FG	FINISHED GRADE
FH	FIRE HYDRANT
℄	FLOW LINE
GB	GRADE BREAK
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PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT-OF-WAY
SAN	SANITARY
SS	SANITARY SEWER
STA	STATION
STM	STORM
TB	THRUST BLOCK
TBC	TOP/BACK OF CURB
TOP	TOP OF PIPE
TS	TOP OF STEP
TW	TOP OF WALL (FG)
TYP	TYPICAL
UG	UNDERGROUND
VERT	VERTICAL
WAT	WATER

APPROVED:

City Engineer — Date: 6/10/24 — Job Number: DA2023-0019

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Know what's below. Call before you dig.

SCALE: 1" = 20'

DESIGNED BY: LME
CHECKED BY: JDO
DRAWN BY: JTKR

ISSUE DATE: 02-17-2023

DATE	REVISION COMMENTS
04-28-2023	PER CITY COMMENTS
07-13-2023	PER CITY COMMENTS
09-01-2023	PER CITY COMMENTS
10-13-2023	ISSUED FOR CONSTRUCTION
03-25-2024	MINOR CITY COMMENTS
04-24-2024	ISSUED FOR CONSTRUCTION

HARRIS KOCHER SMITH
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

LINCOLN AVENUE CAPITAL

MARSHALL POINTE
ROADWAY PLAN & PROFILE

LOUISE M. ROBERTS — 43327 — 05/08/2024 — PROFESSIONAL ENGINEER

PROJECT #: 220319

SHEET NUMBER
RD2

16 OF 44

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FILEPATH: P:\2022\220319\ENGINEERING\ROADWAY\CD - ROADWAY PLAP .DWG LAYOUT: LAYOUT1
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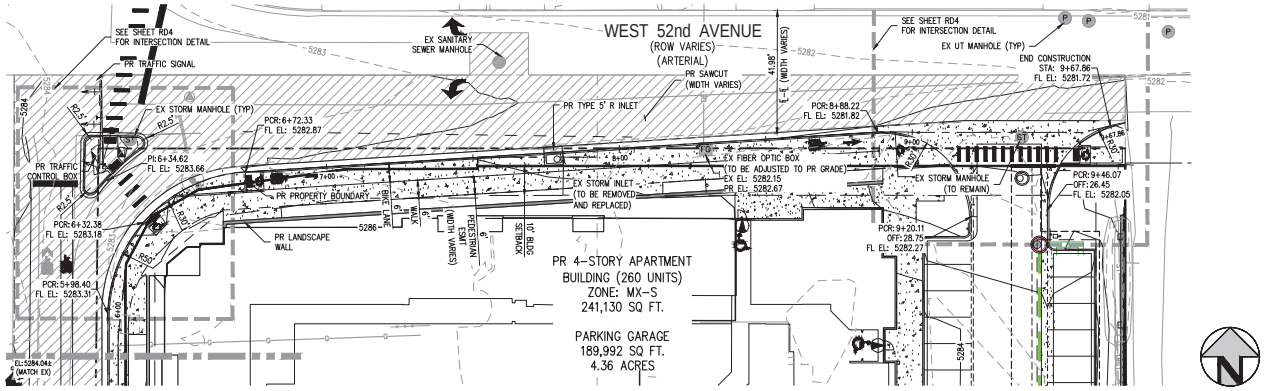
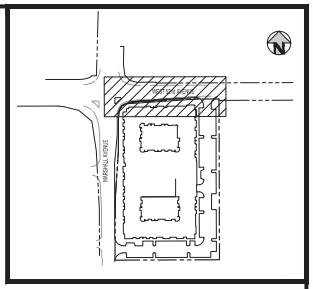


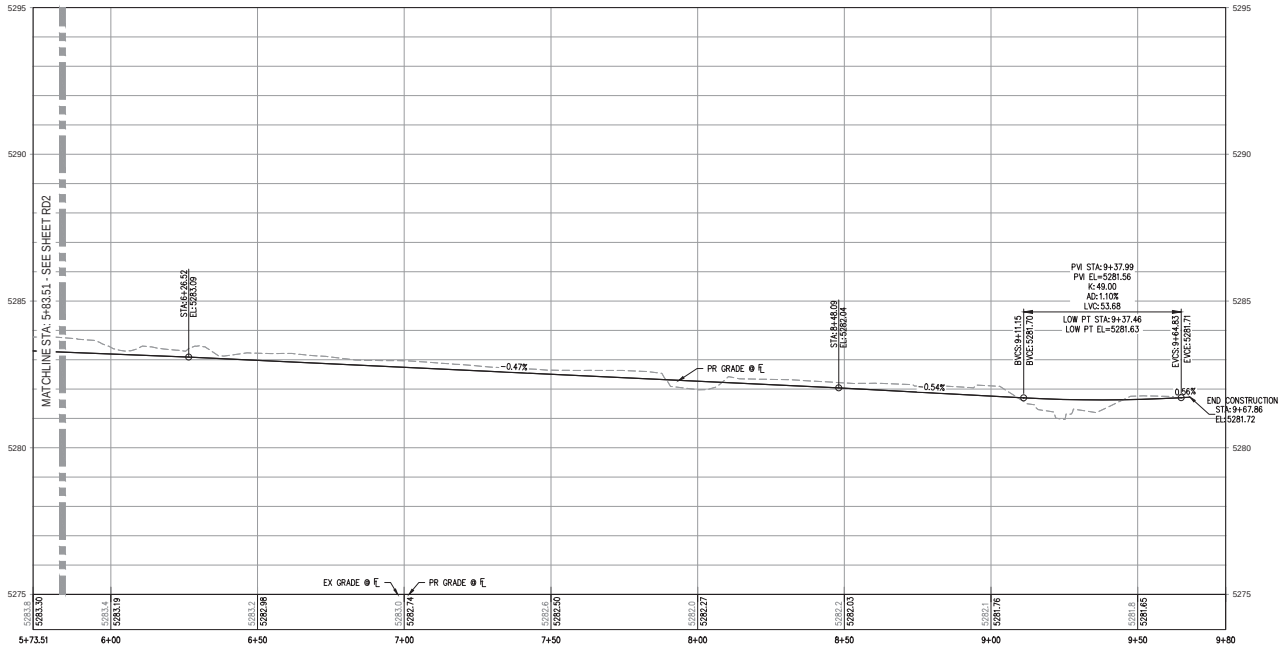
FLOWLINE PLAN

SCALE: 1"=20'



KEY MAP

SCALE: 1"=200'



FLOWLINE ALIGNMENT PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 2'

ABBREVIATIONS	
BOP	BOTTOM OF PIPE
BS	BOTTOM OF STEP
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TW	TOP OF WALL (FG)
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VERT	VERTICAL
WAT	WATER

APPROVED:

City Engineer — Date: 6/10/24 — Job Number: DA2023-0019

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SCALE: 1" = 20'

DESIGNED BY: LME
CHECKED BY: JDO
DRAWN BY: JTKR

ISSUE DATE: 02-17-2023	
DATE	REVISION COMMENTS
04-28-2023	PER CITY COMMENTS
07-13-2023	PER CITY COMMENTS
09-01-2023	PER CITY COMMENTS
10-13-2023	ISSUED FOR CONSTRUCTION
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04-24-2024	ISSUED FOR CONSTRUCTION

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LINCOLN AVENUE CAPITAL

MARSHALL POINTE
ROADWAY PLAN & PROFILE

COLORADO LICENSED JOHN D. ODOM 43327 05/08/2024 PROFESSIONAL ENGINEER

PROJECT #: 220319

SHEET NUMBER
RD3

17 OF 44

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FILEPATH: P:\2022\220319\ENGINEERING\ROADWAY\CD - ROADWAY PLAP .DWG LAYOUT: LAYOUT1 (2)
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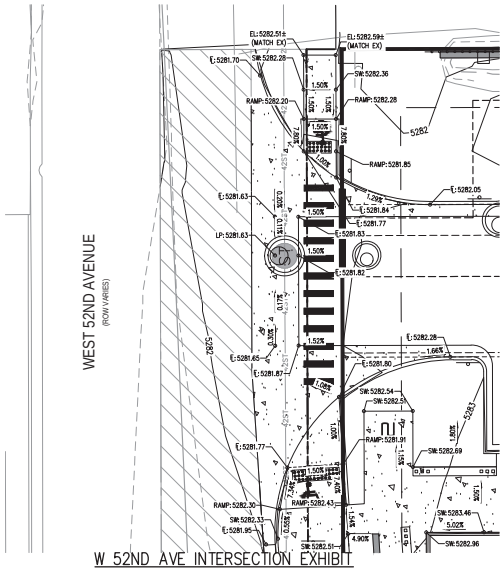
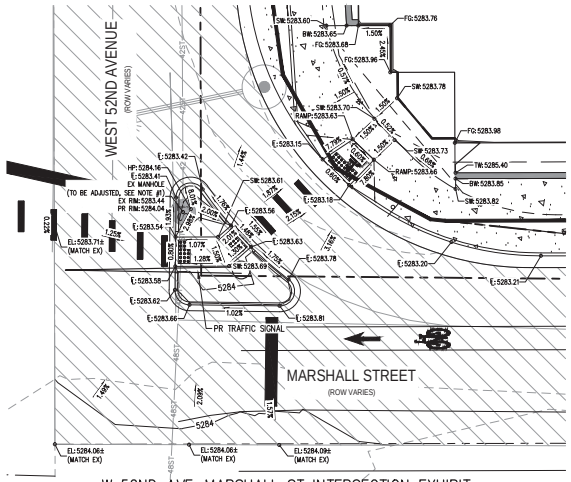


W 52ND AVE INTERSECTION EXHIBIT
SCALE: 1" = 10'



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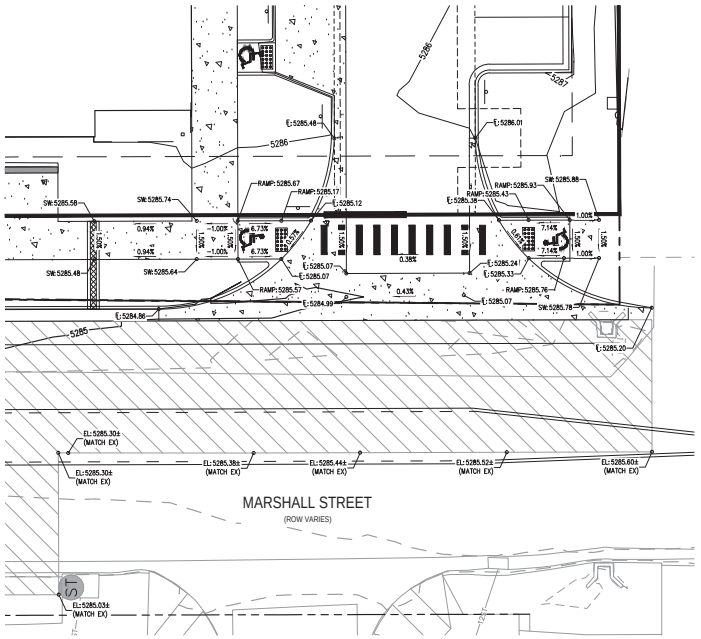
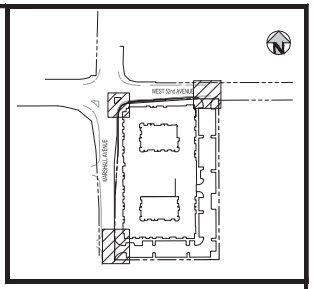
SCALE: 1" = 10'



MARSHALL ST INTERSECTION EXHIBIT
SCALE: 1" = 10'



KEY MAP
SCALE: 1"=200'

ABBREVIATIONS	
BOP	BOTTOM OF PIPE
BS	BOTTOM OF STEP
BW	BOTTOM OF WALL (FG)
CONC	CONCRETE
DIA	DIAMETER
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NOTE:
1. CONTRACTOR SHALL ADJUST EX STORM MANHOLE AS NECESSARY TO AVOID PROPOSED CURB & GUTTER. CONTRACTOR SHALL INSTALL AN ECCENTRIC CONE AND ROTATE MANHOLE I.D TO THE SOUTH. CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD AND CITY OF ANY CONFLICTS PRIOR TO CONSTRUCTION.

APPROVED:

City Engineer — Date: 6/10/24 — Job Number: DA2023-0019

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DESIGNED BY: EE
CHECKED BY: JDO
DRAWN BY: JTKR

ISSUE DATE: 02-17-2023	
DATE	REVISION COMMENTS
04-26-2023	PER CITY COMMENTS
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Denver, Colorado 80203
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HarrisKocherSmith.com

LINCOLN AVENUE CAPITAL

MARSHALL POINTE
INTERSECTION DETAILS

COLORADO REGISTERED 43327 05/08/2024 PROFESSIONAL ENGINEER

PROJECT #: 220319
SHEET NUMBER
RD4
18 OF 44

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F:\LEAP\Projects\2022\220319\ENGINEERING\ROADWAY\CD - INTERSECTION DETAILS.DWG LAYOUT: LAYOUT1
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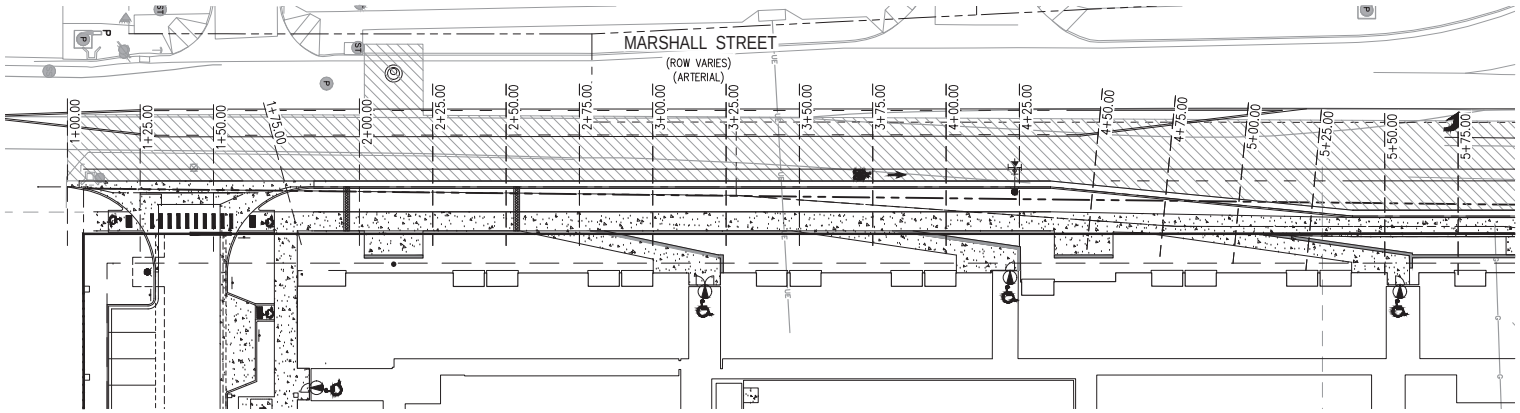
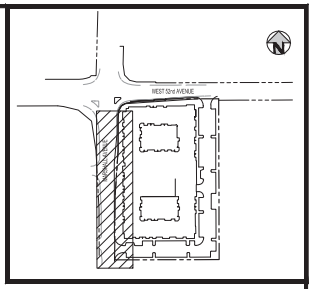


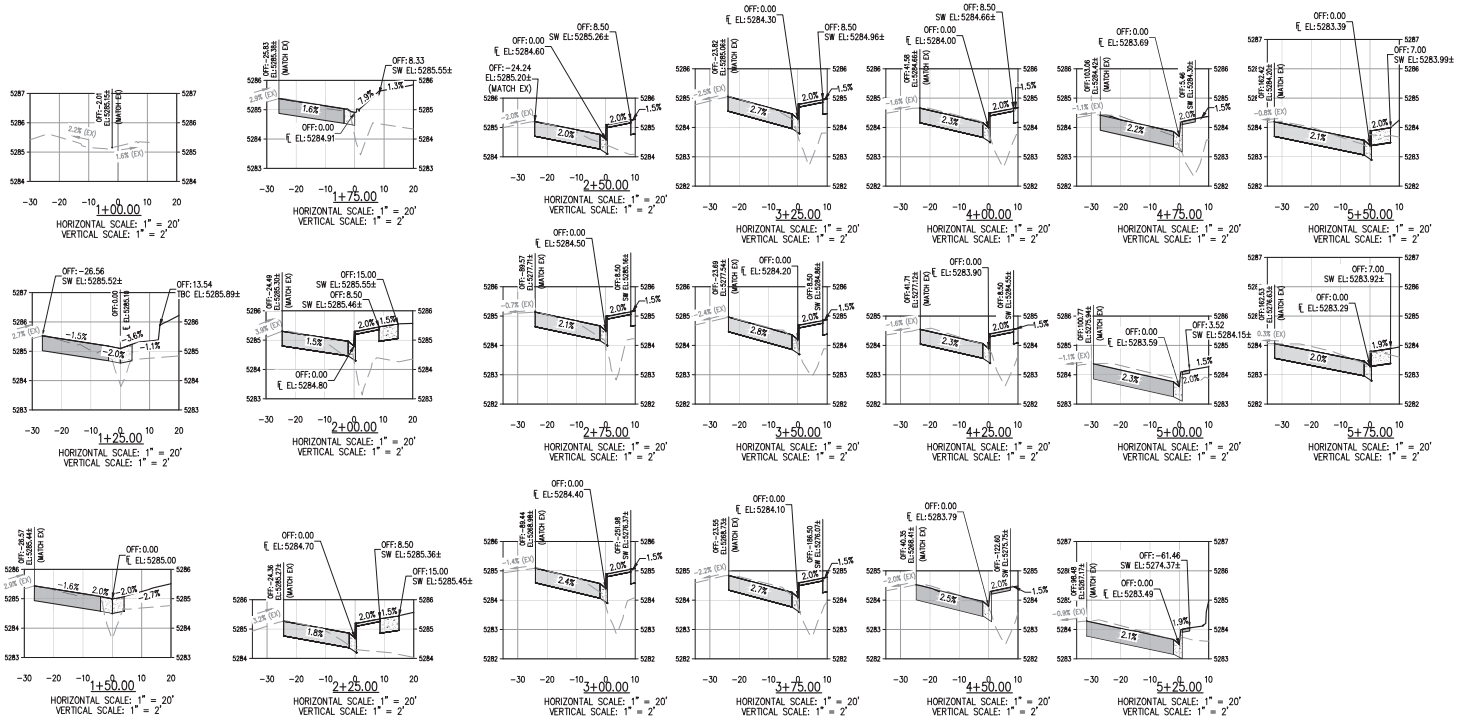
MARSHALL STREET - PLAN

SCALE: 1"=20'



KEY MAP

SCALE: 1"=200'



ABBREVIATIONS

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TYP	TYPICAL
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VERT	VERTICAL
WAT	WATER

APPROVED:

City Engineer — Date: 6/10/24 — Job Number: DA2023-0019

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Know what's below. Call before you dig. 811

SCALE: 1" = 20'

DESIGNED BY: ML
CHECKED BY: JDO
DRAWN BY: ML

ISSUE DATE: 02-17-2023	
DATE	REVISION COMMENTS
04-28-2023	PER CITY COMMENTS
07-13-2023	PER CITY COMMENTS
09-01-2023	PER CITY COMMENTS
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Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

LINCOLN AVENUE CAPITAL

MARSHALL POINTE
SECTION DETAILS

JOSHUA D. ODOM — 43327 — 05/08/2024 — PROFESSIONAL ENGINEER

PROJECT #: 220319

SHEET NUMBER
RD5

19 OF 44

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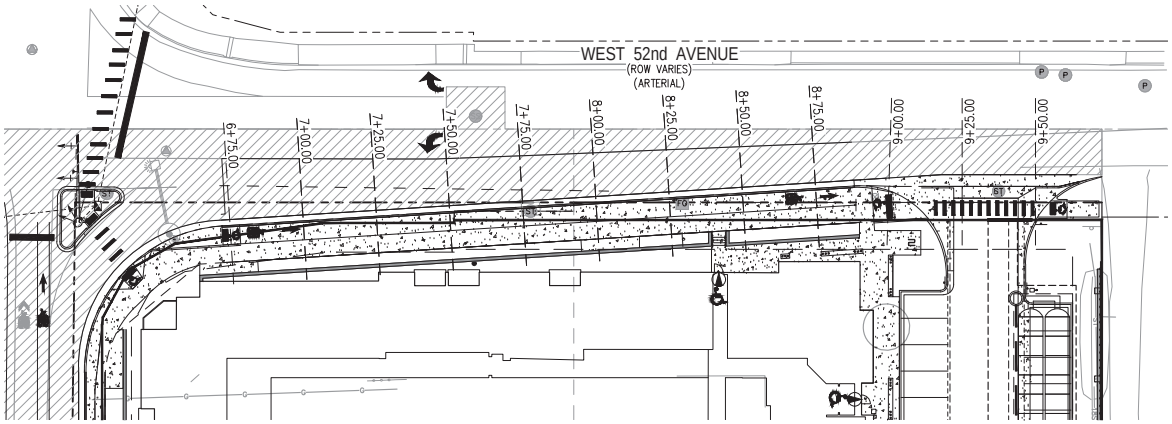
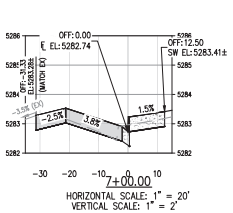
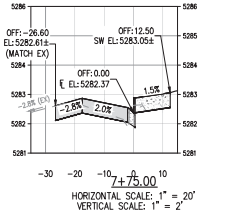
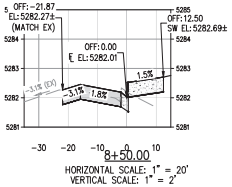


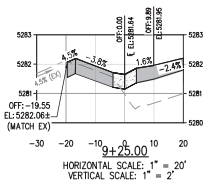
WEST 52ND AVENUE - PLAN

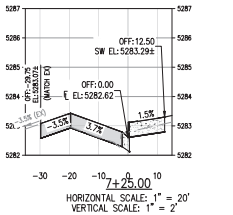
SCALE: 1"=20'

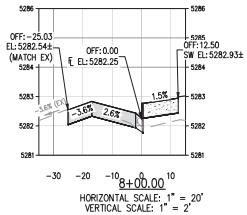


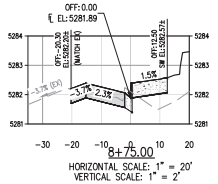


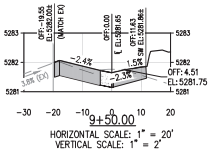


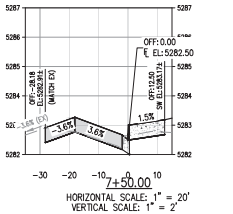


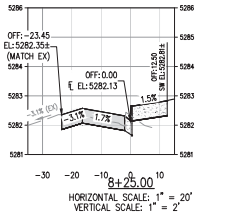


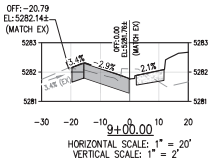


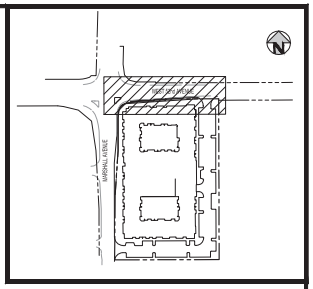












KEY MAP

SCALE: 1"=200'

ABBREVIATIONS

BOP	BOTTOM OF PIPE
BS	BOTTOM OF STEP
BW	BOTTOM OF WALL (FG)
CONC	CONCRETE
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DR	DOOR
DS	DOWNSPOUT
E	EAST, EASTING
EGL	ENERGY GRADE LINE
EL	ELEVATION
EOA	EDGE OF ASPHALT
EOC	EDGE OF CONCRETE
EOP	EDGE OF PAVEMENT
ESMT	EASEMENT
EX	EXISTING
FES	FLARED END SECTION
FF	FINISHED FLOOR
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
GB	GRADE BREAK
GV	GATE VALVE
HC	HANDICAP
HGL	HYDRAULIC GRADE LINE
HORZ	HORIZONTAL
HP	HIGH POINT
INV	INVERT
LP	LOW POINT
LSD	LANDSCAPE DRAIN
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
N	NORTH, NORTHING
PHS	PHASE
PR	PROPOSED
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT-OF-WAY
SAN	SANITARY
SS	SANITARY SEWER
STA	STATION
STM	STORM
TB	THRUST BLOCK
TBC	TOP/BACK OF CURB
TOP	TOP OF PIPE
TS	TOP OF STEP
TW	TOP OF WALL (FG)
TYP	TYPICAL
UG	UNDERGROUND
VERT	VERTICAL
WAT	WATER

APPROVED:

City Engineer — Date: 6/10/24 — Job Number: DA2023-0019

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SCALE: 1" = 20'

DESIGNED BY: ML
CHECKED BY: JDO
DRAWN BY: ML

ISSUE DATE: 02-17-2023	
DATE	REVISION COMMENTS
04-26-2023	PER CITY COMMENTS
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Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

LINCOLN AVENUE CAPITAL

MARSHALL POINTE
SECTION DETAILS

COLORADO REGISTERED JOSEPH D. OSTER 43327 05/08/2024 PROFESSIONAL ENGINEER

PROJECT #: 220319

SHEET NUMBER

RD6

20 OF 44

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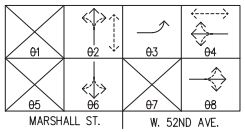
TRAFFIC SIGNAL LEGEND

- SIGNAL POLE AND MAST ARM
- LUMINAIRE
- SIGNAL HEAD WITH BACKPLATE
- SIDE-OF-POLE-MOUNTED SIGNAL HEAD
- PEDESTRIAN SIGNAL HEAD
- PEDESTRIAN PUSHBUTTON AND SIGN
- SIGNAL CONTROLLER CABINET
- PULL BOX
- SERVICE METER CABINET
- UNINTERRUPTED POWER SUPPLY
- OPTICOM DETECTOR (2 WAY)
- VIDEO DETECTOR
- SIGNAL WIRE CONDUIT
- MAST ARM MOUNTED SIGN

SIGNAL PHASING DIAGRAM



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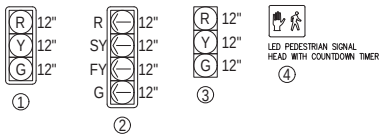
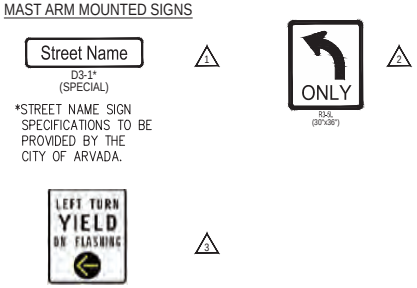
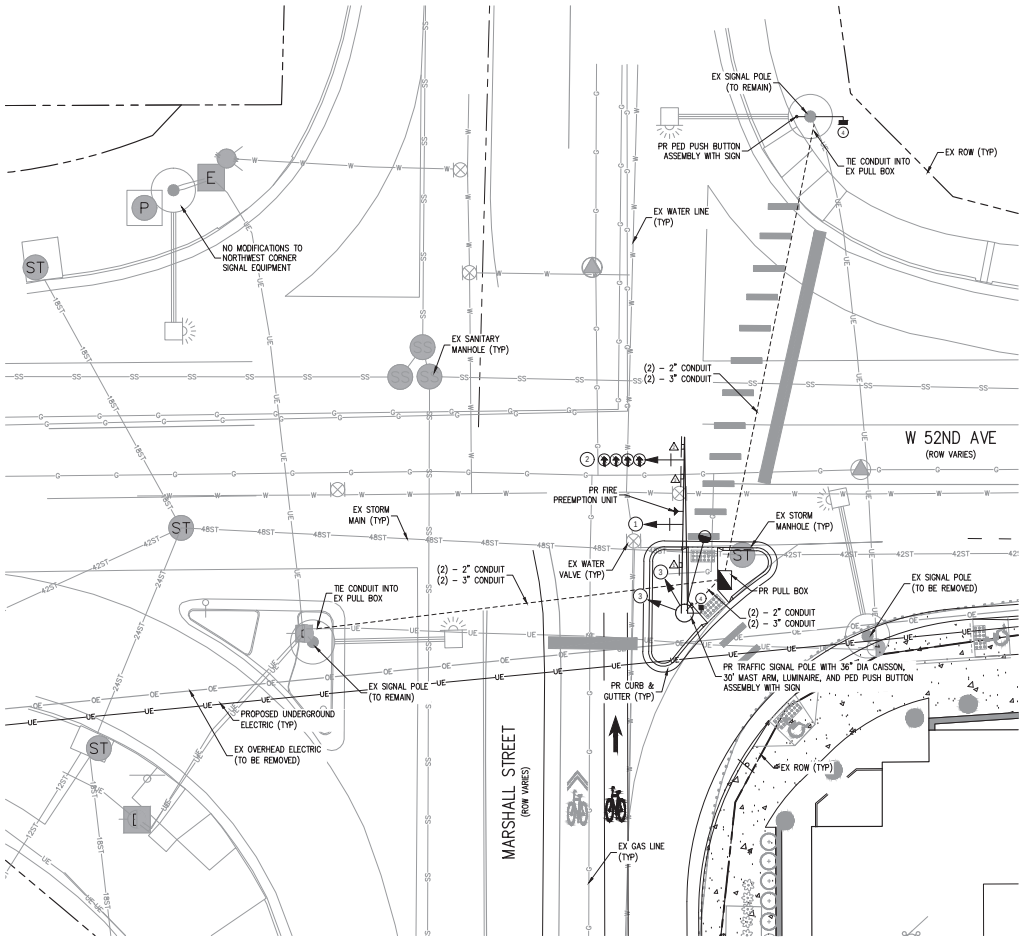
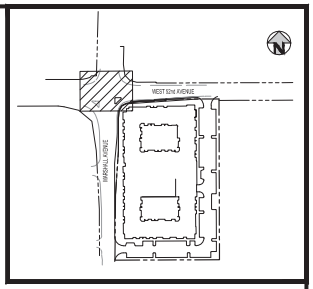


MAST ARM MOUNTED SIGNS







KEY MAP
SCALE: 1"=200'

NOTES:

1. TRAFFIC SIGNAL MATERIALS AND INSTALLATION SHALL COMPLY WITH THE CITY OF ARVADA ENGINEERING STANDARDS AND SPECIFICATIONS, 2022 EDITION.

SUMMARY OF QUANTITIES

CDOT ITEM NO.	DESCRIPTION	UNIT	PLAN
202-00831	REMOVAL OF TRAFFIC SIGNAL HEAD	EACH	4
202-00840	REMOVAL OF TRAFFIC SIGNAL POLE	LF	1
202-00842	REMOVAL OF MAST ARM	LF	1
503-00036	DRILLED SHAFT (36 INCH)	LF	15
613-00206	2 INCH ELECTRICAL CONDUIT (BORED)	LF	315
613-00306	3 INCH ELECTRICAL CONDUIT (BORED)	LF	315
613-07034	PULL BOX (24"X36"X18")	EACH	1
613-13014	LUMINAIRE (LED) (14,000 LUMENS)	EACH	1
614-10160	SIGNAL HEAD BACKPLATES	EACH	2
614-70150	PEDESTRIAN SIGNAL FACE COUNTDOWN	EACH	2
614-70336	TRAFFIC SIGNAL FACE (12-12-12)	EACH	3
614-70448	TRAFFIC SIGNAL FACE (12-12-12-12)	EACH	1
614-72860	PEDESTRIAN PUSH BUTTON	EACH	2
614-72864	FIRE PREEMPTION UNIT	EACH	1
614-81130	TRAFFIC SIGNAL-LIGHT POLE STEEL (1 - 30' MAST ARM)	EACH	1
630-00016	TRAFFIC CONTROL	LS	1

ABBREVIATIONS

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APPROVED:

City Engineer — Date: 6/10/24 — Job Number: DA2023-0019

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CHECKED BY: JDO
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LINCOLN AVENUE CAPITAL

MARSHALL POINTE
TRAFFIC SIGNAL PLAN

COLORADO REGISTERED PROFESSIONAL ENGINEER — BRETT EUGENE SCHLIEP — 47156 — 05/08/2024

PROJECT #: 220319

SHEET NUMBER
RD7

21 OF 44

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FILEPATH: P:\2022\220319\ENGINEERING\ROADWAY\CD - TRAFFIC SIGNAL PLAN.DWG | LAYOUT: LAYOUT1
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PLOTTED: TUE Jul 30 14:31:43 2024 BY: BRETT SCHLIEP

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GENERAL NOTES

1. TRAFFIC SIGNAL MATERIALS AND INSTALLATION SHALL COMPLY WITH THE CITY OF ARVADA ENGINEERING STANDARDS AND SPECIFICATIONS, 2022 EDITION. ITEMS NOT REFERENCED IN THESE DOCUMENTS SHALL CONFORM TO THE LATEST EDITIONS OF THE STATE OF COLORADO "STANDARDS AND SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", THE STATE OF COLORADO "STANDARD PLANS", THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", THE "NATIONAL ELECTRIC CODE", AND ALL LOCAL ORDINANCES AND REGULATIONS THAT APPLY, EXCEPT AS NOTED BELOW. STATE SPECIFICATIONS, STANDARDS, SPECIAL PROVISIONS.
2. CONDUIT, POLE, PULL BOX AND CONTROLLER CABINET LOCATIONS ARE APPROXIMATE. EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR AND SHALL BE VERIFIED BY THE CITY OF ARVADA IN THE FIELD. TRAFFIC SIGNAL POLES AND MAST ARMS SHALL NOT BE ORDERED UNTIL THE EXACT LOCATION OF THE POLE BASES IS FIELD VERIFIED. THE CONTRACTOR SHALL CONTACT THE CITY (720-898-7740) A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO STARTING TRAFFIC SIGNAL CONSTRUCTION.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING OVERHEAD AND UNDERGROUND UTILITIES AND THE PROTECTING OF THESE UTILITIES. LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND NOT ALL UTILITIES ARE NECESSARILY SHOWN. THE CONTRACTOR SHALL CONTACT ALL THE APPROPRIATE ENTITIES TO LOCATE UNDERGROUND FACILITIES AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE EXACT LOCATION OF EACH UTILITY SHALL BE FIELD VERIFIED BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY OCCUR AS A RESULT OF THE CONTRACTOR'S FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
4. THE CONTRACTOR SHALL FURNISH AND INSTALL A METERED ELECTRICAL SERVICE PEDESTAL AT THE LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE CITY. POWER SOURCE A" EACH INTERSECTION SHALL BE DETERMINED BY THE CITY AFTER MEETING WITH XCEL ENERGY. THE POWER SOURCE SHALL BE IDENTIFIED ON THE CONSTRUCTION PLANS. POWER INSTALLATION, INCLUDING THE SERVICE PEDESTAL METER, SHALL MEET XCEL ENERGY REQUIREMENTS. PULL SEPARATE WIRE FOR STREET LIGHTS AND TAG "FOR XCEL ENERGY STREET LIGHT" AT BOTTOM OF MAST ARM POLE. CONTRACTOR SHALL EXTEND ELECTRICAL POWER FROM THE POWER SOURCE TO THE NEW CONTROLLER CABINET.
5. PAYMENT SHALL BE MADE ONLY FOR ITEMS IN THE PAY ITEM LIST. ALL OTHER ITEMS TO PROVIDE A FULLY FUNCTIONAL TRAFFIC SIGNAL INSTALLATION SHALL BE CONSIDERED INCIDENTAL TO THE WORK.
6. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS FROM THE APPROPRIATE AGENCIES. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN FOR CONSTRUCTION TO THE CITY WITH THE PERMIT APPLICATION 48 HOURS IN ADVANCE OF CONSTRUCTION. A RIGHT OF WAY WORK PERMIT WILL NOT BE ISSUED WITHOUT AN APPROVED TRAFFIC CONTROL PLAN.
7. WORKING HOURS SHALL BE IN COMPLIANCE WITH THE CITY OF ARVADA ENGINEERING STANDARDS AND SPECIFICATIONS, 2022 EDITION.
8. THE CONTRACTOR SHALL PROVIDE THE CITY WITH EQUIPMENT SPECIFICATIONS/DESCRIPTIONS AND OBTAIN APPROVALS BEFORE ORDERING THE EQUIPMENT.
9. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL SUBMIT RECORD DRAWINGS, CORRECTED PLANS AND ANY ADDITIONAL DATA REQUIRED BY THE CITY SHOWING IN DETAIL ALL CONSTRUCTION CHANGES.
10. THE SIGNAL POLES SHALL BE FABRICATED BY VALMONT INDUSTRIES TO ARVADA STANDARDS UNLESS OTHERWISE APPROVED. THE POLES SHALL BE FACTORY PAINTED ARVADA BRONZE. SIGNAL POLE FOUNDATIONS SHALL BE INSTALLED ACCORDING TO THE CITY OF ARVADA STANDARDS AND SPECIFICATIONS, 2022 EDITION.
11. THE CONTROLLER SHALL BE AN ECONOLITE COBALT ADVANCED TRANSPORTATION CONTROLLER THAT CAN COMMUNICATE WITH THE CITY'S ECONOLITE CENTRACS SYSTEM. THE CONTROLLER CABINET SHALL BE A TS2 TYPE 1 P CABINET AND SHALL BE NATURAL ALUMINUM. THE CONTROLLER CABINET SHALL BE INSTALLED SUCH THAT WITH THE FRONT DOOR OPEN, A TECHNICIAN VIEWS BOTH THE CONTROLLER AND THE INTERSECTION. THE CONTROLLER CABINET SHALL BE MOUNTED ON A FIBERGLASS REINFORCED POLYMER CONCRETE BASE. EMERGENCY SIGNAL CONTROLLER CABINET SHALL BE A POLE-MOUNTED TS2 G CABINET. TRAFFIC SIGNAL CONTROLLERS SHALL BE DELIVERED TO THE CITY FOR INSPECTION AND PROGRAMMING AT LEAST 15 DAYS PRIOR TO INSTALLATION.
12. ALL SIGNAL HEADS SHALL BE BLACK POLYCARBONATE. ALL OVERHEAD SIGNAL INDICATIONS SHALL HAVE BACKPLATES. BACKPLATES SHALL BE LOUVERED WITH 2-INCH YELLOW RETROREFLECTIVE BORDER TAPE THAT OUTLINES THE OUTSIDE EDGE OF EACH BACKPLATE. PLACEMENT OF SIGNAL AND PEDESTRIAN HEADS SHALL BE APPROVED BY CITY TRAFFIC PERSONNEL.
13. MAST ARM SIGNAL HEADS SHALL BE MOUNTED APPROXIMATELY LEVEL WITH ONE ANOTHER, WITH A 17 TO 19 FOOT CLEARANCE ABOVE GRADE AT THE HIGHEST PAVEMENT ELEVATION. MAST ARM MOUNTED SIGNAL HEADS SHALL HAVE A MINIMUM 8-FOOT SEPARATION.
14. ALL VEHICLE AND PEDESTRIAN INDICATIONS SHALL BE APPROVED LED, NON-GLARE TYPE. ALL VEHICLE INDICATIONS SHALL BE 12". ALL PEDESTRIAN INDICATIONS SHALL BE 16".
15. PEDESTRIAN SIGNALS SHALL BE COUNTDOWN TYPE AS PER CITY SPECIFICATIONS. PEDESTRIAN PUSH BUTTONS SHALL BE POLARA INS2 INAVIGATOR PUSH BUTTON STATION. PEDESTRIAN PUSH BUTTONS SHALL BE ADA COMPLIANT ACCESSIBLE DETECTORS AND INTEGRAL WITH A PUSH BUTTON/PUSH BUTTON SIGN STATION.

NO	DATE	REVISION

CITY OF ARVADA
8101 Ralston Road
Arvada, Colorado 80002

GENERAL TRAFFIC SIGNAL EQUIPMENT INSTALLATION NOTES

2022 ENGINEERING STANDARDS & SPECIFICATIONS

Sht 1 of 2

700-TS-1

GENERAL NOTES (continued)

16. ALL SIGNAL HEADS SHALL BE WIRED SEPARATELY FROM SIGNAL HEAD TO HANDHOLE ABOVE GRADE AT THE BASE OF THE SIGNAL POLE WITH NO OVERHEAD SPLICES. A SEPARATE 19-CONDUCTOR CABLE SHALL RUN FROM THE CONTROLLER CABINET TO THE HANDHOLE AT EACH POLE WITH NO SPLICES.
17. TRAFFIC SIGNAL INDICATIONS MOUNTED ON MAST ARMS SHALL BE FURNISHED WITH ASTRO-TYPE MOUNTING BRACKETS.
18. UNINTERRUPTED POWER SUPPLY (UPS) SHALL BE PROVIDED TO RUN EACH TRAFFIC SIGNAL FOR A MINIMUM OF 2 HOURS IN ALL PHASES AND FLASH UP TO AN ADDITIONAL 3 HOURS.
19. ALL CONDUIT SHALL BE DIRECTIONALLY BORED UNDER EXISTING STREETS UNLESS ANOTHER METHOD IS APPROVED BY THE CITY OF ARVADA. ALL CONDUIT SHALL BE SCHEDULE 80 PVC. ALL CONDUIT SHALL INCLUDE A #12 LOCATE WIRE AND A MULE TAPE PULL LINE. ALL PULL BOXES SHALL BE FIBERGLASS REINFORCED POLYMER CONCRETE, INSTALLED FLUSH WITH THE GROUND.
20. LUMINARIES SHALL BE LED WITH LIGHT OUTPUT EQUIVALENT TO A 250 WATT HPS AT A 30 FT. MOUNTING HEIGHT UNLESS OTHERWISE APPROVED. LUMINAIRE ORIENTATION SHALL BE INSTALLED AS INDICATED ON THE PLANS. WIRING FOR LUMINAIRES SHALL BE PROVIDED FROM THE POWER SOURCE TO THE END OF THE LUMINAIRE ARM. A BREAKAWAY INCLINE FUSE SHALL BE PROVIDED AT THE HAND HOLE ACCESS AT THE BASE OF THE POLE.
21. THE CONTRACTOR SHALL USE AN APPROPRIATE PREFABRICATED, MOBILE, AND APPROVED MEANS FOR CAPTURING AND REMOVAL OF ANY AND ALL CONCRETE WASHOUT.
22. THE CONTRACTOR SHALL REPLACE ANY DAMAGED LANDSCAPING, INCLUDING TOPSOIL, GRASS, IRRIGATION SYSTEM COMPONENTS, TREES, SHRUBS, GROUND COVERS AND MULCH, TO THE ORIGINAL CONDITION. SOD SHALL MATCH EXISTING.
23. THE CONTRACTOR SHALL ENSURE THAT NO MATERIALS, EQUIPMENT, OR VEHICLES ARE STAGED OR PARKED NEAR WETLAND OR DRAINAGE AREAS. THE CONTRACTOR SHALL REMOVE IN A TIMELY MANNER ALL SEDIMENT, MUD DEBRIS OR OTHER POTENTIAL POLLUTANTS WHICH MAY BE DISCHARGED TO, OR ACCUMULATE IN, THE FLOW LINES AND PUBLIC RIGHT-OF-WAYS AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT.
24. THE SIGNAL SHALL NOT BE TURNED ON OR STARTED IN FLASH UNTIL THE CITY HAS INSPECTED AND APPROVED THE INSTALLATION, AS WELL AS THE APPROPRIATE PAVEMENT MARKINGS ARE IN PLACE, UNLESS APPROVED BY THE CITY.
25. STOP LINE DETECTION SHALL BE BY PRESENCE RADAR DETECTORS (WAVETRONIX SMART SENSOR MATRIX), UNLESS SHOWN OTHERWISE ON PLANS. ADVANCE DETECTION SHALL BE BY ADVANCE RADAR DETECTORS (WAVETRONIX SMART SENSOR ADVANCE).
26. ALL SIGNAL EQUIPMENT NOT SPECIFICALLY IDENTIFIED TO BE SALVAGED OR RELOCATED SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
27. ALL SALVAGED SIGNAL EQUIPMENT TO BE REMOVED SHALL BE PROVIDED TO THE CITY OF ARVADA INDIANA SHOPS AT 6701 INDIANA ST., ARVADA, CO. CONTACT THE TRAFFIC ENGINEERING DIVISION (720-898-7740) TO ARRANGE DELIVERY.
28. OPTICOM PREEMPTION SYSTEM SHALL BE INSTALLED FOR PREEMPTING THE DIRECTIONS AS INDICATED ON THE PLANS. THE PREEMPTION SYSTEM SHALL BE COMPATIBLE WITH THE CITY'S EXISTING SYSTEM. OPTICOM WIRE SHALL BE USED FOR THE INSTALLATION.

NO	DATE	REVISION

CITY OF ARVADA
8101 Ralston Road
Arvada, Colorado 80002

GENERAL TRAFFIC SIGNAL EQUIPMENT INSTALLATION NOTES

2022 ENGINEERING STANDARDS & SPECIFICATIONS

Sht 2 of 2

700-TS-2

APPROVED:

City Engineer — Date: 6/10/24 — Job Number: DA2023-0019

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LINCOLN AVENUE CAPITAL

MARSHALL POINTE
TRAFFIC SIGNAL PLAN GENERAL NOTES

PROJECT #: 220319

SHEET NUMBER
RD8

22 OF 44

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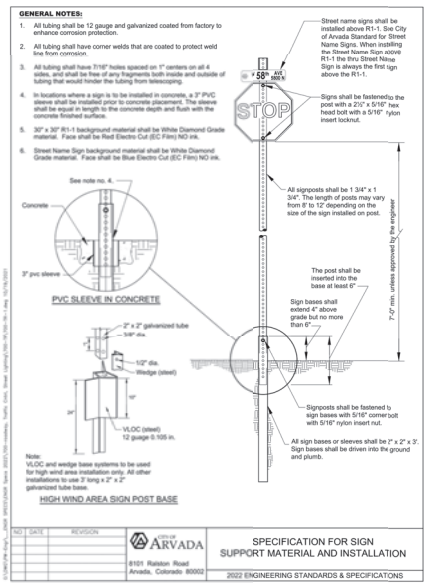

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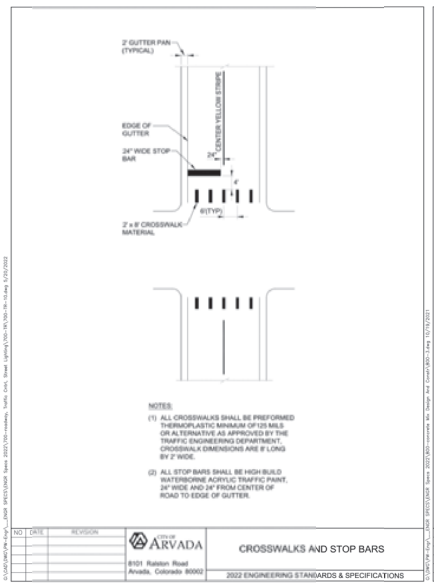

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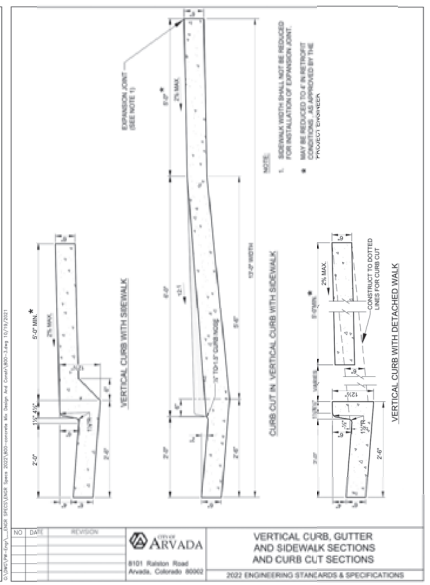

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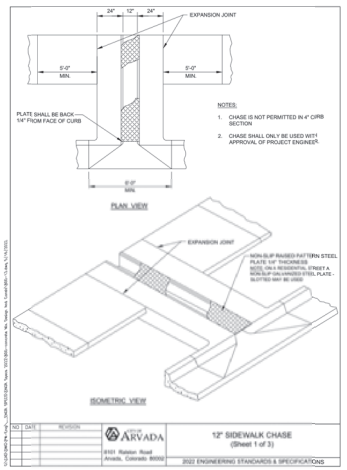

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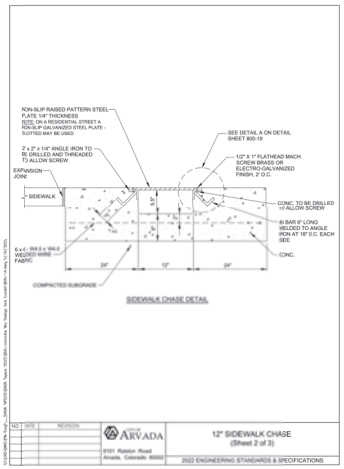

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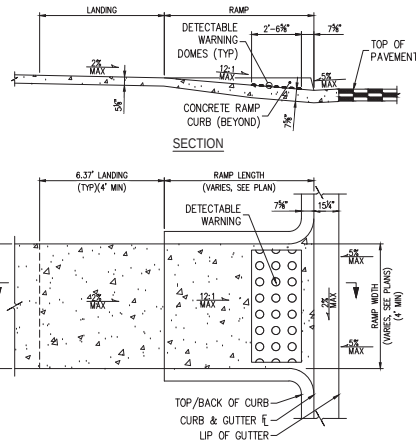
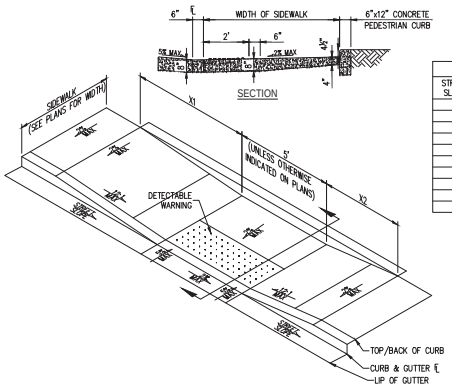


HANDICAP RAMP TYPE 1

N.T.S.

RAMP TYPE 2 NOTES:

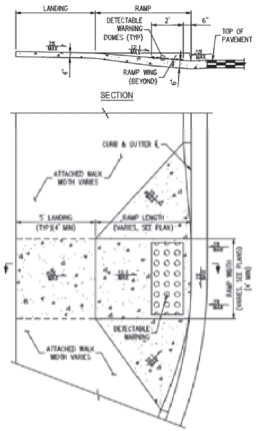
1. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT CURB RAMPS ARE INSTALLED IN CONFORMANCE WITH ALL APPLICABLE LOCAL STATE AND/OR FEDERAL REGULATIONS AND STANDARDS, INCLUDING, BUT NOT LIMITED TO, THE AMERICANS WITH DISABILITIES ACT (ADA), THE FAIR HOUSING ACT (FHA) AND THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
2. RAMPS SHALL HAVE A RUNNING SLOPE NOT STEEPER THAN 12:1.
3. RAMPS SHALL HAVE A CROSS SLOPE NOT STEEPER THAN 50:1 IN ANY DIRECTION.
4. LANDINGS SHALL HAVE POSITIVE SLOPE, TO PREVENT THE ACCUMULATION OF WATER, NOT STEEPER THAN 50:1 IN ANY DIRECTION.
5. COUNTER SLOPES OF ADJOINING GUTTERS AND ROAD SURFACES IMMEDIATELY ADJACENT TO THE CURB RAMP SHALL NOT BE STEEPER THAN 20:1.
6. CURB RAMPS SHALL HAVE A DETECTABLE WARNING, IN ACCORDANCE WITH ADA STANDARDS.



6" VERTICAL CURB		
STREET SLOPE	X1 (MIN)	X2 (MIN)
0.50%	6.70 FT	5.90 FT
1.00%	7.10 FT	5.60 FT
1.50%	7.70 FT	5.30 FT
2.00%	8.30 FT	5.00 FT
2.50%	9.10 FT	4.80 FT
3.00%	10.00 FT	4.60 FT
3.50%	11.10 FT	4.35 FT
4.00%	12.50 FT	4.20 FT
4.50%	14.30 FT	4.00 FT
5.00%	16.70 FT	3.90 FT

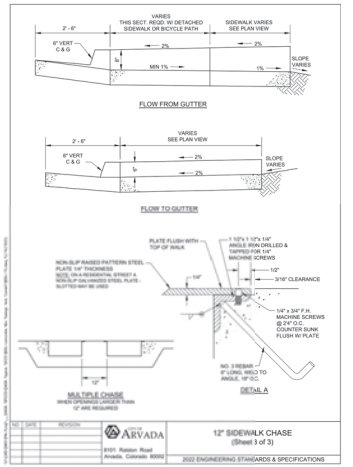
HANDICAP RAMP TYPE 2 LENGTH DETAIL

N.T.S.



HANDICAP RAMP TYPE 3

N.T.S.



800-15

APPROVED:

City Engineer — 6/10/24 Date — DA2023-0019 Job Number

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Know what's below. Call before you dig.

DESIGNED BY: AHG
CHECKED BY: JDO
DRAWN BY: AHG

ISSUE DATE: 02-17-2023

DATE	REVISION COMMENTS
04-26-2023	PER CITY COMMENTS
07-13-2023	PER CITY COMMENTS
09-01-2023	PER CITY COMMENTS
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03-25-2024	MINOR CITY COMMENTS
04-24-2024	ISSUED FOR CONSTRUCTION

HARRIS KOCHER SMITH
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

LINCOLN AVENUE CAPITAL

MARSHALL POINTE
GENERAL DETAILS

COLORADO REGISTERED 43327 05/08/2024 PROFESSIONAL ENGINEER

PROJECT #: 220319

SHEET NUMBER
RD9

23 OF 44

FILEPATH: P:\2022\220319\ENGINEERING\ROADWAY\CD- RP- DETAILS.DWG LAYOUT: LAYOUT1
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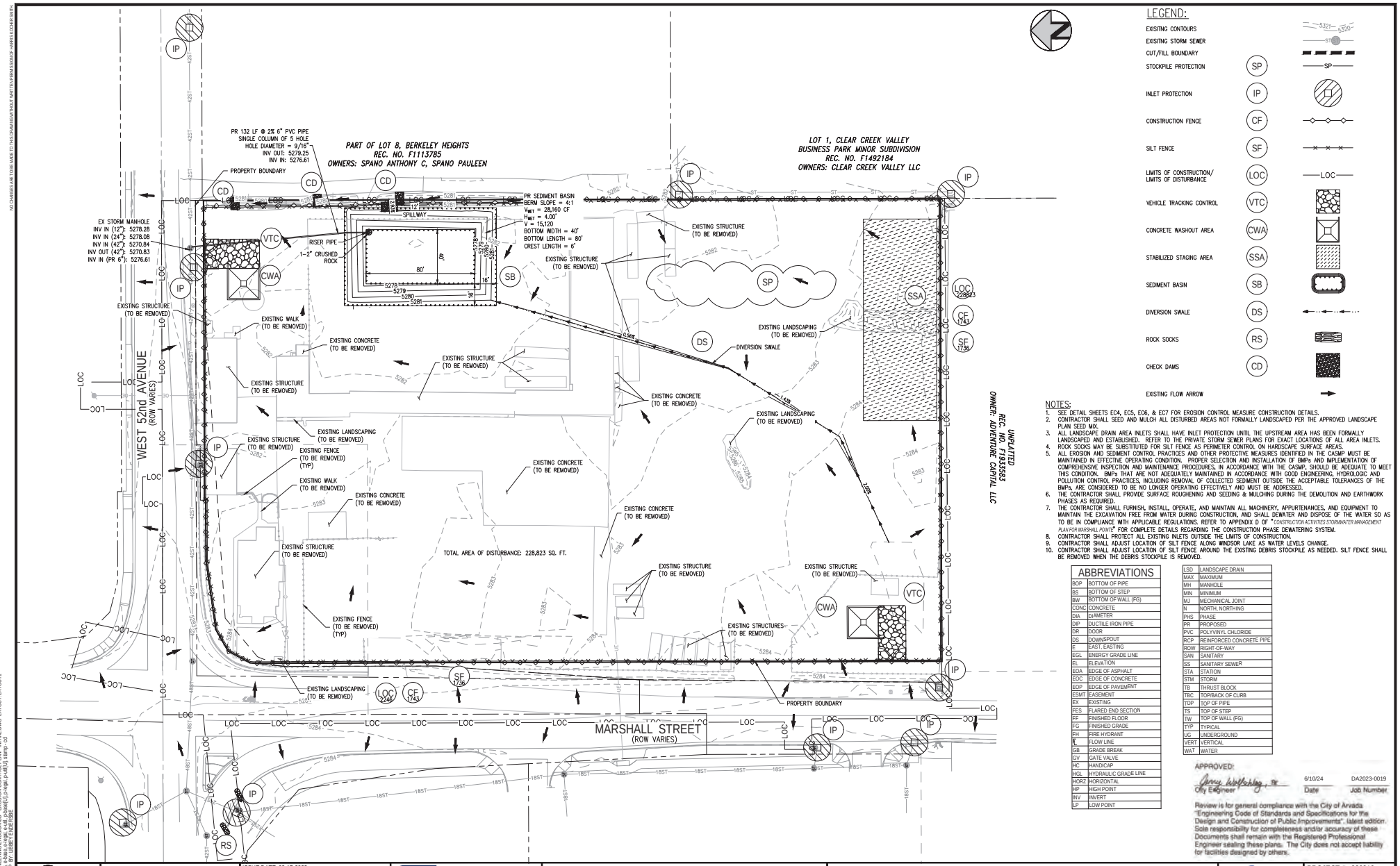

LEGEND:

EXISITNG CONTOURS		5321 5320
EXISTING STORM SEWER		ST
CUT/FILL BOUNDARY		
STOCKPILE PROTECTION	SP	SP
INLET PROTECTION	IP	
CONSTRUCTION FENCE	CF	
SILT FENCE	SF	
LIMITS OF CONSTRUCTION/ LIMITS OF DISTURBANCE	LOC	LOC
VEHICLE TRACKING CONTROL	VTC	
CONCRETE WASHOUT AREA	CWA	
STABILIZED STAGING AREA	SSA	
SEDIMENT BASIN	SB	
DIVERSION SWALE	DS	
ROCK SOCKS	RS	
CHECK DAMS	CD	
EXISTING FLOW ARROW		

NOTES:

1. SEE DETAIL SHEETS EC4, EC5, EC6, & EC7 FOR EROSION CONTROL MEASURE CONSTRUCTION DETAILS.
2. CONTRACTOR SHALL SEED AND MULCH ALL DISTURBED AREAS NOT FORMALLY LANDSCAPED PER THE APPROVED LANDSCAPE PLAN SEED MIX.
3. ALL LANDSCAPE DRAIN AREA INLETS SHALL HAVE INLET PROTECTION UNTIL THE UPSTREAM AREA HAS BEEN FORMALLY LANDSCAPED AND ESTABLISHED. REFER TO THE PRIVATE STORM SEWER PLANS FOR EXACT LOCATIONS OF ALL AREA INLETS.
4. ROCK SOCKS MAY BE SUBSTITUTED FOR SILT FENCE AS PERIMETER CONTROL ON HARDSCAPE SURFACE AREAS.
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7. THE CONTRACTOR SHALL FURNISH, INSTALL, OPERATE, AND MAINTAIN ALL MACHINERY, APPURTENANCES, AND EQUIPMENT TO MAINTAIN THE EXCAVATION FREE FROM WATER DURING CONSTRUCTION, AND SHALL DEWATER AND DISPOSE OF THE WATER SO AS TO BE IN COMPLIANCE WITH APPLICABLE REGULATIONS. REFER TO APPENDIX D OF "*CONSTRUCTION ACTIVITIES STORMWATER MANAGEMENT PLAN FOR MARSHALL POINTE*" FOR COMPLETE DETAILS REGARDING THE CONSTRUCTION PHASE DEWATERING SYSTEM.
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9. CONTRACTOR SHALL ADJUST LOCATION OF SILT FENCE ALONG WINDSOR LAKE AS WATER LEVELS CHANGE.
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ABBREVIATIONS

BOP	BOTTOM OF PIPE
BS	BOTTOM OF STEP
BW	BOTTOM OF WALL (FG)
CONC	CONCRETE
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DR	DOOR
DS	DOWNSPOUT
E	EAST, EASTING
EGL	ENERGY GRADE LINE
EL	ELEVATION
EOA	EDGE OF ASPHALT
EOC	EDGE OF CONCRETE
EOP	EDGE OF PAVEMENT
ESMT	EASEMENT
EX	EXISTING
FES	FLARED END SECTION
FF	FINISHED FLOOR
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
GB	GRADE BREAK
GV	GATE VALVE
HC	HANDICAP
HGL	HYDRAULIC GRADE LINE
HORZ	HORIZONTAL
HP	HIGH POINT
INV	INVERT
LP	LOW POINT
LSD	LANDSCAPE DRAIN
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
N	NORTH, NORTHING
PHS	PHASE
PR	PROPOSED
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT-OF-WAY
SAN	SANITARY
SS	SANITARY SEWER
STA	STATION
STM	STORM
TB	THRUST BLOCK
TBC	TOP/BACK OF CURB
TOP	TOP OF PIPE
TS	TOP OF STEP
TW	TOP OF WALL (FG)
TYP	TYPICAL
UG	UNDERGROUND
VERT	VERTICAL
WAT	WATER

APPROVED:

City Engineer — 6/10/24 Date — DA2023-0019 Job Number

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811 Know what's below. Call before you dig.

SCALE: 1" = 30'

DESIGNED BY: AS
CHECKED BY: JDO
DRAWN BY: AS

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LINCOLN AVENUE CAPITAL

MARSHALL POINTE
CASPM INITIAL

COLORADO REGISTERED 43327 05/08/2024 PROFESSIONAL ENGINEER

PROJECT #: 220319

SHEET NUMBER
EC1

24 OF 44

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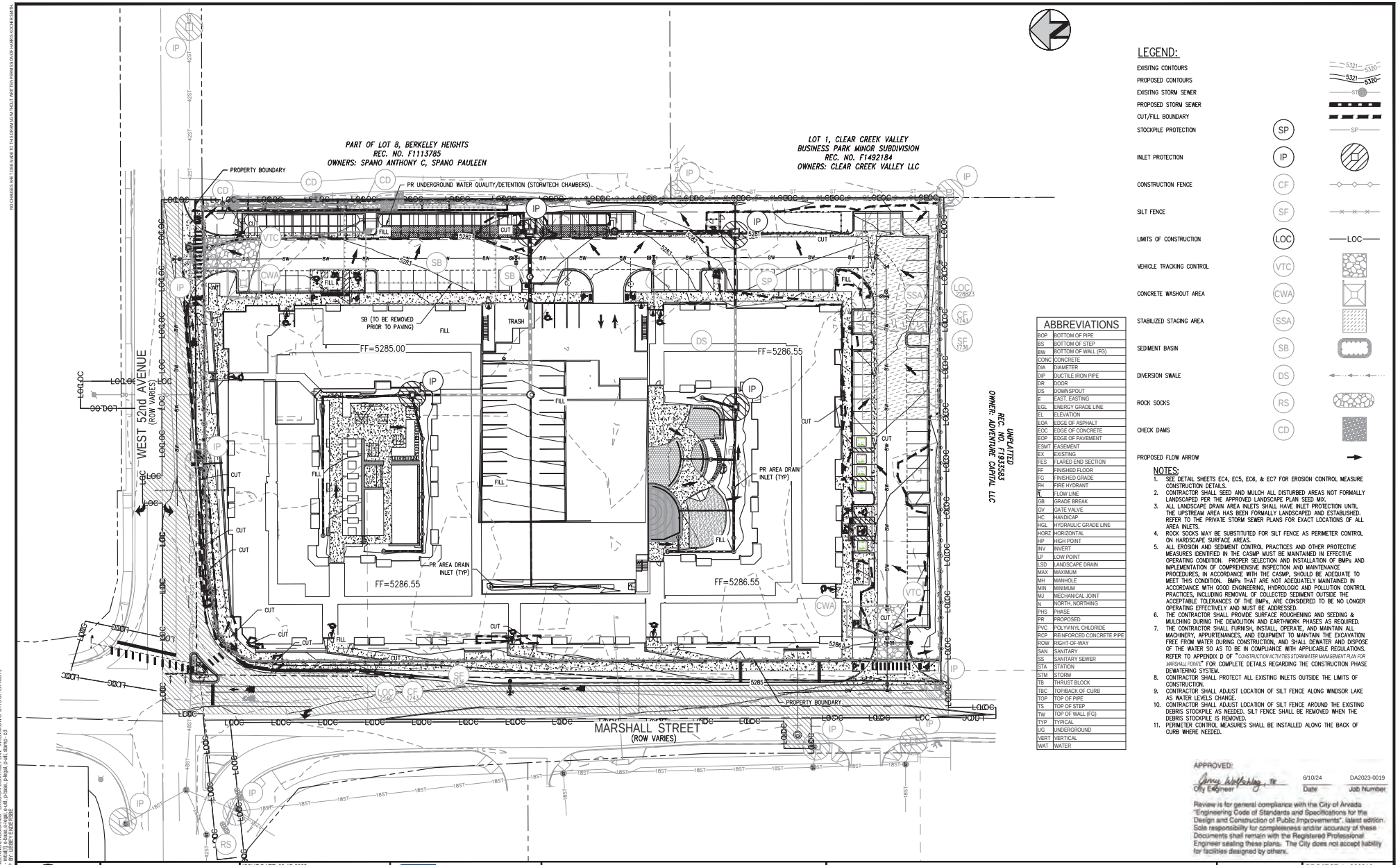

LEGEND:

- EXISTING CONTOURS
- PROPOSED CONTOURS
- EXISITNG STORM SEWER
- PROPOSED STORM SEWER
- CUT/FILL BOUNDARY
- STOCKPILE PROTECTION (SP)
- INLET PROTECTION (IP)
- CONSTRUCTION FENCE (CF)
- SILT FENCE (SF)
- LIMITS OF CONSTRUCTION (LOC)
- VEHICLE TRACKING CONTROL (VTC)
- CONCRETE WASHOUT AREA (CWA)
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- SEDIMENT BASIN (SB)
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- ROCK SOCKS (RS)
- CHECK DAMS (CD)
- PROPOSED FLOW ARROW

ABBREVIATIONS

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11. PERIMETER CONTROL MEASURES SHALL BE INSTALLED ALONG THE BACK OF CURB WHERE NEEDED.

APPROVED:

City Engineer — Date: 6/10/24 — Job Number: DA2023-0019

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LINCOLN AVENUE CAPITAL

MARSHALL POINTE
CASPM INTERIM

COLORADO LICENSED — JOHN D. OSBORN — 43327 — 05/08/2024 — PROFESSIONAL ENGINEER

PROJECT #: 220319

SHEET NUMBER
EC2
25 OF 44

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FILEPATH: P:\2022\220319\ENGINEERING\EROSION\CD - EROSION CONTROL PLAN - INTERIM\DWG LAYOUT: LAYOUT1
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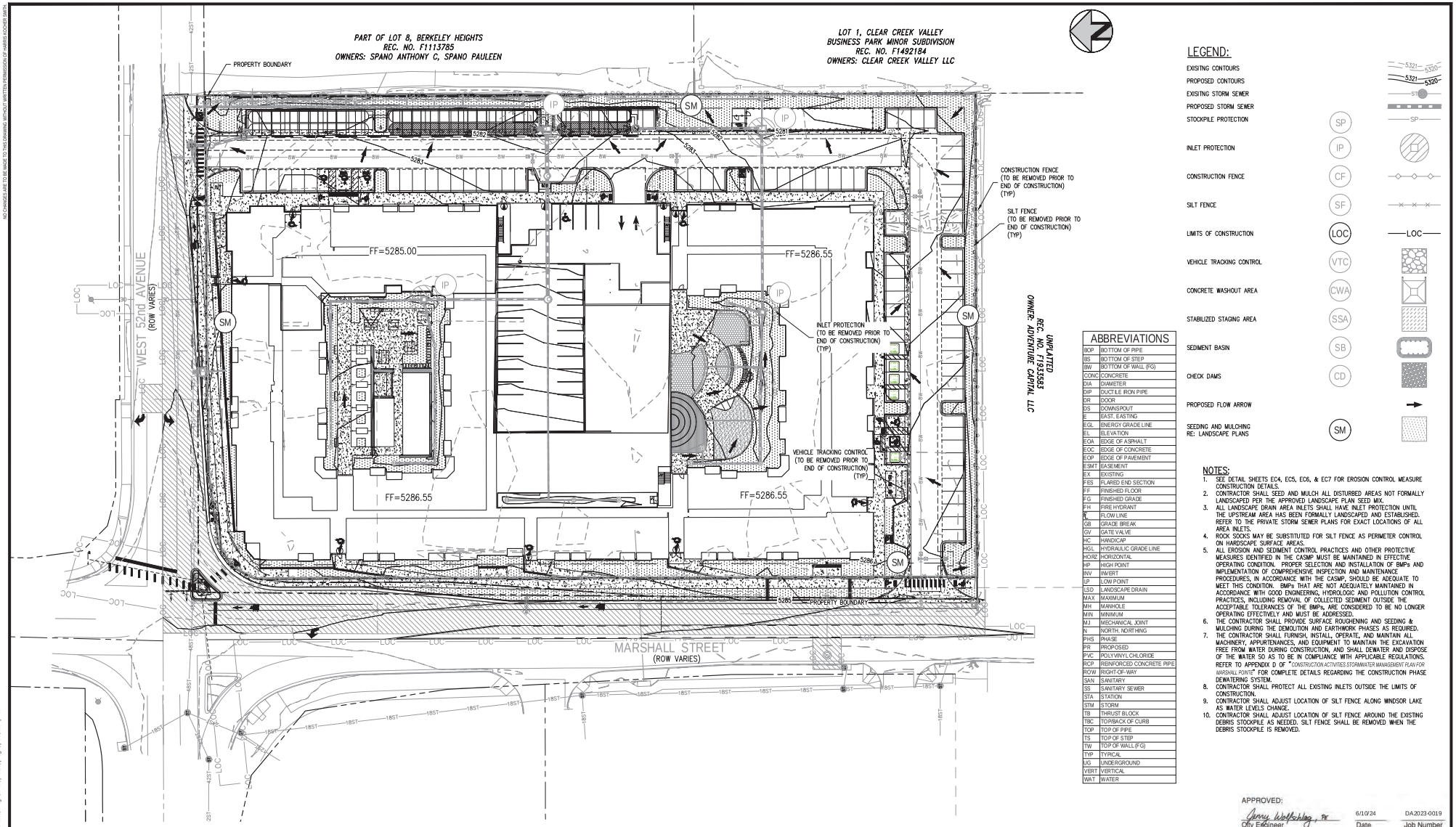

LEGEND:

- EXISTING CONTOURS — 5321 5320
- PROPOSED CONTOURS — 5321 5320
- EXISTING STORM SEWER — ST
- PROPOSED STORM SEWER
- STOCKPILE PROTECTION — SP
- INLET PROTECTION — IP
- CONSTRUCTION FENCE — CF
- SILT FENCE — SF
- LIMITS OF CONSTRUCTION — LOC
- VEHICLE TRACKING CONTROL — VTC
- CONCRETE WASHOUT AREA — CWA
- STABILIZED STAGING AREA — SSA
- SEDIMENT BASIN — SB
- CHECK DAMS — CD
- PROPOSED FLOW ARROW
- SEEDING AND MULCHING RE: LANDSCAPE PLANS — SM

ABBREVIATIONS

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City Engineer — 6/10/24 Date — DA2023-0019 Job Number

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CHECKED BY: JDO
DRAWN BY: AS

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LINCOLN AVENUE CAPITAL

MARSHALL POINTE
CASPM FINAL

PROJECT #: 220319

SHEET NUMBER
EC3

26 OF 44

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FILEPATH: P:\2022\220319\ENGINEERING\EROSION\CD - EROSION CONTROL PLAN - FINAL DWG LAYOUT: LAYOUT1
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PLOTTED: TUE 04/30/2024 2:49:48PM BY: LEBES ENGELSE

Construction BMP Plan Symbols

TITLE	KEY	SYMBOL
BRUSH BARRIER	BB	BB — BB — BB
CHECK DAM	CD	
COMPOST BLANKET AND BERMS	CB	
CONSTRUCTION FENCE	CF	CF — CF — CF
CULVERT INLET PROTECTION	CIP	
STABILIZED CONSTRUCTION ROADWAY	SCR	SCR
CONCRETE WASHOUT AREA	CWA	
DIVERSION DITCHES/CHANNELS	DD/DC	

Construction BMP Plan Symbols

TITLE	KEY	SYMBOL
DEWATERING OPERATIONS	DW	
EARTH DIKES AND DRAINAGE SWALES	ED/DS	
EROSION CONTROL BLANKET	ECB TRM	
INLET PROTECTION	IP	IP
MULCHING	MU	MU
OUTLET PROTECTION	OP	
PERMANENT SEEDING	PS	PS
REINFORCED CHECK DAM	RCD	

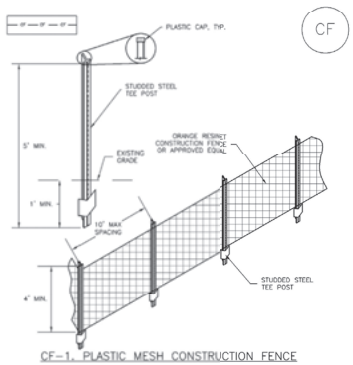
Construction BMP Plan Symbols

TITLE	KEY	SYMBOL
ROCK SOCKS	RS	
ROUGH CUT STREET CONTROL	RCS	
SEDIMENT BASIN	SB	
SEDIMENT CONTROL LOG	SCL	
SILT FENCE	SF	SF — SF — SF
SURFACE ROUGHENING	SR	SR
STABILIZED STAGING AREA	SSA	
STOCKPILE MANAGEMENT W/ PROTECTION	SP	

Construction BMP Plan Symbols

TITLE	KEY	SYMBOL
VEHICLE TRACKING CONTROL	VTC	
VEHICLE TRACKING CONTROL W/ WHEEL WASH	VTC/WW	
VEHICLE TRACKING CONTROL W/ CONSTRUCTION MAT	VTC/CM	
VEHICLE TRACKING CONTROL W/ TRM	VTC/TRM	

SM-3 Construction Fence (CF)



CF-1. PLASTIC MESH CONSTRUCTION FENCE

CONSTRUCTION FENCE INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   -LOCATION OF CONSTRUCTION FENCE.
2. CONSTRUCTION FENCE SHOWN SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
3. CONSTRUCTION FENCE SHALL BE COMPOSED OF ORANGE, CONTRACTOR-GRADE MATERIAL THAT IS AT LEAST 4' HIGH. METAL POSTS SHOULD HAVE A PLASTIC CAP FOR SAFETY.
4. STUDDED STEEL TEE POSTS SHALL BE UTILIZED TO SUPPORT THE CONSTRUCTION FENCE. MAXIMUM SPACING FOR STEEL TEE POSTS SHALL BE 10'.
5. CONSTRUCTION FENCE SHALL BE SECURELY FASTENED TO THE TOP, MIDDLE, AND BOTTOM OF EACH POST.

Construction Fence (CF) SM-3

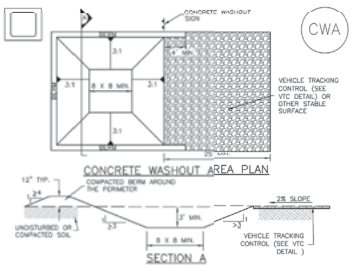
CONSTRUCTION FENCE MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. CONSTRUCTION FENCE SHALL BE REPAIRED OR REPLACED WHEN THERE ARE SIGNS OF DAMAGE SUCH AS RIPS OR SAGS. CONSTRUCTION FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.
5. WHEN CONSTRUCTION FENCES ARE REMOVED, ALL DISTURBED AREAS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, AND/OR REMOVAL OF THE FENCE SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)

Concrete Washout Area (CWA) MM-1



CWA-1. CONCRETE WASHOUT AREA

CWA INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   -CWA INSTALLATION LOCATION.
2. DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (16 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.
3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.
4. CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT LEAST 3' DEEP.
5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.
6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.
7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

MM-1 Concrete Washout Area (CWA)

CWA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. THE CWA SHALL BE REPAIRED, CLEANED, OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE. CONCRETE MATERIALS, ACCUMULATED IN PIT, SHALL BE REMOVED ONCE THE MATERIALS HAVE REACHED A DEPTH OF 2'.
5. CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER-TIGHT CONTAINER AND DISPOSED OF PROPERLY.
6. THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.
7. WHEN THE CWA IS REMOVED, COVER THE DISTURBED AREA WITH TOP SOIL, SEED AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAIL ADAPTED FROM DOUGLAS COUNTY, COLORADO AND THE CITY OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

APPROVED:

City Engineer — Date: 6/10/24 — Job Number: DA2023-0019

Review is for general compliance with the City of Arvada "Engineering Code of Standards and Specifications for the Design and Construction of Public Improvements", latest edition. Sole responsibility for completeness and/or accuracy of these Documents shall remain with the Registered Professional Engineer sealing these plans. The City does not accept liability for facilities designed by others.

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CHECKED BY: JDO
DRAWN BY: AS

ISSUE DATE: 02-17-2023	
DATE	REVISION COMMENTS
04-28-2023	PER CITY COMMENTS
07-13-2023	PER CITY COMMENTS
09-01-2023	PER CITY COMMENTS
10-13-2023	ISSUED FOR CONSTRUCTION
03-25-2024	MINOR CITY COMMENTS
04-24-2024	ISSUED FOR CONSTRUCTION

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LINCOLN AVENUE CAPITAL

MARSHALL POINTE
CASPM DETAILS

PROJECT #: 220319
SHEET NUMBER
EC4
27 OF 44

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH
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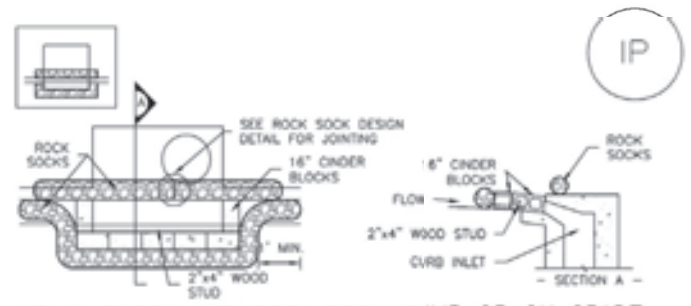


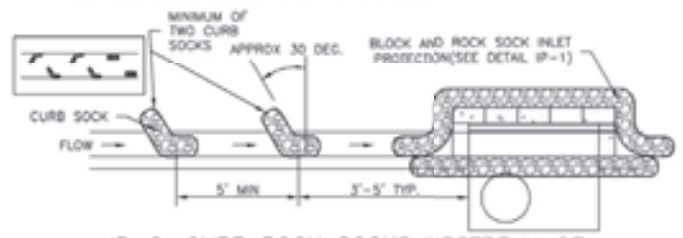
IP–1. BLOCK AND ROCK SOCK SUMP OR ON GRADE INLET PROTECTION

BLOCK AND CURB SOCK INLET PROTECTION INSTALLATION NOTES

1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. CONCRETE "CINDER" BLOCKS SHALL BE LAID ON THEIR SIDES AROUND THE INLET IN A SINGLE ROW, ABUTTING ONE ANOTHER WITH THE OPEN END FACING AWAY FROM THE CURB.

3. GRAVEL BAGS SHALL BE PLACED AROUND CONCRETE BLOCKS, CLOSELY ABUTTING ONE ANOTHER AND JOINTED TOGETHER IN ACCORDANCE WITH ROCK SOCK DESIGN DETAIL.



IP–2. CURB ROCK SOCKS UPSTREAM OF INLET PROTECTION

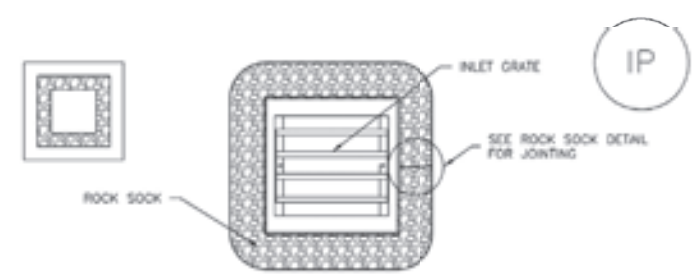
CURB ROCK SOCK INLET PROTECTION INSTALLATION NOTES

1. SEE ROCK SOCK DESIGN DETAIL INSTALLATION REQUIREMENTS.

2. PLACEMENT OF THE SOCK SHALL BE APPROXIMATELY 30 DEGREES FROM PERPENDICULAR IN THE OPPOSITE DIRECTION OF FLOW.

3. SOCKS ARE TO BE FLUSH WITH THE CURB AND SPACED A MINIMUM OF 5 FEET APART.

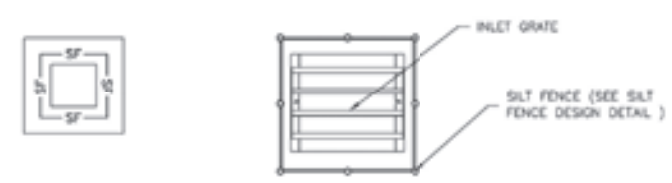
4. AT LEAST TWO CURB SOCKS IN SERIES ARE REQUIRED UPSTREAM OF ON-GRADE INLETS.



IP–3. ROCK SOCK SUMP/AREA INLET PROTECTION

ROCK SOCK SUMP/AREA INLET PROTECTION INSTALLATION NOTES
1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF ROCK SOCKS FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.



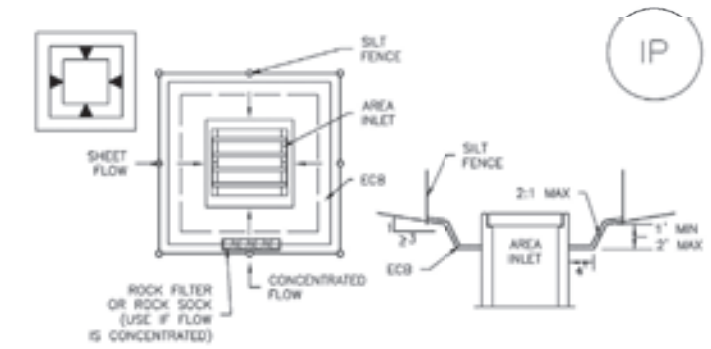
IP–4. SILT FENCE FOR SUMP INLET PROTECTION

SILT FENCE INLET PROTECTION INSTALLATION NOTES

1. SEE SILT FENCE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. POSTS SHALL BE PLACED AT EACH CORNER OF THE INLET AND AROUND THE EDGES AT A MAXIMUM SPACING OF 3 FEET.

3. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF SILT FENCE FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.



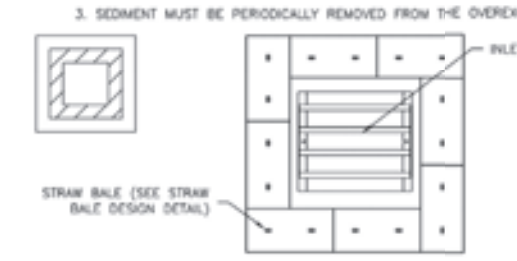
IP–5. OVEREXCAVATION INLET PROTECTION

OVEREXCAVATION INLET PROTECTION INSTALLATION NOTES

1. THIS FORM OF INLET PROTECTION IS PRIMARILY APPLICABLE FOR SITES THAT HAVE NOT YET REACHED FINAL GRADE AND SHOULD BE USED ONLY FOR INLETS WITH A RELATIVELY SMALL CONTRIBUTING DRAINAGE AREA.

2. WHEN USING FOR CONCENTRATED FLOWS, SHAPE BASIN IN 2:1 RATIO WITH LENGTH ORIENTED TOWARDS DIRECTION OF FLOW.

3. SEDIMENT MUST BE PERIODICALLY REMOVED FROM THE OVEREXCAVATED AREA.

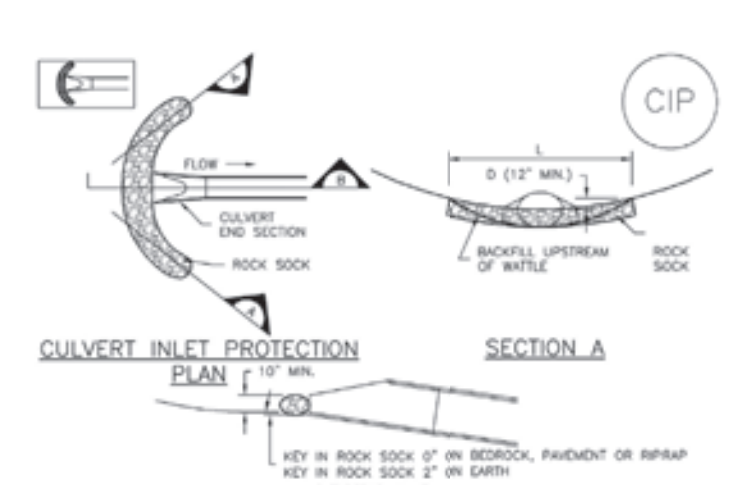


IP–6. STRAW BALE FOR SUMP INLET PROTECTION

STRAW BALE BARRIER INLET PROTECTION INSTALLATION NOTES

1. SEE STRAW BALE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. BALES SHALL BE PLACED IN A SINGLE ROW AROUND THE INLET WITH ENDS OF BALES TIGHTLY ABUTTING ONE ANOTHER.



CIP–1. CULVERT INLET PROTECTION

CULVERT INLET PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR
–LOCATION OF CULVERT INLET PROTECTION.

2. SEE ROCK SOCK DESIGN DETAIL FOR ROCK GRADATION REQUIREMENTS AND JOINTING DETAIL.

CULVERT INLET PROTECTION MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF THE CULVERT SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS ½ THE HEIGHT OF THE ROCK SOCK

5. CULVERT INLET PROTECTION SHALL REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

(DETAILS ADAPTED FROM AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

GENERAL INLET PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
–LOCATION OF INLET PROTECTION.
–TYPE OF INLET PROTECTION (IP.1, IP.2, IP.3, IP.4, IP.5, IP.6)

2. INLET PROTECTION SHALL BE INSTALLED PROMPTLY AFTER INLET CONSTRUCTION OR PAVING IS COMPLETE (TYPICALLY WITHIN 48 HOURS). IF A RAINFALL/RUNOFF EVENT IS FORECAST, INSTALL INLET PROTECTION PRIOR TO ONSET OF EVENT.

3. MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

INLET PROTECTION MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF INLET PROTECTION SHALL BE REMOVED AS NECESSARY TO MAINTAIN BMP EFFECTIVENESS, TYPICALLY WHEN STORAGE VOLUME REACHES 50% OF CAPACITY, A DEPTH OF 6" WHEN SILT FENCE IS USED, OR ¼ OF THE HEIGHT FOR STRAW BALES.

5. INLET PROTECTION IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED, UNLESS THE LOCAL JURISDICTION APPROVES EARLIER REMOVAL OF INLET PROTECTION IN STREETS.

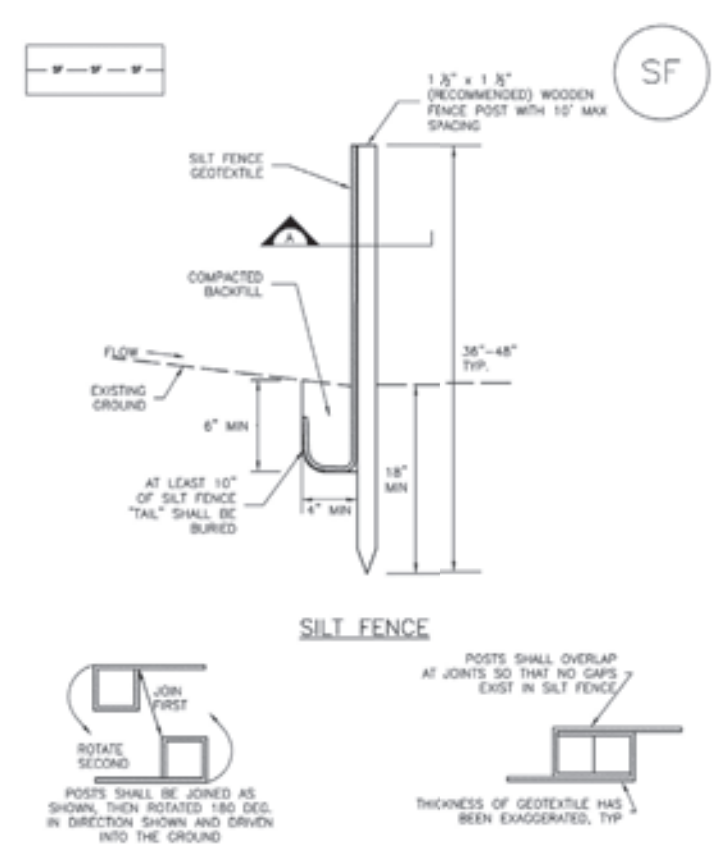
6. WHEN INLET PROTECTION AT AREA INLETS IS REMOVED, THE DISTURBED AREA SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

NOTE: THE DETAILS INCLUDED WITH THIS FACT SHEET SHOW COMMONLY USED, CONVENTIONAL METHODS OF INLET PROTECTION IN THE DENVER METROPOLITAN AREA. THERE ARE MANY PROPRIETARY INLET PROTECTION METHODS ON THE MARKET. UDFCD NEITHER ENDORSES NOR DISCOURAGES USE OF PROPRIETARY INLET PROTECTION; HOWEVER, IN THE EVENT PROPRIETARY METHODS ARE USED, THE APPROPRIATE DETAIL FROM THE MANUFACTURER MUST BE INCLUDED IN THE SWMP AND THE BMP MUST BE INSTALLED AND MAINTAINED AS SHOWN IN THE MANUFACTURER'S DETAILS.

NOTE: SOME MUNICIPALITIES DISCOURAGE OR PROHIBIT THE USE OF STRAW BALES FOR INLET PROTECTION. CHECK WITH LOCAL JURISDICTION TO DETERMINE IF STRAW BALE INLET PROTECTION IS ACCEPTABLE.



SF–1. SILT FENCE

SILT FENCE INSTALLATION NOTES

1. SILT FENCE MUST BE PLACED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER PONDING. SILT FENCE AT THE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST SEVERAL FEET (2–5 FT) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR PONDING AND DEPOSITION.

2. A UNIFORM 6" X 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE INSTALLATION DEVICE. NO ROAD GRADERS, BACKHOES, OR SIMILAR EQUIPMENT SHALL BE USED.

3. COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND.

4. SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO NOTICEABLE SAG BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES.

5. SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING 1" HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS. STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC DOWN THE STAKE.

6. AT THE END OF A RUN OF SILT FENCE ALONG A CONTOUR, THE SILT FENCE SHOULD BE TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J-HOOK." THE "J-HOOK" EXTENDING PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RUNOFF FROM FLOWING AROUND THE END OF THE SILT FENCE (TYPICALLY 10' – 20').

7. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

SILT FENCE MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 6".

5. REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, TEARING, OR COLLAPSE.

6. SILT FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION, OR IS REPLACED BY AN EQUIVALENT PERIMETER SEDIMENT CONTROL BMP.

7. WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

APPROVED:
Jenny Wolfschlag, PE — City Engineer
Date: 6/10/24
Job Number: DA2023-0019

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CHECKED BY: JDO
DRAWN BY: AS

ISSUE DATE: 02-17-2023

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LINCOLN AVENUE CAPITAL

MARSHALL POINTE
CASPM DETAILS

PROJECT #: 220319
SHEET NUMBER
EC5
28 OF 44

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.

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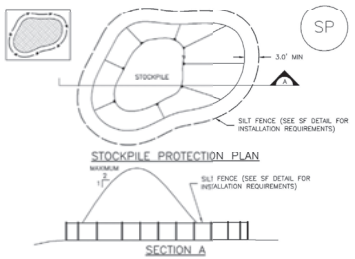


STOCKPILE PROTECTION PLAN

SECTION A

SP-1. STOCKPILE PROTECTION

STOCKPILE PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - –LOCATION OF STOCKPILES.
   - –TYPE OF STOCKPILE PROTECTION.

2. INSTALL PERIMETER CONTROLS IN ACCORDANCE WITH THOIR RESPECTIVE DESIGN DETAILS. SILT FENCE IS SHOWN IN THE STOCKPILE PROTECTION DETAILS; HOWEVER, OTHER TYPES OF PERIMETER CONTROLS INCLUDING SEDIMENT CONTROL LOGS OR ROCK SOCKS MAY BE SUITABLE IN SOME CIRCUMSTANCES. CONSIDERATIONS FOR DETERMINING THE APPROPRIATE TYPE OF PERIMETER CONTROL FOR A STOCKPILE INCLUDE WHETHER THE STOCKPILE IS LOCATED ON A PERVIOUS OR IMPERVIOUS SURFACE, THE RELATIVE HEIGHTS OF THE PERIMETER CONTROL AND STOCKPILE, THE ABILITY OF THE PERIMETER CONTROL TO CONTAIN THE STOCKPILE WITHOUT FAILING IN THE EVENT THAT MATERIAL FROM THE STOCKPILE SHIFTS OR SLUMPS AGAINST THE PERIMETER, AND OTHER FACTORS.

3. STABILIZE THE STOCKPILE SURFACE WITH SURFACE ROUGHENING, TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS, OR SOIL BINDERS. SOILS STOCKPILED FOR AN EXTENDED PERIOD (TYPICALLY FOR MORE THAN 60 DAYS) SHOULD BE SEEDED AND MULCHED WITH A TEMPORARY GRASS COVER ONCE THE STOCKPILE IS PLACED (TYPICALLY WITHIN 14 DAYS). USE OF MULCH ONLY OR A SOIL BINDER IS ACCEPTABLE IF THE STOCKPILE WILL BE IN PLACE FOR A MORE LIMITED TIME PERIOD (TYPICALLY 30–60 DAYS).

4. FOR TEMPORARY STOCKPILES ON THE INTERIOR PORTION OF A CONSTRUCTION SITE, WHERE OTHER DOWNGRADIENT CONTROLS, INCLUDING PERIMETER CONTROL, ARE IN PLACE, STOCKPILE PERIMETER CONTROLS MAY NOT BE REQUIRED.

STOCKPILE PROTECTION MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

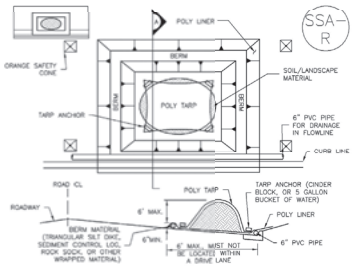
STOCKPILE PROTECTION MAINTENANCE NOTES

4. IF PERIMETER PROTECTION MUST BE MOVED TO ACCESS SOIL STOCKPILE, REPLACE PERIMETER CONTROLS BY THE END OF THE WORKDAY.

5. STOCKPILE PERIMETER CONTROLS CAN BE REMOVED ONCE ALL THE MATERIAL FROM THE STOCKPILE HAS BEEN USED.

(DETAILS ADAPTED FROM PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.



SP-2. MATERIALS STAGING IN ROADWAY

MATERIALS STAGING IN ROADWAYS INSTALLATION NOTES

1. SEE PLAN VIEW FOR
   - –LOCATION OF MATERIAL STAGING AREA(S).
   - –CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.

2. FEATURE MUST BE INSTALLED PRIOR TO EXCAVATION, EARTHWORK OR DELIVERY OF MATERIALS.

3. MATERIALS MUST BE STATIONED ON THE POLY LINER ANY INCIDENTAL MATERIALS DEPOSITED ON PAVED SECTION OR ALONG CURB LINE MUST BE CLEANED UP PROMPTLY.

4. POLY LINER AND TARP COVER SHOULD BE OF SIGNIFICANT THICKNESS TO PREVENT DAMAGE OR LOSS OF INTEGRITY.

5. SAND BAGS MAY BE SUBSTITUTED TO ANCHOR THE COVER TARP OR PROVIDE BERMING UNDER THE BASE LINER.

6. FEATURE IS NOT INTENDED FOR USE WITH WET MATERIAL THAT WILL BE DRAINING AND/OR SPREADING OUT ON THE POLY LINER OR FOR DEMOLITION MATERIALS.

7. THIS FEATURE CAN BE USED FOR:
   - –UTILITY REPAIRS.
   - –WHEN OTHER STAGING LOCATIONS AND OPTIONS ARE LIMITED.
   - –OTHER LIMITED APPLICATION AND SHORT DURATION STAGING.

MATERIALS STAGING IN ROADWAY MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. INSPECT PVC PIPE ALONG CURB LINE FOR CLOGGING AND DEBRIS. REMOVE OBSTRUCTIONS PROMPTLY.

5. CLEAN MATERIAL FROM PAVED SURFACES BY SWEEPING OR VACUUMING.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

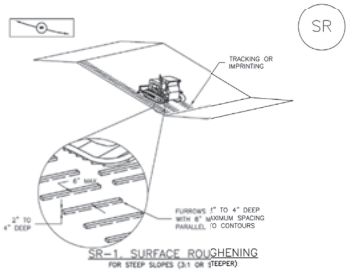
(DETAILS ADAPTED FROM AURORA, COLORADO)

Maintenance and Removal

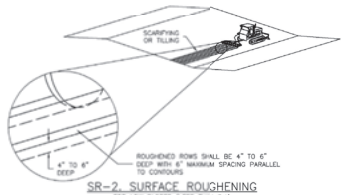
Care should be taken not to drive vehicles or equipment over areas that have been surface roughened. Tire tracks will smooth the roughened surface and may cause runoff to collect into rills and gullies.

Because surface roughening is only a temporary control, additional treatments may be necessary to maintain the soil surface in a roughened condition.

Areas should be inspected for signs of erosion. Surface roughening is a temporary measure, and will not provide long-term erosion control.



SR-1. SURFACE ROUGHENING
FOR STEEP SLOPES (3:1 OR STEEPER)



SR-2. SURFACE ROUGHENING
FOR LOW SLOPES (LESS THAN 3:1)

SURFACE ROUGHENING INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - –LOCATION(S) OF SURFACE ROUGHENING.

2. SURFACE ROUGHENING SHALL BE PROVIDED PROMPTLY AFTER COMPLETION OF FINISHED GRADING (FOR AREAS NOT RECEIVING TOPSOIL) OR PRIOR TO TOPSOIL PLACEMENT OR ANY FORECASTED RAIN EVENT.

3. AREAS WHERE BUILDING FOUNDATIONS, PAVEMENT, OR SOD WILL BE PLACED WITHOUT DELAY IN THE CONSTRUCTION SEQUENCE, SURFACE ROUGHENING IS NOT REQUIRED.

4. DISTURBED SURFACES SHALL BE ROUGHENED USING RIPPING OR TILLING EQUIPMENT ON THE CONTOUR OR TRACKING UP AND DOWN A SLOPE USING EQUIPMENT TREADS.

5. A FARMING DISK SHALL NOT BE USED FOR SURFACE ROUGHENING.

SURFACE ROUGHENING MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACE UPON DISCOVERY OF THE FAILURE.

4. VEHICLES AND EQUIPMENT SHALL NOT BE DRIVEN OVER AREAS THAT HAVE BEEN SURFACE ROUGHENED.

5. IN NON-TURF GRASS FINISHED AREAS, SEEDING AND MULCHING SHALL TAKE PLACE DIRECTLY OVER SURFACE ROUGHENED AREAS WITHOUT FIRST SMOOTHING OUT THE SURFACE.

6. IN AREAS NOT SEEDED AND MULCHED AFTER SURFACE ROUGHENING, SURFACES SHALL BE RE-ROUGHENED AS NECESSARY TO MAINTAIN GROOVE DEPTH AND SMOOTH OVER RILL EROSION.

(DETAILS ADAPTED FROM TOWN OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

APPROVED:

City Engineer — Date: 6/10/24 — Job Number: DA2023-0019

Review is for general compliance with the City of Arvada "Engineering Code of Standards and Specifications for the Design and Construction of Public Improvements", latest edition. Sole responsibility for completeness and/or accuracy of these Documents shall remain with the Registered Professional Engineer sealing these plans. The City does not accept liability for facilities designed by others.

Know what's below. Call before you dig.

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CHECKED BY: JDO
DRAWN BY: AS

ISSUE DATE: 02-17-2023	
DATE	REVISION COMMENTS
04-28-2023	PER CITY COMMENTS
07-13-2023	PER CITY COMMENTS
09-01-2023	PER CITY COMMENTS
10-13-2023	ISSUED FOR CONSTRUCTION
03-25-2024	MINOR CITY COMMENTS
04-24-2024	ISSUED FOR CONSTRUCTION

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LINCOLN AVENUE CAPITAL

MARSHALL POINTE
CASPM DETAILS

PROJECT #: 220319

SHEET NUMBER
EC6

29 OF 44

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH

FILEPATH: P:\2022\220319\ENGINEERING\DESIGN\CD - EROSION CONTROL\DETAILS\DWG LAYOUT1, LAYOUT3
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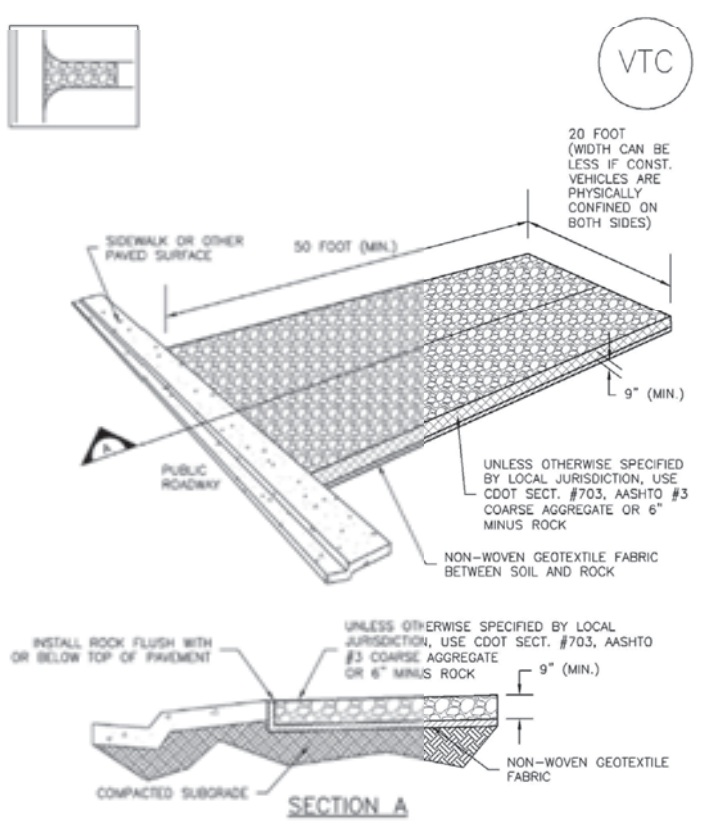
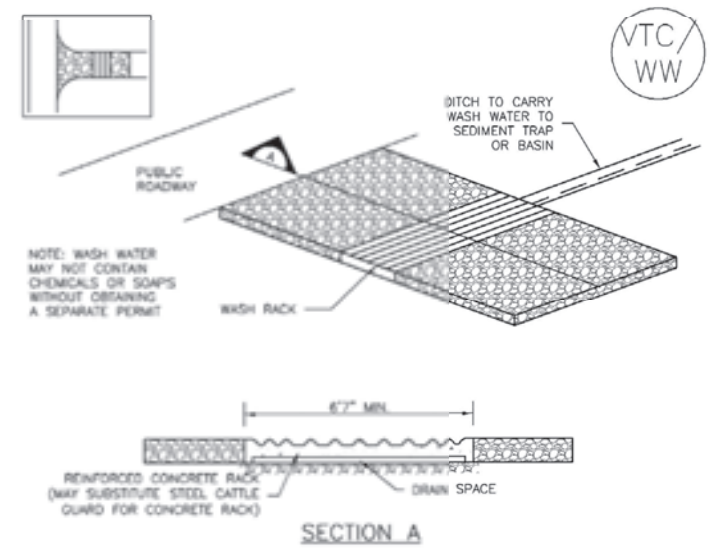
Vehicle Tracking Control (VTC) — SM-4



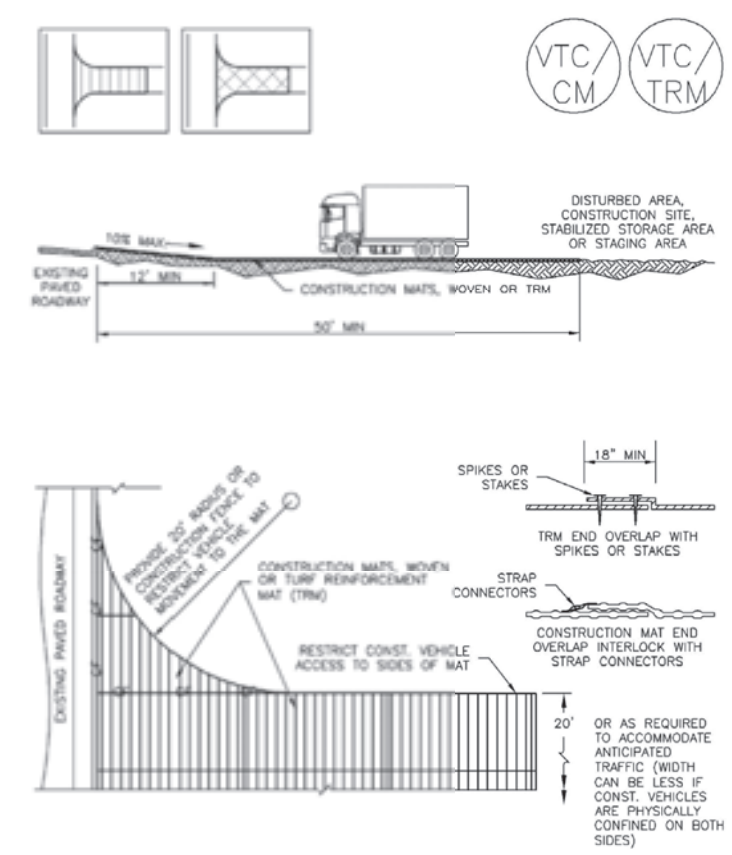
VTC-1. AGGREGATE VEHICLE TRACKING CONTROL

SM-4 — Vehicle Tracking Control (VTC)



VTC-2. AGGREGATE VEHICLE TRACKING CONTROL WITH WASH RACK

Vehicle Tracking Control (VTC) — SM-4



VTC-3. VEHICLE TRACKING CONTROL W/ CONSTRUCTION MAT OR TURF REINFORCEMENT MAT (TRM)

SM-4 — Vehicle Tracking Control (VTC)

STABILIZED CONSTRUCTION ENTRANCE/EXIT INSTALLATION NOTES

1. SEE PLAN VIEW FOR
   - LOCATION OF CONSTRUCTION ENTRANCE(S)/EXIT(S).
   - TYPE OF CONSTRUCTION ENTRANCE(S)/EXITS(S) (WITH/WITHOUT WHEEL WASH, CONSTRUCTION MAT OR TRM).

2. CONSTRUCTION MAT OR TRM STABILIZED CONSTRUCTION ENTRANCES ARE ONLY TO BE USED ON SHORT DURATION PROJECTS (TYPICALLY RANGING FROM A WEEK TO A MONTH) WHERE THERE WILL BE LIMITED VEHICULAR ACCESS.

3. A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE LOCATED AT ALL ACCESS POINTS WHERE VEHICLES ACCESS THE CONSTRUCTION SITE FROM PAVED RIGHT-OF-WAYS.

4. STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

5. A NON-WOVEN GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE STABILIZED CONSTRUCTION ENTRANCE/EXIT PRIOR TO THE PLACEMENT OF ROCK.

6. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

STABILIZED CONSTRUCTION ENTRANCE/EXIT MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

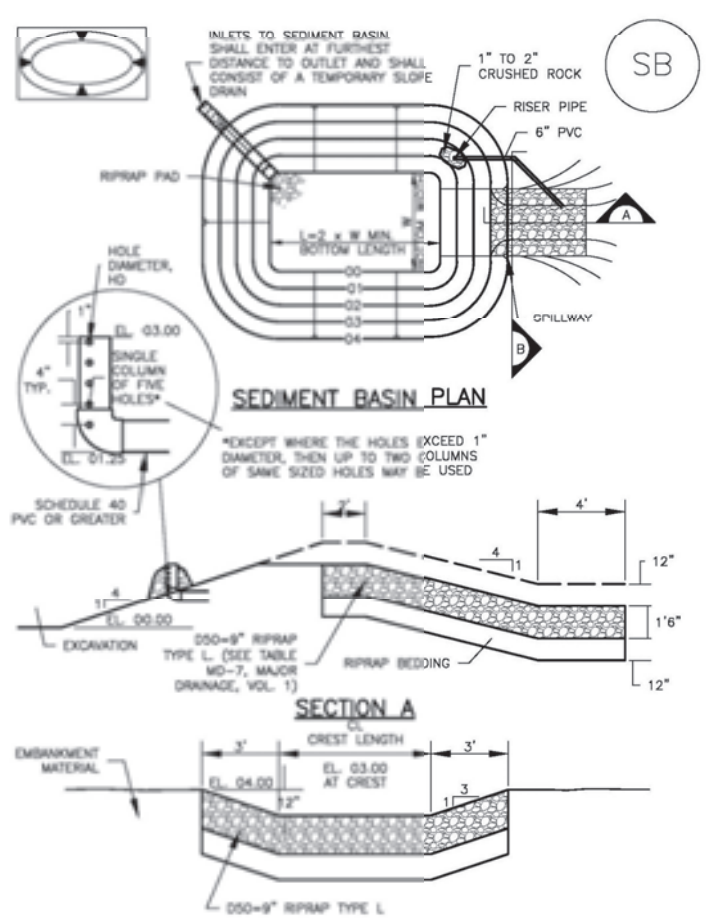
4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY TO THE STABILIZED ENTRANCE/EXIT TO MAINTAIN A CONSISTENT DEPTH.

5. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED THROUGHOUT THE DAY AND AT THE END OF THE DAY BY SHOVELING OR SWEEPING. SEDIMENT MAY NOT BE WASHED DOWN STORM SEWER DRAINS.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM CITY OF BROOMFIELD, COLORADO, NOT AVAILABLE IN AUTOCAD)

Sediment Basin (SB) — SC-7



SC-7 — Sediment Basin (SB)

TABLE SB-1. SIZING INFORMATION FOR STANDARD SEDIMENT BASIN

Upstream Drainage Area (rounded to nearest acre), (ac)	Basin Bottom Width (W), (ft)	Spillway Crest Length (CL), (ft)	Hole Diameter (HD), (in)
1	12 ½	2	9/32
2	21	3	13/16
3	28	5	½
4	33 ½	6	9/16
5	38 ½	8	21/32
6	43	9	21/32
7	47 ¼	11	25/32
8	51	12	27/32
9	55	13	7/8
10	58 ¼	15	15/16
11	61	16	31/32
12	64	18	1
13	67 ½	19	1 1/16
14	70 ½	21	1 1/8
15	73 ¼	22	1 3/16

SEDIMENT BASIN INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - LOCATION OF SEDIMENT BASIN.
   - TYPE OF BASIN (STANDARD BASIN OR NONSTANDARD BASIN).
   - FOR STANDARD BASIN, BOTTOM WIDTH W, CREST LENGTH CL, AND HOLE DIAMETER, HD.
   - FOR NONSTANDARD BASIN, SEE CONSTRUCTION DRAWINGS FOR DESIGN OF BASIN INCLUDING RISER HEIGHT H, NUMBER OF COLUMNS N, HOLE DIAMETER HD AND PIPE DIAMETER D.

2. FOR STANDARD BASIN, BOTTOM DIMENSION MAY BE MODIFIED AS LONG AS BOTTOM AREA IS NOT REDUCED.

3. SEDIMENT BASINS SHALL BE INSTALLED PRIOR TO ANY OTHER LAND-DISTURBING ACTIVITY THAT RELIES ON ON BASINS AS AS A STORMWATER CONTROL.

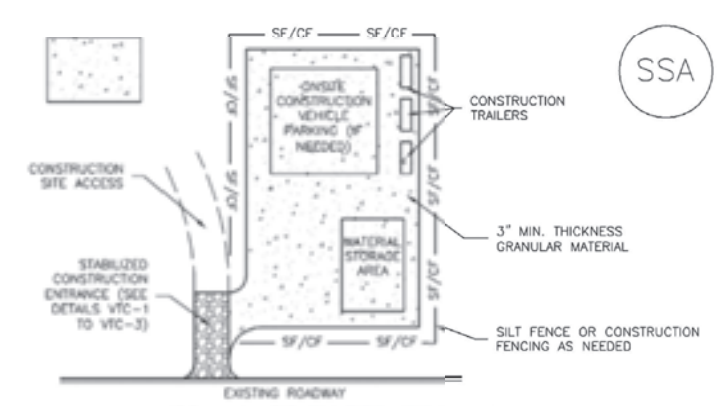
4. EMBANKMENT MATERIAL SHALL CONSIST OF SOIL FREE OF DEBRIS, ORGANIC MATERIAL, AND ROCKS OR CONCRETE GREATER THAN 3 INCHES AND SHALL HAVE A MINIMUM OF 15 PERCENT BY WEIGHT PASSING THE NO. 200 SIEVE.

5. EMBANKMENT MATERIAL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D698.

6. PIPE SCH 40 OR GREATER SHALL BE USED.

7. THE DETAILS SHOWN ON THESE SHEETS PERTAIN TO STANDARD SEDIMENT BASIN(S) FOR DRAINAGE AREAS LESS THAN 15 ACRES. SEE CONSTRUCTION DRAWINGS FOR EMBANKMENT, STORAGE VOLUME, SPILLWAY, OUTLET, AND OUTLET PROTECTION DETAILS FOR ANY SEDIMENT BASIN(S) THAT HAVE BEEN INDIVIDUALLY DESIGNED FOR DRAINAGE AREAS LARGER THAN 15 ACRES.

Stabilized Staging Area (SSA) — SM-6



SSA-1. STABILIZED STAGING AREA

STABILIZED STAGING AREA INSTALLATION NOTES

1. SEE PLAN VIEW FOR
   - LOCATION OF STAGING AREA(S).
   - CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.

2. STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION.

3. STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE.

4. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR MATERIAL.

5. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

6. ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT FENCE AND CONSTRUCTION FENCING.

STABILIZED STAGING AREA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.

SM-6 — Stabilized Staging Area (SSA)

STABILIZED STAGING AREA MAINTENANCE NOTES

5. STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING/LOADING OPERATIONS.

6. THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPROVED BY THE LOCAL JURISDICTION, USED ON SITE, AND THE AREA COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.

NOTE: MANY MUNICIPALITIES PROHIBIT THE USE OF RECYCLED CONCRETE AS GRANULAR MATERIAL FOR STABILIZED STAGING AREAS DUE TO DIFFICULTIES WITH RE-ESTABLISHMENT OF VEGETATION IN AREAS WHERE RECYCLED CONCRETE WAS PLACED.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)

APPROVED:

Jenny Wolfschlag, PE — City Engineer | 6/10/24 — Date | DA2023-0019 — Job Number

Review is for general compliance with the City of Arvada "Engineering Code of Standards and Specifications for the Design and Construction of Public Improvements", latest edition. Sole responsibility for completeness and/or accuracy of these Documents shall remain with the Registered Professional Engineer sealing these plans. The City does not accept liability for facilities designed by others.

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CHECKED BY: JDO
DRAWN BY: AS

ISSUE DATE: 02-17-2023

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10-13-2023	ISSUED FOR CONSTRUCTION
03-25-2024	MINOR CITY COMMENTS
04-24-2024	ISSUED FOR CONSTRUCTION

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LINCOLN AVENUE CAPITAL

MARSHALL POINTE
CASPM DETAILS

PROJECT #: 220319
SHEET NUMBER
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30 OF 44

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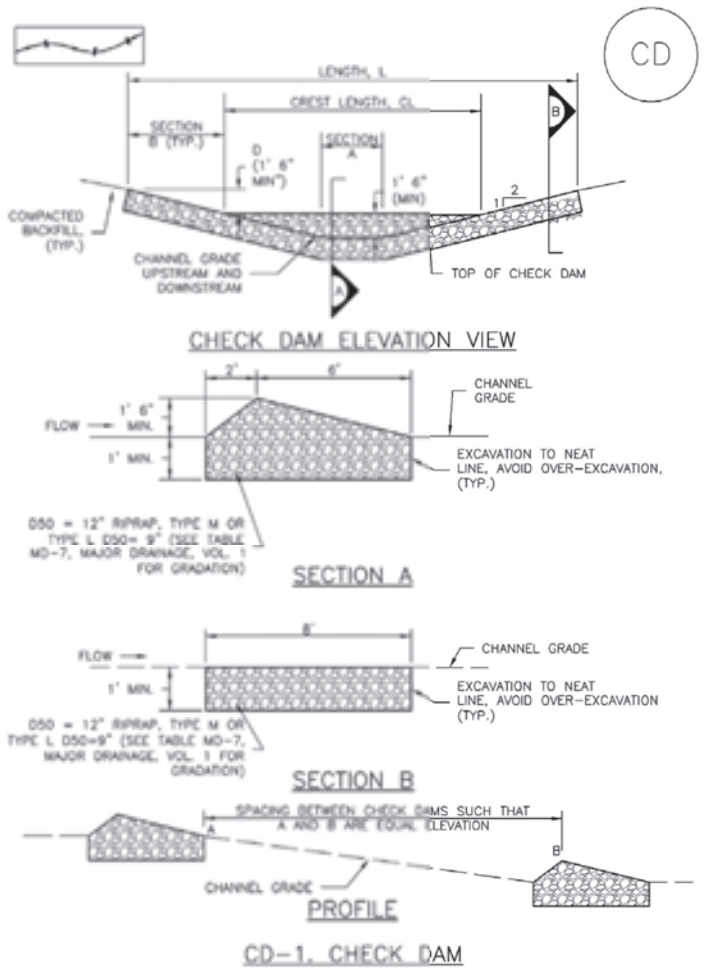


CD-1. CHECK DAM

REINFORCED CHECK DAM MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF REINFORCED CHECK DAMS SHALL BE REMOVED AS NEEDED TO MAINTAIN THE EFFECTIVENESS OF BMP, TYPICALLY WHEN THE UPSTREAM SEDIMENT DEPTH IS WITHIN ½ THE HEIGHT OF THE CREST.

5. REPAIR OR REPLACE REINFORCED CHECK DAMS WHEN THERE ARE SIGNS OF DAMAGE SUCH AS HOLES IN THE GABION OR UNDERCUTTING.

6. REINFORCED CHECK DAMS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

7. WHEN REINFORCED CHECK DAMS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED, AND COVERED WITH A GEOTEXTILE BLANKET, OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAIL ADAPTED FROM DOUGLAS COUNTY, COLORADO AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

CHECK DAM INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
 -LOCATION OF CHECK DAMS.
 -CHECK DAM TYPE (CHECK DAM OR REINFORCED CHECK DAM).
 -LENGTH (L), CREST LENGTH (CL), AND DEPTH (D).

2. CHECK DAMS INDICATED ON INITIAL SWMP SHALL BE INSTALLED AFTER CONSTRUCTION FENCE, BUT PRIOR TO ANY UPSTREAM LAND DISTURBING ACTIVITIES.

3. RIPRAP UTILIZED FOR CHECK DAMS SHOULD BE OF APPROPRIATE SIZE FOR THE APPLICATION. TYPICAL TYPES OF RIPRAP USED FOR CHECK DAMS ARE TYPE M (D50 12") OR TYPE L (D50 9").

4. RIPRAP PAD SHALL BE TRENCHED INTO THE GROUND A MINIMUM OF 1'.

5. THE ENDS OF THE CHECK DAM SHALL BE A MINIMUM OF 1' 6" HIGHER THAN THE CENTER OF THE CHECK DAM.

CHECK DAM MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

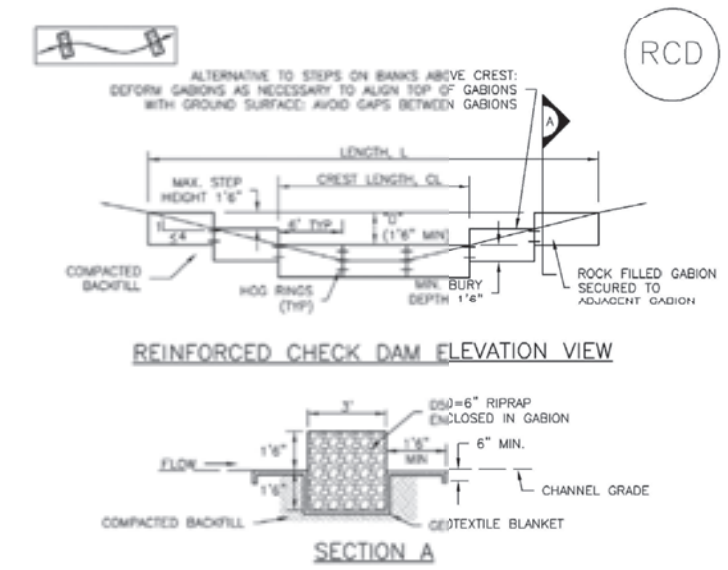
4. SEDIMENT ACCUMULATED UPSTREAM OF THE CHECK DAMS SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS WITHIN ½ OF THE HEIGHT OF THE CREST.

5. CHECK DAMS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

6. WHEN CHECK DAMS ARE REMOVED, EXCAVATIONS SHALL BE FILLED WITH SUITABLE COMPACTED BACKFILL. DISTURBED AREA SHALL BE SEEDED AND MULCHED AND COVERED WITH GEOTEXTILE OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.



REINFORCED CHECK DAM INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
 -LOCATIONS OF CHECK DAMS.
 -CHECK DAM TYPE (CHECK DAM OR REINFORCED CHECK DAM).
 -LENGTH (L), CREST LENGTH (CL), AND DEPTH (D).

2. CHECK DAMS INDICATED ON THE SWMP SHALL BE INSTALLED PRIOR TO AN UPSTREAM LAND-DISTURBING ACTIVITIES.

3. REINFORCED CHECK DAMS, GABIONS SHALL HAVE GALVANIZED TWISTED WIRE NETTING WITH A MAXIMUM OPENING DIMENSION OF 4½" AND A MINIMUM WIRE THICKNESS OF 0.10". WIRE "HOG RINGS" AT 4" SPACING OR OTHER APPROVED MEANS SHALL BE USED AT ALL GABION SEAMS AND TO SECURE THE GABION TO THE ADJACENT SECTION.

4. THE CHECK DAM SHALL BE TRENCHED INTO THE GROUND A MINIMUM OF 1' 6".

5. GEOTEXTILE BLANKET SHALL BE PLACED IN THE REINFORCED CHECK DAM TRENCH EXTENDING A MINIMUM OF 1' 6" ON BOTH THE UPSTREAM AND DOWNSTREAM SIDES OF THE REINFORCED CHECK DAM.

CD-2. REINFORCED CHECK DAM

Description

Earth dikes and drainage swales are temporary storm conveyance channels constructed either to divert runoff around slopes or to convey runoff to additional sediment control BMPs prior to discharge of runoff from a site. Drainage swales may be lined or unlined, but if an unlined swale is used, it must be well compacted and capable of resisting erosive velocities.



Photograph ED/DS-1. Example of an earth dike used to divert flows at a construction site. Photo courtesy of CDOT.

Appropriate Uses

Earth dikes and drainage swales are typically used to control the flow path of runoff at a construction site by diverting runoff around areas prone to erosion, such as steep slopes. Earth dikes and drainage swales may also be constructed as temporary conveyance features. This will direct runoff to additional sediment control treatment BMPs, such as sediment traps or basins.

Design and Installation

When earth dikes are used to divert water for slope protection, the earth dike typically consists of a horizontal ridge of soil placed perpendicular to the slope and angled slightly to provide drainage along the contour. The dike is used in conjunction with a swale or a small channel upslope of the berm to convey the diverted water. Temporary diversion dikes can be constructed by excavation of a V-shaped trench or ditch and placement of the fill on the downslope side of the cut. There are two types of placement for temporary slope diversion dikes:

- A dike located at the top of a slope to divert upland runoff away from the disturbed area and convey it in a temporary or permanent channel.
- A diversion dike located at the base or mid-slope of a disturbed area to intercept runoff and reduce the effective slope length.

Depending on the project, either an earth dike or drainage swale may be more appropriate. If there is a need for cut on the project, then an excavated drainage swale may be better suited. When the project is primarily fill, then a conveyance constructed using a berm may be the better option.

All dikes or swales receiving runoff from a disturbed area should direct stormwater to a sediment control BMP such as a sediment trap or basin.

Earth Dikes and Drainage Swales	
Functions	
Erosion Control	Yes
Sediment Control	Moderate
Site/Material Management	No

Description

A rock sock is constructed of gravel that has been wrapped by wire mesh or a geotextile to form an elongated cylindrical filter. Rock socks are typically used either as a perimeter control or as part of inlet protection. When placed at angles in the curb line, rock socks are typically referred to as curb socks. Rock socks are intended to trap sediment from stormwater runoff that flows onto roadways as a result of construction activities.



Photograph RS-1. Rock socks placed at regular intervals in a curb line can help reduce sediment loading to storm sewer inlets. Rock socks can also be used as perimeter controls.

Appropriate Uses

Rock socks can be used at the perimeter of a disturbed area to control localized sediment loading. A benefit of rock socks as opposed to other perimeter controls is that they do not have to be trenched or staked into the ground; therefore, they are often used on roadway construction projects where paved surfaces are present.

Use rock socks in inlet protection applications when the construction of a roadway is substantially complete and the roadway has been directly connected to a receiving storm system.

Design and Installation

When rock socks are used as perimeter controls, the maximum recommended tributary drainage area per 100 lineal feet of rock socks is approximately 0.25 acres with disturbed slope length of up to 150 feet and a tributary slope gradient no steeper than 3:1. A rock sock design detail and notes are provided in Detail RS-1. Also see the Inlet Protection Fact Sheet for design and installation guidance when rock socks are used for inlet protection and in the curb line.

When placed in the gutter adjacent to a curb, rock socks should protrude no more than two feet from the curb in order for traffic to pass safely. If located in a high traffic area, place construction markers to alert drivers and street maintenance workers of their presence.

Maintenance and Removal

Rock socks are susceptible to displacement and breaking due to vehicle traffic. Inspect rock socks for damage and repair or replace as necessary. Remove sediment by sweeping or vacuuming as needed to maintain the functionality of the BMP, typically when sediment has accumulated behind the rock sock to one-half of the sock's height.

Once upstream stabilization is complete, rock socks and accumulated sediment should be removed and properly disposed.

Rock Sock	
Functions	
Erosion Control	No
Sediment Control	Yes
Site/Material Management	No

TABLE SB-1. SIZING INFORMATION FOR STANDARD SEDIMENT BASIN

Upstream Drainage Area (rounded to nearest acre), (ac)	Basin Bottom Width (W), (ft)	Spillway Crest Length (CL), (ft)	Hole Diameter (HD), (in)
1	12 ½	2	9/32
2	21	3	13/32
3	28	5	½
4	33 ½	6	9/16
5	38 ½	8	21/32
6	43	9	21/32
7	47 ¼	11	25/32
8	51	12	27/32
9	55	13	7/8
10	58 ¼	15	15/16
11	61	16	31/32
12	64	18	1
13	67 ½	19	1 1/16
14	70 ½	21	1 ⅛
15	73 ¼	22	1 3/16

SEDIMENT BASIN INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
 -LOCATION OF SEDIMENT BASIN.
 -TYPE OF BASIN (STANDARD BASIN OR NONSTANDARD BASIN).
 -FOR STANDARD BASIN, BOTTOM WIDTH W, CREST LENGTH CL, AND HOLE DIAMETER, HD.
 -FOR NONSTANDARD BASIN, SEE CONSTRUCTION DRAWINGS FOR DESIGN OF BASIN INCLUDING RISER HEIGHT H, NUMBER OF COLUMNS N, HOLE DIAMETER HD AND PIPE DIAMETER D.

2. FOR STANDARD BASIN, BOTTOM DIMENSION MAY BE MODIFIED AS LONG AS BOTTOM AREA IS NOT REDUCED.

3. SEDIMENT BASINS SHALL BE INSTALLED PRIOR TO ANY OTHER LAND-DISTURBING ACTIVITY THAT RELIES ON ON BASINS AS AS A STORMWATER CONTROL.

4. EMBANKMENT MATERIAL SHALL CONSIST OF SOIL FREE OF DEBRIS, ORGANIC MATERIAL, AND ROCKS OR CONCRETE GREATER THAN 3 INCHES AND SHALL HAVE A MINIMUM OF 15 PERCENT BY WEIGHT PASSING THE NO. 200 SIEVE.

5. EMBANKMENT MATERIAL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D698.

6. PIPE SCH 40 OR GREATER SHALL BE USED.

7. THE DETAILS SHOWN ON THESE SHEETS PERTAIN TO STANDARD SEDIMENT BASIN(S) FOR DRAINAGE AREAS LESS THAN 15 ACRES. SEE CONSTRUCTION DRAWINGS FOR EMBANKMENT, STORAGE VOLUME, SPILLWAY, OUTLET, AND OUTLET PROTECTION DETAILS FOR ANY SEDIMENT BASIN(S) THAT HAVE BEEN INDIVIDUALLY DESIGNED FOR DRAINAGE AREAS LARGER THAN 15 ACRES.

SEDIMENT BASIN MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED IN BASIN SHALL BE REMOVED AS NEEDED TO MAINTAIN BMP EFFECTIVENESS, TYPICALLY WHEN SEDIMENT DEPTH REACHES ONE FOOT (I.E., TWO FEET BELOW THE SPILLWAY CREST).

5. SEDIMENT BASINS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS ACCEPTED BY THE LOCAL JURISDICTION.

6. WHEN SEDIMENT BASINS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

APPROVED:

Jerry Wolfschlag, PE — City Engineer | 6/10/24 — Date | DA2023-0019 — Job Number

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DRAWN BY: AS

ISSUE DATE: 02-17-2023

DATE	REVISION COMMENTS
04-28-2023	PER CITY COMMENTS
07-13-2023	PER CITY COMMENTS
09-01-2023	PER CITY COMMENTS
10-13-2023	ISSUED FOR CONSTRUCTION
03-25-2024	MINOR CITY COMMENTS
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HarrisKocherSmith.com

LINCOLN AVENUE CAPITAL

MARSHALL POINTE
CASPM DETAILS

PROJECT #: 220319
SHEET NUMBER
EC8
31 OF 44

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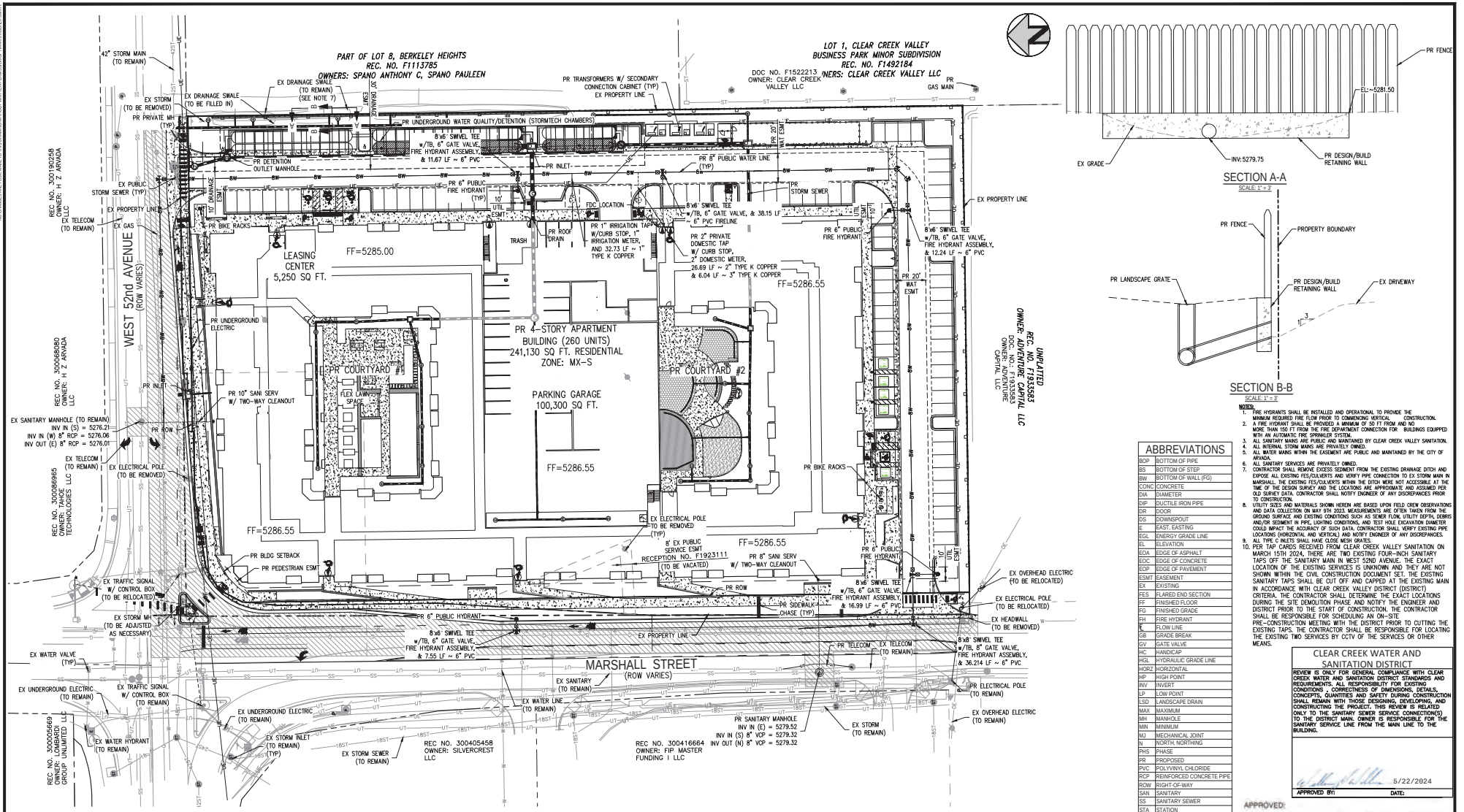

ABBREVIATIONS

BOP	BOTTOM OF PIPE
BS	BOTTOM OF STEP
BW	BOTTOM OF WALL (FG)
CONC	CONCRETE
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DR	DOOR
DS	DOWNSPOUT
E	EAST, EASTING
EGL	ENERGY GRADE LINE
EL	ELEVATION
EOA	EDGE OF ASPHALT
EOC	EDGE OF CONCRETE
EOP	EDGE OF PAVEMENT
ESMT	EASEMENT
EX	EXISTING
FES	FLARED END SECTION
FF	FINISHED FLOOR
FG	FINISHED GRADE
FH	FIRE HYDRANT
℄	FLOW LINE
GB	GRADE BREAK
GV	GATE VALVE
HC	HANDICAP
HGL	HYDRAULIC GRADE LINE
HORZ	HORIZONTAL
HP	HIGH POINT
INV	INVERT
LP	LOW POINT
LSD	LANDSCAPE DRAIN
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
N	NORTH, NORTHING
PHS	PHASE
PR	PROPOSED
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT-OF-WAY
SAN	SANITARY
SS	SANITARY SEWER
STA	STATION
STM	STORM
TB	THRUST BLOCK
TBC	TOP/BACK OF CURB
TOP	TOP OF PIPE
TS	TOP OF STEP
TW	TOP OF WALL (FG)
TYP	TYPICAL
UG	UNDERGROUND
VERT	VERTICAL
WAT	WATER

NOTES:
1. FIRE HYDRANTS SHALL BE INSTALLED AND OPERATIONAL TO PROVIDE THE MINIMUM REQUIRED FIRE FLOW PRIOR TO COMMENCING VERTICAL CONSTRUCTION.
2. A FIRE HYDRANT SHALL BE PROVIDED A MINIMUM OF 50 FT FROM AND NO MORE THAN 150 FT FROM THE FIRE DEPARTMENT CONNECTION FOR BUILDINGS EQUIPPED WITH AN AUTOMATIC FIRE SPRINKLER SYSTEM.
3. ALL SANITARY MAINS ARE PUBLIC AND MAINTAINED BY CLEAR CREEK VALLEY SANITATION.
4. ALL INTERNAL STORM MAINS ARE PRIVATELY OWNED.
5. ALL WATER MAINS WITHIN THE EASEMENT ARE PUBLIC AND MAINTAINED BY THE CITY OF ARVADA.
6. ALL SANITARY SERVICES ARE PRIVATELY OWNED.
7. CONTRACTOR SHALL REMOVE EXCESS SEDIMENT FROM THE EXISTING DRAINAGE DITCH AND EXPOSE ALL EXISTING FES/CULVERTS AND VERIFY PIPE CONNECTION TO EX STORM MAIN IN MARSHALL. THE EXISTING FES/CULVERTS WITHIN THE DITCH WERE NOT ACCESSIBLE AT THE TIME OF THE DESIGN SURVEY AND THE LOCATIONS ARE APPROXIMATE AND ASSUMED PER OLD SURVEY DATA. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
8. UTILITY SIZES AND MATERIALS SHOWN HEREIN ARE BASED UPON FIELD CREW OBSERVATIONS AND DATA COLLECTION ON MAY 9TH 2023. MEASUREMENTS ARE OFTEN TAKEN FROM THE GROUND SURFACE AND EXISTING CONDITIONS SUCH AS SEWER FLOW, UTILITY DEPTH, DEBRIS AND/OR SEDIMENT IN PIPE, LIGHTING CONDITIONS, AND TEST HOLE EXCAVATION DIAMETER COULD IMPACT THE ACCURACY OF SUCH DATA. CONTRACTOR SHALL VERIFY EXISTING PIPE LOCATIONS (HORIZONTAL AND VERTICAL) AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
9. ALL TYPE C INLETS SHALL HAVE CLOSE MESH GRATES.
10. PER TAP CARDS RECEIVED FROM CLEAR CREEK VALLEY SANITATION ON MARCH 15TH 2024, THERE ARE TWO EXISTING FOUR-INCH SANITARY TAPS OFF THE SANITARY MAIN IN WEST 52ND AVENUE. THE EXACT LOCATION OF THE EXISTING SERVICES IS UNKNOWN AND THEY ARE NOT SHOWN WITHIN THE CIVIL CONSTRUCTION DOCUMENT SET. THE EXISTING SANITARY TAPS SHALL BE CUT OFF AND CAPPED AT THE EXISTING MAIN IN ACCORDANCE WITH CLEAR CREEK VALLEY DISTRICT (DISTRICT) CRITERIA. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATIONS DURING THE SITE DEMOLITION PHASE AND NOTIFY THE ENGINEER AND DISTRICT PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING AN ON-SITE PRE-CONSTRUCTION MEETING WITH THE DISTRICT PRIOR TO CUTTING THE EXISTING TAPS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING THE EXISTING TWO SERVICES BY CCTV OF THE SERVICES OR OTHER MEANS.

CLEAR CREEK WATER AND SANITATION DISTRICT

REVIEW IS ONLY FOR GENERAL COMPLIANCE WITH CLEAR CREEK WATER AND SANITATION DISTRICT STANDARDS AND REQUIREMENTS. ALL RESPONSIBILITY FOR EXISTING CONDITIONS , CORRECTNESS OF DIMENSIONS, DETAILS, CONCEPTS, QUANTITIES AND SAFETY DURING CONSTRUCTION SHALL REMAIN WITH THOSE DESIGNING, DEVELOPING, AND CONSTRUCTING THE PROJECT. THIS REVIEW IS RELATED ONLY TO THE SANITARY SEWER SERVICE CONNECTION(S) TO THE DISTRICT MAIN. OWNER IS RESPONSIBLE FOR THE SANITARY SERVICE LINE FROM THE MAIN LINE TO THE BUILDING.

5/22/2024

APPROVED BY: DATE:

APPROVED:

City Engineer — 6/10/24 Date — DA2023-0019 Job Number

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SCALE: 1" = 30'

DESIGNED BY: EE
CHECKED BY: JDO
DRAWN BY: LMD

ISSUE DATE: 03-10-2023

DATE	REVISION COMMENTS
04-28-2023	PER CITY COMMENTS
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HarrisKocherSmith.com

LINCOLN AVENUE CAPITAL

MARSHALL POINTE
UTILITY PLAN

COLORADO REGISTERED PROFESSIONAL ENGINEER 43327 05/08/2024

PROJECT #: 220319

SHEET NUMBER
SS1
32 OF 44

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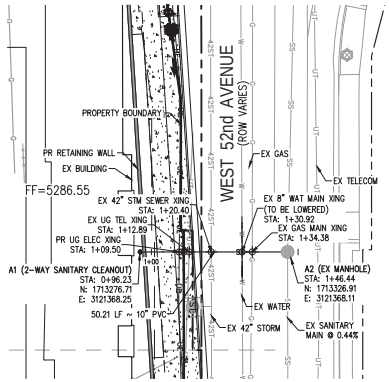
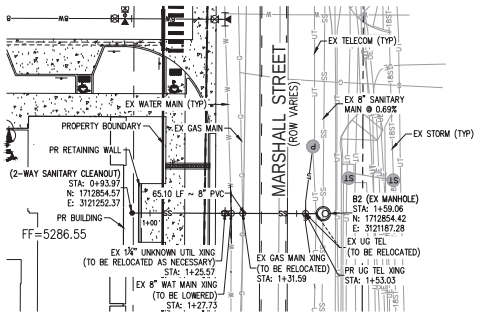


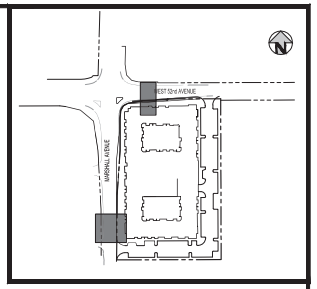
SANITARY LINE A PLAN VIEW

SCALE:1" = 20'



SANITARY LINE B PLAN VIEW

SCALE:1" = 20'



KEY MAP

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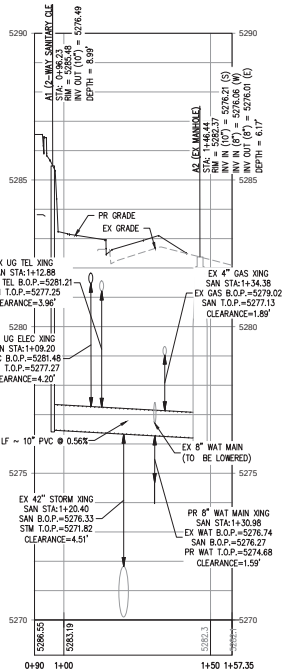
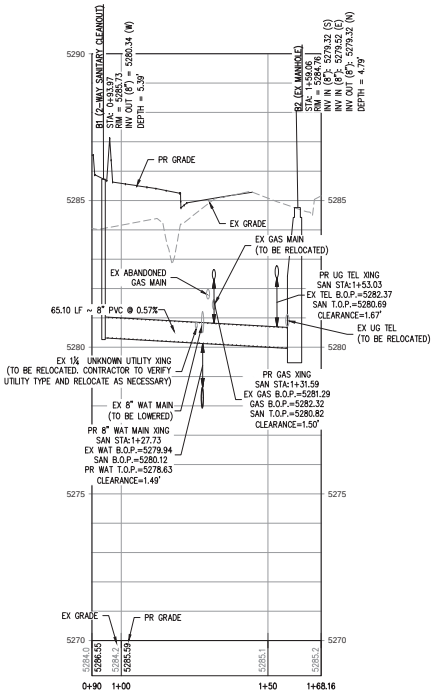


SANITARY LINE A PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 2'



SANITARY LINE B PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 2'

NOTES:

1. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE, AS SUPPLIED BY THE UTILITY OWNERS, PRIOR TO EXCAVATION. THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
2. SANITARY SERVICE IS PROVIDED BY CLEAR CREEK VALLEY SANITATION.
3. UTILITY SIZES AND MATERIALS SHOWN HEREIN ARE BASED UPON FIELD CREW OBSERVATIONS AND DATA COLLECTION ON MAY 9TH 2023. MEASUREMENTS ARE OFTEN TAKEN FROM THE GROUND SURFACE AND EXISTING CONDITIONS SUCH AS SEWER FLOW, UTILITY DEPTH, DEBRIS AND/OR SEDIMENT IN PIPE, LIGHTING CONDITIONS, AND TEST HOLE EXCAVATION DIAMETER COULD IMPACT THE ACCURACY OF SUCH DATA. CONTRACTOR SHALL VERIFY EXISTING PIPE LOCATIONS (HORIZONTAL AND VERTICAL) AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
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CLEAR CREEK WATER AND SANITATION DISTRICT

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5/22/2024

APPROVED BY: DATE:

APPROVED:

City Engineer — 6/10/24 Date — DA2023-0019 Job Number

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HarrisKocherSmith.com

LINCOLN AVENUE CAPITAL

MARSHALL POINTE
SANITARY SERVICE PLAN & PROFILE

COLORADO LICENSED JOSEPH D. OLIVER 43327 05/08/2024 PROFESSIONAL ENGINEER

PROJECT #: 220319

SHEET NUMBER

SS2

33 OF 44

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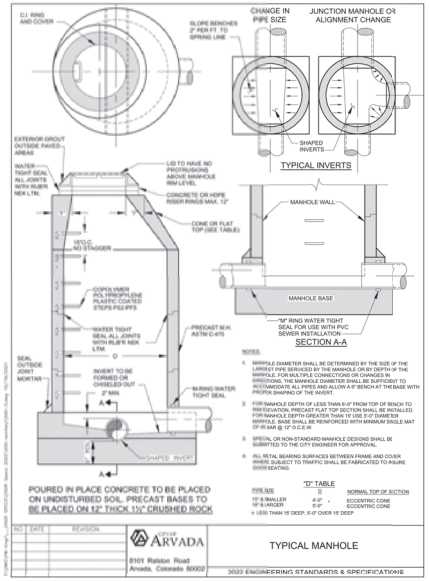

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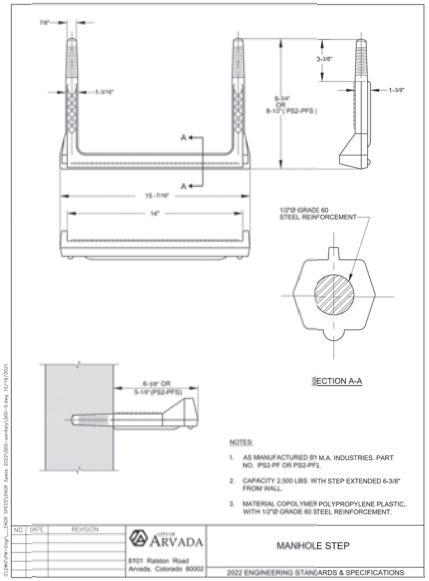

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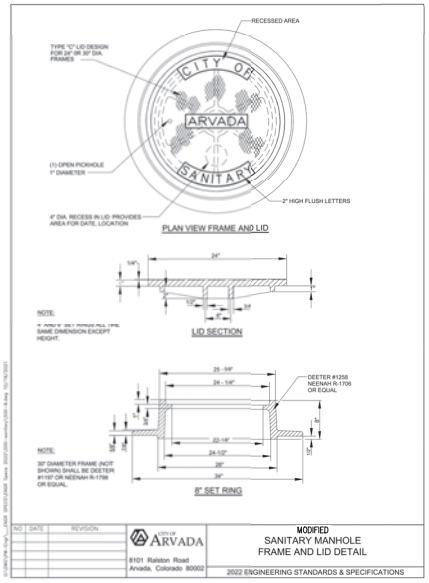

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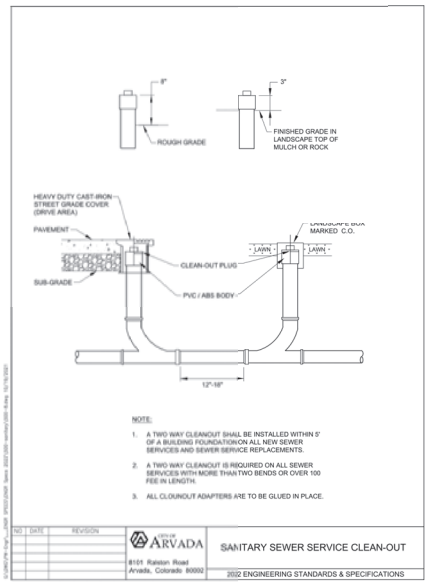

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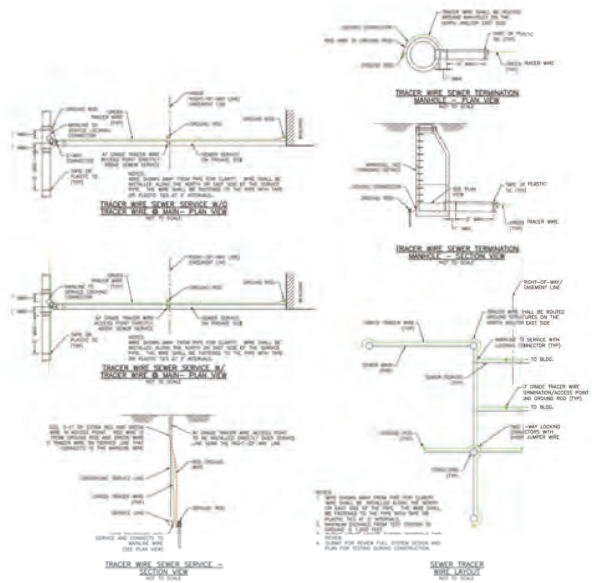

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APPROVED:

City Engineer — 6/10/24 Date — DA2023-0019 Job Number

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DESIGNED BY: EE
CHECKED BY: JDO
DRAWN BY: LMD

ISSUE DATE: 02-17-2023	
DATE	REVISION COMMENTS
04-26-2023	PER CITY COMMENTS
07-13-2023	PER CITY COMMENTS
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HARRIS KOCHER SMITH
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

LINCOLN AVENUE CAPITAL

MARSHALL POINTE
SANITARY DETAILS

PROJECT #: 220319
SHEET NUMBER
SS3
34 OF 44

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH
F:\PATH-P (2022\2203\9\ENGINEERING\CIVIL\TITLES\SANIT ARY\CD\ SANITARY DETAILS.DWG LAYOUT: LAYOUT1
XD:XREFs
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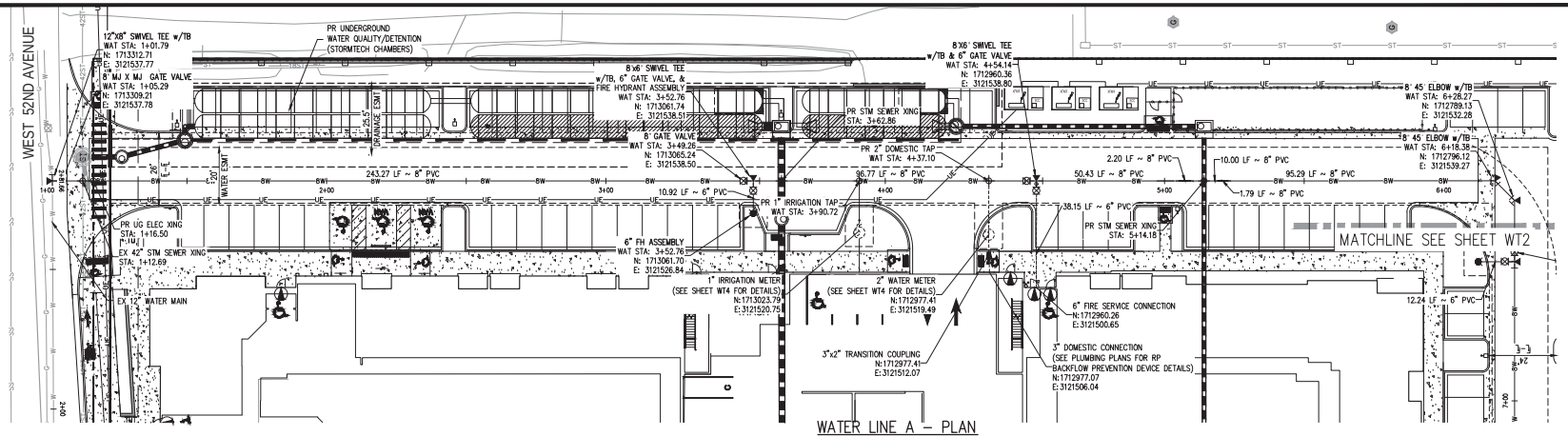
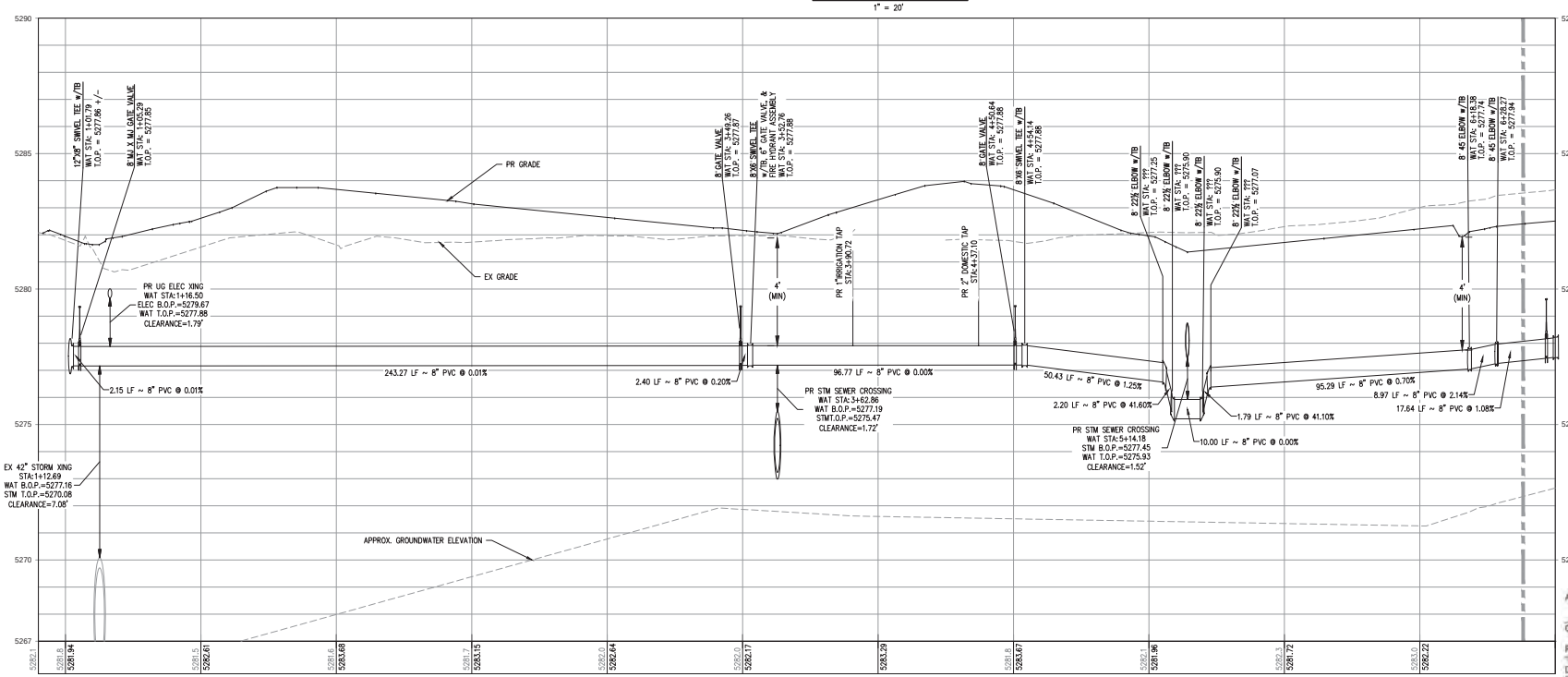
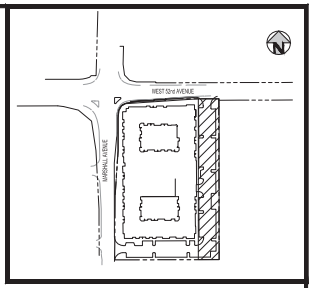


WATER LINE A – PLAN
1" = 20'



WATER LINE A - PROFILE
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 2'



KEY MAP
SCALE: 1"=200'

ABBREVIATIONS

BOP	BOTTOM OF PIPE
BS	BOTTOM OF STEP
BW	BOTTOM OF WALL (FG)
CONC	CONCRETE
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DR	DOOR
DS	DOWNSPOUT
E	EAST, EASTING
EGL	ENERGY GRADE LINE
EL	ELEVATION
EOA	EDGE OF ASPHALT
EOC	EDGE OF CONCRETE
EOP	EDGE OF PAVEMENT
ESMT	EASEMENT
EX	EXISTING
FES	FLARED END SECTION
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FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
GB	GRADE BREAK
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TBC	TOP/BACK OF CURB
TOP	TOP OF PIPE
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TYP	TYPICAL
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NOTES:

1. ALL FIRE LINES SHALL BE PVC DR-14, C-900, OR DR-18 C909.
2. UTILITY SIZES AND MATERIALS SHOWN HEREIN ARE BASED UPON FIELD CREW OBSERVATIONS AND DATA COLLECTION ON MAY 9TH 2023. MEASUREMENTS ARE OFTEN TAKEN FROM THE GROUND SURFACE AND EXISTING CONDITIONS SUCH AS SEWER FLOW, UTILITY DEPTH, DEBRIS AND/OR SEDIMENT IN PIPE, LIGHTING CONDITIONS, AND TEST HOLE EXCAVATION DIAMETER COULD IMPACT THE ACCURACY OF SUCH DATA. CONTRACTOR SHALL VERIFY EXISTING PIPE LOCATIONS (HORIZONTAL AND VERTICAL) AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

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City Engineer — Date: 6/10/24 — Job Number: DA2023-0019

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DRAWN BY: JTKR

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LINCOLN AVENUE CAPITAL

MARSHALL POINTE
WATER PLAN AND PROFILE

COLORADO LICENSED — JOHN D. OSTER — 43327 — 05/08/2024 — PROFESSIONAL ENGINEER

PROJECT #: 220319
SHEET NUMBER
WT1
35 OF 44

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F:\ERA\Th-P (2022\2019\ENGINEERING\CIVIL\TITLES\WATER\CD\ - WATER PLP DWG - LAYOUT: LAYOUT1
9 XREFs: obj signature:Nick, e-base, e-hgal, e-util, keymap, p-base, p-hgal, p-util, stamp - cd
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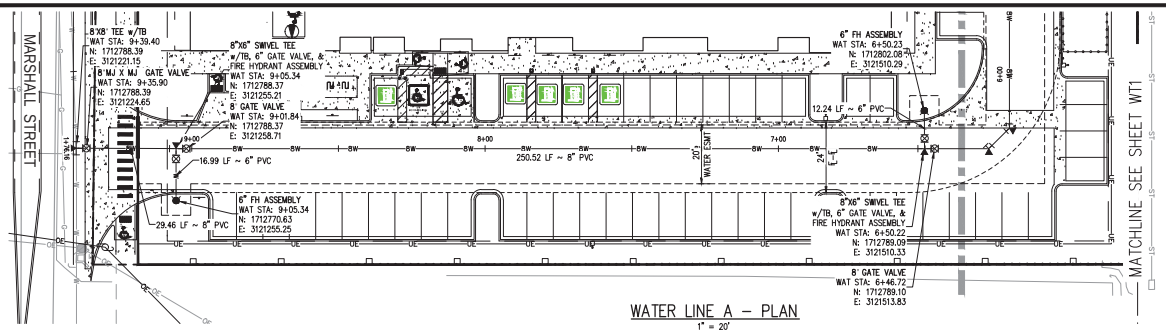

WATER LINE A – PLAN
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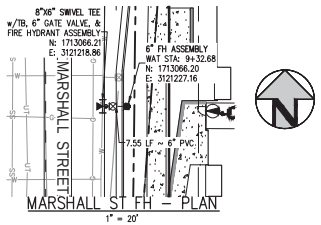
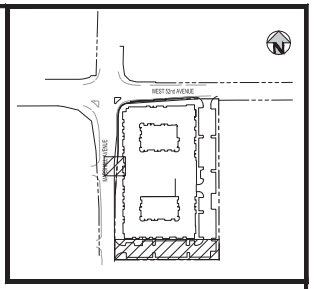
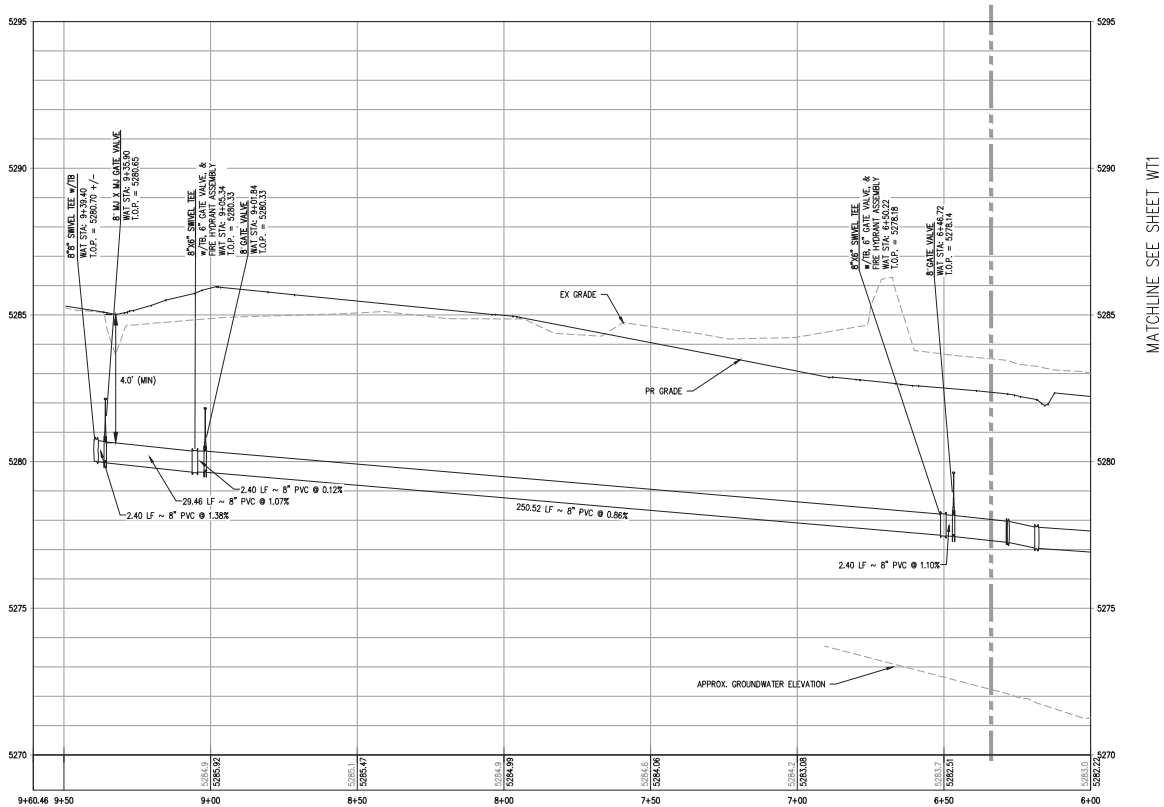


MARSHALL ST FH – PLAN
1" = 20'



SCALE: 1"=200'



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LINCOLN AVENUE CAPITAL

MARSHALL POINTE
WATER PLAN AND PROFILE

COLORADO LICENSED — JOSEPH D. OTTOMAN — 43327 — 05/08/2024 — PROFESSIONAL ENGINEER

PROJECT #: 220319

SHEET NUMBER
WT2

36 OF 44

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F:\LEP\ATH P \2022\220319\ENGINEERING\CUTLITIES\WATER\CD\ - WATER PLP.DWG, LAYOUT: LAYOUT1 (2)
9 XREFs: cfg signature:Nick, e-base, c-topo, p-base, p-legal, p-utl, stamp, cd
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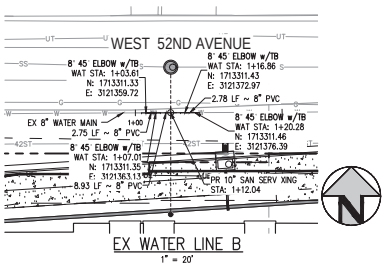
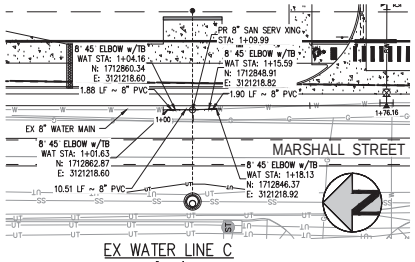


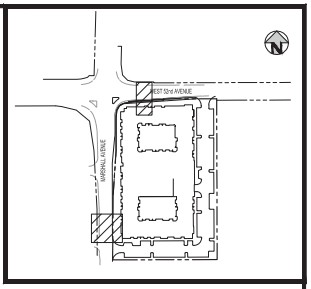
EX WATER LINE B

1" = 20'



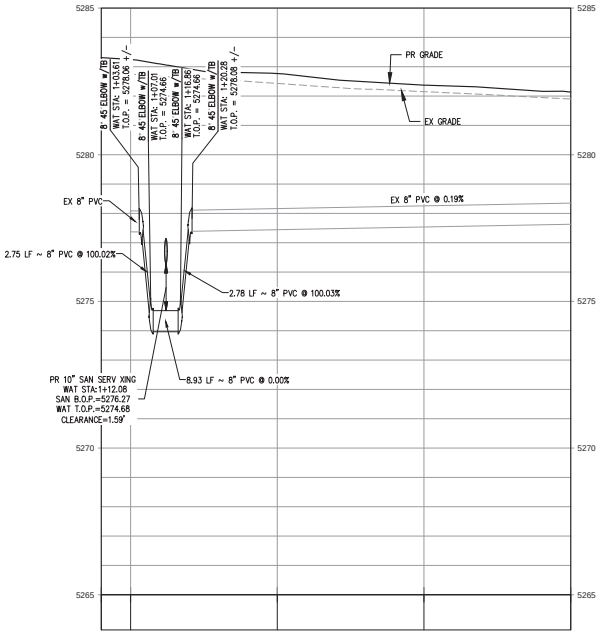
EX WATER LINE C

1" = 20'



KEY MAP

SCALE: 1"=200'



EX WATER LINE B PROFILE

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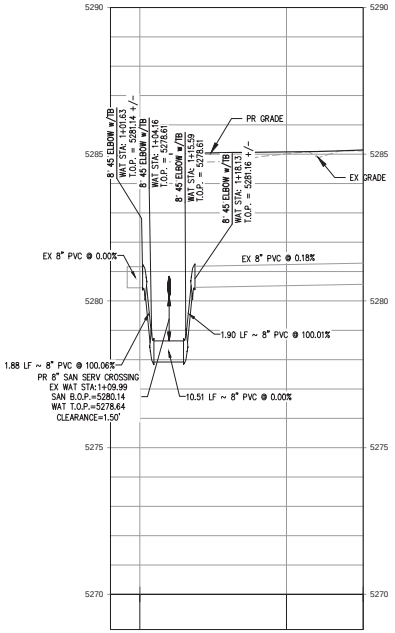

EX WATER LINE C PROFILE

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LINCOLN AVENUE CAPITAL

MARSHALL POINTE
WATER PLAN AND PROFILE

JOSHUA D. OSBORN — 43327 — 05/08/2024 — PROFESSIONAL ENGINEER

PROJECT #: 220319

SHEET NUMBER

WT3

36 OF 44

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F:\LP\ACTIVE P\2022\220319\ENGINEERING\CIVIL\UTILITIES\WATER\CAD\ - WATER PLP.DWG, LAYOUT: LAYOUT1 (3)
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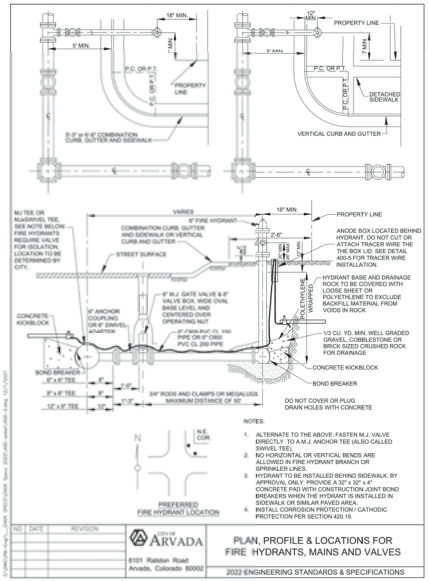

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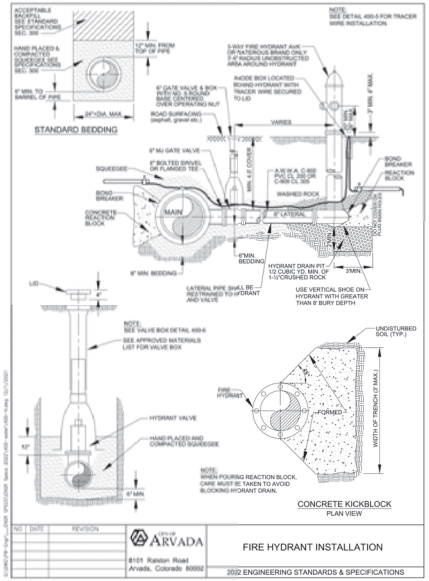

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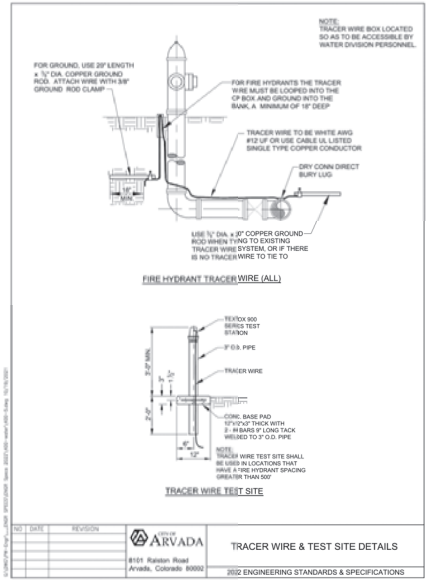

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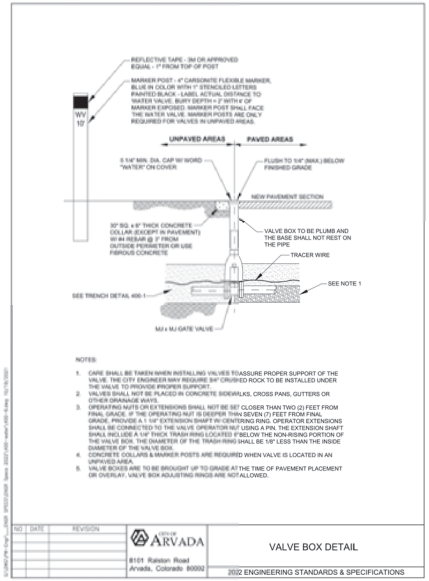

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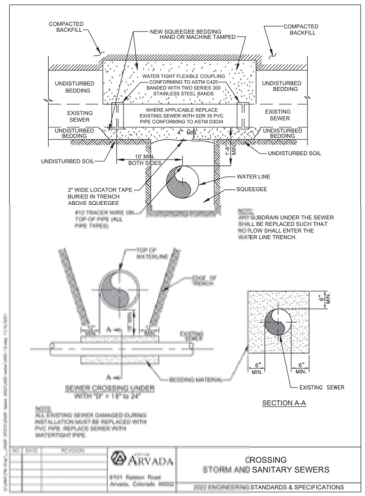

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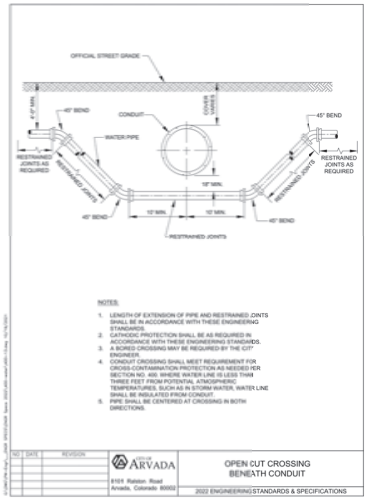

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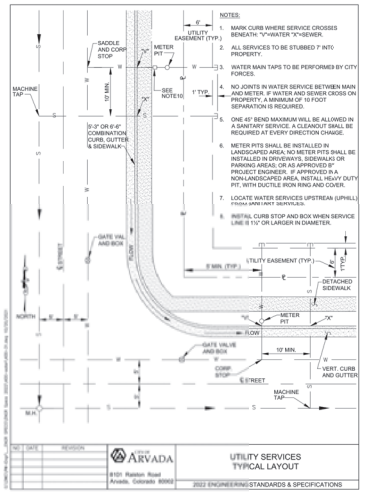

400-31

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LINCOLN AVENUE CAPITAL

MARSHALL POINTE
WATER DETAILS

PROJECT #: 220319
SHEET NUMBER
WT4

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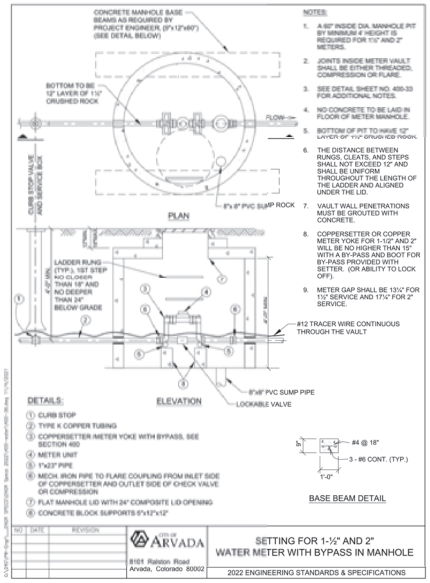

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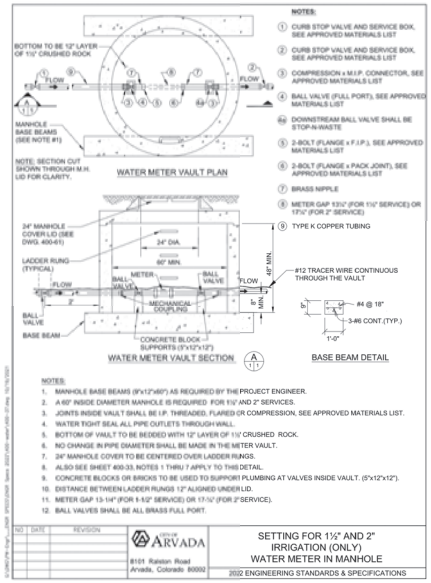

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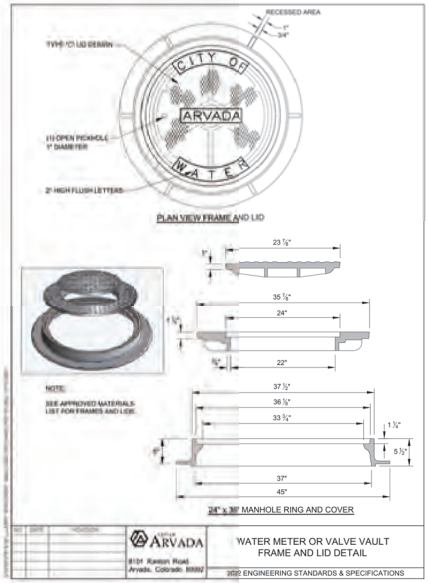


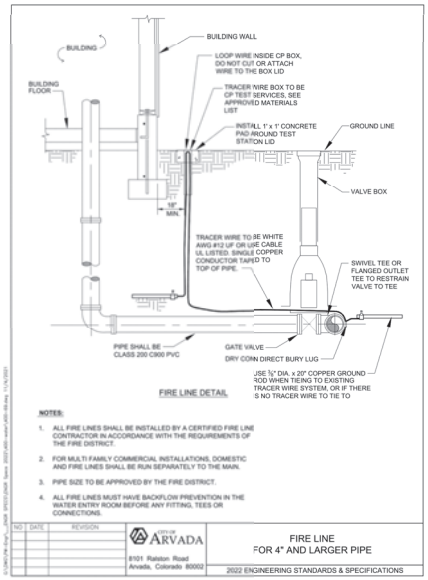
400-61

GENERAL METER NOTES

1. LOCATION OF METER PIT TO BE APPROVED BY PROJECT ENGINEER REPRESENTATIVE IN THE FIELD. LID TO BE A MINIMUM OF 18" FROM BACK OF WALK.
2. ALL SETTINGS MUST BE INSPECTED BY THE ENGINEERING DIVISION BEFORE BACKFILLING.
3. IF THE STREET OR GROUND IS NOT TO FINAL GRADE AT THE TIME OF INSTALLATION OF THE METER, THE OWNER MUST RAISE OR LOWER THE METER VAULT WHEN THE FINAL GRADE IS ESTABLISHED. ALSO THE METER YOKE MUST BE ADJUSTED TO 14" TO 18" BELOW THE TOP OF THE FROST LID.
4. GALVANIZED JOINTS AND PIPING SHALL NOT BE ALLOWED.
5. A BYPASS IS REQUIRED ON ALL METERS 1-1/2" AND LARGER UNLESS OTHERWISE SPECIFIED BY PROJECT ENGINEER. 1-½" AND LARGER IRRIGATION ONLY METERS DO NOT REQUIRE A BYPASS.
6. THE SERVICE LINE THROUGH AND ON BOTH SIDES OF THE METER PIT MUST BE OF TYPE K COPPER (3/4"-2").
7. THE SERVICE LINE SHALL BE TRACEABLE TO THE BUILDING FOUNDATION. IF THE MATERIAL OF THE SERVICE LINE IS NOT TRACEABLE, TRACER WIRE SHALL BE INSTALLED.
8. NO CONNECTIONS SHALL BE MADE IN THE METER PIT. ANY CONNECTIONS INCLUDING UPSIZING MUST BE MADE MORE THAN 5 FT. FROM THE METER PIT ON THE DOWNSTREAM SIDE.
9. VALVES SHALL BE IN CONFORMANCE WITH THESE STANDARDS:
   A. VALVES LESS THAN 3" SHALL BE FULL PORT BALL VALVES ONLY. ALL BALL VALVES SHALL BE LOCKABLE.
   B. ALL GATE VALVES 3" AND LARGER SHALL CONFORM WITH ARVADA'S STANDARD SPECIFICATIONS (SEE SECTION 460) AND APPROVED MATERIALS LIST.
10. ALL VALVES 3 INCH DIAMETER AND LARGER INSIDE VAULTS SHALL BE SUPPORTED BY ADJUSTABLE STEEL PIPE VALVE SUPPORTS. 1-1/2 INCH DIAMETER AND LARGER METERS SHALL BE SUPPORTED BY CONCRETE BLOCKS WITH STEEL SHIMS, IF REQUIRED BY UTILITIES DIVISION.
11. MANHOLE RINGS AND COVERS SHALL BE IN CONFORMANCE WITH DRAWING 400-61 OF THESE ENGINEERING STANDARDS. NO STEP SHALL BE MORE THAN 18" - 24" FROM FINISHED GRADE.
12. METER PITS AND COVERS SHALL BE IN CONFORMINCE WITH SECTION 400 OF THESE ENGINEERING STANDARDS.
13. OTHER METER SETTINGS: SETTINGS OF METERS OTHER THAN SHOWN AND DETAILED HEREIN SHALL BE CONSIDERED AS NON-STANDARD AND SHALL REQUIRE PRIOR APPROVAL OF PROPOSED PIPING LAYOUT, METER SETTING AND STRUCTURAL DESIGN OF VAULT FOR EACH SEPARATE INSTALLATION.
14. ON 1½" & LARGER VAULT SETTINGS, INSTALL RAMNECK BETWEEN SET RING AND ALL RISER RINGS (OR ON LID SECTION WHEN RISERS ARE NOT REQUIRED) TO PREVENT INFILTRATION.
15. CURB BOXES, METER PITS, METER VAULTS AND AMR DEVICES SHALL BE PROTECTED THROUGHOUT CONSTRUCTION. NO METER MAY BE REMOVED FROM ITS INSTALLED LOCATION UNTIL THE EXISTING TAP HAS BEEN CUT AT THE MAIN.
16. INSTALL ELECTRICAL ISOLATION DEVICES AT MAIN CONNECTION AND WITHIN METER AS PER SECTION 490.

GENERAL METER NOTES
8101 Ralston Road Arvada, Colorado 80002
2022 ENGINEERING STANDARDS & SPECIFICATIONS

400-33



400-69

APPROVED:

City Engineer — Date: 6/10/24 — Job Number: DA2023-0019

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Know what's below. Call before you dig.

DESIGNED BY: JDM
CHECKED BY: JDO
DRAWN BY: JDM

ISSUE DATE: 02-17-2023

DATE	REVISION COMMENTS
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07-13-2023	PER CITY COMMENTS
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HARRIS KOCHER SMITH
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

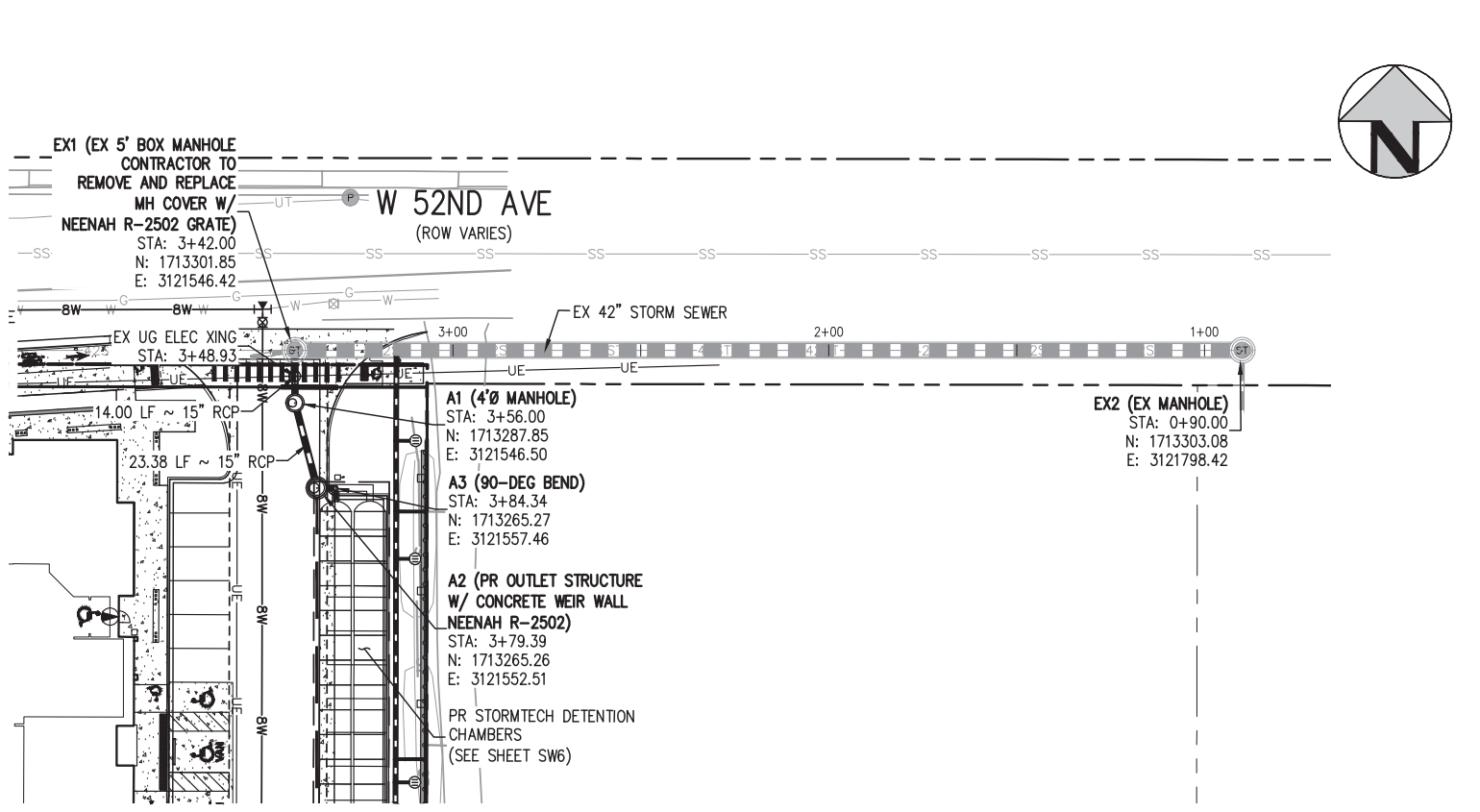
LINCOLN AVENUE CAPITAL

MARSHALL POINTE
WATER DETAILS

PROJECT #: 220319
SHEET NUMBER
WT5
39 OF 44

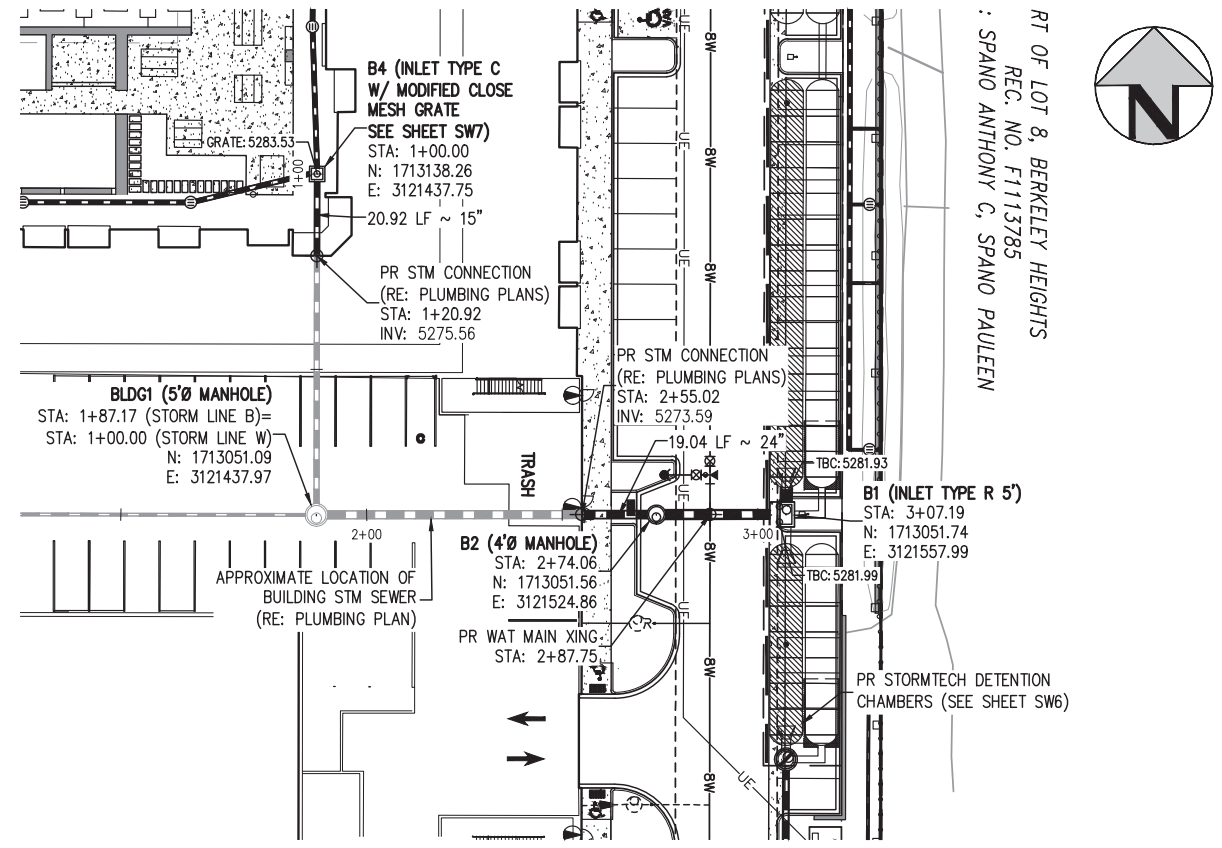
NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH
F:\LER\ATH-P \2022\2203\9\ENGINEERING\UTILITIES\WATER\CD - DETAILS.DWG LAYOUT: LAYOUT1 (2)
NO XREFS
PLOTTED: TUE 04/30/24 3:51:13P BY: LERBE \ ENTERPRISE

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.



STORM LINE A – PLAN

1" = 30'



STORM LINE B – PLAN

1" = 30'

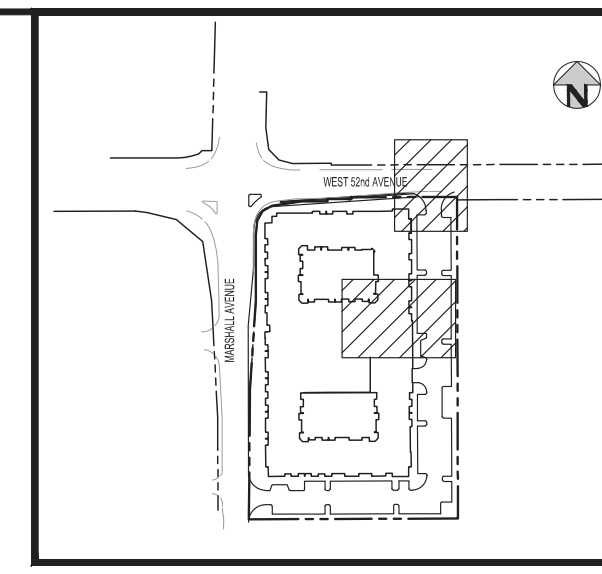
LEGEND

EX

- MANHOLE
- HYDRANT
- STREET LIGHT
- UNDERGROUND ELECTRIC — UE
- WATER — W
- IRRIGATION WATER — IR
- GAS — G
- STORM SEWER — ST
- SANITARY SEWER — SS
- UNDERGROUND TELECOMM — UT
- TO BE DEMOLISHED

PR

- MANHOLE
- HYDRANT
- DOMESTIC WATER SERVICE
- FIRE WATER SERVICE
- INLET
- STREET LIGHT
- UNDERGROUND ELECTRIC — UE
- GAS — G
- WATER — 8W
- STORM SEWER
- SANITARY SEWER — SS
- SANITARY SERVICE



KEY MAP

SCALE: 1"=200'

GENERAL STORM NOTES:

1. THE CONTRACTOR SHALL NOTIFY COLORADO 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE, AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE, AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
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5. ALL COORDINATES ARE AT THE CENTER OF THE STRUCTURE UNLESS OTHERWISE INDICATED.
6. CONTRACTOR SHALL USE RCP, PVC, PP, OR HDPE PIPES FOR THE MAIN LINES, BUT SHALL NOTIFY THE JURISDICTIONAL UTILITY PROVIDER AND THE ENGINEER, PRIOR TO INSTALLATION, FOR APPROVAL. REGARDLESS OF PIPE MATERIAL, ALL STORM SEWER SHALL UTILIZE WATER-TIGHT JOINTS.
7. FOR ALL NON-CONCENTRIC MANHOLES, MANHOLE RINGS/COVERS AND STEPS LIDS SHALL BE ROTATED AS SHOWN IN PLAN VIEW.
8. ALL TYPE C & D INLETS SHALL HAVE CLOSE MESH GRATES.
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14. EXISTING MANHOLE EX1 MAY NEED TO BE REMOVED & REPLACED AT THE DISCRETION OF THE CITY INSPECTOR. THE EXISTING MANHOLE COVER SHALL BE REPLACED WITH NEENAH R-2502 (SEE SHEET SW7) OR ENGINEER APPROVED EQUIVALENT. 12-INCH PIPE SHALL BE REMOVED AND PLUGGED IN ACCORDANCE WITH CITY STANDARDS.
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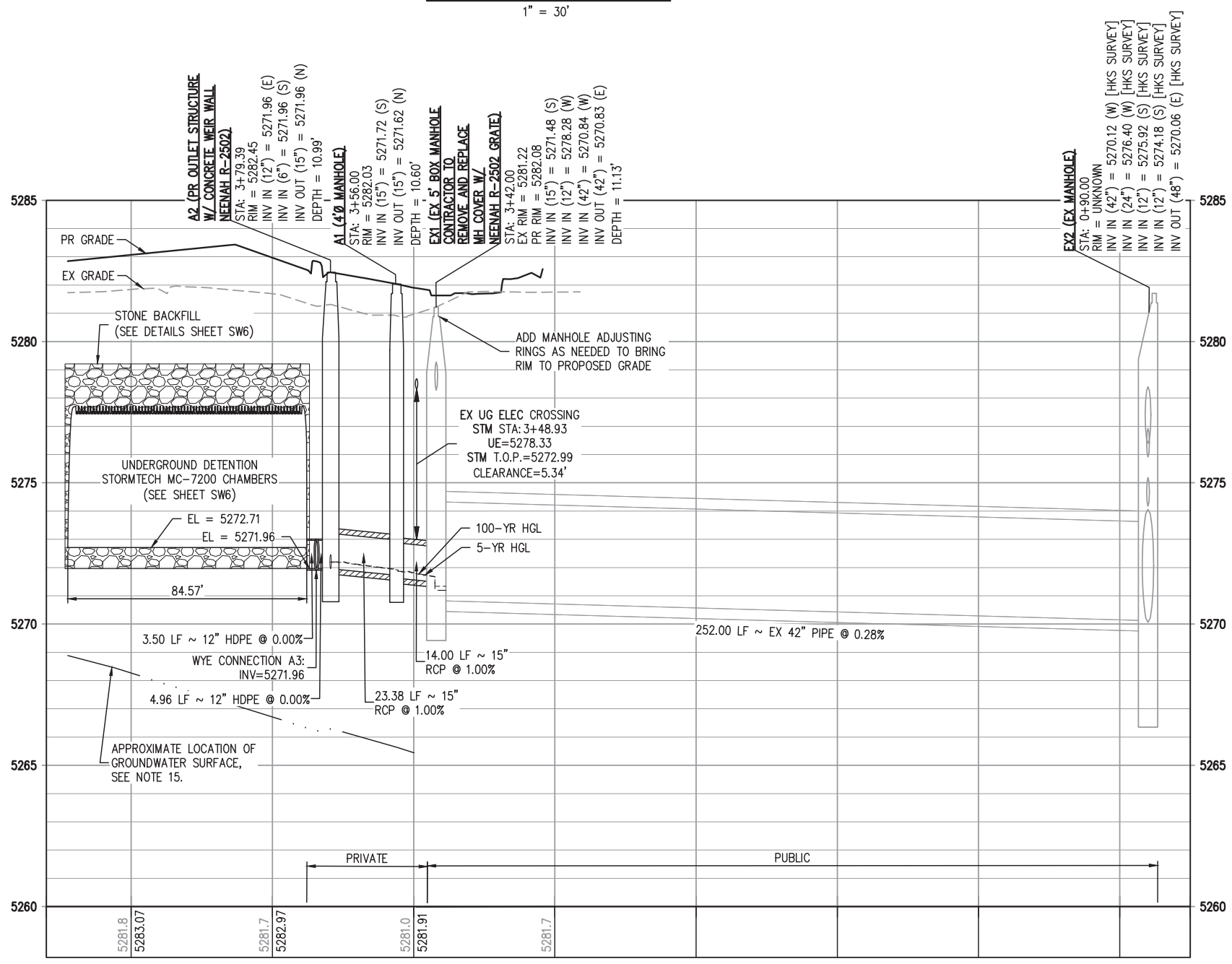
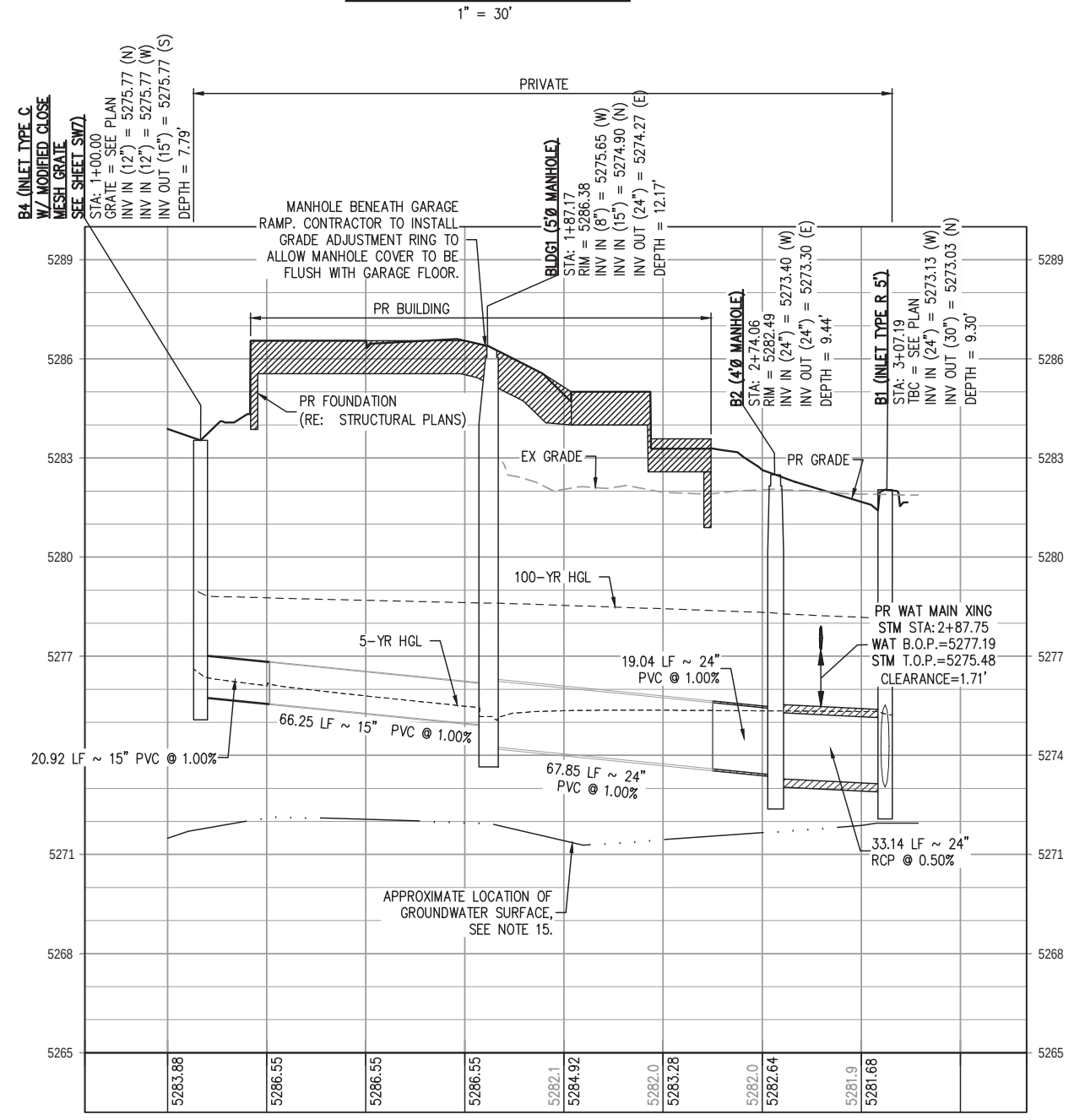


STORM LINE A PROFILE

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'



STORM LINE B PROFILE

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'

ABBREVIATIONS

BOP	BOTTOM OF PIPE
BS	BOTTOM OF STEP
BW	BOTTOM OF WALL (FG)
CONC	CONCRETE
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DR	DOOR
DS	DOWNSPOUT
E	EAST, EASTING
EGL	ENERGY GRADE LINE
EL	ELEVATION
EOA	EDGE OF ASPHALT
EOC	EDGE OF CONCRETE
EOP	EDGE OF PAVEMENT
ESMT	EASEMENT
EX	EXISTING
FES	FLARED END SECTION
FF	FINISHED FLOOR
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
GB	GRADE BREAK
GV	GATE VALVE
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HGL	HYDRAULIC GRADE LINE
HORZ	HORIZONTAL
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PHS	PHASE
PR	PROPOSED
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT-OF-WAY
SAN	SANITARY
SS	SANITARY SEWER
STA	STATION
STM	STORM
TB	THRUST BLOCK
TBC	TOP/BACK OF CURB
TOP	TOP OF PIPE
TS	TOP OF STEP
TW	TOP OF WALL (FG)
TYP	TYPICAL
UG	UNDERGROUND
VERT	VERTICAL
WAT	WATER

APPROVED:

City Engineer	Date	Job Number
Jenny Wolfschlag, PE	6/10/24	DA2023-0019

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PLOTTED: TUE 04/30/24 3:51:37P BY: LIBBEY ENDERSBE

811 Know what's below. Call before you dig.

SCALE: 1" = 30' (30 0 30 60)

DESIGNED BY: AML
CHECKED BY: MAW
DRAWN BY: AML

ISSUE DATE: 02-17-2023

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HKS HARRIS KOCHER SMITH
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LINCOLN AVENUE CAPITAL

MARSHALL POINTE

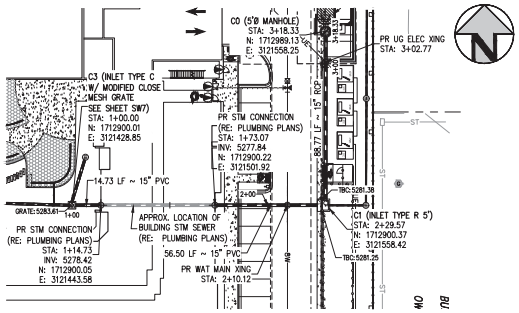
STORM SEWER PLAN & PROFILES

COLORADO LICENSED PROFESSIONAL ENGINEER MARK A. WEST 38561 05-08-2024

PROJECT #: 220319

SHEET NUMBER

SW1



STORM LINE C – PLAN

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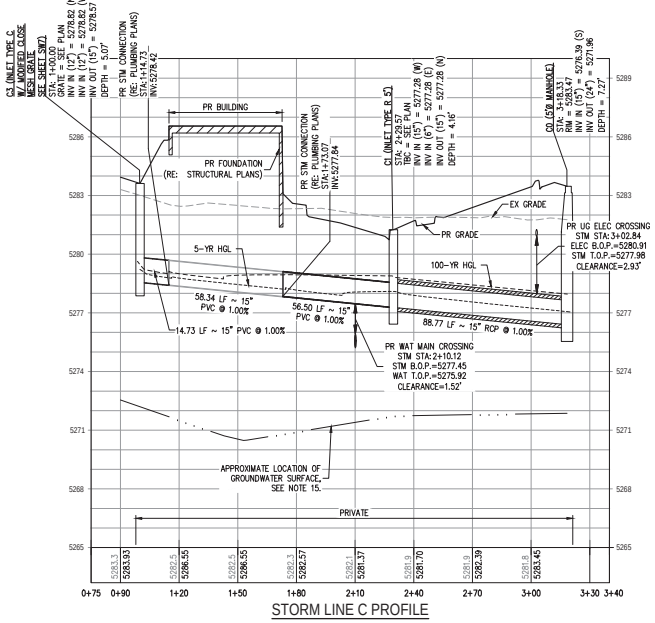

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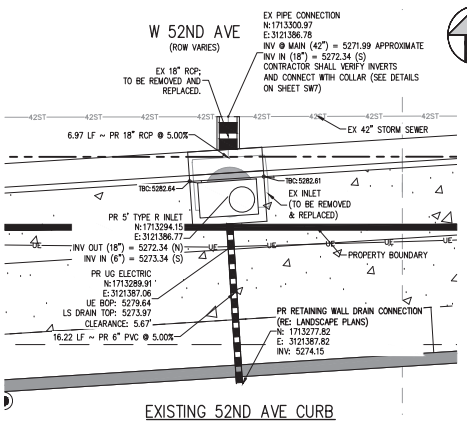
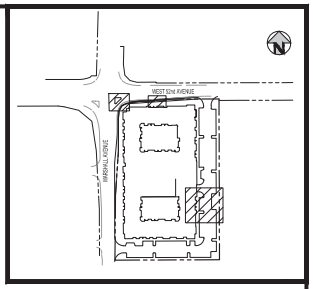


EXISTING 52ND AVE CURB
INLET REPLACEMENT

1" = 5'



KEY MAP

SCALE: 1"=200'

LEGEND

	EX
MANHOLE	
HYDRANT	
STREET LIGHT	
UNDERGROUND ELECTRIC	UE
WATER	W
IRRIGATION WATER	IR
GAS	G
STORM SEWER	ST
SANITARY SEWER	SS
UNDERGROUND TELECOMM	UT
TO BE DEMOLISHED	UT

	PR
MANHOLE	
HYDRANT	
DOMESTIC WATER SERVICE	
FIRE WATER SERVICE	
INLET	
STREET LIGHT	
UNDERGROUND ELECTRIC	UE
GAS	G
WATER	SW
STORM SEWER	
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APPROVED:

City Engineer — 6/10/24 Date — DA2023-0019 Job Number

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811 Know what's below. Call before you dig.

SCALE: 1" = 30'

DESIGNED BY: AML
CHECKED BY: MAW
DRAWN BY: AML

ISSUE DATE: 02-17-2023

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LINCOLN AVENUE CAPITAL

MARSHALL POINTE
STORM SEWER PLAN & PROFILES

COLORADO REGISTERED — MARK A. WAY — 38561 — 05-08-2024

PROJECT #: 220319

SHEET NUMBER

SW2

41 OF 46

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH

FILEPATH: P:\2022\220319\ENGINEERING\DRAINAGE\SW_STORM LINE PROFILES.DWG LAYOUT: LINE C
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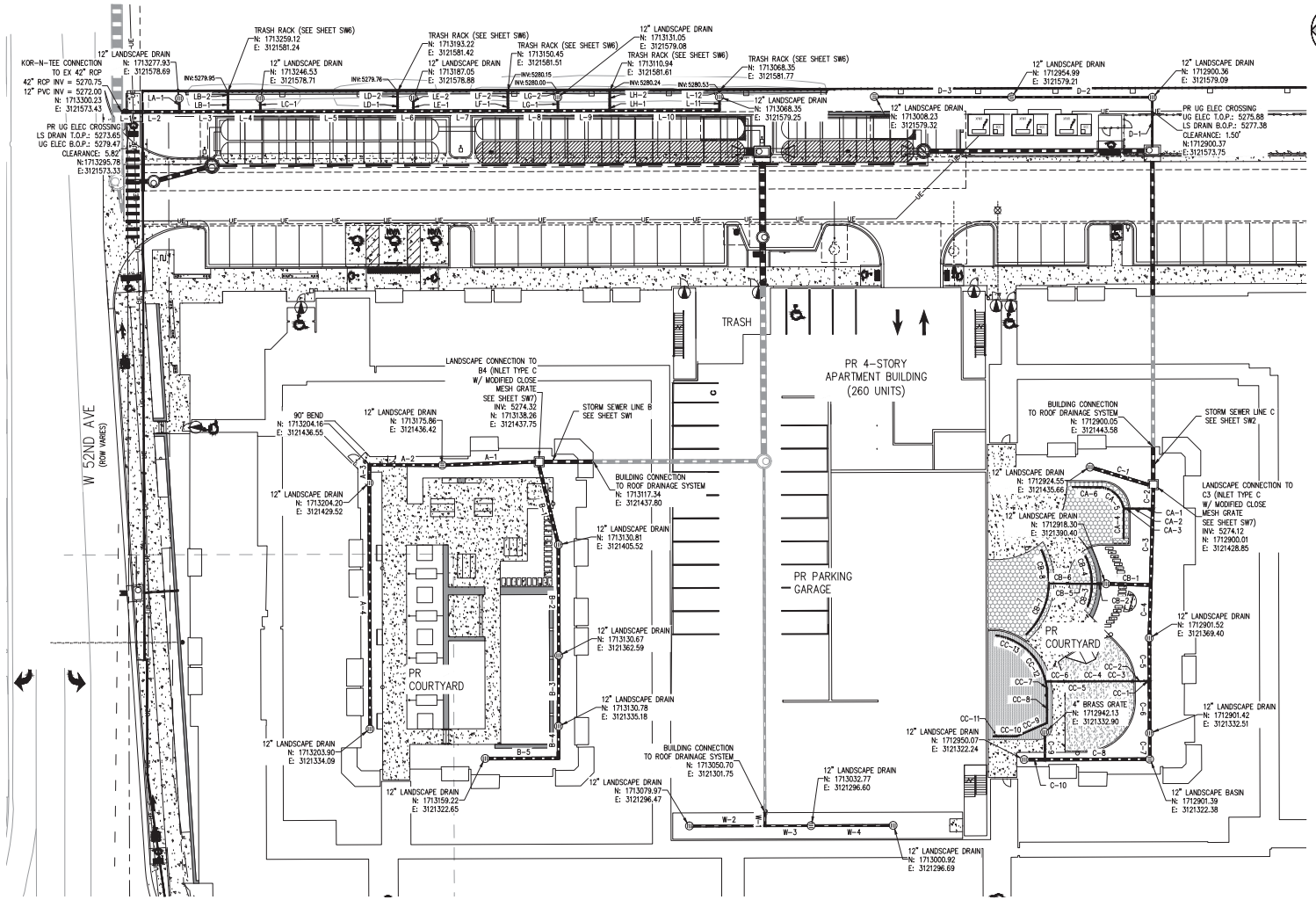

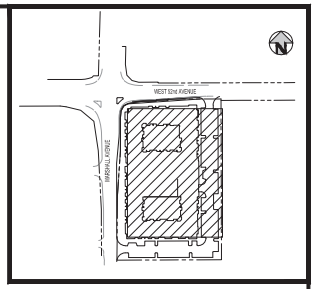

KEY MAP
SCALE: 1"=200'

GENERAL LANDSCAPE DRAIN NOTES:

1. CONTRACTOR SHALL USE 90-DEGREE WYES AT PERPENDICULAR JOINTS WHERE POSSIBLE.
2. CONTRACTOR SHALL USE CONCENTRIC REDUCERS UNLESS OTHERWISE NOTED. WHERE ECCENTRIC REDUCERS ARE USED THE INVERTS MUST MATCH.
3. CONTRACTOR SHALL USE STANDARD PVC FITTINGS WHEN POSSIBLE UNLESS OTHERWISE NOTED ON THE PLAN.
4. ALL LANDSCAPE DRAINS PIPES SHALL BE WATERTIGHT PVC, RIGID HDPE WITH SMOOTH INNER WALL, OR ENGINEER APPROVED EQUIVALENT.
5. ALL LANDSCAPE DRAIN PIPES SHALL BE A MINIMUM OF 2-FT DEEP (UNLESS OTHERWISE NOTED) AND SHALL HAVE A 0.50% MINIMUM SLOPE.
6. LANDSCAPE DRAIN GRATES IN LANDSCAPED AREAS SHALL BE NYLOPLAST 12-INCH DOME STYLE GRATES/COVERS, OR ENGINEER-APPROVED EQUIVALENT.
7. LANDSCAPE DRAIN GRATES IN PAVEMENT SHALL BE PEDESTRIAN-FRIENDLY, 4-INCH ROUND BRASS GRATES OR ENGINEER-APPROVED EQUIVALENT UNLESS OTHERWISE NOTED ON THE PLAN.
8. TRENCH DRAINS SHALL BE ACO KLASSIC KS100S WITH TYPE 461Q DUCTILE IRON SLOTTED GRATE OR ENGINEER-APPROVED EQUIVALENT. TRENCH DRAINS SHALL HAVE AN INVERT SLOPE OF AT LEAST 0.50%. TRENCH DRAIN INVERT SHALL MATCH THE CONNECTING LANDSCAPE DRAIN PIPE INVERT. FOR GRATE ELEVATIONS SEE SHEET(S) C013.
9. LANDSCAPE DRAINS LOCATED AT THE END OF A LINE SHALL BE INSTALLED WITH A RISER AND 90 DEGREE BEND MATCHING THE SIZE OF THE PIPE CONNECTING TO THE DRAIN AS CALLED OUT IN THE LANDSCAPE DRAIN TABLE.
10. LANDSCAPE DRAINS CONNECTING TO ROOF DOWNSPOUTS SHALL BE INSTALLED WITH A RISER AND 90 DEGREE BEND MATCHING THE SIZE OF THE PIPE CONNECTING TO THE ROOF DRAIN AS CALLED OUT IN THE LANDSCAPE DRAIN TABLE.
11. INLINE LANDSCAPE DRAINS SHALL BE INSTALLED WITH A RISER AND TEE FITTING MATCHING THE SIZE OF THE MAIN LINE CONNECTION AS CALLED OUT IN THE LANDSCAPE DRAIN TABLE. IF TWO OR MORE PIPE SIZES INTERSECT AT THE INLINE DRAIN CONNECTION THEN THE LARGER PIPE SIZE SHALL DICTATE THE SIZE OF THE RISER.
12. AT ANY LOCATION WHERE MORE THAN TWO LANDSCAPE DRAIN PIPES INTERSECT AND CANNOT BE CONNECTED WITH STANDARD FITTINGS, A DRAIN BASIN SHALL BE INSTALLED. THE DRAIN BASIN SHALL BE SIZED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS.
13. FOR GRATE ELEVATIONS SEE DETAILED GRADING PLAN SHEET(S).
14. EXISTING ROOF DRAIN LOCATIONS (ALONG THE EAST SIDE OF THE PARCEL) AND INVERTS ARE FROM OLD SURVEY FILES FROM CLARK LAND SURVEY DATED 02/22/2022. THESE ROOF DRAINS WERE NOT ACCESSIBLE AT THE TIME OF THE HKS SURVEY AND HAVE NOT BEEN VERIFIED BY HKS. THE PIPE MATERIAL IS UNKNOWN AT THIS TIME. CONTRACTOR SHALL VERIFY LOCATION, SIZE, INVERT, MATERIAL, ETC. AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO START OF CONSTRUCTION. EXISTING PIPES SHALL BE CONNECTED TO THE PROPOSED PIPE SYSTEM AT THE INLET STRUCTURES; WITH A WYE CONNECTION; OR OTHER ENGINGEERED APPROVED EQUAVALENT AS PROPOSED BY THE CONTRACTOR.

ABBREVIATIONS

BOP	BOTTOM OF PIPE
BS	BOTTOM OF STEP
BW	BOTTOM OF WALL (FG)
CONC	CONCRETE
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DR	DOOR
DS	DOWNSPOUT
E	EAST, EASTING
EGL	ENERGY GRADE LINE
EL	ELEVATION
EOA	EDGE OF ASPHALT
EOC	EDGE OF CONCRETE
EOP	EDGE OF PAVEMENT
ESMT	EASEMENT
EX	EXISTING
FES	FLARED END SECTION
FF	FINISHED FLOOR
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
GB	GRADE BREAK
GV	GATE VALVE
HC	HANDICAP
HGL	HYDRAULIC GRADE LINE
HORZ	HORIZONTAL
HP	HIGH POINT
INV	INVERT
LP	LOW POINT
LSD	LANDSCAPE DRAIN
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
N	NORTH, NORTHING
PHS	PHASE
PR	PROPOSED
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT-OF-WAY
SAN	SANITARY
SS	SANITARY SEWER
STA	STATION
STM	STORM
TB	THRUST BLOCK
TBC	TOP/BACK OF CURB
TOP	TOP OF PIPE
TS	TOP OF STEP
TW	TOP OF WALL (FG)
TYP	TYPICAL
UG	UNDERGROUND
VERT	VERTICAL
WAT	WATER

APPROVED:

City Engineer — Date: 6/10/24 — Job Number: DA2023-0019

Review is for general compliance with the City of Arvada "Engineering Code of Standards and Specifications for the Design and Construction of Public Improvements", latest edition. Sole responsibility for completeness and/or accuracy of these Documents shall remain with the Registered Professional Engineer sealing these plans. The City does not accept liability for facilities designed by others.

811 Know what's below. Call before you dig.

SCALE: 1" = 20'

DESIGNED BY: EE
CHECKED BY: JDO
DRAWN BY: JTKR

ISSUE DATE: 02-17-2023

DATE	REVISION COMMENTS
04-28-2023	PER CITY COMMENTS
07-13-2023	PER CITY COMMENTS
09-01-2023	PER CITY COMMENTS
10-13-2023	ISSUED FOR CONSTRUCTION
03-25-2024	MINOR CITY COMMENTS
04-24-2024	ISSUED FOR CONSTRUCTION

HKS HARRIS KOCHER SMITH
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LINCOLN AVENUE CAPITAL

MARSHALL POINTE
LANDSCAPE DRAIN PLAN

COLORADO LICENSED LANDSCAPE ARCHITECT 38561 — 05-08-2024

PROJECT #: 220319

SHEET NUMBER
SW3

42 OF 46

NO CHANGES ARE TO BE MADE TO THESE DRAWINGS WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH

FILEPATH: P:\2022\220319\ENGINEERING\UTILITIES\STORM\CD - LANDSCAPE DRAIN PLAN.DWG LAYOUT: LAYOUT1
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PLOTTED: TUE, MAR 26, 2024 3:53:57 PM BY: DEREK FEHERSEN

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PIPE TABLE						
NAME	SIZE	LENGTH	SLOPE	START INVERT ELEV	END INVERT ELEV	PIPE TYPE
A-1	12"	36.17'	4.02%	5277.23	5275.77	12" PVC
A-2	12"	28.31'	3.00%	5278.08	5277.23	12" PVC
A-3	12"	7.03'	3.00%	5278.29	5278.08	12" PVC
A-4	12"	95.43'	3.00%	5281.15	5278.29	12" PVC
B-1	12"	31.18'	3.39%	5276.83	5275.77	12" PVC
B-2	12"	42.93'	3.00%	5278.12	5276.83	12" PVC
B-3	12"	27.41'	3.32%	5279.03	5278.12	12" PVC
B-4	12"	12.46'	2.30%	5279.32	5279.03	12" PVC
B-5	12"	28.43'	3.17%	5280.22	5279.32	12" PVC
C-1	12"	23.59'	2.00%	5279.29	5278.82	12" PVC
C-2	12"	7.89'	2.41%	5279.01	5278.82	12" PVC
C-3	12"	29.60'	2.00%	5279.60	5279.01	12" PVC
C-4	12"	20.57'	2.00%	5280.01	5279.60	12" PVC
C-5	12"	16.75'	2.00%	5280.34	5280.01	12" PVC
C-6	12"	20.14'	2.00%	5280.74	5280.34	12" PVC
C-7	12"	10.13'	2.00%	5280.94	5280.74	12" PVC
C-8	12"	40.71'	1.00%	5281.35	5280.94	12" PVC
C-9	6"	10.64'	10.00%	5282.91	5281.85	6" PVC
C-10	12"	7.98'	4.36%	5281.69	5281.35	12" PVC
CA-1	4"	5.10'	2.62%	5279.81	5279.68	ADS 4" HDPE CORRUGATED PERFORATED PIPE
CA-2	4"	4.30'	100.00%	5284.11	5279.81	ADS 4" HDPE CORRUGATED PERFORATED PIPE
CA-3	4"	1.90'	5.26%	5284.21	5284.11	ADS 4" HDPE CORRUGATED PERFORATED PIPE
CA-4	4"	11.68'	1.63%	5284.40	5284.21	ADS 4" HDPE CORRUGATED PERFORATED PIPE
CA-5	4"	12.62'	2.85%	5284.57	5284.21	ADS 4" HDPE CORRUGATED PERFORATED PIPE
CA-6	4"	11.37'	3.08%	5284.92	5284.57	ADS 4" HDPE CORRUGATED PERFORATED PIPE
CB-1	12"	17.32'	14.03%	5282.03	5279.60	12" PVC
CB-2	4"	5.50'	23.70%	5284.00	5282.70	ADS 4" HDPE CORRUGATED PERFORATED PIPE
CB-3	4"	9.05'	5.97%	5284.54	5284.00	ADS 4" HDPE CORRUGATED PERFORATED PIPE
CB-4	4"	11.16'	5.75%	5284.64	5284.00	ADS 4" HDPE CORRUGATED PERFORATED PIPE
CB-5	4"	8.73'	7.06%	5284.62	5284.00	ADS 4" HDPE CORRUGATED PERFORATED PIPE

PIPE TABLE						
NAME	SIZE	LENGTH	SLOPE	START INVERT ELEV	END INVERT ELEV	PIPE TYPE
CB-6	4"	7.99'	1.00%	5284.70	5284.62	ADS 4" HDPE CORRUGATED PERFORATED PIPE
CB-7	4"	22.21'	1.00%	5284.92	5284.70	ADS 4" HDPE CORRUGATED PERFORATED PIPE
CB-8	4"	13.51'	1.00%	5284.84	5284.70	ADS 4" HDPE CORRUGATED PERFORATED PIPE
CC-1	4"	1.55'	13.15%	5281.21	5281.01	ADS 4" HDPE CORRUGATED PERFORATED PIPE
CC-2	4"	4.61'	41.40%	5283.12	5281.21	ADS 4" HDPE CORRUGATED PERFORATED PIPE
CC-3	4"	14.68'	1.00%	5283.27	5283.12	ADS 4" HDPE CORRUGATED PERFORATED PIPE
CC-4	4"	3.68'	2.17%	5283.35	5283.27	ADS 4" HDPE CORRUGATED PERFORATED PIPE
CC-5	4"	8.55'	3.67%	5283.66	5283.35	ADS 4" HDPE CORRUGATED PERFORATED PIPE
CC-6	4"	7.22'	15.51%	5284.78	5283.66	ADS 4" HDPE CORRUGATED PERFORATED PIPE
CC-7	4"	4.93'	4.26%	5284.99	5284.78	ADS 4" HDPE CORRUGATED PERFORATED PIPE
CC-8	4"	11.21'	1.00%	5285.10	5284.99	ADS 4" HDPE CORRUGATED PERFORATED PIPE
CC-9	4"	12.82'	1.00%	5285.23	5285.10	ADS 4" HDPE CORRUGATED PERFORATED PIPE
CC-10	4"	5.99'	1.83%	5285.34	5285.23	ADS 4" HDPE CORRUGATED PERFORATED PIPE
CC-11	4"	3.10'	1.21%	5285.38	5285.34	ADS 4" HDPE CORRUGATED PERFORATED PIPE
CC-12	4"	16.76'	1.00%	5284.95	5284.78	ADS 4" HDPE CORRUGATED PERFORATED PIPE
CC-13	4"	11.22'	3.74%	5285.37	5284.95	ADS 4" HDPE CORRUGATED PERFORATED PIPE
D-1	6"	19.17'	1.00%	5277.47	5277.28	6" PVC
D-2	6"	54.62'	1.00%	5278.02	5277.47	6" PVC
D-3	6"	53.24'	1.00%	5278.55	5278.02	6" PVC
L-1	12"	1.56'	102.00%	5273.59	5272.00	12" PVC
L-2	12"	20.75'	2.00%	5274.01	5273.59	12" PVC
L-3	12"	18.82'	2.45%	5274.47	5274.01	12" PVC
L-4	12"	12.58'	2.50%	5274.79	5274.47	12" PVC
L-5	12"	53.32'	2.50%	5276.12	5274.79	12" PVC
L-6	12"	6.17'	2.50%	5276.27	5276.12	12" PVC
L-7	12"	36.61'	2.50%	5277.19	5276.27	12" PVC
L-8	12"	19.39'	2.50%	5277.67	5277.19	12" PVC
L-9	12"	20.12'	2.50%	5278.18	5277.67	12" PVC
L-10	12"	42.58'	2.50%	5279.24	5278.18	12" PVC
L-11	6"	5.19'	2.00%	5279.34	5279.24	6" PVC

PIPE TABLE						
NAME	SIZE	LENGTH	SLOPE	START INVERT ELEV	END INVERT ELEV	PIPE TYPE
L-12	6"	2.52'	2.00%	5280.53	5280.48	6" PVC
LA-1	6"	5.19'	2.00%	5274.11	5274.01	6" PVC
LB-1	6"	5.33'	102.00%	5279.90	5274.47	6" PVC
LB-2	6"	2.37'	2.00%	5279.95	5279.90	6" PVC
LC-1	6"	5.13'	2.00%	5274.89	5274.79	6" PVC
LD-1	6"	3.49'	102.00%	5279.68	5276.12	6" PVC
LD-2	6"	4.21'	2.00%	5279.76	5279.68	6" PVC
LE-1	6"	2.95'	102.00%	5279.28	5276.27	6" PVC
LE-2	6"	2.19'	2.00%	5279.32	5279.28	6" PVC
LF-1	6"	2.81'	102.00%	5280.05	5277.19	6" PVC
LF-2	6"	4.87'	2.00%	5280.15	5280.05	6" PVC
LG-1	6"	5.19'	2.00%	5277.77	5277.67	6" PVC
LG-2	6"	2.51'	2.00%	5280.00	5279.95	6" PVC
LH-1	6"	1.91'	102.00%	5280.12	5278.18	6" PVC
LH-2	6"	5.77'	2.00%	5280.24	5280.12	6" PVC
W-1	8"	5.20'	1.00%	5277.07	5277.02	8" PVC
W-2	8"	29.29'	2.00%	5277.66	5277.07	8" PVC
W-3	8"	17.91'	2.00%	5277.43	5277.07	8" PVC
W-4	8"	31.85'	2.00%	5278.07	5277.43	8" PVC

APPROVED:

City Engineer — 6/10/24 Date — DA2023-0019 Job Number

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20 0 20 40
SCALE: 1" = 20'

DESIGNED BY: EE
CHECKED BY: JDO
DRAWN BY: JTKR

ISSUE DATE: 02-17-2023

DATE	REVISION COMMENTS
04-26-2023	PER CITY COMMENTS
07-13-2023	PER CITY COMMENTS
10-13-2023	ISSUED FOR CONSTRUCTION
03-25-2024	MINOR CITY COMMENTS
04-24-2024	ISSUED FOR CONSTRUCTION

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LINCOLN AVENUE CAPITAL

MARSHALL POINTE
LANDSCAPE DRAIN TABLE

COLORADO LICENSED LANDSCAPE ARCHITECT
JAMES A. WEST
38561
05-08-2024

PROJECT #: 220319

SHEET NUMBER
SW4
43 OF 46

FILEPATH: P:\2022\220319\ENGINEERING\UTILITIES\STORM\CD - LANDSCAPE DRAIN PLAN.DWG LAYOUT: LAYOUT1 (2)
7 XREFs: e-base, e-input, keymap, p-base, p-input, p-util, stamp - cd
PLOTTED: TUE, MAY 7, 2024 - 3:53:59P BY: LIBBY EAGERSEN

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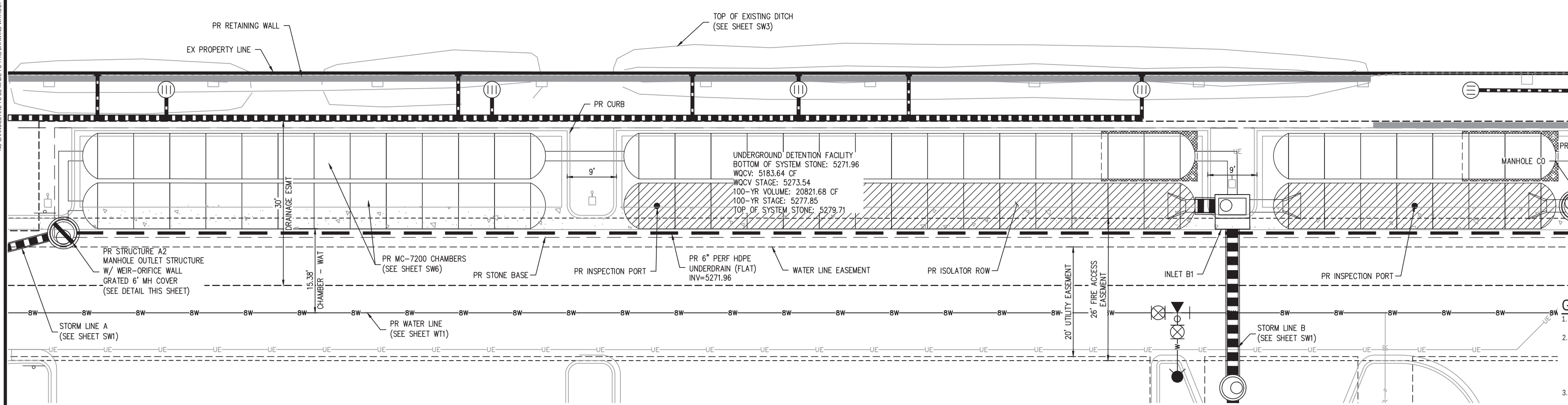
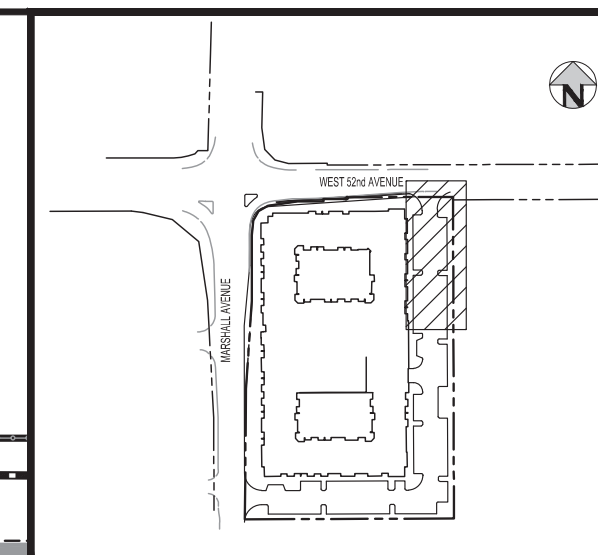


UNDERGROUND DETENTION PLAN

1" = 10'



KEY MAP

SCALE: 1"=200'

GENERAL STORM NOTES:

1. THE CONTRACTOR SHALL NOTIFY COLORADO 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE, AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE, AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
3. PIPE LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE FOR CYLINDRICAL MANHOLES AND TO THE INSIDE FACE OF INLETS AND OTHER BOX STRUCTURES. PIPE LENGTHS ARE MEASURED TO THE END OF THE STRUCTURE FOR ALL FLARED END SECTIONS.
4. STATIONING OF INLETS SHOWN IN STORM SEWER PROFILES IS AT CENTER OF STRUCTURE.
5. ALL COORDINATES ARE AT THE CENTER OF THE STRUCTURE UNLESS OTHERWISE INDICATED.
6. CONTRACTOR SHALL USE RCP, PVC, PP, OR HDPE PIPES FOR THE MAIN LINES, BUT SHALL NOTIFY THE JURISDICTIONAL UTILITY PROVIDER AND THE ENGINEER, PRIOR TO INSTALLATION, FOR APPROVAL. REGARDLESS OF PIPE MATERIAL, ALL STORM SEWER SHALL UTILIZE WATER-TIGHT JOINTS.
7. FOR ALL NON-CONCENTRIC MANHOLES, MANHOLE RINGS/COVERS AND STEPS LIDS SHALL BE ROTATED AS SHOWN IN PLAN VIEW.
8. ALL TYPE C & D INLETS SHALL HAVE CLOSE MESH GRATES.
9. ALL LATERAL PIPE-TO-PIPE CONNECTIONS SHALL BE MADE USING KOR-N-TEE CONNECTORS OR ENGINEER APPROVED EQUIVALENT.
10. CONTRACTOR SHALL ADJUST ALL EXISTING RIM ELEVATIONS TO MATCH THE PROPOSED GRADE.
11. CONTRACTOR SHALL MODIFY INLET BASES AS NEEDED IN ORDER TO ENSURE ALL STORM PIPES CONNECT PROPERLY TO THE INLET. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR REVIEW AND APPROVAL BY ENGINEER, OWNER, AND CITY/COUNTY PRIOR TO INSTALLATION.
12. CONTRACTOR SHALL PROVIDE ENGINEERED SHOP DRAWINGS, DESIGNED BY A LICENSED ENGINEER, DETAILING THE STRUCTURAL DESIGN OF ALL POND IMPROVEMENTS (FOREBAY, ENERGY DISSIPATING BAFFLES, OUTLET STRUCTURE, ETC.) FOR REVIEW AND APPROVAL BY ENGINEER, OWNER, AND CITY/COUNTY PRIOR TO INSTALLATION.
13. ANY SUBSURFACE DETENTION AND/OR WATER QUALITY SYSTEM DESIGNS SHOWN ON THESE PLANS (IF APPLICABLE) ARE SPECIFICALLY LIMITED TO ELEVATIONS, GRADES AND STORMWATER DETENTION AND/OR WATER QUALITY DESIGN VOLUMES AND RELEASE RATES. THE DESIGN AND PROFESSIONAL ENGINEER'S SEAL SPECIFICALLY EXCLUDES STRUCTURAL DESIGN (INCLUDING, BUT NOT LIMITED TO, BUOYANCY CALCULATIONS AND CONSTRUCTION, TRAFFIC, OR OTHER LOADING), DEWATERING, EXCAVATION, SHORING, AND MATERIALS AND BACKFILL SPECIFICATIONS. IF THE PROPOSED SYSTEM UTILIZES A PROPRIETARY AND/OR PRE-MANUFACTURED DETENTION AND/OR WATER QUALITY SYSTEM, THE OWNER OR CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL REQUIRED SYSTEM DESIGN, CALCULATIONS, MATERIALS AND BACKFILL SPECIFICATIONS WITH THE UNDERGROUND DETENTION AND/OR WATER QUALITY SYSTEM MANUFACTURER AND/OR SUPPLIER. CONSTRUCTION OBSERVATION BY THE MANUFACTURER'S REPRESENTATIVE IS ESSENTIAL FOR PROPER INSTALLATION OF UNDERGROUND DETENTION AND/OR WATER QUALITY SYSTEMS. AT A MINIMUM, THE INSTALLATION SHOULD BE INSPECTED BY THE MANUFACTURER'S REPRESENTATIVE DURING CONSTRUCTION AND ANY DEFICIENCIES OF THE INSTALLATION IDENTIFIED BY THE MANUFACTURER'S INSPECTION SHOULD BE CORRECTED IMMEDIATELY.
14. EXISTING MANHOLE EX1 MAY NEED TO BE REMOVED & REPLACED AT THE DISCRETION OF THE CITY INSPECTOR. THE EXISTING MANHOLE COVER SHALL BE REPLACED WITH NEENAH R-2502 (SEE SHEET SW7) OR ENGINEER APPROVED EQUIVALENT. 12-INCH PIPE SHALL BE REMOVED AND PLUGGED IN ACCORDANCE WITH CITY STANDARDS.
15. GROUNDWATER INFORMATION TAKEN FROM "GEOTECHNICAL ENGINEERING REPORT FOR MARSHALL POINTE RESIDENTIAL DEVELOPMENT" BY COLE GARNER GEOTECHNICAL ON APRIL 11, 2023.

STRUCTURE NOTES:

1. PRIOR TO CONSTRUCTION, CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR ALL COMPONENTS OF THE OUTLET STRUCTURE AND FOREBAYS FOR CITY AND ENGINEER REVIEW.
2. GRADE 60 REINFORCING STEEL REQUIRED. REINFORCING STEEL SHALL HAVE 2-INCH MINIMUM CLEARANCE FROM EDGE OF CONCRETE AND 3-INCH MIN CLEARANCE TO EDGE OF CONCRETE PLACED AGAINST SOIL, UNLESS OTHERWISE NOTED.
3. CONCRETE FOR THE OUTLET STRUCTURE AND FOREBAY SHALL BE CDOT CLASS D CONCRETE.
4. ALL EXPOSED CONCRETE CORNERS SHALL HAVE A 3/4-INCH CHAMFER UNLESS OTHERWISE NOTED.
5. BACKFILLING AGAINST WALLS SHALL NOT COMMENCE UNTIL CONCRETE HAS OBTAINED ITS FULL SEVEN DAY STRENGTH.
6. SUBGRADE TO BE 12" THICK COMPACTED CLEAN FILL.
7. OUTLET STRUCTURES STEPS SHALL CONFORM TO AASHTO M199.

WQCV WELL-SCREEN NOTES:

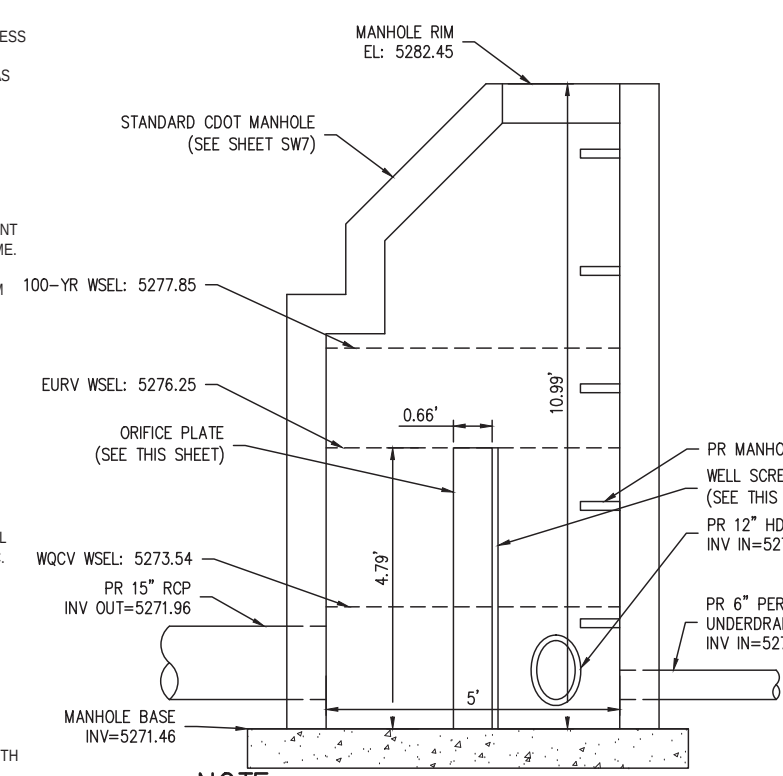
1. WELL-SCREEN SHALL BE STAINLESS STEEL AND ATTACHED BY INTERMITTENT WELDS OR STAINLESS STEEL BOLTS ALONG EDGE OF THE MOUNTING FRAME.
2. WQCV WELL SCREEN
- TYPE OF SCREEN: STAINLESS STEEL #93 VEE WIRE (JOHNSON VEE WIRE TM STAINLESS STEEL SCREEN OR EQUIVALENT WITH 60% OPEN AREA)
- SCREEN SLOT OPENING DIMENSION: 0.139" (SCREEN #93 VEE WIRE SLOT OPENING)
- TYPE AND SIZE OF SUPPORT ROD: TE 0.074"x0.50"
- SPACING OF SUPPORT ROD (O.C.): 1.0 INCH
- TOTAL SCREEN THICKNESS: 0.655"
- CARBON STEEL HOLDING FRAME TYPE: 3/4" x 1.0" ANGLE

GRATE AND ORIFICE PLATE NOTES:

1. GRATES AND ORIFICE PLATES SHALL BE MOUNTED USING STAINLESS STEEL HARDWARE. GRATES TO BE BOLTED DOWN TO OUTLET STRUCTURE 18" O.C.
2. GRATES AND ORIFICE PLATES SHALL BE STAINLESS STEEL, ALUMINUM OR STEEL. STEEL TRASH RACKS SHALL BE HOT DIP GALVANIZED AND HOT POWDER PAINTED AFTER GALVANIZED.
3. FIELD VERIFY GRATE DIMENSION PRIOR TO FABRICATION.

STORMTECH GENERAL NOTES:

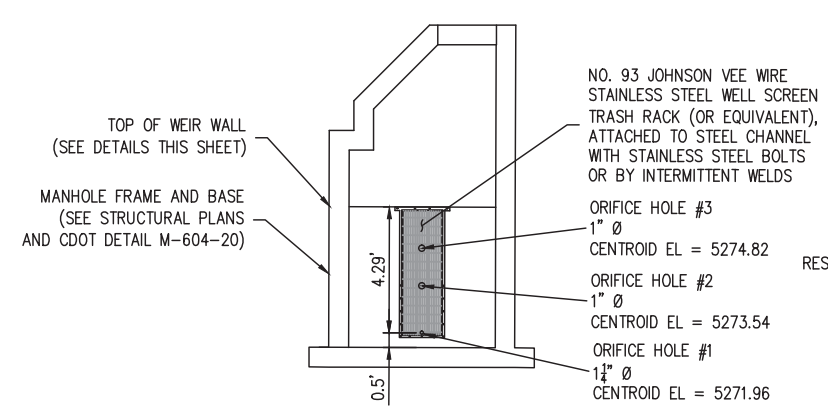
1. STORMTECH MC-7200 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".
2. DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
3. A MINIMUM OF 17.5' OF ADSPLUS175 GEOTEXTILE OVER BEDDING STONE AND UNDERNEATH CHAMBER FEET FOR SCOUR PROTECTION AT ALL CHAMBER INLET ROWS.



NOTE:
SEE CDOT STANDARD DETAIL M-604-20 FOR TYPICAL MANHOLE DESIGN. STRUCTURAL DESIGN BY OTHERS.

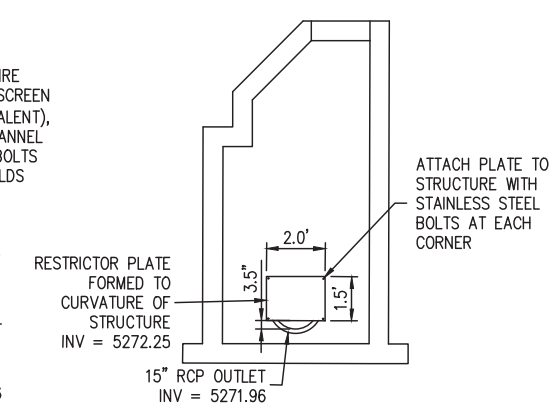
SECTION A-A

SCALE: NTS



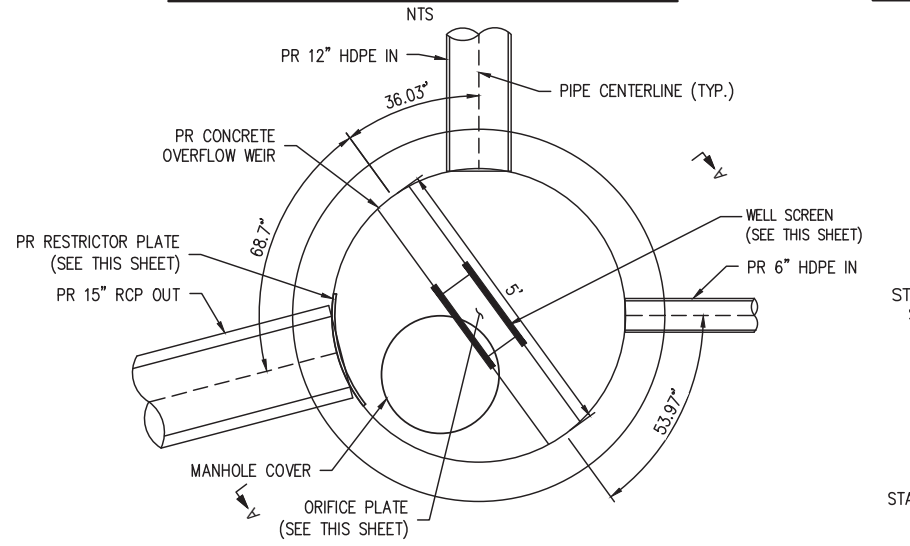
OUTLET STRUCTURE ORIFICE PLATE

NTS



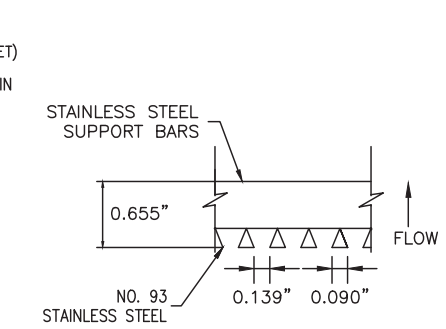
OUTLET STRUCTURE 100-YEAR RESTRICTOR PLATE

NTS



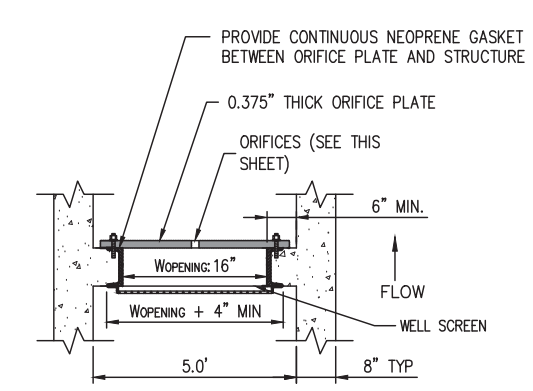
UNDERGROUND DETENTION OUTLET STRUCTURE A2

SCALE: NTS



WELL SCREEN DETAIL

NTS



OUTLET STRUCTURE ORIFICE PLATE

NTS

APPROVED:
Jerry Wolfschlag, PE — City Engineer
6/10/24 — Date
DA2023-0019 — Job Number

Review is for general compliance with the City of Arvada "Engineering Code of Standards and Specifications for the Design and Construction of Public Improvements", latest edition. Sole responsibility for completeness and/or accuracy of these Documents shall remain with the Registered Professional Engineer sealing these plans. The City does not accept liability for facilities designed by others.

Know what's below. Call before you dig. (811)

SCALE: 1" = 10'

DESIGNED BY: AML
CHECKED BY: MAW
DRAWN BY: AML

ISSUE DATE: 02-17-2023

DATE	REVISION COMMENTS
04-28-2023	PER CITY COMMENTS
07-13-2023	PER CITY COMMENTS
09-01-2023	PER CITY COMMENTS
10-13-2023	ISSUED FOR CONSTRUCTION
03-25-2024	MINOR CITY COMMENTS
04-24-2024	ISSUED FOR CONSTRUCTION

HARRIS KOCHER SMITH
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

LINCOLN AVENUE CAPITAL

MARSHALL POINTE
DETENTION PLAN

COLORADO LICENSED PROFESSIONAL ENGINEER MARK A. WEST 38561 05-08-2024

PROJECT #: 220319
SHEET NUMBER
SW5
44 OF 46

FILEPATH: P:\2022\220319\ENGINEERING\DRAINAGE\SW - DETENTION PLAN AND DETAILS.DWG LAYOUT: PLAN
10 XREFs: city signature block, e-base, e-legal, e-util, keymap, p-base, p-legal, p-util, stamp - cd[U], stamp - st
PLOTTED: TUE 04/30/24 3:52:14P BY: LIBBEY ENDERSBE

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.

PROJECT INFORMATION	
ENGINEERED PRODUCT MANAGER	
ADS SALES REP	
PROJECT NO.	

ADS Advanced Drainage Systems, Inc.

ADS SiteAssist FOR STORMTECH INSTALLATION INSTRUCTIONS VISIT OUR APP

MARSHALL POINTE - MC-7200
ARVADA, CO, USA

MC-7200 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH MC-7200.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60x101.
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 450 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-7200 CHAMBER SYSTEM

1. STORMTECH MC-7200 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH MC-7200 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 9" (230 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
8. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
9. STONE SHALL BE BROUGHT UP EVENLY AROUND CHAMBERS SO AS NOT TO DISTORT THE CHAMBER SHAPE. STONE DEPTHS SHOULD NEVER DIFFER BY MORE THAN 12" (300 mm) BETWEEN ADJACENT CHAMBER ROWS.
10. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
11. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIAL BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
12. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH MC-7200 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".
2. THE USE OF EQUIPMENT OVER MC-7200 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-7200 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

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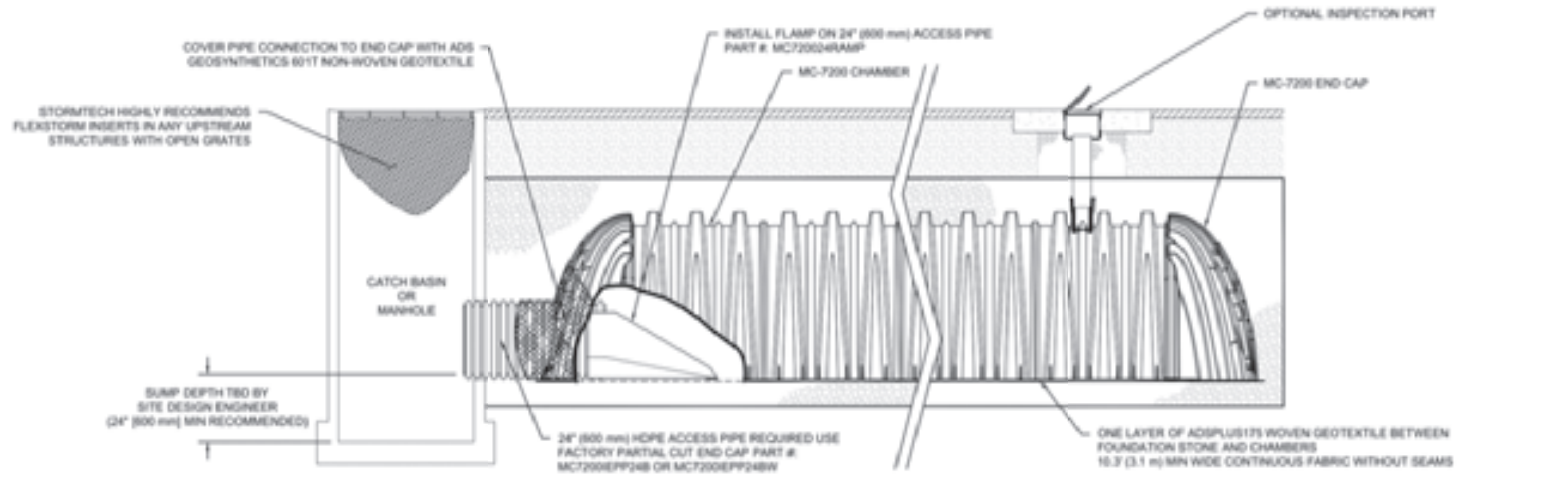


MC-7200 ISOLATOR ROW PLUS DETAIL
NTS

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

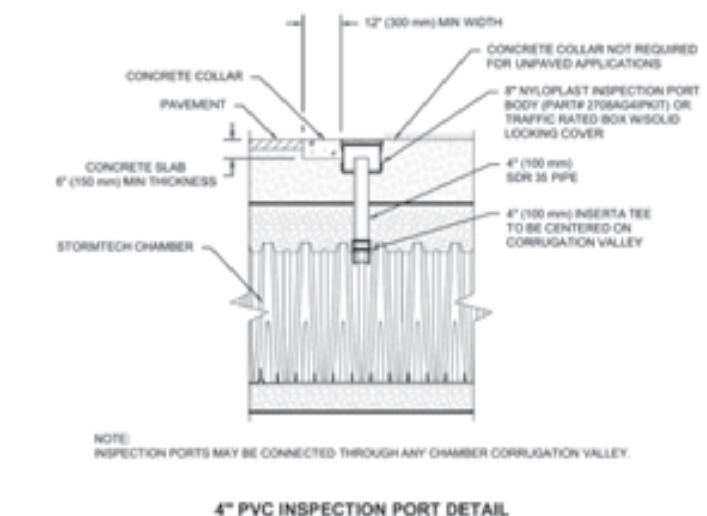
STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.



NOTE:
INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION VALLEY.

4" PVC INSPECTION PORT DETAIL (MC SERIES CHAMBER)
NTS

MARSHALL POINTE - MC-7200 | ARVADA, CO, USA | DATE: | DRAWN: JM | PROJECT #: | CHECKED: N/A | DATE | DRW | CHK | DESCRIPTION

ADS 4640 TRUEMAN BLVD HILLIARD, OH 43026 1-800-733-7473 | StormTech® Chamber System | 888-892-2694 | WWW.STORMTECH.COM

THIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADS UNDER THE DIRECTION OF THE SITE DESIGN ENGINEER OR OTHER PROJECT REPRESENTATIVE. THE SITE DESIGN ENGINEER SHALL REVIEW THIS DRAWING PRIOR TO CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE SITE DESIGN ENGINEER TO ENSURE THAT THE PRODUCT(S) DEPICTED AND ALL ASSOCIATED DETAILS MEET ALL APPLICABLE LAWS, REGULATIONS, AND PROJECT REQUIREMENTS.

SHEET 4 OF 5

PROPOSED LAYOUT

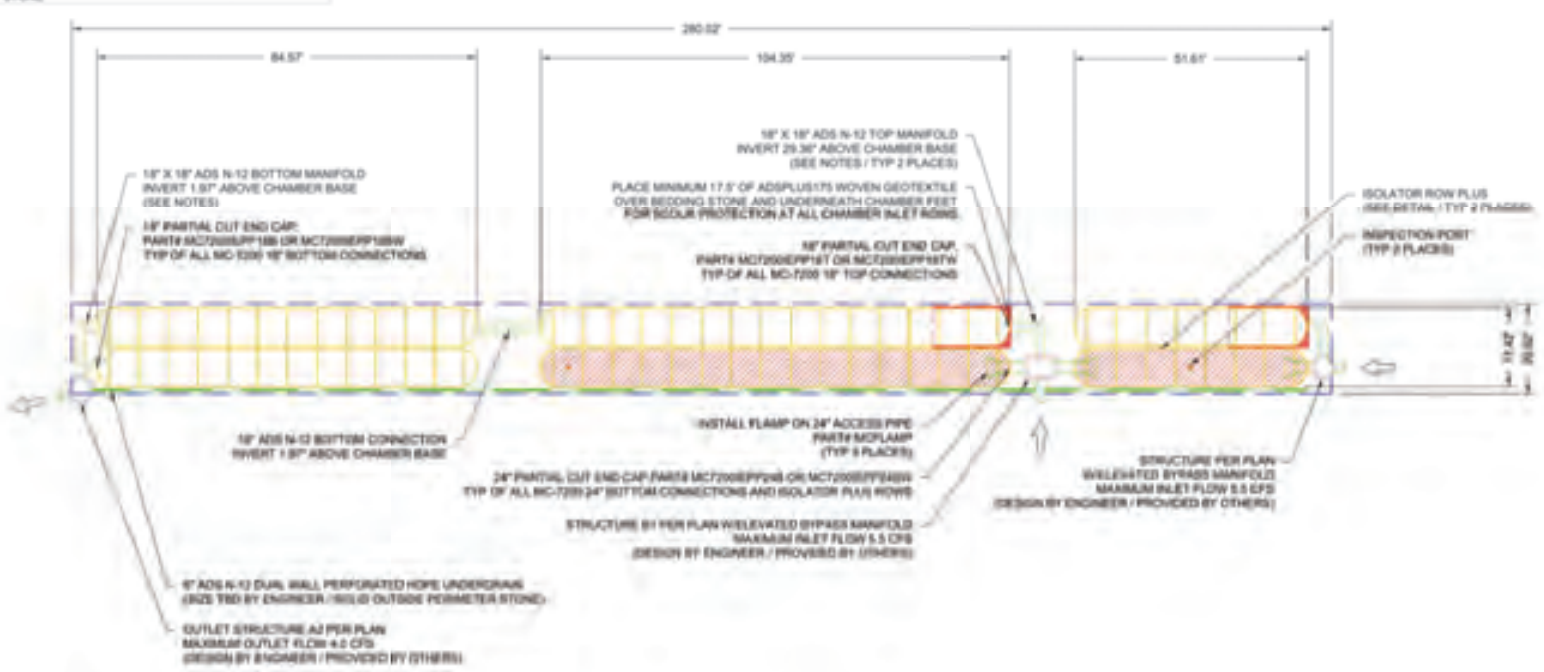
68	STORMTECH MC-7200 CHAMBERS
12	STORMTECH MC-7200 END CAPS
12	STONE ABOVE (in)
9	STONE BELOW (in)
40	% STONE VOID
22,595	**INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED)**
5605	SYSTEM AREA (ft²)
600	SYSTEM PERIMETER (ft)

PROPOSED ELEVATIONS

5284.71	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED)
5280.21	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC)
5279.71	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC)
5279.71	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)
5279.71	MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT)
5278.71	TOP OF STONE
5277.71	TOP OF MC-7200 CHAMBER
5275.16	18" TOP MANIFOLD INVERT
5272.90	24" ISOLATOR ROW PLUS CONNECTION INVERT
5272.87	18" BOTTOM MANIFOLD/CONNECTION INVERT
5272.71	BOTTOM OF MC-7200 CHAMBER
5271.96	UNDERDRAIN INVERT
5271.96	BOTTOM OF STONE

NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECHNICAL NOTE 6.32 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE INSITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.



MARSHALL POINTE | ARVADA, CO | DATE: 11/01/23 | DRAWN: CJM | PROJECT #: S308026 | CHECKED: JEK | DATE | DRWN | CHKD | DESCRIPTION

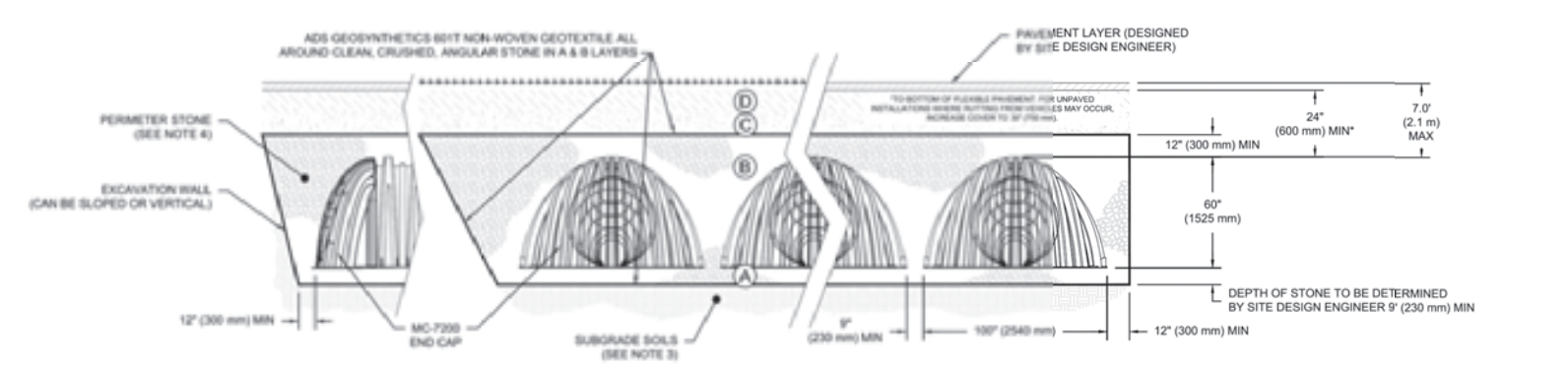
ADS 4640 TRUEMAN BLVD HILLIARD, OH 43026 | StormTech® Chamber System | 888-892-2694 | WWW.STORMTECH.COM | 0 25' 50'

SHEET 2 OF 5

ACCEPTABLE FILL MATERIALS: STORMTECH MC-7200 CHAMBER SYSTEMS

MATERIAL LOCATION		DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145¹ A-1, A-2-4, A-3 OR AASHTO M43¹ 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43¹ 3, 4	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43¹ 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.²,³

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



NOTES:

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2. MC-7200 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
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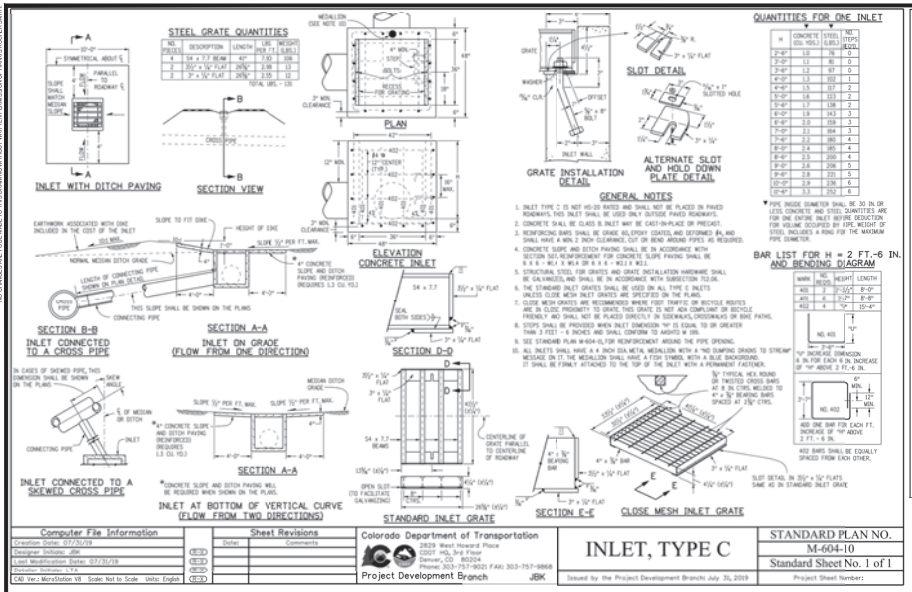
MARSHALL POINTE - MC-7200 | ARVADA, CO, USA | DATE: | DRAWN: JM | PROJECT #: | CHECKED: N/A | DATE | DRW | CHK | DESCRIPTION | StormTech® Chamber System | 888-892-2694 | WWW.STORMTECH.COM

APPROVED:

Jerry Wolfschlag, PE — City Engineer | 6/10/24 — Date | DA2023-0019 — Job Number

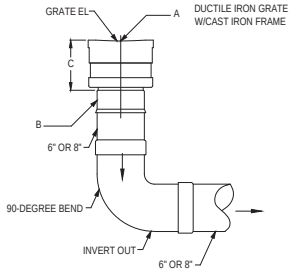
Review is for general compliance with the City of Arvada "Engineering Code of Standards and Specifications for the Design and Construction of Public Improvements", latest edition. Sole responsibility for completeness and/or accuracy of these Documents shall remain with the Registered Professional Engineer sealing these plans. The City does not accept liability for facilities designed by others.



Computer File Information	Sheet Revisions	Colorado Department of Transportation	STANDARD PLAN NO.
Creation Date: 07/31/19	Date / Comments	2829 West Howard Place	M-604-10
Designer Initials: JBK		CDOT HQ, 3rd Floor	Standard Sheet No. 1 of 1
Last Modification Date: 07/31/19		Denver, CO 80204	
Datafile Initials: LTA		Phone: 303-757-9021 FAX: 303-757-9868	
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English		Project Development Branch JBK	Project Sheet Number:

INLET, TYPE C

Issued by the Project Development Branch July 31, 2019



VARIOUS TYPES OF OUTLETS WITH WATERTIGHT ADAPTERS FOR:
12X4
12X6
12X8
12X10
ADS N-12
SDR-35 SEWER
SCHEDULE 40 DWV
CORRUGATED PVC
RIBBED PVC

A	B	C
12"	4"	10.50
12"	6"	11.50
12"	8"	11.50
12"	10"	11.25
12"	12"	6.00

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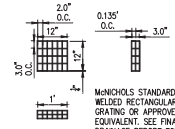
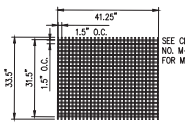
DRAWN BY CJA	MATERIAL	Nyloplast 3130 VERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2460 www.nyloplast-us.com
DATE 6-25-09	PROJECT NO./NAME	TITLE 12" DESIGN DETAILS
APPD BY CJA	INLINE DRAIN	
DATE 6-25-09	SCALE NTS SHEET 1 OF 1	DWG NO. 7003-110-002 REV B
DWG SIZE A		



McNICHOLS STANDARD DUTY WELDED RECTANGULAR BAR GRATING OR APPROVED EQUIVALENT. SEE FINAL DRAINAGE REPORT FOR CAPACITY CALCULATIONS AND GRATE SPECIFICATION.

DITCH WALL LANDSCAPE DRAIN TRASH RACK DETAIL

NTS

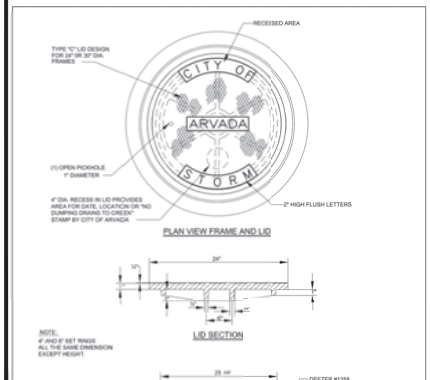


SEE CDOT STANDARD PLAN NO. M-604-10, THIS SHEET, FOR MORE INFORMATION.

TOP

MODIFIED CLOSE MESH GRATE FOR TYPE C INLETS IN COURTYARD

NTS



NOTE: 4" AND 8" SET RINGS ALL THE SAME DIMENSION EXCEPT HEIGHT.

NOTE: 30" DIAMETER FRAME (NOT SHOWN) SHALL BE DEETER #1197 OR NEENAH R-1796 OR EQUAL.

NO.	DATE	REVISION

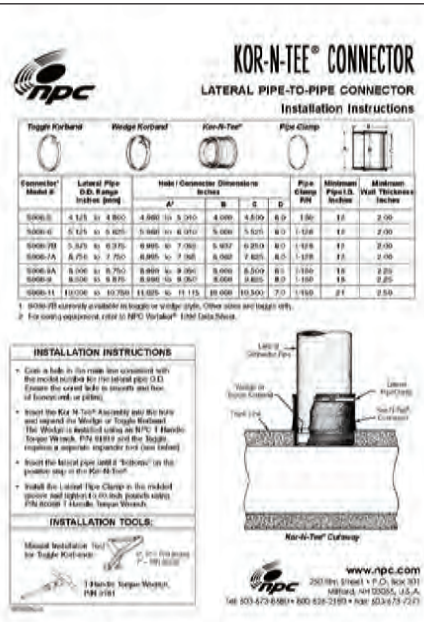
CITY OF ARVADA

8101 Ralston Road
Arvada, Colorado 80002

STORM MANHOLE FRAME AND LID DETAIL

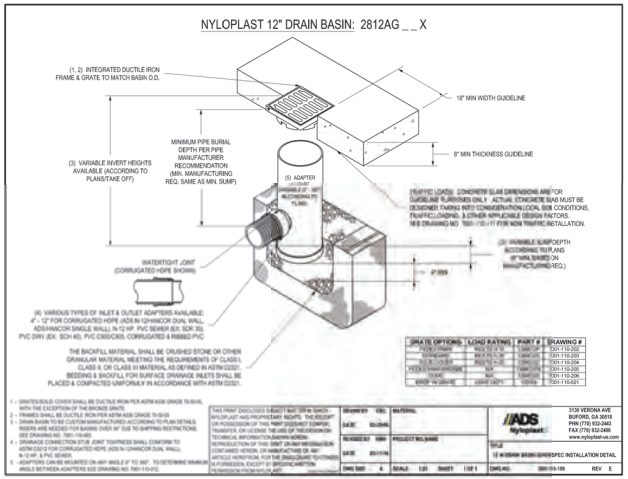
2023 ENGINEERING STANDARDS & SPECIFICATIONS

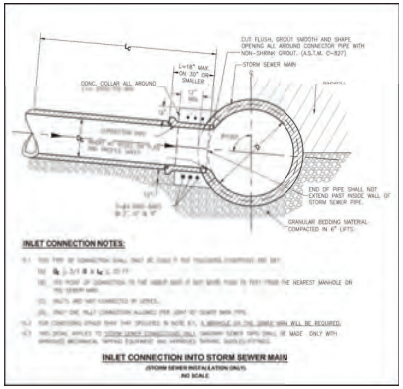
600-1



Connector* Model #	Lateral Pipe O.D. Range Inches (mm)	Hole / Connector Dimensions Inches A*	B	C	D	Pipe Clamp P/N	Minimum Pipe I.D. Inches	Minimum Wall Thickness Inches
5006-S	4.125 to 4.850	4.990 to 5.390	4.990	4.590	6.0	1150	12	2.00
5006-6	5.125 to 6.825	5.990 to 6.910	5.990	5.525	8.0	1-158	12	2.00
5006-7M	5.375 to 6.975	6.895 to 7.760	5.957	6.250	8.0	1-158	12	2.00
5006-7A	6.750 to 7.750	6.895 to 7.760	6.562	7.625	8.0	1-158	12	2.00
5006-8A	8.500 to 8.750	8.890 to 9.050	8.000	8.500	8.5	1150	18	2.25
5006-8	8.500 to 9.875	8.890 to 9.050	8.000	9.875	8.0	1-160	18	2.25
5006-11	10.000 to 10.750	11.025 to 11.175	10.000	10.500	7.0	1150	21	2.50

1. 5006-7M currently available in toggle or wedge style. Other sizes and designs only.
2. For casting equipment, refer to NPC Worldwide® Inlet Data Sheet.



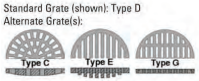


R-2502
Inlet Frame, Grate

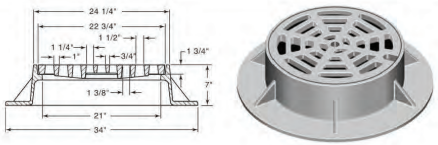
Heavy Duty

CATALOG NUMBER	GRATE TYPE	SQ. FT. OPEN	WEIR PERIMETER LINEAL FEET
S-2502	D	0.9	6.0
R-2502	G	1.3	6.0
R-2502	C	1.2	6.0
R-2502	E	1.5	6.0

Standard Grate (shown): Type D
Alternate Grate(s):



Available Lid: **R-1772**



APPROVED:

City Engineer — Date: 6/10/24 — Job Number: DA2023-0019

Review is for general compliance with the City of Arvada "Engineering Code of Standards and Specifications for the Design and Construction of Public Improvements", latest edition. Sole responsibility for completeness and/or accuracy of these Documents shall remain with the Registered Professional Engineer sealing these plans. The City does not accept liability for facilities designed by others.

Know what's below. Call before you dig.

DESIGNED BY: AML
CHECKED BY: MAW
DRAWN BY: AML

ISSUE DATE: 02-17-2023	
DATE	REVISION COMMENTS
04-28-2023	PER CITY COMMENTS
07-13-2023	PER CITY COMMENTS
09-01-2023	PER CITY COMMENTS
10-13-2023	ISSUED FOR CONSTRUCTION
03-25-2024	MINOR CITY COMMENTS
04-24-2024	ISSUED FOR CONSTRUCTION

HARRIS KOCHER SMITH
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

LINCOLN AVENUE CAPITAL

MARSHALL POINTE
STORM SEWER DETAILS

COLORADO LICENSED — NAME A. WEST — 38561 — 05-08-2024

PROJECT #: 220319
SHEET NUMBER
SW7
46 OF 46

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH

FILEPATH: P:\2022\220319\ENGINEERING\DRAWINGS\SW - DETENTION\DRAINAGE\SW_DETENTION_DRAINAGE DETAILS.DWG, LAYOUT: GENERAL STORM DETAILS
10 XREFs: city signature block, e-base, e-hspd, curb, keymap, p-base, p-hspd, p-utl, saxmp, stamp - sl
PLOTTED: TUE 04/30/24 3:52:29P BY: JBEE [ENGINEER]

GENERAL NOTES

1. THE CONTRACTOR AND OWNER'S REPRESENTATIVE SHALL CONTACT THE LANDSCAPE ARCHITECT FOR A PRE-CONSTRUCTION MEETING PRIOR TO START OF ANY WORK SHOWN ON THESE PLANS.
2. THESE PLANS SHALL NOT BE UTILIZED FOR CONSTRUCTION OR PERMITTING UNLESS STATED FOR SUCH USE IN THE TITLE BLOCK.
3. DRAWINGS ARE INTENDED TO BE PRINTED ON 30" X 42" PAPER. PRINTING THESE DRAWINGS AT A DIFFERENT SIZE WILL IMPACT THE SCALE. VERIFY THE GRAPHIC SCALE BEFORE REFERENCING ANY MEASUREMENTS ON THESE SHEETS. THE RECIPIENT OF THESE DRAWINGS SHALL BE RESPONSIBLE FOR ANY ERRORS RESULTING FROM INCORRECT PRINTING, COPYING, OR ANY OTHER CHANGES THAT ALTER THE SCALE OF THE DRAWINGS.
4. VERIFY ALL PLAN DIMENSIONS PRIOR TO START OF CONSTRUCTION. NOTIFY THE OWNER'S REPRESENTATIVE TO ADDRESS ANY QUESTIONS OR CLARIFY ANY DISCREPANCIES.
5. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.
6. SUBMIT A CHANGE ORDER FOR APPROVAL FOR ANY CHANGES TO WORK SCOPE RESULTING FROM FIELD CONDITIONS OR DIRECTION BY OWNER'S REPRESENTATIVE WHICH REQUIRE ADDITIONAL COST TO THE OWNER PRIOR TO PERFORMANCE OF WORK.
7. THE CONTRACTOR SHALL PROVIDE A STAKED LAYOUT OF ALL SITE IMPROVEMENTS FOR INSPECTION BY THE OWNER'S REPRESENTATIVE AND MAKE MODIFICATIONS AS REQUIRED. ALL LAYOUT INFORMATION IS AVAILABLE IN DIGITAL FORMAT FOR USE BY THE CONTRACTOR.
8. IF A GEOTECHNICAL SOILS REPORT IS NOT AVAILABLE AT THE TIME OF CONSTRUCTION, NORRIS DESIGN RECOMMENDS A REPORT BE AUTHORIZED BY THE OWNER AND THAT ALL RECOMMENDATIONS OF THE REPORT ARE FOLLOWED DURING CONSTRUCTION. THE CONTRACTOR SHALL USE THESE CONTRACT DOCUMENTS AS A BASIS FOR THE BID. IF THE OWNER ELECTS TO PROVIDE A GEOTECHNICAL REPORT, THE CONTRACTOR SHALL REVIEW THE REPORT AND SUBMIT AN APPROPRIATE CHANGE ORDER TO THE OWNER'S REPRESENTATIVE IF ADDITIONAL COSTS ARE REQUESTED.
9. CONTRACTOR SHALL CONFIRM THAT SITE CONDITIONS ARE SIMILAR TO THE PLANS, WITHIN TOLERANCES STATED IN THE CONTRACT DOCUMENTS, AND SATISFACTORY TO THE CONTRACTOR PRIOR TO START OF WORK. SHOULD SITE CONDITIONS BE DIFFERENT THAN REPRESENTED ON THE PLANS OR UNSATISFACTORY TO THE CONTRACTOR, THE CONTRACTOR SHALL CONTACT THE OWNER'S REPRESENTATIVE FOR CLARIFICATION AND FURTHER DIRECTION.
10. CONTRACTOR IS RESPONSIBLE TO PAY FOR, AND OBTAIN, ANY REQUIRED APPLICATIONS, PERMITTING, LICENSES, INSPECTIONS AND METERS ASSOCIATED WITH WORK.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO ANY VIOLATIONS OR NON-CONFORMANCE WITH THE PLANS, SPECIFICATIONS, CONTRACT DOCUMENTS, JURISDICTIONAL CODES, AND REGULATORY AGENCIES.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL UTILITY LOCATES PRIOR TO ANY EXCAVATION. REFER TO ENGINEERING UTILITY PLANS FOR ALL PROPOSED UTILITY LOCATIONS AND DETAILS. NOTIFY OWNER'S REPRESENTATIVE IF EXISTING OR PROPOSED UTILITIES INTERFERE WITH THE ABILITY TO PERFORM WORK.
13. UNLESS IDENTIFIED ON THE PLANS FOR DEMOLITION OR REMOVAL, THE CONTRACTOR IS RESPONSIBLE FOR THE COST TO REPAIR UTILITIES, ADJACENT OR EXISTING LANDSCAPE, ADJACENT OR EXISTING PAVING, OR ANY PUBLIC AND PRIVATE PROPERTY THAT IS DAMAGED BY THE CONTRACTOR OR THEIR SUBCONTRACTOR'S OPERATIONS DURING INSTALLATION, ESTABLISHMENT OR DURING THE SPECIFIED MAINTENANCE PERIOD. ALL DAMAGES SHALL BE REPAIRED TO PRE-CONSTRUCTION CONDITIONS AS DETERMINED BY THE OWNER'S REPRESENTATIVE. CONTRACTOR SHALL BE RESPONSIBLE FOR LOGGING ANY DAMAGES PRIOR TO START OF CONSTRUCTION AND DURING THE CONTRACT PERIOD.
14. ALL WORK SHALL BE CONFINED TO THE AREA WITHIN THE CONSTRUCTION LIMITS AS SHOWN ON THE PLANS. ANY AREAS OR IMPROVEMENTS DISTURBED OUTSIDE THESE LIMITS SHALL BE RETURNED TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. IN THE EVENT THE CONTRACTOR REQUIRES A MODIFICATION TO THE CONSTRUCTION LIMITS, WRITTEN PERMISSION MUST BE OBTAINED FROM THE OWNER'S REPRESENTATIVE PRIOR TO ANY DISTURBANCE OUTSIDE OF THE LIMITS OF WORK.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY OF THEIR TRENCHES OR EXCAVATIONS THAT SETTLE.
16. THE CONTRACTOR SHALL BE RESPONSIBLE TO PREPARE AND SUBMIT A TRAFFIC CONTROL PLAN TO THE APPROPRIATE JURISDICTIONAL AGENCIES AND THE OWNER'S REPRESENTATIVE IF THEIR WORK AND OPERATIONS AFFECT OR IMPACT THE PUBLIC RIGHTS-OF-WAY. OBTAIN APPROVAL PRIOR TO ANY WORK WHICH AFFECTS OR IMPACTS THE PUBLIC RIGHTS-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO THIS REQUIREMENT DURING THE CONTRACT PERIOD.
17. SIGHT TRIANGLES AND SIGHT LINES SHALL REMAIN UNOBSTRUCTED BY EQUIPMENT, CONSTRUCTION MATERIALS, PLANT MATERIAL OR ANY OTHER VISUAL OBSTACLE DURING THE CONTRACT PERIOD AND AT MATURITY OF PLANTS PER LOCAL JURISDICTIONAL REQUIREMENTS.
18. NO PLANT MATERIAL OTHER THAN GROUND COVER IS ALLOWED TO BE PLANTED ADJACENT TO FIRE HYDRANTS AS STIPULATED BY JURISDICTIONAL REQUIREMENTS.
19. COORDINATE SITE ACCESS, STAGING, STORAGE AND CLEANOUT AREAS WITH OWNER'S REPRESENTATIVE.
20. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY SAFETY FENCING AND BARRIERS AROUND ALL IMPROVEMENTS SUCH AS WALLS, PLAY STRUCTURES, EXCAVATIONS, ETC. ASSOCIATED WITH THEIR WORK UNTIL SUCH FACILITIES ARE COMPLETELY INSTALLED PER THE PLANS, SPECIFICATIONS AND MANUFACTURER'S RECOMMENDATIONS.
21. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF THEIR MATERIAL STOCK PILES AND WORK FROM VANDALISM, EROSION OR UNINTENDED DISTURBANCE DURING THE CONSTRUCTION PERIOD AND UNTIL FINAL ACCEPTANCE IS ISSUED.
22. THE CONTRACTOR SHALL KNOW, UNDERSTAND AND ABIDE BY ANY STORM WATER POLLUTION PREVENTION PLAN (SWPPP) ASSOCIATED WITH THE SITE. IF A STORM WATER POLLUTION PREVENTION PLAN IS NOT PROVIDED BY THE OWNER'S REPRESENTATIVE, REQUEST A COPY BEFORE PERFORMANCE OF ANY SITE WORK.
23. MAINTAIN ANY STORM WATER MANAGEMENT FACILITIES THAT EXIST ON SITE FOR FULL FUNCTIONALITY. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ANY NEW STORM WATER MANAGEMENT FACILITIES THAT ARE IDENTIFIED IN THE SCOPE OF WORK TO FULL FUNCTIONALITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER FOR FAILURE TO MAINTAIN STORM WATER MANAGEMENT FACILITIES DURING THE CONTRACT PERIOD.
24. THE CONTRACTOR SHALL PREVENT SEDIMENT, DEBRIS AND ALL OTHER POLLUTANTS FROM EXITING THE SITE OR ENTERING THE STORM SEWER SYSTEM DURING ALL DEMOLITION OR CONSTRUCTION OPERATIONS THAT ARE PART OF THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO THESE REQUIREMENTS DURING THEIR CONTRACTED COURSE OF WORK.
25. THE CONTRACTOR SHALL BE RESPONSIBLE TO PREVENT ANY IMPACTS TO ADJACENT WATERWAYS, WETLANDS, OR OTHER ENVIRONMENTALLY SENSITIVE AREAS RESULTING FROM WORK DONE AS PART OF THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO THESE STANDARDS DURING THEIR CONTRACTED COURSE OF WORK.
26. THE CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL INSURE THAT ALL LOADS OF CONSTRUCTION MATERIAL IMPORTED TO OR EXPORTED FROM THE PROJECT SITE SHALL BE PROPERLY COVERED TO PREVENT LOSS OF MATERIAL DURING TRANSPORT. TRANSPORTATION METHODS ON PUBLIC RIGHT-OF WAYS SHALL CONFORM TO JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO THESE REQUIREMENTS.
27. THE CLEANING OF EQUIPMENT IS PROHIBITED AT THE JOB SITE UNLESS AUTHORIZED BY THE OWNER'S REPRESENTATIVE IN A DESIGNATED AREA. THE DISCHARGE OF WATER, WASTE CONCRETE, POLLUTANTS, OR OTHER MATERIALS SHALL ONLY OCCUR IN AREAS DESIGNED FOR SUCH USE AND APPROVED BY THE OWNER'S REPRESENTATIVE.
28. THE CLEANING OF CONCRETE EQUIPMENT IS PROHIBITED AT THE JOB SITE EXCEPT IN DESIGNATED CONCRETE WASHOUT AREAS. THE DISCHARGE OF WATER CONTAINING WASTE CONCRETE IN THE STORM SEWER IS PROHIBITED.
29. THE USE OF REBAR, STEEL STAKES, OR STEEL FENCE POSTS TO STAKE DOWN STRAW OR HAY BALES OR TO SUPPORT SILT FENCING USED AS AN EROSION CONTROL MEASURE IS PROHIBITED.
30. OPEN SPACE SWALES: IF SWALES ARE EXISTING ON SITE AND ARE NOT INTENDED TO BE MODIFIED AS PART OF THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN THE CONVEYANCE OF WATER WITHIN THE SWALES DURING THE CONTRACT PERIOD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DIVERSION OR PUMPING OF WATER IF REQUIRED TO COMPLETE WORK. ANY SWALES DISTURBED BY THE CONTRACTOR SHALL BE REPAIRED/RESTORED TO THEIR ORIGINAL CONDITION. IF THE SWALE NEEDS TO BE DISTURBED OR MODIFIED FOR ANY REASON, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO DISTURBANCE.
31. DETENTION AND WATER QUALITY PONDS: IF DETENTION PONDS AND WATER QUALITY PONDS ARE EXISTING ON SITE AND ARE NOT INTENDED TO BE MODIFIED AS PART OF THE PLANS, THE CONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE PONDS, DRAINAGE STRUCTURES AND SPILLWAYS DURING CONSTRUCTION. ALL PONDS, DRAINAGE STRUCTURES AND SPILLWAYS SHALL BE MAINTAINED IN OPERABLE CONDITIONS AT ALL TIMES. ANY POND OR SPILLWAY AREAS DISTURBED BY THE CONTRACTOR SHALL BE REPAIRED/RESTORED TO THEIR ORIGINAL CONDITION. IF THE POND NEEDS TO BE DISTURBED OR MODIFIED FOR ANY REASON, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO DISTURBANCE.
32. MAINTENANCE ACCESS BENCHES: IF MAINTENANCE BENCHES OR ACCESS ROADS EXIST ON SITE AND ARE NOT INTENDED TO BE MODIFIED AS PART OF THE PLANS, THE CONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE BENCHES OR ACCESS ROADS DURING CONSTRUCTION. ANY BENCHES OR ACCESS ROADS DISTURBED BY THE CONTRACTOR SHALL BE REPAIRED/RESTORED TO THEIR ORIGINAL CONDITION. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL EXISTING BENCHES AND ACCESS ROADS DURING THE CONSTRUCTION PERIOD. IF ACCESS NEEDS TO BE BLOCKED FOR ANY REASON, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO INTERRUPTION OF ACCESS.
33. LOCAL, STATE AND FEDERAL JURISDICTIONAL REQUIREMENTS, RESTRICTIONS OR PROCEDURES SHALL SUPERSEDE THESE PLANS, NOTES AND SPECIFICATIONS WHEN MORE STRINGENT. NOTIFY THE OWNER'S REPRESENTATIVE IF CONFLICTS OCCUR.

CHECKED BY: CR
DRAWN BY: LV

LANDSCAPE NOTES

1. THE CONTRACTOR SHALL FOLLOW THE LANDSCAPE PLANS AND SPECIFICATIONS AS CLOSELY AS POSSIBLE. ANY SUBSTITUTION OR ALTERATION SHALL NOT BE ALLOWED WITHOUT APPROVAL OF THE OWNER'S REPRESENTATIVE. OVERALL PLANT QUANTITY AND QUALITY SHALL BE CONSISTENT WITH THE PLANS.
2. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PLANT QUANTITIES. GRAPHIC QUANTITIES TAKE PRECEDENCE OVER WRITTEN QUANTITIES.
3. THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO INSPECT AND TAG ALL PLANT MATERIAL PRIOR TO SHIPPING TO THE SITE. IN ALL CASES, THE OWNER'S REPRESENTATIVE MAY REJECT PLANT MATERIAL AT THE SITE IF MATERIAL IS DAMAGED, DISEASED, OR DECLINING IN HEALTH AT THE TIME OF ONSITE INSPECTIONS OR IF THE PLANT MATERIAL DOES NOT MEET THE MINIMUM SPECIFIED STANDARD IDENTIFIED ON THE PLANS AND IN THE SPECIFICATIONS. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER'S REPRESENTATIVE FOR INSPECTION AND APPROVAL OF ALL MATERIALS AND PRODUCTS PRIOR TO INSTALLATION.
4. THE OWNER'S REPRESENTATIVE MAY ELECT TO UPSIZE PLANT MATERIAL AT THEIR DISCRETION BASED ON SELECTION, AVAILABILITY, OR TO ENHANCE SPECIFIC AREAS OF THE PROJECT. THE CONTRACTOR SHALL VERIFY PLANT MATERIAL SIZES WITH OWNER'S REPRESENTATIVE PRIOR TO PURCHASING, SHIPPING OR STOCKING OF PLANT MATERIALS. SUBMIT CHANGE ORDER REQUEST TO OWNER'S REPRESENTATIVE FOR APPROVAL IF ADDITIONAL COST IS REQUESTED BY THE CONTRACTOR PRIOR TO INSTALLATION. RE-STOCKING CHARGES WILL NOT BE APPROVED IF THE CONTRACTOR FAILS TO SUBMIT A REQUEST FOR MATERIAL CHANGES.
5. THE CONTRACTOR SHALL WARRANTY ALL CONTRACTED WORK AND MATERIALS FOR A PERIOD OF ONE YEAR AFTER SUBSTANTIAL COMPLETION HAS BEEN ISSUED BY THE OWNER'S REPRESENTATIVE FOR THE ENTIRE PROJECT UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS OR SPECIFICATIONS.
6. REFER TO IRRIGATION PLANS FOR LIMITS AND TYPES OF IRRIGATION DESIGNED FOR THE LANDSCAPE. IN NO CASE SHALL IRRIGATION BE EMITTED WITHIN THE MINIMUM DISTANCE FROM BUILDING OR WALL FOUNDATIONS AS STIPULATED IN THE GEOTECHNICAL REPORT. ALL IRRIGATION DISTRIBUTION LINES, HEADS AND EMITTERS SHALL BE KEPT OUTSIDE THE MINIMUM DISTANCE AWAY FROM ALL BUILDING AND WALL FOUNDATIONS AS STIPULATED IN THE GEOTECHNICAL REPORT.
7. LANDSCAPE MATERIAL LOCATIONS SHALL HAVE PRECEDENCE OVER IRRIGATION MAINLINE AND LATERAL LOCATIONS. COORDINATE INSTALLATION OF IRRIGATION EQUIPMENT SO THAT IT DOES NOT INTERFERE WITH THE PLANTING OF TREES OR OTHER LANDSCAPE MATERIAL.
8. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING POSITIVE DRAINAGE EXISTS IN ALL LANDSCAPE AREAS. SURFACE DRAINAGE ON LANDSCAPE AREAS SHALL NOT FLOW TOWARD STRUCTURES AND FOUNDATIONS. MAINTAIN SLOPE AWAY FROM FOUNDATIONS PER THE GEOTECHNICAL REPORT RECOMMENDATIONS. ALL LANDSCAPE AREAS BETWEEN WALKS AND CURBS SHALL DRAIN FREELY TO THE CURB UNLESS OTHERWISE IDENTIFIED ON THE GRADING PLAN. IN NO CASE SHALL THE GRADE, TURF THATCH, OR OTHER LANDSCAPE MATERIALS DAM WATER AGAINST WALKS. MINIMUM SLOPES ON LANDSCAPE AREAS SHALL BE 2%; MAXIMUM SLOPE SHALL BE 25% UNLESS SPECIFICALLY IDENTIFIED ON THE PLANS OR APPROVED BY THE OWNER'S REPRESENTATIVE.
9. PRIOR TO INSTALLATION OF PLANT MATERIALS, AREAS THAT HAVE BEEN COMPACTED OR DISTURBED BY CONSTRUCTION ACTIVITY SHALL BE THOROUGHLY LOOSENED TO A DEPTH OF 8" - 12" AND AMENDED PER SPECIFICATIONS.
10. ALL LANDSCAPED AREAS ARE TO RECEIVE ORGANIC SOIL PREPARATION AT 4 CU.YRDS/1000 SF.
11. TREES SHALL NOT BE LOCATED IN DRAINAGE SWALES, DRAINAGE AREAS, OR UTILITY EASEMENTS. CONTACT OWNER'S REPRESENTATIVE FOR RELOCATION OF PLANTS IN QUESTIONABLE AREAS PRIOR TO INSTALLATION.
12. THE CENTER OF EVERGREEN TREES SHALL NOT BE PLACED CLOSER THAN 8' AND THE CENTER OF ORNAMENTAL TREES CLOSER THAN 6' FROM A SIDEWALK, STREET OR DRIVE LANE. EVERGREEN TREES SHALL NOT BE LOCATED ANY CLOSER THAN 15' FROM IRRIGATION ROTOR HEADS. NOTIFY OWNER'S REPRESENTATIVE IF TREE LOCATIONS CONFLICT WITH THESE STANDARDS FOR FURTHER DIRECTION.
13. ALL EVERGREEN TREES SHALL BE FULLY BRANCHED TO THE GROUND AND SHALL NOT EXHIBIT SIGNS OF ACCELERATED GROWTH AS DETERMINED BY THE OWNER'S REPRESENTATIVE.
14. ALL TREES ARE TO BE STAKED AND GUYED PER DETAILS FOR A PERIOD OF 3 YEARS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING STAKES AT THE END OF 3 YEARS FROM ACCEPTANCE OF LANDSCAPE INSTALLATION BY THE OWNER'S REPRESENTATIVE. OBTAIN APPROVAL BY OWNER'S REPRESENTATIVE PRIOR TO REMOVAL.
15. ALL TREES INSTALLED ABOVE RETAINING WALLS UTILIZING GEO-GRID MUST BE HAND DUG TO PROTECT GEO-GRID. IF GEO-GRID MUST BE CUT TO INSTALL TREES, APPROVAL MUST BE GIVEN BY OWNER'S REPRESENTATIVE PRIOR TO DOING WORK.
16. ALL TREES IN SEED OR TURF AREAS SHALL RECEIVE MULCH RINGS. OBTAIN APPROVAL FROM OWNER'S REPRESENTATIVE FOR ANY TREES THAT WILL NOT BE MULCHED FOR EXCESSIVE MOISTURE REASONS.
17. SHRUB, GROUNDCOVER AND PERENNIAL BEDS ARE TO BE CONTAINED BY EDGER SPECIFIED IN MATERIAL SCHEDULE, SHEET LS-003. EDGER IS NOT REQUIRED WHEN ADJACENT TO CURBS, WALLS, WALKS OR SOLID FENCES WITHIN 3" OF PRE-MULCHED FINAL GRADE. EDGER SHALL NOT BE REQUIRED TO SEPARATE MULCH TYPES UNLESS SPECIFIED ON THE PLANS.
18. ALL SHRUB BEDS ARE TO BE MULCHED WITH MINIMUM 3" DEPTH, SPECIFIED LANDSCAPE MULCH IN MATERIAL SCHEDULE, SHEET LS-003, OVER SPECIFIED GEOTEXTILE WEED CONTROL FABRIC. ALL GROUND COVER AND PERENNIAL FLOWER BEDS SHALL BE MULCHED WITH 3" SPECIFIED LANDSCAPE MULCH IN MATERIAL SCHEDULE, SHEET LS-003. NO WEED CONTROL FABRIC IS REQUIRED IN GROUNDCOVER OR PERENNIAL AREAS.
19. AT SEED AREA BOUNDARIES ADJACENT TO EXISTING NATIVE AREAS, OVERLAP ABUTTING NATIVE AREAS BY THE FULL WIDTH OF THE SEEDER.
20. EXISTING TURF AREAS THAT ARE DISTURBED DURING CONSTRUCTION, ESTABLISHMENT AND THE MAINTENANCE PERIOD SHALL BE RESTORED WITH NEW SOD TO MATCH EXISTING TURF SPECIES. DISTURBED NATIVE AREAS WHICH ARE TO REMAIN SHALL BE OVER SEEDED AND RESTORED WITH SPECIFIED SEED MIX.
21. CONTRACTOR SHALL OVER SEED ALL MAINTENANCE OR SERVICE ACCESS BENCHES AND ROADS WITH SPECIFIED SEED MIX UNLESS OTHERWISE NOTED ON THE PLANS.
22. ALL SEEDED SLOPES EXCEEDING 25% IN GRADE (4:1) SHALL RECEIVE EROSION CONTROL BLANKETS. PRIOR TO INSTALLATION, NOTIFY OWNER'S REPRESENTATIVE FOR APPROVAL OF LOCATION AND ANY ADDITIONAL COST IF A CHANGE ORDER IS NECESSARY.
23. WHEN COMPLETE, ALL GRADES SHALL BE WITHIN +/- 1/8" OF FINISHED GRADES AS SHOWN ON THE PLANS.
24. SOFT SURFACE TRAILS NEXT TO MANICURED TURF OR SHRUB BEDS SHALL BE CONTAINED WITH EDGER SPECIFIED IN MATERIAL SCHEDULE, SHEET LS-002.
25. PRIOR TO THE PLACEMENT OF MULCH AND WEED FABRIC, A GRANULAR, PRE-EMERGENT, WEED CONTROL AGENT SHALL BE ADDED TO ALL PLANTING BEDS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTION, EXCEPT AROUND ORNAMENTAL GRASSES.
26. THE CONTRACTOR IS EXPECTED TO KNOW AND UNDERSTAND THE TOWN AND COUNTY SPECIFICATIONS FOR LANDSCAPE AND IRRIGATION. IN CASES OF DISCREPANCIES THE HIGHER OF THE TWO STANDARDS SHALL HAVE PRECEDENCE.
27. THE DEVELOPER, HIS SUCCESSORS AND ASSIGNS SHALL BE RESPONSIBLE FOR THE INSTALLATION, MAINTENANCE AND REPLACEMENT OF ALL IMPROVEMENTS SHOWN OR INDICATED ON THE APPROVED LANDSCAPE PLAN ON FILE IN THE PLANNING DEPARTMENT.

LAYOUT NOTES

1. WRITTEN DIMENSIONS WILL TAKE PRECEDENCE OVER SCALED DIMENSIONS.
2. SHOULD SITE CONDITIONS BE DIFFERENT THAN WHAT IS INDICATED ON THE DRAWINGS CONTACT THE LANDSCAPE ARCHITECT IMMEDIATELY FOR CLARIFICATION.
3. CURVED WALKS AND CURB EDGES ARE INTENDED TO BE CONSTRUCTED WITH SMOOTH FLOWING CURVES. ANYTHING OTHER THAN SMOOTH FLOWING CURVES WILL BE REJECTED.
4. THE CONTRACTOR SHALL OBTAIN, AT THEIR EXPENSE, ALL PERMITS WHICH ARE NECESSARY TO PERFORM THE PROPOSED WORK.
5. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER REGARDING WHO WILL PROVIDE SURVEY SERVICES FOR LAYOUT OF THE WORK.
6. THE CONTRACTOR SHALL REVIEW WITH OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT ALL STAKING PRIOR TO SETTING FORMS OR COMPLETING FLATWORK AND PERFORM MINOR MODIFICATIONS AS REQUIRED TO ACHIEVE PROPER DRAINAGE OR ACCESSIBILITY AS REQUIRED FOR THE DESIGN, AT NO ADDITIONAL COST TO THE OWNER.
7. THE CONTRACTOR SHALL INSTALL SLEEVING FOR IRRIGATION IMPROVEMENTS PRIOR TO INSTALLING CONCRETE FLATWORK. REFER TO IRRIGATION PLANS.
8. LAYOUT WALKS, SCORE JOINTS AND PAVING PATTERNS AS CLOSELY AS POSSIBLE TO PLANS, DETAILS, AND SPECIFICATIONS. DO NOT DEVIATE FROM PLANS UNLESS SPECIFIC APPROVAL IS OBTAINED FROM THE OWNER'S REPRESENTATIVE.
9. ALL WORK SHALL BE CONFINED TO THE AREA WITHIN THE CONSTRUCTION LIMITS AS SHOWN ON THE PLANS. ANY AREAS OR IMPROVEMENTS DISTURBED OUTSIDE THESE LIMITS SHALL BE RETURNED TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. IN THE EVENT THE CONTRACTOR REQUIRES A MODIFICATION TO THE CONSTRUCTION LIMITS, WRITTEN PERMISSION MUST BE OBTAINED FROM THE LANDSCAPE ARCHITECT PRIOR TO ANY DISTURBANCE OUTSIDE OF THE LIMITS OF WORK. SEE TECHNICAL SPECIFICATIONS.
10. WHEN APPLICABLE CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY FENCING AROUND ALL PLAY STRUCTURES UNTIL PROPER FALL SURFACE IS COMPLETELY INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
11. CONTRACTOR IS RESPONSIBLE FOR SUPERVISING ALL SAFETY SURFACING AND PAVEMENT DURING THE CURING PROCESS.

GENERAL MAINTENANCE NOTES

1. THE PRIMARY PRUNING OF DECIDUOUS TREES SHALL BE DONE DURING THE DORMANT SEASON. DAMAGED TREES OR THOSE THAT CONSTITUTE HEALTH OR SAFETY HAZARDS SHALL BE PRUNED AT ANY TIME OF THE YEAR AS REQUIRED.
2. CONIFEROUS TREES SHALL BE THINNED OUT AND SHAPED WHEN NECESSARY TO PREVENT WIND AND STORM DAMAGE.
3. PRUNE SHRUBS, GROUND COVERS, AND FLOWERS TO MAINTAIN A NATURAL APPEARANCE. THERE ARE NO PLANTINGS IN WHICH SHEARING IS INTENDED.
4. CUT BACK ORNAMENTAL GRASSES TO ½ OF THEIR MATURE HEIGHT IN THE SPRING, AFTER SNOW MELT. REMOVE AND DISPOSE OF CUTTINGS.
5. CUT BACK HERBACEOUS PERENNIALS TO THE GROUND IN MAY. REMOVE AND DISPOSE OF CUTTINGS.
6. PRUNE ALL DEAD, DISEASED, AND DYING BRANCHES.
7. FERTILIZATION (FOR TREES AND SHRUBS) IN MAY. FERTILIZE ALL PLANTING BEDS WITH 18-7-10 FORMULATION, SLOW RELEASE FERTILIZER AT THE RATE OF 6 OZ/1,000 SQ. FT. USE A BROADCAST METHOD FOR APPLICATION OF FERTILIZER.
8. AERATION FOR LAWN AREA: THE CONTRACTOR SHALL AERATE ONE TIME PER YEAR IN SEPTEMBER TO IMPROVE WATER PENETRATION, BEFORE THE SECOND FERTILIZATION. CONTRACTOR SHALL USE ONLY A HOLLOW CORE TINE AERATOR THAT PULLS A 3" PLUG.
9. PRIOR TO AERATION THE CONTRACTOR SHALL TAG ALL SPRINKLER HEADS AND VALVE BOXES TO PREVENT DAMAGE. PLUGS SHALL BE LEFT ON THE TURF TO ASSIST IN BREAKING DOWN THATCH.
10. IRRIGATION SYSTEM WILL BE CHECKED OUT FOR DAMAGE BY CONTRACTOR IMMEDIATELY AFTER AERATION AND ANY DAMAGE DUE TO AERATION WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR AT HIS EXPENSE.
11. DAMAGE TO ANY OTHER FIXTURES WILL BE REPAIRED AT CONTRACTOR'S EXPENSE.
12. PRUNE ALL DEAD, DISEASED, AND DYING BRANCHES. (SHRUBS AND TREES)

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SHEET TITLE:
LANDSCAPE NOTES AND CHARTS

LS-001

PLANT SCHEDULE

DECIDUOUS TREES	QTY	BOTANICAL NAME	COMMON NAME	ROOT	SIZE
AC AR	4	ACER RUBRUM `ARMSTRONG`	ARMSTRONG RED MAPLE	B & B	2"CAL
AC HW	5	ACER TATARICUM 'GARANN'	HOT WINGS® TATARIAN MAPLE	B & B	2"CAL
AC BZ	11	ACER X FREEMANII 'JEFFERSRED'	AUTUMN BLAZE® FREEMAN MAPLE	B & B	2"CAL
GI AG	4	GINKGO BILOBA `AUTUMN GOLD` TM	AUTUMN GOLD GINKGO	B & B	2"CAL
GI PS	10	GINKGO BILOBA `PRINCETON SENTRY`	PRINCETON SENTRY GINKGO	B & B	2"CAL
GL IN	6	GLEDITSIA TRIACANTHOS INERMIS	THORNLESS HONEY LOCUST	B & B	2"CAL
KO PA	4	KOELREUTERIA PANICULATA	GOLDENRAIN TREE	B & B	2"CAL
QU MA	3	QUERCUS MACROCARPA	BURR OAK	B & B	2"CAL
QU RO	1	QUERCUS ROBUR	ENGLISH OAK	B & B	2"CAL
QU SK	8	QUERCUS ROBUR `FASTIGIATA`	SKYROCKET® ENGLISH OAK	B & B	2"CAL
TI RE	4	TILIA AMERICANA `REDMOND`	REDMOND AMERICAN LINDEN	B & B	2"CAL
TI GR	5	TILIA CORDATA `GREENSPIRE`	GREENSPIRE LITTLELEAF LINDEN	B & B	2"CAL

EVERGREEN TREES	QTY	BOTANICAL NAME	COMMON NAME	ROOT	SIZE
AB CN	1	ABIES CONCOLOR	WHITE FIR	B & B	6` HT.
JU SC	2	JUNIPERUS SCOPULORUM	ROCKY MOUNTAIN JUNIPER	B & B	6` HT.
JU WO	16	JUNIPERUS SCOPULORUM `WOODWARD`	WOODWARD COLUMNAR JUNIPER	B & B	6` HT.
JN BA	29	JUNIPERUS SCOPULORUM 'BLUE ARROW'	BLUE ARROW JUNIPER	B & B	6` HT.
PI GL	2	PICEA GLAUCA 'BIG BERTA'	BIG BERTA WHITE SPUCE	B & B	6` HT.
PN EM	3	PINUS LEUCODERMIS 'EMERALD ARROW'	EMERALD ARROW BOSNIAN PINE	B & B	6` HT.

ORNAMENTAL TREES	QTY	BOTANICAL NAME	COMMON NAME	ROOT	SIZE
AC TA	3	ACER TATARICUM	TATARIAN MAPLE	B & B	1.5" CAL.
HP MC	6	HEPTACODIUM MICONIOIDES	SEVEN SON FLOWER	B & B	1.5" CAL.
PR AM	1	PRUNUS AMERICANA	AMERICAN PLUM	B & B	1.5" CAL.
PR CH	3	PRUNUS X VIRGINIANA `P002`	SUCKER PUNCH CANADA CHOKECHERRY	B & B	1.5"CAL

DECIDUOUS SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	ROOT	SIZE
AM LE	5	AMORPHA CANESCENS	LEADPLANT	CONT.	#5
AS TB	29	ASCLEPIAS TUBEROSA	BUTTERFLY MILKWEED	CONT.	#5
BU BL	12	BUDDLEJA DAVIDII 'BLACK KNIGHT'	BLACK KNIGHT BUTTERFLY BUSH	CONT.	#5
CH TS	21	CHAENOMELES SPECIOSA 'TEXAS SCARLET'	TEXAS SCARLET FLOWERING QUINCE	CONT.	#5
CO IS	3	CORNUS SERICEA `ISANTI`	ISANTI REDOSIER DOGWOOD	CONT.	#5
CO AP	25	COTONEASTER APICULATUS	CRANBERRY COTONEASTER	CONT.	#5
EU AL	11	EUONYMUS ALATUS `COMPACTUS`	COMPACT BURNING BUSH	CONT.	#5
FR FL	5	FRANGULA ALNUS `FINE LINE` TM	TALL FERNLEAF BUCKTHORN	CONT.	#5
HY EN	24	HYDRANGEA MACROPHYLLA 'BAILMER'	ENDLESS SUMMER® THE ORIGINAL HYDRANGEA	CONT.	#5
HY GR	6	HYDRANGEA PANICULATA 'GRANDIFLORA'	PEEGEE PANICLE HYDRANGEA	CONT.	#5
HY TR	8	HYDRANGEA PANICULATA 'TARDIVA'	TARDIVA PANICLE HYDRANGEA	CONT.	#5
JM AM	20	JAMESIA AMERICANA	WAXFLOWER	CONT.	#5
PE LS	94	PEROVSKIA ATRIPLICIFOLIA `LITTLE SPIRE` TM	LITTLE SPIRE RUSSIAN SAGE	CONT.	#5
PH CH	26	PHILADELPHUS LEWISII `CHEYENNE`	LEWIS MOCK ORANGE	CONT.	#5
PH MO	5	PHYSOCARPUS MONOGYNUS	MOUNTAIN NINEBARK	CONT.	#5
PO FR	46	POTENTILLA FRUTICOSA	BUSH CINQUEFOIL	CONT.	#5
PO MW	45	POTENTILLA FRUTICOSA `MCKAY`S WHITE`	MCKAY`S WHITE BUSH CINQUEFOIL	CONT.	#5
PR BE	16	PRUNUS BESSEYI	WESTERN SAND CHERRY	CONT.	#5
PR ES	9	PRUNUS X CISTENA	PURPLE LEAF SAND CHERRY ESPALIER	CONT.	#5
RH AU	53	RHUS TRILOBATA `AUTUMN AMBER`	AUTUMN AMBER SUMAC	CONT.	#5
SP GO	85	SPIRAEA JAPONICA 'GOLDFLAME'	GOLDFLAME JAPANESE SPIREA	CONT.	#5

EVERGREEN SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	ROOT	SIZE
AR CO	13	ARCTOSTAPHYLOS X COLORADOENSIS	MOCK BEARBERRY MANZANITA	CONT.	#5
CR LD	11	CERCOCARPUS LEDIFOLIUS	CURL-LEAF MOUNTAIN MAHOGANY	CONT.	#5
EU BL	17	EUONYMUS FORTUNEI `BLONDY` TM	BLONDY EUNONYMUS	CONT.	#5
GA PR	19	GAULTHERIA PROCUMBENS	WINTERGREEN	CONT.	#5
JN PR	8	JUNIPERUS PROCUMBENS	JAPANESE GARDEN JUNIPER	CONT.	#5
JU CC	11	JUNIPERUS SABINA `CALGARY CARPET` TM	CALGARY CARPET JUNIPER	CONT.	#5
JN MO	9	JUNIPERUS SCOPULORUM 'MOONGLOW'	MOONGLOW JUNIPER	CONT.	#5
MH AQ	3	MAHONIA AQUIFOLIUM	OREGON GRAPE	CONT.	#5
MH RP	10	MAHONIA REPENS	CREEPING MAHONIA	CONT.	#5
TX HC	14	TAXUS X MEDIA 'HICKSII'	HICKS ANGLO-JAPANESE YEW	CONT.	#5
YC GL	10	YUCCA GLAUCA	SOAPWEED	CONT.	#5

GROUNDCOVER	QTY	BOTANICAL NAME	COMMON NAME	ROOT	SIZE
VN CO	73	VINCA MINOR	COMMON PERIWINKLE	CONT.	#1

ORNAMENTAL GRASSES	QTY	BOTANICAL NAME	COMMON NAME	ROOT	SIZE
AN GR	20	ANDROPOGON GERARDII	BIG BLUESTEM	CONT.	#1
BO CU	24	BOUTELOUA CURTIPENDULA	SIDE OATS GRAMA	CONT.	#1
BO BA	170	BOUTELOUA GRACILIS `BLONDE AMBITION`	BLOND AMBITION BLUE GRAMA GRASS	CONT.	#1
CA KF	37	CALAMAGROSTIS X ACUTIFLORA `KARL FOERSTER`	KARL FOERSTER FEATHER REED GRASS	CONT.	#1
HK AR	34	HAKONECHLOA MACRA 'AUREOLA'	GOLDEN VARIEGATED FOREST GRASS	CONT.	#1
HL AD	25	HELICTOTRICHON PRATENSE	MEADOW OAT GRASS	CONT.	#1
PA SH	67	PANICUM VIRGATUM `SHENANDOAH`	SWITCH GRASS	CONT.	#1
PN BN	50	PENNISETUM ALOPECUROIDES 'LITTLE BUNNY'	LITTLE BUNNY FOUNTAIN GRASS	CONT.	#1
SC SC	34	SCHIZACHYRIUM SCOPARIUM `BLAZE`	BLAZE LITTLE BLUESTEM	CONT.	#1

PERENNIALS	QTY	BOTANICAL NAME	COMMON NAME	ROOT	SIZE
AC MI	3	ACHILLEA MILLEFOLIUM	COMMON YARROW	CONT.	#1
AC MO	34	ACHILLEA X `MOONSHINE`	MOONSHINE YARROW	CONT.	#1
AJ CH	27	AJUGA REPTANS 'CHOCOLATE CHIP'	CHOCOLATE CHIP CARPET BUGLE	CONT.	#1
AQ AL	32	AQUILEGIA ALPINA	ALPINE COLUMBINE	CONT.	#1
AQ CA	18	AQUILEGIA CAERULEA	ROCKY MOUNTAIN COLUMBINE	CONT.	#1
AS GL	22	ASTER ALPINUS 'GOLIATH'	GOLIATH ALPINE ASTER	CONT.	#1
CA IN	20	CALLIRHOE INVOLUCRATA	PRAIRIE WINECUPS	CONT.	#1
CO MO	16	COREOPSIS VERTICILLATA 'MOONBEAM'	MOONBEAM TICKSEED	CONT.	#1
EC PU	24	ECHINACEA PURPUREA	PURPLE CONEFLOWER	CONT.	#1
GA AR	50	GAILLARDIA ARISTATA	NATIVE BLANKET FLOWER	CONT.	#1
HS FC	28	HOSTA X 'FIRE AND ICE'	FIRE AND ICE HOSTA	CONT.	#1
LA PH	14	LAVANDULA X INTERMEDIA `PHENOMENAL`	PHENOMENAL LAVENDER	CONT.	#1
PE RR	17	PENSTEMON MEXICALI `RED ROCKS`	RED ROCKS PENSTEMON	CONT.	#1
PH BI	22	PHLOX BIFIDA	SNOWMASS PHLOX	CONT.	#1
RU FU	8	RUDBECKIA FULGIDA `GOLDSTRUM`	BLACK-EYED SUSAN	CONT.	#1
SL CA	42	SOLIDAGO CANADENSIS	GOLDENROD	CONT.	#1

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SHEET TITLE:
LANDSCAPE SCHEDULES

LS-002

LANDSCAPE MATERIAL SCHEDULE

CODE	DESCRIPTION	PRODUCT NAME	MANUFACTURER	CONTACT	COLOR / FINISH	SIZE / DIMENSIONS	DETAIL	NOTES
M-01	CONCRETE - TYPE 1	STANDARD CIP CONCRETE			STANDARD GRAY			
M-02	ENHANCED CONCRETE	ENHANCED CONCRETE	COLORADO HARDSCAPES OR APPROVED EQUAL	COLORADOHARDSCAPES.COM	SANDSTONE FINISH WITH DECORATIVE SCORE JOINTS/ DAVIS INTEGRAL COLOR CANYON #160	NA	NA	REFER TO PLAN FOR LOCATION.
M-03	CRUSHER FINES	CRUSHER FINES	PIONEER SAND OR APPROVED EQUAL	PIONEERCO.COM	GRAY / BREEZE	NA	3/LS-501	INSTALL PER MANUFACTURER SPECIFICATIONS
M-04	GORILLA HAIR MULCH	SHREDDED RED CEDAR GORILLA MULCH	PINOEER LANDSCAPE	PIONEERCO.COM	RED CEDAR	NA	NA	3" DEPTH. INSTALL PER MANUFACTURER SPECIFICATIONS.
M-05	METAL EDGER	RYERSON PERFORATED ROLL TOP EDGER	SURELOCKEDGING.COM	SURELOCKEDGING.COM	GREEN	1/8" THICK X 4" DEPTH	4/LS-501	INSTALL PER MANUFACTURER SPECIFICATIONS
M-06	ARTIFICIAL TURF	SYNTIPEDE 343	SYNLAWN	HTTPS://WWW.SYNLAWN.COM/	NA	NA	2/ LS-502	INSTALL PR MANUFACTURER SPECIFICATONS
M-07	POURED IN PLACE PLAY SURFACING	PIP RUBBER	PLAYGROUND SURFACING	PLAYGROUNDSURFACING.COM	410: MAY GREEN, 210: BEIGE, 180: SKY BLUE		3/LS-502	INSTALL PER MANUFACTURER SPECIFICATIONS
M-08	ENGINEERED WOOD FIBER	EWF	PLAYGROUND SURFACING	PLAYGROUNDSURFACING.COM	NATURAL CEDAR	NA	8/ LS-501	SURFACE MOUNT PER MANUFACTURER SPECIFICATIONS
M-09	ROCK COBBLE	2-4" LOCAL RIVER ROCK	PIONEER LANDSCAPING	PIONEERCO.COM	GRAY	2-4"	NA	SEE PLANS FOR LOCATION.
M-10	CONCRETE PAVERS	CONCRETE PAVERS	COLORADO HARDSCAPES OR APPROVED EQUAL	COLORADOHARDSCAPES.COM	MOONSTONE SANDSCAPE FINISH	12" X 36"	6/LS-501	INSTALL PER DETAIL
M-11	GRAVEL ROCK MULCH	1.5" GRAVEL	PIONEER LANDSCAPE	PIONEERCO.COM	GRAY	1.5"	NA	AGGREGATE TO BE CLEANED AND FREE OF DUST AND OTHER FINE MATERIALS
M-12	DECORATIVE LANDSCAPE BOULDERS	LANDSCAPE BOULDERS	PIONEER LANDSCAPE	PIONEERCO.COM	MOUNTAIN GRANITE	2-4`	4/LS-502	INSTALL PER MANUFACTURER SPECIFICATIONS
M-14	DOG RUN GATE	MAJESTIC 3 RAIL NO FLUSH BOTTOM	MONTAGE PLUS	HTTPS://WWW.AMERISTARPERIMETER.COM/US/EN	BLACK	4` WIDTH	6/LS-502	ALL GATES SHALL BE SELF CLOSING WITH GATE LOCK TO BE APPROVED BY OWNER
M-15	DOG RUN FENCE	MONTAGE PLUS- 3 RAIL, NO FLUSH BOTTOM	AMERISTAR	HTTPS://WWW.AMERISTARPERIMETER.COM/US/EN	BLACK	NA	5/LS-502	REFER TO MANUFACTURER SPECIFICATIONS.
M-17	GRANITE COUNTER	GRANITE SLAB WITH POLISHED FINISH	DALTILE	DALTILE.COM	WHITE ICE/ G238	3CM	RE: 4/LS-503	INSTALL PER MANUFACTURER SPECIFICATION

KEY NOTES

CODE	DESCRIPTION	DETAIL
N-01	POLLINATOR HABITAT INFORMATIONAL SIGN	7/ LS-503
N-02	BOARDFORM CONCRETE SEAT WALL	4/LS-500
N-03	FIRE HYDRANT	RE: CIVIL
N-04	NORTH COURTYARD HAMMOCK WALL	2/LS-503
N-05	UNDERGROUND WATER DETENTION	RE: CIVIL
N-06	6' PRIVACY WOOD FENCE AND RETAINING WALL	1/ LS-501
N-07	BENCH PAD	2/ LS-501
N-08	MONOLITHIC PLAYGROUND CURB	5/LS-501
N-09	PLAYGROUND RAMP	7/LS-501
N-10	TRANSFORMER	RE: CIVIL
N-11	PUBLIC ART	BY OTHERS
N-12	OUTDOOR KITCHEN	4/ LS-503
N-13	BIKE RACK LAYOUT A	8/LS-502
N-14	BIKE RACK LAYOUT B	9/LS-502
N-15	ARTIFICIAL TURF AT PLAYGROUND CURB	1/ LS-503
N-16	FREESTANDING PLAYGROUND CURB	1/LS-502

AMENITY SCHEDULE

CODE	DESCRIPTION	PRODUCT NAME	MANUFACTURER	CONTACT	MODEL #	COLOR / FINISH	SIZE / DIMENSIONS	NOTES
S-01	NATURE PLAY FEATURE	CLASSIC TIMBERFORM PLAYSTACK	COLUMBIA CASCADE	503-223-1157	PLAYSTACK 4500-008	NATURAL	12`-10" X 10`-10"	INSTALL PER MANUFACTURER`S SPECIFICATIONS
S-02	TOT LOT PLAY FEATURE	MOTION	LANDSCAPE STRUCTURES	THOMAS@RMREC.COM	197057	HONEY / PURPLE	22`6" X 23`11"	SURFACE MOUNT PER MANUFACTURER`S SPECIFICATIONS
S-03	PLAY BOULDER	PAGOSA BOULDER	ID SCULPTURE	970-641-1747	PB006	NATURAL	12`-3" X 7`-9" X 10`-0"	INSTALL PER MANUFACTURER`S SPECIFICATIONS
S-04	72" BENCH	MONOLINE BACKED BENCH	SITE PIECES	513-910-5457	ML-BENCH-72	CORAL	72" X 27" X 38.5"H	INSTALL PER MANUFACTUER`S SPEIFICATION
S-05	48" BENCH	MONOLINE BACKED BENCH	SITE PIECES	513-910-5457	ML-BENCH-48	CORAL	48" X 27" X 38.5"H	SURFACE MOUNT PER MANUFACTURER SPECIFICATIONS
S-06	BIKE RACK	FLO BIKE RACK	LANDSCAPE FORMS	800-430-6209	FLO	STAINLESS STEEL WITH ANCHOR	27.75" X 25.5" W X 32.5"H	SURFACE MOUNT AND ANCHOR PER MANUFACTURER SPECIFICATIONS
S-07	TRASH RECEPTACLE	MONOLINE LITTER BIN	SITE PIECES	513-910-5457	ML-LGLITTER-DL OR APPROVED EQUAL	SLATE GRAY	27" X 14" X 42" H (32 GAL)	SURFACE MOUNT PER MANUFACTUER SPECIFICATIONS
S-08	PICNIC TABLE	MONOLINE COMMUNITY TABLE	SITE PIECES	513-910-5457	ML-CMT-82	MIDNIGHT	82" X 36.25" X 30.75"H	SURFACE MOUNT PER MANUFACTUER SPECIFICATION
S-09	ADA PICNIC TABLE	MONOLINE COMMUNITY TABLE- ADA	SITE PIECES	513-910-5457	ML-CMTADA-112	GLACIAL LAKE	112" X 36.25" X 30.75"H	SURFACE MOUNT PER MANUFACTUER SPECIFICATION
S-10	SHADE SAIL	USA SHADE SAIL OR APPROVED EQUAL	US SHADE OR APPROVED EQUAL	833-394-7750	3 POINT SAIL	GREEN	21.5` X 21.5`	INSTALL PER MANUFACTURER SPECIFICATIONS
S-11	SHED	PREMIER RANCH	TUFFSHED	303-399-8833	6X8 PREMIER RANCH	DOVER GRAY	6` X 8`	SURFACE MOUNT PER MANUFACTURER SPECIFICATION
S-12	ROUND TABLE	MONOLINE CAROUSEL TABLE	SITE PIECES	513-910-5457	ML-CT-4SEAT-RD	GLACIAL LAKE	77" X 77" X 29.3"H	SURFACE MOUNT PER MANUFACTUER SPECIFICATION
S-13	ADIRONDAK CHAIR	ALPINE 46ER CHAIR	SITE PIECES	513-910-5457	AC-46ER-CHR	POPPY	31" X 27.5" X 33.8"H	SURFACE MOUNT PER MANUFACTUERER SPECIFICATION
S-14	PET PICK UP STATION	MODERN DOG KIT	PET PICKUPS	303-443-8914	MD-KIT	ALUMINUM	72.4" HX 19.4" WX 9.1" D	SURFACE MOUNT PER MANUFACTUER SPECIFICATION
S-15	BIKE SHELTER	FLAT ROOF	POLIGON	303-530-4414 EXT. 15	MONOSLOPE	BONE WHITE (ROOF), FOX HOLLOW GRAY (FRAME)	8'W X 19`L X 8`H	INSTALL PER MANUFACTURER SPECIFICATION
S-16	ELECTRIC GRILL	TEXAN ELECTRIC GRILL	KENYON	860-664-4906	ITELLIKEN TOUCH 240V WITH SINGLE PIECE LID, B70426NH	STAINLESS STEEL	2`-6" X 1`-7"	INSTALL PER MANUFACTURER SPECIFICATION
S-17	HAMMOCK	SOFT WEAVE HAMMOCK	HATTERAS	252-317-1955	SQ-WEAVE-ANTBGE	ANTIQUE BEIGE OR APPROVED EQUAL	13`	ATTACH PER MANUFACTURER SPECIFICATION
S-18	OUTDOOR KITCHEN SHADE STRUCTURE	MONOSLOPE	POLIGON	720-899-6242		GLAVANIZED STEEL ROOF WITH CHERRY ZEBRAWOOD TONGUE AND GROVE ON BOTTOM	30`X18`	INSTALL PER MANUFACTURER SPECIFICATION

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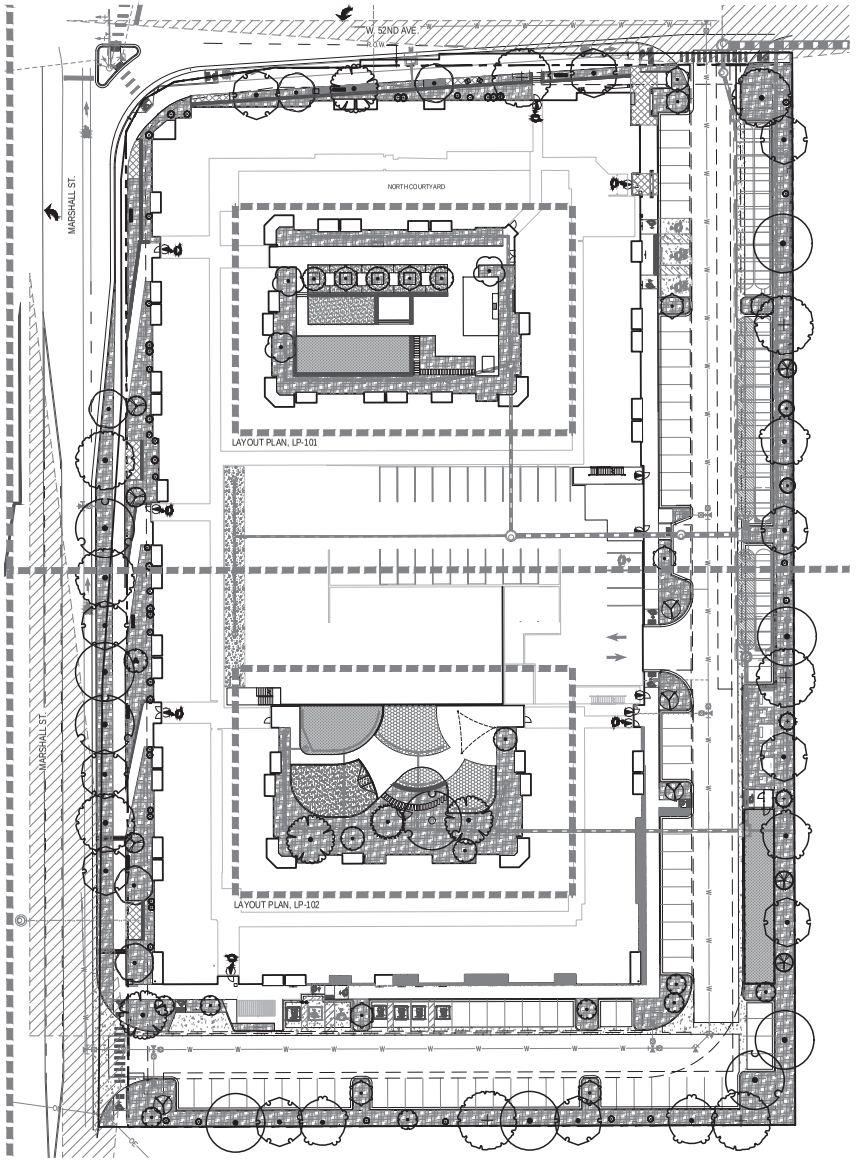
08/07/24 ISSUE FOR CONSTRUCTION

SHEET TITLE:
LANDSCAPE SCHEDULES

LS-003



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DRAWN BY: LV

811 NORTH 0 15 30 60 SCALE 1" = 30' 811

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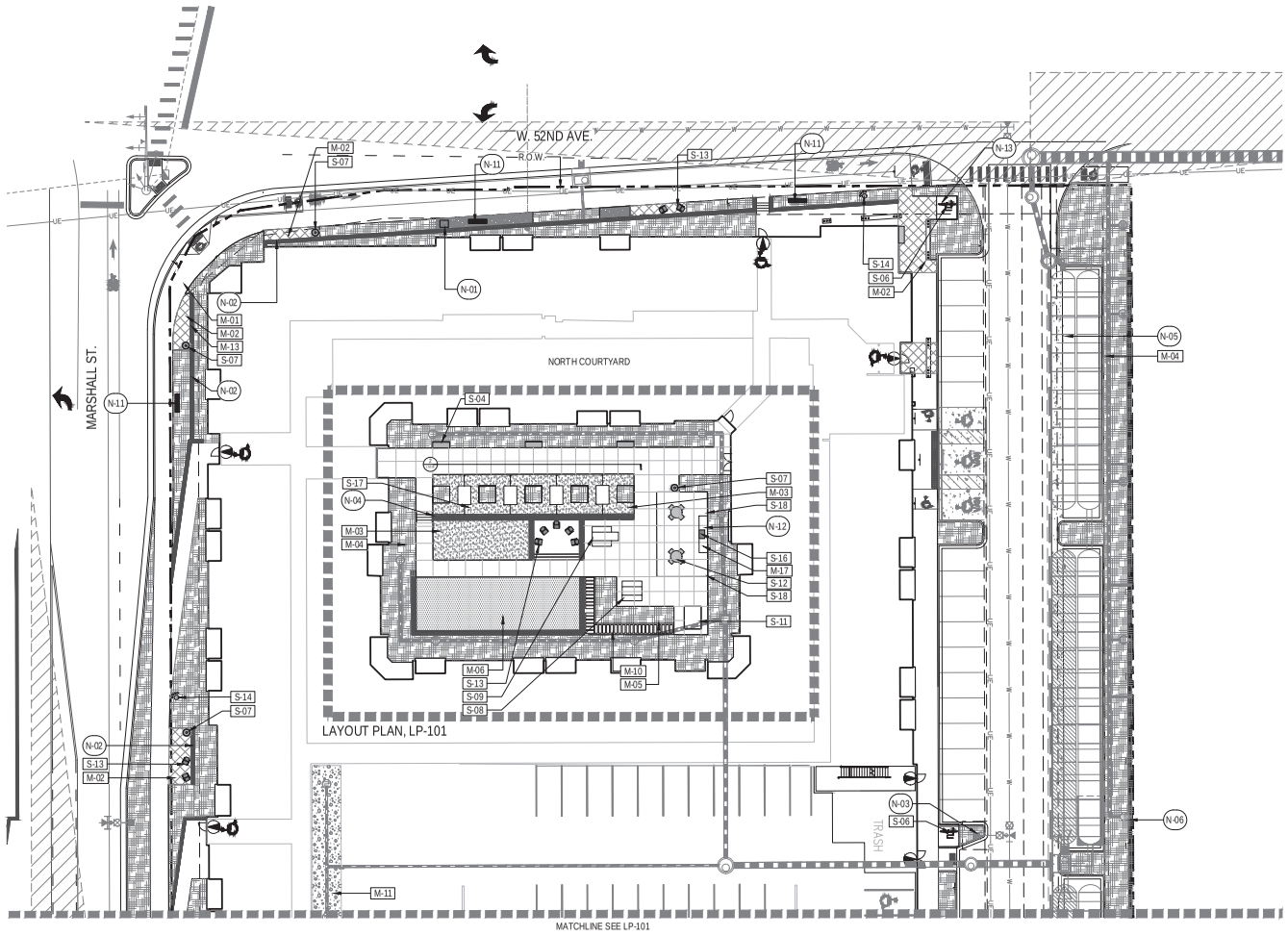
SHEET TITLE:

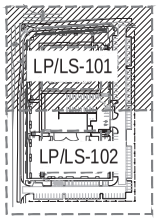
OVERALL LANDSCAPE PLAN

LS-100



LAYOUT PLAN, LP-101

KEY MAP



LEGEND

CODE	DESCRIPTION	
M-01	CONCRETE - TYPE 1	
M-02	ENHANCED CONCRETE	
M-04	GORILLA HAIR MULCH	
M-06	ARTIFICIAL TURF	2/LS-502
M-07	POURED IN PLACE PLAY SURFACING	3/LS-502
M-08	ENGINEERED WOOD FIBER	8/LS-501
M-09	ROCK COBBLE	
M-10	CONCRETE PAVERS	6/LS-501
M-11	GRAVEL ROCK MULCH	

SYMBOL	DESCRIPTION	
M-12	DECORATIVE LANDSCAPE BOULDERS	4/LS-503
M-14	DOG RUN GATE	6/LS-502
M-15	DOG RUN FENCE	5/LS-502

CODE	DESCRIPTION
S-01	NATURE PLAY FEATURE
S-02	TOT LOT PLAY FEATURE
S-03	PLAY BOULDER

SYMBOL	DESCRIPTION
S-04	72" BENCH
S-05	48" BENCH
S-06	BIKE RACK
S-07	TRASH RECEPTACLE
S-10	SHADE SAIL
S-12	ROUND TABLE
S-13	ADIRONDAK CHAIR
S-14	PET PICK UP STATION
S-15	BIKE SHELTER

CODE	DESCRIPTION	DETAIL
N-01	POLLINATOR HABITAT INFORMATIONAL SIGN	7/ LS-503
N-02	BOARDFORM CONCRETE SEAT WALL	4/LS-500
N-03	FIRE HYDRANT	RE: CIVIL
N-05	UNDERGROUND WATER DETENTION	RE: CIVIL
N-07	BENCH PAD	2/ LS-501
N-08	MONOLITHIC PLAYGROUND CURB	5/LS-501
N-09	PLAYGROUND RAMP	7/LS-501
N-10	TRANSFORMER	RE: CIVIL
N-11	PUBLIC ART	BY OTHERS
N-14	BIKE RACK LAYOUT B	9/LS-502
N-15	ARTIFICIAL TURF AT PLAYGROUND CURB	1/ LS-503
N-16	FREESTANDING	1/LS-502
	PROPERTY LINE	
	EASEMENT	

NORTH

0 10 20 40

SCALE 1" = 20'

811

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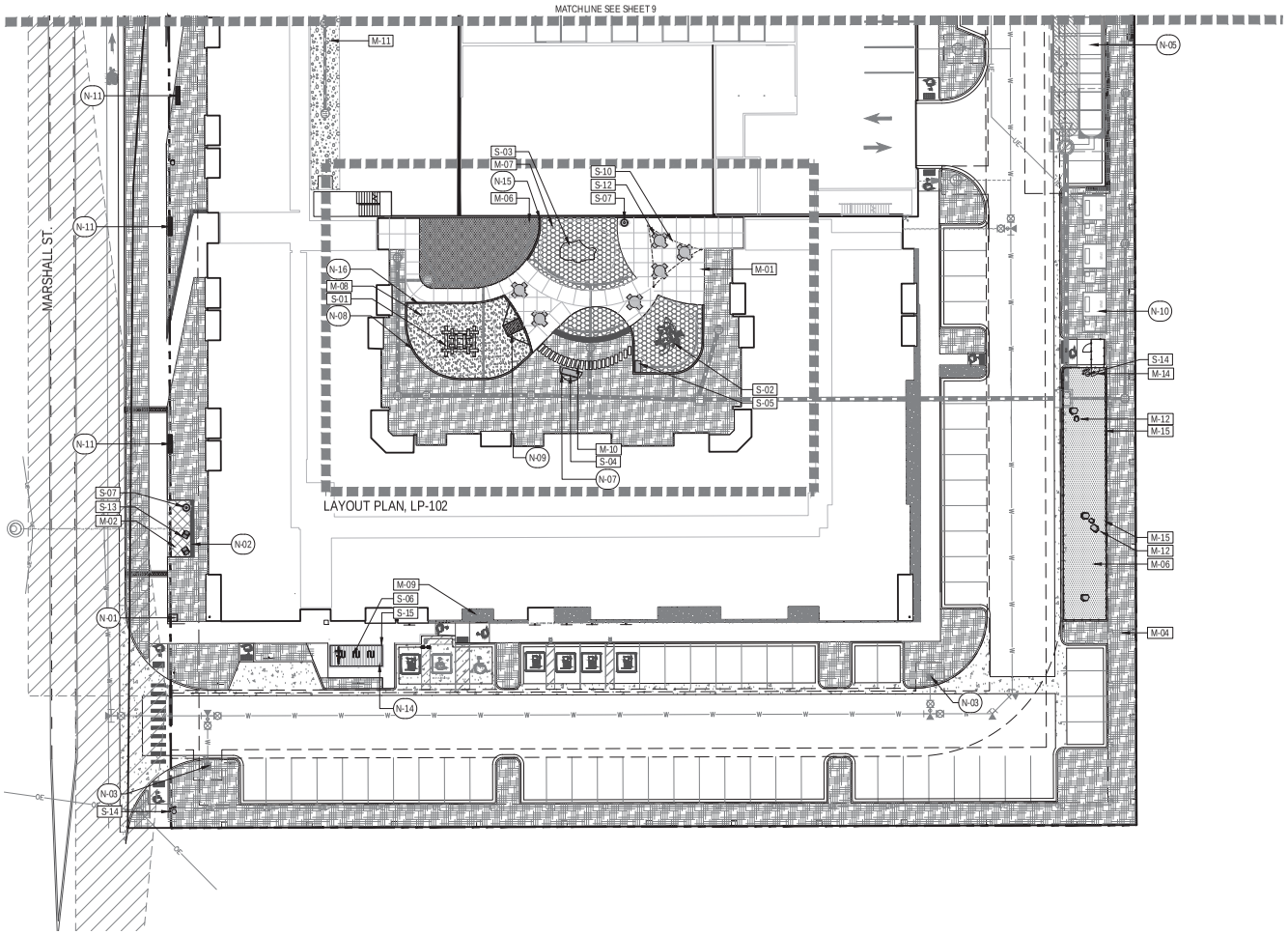
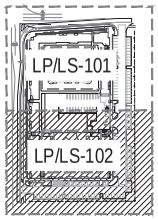
SHEET TITLE:
HARDSCAPE PLAN 1

LS-101



KEY MAP



LEGEND

CODE	DESCRIPTION	
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M-10	CONCRETE PAVERS	6/LS-501
M-11	GRAVEL ROCK MULCH	

SYMBOL	DESCRIPTION	
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M-14	DOG RUN GATE	6/LS-502
M-15	DOG RUN FENCE	5/LS-502

CODE	DESCRIPTION
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CODE	DESCRIPTION	DETAIL
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N-09	PLAYGROUND RAMP	7/LS-501
N-10	TRANSFORMER	RE: CIVIL
N-11	PUBLIC ART	BY OTHERS
N-14	BIKE RACK LAYOUT B	9/LS-502
N-15	ARTIFICIAL TURF AT PLAYGROUND CURB	1/ LS-503
N-16	FREESTANDING	1/LS-502

PROPERTY LINE

EASEMENT

NORTH

0 10 20 40

SCALE 1" = 20'

811

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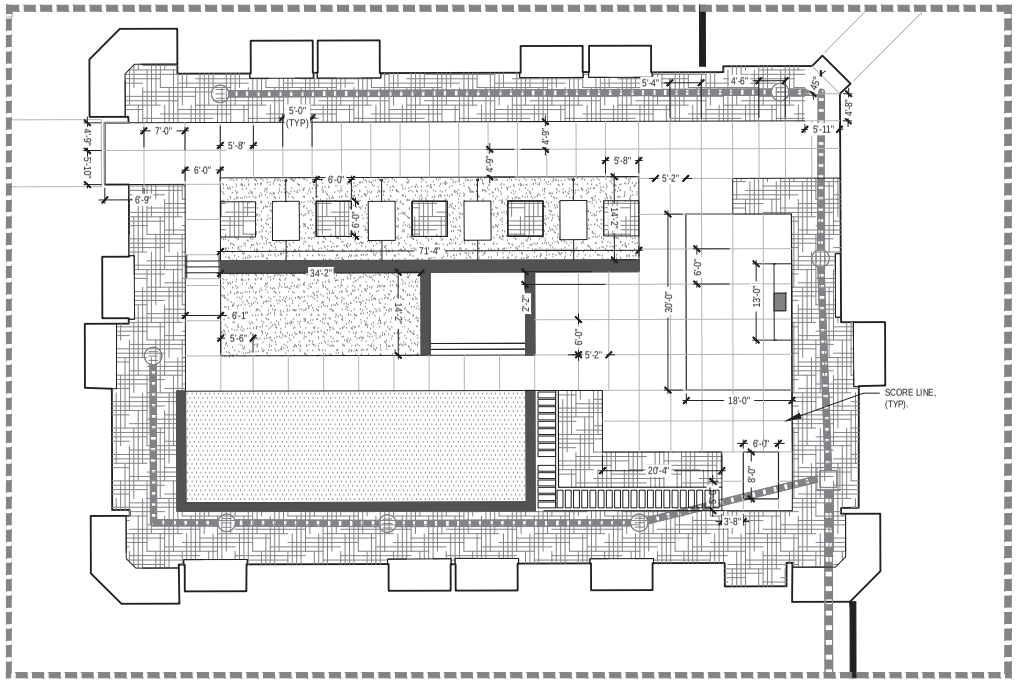
SHEET TITLE:
HARDSCAPE PLAN

LS-102

SOUTHERN COURTYARD



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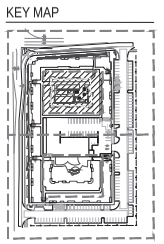

NORTH

0 5 10 20

SCALE 1" = 10'

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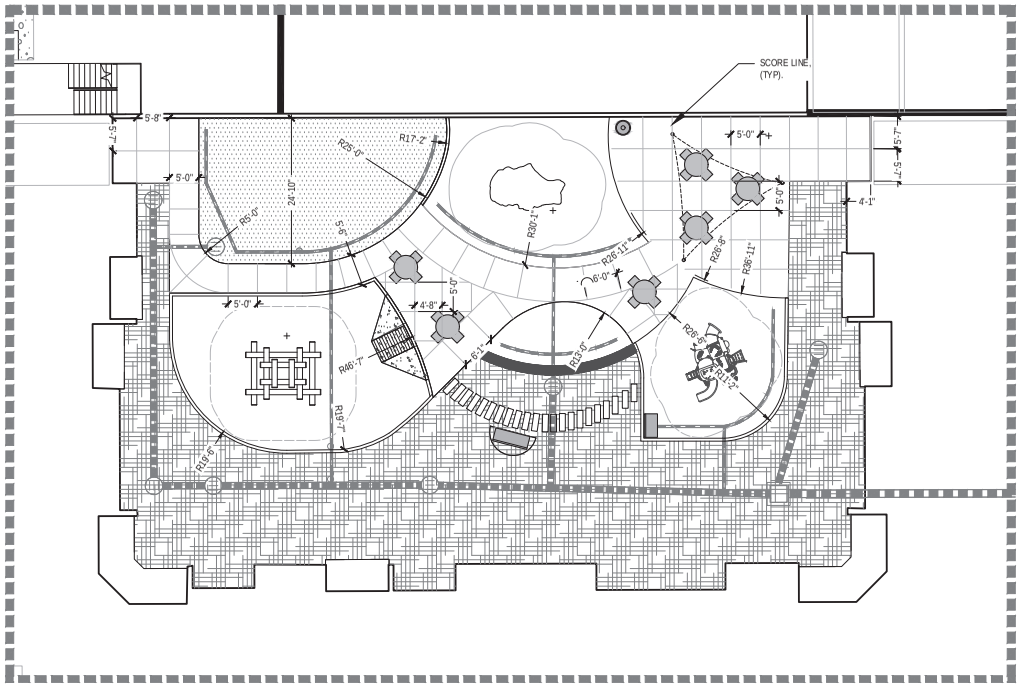
SHEET TITLE:
LAYOUT PLAN

LS-103

SOUTHERN COURTYARD



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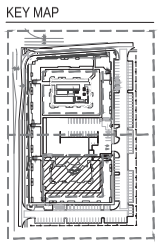

NORTH

0 5 10 20

SCALE 1" = 10'

811

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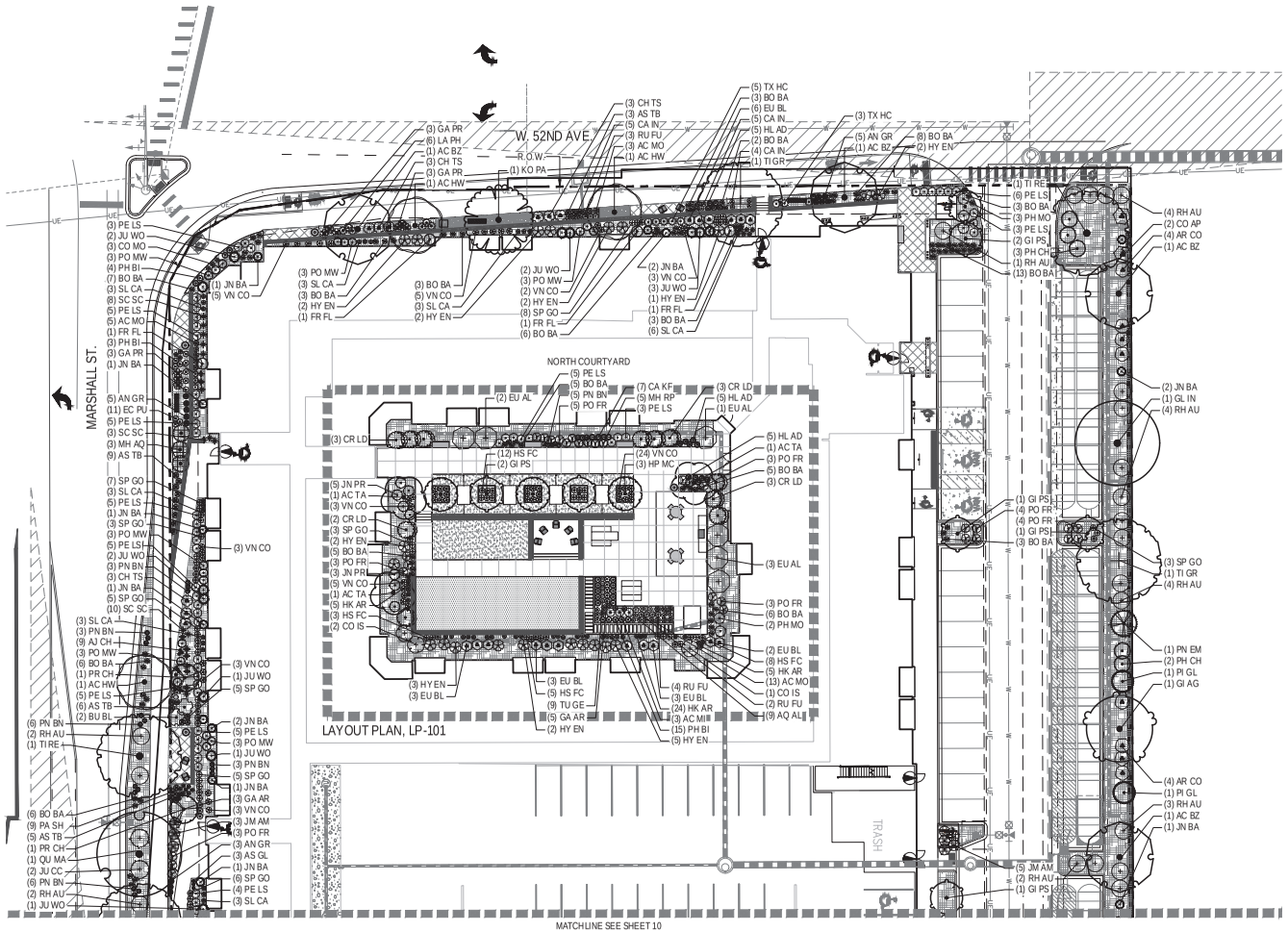
SHEET TITLE:
LAYOUT PLAN

LP-104



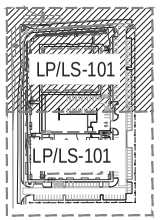
PLANT SCHEDULE NORTH

CODE	BOTANICAL NAME
DECIDUOUS TREES	
AC HW	ACER TATARICUM 'GARANN'
AC BZ	ACER X FREEMANII 'JEFFERSRED'
GI AG	GINKGO BILOBA 'AUTUMN GOLD' TM
GI PS	GINKGO BILOBA 'PRINCETON SENTRY'
GL IN	GLEDITSIA TRIACANTHOS INERMIS
KO PA	KOELREUTERIA PANICULATA
QU MA	QUERCUS MACROCARPA
TI RE	TILIA AMERICANA 'REDMOND'
TI GR	TILIA CORDATA 'GREENSPIRE'
EVERGREEN TREES	
JU WO	JUNIPERUS SCOPULORUM 'WOODWARD'
JN BA	JUNIPERUS SCOPULORUM 'BLUE ARROW'
PI GL	PICEA GLAUCA 'BIG BERTA'
PN EM	PINUS LEUCODERMIS 'EMERALD ARROW'
ORNAMENTAL TREES	
AC TA	ACER TATARICUM
HP MC	HEPTACODIUM MICONIOIDES
PR CH	PRUNUS X VIRGINIANA 'P002'
BULBS	
TU GE	TULIPA GESNERIANA
DECIDUOUS SHRUBS	
AS TB	ASCLEPIAS TUBEROSA
BU BL	BUDDLEJA DAVIDII 'BLACK KNIGHT'
CH TS	CHAENOMELES SPECIOSA 'TEXAS SCARLET'
CO IS	CORNUS SERICEA 'ISANTI'
CO AP	COTONEASTER APICULATUS
EU AL	EUONYMUS ALATUS 'COMPACTUS'
FR FL	FRANGULA ALNUS 'FINE LINE' TM
HY EN	HYDRANGEA MACROPHYLLA 'BAILMER'
JM AM	JAMESIA AMERICANA
PE LS	PEROVSKIA ATRIPLICIFOLIA 'LITTLE SPIRE' TM
PH CH	PHILADELPHUS LEWISII 'CHEYENNE'
PH MO	PHYSOCARPUS MONOGYNUS
PO FR	POTENTILLA FRUTICOSA
PO MW	POTENTILLA FRUTICOSA 'MCKAY'S WHITE'
RH AU	RHUS TRILOBATA 'AUTUMN AMBER'
SP GO	SPIRAEA JAPONICA 'GOLDFLAME'
EVERGREEN SHRUBS	
AR CO	ARCTOSTAPHYLOS X COLORADOENSIS
CR LD	CERCOCARPUS LEDIFOLIUS
EU BL	EUONYMUS FORTUNEI 'BLONDY' TM
GA PR	GAULTHERIA PROCUMBENS
JN PR	JUNIPERUS PROCUMBENS
JU CC	JUNIPERUS SABINA 'CALGARY CARPET' TM
MH AQ	MAHONIA AQUIFOLIUM
MH RP	MAHONIA REPENS
TX HC	TAXUS X MEDIA 'HICKSII'
GROUNDCOVER	
VN CO	VINCA MINOR
ORNAMENTAL GRASSES	
AN GR	ANDROPOGON GERARDII
BO BA	BOUTELOUA GRACILIS 'BLONDE AMBITION'
CA KF	CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'
HK AR	HAKONECHLOA MACRA 'AUREOLA'
HL AD	HELICTOTRICHON PRATENSE
PA SH	PANICUM VIRGATUM 'SHENANDOAH'
PN BN	PENNISETUM ALOPECUROIDES 'LITTLE BUNNY'
SC SC	SCHIZACHYRIUM SCOPARIUM 'BLAZE'
PERENNIALS	
AC MI	ACHILLEA MILLEFOLIUM
AC MO	ACHILLEA X 'MOONSHINE'
AJ CH	AJUGA REPTANS 'CHOCOLATE CHIP'
AQ AL	AQUILEGIA ALPINA
AS GL	ASTER ALPINUS 'GOLIATH'
CA IN	CALLIRHOE INVOLUCRATA
CO MO	COREOPSIS VERTICILLATA 'MOONBEAM'
EC PU	ECHINACEA PURPUREA
GA AR	GAILLARDIA ARISTATA
HS FC	HOSTA X 'FIRE AND ICE'
LA PH	LAVANDULA X INTERMEDIA 'PHENOMENAL'
PH BI	PHLOX BIFIDA
RU FU	RUDBECKIA FULGIDA 'GOLDSTRUM'
SL CA	SOLIDAGO CANADENSIS

PROPERTY LINE

EASEMENT

KEY MAP



NOTE: PLANT MATERIAL LOCATED WITHIN THE EAST AND SOUTH BUFFERYARDS SHALL BE PLANTED IN A MANNER THAT PROVIDES A 2'-0" CLEAR ZONE BETWEEN PLANTINGS AND ADJACENT PARKING STALLS AT PLANT MATURITY, AS MEASURED FROM THE BACK OF CURB.

NORTH

0 10 20 40

SCALE 1" = 20'

811

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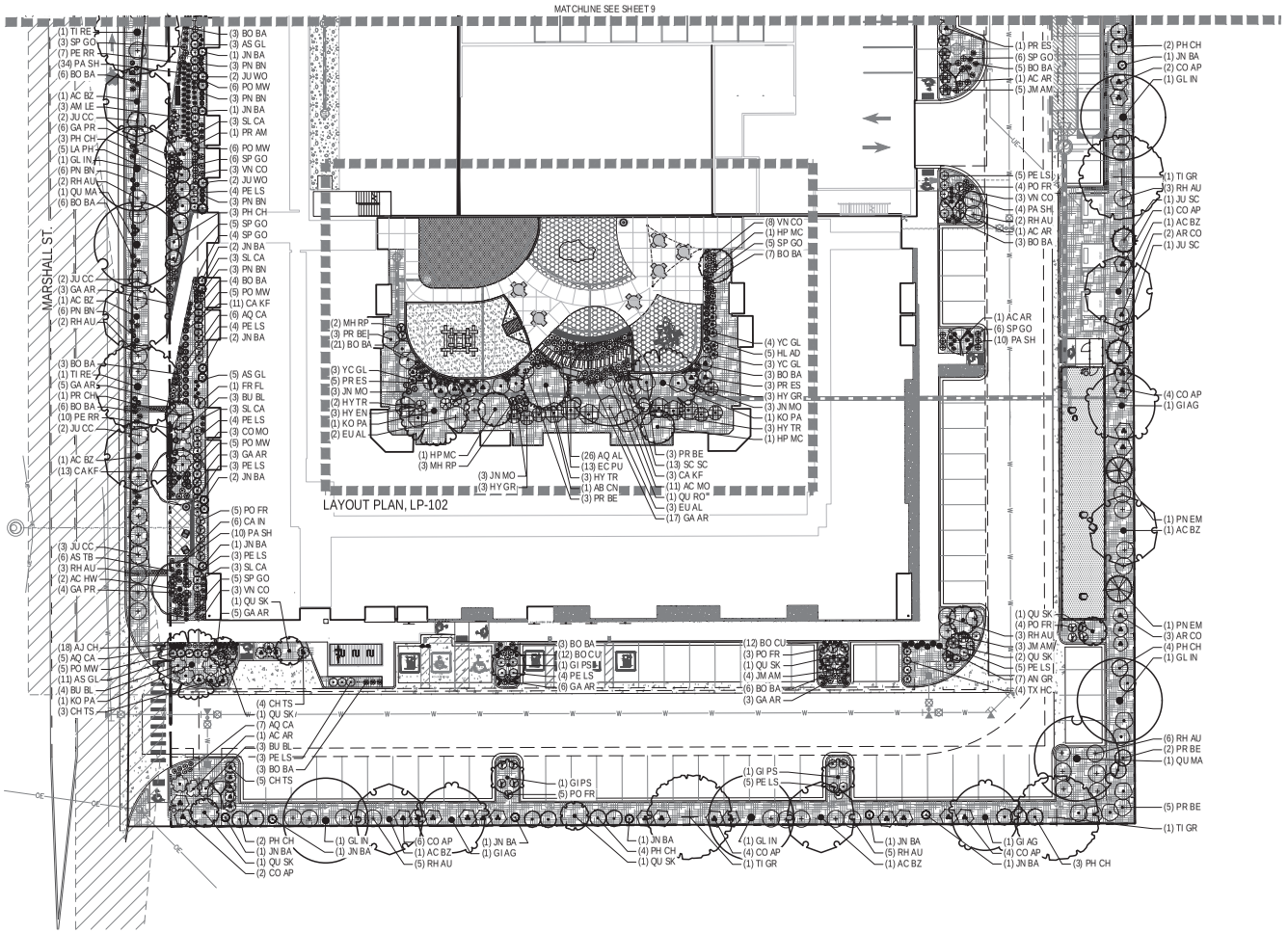
SHEET TITLE:
LANDSCAPE PLAN 1

LS-101



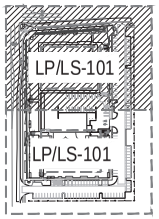
PLANT SCHEDULE SOUTH

CODE	BOTANICAL NAME
DECIDUOUS TREES	
AC AR	ACER RUBRUM `ARMSTRONG`
AC HW	ACER TATARICUM `GARANN`
AC BZ	ACER X FREEMANII `JEFFERSRED`
GI AG	GINKGO BILOBA `AUTUMN GOLD` TM
GI PS	GINKGO BILOBA `PRINCETON SENTRY`
GL IN	GLEDITSIA TRIACANTHOS INERMIS
KO PA	KOELREUTERIA PANICULATA
QU MA	QUERCUS MACROCARPA
QU RO	QUERCUS ROBUR
QU SK	QUERCUS ROBUR `FASTIGIATA`
TI RE	TILIA AMERICANA `REDMOND`
TI GR	TILIA CORDATA `GREENSPIRE`
EVERGREEN TREES	
AB CN	ABIES CONCOLOR
JU SC	JUNIPERUS SCOPULORUM
JU WO	JUNIPERUS SCOPULORUM `WOODWARD`
JN BA	JUNIPERUS SCOPULORUM `BLUE ARROW`
PN EM	PINUS LEUCODERMIS `EMERALD ARROW`
ORNAMENTAL TREES	
HP MC	HEPTACODIUM MICONIOIDES
PR AM	PRUNUS AMERICANA
PR CH	PRUNUS X VIRGINIANA `P002`
DECIDUOUS SHRUBS	
AM LE	AMORPHA CANESCENS
AS TB	ASCLEPIAS TUBEROSA
BU BL	BUDDLEIA DAVIDII `BLACK KNIGHT`
CH TS	CHAENOMELES SPECIOSA `TEXAS SCARLET`
CO AP	COTONEASTER APICULATUS
EU AL	EUONYMUS ALATUS `COMPACTUS`
FR FL	FRANGULA ALNUS `FINE LINE` TM
HY EN	HYDRANGEA MACROPHYLLA `BAILMER`
HY GR	HYDRANGEA PANICULATA `GRANDIFLORA`
HY TR	HYDRANGEA PANICULATA `TARDIVA`
JM AM	JAMESIA AMERICANA
PE LS	PEROVSKIA ATRIPLICIFOLIA `LITTLE SPIRE` TM
PH CH	PHILADELPHUS LEWISII `CHEYENNE`
PO FR	POTENTILLA FRUTICOSA
PO MW	POTENTILLA FRUTICOSA `MCKAY`S WHITE`
PR BE	PRUNUS BESSEYI
PR ES	PRUNUS X CISTENA
RH AU	RHUS TRILOBATA `AUTUMN AMBER`
SP GO	SPIRAEA JAPONICA `GOLDFLAME`
EVERGREEN SHRUBS	
AR CO	ARCTOSTAPHYLOS X COLORADOENSIS
GA PR	GAULTHERIA PROCUMBENS
JU CC	JUNIPERUS SABINA `CALGARY CARPET` TM
JN MO	JUNIPERUS SCOPULORUM `MOONGLOW`
MH RP	MAHONIA REPENS
TX HC	TAXUS X MEDIA `HICKSII`
YC GL	YUCCA GLAUCA
GROUNDCOVER	
VN CO	VINCA MINOR
ORNAMENTAL GRASSES	
AN GR	ANDROPOGON GERARDII
BO CU	BOUTELOUA CURTIPENDULA
BO BA	BOUTELOUA GRACILIS `BLONDE AMBITION`
CA KF	CALAMAGROSTIS X ACUTIFLORA `KARL FOERSTER`
HL AD	HELICTOTRICHON PRATENSE
PA SH	PANICUM VIRGATUM `SHENANDOAH`
PN BN	PENNISETUM ALOPECUROIDES `LITTLE BUNNY`
SC SC	SCHIZACHYRIUM SCOPARIUM `BLAZE`
PERENNIALS	
AC MO	ACHILLEA X `MOONSHINE`
AJ CH	AJUGA REPTANS `CHOCOLATE CHIP`
AQ AL	AQUILEGIA ALPINA
AQ CA	AQUILEGIA CAERULEA
AS GL	ASTER ALPINUS `GOLIATH`
CA IN	CALLIRHOE INVOLUCRATA
CO MO	COREOPSIS VERTICILLATA `MOONBEAM`
EC PU	ECHINACEA PURPUREA
GA AR	GAILLARDIA ARISTATA
LA PH	LAVANDULA X INTERMEDIA `PHENOMENAL`
PE RR	PENSTEMON MEXICALI `RED ROCKS`
SL CA	SOLIDAGO CANADENSIS

PROPERTY LINE

EASEMENT

KEY MAP



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NORTH

0 10 20 40

SCALE 1" = 20'

811

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DRAWN BY: LV

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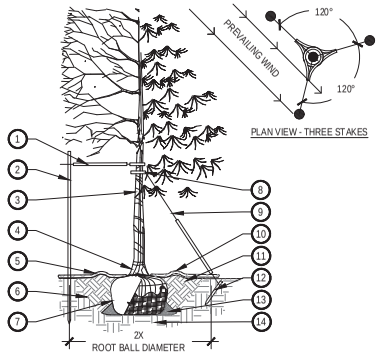
SHEET TITLE:
LANDSCAPE PLAN 2

LS-102

PRUNING NOTES:
1. ALL PRUNING SHALL COMPLY WITH ANSI A300 STANDARDS.
2. DO NOT HEAVILY PRUNE THE TREE AT PLANTING. PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS AND BROKEN BRANCHES. SOME INTERIOR TWIGS AND LATERAL BRANCHES MAY BE PRUNED. HOWEVER, DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.

STAKING NOTES:
1. STAKE TREES PER FOLLOWING SCHEDULE, THEN REMOVE AT END OF FIRST GROWING SEASON.
   a. 1-1/2" CALIPER SIZE - MIN. 1 STAKE ON SIDE OF PREVAILING WIND (GENERALLY N.W. SIDE).
   b. 1-1/2" - 3" CALIPER SIZE - MIN. 2 STAKES - ONE ON N.W. SIDE, ONE ON S.W. SIDE (OR PREVAILING WIND SIDE AND 180° FROM THAT SIDE).
   c. 3" CALIPER SIZE AND LARGER - 3 STAKES PER DIAGRAM.
2. WIRE OR CABLE SHALL BE MIN. 12 GAUGE, TIGHTEN WIRE OR CABLE ONLY ENOUGH TO KEEP FROM SLIPPING. ALLOW FOR SOME TRUNK MOVEMENT. NYLON STRAPS SHALL BE LONG ENOUGH TO ACCOMMODATE 1-1/2" OF GROWTH AND BUFFER ALL BRANCHES FROM WIRE.

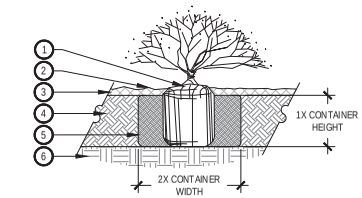


PLAN VIEW - THREE STAKES

1. PLACE MINIMUM 1/2" PVC PIPE AROUND EACH WIRE, EXPOSED WIRE SHALL BE MAXIMUM 2" EACH SIDE
2. 6'-0"UNTREATED WOOD POST, MINIMUM 1.5" DIAMETER, ALL SHALL BE DRIVEN OUTSIDE ROOTBALL AND IN UNDISTURBED SOIL
3. TREE WRAP TO BE INSTALLED ONLY FROM OCTOBER 1 THROUGH APRIL 30, DECIDUOUS ONLY, WRAP FROM BASE OF TRUNK TO BOTTOM LIMB
4. PLANT TREE SO THAT TOP MOST MAJOR ROOT IS 1"-2" ABOVE FINISHED GRADE
5. 2'-0" RADIUS MULCH RING, VENTERED ON TRUNK, 3" DEPTH, DO NOT PLACE MULCH IN CONTACT WITH TREE TRUNK, FINISHED GRADE REFERENCES TOP OF MULCH
6. 1:1 SLOPE ON SIDES OF PLANTING HOLE
7. ROPES AT TOP OF ROOTBALL SHALL BE CUT, REMOVE TOP 1/3 OF BURLAP, NON-BIODEGRADABLE MATERIAL SHALL BE TOTALLY REMOVED
8. GROMMETED NYLON STRAPS
9. GALVANIZED WIRE, MINIMUM 12 GAUGE CABLE,TWIST WIRE ONLY TO KEEP FROM SLIPPING
10. 4-6" HIGH WATER SAUCER IN NON-TURF AREAS
11. BACKFILL WITH BLEND OF EXISTING SOIL AND A MAXIMUM 20%, BY VOLUME, ORGANIC MATERIAL, WATER THOROUGHLY WHEN BACKFILLING
12. 2'-0" STEEL T-POST, ALL SHALL BE DRIVEN BELOW GRADE AND OUTSIDE ROOTBALL IN UNDISTURBED SOIL
13. PLACE SOIL AROUND ROOT BALL FIRMLY, DO NOT COMPACT OR TAMP, SETTLE SOIL WITH WATER TO FILL ALL AIR POCKETS
14. PLACE ROOT BALL ON UNDISTURBED SOIL TO PREVENT SETTLEMENT

1 TREE PLANTING DETAIL (PRIVATE PROPERTY)

SCALE: 3/16" = 1'-0"

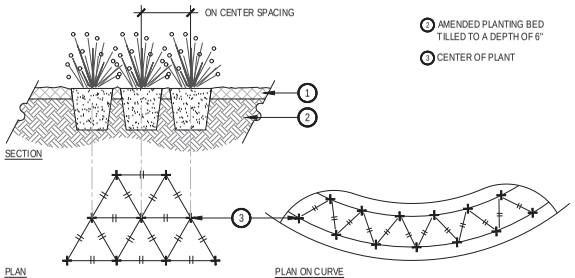


1. SET SHRUB ROOT-BALL 1" HIGHER THAN FINISH GRADE
2. FINISH GRADE (TOP OF MULCH)
3. SPECIFIED MULCH, REFER TO PLANS
4. TILL IN SPECIFIED SOIL AMENDMENT TO A DEPTH OF 8" IN BED
5. BACKFILLED AMENDED SOIL
6. UNDISTURBED SOIL

NOTE:
1. BROKEN OR CRUMBLING ROOT-BALLS WILL BE REJECTED.
2. CARE SHOULD BE TAKEN NOT TO DAMAGE THE SHRUB OR ROOT-BALL WHEN REMOVING IT FROM ITS CONTAINER.
3. ALL JUNIPERS SHOULD BE PLANTED SO THE TOP OF THE ROOT-BALL OCCURS ABOVE THE FINISH GRADE OF THE MULCH LAYER.
4. DIG PLANT PIT TWICE AS WIDE AND AS HIGH AS THE CONTAINER.
5. PRUNE ALL DEAD OR DAMAGED WOOD PRIOR TO PLANTING, DO NOT PRUNE MORE THAN 20% OF LIMBS.

2 SHRUB PLANTING

SCALE: 1 1/2" = 1'-0"



1. SPECIFIED MULCH, REFER TO PLANS
2. AMENDED PLANTING BED TILLED TO A DEPTH OF 6"
3. CENTER OF PLANT

NOTES:
1. WHEN PLANTED ON A CURVE, ORIENT ROWS TO FOLLOW THE LONG AXIS OF AREAS WHERE PLANTS ARE MASSED.

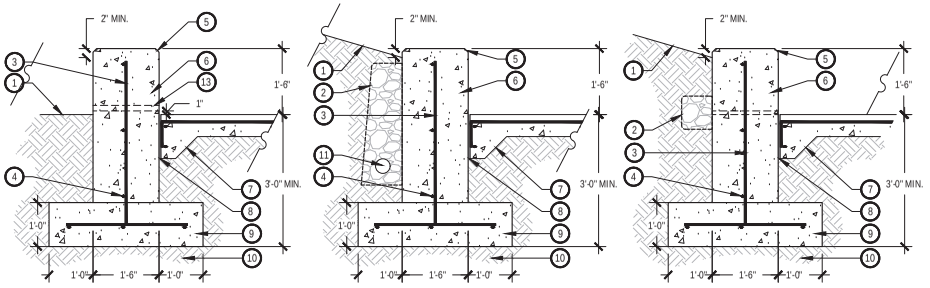
3 PERENNIAL PLANT LAYOUT

SCALE: 1" = 1'-0"

NOTES:
1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5,000 PSI AT 28 DAYS. REFER TO STRUCTURAL SPECIFICATIONS FOR CIP CONCRETE MIX.
2. VERTICAL CONTROL JOINTS SHALL BE 10' ON CENTER WITH EXPANSION JOINTS 50' ON CENTER, UNLESS OTHERWISE NOTED.
3. SEATWALL SHALL BE INSTALLED SO HORIZONTAL CURVES ARE SMOOTH AND FREE-FLOWING AS SHOWN ON PLANS.
4. VERTICAL FACES OF WALL SHALL BE PLUMB, WITH NO INCONSISTENCIES GREATER THAN 1/4" IN 10'-0" MEASURED IN ANY DIRECTION ALONG THE FACE OF WALL.
5. MINIMUM BURY DEPTH ON ALL REBAR SHALL BE 2-1/2".
6. REFER TO CIVIL FOR LOCATIONS OF EACH WALL TYPE.
7. DETAILS ARE PROVIDED TO CONVEY GENERAL DESIGN INTENT ONLY. REFER TO STRUCTURAL FOR FINAL DESIGN OF EACH WALL TYPE.



SEAT WALL PRECEDENT IMAGE



TYPE A- FREE STANDING SEAT WALL

TYPE B- RETAINING WALL WITH STORM DRAIN

TYPE C- RETAINING WALL WITH WEEPHOLE

1. ADJACENT LANDSCAPE, REFER TO PLANS
2. CLASS C FILTER MATERIAL WITH MIRAFI 140 FILTER FABRIC TO SURROUND GRAVEL BACKFILL
3. #4 CONTINUOUS REBAR, 18" ON CENTER, ALTERNATE HOOKS ON VERTICAL
4. #4 CONTINUOUS REBAR, DOWN LENGTH OF FOOTER
5. CAST IN PLACE WALL W/ BOARD FORM RELIEF FINISH AND INTEGRAL COLOR (DAVIS COLOR OUTBACK #677) ON EXTERIOR FACE. 6" BOARD WIDTH W/ NO GAPS BETWEEN. MINIMAL GRAIN RELIEF REQUIRED FOR BOARDS SELECTED FOR POURS. 1" CHAMFER RELIEF ON ALL EXPOSED SIDES
6. CONCRETE SEATWALL, 1" CHAMFER ON ALL EXPOSED EDGES, SMOOTH FINISH
7. ADJACENT HARDSCAPE, RE: LANDSCAPE PLAN FOR LAYOUT
8. EXPANSION JOINT
9. CONCRETE FOOTER
10. SUBGRADE COMPACTED TO 99% STANDARD PROCTOR DENSITY
11. 4" DIA PERFORATED PIPE, RE: CIVIL FOR CONNECTION TO STORM DRAINS
12. 1" COPPER PIPE WEEP HOLE, MESH SCREEN ON CONCRETE SIDE, SPACE 18" ON CENTER TYPICAL, COORDINATE REINFORCEMENT TO AVOID WEEP HOLE, MAINTAIN A 1-1/2" CLEAR COVER FROM REINFORCEMENT OPENINGS
13. 1.5" PVC PIPE WEEP HOLE, MESH SCREEN ON BUILDING-FACING SIDE, SPACE ALONG WALL 48" ON CENTER TYPICAL. COORDINATE REINFORCEMENT TO AVOID WEEP HOLE, MAINTAIN A 1-1/2" CLEAR COVER FROM REINFORCEMENT OPENINGS

4 BOARDFORM CONCRETE SEAT WALL

SCALE: 3/4" = 1'-0"

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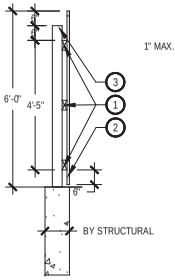
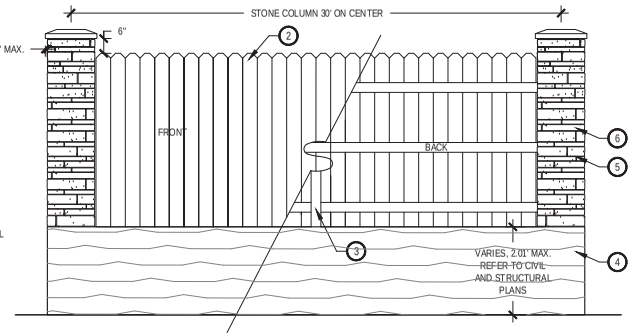
SHEET TITLE:
LANDSCAPE DETAILS

LS-500



RETAINING WALL PRECEDENT IMAGE





1. 2"X4" CEDAR RAILS ON BACK OF FENCE (TOP, MIDDLE, & BOTTOM)
2. 1"X6" CEDAR PICKETS WITH 'DOG EAR TOPS'
3. 4"X4" CEDAR POSTS ON BACK OF FENCE 8' O.C.

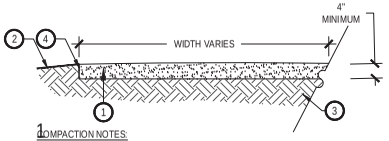
   CAST IN PLACE WALL w/ BOARD FORM RELIEF FINISH AND INTEGRAL COLOR (DAVIS COLOR OUTBACK #677) ON EXTERIOR
4. FACE, 6" BOARD WIDTH w/ ¼" GAPS BETWEEN. MINIMAL GRAIN RELIEF REQUIRED FOR BOARDS SELECTED FOR POURS. REFER TO CIVIL FOR LOCATION AND HEIGHT
5. STONE COLUMN WITH CMU CORE AND CONCRETE CAP.
6. STONE VENEER TO MATCH ARCHITECTURE

   STRUCTURAL FOOTINGS BY CONTRACTOR AND STRUCTURAL ENGINEER, 2% SLOPE MINIMUM ON EXPOSED CONCRETE TO DRAIN AWAY FROM POST

NOTES:
1. NORRIS DESIGN IS NOT RESPONSIBLE FOR STRUCTURAL ENGINEERING ASSOCIATED WITH THIS DETAIL. THIS MUST BE PREPARED BY A LOCALLY LICENSED ENGINEER AS REQUIRED FOR PERMITS AND MUST COMPLY WITH ALL CODES AND REGULATIONS.

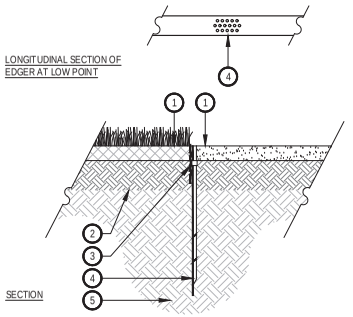
1 6' PRIVACY WOOD FENCE AND RETAINING WALL

SCALE: 1/2" = 1'-0"



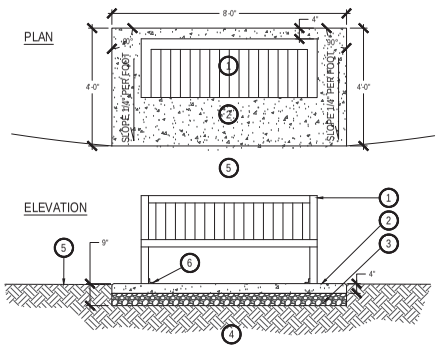
1. COMPACTED CRUSHER FINES
2. SLOPE ADJACENT GRADE AWAY
3. COMPACTED SUBGRADE
4. 6" PERFORATED METAL EDGER, WHERE ADJACENT TO EDGER

COMPACTION NOTES:
1. COMPACT WET FOR BEST RESULTS.
2. USE A SMALL (4) RIDING ROLLER TO COMPACT
3. CROWN IN FLAT AREAS (AS SHOWN).



1. FINISHED GRADE, TOP OF SOD THATCH LAYER AND TOP OF MULCH OR CRUSHER FINES SHALL BE FLUSH WITH TOP OF EDGER
2. AMENDED SOIL PER SPECIFICATIONS
3. METAL EDGER, DRILL (16) 1/2" DIAMETER HOLES 1" ON CENTER MINIMUM AT ALL LOW POINTS OR POORLY DRAINING AREAS IN ORDER TO ENSURE ADEQUATE DRAINAGE
4. EDGER STAKE
5. SUBGRADE COMPACTED TO 95% STANDARD PROCTOR DENSITY

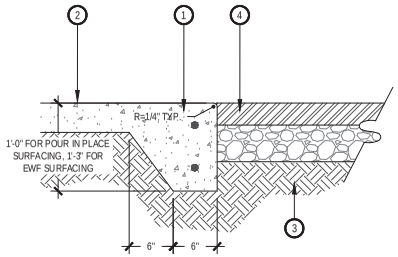
NOTES:
1. THERE SHALL BE NO EXPOSED SHARP/ JAGGED EDGES.
2. CONTRACTOR SHALL INSTALL STAKES AS REQUIRED BY THE MANUFACTURER.
3. ENSURE POSITIVE DRAINAGE.



1. BENCH - CENTER ON SLAB, BACK OF BENCH SHALL BE APPROX. 4" FROM BACK OF CONCRETE SLAB, BENCH SHALL BE SURFACE MOUNTED PER MANUFACTURER'S RECOMMENDATION.
2. CONCRETE SLAB TO BE FLUSH WITH SIDEWALK.
3. 5" DEPTH COMPACTED CRUSHED ROCK (95% STANDARD PROCTOR DENSITY) PER POURED-IN-PLACE SPECIFICATIONS
4. COMPACTED SUB-GRADE PER GEOTECH RECOMMENDATIONS
5. ADJACENT LANDSCAPE, REFER TO PLANS
6. SURFACE MOUNT PER MANUFACTURER'S SPECIFICATIONS

2 BENCH PAD

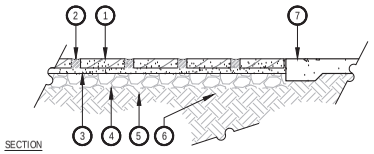
SCALE: 1/2" = 1'-0"



1. CONCRETE THICKENED EDGE W/ (2) #4 REBAR CONTINUOUS. 4,000 PSI COMPRESSIVE STRENGTH @ 28 DAYS.
2. CONCRETE SIDEWALK
3. COMPACTED SUBGRADE (95% STANDARD PROCTOR DENSITY)
4. MATERIAL VARIES, RE: PLANS

3 CRUSHER FINES

SCALE: 3/4" = 1'-0"

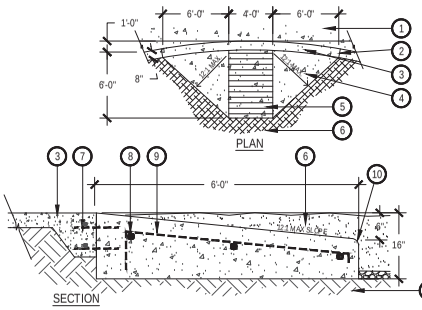


1. 12"x36" CONCRETE PAVERS, 2" THICK MINIMUM, REFER TO MATERIAL SCHEDULE, SHEET 6
2. STONES SHALL BE SPACED 2-4" APART, GAPS SHALL BE FILLED WITH LANDSCAPE MULCH
3. 1" DEPTH SETTING SAND
4. 4" DEPTH MINIMUM COMPACTED ROAD BASE COMPACTED TO 95% STANDARD PROCTOR DENSITY
5. SUBGRADE COMPACTED TO 95% STANDARD PROCTOR DENSITY
6. 6" DIAMETER X 12" MINIMUM DEPTH CONCRETE FOOTER POSITIONED FOR SURFACE MOUNTED FURNITURE
7. ADJACENT CONCRETE FLATWORK, RE: CIVIL

NOTES:
1. CONTRACTOR SHALL COORDINATE SCORING PATTERN OF THE ADJACENT CONCRETE WORK WITH THE SETTING OF THE STONES.
2. TAMP STONES WITH VIBRATOR TO LOCK STONES INTO PLACE.
3. FINISH GRADE OF STONES MUST BE FLUSH WITH ADJACENT FLATWORK.

4 METAL EDGER

SCALE: 1" = 1'-0"

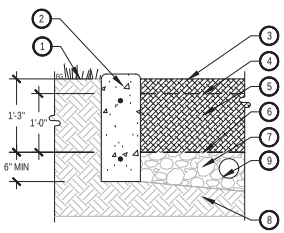


1. CONCRETE WALK
2. SCORE JOINT
3. MONOLITHIC CONCRETE CURB, RE: DETAIL 5 ON SHEET 12
4. CONCRETE RAMP
5. TOOLED SCORE JOINTS - 6" APART
6. ENGINEERED WOOD FIBER SAFETY SURFACE
7. (2) #4 DOWELS 18" O.C.
8. (3) #4 REBAR
9. #4 REBAR 18" O.C.
10. 2" RADIUS ON ALL EXPOSED EDGES
11. COMPACTED SUBGRADE

NOTE:
1. PLAYGROUND RAMP NOT TO BE LOCATED WITHIN FALL ZONE OF PLAY EQUIPMENT. RE: MANUFACTURERS' SPECIFICATIONS.

5 MONOLITHIC PLAYGROUND CURB

SCALE: 1-1/2" = 1'-0"



1. ADJ LANDSCAPE OR CONC PAVING
2. FREESTANDING PLAYGROUND CURB, SEE DETAIL 1 ON SHEET LS-502
3. TOP OF SURFACING AT INSTALLATION
4. MIN DEPTH, TOP OF SURFACING AT END OF WARRANTY PERIOD
5. ENGINEERED WOOD FIBAR SURFACING
6. GEOTEXTILE FABRIC
7. GRAVEL SUBBASE, SLOPE BOTTOM PER CIVIL
8. COMP SUBGRADE
9. 4" PERFORATED PVC PIPE, 1% MINIMUM SLOPE, REFER TO PLANS FOR LOCATIONS, RE: CIVIL

6 CONCRETE PAVERS

SCALE: 3/4" = 1'-0"

7 PLAYGROUND RAMP

N.T.S.

8 EWF SURFACING

SCALE: 1" = 1'-0"

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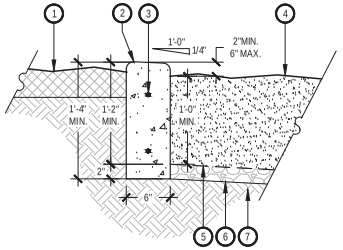
SHEET TITLE:
LANDSCAPE DETAILS

LS-501

1 FREE STANDING CONCRETE PLAYGROUND CURB

SCALE: 1 1/2" = 1'-0"

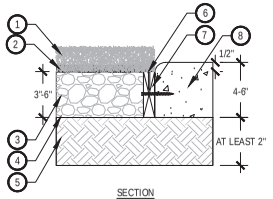


1. ADJACENT LANDSCAPE, REFER TO LANDSCAPE PLANS
2. CONCRETE CURB, 1" RADIUS ON ALL EXPOSED EDGES, SLOPE TOP 1/4" PER FOOT TOWARD PLAYGROUND
3. (2) #4 REBAR 24" ON CENTER
4. PLAYGROUND SURFACE, VARIES. REFER TO PLANS AND MATERIAL SCHEDULE
5. GEOTEXTILE FILTER / DRAINAGE MAT
6. 3/4" WASHED GRAVEL
7. SUBGRADE COMPACTED TO 95% STANDARD PROCTOR DENSITY

NOTES:
1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,500 PSI AT 28 DAYS.
2. THE DEPTH OF THE CURB VARIES TO ADJUST FOR STEEP GRADES ADJACENT TO THE PLAYGROUND PITS. IN NO CASE SHALL THE GRADE WITHIN THE PLAYGROUND PITS BE GREATER THAN 2.5%, REFER TO LAYOUT PLAN.
3. SCORE JOINTS SHALL BE SPACES 5'-0" ON CENTER AND RUN THROUGH TOP AND SIDES OF CURB.
4. SLOPE BOTTOM OF SAFETY SURFACE 2% MINIMUM TO DRAIN.

2 ARTIFICIAL TURF AT ADJACENT HARDSCAPE

NOT TO SCALE



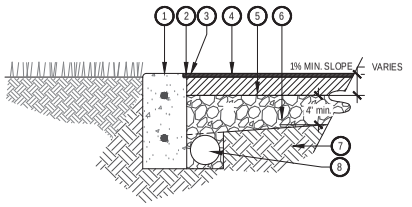
SECTION

1. SYNLAWN ADA COMPLIANT TURF, RE: MATERIAL SCHEDULE, LS-003
2. INFILL, REFER TO MANUFACTURER SPECIFICATIONS
3. 3"-6" LAYER OF AGGREGATE BASE, SEE SPECS.
4. GEOTEXTILE
5. NATURAL DIRT SUBGRADE (COMPACTED)
6. STAPLE OR NAIL TURF TO COMPOSITE WOOD BORDER AT PERIMETER AND SEAMS (OPTIONAL)
7. 2 X 4 COMPOSITE WOOD PERIMETER BOARD
8. ADJACENT HARDSCAPE, RE: CIVIL

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. THE GRASS MUST BE INSTALLED AND SEAMED WITH ADJACENT PIECES RUNNING IN THE SAME DIRECTION; SEAMS SHOULD BE GLUED WITH SUITABLE SEAMING GLUE AND SEAMING CLOTH, NOT ADHESIVE TAPE.

3 POURED IN PLACE SURFACING

SCALE: 1 1/2" = 1'-0"

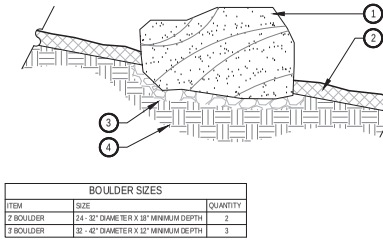


1. ADJACENT CONC. CURB
2. 4"/ 1" NOTCHED KEY WAY
3. FG PIP SURFACE TO BE FLUSH W/ ADJACENT CURB OR PAVING
4. TOP LAYER (WEARING COURSE) 3/4" MIN. EPDM RUBBER AND ALIPHATIC BINDER
5. RESILIENT LAYER (BASE COURSE) SBR AND ALIPHATIC BINDER
6. GRAVEL SUBBASE, RE: CIVIL PLANS FOR SLOPE
7. COMPACTED SUBBASE
8. PERFORATED PVC PIPE, 1% MINIMUM SLOPE, REFER TO PLANS FOR LOCATION, RE: CIVIL

NOTES:
1. COORDINATE REQUIRED DEPTHS OF POURED-IN-PLACE SURFACING WITH PLAYGROUND EQUIPMENT FOR CRITICAL FALL HEIGHTS
2. SLOPE SUB-BASE TOWARD DRAINAGE PIPES/INLETS OR FOR GENERAL SITE POSITIVE DRAINAGE.
3. REFER TO GRADING PLAN FOR FINISHED GRADES

4 LANDSCAPE BOULDER

SCALE: 3/4" = 1'-0"



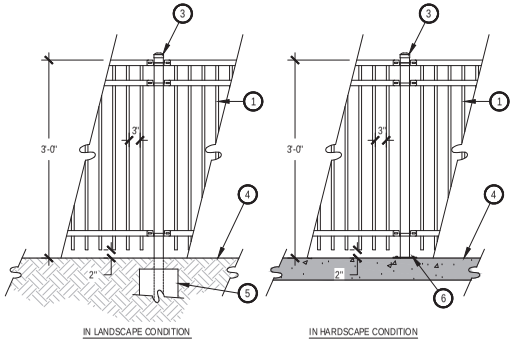
1. BOULDER, NATURALLY SET BOULDER SO THAT A MINIMUM 1/4 OF BOULDER IS BELOW FINISH GRADE, REFER TO MATERIAL SCHEDULE, SHEET LS-001
2. SPECIFIED MULCH, CRUSHER FINES OR COBBLE, REFER TO PLAN
3. 3" MINIMUM ROAD BASE COMPACTED TO 95% OF STANDARD PROCTOR DENSITY
4. UNDISTURBED GRADE

BOULDER SIZES		
ITEM	SIZE	QUANTITY
2' BOULDER	24 - 32" DIAMETER X 18" MINIMUM DEPTH	2
3' BOULDER	32 - 42" DIAMETER X 12" MINIMUM DEPTH	3

NOTES:
1. THE OWNERS REPRESENTATIVE SHALL APPROVE LOCATIONS AND SIZES OF ALL BOULDERS PRIOR TO PLACING.
2. CONTRACTOR SHALL SUBMIT SAMPLE OR PHOTOS FOR APPROVAL.

5 DOG RUN FENCE

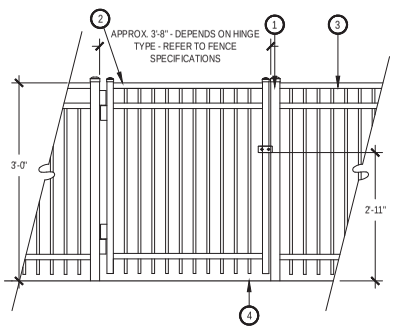
SCALE: NOT TO SCALE



1. AMERISTAR, OR APPROVED EQUAL.
2. FENCE STYLE SHALL BE: MONTAGE PLUS (POOL, PET, PLAY FENCING) MAJESTIC - 3 RAIL, NO FLUSH BOTTOM. COLOR: BLACK.
3. FENCE POST - SET IN CONCRETE FOOTER REFER TO FENCE SPECIFICATIONS FOR FOOTER AND INSTALLATION INFORMATION
4. REFER TO PLANS
5. CONCRETE FOOTER TO FROST DEPTH. REFER TO MANUFACTURER SPECIFICATIONS FOR ADDITIONAL INSTALLATION INFORMATION
6. MOUNTING PLATE FROM AMERISTAR

6 DOG RUN GATE

SCALE: NTS

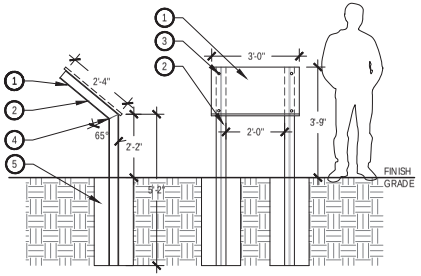


1. GATE POST TYP.
2. GATE STYLE SHALL BE: MONTAGE PLUS (POOL, PET, PLAY FENCING) MAJESTIC - 3 RAIL, NO FLUSH BOTTOM. 4' WIDTH. COLOR: BLACK. ALL GATES SHALL BE SELF CLOSING W GATE LOCK TO BE APPROVED BY OWNER.
3. DOG RUN FENCE. REFER TO DETAIL 3 ON SHEET L-8
4. ADJACENT HARDSCAPE, REFER TO PLANS

NOTES:
1. REFER TO MANUFACTURER'S FENCE SPECIFICATIONS FOR INFORMATION ON FOOTER DEPTH.

7 POLLINATOR HABITAT INFORMATIONAL SIGN

SCALE: 1/2" = 1'-0"

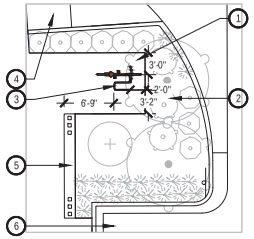


1. 30" X 36" ALUMINUM SIGN PANEL TO BE CENTERED ON SIGN MOUNT, WITH VINYL GRAPHIC APPLIED TO FACE, SIGN CONTENT TO BE PROVIDED BY LANDSCAPE ARCHITECT.
2. 4" SQUARE "H" BEAM, NOT TO BE SEALED, ALLOW TO NATURALLY WEATHER
3. THROUGH BOLTS
4. WELDED JOINT
5. FOOTER AT 36" DEPTH

NOTES:
1. OWNER OR LANDSCAPE ARCHITECT TO VERIFY LOCATION OF SIGN IN THE FIELD.
2. SIGN CONTRACTOR TO VERIFY UTILITIES AND EASEMENTS.

8 BIKE RACK LAYOUT A

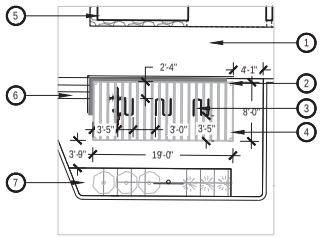
SCALE: 1/8" = 1'-0"



1. CONCRETE PAD
2. ADJACENT LANDSCAPE
3. LANDSCAPE FORMS, FLO RACK. RE: LS-002. 9 TOTAL SPACES
4. PUBLIC SIDEWALK, RE: CIVIL
5. BUILDING COLUMN, RE: ARCHITECTURE
6. ADJACENT PARKING, RE: CIVIL

9 BIKE RACK LAYOUT B

SCALE: 1/8" = 1'-0"



1. ADA RAMP WITH RAILS, RE: CIVIL
2. SHELTER COLUMNS
3. LANDSCAPE FORMS, FLO RACK. RE: S-08
4. POLIGON BIKE SHELTER, RE: S-14
5. ADJACENT BUILDING, RE: ARCHITECTURE
6. STAIRS, RE: CIVIL
7. LANDSCAPE BED, RE: PLANS

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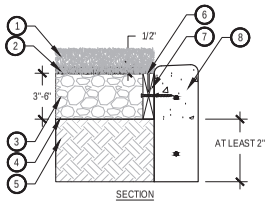
DATE:
08/07/24 ISSUE FOR CONSTRUCTION

SHEET TITLE:
LANDSCAPE DETAILS

LS-502

1 ARTIFICIAL TURF AT PLAYGROUND CURB

NOT TO SCALE



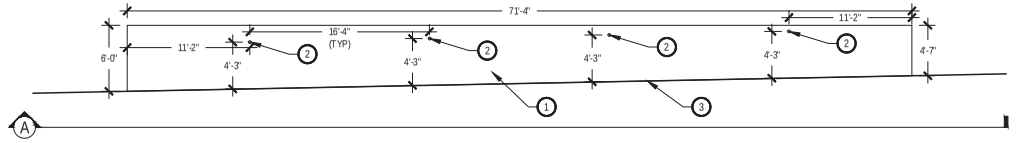
SECTION

1. SYNLAWN ADA COMPLIANT TURF, RE: MATERIAL SCHEDULE, LS-003
2. INFILL, REFER TO MANUFACTURER SPECIFICATIONS
3. 3"-6" LAYER OF AGGREGATE BASE, SEE SPECS.
4. GEOTEXTILE
5. NATURAL DIRT SUBGRADE (COMPACTED)
6. STAPLE OR NAIL TURF TO COMPOSITE WOOD BORDER AT PERIMETER AND SEAMS (OPTIONAL)
7. 2 X 4 COMPOSITE WOOD PERIMETER BOARD
8. FREESTANDING CONCRETE CURB, RE: DETAIL 1 ON SHEET LS-502

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. THE GRASS MUST BE INSTALLED AND SEAMED WITH ADJACENT PIECES RUNNING IN THE SAME DIRECTION; SEAMS SHOULD BE GLUED WITH SUITABLE SEAMING GLUE AND SEAMING CLOTH, NOT ADHESIVE TAPE.

2 NORTH COURTYARD HAMMOCK WALL

SCALE: 3/16" = 1'-0"



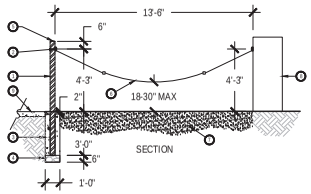
1. CAST IN PLACE CONCRETE WALL, 24" THICKNESS. RE: STRUCTURAL
2. EMBEDDED HAMMOCK LOOP MOUNT
3. ADJACENT FLATWORK, REFER TO PLANS

NOTE:

DETAIL PROVIDED FOR DESIGN INTENT ONLY. LICENSED STRUCTURAL ENGINEER TO PROVIDE DESIGN FOR CAST IN PLACE WALL, REQUIRED FOOTER, AND ANY REINFORCEMENT NEEDED FOR HAMMOCK MOUNTS.

3 HAMMOCK POST

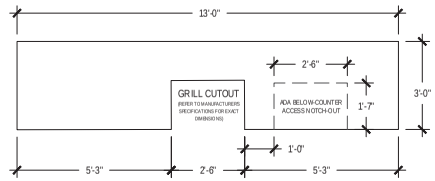
SCALE: 1/4" = 1'-0"



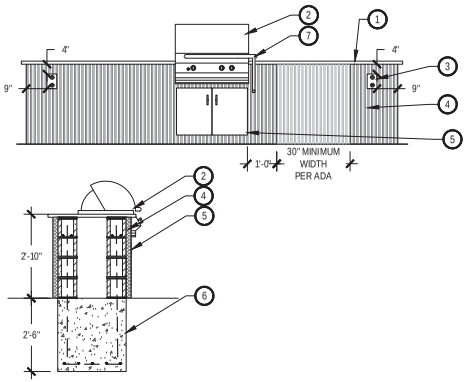
1. 4" DIAMETER STEEL TUBE, BRUSHED ALUMINUM
2. HEAVY GAUGE "D" RING, 3" OPENING, 3/4" THICK RING, WELDED TO POST FOR HAMMOCK ATTACHMENT
3. CONCRETE FOOTING, PER MANUFACTURES SPECIFICATIONS
4. CLASS 6 ANGULAR ROCK - 4" DEPTH, DRAINAGE LAYER
5. CONVEX DOMED POST CAP, WELDED SHUT
6. HAMMOCK, RE: AMENITY SCHEDULE ITEM S-17 ON SHEET LS-003
7. CRUSHER FINES, RE: PLANS
8. CAST IN PLACE CONCRETE WALL, BY STRUCTURAL
9. ADJACENT HARDSCAPE, RE: CIVIL

4 OUTDOOR KITCHEN

SCALE: 1/2" = 1'-0"



NOTES:
1. FOR STRUCTURAL INFORMATION AND FOOTINGS REF: STRUCTURAL.
2. THIS DETAIL SHOWS DESIGN INTENT ONLY. CONTRACTOR SHALL MEET ALL APPLICABLE IBC, CITY, STATE AND ADA CODES.
3. DEBURR AND ROUND ALL EXPOSED EDGES FOR ALL METAL WORK.
4. COORDINATE WITH ELECTRICAL TO PROVIDE 2 GFI OUTLETS AND POWER FOR TIMERS AND SHUT-OFF SYSTEM. ALL TIMERS AND SHUT OFF TO BE ADA COMPLIANT.



1. GRANITE COUNTERTOP, 2" OVERHANG, RE: MATERIAL SCHEDULE
2. BUILT IN GRILL TOP, RE: AMENITY SCHEDULE ITEM S-16 ON SHEET LS-003.
3. (1) GFCI ELECTRICAL OUTLET WITH ALL WEATHER COVER RE: ELECTRICAL.
4. PRECAST SPANDREL TEXTURE: US FORMLINER 2/95 AMAZONAS, TO MATCH ARCHITECTURE
5. STAINLESS STEEL ACCESS DOOR, PGS 30-INCH DOUBLE ACCESS DOOR, MODEL MDS L30
6. CONCRETE FOOTER, REFER TO STRUCTURAL FOR FINAL FOOTER DESIGN.
7. PGS LIFT-ASSIST HANDLE, MODEL# LAHK27.

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SHEET TITLE:
LANDSCAPE DETAILS

LS-503

IRRIGATION GENERAL NOTES

1. THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO INSTALL THE IMPROVEMENTS SHOWN ON THE PLANS.
2. THE CONTRACTOR SHALL COORDINATE AS NECESSARY WITH THE GENERAL CONTRACTOR AND OWNER'S REPRESENTATIVE FOR SUCCESSFUL COMPLETION OF THIS WORK.
3. ALL IRRIGATION EQUIPMENT IS TO BE AS SPECIFIED OR APPROVED EQUAL PER THE DISCRETION OF THE OWNER'S REPRESENTATIVE. THE CONTRACTOR ASSUMES ALL LIABILITY ASSOCIATED WITH THE MODIFICATION OF THE IRRIGATION SYSTEM DESIGN WITHOUT NOTIFYING THE OWNER'S REPRESENTATIVE.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONDUCT A THOROUGH SITE INSPECTION AND REVIEW OF THE PROJECT CONSTRUCTION DOCUMENTS INCLUDING BUT NOT LIMITED TO THE FOLLOWING: LANDSCAPE PLAN, UTILITY PLAN, CIVIL UTILITY PLAN, ARCHITECTURE PLAN, GRADING AND DRAINAGE PLAN AND ALL OTHER ASSOCIATED PLANS AND SPECIFICATIONS THAT AFFECT THIS WORK PRIOR TO START OF WORK. IF THE AND CONTRACTOR OBSERVES ANY DISCREPANCIES AMONG THE CONSTRUCTION DOCUMENTS AND THE EXISTING CONDITIONS ON SITE, IT IS THEIR RESPONSIBILITY TO CONTACT THE OWNER'S REPRESENTATIVE IMMEDIATELY.
5. THE CONTRACTOR MUST VERIFY THE LOCATION OF ALL PUBLIC AND PRIVATE UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. IF THE CONTRACTOR FAILS TO DO SO AND DAMAGES ANY UNDERGROUND UTILITIES. THE CONTRACTOR SHALL PAY FOR ANY REPAIR WORK ASSOCIATED WITH SAID DAMAGES.
6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE ADEQUATE VERTICAL AND HORIZONTAL SEPARATION BETWEEN ALL IRRIGATION DISTRIBUTION LINES AND ALL UTILITIES (EXISTING OR PROPOSED), CONDUIT, STORM WATER COMPONENTS, DRAINS, ETC.
7. THE CONTRACTOR SHALL CONFORM TO ALL LOCAL AND STATE REGULATIONS AND INSTALL THE IRRIGATION SYSTEM AND ITS COMPONENTS PER MANUFACTURER'S SPECIFICATIONS. THE CONTRACTOR SHALL OBTAIN AND PROVIDE PAYMENT FOR ALL PERMITS REQUIRED BY ANY LOCAL AND STATE AGENCIES AND UTILITY COMPANIES HAVING JURISDICTION OVER THIS SITE.
8. THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AND PAYING FOR CERTIFICATION OF THE BACKFLOW PREVENTER BY A STATE CERTIFIED INSPECTOR. THE CONTRACTOR SHALL PROVIDE CERTIFICATES TO OWNER'S REPRESENTATIVE PRIOR TO PROJECT ACCEPTANCE.
9. IT IS THE INTENT OF THIS DESIGN THAT ALL IRRIGATION EQUIPMENT BE INSTALLED WITHIN LANDSCAPE AREAS AND WITHIN THE PROJECT LIMITS. EQUIPMENT SHOWN OUTSIDE OF THESE LIMITS IS SHOWN FOR GRAPHIC CLARITY ONLY. IF THERE IS A QUESTION REGARDING THE LOCATION OF ANY COMPONENT OF THE IRRIGATION SYSTEM, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE OWNER'S REPRESENTATIVE. IF THE CONTRACTOR NEGLECTS TO NOTIFY THE NECESSARY PARTIES, THE CONTRACTOR SHALL PAY FOR ANY REPLACEMENT OR MODIFICATION TO ENSURE PROPER LOCATION AND OPERATION OF THE IRRIGATION SYSTEM AND ITS COMPONENTS.
10. ALL IRRIGATION DISTRIBUTION LINES AND EQUIPMENT INCLUDING BUT NOT LIMITED TO, MAINLINE, LATERALS, SPRAY HEADS, DRIP EMITTERS SHALL BE KEPT A MINIMUM DISTANCE OF 6' AWAY FROM ALL BUILDING AND WALL FOUNDATIONS, OR AS STIPULATED IN THE GEOTECHNICAL REPORT , WHICHEVER IS GREATER. EQUIPMENT MAY BE SHOWN IN THIS AREA FOR GRAPHIC CLARITY. COORDINATE ALL REQUIRED SETBACKS WITH OWNER'S REPRESENTATIVE PRIOR TO START OF WORK.
11. EACH VALVE SHALL BE INSTALLED IN A SEPARATE VALVE BOX AS DETAILED. ALL VALVE BOXES AND LIDS SHALL BE COMMERCIAL GRADE, PLASTIC WITH SELF LOCKING COVERS. LID COLOR TO BE GREEN. INSTALL FLUSH TO FINISH GRADE AND PER CONSTRUCTION DETAILS. DO NOT INSTALL IN PAVED AREAS OR IN BOTTOMS OF DRAINAGE SWALES/BASINS.
12. CONTRACTOR SHALL INSTALL DETECTABLE MARKING TAPE OR #14g DIRECT BURY TRACER WIRE IN ALL PRESSURE MAINLINE TRENCHES. SEE IRRIGATION DETAILS FOR MORE INFORMATION.
13. PLANT MATERIAL LOCATIONS TAKE PRECEDENCE OVER ROUTING OF IRRIGATION PIPING. COORDINATE INSTALLATION OF IRRIGATION EQUIPMENT SO THAT IT DOES NOT INTERFERE WITH THE PLANTING OF TREES OR OTHER LANDSCAPE MATERIAL.
14. THE CONTRACTOR SHALL MARK THE LOCATION OF THE MAINLINE, CONTROL VALVES, GATE VALVES AND HEAD LAYOUT OF A REPRESENTATIVE SPRAY ZONE. SCHEDULE A REVIEW WITH THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
15. INSTALL SCH. 40 BALL WITH OPERATIONAL INDICATOR AT ENDS OF ALL DRIP LATERALS AS DETAILED. FLUSH ALL LATERALS THOROUGHLY BEFORE INSTALLING EMITTERS AND BUBBLERS.
16. CONTRACTOR SHALL FINE TUNE AND ADJUST NOZZLE DIRECTION AND RADIUS TO REDUCE OVERSPRAY ONTO PAVING OR HARD SURFACES.
17. CONTRACTOR SHALL INSTALL A QUICK COUPLER IN 10" VALVE BOX AT THE END OF ALL BRANCHES OF THE MAINLINE, OR AS SHOWN ON PLANS, FOR WINTERIZATION AND FLUSHING OF MAINLINE.
18. THE CONTRACTOR SHALL PERFORM A PRESSURE TEST ON ALL MAINLINES. CONTRACTOR SHALL PRESSURIZE MAINLINES TO 120 PSI AND MAINTAIN PRESSURE AT 120 PSI FOR A MINIMUM CONTINUOUS PERIOD OF TWO (2) HOURS TO ACHIEVE FINAL ACCEPTANCE.
19. THIS IRRIGATION SYSTEM HAS BEEN DESIGNED TO OPERATE DURING A THREE(3) NIGHT PER WEEK, SIXTEEN(16) HOURS PER NIGHT WATERING WINDOW. DRIP IRRIGATION ZONES MAY BE ALLOWED TO RUN ON A SEPARATE SCHEDULE FROM THIS WATER WINDOW DEPENDING JURISDICTION. LANDSCAPE ESTABLISHMENT WILL REQUIRE INCREASED IRRIGATION WATER FOR DURATION OF THE ESTABLISHMENT PERIOD AND MAY REQUIRE TWICE THE AMOUNT OF WATER AS ESTABLISHED PLANT MATERIAL. THE CONTRACTOR SHALL COORDINATE WATERING SCHEDULES AND APPLICATION RATES WITH THE OWNER'S REPRESENTATIVE PRIOR TO FINAL ACCEPTANCE.
20. THE DESIGN IS BASED ON THE FOLLOWING PROJECTED PEAK SEASON WEEKLY APPLICATION RATES AFTER ESTABLISHMENT. THESE FIGURES WILL NEED TO BE ADJUSTED DUE TO SEASONAL CHANGES AND VARIABLE WEATHER CONDITIONS.
    - FESCUE/BLUEGRASS BLEND TURF 1.75" PER WEEK PEAK SEASON
    - TREE, SHRUB, AND PERENNIAL PLANT MATERIAL 1.00" PER WEEK PEAK SEASON
    - NATIVE DROUGHT TOLERANT SEED MIX 0.75" PER WEEK PEAK SEASON
21. THE CONTRACTOR SHALL PROVIDE A SEASONAL MAINTENANCE SCHEDULE WHICH SHALL BEGIN ON APRIL 15TH AND END ON OCTOBER 15TH TO ENSURE THE EFFICIENCY AND LONGEVITY OF THE IRRIGATION SYSTEM. THE MAINTENANCE SCHEDULE SHALL INCLUDE BUT IS NOT LIMITED TO THE FOLLOWING LIST OF BEST MANAGEMENT PRACTICES:
    - CHECK HEADS FOR COVERAGE AND LEAKAGE.
    - CHECK CONTROLLER PROGRAMMING AND ADJUST FOR SEASONAL CHANGES AS NECESSARY.
    - VERIFY THAT THE WATER SUPPLY AND PRESSURE ARE AS STATED IN THE DESIGN.
    - CERTIFY THE BACKFLOW PREVENTION DEVICE AND SUBMIT TEST RESULTS TO THE PROPERTY MANAGER.
    - PERIODICALLY VERIFY THE THE SENSORS IN THE IRRIGATION SYSTEM ARE OPERATING CORRECTLY.
    - WINTERIZATION AND SPRING START UP PROCEDURES.

IRRIGATION POINT OF CONNECTION NOTES

1. POINT OF CONNECTION: THERE ARE THREE (3) POINTS OF CONNECTION ON THIS PROJECT.
   POC #1 : 1" IRRIGATION BACKFLOW PREVENTION UNIT (BY OTHERS) REFER TO PLUMBING DRAWINGS FOR STUB OUT LOCATIONS TO BOTH COURTYARDS AND GROUND LEVEL STREETSCAPE.
   POC #2 : 3/4" IRRIGATION COPPER STUB OUT INTO INTERIOR COURTYARD. REFER TO PLUMBING PLANS FOR EXACT STUB OUT LOCATION.
   POC #2 : 3/4" IRRIGATION COPPER STUB OUT INTO INTERIOR COURTYARD. REFER TO PLUMBING PLANS FOR EXACT STUB OUT LOCATION.
    - CONTRACTOR IS TO LOCATE AND CONNECT DOWNSTREAM OF THE 1" IRRIGATION STUB OUT INTO ADJACENT LANDSCAPE BED (PROVIDED BY OTHERS) WITH TYPE K COPPER AT A DEPTH OF24" OR PER LOCAL CODE, WHICHEVER IS GREATER. INSTALL ONE MANUAL DRAIN, TRANSITION TO AND EXTEND CLASS 200 PVC MAINLINE TO GATE VALVE, MASTER VALVE, FLOW SENSOR, 1" QUICK COUPLER, AND EXTEND MAINLINE TO VALVES AS SHOWN.
    - THE CONTRACTOR SHALL CONFORM TO ALL LOCAL CODES, OBTAIN AND PROVIDE PAYMENT FOR ALL PERMITS ASSOCIATED WITH THIS WORK.
2. CONTROLLER LOCATION: THERE IS ONE (1) CONTROLLER ON THIS PROJECT. IRRIGATION CONTROL WIRE SHALL BE ROUTED TO EACH OF THE THREE (3) POC LOCATIONS. PLUMBING SHALL ROUTE THREE (3) AWG CONTROL WIRE (RED), ONE (1) COMMON WIRE (WHITE) FROM CONTROLLER LOCATION TO EACH INTERIOR COURTYARD STUB OUT.
   CONTROLLER A : WALL MOUNTED CONTROLLER
    - CONTROLLER SHALL BE PROGRAMMED TO RUN MULTIPLE VALVES AT ONE TIME WITH A MAXIMUM TOTAL OF 10 GPM .
    - CONTROLLER TO BE MOUNTED PER DETAILS AND MANUFACTURER'S SPECIFICATIONS.
    - CONTRACTOR TO COORDINATE WITH OWNER'S REPRESENTATIVE AND ELECTRICAL PLANS FOR POWER SERVICE. ALL ELECTRICAL EQUIPMENT AND POWER CONNECTION INSTALLATION SHALL CONFORM TO ALL LOCAL CODES. INSTALL A LINE VOLTAGE SURGE DEVICE (INTERMATIC AG2401C3/ OR SQUARE D SDSA1175) FOR 120V IN A JUNCTION BOX PRIOR TO CONTROLLER.
    - RAIN/FREEZE SENSOR: MOUNT THE RAIN SENSOR ON BUILDING EAVE IN PROXIMITY TO THE CONTROLLER. THE SENSOR SHALL BE MOUNTED IN A LOCATION IN FULL SUN AND OPEN TO RAINFALL. SENSOR SHALL BE NO MORE THAN 200' FROM WIRELESS RECEIVER. MOUNT WIRELESS RECEIVER ON OR ADJACENT TO THE IRRIGATION CONTROLLER.
3. SYSTEM PRESSURE: THE SYSTEM HAS BEEN DESIGNED PER THE FOLLOWING SPECIFICATIONS: REQUIRED MINIMUM STATIC PRESSURE OF 70 PSI AND MAXIMUM SAFE VELOCITY OF 5 FPS IN ANY PVC PIPE AND 7.5 FPS IN ANY COPPER PIPE.
    - PER WATER PURVEYOR THE STATIC PRESSURE ON SITE IS APPROXIMATELY 80 PSI.
    - THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE PRESSURE IN THE FIELD AT THE POINT OF CONNECTION BEFORE CONSTRUCTION BEGINS AND FOR NOTIFYING THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCY BETWEEN THE DESIGN PRESSURE OF THE SYSTEM AND THE MEASURED PRESSURE IN THE FIELD. IF THE CONTRACTOR FAILS TO NOTIFY OWNER'S REPRESENTATIVE OF SUCH DISCREPANCIES, THEN THE CONTRACTOR ASSUMES ALL LIABILITY AND COSTS ASSOCIATED WITH SYSTEM MODIFICATIONS TO ACCOMMODATE THE ACTUAL PRESSURE.
4. FLOW SENSOR: SENSOR REQUIRES A MINIMUM FLOW FOR PROPER READINGS. MULTIPLE ZONES MAY BE REQUIRED TO RUN SIMULTANEOUSLY TO ACHIEVE THE MINIMUM FLOWS REQUIRED. CONTRACTOR TO SET 'K' VALUES PER MANUFACTURER.
    - FLOW SENSOR REQUIRES A MINIMUM FLOW OF 0.22 GPM.

CONVENTIONAL WIRE NOTES

1. GROUNDING FOR THE IRRIGATION CONTROLLER SHALL BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS AND PER THE AMERICAN SOCIETY OF IRRIGATION CONSULTANTS GUIDELINE 100-2002 FOR EARTH GROUNDING ELECTRONIC EQUIPMENT IN IRRIGATION SYSTEMS FOUND AT www.asic.org/Design_Guides.aspx. FOR TECHNICAL SUPPORT REGARDING THE IRRIGATION CONTROLLER OR GROUNDING PLEASE CONTACT THE MANUFACTURER.
2. NEW CONTROLLER WIRE SHALL BE 14GA MIN. UL APPROVED WIRE. CONTRACTOR SHALL VERIFY EXISTING CONNECTIONS AND USE UL APPROVED WIRE STRIPPER AND 3M DBY WATERPROOF CONNECTIONS AT ALL NEW SPLICES AND CONNECTION POINTS. CONTRACTOR TO INSTALL RED ELECTRIC MARKING TAPE WITH CONTROLLER WIRE THAT IS NOT WITH MAINLINE. WIRES SHALL BE BUNDLED TOGETHER BY BLACK ELECTRICAL TAPE EVERY 10 L.F.
3. CONTRACTOR SHALL HAVE 30" OF SPARE CONTROL WIRE PRESENT AT ALL SPLICE POINTS. SPARE WIRE SHALL BE COILED IN A NEAT AND ORDERLY FASHION AT EACH SLICE POINT.
4. CONTRACTOR SHALL EXTEND TWO (2) SPARE CONTROL WIRES, AND ONE (1) SPARE COMMON WIRE AT THE END OF THE MAINLINE. CONTRACTOR SHALL INSTALL ONE (1) WIRE PULL BOX AT EACH END OF THE MAINLINE.

SLEEVING COORDINATION NOTES

1. INSTALLATION OF IRRIGATION SLEEVING IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR SHALL COORDINATE WITH THE IRRIGATION CONTRACTOR FOR LOCATION AND SIZING OF SLEEVES PRIOR TO THE START OF CONSTRUCTION.
2. SLEEVES SHALL BE INSTALLED PRIOR TO THE START OF PAVING OPERATIONS.
3. THE CONTRACTOR SHALL SLEEVE ALL IRRIGATION DISTRIBUTION LINES, VALVE CONTROL WIRES AND COMMUNICATION WIRES UNDER ALL PAVED SURFACES, WALL FOOTERS, DRAINAGE CHANNELS, INLETS, CATCH BASINS, ETC.
4. ALL SLEEVES SHALL EXTEND A MINIMUM OF 12" BEYOND EDGE OF ALL OBSTRUCTIONS. NO TEES, ELLS OR OTHER TURNS IN PIPING SHALL BE LOCATED UNDER ANY OBSTRUCTIONS.
5. EACH PIPE SHALL BE IN A SEPARATE SLEEVE. WIRES SHALL BE IN A SEPARATE PIPE UNDER ALL PAVED SURFACES.
6. SLEEVING SHALL BE INSTALLED PER THE SIZES AND QUANTITIES SHOWN ON THE PLANS BASED ON THE CHART BELOW.

PIPING	REQUIRED SLEEVE SIZE
MAINLINE PIPING	3" CLASS 200 PVC
LATERAL PIPING	2X NOMINAL DIAMETER OF LATERAL
CONTROL WIRES	2" CLASS 200 PVC (2.5" 45 WIRES +)

WATER WISE LANDSCAPE DESIGN

1. OVERALL PLANTING AND AMENITY DESIGN TAKES INTO ACCOUNT SITE CONDITIONS AND INTENDS TO GROUP HIGHER WATER USE LANDSCAPE IN AREAS OF THE SITE THAT WILL BE HIGHLY VISIBLE AND ACTIVE. PERIMETER AREAS THAT HAVE LESS ACTIVE SPACE ARE INTENDED TO USE LESS WATER.
2. SOIL PREPARATION WILL BE DETERMINED BY PLANTING INTENDED FOR A PARTICULAR AREA, WITH A STANDARD 3.5 CU YDS. OF AMENDMENT PER 1000 SF BEING SPECIFIED. AREAS OF NATIVE ESTABLISH A THICKER STAND OF GRASSES, AND AVOID WEEDS.
3. PLANTS ARE INTENDED TO BE SELECTED AND GROUPED BASED ON THEIR WATER REQUIREMENTS INTO SPECIFIC HYDROZONES TO MINIMIZE WATER USE AND ESTABLISH HEALTHY RESILIENT PLANT COMMUNITIES.
4. IN GENERAL, TURF AREAS HAVE BEEN FOCUSED ON HIGH USE AREAS ALONG TRAILS FOR PULL OFF ZONES AND IN PARK AREAS FOR ACTIVE USE.
5. ALL LANDSCAPE BEDS WILL RECIEVE ROCK OR WOOD MULCH TO HELP PREVENT WEEDS AND RETAIN SOIL MOISTURE.
6. THE OVERALL IRRIGATION SYSTEM WILL HAVE A CENTRAL CONTROL SYSTEM THAT RATIONS WATER BASED ON ENVIRONMENTAL CONDITIONS. THE IRRIGATION SYSTEM WILL UTILIZE EFFICIENT TECHNIQUES SUCH AS DRIP IRRIGATION AND LIMIT SPRAY IRRIGATION TO AREAS OF TURF. TEMPORARY IRRIGATION MAY BE UTILIZED FOR INTENT OF LIMITING IRRIGATION TO THESE AREAS LONG TERM.
7. MAINTENANCE OF THE LANDSCAPE WILL PROMOTE WATER SAVINGS THROUGH PROACTIVE STANDARDS INCLUDING TURF HEIGHT TO HELP REDUCE EVAPOTRANSPIRATION AND PROPER PRUNING OF TREES AND SHRUBS TO ENCOURAGE MORE RESILIENT PLANT COMMUNITIES. IN GENERAL, THE DESIGN UTILIZES A HIGH PERCENTAGE OF NATIVE PLANT VARIETIES TO PROMOTE LONG TERM WATER CONSERVATION.

IRRIGATION SCHEDULE

SYMBOL	DESCRIPTION	MODEL NO. DESCRIPTION	DETAIL #	AND SHEET
C	IRRIGATION CONTROLLER	RAIN BIRD ESP-ME3 W/ LNK 2 WIFI MODULE 120VAC POWER REQUIRED - SEE PLANS FOR LOCATION(S)	1	LI-200
RS	RAIN SENSOR	RAIN BIRD WR2-RFC REFER TO CONTROLLER NOTES	2	LI-200
D	MANUAL DRAIN VALVE	MATCO-NORCA 3/4" 201X INSTALLED IN AEP 910L-1G2G VALVE BOX	3	LI-200
MV	MASTER VALVE	RAIN BIRD 100EFB-CP SERIES INSTALLED IN MECHANICAL ROOM	4	LI-200
FS	FLOW SENSOR	FLOWMEC QS200-10 INSTALLED IN MECHANICAL ROOM	4	LI-200
	ISOLATION GATE VALVE	MATCO-NORCA 514TX MATCH LINE SIZE, INSTALLED IN AEP 910L-1G2G VALVE BOX	7	LI-200
	QUICK COUPLER	RAIN BIRD 44LRC INSTALLED IN AEP 910L-1G2G VALVE BOX	6	LI-200
	TURF VALVE ASSEMBLY	RAIN BIRD-PEB SERIES WITH SCH 40 BALL VALVE, AND INSTALLED IN AEP 1015-1G2G VALVE BOX, SIZED PER PLAN	2	LI-201
	DRIP VALVE ASSEMBLY	RAIN BIRD XCZ-100-PRB WITH SCH 40 BALL VALVE, AND INSTALLED IN AEP 1320-1G2G VALVE BOX, SIZED PER PLAN	3	LI-201
STRIP R-VAN14 R-VAN18 R-VAN24	TURF ROTARY	RAIN BIRD RD06-S-P45-F WITH R-VAN SERIES NOZZLE NOZZLE PER PLAN	1	LI-201
	SLEEVING	CLASS 200 PVC REFER TO SLEEVING NOTES	5	LI-200
	SERVICE LINE	TYPE K COPPER SIZE: MATCH POC UNLESS OTHERWISE NOTED		NA
	PVC MAINLINE	CLASS 200 PVC BE SIZE: 1 1/2" UNLESS OTHERWISE NOTED	8	LI-200
	PVC TURF LATERAL	CLASS 200 PVC BE SIZE: 1" MINIMUM UNLESS OTHERWISE NOTED	8	LI-200
	DRIP LATERAL	UV RESISTANT POLYETHYLENE SIZE: 3/4" MINIMUM UNLESS OTHERWISE NOTED	4-6	LI-201
	FLUSH END CAP	SCH 40 BALL VALVE WITH RAIN BIRD OPERIND OPERATIONAL INDICATOR INSTALLED IN AEP 910L-1G2G VALVE BOX	7	LI-201

VALVE CALLOUT

X - X
X" XX

- VALVE/STATION NUMBER
- ZONE DESIGNATION: T (TREES), S (SHRUBS), A (ARTIFICIAL TURF),
- VALVE FLOW: (GPM)
- VALVE SIZE

EMITTER SCHEDULE

PLANT TYPE	EMITTER	QTY.	TOTAL GPH
PERENNIAL / GRASSES	0.5 GPH	TWO EACH	1.0 GPH
DECIDUOUS SHRUBS	1.0 GPH	TWO EACH	2.0 GPH
EVERGREEN SHRUBS	1.0 GPH	TWO EACH	2.0 GPH
DECIDUOUS TREE	1.0 GPH	EIGHT EACH	8.0 GPH
EVERGREEN TREE	1.0 GPH	EIGHT EACH	8.0 GPH

EMITTER NOTES

1. ALL PLANT MATERIAL SHALL BE IRRIGATED WITH RAIN BIRD XB SERIES PRESSURE COMPENSATING EMITTERS.
2. EMITTER SCHEDULE IS FOR REFERENCE ONLY. THE CONTRACTOR SHALL ADJUST EMITTER AND NUMBER OF EMITTERS BASED ON THE NEEDS OF INDIVIDUAL PLANTS OR PLANT HYDROZONES.
3. 1/4" DISTRIBUTION TUBING NOT TO EXCEED 8' IN LENGTH.
4. RAIN BIRD DBC-025 DIFFUSER BUG CAP AND TS-025 STAKE ON ALL 1/4" DISTRIBUTION TUBING EMISSION POINTS.
5. REFER TO DRIP IRRIGATION DETAILS 4-7, SHEET LI-201

CITY OF ARVADA NOTES

1. SITE SHALL BE LANDSCAPED PRIOR TO ISSUANCE OF FINAL CERTIFICATE OF OCCUPANCY (CO) DURING THE GROWING SEASON OF APRIL 1ST TO OCTOBER 1ST, AT ALL OTHER TIMES THE INDIVIDUAL SITES SHALL BE LANDSCAPED WITHIN 45 (FORTY-FIVE) DAYS OF THE START OF THE FOLLOWING GROWING SEASON.
2. LANDSCAPE MAINTENANCE
   - 2.A. ALL PLANTS SHALL BE MAINTAINED CONTINUALLY IN A HEALTHY CONDITION IN ACCORDANCE WITH GENERALLY ACCEPTED PROFESSIONAL HORTICULTURAL STANDARDS AND PRACTICES. PLANTS THAT DIE OR ARE UNHEALTHY SHALL BE REPLACED ACCORDING TO THE APPROVED LANDSCAPE PLAN.
   - 2.B. REGULAR PRUNING AND TRIMMING SHALL BE PERFORMED TO MAINTAIN HEALTH AND AN ATTRACTIVE APPEARANCE TO PERMIT THE PLANTS TO ACHIEVE THEIR INTENDED FORM AND HEIGHT.
   - 2.C. ALL LANDSCAPE AREAS SHALL BE KEPT FREE OF WEEDS, LITTER AND TRASH AND ALL IRRIGATION SYSTEMS SHALL BE PROPERLY MAINTAINED.
3. ALL LANDSCAPE AREAS SHALL BE IRRIGATED WITH UNDERGROUND AUTOMATIC IRRIGATION SYSTEM. TREES, SHRUBS, AND DECORATIVE GRASSES WILL BE IRRIGATED BY A SEPARATE ZONE FROM SOD/GRASS; THIS INCLUDES TREES PLANTED IN SOD/GRASS AREA. THE IRRIGATION SYSTEM IS TO HAVE A RAIN SENSOR SHUT OFF INSTALLED.
4. LANDSCAPING THAT LIES WITHIN SIGHT TRIANGLES SHALL NOT GROW TO BE OVER 2-6" IN HEIGHT.
5. TREES AND LANDSCAPING WITHIN DEVELOPMENTS, WHEN FULLY MATURE, SHALL PROVIDE AN UNOBSTRUCTED VERTICAL CLEARANCE OF 13'-6" AND PROVIDE THE MINIMUM UNOBSTRUCTED FIRE APPARATUS ACCESS ROAD WIDTH AS REQUIRED BASED ON THE HEIGHT OF THE BUILDING.
6. TREES SHALL NOT BE PLANTED CLOSER THAN 10 FEET TO ANY SEWER OR WATER LINE, METER, AND VAULTS. TREE PLANTING SHALL BE COORDINATED WITH XCEL ENERGY. LOCATIONS OF ALL UTILITIES SHALL BE VERIFIED IN THE FILED PRIOR TO PLANTING.

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MARSHALL POINTE
CONSTRUCTION DOCUMENTS
ARVADA, COLORADO

OWNER:
LINCOLN AVENUE
401 WILSHIRE BLVD,
11TH FLOOR
SANTA MONICA, CA 90401
424-222-5521

JARED WESLEY CARLOW 942 STATE OF COLORADO LICENSED LANDSCAPE ARCHITECT

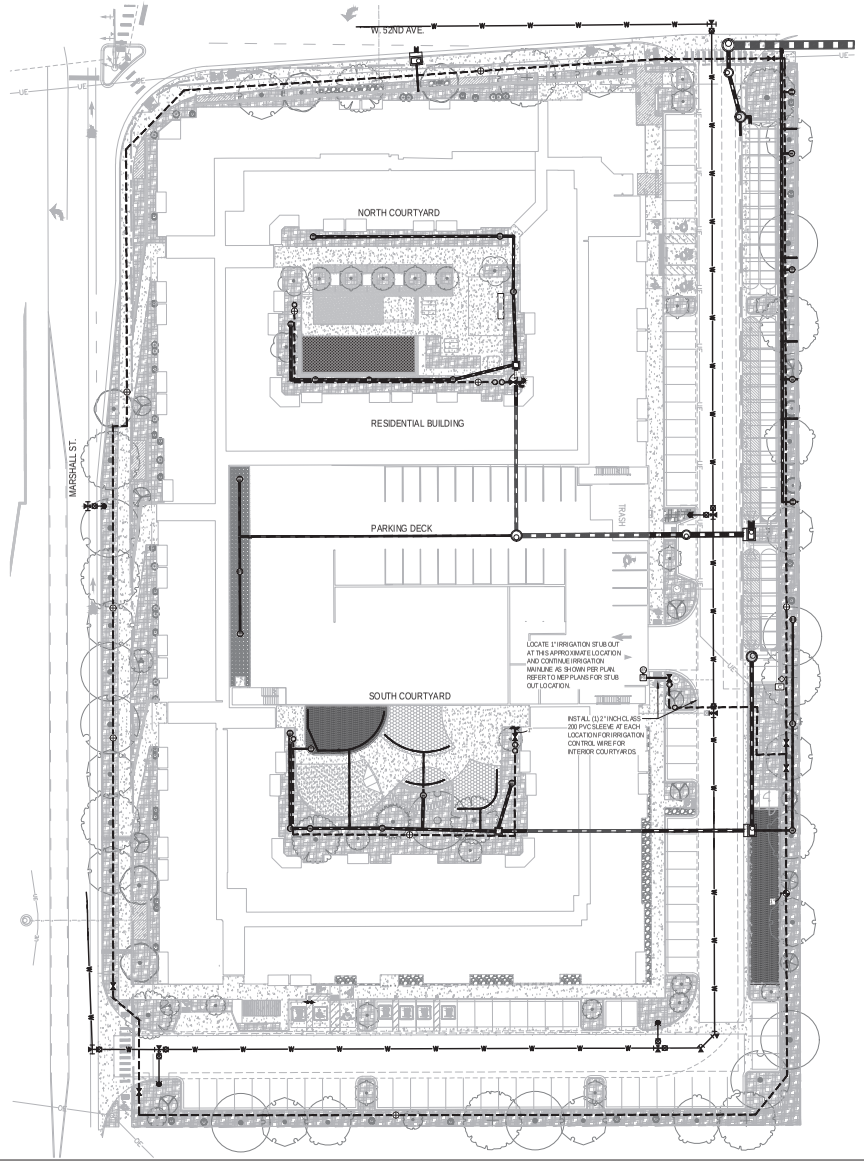
DATE:
08/07/24 ISSUE FOR CONSTRUCTION

SHEET TITLE:
IRRIGATION SCHEDULE

811

LI-001

CHECKED BY: CR, JC
DRAWN BY: LV



NORTH

0 15 30 60

SCALE 1" = 30'

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JARED WESLEY CARLOM
942
11/19/2011
Original Date of Licensure
STATE OF COLORADO
LICENSED LANDSCAPE ARCHITECT

DATE:

08/07/24 ISSUE FOR CONSTRUCTION

SHEET TITLE:

OVERALL IRRIGATION PLAN

LI-100

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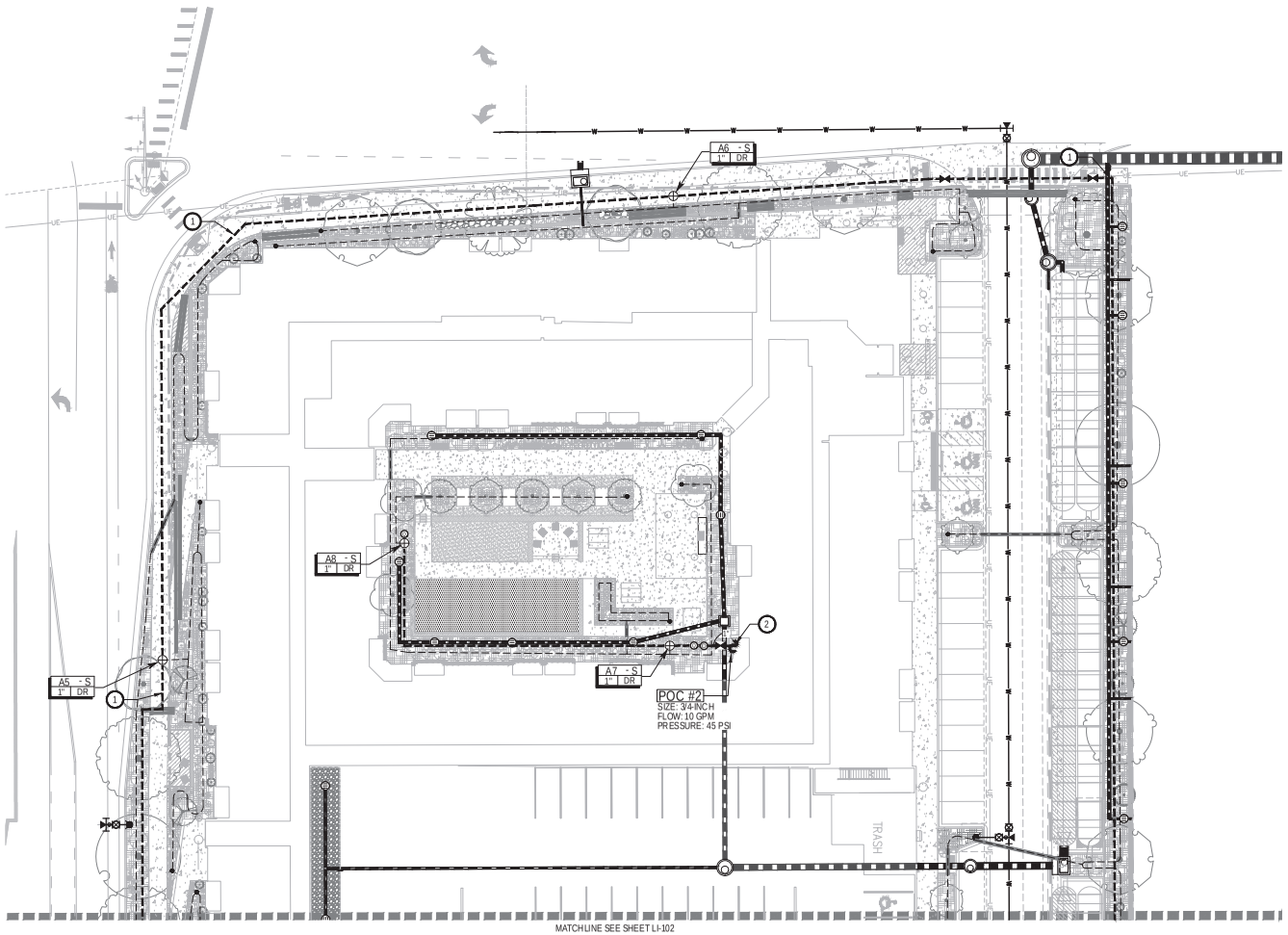


MATCHLINE SEE SHEET LI-102

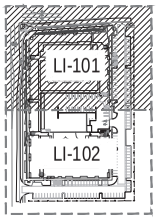
IRRIGATION KEY NOTES

1. IRRIGATION EQUIPMENT IS SHOWN HERE FOR GRAPHIC CLARITY. ALL MAINLINES, LATERALS, VALVES ETC SHALL BE LOCATED WITHIN PLANTING AREAS.
2. IRRIGATION CONTRACTOR TO LOCATE PIPE STUB OUT AND CONTROL WIRE BUNDLE AT THIS APPROXIMATE LOCATION. TRANSITION FROM 3/4" COPPER PIPE TO 1" PVC AND ROUTE PER PLAN.

IRRIGATION SCHEDULE

SYMBOL	DESCRIPTION
	IRRIGATION CONTROLLER
	RAIN SENSOR
	MANUAL DRAIN VALVE
	MASTER VALVE
	FLOW SENSOR
	ISOLATION GATE VALVE
	QUICK COUPLER
	TURF VALVE ASSEMBLY
	DRIP VALVE ASSEMBLY
STRIP RVAN14 RVAN18 RVAN24	TURF ROTARY
	SLEEVING
	SERVICE LINE
	PVC MAINLINE
	PVC TURF LATERAL
	DRIP LATERAL
	FLUSH END CAP

KEY MAP



NORTH

0 10 20 40

SCALE 1" = 20'

811

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LICENSED LANDSCAPE ARCHITECT

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SHEET TITLE:

IRRIGATION PLAN

LI-101

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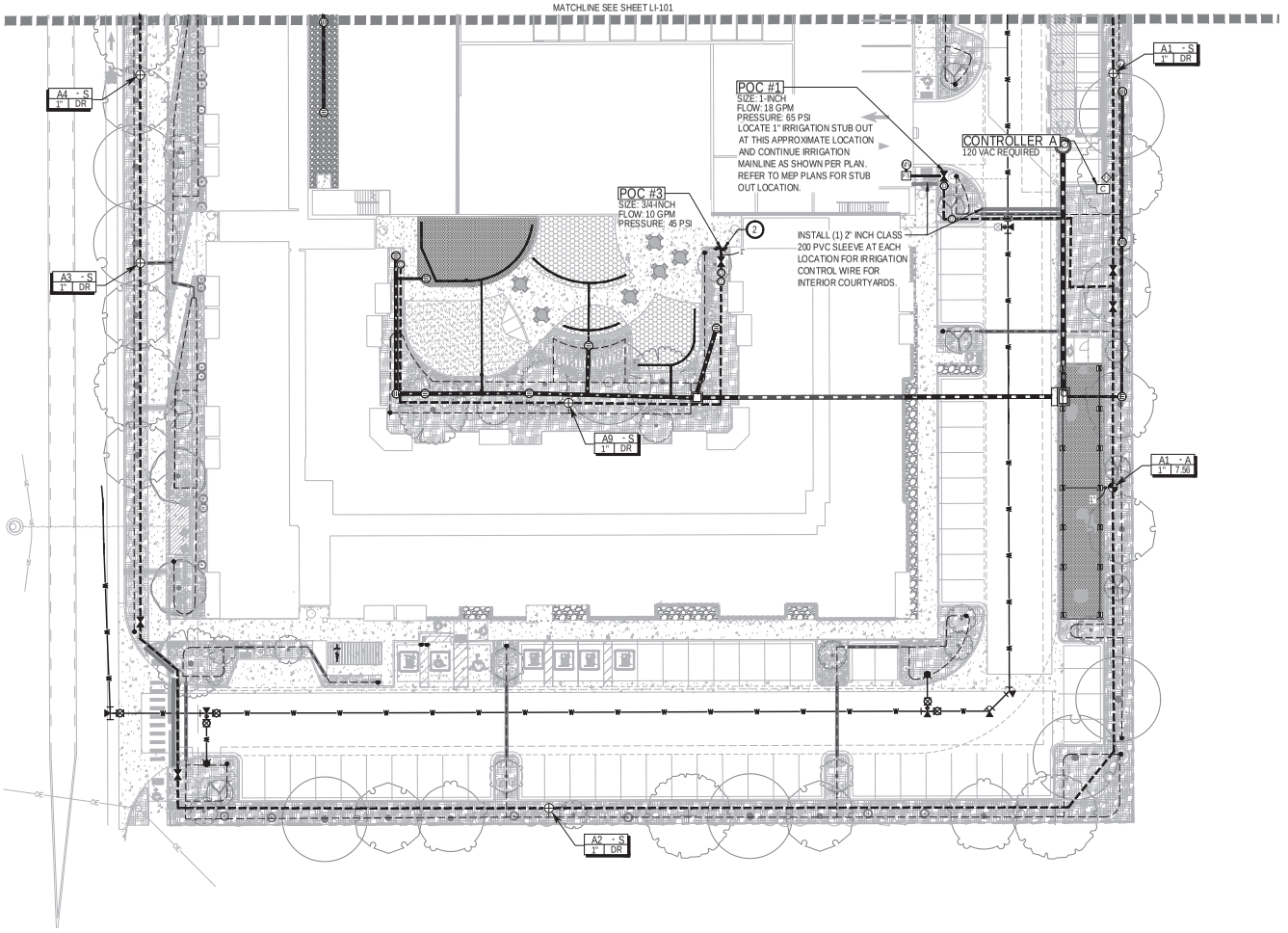
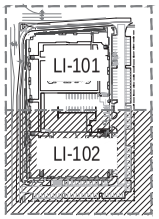


IRRIGATION SCHEDULE	
SYMBOL	DESCRIPTION
C	IRRIGATION CONTROLLER
	RAIN SENSOR
	MANUAL DRAIN VALVE
M	MASTER VALVE
FS	FLOW SENSOR
	ISOLATION GATE VALVE
	QUICK COUPLER
	TURF VALVE ASSEMBLY
	DRIP VALVE ASSEMBLY
STRIP RVAN04 RVAN04 RVAN04	TURF ROTARY
	SLEEVING
	SERVICE LINE
	PVC MAINLINE
	PVC TURF LATERAL
	DRIP LATERAL
	FLUSH END CAP

KEY MAP



IRRIGATION KEY NOTES

1. IRRIGATION EQUIPMENT IS SHOWN HERE FOR GRAPHIC CLARITY. ALL MAINLINES, LATERALS, VALVES ETC SHALL BE LOCATED WITHIN PLANTING AREAS.
2. IRRIGATION CONTRACTOR TO LOCATE PIPE STUB OUT AND CONTROL WIRE BUNDLE AT THIS APPROXIMATE LOCATION. TRANSITION FROM 3/4" COPPER PIPE TO 1" PVC AND ROUTE PER PLAN.

NOTE: PLANT MATERIAL LOCATED WITHIN THE EAST AND SOUTH BUFFERYARDS SHALL BE PLANTED IN A MANNER THAT PROVIDES A 2'-0" CLEAR ZONE BETWEEN PLANTINGS AND ADJACENT PARKING STALLS AT PLANT MATURITY, AS MEASURED FROM THE BACK OF CURB.

NORTH

0 10 20 40
SCALE 1" = 20'

811

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DRAWN BY: LV

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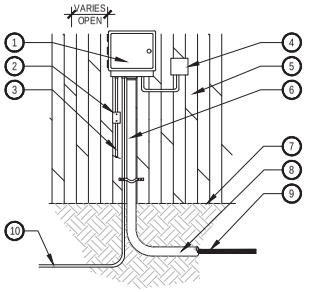
DATE:
08/07/24 ISSUE FOR CONSTRUCTION

SHEET TITLE:
IRRIGATION PLAN

LI-102

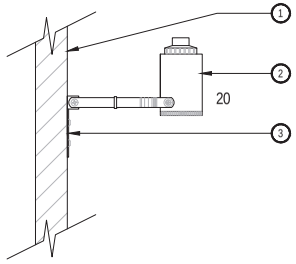


1. CONTROLLER MOUNT AT EYE-LEVEL PER MANUFACTURER'S RECOMMENDATIONS
2. DISCONNECT SWITCH
3. 120 POWER SOURCE IN STEEL CONDUIT
4. WIRELESS SENSOR RECEIVER
5. BUILDING EXTERIOR WALL
6. RIGID STEEL CONDUIT W/ CONTROL WIRES TO VALVES
7. FINISH GRADE
8. CONDUIT TO EXTEND 5 FT. BEYOND WALL
9. UF DIRECT BURIAL WIRE TO CONTROL VALVES
10. UF DIRECT BURIAL WIRE TO GROUNDING PER ASIC GUIDELINES

NOTE:
1. ALL ELECTRICAL AND CONTROLLER WIRE TO BE INSTALLED PER LOCAL CODE AND MANUFACTURER'S SPECIFICATIONS.
2. GROUND CONTROLLER PER LOCAL CODE AND MANUFACTURER'S SPECIFICATIONS.
3. PROVIDE WATERPROOF SEALANT FOR ALL CONDUIT AND WIRE ACCESS POINTS.
4. PROVIDE LOCK FOR ENCLOSURE.

1 CONTROLLER WALL MOUNT EXTERIOR

NTS

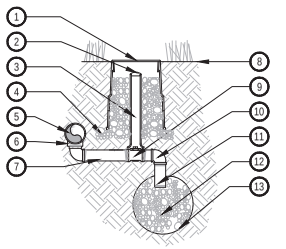


1. SUITABLE FASCIA, WALL, OR GUTTER MOUNT. MOUNT IN LOCATION WHERE SENSOR CAN RECEIVE FULL SUN AND IS OPEN TO RAINFALL.
2. WIRELESS RAIN SENSOR, LOCATE WITHIN 500' OF THE CONTROLLER.
3. SECURE MOUNTING BRACKET TO EXTERIOR WALL WITH SCREWS PER LOCAL CODES

NOTE:
1. PROVIDE WATERPROOF SEALANT FOR ALL CONDUIT AND WIRE ACCESS POINTS.
2. FINAL LOCATION AND MOUNTING SYSTEM TO BE DETERMINED BY OWNER.
3. SENSOR SHOULD NOT BE MOUNTED UNDER TREES, IN AREAS AFFECTED BY SPRINKLER SYSTEM OR UNDER EAVE OF HOUSE.

2 RAIN SENSOR SURFACE MOUNT

NTS

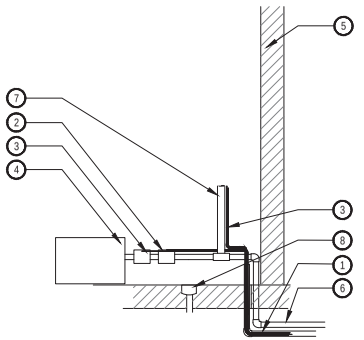


1. 10" LOCKING ROUND BOX & COVER PER SCHEDULE. TOP OF BOX TO BE FLUSH WITH FINISH GRADE.
2. 2" VALVE MARKER
3. 2" CL160 PVC ACCESS SLEEVE LENGTH AS REQUIRED.
4. 3" DEPTH 3/4" CRUSHED GRAVEL 6" BEYOND EDGE OF BOX
5. PVC PRESSURE MAIN LINE
6. SCH. 80 TEE PER MAINLINE SIZE. ALIGN IN A DOWNWARD POSITION
7. SCH. 80 PVC NIPPLE
8. FINISH GRADE
9. 1" BRONZE STOP VALVE WITH SLOTTED KEY OPERATOR
10. SCH. 80 PVC ELL
11. SCH. 80 PVC NIPPLE
12. 3/4" GRAVEL SUMP - 1 CU. FT. MIN
13. SOIL BLANKET ENCLOSING SUMP AMOCO ENG. FABRIC 4545 - 4.5 OZ. OR EQUAL

NOTE:
1. ALL THREADED CONNECTIONS SHALL BE COATED WITH TEFLON TAPE.
2. LOCATE DRAIN VALVE AT POINT OF CONNECTION AND AT ALL LOW POINT(S) ALONG THE IRRIGATION MAINLINE AS NEEDED.

3 MANUAL DRAIN VALVE

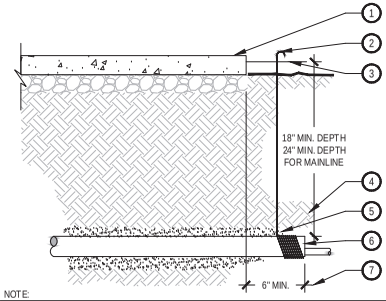
SCALE: NTS



1. SCH 40 CONDUIT WITH CONTROL WIRES TO VALVES AND CONTROL WIRE FOR INTERIOR COURTYARDS, ROUTED IN PARALLEL WITH CW SERVICE LINE
2. FLOW METER PER SCHEDULE
3. CONTROL WIRE FOR INTERIOR COURTYARDS
4. BACKFLOW PREVENTER (BY OTHERS)
5. WATER ENTRY ROOM WALL
6. 1" COPPER SERVICE LINE TO EXTERIOR PLANTING AREA. COORDINATE WITH MECHANICAL AND ARCHITECTURE FOR ROUTING AND CONNECTION STUB LOCATION.
7. 3/4" COPPER SERVICE LINE TO EXTERIOR PLANTING AREA. COORDINATE WITH MECHANICAL AND ARCHITECTURE FOR ROUTING TO INTERIOR COURTYARDS AND CONNECTION STUB LOCATION.
8. FLOOR DRAIN
   REFER TO MECHANICAL AND ARCHITECTURAL PLANS

4 IRRIGATION MANIFOLD AND CONTROLLER IN WATER ENTRY ROOM

SCALE: NTS

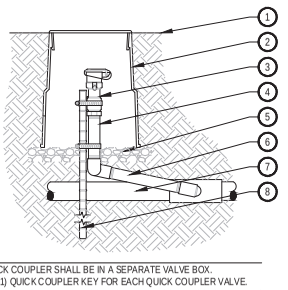


1. PAVING
2. WRAP 12 GAUGE GALVANIZED WIRE AROUND EACH END OF SLEEVE (10 WRAPS MIN.) AND EXTEND TO SURFACE AS A LOCATING DEVICE
3. FINISH GRADE / TOP OF DG
4. COMPACT SOIL AROUND SLEEVE TO SAME DENSITY AS ADJACENT UNDISTURBED SOIL
5. WASHED AND GRADED MORTAR SAND BACKFILL IN ROCKY SOIL CONDITIONS
6. PVC SLEEVE PER SCHEDULE, TWICE DIAMETER OF THE SUM OF THE PIPES/ WIRES
7. EXTEND SLEEVES 6" BEYOND EDGES OF PAVING

NOTE:
1. ALL SLEEVES SHALL BE INSPECTED PRIOR TO BACKFILLING.
2. CAP SLEEVES UNTIL USE.
3. MULTIPLE SLEEVES REQUIRE 4" HORIZONTAL SEPARATION WITHIN SAME SLEEVE TRENCH.
4. IRRIGATION PIPE AND WIRE SHALL NOT SHARE THE SAME SLEEVE.
5. MARK / STAMP - 'X' AND/OR INSTALL PLACARD AT BACK OF CURB.

5 PIPE SLEEVE

SCALE: NTS

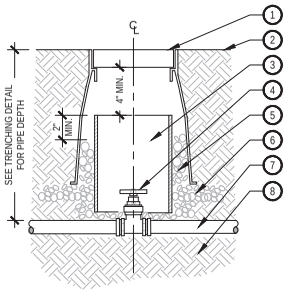


1. FINISH GRADE
2. 10" ROUND BOX & COVER PER SCHEDULE. TOP OF BOX TO FLUSH WITH FINISH GRADE
3. QUICK COUPLING VALVE W/ LOCKING COVER PER SCHEDULE
4. SCH. 80 PVC RISER (T x T)
5. 3" DEPTH 3/4" GRAVEL BASE EXTEND 6" BEYOND EDGE OF BOX
6. PVC SWING JOINT
7. PVC MAINLINE
8. 24" LONG #4 REBAR TO HOLD QUICK COUPLER IN PLACE W/ (2) STAINLESS STEEL CLAMPS

NOTES:
1. EACH QUICK COUPLER SHALL BE IN A SEPARATE VALVE BOX.
2. PROVIDE (1) QUICK COUPLER KEY FOR EACH QUICK COUPLER VALVE.
3. QUICK COUPLER SHALL HAVE LOCKING RUBBER COVER. COLOR PER LEGEND.
4. COMPACT SOIL AROUND GATE VALVE ASSEMBLY TO THE SAME DENSITY AS ADJACENT UNDISTURBED SUB-GRADE.
5. ALL THREADED CONNECTIONS SHALL BE COATED WITH TEFLON TAPE.

6 QUICK COUPLER

SCALE: NTS

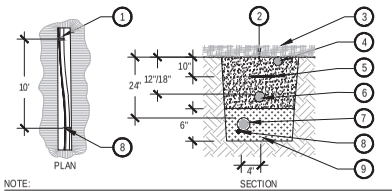


1. LOCKING ROUND BOX & COVER PER SCHEDULE. TOP OF BOX TO BE FLUSH WITH FINISH GRADE
2. FINISH GRADE
3. 8" SCH 40 PVC ACCESS SLEEVE LENGTH AS REQUIRED.
4. GATE VALVE W/ CROSS HANDLE AND SOLID WEDGE DISC PER SCHEDULE
5. 3/4" GRAVEL SUMP FILL IN AND AROUND BOX AS REQUIRED.
6. 3" DEPTH 3/4: GRAVEL EXTEND 6" BEYOND EDGE OF BOX
7. PVC MAINLINE
8. COMPACTED SUBGRADE

NOTE:
1. COMPACT SOIL AROUND GATE VALVE ASSEMBLY TO THE SAME DENSITY AS ADJACENT UNDISTURBED SUBGRADE.
2. DO NOT REST VALVE BOX OR ACCESS SLEEVES ON MAINLINE OR LATERAL LINE.
3. PROVIDE GATE VALVE KEY - LENGTH AS REQUIRED.

7 GATE VALVE 2" AND SMALLER

SCALE: NTS



1. SNAKE PVC OR POLYETHYLENE PIPE IN TRENCH
2. EXCAVATED COVER MATERIAL (SEE NOTES)
3. FINISH GRADE/TOP OF MULCH
4. POLYETHYLENE DRIP LATERAL (INSTALL JUST BELOW ROUGH GRADE TO PROVIDE UV COVER PRIOR TO MULCH LAYER)
5. MAINLINE MARKING TAPE (PURPLE MARKING TAPE IF RECLAIMED)
6. IRRIGATION SPRAY LATERAL PIPE 12" DEPTH FOR SPRAY LATERALS 18" FOR ROTOR LATERALS
7. IRRIGATION MAINLINE PIPE
8. VALVE WIRING. BUNDLE AND TAPE PER IRRIGATION NOTES
9. BEDDING MATERIAL (SEE NOTES)

NOTE:
1. ALL MAINLINES TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' SPECIFICATIONS.
2. ALL PVC PIPING TO BE SNAKED IN TRENCHES AS SHOWN IN PLAN VIEW ABOVE.
3. PROVIDE HORIZONTAL OFFSET FOR PIPING IN SHARED TRENCHES.
4. ALL 120 VOLT WIRING IN CONDUIT TO BE INSTALLED AS PER LOCAL CODES.
5. ALL ELECTRICAL WIRE CONNECTIONS TO VALVES AND SPLICES TO BE INSTALLED WITHIN A VALVE BOX AND MADE WITH DBY WATERPROOF CONNECTORS, OR APPROVED EQUAL.
6. BUNDLE AND TAPE CONTROLLER WIRING PER NOTES AND INSTALL WITHIN MAINLINE TRENCH WHEREVER POSSIBLE.
7. CONTROLLER WIRE TO BE BURIED AT 18" MIN DEPTH IF NOT LOCATED WITH MAINLINE.
8. MAINLINE BEDDING MATERIAL SHALL BE 1/4" MINUS SAND, AND SHALL BE 3" BELOW PIPE OR WIRE AND 3" ABOVE MAINLINE.
9. BEDDING IS NOT REQUIRED IN POLYETHYLENE TUBING TRENCHES OR SHARED TRENCHES.
10. EXCAVATED COVER MATERIAL SHALL BE FREE FROM DEBRIS AND ROCKS 1/2" OR GREATER.

8 PIPE TRENCH

SCALE: NTS

CHECKED BY: CR, JC
DRAWN BY: LV

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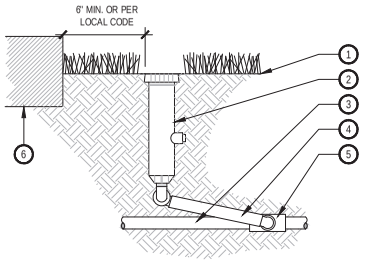
SHEET TITLE:
IRRIGATION DETAILS

LI-200

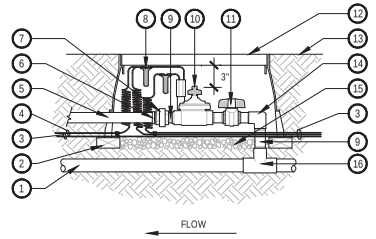


1. FINISH GRADE
2. POP-UP SPRAY HEAD PER SCHEDULE
3. PVC LATERAL PIPE
4. SWING JOINT ASSEMBLY
5. PVC SCH. 40 TEE OR ELL (S x T)
6. WALLS, WALKS, COURTS, CURB, ETC.

NOTE:
1. AFTER FLUSHING HEADS, REGRADE AND COMPACT AS NEEDED TO RETURN TO FINISH GRADE.
2. SPRINKLERS SHALL BE MIN. 6" FROM ANY WALLS, WALKS, COURTS, AND 12" FROM TURF EDGE.
3. ADJUST ALL SPRINKLERS HEADS SO THAT NO OVERSPRAY OCCURS ON ANY WALLS, WALKS, COURTS, ETC.
4. ALL THREADED CONNECTIONS SHALL BE COATED WITH TEFLON TAPE.
5. COMPACT SOIL AROUND HEAD TO THE SAME DENSITY AS ADJACENT UNDISTURBED SUBGRADE.

1 SPRAY POP-UP

SCALE: NTS

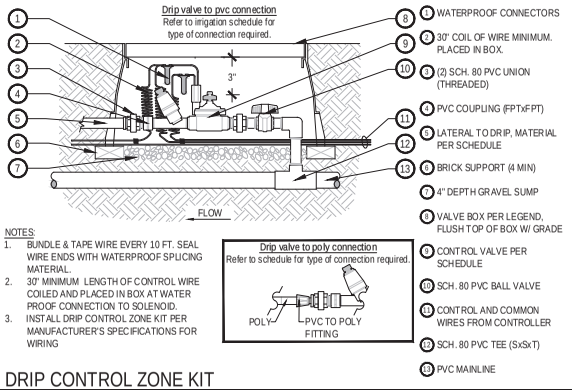


1. PVC MAINLINE
2. BRICK SUPPORT (4 MIN.)
3. CONTROL WIRE
4. COMMON WIRE TO NEXT VALVE(S)
5. PVC LATERAL
6. PVC MALE ADAPTER
7. SCH. 80 PVC UNION (THREADED)
8. WATERPROOF CONNECTORS
9. (4) SCH. 80 PVC NIPPLE/ RISER (SIZE & LENGTH VARY)
10. CONTROL VALVE
11. SCH. 80 PVC BALL VALVE
12. LOCKING VALVE BOX
13. FINISH GRADE
14. PVC ELBOW (TxT)
15. 3/4" GRAVEL SUMP - 4" DEPTH
16. PVC TEE (SxSxT)

NOTE:
1. INSTAL CONTROL VALVE PER MANUFACTURER'S RECOMMENDATIONS.

2 CONTROL VALVE

SCALE: NTS

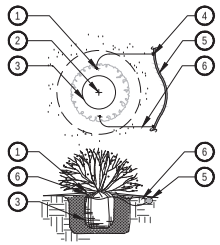


1. WATERPROOF CONNECTORS
2. 30" COIL OF WIRE MINIMUM. PLACED IN BOX.
3. (2) SCH. 80 PVC UNION (THREADED)
4. PVC COUPLING (FPTxFPT)
5. LATERAL TO DRIP, MATERIAL PER SCHEDULE
6. BRICK SUPPORT (4 MIN)
7. 4" DEPTH GRAVEL SUMP
8. VALVE BOX PER LEGEND, FLUSH TOP OF BOX W/ GRADE
9. CONTROL VALVE PER SCHEDULE
10. SCH. 80 PVC BALL VALVE
11. CONTROL AND COMMON WIRES FROM CONTROLLER
12. SCH. 80 PVC TEE (SxSxT)
13. PVC MAINLINE

NOTES:
1. BUNDLE & TAPE WIRE EVERY 10 FT. SEAL WIRE ENDS WITH WATERPROOF SPLICING MATERIAL.
2. 30" MINIMUM LENGTH OF CONTROL WIRE COILED AND PLACED IN BOX AT WATER PROOF CONNECTION TO SOLENOID.
3. INSTALL DRIP CONTROL ZONE KIT PER MANUFACTURER'S SPECIFICATIONS FOR WIRING

3 DRIP CONTROL ZONE KIT

SCALE: NTS

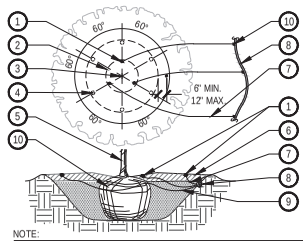


1. DIFFUSER CAP W/ DRIP STAKE
2. PLANT CENTER
3. PLANT ROOTBALL
4. SINGLE OUTLET EMITTER
5. 3/4" POLYETHYLENE DRIP TUBING
6. 1/4" DISTRIBUTION TUBING (LENGTH NOT TO EXCEED 8')

NOTE:
1. EMITTERS SHALL BE EQUALLY SPACED AROUND ROOTBALL.
2. FLUSH ALL LINES THOROUGHLY PRIOR TO EMITTER INSTALLATION.
2. IF PLANTING ON A 4:1 SLOPE OR STEEPER, INSTALL EMITTERS ON THE UPHILL SIDE OF PLANT.
3. EMITTERS SHALL BE SELF-FLUSHING PRESSURE COMPENSATING-TYPE UNLESS NOTED OTHERWISE.
4. DRIP VALVE ZONES (HYDROZONES) ARE DESIGNED TO ACCOUNT FOR DIFFERENCES IN PLANT REQUIREMENTS AND SUN EXPOSURE.
5. CONTRACTOR SHALL ENSURE HYDROZONES ARE VALVED SEPARATELY AS SHOWN ON PLAN.

4 SINGLE OUTLET EMITTER PLACEMENT

SCALE: NTS

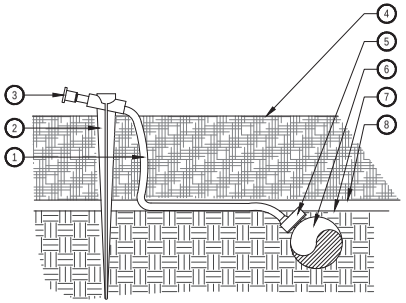


1. EMISSION POINT, DIFFUSER CAP W/ DRIP STAKE (TYP.)
2. PLANT ROOT BALL (TYP.)
3. PLANT CENTER (TYP.)
4. SECOND EMISSION POINTS SEE NOTE 3 BELOW
5. TREE TRUNK
6. MULCH LAYER
7. 1/4" DISTRIBUTION TUBING (LENGTH NOT TO EXCEED 8')
8. 3/4" POLYETHYLENE DRIP TUBING
9. SINGLE OUTLET EMITTER
10. ROOTBALL

NOTE:
1. MAXIMUM LENGTH OF ONE DISTRIBUTION TUBE SHALL BE 8'.
2. ALL EMISSION POINTS SHALL BE LOCATED ON UPHILL SIDE OF PLANT MATERIAL. ONE EMISSION POINT SHALL BE DIRECTLY TO PLANT BALL AS INDICATED. ADDITIONAL EMISSION POINTS SHALL BE WITHIN PLANT PIT PERIMETER AS DIRECTED IN THE EMITTER SCHEDULE.
3. SECOND EMISSION POINTS (IF NEEDED) AS PER THE EMITTER SCHEDULE FOR TREES WITH 3" CALIPER OR GREATER OR CONIFEROUS TREES 10' OR GREATER IN HEIGHT.
4. THIS IS A WATERING GUIDE ONLY. SITE, SOIL AND PLANT CONDITIONS VARY GREATLY. CONTRACTOR MUST OBSERVE THE PLANT MATERIAL AND MAKE ADJUSTMENTS AS NECESSARY FOR PROPER PLANT WATER REQUIREMENT.

5 TREE EMITTER PLACEMENT

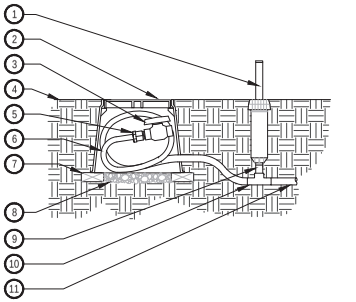
SCALE: NTS



1. 1/4" DISTRIBUTION TUBING. RUN TUBING UNDER WEED BARRIER FABRIC TO PLANT. LENGTH NOT TO EXCEED 8'
2. UNIVERSAL 1/4" STAKE
3. DIFFUSER CAP
4. TOP OF MULCH
5. PRESSURE COMPENSATING EMITTER PER EMITTER SCHEDULE. INSTALL EMITTER AT 45° TO 60° ANGLE
6. 3/4" POLYETHYLENE TUBING SET WITH TOP OF TUBING FLUSH WITH FINISH GRADE OF SOIL
7. FINISH GRADE OF SOIL
8. WEED BARRIER FABRIC

6 SINGLE OUTLET EMITTER

SCALE: NTS



1. 12" MIN. POP-UP HEAD WITH ENCLOSED NOZZLE AND SWING PIPE. (ZONE OPERATIONAL INDICATOR)
2. LOCKING ROUND BOX & COVER PER SCHEDULE. TOP OF BOX TO BE FLUSH WITH FINISH GRADE
3. 3/4" SCH. 40 PVC BALL VALVE
4. FINISH GRADE
5. 3/4" MxI MALE ADAPTER W/ CLAMPS
6. 3/4" POLYETHYLENE DRIP TUBING - 24" COIL IN BOX FOR MAINTENANCE
7. BRICK (2 REQUIRED MIN.)
8. 3/4" GRAVEL SUMP, 4" DEPTH
9. 1/2" SCH. 80 NIPPLE (LENGTH AS NEEDED)
10. 3/4"x3/4"x1/2" IxIxF INSERT TEE
11. POLY LATERAL

NOTE:
1. COMPACT SOIL AROUND VALVE BOX TO THE SAME DENSITY AS ADJACENT UNDISTURBED SUBGRADE.
2. INSTALL OPERATIONAL INDICATOR WITHIN 24" OF FLUSH VALVE.
3. ALL THREADED CONNECTIONS SHALL BE COATED WITH TEFLON TAPE.

7 DRIP FLUSH VALVE WITH OPERATIONAL INDICATOR

SCALE: NTS

CHECKED BY: CR, JC
DRAWN BY: LV

NORRIS DESIGN
PEOPLE + PLACEMAKING
1101 BANNOCK STREET
DENVER, CO 80204
P 303.892.1166
NORRIS-DESIGN.COM

MARSHALL POINTE
CONSTRUCTION DOCUMENTS
ARVADA, COLORADO

OWNER:
LINCOLN AVENUE
401 WILSHIRE BLVD,
11TH FLOOR
SANTA MONICA, CA 90401
424-222-6521

JARED WESLEY CARLSON
942
Myself(1)
Original Wish of Clients(2)
STATE OF COLORADO
LICENSED LANDSCAPE ARCHITECT

DATE:
08/07/24 ISSUE FOR CONSTRUCTION

SHEET TITLE:
IRRIGATION DETAILS

LI-201

STRUCTURAL GENERAL NOTES

DESIGN LOADS & GOVERNING BUILDING CODE

Code: International Building Code (IBC) - 2018 Edition w/ City of Arvada Amendments

Roof:
- Ground Snow Load, P_g.....30 psf
- Flat Roof Snow Load, P_f.....30 psf
- Exposure Factor, C_e.....1.0
- Thermal Factor, C_t.....1.0
- Snow Importance Factor, I_s.....1.0
- Slope Factor(s), C_s.....1.0
- Drift Surcharge Load(s), P_d.....Re: Plan
- Width of Snow Drift(s), w.....Re: Plan

Floor:
- Residential.....40 psf
- Private Corridors.....40 psf
- Private Decks.....60 psf
- Elevator Lobbies.....100 psf
- Exit Facilities.....100 psf
- Public Spaces.....100 psf
- Storage.....125 psf
- Garage Slab.....40 psf

Wind:
- Ultimate Design Wind Speed, V_{ULT}.....136 MPH (3-Second Gust)
- Nominal Design Wind Speed, V_{ASD}.....105 MPH (3-Second Gust)
- Risk Category.....II
- Exposure.....C
- Internal Pressure Coefficient.....0.18
- Parapet (Windward/Leward)$_{(LN-1)}$.....65.3 psf / -43.5 psf
- Components & Cladding$_{(LN-1)}$.....48.1 psf (20 sf) ± (Basic)
  57.6 psf (20 sf) ± (Corner)

Seismic:
- Seismic Design Category.....B
- Occupancy Category.....II
- Seismic Importance Factor, I_E.....1.0
- Mapped Spectral Response Coefficient, S_s.....0.219
- Mapped Spectral Response Coefficient, S_1.....0.059
- Design Spectral Response Coefficient, S_{DS}.....0.234
- Design Spectral Response Coefficient, S_{D1}.....0.095
- Site Class.....D
- Seismic Response Coefficient, C_s.....0.036
- Basic Seismic-Force-Resisting-System.....Light-Framed Walls w/ Wood Structural Panels
- Response Modification Coefficient (R).....6.5
- Design Base Shear.....366.8 kips
- Analysis Procedure.....Equivalent Lateral Force Procedure

Deflection:
Roof:
- Live Load.....L/360
- Total Load.....L/240
- Maximum Total Load Vertical Deflection Limit:.....1-1/4"

Floor Trusts:
- Live Load.....L/480
- Maximum Live Load Vertical Deflection Limit:.....1/2"
- Total Load.....L/240
- Maximum Total Load Vertical Deflection Limit:.....1-1/4"

Members Supporting Brick or Masonry:
- Total Load.....L/600

GENERAL CONSTRUCTION NOTES

- The Structural Contract Documents are intended to be used in conjunction w/ the plans of all other disciplines working on the project. The contractor is responsible for the coordination of all required information indicated on the Structural Contract Documents & incorporating these requirements into the shop drawings of all other disciplines prior to submittal to Anchor Engineering, Inc.
- Information provided within the Structural Contract Documents is subject to all requirements specified within the governing building code. The contractor shall be familiar w/ all portions of the governing building code that impact the type of construction being performed. For conditions where the Structural Contract Documents conflict w/ the governing building code, the more stringent requirements shall apply. The contractor shall keep a copy of the governing building code on site at all times during the construction phase of the project for reference. Anchor Engineering, Inc. shall be notified of any modifications resulting from a more stringent code requirement prior to construction for verification & coordination.
- Modifications to the Structural Contract Documents due to conditions at the site that are unknown or concealed at the time of design or due to field work within the original scope of work or additional modifications shall be performed by anchor engineering services as outlined in the project contract. The Engineer shall be notified in writing by a Request for Information (RFI) to provide recommendations for resolution of the modification requested.
- Dimensions & elevations indicated on the Structural Contract Documents shall be coordinated by the contractor w/ all other disciplines prior to the beginning of construction. Discrepancies shall be brought to the attention of the Architect. Scaling of the Structural Contract Documents is not permitted.
- The contractor shall verify field conditions including existing utilities, sub-grade & above grade conditions which may interfere w/ construction & notify the applicable disciplines for modifications as required.
- In the event of discrepancies btwn. project specifications, general notes, plans & details, the most stringent req'm. shall apply unless approved in writing.
- Coordinate all openings through roof, floors, & walls w/ the appropriate disciplines. The penetration of structural members, unless specifically indicated on the Structural Contract Documents is not permitted without the review & consent of Anchor Engineering, Inc. including Post Tensioned slab on grade & all elevated slab construction. Openings & penetrations brought to the attention of the Engineer after the Structural Contract Documents are submitted to the city for review shall be subject to the requirements outlined in the Shop Drawings & Submittals section of the general notes.
- All items embedded into concrete or masonry shall be positively secured against the hydraulic forces from concrete placement or incidental contact from tools or equipment during concrete placement. The special inspector shall verify all embedded items are secured prior to placement of concrete.
- Unless specifically detailed &/or specified on the Structural Contract Documents, stairs, balusters, half-walls & railings for decks, balconies, awnings, sun shades & walkways as well as all retaining walls & improvements have not been designed by Anchor Engineering, Inc. Design & construction of these elements, when not expressly shown on the Structural Contract Documents, are the responsibility of the general contractor. These elements are considered design-build & the general contractor shall submit plans & calculations, sealed & signed by a professional engineer licensed in the state where the work is being performed.

STRUCTURAL ERECTION & BRACING REQUIREMENTS

- The structural drawings illustrate the completed structure w/ elements in their final positions, properly supported & braced. These construction documents contain typical & representative details to assist the contractor. Details shown apply at all similar conditions unless noted otherwise.
- Although due diligence has been applied to make the drawings as complete as possible, not every detail is illustrated, nor is every exceptional condition addressed. All proprietary connections shall be installed in accordance w/ the manufacturers' recommendations. All work shall be accomplished in a workmanlike manner & in accordance w/ the governing building code, local amendments, & local ordinances.
- The general contractor is responsible for coordination of all work, including layout & dimension verification, materials coordination, shop drawing review, & the work of subcontractors. Any discrepancies or omissions discovered in the course of the work shall be immediately reported to the architect for resolution. Continuation of work without notification of discrepancies relieves the architect & engineer of all liability.
- Unless otherwise specifically indicated, the Structural Contract Documents do not describe means, methods, techniques or sequences of construction. The Contractor, in the proper sequence, shall provide proper shoring & bracing as may be required during construction & is responsible for the procurement of all engineering services required to achieve the final completed structure. The contractor, in the proper sequence, shall perform or supervise all work necessary to achieve the final completed structure, & to protect the structure, workmen, & others during construction. Such work shall include, but not be limited to, bracing, shoring for construction equipment, shoring for excavation, formwork, scaffolding, safety devices & programs of all kinds, support & bracing for cranes & other erection equipment, & the dynamic effects of thermal variations on structural elements & connections during construction. Do not backfill against basement or retaining walls until supporting slabs & floor framing are in place & securely anchored unless adequate bracing is provided. Structural steel frames are "non-self-supporting" per AISC Code of Standard Practice. Temporary guy wall remain in place until all floors, walls, roofs & any other supporting elements are in place. The architect & engineer bear no responsibility for the above items & observation visits to the site do not in any way include inspection of them.
- Where periodic or continuous inspection is required by these documents, governing building code, local amendments, or local ordinance, the owner shall employ an independent inspector certified in the particular area of concern. The inspector shall be responsible to, & report to, the architect & building department.

FOUNDATION DESIGN (Post-Tensioned Slab on Grade)

- The foundation design is based on conclusions & recommendations found in the geotechnical report project #23.22.032 provided by Cole Garner Geotechnical dated April 11, 2023. All recommendations found in this report shall be followed, including site preparation. A copy of this soils report is available for review at the Structural Engineers office, the Architects office, or the job site trailer.
- Post-Tensioned Slab-on-Grade (3rd Edition):
  a. Maximum Bearing Pressure.....3000 psf
  b. Minimum Foot Depth.....36"
  c. Edge Moisture Variation Distance, E_m
     - Center Lift Condition.....9.0 ft
     - Edge Lift Condition.....4.7 ft
  d. Differential Vertical Deflection, Y_m
     - Center Lift Condition.....0.35 in
     - Edge Lift Condition.....0.35 in
- A qualified geotechnical engineer shall observe excavations prior to concreting operations to verify the bearing stratum is properly prepared. A copy of a field report shall be transmitted to the Engineer of Record & the Architect.
- Positive drainage should be maintained around the structure per the recommendations of the geotechnical report for the life of the structure including during construction.
- Foundation walls have been designed for an equivalent active fluid pressure of 45 pcf, an equivalent at-rest fluid pressure of 65 pcf, & an equivalent passive fluid pressure of 275 pcf for the passive condition. Pressure values assume Contractor provides adequate de-watering measures for site.
- Where applicable, owner understands & accepts all risks associated w/ slab-on-grade construction as outlined in the project geotechnical report.

POST-TENSIONING INSTALLER QUALITY ASSURANCE

- Post-Tensioning concrete work shall be performed under the immediate & continual control of Installers Superintendent who shall have not less than 5 years experience in post-tensioning work & who has successfully completed a min. of 10 installations similar in size & complexity.

REINFORCED CONCRETE

- Design is based on "Building Code Requirements for Reinforced Concrete" (ACI 318 - Latest Edition). Concrete work shall conform to "Specifications for Structural Concrete for Buildings" (ACI 301 - Latest Edition). Hot & cold weather shall be in conformance w/ ACI 305 & ACI 306 respectively.
- Concrete design mixes shall provide concrete w/ properties as listed in Concrete Design Mix Matrix below.
- Cement shall conform to ASTM C150.
- Aggregate size shall not exceed 3/4" unless noted otherwise.
- Chloride admixtures shall not be used.
- Concrete mix designs shall be submitted to the structural engineer for approval prior to construction. Pouring concrete before the mix designs have been approved by the structural engineer is at the Contractor's risk. The contractor shall bear the cost, if necessary, to remove & replace the unacceptable conc.
- Concrete exposed to weather shall have a min. air entrainment of 6 ± 1 1/2 percent.
- Air entrainment may be used for interior concrete not exposed to weather but may result in finishing complications. Fly ash shall conform to ASTM specification C618, Class C or Class F. Fly ash shall not exceed 20% of the total weight of cementitious material unless noted otherwise.
- Slabs & grade beams shall not have cold joints in a horizontal plane. Where stop in concrete placement is necessary at a point other than shown on these drawings, contact the Structural Engineer for direction. Vertical construction joints within grade beams shall be made within the center third of the span between supports. Horizontal shear keys or a roughened surface shall be provided. All reinforcing shall be continuous through construction joints.
- Reinforcing Bars shall conform to ASTM A615 of ASTM A706. All bars shall be Grade 60. Bars to be welded shall conform to ASTM A706. Detailing, fabrication, & placement of reinforcing steel shall be in accordance w/ the "Manual of Standard Practice for Detailing Reinforced Concrete Structures (ACI 315 - latest ed.)". No splices of reinforcement shall be made & no welding to reinforcing shall be permitted except as shown or as approved by the Structural Engineer. Any welding of reinforcing thus approved shall be done by certified welders in strict conformance to the "AWS Structural Welding Code - Reinforcing Steel" of the American Welding Society (AWS D1.4 latest ed.). "Tack" welding ofto reinforcing will not be permitted under any circumstances. min. length of lapped splices shall be Class B tension splices as indicated in the reinforcing bar splice schedule on this sheet, unless noted otherwise. Make all bars continuous at corners/intersections or provide corner bars of equal size. Welded wire mesh shall be lapped one full mesh at sides & one full mesh plus 2" at the ends but not less than 6" & shall be wire tied.
- Reinforcing bar extending from surface of cured concrete shall not be twisted in order to achieve correct alignment. Contact Anchor Engineering for repair at all locations where reinforcing bar hooks or extensions are not placed w/ correct orientation or where bars are twisted inadvertently.
- Where conc. bars is discontinued at openings, & walls must be spliced, slice top bars at mid-span & splice bot. bars over supports. Unless noted otherwise on plan or in details, concrete protection for reinforcement in cast-in-place conc. shall be as follows:
  a. Conc. cast against & permanently exposed to earth.....3"
  b. Formed surfaces exposed to earth or weather:
     #6 through #11 bars.....2"
     #5 bar, W31 or D31 wire, & smaller.....1-1/2"
  c. Concrete not exposed to weather or in contact w/ ground:
     Slabs, walls, joists:
     #11 bar & smaller.....1"
     Beams, columns:
     Primary Reinforcement.....1-1/2"
     Stirrups, ties, spirals.....1-1/2"
- Provide (2) #5 bars, one each face, w/ 2'-0" projection on all sides of openings in concrete, unless noted otherwise.
- Provide #3 stirrup support bars where required by absence of other longitudinal reinforcement, use #4 in spandrel beams.
- Slabs-on-grade shall be reinforced w/ a min. of ASTM A1064, 70 ksi 6x6-W1.4xW1.4 W.W.M. for up to 5' thick slabs, 6x6-W2.9xW2.9 W.W.M. for 6" slabs unless noted otherwise. (Slabs-on-grade shall be reinforced w/ Fibermesh, dosage by others, unless noted otherwise.)
- Topping slabs on steel deck shall be reinforced w/ ASTM A1064, 70 ksi unless noted otherwise. Polypropylene fibers may not be used as an acceptable alternative for W.W.M.
- Provide a 3/4" chamfer on all exposed corners of concrete walls & columns unless noted otherwise.
- Contractor to allow for 1500 lineal feet of #5 rebar to be used at the discretion of the Engineer of Record. Bar not used for construction shall be returned to supplier & the returned bar cost shall be credited back to the owner.

CONCRETE MIX DESIGN MATRIX

INTENDED USE OF CONCRETE	28-DAY COMP. STRENGTH, PSI	MAX W/C RATIO	CEMENT TYPE	MINIMUM AIR CONTENT	NOTES
P.T. SLAB (EXPOSED)	4500	0.45	II or I/II	6% ± 1 1/2%	EXTERIOR LOCATIONS EXPOSED TO FREEZE-THAW CYCLES. NO FLY ASH
P.T. SLAB (INTERIOR)	4500	0.50	II or I/II	-	INTERIOR LOCATIONS NOT EXPOSED TO FREEZE-THAW CYCLES. NO FLY ASH
EXTERIOR SOG	4500	0.45	II or I/II	6% ± 1 1/2%	SLAB-ON-GRADE

- The "Concrete Mix Design Matrix" is a performance specification only to specify the final in-place concrete construction. The actual concrete mix design is provided by the concrete supplier. Anchor Engineering, Inc. is not responsible for the performance of the mix during construction or the means & methods required to attain the specified in-place concrete construction. The contractor & concrete supplier should consider the required means & methods required for each mix design to ensure performance during construction.

STRUCTURAL MASONRY

- All structural masonry shall be placed as running bond. Corners & intersections of load bearing walls shall also interlock.
- All concrete masonry block units shall conform to ASTM C90, Grade N, Type I.
- All brick units shall conform to ASTM C62, SW Grade. Mortar for veneer shall be placed in excess of 30'-0" above a supporting foundation or elevated concrete slab, anchor the veneer to the backing w/ two-piece adjustable ties w/ a minimum allowable capacity of 204 lb. spaced as required by Governing Building Code. (ZJ Masonry ZJ-2 assumed w/ safety factor = 2948.)
- All mortar for masonry walls shall conform to ASTM C270. Mortar used for below grade applications shall be Type M or S.
- All grout for masonry walls shall conform to ASTM C476. Provide fine aggregate.
- Masonry shall develop a prism compressive strength of f'm = 2,000 psi in 28 days for all structural bearing walls. Non-structural partition walls may be f'm = 2,000 psi. PERIODIC SPECIAL INSPECTIONS ARE REQUIRED.
- Where the unit strength method is preferred by the contractor in lieu of prism strength testing per the governing building code & associated reference, please refer to "Masonry Unit Compressive Strength Matrix" for min. requirements.
- Horizontal joint reinforcing in all masonry walls shall be standard ladder or truss type wall reinforcement built up from W1.7 (9 ga.) wire or approved equal w/ a maximum vertical spacing of 16" o.c., U.N.O. At multi wythe walls, horizontal joint reinforcing shall be the most central wythe together.
- Vertical reinforcing shall be the size & spacing shown on the drawings & extend full height of the wall. Full height vertical reinforcing shall also be provided at corners, ends of walls, jambs of openings, & each side of vertical control joints. Reinforcing shall conform to ASTM A615, Grade 60 or ASTM A706. All cells containing reinforcing or anchor bolts shall be fully grouted. All masonry reinforcing shall be lapped as required by the Governing Building Code.
- Fill all voids & block cores solid w/ grout for a distance of 24" beneath & 12" each side of all beam reactions or other concentrated loads. U.N.O.
- All dowels from foundation shall match size & location of vertical reinforcing in masonry. Dowel embedment shall be per the Rebar Lap Length table & project bar as required to splice w/ wall vertical bar per the rebar lap length requirements of the Governing Building Code.
- Provide bond beams w/ (2) #5 cont. bars at top of parapet, roof bearing elev. & floor bearing elevs., U.N.O. Lap bond beams 4'-0" where stepped.
- Vertical control joints shall be provided in masonry walls as shown on the architectural drawings. Care shall be taken to assure control joints are free of mortar fins.
- Provide steel lintels as shown in the lintel schedule for all openings in masonry walls unless noted otherwise.
- Care shall be exercised to minimize the penetration of mortar into grout spaces. Provide clean-outs at bottom of each grouted cell. Use high-pressure air or water to clean grout space & reinforcing. Plug clean-outs w/ masonry units & brace against grout pressure.
- Anchor reinforcement at maximum 4'-0" o.c. to prevent displacement during grouting operations.

MASONRY UNIT COMPRESSIVE STRENGTH MATRIX

SPECIFIED MASONRY 28 DAY STRENGTH (f'm), PSI	MIN. NET AREA STRENGTH OF MASONRY UNITS w/ TYPE M OR S MORTAR, PSI	MIN. NET AREA STRENGTH OF MASONRY UNITS w/ TYPE N MORTAR, PSI	MIN. 28 DAY STRENGTH OF GROUT, PSI
2,000	2,000	2,650	2,000
2,500	3,250	4,350	2,500
3,000	4,500	-	3,000

DIMENSION LUMBER, TIMBERS, & STRUCTURAL SHEATHING

- All dimension lumber & timbers used for structural framing (excepting wall studs & plates) shall be Hem Fir visually graded as follows:
  Timbers Used for Structural Framing:
  2" thick, 4" wide..... Hem Fir No. 2 or better Fb = 850 psi
  2"-4" thick, 5" & wider..... Hem Fir No. 2 or better Fb = 850 psi
  5" & thicker, 5" & wider.... Hem Fir No. 1 or better Fb = 975 psi
  Dimension lumber used for 2x6 & 2x4 wall studs shall be the size & type indicated in the Wall Stud Schedule on S0-0.1:
  Hem Fir No. 2 or better..... Fb = 850 psi, Fc = 1300 psi. U.N.O.
- Refer to stud schedule for wall studs.
- Wall top & bottom plates shall be Douglas Fir-Larch Stud grade or better Fb = 700 psi, Fc = 850 psi U.N.O.w/ the following exceptions.
  a. All wall sill plates attached to concrete foundation walls shall be Southern Yellow Pine Stud grade or better, pressure treated, w/ a min. $F_{C(perp)}$ = 405 psi.
  b. All wall sill plates attached to a Post-Tension Slab-On-Grade shall be Southern Yellow Pine Stud grade or better, pressure treated, w/ a min. $F_{C(perp)}$ = 405 psi w/ anchor bolts or PAF's if spacing is sufficient to avoid splitting of plate material. If splitting of the plate material does occur, Strandguard Timberstrand LSL or approved equivalent can be used in lieu of Southern Yellow Pine.
- All dimension lumber & timbers used for structural framing shall be surface dry "S-dry" or kiln dried "kd" w/ a maximum moisture content of 19 percent.
- All wood in contact w/ concrete, masonry, or exposed to weather shall be preservative treated. If a material other than SBX/DOT & zinc borate preservative treated lumber is selected and/or is used for an exterior application, all fasteners in contact w/ the treated lumber (including nails, anchor bolts, etc.) shall be "hot dipped" galvanized or of stainless steel.
- Refer to Shear Wall Schedule for attachment of sill plate to concrete.
- Provide 1 x 4 cross bridging not over 8'-0" on center for all wood joists where depth is equal to or more than 6 times the thickness, & 2 x bridging between joists at supports. Standard grade lumber may be used for bridging & blocking.
- Provide solid blocking between joists or floor trusses under all load bearing partitions running perpendicular to joists.
- Provide squash blocking at all gang studs and shear wall end posts.
- All wood connectors called for on the drawings are manufactured by the Simpson Strong Tie Company. Connectors by other manufacturers may be used if the load capacity is equal to or greater than the connector specified & the alternate connectors are approved in writing by Anchor Engineering, Inc.. Using the manufacturer's furnished nails & bolts for the connection indicated. If the manufacturers literature provides options for maximum & min. fastening, the maximum specified fastening condition shall be used unless noted otherwise.
- Structural sheathing:
  a. Structural sheathing for roof, wall & floor sheathing shall be APA Rated Exposure 1 u.n.o. on the general shear wall schedule w/ exterior glue & shall conform to American Plywood Association Standard PS 2, latest edition.
  b. Diaphragm sheathing shall be of the thickness & index number shown on plans, placed w/ the face grain perpendicular to supports & w/ end joints staggered.
  c. Nails shall be of the size & spacing shown on the plans. Shear walls shall be sheathed & nailed as indicated in the Shear Wall Schedule.
  d. Provide suitable edge support by use of plyclips, tongue & groove panels or solid wood blocking between supports.
  e. Wood structural panels or wood structural sheathing indicated on plan may be Plywood or Oriented Strand Board (O.S.B.) at the contractors option provided all specified requirements for Grade, glue, span rating, direction of application, etc. are met.
- Fasten all wood members w/ common nails according to the International Building Code table 2304.10.1 unless otherwise noted. min. end & edge distances for bolts, nails, or patterns of fasteners shall comply w/ the IBC Chapter 23 & the National Design Standard, N.D.S, Chapter 11, latest edition.
- Fire blocking in all walls shall be provided as required by the IBC or the Local Building Code, whichever is more stringent, or as specifically indicated in the Architectural Drawings.

PLANT FABRICATED / ENGINEERED WOOD FRAMING (Trus Joist)

- Pre-Engineered "plated" roof & floor trusses shall be designed to support the full dead loads & the superimposed design loads noted above, in the Wall Stud Schedule or on the drawings. Web arrangement & member forces shall be determined by the fabricator.
- "I-joist" members shall be as manufactured by iLevel or approved equal & shall carry ICC approval for the composite section. Bridging & blocking shall be installed & erection requirements shall be as recommended by the manufacturer.
- Laminated Veneer Lumber (LVL): Beam Members noted as "LVL" on these plans shall be supplied in the net sizes as called out & shall be manufactured by Trus Joist or approved equal. The min. allowable design values shall be:
  Modulus of elasticity (E):..... 2,000,000 psi
  Flexural stress (Fb):..... 2,600 psi
  Compression Perp. to Grain (Fc-perp):..... 750 psi
  Compression Para. to Grain (Fc-para):..... 2,510 psi
  Horizontal Shear (Fv):..... 285 psi
- Laminated Strand Lumber (LSL): Beam Members noted as "LSL" on these plans shall be supplied in the net sizes as called out & shall be manufactured by Trus Joist or approved equal. The min. allowable design values shall be:
  Modulus of elasticity (E):..... 1,550,000 psi
  Flexural stress (Fb):..... 2,325 psi
  Compression Perp. to Grain (Fc-perp):..... 900 psi
  Compression Para. to Grain (Fc-para):..... 2,900 psi
  Horizontal Shear (Fv):..... 310 psi
- Parallel Strand Lumber (PSL): Members noted as "PSL" on these plans shall be supplied in the net sizes as called out & shall be manufactured by Trus Joist or approved equal. The min. allowable design values shall be:
  Modulus of elasticity (E):..... 2,000,000 psi
  Flexural stress (Fb):..... 2,900 psi
  Compression Perp. to Grain (Fc-perp):..... 750 psi
  Compression Para. to Grain (Fc-para):..... 2,900 psi
  Horizontal Shear (Fv):..... 290 psi
- X-Beam (XB) (24F-1/4): Members noted as "XB" on these plans shall be supplied in the net sizes as called out & shall be manufactured by Rosboro or approved equal. Contractor to note X-Beam is not a uniform product full depth & must be installed w/ the correct side facing upward. Contractor is responsible for verifying all X-Beams are installed in the correct orientation per the manufacturers recommendations. The min. allowable design values shall be:
  Modulus of elasticity (E):..... 1,800,000 psi
  Flexural stress (Fb):..... 2,400 psi (Tension Zone)
  Flexural stress (Fb):..... 1,950 psi (Compressive Zone)
  Compression Perp. to Grain (Fc-perp):..... 650 psi
  Compression Para. to Grain (Fc-para):..... 1,850 psi
  Horizontal Shear (Fv):..... 265 psi
- Glu-Laminated (Glu-Lam): Members noted as "GLB" on these plans shall be manufactured from 2" nominal Douglas Fir-Larch lumber. Laminated members shall be designed, detailed, & fabricated in accordance w/ the AITC standard specifications for structural glued laminated timber of softwood species, latest edition & the NFPA national design specification for wood construction, latest edition. Except where otherwise noted, the following AITC laminating combinations are to be provided:
  Posts & Columns:..... Combination #2
  Simple span beams:..... 24F-V4 (20F-V12 for Alaskan Yellow Cedar)
  Continuous Span & Cantilever Beams:..... 24F-V8 (20F-V13 for Alaskan Yellow Cedar)
  Appearance shall be of the grade specified in the architectural drawings.
- Prefabricated wall components may be used given shop drawings are provided by the manufacturer for review by the Structural Engineer of Record. Shop drawings & calculations bearing the seal of a professional engineer (employed by the manufacturer) registered in the state where the project is being built shall be submitted to the Structural Engineer for review.
- Shop drawings & calculations bearing the seal of a professional engineer (employed by the manufacturer) registered in the state where the project is being built shall be submitted to the Structural Engineer for review.

STRUCTURAL STEEL

- Structural steel shall be detailed, fabricated, & erected in conformance w/ the AISC Specification & the Code of Standard Practice, latest editions.
- Rolled structural steel shapes shall conform to the following specifications:
  a. W Shapes..... ASTM A992, 50 ksi
  b. Channels, Angles, & Plates..... ASTM A36, 36 ksi (U.N.O. in plans)
  c. Pipe Shapes..... ASTM A53, Grade B, 35 ksi
  d. Structural Tubing (TS/HSS)..... ASTM A500, Grade B, 46 ksi
- Connections made under shop conditions shall be welded or bolted w/ ASTM F3125 Grade A325 high strength bolts, type X or N. Welds shall be made w/ AWS A5.1 or A5.5 class E70XX electrodes or equivalent submerged arc & follow all requirements of AWS D1.1.
- Design of all steel connections shall be the responsibility of the steel fabricator in accordance w/ AISC 303 Code of Standard Practice for Steel Buildings & Bridges, latest edition. Steel fabricator to submit 3 1 1 Option 3 & all associated requirements. Field bolted connections shall be bearing type w/ 3/4" diameter A325-N bolts, unless noted otherwise. All connections where reactions are not indicated on plan shall support 60% of the total uniform load capacity in bending for each beam & span as shown in the AISC uniform load constant tables. Connections shall generally follow those as found in AISC "Steel Construction Manual" latest edition. The fabricator shall submit plans, details, & calculations, sealed & signed by a professional engineer licensed in the state where the work is being performed for review by Anchor Engineering, Inc.
- All welding shall be performed by an AWS certified welder.
- Min. fillet weld sizes shall conform to AISC requirements.
- Anchor bolts shall conform to ASTM F1554, 36 ksi unless noted otherwise.
- Headed anchor studs (H.A.S.) shall conform to ASTM A108 w/ a min. tensile strength of 60,000 psi. Deformed anchor studs (D.A.S.) shall be ASTM A706 w/ a min. tensile strength of 60,000 psi.
- Structural steel members shall as a min. be coated w/ SSPC 15-6B, Type 1 (Red Oxide) paint. Structural steel exposed to weather shall be Hot-Dipped Galvanized in accordance w/ ASTM A153. Coatings damaged due to shipping, erection, welding or field cutting shall be repaired in a manner that will provide a minimum surface equivalent or better than that provided in shop.
- Steel in contact w/ earth shall be coated w/ (2) layers of a bituminous paint unless noted otherwise.

POST-INSTALLED ANCHOR NOTES

- Drill & install post-installed anchors according to manufacturer's printed installation instructions & if applicable, per manufacturer's on-site training.
- All post-installed anchors shall meet ICC-ES Compliance for each type of application.
- Unless noted otherwise on the Structural Contract Documents, the product information & ICC-ES Evaluation Report for all anchors must be submitted.
- Concrete must be at least 21 days old before installation of adhesive anchors.
- All anchor designs are for installation in the following conditions unless noted otherwise. Written approval must be received from Engineer prior to installation of adhesive anchors in alternate conditions.
  a. Dry concrete, unless noted otherwise.
  b. Concrete temperature at time of installation must be within the temperature range indicated by the product manufacturer for full anchor capacity. See manufacturer's printed installation instruction for adhesive gel & cure times.
  c. Anchor holes to be hammer drilled.
  d. Anchor holes to be cleaned per manufacturer's printed installation instructions prior to adhesive injection.
- All installers of post-installed anchors shall have taken the ACI certification program per IBC-2012 & later codes as well as the product manufacturer training program. Submit certificates for record.
- All post-installed anchors in concrete shall be suited for use in seismic & cracked concrete applications.
- Adhesive anchors in concrete shall be as indicated in the Structural Contract Documents or approved equal.
- Adhesive anchors in CMU grouted solid at the anchor shall be as indicated in the Structural Contract Documents or approved equal. Cells at the anchor & one course above & below the anchor shall be grouted solid.
- Adhesive anchors in masonry & hollow CMU shall be as indicated in the Structural Contract Documents w/ matching screens produced by the same manufacturer as the anchor or approved equal.
- Adhesive anchors in overhead, negative slope, or horizontal applications must be qualified for these installation orientations w/ specific recommendations from the manufacturer. Installers for these applications shall be certified in accordance w/ ACI requirements.
- Expansion anchors in concrete shall be as indicated in the Structural Contract Documents or approved equal.
- Expansion anchors in CMU grouted solid at the anchor shall be as indicated in the Structural Contract Documents. Cells at the anchor & one course above & below the anchor shall be grouted solid.
- Anchor capacity used in design shall be based on the technical data published by the manufacturer or such other method as approved by the Structural Engineer of Record. Substitution request for alternate products must be approved in writing by the Structural Engineer of Record prior to use. Contractor shall provide calculations demonstrating that the substituted product is capable of achieving the performance values of the specified product. Substitutions will be evaluated by their having & ICC ESR showing compliance w/ the relevant building code for seismic uses, load resistance, installation category, & availability of comprehensive installation instructions. Adhesive anchor evaluation will also consider creep, in-service temperature & installation temperature.

SHOP DRAWINGS & SUBMITTALS

- Review of shop drawings by the Structural Engineer is to establish general conformance of the shop drawings w/ the Structural Contract Documents. No responsibility is assumed by the Structural Engineer for correctness, dimensions or details. All min. conditions & requirements specified on the Structural Contract Documents or in the governing building code & referenced standards shall be met regardless of the information indicated on the shop drawings. The contractor bears sole responsibility for errors, omissions & code requirements associated w/ the shop drawings & the application of the information therein.
  Shop drawings will be reviewed one (1) time by Anchor Engineering, Inc. (AEI) for conformance w/ the Structural Contract Documents. If shop drawings are indicated by AEI as Revise & Resubmit, AEI will review the resubmittal for incorporation of the redlined items only. Further review of structural submittals beyond these indicated will result in additional fees charged on an hourly basis at AEI's standard rates per the project Agreement.
- Construction Documents are copyrighted & shall not be reproduced for use as erection plans or shop details.
- All shop & erection drawings shall be checked & stamped by the General Contractor prior to submission for Engineer's review. Unchecked submittals will be returned without review. Furnish one (1) electronic or two (2) hard copy sets of shop & erection drawings for [Concrete Mix Design, Concrete Reinforcing Steel, Masonry Reinforcing, Structural Steel, Structural Steel Connection Design, Steel Deck, Wood Floor Trusses, Wood Roof Trusses, Plant Fabricated Wood Joists, Glued-Laminated Timber & Headed Shear Studs] to Structural Engineer for review prior to fabrication.
- Submit in a timely manner to permit ten (10) working days for review by Structural Engineer.
  Requests for the modification of plans or specifications shall be submitted in writing. Shop drawings, submitted for review do not constitute "in writing" unless specific suggested changes are clearly marked. In any event, such changes must be noted. Bid of the shop drawing submittal or request for information process become the responsibility of the one initiating such change & shall compensate Anchor Engineering, Inc. for expense incurred for making the desired modifications.
- The contractor shall allow for adequate time for the review, design & detailing of requested modifications or repairs in the construction schedule.
- Review of shop drawings by the Engineer of Record is a courtesy & does not relieve the supplier of requirements indicated in the Structural Contract Documents unless specifically noted otherwise in writing by the reviewing engineer.

DEFERRED SUBMITTALS

- Unless specifically detailed herein and/or specified on the structural contract documents, the following items have not been designed by Anchor Engineering, Inc.. Design & construction of these elements, when not expressly shown on the Structural Contract Documents, are the responsibility of the General Contractor. These elements are considered design-build & the General Contractor shall submit plans & calculations to our office for review. The plans & calculations must be sealed & signed by a Professional Engineer licensed in the state where the work is being performed unless noted otherwise. Connections to post-tensioned concrete must be designed by the specialty engineer for the applicable deferred submittal building element. Shop drawings must be submitted for coordination & review by the General Contractor & review by the Engineer of Record prior to construction of the first post-tensioned slab.
  - Wood Floor Trusses
  - Wood Roof Trusses
  - Structural Steel Connections
  - Miscellaneous Steel Assemblies (Including but not limited too Stairs, Handrails, Guard Rails, Balusters, Half-Walls, Balconies, Awnings, Sun Shades, Canopies, ect.)
  - Storefront/Curtain Wall Including Connections. All connections must be designed by the storefront/curtain wall specialty engineer. Shop drawings must be submitted for coordination by the General Contractor & review by the Engineer of Record prior to construction
  - Precast Panels (Including Connections to Superstructure)
  - Photovoltaic Systems & Support Framing for Distribution of Loads

STRUCTURAL OBSERVATIONS

- Structural Engineer shall make periodic observations of the construction during placement of foundation & erection of structural framing. The purpose of the observations shall be to become generally familiar w/ the quality of work of the contractor in order to determine general conformance w/ the contract documents. Such observations shall not replace required inspections by the governing authorities or serve as "special inspections" as may be required by Chapter 17 of the governing building code.
- The contractor shall notify the Structural Engineer at the following stages of construction so that these observations may be made:
  a. Prior to placing foundation concrete (after reinforcement placement).
  b. Prior to grouting structural masonry walls (after block & reinforcement placement).
  c. During erection of each level of structural framing.
  d. After completion of all structural framing erection (including permanent bracing).
  e. After roof deck has been placed & connected (before roofing operations).
- Notification for observation shall be made to the Structural Engineer at least 24 hours prior to the time the observation is needed. The Structural Engineer may not make observations at each notification & lack of observation shall not stop progress of construction nor shall the observation indicate owner's acceptance of all work related to the observation.

ADDITIONAL NOTES FOR OWNER & CONTRACTOR

- Multi-story wood structures have an increased possibility of developing drywall cracks over a duration of approximately the first year. Drywall cracks may result due to a host of reasons including but not limited to wood shrinkage in dry climates, differential foundation settlement within allowable limits specified in the soils report, & increased likelihood of slab shortening under post-tensioning forces. The repair of drywall cracking is common & shall generally occur along joints of the wall panel. It is recommended that this type of cracking is anticipated & allowances are made for repair.
- Lumber used for construction may begin with a moisture content as high as 19%. The lumber will dry as it approaches equilibrium with the environment to a final moisture content that may be as low as 6%. This loss in moisture will result in shrinkage of the lumber, both longitudinally and to a greater extent tangentially, until equilibrium is achieved. If there are conditions within a structure where there are materials that do not shrink due to loss of moisture, such as steel or CMU, or materials that can expand due to moisture such as clay masonry, there will be differential movement at the interface of the two systems that will need to be accounted for. Several factors have an impact on the amount of shrinkage but generally in the range of ½" to 3/8" of shrinkage per floor would not be an unreasonable estimate. We recommend the owner engages the project geotechnical engineer to discuss the possible magnitude of this differential movement.
  Structures with varying foundation types (i.e.: Post-Tension Slab-On-Grade and Drilled Piers) will have different behavior characteristics that will result in differential movement between structures. This issue can be amplified for conditions here different structural systems are used for the superstructure of the buildings (i.e.: conventional wood-framed, steel-framed buildings or spaces, and precast buildings). Our office recommends that the owner engages the project geotechnical engineer to discuss the possible magnitude of the differential movement and that allowances are made for possible corrective actions when needed, particularly at threshold conditions between buildings, as part of a general maintenance plan for the project.

TYPICAL FOUNDATION NOTES

- Re: Civil Plans for top of first floor slab elevation (Elevations indicated on structural sheets are reference elevations only).
- Provide 6Ø"x" anchor bolts @ 6'-0" o.c. u.n.o. (Provide 12" o.c. u.n.o. in all cases provide (1) anchor bolt within 12" of all corners & solle ft ends, slab side) & provide a min. of (2) anchor bolts per solle ft. All anchor bolts shall have 1-3/4"ø plate washers & shall be embedded a min. of 7" into concrete w/ a 2" min. leg.
- All slab-on-grade conditions shall be separated from all bearing walls, columns, & foundation walls w/ slip joints that will allow unrestrained vertical movement & the slip joints maintained over time.
  Interior partition infill framing or masonry walls resting on non-structural slab-on-grade shall be constructed w/ a slip joint that will allow unrestrained vertical movement. The slip joint shall have sufficient depth to account for the anticipated differential vertical movement of the slab-on-grade indicated in the project geotechnical report.
- Re:

SPECIAL INSPECTION REQUIREMENTS

- A special inspector shall be engaged to make Special Inspections of the construction work as outlined below in conformance w/ the provisions of chapter 17 of the Governing Building Code.
- Special Inspections shall be performed by an independent, established & recognized agency approved by the building official as demonstrating competence in performing the required Special Inspections.
- The special inspector shall have experience in the inspection of the particular type of construction or operation for which the special inspection is being performed.
- The inspecting agency shall keep records of all inspections performed. A copy of all inspection reports shall be provided to the building official as well as to Anchor Engineering, Inc.
- Inspection reports shall specify that work inspected was completed in full conformance to the most recent approved Structural Contract Documents. Any discrepancies w/ the Structural Contract Documents shall be brought to the immediate attention of the contractor for correction. All required structural corrections/modifications shall be submitted to Anchor Engineering, Inc. & adequate time shall be allotted for by the contractor for review & response. Costs incurred due to required corrections, modifications & time delays shall be the sole responsibility of the contractor.
- A final report shall be issued by the inspection agency to the building department as well as Anchor Engineering, Inc. stipulating that all inspected items are in conformance w/ the Structural Contract Documents or w/ additional documentation provided by the building department or Anchor Engineering, Inc.. All Structural Contract Documents used in the special inspection process shall be identified & itemized, including dates of issue.
- Inspection reports shall include the names of personnel on site during inspection.
- The following work shall be inspected by the special inspector in accordance with chapter 17 of the Governing Building Code and referenced standards. 2015 & 2018 IBC Sec. Alt. 2012 IBC Sec.
  - Steel Construction: IBC Section 1705.2
  - Concrete Construction: IBC Section 1705.3
  - Masonry Construction: IBC Section 1705.4
  - Wood Construction: IBC Section 1705.5
  - Soils: IBC Section 1705.6
  - Fabricated Items: IBC Section 1705.10 IBC Section 1704.2.5

MATERIALS TESTING REQUIREMENTS

- Testing & Inspecting: Owner will engage a special inspector & qualified testing & inspecting agency to perform field tests & inspections & prepare test reports.

CONCRETE:
- Testing of composite samples of fresh concrete obtained according to ASTM C 172 shall be performed according to the following requirements:
  1. Testing Frequency: Obtain one sample for each day's pour of each concrete mixture exceeding 5 cu. yd., & not less than one sample for each 100 cu. yd. or fraction thereof.
  2. When frequency of testing will provide fewer than five compressive-strength tests for each concrete mixture, testing shall be conducted from at least five randomly selected batches or from each batch if fewer than five are used.
  3. Slump: ASTM C 143/C 143M; one test at point of placement for each sample, but not less than one test for each day's pour of each concrete mixture. Perform additional tests when concrete consistency appears to change.
  4. Air Content: ASTM C 231, pressure method, for normal-weight concrete; one test for each sample, but not less than one test for each day's pour of each concrete mixture.
  5. Concrete Temperature: ASTM C 1064/C 1064M; one test hourly when air temperature is 40 deg F & below & when 80 deg F & above, & one test for each composite sample.
  6. Compressive-Strength Tests: mold the cylinders per ASTM C31 & test the cylinders per ASTM C39.
     a. Provide a min. of four 6x12 (or five 4x8) cylinders from each sample taken. More cylinders may be taken at Contractor's option or for determination of compressive strength for stressing operations.
     b. Cylinders for compressive-strength tests (other than for stressing operations) are laboratory-cured u.n.o.
     c. Test one cylinder at 7 days & two 6x12 (or three 4x8) cylinders at 28 days. Hold one cylinder in reserve.
     d. A 28-day compressive-strength test shall be the average compressive strength from a set of two 6x12 (or three 4x8) cylinders obtained from same sample & tested at an age of 28 days.
  7. Strength of each concrete mixture will be satisfactory if the average of any three consecutive compressive-strength tests equals or exceeds specified compressive strength & no compressive-strength test value falls below specified compressive strength by more than 500 psi.
  8. Test results shall be reported in writing to Engineer, Architect, concrete manufacturer, & Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project identification name & number, date of concrete placement, name of concrete testing & inspecting agency, location of concrete batch in work, design compressive strength at 28 days, concrete mixture proportions & materials, compressive breaking strength, & type of break for both 7- & 28-day tests.
  9. Additional Tests: Testing & inspecting agency shall make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Architect. Testing & inspecting agency may conduct tests to determine adequacy of concrete w/ remaining cylinder specimens after 28 day tests are conducted, cored cylinders complying w/ ASTM C 42/C 42M or by other methods as directed by Architect.
  10. Additional testing & inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work w/ specified requirements.
  11. Correct deficiencies in the work that test reports & inspections indicate does not comply w/ the Contract Documents.
  12. Measure floor & slab flatness within 48 hours of finishing.

MASONRY:
1. Grout shall be placed only after inspectors have verified compliance of grout spaces & grades, sizes, & locations of reinforcement.
2. Testing Frequency: One set of tests for each 5000 sq. ft. of wall area or portion thereof.
3. Concrete Masonry Unit Test: For each type of unit provided, per ASTM C 140.
4. Mortar Test: For each mix provided, per ASTM C 780. Test mortar for mortar air content & compressive strength.
5. Grout Test: For each mix provided, per ASTM C 1019. Test grout for compressive strength.
6. Prism Test: For each type of construction provided, per ASTM C 1314 at 28 days.

WELDING:
1. Partial & complete joint penetration welds shall have magnetic particle inspection in accordance w/ ASTM E709 performed on root pass & on finished weld.

TRUSS HOLDOWN SCHEDULE[1, 2]

PLY	UPLIFT LOAD	HOLDOWN REQ'D	FLOOR-TO-FLOOR STRAP[3, 4]	FOUNDATION ANCHOR[3]
ALL	< 495 lbs	H2.5T	N/A	N/A
1	< 1015 lbs	H10A	N/A	N/A
ALL	< 2250 lbs	(2) HTS20[5]	CS14	HDU2-SDS2.5
1, 2	< 1620 lbs	LGT2[6]	CS14	HDU2-SDS2.5
3	< 2920 lbs	LGT3-SDS2.5	CMSTC16	HDU5-SDS2.5
2, 3, 4	< 3285 lbs	MGT w/ HDU4-SDS2.5	(2) CS14	HDU5-SDS2.5
3, 4	< 8425 lbs	HGT-x w/ (2) HDU5-SDS2.5[7, 8]	CMST12	HDU11-SDS2.5

NOTES:
1. ALL HARDWARE BY SIMPSON STRONG-TIE, TYP. U.N.O. AT CONTRACTORS OPTION, REPLACE w/ APPROVED EQUAL. FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS REGARDING REQ'D. FASTENERS & INSTALLATION PROCEDURES.
2. IF UPLIFT CONDITIONS FALL OUTSIDE THE LIMITS INDICATED IN THIS TABLE, CONTACT ANCHOR ENGINEERING, INC. FOR ADDITIONAL RECOMMENDATIONS.
3. REFER TO HOLDOWN SCHEDULE FOR FOUNDATION ANCHOR/END LENGTH REQ'M. RE: MANUF. FOR ADDITIONAL REQ'M. TYP.
4. FLOOR TO FLOOR STRAPS SHALL BE INSTALLED @ EACH FLOOR LEVEL OF THE STRUCTURE. LOCATE STRAP DIRECTLY BELOW TRUSS BEARING.
5. PROVIDE MINIMUM (2) 2x VERTICAL STUDS BELOW TRUSS. TWIST STRAPS TO TWIST TO EXTEND VERTICALLY DOWN STUDS ONE STRAP PER STUD.
6. AT SINGLE PLY TRUSS PROVIDE 2x BEARING BLOCK x 1'-6". BEARING BLOCK TO MATCH BOTTOM CHORD DEPTH OF PRE-MANUFACTURED ROOF TRUSS. FASTEN 2x BEARING BLOCK TO BOTTOM CHORD OF PRE-MANUFACTURED ROOF TRUSS w/ (4) 10d NAILS EA. SIDE OF GIRDER TRUSS TAB CONNECTION [(8) 10d NAILS TOTAL].
7. x INDICATES # OF PLIES OF GIRDER TRUSS
8. STAGGER HOLDOWNS VERTICALLY SO SCREWS DO NOT CONFLICT.

REBAR SPLICE LENGTH, IN. (f'c = 4000 psi)

CLASS 'B' TENSION SPLICES

BAR SIZE	CONC. COVER = 1"		CONC. COVER = 1 1/2"		CONC. COVER = 2"	
	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM
#3	16	16	16	16	16	16
#4	20	16	20	16	20	16
#5	29	22	24	19	24	19
#6	40	31	29	22	29	22
#7	64	50	48	37	42	33
#8	80	62	60	47	48	37
#9	98	76	74	57	60	46
#10	119	92	91	70	74	57
#11	141	108	109	84	89	68

NOTES:
1. SPLICE LENGTHS ARE BASED ON ACI 318, LATEST EDITION.
2. SPLICE LENGTHS ARE 1.3 x BASIC DEVELOPMENT LENGTH.
3. IT IS ASSUMED REBAR CENTER-TO-CENTER SPACING > 2"(COVER +1/2 BAR DIAMETER).
4. IT IS ASSUMED REBARS ARE UNCOATED (NOT EPOXY-COATED).
5. VERTICAL REBARS USE SAME SPLICE LENGTH AS BOT. REBARS.
6. TOP BAR LENGTHS ARE SPECIFIED FOR HORIZ. REINF. SO PLACED THAT MORE THAN 12" OF FRESH CONC. IS CAST IN MEMBER BELOW THE SPLICE.
7. SPLICE LENGTHS FOR REBARS w/ DIFFERENT SIZES SHALL BE BASED ON THE SPLICE LENGTH FOR THE SMALLER SIZE REBAR.

HOLDOWN SCHEDULE

TYPE	HOLDOWN MODEL	FOUNDATION ANCHOR/ END LENGTH	# VERT. STUDS	MIN. EDGE DISTANCE	MIN. END DISTANCE	MIN. SPACING	MIN. EMBED.
HD1	HDU4-SDS2.5	5/8" THREADED ROD	(2) 2x4 or (2) 2x6	N/A	N/A	N/A	N/A
HD2	HDU5-SDS2.5	5/8" THREADED ROD	(3) 2x4 or (2) 2x6	N/A	N/A	N/A	N/A
HD3	HDU8-SDS2.5	7/8" THREADED ROD	(4) 2x4 or (3) 2x6	N/A	N/A	N/A	N/A
HD4	HDU11-SDS2.5	1" THREADED ROD	(5) 2x4 or (3) 2x6	N/A	N/A	N/A	N/A
HD5	HDU14-SDS2.5	1" THREADED ROD	(5) 2x4 or (4) 2x6	N/A	N/A	N/A	N/A
HD6	HD19	1-1/4" THREADED ROD	(5) 2x4 or (4) 2x6	N/A	N/A	N/A	N/A
HD7	CMSTC16	25"	(3) 2x4 or (2) 2x6	N/A	N/A	N/A	N/A
HD8	CMST14	34"	(4) 2x4 or (2) 2x6	N/A	N/A	N/A	N/A
HD9	CMST12	44"	(3) 2x6	N/A	N/A	N/A	N/A

HD1 — Holdown Mark

NOTES:
1. REFER TO GENERAL NOTES SHEETS FOR HOLDOWN DETAILS.
2. ALL HOLDOWNS ON PLAN ARE TO BE INSTALLED @ LEVEL SHOWN. PLACE HOLDOWNS @ CORNER STUDS, TYP. U.N.O.
3. ALL HARDWARE BY SIMPSON STRONG-TIE, TYP. U.N.O. AT CONTRACTORS OPTION, REPLACE w/ APPROVED EQUAL. FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS REGARDING REQ'D FASTENERS & INSTALLATION PROCEDURES.
4. IF FIELD CONDITIONS FALL OUTSIDE OF LIMITS INDICATED IN THE TABLE ABOVE, CONTACT ANCHOR ENGINEERING, INC. FOR ADDITIONAL RECOMMENDATIONS.
5. RE: POST INSTALLED HOLDOWN SCHEDULE FOR POST INSTALLED HOLDOWN OPTIONS.
6. **RE: TYP. HOLDOWN DETAILS FOR REQ'D EMBED ℞ AT EA. HOLDOWN LOCATION**

REBAR MARK CONVERSION

BAR SIZE DESIGNATION		BAR DIAMETER	
U.S.	SI	in.	mm
#3	#10	0.375	9.5
#4	#13	0.500	12.7
#5	#16	0.625	15.9
#6	#19	0.750	19.1
#7	#22	0.875	22.2
#8	#25	1.000	25.4
#9	#29	1.128	28.7
#10	#32	1.270	32.3
#11	#36	1.410	35.8

"SOFT METRIFICATION"

U.S. GRADE 60 = SI GRADE 420 (4)
U.S. GRADE 40 = SI GRADE 300

REBAR SPLICE LENGTHS IN MASONRY

BAR SIZE	LAP SPLICE LENGTH (in)
#4	36
#5	45
#6	54
#7	63
#8	72
#9	82

NOTES:
1. SPLICE LENGTHS ARE BASED ON f'm = 1500 psi.

WALL STUD SCHEDULE

LEVEL OF FRAMING	WALL STUD DESCRIPTION
TYP. EXTERIOR WALLS:	
ROOF TO 4th FLOOR (10'-5" MAX.)	2x6 HEM-FIR #2 @ 16" o.c.
4th FLOOR TO 3rd FLOOR (10'-5" MAX.)	2x6 HEM-FIR #2 @ 16" o.c.
3rd FLOOR TO 2nd FLOOR (10'-5" MAX.)	2x6 HEM-FIR #2 @ 16" o.c.
2nd FLOOR TO FOUNDATION (12'-0" MAX.)	2x6 HEM-FIR #2 @ 12" o.c.
TYP. INTERIOR PARTY WALLS:	
ROOF TO 4th FLOOR (10'-5" MAX.)	2x4 HEM-FIR #2 @ 16" o.c.
4th FLOOR TO 3rd FLOOR (10'-5" MAX.)	2x4 HEM-FIR #2 @ 16" o.c.
3rd FLOOR TO 2nd FLOOR (10'-5" MAX.)	2x4 HEM-FIR #2 @ 12" o.c.
2nd FLOOR TO FOUNDATION (12'-0" MAX.)	(2) 2x4 HEM-FIR #2 @ 16" o.c.
CORRIDOR WALLS:	
ROOF TO 4th FLOOR (10'-5" MAX.)	2x6 HEM-FIR #2 @ 16" o.c.
4th FLOOR TO 3rd FLOOR (10'-5" MAX.)	2x6 HEM-FIR #2 @ 16" o.c.
3rd FLOOR TO 2nd FLOOR (10'-5" MAX.)	2x6 HEM-FIR #2 @ 16" o.c.
2nd FLOOR TO FOUNDATION (12'-0" MAX.)	2x6 HEM-FIR #2 @ 12" o.c.
INTERIOR LOAD BEARING WALLS:	
ROOF TO 4th FLOOR (10'-5" MAX.)	2x4 HEM-FIR #2 @ 16" o.c. -OR- 2x6 HEM-FIR #2 @ 16" o.c.
4th FLOOR TO 3rd FLOOR (10'-5" MAX.)	2x4 HEM-FIR #2 @ 12" o.c. -OR- 2x6 HEM-FIR #2 @ 16" o.c.
3rd FLOOR TO 2nd FLOOR (10'-5" MAX.)	(2) 2x4 HEM-FIR #2 @ 12" o.c. -OR- 2x6 HEM-FIR #2 @ 16" o.c.
2nd FLOOR TO FOUNDATION (12'-0" MAX.)	(2) 2x4 HEM-FIR #2 @ 8" o.c. -OR- 2x6 HEM-FIR #2 @ 12" o.c.
STW1 LOAD BEARING	(2) 2x4 HEM-FIR #2 @ 16" o.c.
STW2 LOAD BEARING	(2) 2x4 HEM-FIR #2 @ 8" o.c.
STW3 LOAD BEARING	2x6 HEM-FIR #2 @ 12" o.c.
STW4 LOAD BEARING	(2) 2x6 HEM-FIR #2 @ 16" o.c.

STUD SPECIES, GRADE, OR SPACING INDICATED IN PLAN TAKES PRECEDENCE OVER INFORMATION CONTAINED IN THE WALL STUD SCHEDULE.

STUD WALLS INDICATED IN PLAN TO HAVE A SPACING VARYING FROM THAT INDICATED IN THE SCHEDULE SHALL BE OF THE SAME SPECIES AND GRADE AS THE SCHEDULE INDICATES FOR THE CONDITION OF THE STUDS SHOWN IN PLAN (i.e. INTERIOR/EXTERIOR/LOAD BEARING)

DESIGNATED STUD WALLS (STW#) TO BE CONSTRUCTED BELOW LEVEL IN WHICH DESIGNATION MARK APPEARS.

TYPICAL MASONRY NOTES:
1. ALL MASONRY SHALL BE GROUTED SOLID, TYP. U.N.O.
2. REINF. MASONRY WALL w/ # VERT. BARS (CENTERED) @ 16" o.c. & STD. DUR-O-WALL @ 16" o.c. U.N.O. PROVIDE (2) VERT. BARS ((1) #5 EA. FACE) AT ALL CORNERS AND OPENING END WALLS.
3. 8" BOND BEAMS @ EA. FLOOR ELEV. & @ TOP OF DOOR ELEV. (8'-0" o.c. MAX.) w/ (2) #5 HORIZ. BARS ((1) #5 EA. FACE), U.N.O. BOND BEAM EXTENT TO BE FULL PERIMETER OF ELEVATOR SHAFT.
4. STAIR FRAMING AND ATTACHMENTS TO LANDINGS/SHAFT WALLS TO BE DESIGN-BUILD. REFER TO THE "DEFERED SUBMITTALS" SECTION OF THE GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.
5. MISCELLANEOUS STEEL REQUIREMENTS FOR ELEVATOR INSTALLATION INCLUDING BUT NOT LIMITED TO HOIST BEAM, BACK-UP BEAMS, RAILS, AND ATTACHMENTS TO BE DESIGN-BUILD. REFER TO THE "DEFERRED SUBMITTALS" SECTION OF THE GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.

MASONRY LINTEL SCHEDULE

MARK	DEPTH (NOMINAL)	MAJOR AXIS FLEXURAL BARS	SETS OF MINOR AXIS FLEXURAL BARS	SHEAR STIRRUPS	JAMB CELLS	JAMB REINF.
ML1	8"	(2) #5's	N/A	N/A	1	(1) #5 EA. CELL, CENTERED
ML2	16"	(2) #5's	(1) #5 EA. FACE OF EA. CELL	N/A	1	(1) #5 EA. CELL, CENTERED

NOTES:
1. ALL LINTELS TO BE FULLY GROUTED.
2. PROVIDE 90° STD. HOOK OF FLEXURAL BARS INTO GROUTED JAMB CELLS
3. SHEAR STIRRUPS TO CONSIST OF SINGLE LEG BARS w/ 180° STD. HOOK EA. SIDE. ( ) STIRRUPS SHALL BE HOOKED AROUND LONGITUDINAL REINFORCEMENT.
4. JAMB CELLS SHALL BE REINFORCED & GROUTED FOR FULL HEIGHT OF WALL.
5. AT LOCATIONS WHERE JAMB STEEL IS SPECIFIED IN PLAN, PROVIDE LARGER OF BARS SPECIFIED.
6. REFER TO MASONRY DETAILS ON ***S0-0.3***.
7. MINOR AXIS FLEXURAL BARS ARE REQUIRED @ EXTERIOR APPLICATIONS ONLY.

SHEAR WALL SCHEDULE (FOUNDATION WALLS)

GENERAL SHEAR WALL NOTES: *(ALL FASTENING IN SCHEDULE BASED ON HEM-FIR LUMBER)*
- ALL PANELS BACKED w/ 2-INCH NOMINAL OR WIDER FRAMING.
- WHERE WOOD STRUCTURAL PANEL SHEAR WALL PANELS ARE APPLIED ON EA. SIDE OF WALL /w NAIL SPACING OF LESS THAN 6" ON ONE OR BOTH SIDES, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS OR 3" NOMINAL OR GREATER FRAMING MEMBERS MUST BE USED @ PANEL EDGES & ALL NAILS SHALL BE STAGGERED.
- BLOCK ALL PANEL EDGES & PROVIDE EDGE NAILING @ ALL SUPPORTS & ALL PANEL EDGES U.N.O.
- PANELS MAY BE INSTALLED EITHER VERTICALLY OR HORIZONTALLY.
- SPACE ALL NAILS AS INDICATED IN THIS SCHEDULE.
- SHEATHING & NAILING INDICATED FOR SHEAR WALLS SHALL CONTINUE ABOVE & BELOW OPENINGS IN SHEAR WALLS.
- SHEAR WALLS INDICATED IN THIS SCHEDULE ARE TO BE CONSTRUCTED BELOW ROOF OR FLOOR WHERE SHEAR WALL IS SHOWN ON FRAMING PLAN.
- MINIMUM NAIL SIZES ARE AS FOLLOWS:
  - 5d COOLER............ (0.086"ø, 1-5/8" long, 0.234" head)
  - 6d COOLER............ (0.092"ø, 1-7/8" long, 0.250" head)
  - 8d COOLER............ (0.113"ø, 2-3/8" long, 0.281" head)
  - 8d............................ (0.131"ø, 2-1/2" long, 0.281" head)
  - 16d.......................... (0.162"ø, 3-1/2" long, 0.344" head)
- ALL SHEAR WALL ANCHOR BOLTS SHALL HAVE A 1-3/4"ø PLATE WASHER.
- PROVIDE DBL. 2x STUDS (FASTENED w/ 16d NAILS @ 24" o.c.) @ ALL SHEAR WALL ENDS U.N.O. IN PLAN. RE: HOLDOWN SCHEDULE FOR ADD'L. POST REQ'M.
- ALL SHEAR WALLS SHALL HAVE DBL. 2x TOP ℞'s. LAP SPLICES IN TOP ℞'s SHALL BE 4'-0" MIN. CONNECT DBL. ℞'s w/ 16d NAILS @ 16" o.c., w/ (8) 16d NAILS EA. SIDE OF SPLICE @ LAP SPLICES (16 TOTAL). *(Tension cap. = 1862 lb)*
- RE: APPLICABLE SECTIONS & DETAILS FOR ADD'L. INFORMATION REGARDING HOLDOWNS & ANCHOR BOLTS.
- FOR SHEAR WALLS SHEATHED BOTH SIDES /w WOOD STRUCTURAL PANELS & FASTENING @ 3" o.c. OR LESS, TOP & BOT. WALL ℞'s SHALL HAVE NO PENETRATIONS GREATER THAN 1"ø.
- NOTED ATTACHMENT SHALL APPLY ALONG THE FULL LENGTH OF SHEAR WALLS.
- BLOCKING NOTED HEREIN REPRESENTS SOLID BLOCKING, BLOCKING PANELS, END WALL FLOOR TRUSSES, ETC. RE: PLANS & SECTIONS.
- SILL ℞: HORIZ. WOOD ℞ ATTACHED TO CONCRETE FOUNDATION OR SLAB.
- SOLE ℞: HORIZ. WOOD ℞ @ BOT. OF FRAMED WALL @ EA. LEVEL.
- AT ANCHOR BOLTS, PROVIDE (1) BTWN. 4-1/2" & 12" OF ALL WALL CORNERS & SILL PLATE ENDS AS WELL AS A MIN. OF (2) PER SECTION OF SILL ℞.
- **AT POWDER ACTUATED FASTENERS (P.A.F.), PROVIDE (2) WITHIN 6" OF ALL WALL CORNERS & SILL ℞ ENDS AS WELL AS A MIN. OF (4) PER SECTION OF SILL ℞. ALL P.A.F.'s SHALL HAVE 1-3/8" MIN. EMBEDMENT INTO CONCRETE.**

UNLESS NOTED OTHERWISE, SHEATH WALLS AS INDICATED BELOW:

PERIMETER WALLS (ALL LEVELS): *(W:484plf/E:242plf)*
SHEATH EXTERIOR w/ 7/16" WOOD STRUCTURAL PANELS w/ 8d NAILS @ 6" o.c. @ PANEL & BOUNDARY EDGES & 12" o.c. @ INTERMEDIATE SUPPORTS.
SHEATH INTERIOR w/ 5/8" GYPSUM WALL BOARD w/ DRYWALL SCREWS @ 7" o.c. @ PANEL & BOUNDARY EDGES & INTERMEDIATE SUPPORTS.
SILL ℞ CONN.:
PROVIDE 5/8"ø x 7" MIN. EMBED ANCHOR BOLTS @ 32" o.c.
SOLE ℞ CONN. TO BLOCKING:
16d NAILS @ 3" o.c. OR SIMPSON A34 ANGLES @ 8" o.c.
BLOCKING CONN. TO DBL. TOP ℞:
USE NAILING OF SOLE ℞ CONN. TO BLOCKING INDICATED FOR SHEAR WALL BELOW.

INTERIOR PARTY WALLS (ALL LEVELS): *(W:145plf/E:145plf)*
SHEATH ONE SIDE w/ 5/8" GYPSUM WALL BOARD w/ DRYWALL SCREWS @ 7" o.c. @ PANEL & BOUNDARY EDGES & INTERMEDIATE SUPPORTS.
SILL ℞ CONN.:
PROVIDE 5/8"ø x 7" MIN EMBED ANCHOR BOLTS @ 32" o.c.
SOLE ℞ CONN. TO BLOCKING:
16d NAILS @ 12" o.c. OR 8d TOE-NAILS @ 8" o.c.
BLOCKING CONN. TO DBL. TOP ℞:
USE NAILING OF SOLE ℞ CONN. TO BLOCKING INDICATED FOR SHEAR WALL BELOW.

INTERIOR BEARING WALLS (ALL LEVELS): *(W:145plf/E:145plf)*
SHEATH BOTH SIDES w/ 5/8" GYPSUM WALL BOARD w/ DRYWALL SCREWS @ 7" o.c. @ PANEL & BOUNDARY EDGES & INTERMEDIATE SUPPORTS.
SILL ℞ CONN.:
PROVIDE 5/8"ø x 7" MIN EMBED ANCHOR BOLTS @ 32" o.c.
SOLE ℞ CONN. TO BLOCKING:
16d NAILS @ 12" o.c. OR 8d TOE-NAILS @ 8" o.c.
BLOCKING CONN. TO DBL. TOP ℞:
USE NAILING OF SOLE ℞ CONN. TO BLOCKING INDICATED FOR SHEAR WALL BELOW.

WHERE SPECIAL SHEAR WALLS ARE NOTED IN PLAN, SHEATHE AS INDICATED BELOW[3]:

SW1 7/16" WOOD STRUCTURAL PANELS w/ 8d NAILS @ 6" o.c. @ PANEL & BOUNDARY EDGES & 12" o.c. @ INTERMEDIATE SUPPORTS.
SILL ℞ CONN.:
PERIMETER: PROVIDE 5/8"ø x 7" MIN EMBED ANCHOR BOLTS @ 32" o.c.
INTERIOR[2]: PROVIDE 0.145"ø HILTI X-CP72 P8 S23 (OR EQ.) @ 4" o.c.
SOLE ℞ CONN. TO BLOCKING:
16d NAILS @ 4" o.c. OR 8d TOE-NAILS @ 3" o.c.
BLOCKING CONN. TO DBL. TOP ℞:
USE NAILING OF SOLE ℞ CONN. TO BLOCKING INDICATED FOR SHEAR WALL BELOW.

SW2 7/16" WOOD STRUCTURAL PANELS w/ 8d NAILS @ 4" o.c. @ PANEL & BOUNDARY EDGES & 12" o.c. @ INTERMEDIATE SUPPORTS.
SILL ℞ CONN.:
PERIMETER: PROVIDE 5/8"ø x 7" MIN EMBED ANCHOR BOLTS @ 32" o.c.
INTERIOR[2]: PROVIDE 0.145"ø HILTI X-CP72 P8 S23 (OR EQ.) @ 3" o.c.
SOLE ℞ CONN. TO BLOCKING:
16d NAILS @ 3" o.c. OR SIMPSON A34 ANGLES @ 8" o.c.
BLOCKING CONN. TO DBL. TOP ℞:
USE NAILING OF SOLE ℞ CONN. TO BLOCKING INDICATED FOR SHEAR WALL BELOW.

SW3 7/16" WOOD STRUCTURAL PANELS w/ 8d NAILS @ 3" o.c. @ PANEL & BOUNDARY EDGES & 12" o.c. @ INTERMEDIATE SUPPORTS.
SILL ℞ CONN.:
PERIMETER: PROVIDE 5/8"ø x 7" MIN EMBED ANCHOR BOLTS @ 24" o.c.
INTERIOR[2]: PROVIDE 0.145"ø HILTI X-CP72 P8 S23 (OR EQ.) @ 3" o.c.
SOLE ℞ CONN. TO BLOCKING:
16d NAILS @ 2" o.c. OR SIMPSON A34 ANGLES @ 6" o.c.
BLOCKING CONN. TO DBL. TOP ℞:
USE NAILING OF SOLE ℞ CONN. TO BLOCKING INDICATED FOR SHEAR WALL BELOW.

SW4 7/16" WOOD STRUCTURAL PANELS w/ 8d NAILS @ 2" o.c.[3] @ PANEL & BOUNDARY EDGES & 12" o.c. @ INTERMEDIATE SUPPORTS.
SILL ℞ CONN.:
PERIMETER: PROVIDE 5/8"ø x 7" MIN EMBED ANCHOR BOLTS @ 16" o.c.
INTERIOR[2]: PROVIDE (2) 0.145"ø HILTI X-CP72 P8 S23 (OR EQ.) @ 4" o.c.[1]
SOLE ℞ CONN. TO BLOCKING:
16d NAILS @ 2" o.c. OR SIMPSON A34 ANGLES @ 4" o.c.
BLOCKING CONN. TO DBL. TOP ℞:
USE NAILING OF SOLE ℞ CONN. TO BLOCKING INDICATED FOR SHEAR WALL BELOW.

NOTE:
1. DBL. ROWS OF NAILING @ SOLE ℞ CONN. SHALL HAVE 3/4" EDGE DISTANCE, STAGGERED w/ 2" SPACING BTWN. ROWS.
2. AT CONTRACTORS OPTION, 3/8" WOOD STRUCTURAL PANELS MAY BE USED @ INTERIOR SHEAR WALL LOCATIONS IN LIEU OF 7/16" WOOD STRUCTURAL PANELS PROVIDED ALL OTHER REQ'M. NOTED ABOVE ARE FOLLOWED.
3. PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS OR 3" NOMINAL OR GREATER FRAMING MEMBERS MUST BE USED @ PANEL EDGES & ALL NAILS SHALL BE STAGGERED.

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COLORADO LICENSED PROFESSIONAL ENGINEER — RODNEY WARREN HACHETT — 39330 — 08/05/2024

No.	Date	Issue
	07/19/23	PERMIT SET
4	08/07/24	IFC

Project Architect:
Project Designer: MPM/SRJ/STZ
Date: 08/07/24
Job Number: 220930
Drawn By: CR/SRJ
Checked By: RWH
Title: GEN. NOTES & SCHEDULES
Sheet Number: S0-0.1

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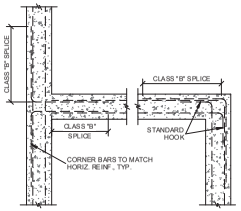
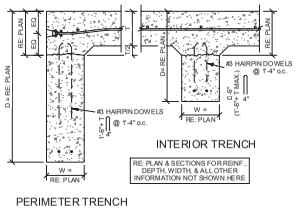
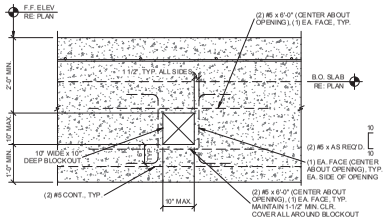


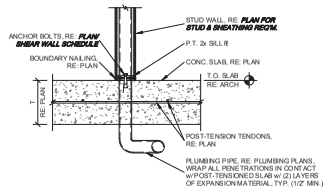
RIB INTERSECTIONS
1 TYPICAL DETAIL
3/4" = 1'-0"



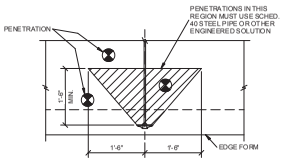
P.T. SLAB-ON-GRADE TWO POUR SYSTEM
2 TYPICAL DETAIL
3/4" = 1'-0"



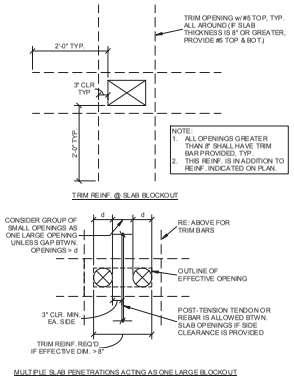
BLOCK OUT @ TRENCH
3 TYPICAL DETAIL
3/4" = 1'-0"



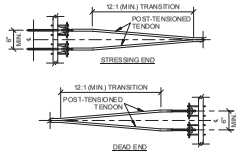
PLUMBING PENETRATION
4 TYPICAL DETAIL
3/4" = 1'-0"



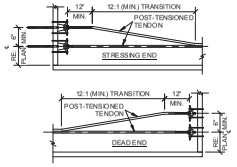
ANCHORAGE ZONES
5 TYPICAL DETAIL
3/4" = 1'-0"



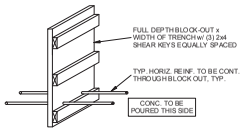
PLUMBING BLOCKOUT IN SLAB
6 TYPICAL DETAIL
3/4" = 1'-0"



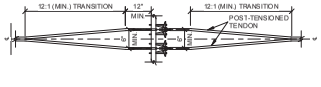
BUNDLED TENDON PLACEMENT
7 TYPICAL DETAIL
3/4" = 1'-0"



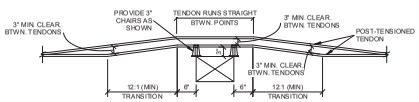
BUNDLED TENDON PLACEMENT AT CORNERS
8 TYPICAL DETAIL
3/4" = 1'-0"



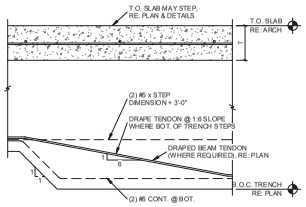
9 TYPICAL DETAIL
3/4" = 1'-0"



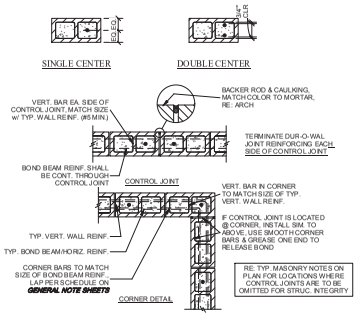
BUNDLED TENDON PLACEMENT AT INTERMEDIATE STRESSING
10 TYPICAL DETAIL
3/4" = 1'-0"



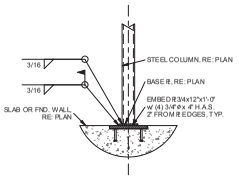
BUNDLED TENDON PLACEMENT AROUND OPENINGS
11 TYPICAL DETAIL
3/4" = 1'-0"



12 TYPICAL DETAIL
3/4" = 1'-0"

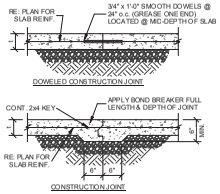


MASONRY DETAILS
13 TYPICAL DETAIL
3/4" = 1'-0"



COLUMN CONNECTION TO PT SLAB, MILD REINF. SLAB, &/OR FND. WALL U.N.O.
14 TYPICAL DETAIL
3/4" = 1'-0"

NOTES:
1. RE: SOILS REPORT FOR SUBGRADE PREPARATION REQ'M.
2. PROVIDE SLAB CONTROL JOINTS EA. WAY @ COLUMN LINES & @ 10' o.c. MAX. EA. WAY BTWN. OR AS NOTED OTHERWISE.
3. UNLESS NOTED OTHERWISE, USE SAWCUT CONTROL JOINTS @ INTERIOR SLABS & USE TOOLED CONTROL JOINTS @ EXTERIOR FLATWORK.



SLAB-ON-GRADE JOINTS
15 TYPICAL DETAIL
3/4" = 1'-0"

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No.	Date	Issue
	07/19/23	PERMIT SET
4	08/07/24	PC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: TYPICAL FOUNDATION DETAILS

Sheet Number: **S0-0.2**

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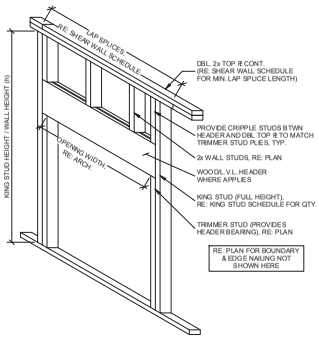
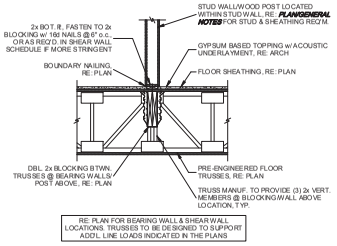


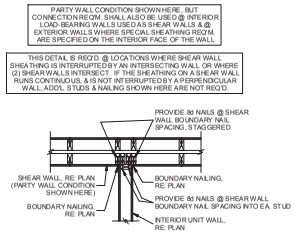
1 TYPICAL DETAIL

3/4" = 1'-0"



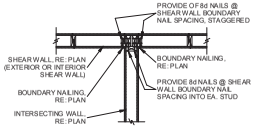
2 TYPICAL DETAIL

3/4" = 1'-0"



3 TYPICAL DETAIL

3/4" = 1'-0"



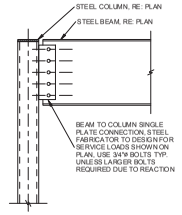
4 TYPICAL DETAIL

3/4" = 1'-0"

AT LOCATIONS WHERE BEAMS FRAME OVER TOP OF COLUMNS, PROVIDE 3/8" FITTED STIFFENERS EACH SIDE OF BEAM WEB CENTERED ABOVE COLUMN, TYPICAL.

DESIGN OF ALL STEEL CONNECTIONS SHALL BE THE RESPONSIBILITY OF THE STEEL FABRICATOR. F IELD BOLTED CONNECTIONS SHALL BE BEARING TYPE WITH 3/4" DIAMETER A325 N BOLTS, UNLESS NOTED OTHERWISE. ALL CONNECTIONS WHERE REACTIONS ARE NOT INDICATED ON PLAN SHALL SUPPORT 60% OF THE TOTAL UNIFORM LOAD CAPACITY IN BENDING FOR EACH BEAM AND SPAN AS SHOWN IN THE AISC UNIFORM LOAD CONSTANT TABLES. CONNECTIONS SHALL GENERALLY FOLLOW THOSE AS FOUND IN AISC "STEEL CONSTRUCTION MANUAL" FOURTEENTH EDITION.

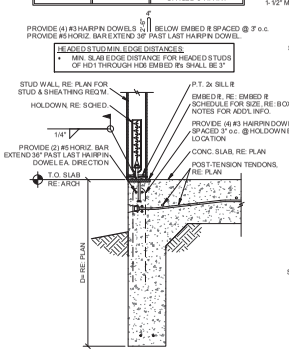
JOISTS, FLOOR TRUSS, DECKING, ETC. NOT SHOWN FOR CLARITY



5 TYPICAL DETAIL

1" = 1'-0"

EMBED PLATE SCHEDULE		
HOLDOWN	EMBED R SIZE	HEADED ANCHOR STUDS
HD1 THRU HD3	R 3/4"x6"x0'-10"	(2) 3/4"x6 H.A.S. SPACED 6" APART
HD4 THRU HD8	R 3/4"x10"x0'-10"	(4) 3/4"x6 H.A.S. SPACED 6" APART



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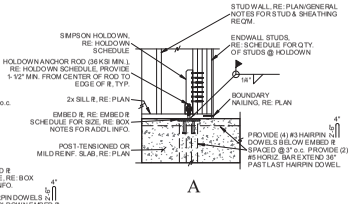

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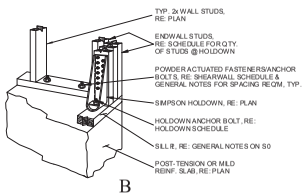

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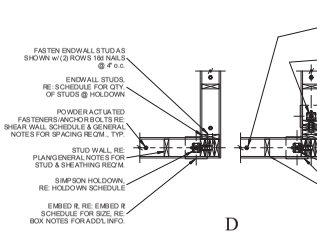

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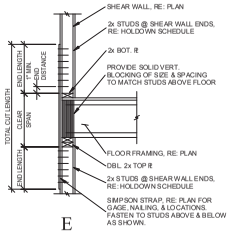
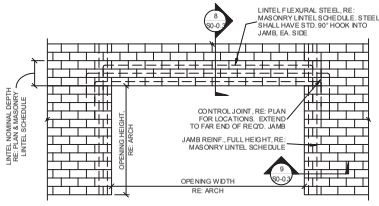


E

TYPICAL HOLDOWN DETAILS

6 TYPICAL DETAIL

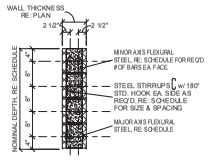
3/4" = 1'-0"



MASONRY LINTEL ELEVATION

7 SECTION

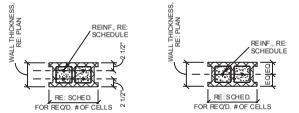
1/4" = 1'-0"



MASONRY LINTEL SECTION

8 SECTION

3/4" = 1'-0"



MASONRY JAMB SECTION

9 SECTION

3/4" = 1'-0"

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No.	Date	Issue
	07/19/23	PERMIT SET
4	08/07/24	ITC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: TYPICAL DETAILS

Sheet Number: **S0-0.3**

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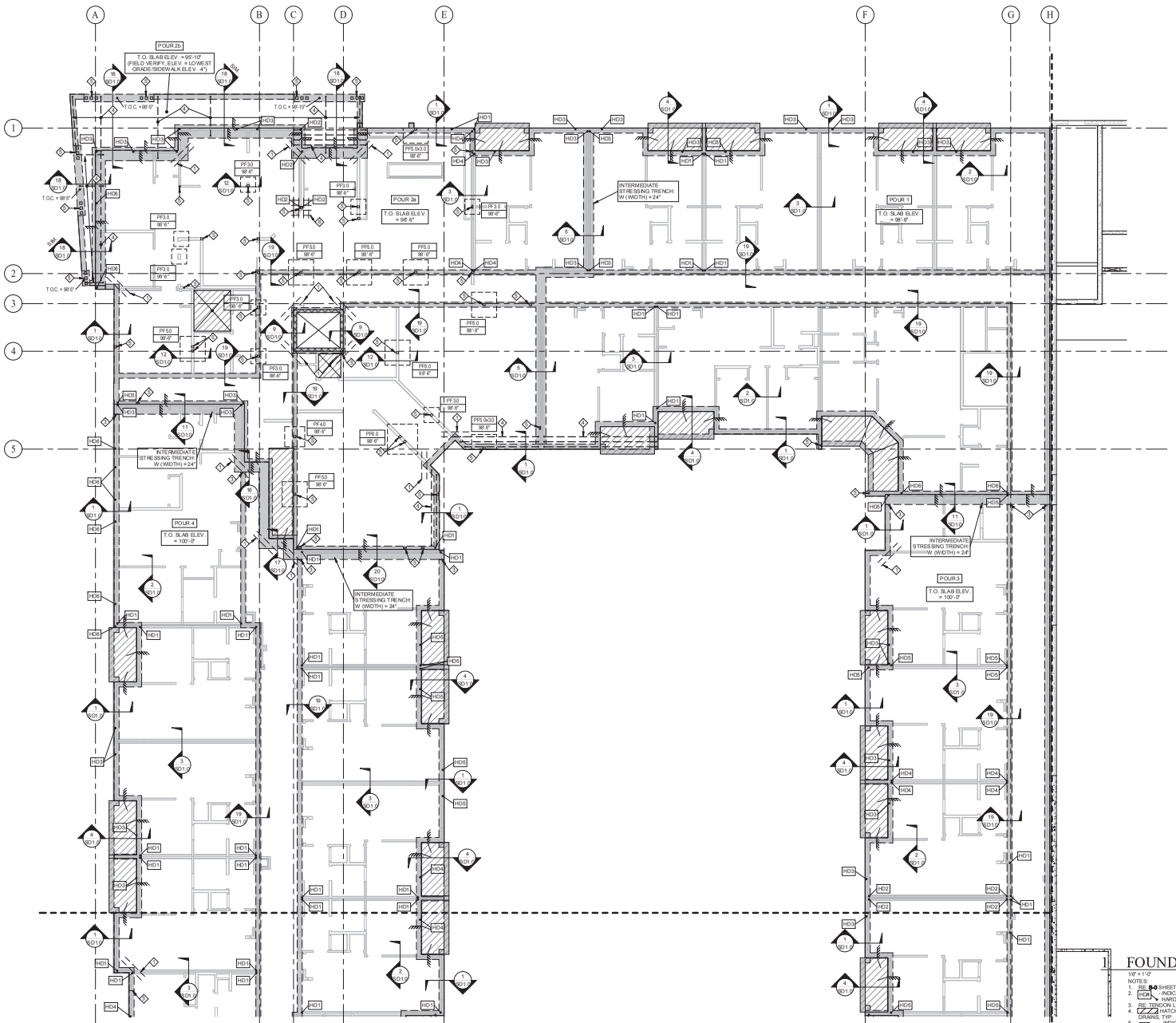

KEYNOTE SCHEDULE - FOUNDATION

1	(2) #5 x 6'-0" DIAGONAL BARS TOP & BOT. @ ALL RE-ENTREANT CORNERS WHERE SHOWN.
2	STEP T.O.C.
3	STEP B.O.C.
4	#5 @ 12" o.c. TOP & BOT. w/ 12" HOOK, TURN DOWN INTO PERIMETER RIB, TYP. WHERE SHOWN THUS:
5	PROVIDE EMBED PLATE @ STEEL COLUMN, REF 13/S0-1.0 FOR ADD'L DETAILS
6	PROVIDE (8) #5 x 8'-0" HORIZ. BARS SPACED 12" O.C. CENTERED w/ THE HOLDOWN LOCATION INDICATED

SPREAD FOOTING SCHEDULE

MARK	SIZE WIDTH	LENGTH	THICKNESS	REINFORCING TRANSVERSE	LONGITUDINAL
PF3.0	3'-0"	3'-0"	13 1/2"	(3) #5 BOT. BARS	(3) #5 BOT. BARS
PF4.0	4'-0"	4'-0"	13 1/2"	(4) #5 BOT. BARS	(4) #5 BOT. BARS
PF5.0	5'-0"	5'-0"	13 1/2"	(5) #5 BOT. BARS	(5) #5 BOT. BARS
PF5.0x3.0	5'-0"	3'-0"	13 1/2"	(5) #5 BOT. BARS	(3) #5 BOT. BARS
PF6.0	6'-0"	6'-0"	15"	(7) #5 BOT. BARS	(7) #5 BOT. BARS
PFG10.0	10'-0"	10'-0"	34"	#8 @ 10" o.c. TOP & BOT EA. WAY	#8 @ 10" o.c. TOP & BOT EA. WAY
PFG13.0	13'-0"	13'-0"	36"	#8 @ 8" o.c. TOP & BOT EA. WAY	#8 @ 8" o.c. TOP & BOT EA. WAY
PFG14.0	14'-0"	14'-0"	38"	#8 @ 8" o.c. TOP & BOT EA. WAY	#8 @ 8" o.c. TOP & BOT EA. WAY

CONTINUOUS FOOTING SCHEDULE

MARK	SIZE WIDTH	LENGTH	THICKNESS	REINFORCING TRANSVERSE	LONGITUDINAL
F18	1'-6"	CONT.	1'-0"	N/A	(3) #5 BOT.
F48	4'-0"	CONT.	2'-0"	#6 @ 9" o.c. TOP & BOT.	(5) #6 TOP & BOT.
F60	5'-0"	CONT.	2'-6"	#7 @ 9" o.c. TOP & BOT.	(6) #6 TOP & BOT.
F108	9'-0"	CONT.	2'-6"	#7 @ 10" o.c. TOP & BOT.	(10) #7 TOP & BOT.

F16 — *Footing Mark*
92'-0" — *Top of Footing Elevation*

NOTES:
1. ALL REINFORCING TO BE PLACED IN BOTTOM OF FOOTING w/ PROPER CLEAR COVER (SEE GENERAL NOTES), TYP. U.N.O.
2. REINFORCING SHALL BE CONTINUOUS IN ALL CONTINUOUS SPREAD FOOTINGS. RE: REBAR SPLICE SCHEDULE FOR SPLICE LENGTHS.
3. PADS TO BE FORMED w/ 2x WOOD FORMS. IF CONTRACTOR OPTS TO USE EARTH FORMING, THE PLAN DIMENSIONS MUST BE INCREASED 4 INCHES.
4. ALL FOOTINGS TO BE CENTERED ABOUT STEM WALL, TYP. U.N.O.

1 FOUNDATION PLAN - AREA A

1/8" = 1'-0"

NOTES:
1. RE: **S-0** SHEETS FOR GENERAL FOUNDATION NOTES; RE: S-300 FOR TYP. FOUNDATION DETAILS.
2. HDH INDICATES SIMPSON HOLDOWN, RE: SCHEDULE ON SHEET S-002. REFER TO THE PLAN FOR THE SPECIFIC HARDWARE REQUIRED & LOCATION TYP/GAL.
3. RE: TENDON LAYOUT PLAN FOR TRENCH & SLAB TENDON PLACEMENT.
4. HATCHED AREAS ON THE PLANS INDICATE SLOPED CONCRETE. RE: ARCH. FOR SLOPES, & SLOPES TO DRAINS, TYP.
5. INDICATES A STEP IN THE SLAB. THE NUMBERS SHOWN INDICATE THE RELATIVE ELEVATIONS OF THE SLAB ON EACH SIDE. RE: CIVIL & ARCH FOR ACTUAL ELEVATIONS.
6. INDICATES A BREAK LINE WHERE THE SLAB BEGINS TO SLOPE.
7. IN ALL TRENCHES PROVIDE A MIN. OF (2) #5 CONT. @ BOT. OF TRENCH, TYP. U.N.O.
8. STEP B.O. TRENCH AS REQ'D. TO MEET MINIMUM **3'-0"** FROST DEPTH REQ'M. CONTRACTOR TO VERIFY THAT STEPS IN B.O. TRENCH COORDINATE w/ SITE GRADING & THAT 3'-0" FROST DEPTH IS MAINTAINED FOR B.O. TRENCH @ PERIMETER & EXTERIOR LOCATION, RE: **S/S-003** FOR REINFORCING REQ'M @ STEP LOCATIONS. FIELD VERIFY ALL STEP LOCATIONS INDICATED ON PLAN. RE: **S/S-003** FOR TRENCH REINFORCING REQ'M @ VARIOUS GRADE CHANGES.

POST-TENSIONED SLAB-ON-GRADE VARIABLES

T = 13-1/2" = POST TENSION SLAB ON GRADE THICKNESS (U.N.O.)
D = 44" (MIN.) FOR SHADED TRENCH DEPTH, TYP. U.N.O.
W = 12" WIDTH FOR ALL TRENCHES, TYP. U.N.O.

PROVIDE 6 MIL MIN. POLYVAPOR BARRIER BELOW ALL POST-TENSIONED SLABS ON-GRADE

RIGID INSULATION TO BE PROVIDED BELOW SLAB @ ALL EXTERIOR PATIO, GARAGE APRONS, & BREEZEWAYS/EXIT ENCLOSURES, TYP. U.N.O. RE: ARCH/MECH DWGS. FOR ADD'L BELOW SLAB INSULATION TO MEET MECHANICAL REQ'M.

ALL DIMENSIONS & T.O.C. ELEVATIONS TO BE VERIFIED w/ ARCH DRAWINGS PRIOR TO CONSTRUCTION. ANCHOR ENGINEERING, INC. ACCEPTS NO LIABILITY FOR DISCREPANCIES

LOCATE SLAB TENDONS MAXIMUM 24" FROM PARALLEL CONCRETE EDGE AND MINIMUM 6" FROM PARALLEL CONCRETE EDGE, TYP.

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5190 MARSHALL ST - ARVADA, CO 80002



No.	Date	Issue
1	07/10/23	PERMIT SET
4	08/07/24	DTC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: FOUNDATION PLAN - AREA A

Sheet Number: **S1-1.1**

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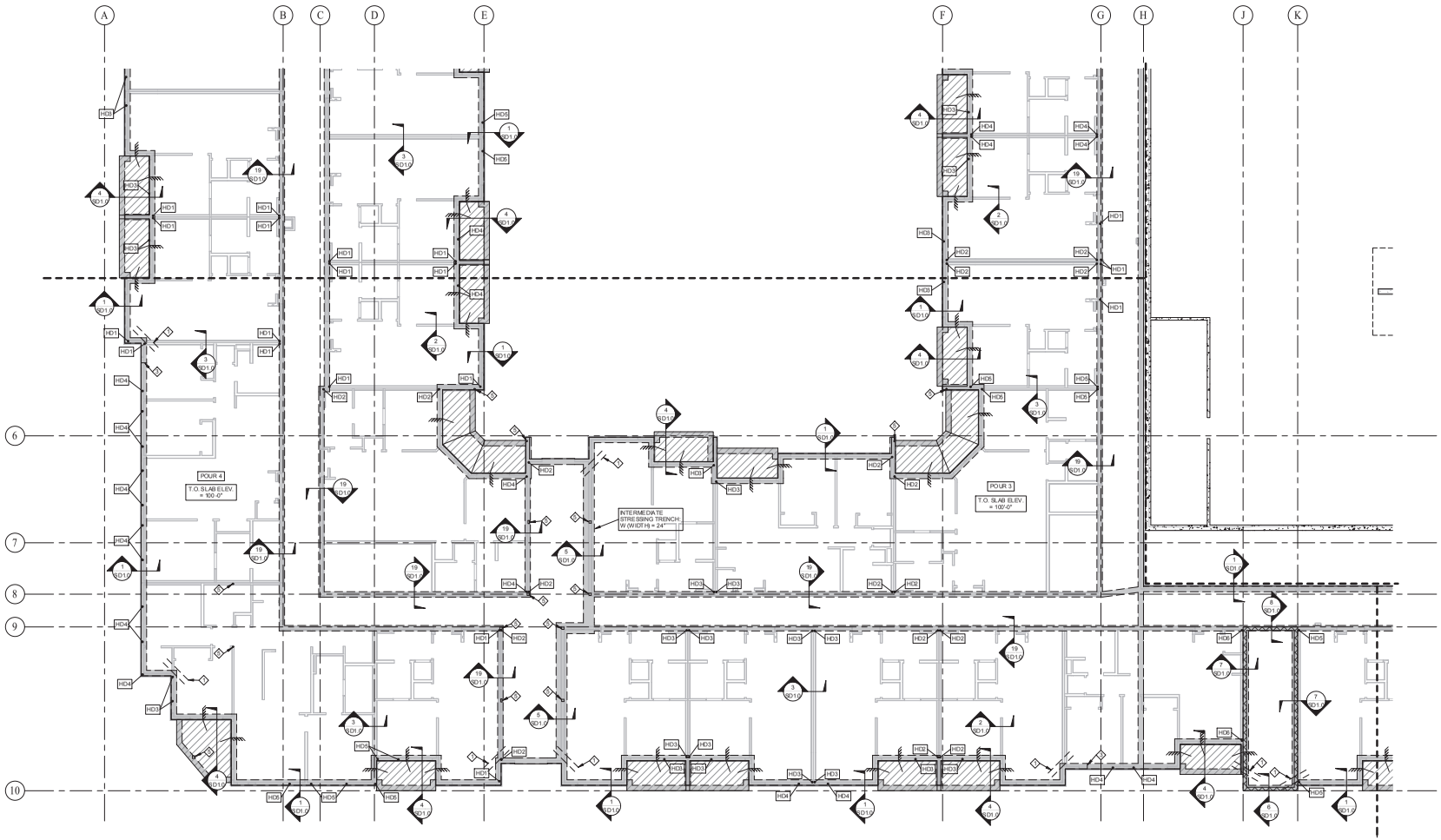
KEYNOTE SCHEDULE - FOUNDATION	
1	(2) #5 x 6'-0" DIAGONAL BARS TOP & BOT. @ ALL RE-ENTREANT CORNERS WHERE SHOWN.
2	STEP T.O.C.
3	STEP B.O.C.
4	#5 @ 12" o.c. TOP & BOT. w/ 12" HOOK, TURN DOWN INTO PERIMETER RIB, TYP. WHERE SHOWN THUS.
5	PROVIDE EMBED PLATE @ STEEL COLUMN. RE: 13/SD-1.0 FOR ADD'L DETAILS
6	PROVIDE (8) #5 x 8'-0" HORIZ. BARS SPACED 12" o.c. CENTERED w/ THE HOLDOWN LOCATION INDICATED



1 FOUNDATION PLAN - AREA B

1/8" = 1'-0"

NOTES:

1. RE: S-0 SHEETS FOR GENERAL FOUNDATION NOTES; RE: S-300 FOR TYP. FOUNDATION DETAILS.
2. HDW - INDICATES SIMPSON HOLDOWN. RE: SCHEDULE ON SHEET S-002. REFER TO THE PLAN FOR THE SPECIFIC HARDWARE REQUIRED & LOCATION TYPICAL.
3. RE: TENDON LAYOUT PLAN FOR TRENCH & SLAB TENDON PLACEMENT.
4. HATCHED AREAS ON THE PLANS INDICATE SLOPED CONCRETE. RE: ARCH. FOR SLOPES, & SLOPES TO DRAINS, TYP.
5. INDICATES A STEP IN THE SLAB. THE NUMBERS SHOWN INDICATE THE RELATIVE ELEVATIONS OF THE SLAB ON EACH SIDE. RE: CIVIL & ARCH FOR ACTUAL ELEVATIONS.
6. INDICATES A BREAK LINE WHERE THE SLAB BEGINS TO SLOPE.
7. IN ALL TRENCHES PROVIDE A MIN. OF (2) #5 CONT. @ BOT. OF TRENCH, TYP. U.N.O.
8. STEP B.O. TRENCH AS REQ'D. TO MEET MINIMUM 3'-0" FROST DEPTH REQ'M. CONTRACTOR TO VERIFY THAT STEPS IN B.O. TRENCH COORDINATE w/ SITE GRADING & THAT 3'-0" FROST DEPTH IS MAINTAINED FOR B.O. TRENCH @ PERIMETER & EXTERIOR LOCATION. RE: 6/S-003 FOR REINFORCING REQ'M @ STEP LOCATIONS. FIELD VERIFY ALL STEP LOCATIONS INDICATED ON PLAN. RE: 8/S-003 FOR TRENCH REINFORCING REQ'M @ VARIOUS GRADE CHANGES.

POST-TENSIONED SLAB-ON-GRADE VARIABLES
T = 13-1/2" = POST TENSION SLAB ON GRADE THICKNESS (U.N.O)
D = 44" (MIN.) FOR SHADED TRENCH DEPTH, TYP. U.N.O.
W = 12" WIDTH FOR ALL TRENCHES, TYP. U.N.O.

PROVIDE 6 MIL MIN. POLYVAPOR BARRIER BELOW ALL POST-TENSIONED SLABS-ON-GRADE

RIGID INSULATION TO BE PROVIDED BELOW SLAB @ ALL EXTERIOR PATIO, GARAGE APRONS, & BREEZEWAYS/EXIT ENCLOSURES, TYP. U.N.O. RE: ARCH/MECH DWGS. FOR ADD'L. BELOW SLAB INSULATION TO MEET MECHANICAL REQ'M.

ALL DIMENSIONS & T.O.C. ELEVATIONS TO BE VERIFIED w/ ARCH DRAWINGS PRIOR TO CONSTRUCTION. ANCHOR ENGINEERING, INC. ACCEPTS NO LIABILITY FOR DISCREPANCIES

LOCATE SLAB TENDONS MAXIMUM 24" FROM PARALLEL CONCRETE EDGE AND MINIMUM 6" FROM PARALLEL CONCRETE EDGE, TYP.

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MARSHALL POINTE APARTMENTS, LP
5190 MARSHALL ST - ARVADA, CO 80002

COLORADO LICENSED PROFESSIONAL ENGINEER 39330 08/05/2024

No.	Date	Issue
	07/18/23	PERMIT SET
4	08/07/24	TFC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: FOUNDATION PLAN - AREA B

Sheet Number: S1-1.2

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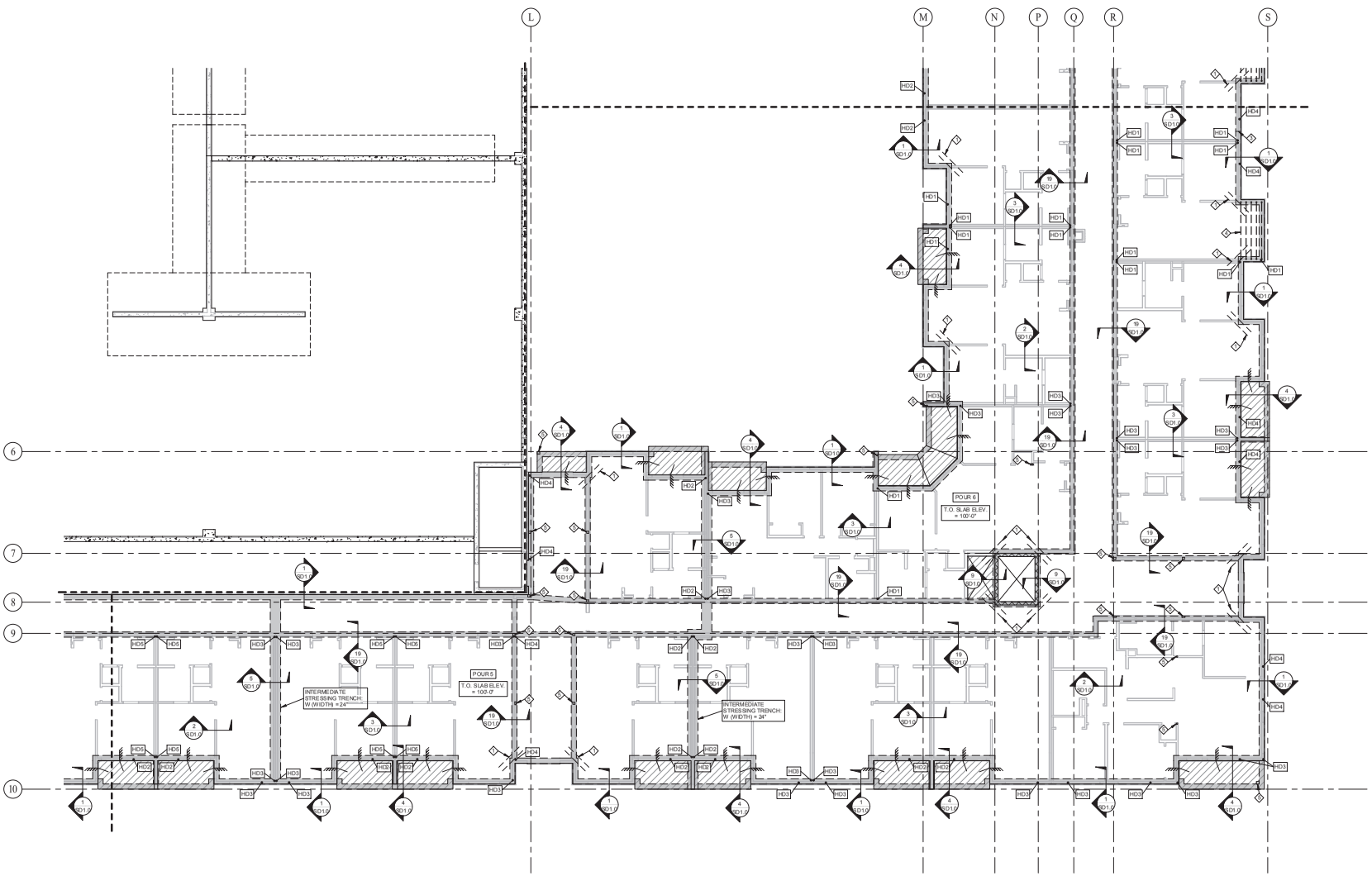
KEYNOTE SCHEDULE - FOUNDATION	
1	(2) #5 x 6'-0" DIAGONAL BARS TOP & BOT. @ ALL RE-ENTREANT CORNERS WHERE SHOWN.
2	STEP T.O.C.
3	STEP B.O.C.
4	#5 @ 12" o.c. TOP & BOT. w/ 12" HOOK, TURN DOWN INTO PERIMETER RIB, TYP. WHERE SHOWN THUS.
5	PROVIDE EMBED PLATE @ STEEL COLUMN. RE: 13/SD-10 FOR ADD'L DETAILS
6	PROVIDE (8) #5 x 8'-0" HORIZ. BARS SPACED 12" o.c. CENTERED w/ THE HOLDOWN LOCATION INDICATED



1 FOUNDATION PLAN - AREA C

1/8" = 1'-0"

NOTES:

1. RE: S-0 SHEETS FOR GENERAL FOUNDATION NOTES; RE: S-300 FOR TYP. FOUNDATION DETAILS.
2. HDR - INDICATES SIMPSON HOLDOWN. RE: SCHEDULE ON SHEET S-002. REFER TO THE PLAN FOR THE SPECIFIC HARDWARE REQUIRED & LOCATION TYPICAL.
3. RE: TENDON LAYOUT PLAN FOR TRENCH & SLAB TENDON PLACEMENT.
4. HATCHED AREAS ON THE PLANS INDICATE SLOPED CONCRETE. RE: ARCH. FOR SLOPES, & SLOPES TO DRAINS, TYP.
5. INDICATES A STEP IN THE SLAB. THE NUMBERS SHOWN INDICATE THE RELATIVE ELEVATIONS OF THE SLAB ON EACH SIDE. RE: CIVIL & ARCH FOR ACTUAL ELEVATIONS.
6. INDICATES A BREAK LINE WHERE THE SLAB BEGINS TO SLOPE.
7. IN ALL TRENCHES PROVIDE A MIN. OF (2) #5 CONT. @ BOT. OF TRENCH, TYP. U.N.O.
8. STEP B.O. TRENCH AS REQ'D. TO MEET MINIMUM 3'-0" FROST DEPTH REQ'M. CONTRACTOR TO VERIFY THAT STEPS IN B.O. TRENCH COORDINATE w/ SITE GRADING & THAT 3'-0" FROST DEPTH IS MAINTAINED FOR B.O. TRENCH @ PERIMETER & EXTERIOR LOCATION. RE: 8/S-003 FOR REINFORCING REQ'M @ STEP LOCATIONS. FIELD VERIFY ALL STEP LOCATIONS INDICATED ON PLAN. RE: 8/S-003 FOR TRENCH REINFORCING REQ'M @ VARIOUS GRADE CHANGES.

POST-TENSIONED SLAB-ON-GRADE VARIABLES
T = 13-1/2" = POST TENSION SLAB ON GRADE THICKNESS (U.N.O)
D = 44" (MIN.) FOR SHADED TRENCH DEPTH, TYP. U.N.O.
W = 12" WIDTH FOR ALL TRENCHES, TYP. U.N.O.

PROVIDE 6 MIL MIN. POLY VAPOR BARRIER BELOW ALL POST-TENSIONED SLABS-ON-GRADE

RIGID INSULATION TO BE PROVIDED BELOW SLAB @ ALL EXTERIOR PATIO, GARAGE APRONS, & BREEZEWAYS/EXIT ENCLOSURES, TYP. U.N.O. RE: ARCH/MECH DWGS. FOR ADD'L. BELOW SLAB INSULATION TO MEET MECHANICAL REQ'M.

ALL DIMENSIONS & T.O.C. ELEVATIONS TO BE VERIFIED w/ ARCH DRAWINGS PRIOR TO CONSTRUCTION. ANCHOR ENGINEERING, INC. ACCEPTS NO LIABILITY FOR DISCREPANCIES

LOCATE SLAB TENDONS MAXIMUM 24" FROM PARALLEL CONCRETE EDGE AND MINIMUM 6" FROM PARALLEL CONCRETE EDGE, TYP.

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5190 MARSHALL ST - ARVADA, CO 80002

COLORADO LICENSED PROFESSIONAL ENGINEER 39330 08/05/2024 CHRISTOPHER J. TIMMERMAN

No.	Date	Issue
	07/18/23	PERMIT SET
4	08/07/24	PC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: FOUNDATION PLAN - AREA C

Sheet Number: S1-1.3

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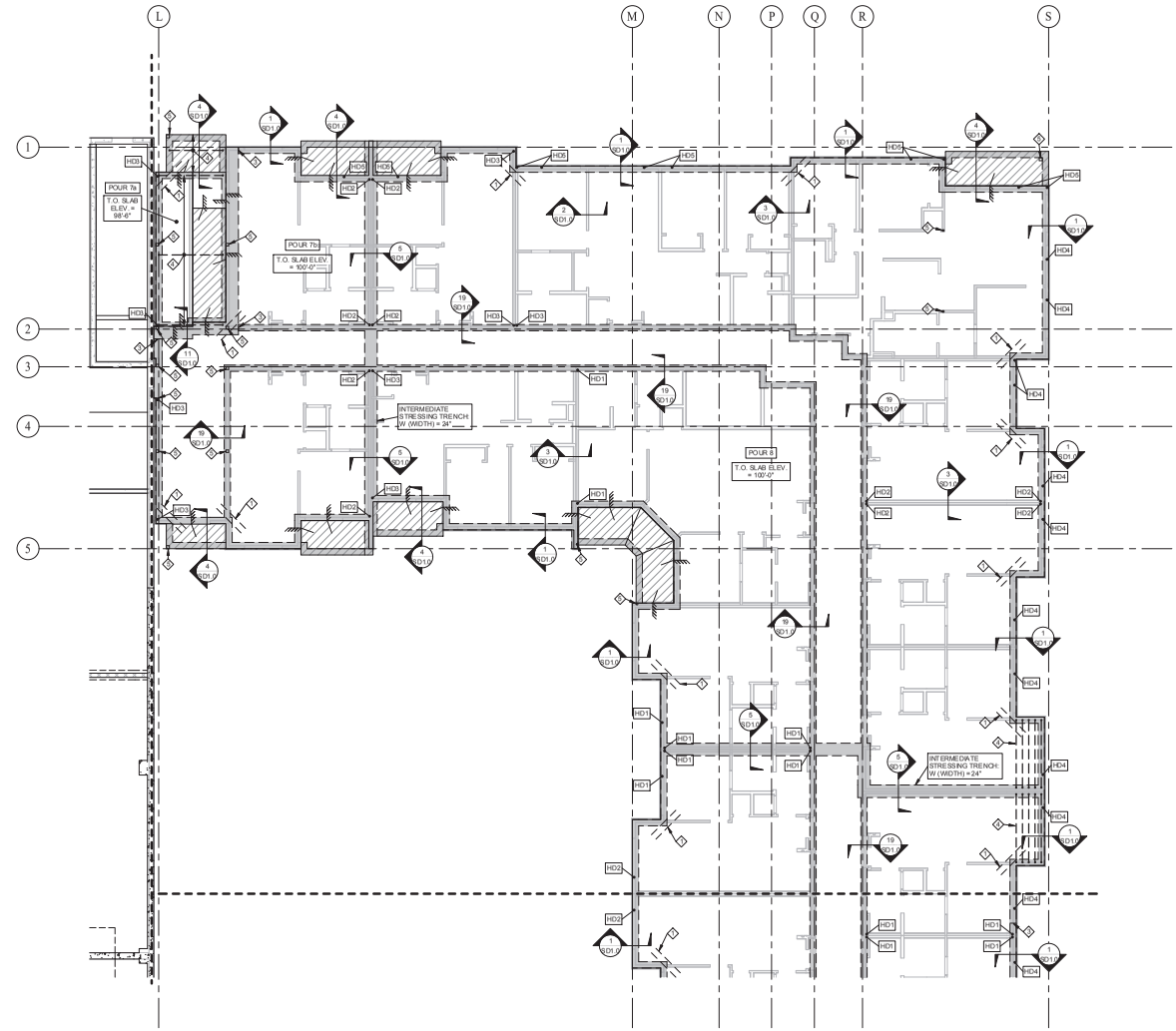
KEYNOTE SCHEDULE - FOUNDATION	
1	(2) #5 x 6'-0" DIAGONAL BARS TOP & BOT. @ ALL RE-ENTREANT CORNERS WHERE SHOWN.
2	STEP T.O.C.
3	STEP B.O.C.
4	#5 @ 12" o.c. TOP & BOT. w/ 12" HOOK, TURN DOWN INTO PERIMETER RIB, TYP. WHERE SHOWN THUS.
5	PROVIDE EMBED PLATE @ STEEL COLUMN. RE: 13/SD-10 FOR ADD'L DETAILS
6	PROVIDE (8) #5 x 8'-0" HORIZ. BARS SPACED 12" o.c. CENTERED w/ THE HOLDOWN LOCATION INDICATED



1 FOUNDATION PLAN - AREA D

1/8" = 1'-0"

NOTES:

1. RE: **S-0** SHEETS FOR GENERAL FOUNDATION NOTES; RE: S-300 FOR TYP. FOUNDATION DETAILS.
2. HD# - INDICATES SIMPSON HOLDOWN; RE: SCHEDULE ON SHEET S-002. REFER TO THE PLAN FOR THE SPECIFIC HARDWARE REQUIRED & LOCATION TYPICAL.
3. RE: TENDON LAYOUT PLAN FOR TRENCH & SLAB TENDON PLACEMENT.
4. HATCHED AREAS ON THE PLANS INDICATE SLOPED CONCRETE. RE: ARCH. FOR SLOPES, & SLOPES TO DRAINS, TYP.
5. - INDICATES A STEP IN THE SLAB. THE NUMBERS SHOWN INDICATE THE RELATIVE ELEVATIONS OF THE SLAB ON EACH SIDE. RE: CIVIL & ARCH FOR ACTUAL ELEVATIONS.
6. INDICATES A BREAK LINE WHERE THE SLAB BEGINS TO SLOPE.
7. IN ALL TRENCHES PROVIDE A MIN. OF (2) #5 CONT. @ BOT. OF TRENCH, TYP. U.N.O.
8. STEP B.O. TRENCH AS REQ'D. TO MEET MINIMUM **3'-0"** FROST DEPTH REQ'M. CONTRACTOR TO VERIFY THAT STEPS IN B.O. TRENCH COORDINATE w/ SITE GRADING & THAT 3'-0" FROST DEPTH IS MAINTAINED FOR B.O. TRENCH @ PERIMETER & EXTERIOR LOCATION, RE: **S/S-003** FOR REINFORCING REQ'M @ STEP LOCATIONS. FIELD VERIFY ALL STEP LOCATIONS INDICATED ON PLAN. RE: **S/S-003** FOR TRENCH REINFORCING REQ'M @ VARIOUS GRADE CHANGES.

POST-TENSIONED SLAB-ON-GRADE VARIABLES
T = 13-1/2" = POST TENSION SLAB ON GRADE THICKNESS (U.N.O)
D = 44" (MIN.) FOR SHADED TRENCH DEPTH, TYP. U.N.O.
W = 12" WIDTH FOR ALL TRENCHES, TYP. U.N.O.

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PROVIDE 6 MIL MIN. POLYVAPOR BARRIER BELOW ALL POST-TENSIONED SLABS-ON-GRADE

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No.	Date	Issue
1	07/19/23	PERMIT SET
4	08/07/24	PC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: FOUNDATION PLAN - AREA D

Sheet Number: S1-1.4

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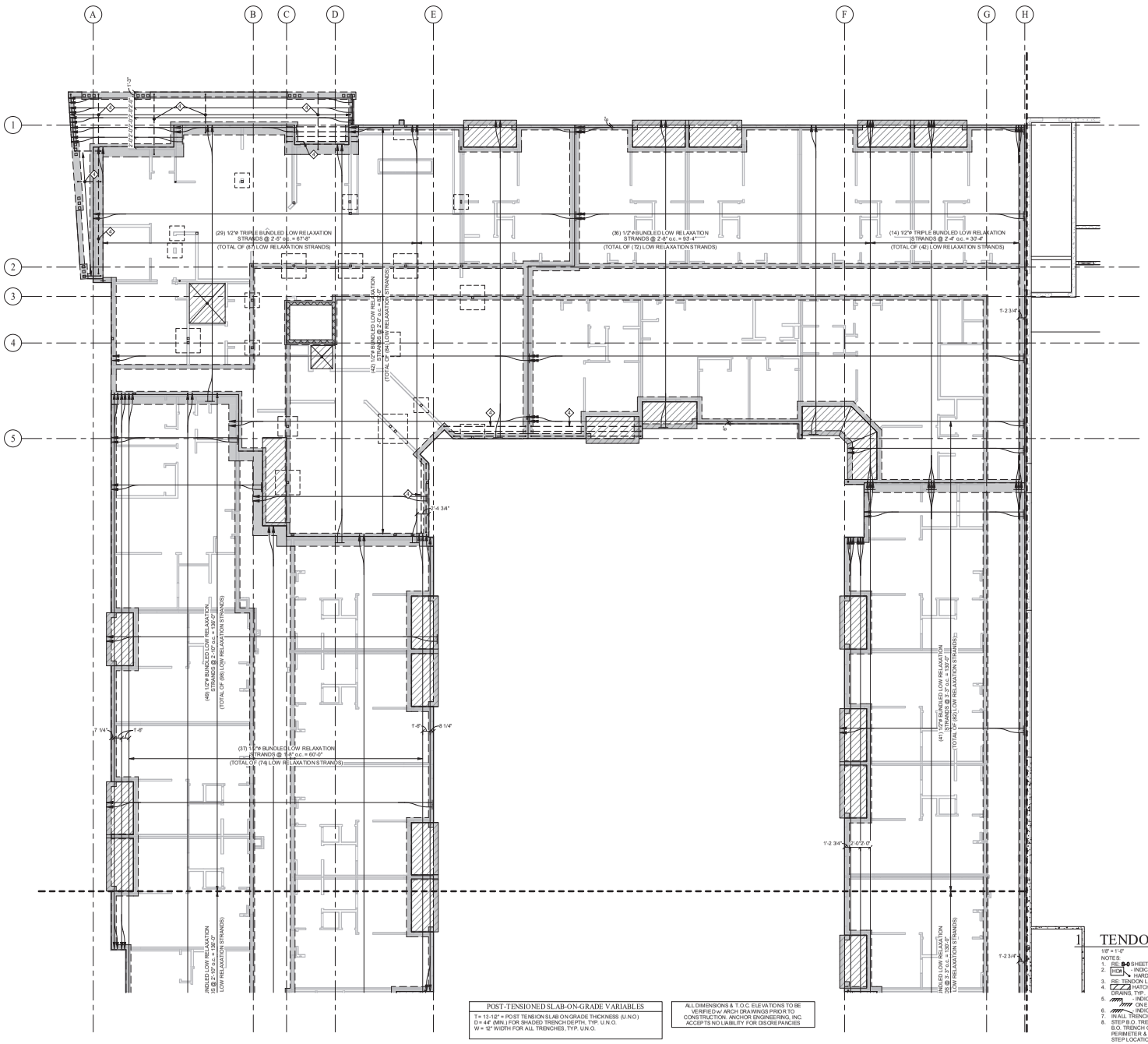

KEYNOTE SCHEDULE - FOUNDATION

1	(2) #5 x 6'-0" DIAGONAL BARS TOP & BOT. @ ALL RE-ENTRANT CORNERS WHERE SHOWN.
2	STEP T.O.C.
3	STEP B.O.C.
4	#5 @ 12" o.c. TOP & BOT. w/ 12" HOOK, TURN DOWN INTO PERIMETER RIB, TYP. WHERE SHOWN THUS:
5	PROVIDE EMBED PLATE @ STEEL COLUMN, REF 13/S0-1.0 FOR ADD'L DETAILS
6	PROVIDE (8) #5 x 8'-0" HORIZ. BARS SPACED 12" O.C. CENTERED w/ THE HOLDOWN LOCATION INDICATED

1 TENDON LAYOUT PLAN - AREA A

1/8" = 1'-0"

NOTES:
1. RE: **S-0** SHEETS FOR GENERAL FOUNDATION NOTES; RE: S-300 FOR TYP. FOUNDATION DETAILS.
2. HDH INDICATES SIMPSON HOLDOWN, RE: SCHEDULE ON SHEET S-002. REFER TO THE PLAN FOR THE SPECIFIC HARDWARE REQUIRED & LOCATION TYP/GAL.
3. RE: TENDON LAYOUT PLAN FOR TRENCH & SLAB TENDON PLACEMENT.
4. HATCHED AREAS ON THE PLANS INDICATE SLOPED CONCRETE. RE: ARCH. FOR SLOPES, & SLOPES TO DRAINS, TYP.
5. INDICATES A STEP IN THE SLAB. THE NUMBERS SHOWN INDICATE THE RELATIVE ELEVATIONS OF THE SLAB ON EACH SIDE. RE: CIVIL & ARCH FOR ACTUAL ELEVATIONS.
6. INDICATES A BREAK LINE WHERE THE SLAB BEGINS TO SLOPE.
7. IN ALL TRENCHES PROVIDE A MIN. OF (2) #5 CONT. @ BOT. OF TRENCH, TYP. U.N.O.
8. STEP B.O. TRENCH AS REQ'D. TO MEET MINIMUM **3'-0"** FROST DEPTH REQM. CONTRACTOR TO VERIFY THAT STEPS IN B.O. TRENCH COORDINATE w/ SITE GRADING & THAT 3'-0" FROST DEPTH IS MAINTAINED FOR B.O. TRENCH @ PERIMETER & EXTERIOR LOCATION, RE: **S/S-003** FOR REINFORCING REQ'M @ STEP LOCATIONS. FIELD VERIFY ALL STEP LOCATIONS INDICATED ON PLAN. RE: **S/S-003** FOR TRENCH REINFORCING REQ'M @ VARIOUS GRADE CHANGES.

POST-TENSIONED SLAB-ON-GRADE VARIABLES

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No.	Date	Issue
	07/19/23	PERMIT SET
4	08/07/24	PC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: TENDON LAYOUT PLAN - AREA A

Sheet Number: **S1-2.1**

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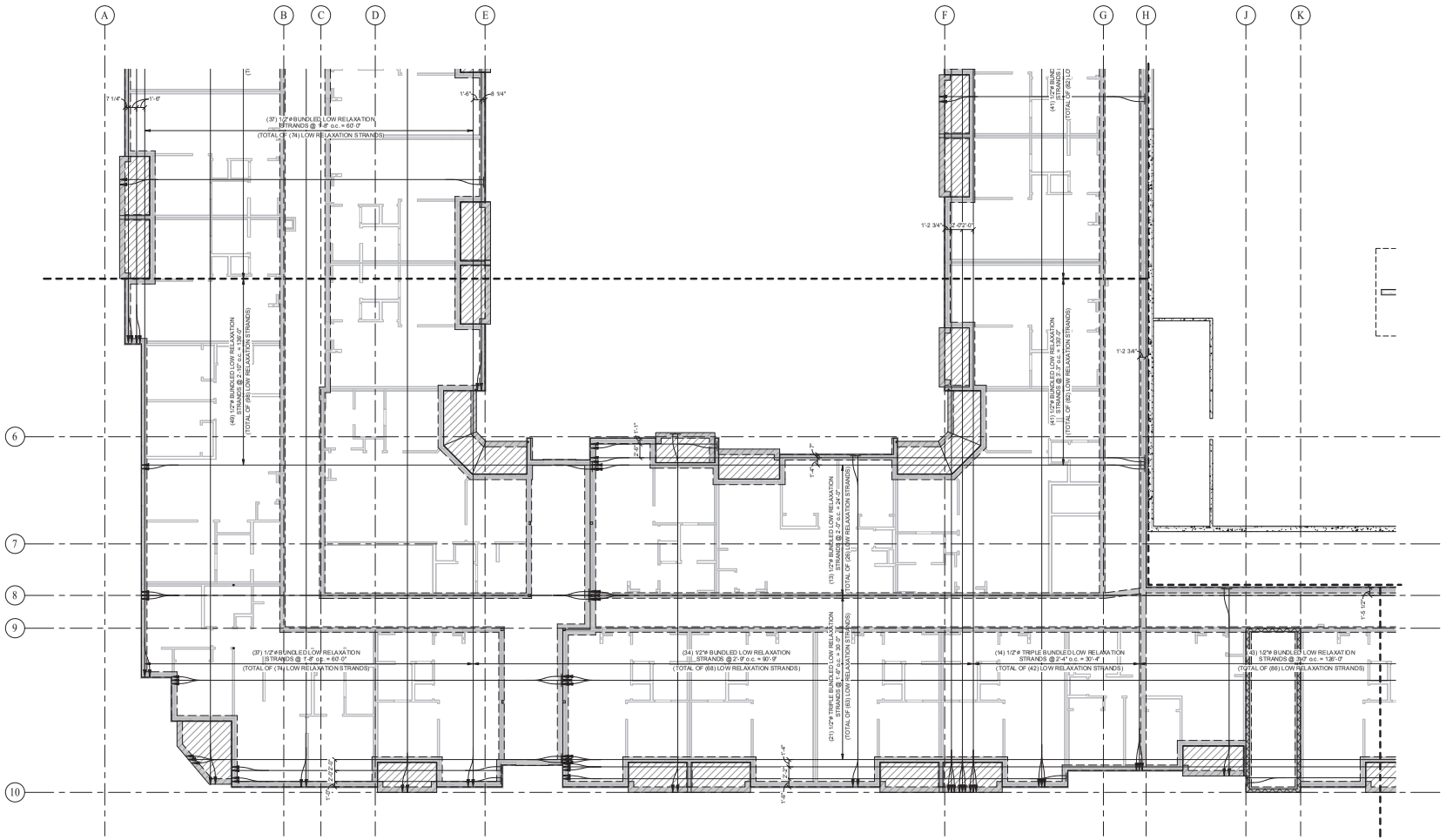
KEYNOTE SCHEDULE - FOUNDATION	
1	(2) #5 x 6'-0" DIAGONAL BARS TOP & BOT. @ ALL RE-ENTREANT CORNERS WHERE SHOWN.
2	STEP T.O.C.
3	STEP B.O.C.
4	#6 @ 12" o.c. TOP & BOT. w/ 12" HOOK. TURN DOWN INTO PERIMETER RIB, TYP. WHERE SHOWN THUS.
5	PROVIDE EMBED PLATE @ STEEL COLUMN. RE: S3/SD-1.0 FOR ADD'L DETAILS
6	PROVIDE (3) #5 x 8'-0" HORIZ. BARS SPACED 12" O.C. CENTERED w/ THE HOLDOWN LOCATION INDICATED.


A
B
C
D
E
F
G
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J
K
6
7
8
9
10
(37) 1/2"ø BUNDLED LOW RELAXATION STRANDS @ 7'-8" o.c. = 60'-0"
(TOTAL OF (74) LOW RELAXATION STRANDS)
(49) 1/2"ø BUNDLED LOW RELAXATION STRANDS @ 2'-10" o.c. = 138'-0"
(TOTAL OF (98) LOW RELAXATION STRANDS)
(37) 1/2"ø BUNDLED LOW RELAXATION STRANDS @ 7'-8" o.c. = 60'-0"
(TOTAL OF (74) LOW RELAXATION STRANDS)
(34) 1/2"ø BUNDLED LOW RELAXATION STRANDS @ 2'-9" o.c. = 90'-9"
(TOTAL OF (68) LOW RELAXATION STRANDS)
(21) 1/2"ø TRIPLE BUNDLED LOW RELAXATION STRANDS @ 2'-6" o.c. = 39'-2"
(TOTAL OF (63) LOW RELAXATION STRANDS)
(15) 1/2"ø BUNDLED LOW RELAXATION STRANDS @ 2'-0" o.c. = 24'-0"
(TOTAL OF (30) LOW RELAXATION STRANDS)
(41) STRANDING
(TOTAL OF (82) LO
(41) STRANDING
(TOTAL OF (82) LO
(41) STRANDING
(TOTAL OF (82) LO

KEYNOTE SCHEDULE - FOUNDATION	
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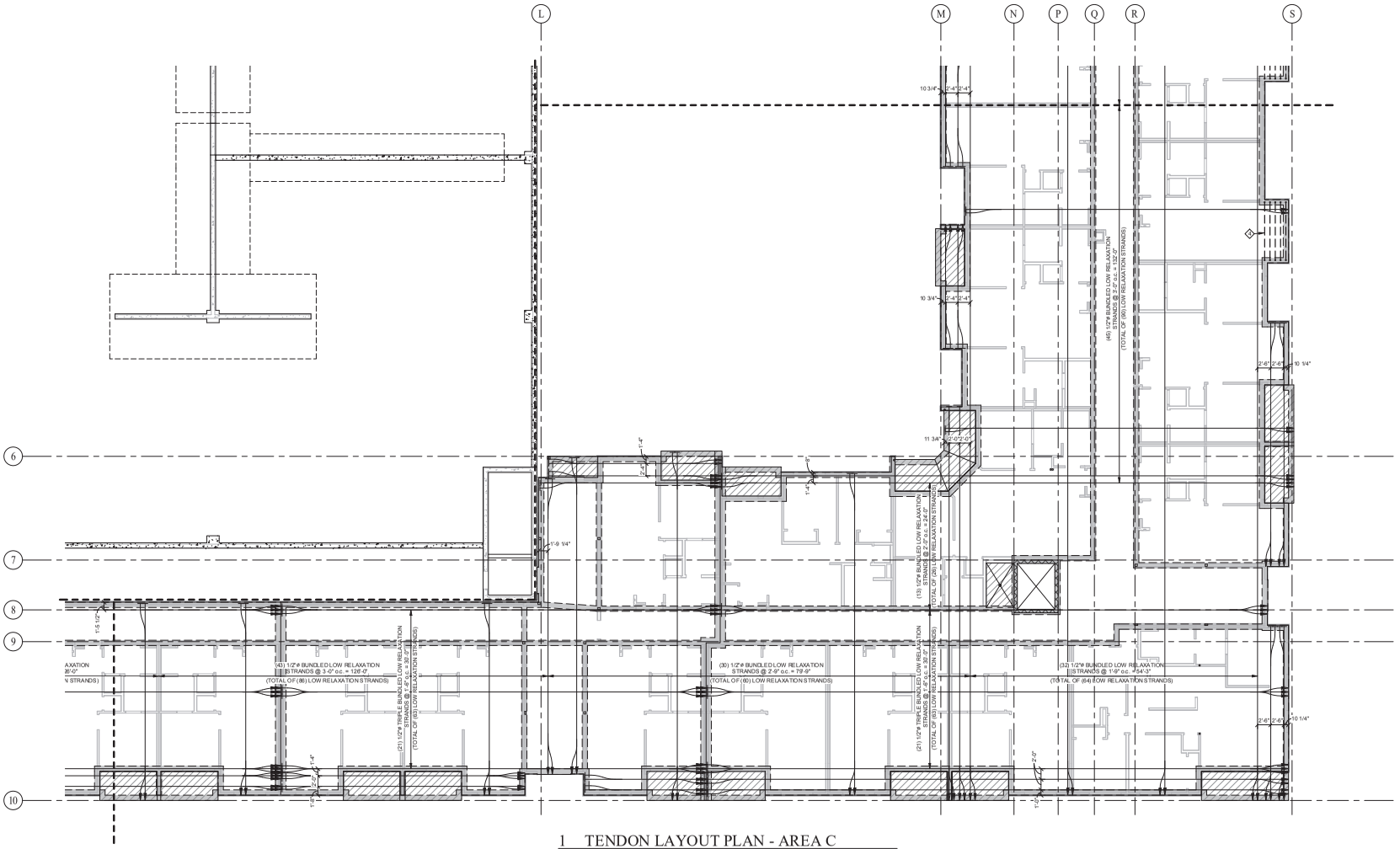
5	PROVIDE EMBED PLATE @ STEEL COLUMN. RE: 13/SD-1.0 FOR ADDL DETAILS
6	PROVIDE (3) #5 x 8'-0" HORIZ. BARS SPACED 12" O.C. CENTERED w/ THE HOLDOWN LOCATION INDICATED.



1 TENDON LAYOUT PLAN - AREA C

1/8" = 1'-0"

NOTES:
1. RE: **S-0** SHEETS FOR GENERAL FOUNDATION NOTES; RE: S-300 FOR TYP. FOUNDATION DETAILS.
2. ⊡H - INDICATES SIMPSON HOLDOWN. RE: SCHEDULE ON SHEET S-002. REFER TO THE PLAN FOR THE SPECIFIC HARDWARE REQUIRED & LOCATION TYPICAL.
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4. HATCHED AREAS ON THE PLANS INDICATE SLOPED CONCRETE. RE: ARCH. FOR SLOPES, & SLOPES TO DRAINS, TYP.
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PROVIDE 6 MIL MIN. POLY VAPOR BARRIER BELOW ALL POST-TENSIONED SLABS ON-GRADE

LOCATE SLAB TENDONS MAXIMUM 24" FROM PARALLEL CONCRETE EDGE AND MINIMUM 6" FROM PARALLEL CONCRETE EDGE, TYP.

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No.	Date	Issue
3	07/10/23	PERMIT SET
4	08/07/24	DTC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: TENDON LAYOUT PLAN - AREA C

Sheet Number: **S1-2.3**

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KEYNOTE SCHEDULE - FOUNDATION	
1	(2) #5 x 6'-0" DIAGONAL BARS TOP & BOT. @ ALL RE-ENTREANT CORNERS WHERE SHOWN
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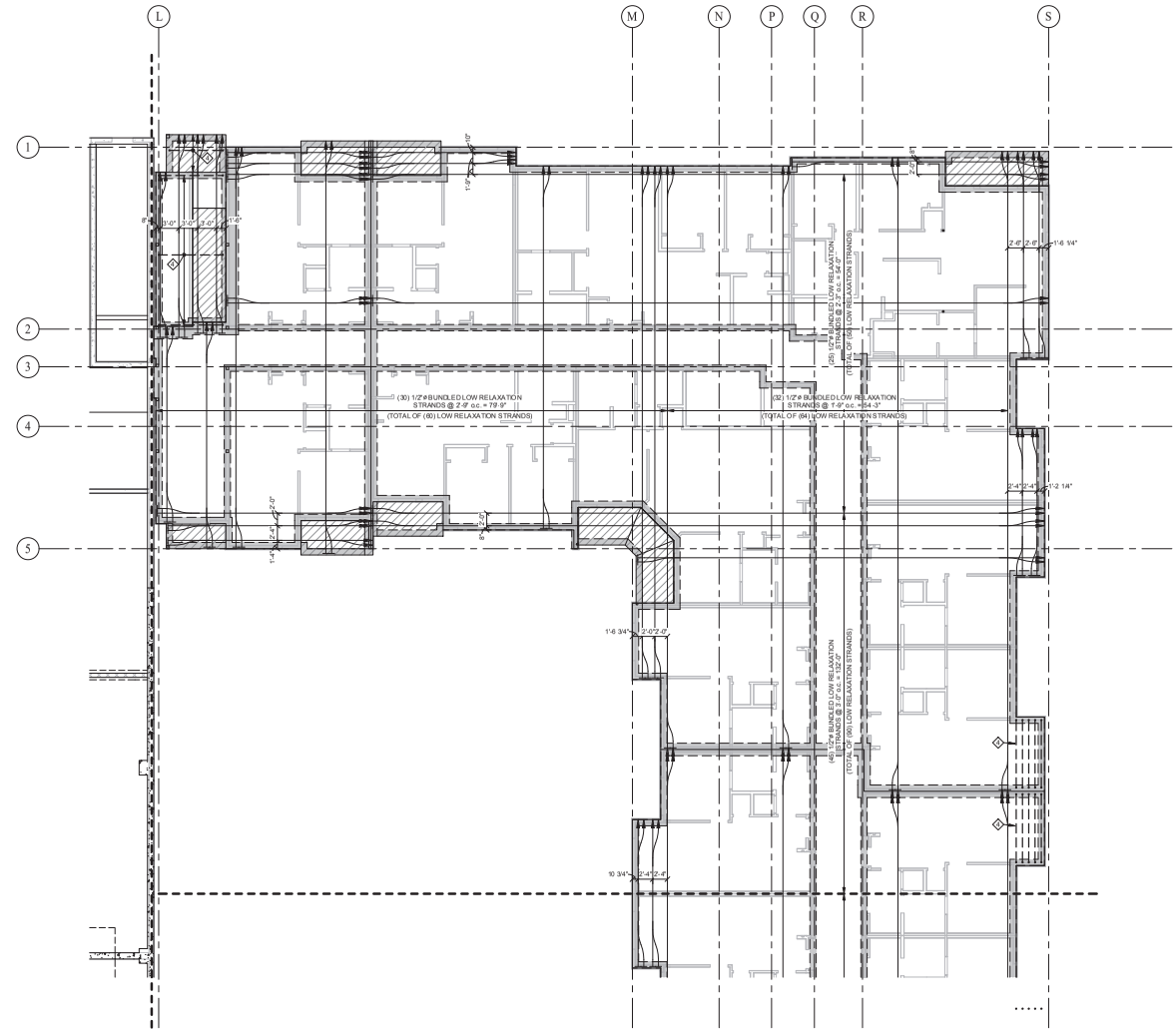
6	PROVIDE (3) #5 x 8'-0" HORIZ. BARS SPACED 12" O.C. CENTERED w/ THE HOLDOWN LOCATION INDICATED



1 TENDON LAYOUT PLAN - AREA D

1/8" = 1'-0"

NOTES:
1. RE: **S-0** SHEETS FOR GENERAL FOUNDATION NOTES. RE: S-300 FOR TYP. FOUNDATION DETAILS.
2. HDB - INDICATES SIMPSON HOLDOWN. RE: SCHEDULE ON SHEET S-002. REFER TO THE PLAN FOR THE SPECIFIC HARDWARE REQUIRED & LOCATION TYPICAL.
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MARSHALL POINTE

MARSHALL POINTE APARTMENTS, LP
5190 MARSHALL ST - ARVADA, CO 80002

No.	Date	Issue
1	07/19/23	PERMIT SET
4	08/07/24	PC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: TENDON LAYOUT PLAN - AREA D

Sheet Number: **S1-2.4**

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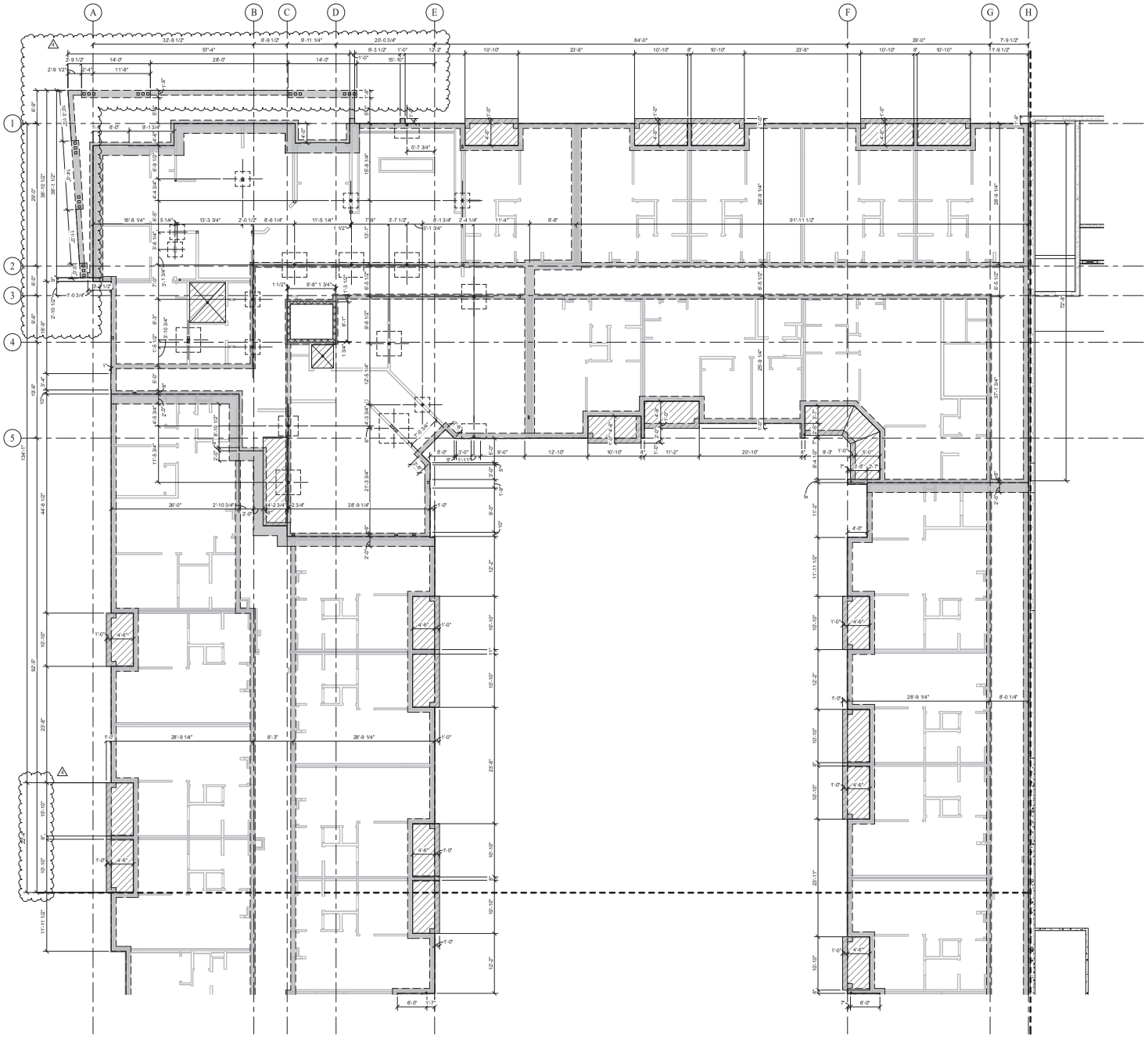

1 FOUNDATION DIMENSION PLAN - AREA A

1/8" = 1'-0"

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5190 MARSHALL ST - ARVADA, CO 80002

COLORADO LICENSED PROFESSIONAL ENGINEER
39330
08/05/2024

No.	Date	Issue
	07/19/23	PERMIT SET
4	08/07/24	IFC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: FOUNDATION DIMENSION PLAN - AREA A

Sheet Number: S1-3.1

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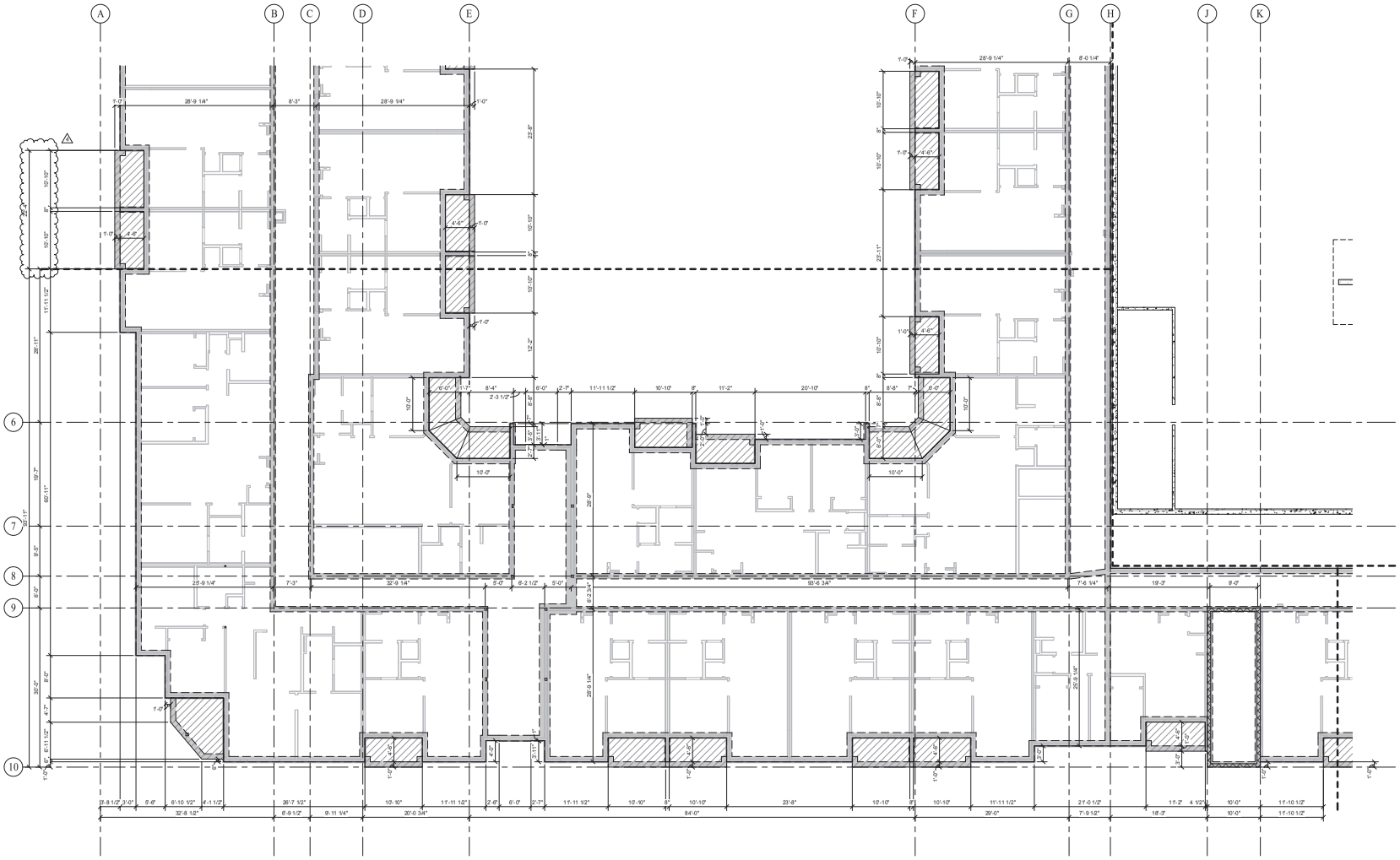

1 FOUNDATION DIMENSION PLAN - AREA B

1/8" = 1'-0"

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No.	Date	Issue
	07/19/23	PERMIT SET
4	08/07/24	PC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: FOUNDATION DIMENSION PLAN - AREA B

Sheet Number: S1-3.2

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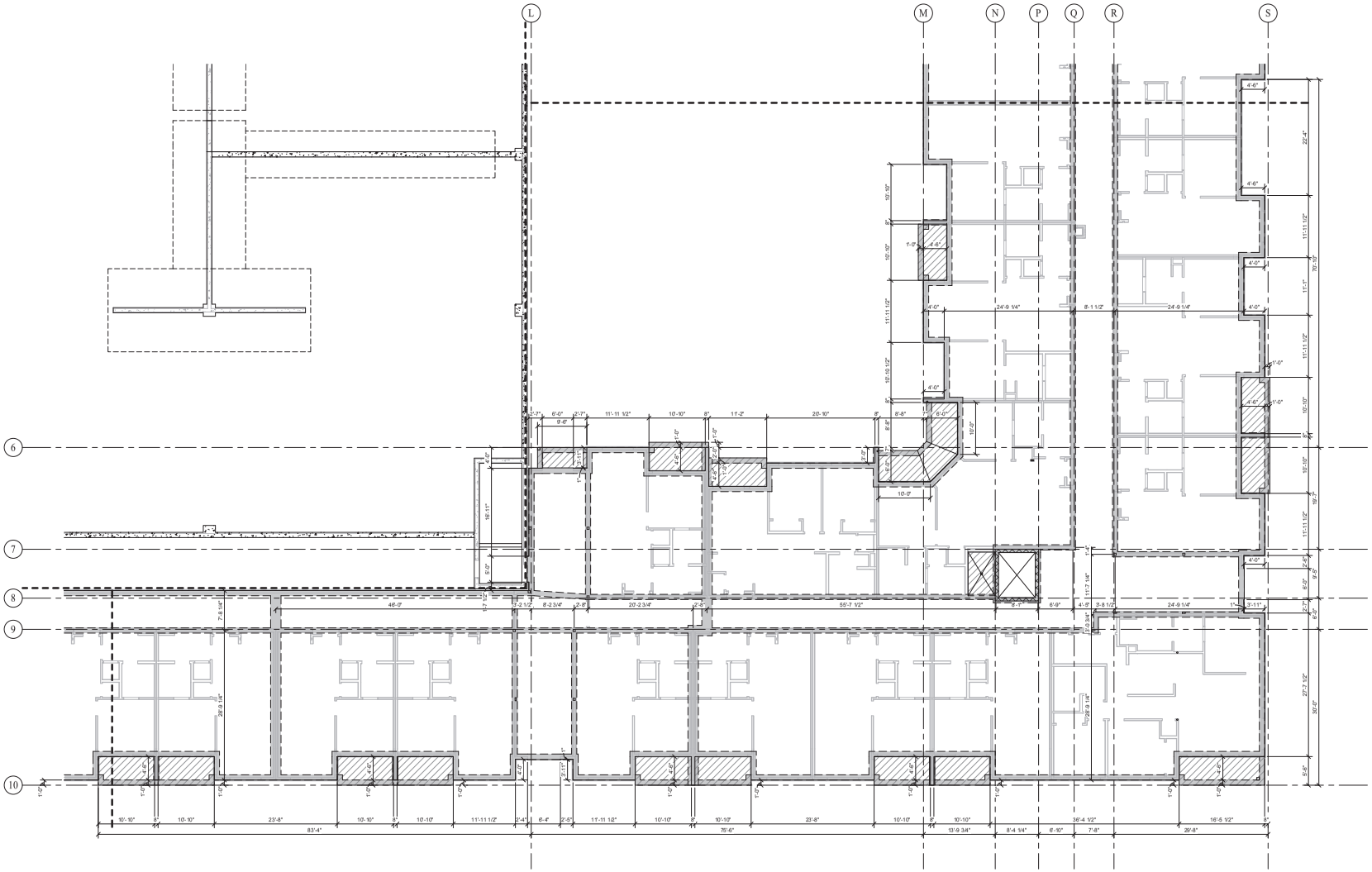

1 FOUNDATION DIMENSION PLAN - AREA C

1/8" = 1'-0"

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No.	Date	Issue
	07/09/23	PERMIT SET
4	08/07/24	PC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: FOUNDATION DIMENSION PLAN - AREA C

Sheet Number: S1-3.3

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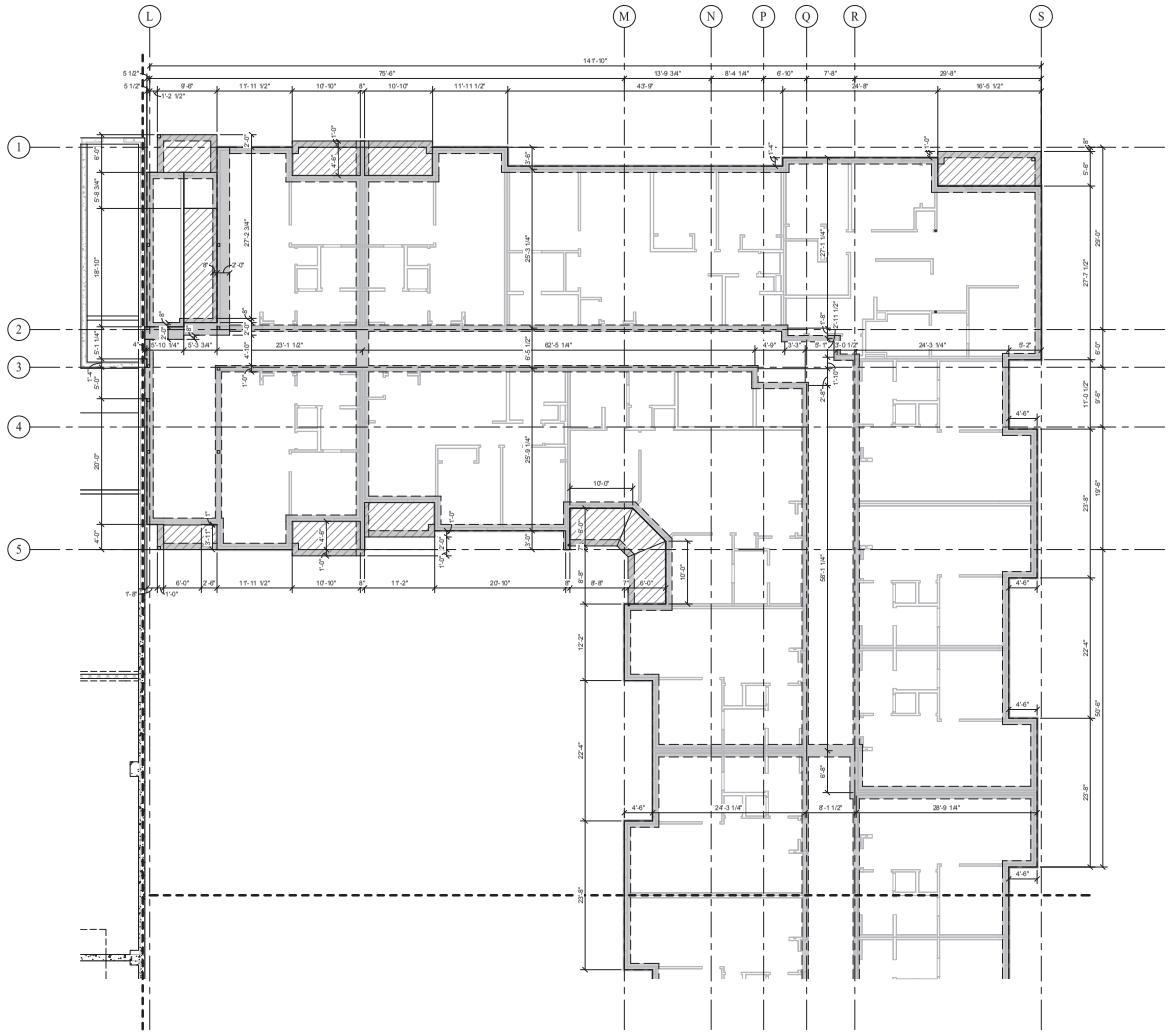

1 FOUNDATION DIMENSION PLAN - AREA D

1/8" = 1'-0"

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No.	Date	Issue
	07/19/23	PERMIT SET
4	08/07/24	DPC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: FOUNDATION DIMENSION PLAN - AREA D

Sheet Number: **S1-3.4**

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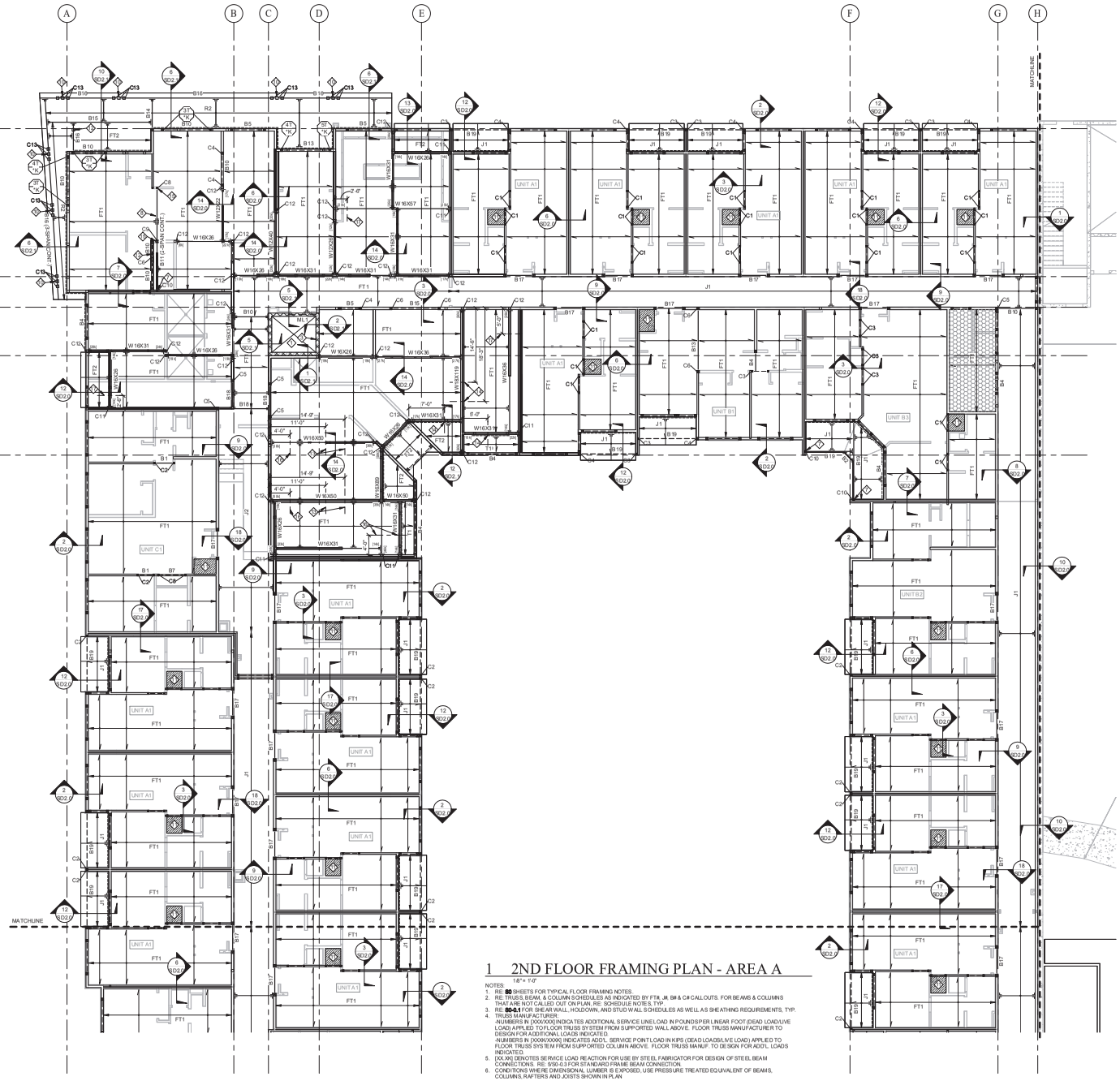

1 2ND FLOOR FRAMING PLAN - AREA A

1/8" = 1'-0"

NOTES:
1. RE: **S0** SHEETS FOR TYPICAL FLOOR FRAMING NOTES.
2. RE: TRUSS, BEAM, & COLUMN SCHEDULES AS INDICATED BY FT#, JI#, BI# & C# CALLOUTS. FOR BEAMS & COLUMNS THAT ARE NOT CALLED OUT ON PLAN, RE: SCHEDULE NOTES, TYP.
3. RE: **S0-0.1** FOR SHEAR WALL, HOLDOWN, AND STUD WALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.
4. TRUSS MANUFACTURER:
   -NUMBERS IN (XXX/XXX) INDICATES ADDITIONAL SERVICE LINE LOAD IN P OUNDS PER LINEAR FOOT (DEAD LOAD/LIVE LOAD) APPLIED TO FLOOR TRUSS SYSTEM FROM SUPPORTED WALL ABOVE. FLOOR TRUSS MANUFACTURER TO DESIGN FOR ADDITIONAL LOADS INDICATED.
   -NUMBERS IN (XXXK/XXXK) INDICATES ADDTL. SERVICE POINT LOAD IN KIPS (DEAD LOADS/LIVE LOAD) APPLIED TO FLOOR TRUSS SYSTEM FROM SUPPORTED COLUMN ABOVE. FLOOR TRUSS MANUF. TO DESIGN FOR ADDTL. LOADS INDICATED.
5. [XX.XK] DENOTES SERVICE LOAD REACTION FOR USE BY STEEL FABRICATOR FOR DESIGN OF STEEL BEAM CONNECTIONS. RE: S/S0-0.3 FOR STANDARD FRAME BEAM CONNECTION.
6. CONDITIONS WHERE DIMENSIONAL LUMBER IS EXPOSED, USE PRESSURE TREATED EQUIVALENT OF BEAMS, COLUMNS, RAFTERS AND JOISTS SHOWN IN PLAN.

COLUMN SCHEDULE

TYPE	SIZE	CAP/BASE
C1	(3) 2x4	N/A
C2	(4) 2x4	N/A
C3	(5) 2x4	N/A
C4	(3) 2x6	N/A
C5	(4) 2x6	N/A
C6	(5) 2x6	N/A
C7	P.T. 6x6	PCwebsPC6Z
C8	3-1/2"x7" PSL	PCAZ/EPC4Z
C9	5-1/4"x7" PSL	
C10	3" STD PIPE	RE: PLAN
C11	HSS7X3X1/2	RE: PLAN
C12	HSS6X6X1/2	RE: PLAN
C13	HSS6X6X1/8	RE: PLAN

BEAM SCHEDULE

TYPE	SIZE	HANGER
B1	(2) 2x8	N/A
B2	(2) 2x10	N/A
B3	(2) 2x12	N/A
B4	(3) 2x8	HUZ6-3 (MAX.)
B5	(3) 2x10	HHUS210-3
B6	(3) 2x12	HHUS210-3
B7	(2) 1-3/4" x 7-1/4" LVL	N/A
B8	(3) 1-3/4" x 7-1/4" LVL	N/A
B9	(2) 1-3/4" x 9-1/4" LVL	N/A
B10	(3) 1-3/4" x 9-1/4" LVL	N/A
B11	(4) 1-3/4" x 9-1/4" LVL	N/A
B12	(2) 1-3/4" x 11-7/8" LVL	N/A
B13	(3) 1-3/4" x 11-7/8" LVL	N/A
B14	(2) 1-3/4" x 14" LVL	HUI416HUC416 (MAX)
B15	(3) 1-3/4" x 14" LVL	HHUS5.50/10
B16	(4) 1-3/4" x 14" LVL	HHUS7.25/10
B17	(2) 1-3/4" x 18" LVL	HGUS414
B18	(3) 1-3/4" x 18" LVL	HGUS5.50/14
B19	P.T. DF No.1 6x10	HUC6Q10-SDS

NOTES:
1. BEAMS & HEADERS SHOWN ON PLAN & NOT DESIGNATED w/ A MARK ARE TO BE (2) 2x6. INCREASE TO THREE PLY BEAMS & HEADERS INSIDE 2x6 WALL FRAMING, TYP. @ CONTRACTOR'S OPTION, A FULL DEPTH HEADER MAY BE INSTALLED DIRECTLY BENEATH THE DBL. TOP PL. HEADER SIZE NOT TO BE LESS THAN INDICATED ON PLAN.
2. RE: COLUMN SCHEDULE FOR TRIMMER STUD REQ'M. & KING STUD SCHEDULE FOR KING STUD REQ'M.
3. SKIRTED BEAM TYPES ARE DROPPED, TYPICAL.
4. SIDE LOADED MULTIPLE PLY BEAM CONNECTIONS:
   - (2) PLY: NAIL w/ (3) ROWS 16d NAILS @ 12" o.c.
   - (3) PLY: (2) ROWS SIMPSON SDW SCREWS @ 12" o.c., ONE SIDE. SCREW LENGTH SHALL BE 4-5/8" @ 2x MATERIAL & 7" @ LVL MATERIAL.
   - (4) PLY: (2) ROWS SIMPSON SDW SCREWS @ 12" o.c., ONE SIDE. SCREW LENGTH SHALL BE 5-3/8" @ 2x MATERIAL & 6-3/4" @ LVL MATERIAL.

FLOOR TRUSS & JOIST SCHEDULE

TYPE	SIZE/SPACING	HANGER (FACE MOUNT)	HANGER (TOP FLANGE)
FT1	18" DEEP PRE-ENGINEERED TRUSSEES SPACED PER MANUF. (24" o.c. MAX.)	PER MANUF.	PER MANUF.
FT2	16" DEEP PRE-ENGINEERED TRUSSEES SPACED PER MANUF. (24" o.c. MAX.)	PER MANUF.	PER MANUF.
FEW	PRE-ENGINEERED END WALL TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
SFEW	PRE-ENGINEERED STRUC. END WALL TRUS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
FGT	PRE-ENGINEERED GIRDER TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
J1	2x10's @ 16" o.c.	LUS210	N/A
J2	2x10's @ 12" o.c.	LUS210	N/A
J3	(2) 1-3/4"x9-1/4" LVL's @ 16" o.c.	HUS410	N/A

NOTES:
1. FLOOR TRUSSES SHALL BE DESIGNED & SHOP DRAWINGS SHALL BE PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF COLORADO. SUBMIT TO THE ARCHITECT FOR REVIEW & APPROVAL PRIOR TO SUBMITTING TO THE ENGINEER OF RECORD.
2. FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS FOR BLOCKING, BRIDGING, & CANTILVERED ENDS.
3. FLOOR TRUSS MANUFACTURER TO DESIGN TRUSSES FOR THE FOLLOWING CRITERIA:
   - TRUSS DEFLECTIONS MUST NOT EXCEED L/480 LIVE LOAD, L/240 DEAD LOAD, OR 1/2" (LIVE LOAD ONLY).
   - TYPICAL TRUSS LOADING (psf):

	TC LIVE LOAD	TC DEAD LOAD	BC LIVE LOAD	BC DEAD LOAD
UNIT FLOOR (TYP.)	40 psf	15 psf	0 psf	10 psf
CORRIDOR/STAIR FLOOR	100 psf	15 psf	0 psf	15 psf

HATCH INDICATES PUBLIC AREA LOADING, TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR 100 psf LIVE LOAD

HATCH INDICATES STORAGE AREA LOADING, TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR 125 psf LIVE LOAD

KING STUD SCHEDULE

WALL HEIGHT (1)	OPENING WIDTH (2)	REQ'D. STUDS (3)
0'-0" =< h =< 10'-0"	0'-0" < w =< 3'-6"	(1) 2x6
	3'-6" < w =< 9'-0"	(2) 2x6
	9'-0" < w =< 14'-0"	(3) 2x6
	14'-0" < w =< 18'-0"	(4) 2x6
10'-0" < h =< 13'-0"	0'-0" < w =< 3'-6"	(2) 2x6
	3'-6" < w =< 6'-6"	(3) 2x6
	6'-6" < w =< 9'-6"	(4) 2x6

NOTES:
1. h = TOTAL STUD/ WALL HEIGHT, RE: ARCH.
2. w = ROUGH OPZNING WIDTH, RE: ARCH. AT MULTI-SPAN HEADERS, INTERMEDIATE SUPPORTS SHALL NOT BE CONSIDERED AND THE OPENING WIDTH SHALL BE BASED ON THE FULL LENGTH OF THE HEADER.
3. KING STUDS SHALL BE THE SAME SIZE, SPECIES, & GRADE AS THE SURROUNDING WALL FRAMING.
4. AT ALL EXTERIOR WINDOW & DOOR LOCATIONS PROVIDE KING STUDS AS INDICATED ABOVE.
5. SPECIAL CALLOUTS INDICATED THUS:
   (#T) — INDICATES NUMBER OF TRIMMER STUDS REQ'D.
   (#K) — INDICATES NUMBER OF KING STUDS REQ'D.

TAKE PRECEDENCE OVER THIS SCHEDULE.

ROOF TRUSS SCHEDULE

TYPE	DESCRIPTION/SPACING	HANGER
T1	ROOF TRUSSES @ 24" o.c. (MAX.)	PER MANUF.
T2	JACK TRUSSES @ 24" o.c. (MAX.)	PER MANUF.
GT	GIRDER TRUSS	PER MANUF.
EW	END WALL TRUSS	PER MANUF.
SEW	STRUCTURAL ENDWALL TRUSS	PER MANUF.
R1	2x 12 RAFTERS @ 16" o.c.	LUS210
R2	14" TJI 210 RAFTERS @ 24" o.c.	IUS2.06/14

NOTES:
1. TRUSSES SHALL BE DESIGNED & SHOP DRAWINGS SHALL BE PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF COLORADO.
2. GIRDER TRUSSES (GT) SHALL BE SUPPORTED BY QUADRUPLE 2x GANG STUDS EA. END. STUDS SHALL BE CONT. TO FND. PROVIDE FULL DEPTH BLOCKING BTWN. FLOORS, TYP.
3. TRUSS MANUF. TO DESIGN & SUPPLY ALL TRUSS-TO-TRUSS, TRUSS-TO-BEAM, & TRUSS-TO-GIRDER CONNECTIONS, TYP.
4. * RE: ARCH. FOR BOT. CHORD OF ROOF TRUSS PROFILE TYP.
5. TRUSS MANUF. TO DESIGN TRUSSES FOR:
   TC DEAD LOAD = 15 psf (0psf ALLOWANCE FOR SOLAR PANELS)
   BC DEAD LOAD = 10 psf
   SNOW LOAD = 30 psf, TYPICAL

KEY NOTE SCHEDULE - FRAMING

1	OPEN TO BELOW
2	ROOF ACCESS HATCH, RE: ARCH
3	8" CMU STAIR/ELEVATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S0-0.1 FOR REINF. REQ'M.
4	PROVIDE EPC6Z POST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UPSIDE DOWN EPC6Z POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"# x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LGUM410-SDS HANGER FASTENED DIRECTLY TO CMU WALL w/ (8) 3/8"x4" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CCQQ/ECCQQ COLUMN CAP, WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL-AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP FLUSH WITH ADJACENT TRUSSES, TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM
9	RE: S/S02.1 FOR COLUMN CAP/BASE CONNECTION TO WOOD BEAMS
10	RE: S/S02.1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 24" CLEAR). TRUSS MANUF TO DESIGN TRUSSES IN MECH. RO OM FOR 80psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13-SD1.0 w/ (4) 4-1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE
13	PROVIDE 11"# MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADDTL. INFORMATION. PROVIDE WEB STIFFENER #3/8 WITHIN 1" OF EDGE OF OPENING/BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 9"# MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADDTL. INFORMATION. PROVIDE WEB STIFFENER #3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LCE4 COLUMN CAP CONNECTION EA. SIDE OF BEAM TO COLUMN BELOW (2) CLIP'S TOTAL PER POST)
16	PROVIDE 8"# MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADDTL. INFORMATION. PROVIDE WEB STIFFENER #3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 6"# MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADDTL. INFORMATION.

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No.	Date	Issue
1	07/19/23	PERMIT SET
4	08/07/24	DPC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: LEVEL 2 FRAMING PLAN - AREA A

Sheet Number: **S2-1.1**

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KEYNOTE SCHEDULE - FRAMING	
1	OPEN TO BELOW
2	RO OF ACCESS HATCH, RE: ARCH
3	8" CMU STAIR/ELEVATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S0-0.1 FOR REINF. REQ'M.
4	PROVIDE EPOSZ POST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UP SIDE DOWN EPOSZ POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"Ø x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LGUM410-SDS HANGER FASTENED DIRECTLY TO CMU WALL w/ (6) 3/8"x4" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CCOQ/ECCOQ COLUMN CAP. WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP-FLUSH WITH ADJACENT TRUSSES, TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM.
9	RE: 9/S23.1 FOR COLUMN CAP/BASE CONNECTION TO WOOD BEAMS
10	RE: 9/S23.1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 24" CLEAR). TRUSS MANUF. TO DESIGN TRUSSES IN MECH. ROOM FOR 60 psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13/SD1.0 w/ (4) 4 1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE.
13	PROVIDE 1"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 8/S18 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 8/S18 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LCI24 COLUMN CAP CONNECTION EA. SIDE OF BEAM TO COLUMN BELOW. (2) CLIPS TOTAL PER POST).
16	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 8/S18 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 6"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION

ROOF TRUSS SCHEDULE		
TYPE	DESCRIPTION/SPACING	HANGER
T1	ROOF TRUSSES @ 24" o.c. (MAX.)	PER MANUF.
T2	JACK TRUSSES @ 24" o.c. (MAX.)	PER MANUF.
GT	GIRDER TRUSS	PER MANUF.
EW	END WALL TRUSS	PER MANUF.
SEW	STRUCTURAL END WALL TRUSS	PER MANUF.
R1	2x12 RAFTERS @ 16" o.c.	LUS210
R2	1/4" TJI J210 RAFTERS @ 24" o.c.	IUS2.06/14

NOTES:
1. TRUSSES SHALL BE DESIGNED & SHOP DRAWINGS SHALL BE PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF COLORADO.
2. GIRDER TRUSSES (GT) SHALL BE SUPPORTED BY QUADRUPLE 2x GANG STUDS EA. END. STUDS SHALL BE CONT. TO FND. PROVIDE FULL DEPTH BLOCKING BTWN. FLOORS, TYP.
3. TRUSS MANUF. TO DESIGN & SUPPLY ALL TRUSS-TO-TRUSS, TRUSS-TO-BEAM, & TRUSS-TO-GIRDER CONNECTIONS, TYP.
4. * RE: ARCH. FOR BOT. CHORD OF ROOF TRUSS PROFILE TYP.
5. TRUSS MANUF. TO DESIGN TRUSSES FOR:
   TC DEAD LOAD = 15 psf (5psf ALLOWANCE FOR SOLAR PANELS)
   BC DEAD LOAD = 10 psf
   SNOW LOAD = 30 psf, TYPICAL

FLOOR TRUSS & JOIST SCHEDULE			
TYPE	SIZE/SPACING	HANGER (FACE MOUNT)	HANGER (TOP FLANGE)
FT1	18" DEEP PRE-ENGINEERED TRUSSES SPACED PER MANUF. (24" o.c. MAX.)	PER MANUF.	PER MANUF.
FT2	16" DEEP PRE-ENGINEERED TRUSSES SPACED PER MANUF. (24" o.c. MAX.)	PER MANUF.	PER MANUF.
FEW	PRE-ENGINEERED END WALL TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
SFEW	PRE-ENGINEERED STRUC. END WALL TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
FGT	PRE-ENGINEERED GIRDER TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
J1	2x10's @ 16" o.c.	LUS210	N/A
J2	2x10's @ 12" o.c.	LUS210	N/A
J3	(2) 1-3/4"x9-1/4" LVL's @ 16" o.c.	HUS410	N/A

NOTES:
1. FLOOR TRUSSES SHALL BE DESIGNED & SHOP DRAWINGS SHALL BE PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF COLORADO. SUBMIT TO THE ARCHITECT FOR REVIEW & APPROVAL PRIOR TO SUBMITTING TO THE ENGINEER OF RECORD.
2. FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS FOR BLOCKING, BRIDGING, & CANTILEVERED ENDS.
3. FLOOR TRUSS MANUFACTURER TO DESIGN TRUSSES FOR THE FOLLOWING CRITERIA:
   • TRUSS DEFLECTIONS MUST NOT EXCEED L/480 LIVE LOAD, LIVE LOAD, L/240 DEAD LOAD, OR 1/2" (LIVE LOAD ONLY).
   • TYPICAL TRUSS LOADING (psf):

	TC LIVE LOAD	TC DEAD LOAD	BC LIVE LOAD	BC DEAD LOAD
UNIT FLOOR (TYP.)	40 psf	15 psf	0 psf	10 psf
CORRIDOR/STAIR FLOOR	100 psf	15 psf	0 psf	15 psf

HATCH INDICATES PUBLIC AREA LOADING, TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR 100 psf LIVE LOAD

HATCH INDICATES STORAGE AREA LOADING, TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR 125 psf LIVE LOAD

KING STUD SCHEDULE		
WALL HEIGHT (1)	OPENING WIDTH (2)	REQ'D. STUDS (3)
0'-0" =< h =< 10'-0"	0'-0" =< w =< 3'-0"	(1) 2x6
	3'-0" =< w =< 9'-0"	(2) 2x6
	9'-0" =< w =< 14'-0"	(3) 2x6
	14'-0" =< w =< 18'-0"	(4) 2x6
10'-0" =< h =< 13'-0"	0'-0" =< w =< 3'-0"	(2) 2x6
	3'-0" =< w =< 6'-6"	(3) 2x6
	6'-6" =< w =< 9'-6"	(4) 2x6

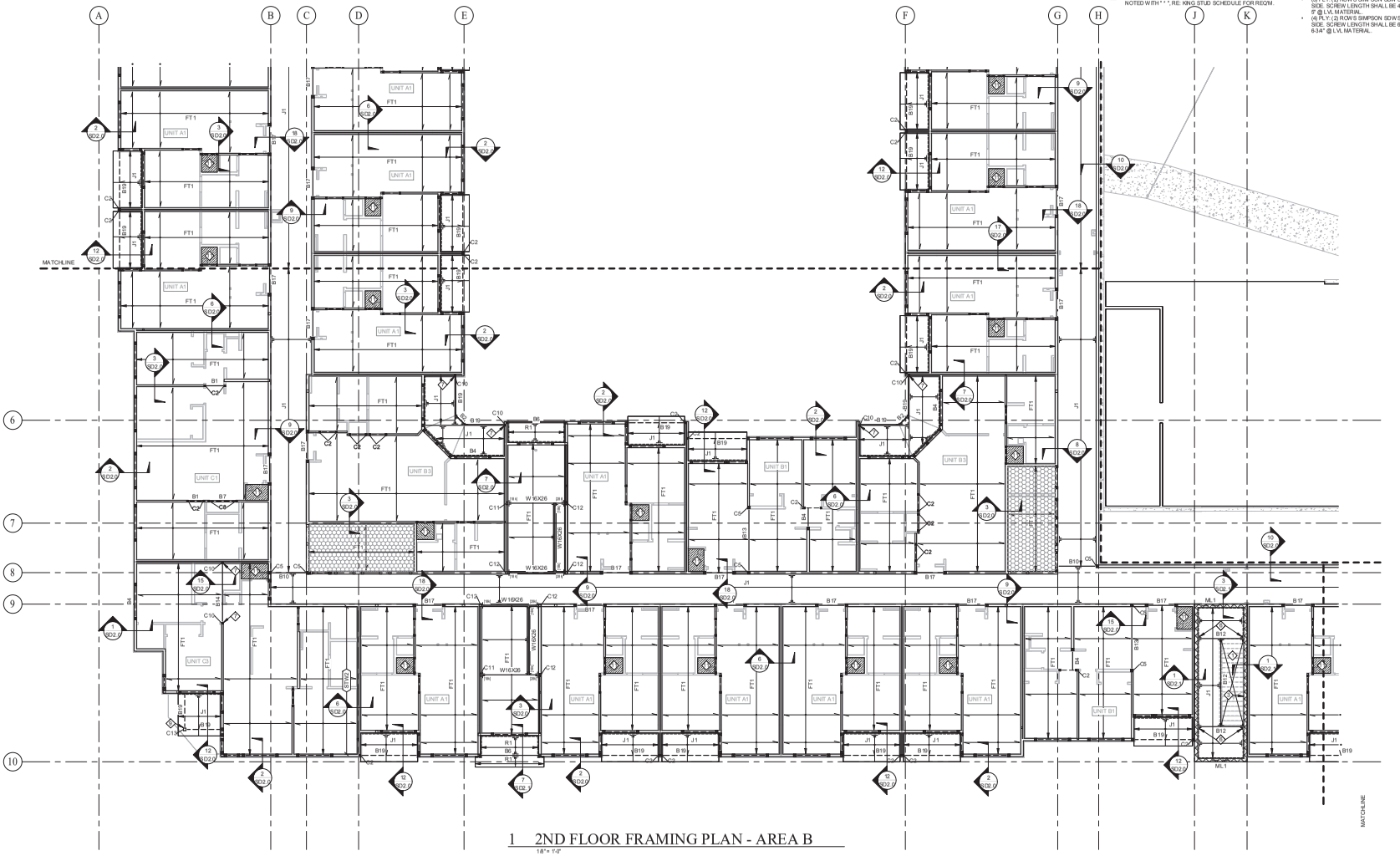
NOTES:
1. h = TOTAL STUD WALL HEIGHT, RE: ARCH.
2. w = ROUGH OPENING WIDTH, RE: ARCH. AT MULTI-SPAN HEADERS, INTERMEDIATE SUPPORTS SHALL NOT BE CONSIDERED AND THE OPENING WIDTH SHALL BE BASED ON THE FULL LENGTH OF THE HEADER.
3. KING STUDS SHALL BE THE SAME SIZE, SPECIES, & GRADE AS THE SURROUNDING WALL FRAMING.
4. AT ALL EXTERIOR WINDOW & DOOR LOCATIONS PROVIDE KING STUDS AS INDICATED ABOVE.
5. SPECIAL CALLOUTS INDICATED THUS:
   (#) = INDICATES NUMBER OF TRIMMER STUDS REQ'D.
   (#) = INDICATES NUMBER OF KING STUDS REQ'D.
   TAKE PRECEDENCE OVER THIS SCHEDULE.

COLUMN SCHEDULE		
TYPE	SIZE	CAP/BASE
C1	(3) 2x4	N/A
C2	(4) 2x4	N/A
C3	(5) 2x4	N/A
C4	(3) 2x6	N/A
C5	(4) 2x6	N/A
C6	(5) 2x6	N/A
C7	P.T. 6x6	PCQZ/EPOSZ
C8	3-1/2"x7" PSL	PCAZ/EPOAZ
C9	5-1/4"x7" PSL	
C10	3" STD PIPE	RE: PLAN
C11	HSS7X3X1/2	RE: PLAN
C12	HSS6X5X1/2	RE: PLAN
C13	HSS6X6X1/8	RE: PLAN

NOTES:
1. STUD MATERIAL & GRADE TO MATCH STRENGTH PER THE GENERAL NOTES, U.N.O.
2. COLUMNS SHOWN THUS ⊠ ON PLAN & NOT CALLED OUT TO BE DBL. 2x6 IF POST IS LOCATED IN 2x4 WALL FRAMING, DBL. 2x6 IF LOCATED IN 2x6 WALL FRAMING.
3. □ INDICATES POST FROM ABOVE. CONTRACTOR TO ENSURE THAT POST BEARS DIRECTLY ATOP BEAM BELOW OR CONTINUE SAME POST THAT IS INDICATED IN UPPER FRAMING PLANS w/ SQUASH BLOCKS BETWEEN FLOORS TO THE FND., TYP.
4. RE: APPROPRIATE DETAILS FOR CAP & BASE @ BOLTING REQ'M.
5. SUPPORT ALL EXTERIOR WINDOW & DOOR HEADERS w/ (2) TRIMMER STUDS U.N.O., ONLY (1) TRIMMER IS REQ'D @ OPENINGS =< 4'-0", TYP. U.N.O.
6. SPECIAL CALLOUTS INDICATED THUS:
   (#T) = INDICATES NUMBER OF TRIMMER STUDS REQ'D.
   (#K) = INDICATES NUMBER OF KING STUDS REQ'D. WHEN NOTED WITH " * ". RE: KING STUD SCHEDULE FOR REQ'M.

BEAM SCHEDULE		
TYPE	SIZE	HANGER
B1	(2) 2x8	N/A
B2	(2) 2x10	N/A
B3	(2) 2x12	N/A
B4	(3) 2x8	HU26-3 (MAX.)
B5	(3) 2x10	HHUS210-3
B6	(3) 2x12	HHUS210-3
B7	(2) 1-3/4" x 7-1/4" LVL	N/A
B8	(3) 1-3/4" x 7-1/4" LVL	N/A
B9	(2) 1-3/4" x 9-1/4" LVL	N/A
B10	(3) 1-3/4" x 9-1/4" LVL	N/A
B11	(4) 1-3/4" x 9-1/4" LVL	N/A
B12	(2) 1-3/4" x 11-7/8" LVL	N/A
B13	(3) 1-3/4" x 11-7/8" LVL	N/A
B14	(2) 1-3/4" x 14" LVL	HUI 16/HUC416 (MAX)
B15	(3) 1-3/4" x 14" LVL	HHUS5.50/10
B16	(4) 1-3/4" x 14" LVL	HHUS7.25/10
B17	(2) 1-3/4" x 18" LVL	HGUS.414
B18	(3) 1-3/4" x 18" LVL	HGUS5.50/14
B19	P.T. DF No. 1 6x10	HUCQ6 10-SDS

NOTES:
1. BEAMS & HEADERS SHOWN ON PLAN & NOT DESIGNATED w/ A MARK ARE TO BE (3) 2x6. INCREASE TO THREE PLY BEAMS & HEADERS INSIDE 2x6 WALL FRAMING, TYP. @ CONTRACTOR'S OPTION, A FULL DEPTH HEADER MAY BE INSTALLED DIRECTLY BENEATH THE DBL. TOPPR. HEADER SIZE NOT TO BE LESS THAN INDICATED ON PLAN.
2. RE: COLUMN SCHEDULE FOR TRIMMER STUD REQ'M. & KING STUD SCHEDULE FOR KING STUD REQ'M.
3. DA SHED BEAM TYPES ARE DROPPED, TYPICAL.
4. SIDE LOADED MULTIPLE PLY BEAM CONNECTIONS:
   • (2) PLY NAIL w/ (3) ROWS 16d NAILS @ 12" o.c.
   • (3) PLY: (2) ROWS SIMPSON SDW SCREWS @ 12" o.c., ONE SIDE. SCREW LENGTH SHALL BE 4-5/8" @ 2x MATERIAL & 5" @ LVL MATERIAL.
   • (4) PLY: (2) ROWS SIMPSON SDW SCREWS @ 12" o.c., ONE SIDE. SCREW LENGTH SHALL BE 6-3/8" @ 2x MATERIAL & 6-3/4" @ LVL MATERIAL.



1 2ND FLOOR FRAMING PLAN - AREA B

1/8" = 1'-0"

NOTES:
1. RE: ■/S SHEETS FOR TYPICAL FLOOR FRAMING NOTES.
2. RE: TRUSS, BEAM, & COLUMN SCHEDULES AS INDICATED BY FT#, J#, B# & C# CALLOUTS. FOR BEAMS & COLUMNS THAT ARE NOT CALLED OUT ON PLAN, RE: SCHEDULE NOTES, TYP.
3. RE: ■/A-1 FOR SHEAR WALL, HOLDOWN, AND STUD WALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.
4. TRUSS MANUFACTURER:
   -NUMBERS IN [XXXXXXX] INDICATES ADDITIONAL SERVICE LINE LOAD IN POUNDS PER LINEAR FOOT (DEAD LOAD/LIVE LOAD) APPLIED TO FLOOR TRUSS SYSTEM FROM SUPPORTED WALL ABOVE. FLOOR TRUSS MANUFACTURER TO DESIGN FOR ADDITIONAL LOADS INDICATED.
   -NUMBERS IN [XXXKXXXK] INDICATES ADD'L. SERVICE POINT LOAD IN KIPS (DEAD LOADS/LIVE LOAD) APPLIED TO FLOOR TRUSS SYSTEM FROM SUPPORTED COLUMN ABOVE. FLOOR TRUSS MANUF. TO DESIGN FOR ADD'L. LOADS INDICATED.
5. [XX.XX] DENOTES SERVICE LOAD REACTION FOR USE BY STEEL FABRICATOR. FOR DESIGN OF STEEL BEAM CONNECTIONS. RE: S/S0-0.3 FOR STANDARD FRAME BEAM CONNECTION.
6. CONDITIONS WHERE DIMENSIONAL LUMBER IS EXPOSED, USE PRESSURE TREATED EQUIVALENT OF BEAMS, COLUMNS, RAFTERS AND JOISTS SHOWN IN PLAN

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No.	Date	Issue
1	07/19/23	PERMIT SET
4	08/07/24	ITC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: LEVEL 2 FRAMING PLAN - AREA B

Sheet Number: S2-1.2

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KEYNOTE SCHEDULE - FRAMING

1	OPEN TO BELOW
2	RO OF ACCESS HATCH, RE: ARCH
3	8" CMU STAIR/ELEVATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S0-0.1 FOR REINF. REQ'M.
4	PROVIDE EPOSZ POST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UP SIDE DOWN EPOSZ POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"Ø x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LGUM410-SDS HANGER FASTENED DIRECTLY TO CMU WALL w/ (6) 3/8"x4" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CCOQ/ECCOQ COLUMN CAP. WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP-FLUSH WITH ADJACENT TRUSSES, TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM.
9	RE: 9/S23.1 FOR COLUMN CAP-BASE CONNECTION TO WOOD BEAMS
10	RE: 9/S23.1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 24" CLEAR). TRUSS MANUF. TO DESIGN TRUSSES IN MECH. ROOM FOR 60 psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13/SD1.0 w/ (4) 4 1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE.
13	PROVIDE 1"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM F OR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. P ROVIDE WEB STIFFENER 8DJB WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS F OR ADD'L. INFORMATION. P ROVIDE WEB S TIFFENER 8DJB WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LCI24 COLUMN CAP CONNECTION EA. SIDE OF BEAM TO COLUMN BELOW. (2) CLIPS TOTAL PER POST).
16	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS F OR ADD'L. INFORMATION. P ROVIDE WEB S TIFFENER 8DJB WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 6"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION

ROOF TRUSS SCHEDULE

TYPE	DESCRIPTION/SPACING	HANGER
T1	ROOF TRUSSES @ 24" o.c. (MAX.)	PER MANUF.
T2	JACK TRUSSES @ 24" o.c. (MAX.)	PER MANUF.
GT	GIRDER TRUSS	PER MANUF.
EW	END WALL TRUSS	PER MANUF.
SEW	STRUCTURAL END WALL TRUSS	PER MANUF.
R1	2x12 RAFTERS @ 16" o.c.	LUS210
R2	1/4" TJI J210 RAFTERS @ 24" o.c.	IUS2.06/14

NOTES:
1. TRUSSES SHALL BE DESIGNED & SHOP DRAWINGS SHALL BE PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF COLORADO.
2. GIRDER TRUSSES (GT) SHALL BE SUPPORTED BY QUADRUPLE 2x GANG STUDS EA. END. STUDS SHALL BE CONT. TO FND. PROVIDE FULL DEPTH BLOCKING BTWN. FLOORS, TYP.
3. TRUSS MANUF. TO DESIGN & SUPPLY ALL TRUSS-TO-TRUSS, TRUSS-TO-BEAM, & TRUSS-TO-GIRDER CONNECTIONS, TYP..
4. * RE: ARCH. FOR BOT. CHORD OF ROOF TRUSS PROFILE TYP.
5. TRUSS MANUF. TO DESIGN TRUSSES FOR:
   TC DEAD LOAD = 15 psf (5psf ALLOWANCE FOR SOLAR PANELS)
   BC DEAD LOAD = 10 psf
   SNOW LOAD = 30 psf, TYPICAL

FLOOR TRUSS & JOIST SCHEDULE

TYPE	SIZE/SPACING	HANGER (FACE MOUNT)	HANGER (TOP FLANGE)
FT1	18" DEEP PRE-ENGINEERED TRUSSES SPACED PER MANUF. (24" o.c. MAX.)	PER MANUF.	PER MANUF.
FT2	16" DEEP PRE-ENGINEERED TRUSSES SPACED PER MANUF. (24" o.c. MAX.)	PER MANUF.	PER MANUF.
FEW	PRE-ENGINEERED END WALL TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
SFEW	PRE-ENGINEERED STRUC. END WALL TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
FGT	PRE-ENGINEERED GIRDER TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
J1	2x10's @ 16" o.c.	LUS210	N/A
J2	2x10's @ 12" o.c.	LUS210	N/A
J3	(2) 1-3/4"x9-1/4" LVL's @ 16" o.c.	HUS410	N/A

NOTES:
1. FLOOR TRUSSES SHALL BE DESIGNED & SHOP DRAWINGS SHALL BE PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF COLORADO. SUBMIT TO THE ARCHITECT FOR REVIEW & APPROVAL PRIOR TO SUBMITTING TO THE ENGINEER OF RECORD.
2. FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS FOR BLOCKING, BRIDGING, & CANTILEVERED ENDS.
3. FLOOR TRUSS MANUFACTURER TO DESIGN TRUSSES FOR THE FOLLOWING CRITERIA:
   - TRUSS DEFLECTIONS MUST NOT EXCEED L/480 LIVE LOAD, LIVE LOAD, L/240 DEAD LOAD, OR 1/2" (LIVE LOAD ONLY).
   - TYPICAL TRUSS LOADING (psf):

	TC LIVE LOAD	TC DEAD LOAD	BC LIVE LOAD	BC DEAD LOAD
UNIT FLOOR (TYP.)	40 psf	15 psf	0 psf	10 psf
CORRIDOR/STAIR FLOOR	100 psf	15 psf	0 psf	15 psf

HATCH INDICATES PUBLIC AREA LOADING, TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR 100 psf LIVE LOAD

HATCH INDICATES STORAGE AREA LOADING, TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR 125 psf LIVE LOAD

KING STUD SCHEDULE

WALL HEIGHT (1)	OPENING WIDTH (2)	REQ'D. STUDS (3)
0'-0" =< h =< 10'-0"	0'-0" =< w =< 3'-0"	(1) 2x6
	3'-0" =< w =< 9'-0"	(2) 2x6
	9'-0" =< w =< 14'-0"	(3) 2x6
	14'-0" =< w =< 18'-0"	(4) 2x6
10'-0" =< h =< 13'-0"	0'-0" =< w =< 3'-0"	(2) 2x6
	3'-0" =< w =< 6'-6"	(3) 2x6
	6'-6" =< w =< 9'-6"	(4) 2x6

NOTES:
1. h = TOTAL STUD WALL HEIGHT, RE: ARCH.
2. w = ROUGH OPENING WIDTH, RE: ARCH. AT MULTI SPAN HEADERS, INTERMEDIATE SUPPORTS SHALL NOT BE CONSIDERED AND THE OPENING WIDTH SHALL BE BASED ON THE FULL LENGTH OF THE HEADER.
3. KING STUDS SHALL BE THE SAME SIZE, SPECIES, & GRADE AS THE SURROUNDING WALL FRAMING.
4. AT ALL EXTERIOR WINDOW & DOOR LOCATIONS PROVIDE KING STUDS AS INDICATED ABOVE.
5. SPECIAL CALLOUTS INDICATED THUS:
   (21) — INDICATES NUMBER OF TRIMMER STUDS REQ'D.
   (3) — INDICATES NUMBER OF KING STUDS REQ'D.
   TAKE PRECEDENCE OVER THIS SCHEDULE.

COLUMN SCHEDULE

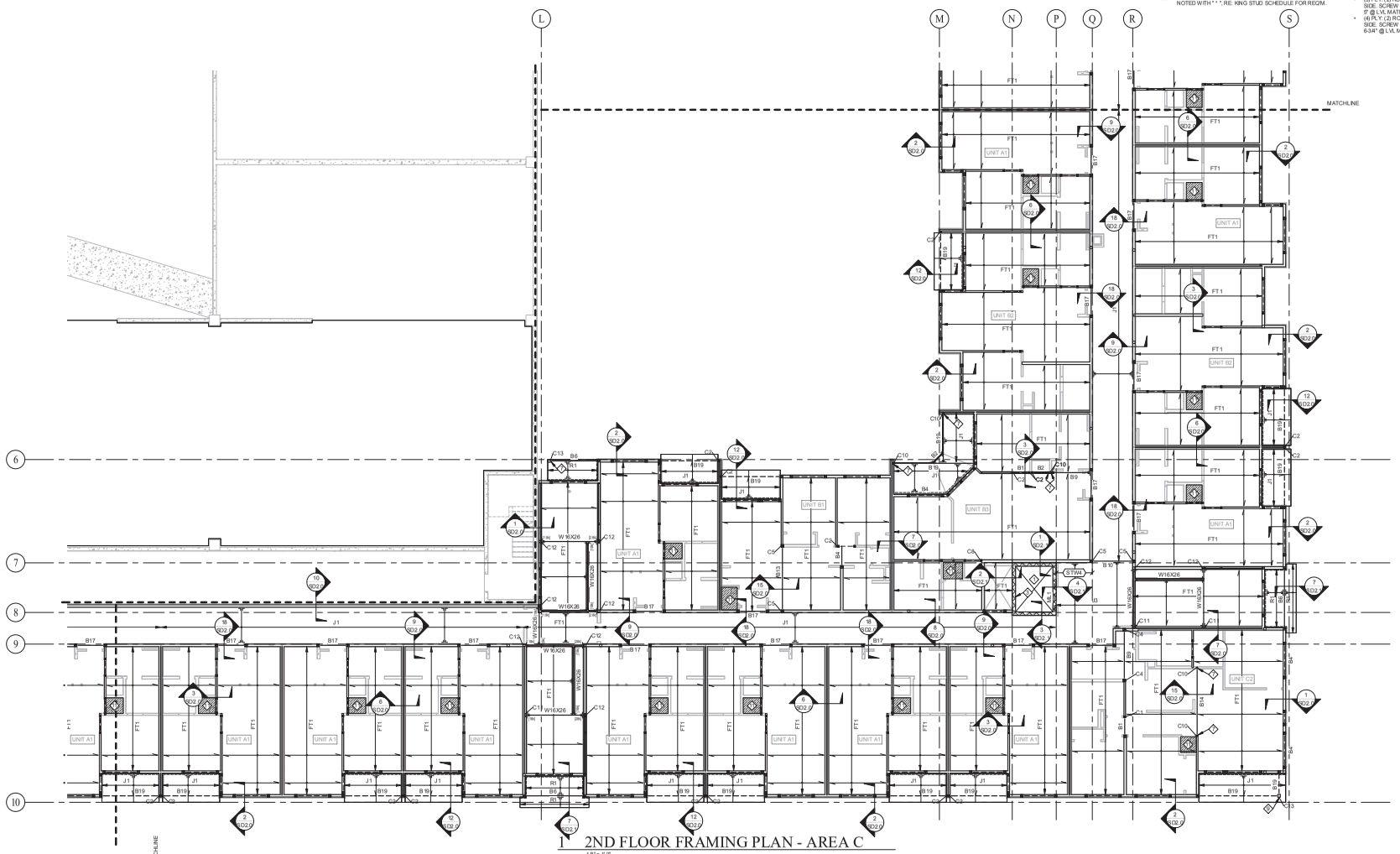
TYPE	SIZE	CAP/BASE
C1	(3) 2x4	N/A
C2	(4) 2x4	N/A
C3	(5) 2x4	N/A
C4	(3) 2x6	N/A
C5	(4) 2x6	N/A
C6	(5) 2x6	N/A
C7	P.T. 6x6	PCQZ/EPCBZ
C8	3-1/2"x7" PSL	PCAZ/EPCAZ
C9	5-1/4"x7" PSL	
C10	3" STD PIPE	RE: PLAN
C11	HSS7X3X1/2	RE: PLAN
C12	HSS5X5X1/2	RE: PLAN
C13	HSS6X6X1/8	RE: PLAN

NOTES:
1. STUD MATERIAL & GRADE TO MATCH STRENGTH PER THE GENERAL NOTES, U.N.O.
2. COLUMNS SHOWN THUS ⊠ ON PLAN & NOT CALLED OUT TO BE DBL. 2x4 IF POST IS LOCATED IN 2x4 WALL FRAMING, DBL. 2x6 IF LOCATED IN 2x6 WALL FRAMING.
3. □ INDICATES POST FROM ABOVE. CONTRACTOR TO ENSURE THAT POST BEARS DIRECTLY ATOP BEAM BELOW OR CONTINUE SAME POST THAT IS INDICATED IN UPPER FRAMING PLANS w/ SQUASH BLOCKS BETWEEN FLOORS TO THE FND., TYP.
4. RE: APPROPRIATE DETAILS FOR CAP & BASE @ BOLTING REQ'M.
5. SUPPORT ALL EXTERIOR WINDOW & DOOR HEADERS w/ (2) TRIMMER STUDS U.N.O.; ONLY (1) TRIMMER IS REQ'D @ OPENINGS <4'-0", TYP. U.N.O.
6. SPECIAL CALLOUTS INDICATED THUS:
   (21) — INDICATES NUMBER OF TRIMMER STUDS REQ'D.
   (3) — INDICATES NUMBER OF KING STUDS REQ'D. WHEN NOTED WITH "*" : RE: KING STUD SCHEDULE FOR REQ'M.

BEAM SCHEDULE

TYPE	SIZE	HANGER
B1	(2) 2x8	N/A
B2	(2) 2x10	N/A
B3	(2) 2x12	N/A
B4	(3) 2x8	HU26-3 (MAX.)
B5	(3) 2x10	HHUS210-3
B6	(3) 2x12	HHUS210-3
B7	(2) 1-3/4" x 7-1/4" LVL	N/A
B8	(3) 1-3/4" x 7-1/4" LVL	N/A
B9	(2) 1-3/4" x 9-1/4" LVL	N/A
B10	(3) 1-3/4" x 9-1/4" LVL	N/A
B11	(4) 1-3/4" x 9-1/4" LVL	N/A
B12	(2) 1-3/4" x 11-7/8" LVL	N/A
B13	(3) 1-3/4" x 11-7/8" LVL	N/A
B14	(2) 1-3/4" x 14" LVL	HUC16/HUC416 (MAX)
B15	(3) 1-3/4" x 14" LVL	HHUS5.50/10
B16	(4) 1-3/4" x 14" LVL	HHUS7.25/10
B17	(2) 1-3/4" x 18" LVL	HGUS.414
B18	(3) 1-3/4" x 18" LVL	HGUS5.50/14
B19	P.T. DF No. 1 6x10	HUCQ610-SDS

NOTES:
1. BEAMS & HEADERS SHOWN ON PLAN & NOT DESIGNATED w/ A MARK ARE TO BE: (2) 2x6. INCREASE TO THREE PLY BEAMS & HEADERS INSIDE 2x6 WALL FRAMING, TYP. @ CONTRACTOR'S OPTION, A FULL DEPTH HEADER MAY BE INSTALLED DIRECTLY BENEATH THE DBL. TOPPR. HEADER SIZE NOT TO BE LESS THAN INDICATED ON PLAN.
2. RE: COLUMN SCHEDULE FOR TRIMMER STUD REQ'M. & KING STUD SCHEDULE FOR KING STUD REQ'M.
3. DASHED BEAM TYPES ARE DROPPED, TYPICAL.
4. SIDE LOADED MULTIPLE PLY BEAM CONNECTIONS:
   - (2) PLY NAIL w/ (3) ROWS 16d NAILS @ 12" o.c.
   - (3) PLY: (2) ROWS SIMPSON SDW SCREWS @ 12" o.c., ONE SIDE. SCREW LENGTH SHALL BE 4-5/8" @ 2x MATERIAL & 5" @ LVL MATERIAL.
   - (4) PLY: (2) ROWS SIMPSON SDW SCREWS @ 12" o.c., ONE SIDE. SCREW LENGTH SHALL BE 6-3/8" @ 2x MATERIAL & 6-3/4" @ LVL MATERIAL.



1 2ND FLOOR FRAMING PLAN - AREA C

1/8" = 1'-0"

NOTES:
1. RE: ▣ SHEETS FOR TYPICAL FLOOR FRAMING NOTES.
2. RE: TRUSS, BEAM, & COLUMN SCHEDULES AS INDICATED BY FT#, J#, B# & C# CALLOUTS. FOR BEAMS & COLUMNS THAT ARE NOT CALLED OUT ON PLAN, RE: SCHEDULE NOTES, TYP.
3. RE: ▣-4.1 FOR SHEAR WALL, HOLDOWN, AND STUD WALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.
4. TRUSS MANUFACTURER:
   -NUMBERS IN [XXXXXXX] INDICATES ADDITIONAL SERVICE LINE LOAD IN POUNDS PER LINEAR FOOT (DEAD LOAD/LIVE LOAD) APPLIED TO FLOOR TRUSS SYSTEM FROM SUPPORTED WALL ABOVE. FLOOR TRUSS MANUFACTURER TO DESIGN FOR ADDITIONAL LOADS INDICATED.
   -NUMBERS IN [XXXKXXXK] INDICATES ADD'L. SERVICE POINT LOAD IN KIPS (DEAD LOADS/LIVE LOAD) APPLIED TO FLOOR TRUSS SYSTEM FROM SUPPORTED COLUMN ABOVE. FLOOR TRUSS MANUF. TO DESIGN FOR ADD'L. LOADS INDICATED.
5. [XX.XX] DENOTES SERVICE LOAD REACTION FOR USE BY STEEL FABRICATOR. FOR DESIGN OF STEEL BEAM CONNECTIONS. RE: 5/S0-0.3 FOR STANDARD FRAME BEAM CONNECTION.
6. CONDITIONS WHERE DIMENSIONAL LUMBER IS EXPOSED, USE PRESSURE TREATED EQUIVALENT OF BEAMS, COLUMNS, RAFTERS AND JOISTS SHOWN IN PLAN

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No.	Date	Issue
3	07/10/24	PERMIT SET
4	08/07/24	ITC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: LEVEL 2 FRAMING PLAN - AREA C

Sheet Number: **S2-1.3**

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BEAM SCHEDULE		
TYPE	SIZE	HANGER
B1	(2) 2x8	N/A
B2	(2) 2x10	N/A
B3	(2) 2x12	N/A
B4	(3) 2x8	HU26-3 (MAX.)
B5	(3) 2x10	HHUS210-3
B6	(3) 2x12	HHUS210-3
B7	(2) 1-3/4" x 7-1/4" LVL	N/A
B8	(3) 1-3/4" x 7-1/4" LVL	N/A
B9	(2) 1-3/4" x 9-1/4" LVL	N/A
B10	(3) 1-3/4" x 9-1/4" LVL	N/A
B11	(4) 1-3/4" x 9-1/4" LVL	N/A
B12	(2) 1-3/4" x 11-7/8" LVL	N/A
B13	(3) 1-3/4" x 11-7/8" LVL	N/A
B14	(2) 1-3/4" x 14" LVL	HUA16HUC416 (MAX)
B15	(3) 1-3/4" x 14" LVL	HHUS5.50/10
B16	(4) 1-3/4" x 14" LVL	HHUS7.25/10
B17	(2) 1-3/4" x 18" LVL	HGUS414
B18	(3) 1-3/4" x 18" LVL	HGUS5.50/14
B19	P.T. DF No.1 6x10	HUCQ610-SDS

NOTES:
1. BEAMS & HEADERS SHOWN ON PLAN & NOT DESIGNATED w/ A MARK ARE TO BE (2) 2x8. INCREASE TO THREE PLY BEAMS & HEADERS INSIDE 2x6 WALL FRAMING, TYP. @ CONTRACTOR'S OPTION. A FULL DEPTH HEADER MAY BE INSTALLED DIRECTLY BENEATH THE DBL. TOP'S. HEADER SIZE NOT TO BE LESS THAN INDICATED ON PLAN.
2. RE: COLUMN SCHEDULE FOR TRIMMER STUD REQ'M. & KING STUD SCHEDULE FOR KING STUD REQ'M.
3. DASHED BEAM TYPES ARE DROPPED, TYP.CAL.
4. SIDE LOADED MULTIPLE PLY BEAM CONNECTIONS:
   - (2) PLY: NAIL w/ (3) ROWS 16d NAILS @ 12" o.c.
   - (3) PLY: (2) ROW'S SIMPSON SDW SCREWS @ 12" o.c., ONE SIDE. SCREW LENGTH SHALL BE 4-3/8" @ 2x MATERIAL & 8" @ LVL MATERIAL.
   - (4) PLY: (2) ROW'S SIMPSON SDW SCREWS @ 12" o.c., ONE SIDE. SCREW LENGTH SHALL BE 6-3/8" @ 2x MATERIAL & 6-3/4" @ LVL MATERIAL.

COLUMN SCHEDULE		
TYPE	SIZE	CAP/BASE
C1	(3) 2x4	N/A
C2	(4) 2x4	N/A
C3	(5) 2x4	N/A
C4	(3) 2x6	N/A
C5	(4) 2x6	N/A
C6	(5) 2x6	N/A
C7	P.T. 6x6	PCBZ/EPC6Z
C8	3-1/2"x7" PSL	PCAZ/EPC4Z
C9	5-1/4"x7" PSL	
C10	3" STD PIPE	RE: PLAN
C11	HSS7X3X1/2	RE: PLAN
C12	HSS6X3X1/2	RE: PLAN
C13	HSS6X6X1/8	RE: PLAN

NOTES:
1. STUD MATERIAL & GRADE TO MATCH STRENGTH PER THE GENERAL NOTES, U.N.O.
2. COLUMNS SHOWN THUS ▣ ON PLAN & NOT CALLED OUT TO BE DBL. 2x4 IF POST IS LOCATED IN 2x4 WALL FRAMING, DBL. 2x6 IF LOCATED IN 2x6 WALL FRAMING.
3. ▢ INDICATES POST FROM ABOVE. CONTRACTOR TO ENSURE THAT POST BEARS DIRECTLY ATOP BEAM BELOW OR CONTINUE SAME POST THAT IS INDICATED IN UPPER FRAMING PLANS w/ SQUASH BLOCKS BETWEEN FLOORS TO THE IND., TYP.
4. RE: APPROPRIATE DETAILS FOR CAP R & BASE R BOLTING REQ'M.
5. SUPPORT ALL EXTERIOR WINDOW & DOOR HEADERS w/ (2) TRIMMER STUDS U.N.O.; ONLY (1) TRIMMER IS REQ'D @ OPENINGS < 4'-0", TYP. U.N.O.
6. SPECIAL CALLOUTS INDICATED THUS:
   #T = INDICATES NUMBER OF TRIMMER STUDS REQ'D.
   #K = INDICATES NUMBER OF KING STUDS REQ'D. WHEN NOTED WITH "*", RE: KING STUD SCHEDULE FOR REQ'M.

KING STUD SCHEDULE		
WALL HEIGHT (1)	OPENING WIDTH (2)	REQ'D. STUDS (3)
0'-0" =< h =< 10'-0"	0'-0" < w =< 3'-6"	(1) 2x6
	3'-6" < w =< 9'-0"	(2) 2x6
	9'-0" < w =< 14'-0"	(3) 2x6
	14'-0" < w =< 18'-0"	(4) 2x6
10'-0" < h =< 13'-0"	0'-0" < w =< 3'-6"	(2) 2x6
	3'-6" < w =< 6'-6"	(3) 2x6
	6'-6" < w =< 9'-6"	(4) 2x6

NOTES:
1. h = TOTAL STUD WALL HEIGHT, RE: ARCH.
2. w = ROUGH OPENING WIDTH, RE: ARCH. AT MULTI-SPAN HEADERS, INTERMEDIATE SUPPORTS SHALL NOT BE CONSIDERED AND THE OPENING WIDTH SHALL BE BASED ON THE FULL LENGTH OF THE HEADER.
3. KING STUDS SHALL BE THE SAME SIZE, SPECIES, & GRADE AS THE SURROUNDING WALL FRAMING.
4. AT ALL EXTERIOR WINDOW & DOOR LOCATIONS PROVIDE KING STUDS AS INDICATED ABOVE.
5. SPECIAL CALLOUTS INDICATED THUS:
   #T = INDICATES NUMBER OF TRIMMER STUDS REQ'D.
   #K = INDICATES NUMBER OF KING STUDS REQ'D.
   TAKE PRECEDENCE OVER THIS SCHEDULE.

FLOOR TRUSS & JOIST SCHEDULE			
TYPE	SIZE/SPACING	HANGER (FACE MOUNT)	HANGER (TOP FLANGE)
FT1	18" DEEP PRE- ENGINEERED TRUSSES ES SPACED PER MANUF. (24" o.c. MAX.)	PER MANUF.	PER MANUF.
FT2	16" DEEP PRE- ENGINEERED TRUSSES ES SPACED PER MANUF. (24" o.c. MAX.)	PER MANUF.	PER MANUF.
FEW	PRE-ENGINEERED END WALL TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
SFEW	PRE-ENGINEERED STRUC. END WALL TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
FGT	PRE-ENGINEERED GIRDER TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
J1	2x10's @ 16" o.c.	LUS210	N/A
J2	2x10's @ 12" o.c.	LUS210	N/A
J3	(2) 1-3/4"x9-1/4" LVL's @ 16" o.c.	HUS410	N/A

NOTES:
1. FLOOR TRUSSES SHALL BE DESIGNED & SHOP DRAWINGS SHALL BE PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF COLORADO. SUBMIT TO THE ARCHITECT FOR REVIEW & APPROVAL PRIOR TO SUBMITTING TO THE ENGINEER OF RECORD.
2. FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS FOR BLOCKING, BRIDGING, & CANTILEVERED ENDS.
3. FLOOR TRUSS MANUFACTURER TO DESIGN TRUSSES FOR THE FOLLOWING CRITERIA:
   - TRUSS DEFLECTIONS MUST NOT EXCEED L/480 LIVE LOAD, LIVE LOAD, L/240 DEAD LOAD, OR 1.0" (LIVE LOAD ONLY).
   - TYPICAL TRUSS LOADING (psf):

	TC LIVE LOAD	TC DEAD LOAD	BC LIVE LOAD	BC DEAD LOAD
UNIT FLOOR (TYP.)	40 psf	15 psf	0 psf	10 psf
CORRIDOR/STAIR FLOOR	100 psf	15 psf	0 psf	15 psf

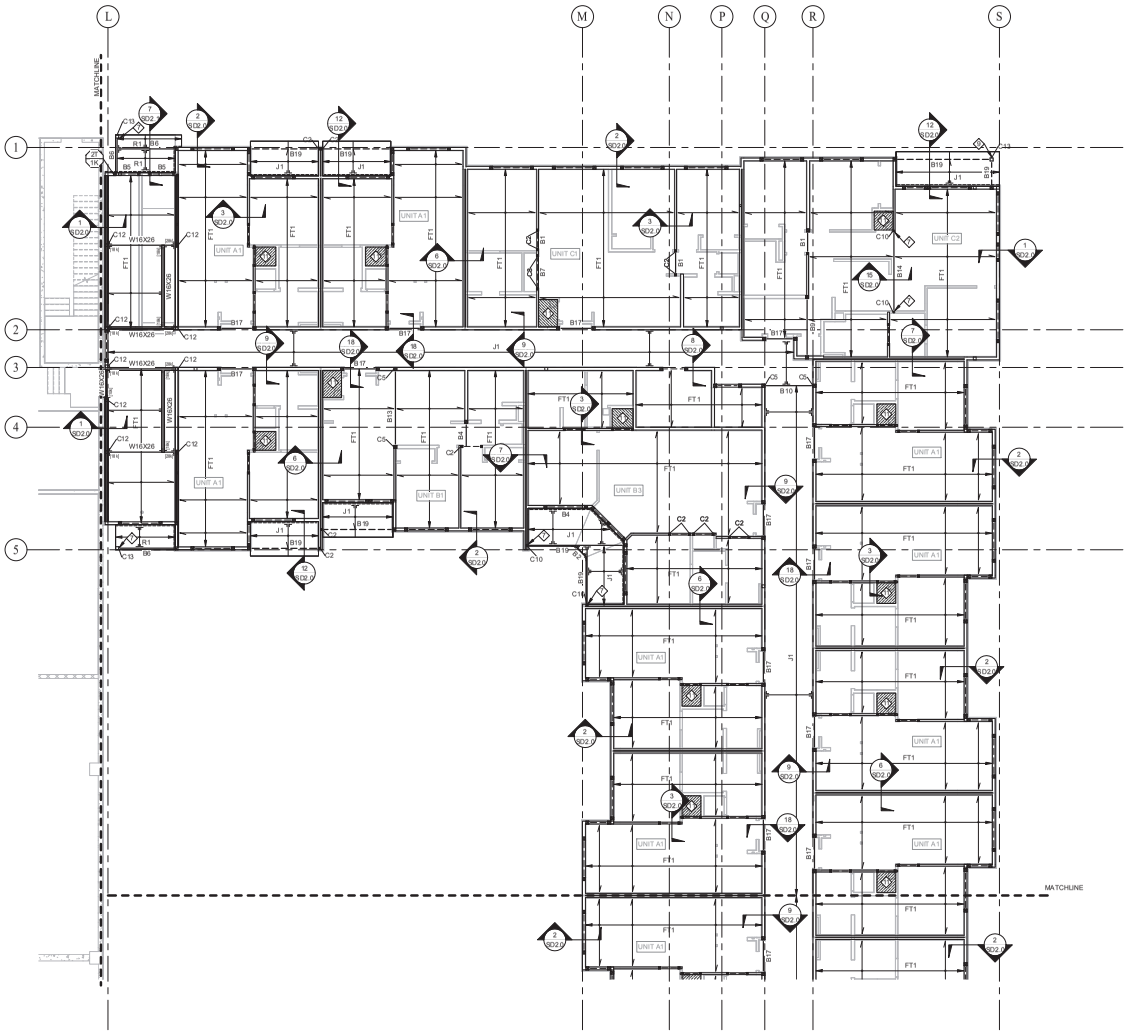
HATCH INDICATES PUBLIC AREA LOADING, TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR 100 psf LIVE LOAD

HATCH INDICATES STORAGE AREA LOADING, TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR 125 psf LIVE LOAD

ROOF TRUSS SCHEDULE		
TYPE	DESCRIPTION/SPACING	HANGER
T1	ROOF TRUSSES @ 24" o.c. (MAX.)	PER MANUF.
T2	JACK TRUSSES @ 24" o.c. (MAX.)	PER MANUF.
GT	GIRDER TRUSS	PER MANUF.
EW	END WALL TRUSS	PER MANUF.
SEW	STRUCTURAL END WALL TRUSS	PER MANUF.
R1	2x12 RAFTERS @ 16" o.c.	LUS210
R2	14" TJI 210 RAFTERS @ 24" o.c.	IUS2.06/14

NOTES:
1. TRUSSES SHALL BE DESIGNED & SHOP DRAWINGS SHALL BE PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF COLORADO.
2. GIRDER TRUSSES (GT) SHALL BE SUPPORTED BY QUADRUPLE 2x GANG STUDS EA. END. STUDS SHALL BE CONT. TO FND. PROVIDE FULL DEPTH BLOCKING BTWN. FLOORS, TYP.
3. TRUSS MANUF. TO DESIGN & SUPPLY ALL TRUSS-TO-TRUSS, TRUSS-TO-BEAM, & TRUSS-TO-GIRDER CONNECTIONS, TYP.
4. *RE: ARCH. FOR BOT. CHORD OF ROOF TRUSS PROFILE TYP.
5. TRUSS MANUF. TO DESIGN TRUSSES FOR:
   TC DEAD LOAD = 15 psf (Spf ALLOWANCE FOR SOLAR PANELS)
   BC DEAD LOAD = 10 psf
   SNOW LOAD = 30 psf, TYP.CAL

KEYNOTE SCHEDULE - FRAMING	
1	OPEN TO BELOW
2	ROOF ACCESS HATCH, RE: ARCH
3	8"-CMU STAIR/ELEVATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S0-0.1 FOR REINF. REQ'M.
4	PROVIDE EPC6Z POST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UP SIDE DOWN EPC6Z POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"# x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LGUM 16-SDS HANGER FASTENED DIRECTLY TO CMU WALL w/ (8) 3/8"x4" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CCQQS/CCQQ COLUMN CAP. WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL-AROUND. COLUMN CAP. WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP- FLUSH WITH ADJACENT TRUSSES, TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM
9	RE: S/SD2.1 FOR COLUMN CAP/BASE CONNECTION TO WOOD BEAMS
10	RE: S/SD2.1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 24" CLEAR). TRUSS MANUF. TO DESIGN TRUSSES IN MECH. ROOM FOR 80psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13/SD1.0 w/ (4) 4-1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE
13	PROVIDE 1"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADDTL. INFORMATION. PROVIDE WEB STIFFENER BS/B WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADDTL. INFORMATION. PROVIDE WEB STIFFENER BS/B WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LGS 4 COLUMN CAP CONNECTION EA. SIDE OF BEAM TO COLUMN BELOW (2) CLIPS TOTAL PER POST)
16	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADDTL. INFORMATION. PROVIDE WEB STIFFENER BS/B WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 6"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADDTL. INFORMATION



1 2ND FLOOR FRAMING PLAN - AREA D

1/8" = 1'-0"

NOTES:
1. RE: **S0** SHEETS FOR TYP.CAL FLOOR FRAMING NOTES.
2. RE: TRUSS, BEAM, & COLUMN SCHEDULES AS INDICATED BY FT#, JR, B# & C# CALLOUTS. FOR BEAMS & COLUMNS THAT ARE NOT CALLED OUT ON PLAN, RE: SCHEDULE NOTES, TYP.
3. RE: **S0-0.1** FOR SHEAR WALL, HOLDOWN, AND STUD WALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.
4. TRUSS MANUFACTURER:
   -NUMBERS IN (XXX.XX/XX) INDICATES ADDITIONAL SERVICE LINE LOAD IN POUNDS PER LINEAR FOOT (DEAD LOAD/LIVE LOAD) APPLIED TO FLOOR TRUSS SYSTEM FROM SUPPORTED WALL ABOVE. FLOOR TRUSS MANUFACTURER TO DESIGN FOR ADDITIONAL LOADS INDICATED.
   -NUMBERS IN [XXX/XXXX] INDICATES ADDTL. SERVICE POINT LOAD IN KIPS (DEAD LOAD/SLIVE LOAD) APPLIED TO FLOOR TRUSS SYSTEM FROM SUPPORTED COLUMN ABOVE. FLOOR TRUSS MANUF. TO DESIGN FOR ADDTL. LOADS INDICATED.
5. [XX.XK] DENOTES SERVICE LOAD REACTION FOR USE BY STEEL FABRICATOR FOR DESIGN OF STEEL BEAM CONNECTIONS. RE: S/SHO.3 FOR STANDARD FRAME BEAM CONNECTION.
6. CONDITIONS WHERE DIMENSIONAL LUMBER IS EXPOSED, USE PRESSURE TREATED EQUIVALENT OF BEAMS, COLUMNS, RAFTERS AND JOISTS SHOWN IN PLAN

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No.	Date	Issue
1	07/19/23	PERMIT SET
4	08/07/24	ZPC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: LEVEL 2 FRAMING PLAN - AREA D

Sheet Number: **S2-1.4**

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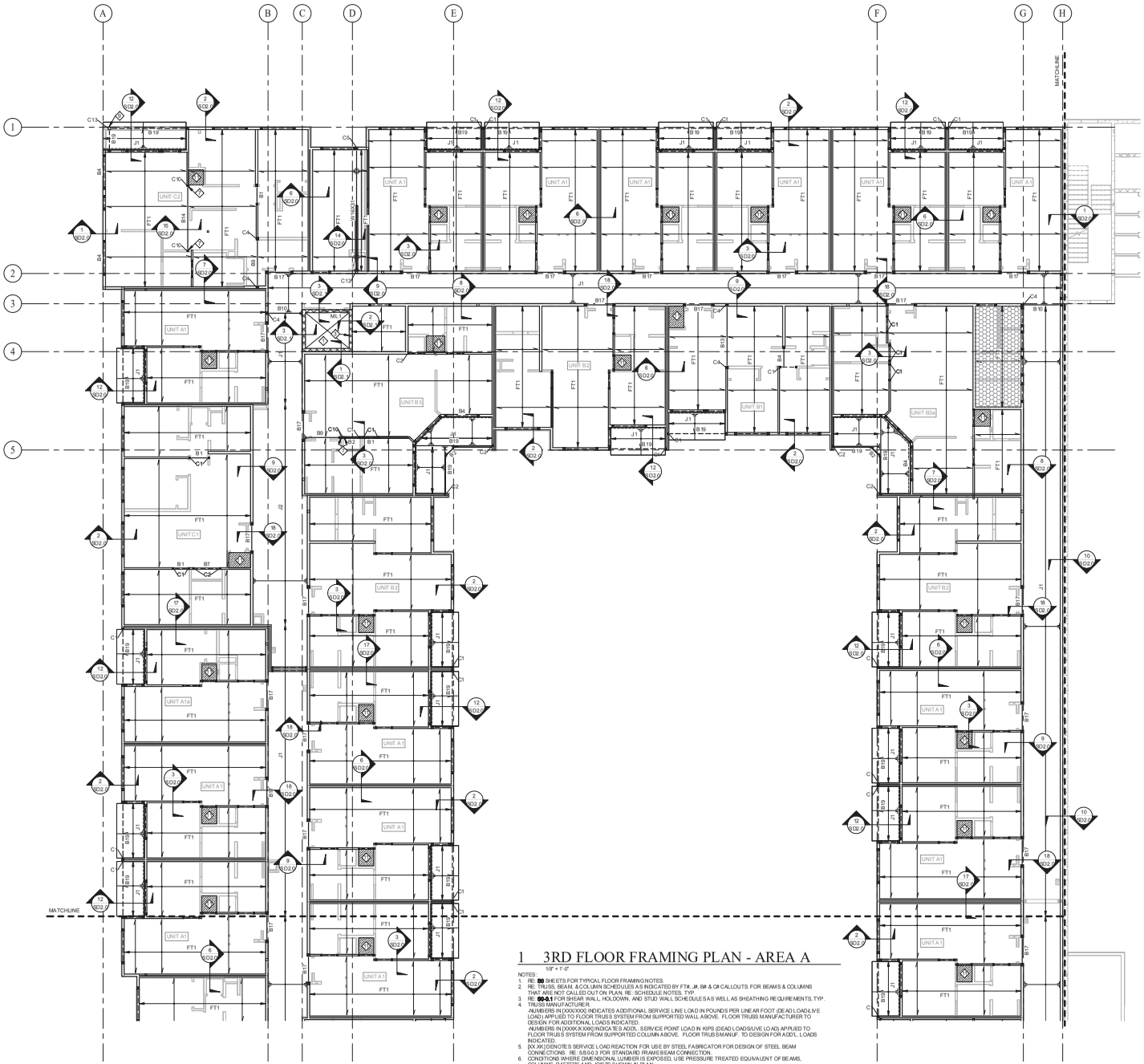

1 3RD FLOOR FRAMING PLAN - AREA A

1/8" = 1'-0"

NOTES:
1. RE: S0 SHEETS FOR TYPICAL FLOOR FRAMING NOTES.
2. RE: TRUSS, BEAM, & COLUMN SCHEDULES AS INDICATED BY FT#, J#, B# & C# CALLOUTS. FOR BEAMS & COLUMNS THAT ARE NOT CALLED OUT ON PLAN, RE: SCHEDULE NOTES, TYP.
3. RE: S0-0.1 FOR SHEAR WALL HOLDOWN, AND STUD WALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.
4. TRUSS MANUFACTURER:
   -NUMBERS IN [XXX/XXX] INDICATES ADDITIONAL SERVICE LINE LOAD IN POUNDS PER LINEAR FOOT (DEAD LOAD/LIVE LOAD) APPLIED TO FLOOR TRUSS SYSTEM FROM SUPPORTED WALL ABOVE. FLOOR TRUSS MANUFACTURER TO DESIGN FOR ADDITIONAL LOADS INDICATED.
   -NUMBERS IN [XXXK/XXXK] INDICATES ADDL. SERVICE POINT LOAD IN KIPS (DEAD LOAD/LIVE LOAD) APPLIED TO FLOOR TRUSS SYSTEM FROM SUPPORTED COLUMN ABOVE. FLOOR TRUSS MANUF. TO DESIGN FOR ADDTL. LOADS INDICATED.
5. [XX.XK] DENOTES SERVICE LOAD REACTION FOR USE BY STEEL FABRICATOR FOR DESIGN OF STEEL BEAM CONNECTIONS. RE: S5.0-0.3 FOR STANDARD FRAME BEAM CONNECTION.
6. CONDITIONS WHERE DIMENSIONAL LUMBER IS EXPOSED, USE PRESSURE TREATED EQUIVALENT OF BEAMS, COLUMNS, RAFTERS AND JOISTS SHOWN IN PLAN

COLUMN SCHEDULE

TYPE	SIZE	CAP/BASE
C1	(3) 2x4	N/A
C2	(4) 2x4	N/A
C3	(5) 2x4	N/A
C4	(3) 2x6	N/A
C5	(4) 2x6	N/A
C6	(5) 2x6	N/A
C7	P.T. 6x6	PCQZ/EPCQZ
C8	3-1/2"x7" PSL	PCAZ/EPCAZ
C9	5-1/4"x7" PSL	
C10	3" STD PIPE	RE: PLAN
C11	HSS7X3X1/2	RE: PLAN
C12	HSS9X5X1/2	RE: PLAN
C13	HSS6X6X1/8	RE: PLAN

NOTES:
1. STUD MATERIAL & GRADE TO MATCH STRENGTH PER THE GENERAL NOTES, U.N.O.
2. COLUMNS SHOWN THUS ⊠ ON PLAN & NOT CALLED OUT TO BE DBL. 2x4 IF POST IS LOCATED IN 2x4 WALL FRAMING, DBL. 2x6 IF LOCATED IN 2x6 WALL FRAMING.
3. □ INDICATES POST FROM ABOVE. CONTRACTOR TO ENSURE THAT POST BEARS DIRECTLY ATOP BEAM BELOW OR CONTINUE SAME POST THAT IS INDICATED IN UPPER FRAMING PLANS w/ SQUASH BLOCKS BETWEEN FLOORS TO THE IND., TYP.
4. RE: APPROPRIATE DETAILS FOR CAP B & BASE B BOLTING REQM.
5. SUPPORT ALL EXTERIOR WINDOW & DOOR HEADERS w/ (2) TRIMMER STUDS U.N.O. ONLY (1) TRIMMER IS REQ'D @ OPENINGS < 4'-0", TYP. U.N.O.
6. SPECIAL CALLOUTS INDICATED THUS:
   (T#) — INDICATES NUMBER OF TRIMMER STUDS REQ'D.
   (K#) — INDICATES NUMBER OF KING STUDS REQ'D. WHEN NOTED WITH " * ", RE: KING STUD SCHEDULE FOR REQM.

BEAM SCHEDULE

TYPE	SIZE	HANGER
B1	(2) 2x8	N/A
B2	(2) 2x10	N/A
B3	(2) 2x12	N/A
B4	(3) 2x8	HUZ6-3 (MAX.)
B5	(3) 2x10	HHUS210-3
B6	(3) 2x12	HHUS210-3
B7	(2) 1-3/4" x 7-1/4" LVL	N/A
B8	(3) 1-3/4" x 7-1/4" LVL	N/A
B9	(2) 1-3/4" x 9-1/4" LVL	N/A
B10	(3) 1-3/4" x 9-1/4" LVL	N/A
B11	(4) 1-3/4" x 9-1/4" LVL	N/A
B12	(2) 1-3/4" x 11-7/8" LVL	N/A
B13	(3) 1-3/4" x 11-7/8" LVL	N/A
B14	(2) 1-3/4" x 14" LVL	HUI416/HUC416 (MAX)
B15	(3) 1-3/4" x 14" LVL	HHUSS5070
B16	(4) 1-3/4" x 14" LVL	HHUS7.25/10
B17	(2) 1-3/4" x 18" LVL	HGUS414
B18	(3) 1-3/4" x 18" LVL	HGUSS.50/14
B19	P.T. DF No.1/6x10	HUC6Q10-SDS

NOTES:
1. BEAMS & HEADERS SHOWN ON PLAN & NOT DESIGNATED w/ A MARK ARE TO BE (2) 2x6. INCREASE TO THREE PLY BEAMS & HEADERS INSIDE 2x6 WALL FRAMING, TYP. @ CONTRACTOR'S OPTION, A FULL DEPTH HEADER MAY BE INSTALLED DIRECTLY BENEATH THE DBL. TOP'R. HEADER SIZE NOT TO BE LESS THAN INDICATED ON PLAN.
2. RE: COLUMN SCHEDULE FOR TRIMMER STUD REQ'M. & KING STUD SCHEDULE FOR KING STUD REQ'M.
3. DASHED BEAM TYPES ARE DROPPED, TYPICAL.
4. SIDE LOADED MULTIPLE PLY BEAM CONNECTIONS:
   - (2) PLY: NAIL w/ (3) ROWS 16d NAILS @ 12" o.c.
   - (3) PLY: (2) ROWS SIMPSON SDW SCREWS @ 12" o.c., ONE SIDE. SCREW LENGTH SHALL BE 4-5/8" @ 2x MATERIAL & 9" @ LVL MATERIAL.
   - (4) PLY: (2) ROWS SIMPSON SDWS SCREWS @ 12" o.c., ONE SIDE. SCREW LENGTH SHALL BE 5-3/8" @ 2x MATERIAL & 6-3/4" @ LVL MATERIAL.

FLOOR TRUSS & JOIST SCHEDULE

TYPE	SIZE/SPACING	HANGER (FACE MOUNT)	HANGER (TOP FLANGE)
FT1	18" DEEP PRE-ENGINEERED TRUSSEES SPACED PER MANUF. (24" o.c. MAX.)	PER MANUF.	PER MANUF.
FT2	16" DEEP PRE-ENGINEERED TRUSSEES SPACED PER MANUF. (24" o.c. MAX.)	PER MANUF.	PER MANUF.
FEW	PRE-ENGINEERED END WALL TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
SFEW	PRE-ENGINEERED STRUC. END WALL TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
FGT	PRE-ENGINEERED GIRDER TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
J1	2x10's @ 16" o.c.	LUS210	N/A
J2	2x10's @ 12" o.c.	LUS210	N/A
J3	(2) 1-3/4"x9-1/4" LVL's @ 16" o.c.	HUS410	N/A

NOTES:
1. FLOOR TRUSSES SHALL BE DESIGNED & SHOP DRAWINGS SHALL BE PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF COLORADO. SUBMIT TO THE ARCHITECT FOR REVIEW & APPROVAL PRIOR TO SUBMITTING TO THE ENGINEER OF RECORD.
2. FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS FOR BLOCKING, BRIDGING, & CANTILEVERED ENDS.
3. FLOOR TRUSS MANUFACTURER TO DESIGN TRUSSES FOR THE FOLLOWING CRITERIA:
   - TRUSS DEFLECTIONS MUST NOT EXCEED L/480 LIVE LOAD, LIVE LOAD, L/240 DEAD LOAD, OR 1/2" (LIVE LOAD ONLY).
   - TYPICAL TRUSS LOADING (psf):

	TC LIVE LOAD	TC DEAD LOAD	BC LIVE LOAD	BC DEAD LOAD
UNIT FLOOR (TYP.)	40 psf	15 psf	0 psf	10 psf
CORRIDOR/STAIR FLOOR	100 psf	15 psf	0 psf	15 psf

HATCH INDICATES PUBLIC AREA LOADING, TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR 100 psf LIVE LOAD

HATCH INDICATES STORAGE AREA LOADING, TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR 125 psf LIVE LOAD

KING STUD SCHEDULE

WALL HEIGHT (1)	OPENING WIDTH (2)	REQ'D. STUDS (3)
0'-0" =< h ≤ 10'-0"	0'-0" < w ≤ 3'-6"	(1) 2x6
	3'-6" < w ≤ 9'-0"	(2) 2x6
	9'-0" < w ≤ 14'-0"	(3) 2x6
	14'-0" < w ≤ 18'-0"	(4) 2x6
10'-0" < h ≤ 13'-0"	0'-0" < w ≤ 3'-6"	(2) 2x6
	3'-6" < w ≤ 6'-6"	(3) 2x6
	6'-6" < w ≤ 9'-6"	(4) 2x6

NOTES:
1. h = TOTAL STUD WALL HEIGHT, RE: ARCH.
2. w = ROUGH OPENING WIDTH, RE: ARCH. AT MULTI-SPAN HEADERS, INTERMEDIATE SUPPORTS SHALL NOT BE CONSIDERED AND THE OPENING WIDTH SHALL BE BASED ON THE FULL LENGTH OF THE HEADER.
3. KING STUDS SHALL BE THE SAME SIZE, SPECIES, & GRADE AS THE SURROUNDING WALL FRAMING.
4. AT ALL EXTERIOR WINDOW & DOOR LOCATIONS PROVIDE KING STUDS AS INDICATED ABOVE.
5. SPECIAL CALLOUTS INDICATED THUS:
   (T#) — INDICATES NUMBER OF TRIMMER STUDS REQ'D.
   (K#) — INDICATES NUMBER OF KING STUDS REQ'D.

TAKE PRECEDENCE OVER THIS SCHEDULE.

KEY NOTE SCHEDULE - FRAMING

1	OPEN TO BELOW
2	ROOF ACCESS HATCH, RE: ARCH
3	IF CMU STAIR/ELEVATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S3-0.1 FOR REINF. REQ'M.
4	PROVIDE EPCQZ POST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UPSIDE DOWN EPCQZ POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"ø x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LGUM410-SDS HANGER FASTENED DIRECTLY TO CMU WALL w/ (8) 3/8"x4" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CC/CQ/ECC/CQQ COLUMN CAP, WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL-AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP-FLUSH WITH ADJACENT TRUSSES, TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM
9	RE: S-SDQ2.1 FOR COLUMN CAP/BASE CONNECTION TO WOOD BEAMS
10	RE: S-SDQ2.1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 2'-0" CLEAR). TRUSS MANUF TO DESIGN TRUSSES IN MECH. RO'OM FOR 80psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13-SD1.0 w/ (4) 4-1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE
13	PROVIDE 11"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 83/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 9"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 83/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LCE4 COLUMN CAP CONNECTION EA. SIDE OF BEAM TO COLUMN BELOW (2) CLIPS TOTAL PER POST.
16	PROVIDE 6"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 83/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 8"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION

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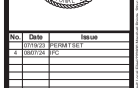

No.	Date	Issue
1	07/19/23	PERMIT SET
4	08/07/24	ITC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: LEVEL 3 FRAMING PLAN - AREA A

Sheet Number: S2-2.1

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KEYNOTE SCHEDULE - FRAMING	
1	OPEN TO BELOW
2	RO OF ACCESS HATCH, RE: ARCH
3	8" CMU STAIR/ELEVATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S0-0.1 FOR REINF. REQ'M.
4	PROVIDE EPOSZ POST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UP SIDE DOWN EPOSZ POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"ø x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LGUM410-SDS HANGER FASTENED DIRECTLY TO CMU WALL w/ (6) 3/8"x4" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CCOQ/ECCOQ COLUMN CAP. WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP-FLUSH WITH ADJACENT TRUSSES, TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM.
9	RE: 9/S2.1 FOR COLUMN CAP/BASE CONNECTION TO WOOD BEAMS
10	RE: 9/S2.1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 24" CLEAR). TRUSS MANUF TO DESIGN TRUSSES IN MECH. ROOM FOR 60psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13/SD1.0 w/ (4) 4 1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE.
13	PROVIDE 1"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER ID/A WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER ID/A WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LCI24 COLUMN CAP CONNECTION EA. SIDE OF BEAM TO COLUMN BELOW. (2) CLIPS TOTAL PER POST).
16	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER ID/A WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 6"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION

FLOOR TRUSS & JOIST SCHEDULE			
TYPE	SIZE/SPACING	HANGER (FACE MOUNT)	HANGER (TOP FLANGE)
FT1	18" DEEP PRE-ENGINEERED TRUSSES SPACED PER MANUF. (24" o.c. MAX.)	PER MANUF.	PER MANUF.
FT2	16" DEEP PRE-ENGINEERED TRUSSES SPACED PER MANUF. (24" o.c. MAX.)	PER MANUF.	PER MANUF.
FEW	PRE-ENGINEERED END WALL TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
SFEW	PRE-ENGINEERED STRUC. END WALL TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
FGT	PRE-ENGINEERED GIRDER TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
J1	2x10's @ 16" o.c.	LUS210	N/A
J2	2x10's @ 12" o.c.	LUS210	N/A
J3	(2) 1-3/4"x9-1/4" LVL's @ 16" o.c.	HUS410	N/A

NOTES:
1. FLOOR TRUSSES SHALL BE DESIGNED & SHOP DRAWINGS SHALL BE PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF COLORADO. SUBMIT TO THE ARCHITECT FOR REVIEW & APPROVAL PRIOR TO SUBMITTING TO THE ENGINEER OF RECORD.
2. FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS FOR BLOCKING, BRIDGING, & CANTILEVERED ENDS.
3. FLOOR TRUSS MANUFACTURER TO DESIGN TRUSSES FOR THE FOLLOWING CRITERIA:
   - TRUSS DEFLECTIONS MUST NOT EXCEED L/480 LIVE LOAD, LIVE LOAD, L/240 DEAD LOAD, OR 1/2" (LIVE LOAD ONLY).
   - TYPICAL TRUSS LOADING (psf):

	TC LIVE LOAD	TC DEAD LOAD	BC LIVE LOAD	BC DEAD LOAD
UNIT FLOOR (TYP.)	40 psf	15 psf	0 psf	10 psf
CORRIDOR/STAIR FLOOR	100 psf	15 psf	0 psf	15 psf

HATCH INDICATES PUBLIC AREA LOADING, TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR 100 psf LIVE LOAD

HATCH INDICATES STORAGE AREA LOADING, TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR 125 psf LIVE LOAD

KING STUD SCHEDULE		
WALL HEIGHT (1)	OPENING WIDTH (2)	REQ'D. STUDS (3)
0'-0" =< h =< 10'-0"	0'-0" =< w =< 3'-6"	(1) 2x6
	3'-6" =< w =< 9'-0"	(2) 2x6
	9'-0" =< w =< 14'-0"	(3) 2x6
	14'-0" =< w =< 18'-0"	(4) 2x6
10'-0" < h =< 13'-0"	0'-0" =< w =< 3'-6"	(2) 2x6
	3'-6" =< w =< 6'-6"	(3) 2x6
	6'-6" =< w =< 9'-6"	(4) 2x6

NOTES:
1. h = TOTAL STUD WALL HEIGHT, RE: ARCH.
2. w = ROUGH OPENING WIDTH, RE: ARCH. AT MULTI-SPAN HEADERS, INTERMEDIATE SUPPORTS SHALL NOT BE CONSIDERED AND THE OPENING WIDTH SHALL BE BASED ON THE FULL LENGTH OF THE HEADER.
3. KING STUDS SHALL BE THE SAME SIZE, SPECIES, & GRADE AS THE SURROUNDING WALL FRAMING.
4. AT ALL EXTERIOR WINDOW & DOOR LOCATIONS PROVIDE KING STUDS AS INDICATED ABOVE.
5. SPECIAL CALLOUTS INDICATED THUS:
   - (2T) — INDICATES NUMBER OF TRIMMER STUDS REQ'D.
   - (2K) — INDICATES NUMBER OF KING STUDS REQ'D.

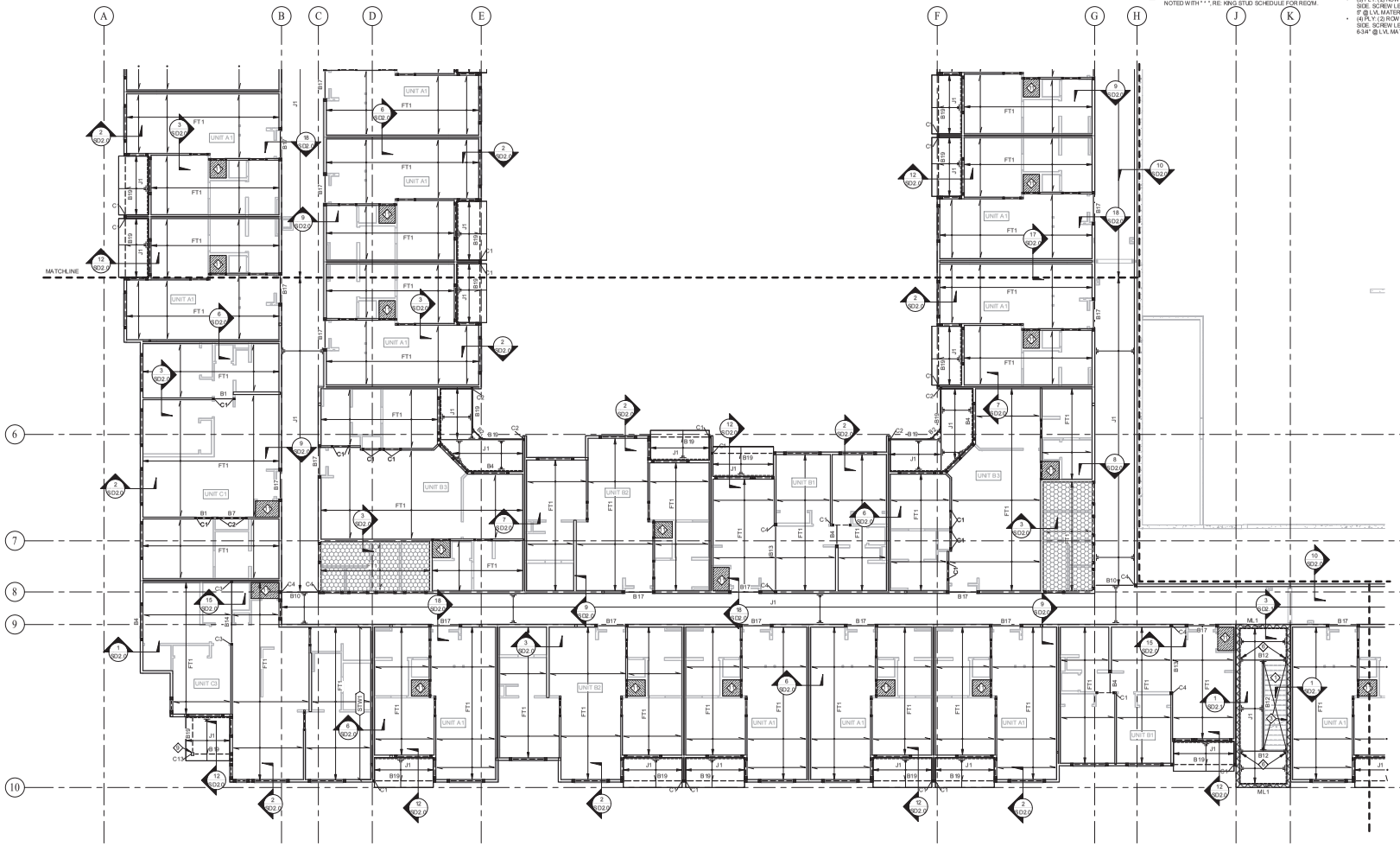
   TAKE PRECEDENCE OVER THIS SCHEDULE.

COLUMN SCHEDULE		
TYPE	SIZE	CAP/BASE
C1	(3) 2x4	N/A
C2	(4) 2x4	N/A
C3	(5) 2x4	N/A
C4	(3) 2x6	N/A
C5	(4) 2x6	N/A
C6	(5) 2x6	N/A
C7	P.T. 6x6	PC62/EPC6Z
C8	3-1/2"x7" PSL	PC42/EPC4Z
C9	5-1/4"x7" PSL	
C10	3" STD PIPE	RE: PLAN
C11	HSS7X3X1/2	RE: PLAN
C12	HSS6X5X1/2	RE: PLAN
C13	HSS6X6X1/8	RE: PLAN

NOTES:
1. STUD MATERIAL & GRADE TO MATCH STRENGTH PER THE GENERAL NOTES, U.N.O.
2. COLUMNS SHOWN THUS ⊠ ON PLAN & NOT CALLED OUT TO BE DBL. 2x6 IF POST IS LOCATED IN 2x4 WALL FRAMING, DBL. 2x6 IF LOCATED IN 2x6 WALL FRAMING.
3. □ INDICATES POST FROM ABOVE. CONTRACTOR TO ENSURE THAT POST BEARS DIRECTLY ATOP BEAM BELOW OR CONTINUE SAME POST THAT IS INDICATED IN UPPER FRAMING PLANS w/ SQUASH BLOCKS BETWEEN FLOORS TO THE FIND., TYP.
4. RE: APPROPRIATE DETAILS FOR CAP & BASE ® BOLTING REQ'M.
5. SUPPORT ALL EXTERIOR WINDOW & DOOR HEADERS w/ (2) TRIMMER STUDS U.N.O., ONLY (1) TRIMMER IS REQ'D @ OPENINGS =4'-0", TYP. U.N.O.
6. SPECIAL CALLOUTS INDICATED THUS:
   - (2T) — INDICATES NUMBER OF TRIMMER STUDS REQ'D.
   - (2K) — INDICATES NUMBER OF KING STUDS REQ'D. WHEN NOTED WITH " * ": RE: KING STUD SCHEDULE FOR REQ'M.

BEAM SCHEDULE		
TYPE	SIZE	HANGER
B1	(2) 2x8	N/A
B2	(2) 2x10	N/A
B3	(2) 2x12	N/A
B4	(3) 2x8	HU26-3 (MAX.)
B5	(3) 2x10	HHUS210-3
B6	(3) 2x12	HHUS210-3
B7	(2) 1-3/4" x 7-1/4" LVL	N/A
B8	(3) 1-3/4" x 7-1/4" LVL	N/A
B9	(2) 1-3/4" x 9-1/4" LVL	N/A
B10	(3) 1-3/4" x 9-1/4" LVL	N/A
B11	(4) 1-3/4" x 9-1/4" LVL	N/A
B12	(2) 1-3/4" x 11-7/8" LVL	N/A
B13	(3) 1-3/4" x 11-7/8" LVL	N/A
B14	(2) 1-3/4" x 14" LVL	HUH16/HUC416 (MAX)
B15	(3) 1-3/4" x 14" LVL	HHUS5.50/10
B16	(4) 1-3/4" x 14" LVL	HHUS7.25/10
B17	(2) 1-3/4" x 18" LVL	HGUS.414
B18	(3) 1-3/4" x 18" LVL	HGUS5.50/14
B19	P.T. DF No. 1 6x10	HUCQ6 10-SDS

NOTES:
1. BEAMS & HEADERS SHOWN ON PLAN & NOT DESIGNATED w/ A MARK ARE TO BE (3) 2x6. INCREASE TO THREE PLY BEAMS & HEADERS INSIDE 2x6 WALL FRAMING, TYP. @ CONTRACTOR'S OPTION, A FULL DEPTH HEADER MAY BE INSTALLED DIRECTLY BENEATH THE DBL. TOPPR. HEADER SIZE NOT TO BE LESS THAN INDICATED ON PLAN.
2. RE: COLUMN SCHEDULE FOR TRIMMER STUD REQ'M. & KING STUD SCHEDULE FOR KING STUD REQ'M.
3. DASHED BEAM TYPES ARE DROPPED, TYPICAL.
4. SIDE LOADED MULTIPLE PLY BEAM CONNECTIONS:
   - (2) PLY NAIL w/ (3) ROWS 16d NAILS @ 12" o.c.
   - (3) PLY: (2) ROWS SIMPSON SDW SCREWS @ 12" o.c., ONE SIDE. SCREW LENGTH SHALL BE 4-5/8" @ 2x MATERIAL & 5" @ LVL MATERIAL.
   - (4) PLY: (2) ROWS SIMPSON SDW SCREWS @ 12" o.c., ONE SIDE. SCREW LENGTH SHALL BE 6-3/8" @ 2x MATERIAL & 6-3/4" @ LVL MATERIAL.



1 3RD FLOOR FRAMING PLAN - AREA B

1/8" = 1'-0"

NOTES:
1. RE: S0 SHEETS FOR TYPICAL FLOOR FRAMING NOTES.
2. RE: TRUSS, BEAM, & COLUMN SCHEDULES AS INDICATED BY FT#, J#, B# & C# CALLOUTS. FOR BEAMS & COLUMNS THAT ARE NOT CALLED OUT ON PLAN, RE: SCHEDULE NOTES, TYP.
3. RE: S0-0.1 FOR SHEAR WALL, HOLDOWN, AND STUD WALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.
4. TRUSS MANUFACTURER:
   -NUMBERS IN [XXXXXXX] INDICATES ADDITIONAL SERVICE LINE LOAD IN POUNDS PER LINEAR FOOT (DEAD LOAD/LIVE LOAD) APPLIED TO FLOOR TRUSS SYSTEM FROM SUPPORTED WALL ABOVE. FLOOR TRUSS MANUFACTURER TO DESIGN FOR ADDITIONAL LOADS INDICATED.
   -NUMBERS IN [XXXXXXX] INDICATES ADD'L. SERVICE POINT LOAD IN KIPS (DEAD LOADS/LIVE LOAD) APPLIED TO FLOOR TRUSS SYSTEM FROM SUPPORTED COLUMN ABOVE. FLOOR TRUSS MANUF. TO DESIGN FOR ADD'L. LOADS INDICATED.
5. [XX.XX] DENOTES SERVICE LOAD REACTION FOR USE BY STEEL FABRICATOR. FOR DESIGN OF STEEL BEAM CONNECTIONS. RE: S50-0.3 FOR STANDARD FRAME BEAM CONNECTION.
6. CONDITIONS WHERE DIMENSIONAL LUMBER IS EXPOSED, USE PRESSURE TREATED EQUIVALENT OF BEAMS, COLUMNS, RAFTERS AND JOISTS SHOWN IN PLAN

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No.	Date	Issue
3	07/19/23	PERMIT SET
4	08/07/24	ITC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: LEVEL 3 FRAMING PLAN - AREA B

Sheet Number: **S2-2.2**

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KEYNOTE SCHEDULE - FRAMING

1	OPEN TO BELOW
2	RO OF ACCESS HATCH, RE: ARCH
3	8" CMU STAIR/ELEVATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S0-0.1 FOR REINF. REQ'M.
4	PROVIDE EPOSZ POST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UP SIDE DOWN EPOSZ POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"Ø x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LGUH410-SDS HANGER FASTENED DIRECTLY TO CMU WALL w/ (6) 3/8"x4" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CCOQ/ECCOQ COLUMN CAP. WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP-FLUSH WITH ADJACENT TRUSSES, TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM.
9	RE: S/S2.1 FOR COLUMN CAP/BASE CONNECTION TO WOOD BEAMS
10	RE: S/S2.1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 24" CLEAR). TRUSS MANUF TO DESIGN TRUSSES IN MECH. ROOM FOR 60psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13/SD1.0 w/ (4) 4 1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE.
13	PROVIDE 1"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM F OR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER ID/A WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS F OR ADD'L. INFORMATION. PROVIDE WEB S TIFFENER ID/A WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LCI24 COLUMN CAP CONNECTION EA. SIDE OF BEAM TO COLUMN BELOW (2) CLIPS TOTAL PER POST).
16	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS F OR ADD'L. INFORMATION. PROVIDE WEB S TIFFENER ID/A WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 6"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION

FLOOR TRUSS & JOIST SCHEDULE

TYPE	SIZE/SPACING	HANGER (FACE MOUNT)	HANGER (TOP FLANGE)
FT1	18" DEEP PRE-ENGINEERED TRUSSES SPACED PER MANUF. (24" o.c. MAX.)	PER MANUF.	PER MANUF.
FT2	16" DEEP PRE-ENGINEERED TRUSSES SPACED PER MANUF. (24" o.c. MAX.)	PER MANUF.	PER MANUF.
FEW	PRE-ENGINEERED END WALL TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
SFEW	PRE-ENGINEERED STRUC. END WALL TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
FGT	PRE-ENGINEERED GIRDER TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
J1	2x10's @ 16" o.c.	LUS210	N/A
J2	2x10's @ 12" o.c.	LUS210	N/A
J3	(2) 1-3/4"x9-1/4" LVL's @ 16" o.c.	HUS410	N/A

NOTES:
1. FLOOR TRUSSES SHALL BE DESIGNED & SHOP DRAWINGS SHALL BE PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF COLORADO. SUBMIT TO THE ARCHITECT FOR REVIEW & APPROVAL PRIOR TO SUBMITTING TO THE ENGINEER OF RECORD.
2. FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS FOR BLOCKING, BRIDGING, & CANTILEVERED ENDS.
3. FLOOR TRUSS MANUFACTURER TO DESIGN TRUSSES FOR THE FOLLOWING CRITERIA:
   - TRUSS DEFLECTIONS MUST NOT EXCEED L/480 LIVE LOAD, LIVE LOAD, L/240 DEAD LOAD, OR 1/2" (LIVE LOAD ONLY).
   - TYPICAL TRUSS LOADING (psf):

	TC LIVE LOAD	TC DEAD LOAD	BC LIVE LOAD	BC DEAD LOAD
UNIT FLOOR (TYP.)	40 psf	15 psf	0 psf	10 psf
CORRIDOR/STAIR FLOOR	100 psf	15 psf	0 psf	15 psf

HATCH INDICATES PUBLIC AREA LOADING. TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR 100 psf LIVE LOAD

HATCH INDICATES STORAGE AREA LOADING. TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR 125 psf LIVE LOAD

KING STUD SCHEDULE

WALL HEIGHT (1)	OPENING WIDTH (2)	REQ'D. STUDS (3)
0'-0" =< h =< 10'-0"	0'-0" =< w =< 3'-6"	(1) 2x6
	3'-6" =< w =< 9'-0"	(2) 2x6
	9'-0" =< w =< 14'-0"	(3) 2x6
	14'-0" =< w =< 18'-0"	(4) 2x6
10'-0" =< h =< 13'-0"	0'-0" =< w =< 3'-6"	(2) 2x6
	3'-6" =< w =< 6'-6"	(3) 2x6
	6'-6" =< w =< 9'-6"	(4) 2x6

NOTES:
1. h = TOTAL STUD WALL HEIGHT, RE: ARCH.
2. w = ROUGH OPENING WIDTH, RE: ARCH. AT MULTI SPAN HEADERS, INTERMEDIATE SUPPORTS SHALL NOT BE CONSIDERED AND THE OPENING WIDTH SHALL BE BASED ON THE FULL LENGTH OF THE HEADER.
3. KING STUDS SHALL BE THE SAME SIZE, SPECIES, & GRADE AS THE SURROUNDING WALL FRAMING.
4. AT ALL EXTERIOR WINDOW & DOOR LOCATIONS PROVIDE KING STUDS AS INDICATED ABOVE.
5. SPECIAL CALLOUTS INDICATED THUS:
   - (2) — INDICATES NUMBER OF TRIMMER STUDS REQ'D.
   - (3) — INDICATES NUMBER OF KING STUDS REQ'D.

   TAKE PRECEDENCE OVER THIS SCHEDULE.

COLUMN SCHEDULE

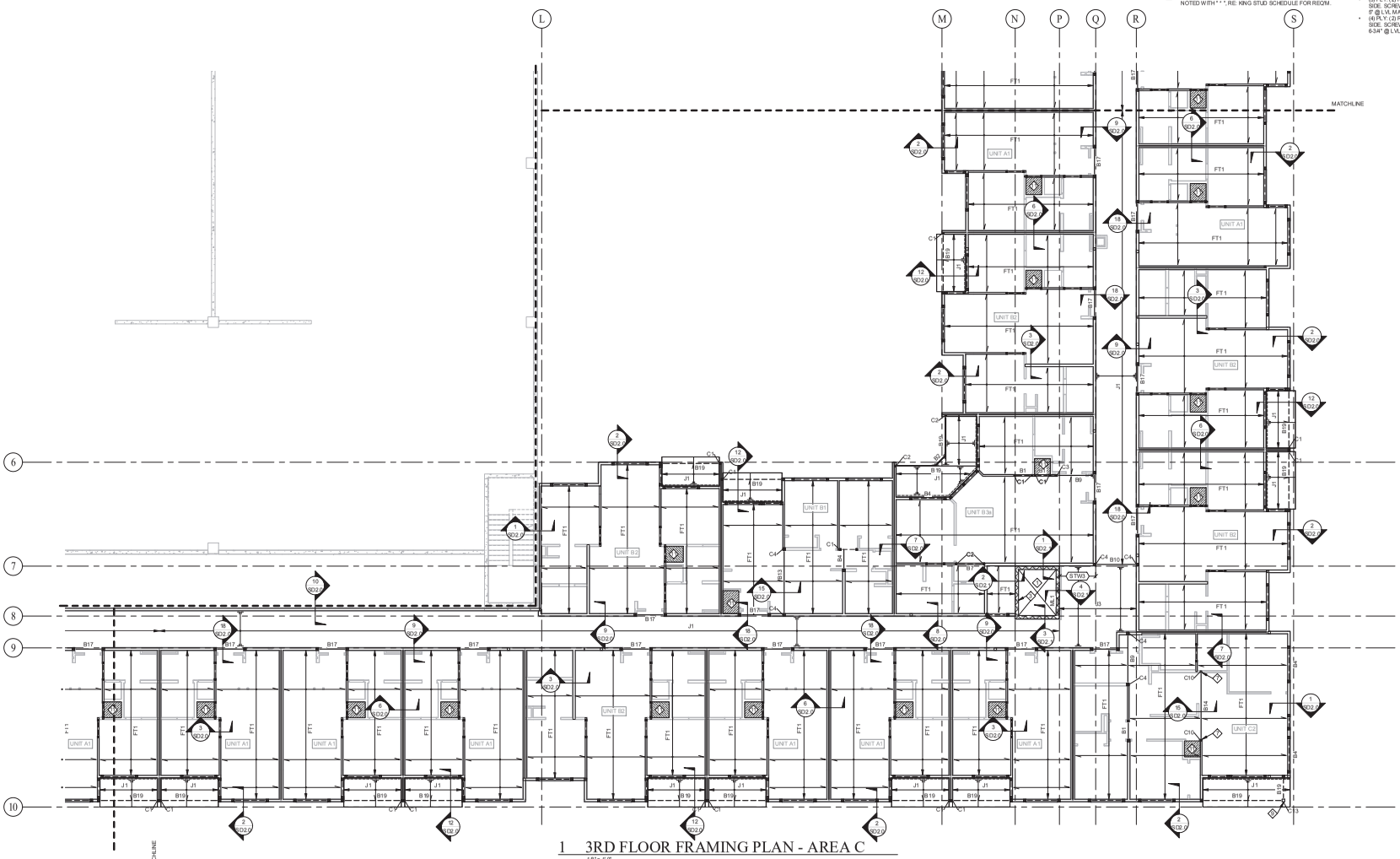
TYPE	SIZE	CAP/BASE
C1	(3) 2x4	N/A
C2	(4) 2x4	N/A
C3	(5) 2x4	N/A
C4	(3) 2x6	N/A
C5	(4) 2x6	N/A
C6	(5) 2x6	N/A
C7	P.T. 6x6	PCQ6/EPOSZ
C8	3-1/2"x7" PSL	PCQ4/EPOAZ
C9	5-1/4"x7" PSL	
C10	3" STD PIPE	RE: PLAN
C11	HSS7X3X1/2	RE: PLAN
C12	HSS5X5X1/2	RE: PLAN
C13	HSS6X6X1/8	RE: PLAN

NOTES:
1. STUD MATERIAL & GRADE TO MATCH STRENGTH PER THE GENERAL NOTES, U.N.O.
2. COLUMNS SHOWN THUS ⊠ ON PLAN & NOT CALLED OUT TO BE DBL. 2x4 IF POST IS LOCATED IN 2x4 WALL FRAMING, DBL. 2x6 IF LOCATED IN 2x6 WALL FRAMING.
3. □ INDICATES POST FROM ABOVE. CONTRACTOR TO ENSURE THAT POST BEARS DIRECTLY ATOP BEAM BELOW OR CONTINUE SAME POST THAT IS INDICATED IN UPPER FRAMING PLANS w/ SQUASH BLOCKS BETWEEN FLOORS TO THE FIND., TYP.
4. RE: APPROPRIATE DETAILS FOR CAP & BASE @ BOLTING REQ'M.
5. SUPPORT ALL EXTERIOR WINDOW & DOOR HEADERS w/ (2) TRIMMER STUDS U.N.O.; ONLY (1) TRIMMER IS REQ'D @ OPENINGS =< 4'-0", TYP. U.N.O.
6. SPECIAL CALLOUTS INDICATED THUS:
   - (#T) — INDICATES NUMBER OF TRIMMER STUDS REQ'D.
   - (#K) — INDICATES NUMBER OF KING STUDS REQ'D. WHEN NOTED WITH "* " : RE: KING STUD SCHEDULE FOR REQ'M.

BEAM SCHEDULE

TYPE	SIZE	HANGER
B1	(2) 2x8	N/A
B2	(2) 2x10	N/A
B3	(2) 2x12	N/A
B4	(3) 2x8	HU26-3 (MAX.)
B5	(3) 2x10	HHUS210-3
B6	(3) 2x12	HHUS210-3
B7	(2) 1-3/4" x 7-1/4" LVL	N/A
B8	(3) 1-3/4" x 7-1/4" LVL	N/A
B9	(2) 1-3/4" x 9-1/4" LVL	N/A
B10	(3) 1-3/4" x 9-1/4" LVL	N/A
B11	(4) 1-3/4" x 9-1/4" LVL	N/A
B12	(2) 1-3/4" x 11-7/8" LVL	N/A
B13	(3) 1-3/4" x 11-7/8" LVL	N/A
B14	(2) 1-3/4" x 14" LVL	HUC16/HUC416 (MAX)
B15	(3) 1-3/4" x 14" LVL	HHUS5.50/10
B16	(4) 1-3/4" x 14" LVL	HHUS7.25/10
B17	(2) 1-3/4" x 18" LVL	HGUS.414
B18	(3) 1-3/4" x 18" LVL	HGUS5.50/14
B19	P.T. DF No. 1 6x10	HUCQ610-SDS

NOTES:
1. BEAMS & HEADERS SHOWN ON PLAN & NOT DESIGNATED w/ A MARK ARE TO BE (2) 2x6. INCREASE TO THREE PLY BEAMS & HEADERS INSIDE 2x6 WALL FRAMING, TYP. @ CONTRACTOR'S OPTION, A FULL DEPTH HEADER MAY BE INSTALLED DIRECTLY BENEATH THE DBL. TOPPR. HEADER SIZE NOT TO BE LESS THAN INDICATED ON PLAN.
2. RE: COLUMN SCHEDULE FOR TRIMMER STUD REQ'M. & KING STUD SCHEDULE FOR KING S TUD REQ'M.
3. DASHED BEAM TYPES ARE DROPPED, TYPICAL.
4. SIDE LOADED MULTIPLE PLY BEAM CONNECTIONS:
   - (2) PLY NAIL w/ (3) ROWS 16d NAILS @ 12" o.c.
   - (3) PLY: (2) ROWS SIMPSON SDW SCREWS @ 12" o.c., ONE SIDE. SCREW LENGTH SHALL BE 4-5/8" @ 2x MATERIAL & 5" @ LVL MATERIAL.
   - (4) PLY: (2) ROWS SIMPSON SDW S CREWS @ 12" o.c., ONE SIDE. SCREW LENGTH SHALL BE 6-3/8" @ 2x MATERIAL & 6-3/4" @ LVL MATERIAL.



1 3RD FLOOR FRAMING PLAN - AREA C

1/8" = 1'-0"

NOTES:
1. RE: S0 SHEETS FOR TYPICAL FLOOR FRAMING NOTES.
2. RE: TRUSS, BEAM, & COLUMN SCHEDULES AS INDICATED BY FT#, J#, B# & C# CALLOUTS. FOR BEAMS & COLUMNS THAT ARE NOT CALLED OUT ON PLAN, RE: SCHEDULE NOTES, TYP.
3. RE: S0-0.1 FOR SHEAR WALL, HOLDOWN, AND STUD WALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.
4. TRUSS MANUFACTURER:
   -NUMBERS IN [XXXX.XXX] INDICATES ADDITIONAL SERVICE LINE LOAD IN POUNDS PER LINEAR FOOT (DEAD LOAD/LIVE LOAD) APPLIED TO FLOOR TRUSS SYSTEM FROM SUPPORTED WALL ABOVE. FLOOR TRUSS MANUFACTURER TO DESIGN FOR ADDITIONAL LOADS INDICATED.
   -NUMBERS IN [XXXXXXXX] INDICATES ADD'L. SERVICE POINT LOAD IN KIPS (DEAD LOADS/LIVE LOAD) APPLIED TO FLOOR TRUSS SYSTEM FROM SUPPORTED COLUMN ABOVE. FLOOR TRUSS MANUF. TO DESIGN FOR ADD'L. LOADS INDICATED.
5. [XX.XX] DENOTES SERVICE LOAD REACTION FOR USE BY STEEL FABRICATOR. FOR DESIGN OF STEEL BEAM CONNECTIONS. RE: S/S0-0.3 FOR STANDARD FRAME BEAM CONNECTION.
6. CONDITIONS WHERE DIMENSIONAL LUMBER IS EXPOSED, USE PRESSURE TREATED EQUIVALENT OF BEAMS, COLUMNS, RAFTERS AND JOISTS SHOWN IN PLAN

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REGISTERED PROFESSIONAL ENGINEER
STATE OF COLORADO
39330
08/05/2024
ANCHOR ENGINEERING

No.	Date	Issue
1	07/10/23	PERMIT SET
4	08/07/24	STC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: LEVEL 3 FRAMING PLAN - AREA C

Sheet Number: S2-2.3

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BEAM SCHEDULE		
TYPE	SIZE	HANGER
B1	(2) 2x8	N/A
B2	(2) 2x10	N/A
B3	(2) 2x12	N/A
B4	(3) 2x8	HU26-3 (MAX.)
B5	(3) 2x10	HHUS210-3
B6	(3) 2x12	HHUS210-3
B7	(2) 1-3/4" x 7-1/4" LVL	N/A
B8	(3) 1-3/4" x 7-1/4" LVL	N/A
B9	(2) 1-3/4" x 9-1/4" LVL	N/A
B10	(3) 1-3/4" x 9-1/4" LVL	N/A
B11	(4) 1-3/4" x 9-1/4" LVL	N/A
B12	(2) 1-3/4" x 11-7/8" LVL	N/A
B13	(3) 1-3/4" x 11-7/8" LVL	N/A
B14	(2) 1-3/4" x 14" LVL	HUI 16H/UC416 (MAX)
B15	(3) 1-3/4" x 14" LVL	HHUS5.50/10
B16	(4) 1-3/4" x 14" LVL	HHUS7.25/10
B17	(2) 1-3/4" x 18" LVL	HGUS414
B18	(3) 1-3/4" x 18" LVL	HGUS5.50/14
B19	P.T. DF No.1 6x10	HUCQ610-SDS

NOTES:
1. BEAMS & HEADERS SHOWN ON PLAN & NOT DESIGNATED w/ A MARK ARE TO BE (2) 2x8. INCREASE TO THREE PLY BEAMS & HEADERS INSIDE 2x6 WALL FRAMING, TYP. @ CONTRACTOR'S OPTION. A FULL DEPTH HEADER MAY BE INSTALLED DIRECTLY BENEATH THE DBL. TOP'R. HEADER SIZE NOT TO BE LESS THAN INDICATED ON PLAN.
2. RE: COLUMN SCHEDULE FOR TRIMMER STUD REQ'M. & KING STUD SCHEDULE FOR KING STUD REQ'M.
3. DASHED BEAM TYPES ARE DROPPED, TYP/CAL.
4. SIDE LOADED MULTIPLE PLY BEAM CONNECTIONS:
   - (2) PLY: NAIL w/ (3) ROWS 16d NAILS @ 12" o.c.
   - (3) PLY: (2) ROW'S SIMPSON SDW SCREWS @ 12" o.c., ONE SIDE. SCREW LENGTH SHALL BE 4-3/8" @ 2x MATERIAL & 8" @ LVL MATERIAL.
   - (4) PLY: (2) ROW'S SIMPSON SDW SCREWS @ 12" o.c., ONE SIDE. SCREW LENGTH SHALL BE 6-3/8" @ 2x MATERIAL & 6-3/4" @ LVL MATERIAL.

COLUMN SCHEDULE		
TYPE	SIZE	CAP/BASE
C1	(3) 2x4	N/A
C2	(4) 2x4	N/A
C3	(5) 2x4	N/A
C4	(3) 2x6	N/A
C5	(4) 2x6	N/A
C6	(5) 2x6	N/A
C7	P.T. 6x6	PCBZ/EPC6Z
C8	3-1/2"x7" PSL	PCAZ/EPC4Z
C9	5-1/4"x7" PSL	
C10	3" STD PIPE	RE: PLAN
C11	HSS7X3X1/2	RE: PLAN
C12	HSS5X5X1/2	RE: PLAN
C13	HSS6X6X1/8	RE: PLAN

NOTES:
1. STUD MATERIAL & GRADE TO MATCH STRENGTH PER THE GENERAL NOTES, U.N.O.
2. COLUMNS SHOWN THUS ■ ON PLAN & NOT CALLED OUT TO BE DBL. 2x4 IF POST IS LOCATED IN 2x4 WALL FRAMING, DBL. 2x6 IF LOCATED IN 2x6 WALL FRAMING.
3. □ INDICATES POST FROM ABOVE. CONTRACTOR TO ENSURE THAT POST BEARS DIRECTLY ATOP BEAM BELOW OR CONTINUE SAME POST THAT IS INDICATED IN UPPER FRAMING PLANS w/ SQUASH BLOCKS BETWEEN FLOORS TO THE IND., TYP.
4. RE: APPROPRIATE DETAILS FOR CAP R & BASE R BOLTING REQ'M.
5. SUPPORT ALL EXTERIOR WINDOW & DOOR HEADERS w/ (2) TRIMMER STUDS U.N.O.; ONLY (1) TRIMMER IS REQ'D @ OPENINGS < 4'-0", TYP. U.N.O.
6. SPECIAL CALLOUTS INDICATED THUS:
   #T/#K — INDICATES NUMBER OF TRIMMER STUDS REQ'D.
   #T/#K — INDICATES NUMBER OF KING STUDS REQ'D. WHEN NOTED WITH "*", RE: KING STUD SCHEDULE FOR REQ'M.

KING STUD SCHEDULE		
WALL HEIGHT (1)	OPENING WIDTH (2)	REQ'D. STUDS (3)
0'-0" =< h =< 10'-0"	0'-0" < w =< 3'-6"	(1) 2x6
	3'-6" < w =< 9'-0"	(2) 2x6
	9'-0" < w =< 14'-0"	(3) 2x6
	14'-0" < w =< 18'-0"	(4) 2x6
10'-0" < h =< 13'-0"	0'-0" < w =< 3'-6"	(2) 2x6
	3'-6" < w =< 6'-6"	(3) 2x6
	6'-6" < w =< 9'-6"	(4) 2x6

NOTES:
1. h = TOTAL STUD WALL HEIGHT, RE: ARCH.
2. w = ROUGH OPENING WIDTH, RE: ARCH. AT MULTI-SPAN HEADERS, INTERMEDIATE SUPPORTS SHALL NOT BE CONSIDERED AND THE OPENING WIDTH SHALL BE BASED ON THE FULL LENGTH OF THE HEADER.
3. KING STUDS SHALL BE THE SAME SIZE, SPECIES, & GRADE AS THE SURROUNDING WALL FRAMING.
4. AT ALL EXTERIOR WINDOW & DOOR LOCATIONS PROVIDE KING STUDS AS INDICATED ABOVE.
5. SPECIAL CALLOUTS INDICATED THUS:
   #T/#K — INDICATES NUMBER OF TRIMMER STUDS REQ'D.
   #T/#K — INDICATES NUMBER OF KING STUDS REQ'D.

   TAKE PRECEDENCE OVER THIS SCHEDULE.

FLOOR TRUSS & JOIST SCHEDULE			
TYPE	SIZE/SPACING	HANGER (FACE MOUNT)	HANGER (TOP FLANGE)
FT1	18" DEEP PRE-ENGINEERED TRUSSES SPACED PER MANUF. (24" o.c. MAX.)	PER MANUF.	PER MANUF.
FT2	16" DEEP PRE-ENGINEERED TRUSSES SPACED PER MANUF. (24" o.c. MAX.)	PER MANUF.	PER MANUF.
FEW	PRE-ENGINEERED END WALL TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
SFEW	PRE-ENGINEERED STRUC. END WALL TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
FGT	PRE-ENGINEERED GIRDER TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
J1	2x10's @ 16" o.c.	LUS210	N/A
J2	2x10's @ 12" o.c.	LUS210	N/A
J3	(2) 1-3/4"x9-1/4" LVL's @ 16" o.c.	HUS410	N/A

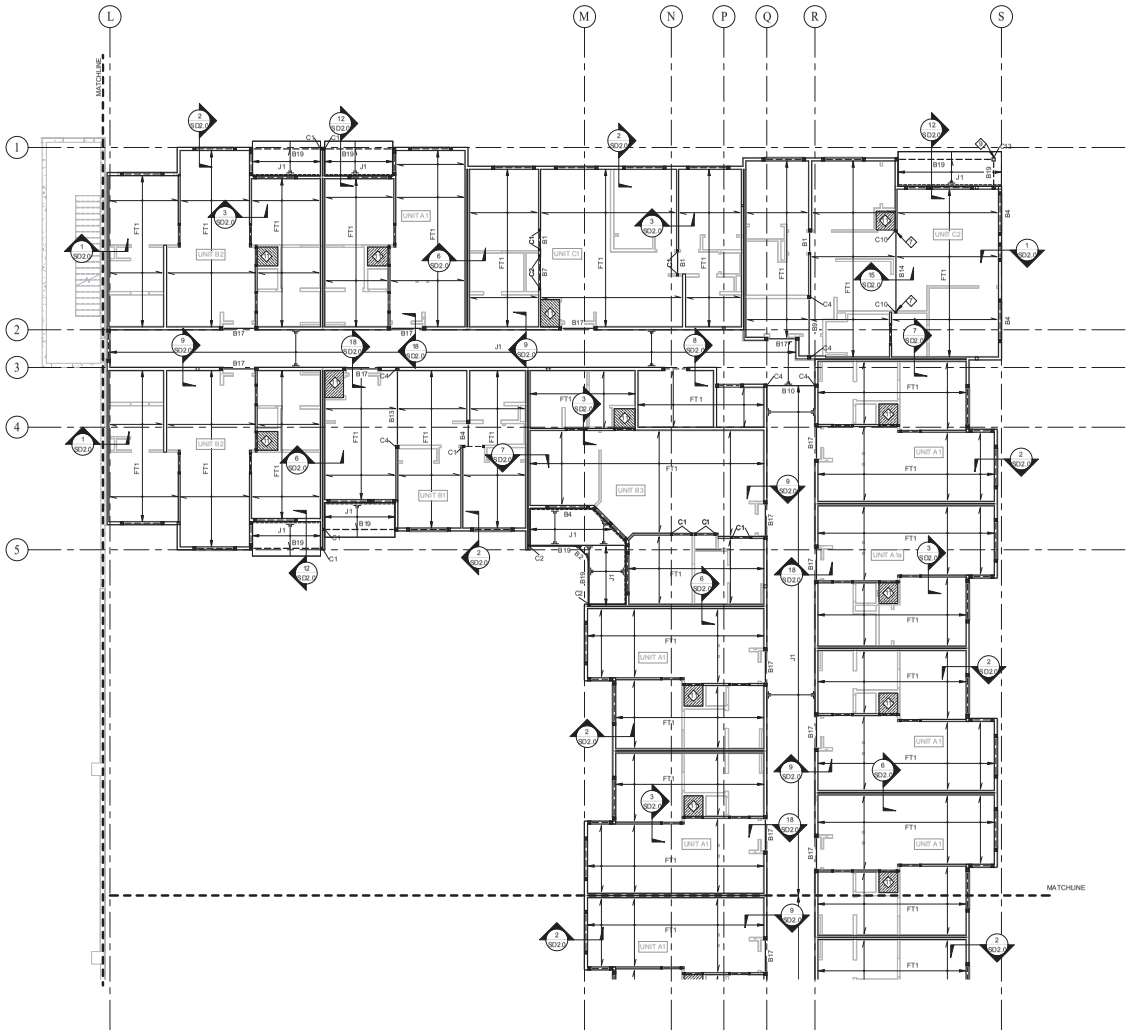
NOTES:
1. FLOOR TRUSSES SHALL BE DESIGNED & SHOP DRAWINGS SHALL BE PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF COLORADO. SUBMIT TO THE ARCHITECT FOR REVIEW & APPROVAL PRIOR TO SUBMITTING TO THE ENGINEER OF RECORD.
2. FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS FOR BLOCKING, BRIDGING, & CANTILEVERED ENDS.
3. FLOOR TRUSS MANUFACTURER TO DESIGN TRUSSES FOR THE FOLLOWING CRITERIA:
   - TRUSS DEFLECTIONS MUST NOT EXCEED L/480 LIVE LOAD, LIVE LOAD, L/240 DEAD LOAD, OR 1/2" (LIVE LOAD ONLY).
   - TYPICAL TRUSS LOADING (psf):

	TC LIVE LOAD	TC DEAD LOAD	BC LIVE LOAD	BC DEAD LOAD
UNIT FLOOR (TYP.)	30 psf	15 psf	0 psf	10 psf
CORRIDOR/STAIR FLOOR	100 psf	15 psf	0 psf	15 psf

HATCH INDICATES PUBLIC AREA LOADING, TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR 100 psf LIVE LOAD

HATCH INDICATES STORAGE AREA LOADING, TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR 125 psf LIVE LOAD

KEY NOTE SCHEDULE - FRAMING	
1	OPEN TO BELOW
2	ROOF ACCESS HATCH, RE: ARCH
3	@ CMU STAIR/ELEVATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S0.0.1 FOR REINF. REQ'M.
4	PROVIDE EPC6Z POST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UPSIDE DOWN EPC6Z POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"ø x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LGUH410-SDS HANGER FASTENED DIRECTLY TO CMU WALL w/ (8) 3/8"x4" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CCOQ/ECCOQ COLUMN CAP. WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL-AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP FLUSH WITH ADJACENT TRUSSES, TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM
9	RE: 8/SD2.1 FOR COLUMN CAP/BASE CONNECTION TO WOOD BEAMS
10	RE: 9/SD2.1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 24" CLEAR). TRUSS MANUF. TO DESIGN TRUSSES IN MECH. ROOM FOR 80psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13/SD1.0 w/ (4) 4-1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE
13	PROVIDE 11"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 8/38 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 9"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 8/38 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LCS4 COLUMN CAP CONNECTION AT ALL SIDE OF BEAM TO COLUMN BELOW (2) CLIPS TOTAL PER POST)
16	PROVIDE 9"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 8/38 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 9"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION



1 3RD FLOOR FRAMING PLAN - AREA D

1/8" = 1'-0"

NOTES:
1. RE: **S0** SHEETS FOR TYP/CAL FLOOR FRAMING NOTES.
2. RE: TRUSS, BEAM, & COLUMN SCHEDULES AS INDICATED BY FT#, JR, B# & C# CALLOUTS. FOR BEAMS & COLUMNS THAT ARE NOT CALLED OUT ON PLAN, RE: SCHEDULE NOTES, TYP.
3. RE: **S0-0.1** FOR SHEAR WALL, HOLDOWN, AND STUD WALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.
4. TRUSS MANUFACTURER:
   -NUMBERS IN (XXX.XX/XX) INDICATES ADDITIONAL SERVICE LINE LOAD IN POUNDS PER LINEAR FOOT (DEAD LOAD/LIVE LOAD) APPLIED TO FLOOR TRUSS SYSTEM FROM SUPPORTED WALL ABOVE. FLOOR TRUSS MANUFACTURER TO DESIGN FOR ADDITIONAL LOADS INDICATED.
   -NUMBERS IN (XXX/XXXX) INDICATES ADD'L. SERVICE POINT LOAD IN KIPS (DEAD LOAD/LIVE LOAD) APPLIED TO FLOOR TRUSS SYSTEM FROM SUPPORTED COLUMN ABOVE. FLOOR TRUSS MANUF. TO DESIGN FOR ADD'L. LOADS INDICATED.
5. [XX.XK] DENOTES SERVICE LOAD REACTION FOR USE BY STEEL FABRICATOR FOR DESIGN OF STEEL BEAM CONNECTIONS. RE: S/SHO.3 FOR STANDARD FRAME BEAM CONNECTION.
6. CONDITIONS WHERE DIMENSIONAL LUMBER IS EXPOSED, USE PRESSURE TREATED EQUIVALENT OF BEAMS, COLUMNS, RAFTERS AND JOISTS SHOWN IN PLAN

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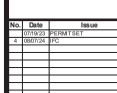

No.	Date	Issue
1	07/19/23	PERMIT SET
4	08/07/24	ITC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: LEVEL 3 FRAMING PLAN - AREA D

Sheet Number: **S2-2.4**

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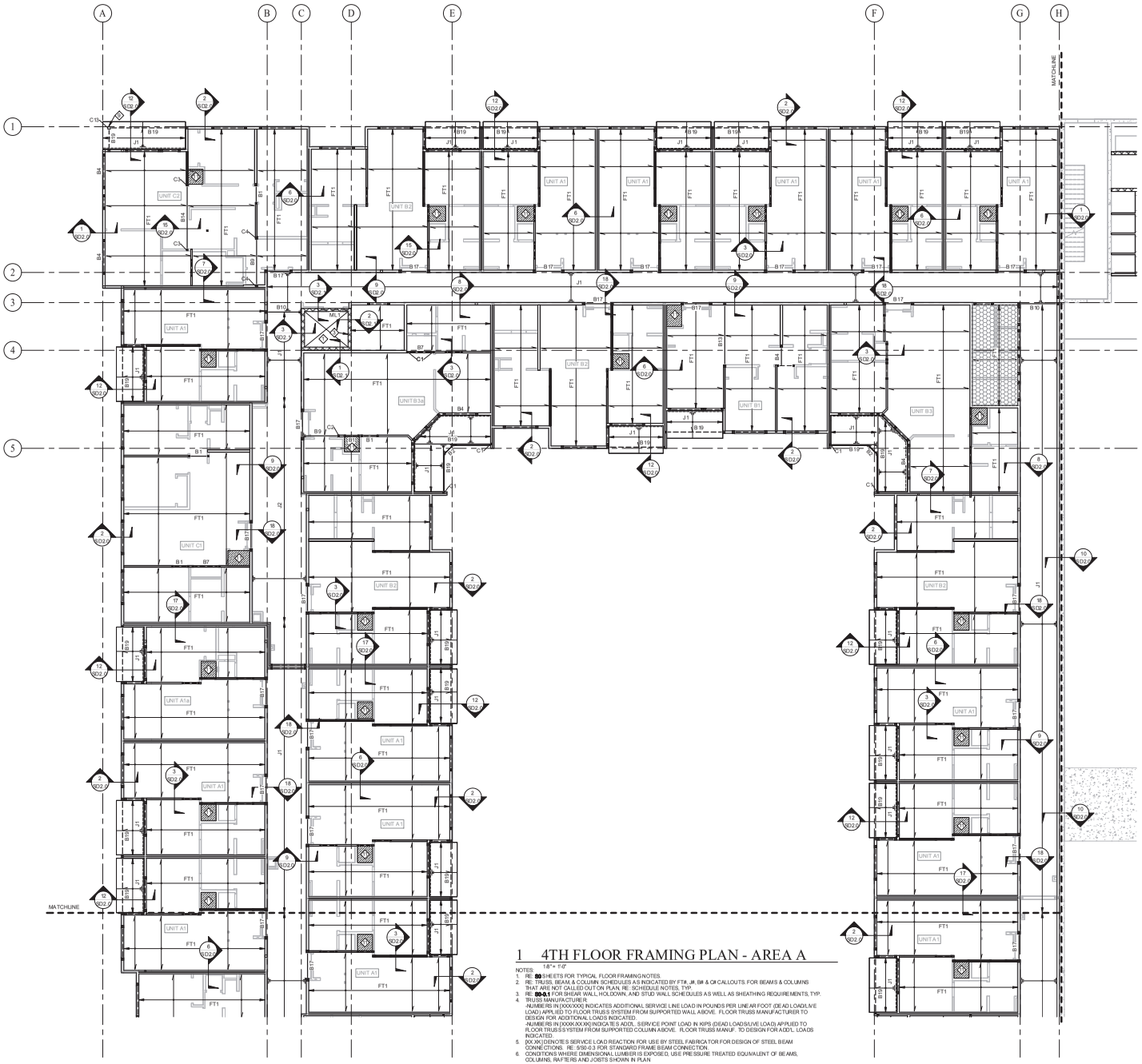

1 4TH FLOOR FRAMING PLAN - AREA A

1/8" = 1'-0"

NOTES:
1. RE: SHEETS FOR TYPICAL FLOOR FRAMING NOTES.
2. RE: TRUSS, BEAM, & COLUMN SCHEDULES AS INDICATED BY FTx, JR, B# & C# CALLOUTS. FOR BEAMS & COLUMNS THAT ARE NOT CALLED OUT ON PLAN, RE: SCHEDULE NOTES, TYP.
3. RE: SW-5.1 FOR SHEAR WALL HOLDOWN, AND STUD WALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.
4. TRUSS MANUFACTURER
   -NUMBERS IN (XXX/XXX) INDICATES ADDITIONAL SERVICE LINE LOAD IN POUNDS PER LINEAR FOOT (DEAD LOAD/LIVE LOAD) APPLIED TO FLOOR TRUSS SYSTEM FROM SUPPORTED WALL ABOVE. FLOOR TRUSS MANUFACTURER TO DESIGN FOR ADDITIONAL LOADS INDICATED.
   -NUMBERS IN (XXXK/XX.XK) INDICATES ADDL. SERVICE POINT LOAD IN KIPS (DEAD LOAD/LIVE LOAD) APPLIED TO FLOOR TRUSS SYSTEM FROM SUPPORTED COLUMN ABOVE. FLOOR TRUSS MANUF. TO DESIGN FOR ADDTL. LOADS INDICATED.
5. (XX.XK) DENOTES SERVICE LOAD REACTION FOR USE BY STEEL FABRICATOR FOR DESIGN OF STEEL BEAM CONNECTIONS. RE: S/S0-0.3 FOR STANDARD FRAME BEAM CONNECTION.
6. CONDITIONS WHERE DIMENSIONAL LUMBER IS EXPOSED, USE PRESSURE TREATED EQUIVALENT OF BEAMS, COLUMNS, RAFTERS AND JOISTS SHOWN IN PLAN

COLUMN SCHEDULE

TYPE	SIZE	CAP/BASE
C1	(3) 2x4	N/A
C2	(4) 2x4	N/A
C3	(5) 2x4	N/A
C4	(3) 2x6	N/A
C5	(4) 2x6	N/A
C6	(5) 2x6	N/A
C7	P.T. 6x6	PCQZ/EPCQZ
C8	3-1/2"x7" PSL	PCAZ/EPCAZ
C9	5-1/4"x7" PSL	—
C10	3" STD PIPE	RE: PLAN
C11	HSS7X3X1/2	RE: PLAN
C12	HSS6X6X1/2	RE: PLAN
C13	HSS6X6X1/8	RE: PLAN

NOTES:
1. STUD MATERIAL & GRADE TO MATCH STRENGTH PER THE GENERAL NOTES, U.N.O.
2. COLUMNS SHOWN THUS ⊠ ON PLAN & NOT CALLED OUT TO BE DBL. 2x4 IF POST IS LOCATED IN 2x4 WALL FRAMING, DBL. 2x6 IF LOCATED IN 2x6 WALL FRAMING.
3. □ INDICATES POST FROM ABOVE. CONTRACTOR TO ENSURE THAT POST BEARS DIRECTLY ATOP BEAM BELOW OR CONTINUE SAME POST THAT IS INDICATED IN UPPER FRAMING PLANS w/ SQUASH BLOCKS BETWEEN FLOORS TO THE IND., TYP.
4. RE: APPROPRIATE DETAILS FOR CAP & BASE & BOLTING REQM.
5. SUPPORT ALL EXTERIOR WINDOW & DOOR HEADERS w/ (2) TRIMMER STUDS U.N.O.; ONLY (1) TRIMMER IS REQ'D @ OPENINGS < 4'-0", TYP. U.N.O.
6. SPECIAL CALLOUTS INDICATED THUS:
   (T1) — INDICATES NUMBER OF TRIMMER STUDS REQ'D.
   (K1) — INDICATES NUMBER OF KING STUDS REQ'D. WHEN NOTED WITH " * ", RE: KING STUD SCHEDULE FOR REQM.

BEAM SCHEDULE

TYPE	SIZE	HANGER
B1	(2) 2x8	N/A
B2	(2) 2x10	N/A
B3	(2) 2x12	N/A
B4	(3) 2x8	HUZ6-3 (MAX.)
B5	(3) 2x10	HHUS210-3
B6	(3) 2x12	HHUS210-3
B7	(2) 1-3/4" x 7-1/4" LVL	N/A
B8	(3) 1-3/4" x 7-1/4" LVL	N/A
B9	(2) 1-3/4" x 9-1/4" LVL	N/A
B10	(3) 1-3/4" x 9-1/4" LVL	N/A
B11	(4) 1-3/4" x 9-1/4" LVL	N/A
B12	(2) 1-3/4" x 11-7/8" LVL	N/A
B13	(3) 1-3/4" x 11-7/8" LVL	N/A
B14	(2) 1-3/4" x 14" LVL	HUI416/HUC416 (MAX)
B15	(3) 1-3/4" x 14" LVL	HHUSS5070
B16	(4) 1-3/4" x 14" LVL	HHUS7.25/10
B17	(2) 1-3/4" x 18" LVL	HGUS414
B18	(3) 1-3/4" x 18" LVL	HGUSS.50/14
B19	P.T. DF No.1 6x10	HUC6Q10-SDS

NOTES:
1. BEAMS & HEADERS SHOWN ON PLAN & NOT DESIGNATED w/ A MARK ARE TO BE (2) 2x6. INCREASE TO THREE PLY BEAMS & HEADERS INSIDE 2x6 WALL FRAMING, TYP. @ CONTRACTOR'S OPTION, A FULL DEPTH HEADER MAY BE INSTALLED DIRECTLY BENEATH THE DBL. TOPPL HEADER SIZE NOT TO BE LESS THAN INDICATED ON PLAN.
2. RE: COLUMN SCHEDULE FOR TRIMMER STUD REQM. & KING STUD SCHEDULE FOR KING STUD REQM.
3. SKSHED BEAM TYPES ARE DROPPED, TYPICAL.
4. SIDE LOADED MULTIPLE PLY BEAM CONNECTIONS:
   - (2) PLY: NAIL w/ (3) ROWS 16d NAILS @ 12" o.c.
   - (3) PLY: (2) ROWS SIMPSON SDW SCREWS @ 12" o.c., ONE SIDE. SCREW LENGTH SHALL BE 4-5/8" @ 2x MATERIAL & 5" @ LVL MATERIAL.
   - (4) PLY: (2) ROWS SIMPSON SDWS SCREWS @ 12" o.c., ONE SIDE. SCREW LENGTH SHALL BE 5-3/8" @ 2x MATERIAL & 6-3/4" @ LVL MATERIAL.

FLOOR TRUSS & JOIST SCHEDULE

TYPE	SIZE/SPACING	HANGER (FACE MOUNT)	HANGER (TOP FLANGE)
FT1	18" DEEP PRE-ENGINEERED TRUSSEES SPACED PER MANUF. (24" o.c. MAX.)	PER MANUF.	PER MANUF.
FT2	16" DEEP PRE-ENGINEERED TRUSSEES SPACED PER MANUF. (24" o.c. MAX.)	PER MANUF.	PER MANUF.
FEW	PRE-ENGINEERED END WALL TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
SFEW	PRE-ENGINEERED STRUC. END WALL TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
FGT	PRE-ENGINEERED GIRDER TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
J1	2x10's @ 16" o.c.	LUS210	N/A
J2	2x10's @ 12" o.c.	LUS210	N/A
J3	(2) 1-3/4"x9-1/4" LVL's @ 16" o.c.	HUS410	N/A

NOTES:
1. FLOOR TRUSSES SHALL BE DESIGNED & SHOP DRAWINGS SHALL BE PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF COLORADO. SUBMIT TO THE ARCHITECT FOR REVIEW & APPROVAL PRIOR TO SUBMITTING TO THE ENGINEER OF RECORD.
2. FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS FOR BLOCKING, BRIDGING, & CANTILEVERED ENDS.
3. FLOOR TRUSS MANUFACTURER TO DESIGN TRUSSES FOR THE FOLLOWING CRITERIA:
   - TRUSS DEFLECTIONS MUST NOT EXCEED L/480 LIVE LOAD, LIVE LOAD, L/240 DEAD LOAD, OR 1/2" (LIVE LOAD ONLY).
   - TYPICAL TRUSS LOADING (psf):

	TC LIVE LOAD	TC DEAD LOAD	BC LIVE LOAD	BC DEAD LOAD
UNIT FLOOR (TYP.)	40 psf	15 psf	0 psf	10 psf
CORRIDOR/STAIR FLOOR	100 psf	15 psf	0 psf	15 psf

HATCH INDICATES PUBLIC AREA LOADING. TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR 100 psf LIVE LOAD

HATCH INDICATES STORAGE AREA LOADING. TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR 125 psf LIVE LOAD

KING STUD SCHEDULE

WALL HEIGHT (1)	OPENING WIDTH (2)	REQ'D. STUDS (3)
0'-0" =< h ≤ 10'-0"	0'-0" < w ≤ 3'-6"	(1) 2x6
	3'-6" < w ≤ 9'-0"	(2) 2x6
	9'-0" < w ≤ 14'-0"	(3) 2x6
	14'-0" < w ≤ 18'-0"	(4) 2x6
10'-0" < h ≤ 13'-0"	0'-0" < w ≤ 3'-6"	(2) 2x6
	3'-6" < w ≤ 6'-6"	(3) 2x6
	6'-6" < w ≤ 9'-6"	(4) 2x6

NOTES:
1. h = TOTAL STUD WALL HEIGHT, RE: ARCH.
2. w = ROUGH OPENING WIDTH, RE: ARCH. AT MULTI-SPAN HEADERS, INTERMEDIATE SUPPORTS SHALL NOT BE CONSIDERED AND THE OPENING WIDTH SHALL BE BASED ON THE FULL LENGTH OF THE HEADER.
3. KING STUDS SHALL BE THE SAME SIZE, SPECIES, & GRADE AS THE SURROUNDING WALL FRAMING.
4. AT ALL EXTERIOR WINDOW & DOOR LOCATIONS PROVIDE KING STUDS AS INDICATED ABOVE.
5. SPECIAL CALLOUTS INDICATED THUS:
   (T2) — INDICATES NUMBER OF TRIMMER STUDS REQ'D.
   (K2) — INDICATES NUMBER OF KING STUDS REQ'D.

TAKE PRECEDENCE OVER THIS SCHEDULE.

KEY NOTE SCHEDULE - FRAMING

1	OPEN TO BELOW
2	ROOF ACCESS HATCH, RE: ARCH
3	IF CMU STAIR/ELEVATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S3-0.1 FOR REINF. REQ'M.
4	PROVIDE EPCQZ POST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UPSIDE DOWN EPCQZ POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"Ø x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LGUM410-SDS HANGER FASTENED DIRECTLY TO CMU WALL w/ (8) 3/8"Ø x4" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CC/CQ/ECC/CQQ COLUMN CAP. WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL-AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP-FLUSH WITH ADJACENT TRUSSES, TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM
9	RE: S/S02.1 FOR COLUMN CAP/BASE CONNECTION TO WOOD BEAMS
10	RE: S/S02.1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 2'-0" CLEAR). TRUSS MANUF TO DESIGN TRUSSES IN MECH. RO'OM FOR 80psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13-SD1.0 w/ (4) 4-1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE
13	PROVIDE 11"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 83/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 8"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 83/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LCE4 COLUMN CAP CONNECTION EA. SIDE OF BEAM TO COLUMN BELOW (2) CLIPS TOTAL PER POST.
16	PROVIDE 8"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 83/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 8"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION

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No.	Date	Issue
1	07/19/23	PERMIT SET
4	08/07/24	DPC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: LEVEL 4 FRAMING PLAN - AREA A

Sheet Number: S2-3.1

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KEYNOTE SCHEDULE - FRAMING	
1	OPEN TO BELOW
2	ROOF ACCESS HATCH, RE: ARCH
3	8" CMU STAIR/ELEVATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S0-0.1 FOR REINF. REQ'M.
4	PROVIDE EPOSZ POST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UP SIDE DOWN EPOSZ POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"ø x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LGUH410-SDS HANGER FASTENED DIRECTLY TO CMU WALL w/ (6) 3/8"ø4" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CCOQ/ECCOQ COLUMN CAP. WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP-FLUSH WITH ADJACENT TRUSSES, TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM.
9	RE: 9/S23.1 FOR COLUMN CAP-BASE CONNECTION TO WOOD BEAMS
10	RE: 9/S23.1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 24" CLEAR). TRUSS MANUF TO DESIGN TRUSSES IN MECH. ROOM FOR 60psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13/SD1.0 w/ (4) 4 1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE.
13	PROVIDE 1"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM F OR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER ID3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS F OR ADD'L. INFORMATION. PROVIDE WEB STIFFENER ID3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LCI24 COLUMN CAP CONNECTION EA. SIDE OF BEAM TO COLUMN BELOW. (2) CLIPS TOTAL PER POST).
16	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS F OR ADD'L. INFORMATION. PROVIDE WEB STIFFENER ID3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 6"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION

FLOOR TRUSS & JOIST SCHEDULE			
TYPE	SIZE/SPACING	HANGER (FACE MOUNT)	HANGER (TOP FLANGE)
FT1	18" DEEP PRE-ENGINEERED TRUSSES SPACED PER MANUF. (24" o.c. MAX.)	PER MANUF.	PER MANUF.
FT2	16" DEEP PRE-ENGINEERED TRUSSES SPACED PER MANUF. (24" o.c. MAX.)	PER MANUF.	PER MANUF.
FEW	PRE-ENGINEERED END WALL TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
SFEW	PRE-ENGINEERED STRUC. END WALL TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
FGT	PRE-ENGINEERED GIRDER TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
J1	2x10's @ 16" o.c.	LUS210	N/A
J2	2x10's @ 12" o.c.	LUS210	N/A
J3	(2) 1-3/4"x9-1/4" LVL's @ 16" o.c.	HUS410	N/A

NOTES:
1. FLOOR TRUSSES SHALL BE DESIGNED & SHOP DRAWINGS SHALL BE PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF COLORADO. SUBMIT TO THE ARCHITECT FOR REVIEW & APPROVAL PRIOR TO SUBMITTING TO THE ENGINEER OF RECORD.
2. FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS FOR BLOCKING, BRIDGING, & CANTILEVERED ENDS.
3. FLOOR TRUSS MANUFACTURER TO DESIGN TRUSSES FOR THE FOLLOWING CRITERIA:
   - TRUSS DEFLECTIONS MUST NOT EXCEED L/480 LIVE LOAD, LIVE LOAD, L/240 DEAD LOAD, OR 1-1/2" (LIVE LOAD ONLY).
   - TYPICAL TRUSS LOADING (psf):

UNIT FLOOR (TYP.)	TC LIVE LOAD	TC DEAD LOAD	BC LIVE LOAD	BC DEAD LOAD
	40 psf	15 psf	0 psf	10 psf
CORRIDOR/STAIR FLOOR	100 psf	15 psf	0 psf	15 psf

HATCH INDICATES PUBLIC AREA
LOADING, TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR 100 psf LIVE LOAD

HATCH INDICATES STORAGE AREA
LOADING, TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR 125 psf LIVE LOAD

KING STUD SCHEDULE		
WALL HEIGHT (1)	OPENING WIDTH (2)	REQ'D. STUDS (3)
0'-0" =< h =< 10'-0"	0'-0" =< w =< 3'-0"	(1) 2x6
	3'-0" < w =< 9'-0"	(2) 2x6
	9'-0" < w =< 14'-0"	(3) 2x6
	14'-0" < w =< 18'-0"	(4) 2x6
10'-0" < h =< 13'-0"	0'-0" =< w =< 3'-0"	(2) 2x6
	3'-0" < w =< 6'-0"	(3) 2x6
	6'-0" < w =< 9'-0"	(4) 2x6

NOTES:
1. h = TOTAL STUD WALL HEIGHT, RE: ARCH.
2. w = ROUGH OPENING WIDTH, RE: ARCH. AT MULTI SPAN HEADERS, INTERMEDIATE SUPPORTS SHALL NOT BE CONSIDERED AND THE OPENING WIDTH SHALL BE BASED ON THE FULL LENGTH OF THE HEADER.
3. KING STUDS SHALL BE THE SAME SIZE, SPECIES, & GRADE AS THE SURROUNDING WALL FRAMING.
4. AT ALL EXTERIOR WINDOW & DOOR LOCATIONS PROVIDE KING STUDS AS INDICATED ABOVE.
5. SPECIAL CALLOUTS INDICATED THUS:
   - (#) = INDICATES NUMBER OF TRIMMER STUDS REQ'D.
   - (K#) = INDICATES NUMBER OF KING STUDS REQ'D.

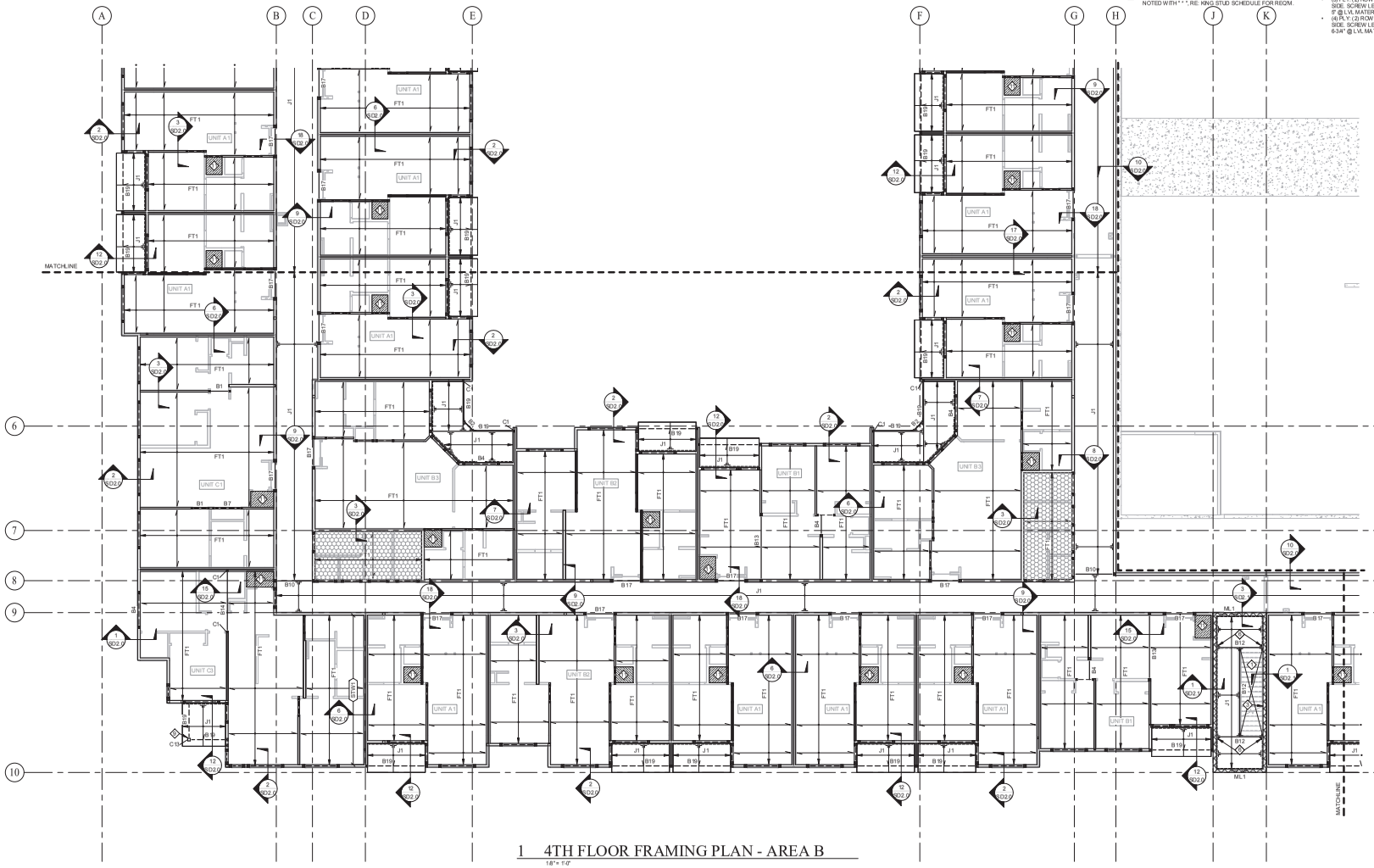
   TAKE PRECEDENCE OVER THIS SCHEDULE.

COLUMN SCHEDULE		
TYPE	SIZE	CAP/BASE
C1	(3) 2x4	N/A
C2	(4) 2x4	N/A
C3	(5) 2x4	N/A
C4	(3) 2x6	N/A
C5	(4) 2x6	N/A
C6	(5) 2x6	N/A
C7	P.T. 6x6	PCQZ/EPCBZ
C8	3-1/2"x7" PSL	PCAZ/EPCAZ
C9	5-1/4"x7" PSL	
C10	3" STD PIPE	RE: PLAN
C11	HSS73X3X1/2	RE: PLAN
C12	HSS6X5X1/2	RE: PLAN
C13	HSS6X6X1/8	RE: PLAN

NOTES:
1. STUD MATERIAL & GRADE TO MATCH STRENGTH PER THE GENERAL NOTES, U.N.O.
2. COLUMNS SHOWN THUS ⊠ ON PLAN & NOT CALLED OUT TO BE DBL. 2x4 IF POST IS LOCATED IN 2x4 WALL FRAMING, DBL. 2x6 IF LOCATED IN 2x6 WALL FRAMING.
3. ☐ INDICATES POST FROM ABOVE. CONTRACTOR TO ENSURE THAT POST BEARS DIRECTLY ATOP BEAM BELOW OR CONTINUE SAME POST THAT IS INDICATED IN UPPER FRAMING/PLANS w/ SQUASH BLOCKS BETWEEN FLOORS TO THE FND., TYP.
4. RE: APPROPRIATE DETAILS FOR CAP R & BASE R BOLTING REQ'M.
5. SUPPORT ALL EXTERIOR WINDOW & DOOR HEADERS w/ (2) TRIMMER STUDS U.N.O., ONLY (1) TRIMMER IS REQ'D @ OPENINGS =< 4'-0", TYP. U.N.O.
6. SPECIAL CALLOUTS INDICATED THUS:
   - (#) = INDICATES NUMBER OF TRIMMER STUDS REQ'D.
   - (K#) = INDICATES NUMBER OF KING STUDS REQ'D. WHEN NOTED WITH * * *, RE: KING STUD SCHEDULE FOR REQ'M.

BEAM SCHEDULE		
TYPE	SIZE	HANGER
B1	(2) 2x8	N/A
B2	(2) 2x10	N/A
B3	(2) 2x12	N/A
B4	(3) 2x8	HU26-3 (MAX.)
B5	(3) 2x10	HHUS210-3
B6	(3) 2x12	HHUS210-3
B7	(2) 1-3/4" x 7-1/4" LVL	N/A
B8	(3) 1-3/4" x 7-1/4" LVL	N/A
B9	(2) 1-3/4" x 9-1/4" LVL	N/A
B10	(3) 1-3/4" x 9-1/4" LVL	N/A
B11	(4) 1-3/4" x 9-1/4" LVL	N/A
B12	(2) 1-3/4" x 11-7/8" LVL	N/A
B13	(3) 1-3/4" x 11-7/8" LVL	N/A
B14	(2) 1-3/4" x 14" LVL	HUH16/HUC416 (MAX)
B15	(3) 1-3/4" x 14" LVL	HHUS5.50/16
B16	(4) 1-3/4" x 14" LVL	HHUS7.25/16
B17	(2) 1-3/4" x 18" LVL	HGUS.414
B18	(3) 1-3/4" x 18" LVL	HGUS5.50/14
B19	P.T. DF No. 1 6x10	HUCQ6.10-SDS

NOTES:
1. BEAMS & HEADERS SHOWN ON PLAN & NOT DESIGNATED w/ A MARK ARE TO BE (2) 2x6. INCREASE TO THREE PLY BEAMS & HEADERS INSIDE 2x6 WALL FRAMING. TYP. @ CONTRACTOR'S OPTION, A FULL DEPTH HEADER MAY BE INSTALLED DIRECTLY BENEATH THE DBL. TOPPR. HEADER SIZE NOT TO BE LESS THAN INDICATED ON PLAN.
2. RE: COLUMN SCHEDULE FOR TRIMMER STUD REQ'M. & KING STUD SCHEDULE FOR KING S TUD REQ'M.
3. DASHED BEAM TYPES ARE DROPPED, TYPICAL.
4. SIDE LOADED MULTIPLE PLY BEAM CONNECTIONS:
   - (2) PLY NAIL w/ (3) ROWS 16d NAILS @ 12" o.c.
   - (3) PLY: (2) ROWS SIMPSON SDW SCREWS @ 12" o.c., ONE SIDE. SCREW LENGTH SHALL BE 4-5/8" @ 2x MATERIAL & 5" @ LVL MATERIAL.
   - (4) PLY: (2) ROWS SIMPSON SDW SCREWS @ 12" o.c., ONE SIDE. SCREW LENGTH SHALL BE 6-3/8" @ 2x MATERIAL & 6-3/4" @ LVL MATERIAL.



1 4TH FLOOR FRAMING PLAN - AREA B

1/8" = 1'-0"

NOTES:
1. RE: S0 SHEETS FOR TYPICAL FLOOR FRAMING NOTES.
2. RE: TRUSS, BEAM, & COLUMN SCHEDULES AS INDICATED BY FT#, J#, B# & C# CALLOUTS. FOR BEAMS & COLUMNS THAT ARE NOT CALLED OUT ON PLAN, RE: SCHEDULE NOTES, TYP.
3. RE: S0-0.1 FOR SHEAR WALL, HOLDOWN, AND STUD WALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.
4. TRUSS MANUFACTURER:
   -NUMBERS IN [XXXXXXX] INDICATES ADDITIONAL SERVICE LINE LOAD IN POUNDS PER LINEAR FOOT (DEAD LOAD/LIVE LOAD) APPLIED TO FLOOR TRUSS SYSTEM FROM SUPPORTED WALL ABOVE. FLOOR TRUSS MANUFACTURER TO DESIGN FOR ADDITIONAL LOADS INDICATED.
   -NUMBERS IN [XXXXXXXX] INDICATES ADD'L. SERVICE POINT LOAD IN KIPS (DEAD LOADS/LIVE LOAD) APPLIED TO FLOOR TRUSS SYSTEM FROM SUPPORTED COLUMN ABOVE. FLOOR TRUSS MANUF. TO DESIGN FOR ADD'L. LOADS INDICATED.
5. (XX.XX) DENOTES SERVICE LOAD REACTION FOR USE BY STEEL FABRICATOR. FOR DESIGN OF STEEL BEAM CONNECTIONS. RE: S50-0.3 FOR STANDARD FRAME BEAM CONNECTION.
6. CONDITIONS WHERE DIMENSIONAL LUMBER IS EXPOSED, USE PRESSURE TREATED EQUIVALENT OF BEAMS, COLUMNS, RAFTERS AND JOISTS SHOWN IN PLAN

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STATE OF COLORADO
RYAN W. HOLT
39330
08/05/2024
REGISTERED PROFESSIONAL ENGINEER

No.	Date	Issue
1	07/19/23	PERMIT SET
4	08/07/24	ITC

Project Architect
Project Designer: MPM/SRJ/STZ
Date: 08/07/24
Job Number: 220930
Drawn By: CR/SRJ
Checked By: RWH
Title: LEVEL 4 FRAMING PLAN - AREA B
Sheet Number: S2-3.2

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KEYNOTE SCHEDULE - FRAMING	
1	OPEN TO BELOW
2	RO OF ACCESS HATCH, RE: ARCH
3	8" CMU STAIR/ELEVATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S0-0.1 FOR REINF. REQ'M.
4	PROVIDE EPOSZ POST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UP SIDE DOWN EPOSZ POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"ø x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LGUH410-SDS HANGER FASTENED DIRECTLY TO CMU WALL w/ (6) 3/8"ø4" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CCOQ/ECCOQ COLUMN CAP. WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP-FLUSH WITH ADJACENT TRUSSES, TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM.
9	RE: 9/S23.1 FOR COLUMN CAP-BASE CONNECTION TO WOOD BEAMS
10	RE: 9/S23.1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 24" CLEAR). TRUSS MANUF TO DESIGN TRUSSES IN MECH. ROOM FOR 60psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13/SD1.0 w/ (4) 4 1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE.
13	PROVIDE 1"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM F OR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER ß3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS F OR ADD'L. INFORMATION. PROVIDE WEB S TIFFENER ß3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LCI24 COLUMN CAP CONNECTION EA. SIDE OF BEAM TO COLUMN BELOW. (2) CLIPS TOTAL PER POST).
16	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS F OR ADD'L. INFORMATION. PROVIDE WEB S TIFFENER ß3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 6"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION

FLOOR TRUSS & JOIST SCHEDULE			
TYPE	SIZE/SPACING	HANGER (FACE MOUNT)	HANGER (TOP FLANGE)
FT1	18" DEEP PRE-ENGINEERED TRUSSES SPACED PER MANUF. (24" o.c. MAX.)	PER MANUF.	PER MANUF.
FT2	16" DEEP PRE-ENGINEERED TRUSSES SPACED PER MANUF. (24" o.c. MAX.)	PER MANUF.	PER MANUF.
FEW	PRE-ENGINEERED END WALL TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
SFEW	PRE-ENGINEERED STRUC. END WALL TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
FGT	PRE-ENGINEERED GIRDER TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
J1	2x10's @ 16" o.c.	LUS210	N/A
J2	2x10's @ 12" o.c.	LUS210	N/A
J3	(2) 1-3/4"x9-1/4" LVL's @ 16" o.c.	HUS410	N/A

NOTES:
1. FLOOR TRUSSES SHALL BE DESIGNED & SHOP DRAWINGS SHALL BE PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF COLORADO. SUBMIT TO THE ARCHITECT FOR REVIEW & APPROVAL PRIOR TO SUBMITTING TO THE ENGINEER OF RECORD.
2. FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS FOR BLOCKING, BRIDGING, & CANTILEVERED ENDS.
3. FLOOR TRUSS MANUFACTURER TO DESIGN TRUSSES FOR THE FOLLOWING CRITERIA:
   - TRUSS DEFLECTIONS MUST NOT EXCEED L/480 LIVE LOAD, LIVE LOAD, L/240 DEAD LOAD, OR 1/2" (LIVE LOAD ONLY).
   - TYPICAL TRUSS LOADING (psf):

UNIT FLOOR (TYP.)	TC LIVE LOAD	TC DEAD LOAD	BC LIVE LOAD	BC DEAD LOAD
	40 psf	15 psf	0 psf	10 psf
CORRIDOR/STAIR FLOOR	100 psf	15 psf	0 psf	15 psf

HATCH INDICATES PUBLIC AREA
LOADING, TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR 100 psf LIVE LOAD

HATCH INDICATES STORAGE AREA
LOADING, TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR 125 psf LIVE LOAD

KING STUD SCHEDULE		
WALL HEIGHT (1)	OPENING WIDTH (2)	REQ'D. STUDS (3)
0'-0" =< h ≤ 10'-0"	0'-0" < w ≤ 3'-0"	(1) 2x6
	3'-0" < w ≤ 9'-0"	(2) 2x6
	9'-0" < w ≤ 14'-0"	(3) 2x6
	14'-0" < w ≤ 18'-0"	(4) 2x6
10'-0" < h ≤ 13'-0"	0'-0" < w ≤ 3'-0"	(2) 2x6
	3'-0" < w ≤ 6'-6"	(3) 2x6
	6'-6" < w ≤ 9'-6"	(4) 2x6

NOTES:
1. h = TOTAL STUD WALL HEIGHT, RE: ARCH.
2. w = ROUGH OPENING WIDTH, RE: ARCH. AT MULTI SPAN HEADERS, INTERMEDIATE SUPPORTS SHALL NOT BE CONSIDERED AND THE OPENING WIDTH SHALL BE BASED ON THE FULL LENGTH OF THE HEADER.
3. KING STUDS SHALL BE THE SAME SIZE, SPECIES, & GRADE AS THE SURROUNDING WALL FRAMING.
4. AT ALL EXTERIOR WINDOW & DOOR LOCATIONS PROVIDE KING STUDS AS INDICATED ABOVE.
5. SPECIAL CALLOUTS INDICATED THUS:
   - (#) — INDICATES NUMBER OF TRIMMER STUDS REQ'D.
   - (K) — INDICATES NUMBER OF KING STUDS REQ'D.

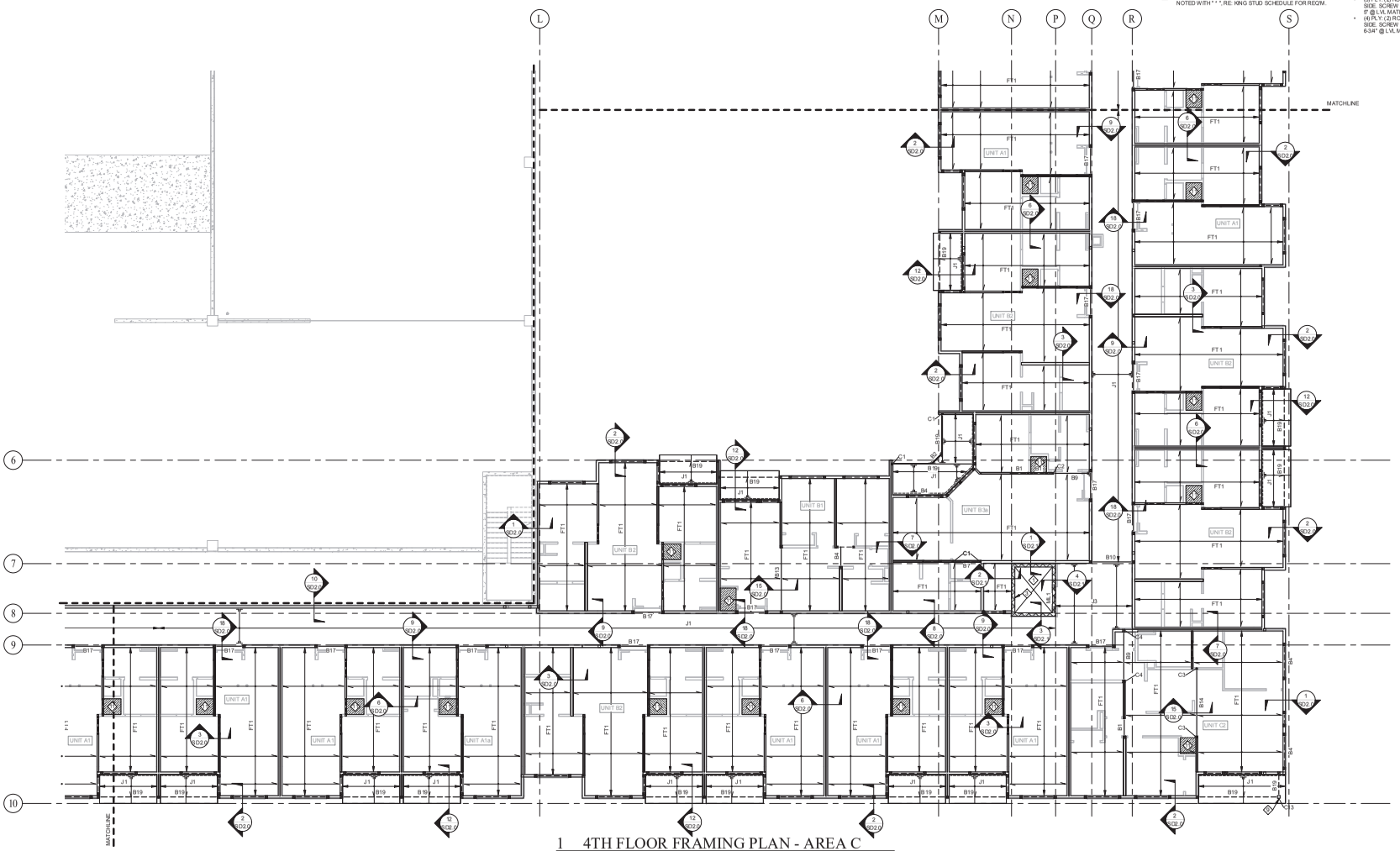
   TAKE PRECEDENCE OVER THIS SCHEDULE.

COLUMN SCHEDULE		
TYPE	SIZE	CAP/BASE
C1	(3) 2x4	N/A
C2	(4) 2x4	N/A
C3	(5) 2x4	N/A
C4	(3) 2x6	N/A
C5	(4) 2x6	N/A
C6	(5) 2x6	N/A
C7	P.T. 6x6	PCQZ/EPCQZ
C8	3-1/2"x7" PSL	PCQZ/EPCQZ
C9	5-1/4"x7" PSL	
C10	3" STD PIPE	RE: PLAN
C11	HSS73X3X1/2	RE: PLAN
C12	HSS5X5X1/2	RE: PLAN
C13	HSS6X6X1/8	RE: PLAN

NOTES:
1. STUD MATERIAL & GRADE TO MATCH STRENGTH PER THE GENERAL NOTES, U.N.O.
2. COLUMNS SHOWN THUS ⊠ ON PLAN & NOT CALLED OUT TO BE DBL. 2x4 IF POST IS LOCATED IN 2x4 WALL FRAMING, DBL. 2x6 IF LOCATED IN 2x6 WALL FRAMING.
3. ☐ INDICATES POST FROM ABOVE. CONTRACTOR TO ENSURE THAT POST BEARS DIRECTLY ATOP BEAM BELOW OR CONTINUE SAME POST THAT IS INDICATED IN UPPER FRAMING PLANS w/ SQUASH BLOCKS BETWEEN FLOORS TO THE FIND., TYP.
4. RE: APPROPRIATE DETAILS FOR CAP & BASE ® BOLTING REQ'M.
5. SUPPORT ALL EXTERIOR WINDOW & DOOR HEADERS w/ (2) TRIMMER STUDS U.N.O.; ONLY (1) TRIMMER IS REQ'D @ OPENINGS <4'-0", TYP. U.N.O.
6. SPECIAL CALLOUTS INDICATED THUS:
   - (#) — INDICATES NUMBER OF TRIMMER STUDS REQ'D..
   - (K) — INDICATES NUMBER OF KING STUDS REQ'D. WHEN NOTED WITH " * ": RE: KING STUD SCHEDULE FOR REQ'M.

BEAM SCHEDULE		
TYPE	SIZE	HANGER
B1	(2) 2x8	N/A
B2	(2) 2x10	N/A
B3	(2) 2x12	N/A
B4	(3) 2x8	HU26-3 (MAX.)
B5	(3) 2x10	HHUS210-3
B6	(3) 2x12	HHUS210-3
B7	(2) 1-3/4" x 7-1/4" LVL	N/A
B8	(3) 1-3/4" x 7-1/4" LVL	N/A
B9	(2) 1-3/4" x 9-1/4" LVL	N/A
B10	(3) 1-3/4" x 9-1/4" LVL	N/A
B11	(4) 1-3/4" x 9-1/4" LVL	N/A
B12	(2) 1-3/4" x 11-7/8" LVL	N/A
B13	(3) 1-3/4" x 11-7/8" LVL	N/A
B14	(2) 1-3/4" x 14" LVL	HUH16/HUC416 (MAX)
B15	(3) 1-3/4" x 14" LVL	HHUS5.50/16
B16	(4) 1-3/4" x 14" LVL	HHUS7.25/16
B17	(2) 1-3/4" x 18" LVL	HGUS.414
B18	(3) 1-3/4" x 18" LVL	HGUS5.50/14
B19	P.T. DF No. 1 6x10	HUCQ6 10-SDS

NOTES:
1. BEAMS & HEADERS SHOWN ON PLAN & NOT DESIGNATED w/ A MARK ARE TO BE: (3) 2x6 INCREASE TO THREE PLY BEAMS & HEADERS INSIDE 2x6 WALL FRAMING, TYP. @ CONTRACTOR'S OPTION, A FULL DEPTH HEADER MAY BE INSTALLED DIRECTLY BENEATH THE DBL. TOPPR. HEADER SIZE NOT TO BE LESS THAN INDICATED ON PLAN.
2. RE: COLUMN SCHEDULE FOR TRIMMER STUD REQ'M. & KING STUD SCHEDULE FOR KING S TUD REQ'M.
3. DASHED BEAM TYPES ARE DROPPED, TYPICAL.
4. SIDE LOADED MULTIPLE PLY BEAM CONNECTIONS:
   - (2) PLY NAIL w/ (3) ROWS 16d NAILS @ 12" o.c.
   - (3) PLY: (2) ROWS SIMPSON SDW SCREWS @ 12" o.c., ONE SIDE. SCREW LENGTH SHALL BE 4-5/8" @ 2x MATERIAL & 5" @ LVL MATERIAL.
   - (4) PLY: (2) ROWS SIMPSON SDW S CREWS @ 12" o.c., ONE SIDE. SCREW LENGTH SHALL BE 6-3/8" @ 2x MATERIAL & 6-3/4" @ LVL MATERIAL.



1 4TH FLOOR FRAMING PLAN - AREA C

1/8" = 1'-0"

NOTES:
1. RE: ▣ SHEETS FOR TYPICAL FLOOR FRAMING NOTES.
2. RE: TRUSS, BEAM, & COLUMN SCHEDULES AS INDICATED BY FT#, J#, B# & C# CALLOUTS. FOR BEAMS & COLUMNS THAT ARE NOT CALLED OUT ON PLAN, RE: SCHEDULE NOTES, TYP.
3. RE: ▣-0.1 FOR SHEAR WALL, HOLDOWN, AND STUD WALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.
4. TRUSS MANUFACTURER:
   -NUMBERS IN [XXXXXXX] INDICATES ADDITIONAL SERVICE LINE LOAD IN POUNDS PER LINEAR FOOT (DEAD LOAD/LIVE LOAD) APPLIED TO FLOOR TRUSS SYSTEM FROM SUPPORTED WALL ABOVE. FLOOR TRUSS MANUFACTURER TO DESIGN FOR ADDITIONAL LOADS INDICATED.
   -NUMBERS IN [XXXXXXXX] INDICATES ADD'L. SERVICE POINT LOAD IN KIPS (DEAD LOADS/LIVE LOAD) APPLIED TO FLOOR TRUSS SYSTEM FROM SUPPORTED COLUMN ABOVE. FLOOR TRUSS MANUF. TO DESIGN FOR ADD'L. LOADS INDICATED.
5. [XX.XX] DENOTES SERVICE LOAD REACTION FOR USE BY STEEL FABRICATOR. FOR DESIGN OF STEEL BEAM CONNECTIONS. RE: S/S0-0.3 FOR STANDARD FRAME BEAM CONNECTION.
6. CONDITIONS WHERE DIMENSIONAL LUMBER IS EXPOSED, USE PRESSURE TREATED EQUIVALENT OF BEAMS, COLUMNS, RAFTERS AND JOISTS SHOWN IN PLAN

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No.	Date	Issue
1	07/10/23	PERMIT SET
4	08/07/24	PC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: LEVEL 4 FRAMING PLAN - AREA C

Sheet Number: **S2-3.3**

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BEAM SCHEDULE		
TYPE	SIZE	HANGER
B1	(2) 2x8	N/A
B2	(2) 2x10	N/A
B3	(2) 2x12	N/A
B4	(3) 2x8	HU26-3 (MAX.)
B5	(3) 2x10	HHUS210-3
B6	(3) 2x12	HHUS210-3
B7	(2) 1-3/4" x 7-1/4" LVL	N/A
B8	(3) 1-3/4" x 7-1/4" LVL	N/A
B9	(2) 1-3/4" x 9-1/4" LVL	N/A
B10	(3) 1-3/4" x 9-1/4" LVL	N/A
B11	(4) 1-3/4" x 9-1/4" LVL	N/A
B12	(2) 1-3/4" x 11-7/8" LVL	N/A
B13	(3) 1-3/4" x 11-7/8" LVL	N/A
B14	(2) 1-3/4" x 14" LVL	HUI 16H/UC416 (MAX)
B15	(3) 1-3/4" x 14" LVL	HHUS5.50/10
B16	(4) 1-3/4" x 14" LVL	HHUS7.25/10
B17	(2) 1-3/4" x 18" LVL	HGUS414
B18	(3) 1-3/4" x 18" LVL	HGUS5.50/14
B19	P.T. DF No.1 6x10	HUCQ610-SDS

NOTES:
1. BEAMS & HEADERS SHOWN ON PLAN & NOT DESIGNATED w/ A MARK ARE TO BE (2) 2x8. INCREASE TO THREE PLY BEAMS & HEADERS INSIDE 2x6 WALL FRAMING. TYP. @ CONTRACTOR'S OPTION. A FULL DEPTH HEADER MAY BE INSTALLED DIRECTLY BENEATH THE DBL. TOP.E. HEADER SIZE NOT TO BE LESS THAN INDICATED ON PLAN.
2. RE: COLUMN SCHEDULE FOR TRIMMER STUD REQ'M. & KING STUD SCHEDULE FOR KING STUD REQ'M.
3. DASHED BEAM TYPES ARE DROPPED. TYP/CAL.
4. SIDE LOADED MULTIPLE PLY BEAM CONNECTIONS:
   - (2) PLY: NAIL w/ (3) ROWS 16d NAILS @ 12" o.c.
   - (3) PLY: (2) ROW'S SIMPSON SDW SCREWS @ 12" o.c., ONE SIDE. SCREW LENGTH SHALL BE 4-3/8" @ 2x MATERIAL & 8" @ LVL MATERIAL.
   - (4) PLY: (2) ROW'S SIMPSON SDW SCREWS @ 12" o.c., ONE SIDE. SCREW LENGTH SHALL BE 6-3/8" @ 2x MATERIAL & 6-3/4" @ LVL MATERIAL.

COLUMN SCHEDULE		
TYPE	SIZE	CAP/BASE
C1	(3) 2x4	N/A
C2	(4) 2x4	N/A
C3	(5) 2x4	N/A
C4	(3) 2x6	N/A
C5	(4) 2x6	N/A
C6	(5) 2x6	N/A
C7	P.T. 6x6	PCBZ/EPC6Z
C8	3-1/2"x7" PSL	PCAZ/EPC4Z
C9	5-1/4"x7" PSL	
C10	3" STD PIPE	RE: PLAN
C11	HSS7X3X1/2	RE: PLAN
C12	HSS6X6X1/2	RE: PLAN
C13	HSS6X6X1/8	RE: PLAN

NOTES:
1. STUD MATERIAL & GRADE TO MATCH STRENGTH PER THE GENERAL NOTES, U.N.O.
2. COLUMNS SHOWN THUS ■ ON PLAN & NOT CALLED OUT TO BE DBL. 2x4 IF POST IS LOCATED IN 2x4 WALL FRAMING, DBL. 2x6 IF LOCATED IN 2x6 WALL FRAMING.
3. □ INDICATES POST FROM ABOVE. CONTRACTOR TO ENSURE THAT POST BEARS DIRECTLY ATOP BEAM BELOW OR CONTINUE SAME POST THAT IS INDICATED IN UPPER FRAMING PLANS w/ SQUASH BLOCKS BETWEEN FLOORS TO THE IND., TYP.
4. RE: APPROPRIATE DETAILS FOR CAP R & BASE R BOLTING REQ'M.
5. SUPPORT ALL EXTERIOR WINDOW & DOOR HEADERS w/ (2) TRIMMER STUDS U.N.O.; ONLY (1) TRIMMER IS REQ'D @ OPENINGS < 4'-0", TYP. U.N.O.
6. SPECIAL CALLOUTS INDICATED THUS:
   #T / #K — INDICATES NUMBER OF TRIMMER STUDS REQ'D. / INDICATES NUMBER OF KING STUDS REQ'D. WHEN NOTED WITH "*", RE: KING STUD SCHEDULE FOR REQ'M.

KING STUD SCHEDULE		
WALL HEIGHT (1)	OPENING WIDTH (2)	REQ'D. STUDS (3)
0'-0" =< h =< 10'-0"	0'-0" < w =< 3'-6"	(1) 2x6
	3'-6" < w =< 9'-0"	(2) 2x6
	9'-0" < w =< 14'-0"	(3) 2x6
	14'-0" < w =< 18'-0"	(4) 2x6
10'-0" < h =< 13'-0"	0'-0" < w =< 3'-6"	(2) 2x6
	3'-6" < w =< 6'-6"	(3) 2x6
	6'-6" < w =< 9'-6"	(4) 2x6

NOTES:
1. h = TOTAL STUD WALL HEIGHT, RE: ARCH.
2. w = ROUGH OPENING WIDTH, RE: ARCH. AT MULTI-SPAN HEADERS, INTERMEDIATE SUPPORTS SHALL NOT BE CONSIDERED AND THE OPENING WIDTH SHALL BE BASED ON THE FULL LENGTH OF THE HEADER.
3. KING STUDS SHALL BE THE SAME SIZE, SPECIES, & GRADE AS THE SURROUNDING WALL FRAMING.
4. AT ALL EXTERIOR WINDOW & DOOR LOCATIONS PROVIDE KING STUDS AS INDICATED ABOVE.
5. SPECIAL CALLOUTS INDICATED THUS:
   #T / #K — INDICATES NUMBER OF TRIMMER STUDS REQ'D. / INDICATES NUMBER OF KING STUDS REQ'D.

   TAKE PRECEDENCE OVER THIS SCHEDULE.

FLOOR TRUSS & JOIST SCHEDULE			
TYPE	SIZE/SPACING	HANGER (FACE MOUNT)	HANGER (TOP FLANGE)
FT1	9" DEEP PRE-ENGINEERED TRUSSES SPACED PER MANUF. (24" o.c. MAX.)	PER MANUF.	PER MANUF.
FT2	16" DEEP PRE-ENGINEERED TRUSSES SPACED PER MANUF. (24" o.c. MAX.)	PER MANUF.	PER MANUF.
FEW	PRE-ENGINEERED END WALL TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
SFEW	PRE-ENGINEERED STRUC. END WALL TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
FGT	PRE-ENGINEERED GIRDER TRUSS (MATCH ADJACENT TRUSS DEPTH)	PER MANUF.	PER MANUF.
J1	2x10's @ 16" o.c.	LUS210	N/A
J2	2x10's @ 12" o.c.	LUS210	N/A
J3	(2) 1-3/4"x9-1/4" LVL's @ 16" o.c.	HUS410	N/A

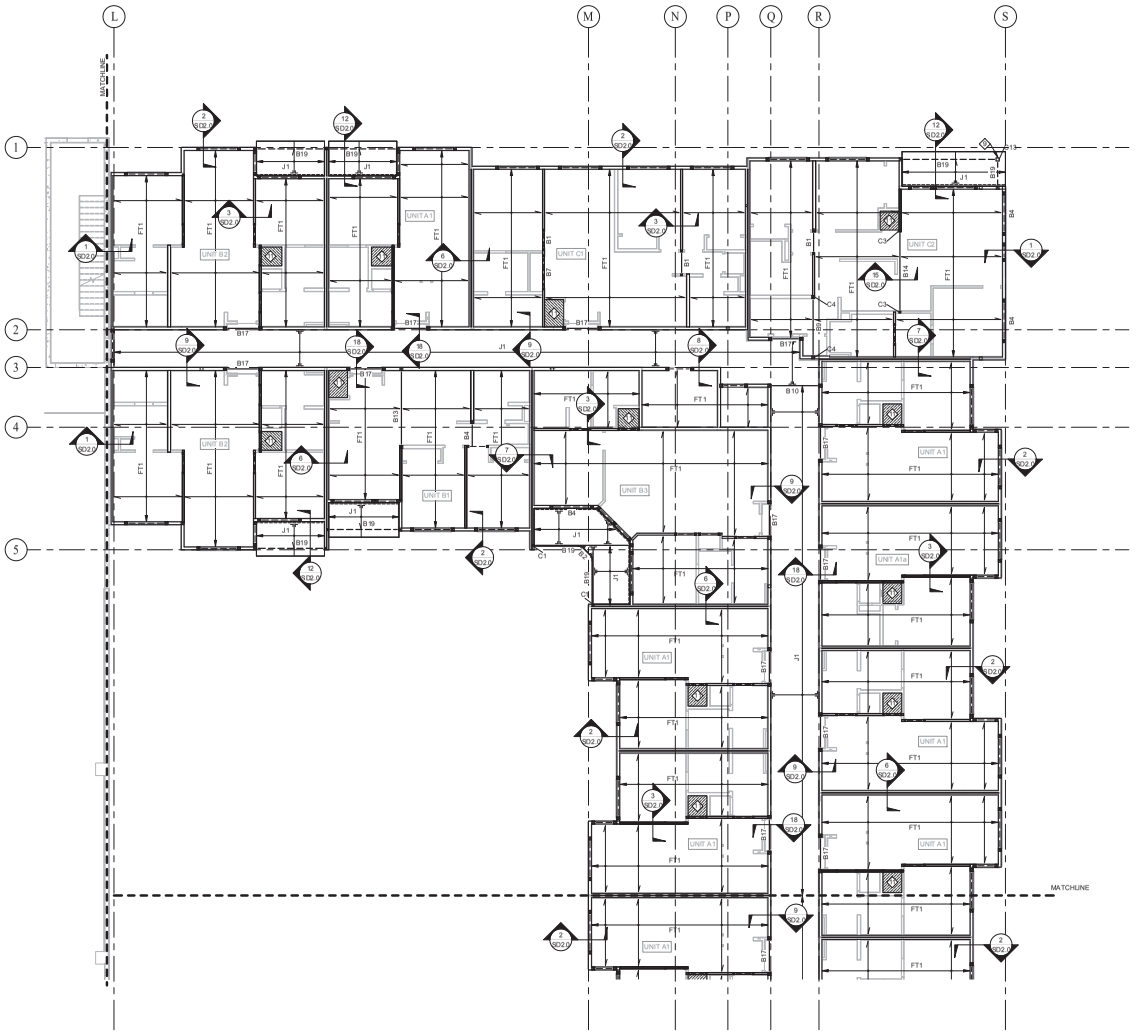
NOTES:
1. FLOOR TRUSSES SHALL BE DESIGNED & SHOP DRAWINGS SHALL BE PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF COLORADO. SUBMIT TO THE ARCHITECT FOR REVIEW & APPROVAL PRIOR TO SUBMITTING TO THE ENGINEER OF RECORD.
2. FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS FOR BLOCKING, BRIDGING, & CANTILEVERED ENDS.
3. FLOOR TRUSS MANUFACTURER TO DESIGN TRUSSES FOR THE FOLLOWING CRITERIA:
   - TRUSS DEFLECTIONS MUST NOT EXCEED L/480 LIVE LOAD, LIVE LOAD, L/240 DEAD LOAD, OR 1/2" (LIVE LOAD ONLY).
   - TYPICAL TRUSS LOADING (psf):

	TC LIVE LOAD	TC DEAD LOAD	BC LIVE LOAD	BC DEAD LOAD
UNIT FLOOR (TYP.)	30 psf	15 psf	0 psf	10 psf
CORRIDOR/STAIR FLOOR	100 psf	15 psf	0 psf	15 psf

HATCH INDICATES PUBLIC AREA LOADING, TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR 100 psf LIVE LOAD

HATCH INDICATES STORAGE AREA LOADING, TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR 125 psf LIVE LOAD

KEYNOTE SCHEDULE - FRAMING	
1	OPEN TO BELOW
2	ROOF ACCESS HATCH, RE: ARCH
3	IF CMU STAIR/ELEVATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S0.0.1 FOR REINF. REQ'M.
4	PROVIDE EPC6Z POST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UPSIDE DOWN EPC6Z POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"Ø x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LGUM410-SDS HANGER FASTENED DIRECTLY TO CMU WALL w/ (8) 3/8"x4" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CCQQ/ECCQQ COLUMN CAP. WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL-AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP FLUSH WITH ADJACENT TRUSSES, TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM
9	RE: 8/SD2.1 FOR COLUMN CAP/BASE CONNECTION TO WOOD BEAMS
10	RE: 9/SD2.1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 24" CLEAR). TRUSS MANUF. TO DESIGN TRUSSES IN MECH. ROOM FOR 80psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13/SD1.0 w/ (4) 4-1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE
13	PROVIDE 11"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 8/S8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 8/S8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LCS4 COLUMN CAP CONNECTION AT EA. SIDE OF BEAM TO COLUMN BELOW (2) CLIPS TOTAL PER POST)
16	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 8/S8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION



1 4TH FLOOR FRAMING PLAN - AREA D

1/8" = 1'-0"

NOTES:
1. RE: **S0** SHEETS FOR TYP/CAL FLOOR FRAMING NOTES.
2. RE: TRUSS, BEAM, & COLUMN SCHEDULES AS INDICATED BY FT#, JR, B# & C# CALLOUTS. FOR BEAMS & COLUMNS THAT ARE NOT CALLED OUT ON PLAN, RE: SCHEDULE NOTES, TYP.
3. RE: **S0-0.1** FOR SHEAR WALL, HOLDOWN, AND STUD WALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.
4. TRUSS MANUFACTURER:
   -NUMBERS IN (XXX,XXX)INDICATES ADDITIONAL SERVICE LINE LOAD IN POUNDS PER LINEAR FOOT (DEAD LOAD/LIVE LOAD) APPLIED TO FLOOR TRUSS SYSTEM FROM SUPPORTED WALL ABOVE. FLOOR TRUSS MANUFACTURER TO DESIGN FOR ADDITIONAL LOADS INDICATED.
   -NUMBERS IN (XXXX/XXXX) INDICATES ADD'L. SERVICE POINT LOAD IN KIPS (DEAD LOAD/LIVE LOAD) APPLIED TO FLOOR TRUSS SYSTEM FROM SUPPORTED COLUMN ABOVE. FLOOR TRUSS MANUF. TO DESIGN FOR ADD'L. LOADS INDICATED.
5. [XX,XX] DENOTES SERVICE LOAD REACTION FOR USE BY STEEL FABRICATOR FOR DESIGN OF STEEL BEAM CONNECTIONS. RE: S/SHO.3 FOR STANDARD FRAME BEAM CONNECTION.
6. CONDITIONS WHERE DIMENSIONAL LUMBER IS EXPOSED, USE PRESSURE TREATED EQUIVALENT OF BEAMS, COLUMNS, RAFTERS AND JOISTS SHOWN IN PLAN

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STATE OF COLORADO
RYAN W. HOLT
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REGISTERED
PROFESSIONAL ENGINEER
08/05/2024

No.	Date	Issue
	07/19/24	PERMIT SET
1	08/07/24	PC

Project Architect
Project Designer MPM/SRJ/STZ
Date 08/07/24
Job Number 220930
Drawn By CR/SRJ
Checked By RWH
Title LEVEL 4 FRAMING PLAN - AREA D
Sheet Number **S2-3.4**

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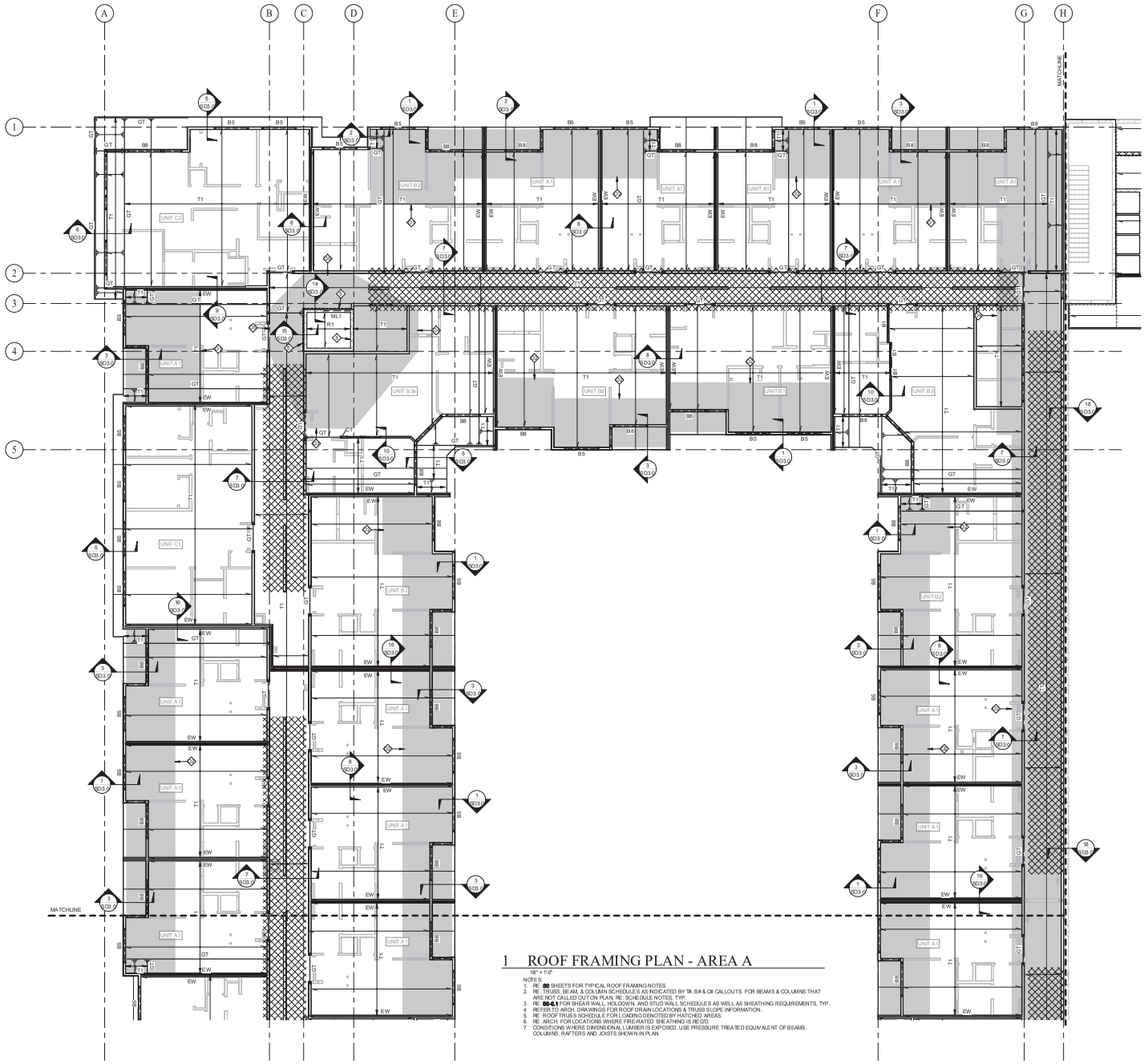

1 ROOF FRAMING PLAN - AREA A

18" = 1'-0"

NOTES:
1. RE: **S0** SHEETS FOR TYPICAL ROOF FRAMING NOTES.
2. RE: TRUSS, BEAM, & COLUMN SCHEDULES AS INDICATED BY 'B#, B#' & C#' CALLOUTS. FOR BEAMS & COLUMNS THAT ARE NOT CALLED OUT ON PLAN, RE: SCHEDULE NOTES, TYP.
3. RE: **S0-0.1** FOR SHEAR WALL, HOLDOWN, AND STUD WALL SCHEDULE S AS WELL AS SHEATHING REQUIREMENTS, TYP.
4. REFER TO ARCH. DRAWINGS FOR ROOF DRAIN LOCATIONS & TRUSS SLOPE INFORMATION.
5. RE: ROOF TRUSS SCHEDULE FOR LOADING DENOTED BY HATCHED AREAS.
6. RE: ARCH. FOR LOCATIONS WHERE FIRE-RATED SHEATHING IS REQ'D.
7. CONDITIONS WHERE DIMENSIONAL LUMBER IS EXPOSED, USE PRESSURE TREATED EQUIVALENT OF BEAMS, COLUMNS, RAFTERS AND JOISTS SHOWN IN PLAN

COLUMN SCHEDULE

TYPE	SIZE	CAP/BASE
C1	(3) 2x6	N/A
C2	(4) 2x4	N/A
C3	(5) 2x4	N/A
C4	(3) 2x6	N/A
C5	(4) 2x6	N/A
C6	(5) 2x6	N/A
C7	P.T. 6x6	PCBZ/EPC6Z
C8	3-1/2"X7" PSL	PCAZ/EPC4Z
C9	5-1/4"X7" PSL	
C10	3" STD PIPE	RE: PLAN
C11	HSS7X3X1/2	RE: PLAN
C12	HSS8X3X1/2	RE: PLAN
C13	HSS6X6X1/8	RE: PLAN

NOTES:
1. STUD MATERIAL & GRADE TO MATCH STRENGTH PER THE GENERAL NOTES, U.N.O.
2. COLUMNS SHOWN THUS ■ ON PLAN & NOT CALLED OUT TO BE DBL. 2x4 IF POST IS LOCATED IN 2x4 WALL FRAMING, DBL. 2x6 IF LOCATED IN 2x6 WALL FRAMING.
3. ☐ INDICATES POST FROM ABOVE. CONTRACTOR TO ENSURE THAT POST BEARS DIRECTLY ATOP BEAM BELOW OR CONTINUE SAME POST THAT IS INDICATED IN UPPER FRAMING PLANS w/ SQUASH BLOCKS BETWEEN FLOORS TO THE FND., TYP.
4. RE: APPROPRIATE DETAILS FOR CAP R & BASE R BOLTING REQM.
5. SUPPORT ALL EXTERIOR WINDOW & DOOR HEADERS w/ (2) TRIMMER STUDS U.N.O., ONLY (1) TRIMMER IS REQ'D @ OPENINGS < 4'-0", TYP. U.N.O.
6. SPECIAL CALLOUTS INDICATED THUS:
   - #T = INDICATES NUMBER OF TRIMMER STUDS REQ'D.
   - #K = INDICATES NUMBER OF KING STUDS REQ'D. WHEN NOTED WITH " * ", RE: KING STUD SCHEDULE FOR REQM.

BEAM SCHEDULE

TYPE	SIZE	HANGER
B1	(2) 2x8	N/A
B2	(2) 2x10	N/A
B3	(2) 2x12	N/A
B4	(3) 2x8	HUZ6-3 (MAX.)
B5	(3) 2x10	HHUS210-3
B6	(3) 2x12	HHUS210-3
B7	(2) 1-3/4" x 7-1/4" LVL	N/A
B8	(3) 1-3/4" x 7-1/4" LVL	N/A
B9	(2) 1-3/4" x 9-1/4" LVL	N/A
B10	(3) 1-3/4" x 9-1/4" LVL	N/A
B11	(4) 1-3/4" x 9-1/4" LVL	N/A
B12	(2) 1-3/4" x 11-7/8" LVL	N/A
B13	(3) 1-3/4" x 11-7/8" LVL	N/A
B14	(2) 1-3/4" x 14" LVL	HUI416/HUC416 (MAX)
B15	(3) 1-3/4" x 14" LVL	HHUSS.50/10
B16	(4) 1-3/4" x 14" LVL	HHUS7.25/10
B17	(2) 1-3/4" x 18" LVL	HGUS414
B18	(3) 1-3/4" x 18" LVL	HGUSS.50/14
B19	P.T. DF No.1 6x10	HUC6Q10-SDS

NOTES:
1. BEAMS & HEADERS SHOWN ON PLAN & NOT DESIGNATED w/ A MARK ARE TO BE (2) 2x6. INCREASE TO THREE PLY BEAMS & HEADERS INSIDE 2x6 WALL FRAMING, TYP. @ CONTRACTOR'S OPTION, A FULL DEPTH HEADER MAY BE INSTALLED DIRECTLY BENEATH THE DBL. TOP'R. HEADER SIZE NOT TO BE LESS THAN INDICATED ON PLAN.
2. RE: COLUMN SCHEDULE FOR TRIMMER STUD REQM. & KING STUD SCHEDULE FOR KING STUD REQM.
3. DASHED BEAM TYPES ARE DROPPED, TYPICAL.
4. SIDE LOADED MULTIPLE PLY BEAM CONNECTIONS:
   - (2) PLY: NAIL w/ (3) ROWS 16d NAILS @ 12" o.c.
   - (3) PLY: (2) ROWS SIMPSON SDW SCREWS @ 12" o.c., ONE SIDE. SCREW LENGTH SHALL BE 4-5/8" @ 2x MATERIAL & 9" @ LVL MATERIAL.
   - (4) PLY: (2) ROWS SIMPSON SDWS SCREWS @ 12" o.c., ONE SIDE. SCREW LENGTH SHALL BE 5-3/8" @ 2x MATERIAL & 6-3/4" @ LVL MATERIAL.

KING STUD SCHEDULE

WALL HEIGHT (1)	OPENING WIDTH (w) (2)	REQ'D. STUDS (K)
0'-0" =< h =< 10'-0"	0'-0" < w =< 3'-0"	(1) 2x6
	3'-0" < w =< 9'-0"	(2) 2x6
	9'-0" < w =< 14'-0"	(3) 2x6
	14'-0" < w =< 18'-0"	(4) 2x6
10'-0" < h =< 13'-0"	0'-0" < w =< 3'-0"	(2) 2x6
	3'-0" < w =< 6'-0"	(3) 2x6
	6'-0" < w =< 9'-0"	(4) 2x6

NOTES:
1. h = TOTAL STUD WALL HEIGHT, RE: ARCH.
2. w = ROUGH OPENING WIDTH, RE: ARCH. AT MULTI-SPAN HEADERS, INDICATE SUPPORTS SHALL NOT BE CONSIDERED AND THE OPENING WIDTH SHALL BE BASED ON THE FULL LENGTH OF THE HEADER.
3. KING STUDS SHALL BE THE SAME SIZE, SPECIES, & GRADE AS THE SURROUNDING WALL FRAMING.
4. AT ALL EXTERIOR WINDOW & DOOR LOCATIONS PROVIDE KING STUDS AS INDICATED ABOVE.
5. SPECIAL CALLOUTS INDICATED THUS:
   - #T = INDICATES NUMBER OF TRIMMER STUDS REQ'D.
   - #K = INDICATES NUMBER OF KING STUDS REQ'D.

TAKE PRECEDENCE OVER THIS SCHEDULE.

ROOF TRUSS SCHEDULE

TYPE	DESCRIPTION/SPACING	HANGER
T1	ROOF TRUSSES @ 24" o.c. (MAX.)	PER MANUF.
T2	JACK TRUSSES @ 24" o.c. (MAX.)	PER MANUF.
GT	GIRDER TRUSS	PER MANUF.
EW	ENDWALL TRUSS	PER MANUF.
SEW	STRUCTURAL ENDWALL TRUSS	PER MANUF.
R1	2x12 RAFTERS @ 16" o.c.	LUS210
R2	1-¾" TJI 210 RAFTERS @ 24" o.c.	IUS2.06/14

NOTES:
1. TRUSSES SHALL BE DESIGNED & SHOP DRAWINGS SHALL BE PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF COLORADO.
2. GIRDER TRUSSES (GT) SHALL BE SUPPORTED BY QUADRUPLE 2x GANG STUDS EA. END. STUDS SHALL BE CONT. TO FND. PROVIDE FULL DEPTH BLOCKING BTWN. FLOORS, TYP.
3. TRUSS MANUF. TO DESIGN & SUPPLY ALL TRUSS TO- TRUSS, TRUSS-TO-BEAM, & TRUSS-TO-GIRDER CONNECTIONS, TYP.
4. * RE: ARCH. FOR 60:1 CHORD OF ROOF TRUSS PROFILE TYP.
5. TRUSS MANUF. TO DESIGN TRUSSES FOR:
   TC DEAD LOAD = 15 psf (5psf ALLOWANCE FOR SOLAR PANELS)
   BC DEAD LOAD = 10 psf
   SNOW LOAD = 30 psf, TYPICAL

HATCH INDICATES SNOW DRIFT ZONE. PORTIONS OF TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR AN ADDTL. TOP CHORD SNOW LOAD AS INDICATED ON PLAN.

HATCH INDICATES MECH. ZONE. PORTIONS OF TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR AN ADDTL. TOP CHORD DEAD LOAD OF 20 psf.

KEYNOTE SCHEDULE - SNOW DRIFT

D1	MAX DRIFT LOAD = +34.8 psf REDUCING TO A MIN. UNIFORM FLAT ROOF SNOW LOAD OF 30 psf 15'-0" FROM PARAPET/ROOF PROJECTION.
D2	MAX DRIFT LOAD = +34.8 psf REDUCING TO A MIN. UNIFORM FLAT ROOF SNOW LOAD OF 30 psf 9'-9" FROM PARAPET/ROOF PROJECTION.
D3	MAX DRIFT LOAD = +71.2 psf REDUCING TO A MIN. UNIFORM FLAT ROOF SNOW LOAD OF 30 psf 15'-4" FROM PARAPET/ROOF PROJECTION.
D4	MAX DRIFT LOAD = +59.6 psf REDUCING TO A MIN. UNIFORM FLAT ROOF SNOW LOAD OF 30 psf 12'-10" FROM PARAPET/ROOF PROJECTION.
D5	MAX DRIFT LOAD = +32.1 psf REDUCING TO A MIN. UNIFORM FLAT ROOF SNOW LOAD OF 30 psf 7'-0" FROM PARAPET/ROOF PROJECTION.

KEYNOTE SCHEDULE - FRAMING

1	OPEN TO BELOW
2	RO OF ACCESS HATCH, RE: ARCH
3	8" CMU STAIR/ELEVATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S0-0.1 FOR REINF. REQ'M.
4	PROVIDE EPC6Z POST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UPSIDE DOWN EPC6Z POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"Ø x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LGUM410-SDS HANGER FASTENED DIRECTLY TO CMU WALL w/ (8) 3/8"x4" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CCQ3/CCQ3Q COLUMN CAP. WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP-FLUSH WITH ADJACENT TRUSSES, TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM
9	RE: S/SD2.1 FOR COLUMN CAP/BASE CONNECTION TO WOOD BEAMS
10	RE: S/SD2.1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 2-0" CLEAR). TRUSS MANUF TO DESIGN TRUSSES IN MECH. ROOM FOR 80psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13/SD1.0 w/ (4) ¾ x 1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE
13	PROVIDE 1 7/8" MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADDTL. INFORMATION. PROVIDE WEB STIFFENER 8D/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 9" MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADDTL. INFORMATION. PROVIDE WEB STIFFENER 8D/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LGE4 COLUMN CAP CONNECTION EA. SIDE OF BEAM TO COLUMN BELOW (22) CLIPS TOTAL PER POST)
16	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADDTL. INFORMATION. PROVIDE WEB STIFFENER 8D/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 6"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADDTL. INFORMATION

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No.	Date	Issue
3	07/19/23	PERMIT SET
4	08/07/24	PC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: ROOF FRAMING PLAN - AREA A

Sheet Number: **S2-4.1**

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KEYNOTE SCHEDULE - FRAMING	
1	OPEN TO BELOW
2	RO OF ACCESS HATCH, RE: ARCH
3	8" CMU STAIR/ELEVATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S0-0.1 FOR REINF. REQ'M.
4	PROVIDE EPOSZ POST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UP SIDE DOWN EPOSZ POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"ø x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LGUM410-SDS HANGER FASTENED DIRECTLY TO CMU WALL w/ (6) 3/8"x4" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CCOQ/ECCOQ COLUMN CAP. WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP-FLUSH WITH ADJACENT TRUSSES, TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM.
9	RE: 9/S2.1 FOR COLUMN CAP/BASE CONNECTION TO WOOD BEAMS
10	RE: 9/S2.1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 24" CLEAR). TRUSS MANUF TO DESIGN TRUSSES IN MECH. ROOM FOR 60psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13/SD1.0 w/ (4) 4 1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE.
13	PROVIDE 1"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM F OR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 8D/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS F OR ADD'L. INFORMATION. PROVIDE WEB S TIFFENER 8D/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LCD4 COLUMN CAP CONNECTION EA. SIDE OF BEAM TO COLUMN BELOW (2) CLIPS TOTAL PER POST).
16	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS F OR ADD'L. INFORMATION. PROVIDE WEB S TIFFENER 8D/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 6"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION

KEYNOTE SCHEDULE - SNOW DRIFT	
D1	MAX DRIFT LOAD = +34.9 psf REDUCING TO A MIN. UNIFORM FLAT ROOF SNOW LOAD OF 30 psf 15'-0" FROM PARAPET/ROOF PROJECTION.
D2	MAX DRIFT LOAD = +34.9 psf REDUCING TO A MIN. UNIFORM FLAT ROOF SNOW LOAD OF 30 psf 9'-9" FROM PARAPET/ROOF PROJECTION.
D3	MAX DRIFT LOAD = +71.2 psf REDUCING TO A MIN. UNIFORM FLAT ROOF SNOW LOAD OF 30 psf 15'-4" FROM PARAPET/ROOF PROJECTION.
D4	MAX DRIFT LOAD = +59.6 psf REDUCING TO A MIN. UNIFORM FLAT ROOF SNOW LOAD OF 30 psf 12'- 10" FROM PARAPET/ROOF PROJECTION.
D5	MAX DRIFT LOAD = +32.1 psf REDUCING TO A MIN. UNIFORM FLAT ROOF SNOW LOAD OF 30 psf 7'-0" FROM PARAPET/ROOF PROJECTION.

KING STUD SCHEDULE		
WALL HEIGHT [1]	OPENING WIDTH [2]	REQ'D. STUDS [3]
0'-0" =< h =< 10'-0"	0'-0" < w =< 3'-0"	(1) 2x6
	3'-6" < w =< 9'-0"	(2) 2x6
	9'-0" < w =< 14'-0"	(3) 2x6
	14'-0" < w =< 18'-0"	(4) 2x6
10'-0" < h =< 13'-0"	0'-0" < w =< 3'-6"	(2) 2x6
	3'-6" < w =< 6'-6"	(3) 2x6
	6'-6" < w =< 9'-6"	(4) 2x6

NOTES:
1. h = TOTAL STUD WALL HEIGHT, RE: ARCH.
2. w = ROUGH OPENING WIDTH, RE: ARCH. AT MULTI-SPAN HEADERS, INTERMEDIATE SUPPORTS SHALL NOT BE CONSIDERED AND THE OPENING WIDTH SHALL BE BASED ON THE FULL LENGTH OF THE HEADER.
3. KING STUDS SHALL BE THE SAME SIZE, SPECIES, & GRADE AS THE SURROUNDING WALL FRAMING.
4. AT ALL EXTERIOR WINDOW & DOOR LOCATIONS PROVIDE KING STUDS AS INDICATED ABOVE.
5. SPECIAL CALLOUTS INDICATED THUS:
   - (#) — INDICATES NUMBER OF TRIMMER STUDS REQ'D.
   - (K) — INDICATES NUMBER OF KING STUDS REQ'D.

   TAKE PRECEDENCE OVER THIS SCHEDULE.

ROOF TRUSS SCHEDULE		
TYPE	DESCRIPTION/SPACING	HANGER
T1	ROOF TRUSSES @ 24" o.c. (MAX.)	PER MANUF.
T2	JACK TRUSSES @ 24" o.c. (MAX.)	PER MANUF.
GT	GIRDER TRUSS	PER MANUF.
EW	END WALL TRUSS	PER MANUF.
SEW	STRUCTURAL END WALL TRUSS	PER MANUF.
R1	2x12 RAFTERS @ 16" o.c.	LUS210
R2	1/4" TJI 210 RAFTERS @ 24" o.c.	IUS2.06/14

NOTES:
1. TRUSSES SHALL BE DESIGNED & SHOP DRAWINGS SHALL BE PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF COLORADO.
2. GIRDER TRUSSES (GT) SHALL BE SUPPORTED BY QUADRUPLE 2x GANG STUDS EA. END. STUDS SHALL BE CONT. TO FND. PROVIDE FULL DEPTH BLOCKING BTWN. FLOORS, TYP.
3. TRUSS MANUF. TO DESIGN & SUPPLY ALL TRUSS-TO TRUSS, TRUSS-TO-BEAM, & TRUSS-TO-GIRDER, CONNECTIONS, TYP.
4. * RE: ARCH. FOR BOT. CHORD OF ROOF TRUSS PROFILE TYP.
5. TRUSS MANUF. TO DESIGN TRUSSES FOR:
   TC DEAD LOAD = 15 psf (5psf ALLOWANCE FOR SOLAR PANELS)
   BC DEAD LOAD = 10 psf
   SNOW LOAD = 30 psf, TYP/CAL

HATCH INDICATES SNOW DRIFT ZONE. PORTIONS OF TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR AN ADD'L. TOP CHORD SNOW LOAD AS INDICATED ON PLAN.

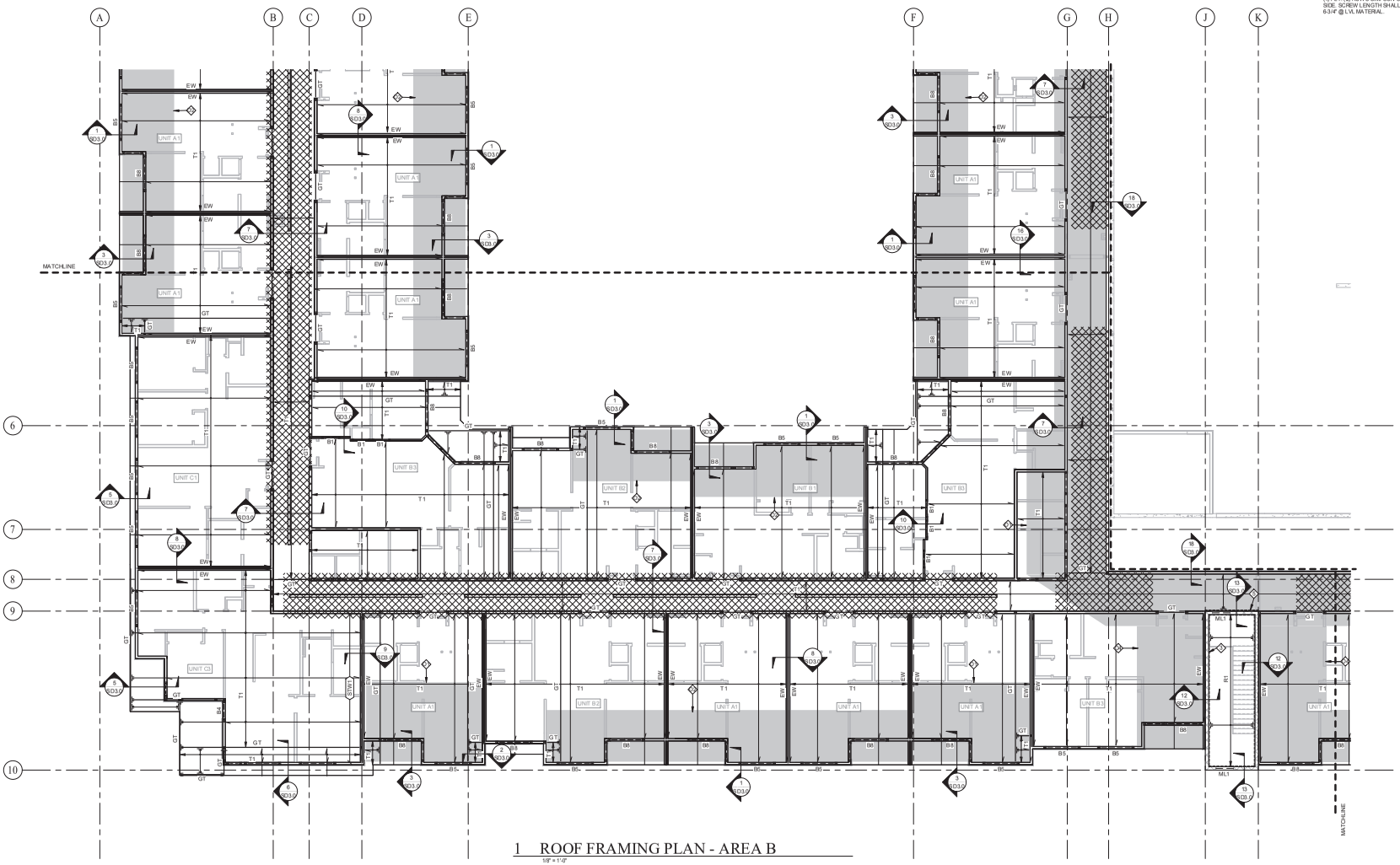
HATCH INDICATES MECH. ZONE. PORTIONS OF TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR AN ADD'L. TOP CHORD DEAD LOAD OF 20 psf.

COLUMN SCHEDULE		
TYPE	SIZE	CAP/BASE
C1	(3) 2x4	N/A
C2	(4) 2x4	N/A
C3	(5) 2x4	N/A
C4	(3) 2x6	N/A
C5	(4) 2x6	N/A
C6	(5) 2x6	N/A
C7	P.T. 6x6	PCQ6Z/EPQ6Z
C8	3-1/2"x7" PSL	PCQ4Z/EPQ4Z
C9	5-1/4"x7" PSL	
C10	3" STD PIPE	RE: PLAN
C11	HSS7X3X1/2	RE: PLAN
C12	HSS6X5X1/2	RE: PLAN
C13	HSS6X6X1/8	RE: PLAN

NOTES:
1. STUD MATERIAL & GRADE TO MATCH STRENGTH PER THE GENERAL NOTES, U.N.O.
2. COLUMNS SHOWN THUS ⊠ ON PLAN & NOT CALLED OUT TO BE DBL. 2x6 IF POST IS LOCATED IN 2x4 WALL FRAMING, DBL. 2x8 IF LOCATED IN 2x6 WALL FRAMING.
3. □ INDICATES POST FROM ABOVE. CONTRACTOR TO ENSURE THAT POST BEARS DIRECTLY ATOP BEAM BELOW OR CONTINUE SAME POST THAT IS INDICATED IN UPPER FRAMING PLANS w/ SQUASH BLOCKS BETWEEN FLOORS TO THE FND., TYP.
4. RE: APPROPRIATE DETAILS FOR CAP R & BASE R BOLTING REQ'M.
5. SUPPORT ALL EXTERIOR WINDOW & DOOR HEADERS w/ (2) TRIMMER STUDS U.N.O., ONLY (1) TRIMMER IS REQ'D @ OPENINGS =4'-0", TYP. U.N.O.
6. SPECIAL CALLOUTS INDICATED THUS:
   - (#) — INDICATES NUMBER OF TRIMMER STUDS REQ'D.
   - (K) — INDICATES NUMBER OF KING STUDS REQ'D. WHEN NOTED WITH * * *, RE: KING STUD SCHEDULE FOR REQ'M.

BEAM SCHEDULE		
TYPE	SIZE	HANGER
B1	(2) 2x8	N/A
B2	(2) 2x10	N/A
B3	(2) 2x12	N/A
B4	(3) 2x8	HU26-3 (MAX.)
B5	(3) 2x10	HHUS210-3
B6	(3) 2x12	HHUS210-3
B7	(2) 1-3/4" x 7-1/4" LVL	N/A
B8	(3) 1-3/4" x 7-1/4" LVL	N/A
B9	(2) 1-3/4" x 9-1/4" LVL	N/A
B10	(3) 1-3/4" x 9-1/4" LVL	N/A
B11	(4) 1-3/4" x 9-1/4" LVL	N/A
B12	(2) 1-3/4" x 11-7/8" LVL	N/A
B13	(3) 1-3/4" x 11-7/8" LVL	N/A
B14	(2) 1-3/4" x 14" LVL	HUC16/HUC416 (MAX)
B15	(3) 1-3/4" x 14" LVL	HHUSS5.50/16
B16	(4) 1-3/4" x 14" LVL	HHUS7.25/16
B17	(2) 1-3/4" x 18" LVL	HGUS.414
B18	(3) 1-3/4" x 18" LVL	HGUSS.50/14
B19	P.T. DF No. 1 6x10	HUCQ6 10-SDS

NOTES:
1. BEAMS & HEADERS SHOWN ON PLAN & NOT DESIGNATED w/ A MARK ARE TO BE (3) 2x6. INCREASE TO THREE PLY BEAMS & HEADERS INSIDE 2x6 WALL FRAMING, TYP. @ CONTRACTOR'S OPTION, A FULL DEPTH HEADER MAY BE INSTALLED DIRECTLY BENEATH THE DBL. TOPPR. HEADER SIZE NOT TO BE LESS THAN INDICATED ON PLAN.
2. RE: COLUMN SCHEDULE FOR TRIMMER STUD REQ'M. & KING STUD SCHEDULE FOR KING S TUD REQ'M.
3. DASHED BEAM TYPES ARE DROPPED, TYP/CAL.
4. SIDE LOADED MULTIPLE PLY BEAM CONNECTIONS:
   - (2) PLY NAIL w/ (3) ROWS 16d NAILS @ 12" o.c.
   - (3) PLY: (2) ROWS SIMPSON SDW SCREWS @ 12" o.c., ONE SIDE. SCREW LENGTH SHALL BE 4-5/8" @ 2x MATERIAL & 8" @ LVL MATERIAL.
   - (4) PLY: (2) ROWS SIMPSON SDW SCREWS @ 12" o.c., ONE SIDE. SCREW LENGTH SHALL BE 6-3/8" @ 2x MATERIAL & 6-3/4" @ LVL MATERIAL.



1 ROOF FRAMING PLAN - AREA B

1/8" = 1'-0"

NOTES:
1. RE: GENERAL SHEETS FOR TYPICAL ROOF FRAMING NOTES.
2. RE: TRUSS, BEAM, & COLUMN SCHEDULES AS INDICATED BY T#, B# & C# CALLOUTS. FOR BEAMS & COLUMNS THAT ARE NOT CALLED OUT ON PLAN, RE: SCHEDULE NOTES, TYP.
3. RE: SD-4.1 FOR SHEAR WALL, HOLDOWN, AND S TUD W ALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.
4. REFER TO ARCH. DRAWINGS FOR ROOF DRAIN LOCATIONS & TRUSS SLOPE INFORMATION.
5. RE: ROOF TRUSS SCHEDULE FOR LOADING DENOTED BY HATCHED AREAS.
6. RE: ARCH. FOR LOCATIONS WHERE FIRE-RATED SHEATHING IS REQ'D.
7. CONDITIONS WHERE DIMENSIONAL LUMBER IS EXPOSED, USE PRESSURE TREATED EQUIVALENT OF BEAMS, COLUMNS, RAFTERS AND JOISTS SHOWN IN PLAN

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No.	Date	Issue
3	07/31/23	PERMIT SET
4	08/07/24	PC

Project Architect
Project Designer: MPM/SRJ/STZ
Date: 08/07/24
Job Number: 220930
Drawn By: CR/SRJ
Checked By: RWH
Title: ROOF FRAMING PLAN - AREA B
Sheet Number: S2-4.2

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KEYNOTE SCHEDULE - FRAMING	
1	OPEN TO BELOW
2	RO OF ACCESS HATCH, RE: ARCH
3	8" CMU STAIR/ELEVATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S0-0.1 FOR REINF. REQ'M.
4	PROVIDE EPOSZ POST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UP SIDE DOWN EPOSZ POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"Ø x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LGUM410-SDS HANGER FASTENED DIRECTLY TO CMU WALL w/ (6) 3/8"x4" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CCOQ/ECCOQ COLUMN CAP. WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP-FLUSH WITH ADJACENT TRUSSES, TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM.
9	RE: 9/S23.1 FOR COLUMN CAP/BASE CONNECTION TO WOOD BEAMS
10	RE: 9/S23.1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 24" CLEAR). TRUSS MANUF. TO DESIGN TRUSSES IN MECH. ROOM FOR 60psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13/SD1.0 w/ (4) 4 1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE.
13	PROVIDE 1"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM F OR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 8/D.8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS F OR ADD'L. INFORMATION. PROVIDE WEB S TIFFENER 8/D.8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LCI24 COLUMN CAP CONNECTION EA. SIDE OF BEAM TO COLUMN BELOW (2) CLIPS TOTAL PER POST).
16	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS F OR ADD'L. INFORMATION. PROVIDE WEB S TIFFENER 8/D.8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 6"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION

KEYNOTE SCHEDULE - SNOW DRIFT	
D1	MAX DRIFT LOAD = +34.9 psf REDUCING TO A MIN. UNIFORM FLAT ROOF SNOW LOAD OF 30 psf 15'-0" FROM PARAPET/ROOF PROJECTION.
D2	MAX DRIFT LOAD = +34.9 psf REDUCING TO A MIN. UNIFORM FLAT ROOF SNOW LOAD OF 30 psf 9'-8" FROM PARAPET/ROOF PROJECTION.
D3	MAX DRIFT LOAD = +71.2 psf REDUCING TO A MIN. UNIFORM FLAT ROOF SNOW LOAD OF 30 psf 15'-4" FROM PARAPET/ROOF PROJECTION.
D4	MAX DRIFT LOAD = +59.6 psf REDUCING TO A MIN. UNIFORM FLAT ROOF SNOW LOAD OF 30 psf 12'- 10" FROM PARAPET/ROOF PROJECTION.
D5	MAX DRIFT LOAD = +32.1 psf REDUCING TO A MIN. UNIFORM FLAT ROOF SNOW LOAD OF 30 psf 7'-0" FROM PARAPET/ROOF PROJECTION.

KING STUD SCHEDULE		
WALL HEIGHT [1]	OPENING WIDTH [2]	REQ'D. STUDS [3]
0'-0" =< h =< 10'-0"	0'-0" < w =< 3'-0"	(1) 2x6
	3'-6" < w =< 9'-0"	(2) 2x6
	9'-0" < w =< 14'-0"	(3) 2x6
	14'-0" < w =< 18'-0"	(4) 2x6
10'-0" < h =< 13'-0"	0'-0" < w =< 3'-6"	(2) 2x6
	3'-6" < w =< 6'-6"	(3) 2x6
	6'-6" < w =< 9'-6"	(4) 2x6

NOTES:
1. h = TOTAL STUD WALL HEIGHT, RE: ARCH.
2. w = ROUGH OPENING WIDTH, RE: ARCH. AT MULTI-SPAN HEADERS, INTERMEDIATE SUPPORTS SHALL NOT BE CONSIDERED AND THE OPENING WIDTH SHALL BE BASED ON THE FULL LENGTH OF THE HEADER.
3. KING STUDS SHALL BE THE SAME SIZE, SPECIES, & GRADE AS THE SURROUNDING WALL FRAMING.
4. AT ALL EXTERIOR WINDOW & DOOR LOCATIONS PROVIDE KING STUDS AS INDICATED ABOVE.
5. SPECIAL CALLOUTS INDICATED THUS:
   - (#) — INDICATES NUMBER OF TRIMMER STUDS REQ'D.
   - (K) — INDICATES NUMBER OF KING STUDS REQ'D.

   TAKE PRECEDENCE OVER THIS SCHEDULE.

ROOF TRUSS SCHEDULE		
TYPE	DESCRIPTION/SPACING	HANGER
T1	ROOF TRUSSES @ 24" o.c. (MAX.)	PER MANUF.
T2	JACK TRUSSES @ 24" o.c. (MAX.)	PER MANUF.
GT	GIRDER TRUSS	PER MANUF.
EW	END WALL TRUSS	PER MANUF.
SEW	STRUCTURAL ENDWALL TRUSS	PER MANUF.
R1	2x12 RAFTERS @ 16" o.c.	LUS210
R2	1/4" TJI 210 RAFTERS @ 24" o.c.	IUS2.06/14

NOTES:
1. TRUSSES SHALL BE DESIGNED & SHOP DRAWINGS SHALL BE PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF COLORADO.
2. GIRDER TRUSSES (GT) SHALL BE SUPPORTED BY QUADRUPLE 2x GANG STUDS EA. END. STUDS SHALL BE CONT. TO FND. PROVIDE FULL DEPTH BLOCKING BTWN. FLOORS, TYP.
3. TRUSS MANUF. TO DESIGN & SUPPLY ALL TRUSS-TO TRUSS, TRUSS-TO-BEAM, & TRUSS-TO-GIRDER, CONNECTIONS, TYP.
4. * RE: ARCH. FOR BOT. CHORD OF ROOF TRUSS PROFILE TYP.
5. TRUSS MANUF. TO DESIGN TRUSSES FOR:
   TC DEAD LOAD = 15 psf (5psf ALLOWANCE FOR SOLAR PANELS)
   BC DEAD LOAD = 10 psf
   SNOW LOAD = 30 psf, TYP/CAL

HATCH INDICATES SNOW DRIFT ZONE. PORTIONS OF TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR AN ADD'L. TOP CHORD SNOW LOAD AS INDICATED ON PLAN.

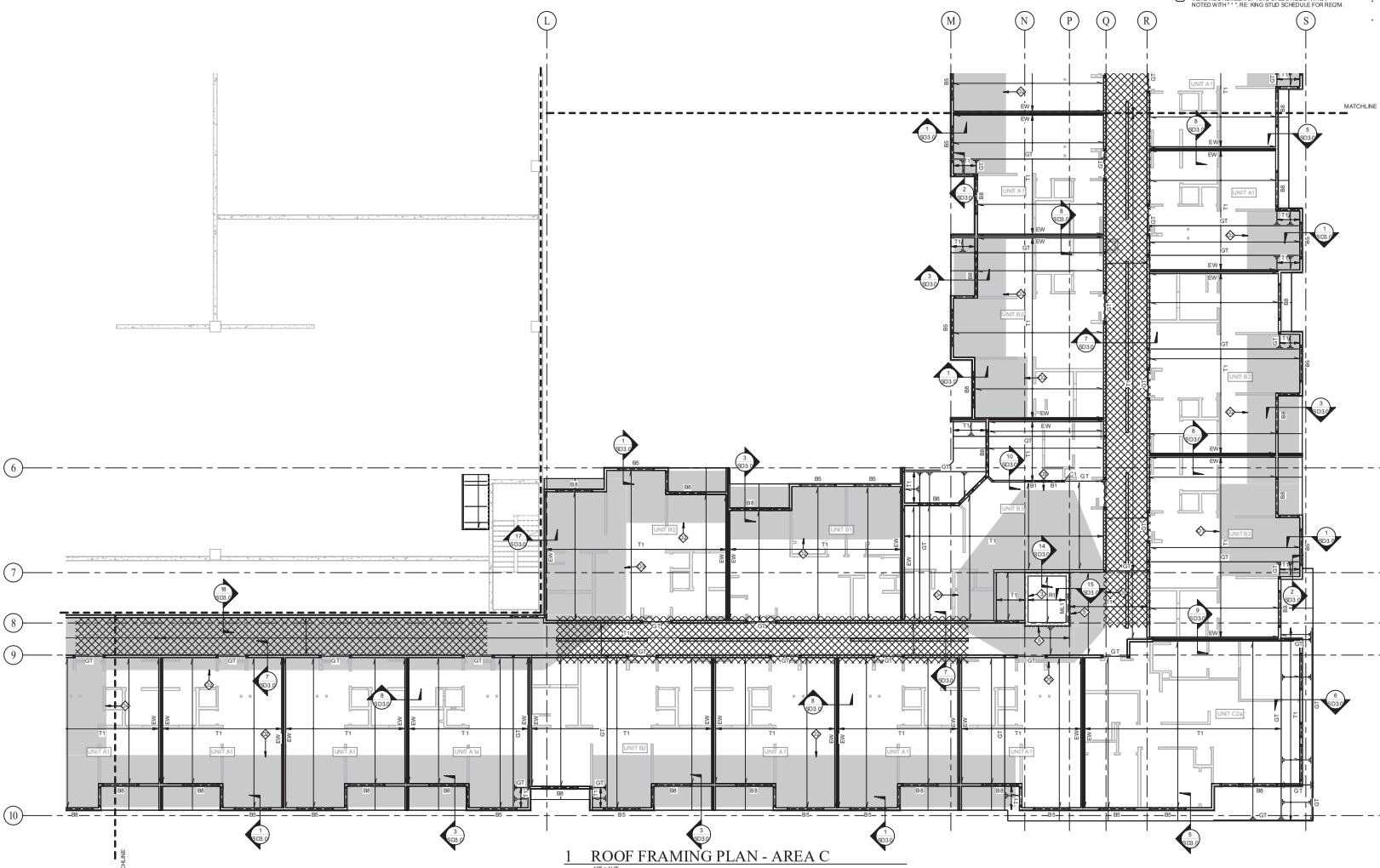
HATCH INDICATES MECH. ZONE. PORTIONS OF TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR AN ADD'L. TOP CHORD DEAD LOAD OF 20 psf.

COLUMN SCHEDULE		
TYPE	SIZE	CAP/BASE
C1	(3) 2x4	N/A
C2	(4) 2x4	N/A
C3	(5) 2x4	N/A
C4	(3) 2x6	N/A
C5	(4) 2x6	N/A
C6	(5) 2x6	N/A
C7	P.T. 6x6	PC6Z/EPO6Z
C8	3-1/2"x7" PSL	PC4Z/EPO4Z
C9	5-1/4"x7" PSL	
C10	3" STD PIPE	RE: PLAN
C11	HSS7X3X1/2	RE: PLAN
C12	HSS6X5X1/2	RE: PLAN
C13	HSS6X6X1/8	RE: PLAN

NOTES:
1. STUD MATERIAL & GRADE TO MATCH STRENGTH PER THE GENERAL NOTES, U.N.O.
2. COLUMNS SHOWN THUS ⊠ ON PLAN & NOT CALLED OUT TO BE DBL. 2x6 IF POST IS LOCATED IN 2x4 WALL FRAMING, DBL. 2x8 IF LOCATED IN 2x6 WALL FRAMING.
3. □ INDICATES POST FROM ABOVE. CONTRACTOR TO ENSURE THAT POST BEARS DIRECTLY ATOP BEAM BELOW OR CONTINUE SAME POST THAT IS INDICATED IN UPPER FRAMING PLANS w/ SQUASH BLOCKS BETWEEN FLOORS TO THE FND., TYP.
4. RE: APPROPRIATE DETAILS FOR CAP R & BASE R BOLTING REQ'M.
5. SUPPORT ALL EXTERIOR WINDOW & DOOR HEADERS w/ (2) TRIMMER STUDS U.N.O.; ONLY (1) TRIMMER IS REQ'D @ OPENINGS =< 4'-0", TYP. U.N.O.
6. SPECIAL CALLOUTS INDICATED THUS:
   - (#) — INDICATES NUMBER OF TRIMMER STUDS REQ'D.
   - (K) — INDICATES NUMBER OF KING STUDS REQ'D. WHEN NOTED WITH * * I.E. KING STUD SCHEDULE FOR REQ'M.

BEAM SCHEDULE		
TYPE	SIZE	HANGER
B1	(2) 2x8	N/A
B2	(2) 2x10	N/A
B3	(2) 2x12	N/A
B4	(3) 2x8	HU26-3 (MAX.)
B5	(3) 2x10	HHUS210-3
B6	(3) 2x12	HHUS210-3
B7	(2) 1-3/4" x 7-1/4" LVL	N/A
B8	(3) 1-3/4" x 7-1/4" LVL	N/A
B9	(2) 1-3/4" x 9-1/4" LVL	N/A
B10	(3) 1-3/4" x 9-1/4" LVL	N/A
B11	(4) 1-3/4" x 9-1/4" LVL	N/A
B12	(2) 1-3/4" x 11-7/8" LVL	N/A
B13	(3) 1-3/4" x 11-7/8" LVL	N/A
B14	(2) 1-3/4" x 14" LVL	HUH16/HUC416 (MAX)
B15	(3) 1-3/4" x 14" LVL	HHUSS.50/10
B16	(4) 1-3/4" x 14" LVL	HHUS7.25/10
B17	(2) 1-3/4" x 18" LVL	HGUS.414
B18	(3) 1-3/4" x 18" LVL	HGUSS.50/14
B19	P.T. DF No. 1 6x10	HUCQ610-SDS

NOTES:
1. BEAMS & HEADERS SHOWN ON PLAN & NOT DESIGNATED w/ A MARK ARE TO BE (3) 2x6. INCREASE TO THREE PLY BEAMS & HEADERS INSIDE 2x6 WALL FRAMING, TYP. @ CONTRACTOR'S OPTION, A FULL DEPTH HEADER MAY BE INSTALLED DIRECTLY BENEATH THE DBL. TOPPL. HEADER SIZE NOT TO BE LESS THAN INDICATED ON PLAN.
2. RE: COLUMN SCHEDULE FOR TRIMMER STUD REQ'M. & KING STUD SCHEDULE FOR KING S TUD REQ'M.
3. DASHED BEAM TYPES ARE DROPPED, TYP/CAL.
4. SIDE LOADED MULTIPLE PLY BEAM CONNECTIONS:
   - (2) PLY NAIL w/ (3) ROWS 16d NAILS @ 12" o.c.
   - (3) PLY: (2) ROWS SIMPSON SDW SCREWS @ 12" o.c., ONE SIDE. SCREW LENGTH SHALL BE 4-5/8" @ 2x MATERIAL & 8" @ LVL MATERIAL.
   - (4) PLY: (2) ROWS SIMPSON SDW SCREWS @ 12" o.c., ONE SIDE. SCREW LENGTH SHALL BE 6-3/8" @ 2x MATERIAL & 6-3/4" @ LVL MATERIAL.



1 ROOF FRAMING PLAN - AREA C

1/8" = 1'-0"

NOTES:
1. RE: Ø SHEETS FOR TYPICAL ROOF FRAMING NOTES.
2. RE: TRUSS, BEAM, & COLUMN SCHEDULES AS INDICATED BY T#, B# & C# CALLOUTS. FOR BEAMS & COLUMNS THAT ARE NOT CALLED OUT ON PLAN, RE: SCHEDULE NOTES, TYP.
3. RE: SD-4.1 FOR SHEAR WALL, HOLDOWN, AND STUD WALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.
4. REFER TO ARCH. DRAWINGS FOR ROOF DRAIN LOCATIONS & TRUSS SLOPE INFORMATION.
5. RE: ROOF TRUSS SCHEDULE FOR LOADING DENOTED BY HATCHED AREAS.
6. RE: ARCH. FOR LOCATIONS WHERE FIRE-RATED SHEATHING IS REQ'D.
7. CONDITIONS WHERE DIMENSIONAL LUMBER IS EXPOSED, USE PRESSURE TREATED EQUIVALENT OF BEAMS, COLUMNS, RAFTERS AND JOISTS SHOWN IN PLAN

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No.	Date	Issue
3	07/19/23	PERMIT SET
4	08/07/24	PC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: ROOF FRAMING PLAN - AREA C

Sheet Number: **S2-4.3**

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BEAM SCHEDULE		
TYPE	SIZE	HANGER
B1	(2) 2x8	N/A
B2	(2) 2x 10	N/A
B3	(2) 2x 12	N/A
B4	(3) 2x8	HUS6-3 (MAX.)
B5	(3) 2x 10	HHUS210-3
B6	(3) 2x 12	HHUS210-3
B7	(2) 1-3/4" x 7-1/4" LVL	N/A
B8	(3) 1-3/4" x 7-1/4" LVL	N/A
B9	(2) 1-3/4" x 9-1/4" LVL	N/A
B10	(3) 1-3/4" x 9-1/4" LVL	N/A
B11	(4) 1-3/4" x 9-1/4" LVL	N/A
B12	(2) 1-3/4" x 11-7/8" LVL	N/A
B13	(3) 1-3/4" x 11-7/8" LVL	N/A
B14	(2) 1-3/4" x 14" LVL	HU416/HUC416 (MAX)
B15	(3) 1-3/4" x 14" LVL	HHUS5.50/16
B16	(4) 1-3/4" x 14" LVL	HHU57.25/16
B17	(2) 1-3/4" x 18" LVL	HGU5/14
B18	(3) 1-3/4" x 18" LVL	HGU5S.50/14
B19	P.T. DF No.1 6x 10	HUCQ610-SDS

NOTES:
1. BEAMS & HEADERS SHOWN ON PLAN & NOT DESIGNATED w/ A MARK ARE TO BE (2) 2x6. INCREASE TO THREE PLY BEAMS & HEADERS INSIDE 2x6 WALL FRAMING, TYP. @ CONTRACTOR'S OPTION, A FULL DEPTH HEADER MAY BE INSTALLED DIRECTLY BENEATH THE DBL. TOP B; HEADER SIZE NOT TO BE LESS THAN INDICATED ON PLAN.
2. RE: COLUMN SCHEDULE FOR TRIMMER, STUD REQ'M. & KING STUD SCHEDULE FOR KING STUD REQ'M.
3. DASHED BEAM TYPES ARE DROPPED, TYPICAL.
4. SIDE LOADED MULTIPLE PLY BEAM CONNECTIONS:
   - (2) PLY: NAIL w/ (3) 0X3WS 16d NAILS @ 12" o.c.
   - (3) PLY: (2) ROWS SIMPSON SDW SCREWS @ 12" o.c., ONE SIDE: SCREW LENGTH SHALL BE 4-9/8" @ 2x MATERIAL & 5" @ LVL MATERIAL.
   - (4) PLY: (2) ROWS SIMPSON SDW SCREWS @ 12" o.c., ONE SIDE: SCREW LENGTH SHALL BE 6-3/8" @ 2x MATERIAL & 6-3/4" @ LVL MATERIAL.

COLUMN SCHEDULE		
TYPE	SIZE	CAP/BASE
C1	(3) 2x4	N/A
C2	(4) 2x4	N/A
C3	(5) 2x4	N/A
C4	(3) 2x6	N/A
C5	(4) 2x6	N/A
C6	(5) 2x6	N/A
C7	P.T. 6x6	PCSZ/EPCBZ
C8	3-1/2"x7" PSL	PCAZ/EPCAZ
C9	5-1/4"x7" PSL	
C10	3" STD PIPE	RE: PLAN
C11	HSS7X3X1/2	RE: PLAN
C12	HSS5X5X1/2	RE: PLAN
C13	HSS6X6X1/8	RE: PLAN

NOTES:
1. STUD MATERIAL & GRADE TO MATCH STRENGTH PER THE GENERAL NOTES, U.N.O.
2. COLUMNS SHOWN THUS ▩ ON PLAN & NOT CALLED OUT TO BE DBL. 2x6 IF POST IS LOCATED IN 2x4 WALL FRAMING, DBL. 2x6 IF LOCATED IN 2x6 WALL FRAMING.
3. □ INDICATES POST FROM ABOVE, CONTRACTOR TO ENSURE THAT POST BEARS DIRECTLY ATOP BEAM BELOW OR CONTINUE SAME POST THAT IS INDICATED IN UPPER FRAMING PLANS W/ SQUASH BLOCKS BETWEEN FLOORS TO THE FND., TYP.
4. RE: APPROPRIATE DETAILS FOR CAP/B & BASE/B BOLTING REQ'M.
5. SUPPORT ALL EXTERIOR WINDOW & DOOR HEADERS w/ (2) TRIMMER STUDS U.N.O., ONLY (1) TRIMMER IS REQ'D @ OPENINGS < 4'-0", TYP. U.N.O.
6. SPECIAL CALLOUTS INDICATED THUS:
   - (#T) INDICATES NUMBER OF TRIMMER STUDS REQ'D.
   - (#K) INDICATES NUMBER OF KING STUDS REQ'D. WHEN NOTED WITH " * ", RE: KING STUD SCHEDULE FOR REQ'M.

ROOF TRUSS SCHEDULE		
TYPE	DESCRIPTION/SPACING	HANGER
T1	ROOF TRUSSES @ 24" o.c. (MAX.)	PER MANUF.
T2	JACK TRUSSES @ 24" o.c. (MAX.)	PER MANUF.
GT	GIRDER TRUSS	PER MANUF.
EW	END WALL TRUSS	PER MANUF.
SEW	STRUCTURAL END WALL TRUSS	PER MANUF.
R1	2x12 RAFTERS @ 16" o.c.	LUS210
R2	1-4" TJI 210 RAFTERS @ 24" o.c.	IUS2.06/14

NOTES:
1. TRUSSES SHALL BE DESIGNED & SHOP DRAWINGS SHALL BE PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF COLORADO.
2. GIRDER TRUSSES (GT) SHALL BE SUPPORTED BY QUADRUPLE 2x GANG STUDS EA. END. STUDS SHALL BE CONT. TO FND. PROVIDE FULL DEPTH BLOCKING BTWN. FLOORS, TYP.
3. TRUSS MANUF. TO DESIGN & SUPPLY ALL TRUSS-TO-TRUSS, TRUSS TO BEAM, & TRUSS-TO-GIRDER CONNECTIONS, TYP.
4. * RE: ARCH. FOR BOT. CHORD OF ROOF TRUSS PROFILE TYP.
5. TRUSS MANUF. TO DESIGN TRUSSES FOR:
   TC DEAD LOAD = 15 psf (5psf ALLOWANCE FOR SOLAR PANELS)
   BC DEAD LOAD = 10 psf
   SNOW LOAD = 30 psf, TYPICAL

HATCH INDICATES SNOW DRIFT ZONE. PORTIONS OF TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR AN ADD'L. TOP CHORD SNOW LOAD AS INDICATED ON PLAN.

HATCH INDICATES MECH. ZONE. PORTIONS OF TRUSSES WITHIN THIS AREA TO BE DESIGNED FOR AN ADD'L. TOP CHORD DEAD LOAD OF 20 psf.

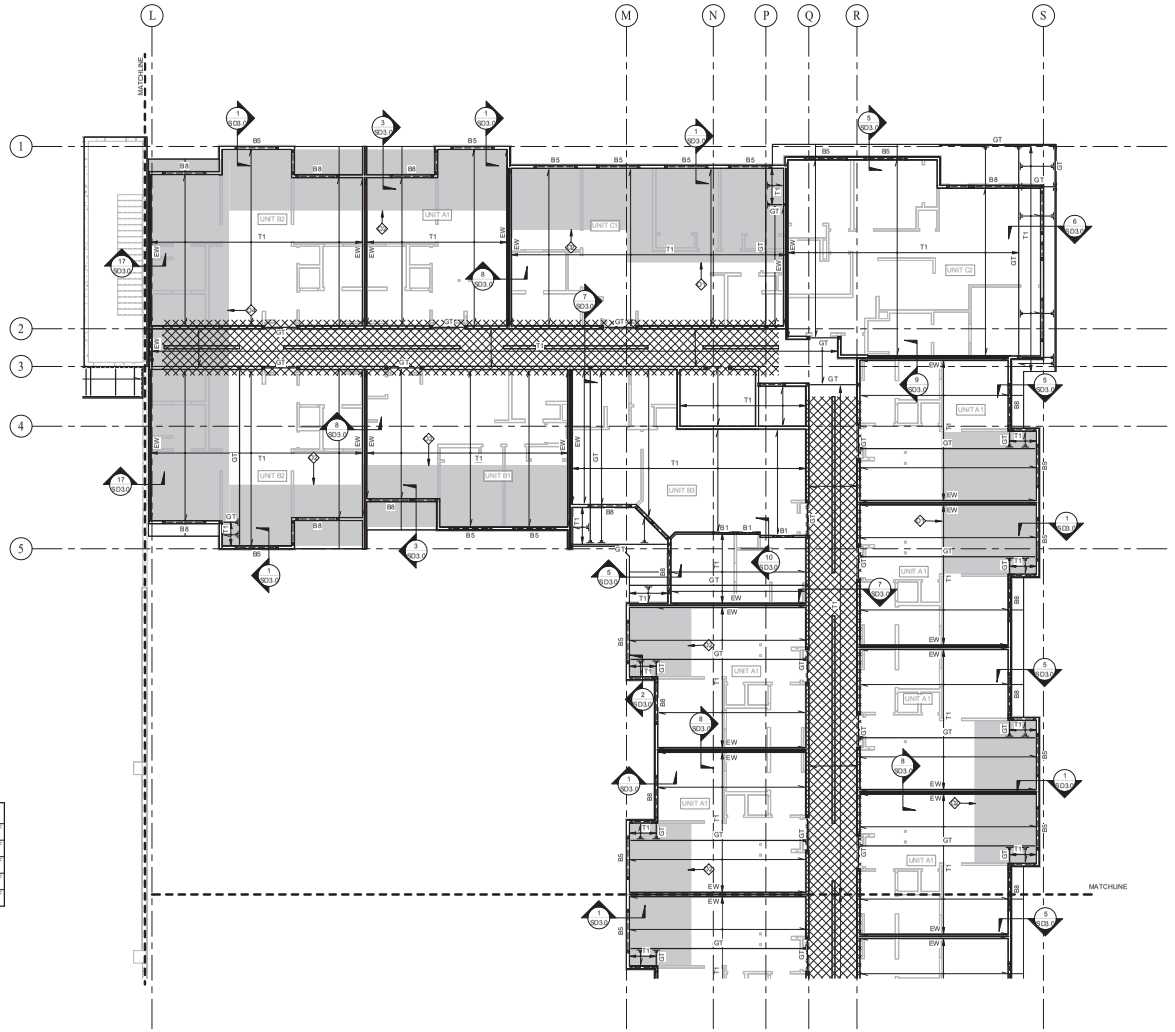
KING STUD SCHEDULE		
WALL HEIGHT (1)	OPENING WIDTH (2)	REQ'D. STUDS (3)
0'-0" =< h < 10'-0"	0'-0" < w < 3'-6"	(1) 2x6
	3'-6" < w < 9'-0"	(2) 2x6
	9'-0" < w < 14'-0"	(3) 2x6
	14'-0" < w < 18'-0"	(4) 2x6
10'-0" < h < 13'-0"	0'-0" < w < 3'-6"	(2) 2x6
	3'-6" < w < 6'-6"	(3) 2x6
	6'-6" < w < 9'-6"	(4) 2x6

NOTES:
1. h = TOTAL STUD WALL HEIGHT, RE: ARCH.
2. w = ROUGH OPENING WIDTH, RE: ARCH. AT MULTI-SPAN HEADERS, INTERMEDIATE SUPPORTS SHALL NOT BE CONSIDERED AND THE OPENING WIDTH SHALL BE BASED ON THE FULL LENGTH OF THE HEADER.
3. KING STUDS SHALL BE THE SAME SIZE, SPECIES, & GRADE AS THE SURROUNDING WALL FRAMING.
4. AT ALL EXTERIOR WINDOW & DOOR LOCATIONS PROVIDE KING STUDS AS INDICATED ABOVE.
5. SPECIAL CALLOUTS INDICATED THUS:
   - (#T) INDICATES NUMBER OF TRIMMER STUDS REQ'D.
   - (#K) INDICATES NUMBER OF KING STUDS REQ'D.

TAKE PRECEDENCE OVER THIS SCHEDULE.

KEYNOTE SCHEDULE - FRAMING	
1	OPEN TO BELOW
2	ROOF ACCESS HATCH, RE: ARCH
3	8" CMU STAIR/ELEVATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S0.0.1 FOR REINF. REQ'M.
4	PROVIDE EPCBZ POST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UPSIDE DOWN EPCBZ POST CAP
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"Ø x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LGUM410-SDS HANGER FASTENED DIRECTLY TO CMU WALL w/ (8) 3/8"xK" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CCQ/ECQ/CQ COLUMN CAP, WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL-AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP FLUSH WITH ADJACENT TRUSSES, TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM
9	RE: S/S02.1 FOR COLUMN CAP/BASE CONNECTION TO WOOD BEAMS
10	RE: S/S02.1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 24" CLEAR). TRUSS MANUF TO DESIGN TRUSSES IN MECH. ROOM FOR 80 psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13/S01.0 w/ (4) 4 1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE
13	PROVIDE 11"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER B3/8 WITHIN 7" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 8"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER B3/8 WITHIN 7" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LCE4 COLUMN CAP CONNECTION EA. SIDE OF BEAM TO COLUMN BELOW (2) CLIPS TOTAL PER POST)
16	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER B3/8 WITHIN 7" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 6"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION

KEYNOTE SCHEDULE - SNOW DRIFT	
D1	MAX DRIFT LOAD = =34.9 psf REDUCING TO A MIN. UNIFORM FLAT ROOF SNOW LOAD OF 30 psf 15'-0" FROM PARAPET/ROOF PROJECTION.
D2	MAX DRIFT LOAD = =34.9 psf REDUCING TO A MIN. UNIFORM FLAT ROOF SNOW LOAD OF 30 psf 9'-9" FROM PARAPET/ROOF PROJECTION.
D3	MAX DRIFT LOAD = =71.2 psf REDUCING TO A MIN. UNIFORM FLAT ROOF SNOW LOAD OF 30 psf 15'-4" FROM PARAPET/ROOF PROJECTION.
D4	MAX DRIFT LOAD = =59.6 psf REDUCING TO A MIN. UNIFORM FLAT ROOF SNOW LOAD OF 30 psf 12'-10" F ROM PARAPET/ROOF PROJECTION.
D5	MAX DRIFT LOAD = =32.1 psf REDUCING TO A MIN. UNIFORM FLAT ROOF SNOW LOAD OF 30 psf 7'-0" FROM PARAPET/ROOF PROJECTION.



1 ROOF FRAMING PLAN - AREA D

1/8" = 1'-0"

NOTES:
1. RE: **S0** SHEETS FOR TYPICAL ROOF FRAMING NOTES.
2. RE: TRUSS, BEAM, & COLUMN SCHEDULE S.A.S INDICATED BY T#, B# & C# CALLOUTS. FOR BEAMS & COLUMNS THAT ARE NOT CALLED OUT ON PLAN, RE: SCHEDULE NOTES, TYP.
3. RE: **S0-0.1** FOR SHEAR WALL, HOLDOWN, AND STUD WALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.
4. RE/ER TO ARCH. DRAWINGS FOR ROOF DRAIN LOCATIONS & TRUSS SLOPE INFORMATION.
5. RE: ROOF TRUSS SCHEDULE FOR LOADING DENOTED BY HATCHED AREAS.
6. RE: ARCH. FOR LOCATIONS WHERE FIRE-RATED SHEATHING IS REQ'D.
7. CONDITIONS WHERE DIMENSIONAL LUMBER IS EXPOSED, USE PRESSURE TREATED EQUIVALENT OF BEAMS, COLUMNS, RAFTERS AND JOISTS SHOWN IN PLAN.

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No.	Date	Issue
3	07/19/24	PERMIT SET
4	08/07/24	IFC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: ROOF FRAMING PLAN - AREA D

Sheet Number: **S2-4.4**

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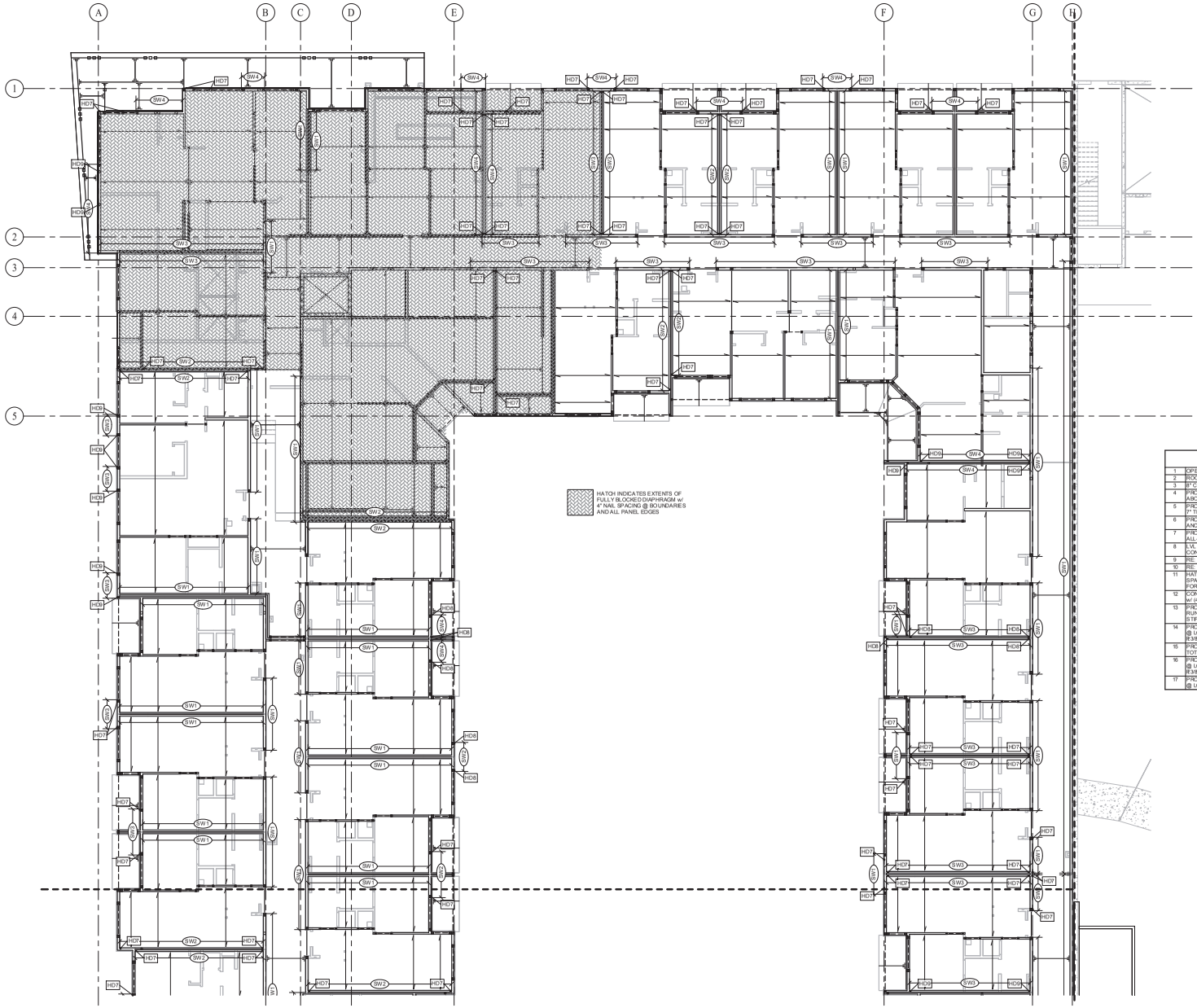

KEYNOTE SCHEDULE - FRAMING	
1	OPEN TO BELOW
2	ROOF ACCESS HATCH, RE: ARCH
3	8" CMU STAIR/ELEVATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S0-0.1 FOR REINF. REQM.
4	PROVIDE EPOZ POST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UPSIDE DOWN EPCEZ POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"ø x 7" TITEN HD SCREW ANCHORS @ 18" o.c.
6	PROVIDE LCUM410 SDS HANGER FASTENED DIRECTLY TO CMU WALL w/ (8) 3/8"x4" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CCOQ/ECOQ COLUMN CAP, WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL-AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP-FLUSH WITH ADJACENT TRUSSES, TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM.
9	RE: &S12.1 FOR COLUMN CAP/BASE CONNECTION TO WOOD BEAMS
10	RE: &S12.1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 24" CLEAR). TRUSS MANUF TO DESIGN TRUSSES IN MECH. ROOM FOR 80psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13/SD1.0 w/ (4) 4-1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE
13	PROVIDE 11"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER IF3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 9"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER IF3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LCE4 COLUMN CAP CONNECTION EA. SIDE OF BEAM TO COLUMN BELOW (/2) CLIPS TOTAL PER POST)
16	PROVIDE 9"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER IF3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 6"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION.

1 2ND FLOOR LATERAL TREATMENT PLAN - AREA A

1/8" = 1'-0"

NOTES:
1. RE: **S0** SHEETS FOR TYPICAL FLOOR FRAMING NOTES AND TYPICAL WALL FRAMING NOTES.
2. RE: **S0-0.1** FOR SHEAR WALL, HOLDOWN AND STUD WALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.

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No.	Date	Issue
	07/19/23	PERMIT SET
4	08/07/24	ITC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: LEVEL 2 LATERAL TREATMENT PLAN - AREA A

Sheet Number: **S3-1.1**

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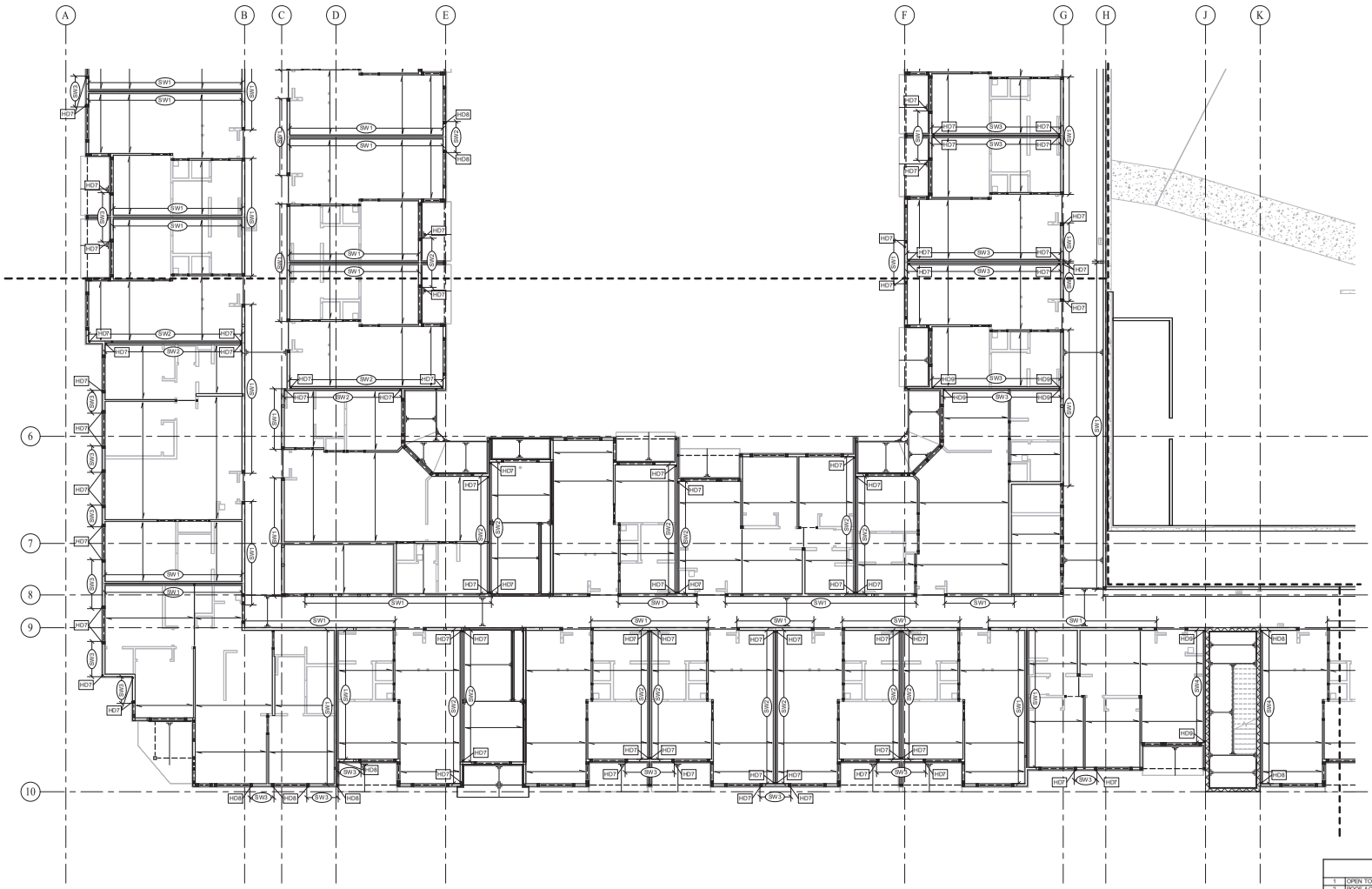

1 2ND FLOOR LATERAL TREATMENT PLAN - AREA B

1/8" = 1'-0"

NOTES:
1. RE: **80** SHEETS FOR TYPICAL FLOOR FRAMING NOTES AND TYPICAL WALL FRAMING NOTES.
2. RE: **80-0.1** FOR SHEAR WALL, HOLDOWN AND STUD WALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.

KEY NOTE SCHEDULE - FRAMING	
1	OPEN TO BELOW
2	ROOF ACCESS HATCH, RE: ARCH
3	8" CMU STAIR/ELEVATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S0-0.1 FOR REINF. REQ'M.
4	PROVIDE EPC6Z POST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UPSIDE DOWN EPC6Z POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"Ø x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LGUM410 SDS HANGER FASTENED DIRECTLY TO CMU WALL w/ (8) 3/8"x4" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CCOQ/ECCOQ COLUMN CAP. WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL-AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP-FLUSH WITH ADJACENT TRUSSES. TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM
9	RE: 8/SD2.1 FOR COLUMN CAP/BASE CONNECTION TO WOOD BEAMS
10	RE: 9/SD2.1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 24" CLEAR). TRUSS MANUF TO DESIGN TRUSSES IN MECH. ROOM FOR 80psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13/SD1.0 w/ (4) 4-1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE.
13	PROVIDE 11"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER ID.8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER ID.8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LC64 COLUMN CAP CONNECTION EA. SIDE OF BEAM TO COLUMN BELOW (2) CLP.S TOTAL PER POST).
16	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER ID.8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 6"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION.

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39330
08/05/2024

No.	Date	Issue
	07/18/23	PERMIT SET
4	08/07/24	PC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: LEVEL 2 LATERAL TREATMENT PLAN - AREA B

Sheet Number: S3-1.2

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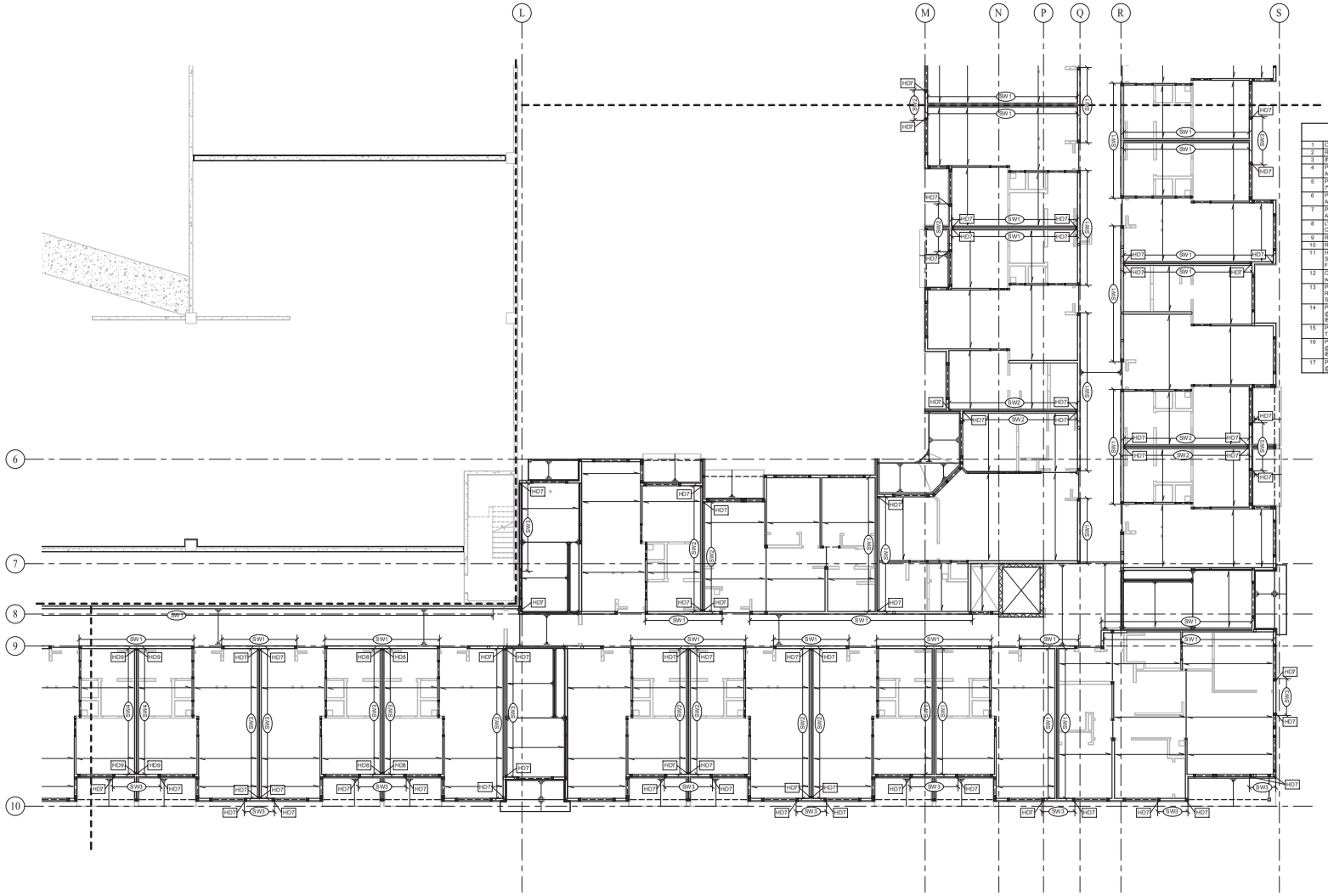

KEY NOTE SCHEDULE - FRAMING	
1	OPEN TO BELOW
2	ROOF ACCESS HATCH, RE: ARCH
3	IF CMU STAIR/ELEVATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S00.1 FOR REINF. REQ'M.
4	PROVIDE EPC6ZPOST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UPSIDE DOWN EPOXZ POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"Ø x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LGUM410-SDS HANGER FASTENED DIRECTLY TO CMU WALL w/ (8) 3/8"ø" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CCOQ/ECCOQ COLUMN CAP. WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL-AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP FLUSH WITH ADJACENT TRUSSES. TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM.
9	RE: S/SD2.1 FOR COLUMN CAP/BASE CONNECTION TO WOOD BEAMS
10	RE: S/SD2.1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 24" CLEAR). TRUSS MANUF TO DESIGN TRUSSES IN MECH. RO OM FOR 80psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13/8 DI. 0 w/ (4) 4-1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE
13	PROVIDE 11"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 83/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 8"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 83/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LCE4 COLUMN CAP CONNECTION E A. SIDE OF BEAM TO COLUMN BELOW (2) CLIP S TOTAL PER POST)
16	PROVIDE 8"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 83/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 8"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION

1 2ND FLOOR LATERAL TREATMENT PLAN - AREA C

1/8" = 1'-0"

NOTES:
1. RE: **S0** SHEETS FOR TYPICAL FLOOR FRAMING NOTES AND TYPICAL WALL FRAMING NOTES.
2. RE: **S0.4.1** FOR SHEAR WALL, HOLDOWN AND STUD WALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.

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No.	Date	Issue
	07/19/23	PERMIT SET
4	08/07/24	IFC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: LEVEL 2 LATERAL TREATMENT PLAN - AREA C

Sheet Number: **S3-1.3**

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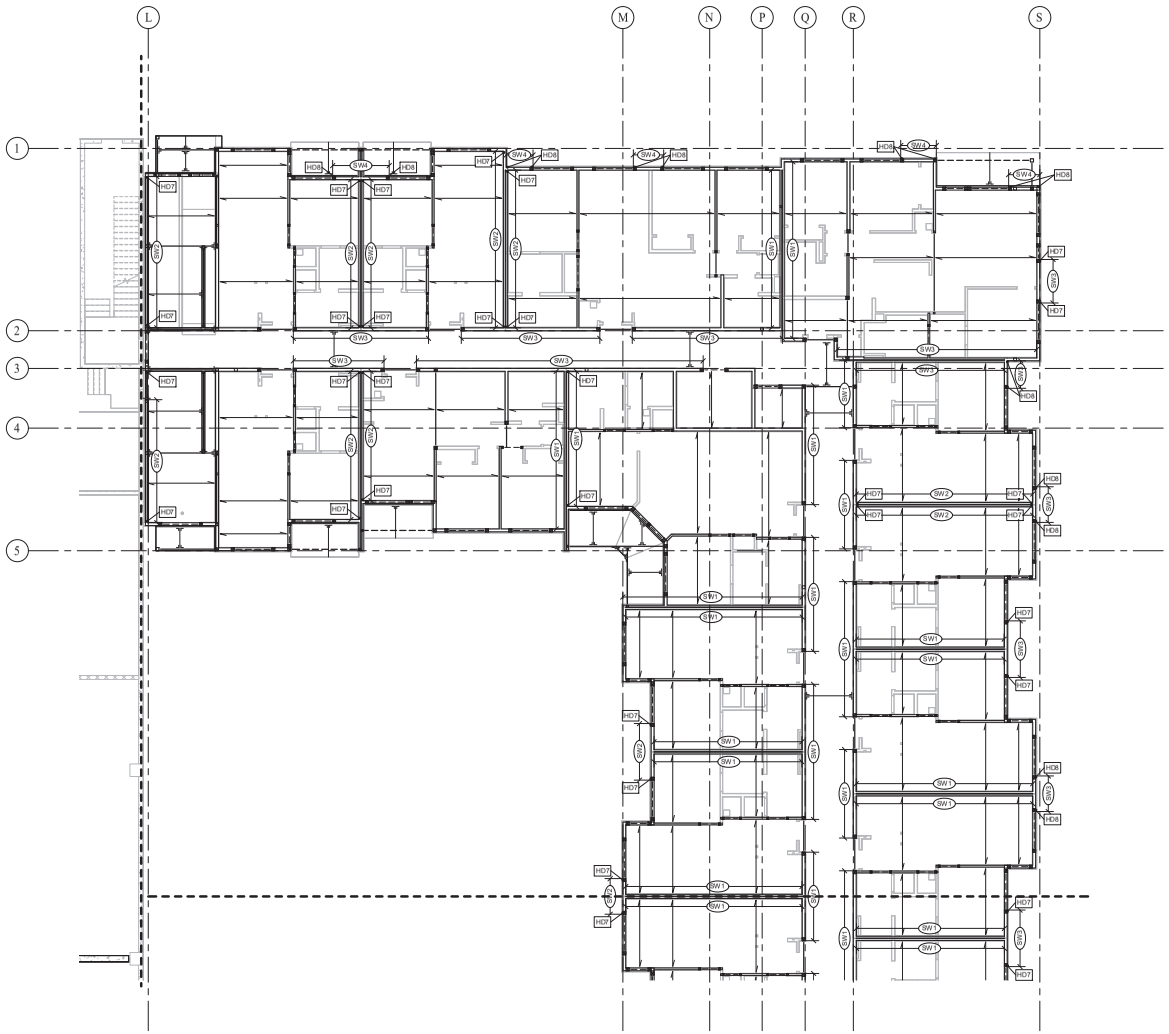

1 2ND FLOOR LATERAL TREATMENT PLAN - AREA D

1/8" = 1'-0"

NOTES
1. RE: **S0** SHEETS FOR TYPICAL FLOOR FRAMING NOTES AND TYPICAL WALL FRAMING NOTES.
2. RE: **S0-0.1** FOR SHEAR WALL, HOLDOWN AND STUD WALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.

KEYNOTE SCHEDULE - FRAMING	
1	OPEN TO BELOW
2	ROOF ACCESS HATCH, RE: ARCH
3	8" CMU STAIR/ELEVATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S0-0.1 FOR REINF. REQ'M.
4	PROVIDE EPOZ/EPOST CAP FROM BEAM TO COLUMN/BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UPSIDE DOWN EPOZ POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"Ø x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LGUM410.5/D5 HANGER FASTENED DIRECTLY TO CMU WALL w/ (8) 3/8"ø" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CCOQ/ECCOQ COLUMN CAP. WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL-AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP-FLUSH WITH ADJACENT TRUSSES, TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM
9	RE: S/SD2.1 FOR COLUMN CAP/BASE CONNECTION TO WOOD BEAMS
10	RE: S/SD2.1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 24" CLEAR). TRUSS MANUF TO DESIGN TRUSSES IN MECH. ROOM FOR 80psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13.5/D1.0 w/ (4) 4-1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE
13	PROVIDE 11"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER #3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB
14	PROVIDE 6"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER #3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LCE4 COLUMN CAP CONNECTION EA. SIDE OF BEAM TO COLUMN BELOW (2) CLIPS TOTAL PER POST.
16	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER #3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 8"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION.

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No.	Date	Issue
3	07/19/23	PERMIT SET
4	08/07/24	DPC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: LEVEL 2 LATERAL TREATMENT PLAN - AREA D

Sheet Number: **S3-1.4**

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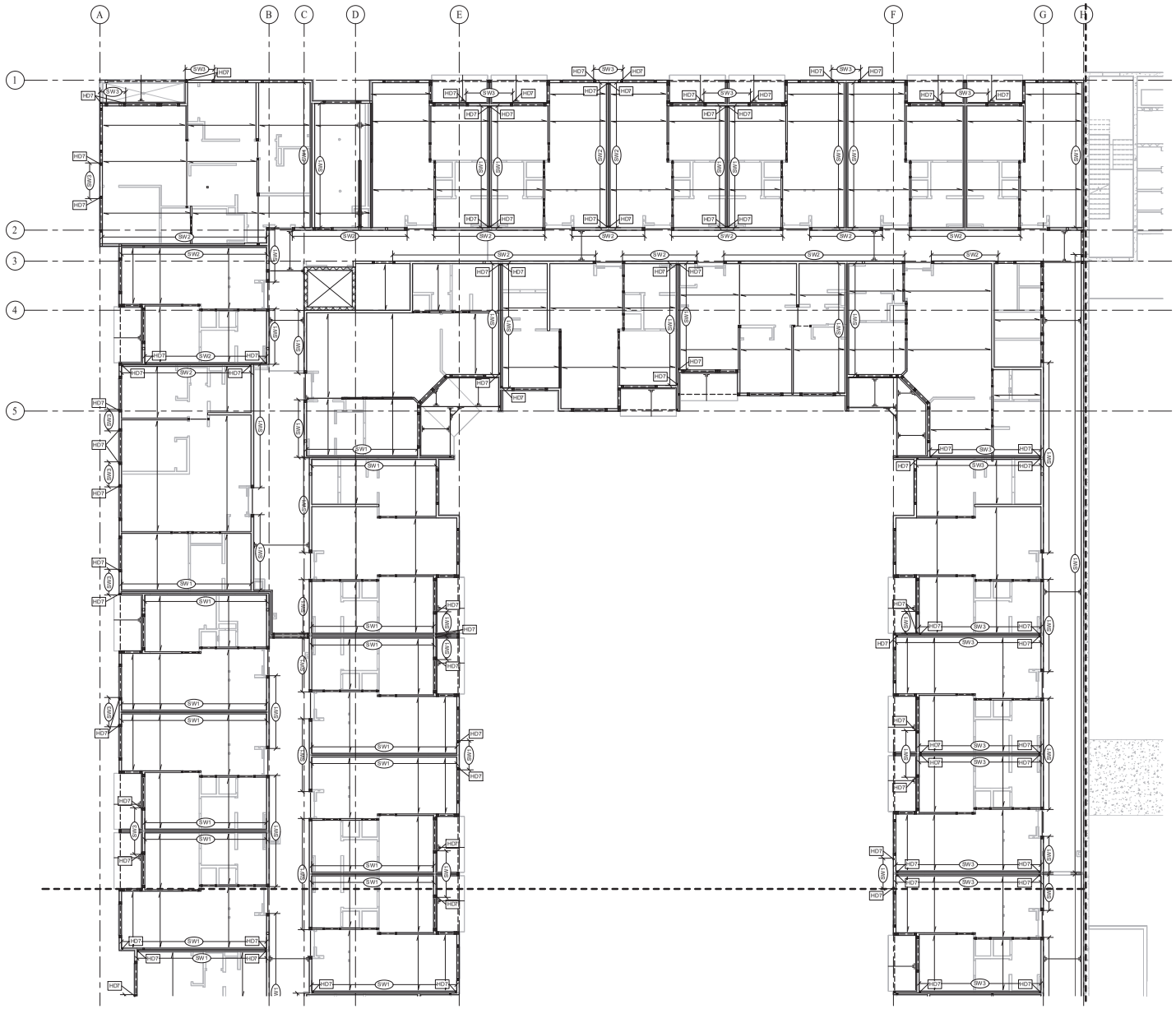

1 3RD FLOOR LATERAL TREATMENT PLAN - AREA A

1/8" = 1'-0"

NOTES:
1. RE: **S0** SHEETS FOR TYPICAL FLOOR FRAMING NOTES AND TYPICAL WALL FRAMING NOTES.
2. RE: **S0-0.1** FOR SHEAR WALL, HOLDOWN AND STUD WALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.

KEYNOTE SCHEDULE - FRAMING	
1	OPEN TO BELOW
2	ROOF ACCESS HATCH, RE: ARCH
3	8" CMU STAIR/ELEVATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S0-0.1 FOR REINF. REQM.
4	PROVIDE EPC6Z POST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UPSIDE DOWN EPC6Z POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"ø x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LGU44 10-SDS HANGER FASTENED DIRECTLY TO CMU WALL w/ (8) 3/8"x4" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CCOQ/ECCOQ COLUMN CAP, WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL-AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP-FLUSH WITH ADJACENT TRUSSES, TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM
9	RE: 8/S12.1 FOR COLUMN CAP/BASE CONNECTION TO WOOD BEAMS
10	RE: 9/S12.1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 24" CLEAR). TRUSS MANUF TO DESIGN TRUSSES IN MECH. ROOM FOR 80psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13/SD1.0 w/ (4) 4-1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE
13	PROVIDE 11"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER ft 3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 9"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER ft 3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LC64 COLUMN CAP CONNECTION EA. SIDE OF BEAM TO COLUMN BELOW (2) CLIPS TOTAL PER POST)
16	PROVIDE 9"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER ft 3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 6"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION

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COLORADO LICENSED PROFESSIONAL ENGINEER
39330
08/05/2024

No.	Date	Issue
	07/19/23	PERMIT SET
4	08/07/24	PC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: LEVEL 3 LATERAL TREATMENT PLAN - AREA A

Sheet Number: S3-2.1

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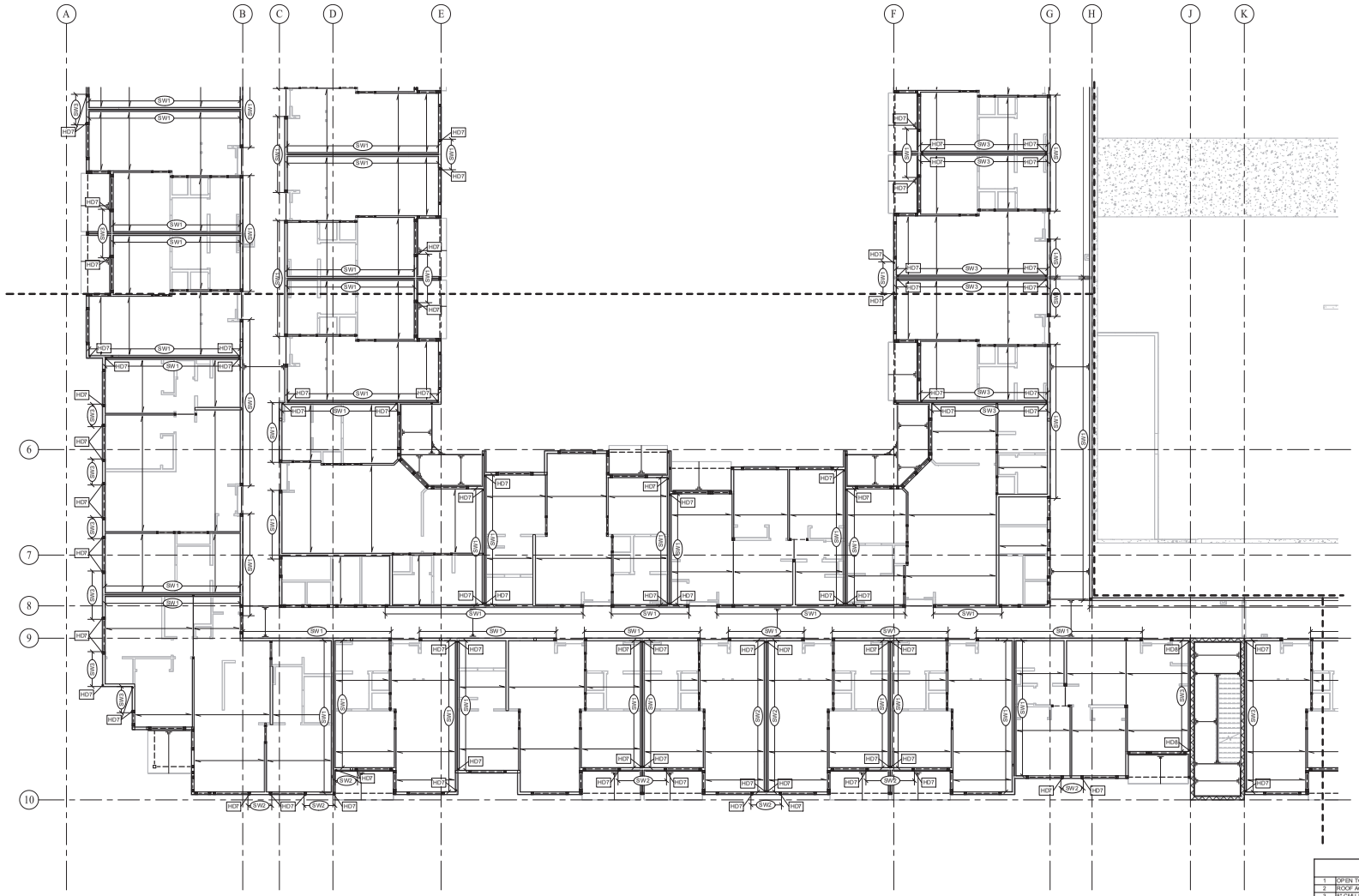

1 3RD FLOOR LATERAL TREATMENT PLAN - AREA B

1/8" = 1'-0"

NOTES:
1. RE: **S0** SHEETS FOR TYPICAL FLOOR FRAMING NOTES AND TYPICAL WALL FRAMING NOTES.
2. RE: **S0-0.1** FOR SHEAR WALL, HOLDOWN AND STUD WALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.

KEYNOTE SCHEDULE - FRAMING	
1	OPEN TO BELOW
2	ROOF ACCESS HATCH, RE: ARCH
3	8" CMU STAIR/ELEVATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S0-0.1 FOR REINF. REQM.
4	PROVIDE EPC6Z POST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UPSIDE DOWN EPC6Z POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"ø x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LGUM410-SDS HANGER FASTENED DIRECTLY TO CMU WALL w/ (8) 3/8"x4" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CCQ/ECCQ COLUMN CAP, WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL-AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP-FLUSH WITH ADJACENT TRUSSES, TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM
9	RE: 8/SD2.1 FOR COLUMN CAP/BASE CONNECTION TO WOOD BEAMS
10	RE: 9/SD2.1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	MATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 24" CLEAR). TRUSS MANUF TO DESIGN TRUSSES IN MECH. ROOM FOR 80psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13/SD1.0 w/ (4) 4-1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE.
13	PROVIDE 11"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 8/3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 9"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 8/3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LCE4 COLUMN CAP CONNECTION EA. SIDE OF BEAM TO COLUMN BELOW (2) CLIPS TOTAL PER POST)
16	PROVIDE 9"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 8/3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 9"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION

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08/05/2024

No.	Date	Issue
	07/18/23	PERMIT SET
4	08/07/24	PC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: LEVEL 3 LATERAL TREATMENT PLAN - AREA B

Sheet Number: S3-2.2

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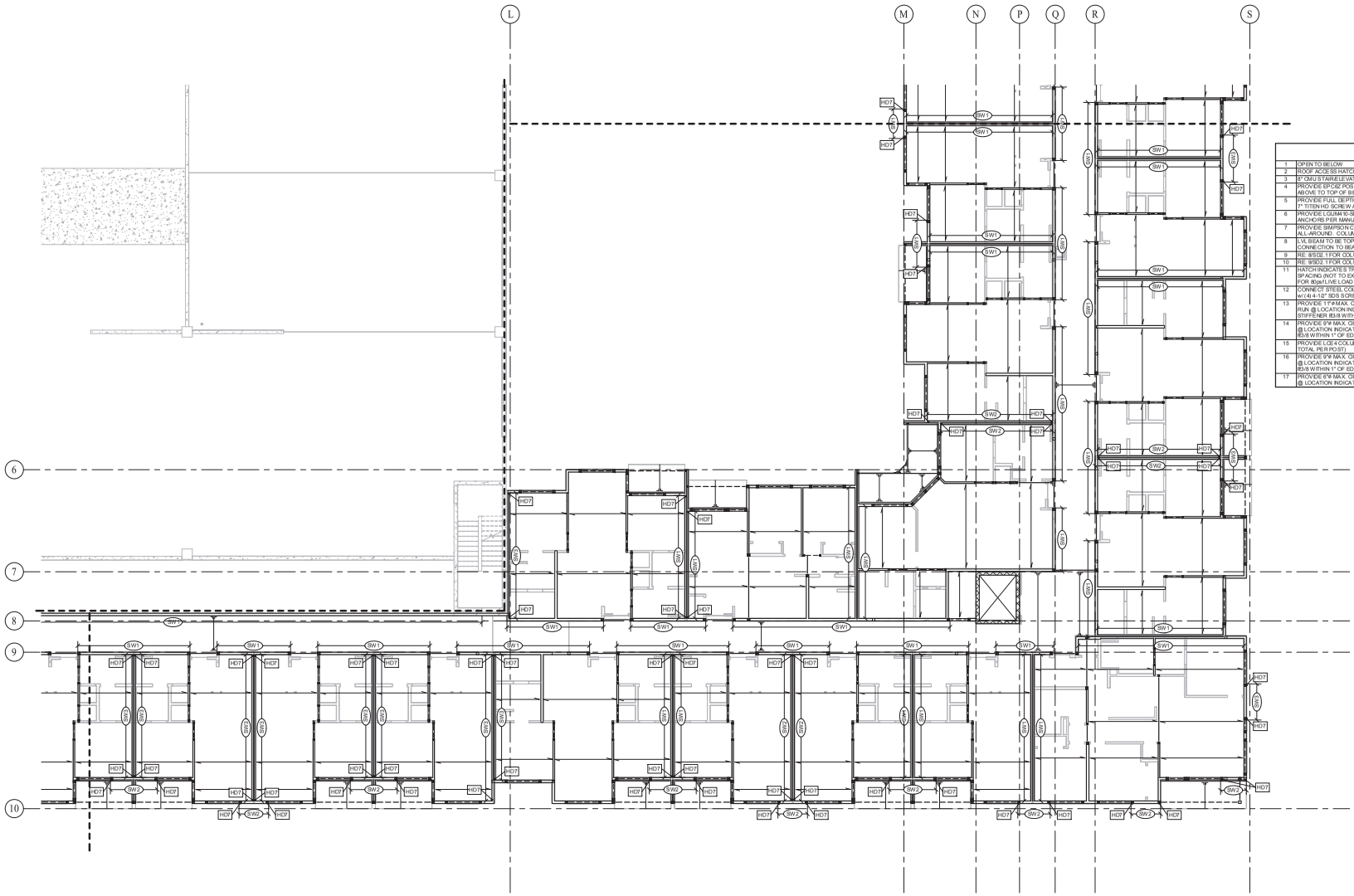

KEYNOTE SCHEDULE - FRAMING	
1	OPEN TO BELOW
2	ROOF ACCESS HATCH, RE: ARCH.
3	8" CMU STAIRWELL VATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S0-0.1 FOR REINF. REQ'M.
4	PROVIDE EPCGZ POST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UPSIDE DOWN EPOSZ POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"Ø x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LGUHA 10-SDS HANGER FASTENED DIRECTLY TO CMU WALL w/ (8) 3/8"x4" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CCQQ/ECCQQ COLUMN CAP. WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL-AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP-FLUSH WITH ADJACENT TRUSSES. TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM.
9	RE: S/S3.2, 1 FOR COLUMN CAP/BASE CONNECTION TO WOOD BEAMS
10	RE: S/S3.2, 1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 24" CLEAR). TRUSS MANUF TO DESIGN TRUSSES IN MECH. ROOM FOR 80psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13/SD1.0 w/ (4) 4-1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE
13	PROVIDE 1"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER @3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER @3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LCE4 COLUMN CAP CONNECTION EA. SIDE OF BEAM TO COLUMN BELOW (2) CLIPS TOTAL PER POST)
16	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER @3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 6"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION

1 3RD FLOOR LATERAL TREATMENT PLAN - AREA C

1/8" = 1'-0"

NOTES:
1. RE: **S0** SHEETS FOR TYPICAL FLOOR FRAMING NOTES AND TYPICAL WALL FRAMING NOTES.
2. RE: **S0-0.1** FOR SHEAR WALL, HOLDOWN AND STUD WALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.

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No.	Date	Issue
	07/19/23	PERMIT SET
4	08/07/24	DTC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: LEVEL 3 LATERAL TREATMENT PLAN - AREA C

Sheet Number: **S3-2.3**

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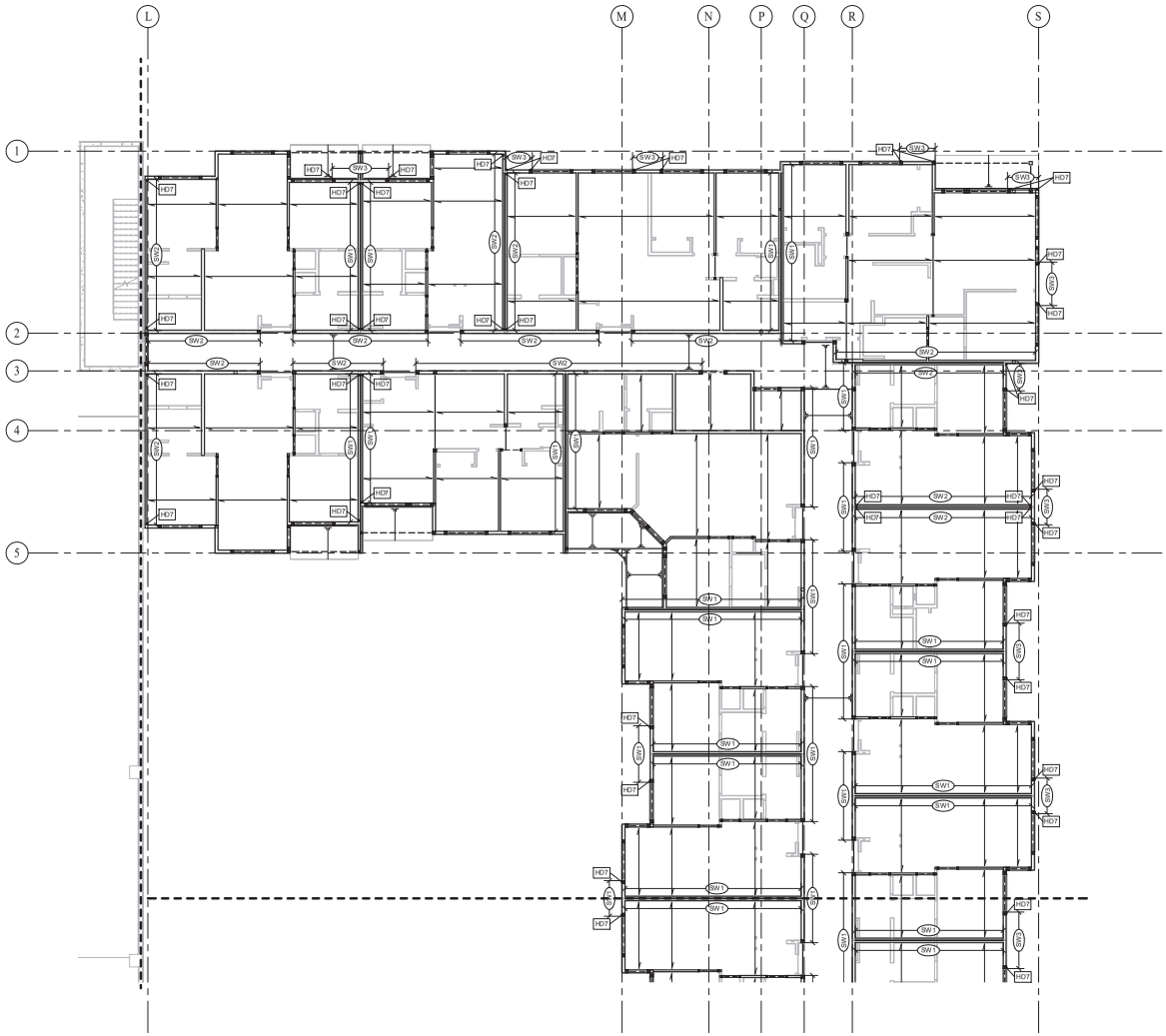

1 3RD FLOOR LATERAL TREATMENT PLAN - AREA D

1/8" = 1'-0"

NOTES:
1. RE: **S0** SHEETS FOR TYPICAL FLOOR FRAMING NOTES AND TYPICAL WALL FRAMING NOTES.
2. RE: **S0-0.1** FOR SHEAR WALL, HOLDOWN AND STUD WALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.

KEYNOTE SCHEDULE - FRAMING	
1	OPEN TO BELOW
2	ROOF ACCESS HATCH, RE: ARCH
3	8" CMU STAIR/ELEVATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S0-0.1 FOR REINF. REQ'M.
4	PROVIDE EPOEZ POST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UP SIDE DOWN EPOSE POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"Ø x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LGUM410 SDS HANGER FASTENED DIRECTLY TO CMU WALL w/ (8) 3/8"x4" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CCQQ/ECCQQ COLUMN CAP. WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL-AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP-FLUSH WITH ADJACENT TRUSSES, TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM
9	RE: S/SD2.1 FOR COLUMN CAP BASE CONNECTION TO WOOD BEAMS
10	RE: S/SD2.1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 2-0" CLEAR). TRUSS MANUF TO DESIGN TRUSSES IN MECH. ROOM FOR 80psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13/SD1.0 w/ (4) 4-1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE
13	PROVIDE 1 1"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER IB/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER IB/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LCS4 COLUMN CAP CONNECTION EA. SIDE OF BEAM TO COLUMN BELOW (2) CLIPS TOTAL PER POST)
16	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER IB/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 6"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION

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No.	Date	Issue
3	07/19/23	PERMIT SET
4	08/07/24	DPC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: LEVEL 3 LATERAL TREATMENT PLAN - AREA D

Sheet Number: **S3-2.4**

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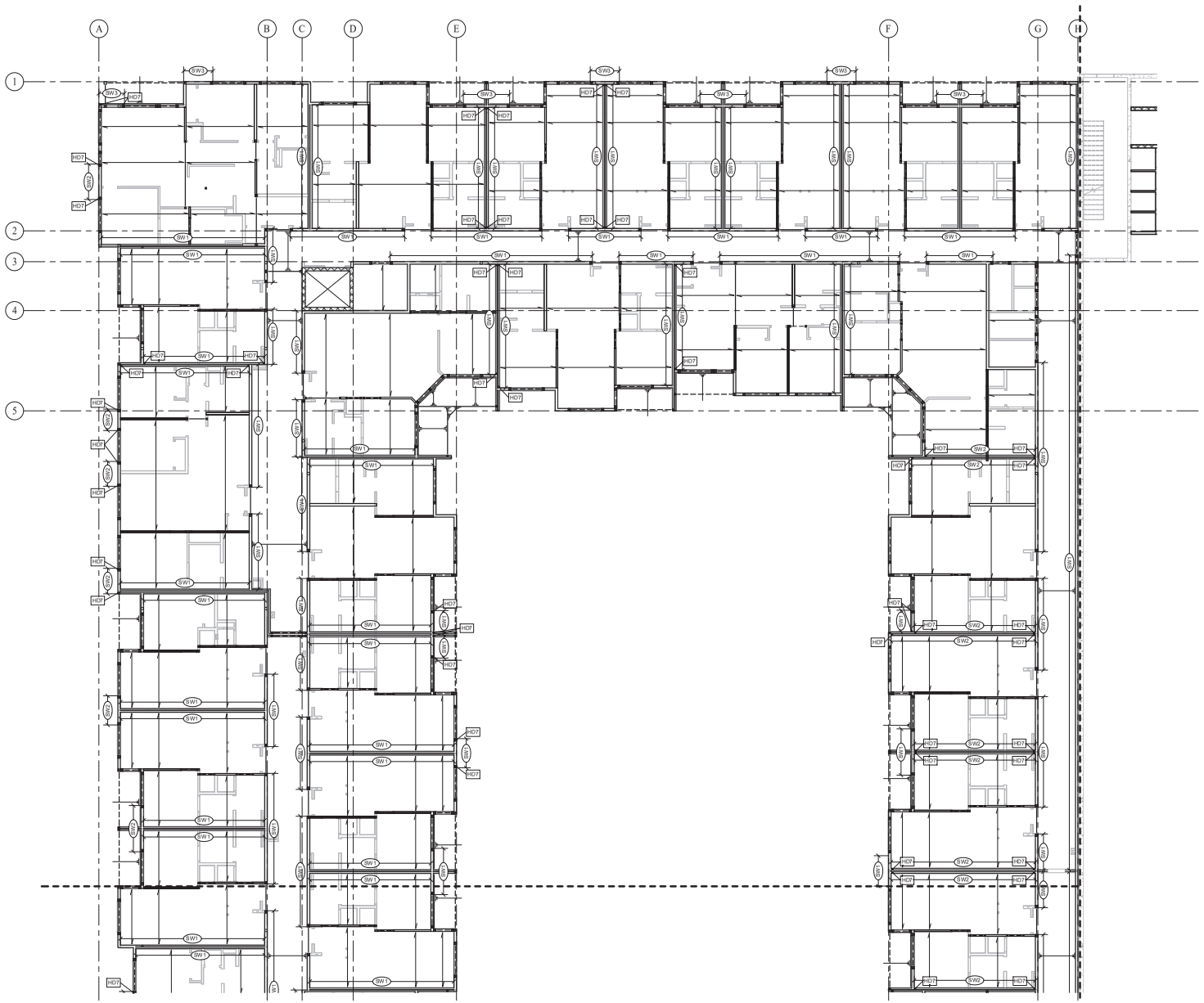

KEYNOTE SCHEDULE - FRAMING	
1	OPEN TO BELOW
2	ROOF ACCESS HATCH, RE: ARCH
3	5" CMU STAIR/ELEVATOR SHAFT. RE: TYP. MASONRY NOTES ON SHEET S0-0.1 FOR REINF. REQ'M.
4	PROVIDE EPOSZ POST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UPSIDE DOWN EPOSZ POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4" ø x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LGUAM 10-3/16 HANGER FASTENED DIRECTLY TO CMU WALL w/ (8) 3/8"x 4" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CCQQ/ECCQQ COLUMN CAP. WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL-AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP-FLUSH WITH ADJACENT TRUSSES. TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM
9	RE: S5.02.1 FOR COLUMN CAP/BASE CONNECTION TO WOOD BEAMS
10	RE: S5.02.1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 24" CLEAR). TRUSS MANUF TO DESIGN TRUSSES IN MECH. ROOM FOR 40psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13/SD1.0 w/ (4) 4-1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE.
13	PROVIDE 11"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 8"3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 9"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 8"3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LCE4 COLUMN CAP CONNECTION EA. SIDE OF BEAM TO COLUMN BELOW (2) CLIPS TOTAL PER POST).
16	PROVIDE 9"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 8"3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 6"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION.

1 4TH FLOOR LATERAL TREATMENT PLAN - AREA A

1/8" = 1'-0"

NOTES:
1. RE: **S0** SHEET S FOR TYPICAL FLOOR FRAMING NOTES AND TYPICAL WALL FRAMING NOTES.
2. RE: **S0-0.1** FOR SHEAR WALL, HOLDOWN AND STUD WALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.

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No.	Date	Issue
	07/19/23	PERMIT SET
4	08/07/24	ITC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: LEVEL 4 LATERAL TREATMENT PLAN - AREA A

Sheet Number: **S3-3.1**

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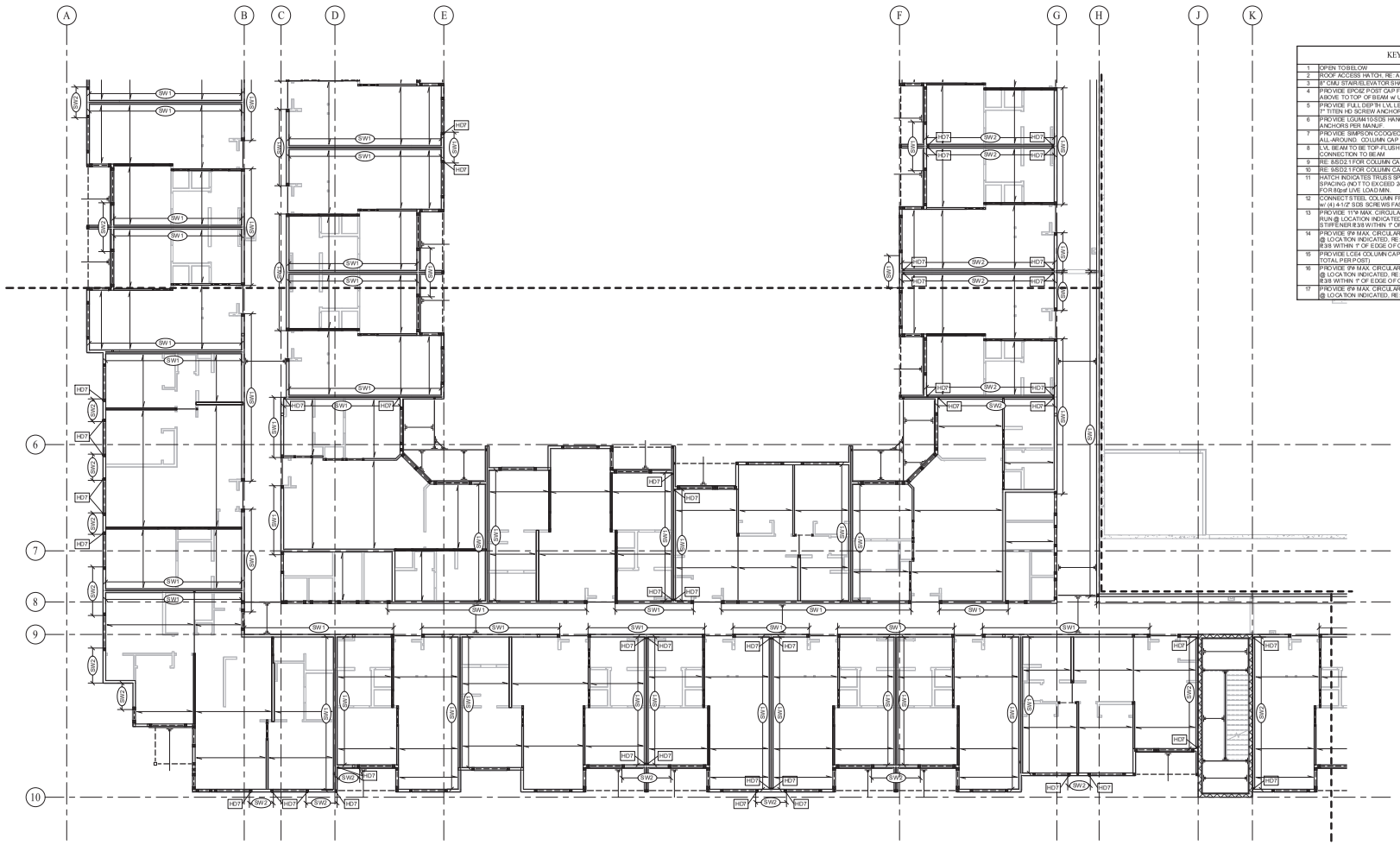

KEYNOTE SCHEDULE - FRAMING	
1	OPEN TO BELOW
2	ROOF ACCESS HATCH, RE: ARCH
3	8" CMU STAIR/ELEVATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S0-0.1 FOR REINF. REQ'M.
4	PROVIDE EPOS2 POST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM. w/ UPSIDE DOWN EPOS2 POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"Ø x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LGUM410/SDS HANGER FASTENED DIRECTLY TO CMU WALL w/ (8) 3/8"x 4" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CCQQ/ECCQQ COLUMN CAP. WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL-AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP-FLUSH WITH ADJACENT TRUSSES, TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM.
9	RE: S/S/D2.1 FOR COLUMN CAP/BASE CONNECTION TO WOOD BEAMS
10	RE: S/S/D2.1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 24" CLEAR). TRUSS MANUF TO DESIGN TRUSSES IN MECH. ROOM FOR 80psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13/SD1.0 w/ (4) 4-1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE
13	PROVIDE 11"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 8"3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 8"3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LCE4 COLUMN CAP CONNECTION EA. SIDE OF BEAM TO COLUMN BELOW ((2) CLIPS TOTAL PER POST)
16	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 8"3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION

1 4TH FLOOR LATERAL TREATMENT PLAN - AREA B

1/8" = 1'-0"

NOTES:
1. RE: **S0** SHEETS FOR TYPICAL FLOOR FRAMING NOTES AND TYPICAL WALL FRAMING NOTES.
2. RE: **S0-0.1** FOR SHEAR WALL, HOLDOWN AND STUD WALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.

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No.	Date	Issue
	07/19/23	PERMIT SET
4	08/07/24	JPC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: LEVEL 4 LATERAL TREATMENT PLAN - AREA B

Sheet Number: **S3-3.2**

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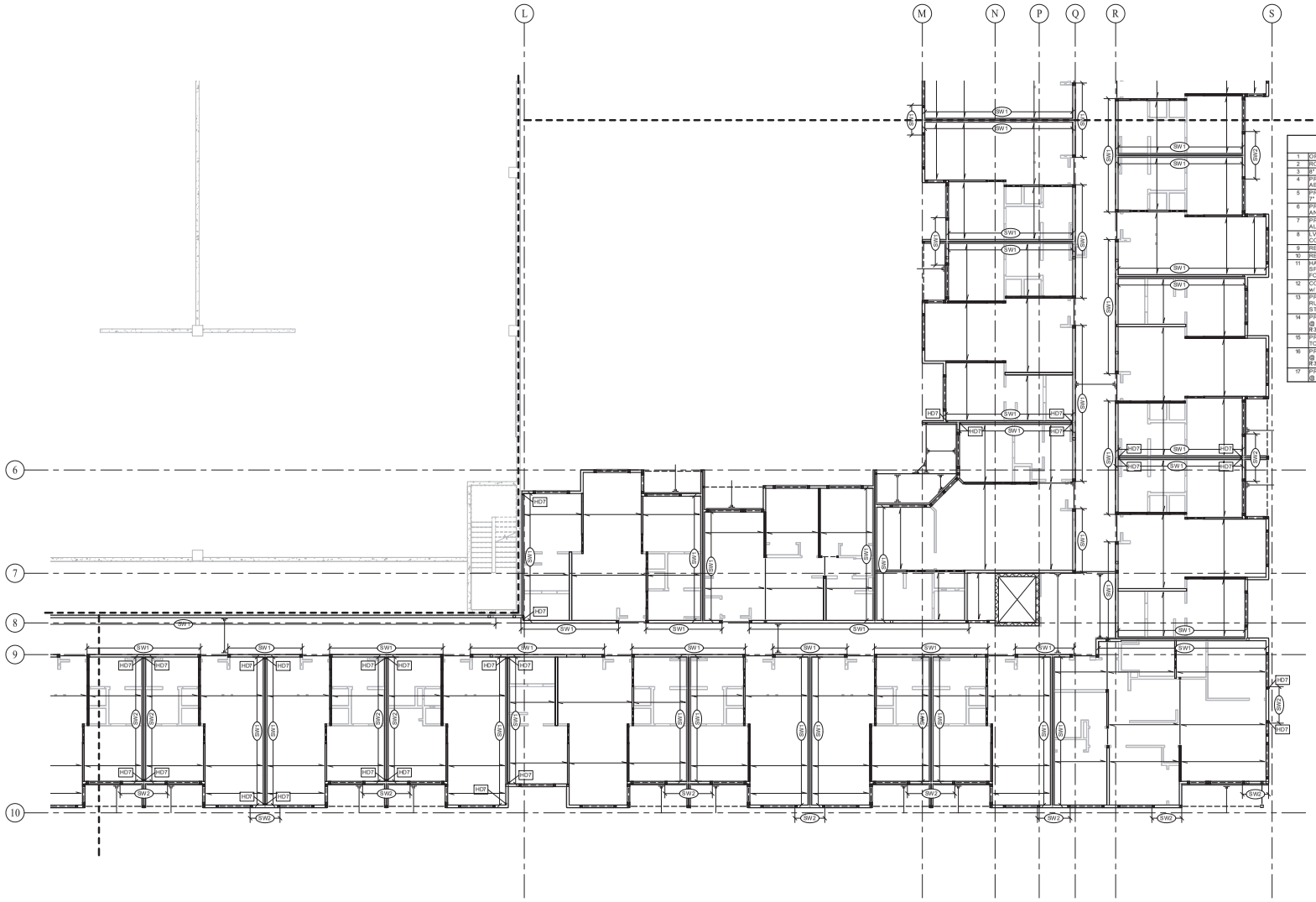

KEYNOTE SCHEDULE - FRAMING	
1	OPEN TO BELOW
2	ROOF ACCESS HATCH, RE: ARCH
3	8" CMU STAIR/ELEVATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S0.0.1 FOR REINF. REQ'M.
4	PROVIDE EPC6Z POST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UPSIDE DOWN EPC6Z POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"ø x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LGUM410-SDS HANGER FASTENED DIRECTLY TO CMU WALL w/ (8) 3/8"x4" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CCOQ/ECCOQ COLUMN CAP. WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL-AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP-FLUSH WITH ADJACENT TRUSSES. TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM
9	RE: 8/SD2.1 FOR COLUMN CAP/BASE CONNECTION TO WOOD BEAMS
10	RE: 9/SD2.1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 24" CLEAR). TRUSS MANUF TO DESIGN TRUSSES IN MECH. ROOM FOR 80psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13/SD1.0 w/ (4) 4-1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE
13	PROVIDE 11"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER ℄3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 9"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER ℄3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LC64 COLUMN CAP CONNECTION EA. SIDE OF BEAM TO COLUMN BELOW (2) CLIPS TO TAL PER POST)
16	PROVIDE 9"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER ℄3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 6"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION

1 4TH FLOOR LATERAL TREATMENT PLAN - AREA C

1/8" = 1'-0"

NOTES:
1. RE: **S0** SHEETS FOR TYPICAL FLOOR FRAMING NOTES AND TYPICAL WALL FRAMING NOTES.
2. RE: **S0-0.1** FOR SHEAR WALL, HOLDOWN AND STUD WALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.

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COLORADO LICENSED PROFESSIONAL ENGINEER
39330
08/05/2024

No.	Date	Issue
	07/19/23	PERMIT SET
4	08/07/24	PC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: LEVEL 4 LATERAL TREATMENT PLAN - AREA C

Sheet Number: S3-3.3

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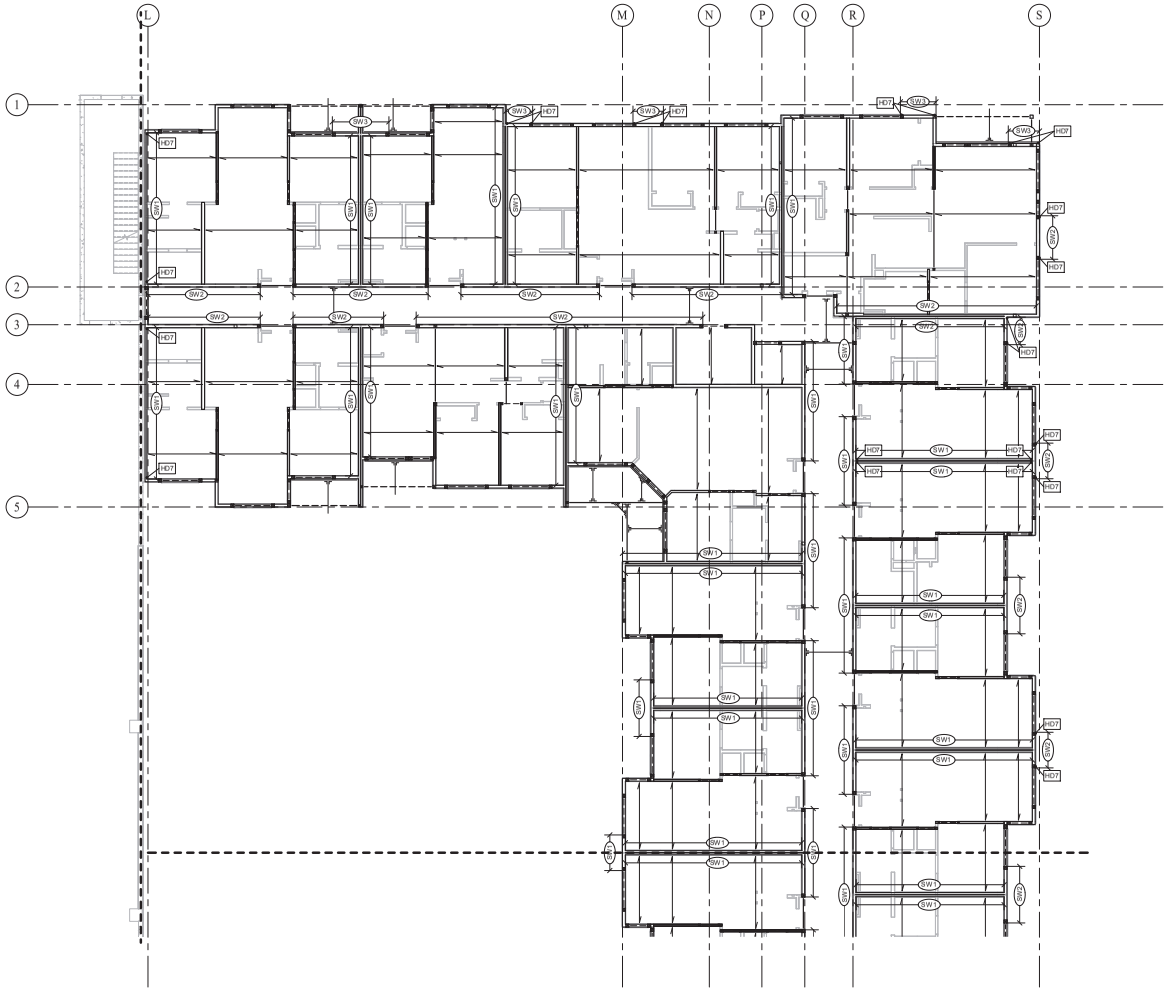

1 4TH FLOOR LATERAL TREATMENT PLAN - AREA D

1/8" = 1'-0"

NOTES:
1. RE: **S0** SHEETS FOR TYPICAL FLOOR FRAMING NOTES AND TYPICAL WALL FRAMING NOTES.
2. RE: **S0-0.1** FOR SHEAR WALL, HOLDOWN AND STUD WALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.

KEY NOTE SCHEDULE - FRAMING	
1	OPEN TO BELOW
2	ROOF ACCESS HATCH, RE: ARCH
3	8" CMU STAIR/ELEVATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S0-0.1 FOR REINF. REQ'M.
4	PROVIDE EPOSZ POST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UPSIDE DOWN EPOSZ POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"Ø x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LGUM410-SDS HANGER FASTENED DIRECTLY TO CMU WALL w/ (6) 3/8"x4" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CCOQVECCOQ COLUMN CAP. WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL-AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP-FLUSH WITH ADJACENT TRUSSES, TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM
9	RE: 8/S02.1 FOR COLUMN CAP BASE CONNECTION TO WOOD BEAMS
10	RE: 9/S02.1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 24" CLEAR). TRUSS MANUF TO DESIGN TRUSSES IN MECH. ROOM FOR 80psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13/SD1.0 w/ (4) 4-1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE
13	PROVIDE 1"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 8SB WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 6"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 8SB WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LCE4 COLUMN CAP CONNECTION E.A. SIDE OF BEAM TO COLUMN BELOW (2) CLIPS TOTAL PER POST)
16	PROVIDE 8"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 8SB WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 8"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION.

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No.	Date	Issue
3	07/19/23	PERMIT SET
4	08/07/24	DTC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: LEVEL 4 LATERAL TREATMENT PLAN - AREA D

Sheet Number: **S3-3.4**

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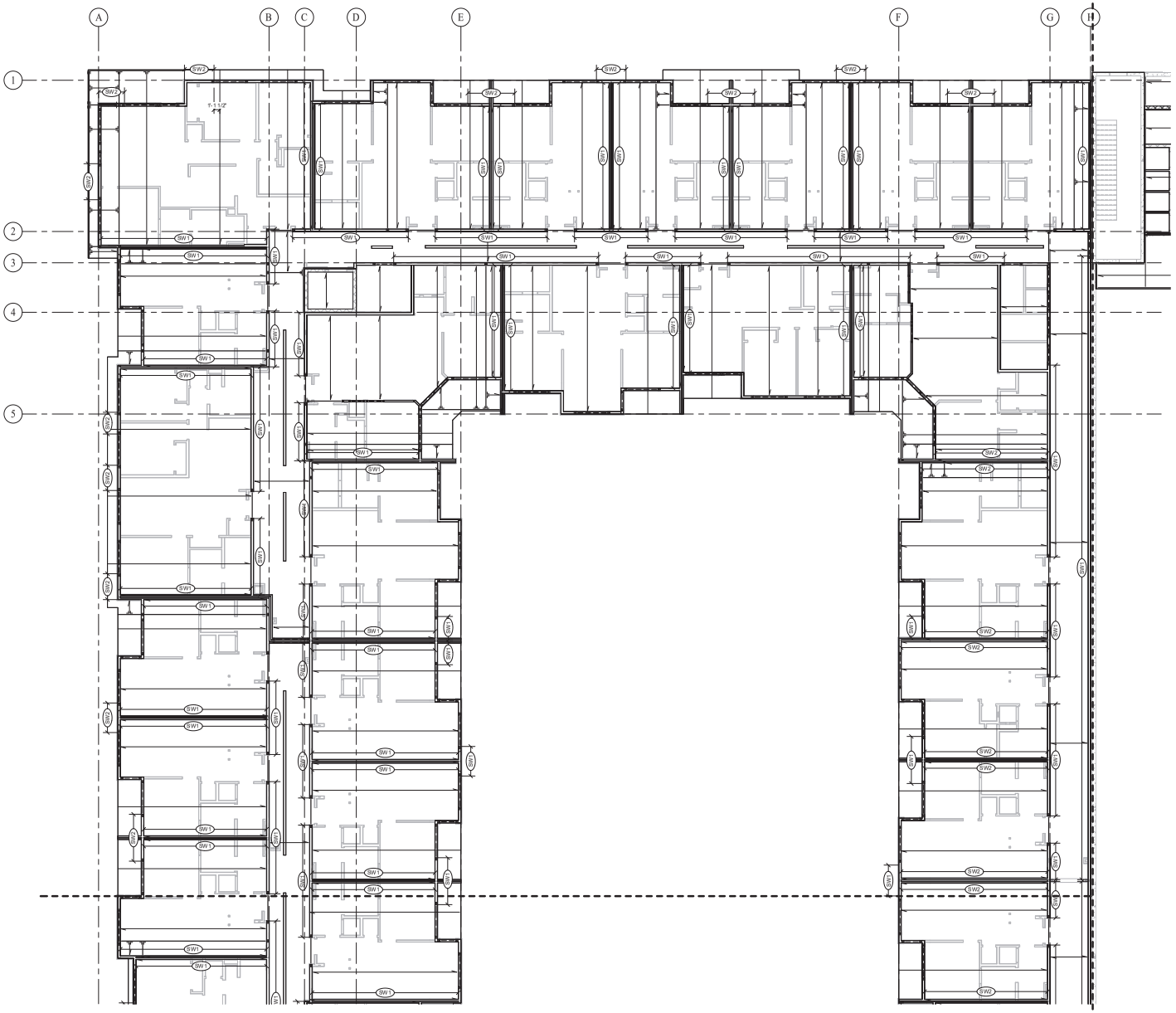

KEYNOTE SCHEDULE - FRAMING	
1	OPEN TO BELOW
2	ROOF ACCESS HATCH, RE: ARCH
3	5" CMU STAIR/ELEVATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S0-0.1 FOR REINF. REQ'M.
4	PROVIDE EPCBZ POST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UPSIDE DOWN EPCBZ POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"ø x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LGUM410-SDS HANGER FASTENED DIRECTLY TO CMU WALL w/ (8) 3/8"x4" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CCQQSSCQQQ COLUMN CAP. WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL-AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP-FLUSH WITH ADJACENT TRUSSES, TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM
9	RE: S5.02.1 FOR COLUMN CAP/BASE CONNECTION TO WOOD BEAMS
10	RE: S5.02. 1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 24" CLEAR). TRUSS MANUF TO DESIGN TRUSSES IN MECH. ROOM FOR 80psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13/SD1.0 w/ (4) 4-1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE
13	PROVIDE 11"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 8"X8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 8"X8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LCE4 COLUMN CAP CONNECTION E.A. SIDE OF BEAM TO COLUMN BELOW (2) CUPS TOTAL PER POST)
16	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 8"X8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION.

1 ROOF LATERAL TREATMENT PLAN - AREA A

1/8" = 1'-0"

NOTES:
1. RE: **S0** SHEET S FOR TYPICAL FLOOR FRAMING NOTES AND TYPICAL WALL FRAMING NOTES.
2. RE: **S0-0.1** FOR SHEAR WALL, HOLDOWN AND STUD WALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.

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MARSHALL POINTE APARTMENTS, LP
5190 MARSHALL ST - ARVADA, CO 80002



No.	Date	Issue
	07/19/23	PERMIT SET
4	08/07/24	ITC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: ROOF LATERAL TREATMENT PLAN - AREA A

Sheet Number: **S3-4.1**

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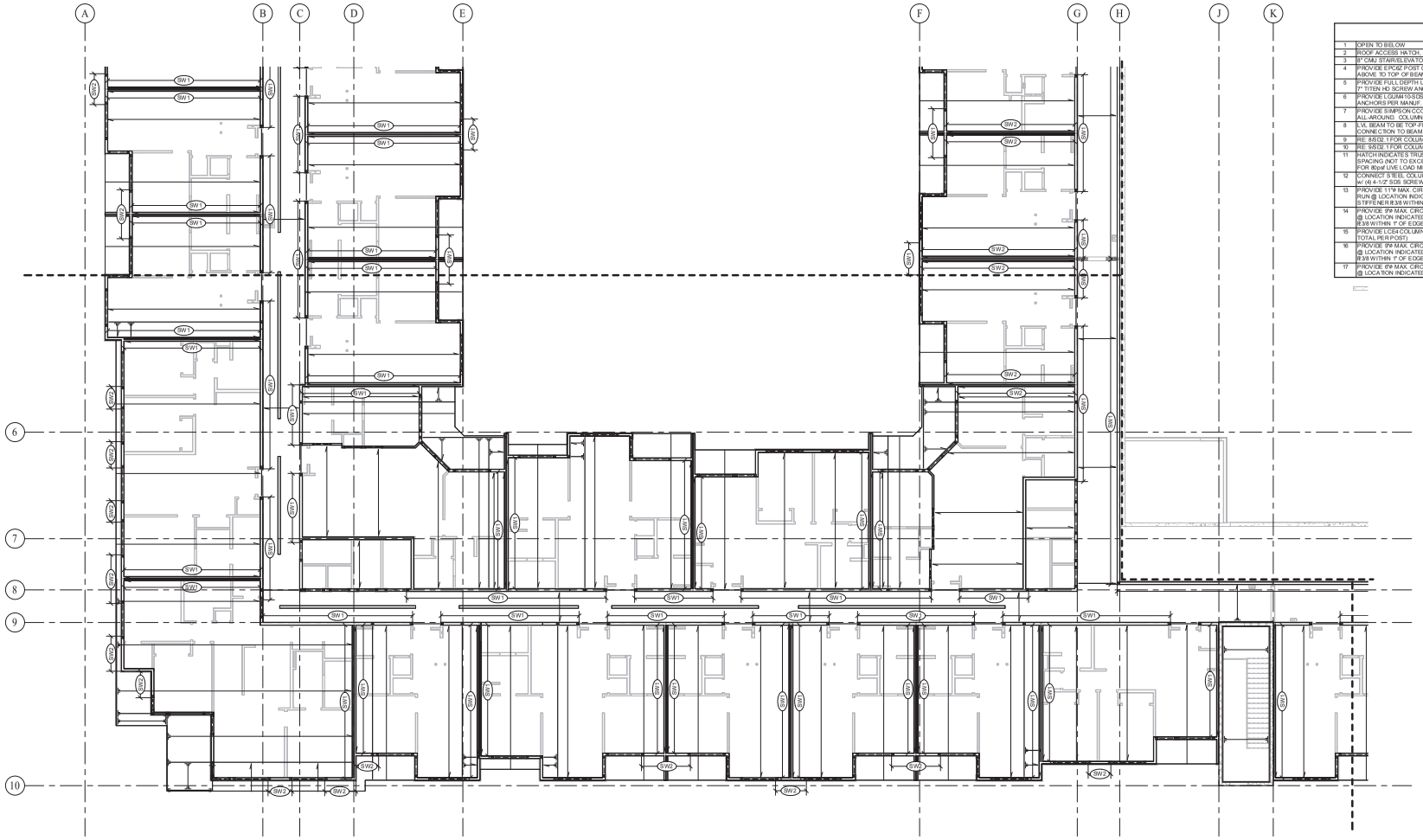

KEYNOTE SCHEDULE - FRAMING	
1	OPEN TO BELOW
2	ROOF ACCESS HATCH, RE: ARCH
3	8" CMU STAIR/ELEVATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S0-0.1 FOR REINF. REQ'M.
4	PROVIDE EPC6Z POST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UPSIDE DOWN EPC6Z POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"ø x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LGUM410-SDS HANGER FASTENED DIRECTLY TO CMU WALL w/ (8) 3/8"x4" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CCOQ/ECCOQ COLUMN CAP. WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL-AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP-FLUSH WITH ADJACENT TRUSSES, TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM
9	RE: S/S0.2.1 FOR COLUMN CAP/BASE CONNECTION TO WOOD BEAMS
10	RE: S/S0.2.1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 24" CLEAR). TRUSS MANUF TO DESIGN TRUSSES IN MECH. ROOM FOR 80psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13/SD1.0 w/ (4) 4-1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE
13	PROVIDE 11"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER ℄3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 9"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER ℄3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LCE4 COLUMN CAP CONNECTION EA. SIDE OF BEAM TO COLUMN BELOW (2) CLIPS TOTAL PER POST)
16	PROVIDE 9"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER ℄3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 6"ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION

1 ROOF LATERAL TREATMENT PLAN - AREA B

1/8" = 1'-0"

NOTES:
1. RE: **S0** SHEETS FOR TYPICAL FLOOR FRAMING NOTES AND TYPICAL WALL FRAMING NOTES.
2. RE: **S0-0.1** FOR SHEAR WALL, HOLDOWN AND STUD WALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.

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No.	Date	Issue
	07/19/23	PERMIT SET
4	08/07/24	PC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: ROOF LATERAL TREATMENT PLAN - AREA B

Sheet Number: S3-4.2

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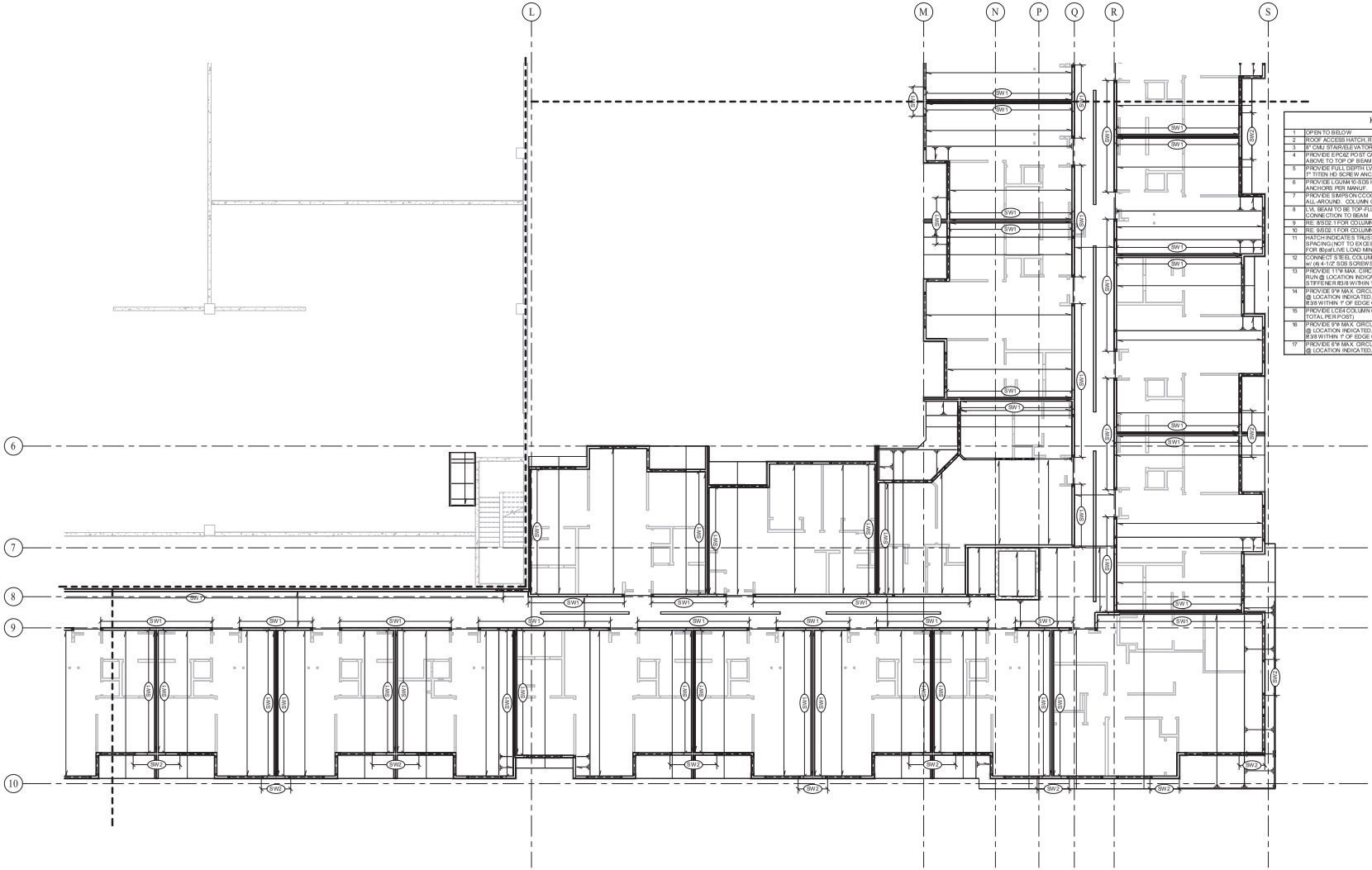

KEYNOTE SCHEDULE - FRAMING	
1	OPEN TO BELOW
2	ROOF ACCESS HATCH, RE: ARCH
3	8" CMU STAIR/ELEVATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S0-0.1 FOR REINF. REQM.
4	PROVIDE EPOZ POST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UPSIDE DOWN EPCBZ POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"Ø x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LSUM410-5/16 HANGER FASTENED DIRECTLY TO CMU WALL w/ (8) 3/8"x4" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CCQGEC/CQQ COLUMN CAP. WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL-AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP-FLUSH WITH ADJACENT TRUSSES, TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM
9	RE: 8/S12. 1 FOR COLUMN CAP/BASE CONNECTION TO WOOD BEAMS
10	RE: 9/S12. 1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 24" CLEAR). TRUSS MANUF TO DESIGN TRUSSES IN MECH. ROOM FOR 65psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13/SD1.0 w/ (4) 4-1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE
13	PROVIDE 11"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER IEJ3.8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER IF3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LCE4 COLUMN CAP CONNECTION EA. SIDE OF BEAM TO COLUMN BELOW ((2) CLIPS TOTAL PER POST)
16	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADDL. INFORMATION. PROVIDE WEB STIFFENER IF3/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 6"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED, RE: MECH. PLANS FOR ADD'L. INFORMATION

1 ROOF LATERAL TREATMENT PLAN - AREA C

NOTES: 1/8" = 1'-0"

1. RE: **S0** SHEETS FOR TYPICAL FLOOR FRAMING NOTES AND TYPICAL WALL FRAMING NOTES.
2. RE: **S0-0.1** FOR SHEAR WALL, HOLDOWN AND STUD WALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.

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No.	Date	Issue
	07/19/23	PERMIT SET
4	08/07/24	PC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: ROOF LATERAL TREATMENT PLAN - AREA C

Sheet Number: **S3-4.3**

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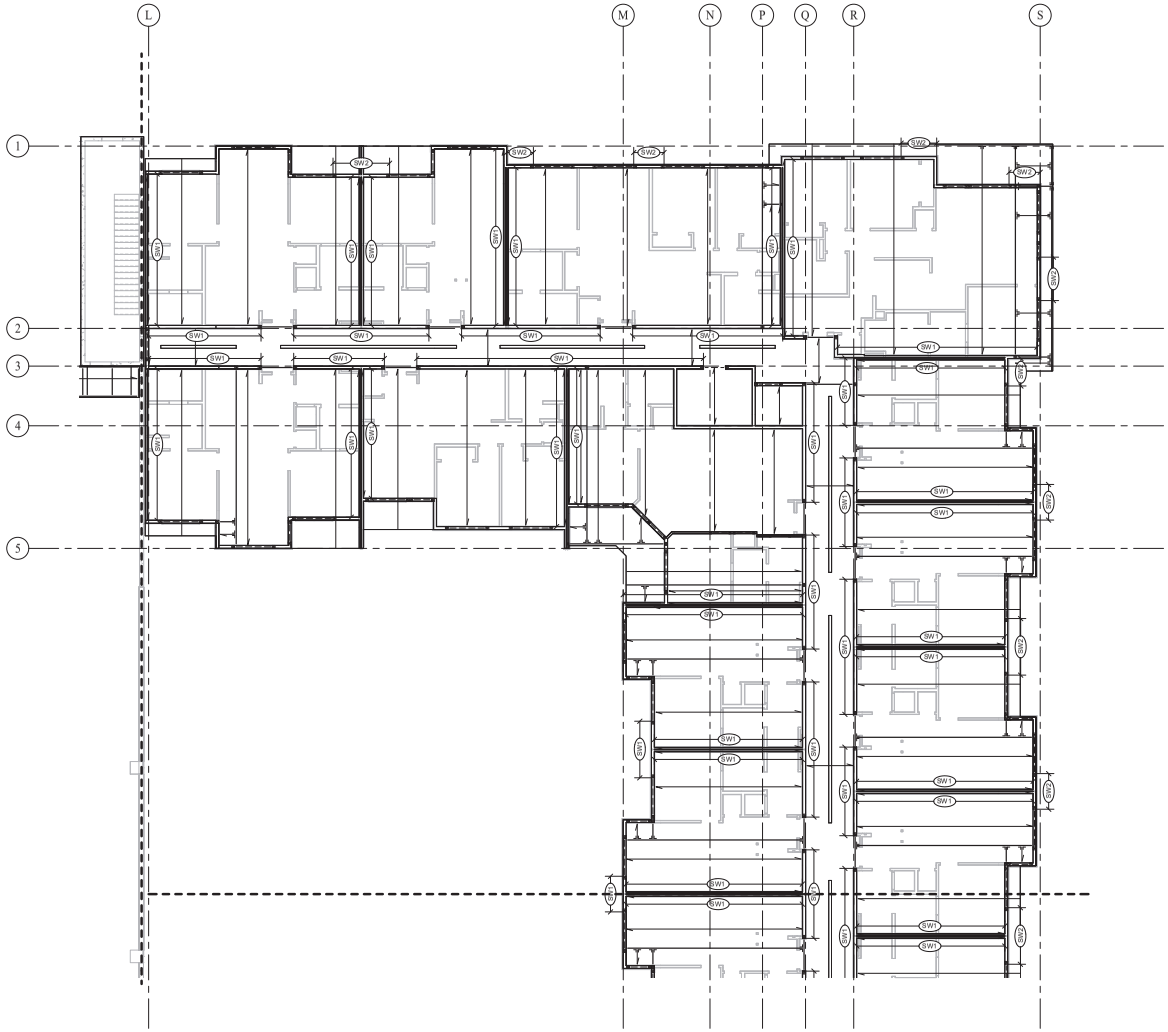

KEYNOTE SCHEDULE - FRAMING	
1	OPEN TO BELOW
2	ROOF ACCESS HATCH, RE: ARCH
3	8" CMU STAIR/ELEVATOR SHAFT, RE: TYP. MASONRY NOTES ON SHEET S0.0. 1 FOR REINF. REQ'M.
4	PROVIDE EPOEZ POST CAP FROM BEAM TO COLUMN BELOW. CONNECT BASE OF COLUMN FROM ABOVE TO TOP OF BEAM w/ UPSIDE DOWN EPOEZ POST CAP.
5	PROVIDE FULL DEPTH LVL LEDGER FASTENED TO CMU WALL w/ (2) STAGGERED ROWS OF 3/4"Ø x 7" TITEN HD SCREW ANCHORS @ 16" o.c.
6	PROVIDE LGUM410 SDS HANGER F ASTENED DIRECTLY TO CMU WALL w/ (8) 3/8"x4" TITEN HD ANCHORS PER MANUF.
7	PROVIDE SIMPSON CCQQEICCOQ COLUMN CAP. WELD TO STEEL COLUMN w/ 1/4" FILLET WELD ALL-AROUND. COLUMN CAP WIDTH TO MATCH BEAM WIDTH INDICATED IN PLAN.
8	LVL BEAM TO BE TOP-FLUSH WITH ADJACENT TRUSSES, TRUSS MANUF. TO PROVIDE HANGER CONNECTION TO BEAM
9	RE: S/SD2.1 FOR COLUMN CAP/BASE CONNECTION TO WOOD BEAMS
10	RE: S/SD2.1 FOR COLUMN CAP CONNECTION TO WOOD BEAMS
11	HATCH INDICATES TRUSS SPACING TO BE CENTERED OVER MECH. ROOM & TO BE AT MAXIMUM SPACING (NOT TO EXCEED 24" CLEAR). TRUSS MANUF TO DESIGN TRUSSES IN MECH. ROOM FOR 80psf LIVE LOAD MIN.
12	CONNECT STEEL COLUMN FROM ABOVE TO WOOD BEAM w/ BASE PL SIZED TO MATCH 13/SD1.0 w/ (4) 4-1/2" SDS SCREWS FASTENED TO TOP OF BEAM w/ 1" MIN. EDGE DISTANCE
13	PROVIDE 11"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 83/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
14	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 83/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
15	PROVIDE LCS4 COLUMN CAP CONNECTION EA. SIDE OF BEAM TO COLUMN BELOW (2) CLIPS TOTAL PER POST)
16	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION. PROVIDE WEB STIFFENER 83/8 WITHIN 1" OF EDGE OF OPENING BOTH SIDES OF OPENING & BEAM WEB.
17	PROVIDE 9"Ø MAX. CIRCULAR WEB PENETRATION CENTERED w/ DEPTH OF BEAM FOR MECH. RUN @ LOCATION INDICATED. RE: MECH. PLANS FOR ADD'L. INFORMATION.

1 ROOF LATERAL TREATMENT PLAN - AREA D

3/8" = 1'-0"

NOTES:
1. RE: **S0** SHEETS FOR TYPICAL FLOOR FRAMING NOTES AND TYPICAL WALL FRAMING NOTES.
2. RE: **S0-0.1** FOR SHEAR WALL, HOLDOWN AND STUD WALL SCHEDULES AS WELL AS SHEATHING REQUIREMENTS, TYP.

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No.	Date	Issue
3	07/19/23	PERMIT SET
4	08/07/24	STC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: ROOF LATERAL TREATMENT PLAN - AREA D

Sheet Number: **S3-4.4**

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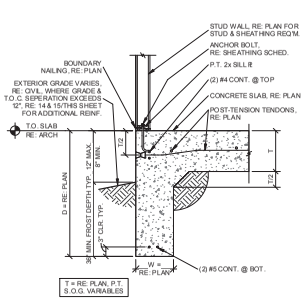
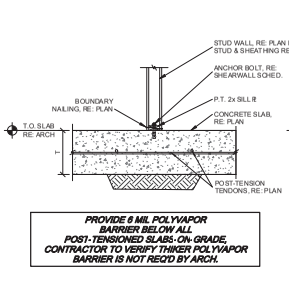
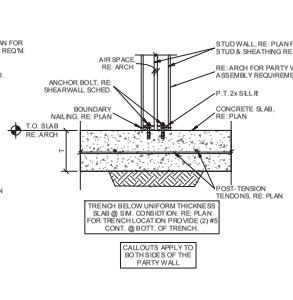


1 SECTION
3/4" = 1'-0"



2 SECTION
3/4" = 1'-0"



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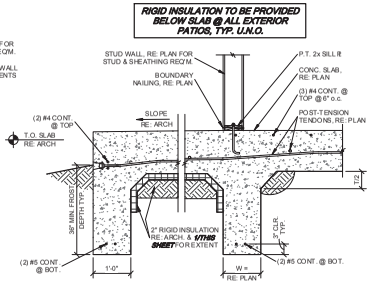
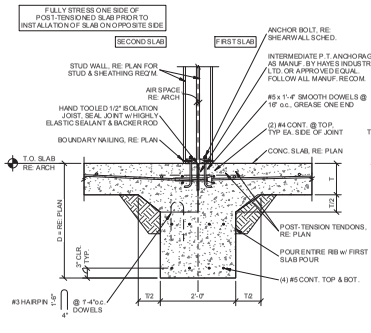
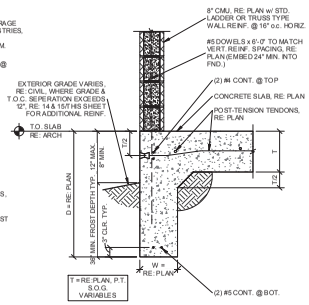
3/4" = 1'-0"



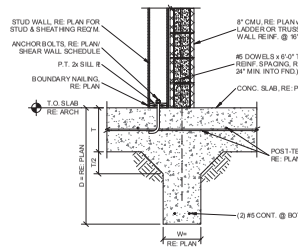
4 SECTION
3/4" = 1'-0"



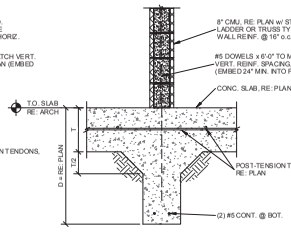
5 SECTION
3/4" = 1'-0"



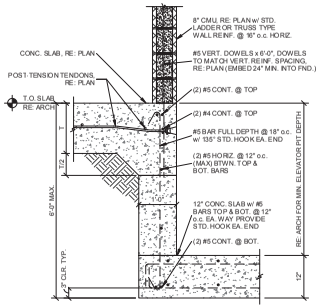
6 SECTION
3/4" = 1'-0"



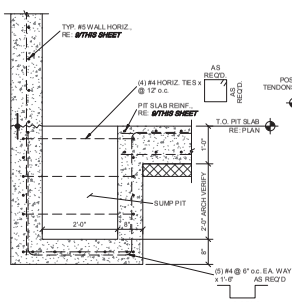
7 SECTION
3/4" = 1'-0"



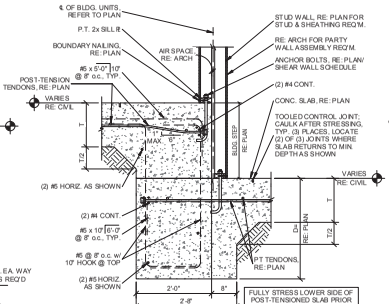
8 SECTION
3/4" = 1'-0"



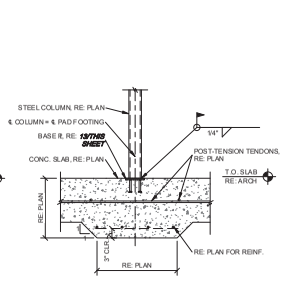
ELEVATOR PIT
9 SECTION
3/4" = 1'-0"



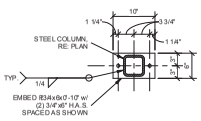
SUMP PIT @ ELEVATOR PIT SLAB
10 SECTION
3/4" = 1'-0"



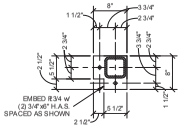
11 SECTION
3/4" = 1'-0"



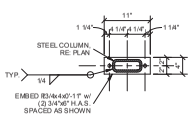
12 SECTION
3/4" = 1'-0"



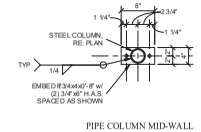
5" COLUMN MID-WALL BASEPLATE DETAIL
A



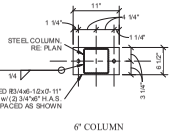
5" COLUMN CORNER BASEPLATE DETAIL
B



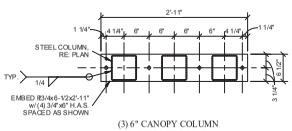
RECT. COLUMN MID-WALL BASEPLATE DETAIL
C



PIPE COLUMN MID-WALL BASEPLATE DETAIL
D

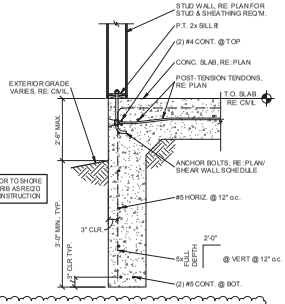


6" COLUMN BASEPLATE DETAIL
E

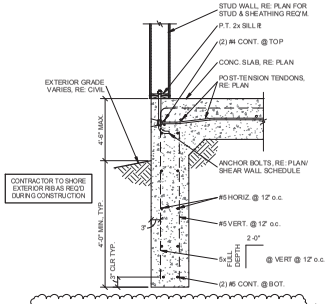


(3) 6" CANOPY COLUMN BASEPLATE DETAIL
F

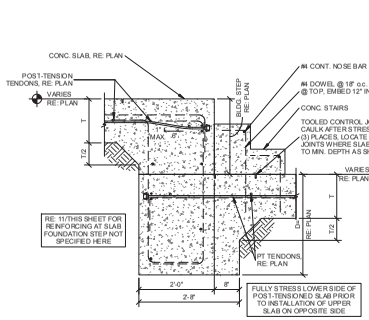
COLUMN EMBED BASEPLATES
13 SECTION
1" = 1'-0"



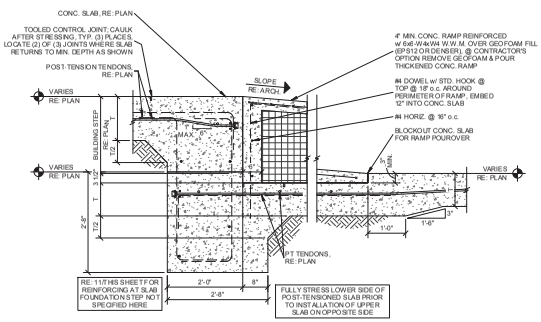
STEM WALL FOR SLAB ELEV. 2'-6" MAX. WHERE APPLICABLE ABOVE GRADE
14 SECTION
3/4" = 1'-0"



STEM WALL FOR SLAB ELEV. 4'-6" MAX. WHERE APPLICABLE ABOVE GRADE
15 SECTION
3/4" = 1'-0"



16 SECTION
3/4" = 1'-0"



17 SECTION
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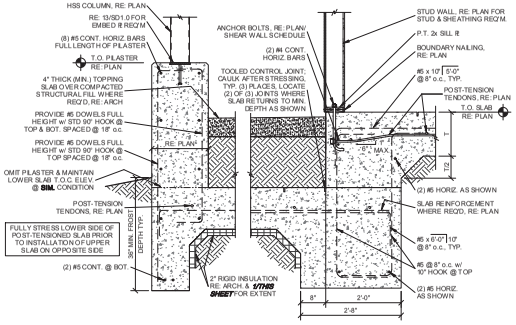
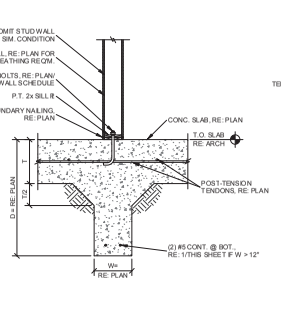
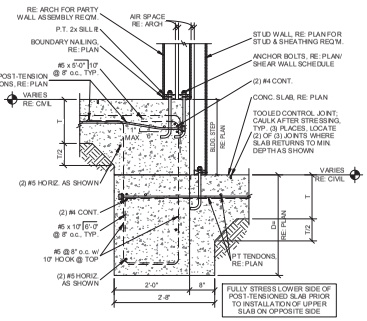


18 SECTION
3/4" = 1'-0"



19 SECTION
3/4" = 1'-0"



20 SECTION
3/4" = 1'-0"

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STATE OF COLORADO
RYAN W. HOLT
39330
REGISTERED
PROFESSIONAL ENGINEER
08/05/2024

No.	Date	Issue
1	07/19/23	PERMIT SET
4	08/07/24	PC

Project Architect

Project Designer: MPM/SRJ/ST/SZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: FOUNDATION SECTIONS

Sheet Number: **SD1.0**

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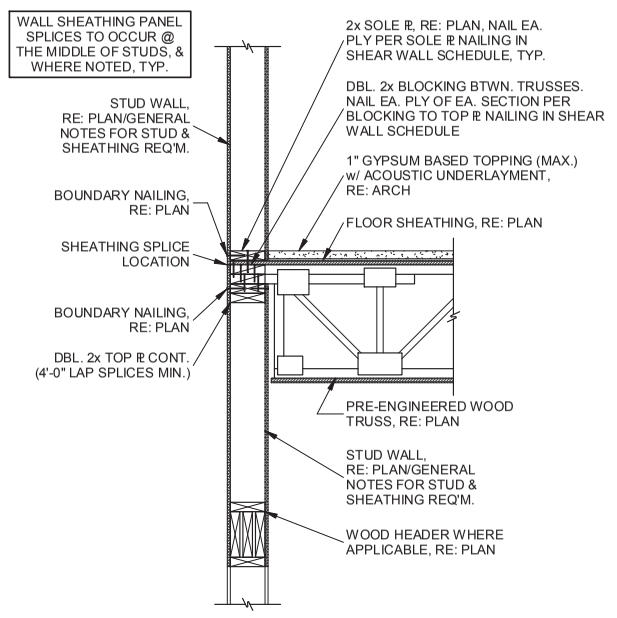
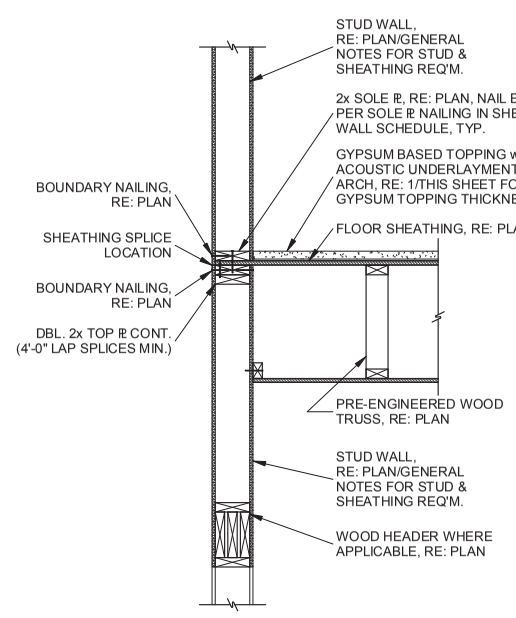


1 SECTION
3/4" = 1'-0"



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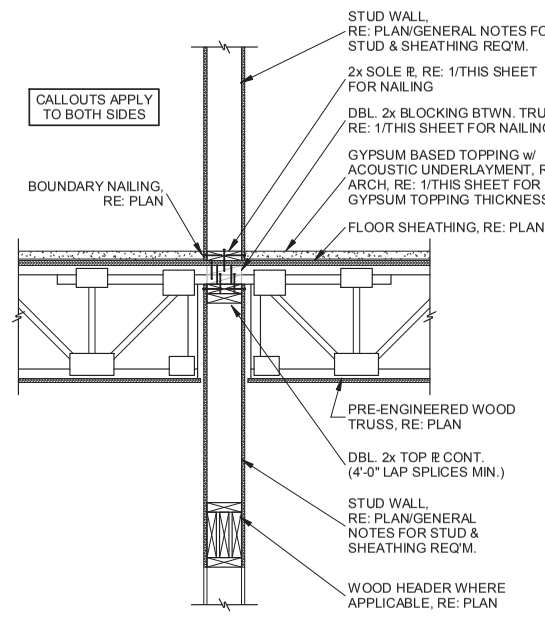
3/4" = 1'-0"



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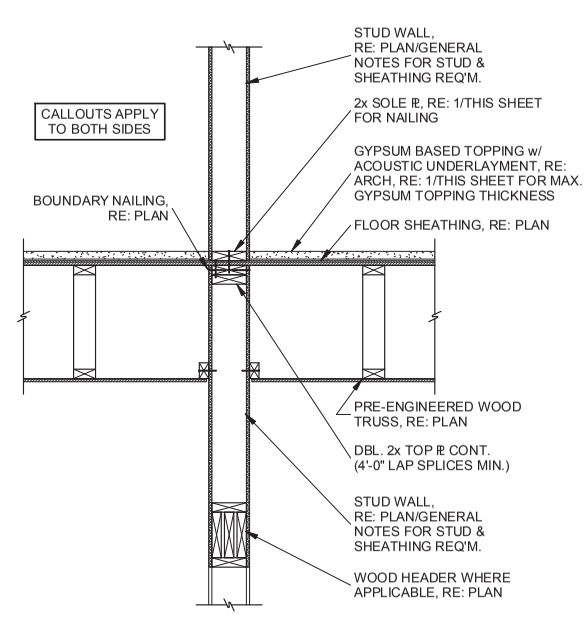
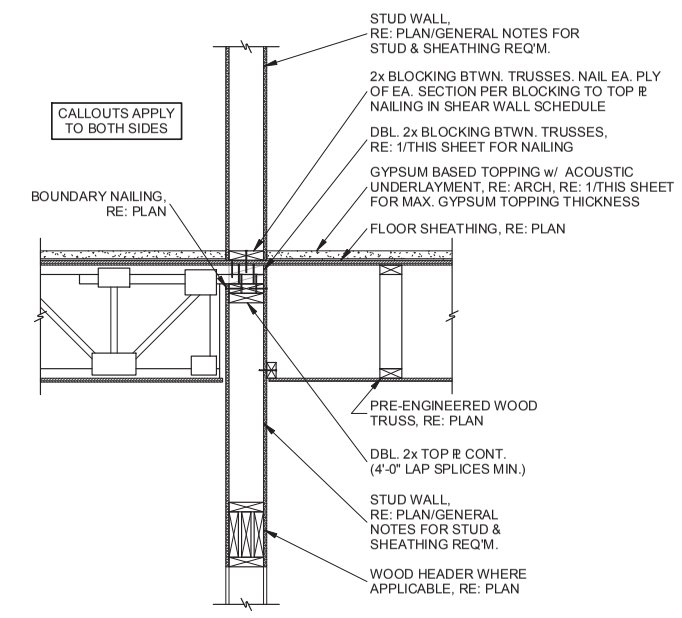
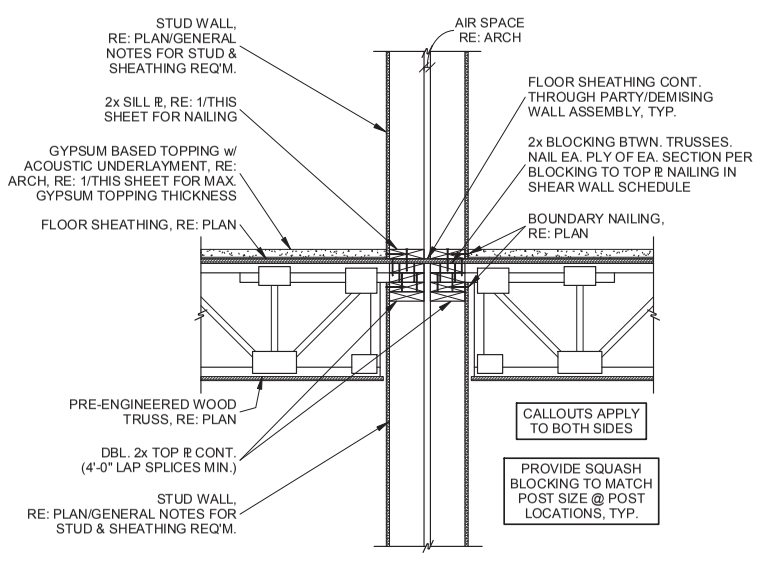
3/4" = 1'-0"



4 SECTION
3/4" = 1'-0"



5 SECTION
3/4" = 1'-0"



6 SECTION
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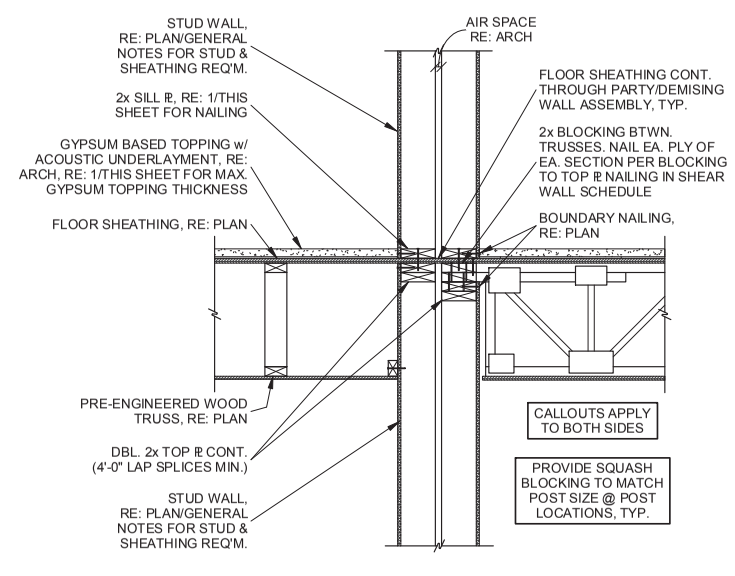

7 SECTION
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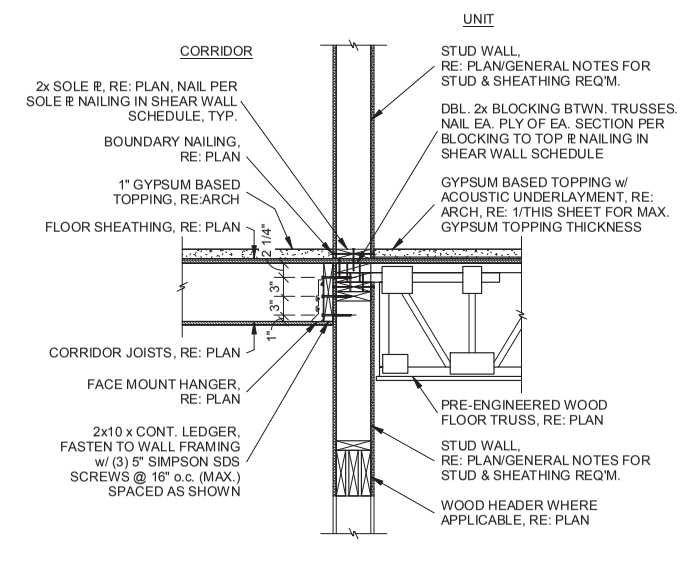

8 SECTION
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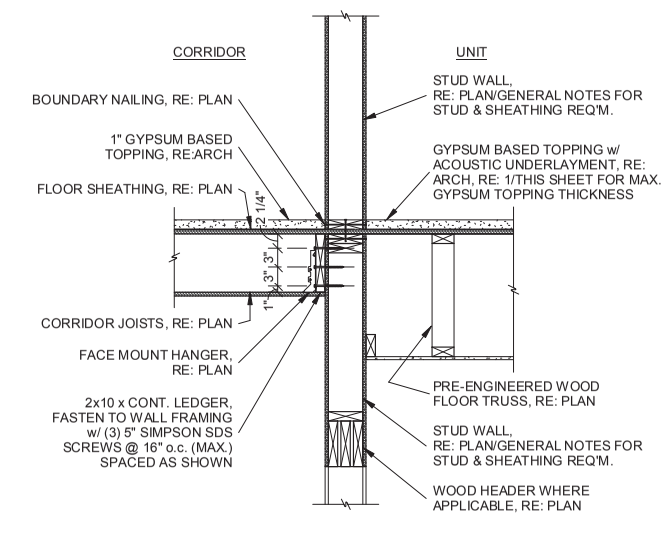

9 SECTION
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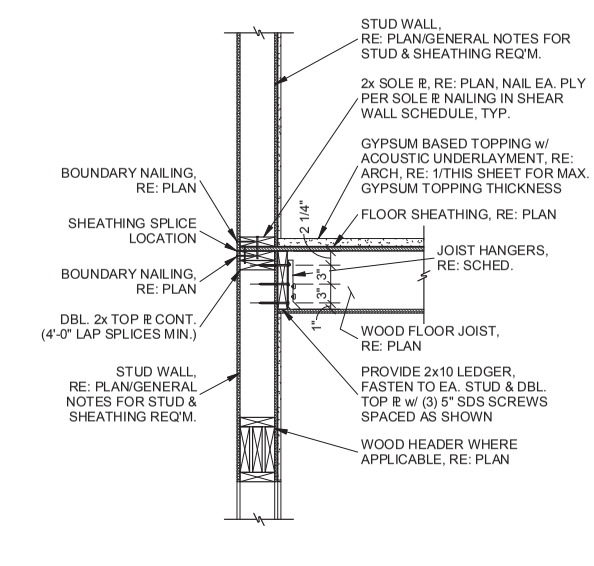

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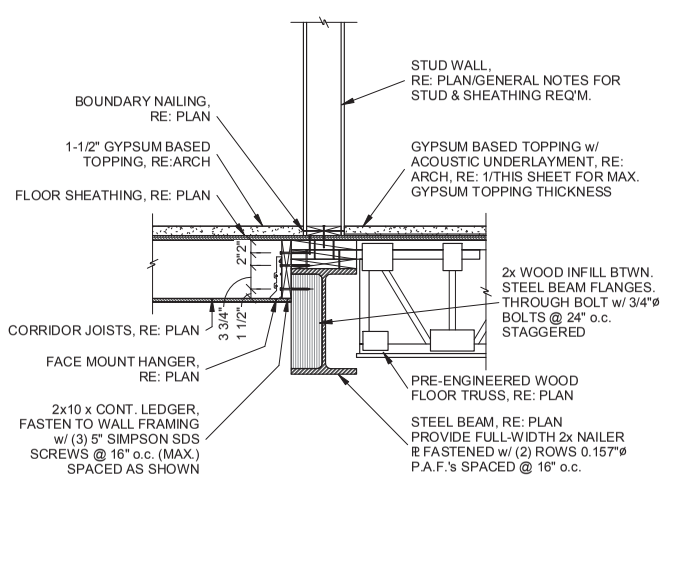

11 SECTION
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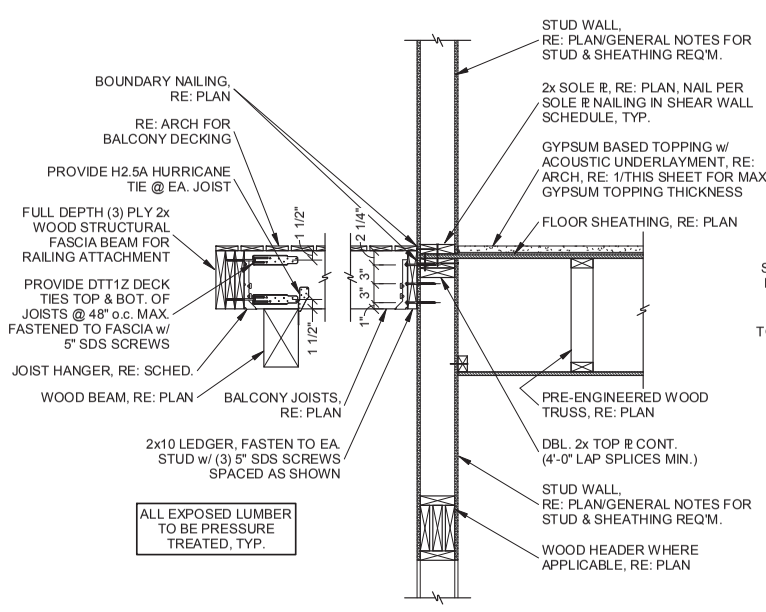

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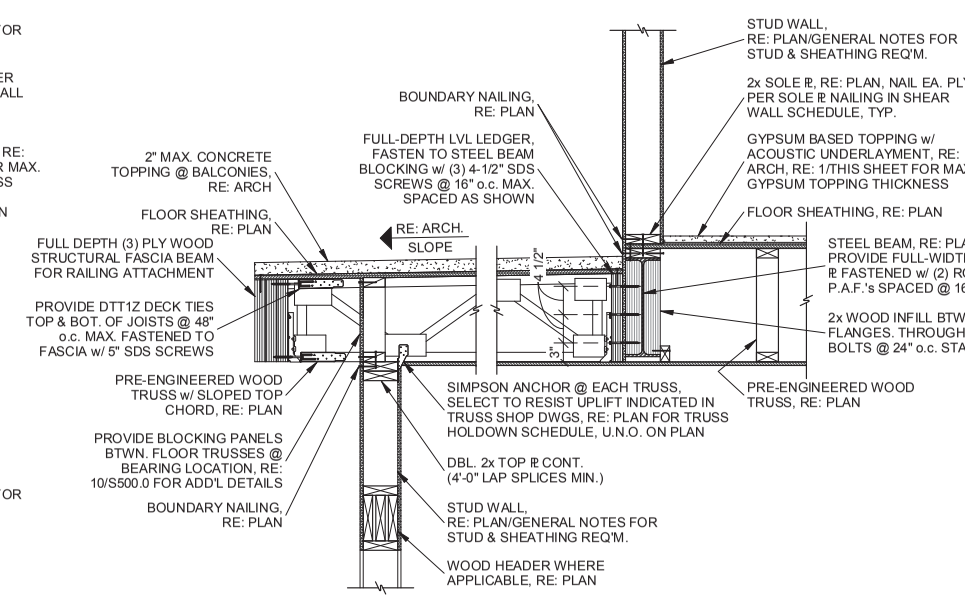

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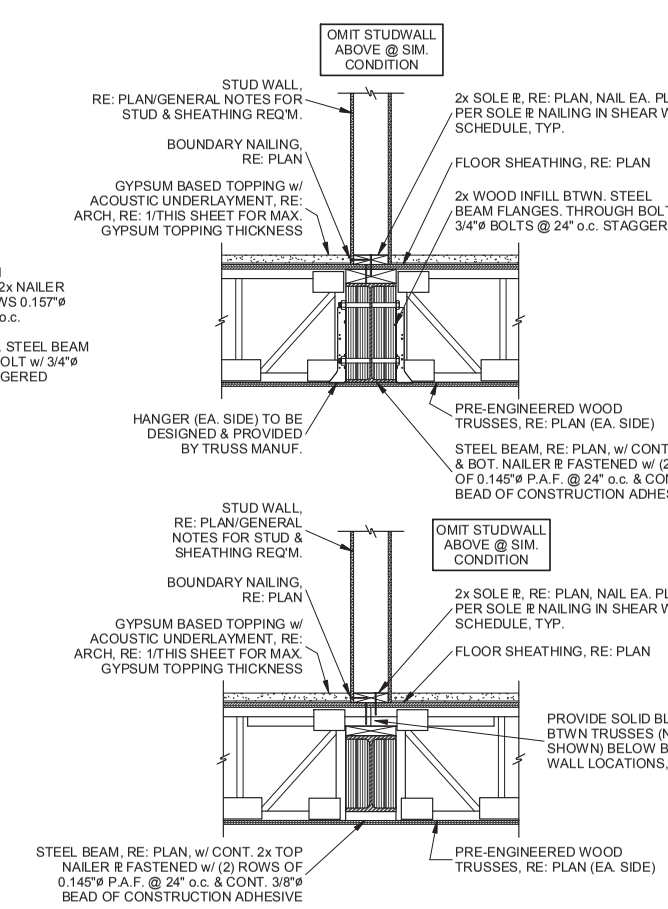

14 SECTION
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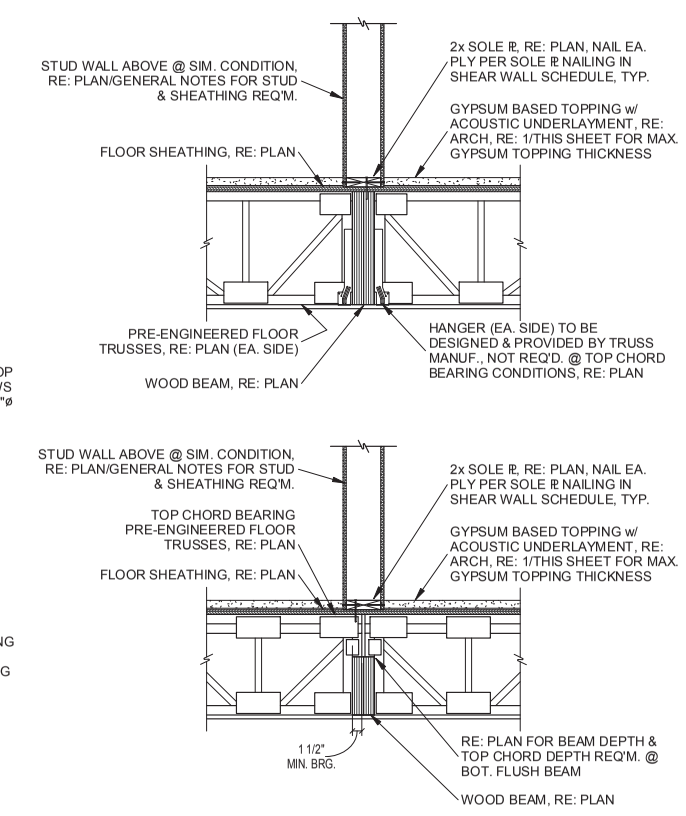

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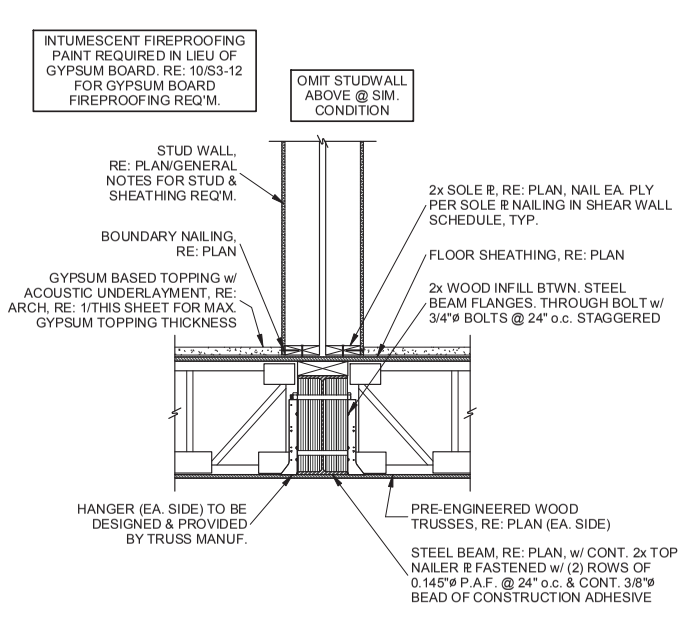

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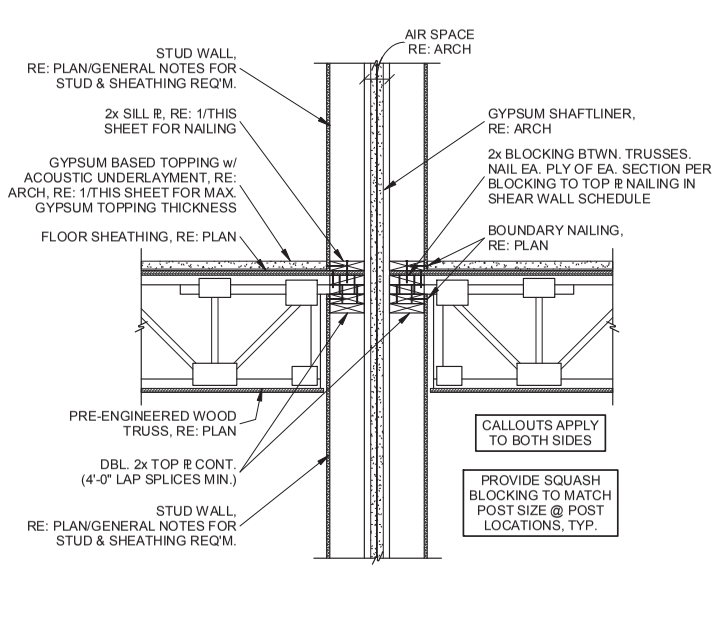

17 SECTION
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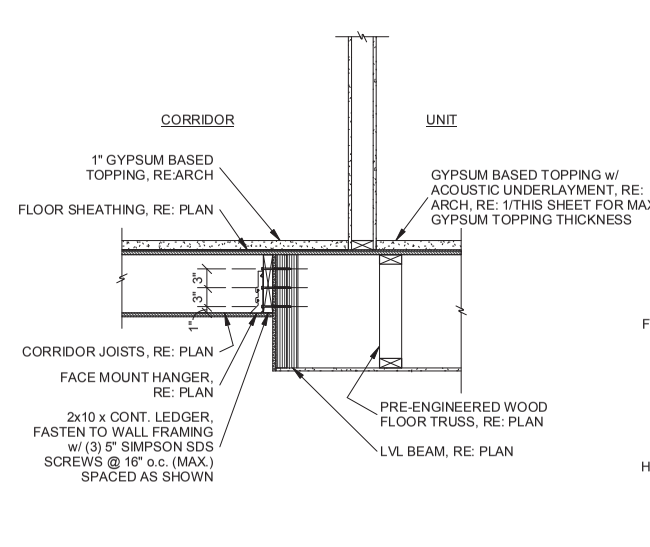

18 SECTION
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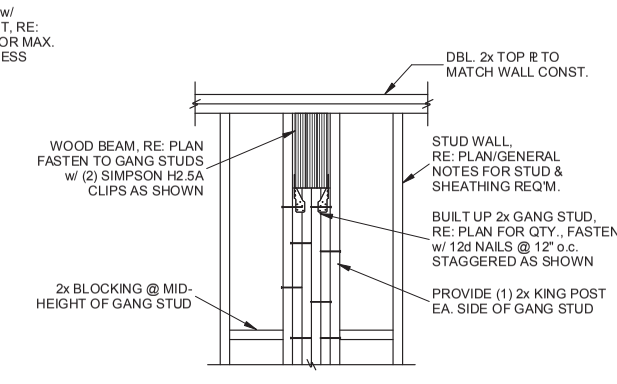
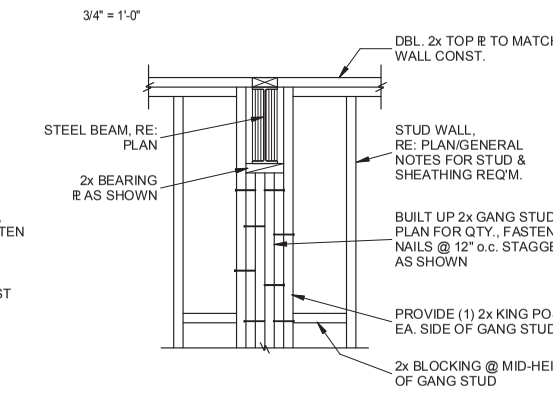
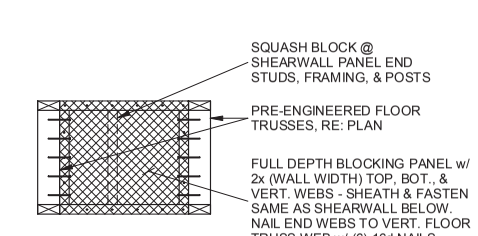


WOOD BEAM ON GANG STUD COLUMN
19 SECTION
3/4" = 1'-0"



STEEL BEAM ON GANG STUD COLUMN
20 SECTION
3/4" = 1'-0"



FLOOR TRUSS BLOCKING PANELS
21 SECTION
3/4" = 1'-0"

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COLORADO LICENSE, RODNEY WARREN HATCHETT, 39330, 08/05/2024, PROFESSIONAL ENGINEER

No.	Date	Issue
	07/19/23	PERMIT SET
4	08/07/24	IFC

Project Architect	
Project Designer	MPM/SRJ/STZ
Date	08/07/24
Job Number	220930
Drawn By	CR/SRJ
Checked By	RWH
Title	FLOOR SECTIONS
Sheet Number	SD2.0

8/5/2024 1:58:0 C:\Users\cesarrobles\Documents\00_Revit Local Files\220930.Marshall Pointe_Struc_R22_Cesar.roblesLYYAA.rvt
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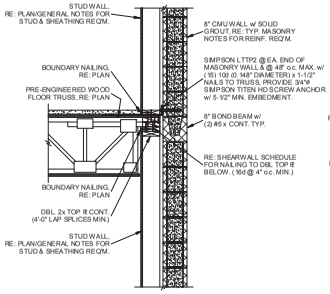

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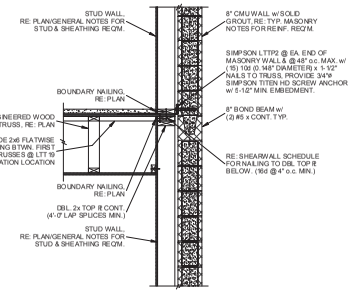
3/4" = 1'-0"



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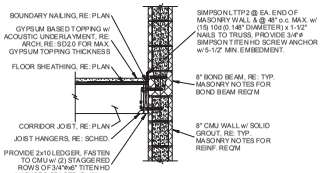
3/4" = 1'-0"



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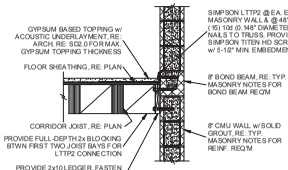

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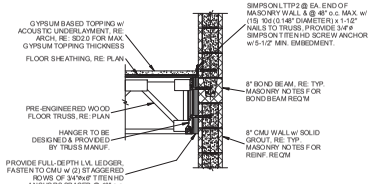
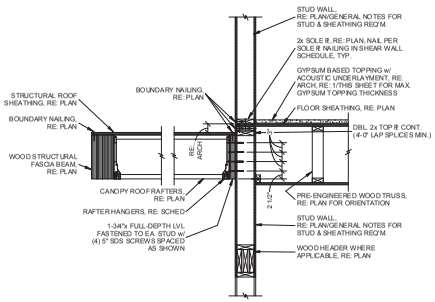
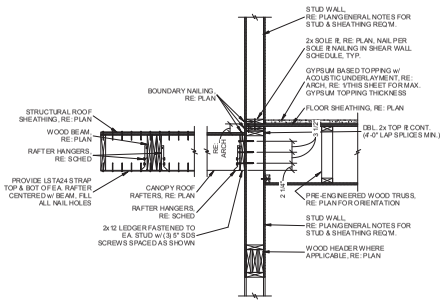
3/4" = 1'-0"



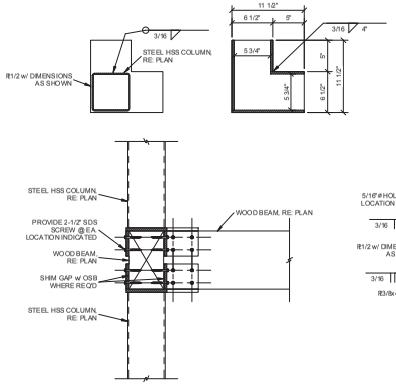
5 SECTION
3/4" = 1'-0"



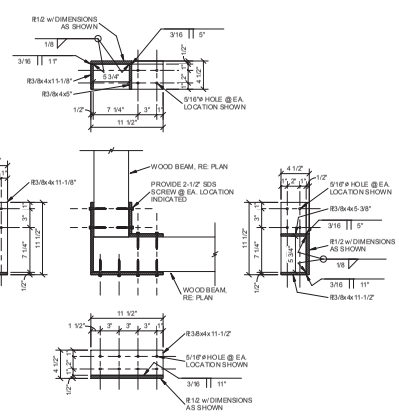
6 SECTION
3/4" = 1'-0"



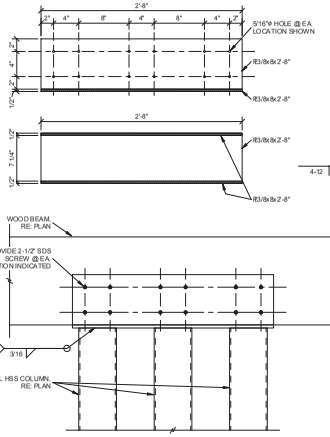
7 SECTION
3/4" = 1'-0"



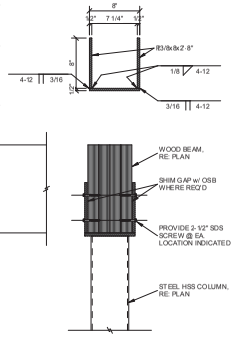
INSTALLED CONFIGURATION



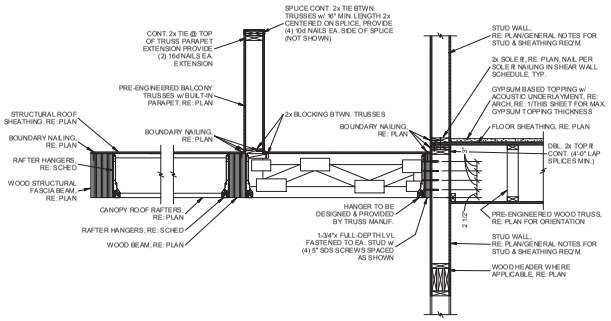
BALCONY CORNER COLUMN CAP
8 SECTION
1 1/2" = 1'-0"



INSTALLED CONFIGURATION



ENTRANCE CANOPY COLUMN CAP
9 SECTION
1 1/2" = 1'-0"



10 SECTION
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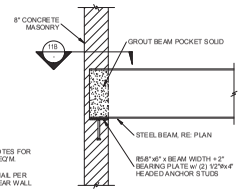

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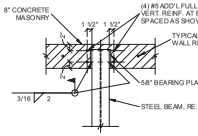
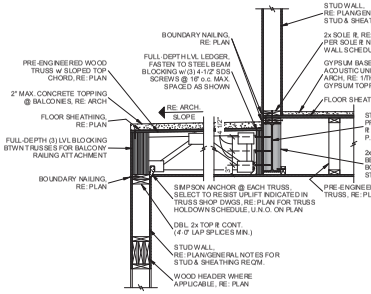


11B

11 SECTION
3/4" = 1'-0"



12 SECTION
3/4" = 1'-0"

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No.	Date	Issue
	07/19/23	PERMIT SET
4	08/07/24	DTC

Project Architect

Project Designer: MPM/SRJ/STZ

Date: 08/07/24

Job Number: 220930

Drawn By: CR/SRJ

Checked By: RWH

Title: FLOOR SECTIONS

Sheet Number: **SD2.1**

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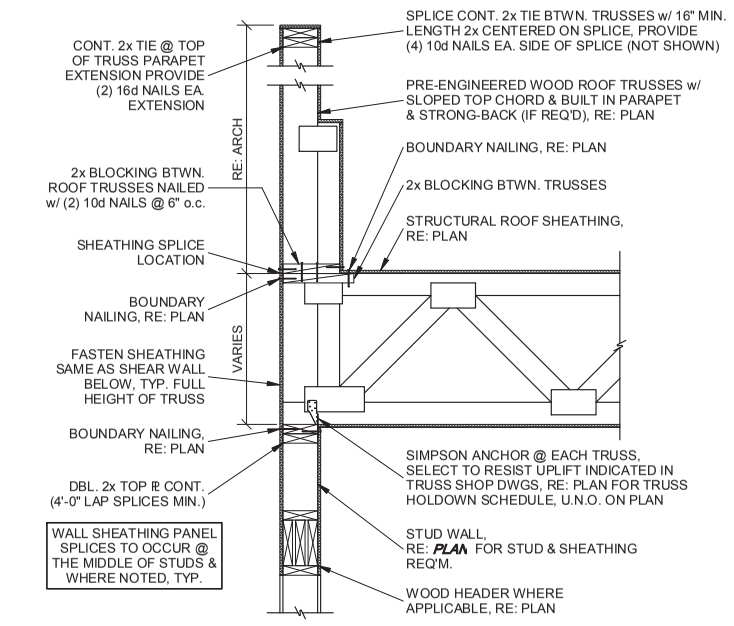
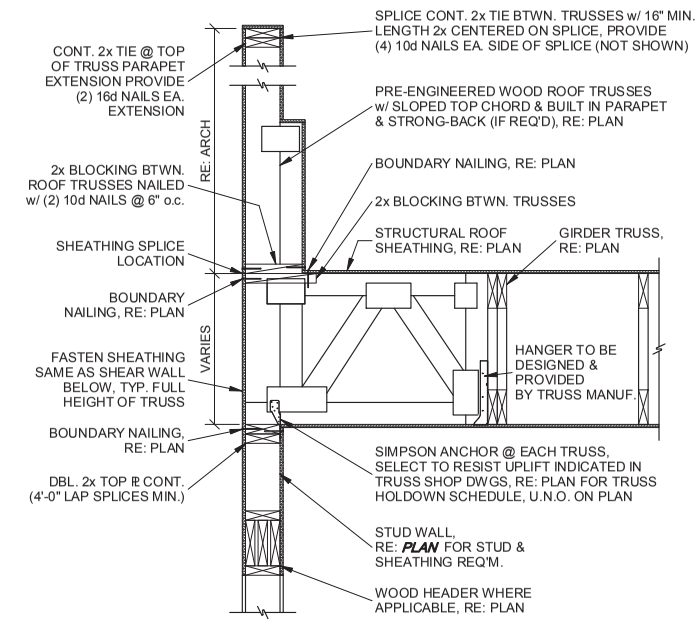
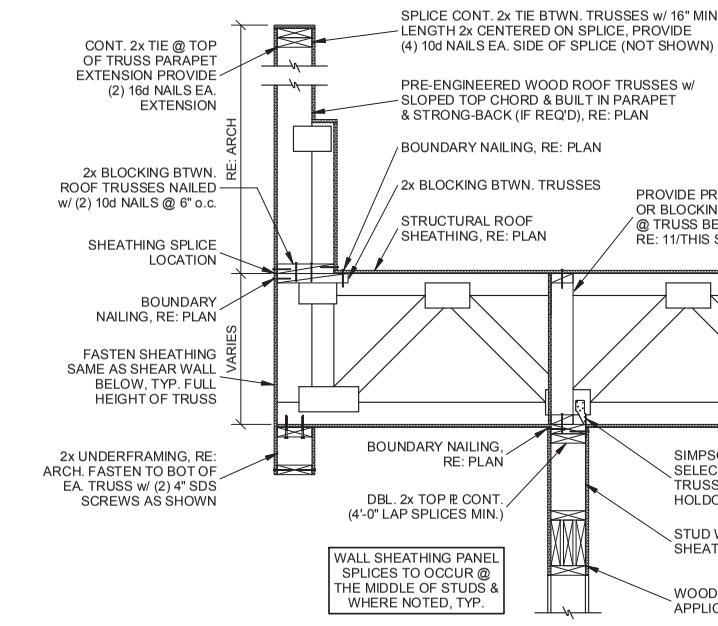


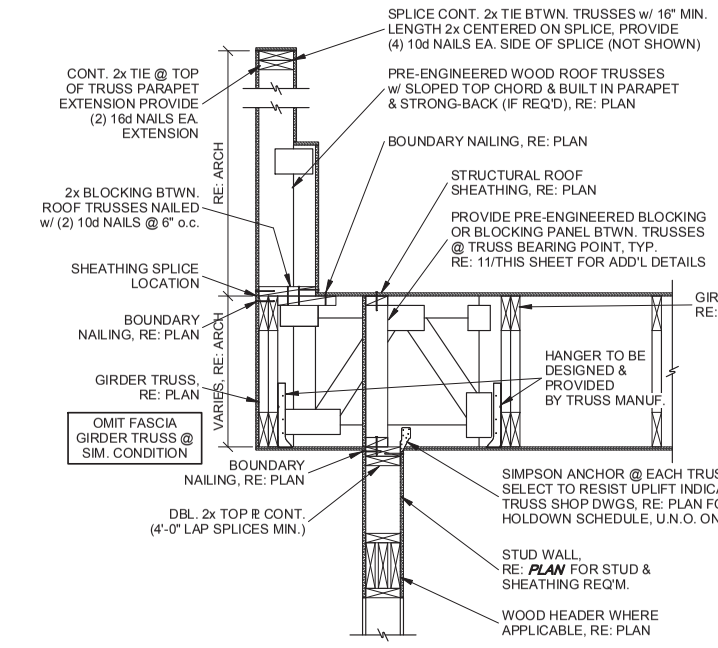
1 SECTION
3/4" = 1'-0"



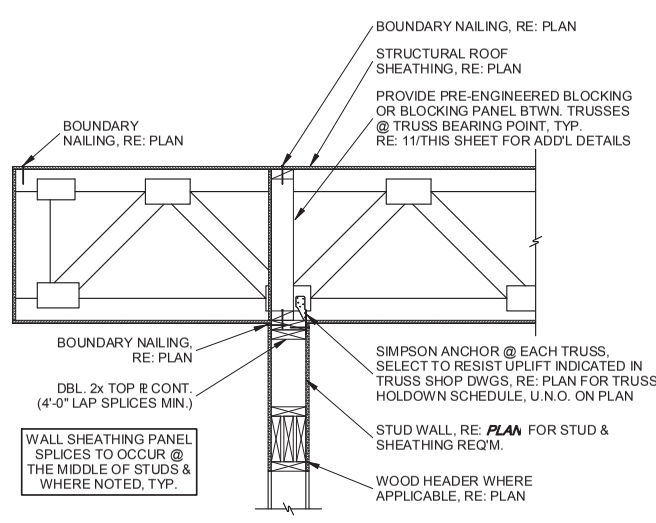
2 SECTION
3/4" = 1'-0"



3 SECTION
3/4" = 1'-0"



4 SECTION
3/4" = 1'-0"



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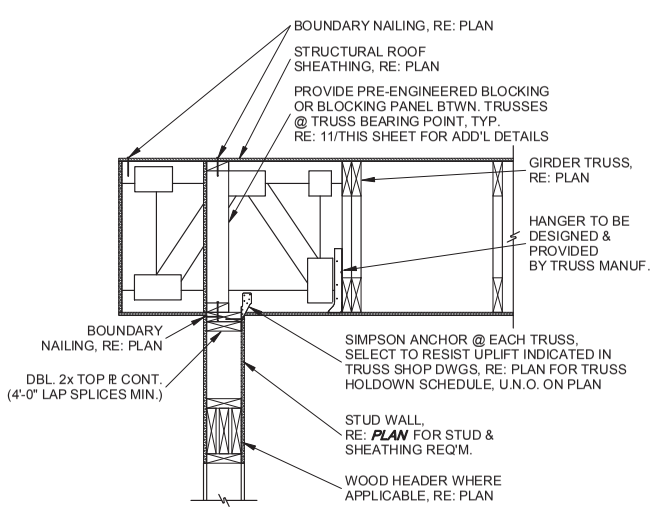

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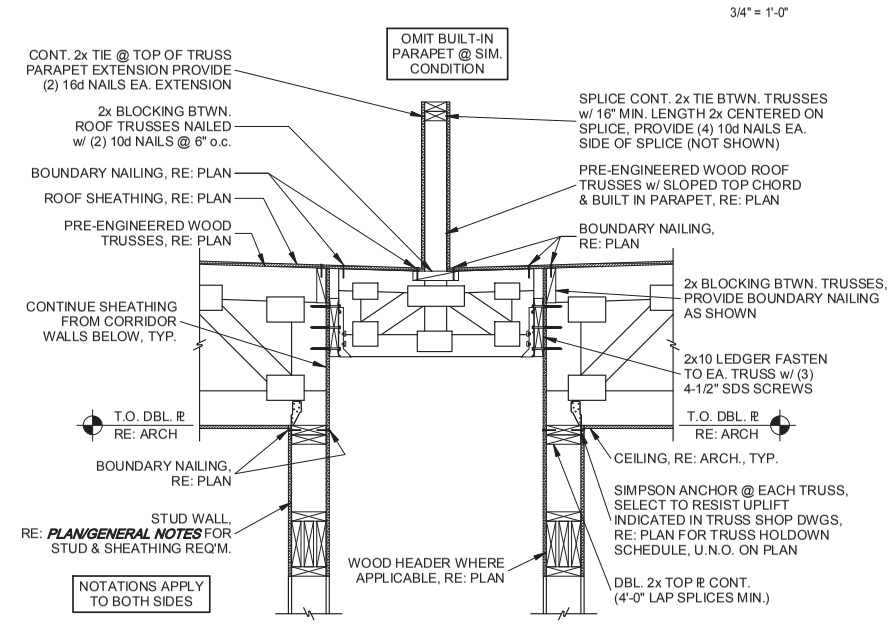

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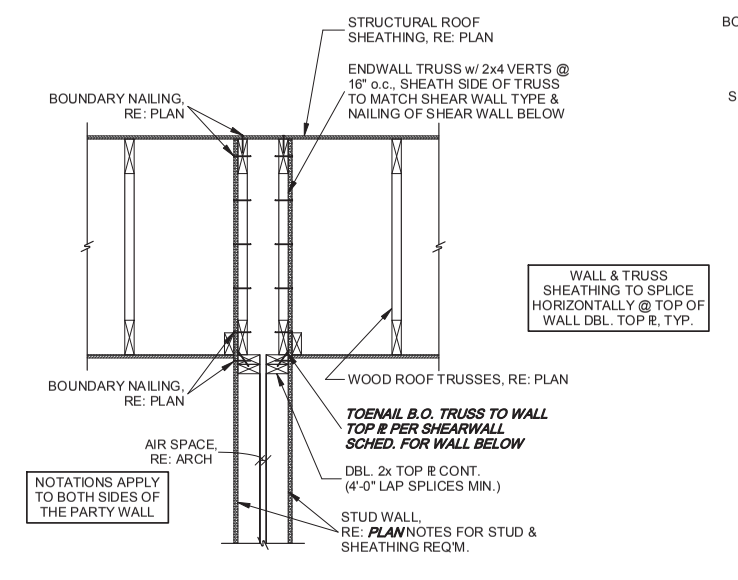

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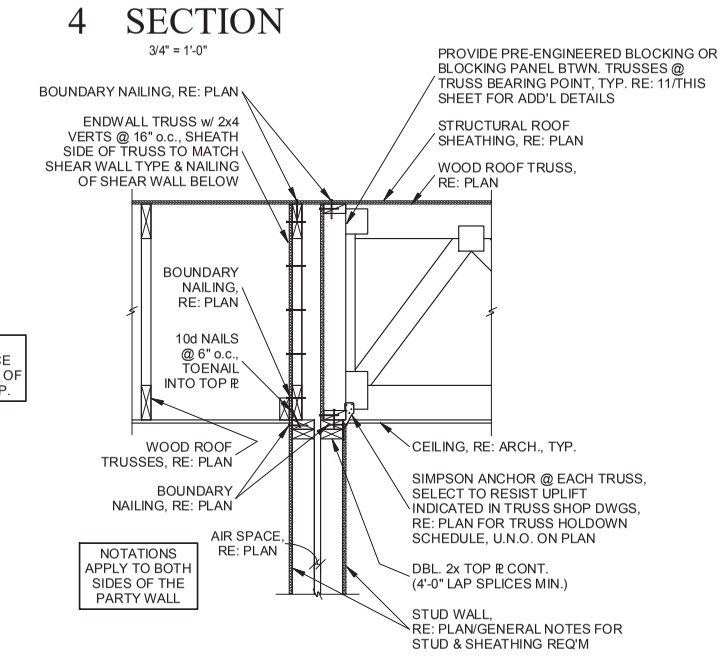

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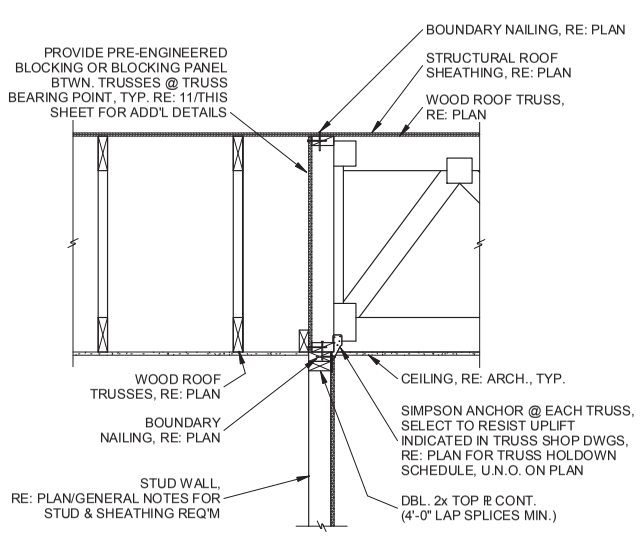

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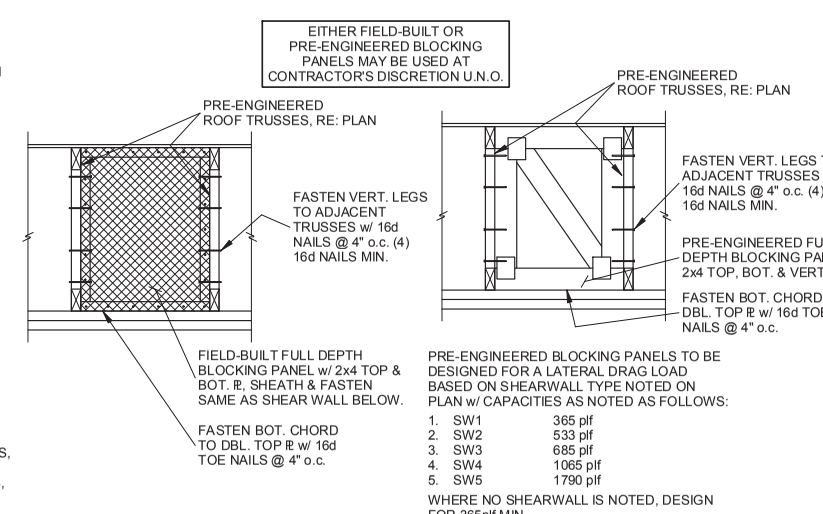

11A

11B

11 SECTION
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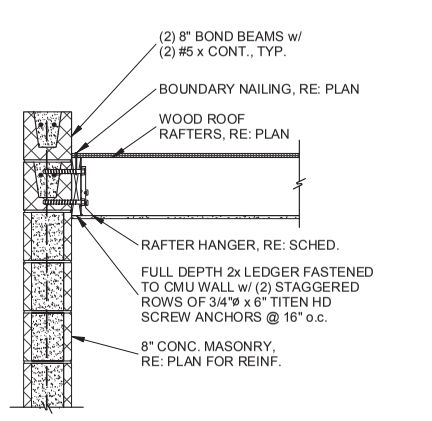

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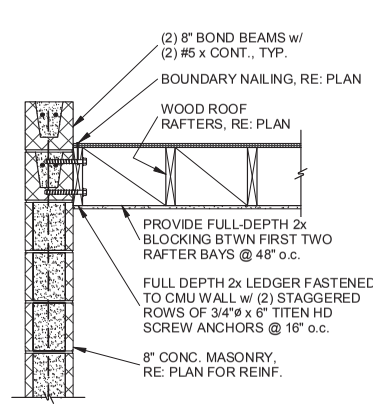

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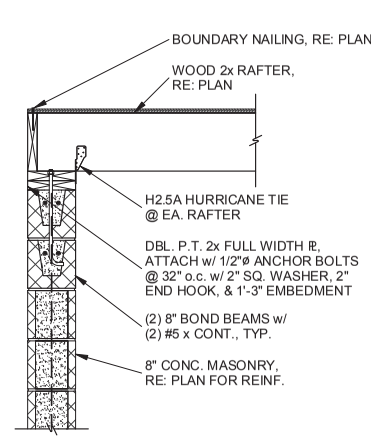

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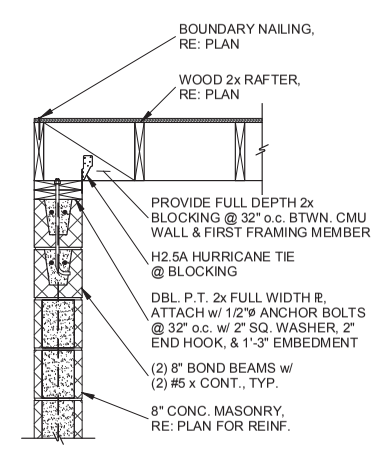

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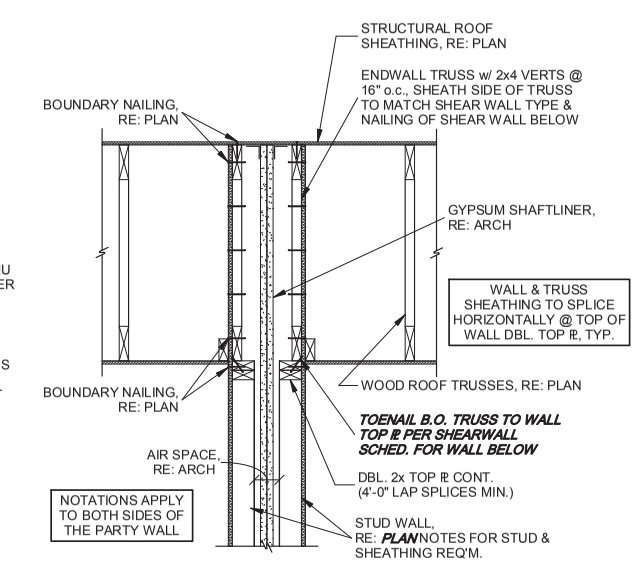

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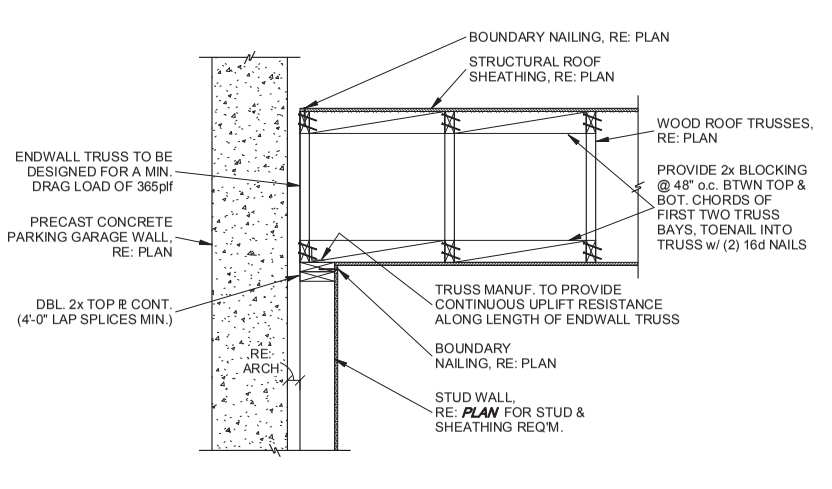
3/4" = 1'-0"



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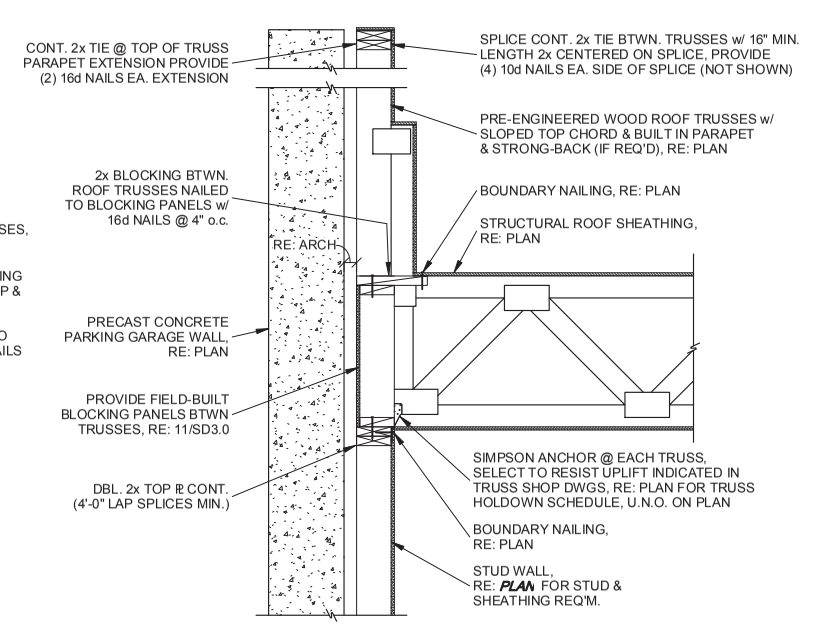

18 SECTION
3/4" = 1'-0"

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COLORADO LICENSED PROFESSIONAL ENGINEER — RODNEY WARREN HATCHETT 39330 — 08/05/2024

No.	Date	Issue
	07/19/23	PERMIT SET
4	08/07/24	IFC

Project Architect	
Project Designer	MPM/SRJ/STZ
Date	08/07/24
Job Number	220930
Drawn By	CR/SRJ
Checked By	RWH
Title	ROOF SECTIONS
Sheet Number	SD3.0

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GENERAL NOTES

1. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE STATE CODES, LOCAL CODES, AND OWNER'S STANDARDS INDICATED BY THE CONSTRUCTION DOCUMENTS.
2. MECHANICAL DRAWINGS ARE DIAGRAMMATIC AND DO NOT NECESSARILY INDICATE EVERY REQUIRED OFFSET, FITTING, ETC. DRAWINGS ARE NOT TO BE SCALED FOR DIMENSIONS. TAKE ALL DIMENSIONS FROM ARCHITECTURAL DRAWINGS, CERTIFIED EQUIPMENT DRAWINGS AND FROM THE STRUCTURE ITSELF BEFORE FABRICATING ANY WORK. VERIFY ALL SPACE REQUIREMENTS COORDINATING WITH OTHER TRADES, AND INSTALL THE SYSTEMS IN THE SPACE PROVIDED WITHOUT EXTRA CHARGES TO THE OWNER.
3. CONTRACTOR SHALL COORDINATE WORK INDICATED WITH PLUMBING, ELECTRICAL, FIRE PROTECTION, STRUCTURAL, AND ARCHITECTURAL DIVISIONS. VERIFY FIT OF MECHANICAL SYSTEMS PRIOR TO FABRICATION. COORDINATE ALL CHASE, SLEEVE, AND SLAB BLOCKOUT REQUIREMENTS BEFORE CONCRETE IS POURED OR BLOCK IS SET.
4. PROVIDE ALL EQUIPMENT SCHEDULED OR INDICATED ON THE DRAWINGS BUT NOT INCLUDED WITHIN THE SPECIFICATIONS INCLUDING ANY REQUIRED BUT NOT LISTED MISC ITEMS NEEDED TO PROVIDE COMPLETELY OPERATIONAL SYSTEMS AS INDICATED WHETHER SPECIFICALLY CALLED FOR OR NOT. INSTALLATION SHALL CONFORM TO MANUFACTURERS RECOMMENDATIONS AND APPLICABLE CODES. PROVIDE SUBMITTALS FOR ALL PROPOSED EQUIPMENT AND MATERIALS TO BE UTILIZED. PROVIDE OPERATION AND MAINTENANCE MANUAL FOR ALL SYSTEMS AND EQUIPMENT AT END OF PROJECT.
5. ELECTRICAL CHARACTERISTICS OF MECHANICAL EQUIPMENT SHALL BE VERIFIED WITH ELECTRICAL DRAWINGS AND ELECTRICAL CONTRACTOR PRIOR TO EQUIPMENT ORDER RELEASE. ADDITIONAL ELECTRICAL WORK RESULTING FROM EQUIPMENT SUBSTITUTION IS THE RESPONSIBILITY OF THIS CONTRACTOR.
6. DRAIN PIPING FROM EQUIPMENT SHALL BE ROUTED SO AS NOT TO CREATE A TRIPPING HAZARD. COORDINATE ACTUAL DRAIN CONNECTIONS WITH PLUMBING CONTRACTOR.
7. ITEM DESIGNATIONS INDICATED HEREON ARE FOR PURPOSES OF THESE DOCUMENTS ONLY. CONTRACTOR SHALL VERIFY WITH OWNERS REPRESENTATIVE ACTUAL "TAGGING" INFORMATION TO BE PROVIDED FOR EACH ITEM OF MECHANICAL EQUIPMENT PRIOR TO NAMEPLATE ORDER RELEASE.
8. PROVIDE 18" X 18" MINIMUM ACCESS DOOR IN INACCESSIBLE CEILINGS AND WALLS FOR EQUIPMENT AND VALVES REQUIRING ACCESS OR ADJUSTMENT. COORDINATE LOCATIONS AND SUBMIT TO ARCHITECT FOR APPROVAL PRIOR TO BEGINNING WORK.
9. VALVES SHALL BE LOCATED WITHIN EASY REACH OF CEILING WHERE CEILINGS OCCUR & DROPPED TO WITHIN A MAXIMUM 10'-0" ABOVE FINISHED FLOOR WHERE NO CEILING OCCURS.
10. DUCT SIZES INDICATED ARE OUTSIDE SHEETMETAL DIMENSIONS. BRANCH RUNOUT DUCTS TO DIFFUSERS AND GRILLES TO BE SAME SIZE AS DIFFUSER OR GRILLE CONNECTION SIZE UNLESS OTHERWISE NOTED.
11. PROVIDE CEILING OPERATORS FOR INACCESSIBLE MVD'S WHERE INDICATED, EQUAL TO YOUNG REGULATOR, REMOTE GEAR OPERATED, WITH CEILING ESCUTCHEON.
12. DUCT MOUNTED SMOKE DETECTORS SHALL BE ZERO VELOCITY TYPE WHERE INDICATED ON DRAWINGS.
13. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR ACTUAL LOCATION OF GRILLES, DIFFUSERS, AND ACCESS DOORS IN CEILING. SECURE DIFFUSERS & GRILLES TO T-BAR CEILINGS WHERE APPLICABLE.
14. AT THE COMPLETION OF WORK, PROVIDE TESTING AND BALANCING SERVICES FOR MECHANICAL SYSTEM. SUBMIT WRITTEN REPORT TO ARCHITECT LISTING SYSTEM AIRFLOWS, ELECTRIC DATA, TEMPERATURES, AND PRESSURE DROPS.
15. WHERE PIPES PASS THROUGH FIRE-RATED FLOOR OR WALLS, SEAL WITH MATERIALS EQUAL TO 3M FIRE BARRIER, MEETING TESTING PER ASTM-E-8 14 (UL 1479). USE CAULK OR PUTTY TYPE. ALL EXTERIOR WALL AND ROOF PENETRATIONS SHALL BE SEALED WATERPROOF.
16. AT THE COMPLETION OF THE WORK AND PRIOR TO FINAL ACCEPTANCE, ALL PARTS OF THE WORK INSTALLED UNDER THIS SPECIFICATION SHALL BE THOROUGHLY CLEANED.
17. ALL EQUIPMENT, MATERIALS, AND INSTALLATION IS TO BE WARRANTEED FOR ONE YEAR TO BE FREE FROM DEFECT. PROVIDE WRITTEN WARRANTY TO OWNER.
18. THE OWNER AND ENGINEER ARE NOT RESPONSIBLE FOR THE CONTRACTOR'S SAFETY PRECAUTIONS OR TO MEANS, METHODS, TECHNIQUES, CONSTRUCTION SEQUENCES, OR PROCEDURES REQUIRED TO PERFORM HIS WORK.
19. ALL MECHANICAL EQUIPMENT DRAIN PANS SHALL BE FIELD TESTED BY THE MECHANICAL CONTRACTOR AT INSTALLATION. A SMALL AMOUNT OF WATER SHALL BE POURED INTO THE PAN TO VERIFY PROPER DRAINAGE AND THAT NO STANDING WATER RESULTS. A VISUAL EXAMINATION BENEATH THE PAN AND DRAIN PIPING SHALL BE PERFORMED TO INSURE NO LEAKS ARE PRESENT. PANS SHALL BE TESTED AGAIN WITH THE SAME TESTING PROCEDURES DURING INITIAL STARTUP WITH FAN RUNNING AND PROPER TRAP OPERATION SHALL BE CONFIRMED.

△

20. THE SPECIAL INSPECTIONS FORM FOR THE CITY OF ARVADA SHALL BE A DEFERRED SUBMITTALL BY THE CONTRACTOR. THE CONTRACTOR SHALL IDENTIFY ALL SPECIAL INSPECTION ITEMS PER 2018 IBC SECTION 1705.
21. ALL FIRE, SMOKE, AND FIRE/SMOKE DAMPERS ARE TO HAVE RATINGS THAT MATCH RATINGS OF THE WALL, CEILING, OR FLOOR IN WHICH THEY ARE INSTALLED. REFER TO THE ARCHITECTURAL PLANS FOR THE RATINGS OF ALL BUILDING ELEMENTS.

MECHANICAL LEGEND

ABBR	SYMBOL	DESCRIPTION
D		DRAIN
RL		REFRIGERANT LIQUID
RS		REFRIGERANT SUCTION
PD		PUMPED DRAIN
CONT V		CONTROL VALVE (2-WAY OR 3-WAY AS SHOWN)
SOV		SHUT-OFF VALVE
TV		THROTTLING VALVE
CV		CHECK VALVE
REL V		RELIEF VALVE
STR		STRAINER
FPC		FLEXIBLE PIPE CONNECTION
UNION		UNION
AV		AIR VENT
RED		REDUCER
PG		PRESSURE GAUGE
TH		THERMOMETER
TW		TEST WELL (PETE'S PLUG)
FSW	FS	FLOW SWITCH
T-STAT	T	THERMOSTAT
S	S	REMOTE TEMPERATURE SENSOR
FLFD	FLFD	FUSIBLE LINK FIRE DAMPER OR RADIATION DAMPER IN CEILING
RD	RD	RADIATION DAMPER IN CEILING
DD	DD	DUCT MOUNTED SMOKE DETECTOR
FSD	FSD	COMBINATION FIRE/SMOKE DAMPER
AUTO D	M	MOTORIZED DAMPER
MVD		MANUAL VOLUME DAMPER
RE-D		MVD WITH REMOTE CEILING OPERATOR
OBD		OPPOSED BLADE DAMPER
BDD	BDD	BACKDRAFT DAMPER
SA		SUPPLY AIR
RA		RETURN AIR
EA		EXHAUST AIR
OA		OUTSIDE AIR
SW		SIDEWALL DIFFUSER
LD		LINED DUCTWORK
DIFF		DIFFUSER
GR		GRILLE
MA		MIXED AIR
AD		ACCESS DOOR
SP		STATIC PRESSURE
GBS		GALVANIZED BIRD SCREEN
ESP		EXTERNAL STATIC PRESSURE
WC		WATER COLUMN
TDH		TOTAL DYNAMIC HEAD
APD		AIR PRESSURE DROP
FG		FIBERGLASS
UNO		UNLESS NOTED OTHERWISE
FC		FORWARD CURVED
AF		AIRFOIL
PL		PLUG FAN
CV		CONSTANT VOLUME
VAV		VARIABLE AIR VOLUME
WP		WORKING PRESSURE
TSP		TOTAL STATIC PRESSURE
WPD		WATER PRESSURE DROP
EMCS		ENERGY MANAGEMENT AND CONTROL SYSTEM
AFF		ABOVE FINISHED FLOOR

SHEET INDEX

ISSUE: 10-03-23 RC1 RESPONSE	ISSUE: 06-29-23 PERMIT SET	SHEET NO.	SHEET DESCRIPTION
	○	M0-0.1	MECHANICAL COVER SHEET
	○	M1-1.1	OVERALL FIRST FLOOR MECHANICAL PLAN
	○	M1-1.2	OVERALL SECOND FLOOR MECHANICAL PLAN
	○	M1-1.3	OVERALL THIRD FLOOR MECHANICAL PLAN
	○	M1-1.4	OVERALL FOURTH FLOOR MECHANICAL PLAN
	○	M1-5.0	OVERALL ROOF MECHANICAL PLAN
○	○	M2-1.5	FIRST FLOOR MECHANICAL PLAN AREA A
	○	M2-1.6	FIRST FLOOR MECHANICAL PLAN AREA B
	○	M2-1.7	FIRST FLOOR MECHANICAL PLAN AREA C
	○	M2-1.8	FIRST FLOOR MECHANICAL PLAN AREA D
	○	M2-2.1	SECOND FLOOR MECHANICAL PLAN AREA A
	○	M2-2.2	SECOND FLOOR MECHANICAL PLAN AREA B
	○	M2-2.3	SECOND FLOOR MECHANICAL PLAN AREA C
	○	M2-2.4	SECOND FLOOR MECHANICAL PLAN AREA D
	○	M2-3.1	THIRD FLOOR MECHANICAL PLAN AREA A
	○	M2-3.2	THIRD FLOOR MECHANICAL PLAN AREA B
	○	M2-3.3	THIRD FLOOR MECHANICAL PLAN AREA C
	○	M2-3.4	THIRD FLOOR MECHANICAL PLAN AREA D
	○	M2-4.1	FOURTH FLOOR MECHANICAL PLAN AREA A
	○	M2-4.2	FOURTH FLOOR MECHANICAL PLAN AREA B
	○	M2-4.3	FOURTH FLOOR MECHANICAL PLAN AREA C
	○	M2-4.4	FOURTH FLOOR MECHANICAL PLAN AREA D
	○	M2-5.1	ROOF MECHANICAL PLAN AREA A
	○	M2-5.2	ROOF MECHANICAL PLAN AREA B
	○	M2-5.3	ROOF MECHANICAL PLAN AREA C
	○	M2-5.4	ROOF MECHANICAL PLAN AREA D
	○	M5-1.1	UNIT PLANS MECHANICAL
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	○	M5-1.3	UNIT PLANS MECHANICAL
	○	M6-0.1	MECHANICAL SCHEDULES
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	○	M6-0.3	MECHANICAL SCHEDULES
	○	M6-0.4	MECHANICAL SCHEDULES
	○	M6-0.5	MECHANICAL SCHEDULES
	○	M7-0.1	MECHANICAL DETAILS
	○	M7-0.2	MECHANICAL DETAILS
	○	M7-0.3	MECHANICAL DETAILS

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08.06.2024

MARSHALL POINTE

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5170 MARSHALL ST
ARVADA, CO 80002

No.	Date	Issue
1	10.03.2023	RC1 RESPONSE
2		

Project Architect: DV
Project Designer: DR
Date: 06/29/2023
Job Number: 222001
Drawn By: JW
Checked By: BM
Title: MECHANICAL COVER SHEET
Sheet Number: M0-0.1

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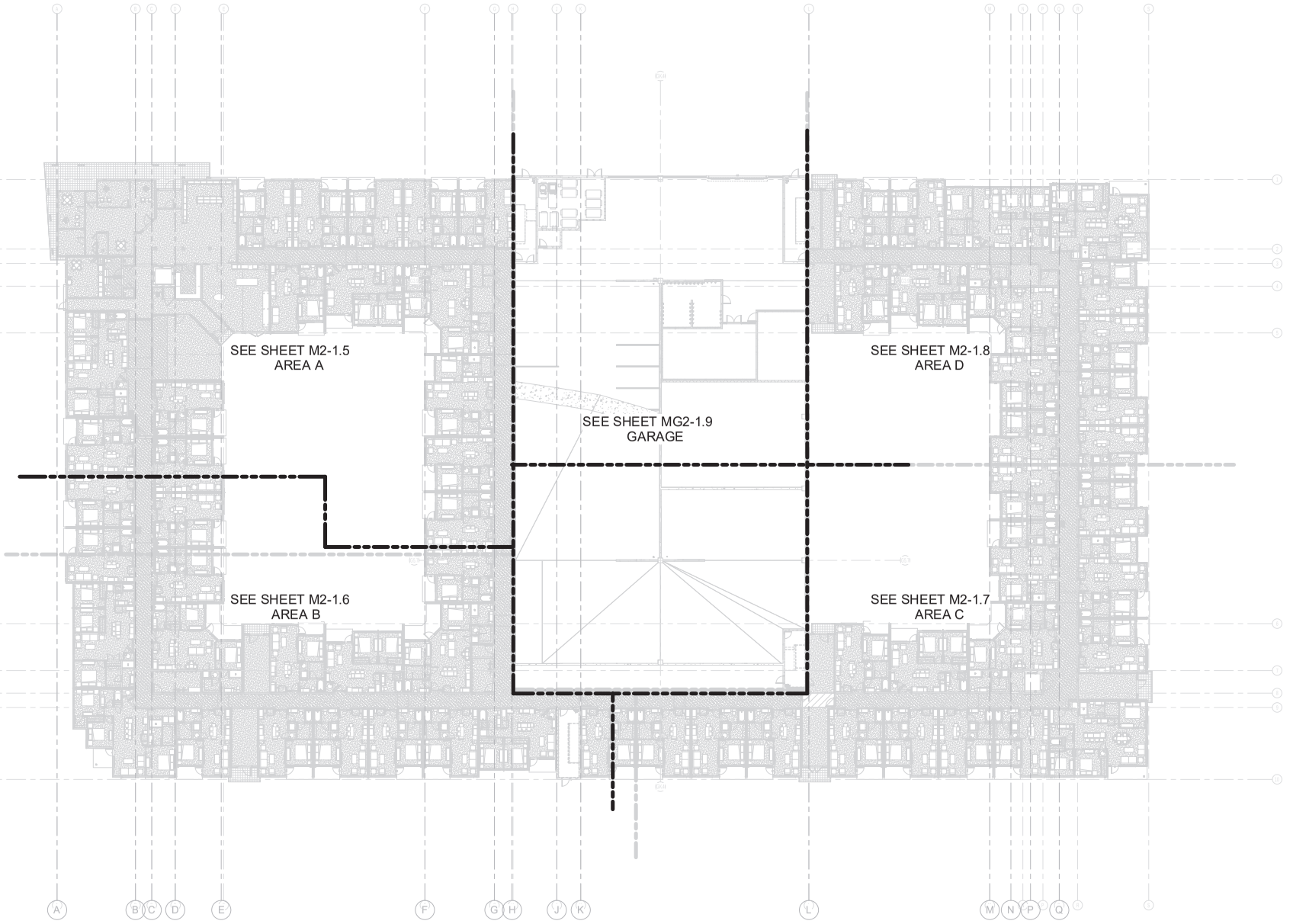

OVERALL LEVEL 1 MECHANICAL PLAN
SCALE: 1/16" = 1'-0"

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No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM
Title	OVERALL LEVEL 1 MECHANICAL PLAN
Sheet Number	M1-1.1

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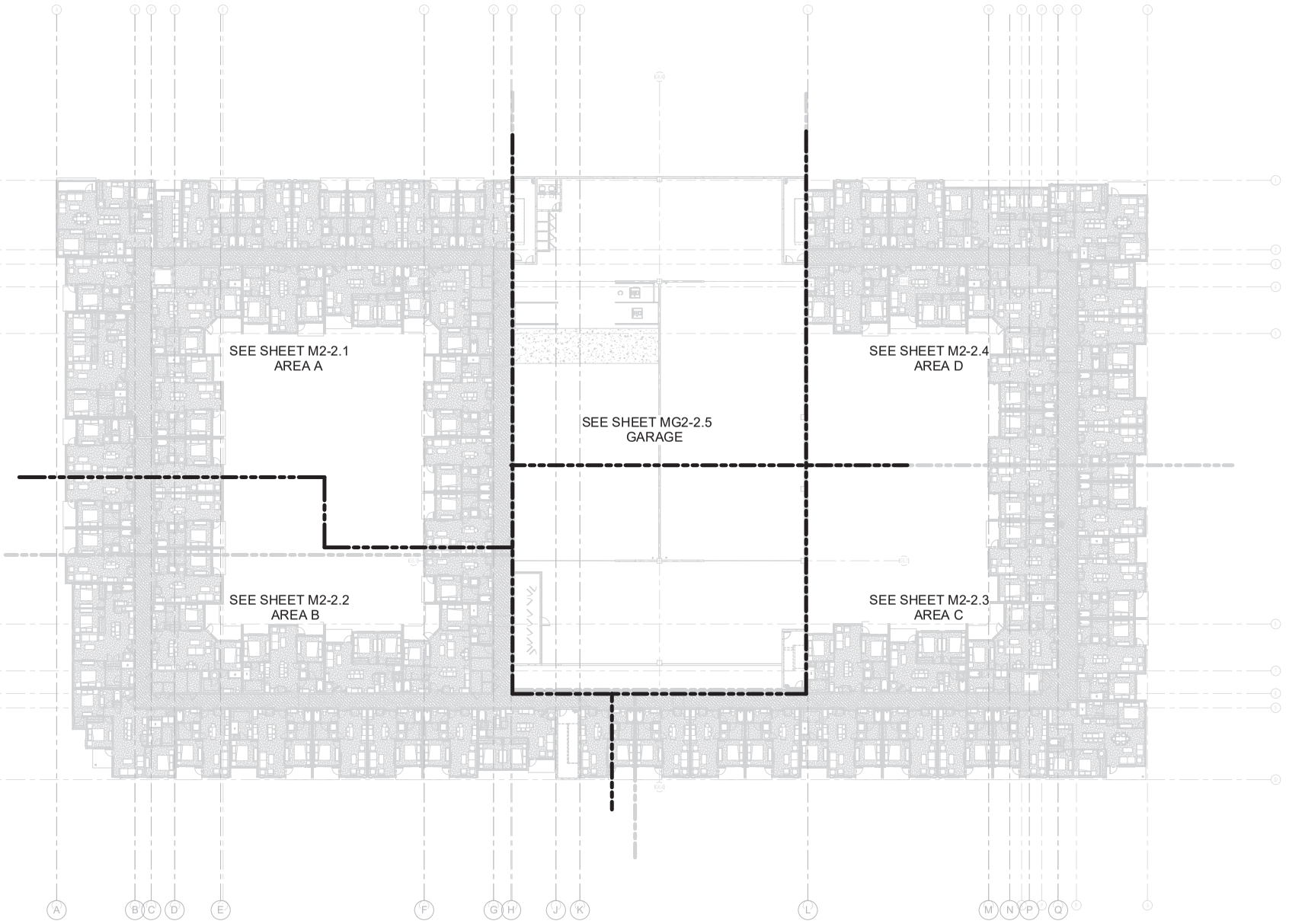

OVERALL LEVEL 2 MECHANICAL PLAN
SCALE: 1/16" = 1'-0"

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ARVADA, CO 80002

No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM
Title	OVERALL LEVEL 2 MECHANICAL PLAN
Sheet Number	M1-1.2

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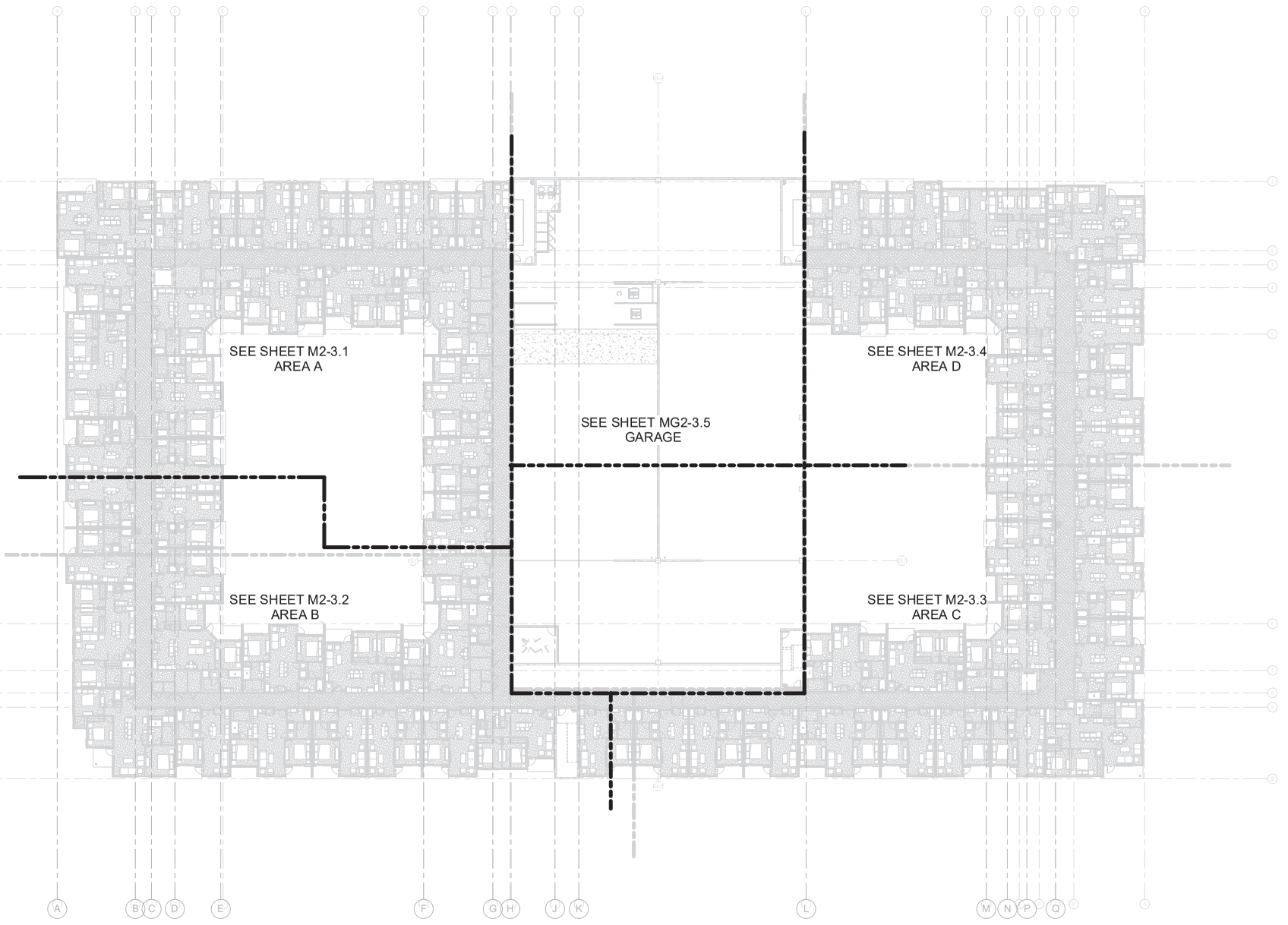

OVERALL LEVEL 3 MECHANICAL PLAN
SCALE: 1/16" = 1'-0"

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No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM
Title	OVERALL LEVEL 3 MECHANICAL PLAN
Sheet Number	M1-1.3

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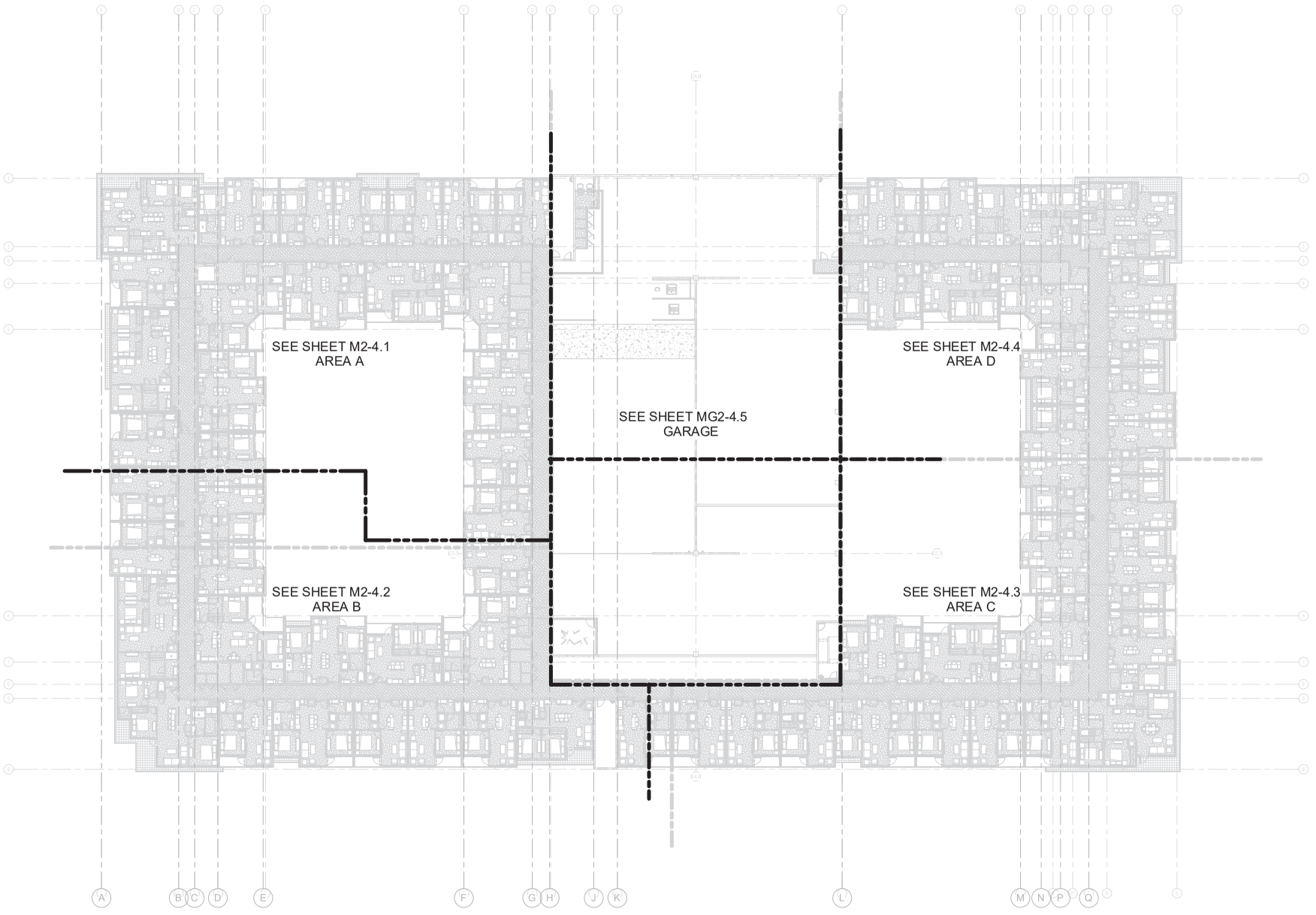

OVERALL LEVEL 4 MECHANICAL PLAN
SCALE: 1/16" = 1'-0"

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No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM
Title	OVERALL LEVEL 4 MECHANICAL PLAN
Sheet Number	M1-1.4

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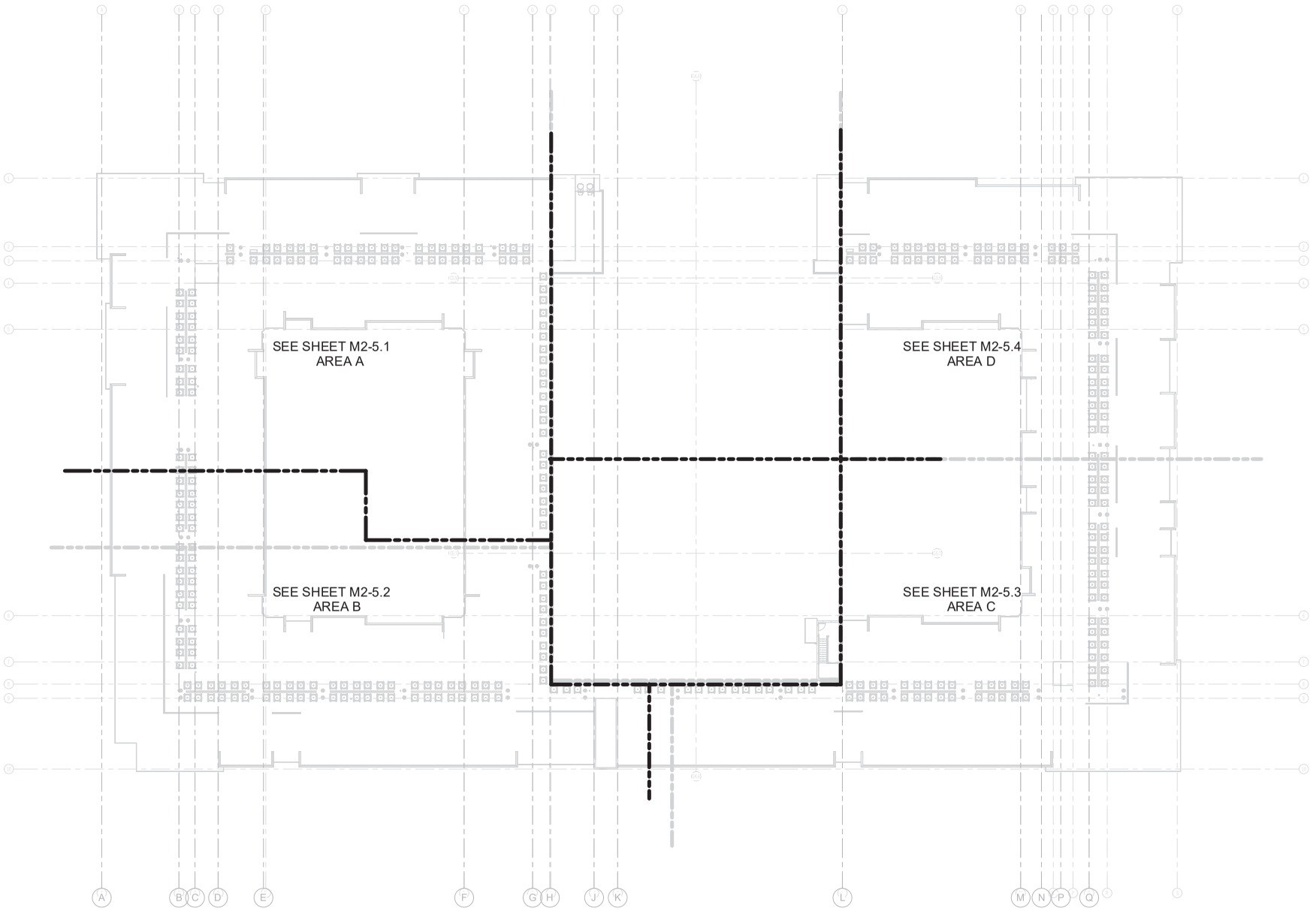

OVERALL ROOF MECHANICAL PLAN
SCALE: 1/16" = 1'-0"

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ARVADA, CO 80002

No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM
Title	OVERALL ROOF MECHANICAL PLAN
Sheet Number	M1-5.0

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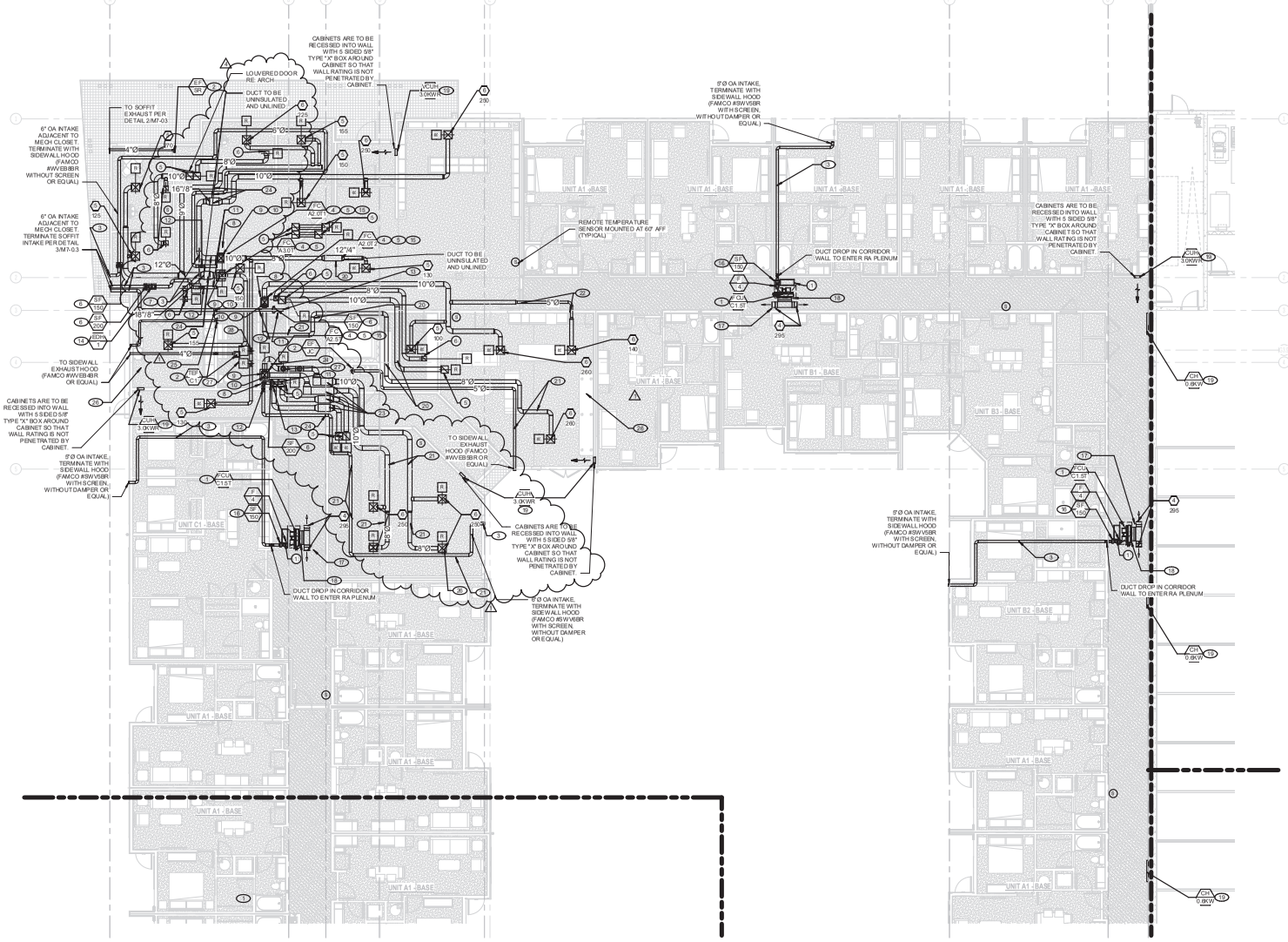

LEVEL 1 MECHANICAL PLAN - AREA A

SCALE: 1/8" = 1'-0"

KEYNOTES:

1. FAN COIL UNIT: BELOW FIRE RATED CEILING IN DROP CEILING. PROVIDE HINGED SOLID WHITE ENAMELED ACCESS PANEL (NON-RATED, AMANA #CAP-2) SIZED AS RECOMMENDED BY MANUFACTURER (ESTIMATED SIZE IS 49x27-1/2"). SUPPORT UNIT FROM STRUCTURE WITH RUBBER VIBRATION ISOLATORS AT EACH CONNECTION. RS/RL LINE-SET FROM FAN COIL UNIT COIL TO HEAT PUMP UNIT ON ROOF PER MANUFACTURERS RECOMMENDATIONS. RE: CORRIDOR FAN COIL DETAIL 2/M7-0.1. INTERLOCK SF/150 TO RUN WHEN FAN COIL UNIT IS RUNNING.
2. ROUND DUCT FROM EXHAUST FAN (SIZED AS SHOWN), UP IN WALL THROUGH TOP PLATE AND EXTEND THROUGH EXTERIOR WALL. PROVIDE 10" CLEARANCE BETWEEN EXHAUST TERMINATION AND ALL OUTSIDE VENTILATION AIR INTAKES. ALL DUCTS EXTENDING THROUGH RATED WALLS OR FLOORS TO BE CONSTRUCTED OF 26 GAGE MINIMUM STEEL WITH APPROVED THROUGH PENETRATION FIRESTOP ASSEMBLIES. RE: DRYER & EXHAUST FAN WALL DETAIL 4/M7-0.1.
3. OUTSIDE AIR DUCT: R-3.5 INSULATED 26 GAGE MINIMUM STEEL DUCT WITH APPROVED THROUGH PENETRATION FIRESTOP ASSEMBLIES AT ALL RATED WALL PENETRATIONS EXTENDED FROM WALL INTAKE HOOD LOCATED 10' MINIMUM FROM EXHAUST TERMINATIONS TO FAN COIL RETURN AIR PLENUM.
4. FAN COIL UNIT: PROVIDE AND INSTALL WALL HUNG FAN COIL UNIT WITH SIDE OUTSIDE AIR CONNECTION AND OPEN RETURN AIR FROM THE FRONT OF THE UNIT. PROVIDE BALANCING DAMPER ON UNIT FRONT RETURN FOR OA BALANCING. TRANSITION FROM UNIT OPENING SIZE TO 14"X14" (FOR 2.0T AND 2.5T UNITS) OR 16X14" (FOR 3.0T UNITS) IN VERTICAL, BELOW RATED FLOOR CEILING ASSEMBLY. RE: FAN COIL DETAIL 1/M7-0.3. THERMOSTAT TO CONTROL CORRIDOR FAN COIL UNIT LOCATED IN MECHANICAL CLOSET (NOT SHOWN ON FLOOR PLANS FOR DRAWING CLARITY). TEMPERATURE INPUT VIA REMOTE (NON-ADJUSTABLE) TEMPERATURE SENSOR (TYPICAL)
5. RS/RL LINES: RS/RL LINE-SET FROM HEAT PUMP UNIT TO FAN COIL PER MANUFACTURERS RECOMMENDATIONS.
6. VENTILATION SUPPLY FAN. FAN TO BE ACCESSIBLE FROM ACCESS PANEL OR MECHANICAL CLOSET AS SHOWN. ADJUST FAN SPEED CONTROLLER TO CFM INDICATED IN VENTILATION OR UNIT SCHEDULE. FAN TO BE INTERLOCKED WITH ASSOCIATED FAN COIL UNIT OPERATION TO RUN WHENEVER FAN COIL UNIT FAN IS RUNNING.
7. RETURN AIR GRILLE: SIZE AS INDICATED. INSTALL IN MECHANICAL CLOSET WALL, ABOVE DOOR. GENERAL CONTRACTOR SHALL ENSURE ALL MATERIALS IN THE MECHANICAL CLOSET ARE PLENUM RATED TO ALLOW FOR RETURN AIR PATH FROM GRILLE TO FAN COIL RETURN AIR. WIRING TO BE PLENUM RATED IN PLUMBING PIPING OR POSITIVE PRESSURE EXHAUST DUCTS SHALL BE LOCATED IN PLENUM.
8. RETURN AIR PLENUM: MECHANICAL CLOSET TO ACT AT RETURN AIR PLENUM AREA. PROVIDE ALL PLENUM RATED MATERIALS.
9. BOX PLENUM: PROVIDE SHEET METAL OR SMACNA DUCT BOARD PLENUM WITH 1" DUCT LINER TO ATTENUATE FAN NOISE.
10. FIRE DAMPER: PROVIDE 14"X 14" (FOR 2.0T AND 2.5T UNITS) OR 16X14" (FOR 3.0T UNITS) UL LISTED FIRE DAMPER FOR HORIZONTAL UPFLOW INSTALLATION AT CEILING MEMBRANE PENETRATION. FIRE DAMPER TO BE ACCESSIBLE FROM MECHANICAL ROOM.
11. PROVIDE BALANCE DAMPER AND FILTER BOX (HVACQUICK IFB-6, TAG F6, FOR 2.0T UNITS AND OR HVACQUICK IFB-8, TAG F8, FOR 2.5T AND 3.0T UNITS EQUAL) WITH MERV-8 FILTER FABRIC AT OUTSIDE AIR DISCHARGE OPENING FROM FILTER BOX. LOCATE DAMPER AND FILTER TO BE ACCESSIBLE FROM THE MECHANICAL CLOSET. LEAVE DISCHARGE OPEN TO RETURN PLENUM.
12. DROP OA DUCT IN WALL AS 5"Ø. UPSIZE BACK TO 6"Ø UPSTREAM OF FILTER BOX.
13. 8"Ø OA DUCT TO SF/150 AND FILTER BOX, ROUTE LOW IN MECHANICAL ROOM. RETURN AIR DUCT TO TERMINATE IN MECHANICAL ROOM CEILING.
14. ELECTRIC DUCT HEATER. HEATER TO BE ACCESSIBLE FROM ACCESS PANEL. TRANSITION DUCTWORK TO 6/8" SA UPSTREAM OF DUCT HEATER, TRANSITION BACK TO 6" ROUND DOWNSTREAM OF DUCT HEATER.
15. PROVIDE RETURN AIR SMOKE DETECTOR FOR THIS UNIT. PROVIDED AND INSTALLED BY M.C. POWERED BY E.C.
16. TRANSITION FROM SF/150 DISCHARGE TO FILTER BOX SIZE AS NEEDED. DISCHARGE TO RETURN AIR PLENUM. FILTER BOX AND FAN TO BE ACCESSIBLE FROM UNIT RETURN AIR GRILLE.
17. SOFFIT HOUSING FCU AND DUCTWORK SHALL BE CONSTRUCTED OF PLENUM RATED MATERIALS. ALL WIRING AND PIPING IN PLENUM SHALL BE PLENUM RATED.
18. TRANSITION FROM FULL SIZE FCU DISCHARGE OPENING TO 30/12 SA MAIN
19. PRICE AS ADD ALTERNATE M1.
20. ROUTE DUCT OVER THE TOP OF STRUCTURAL MEMBER.
21. ROUTE DUCT THROUGH STRUCTURAL MEMBER. REFER TO STRUCTURAL PLANS FOR DETAILING.
22. ROUND 8A DUCT THROUGH RATED CORRIDOR WALL. ALL DUCTS EXTENDING THROUGH RATED WALLS OR FLOORS TO BE CONSTRUCTED OF 26 GAGE MINIMUM STEEL WITH APPROVED THROUGH PENETRATION FIRESTOP ASSEMBLIES.
23. TRANSITION DUCT FROM 10"Ø ON EITHER SIDE OF BEAM TO 16/6 (UNISULATED AND UNLINED) RECTANGULAR TO ROUTE DUCT UNDER THE STRUCTURAL MEMBER.
24. ROUTE DUCT UNDER THE STRUCTURAL MEMBER.
25. DROP OA DUCT IN WALL AS 5"Ø TO GET TO NON-RATED DROPPED CEILING SPACE TO AVOID CONFLICT WITH OTHER SUPPLY AIR DUCTS IN THIS AREA.
26. CONFIRM AMENITY SPACE GRILLE, REGISTER, AND DIFFUSER WITH INTERIOR DESIGNER. COORDINATE PRIOR TO ORDERING.
27. DUCT RISE UP TO FLOOR-CEILING ASSEMBLY WITH RADIATION DAMPER AT PENETRATION (PROVIDE WITH ACCESS PANEL).
28. DUCT DROP DOWN TO NON-RATED CEILING FROM FLOOR-CEILING ASSEMBLY WITH RADIATION DAMPER AT PENETRATION (PROVIDE WITH ACCESS PANEL).

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08.06.2024

MARSHALL POINTE

MARSHALL POINTE APARTMENTS, LP
5170 MARSHALL ST
ARVADA, CO 80002

No.	Date	Issue
3	10.03.2023	PCH RESPONSE
4	8.7.2024	DPC

Project Architect: DV
Project Designer: DR
Date: 06/29/2023
Job Number: 222001
Drawn By: JW
Checked By: BM

Title: ENLARGED LEVEL 1 MECHANICAL PLAN - AREA A

Sheet Number: M2-1.5

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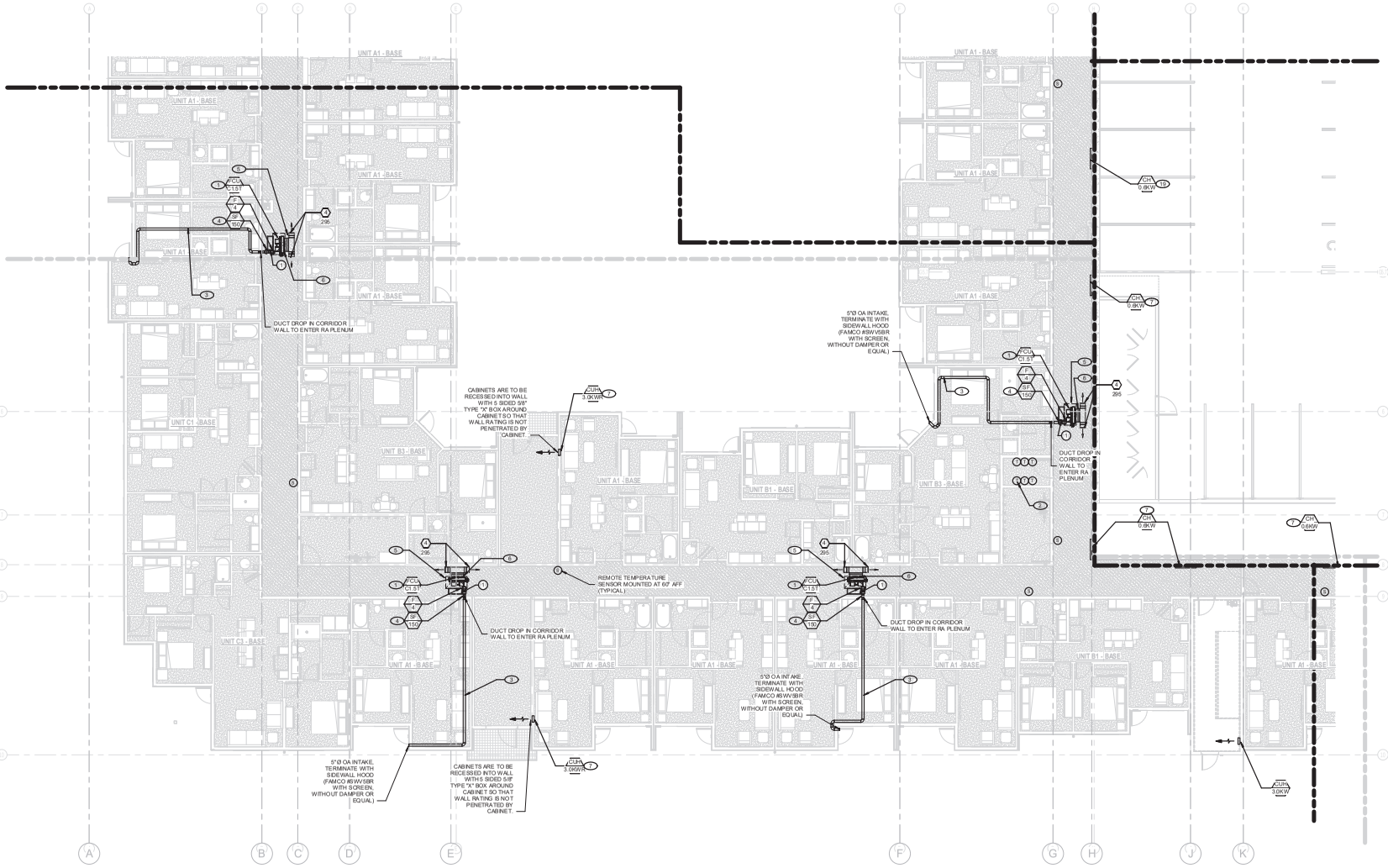
KEYNOTES:

1. FAN COIL UNIT. BELOW FIRE RATED CEILING IN DROP CEILING. PROVIDE HINGED SOLID WHITE ENAMELED ACCESS PANEL (NON-RATED, AMANA #CAP-21 SIZED AS RECOMMENDED BY MANUFACTURER (ESTIMATED SIZE IS 49x27-1/2"). SUPPORT UNIT FROM STRUCTURE WITH RUBBER VIBRATION ISOLATORS AT EACH CONNECTION. RS/RL LINE SET FROM FAN COIL UNIT COIL TO HEAT PUMP UNIT ON ROOF PER MANUFACTURERS RECOMMENDATIONS. RE: CORRIDOR FAN COIL DETAIL 2/M7-0.1. INTERLOCK SF/150 TO RUN WHEN FAN COIL UNIT IS RUNNING.
2. THERMOSTAT TO CONTROL CORRIDOR FAN COIL UNIT. TEMPERATURE IN/OUT VIA REMOTE (NON-ADJUSTABLE) TEMPERATURE SENSOR (TYPICAL)
3. OUTSIDE AIR DUCT: R-3.5 INSULATED 26 GAGE MINIMUM STEEL DUCT WITH APPROVED THROUGH PENETRATION FIRESTOP ASSEMBLIES AT ALL RATED WALL PENETRATIONS EXTENDED FROM WALL INTAKE HOOD LOCATED 10' MINIMUM FROM EXHAUST TERMINATIONS TO FAN COIL RETURN AIR PLENUM.
4. TRANSITION FROM SF/150 DISCHARGE TO FILTER BOX SIZE AS NEEDED. DISCHARGE TO RETURN AIR PLENUM. FILTER BOX AND FAN TO BE ACCESSIBLE FROM UNIT RETURN AIR GRILLE.
5. SOFFIT HOUSING FCU AND DUCTWORK SHALL BE CONSTRUCTED OF PLENUM RATED MATERIALS. ALL WIRING AND PIPING IN PLENUM SHALL BE PLENUM RATED.
6. TRANSITION FROM FULL SIZE FCU DISCHARGE OPENING TO 30/12 SA MAIN
7. PRICE AS ADD ALTERNATE M1.



LEVEL 1 MECHANICAL PLAN - AREA B
SCALE: 1/8" = 1'-0"

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08.06.2024

MARSHALL POINTE

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No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM

Title: ENLARGED LEVEL 1 MECHANICAL PLAN - AREA B

Sheet Number: **M2-1.6**

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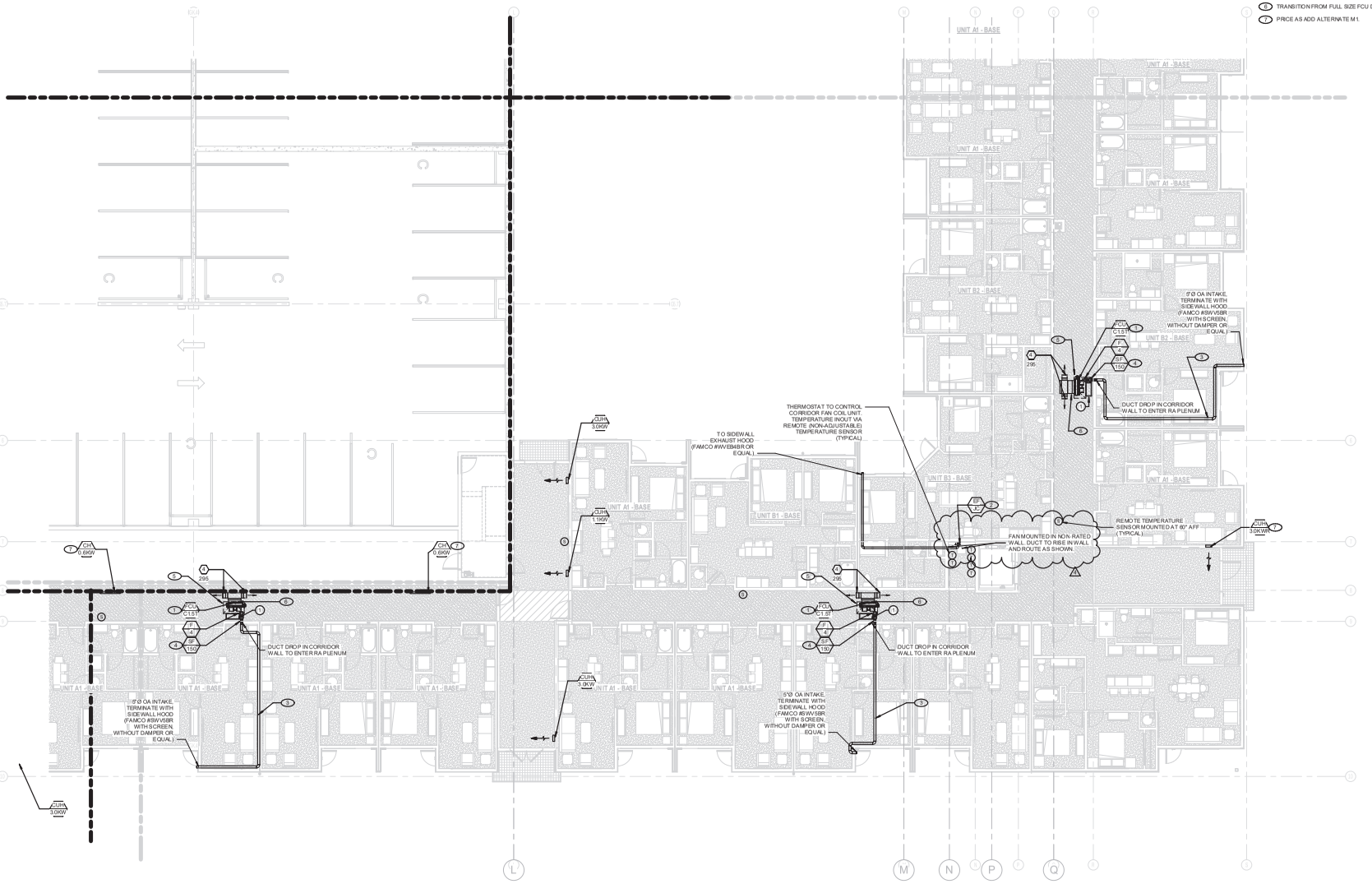

LEVEL 1 MECHANICAL PLAN - AREA C

SCALE: 1/8" = 1'-0"

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MARSHALL POINTE

MARSHALL POINTE APARTMENTS, LP
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ARVADA, CO 80002

No.	Date	Issue
1	07.2024	DRC

Project Architect: DV
Project Designer: DR
Date: 06/29/2023
Job Number: 222001
Drawn By: JW
Checked By: BM

Title: ENLARGED LEVEL 1 MECHANICAL PLAN - AREA C

Sheet Number: M2-1.7

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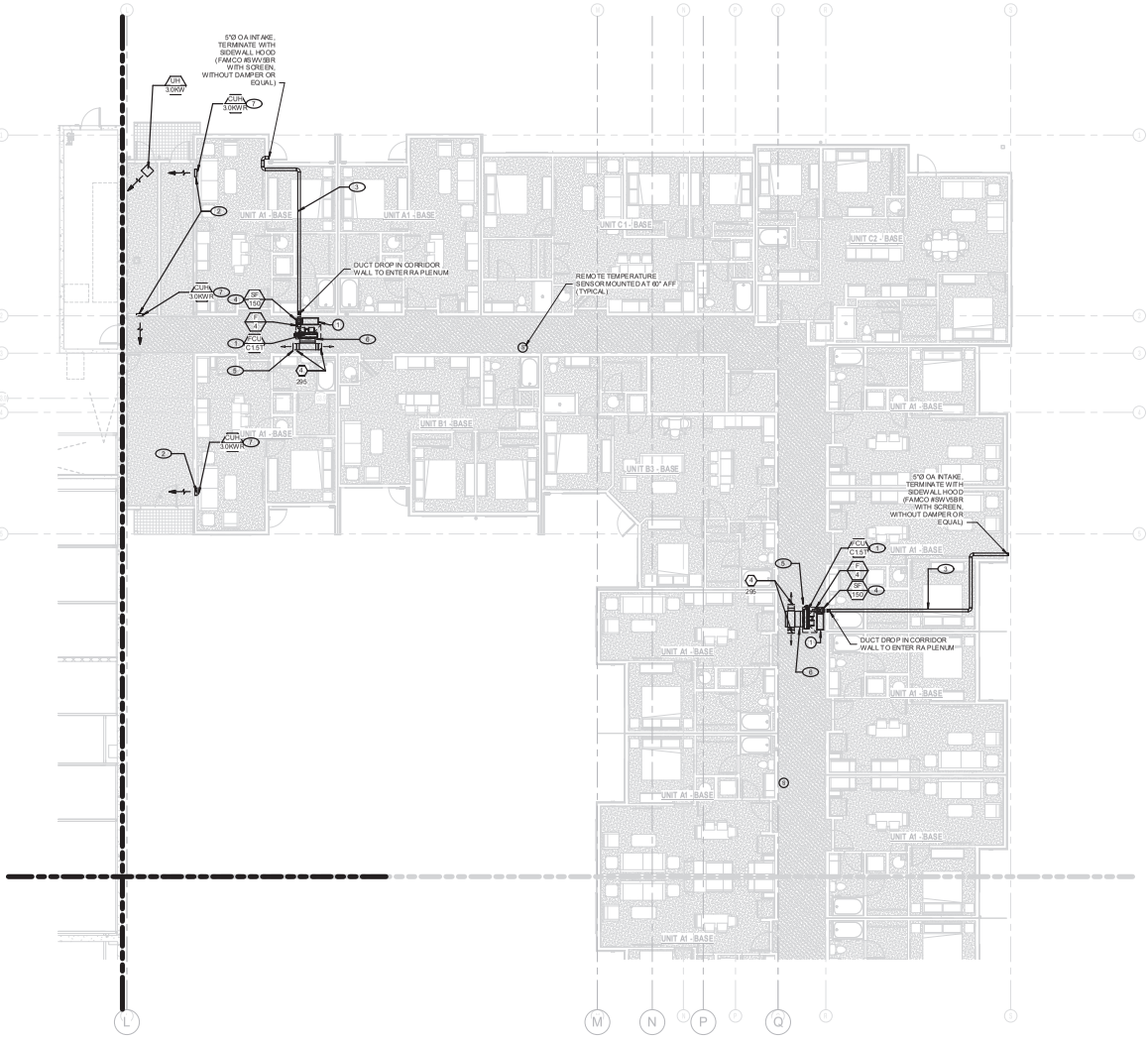

LEVEL 1 MECHANICAL PLAN - AREA D

SCALE: 1/8" = 1'-0"

KEYNOTES:

1. FAN COIL UNIT. BELOW FIRE RATED CEILING IN DROP CEILING. PROVIDE HINGED SOLID WHITE ENAMELED ACCESS PANEL (NON-RATED, AMANA #CAP-J) SIZED AS RECOMMENDED BY MANUFACTURER (ESTIMATED SIZE IS 46x27-1/2"). SUPPORT UNIT FROM STRUCTURE WITH RUBBER VIBRATION ISOLATORS AT EACH CONNECTION. RS/RL LINE-SET FROM FAN COIL UNIT COIL TO HEAT PUMP UNIT ON ROOF PER MANUFACTURERS RECOMMENDATIONS. RE: CORRIDOR FAN COIL DETAIL 2/M7-0.1. INTERLOCK SF/150 TO RUN WHEN FAN COIL UNIT IS RUNNING.
2. CABINETS ARE TO BE RECESSED INTO WALL WITH 5 SIDED 5/8" TYPE "X" BOX AROUND CABINET SO THAT WALL RATING IS NOT PENETRATED BY CABINET.
3. OUTSIDE AIR DUCT. R-3.5 INSULATED 26 GAGE MINIMUM STEEL DUCT WITH APPROVED THROUGH PENETRATION FIRESTOP ASSEMBLIES AT ALL RATED WALL PENETRATIONS EXTENDED FROM WALL INTAKE HOOD LOCATED 10' MINIMUM FROM EXHAUST TERMINATIONS TO FAN COIL RETURN AIR PLENUM.
4. TRANSITION FROM SF/150 DISCHARGE TO FILTER BOX SIZE AS NEEDED. DISCHARGE TO RETURN AIR PLENUM. FILTER BOX AND FAN TO BE ACCESSIBLE FROM UNIT RETURN AIR GRILLE.
5. SOFFIT HOUSING FCU AND DUCTWORK SHALL BE CONSTRUCTED OF PLENUM RATED MATERIALS. ALL WIRING AND PIPING IN PLENUM SHALL BE PLENUM RATED.
6. TRANSITION FROM FULL SIZE FCU DISCHARGE OPENING TO 30/12 SA MAIN
7. PRICE AS ADD ALTERNATE M1.

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08.06.2024

MARSHALL POINTE

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ARVADA, CO 80002

No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM
Title	ENLARGED LEVEL 1 MECHANICAL PLAN - AREA D
Sheet Number	M2-1.8

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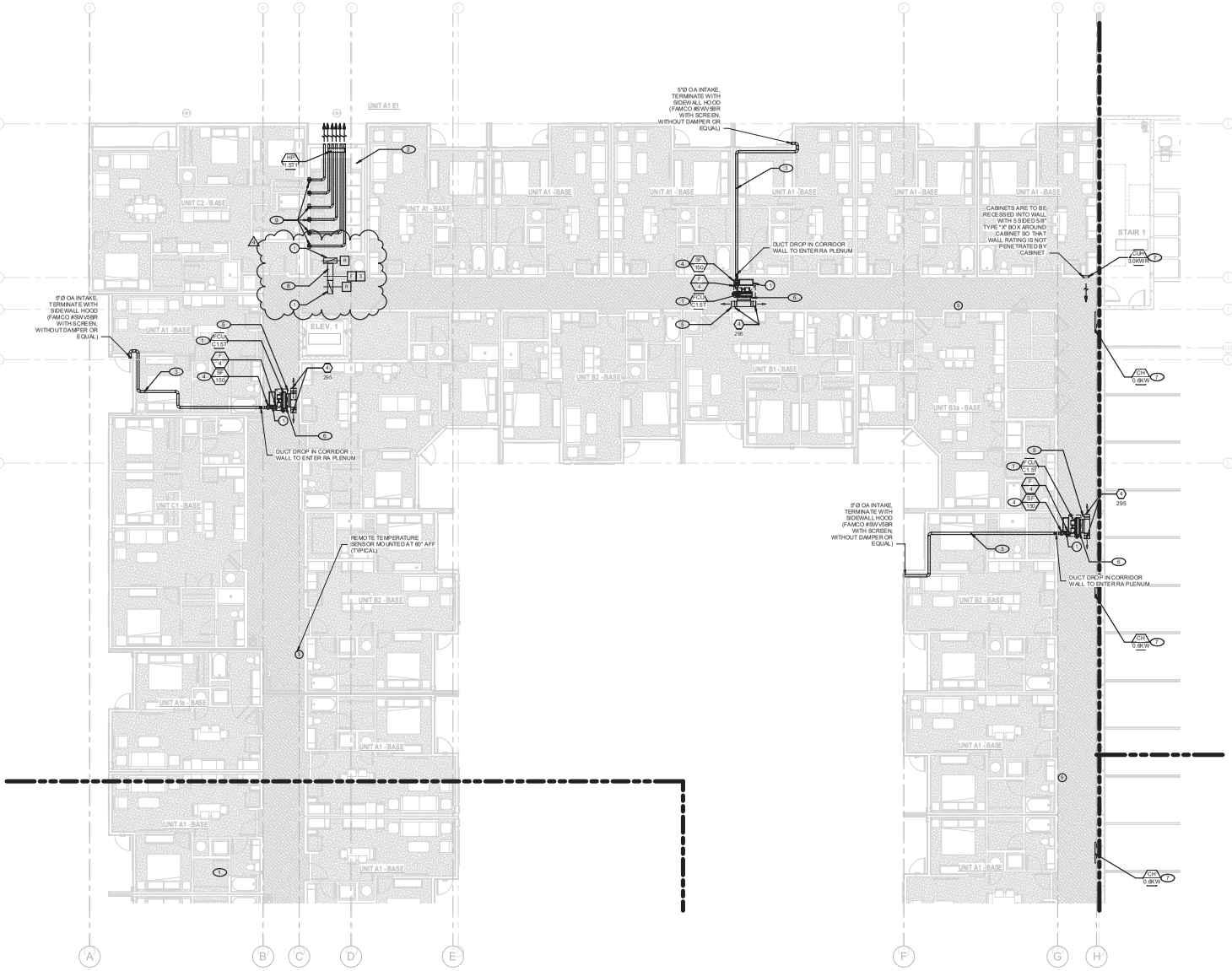

LEVEL 2 MECHANICAL PLAN - AREA A

SCALE: 1/8" = 1'-0"

KEYNOTES:

1. FAN COIL UNIT: BELOW FIRE RATED CEILING IN DROP CEILING. PROVIDE HINGED SOLID WHITE ENAMELED ACCESS PANEL (NON-RATED, AMANA #CAP-2) SIZED AS RECOMMENDED BY MANUFACTURER (ESTIMATED SIZE IS 49x27-1/2"). SUPPORT UNIT FROM STRUCTURE WITH RUBBER VIBRATION ISOLATORS AT EACH CONNECTION. RS/RL LINE-SET FROM FAN COIL UNIT COIL TO HEAT PUMP UNIT ON ROOF PER MANUFACTURER'S RECOMMENDATIONS. RE: CORRIDOR FAN COIL DETAIL 2/M7.0-1. INTERLOCK SF/1S0 TO RUN WHEN FAN COIL UNIT IS RUNNING.
2. EXACT LAUNDRY MECHANICAL (EXHAUST AND MAKE-UP AIR) NEEDS TO BE DETERMINED BASED ON THE MANUFACTURER'S REQUIREMENTS OF THE FINAL PURCHASED EQUIPMENT
3. OUTSIDE AIR DUCT: R-3.5 INSULATED 26 GAGE MINIMUM STEEL DUCT WITH APPROVED THROUGH PENETRATION FIRESTOP ASSEMBLIES AT ALL RATED WALL PENETRATIONS EXTENDED FROM WALL INTAKE HOOD LOCATED 10' MINIMUM FROM EXHAUST TERMINATIONS TO FAN COIL RETURN AIR PLENUM.
4. TRANSITION FROM SF/150 DISCHARGE TO FILTER BOX SIZE AS NEEDED. DISCHARGE TO RETURN AIR PLENUM. FILTER BOX AND FAN TO BE ACCESSIBLE FROM UNIT RETURN AIR GRILLE.
5. SOFFIT HOUSING FCU AND DUCTWORK SHALL BE CONSTRUCTED OF PLENUM RATED MATERIALS. ALL WIRING AND PIPING IN PLENUM SHALL BE PLENUM RATED.
6. TRANSITION FROM FULL SIZE FCU DISCHARGE OPENING TO 30/12 SA MAIN
7. RISE AND/OR DETENTE AT 1
8. 12/12 TRANSFER AIR DUCT ROUTED THROUGH JOIST SPACE WITH AND TRANSITION GRILLE ON EACH SIDE OF CORRIDOR. PROVIDE FIRE SMOKE DAMPER AT CORRIDOR WALL PENETRATION AND RADIATION DAMPER AT EACH GRILLE.
9. DRYER DUCT: 4" DUCT RUN FROM DRYER IN WALL THROUGH OR PLATE TO JOIST SPACE, EXTEND TO EXTERIOR WALL HOOD (FAMCO #WVEB4BR WITHOUT SCREEN OR EQUAL), SOFFIT VENT, OR THROUGH THE ROOF TO SMACNA ROOF CAP WITH BACKDRAFT DAMPER AS INDICATED ON PLANS. DRYER IS TO BE LONG VENT LENGTH DRYER (MAXIMUM 160' VENT LENGTH). DO NOT TERMINATE IN BREEZE WAY, WITHIN 3'-0" OF OPERABLE WINDOW OR DOOR OR WITHIN 10'-0" MECHANICAL AIR INTAKES. WHERE DRYER VENT TERMINATES ADJACENT TO WATER HEATER CONCENTRIC VENT LOCATE DRYER VENT BELOW WATER HEATER CONCENTRIC VENT. (DO NOT ROUTE POSITIVE PRESSURE EXHAUST DUCTS IN RETURN AIR PLENUM). ALL DUCTS EXTENDING THROUGH RATED WALLS OR FLOORS TO BE CONSTRUCTED OF 26 GAGE MINIMUM STEEL WITH APPROVED THROUGH PENETRATION FIRESTOP ASSEMBLIES. RE: DRYER & EXHAUST FAN WALL DETAIL 4/M7.0-1.

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MARSHALL POINTE

MARSHALL POINTE APARTMENTS, LP
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No.	Date	Issue
1	07.2024	IFC

Project Architect: DV
Project Designer: DR
Date: 06/29/2023
Job Number: 222001
Drawn By: JW
Checked By: BM

Title: ENLARGED LEVEL 2 MECHANICAL PLAN - AREA A

Sheet Number: **M2-2.1**

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KEYNOTES:

1. FAN COIL UNIT: BELOW FIRE RATED CEILING IN DROP CEILING. PROVIDE HINGED SOLID WHITE ENAMELED ACCESS PANEL (NON-RATED, AMANA #CAPJ-2) SIZED AS RECOMMENDED BY MANUFACTURER (ESTIMATED SIZE IS 49x27-1/2"). SUPPORT UNIT FROM STRUCTURE WITH RUBBER VIBRATION ISOLATORS AT EACH CONNECTION. RS/RL LINE-SET FROM FAN COIL UNIT COIL TO HEAT PUMP UNIT ON ROOF PER MANUFACTURERS RECOMMENDATIONS. RE: CORRIDOR FAN COIL DETAIL 2/M7-0.1. INTERLOCK SF/150 TO RUN WHEN FAN COIL UNIT IS RUNNING.
2. THERMOSTAT TO CONTROL CORRIDOR FAN COIL UNIT. TEMPERATURE IN/OUT VIA REMOTE (NON-ADJUSTABLE) TEMPERATURE SENSOR (TYPICAL)
3. OUT SIDE AIR DUCT, R-3.5 INSULATED 26 GAGE MINIMUM STEEL DUCT WITH APPROVED THROUGH PENETRATION FIRESTOP ASSEMBLIES AT ALL RATED WALL PENETRATIONS EXTENDED FROM WALL INTAKE HOOD LOCATED 10' MINIMUM FROM EXHAUST TERMINATIONS TO FAN COIL RETURN AIR PLENUM.
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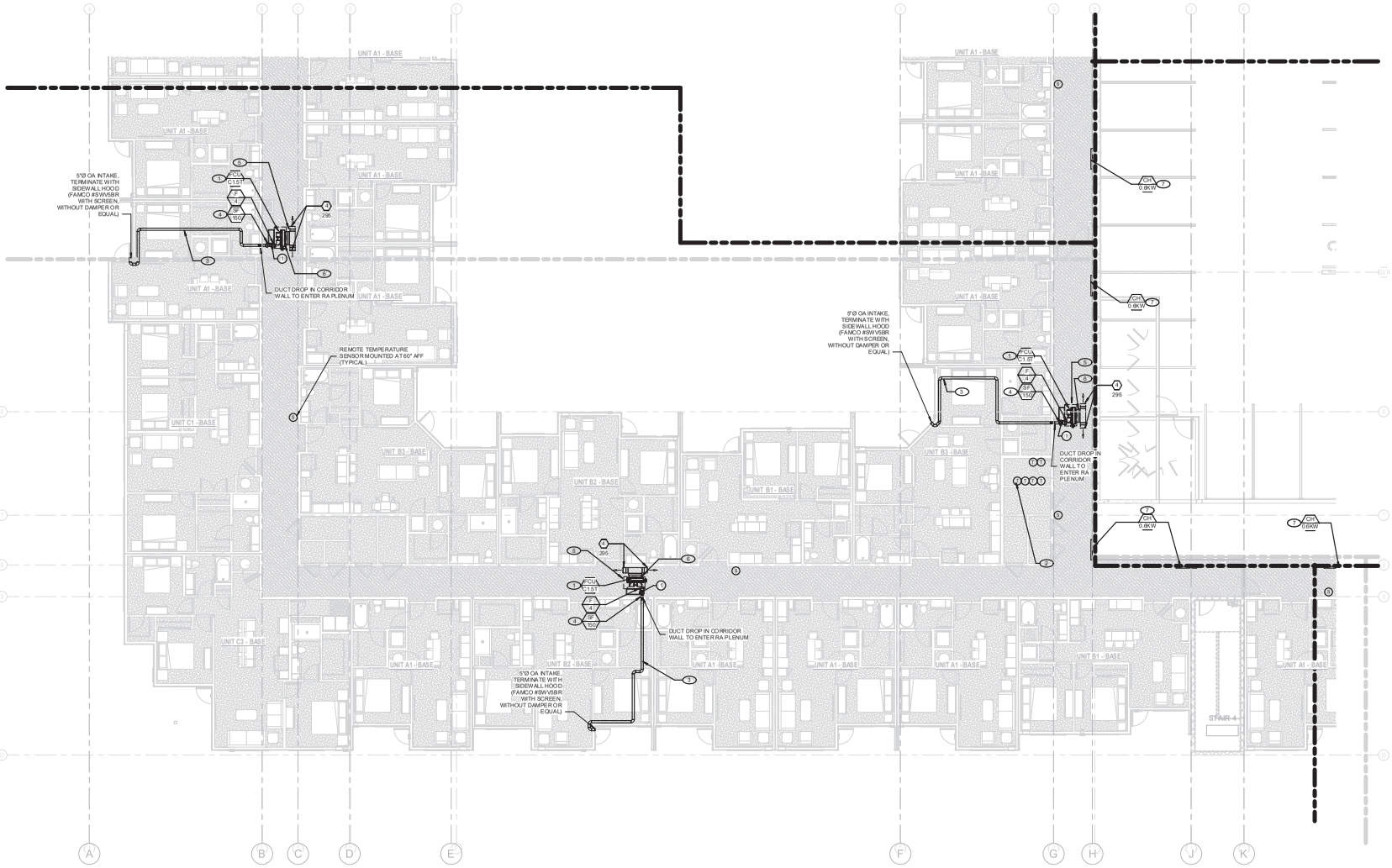
5. SOFFIT HOUSING FCU AND DUCTWORK SHALL BE CONSTRUCTED OF PLENUM RATED MATERIALS. ALL WIRING AND PIPING IN PLENUM SHALL BE PLENUM RATED.
6. TRANSITION FROM FULL SIZE FCU DISCHARGE OPENING TO 30"/2 SA MAIN
7. PRICE AS ADD ALTERNATE M1.



LEVEL 2 MECHANICAL PLAN - AREA B
SCALE: 1/8" = 1'-0"

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08.06.2024

MARSHALL POINTE

MARSHALL POINTE APARTMENTS, LP
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ARVADA, CO 80002

No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM
Title	ENLARGED LEVEL 2 MECHANICAL PLAN - AREA B
Sheet Number	M2-2.2

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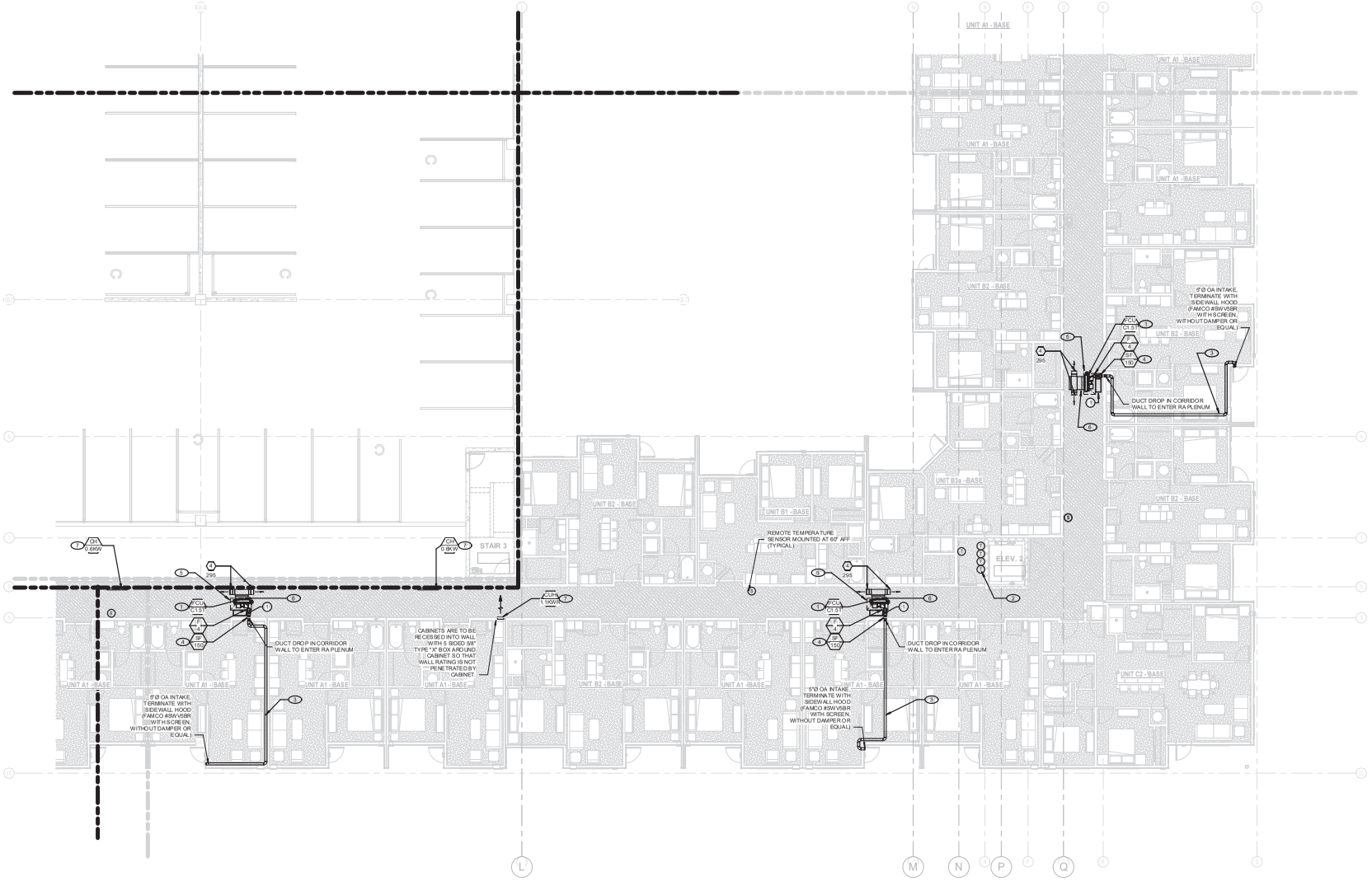

KEYNOTES:

1. FAN COIL UNIT. BELOW FIRE RATED CEILING IN DROP CEILING. PROVIDE HINGED SOLID WHITE ENAMELED ACCESS PANEL (NON-RATED, AMANA #CAP-2) SIZED AS RECOMMENDED BY MANUFACTURER (ESTIMATED SIZE IS 49x27-1/2"). SUPPORT UNIT FROM STRUCTURE WITH RUBBER VIBRATION ISOLATORS AT EACH CONNECTION. RS/RL LINE-SET FROM FAN COIL UNIT COIL TO HEAT PUMP UNIT ON ROOF PER MANUFACTURER'S RECOMMENDATIONS. RE: CORRIDOR FAN COIL DETAIL 2/M7.0-1. INTERLOCK SF/150 TO RUN WHEN FAN COIL UNIT IS RUNNING.
2. THERMOSTAT TO CONTROL CORRIDOR FAN COIL UNIT. TEMPERATURE IN/OUT VIA REMOTE (NON-ADJUSTABLE) TEMPERATURE SENSOR (TYPICAL)
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5. SOFFIT HOUSING FCU AND DUCTWORK SHALL BE CONSTRUCTED OF PLENUM RATED MATERIALS. ALL WIRING AND PIPING IN PLENUM SHALL BE PLENUM RATED.
6. TRANSITION FROM FULL SIZE FCU DISCHARGE OPENING TO 30/12 SA MAIN
7. PRICE AS ADD ALTERNATE M1.

LEVEL 2 MECHANICAL PLAN - AREA C

SCALE: 1/8" = 1'-0"

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08.06.2024

MARSHALL POINTE

MARSHALL POINTE APARTMENTS, LP
5170 MARSHALL ST
ARVADA, CO 80002

No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM

Title: ENLARGED LEVEL 2 MECHANICAL PLAN - AREA C

Sheet Number: **M2-2.3**

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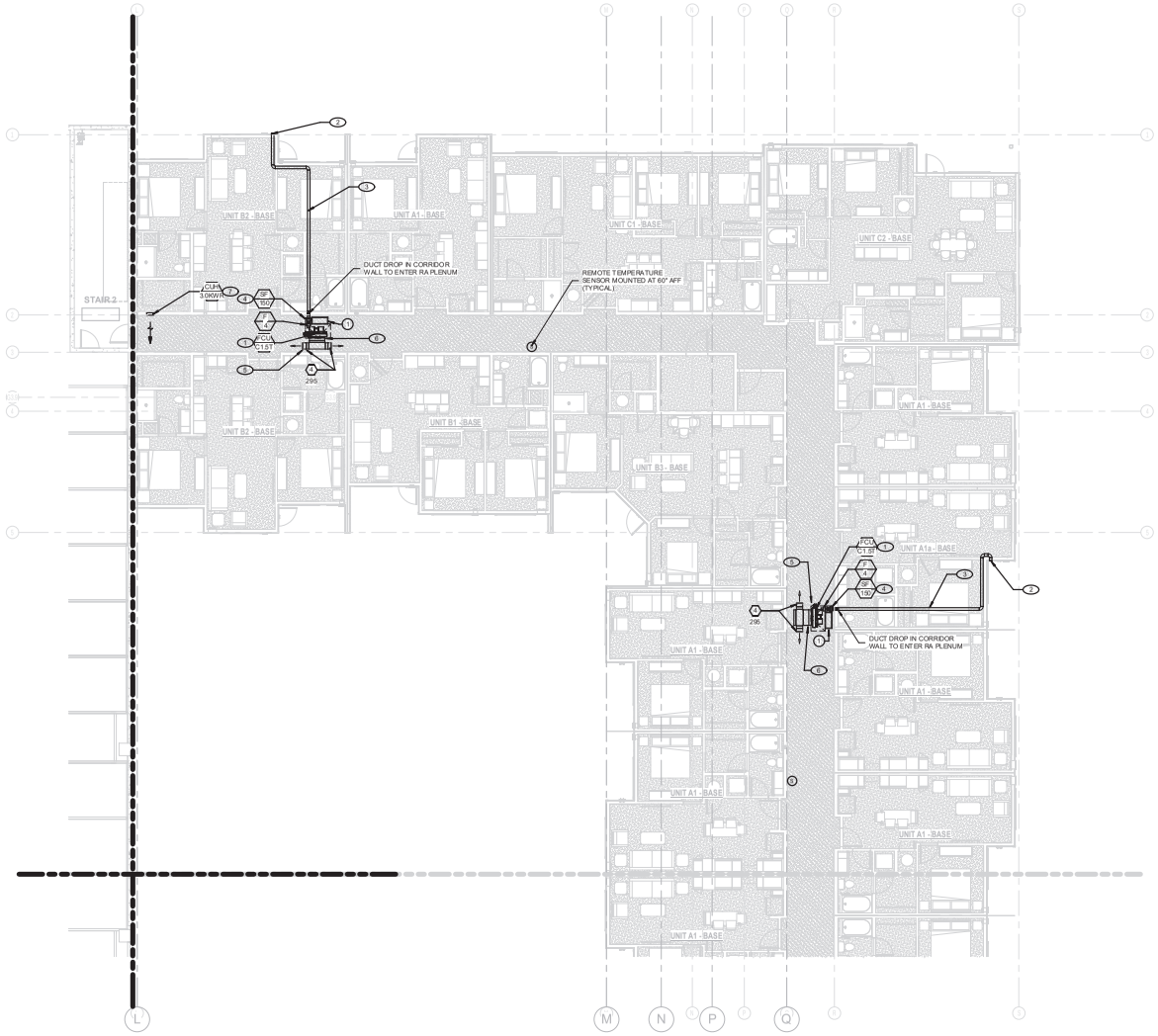

LEVEL 2 MECHANICAL PLAN - AREA D

SCALE: 1/8" = 1'-0"

KEYNOTES:

1. FAN COIL UNIT: BELOW FIRE RATED CEILING IN DROP CEILING. PROVIDE HINGED SOLID WHITE ENAMELED ACCESS PANEL (NON-RATED, AMANA #CAP-2) SIZED AS RECOMMENDED BY MANUFACTURER (ESTIMATED SIZE IS 49x27-1/2"). SUPPORT UNIT FROM STRUCTURE WITH RUBBER VIBRATION ISOLATORS AT EACH CONNECTION. RS/RL LINE-SET FROM FAN COIL UNIT COIL TO HEAT PUMP UNIT ON ROOF PER MANUFACTURERS RECOMMENDATIONS. RE: CORRIDOR FAN COIL DETAIL 2/M7-0.1. INTERLOCK SF/150 TO RUN WHEN FAN COIL UNIT IS RUNNING.
2. 5"Ø OA INTAKE. TERMINATE WITH SIDEWALL HOOD (FAMCO #SWV58R WITH SCREEN, WITHOUT DAMPER OR EQUAL)
3. OUTSIDE AIR DUCT: R-3.5 INSULATED 26 GAGE MINIMUM STEEL DUCT WITH APPROVED THROUGH PENETRATION FIRESTOP ASSEMBLIES AT ALL RATED WALL PENETRATIONS EXTENDED FROM WALL INTAKE HOOD LOCATED 10' MINIMUM FROM EXHAUST TERMINATIONS TO FAN COIL RETURN AIR PLENUM.
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6. TRANSITION FROM FULL SIZE FCU DISCHARGE OPENING TO 30/12 SA MAIN
7. PRICE AS ADD ALTERNATE M1.

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08.06.2024

MARSHALL POINTE

MARSHALL POINTE APARTMENTS, LP
5170 MARSHALL ST
ARVADA, CO 80002

No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM
Title	ENLARGED LEVEL 2 MECHANICAL PLAN - AREA D
Sheet Number	M2-2.4

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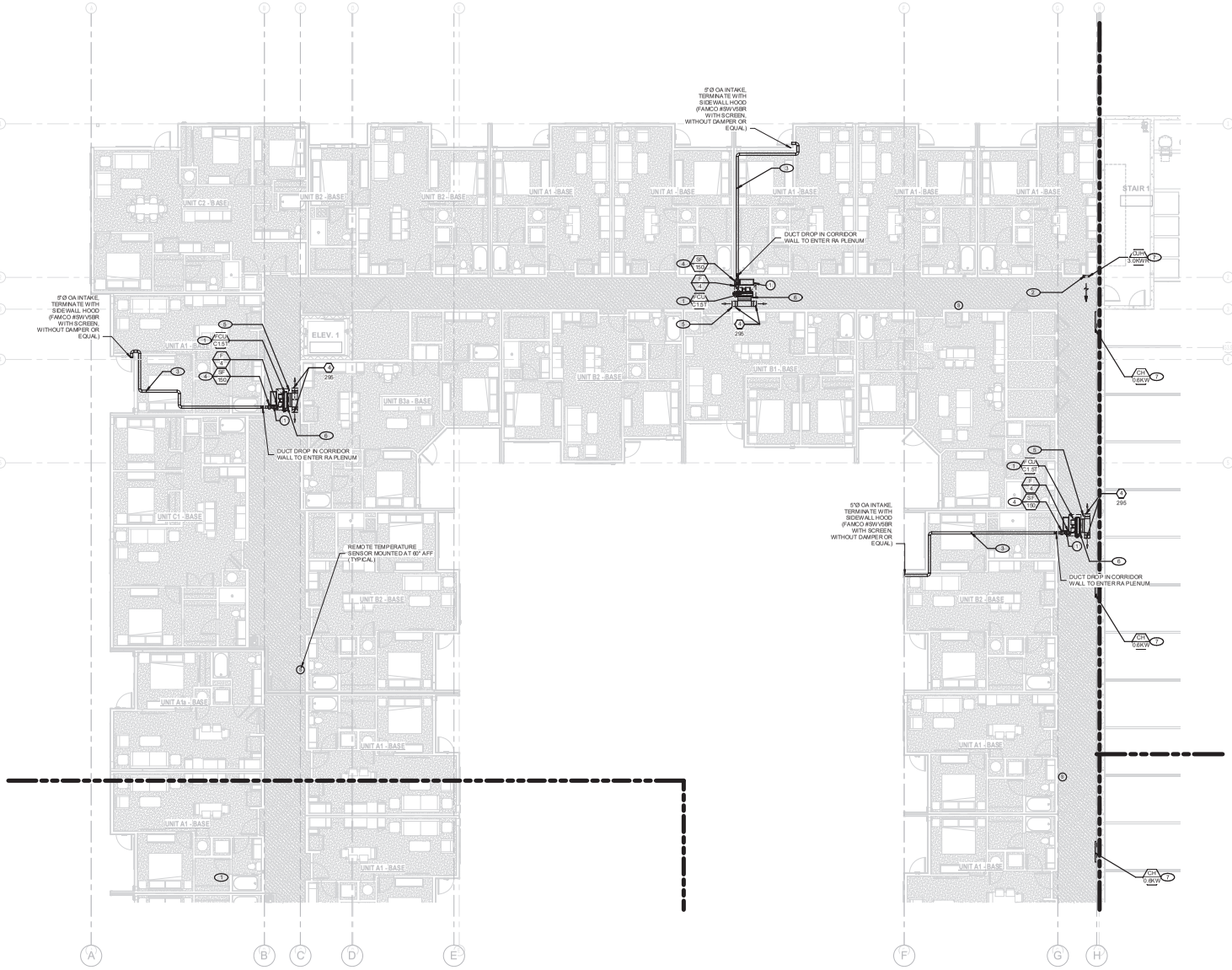

KEYNOTES:

1. FAN COIL UNIT: BELOW FIRE RATED CEILING IN DROP CEILING. PROVIDE HINGED SOLID WHITE ENAMELED ACCESS PANEL (NON-RATED, AMANA #CAP-2) SIZED AS RECOMMENDED BY MANUFACTURER (ESTIMATED SIZE IS 48x27-1/2"). SUPPORT UNIT FROM STRUCTURE WITH RUBBER VIBRATION ISOLATORS AT EACH CONNECTION. RS/RL LINE-SET FROM FAN COIL UNIT COIL TO HEAT PUMP UNIT ON ROOF PER MANUFACTURER'S RECOMMENDATIONS. RE: CORRIDOR FAN COIL DETAIL 2/M7-0.1. INTERLOCK SF/150 TO RUN WHEN FAN COIL UNIT IS RUNNING.
2. CABINETS ARE TO BE RECESSED INTO WALL WITH 5 SIDED 5/8" TYPE "X" BOX AROUND CABINET SO THAT WALL RATING IS NOT PENETRATED BY CABINET.
3. OUTSIDE AIR DUCT: R-3.5 INSULATED 26 GAGE MINIMUM STEEL DUCT WITH APPROVED THROUGH PENETRATION FIRESTOP ASSEMBLIES AT ALL RATED WALL PENETRATIONS EXTENDED FROM WALL INTAKE HOOD LOCATED 10' MINIMUM FROM EXHAUST TERMINATIONS TO FAN COIL RETURN AIR PLENUM.
4. TRANSITION FROM SF/150 DISCHARGE TO FILTER BOX SIZE AS NEEDED. DISCHARGE TO RETURN AIR PLENUM. FILTER BOX AND FAN TO BE ACCESSIBLE FROM UNIT RETURN AIR GRILLE.
5. SOFFIT HOUSING FCU AND DUCTWORK SHALL BE CONSTRUCTED OF PLENUM RATED MATERIALS. ALL WIRING AND PIPING IN PLENUM SHALL BE PLENUM RATED.
6. TRANSITION FROM FULL SIZE FCU DISCHARGE OPENING TO 30/12 SA MAIN
7. PRICE AS ADD ALTERNATE M1.

LEVEL 3 MECHANICAL PLAN - AREA A

SCALE: 1/8" = 1'-0"

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No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM
Title	ENLARGED LEVEL 3 MECHANICAL PLAN - AREA A
Sheet Number	M2-3.1

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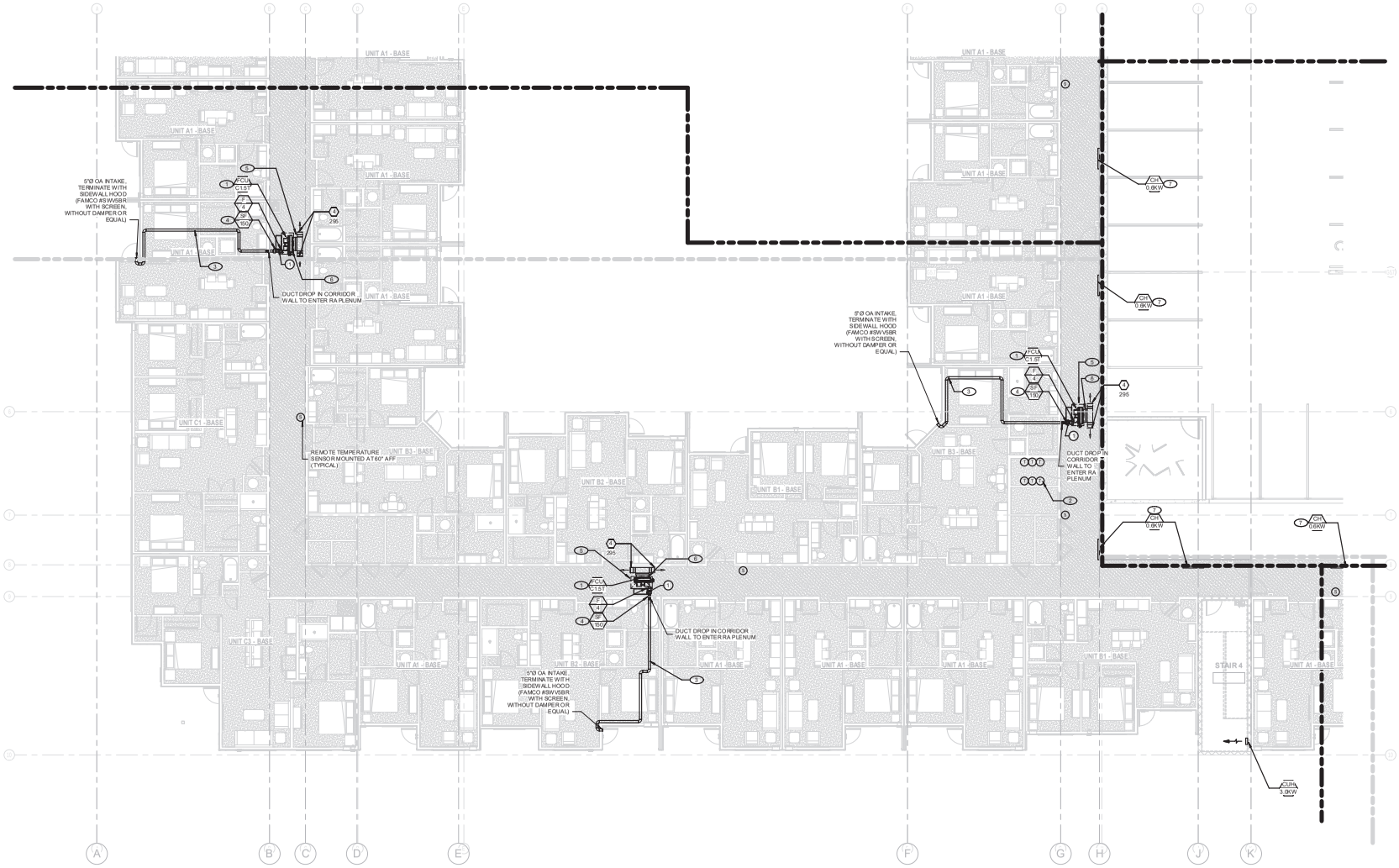
KEYNOTES:

1. FAN COIL UNIT: BELOW FIRE RATED CEILING IN DROP CEILING. PROVIDE HINGED SOLID WHITE ENAMELED ACCESS PANEL (NON-RATED). AMANA #CAP-21 SIZED AS RECOMMENDED BY MANUFACTURER (ESTIMATED SIZE IS 49x27-1/2"). SUPPORT UNIT FROM STRUCTURE WITH RUBBER VIBRATION ISOLATORS AT EACH CONNECTION. R5/R1 LINE SET FROM FAN COIL UNIT COIL TO HEAT PUMP UNIT ON ROOF PER MANUFACTURERS RECOMMENDATIONS. RE: CORRIDOR FAN COIL DETAIL 2/M7-0.1. INTERLOCK SF/150 TO RUN WHEN FAN COIL UNIT IS RUNNING.
2. THERMOSTAT TO CONTROL CORRIDOR FAN COIL UNIT. TEMPERATURE IN/OUT VIA REMOTE (NON-ADJUSTABLE) TEMPERATURE SENSOR (TYPICAL)
3. OUTSIDE AIR DUCT: R-3.5 INSULATED 26 GAGE MINIMUM STEEL DUCT WITH APPROVED THROUGH PENETRATION FIRESTOP ASSEMBLIES AT ALL RATED WALL PENETRATIONS EXTENDED FROM WALL INTAKE HOOD LOCATED 10' MINIMUM FROM EXHAUST TERMINATIONS TO FAN COIL RETURN AIR PLENUM.
4. TRANSITION FROM SF/150 DISCHARGE TO FILTER BOX SIZE AS NEEDED. DISCHARGE TO RETURN AIR PLENUM. FILTER BOX AND FAN TO BE ACCESSIBLE FROM UNIT RETURN AIR GRILLE.
5. SOFFIT HOUSING FCU AND DUCTWORK SHALL BE CONSTRUCTED OF PLENUM RATED MATERIALS. ALL WIRING AND PIPING IN PLENUM SHALL BE PLENUM RATED.
6. TRANSITION FROM FULL SIZE FCU DISCHARGE OPENING TO 30/12 SA MAIN
7. PRICE AS ADD ALTERNATE M1.



LEVEL 3 MECHANICAL PLAN - AREA B
SCALE: 1/8" = 1'-0"

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MARSHALL POINTE

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No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM
Title	ENLARGED LEVEL 3 MECHANICAL PLAN - AREA B
Sheet Number	M2-3.2

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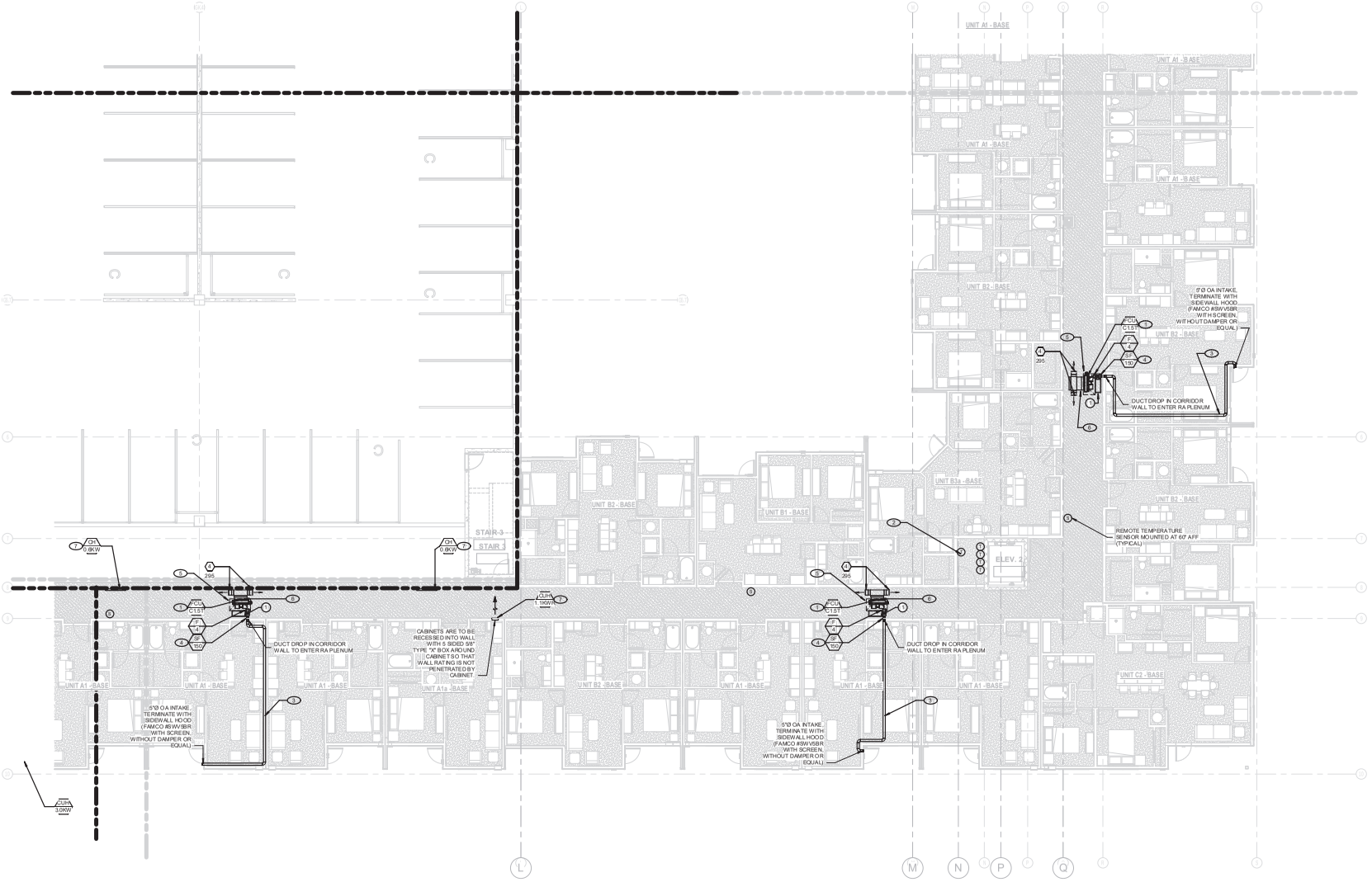

LEVEL 3 MECHANICAL PLAN - AREA C
SCALE: 1/8" = 1'-0"

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No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM

Title: ENLARGED LEVEL 3 MECHANICAL PLAN - AREA C

Sheet Number: **M2-3.3**

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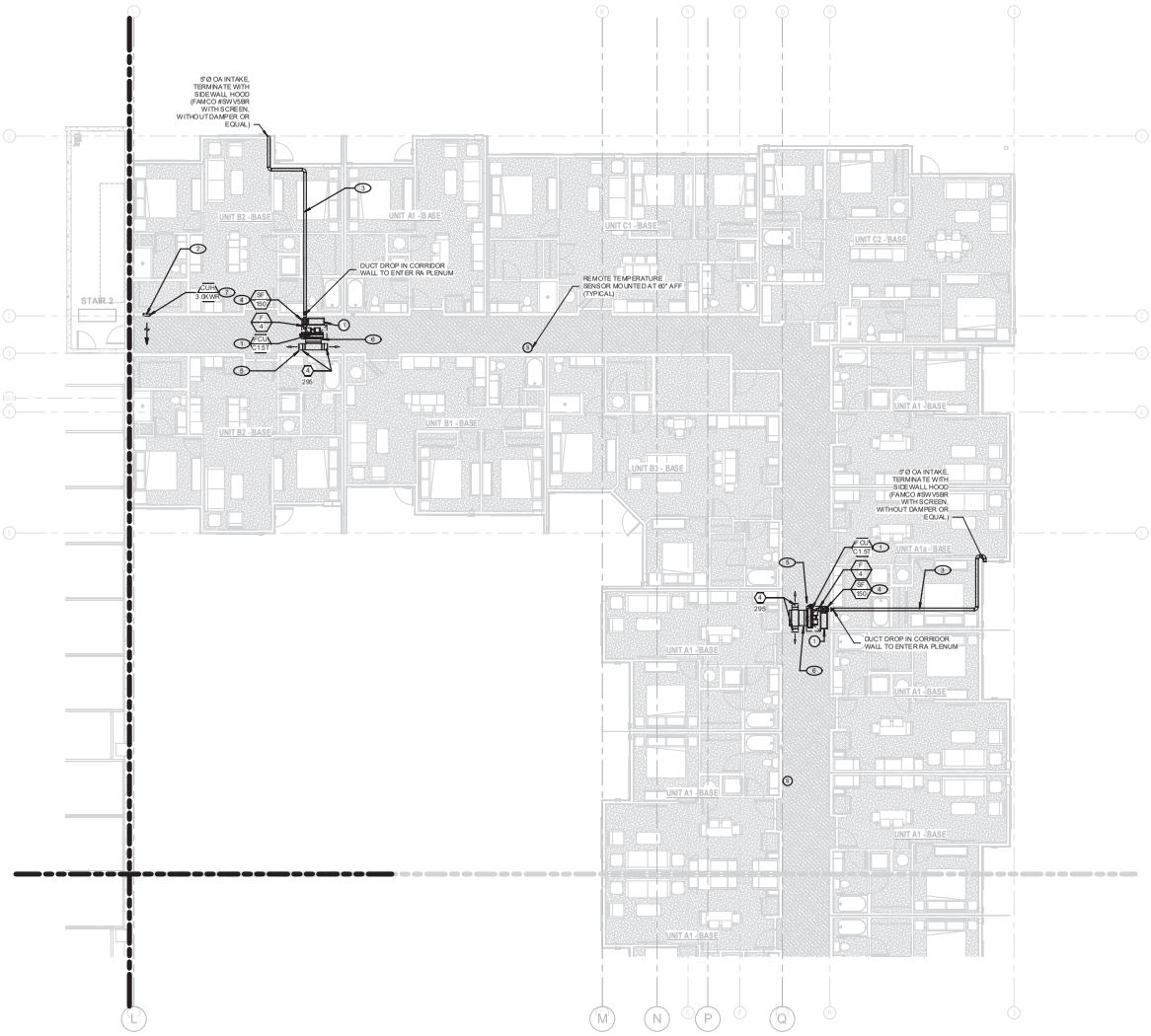

LEVEL 3 MECHANICAL PLAN - AREA D

SCALE 1/8" = 1'-0"

KEYNOTES:

1. FAN COIL UNIT: BELOW FIRE RATED CEILING IN DROP CEILING. PROVIDE HINGED SOLID WHITE ENAMELED ACCESS PANEL (NON-RATED). AMANA #CAP-21 SIZED AS RECOMMENDED BY MANUFACTURER (ESTIMATED SIZE IS 49x21-1/2"). SUPPORT UNIT FROM STRUCTURE WITH RUBBER VIBRATION ISOLATORS AT EACH CONNECTION. RS/RL LINE SET FROM FAN COIL UNIT COIL TO HEAT PUMP UNIT ON ROOF PER MANUFACTURERS RECOMMENDATIONS. RE: CORRIDOR FAN COIL DETAIL 2/M7-0.1. INTERLOCK SF/150 TO RUN WHEN FAN COIL UNIT IS RUNNING.
2. CABINETS ARE TO BE RECESSED INTO WALL WITH 5 SIDED 5/8" TYPE "X" BOX AROUND CABINET SO THAT WALL RATING IS NOT PENETRATED BY CABINET.
3. OUTSIDE AIR DUCT: R-3.5 INSULATED 26 GAGE MINIMUM STEEL DUCT WITH APPROVED THROUGH PENETRATION FIRESTOP ASSEMBLIES AT ALL RATED WALL PENETRATIONS EXTENDED FROM WALL INTAKE HOOD LOCATED 10' MINIMUM FROM EXHAUST TERMINATIONS TO FAN COIL RETURN AIR PLENUM.
4. TRANSITION FROM SF/150 DISCHARGE TO FILTER BOX SIZE AS NEEDED. DISCHARGE TO RETURN AIR PLENUM. FILTER BOX AND FAN TO BE ACCESSIBLE FROM UNIT RETURN AIR GRILLE.
5. SOFFIT HOUSING FCU AND DUCTWORK SHALL BE CONSTRUCTED OF PLENUM RATED MATERIALS. ALL WIRING AND PIPING IN PLENUM SHALL BE PLENUM RATED.
6. TRANSITION FROM FULL SIZE FCU DISCHARGE OPENING TO 30/12 SA MAIN
7. PRICE AS ADD ALTERNATE M1.

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No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM
Title	ENLARGED LEVEL 3 MECHANICAL PLAN - AREA D
Sheet Number	M2-3.4

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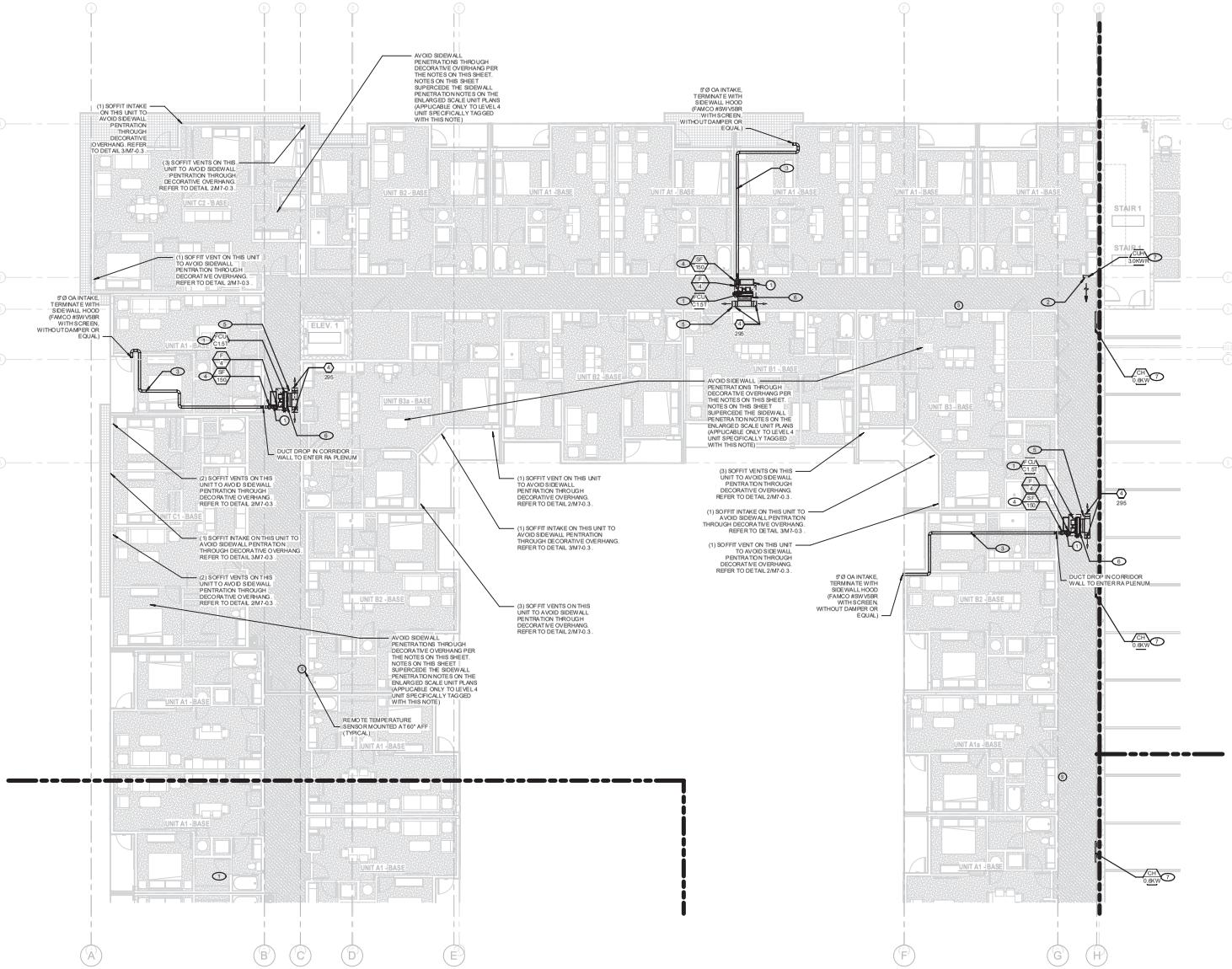

LEVEL 4 MECHANICAL PLAN - AREA A

SCALE: 1/8" = 1'-0"

KEYNOTES:

1. FAN COIL UNIT: BELOW FIRE RATED CEILING IN DROP CEILING. PROVIDE HINGED SOLID WHITE ENAMELED ACCESS PANEL (NON-RATED, AMANA #CAPI-1) SIZED AS RECOMMENDED BY MANUFACTURER (ESTIMATED SIZE IS 43x27-1/2"). SUPPORT UNIT FROM STRUCTURE WITH RUBBER VIBRATION ISOLATORS AT EACH CONNECTION. RS-R/L LINE-SET FROM FAN COIL UNIT COIL TO HEAT PUMP UNIT ON ROOF PER MANUFACTURER'S RECOMMENDATIONS. RE: CORRIDOR FAN COIL DETAIL 2/M7-0.1. INTERLOCK SF/150 TO RUN WHEN FAN COIL UNIT IS RUNNING.
2. CABINETS ARE TO BE RECESSED INTO WALL WITH 5 SIDED 5/8" TYPE 'X' BOX AROUND CABINET SO THAT WALL RATING IS NOT PENETRATED BY CABINET.
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5. SOFFIT HOUSING FCU AND DUCTWORK SHALL BE CONSTRUCTED OF PLENUM RATED MATERIALS. ALL WIRING AND PIPING IN PLENUM SHALL BE PLENUM RATED.
6. TRANSITION FROM FULL SIZE FCU DISCHARGE OPENING TO 30/12 SA MAIN
7. PRICE AS ADD ALTERNATE M1.

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No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM
Title	ENLARGED LEVEL 4 MECHANICAL PLAN - AREA A
Sheet Number	M2-4.1

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KEY NOTES:

1. FAN COIL UNIT: BELOW FIRE RATED CEILING IN DROP CEILING. PROVIDE HINGED SOLID WHITE ENAMELED ACCESS PANEL (NON-RATED, AMANA #CAP-2) SIZED AS RECOMMENDED BY MANUFACTURER (ESTIMATED SIZE IS 48x27-1/2"). SUPPORT UNIT FROM STRUCTURE WITH RUBBER VIBRATION ISOLATORS AT EACH CONNECTION. RS/RL LINE-SET FROM FAN COIL UNIT COIL TO HEAT PUMP UNIT ON ROOF PER MANUFACTURERS RECOMMENDATIONS. RE: CO RRIDOR FAN COIL DETAIL 2/M7-0.1. INTERLOCK SF/150 TO RUN WHEN F AN COIL UNIT IS RUNNING.
2. THERMOSTAT TO CONTROL CORRIDOR FAN COIL UNIT. TEMPERATURE IN/OUT VIA REMOTE (NON-ADJUSTABLE) TEMPERATURE SENSOR (TYPICAL)
3. OUTSIDE AIR DUCT: R-3.5 INSULATED 26 GAGE MINIMUM STEEL DUCT WITH APPROVED THROUGH PENETRATION FIRESTOP ASSEMBLIES AT ALL RATED WALL PENETRATIONS EXTENDED FROM WALL INTAKE HOOD LOCATED 10' MINIMUM FROM EXHAUST TERMINATIONS TO FAN COIL RETURN AIR PLENUM.
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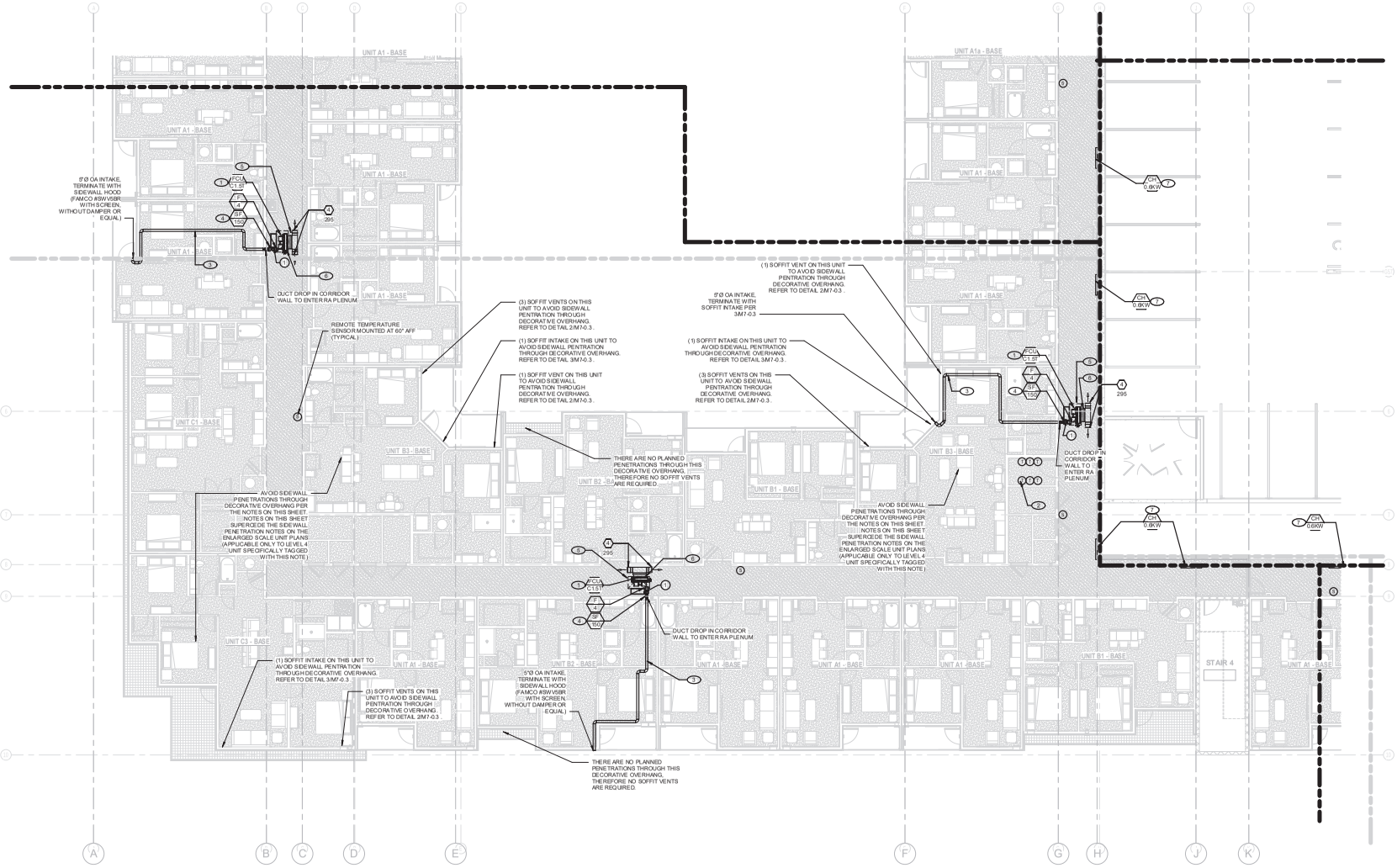

LEVEL 4 MECHANICAL PLAN - AREA B
SCALE: 1/8" = 1'-0"

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MARSHALL POINTE

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No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM
Title	ENLARGED LEVEL 4 MECHANICAL PLAN - AREA B
Sheet Number	M2-4.2

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KEYNOTES:

1. FAN COIL UNIT: BELOW FIRE RATED CEILING IN DROP CEILING. PROVIDE HINGED SOLID WHITE ENAMELED ACCESS PANEL (NON-RATED, AMANA #CAP-21 SIZED AS RECOMMENDED BY MANUFACTURER (ESTIMATED SIZE IS 49x27-1/2"). SUPPORT UNIT FROM STRUCTURE WITH RUBBER VIBRATION ISOLATORS AT EACH CONNECTION. RS/RL LINE SET FROM FAN COIL UNIT COIL TO HEAT PUMP UNIT ON ROOF PER MANUFACTURERS RECOMMENDATIONS. RE: CORRIDOR FAN COIL DETAIL 2/M7-0.1. INTERLOCK SF/150 TO RUN WHEN FAN COIL UNIT IS RUNNING.
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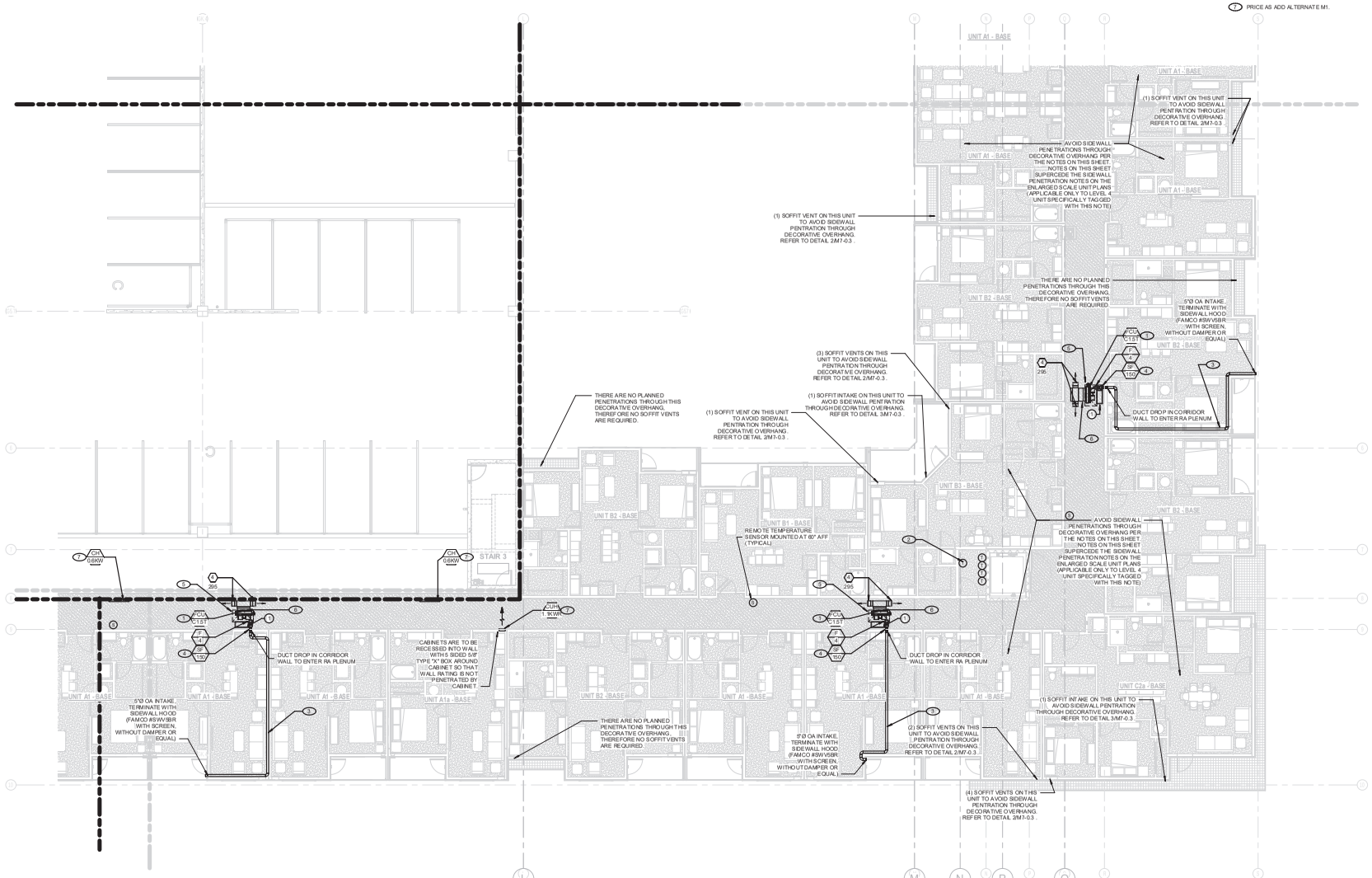
6. TRANSITION FROM FULL SIZE FCU DISCHARGE OPENING TO 30/12 SA MAIN
7. PRICE AS ADD ALTERNATE M1.



LEVEL 4 MECHANICAL PLAN - AREA C
SCALE: 1/8" = 1'-0"

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No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date: 06/29/2023
Job Number: 222001
Drawn By: JW
Checked By: BM

Title: ENLARGED LEVEL 4 MECHANICAL PLAN - AREA C

Sheet Number: **M2-4.3**

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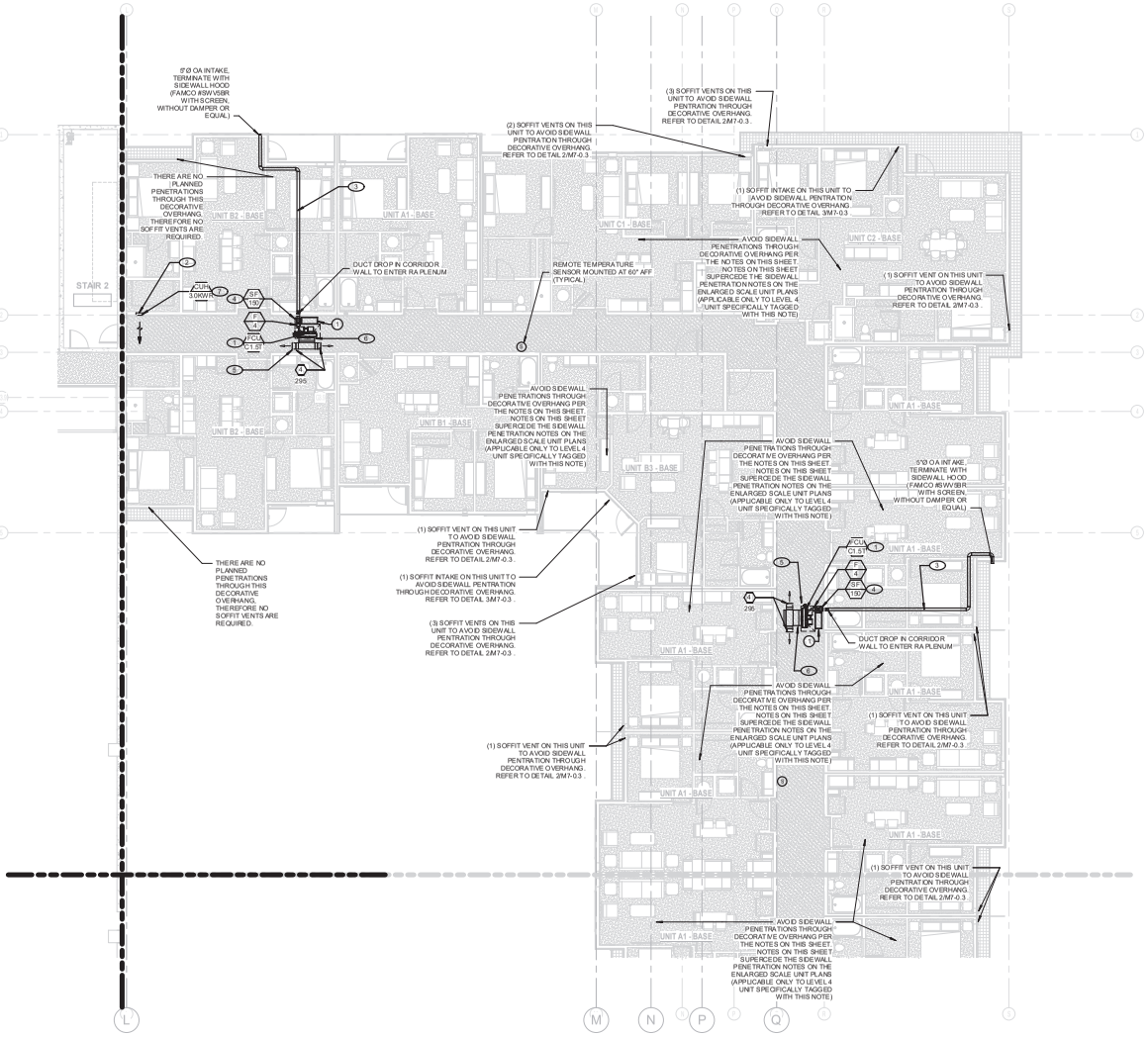
KEYNOTES:

1. FAN COIL UNIT: BELOW F RE RATED CEILING IN DROP CEILING. PROVIDE HINGED SOLID WHITE ENAMELED ACCESS PANEL (NON-RATED, AMANA #CAP-2) SIZED AS RECOMMENDED BY MANUFACTURER (ESTIMATED SIZE IS 49x27-1/2"). SUPPORT UNIT FROM STRUCTURE WITH RUBBER VIBRATION ISOLATORS AT EACH CONNECTION. RS/RL LINE-SET FROM FAN COIL UNIT COIL TO HEAT PUMP UNIT ON ROOF PER MANUFACTURERS RECOMMENDATIONS. RE: CORRIDOR FAN COIL DETAIL 2/M7-0.1. INTERLOCK SF/150 TO RUN WHEN FAN COIL UNIT IS RUNNING.
2. CABINET S ARE TO BE RECESSED INTO WALL WITH 5 SIDED 5/8" TYPE "X" BOX AROUND CABINET SO THAT WALL RATING IS NOT PENETRATED BY CABINET.
3. OUTSIDE AIR DUCT: R-3.5 INSULATED 26 GAGE MINIMUM STEEL DUCT WITH APPROVED THROUGH PENETRATION FIRESTOP ASSEMBLIES AT ALL RATED WALL PENETRATIONS EXTENDED FROM WALL INTAKE HOOD LOCATED 10' MINIMUM FROM EXHAUST TERMINATIONS TO FAN COIL RETURN AIR PLENUM.
4. TRANSITION FROM SF/150 DISCHARGE TO FILTER BOX. SIZE AS NEEDED. DISCHARGE TO RETURN AIR PLENUM. FILTER BOX AND FAN TO BE ACCESSIBLE FROM UNIT RETURN AIR GRILLE.
5. SOFFIT HOUSING FCU AND DUCTWORK SHALL BE CONSTRUCTED OF PLENUM RATED MATERIALS. ALL WIRING AND PIPING IN PLENUM SHALL BE PLENUM RATED.
6. TRANSITION FROM FULL SIZE FCU DISCHARGE OPENING TO 30/12 SA MAIN
7. PRICE AS ADD ALTERNATE M1.



LEVEL 4 MECHANICAL PLAN - AREA D

SCALE: 1/8" = 1'-0"

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No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date: 06/29/2023
Job Number: 222001
Drawn By: JW
Checked By: BM

Title: ENLARGED LEVEL 4 MECHANICAL PLAN - AREA D

Sheet Number: **M2-4.4**

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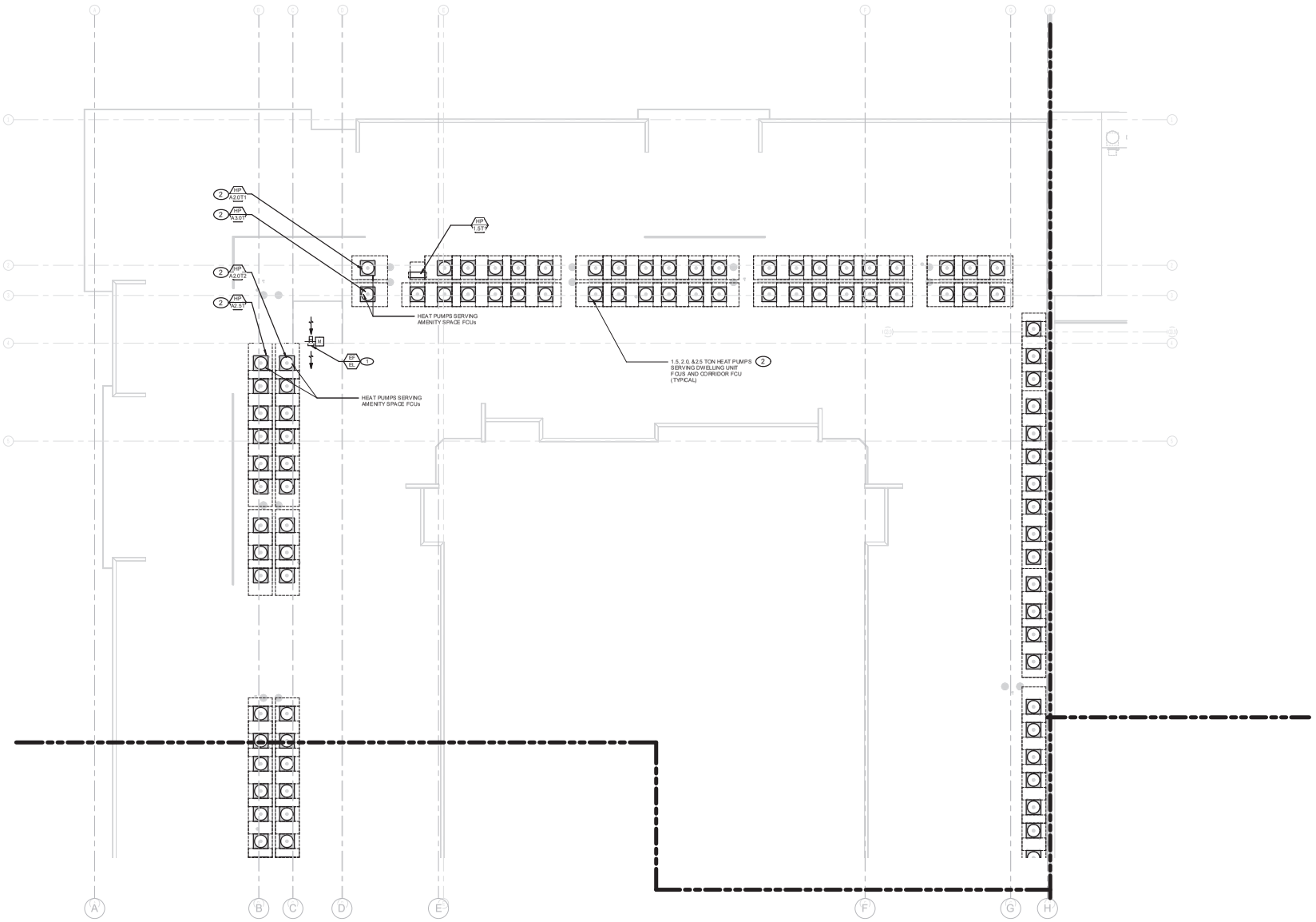
KEYNOTES:

1. ELEVATOR SHAFT HEAT EXHAUST FAN CONTROLLED BY REVERSE ACTING THERMOSTAT INSTALLED AT TOP OF ELEVATOR SHAFT. FAN DISCHARGE TO BE 18" MIN ABOVE ROOF. EXTEND 8"EA FROM FAN THROUGH ELEVATOR SHAFT WALL ABOVE ROOF. TERMINATE AS HIGH AS POSSIBLE IN ELEVATOR SHAFT WITH GALVANIZED BIRDSCREEN AT INLET. PROVIDE NORMALLY CLOSED MOTORIZED DAMPER INSIDE ELEVATOR SHAFT ON EA INTAKE POWERED TO OPEN WITH FAN OPERATION.

2. CONDENSER/HEAT PUMP LOCATION: VERIFY LOCATION W/ ARCHITECT PRIOR TO ORDERING RS/RL LINE SETS. INSTALL MAINTAINING ALL MANUFACTURER'S REQUIRED CLEARANCES. EXTEND REFRIGERANT PIPING FROM CONDENSER/HEAT PUMP TO FAN COIL UNITS INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. RE: CONDENSING UNIT DETAIL 3/M7-0.2 AND CONDENSING UNIT ROOF SUPPORT DETAIL 3/M7-0.1. PROVIDE HP-1.5T, HP-2.0T, OR HP-2.5T AS REQUIRED FOR EACH RESIDENTIAL UNIT. TAG EACH UNIT TO IDENTIFY WHICH APARTMENT FAN COIL IT IS PIPED TO.



ROOF MECHANICAL PLAN - AREA A
SCALE: 1/8" = 1'-0"

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No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM
Title	ENLARGED ROOF MECHANICAL PLAN - AREA A
Sheet Number	M2-5.1

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KEYNOTES

1 CONTRACTOR SHALL HEAT EXHAUST FAN CONTROLLED BY ROOFTOP MOUNTED ACTING THERMOSTAT INSTALLED ATTOP OF ELEVATOR SHAFT. FAN DISCHARGE TO BE 15" MIN ABOVE ROOF. EXISTING EFA FROM FAN THROUGH ELEVATOR SHAFT WALL ABOVE ROOF. TERMINATE AS PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE BACKDRAFT DAMPER IN FAN DISCHARGE. PROVIDE NORMALLY CLOSED MOTORIZED DAMPER INSIDE ELEVATOR SHAFT ON EA. FLOOR CONNECTED TO CONTROL PANEL FOR EA. FLOOR.

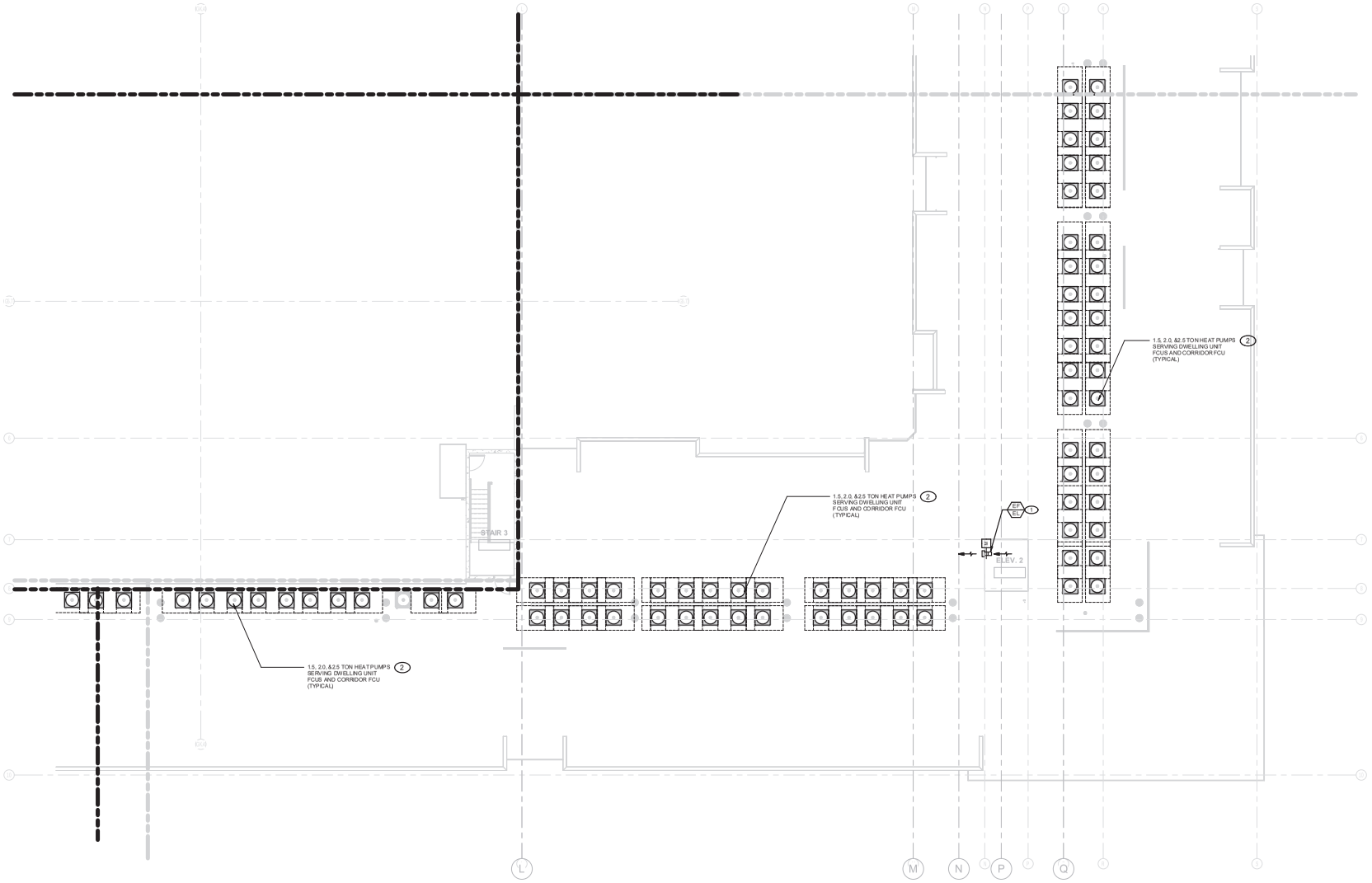
2 CONDENSER/HEAT PUMP LOCATION. VERIFY LOCATION W/ ARCHITECT PRIOR TO ORDERING. RS RL LINE SETS. INSTALL MANTARING ALL MANUFACTURER'S REQUIRED CLEARANCES. ESTIMATED WEIGHT OF EACH CONDENSER IS 400 LBS. PROVIDE CONCRETE COLUMNS INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. SEE STRUCTURAL FOR REINFORCEMENT. CONDENSER SHALL BE MOUNTED ON 3/4" PLYWOOD SHEET ON 3/4"x3"x1'-10" SKIDS. PROVIDE HP: 1.5T - HPZ-24 , OR HP-2.5T AS REQUIRED FOR EACH RESIDENTIAL UNIT. TAG EACH UNIT TO IDENTIFY WHICH APARTMENT FAN COIL IT IS PIRED TO.

ROOF MECHANICAL PLAN - AREA B
SCALE: 1/8" = 1'-0"

KEYNOTES:

1. ELEVATOR SHAFT HEAT EXHAUST FAN CONTROLLED BY REVERSE ACTING THERMOSTAT INSTALLED AT TOP OF ELEVATOR SHAFT, FAN DISCHARGE TO BE 18" MIN ABOVE ROOF, EXTEND 8'EA FROM FAN THROUGH ELEVATOR SHAFT WALL ABOVE ROOF, TERMINATE AS HIGH AS POSSIBLE IN ELEVATOR SHAFT WITH GALVANIZED BIRDSCREEN AT INLET, PROVIDE NORMALLY CLOSED MOTORIZED DAMPER INSIDE ELEVATOR SHAFT ON EA INTAKE POWERED TO OPEN WITH FAN OPERATION.

2. CONDENSER/HEAT PUMP LOCATION: VERIFY LOCATION W/ ARCHITECT PRIOR TO ORDERING R5/RL LINE SETS. INSTALL MAINTAINING ALL MANUFACTURER'S REQUIRED CLEARANCES. EXTEND REFRIGERANT PIPING FROM CONDENSER/HEAT PUMP TO FAN COIL UNITS INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. RE: CONDENSING UNIT DETAIL 3/M7-0.2 AND CONDENSING UNIT ROOF SUPPORT DETAIL 3/M7-0.1. PROVIDE HP-1.5T, HP-2.0T, OR HP-2.5T AS REQUIRED FOR EACH RESIDENTIAL UNIT, TAG EACH UNIT TO IDENTIFY WHICH APARTMENT FAN COIL IT IS PIPED TO.



ROOF MECHANICAL PLAN - AREA C
SCALE: 1/8" = 1'-0"

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08.06.2024

MARSHALL POINTE

MARSHALL POINTE APARTMENTS, LP
5170 MARSHALL ST
ARVADA, CO 80002

No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM
Title	ENLARGED ROOF MECHANICAL PLAN - AREA C
Sheet Number	M2-5.3

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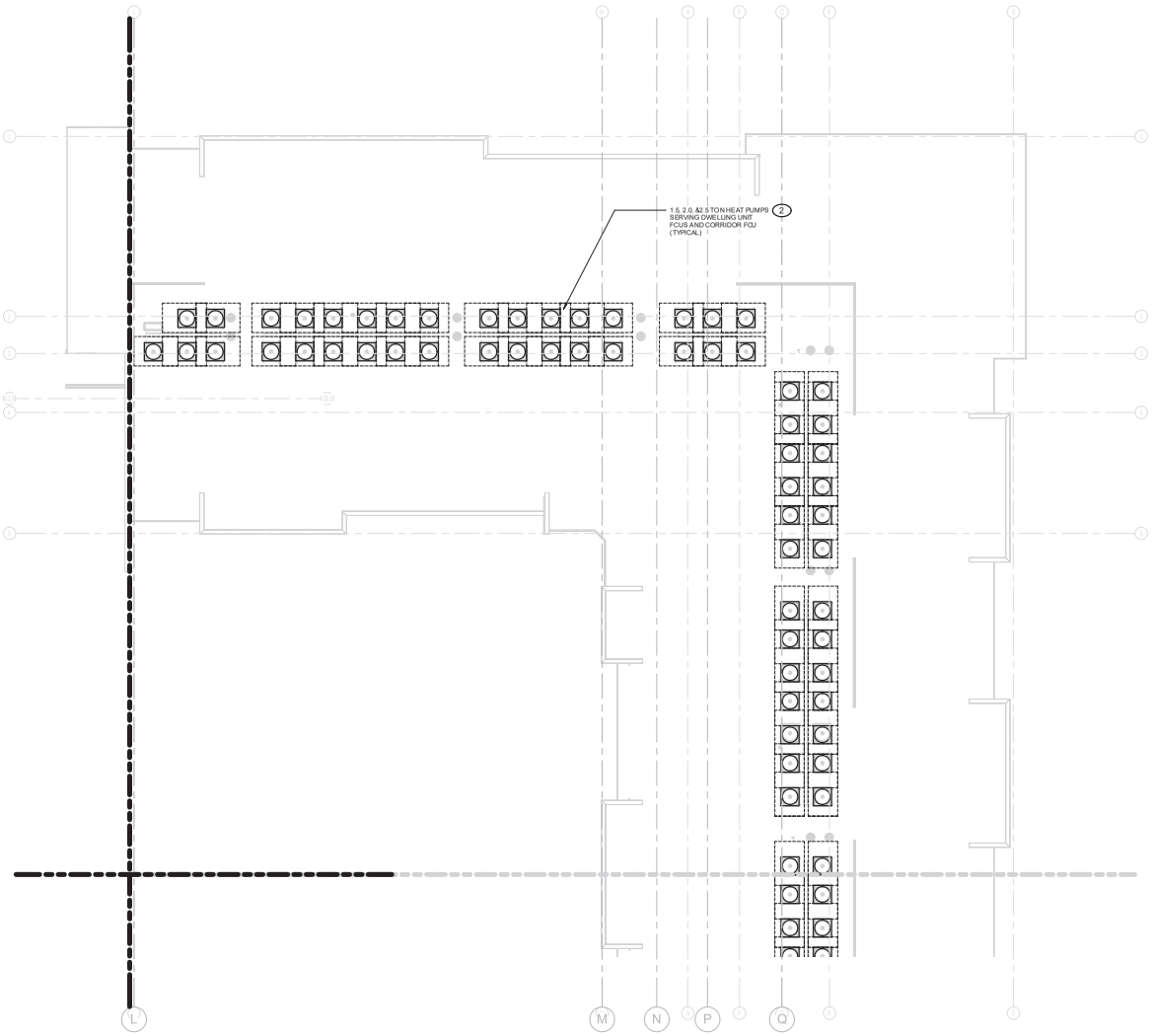

ROOF MECHANICAL PLAN - AREA D
SCALE: 1/8" = 1'-0"

KEYNOTES:

1. ELEVATOR SHAFT HEAT EXHAUST FAN CONTROLLED BY REVERSE ACTING THERMOSTAT INSTALLED AT TOP OF ELEVATOR SHAFT. FAN DISCHARGE TO BE 18" MIN ABOVE ROOF. EXTEND ØEA FROM FAN THROUGH ELEVATOR SHAFT WALL ABOVE ROOF. TERMINATE AS HIGH AS POSSIBLE IN ELEVATOR SHAFT WITH GALVANIZED BIRDSCREEN AT INLET. PROVIDE NORMALLY CLOSED MOTORIZED DAMPER INSIDE ELEVATOR SHAFT ON EA INTAKE. POWERED TO OPEN WITH FAN OPERATION.
2. CONDENSER/HEAT PUMP LOCATION: VERIFY LOCATION W/ ARCHITECT PRIOR TO ORDERING RS/RL LINE SETS. INSTALL MAINTAINING ALL MANUFACTURER'S REQUIRED CLEARANCES. EXTEND REFRIGERANT PIPING FROM CONDENSER/HEAT PUMP TO FAN COIL UNITS INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. RE: CONDENSING UNIT DETAIL 3/M7-0.2 AND CONDENSING UNIT ROOF SUPPORT DETAIL 3/M7-0.1. PROVIDE HP-1.5T, HP-2.0T, OR HP-2.5T AS REQUIRED FOR EACH RESIDENTIAL UNIT. TAG EACH UNIT TO IDENTIFY WHICH APARTMENT FAN COIL IT IS PIPED TO.

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MARSHALL POINTE

MARSHALL POINTE APARTMENTS, LP
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ARVADA, CO 80002

No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM
Title	ENLARGED ROOF MECHANICAL PLAN - AREA D
Sheet Number	M2-5.4

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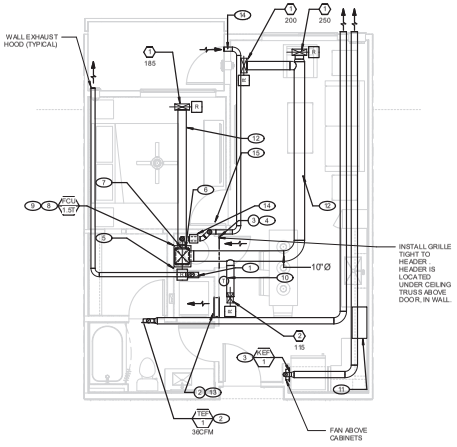
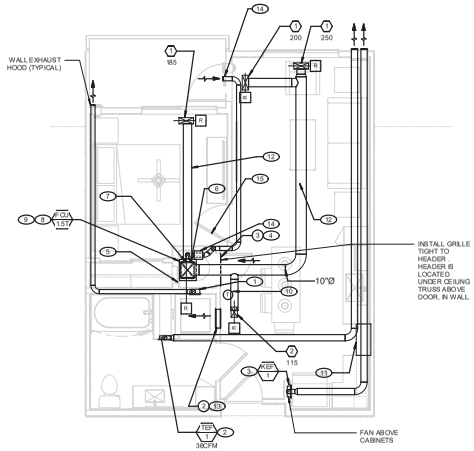


1 UNIT A1 MECHANICAL PLAN
1/4" = 1'-0"



2 UNIT A1a MECHANICAL PLAN
1/4" = 1'-0"

KEYNOTES

1. DRYER DUCT: 4" Ø DUCT UP FROM DRYER IN WALL THROUGH TOP PLATE TO JOIST SPACE, EXTEND TO EXTERIOR WALL HOOD (FAMCO #WV4EW WITHOUT SCREEN, WITH DAMPER OR EQUAL), SOFFIT VENT, OR THROUGH THE ROOF TO SMACNA ROOF CAP WITH BACKDRAFT DAMPER AS INDICATED ON PLANS. DRYER IS TO BE LONG VENT LENGTH DRYER (MAXIMUM 160' VENT LENGTH). DO NOT TERMINATE IN BREEZE WAY. WITHIN 3'-0" OF OPERABLE WINDOW OR DOOR OR WITHIN 10' OF MECHANICAL AIR INTAKES. (DO NOT ROUTE POSITIVE PRESSURE EXHAUST DUCTS IN RETURN AIR PLENUM). ALL DUCTS EXTENDING THROUGH RATED WALLS OR FLOORS TO BE CONSTRUCTED OF 26 GAGE MINIMUM STEEL WITH APPROVED THROUGH PENETRATION FIRESTOP ASSEMBLIES. RE: DRYER & EXHAUST FAN WALL DETAIL 4/M7-0.1.
2. EXHAUST DUCT: 4" Ø DUCT FROM RESTROOM EXHAUST FAN UP IN WALL THROUGH TOP PLATE TO JOIST SPACE, EXTEND 6"Ø DUCT TO EXTERIOR WALL HOOD (FAMCO #WVEB6 WITH SCREEN, WITH DAMPER OR EQUAL), SOFFIT VENT, OR THROUGH THE ROOF TO SMACNA ROOF CAP AS INDICATED ON PLANS. DO NOT TERMINATE IN BREEZE WAY. WITHIN 3'-0" OF OPERABLE WINDOW OR DOOR OR WITHIN 10' OF MECHANICAL AIR INTAKES. (DO NOT ROUTE POSITIVE PRESSURE EXHAUST DUCTS IN RETURN AIR PLENUM). ALL DUCTS EXTENDING THROUGH RATED WALLS OR FLOORS TO BE CONSTRUCTED OF 26 GAGE MINIMUM STEEL WITH APPROVED THROUGH PENETRATION FIRESTOP ASSEMBLIES. RE: DRYER & EXHAUST FAN WALL DETAIL 4/M7-0.1.
3. EXHAUST DUCT: 4" Ø DUCT FROM KITCHEN EXHAUST FAN UP IN WALL THROUGH TOP PLATE TO JOIST SPACE, EXTEND 6"Ø DUCT TO EXTERIOR WALL HOOD (FAMCO #WVEB6 WITH SCREEN WITH DAMPER OR EQUAL), SOFFIT VENT, OR THROUGH THE ROOF TO SMACNA ROOF CAP AS INDICATED ON PLANS. DO NOT TERMINATE IN BREEZE WAY. WITHIN 3'-0" OF OPERABLE WINDOW OR DOOR OR WITHIN 10' OF MECHANICAL AIR INTAKES. (DO NOT ROUTE POSITIVE PRESSURE EXHAUST DUCTS IN RETURN AIR PLENUM). ALL DUCTS EXTENDING THROUGH RATED WALLS OR FLOORS TO BE CONSTRUCTED OF 26 GAGE MINIMUM STEEL WITH APPROVED THROUGH PENETRATION FIRESTOP ASSEMBLIES. RE: DRYER & EXHAUST FAN WALL DETAIL 4/M7-0.1.
4. RETURN AIR GRILLE: SIZE AS INDICATED. INSTALL IN MECHANICAL CLOSET WALL ABOVE DOOR. GENERAL CONTRACTOR SHALL ENSURE ALL MATERIALS IN THE MECHANICAL CLOSET ARE PLENUM RATED TO ALLOW FOR RETURN AIR PATH FROM GRILLE TO FAN COIL RETURN AIR. WIRING TO BE PLENUM RATED. NO PLASTIC PIPING OR POSITIVE PRESSURE EXHAUST DUCTS SHALL BE LOCATED IN PLENUM.
5. RETURN AIR PLENUM: MECHANICAL CLOSET TO ACT AT RETURN AIR PLENUM AREA. PROVIDE ALL PLENUM RATED MATERIALS.
6. BOX PLENUM: PROVIDE SHEET METAL OR SMACNA DUCT BOARD PLENUM WITH 1" DUCT LINER TO ATTENUATE FAN NOISE.
7. FIRE DAMPER: PROVIDE 14"X14" UL LISTED FIRE DAMPER FOR HORIZONTAL UPFLOW INSTALLATION AT CEILING MEMBRANE PENETRATION. FIRE DAMPER TO BE ACCESSIBLE FROM MECHANICAL ROOM.
8. FAN COIL UNIT: PROVIDE AND INSTALL WALL HUNG FAN COIL UNIT WITH SIDE OUTSIDE AIR CONNECTION AND OPEN RETURN AIR FROM THE FRONT OF THE UNIT. TRANSITION IF FROM UNIT OPENING SIZE TO 14"X14" IN VERTICAL, BELOW RATED FLOOR CEILING ASSEMBLY. RE: FAN COIL DETAIL 1/M7-0.2.
9. RS/RL LINES: RS/RL LINE-SET FROM HEAT PUMP UNIT TO FAN COIL PER MANUFACTURERS RECOMMENDATIONS.
10. FAN COIL UNIT THERMOSTAT AT 60"AFF TO TOP OF UNIT IN STANDARD UNITS AND 48" AFF TO TOP OF UNIT IN TYPE A UNITS.
11. RECIRCULATING RANGE HOOD WITH CHARCOAL FILTER PROVIDED BY GENERAL CONTRACTOR.
12. DUCT ROUTING: DUCT ABOVE FIRE RATED CEILING ROUTED BETWEEN AND THROUGH TRUSSES TO 14"X14" SUPPLY AIR PLENUM BETWEEN THE FLOOR TRUSSES ABOVE THE 14"X14" RADIATION DAMPER (UNLESS OTHERWISE NOTED ON PLANS) IN ATTIC SPACE INSULATE PER SPECIFICATIONS.
13. TRANSFER GRILLES: CUT 18"X8" HOLE IN WALL AND PROVIDE TWO 16"X8" TRANSFER GRILLES IN WALL NEAR CEILING, ONE ON SIDE OF ROOM AND OTHER ON OUT SIDE OF ENCLOSED SPACE TO EACH MAXIMUM ONE HUNDRED LINEAR FEET OF DUCTWORK OR FRACTION
14. OUTSIDE AIR DUCT: 4" Ø DUCT FROM FAN COIL UNIT OUTSIDE AIR OPENING UP IN WALL THROUGH TOP PLATE TO JOIST SPACE. EXTEND THROUGH JOIST SPACE TO EXTERIOR WALL HOOD (FAMCO #EWV4 WITH SCREEN, WITHOUT DAMPER OR EQUAL), BALCONY SOFFIT INTAKE OR THROUGH THE ROOF TO SMACNA ROOF CAP AS INDICATED ON PLANS. DO NOT TERMINATE WITHIN 10' OF EXHAUST OUTLET. ALL DUCTS EXTENDING THROUGH RATED WALLS OR FLOORS TO BE CONSTRUCTED OF 26 GAGE MINIMUM STEEL WITH APPROVED THROUGH PENETRATION FIRESTOP ASSEMBLIES. PROVIDE BALANCE DAMPER AND FILTER BOX (HVACQUICK IFB-4 OR EQUAL) WITH MERV 8 FILTER FABRIC AT OUTSIDE AIR DISCHARGE OPENING FROM FILTER BOX, ROUTE 4"Ø FROM FILTER BOX OUTLET TO FAN COIL UNIT OUTSIDE AIR INLET. LOCATE DAMPER AND FILTER TO BE ACCESSIBLE FROM THE MECHANICAL CLOSET.
15. UNDERCUT DOOR - FOR RETURN AIR PATH

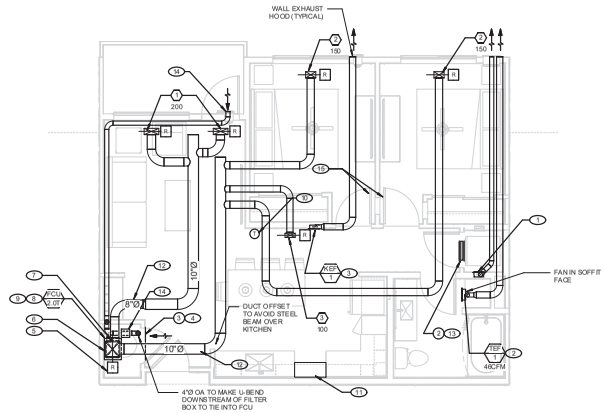
GENERAL NOTES:

1. PROVIDE GALVANIZED STEEL CONICAL BRANCH FITTING AT ALL FLEXIBLE DUCT SUPPLY AIR DIVERGING BRANCH CONNECTIONS.
2. PROVIDE GALVANIZED STEEL SHORT RADIUS FITTING AT ALL FLEXIBLE DUCT SUPPLY AIR 90 DEGREE ELBOWS.
3. REFER TO ARCHITECTURAL ELEVATIONS FOR FINAL LOCATIONS OF ALL VENTS THROUGH EXTERIOR WALLS.

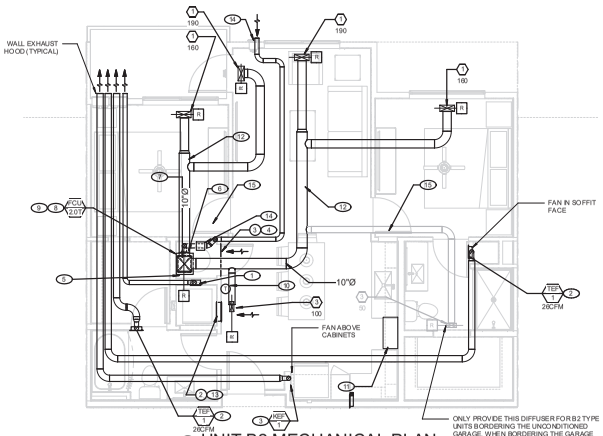
DRYER DUCT EXHAUST NOTE:

DRYER EXHAUST DUCT WORK DESIGN FOR NON-TYPE-A UNITS IS BASED ON GE #GFD85ESSMWW DRYER. CONTRACTOR TO CONFIRM DRYER MODEL TO BE INSTALLED WITH OWNER PRIOR TO ORDERING OF APPLIANCES AND CONFIRM DRYER MANUFACTURER ALLOWABLE EXHAUST VENT LENGTHS AND ALLOWANCE FOR REQUIRED ELBOWS COMPLIES WITH DRYER MANUFACTURER INSTALLATION REQUIREMENTS. DRYER EXHAUST FOR TYPE-A UNITS IS ONLY FOR FUTURE USE AS THE BASIS OF DESIGN DRYER IS INTENDED TO BE A VENTLESS TYPE APPLIANCE.

EXHAUST LENGTH FOR NORMAL VENT MODELS	RECOMMENDED MAXIMUM LENGTH	
	Exhaust Hood Types	
	Recommended	Use only for short run
No. of 90° Elbows	Rigid-Metal	Rigid-Metal
0	50 Feet (27.4 m)	59 Feet (18.0 m)
1	40 Feet (10.9 m)	49 Feet (13.7 m)
2	45 Feet (13.7 m)	57 Feet (18.7 m)
3	35 Feet (10.7 m)	29 Feet (7.9 m)
4	25 Feet (7.6 m)	19 Feet (4.6 m)



3 UNIT B1 MECHANICAL PLAN
1/4" = 1'-0"



4 UNIT B2 MECHANICAL PLAN
1/4" = 1'-0"

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08.06.2024

MARSHALL POINTE

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No.	Date	Issue
1	07.2024	IPC

Project Architect: DV
Project Designer: DR
Date: 06/29/2023
Job Number: 222001
Drawn By: JW
Checked By: BM
Title: MECHANICAL UNIT PLANS
Sheet Number: M5-1.1

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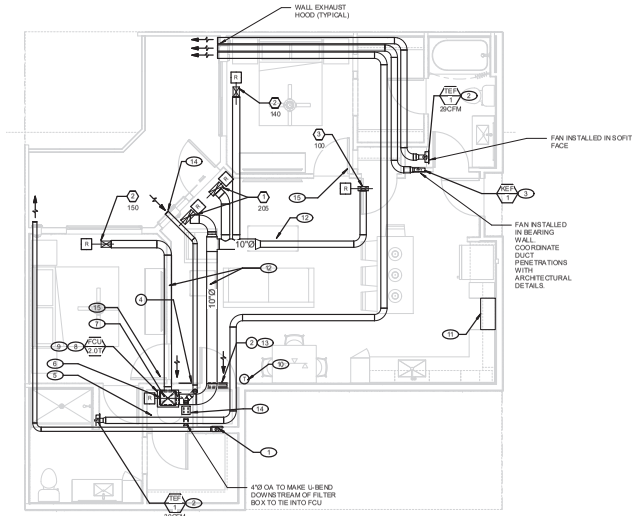
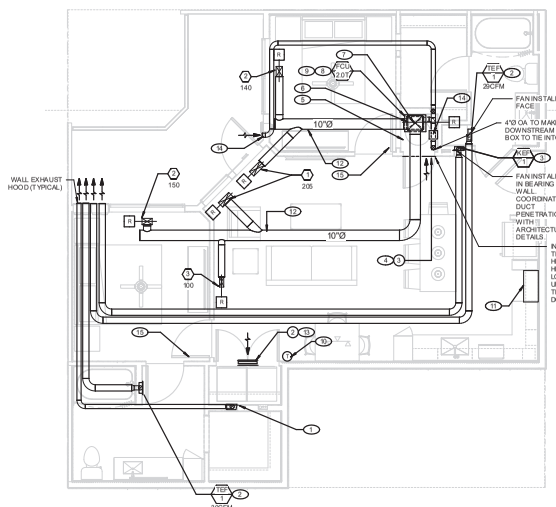


1 UNIT B3 MECHANICAL PLAN
1/4" = 1'-0"



2 UNIT B3a MECHANICAL PLAN
1/4" = 1'-0"

KEYNOTES:

1. DRYER DUCT: 4"Ø DUCT UP FROM DRYER IN WALL THROUGH TOP PLATE TO JOIST SPACE, EXTEND TO EXTERIOR WALL HOOD (FAMCO #WVEB4 WITHOUT SCREEN, WITH DAMPER OR EQUAL), SOFFIT VENT, OR THROUGH THE ROOF TO SMACNA ROOF CAP WITH BACKDRAFT DAMPER AS INDICATED ON PLANS. DRYER IS TO BE LONG VENT LENGTH DRYER (MAXIMUM 160' VENT LENGTH). DO NOT TERMINATE IN BREEZE WAY, WITHIN 3'-0" OF OPERABLE WINDOW OR DOOR OR WITHIN 10' OF MECHANICAL AIR INTAKES. (DO NOT ROUTE POSITIVE PRESSURE EXHAUST DUCTS IN RETURN AIR PLENUM). ALL DUCTS EXTENDING THROUGH RATED WALLS OR FLOORS TO BE CONSTRUCTED OF 26 GAGE MINIMUM STEEL WITH APPROVED THROUGH PENETRATION FIRESTOP ASSEMBLIES. RE: DRYER & EXHAUST FAN WALL DETAIL 4/M7-0.1.
2. EXHAUST DUCT: 4"Ø DUCT FROM RESTROOM EXHAUST FAN UP IN WALL THROUGH TOP PLATE TO JOIST SPACE, EXTEND 6"Ø DUCT TO EXTERIOR WALL HOOD (FAMCO #WVEB6 WITH SCREEN WITH DAMPER OR EQUAL), SOFFIT VENT, OR THROUGH THE ROOF TO SMACNA ROOF CAP AS INDICATED ON PLANS. DO NOT TERMINATE IN BREEZE WAY, WITHIN 3'-0" OF OPERABLE WINDOW OR DOOR OR WITHIN 10' OF MECHANICAL AIR INTAKES. (DO NOT ROUTE POSITIVE PRESSURE EXHAUST DUCTS IN RETURN AIR PLENUM). ALL DUCTS EXTENDING THROUGH RATED WALLS OR FLOORS TO BE CONSTRUCTED OF 26 GAGE MINIMUM STEEL WITH APPROVED THROUGH PENETRATION FIRESTOP ASSEMBLIES. RE: DRYER & EXHAUST FAN WALL DETAIL 4/M7-0.1.
3. EXHAUST DUCT: 4"Ø DUCT FROM KITCHEN EXHAUST FAN UP IN WALL THROUGH TOP PLATE TO JOIST SPACE, EXTEND 6"Ø DUCT TO EXTERIOR WALL HOOD (FAMCO #WVEB6 WITH SCREEN WITH DAMPER OR EQUAL), SOFFIT VENT, OR THROUGH THE ROOF TO SMACNA ROOF CAP AS INDICATED ON PLANS. DO NOT TERMINATE IN BREEZE WAY, WITHIN 3'-0" OF OPERABLE WINDOW OR DOOR OR WITHIN 10' OF MECHANICAL AIR INTAKES. (DO NOT ROUTE POSITIVE PRESSURE EXHAUST DUCTS IN RETURN AIR PLENUM). ALL DUCTS EXTENDING THROUGH RATED WALLS OR FLOORS TO BE CONSTRUCTED OF 26 GAGE MINIMUM STEEL WITH APPROVED THROUGH PENETRATION FIRESTOP ASSEMBLIES. RE: DRYER & EXHAUST FAN WALL DETAIL 4/M7-0.1.
4. RETURN AIR GRILLE: PROVIDE SHEET METAL OPENING WITH GRILLE IN CLOSET DOOR. GENERAL CONTRACTOR SHALL ENSURE ALL MATERIALS IN THE MECHANICAL CLOSET ARE PLENUM RATED TO ALLOW FOR RETURN AIR PATH FROM GRILLE TO FAN COIL RETURN AIR. WIRING TO BE PLENUM RATED. NO PLASTIC PIPING OR POSITIVE PRESSURE EXHAUST DUCTS SHALL BE LOCATED IN PLENUM.
5. RETURN AIR PLENUM: MECHANICAL CLOSET TO ACT AT RETURN AIR PLENUM AREA. PROVIDE ALL PLENUM RATED MATERIALS.
6. BOX PLENUM: PROVIDE SHEET METAL OR SMACNA DUCT BOARD PLENUM WITH 1" DUCT LINER TO ATTENUATE FAN NOISE.
7. FIRE DAMPER: PROVIDE 14"X14" UL LISTED FIRE DAMPER FOR HORIZONTAL UPFLOW INSTALLATION AT CEILING MEMBRANE PENETRATION. FIRE DAMPER TO BE ACCESSIBLE FROM MECHANICAL ROOM.
8. FAN COIL UNIT: PROVIDE AND INSTALL WALL HUNG FAN COIL UNIT WITH SIDE OUTSIDE AIR CONNECTION AND OPEN RETURN AIR FROM THE FRONT OF THE UNIT. TRANSITION FROM UNIT OPENING SIZE TO 14"X14" IN VERTICAL, BELOW RATED FLOOR CEILING ASSEMBLY. RE: FAN COIL DETAIL 1/M7-0.2.
9. RS/RL LINES: RS/RL LINE-SET FROM HEAT PUMP UNIT TO FAN COIL PER MANUFACTURERS RECOMMENDATIONS.
10. FAN COIL UNIT THERMOSTAT AT 60"AFF TO TOP OF UNIT IN STANDARD UNITS AND 48" AFF TO TOP OF UNIT IN TYPE A UNITS.
11. RECIRCULATING RANGE HOOD WITH CHARCOAL FILTER PROVIDED BY GENERAL CONTRACTOR.
12. DUCT ROUTING: DUCT ABOVE FIRE RATED CEILING ROUTED BETWEEN AND THROUGH TRUSSES TO 14"X14" SUPPLY AIR PLENUM BETWEEN THE FLOOR TRUSSES ABOVE THE 14"X14" RADIATION DAMPER (UNLESS OTHERWISE NOTED ON PLANS). IN ATTIC SPACE INSULATE PER SPECIFICATIONS.
13. TRANSFER GRILLE S: CUT 18"X8" HOLE IN WALL AND PROVIDE TWO 18"X8" TRANSFER GRILLES IN WALL NEAR CEILING, ONE ON INSIDE OF ROOM AND OTHER ON OUTSIDE OF ROOM AS REQUIRED TO BOX OFF TRANSFER DUCT. AT BOTTOM OF DOOR FOR CIRCULATION.
14. OUT SIDE AIR DUCT: 4"Ø DUCT FROM FAN COIL UNIT OUTSIDE AIR OPENING UP IN WALL THROUGH TOP PLATE TO JOIST SPACE. EXTEND THROUGH JOIST SPACE TO EXTERIOR WALL HOOD (FAMCO #SVW4 WITH SCREEN, WITHOUT DAMPER OR EQUAL), BALCONY SOFFIT INTAKE OR THROUGH THE ROOF TO SMACNA ROOF CAP AS INDICATED ON PLANS. DO NOT TERMINATE WITHIN 10' OF EXHAUST OUTLET. ALL DUCTS EXTENDING THROUGH RATED WALLS OR FLOORS TO BE CONSTRUCTED OF 26 GAGE MINIMUM STEEL WITH APPROVED THROUGH PENETRATION FIRESTOP ASSEMBLIES. PROVIDE BALANCE DAMPER AND FILTER BOX (HVACQUICK #FB-4 OR EQUAL) WITH MERV 8 FILTER FABRIC AT OUTSIDE AIR DISCHARGE OPENING FROM FILTER BOX, ROUTE 4"Ø FROM FILTER BOX OUTLET TO FAN COIL UNIT OUTSIDE AIR INLET. LOCATE DAMPER AND FILTER TO BE ACCESSIBLE FROM THE MECHANICAL CLOSET.
15. UNDERCUT DOOR 1" FOR RETURN AIR PATH.

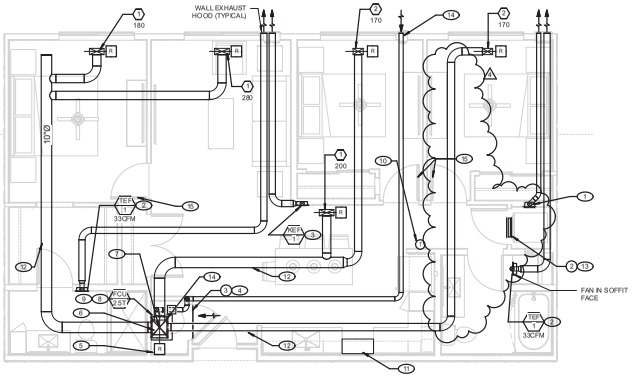
GENERAL NOTES:

1. PROVIDE GALVANIZED STEEL CONICAL BRANCH FITTING AT ALL FLEXIBLE DUCT SUPPLY AIR DIVERGING BRANCH CONNECTIONS.
2. PROVIDE GALVANIZED STEEL SHORT RADIUS FITTING AT ALL FLEXIBLE DUCT SUPPLY AIR 90 DEGREE ELBOWS.
3. REFER TO ARCHITECTURAL ELEVATIONS FOR FINAL LOCATIONS OF ALL VENTS THROUGH EXTERIOR WALLS.

DRYER DUCT EXHAUST NOTE:

DRYER EXHAUST DUCTWORK DESIGN FOR NON-TYPE-A UNITS IS BASED ON GE #GFD85ESSNWW DRYER. CONTRACTOR TO CONFIRM DRYER MODEL TO BE INSTALLED WITH OWNER PRIOR TO ORDERING OF APPLIANCES AND CONFIRM DRYER MANUFACTURER ALLOWABLE EXHAUST VENT LENGTHS AND ALLOWANCE FOR REQUIRED ELBOWS COMPLIES WITH DRYER MANUFACTURER INSTALLATION REQUIREMENTS. DRYER EXHAUST FOR TYPE-A UNITS IS ONLY FOR FUTURE USE AS THE BASIS OF DESIGN DRYER IS INTENDED TO BE A VENTLESS TYPE APPLIANCE.

EXHAUST LENGTH FOR NORMAL VENT MODELS	RECOMMENDED MAXIMUM LENGTH	
	Exhaust Hood Type	
	Recommended	Use only for short run (see illustration)
	4" Dia.	4" Dia. Flex Duct
No. of 90° Elbows	Rigid Metal	Rigid Metal
0	90 Feet (27.4 m)	60 Feet (18.3 m)
1	80 Feet (15.5 m)	20 Feet (12.7 m)
2	70 Feet (13.7 m)	10 Feet (10.7 m)
3	60 Feet (10.7 m)	25 Feet (7.6 m)
4	25 Feet (7.6 m)	15 Feet (4.6 m)



3 UNIT C1 MECHANICAL PLAN
1/4" = 1'-0"

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No.	Date	Issue
1	07.2024	IPC

Project Architect: DV
Project Designer: DR
Date: 06/29/2023
Job Number: 222001
Drawn By: JW
Checked By: BM
Title: MECHANICAL UNIT PLANS
Sheet Number: M5-1.2

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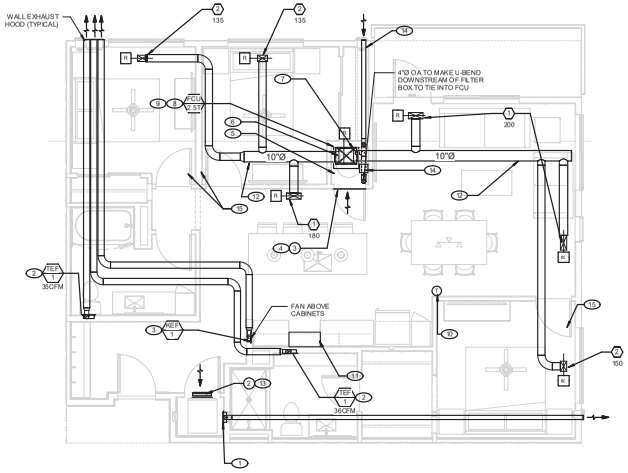
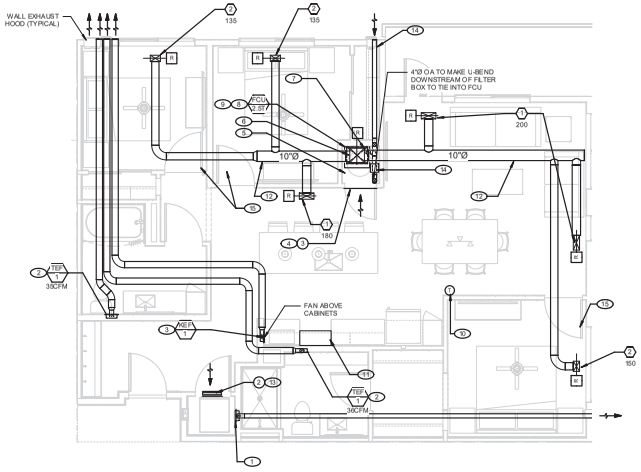
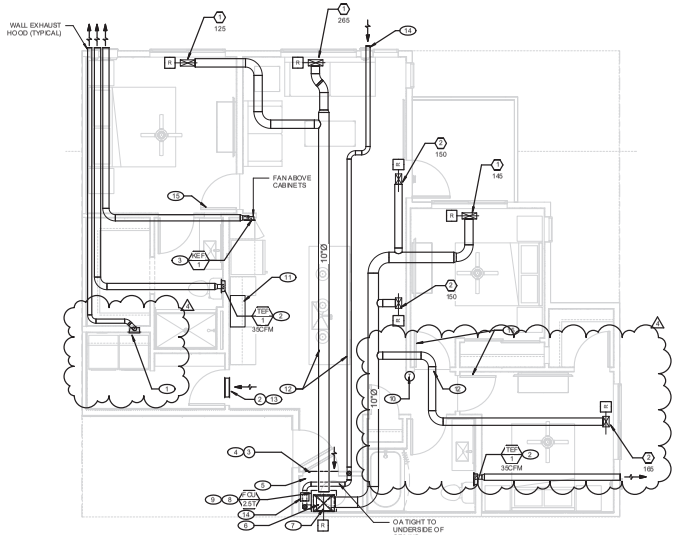


1 UNIT C2 MECHANICAL PLAN
1/4" = 1'-0"



2 UNIT C2a MECHANICAL PLAN
1/4" = 1'-0"



3 UNIT C3 MECHANICAL PLAN
1/4" = 1'-0"

KEY NOTES:

1. DRYER DUCT: 4"Ø DUCT UP FROM DRYER IN WALL THROUGH TOP PLATE TO JOIST SPACE, EXTEND TO EXTERIOR WALL HOOD (FAMCO #WV-SB4 WITHOUT SCREEN, WITH DAMPER OR EQUAL), SOFFIT VENT, OR THROUGH THE ROOF TO SMACNA ROOF CAP WITH BACKDRAFT DAMPER AS INDICATED ON PLANS. DRYER IS TO BE LONG VENT LENGTH DRYER (MAXIMUM 160' VENT LENGTH). DO NOT TERMINATE IN BREEZE WAY, WITHIN 3'-0" OF OPERABLE WINDOW OR DOOR OR WITHIN 10' OF MECHANICAL AIR INTAKES. (DO NOT ROUTE POSITIVE PRESSURE EXHAUST DUCTS IN RETURN AIR PLENUM). ALL DUCTS EXTENDING THROUGH RATED WALLS OR FLOORS TO BE CONSTRUCTED OF 26 GAGE MINIMUM STEEL WITH APPROVED THROUGH PENETRATION FIRESTOP ASSEMBLIES. RE: DRYER & EXHAUST FAN WALL DETAIL 4/M7-0.1.
2. EXHAUST DUCT: 4"Ø DUCT FROM RESTROOM EXHAUST FAN UP IN WALL THROUGH TOP PLATE TO JOIST SPACE, EXTEND 4" Ø DUCT TO EXTERIOR WALL HOOD (FAMCO #WV-EB4 WITH SCREEN, WITH DAMPER OR EQUAL), SOFFIT VENT, OR THROUGH THE ROOF TO SMACNA ROOF CAP AS INDICATED ON PLANS. DO NOT TERMINATE IN BREEZE WAY, WITHIN 3'-0" OF OPERABLE WINDOW OR DOOR OR WITHIN 10' OF MECHANICAL AIR INTAKES. (DO NOT ROUTE POSITIVE PRESSURE EXHAUST DUCTS IN RETURN AIR PLENUM). ALL DUCTS EXTENDING THROUGH RATED WALLS OR FLOORS TO BE CONSTRUCTED OF 26 GAGE MINIMUM STEEL WITH APPROVED THROUGH PENETRATION FIRESTOP ASSEMBLIES. RE: DRYER & EXHAUST FAN WALL DETAIL 4/M7-0.1.
3. EXHAUST DUCT: 4"Ø DUCT FROM KITCHEN EXHAUST FAN UP IN WALL THROUGH TOP PLATE TO JOIST SPACE, EXTEND 6" Ø DUCT TO EXTERIOR WALL HOOD (FAMCO #WV-EB6 WITH SCREEN WITH DAMPER OR EQUAL), SOFFIT VENT, OR THROUGH THE ROOF TO SMACNA ROOF CAP AS INDICATED ON PLANS. DO NOT TERMINATE IN BREEZE WAY, WITHIN 3'-0" OF OPERABLE WINDOW OR DOOR OR WITHIN 10' OF MECHANICAL AIR INTAKES. (DO NOT ROUTE POSITIVE PRESSURE EXHAUST DUCTS IN RETURN AIR PLENUM). ALL DUCTS EXTENDING THROUGH RATED WALLS OR FLOORS TO BE CONSTRUCTED OF 26 GAGE MINIMUM STEEL WITH APPROVED THROUGH PENETRATION FIRESTOP ASSEMBLIES. RE: DRYER & EXHAUST FAN WALL DETAIL 4/M7-0.1.
4. RETURN AIR GRILLE: SIZED AS INDICATED. INSTALL IN MECHANICAL CLOSET WALL ABOVE DOOR. GENERAL CONTRACTOR SHALL ENSURE ALL MATERIALS IN THE MECHANICAL CLOSET ARE PLENUM RATED TO ALLOW FOR RETURN AIR PATH FROM GRILLE TO FAN COIL RETURN AIR. WIRING TO BE PLENUM RATED. NO PLASTIC PIPING OR POSITIVE PRESSURE EXHAUST DUCTS SHALL BE LOCATED IN PLENUM.
5. RETURN AIR PLENUM: MECHANICAL CLOSET TO ACT AT RETURN AIR PLENUM AREA. PROVIDE ALL PLENUM RATED MATERIALS.
6. BOX PLENUM: PROVIDE SHEET METAL OR SMACNA DUCT BOARD PLENUM WITH 1" DUCT LINER TO ATTENUATE FAN NOISE.
7. FIRE DAMPER: PROVIDE 14"X 14" UL LISTED FIRE DAMPER FOR HORIZONTAL UPFLOW INSTALLATION AT CEILING MEMBRANE PENETRATION. FIRE DAMPER TO BE ACCESSIBLE FROM MECHANICAL ROOM.
8. FAN COIL UNIT: PROVIDE AND INSTALL WALL HUNG FAN COIL UNIT WITH SIDE OUTSIDE AIR CONNECTION AND OPEN RETURN AIR FROM THE FRONT OF THE UNIT. TRANSITION FROM UNIT OPENING SIZE TO 14"X14" IN VERTICAL, BELOW RATED FLOOR CEILING ASSEMBLY. RE: FAN COIL DETAIL 1/M7-0.2.
9. RS/RL LINES: RS/RL LINE-SET FROM HEAT PUMP UNIT TO FAN COIL PER MANUFACTURERS RECOMMENDATIONS.
10. FAN COIL UNIT THERMOSTAT AT 60"AFF TO TOP OF UNIT IN STANDARD UNITS AND 48" AFF TO TOP OF UNIT IN TYPE A UNITS.
11. RECIRCULATING RANGE HOOD WITH CHARCOAL FILTER PROVIDED BY GENERAL CONTRACTOR.
12. DUCT ROUTING: DUCT ABOVE FIRE RATED CEILING ROUTED BETWEEN AND THROUGH TRUSSES TO 14"X14" SUPPLY AIR PLENUM BETWEEN THE FLOOR TRUSSES ABOVE THE 14"X 14" RADIATION DAMPER (UNLESS OTHERWISE NOTED ON PLANS). IN ATTIC SPACE INSULATE PER SPECIFICATIONS.
13. TRANSFER GRILLES: CUT 18"X8" HOLE IN WALL AND PROVIDE TWO 16"X8" TRANSFER GRILLES IN WALL NEAR CEILING, ONE IN INSIDE OF BEDROOM AND OTHER ON OUTSIDE OF DOOR AND PROVIDE 16 INCH MINIMUM UNDERCUT BOTTOM OF DOOR FOR CIRCULATION.
14. OUTSIDE AIR DUCT: 4"Ø DUCT FROM FAN COIL UNIT OUTSIDE AIR OPENING UP IN WALL THROUGH TOP PLATE TO JOIST SPACE. EXTEND THROUGH JOIST SPACE TO EXTERIOR WALL HOOD (FAMCO #SW-V4 WITH SCREEN, WITHOUT DAMPER OR EQUAL), BALCONY SOFFIT INTAKE OR THROUGH THE ROOF TO SMACNA ROOF CAP AS INDICATED ON PLANS. DO NOT TERMINATE WITHIN 10' OF EXHAUST OUTLET. ALL DUCTS EXTENDING THROUGH RATED WALLS OR FLOORS TO BE CONSTRUCTED OF 26 GAGE MINIMUM STEEL WITH APPROVED THROUGH PENETRATION FIRESTOP ASSEMBLIES. PROVIDE BALANCE DAMPER AND FILTER BOX (HVACQUICK IFB-4 OR EQUAL) WITH MERV 8 FILTER FABRIC AT OUTSIDE AIR DISCHARGE OPENING FROM FILTER BOX, ROUTE 4"Ø FROM FILTER BOX OUTLET TO FAN COIL UNIT OUTSIDE AIR INLET. LOCATE DAMPER AND FILTER TO BE ACCESSIBLE FROM THE MECHANICAL CLOSET.
15. UNDERCUT DOOR 1" FOR RETURN AIR PATH.

GENERAL NOTES:

1. PROVIDE GALVANIZED STEEL CONICAL BRANCH FITTING AT ALL FLEXIBLE DUCT SUPPLY AIR DIVERGING BRANCH CONNECTIONS.
2. PROVIDE GALVANIZED STEEL SHORT RADIUS FITTING AT ALL FLEXIBLE DUCT SUPPLY AIR 90 DEGREE ELBOWS.
3. REFER TO ARCHITECTURAL ELEVATIONS FOR FINAL LOCATIONS OF ALL VENTS THROUGH EXTERIOR WALLS.

DRYER DUCT EXHAUST NOTE:

DRYER EXHAUST DUCTWORK DESIGN FOR NON-TYPE-A UNITS IS BASED ON GE #GFD35ESSMWW DRYER. CONTRACTOR TO CONFIRM DRYER MODEL TO BE INSTALLED WITH OWNER PRIOR TO ORDERING OF APPLIANCES AND CONFIRM DRYER MANUFACTURER ALLOWABLE EXHAUST VENT LENGTHS AND ALLOWANCE FOR REQUIRED ELBOWS COMPLIES WITH DRYER MANUFACTURER INSTALLATION REQUIREMENTS. DRYER EXHAUST FOR TYPE-A UNITS IS ONLY FOR FUTURE USE AS THE BASIS OF DESIGN DRYER IS INTENDED TO BE A VENTLESS TYPE APPLIANCE.

EXHAUST LENGTH FOR NORMAL VENT MODELS	RECOMMENDED MAXIMUM LENGTH	
	Exterior Hood Types	
	Recommended	Use for short run installations
		
No. of 90° Elbows	Rigid-Metal	Rigid-Metal
0	90 Feet (27.4 m)	50 Feet (15.2 m)
1	40 Feet (15.5 m)	35 Feet (10.7 m)
2	45 Feet (13.7 m)	30 Feet (9.1 m)
3	30 Feet (10.7 m)	25 Feet (7.6 m)
4	25 Feet (7.6 m)	15 Feet (4.6 m)

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08.06.2024

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No.	Date	Issue
1	07.2024	PC

Project Architect: DV
Project Designer: DR
Date: 06/29/2023
Job Number: 222001
Drawn By: JW
Checked By: BM
Title: MECHANICAL UNIT PLANS
Sheet Number: M5-1.3

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DWELLING UNIT FAN COIL SCHEDULE (DX COOLING - HEAT PUMP HEAT WITH ELECTRIC BACKUP)

ITEM	MANUFACTURER/ MODEL	DX COOLING COIL							HEATING PERFORMANCE									SUPPLY FAN			ELECTRICAL			MIN. OA (CFM)	MAX. OPER. WT. (LBS.)	OVERALL DIMENSIONS	NOTES
									ELECTRIC HEAT				HEAT PUMP															
		CFM	CLG CAP (MBH@ 95°F AMBIENT	EAT (°F)		LAT (°F)		MINIMUM EFFICIENCY (SEER)	CFM	HTG CAP (KW)	EAT (°F)	LAT (°F)	CFM	HTG CAP (MBH @47°F AMBIENT	EAT (°F)	LAT (°F)	MINIMUM EFFICIENCY (HSPF @47°F AMBIENT)	CFM	SUPPLY ESP (IN. WC)	MIN. MOTOR HP	MCA	MOP	VOLTS/PH				
				DB	WB	DB	WB				DB	DB			DB	DB												
FC-1.5T	DAIKIN/AWST18SU1405	750	17	76	57	52	51	14.3	750	4.1	70.0	90.7	750	17	70.0	95.3	7.5	750	.5	1/3	24.9	25	208/1	-	100	16-1/8"LONG X 20-1/4"WIDE X 36"TALL	1 2 3 4 5
FC-2.0T	DAIKIN/AWST24SU1408	800	22	76	57	48	47	14.3	800	6.6	70.0	101.2	800	22	70.0	101	7.5	800	.3	1/3	36	40	208/1	-	100	16-1/8"LONG X 20-1/4"WIDE X 36"TALL	1 2 3 4 5
FC-2.5T	DAIKIN/AWST30LU1408	1,000	28	76	57	48	47	14.3	1,000	6.6	70.0	94.9	1,000	27	70.0	101	7.5	1,000	.5	1/2	37.8	40	208/1	-	125	19-7/8"LONG X 24"WIDE X 36"TALL	1 2 3 4 5

NOTES:

1. VERTICAL WALL-HUNG CASED FAN COIL WITH DX COOLING COIL, HEAT PUMP OPERATION, ELECTRIC BACKUP HEAT, TXV, REVERSING VALVE, AND 7 DAY PROGRAMMABLE THERMOSTAT WITH AUTOMATIC CHANGE-OVER FROM HEATING TO COOLING. THERMOSTAT TO INDICATE WHEN FAN IS RUNNING.
2. PROVIDE WITH A 1" DISPOSABLE FILTER TO BE INSTALLED IN THE INTEGRAL 1" FILTER FRAME.
3. PROVIDE WITH WALL HANGING BRACKET WITH RUBBER OR NEOPRENE VIBRATION ISOLATION
4. PROVIDE CONDENSATE OVERFLOW SWITCH SET TO SHUT-DOWN UNIT IN EVENT OF CONDENSATE OVERFLOW.
5. PROVIDE INTERLOCK WITH SMOKE AND FIRE ALARM SYSTEM, RE: 4/M7-0.2

AMENITY FAN COIL SCHEDULE (DX COOLING - HEAT PUMP HEAT WITH ELECTRIC BACKUP)

ITEM	MANUFACTURER/ MODEL	DX COOLING COIL							HEATING PERFORMANCE									SUPPLY FAN			ELECTRICAL			MIN. OA (CFM)	MAX. OPER. WT. (LBS.)	OVERALL DIMENSIONS	NOTES
									ELECTRIC HEAT				HEAT PUMP															
		CFM	CLG CAP (MBH@ 95°F AMBIENT	EAT (°F)		LAT (°F)		MINIMUM EFFICIENCY (SEER)	CFM	HTG CAP (KW)	EAT (°F)	LAT (°F)	CFM	HTG CAP (MBH @47°F AMBIENT	EAT (°F)	LAT (°F)	MINIMUM EFFICIENCY (HSPF @47°F AMBIENT)	CFM	SUPPLY ESP (IN. WC)	MIN. MOTOR HP	MCA	MOP	VOLTS/PH				
				DB	WB	DB	WB				DB	DB			DB	DB												
FC-3.0T	DAIKIN/AWST36LU1410	1,230	34	76	57	48	47	14.3	1,230	8.2	60.2	85.2	1,230	34	70.0	101	7.5	1,230	.5	1/2	49	50	208/1	195	100	16-1/8"LONG X 20-1/4"WIDE X 36"TALL	1 2 3 4
FC-2.0T	DAIKIN/AWST24SU1408	760	22	76	57	48	47	14.3	760	6.6	57.4	90.4	760	22	70.0	101	7.5	760	.5	1/3	36	40	208/1	145	125	19-7/8"LONG X 24"WIDE X 36"TALL	1 2 3 4
FC-2.0T	DAIKIN/AWST24SU1405	760	22	76	57	48	47	14.3	760	4.1	60.9	81.4	760	22	70.0	101	7.5	760	.5	1/3	24.9	25	208/1	110	125	19-7/8"LONG X 24"WIDE X 36"TALL	1 2 3 4
FC-2.5T	DAIKIN/AWST30LU1405	1,000	28	76	57	48	47	14.3	1,000	6.6	53.9	79.0	1,000	27	70.0	101	7.5	1,000	.5	1/2	37.8	40	208/1	225	125	19-7/8"LONG X 24"WIDE X 36"TALL	1 2 3 4

NOTES:

1. VERTICAL WALL-HUNG CASED FAN COIL WITH DX COOLING COIL, HEAT PUMP OPERATION, ELECTRIC BACKUP HEAT, TXV, REVERSING VALVE, AND 7 DAY PROGRAMMABLE THERMOSTAT WITH AUTOMATIC CHANGE-OVER FROM HEATING TO COOLING, AND REMOTE TEMPERATURE SENSOR. THERMOSTAT TO INDICATE WHEN FAN IS RUNNING. THERMOSTAT TO CONTROL CORRIDOR FAN COIL UNIT. TEMPERATURE IN/OUT VIA REMOTE (NON-ADJUSTABLE) TEMPERATURE SENSOR (TYPICAL)
2. PROVIDE WITH A 1" DISPOSABLE FILTER TO BE INSTALLED IN THE INTEGRAL 1" FILTER FRAME.
3. PROVIDE WITH WALL HANGING BRACKET WITH RUBBER OR NEOPRENE VIBRATION ISOLATION
4. PROVIDE CONDENSATE OVERFLOW SWITCH SET TO SHUT-DOWN UNIT IN EVENT OF CONDENSATE OVERFLOW.

CORRIDOR FAN COIL SCHEDULE (DX COOLING - HEAT PUMP HEAT WITH ELECTRIC BACKUP)

ITEM	MANUFACTURER/ MODEL	DX COOLING COIL							HEATING PERFORMANCE									SUPPLY FAN			ELECTRICAL			MIN. OA (CFM)	MAX. OPER. WT. (LBS.)	OVERALL DIMENSIONS	NOTES
									ELECTRIC HEAT				HEAT PUMP															
		CFM	CLG CAP (MBH@ 95°F AMBIENT	EAT (°F)		LAT (°F)		MINIMUM EFFICIENCY (SEER)	CFM	HTG CAP (KW)	EAT (°F)	LAT (°F)	CFM	HTG CAP (MBH @47°F AMBIENT	EAT (°F)	LAT (°F)	MINIMUM EFFICIENCY (HSPF @47°F AMBIENT)	CFM	SUPPLY ESP (IN. WC)	MIN. MOTOR HP	MCA	MOP	VOLTS/PH				
				DB	WB	DB	WB				DB	DB			DB	DB												
FC-1.5	DAIKIN/ACSF18MN1605AA	590	17	76	57	-	-	14.2	590	4.1	58.5	84.9	590	17	70.0	-	7.5	590	.3	1/4	25	30	208/1	-	75	21"LONG X 43-1/4"WIDE X 10"TALL	1 2 3 4

NOTES:

1. HORIZONTAL CEILING-HUNG UNCASED FAN COIL WITH DX COOLING COIL, HEAT PUMP OPERATION, ELECTRIC BACKUP HEAT, TXV, REVERSING VALVE, AND 7 DAY PROGRAMMABLE THERMOSTAT WITH AUTOMATIC CHANGE-OVER FROM HEATING TO COOLING, AND REMOTE TEMPERATURE SENSOR. THERMOSTAT TO INDICATE WHEN FAN IS RUNNING. LABEL THERMOSTAT AND REMOTE TEMPERATURE SENSOR WITH ASSOCIATED FCU TAG.
2. PROVIDE SOLID CEILING ACCESS PANEL.
3. PROVIDE RUBBER VIBRATION ISOLATORS FOR SUSPENDED INSTALLATION.
4. PROVIDE CONDENSATE OVERFLOW SWITCH SET TO SHUT-DOWN UNIT IN EVENT OF CONDENSATE OVERFLOW.

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08.06.2024

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No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date: 06/29/2023
Job Number: 222001
Drawn By: JW
Checked By: BM
Title: MECHANICAL SCHEDULES
Sheet Number: M6-0.1

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MECHANICAL EQUIPMENT SCHEDULE

ITEM	DESCRIPTION
F 4	HVAC QUICK #IFB-4 IN LINE FILTER BOX CONSTRUCTED OF 22 GAUGE GALVANIZED STEEL WITH MERV 8 FILTER MEDIA. PHYSICAL DATA: 8"W X 8"D X 8"TALL AND 10LB MAX OPERATING WEIGHT.
F 6	HVAC QUICK #IFB-6 IN LINE FILTER BOX CONSTRUCTED OF 22 GAUGE GALVANIZED STEEL WITH MERV 8 FILTER MEDIA. PHYSICAL DATA: 10"W X 10"D X 10"TALL AND 10LB MAX OPERATING WEIGHT.
F 8	HVAC QUICK #IFB-8 IN LINE FILTER BOX CONSTRUCTED OF 22 GAUGE GALVANIZED STEEL WITH MERV 8 FILTER MEDIA. PHYSICAL DATA: 12"W X 12"D X 12"TALL AND 10LB MAX OPERATING WEIGHT.

CONDENSING UNIT SCHEDULE

ITEM	MANUFACTURER/ MODEL	LOCATION/ SERVICE	NOMINAL COOLING CAPACITY (MBH)	REFRIGERANT	EAT DB (°F)			MCA	MOP	VOLT/ PHASE	MAX WEIGHT (LBS)	OVERALL DIMENSIONS	NOTES
HP 1.5T	DAIKIN/ DZ5SEA018	ROOF/ FCU - 1.5T	18	R-410	95			12.2	20	208/230-60-1	200	29" X 29" X 39-1/2" TALL	1 2
HP 2.0T	DAIKIN/ DZ5SEA024	ROOF/ FCU - 2.0T	24	R-410	95			15.3	25	208/230-60-1	250	35-1/2" X 35-1/2" X 35-3/4" TALL	1 2
HP 2.5T	DAIKIN/ DZ5SEA030	ROOF/ FCU - 2.5T	30	R-410	95			18.6	30	208/230-60-1	250	35-1/2" X 35-1/2" X 39-1/2" TALL	1 2
HP A3.0T	DAIKIN/ DZ5SEA036	ROOF/ FCU - A3.0T	36	R-410	95			22.8	35	208/230-60-1	250	35-1/2" X 35-1/2" X 39-1/2" TALL	1 2 3
HP A2.5T	DAIKIN/ DZ5SEA030	ROOF/ FCU - A2.5T	30	R-410	95			18.6	30	208/230-60-1	250	35-1/2" X 35-1/2" X 39-1/2" TALL	1 2 3
HP A2.0T	DAIKIN/ DZ5SEA024	ROOF/ FCU - A2.0T	24	R-410	95			15.3	25	208/230-60-1	250	35-1/2" X 35-1/2" X 35-3/4" TALL	1 2 3
HP C1.5T	DAIKIN/ DZ4SEA1810A	ROOF/ FCU - C1.5T	18	R-410	95			12.2	20	208/230-60-1	200	29" X 29" X 35-11/16" TALL	1 2

NOTES:

1. AIR SOURCE HEAT PUMP CONDENSING UNIT WITH CRANKCASE HEATER, SUPPORT FEET, AND LONG LINE KIT WHERE REFRIGERANT PIPING RUNS EXCEED MANUFACTURER'S INSTALLATION INSTRUCTIONS.
2. PROVIDE AR MATCHED EVAPORATOR COIL WITH TXV AND EVAPORATOR FREEZESTAT AT FAN COIL UNIT.
3. PROVIDE LOW AMBIENT COOLING (0 DEGREES F) OPERATING ACCESSORIES FOR UNITS SERVING PUBLIC AMENITY AREAS.

UNIT HEATER (ELECTRIC)

ITEM	MANUFACTURER/ MODEL	LOCATION/ SERVICE	HEATING CAP. (KW)	MAX. CFM	VOLTS/PHASE	MCA	MAX. OPER. WT. (LBS.)	OVERALL DIMENSIONS	NOTES
UH 9.0KW	INDEECO/ UCI	CEILING/ HEAT	3.0	700	208/3	6.3	50	17" DEEP X 16-1/2" WIDE X 12" TALL	1

NOTES:

1. FURNISH FACTORY INSTALLED DISCONNECT AND REMOTE THERMOSTAT SET AT 65 DEG F

CABINET UNIT HEATER (ELECTRIC)

ITEM	MANUFACTURER/ MODEL	LOCATION/ SERVICE	HEATING CAP. (KW)	MAX. CFM	VOLTS/PHASE	MCA	MAX. OPER. WT. (LBS.)	OVERALL DIMENSIONS	NOTES
CUH 1KW	INDEECO/ WAI	WALL/ HEAT	1.1	160	208/1	5.8	24	4-1/2" DEEP X 14-1/2" WIDE X 19-7/8" TALL	1 2 3
CUH 1KWR	INDEECO/ WAI	WALL/ HEAT	1.1	160	208/1	5.8	24	4-1/2" DEEP X 14-1/2" WIDE X 19-7/8" TALL	1 2 4
CUH 3KWR	INDEECO/ WAI	WALL/ HEAT	3.0	160	208/1	14.8	24	4-1/2" DEEP X 14-1/2" WIDE X 19-7/8" TALL	1 2 4
CUH 3KW	INDEECO/ WAI	WALL/ HEAT	3.0	160	208/1	14.8	24	4-1/2" DEEP X 14-1/2" WIDE X 19-7/8" TALL	1 2 3
CUH 3KWR	INDEECO/ WAI	WALL/ HEAT	3.0	160	208/1	14.8	24	4-1/2" DEEP X 14-1/2" WIDE X 19-7/8" TALL	2 4 6
CH 0.6KW	STELPRO/ SCR0601	CEILING/ HEAT	0.6	0	120/1	5.0	15	3-5/8" DEEP X 4.7" WIDE X 4-1/16" TALL	5

NOTES:

1. FURNISH FACTORY INSTALLED DISCONNECT AND INTEGRAL TAMPER-PROOF THERMOSTAT SET AT 60 DEG F IN STAIRWELLS, 70 DEG F IN CORRIDORS
2. FURNISH WITH ARCHITECTURAL WALL LOUVER - METALLIC CHARCOAL COLOR
3. FURNISH WITH SURFACE MOUNT BOX.
4. FURNISH WITH 1" SEMI-RECESSED WALL BOX.
5. CEILING COVE HEATER WITH INTEGRAL SINGLE POLE THERMOSTAT SET AT 70 DEG F, MOUNTED HEATER AT 3" BELOW CEILING.
6. FURNISH FACTORY INSTALLED DISCONNECT AND INTEGRAL TAMPER-PROOF THERMOSTAT SET AT 60 DEG F. PROVIDE NORMALLY CLOSED THERMOSTAT WITH IN NEMA 1 BOX WITH REMOTE AMBIENT TEMP SENSOR TO DISABLE HEATER AT OUTDOOR AMBIENT TEMPERATURES ABOVE 45 DEG F (TEMPCO TST-101-109).

DUCT HEATER (ELECTRIC)

ITEM	MANUFACTURER/ MODEL	LOCATION/ SERVICE	HEATING CAP. (KW)	EAT (° F DB)	LAT (° F DB)	MAX. CFM	VOLTS/PHASE	MAX. OPER. WT. (LBS.)	NOTES
DH 1	INDEECO/ QUA OR QUZ	FC/A3.0T / SF/200 VENTILATION	5.0	-10	85	200	208/3	50	1 2

NOTES:

1. OPEN COIL DUCT HEATER, PROVIDE OVER-TEMPERATURE PROTECTION WITH AUTOMATIC RESET LOW TEMPERATURE CUTOUT AND MANUAL RESETTING HIGH TEMPERATURE CUTOUT. BUILT-IN SNAP-ACTING DOOR INTERLOCKING DISCONNECT SWITCH, SCR VARIABLE CAPACITY ELECTRIC HEATING ELEMENT WITH INLET AND DISCHARGE AIR TEMPERATURE SENSOR SET TO MAINTAIN DISCHARGE AIR TEMP = 70 DEG F., OUTSIDE AIR CUT OUT SET TO DISABLE HEATER WHEN OUTSIDE AIR TEMP AT HEATER INLET IS ABOVE 50 DEG F, FACTORY INSTALLED CONTROL TRANSFORMER.
2. PROVIDE FAN RELAY AND INTERLOCK UNIT TO OPERATE WHEN ASSOCIATED SUPPLY FAN OPERATES.

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08.06.2024

MARSHALL POINTE

MARSHALL POINTE APARTMENTS, LP
5170 MARSHALL ST
ARVADA, CO 80002

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date: 06/29/2023
Job Number: 222001
Drawn By: JW
Checked By: BM
Title: MECHANICAL SCHEDULES
Sheet Number: M6-0.2

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FAN SCHEDULE

ITEM	MANUFACTURER/ MODEL	LOCATION/ SERVICE	CFM	ESP	MAX FAN RPM	MAX SONES	ELEC. DATA			MAXIMUM OPERATING WEIGHT (LBS)	OVERALL DIMENSIONS	NOTES
							POWER	VOLT	PH			
TEF 1	PANASONIC/ FV-0810VSS1	PLAN/ TOILET EXHAUST	0, 30-100	.25	-	1.5	18 WATTS	115	1	15	10-1/4"W X 10-1/4"L X 3-3/8"TALL	1
KEF 1	PANASONIC/ FV-0810VSS1	PLAN/ KITCHEN EXHAUST	100	.25	-	1.5	18 WATTS	115	1	15	10-1/4"W X 10-1/4"L X 3-3/8"TALL	2, 5
TEF C1	PANASONIC/ FV-0810VSS1	PLAN/ TOILET EXHAUST	80	.25	-	1.0	18 WATTS	115	1	15	10-1/4"W X 10-1/4"L X 3-3/8"TALL	2, 3, 7
EF JC	PANASONIC/ FV-0810VSS1	JANITOR'S CLOSET/ EXHAUST	80	.25	-	1.0	18 WATTS	115	1	15	10-1/4"W X 10-1/4"L X 3-3/8"TALL	2, 7
EF EL	FANTECH/ RVF 8XL	ROOF/ ELEVATOR SHAFT VENT	350	.20	-	5.0	106 WATTS	115	1	15	14-1/4"W X 6"D X 17"TALL	9, 10
SF 150	FANTECH/ FG 4XL EC	FAN COIL RA PLENUM/ VENTILATION	150	.40	-	3.0	33 WATTS	115	1	5	8-1/2"DIA X 6-1/2"L	4, 6, 8
SF 200	FANTECH/ FG 6M EC	FAN COIL RA PLENUM/ VENTILATION	300	1.0	-	3.0	74 WATTS	115	1	9	13-1/8"DIA X 7"L	4, 6, 8
EF SR	PANASONIC/ FV-0810VSS1	SERVER ROOM/ EXHAUST	80	.25	-	1.0	18 WATTS	115	1	15	10-1/4"W X 10-1/4"L X 3-3/8"TALL	2, 9

NOTES:

1. VARIABLE-SPEED ENERGY STAR EXHAUST CEILING FAN APPROVED FOR MOUNTING IN 4" WALL WITH 5" X 2-9/16" DUCT CONNECTION, WHITE PLASTIC GRILLE, AND BACKDRAFT DAMPER RATED FOR CONTINUOUS OPERATION. PROVIDE WITH OPTIONAL ASHRAE 62.2 CONTROL SYSTEM SET FAN TO OPERATE CONTINUOUSLY AT CFM INDICATED IN UNIT VENTILATION SCHEDULE WITH WALL SWITCH TO TRIGGER HIGH SPEED 100 CFM SETTING WITH RELAY, REFER TO ELECTRICAL DRAWINGS FOR CIRCUITING (THE INTENT IS FOR A SINGLE SWITCH TO CONTROL THE LIGHTING AND THE HIGH SPEED MODE).
2. VARIABLE-SPEED ENERGY STAR EXHAUST FAN APPROVED FOR MOUNTING IN 4" WALL WITH 4"X3" DUCT CONNECTION, WHITE PLASTIC GRILLE, AND BACKDRAFT DAMPER.
3. VARIABLE-SPEED ENERGY STAR EXHAUST FAN APPROVED FOR MOUNTING IN CEILING WITH 4"X3" DUCT CONNECTION, WHITE PLASTIC GRILLE, AND BACKDRAFT DAMPER.
4. INLINE EXHAUST FAN WITH HIGH EFFICIENCY ECM MOTOR RATED FOR CONTINUOUS USE, PROVIDE RUBBER VIBRATION ISOLATORS AND BACKDRAFT DAMPER.
5. FAN TO BE OPERATED BY DEDICATED WALL SWITCH.
6. PROVIDE FAN SPEED CONTROLLER, BALANCE TO CFM INDICATED ON PLANS.
7. SET TO OPERATE CONTINUOUSLY.
8. SET TO OPERATE CONTINUOUSLY INTERLOCKED TO SHUT OFF WHEN ASSOCIATED FCU SUPPLY FAN IS OFF.
9. PROVIDE REVERSE ACTING THERMOSTAT SET AT 85 DEG F.
10. WALL MOUNTED DIRECT DRIVE EXHAUST FAN WITH REMOVABLE GALVANIZED SHEET METAL WEATHER HOOD, MOTOR WITH THERMAL OVERLOAD RATED FOR CONTINUOUS OPERATION AND BACKDRAFT DAMPER.

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OUTSIDE AIR VENTILATION CALCULATIONS

PROJECT: MARSHALL POINTE | CODE: 2018 IMC | SYSTEM: LEVEL 1 S HALF SW

ROOM	AREA (SQFT)	OCCUPANCY #/1000 SQFT	OCCUPANCY # PEOPLE	OCCUPANCY OSA PER (CFM)	AREA CFM/SQFT	Ez	TOTAL REQD OSA (CFM)	SUPPLY AIR (CFM)	% OSA
LEVEL 1 CORRIDOR SOUTH HALF SW	939	0	0	0.0	0.06	0.80	70	640	11%
TOTALS	939		0				70	640	

SYSTEM CALCULATIONS			
SUPPLY AIR	640 CFM	VENTILATION SYSTEM EFFICIENCY	100%
TOTAL UNCORRECTED OSA REQD	70 CFM	SYSTEM OCCUPANT DIVERSITY	100%
AVERAGE OUTDOOR AIR %	11%	CORRECTED SYSTEM MIN OUTDOOR AIR	70 CFM

OUTSIDE AIR VENTILATION CALCULATIONS

PROJECT: MARSHALL POINTE | CODE: 2018 IMC | SYSTEM: LEVEL 1 S HALF SSW

ROOM	AREA (SQFT)	OCCUPANCY #/1000 SQFT	OCCUPANCY # PEOPLE	OCCUPANCY OSA PER (CFM)	AREA CFM/SQFT	Ez	TOTAL REQD OSA (CFM)	SUPPLY AIR (CFM)	% OSA
LEVEL 1 CORRIDOR SOUTH HALF SSW	805	0	0	0.0	0.06	0.80	60	640	9%
TOTALS	805		0				60	640	

SYSTEM CALCULATIONS			
SUPPLY AIR	640 CFM	VENTILATION SYSTEM EFFICIENCY	100%
TOTAL UNCORRECTED OSA REQD	60 CFM	SYSTEM OCCUPANT DIVERSITY	100%
AVERAGE OUTDOOR AIR %	9%	CORRECTED SYSTEM MIN OUTDOOR AIR	60 CFM

OUTSIDE AIR VENTILATION CALCULATIONS

PROJECT: MARSHALL POINTE | CODE: 2018 IMC | SYSTEM: LEVEL 1 W

ROOM	AREA (SQFT)	OCCUPANCY #/1000 SQFT	OCCUPANCY # PEOPLE	OCCUPANCY OSA PER (CFM)	AREA CFM/SQFT	Ez	TOTAL REQD OSA (CFM)	SUPPLY AIR (CFM)	% OSA
LEVEL 1 CORRIDOR WEST	697	0	0	0.0	0.06	0.80	52	640	8%
TOTALS	697		0				52	640	

SYSTEM CALCULATIONS			
SUPPLY AIR	640 CFM	VENTILATION SYSTEM EFFICIENCY	100%
TOTAL UNCORRECTED OSA REQD	52 CFM	SYSTEM OCCUPANT DIVERSITY	100%
AVERAGE OUTDOOR AIR %	8%	CORRECTED SYSTEM MIN OUTDOOR AIR	52 CFM

PROJECT: MARSHALL POINTE | CODE: 2018 IMC | SYSTEM: LEVEL 2-4 N HALF NE

ROOM	AREA (SQFT)	OCCUPANCY #/1000 SQFT	OCCUPANCY # PEOPLE	OCCUPANCY OSA PER (CFM)	AREA CFM/SQFT	Ez	TOTAL REQD OSA (CFM)	SUPPLY AIR (CFM)	% OSA
LEVEL 2-4 CORRIDOR NORTH HALF NE	906	0	0	0.0	0.06	0.80	68	640	11%
TOTALS	906		0				68	640	

SYSTEM CALCULATIONS			
SUPPLY AIR	640 CFM	VENTILATION SYSTEM EFFICIENCY	100%
TOTAL UNCORRECTED OSA REQD	68 CFM	SYSTEM OCCUPANT DIVERSITY	100%
AVERAGE OUTDOOR AIR %	11%	CORRECTED SYSTEM MIN OUTDOOR AIR	68 CFM

NOTES:

PROJECT: MARSHALL POINTE | CODE: 2018 IMC | SYSTEM: LEVEL 2-4 N HALF NNW

ROOM	AREA (SQFT)	OCCUPANCY #/1000 SQFT	OCCUPANCY # PEOPLE	OCCUPANCY OSA PER (CFM)	AREA CFM/SQFT	Ez	TOTAL REQD OSA (CFM)	SUPPLY AIR (CFM)	% OSA
LEVEL 2-4 CORRIDOR NORTH HALF NNW	701	0	0	0.0	0.06	0.80	53	640	8%
TOTALS	701		0				53	640	

SYSTEM CALCULATIONS			
SUPPLY AIR	640 CFM	VENTILATION SYSTEM EFFICIENCY	100%
TOTAL UNCORRECTED OSA REQD	53 CFM	SYSTEM OCCUPANT DIVERSITY	100%
AVERAGE OUTDOOR AIR %	8%	CORRECTED SYSTEM MIN OUTDOOR AIR	53 CFM

NOTES:

PROJECT: MARSHALL POINTE | CODE: 2018 IMC | SYSTEM: LEVEL 2-4 N HALF W

ROOM	AREA (SQFT)	OCCUPANCY #/1000 SQFT	OCCUPANCY # PEOPLE	OCCUPANCY OSA PER (CFM)	AREA CFM/SQFT	Ez	TOTAL REQD OSA (CFM)	SUPPLY AIR (CFM)	% OSA
LEVEL 2-4 CORRIDOR NORTH HALF W	999	0	0	0.0	0.06	0.80	75	640	12%
TOTALS	999		0				75	640	

SYSTEM CALCULATIONS			
SUPPLY AIR	640 CFM	VENTILATION SYSTEM EFFICIENCY	100%
TOTAL UNCORRECTED OSA REQD	75 CFM	SYSTEM OCCUPANT DIVERSITY	100%
AVERAGE OUTDOOR AIR %	12%	CORRECTED SYSTEM MIN OUTDOOR AIR	75 CFM

NOTES:

PROJECT: MARSHALL POINTE | CODE: 2018 IMC | SYSTEM: LEVEL 2-4 N HALF SEE

ROOM	AREA (SQFT)	OCCUPANCY #/1000 SQFT	OCCUPANCY # PEOPLE	OCCUPANCY OSA PER (CFM)	AREA CFM/SQFT	Ez	TOTAL REQD OSA (CFM)	SUPPLY AIR (CFM)	% OSA
LEVEL 2-4 CORRIDOR NORTH HALF SEE	696	0	0	0.0	0.06	0.80	52	640	8%
TOTALS	696		0				52	640	

SYSTEM CALCULATIONS			
SUPPLY AIR	640 CFM	VENTILATION SYSTEM EFFICIENCY	100%
TOTAL UNCORRECTED OSA REQD	52 CFM	SYSTEM OCCUPANT DIVERSITY	100%
AVERAGE OUTDOOR AIR %	8%	CORRECTED SYSTEM MIN OUTDOOR AIR	52 CFM

NOTES:

PROJECT: MARSHALL POINTE | CODE: 2018 IMC | SYSTEM: LEVEL 2-4 N HALF SSE

ROOM	AREA (SQFT)	OCCUPANCY #/1000 SQFT	OCCUPANCY # PEOPLE	OCCUPANCY OSA PER (CFM)	AREA CFM/SQFT	Ez	TOTAL REQD OSA (CFM)	SUPPLY AIR (CFM)	% OSA
LEVEL 2-4 CORRIDOR NORTH HALF SSE	968	0	0	0.0	0.06	0.80	73	640	11%
TOTALS	968		0				73	640	

SYSTEM CALCULATIONS			
SUPPLY AIR	640 CFM	VENTILATION SYSTEM EFFICIENCY	100%
TOTAL UNCORRECTED OSA REQD	73 CFM	SYSTEM OCCUPANT DIVERSITY	100%
AVERAGE OUTDOOR AIR %	11%	CORRECTED SYSTEM MIN OUTDOOR AIR	73 CFM

NOTES:

OUTSIDE AIR VENTILATION CALCULATIONS

PROJECT: MARSHALL POINTE | CODE: 2018 IMC | SYSTEM: LEVEL 1 N HALF N

ROOM	AREA (SQFT)	OCCUPANCY #/1000 SQFT	OCCUPANCY # PEOPLE	OCCUPANCY OSA PER (CFM)	AREA CFM/SQFT	Ez	TOTAL REQD OSA (CFM)	SUPPLY AIR (CFM)	% OSA
LEVEL 1 CORRIDOR NORTH HALF N	475	0	0	0.0	0.06	0.80	36	640	6%
TOTALS	475		0				36	640	

SYSTEM CALCULATIONS			
SUPPLY AIR	640 CFM	VENTILATION SYSTEM EFFICIENCY	100%
TOTAL UNCORRECTED OSA REQD	36 CFM	SYSTEM OCCUPANT DIVERSITY	100%
AVERAGE OUTDOOR AIR %	6%	CORRECTED SYSTEM MIN OUTDOOR AIR	36 CFM

OUTSIDE AIR VENTILATION CALCULATIONS

PROJECT: MARSHALL POINTE | CODE: 2018 IMC | SYSTEM: LEVEL 1 N HALF NNW

ROOM	AREA (SQFT)	OCCUPANCY #/1000 SQFT	OCCUPANCY # PEOPLE	OCCUPANCY OSA PER (CFM)	AREA CFM/SQFT	Ez	TOTAL REQD OSA (CFM)	SUPPLY AIR (CFM)	% OSA
LEVEL 1 CORRIDOR NORTH HALF NNW	700	0	0	0.0	0.06	0.80	53	640	8%
TOTALS	700		0				53	640	

SYSTEM CALCULATIONS			
SUPPLY AIR	640 CFM	VENTILATION SYSTEM EFFICIENCY	100%
TOTAL UNCORRECTED OSA REQD	53 CFM	SYSTEM OCCUPANT DIVERSITY	100%
AVERAGE OUTDOOR AIR %	8%	CORRECTED SYSTEM MIN OUTDOOR AIR	53 CFM

OUTSIDE AIR VENTILATION CALCULATIONS

PROJECT: MARSHALL POINTE | CODE: 2018 IMC | SYSTEM: LEVEL 1 N HALF NWW

ROOM	AREA (SQFT)	OCCUPANCY #/1000 SQFT	OCCUPANCY # PEOPLE	OCCUPANCY OSA PER (CFM)	AREA CFM/SQFT	Ez	TOTAL REQD OSA (CFM)	SUPPLY AIR (CFM)	% OSA
LEVEL 1 CORRIDOR NORTH HALF NWW	642	0	0	0.0	0.06	0.80	48	640	8%
TOTALS	642		0				48	640	

SYSTEM CALCULATIONS			
SUPPLY AIR	640 CFM	VENTILATION SYSTEM EFFICIENCY	100%
TOTAL UNCORRECTED OSA REQD	48 CFM	SYSTEM OCCUPANT DIVERSITY	100%
AVERAGE OUTDOOR AIR %	8%	CORRECTED SYSTEM MIN OUTDOOR AIR	48 CFM

OUTSIDE AIR VENTILATION CALCULATIONS

PROJECT: MARSHALL POINTE | CODE: 2018 IMC | SYSTEM: LEVEL 1 N HALF SEE

ROOM	AREA (SQFT)	OCCUPANCY #/1000 SQFT	OCCUPANCY # PEOPLE	OCCUPANCY OSA PER (CFM)	AREA CFM/SQFT	Ez	TOTAL REQD OSA (CFM)	SUPPLY AIR (CFM)	% OSA
LEVEL 1 CORRIDOR NORTH HALF SEE	695	0	0	0.0	0.06	0.80	52	640	8%
TOTALS	695		0				52	640	

SYSTEM CALCULATIONS			
SUPPLY AIR	640 CFM	VENTILATION SYSTEM EFFICIENCY	100%
TOTAL UNCORRECTED OSA REQD	52 CFM	SYSTEM OCCUPANT DIVERSITY	100%
AVERAGE OUTDOOR AIR %	8%	CORRECTED SYSTEM MIN OUTDOOR AIR	52 CFM

OUTSIDE AIR VENTILATION CALCULATIONS

PROJECT: MARSHALL POINTE | CODE: 2018 IMC | SYSTEM: LEVEL 1 N HALF SSE

ROOM	AREA (SQFT)	OCCUPANCY #/1000 SQFT	OCCUPANCY # PEOPLE	OCCUPANCY OSA PER (CFM)	AREA CFM/SQFT	Ez	TOTAL REQD OSA (CFM)	SUPPLY AIR (CFM)	% OSA
LEVEL 1 CORRIDOR NORTH HALF SSE	904	0	0	0.0	0.06	0.80	68	640	11%
TOTALS	904		0				68	640	

SYSTEM CALCULATIONS			
SUPPLY AIR	640 CFM	VENTILATION SYSTEM EFFICIENCY	100%
TOTAL UNCORRECTED OSA REQD	68 CFM	SYSTEM OCCUPANT DIVERSITY	100%
AVERAGE OUTDOOR AIR %	11%	CORRECTED SYSTEM MIN OUTDOOR AIR	68 CFM

OUTSIDE AIR VENTILATION CALCULATIONS

PROJECT: MARSHALL POINTE | CODE: 2018 IMC | SYSTEM: LEVEL 1 N HALF SSW

ROOM	AREA (SQFT)	OCCUPANCY #/1000 SQFT	OCCUPANCY # PEOPLE	OCCUPANCY OSA PER (CFM)	AREA CFM/SQFT	Ez	TOTAL REQD OSA (CFM)	SUPPLY AIR (CFM)	% OSA
LEVEL 1 CORRIDOR NORTH HALF SSW	685	0	0	0.0	0.06	0.80	51	640	8%
TOTALS	685		0				51	640	

SYSTEM CALCULATIONS			
SUPPLY AIR	640 CFM	VENTILATION SYSTEM EFFICIENCY	100%
TOTAL UNCORRECTED OSA REQD	51 CFM	SYSTEM OCCUPANT DIVERSITY	100%
AVERAGE OUTDOOR AIR %	8%	CORRECTED SYSTEM MIN OUTDOOR AIR	51 CFM

OUTSIDE AIR VENTILATION CALCULATIONS

PROJECT: MARSHALL POINTE | CODE: 2018 IMC | SYSTEM: LEVEL 1 N HALF SWW

ROOM	AREA (SQFT)	OCCUPANCY #/1000 SQFT	OCCUPANCY # PEOPLE	OCCUPANCY OSA PER (CFM)	AREA CFM/SQFT	Ez	TOTAL REQD OSA (CFM)	SUPPLY AIR (CFM)	% OSA
LEVEL 1 CORRIDOR NORTH HALF SWW	918	0	0	0.0	0.06	0.80	69	640	11%
TOTALS	918		0				69	640	

SYSTEM CALCULATIONS			
SUPPLY AIR	640 CFM	VENTILATION SYSTEM EFFICIENCY	100%
TOTAL UNCORRECTED OSA REQD	69 CFM	SYSTEM OCCUPANT DIVERSITY	100%
AVERAGE OUTDOOR AIR %	11%	CORRECTED SYSTEM MIN OUTDOOR AIR	69 CFM

OUTSIDE AIR VENTILATION CALCULATIONS

PROJECT: MARSHALL POINTE | CODE: 2018 IMC | SYSTEM: LEVEL 1 S HALF SE

ROOM	AREA (SQFT)	OCCUPANCY #/1000 SQFT	OCCUPANCY # PEOPLE	OCCUPANCY OSA PER (CFM)	AREA CFM/SQFT	Ez	TOTAL REQD OSA (CFM)	SUPPLY AIR (CFM)	% OSA
LEVEL 1 CORRIDOR SOUTH HALF SE	1,097	0	0	0.0	0.06	0.80	82	640	13%
TOTALS	1,097		0				82	640	

SYSTEM CALCULATIONS			
SUPPLY AIR	640 CFM	VENTILATION SYSTEM EFFICIENCY	100%
TOTAL UNCORRECTED OSA REQD	82 CFM	SYSTEM OCCUPANT DIVERSITY	100%
AVERAGE OUTDOOR AIR %	13%	CORRECTED SYSTEM MIN OUTDOOR AIR	82 CFM

OUTSIDE AIR VENTILATION CALCULATIONS

PROJECT: MARSHALL POINTE | CODE: 2018 IMC | SYSTEM: LEVEL 1 S HALF SSE

ROOM	AREA (SQFT)	OCCUPANCY #/1000 SQFT	OCCUPANCY # PEOPLE	OCCUPANCY OSA PER (CFM)	AREA CFM/SQFT	Ez	TOTAL REQD OSA (CFM)	SUPPLY AIR (CFM)	% OSA
LEVEL 1 CORRIDOR SOUTH HALF SSE	594	0	0	0.0	0.06	0.80	45	640	7%
TOTALS	594		0				45	640	

SYSTEM CALCULATIONS			
SUPPLY AIR	640 CFM	VENTILATION SYSTEM EFFICIENCY	100%
TOTAL UNCORRECTED OSA REQD	45 CFM	SYSTEM OCCUPANT DIVERSITY	100%
AVERAGE OUTDOOR AIR %	7%	CORRECTED SYSTEM MIN OUTDOOR AIR	45 CFM

DIFFUSER & REGISTER SCHEDULE

SUPPLY AIR				RETURN/EXHAUST AIR			
ITEM	NECK SIZE	CFM RANGE	TYPE	ITEM	NECK SIZE	CFM RANGE	TYPE
1	14/6 - 8"	0 - 260	S1	1	30/12	0 - 1,050	R1
2	10/6 - 7"	0 - 180	S1	2	18/8	0 - 330	R2
3	10/4 - 6"	0 - 125	S1	3	36/12	0 - 1,500	R2
4	12/8 - 9"	0 - 300	S1	4	12/36	0 - 1,500	R2
5	18/18 - 6"	0 - 200	S2	5	16/16	0 - 745	R2
6	18/18 - 8"	0 - 400	S2	6	10/10	0 - 300	R2

DIFFUSER & REGISTER SPECIFICATIONS

SUPPLY AIR

TYPE S1: SHOEMAKER MANUFACTURING MODEL #950-O STEEL EXTRUDED FRAME ADJUSTABLE AIRFOIL BLADE WALL OR CEILING MOUNTED DIFFUSER, WHITE FINISH. PROVIDE LEVER OPERATED OPPOSED BLADE DAMPER. PROVIDE CEILING RADIATION DAMPER WHERE INDICATED ON PLANS.

TYPE S2: SHOEMAKER MODEL #DVD-4S-0-CM STEEL LOUVERED PANEL DIFFUSER WITH CONCEALED MOUNTING HOLES, RECESSED SCREWDRIVER OPERATED OPPOSED BLADE DAMPER, NON-ADJUSTABLE 4-WAY HORIZONTAL THROW, WHITE FINISH. PROVIDE CEILING RADIATION DAMPER WHERE INDICATED ON PLANS.

RETURN/EXHAUST AIR

TYPE R1: SHOEMAKER MANUFACTURING MODEL #FG1 STAMPED STEEL GRILLE WITH HINGED REMOVABLE FACE AND RACK FOR 1" MERV 8 FILTER, WHITE FINISH.

TYPE R2: SHOEMAKER MODEL #935 STEEL GRILLE, 45° BLADE ANGLE, OBD, WHITE FINISH. PROVIDE CEILING RADIATION DAMPER WHERE INDICATED ON PLANS.

MARSHALL POINTE

RESIDENTIAL UNIT VENTILATION CALCULATIONS

Unit	sqft	Ceiling Height	# Bedrooms	Req'd Ventilation (CFM)
UNIT A1	612	10	1	36
UNIT B1	792	10	2	46
UNITS B2	895	10	2	52
UNIT B3	1013	10	2	59
UNIT C1	1139	10	3	66
UNITS C2	1211	10	3	71
UNITS C3	1208	10	3	70

Q = .35 Air Changes Per Hour or 15 CFM Per Person Based On 2 Occupants For First Bedroom And 1 Occupant For Each Additional Bedroom

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MARSHALL POINTE

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Sheet Number	M6-0.4

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PROJECT: MARSHALL POINTE		CODE: 2018 IMC						SYSTEM: FC/A2.ST		
	AREA	OCCUPANCY			AREA		TOTAL REQD	SUPPLY		
ROOM	(SQFT)	#/1000 SQFT	# PEOPLE	OSA PER (CFM)	CFM/SQFT	Ez	OSA (CFM)	AIR (CFM)	% OSA	
FITNESS	670	10	7	20.0	0.06	0.80	225	1,000	23%	
TOTALS	670		7				225	1,000		
SYSTEM CALCULATIONS										
SUPPLY AIR	1,000	CFM		VENTILATION SYSTEM EFFICIENCY				100%		
TOTAL UNCORRECTED OSA REQD	225	CFM		SYSTEM OCCUPANT DIVERSITY				100%		
AVERAGE OUTDOOR AIR %	23%			CORRECTED SYSTEM MIN OUTDOOR AIR				225	CFM	

PROJECT: MARSHALL POINTE		CODE: 2018 IMC						SYSTEM: LEVEL 2-4 S HALF SE	
	AREA	OCCUPANCY			AREA		TOTAL REQD OSA	SUPPLY	
ROOM	(SQFT)	#/1000 SQFT	# PEOPLE	OSA PER (CFM)	CFM/SQFT	Ez	(CFM)	AIR (CFM)	% OSA
LEVEL 2-4 CORRIDOR SOUTH HALF SE	684	0	0	0.0	0.06	0.80	51	640	8%
TOTALS	684		0				51	640	
SYSTEM CALCULATIONS									
SUPPLY AIR	640	CFM		VENTILATION SYSTEM EFFICIENCY				100%	
TOTAL UNCORRECTED OSA REQD	51	CFM		SYSTEM OCCUPANT DIVERSITY				100%	
AVERAGE OUTDOOR AIR %	8%			CORRECTED SYSTEM MIN OUTDOOR AIR				51	CFM
NOTES:									

PROJECT: MARSHALL POINTE		CODE: 2018 IMC						SYSTEM: LEVEL 2-4 S HALF SSE	
	AREA	OCCUPANCY			AREA		TOTAL REQD OSA	SUPPLY	
ROOM	(SQFT)	#/1000 SQFT	# PEOPLE	OSA PER (CFM)	CFM/SQFT	Ez	(CFM)	AIR (CFM)	% OSA
LEVEL 2-4 CORRIDOR SOUTH HALF SSE	679	0	0	0.0	0.06	0.80	51	640	8%
TOTALS	679		0				51	640	
SYSTEM CALCULATIONS									
SUPPLY AIR	640	CFM		VENTILATION SYSTEM EFFICIENCY				100%	
TOTAL UNCORRECTED OSA REQD	51	CFM		SYSTEM OCCUPANT DIVERSITY				100%	
AVERAGE OUTDOOR AIR %	8%			CORRECTED SYSTEM MIN OUTDOOR AIR				51	CFM
NOTES:									

PROJECT: MARSHALL POINTE		CODE: 2018 IMC						SYSTEM: LEVEL 2-4 S HALF SSW	
	AREA	OCCUPANCY			AREA		TOTAL REQD OSA	SUPPLY	
ROOM	(SQFT)	#/1000 SQFT	# PEOPLE	OSA PER (CFM)	CFM/SQFT	Ez	(CFM)	AIR (CFM)	% OSA
LEVEL 2-4 CORRIDOR SOUTH HALF SSW	804	0	0	0.0	0.06	0.80	60	640	9%
TOTALS	804		0				60	640	
SYSTEM CALCULATIONS									
SUPPLY AIR	640	CFM		VENTILATION SYSTEM EFFICIENCY				100%	
TOTAL UNCORRECTED OSA REQD	60	CFM		SYSTEM OCCUPANT DIVERSITY				100%	
AVERAGE OUTDOOR AIR %	9%			CORRECTED SYSTEM MIN OUTDOOR AIR				60	CFM
NOTES:									

PROJECT: MARSHALL POINTE		CODE: 2018 IMC						SYSTEM: LEVEL 2-4 S HALF SW	
	AREA	OCCUPANCY			AREA		TOTAL REQD OSA	SUPPLY	
ROOM	(SQFT)	#/1000 SQFT	# PEOPLE	OSA PER (CFM)	CFM/SQFT	Ez	(CFM)	AIR (CFM)	% OSA
LEVEL 2-4 CORRIDOR SOUTH HALF SW	1,025	0	0	0.0	0.06	0.80	77	640	12%
TOTALS	1,025		0				77	640	
SYSTEM CALCULATIONS									
SUPPLY AIR	640	CFM		VENTILATION SYSTEM EFFICIENCY				100%	
TOTAL UNCORRECTED OSA REQD	77	CFM		SYSTEM OCCUPANT DIVERSITY				100%	
AVERAGE OUTDOOR AIR %	12%			CORRECTED SYSTEM MIN OUTDOOR AIR				77	CFM
NOTES:									

PROJECT: MARSHALL POINTE		CODE: 2018 IMC						SYSTEM: LEVEL 2-4 W	
	AREA	OCCUPANCY			AREA		TOTAL REQD OSA	SUPPLY	
ROOM	(SQFT)	#/1000 SQFT	# PEOPLE	OSA PER (CFM)	CFM/SQFT	Ez	(CFM)	AIR (CFM)	% OSA
LEVEL 2-4 CORRIDOR WEST	670	0	0	0.0	0.06	0.80	50	640	8%
TOTALS	670		0				50	640	
SYSTEM CALCULATIONS									
SUPPLY AIR	640	CFM		VENTILATION SYSTEM EFFICIENCY				100%	
TOTAL UNCORRECTED OSA REQD	50	CFM		SYSTEM OCCUPANT DIVERSITY				100%	
AVERAGE OUTDOOR AIR %	8%			CORRECTED SYSTEM MIN OUTDOOR AIR				50	CFM
NOTES:									

PROJECT: MARSHALL POINTE		CODE: 2018 IMC						SYSTEM: LEVEL 2-4 N HALF SWW	
	AREA	OCCUPANCY			AREA		TOTAL REQD OSA	SUPPLY	
ROOM	(SQFT)	#/1000 SQFT	# PEOPLE	OSA PER (CFM)	CFM/SQFT	Ez	(CFM)	AIR (CFM)	% OSA
LEVEL 2-4 CORRIDOR NORTH HALF SWW	637	0	0	0.0	0.06	0.80	48	640	7%
TOTALS	637		0				48	640	
SYSTEM CALCULATIONS									
SUPPLY AIR	640	CFM		VENTILATION SYSTEM EFFICIENCY				100%	
TOTAL UNCORRECTED OSA REQD	48	CFM		SYSTEM OCCUPANT DIVERSITY				100%	
AVERAGE OUTDOOR AIR %	7%			CORRECTED SYSTEM MIN OUTDOOR AIR				48	CFM
NOTES:									

PROJECT: MARSHALL POINTE		CODE: 2018 IMC						SYSTEM: FC/A3.0T	
	AREA	OCCUPANCY			AREA		TOTAL REQD	SUPPLY	
ROOM	(SQFT)	#/1000 SQFT	# PEOPLE	OSA PER (CFM)	CFM/SQFT	Ez	OSA (CFM)	AIR (CFM)	% OSA
FILE STORAGE	119	0	0	0.0	0.12	0.80	18	125	14%
OFFICE	168	5	1	5.0	0.06	0.80	19	270	7%
OFFICE	145	5	1	5.0	0.06	0.80	17	225	8%
RECEPTION	111	30	4	5.0	0.06	0.80	33	155	22%
LEASING	324	5	2	5.0	0.06	0.80	37	150	25%
WAITING	105	10	2	5.0	0.06	0.80	20	130	14%
WORK ROOM	239	5	2	5.0	0.06	0.80	30	155	20%
TOTALS	1,211		12				175	1,210	
SYSTEM CALCULATIONS									
SUPPLY AIR	1,210	CFM		VENTILATION SYSTEM EFFICIENCY				90%	
TOTAL UNCORRECTED OSA REQD	175	CFM		SYSTEM OCCUPANT DIVERSITY				100%	
AVERAGE OUTDOOR AIR %	14%			CORRECTED SYSTEM MIN OUTDOOR AIR				195	CFM

PROJECT: MARSHALL POINTE		CODE: 2018 IMC						SYSTEM: FC/A2.0T1	
	AREA	OCCUPANCY			AREA		TOTAL REQD	SUPPLY	
ROOM	(SQFT)	#/1000 SQFT	# PEOPLE	OSA PER (CFM)	CFM/SQFT	Ez	OSA (CFM)	AIR (CFM)	% OSA
MAILROOM	640	5	4	5.0	0.06	0.80	73	380	19%
ENTRY CORRIDOR	853	0	0	0.0	0.06	0.80	64	380	17%
TOTALS	1,493		4				137	760	
SYSTEM CALCULATIONS									
SUPPLY AIR	760	CFM		VENTILATION SYSTEM EFFICIENCY				95%	
TOTAL UNCORRECTED OSA REQD	137	CFM		SYSTEM OCCUPANT DIVERSITY				100%	
AVERAGE OUTDOOR AIR %	18%			CORRECTED SYSTEM MIN OUTDOOR AIR				139	CFM

PROJECT: MARSHALL POINTE		CODE: 2018 IMC						SYSTEM: FC/A2.0T2	
	AREA	OCCUPANCY			AREA		TOTAL REQD	SUPPLY	
ROOM	(SQFT)	#/1000 SQFT	# PEOPLE	OSA PER (CFM)	CFM/SQFT	Ez	OSA (CFM)	AIR (CFM)	% OSA
CLUBROOM	693	5	4	5.0	0.06	0.80	77	660	12%
PARCEL	152	0	0	0.0	0.12	0.80	23	100	23%
TOTALS	845		4				100	760	
SYSTEM CALCULATIONS									
SUPPLY AIR	760	CFM		VENTILATION SYSTEM EFFICIENCY				90%	
TOTAL UNCORRECTED OSA REQD	100	CFM		SYSTEM OCCUPANT DIVERSITY				100%	
AVERAGE OUTDOOR AIR %	13%			CORRECTED SYSTEM MIN OUTDOOR AIR				130	CFM

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08.06.2024

MARSHALL POINTE

MARSHALL POINTE APARTMENTS, LP
5170 MARSHALL ST
ARVADA, CO 80002

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date: 06/29/2023
Job Number: 222001
Drawn By: JW
Checked By: BM
Title: MECHANICAL SCHEDULES
Sheet Number: M6-0.5

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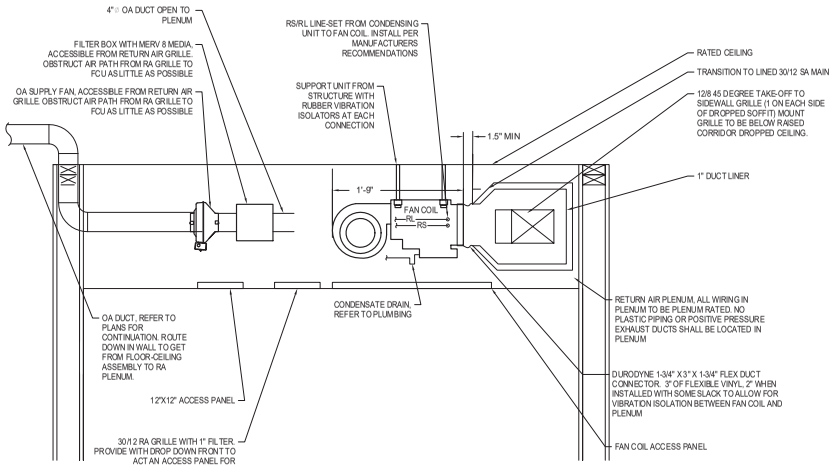
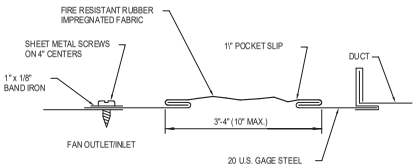


CORRIDOR FAN COIL DETAIL

NO SCALE

2 M7-0.1



FLEXIBLE DUCT CONNECTION DETAIL

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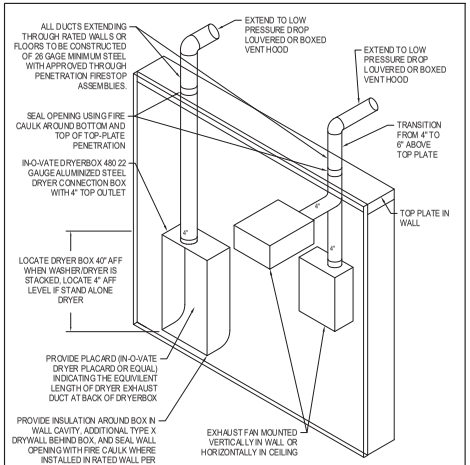
1 M7-0.1



DRYER & EXHAUST FAN WALL DETAIL

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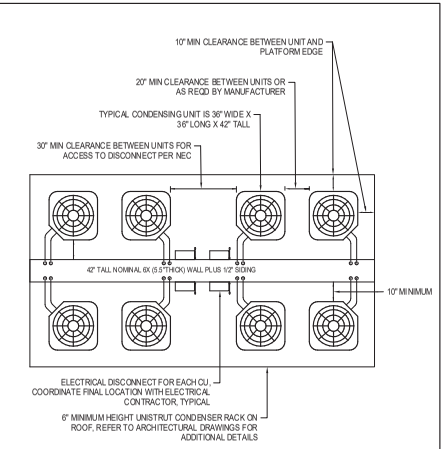
4 M7-0.1



CONDENSING UNIT ROOF SUPPORT DETAIL

NO SCALE

3 M7-0.1

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5170 MARSHALL ST
ARVADA, CO 80002

No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM
Title	MECHANICAL DETAILS
Sheet Number	M7-0.1

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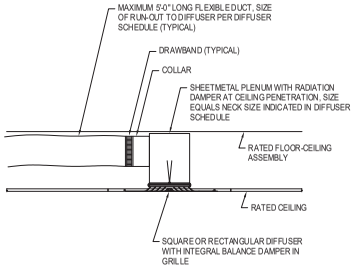
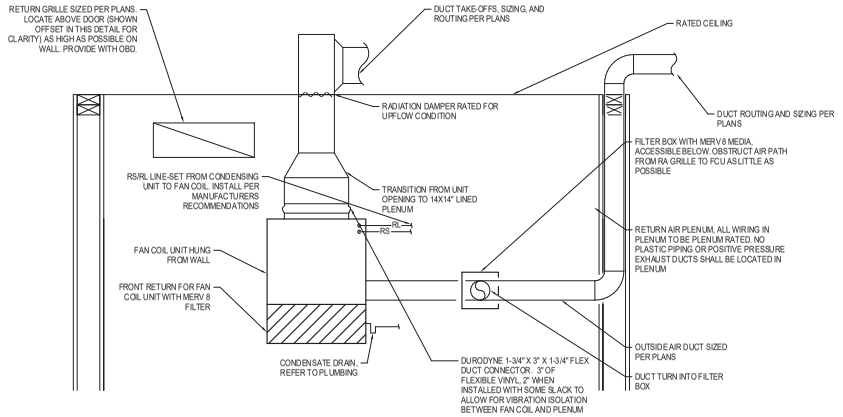


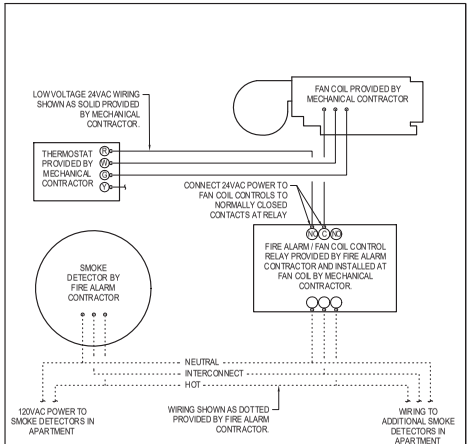
DIFFUSER MOUNTING DETAIL — 2 / M7-0.2

NO SCALE



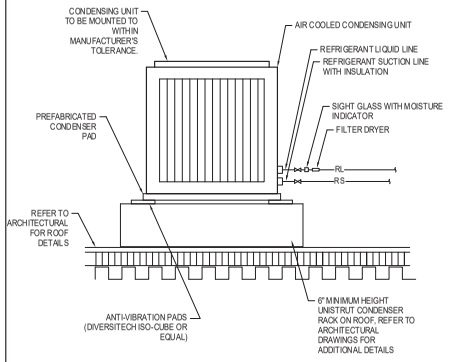
DWELLING UNIT FAN COIL DETAIL — 1 / M7-0.2

NO SCALE



FAN COIL FIRE ALARM SHUT-DOWN DETAIL — 4 / M7-0.2

NO SCALE



CONDENSING UNIT ON ROOF — 3 / M7-0.2

NO SCALE

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MARSHALL POINTE

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No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM
Title	MECHANICAL DETAILS
Sheet Number	M7-0.2

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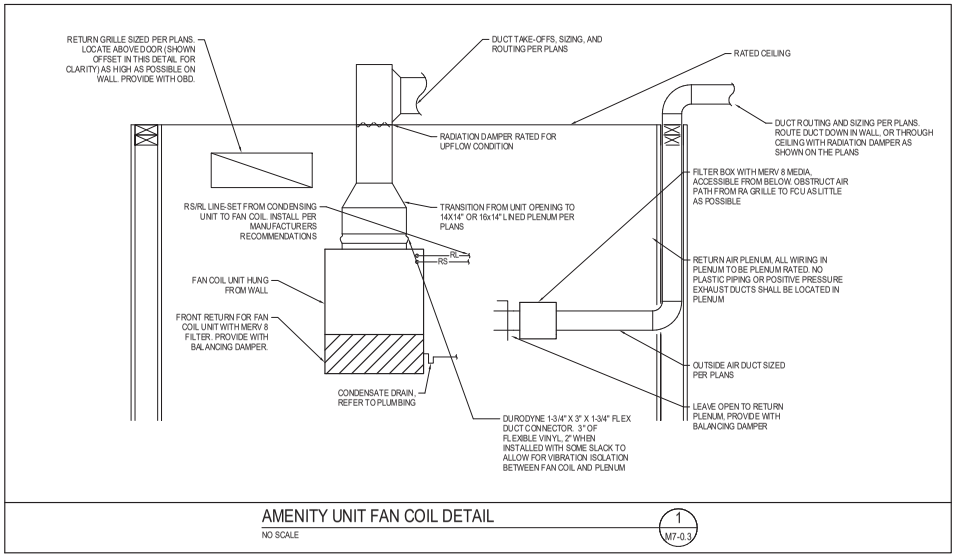
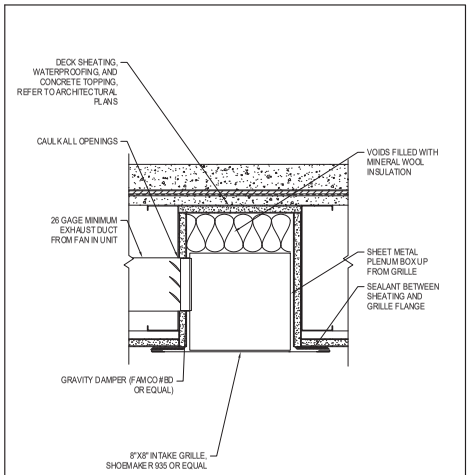


AMENITY UNIT FAN COIL DETAIL

NO SCALE

1
M7-0.3



SOFFIT INTAKE DETAIL

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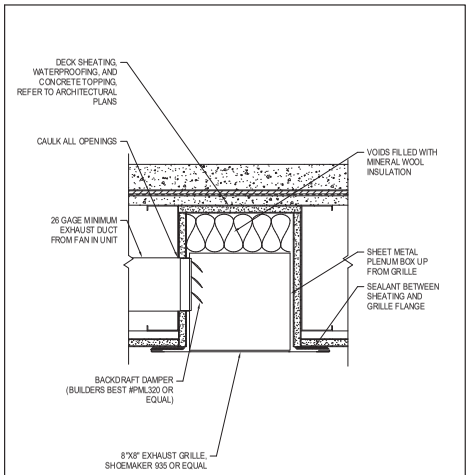
M7-0.3



SOFFIT VENT DETAIL

NO SCALE

2
M7-0.3

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MARSHALL POINTE

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No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	06/29/2023
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Checked By	BM
Title	MECHANICAL DETAILS
Sheet Number	M7-0.3

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GENERAL NOTES

1. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE STATE CODES, LOCAL CODES, AND OWNER'S STANDARDS INDICATED BY THE CONSTRUCTION DOCUMENTS.
2. PLUMBING DRAWINGS ARE DIAGRAMMATIC AND DO NOT NECESSARILY INDICATE EVERY REQUIRED OFFSET, FITTING, ETC. DRAWINGS ARE NOT TO BE SCALED FOR DIMENSIONS. TAKE ALL DIMENSIONS FROM ARCHITECTURAL DRAWINGS, CERTIFIED EQUIPMENT DRAWINGS AND FROM THE STRUCTURE ITSELF BEFORE FABRICATING ANY WORK. VERIFY ALL SPACE REQUIREMENTS COORDINATING WITH OTHER TRADES, AND INSTALL THE SYSTEMS IN THE SPACE PROVIDED WITHOUT EXTRA CHARGES TO THE OWNER.
3. CONTRACTOR SHALL COORDINATE WORK INDICATED WITH MECHANICAL, ELECTRICAL, FIRE PROTECTION, STRUCTURAL, CIVIL, AND ARCHITECTURAL DIVISIONS. CONTRACTOR SHALL VERIFY SIZE & LOCATION OF EXISTING UTILITIES PRIOR TO COMMENCING WORK. COORDINATE WITH OTHER TRADES AND MAKE FINAL CONNECTION. VERIFY FIT OF PLUMBING SYSTEMS PRIOR TO FABRICATION. COORDINATE ALL CHASE, SLEEVE, AND SLAB BLOCK-OUT REQUIREMENTS BEFORE CONCRETE IS POURED OR BLOCK IS SET.
4. PROVIDE ALL EQUIPMENT SCHEDULED OR INDICATED ON THE DRAWINGS BUT NOT INCLUDED WITHIN THE SPECIFICATIONS INCLUDING ANY REQUIRED BUT NOT LISTED MISC ITEMS REQUIRED TO PROVIDE COMPLETE OPERATIONAL SYSTEMS AS INDICATED WHETHER SPECIFICALLY CALLED FOR OR NOT. INSTALLATION SHALL CONFORM TO MANUFACTURERS RECOMMENDATIONS AND APPLICABLE CODES. PROVIDE SUBMITTALS FOR ALL PROPOSED FIXTURES, EQUIPMENT AND MATERIALS TO BE UTILIZED. PROVIDE OPERATION AND MAINTENANCE MANUAL FOR ALL SYSTEMS AND EQUIPMENT AT END OF PROJECT.
5. ELECTRICAL CHARACTERISTICS OF PLUMBING EQUIPMENT SHALL BE VERIFIED WITH ELECTRICAL DRAWINGS AND ELECTRICAL CONTRACTOR PRIOR TO EQUIPMENT ORDER RELEASE. ADDITIONAL ELECTRICAL WORK RESULTING FROM EQUIPMENT SUBSTITUTION IS THE RESPONSIBILITY OF THIS CONTRACTOR.
6. DRAIN PIPING FROM EQUIPMENT SHALL BE ROUTED SO AS NOT TO CREATE A TRIPPING HAZARD.
7. ITEM DESIGNATIONS INDICATED HEREON ARE FOR PURPOSES OF THESE DOCUMENTS ONLY. CONTRACTOR SHALL VERIFY WITH OWNERS REPRESENTATIVE ACTUAL "TAGGING" INFORMATION TO BE PROVIDED FOR EACH ITEM OF MECHANICAL EQUIPMENT PRIOR TO NAMEPLATE ORDER RELEASE.
8. PROVIDE 18" X 18" MINIMUM ACCESS DOOR IN INACCESSIBLE CEILINGS AND WALLS FOR EQUIPMENT AND VALVES REQUIRING ACCESS OR ADJUSTMENT. COORDINATE LOCATIONS AND SUBMIT TO ARCHITECT FOR APPROVAL PRIOR TO BEGINNING WORK.
9. PROVIDE CLEANOUTS WHERE INDICATED ON DRAWINGS OR AS REQUIRED BY JURISDICTIONAL PLUMBING CODE.
10. VTRS SHALL BE 10'-0" MINIMUM FROM BUILDING AIR INTAKES AND OPENINGS INTO BUILDING. COORDINATE WITH MECHANICAL DRAWINGS AND CONTRACTOR.
11. ALL WORK UNDER THIS CONTRACT IS TO FIVE (5) FEET OUTSIDE THE BUILDING.
12. CLEAN, TEST, AND SANITIZE ALL PLUMBING IN ACCORDANCE WITH REQUIREMENTS OF JURISDICTIONAL PLUMBING AND HEALTH CODES.
13. WHERE PIPES PASS THROUGH FIRE-RATED FLOOR OR WALLS, SEAL WITH MATERIALS EQUAL TO 3M FIRE BARRIER, MEETING TESTING PER ASTM-E-814 (UL 1479). USE CAULK OR PUTTY TYPE. ALL EXTERIOR WALL AND ROOF PENETRATIONS SHALL BE SEALED WATERPROOF.
14. AT THE COMPLETION OF THE WORK AND PRIOR TO FINAL ACCEPTANCE, ALL PARTS OF THE WORK INSTALLED UNDER THIS SPECIFICATION SHALL BE THOROUGHLY CLEANED.
15. ALL EQUIPMENT, MATERIALS, AND INSTALLATION IS TO BE WARRANTEED FOR ONE YEAR TO BE FREE FROM DEFECT. PROVIDE WRITTEN WARRANTY TO OWNER.
16. THE OWNER AND ENGINEER ARE NOT RESPONSIBLE FOR THE CONTRACTOR'S SAFETY PRECAUTIONS OR TO MEANS, METHODS, TECHNIQUES, CONSTRUCTION SEQUENCES, OR PROCEDURES REQUIRED TO PERFORM HIS WORK.
17. COORDINATE ALL PIPING PENETRATIONS INTO STRUCTURAL P/T SLAB PRIOR TO ANY FLOOR POUR. PROVIDE SLEEVING PRIOR TO POUR. PIPE PENETRATIONS INTO P/T SLAB SHALL COMPLY WITH STRUCTURAL DETAILS. COORDINATE EXACT REQUIREMENTS WITH STRUCTURAL DRAWINGS AND STRUCTURAL ENGINEER.

PLUMBING LEGEND

ABBR.	SYMBOL	DESCRIPTION
S OR W		SOIL, WASTE OR SEWER BELOW GRADE OR FLOOR
S OR W		SOIL, WASTE OR SEWER ABOVE GRADE OR FLOOR
CWV	—CWV—	COMBINATION WASTE AND VENT
SOG	—SOG—	SAND/OIL/GAS WASTE BELOW GRADE OR FLOOR
SOG	—SOG—	SAND/OIL/GAS WASTE ABOVE GRADE OR FLOOR
SD	—SD—	STORM DRAIN BELOW GRADE OR FLOOR
SD	—SD—	STORM DRAIN ABOVE GRADE OR FLOOR
OSD	—OSD—	OVER FLOW STORM DRAIN BELOW GRADE OR FLOOR
OSD	—OSD—	OVER FLOW STORM DRAIN ABOVE GRADE OR FLOOR
FCO/GCO		FLOOR OR GRADE CLEANOUT
CO		CLEANOUT
V		VENT
CW		COLD WATER
HW		HOT WATER
HWR		HOT WATER RETURN
TW	—T—	TEMPERED WATER
WHA		WATER HAMMER ARRESTOR
D	—D—	DRAIN
OD	—OD—	OVERFLOW DRAIN
SOV		SHUT-OFF VALVE
TV		THROTTLING VALVE
CV		CONTROL VALVE
STR		STRAINER
U		UNION
PG		PRESSURE GAUGE
SOL V		SOLENOID VALVE
REL V		RELIEF VALVE
RED		REDUCER
HB		HOSE BIBB
G	—G—	GAS, LOW PRESSURE
F	—F—	FIRE LINE
FSR	—F—	FIRE SPRINKLER/STANDPIPE RISER
CSP	—CSP—	COMBINATION STANDPIPE
FDC		FIRE DEPARTMENT CONNECTION
TH	(0"-100" RANGE)	THERMOMETER
FD		FLOOR DRAIN
FS		FLOOR SINK
RD		ROOF DRAIN
ORD		OVERFLOW ROOF DRAIN
VTR		VENT THRU ROOF
PC		PIPE CAP
AFF		ABOVE FINISHED FLOOR
AFG		ABOVE FINISHED GRADE
UNO		UNLESS NOTED OTHERWISE
AAV		AIR ADMITTANCE VALVE

SHEET INDEX

ISSUE: 05-25-23 PERMIT SET	SHEET NO.	SHEET DESCRIPTION
○	P0-0.1	PLUMBING COVER SHEET
○	P1-1.1	OVERALL FIRST FLOOR PLUMBING PLAN
○	P1-1.2	OVERALL SECOND FLOOR PLUMBING PLAN
○	P1-1.3	OVERALL THIRD FLOOR PLUMBING PLAN
○	P1-1.4	OVERALL FOURTH FLOOR PLUMBING PLAN
○	P1-5.0	OVERALL ROOF PLUMBING PLAN
○	P2-1.5	FIRST FLOOR PLUMBING PLAN AREA A
○	P2-1.6	FIRST FLOOR PLUMBING PLAN AREA B
○	P2-1.7	FIRST FLOOR PLUMBING PLAN AREA C
○	P2-1.8	FIRST FLOOR PLUMBING PLAN AREA D
○	P2-2.1	SECOND FLOOR PLUMBING PLAN AREA A
○	P2-2.2	SECOND FLOOR PLUMBING PLAN AREA B
○	P2-2.3	SECOND FLOOR PLUMBING PLAN AREA C
○	P2-2.4	SECOND FLOOR PLUMBING PLAN AREA D
○	P2-3.1	THIRD FLOOR PLUMBING PLAN AREA A
○	P2-3.2	THIRD FLOOR PLUMBING PLAN AREA B
○	P2-3.3	THIRD FLOOR PLUMBING PLAN AREA C
○	P2-3.4	THIRD FLOOR PLUMBING PLAN AREA D
○	P2-4.1	FOURTH FLOOR PLUMBING PLAN AREA A
○	P2-4.2	FOURTH FLOOR PLUMBING PLAN AREA B
○	P2-4.3	FOURTH FLOOR PLUMBING PLAN AREA C
○	P2-4.4	FOURTH FLOOR PLUMBING PLAN AREA D
○	P2-5.1	ROOF PLUMBING PLAN AREA A
○	P2-5.2	ROOF PLUMBING PLAN AREA B
○	P2-5.3	ROOF PLUMBING PLAN AREA C
○	P2-5.4	ROOF PLUMBING PLAN AREA D
○	P5-1.1	UNIT PLANS PLUMBING
○	P5-1.2	UNIT PLANS PLUMBING
○	P5-1.3	UNIT PLANS PLUMBING
○	P6-0.1	PLUMBING SCHEDULES
○	P6-0.2	PLUMBING SCHEDULES
○	P6-0.3	PLUMBING SCHEDULES
○	P7-0.1	PLUMBING DETAILS
○	P7-0.2	PLUMBING DETAILS
○	P8-0.1	PLUMBING RISERS
○	P8-0.2	PLUMBING RISERS
○	P8-0.3	PLUMBING RISERS

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MARSHALL POINTE

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No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date: 06/29/2023
Job Number: 222001
Drawn By: JW
Checked By: BM
Title: PLUMBING COVER SHEET
Sheet Number: **P0-0.1**

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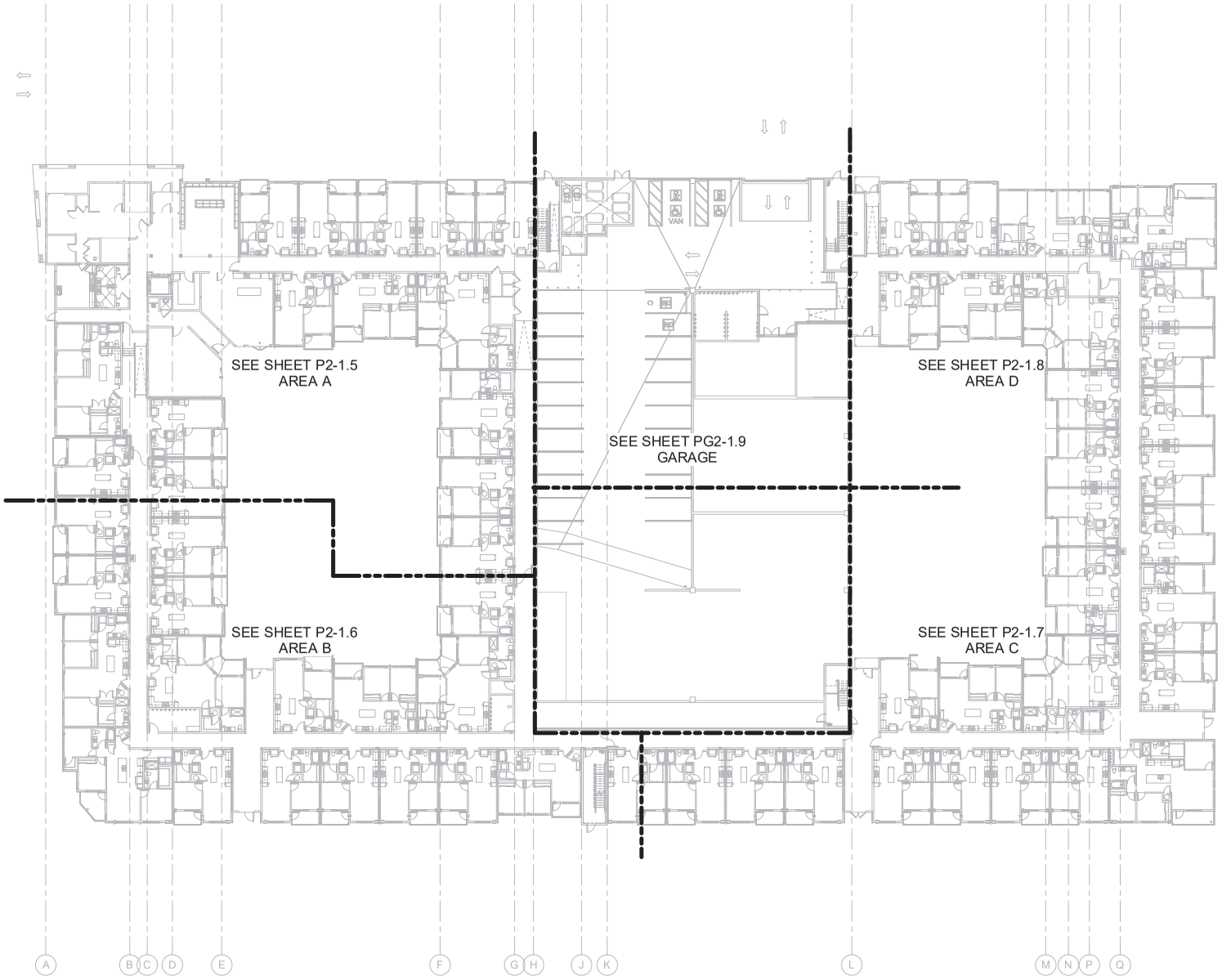

OVERALL LEVEL 1 PLUMBING PLAN
SCALE: 1/16" = 1'-0"

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Drawn By	JW
Checked By	BM
Title	OVERALL LEVEL 1 PLUMBING PLAN
Sheet Number	P1-1.1

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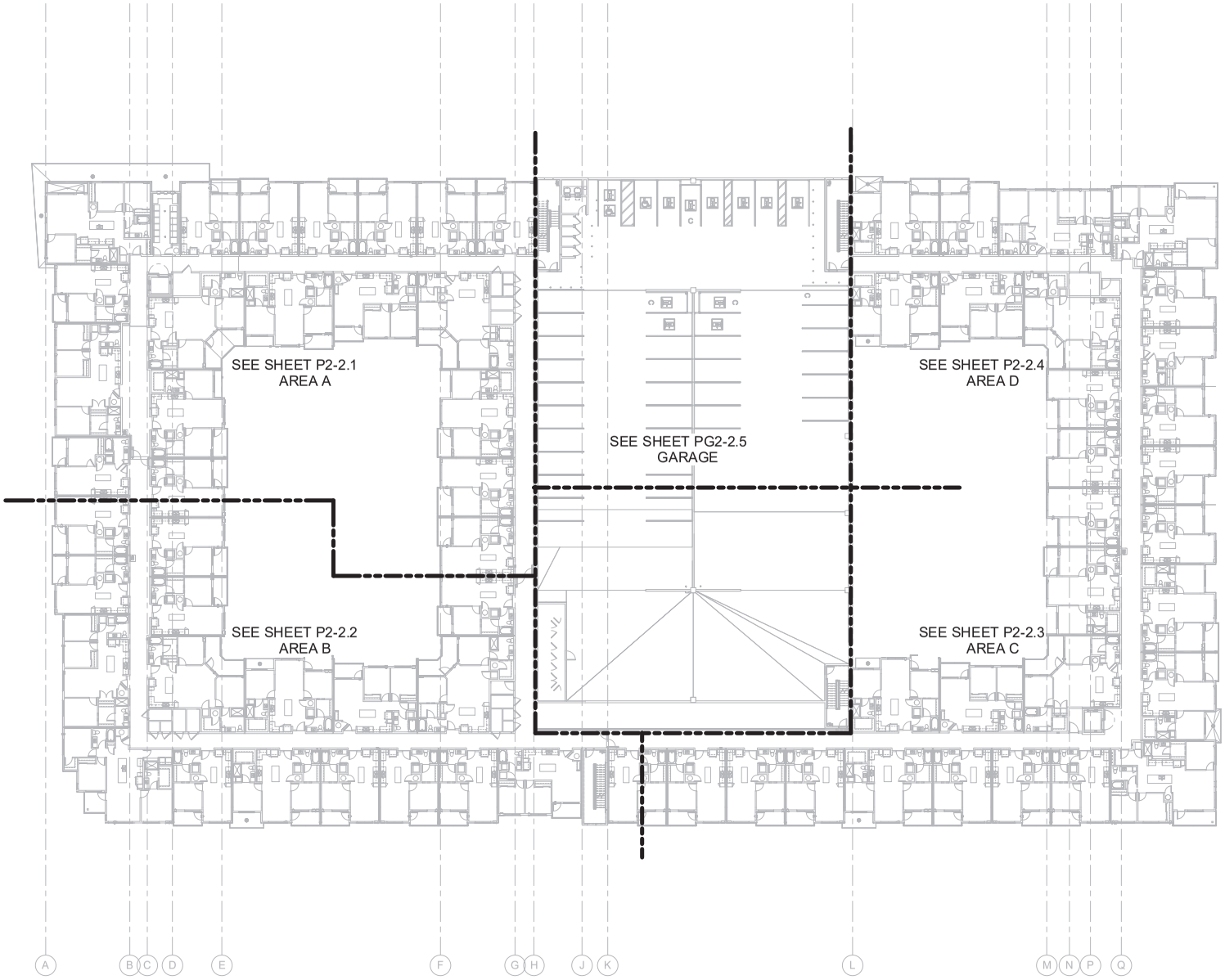

OVERALL LEVEL 2 PLUMBING PLAN
SCALE: 1/16" = 1'-0"

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ARVADA, CO 80002

No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
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Title	OVERALL LEVEL 2 PLUMBING PLAN
Sheet Number	P1-1.2

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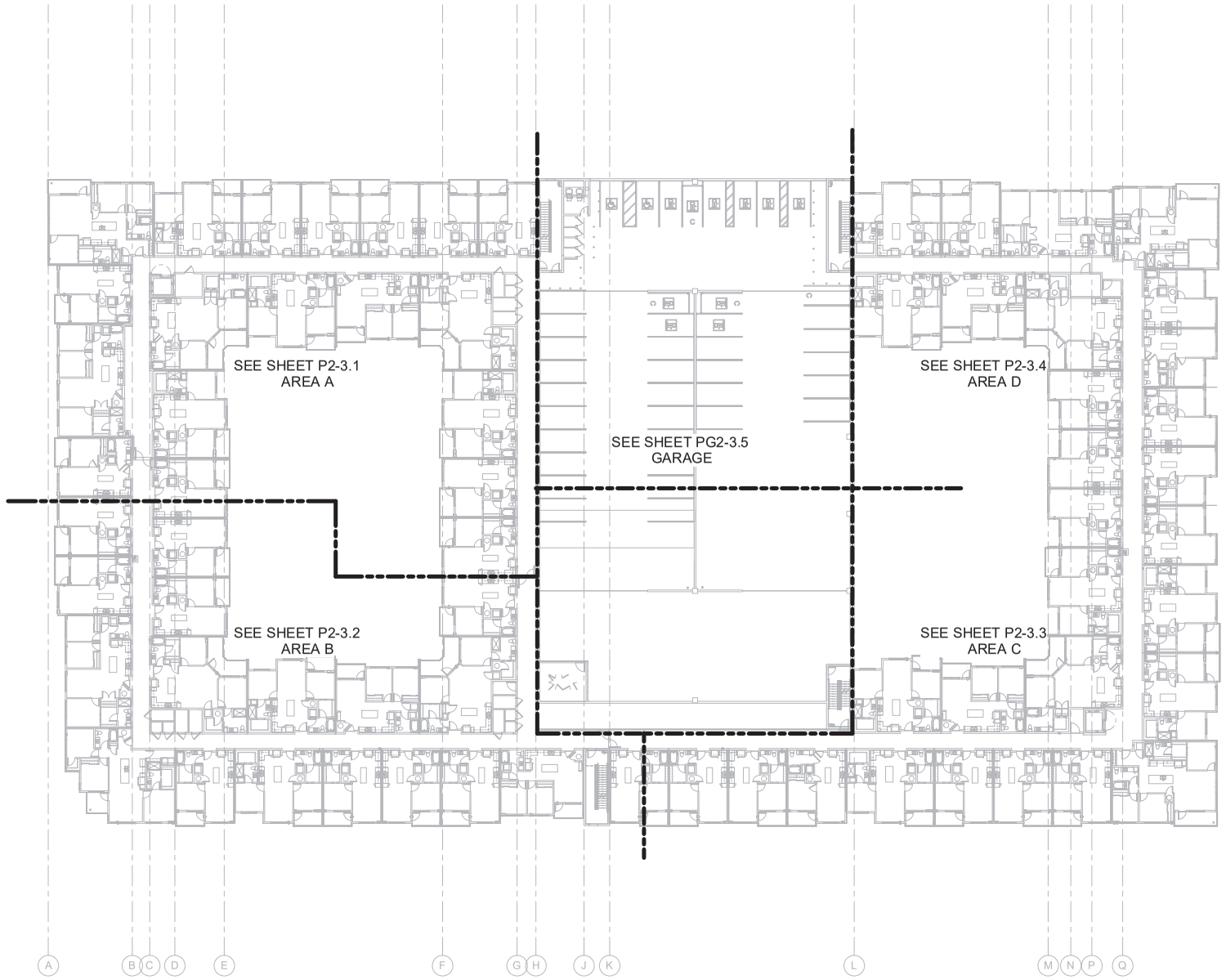

OVERALL LEVEL 3 PLUMBING PLAN
SCALE: 1/16" = 1'-0"

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No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
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Title	OVERALL LEVEL 3 PLUMBING PLAN
Sheet Number	P1-1.3

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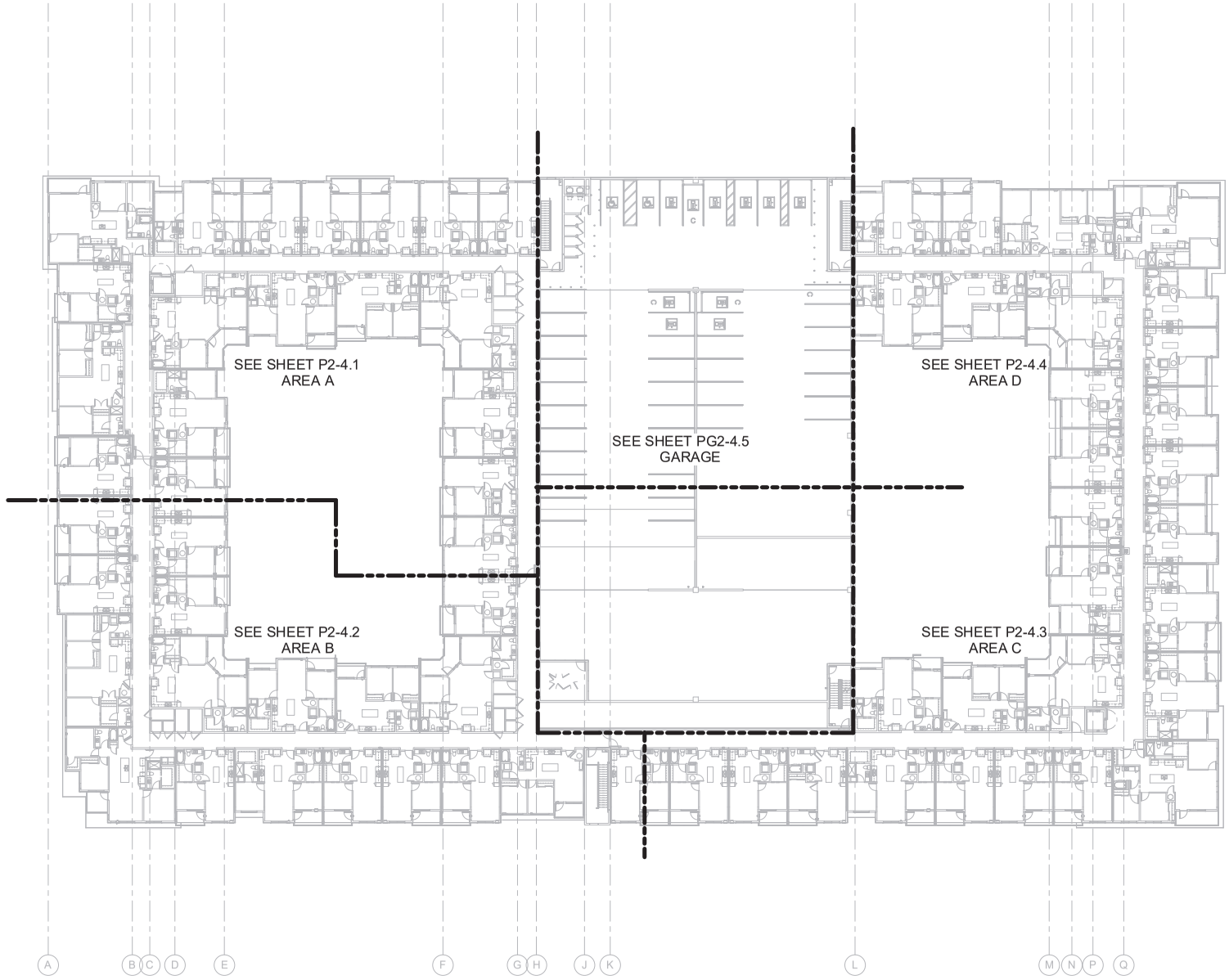

OVERALL LEVEL 4 PLUMBING PLAN
SCALE: 1/16" = 1'-0"

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No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM
Title	OVERALL LEVEL 4 PLUMBING PLAN
Sheet Number	P1-1.4

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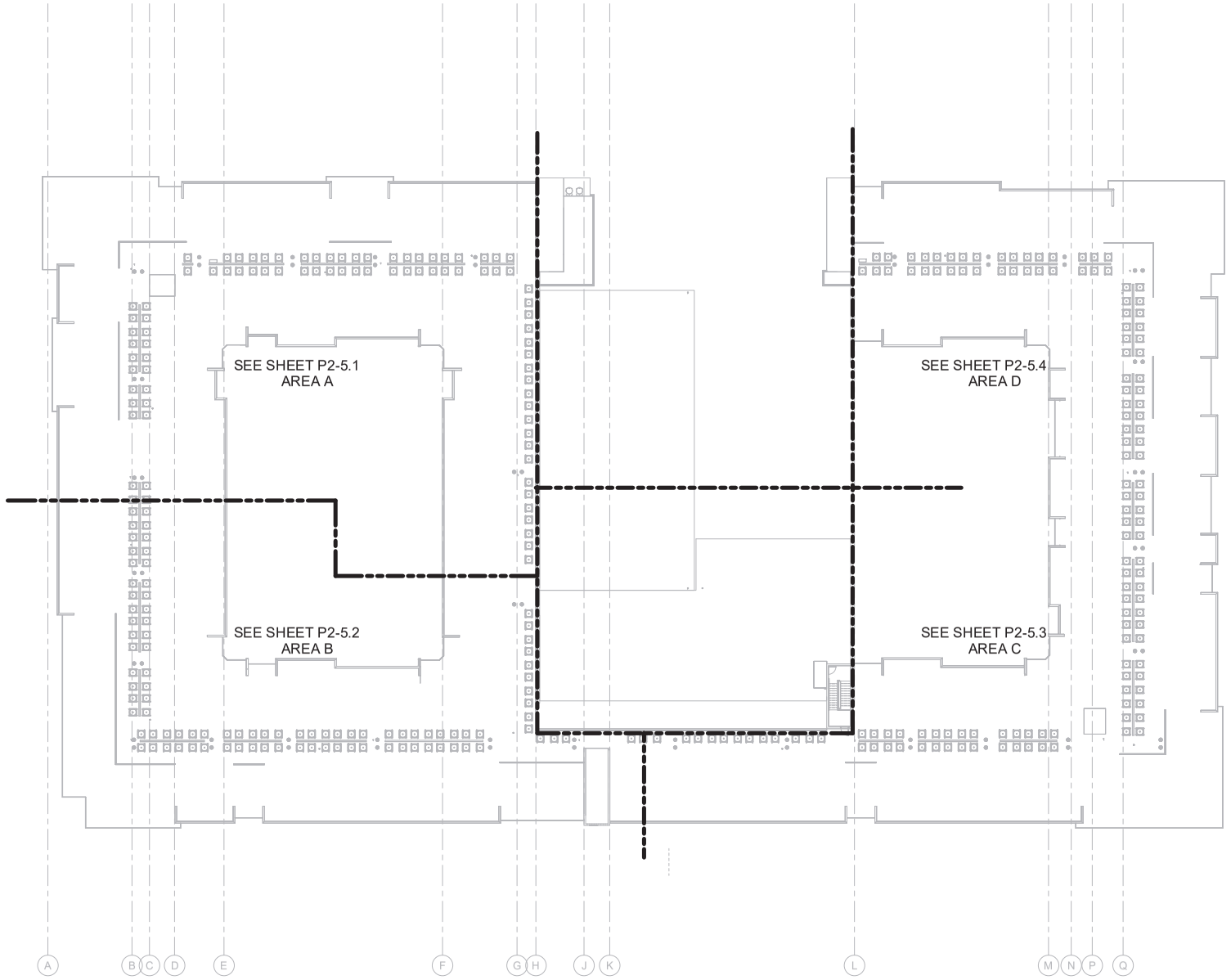

OVERALL ROOF PLUMBING PLAN
SCALE: 1/16" = 1'-0"

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No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM
Title	OVERALL ROOF PLUMBING PLAN
Sheet Number	P1-5.0

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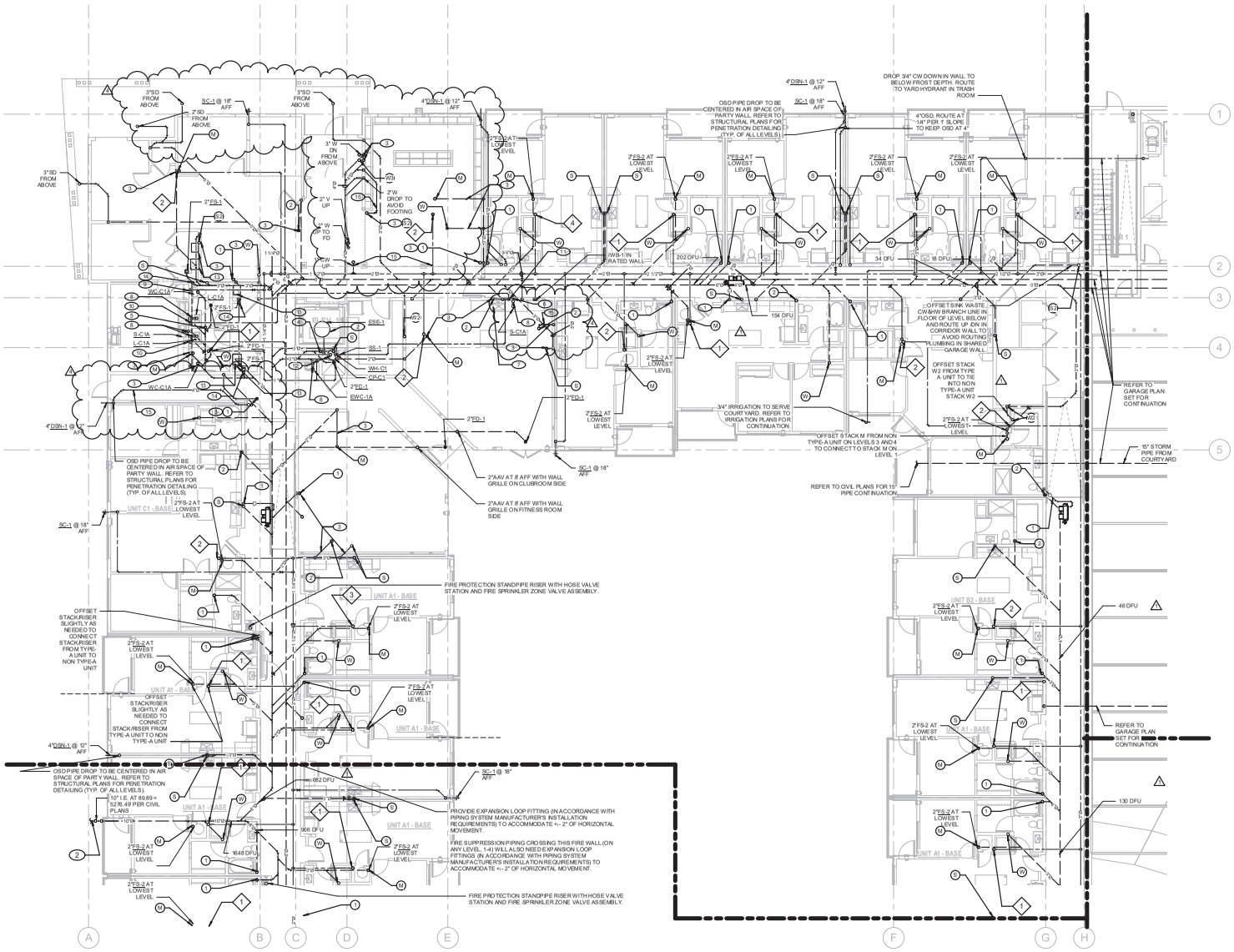

LEVEL 1 PLUMBING PLAN - AREA A

SCALE: 1/8" = 1'-0"

KEYNOTES:

1. CONNECT 3/4" CONDENSATE DRAIN TO FAN COIL. EXTEND DRAIN DOWN IN WALL AND CONNECT TO DIVERTER TEE INSTALLED AT WASHER WALL BOX. SINK, OR LAVATORY.
2. EXTEND 2" INDIRECT DRAIN FROM ELEVATOR SUMP PUMP LOCATED IN 24"X24"X24" PIT AT BOTTOM OF ELEVATOR SHAFT TO FLOOR SINK/MOP SINK WITH 1" AIR BREAK. REFER TO ELEVATOR SUMP PUMP DETAIL 5/P7-0.1.
3. OFFSET SANITARY PIPING IN LEVEL 1 CEILING SPACE TO DROP IN NEAREST WALL TO BELOW SLAB.
4. 2"AAV TO 8' AFF WITH WALL GRILLE ON JANITOR'S CLOSET SIDE
5. 2"AAV TO 8' AFF WITH WALL GRILLE ON NORTH RESTROOM SIDE
6. DROP SINK WASTE IN WALL TO TIE INTO WASTE MAIN.
7. CONNECT 1/2"HW AND FULL SIZE DRAIN TO DISHWASHER. RE: DETAIL 2/P7-0.1.
8. PROVIDE AIR ADMITTANCE VALVE INSTALLED ON TRAP ARM BELOW SINK/LAVATORY/EWC.
9. 1"CW DOWN IN WALL AND OFFSET FULLSIZE TO SERVE (2) LAVATORIES, (1) SINK, AND (2) WATER CLOSETS.
10. 3/4"HW DOWN IN WALL AND OFFSET FULLSIZE TO SERVE (2) LAVATORIES AND (1) SINK. LOOP 3/4"HW BACK TO CEILING SPACE AS SHOWN. UNCIRCULATED HW BRANCH TO LAVATORY 8' MAXIMUM LENGTH IN COMPLIANCE WITH 2018 IECC.
11. 3/4"HW DOWN IN WALL TO SERVE (1) SINK. LOOP 3/4"HW BACK TO CEILING SPACE AS SHOWN.
12. 3/4"CW, 3/4"HW AND 3/4"HWR TO WATER HEATER. RE: CEILING MTD. ELEC. WATER HEATER DETAIL 4/P7-0.1.
13. ROUTE 3/4" CONDENSATE DRAIN FROM FCU TO FLOOR SINK AND AIRGAP.
14. 2"AAV TO 8' AFF WITH WALL GRILLE ON MECHANICAL ROOM SIDE.
15. PIPE THROUGH STRUCTURAL ELEMENT. COORDINATE PENETRATION DETAILING WITH STRUCTURAL PLANS.

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No.	Date	Issue
3		
4	8.7.2024	IPC

Project Architect: DV
Project Designer: DR
Date: 06/29/2023
Job Number: 222001
Drawn By: JW
Checked By: BM

Title: ENLARGED LEVEL 1 PLUMBING PLAN - AREA A

Sheet Number: P2-1.5

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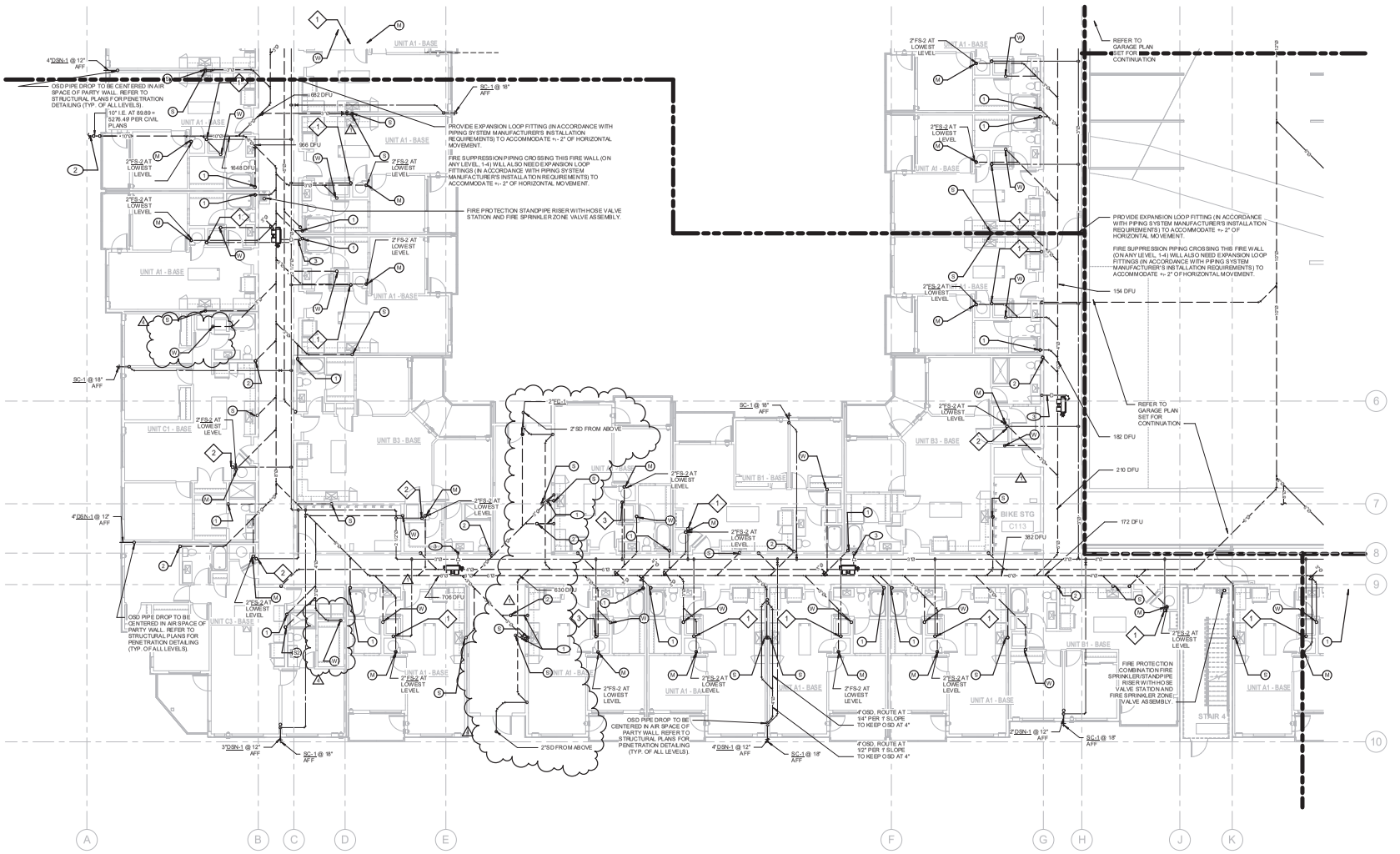

LEVEL 1 PLUMBING PLAN - AREA B

SCALE: 1/8" = 1'-0"

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MARSHALL POINTE

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No.	Date	Issue
3	10.03.2023	PCH RESPONSE
4	07.2024	DPC

Project Architect: DV
Project Designer: DR
Date: 06/29/2023
Job Number: 222001
Drawn By: JW
Checked By: BM

Title: ENLARGED LEVEL 1 PLUMBING PLAN - AREA B

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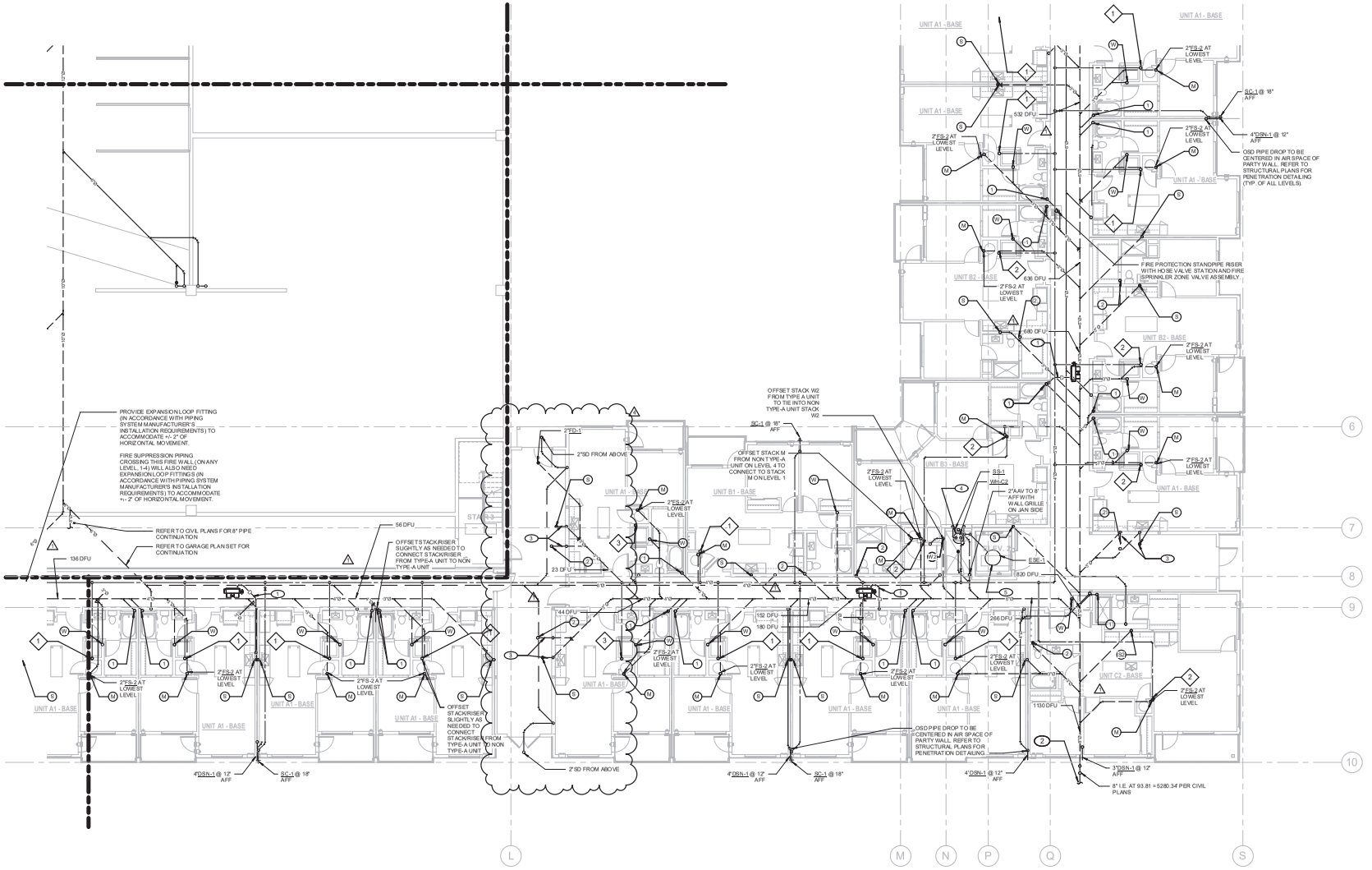

LEVEL 1 PLUMBING PLAN - AREA C
SCALE: 1/8" = 1'-0"

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MARSHALL POINTE

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No.	Date	Issue
1	10.03.2023	PCH RESPONSE
2		
3		
4	8.7.2024	DPC

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM
Title	ENLARGED LEVEL 1 PLUMBING PLAN - AREA C
Sheet Number	P2-1.7

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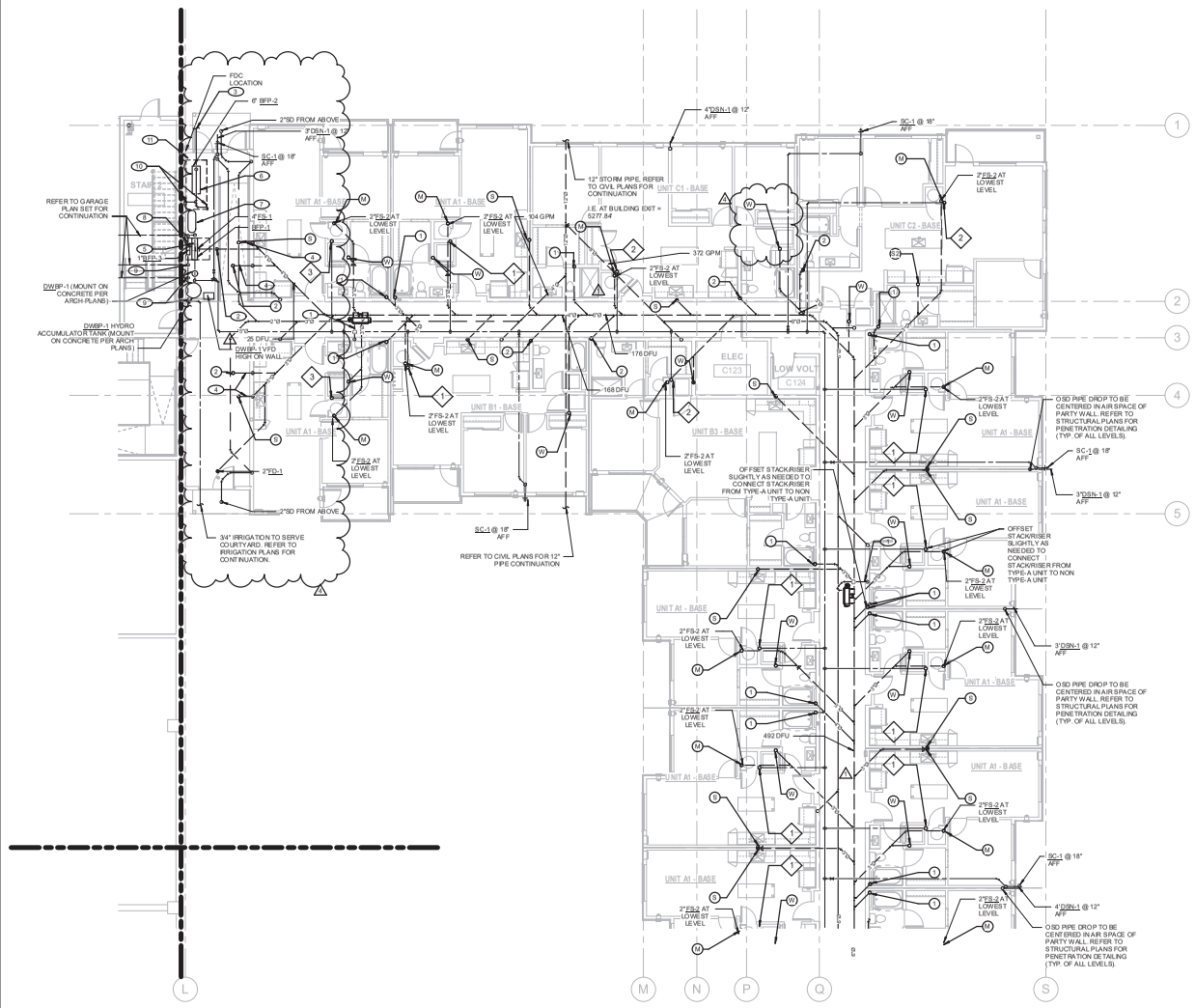

LEVEL 1 PLUMBING PLAN - AREA D

SCALE: 1/8" = 1'-0"

KEYNOTES:

1. CONNECT 3/4" CONDENSATE DRAIN TO FAN COIL. EXTEND DRAIN DOWN IN WALL AND CONNECT TO DIVERTER TEE INSTALLED AT WASHER WALL BOX, SINK, OR LAVATORY.
2. 2" AAV TO RISE IN WALL TO 8' AFF AND TERMINATE WITH WALL GRILLE ON WATER ENTRY ROOM SIDE.
3. CONNECT 6" AUTOMATIC FIRE SPRINKLER SERVICE TO MAIN EXTENDED UP TO THE BUILDING IN THE SITE UTILITIES PHASE OF WORK. REFER TO CIVIL DRAWINGS FOR CONTINUATION.
4. OFFSET SANITARY PIPING IN LEVEL 1 CEILING SPACE TO DROP IN NEAREST WALL TO BELOW SLAB.
5. 3" DOMESTIC WATER ENTRY SERVICE WITH REDUCED PRESSURE BACKFLOW PREVENTER BFP-1. SIZED TO MATCH WATER SERVICE SIZE. BFP-1 TO BE PROVIDED WITH FLOOD PREVENTION VALVE INSTALLED AT 18" AFF. EXTEND FULL SIZE RELIEF DRAIN FROM BACKFLOW PREVENTOR TO FLOOR SINK AND DISCHARGE WITH 2" AIR GAP.
6. 6" FIRE ENTRY WITH 6" DOUBLE CHECK VALVE BACKFLOW PREVENTER BFP-2 INSTALLED VERTICALLY. INSTALL TO ALLOW 12" CLEARANCE TO ALL WALLS, 30" CLEAR ON THE VALVE SIDE, AT LEAST 32" FROM CENTER OF FIRE PROTECTION PIPE RISE TO THE ENTRY DOOR, AND AT LEAST 24" CLEAR BACKFLOW PREVENTER TO THE ENTRY DOOR TO ALLOW MAINTENANCE ACCESS. TEST PORTS TO FACE SOUTH, VALVES TO FACE WEST.
7. DRY FIRE SPRINKLER SYSTEM ZONE VALVE ASSEMBLY AND AIR COMPRESSOR FOR UNHEATED GARAGE LEVEL. ESTIMATED COMPRESSOR SIZE = 2 HP. FIRE PROTECTION SYSTEM DESIGNER TO CONFIRM ACTUAL COMPRESSOR SIZE WITH GENERAL CONTRACTOR AND ELECTRICAL ENGINEER AFTER DESIGN OF GARAGE DRY SYSTEM IS COMPLETE.
8. 1" IRRIGATION SERVICE WITH 1" REDUCED PRESSURE BACKFLOW PREVENTION ASSEMBLY (BFP-3). DROP DOWN TO BELOW SLAB DOWNSTEAM OF BFP-3 AND EXTEND 1"IRR TO EACH COURTYARD. EXTEND FULL SIZE DRAIN FROM BACKFLOW PREVENTOR TO FLOOR SINK AND DISCHARGE WITH 2" AIR GAP. INSTALL BACKFLOW PREVENTER STACKED ABOVE BFP-1. BACKFLOW IS SHOWN OFFSET FOR DRAWING CLARITY BUT SHOULD HAVE 12" CLEAR FROM BACK SIDE OF BFP-3 TO WALL.
9. 3/4" IRRIGATION LINE BELOW GRADE TO SERVE COURTYARD OR EXTERIOR SPRINKLERS. REFER TO IRRIGATION CONSULTANT DRAWINGS FOR CONTINUATION.
10. REFER TO FIRE PROTECTION DESIGN BUILD CONTRACTOR PLANS FOR FIRE SUPPRESSION PIPING CONTINUATIONS.
11. COORDINATE SLEEVING WITH STRUCTURAL FOR PIPE RISES UP FROM BELOW AND THROUGH FOOTER FOR TEH WATER MAINS IN THIS AREA.

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ARVADA, CO 80002

No.	Date	Issue
1	10.03.2023	PCI RESPONSE
2		
4	8.7.2024	PC

Project Architect: DV
Project Designer: DR
Date: 06/29/2023
Job Number: 222001
Drawn By: JW
Checked By: BM
Title: ENLARGED LEVEL 1 PLUMBING PLAN - AREA D
Sheet Number: P2-1.8

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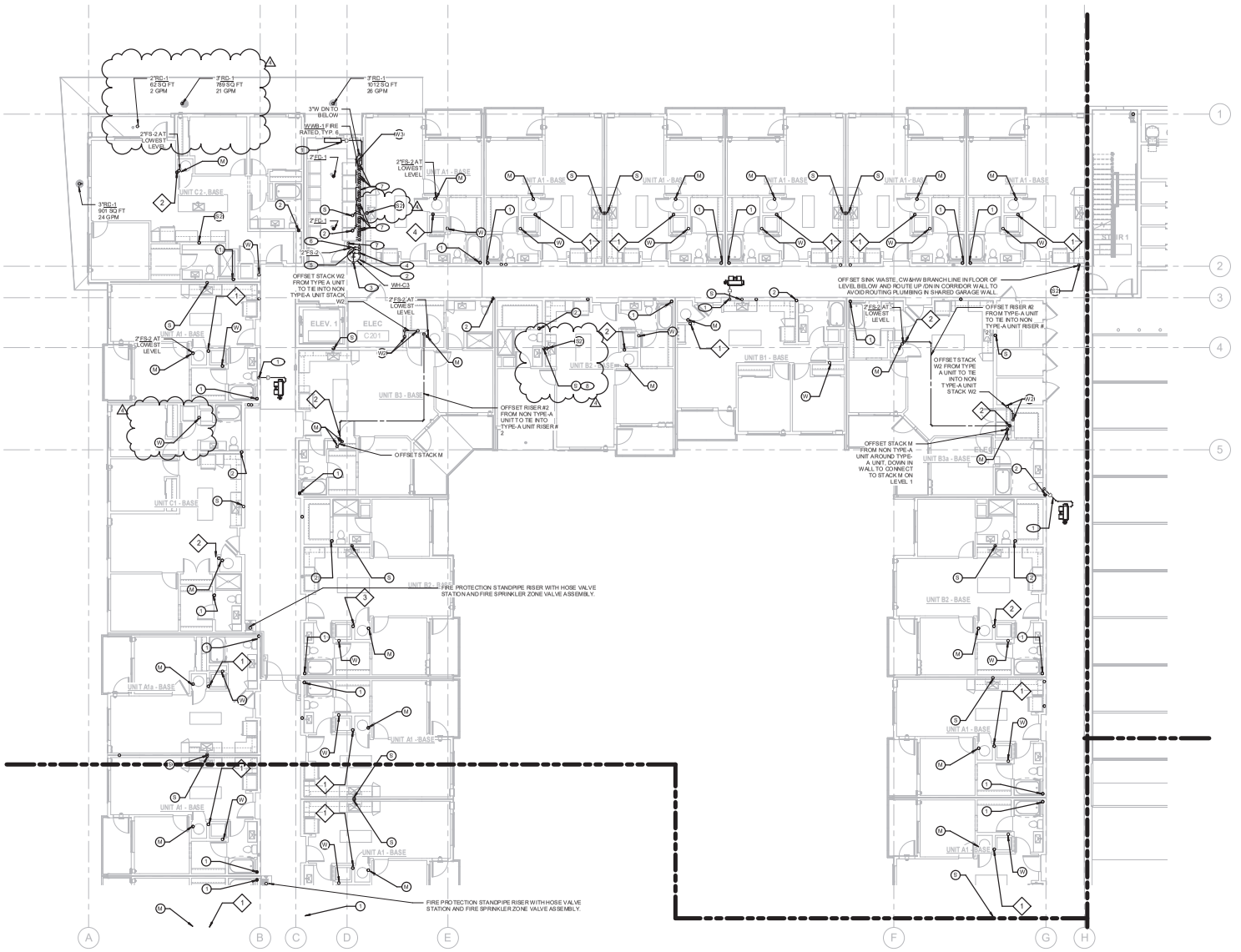

LEVEL 2 PLUMBING PLAN - AREA A

SCALE: 1/8" = 1'-0"

KEYNOTES:

1. CONNECT 3/4" CONDENSATE DRAIN TO FAN COIL. EXTEND DRAIN DOWN IN WALL AND CONNECT TO DIVERTER TEE INSTALLED AT WASHER WALL BOX, SINK, OR LAVATORY.
2. 1"CW, 1"HW TO WATER HEATER. RE: ELEC. WATER HEATER DETAIL 6/P7-0.1.
3. 1"CW UP FROM BELOW TO SERVE WATER HEATER AND (6) CLOTHES WASHERS. PROVIDE SHUT OFF VALVE UPSTREAM OF WATER HEATER TAKE OFF.
4. 1" CW IN WALL AND OFFSET FULL SIZE TO SERVE (6) CLOTHES WASHERS.
5. ROUTE 3/4" HW BRANCH OFF OF 1" HW MAIN FROM WATER HEATER AND ROUTE DOWN IN WALL AND OFFSET FULL SIZE TO SERVE THE FIRST (3) CLOTHES WASHERS. ROUTE HW IN SUCH A WAY THAT THE MAXIMUM LENGTH OF PIPING FROM WATER HEATER TO FURTHEST FIXTURE IS 2'1" OR LESS TO COMPLY WITH THE 2018 IECC.
6. ROUTE 3/4" HW BRANCH OFF OF 1" HW MAIN FROM WATER HEATER AND ROUTE DOWN IN WALL AND OFFSET FULL SIZE TO SERVE THE SECOND (3) CLOTHES WASHERS. ROUTE HW IN SUCH A WAY THAT THE MAXIMUM LENGTH OF PIPING FROM WATER HEATER TO FURTHEST FIXTURE IS 2'1" OR LESS TO COMPLY WITH THE 2018 IECC.
7. 2"A/W TO 8" AFF WITH WALL GRILLE ON LAUNDRY ROOM SIDE.
8. OFFSET WASTE STACK INTO SINK CASEWORK TO AVOID STRCTURAL BEAM BELOW AND TIE INTO 'S2' TYPE WASTE STACK SERVING SINGLE DWELLING UNIT. WASTE STACK TO BE 3".

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No.	Date	Issue
4	8.7.2024	IFC

Project Architect: DV
Project Designer: DR
Date: 06/29/2023
Job Number: 222001
Drawn By: JW
Checked By: BM
Title: ENLARGED LEVEL 2 PLUMBING PLAN - AREA A
Sheet Number: P2-2.1

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KEYNOTES

1. CONNECT 3/4" CONDENSATE DRAIN TO FAN COIL. EXTEND DRAIN DOWN IN WALL AND CONNECT TO DIVERTER TEE INSTALLED AT WASHER WALL BOX, SINK, OR LAVATORY.

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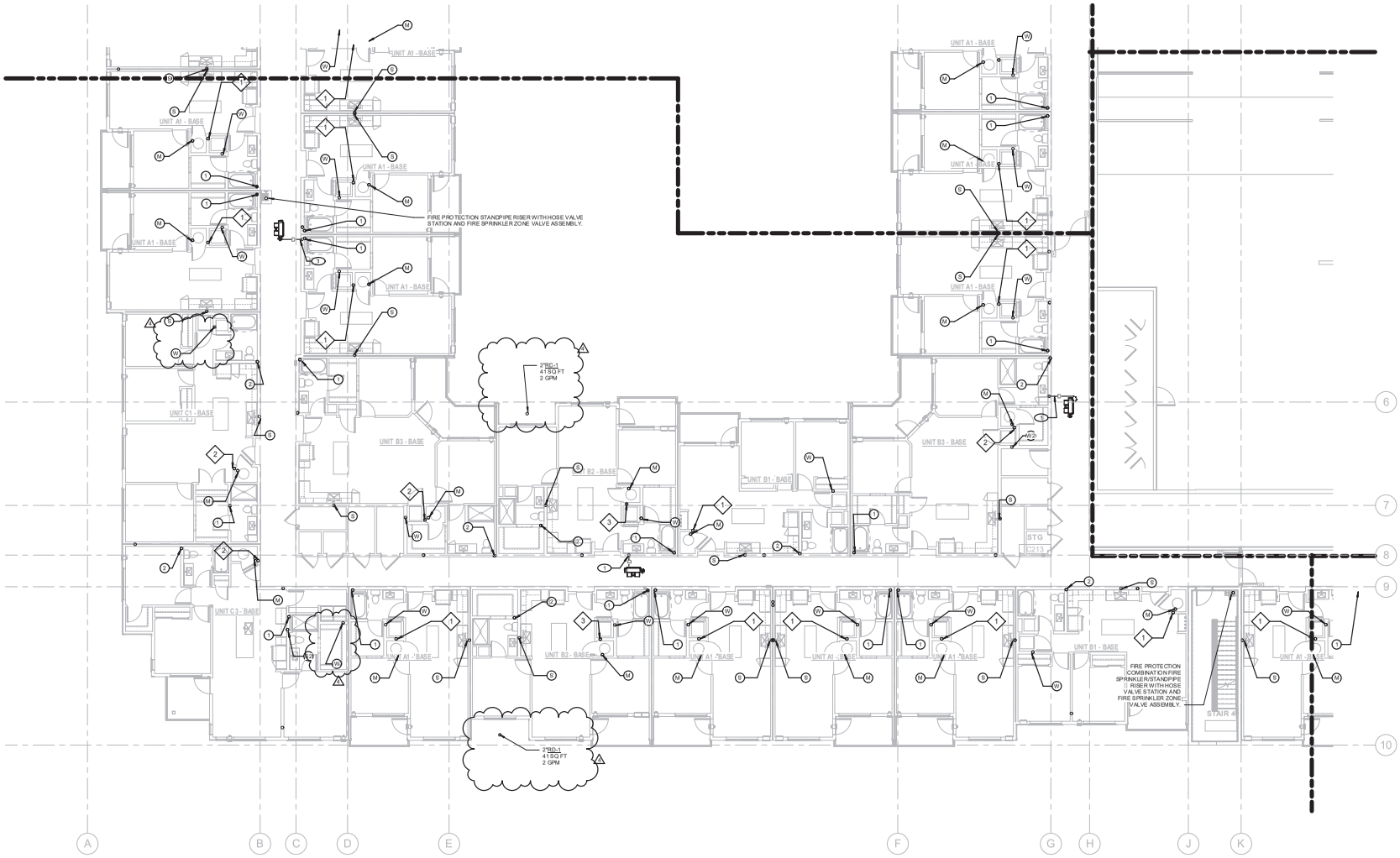

LEVEL 2 PLUMBING PLAN - AREA B

SCALE: 1/8" = 1'-0"

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No.	Date	Issue
1	07.2024	IPC

Project Architect: DV
Project Designer: DR
Date: 06/29/2023
Job Number: 222001
Drawn By: JW
Checked By: BM

Title: ENLARGED LEVEL 2 PLUMBING PLAN - AREA B

Sheet Number: **P2-2.2**

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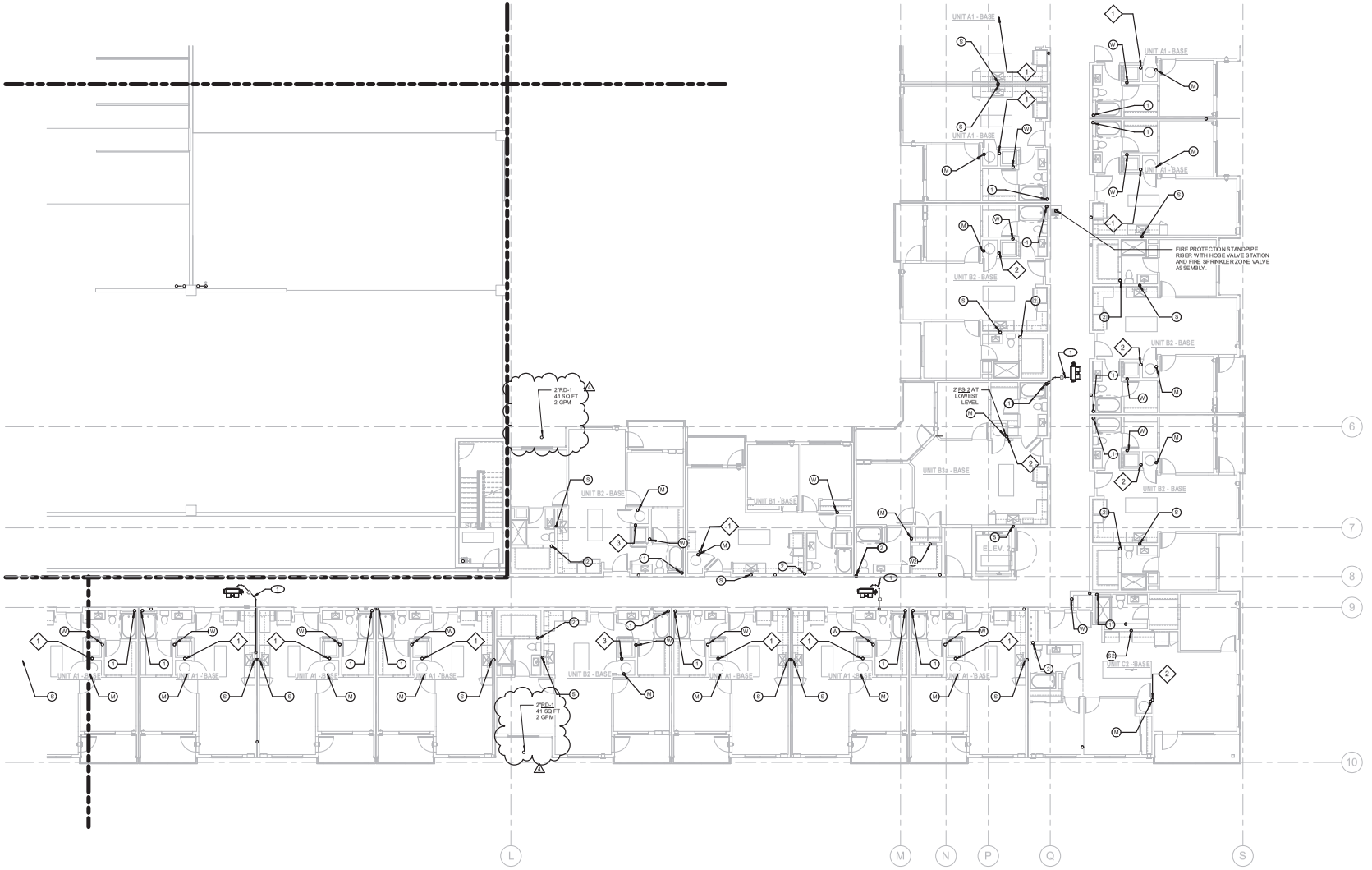
KEYNOTES:

1. CONNECT 3/4" CONDENSATE DRAIN TO FAN COIL, EXTEND DRAIN DOWN IN WALL AND CONNECT TO DIVERTER TEE INSTALLED AT WASHER WALL BOX, SINK, OR LAVATORY.

WASTE AND VENT RISER

DOMESTIC WATER RISER



LEVEL 2 PLUMBING PLAN - AREA C

SCALE: 1/8" = 1'-0"

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No.	Date	Issue
4	8.7.2024	IFC

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM
Title	ENLARGED LEVEL 2 PLUMBING PLAN - AREA C
Sheet Number	P2-2.3

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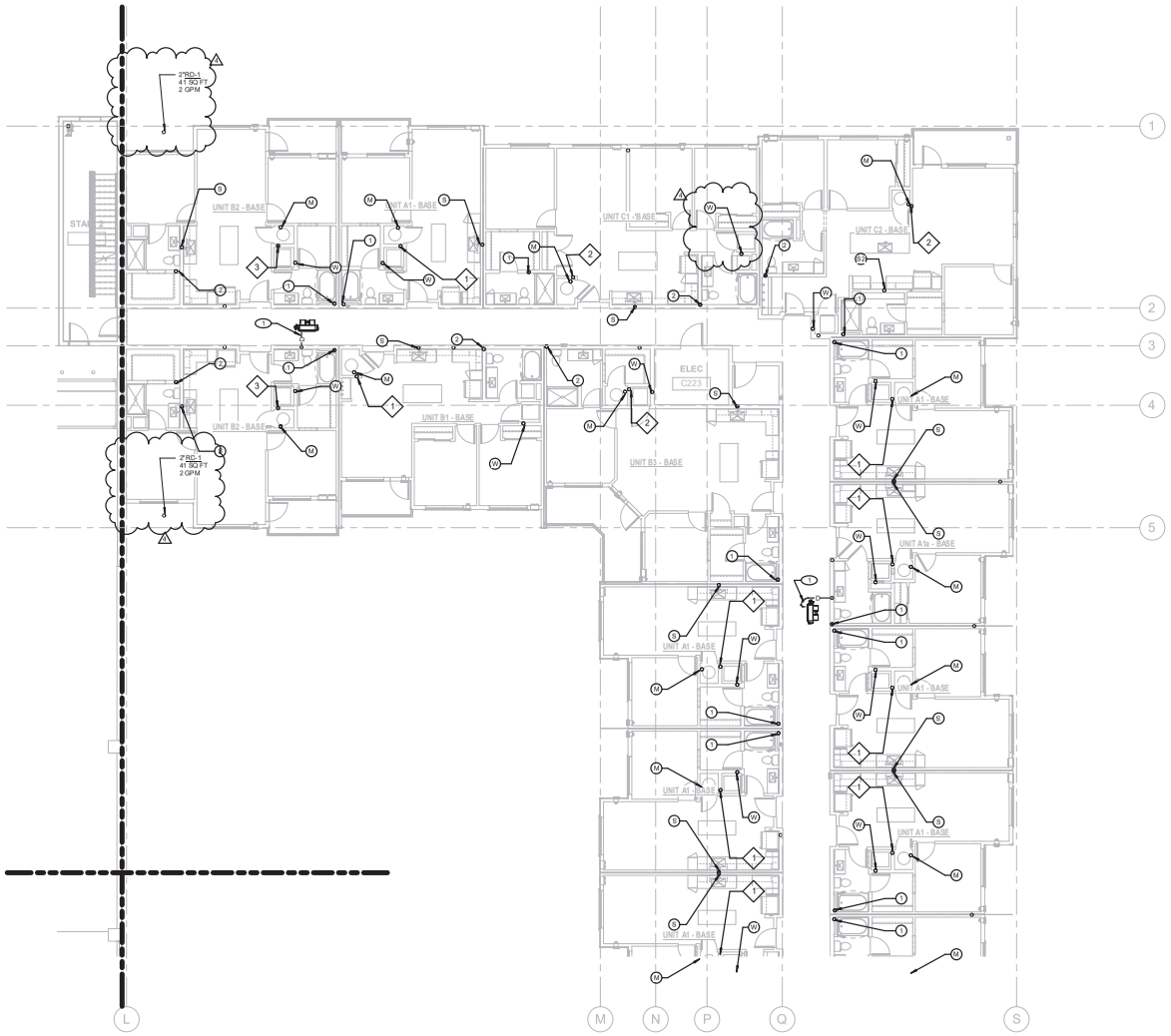

LEVEL 2 PLUMBING PLAN - AREA D

SCALE: 1/8" = 1'-0"

KEYNOTES:

1. CONNECT 3/4" CONDENSATE DRAIN TO FAN COIL, EXTEND DRAIN DOWN IN WALL AND CONNECT TO DIVERTER TEE INSTALLED AT WASHER WALL BOX, SINK, OR LAVATORY.

WASTE AND VENT RISER

DOMESTIC WATER RISER

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ARVADA, CO 80002

No.	Date	Issue
4	8.7.2024	IFC

Project Architect: DV

Project Designer: DR

Date: 06/29/2023

Job Number: 222001

Drawn By: JW

Checked By: BM

Title: ENLARGED LEVEL 2 PLUMBING PLAN - AREA D

Sheet Number: P2-2.4

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KEYNOTES

1. CONNECT 3/4" CONDENSATE DRAIN TO FAN COIL. EXTEND DRAIN DOWN IN WALL AND CONNECT TO DIVERTER TEE INSTALLED AT WASHER WALL BOX, SINK, OR LAVATORY.

WASTE AND VENT RISER

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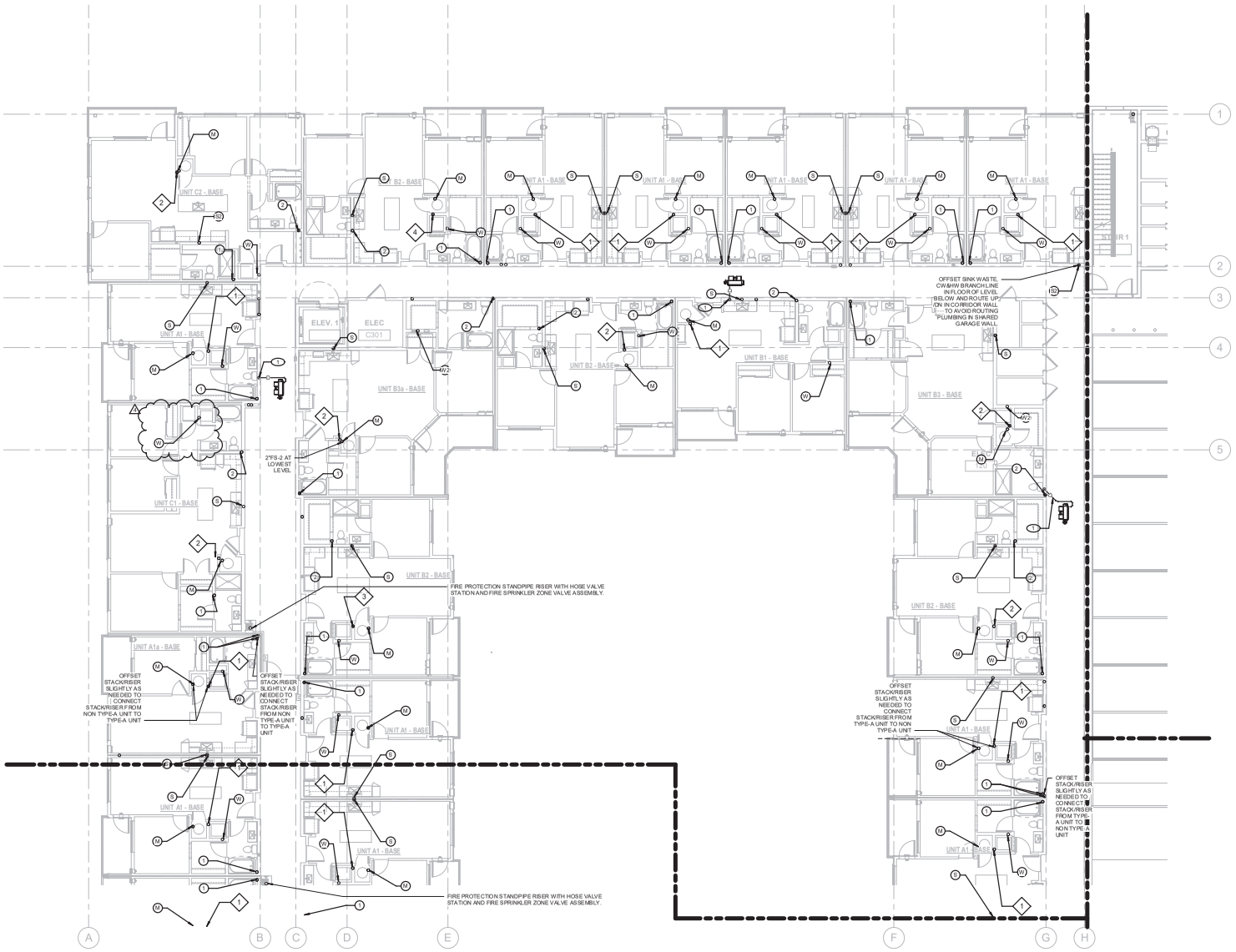

LEVEL 3 PLUMBING PLAN - AREA A

SCALE: 1/8" = 1'-0"

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No.	Date	Issue
1	07.2024	DPC

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM
Title	ENLARGED LEVEL 3 PLUMBING PLAN - AREA A
Sheet Number	P2-3.1

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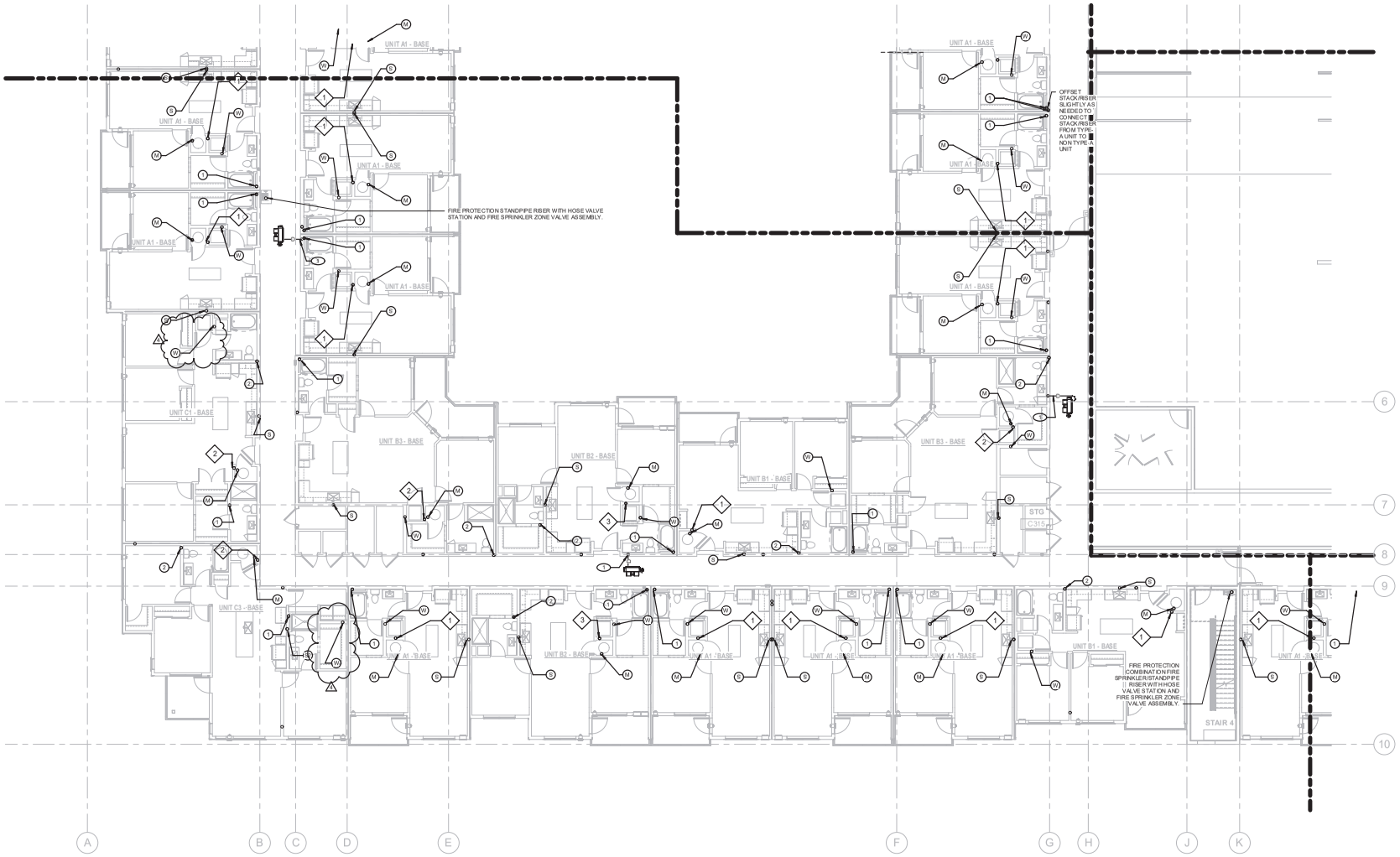
KEYNOTES

1. CONNECT 3/4" CONDENSATE DRAIN TO FAN COIL. EXTEND DRAIN DOWN IN WALL AND CONNECT TO DIVERTER TEE INSTALLED AT WASHER WALL BOX, SINK, OR LAVATORY.

W — WASTE AND VENT RISER

D — DOMESTIC WATER RISER



LEVEL 3 PLUMBING PLAN - AREA B

SCALE: 1/8" = 1'-0"

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MARSHALL POINTE

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ARVADA, CO 80002

No.	Date	Issue
1	07.2024	IFC

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM
Title	ENLARGED LEVEL 3 PLUMBING PLAN - AREA B
Sheet Number	P2-3.2

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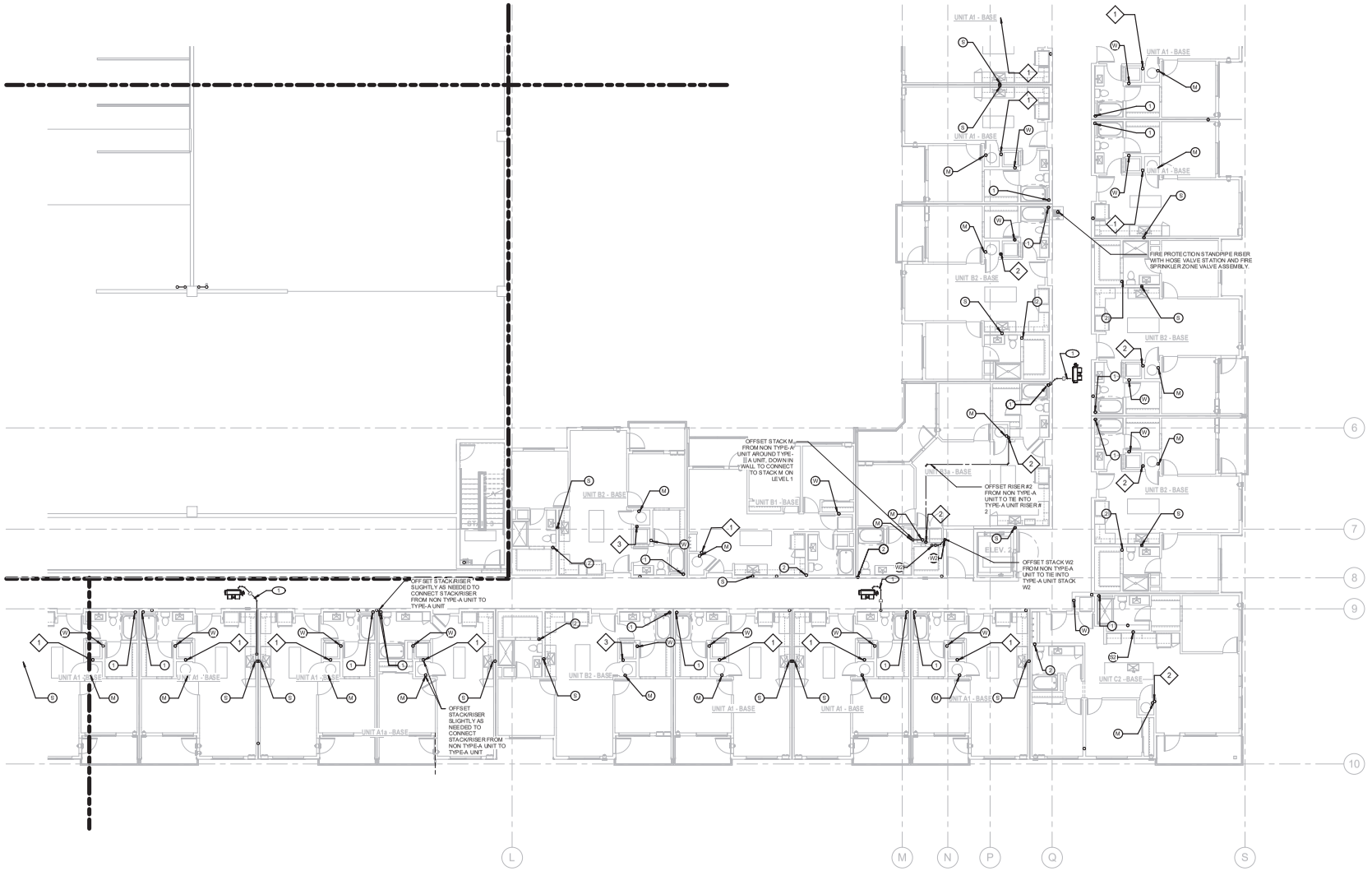
KEYNOTES

1 CONNECT 3/4" CONDENSATE DRAIN TO FAN COIL. EXTEND DRAIN DOWN IN WALL AND CONNECT TO DIVERTER TEE INSTALLED AT WASHER WALL BOX, SINK, OR LAVATORY.

WASTE AND VENT RISER

DOMESTIC WATER RISER



LEVEL 3 PLUMBING PLAN - AREA C

SCALE: 1/8" = 1'-0"

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No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM
Title	ENLARGED LEVEL 3 PLUMBING PLAN - AREA C
Sheet Number	P2-3.3

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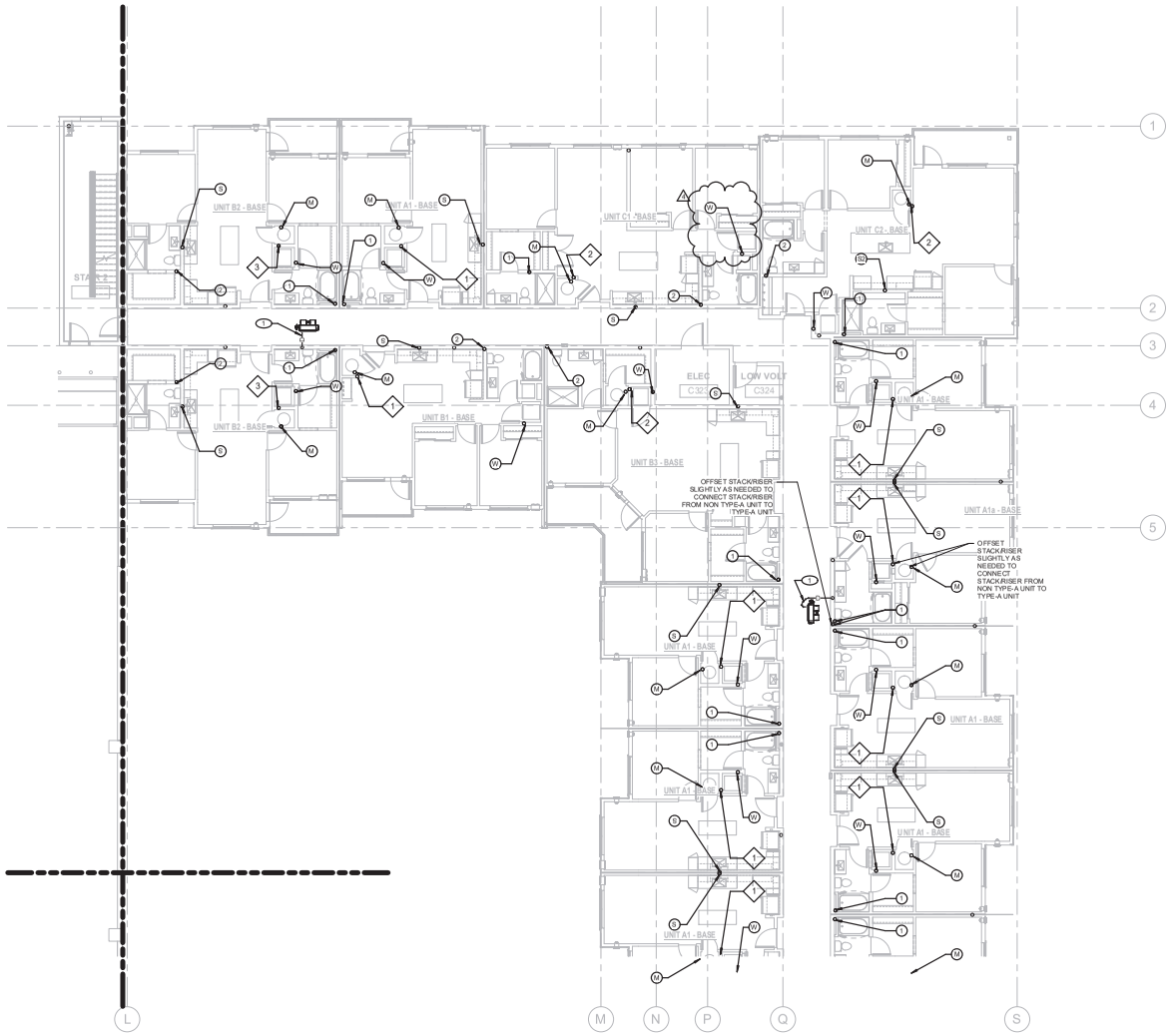
KEYNOTES

1 CONNECT 3/4" CONDENSATE DRAIN TO FAN COIL. EXTEND DRAIN DOWN IN WALL AND CONNECT TO DIVERTER TEE INSTALLED AT WASHER WALL BOX, SINK, OR LAVATORY.

WASTE AND VENT RISER

DOMESTIC WATER RISER



LEVEL 3 PLUMBING PLAN - AREA D

SCALE: 1/8" = 1'-0"

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No.	Date	Issue
1	07.2024	IPC

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM
Title	ENLARGED LEVEL 3 PLUMBING PLAN - AREA D
Sheet Number	P2-3.4

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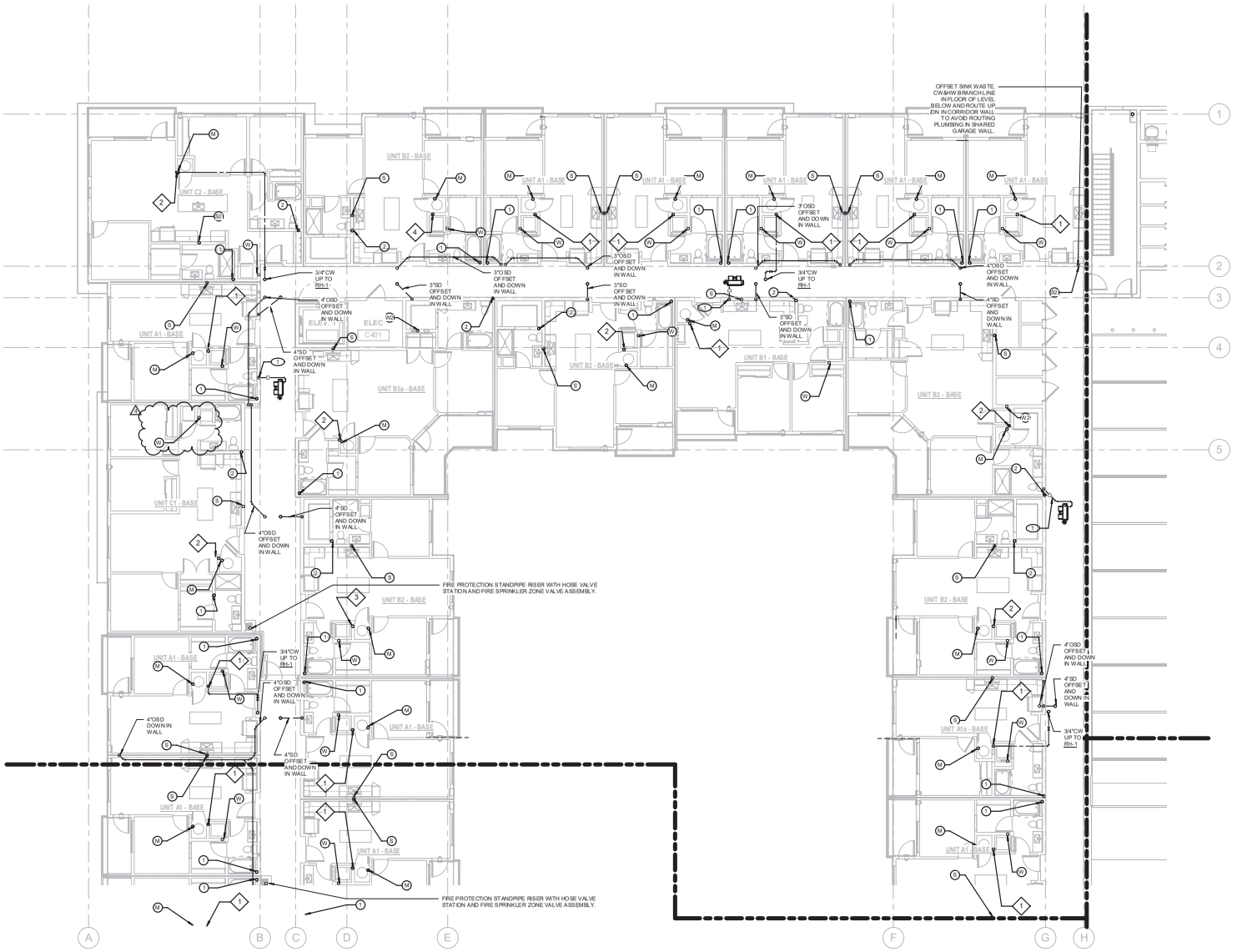

LEVEL 4 PLUMBING PLAN - AREA A
SCALE: 1/8" = 1'-0"

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No.	Date	Issue
1	07.2024	IPC

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM

Title: ENLARGED LEVEL 4 PLUMBING PLAN - AREA A

Sheet Number: **P2-4.1**

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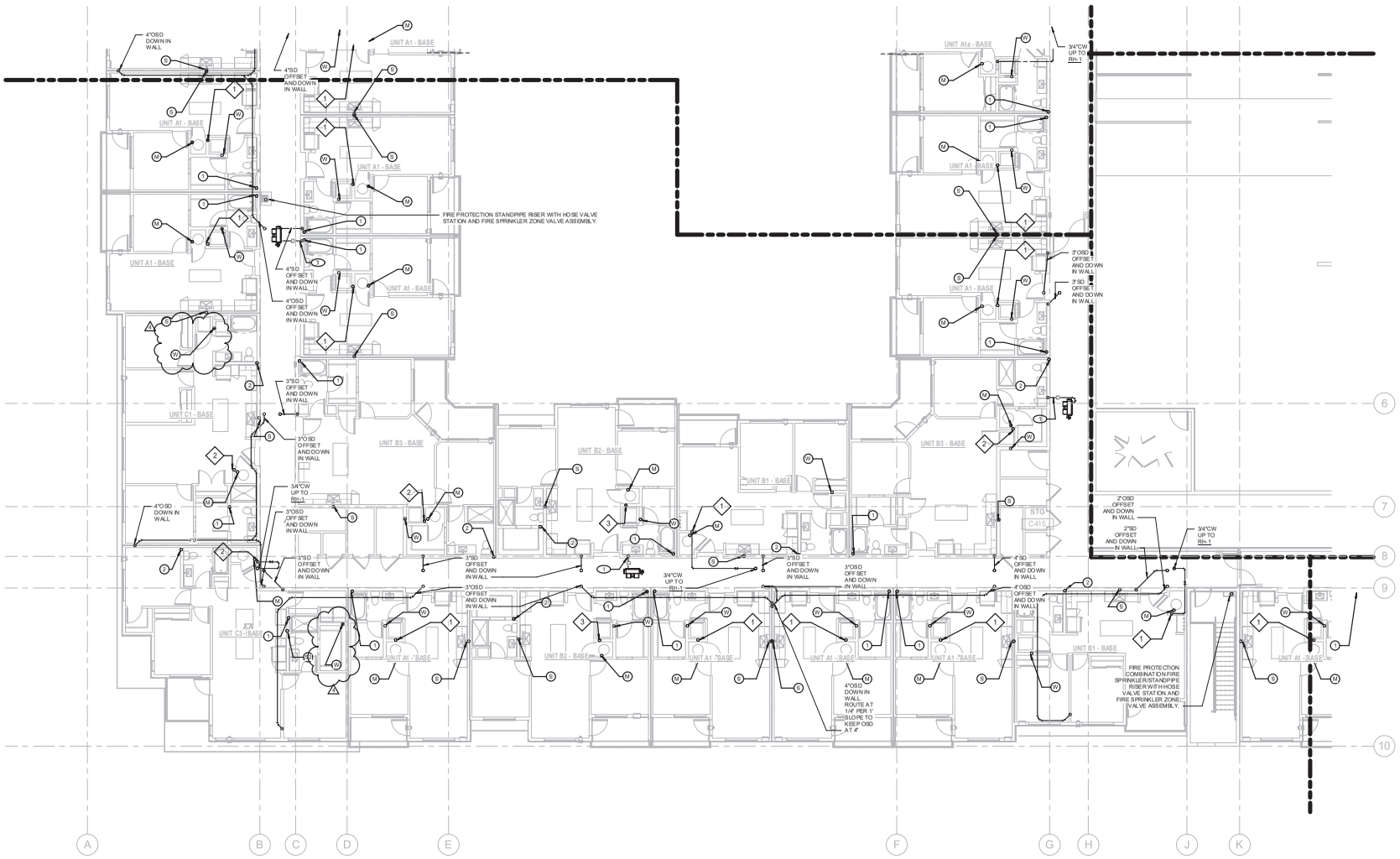

LEVEL 4 PLUMBING PLAN - AREA B

SCALE: 1/8" = 1'-0"

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No.	Date	Issue
1	07.2024	IFC

Project Architect: DV
Project Designer: DR
Date: 06/29/2023
Job Number: 222001
Drawn By: JW
Checked By: BM

Title: ENLARGED LEVEL 4 PLUMBING PLAN - AREA B

Sheet Number: **P2-4.2**

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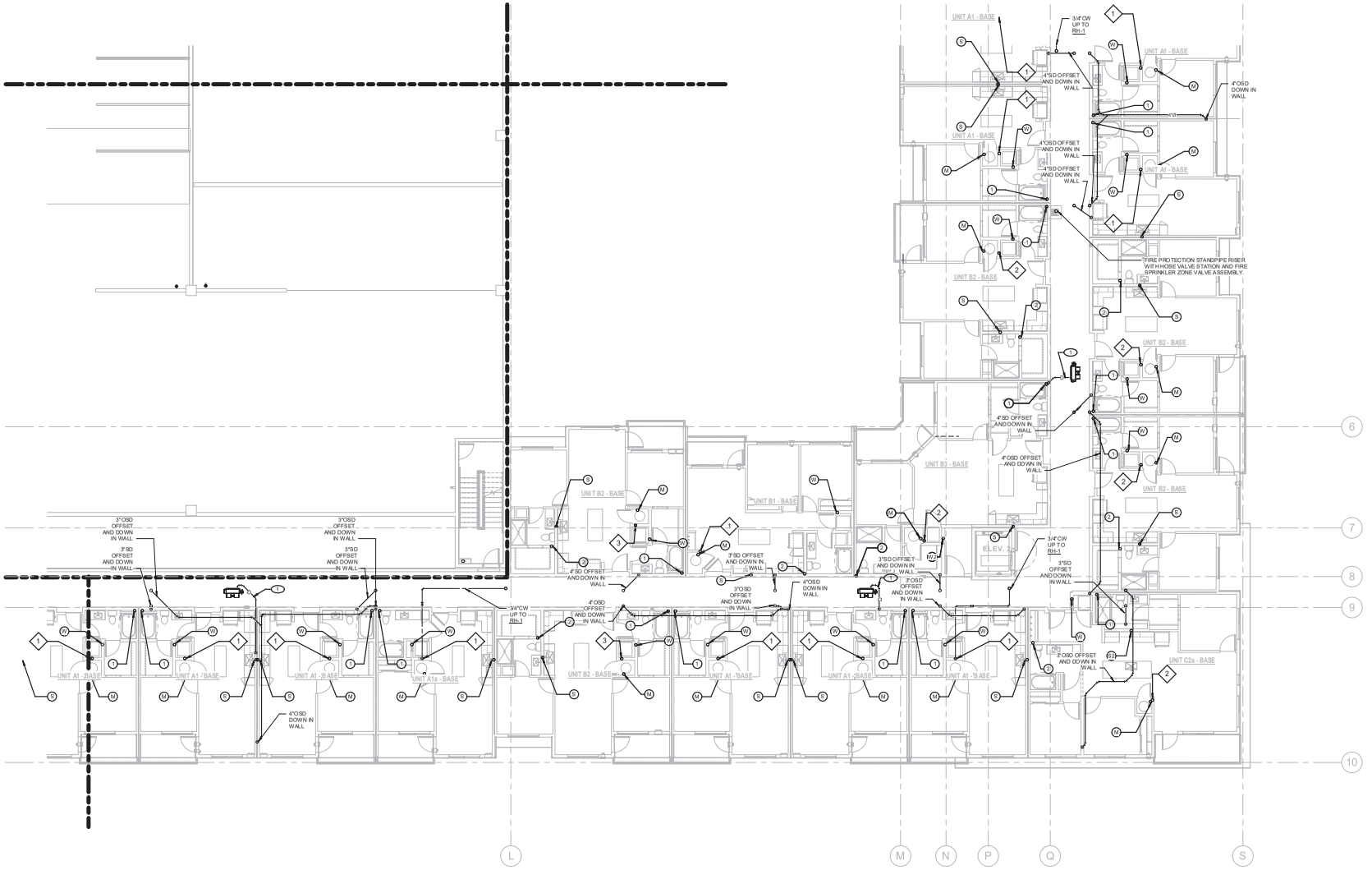
KEYNOTES

1 CONNECT 3/4" CONDENSATE DRAIN TO FAN COIL. EXTEND DRAIN DOWN IN WALL AND CONNECT TO DIVERTER TEE INSTALLED AT WASHER WALL BOX, SINK, OR LAVATORY.

WASTE AND VENT RISER

DOMESTIC WATER RISER



LEVEL 4 PLUMBING PLAN - AREA C

SCALE: 1/8" = 1'-0"

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No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
Checked By	BM
Title	ENLARGED LEVEL 4 PLUMBING PLAN - AREA C
Sheet Number	P2-4.3

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KEYNOTES:

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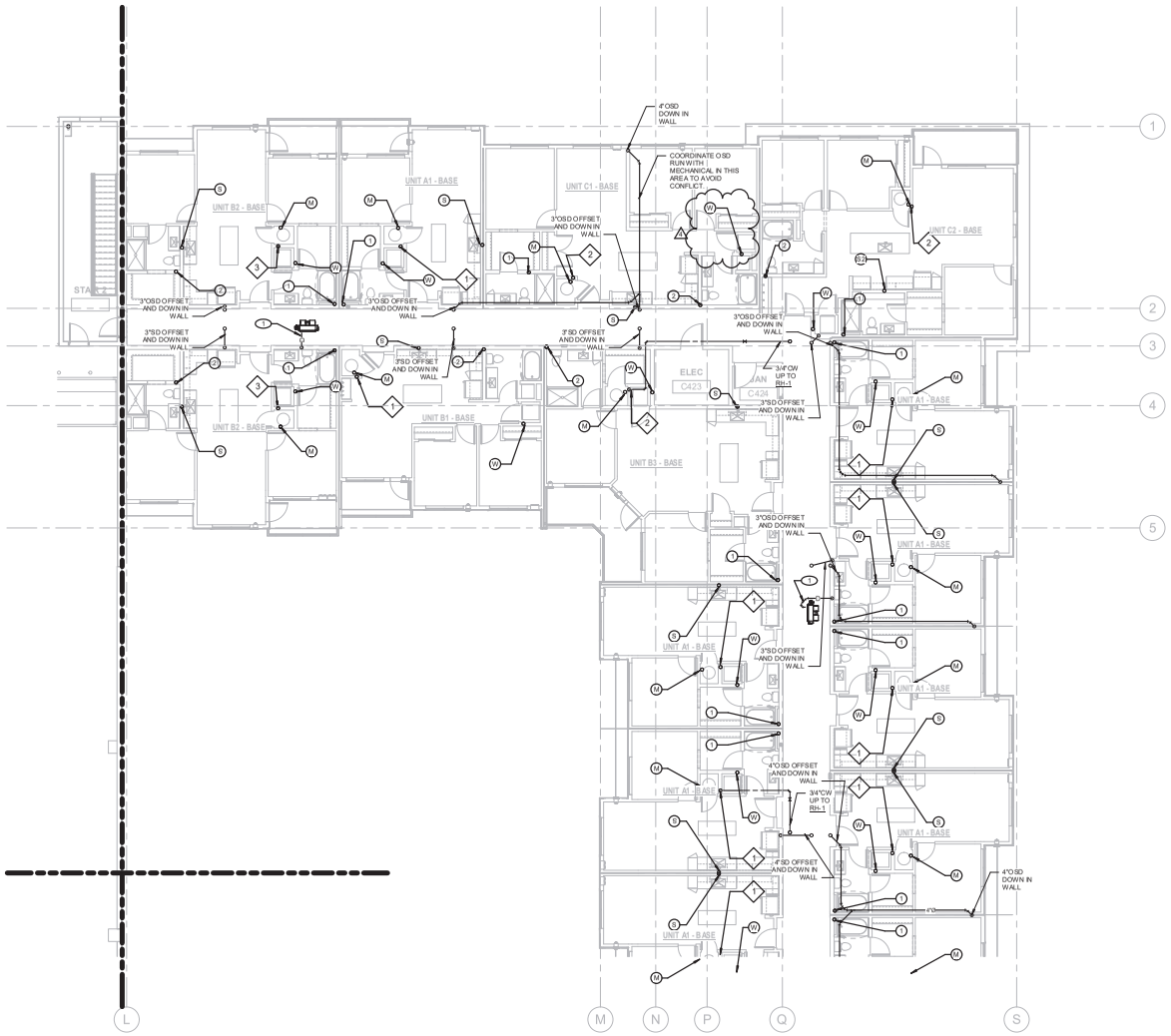
WASTE AND VENT RISER

DOMESTIC WATER RISER



LEVEL 4 PLUMBING PLAN - AREA D

SCALE: 1/8" = 1'-0"

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No.	Date	Issue
1	07.2024	IPC

Project Architect: DV
Project Designer: DR
Date: 06/29/2023
Job Number: 222001
Drawn By: JW
Checked By: BM

Title: ENLARGED LEVEL 4 PLUMBING PLAN - AREA D

Sheet Number: **P2-4.4**

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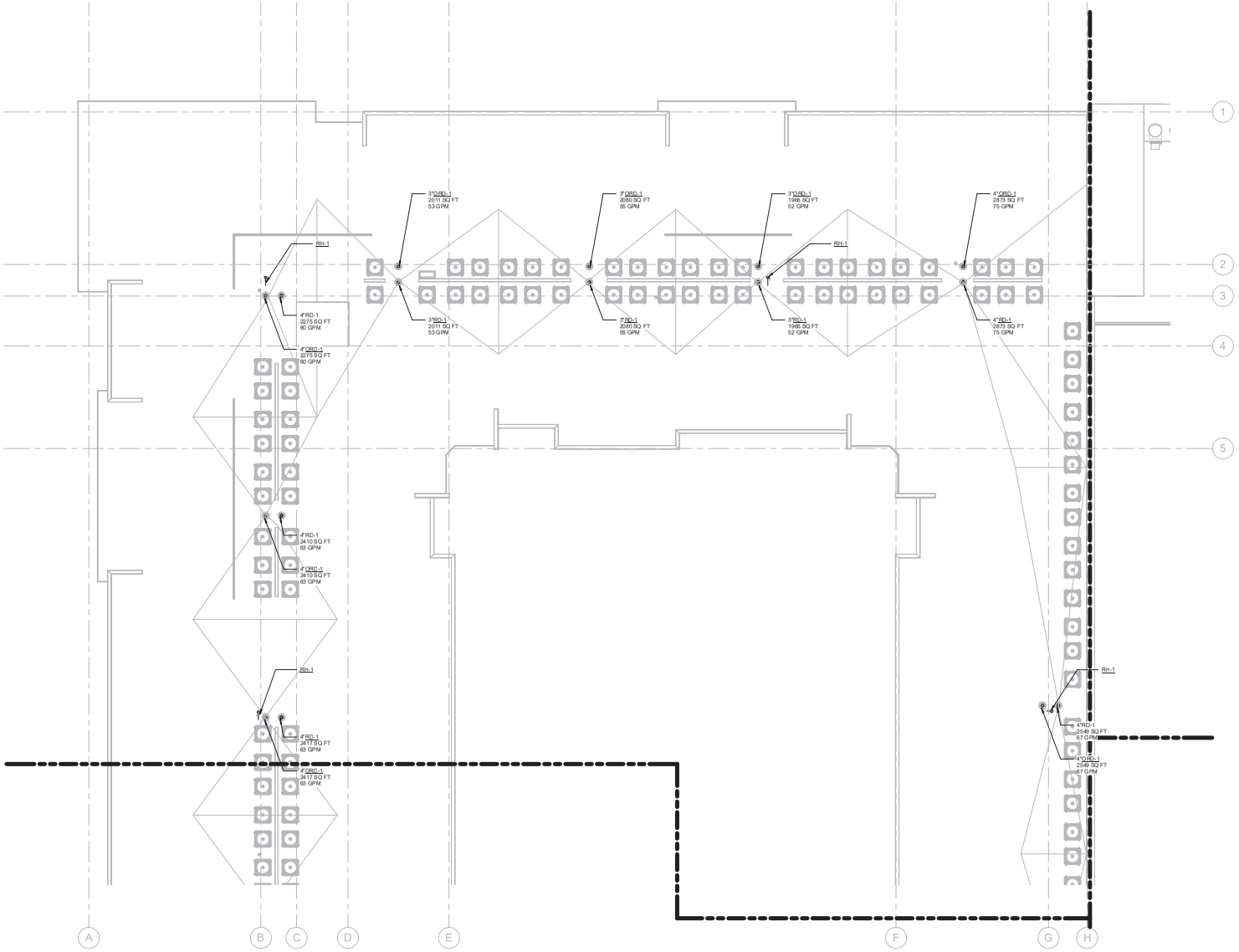
GENERAL NOTES:

COORDINATE ALL VENT THROUGH ROOF PENETRATIONS WITH MECHANICAL EQUIPMENT AND SOLAR PANELS LAYOUT. OFFSET VENT RISER IN LEVEL 4 CEILING SPACE AS NEEDED TO AVOID CONFLICT. KEEP VENTS THROUGH ROOF CLEAR OF CONDENSING UNIT WALKING PATH, BUT AS CLOSE TO WALKING PATH AS POSSIBLE (WITHIN 4' BAND OF CONDENSING UNITS)

THERE SHALL BE NO ROOF PENETRATIONS WITH 4'-0" OF ANY FIREWALL



ROOF PLUMBING PLAN - AREA A

SCALE: 1/8" = 1'-0"

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No.	Date	Issue

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Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
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Title	ENLARGED ROOF PLUMBING PLAN - AREA A
Sheet Number	P2-5.1

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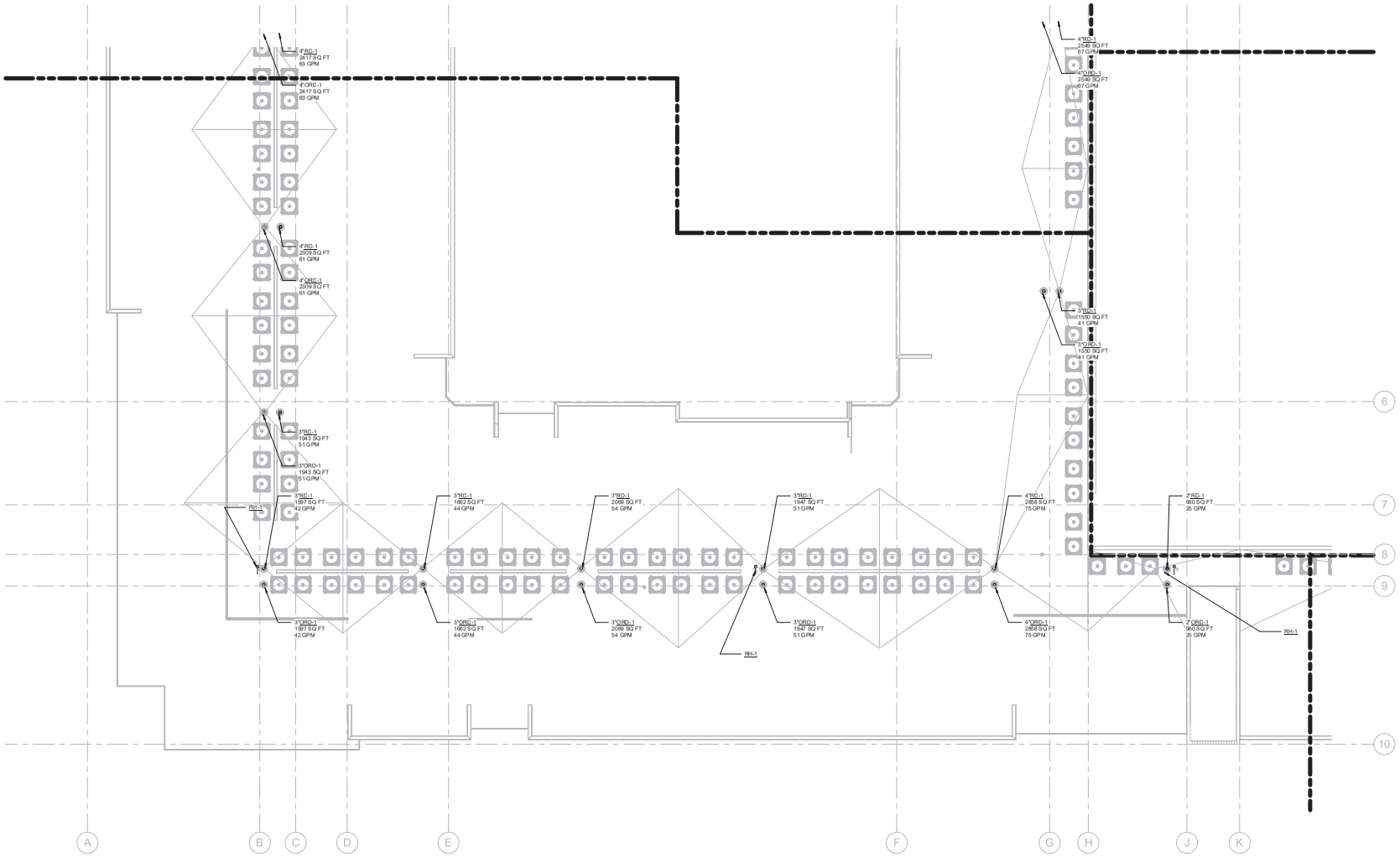
GENERAL NOTES:

COORDINATE ALL VENT THROUGH ROOF PENETRATIONS WITH MECHANICAL EQUIPMENT AND SOLAR PANELS LAYOUT. OFFSET VENT RISER IN LEVEL 4 CEILING SPACE AS NEEDED TO AVOID CONFLICT. KEEP VENTS THROUGH ROOF CLEAR OF CONDENSING UNIT WALKING PATH, BUT AS CLOSE TO WALKING PATH AS POSSIBLE (WITHIN 4' BAND OF CONDENSING UNITS)

THERE SHALL BE NO ROOF PENETRATIONS WITH 4'-0" OF ANY FIREWALL.



ROOF PLUMBING PLAN - AREA B

SCALE: 1/8" = 1'-0"

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No.	Date	Issue

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Project Designer	DR
Date	06/29/2023
Job Number	222001
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Title	ENLARGED ROOF PLUMBING PLAN - AREA B
Sheet Number	P2-5.2

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No.	Date	Issue

drawn/checked	DV
submitted/approved	DR
date	06/26/2023
scale/size	22x34
project #	JW
checked by	BM

title: ENLARGED ROOF PLUMBING PLAN - AREA C

sheet number: **P2-5.3**

GENERAL NOTES

COORDINATE ALL PLUMBING VENT THROUGH ROOF PENETRATIONS WITH MECHANICAL EQUIPMENT AND ROOF MOUNTED EQUIPMENT. LOCATE VENTS IN THE LEAST VISIBLE SPACE AS PERMITTED TO AVOID CONFLICT. KEEP VENTS THROUGH ROOF CLEAR OF CONDENSING UNIT MANUFACTURER'S REQUIRED CLEARANCE TO MAINTAIN MAXIMUM EQUIPMENT EFFICIENCY OF CONDENSING UNIT.

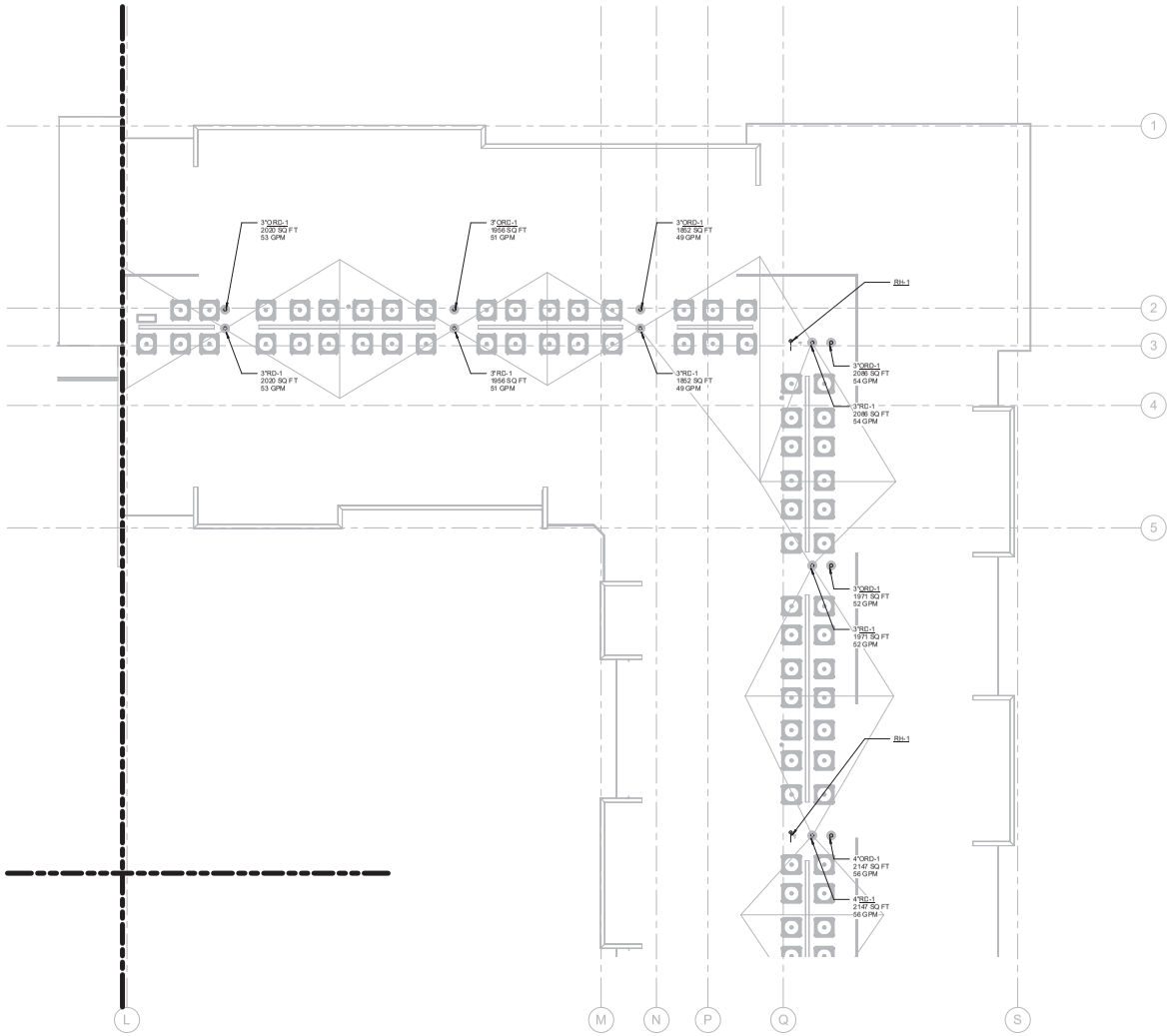
THERE SHALL BE NO ROOF PENETRATIONS WITH 4'-0" OF ANY FIRE WALL

ROOF PLUMBING PLAN - AREA C
SCALE: 1/8" = 1'-0"

GENERAL NOTES:

COORDINATE ALL VENT THROUGH ROOF PENETRATIONS WITH MECHANICAL EQUIPMENT AND SOLAR PANELS LAYOUT. OFFSET VENT RISER IN LEVEL 4 CEILING SPACE AS NEEDED TO AVOID CONFLICT. KEEP VENTS THROUGH ROOF CLEAR OF CONDENSING UNIT WALKING PATH, BUT AS CLOSE TO WALKING PATH AS POSSIBLE (WITHIN 4' BAND OF CONDENSING UNITS)

THERE SHALL BE NO ROOF PENETRATIONS WITH 4'-0" OF ANY FIREWALL.



ROOF PLUMBING PLAN - AREA D
SCALE: 1/8" = 1'-0"

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No.	Date	Issue

Project Architect	DV
Project Designer	DR
Date	06/29/2023
Job Number	222001
Drawn By	JW
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Title	ENLARGED ROOF PLUMBING PLAN - AREA D
Sheet Number	P2-5.4

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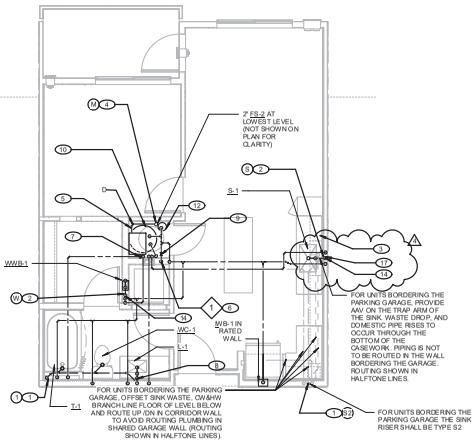
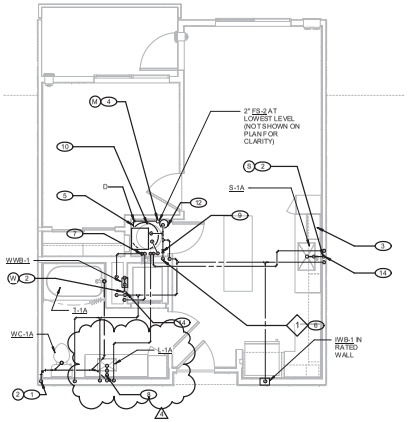
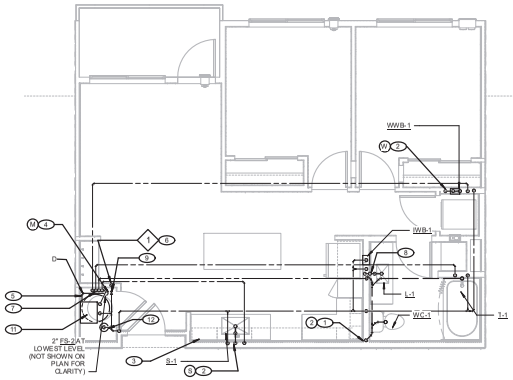


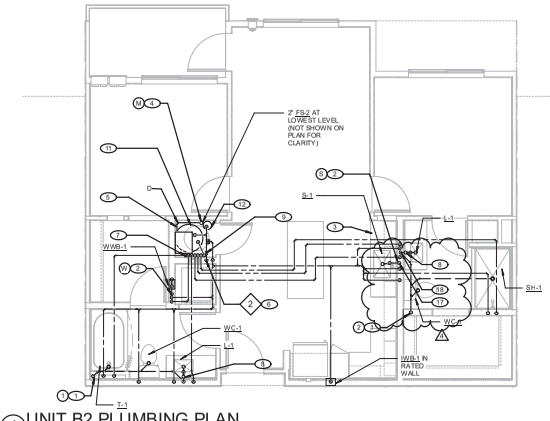
1 UNIT A1 PLUMBING PLAN
1/4" = 1'-0"



2 UNIT A1a PLUMBING PLAN
1/4" = 1'-0"



3 UNIT B1 PLUMBING PLAN
1/4" = 1'-0"



4 UNIT B2 PLUMBING PLAN
1/4" = 1'-0"

KEYNOTES:

1. WASTE STACK.
2. WASTE STACK VENT.
3. CONNECT 1/2"HW AND FULL SIZE DRAIN TO DISHWASHER. RE: DETAIL 2/P7-0.1.
4. 1-1/2" WATER HEATER DRAIN RISER. CONNECT TO WATER HEATER DRAIN PAN AT EACH LEVEL AND DISCHARGE TO FLOOR SINK AT LOWEST LEVEL.
5. CONNECT 3/4" CONDENSATE DRAIN TO 1-1/2" WATER HEATER DRAIN RISE. CONNECT WITH WYE FITTING.
6. CW RISER. INSTALL SHUT-OFF VALVE AND 12" OF STRAIGHT PIPE WITH UNIONS ON EACH END TO ACT AS WATER METER SPACER ON CW SERVICE TO EACH UNIT. WATER METER IS NOT BEING PROVIDED AS PART OF THIS CONTRACTOR'S SCOPE, BUT THE METER SPACER SHALL BE LOCATED TO ALLOW THE FUTURE METER TO BE ACCESSIBLE FROM FRONT OF CLOSET.
7. PROVIDE HOT WATER MANIFOLD IN WATER HEATER CLOSET AS CLOSE TO WATER HEATER AS POSSIBLE. CONNECT 3/4"HW FROM WATER HEATER TO MANIFOLD. RISE TO ABOVE CEILING AND ROUTE 1/2"HW TO EACH FIXTURE AS REQUIRED. ROUTE PIPING AS DIRECTLY AS POSSIBLE. MAXIMUM HOT WATER DEADLEG LENGTH = 40'.
8. PROVIDE AIR ADMITTANCE VALVE INSTALLED ON TRAP ARM BELOW SINK/LAVATORY.
9. DOMESTIC WATER PIPING TO/FROM WATER HEATER TO STAY AS LOW AS POSSIBLE (BELOW 4' AFF) TO STAY CLEAR OF THE FAN COIL UNIT AND ITS SERVICE AND CLEARANCE REQUIREMENTS.
10. WH-40 MOUNTED ON FLOOR, UNDER WALL MOUNTED FAN COIL UNIT. RE: WATER HEATER DETAIL - 1/P7-0.1
11. WH-50 MOUNTED ON FLOOR, UNDER WALL MOUNTED FAN COIL UNIT. RE: WATER HEATER DETAIL - 1/P7-0.1
12. DET-1 INSTALLED TIGHT TO WALL TO AVOID CONFLICTING WITH REMOVAL OF FAN COIL UNIT AND WATER HEATER.
13. WHG-50 MOUNTED ON FLOOR, UNDER WALL MOUNTED FAN COIL UNIT. RE: WATER HEATER DETAIL - 1/P7-0.1
14. THE INTENT IS TO ALIGN THIS WASTE STACK VENT FROM TYPE-A UNITS, TO NON-TYPE-A UNITS SO THAT NO STACK OFFSETTING IS REQUIRED BETWEEN FLOORS.
15. PROVIDE AIR ADMITTANCE VALVE INSTALLED ON WALL WASHER BOX TRAP ARM BELOW. INSTALL AIR ADMITTANCE VALVE HIGH IN WALL JUST BELOW CEILING WITH WALL GRILLE ON LAUNDRY ROOM SIDE.
16. PROVIDE TYPE W RISER FOR UNIT STACKS THAT REQUIRE NO WASTE STACK VENT OFFSETTING (NO MIX OF TYPE-A, AND NON-TYPE-A UNITS.) PROVIDE TYPE W2 RISER FOR UNIT STACKS THAT REQUIRE WASTE STACK OFFSETTING (THERE IS A MIX OF TYPE-A AND NON-TYPE-A UNITS ON THE STACK)
17. FOR A DWELLING UNIT ON LEVEL 2, WHERE THE SINK WALL IS STACKED OVER A STRUCTURAL BEAM, USE A TYPE "S2" WASTE STACK AND DROP THE WASTE PIPING IN THE SINK CASEWORK TO AVOID STRUCTUAL CONFLICT. PROVIDE AIR ADMITTANCE VALVE INSTALLED ON TRAP ARM BELOW SINK.
18. FOR A DWELLING UNIT ON LEVEL 2, WHERE THE LAVATORY WALL IS STACKED OVER A STRUCTURAL BEAM, DROP THE WASTE PIPING IN THE LAVATORY CASEWORK TO AVOID STRUCTUAL CONFLICT.

GENERAL NOTES:

1. ALL HW AND CW PIPING IN UNITS IS 3/4" OR FINAL FIXTURE CONNECTION SIZE UNLESS OTHERWISE NOTED.
2. NO WATER PIPING IS TO BE ROUTED IN EXTERIOR WALLS OR UNHEATED ATTIC SPACE. PIPING TO BE ROUTED ON HEATED SIDE OF INSULATED WALLS AND CEILINGS.

WASTE AND VENT RISER

DOMESTIC WATER RISER

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No.	Date	Issue
1	07.2024	IPC

Project Architect: DV
Project Designer: DR
Date: 06/29/2023
Job Number: 222001
Drawn By: JW
Checked By: BM
Title: PLUMBING UNIT PLANS
Sheet Number: P5-1.1

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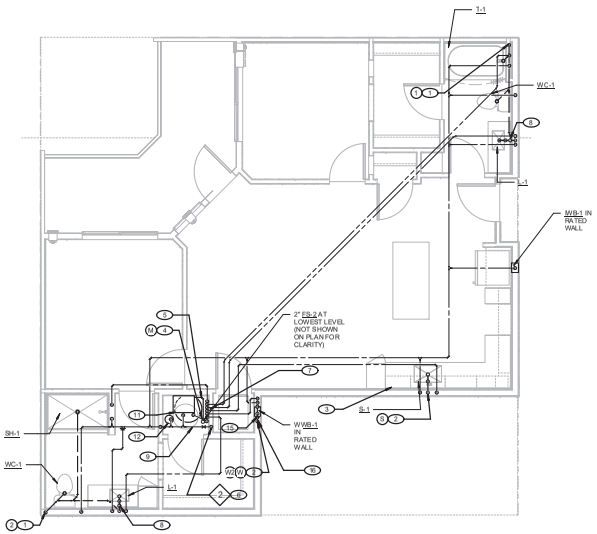
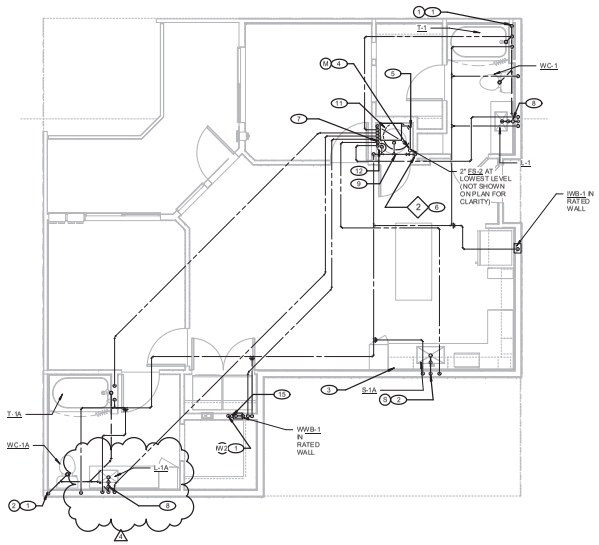


1 UNIT B3 PLUMBING PLAN
1/4" = 1'-0"



2 UNIT B3a PLUMBING PLAN
1/4" = 1'-0"

KEYNOTES

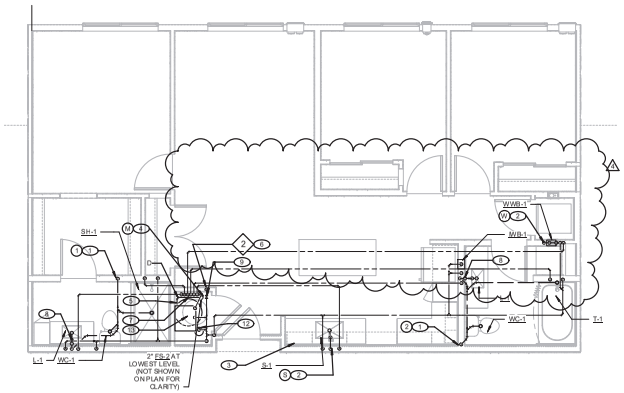
1. WASTE STACK.
2. WASTE STACK VENT.
3. CONNECT 1/2"HW AND FULL SIZE DRAIN TO DISHWASHER. RE: DETAIL 2/P7-0.1.
4. 1-1/2" WATER HEATER DRAIN RISER. CONNECT TO WATER HEATER DRAIN PAN AT EACH LEVEL AND DISCHARGE TO FLOOR SINK AT LOWEST LEVEL.
5. CONNECT 3/4" CONDENSATE DRAIN TO 1-1/2" WATER HEATER DRAIN RISE. CONNECT WITH WYE FITTING.
6. CW RISER. INSTALL SHUT-OFF VALVE AND 12" OF STRAIGHT PIPE WITH UNIONS ON EACH END TO ACT AS WATER METER SPACER ON CW SERVICE TO EACH UNIT. WATER METER IS NOT BEING PROVIDED AS PART OF THIS CONTRACTOR'S SCOPE, BUT THE METER SPACER SHALL BE LOCATED TO ALLOW THE FUTURE METER TO BE ACCESSIBLE FROM FRONT OF CLOSET.
7. PROVIDE HOT WATER MANIFOLD IN WATER HEATER CLOSET AS CLOSE TO WATER HEATER AS POSSIBLE. CONNECT 3/4"HW FROM WATER HEATER TO MANIFOLD. RISE TO ABOVE CEILING AND ROUTE 1/2"HW TO EACH FIXTURE AS REQUIRED. ROUTE PIPING AS DIRECTLY AS POSSIBLE. MAXIMUM HOT WATER DEADLEG LENGTH = 49'.
8. PROVIDE AIR ADMITTANCE VALVE INSTALLED ON TRAP ARM BELOW SINK/LAVATORY.
9. DOMESTIC WATER PIPING TO/FROM WATER HEATER TO STAY AS LOW AS POSSIBLE (BELOW 4'AFF) TO STAY CLEAR OF THE FAN COIL UNIT AND ITS SERVICE AND CLEARANCE REQUIREMENTS.
10. WH-40 MOUNTED ON FLOOR, UNDER WALL MOUNTED FAN COIL UNIT. RE: WATER HEATER DETAIL - 1/P7-0.1
11. WH1-50 MOUNTED ON FLOOR, UNDER WALL MOUNTED FAN COIL UNIT. RE: WATER HEATER DETAIL - 1/P7-0.1
12. DET-1 INSTALLED TIGHT TO WALL TO AVOID CONFLICTING WITH REMOVAL OF FAN COIL UNIT AND WATER HEATER.
13. WH1-50 MOUNTED ON FLOOR, UNDER WALL MOUNTED FAN COIL UNIT. RE: WATER HEATER DETAIL - 1/P7-0.1
14. THE INTENT IS TO ALIGN THIS WASTE STACK VENT FROM TYPE-A UNITS, TO NON-TYPE-A UNITS SO THAT NO STACK OFFSETTING IS REQUIRED BETWEEN FLOORS.
15. PROVIDE AIR ADMITTANCE VALVE INSTALLED ON WALL WASHER BOX TRAP ARM BELOW. INSTALL AIR ADMITTANCE VALVE HIGH IN WALL JUST BELOW CEILING WITH WALL GRILLE ON LAUNDRY ROOM SIDE.
16. PROVIDE TYPE W RISER FOR UNIT STACKS THAT REQUIRE NO WASTE STACK VENT OFFSETTING (NO MIX OF TYPE-A AND NON-TYPE-A UNITS.) PROVIDE TYPE W2 RISER FOR UNIT STACKS THAT REQUIRE WASTE STACK OFFSETTING (THERE IS A MIX OF TYPE-A AND NON-TYPE A UNITS IN THE STACK).

GENERAL NOTES

1. ALL HW AND CW PIPING IN UNITS IS 3/4" OR FINAL FIXTURE CONNECTION SIZE UNLESS OTHERWISE NOTED.
2. NO WATER PIPING IS TO BE ROUTED IN EXTERIOR WALLS OR UNHEATED ATTIC SPACE. PIPING TO BE ROUTED ON HEATED SIDE OF INSULATED WALLS AND CEILINGS.

WASTE AND VENT RISER

DOMESTIC WATER RISER



3 UNIT C1 PLUMBING PLAN
1/4" = 1'-0"

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08.06.2024

MARSHALL POINTE

MARSHALL POINTE APARTMENTS, LP
5170 MARSHALL ST
ARVADA, CO 80002

No.	Date	Issue
1	07.2024	IFC

Project Architect: DV
Project Designer: DR
Date: 06/29/2023
Job Number: 222001
Drawn By: JW
Checked By: BM

Title: PLUMBING UNIT PLANS

Sheet Number: P5-1.2

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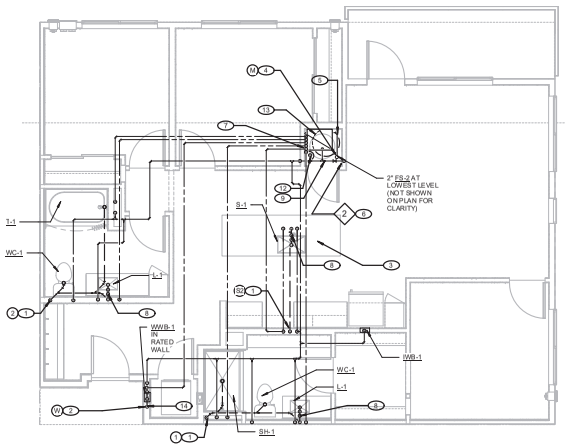
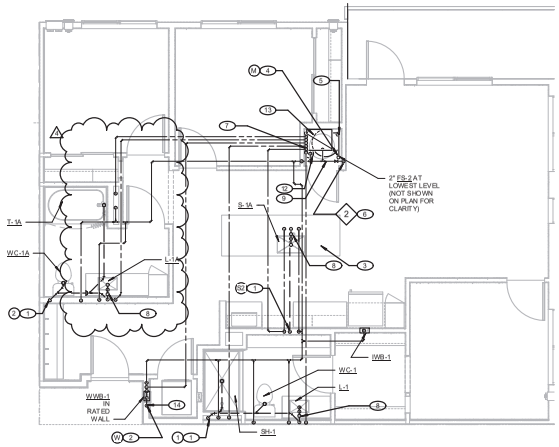
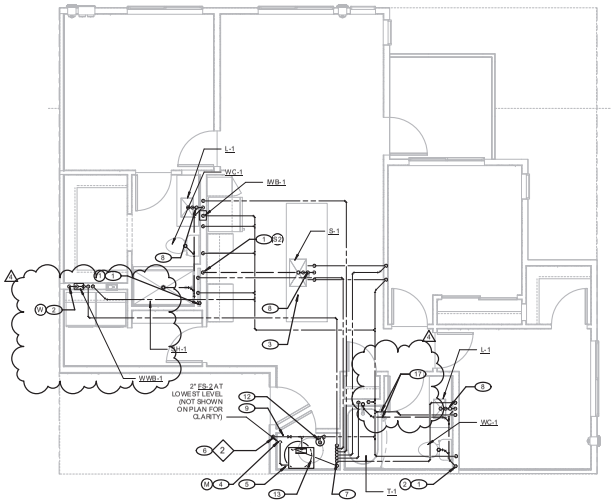


1 UNIT C2 PLUMBING PLAN
1/4" = 1'-0"



2 UNIT C2a PLUMBING PLAN
1/4" = 1'-0"



3 UNIT C3 PLUMBING PLAN
1/4" = 1'-0"

KEYNOTES:

1. WASTE STACK.
2. WASTE STACK VENT.
3. CONNECT 1/2"HW AND FULL SIZE DRAIN TO DISHWASHER. RE: DETAIL 2/P7-0.1.
4. 1-1/2" WATER HEATER DRAIN RISER. CONNECT TO WATER HEATER DRAIN PAN AT EACH LEVEL AND DISCHARGE TO FLOOR SINK AT LOWEST LEVEL.
5. CONNECT 3/4" CONDENSATE DRAIN TO 1-1/2" WATER HEATER DRAIN RISE. CONNECT WITH WYE FITTING.
6. CW RISER. INSTALL SHUT-OFF VALVE AND 12" OF STRAIGHT PIPE WITH UNIONS ON EACH END TO ACT AS WATER METER SPACER ON CW SERVICE TO EACH UNIT. WATER METER IS NOT BEING PROVIDED AS PART OF THIS CONTRACTOR'S SCOPE. BUT THE METER SPACER SHALL BE LOCATED TO ALLOW THE FUTURE METER TO BE ACCESSIBLE FROM FRONT OF CLOSET.
7. PROVIDE HOT WATER MANIFOLD IN WATER HEATER CLOSET AS CLOSE TO WATER HEATER AS POSSIBLE. CONNECT 3/4"HW FROM WATER HEATER TO MANIFOLD. RISE TO ABOVE CEILING AND ROUTE 1/2"HW TO EACH FIXTURE AS REQUIRED. ROUTE PIPING AS DIRECTLY AS POSSIBLE. MAXIMUM HOT WATER DEADLEG LENGTH = 40'.
8. PROVIDE AIR ADMITTANCE VALVE INSTALLED ON TRAP ARM BELOW SINK/LAVATORY.
9. DOMESTIC WATER PIPING TO/FROM WATER HEATER TO STAY AS LOW AS POSSIBLE (BELOW 4' AFF) TO STAY CLEAR OF THE FAN COIL UNIT AND ITS SERVICE AND CLEARANCE REQUIREMENTS.
10. WH-40 MOUNTED ON FLOOR, UNDER WALL MOUNTED FAN COIL UNIT. RE: WATER HEATER DETAIL - 1/P7-0.1
11. WH1-50 MOUNTED ON FLOOR, UNDER WALL MOUNTED FAN COIL UNIT. RE: WATER HEATER DETAIL - 1/P7-0.1
12. DET-1 INSTALLED TIGHT TO WALL TO AVOID CONFLICTING WITH REMOVAL OF FAN COIL UNIT AND WATER HEATER.
13. WHG-50 MOUNTED ON FLOOR, UNDER WALL MOUNTED FAN COIL UNIT. RE: WATER HEATER DETAIL - 1/P7-0.1
14. THE INTENT IS TO ALIGN THIS WASTE STACK VENT FROM TYPE-A UNITS, TO NON-TYPE-A UNITS SO THAT NO STACK OFFSETTING IS REQUIRED BETWEEN FLOORS.
15. PROVIDE AIR ADMITTANCE VALVE INSTALLED ON WALL WASHER BOX TRAP ARM BELOW. INSTALL AIR ADMITTANCE VALVE HIGH IN WALL JUST BELOW CEILING WITH WALL GRILLE ON LAUNDRY ROOM SIDE.
16. PROVIDE TYPE W RISER FOR UNIT STACKS THAT REQUIRE NO WASTE STACK VENT OFFSETTING (NO MIX OF TYPE-A AND NON-TYPE-A UNITS). PROVIDE TYPE WO RISER FOR UNIT STACKS THAT REQUIRE WASTE STACK OFFSETTING (THERE IS A MIX OF TYPE-A AND NON-TYPE A UNITS ON THE STACK).
17. ROUTE PIPING UNDER LVL (REFER TO STRUCTURAL PLANS) AND ABOVE CEILING TO AVOID STRUCTURAL CONFLICT.

GENERAL NOTES:

1. ALL HW AND CW PIPING IN UNITS IS 3/4" OR FINAL FIXTURE CONNECTION SIZE UNLESS OTHERWISE NOTED.
2. NO WATER PIPING IS TO BE ROUTED IN EXTERIOR WALLS OR UNHEATED ATTIC SPACE. PIPING TO BE ROUTED ON HEATED SIDE OF INSULATED WALLS AND CEILINGS.

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ARVADA, CO 80002

No.	Date	Issue
1	07.2024	IPC

Project Architect: DV
Project Designer: DR
Date: 06/29/2023
Job Number: 222001
Drawn By: JW
Checked By: BM
Title: PLUMBING UNIT PLANS
Sheet Number: P5-1.3

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PLUMBING EQUIPMENT SCHEDULE

ITEM	DESCRIPTION
WH-40	STATE #EN6 40 DOLS ELECTRIC STORAGE WATER HEATER WITH 38 GALLON TANK RATED FOR 21 GPH RECOVERY @ 90°F RISE WITH 4.5 KW HEATING ELEMENT. FURNISH WITH ASME TEMPERATURE & PRESSURE RELIEF VALVE. FACTORY INSTALLED HEAT TRAPS IN CONNECTION NIPPLES. OPERATING WEIGHT = 450 LB. TEMPERATURE SETPOINT = 140 DEG F. DIMENSIONS = 26" DIAMETER X 33-1/2" TALL. ELECTRICAL LOAD = 208/1 POWER WITH 4.5 KW ELECTRIC ELEMENT. UNIT TO BE DEMAND RESPONSE READY AS ADD ALTERNATE P1. PROVIDE AND INSTALL TRICKLESTAR #TS2301 WI-FI ELECTRIC WATER HEATER CONTROLLER TO ALLOW FOR FUTURE DEMAND RESPONSE OPERATION AS ADD. ALTERNATE P1.
WH1-50	STATE #EN6 50 DOLS ELECTRIC STORAGE WATER HEATER WITH 51 GALLON TANK RATED FOR 21 GPH RECOVERY @ 90°F RISE WITH 4.5 KW HEATING ELEMENT. FURNISH WITH ASME TEMPERATURE & PRESSURE RELIEF VALVE. FACTORY INSTALLED HEAT TRAPS IN CONNECTION NIPPLES. OPERATING WEIGHT = 600 LB. TEMPERATURE SETPOINT = 140 DEG F. DIMENSIONS = 26-1/2" DIAMETER X 36" TALL. ELECTRICAL LOAD = 208/1 POWER WITH 4.5 KW ELECTRIC ELEMENT. UNIT TO BE DEMAND RESPONSE READY AS ADD ALTERNATE P1. PROVIDE AND INSTALL TRICKLESTAR #TS2301 WI-FI ELECTRIC WATER HEATER CONTROLLER TO ALLOW FOR FUTURE DEMAND RESPONSE OPERATION AS ADD. ALTERNATE P1.
WH2-50	STATE #EN6 50 DOLS ELECTRIC STORAGE WATER HEATER WITH 51 GALLON TANK RATED FOR 27 GPH RECOVERY @ 90°F RISE WITH 6.0 KW HEATING ELEMENT. FURNISH WITH ASME TEMPERATURE & PRESSURE RELIEF VALVE. FACTORY INSTALLED HEAT TRAPS IN CONNECTION NIPPLES. OPERATING WEIGHT = 600 LB. TEMPERATURE SETPOINT = 140 DEG F. DIMENSIONS = 26-1/2" DIAMETER X 36" TALL. ELECTRICAL LOAD = 208/1 POWER WITH 6.0 KW ELECTRIC ELEMENT. UNIT TO BE DEMAND RESPONSE READY AS ADD ALTERNATE P1. PROVIDE AND INSTALL TRICKLESTAR #TS2301 WI-FI ELECTRIC WATER HEATER CONTROLLER TO ALLOW FOR FUTURE DEMAND RESPONSE OPERATION AS ADD. ALTERNATE P1.
WH-C1	STATE PCE 20 OR EQUAL 20 GALLON ELECTRIC WATER HEATER WITH 3.0 KW 120VAC/1-PHASE IMMERSION ELEMENT, 12 GAL/HR RECOVERY @ 100°F RISE. FURNISH WITH ASME TEMPERATURE & PRESSURE RELIEF VALVE. DIMENSIONS = 21-3/4"DIA X 22-1/4" TALL. OPERATING WEIGHT=250LB. UNIT TO BE DEMAND RESPONSE READY AS ADD ALTERNATE P1. PROVIDE AND INSTALL TRICKLESTAR #TS2301 WI-FI ELECTRIC WATER HEATER CONTROLLER TO ALLOW FOR FUTURE DEMAND RESPONSE OPERATION AS ADD ALTERNATE P1.
WH-C2	STATE PCE 20 OR EQUAL 20 GALLON ELECTRIC WATER HEATER WITH 1.5 KW 120VAC/1-PHASE IMMERSION ELEMENT, 6 GAL/HR RECOVERY @ 100°F RISE. FURNISH WITH ASME TEMPERATURE & PRESSURE RELIEF VALVE. DIMENSIONS = 21-3/4"DIA X 22-1/4" TALL. OPERATING WEIGHT=250LB. UNIT TO BE DEMAND RESPONSE READY AS ADD ALTERNATE P1. PROVIDE AND INSTALL TRICKLESTAR #TS2301 WI-FI ELECTRIC WATER HEATER CONTROLLER TO ALLOW FOR FUTURE DEMAND RESPONSE OPERATION AS ADD ALTERNATE P1.
WH-C3	AO SMITH #DRE-120 ELECTRIC STORAGE WATER HEATER WITH 119 GALLON TANK RATED FOR 98 GPH RECOVERY @ 100°F RISE WITH 24.0 KW HEATING ELEMENT. FURNISH WITH ASME TEMPERATURE & PRESSURE RELIEF VALVE, FACTORY INSTALLED HEAT TRAPS IN CONNECTION NIPPLES. OPERATING WEIGHT = 1400 LB. TEMPERATURE SETPOINT = 140 DEG F. DIMENSIONS = 29-1/2" DIAMETER X 62-1/4" TALL. ELECTRICAL LOAD = 208/3 POWER WITH 24.0 KW ELECTRIC ELEMENT.
CP-C1	BELL & GOSSETT NBF-22ULW DOMESTIC WATER RECIRCULATING PUMP CONSISTING OF LEAD FREE BRONZE OR STAINLESS STEEL BODY WITH PLASTIC OR STAINLESS STEEL IMPELLER RATED FOR POTABLE WATER OPERATION. CAPACITY = 2 GPM @ 14 FT TDH. PROVIDE WITH AQUASTAT CONTROL SET TO TURN PUMP ON AT 100 DEGREES F AND OFF AT 115 DEGREES F AND TIMER SET TO TURN PUMP ON AT 6:00 AM AND OFF AT 6:00 PM. ELECTRICAL = 92 WATTS, 115V/1~.
DET-1	AMTROL ST-5 DOMESTIC WATER BLADDER TYPE PRESSURE TANK FOR 2.0 GALLONS TANK VOLUME, ASME RATED FOR 125 PSI WORKING PRESSURE, PRECHARGED TO SYSTEM PRESSURE AT CONNECTION LOCATION. DIMENSIONS = 8"DIA X 12-5/8" TALL WEIGHT WITH RUPTURED BLADDER=22LB
DET-2	AMTROL ST-12C-DD DOMESTIC WATER BLADDER TYPE PRESSURE TANK FOR 6.4 GALLONS TANK VOLUME AND 3.2 GALLON ACCEPTANCE VOLUME, RATED FOR 150 PSI WORKING PRESSURE, PRECHARGED TO SYSTEM PRESSURE AT CONNECTION LOCATION. SYSTEM CONNECTION SIZE = 3/4" NPTF. DIMENSIONS = 12" DIA X 18" TALL. WEIGHT WITH RUPTURED BLADDER = 53 LB
TMV-1	WATTS #LF1170 ASSE 1017 & ASSE 1070 3/4" THERMOSTATIC MIXING VALVE BODY AND SHALL INCLUDE INTEGRAL FILTER WASHERS AND AN ADJUSTMENT CAP WITH LOCKING FEATURE. VALVE TO MAINTAIN DISCHARGE TEMPERATURE WITH 3 DEGREES OF SETPOINT. DISCHARGE TEMPERATURE SETPOINT = 118 DEGREES F.
BFP-1	WILKINS #375AMS-EST WITH #ZW206 2-1/2"-8" REDUCED PRESSURE BACKFLOW PREVENTION ASSEMBLY WITH AUTOMATIC SOLENOID SHUT-OFF CONTROL VALVE AND TIMER. ASSE LISTED 1013 AND APPROVED BY THE FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH AT THE UNIVERSITY OF SOUTHERN CALIFORNIA. SUPPLIED WITH FULL PORT GATE VALVES. THE MAIN BODY AND ACCESS COVER SHALL BE EPOXY COATED DUCTILE IRON (ASTM A 536 GRADE 4). THE STEM SHALL BE STAINLESS STEEL (ASTM A 276) AND THE SEAT DISC ELASTOMERS SHALL BE EPDM. (ELECTRICAL: 115V/1-PH, 5 AMPS)
BFP-2	WILKINS #350A-PI 4"-8" DOUBLE CHECK BACKFLOW PREVENTION ASSEMBLY. ASSE LISTED 1015 AND APPROVED BY THE FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH AT THE UNIVERSITY OF SOUTHERN CALIFORNIA. SUPPLIED WITH FULL PORT POST INDICATOR GATE VALVES. THE MAIN BODY AND ACCESS COVER SHALL BE EPOXY COATED DUCTILE IRON (ASTM A 536 GRADE 4). THE STEM SHALL BE STAINLESS STEEL (ASTM A 276) AND THE SEAT DISC ELASTOMERS SHALL BE EPDM.
BFP-3	WILKINS #975XL2 3/4"-2" REDUCED PRESSURE BACKFLOW PREVENTION ASSEMBLY. ASSE LISTED 1013 AND APPROVED BY THE FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH AT THE UNIVERSITY OF SOUTHERN CALIFORNIA. SUPPLIED WITH FULL PORT BALL VALVES. THE MAIN BODY AND ACCESS COVER SHALL BE CAST BRONZE (ASTM B 584). THE SEAT DISC ELASTOMERS SHALL BE EPDM.
ESE-1	ZOELLER #161 SUBMERSIBLE SINGLE SEAL CAST IRON SUMP PUMP PACKAGE WITH (1) 1/2 HP PUMP FOR 50 GPM @ 20' T.D.H., PREPACKAGED CONTROLS TO INCLUDE NEMA 4X SIMPLEX CONTROL PANEL WITH STARTER DISCONNECT SWITCH, HAND-OFF-AUTO SWITCH, MECHANICAL FLOAT SWITCH, HIGH WATER ALARM WITH AUDIBLE & VISUAL ALARM & SILENCE SWITCH, & WIRING PACKAGE. SET PUMP ON AT 12" AFF AND OFF AT 6" AFF. ELECTRICAL = 208VAC/3PH 1/2HP
DWBP-1	GRUNDFOS CR 45-1-1 ph MULTI-STAGE, VERTICAL INLINE PUMP. TOTAL CAPACITY = 200 GPM @ 40 PSI PRESSURE BOOST. PROVIDE WITH REMOTE MOUNTED VFD SIZED FOR PUMP MOTOR (DANFOSS #VLT OR EQUAL) WITH DISCONNECT AND BYPASS. PROVIDE GRUNDFOS GFXA-400 106 GALLON 30"DIA X 49" TALL DOMESTIC WATER BLADDER TYPE PRESSURE TANK ASME RATED FOR 125 PSI WORKING PRESSURE PRECHARGED TO DESIGN SYSTEM PRESSURE AT POINT OF CONNECTION TO SYSTEM, 1-1/4" SYSTEM CONNECTION. 1200 LB MAXIMUM WEIGHT. SET BLADDER TANK ON 4" TALL HOUSEKEEPING PAD. ALL COMPONENTS EXPOSED TO FLUID TO MEET NSF 61 REQUIREMENTS. ELECTRICAL = 208VAC/1PH 10-HP PUMP.

PLUMBING FIXTURE SCHEDULE

COORDINATE ALL FIXTURE SPECIFICATIONS WITH OWNER AND ARCHITECT PRIOR TO PRICING

MARK	DESCRIPTION	MFR/MODEL	ROUGH-IN (INCHES) HW	CW	V	TRAP	S/W	NOTES
	COORDIANTE ALL FIXTURE SPECIFICATIONS WITH OWNER PRIOR TO ORDERING. SUBSTITUTIONS SHALL BE REVIEWED AND APPROVED BY OWNER							
WC-1	FLOOR SET FLUSH TANK TYPE CLOSE COUPLED TOILET WITH LOW CONSUMPTION WATER SENSE CERTIFIED 1.28 GPF SIPHON JET FLUSHING ACTION, ELONGATED BOWL, GLAZED TRAPWAY. PROVIDE CHROME PLATED 1/2" NOM. COMP. X 3/8" NOM. COMP. ANGLE STOP AND SEAMLESS CHROME PLATED COPPER TUBE WATER SUPPLY WITH CHROME PLATED (1) PIECE SET SCREW TYPE CHROME PLATED BRASS ESCUTCHEON AT WALL PENETRATION. PROVIDE CLOSED FRONT WHITE SEAT WITH COVER. ALL TRIM TO BE CHROME PLATED COPPER OR BRASS.	TOILET = STERLING #4023130 OR EQUAL BY AMER. STD., KOHLER, CRANE, TOTO SEAT = BEMIS #1200SLOWT OR EQUAL BY OLSONITE, BENEKE, CHURCH, BEMIS, CENTOCO, TOTO	--	1/2	2	–	3	FLOOR MOUNTED WITH WAX OR NEOPRENE CLOSET RING. SET WITH PLASTER OF PARIS AND WHITE NON-HARDENING ADHESIVE SEALANT BETWEEN THE FLOOR AND THE FIXTURE BASE WITH "COVED" FINISHING. COORDINATE EXACT FIXTURE TYPES AND SPECIFICATIONS WITH OWNER.
WC-1A	ADA FLOOR SET FLUSH TANK TYPE CLOSE COUPLED TOILET WITH LOW CONSUMPTION WATER SENSE CERTIFIED 1.28 GPF SIPHON JET FLUSHING ACTION, ELONGATED BOWL, GLAZED TRAPWAY. PROVIDE CHROME PLATED 1/2" NOM. COMP. X 3/8" NOM. COMP. ANGLE STOP AND SEAMLESS CHROME PLATED COPPER TUBE WATER SUPPLY WITH CHROME PLATED (1) PIECE SET SCREW TYPE CHROME PLATED BRASS ESCUTCHEON AT WALL PENETRATION. PROVIDE CLOSED FRONT WHITE SEAT WITH COVER. ALL TRIM TO BE CHROME PLATED COPPER OR BRASS.	TOILET = STERLING #4023130 OR EQUAL BY AMER. STD., KOHLER, CRANE, TOTO SEAT = BEMIS #1200SLOWT OR EQUAL BY OLSONITE, BENEKE, CHURCH, BEMIS, CENTOCO, TOTO	--	1/2	2	–	3	FLOOR MOUNTED WITH WAX OR NEOPRENE CLOSET RING. SET WITH PLASTER OF PARIS AND WHITE NON-HARDENING ADHESIVE SEALANT BETWEEN THE FLOOR AND THE FIXTURE BASE WITH "COVED" FINISHING. ADA WATER CLOSET TANKS ARE TO BE PROVIDED WITH LEFT OR RIGHT HAND TRIP LEVERS AS REQUIRED TO ALLOW FOR TRIP LEVERS ARE TO BE INSTALLED TO WIDE SIDE OF ADA TOILET STALL. COORDINATE EXACT FIXTURE TYPES AND SPECIFICATIONS WITH OWNER.

WC-C1A	ADA FLOOR SET FLUSH TANK TYPE CLOSE COUPLED TOILET WITH LOW CONSUMPTION 1.28 GPF SIPHON JET FLUSHING ACTION, ELONGATED BOWL, GLAZED TRAPWAY. PROVIDE CHROME PLATED 1/2" NOM. COMP. X 3/8" NOM. COMP. ANGLE STOP AND SEAMLESS CHROME PLATED COPPER TUBE WATER SUPPLY WITH CHROME PLATED (1) PIECE SET SCREW TYPE CHROME PLATED BRASS ESCUTCHEON AT WALL PENETRATION. PROVIDE OPEN FRONT WHITE SEAT LESS COVER WITH CHECK HINGE. ALL TRIM TO BE CHROME PLATED COPPER OR BRASS.	TOILET = TOTO #CST244EF OR EQUAL BY AMER. STD., KOHLER, CRANE, TOTO
		SEAT = BEMIS #1200SLOWT OR EQUAL BY OLSONITE, BENEKE, CHURCH, BEMIS, CENTOCO, TOTO
			--	1/2	2	–	4	FLOOR MOUNTED WITH WAX OR NEOPRENE CLOSET RING. SET WITH PLASTER OF PARIS AND WHITE NON-HARDENING ADHESIVE SEALANT BETWEEN THE FLOOR AND THE FIXTURE BASE WITH "COVED" FINISHING. ADA WATER CLOSET TANKS ARE TO BE PROVIDED WITH LEFT OR RIGHT HAND TRIP LEVERS AS REQUIRED TO ALLOW FOR TRIP LEVERS ARE TO BE INSTALLED TO WIDE SIDE OF ADA TOILET STALL.
								
								COORDINATE EXACT FIXTURE TYPES AND SPECIFICATIONS WITH OWNER/INTERIOR DESIGN PLANS.

L-1	20"X17" VITREOUS CHINA SELF RIMMING COUNTERTOP LAVATORY SINK WITH HOLE DRILLINGS TO MEET FAUCET SPECIFICATIONS. PROVIDE CHROME PLATED POP-UP DRAIN, CHROME PLATED BRASS P-TRAP AND WASTE ARM, 1/2" NOM. COMP. X 3/8" NOM. COMP. CHROME PLATED ANGLE STOPS WITH WHEEL HANDLES, CHROME PLATED FLEXIBLE SEAMLESS COPPER TUBE SUPPLIES, AND (1) PIECE SET SCREW TYPE CHROME PLATED CAST BRASS ESCUTCHEONS AT WALL PENETRATIONS. FAUCET TO BE OF CHROME PLATED CAST BRASS CONSTRUCTION. PROVIDE WITH WATER SENSE CERTIFIED 1.2 GPM AERATOR. ALL TRIM TO BE CHROME PLATED COPPER OR BRASS.	LAVATORY = STERLING #442004 OR EQUAL BY TOTO, KOHLER, CRANE, AMER. STD., ZURN FAUCET = MOEN #6702 OR EQUAL BY AMERICAN STANDARD, KOHLER, ZURN SYMMONS, CHICAGO, PEERLESS DRAIN = POP-UP BY BRASSCRAFT, KOHLER, AMER. STD., DELTA, CHICAGO, PROFLO	1/2	1/2	1.5	1.25	1.5	COORDINATE EXACT FIXTURE TYPES AND SPECIFICATIONS WITH OWNER.
L-1A	20"X17" VITREOUS CHINA SELF RIMMING COUNTERTOP LAVATORY SINK WITH HOLE DRILLINGS TO MEET FAUCET SPECIFICATIONS. PROVIDE CHROME PLATED POP-UP DRAIN, CHROME PLATED BRASS P-TRAP AND WASTE ARM, 1/2" NOM. COMP. X 3/8" NOM. COMP. CHROME PLATED ANGLE STOPS WITH WHEEL HANDLES, CHROME PLATED FLEXIBLE SEAMLESS COPPER TUBE SUPPLIES, AND (1) PIECE SET SCREW TYPE CHROME PLATED CAST BRASS ESCUTCHEONS AT WALL PENETRATIONS. FAUCET TO BE OF CHROME PLATED CAST BRASS CONSTRUCTION. PROVIDE WITH WATER SENSE CERTIFIED 1.2 GPM AERATOR. ALL TRIM TO BE CHROME PLATED COPPER OR BRASS.	LAVATORY = STERLING #442004 OR EQUAL BY TOTO, KOHLER, CRANE, AMER. STD., ZURN FAUCET = MOEN #6702 OR EQUAL BY AMERICAN STANDARD, KOHLER, ZURN SYMMONS, CHICAGO, PEERLESS DRAIN = POP-UP BY BRASSCRAFT, KOHLER, AMER. STD., DELTA, CHICAGO, PROFLO TRAP AND SUPPLY INSULATION = TRUEBRO #103 E-Z OR EQUAL BY BROCAR, PROFLO	1/2	1/2	1.5	1.25	1.5	COORDINATE EXACT FIXTURE TYPES AND SPECIFICATIONS WITH OWNER.

L-C1A	ADA COMPLIANT 22"X18" VITREOUS CHINA WALL HUNG LAVATORY SINK WITH HOLE DRILLINGS TO MEET FAUCET SPECIFICATIONS. PROVIDE CHROME PLATED BRASS PERFORATED GRID DRAIN WITH ADA WHEELCHAIR OFFSET DRAIN, CHROME PLATED BRASS P-TRAP AND WASTE ARM, 1/2" NOM. COMP. X 3/8" NOM. COMP. CHROME PLATED ANGLE STOPS WITH WHEEL HANDLES, CHROME PLATED FLEXIBLE SEAMLESS COPPER TUBE SUPPLIES, (1) PIECE SET SCREW TYPE CHROME PLATED CAST BRASS ESCUTCHEONS AT WALL PENETRATIONS, AND WALL SUPPORT SYSTEM WITH CONCEALED ARM SUPPORTS, WELDED FEET, RECTANGULAR STEEL UPRIGHTS, AND MOUNTING FASTENERS. FAUCET TO BE OF BLACK FINISH CAST BRASS CONSTRUCTION WITH 0.5 GPM VANDAL RESISTANT AERATOR AND CERAMIC DISK CARTRIDGE TYPE VALVE. ALL TRIM TO BE BLACK FINISH COPPER OR BRASS. PROVIDE ASSE 1070 MIXING VALVE BELOW LAVATORY SET AT 105 DEG F DISCHARGE TEMP.	LAVATORY = KOHLER #K-2035-4 OR EQUAL AS APPROVED BY OWNER
		FAUCET = MOEN #T64128L OR EQUAL AS APPROVED BY OWNER
		MIXING VALVE = LEONARD #170-LF OR EQUAL BY WATTS, SYMMONS, POWERS, WILKINS, ZURN
		TRAP AND SUPPLY INSULATION = TRUEBRO #103 E-Z OR EQUAL BY BROCAR, PROFLO
		CARRIER = ZURN #Z1224 OR EQUAL BY JOSAM, JR SMITH, WADE, MIFAB
			1/2	1/2	1.5	1.25	1.5	INSTALL MIXING VALVE ON WALL BELOW LAVATORY. CONNECT 3/8"HW AND 3/8"CW TO MIXING VALVE, EXTEND 3/8" TEMPERED WATER FROM MIXING VALVE TO FAUCET HOT WATER INLET.
								
								COORDINATE EXACT FIXTURE TYPES AND SPECIFICATIONS WITH OWNER/INTERIOR DESIGN PLANS.

SH-1	60"X38" SHOWER PAN AND PRESSURE BALANCE MIXING VALVE OF CHROME PLATED BRASS AND BRONZE CONSTRUCTION, ASSE 1016 CERTIFIED, ADJUSTABLE HIGH LIMIT TEMPERATURE STOP SET AT 110 DEGREES F., AND CAST CHROME PLATED WALL FLANGE. PROVIDE ADJUSTABLE SHOWER HEAD OF CHROME PLATED CONSTRUCTION WITH 1.75 GPM AT 80 PSI MAXIMUM FLOW RATE AND WATERSENSE CERTIFIED. PROVIDE PREFABRICATED SHOWER PAN WITH CENTER DRAIN LOCATION.	SHOWER HEAD, AND TRIM = MOEN #T2472EP OR EQUAL BY KOHLER, AMER. STD.
		VALVE = MOEN #62370 OR EQUAL BY DELTA, KOHLER, AMER. STD.
		SHOWER PAN = STERLING #95079 WITH #K-9132 DRAIN OR EQUAL AS APPROVED BY OWNER.
			1/2	1/2	1.5	2	2	SET SHOWER VALVE TEMPERATURE LIMIT STOP AT 110 DEGREES F
								
								COORDINATE EXACT FIXTURE TYPES AND SPECIFICATIONS WITH OWNER.
								
								PREFABRICATED SURROUND BY OWNER/INTERIOR DESIGNER.

SH-1A	60"X38" ANSI-B COMPLIANT ACCESSIBLE SHOWER PAN WITH PRESSURE BALANCE MIXING VALVE OF CHROME PLATED BRASS AND BRONZE CONSTRUCTION, ASSE 1016 CERTIFIED, ADJUSTABLE HIGH LIMIT TEMPERATURE STOP SET AT 110 DEGREES F., NOT A POSITIVE SHUT-OFF, COLOR CODED DIAL WITH DIRECTIONAL INDICATOR, CAST CHROME PLATED WALL FLANGE, AND SCREWDRIVER STOPS ON SUPPLY CONNECTIONS. PROVIDED HAND HELD SHOWER, 69" MINIMUM LENGTH FLEXIBLE HOSE SUPPLY, 30" MINIMUM ADJUSTABLE SLIDE BAR, INLINE CHROME PLATED VACUUM BREAKER, AND CHROME PLATED SUPPLY ELBOW AND WALL FLANGE. PROVIDE PREFABRICATED PAN WITH TEXTURE FLOOR, AND CENTER DRAIN LOCATION. PROVIDE HAND HELD SHOWER HEAD WITH 1.75 GPM AT 80 PSI MAXIMUM FLOW RATE. SHOWER HEAD TO BE WATERSENSE LABELED.	HAND SHOWER HEAD = MOEN #3671EP AND #A721 OR EQUAL BY KOHLER, AMER. STD. VALVE AND TRIM = MOEN #62370 AND #T2471 OR EQUAL BY DELTA, KOHLER, AMER. STD. SHOWER PAN AND DRAIN = STERLING #95079 PAN AND #K-9132 DRAIN OR EQUAL AS APPROVED BY OWNER.	1/2	1/2	1.5	2	2	SET SHOWER VALVE TEMPERATURE LIMIT STOP AT 110 DEGREES F COORDINATE EXACT FIXTURE TYPES AND SPECIFICATIONS WITH OWNER. PREFABRICATED SURROUND BY OWNER/INTERIOR DESIGNER.

T-1	60" LONG X 36" WIDE X 81-3/4" HIGH TUB/SHOWER ENCLOSURE WITH PRESSURE BALANCE MIXING VALVE, ASSE 1016 CERTIFIED, ADJUSTABLE HIGH LIMIT TEMPERATURE STOP SET AT 110 DEGREES F., CAST CHROME PLATED WALL FLANGE. PROVIDE ADJUSTABLE SHOWER HEAD WITH 1.75 GPM MAXIMUM AT 80 PSI MAXIMUM FLOW RATE, AND TUB SPOUT. SHOWER HEAD TO BE EPA WATER SENSE CERTIFIED.	SHOWER/TUB HEAD, SPOUT, AND TRIM = MOEN #T2473EP OR EQUAL BY KOHLER, AMER. STD.
		VALVE = MOEN #62370 OR EQUAL BY DELTA KOHLER, AMER. STD.
		TUB/SHOWER ENCLOSURE = AQUATIC #F6036STT WHITE OR EQUAL AS APPROVED BY OWNER.
			1/2	1/2	1.5	2	2	SET SHOWER VALVE TEMPERATURE LIMIT STOP AT 110 DEGREES F. PROVIDE LEFT OR RIGHT HAND TUB AS REQUIRED.
								
								PROVIDE RIGHT OR LEFT HAND DRAIN AS APPLICABLE.
								
								COORDINATE EXACT FIXTURE TYPES AND SPECIFICATIONS WITH OWNER.

T-1A	60" LONG X 36" WIDE X 18-1/4" HIGH ACCESSIBLE TUB WITH PRESSURE BALANCE MIXING VALVE, ASSE 1016 CERTIFIED, ADJUSTABLE HIGH LIMIT TEMPERATURE STOP SET AT 110 DEGREES F., COLOR CODED DIAL WITH DIRECTIONAL INDICATOR, CAST CHROME PLATED WALL FLANGE, AND SCREWDRIVER STOPS ON SUPPLY CONNECTIONS, AND PREFABRICATED SURROUND. PROVIDED HAND HELD SHOWER, 69" MINIMUM LENGTH FLEXIBLE HOSE SUPPLY, 30" MINIMUM ADJUSTABLE SLIDE BAR, INLINE CHROME PLATED VACUUM BREAKER, AND CHROME PLATED SUPPLY ELBOW AND WALL FLANGE. PROVIDE PREFABRICATED PAN WITH TEXTURE FLOOR, AND CENTER DRAIN LOCATION. PROVIDE HAND HELD SHOWER HEAD WITH 1.75 GPM AT 80 PSI MAXIMUM FLOW RATE. SHOWER HEAD TO BE WATERSENSE LABELED. PROVIDE TUB SPOUT. PROVIDE ADA COMPLIANT PRESS FLOW TUB DRAIN AND OVERFLOW.	HAND SHOWER HEAD = MOEN #3671EP AND #A721 OR EQUAL BY KOHLER, AMER. STD.
		TUB SPOUT AND TRIM = MOEN #T2473NH OR EQUAL BY DELTA, KOHLER, AMER. STD.
		VALVE AND TRIM = MOEN #62370 AND #T2471 OR EQUAL BY DELTA, KOHLER, AMER. STD.
		TUB = STERLING #7110001112 WHITE OR EQUAL AS APPROVED BY OWNER.
			1/2	1/2	1.5	2	2	ACCESSIBLE UNIT HANDHELD SHOWER TO BE MOUNTED SO THAT ADJUSTABLE RANGE OF HEAD MOVEMENT ON BAR IS BETWEEN 48" AND 72" AFF. SET SHOWER VALVE TEMPERATURE LIMIT STOP AT 110 DEGREES F. PROVIDE LEFT OR RIGHT HAND TUB AS REQUIRED.
								
								PROVIDE RIGHT OR LEFT HAND DRAIN AS APPLICABLE.
								
								COORDINATE EXACT FIXTURE TYPES AND SPECIFICATIONS WITH OWNER.
								
								PREFABRICATED SURROUND BY OWNER/INTERIOR DESIGNER.

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08.06.2024

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No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date: 06/29/2023
Job Number: 222001
Drawn By: JW
Checked By: BM
Title: PLUMBING SCHEDULES
Sheet Number: P6-0.1

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PLUMBING FIXTURE SCHEDULE

COORDINATE ALL FIXTURE SPECIFICATIONS WITH OWNER AND ARCHITECT PRIOR TO PRICING

MARK	DESCRIPTION	MFR/MODEL	ROUGH-IN (INCHES) HW	CW	V	TRAP	S/W	NOTES
COORDIANTE ALL FIXTURE SPECIFICATIONS WITH OWNER PRIOR TO ORDERING. SUBSTITUTIONS SHALL BE REVIEWED AND APPROVED BY OWNER								

S-1	2'2"X18"X9" UNDERMOUNT SINGLE COMPARTMENT 18 GA. ST/ST SINK WITH DRAIN OUTLET LOCATED ON LEFT OR RIGHT REAR OF SINK. PROVIDE CHROME PLATED BRASS P-TRAP AND WASTE ARM, 1/2" NOM. COMP. X 3/8" NOM. COMP. CHROME PLATED ANGLE STOPS WITH WHEEL HANDLES, CHROME PLATED FLEXIBLE SEAMLESS COPPER TUBE SUPPLIES, AND (1) PIECE SET SCREW TYPE CHROME PLATED CAST BRASS ESCUTCHEONS AT WALL PENETRATIONS. SINGLE HANDLE FAUCET TO BE OF CHROME PLATED CAST BRASS CONSTRUCTION WITH 1.5 GPM MAXIMUM AERATOR, PULL DOWN HIGH ARC SPOUT. ALL TRIM TO BE CHROME PLATED COPPER OR BRASS. PROVIDE CONTINUOUS FEED RUBBER CUSHION MTD. DISPOSER, MOTOR WITH MANUAL RESET OVERLOAD PROTECTION, STAINLESS STEEL STOPPER AND IMPELLERS (SWIVEL TYPE).	SINK = CANTRIO KONCEPTS #KS-005 SQUARE SHAPE OR EQUAL AS APPROVED BY OWNER
		FAUCET = MOEN #7882 OR EQUAL BY DELTA, KOHLER, SYMMONS, CHICAGO, AMER. STD.
		DISPOSAL = MOEN #GXP50C OR EQUAL BY WHIRLAWAY, WASTE KING, SINKGUARD
			1/2	1/2	1.5	1.5	1.5	DISPOSAL ELECTRICAL LOAD = 115VAC, 60 HZ, 1/2HP, CONTROL FROM WALL SWITCH.
								
								COORDINATE EXACT FIXTURE TYPES AND SPECIFICATIONS WITH OWNER.

S-1A	25"X22"X5-3/8"DEEP, DROP IN, ADA COMPLIANT SINGLE COMPARTMENT SINK WITH HOLE DRILLINGS TO MEET FAUCET SPECIFICATIONS. PROVIDE CHROME PLATED BRASS P-TRAP AND WASTE ARM, 1/2" NOM. COMP. X 3/8" NOM. COMP. CHROME PLATED ANGLE STOPS WITH WHEEL HANDLES, CHROME PLATED FLEXIBLE SEAMLESS COPPER TUBE SUPPLIES, AND (1) PIECE SET SCREW TYPE CHROME PLATED CAST BRASS ESCUTCHEONS AT WALL PENETRATIONS. SINGLE HANDLE FAUCET TO BE OF CHROME PLATED CAST BRASS CONSTRUCTION WITH 1.5 GPM MAXIMUM AERATOR, PULL DOWN HIGH ARC SPOUT. ALL TRIM TO BE CHROME PLATED COPPER OR BRASS. PROVIDE CONTINUOUS FEED RUBBER CUSHION MTD. DISPOSER, MOTOR WITH MANUAL RESET OVERLOAD PROTECTION, STAINLESS STEEL STOPPER AND IMPELLERS (SWIVEL TYPE).	SINK = DAYTON #GE1252.2 WITH REAR DRAIN HOLE OR EQUAL BY JUST, MOEN, ELKAY
		FAUCET = MOEN #7882.B OR EQUAL BY DELTA, KOHLER, SYMMONS, CHICAGO, AMER. STD.
		DISPOSAL = MOEN #GXP50C OR EQUAL BY WHIRLAWAY, WASTE KING, SINKGUARD
		TRAP AND SUPPLY INSULATION = TRUEBRO #102-E-Z & #402W & #106 E-Z OR EQUAL BY BROCAR, PROFLO
			1/2	1/2	1.5	1.5	1.5	DISPOSAL ELECTRICAL LOAD = 115VAC, 60 HZ, 1/2HP, CONTROL FROM WALL SWITCH.
								
								COORDINATE EXACT FIXTURE TYPES AND SPECIFICATIONS WITH OWNER.

S-C1A	25"X18"X5"DEEP, ADA SINGLE COMPARTMENT UNDER MOUNT SINK CONSTRUCTED OF BLACK GRANITE COMPOSITE. PROVIDE STAINLESS STEEL BASKET STRAINER, CHROME PLATED BRASS P-TRAP AND WASTE ARM, 1/2" NOM. COMP. X 3/8" NOM. COMP. CHROME PLATED ANGLE STOPS WITH WHEEL HANDLES, CHROME PLATED FLEXIBLE SEAMLESS COPPER TUBE SUPPLIES, AND (1) PIECE SET SCREW TYPE CHROME PLATED CAST BRASS ESCUTCHEONS AT WALL PENETRATIONS. SINGLE HANDLE FAUCET TO BE OF BLACK FINISHED CAST BRASS CONSTRUCTION WITH 1.5 GPM MAXIMUM AERATOR, PULL DOWN HIGH ARC SPOUT. ALL TRIM TO BE BLACK FINISHED COPPER OR BRASS. PROVIDE CONTINUOUS FEED RUBBER CUSHION MTD. DISPOSER, MOTOR WITH MANUAL RESET OVERLOAD PROTECTION, STAINLESS STEEL STOPPER AND IMPELLERS (SWIVEL TYPE).	SINK = BLANCO #442929 WITH REAR DRAIN HOLE OR EQUAL BY JUST, MOEN, ELKAY FAUCET = MOEN #7662.BL OR EQUAL BY DELTA, KOHLER, SYMMONS, CHICAGO, AMER. STD. DISPOSAL = MOEN #GXP50C OR EQUAL BY WHIRLAWAY, WASTE KING, SINKGUARD TRAP AND SUPPLY INSULATION = TRUEBRO #102-E-Z & #402W & #106 E-Z OR EQUAL BY BROCAR, PROFLO	1/2	1/2	1.5	1.5	1.5	DISPOSAL ELECTRICAL LOAD = 115VAC, 60 HZ, 1/2HP, CONTROL FROM WALL SWITCH. COORDINATE EXACT FIXTURE TYPES AND SPECIFICATIONS WITH OWNER/INTERIOR DESIGN PLANS.

EWC-1A	ADA COMPLIANT WALL HUNG ELECTRIC WATER COOLER WITH BAKED ENAMEL OR VINYL COVERED STEEL BODY AND STAINLESS STEEL TOP/TRIM AND BOTTLE FILLER INSTALLED IN WALL ABOVE MAIN UNIT. PROVIDE WITH AUTOMATIC STREAM REGULATOR, FILTER, SCREWDRIVER STOP, AND FAN COOLED REFRIGERATED CONDENSING UNIT. MANUFACTURER TO CERTIFY UNIT TO BE LEAD FREE AS DEFINED BY THE SAFE DRINKING WATER ACT. PROVIDE CHROME PLATED BRASS P-TRAP AND WASTE ARM, 1/2" NOM. COMP. X 3/8" NOM. COMP. CHROME PLATED ANGLE STOP WITH WHEEL HANDLE, AND CHROME PLATED FLEXIBLE SEAMLESS COPPER TUBE SUPPLY. PROVIDE WALL SUPPORT SYSTEM WITH TOP AND BOTTOM SUPPORT PLATES, WELDED FEET, RECTANGULAR STEEL UPRIGHTS, AND MOUNTING FASTENERS.	ELECTRIC WATER COOLER = ELKAY #LZS8WSVRLK OR EQUAL BY OASIS, HAWS, SUNROC, HALSEY TAYLOR
		CARRIER = ZURN #Z1225 OR EQUAL BY JOSAM, J.R. SMITH, WADE, MIFAB
			--	1/2	1.5	1.5	1.5	INSTALL SPOUT HEIGHTS AS REQUIRED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS TO MEET ADA REQUIREMENTS.
								
								ELECTRICAL LOAD = 115VAC, 60HZ 370 WATTS, 6.0 FLA
								
								COORDINATE EXACT FIXTURE TYPES AND SPECIFICATIONS WITH OWNER.

SS-1	ONE PIECE MOLDED STONE STAIN AND CHEMICAL RESISTANT SERVICE SINK BASIN WITH 10" HIGH SIDES, STAINLESS STEEL WALL GUARDS, 3"IPS INTEGRAL STAINLESS STEEL DRAIN, AND REMOVABLE STRAINER. PROVIDE FAUCET MOUNTED AT 40" ABOVE FINISHED FLOOR WITH INTEGRAL VACUUM BREAKER, BUCKET HOOK, AND WALL BRACE. PROVIDE 5 FT. 5/8" HOSE WITH WALL CLAMPS AND MOP HANGER MOUNTED OVER SINK	SERVICE SINK = FIAT #MSB-2424 WITH #832-AA AND #689-CC OR EQUAL BY STERN WILLIAMS, FLORESTONE
		FAUCET = FIAT #830-AA OR EQUAL BY AMER. STD., T&S BRASS, KOHLER, DELTA, CHICAGO
			1/2	1/2	2	3	3	UNIT TO BE INSTALLED ON A MORTAR BED

RD-1	CAST IRON ROOF DRAIN WITH 15" CAST IRON REMOVABLE DOME, FLASHING CLAMP DEVICE, GRAVEL STOP, AND DRAIN OUTLET OF SIZE INDICATED ON DRAWINGS. PROVIDE DECK CLAMP AND SUMP RECEIVER FOR ALL DRAINS EXCEPT WHEN DRAIN IS INSTALLED IN POURED IN PLACE CONCRETE ROOF. PROVIDE ADJUSTABLE EXTENSION ASSEMBLY WHERE WATER PROOF MEMBRANE IS INSTALLED ON TOP OF BUILT UP ROOF INSULATION.	ROOF DRAIN = ZURN #ZC100-C-EA-R OR EQUAL BY JOSAM, J.R. SMITH, WADE	--	--	--	SEE NOTES	SEE NOTES	SET DRAIN FLUSH AND LEVEL WITH FINISHED SURFACES, COORDINATE PLACEMENT WITH OTHER TRADES. COVER DRAIN DURING CONSTRUCTION TO PREVENT FOREIGN OBSTACLES FROM ENTERING DRAIN. DRAIN CONNECTION SIZE AS NOTED ON PLANS.
ORD-1	CAST IRON ROOF DRAIN WITH 15" CAST IRON REMOVABLE DOME, FLASHING CLAMP DEVICE, GRAVEL STOP, 2" HIGH INTERNAL WATER DAM, AND DRAIN OUTLET OF SIZE INDICATED ON DRAWINGS. PROVIDE DECK CLAMP AND SUMP RECEIVER FOR ALL DRAINS EXCEPT WHEN DRAIN IS INSTALLED IN POURED IN PLACE CONCRETE ROOF. PROVIDE ADJUSTABLE EXTENSION ASSEMBLY WHERE WATER PROOF MEMBRANE IS INSTALLED ON TOP OF BUILT UP ROOF INSULATION.	ROOF DRAIN = ZURN #ZC100-C-EA-R-W2 OR EQUAL BY JOSAM, J.R. SMITH, WADE	--	--	--	SEE NOTES	SEE NOTES	SET DRAIN FLUSH AND LEVEL WITH FINISHED SURFACES, COORDINATE PLACEMENT WITH OTHER TRADES. COVER DRAIN DURING CONSTRUCTION TO PREVENT FOREIGN OBSTACLES FROM ENTERING DRAIN. DRAIN CONNECTION SIZE AS NOTED ON PLANS.
DSN-1	CAST BRASS DOWNSPOUT NOZZLE WITH THREADED INLET, FACE OF WALL FLANGE, AND INLET OF SIZE INDICATED ON DRAWINGS.	ROOF DRAIN = ZURN #ZARB199 OR EQUAL BY JOSAM, J.R. SMITH, WADE	--	--	--	SEE NOTES	SEE NOTES	CONNECTION SIZE AS NOTED ON PLANS.

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No.	Date	Issue
1	07.2024	IPC

Project Architect: DV
Project Designer: DR
Date: 06/29/2023
Job Number: 222001
Drawn By: JW
Checked By: BM
Title: PLUMBING SCHEDULES
Sheet Number: **P6-0.2**

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PLUMBING FIXTURE SCHEDULE

COORDINATE ALL FIXTURE SPECIFICATIONS WITH OWNER AND ARCHITECT PRIOR TO PRICING

MARK	DESCRIPTION	MFR/MODEL	ROUGH-IN (INCHES) HW	CW	V	TRAP	S/W	NOTES
	COORDIANTE ALL FIXTURE SPECIFICATIONS WITH OWNER PRIOR TO ORDERING. SUBSTITUTIONS SHALL BE REVIEWED AND APPROVED BY OWNER							
WWB-1	RECESSED WALL BOX WITH SINGLE LEVER DOMESTIC WATER SUPPLY AND SHUT-OFF VALVE AND WATER HAMMER ARRESTORS FOR HOT AND COLD WATER SUPPLIES AND 2 MALE THREADED WASTE CONNECTION.	WASHER SUPPLY AND WASTE WALL BOX = WATER TITE #ECONO CENTER DRAIN OUTLET BOX IN NON-RATED WALLS AND #FR-12 WHERE INSTALLED IN RATED WALLS OR EQUAL BY SPECIALTY PRODUCTS, SIOUX CHIEF, OATEY	1/2	1/2	1.5	2	2	
IWB-1	COLD ROLLED STEEL, RECESSED WALL BOX WITH WHITE POWDER COAT FINISH, DOMESTIC WATER SUPPLY AND SHUT-OFF VALVE FOR COLD WATER SUPPLY. FIRE RATED WHEN PROVIDED IN RATED WALL ASSEMBLY.	ICE MACHINE SUPPLY WALL BOX = WATER TITE PLASTIC ICE MAKER BOX IN NON-RATED WALLS AND #FR-12 WHERE INSTALLED IN RATED WALLS OR EQUAL BY SPECIALTY PRODUCTS, SIOUX CHIEF, OATEY	--	1/2	--	--	--	INSTALL RECESSED WALL UTILITY BOX PER MANUFACTURER'S INSTALLATION INSTRUCTIONS TO MAINTAIN FIRE RATING OF WALL BOX IS INSTALLED IN.
SC-1	FROST PROOF ANTI-FREEZE RECESSED HOSE BIBB OF CAST BRASS CONSTRUCTION WITH 3/4" HOSE END WALL HYDRANT, RENEWABLE SEAT WASHER, INTEGRAL VACUUM BREAKER, AND LOOSE T HANDLE KEY. PROVIDE OWNER 1 KEY FOR EACH HYDRANT INSTALLED.	HOSE BIBB = WOODFORD #865 OR EQUAL BY JOSAM, ZURN, J.R. SMITH, WADE	--	3/4	--	--	--	
RH-1	ROOF MOUNTED HYDRANT ASSE 1057 LISTED WITH CAST BRASS CONSTRUCTION WITH 3/4" HOSE END CONNECTION, ASSE 1052 DOUBLE CHECK BACKFLOW PREVENTER, UNDER DECK FLANGE, EPDM BOOT COVERS, SHIM AS REQUIRED, HEIGHT AS REQUIRED ABOVE PLANTER FINISHED GRADE.	HYDRANT = WOODFORD #SRH-MS OR EQUAL BY JOSAM, ZURN, J.R. SMITH, WADE	--	3/4	--	--	--	
HB-1	WALL MOUNTED HOSE BIBB OF CHROME PLATED CAST BRASS CONSTRUCTION WITH 3/4" HOSE END CONNECTION, RENEWABLE SEAT WASHER, INTEGRAL VACUUM BREAKER.	HOSE BIBB = WOODFORD #24 OR EQUAL BY JOSAM, ZURN, J.R. SMITH, WADE	--	1/2	--	--	--	
YH-1	FROST PROOF ANTI-FREEZE YARD HYDRANT WITH 3/4" HOSE END AND ASSE 1052 DUAL CHECK BACKFLOW PREVENTOR, CAST IRON SUPPORT WITH 4' DEEP EXTENSION BURY DEPTH.	YARD HYDRANT = WOODFORD #Y2 OR EQUAL BY JOSAM, ZURN, J.R. SMITH, WADE	--	3/4	--	--	--	
FD-1	CAST IRON FLOOR DRAIN WITH DOUBLE DRAINAGE FLANGE AND WEEPHOLES WHERE WATERPROOF MEMBRANES OCCUR, ADJUSTABLE (UTILIZING MULTIPLE THREAD INTERCONNECTIONS) NICKEL BRONZE STRAINER, PROVIDE P-TRAP OF MATERIAL SPECIFIED FOR DRAINAGE PIPING AND SIZE INDICATED ON DRAWINGS. PROVIDE NEOPRENE RUBBER DIAPHRAGM TRAP SEAL IN DRAIN OUTLET.	FLOOR DRAIN = ZURN #ZN-4 15B OR EQUAL BY JOSAM, J.R. SMITH, WADE TRAP SEAL = SURE SEAL INLINE NEOPRENE RUBBER DIAPHRAGM	--	--	--	SEE NOTES	SEE NOTES	SET DRAIN FLUSH AND LEVEL WITH FINISHED SURFACES, COORDINATE PLACEMENT WITH OTHER TRADES. COVER DRAIN DURING CONSTRUCTION TO PREVENT FOREIGN OBSTACLES FROM ENTERING DRAIN. FLOOR DRAIN CONNECTION SIZE AS NOTED ON PLANS.
FD-2	CAST IRON FLOOR DRAIN WITH DOUBLE DRAINAGE FLANGE AND WEEPHOLES WHERE WATERPROOF MEMBRANES OCCUR, MEDIUM DUTY CAST IRON STRAINER, PROVIDE P-TRAP OF MATERIAL SPECIFIED FOR DRAINAGE PIPING AND SIZE INDICATED ON DRAWINGS. PROVIDE NEOPRENE RUBBER DIAPHRAGM TRAP SEAL IN DRAIN OUTLET.	FLOOR DRAIN = ZURN #Z-550 OR EQUAL BY JOSAM, J.R. SMITH, WADE TRAP SEAL = SURE SEAL INLINE NEOPRENE RUBBER DIAPHRAGM	--	--	--	SEE NOTES	SEE NOTES	SET DRAIN FLUSH AND LEVEL WITH FINISHED SURFACES, COORDINATE PLACEMENT WITH OTHER TRADES. COVER DRAIN DURING CONSTRUCTION TO PREVENT FOREIGN OBSTACLES FROM ENTERING DRAIN. FLOOR DRAIN CONNECTION SIZE AS NOTED ON PLANS.
FS-1	12"X12" CAST IRON SANITARY FLOOR SINK WITH ACID RESISTING PORCELAIN ENAMEL OR EPOXY COATED INTERIOR, DOUBLE DRAINAGE FLANGE WITH WEEPHOLES WHERE WATERPROOF MEMBRANES OCCUR, REMOVABLE INTERNAL ANTI-SPLASH DOME STRAINER, NICKEL BRONZE 1/2 GRATE, 1/2" PRIMER TAPPING, AND DRAIN OUTLET OF SIZE INDICATED ON DRAWINGS. PROVIDE P-TRAP OF MATERIAL SPECIFIED FOR DRAINAGE PIPING AND SIZE INDICATED ON DRAWINGS. PROVIDE NEOPRENE RUBBER DIAPHRAGM TRAP SEAL IN DRAIN OUTLET.	FLOOR SINK = ZURN #ZN1902-KC-2-3 3 OR EQUAL BY JOSAM, J.R. SMITH, WADE TRAP SEAL = SURE SEAL INLINE NEOPRENE RUBBER DIAPHRAGM	--	--	--	SEE NOTES	SEE NOTES	SET DRAIN FLUSH AND LEVEL WITH FINISHED SURFACES, COORDINATE PLACEMENT WITH OTHER TRADES. COVER DRAIN DURING CONSTRUCTION TO PREVENT FOREIGN OBSTACLES FROM ENTERING DRAIN. FLOOR DRAIN CONNECTION SIZE AS NOTED ON PLANS.
FS-2	5-3/8" DIA. PVC FLOOR SINK WITH REMOVABLE 18 GA STAINLESS STEEL STRAINER AND DRAIN OUTLET OF SIZE INDICATED ON DRAWINGS. PROVIDE P-TRAP OF MATERIAL SPECIFIED FOR DRAINAGE PIPING AND SIZE INDICATED ON DRAWINGS. PROVIDE NEOPRENE RUBBER DIAPHRAGM TRAP SEAL IN DRAIN OUTLET.	FLOOR SINK = SIOUX CHIEF #822-2PS OR EQUAL TRAP SEAL = SURE SEAL INLINE NEOPRENE RUBBER DIAPHRAGM	--	--	--	SEE NOTES	SEE NOTES	SET DRAIN FLUSH AND LEVEL WITH FINISHED SURFACES, COORDINATE PLACEMENT WITH OTHER TRADES. COVER DRAIN DURING CONSTRUCTION TO PREVENT FOREIGN OBSTACLES FROM ENTERING DRAIN. FLOOR DRAIN CONNECTION SIZE AS NOTED ON PLANS.

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No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date: 06/29/2023
Job Number: 222001
Drawn By: JW
Checked By: BM
Title: PLUMBING SCHEDULES
Sheet Number: **P6-0.3**

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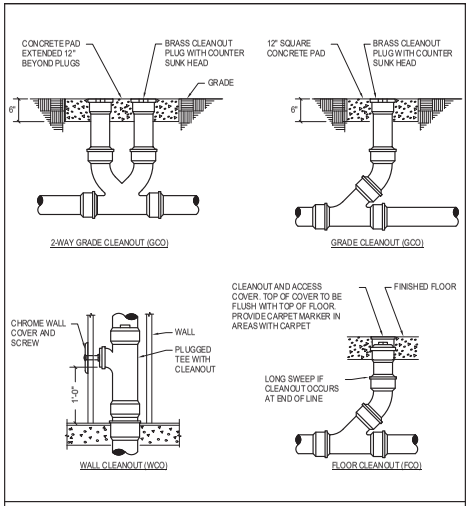
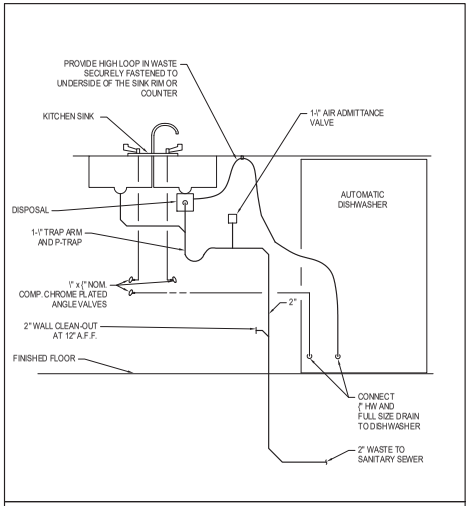


CLEANOUT DETAILS

NO SCALE

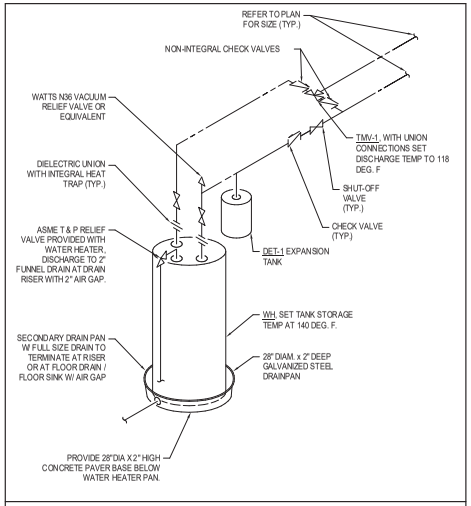
3 P7-0.1



SINK/DISHWASHER DETAIL

NO SCALE

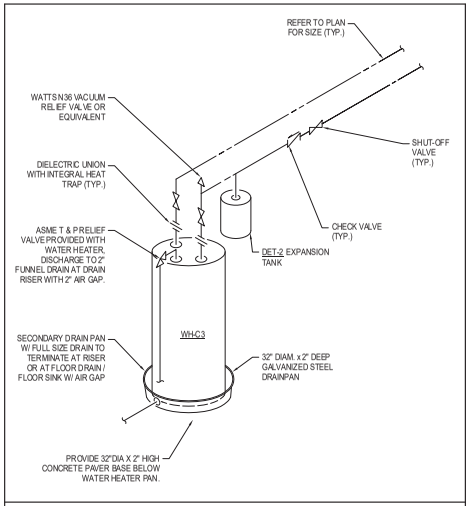
2 P7-0.1



ELECTRIC WATER HEATER DETAIL

NO SCALE

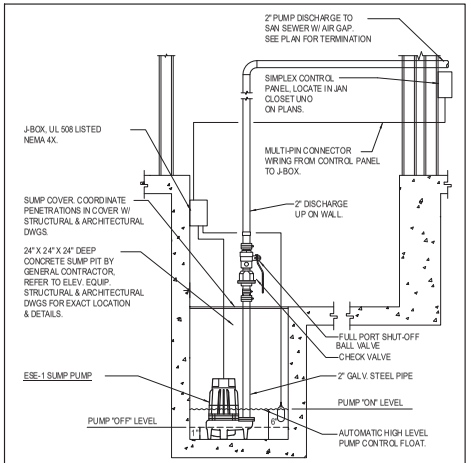
1 P7-0.1



ELECTRIC WATER HEATER DETAIL

NO SCALE

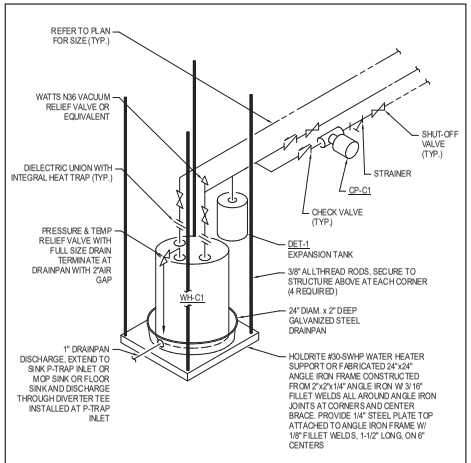
6 P7-0.1



ELEVATOR SUMP PUMP DETAIL

NO SCALE

5 P7-0.1



CEILING MTD. ELEC. WATER HEATER DETAIL 1

NO SCALE

4 P7-0.1

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08.06.2024

MARSHALL POINTE

MARSHALL POINTE APARTMENTS, LP
5170 MARSHALL ST
ARVADA, CO 80002

No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date: 06/29/2023
Job Number: 222001
Drawn By: JW
Checked By: BM
Title: PLUMBING DETAILS
Sheet Number: P7-0.1

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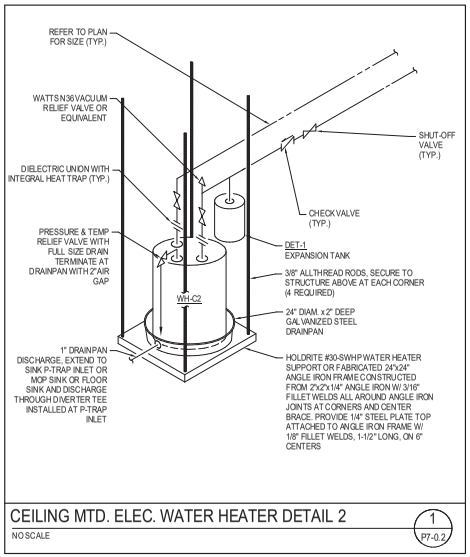

CEILING MTD. ELEC. WATER HEATER DETAIL 2

NO SCALE

1
P7-0.2

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Project Designer: DR
Date: 06/29/2023
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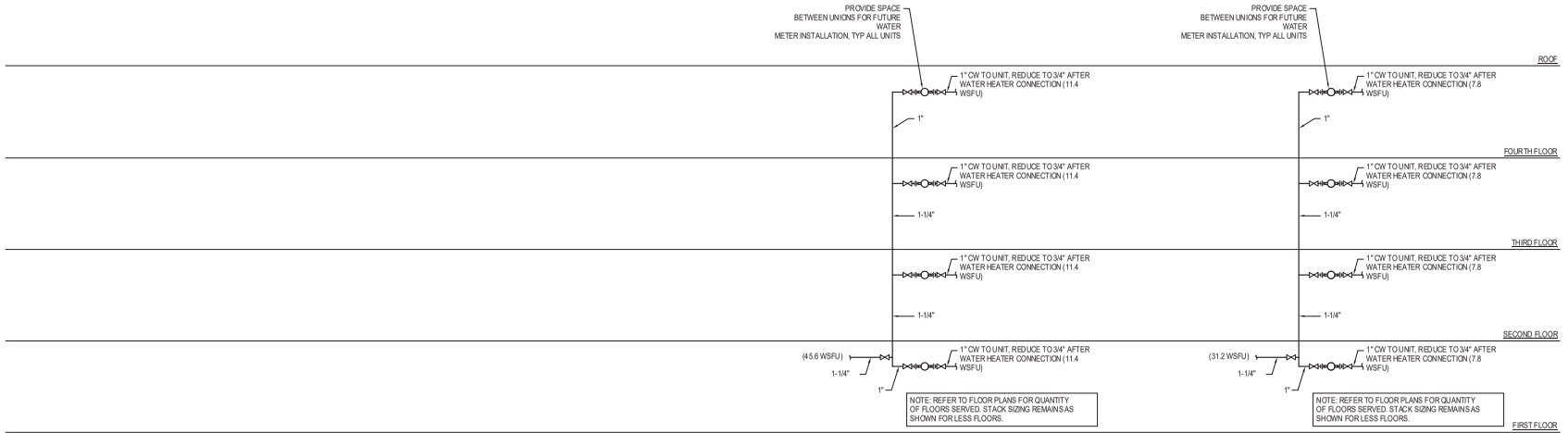

TWO BATHROOM DOMESTIC WATER RISER #2 DIAGRAM

SCALE: NONE

ONE BATHROOM DOMESTIC WATER RISER #1 DIAGRAM

SCALE: NONE

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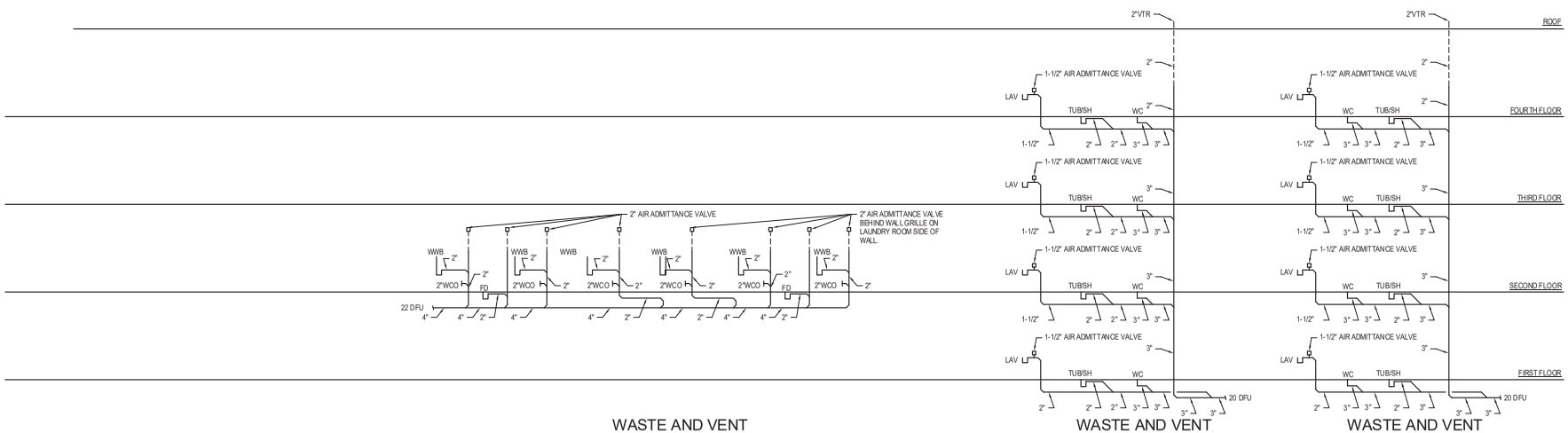
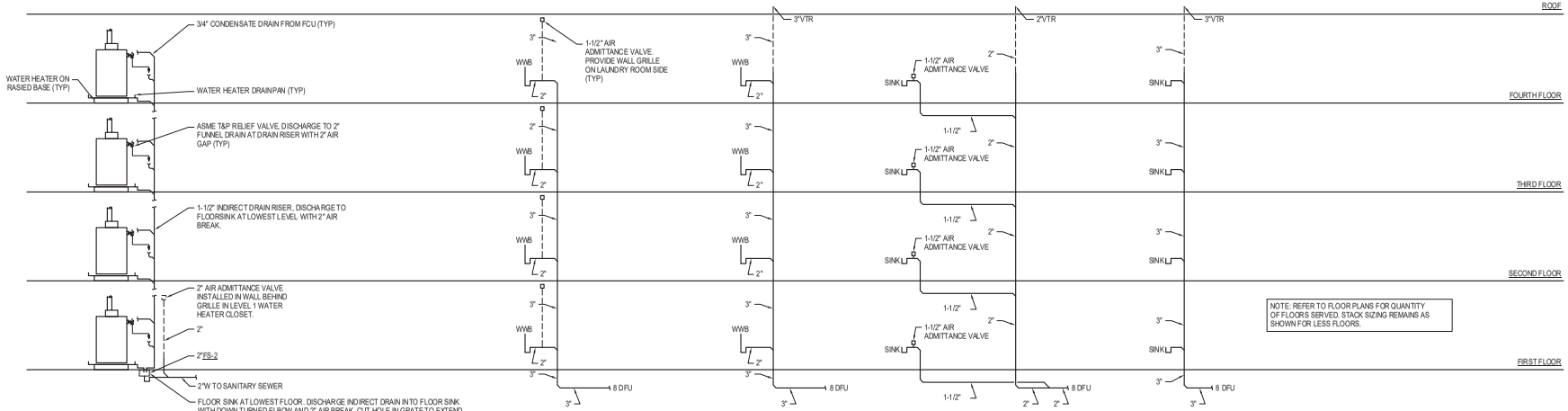


WASTE AND VENT STACK DIAGRAM #W3
SCALE: NONE

WASTE AND VENT STACK RISER #2
SCALE: NONE

WASTE AND VENT STACK RISER #1
SCALE: NONE



NOTE: REFER TO FLOOR PLANS FOR QUANTITY OF FLOORS SERVED. STACK SIZING REMAINS AS SHOWN FOR LESS FLOORS.

TYPICAL WATER HEATER DRAIN RISER "M"
SCALE: NONE

WASTE AND VENT STACK RISER "W2"
SCALE: NONE

WASTE AND VENT STACK RISER "W"
SCALE: NONE

WASTE AND VENT STACK RISER "S2"
SCALE: NONE

WASTE AND VENT STACK RISER "S"
SCALE: NONE

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Project Designer	DR
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Job Number	222001
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Checked By	BM
Title	PLUMBING RISER DIAGRAMS
Sheet Number	P8-1.2

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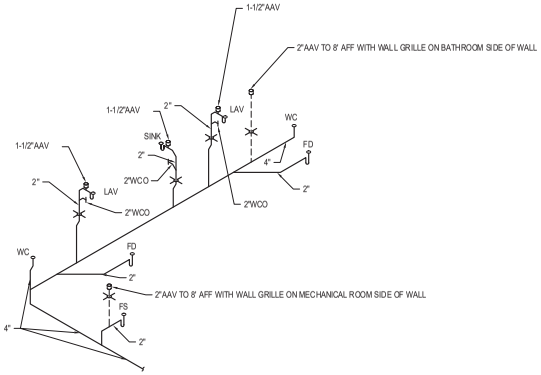


LEVEL 1 AMENITY RESTROOMS
WASTE & VENT ISOMETRIC

NO SCALE

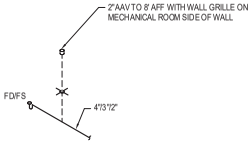
3
P8-1.3



ELECTRIC WATER COOLER
WASTE & VENT ISOMETRIC

NO SCALE

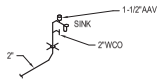
2
P8-1.3



TYPICAL FD/FS
WASTE & VENT ISOMETRIC

NO SCALE

1
P8-1.3



TYPICAL SINK
WASTE & VENT ISOMETRIC

NO SCALE

4
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GENERAL PROJECT NOTES

NOTE: SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL CONSTRUCTION REQUIREMENTS

1. THE CONTRACTOR SHALL PROVIDE ALL LABOR AND MATERIAL, INCIDENTAL FOR A COMPLETE, OPERATIONAL AND PROPERLY FUNCTIONING ELECTRICAL SYSTEM.
2. MATERIALS AND INSTALLATION SHALL COMPLY WITH CODES, LAWS AND ORDINANCES OF FEDERAL, STATE AND LOCAL GOVERNING BODIES HAVING JURISDICTION.
3. MATERIALS NOT EQUIPMENT SHALL BE LISTED AND/OR LABELED BY UL, ETL, CSA OR ANOTHER RECOGNIZED TESTING LAB. ALL MATERIAL, EQUIPMENT, WIRING DEVICES, ETC. SHALL BE NEW UNLESS SPECIFICALLY INDICATED AS EXISTING TO BE REUSED.
4. THE CONTRACTOR SHALL PREPARE AND SUBMIT TO GOVERNMENTAL AGENCIES AND UTILITY COMPANIES SHOP DRAWINGS REQUIRED BY THESE AGENCIES FOR APPROVAL. THE CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, GOVERNMENTAL FEES, TAXES AND LICENSE FEES NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE ELECTRICAL WORK. THIS CONTRACTOR SHALL SECURE AND PAY ALL FEES AND PERMIT FOR THIS CONTRACT. SHALL BE RESPONSIBLE FOR NOTIFICATIONS IDENTIFICATION AND BAGGING, SAFETY, AND LIABILITY INSURANCE. PROVIDE BARRICADES, WARNING SIGNS, AND TRASH REMOVAL FOR THIS SAFETY OF THE WORKERS UNDER THIS CONTRACTORS EMPLOY.
5. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER OWNER OF ANY MATERIALS OR APPARATUS BELIEVED TO BE INADEQUATE, UNSUITABLE OR IN VIOLATION OF LAWS, ORDINANCES, RULES OR REGULATIONS OF AUTHORITIES HAVING JURISDICTION.
6. THE CONTRACTOR SHALL PREPARE THE DOCUMENTS, INCLUDING DRAWINGS, REQUIRED TO OBTAIN APPROVAL OF THE EQUIPMENT AND LOCATIONS OF THE DEVICES THAT COMPRISE THE BUILDING FIRE ALARM LIFE SAFETY SYSTEM. THE DRAWINGS AND CUT SHEETS SHALL BE PROVIDED TO A PROFESSIONAL ENGINEER FOR REVIEW AND APPROVAL. THE APPROVED DRAWINGS WILL BE STAMPED, SIGNED AND RETURNED TO E.C. TO SUBMIT TO THE BUILDING DEPARTMENT.
7. THE CONTRACTOR SHALL CAREFULLY EXAMINE THE CONTRACT DOCUMENTS, VISIT THE SITE, AND THOROUGHLY BECOME FAMILIAR WITH THE BUILDING STANDARDS, LOCAL JURISDICTIONAL CODES AND REQUIREMENTS, AND LOCAL CONDITIONS RELATING TO THE WORK. FAILURE TO DO SO WILL NOT RELIEVE THE CONTRACTOR OF THE OBLIGATIONS OF THE CONTRACT. SUBMISSION OF PROPOSAL INCLONCE IN CONNECTION WITH THIS WORK SHALL IMPLY THAT THE BIDDER HAS EXAMINED THE JOB SITE. NO EXTRA CHARGE WILL BE ALLOWED FOR CHANGES AS A RESULT FROM FAILURE TO EXAMINE THE JOB SITE.
8. THE CONTRACTOR SHALL PROVIDE TEMPORARY POWER AND WIRING FOR THE PERFORMANCE OF ALL TRADES, FOR THE ENTIRE PERIOD OF CONSTRUCTION AND SHALL REMOVE ALL TEMPORARY WIRING AT THE COMPLETION OF CONSTRUCTION.
9. THE EXISTING POWER, SIGNAL AND COMMUNICATIONS SYSTEMS ARE TO REMAIN IN SERVICE TO PROVIDE FOR THE OWNER'S FUNCTION. SHOULD IT BECOME NECESSARY TO SHUT DOWN ANY SYSTEM OR PORTION OF A SYSTEM, APPROVAL IN WRITING MUST BE OBTAINED FROM THE OWNER AND SHALL ONLY APPLY FOR THE PERIOD AND TIME AGREED UPON. THE BID IS TO INCLUDE THE COST OF ANY TEMPORARY WIRING AND PREMIUM TIME REQUIRED FOR THE SHUTDOWN.
10. ALL MATERIALS AND EQUIPMENT SHALL BE RESTED, INSTALLED, CONNECTED, CLEANED, ADJUSTED, TESTED, CONDITIONED, AND PLACED IN SERVICE IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS AND RECOMMENDATIONS.
11. ALL CUTTING, DRILLING AND PATCHING OF MASONRY, STEEL OR IRON WORK BELONGING TO THE BUILDING MUST BE DONE BY THIS CONTRACTOR IN ORDER THAT HIS WORK MAY BE PROPERLY INSTALLED, BUT UNDER NO CONDITIONS MAY STRUCTURAL WORK BE CUT, EXCEPT AT THE DIRECTION OF THE ARCHITECT/ENGINEER OR THEIR REPRESENTATIVE.
12. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND MOUNTING HEIGHTS OF ELECTRICAL FIXTURES AND ELECTRICAL DEVICES. DEVICE LOCATIONS SHALL CONFORM TO ADA/ICC/ANSI STANDARDS.
13. ALL WORK REQUIRED FOR THE INSTALLATION AS SHOWN ON DRAWINGS INCLUDING LABOR, EQUIPMENT AND MATERIALS SHALL BE IN STRICT COMPLIANCE WITH THE BUILDING STANDARDS.
14. PROVIDE CONDUIT, METAL RACEWAY SYSTEMS AND ENCLOSURES FOR ALL WIRING THROUGHOUT THE EXTENT OF THE REQUIRED SYSTEMS AS OTHERWISE PERMITTED BY THE NEC.
    M.a. TYPE XHHW-2 CONSTRUCTION- WHERE PERMITTED PER NEC ARTICLE 334 NONMETALLIC SHEATHED CABLE AND NONMETALLIC BOXES MAY BE USED.
    M.b. TYPE MC AND AC CABLE MAY BE USED WHERE PERMITTED BY THE NEC (ARTICLE 330)
15. ALL TELCO DATA BOXES SHALL BE PROVIDED WITH A 1/2" CONDUIT AND BUSHING WITH PULL STRING RUN IF ABOVE FINISHED CEILING OR CEILING SPACE. EXCEPT FOR SPECIFICAL METALIC TUBING (EMT) SHALL BE USED FOR ALL WALL OUTLETS & TELE PHONE WIRING RUNNING BELOW RAISED FLOOR OR ABOVE HARD CEILINGS.
16. ALL RECEPTACLES NOTED AS ISOLATED GROUND (IG) OR DEDICATED OR CIRCUITED AS DEDICATED SHALL BE PROVIDED WITH A DEDICATED GROUND AND NEUTRAL.
17. MINIMUM CONDUIT SIZE SHALL BE 3/4" UNLESS OTHERWISE INDICATED. CONDUITS LARGER THAN 2" DIAMETER OR CONDUITS OF ANY SIZE ROUTED OUTDOORS SHALL BE INTERMEDIATE METAL CONDUIT (IMC).
18. FLEXIBLE CONDUIT CONNECTIONS TO RECESSED LIGHTING FIXTURES SHALL BE MADE WITH FLEXIBLE STEEL CONDUIT, 3/8 INCH MINIMUM.
19. FINAL CONNECTIONS TO MOTORS SHALL BE MADE WITH LIQUID TIGHT FLEXIBLE STEEL CONDUIT, 1/2 INCH MINIMUM.
20. WIRE NO. 8 AND SMALLER INSTALLED IN DRY LOCATIONS SHALL BE TYPE THWN OR THHN THERMOPLASTIC 600V INSULATED COPPER CONDUCTORS. WIRE SMALLER THAN NO.12 SHALL BE USED FOR LIGHTING OR POWER WIRING. WIRE NO. 8 AND LARGER SHALL BE STRANDED. ALL CONDUCTORS INSTALLED IN EXTERIOR OR WET LOCATIONS SHALL BE TYPE THWN 600V INSULATED COPPER CONDUCTORS.
21. ALL NEW CIRCUIT BREAKERS FOR NEW OR EXISTING PANELBOARDS SHALL MATCH EXISTING OR NEW BUILDING STANDARD PANELBOARD MANUFACTURER AND BRAND. WHERE THE EXISTING PANEL SHALL PROVIDE NEW ACCURATE AND DETAILED TYPE WRITTEN PANEL DIRECTORIES PER NEC 408.4 FOR ALL NEW OR MODIFIED PANELS. NUMBER RECEPTACLES ARE FOR CONVENIENCE OF DESIGN ONLY. E.C. TO FIELD VERIFY ACTUAL CIRCUIT NUMBERS USED AND CORRECT IF INDICATE ON "AS-BUILT" DRAWINGS. THE E.C. SHALL REMOVE ALL UNKNOWN RECEPTACLES.
22. PROVIDE MINIMUM #10 FOR NEW CIRCUITS OVER 75 FT 120 VAND OVER 150 FT 277V. E.C. TO FIELD VERIFY BRANCH CIRCUIT LENGTHS AND INCREASE CONDUCTOR SIZES AS REQUIRED TO COMPENSATE FOR VOLTAGE DROP.
23. EACH SWITCH, LIGHT, RECEPTACLE AND ALL OTHER DEVICES SHALL BE PROVIDED AND INSTALLED WITH A GALVANIZED OR HERMAPHRODITED PRESSED STEEL JUNCTION BOX OF NOT LESS THAN NO. 16 U.S. GAUGE STEEL. CONDUITS SHALL BE FASTENED WITH LOCKNUTS AND BUSHINGS. AND ALL UNUSED OPENINGS MUST BE LEFT SEALED. THERE MUST BE SUFFICIENT ROOM FOR WIRES AND BUSHINGS AND DEEP BOXES SHALL BE HID INLLED WHERE REQUIRED. ALL BOXES SHALL BE SECURELY AND RIGIDLY SUPPORTED. PROVIDE CIRCUIT NUMBERS PRINTED ON FACEPLATE OF EACH DEVICE.
    23.a EXCEPTION: TYPE XHHW-2 CONSTRUCTION - WHERE PERMITTED PER NEC ARTICLE 334 NONMETALLIC BOXES MAY BE USED.
24. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL SPECIAL OUTLET BOXES THAT MAY BE REQUIRED TO ENCLOSE RECEPTACLES.
25. IN SUSPENDED CEILINGS SUPPORT CONDUIT AND JUNCTION BOXES DIRECT FROM THE STRUCTURAL SLAB, DECK, OR FRAMING PROVIDED FOR THAT PURPOSE. LIGHTING BRANCH CIRCUIT CONDUITS SHALL NOT BE CUPPED TO THE CEILING SUPPORT WIRES OR SPLINE UNLESS THE CEILING SYSTEM HAS BEEN SPECIFICALLY DESIGNED FOR THAT PURPOSE.
26. PROVIDE LOCAL DISCONNECT SWITCHES FOR ALL MOTORS (PLENUM APPROVED WHERE REQUIRED).
27. THE E.C. SHALL INCLUDE IN HIS COST THE REMOVAL OF ALL EXISTING ELECTRICAL DEVICES, CONDUITS, FIXTURES AND EQUIPMENT THAT IS NOT TO BE REUSED. DISCARD ALL EQUIPMENT AS REQUIRED. E.C. SHALL BE RESPONSIBLE FOR DISCONNECTING PRIMARY SERVICE AND TEMPORARY POWER.
28. PROVIDE WARRANTY GUARANTEED FOR A PERIOD OF ONE YEAR AFTER COMPLETION AND ACCEPTANCE, REPLACE ALL DEFECTIVE WORKMANSHIP, EQUIPMENT AND MATERIALS WITHOUT ADDITIONAL CHARGES.
29. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFEKEEPING OF HIS/HER OWN PROPERTY ON THE JOB SITE. THE OWNER OR TENANT AS BASES NO RESPONSIBILITY FOR PROTECTION OF THIS CONTRACTORS PROPERTY AGAINST FIRE, THEFT, OR ENVIRONMENTAL CONDITIONS.
30. WHERE CONDUIT, CABLES, DUCTWORK OR PIPING PASSES THROUGH FIRE RATED FLOORS, WALLS, OR PARTITIONS, THE SLEEVES SHALL BE COMPLETELY SEALED WITH A FIRE STOP MATERIAL THAT IS U.L. LISTED (EQUAL TO DOW CORNING) AND ACCEPTED BY THE BUILDING DEPARTMENT AS FIRE DEPARTMENT AS BEING SUITABLE FOR THE SERVICE. THIS MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED INSTRUCTIONS IN ORDER TO MAINTAIN THE FIRE RATING OF THE PENETRATED WALL, FLOOR, OR PARTITION. INSTALLATION SHALL BE A THROUGH PENETRATION FIRE STOP SYSTEM INSTALLED AS TESTED IN ACCORDANCE WITH AS TM ANDUL . THE FIRE RATING SHALL MATCH THE RATING OF THE BARRIER BEING PENETRATED.
31. SUBMIT AN ELECTRONIC COPY OR SIX (6 SETS) OF SHOP DRAWING, CONTROL DIAGRAMS, AND EQUIPMENT CUTS TO THE ENGINEER FOR APPROVAL PRIOR TO STARTING RELATED WORK. SHOP DRAWINGS SHALL INCLUDE MANUFACTURERS NAMES, CATALOG NUMBERS, CUTS, DIAGRAMS AND OTHER SUCH DESCRIPTIVE DATA AS MAYBE REQUIRED TO IDENTIFY AND REVIEW THE EQUIPMENT. SUBMITTALS SHALL BE IN LOGICAL GROUPS. PARTIAL SUBMITTALS WILL NOT BE REVIEWED.
32. UPON COMPLETION OF CONSTRUCTION, SUPPLY THE ENGINEER WITH ONE COMPLETE SET OF FULL SIZE AS-BUILT DRAWINGS. PROVIDE THE OWNER WITH THREE (3) SETS OF OPERATION AND MAINTENANCE MANUALS FOR EACH TYPE OF EQUIPMENT INSTALLED.
33. THIS CONTRACTOR SHALL ASSUME ALL ADDED EXPENSES TO ALL TRADES ASSOCIATED WITH THE INSTALLATION OF SUBMITTED AND APPROVED ALTERNATE EQUIPMENT.
34. THE CONTRACTOR SHALL COORDINATE THE LAYOUT OF THEIR WORK WITH ALL OTHER DISCIPLINES, ESPECIALLY THE FIRE ALARM AND FIRE PROTECTION DESIGN-BUILD CONTRACTORS PRIOR TO ANY WORK.
35. IF ANY CHANGES ARE MADE TO ACCOMMODATE FIELD CONDITIONS NOTIFY THE ENGINEER IMMEDIATELY OF WHAT THE CHANGES WERE, THE REASON FOR THE CHANGES, AND THE COST IMPACTS.
36. LOCATE ALL ELECTRICAL SWITCHBOARDS, PANELBOARDS AND ELECTRICAL DISTRIBUTION EQUIPMENT IN DEDICATED SPACES AND PROTECTED FROM DAMAGE WITH ADEQUATE WORKING CLEARANCE ACCORDANCE WITH NEC 110 REQUIREMENTS. PROVIDE PROTECTION FROM ANY FOREIGN SYSTEM INSTALLED ABOVE THE DEDICATED EQUIPMENT SPACE PER NEC 110.26(E).
37. SERVICE EQUIPMENT SHALL BE MARKED TO IDENTIFY IT AS BEING SUITABLE FOR USE AS SERVICE EQUIPMENT PER NEC 230.66
38. ELECTRICAL ROOM DOORS SHALL BE EQUIPPED WITH PANIC BARS, PRESSURE PLATES, OR OTHER DEVICES THAT ARE NORMALLY LATCHED BUT OPEN UNDER SIMPLE PRESSURE IN ACCORDANCE WITH NEC 110.26(C)(3).

FIRE ALARM SYSTEM NOTES

FIRE ALARM SYSTEM IS TO BE DESIGN/BUILD BY THE CONTRACTOR.

ELECTRICAL LEGEND

NOTE: NOT ALL ITEMS APPEAR ON DRAWINGS. SYMBOLS MAY OR MAY NOT BE PROPOSED TO AND DEMO WORK OR DEVICES REFERENCED BY SYMBOLS USED FROM DRAWING BY OTHERS.

POWER AND LIGHTING

- GROUNDED SWITCHED DUPLEX RECEPTACLE
- GROUNDED SPLIT-WIRED DUPLEX RECEPTACLE
- GROUNDED DUPLEX RECEPTACLE
- GROUNDED QUADRAPLEX RECEPTACLE
- SPECIAL PURPOSE RECEPTACLE
- FLOOR/CEILING MOUNTED RECEPTACLE
- JUNCTION BOX
- WALL MOUNTED JUNCTION BOX
- DISCONNECT SWITCH
- FUSED DISCONNECT SWITCH
- THERMAL OVERLOAD SWITCH
- ELECTRICAL PANEL BOARD
- TRANSFORMER
- CIRCUIT BY HOMERUN TO PANEL 'X' WITH ARROWS INDICATING NUMBER OF CONDUCTORS; NUMBERS APPEAR NEXT TO CONDUCTORS
- PORCELAIN LAMP HOLDER
- RECESSED FLUORESCENT 2 OR 4 TYPE FIXTURE
- SURFACE MOUNTED FLUORESCENT FIXTURE
- CEILING FIXTURE
- WALL WASHER (+ or ADJUSTABLE) DOWN LIGHT
- SINGLE POLE SWITCH, OPEN IPOLE
- DIMMER SWITCH
- EXIT SIGN
- EMERGENCY FIXTURE - SHADED
- BATTERY PACK EMERGENCY LIGHT WITH REMOTE - SEE SCHEDULE
- MOTOR

LOW VOLTAGE SYSTEMS

- TELEPHONE/DATA WALL BOARD
- DATA OUTLET (RJ45 CABLING UNLIMITED LENGTH)
- RECESSED MOUNTED TELEPHONE OUTLET
- DATA OUTLET
- TELEPHONE/MEDIA OUTLET PROJECT STANDARD
- TELEPHONE OUTLET
- CATV MONITOR AND OUTLET
- SPEAKER
- FIRE ALARM PANEL
- FIRE ALARM REMOTE ANNUNCIATOR PANEL
- SMOKE THEAT DETECTOR
- DUCT FIRE DETECTOR

ABBREVIATIONS

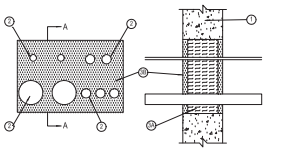
EWC	ELECTRIC WATER COOLER
EF	EXHAUST FAN
GFI	GROUND FAULT INTERRUPTING
AFI	ARC FAULT INTERRUPTING
EC	ELECTRICAL CONTRACTOR
EC	ELECTRICAL CONTRACTOR
AG	ABOVE COUNTER/GFI - VERIFY HEIGHT
AC	ABOVE COUNTER - VERIFY HEIGHT
WP	WEATHERPROOF
TR	TELEPHONE/TERMINAL BOARD
AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITY HAVING JURISDICTION
(E)	EXISTING TO REMAIN
(EA)	EXISTING TO BE REMOVED
(ER)	EXISTING TO BE REUSED TO
(R) (RL)	RELOCATE OR LEVER TO LOCATION

REFERENCE SYMBOLS

- KEYED NOTE
- EQUIPMENT - SEE SCHEDULE
- FEEDER - SEE SCHEDULE
- TRANSFORMER WITH SIZE (KVA), AND OVERCURRENT DEVICES SEE TRANSFORMER SCHEDULE

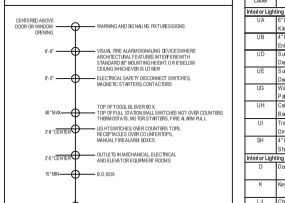
ELECTRICAL PENETRATION DETAIL
FIRE RATING - 2HR

T Ratings - 1/4, 1/2 or 3/4 HR (See Item 2)



1. Wall Assembly — Min 6in. thick reinforced lightweight or normal-weight (90 to 150 pcf) concrete. Wall may also be constructed of any UL Classified Concrete Blocked Masonry. Maximum of opening is 200 sq in. with a max dimension of 20 in.
   See Concrete Blocks (CAST) category in the Fire Resistance Directory for names of manufacturers.
2. Through-Penetrants — Any combination of the following metallic penetrants to be installed within the fire stop system. The annular space between penetrants shall be min 1/4 in. to max 3-1/2 in. and between penetrants and periphery of opening shall be min 1/4 in. to max 3-1/2 in. Penetrants to be rigidly supported on both sides of floor or wall assembly. The following pipes and sizes of conduit or metal cable may be used:
   A. Conduit – Nom 4 in. diam (or smaller) electrical metallic tubing. Max two 4 in. diam conduits and max three 2 in. diam conduits per opening.
   When two 4 in diam EMT is used, TRating is 1/4 hr. When 2 in. diam (or smaller) EMT is used, T Rating is 1/4.
   B. Metal Clad Cable — Nom 2 in. diam (or smaller) 4 conductor 20 AWG steel or aluminum Metal Clad Cable with one Metal PVC jacket. Max two cables permitted. Other cable constructions used, T Ratings 1/4 hr.
   See Through-Penetrating Products (XHTR) category in Vol 2 of the Fire Resistance Directory for names of manufacturers.
   C. Flexible Metal Conduit — Nom 1-1/2 in. diam (or smaller) steel or aluminum Flexible Metal Conduit. Max two flexible metal conduits per opening. When flexible metal conduit is used, T Rating is 1/4 hr.
   See Flexible Metal Conduit (DXUZ) category in the Electrical Construction Materials Directory
3. Fire-stop System — The fire stop system shall consist of the following:
   A. Packing Material — Min 4-3/4 in. thickness of min 4 pcf mineral wool batt insulation firmly packed into openings as permanent form. Packing material to be recessed from both surfaces of wall as required to accommodate the required thickness of fill material.
   B. Fill, Void or Cavity Material* – Caulk — Min 5/8 in. thickness of fill material applied within the annulus, flush with both surfaces of wall. FIRESTOP SEAL — Metacaulk 1000

MOUNTING HEIGHTS



MOUNTING HEIGHT NOTES

1. MOUNTING HEIGHT IS TO CENTER OF OUTLETS UNLESS NOTED OTHERWISE. IN MASONRY CONSTRUCTION WHERE ABOVE MOUNTING HEIGHTS SHALL BE USED FOR REFERENCE TO NEAREST BLOCK OR BRICK COURSE.
2. THE ABOVE MOUNTING HEIGHTS SHALL BE ADHERED TO UNLESS SPECIFICALLY NOTED OR DETAILED OTHERWISE ON THE DRAWINGS OR IN SPECIFICATIONS.

LUMINAIRE SCHEDULE

May 2, 2024

Label	Light Fixture Description	Specification	Lamping	Voltage	Mounting	Comment
Interior Lighting - Residential Units						
UA	6" LED Surface Mount Downlight Kitchen and Living Room	Specified by Others	15W LED 3000K	120	Surface	
UB	4" LED Surface Mount Downlight Entry and Closets	Specified by Others	12W LED 3000K	120	Surface	
UD	Surface Mounted Suspended Pendant Decorative Trim and Glass Shade	Specified by Others	9W LED 3000K	120	Suspended	
UE	Surface Mounted Vanity Light, 4 Bulb Decorative Trim and Glass Shade	Specified by Others	(4) 7.5W LED 3000K	120	Surface	1
UG	Wall Sconce - Decorative Patios	Specified by Others	15W LED 3000K	120	Surface	2,3
UH	Ceiling Fan W/ Light Kit, 6" LED Bedrooms and Living Room	Specified by Others	15W LED 3000K	120	Surface	
UI	Track Light, 3 Bulb Dining	Specified by Others	(3) 7.5W LED 3000K	120	Surface	
SH	4" LED Surface Mount Downlight, Wet Rated Shower	Specified by Others	12W LED 3000K	120	Surface	2
Interior Lighting - Public Spaces, Corridors, Garage, and Commercial Spaces						
D	Downlight - Corridor	Halo SMD8R-6-SD-WH	9.6W LED	120	Surface	
K	Keyless Fixture	Porcelain Keyless Fixture	6W LED	120	Surface	
L-1	Chandelier Clubroom Island	Specified by ID	16W LED	120	Suspended	
L-2	Wall Sconce Clubroom Banquette	Specified by ID	21.5W LED	120	Surface	
L-3	Chandelier Clubroom TV	Specified by ID	26W LED	120	Suspended	
L-4	Flush Mount Clubroom Shuffleboard	Specified by ID	13W LED	120	Surface	
L-5	Flush Mount Fitness	Specified by ID	16W LED	120	Surface	
L-6	Directional Light Restroom Entry Soffit	Specified by ID	7W LED	120	Surface	
L-7	Pan Fitness	Specified by ID	18W N/A	120	Suspended	
L-8	Chandelier Entry	Specified by ID	16W LED	120	Suspended	
L-9	Chandelier Restroom Seating	Specified by ID	16W LED	120	Suspended	
L-10	Chandelier Restroom Island	Specified by ID	46W LED	120	Suspended	
L-11	Wall Sconce Lobby Columns	Specified by ID	26W LED	120	Surface	
L-12	Pendant Vestibule	Specified by ID	60W LED	120	Suspended	
L-13	Flush Mount Leasing	Specified by ID	13W LED	120	Surface	
L-14	Semi Flush Mount Work Room, Courtyard Access, Pavcil	Specified by ID	13W LED	120	Surface	
L-15	Fan w/ Light Kit Leasing Offices	Specified by ID	18W N/A	120	Suspended	
L-16	Mini Pendant Restrooms	Specified by ID	8W LED	120	Suspended	
L-17	Neon Sign Fitness	Specified by ID	600W LED	120	Surface	
L-18	Pin Light Courtyard Access	Specified by ID	9W LED	120	Surface	
L-19	Strip Light Restroom Mirrors	Specified by ID	15W LED	120	Surface	
L-20	Wall Sconce Waiting Area	Specified by ID	9W LED	120	Surface	
L-21	Wall Sconce Reception	Specified by ID	14W LED	120	Surface	
L-22	Can Light Amenity Area	Elite Lighting RH4-LED-WDM-30K-18K-90DL-DIM10-120-VWD Private Dark Finish That Matches Adjacent Ceiling Color Medium Beam	17.4W LED	120	Recessed	
Q	Garage Light with Battery Backup & Dimming Occupancy Sensor	5TWLED TT-DA-14-SU-WQ-XX-XX-BK-BP-MS/DIM-LB-FSIR-100	5TWLED 30DK	120	Surface or Suspended	2,3,4
S	4' Strip Light	Eaton Metalux 4SNLED-LD4-41SL-UNV/MV-UNV-CCD1-U	41W LED	120	Surface Wall	
ST	Stairwell LED Fixture with Motion Sensor/Dual Level & EM Battery Backup	Alico Lighting LL8-4-WE-2S8-4-1-EM7-4D-DS	40W LED	120	Surface Wall	
S1	Strip Light, 1 Lamp Clubroom Under Ballast & Wet Guard	Elite Oxide 4-OC-1-32-T8E-MV	40WLED 3000K	120	Surface or Suspended	2,3
WS	Wall Sconce - Corridors Decorative	Specified by Others	8.5W LED 3000K	120	Surface	
Emergency Lighting						
EM	Emergency Light Fixture with Dual Head and Emergency Operation	Exitronix LUDH-5-25	Included	120	Surface	
X	LED Edge-Lit Exit Sign with Emergency Operation	Exitronix SRDX-LB-SR-GM-BA	Included	120	Surface	
X-1	Exterior LED Exit Sign with location cold weather with battery	Eaton Sunlite LUXN SD	1.4W LED color per local code	120/277	Surface	2,3
XEM	Combination Exit Sign/Emergency Egress Light Twin Head LED with 90-Minute Battery Pack	Cooper Sure-Lites APC7	(2) 3.6W, 7.8W LED Included	120	Surface 8ft on Center	
XEM1	Exterior Emergency Egress Light 90-Minute Battery Pack	Best Lighting CMLEZDTD-X-G-X-CW	(2) 3.6W	120	Surface	2,3
XR	Exterior Emergency Egress Light 90-Minute Battery Pack	Cooper Sunlite AELSD or Match Building Standard	Included	120	Surface	2,3
Exterior Lighting						
LT	LED Light Tape Wall and Seating Areas	American Lighting IP-B-S TL60-WW	2.19W/FT LED	120	Surface 4' AFG	2,3,5
SD	Downlight Overhangs	Halo SMD6R-6-SD-WH	9.6W LED	120	Surface 10' AFG	2,3,5
SL	Step Lights Stairs	Lumenx 12D1-LA-3ST4-12-BK-MB	3W Halogen	120	Recessed 3" AFG	2,3,5
SP1	Site Pole Parking and Drives	McGraw-Edison GLEON-8-A1C-150-U-T4W-BK-DIM	95W LED	120	Pole 20' AFG	2,3,5
SP2	Pedestrian Pole Courtyards	Inoue EMM-EGO-LED-E1-SU-HSS-SR-6-W-BK-7000-VM012	50W LED	120	Pole 12' AFG	2,3,5
SP3	Site Pole Top of Parking Garage	McGraw-Edison GLEON-8-A1C-150-U-T4FT8-KMS-EM-L20-MA1D7-X-X	(2)95W LED	120	Pole + Base 16' AFF	2,3,4,5
SW	Wall Sconce Entries	Lumenx 3SD-WT-LED81-3000-UNV-T4-DIM10-BK	8.5W LED	120	Surface 8' AFG	2,3,5
WP	Wall Pack Garage Entry	Lumenx XTOR5-Y-BK-XX	12W LED	120	Surface 12' AFG	2,3,5
WP1	Wall Pack Top of Garage Exits	Lumenx XTOR-1B-Y-BK	10W LED	120	Surface 8' AFF	2,3,5

GENERAL LIGHT FIXTURE NOTES: Apply to all fixtures whenever applicable.

1. EMERGENCY FIXTURES - All Fixtures Indicated as Emergency shall be provided with a 90 Minute Battery Pack with minimum 1300 Lumen output.
2. VERIFY VOLTAGES - The E.C. shall verify voltages on drawings prior to ordering or any work, the engineer shall be notified of any discrepancies in the voltage of the circuiting on the drawings and the luminaire schedule prior to any purchase or work.
3. VERIFY LAMPING - The E.C. shall verify lamping with the manufacturer prior to ordering and notify the engineer of any lamping discrepancies.
4. PROVIDE A COMPLETE INSTALLATION - The E.C. shall provide all labor and material to provide a complete and functional system per the design intent as indicated by the switching type and location (including dimmer switches and compatible drivers, ballast or transformers), ceiling type and location, circuiting, voltages, and lamping types.
5. BALLAST DISCONNECT - All electronic/programmable/instant start ballasts shall comply with NEC 410.130 and shall have a means of disconnect for the ballast.
6. DUAL LEVEL SWITCHING - For fixtures with more than one switch designation shown on plans provide fixtures with additional ballasts for dual level light control by separate switching of inboard and outboard lamps as required to conform to IECC Requirements.
7. OWNER APPROVAL - Approve all light fixture types with brand/owner before ordering any materials or any work.
8. EXTERIOR LIGHTING - Fixtures installed outdoors shall be U.L. listed Wet Location and provided with cold weather screw ballasts/lamps as required for proper operation.
9. DIMMING COMPATIBILITY - Fixtures noted as dimmable on plans shall be provided with dimmable drivers paired with compatible dimming controls approved by the fixture manufacturer. The E.C. shall be responsible for providing compatible LED Drivers and dimming control devices sized for connected load
10. Luminaires in building envelope to be IC-rated and meet ASTM E283 standards.

SPECIFIC FIXTURE COMMENTS: Apply to specific fixture types as noted on schedule

1. DAMP LOCATION - Provide fixture with U.L. Damp Location Label.
2. WET LOCATION - Provide fixture with U.L. Wet Location Label.
3. COLD WEATHER - Provide fixture with Cold-Weather Driver/Ballast/Battery for fixtures installed outdoors.
4. DIMMING CONTROL - catalog number specified in luminaire schedule includes occupancy control to dim fixture to 50% after 10-minutes of inactivity.
5. 0-10V Dimming - Provide low voltage wiring between all fixtures and low-voltage wallbox dimmer. Verify requirements with provider and provide all work required for a complete installation.

CODE COMPLIANCE STATEMENT:

THIS PROJECT HAS BEEN DESIGNED TO COMPLY WITH THE FOLLOWING CODES:

1. 2020 NATIONAL ELECTRIC CODE (NEC)
2. 2018 INTERNATIONAL ENERGY CONSERVATION CODE

SHEET LOG

		1	2	3	4	5
		11.10.22	12.15.22	03.10.23	06.09.23	08.07.24
		50% DESIGN DEVELOPMENT	100% DESIGN DEVELOPMENT	PERMIT CONSTRUCTION DOCUMENTS		RFC SUBMITTAL
ELECTRICAL SPECS, LEGEND AND SHEET LOG	E0-1.0	●	●	●	●	●
ELECTRICAL ONE LINE DIAGRAM	E0-2.0	●	●	●	●	●
ELECTRICAL ONE LINE DIAGRAM	E0-2.1	●	●	●	●	●
ELECTRICAL ROOM ENLARGEMENTS	E0-3.0	●	●	●	●	●
ELECTRICAL SCHEDULES	E0-4.0			●	●	●
ELECTRICAL SCHEDULES	E0-4.1			●	●	●
ELECTRICAL SCHEDULES	E0-4.2			●	●	●
ELECTRICAL SITE PLAN	E1-0.0		●	●	●	●
ELECTRICAL FLOOR PLAN - LEVEL 1 - AREA A	E2-1.1	●	●	●	●	●
ELECTRICAL FLOOR PLAN - LEVEL 1 - AREA B	E2-1.2	●	●	●	●	●
ELECTRICAL FLOOR PLAN - LEVEL 1 - AREA C	E2-1.3	●	●	●	●	●
ELECTRICAL FLOOR PLAN - LEVEL 1 - AREA D	E2-1.4	●	●	●	●	●
ELECTRICAL FLOOR PLAN - LEVEL 2 - AREA A	E2-2.1	●	●	●	●	●
ELECTRICAL FLOOR PLAN - LEVEL 2 - AREA B	E2-2.2	●	●	●	●	●
ELECTRICAL FLOOR PLAN - LEVEL 2 - AREA C	E2-2.3	●	●	●	●	●
ELECTRICAL FLOOR PLAN - LEVEL 2 - AREA D	E2-2.4	●	●	●	●	●
ELECTRICAL FLOOR PLAN - LEVEL 3 - AREA A	E2-3.1	●	●	●

MARSHALL POINTE

MARSHALL POINTE APARTMENTS, LP
5190 MARSHALL ST
ARVADA, CO 80002

KEPHART
community ▪ planning ▪ architecture
2555 WALNUT STREET
DENVER, COLORADO 80205
www.kephart.com

Front Range Electrical Engineering
3333 South Wadsworth Boulevard - Suite D210
Lakewood, CO 80227 | Phone: 303.985.0548
www.FREEngineer.com

ALUMINUM FEEDER BID ALTERNATE: PROVIDE SEPARATE PRICE FOR ALUMINUM MAIN FEEDERS WHERE INDICATED ON THE ONE LINE DIAGRAM ONLY. ANY USE OF ALUMINUM CONDUCTORS SHALL BE APPROVED BY THE OWNER.

Feeder Schedule

Feeder	Conductors	
4000W	11[W-500kcmil, 500kcmil, 3-1/2"C]	
3000W	8[W-500kcmil, 400kcmil, 3-1/2"C]	
2000W	6[W-400kcmil, 250kcmil, 3"C]	
1600W	5[W-400kcmil, 4/0G, 3"C]	
1200W	4[W-350kcmil, 3/0G, 3"C]	
1000W	3[W-400kcmil, 2/0G, 3"C]	
800W	3[W-300kcmil, 1/0G, 3"C]	
760W	2[W-500kcmil, 1/0G, 3-1/2"C]	
600W	2[W-350kcmil, #1G, 3"C]	
500W	2[W-250kcmil, #2G, 3"C]	
400W	2[W-3/0, #3G, 2"C]	
380W	W-500kcmil, #3G, 3-1/2"C	
300W	W-350kcmil, #4G, 3"C	
250W	W-250kcmil, #4G, 3"C	
225W	W-4/0, #4G, 2-1/2"C	
200W	W-3/0, #6G, 2"C	
175W	W-2/0, #6G, 2"C	
150W	W-1/0, #6G, 2"C	
125W	W#1, #6G, 1-1/2"C	
110W	W#2, #6G, 1-1/4"C	
	*60 Degree	*75 Degree
100W	W#1, #6G, 1-1/2"C	W#3, #6G, 1-1/4"C
90W	W#2, #8G, 1-1/4"C	W#3, #8G, 1-1/4"C
80W	W#3, #8G, 1-1/4"C	W#4, #8G, 1-1/4"C
70W	W#4, #8G, 1-1/4"C	W#4, #8G, 1-1/4"C
60W	W#4, #10G, 1-1/4"C	W#6, #10G, 1"C
50W	W#6, #10G, 1"C	W#8, #10G, 1"C
40W	W#8, #10G, 1"C	W#8, #10G, 1"C
30W	W#10, #10G, 3/4"C	W#10, #10G, 3/4"C
20W	W#12, #12G, 3/4"C	W#12, #12G, 3/4"C

This table indicates minimum conductor size for feeders of the ampacity indicated where #W indicates the #-Ampacity and W-numbers of wire, #S/W indicates no ground. All conductors shall be Copper unless noted otherwise.

* Conductor Ampacities shall be based on table 310.15(B)(16) 60 degree column up to 100 Amps and 75 degree column above 100 Amps unless otherwise permitted by NEC. Ampacity rating shall be selected in accordance NEC 110.14 (C).

The master electrician shall be responsible for ensuring that no feeders or branch circuits are installed in a manner or sized in such a way as to violate the NEC.

Service Ground Table		Equipment Ground Table	
150G	#6	20EG	#12
200G	#4	60EG	#10
300G	#2	100EG	#8
500G	1/0	200-1200A per Above	
800G	2/0	1600EG	4/0
>800G	3/0	2000EG	250kcmil

Service Ground Conductors sized Per NEC Table 250.66
Equipment Ground Conductors sized Per NEC Table 250.122
All conductors shall be Copper unless noted otherwise.

The service ground chart indicates the minimum Service Ground Conductor based on #G where # is the ampacity from the chart above, and the equipment ground chart indicates the minimum equipment grounding conductor size #EG where # is the rating/ setting of the overcurrent device protecting the conductors and equipment.

Where discrepancies occur between the Feeder Schedule Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC.

The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10

Feeder Schedule - Aluminum

Feeder	Conductors	
4000S/W	13[W-500kcmil, 800kcmil G, 3-1/2"C]	
3000S/W	14[W-350kcmil, 3"C]	
2000W	7[W-500kcmil, 400kcmil G, 3-1/2"C]	
1600W	8[W-250kcmil, 350kcmil G, 3"C]	
1200W	4[W-500kcmil, 250kcmil G, 3-1/2"C]	
1000W	4[W-350kcmil, 4/0G, 3"C]	
800W	3[W-400kcmil, 3/0G, 3"C]	
750W	3[W-350kcmil, 2/0G, 3"C]	
600W	2[W-500kcmil, 2/0G, 3-1/2"C]	
500W	2[W-350kcmil, 1/0G, 3"C]	
400W	2[W-250 kcmil, #1G, 3"C]	
350W	2[W-4/0, #1G, 2-1/2"C]	
300W	W-500kcmil, #2G, 3-1/2"C	
250W	W-350kcmil, #2G, 3"C	
225W	W-300kcmil, #2G, 3"C	
200W	W-250kcmil, #4G, 2-1/2"C	
175W	W-4/0, #4G, 2"C	
150W	W-3/0, #4G, 2"C	
125W	W-2/0, #4G, 2"C	
110W	W-1/0, #4G, 2"C	
	*60 Degree	*75 Degree
100W	W-1/0, #6G, 2"C	W#1, #6G, 1-1/2"C
90W	W-1/0, #6G, 2"C	W#2, #6G, 1-1/4"C
80W	W#1, #6G, 1-1/2"C	W#2, #6G, 1-1/4"C
70W	W#2, #6G, 1-1/4"C	W#3, #6G, 1-1/4"C
60W	W#2, #8G, 1-1/4"C	W#4, #8G, 1-1/4"C
50W	W#4, #8G, 1-1/4"C	W#6, #8G, 1"C
40W	W#6, #8G, 1"C	W#8, #8G, 1"C
30W	W#8, #8G, 3/4"C	W#10, #8G, 3/4"C
20W	W#10, #10G, 3/4"C	W#12, #10G, 3/4"C

This table indicates minimum conductor size for feeders of the ampacity indicated where #W indicates the #-Ampacity and W-numbers of wire, #S/W indicates no ground. All conductors shall be Aluminum unless noted otherwise.

* Conductor Ampacities shall be based on table 310.15(B)(16) 60 degree column up to 100 Amps and 75 degree column above 100 Amps unless otherwise permitted by NEC. Ampacity rating shall be selected in accordance NEC 110.14 (C).

The master electrician shall be responsible for ensuring that no feeders or branch circuits are installed in a manner or sized in such a way as to violate the NEC.

Service Ground Table		Equipment Ground Table	
150G	#4	20EG	#10
200G	#2	60EG	#8
300G	1/0	100EG	#6
500G	3/0	200-1200A per Above	
1000G	4/0	1600EG	350kcmil
>1000G	250	2000EG	400kcmil

Service Ground Conductors sized Per NEC Table 250.66
Equipment Ground Conductors sized Per NEC Table 250.122
All conductors shall be Aluminum unless noted otherwise.

The service ground chart indicates the minimum Service Ground Conductor based on #G where # is the ampacity from the chart above, and the equipment ground chart indicates the minimum equipment grounding conductor size #EG where # is the rating/ setting of the overcurrent device protecting the conductors and equipment.

Where discrepancies occur between the Feeder Schedule Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC.

The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10

FAULT CURRENT CALCULATION TABLE - MSB

May 3, 2023

500 kVA Utility Transformer; VOLTAGE 208; AVAILABLE FAULT CURRENT (F) 77,100

FEEDER	LOCATION (n)	# of RUNS	CONDUCTOR	VOLTAGE	L(ft)	C	Total C	f	M	F
	MSB	13	500	208	130	21,391	278,083	0.30	0.77	59,318
E1	Elevator 1	1	4	208	270	3,806	3,806	35.00	0.03	1,648
E2	Elevator 2	1	4	208	175	3,806	3,806	22.68	0.04	2,504
1	Panel C	2	3/0	208	310	12,844	25,688	5.95	0.14	8,530
2	Panel HN1	2	3/0	208	140	12,844	25,688	2.69	0.27	16,080
3	Panel HS1	2	3/0	208	120	12,844	25,688	2.30	0.30	17,949
4	Panel G1	2	3/0	208	25	12,844	25,688	0.48	0.68	40,075
5	Panel EV1	2	3/0	208	28	12,844	25,688	0.54	0.65	38,574
6	Panel HN2	2	3/0	208	270	12,844	25,688	5.19	0.16	9,590
7	Panel HS2	1	3/0	208	130	12,844	12,844	4.99	0.17	9,897
8	Panel G2	2	3/0	208	55	12,844	25,688	1.06	0.49	28,846
9	Panel HN3	1	3/0	208	280	12,844	12,844	10.76	0.09	5,046
10	Panel HS3	1	3/0	208	140	12,844	12,844	5.38	0.16	9,301
11	Panel G3	2	3/0	208	65	12,844	25,688	1.25	0.44	26,382
12	Panel G4	2	3/0	208	75	12,844	25,688	1.44	0.41	24,306
13	Panel HN4	2	3/0	208	290	12,844	25,688	5.57	0.15	9,029
14	Panel HS4	2	3/0	208	150	12,844	25,688	2.88	0.26	15,285
	Fire Pump	2	500	208	65	21,391	42,782	0.97	0.51	39,052

NOTES:
1. All Calculations use Bussman "Point-To-Point" Method.
2. Variables: L=Feeder Length (LF); C=Conductor "C" Value; f(n) = (1.73 x L x F(n-1))/(C x # of runs x Voltage) in Amperes; M(n) = 1 ÷ (1+f(n)); F(n)=F(n-1) x M(n)
3. The E.C. shall report any discrepancies to the Engineer.
4. Conductor lengths shall not be less than the values listed. The E.C. shall field verify conductor lengths and contact engineer immediately if conductor lengths are less than the values shown.
5. Conductor Lengths listed in this table are for fault study purposes only and shall not be used for bidding or other calculations.
6. All in-line Utility Meters shall be protected to limit the Fault Current to no more than 10kA at the Meter per the Utility Company requirements.
7. Label and date available fault current value at the main service disconnect per NEC 110.24(A)
8. Provide Arc-Flash Hazard study and labeling for personnel and protective equipment prior to energizing equipment per NEC 110.16 and NFPA 70E.

FIRE PUMP GENERAL NOTES:
1. FIRE PUMP SIZE AND REQUIREMENTS SHALL BE DETERMINED BY THE PROVIDER.
2. SEPARATE SERVICE FOR FIRE PUMP MUST BE APPROVED BY XCEL ENERGY AND BUILDING DEPARTMENT PRIOR TO ANY WORK.
3. FIRE PUMP INSTALLATION SHALL COMPLY WITH ALL NEC REQUIREMENTS, RE: NEC ARTICLE 695.
4. PROVIDE PLACARD ON EACH SERVICE DISCONNECT LOCATION DENOTING ALL OTHER SERVICES, FEEDERS, AND BRANCH CIRCUITS SUPPLYING THE BUILDING IN ACCORDANCE WITH NEC 230.2(E).
5. PROVIDE SEPARATE PRICE FOR ALL ELECTRICAL WORK ASSOCIATED WITH THE FIRE PUMP SYSTEM.

LOAD SUMMARY - MSB

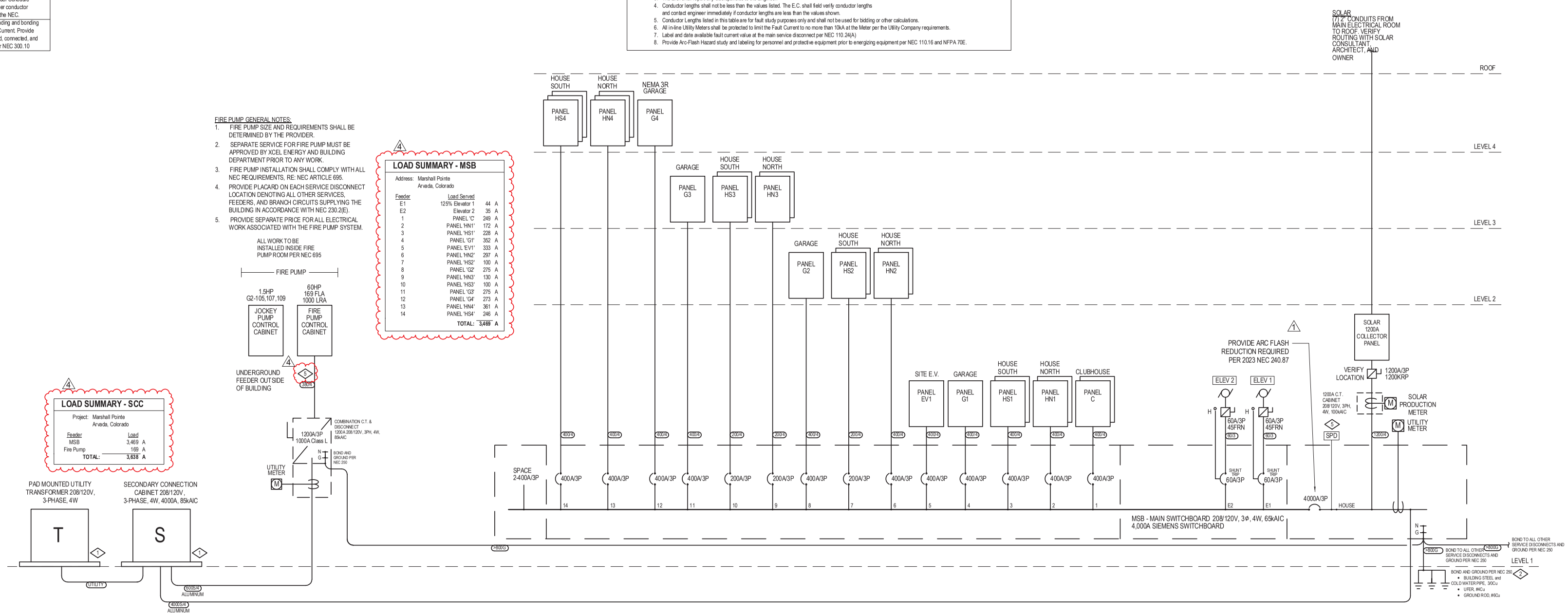
Address: Marshall Pointe, Arvada, Colorado

Feeder	Load Served	
E1	125% Elevator 1	44 A
E2	Elevator 2	35 A
1	PANEL 'C'	249 A
2	PANEL 'HN1'	172 A
3	PANEL 'HS1'	228 A
4	PANEL 'G1'	352 A
5	PANEL 'EV1'	333 A
6	PANEL 'HN2'	297 A
7	PANEL 'HS2'	100 A
8	PANEL 'G2'	275 A
9	PANEL 'HN3'	130 A
10	PANEL 'HS3'	100 A
11	PANEL 'G3'	275 A
12	PANEL 'G4'	273 A
13	PANEL 'HN4'	361 A
14	PANEL 'HS4'	246 A
	TOTAL:	3,469 A

LOAD SUMMARY - SCC

Project: Marshall Pointe, Arvada, Colorado

Feeder	Load
MSB	3,469 A
Fire Pump	169 A
TOTAL:	3,638 A



1 ONE LINE DIAGRAM

SCALE: NTS

ONE LINE DIAGRAM GENERAL NOTES:
1. E.C. TO FIELD VERIFY EXISTING CONDITIONS
2. ALL EQUIPMENT IS NEW.
3. ALL EXTERIOR EQUIPMENT TO BE WEATHERPROOF
4. FIELD VERIFY INSTALLATION REQUIREMENTS WITH UTILITY PRIOR TO ANY ROUGH-IN.
5. THE E.C. SHALL PROVIDE LABELING OF ALL DISCONNECTING MEANS IN ACCORDANCE WITH NEC 110.22:
   - 5.a. PROVIDE LABEL ON EACH DISCONNECTING MEANS PER NEC 110.22(A)
   - 5.b. SERVICE EQUIPMENT SHALL BE LABELED WITH THE MAXIMUM AVAILABLE FAULT CURRENT AND DATE PER NEC 110.24(A).
   - 5.c. WHERE ANY SERIES RATED COMBINATION SYSTEMS ARE UTILIZED, PROVIDE LABEL ON EQUIPMENT CLOSURE INDICATING THE SERIES RATED SYSTEM COMPONENTS INCLUDING FUSE AND BREAKER TYPES AND RATINGS IN ACCORDANCE WITH NEC 110.22(B) AND 110.22(C): CAUTION -- SERIES COMBINATION SYSTEM RATED ____ AMPERES. IDENTIFIED REPLACEMENT COMPONENTS REQUIRED.

ONE LINE DIAGRAM KEYED NOTES:
1. PROVIDE CONCRETE PAD FOR UTILITY COMPANY PAD MOUNT TRANSFORMER. REFER TO UTILITY COMPANY STANDARD FOR INSTALLATION AND USE FOR REQUIREMENTS.
2. PROVIDE GROUNDING ELECTRODE CONDUCTORS, GROUNDING ELECTRODES FOR GROUND RODS, WATER SERVICE, BUILDING STEEL, AND CONCRETE ENCASED GROUNDING ELECTRODES, AND ALL CONNECTIONS AS REQUIRED PER NEC 250 PART III.
3. PROVIDE A TYPE I or TYPE II SURGE PROTECTION DEVICE (SPD) TRANSIENT VOLTAGE SURGE SUPPRESSOR (TVSS) IN ACCORDANCE WITH NEC 230.67(A). THE SPD MAY BE AN INTEGRAL PART OF THE SERVICE EQUIPMENT OR LOCATED IMMEDIATELY ADJACENT THERETO, OR, PER NEC EXCEPTION, AT EACH NEXT LEVEL DISTRIBUTION EQUIPMENT DOWNSTREAM TOWARDS THE LOAD.
4. PROVIDE TENANT SUB-METERING SYSTEM PER ENERGY CODE (IECC) REQUIREMENTS. PROVIDE SIEMENS SEM3 SERIES EMBEDDED MICRO METERING MODULES FOR BILLING GRADE METERING OF EACH RESIDENTIAL UNIT. VERIFY REQUIREMENTS WITH OWNER AND SUB-METERING SYTEM PROVIDER AND PROVIDE ALL COMMUNICATION LINES AND ALL WORK REQUIRED FOR A COMPLETE INSTALLATION.
   - 4.a. RETAIL METER - PROVIDE WITH kWh CONSUMPTION AND kW PEAK DEMAND RECORDING CAPABILITY
5. PROTECT FIRE PUMP NORMAL AND EMERGENCY FEEDERS PER NEC 695.6(A)(A). FEEDER SHALL BE INSTALLED UNDERGROUND AND/OR OUTSIDE OF BUILDING OR ENCASE IN CONCRETE WHERE ROUTED THROUGH BUILDING

No.	Date	Issue
1	10.03.23	City Comments
4	08.07.24	IFC Set

Project Architect	DV
Project Designer	DR
Date	
Job Number	222001
Drawn By	FREE
Checked By	CF
Title	ELECTRICAL ONE LINE DIAGRAM
Sheet Number	E0-2.0

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5190 MARSHALL ST
ARVADA, CO 80002

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Front Range Electrical Engineering
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Lakewood, CO 80227 | Phone: 303.985.0548
www.FREEngineer.com

ALUMINUM FEEDER BID ALTERNATE: PROVIDE SEPARATE PRICE FOR ALUMINUM MAIN FEEDERS WHERE INDICATED ON THE ONE LINE DIAGRAM ONLY. ANY USE OF ALUMINUM CONDUCTORS SHALL BE APPROVED BY THE OWNER.

Feeder Schedule			Feeder Schedule - Aluminum		
4000/W	11[W-500kcmil, 500kcmil, 3-1/2"C]		4000S/W	13[W-500kcmil, 800kcmil G, 3-1/2"C]	
3000/W	8[W-500kcmil, 400kcmil, 3-1/2"C]		3000S/W	14[W-350kcmil, 3"C]	
2000/W	6[W-400kcmil, 250kcmil, 3"C]		2000/W	7[W-500kcmil, 400kcmil G, 3-1/2"C]	
1600/W	5[W-400kcmil, 4/0G, 3"C]		1600/W	8[W-250kcmil, 350kcmil G, 3"C]	
1200/W	4[W-350kcmil, 3/0G, 3"C]		1200/W	4[W-500kcmil, 250kcmil G, 3-1/2"C]	
1000/W	3[W-400kcmil, 2/0G, 3"C]		1000/W	4[W-350kcmil, 4/0G, 3"C]	
800/W	3[W-300kcmil, 1/0G, 3"C]		800/W	3[W-400kcmil, 3/0G, 3"C]	
760/W	2[W-500kcmil, 1/0G, 3-1/2"C]		750/W	3[W-350kcmil, 2/0G, 3"C]	
600/W	2[W-350kcmil, #1G, 3"C]		600/W	2[W-500kcmil, 2/0G, 3-1/2"C]	
500/W	2[W-250kcmil, #2G, 3"C]		500/W	2[W-350kcmil, 1/0G, 3"C]	
400/W	2[W-3/0, #3G, 2"C]		400/W	2[W-250kcmil, #1G, 3"C]	
380/W	W-500kcmil, #3G, 3-1/2"C		350/W	2[W-4/0, #1G, 2-1/2"C]	
300/W	W-350kcmil, #4G, 3"C		300/W	W-500kcmil, #2G, 3-1/2"C	
250/W	W-250kcmil, #4G, 3"C		250/W	W-350kcmil, #2G, 3"C	
225/W	W-4/0, #4G, 2-1/2"C		225/W	W-300kcmil, #2G, 3"C	
200/W	W-3/0, #6G, 2"C		200/W	W-250kcmil, #4G, 2-1/2"C	
175/W	W-2/0, #6G, 2"C		175/W	W-4/0, #4G, 2"C	
150/W	W-1/0, #6G, 2"C		150/W	W-3/0, #4G, 2"C	
125/W	W#1, #6G, 1-1/2"C		125/W	W-2/0, #4G, 2"C	
110/W	W#2, #6G, 1-1/4"C		110/W	W-1/0, #4G, 2"C	
	*60 Degree	*75 Degree		*60 Degree	*75 Degree
100/W	W#1, #6G, 1-1/2"C	W#3, #6G, 1-1/4"C	100/W	W-1/0, #6G, 2"C	W#1, #6G, 1-1/2"C
90/W	W#2, #8G, 1-1/4"C	W#3, #8G, 1-1/4"C	90/W	W-1/0, #6G, 2"C	W#2, #6G, 1-1/4"C
80/W	W#3, #8G, 1-1/4"C	W#4, #8G, 1-1/4"C	80/W	W#1, #6G, 1-1/2"C	W#2, #6G, 1-1/4"C
70/W	W#4, #8G, 1-1/4"C	W#4, #8G, 1-1/4"C	70/W	W#2, #6G, 1-1/4"C	W#3, #6G, 1-1/4"C
60/W	W#4, #10G, 1-1/4"C	W#6, #10G, 1"C	60/W	W#2, #8G, 1-1/4"C	W#4, #8G, 1-1/4"C
50/W	W#6, #10G, 1"C	W#8, #10G, 1"C	50/W	W#4, #8G, 1-1/4"C	W#6, #8G, 1"C
40/W	W#8, #10G, 1" C	W#8, #10G, 1" C	40/W	W#6, #8G, 1" C	W#8, #8G, 1" C
30/W	W#10, #10G, 3/4"C	W#10, #10G, 3/4"C	30/W	W#8, #8G, 3/4"C	W#10, #8G, 3/4"C
20/W	W#12, #12G, 3/4"C	W#12, #12G, 3/4"C	20/W	W#10, #10G, 3/4"C	W#12, #10G, 3/4"C

This table indicates minimum conductor size for feeders of the ampacity indicated where #W indicates the #-Ampacity and W-numbers of wire, #S/W indicates no ground. All conductors shall be Copper unless noted otherwise. (Aluminum table: All conductors shall be Aluminum unless noted otherwise.)

* Conductor Ampacities shall be based on table 310.15(B)(16) 60 degree column up to 100 Amps and 75 degree column above 100 Amps unless otherwise permitted by NEC. Ampacity rating shall be selected in accordance NEC 110.14 (C).

The master electrician shall be responsible for ensuring that no feeders or branch circuits are installed in a manner or sized in such a way as to violate the NEC.

Service Ground Table		Equipment Ground Table		Service Ground Table		Equipment Ground Table	
150G	#6	20EG	#12	150G	#4	20EG	#10
200G	#4	60EG	#10	200G	#2	60EG	#8
300G	#2	100EG	#8	300G	1/0	100EG	#6
500G	1/0	200-1200A per Above		500G	3/0	200-1200A per Above	
800G	2/0	1600EG	4/0	1000G	4/0	1600EG	350kcmil
>800G	3/0	2000EG	250kcmil	>1000G	250	2000EG	400kcmil

Service Ground Conductors sized Per NEC Table 250.66. Equipment Ground Conductors sized Per NEC Table 250.122. All conductors shall be Copper unless noted otherwise. (Aluminum table: All conductors shall be Aluminum unless noted otherwise.)

The service ground chart indicates the minimum Service Ground Conductor based on #G where # is the ampacity from the chart above, and the equipment ground chart indicates the minimum equipment grounding conductor size #EG where # is the rating/ setting of the overcurrent device protecting the conductors and equipment.

Where discrepancies occur between the Feeder Schedule Schedule and the Grounding Tables, the larger conductor shall be used unless otherwise permitted by the NEC.

The installation shall meet all NEC 250 grounding and bonding requirements including 250.4 Path for Fault Current. Provide complete raceway systems metallically joined, connected, and fittings as required for electrical continuity per NEC 300.10

FAULT CURRENT CALCULATION TABLE - MSB-S1 & S2

May 3, 2023

500 kVA Utility Transformer — VOLTAGE 208 — AVAILABLE FAULT CURRENT (F) 77,100

LOCATION (n)	# of RUNS	CONDUCTOR	VOLTAGE	L(ft)	C	Total C	f	M	F
MSB-S1	7	500	208	120	21,391	149,737	0.51	0.66	50,928
MSB-S2	7	500	208	120	21,391	149,737	0.51	0.66	50,928
RMC-1S1 - METER PANEL	6	400	208	110	16,671	100,026	0.47	0.68	34,744
--- 400A Fuse Let-Thru									6,000
Nearest Unit	1	1/0	208	20	5,777	5,777	1.00	0.50	17,368
RMC-2S1 - METER PANEL	6	400	208	120	16,671	100,026	0.51	0.66	33,768
--- 400A Fuse Let-Thru									6,000
Nearest Unit	1	1/0	208	20	5,777	5,777	0.97	0.51	17,121
RMC-3S1 - METER PANEL	6	400	208	130	16,671	100,026	0.55	0.64	32,846
--- 400A Fuse Let-Thru									6,000
Nearest Unit	1	1/0	208	20	5,777	5,777	0.95	0.51	16,881
RMC-4S1 - METER PANEL	6	400	208	140	16,671	100,026	0.59	0.63	31,972
--- 400A Fuse Let-Thru									6,000
Nearest Unit	1	1/0	208	20	5,777	5,777	0.92	0.52	16,647
RMC-1S2 - METER PANEL	6	400	208	90	16,671	100,026	0.38	0.72	36,874
--- 400A Fuse Let-Thru									6,000
Nearest Unit	1	1/0	208	20	5,777	5,777	1.06	0.49	17,885
RMC-2S2 - METER PANEL	6	400	208	100	16,671	100,026	0.42	0.70	35,777
--- 400A Fuse Let-Thru									6,000
Nearest Unit	1	1/0	208	20	5,777	5,777	1.03	0.49	17,623
RMC-3S2 - METER PANEL	6	400	208	110	16,671	100,026	0.47	0.68	34,744
--- 400A Fuse Let-Thru									6,000
Nearest Unit	1	1/0	208	20	5,777	5,777	1.00	0.50	17,368
RMC-4S2 - METER PANEL	6	400	208	120	16,671	100,026	0.51	0.66	33,768
--- 400A Fuse Let-Thru									6,000
Nearest Unit	1	1/0	208	20	5,777	5,777	0.97	0.51	17,121

NOTES:
1. All Calculations use Bussman "Point-To-Point" Method.
2. Variables: L=Feeder Length (LF) C=Conductor "C" Value M(n) =1 ÷ (1+f(n))
f(n) = (1.73 x L x F(n-1))/(C x # of runs x Voltage) in Amperes F(n)=F(n-1) x M(n)
3. The E.C. shall report any discrepancies to the Engineer.
4. Conductor lengths shall not be less than the values listed. The E.C. shall field verify conductor lengths and contact engineer immediately if conductor lengths are less than the values shown.
5. Conductor Lengths listed in this table are for fault study purposes only and shall not be used for bidding or other calculations.
6. All in-line Utility Meters shall be protected to limit the Fault Current to no more than 10kA at the Meter per the Utility Company requirements.
7. Label and date available fault current value at the main service disconnect per NEC 110.24(A)
8. Provide Arc-Flash Hazard study and labeling for personnel and protective equipment prior to energizing equipment per NEC 110.16 and NFPA 70E.

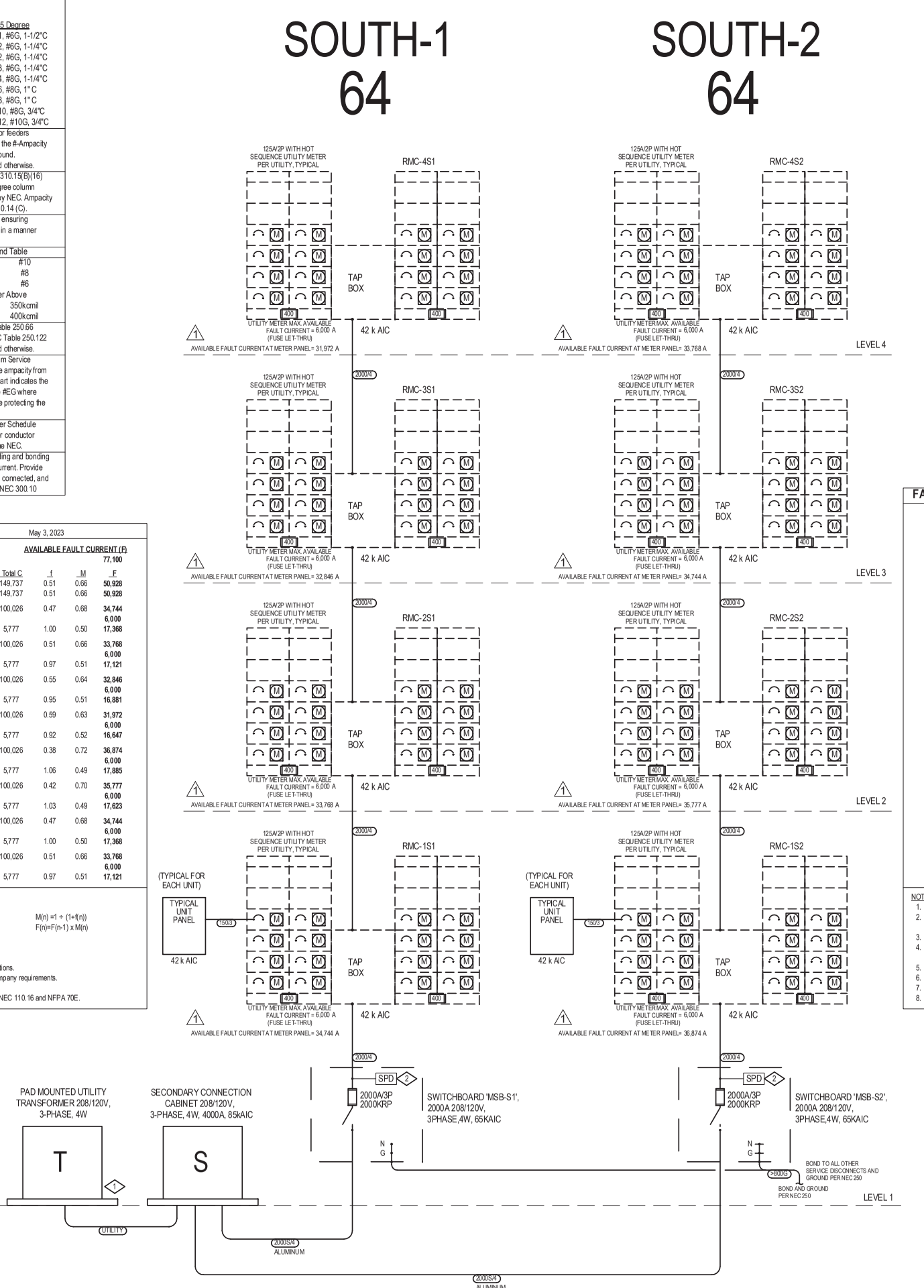
FAULT CURRENT CALCULATION TABLE - MSB-N1 & N2

May 3, 2023

500 kVA Utility Transformer — VOLTAGE 208 — AVAILABLE FAULT CURRENT (F) 77,100

LOCATION (n)	# of RUNS	CONDUCTOR	VOLTAGE	L(ft)	C	Total C	f	M	F
MSB-N1	7	500	208	120	21,391	149,737	0.51	0.66	50,928
MSB-N2	7	500	208	120	21,391	149,737	0.51	0.66	50,928
RMC-1N1 - METER PANEL	6	400	208	135	16,671	100,026	0.57	0.64	32,403
--- 400A Fuse Let-Thru									6,000
Nearest Unit	1	1/0	208	20	5,777	5,777	0.93	0.52	16,763
RMC-2N1 - METER PANEL	6	400	208	265	16,671	100,026	1.12	0.47	23,998
--- 400A Fuse Let-Thru									5,000
Nearest Unit	1	1/0	208	20	5,777	5,777	0.69	0.59	14,191
RMC-3N1 - METER PANEL	6	400	208	275	16,671	100,026	1.16	0.46	23,528
--- 400A Fuse Let-Thru									5,000
Nearest Unit	1	1/0	208	20	5,777	5,777	0.68	0.60	14,026
RMC-4N1 - METER PANEL	6	400	208	285	16,671	100,026	1.21	0.45	23,077
--- 400A Fuse Let-Thru									5,000
Nearest Unit	1	1/0	208	20	5,777	5,777	0.66	0.60	13,864
RMC-0N2 - METER PANEL	6	400	208	15	16,671	100,026	0.06	0.94	47,886
--- 400A Fuse Let-Thru									7,000
Nearest Unit	1	1/0	208	20	5,777	5,777	1.38	0.42	20,130
RMC-1N2 - METER PANEL	6	400	208	135	16,671	100,026	0.57	0.64	32,403
--- 400A Fuse Let-Thru									6,000
Nearest Unit	1	1/0	208	20	5,777	5,777	0.93	0.52	16,763
RMC-2N2 - METER PANEL	6	400	208	265	16,671	100,026	1.12	0.47	23,998
--- 400A Fuse Let-Thru									5,000
Nearest Unit	1	1/0	208	20	5,777	5,777	0.69	0.59	14,191
RMC-3N2 - METER PANEL	6	400	208	275	16,671	100,026	1.16	0.46	23,528
--- 400A Fuse Let-Thru									5,000
Nearest Unit	1	1/0	208	20	5,777	5,777	0.68	0.60	14,026
RMC-4N2 - METER PANEL	6	400	208	285	16,671	100,026	1.21	0.45	23,077
--- 400A Fuse Let-Thru									5,000
Nearest Unit	1	1/0	208	20	5,777	5,777	0.66	0.60	13,864

NOTES:
1. All Calculations use Bussman "Point-To-Point" Method.
2. Variables: L=Feeder Length (LF) C=Conductor "C" Value M(n) =1 ÷ (1+f(n))
f(n) = (1.73 x L x F(n-1))/(C x # of runs x Voltage) in Amperes F(n)=F(n-1) x M(n)
3. The E.C. shall report any discrepancies to the Engineer.
4. Conductor lengths shall not be less than the values listed. The E.C. shall field verify conductor lengths and contact engineer immediately if conductor lengths are less than the values shown.
5. Conductor Lengths listed in this table are for fault study purposes only and shall not be used for bidding or other calculations.
6. All in-line Utility Meters shall be protected to limit the Fault Current to no more than 10kA at the Meter per the Utility Company requirements.
7. Label and date available fault current value at the main service disconnect per NEC 110.24(A)
8. Provide Arc-Flash Hazard study and labeling for personnel and protective equipment prior to energizing equipment per NEC 110.16 and NFPA 70E.

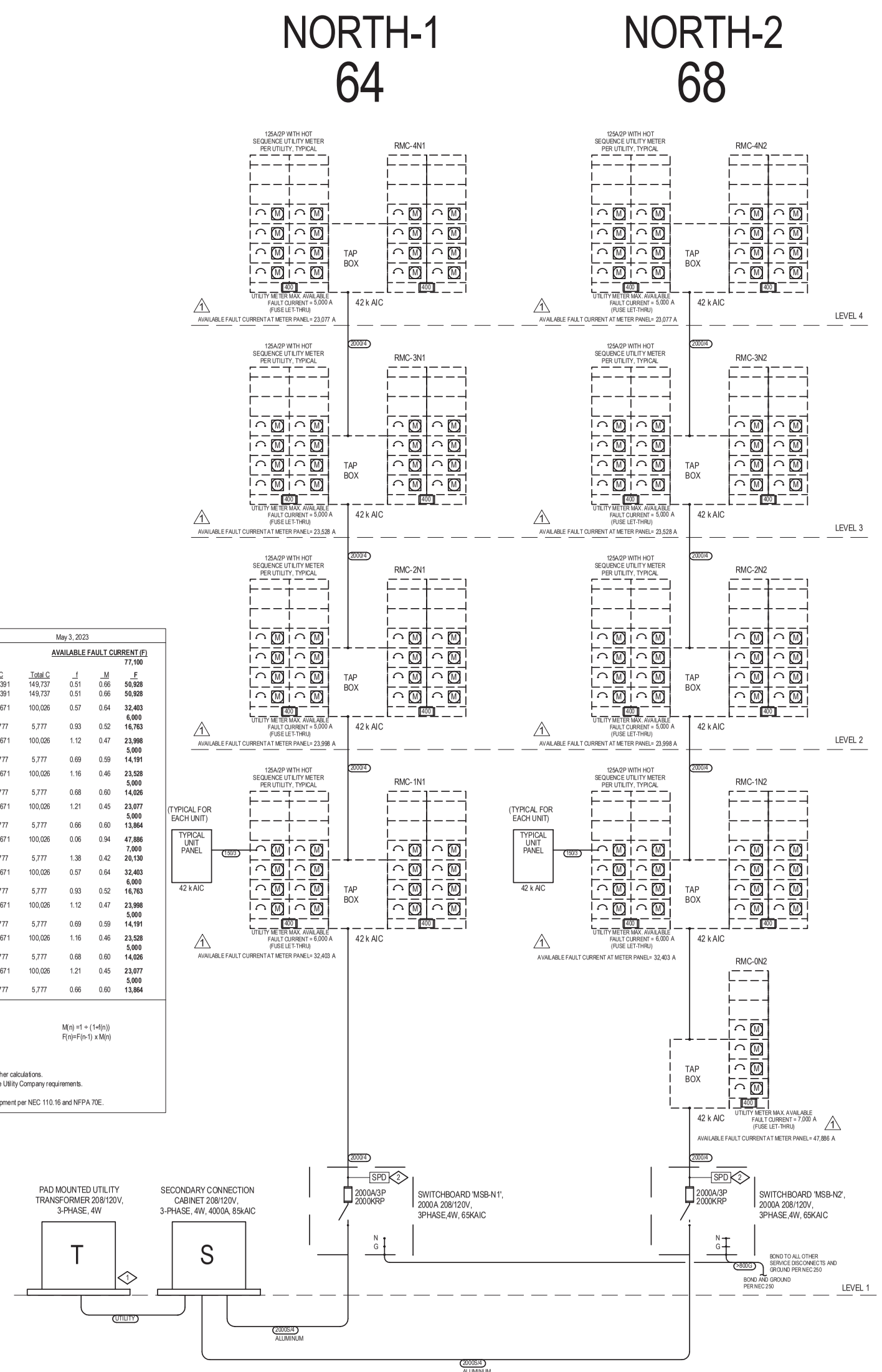


2 RESIDENTIAL ONE LINE DIAGRAM - SOUTH

SCALE: NTS

ONE LINE DIAGRAM GENERAL NOTES:
1. E.C. TO FIELD VERIFY EXISTING CONDITIONS
2. ALL EQUIPMENT IS NEW.
3. ALL EXTERIOR EQUIPMENT TO BE WEATHERPROOF
4. FIELD VERIFY INSTALLATION REQUIREMENTS WITH UTILITY PRIOR TO ANY ROUGH-IN.
5. THE E.C. SHALL PROVIDE LABELING OF ALL DISCONNECTING MEANS IN ACCORDANCE WITH NEC 110.22:
   - 5.a. PROVIDE LABEL ON EACH DISCONNECTING MEANS PER NEC 110.22(A)
   - 5.b. SERVICE EQUIPMENT SHALL BE LABELED WITH THE MAXIMUM AVAILABLE FAULT CURRENT AND DATE PER NEC 110.24(A) AND THE CLEARING TIME OF SERVICE OVERCURRENT PROTECTIVE DEVICES BASED ON THE AVAILABLE FAULT CURRENT PER NEC 110.16(B).
   - 5.c. WHERE ANY SERIES RATED COMBINATION SYSTEMS ARE UTILIZED, PROVIDE LABEL ON EQUIPMENT CLOSURE INDICATING THE SERIES RATED SYSTEM COMPONENTS INCLUDING FUSE AND BREAKER TYPES AND RATINGS IN ACCORDANCE WITH NEC 110.22(B) AND 110.22(C): CAUTION -- SERIES COMBINATION SYSTEM RATED ___ AMPERES. IDENTIFIED REPLACEMENT COMPONENTS REQUIRED.

ONE LINE DIAGRAM KEYED NOTES:
1. PROVIDE CONCRETE PAD FOR UTILITY COMPANY PAD MOUNT TRANSFORMER AND SECONDARY CONNECTION CABINET. REFER TO UTILITY COMPANY STANDARD FOR INSTALLATION AND USE FOR REQUIREMENTS.
2. PROVIDE SURGE PROTECTION DEVICE (SPD) TRANSIENT VOLTAGE SURGE SUPPRESSER (TVSS) BY CURRENT TECHNOLOGY OR EQUAL. PROVIDE INTEGRAL SURGE SUPPRESSION DEVICE (SPD) FOR EACH SWITCHBOARD/PANELBOARD IN ACCORDANCE WITH NEC REQUIREMENTS.



1 RESIDENTIAL ONE LINE DIAGRAM - NORTH

SCALE: NTS

ONE LINE DIAGRAM GENERAL NOTES:
1. E.C. TO FIELD VERIFY EXISTING CONDITIONS
2. ALL EQUIPMENT IS NEW.
3. ALL EXTERIOR EQUIPMENT TO BE WEATHERPROOF
4. FIELD VERIFY INSTALLATION REQUIREMENTS WITH UTILITY PRIOR TO ANY ROUGH-IN.
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   - 5.c. WHERE ANY SERIES RATED COMBINATION SYSTEMS ARE UTILIZED, PROVIDE LABEL ON EQUIPMENT CLOSURE INDICATING THE SERIES RATED SYSTEM COMPONENTS INCLUDING FUSE AND BREAKER TYPES AND RATINGS IN ACCORDANCE WITH NEC 110.22(B) AND 110.22(C): CAUTION -- SERIES COMBINATION SYSTEM RATED ___ AMPERES. IDENTIFIED REPLACEMENT COMPONENTS REQUIRED.

ONE LINE DIAGRAM KEYED NOTES:
1. PROVIDE CONCRETE PAD FOR UTILITY COMPANY PAD MOUNT TRANSFORMER AND SECONDARY CONNECTION CABINET. REFER TO UTILITY COMPANY STANDARD FOR INSTALLATION AND USE FOR REQUIREMENTS.
2. PROVIDE SURGE PROTECTION DEVICE (SPD) TRANSIENT VOLTAGE SURGE SUPPRESSER (TVSS) BY CURRENT TECHNOLOGY OR EQUAL. PROVIDE INTEGRAL SURGE SUPPRESSION DEVICE (SPD) FOR EACH SWITCHBOARD/PANELBOARD IN ACCORDANCE WITH NEC REQUIREMENTS.

No.	Date	Issue
1	10.03.23	City Comments

Project Architect	DV
Project Designer	DR
Date	
Job Number	222001
Drawn By	FREE
Checked By	CF
Title	ELECTRICAL ONE LINE DIAGRAM
Sheet Number	E0-2.1

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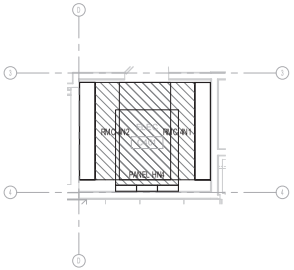
ELECTRICAL ROOM NOTES:

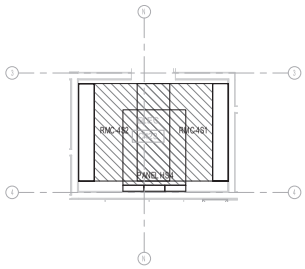
1. FIELD VERIFY EXISTING CONDITIONS AND PROVIDE INSTALLATION IN ACCORDANCE WITH NEC REQUIREMENTS INCLUDING WORKING CLEARANCE.
2. LOCATE ALL ELECTRICAL SWITCHBOARDS, PANELBOARDS AND ELECTRICAL DISTRIBUTION EQUIPMENT IN DEDICATED SPACES AND PROTECTED FROM DAMAGE WITH ADEQUATE WORKING CLEARANCE ACCORDANCE WITH NEC 1 10 REQUIREMENTS. PROVIDE PROTECTION FROM ANY FOREIGN SYSTEM INSTALLED ABOVE THE DEDICATED EQUIPMENT SPACE PER NEC 110.26(E).
3. ELECTRICAL ROOM DOORS SHALL SWING OUTWARD AND BE EQUIPPED WITH PANIC BARS, PRESSURE PLATES, OR OTHER DEVICES THAT ARE NORMALLY LATCHED BUT OPEN UNDER SIMPLE PRESSURE IN ACCORDANCE WITH NEC 110.26(C)(3).
4. EQUIPMENT DOORS SHALL NOT IMPEDE ACCESS TO AND EGRESS FROM THE WORKING SPACE IN ACCORDANCE WITH NEC 110.33(A). ACCESS OR EGRESS IS IMPEDED IF ONE OR MORE SIMULTANEOUSLY OPENED EQUIPMENT DOORS RESTRICT WORKING SPACE ACCESS TO BE LESS THAN 24 INCHES WIDE AND 6.5 FEET HIGH.

TELECOMMUNICATIONS ROOM NOTES:

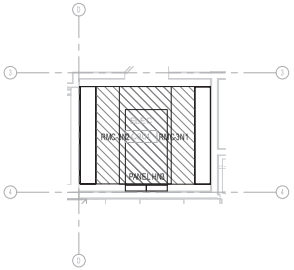
1. FIELD VERIFY EXISTING CONDITIONS AND PROVIDE INSTALLATION IN ACCORDANCE WITH TELECOMMUNICATIONS SYTEMS PROVIDER REQUIREMENTS INCLUDING SPACE, WORKING CLEARANCE, CABLE ROUTING, BEND RADIUS LIMITATIONS, HORIZONTAL AND VERTICAL RACEWAY QUANTITY AND SIZES, PULL BOX REQUIREMENTS, AND VENTILATION REQUIREMENTS
2. ALL TELECOMMUNICATIONS ROOMS WILL REQUIRE ACCESS BY THE SERVICE PROVIDERS. COORDINATE REQUIREMENTS WITH PROVIDER AND BUILDING OWNER.
3. PROVIDE ADDITIONAL RACEWAYS AND MEANS TO ROUT SERVICE CABLING TO EACH RESIDENCE IN ACCORDANCE WITH RUN LENGTH LIMITS.
4. COORDINATE ALL ROUTING WITH ARCHITECTURAL, STRUCTURAL, HVAC EQUIPMENT AND DUCTWORK, ELECTRICAL AND LIGHTING, FIRE SPRINKLER AND PLUMBING PIPING, AND ALL OTHER TRADES PRIOR TO ANY WORK.
5. CONFIRM QUANTITY AND LOCATIONS OF ALL TELECOMMUNICATIONS ROOMS REQUIRED FOR THIS PROJECT. INFORM ARCHITECT AND/OR OWNER OF ANY ROOMS THAT WILL BE NOT USED OR IF ANY ADDITIONAL ROOM IS NEEDED.



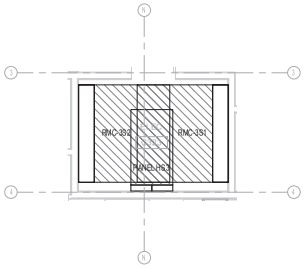
9 ELECTRICAL ROOM - LEVEL 4 - NORTH
1/4" = 1'-0"



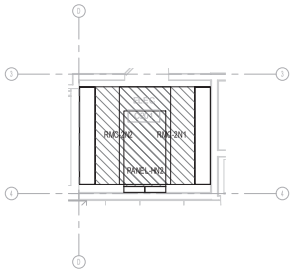
5 ELECTRICAL ROOM - LEVEL 4 - SOUTH
1/4" = 1'-0"



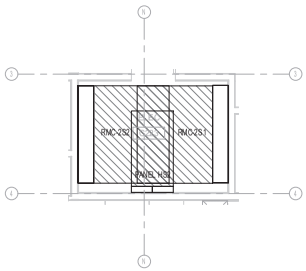
8 ELECTRICAL ROOM - LEVEL 3 - NORTH
1/4" = 1'-0"



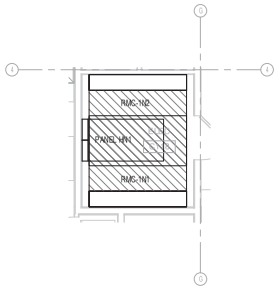
4 ELECTRICAL ROOM - LEVEL 3 - SOUTH
1/4" = 1'-0"



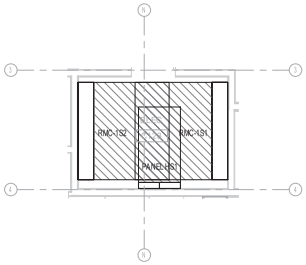
7 ELECTRICAL ROOM - LEVEL 2 - NORTH
1/4" = 1'-0"



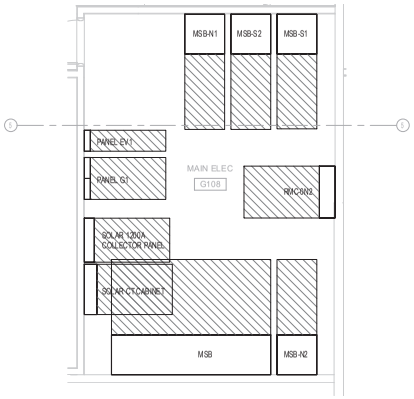
3 ELECTRICAL ROOM - LEVEL 2 - SOUTH
1/4" = 1'-0"



6 ELECTRICAL ROOM - LEVEL 1 - NORTH
1/4" = 1'-0"



2 ELECTRICAL ROOM - LEVEL 1 - SOUTH
1/4" = 1'-0"



1 MAIN ELECTRICAL ROOM
1/4" = 1'-0"

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MARSHALL POINTE

MARSHALL POINTE APARTMENTS, LP
5190 MARSHALL ST
ARVADA, CO 80002

No.	Date	Issue
1	10.03.23	City Comments

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: FREE
Checked By: CF
Title: ELECTRICAL ROOM ENLARGEMENTS
Sheet Number: **E0-3.0**

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LOAD CALCULATION: 128 UNITS

		Quantity	SF		
A.	Lighting Loads (NEC 220.42):				
	General Lighting (3VA/SF)	128	850	SF	326,400
B.	Small Appliance and Laundry Loads NEC 220.52):				
	Laundry Circuit	128	1	x 1,500 VA	192,000
	Appliance Circuit	128	2	x 1,500 VA	384,000
C.	Lighting Loads				
				SUB-TOTAL #1:	902,400 VA
D.	Electric Clothes Dryers (NEC 220.54):				
	Dryer	128	5,000	VA	640,000 VA
E.	Electric Ranges and Other Cooking Appliances (NEC 220.55):				
	Elec Range Oven	128	8,000	VA	1,024,000 VA
F.	Appliance Loads (NEC 220.5S):				
	Dishwasher	128	750	VA x 100%	96,000 VA
	Disposal	128	1176	VA x 100%	150,528 VA
	Microwave Hood	128	1200	VA x 100%	153,600 VA
	Refrigerator	128	700	VA x 100%	96,000 VA
	Water Heater	128	6000	VA x 100%	768,000 VA
G.	Heating and Air-Conditioning Loads				
	HP-2.5T	128	3869	VA x 0%	0 VA
	FCU-2.5T	128	7862	VA x 100%	1,006,336 VA
				SUB-TOTAL #2:	3,194,464 VA
H.	Total Design Load (NEC 220.84 Optional Method):			TOTAL:	4,096,864 VA
	System Voltage:		208	Volts, 3-Phase	11,436 A
	NEC Table 220.84 Demand Factor:		25	% (Table 220.84)	3,059 A

LOAD CALCULATION: 132 UNITS

		Quantity	SF		
A.	Lighting Loads (NEC 220.42):				
	General Lighting (3VA/SF)	132	850	SF	336,600
B.	Small Appliance and Laundry Loads NEC 220.52):				
	Laundry Circuit	132	1	x 1,500 VA	198,000
	Appliance Circuit	132	2	x 1,500 VA	396,000
C.	Lighting Loads				
				SUB-TOTAL #1:	930,600 VA
D.	Electric Clothes Dryers (NEC 220.54):				
	Dryer	132	5,000	VA	660,000 VA
E.	Electric Ranges and Other Cooking Appliances (NEC 220.55):				
	Elec Range Oven	132	8,000	VA	1,056,000 VA
F.	Appliance Loads (NEC 220.5S):				
	Dishwasher	132	750	VA x 100%	99,000 VA
	Disposal	132	1176	VA x 100%	155,232 VA
	Microwave Hood	132	1200	VA x 100%	158,400 VA
	Refrigerator	132	750	VA x 100%	99,000 VA
	Water Heater	132	6000	VA x 100%	792,000 VA
G.	Heating and Air-Conditioning Loads				
	HP-2.5T	132	3869	VA x 0%	0 VA
	FCU-2.5T	132	7862	VA x 100%	1,037,784 VA
				SUB-TOTAL #2:	4,057,416 VA
H.	Total Design Load (NEC 220.84 Optional Method):			TOTAL:	4,988,016 VA
	System Voltage:		208	Volts, 3-Phase	13,836 A
	NEC Table 220.84 Demand Factor:		25	% (Table 220.84)	3,187 A

LOAD CALCULATION: 4 UNITS

		Quantity	SF		
A.	Lighting Loads (NEC 220.42):				
	General Lighting (3VA/SF)	4	850	SF	10,200
B.	Small Appliance and Laundry Loads NEC 220.52):				
	Laundry Circuit	4	1	x 1,500 VA	6,000
	Appliance Circuit	4	2	x 1,500 VA	12,000
C.	Lighting Loads				
				SUB-TOTAL #1:	28,200 VA
D.	Electric Clothes Dryers (NEC 220.54):				
	Dryer	4	5,000	VA	20,000 VA
E.	Electric Ranges and Other Cooking Appliances (NEC 220.55):				
	Elec Range Oven	4	8,000	VA	32,000 VA
F.	Appliance Loads (NEC 220.5S):				
	Dishwasher	4	750	VA x 100%	3,000 VA
	Disposal	4	1176	VA x 100%	4,704 VA
	Microwave Hood	4	1200	VA x 100%	4,800 VA
	Refrigerator	4	750	VA x 100%	3,000 VA
	Water Heater	4	6000	VA x 100%	24,000 VA
G.	Heating and Air-Conditioning Loads				
	HP-2.5T	4	3869	VA x 0%	0 VA
	FCU-2.5T	4	7862	VA x 100%	31,448 VA
				SUB-TOTAL #2:	127,952 VA
H.	Total Design Load (NEC 220.84 Optional Method):			TOTAL:	151,152 VA
	System Voltage:		208	Volts, 3-Phase	420 A
	NEC Table 220.84 Demand Factor:		40	% (Table 220.84)	168 A

LOAD CALCULATION: 8 UNITS

		Quantity	SF		
A.	Lighting Loads (NEC 220.42):				
	General Lighting (3VA/SF)	8	850	SF	20,400
B.	Small Appliance and Laundry Loads NEC 220.52):				
	Laundry Circuit	8	1	x 1,500 VA	12,000
	Appliance Circuit	8	2	x 1,500 VA	24,000
C.	Lighting Loads				
				SUB-TOTAL #1:	56,400 VA
D.	Electric Clothes Dryers (NEC 220.54):				
	Dryer	8	5,000	VA	40,000 VA
E.	Electric Ranges and Other Cooking Appliances (NEC 220.55):				
	Elec Range Oven	8	8,000	VA	64,000 VA
F.	Appliance Loads (NEC 220.5S):				
	Dishwasher	8	750	VA x 100%	6,000 VA
	Disposal	8	1176	VA x 100%	9,408 VA
	Microwave Hood	8	1200	VA x 100%	9,600 VA
	Refrigerator	8	750	VA x 100%	6,000 VA
	Water Heater	8	6000	VA x 100%	48,000 VA
G.	Heating and Air-Conditioning Loads				
	HP-2.5T	8	3869	VA x 0%	0 VA
	FCU-2.5T	8	7862	VA x 100%	62,896 VA
				SUB-TOTAL #2:	305,896 VA
H.	Total Design Load (NEC 220.84 Optional Method):			TOTAL:	302,304 VA
	System Voltage:		208	Volts, 3-Phase	840 A
	NEC Table 220.84 Demand Factor:		40	% (Table 220.84)	361 A

LOAD CALCULATION: 64 UNITS

		Quantity	SF		
A.	Lighting Loads (NEC 220.42):				
	General Lighting (3VA/SF)	64	850	SF	163,200
B.	Small Appliance and Laundry Loads NEC 220.52):				
	Laundry Circuit	64	1	x 1,500 VA	96,000
	Appliance Circuit	64	2	x 1,500 VA	192,000
C.	Lighting Loads				
				SUB-TOTAL #1:	451,200 VA
D.	Electric Clothes Dryers (NEC 220.54):				
	Dryer	64	5,000	VA	320,000 VA
E.	Electric Ranges and Other Cooking Appliances (NEC 220.55):				
	Elec Range Oven	64	8,000	VA	512,000 VA
F.	Appliance Loads (NEC 220.5S):				
	Dishwasher	64	750	VA x 100%	48,000 VA
	Disposal	64	1176	VA x 100%	75,264 VA
	Microwave Hood	64	1200	VA x 100%	76,800 VA
	Refrigerator	64	700	VA x 100%	48,000 VA
	Water Heater	64	6000	VA x 100%	384,000 VA
G.	Heating and Air-Conditioning Loads				
	HP-2.5T	64	3869	VA x 0%	0 VA
	FCU-2.5T	64	7862	VA x 100%	503,168 VA
				SUB-TOTAL #2:	1,967,232 VA
H.	Total Design Load (NEC 220.84 Optional Method):			TOTAL:	2,418,432 VA
	System Voltage:		208	Volts, 3-Phase	6,716 A
	NEC Table 220.84 Demand Factor:		25	% (Table 220.84)	1,545 A

LOAD CALCULATION: 68 UNITS

		Quantity	SF		
A.	Lighting Loads (NEC 220.42):				
	General Lighting (3VA/SF)	68	850	SF	173,400
B.	Small Appliance and Laundry Loads NEC 220.52):				
	Laundry Circuit	68	1	x 1,500 VA	102,000
	Appliance Circuit	68	2	x 1,500 VA	204,000
C.	Lighting Loads				
				SUB-TOTAL #1:	479,400 VA
D.	Electric Clothes Dryers (NEC 220.54):				
	Dryer	68	5,000	VA	340,000 VA
E.	Electric Ranges and Other Cooking Appliances (NEC 220.55):				
	Elec Range Oven	68	8,000	VA	544,000 VA
F.	Appliance Loads (NEC 220.5S):				
	Dishwasher	68	750	VA x 100%	51,000 VA
	Disposal	68	1176	VA x 100%	79,968 VA
	Microwave Hood	68	1200	VA x 100%	81,600 VA
	Refrigerator	68	700	VA x 100%	51,000 VA
	Water Heater	68	6000	VA x 100%	408,000 VA
G.	Heating and Air-Conditioning Loads				
	HP-2.5T	68	3869	VA x 0%	0 VA
	FCU-2.5T	68	7862	VA x 100%	534,616 VA
				SUB-TOTAL #2:	2,080,184 VA
H.	Total Design Load (NEC 220.84 Optional Method):			TOTAL:	2,559,584 VA
	System Voltage:		208	Volts, 3-Phase	7,110 A
	NEC Table 220.84 Demand Factor:		25	% (Table 220.84)	1,642 A

LOAD CALCULATION: Largest 1BR - NEC 220.82

General Loads - NEC 220.82 (B)

1.	General Lighting and General-Use Receptacles			
		612 SF x 3VA/SF		1,836 VA
2.	Small Appliance and Laundry Loads NEC 210.11(C)(1) and (C)(2):			
	Laundry Circuit	1 x 1,500 VA		1,500 VA
	Appliance Circuit	2 x 1,500 VA		3,000 VA
3.a.	Appliance Loads (NEC 220.5S):			
	Dishwasher	750 VA		750 VA
	Disposal	1176 VA		1,176 VA
	Microwave Hood	1200 VA		1,200 VA
	Refrigerator	700 VA		700 VA
3.b.	Electric Ranges and Other Cooking Appliances			
	Elec Range Oven	8,000 VA		8,000 VA
3.c.	Electric Clothes Dryers			
	Dryer	5,000 VA		5,000 VA
3.d	Water Heaters			
	Water Heater	4,500 VA		4,500 VA
			Sub-Total	27,712 VA
		10000VA at 100%		10,000 VA
		Remainder at 40%		7,085 VA
			SUB-TOTAL #1:	17,085 VA

Heating and Air Conditioning Loads - NEC 220.82 (C)

1.	Air-Conditioning Loads		
	HP-1.5T	2538 VA x 100%	2,538 VA
2.	Fan Coil		
	FCU-1.5T	5180 VA x 100%	5,180 VA
3.	Fans - Largest Occurrence		
	(1)TEF-1 & (1)KEF-1	36 VA x 100%	36 VA
		SUB-TOTAL #2:	7,754 VA
H.	Total Design Load	TOTAL:	24,839 VA
	System Voltage:	208 Volts, 1-Phase	119 A

Notes:
1. Not Used.

LOAD CALCULATION: Largest 2BR - NEC 220.82

General Loads - NEC 220.82 (B)

1.	General Lighting and General-Use Receptacles			
		1,015 SF x 3VA/SF		3,059 VA
2.	Small Appliance and Laundry Loads NEC 210.11(C)(1) and (C)(2):			
	Laundry Circuit	1 x 1,500 VA		1,500 VA
	Appliance Circuit	2 x 1,500 VA		3,000 VA
3.a.	Appliance Loads (NEC 220.5S):			
	Dishwasher	750 VA		750 VA
	Disposal	1176 VA		1,176 VA
	Microwave Hood	1200 VA		1,200 VA
	Refrigerator	700 VA		700 VA
3.b.	Electric Ranges and Other Cooking Appliances			
	Elec Range Oven	8,000 VA		8,000 VA
3.c.	Electric Clothes Dryers			
	Dryer	5,000 VA		5,000 VA
3.d	Water Heaters			
	Water Heater	4,500 VA		4,500 VA
			Sub-Total	29,985 VA
		10000VA at 100%		10,000 VA
		Remainder at 40%		7,594 VA
			SUB-TOTAL #1:	17,594 VA

Heating and Air Conditioning Loads - NEC 220.82 (C)

1.	Air-Conditioning Loads		
	HP-2.0T	3182 VA x 100%	3,182 VA
2.	Fan Coil		
	FCU-2.0T	7488 VA x 100%	7,488 VA
3.	Fans - Largest Occurrence		
	(2)TEF-1, (1)KEF-1	54 VA x 100%	54 VA
		SUB-TOTAL #2:	10,724 VA
H.	Total Design Load	TOTAL:	28,318 VA
	System Voltage	208 Volts, 1-Phase	136 A

Notes:
1. Not Used.

LOAD CALCULATION: Largest 3BR - NEC 220.82

General Loads - NEC 220.82 (B)

1.	General Lighting and General-Use Receptacles			
		1,211 SF x 3VA/SF		3,633 VA
2.	Small Appliance and Laundry Loads NEC 210.11(C)(1) and (C)(2):			
	Laundry Circuit	1 x 1,500 VA		1,500 VA
	Appliance Circuit	2 x 1,500 VA		3,000 VA
3.a.	Appliance Loads (NEC 220.5S):			
	Dishwasher	750 VA		750 VA
	Disposal	1176 VA		1,176 VA
	Microwave Hood	1200 VA		1,200 VA
	Refrigerator	700 VA		700 VA
3.b.	Electric Ranges and Other Cooking Appliances			
	Elec Range Oven	8,000 VA		8,000 VA
3.c.	Electric Clothes Dryers			
	Dryer	5,000 VA		5,000 VA
3.d	Water Heaters			
	Water Heater	6,000 VA		6,000 VA
			Sub-Total	31,959 VA
		10000VA at 100%		10,000 VA
		Remainder at 40%		8,404 VA
			SUB-TOTAL #1:	18,404 VA

Heating and Air Conditioning Loads - NEC 220.82 (C)

1.	Air-Conditioning Loads		
	HP-2.5T	3869 VA x 100%	3,869 VA
2.	Fan Coil		
	FCU-2.5T	7862 VA x 100%	7,862 VA
3.	Fans - Largest Occurrence		
	(2)TEF-1, (1)KEF-1	54 VA x 100%	54 VA
		SUB-TOTAL #2:	11,784 VA
H.	Total Design Load	TOTAL:	30,188 VA
	System Voltage	208 Volts, 1-Phase	145 A

Notes:
1. Not Used.

PANEL SCHEDULE: Typical 1BR Unit

April 26, 2023

BUS RATING: 150A, 1-3 WIRE
MAIN C.B.: or M.L.O. 150A
MOUNTING: Flush
COMMENTS: New Panelboard

VOLTAGE L-L: 208
VOLTAGE L-G: 120
S.C.R.MS RATING (AIC): 40K Minimum Series Rating, Combination of SIEMENS Type QP Feeder and Type QP Bench Breakers

CIR NO.	CIRCUIT AMPS	BREAKER POLE	CONNECTED LOAD (VA)	NEC DEMAND FACTOR	DESCRIPTION OF LOAD SERVED	PH. ID	DESCRIPTION OF LOAD SERVED	NEC DEMAND FACTOR	CONNECTED LOAD (VA)	CIRCUIT BREAKER POLE	CIRCUIT BREAKER AMPS	CIR NO.
1	50	2	4000	1.00	Oven/Range	A	Spare			1	20	2
3	50	2	4000	1.00	Oven/Range	B	Disposal	1.00	1176	1	20	4
5	20	1	1500	1.00	Appliance Cir. Kitchen	A	Refrigerator	1.00	700	1	20	6
7	20	1	1500	1.00	Appliance Cir. Kitch/Dining	B	Bath GFI	1.00	180	1	20	8
9	20	1	750	1.00	Dishwasher	A	Lights/Receptacles	1.00	1250	1	20	10
11	20	1	1200	1.00	Microwave Hood	B	Lights/Receptacles	1.00	1250	1	20	12
13					Bussed Space	A	Lights/Receptacles	1.00	1250	1	20	14
15					Bussed Space	B	Lights/Receptacles	1.00	1250	1	20	16
17					Bussed Space	A	Bussed Space					18
19					Surge Protector	B	Dryer	1.00	2500	2	30	20
21					Surge Protector	A	Dryer	1.00	2500	2	30	22
23	25	2	2500	1.00	FCU-1.5T	B	Warmer	1.00	1200	1	20	24
25	25	2	2500	1.00	FCU-1.5T	A	Water Heater	1.00	2250	2	30	26
27	20	2	1200	1.00	HP-1.5T	B	Water Heater	1.00	2250	2	30	28
29	20	2	1200	1.00	HP-1.5T	A	Comm Box	1.00	180	1	20	30

NOTES:
1. Branch circuits shall be protected by a listed arc-fault circuit interrupter, combination type, installed to provide protection of the branch circuit per NEC 210.12
2. Provide GFCI and combination AFCI/GFCI type circuit breakers as required where outlets are installed in any condition that is not readily accessible. All test switches shall be installed in accessible locations and utility breakers with test switches located inside unit panels, adjust panel mounting heights as required.
3. Provide separate neutral conductors for each circuit or provide multiple breakers or breaker ties in accordance with NEC 210.4(B) and 240.15(B).
4. 15A circuit breakers may be used for general purpose lighting and receptacles if accepted with owner.
5. Confirm breaker sizes (HVAC equipment, appliances, etc) with nameplate data before ordering any material and provide all work necessary for a complete and code compliant installation.

PANEL SCHEDULE: Typical 2BR Unit

April 26, 2023

BUS RATING: 150A, 1-3 WIRE
MAIN C.B.: or M.L.O. 150A
MOUNTING: Flush
COMMENTS: New Panelboard

VOLTAGE L-L: 208
VOLTAGE L-G: 120
S.C.R.MS RATING (AIC): 40K Minimum Series Rating, Combination of SIEMENS Type QP Feeder and Type QP Bench Breakers

CIR NO.	CIRCUIT AMPS	BREAKER POLE	CONNECTED LOAD (VA)	NEC DEMAND FACTOR	DESCRIPTION OF LOAD SERVED	PH. ID	DESCRIPTION OF LOAD SERVED	NEC DEMAND FACTOR	CONNECTED LOAD (VA)	CIRCUIT BREAKER POLE	CIRCUIT BREAKER AMPS	CIR NO.
1	50	2	4000	1.00	Oven/Range	A	Spare			1	20	2
3	50	2	4000	1.00	Oven/Range	B	Disposal	1.00	1176	1	20	4
5	20	1	1500	1.00	Appliance Cir. Kitchen	A	Refrigerator	1.00	700	1	20	6
7	20	1	1500	1.00	Appliance Cir. Kitch/Dining	B	Bath GFI	1.00	180	1	20	8
9	20	1	750	1.00	Dishwasher	A	Lights/Receptacles	1.00	1250	1	20	10
11	20	1	1200	1.00	Microwave Hood	B	Lights/Receptacles	1.00	1250	1	20	12
13	20	1	180	1.00	Bath GFI	A	Lights/Receptacles	1.00	1250	1	20	14
15					Bussed Space	B	Lights/Receptacles	1.00	1250	1	20	16
17					Bussed Space	A	Lights/Receptacles	1.00	1250	1	20	18
19					Surge Protector	B	Dryer	1.00	2500	2	30	20
21					Surge Protector	A	Dryer	1.00	2500	2	30	22
23	40	2	3744	1.00	FCU-2.0T	B	Warmer	1.00	1200	1	20	24
25	40	2	3744	1.00	FCU-2.0T	A	Water Heater	1.00	2250	2	30	26
27	25	2	1558	1.00	HP-2.0T	B	Water Heater	1.00	2250	2	30	28
29	25	2	1558	1.00	HP-2.0T	A	Comm Box	1.00	180	1	20	30

NOTES:
1. Branch circuits shall be protected by a listed arc-fault circuit interrupter, combination type, installed to provide protection of the branch circuit per NEC 210.12
2. Provide GFCI and combination AFCI/GFCI type circuit breakers as required where outlets are installed in any condition that is not readily accessible. All test switches shall be installed in accessible locations and utility breakers with test switches located inside unit panels, adjust panel mounting heights as required.
3. Provide separate neutral conductors for each circuit or provide multiple breakers or breaker ties in accordance with NEC 210.4(B) and 240.15(B).
4. 15A circuit breakers may be used for general purpose lighting and receptacles if accepted with owner.
5. Confirm breaker sizes (HVAC equipment, appliances, etc) with nameplate data before ordering any material and provide all work necessary for a complete and code compliant installation.

PANEL SCHEDULE: Typical 3BR Unit

April 26, 2023

BUS RATING: 150A, 1-3 WIRE
MAIN C.B.: or M.L.O. 150A
MOUNTING: Flush
COMMENTS: New Panelboard

VOLTAGE L-L: 208
VOLTAGE L-G: 120
S.C.R.MS RATING (AIC): 40K Minimum Series Rating, Combination of SIEMENS Type QP Feeder and Type QP Bench Breakers

CIR NO.	CIRCUIT AMPS	BREAKER POLE	CONNECTED LOAD (VA)	NEC DEMAND FACTOR	DESCRIPTION OF LOAD SERVED	PH. ID	DESCRIPTION OF LOAD SERVED	NEC DEMAND FACTOR	CONNECTED LOAD (VA)	CIRCUIT BREAKER POLE	CIRCUIT BREAKER AMPS	CIR NO.
1	50	2	4000	1.00	Oven/Range	A	Spare			1	20	2
3	50	2	4000	1.00	Oven/Range	B	Disposal	1.00	1176	1	20	4
5	20	1	1500	1.00	Appliance Cir. Kitchen	A	Refrigerator	1.00	700	1	20	6
7	20	1	1500	1.00	Appliance Cir. Kitch/Dining	B	Bath GFI	1.00	180	1	20	8
9	20	1	750	1.00	Dishwasher	A	Lights/Receptacles	1.00	1250	1	20	10
11	20	1	1200	1.00	Microwave Hood	B	Lights/Receptacles	1.00	1250	1	20	12
13	20	1	180	1.00	Bath GFI	A	Lights/Receptacles	1.00	1250	1	20	14
15					Bussed Space	B	Lights/Receptacles	1.00	1250	1	20	16
17					Bussed Space	A	Lights/Receptacles	1.00	1250	1	20	18
19					Surge Protector	B	Dryer	1.00	2500	2	30	20
21					Surge Protector	A	Dryer	1.00	2500	2	30	22
23	40	2	3838	1.00	FCU-2.5T	B	Warmer	1.00	1200	1	20	24
25	40	2	3838	1.00	FCU-2.5T	A	Water Heater	1.00	3000	2	40	26
27	30	2	1934	1.00	HP-2.5T	B	Water Heater	1.00	3000	2	40	28
29	30	2	1934	1.00	HP-2.5T	A	Comm Box	1.00	180	1	20	30

NOTES:
1. Branch circuits shall be protected by a listed arc-fault circuit interrupter, combination type, installed to provide protection of the branch circuit per NEC 210.12
2. Provide GFCI and combination AFCI/GFCI type circuit breakers as required where outlets are installed in any condition that is not readily accessible. All test switches shall be installed in accessible locations and utility breakers with test switches located inside unit panels, adjust panel mounting heights as required.
3. Provide separate neutral conductors for each circuit or provide multiple breakers or breaker ties in accordance with NEC 210.4(B) and 240.15(B).
4. 15A circuit breakers may be used for general purpose lighting and receptacles if accepted with owner.
5. Confirm breaker sizes (HVAC equipment, appliances, etc) with nameplate data before ordering any material and provide all work necessary for a complete and code compliant installation.

EQUIPMENT SCHEDULE

April 26, 2023

Key	Equipment	Equipment Load WI	Equipment Load TYP	Equipment Load Amps	Volt	#	Branch Circuit Conductors	Conduit	Disconnect Switch	Disconnect Fuse	Panel Circuit	Comment
Fans												
TEF-1 & 2	Exhaust Fan	0.018		0.2 A	120	1	2#12/#12EG	3/4"	Sto	NA	SEE PLANS	
KEF-1	Exhaust Fan	0.018		0.2 A	120	1	2#12/#12EG	3/4"	Sto	NA	SEE PLANS	
TEF-C1	Exhaust Fan	0.018		0.2 A	120	1	2#12/#12EG	3/4"	Sto	NA	SEE PLANS	
EF-2C	Exhaust Fan	0.018		0.2 A	120	1	2#12/#12EG	3/4"	Sto	NA	SEE PLANS	
EF-TR1	Exhaust Fan		1.6	4.4 A	120	1	2#12/#12EG	3/4"	Sto	NA	SEE PLANS	
EF-EL	Exhaust Fan	0.106		0.9 A	120	1	2#12/#12EG	3/4"	Sto	NA	SEE PLANS	
SF-150	Supply Fan	0.053		0.3 A	120	1	2#12/#12EG	3/4"	Sto	NA	SEE PLANS	
SF-200	Supply Fan	0.074		0.6 A	120	1	2#12/#12EG	3/4"	Sto	NA	SEE PLANS	
EF-SR	Exhaust Fan	0.018		0.2 A	120	1	2#12/#12EG	3/4"	Sto	NA	SEE PLANS	
Water Heaters												
WH-4D	Water Heater	4.5		37.5 A	208	1	3#10/#10EG	3/4"	30A/3P WP	--	SEE PLANS	
WH-5D	Water Heater	4.5		21.6 A	208	1	3#10/#10EG	3/4"	30A/3P WP	--	SEE PLANS	
WH-2D	Water Heater	6		28.8 A	208	1	3#6/#10EG	1"	60A/3P WP	--	SEE PLANS	
WH-C1	Water Heater	3		25.0 A	120	1	2#6/#10EG	1"	60A/1P WP	--	SEE PLANS	
WH-C2	Water Heater	1.5		12.5 A	120	1	2#12/#12EG	3/4"	30A/1P WP	--	SEE PLANS	
WH-C3	Water Heater	24		66.7 A	208	3	4#2/#6G	1-1/4"	100A/3P WP	--	SEE PLANS	
Backflow Preventor												
BFP-1	Backflow Preventor			5.0 A	120	1	2#12/#12EG	3/4"	30A/1P WP	--	SEE PLANS	
Pumps												
CP-C1	Circ Pump	0.092		0.8 A	120	1	2#12/#12EG	3/4"	Sto	NA	SEE PLANS	
ESE-1	Sump Pump		1.0	2.4 A	208	3	4#12/#12EG	3/4"	30A/3P WP	--	SEE PLANS	
DWBP-1	Booster Pump		10	66.0 A	208	1	3#4/#6G	1-1/4"	100A/2P WP	--	SEE PLANS	
Split Systems												
HPF-1.5T	Condensing Unit			12.2 MCA 20 MOCP	208	1	3#10/#10EG	3/4"	30A/3P WP	--	SEE PLANS	
HP-2.0T	Condensing Unit			15.3 MCA 25 MOCP	208	1	3#10/#10EG	3/4"	30A/3P WP	--	SEE PLANS	
HP-2.5T	Condensing Unit			18.6 MCA 30 MOCP	208	1	3#10/#10EG	3/4"	30A/3P WP	--	SEE PLANS	
HP-A3.0T	Condensing Unit			22.8 MCA 35 MOCP	208	1	3#8/#10EG	1"	60A/3P WP	--	SEE PLANS	
HP-A2.5T	Condensing Unit			18.6 MCA 30 MOCP	208	1	3#10/#10EG	3/4"	30A/3P WP	--	SEE PLANS	
HP-A2.0T	Condensing Unit			15.3 MCA 25 MOCP	208	1	3#10/#10EG	3/4"	30A/3P WP	--	SEE PLANS	
HP-C1.5T	Condensing Unit			12.2 MCA 20 MOCP	208	1	3#10/#10EG	3/4"	30A/3P WP	--	SEE PLANS	
FC-1.5F	Fan Coil Unit			36.0 MCA 50 MOCP	208	1	3#6/#10EG	1"	60A/3P WP	--	SEE PLANS	
FC-2.0T	Fan Coil Unit			36.0 MCA 40 MOCP	208	1	3#6/#10EG	1"	60A/3P WP	--	SEE PLANS	
FC-2.5T	Fan Coil Unit			37.8 MCA 40 MOCP	208	1	3#6/#10EG	1"	60A/3P WP	--	SEE PLANS	
FC-A3.0T	Fan Coil Unit			49.0 MCA 60 MOCP	208	1	3#6/#10EG	1"	60A/3P WP	--	SEE PLANS	
FC-A2.0T	Fan Coil Unit			36.0 MCA 40 MOCP	208	1	3#10/#10EG	1"	60A/3P WP	--	SEE PLANS	
FC-A2.5T	Fan Coil Unit			36.0 MCA 40 MOCP	208	1	3#10/#10EG	3/4"	30A/3P WP	--	SEE PLANS	
FC-A2.0T	Fan Coil Unit			26.7 MCA 25 MOCP	208	1	3#10/#10EG	3/4"	30A/3P WP	--	SEE PLANS	
FC-A2.5T	Fan Coil Unit			37.8 MCA 40 MOCP	208	1	3#6/#10EG	1"	60A/3P WP	--	SEE PLANS	
FC-C1.5T	Fan Coil Unit			35.0 MCA 30 MOCP	208	1	3#10/#10EG	3/4"	30A/3P WP	--	SEE PLANS	
H/A-1.5T1	Outdoor Unit			16.0 MCA 25 MOCP	208	1	3#10/#10EG	3/4"	30A/3P WP	--	SEE PLANS	
H/A-1.5T1	Indoor Unit			1.0 MCA 15 MOCP	208	1	Powered by Outdoor Unit	-	-	-	-	
Electric Heat												
CUH-1.1KW	Unit Heater	1.1		5.8 MCA	208	1	3#12/#12EG	3/4"	30A/2P	--	SEE PLANS	
CUH-1.1KW/R	Unit Heater	1.1		5.8 MCA	208	1	3#12/#12EG	3/4"	30A/2P	--	SEE PLANS	
CUH-3.0KW	Unit Heater	3.0		14.8 MCA	208	1	3#10/#10EG	3/4"	30A/2P	--	SEE PLANS	
CUH-3.0KW/R	Unit Heater	3.0		14.8 MCA	208	1	3#10/#10EG	3/4"	30A/2P	--	SEE PLANS	
VOUH-3.0KW/R	Unit Heater	3.0		14.8 MCA	208	1	3#10/#10EG	3/4"	30A/2P	--	SEE PLANS	
CH-0.6KW	Ceiling Heater	0.6		5.0 MCA	120	1	2#12/#12EG	3/4"	30A/1

PANEL SCHEDULE: HN3

May 3, 2023

BUS RATING: 200 Amperes 3, 4-WIRE
MAIN C.B.: or M.L.O. 200A
MOUNTING: Surface
COMMENTS: New Panelboard

VOLTAGE L-L: 208
VOLTAGE L-G: 120
S.C.RMS RATING (A/C): 10,000

NO	AMPS	POLE	LOAD (VA)	NEC Demand	LOAD DESCRIPTION	Phase	LOAD DESCRIPTION	NEC Demand	LOAD (VA)	POLE	AMPS	NO
1	20	1	1146	1.00	Level 3 Corridor Receptacles	A	Level 3 Corridor Lighting	1.25	671	1	20	2
3	20	1	986	1.00	Level 3 Corridor Receptacles	B	Level 3 Corridor Lighting	1.25	682	1	20	4
5	20	1	786	1.00	Level 3 Corridor Receptacles	C	CH-0.5KW	1.00	600	1	20	6
7	20	1	180	1.00	Elec Room Receptacles	A	CH-0.5KW	1.00	600	1	20	8
9	20	1	360	1.00	Mag Hold Open	B	CH-0.5KW	1.00	600	1	20	10
11	20	1	360	1.00	Mag Hold Open	C	CH-0.5KW	1.00	600	1	20	12
13	20	1	360	1.00	Mag Hold Open	A	CH-0.5KW	1.00	600	1	20	14
15	20	2	2600	1.00	FC-C1.5T	B	CH-0.5KW	1.00	600	1	20	16
17	30	2	2600	1.00	FC-C1.5T	C	CUH-3.0KW	1.00	1500	2	20	18
19	30	2	2600	1.00	FC-C1.5T	A	CUH-3.0KW	1.00	1500	2	20	20
21	30	2	2600	1.00	FC-C1.5T	B	CUH-3.0KW	1.00	1500	2	20	22
23	30	2	2600	1.00	FC-C1.5T	C	CUH-3.0KW	1.00	1500	2	20	24
25	30	2	2600	1.00	FC-C1.5T	A	Buised Space					26
27	30	2	2600	1.00	FC-C1.5T	B	Buised Space					28
29	30	2	2600	1.00	FC-C1.5T	C	Buised Space					30
31	30	2	2600	1.00	FC-C1.5T	A	Buised Space					32
33	30	2	2600	1.00	FC-C1.5T	B	Buised Space					34
35	30	2	2600	1.00	FC-C1.5T	C	Buised Space					36
37	30	2	2600	1.00	FC-C1.5T	A	Buised Space					38
39	20	1	180	1.00	Elec Mag Hold Open	B	Buised Space					40
41					Buised Space	C	Buised Space					42
43					Buised Space	A	Buised Space					44
45					Buised Space	B	Buised Space					46
47					Buised Space	C	Buised Space					48
49					Buised Space	A	Buised Space					50
51					Buised Space	B	Buised Space					52
53					Buised Space	C	Buised Space					54
55					Buised Space	A	Buised Space					56
57					Buised Space	B	Buised Space					58
59					Buised Space	C	Buised Space					60
61					Buised Space	A	Buised Space					62
63					Buised Space	B	Buised Space					64
65					Buised Space	C	Buised Space					66
67					Buised Space	A	Buised Space					68
69					Buised Space	B	Buised Space					70
71					Buised Space	C	Buised Space					72
73					Buised Space	A	Buised Space					74
75					Buised Space	B	Buised Space					76
77	20	1			Spare	C	Spare			1	20	78
79	20	1			Spare	A	Spare			1	20	80
81	20	1			Spare	B	Spare			1	20	82
83	20	1			Spare	C	Spare			1	20	84

CONNECTED LOAD:
PHASE A (VA): 15,457
PHASE B (VA): 15,286
PHASE C (VA): 13,746
TOTAL LOAD (VA): 44,490

CALCULATED DEMAND LOAD:
PHASE A (VA): 15,624
PHASE B (VA): 15,458
PHASE C (VA): 13,746
CALCULATED DEMAND LOAD (VA): 44,828 — **128.69 A**

NOTES:
1. Not Used.

PANEL SCHEDULE: HN2

October 2, 2023

BUS RATING: 400 Amperes 3, 4-WIRE
MAIN C.B.: or M.L.O. 400A
MOUNTING: Surface
COMMENTS: New Panelboard

VOLTAGE L-L: 208
VOLTAGE L-G: 120
S.C.RMS RATING (A/C): 10,000

NO	AMPS	POLE	LOAD (VA)	NEC Demand	LOAD DESCRIPTION	Phase	LOAD DESCRIPTION	NEC Demand	LOAD (VA)	POLE	AMPS	NO
1	20	1	1200	1.00	Washer	A	Dryer	1.00	2800	2	30	2
3	20	1	1200	1.00	Washer	B	Dryer	1.00	2800	2	30	4
5	20	1	1200	1.00	Washer	C	Dryer	1.00	2800	2	30	6
7	20	1	1200	1.00	Washer	A	Dryer	1.00	2800	2	30	8
9	20	1	1200	1.00	Washer	B	Dryer	1.00	2800	2	30	10
11	20	1	1200	1.00	Washer	C	Dryer	1.00	2800	2	30	12
13	20	1	360	1.00	Mag Hold Open	A	Dryer	1.00	2800	2	30	14
15	20	1	360	1.00	Mag Hold Open	B	Dryer	1.00	2800	2	30	16
17	30	2	2600	1.00	FC-C1.5T	C	CUH-3.0KW	1.00	1500	2	20	18
19	30	2	2600	1.00	FC-C1.5T	A	CUH-3.0KW	1.00	1500	2	20	20
21	30	2	2600	1.00	FC-C1.5T	B	CUH-3.0KW	1.00	1500	2	20	22
23	30	2	2600	1.00	FC-C1.5T	C	CUH-3.0KW	1.00	1500	2	20	24
25	30	2	2600	1.00	FC-C1.5T	A	WH-C3	1.00	6000	3	60	26
27	30	2	2600	1.00	FC-C1.5T	B	WH-C3	1.00	6000	3	60	28
29	30	2	2600	1.00	FC-C1.5T	C	WH-C3	1.00	6000	3	60	30
31	30	2	2600	1.00	FC-C1.5T	A	CUH-3.0KW/R	1.00	1500	2	20	32
33	30	2	2600	1.00	FC-C1.5T	B	CUH-3.0KW/R	1.00	1500	2	20	34
35	30	2	2600	1.00	FC-C1.5T	C	Level 2 Corridor Lighting	1.25	671	1	20	36
37	30	2	2600	1.00	FC-C1.5T	A	Level 2 Corridor Lighting	1.25	729	1	20	38
39	30	2	2600	1.00	FC-C1.5T	B	SATV	1.00	180	1	20	40
41	20	1	180	1.00	Elec Room Receptacles	C	IT	1.00	180	1	20	42
43	20	1	360	1.00	Mag Hold Open	A	CATV	1.00	180	1	20	44
45	20	1	180	1.00	Elev Mag Hold Open	B	TTB	1.00	180	1	20	46
47	20	1	1146	1.00	Level 2 Corridor Receptacles	C	CH-0.5KW	1.00	600	1	20	48
49	20	1	986	1.00	Level 2 Corridor Receptacles	A	CH-0.5KW	1.00	600	1	20	50
51	20	1	986	1.00	Level 2 Corridor Receptacles	B	CH-0.5KW	1.00	600	1	20	52
53	20	1	180	1.00	Access Control	C	CH-0.5KW	1.00	600	1	20	54
55					Buised Space	A	CH-0.5KW	1.00	600	1	20	56
57					Buised Space	B	CH-0.5KW	1.00	600	1	20	58
59					Buised Space	C	SATV	1.00	180	1	20	60
61					Buised Space	A	IT	1.00	180	1	20	62
63					Buised Space	B	CATV	1.00	180	1	20	64
65					Buised Space	C	TTB	1.00	180	1	20	66
67					Buised Space	A	Buised Space					68
69					Buised Space	B	Buised Space					70
71					Buised Space	C	Buised Space					72
73					Buised Space	A	Buised Space					74
75					Buised Space	B	Buised Space					76
77	20	1			Spare	C	Spare			1	20	78
79	20	1			Spare	A	Spare			1	20	80
81	20	1			Spare	B	Spare			1	20	82
83	20	1			Spare	C	Spare			1	20	84

CONNECTED LOAD:
PHASE A (VA): 35,275
PHASE B (VA): 35,546
PHASE C (VA): 36,117
TOTAL LOAD (VA): 106,937

CALCULATED DEMAND LOAD:
PHASE A (VA): 36,457
PHASE B (VA): 36,565
PHASE C (VA): 34,664
CALCULATED DEMAND LOAD (VA): 108,687 — **266.70 A**

NOTES:
1. Not Used.

PANEL SCHEDULE: HS1

May 3, 2023

BUS RATING: 400 Amperes 3, 4-WIRE
MAIN C.B.: or M.L.O. 400A
MOUNTING: Surface
COMMENTS: New Panelboard

VOLTAGE L-L: 208
VOLTAGE L-G: 120
S.C.RMS RATING (A/C): 22,000

NO	AMPS	POLE	LOAD (VA)	NEC Demand	LOAD DESCRIPTION	Phase	LOAD DESCRIPTION	NEC Demand	LOAD (VA)	POLE	AMPS	NO
1	20	1	1800	1.25	Stair Lighting	A	Busied Space					2
3						B	Busied Space					4
5	20	1	600	1.00		C	Busied Space					6
7	20	1	540	1.00		A	Busied Space					8
9	20	1	1146	1.00	Level 1 Corridor Receptacles	B	CUH-3.0KW	1.00	1500	2	20	10
11	20	1	966	1.00	Level 1 Corridor Receptacles	C	CUH-3.0KW	1.00	1500	2	20	12
13	20	1	933	1.00	Level 1 Corridor Receptacles	A	CUH-3.0KW	1.00	1500	2	20	14
15	20	1	180	1.00	Elec Room Receptacles	B	CUH-3.0KW	1.00	1500	2	20	16
17	30	2	2800	1.00		C	CUH-1.5KW	1.00	550	2	20	18
19	30	2	2800	1.00		A	CUH-1.5KW	1.00	550	2	20	20
21						B	WH-C2	1.00	1500	2	20	22
23						C	ESE-1	1.00	288	3	20	24
25	30	2	2800	1.00		A	WH-C3	1.00	6000	3	60	26
27	30	2	2800	1.00		B	WH-C3	1.00	6000	3	60	28
29	30	2	2800	1.00		C	WH-C3	1.00	6000	3	60	30
31	30	2	2800	1.00		A	CUH-3.0KW/R	1.00	1500	2	20	32
33	30	2	2800	1.00		B	CUH-3.0KW/R	1.00	1500	2	20	34
35	30	2	2800	1.00		C	IT	1.00	180	1	20	36
37	30	2	2800	1.00		A	CATV	1.00	180	1	20	38
39	30	2	2800	1.00		B	TTB	1.00	180	1	20	40
41	20	1	360	1.00	Courtyard Receptacles	C	CUH-3.0KW	1.00	1500	2	20	42
43	20	1	360	1.00	Exterior Receptacles	A	CUH-3.0KW	1.00	1500	2	20	44
45	20	1	120	1.25	Elevator Pit Lights	B	CUH-3.0KW	1.00	1500	2	20	46
47	20	1	500	1.25	Elevator Cab Lights	C	CUH-3.0KW	1.00	1500	2	20	48
49	20	1	500	1.00	Elevator CabFan	A	CUH-3.0KW	1.00	1500	2	20	50
51	20	1	180	1.00	Elevator Pit Receptacle	B	CUH-3.0KW	1.00	1500	2	20	52
53					Buised Space	C	Buised Space					54
55					Buised Space	A	UH-3.0KW	1.00	1000	3	20	56
57					Buised Space	B	UH-3.0KW	1.00	1000	3	20	58
59					Buised Space	C	UH-3.0KW	1.00	1000	3	20	60
61					Buised Space	A	DWSP-1	1.00	6600	3	70	62
63					Buised Space	B	DWSP-1	1.00	6600	3	70	64
65					Buised Space	C	DWSP-1	1.00	6600	3	70	66
67					Buised Space	A	Buised Space					68
69					Buised Space	B	Buised Space					70
71					Buised Space	C	Buised Space					72
73					Buised Space	A	Buised Space					74
75					Buised Space	B	Buised Space					76
77	20	1			Spare	C	Spare			1	20	78
79	20	1			Spare	A	Spare			1	20	80
81	20	1			Spare	B	Spare			1	20	82
83	20	1			Spare	C	Spare			1	20	84

CONNECTED LOAD:
PHASE A (VA): 29,551
PHASE B (VA): 26,438
PHASE C (VA): 25,446
TOTAL LOAD (VA): 81,419

CALCULATED DEMAND LOAD:
PHASE A (VA): 29,991
PHASE B (VA): 26,797
PHASE C (VA): 25,590
CALCULATED DEMAND LOAD (VA): 82,297 — **228.61 A**

NOTES:
1. Not Used.

PANEL SCHEDULE: C

July 24, 2024

BUS RATING: 400 Amperes 3, 4-WIRE
MAIN C.B.: or M.L.O. 400A
MOUNTING: Surface
COMMENTS: New Panelboard

VOLTAGE L-L: 208
VOLTAGE L-G: 120
S.C.RMS RATING (A/C): 10,000

NO	AMPS	POLE	LOAD (VA)	NEC Demand	LOAD DESCRIPTION	Phase	LOAD DESCRIPTION	NEC Demand	LOAD (VA)	POLE	AMPS	NO
1	20	1	1080	1.00	Access Control	A	Lobby & Mailroom Lighting	1.25	1309	1	20	2
3	20	1	540	1.00	Bathroom Receptacles	B	VCU-3.0KW	1.00	1500	2	20	4
5	20	1	774	1.00	Mech Room Receptacles	C	VCU-3.0KW	1.00	1500	2	20	6
7	40	2	3744	1.00	FC-AC2.0T1	A	CUH-3.0KW/R	1.00	1500	2	20	8
9	40	2	3744	1.00	FC-AC2.0T1	B	CUH-3.0KW/R	1.00	1500	2	20	10
11	50	2	5096	1.00	FC-AC1.0T	C	CUH-3.0KW/R	1.00	1500	2	20	12
13	50	2	5096	1.00	FC-AC1.0T	A	CUH-3.0KW/R	1.00	1500	2	20	14
15	25	2	2550	1.00	FC-AC2.0T2	B	CUH-3.0KW/R	1.00	1500	2	20	16
17	25	2	2550	1.00	FC-AC2.0T2	C	CUH-3.0KW/R	1.00	1500	2	20	18
19	40	2	3931	1.00	FC-AC1.5T	A	SATV	1.00	180	1	20	20
21	40	2	3931	1.00	FC-AC1.5T	B	IT	1.00	180	1	20	22
23	35	1	3000	1.00	WH-C1	C	CATV	1.00	180	1	20	24
25	20	1	192	1.00	CPC-1	A	TTB	1.00	180	1	20	26
27	20	2	1500	1.00	Electric Grill	B	Elevator PH Lights	1.25	120	1	20	28
29	20	2	1500	1.00	Electric Grill	C	Elevator Cab Lights	1.25	500	1	20	30
31	20	1	720	1.00	Courtyard Receptacles	A	Elevator Cab Fan	1.00	500	1	20	32
33	20	1	360	1.00	Exterior Receptacles	B	Elevator PH Receptacle	1.00	180	1	20	34
35	20	1	900	1.00	Access Control	C	ESE-1	1.00	288	3	20	36
37	20	1	1080	1.00	Lobby Access	A	ESE-1	1.00	288	3	20	38
39	20	1	1080	1.00	Refrigerator	B	ESE-1	1.00	288	3	20	40
41	20	1	1080	1.00	Work Center	C	EDH-1	1.00	1867	3	20	42
43	20	1	1080	1.00	Clubroom Receptacles	A	EDH-1	1.00	1867	3	20	44
45	20	1	270	1.00	Clubroom TV	B	EDH-1	1.00	1867	3	20	46
47	20	1	540	1.00	Clubroom Receptacles	C	Fitness Lighting	1.25	278	1	20	48
49	20	1	750	1.00	Dishwasher	A	Fitness Sign	1.25	500	1	20	50
51	20	1	1200	1.00	Microwave	B	Clubroom Lighting	1.25	749	1	20	52
53	20	1	750	1.00	Refrigerator	C	Leasing Lighting	1.25	850	1	20	54
55	20	1	1176	1.00	Disposal	A	Exercise Equipment	1.00	1200	1	20	56
57	20	1	900	1.00	Fitness Receptacles	B	Exercise Equipment	1.00	1200	1	20	58
59	20	1	900	1.00	Leasing Receptacles	C	Exercise Equipment	1.00	1200	1	20	60
61	20	1	1080	1.00	Office Receptacles	A	Exercise Equipment	1.00	1200	1	20	62
63	20	1	900	1.00	Work Room Receptacles	B	Exercise Equipment	1.00	1200	1	20	64
65	20	1	1200	1.00	Microwave	C	Office Equipment	1.00	1200	1	20	66
67	20	1	750	1.00	Refrigerator	A	Courtyard Lighting	1.00	450	1	20	68
69	20	1	1176	1.00	Disposal	B	Hand Dryer	1.00	1200	1	20	70
71					Buised Space	C	Hand Dryer	1.00	1200	1	20	72
73					Buised Space	A	Buised Space					74
75					Buised Space	B	Buised Space					76
77	20	1			Spare	C	Spare			1	20	78
79	20	1			Spare	A	Spare			1	20	80
81	20	1			Spare	B	Spare			1	20	82
83	20	1			Spare	C	Spare			1	20	84

CONNECTED LOAD:
PHASE A (VA): 30,880
PHASE B (VA): 28,724
PHASE C (VA): 23,872
TOTAL LOAD (VA): 83,477

CALCULATED DEMAND LOAD:
PHASE A (VA): 31,932
PHASE B (VA): 29,941
PHASE C (VA): 29,252
CALCULATED DEMAND LOAD (VA): 89,675 — **248.82 A**

NOTES:
1. Not Used.

PANEL SCHEDULE: HS3

May 3, 2023

BUS RATING: 200 Amperes 3, 4-WIRE
MAIN C.B.: or M.L.O. 200A
MOUNTING: Surface
COMMENTS: New Panelboard

VOLTAGE L-L: 208
VOLTAGE L-G: 120
S.C.RMS RATING (A/C): 10,000

NO	AMPS	POLE	LOAD (VA)	NEC Demand	LOAD DESCRIPTION	Phase	LOAD DESCRIPTION	NEC Demand	LOAD (VA)	POLE	AMPS	NO
1	20	1	180	1.00	Elec Room Receptacles	A	Level 3 Corridor Lighting	1.25	992	1	20	2
3	20	1	1146	1.00	Level 3 Corridor Receptacles	B	CUH-3.0KW/R	1.00	1500	2	20	4
5	20	1	1179	1.00	Level 3 Corridor Receptacles	C	CUH-3.0KW/R	1.00	1500	2	20	6
7	30	2	2600	1.00	FC-C1.5T	A	SATV	1.00	180	1	20	8
9	30	2	2600	1.00	FC-C1.5T	B	IT	1.00	180	1	20	10
11	30	2	2600	1.00	FC-C1.5T	C	CATV	1.00	180	1	20	12
13	30	2	2600	1.00	FC-C1.5T	A	TTB	1.00	180	1	20	14
15	30	2	2600	1.00	FC-C1.5T	B	CUH-1.5KW/R	1.00	550	2	20	16
17	30	2	2600	1.00	FC-C1.5T	C	CUH-1.5KW/R	1.00	550	2	20	18
19	20	1	360	1.00	Mag Hold Open	A	CH-0.5KW	1.00	600	1	20	20
21	30	2	2600	1.00	FC-C1.5T	B	CH-0.5KW	1.00	600	1	20	22
23	30	2	2600	1.00	FC-C1.5T	C	Busied Space					24
25	30	2	2600	1.00	FC-C1.5T	A	Busied Space					26
27	20	1	180	1.00	Elev Mag Hold Open	B	Busied Space					28
29					Busied Space	C	Busied Space					30
31					Busied Space	A	Busied Space					32
33					Busied Space	B	Busied Space					34
35					Busied Space	C	Busied Space					36
37					Busied Space	A	Busied Space					38
39					Busied Space	B	Busied Space					40
41					Busied Space	C	Busied Space					42
43					Busied Space	A	Busied Space					44
45					Busied Space	B	Busied Space					46
47					Busied Space	C	Busied Space					48
49					Busied Space	A	Busied Space					50
51					Busied Space	B	Busied Space					52
53					Busied Space	C	Busied Space					54
55					Busied Space	A	Busied Space					56
57					Busied Space	B	Busied Space					58
59					Busied Space	C	Busied Space					60
61					Busied Space	A	Busied Space					62
63					Busied Space	B	Busied Space					64
65					Busied Space	C	Busied Space					66
67					Busied Space	A	Busied Space					68
69					Busied Space	B	Busied Space					70
71					Busied Space	C	Busied Space					72
73					Busied Space	A	Busied Space					74
75					Busied Space	B	Busied Space					76
77	20	1			Spare	C	Spare			1	20	78
79	20	1			Spare	A	Spare			1	20	80
81	20	1			Spare	B	Spare			1	20	82
83	20	1			Spare	C	Spare			1	20	84

CONNECTED LOAD:
PHASE A (VA): 12,052
PHASE B (VA): 11,966
PHASE C (VA): 11,209
TOTAL LOAD (VA): 35,807

CALCULATED DEMAND LOAD:
PHASE A (VA): 12,780
PHASE B (VA): 11,998
PHASE C (VA): 11,209
CALCULATED DEMAND LOAD (VA): 35,945 — **99.78 A**

NOTES:
1. Not Used.

PANEL SCHEDULE: HS2

May 3, 2023

BUS RATING: 200 Amperes 3, 4-WIRE
MAIN C.B.: or M.L.O. 200A
MOUNTING: Surface
COMMENTS: New Panelboard

VOLTAGE L-L: 208
VOLTAGE L-G: 120
S.C.RMS RATING (A/C): 10,000

NO	AMPS	POLE	LOAD (VA)	NEC Demand	LOAD DESCRIPTION	Phase	LOAD DESCRIPTION	NEC Demand	LOAD (VA)	POLE	AMPS	NO
1	20	1	180	1.00	Elec Room Receptacles	A	Level 2 Corridor Lighting	1.25	992	1	20	2
3	20	1	1146	1.00	Level 2 Corridor Receptacles	B	CUH-3.0KW/R	1.00	1500	2	20	4
5	20	1	1179	1.00	Level 2 Corridor Receptacles	C	CUH-3.0KW/R	1.00	1500	2	20	6
7	30	2	2600	1.00	FC-C1.5T	A	SATV	1.00	180	1	20	8
9	30	2	2600	1.00	FC-C1.5T	B	IT	1.00	180	1	20	10
11	30	2	2600	1.00	FC-C1.5T	C	CATV	1.00	180	1	20	12
13	30	2	2600	1.00	FC-C1.5T	A	TTB	1.00	180	1	20	14
15	30	2	2600	1.00	FC-C1.5T	B	CUH-1.5KW/R	1.00	550	2	20	16
17	30	2	2600	1.00	FC-C1.5T	C	CUH-1.5KW/R	1.00	550	2	20	18
19	20	1	360	1.00	FC-C1.5T	A	CH-0.5KW	1.00	600	1	20	20
21	30	2	2600	1.00	FC-C1.5T	B	CH-0.5KW	1.00	600	1	20	22
23	30	2	2600	1.00	FC-C1.5T	C	Busied Space					24
25	30	2	2600	1.00	FC-C1.5T	A	Busied Space					26
27	20	1	180	1.00	Elev Mag Hold Open	B	Busied Space					28
29					Busied Space	C	Busied Space					30
31					Busied Space	A	Busied Space					32
33					Busied Space	B	Busied Space					34
35					Busied Space	C	Busied Space					36
37					Busied Space	A	Busied Space					38
39					Busied Space	B	Busied Space					40
41					Busied Space	C	Busied Space					42
43					Busied Space	A	Busied Space					44
45					Busied Space	B	Busied Space					46
47					Busied Space	C	Busied Space					48
49					Busied Space	A	Busied Space					50
51					Busied Space	B	Busied Space					52
53					Busied Space	C	Busied Space					54
55					Busied Space	A	Busied Space					56
57					Busied Space	B	Busied Space					58
59					Busied Space	C	Busied Space					60
61					Busied Space	A	Busied Space					62
63					Busied Space	B	Busied Space					64
65					Busied Space	C	Busied Space					66
67					Busied Space	A	Busied Space					68
69					Busied Space	B	Busied Space					70
71					Busied Space	C	Busied Space					72
73					Busied Space	A	Busied Space					74
75					Busied Space	B	Busied Space					76
77	20	1			Spare	C	Spare			1	20	78
79	20	1			Spare	A	Spare			1	20	80
81	20	1			Spare	B	Spare			1	20	82
83	20	1			Spare	C	Spare			1	20	84

CONNECTED LOAD:
PHASE A (VA): 12,532
PHASE B (VA): 11,958
PHASE C (VA): 11,209
TOTAL LOAD (VA): 35,697

CALCULATED DEMAND LOAD:
PHASE A (VA): 12,780
PHASE B (VA): 11,998
PHASE C (VA): 11,209
CALCULATED DEMAND LOAD (VA): 35,945 — **99.78 A**

NOTES:
1. Not Used.

PANEL SCHEDULE: G1

May 3, 2023

BUS RATING: 400 Amperes 3, 4-WIRE
MAIN C.B.: or M.L.O. 400A
MOUNTING: Surface
COMMENTS: New Panelboard

VOLTAGE L-L: 208
VOLTAGE L-G: 120
S.C.RMS RATING (A/C): 42,000

NO	AMPS	POLE	LOAD (VA)	NEC Demand	LOAD DESCRIPTION	Phase	LOAD DESCRIPTION	NEC Demand	LOAD (VA)	POLE	AMPS	NO
1	20	1	900	1.00	Access Control	A	Stair 1 Lighting	1.25	504	1	20	2
3	20	1	180	1.00	Elec Room Receptacles	B	Stair 2 Lighting	1.25	504	1	20	4
5	20	1	900	1.00	Garage Receptacles	C	Stair 3 Lighting	1.25	420	1	20	6
7	100	2	9600	1.25	EV Charger	A	Garage Lighting	1.25	1710	1	20	8
9	100	2	9600	1.25	EV Charger	B	Trash Lighting	1.25	234	1	20	10
11

PANEL SCHEDULE: G4

June 26, 2023

BUS RATING: 400 Amperes 3 , 4-WIRE
MAIN C.B.: or M.L.O: 400A
MOUNTING: Surface
COMMENTS: New Panelboard, NEMA 3R

VOLTAGE L-L: 208
VOLTAGE L-G: 120
S.C.RMS RATING (AIC): 42,000

NO.	AMPS	POLE	LOAD (VA)	NEC Demand	LOAD DESCRIPTION	Phase	LOAD DESCRIPTION	NEC Demand	LOAD (VA)	POLE	AMPS	NO.
1	20	1	180	1.00	Garage Recepts	A	Garage Lighting	1.25	419	1	20	2
3	100	2	9600	1.25	EV Charger	B	Trash & Storage Lighting	1.25	74	1	20	4
5	100	2	9600	1.25	EV Charger	C	EF-TR1	1.00	528	1	20	6
7	100	2	9600	1.25	EV Charger	A	Roof Recept	1.00	180	1	20	8
9	100	2	9600	1.25	EV Charger	B	Bussed Space					10
11	100	2	9600	1.25	EV Charger	C	Bussed Space					12
13	100	2	9600	1.25	EV Charger	A	Bussed Space					14
15	100	2	9600	1.25	EV Charger	B	Bussed Space					16
17	100	2	9600	1.25	EV Charger	C	Bussed Space					18
19	20	1	180	1.00	Access Control	A	Bussed Space					20
21	20	1	528	1.00	EF-TR1	B	Bussed Space					22
23					Bussed Space	C	Bussed Space					24
25					Bussed Space	A	Bussed Space					26
27					Bussed Space	B	Bussed Space					28
29					Bussed Space	C	Bussed Space					30
31					Bussed Space	A	Bussed Space					32
33					Bussed Space	B	Bussed Space					34
35					Bussed Space	C	Bussed Space					36
37					Bussed Space	A	Bussed Space					38
39					Bussed Space	B	Bussed Space					40
41	20	1			Spare	C	Spare			1	20	42
43	20	1			Spare	A	Spare			1	20	44

CONNECTED LOAD:
PHASE A (VA): 20,159
PHASE B (VA): 29,402
PHASE C (VA): 29,328
TOTAL LOAD (VA): 78,889

CALCULATED DEMAND LOAD:
PHASE A (VA): 25,064
PHASE B (VA): 36,621
PHASE C (VA): 36,528
CALCULATED DEMAND LOAD (VA): 98,212 272.62 A

NOTES:
1. Not Used.

PANEL SCHEDULE: HS4

May 4, 2023

BUS RATING: 400 Amperes 3 , 4-WIRE
MAIN C.B.: or M.L.O: 400A
MOUNTING: Surface
COMMENTS: New Panelboard

VOLTAGE L-L: 208
VOLTAGE L-G: 120
S.C.RMS RATING (AIC): 22,000

NO.	AMPS	POLE	LOAD (VA)	NEC Demand	LOAD DESCRIPTION	Phase	LOAD DESCRIPTION	NEC Demand	LOAD (VA)	POLE	AMPS	NO.
1	20	1	180	1.00	Elec Room Recepts	A	Level 4 Corridor Lighting	1.25	992	1	20	2
3	20	1	1179	1.00	Level 4 Corridor Recepts	B	CUH-3.0KWR	1.00	1500	2	20	4
5	20	1	1146	1.00	Level 4 Corridor Recepts	C	CUH-3.0KWR	1.00	1500	2	20	6
7	30	2	2600	1.00	FC-C1.5T	A	SATV	1.00	180	1	20	8
9	30	2	2600	1.00	FC-C1.5T	B	IT	1.00	180	1	20	10
11	30	2	2600	1.00	FC-C1.5T	C	CATV	1.00	180	1	20	12
13	30	2	2600	1.00	FC-C1.5T	A	TTB	1.00	180	1	20	14
15	30	2	2600	1.00	FC-C1.5T	B	CUH-1.1KWR	1.00	550	2	20	16
17	30	2	2600	1.00	FC-C1.5T	C	CUH-1.1KWR	1.00	550	2	20	18
19	30	2	2600	1.00	FC-C1.5T	A	CH-0.6KW	1.00	600	1	20	20
21	30	2	2600	1.00	FC-C1.5T	B	CH-0.6KW	1.00	600	1	20	22
23	30	2	2600	1.00	FC-C1.5T	C	HP-C1.5T	1.00	1269	2	20	24
25	30	2	2600	1.00	FC-C1.5T	A	HP-C1.5T	1.00	1269	2	20	26
27	20	1	1080	1.00	Roof Recepts	B	HP-C1.5T	1.00	1269	2	20	28
29	20	1	900	1.00	Roof Recepts	C	HP-C1.5T	1.00	1269	2	20	30
31					Bussed Space	A	HP-C1.5T	1.00	1269	2	20	32
33					Bussed Space	B	HP-C1.5T	1.00	1269	2	20	34
35	20	1	106	1.00	EF-EL	C	HP-C1.5T	1.00	1269	2	20	36
37	20	2	1269	1.00	HP-C1.5T	A	HP-C1.5T	1.00	1269	2	20	38
39	20	2	1269	1.00	HP-C1.5T	B	HP-C1.5T	1.00	1269	2	20	40
41	20	2	1269	1.00	HP-C1.5T	C	HP-C1.5T	1.00	1269	2	20	42
43	20	2	1269	1.00	HP-C1.5T	A	HP-C1.5T	1.00	1269	2	20	44
45	20	2	1269	1.00	HP-C1.5T	B	HP-C1.5T	1.00	1269	2	20	46
47	20	2	1269	1.00	HP-C1.5T	C	HP-C1.5T	1.00	1269	2	20	48
49	20	2	1269	1.00	HP-C1.5T	A	HP-C1.5T	1.00	1269	2	20	50
51	20	2	1269	1.00	HP-C1.5T	B	HP-C1.5T	1.00	1269	2	20	52
53	20	2	1269	1.00	HP-C1.5T	C	HP-C1.5T	1.00	1269	2	20	54
55	20	2	1269	1.00	HP-C1.5T	A	HP-C1.5T	1.00	1269	2	20	56
57	20	2	1269	1.00	HP-C1.5T	B	HP-C1.5T	1.00	1269	2	20	58
59	20	2	1269	1.00	HP-C1.5T	C	HP-C1.5T	1.00	1269	2	20	60
61	20	2	1269	1.00	HP-C1.5T	A	HP-C1.5T	1.00	1269	2	20	62
63	20	2	1269	1.00	HP-C1.5T	B	HP-C1.5T	1.00	1269	2	20	64
65	20	2	1269	1.00	HP-C1.5T	C	HP-C1.5T	1.00	1269	2	20	66
67	20	2	1269	1.00	HP-C1.5T	A	HP-C1.5T	1.00	1269	2	20	68
69	20	1	180	1.00	Elev Mag Hold Open	B	HP-C1.5T	1.00	1269	2	20	70
71					Bussed Space	C	Bussed Space					72
73					Bussed Space	A	Bussed Space					74
75					Bussed Space	B	Bussed Space					76
77					Bussed Space	C	Bussed Space					78
79					Bussed Space	A	Bussed Space					80
81					Bussed Space	B	Bussed Space					82
83					Bussed Space	C	Bussed Space					84
85					Bussed Space	A	Bussed Space					86
87					Bussed Space	B	Bussed Space					88
89					Bussed Space	C	Bussed Space					90
91					Bussed Space	A	Bussed Space					92
93					Bussed Space	B	Bussed Space					94
95					Bussed Space	C	Bussed Space					96
97					Bussed Space	A	Bussed Space					98
99					Bussed Space	B	Bussed Space					100
101					Bussed Space	C	Bussed Space					102
103					Bussed Space	A	Bussed Space					104
105					Bussed Space	B	Bussed Space					106
107					Bussed Space	C	Bussed Space					108
109					Bussed Space	A	Bussed Space					110
111					Bussed Space	B	Bussed Space					112
113					Bussed Space	C	Bussed Space					114
115	20	1			Spare	A	Spare			1	20	116
117	20	1			Spare	B	Spare			1	20	118
119	20	1			Spare	C	Spare			1	20	120
121	20	1			Spare	A	Spare			1	20	122
123	20	1			Spare	B	Spare			1	20	124
125	20	1			Spare	C	Spare			1	20	126

CONNECTED LOAD:
PHASE A (VA): 30,295
PHASE B (VA): 29,563
PHASE C (VA): 28,676
TOTAL LOAD (VA): 88,535

CALCULATED DEMAND LOAD:
PHASE A (VA): 30,543
PHASE B (VA): 29,563
PHASE C (VA): 28,676
CALCULATED DEMAND LOAD (VA): 88,783 246.44 A

NOTES:
1. Not Used.

PANEL SCHEDULE: HN4

June 22, 2023

BUS RATING: 400 Amperes 3 , 4-WIRE
MAIN C.B.: or M.L.O: 400A
MOUNTING: Surface
COMMENTS: New Panelboard

VOLTAGE L-L: 208
VOLTAGE L-G: 120
S.C.RMS RATING (AIC): 10,000

NO.	AMPS	POLE	LOAD (VA)	NEC Demand	LOAD DESCRIPTION	Phase	LOAD DESCRIPTION	NEC Demand	LOAD (VA)	POLE	AMPS	NO.
1	20	1	1146	1.00	Level 4 Corridor Recepts	A	Level 4 Corridor Lighting	1.25	671	1	20	2
3	20	1	966	1.00	Level 4 Corridor Recepts	B	Level 4 Corridor Lighting	1.25	682	1	20	4
5	20	1	786	1.00	Level 4 Corridor Recepts	C	CH-0.6KW	1.00	600	1	20	6
7	20	1	180	1.00	Elec Room Recepts	A	CH-0.6KW	1.00	600	1	20	8
9	20	1	360	1.00	Mag Hold Open	B	CH-0.6KW	1.00	600	1	20	10
11	20	1	360	1.00	Mag Hold Open	C	CH-0.6KW	1.00	600	1	20	12
13	20	1	360	1.00	Mag Hold Open	A	CH-0.6KW	1.00	600	1	20	14
15	30	2	2600	1.00	FC-C1.5T	B	CH-0.6KW	1.00	600	1	20	16
17	30	2	2600	1.00	FC-C1.5T	C	CUH-3.0KWR	1.00	1500	2	20	18
19	30	2	2600	1.00	FC-C1.5T	A	CUH-3.0KWR	1.00	1500	2	20	20
21	30	2	2600	1.00	FC-C1.5T	B	SATV	1.00	180	1	20	22
23	30	2	2600	1.00	FC-C1.5T	C	IT	1.00	180	1	20	24
25	30	2	2600	1.00	FC-C1.5T	A	CATV	1.00	180	1	20	26
27	30	2	2600	1.00	FC-C1.5T	B	TTB	1.00	180	1	20	28
29	30	2	2600	1.00	FC-C1.5T	C	SATV	1.00	180	1	20	30
31	30	2	2600	1.00	FC-C1.5T	A	IT	1.00	180	1	20	32
33	30	2	2600	1.00	FC-C1.5T	B	CATV	1.00	180	1	20	34
35	30	2	2600	1.00	FC-C1.5T	C	TTB	1.00	180	1	20	36
37	30	2	2600	1.00	FC-C1.5T	A	HP-C1.5T	1.00	1269	2	20	38
39	20	1	900	1.00	Roof Recepts	B	HP-C1.5T	1.00	1269	2	20	40
41	20	1	1080	1.00	Roof Recepts	C	HP-C1.5T	1.00	1269	2	20	42
43	20	1	1080	1.00	Roof Recepts	A	HP-C1.5T	1.00	1269	2	20	44
45					Bussed Space	B	HP-C1.5T	1.00	1269	2	20	46
47	25	2	1664	1.00	HP-1.5T1	C	HP-C1.5T	1.00	1269	2	20	48
49	25	2	1664	1.00	HP-1.5T1	A	HP-C1.5T	1.00	1269	2	20	50
51	25	2	1591	1.00	HP-A2.0T1	B	HP-C1.5T	1.00	1269	2	20	52
53	25	2	1591	1.00	HP-A2.0T1	C	HP-C1.5T	1.00	1269	2	20	54
55	25	2	1591	1.00	HP-A2.0T2	A	HP-C1.5T	1.00	1269	2	20	56
57	25	2	1591	1.00	HP-A2.0T2	B	HP-C1.5T	1.00	1269	2	20	58
59	35	2	2371	1.00	HP-A3.0T	C	HP-C1.5T	1.00	1269	2	20	60
61	35	2	2371	1.00	HP-A3.0T	A	HP-C1.5T	1.00	1269	2	20	62
63	30	2	1934	1.00	HP-A2.5T	B	HP-C1.5T	1.00	1269	2	20	64
65	30	2	1934	1.00	HP-A2.5T	C	HP-C1.5T	1.00	1269	2	20	66
67	20	1	106	1.00	EF-EL	A	HP-C1.5T	1.00	1269	2	20	68
69	20	2	1269	1.00	HP-C1.5T	B	HP-C1.5T	1.00	1269	2	20	70
71	20	2	1269	1.00	HP-C1.5T	C	HP-C1.5T	1.00	1269	2	20	72
73	20	2	1269	1.00	HP-C1.5T	A	HP-C1.5T	1.00	1269	2	20	74
75	20	2	1269	1.00	HP-C1.5T	B	HP-C1.5T	1.00	1269	2	20	76
77	20	2	1269	1.00	HP-C1.5T	C	HP-C1.5T	1.00	1269	2	20	78
79	20	2	1269	1.00	HP-C1.5T	A	HP-C1.5T	1.00	1269	2	20	80
81	20	2	1269	1.00	HP-C1.5T	B	HP-C1.5T	1.00	1269	2	20	82
83	20	2	1269	1.00	HP-C1.5T	C	HP-C1.5T	1.00	1269	2	20	84
85	20	2	1269	1.00	HP-C1.5T	A	HP-C1.5T	1.00	1269	2	20	86
87	20	2	1269	1.00	HP-C1.5T	B	HP-C1.5T	1.00	1269	2	20	88
89	20	2	1269	1.00	HP-C1.5T	C	HP-C1.5T	1.00	1269	2	20	90
91	20	2	1269	1.00	HP-C1.5T	A	HP-C1.5T	1.00	1269	2	20	92
93	20	2	1269	1.00	HP-C1.5T	B	HP-C1.5T	1.00	1269	2	20	94
95	20	2	1269	1.00	HP-C1.5T	C	HP-C1.5T	1.00	1269	2	20	96
97	20	2	1269	1.00	HP-C1.5T	A	HP-C1.5T	1.00	1269	2	20	98
99	20	2	1269	1.00	HP-C1.5T	B	HP-C1.5T	1.00	1269	2	20	100
101	20	1	180	1.00	Elev Mag Hold Open	C	HP-C1.5T	1.00	1269	2	20	102
103					Bussed Space	A	HP-C1.5T	1.00	1269	2	20	104
105					Bussed Space	B	Bussed Space					106
107					Bussed Space	C	Bussed Space					108
109					Bussed Space	A	Bussed Space					110
111					Bussed Space	B	Bussed Space					112
113					Bussed Space	C	Bussed Space					114
115	20	1			Spare	A	Spare			1	20	116
117	20	1			Spare	B	Spare			1	20	118
119	20	1			Spare	C	Spare			1	20	120
121	20	1			Spare	A	Spare			1	20	122
123	20	1			Spare	B	Spare			1	20	124
125	20	1			Spare	C	Spare			1	20	126

CONNECTED LOAD:
PHASE A (VA): 44,199
PHASE B (VA): 41,734
PHASE C (VA): 43,908
TOTAL LOAD (VA): 129,840

CALCULATED DEMAND LOAD:
PHASE A (VA): 44,366
PHASE B (VA): 41,904
PHASE C (VA): 43,908
CALCULATED DEMAND LOAD (VA): 130,178 361.35 A

NOTES:
1. Not Used.

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No.	Date	Issue

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: FREE
Checked By: CF
Title: ELECTRICAL SCHEDULES
Sheet Number: E0-4.2

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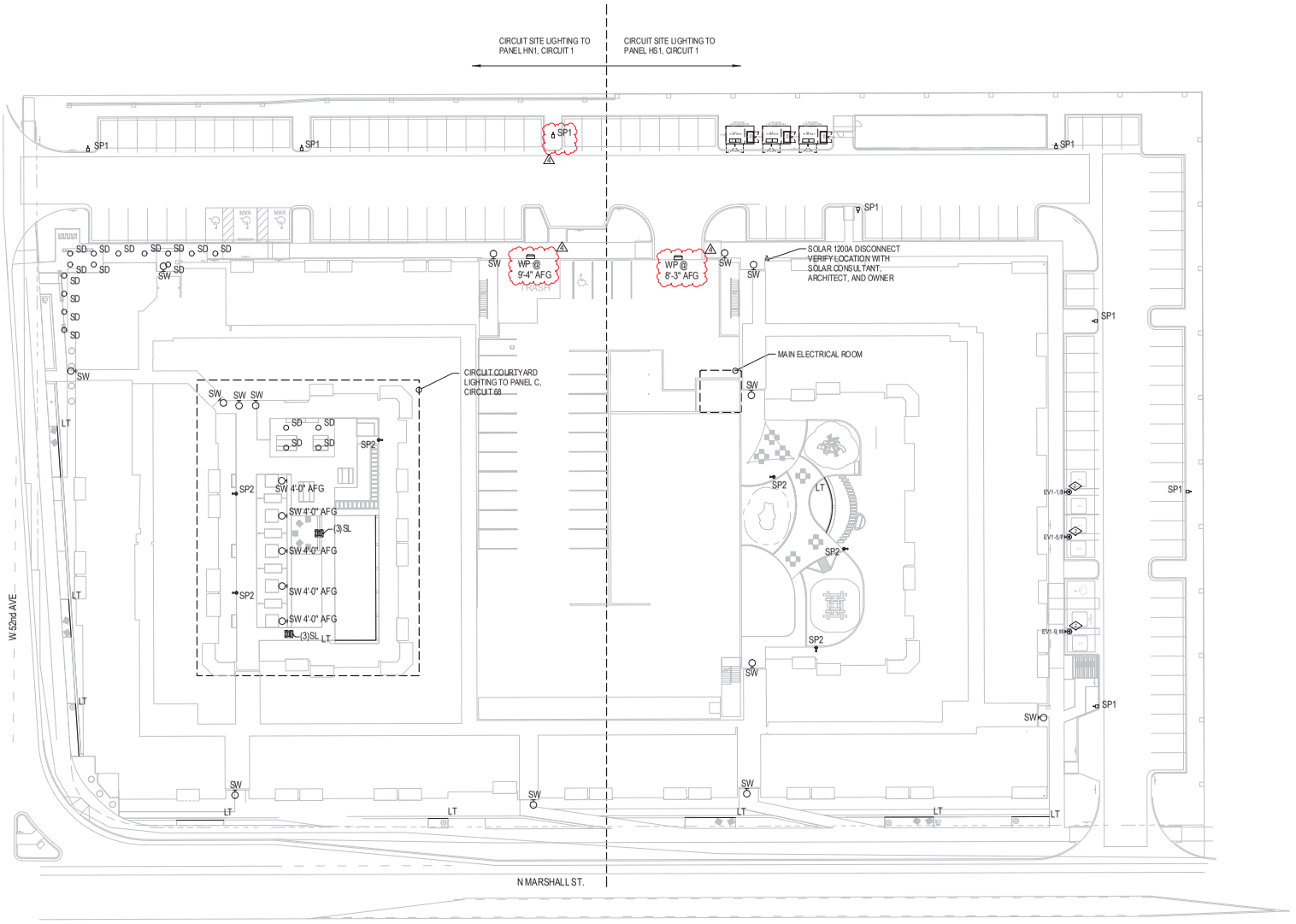

1 ELECTRICAL SITE PLAN

SCALE: 1" =20'-0"

GENERAL NOTES:

1. NUMBERS NEXT TO DEVICES INDICATE CIRCUITING TO PANEL UNLESS NOTED OTHERWISE.
2. CIRCUIT EXTERIOR LIGHTING FIXTURES VIA MULTIPOLE CONTACTOR AND PROVIDE PHOTOCELL ON TIMECLOCK OFF OPERATION (THE TIME CLOCK SHALL BE IECC COMPLIANT).
3. E.C. TO FIELD VERIFY BRANCH CIRCUIT LENGTHS AND ADJUST CONDUCTOR SIZES FOR VOLTAGE DROP AS REQUIRED. PROVIDE ALL SITE LIGHTING CONDUCTORS SIZE #10 Cu MINIMUM.
4. EXTERIOR LIGHTING CONTROLS
   a. BUILDING FACADE AND LANDSCAPE LIGHTING SHALL AUTOMATICALLY SHUT OFF FROM NOT LATER THAN 1 HOUR AFTER BUSINESS CLOSING TO NOT EARLIER THAN 1 HOUR BEFORE BUSINESS OPENING.
   b. LIGHTING THAT IS NOT CONTROLLED IN ACCORDANCE WITH 5(A) SHALL COMPLY WITH THE FOLLOWING.
      i.a. BE CONTROLLED SO THAT THE TOTAL WATTAGE OF SUCH LIGHTING IS AUTOMATICALLY REDUCED BY NOT LESS THAN 50 PERCENT BY SELECTIVELY SWITCHING OFF OR DIMMING LUMINAIRES AT ONE OF THE FOLLOWING TIMES:
         1.1.1.1. FROM NOT LATER THAN MIDNIGHT TO NOT EARLIER THAN 6AM.
         1.1.1.2. FROM NOT LATER THAN ONE HOUR AFTER BUSINESS CLOSING TO NOT EARLIER THAN ONE HOUR BEFORE BUSINESS OPENING.
         1.1.1.3. DURING ANY TIME WHERE ACTIVITY HAS NOT BEEN DETECTED FOR 15 MINUTES OR MORE.
      ii.b. LUMINAIRES SERVING OUTDOOR PARKING AREAS AND HAVING A RATED INPUT WATTAGE OF GREATER THAN 78 WATTS AND A MOUNTING HEIGHT OF 24' OR LESS ABOVE THE GROUND SHALL BE CONTROLLED SO THAT THE WATTAGE OF SUCH LIGHTING IS AUTOMATICALLY REDUCED BY NOT LESS THAN 50 PERCENT DURING ANY TIME WHERE ACTIVITY HAS NOT BEEN DETECTED FOR 15 MINUTES OR MORE. NOT MORE THAN 1,500 WATTS OF LIGHTING POWER SHALL BE CONTROLLED TOGETHER.

KEYED NOTES:

1. E.C. SHALL FIELD VERIFY THE LOCATION OF THE TRANSFORMER WITH THE UTILITY CO. PROPOSED LOCATION SARE SHOWN FOR REFERENCE ONLY AND FINAL LOCATION SHALL BE DETERMINED ON SITE BY THE UTILITY CO. INFORM ENGINEER IMMEDIATELY OF ANY CHANGE OF TRANSFORMER LOCATION.
2. CAR CHARGER - PROVIDE 100A/208/120V OUTLET WITH 3#1,#6G, 1-1/2"C FOR ELECTRIC CAR CHARGER FIELD VERIFY ELECTRICAL REQUIREMENTS AND OUTLET TYPE. CHARGING STATIONS MUST BE ON AN ACCESSIBLE ROUTE FROM CORRIDORS / ELEVATOR LOBBIES. CHARGING STATIONS MUST HAVE MINIMUM 5' WIDTH ACCESS AISLE ON ONE SIDE OF PARKING SPACE AND MINIMUM 8' WIDTH ACCESS AISLE ON OTHER SIDE OF PARKING SPACE WITH CHARGING STATION AT HEAD OF EITHER ACCESS AISLE. CHARGING STATION CONTROLS SHOT TO EXCEED MAX. 48"AFF.

XCEL ENERGY TRANSFORMER INSTALLATION NOTES:

1. XCEL TRANSFORMER SHALL BE PLACED AWAY FROM BUILDINGS, DOORS, WINDOWS, AIR INTAKES, AND ALL OTHER BUILDING OPENINGS IN ACCORDANCE WITH XCEL REQUIREMENTS. SEE DRAWINGS CR-30, CR-30A, CR-40, CR-40, SEE CURRENT EDITION OF THE XCEL ENERGY STANDARD FOR ELECTRIC INSTALLATION AND USE.
2. PROVIDE TRANSFORMER PAD. POURED IN PLACE PER DRAWING CC-60, CC-60A, CC-60B, CC-60C, CC-60D, AND CC-60E. POURED IN PLACE TRANSFORMER AND SECONDARY CONNECTION CABINET PAD SHALL BE PROVIDED PER DRAWING CC-50, CC-50A, CC-50B, CC-50C, CC-50D, CC-50E. PRE-CAST TRANSFORMER AND SECONDARY CONNECTION CABINET MAY BE PROVIDED PER DRAWING CC-40 OR CC-40A.
3. PROVIDE PRIMARY CONDUIT IF REQUIRED BY UTILITY. COORDINATE WITH XCEL ENERGY.
4. PROVIDE SECONDARY CONDUITS AND CONDUCTORS IN ACCORDANCE WITH XCEL ENERGY STANDARD FOR ELECTRIC INSTALLATION AND USE. INSTALLATION OF SECONDARY RUNS SHALL NOT EXCEED XCEL ENERGY LIMITS BASED ON TRANSFORMER CAPACITY. VERIFY REQUIREMENTS WITH XCEL ENERGY AND PROVIDE SECONDARY CONNECTION CABINET WHERE REQUIRED.

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No.	Date	Issue
1	09.07.23	DPC Set

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: FREE
Checked By: CF
Title: ELECTRICAL SITE PLAN
Sheet Number: E1-0.0

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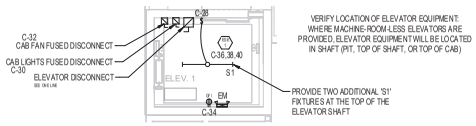
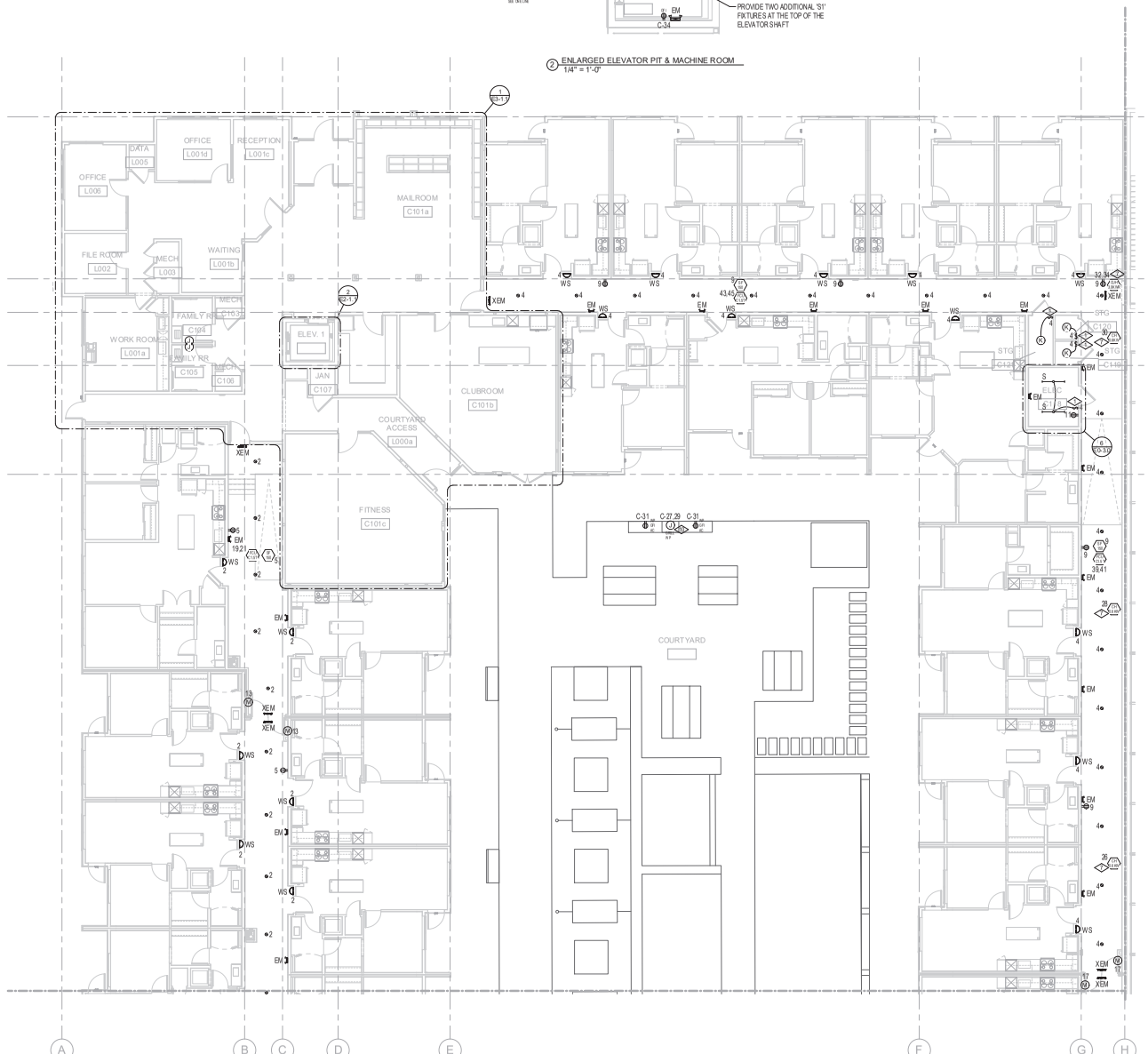
ELEVATOR EQUIPMENT ROOM NOTES - NEC ARTICLE 620 SUMMARY

1. CIRCUIT ELEVATOR MACHINE ROOM LIGHTING AND RECEPTACLES TO SEPARATE CIRCUIT AND INSTALL AT LEAST ONE DUPLEX OUTLET AND LOCATE SWITCH AT POINT OF ENTRY PER NEC 620-23.2.
2. PROVIDE ELEVATOR DISCONNECT PER NEC 620.51, REFERENCE ONE LINE DIAGRAM
3. PROVIDE FUSED DISCONNECTS FOR POWER TO ELEVATOR CAR AND LABEL IN ACCORDANCE WITH NEC 620-54.4.
4. CIRCUIT ELEVATOR PIT LIGHTING AND RECEPTACLES TO SEPARATE CIRCUIT AND INSTALL AT LEAST ONE DUPLEX OUTLET AND LOCATE SWITCH AT ACCESS DOOR PER NEC 620-24.



2 ENLARGED ELEVATOR PIT & MACHINE ROOM
1/4" = 1'-0"



1 ELECTRICAL PLAN - LEVEL 01 - AREA A
1/8" = 1'-0"

N TRUE N PROJECT

NUMBERS NEXT TO DEVICES REFER TO CIRCUIT DESIGNATIONS IN PANEL HN1 UNLESS NOTED OTHERWISE.

GENERAL NOTES

1. PROVIDE OUTLET WITHIN 2'0" OF EQUIPMENT IN ACCORDANCE WITH NEC 210.63. PROVIDE WEATHERPROOF GFCI OUTLET ON ROOFTOPS WITHIN 2'0" OF ROOFTOP EQUIPMENT.
2. PROVIDE A CO DETECTOR AND ALARM WITHIN 15 FEET OF EVERY SLEEPING ROOM WHEREVER FOSSIL FUELS ARE USED IN ACCORDANCE WITH STATE LAW AND LOCAL CODES. FIELD VERIFY REQUIREMENTS WITH OWNER.
3. FIELD VERIFY FINAL LOCATION OF ALL EQUIPMENT WITH PROVIDER PRIOR TO ROUGH-IN.
4. ALL RECEPTACLES IN BATHROOMS, GARAGES, EXTERIOR, CRAWL SPACES, UNFINISHED AND FINISHED BASEMENTS, LAUNDRY, AREAS DEFINED AS KITCHEN, DISHWASHERS, DRYER, RANGES WITHIN 6 FEET OF ANY SINK, AND WITHIN 6 FEET OF ANY SINK, BATHTUB, SHOWER, UTILITY AND WET-BAR SINKS, AND ALL OTHER REQUIRED LOCATIONS SHALL BE GFCI (OR SERVED BY A GR CIRCUIT BREAKER) PER NEC 210.8(B). THE E.C. SHALL PROVIDE GFCI OUTLETS (OR CIRCUIT BREAKERS) IN ALL LOCATIONS REQUIRED BY THE NEC. PROVIDE GFCI TEST SWITCH (OR GFCI BREAKER) IN READILY ACCESSIBLE LOCATION PER NEC. ALL EXTERIOR RECEPTACLES SHALL BE WEATHER RESISTANT AND ENCLOSED IN A WEATHERPROOF EXTRA DUTY ENCLOSURE WHILE IN USE IN ACCORDANCE WITH NEC 406.9(B).
5. FOR ANY EGRESS LIGHTING FIXTURES AND EXIT SIGNS NOT POWERED BY THE GENERATOR, CONNECT TO AREA LIGHTING CIRCUIT AHEAD OF ANY SWITCH PER NEC 700-12(F) INCLUDING ANY NIGHT LIGHTS. FIXTURES SHOWN SHADED OR LABELED ARE EMERGENCY EGRESS (EM) WITH BATTERY PACK, NIGHT LIGHT (NL) OR BOTH (EMNL).
6. NUMBERS NEXT TO DEVICES REFER TO CIRCUIT DESIGNATION IN HOUSE PANEL, UNLESS NOTED.
7. ALL UNLABELED DOWNLIGHTS ARE FIXTURE TYPE "D".
8. ALL TELE/DATA LOCATIONS SHALL INCLUDE 4" SQUARE J-BOX AND 3/4" CONDUIT TO CEILING SPACE. ALL TELEPHONE/DATA CABLE IS TO BE PLENUM RATED WIRE OR SHALL BE INSTALLED IN CONDUIT ABOVE CEILING OR IN WALLS. FIELD VERIFY LOCATIONS OF ALL DATA JACKS WITH OWNER PRIOR TO ROUGH-IN. VERIFY ALL PHONE/DATA LOCATIONS W/ OWNER FOR ALL OFFICE AREAS.
9. PROVIDE ADDITIONAL THREE (3) POWER & CATV OUTLETS (IN ADDITION TO THOSE SHOWN ON PLANS) NEAR CEILING FOR WALL-MOUNTED TV'S, LOCATIONS TO BE DETERMINED. FIELD VERIFY W/ ARCHITECT.
10. CIRCUIT FIRE SMOKE DAMPERS TO NEAREST NON-SWITCHED 120 V EM CIRCUIT.
11. PROVIDE TAMPER-RESISTANT RECEPTACLES FOR ALL AREAS SPECIFIED IN NEC ARTICLE 406.12.
12. FOR EXTERIOR RECEPTACLES, PROVIDE WEATHER-PROOF LOCKABLE OUTLET COVERS.
13. GFCI PROTECTION SHALL BE PROVIDED (NO MATTER IF HARD WIRED OR PLUG AND CORD) FOR THE BRANCH CIRCUIT SUPPLYING THE FOLLOWING APPLIANCES RATED 150 VOLTS OR LESS TO GROUND AND 60 AMPERES OR LESS, SINGLE OR 3-PHASE: DRINKING WATER COOLERS AND BOTTLE FILL STATIONS, HIGH-PRESSURE SPRAY WASHING MACHINES, VENDING MACHINES, SUMP PUMPS, DISHWASHERS, ELECTRIC RANGES, WALL-MOUNTED COOKING UNITS, CLOTHES DRYERS AND MICROWAVE OVENS.

KEYED NOTES

1. WALLBOX VACANCY SENSOR.
2. IRRIGATION CONTROLLER - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.
3. CARD READER - CARD READER/ACCESS CONTROL DEVICE - PROVIDE J-BOX AND CONDUIT RACEWAY MOUNTED NO MORE THAN 48" AFF. FIELD VERIFY REQUIREMENTS WITH TENANT/PROVIDE.
4. TRASH COMPACTOR - PROVIDE DEDICATED 30A/3P BRANCH CIRCUIT WITH #8(#10 G), 1"C. FIELD VERIFY FINAL LOCATION, OUTLET TYPE AND CONFIGURATION AND REQUIREMENTS WITH PROVIDER PRIOR TO ROUGH-IN. PROVIDE A DEDICATED CIRCUIT AND ALL POWER AND CONTROL WIRING AS REQUIRED FOR TRASH CHUTE SYSTEM INCLUDING CONTROL PANELS AND DOORS. FIELD VERIFY REQUIREMENTS WITH PROVIDER AND PROVIDE ALL WORK NECESSARY FOR A COMPLETE INSTALLATION.
5. MOTORIZED ROLL UP DOOR. E.C. TO VERIFY ELECTRICAL REQUIREMENTS WITH PROVIDER PRIOR TO ROUGH IN.
6. ELECTRIC VEHICLE READY SPACE - PROVIDE 100A 208/120V OUTLET WITH 3#1,#6 G, 1-1/2"C FOR ELECTRIC CAR CHARGER FIELD VERIFY ELECTRICAL REQUIREMENTS AND OUTLET TYPE. CHARGING STATIONS MUST BE ON AN ACCESSIBLE ROUTE FROM CORRIDORS / ELEVATOR LOBBIES. CHARGING STATIONS MUST HAVE MINIMUM 5' WIDTH ACCESS AISLE ON ONE SIDE OF PARKING SPACE AND MINIMUM 3' WIDTH ACCESS AISLE ON OTHER SIDE OF PARKING SPACE WITH CHARGING STATION AT HEAD OF EITHER ACCESS AISLE.
7. PROVIDE ADD AL TERNATE RE: MECHANICAL DRAWINGS.
8. EMERGENCY LIGHTING INVERTER PROVIDE LIGHTING INVERTER SIZED FOR A MINIMUM 600 WATTS.
9. EXTERIOR LIGHTING CONTROLS - PROVIDE PHOTOCELL ON/TIMECLOCK OFF CONTROLS AND MULTIPOLE LIGHTING CONTACTOR. PHOTOCELL ON ROOF AND PROGRAMMABLE TIME CLOCK AS REQUIRED. FIELD VERIFY REQUIREMENTS WITH OWNER.
10. ELECTRIC GRILL - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.
11. TV MONITOR - PROVIDE POWER AND DATA/CATV JACKS AS REQUIRED IN CEILING AND PROVIDE RACEWAY TO VIDEO SOURCE. FIELD VERIFY REQUIREMENTS WITH TENANT AND TV PROVIDER. FIELD VERIFY FINAL LOCATION WITH ARCHITECT PRIOR TO ANY ROUGH-IN.
12. EXERCISE EQUIPMENT - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.
13. PROVIDE POWER AND CONTROLS FOR SIGNAGE. FIELD VERIFY LOCATION AND REQUIREMENTS WITH OWNER PRIOR TO INSTALLATION.
14. OFFICE EQUIPMENT - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.
15. HAND DRYER - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.

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No.	Date	Issue
1	10.03.23	City Comments

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: FREE
Checked By: CF
Title: ELECTRICAL FLOOR PLAN - LEVEL 1 - AREA A
Sheet Number: E2-1.1

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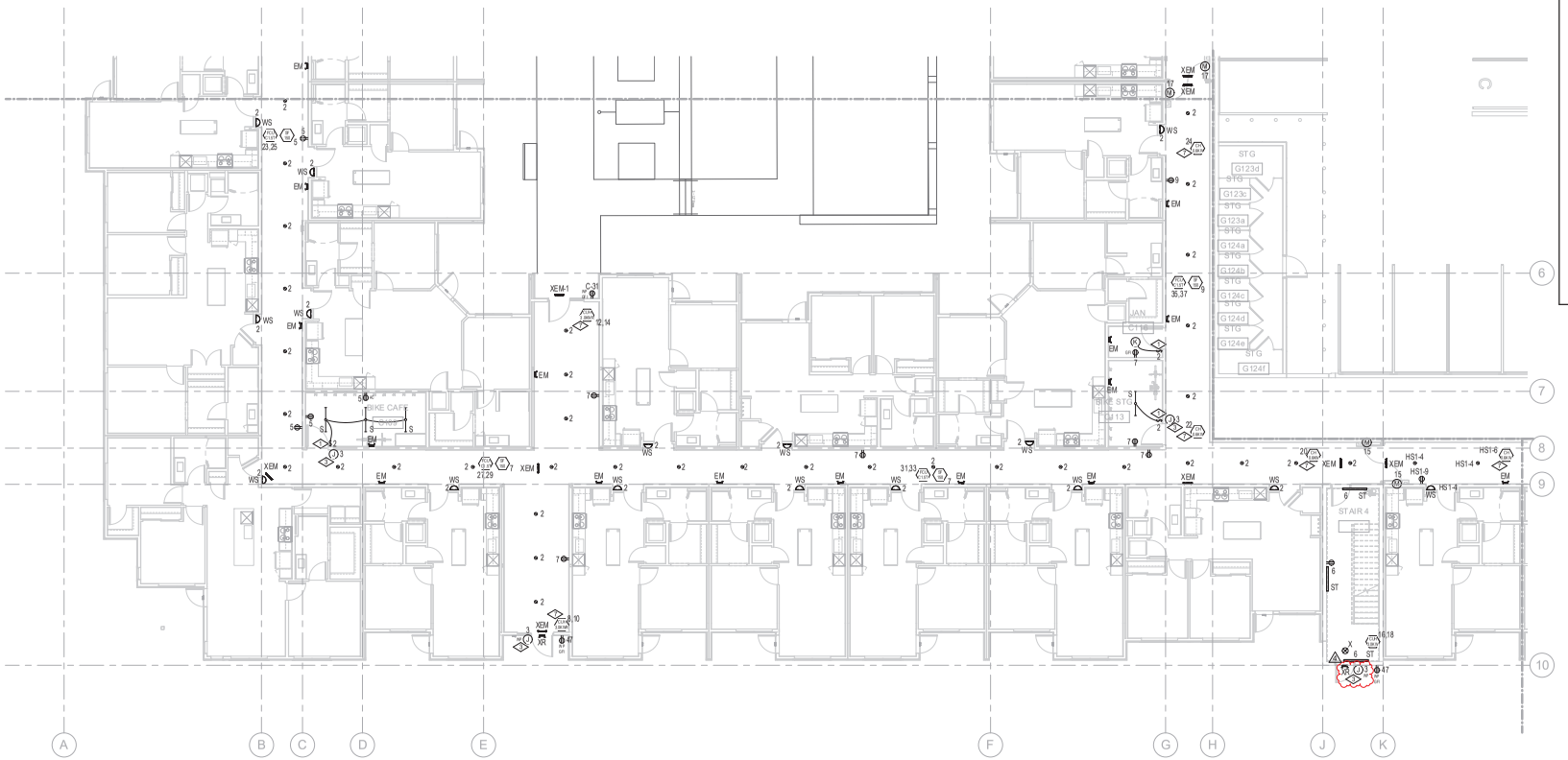

1 ELECTRICAL PLAN - LEVEL 01 - AREA B
1/8" = 1'-0"

N TRUE N PROJECT

NUMBERS NEXT TO DEVICES REFER TO CIRCUIT DESIGNATIONS IN PANEL HN1 UNLESS NOTED OTHERWISE.

GENERAL NOTES

1. PROVIDE OUTLET WITHIN 2'0" OF EQUIPMENT IN ACCORDANCE WITH NEC 210.63.PROVIDE WEATHERPROOF GFI OUTLET ON ROOFTOPS WITHIN 2'0" OF ROOFTOP EQUIPMENT.
2. PROVIDE A CO DETECTOR AND ALARM WITHIN 15 FEET OF EVERY SLEEPING ROOM WHEREVER FOSSIL FUELS ARE USED IN ACCORDANCE WITH STATE LAW AND LOCAL CODES. FIELD VERIFY REQUIREMENTS WITH OWNER.
3. FIELD VERIFY FINAL LOCATION OF ALL EQUIPMENT WITH PROVIDER PRIOR TO ROUGH-IN.
4. ALL RECEPTACLES IN BATHROOMS, GARAGES, EXTERIOR, CRAWL SPACES, UNFINISHED AND FINISHED BASEMENTS, LAUNDRY, AREAS DEFINED AS KITCHEN, DISHWASHERS, DRYER, RANGES WITHIN 6 FEET OF ANY SINK, AND WITHIN 6 FEET OF ANY SINK, BATHTUB, SHOWER, UTILITY AND WET-BAR SINKS, AND ALL OTHER REQUIRED LOCATIONS SHALL BE GFCI (OR SERVED BY A GR CIRCUIT BREAKER) PER NEC 210.8(B). THE E.C. SHALL PROVIDE GFCI OUTLETS (OR CIRCUIT BREAKERS) IN ALL LOCATIONS REQUIRED BY THE NEC. PROVIDE GFCI TEST SWITCH (OR GFCI BREAKER) IN READILY ACCESSIBLE LOCATION PER NEC. ALL EXTERIOR RECEPTACLES SHALL BE WEATHER RESISTANT AND ENCLOSED IN A WEATHERPROOF EXTRA DUTY ENCLOSURE WHILE IN USE IN ACCORDANCE WITH NEC 406.9(B).
5. FOR ANY EGRESS LIGHTING FIXTURES AND EXIT SIGNS NOT POWERED BY THE GENERATOR, CONNECT TO AREA LIGHTING CIRCUIT AHEAD OF ANY SWITCH PER NEC 700-12(F) INCLUDING ANY NIGHT LIGHTS. FIXTURES SHOWN SHADED OR LABELED ARE EMERGENCY EGRESS (EM) WITH BATTERY PACK, NIGHT LIGHT (NL) OR BOTH (EMNL).
6. NUMBERS NEXT TO DEVICES REFER TO CIRCUIT DESIGNATION IN HOUSE PANEL, UNLESS NOTED.
7. ALL UNLABELED DOWNLIGHTS ARE FIXTURE TYPE "D".
8. ALL TEL/DATA LOCATIONS SHALL INCLUDE 4" SQUARE J-BOX AND 3/4" CONDUIT TO CEILING SPACE. ALL TEL/PHONE/DATA CABLE IS TO BE PLENUM RATED WIRE OR SHALL BE INSTALLED IN CONDUIT ABOVE CEILING OR IN WALLS. FIELD VERIFY LOCATIONS OF ALL DATA JACKS WITH OWNER PRIOR TO ROUGH-IN. VERIFY ALL PHONE/DATA LOCATIONS W/ OWNER FOR ALL OFFICE AREAS.
9. PROVIDE ADDITIONAL THREE (3) POWER & CATV OUTLETS (IN ADDITION TO THOSE SHOWN ON PLANS) NEAR CEILING FOR WALL-MOUNTED TV'S, LOCATIONS TO BE DETERMINED. FIELD VERIFY W/ ARCHITECT.
10. CIRCUIT FIRE/SMOKE DAMPERS TO NEAREST NON-SWITCHED 120 V EM CIRCUIT.
11. PROVIDE TAMPER-RESISTANT RECEPTACLES FOR ALL AREAS SPECIFIED IN NEC ARTICLE 406.12.
12. FOR EXTERIOR RECEPTACLES, PROVIDE WEATHER-PROOF LOCKABLE OUTLET COVERS.
13. GFCI PROTECTION SHALL BE PROVIDED (NO MATTER IF HARD WIRED OR PLUG AND CORD) FOR THE BRANCH CIRCUIT SUPPLYING THE FOLLOWING APPLIANCES RATED 150 VOLTS OR LESS TO GROUND AND 60 AMPERES OR LESS, SINGLE OR 3-PHASE: DRINKING WATER COOLERS AND BOTTLE FILL STATIONS, HIGH-PRESSURE SPRAY WASHING MACHINES, VENDING MACHINES, SUMP PUMPS, DISHWASHERS, ELECTRIC RANGES, WALL-MOUNTED COOKING UNITS, CLOTHES DRYERS AND MICROWAVE OVENS.

KEYED NOTES

1. WALLBOX VACANCY SENSOR.
2. IRRIGATION CONTROLLER - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.
3. CARD READER - CARD READER/ACCESS CONTROL DEVICE - PROVIDE J-BOX AND DATA RACEWAY MOUNTED NO MORE THAN 48" AFF. FIELD VERIFY REQUIREMENTS WITH TENANT/PROVIDE.
4. TRASH COMPACTOR - PROVIDE DEDICATED 30A/3P BRANCH CIRCUIT WITH #8(#10 GD, 1"C. FIELD VERIFY FINAL LOCATION, OUTLET TYPE AND CONFIGURATION AND REQUIREMENTS WITH PROVIDER PRIOR TO ROUGH-IN. PROVIDE A DEDICATED CIRCUIT AND ALL POWER AND CONTROL WIRING AS REQUIRED FOR TRASH CHUTE SYSTEM INCLUDING CONTROL PANELS AND DOORS. FIELD VERIFY REQUIREMENTS WITH PROVIDER AND PROVIDE ALL WORK NECESSARY FOR A COMPLETE INSTALLATION.
5. MOTORIZED ROLL UP DOOR. E.C. TO VERIFY ELECTRICAL REQUIREMENTS WITH PROVIDER PRIOR TO ROUGH IN.
6. ELECTRIC VEHICLE READY SPACE - PROVIDE 100A 208/120V OUTLET WITH 3#1,#6 G, 1-1/2"C FOR ELECTRIC CAR CHARGER FIELD VERIFY ELECTRICAL REQUIREMENTS AND OUTLET TYPE. CHARGING STATIONS MUST BE ON AN ACCESSIBLE ROUTE FROM CORRIDORS / ELEVATOR LOBBIES. CHARGING STATIONS MUST HAVE MINIMUM 5' WIDTH ACCESS AISLE ON ONE SIDE OF PARKING SPACE AND MINIMUM 3' WIDTH ACCESS AISLE ON OTHER SIDE OF PARKING SPACE WITH CHARGING STATION AT HEAD OF EITHER ACCESS AISLE.
7. PRICE AS ADD ALTERNATE #1. REF. MECHANICAL DRAWINGS.
8. EMERGENCY LIGHTING INVERTER PROVIDE LIGHTING INVERTER SIZED FOR A MINIMUM 600 WATTS.
9. EXTERIOR LIGHTING CONTROLS - PROVIDE PHOTOCELL ON/TIMECLOCK OFF CONTROLS AND MULTIPOLE LIGHTING CONTACTOR. PHOTOCELL ON ROOF AND PROGRAMMABLE TIME CLOCK AS REQUIRED. FIELD VERIFY REQUIREMENTS WITH OWNER.
10. ELECTRIC GRILL - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.
11. TV MONITOR - PROVIDE POWER AND DATA/CATV JACKS AS REQUIRED IN CEILING AND PROVIDE RACEWAY TO VIDEO SOURCE. FIELD VERIFY REQUIREMENTS WITH TENANT AND TV PROVIDER. FIELD VERIFY FINAL LOCATION WITH ARCHITECT PRIOR TO ANY ROUGH-IN.
12. EXERCISE EQUIPMENT - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.
13. PROVIDE POWER AND CONTROLS FOR SIGNAGE. FIELD VERIFY LOCATION AND REQUIREMENTS WITH OWNER PRIOR TO INSTALLATION.
14. OFFICE EQUIPMENT - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.
15. HAND DRYER - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.

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No.	Date	Issue
1	10.03.23	City Comments
4	08.07.24	PTC Set

Project Architect: DV
Project Designer: DR
Title:
Job Number: 222001
Drawn By: FREE
Checked By: CF
Title: ELECTRICAL FLOOR PLAN - LEVEL 1 - AREA B
Sheet Number: E2-1.2

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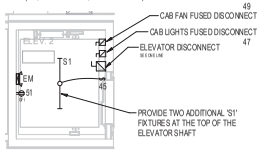
ELEVATOR EQUIPMENT ROOM NOTES - NEC ARTICLE 620 SUMMARY

1. CIRCUIT ELEVATOR MACHINE ROOM LIGHTING AND RECEPTACLES TO SEPARATE CIRCUIT AND INSTALL AT LEAST ONE DUPLEX OUTLET AND LOCATE SWITCH AT POINT OF ENTRY PER NEC 620.23.2.
2. PROVIDE ELEVATOR DISCONNECT PER NEC 620-51, REFERENCE ONE LINE DIAGRAM
3. PROVIDE FUSED DISCONNECTS FOR POWER TO ELEVATOR CAR AND LABEL IN ACCORDANCE WITH NEC 620-54.4
4. CIRCUIT ELEVATOR PIT LIGHTING AND RECEPTACLES TO SEPARATE CIRCUIT AND INSTALL AT LEAST ONE DUPLEX OUTLET AND LOCATE SWITCH AT ACCESS DOOR PER NEC 620-24.

VERIFY LOCATION OF ELEVATOR EQUIPMENT: WHERE MACHINE-ROOM-LESS ELEVATORS ARE PROVIDED, ELEVATOR EQUIPMENT WILL BE LOCATED IN SHAFT (PIT, TOP OF SHAFT, OR TOP OF CAB)



2 ENLARGED ELEVATOR PIT & MACHINE ROOM
1/4" = 1'-0"

GENERAL NOTES

1. PROVIDE OUTLET WITHIN 2'0" OF EQUIPMENT IN ACCORDANCE WITH NEC 210.63. PROVIDE WEATHERPROOF GFCI OUTLET ON ROOFTOPS WITHIN 2'0" OF ROOFTOP EQUIPMENT.
2. PROVIDE A CO DETECTOR AND ALARM WITHIN 15 FEET OF EVERY SLEEPING ROOM WHEREVER FOSSIL FUELS ARE USED IN ACCORDANCE WITH STATE LAW AND LOCAL CODES. FIELD VERIFY REQUIREMENTS WITH OWNER.
3. FIELD VERIFY FINAL LOCATION OF ALL EQUIPMENT WITH PROVIDER PRIOR TO ROUGH-IN.
4. ALL RECEPTACLES IN BATHROOMS, GARAGES, EXTERIOR, CRAWL SPACES, UNFINISHED AND FINISHED BASEMENTS, LAUNDRY, AREAS DEFINED AS KITCHEN, DISHWASHERS, DRYER, RANGES WITHIN 6 FEET OF ANY SINK, AND WITHIN 6 FEET OF ANY SINK, BATHTUB, SHOWER, UTILITY AND WET-BAR SINKS, AND ALL OTHER REQUIRED LOCATIONS SHALL BE GFCI (OR SERVED BY A GR CIRCUIT BREAKER) PER NEC 210.8(B). THEE C. SHALL PROVIDE GFCI OUTLETS (OR CIRCUIT BREAKERS) IN ALL LOCATIONS REQUIRED BY THE NEC. PROVIDE GRCI TEST SWITCH (OR GFCI BREAKER) IN READILY ACCESSIBLE LOCATION PER NEC. ALL EXTERIOR RECEPTACLES SHALL BE WEATHER RESISTANT AND ENCLOSED IN A WEATHERPROOF EXTRA-DUTY ENCLOSURE WHILE IN USE IN ACCORDANCE WITH NEC 406.9(B).
5. FOR ANY EGRESS LIGHTING FIXTURES AND EXIT SIGNS NOT POWERED BY THE GENERATOR, CONNECT TO AREA LIGHTING CIRCUIT AHEAD OF ANY SWITCH PER NEC 700-12(F) INCLUDING ANY NIGHT LIGHTS. FIXTURES SHOWN SHADED OR LABELED ARE EMERGENCY EGRESS (EM) WITH BATTERY PACK, NIGHT LIGHT (NL) OR BOTH (EMNL).
6. NUMBERS NEXT TO DEVICES REFER TO CIRCUIT DESIGNATION IN HOUSE PANEL, UNLESS NOTED.
7. ALL UNLABELED DOWNLIGHTS ARE FIXTURE TYPE "D".
8. ALL TELE/DATA LOCATIONS SHALL INCLUDE 4" SQUARE J-BOX AND 3/4" CONDUIT TO CEILING SPACE. ALL TELEPHONE/DATA CABLE IS TO BE PLENUM RATED WIRE OR SHALL BE INSTALLED IN CONDUIT ABOVE CEILING OR IN WALLS. FIELD VERIFY LOCATIONS OF ALL DATA JACKS WITH OWNER PRIOR TO ROUGH-IN. VERIFY ALL PHONE/DATA LOCATIONS W/ OWNER FOR ALL OFFICE AREAS.
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11. PROVIDE TAMPER-RESISTANT RECEPTACLES FOR ALL AREAS SPECIFIED IN NEC ARTICLE 406.12.
12. FOR EXTERIOR RECEPTACLES, PROVIDE WEATHER-PROOF LOCKABLE OUTLET COVERS. ⚠
13. GFCI PROTECTION SHALL BE PROVIDED (NO MATTER IF HARD WIRED OR PLUG AND CORD) FOR THE BRANCH CIRCUIT SUPPLYING THE FOLLOWING APPLIANCES RATED 150 VOLTS OR LESS TO GROUND AND 60 AMPERES OR LESS, SINGLE OR 3-PHASE: DRINKING WATER COOLERS AND BOTTLE FILL STATIONS, HIGH-PRESSURE SPRAY WASHING MACHINES, VENDING MACHINES, SUMP PUMPS, DISHWASHERS, ELECTRIC RANGES, WALL-MOUNTED COOKING UNITS, CLOTHES DRYERS AND MICROWAVE OVENS.

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4. TRASH COMPACTOR - PROVIDE DEDICATED 3WGP BRANCH CIRCUIT WITH #8(#10 GD, 1"C. FIELD VERIFY FINAL LOCATION, OUTLET TYPE AND CONFIGURATION AND REQUIREMENTS WITH PROVIDER PRIOR TO ROUGH-IN. PROVIDE A DEDICATED CIRCUIT AND ALL POWER AND CONTROL WIRING AS REQUIRED FOR TRASH CHUTE SYSTEM INCLUDING CONTROL PANELS AND DOORS. FIELD VERIFY REQUIREMENTS WITH PROVIDER AND PROVIDE ALL WORK NECESSARY FOR A COMPLETE INSTALLATION.
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6. ELECTRIC VEHICLE READY SPACE - PROVIDE 100A 208/120V OUTLET WITH 3#1,#6 G, 1-1/2"C FOR ELECTRIC CAR CHARGER FIELD VERIFY ELECTRICAL REQUIREMENTS AND OUTLET TYPE. CHARGING STATIONS MUST BE ON AN ACCESSIBLE ROUTE FROM CORRIDORS / ELEVATOR LOBBIES. CHARGING STATIONS MUST HAVE MINIMUM 5' WIDTH ACCESS AISLE ON ONE SIDE OF PARKING SPACE AND MINIMUM 3' WIDTH ACCESS AISLE ON OTHER SIDE OF PARKING SPACE WITH CHARGING STATION AT HEAD OF EITHER ACCESS AISLE.
7. PROCEAS ADD ALTERNATE#1: REC-MECHANICAL DRAWINGS.
8. EMERGENCY LIGHTING INVERTER PROVIDE LIGHTING INVERTER SIZED FOR A MINIMUM 600 WATTS.
9. EXTERIOR LIGHTING CONTROLS - PROVIDE PHOTOCELL ON/TIMECLOCK OFF CONTROLS AND MULTIPOLE LIGHTING CONTACTOR. PHOTOCELL ON ROOF AND PROGRAMMABLE TIME CLOCK AS REQUIRED. FIELD VERIFY REQUIREMENTS WITH OWNER.
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1 ELECTRICAL PLAN - LEVEL 01 - AREA C
1/8" = 1'-0"

N TRUE N PROJECT

NUMBERS NEXT TO DEVICES REFER TO CIRCUIT DESIGNATIONS IN PANEL HS1 UNLESS NOTED OTHERWISE.

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No.	Date	Issue
1	10.03.23	City Comments

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: FREE
Checked By: CF
Title: ELECTRICAL FLOOR PLAN - LEVEL 1 - AREA C
Sheet Number: E2-1.3

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1 ELECTRICAL PLAN - LEVEL 01 - AREA D
1/8" = 1'-0"

N TRUE N PROJECT

NUMBERS NEXT TO DEVICES REFER TO CIRCUIT DESIGNATIONS IN PANEL HS1 UNLESS NOTED OTHERWISE.

GENERAL NOTES

1. PROVIDE OUTLET WITHIN 2'0" OF EQUIPMENT IN ACCORDANCE WITH NEC 210.63.PROVIDE WEATHERPROOF GFI OUTLET ON ROOFTOPS WITHIN 2'0" OF ROOFTOP EQUIPMENT.
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MARSHALL POINTE

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No.	Date	Issue
1	10.03.23	City Comments

Project Architect: DV
Project Designer: DR
Title:
Job Number: 222001
Drawn By: FREE
Checked By: CF

Title: ELECTRICAL FLOOR PLAN - LEVEL 1 - AREA D

Sheet Number: **E2-1.4**

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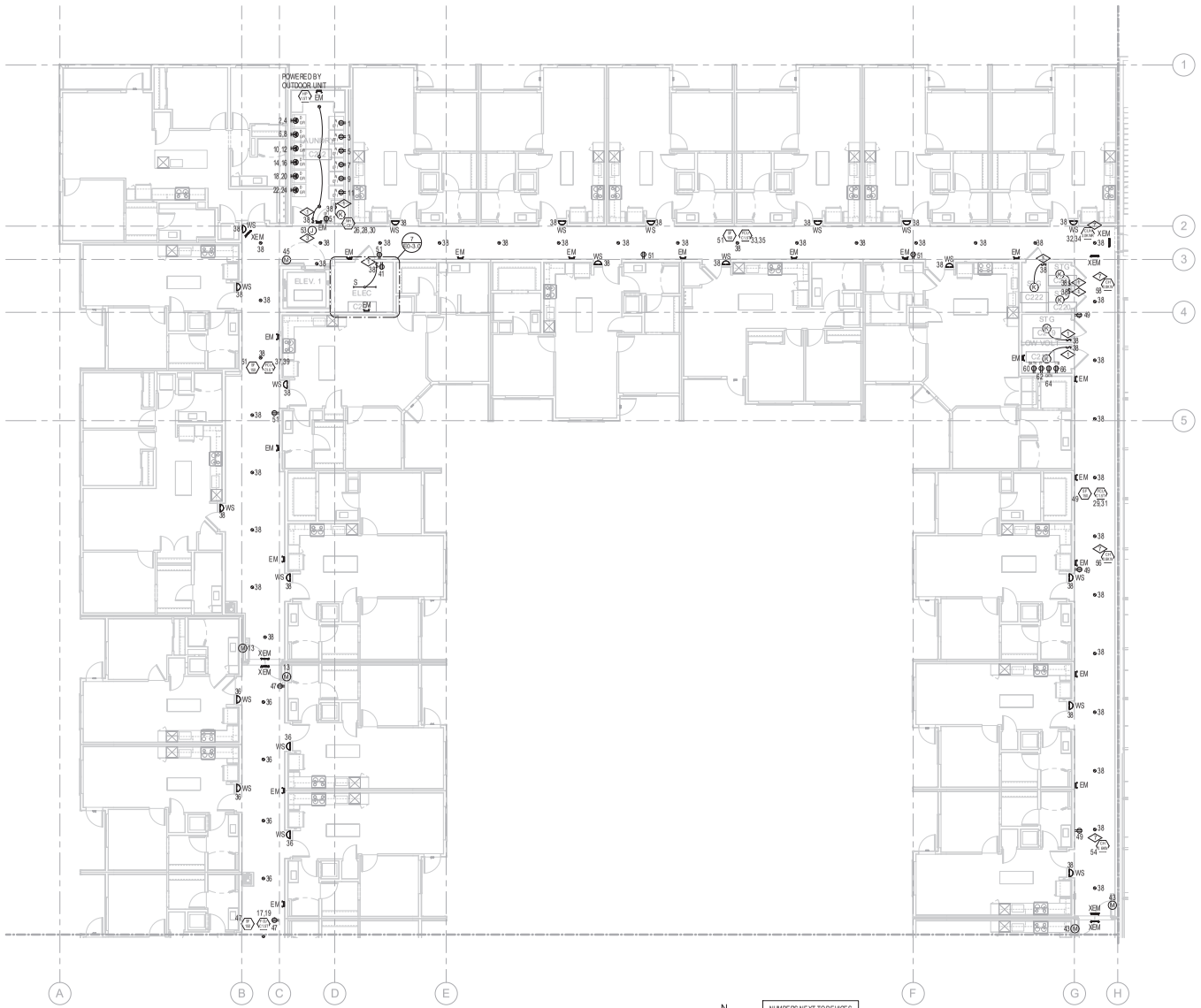

1 ELECTRICAL PLAN - LEVEL 02 - AREA A
1/8" = 1'-0"

N TRUE N PROJECT

NUMBERS NEXT TO DEVICES REFER TO CIRCUIT DESIGNATIONS IN PANEL HN2 UNLESS NOTED OTHERWISE.

GENERAL NOTES

1. PROVIDE OUTLET WITHIN 2'0" OF EQUIPMENT IN ACCORDANCE WITH NEC 210.63. PROVIDE WEATHERPROOF GFI OUTLET ON ROOFTOPS WITHIN 2'0" OF ROOFTOP EQUIPMENT.
2. PROVIDE A CO DETECTOR AND ALARM WITHIN 15 FEET OF EVERY SLEEPING ROOM WHEREVER FOSSIL FUELS ARE USED IN ACCORDANCE WITH STATE LAW AND LOCAL CODES. FIELD VERIFY REQUIREMENTS WITH OWNER.
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13. GFCI PROTECTION SHALL BE PROVIDED (NO MATTER IF HARD WIRED OR PLUG AND CORD) FOR THE BRANCH CIRCUIT SUPPLYING THE FOLLOWING APPLIANCES RATED 150 VOLTS OR LESS TO GROUND AND 60 AMPERES OR LESS, SINGLE OR 3-PHASE: DRINKING WATER COOLERS AND BOTTLE FILL STATIONS, HIGH-PRESSURE SPRAY WASHING MACHINES, VENDING MACHINES, SUMP PUMPS, DISHWASHERS, ELECTRIC RANGES, WALL-MOUNTED COOKING UNITS, CLOTHES DRYERS AND MICROWAVE OVENS.

KEYED NOTES

1. WALLBOX VACANCY SENSOR.
2. IRRIGATION CONTROLLER - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.
3. CARD READER - CARD READER/ACCESS CONTROL DEVICE - PROVIDE J-BOX AND DATA RACEWAY MOUNTED NO MORE THAN 48" AFF. FIELD VERIFY REQUIREMENTS WITH TENANT/PROVIDE.
4. TRASH COMPACTOR - PROVIDE DEDICATED 30A/2P BRANCH CIRCUIT WITH 4#8,#10 GD, 1"C. FIELD VERIFY FINAL LOCATION, OUTLET TYPE AND CONFIGURATION AND REQUIREMENTS WITH PROVIDER PRIOR TO ROUGH-IN. PROVIDE A DEDICATED CIRCUIT AND ALL POWER AND CONTROL WIRING AS REQUIRED FOR TRASH CHUTE SYSTEM INCLUDING CONTROL PANELS AND DOORS. FIELD VERIFY REQUIREMENTS WITH PROVIDER AND PROVIDE ALL WORK NECESSARY FOR A COMPLETE INSTALLATION.
5. MOTORIZED ROLL UP DOOR. E.C. TO VERIFY ELECTRICAL REQUIREMENTS WITH PROVIDER PRIOR TO ROUGH IN.
6. ELECTRIC VEHICLE READY SPACE - PROVIDE 100A 208/120V OUTLET WITH 3#1,#6 G, 1-1/2"C FOR ELECTRIC CAR CHARGER FIELD VERIFY ELECTRICAL REQUIREMENTS AND OUTLET TYPE. CHARGING STATIONS MUST BE ON AN ACCESSIBLE ROUTE FROM CORRIDORS / ELEVATOR LOBBIES. CHARGING STATIONS MUST HAVE MINIMUM 5' WIDTH ACCESS AISLE ON ONE SIDE OF PARKING SPACE AND MINIMUM 3' WIDTH ACCESS AISLE ON OTHER SIDE OF PARKING SPACE WITH CHARGING STATION AT HEAD OF EITHER ACCESS AISLE.
7. PRICE AS ADD ALTERNATE #1. REFER TO MECHANICAL DRAWINGS.
8. EMERGENCY LIGHTING INVERTER PROVIDE LIGHTING INVERTER SIZED FOR A MINIMUM 600 WATTS.
9. EXTERIOR LIGHTING CONTROLS - PROVIDE PHOTOCELL ON/TIMECLOCK OFF CONTROLS AND MULTIPOLE LIGHTING CONTACTOR. PHOTOCELL ON ROOF AND PROGRAMMABLE TIME CLOCK AS REQUIRED. FIELD VERIFY REQUIREMENTS WITH OWNER.
10. ELECTRIC GRILL - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.
11. TV/MONITOR - PROVIDE POWER AND DATA/CATV JACKS AS REQUIRED IN CEILING AND PROVIDE RACEWAY TO VIDEO SOURCE. FIELD VERIFY REQUIREMENTS WITH TENANT AND TV PROVIDER. FIELD VERIFY FINAL LOCATION WITH ARCHITECT PRIOR TO ANY ROUGH-IN.
12. EXERCISE EQUIPMENT - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.
13. PROVIDE POWER AND CONTROLS FOR SIGNAGE. FIELD VERIFY LOCATION AND REQUIREMENTS WITH OWNER PRIOR TO INSTALLATION.
14. OFFICE EQUIPMENT - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.
15. HAND DRYER - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.

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No.	Date	Issue
1	10.03.23	City Comments

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: FREE
Checked By: CF
Title: ELECTRICAL FLOOR PLAN - LEVEL 2 - AREA A
Sheet Number: E2-2.1

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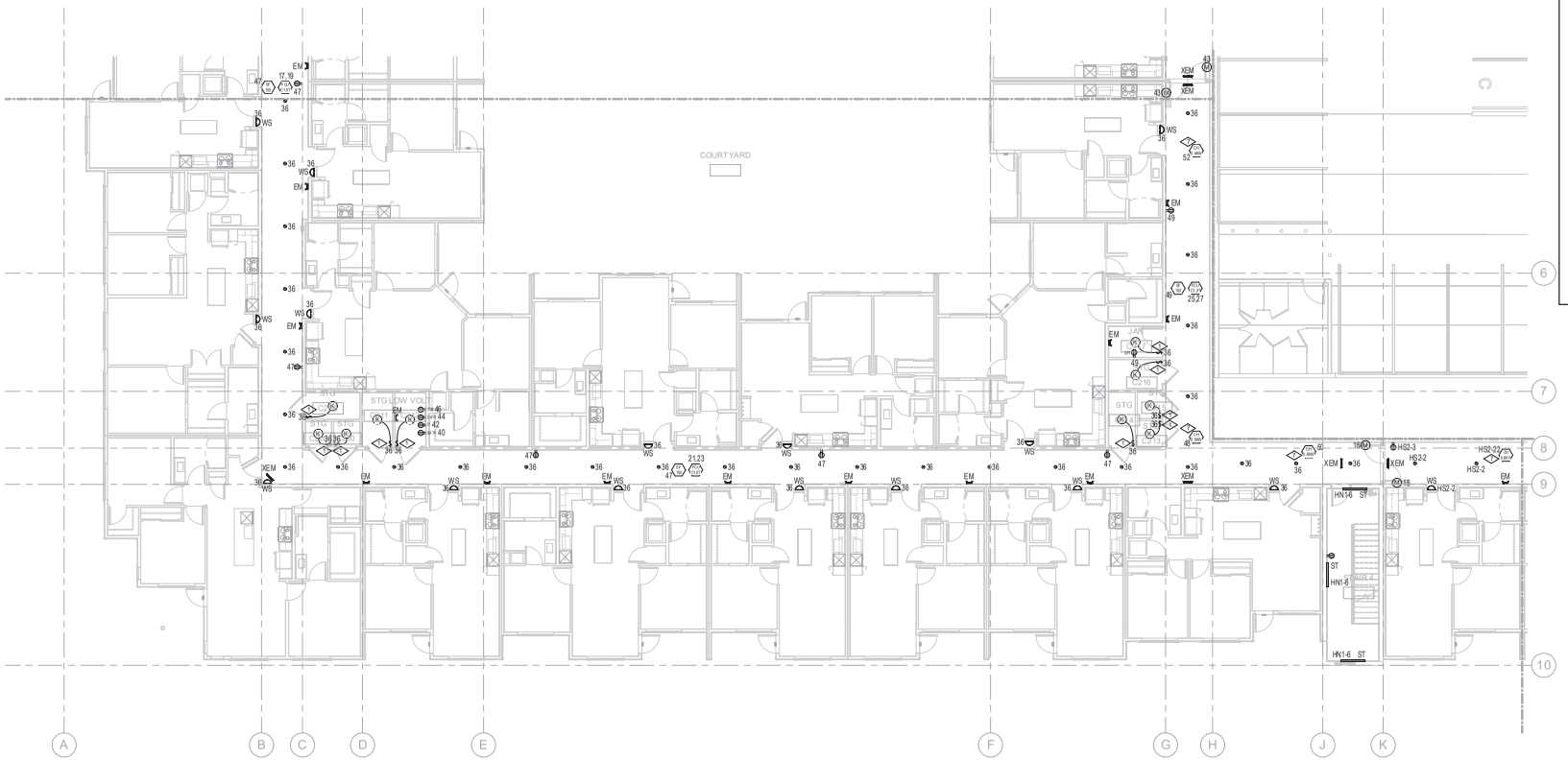

1 ELECTRICAL PLAN - LEVEL 02 - AREA B
1/8" = 1'-0"

N TRUE N PROJECT

NUMBERS NEXT TO DEVICES REFER TO CIRCUIT DESIGNATIONS IN PANEL HN2 UNLESS NOTED OTHERWISE.

GENERAL NOTES

1. PROVIDE OUTLET WITHIN 2'0" OF EQUIPMENT IN ACCORDANCE WITH NEC 210.63. PROVIDE WEATHERPROOF GFI OUTLET ON ROOFTOPS WITHIN 2'0" OF ROOFTOP EQUIPMENT.
2. PROVIDE A CO DETECTOR AND ALARM WITHIN 15 FEET OF EVERY SLEEPING ROOM WHEREVER FOSSIL FUELS ARE USED IN ACCORDANCE WITH STATE LAW AND LOCAL CODES. FIELD VERIFY REQUIREMENTS WITH OWNER.
3. FIELD VERIFY FINAL LOCATION OF ALL EQUIPMENT WITH PROVIDER PRIOR TO ROUGH-IN.
4. ALL RECEPTACLES IN BATHROOMS, GARAGES, EXTERIOR, CRAWL SPACES, UNFINISHED AND FINISHED BASEMENTS, LAUNDRY, AREAS DEFINED AS KITCHEN, DISHWASHERS, DRYER, RANGES WITHIN 6 FEET OF ANY SINK, AND WITHIN 6 FEET OF ANY SINK, BATHTUB, SHOWER, UTILITY AND WET-BAR SINKS, AND ALL OTHER REQUIRED LOCATIONS SHALL BE GFCI (OR SERVED BY A GR CIRCUIT BREAKER) PER NEC 210.8(B). THE E.C. SHALL PROVIDE GFCI OUTLETS (OR CIRCUIT BREAKERS) IN ALL LOCATIONS REQUIRED BY THE NEC. PROVIDE GFCI TEST SWITCH (OR GFCI BREAKER) IN READILY ACCESSIBLE LOCATION PER NEC. ALL EXTERIOR RECEPTACLES SHALL BE WEATHER RESISTANT AND ENCLOSED IN A WEATHERPROOF EXTRA DUTY ENCLOSURE WHILE IN USE IN ACCORDANCE WITH NEC 406.9(B).
5. FOR ANY EGRESS LIGHTING FIXTURES AND EXIT SIGNS NOT POWERED BY THE GENERATOR, CONNECT TO AREA LIGHTING CIRCUIT AHEAD OF ANY SWITCH PER NEC 700-12(F) INCLUDING ANY NIGHT LIGHTS. FIXTURES SHOWN SHADED OR LABELED ARE EMERGENCY EGRESS (EM) WITH BATTERY PACK, NIGHT LIGHT (NL) OR BOTH (EMNL).
6. NUMBERS NEXT TO DEVICES REFER TO CIRCUIT DESIGNATION IN HOUSE PANEL, UNLESS NOTED.
7. ALL UNLABELED DOWNLIGHTS ARE FIXTURE TYPE "D".
8. ALL TEL/DATA LOCATIONS SHALL INCLUDE 4" SQUARE J-BOX AND 3/4" CONDUIT TO CEILING SPACE. ALL TELEPHONE/DATA CABLE IS TO BE PLENUM RATED WIRE OR SHALL BE INSTALLED IN CONDUIT ABOVE CEILING OR IN WALLS. FIELD VERIFY LOCATIONS OF ALL DATA JACKS WITH OWNER PRIOR TO ROUGH-IN. VERIFY ALL PHONE/DATA LOCATIONS W/ OWNER FOR ALL OFFICE AREAS.
9. PROVIDE ADDITIONAL THREE (3) POWER & CATV OUTLETS (IN ADDITION TO THOSE SHOWN ON PLANS) NEAR CEILING FOR WALL-MOUNTED TV'S, LOCATIONS TO BE DETERMINED. FIELD VERIFY W/ ARCHITECT.
10. CIRCUIT FIRE/SMOKE DAMPERS TO NEAREST NON-SWITCHED 120 V EM CIRCUIT.
11. PROVIDE TAMPER-RESISTANT RECEPTACLES FOR ALL AREAS SPECIFIED IN NEC ARTICLE 406.12.
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No.	Date	Issue
1	10.03.23	City Comments

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: FREE
Checked By: CF
Title: ELECTRICAL FLOOR PLAN - LEVEL 2 - AREA B
Sheet Number: E2-2.2

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1 ELECTRICAL PLAN - LEVEL 02 - AREA C
1/8" = 1'-0"

N TRUE N PROJECT

NUMBERS NEXT TO DEVICES REFER TO CIRCUIT DESIGNATIONS IN PANEL HS2 UNLESS NOTED OTHERWISE.

GENERAL NOTES

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No.	Date	Issue
1	10.03.23	City Comments

Project Architect	DV
Project Designer	DR
Date	
Job Number	222001
Drawn By	FREE
Checked By	CF
Title	ELECTRICAL FLOOR PLAN - LEVEL 2 - AREA C
Sheet Number	E2-2.3

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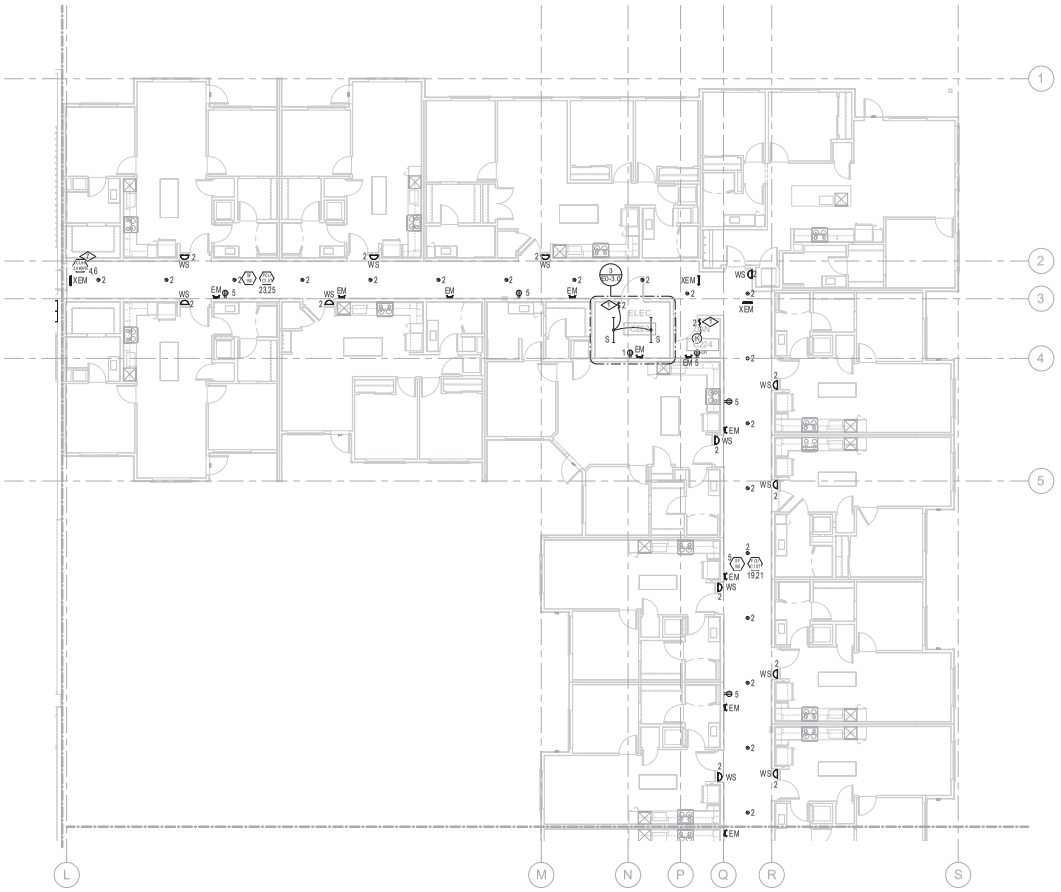

1 ELECTRICAL PLAN - LEVEL 02 - AREA D
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N TRUE N PROJECT

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6. ELECTRIC VEHICLE READY SPACE - PROVIDE 100A 208/120V OUTLET WITH 3#1,#6G, 1-1/2"C FOR ELECTRIC CAR CHARGER FIELD VERIFY ELECTRICAL REQUIREMENTS AND OUTLET TYPE. CHARGING STATIONS MUST BE ON AN ACCESSIBLE ROUTE FROM CORRIDORS / ELEVATOR LOBBIES. CHARGING STATIONS MUST HAVE MINIMUM 5' WIDTH ACCESS AISLE ON ONE SIDE OF PARKING SPACE AND MINIMUM 9' WIDTH ACCESS AISLE ON OTHER SIDE OF PARKING SPACE WITH CHARGING STATION AT HEAD OF EITHER ACCESS AISLE.
7. PRICE AS ADD ALTERNATE IN E.C. MECHANICAL DRAWINGS.
8. EMERGENCY LIGHTING INVERTER PROVIDE LIGHTING INVERTER SIZED FOR A MINIMUM 600 WATTS.
9. EXTERIOR LIGHTING CONTROLS - PROVIDE PHOTOCELL ON/TIMECLOCK OFF CONTROLS AND MULTIPOLE LIGHTING CONTACTOR. PHOTOCELL ON ROOF AND PROGRAMMABLE TIME CLOCK AS REQUIRED. FIELD VERIFY REQUIREMENTS WITH OWNER.
10. ELECTRIC GRILL - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.
11. TV/MONITOR - PROVIDE POWER AND DATA/CATV JACKS AS REQUIRED IN CEILING AND PROVIDE RACEWAY TO VIDEO SOURCE. FIELD VERIFY REQUIREMENTS WITH TENANT AND TV PROVIDER. FIELD VERIFY FINAL LOCATION WITH ARCHITECT PRIOR TO ANY ROUGH-IN.
12. EXERCISE EQUIPMENT - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.
13. PROVIDE POWER AND CONTROLS FOR SIGNAGE. FIELD VERIFY LOCATION AND REQUIREMENTS WITH OWNER PRIOR TO INSTALLATION.
14. OFFICE EQUIPMENT - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.
15. HAND DRYER - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.

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No.	Date	Issue
1	10.03.23	City Comments

Project Architect: DV
Project Designer: DR
Title:
Job Number: 222001
Drawn By: FREE
Checked By: CF
Title: ELECTRICAL FLOOR PLAN - LEVEL 2 - AREA D
Sheet Number: E2-2.4

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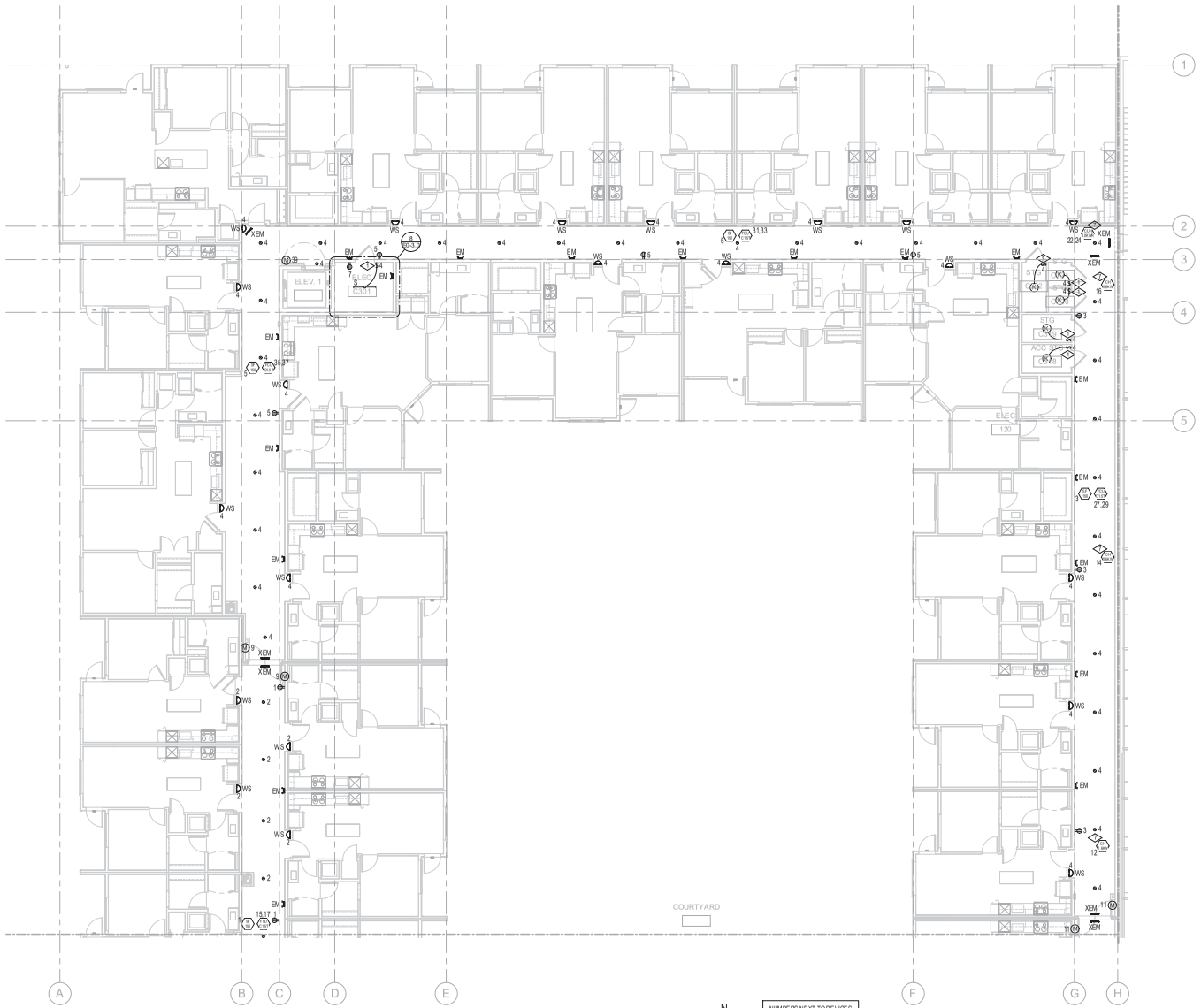

1 ELECTRICAL PLAN - LEVEL 03 - AREA A
1/8" = 1'-0"

N TRUE N PROJECT

NUMBERS NEXT TO DEVICES REFER TO CIRCUIT DESIGNATIONS IN PANEL HN3 UNLESS NOTED OTHERWISE.

GENERAL NOTES

1. PROVIDE OUTLET WITHIN 2'0" OF EQUIPMENT IN ACCORDANCE WITH NEC 210.63. PROVIDE WEATHERPROOF GFCI OUTLET ON ROOFTOPS WITHIN 2'0" OF ROOFTOP EQUIPMENT.
2. PROVIDE A CO DETECTOR AND ALARM WITHIN 15 FEET OF EVERY SLEEPING ROOM WHEREVER FOSSIL FUELS ARE USED IN ACCORDANCE WITH STATE LAW AND LOCAL CODES. FIELD VERIFY REQUIREMENTS WITH OWNER.
3. FIELD VERIFY FINAL LOCATION OF ALL EQUIPMENT WITH PROVIDER PRIOR TO ROUGH-IN.
4. ALL RECEPTACLES IN BATHROOMS, GARAGES, EXTERIOR, CRAWL SPACES, UNFINISHED AND FINISHED BASEMENTS, LAUNDRY, AREAS DEFINED AS KITCHEN, DISHWASHERS, DRYER, RANGES WITHIN 6 FEET OF ANY SINK, AND WITHIN 6 FEET OF ANY SINK, BATHTUB, SHOWER, UTILITY AND WET-BAR SINKS, AND ALL OTHER REQUIRED LOCATIONS SHALL BE GFCI (OR SERVED BY A GR CIRCUIT BREAKER) PER NEC 210.8(B). THE E.C. SHALL PROVIDE GFCI OUTLETS (OR CIRCUIT BREAKERS) IN ALL LOCATIONS REQUIRED BY THE NEC. PROVIDE GFCI TEST SWITCH (OR GFCI BREAKER) IN READILY ACCESSIBLE LOCATION PER NEC. ALL EXTERIOR RECEPTACLES SHALL BE WEATHER RESISTANT AND ENCLOSED IN A WEATHERPROOF EXTRA DUTY ENCLOSURE WHILE IN USE IN ACCORDANCE WITH NEC 406.9(B).
5. FOR ANY EGRESS LIGHTING FIXTURES AND EXIT SIGNS NOT POWERED BY THE GENERATOR, CONNECT TO AREA LIGHTING CIRCUIT AHEAD OF ANY SWITCH PER NEC 700-12(F) INCLUDING ANY NIGHT LIGHTS. FIXTURES SHOWN SHADED OR LABELED ARE EMERGENCY EGRESS (EM) WITH BATTERY PACK, NIGHT LIGHT (NL) OR BOTH (EMNL).
6. NUMBERS NEXT TO DEVICES REFER TO CIRCUIT DESIGNATION IN HOUSE PANEL, UNLESS NOTED.
7. ALL UNLABELED DOWNLIGHTS ARE FIXTURE TYPE "D".
8. ALL TEL/DATA LOCATIONS SHALL INCLUDE 4" SQUARE J-BOX AND 3/4" CONDUIT TO CEILING SPACE. ALL TELEPHONE/DATA CABLE IS TO BE PLENUM RATED WIRE OR SHALL BE INSTALLED IN CONDUIT ABOVE CEILING OR IN WALLS. FIELD VERIFY LOCATIONS OF ALL DATA JACKS WITH OWNER PRIOR TO ROUGH-IN. VERIFY ALL PHONE/DATA LOCATIONS W/ OWNER FOR ALL OFFICE AREAS.
9. PROVIDE ADDITIONAL THREE (3) POWER & CATV OUTLETS (IN ADDITION TO THOSE SHOWN ON PLANS) NEAR CEILING FOR WALL-MOUNTED TV'S, LOCATIONS TO BE DETERMINED. FIELD VERIFY W/ ARCHITECT.
10. CIRCUIT FIRE SMOKE DAMPERS TO NEAREST NON-SWITCHED 120 V EM CIRCUIT.
11. PROVIDE TAMPER-RESISTANT RECEPTACLES FOR ALL AREAS SPECIFIED IN NEC ARTICLE 406.12.
12. FOR EXTERIOR RECEPTACLES, PROVIDE WEATHER-PROOF LOCKABLE OUTLET COVERS. ⚠
13. GFCI PROTECTION SHALL BE PROVIDED (NO MATTER IF HARD WIRED OR PLUG AND CORD) FOR THE BRANCH CIRCUIT SUPPLYING THE FOLLOWING APPLIANCES RATED 150 VOLTS OR LESS TO GROUND AND 60 AMPERES OR LESS, SINGLE OR 3-PHASE: DRINKING WATER COOLERS AND BOTTLE FILL STATIONS, HIGH-PRESSURE SPRAY WASHING MACHINES, VENDING MACHINES, SUMP PUMPS, DISHWASHERS, ELECTRIC RANGES, WALL-MOUNTED COOKING UNITS, CLOTHES DRYERS AND MICROWAVE OVENS.

KEYED NOTES

1. WALLBOX VACANCY SENSOR.
2. IRRIGATION CONTROLLER - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.
3. CARD READER - CARD READER/ACCESS CONTROL DEVICE - PROVIDE J-BOX AND DATA RACEWAY MOUNTED NO MORE THAN 48" AFF. FIELD VERIFY REQUIREMENTS WITH TENANT/PROVIDE.
4. TRASH COMPACTOR - PROVIDE DEDICATED 30A/3P BRANCH CIRCUIT WITH #8(#10)G, 1"C. FIELD VERIFY FINAL LOCATION, OUTLET TYPE AND CONFIGURATION AND REQUIREMENTS WITH PROVIDER PRIOR TO ROUGH-IN. PROVIDE A DEDICATED CIRCUIT AND ALL POWER AND CONTROL WIRING AS REQUIRED FOR TRASH CHUTE SYSTEM INCLUDING CONTROL PANELS AND DOORS. FIELD VERIFY REQUIREMENTS WITH PROVIDER AND PROVIDE ALL WORK NECESSARY FOR A COMPLETE INSTALLATION.
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7. PRICE AS ADD ALTERNATE #1. REFER TO MECHANICAL DRAWINGS.
8. EMERGENCY LIGHTING INVERTER PROVIDE LIGHTING INVERTER SIZED FOR A MINIMUM 900 WATTS.
9. EXTERIOR LIGHTING CONTROLS - PROVIDE PHOTOCELL ON/TIMECLOCK OFF CONTROLS AND MULTIPOLE LIGHTING CONTACTOR. PHOTOCELL ON ROOF AND PROGRAMMABLE TIME CLOCK AS REQUIRED. FIELD VERIFY REQUIREMENTS WITH OWNER.
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No.	Date	Issue
1	10.03.23	City Comments

Project Architect: DV
Project Designer: DR
Title:
Job Number: 222001
Drawn By: FREE
Checked By: CF
Title: ELECTRICAL FLOOR PLAN - LEVEL 3 - AREA A
Sheet Number: E2-3.1

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2. PROVIDE A CO DETECTOR AND ALARM WITHIN 15 FEET OF EVERY SLEEPING ROOM WHEREVER FOSSIL FUELS ARE USED IN ACCORDANCE WITH STATE LAW AND LOCAL CODES. FIELD VERIFY REQUIREMENTS WITH OWNER.
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4. TRASH COMPACTOR - PROVIDE DEDICATED 30A/3P BRANCH CIRCUIT WITH #8(JHN3). 1"C. FIELD VERIFY FINAL LOCATION, OUTLET TYPE AND CONFIGURATION AND REQUIREMENTS WITH PROVIDER PRIOR TO ROUGH-IN. PROVIDE A DEDICATED CIRCUIT AND ALL POWER AND CONTROL WIRING AS REQUIRED FOR TRASH CHUTE SYSTEM INCLUDING CONTROL PANELS AND DOORS. FIELD VERIFY REQUIRMENTS WITH PROVIDER AND PROVIDE ALL WORK NECESSARY FOR A COMPLETE INSTALLATION.
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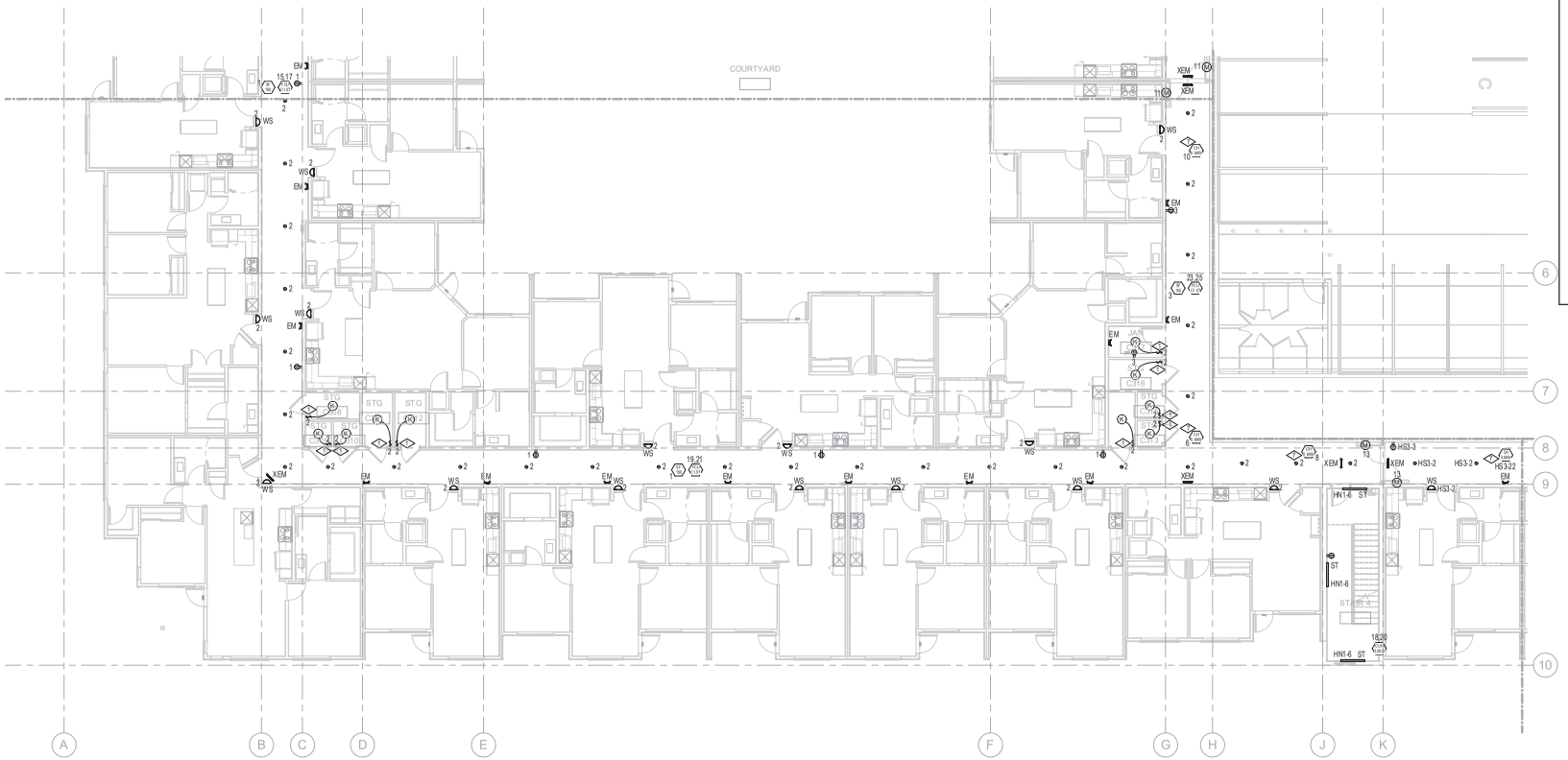

1 ELECTRICAL PLAN - LEVEL 03 - AREA B
1/8" = 1'-0"

N TRUE N PROJECT

NUMBERS NEXT TO DEVICES REFER TO CIRCUIT DESIGNATIONS IN PANEL HN3 UNLESS NOTED OTHERWISE.

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No.	Date	Issue
1	10.03.23	City Comments

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: FREE
Checked By: CF
Title: ELECTRICAL FLOOR PLAN - LEVEL 3 - AREA B
Sheet Number: E2-3.2

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GENERAL NOTES

1. PROVIDE OUTLET WITHIN 25' OF EQUIPMENT IN ACCORDANCE WITH NEC 210.63. PROVIDE WEATHERPROOF GFI OUTLET ON ROOFTOPS WITHIN 25' OF ROOFTOP EQUIPMENT.
2. PROVIDE A CO DETECTOR AND ALARM WITHIN 15 FEET OF EVERY SLEEPING ROOM WHEREVER FOSSIL FUELS ARE USED IN ACCORDANCE WITH STATE LAW AND LOCAL CODES. FIELD VERIFY REQUIREMENTS WITH OWNER.
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8. EMERGENCY LIGHTING INVERTER PROVIDE LIGHTING INVERTER SIZED FOR A MINIMUM 600 WATTS.
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13. PROVIDE POWER AND CONTROLS FOR SIGNAGE. FIELD VERIFY LOCATION AND REQUIREMENTS WITH OWNER PRIOR TO INSTALLATION.
14. OFFICE EQUIPMENT - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.
15. HAND DRYER - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.



1 ELECTRICAL PLAN - LEVEL 03 - AREA C
1/8" = 1'-0"

N TRUE N PROJECT

NUMBERS NEXT TO DEVICES REFER TO CIRCUIT DESIGNATIONS IN PANEL HS3 UNLESS NOTED OTHERWISE.

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No.	Date	Issue
1	10.03.23	City Comments

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: FREE
Checked By: CF
Title: ELECTRICAL FLOOR PLAN - LEVEL 3 - AREA C
Sheet Number: E2-3.3

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1 ELECTRICAL PLAN - LEVEL 03 - AREA D
1/8" = 1'-0"

N TRUE N PROJECT

NUMBERS NEXT TO DEVICES REFER TO CIRCUIT DESIGNATIONS IN PANEL HS3 UNLESS NOTED OTHERWISE.

GENERAL NOTES

1. PROVIDE OUTLET WITHIN 25' OF EQUIPMENT IN ACCORDANCE WITH NEC 210.63. PROVIDE WEATHERPROOF GFI OUTLET ON ROOFTOPS WITHIN 25' OF ROOFTOP EQUIPMENT.
2. PROVIDE A CO DETECTOR AND ALARM WITHIN 15 FEET OF EVERY SLEEPING ROOM WHEREVER FOSSIL FUELS ARE USED IN ACCORDANCE WITH STATE LAW AND LOCAL CODES. FIELD VERIFY REQUIREMENTS WITH OWNER.
3. FIELD VERIFY FINAL LOCATION OF ALL EQUIPMENT WITH PROVIDER PRIOR TO ROUGH-IN.
4. ALL RECEPTACLES IN BATHROOMS, GARAGES, EXTERIOR, CRAWL SPACES, UNFINISHED AND FINISHED BASEMENTS, LAUNDRY, AREAS DEFINED AS KITCHEN, DISHWASHERS, DRYER, RANGES WITHIN 6 FEET OF ANY SINK, AND WITHIN 6 FEET OF ANY SINK, BATHTUB, SHOWER, UTILITY AND WET-BAR SINKS, AND ALL OTHER REQUIRED LOCATIONS SHALL BE GFCI (OR SERVED BY A GR CIRCUIT BREAKER) PER NEC 210.8(B). THEE C. SHALL PROVIDE GFCI OUTLETS (OR CIRCUIT BREAKERS) IN ALL LOCATIONS REQUIRED BY THE NEC. PROVIDE GFCI TEST SWITCH (OR GFCI BREAKER) IN READILY ACCESSIBLE LOCATION PER NEC. ALL EXTERIOR RECEPTACLES SHALL BE WEATHER RESISTANT AND ENCLOSED IN A WEATHERPROOF EXTRA DUTY ENCLOSURE WHILE IN USE IN ACCORDANCE WITH NEC 406.9(B).
5. FOR ANY EGRESS LIGHTING FIXTURES AND EXIT SIGNS NOT POWERED BY THE GENERATOR, CONNECT TO AREA LIGHTING CIRCUIT AHEAD OF ANY SWITCH PER NEC 700-12(F) INCLUDING ANY NIGHT LIGHTS. FIXTURES SHOWN SHADED OR LABELED ARE EMERGENCY EGRESS (EM) WITH BATTERY PACK, NIGHT LIGHT (NL) OR BOTH (EMNL).
6. NUMBERS NEXT TO DEVICES REFER TO CIRCUIT DESIGNATION IN HOUSE PANEL, UNLESS NOTED.
7. ALL UNLABELED DOWNLIGHTS ARE FIXTURE TYPE "D".
8. ALL TELE/DATA LOCATIONS SHALL INCLUDE 4" SQUARE J-BOX AND 3/4" CONDUIT TO CEILING SPACE. ALL TELEPHONE/DATA CABLE IS TO BE PLENUM RATED WIRE OR SHALL BE INSTALLED IN CONDUIT ABOVE CEILING OR IN WALLS. FIELD VERIFY LOCATIONS OF ALL DATA JACKS WITH OWNER PRIOR TO ROUGH-IN. VERIFY ALL PHONE/DATA LOCATIONS W/ OWNER FOR ALL OFFICE AREAS.
9. PROVIDE ADDITIONAL THREE (3) POWER & CATV OUTLETS (IN ADDITION TO THOSE SHOWN ON PLANS) NEAR CEILING FOR WALL-MOUNTED TV'S, LOCATIONS TO BE DETERMINED. FIELD VERIFY W/ ARCHITECT.
10. CIRCUIT FIRE SMOKE DAMPERS TO NEAREST NON-SWITCHED 120 V EM CIRCUIT.
11. PROVIDE TAMPER-RESISTANT RECEPTACLES FOR ALL AREAS SPECIFIED IN NEC ARTICLE 406.12.
12. FOR EXTERIOR RECEPTACLES, PROVIDE WEATHER-PROOF LOCKABLE OUTLET COVERS. ⚠
13. GFCI PROTECTION SHALL BE PROVIDED (NO MATTER IF HARD WIRED OR PLUG AND CORD) FOR THE BRANCH CIRCUIT SUPPLYING THE FOLLOWING APPLIANCES RATED 150 VOLTS OR LESS TO GROUND AND 60 AMPERES OR LESS, SINGLE OR 3-PHASE: DRINKING WATER COOLERS AND BOTTLE FILL STATIONS, HIGH-PRESSURE SPRAY WASHING MACHINES, VENDING MACHINES, SUMP PUMPS, DISHWASHERS, ELECTRIC RANGES, WALL-MOUNTED COOKING UNITS, CLOTHES DRYERS AND MICROWAVE OVENS.

KEYED NOTES

1. WALLBOX VACANCY SENSOR.
2. IRRIGATION CONTROLLER - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.
3. CARD READER - CARD READER/ACCESS CONTROL DEVICE - PROVIDE J-BOX AND DATA RACEWAY MOUNTED NO MORE THAN 48" AFF. FIELD VERIFY REQUIREMENTS WITH TENANT/PROVIDE.
4. TRASH COMPACTOR - PROVIDE DEDICATED 30A/2P BRANCH CIRCUIT WITH #8(#10G, 1"C. FIELD VERIFY FINAL LOCATION, OUTLET TYPE AND CONFIGURATION AND REQUIREMENTS WITH PROVIDER PRIOR TO ROUGH-IN. PROVIDE A DEDICATED CIRCUIT AND ALL POWER AND CONTROL WIRING AS REQUIRED FOR TRASH CHUTE SYSTEM INCLUDING CONTROL PANELS AND DOORS. FIELD VERIFY REQUIRMENTS WITH PROVIDER AND PROVIDE ALL WORK NECESSARY FOR A COMPLETE INSTALLATION.
5. MOTORIZED ROLL UP DOOR. E.C. TO VERIFY ELECTRICAL REQUIREMENTS WITH PROVIDER PRIOR TO ROUGH IN.
6. ELECTRIC VEHICLE READY SPACE - PROVIDE 100A 208/120V OUTLET WITH 3#1,#6G, 1-1/2"C FOR ELECTRIC CAR CHARGER FIELD VERIFY ELECTRICAL REQUIREMENTS AND OUTLET TYPE. CHARGING STATIONS MUST BE ON AN ACCESSIBLE ROUTE FROM CORRIDORS / ELEVATOR LOBBIES. CHARGING STATIONS MUST HAVE MINIMUM 5' WIDTH ACCESS AISLE ON ONE SIDE OF PARKING SPACE AND MINIMUM 9' WIDTH ACCESS AISLE ON OTHER SIDE OF PARKING SPACE WITH CHARGING STATION AT HEAD OF EITHER ACCESS AISLE.
7. PRICE AS ADD ALTERNATE #1 - REF. MECHANICAL DRAWINGS.
8. EMERGENCY LIGHTING INVERTER PROVIDE LIGHTING INVERTER SIZED FOR A MINIMUM 600 WATTS.
9. EXTERIOR LIGHTING CONTROLS - PROVIDE PHOTOCELL ON/TIMECLOCK OFF CONTROLS AND MULTIPOLE LIGHTING CONTACTOR. PHOTOCELL ON ROOF AND PROGRAMMABLE TIME CLOCK AS REQUIRED. FIELD VERIFY REQUIREMENTS WITH OWNER.
10. ELECTRIC GRILL - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.
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No.	Date	Issue
1	10.03.23	City Comments

Project Architect: DV
Project Designer: DR
Title:
Job Number: 222001
Drawn By: FREE
Checked By: CF

Title: ELECTRICAL FLOOR PLAN - LEVEL 3 - AREA D

Sheet Number: E2-3.4

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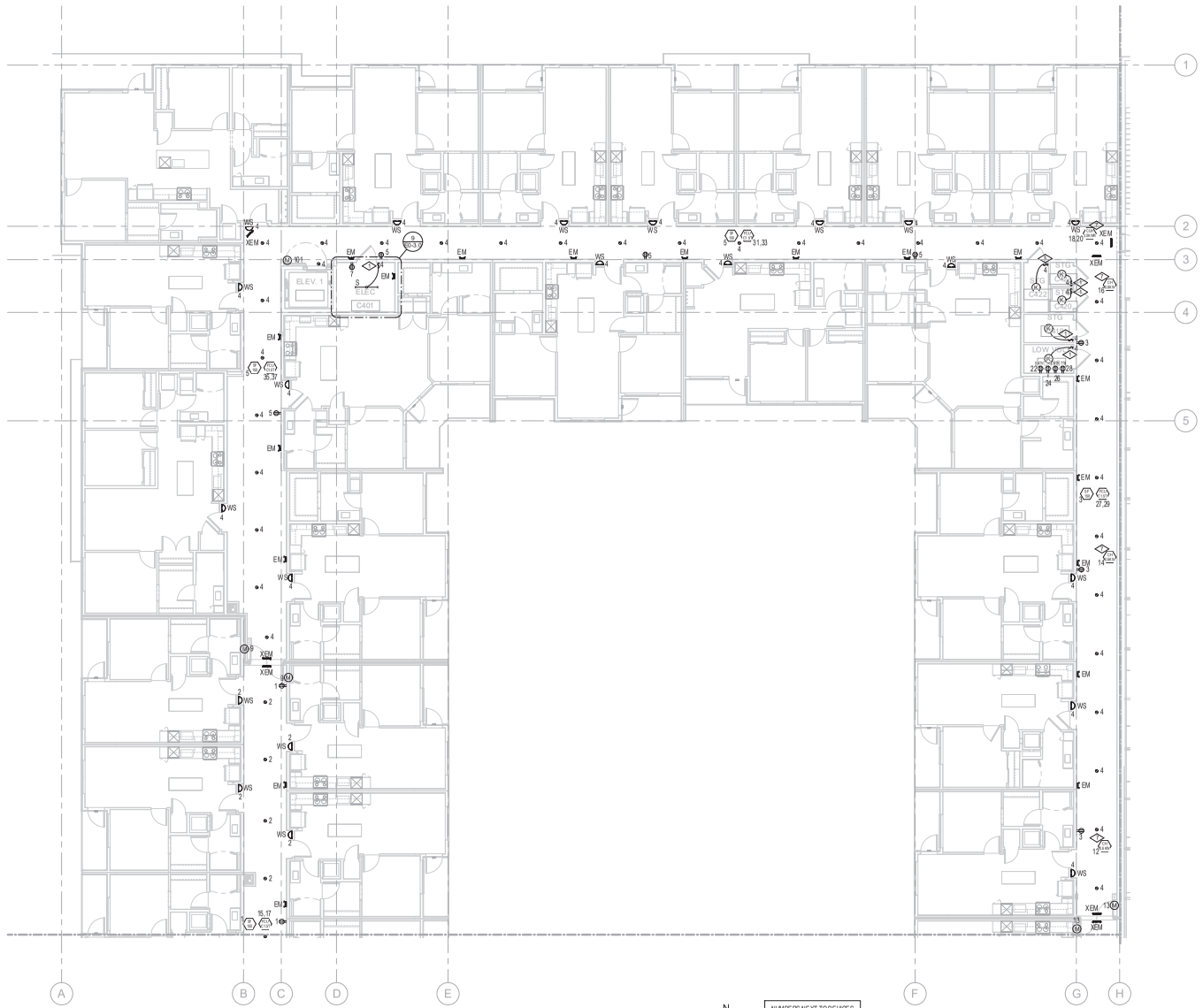

1 ELECTRICAL PLAN - LEVEL 04 - AREA A
1/8" = 1'-0"

N TRUE N PROJECT

NUMBERS NEXT TO DEVICES REFER TO CIRCUIT DESIGNATIONS IN PANEL HN4 UNLESS NOTED OTHERWISE.

GENERAL NOTES

1. PROVIDE OUTLET WITHIN 2'0" OF EQUIPMENT IN ACCORDANCE WITH NEC 210.63. PROVIDE WEATHERPROOF GFI OUTLET ON ROOFTOPS WITHIN 2'0" OF ROOFTOP EQUIPMENT.
2. PROVIDE A CO DETECTOR AND ALARM WITHIN 15 FEET OF EVERY SLEEPING ROOM WHEREVER FOSSIL FUELS ARE USED IN ACCORDANCE WITH STATE LAW AND LOCAL CODES. FIELD VERIFY REQUIREMENTS WITH OWNER.
3. FIELD VERIFY FINAL LOCATION OF ALL EQUIPMENT WITH PROVIDER PRIOR TO ROUGH-IN.
4. ALL RECEPTACLES IN BATHROOMS, GARAGES, EXTERIOR, CRAWL SPACES, UNFINISHED AND FINISHED BASEMENTS, LAUNDRY, AREAS DEFINED AS KITCHEN, DISHWASHERS, DRYER, RANGES WITHIN 6 FEET OF ANY SINK, AND WITHIN 6 FEET OF ANY SINK, BATHTUB, SHOWER, UTILITY AND WET-BAR SINKS, AND ALL OTHER REQUIRED LOCATIONS SHALL BE GFCI (OR SERVED BY A GR CIRCUIT BREAKER) PER NEC 210.8(B). THE E.C. SHALL PROVIDE GFCI OUTLETS (OR CIRCUIT BREAKERS) IN ALL LOCATIONS REQUIRED BY THE NEC. PROVIDE GFCI TEST SWITCH (OR GFCI BREAKER) IN READILY ACCESSIBLE LOCATION PER NEC. ALL EXTERIOR RECEPTACLES SHALL BE WEATHER RESISTANT AND ENCLOSED IN A WEATHERPROOF EXTRA DUTY ENCLOSURE WHILE IN USE IN ACCORDANCE WITH NEC 406.9(B).
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No.	Date	Issue
1	10.03.23	City Comments

Project Architect: DV
Project Designer: DR
Title:
Job Number: 222001
Drawn By: FREE
Checked By: CF
Title: ELECTRICAL FLOOR PLAN - LEVEL 4 - AREA A
Sheet Number: E2-4.1

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GENERAL NOTES

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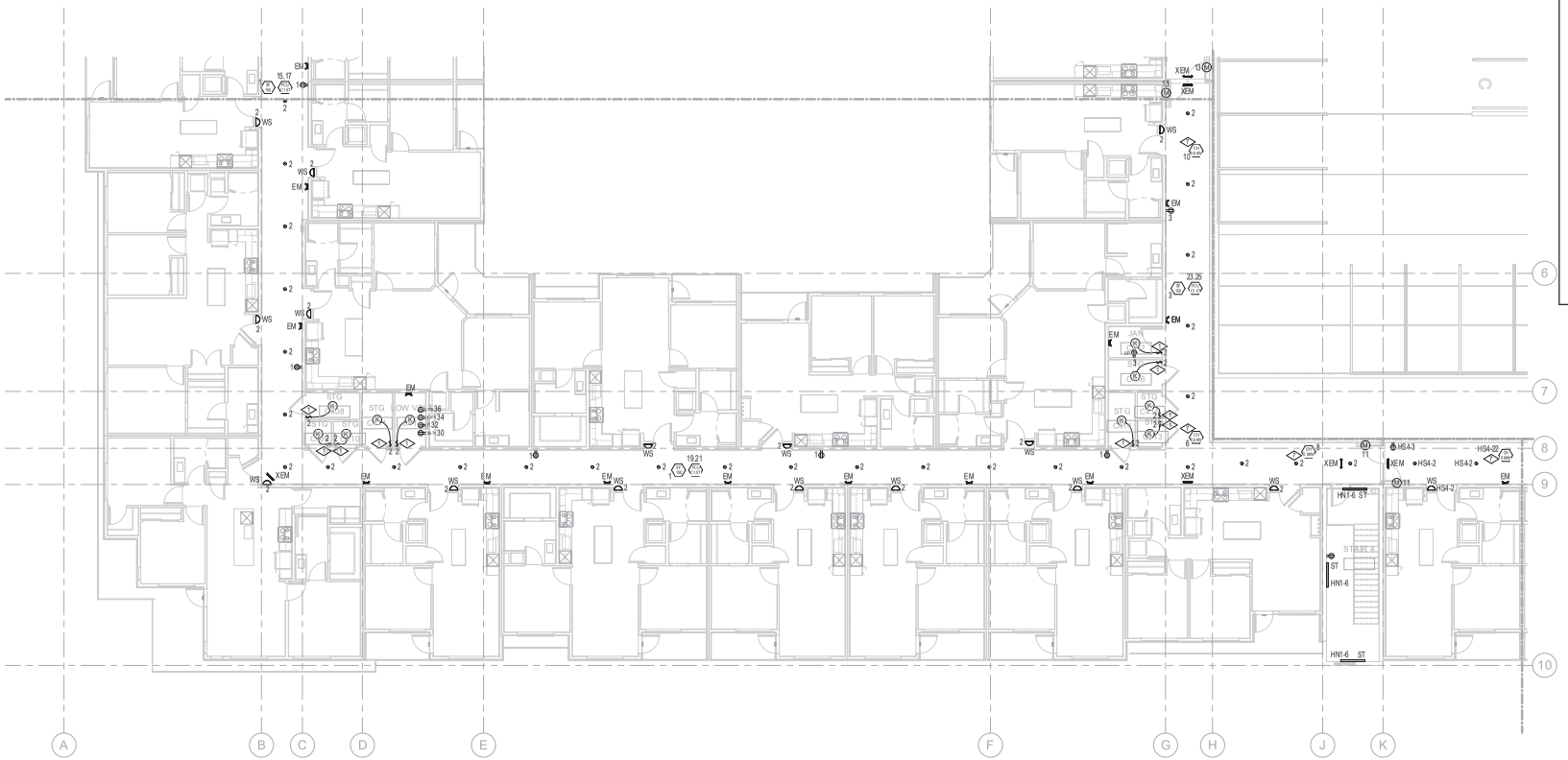

1 ELECTRICAL PLAN - LEVEL 04 - AREA B
1/8" = 1'-0"

N TRUE N PROJECT

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Project Designer: DR
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Job Number: 222001
Drawn By: FREE
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Title: ELECTRICAL FLOOR PLAN - LEVEL 4 - AREA B

Sheet Number: E2-4.2

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GENERAL NOTES

1. PROVIDE OUTLET WITHIN 25' OF EQUIPMENT IN ACCORDANCE WITH NEC 210.63. PROVIDE WEATHERPROOF GFCI OUTLET ON ROOFTOPS WITHIN 25' OF ROOFTOP EQUIPMENT.
2. PROVIDE A CO DETECTOR AND ALARM WITHIN 15 FEET OF EVERY SLEEPING ROOM WHEREVER FOSSIL FUELS ARE USED IN ACCORDANCE WITH STATE LAW AND LOCAL CODES. FIELD VERIFY REQUIREMENTS WITH OWNER.
3. FIELD VERIFY FINAL LOCATION OF ALL EQUIPMENT WITH PROVIDER PRIOR TO ROUGH-IN.
4. ALL RECEPTACLES IN BATHROOMS, GARAGES, EXTERIOR, CRAWL SPACES, UNFINISHED AND FINISHED BASEMENTS, LAUNDRY, AREAS DEFINED AS KITCHEN, DISHWASHERS, DRYER, RANGES WITHIN 6 FEET OF ANY SINK, AND WITHIN 6 FEET OF ANY SINK, BATHTUB, SHOWER, UTILITY AND WET-BAR SINKS, AND ALL OTHER REQUIRED LOCATIONS SHALL BE GFCI (OR SERVED BY A GR CIRCUIT BREAKER) PER NEC 210.8(B). THEE C. SHALL PROVIDE GFCI OUTLETS (OR CIRCUIT BREAKERS) IN ALL LOCATIONS REQUIRED BY THE NEC. PROVIDE GFCI TEST SWITCH (OR GFCI BREAKER) IN READILY ACCESSIBLE LOCATION PER NEC. ALL EXTERIOR RECEPTACLES SHALL BE WEATHER RESISTANT AND ENCLOSED IN A WEATHERPROOF EXTRA-DUTY ENCLOSURE WHILE IN USE IN ACCORDANCE WITH NEC 406.9(B).
5. FOR ANY EGRESS LIGHTING FIXTURES AND EXIT SIGNS NOT POWERED BY THE GENERATOR, CONNECT TO AREA LIGHTING CIRCUIT AHEAD OF ANY SWITCH PER NEC 700-12(F) INCLUDING ANY NIGHT LIGHTS. FIXTURES SHOWN SHADED OR LABELED ARE EMERGENCY EGRESS (EM) WITH BATTERY PACK, NIGHT LIGHT (NL) OR BOTH (EMNL).
6. NUMBERS NEXT TO DEVICES REFER TO CIRCUIT DESIGNATION IN HOUSE PANEL, UNLESS NOTED.
7. ALL UNLABELED DOWNLIGHTS ARE FIXTURE TYPE "D".
8. ALL TEL/DATA LOCATIONS SHALL INCLUDE 4" SQUARE J-BOX AND 3/4" CONDUIT TO CEILING SPACE. ALL TELEPHONE/DATA CABLE IS TO BE PLENUM RATED WIRE OR SHALL BE INSTALLED IN CONDUIT ABOVE CEILING OR IN WALLS. FIELD VERIFY LOCATIONS OF ALL DATA JACKS WITH OWNER PRIOR TO ROUGH-IN. VERIFY ALL PHONE/DATA LOCATIONS W/ OWNER FOR ALL OFFICE AREAS.
9. PROVIDE ADDITIONAL THREE (3) POWER & CATV OUTLETS (IN ADDITION TO THOSE SHOWN ON PLANS) NEAR CEILING FOR WALL-MOUNTED TV'S. LOCATIONS TO BE DETERMINED. FIELD VERIFY W/ ARCHITECT.
10. CIRCUIT FIRE/SMOKE DAMPERS TO NEAREST NON-SWITCHED 120 V EM CIRCUIT.
11. PROVIDE TAMPER-RESISTANT RECEPTACLES FOR ALL AREAS SPECIFIED IN NEC ARTICLE 406.12.
12. FOR EXTERIOR RECEPTACLES, PROVIDE WEATHER-PROOF LOCKABLE OUTLET COVERS. ⚠
13. GFCI PROTECTION SHALL BE PROVIDED (NO MATTER IF HARD WIRED OR PLUG AND CORD) FOR THE BRANCH CIRCUIT SUPPLYING THE FOLLOWING APPLIANCES RATED 150 VOLTS OR LESS TO GROUND AND 60 AMPERES OR LESS, SINGLE OR 3-PHASE: DRINKING WATER COOLERS AND BOTTLE FILL STATIONS, HIGH-PRESSURE SPRAY WASHING MACHINES, VENDING MACHINES, SUMP PUMPS, DISHWASHERS, ELECTRIC RANGES, WALL-MOUNTED COOKING UNITS, CLOTHES DRYERS AND MICROWAVE OVENS.

KEYED NOTES

1. WALLBOX VACANCY SENSOR.
2. IRRIGATION CONTROLLER - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.
3. CARD READER - CARD READER/ACCESS CONTROL DEVICE - PROVIDE J-BOX AND DATA RACEWAY MOUNTED NO MORE THAN 48" AFF. FIELD VERIFY REQUIREMENTS WITH TENANT/PROVIDE.
4. TRASH COMPACTOR - PROVIDE DEDICATED 3/4"P BRANCH CIRCUIT WITH #8(#10 GD, 1"C. FIELD VERIFY FINAL LOCATION, OUTLET TYPE AND CONFIGURATION AND REQUIREMENTS WITH PROVIDER PRIOR TO ROUGH-IN. PROVIDE A DEDICATED CIRCUIT AND ALL POWER AND CONTROL WIRING AS REQUIRED FOR TRASH CHUTE SYSTEM INCLUDING CONTROL PANELS AND DOORS. FIELD VERIFY REQUIREMENTS WITH PROVIDER AND PROVIDE ALL WORK NECESSARY FOR A COMPLETE INSTALLATION.
5. MOTORIZED ROLL UP DOOR. E.C. TO VERIFY ELECTRICAL REQUIREMENTS WITH PROVIDER PRIOR TO ROUGH IN.
6. ELECTRIC VEHICLE READY SPACE - PROVIDE 100A 208/120V OUTLET WITH 3#1,#6G, 1-1/2"C FOR ELECTRIC CAR CHARGER FIELD VERIFY ELECTRICAL REQUIREMENTS AND OUTLET TYPE. CHARGING STATIONS MUST BE ON AN ACCESSIBLE ROUTE FROM CORRIDORS / ELEVATOR LOBBIES. CHARGING STATIONS MUST HAVE MINIMUM 5' WIDTH ACCESS AISLE ON ONE SIDE OF PARKING SPACE AND MINIMUM 9' WIDTH ACCESS AISLE ON OTHER SIDE OF PARKING SPACE WITH CHARGING STATION AT HEAD OF EITHER ACCESS AISLE.
7. PROCEAS ADD AL TERNATE#1: RE: MECHANICAL DRAWINGS.
8. EMERGENCY LIGHTING INVERTER PROVIDE LIGHTING INVERTER SIZED FOR A MINIMUM 600 WATTS.
9. EXTERIOR LIGHTING CONTROLS - PROVIDE PHOTOCELL ON/TIMECLOCK OFF CONTROLS AND MULTIPOLE LIGHTING CONTACTOR. PHOTOCELL ON ROOF AND PROGRAMMABLE TIME CLOCK AS REQUIRED. FIELD VERIFY REQUIREMENTS WITH OWNER.
10. ELECTRIC GRILL - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.
11. TV/MONITOR - PROVIDE POWER AND DATA/CATV JACKS AS REQUIRED IN CEILING AND PROVIDE RACEWAY TO VIDEO SOURCE. FIELD VERIFY REQUIREMENTS WITH TENANT AND TV PROVIDER. FIELD VERIFY FINAL LOCATION WITH ARCHITECT PRIOR TO ANY ROUGH-IN.
12. EXERCISE EQUIPMENT - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.
13. PROVIDE POWER AND CONTROLS FOR SIGNAGE. FIELD VERIFY LOCATION AND REQUIREMENTS WITH OWNER PRIOR TO INSTALLATION.
14. OFFICE EQUIPMENT - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.
15. HAND DRYER - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.



1 ELECTRICAL PLAN - LEVEL 04 - AREA C
1/8" = 1'-0"

N TRUE N PROJECT

NUMBERS NEXT TO DEVICES REFER TO CIRCUIT DESIGNATIONS IN PANEL HS4 UNLESS NOTED OTHERWISE.

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No.	Date	Issue
1	10.03.23	City Comments

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: FREE
Checked By: CF

Title: ELECTRICAL FLOOR PLAN - LEVEL 4 - AREA C

Sheet Number: **E2-4.3**

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1 ELECTRICAL PLAN - LEVEL 04 - AREA D
1/8" = 1'-0"

N TRUE N PROJECT

NUMBERS NEXT TO DEVICES REFER TO CIRCUIT DESIGNATIONS IN PANEL HS4 UNLESS NOTED OTHERWISE.

GENERAL NOTES

1. PROVIDE OUTLET WITHIN 2'0" OF EQUIPMENT IN ACCORDANCE WITH NEC 210.63.PROVIDE WEATHERPROOF GFI OUTLET ON ROOFTOPS WITHIN 2'0" OF ROOFTOP EQUIPMENT.
2. PROVIDE A CO DETECTOR AND ALARM WITHIN 15 FEET OF EVERY SLEEPING ROOM WHEREVER FOSSIL FUELS ARE USED IN ACCORDANCE WITH STATE LAW AND LOCAL CODES. FIELD VERIFY REQUIREMENTS WITH OWNER.
3. FIELD VERIFY FINAL LOCATION OF ALL EQUIPMENT WITH PROVIDER PRIOR TO ROUGH-IN.
4. ALL RECEPTACLES IN BATHROOMS, GARAGES, EXTERIOR, CRAWL SPACES, UNFINISHED AND FINISHED BASEMENTS, LAUNDRY, AREAS DEFINED AS KITCHEN, DISHWASHERS, DRYER, RANGES WITHIN 6 FEET OF ANY SINK, AND WITHIN 6 FEET OF ANY SINK, BATHTUB, SHOWER, UTILITY AND WET-BAR SINKS, AND ALL OTHER REQUIRED LOCATIONS SHALL BE GFCI (OR SERVED BY A GR CIRCUIT BREAKER) PER NEC 210.8(B). THE E.C. SHALL PROVIDE GFCI OUTLETS (OR CIRCUIT BREAKERS) IN ALL LOCATIONS REQUIRED BY THE NEC. PROVIDE GFCI TEST SWITCH (OR GFCI BREAKER) IN READILY ACCESSIBLE LOCATION PER NEC. ALL EXTERIOR RECEPTACLES SHALL BE WEATHER RESISTANT AND ENCLOSED IN A WEATHERPROOF EXTRA DUTY ENCLOSURE WHILE IN USE IN ACCORDANCE WITH NEC 406.9(B).
5. FOR ANY EGRESS LIGHTING FIXTURES AND EXIT SIGNS NOT POWERED BY THE GENERATOR, CONNECT TO AREA LIGHTING CIRCUIT AHEAD OF ANY SWITCH PER NEC 700-12(F) INCLUDING ANY NIGHT LIGHTS. FIXTURES SHOWN SHADED OR LABELED ARE EMERGENCY EGRESS (EM) WITH BATTERY PACK, NIGHT LIGHT (NL) OR BOTH (EMNL).
6. NUMBERS NEXT TO DEVICES REFER TO CIRCUIT DESIGNATION IN HOUSE PANEL, UNLESS NOTED.
7. ALL UNLABELED DOWNLIGHTS ARE FIXTURE TYPE "D".
8. ALL TELE/DATA LOCATIONS SHALL INCLUDE 4" SQUARE J-BOX AND 3/4" CONDUIT TO CEILING SPACE. ALL TELEPHONE/DATA CABLE IS TO BE PLENUM RATED WIRE OR SHALL BE INSTALLED IN CONDUIT ABOVE CEILING OR IN WALLS. FIELD VERIFY LOCATIONS OF ALL DATA JACKS WITH OWNER PRIOR TO ROUGH-IN. VERIFY ALL PHONE/DATA LOCATIONS W/ OWNER FOR ALL OFFICE AREAS.
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10. CIRCUIT FIRE/SMOKE DAMPERS TO NEAREST NON-SWITCHED 120 V EM CIRCUIT.
11. PROVIDE TAMPER-RESISTANT RECEPTACLES FOR ALL AREAS SPECIFIED IN NEC ARTICLE 406.12.
12. FOR EXTERIOR RECEPTACLES, PROVIDE WEATHER-PROOF LOCKABLE OUTLET COVERS. ⚠
13. GFCI PROTECTION SHALL BE PROVIDED (NO MATTER IF HARD WIRED OR PLUG AND CORD) FOR THE BRANCH CIRCUIT SUPPLYING THE FOLLOWING APPLIANCES RATED 150 VOLTS OR LESS TO GROUND AND 60 AMPERES OR LESS, SINGLE OR 3-PHASE: DRINKING WATER COOLERS AND BOTTLE FILL STATIONS, HIGH-PRESSURE SPRAY WASHING MACHINES, VENDING MACHINES, SUMP PUMPS, DISHWASHERS, ELECTRIC RANGES, WALL-MOUNTED COOKING UNITS, CLOTHES DRYERS AND MICROWAVE OVENS.

KEYED NOTES

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3. CARD READER - CARD READER/ACCESS CONTROL DEVICE - PROVIDE J-BOX AND DATA RACEWAY MOUNTED NO MORE THAN 48" AFF. FIELD VERIFY REQUIREMENTS WITH TENANT/PROVIDE.
4. TRASH COMPACTOR - PROVIDE DEDICATED 30A/2P BRANCH CIRCUIT WITH #8(#10G, 1"C. FIELD VERIFY FINAL LOCATION, OUTLET TYPE AND CONFIGURATION AND REQUIREMENTS WITH PROVIDER PRIOR TO ROUGH-IN. PROVIDE A DEDICATED CIRCUIT AND ALL POWER AND CONTROL WIRING AS REQUIRED FOR TRASH CHUTE SYSTEM INCLUDING CONTROL PANELS AND DOORS. FIELD VERIFY REQUIREMENTS WITH PROVIDER AND PROVIDE ALL WORK NECESSARY FOR A COMPLETE INSTALLATION.
5. MOTORIZED ROLL UP DOOR. E.C. TO VERIFY ELECTRICAL REQUIREMENTS WITH PROVIDER PRIOR TO ROUGH IN.
6. ELECTRIC VEHICLE READY SPACE - PROVIDE 100A 208/120V OUTLET WITH 3#1,#6G, 1-1/2"C FOR ELECTRIC CAR CHARGER FIELD VERIFY ELECTRICAL REQUIREMENTS AND OUTLET TYPE. CHARGING STATIONS MUST BE ON AN ACCESSIBLE ROUTE FROM CORRIDORS / ELEVATOR LOBBIES. CHARGING STATIONS MUST HAVE MINIMUM 9' WIDTH ACCESS AISLE ON ONE SIDE OF PARKING SPACE AND MINIMUM 9' WIDTH ACCESS AISLE ON OTHER SIDE OF PARKING SPACE WITH CHARGING STATION AT HEAD OF EITHER ACCESS AISLE.
7. PRICE AS ADD ALTERNATE IN RE: MECHANICAL DRAWINGS.
8. EMERGENCY LIGHTING INVERTER PROVIDE LIGHTING INVERTER SIZED FOR A MINIMUM 600 WATTS.
9. EXTERIOR LIGHTING CONTROLS - PROVIDE PHOTOCELL ON/TIMECLOCK OFF CONTROLS AND MULTIPOLE LIGHTING CONTACTOR. PHOTOCELL ON ROOF AND PROGRAMMABLE TIME CLOCK AS REQUIRED. FIELD VERIFY REQUIREMENTS WITH OWNER.
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No.	Date	Issue
1	10.03.23	City Comments

Project Architect: DV
Project Designer: DR
Title:
Job Number: 222001
Drawn By: FREE
Checked By: CF
Title: ELECTRICAL FLOOR PLAN - LEVEL 4 - AREA D
Sheet Number: E2-4.4

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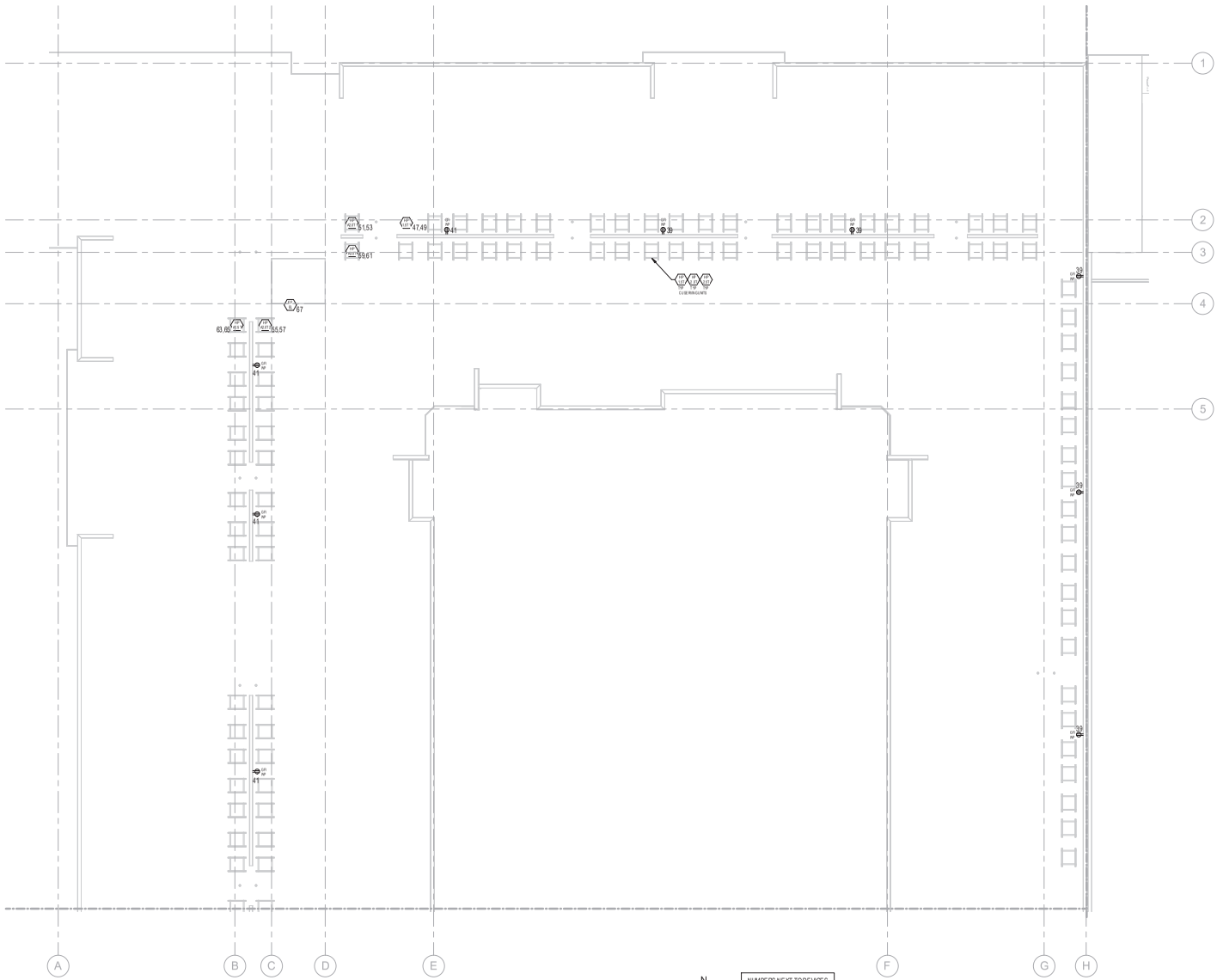

1 ELECTRICAL PLAN - ROOF LEVEL - AREA A
1/8" = 1'-0"

GENERAL NOTES

1. PROVIDE OUTLET WITHIN 2'0" OF EQUIPMENT IN ACCORDANCE WITH NEC 210.63. PROVIDE WEATHERPROOF GFI OUTLET ON ROOFTOPS WITHIN 2'0" OF ROOFTOP EQUIPMENT.
2. PROVIDE A CO DETECTOR AND ALARM WITHIN 15 FEET OF EVERY SLEEPING ROOM WHEREVER FOSSIL FUELS ARE USED IN ACCORDANCE WITH STATE LAW AND LOCAL CODES. FIELD VERIFY REQUIREMENTS WITH OWNER.
3. FIELD VERIFY FINAL LOCATION OF ALL EQUIPMENT WITH PROVIDER PRIOR TO ROUGH-IN.
4. ALL RECEPTACLES IN BATHROOMS, GARAGES, EXTERIOR, CRAWL SPACES, UNFINISHED AND FINISHED BASEMENTS, LAUNDRY, AREAS DEFINED AS KITCHEN, DISHWASHERS, DRYER, RANGES WITHIN 6 FEET OF ANY SINK, AND WITHIN 6 FEET OF ANY SINK, BATHTUB, SHOWER, UTILITY AND WET-BAR SINKS, AND ALL OTHER REQUIRED LOCATIONS SHALL BE GFCI (OR SERVED BY A GR CIRCUIT BREAKER) PER NEC 210.8(B). THEE C. SHALL PROVIDE GFCI OUTLETS (OR CIRCUIT BREAKERS) IN ALL LOCATIONS REQUIRED BY THE NEC. PROVIDE GFCI TEST SWITCH (OR GFCI BREAKER) IN READILY ACCESSIBLE LOCATION PER NEC. ALL EXTERIOR RECEPTACLES SHALL BE WEATHER RESISTANT AND ENCLOSED IN A WEATHERPROOF EXTRA-DUTY ENCLOSURE WHILE IN USE IN ACCORDANCE WITH NEC 406.9(B).
5. FOR ANY EGRESS LIGHTING FIXTURES AND EXIT SIGNS NOT POWERED BY THE GENERATOR, CONNECT TO AREA LIGHTING CIRCUIT AHEAD OF ANY SWITCH PER NEC 700-12(F) INCLUDING ANY NIGHT LIGHTS. FIXTURES SHOWN SHADED OR LABELED ARE EMERGENCY EGRESS (EM) WITH BATTERY PACK, NIGHT LIGHT (NL) OR BOTH (EM/NL).
6. NUMBERS NEXT TO DEVICES REFER TO CIRCUIT DESIGNATION IN HOUSE PANEL, UNLESS NOTED.
7. ALL UNLABELED DOWNLIGHTS ARE FIXTURE TYPE "D".
8. ALL TELE/DATA LOCATIONS SHALL INCLUDE 4" SQUARE J-BOX AND 3/4" CONDUIT TO CEILING SPACE. ALL TELEPHONE/DATA CABLE IS TO BE PLENUM RATED WIRE OR SHALL BE INSTALLED IN CONDUIT ABOVE CEILING OR IN WALLS. FIELD VERIFY LOCATIONS OF ALL DATA JACKS WITH OWNER PRIOR TO ROUGH-IN. VERIFY ALL PHONE/DATA LOCATIONS W/ OWNER FOR ALL OFFICE AREAS.
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10. CIRCUIT FIRE SMOKE DAMPERS TO NEAREST NON-SWITCHED 120 V EM CIRCUIT.
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13. GFCI PROTECTION SHALL BE PROVIDED (NO MATTER IF HARD WIRED OR PLUG AND CORD) FOR THE BRANCH CIRCUIT SUPPLYING THE FOLLOWING APPLIANCES RATED 150 VOLTS OR LESS TO GROUND AND 60 AMPERES OR LESS, SINGLE OR 3-PHASE: DRINKING WATER COOLERS AND BOTTLE FILL STATIONS, HIGH-PRESSURE SPRAY WASHING MACHINES, VENDING MACHINES, SUMP PUMPS, DISHWASHERS, ELECTRIC RANGES, WALL-MOUNTED COOKING UNITS, CLOTHES DRYERS AND MICROWAVE OVENS.

KEYED NOTES

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2. IRRIGATION CONTROLLER - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.
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4. TRASH COMPACTOR - PROVIDE DEDICATED 30A/2P BRANCH CIRCUIT WITH 4#8,#10 GD, 1"C. FIELD VERIFY FINAL LOCATION, OUTLET TYPE AND CONFIGURATION AND REQUIREMENTS WITH PROVIDER PRIOR TO ROUGH-IN. PROVIDE A DEDICATED CIRCUIT AND ALL POWER AND CONTROL WIRING AS REQUIRED FOR TRASH CHUTE SYSTEM INCLUDING CONTROL PANELS AND DOORS. FIELD VERIFY REQUIRMENTS WITH PROVIDER AND PROVIDE ALL WORK NECESSARY FOR A COMPLETE INSTALLATION.
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No.	Date	Issue
1	10.03.23	City Comments

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: FREE
Checked By: CF
Title: ELECTRICAL FLOOR PLAN - ROOF LEVEL - AREA A
Sheet Number: E2-5.1

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10. CIRCUIT FIRE SMOKE DAMPERS TO NEAREST NON-SWITCHED 120 V EM CIRCUIT.
11. PROVIDE TAMPER-RESISTANT RECEPTACLES FOR ALL AREAS SPECIFIED IN NEC ARTICLE 406.12.
12. FOR EXTERIOR RECEPTACLES, PROVIDE WEATHER-PROOF LOCKABLE OUTLET COVERS. ⚠
13. GFCI PROTECTION SHALL BE PROVIDED (NO MATTER IF HARD WIRED OR PLUG AND CORD) FOR THE BRANCH CIRCUIT SUPPLYING THE FOLLOWING APPLIANCES RATED 150 VOLTS OR LESS TO GROUND AND 60 AMPERES OR LESS, SINGLE OR 3-PHASE: DRINKING WATER COOLERS AND BOTTLE FILL STATIONS, HIGH-PRESSURE SPRAY WASHING MACHINES, VENDING MACHINES, SUMP PUMPS, DISHWASHERS, ELECTRIC RANGES, WALL-MOUNTED COOKING UNITS, CLOTHES DRYERS AND MICROWAVE OVENS.

KEYED NOTES

1. WALLBOX VACANCY SENSOR.
2. IRRIGATION CONTROLLER - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.
3. CARD READER - CARD READER/ACCESS CONTROL DEVICE - PROVIDE J-BOX AND DATA RACEWAY MOUNTED NO MORE THAN 48" AFF. FIELD VERIFY REQUIREMENTS WITH TENANT/PROVIDE.
4. TRASH COMPACTOR - PROVIDE DEDICATED 30A/3P BRANCH CIRCUIT WITH 4#8,#10 GD, 1"C. FIELD VERIFY FINAL LOCATION, OUTLET TYPE AND CONFIGURATION AND REQUIREMENTS WITH PROVIDER PRIOR TO ROUGH-IN. PROVIDE A DEDICATED CIRCUIT AND ALL POWER AND CONTROL WIRING AS REQUIRED FOR TRASH CHUTE SYSTEM INCLUDING CONTROL PANELS AND DOORS. FIELD VERIFY REQUIREMENTS WITH PROVIDER AND PROVIDE ALL WORK NECESSARY FOR A COMPLETE INSTALLATION.
5. MOTORIZED ROLL UP DOOR. E.C. TO VERIFY ELECTRICAL REQUIREMENTS WITH PROVIDER PRIOR TO ROUGH IN.
6. ELECTRIC VEHICLE READY SPACE - PROVIDE 100A 208/120V OUTLET WITH 3#1,#6 G, 1-1/2"C FOR ELECTRIC CAR CHARGER FIELD VERIFY ELECTRICAL REQUIREMENTS AND OUTLET TYPE. CHARGING STATIONS MUST BE ON AN ACCESSIBLE ROUTE FROM CORRIDORS / ELEVATOR LOBBIES. CHARGING STATIONS MUST HAVE MINIMUM 5' WIDTH ACCESS AISLE ON ONE SIDE OF PARKING SPACE AND MINIMUM 9' WIDTH ACCESS AISLE ON OTHER SIDE OF PARKING SPACE WITH CHARGING STATION AT HEAD OF EITHER ACCESS AISLE.
7. PRICE AS ADD ALTERNATE #1. REF. MECHANICAL DRAWINGS.
8. EMERGENCY LIGHTING INVERTER PROVIDE LIGHTING INVERTER SIZED FOR A MINIMUM 900 WATTS.
9. EXTERIOR LIGHTING CONTROLS - PROVIDE PHOTOCELL ON/TIMECLOCK OFF CONTROLS AND MULTIPOLE LIGHTING CONTACTOR. PHOTOCELL ON ROOF AND PROGRAMMABLE TIME CLOCK AS REQUIRED. FIELD VERIFY REQUIREMENTS WITH OWNER.
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13. PROVIDE POWER AND CONTROLS FOR SIGNAGE. FIELD VERIFY LOCATION AND REQUIREMENTS WITH OWNER PRIOR TO INSTALLATION.
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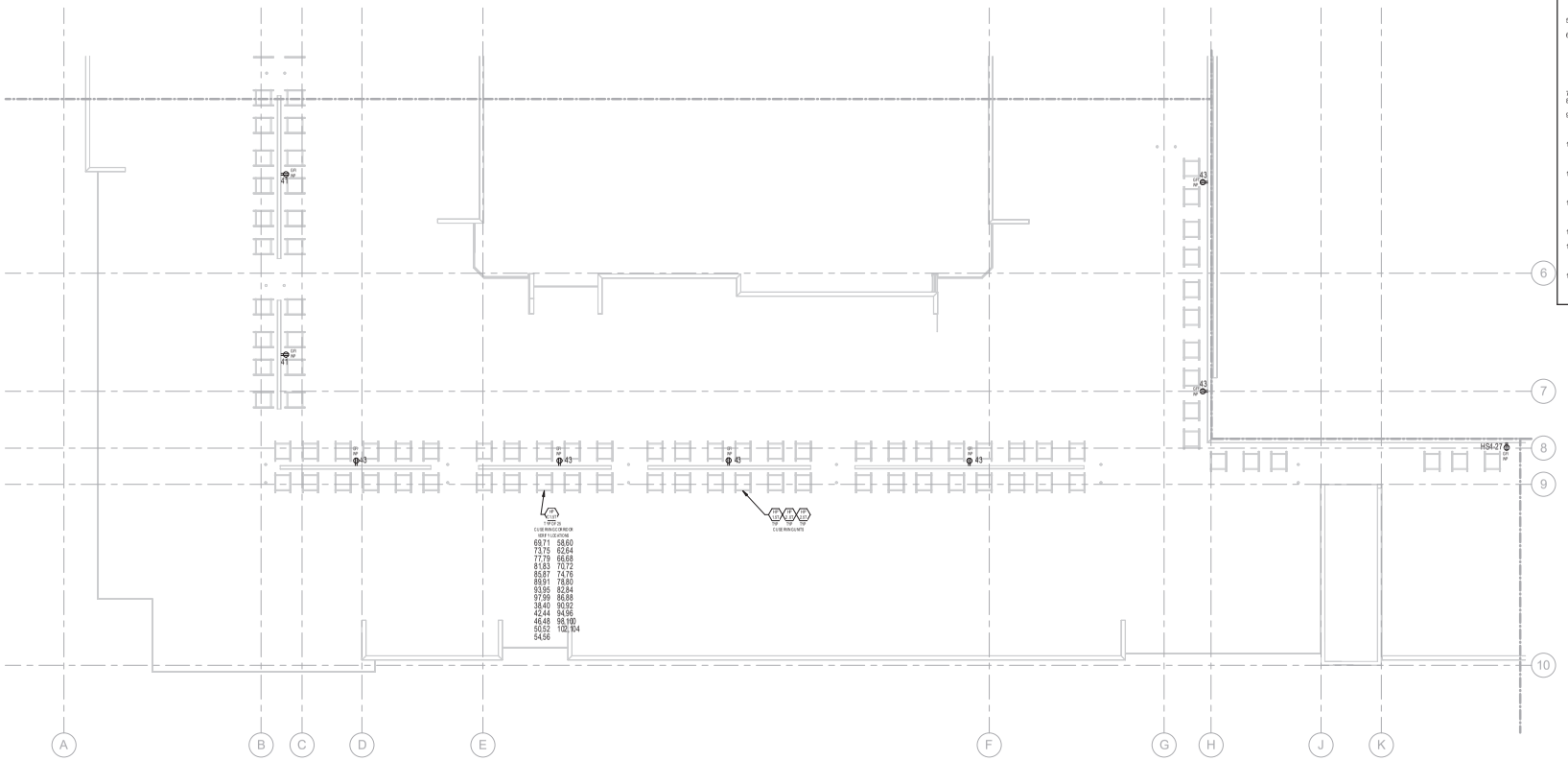

1 ELECTRICAL PLAN - ROOF LEVEL - AREA B
1/8" = 1'-0"

NUMBERS NEXT TO DEVICES REFER TO CIRCUIT DESIGNATIONS IN PANEL HN4 UNLESS NOTED OTHERWISE.

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No.	Date	Issue
1	10.03.23	City Comments

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: FREE
Checked By: CF
Title: ELECTRICAL FLOOR PLAN - ROOF LEVEL - AREA B
Sheet Number: E2-5.2

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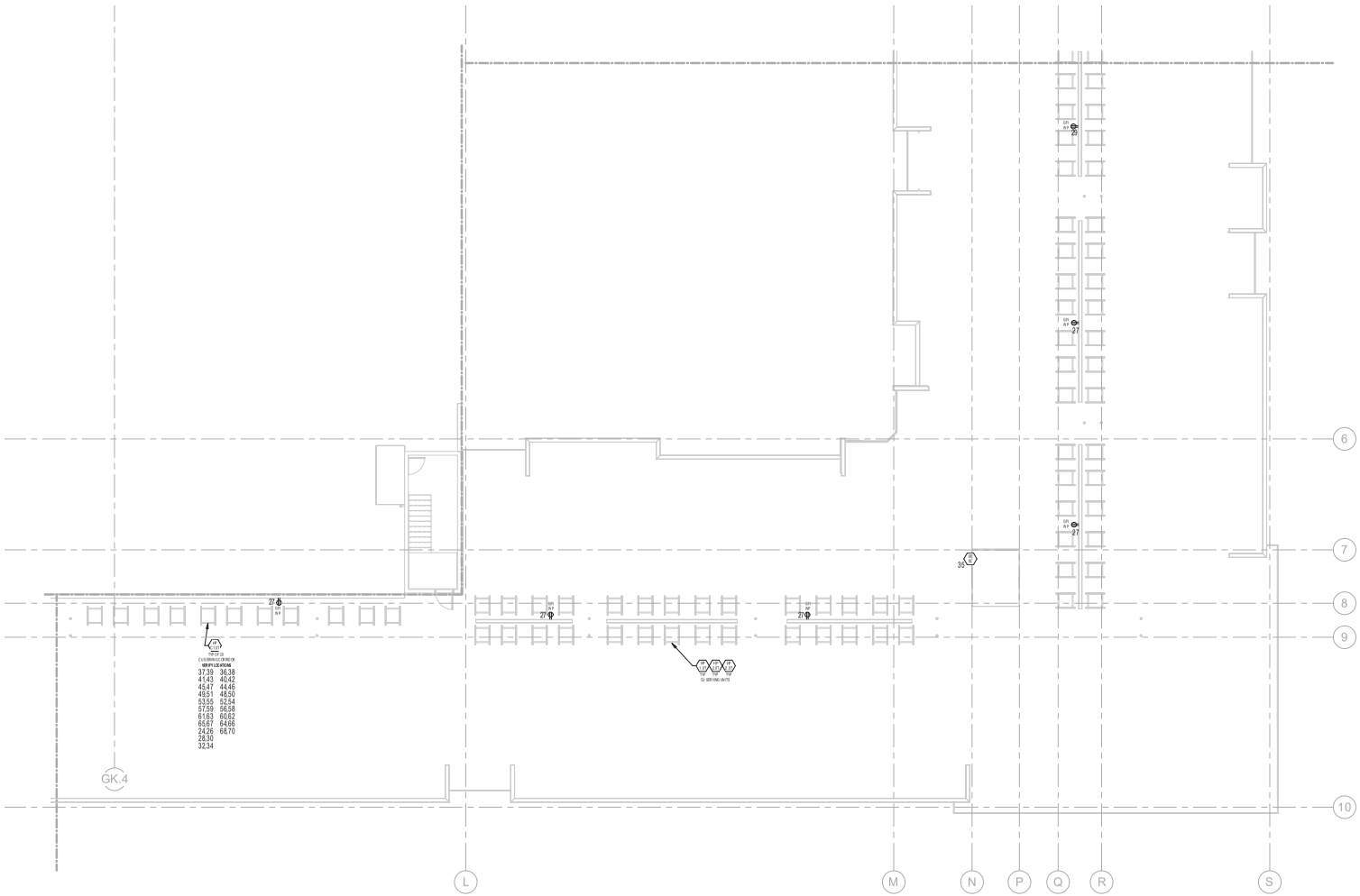

1 ELECTRICAL PLAN - ROOF LEVEL - AREA C
1/8" = 1'-0"

N TRUE N PROJECT

NUMBERS NEXT TO DEVICES REFER TO CIRCUIT DESIGNATIONS IN PANEL HS4 UNLESS NOTED OTHERWISE.

GENERAL NOTES

1. PROVIDE OUTLET WITHIN 2'0" OF EQUIPMENT IN ACCORDANCE WITH NEC 210.63.PROVIDE WEATHERPROOF GFI OUTLET ON ROOFTOPS WITHIN 2'0" OF ROOFTOP EQUIPMENT.
2. PROVIDE A CO DETECTOR AND ALARM WITHIN 15 FEET OF EVERY SLEEPING ROOM WHEREVER FOSSIL FUELS ARE USED IN ACCORDANCE WITH STATE LAW AND LOCAL CODES. FIELD VERIFY REQUIREMENTS WITH OWNER.
3. FIELD VERIFY FINAL LOCATION OF ALL EQUIPMENT WITH PROVIDER PRIOR TO ROUGH-IN.
4. ALL RECEPTACLES IN BATHROOMS, GARAGES, EXTERIOR, CRAWL SPACES, UNFINISHED AND FINISHED BASEMENTS, LAUNDRY, AREAS DEFINED AS KITCHEN, DISHWASHERS, DRYER, RANGES WITHIN 6 FEET OF ANY SINK, AND WITHIN 6 FEET OF ANY SINK, BATHTUB, SHOWER, UTILITY AND WET-BAR SINKS, AND ALL OTHER REQUIRED LOCATIONS SHALL BE GFCI (OR SERVED BY A GR CIRCUIT BREAKER) PER NEC 210.8(B). THEE C. SHALL PROVIDE GFCI OUTLETS (OR CIRCUIT BREAKERS) IN ALL LOCATIONS REQUIRED BY THE NEC. PROVIDE GRCI TEST SWITCH (OR GFCI BREAKER) IN READILY ACCESSIBLE LOCATION PER NEC. ALL EXTERIOR RECEPTACLES SHALL BE WEATHER RESISTANT AND ENCLOSED IN A WEATHERPROOF EXTRA DUTY ENCLOSURE WHILE IN USE IN ACCORDANCE WITH NEC 406.9(B).
5. FOR ANY EGRESS LIGHTING FIXTURES AND EXIT SIGNS NOT POWERED BY THE GENERATOR, CONNECT TO AREA LIGHTING CIRCUIT AHEAD OF ANY SWITCH PER NEC 700-12(F) INCLUDING ANY NIGHT LIGHTS. FIXTURES SHOWN SHADED OR LABELED ARE EMERGENCY EGRESS (EM) WITH BATTERY PACK, NIGHT LIGHT (NL) OR BOTH (EMNL).
6. NUMBERS NEXT TO DEVICES REFER TO CIRCUIT DESIGNATION IN HOUSE PANEL, UNLESS NOTED.
7. ALL UNLABELED DOWNLIGHTS ARE FIXTURE TYPE "D".
8. ALL TEL/DATA LOCATIONS SHALL INCLUDE 4" SQUARE J-BOX AND 3/4" CONDUIT TO CEILING SPACE. ALL TELEPHONE/DATA CABLE IS TO BE PLENUM RATED WIRE OR SHALL BE INSTALLED IN CONDUIT ABOVE CEILING OR IN WALLS. FIELD VERIFY LOCATIONS OF ALL DATA JACKS WITH OWNER PRIOR TO ROUGH-IN. VERIFY ALL PHONE/DATA LOCATIONS W/ OWNER FOR ALL OFFICE AREAS.
9. PROVIDE ADDITIONAL THREE (3) POWER & CATV OUTLETS (IN ADDITION TO THOSE SHOWN ON PLANS) NEAR CEILING FOR WALL-MOUNTED TV'S, LOCATIONS TO BE DETERMINED. FIELD VERIFY W/ ARCHITECT.
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11. PROVIDE TAMPER-RESISTANT RECEPTACLES FOR ALL AREAS SPECIFIED IN NEC ARTICLE 406.12.
12. FOR EXTERIOR RECEPTACLES, PROVIDE WEATHER-PROOF LOCKABLE OUTLET COVERS. ⚠
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7. PRICE AS ADD ALTERNATE #1. REFER TO MECHANICAL DRAWINGS.
8. EMERGENCY LIGHTING INVERTER PROVIDE LIGHTING INVERTER SIZED FOR A MINIMUM 600 WATTS.
9. EXTERIOR LIGHTING CONTROLS - PROVIDE PHOTOCELL ON/TIMECLOCK OFF CONTROLS AND MULTIPOLE LIGHTING CONTACTOR. PHOTOCELL ON ROOF AND PROGRAMMABLE TIME CLOCK AS REQUIRED. FIELD VERIFY REQUIREMENTS WITH OWNER.
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No.	Date	Issue
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Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: FREE
Checked By: CF

Title: ELECTRICAL FLOOR PLAN - ROOF LEVEL - AREA C

Sheet Number: **E2-5.3**

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1 ELECTRICAL PLAN - ROOF LEVEL - AREA D
1/8" = 1'-0"

N TRUE N PROJECT

NUMBERS NEXT TO DEVICES REFER TO CIRCUIT DESIGNATIONS IN PANEL HS4 UNLESS NOTED OTHERWISE.

GENERAL NOTES

1. PROVIDE OUTLET WITHIN 25' OF EQUIPMENT IN ACCORDANCE WITH NEC 210.63. PROVIDE WEATHERPROOF GFI OUTLET ON ROOFTOPS WITHIN 25' OF ROOFTOP EQUIPMENT.
2. PROVIDE A CO DETECTOR AND ALARM WITHIN 15 FEET OF EVERY SLEEPING ROOM WHEREVER FOSSIL FUELS ARE USED IN ACCORDANCE WITH STATE LAW AND LOCAL CODES. FIELD VERIFY REQUIREMENTS WITH OWNER.
3. FIELD VERIFY FINAL LOCATION OF ALL EQUIPMENT WITH PROVIDER PRIOR TO ROUGH-IN.
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No.	Date	Issue
1	10.03.23	City Comments

Project Architect: DV
Project Designer: DR
Date:
Job Number: 222001
Drawn By: FREE
Checked By: CF
Title: ELECTRICAL FLOOR PLAN - ROOF LEVEL - AREA D
Sheet Number: E2-5.4

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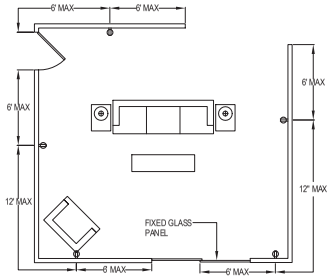
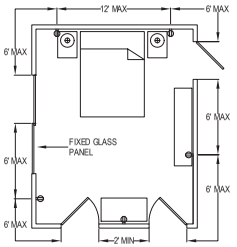


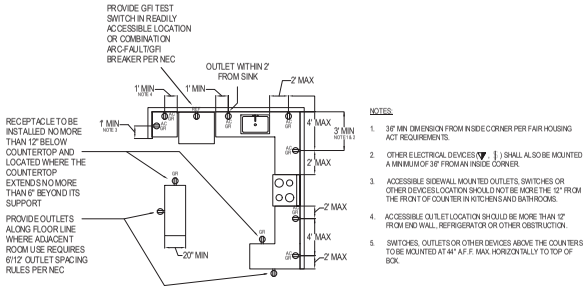
5 SAMPLE LIVING ROOM NEC SPACING RULES

SCALE: NTS



4 SAMPLE BEDROOM NEC SPACING RULES

SCALE: NTS

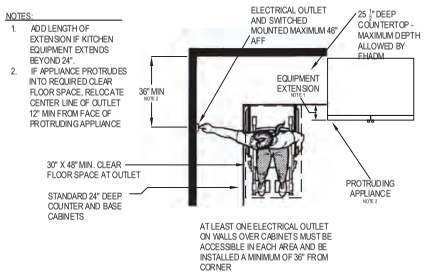


3 DWELLING UNIT RECEPTACLES SERVING COUNTERTOP SPACES

SCALE: NTS

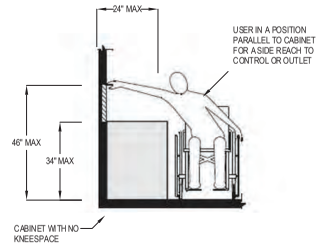
ACCESSIBILITY DETAILS

1. TOP OF SWITCHES IN ON-POSITION NOT TO EXCEED 48" AFF, AND IF OVER COUNTERTOP, NOT TO EXCEED 44" AFF.
2. BOTTOM OF OUTLETS MUST BE MINIMUM 15" AFF. WHERE WEATHERPROOF OUTLETS ARE PROVIDED, ENSURE THE WEATHERPROOF COVER IS OPERABLE WITHIN THE REQUIRED REACH RANGE OF 15" TO 48" AFF. CENTERLINE OF TOP OUTLET OF DUPLEX OVER COUNTERTOPS NOT TO EXCEED MAX. 46" AFF.
3. WALL MOUNTED FIXTURES PROJECTING MORE THAN 4" FROM WALL MUST HAVE MINIMUM 80" VERTICAL CLEARANCE.
4. THERMOSTATS TO BE MOUNTED NO MORE THAN 48" TO TOP OF CONTROL.
5. SIDE WALL MOUNTED BATHROOM OUTLETS ABOVE COUNTERTOPS TO BE CENTERED MINIMUM OF 18" FROM INSIDE CORNER.
6. PANEL WITH BREAKERS, AFI OR GFI TEST SWITCHES REQUIRED TO BE ACCESSIBLE SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS.
7. THE TOP ROW OF CIRCUIT BREAKERS SHALL BE NO HIGHER THAN 48" AFF IN ALL ELECTRICAL PANELS IN TYPE 'A' AND TYPE 'B' UNITS.



2 FHA CHAPTER 5 CLEARANCE REQUIREMENTS

SCALE: NTS



1 ANSI 308.3.2 CLEARANCE REQUIREMENTS

SCALE: NTS

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No.	Date	Issue

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Project Designer: DR
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Sheet Number: E3-0.0

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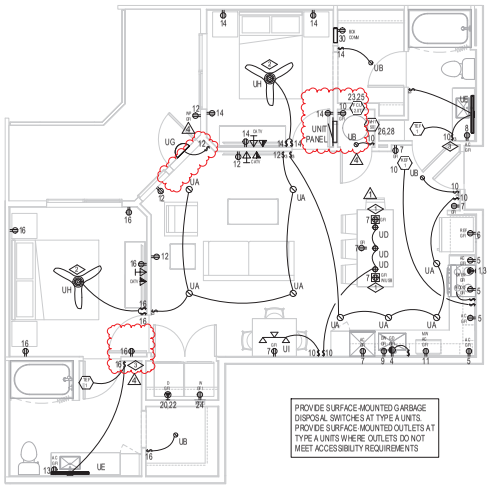
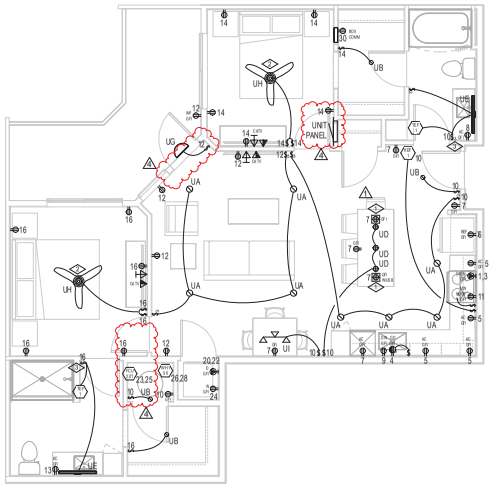
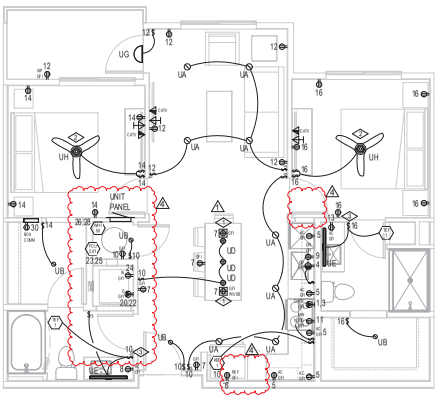


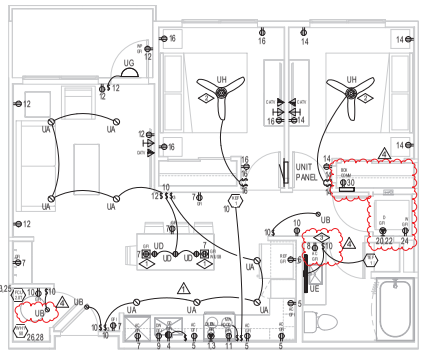
6 UNIT B3a - ELECTRICAL
1/4" = 1'-0"



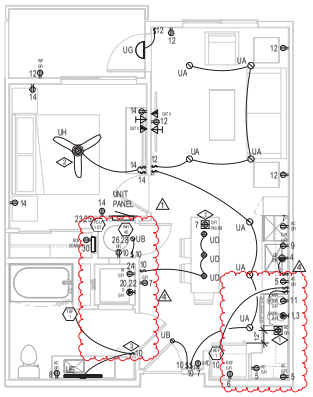
5 UNIT B3 - ELECTRICAL
1/4" = 1'-0"



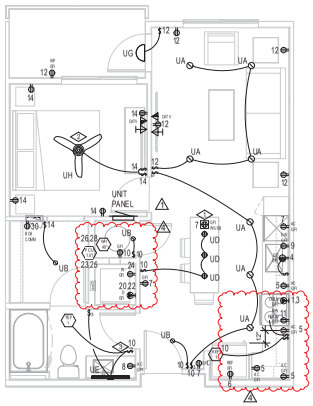
4 UNIT B2 - ELECTRICAL
1/4" = 1'-0"



3 UNIT B1 - ELECTRICAL
1/4" = 1'-0"



2 UNIT A1a - ELECTRICAL
1/4" = 1'-0"



1 UNIT A1 - ELECTRICAL
1/4" = 1'-0"

GENERAL NOTES

1. THE ELECTRICAL CONTRACTOR SHALL PROVIDE OUTLETS, LIGHTING AND BRANCH CIRCUITS AS REQUIRED IN ACCORDANCE WITH NEC ARTICLE 210. DEVICES QUANTITIES AND LOCATIONS SHALL BE APPROVED BY LOCAL ELECTRICAL INSPECTOR.
   1.a. RECEPTACLES SHALL BE PROVIDED FOR WALL SPACES IN EXCESS OF 24" WIDE AND NO POINT OF WALL SPACE SHALL BE FURTHER THAN 6' FROM A RECEPTACLE PER NEC 2 10-52.
   1.b. WALL COUNTERTOP RECEPTACLES SHALL BE PROVIDED FOR WALLS 12" OR WIDER AND NO POINT OF WALL SPACE SHALL BE FURTHER THAN 24' FROM A RECEPTACLE PER NEC 210-52. FIELD VERIFY OUTLET HEIGHTS AND LOCATIONS WITH OWNER TO COMPLY WITH NEC REQUIREMENTS AND ALSO TO ACCOMMODATE SURFACE FINISHES SUCH AS TILE, TRIM AND BACKSPLASHES WHERE POSSIBLE. RECEPTACLE OUTLETS, IF INSTALLED TO SERVE AN ISLAND OR PENINSULA COUNTERTOP OR WORK SURFACE, SHALL BE INSTALLED IN ACCORDANCE WITH 210.52(C)(3). IF A RECEPTACLE IS NOT PROVIDED TO SERVE AN ISLAND OR PENINSULAR COUNTERTOP OR WORK SURFACE PROVISIONS SHALL BE PROVIDED AT THE ISLAND OR PENINSULA FOR FUTURE ADDITION OF A RECEPTACLE OUTLET TO SERVE THE ISLAND OR PENINSULAR COUNTERTOP OR WORK SURFACE.
   1.b.a ISLAND/PENINSULA OUTLET LOCATIONS. RECEPTACLE OUTLETS SHALL BE LOCATED IN ONE OR MORE OF THE FOLLOWING.
   1.b.a.i. ON OR ABOVE, BUT NOT MORE THAN 20" ABOVE, A COUNTERTOP OR WORK SURFACE.
   1.b.a.ii. IN A COUNTERTOP USING RECEPTACLE OUTLET ASSEMBLIES LISTED FOR USE IN COUNTERTOPS.
   1.b.a.iii. IN A WORK SURFACE USING RECEPTACLE OUTLET ASSEMBLIES LISTED FOR USE IN WORK SURFACES OR LISTED FOR USE IN COUNTERTOPS.
   1.c. ACCESSIBILITY - ELECTRICAL DEVICES SHALL BE LOCATED SUCH THAT THEY ARE ACCESSIBLE IN ACCORDANCE WITH ANSI REQUIREMENTS. LOCATE OUTLETS, SWITCHES AND DEVICES BETWEEN 15" AND 48" (TOP OF TOGGLE) FOR UNOBSTRUCTED FORWARD AND SIDE REACH AREAS. FOR OBSTRUCTED AREAS THE FORWARD REACH SHALL NOT EXCEED 25" AND WHERE OVER 20" THE HEIGHT SHALL BE LIMITED TO 44" PER ANSI 308.2. FOR OBSTRUCTED AREAS THE SIDE REACH SHALL NOT EXCEED 24" AND WHERE OVER 10" THE HEIGHT SHALL BE LIMITED TO 46" PER ANSI 308.3 AT LEAST ONE OUTLET SHALL BE INSTALLED A MINIMUM OF 36" FROM THE CORNER OF A KITCHEN WORK SURFACE OR AS REQUIRED TO MEET THE OBSTRUCTED SIDE REACH REQUIREMENT.
2. KITCHEN OVEN RANGE AND ANY ELECTRIC DRYER SHALL BE SUPPLIED BY A 4-WIRE RECEPTACLE AND CONNECTED TO THE BRANCH CIRCUIT EQUIPMENT GROUND CONDUCTOR PER NEC ARTICLE 250.140.
   2.a. OVEN BRANCH CIRCUIT SHALL BE MINIMUM 3#6,#10G,1"C FOR 50A (OR 3#8,#10G, 1"C FOR 40A) COPPER.
   2.b. DRYER BRANCH CIRCUIT SHALL BE MINIMUM 3#10,#10G,3/4"C COPPER.
   2.c. THE KITCHEN OVEN RANGE SHALL BE GFCI PROTECTED WHEN LOCATED WITHIN 6' OF FROM THE EDGE OF A SINK PER NEC ARTICLE 210.8(A).
   2.d. THE DRYER SHALL BE GFCI PROTECTED PER NEC ARTICLE 210.8(A)
3. THE DISHWASHER RECEPTACLE SHALL BE GFCI PROTECTED AND LOCATED IN THE SPACE ADJACENT TO THE SPACE OCCUPIED BY THE DISHWASHER AND IN ACCORDANCE WITH NEC 422.16(B)(2)
4. FIELD VERIFY FINAL LOCATION AND REQUIREMENTS OF HVAC EQUIPMENT WITH PROVIDER.
5. ALL 125-VOLT 15- AND 20-AMPERE RECEPTACLES SHALL BE USTED TAMPER-RESISTANT RECEPTACLES IN ACCORDANCE WITH NEC 406.12.
6. ALL BRANCH CIRCUITS (INCLUDING OUTLET, LIGHTING AND SMOKE DETECTORS) SHALL BE PROTECTED BY A USTED ARC-FAULT CIRCUIT INTERRUPTER, COMBINATION TYPE PER NEC 210 -12.
7. ALL RECEPTACLES IN BATHROOMS, GARAGES, EXTERIOR, CRAWL SPACES, UNFINISHED AND FINISHED BASEMENTS, LAUNDRY, AREAS DEFINED AS KITCHEN, DISHWASHERS, BARS, RANGES WITHIN 6 FEET OF ANY SINK, AND WITHIN 6 FEET OF ANY SINK, BATH TUB, SHOWER, UTILITY AND WET-BAR SINKS AND ALL OTHER REQUIRED LOCATIONS SHALL BE GFCI (OR SERVED BY A GFI CIRCUIT BREAKER (PER NEC 210.8(B). THE E.C. SHALL PROVIDE GFCI OUTLETS (OR CIRCUIT BREAKERS) IN ALL LOCATIONS REQUIRED BY THE NEC. PROVIDE GFCI TEST SWITCH (OR GFCI BREAKER) IN READILY ACCESSIBLE LOCATION PER NEC. ALL EXTERIOR RECEPTACLES SHALL BE WEATHER RESISTANT AND ENCLOSED IN A WEATHERPROOF EXTRA DUTY ENCLOSURE WHILE IN USE IN ACCORDANCE WITH NEC 406.9(B).
8. PROVIDE SEPARATE DEDICATED CIRCUITS FOR BATHROOM RECEPTACLE OUTLETS IN ACCORDANCE WITH NEC 210.11(C)(3).
9. ALL EXTERIOR RECEPTACLES SHALL BE WEATHER RESISTANT PER NEC 406.9 AND ENCLOSED IN A WEATHERPROOF ENCLOSURE WHILE IN USE.
10. FIELD VERIFY FINAL LOCATION OF PANELBOARDS WITH OWNER PRIOR TO INSTALLATION. LOCATE PANELBOARD SUCH THAT WORKING CLEARANCE IS MAINTAINED IN ACCORDANCE WITH NEC 110. FIELD VERIFY FINAL LOCATION AND COORDINATE WITH OTHER TRADES.
11. FIXTURES IN CLOTHES CLOSETS SHALL BE COMPLY WITH NEC 410.16 REGARDING DISTANCES FROM STORAGE AREAS AND TYPE OF FIXTURE. ALL LAMPS SHALL BE ENCLOSED. FIXTURES WITH EXPOSED LAMPS ARE NOT PERMITTED.
12. LIGHTING WITHIN DWELLING UNITS SHALL HAVE 75 PERCENT OR MORE OF THE PERMANENTLY INSTALLED INTERIOR LIGHT FIXTURES FITTED WITH HIGH-EFFICACY LAMPS.
13. COMMUNICATION SYSTEMS - PROVIDE COMPLETE COMMUNICATION SYSTEMS WIRING AND DEVICES AS REQUIRED FOR TELEPHONE, DATA, INTERNET, SATV, CATV SERVICES.
   13.a. FIELD VERIFY FINAL QUANTITY, LOCATION, AND REQUIREMENTS OF ALL TELEPHONE, DATA, INTERNET AND TV DEVICE JACKS AND OUTLETS WITH OWNER.
   13.b. COMMUNICATION BOX - FOR EACH UNIT IN THE WALK-IN CLOSET PROVIDE 12" x 14"x 4" FLUSH MOUNTED WALL BOX FOR ALL COMMUNICATION CABLES (TELEPHONE, DATA, INTERNET, SATV, CATV) AS REQUIRED TO ACCOMMODATE SEPARATE SERVICE FROM EACH PROVIDER. PROVIDE A PHONE TERMINAL BOX AND COAX SPLITTER TO ACCOMMODATE THE NUMBER OF PHONE/DATA AND TV DEVICES PLUS ONE SPARE FOR EACH. PROVIDE A DEDICATED CIRCUIT AND 4-PLEX OUTLET INSIDE BOX.
   13.c. IF COMPLETE COMMUNICATION SERVICES ARE NOT FULLY INSTALLED DURING CONSTRUCTION, PROVIDE RACEWAY OR COORDINATE WITH G.C. SUCH THAT SERVICE PROVIDER CABLES MAY BE INSTALLED AFTER CONSTRUCTION IS COMPLETE.
14. CEILING FAN BOXES - PROVIDE ADD. ALTERNATE TO INSTALL JUNCTION BOX RATED FOR STRUCTURAL SUPPORT AND USE WITH CEILING FAN IN BEDROOMS. PROVIDE WIRING FOR SEPARATE WALL BOX CONTROL OF FAN SPEED AND LIGHT KIT. FIELD VERIFY REQUIREMENTS WITH OWNER PRIOR TO ANY WORK.
15. PROVIDE SMOKE DETECTORS THROUGHOUT UNIT AS REQUIRED IN ACCORDANCE WITH ALL NATIONAL, STATE, AND LOCAL CODE REQUIREMENTS. INSTALL DETECTOR IN EACH ROOM THAT MAY BE USED FOR SLEEPING AND ALL HALLWAYS LEADING TO SLEEPING ROOM. PROVIDE ADDITIONAL DETECTORS ON NON-CONTINUOUS PLANE CEILINGS AS REQUIRED.
16. PROVIDE A CO DETECTOR AND ALARM WITHIN 15 FEET OF ALL ROOMS USED FOR SLEEPING PURPOSES AND INSTALL IN ACCORDANCE WITH STATE LAW AND LOCAL CODES.
17. VERIFY FAN COIL AND CONDENSING UNIT SIZE.
18. PROVIDE CONDUIT IN WALL FOR HIGH TV LOCATIONS.
19. IN BATHROOMS, SIDE WALL MOUNTED RECEPTACLES MUST BE CENTERED A MINIMUM OF 1'-9" FROM THE INSIDE GB CORNER AT CONTINUOUS SIDE WALL CONDITIONS. WHERE SIDE WALL RECEPTACLE IS THE ONLY RECEPTACLE IN THE BATHROOM. BACK WALL MOUNTED RECEPTACLES MUST BE CENTERED A MINIMUM OF 1'-2" FROM INSIDE GB CORNER AT ADJACENT CONTINUOUS WALL CONDITIONS. WHERE BACK WALL RECEPTACLE IS THE ONLY RECEPTACLE IN THE BATHROOM.
20. PROVIDE 2018 IECC COMPLIANT EXHAUST FAN IN BATHROOMS AND SWITCHING THAT ALLOWS CONTINUOUS VENTILATION AND INCREASED FAN SPEED. IF POSSIBLE, PROVIDE SWITCH TO CONTROL BOTH THE EXHAUST FAN AND SHOWER LIGHT AND CREDIT ANY SAVINGS TO THE OWNER.
21. ALL LIGHT SWITCH CONTROLS TO BE ROCKER-TYPE, NO TOGGLE-TYPE SWITCHES ARE ALLOWED.

KEYED NOTES

1. MOUNT OUTLET IN COUNTERTOP USING RECEPTACLE OUTLET ASSEMBLIES LISTED FOR USE IN COUNTERTOPS.
2. CEILING FAN BOX - PROVIDE JUNCTION BOX RATED FOR STRUCTURAL SUPPORT AND USE WITH CEILING FAN. PROVIDE WIRING FOR SEPARATE WALL BOX CONTROL OF FAN SPEED AND LIGHT KIT. FIELD VERIFY REQUIREMENTS WITH OWNER PRIOR TO ANY WORK.
3. SMART SWITCH - PROVIDE SWITCH WITH THE CAPABILITY TO CONTROL THE LIGHT AND FAN INDEPENDENTLY.

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No.	Date	Issue
3	10.03.23	City Comments
4	08.07.24	DRC Set

Project Architect: DV
Project Engineer: DR
Title:
Job Number: 222001
Drawn By: FREE
Checked By: CF
Title: ELECTRICAL UNIT PLAN ENLARGEMENTS
Sheet Number: E3-0.1

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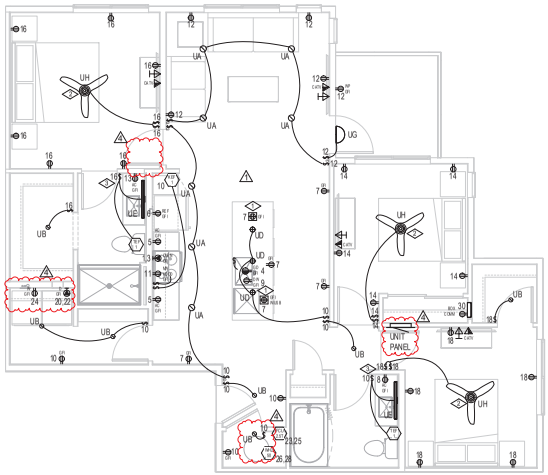
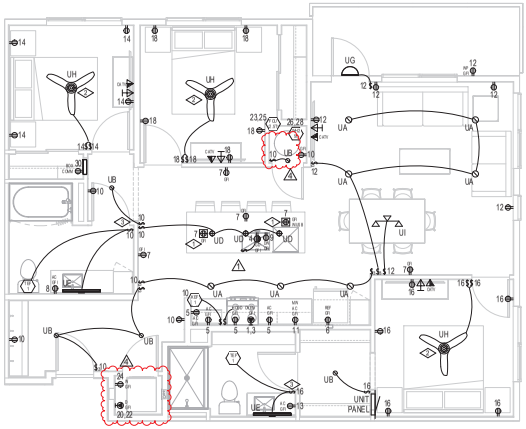
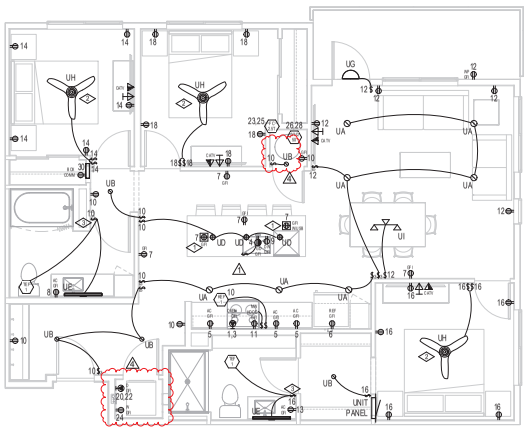


4 UNIT C3 - ELECTRICAL
1/4" = 1'-0"

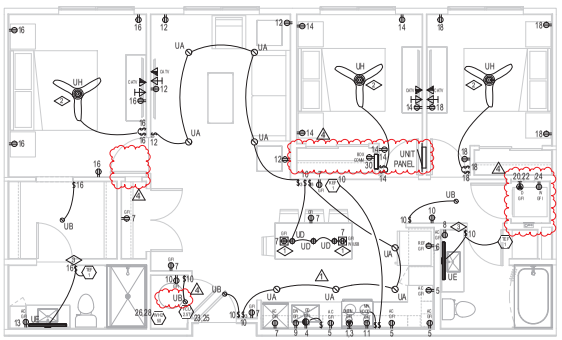
PROVIDE SURFACE-MOUNTED GARBAGE DISPOSAL SWITCHES AT TYPE A UNITS. PROVIDE SURFACE-MOUNTED OUTLETS AT TYPE A UNITS WHERE OUTLETS DO NOT MEET ACCESSIBILITY REQUIREMENTS



3 UNIT C2a - ELECTRICAL
1/4" = 1'-0"



2 UNIT C2 - ELECTRICAL
1/4" = 1'-0"



1 UNIT C1 - ELECTRICAL
1/4" = 1'-0"

GENERAL NOTES

1. THE ELECTRICAL CONTRACTOR SHALL PROVIDE OUTLETS, LIGHTING AND BRANCH CIRCUITS AS REQUIRED IN ACCORDANCE WITH NEC ARTICLE 210. DEVICES QUANTITIES AND LOCATIONS SHALL BE APPROVED BY LOCAL ELECTRICAL INSPECTOR.
   1.a. RECEPTACLES SHALL BE PROVIDED FOR WALL SPACES IN EXCESS OF 24" WIDE AND NO POINT OF WALL SPACE SHALL BE FURTHER THAN 6' FROM A RECEPTACLE PER NEC 2 10-52.
   1.b. WALL COUNTERTOP RECEPTACLES SHALL BE PROVIDED FOR WALLS 12" OR WIDER AND NO POINT OF WALL SPACE SHALL BE FURTHER THAN 24" FROM A RECEPTACLE PER NEC 210-52. FIELD VERIFY OUTLET HEIGHTS AND LOCATIONS WITH OWNER TO COMPLY WITH NEC REQUIREMENTS AND ALSO TO ACCOMMODATE SURFACE FINISHES SUCH AS TILE, TRIM AND BACKSPLASHES WHERE POSSIBLE. RECEPTACLE OUTLETS, IF INSTALLED TO SERVE AN ISLAND OR PENINSULA COUNTERTOP OR WORK SURFACE, SHALL BE INSTALLED IN ACCORDANCE WITH 210.52(C)(3). IF A RECEPTACLE IS NOT PROVIDED TO SERVE AN ISLAND OR PENINSULAR COUNTERTOP OR WORK SURFACE PROVISIONS SHALL BE PROVIDED AT THE ISLAND OR PENINSULA FOR FUTURE ADDITION OF A RECEPTACLE OUTLET TO SERVE THE ISLAND OR PENINSULAR COUNTERTOP OR WORK SURFACE.
   1.b.a ISLAND/PENINSULA OUTLET LOCATIONS. RECEPTACLE OUTLETS SHALL BE LOCATED IN ONE OR MORE OF THE FOLLOWING.
   1.b.a.i. ON OR ABOVE, BUT NOT MORE THAN 20" ABOVE, A COUNTERTOP OR WORK SURFACE
   1.b.a.ii. IN A COUNTERTOP USING RECEPTACLE OUTLET ASSEMBLIES LISTED FOR USE IN COUNTERTOPS.
   1.b.a.c. IN A WORK SURFACE USING RECEPTACLE OUTLET ASSEMBLIES LISTED FOR USE IN WORK SURFACES OR LISTED FOR USE IN COUNTERTOPS.
   1.c. ACCESSIBILITY - ELECTRICAL DEVICES SHALL BE LOCATED SUCH THAT THEY ARE ACCESSIBLE IN ACCORDANCE WITH ANSI REQUIREMENTS. LOCATE OUTLETS, SWITCHES AND DEVICES BETWEEN 15" AND 48" (TOP OF TOGGLE) FOR UNOBSTRUCTED FORWARD AND SIDE REACH AREAS. FOR OBSTRUCTED ARE AS THE FORWARD REACH SHALL NOT EXCEED 25" AND WHERE OVER 20" THE HEIGHT SHALL BE LIMITED TO 44" PER IRANSI 308.2. FOR OBSTRUCTED AREAS THE SIDE REACH SHALL NOT EXCEED 24" AND WHERE OVER 10" THE HEIGHT SHALL BE LIMITED TO 46" PER IRANSI 308.3. AT LEAST ONE OUTLET SHALL BE INSTALLED A MINIMUM OF 36" FROM THE CORNER OF A KITCHEN WORK SURFACE OR AS REQUIRED TO MEET THE OBSTRUCTED SIDE REACH REQUIREMENT.
2. KITCHEN OVEN RANGE AND ANY ELECTRIC DRYER SHALL BE SUPPLIED BY 4-WIRE RECEPTACLE AND CONNECTED TO THE BRANCH CIRCUIT EQUIPMENT GROUND CONDUCTOR PER NEC ARTICLE 250.140. ⚠
   2.a. OVEN BRANCH CIRCUIT SHALL BE MINIMUM 3#6,#10GX1"C FOR 50A (OR 3#8#10G, 1"C FOR 40A) COPPER.
   2.b. DRYER BRANCH CIRCUIT SHALL BE MINIMUM 3#10,#10G,3/4"C COPPER.
   2.c. THE KITCHEN OVEN RANGE SHALL BE GFCI PROTECTED WHEN LOCATED WITHIN 6' OF FROM THE EDGE OF A SINK PER NEC ARTICLE 210.8(A).
   2.d. THE DRYER SHALL BE GFCI PROTECTED PER NEC ARTICLE 210.8(A)
3. THE DISHWASHER RECEPTACLE SHALL BE GFCI PROTECTED AND LOCATED IN THE SPACE ADJACENT TO THE SPACE OCCUPIED BY THE DISHWASHER AND IN ACCORDANCE WITH NEC 422.16(B)(2)
4. FIELD VERIFY FINAL LOCATION AND REQUIREMENTS OF HVAC EQUIPMENT WITH PROVIDER.
5. ALL 125-VOLT 15- AND 20-AMPERE RECEPTACLES SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES IN ACCORDANCE WITH NEC 406.12.
6. ALL BRANCH CIRCUITS (INCLUDING OUTLET, LIGHTING AND SMOKE DETECTORS) SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER, COMBINATION TYPE PER NEC 210 -12.
7. ALL RECEPTACLES IN BATHROOMS, GARAGES, EXTERIOR, CRAWL SPACES, UNFINISHED AND FINISHED BASEMENTS, LAUNDRY, AREAS DERIVED IN KITCHEN, DISHWASHERS, DRYER, RANGES WITHIN 6 FEET OF ANY SINK, AND WITHIN 6 FEET OF ANY SINK, BATH TUB, SHOWER, UTILITY AND WET-BAR SINKS, AND ALL OTHER REQUIRED LOCATIONS SHALL BE GFCI (OR SERVED BY A GFI CIRCUIT BREAKER) PER NEC 210.8(B). THE E.C. SHALL PROVIDE GFCI OUTLETS (OR CIRCUIT BREAKERS) IN ALL LOCATIONS REQUIRED BY THE NEC. PROVIDE GFCI TEST SWITCH (OR GFCI BREAKER) IN READILY ACCESSIBLE LOCATION PER NEC. ALL EXTERIOR RECEPTACLES SHALL BE WEATHER RESISTANT AND ENCLOSED IN A WEATHERPROOF EXTRA DUTY ENCLOSURE WHILE IN USE IN ACCORDANCE WITH NEC 406.9(B).
8. PROVIDE SEPARATE DEDICATED CIRCUITS FOR BATHROOM RECEPTACLE OUTLETS IN ACCORDANCE WITH NEC 210.11(C)(3).
9. ALL EXTERIOR RECEPTACLES SHALL BE WEATHER RESISTANT PER NEC 406.9 AND ENCLOSED IN A WEATHERPROOF ENCLOSURE WHILE IN USE
10. FIELD VERIFY FINAL LOCATION OF PANELBOARDS WITH OWNER PRIOR TO ROUGH-IN. LOCATE PANELBOARD SUCH THAT WORKING CLEARANCE IS MAINTAINED IN ACCORDANCE WITH NEC 110. FIELD VERIFY FINAL LOCATION AND COORDINATE WITH OTHER TRADES.
11. FIXTURES IN CLOTHES CLOSETS SHALL BE COMPLY WITH NEC 410.16 REGARDING DISTANCES FROM STORAGE AREAS AND TYPE OF FIXTURE. ALL LAMPS SHALL BE ENCLOSED FIXTURES WITH EXPOSED LAMPS ARE NOT PERMITTED.
12. LIGHTING WITHIN DWELLING UNITS SHALL HAVE 75 PERCENT OR MORE OF THE PERMANENTLY INSTALLED INTERIOR LIGHT FIXTURES FITTED WITH HIGH-EFFICACY LAMPS.
13. COMMUNICATION SYSTEMS - PROVIDE COMPLETE COMMUNICATION SYSTEMS WIRING AND DEVICES AS REQUIRED FOR TELEPHONE, DATA, INTERNET, SATV, CATV SERVICES.
   13.a. FIELD VERIFY FINAL QUANTITY, LOCATION, AND REQUIREMENTS OF ALL TELEPHONE, DATA, INTERNET AND TV DEVICE JACKS AND OUTLETS WITH OWNER.
   13.b. COMMUNICATION BOX - FOR EACH UNIT IN THE WALK-IN CLOSET PROVIDE 12" x 14"x 4" FLUSH MOUNTED WALL BOX FOR ALL COMMUNICATION CABLES (TELEPHONE, DATA, INTERNET, SATV, CATV) AS REQUIRED TO ACCOMMODATE SEPARATE SERVICE FROM EACH PROVIDER. PROVIDE A PHONE TERMINAL BOX AND COAX SPLITTER TO ACCOMMODATE THE NUMBER OF PHONE/DATA AND TV DEVICES PLUS ONE SPARE FOR EACH. PROVIDE A DEDICATED CIRCUIT AND 4-PLEX OUTLET INSIDE BOX.
   13.c. IF COMPLETE COMMUNICATION SERVICES ARE NOT FULLY INSTALLED DURING CONSTRUCTION, PROVIDE RACEWAY OR COORDINATE WITH G.C. SUCH THAT SERVICE PROVIDER CABLES MAY BE INSTALLED AFTER CONSTRUCTION IS COMPLETE.
14. CEILING FAN BOXES - PROVIDE ADD ALTERNATE TO INSTALL JUNCTION BOX RATED FOR STRUCTURAL SUPPORT AND USE WITH CEILING FAN IN BEDROOMS. PROVIDE WIRING FOR SEPARATE WALL BOX CONTROL OF FAN SPEED AND LIGHT KIT. FIELD VERIFY REQUIREMENTS WITH OWNER PRIOR TO ANY WORK.
15. PROVIDE SMOKE DETECTORS THROUGHOUT UNIT AS REQUIRED IN ACCORDANCE WITH ALL NATIONAL, STATE, AND LOCAL CODE REQUIREMENTS. INSTALL DETECTOR IN EACH ROOM THAT MAY BE USED FOR SLEEPING AND ALL HALLWAYS LEADING TO SLEEPING ROOM. PROVIDE ADDITIONAL DETECTORS ON NON-CONTINUOUS PLANE CEILINGS AS REQUIRED.
16. PROVIDE A CO DETECTOR AND ALARM WITHIN 15 FEET OF ALL ROOMS USED FOR SLEEPING PURPOSES AND INSTALL IN ACCORDANCE WITH STATE LAW AND LOCAL CODES.
17. VERIFY FAN COIL AND CONDENSING UNIT SIZE.
18. PROVIDE CONDUIT IN WALL FOR HIGH TV LOCATIONS.
19. IN BATHROOMS, SIDE WALL MOUNTED RECEPTACLES MUST BE CENTERED A MINIMUM OF 1'-8" FROM THE INSIDE GB CORNER AT CONTINUOUS SIDE WALL CONDITIONS. WHERE SIDE WALL RECEPTACLE IS THE ONLY RECEPTACLE IN THE BATHROOM, BACK WALL MOUNTED RECEPTACLES MUST BE CENTERED A MINIMUM OF 12" FROM INSIDE GB CORNER AT ADJACENT CONTINUOUS WALL CONDITIONS. WHERE BACK WALL RECEPTACLE IS THE ONLY RECEPTACLE IN THE BATHROOM.
20. PROVIDE 2018 IECC COMPLIANT EXHAUST FAN IN BATHROOMS AND SWITCHING THAT ALLOWS CONTINUOUS VENTILATION AND INCREASED FAN SPEED. IF POSSIBLE, PROVIDE SWITCH TO CONTROL BOTH THE EXHAUST FAN AND SHOWER LIGHT AND CREDIT ANY SAVINGS TO THE OWNER.
21. ALL LIGHT SWITCH CONTROLS TO BE ROCKER-TYPE, NO TOGGLE-TYPE SWITCHES ARE ALLOWED.

⚠ KEYED NOTES

1. MOUNT OUTLET IN COUNTERTOP USING RECEPTACLE OUTLET ASSEMBLIES LISTED FOR USE IN COUNTERTOPS.
2. CEILING FAN BOX - PROVIDE JUNCTION BOX RATED FOR STRUCTURAL SUPPORT AND USE WITH CEILING FAN. PROVIDE WIRING FOR SEPARATE WALL BOX CONTROL OF FAN SPEED AND LIGHT KIT. FIELD VERIFY REQUIREMENTS WITH OWNER PRIOR TO ANY WORK.
3. SMART SWITCH - PROVIDE SWITCH WITH THE CAPABILITY TO CONTROL THE LIGHT AND FAN INDEPENDENTLY.

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No.	Date	Issue
3	10.03.23	City Comments
4	08.07.24	DRC Set

Project Architect: DV
Project Designer: DR
Title:
Job Number: 222001
Drawn By: FREE
Checked By: CF
Title: ELECTRICAL UNIT PLAN ENLARGEMENTS
Sheet Number: E3-0.2

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1 ELECTRICAL PLAN - ENLARGED AMENITY AREA
1/4" = 1'-0"

GENERAL NOTES

1. PROVIDE OUTLET WITHIN 25' OF EQUIPMENT IN ACCORDANCE WITH NEC 210.63. PROVIDE WEATHERPROOF GFI OUTLET ON ROOFTOPS WITHIN 25' OF ROOFTOP EQUIPMENT.
2. PROVIDE A CO DETECTOR AND AL ARM WITHIN 15 FEET OF EVERY SLEEPING ROOM WHEREVER FOSSIL FUELS ARE USED IN ACCORDANCE WITH STATE LAW AND LOCAL CODES. FIELD VERIFY REQUIREMENTS WITH OWNER.
3. FIELD VERIFY FINAL LOCATION OF ALL EQUIPMENT WITH PROVIDER PRIOR TO ROUGH-IN.
4. ALL RECEPTACLES IN BATHROOMS, GARAGES, EXTERIOR, CRAWL SPACES, UNFINISHED AND FINISHED BASEMENTS, LAUNDRY, AREAS DEFINED AS KITCHEN, DISHWASHERS, DRYER, RANGES WITHIN 6 FEET OF ANY SINK, AND WITHIN 6 FEET OF ANY SINK, BATHTUB, SHOWER, UTILITY AND WET-BAR SINKS, AND ALL OTHER REQUIRED LOCATIONS SHALL BE GFCI (OR SERVED BY A GFI CIRCUIT BREAKER) PER NEC 210.8(B). THE E.C. SHALL PROVIDE GFCI OUTLETS (OR CIRCUIT BREAKERS) IN ALL LOCATIONS REQUIRED BY THE NEC. PROVIDE GFCI TEST SWITCH (OR GFCI BREAKER) IN READILY ACCESSIBLE LOCATION PER NEC. ALL EXTERIOR RECEPTACLES SHALL BE WEATHER RESISTANT AND ENCLOSED IN A WEATHERPROOF EXTRA DUTY ENCLOSURE WHILE IN USE IN ACCORDANCE WITH NEC 406.9(B).
5. FOR ANY EGRESS LIGHTING FIXTURES AND EXIT SIGNS NOT POWERED BY THE GENERATOR, CONNECT TO AREA LIGHTING CIRCUIT AHEAD OF ANY SWITCH PER NEC 700-12(F) INCLUDING ANY NIGHT LIGHTS. FIXTURES SHOWN SHADED OR LABELED ARE EMERGENCY EGRESS (EM) WITH BATTERY PACK, NIGHT LIGHT (NL) OR BOTH (EMNL).
6. NUMBERS NEXT TO DEVICES REFER TO CIRCUIT DESIGNATION IN HOUSE PANEL, UNLESS NOTED.
7. ALL UNLABELED DOWNLIGHTS ARE FIXTURE TYPE "D".
8. ALL TELE/DATA LOCATIONS SHALL INCLUDE 4" SQUARE J-BOX AND 3/4" CONDUIT TO CEILING SPACE. ALL TELEPHONE/DATA CABLE IS TO BE PLENUM RATED WIRE OR SHALL BE INSTALLED IN CONDUIT ABOVE CEILING OR IN WALLS. FIELD VERIFY LOCATIONS OF ALL DATA JACKS WITH OWNER PRIOR TO ROUGH-IN. VERIFY ALL PHONE/DATA LOCATIONS W/ OWNER FOR ALL OFFICE AREAS.
9. PROVIDE ADDITIONAL THREE (3) POWER & CATV OUTLETS (IN ADDITION TO THOSE SHOWN ON PLANS) NEAR CEILING FOR WALL-MOUNTED TVS, LOCATIONS TO BE DETERMINED. FIELD VERIFY W/ ARCHITECT.
10. CIRCUIT FIRE SMOKED AMPERS TO NEAREST NON-SWITCHED 120V EM CIRCUIT.
11. PROVIDE TAMPER-RESISTANT RECEPTACLES FOR ALL AREAS SPECIFIED IN NEC ARTICLE 406.12.
12. FOR EXTERIOR RECEPTACLES, PROVIDE WEATHER-PROOF LOCKABLE OUTLET COVERS.
13. GFCI PROTECTION SHALL BE PROVIDED (NO MATTER IF HARDWIRED OR PLUG AND CORD) FOR THE BRANCH CIRCUIT SUPPLYING THE FOLLOWING APPLIANCES RATED 150 VOLTS OR LESS TO GROUND AND 60 AMPERES OR LESS. SINGLE OR 3-PHASE: DRINKING WATER COOLERS AND BOTTLE FILL STATIONS, HIGH-PRESSURE SPRAY WASHING MACHINES, VENDING MACHINES, SUMP PUMPS, DISHWASHERS, ELECTRIC RANGES, WALL-MOUNTED COOKING UNITS, CLOTHES DRYERS AND MICROWAVE OVENS.

KEYED NOTES

1. WALLBOX VACANCY SENSOR.
2. IRRIGATION CONTROLLER - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.
3. CARD READER - CARD READER/ACCESS CONTROL DEVICE - PROVIDE J-BOX AND DATA RACEWAY MOUNTED NO MORE THAN 48" AFF. FIELD VERIFY REQUIREMENTS WITH TENANT/PROVIDE.
4. TRASH COMPACTOR - PROVIDE DEDICATED 30A/3P BRANCH CIRCUIT WITH #8 THWN-2, 1"C. FIELD VERIFY FINAL LOCATION, OUTLET TYPE AND CONFIGURATION AND REQUIREMENTS WITH PROVIDER PRIOR TO ROUGH-IN. PROVIDE A DEDICATED CIRCUIT AND ALL POWER AND CONTROL WIRING AS REQUIRED FOR TRASH CHUTE SYSTEM, INCLUDING CONTROL PANELS AND DOORS. FIELD VERIFY REQUIREMENTS WITH PROVIDER AND PROVIDE ALL WORK NECESSARY FOR A COMPLETE INSTALLATION.
5. MOTORIZED ROLL UP DOOR. E.C. TO VERIFY ELECTRICAL REQUIREMENTS WITH PROVIDER PRIOR TO ROUGH IN.
6. ELECTRIC VEHICLE READY SPACE - PROVIDE 100A 208/120V OUTLET WITH 3#1, #6G, 1-1/2"C FOR ELECTRIC CAR CHARGER FIELD VERIFY ELECTRICAL REQUIREMENTS AND OUTLET TYPE. CHARGING STATION MUST BE ON AN ACCESSIBLE ROUTE FROM CORRIDORS / ELEVATOR LOBBIES. CHARGING STATIONS MUST HAVE MINIMUM 9' WIDTH ACCESS AISLE ON ONE SIDE OF PARKING SPACE AND MINIMUM 9' WIDTH ACCESS AISLE ON OTHER SIDE OF PARKING SPACE WITH CHARGING STATION AT HEAD OF EITHER ACCESS AISLE.
7. PRICE AS ADD ALTERNATE MT. RE: MECHANICAL DRAWINGS.
8. EMERGENCY LIGHTING INVERTER. PROVIDE LIGHTING INVERTER SIZED FOR A MINIMUM 600 WATTS.
9. EXTERIOR LIGHTING CONTROLS - PROVIDE PHOTOCELL ON/TIMECLOCK OFF CONTROLS AND MULTIPOLE LIGHTING CONTACTOR. PHOTOCELL ON ROOF AND PROGRAMMABLE TIME CLOCK AS REQUIRED. FIELD VERIFY REQUIREMENTS WITH OWNER.
10. ELECTRIC GRILL - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.
11. TV/MONITOR - PROVIDE POWER AND DATA/CATV JACKS AS REQUIRED IN CEILING AND PROVIDE RACEWAY TO VIDEO SOURCE. FIELD VERIFY REQUIREMENTS WITH TENANT AND TV PROVIDER. FIELD VERIFY FINAL LOCATION WITH ARCHITECT PRIOR TO ANY ROUGH-IN.
12. EXERCISE EQUIPMENT - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.
13. PROVIDE POWER AND CONTROLS FOR SIGNAGE. FIELD VERIFY LOCATION AND REQUIREMENTS WITH OWNER PRIOR TO INSTALLATION.
14. OFFICE EQUIPMENT - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.
15. HAND DRYER - PROVIDE DEDICATED CIRCUIT WITH DEDICATED GROUND AND NEUTRAL CONDUCTOR. FIELD VERIFY FINAL LOCATION, MOUNTING HEIGHT, ELECTRICAL REQUIREMENTS, NUMBER OF WIRES, OUTLET TYPE AND CONFIGURATION WITH PROVIDER PRIOR TO ROUGH-IN.

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MARSHALL POINTE

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No.	Date	Issue
5	10.03.23	City Comments
4	08.07.24	DTC Set

Project Architect: DV
Project Designer: DR
Title:
Job Number: 222001
Drawn By: FREE
Checked By: CF
Title: ELECTRICAL AMENITY PLAN ENLARGEMENT
Sheet Number: E3-1.1

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INTERIOR DESIGN PACKAGE

MARSHALL POINTE



5190 MARSHALL ST

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IFC

1. COURTYARD SHEETS, CORRIDOR AND UNIT STANDARD SHEET ADDED.

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ID-10.0	STANDARD UNIT FINISH

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PROJECT NAME

MARSHALL POINTE
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PROJECT ISSUE / DATE

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ISSUE LOG:	ISSUE DATES:
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REVISION 1	08.01.23
IFC SET	08.01.24

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STUDIO B DESIGN GROUP

PROJECT: MARSHALL POINTE	SHEET: IDN-1.0
DATE: AUGUST 1, 2024	PROJECT STANDARDS AND SHEET INDEX 1 OF 23 SHEETS
SCALE	

DEMOLITION NOTES (WHERE APPLICABLE)

1. THE DEMOLITION DRAWINGS BUILDING CONDITIONS PER EXISTING DRAWINGS. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND IS RESPONSIBLE FOR WORK REQUIRED DEMOLITION TO COMPLETE THE WORK, WHETHER SPECIFICALLY INDICATED OR NOT.
2. PRIOR TO DEMOLITION AND BEFORE SUBMISSION OF PROPOSED METHODS AND SEQUENCE OF OPERATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN FOR REFERENCE ANY OTHER EXISTING RECORD DRAWINGS AND TO CONDUCT ANY APPROPRIATE FIELD TESTING TO DETERMINE THE NATURE OF THE WORK TO BE REMOVED.
3. PROVIDE COVERINGS FOR EXISTING CONSTRUCTION DESIGNATED TO REMAIN TO PREVENT DAMAGE.
4. ENSURE THAT UTILITIES REQUIRING MODIFICATION ARE TEMPORARILY OR PERMANENTLY DISCONNECTED AS APPLICABLE
5. PROVIDE NECESSARY TEMPORARY SHORING, BRACING, SUPPORTS, ETC. AS REQUIRED TO MAINTAIN STRUCTURAL INTEGRITY OF EXISTING CONSTRUCTION.
6. REMOVE EXISTING CONSTRUCTION TO EXTENT INDICATED AND AS NECESSARY TO JOIN NEW WORK TO EXISTING.
7. TELEPHONE AND ELECTRICAL OUTLETS SHALL BE REMOVED AND CAPPEDD OFF AT THE NEAREST JUNCTION BOX WHEN EXISTING WALLS ARE DEMOLISHED.
8. ALL EXISTING CONSTRUCTION MATERIAL, INCLUDING BUT NOT LIMITED TO DOORS, FRAMES, DOOR HARDWARE, LIGHT FIXTURES, COMMUNICATIONS CABLING, MECHANICAL COMPONENTS AND ELECTRICAL COMPONENTS TO BE RE-USED WHERE ECONOMICAL AND POSSIBLE NEW CONSTRUCTION AREAS.
9. CONTRACTOR TO COORDINATE DEMOLITION TO CONSTRUCTION, ELECTRICAL, LIGHTING, AND NEW FINISH PLANS TO VERIFY INTENT OF DEMOLITION SHOWN.
10. ALL EXISTING DOORS AND FRAMES TO REMAIN ARE TO BE VERIFIED BY THE GENERAL CONTRACTOR FOR APPROPRIATENESS OF REUSE TO REMAIN, SHALL BE INSPECTED TO CONFIRM THAT CHIPS, NICKS OR SUPERFICIAL SCRATCHES OCCUR ONLY AT EDGES. SIMILAR IRREGULARITIES WHICH MAR ONLY THE FINISH WILL REQUIRE REFINISHING THE EFFECTED FACE OF DOOR. SCRATCHES OR DELAMINATING OF VENEER DISQUALIFY MATERIAL FOR RE-USE. ALL APPARENT IMPERFECTIONS ARE THE BE TOUCHED UP AND REFURBISHED FOR CONSISTENCY OF STAIN AND FINISH.
11. AT ALL LOCATIONS OF DAMAGED OR REMOVAL OF FIRE PROOFING MATERIALS ON STRUCTURAL ELEMENTS, CONTRACTOR MUST RESTORE SUCH FIRE PROOFING AFTER REQUIRED CONSTRUCTION IS COMPLETED.
12. DURING REMOVAL OF ITEMS INDICATED TO BE SALVAGED, PROTECTION AND CAUTION SHALL BE USED TO ELIMINATE THE POSSIBILITY OF DAMAGE TO SUCH ITEMS. ALL ITEMS OF EXISTING EQUIPMENT, MATERIALS, FIXTURES, ETC. SHALL REMAIN THE PROPERTY OF TENANT / OWNER ITEMS INSPECTED AND REJECTED BY THE OWNER OR DESIGNER SHALL BE DISPOSED BY THE CONTRACTOR.

GENERAL CONSTRUCTION NOTES

1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE BUILDING CODES AND ORDINANCES.
2. ALL WORK SHALL CONFORM TO THE CONTRACT DOCUMENTS AND SPECIFICATIONS.
3. THE CONTRACTOR SHALL COMPLY WITH ALL BUILDING REGULATIONS, SUCH REGULATIONS ARE HEREBY MADE A PART OF THESE CONTRACT DOCUMENTS AND BY REFERENCE ARE INCORPORATED HEREIN AS FULLY AS IF REPEATED AT LENGTH.
4. STUDIO B DESIGN GROUP HAS NO KNOWLEDGE OF AND SHALL NOT BE HELD LIABLE FOR ANY ASBESTOS OR OTHER HAZARDOUS MATERIALS ON THE JOBSITE. IF ASBESTOS OR OTHER HAZARDOUS MATERIALS ARE DISCOVERED DURING CONSTRUCTION, THE CONTRACTOR SHALL ISOLATE THE CONTAMINATED AREA AND CONTACT THE OWNER AND TENANT FOR FURTHER INSTRUCTIONS BEFORE PROCEEDING.
5. CONTRACTOR SHALL COMPLY WITH APPLICABLE LOCAL, STATE, AND FEDERAL CODES, REGULATIONS PERTAINING TO SAFETY OF PERSONS, PROPERTY AND ENVIRONMENTAL PROTECTION.
6. THE CONTRACTOR SHALL OBTAIN ALL PERMITS AND INSPECTIONS AND COMPLY WITH ALL CODES, LAWS, ORDINANCES, RULES AND REGULATIONS OF ALL PUBLIC AUTHORITIES (FEDERAL, STATE OR LOCAL) GOVERNING THE WORK. THE MOST STRINGENT SHALL APPLY.
7. THE GENERAL CONTRACTOR WARRANTS WITH THEIR BID THAT THEY HAVE VISITED THE SITE AND ACCEPTS ALL EXISTING CONDITIONS UNLESS CONCEALED.
8. THE GENERAL CONTRACTOR SHALL FIELD VERIFY ALL MEASUREMENTS, LOCATIONS AND CHARACTERISTICS OF ALL WORK AND EQUIPMENTS COORDINATE WITH THE MANUFACTURER OR SUPPLIER PRIOR TO THE START OF RELATED WORK. IF CONFLICT OCCURS, CONTACT STUDIO B DESIGN GROUP.
9. CONTRACTOR SHALL NOTIFY STUDIO B DESIGN GROUP OF ALL UTILITIES DETERMINED IN COURSE OF CONSTRUCTION, AS BEING NECESSARY TO BE REMOVED WHICH HAS NOT OTHERWISE BEEN NOTED FOR REMOVAL IN THE CONSTRUCTION DOCUMENTS. CONTRACTOR TO REMOVE SUCH UTILITIES FOLLOWING CONSULTATION WITH STUDIO B DESIGN GROUP AND OWNER. WHETHER PRE DETERMINED IN THE CONSTRUCTION DOCUMENTS OR LATER IN THE FIELD, DISCONNECT, CUT BACK TO SOURCE AND CAP ALL UTILITY SERVICES REMOVED. SEAL ALL PENETRATIONS CREATED BY REMOVAL OF UTILITIES TO MATCH ADJACENT CONSTRUCTION AND FINISHES.
10. THERE SHALL BE NO CHANGES WITHOUT WRITTEN APPROVAL OF STUDIO B DESIGN GROUP.
11. ALL PARTITIONS ARE DIMENSIONED FROM FACE OF FINISH TO FACE OF FINISH, U.N.O. ALL DIMENSIONS MARKED CLEAR OR HOLD SHALL BE MAINTAINED, AND ALLOW FOR THICKNESS OF ALL FINISHES INCLUDING CARPET, CERAMIC TILE, VCT, ETC.
12. ANY VARIATIONS FROM INDICATED DIMENSIONS OR CONDITIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF STUDIO B DESIGN GROUP. THE WORK IN THE AREA IN QUESTION SHALL NOT PROCESS UNTIL APPROVED BY STUDIO B DESIGN GROUP.
13. WHERE DESIGN INTENT CANNOT BE DETERMINED FROM THE CONSTRUCTION DOCUMENTS, THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE DESIGNER PRIOR TO PROCEEDING WITH THE WORK IN QUESTION.
14. THE CONTRACTOR AND EACH TRADE IS RESPONSIBLE FOR REVIEWING AND COORDINATING ALL EXISTING CONDITIONS AND WITH ALL OTHER TRADES. NO FIELD ORDERS WILL BE APPROVED FOR ANY CONDITIONS OR CONFLICTS THAT COULD HAVE BEEN AVOIDED BY COORDINATION BETWEEN CONTRACTOR AND EACH TRADE AFTER AWARD OF CONTRACT.
15. GENERAL CONTRACTOR AND SUBCONTRACTORS TO FIELD VERIFY ALL EXISTING SIZES, LOCATIONS AND CHARACTERISTICS OF EXISTING EQUIPMENT BEFORE CONSTRUCTION AND TO FULLY COORDINATE TO DESIGN DOCUMENTS TO CORRECT ANY FIELD CONDITIONS OR CONFLICTS AS REQUIRED. PROPER MAINTENANCE AND SERVICE ACCESS TO ALL ABOVE CEILING EQUIPMENT IS TO BE MAINTAINED, AND GENERAL CONTRACTOR AND SUBCONTRACTORS ARE RESPONSIBLE FOR CONFIRMING ALL ROUTING OF PLUMBING, DUCTWORK, AND OTHER SERVICES AS APPLICABLE. ANY ABANDONED ELECTRICAL AND/OR VOICE/DATA CABLING TO BE MOVED BY THE GENERAL CONTRACTOR.
16. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTLITIES WITH THE OWNER OR TENANT.
17. WHERE EXISTING ACCESS PANELS CONFLICT WITH NEW CONSTRUCTION, CONTACT STUDIO B DESIGN GROUP.

GENERAL CONSTRUCTION NOTES (CONT.)

18. WORK AREAS ARE TO REMAIN SECURE WITH TEMPORARY PARTITIONS AND LOCKABLE DURING CONSTRUCTION, CONTRACTOR SHALL COORDINATE WITH TENANT AND OWNER TO ENSURE SECURITY.
19. THE CONTRACTOR SHALL MAINTAIN FOR THE ENTIRE DURATION OF THE WORK ALL EXITS, EXIT LIGHTING, FIRE PROTECTIVE DEVICES AND ALARMS IN CONFORMANCE WITH ALL APPLICABLE CODES AND ORDINANCES.
20. THE SCOPE OF WORK, EXISTING CONDITIONS AND ADJACENT AREAS (INCLUDING PATH OF ACCESS) SHALL BE PROTECTED FROM ANY DAMAGE THAT OCCURS BECAUSE OF NEW WORK. ANY DAMAGE THAT OCCURS SHALL BE THE FINANCIAL RESPONSIBILITY OF THE CONTRACTOR.
21. ANY CONSTRUCTION THAT PRODUCES EXCESS DIRT AND/OR NOISE FROM POWER EQUIPMENT SHALL BE PERFORMED AFTER BUSINESS HOURS AND PLANNED FOR.
22. CONTRACTOR TO COORDINATE WITH BUILDING MANAGEMENT FOR RULES AND REGULATIONS REGARDING CONDUCT OF CONSTRUCTION PERSONNEL AS WELL AS PROCEDURES, SCHEDULING OF DELIVERIES AND ANY OTHER CONSTRUCTION ACTIVITIES, AS WELL AS TO ASSURE THAT ADEQUATE STANDARDS OF CLEANING PROCESSES ARE MAINTAINED, PROTECTION OF EXISTING FINISHES THROUGHOUT THE BUILDING IS REQUIRED AT ALL TIMES. ANY DAMAGE INCURRED TO WALLS, FLOORING, ETC. MUST BE FULLY REPAIRED.
23. ERECT AND MAINTAIN DUST PROOF PARTITIONS AS REQUIRED TO PREVENT SPREAD OF DUST, FUMES, SMOKE, ETC. TO OTHER PARTS OF THE BUILDING. ON COMPLETION, REMOVE PARTITIONS AND REPAIR DAMAGED SURFACES TO MATCH ADJACENT SURFACES.
24. WHERE EXISTING SURFACES ARE CUT OR DAMAGED, PATCH AND FINISH TO MAKE PATCHING AS INCONSPICUOUS AS POSSIBLE
    - 24.1. FOR CONTINUOUS SURFACES: REFINISH TO THE NEAREST OFFSET, INTERSECTION, OR OTHER EXISTING POINT AT WHICH WORK CAN BE NEATLY TERMINATED.
    - 24.2. FOR ASSEMBLIES: REFINISH ENTIRELY.
    - 24.3. WHERE NEW WORK ABUTS OR FINISHES FLUSH WITH EXISTING WORK, MAKE TRANSITION SMOOTH.
    - 24.4. IF SMOOTH TRANSITION OF NEW WORK TO EXISTING FINISHED SURFACE IS NOT POSSIBLE, TERMINATE EXISTING SURFACE ALONG LEVELING COMPOUND COMPATIBLE WITH SCHEDULED FINISH MATERIAL TO ACHIEVE FINAL LEVELING.
    - 24.5. PROVIDE APPROPRIATE SUPPORT OF SUBSTRATE FOR PATCHING OF FINISHED SURFACES.
    - 24.6. WHERE REMOVAL OR EXISTING CONSTRUCTION EXPOSES ITEMS WHICH WERE PREVIOUSLY CONCEALED, REWORK SUCH ITEMS TO BE CONCEALED IN FINISHED CONSTRUCTION.
    - 24.7. DO NOT CUT OR REMOVE EXISTING STRUCTURAL MEMBERS OR FINISHED SURFACES, OTHER THAN TO THE EXTENT CONTAINED IN THE CONTRACT DOCUMENTS, WITHOUT WRITTEN PERMISSION OF STUDIO B DESIGN GROUP.
    - 24.8. ANY QUESTIONS CONCERNING OWNERSHIP OF SALVAGEABLE MATERIAL SHALL BE ANSWER BY THE OWNER.
25. ALL WOOD BLOCKING SHALL BE FIRE RETARDANT TREATED. PROVIDE WOOD BLOCKING IN ALL STUD WALLS OF MILLWORK AND SPECIAL ITEM ANCHORING POINTS. WOOD BLOCKING SHALL BE MOISTURE TREATED IF LOCATED IN DAMP LOCATIONS OR ADJACENT TO CONCRETE OR MASONRY CONSTRUCTION.
26. CONTRACTOR SHALL COORDINATE AND PROVIDE METAL BACKING PLATES OR SOLID WOOD BLOCKING (FIRE TREATED) IN PARTITIONS FOR ALL MILLWORK AND WALL MOUNTED HARDWARE AS REQUIRED.
27. ALL MANUFACTURED ARTICLES, MATERIALS AND EQUIPMENT SHALL BE APPLIED, INSTALLED, CONNECTED, ERECTED, CLEANED, AND CONDITIONED PER MANUFACTURER'S RECOMMENDATIONS. WHEN DIFFERENCES BETWEEN THE MANUFACTURE'S INSTRUCTIONS AND CONTRACT DOCUMENTS OCCUR THE CONTRACTOR SHALL NOTIFY STUDIO B DESIGN GROUP BEFORE PROCEEDING.
28. UNDERCUT ALL DOORS TO CLEAR TOP OF FLOOR FINISHES BY ¼" MAX, U.N.O.
29. ALL HINGED SIDE OF DOOR FRAMES ADJACENT TO THE PERPENDICULAR PARTITION AND/OR ANGLED PARTITION ARE TO BE 6" FROM THE OUTSIDE EDGE OF DOOR FRAME TO FINISH FACE OF PARTITION, U.N.O.
30. MANUFACTURER'S NAMES, TRADEMARKS, LOGOS, ETC., SHALL NOT BE VISIBLE TO THE PUBLIC.
31. IT IS THE INTENT OF THE DRAWINGS THAT ALL EXPOSED SURFACES RECEIVE FINISHES AS INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS UNLESS SPECIFICALLY NOTED OTHERWISE. ANY SURFACES WHICH DO NOT HAVE A SPECIFIC FINISH NOTED, OR ARE NOTED TO REMAIN UNFINISHED,

GENERAL CONSTRUCTION NOTES (CONT.)

SHALL BE BROUGHT TO THE ATTENTION OF STUDIO B DESIGN GROUP AND FINISHED PER STUDIO B DESIGN GROUPS INSTRUCTIONS.

32. REMOVE FROM SITE AND LEGALLY DISPOSE OF DAILY ALL REFUSE, DEBRIS, RUBBISH, AND OTHER MATERIALS RESULTING FROM DEMOLITION OPERATIONS. BURNING OF DEBRIS ON SITE SHALL NOT BE PERMITTED.
33. ALL SUBCONTRACTORS TO CLEAN ALL AREAS DURING AND AFTER CONSTRUCTION AND TO MAKE READY FOR OTHER TRADES TO FOLLOW. AT FINAL PHASE, CONSTRUCTION AREAS TO BE FULLY CLEANED FOR OCCUPANCY, INCLUDING DOORS, FRAMES, WALLS, CEILINGS, LIGHT FIXTURES, MILLWORK, WINDOWS, WINDOW TREATMENTS, HVAC DISTRIBUTION, GRILLES, MULLIONS, SILLS, ETC.
34. DISPOSAL OF DEBRIS:
    - 34.1. REMOVE AND DISPOSE OF WASTE MATERIALS OFF SITE.
    - 34.2. STORE ITEMS DESIGNATED TO REMAIN PROPERTY OF TENANT OWNER IN BUILDING WHERE DIRECTED.
35. ALL WORK NOTED "BY OTHERS" OR "NIC" SHALL BE PROVIDED BY OWNER AND STUDIO B DESIGN GROUP UNDER SEPARATE CONTRACT. CONTRACTOR SHALL INCLUDE "BY OTHERS" OR "NIC" WORK IN CONSTRUCTION SCHEDULE AND COORDINATE AS REQUIRED TO ASSURE ORDERLY SEQUENCE OF INSTALLATION.
36. "ALIGN" SHALL MEAN TO ACCURATELY LOCATE FINISH FACES IN THE SAME PLANE.
37. "TYPICAL" OR "TYP" SHALL MEAN THAT THE CONDITION IS REPRESENTATIVE FOR SIMILAR CONDITIONS THROUGHOUT, U.N.O. DETAILS ARE USUALLY KEYED AND NOTED "TYP" ONLY ONCE, WHEN FIRST OCCUR.
38. "SIMILAR" OR "SIM" MEAN COMPARABLE CHARACTERISTIC FOR THE CONDITIONS NOTED. VERIFY DIMENSIONS AND ORIENTATION ON PLANS AND ELEVATIONS.
39. ITEMS NOT NOTED ABOVE OR CLEARLY INDICATED IN CONSTRUCTION DRAWINGS TO BE SUBMITTED TO STUDIO B DESIGN GROUP FOR CLARIFICATION. NO SUBSTITUTIONS TO BE MADE FOR ANY SPECIFIED PRODUCT TO BE MADE WITHOUT EXPRESS WRITTEN APPROVAL BY STUDIO B DESIGN GROUP.

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DRAWN BY: JR / EB
STUDIO B DESIGN GROUP

PROJECT	SHEET
MARSHALL POINTE	IDN-1.1
DATE: AUGUST 1, 2024	
SCALE	GENERAL NOTES 2 OF 23 SHEETS

FINISH NOTES

1. PRIOR TO RECEIVING FINISHES VERIFY SURFACES TO RECEIVE FINISHES ARE CLEAN TRUE AND FREE OF IRREGULARITIES, DO NOT PROCEED WITH FINISH WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.
2. WOOD DOORS, STAIN GRADE ARCHITECTURAL MILLWORK AND CABINETRY SHALL BE SHOP FINISHED.
3. PRIOR TO PURCHASE OR INSTALLATION OF ANY FINISH, SUBMIT (3) SAMPLES TO STUDIO B DESIGN GROUP FOR REVIEW. ALLOW TIME FOR SUBMITTAL REVIEW AND RESUBMITTALS IF REQUIRED.
4. WHERE DEMOLITION AFFECTS WALLS, CEILINGS, CARPET, ETC. THAT IS TO REMAIN PATCH, REPAIR AND REFINISH TO PROVIDE A "LIKE NEW" APPEARANCE.
5. ALL NEW AND EXISTING FINISHES SCHEDULED TO REMAIN, SHALL BE PROTECTED DURING CONSTRUCTION, ANY DAMAGE SHALL BE REPAIRED BY CONTRACTOR INVOLVED AT HIS COST, WITH NO COST TO OWNER.
6. PRIOR TO INSTALLATION OF NEW FLOORING, REMOVE ALL FOREIGN MATTERS SUCH AS GREASE, WAX, OIL, DIRT, ETC. FILL CRACKS, HOLES AND DEPRESSIONS, AND GRIND ANY PROTRUDING OBJECTS SMOOTH WITH FLOOR SURFACE.
7. THE LONGEST LEAD TIME PRODUCTS ARE TO BE ORDERED FIRST, NO SUBSTITUTES WILL BE ACCEPTED W/O APPROVAL OF STUDIO B DESIGN GROUP.
8. ALL FLOORING TRANSITIONS TO OCCUR AT CENTER OF DOORS, UNLESS OTHERWISE NOTED, REFER TO FLOOR TRANSITION DETAILS.
9. CONTRACTOR TO PROVIDE 5% ATTIC STOCK FOR ALL FINISHES.
10. ALL FINISHES SHALL MEET OR EXCEED LOCAL CODES.
11. ALL NEWLY INSTALLED FLOORING FINISHES SHALL BE PROTECTED FROM DAMAGE UNTIL CONSTRUCTION IS COMPLETED.

CARPET

1. CARPET INSTALLER TO PROVIDE SEAMING DIAGRAM TO STUDIO B DESIGN GROUP FOR REVIEW AND APPROVAL PRIOR TO ORDERING CARPET. DO NOT CROSS SEAM, OR SUBSTITUTE MANUFACTURERS.
2. ALL SEAMS SHALL BE SECURED BY MANUFACTURERS RECOMMENDATIONS
3. INSTALL CARPET FLAT, LEVEL AND SECURE, USING METHOD NOTED ON FINISH PLAN AND MANUFACTURERS RECOMMENDATIONS
4. ALL FLOOR MONUMENTS OR DEVICES SHALL BE INSTALLED FOLLOWING CARPET INSTALLATION. CARPET INSTALLER TO COORDINATE CUTTING OF CARPET FOR FLOOR OUTLETS WITH ELECTRICAL CONTRACTOR.
5. ALL SIZABLE PIECES OF UNUSED CARPET IN ADDITION TO CARPET ORDERED FOR ATTIC STOCK, IS TO BE LEFT ON SITE FOLLOWING INSTALLATION, OR STORED OFF SITE PER OWNERS INSTRUCTIONS.

CERAMIC TILE

1. CERAMIC TILE SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE REFERENCE STANDARDS PUBLISHED IN THE TILE COUNCIL OF AMERICA'S HANDBOOK FOR CERAMIC TILE INSTALLATION AND WITH MANUFACTURER'S RECOMMENDED GUIDELINES
2. OTHER TILE TYPES: GLASS, PORCELAIN, ETC. SHALL COMPLY WITH THE MANUFACTURER'S / DISTRIBUTOR'S INSTALLATION RECOMMENDATIONS.

WALL COVERING

1. ALL WALL COVERING PRIMERS, SEALERS, ADHESIVES, SIZING AND INSTALLATION METHODS SHALL BE PER WALL COVERING MANUFACTURER'S RECOMMENDATIONS.
2. INSTALL WALL COVERING TO BE SECURE AND FLAT, WITHOUT WRINKLES, GAPS OR OVERLAPS, SEAMS SHALL BE TIGHT AND SECURE. CLEAN WALL COVERING TO BE FREE OF DIRT AND GLUE
3. WALL COVERING SEAMS SHOULD BE NO CLOSER THAN 6 INCHES FROM OUTSIDE CORNERS AND 3 INCHES FROM INSIDE CORNERS. HORIZONTAL SEAMS ARE UNACCEPTABLE, U.N.O. ALL SEAMS SHALL BE VERTICAL AND PLUMB, WITH PATTERNS MATCHED TO GREATEST EXTENT POSSIBLE WHERE PATTERNS OCCUR.

FINISH NOTES (CONT'D)

PAINT

1. COMPLY WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS GOVERNING THE USE OF PAINT MATERIALS.
2. COMPLY WITH MANUFACTURERS RECOMMENDATIONS FOR ENVIRONMENTAL CONDITIONS UNDER WHICH COATINGS AND COATING SYSTEMS CAN BE APPLIED.
3. PROTECT FLOORS AND ALL ADJACENT SURFACES FROM PAINT SMEARS, SPATTERS AND DROPPINGS. USE DROP CLOTHS TO PROTECT FLOORS AND ITEMS NOT TO BE PAINTED, MASK OFF AREAS WHERE REQUIRED.
4. CLEAN SURFACES FREE OF DUST, DIRT, OIL, GREASE AND OTHER FOREIGN MATTER PRIOR TO APPLICATION OF THE PRIME COAT.
5. REPAIR ALL VOIDS, NICKS CRACKS, DENTS, ETC. WITH SUITABLE PATCHING MATERIAL AND FINISH FLUSH TO ADJACENT SURFACE.
6. DO NO APPLY FINISHES IN AREAS WHERE DUST IS BEING GENERATED, OR WHEN ROOM TEMPERATURE IS BELOW 50 DEGREES F.
7. ENSURE THAT HARDWARE, COVER PLATES, AND SIMILAR ITEMS ARE REMOVED PRIOR TO PAINTING, AND REPLACE ONLY WHEN PAINT FINISHES ARE THOROUGHLY DRY.
8. UNLESS NOTED OTHERWISE, PROVIDE MINIMUM 3-COAT SYSTEM AS SPECIFIED FOR EACH NEW SURFACE, FOR EXISTING SURFACES, APPLY NUMBER OF COATS TO INSURE COMPLETE COVERAGE OF PREVIOUS COLOR AND SURFACES REPAIRS AND/OR PATCHING. REFER TO FINISH PLAN FOR COLORS AND SHEENS 1 PRIMER/2-3 FINISH COATS PER MANUFACTURER'S RECOMMENDATIONS.
9. ALLOW EACH COAT TO THOROUGHLY DRY BEFORE ADDITIONAL APPLICATIONS.
10. EMPLOY COATS AND UNDERCOATS FOR ALL TYPES OF FINISHES IN STRICT ACCORDANCE WITH RECOMMENDATIONS OF THE PAINT MANUFACTURER, ALL UNDERCOATS SHALL BE TINTED TO APPROXIMATE THE FINISH COLOR.
11. APPLY MATERIAL EVENLY BY BRUSH, ROLLER OR SPRAY. SURFACE IMPERFECTIONS WILL NOT BE ACCEPTABLE, ALL DECORATIVE PAINTING TO BE APPROVED BY STUDIO B DESIGN GROUP.
12. SAND AND DUST BETWEEN COATS TO REMOVED DEFECTS VISIBLE TO THE NAKED EYE FROM A DISTANCE OF FIVE FEET.
13. IN AREAS OF HIGH HUMIDITY, SUCH AS ROOMS WITH BATHTUBS AND SHOWERS ADD AN APPROVED FUNGICIDE TO PAINTS.
14. PAINT VISIBLE DUCT SURFACES BEHIND VENTS, REGISTERS, AND GRILLS WITH FLAT BLACK INTERIOR PAINT.
15. LEAVE PAINT STORAGE IN A CLEAN AND FINISHED CONDITION, ALL EXTRA PAINT TO BE LEFT AT JOB SITE IN TIGHTLY SEALED CONTAINERS CLEARLY MARKED WITH CONTENTS AND LOCATIONS WHERE USED.
16. FINISH IN SEMI-GLOSS: SHELVING, ELECTRIC PANELS, ACCESS DOORS, CONDUIT, PIPES, DUCTS, GRILLES, AND ITEMS OF SIMILAR NATURE TO MATCH THE ADJACENT WALL AND CEILING PAINT COLOR. UNLESS PRE-FINISHED IN FINAL INTENDED COLOR, OR AS DIRECTED.
17. USE OIL-BASED SEMI-GLOSS FOR METAL DOOR JAMBS AND DOORS WHEN APPLICABLE.
18. WHEN PAINTING OVER WALL COVERING, MAKE REPAIRS TO WALL COVERING PRIOR TO PAINTING TO INSURE THAT IS SECURELY ADHERED TO WALL.
19. ALL PAINT TO MATCH SHERWIN WILLIAMS, WALLS & CEILINGS: EGG SHELL FINISH, TRIM: SEMI-GLOSS FINISH.

MILLWORK NOTES

1. FURNISH AND INSTALL CUSTOM MILLWORK AS SHOWN ON PLANS AND DETAILS.
2. THE CUSTOM GRADE STANDARDS OF THE ARCHITECTURAL WOODWORK INSTITUTE (AWI) WILL BE USED TO ESTABLISH EQUALITY OF WORKMANSHIP AND REQUIRED TOLERANCES, HOWEVER, (AWI) CERTIFICATION WILL NOT BE REQUIRED.
3. PROVIDE SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO FABRICATION. SHOW DIMENSIONED PLANS, ELEVATIONS, SECTIONS DETAILS AND HARDWARE SPECIFICATIONS PER UNIT, INCLUDING INSTALLATION. FABRICATOR IS RESPONSIBLE FOR COORDINATING WORK WITH OTHER DISCIPLINES.
4. PROVIDE TWO 6X6 SAMPLES OF EACH FINISH PRIOR TO FABRICATION.
5. INSTALL THE WORK PLUMB, LEVEL TRUE AND STRAIGHT WITH NO DISTORTIONS. ATTACH UNIT SECURELY TO WALLS, AND ATTACH COUNTERTOPS SECURELY TO BASE CABINETS, MAKE CUTS FOR HARDWARE AND EQUIPMENT NEAT AND TRUE. INSTALL AND ADJUST HARDWARE, DOORS AND SHELVING TO OPERATE IN A SMOOTH MANNER WITHOUT BINDING, SCRIBE AND FIT ALL WORK AS REQUIRED.
6. VERIFY QUANTITY, SIZE AND LOCATION OF ALL ITEMS AFFECTING WORK INCLUDING, BUT NOT LIMITED TO, PLUMBING FIXTURES, ELECTRICAL RECEPTACLES, CONDUIT, APPLIANCES AND EQUIPMENT BEING PROVIDED BY OTHERS, PRIOR TO FABRICATION. ADVISE STUDIO B DESIGN GROUP OF ANY ITEMS IN CONFLICT WITH MILLWORK PRIOR TO FABRICATION.
7. CONTRACTOR TO COORDINATE LOCATIONS OF ELECTRICAL, TELEPHONE AND DATA OUTLETS MOUNTED ABOVE MILLWORK COUNTERTOPS UNDER WALL CABINETS AND WITHIN MILLWORK CABINETS WITH FABRICATOR.

POWER/DATA NOTES & SPECIFICATIONS

1. ALL LIGHT FIXTURES SHALL BE LOCATED 6" FROM LATCH SIDE OF DOOR FRAME, U.N.O., SWITCH HEIGHT SHALL CONFORM TO ADA STANDARDS, REFER TO ARCHITECTURAL AND ELECTRICAL DRAWINGS
2. USE HIGH VOLTAGE DIMMERS AS REQUIRED WHEN SPECIFIED.
3. ALL ELECTRICAL SYSTEMS, DEVICES AND RELATED ITEMS SHALL BE TESTED. ENSURE PROPER OPERATIONS OF ALL ITEMS OR SYSTEMS BEFORE COMPLETION OF THE PROJECT.
4. UPON COMPLETION OF THE INSTALLATION OF ALL ELECTRICAL BOXES PRIOR TO WIRING AND DRYWALL CLOSE-IN, A SCHEDULED WALK-THROUGH SHALL BE COORDINATED TO REVIEW LOCATIONS OF ALL THERMOSTATS, TELE/DATA, LIGHTING AND ELECTRICAL. RECORD DOCUMENT (AS-BUILTS) DRAWINGS TO BE PROVIDED AT COMPLETION OF PROJECT.
5. ALL WORK SHALL CONFORM TO ALL APPLICABLE BUILDING CODES.
6. ALL MATERIALS SHALL BE U.L LISTED WHEN SUCH LISTINGS EXIST AND ALL WORK AND MATERIALS SHALL CONFORM WITH ALL CODES, REGULATIONS, AND LAWS IN FORCE AND THE ELECTRICAL SPECIFICATIONS.
7. FIELD VERIFY EXISTING CONDITIONS, VERIFY LOCATION OF ALL OUTLETS IN RELATION TO MECHANICAL, STRUCTURAL AND PLUMBING ELEMENTS.
8. NEW OUTLET DEVICES SHALL BE MOUNTED AT 18" A.F.F. U.N.O. DO NOT MATCH EXISTING OUTLET HEIGHTS THAT DO NOT COMPLY WITH THIS REQUIREMENT.
9. ANY ADDITIONAL OUTLETS REQUIRED BY CODE ARE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL NOTIFY STUDIO B DESIGN GROUP OF ANY ADDITIONALLY REQUIRED OUTLETS AND SHALL BE COORDINATED PRIOR TO INSTALLATION.
10. DEVICES ARE SHOWN FOR LOCATION ONLY. REFER TO ELECTRICAL SPECIFICATIONS FOR ALL SPECIFIC REQUIREMENTS CIRCUITING, ETC. IN CASE OF CONFLICT BETWEEN INTERIOR PLANS AND ELECTRICAL PLANS. CLARIFICATION SHALL BE REQUESTED IN WRITING PRIOR TO INSTALLATION.
11. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL NOTES AND INFORMATION. NOTIFY STUDIO B DESIGN GROUP OF ANY CONFLICTS WITH DESIGN INTENT PRIOR TO CONSTRUCTION.
12. PROVIDE CIRCUITING AS REQUIRED OR AS NOTED IN ELECTRICAL DRAWINGS.
13. DIMENSIONS NOTED ARE TO THE CENTERLINE OF THE OUTLET AND OR SWITCH (INCLUDING CLUSTERS) UNLESS NOTED OTHERWISE.
14. ALL FLOOR CORE LOCATIONS TO BE FIELD LOCATED AND VERIFIED WITH STUDIO B DESIGN GROUP.

POWER/DATA NOTES (CONT'D)

15. FOR NEW DEVICES OCCURRING IN FIRE RESISTANT WALL CONSTRUCTION, REFER TO ARCHITECTURAL AND ELECTRICAL FOR INSTALLATION REQUIREMENTS.
16. FOR VOICE AND TELE/DATA LOCATED NOTED, CONTRACTOR SHALL REFER TO ELECTRICAL FOR INSTALLATION REQUIREMENTS.
17. STANDARD WALL OUTLETS TO BE INSTALLED VERTICALLY, U.N.O.
18. COVER PLATES SHALL BE ONE PIECE TYPE, U.N.O.
19. THE STYLE AND FINISH OF ALL COVER PLATES SHALL BE VERIFIED WITH STUDIO B DESIGN GROUP.
20. LOCATION OF REMOTE POWER PANELS, DISCONNECT SWITCHES, SPECIAL PANELS, THERMOSTATS, SWITCHES, ALARMS OR ANY OTHER DEVICES WHICH ARE EXPOSED TO VIEW AND NOT INDICATED ON DRAWINGS SHALL BE VERIFIED WITH STUDIO B DESIGN GROUP.
21. ALL EQUIPMENT MOUNTING REQUIREMENTS AND POWER SPECIFICATIONS SHALL BE VERIFIED PRIOR TO INSTALLATION. CONTACT STUDIO B DESIGN GROUP WHERE CONFLICTS OCCUR.
22. ALL EQUIPMENT REQUIRING DEDICATED CIRCUITS SHALL BE VERIFIED BY CONTRACTOR PRIOR TO INSTALLATION.
23. ALL ISOLATED GROUND COMPUTER CIRCUIT OUTLETS SHALL BE AN ORANGE COLORED RECEPTACLE.
24. ALL POWER AND TELE/DATA OUTLETS ARE TO COORDINATED TO MATCH FLUSH WITH NEW FLOOR FINISHES.
25. ELECTRONIC OR MAGNETIC DIMMERS ARE TO BE VERIFIED BY ELECTRICIAN AS TO COMPATIBILITY Y ON LOW VOLTAGE FIXTURES
26. ALL OUTLETS ON SPECIALTY FINISH WALLS TO BE WOOD PAINTED TO MATCH SPECIALTY FINISH.

REFLECTED CEILING NOTES

1. LIGHT FIXTURES AND OTHER ITEMS SCHEDULED ON THE DRAWINGS SHALL BE LOCATED PER REFLECTED CEILING PLAN. THE GENERAL, MECHANICAL, AND ELECTRICAL CONTRACTORS SHALL USE EXTREME CARE IN COORDINATING THEIR WORK TO FIT THE PATTERN SHOWN ON THE REFLECTED CEILING PLAN. IF CONFLICT OCCURS BETWEEN MECHANICAL AND COORDINATION OF LIGHTING FIXTURES ABOVE CEILING, NOTIFY STUDIO B DESIGN GROUP.
2. GANG ALL SWITCHES
3. ELECTRICAL CONTRACTOR TO DETERMINE APPROPRIATE VOLTAGE FOR ALL FIXTURES PRIOR TO ORDERING
4. ELECTRICIAN TO SUPPLY LAMPS FOR ALL FIXTURES, INCLUDING FIXTURES SUPPLIED BY STUDIO B DESIGN GROUP.
5. DO NOT USE HIGH VOLTAGE DIMMERS, U.N.O.

GENERAL INTERIORS NOTES

1. ELECTRICAL SWITCH PLATES ONLY: TO BE RECTANGULAR WOOD PAINTED TO MATCH TRIM, ALL OTHER PLATES TO BE PLASTIC - COLOR WHITE. ALL ELECTRICAL OUTLETS TO BE POSITIONED ACCORDING TO ELECTRICAL PLAN AND AT MAX. OF 15" A.F.F. ALL SWITCH PLATES IN RESTROOMS TO BE INSTALLED WITH TOP AT 44" A.F.F., U.N.O. PAINTED TO MATCH WALL. ALL SWITCHES, ALARMS AND SPEAKERS TO BE POSITIONED TO SIDE OF WALLS, NOT MIDDLE OF WALLS. THERMOSTAT LOCATIONS TO BE COORDINATED BETWEEN INTERIOR DESIGN AND MECHANICAL DRAWINGS. NOTIFY STUDIO B DESIGN GROUP OF ANY CONFLICTS PRIOR TO INSTALLATION.
2. VENTS AND SPEAKERS TO MATCH WALLS AND CEILINGS.
3. NO SLAB DEPRESSIONS REQUIRED AS A RESULT OF FLOORING MATERIAL SPECIFIED BY DESIGNERS.
4. NO SUBSTITUTIONS ACCEPTED UNLESS APPROVED BY STUDIO B DESIGN GROUP IN WRITING.

STUDIO B DESIGN GROUP

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PROJECT NAME

MARSHALL POINTE
5190 Marshall St.
Arvada, Colorado 80002

The interior design plans and specifications for this project have been prepared by studio b design group (SBDG) from data provided by the representative of the client. The completeness and accuracy of which has been relied upon by SBDG. Interior and product designs are subject to modifications or changes due to field verifications, existing or other conditions, and building code requirements. The client/developer shall be responsible for obtaining all required permits for the project and for compliance with all local, state, and federal codes. In the event that the plans and/or specifications are required to be sealed by a licensed professional it is the client/developer responsibility to retain a professional to sign and seal the plans. SBDG shall not be responsible for any changes or modifications to the plans and specifications unless expressly approved in writing by SBDG.

PROJECT ISSUE / DATE

IFC SET

ISSUE LOG:	ISSUE DATES:
50% ID CONSTRUCTION SET	02.09.23
100% ID CONSTRUCTION SET	05.04.23
REVISION 1	08.01.23
IFC SET	08.01.24

PROJECT CONTACTS

JUANA RODRIGUEZ (PROJECT MANAGER)
ERICA BARNES (LEAD DESIGN)

DRAWN BY: JR / EB
STUDIO B DESIGN GROUP

PROJECT: MARSHALL POINTE	SHEET: IDN-1.2
DATE: AUGUST 1, 2024	
SCALE:	GENERAL NOTES 3 OF 23 SHEETS

MARSHALL POINTE CLUBHOUSE

PROVIDED BY SBDG

LEAD TIME CAUTION

APPLIANCES

CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH/COLOR	SIZE	PRODUCT NO.	LOCATION	VENDOR/ CONTACT	NOTES
APP-1	Refrigerator/ Freezer	GE Appliances	Café™ ENERGY STAR® 23.1 Cu. Ft. Smart Counter-Depth French-Door Refrigerator	Stainless Steel	35.75" W, 70.5" H, 31.25" D	CWE23SP2MS1	Clubroom Kitchenette	Contractor's Choice	N/A
APP-2	Undercounter Fridge	Summit Appliance	24" Wide Built-In All-Refrigerator, ADA Compliant	Stainless Steel	32.0" H x 23.63" W x 22.63" D	SKU: AL54	Workroom	Contractor's Choice	Summit Appliance Model
APP-3	Dishwasher	GE Appliances	ADA Compliant Stainless Steel Interior Dishwasher with Sanitize Cycle	Stainless Steel	32 1/4 H x 23 3/4 W x 23 1/2 D	GDT225SSLSS	Clubroom Kitchenette	Contractor's Choice	N/A
APP-4	Microwave	GE Appliances	Café™ 1.5 Cu. Ft. Smart Countertop Convection/Microwave Oven	Stainless Steel	21 3/4" W, 13" H, 20" D	CEB515P2NSS	Workroom Kitchenette	Contractor's Choice	N/A
APP-5	TrimKit for App-4	GE Appliances	Café™ 30" Trim	Brushed Stainless	20-7/8 H x 29-3/4 W	CX153P2MSS	Clubroom Kitchenette	Contractor's Choice	N/A
APP-6	Garbage Disposer	Moen	1/2 HP Continuous Feed Garbage Disposer - Wall Switch	Black	13-3/8" H X 5-3/8" W	Model: GXP50c	Clubroom & Workroom Kitchenette	Contractor's Choice	N/A
APP-7	Electric Hand Dryer	Bobrick	QuietDry™ Series, TrimDry™ ADA Surface-Mounted Hand Dryer	satin-finish stainless steel cover with black plastic trim	13 25/32" W, 13 19/32" H, 4" D	B-7128	Restrooms	Contractor's Choice	Provide tile or another washable surface around and below the dryer
APP-8	65" TV	Per Owner	Per Owner	Per Owner	Per Owner	Per Owner	Per Owner	Per Owner	Per Owner
APP-9	Commercial Printer	Per Owner	Per Owner	Per Owner	Per Owner	Per Owner	Per Owner	Per Owner	Per Owner
APP-10	Countertop Microwave	GE Appliances	Café™ 1.5 Cu. Ft. Smart Countertop Convection/Microwave Oven	Stainless Steel	21 3/4" W, 13" H, 20" D	CEB515P2NSS	Workroom Kitchenette	Contractor's Choice	N/A

CABINETS

CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH/COLOR	SIZE	PRODUCT NO.	LOCATION	VENDOR/ CONTACT	NOTES
CAB-1	Stain Grade Cabinet	Contractor's Choice	Flat Panel	Beech/ Stain to match Wilsonart Norwegian Ash 8241/ Satin Finish	N/A	N/A	Clubroom Kitchen	Contractor's Choice	Contractor to provide sample to designer for approval
CAB-2	Paint Grade Cabinet	Contractor's Choice	Shaker	Satin Enamel/ SW 7622 Homburg Gray	N/A	N/A	Reception	Contractor's Choice	N/A
CAB-3	Paint Grade Cabinet	Contractor's Choice	Shaker	Satin Enamel/ SW 7005 Pure White	N/A	N/A	Workroom	Contractor's Choice	N/A

CARPET

CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH/COLOR	SIZE	PRODUCT NO.	LOCATION	VENDOR/ CONTACT	
CPT-1	Carpet Tile	Interface	Granite Mountain/Bridge Creek	Natural Edge	50 CM X 50 CM, Pile Thickness: 0.105"	107318.0	Leasing Offices	Matt Bradley P:682.351.0820, E:matt.bradley@interface.com	N/A

CONCRETE

CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH/COLOR	SIZE	PRODUCT NO.	LOCATION	VENDOR/ CONTACT	NOTES/GROUT COLOR & THICKNESS
CONC-1	Concrete	Contractor's Choice	Contractor's Choice	Polished/Natural	Contractor's Choice	Contractor's Choice	All Mech	Contractor's Choice	Contractor's Choice

COUNTERTOPS

CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH/COLOR	SIZE	PRODUCT NO.	LOCATION	VENDOR/ CONTACT	EDGE
CTOP-1	Quartz	MSI	N/A	Polished/Fossil Gray	3 CM	QSL-FOSGRY-3CM	Clubroom Kitchen & Island	Amy Ravy P:214.536.1644, E:amy.ravy@msisurfaces.com	Waterfall at Clubroom, Square
CTOP-2	Quartz	MSI	N/A	Polished/Frost White	3 CM	QSL-FRSTWHT-3CM	Workroom Countertop	Amy Ravy P:214.536.1644, E:amy.ravy@msisurfaces.com	Square

HARDWARE

CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH/COLOR	SIZE	PRODUCT NO.	LOCATION	VENDOR/ CONTACT	NOTES
HDW-1	Door Lever and Lock Sets	Kwikset	Halifax (Square Rosette) Lever and Deadbolt	Matte Black	N/A	N/A	Throughout	Contractor's Choice	N/A
HDW-2	Cabinet Pulls	Schwinn Hardware	N/A	Matte Black	1-3/4 Inch Long	Model:60087	Clubroom	Contractor's Choice	N/A
HDW-3	Cabinet Pulls	Signature Hardware	Beryn Collection	Satin Brass	6"	Model:450376	Reception	Contractor's Choice	N/A
HDW-4	Cabinet Pulls	Top Knobs	Nouveau III Collection	Flat Black	6-5/16 Inch Center to Center	Model:M1156	Workroom	Contractor's Choice	N/A
HDW-5	Shelf Bracket	Ultra Shelf	Studlock Ultra Bracket	Black	46" Length, Depth: 8	N/A	Clubroom Kitchenette	Contractor's Choice	For 12" Deep Shelf
HDW-6	Shelf Bracket	Ultra Shelf	Studlock Ultra Bracket	Black	46" Length, Depth: 6	N/A	Clubroom Kitchenette	Contractor's Choice	For 8" Deep Shelf

LIGHTING

CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH/COLOR	SIZE	PRODUCT NO.	LOCATION	VENDOR/ CONTACT	NOTES
L-1	Chandelier	Elk Home	Massive Impact	Antique Gold	Height: 27.5" Width: 48.5" Depth: 14"	D3557	Clubroom Island	Installed by G.C. Provided by SBDG Hannah Groombridge 312.659.0930	Bulbs not included/ 5 B11 Candelabra - E12 60 watts
L-2	Wall Sconce	Lamps.com	dwelLED	Aged Brass	Height: 5.63" Width: 2.88" Length: 7"	608469.0	Clubroom Banquette	Installed by G.C. Provided by SBDG Hannah Groombridge 312.659.0930	Bulbs included
L-3	Chandelier	Elk Home	Guesting 20-Light	Antique Brass	Height: 35" Width: 54" Depth: 54"	D4350	Clubroom TV	Installed by G.C. Provided by SBDG Hannah Groombridge 312.659.0930	Bulbs not included/ 20 Medium A19 60 watts
L-4	Flush Mount	Lights.com	Aria	Satin Brass, Clear Glass	Height: 12.25" Diameter: 10"	LC005221	Clubroom Shuffleboard	Installed by G.C. Provided by SBDG Hannah Groombridge 312.659.0930	Bulbs not included/ 1 60watt max, 120 volts, E26
L-5	Flush Mount	Elk Showroom	Canning	Matte Black	Height: 3.5" Width: 12" Length: 12"	70304/LED-ELK	Fitness	Installed by G.C. Provided by SBDG Hannah Groombridge 312.659.0930	Integrated LED
L-6	Directional Light	Amazon/Aisilan	Ceiling Spotlight	Black	Height: 4.3" Diameter: 3.35"	HYSL52	Restroom Entry Soffit	Contractor's Choice	NonDimmable
L-7	Fan	Build.com	Xtreme H20	Smoked Iron	84" Blade Span	F896-84-SI	Fitness	Installed by G.C. Provided by SBDG Hannah Groombridge 312.659.0930	N/A
L-8	Chandelier	Elk Home	Oriah	Matte Black	Height: 30" Width: 28" Depth: 28"	15426/6	Entry	Installed by G.C. Provided by SBDG Hannah Groombridge 312.659.0930	Bulbs not included/ 6 Medium A19 60 watts
L-9	Chandelier	Elk Home	Crosspiece	White	Height: 59" Width: 39" Depth: 39"	H0018-10359	Mailroom Seating	Installed by G.C. Provided by SBDG Hannah Groombridge 312.659.0930	Bulbs not included/ 6 B10 Candelabra - E12 60 watts
L-10	Chandelier	Elk Home	Acuminate	Opal White	Height: 17" Width: 61" Depth: 9"	H0018-8565	Mailroom Island	Installed by G.C. Provided by SBDG Hannah Groombridge 312.659.0930	Bulbs included
L-11	Wall Sconce	Lumens	Redford	Natural Brass	Height: 22" Width: 4.25" Depth: 4"	RGA1744594	Lobby Columns	Installed by G.C. Provided by SBDG Hannah Groombridge 312.659.0930	Bulbs not included/ 2 BA9 1/2 E12 25 watts 120 Volts
L-12	Chandelier	Bellacor/ Nuvo Lighting	Intention	Brass	Height: 6", Width, 23.5, 18" of Rod	BC# 2219652	Vestibule	Installed by G.C. Provided by SBDG Hannah Groombridge 312.659.0930	2-6" rods. 2-12" rods, 48" chain
L-13	Flush Mount	Lampsplus.com	Eglo Arenales	Brushed Brass, White opal glass	Height: 9" Diameter: 10.8"	211D2	Leasing	Installed by G.C. Provided by SBDG Hannah Groombridge 312.659.0930	Bulbs not included/ 1 Medium A19 E26 75 watt max
L-14	Semi Flush Mount	Lampsplus.com	Hazel	Antique Brass	Height: 9.5" Diameter: 24"	740V0	Work Room, Courtyard Access, Parcel	Installed by G.C. Provided by SBDG Hannah Groombridge 312.659.0930	Bulbs not included/ 1 standard-medium base 60 watt
L-15	Fan w/out Light Kit	Build.com/MinkaAire	Roto	Oil Rubbed Bronze	Height: 9.5" Diameter: 52"	F524-CL	Leasing Offices	Installed by G.C. Provided by SBDG Hannah Groombridge 312.659.0930	Includes: 6" downrod
L-16	Mini Pendant	Lampsplus.com/ Hinkley Lighting	Jax	Brass	Height: 7" Diameter: 5"	Style # 148A2	Restrooms	Installed by G.C. Provided by SBDG Hannah Groombridge 312.659.0930	Produces a maximum wattage of 8 watts
L-17	Neon Sign	Custom Neon	N/A	Lemon Yellow	Height: 10" Length: 183"	N/A	Fitness	Installed by G.C. Provided by SBDG Hannah Groombridge 312.659.0930	Font: Mayfair, Naked Neon, XX L, Gold Wall Mount
L-18	Pin Light	Build.com/ WAC Lighting	Ion	White	Height: 3-7/8" Diameter: 3-1/2", Trim: 2"	R2DRDN-F930-WT	Courtyard Access	Contractor's Choice	Bulb Included, Paint trim ring to match ceiling
L-19	LED Strip Light	Aspect LED or Similar	N/A	4000K White	N/A	N/A	Restroom Mirrors	Contractor's Choice	N/A
L-20	Wall Sconce	Lumens/ Visual Comfort Modern	Sean Lavin/Orbel	Aged Brass	Height: 12.9", Width: 6.7", Depth: 5"	TEC1833549	Waiting Area	Installed by G.C. Provided by SBDG Hannah Groombridge 312.659.0930	Dimmable, LED
L-21	Wall Sconce	Lumens/ Arteriors	Anthony	Antique Brass with Bronze	Height: 14", Width: 13"-34", Depth: 13"-34"	ARR1947330	Reception	Installed by G.C. Provided by SBDG Hannah Groombridge 312.659.0930	1 14W A19 E26 (Not Included), LED

MIRRORS

CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH/COLOR	SIZE	PRODUCT NO.	LOCATION	VENDOR/ CONTACT	NOTES
M-1	Vanity Mirror	Renwil	Augustus	Powder Coated Charcoal Grey	Width: 24", Height: 40", Depth: 0.75"	MT2448	Family Restrooms	Installed by G.C. Provided by SBDG Hannah Groombridge 312.659.0930	N/A
M-2	Plate Mirror	Contractor's Choice	Contractor's Choice	Contractor's Choice	Width: 4', Length: 8'	Contractor's Choice	Fitness Room	Contractor's Choice	N/A

PAINT

CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH	SIZE	PRODUCT NO.	LOCATION	VENDOR/ CONTACT	NOTES
PT-1	Paint	Sherwin Williams	Evergreen Fog 9130	Satin	N/A	9130.0	Fitness drop down ceiling & wall bumpouts, Work Room	Sherwin Williams	N/A
PT-2	Paint	Sherwin Williams	Homburg Gray 7622	Eggshell	N/A	7622.0	Clubroom walls & Ceiling	Sherwin Williams	N/A
PT-3	Paint	Sherwin Williams	Iron Ore 7069	Eggshell	N/A	7069.0	Vestibule door wall, Entry door wall, Lobby/Mailroom walls, Lobby columns, Reception, Office 1 & 2 walls, Restrooms ceiling & door wall, Fitness Accent Wall	Sherwin Williams	N/A
PT-4	Paint	Sherwin Williams	Elephant Ear 9168	Satin	N/A	9168.0	Mailroom wainscott, Restroom Portal (walls & Ceiling)	Sherwin Williams	N/A
PT-5	Paint	Sherwin Williams	Pure White 7005	Eggshell	N/A	7005.0	"Ceilings throughout, U.N.O Walls throughout , U.N.O"	Sherwin Williams	N/A
PT-6	Paint	Sherwin Williams	Tricorn Black 6258	Satin Enamel	N/A	6258.0	Doors throughout, U.N.O	Sherwin Williams	N/A
PT-7	Paint	Sherwin Williams	Iron Ore 7069	Satin Enamel	N/A	7069.0	Base Trim: Throughout U.N.O, Restroom Door Wall, Leasing Waiting/ Reception, Fitness. Decorative Trim: Mailroom Wainscott, Mailroom Mailbox Trim, Reception end of wall Paint, Elevator Wallpaper, Courtyard Access	Sherwin Williams	N/A
PT-8	Paint	Sherwin Williams	Pure White 7005	Satin Enamel	N/A	7005.0	Base Trim: Leasing Waiting/ Reception. Decorative Trim: Waiting Wainscott, Waiting Wallpaper Trim	Sherwin Williams	N/A
PT-9	Paint	Sherwin Williams	Elephant Ear 9168	Satin Enamel	N/A	9168.0	Base Trim: Restroom Lobby	Sherwin Williams	N/A
PT-10	Paint	Sherwin Williams	Homburg Gray 7622	Satin Enamel	N/A	7622.0	Decorative Trim: Clubroom Kitchenette, Mailroom	Sherwin Williams	N/A
PT-11	Paint	Sherwin Williams	Evergreen Fog 9130	Satin Enamel	N/A	9130.0	Base Trim: Fitness Accent Wall, Reception Cabinets, Base Trim in Clubroom	Sherwin Williams	N/A

PLUMBING

CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH/COLOR	SIZE	PRODUCT NO.	LOCATION	VENDOR/ CONTACT	NOTES
PF-1	Sink Faucet	Moen	Cia Collection	Matte Black	Height: 16.88", Spout Height: 16.86", Spout Reach: 8.75"	Model:7622BL	Clubroom & Workroom Kitchenette	Contractor's Choice	N/A
PF-2	Kitchen Sink	Blanco	Precis Collection	Coal Black	Length: 25", Width: 18", Basin Depth: 5"	Model:442929	Clubroom & Workroom Kitchenette	Contractor's Choice	N/A
PF-3	Soap Dispenser	Moen	Soap Dispenser Collection	Matte Black	Height: 3.125", Hole Size: 1.125"	Model:3942BL	Clubroom & Workroom Kitchenette	Contractor's Choice	N/A
PF-4	Lavatory Faucet	Moen	Gibson Collection	Matte Black	Height: 8.3125", Spout Height: 6", Spout Reach: 5"	Model:T6142BL	Restrooms	Contractor's Choice	N/A
PF-5	Lavatory Sink	Kohler	Pinoir	White	Length: 22", Width: 18"	K-2035-4-0	Restrooms	Contractor's Choice	Install per ADA code
PF-6	Toilet	TOTO	Entrada Collection	White	17.25" Seat Hight	CST244EF#01	Restrooms	Contractor's Choice	1.28GPF
PF-7	Soap Dispenser	Bobrick	TrimLineSeries	Matte Black	Height: 5.5", Length: 9.5"	B-306.MBLK	Restrooms	Contractor's Choice	Install per ADA code. Wall mount. Don't mount over open floor space, mount over countertop.
PF-8	Toilet Paper Holder	Bobrick	Surface-Mounted Toilet Tissue Dispenser & Utility Shelf	Matte Black	Height: 3.75", Length: 11", Depth: 3.75"	B-540.MBLK	Restrooms	Contractor's Choice	Install per ADA code
PF-9	Waste Receptacle	Bobrick	Recessed Waste Receptacle with Disposal Door	Matte Black	Height: 28.125, Length: 17.125"	B-35633.MBLK	Restrooms	Contractor's Choice	Install per ADA code
PF-10	Grab Bars	Bobrick	Straight Grab Bar with Concealed Flange	Matte Black	Per Architect	150C.MBLK	Restrooms	Contractor's Choice	Install per ADA code
PF-11	Water Fountain	Elkay	EZH2O Collection	Stainless Steel	46 1/4"H x 36 1/4"L x 18 5/8"W	Model:EMABFTL8WSSK	Courtyard Access	Contractor's Choice	Wall Mounted Bi-Level Station Hands Free Bottle Filler Combo with Cooler
PF-12	Paper Towel Dispenser	Uline	Senior EZ Pull Dispenser	Transparent Black	Height: 15", Width: 11", Depth: 12"	Model: H-2534	Fitness Room	Contractor's Choice	Install per ADA code

RUBBER BASE FLOORING

CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH/COLOR	SIZE	PRODUCT NO.	LOCATION	VENDOR/ CONTACT	NOTES
RBF-1	Rubber Flooring	Capri	Fitness & Rec	Rock Bottom	Roll, Thickness: 8mm	RTL4035	Fitness	Gabriele Stevens, P:817-714-8721, E:gabrieleflooring@att.net	N/A
RBF-2	Rubber Flooring	Capri	AND/OR 2.0	Nickel	Roll, Thickness: 8mm	AD4002	Fitness	Gabriele Stevens, P:817-714-8721, E:gabrieleflooring@att.net	N/A

TRIM

CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH/COLOR	SIZE	PRODUCT NO.	LOCATION	VENDOR/ CONTACT	NOTES
TR-1	Base Trim	Contractor's Choice	Square Edge/Flat	N/A	1 X 4	N/A	Throughout U.N.O, Restroom Door Wall, Leasing Waiting/ Reception, Fitness, Restroom Lobby, Fitness Accent Wall, Reception Cabinets, Clubroom	Contractor's Choice	Paint Grade Trim
TR-2	Decorative Trim	Contractor's Choice	Square Edge/Flat	N/A	1 X 3	N/A	Mailroom Wainscott, Waiting Wainscott,	Contractor's Choice	Paint Grade Trim
TR-3	Decorative Trim	Contractor's Choice	Square Edge/Flat	N/A	1 X 2	N/A	Mailroom Mailbox Trim	Contractor's Choice	Paint Grade Trim
TR-4	Decorative Trim	Contractor's Choice	Square Edge/Flat	N/A	1 X 1	N/A	Reception end of wall Paint, Elevator Wallpaper, Waiting Wainscott, Waiting Wallpaper Trim, Clubroom Kitchenette, Mailroom,	Contractor's Choice	Paint Grade Trim
TR-5	Decorative Trim	Contractor's Choice	Square Edge/Flat	N/A	1 X 6	N/A	Courtyard Access	Contractor's Choice	Paint Grade Trim
TR-6	Base Trim	Contractor's Choice	Square Edge/Flat	Beech/ Stain to match Wilsonart Norwegian Ash 8241/ Satin Finish	1 X 4	N/A	Office 1, Office 2	Contractor's Choice	Stain Grade Trim. Contractor to Provide Sample to designer for approval
TR-7	Base Trim	Contractor's Choice	Square Edge/Flat	Beech/ Stain to match Wilsonart Norwegian Ash 8241/ Satin Finish	1 X 12	N/A	Clubroom TV Wall	Contractor's Choice	Stain Grade Trim. Contractor to Provide Sample to designer for approval
TR-8	Decorative Trim	Contractor's Choice	Square Edge/Flat	Beech/ Stain to match Wilsonart Norwegian Ash 8241/ Satin Finish	1 X 2	N/A	Clubroom TV Wall	Contractor's Choice	Stain Grade Trim. Contractor to Provide Sample to designer for approval

TILE

CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH/COLOR	SIZE	PRODUCT NO.	LOCATION	VENDOR/ CONTACT	NOTES/GROUT COLOR & THICKNESS
TI-1	Wall Tile	TileBar	Division 3D	Matte / White	Width: 8" Length: 16", Thickness: 10.3mm	N/A	Backsplash to bottom of Upper Shelf	Melanie Walker P:214.507.5607, E:mwalker@tilebar.com	CBP #381 Bright White 1/8"
TI-2	Wall Tile	TileBar	Enso Ribbed	Matte/Ash	Width: 23.62", Length: 47.24", Thickness: 10.5mm	N/A	3 Full Walls in Family Restrooms	Melanie Walker P:214.507.5607, E:mwalker@tilebar.com	CBP #386 Oyster Gray 1/8"
TI-3	Floor Tile	IB Supply	Dos	Matte/Chalk	Width: 24", Length: 24", Thickness: 5/16"	N/A	Reception / Waiting, File Room, Workroom, Parcel, Clubroom, Courtyard Access	Ryan De Hoyos P:4695970085, E:ryan@ibsupply.com	AccuColor Silverado, 1/8"
TI-4	Wall Tile	IB Supply	Trance	Russet	Width: 32", Length: 32", Thickness: 25/64"	N/A	Vestibule Walls, Entry Walls	Ryan De Hoyos P:469.597.0085, E:ryan@ibsupply.com	CBP #95 Sable Brown, 1/8"
TI-5	Floor Tile	Dal-Tile/Marazzi	Treverkchic	noce francese	Width: 5.90551", Length: 47.2441", Thickness: 9mm	Code: MH30	Throughout U.N.O	Taylor Lewis P:918.527.3320, E: taylor.lewis1@daltile.com	AccuColor Sandstone Beige, 1/8"
TI-6	Mosaic Floor Tile	Festival	Hexagon Porcelain Mosaic	Matte / Black	Width: 11", Length: 13", Thickness: 6mm	SKU: 100782390	Vestibule	Floor & Décor	CBP #60 Charcoal

TRANSITION STRIP

CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH/COLOR	SIZE	PRODUCT NO.	LOCATION	VENDOR/ CONTACT	NOTES
TS-1	Floor Transition Strip	Schluter Systems	RENO-TK	Satin Anodized	Contractor's Choice	N/A	Office 1, Office 2, CPT-1 to TI-3	Chelsea Enloe E:cenloe@schluter.com	Contractor to Verify Compatibility
TS-2	Floor Transition Strip	Schluter Systems	RENO-TK	Satin Anodized	Contractor's Choice	N/A	Vestibule, TI-5 to TI-6	Chelsea Enloe E:cenloe@schluter.com	Contractor to Verify Compatibility
TS-3	Wall Transition Strip	Schluter Systems	QUADEC	Bronze	Contractor's Choice	N/A	Vestibule	Chelsea Enloe E:cenloe@schluter.com	Contractor to Verify Compatibility
TS-4	Floor/Wall Transition Strip	Schluter Systems	DILEX-AHK	Bronze	Contractor's Choice	N/A	Vestibule, TI-4 to TI-5	Chelsea Enloe E:cenloe@schluter.com	Contractor to Verify Compatibility
TS-5	Floor/Wall Transition Strip	Schluter Systems	DILEX-AHK	Cream	Contractor's Choice	N/A	Restrooms, TI-2 to TI-5	Chelsea Enloe E:cenloe@schluter.com	Contractor to Verify Compatibility

SPECIALTY PRODUCTS

CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH/COLOR	SIZE	PRODUCT NO.	LOCATION	VENDOR/ CONTACT	NOTES
SP-1	Metal Reveal	Fry Reglet	Drywall Reveal Molding	Cream	Width: 1-1/2"	N/A	Lobby Columns	Contractor's Choice	N/A
SP-2	Signage/Decal	Etsy/Ladiessquare	Man	Gold	Height: 7", Width: 1.29", Thickness: 4-5mm	N/A	Restroom Doors	Installed by G.C. Provided by SBDG Hannah Groombridge 312.659.0930	N/A
SP-3	Signage/Decal	Etsy/Ladiessquare	Woman	Gold	Height: 7" Width: 1.29", Thickness: 4-5mm	N/A	Restroom Doors	Installed by G.C. Provided by SBDG Hannah Groombridge 312.659.0930	N/A
SP-4	Signage/Decal	Etsy/Ladiessquare	Handicap	Gold	Height: 5.47", Width: 2.87", Thickness 4-5mm	N/A	Restroom Doors	Installed by G.C. Provided by SBDG Hannah Groombridge 312.659.0930	N/A
SP-5	Mailbox Finish	Florence Corporation	Contractor's Choice	Dark Bronze (Black 7C)	Contractor's Choice	Contractor's Choice	Mailroom	Contractor's Choice	N/A
SP-6	Signage	Etsy/ SpotIndustriesUSA	3D Outdoor Sign Letters (Stud Mount)	Dark Gold	Height: 9", Thickness: 1"	N/A	Clubroom Entry/Parcel Entry	Installed by G.C. Provided by SBDG Hannah Groombridge 312.659.0930	Font: Roboto Condensed, Text: Clubroom, Text: Parcel
SP-7	Opaque Privacy Window Film	Decorative Films/SOLYX	N/A	Cool Grey	N/A	SX-4500	Parcel Door, Door by mail seating leading to units	Contractor's Choice	N/A

STAIN

CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH/COLOR	SIZE	PRODUCT NO.	LOCATION	VENDOR/ CONTACT	NOTES
STN-1	Semi Transparent Stain	Contractor's Choice	Contractor's Choice	Beech/ Stain to match Wilsonart Norwegian Ash 8241/ Satin Finish	N/A	Contractor's Choice	Clubroom TV Wall Trim, Clubroom Base Trim, Leasing Offices Base Trim, Kitchen Cabinets and Shelves	Contractor's Choice	Contractor to Provide Sample to designer for Approval
STN-2									

WALL COVERINGS

CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH/COLOR	SIZE	PRODUCT NO.	LOCATION	VENDOR/ CONTACT	NOTES
WC-1	Wallpaper	Rebel Walls	Passion	White	Panels/ Custom Size to Wall	R14092	Clubroom Kitchen Above Tile	Installed by G.C. Provided by SBDG Hannah Groombridge 312.659.0930	N/A
WC-2	Wallpaper	Fast Signs	Black and white aspen trees make a natural background texture pattern in Colorado forest stock photo	Black and White	Panels/ Custom Size to Wall	902745938.0	Walls Around Elevator	Installed by Fast Signs Provided by SBDG Hannah Groombridge 312.659.0930	"Largest size: 3200 x 2133 px (10.67 x 7.11 in.) - 300 dpi - RGB"
WC-3	Wallpaper	Burke Décor/Brewster Home Fashions	Brewster Home Fashions	Lars Charcoal Retro Wave Wallpaper	Pattern Repeat: 20.9" Roll: 20.5" W x 33' L (56 SF)	4066-26501	Leasing Waiting Area	Installed by G.C. Provided by SBDG Hannah Groombridge 312.659.0930	Sold as in a minimum of 2 single rolls, which are physically packaged as 1 double-roll
WC-4	Wallpaper	Burke Décor/ Seabrook Wallcoverings	Tikki Natural Ombre	Grey Mist and Ivory	Pattern Repeat: 20.87" Roll: 27"W x 27'L (60 SF)	RY31000	Mailroom	Installed by G.C. Provided by SBDG Hannah Groombridge 312.659.0930	Sold as in a minimum of 2 single rolls, which are physically packaged as 1 double-roll
WC-5	Wallpaper	Rebel Walls	Paper Mountains	Grey	Panel: 19.7"W	R13871	Fitness	Installed by G.C. Provided by SBDG Hannah Groombridge 312.659.0930	N/A
WC-6	Wallpaper	Murals Your Way	Pollock Wall Mural	N/A	Custom Size to Wall	SKU #RL64141682	Mailroom Seating	Installed by G.C. Provided by SBDG Hannah Groombridge 312.659.0930	Prepasted Wallpaper

WOOD

CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH/COLOR	SIZE	PRODUCT NO.	LOCATION	VENDOR/ CONTACT	NOTES
WD-1	Stain Grade Wood	Contractor's Choice	Beech or Equivalent	To Match CAB-1	N/A	N/A	Clubroom Kitchen Shelves	Contractor's Choice	Center of lower shelf to align with with grout of 2nd course of tile, Top of upper shelf to align with 3rd course of tile
WD-2	Paint Grade Plywood	Contractor's Choice	N/A	To Match TR-3	N/A	N/A	Mailroom	Contractor's Choice	Paint Grade Plywood Top with TR-3 Edge

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CLIENT / DEVELOPER

Lincoln Avenue Capital

401 WILSHIRE BLVD. STE 1070
SANTA MONICA, CA 90401

PROJECT NAME

MARSHALL POINTE
5190 Marshall St.
Arvada, Colorado 80002

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PROJECT ISSUE / DATE

IFC SET

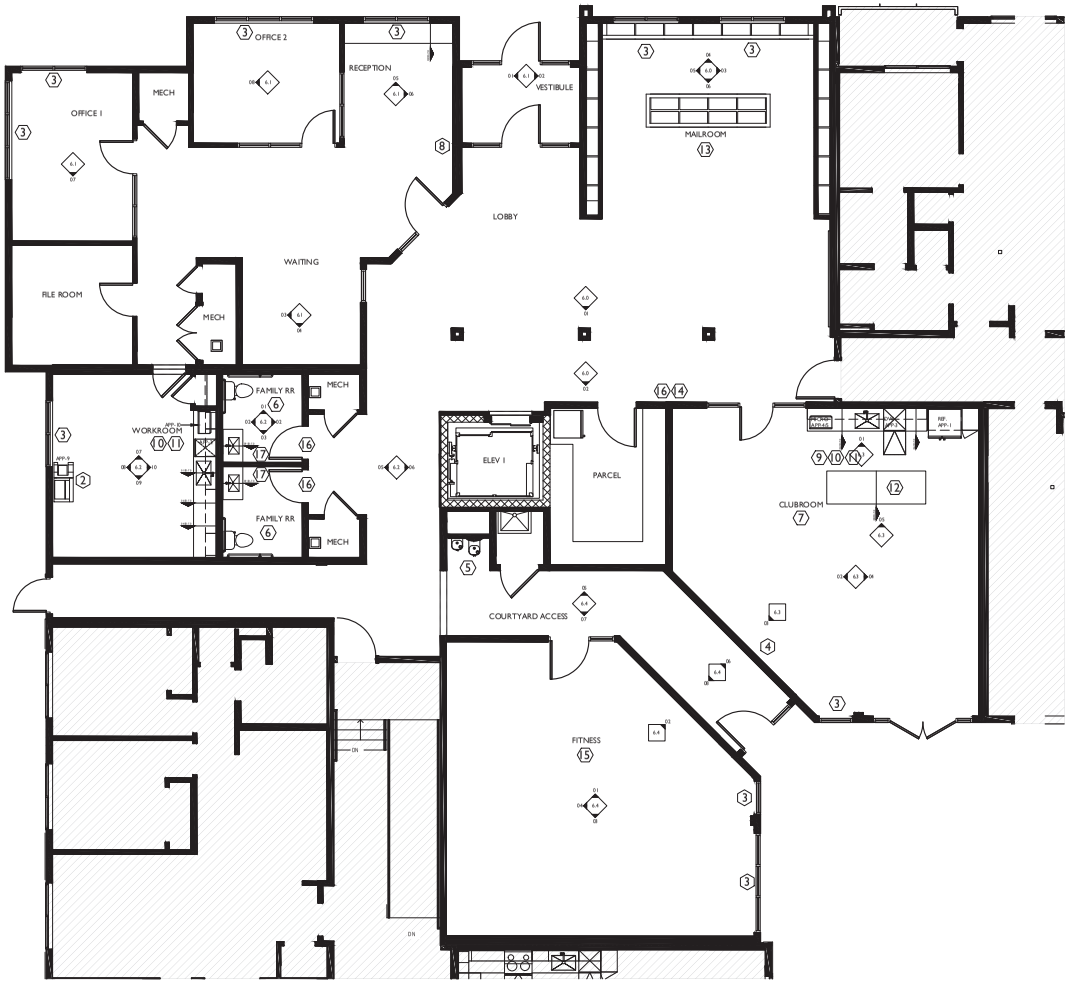
ISSUE LOG:	ISSUE DATES:
50% ID CONSTRUCTION SET	02.09.23
100% ID CONSTRUCTION SET	05.04.23
REVISION 1	08.01.23
IFC SET	08.01.24

PROJECT CONTACTS

JUANA RODRIGUEZ (PROJECT MANAGER)
ERICA BARNES (LEAD DESIGN)

DRAWN BY: JR / EB
STUDIO B DESIGN GROUP

PROJECT: MARSHALL POINTE	SHEET: IDN-1.3
DATE: AUGUST 1, 2024	
SCALE	FINISH SCHEDULE 4 OF 23 SHEETS



01 KEYNOTES PLAN

SCALE: 3/16" = 1'0"

ID-1.0 KEYNOTES

1. NOT USED
2. COPIER / PRINTER
3. WINDOWS TO RECEIVE COVERING SPECIFIED AND/OR PURCHASED BY SBDG
4. TV PROVIDED BY OWNER / GC PROVIDE BLOCKING
5. FOUNTAIN SPECIFICATION PF-11
6. ALL TOILETS / URINALS TO BE WHITE; HANDICAP BARS TO BE BLACK. REF. IDN - 1.3
7. FLOOR OUTLET TO BE STAINLESS STEEL OR EQUAL
8. SITE MAP TO BE 36X42 ON PLEXI
9. COFFEE MACHINE - ALLOW GROMMET HOLE FOR PLUMBING
10. REF. APPLIANCES SCHEDULE IDN-1.3
11. REF. CABINET SCHEDULE IDN-1.3
12. HIDDEN L-BRACKET SUPPORT
13. REF. MAILBOX FINISH IDN-1.3
14. TRASH/RECYCLING
15. ALL EXERCISE EQUIPMENT SPECIFIED AND INSTALL BY MANUFACTURER
16. DECORATIVE SIGNAGE TO BE PROVIDED BY SBDG
17. ELECTRIC HAND DRYER

ID-1.0 SHEET NOTES

1. REFER TO ARCHITECTURAL DRAWINGS FOR DOOR AND WINDOW SCHEDULES, PROVIDE DESIGNER WITH SUBMITTALS FOR APPROVAL
2. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS AND WALL PLACEMENTS
3. REFER TO ARCHITECTURAL DRAWINGS FOR WALL TYPES
4. HVAC COVERS AND ELECTRICAL PANELS PAINTED TO MATCH ADJACENT WALL COLOR

LEGEND

XX KEY NOTE TAG

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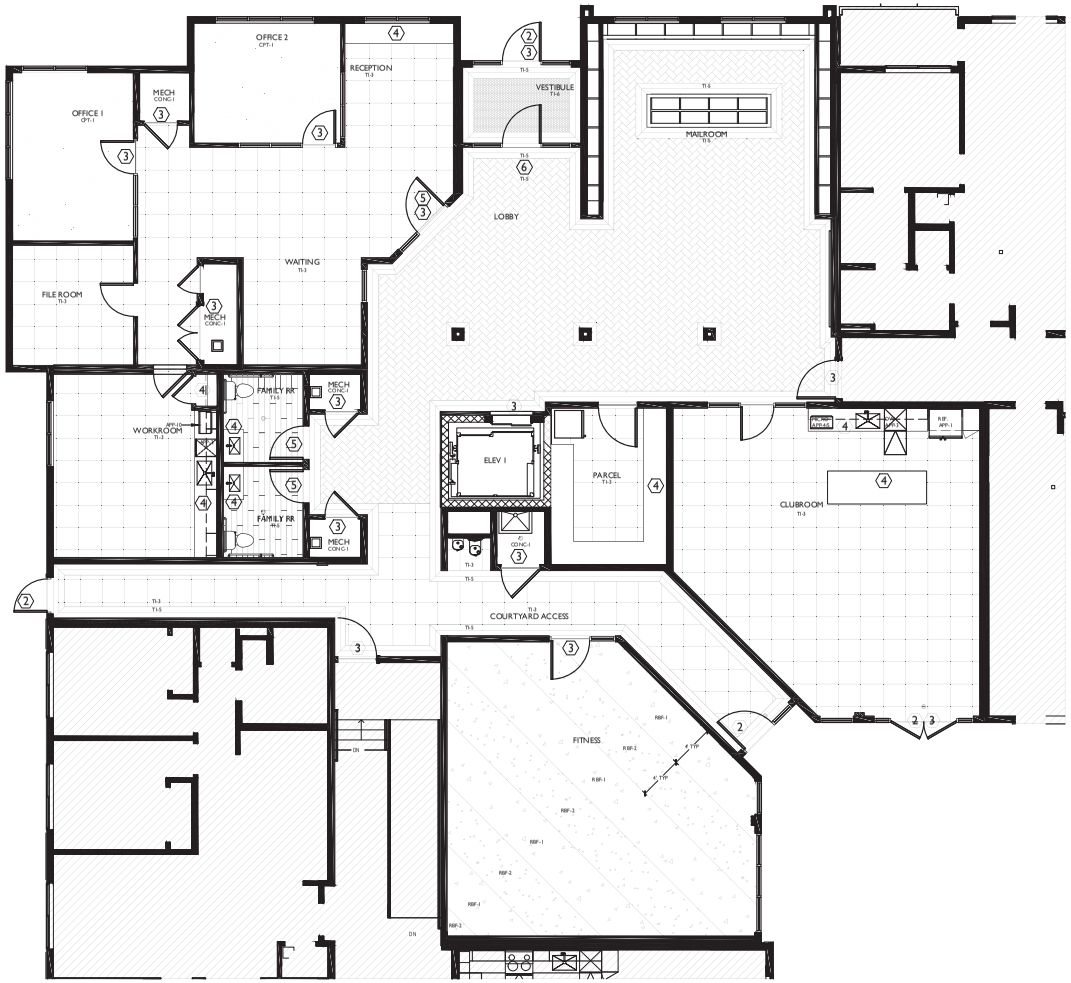
REVISION 1	08.01.23
IFC SET	08.01.24

PROJECT CONTACTS

JUANA RODRIGUEZ (PROJECT MANAGER)
ERICA BARNES (LEAD DESIGN)

DRAWN BY: JR / EB
STUDIO B DESIGN GROUP

PROJECT: MARSHALL POINTE	SHEET: ID-1.0
DATE: AUGUST 1, 2024	
SCALE: 3/16" = 1' - 0"	KEYNOTES 5 OF 23 SHEETS



01 FLOOR FINISH PLAN

SCALE: 3/16" = 1'0"

ID.2.0 KEYNOTES

1. REFER TO ARCHITECTURALS
2. WEATHERPROOF THRESHOLD PER ARCH
3. TRANSITION STRIP PER SPECIFICATIONS
4. EXTEND FLOOR FINISH UNDER MILLWORK
5. USE FULL TILE AT DOORWAY
6. CENTER TILE PATTERN ON DOOR

ID-2.0 SHEET NOTES

1. G.C. TO VERIFY ALL TRANSITION STRIPS ARE COMPATIBLE AND COMPLAINT WITH LOCAL CODES
2. FLOORING HATCH PATTERN NOT TO SCALE

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PROJECT ISSUE / DATE

IFC SET

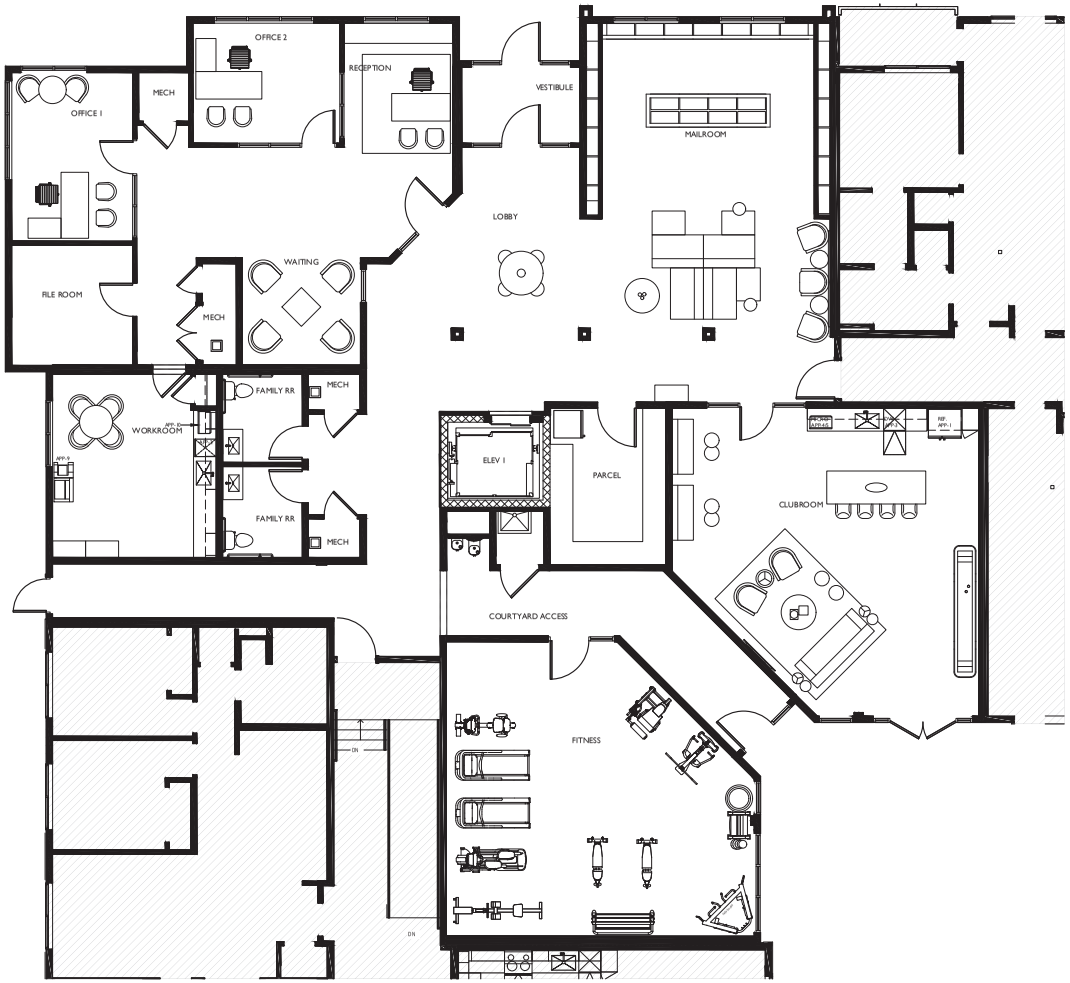
ISSUE LOG:	ISSUE DATES:
50% ID CONSTRUCTION SET	02.09.23
100% ID CONSTRUCTION SET	05.04.23
REVISION 1	08.01.23
IFC SET	08.01.24

PROJECT CONTACTS

JUANA RODRIGUEZ (PROJECT MANAGER)
ERICA BARNES (LEAD DESIGN)

DRAWN BY: JR / EB
STUDIO B DESIGN GROUP

PROJECT	SHEET
MARSHALL POINTE	ID-2.0
DATE: AUGUST 1, 2024	
SCALE: 3/16" = 1' - 0"	FLOOR FINISH 8 OF 23 SHEETS



01 FURNITURE PLAN

SCALE: 3/16" = 1'0"

ID-3.0 KEYNOTES

1 NOT USED

ID-3.0 SHEET NOTES

1. FURNITURE TO BE PURCHASED AND INSTALLED BY STUDIO B DESIGN GROUP
2. ALL TVS AND ELECTRICAL EQUIPMENT BY OWNER/ MANAGEMENT
3. ALL FITNESS EQUIPMENT PROVIDED BY FITNESS CONSULTANT, COLOR TO BE BLACK

STUDIO B DESIGN GROUP

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CLIENT / DEVELOPER

Lincoln Avenue Capital

401 WILSHIRE BLVD. STE 1070
SANTA MONICA, CA 90401

PROJECT NAME

MARSHALL POINTE
5190 Marshall St.
Arvada, Colorado 80002

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PROJECT ISSUE / DATE

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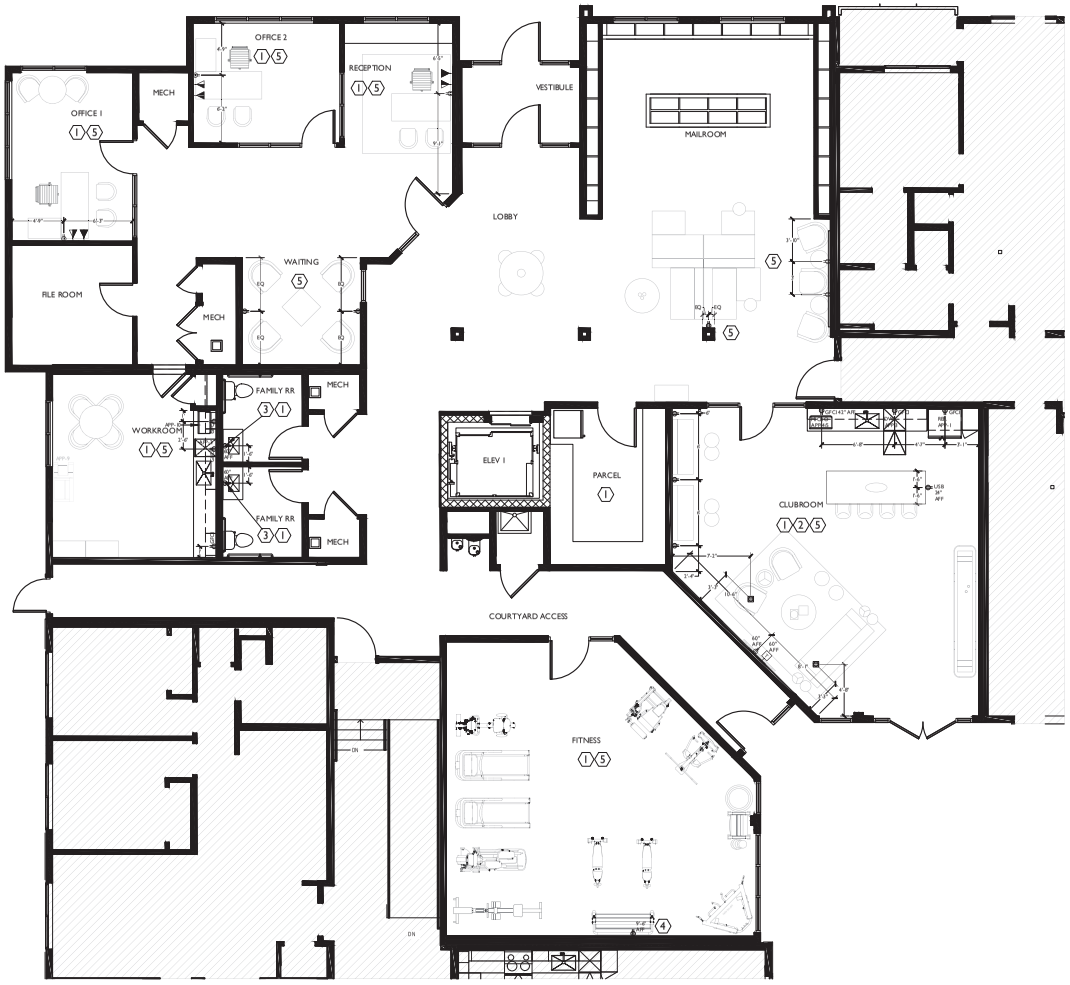
ERICA BARNES (LEAD DESIGN)

DRAWN BY: JR / EB
STUDIO B DESIGN GROUP

PROJECT	SHEET
MARSHALL POINTE	ID-3.0
DATE: AUGUST 1, 2024	
SCALE: 3/16" = 1' - 0"	FURNITURE PLAN 7 OF 23 SHEETS



01 SPECIALTY POWER PLAN

SCALE: 3/16" = 1'0"

ID-4.0 KEYNOTES

1. COORDINATE POWER AND DATA FOR EQUIPMENT AND APPLIANCES W/ OWNER AND DESIGNER PRIOR TO INSTALLATION
2. VERIFY FLOOR OUTLET LOCATION WITH DESIGNER, FINISH GOLD.
3. POWER FOR LED STRIP LIGHT L-19
4. POWER FOR NEON SIGN L-17
5. OUTLETS INDICATED ARE FOR SPECIFIC EQUIPMENT, REFERENCE MEP FOR STANDARD POWER PLACEMENT

ID-4.0 SHEET NOTES

1. ALL OUTLETS AT 18" U.N.O.
2. ALL RECEPTACLES, SWITCHES, AND PLATES TO BE WHITE
3. ALL FLOOR OUTLETS TO BE GOLD

GRAPHICS LEGEND

- DUPLEX OUTLET
- FLOOR OUTLET
- TELEPHONE JACK
- TELEVISION OUTLET
- DATA
- USB OUTLET (USB)
- GFCI (GFCI)

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CLIENT / DEVELOPER

Lincoln Avenue Capital

401 WILSHIRE BLVD. STE 1070
SANTA MONICA, CA 90401

PROJECT NAME

MARSHALL POINTE
5190 Marshall St.
Arvada, Colorado 80002

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PROJECT ISSUE / DATE

IFC SET

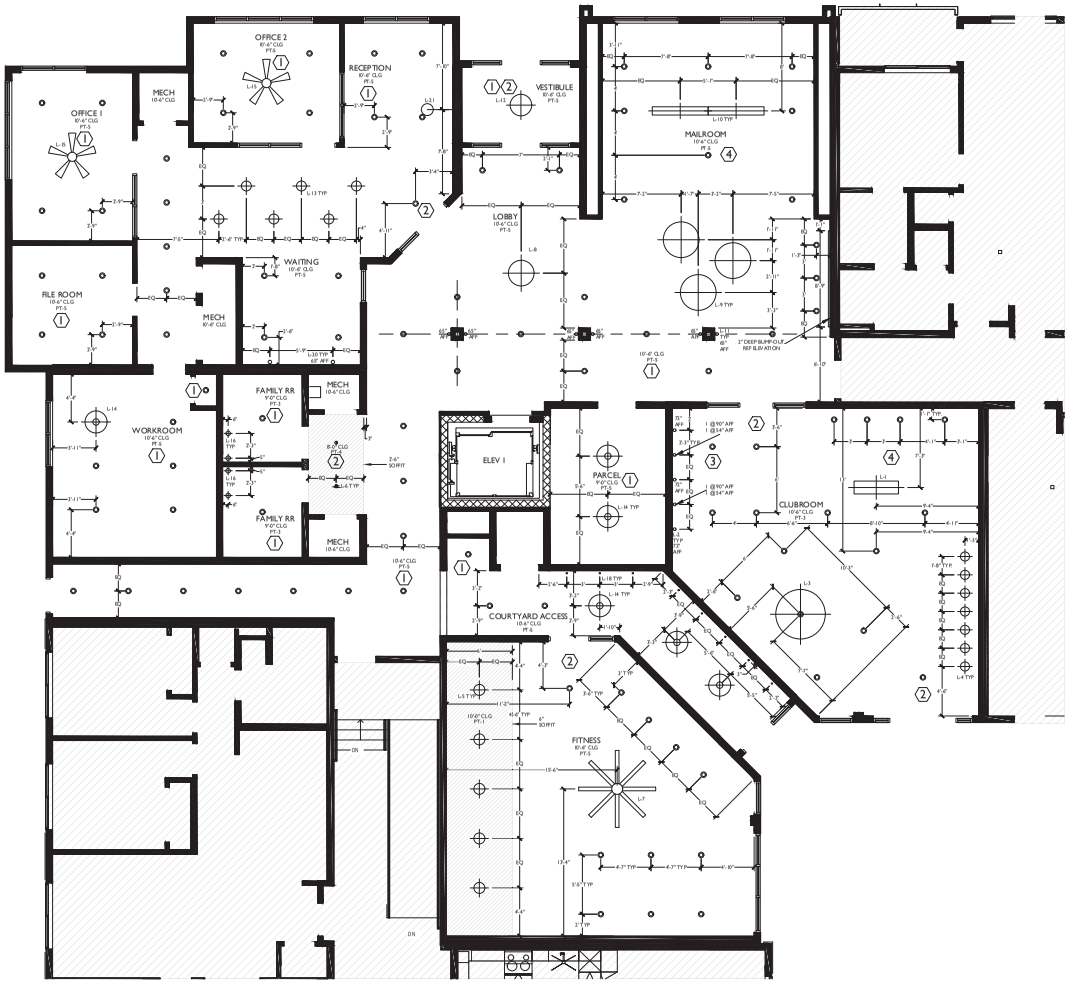
ISSUE LOG:	ISSUE DATES:
50% ID CONSTRUCTION SET	02.09.23
100% ID CONSTRUCTION SET	05.04.23
REVISION 1	08.01.23
IFC SET	08.01.24

PROJECT CONTACTS

JUANA RODRIGUEZ (PROJECT MANAGER)
ERICA BARNES (LEAD DESIGN)

DRAWN BY: JR / EB
STUDIO B DESIGN GROUP

PROJECT	SHEET
MARSHALL POINTE	ID-4.0
DATE: AUGUST 1, 2024	
SCALE: 3/16" = 1' - 0"	SPECIALITY POWER 8 OF 23 SHEETS



01 REFLECTED CEILING PLAN

SCALE: 3/16" = 1'0"

ID.5.00 KEYNOTES

1. CENTER FIXTURES IN ROOM
2. CENTER LIGHTS ON DOOR
3. REF. ID 6.3 FOR ELEVATION LIGHTING PLACEMENT
4. CENTER FIXTURE ON MILLWORK

ID.5.00 SHEET NOTES

1. LIGHTING LAYOUT FOR DECORATIVE PURPOSES, VERIFY WITH MEP AND ARCHITECTURAL PLANS
2. PAINT ALL TRIM RINGS, SPEAKERS, AND HVAC VENTS TO MATCH ADJACENT CEILING COLOR

GRAPHICS LEGEND

- CHANDELIER
- LINEAR PENDANT
- MEDIUM CEILING FAN
- CAN LIGHT
- FLUSH MOUNT
- SEMI FLUSH MOUNT
- WALL SCONCE
- DIRECTIONAL LIGHT
- LARGE CEILING FAN
- PIN LIGHT

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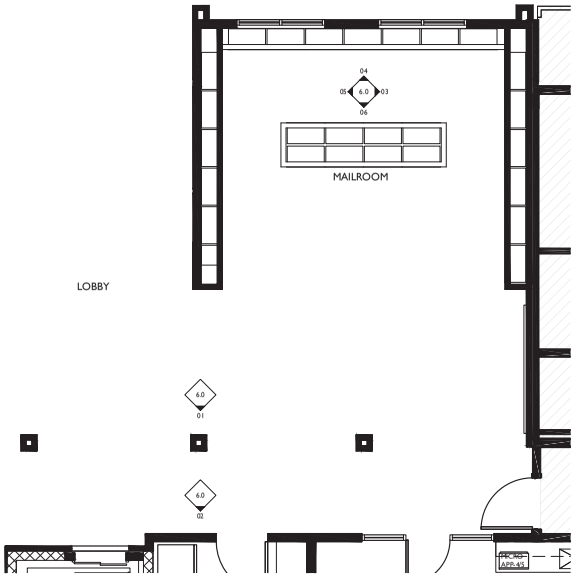
100% ID CONSTRUCTION SET	05.04.23
REVISION 1	08.01.23
IFC SET	08.01.24

PROJECT CONTACTS

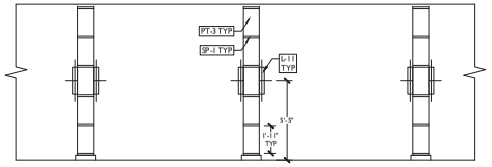
JUANA RODRIGUEZ (PROJECT MANAGER)
ERICA BARNES (LEAD DESIGN)

DRAWN BY: JR / EB
STUDIO B DESIGN GROUP

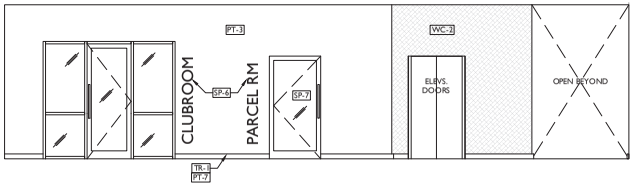
PROJECT: MARSHALL POINTE	SHEET: ID-5.0
DATE: AUGUST 1, 2024	
SCALE: 3/16" = 1' - 0"	REFLECTED CEILING PLAN 9 OF 23 SHEETS



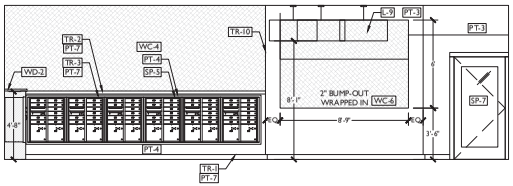
00 ENLARGED PLAN
SCALE: 1/4" = 1'0"



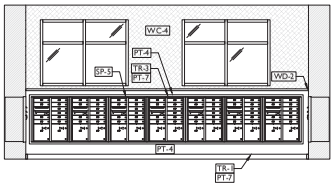
01 LOBBY COLUMNS SOUTH
SCALE: 1/4" = 1'0"



02 LOBBY SOUTH
SCALE: 1/4" = 1'0"



03 MAILROOM EAST
SCALE: 1/4" = 1'0"



04 MAILROOM NORTH
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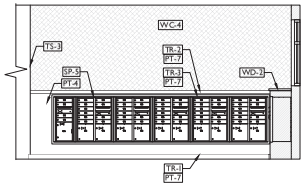

05 MAILROOM WEST
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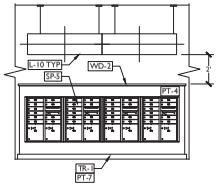

06 MAILROOM ISLAND
SCALE: 1/4" = 1'0"

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PROJECT NAME

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5190 Marshall St.
Arvada, Colorado 80002

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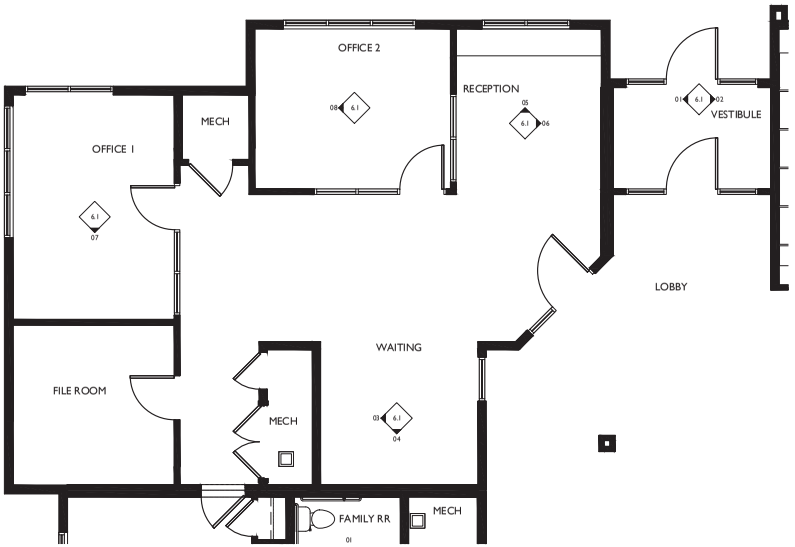
IFC SET	08.01.24

PROJECT CONTACTS

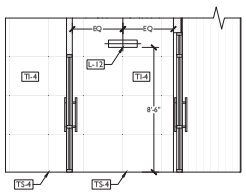
JUANA RODRIGUEZ (PROJECT MANAGER)
ERICA BARNES (LEAD DESIGN)

DRAWN BY: JR / EB
STUDIO B DESIGN GROUP

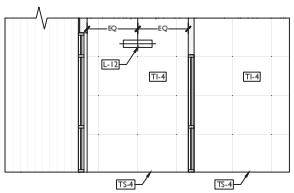
PROJECT	SHEET
MARSHALL POINTE	ID-6.0
DATE: AUGUST 1, 2024	
SCALE: 1/4" = 1'-0"	INTERIOR ELEVATIONS 10 OF 23 SHEETS



00 ENLARGED PLAN
SCALE: 1/4" = 1'0"



01 VESTIBULE WEST
SCALE: 1/4" = 1'0"



02 VESTIBULE EAST
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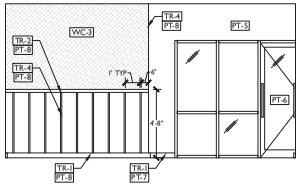
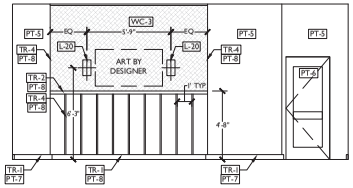
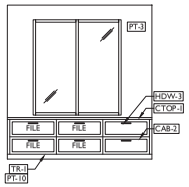


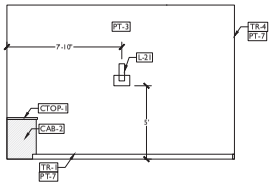
03 WAITING WEST
SCALE: 1/4" = 1'0"



04 WAITING SOUTH
SCALE: 1/4" = 1'0"



05 RECEPTION NORTH
SCALE: 1/4" = 1'0"



06 RECEPTION EAST
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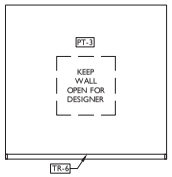
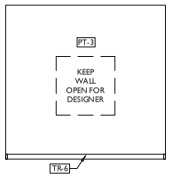


07 OFFICE 1 SOUTH
SCALE: 1/4" = 1'0"



08 OFFICE 2 WEST
SCALE: 1/4" = 1'0"

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CLIENT / DEVELOPER

Lincoln Avenue Capital

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SANTA MONICA, CA 90401

PROJECT NAME

MARSHALL POINTE
5190 Marshall St.
Arvada, Colorado 80002

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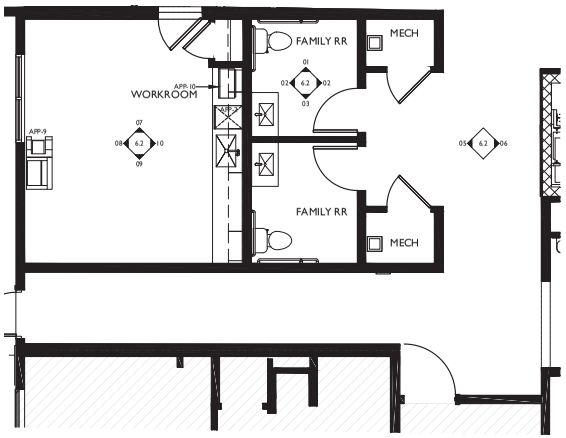
REVISION 1	08.01.23
IFC SET	08.01.24

PROJECT CONTACTS

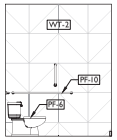
JUANA RODRIGUEZ (PROJECT MANAGER)
ERICA BARNES (LEAD DESIGN)

DRAWN BY: JR / EB
STUDIO B DESIGN GROUP

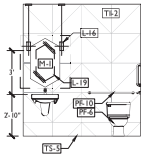
PROJECT	SHEET
MARSHALL POINTE	ID-6.1
DATE: AUGUST 1, 2024	
SCALE: 1/4" = 1'-0"	INTERIOR ELEVATIONS 11 OF 23 SHEETS



00 ENLARGED PLAN
SCALE: 1/4" = 1'0"



01 FAMILY RR NORTH
SCALE: 1/4" = 1'0"



02 FAMILY RR WEST
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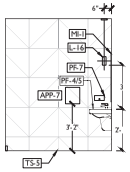
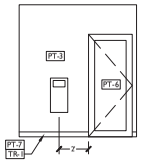


03 FAMILY RR SOUTH
SCALE: 1/4" = 1'0"



04 FAMILY RR EAST
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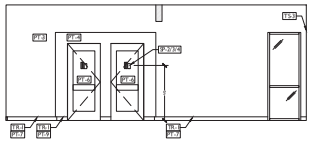

05 RR HALL WEST
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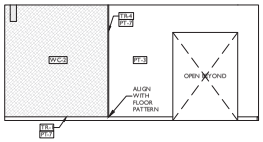
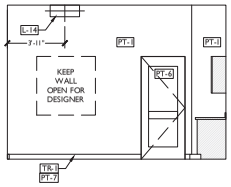
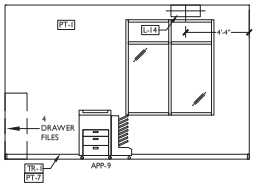


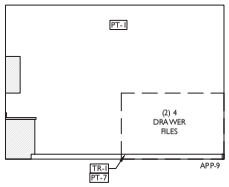
06 RR HALL EAST
SCALE: 3/16" = 1'0"



07 WORKROOM NORTH
SCALE: 1/4" = 1'0"



08 WORKROOM WEST
SCALE: 1/4" = 1'0"



09 WORKROOM SOUTH
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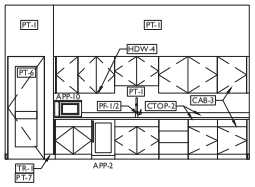

10 WORKROOM KITCHENETTE
SCALE: 1/4" = 1'0"

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PROJECT ISSUE / DATE

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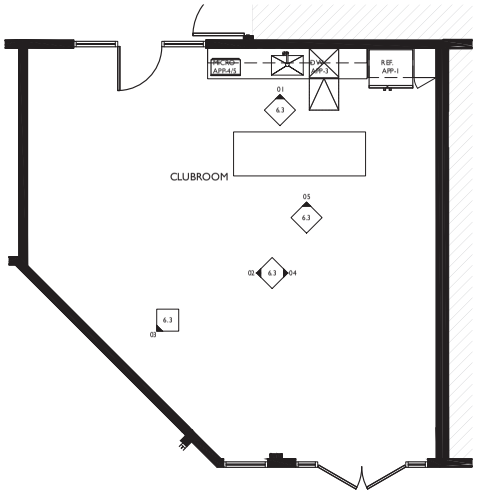
100% ID CONSTRUCTION SET	05.04.23
REVISION 1	08.01.23
IFC SET	08.01.24

PROJECT CONTACTS

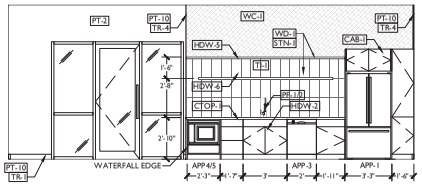
JUANA RODRIGUEZ (PROJECT MANAGER)
ERICA BARNES (LEAD DESIGN)

DRAWN BY: JR / EB
STUDIO B DESIGN GROUP

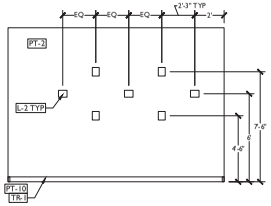
PROJECT: MARSHALL POINTE	SHEET: ID-6.2
DATE: AUGUST 1, 2024	
SCALE: VARIES	INTERIOR ELEVATIONS 12 OF 23 SHEETS



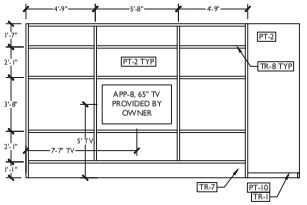
00 ENLARGED PLAN
SCALE: 1/4" = 1'0"



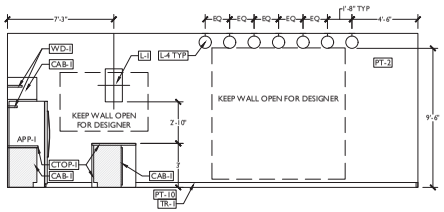
01 CLUBROOM NORTH
SCALE: 1/4" = 1'0"



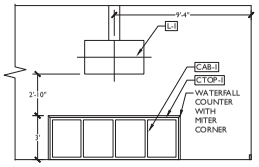
02 CLUBROOM WEST
SCALE: 1/4" = 1'0"



03 CLUBROOM SOUTH WEST
SCALE: 1/4" = 1'0"



04 CLUBROOM EAST
SCALE: 1/4" = 1'0"



05 CLUBROOM ISLAND
SCALE: 1/4" = 1'0"

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ebarnes@studiobdesigngroup.com

CLIENT / DEVELOPER

Lincoln Avenue Capital

401 WILSHIRE BLVD. STE 1070
SANTA MONICA, CA 90401

PROJECT NAME

MARSHALL POINTE
5190 Marshall St.
Arvada, Colorado 80002

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PROJECT ISSUE / DATE

IFC SET

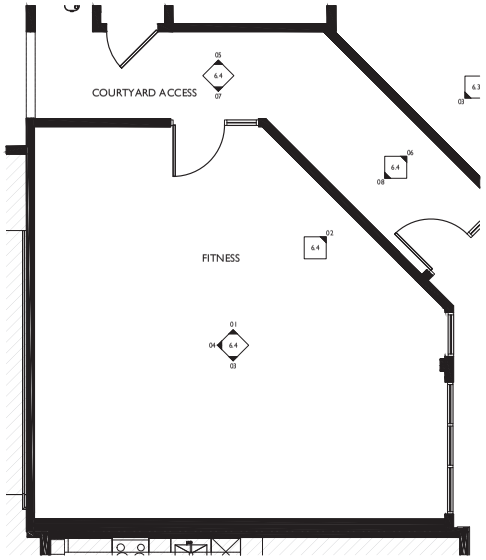
ISSUE LOG:	ISSUE DATES:
50% ID CONSTRUCTION SET	02.09.23
100% ID CONSTRUCTION SET	05.04.23
REVISION 1	08.01.23
IFC SET	08.01.24

PROJECT CONTACTS

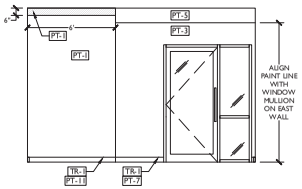
JUANA RODRIGUEZ (PROJECT MANAGER)
ERICA BARNES (LEAD DESIGN)

DRAWN BY: JR / EB
STUDIO B DESIGN GROUP

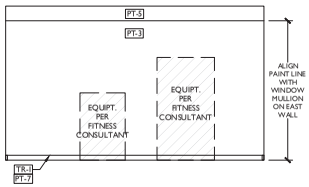
PROJECT	SHEET
MARSHALL POINTE	ID-6.3
DATE: AUGUST 1, 2024	
SCALE: 1/4" = 1'-0"	INTERIOR ELEVATIONS 33 OF 23 SHEETS



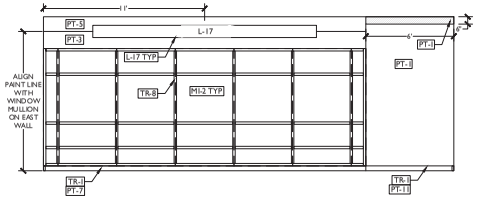
00 ENLARGED PLAN
SCALE: 1/4" = 1'0"



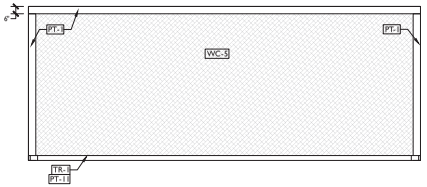
01 FITNESS PLAN NORTH
SCALE: 1/4" = 1'0"



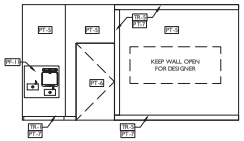
02 FITNESS PLAN NORTHEAST
SCALE: 1/4" = 1'0"



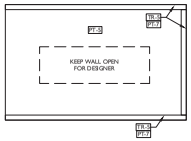
03 FITNESS PLAN SOUTH
SCALE: 1/4" = 1'0"



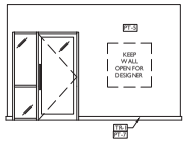
04 FITNESS PLAN WEST
SCALE: 1/4" = 1'0"



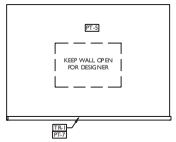
05 CORRIDOR ACCESS NORTH
SCALE: 3/16" = 1'0"



06 CORRIDOR ACCESS NORTHEAST
SCALE: 3/16" = 1'0"



07 CORRIDOR ACCESS SOUTH
SCALE: 3/16" = 1'0"



08 CORRIDOR ACCESS SOUTHWEST
SCALE: 3/16" = 1'0"

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CLIENT / DEVELOPER

Lincoln Avenue Capital

401 WILSHIRE BLVD. STE 1070
SANTA MONICA, CA 90401

PROJECT NAME

MARSHALL POINTE
5190 Marshall St.
Arvada, Colorado 80002

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PROJECT ISSUE / DATE

IFC SET

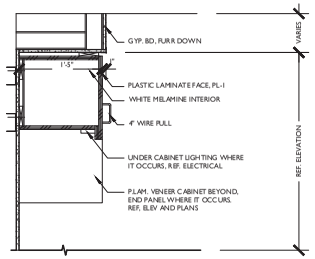
ISSUE LOG:	ISSUE DATES:
50% ID CONSTRUCTION SET	02.09.23
100% ID CONSTRUCTION SET	05.04.23
REVISION 1	08.01.23
IFC SET	08.01.24

PROJECT CONTACTS

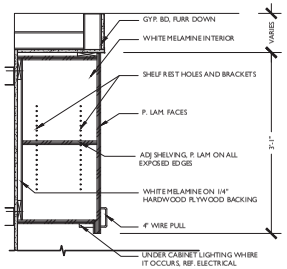
JUANA RODRIGUEZ (PROJECT MANAGER)
ERICA BARNES (LEAD DESIGN)

DRAWN BY: JR / EB
STUDIO B DESIGN GROUP

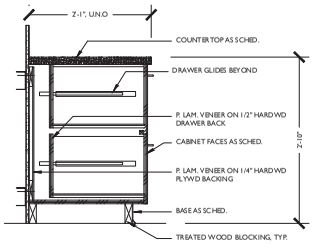
PROJECT	SHEET
MARSHALL POINTE	ID-6.4
DATE: AUGUST 1, 2024	
SCALE: VARIES	INTERIOR ELEVATIONS 34 OF 23 SHEETS



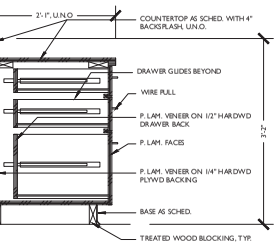
01 UPPER - OVER SINK
SCALE -1" = 1'0"



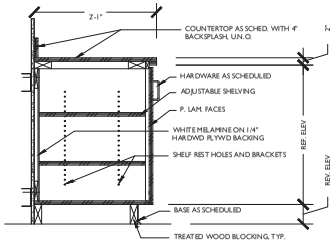
02 UPPER - CABINET
SCALE -1" = 1'0"



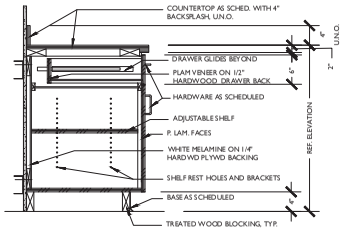
03 BASE - TWO DRAWERS
SCALE -1" = 1'0"



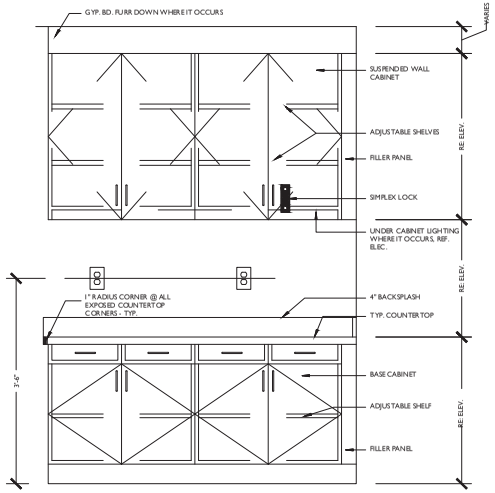
04 BASE - THREE DRAWERS
SCALE -1" = 1'0"



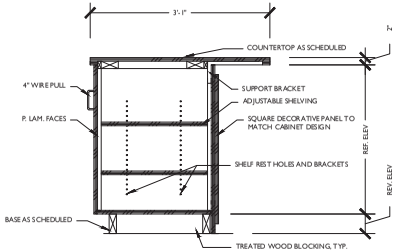
05 BASE - DOOR
SCALE -1" = 1'0"



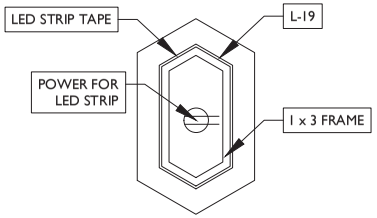
06 BASE - TOP DRAWER
SCALE -1" = 1'0"



07 MILLWORK DETAIL ELEVATION
SCALE -1" = 1'0"



08 BASE - ISLAND
SCALE -1" = 1'0"



09 RESTROOM MIRROR
SCALE - 1" = 1'0"

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CLIENT / DEVELOPER

Lincoln Avenue Capital

401 WILSHIRE BLVD. STE 1070
SANTA MONICA, CA 90401

PROJECT NAME

MARSHALL POINTE
5190 Marshall St.
Arvada, Colorado 80002

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PROJECT ISSUE / DATE

IFC SET

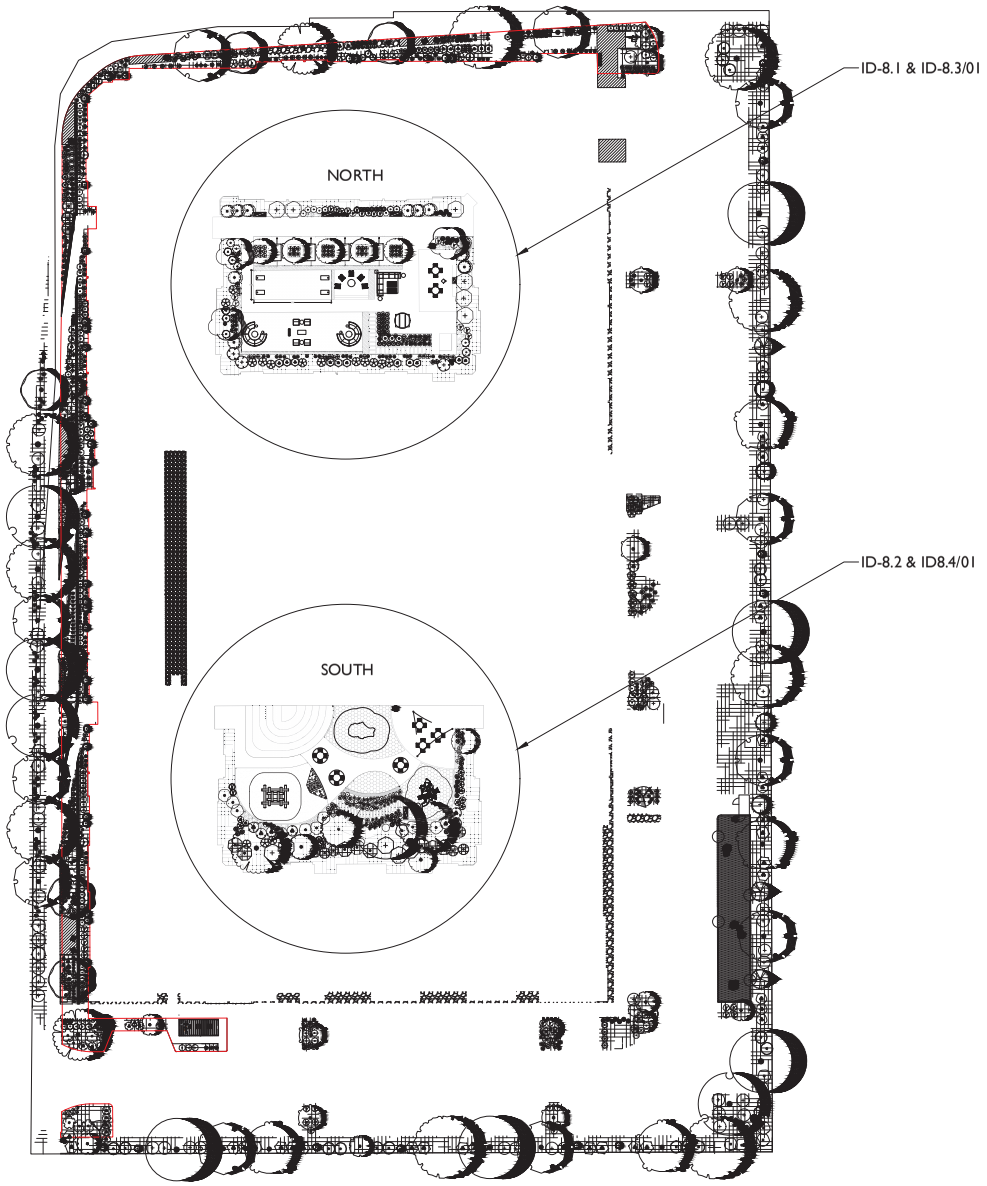
ISSUE LOG:	ISSUE DATES:
50% ID CONSTRUCTION SET	02.09.23
100% ID CONSTRUCTION SET	05.04.23
REVISION 1	08.01.23
IFC SET	08.01.24

PROJECT CONTACTS

JUANA RODRIGUEZ (PROJECT MANAGER)
ERICA BARNES (LEAD DESIGN)

DRAWN BY: JR / EB
STUDIO B DESIGN GROUP

PROJECT	SHEET
MARSHALL POINTE	ID-7.0
DATE: AUGUST 1, 2024	
SCALE: 1" = 1'-0"	SECTIONS AND DETAILS 15 OF 23 SHEETS



01 SITE PLAN
SCALE: NOT TO SCALE

ID-8.0 SHEET NOTES

1. G.C. TO ENSURE ALL MATERIALS ARE CODE COMPLIANT
2. G.C. TO ENSURE ID PLANS ARE COMPLIANT WITH ARCHITECT AND LANDSCAPE DESIGN PLANS
3. POOL FURNITURE PROVIDED BY SBDG

STUDIO B DESIGN GROUP

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PROJECT NAME

MARSHALL POINTE
5190 Marshall St.
Arvada, Colorado 80002

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PROJECT ISSUE / DATE

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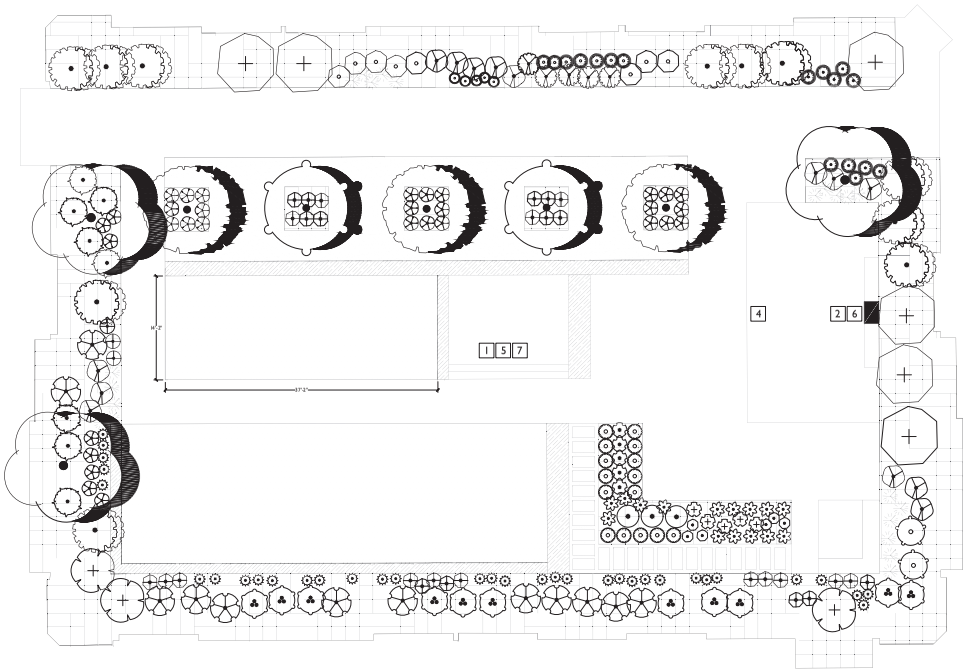
ISSUE LOG:	ISSUE DATES:
50% ID CONSTRUCTION SET	02.09.23
100% ID CONSTRUCTION SET	05.04.23
REVISION 1	08.01.23
IFC SET	08.01.24

PROJECT CONTACTS

JUANA RODRIGUEZ (PROJECT MANAGER)
ERICA BARNES (LEAD DESIGN)

DRAWN BY: JR / EB
STUDIO B DESIGN GROUP

PROJECT	SHEET
MARSHALL POINTE	ID-8.0
DATE: AUGUST 1, 2024	
SCALE: NTS	SITE PLAN 33 OF 23 SHEETS



01 NORTH COURTYARD

SCALE: 1/8" = 1'-0"

ID-8.1 SHEET NOTES

1. G.C. TO ENSURE ALL MATERIALS ARE CODE COMPLIANT
2. G.C. TO ENSURE ID PLANS ARE COMPLIANT WITH ARCHITECT AND LANDSCAPE DESIGN PLANS

ID-8.1 KEYNOTES

1 NOT USED

LEGEND

1 KEY NOTE TAG

TURF

MATERIAL SCHEDULE

MARSHALL POINTE - COURTYARD

PROVIDED BY SBDG

LEAD TIME CAUTION

	CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH/COLOR	SIZE	PRODUCT NO.	LOCATION	VENDOR / CONTACT	NOTES	
	APPLIANCES										
1	APP-1	Fire Pit	Room & Board	N/A	White	42" DIA	N/A	North Courtyard Raised Area with Fire Pit	Installed by G.C. Provided by SBDG Hannah Groenteridge 312.659.0930	Adara	N/A
	COUNTERTOPS										
	CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH/COLOR	SIZE	PRODUCT NO.	LOCATION	VENDOR / CONTACT	EDGE	
2	CTOP-1	Granite Countertop	MSI	N/A	Brushed Piano Mist Granite	3CM	RSL-NERO MIST-3CM-BR	North Courtyard Grill Areas	Stone Center P: 214.536.1661 E: Eammy.ww@mirastonetx.com	Square	N/A
	FLOORING										
	CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH/COLOR	SIZE	PRODUCT NO.	LOCATION	VENDOR / CONTACT	NOTES	PATTERN/ ORIENTATION
3	FUR-1	Poured in Place Rubber	PLAYGROUNDSURFACING.COM	Optiflex EPDM Granules	Mey Green 410	N/A	N/A	South Courtyard	Landscape Architect's Choice	N/A	N/A
	FUR-2	Poured in Place Rubber	PLAYGROUNDSURFACING.COM	Optiflex EPDM Granules	Light Grey 380	N/A	N/A	South Courtyard	Landscape Architect's Choice	N/A	N/A
	FUR-3	Poured in Place Rubber	PLAYGROUNDSURFACING.COM	Optiflex EPDM Granules	Rainbow Green 560	N/A	N/A	South Courtyard	Landscape Architect's Choice	N/A	N/A
	FUR-4	Poured in Place Rubber	PLAYGROUNDSURFACING.COM	Optiflex EPDM Granules	Black 390	N/A	N/A	South Courtyard	Landscape Architect's Choice	N/A	N/A
	FUR-5	Poured in Place Rubber	PLAYGROUNDSURFACING.COM	Optiflex EPDM Granules	Turquoise Blue 540	N/A	N/A	South Courtyard	Landscape Architect's Choice	N/A	N/A
	PAINT										
	CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH	SIZE	PRODUCT NO.	LOCATION	VENDOR / CONTACT	NOTES	
4	P-1	Paint	Contractor's Choice	Contractor's Choice	Matte Black	N/A	Contractor's Choice	North Courtyard Grill Area Trade Furniture	Contractor's Choice	N/A	N/A
	TILE										
	CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH/COLOR	SIZE	PRODUCT NO.	LOCATION	VENDOR / CONTACT	NOTES/GROUT COLOR & THICKNESS	PATTERN/ ORIENTATION
5	TI-1	Wall Tile	Daltile	Color Wheel	Glossy / 0100 Arctic White	3 X 3, Trim as req. 1/4	N/A	North Courtyard Stairs to Firepit Area	Taylor Lewis P: 918.527.3321 E: tlaylor.lewis@daltile.com	1/8" CBP960 Charcoal Gray	Chevron Mosaic
	SPECIALTY PRODUCTS										
	CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH/COLOR	SIZE	PRODUCT NO.	LOCATION	VENDOR / CONTACT	NOTES	
6	SP-1	Wood Paneling	Contractor's Choice	Contractor's Choice	Contractor's Choice	Contractor's Choice	Contractor's Choice	North Courtyard Grill Area	Contractor's Choice	To Match Building Exterior	N/A
7	SP-2	Concrete Stairs	Contractor's Choice	Contractor's Choice	Dark Gray	Contractor's Choice	Contractor's Choice	North Courtyard Raised Area with Fire Pit	Contractor's Choice	Dark Gray Color Concrete to be on Stair Treads and Top Landing	N/A

STUDIO B DESIGN GROUP

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Lincoln Avenue Capital

401 WILSHIRE BLVD. STE 1070
SANTA MONICA, CA 90401

PROJECT NAME

MARSHALL POINTE
5190 Marshall St.
Arvada, Colorado 80002

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PROJECT ISSUE / DATE

IFC SET

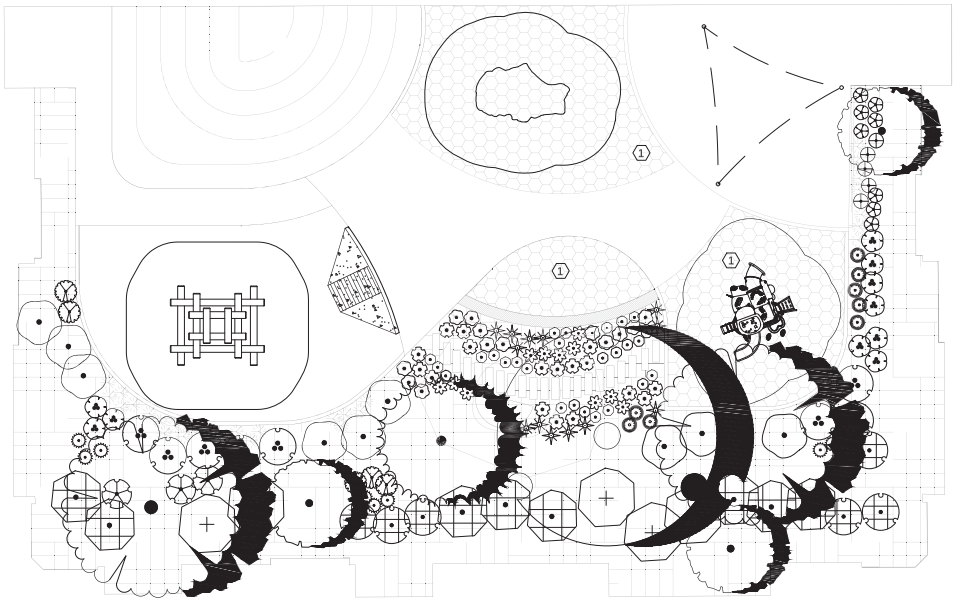
ISSUE LOG:	ISSUE DATES:
50% ID CONSTRUCTION SET	02.09.23
100% ID CONSTRUCTION SET	05.04.23
REVISION 1	08.01.23
IFC SET	08.01.24

PROJECT CONTACTS

JUANA RODRIGUEZ (PROJECT MANAGER)
ERICA BARNES (LEAD DESIGN)

DRAWN BY: JR / EB
STUDIO B DESIGN GROUP

PROJECT: MARSHALL POINTE	SHEET: ID-8.1
DATE: AUGUST 1, 2024	NORTH COURTYARD FLOOR FINISH
SCALE: 1/8" = 1'-0"	17 OF 23 SHEETS



01 SOUTH COURTYARD

SCALE: 1/8" = 1'-0"

ID-8.2 SHEET NOTES

1. G.C. TO ENSURE ALL MATERIALS ARE CODE COMPLIANT
2. G.C. TO ENSURE ID PLANS ARE COMPLIANT WITH ARCHITECT AND LANDSCAPE DESIGN PLANS

ID-8.2 KEYNOTES

1 MIX POURED IN PLACE RUBBER

LEGEND

1 KEY NOTE TAG

FLR-1, FLR-2, FLR-3, FLR-4, FLR-5 MIXED

MATERIAL SCHEDULE

MARSHALL POINTE - COURTYARD

PROVIDED BY SBDG

LEAD TIME CAUTION

CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH/COLOR	SIZE	PRODUCT NO.	LOCATION	VENDOR / CONTACT	NOTES	
APPLIANCES										
APP-1	Fire Pit	Room & Board	N/A	White	42" DIA	N/A	North Courtyard Raised Area with Fire Pit	Installed by G.C. Contact: 980-6 Hamish Groombridge 312.659.0930	Adara	N/A
COUNTERTOPS										
CTOP-1	Granite Countertop	MSI	N/A	Brushed Ivory Mist Granite	3CM	IVS-NERO M1-3CM-BR	North Courtyard Grill Areas	Amy Neary (P.214.536.1644, E.amy.neary@msisurfaces.com	Square	N/A
FLOORING										
CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH/COLOR	SIZE	PRODUCT NO.	LOCATION	VENDOR / CONTACT	NOTES	PATTERN/ ORIENTATION
FLR-1	Poured in Place Rubber	PLAYGROUNDSURFACING.COM	Optiflex EPDM Granules	Alley Green 410	N/A	N/A	South Courtyard	Landscape Architect's Choice	N/A	N/A
FLR-2	Poured in Place Rubber	PLAYGROUNDSURFACING.COM	Optiflex EPDM Granules	Light Grey 380	N/A	N/A	South Courtyard	Landscape Architect's Choice	N/A	N/A
FLR-3	Poured in Place Rubber	PLAYGROUNDSURFACING.COM	Optiflex EPDM Granules	Rainbow Green 560	N/A	N/A	South Courtyard	Landscape Architect's Choice	N/A	N/A
FLR-4	Poured in Place Rubber	PLAYGROUNDSURFACING.COM	Optiflex EPDM Granules	Black 100	N/A	N/A	South Courtyard	Landscape Architect's Choice	N/A	N/A
FLR-5	Poured in Place Rubber	PLAYGROUNDSURFACING.COM	Optiflex EPDM Granules	Turquoise Blue 540	N/A	N/A	South Courtyard	Landscape Architect's Choice	N/A	N/A
PAINT										
CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH	SIZE	PRODUCT NO.	LOCATION	VENDOR / CONTACT	NOTES	
P-1	Paint	Contractor's Choice	Contractor's Choice	Matte Black	N/A	Contractor's Choice	North Courtyard Grill Area Shade Structure	Contractor's Choice	N/A	N/A
TILE										
CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH/COLOR	SIZE	PRODUCT NO.	LOCATION	VENDOR / CONTACT	NOTES/GROUT COLOR & THICKNESS	PATTERN/ ORIENTATION
TI-1	Wall Tile	Daltile	Color Wheel	Glossy / 0190 Arctic White	3 X 3, Thickness: 1/4	N/A	North Courtyard Stairs to Firepit Area	Taylor Lewis (P.918.527.3500, E.taylor.lewis@daltile.com	1/8" GBW60 Charcoal Gray	Chevron Mosaic
SPECIALTY PRODUCTS										
CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH/COLOR	SIZE	PRODUCT NO.	LOCATION	VENDOR / CONTACT	NOTES	
SP-1	Wood Panelling	Contractor's Choice	Contractor's Choice	Contractor's Choice	Contractor's Choice	Contractor's Choice	North Courtyard Grill Area	Contractor's Choice	To Match Building Exterior Material	N/A
SP-2	Concrete Stairs	Contractor's Choice	Contractor's Choice	Dark Gray	Contractor's Choice	Contractor's Choice	North Courtyard Raised Area with Fire Pit	Contractor's Choice	Darker Concrete to be on Stair Treads and Top Landing	N/A

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CLIENT / DEVELOPER

Lincoln Avenue Capital

401 WILSHIRE BLVD. STE 1070
SANTA MONICA, CA 90401

PROJECT NAME

MARSHALL POINTE
5190 Marshall St.
Arvada, Colorado 80002

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PROJECT ISSUE / DATE

IFC SET

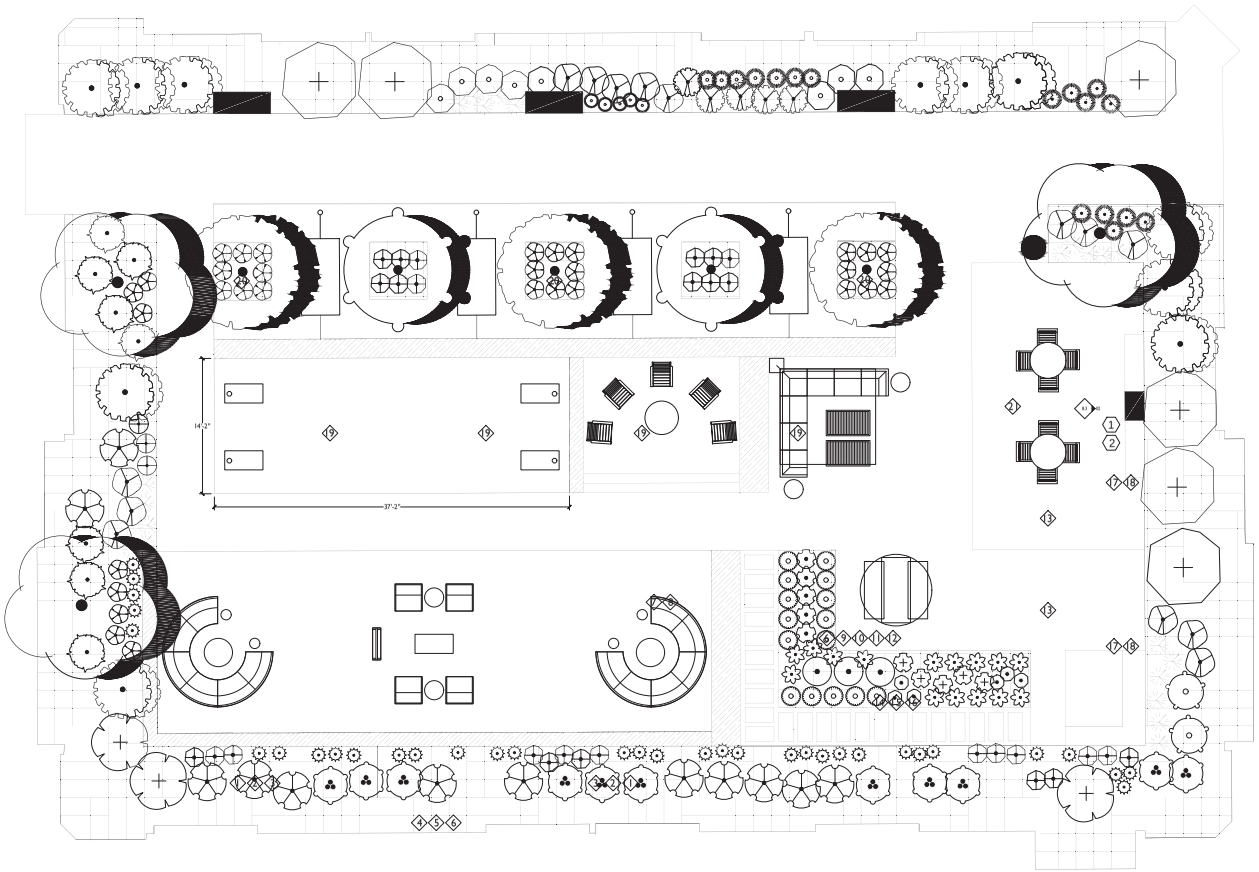
ISSUE LOG:	ISSUE DATES:
50% ID CONSTRUCTION SET	02.09.23
100% ID CONSTRUCTION SET	05.04.23
REVISION 1	08.01.23
IFC SET	08.01.24

PROJECT CONTACTS

JUANA RODRIGUEZ (PROJECT MANAGER)
ERICA BARNES (LEAD DESIGN)

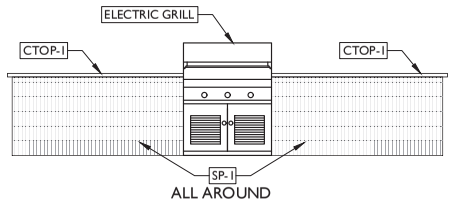
DRAWN BY: JR / EB
STUDIO B DESIGN GROUP

PROJECT: MARSHALL POINTE	SHEET: ID-8.2
DATE: AUGUST 1, 2024	NORTH COURTYARD FLOOR FINISH
SCALE: 1/8" = 1'-0"	18 OF 23 SHEETS



01 NORTH COURTYARD

SCALE: NOT TO SCALE



02 STANDARD GRILL STATION

SCALE: 1/2" = 1'-0"

ID-8.3 SHEET NOTES

1. G.C. TO ENSURE ALL MATERIALS ARE CODE COMPLIANT
2. G.C. TO ENSURE ID PLANS ARE COMPLIANT WITH ARCHITECT AND LANDSCAPE DESIGN PLANS

ID-8.3 KEYNOTES

1. PERGOLA
2. GRILL STATION

LEGEND

1. KEY NOTE TAG

FURNISHING SCHEDULE

CODE	DESCRIPTION	VENDOR	ITEM #	FRAME	FABRIC	NOTES
1	Curved Sectional	Texacraft	SKU: M35034	BKN Black	Java	Southern Cay Modular Quarter Circle
2	Coffee Table	CB2	SKU: 218113	White	N/A	Terrazzo Outdoor Coffee Table
3	Side Table	Four Hands	226907-001	Natural Teak	N/A	Jovie Outoor End Table
4	Lounge Chair	Modloft / Wayfair	SKU: MD1012-BLK	N/A	Peppercorn	Clifton Lounge Chair
5	Coffee Table	CB2	SKU: 493968	Ivory	N/A	Ivory Concrete Outdoor Coffee Table
6	Side Table	BluDot	N/A	Grey Green	N/A	Circula Low Side Table
7	Adirondack Chair	Site Pieces	SKU: AC-46ER-CHR	Sage	N/A	Alpine 46er Chair
8	Fire Pit	Room & Board	N/A	White	N/A	Adara 42 DIA
9	Corner Modular Sectional	Leisure Creations	6113	Starlight Black	Java	Santa Barbara Corner Modular Seat
10	Middle Modular Sectional	Leisure Creations	6103	Starlight Black	Java	Santa Barbara Center Modular Seat
11	Coffee Table	Mod Loft / Wayfair	SKU: MD1016-BLK	N/A	N/A	Clifton Coffee Table
12	Cantilever Umbrella	Ratana	"SKU UM01009BLK/C"	Black	Canopy: Java, Umbrella: Midori Stone	Patio Umbrella 107 Sq Cantilever Alum Umbrella w/Canopy and Base
13	Carousel Table	Site Pieces	SKU: ML-CT	Sage	N/A	Monoline Carousel Table
14	In Table Base	Leisure Creations	7100LM	Starlight Black	N/A	"80/# Round Steel Umbrella Base with Locking Mechanism"
15	7.5" Umbrella	Leisure Creations	UMB7.5	Starlight Black	Midori Stone, Vent: Java	Market Umbrella
16	Community Table	Site Pieces	ML-CMT-82-SET	Sage	N/A	Monoline 82" Community Table Set
17	Planter Pot Set of 2	Emissary USA	12154MB/2	Black	N/A	Set of 2 Round Ridge Ceramic Planters
18	Planter Pot Set of 2	Emissary USA	12154DW/2	White	N/A	Set of 2 Round Ridge Ceramic Planters
19	Hammock	Hatteras Hammocks	SQ-WEAVE-ANT BGE	N/A	Antique Beige	Soft Weave Hammock
20	Backed Bench	Site Pieces	ML-BENCH	Sage	N/A	Monoline Backed Bench
21	Trash Receptacle	Site Pieces	ML-LGLITTER-DL	Sage	N/A	Monoline Litter Bin

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PROJECT NAME

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5190 Marshall St.
Arvada, Colorado 80002

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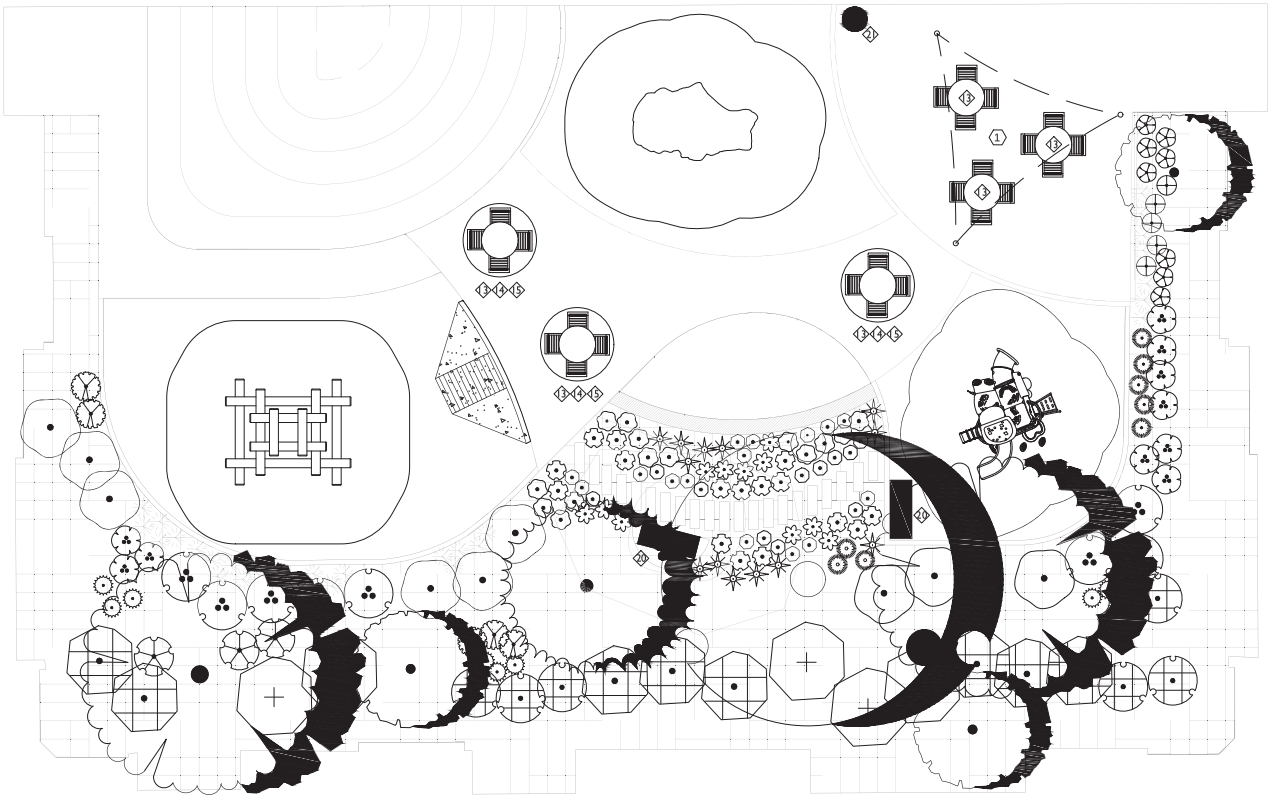
100% ID CONSTRUCTION SET	05.04.23
REVISION 1	08.01.23
IFC SET	08.01.24

PROJECT CONTACTS

JUANA RODRIGUEZ (PROJECT MANAGER)
ERICA BARNES (LEAD DESIGN)

DRAWN BY: JR / EB
STUDIO B DESIGN GROUP

PROJECT	SHEET
MARSHALL POINTE	ID-8.3
DATE: AUGUST 1, 2024	NORTH COURTYARD FURNITURE PLAN
SCALE: NTS	19 OF 23 SHEETS



01 SOUTH COURTYARD

SCALE: NOT TO SCALE

ID-8.4 SHEET NOTES

1. G.C. TO ENSURE ALL MATERIALS ARE CODE COMPLIANT
2. G.C. TO ENSURE ID PLANS ARE COMPLIANT WITH ARCHITECT AND LANDSCAPE DESIGN PLANS
3. PLAYGROUND REF. ARCH.

ID-8.4 KEYNOTES

1 SHADE SAIL

LEGEND

1 KEY NOTE TAG

FURNISHING SCHEDULE

CODE	DESCRIPTION	VENDOR	ITEM #	FRAME	FABRIC	NOTES
7	Adirondack Chair	Site Pieces	SKU: AC-46ER-CHR	Sage	N/A	Alpine 46er Chair
13	Carousel Table	Site Pieces	SKU: ML-CT	Sage	N/A	Monoline Carousel Table
14	In Table Base	Leisure Creations	7100LM	Starlight Black	N/A	"80# Round Steel Umbrella Base with Locking Mechanism"
15	7.5" Umbrella	Leisure Creations	UMB7.5	Starlight Black	Midori Stone, Vent: Java	Market Umbrella
20	Backed Bench	Site Pieces	ML-BENCH	Sage	N/A	Monoline Backed Bench
21	Trash Receptacle	Site Pieces	ML-LGLITTER-DL	Sage	N/A	Monoline Litter Bin

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Arvada, Colorado 80002

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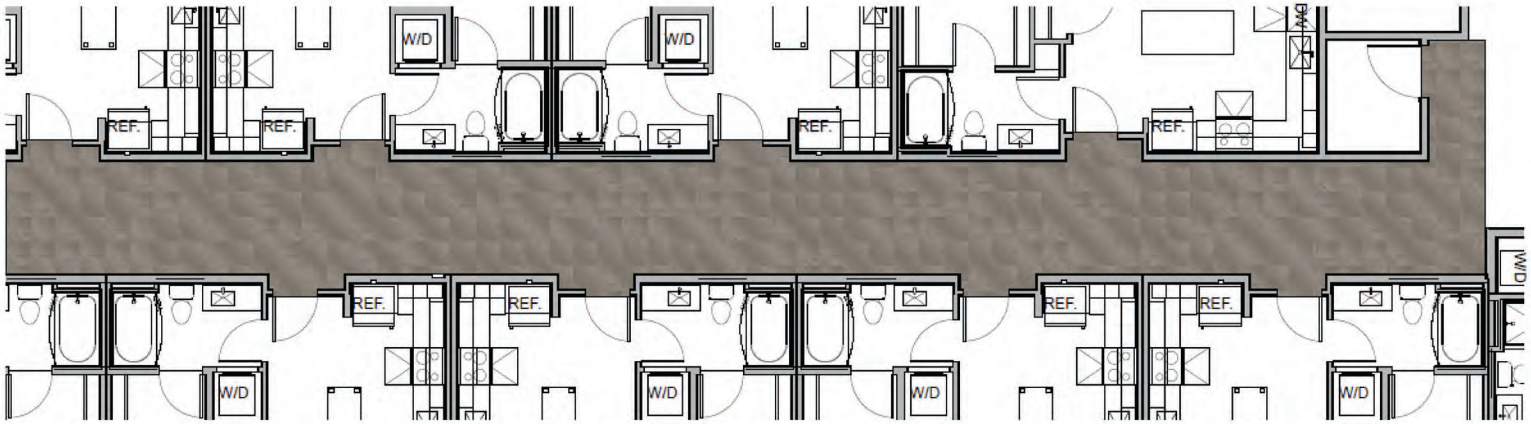
100% ID CONSTRUCTION SET	05.04.23
REVISION 1	08.01.23
IFC SET	08.01.24

PROJECT CONTACTS

JUANA RODRIGUEZ (PROJECT MANAGER)
ERICA BARNES (LEAD DESIGN)

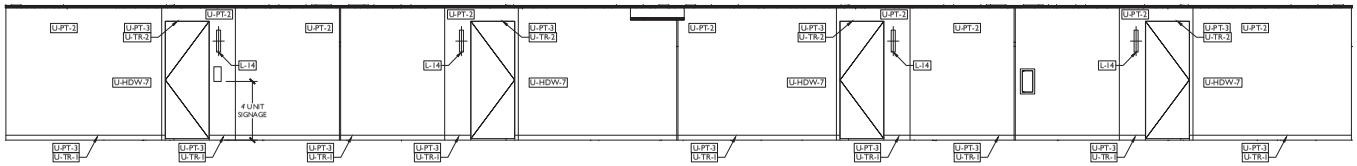
DRAWN BY: JR / EB
STUDIO B DESIGN GROUP

PROJECT	SHEET
MARSHALL POINTE	ID-8.4
DATE: AUGUST 1, 2024	SOUTH COURTYARD FURNITURE PLAN
SCALE: NTS	20 OF 23 SHEETS



01 TYPICAL UNIT CORRIDOR FLOOR FINISH PLAN

NOT TO SCALE



02 TYPICAL UNIT CORRIDOR ELEVATION

SCALE: 1/4" = 1'-0"

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REVISION 1	08.01.23
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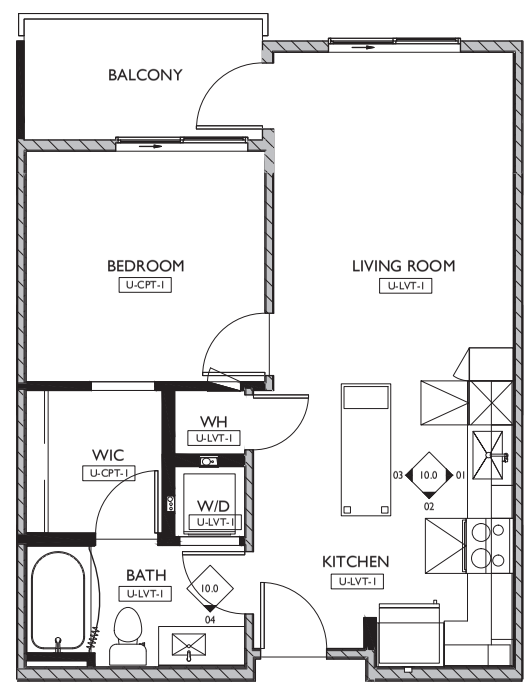
PROJECT CONTACTS

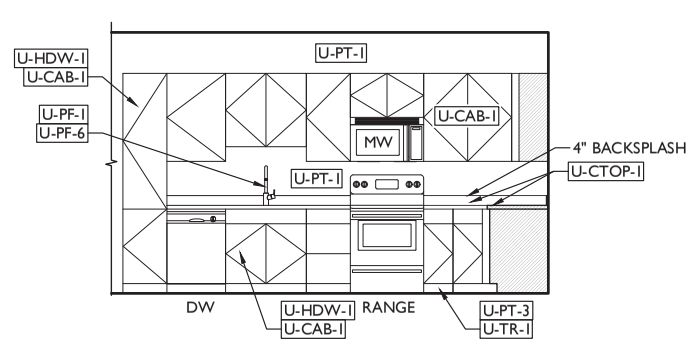
JUANA RODRIGUEZ (PROJECT MANAGER)
ERICA BARNES (LEAD DESIGN)

DRAWN BY: JR / EB
STUDIO B DESIGN GROUP

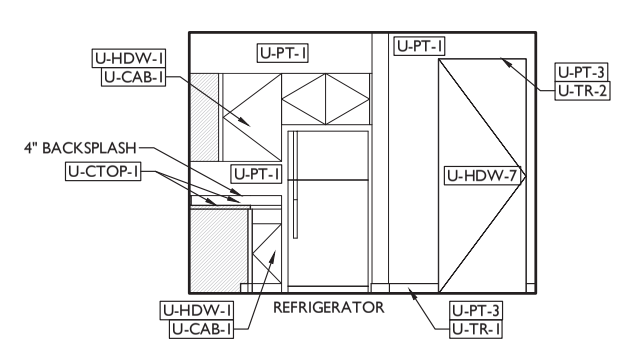
PROJECT: MARSHALL POINTE	SHEET: ID-9.0
DATE: AUGUST 1, 2024	
SCALE: VARIES	CORRIDORS 22 OF 23 SHEETS



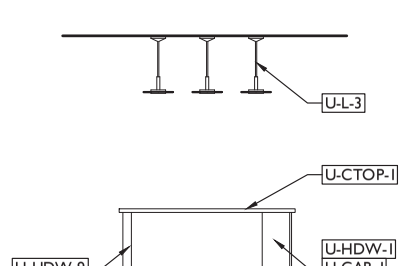
00 FLOOR FINISH PLAN
SCALE: 3/16" = 1'-0"



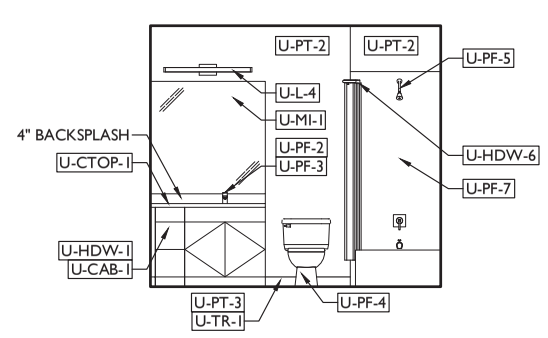
01 UNIT KITCHEN PLAN EAST
SCALE: 1/4" = 1'-0"



02 UNIT KITCHEN PLAN SOUTH
SCALE: 1/4" = 1'-0"



03 UNIT KITCHEN ISLAND
SCALE: 1/4" = 1'-0"



04 UNIT BATHROOM PLAN SOUTH
SCALE: 1/4" = 1'-0"

MARSHALL POINTE - UNITS

PROVIDED BY SBDG

LEAD TIME CAUTION

CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH/COLOR	SIZE	PRODUCT NO.	LOCATION	VENDOR/ CONTACT	NOTES
APPLIANCES									
U-APP-1	Refrigerator	GE	N/A	Stainless Steel	67 3/8 H x 28 W x 32 1/2 D	GTS18HYNRFS	Kitchen	Contractor's Choice	Verify the 21CF will fit in the existing space allotted, if not, select a model that will
U-APP-1 (ADA)	Refrigerator	GE	N/A	Stainless Steel	66 3/8 H x 32 3/4 W x 34 1/2 D	GIE22JSNRSS	Kitchen	Contractor's Choice	Verify the 21CF will fit in the existing space allotted, if not, select a model that will
U-APP-2	Electric Range	GE	N/A	Stainless Steel	47 H x 30 W x 28 D	JB258GMSA	Kitchen	Contractor's Choice	N/A
U-APP-2 (ADA)	Electric Range	GE	N/A	Stainless Steel	47 H x 30 W x 29 D	JB480SMSS	Kitchen	Contractor's Choice	N/A
U-APP-3	Dishwasher	GE	N/A	Stainless Steel	34 H x 23 3/4 W x 24 D	GDF511PGMSS	Kitchen	Contractor's Choice	with power cord
U-APP-3 (ADA)	Dishwasher	GE	N/A	Stainless Steel	32 1/4 H x 23 3/4 W x 23 1/2 D	GDT225SSLS	Kitchen	Contractor's Choice	N/A
U-APP-4	Over the Range Microwave	GE	N/A	Stainless Steel	16 1/8 H x 29 7/8 W x 15 9/16 D	JVM3160DFSS	Kitchen	Contractor's Choice	N/A
U-APP-4 (ADA)	Over the Range Microwave	GE	N/A	Stainless Steel	16 1/8 H x 29 7/8 W x 15 9/16 D	JVM3160DFSS	Kitchen	Contractor's Choice	N/A
U-APP-4 (ADA)									
U-APP-5	Garbage Disposer	Moen	N/A	Black	H 13.375 x W 5.375 x D 5.375	Model:GXP50C	Kitchen	Contractor's Choice	N/A
U-APP-5 (ADA)	Garbage Disposer	Moen	N/A	Black	H 13.375 x W 5.375 x D 5.375	Model:GXP50C	Kitchen	Contractor's Choice	N/A
U-APP-6	Washer	GE Appliances	N/A	White	44 H x 27 W x 27 D	"Model #: GTW490ACJWW"	Laundry	Contractor's Choice	N/A
U-APP-6 (ADA)	Washer	GE Appliances	N/A	White	N/A	GE G550SSNWW	Laundry	Contractor's Choice	Front Load
U-APP-7	Dryer	GE Appliances	N/A	White	44 H x 27 W x 29 1/2 D	"Model #: GTD42EASJWW"	Laundry	Contractor's Choice	N/A
U-APP-7 (ADA)	Dryer	GE Appliances	N/A	White	7.8 cu. ft., 39 3/4 H x 28 W x 32 D	GE GFD55ESSNWW	Laundry	Contractor's Choice	Front Load
U-APP-8 (ADA)	Vent Hood	GE Appliances	N/A	Black	5.0" H x 30.0" W x 18.0" D	Vented GE ADAH 1630W	Kitchen	Contractor's Choice	N/A
CABINETS									
U-CAB-1	Paint Grade Cabinet	Smart Cabinetry or Equivalent	Squire/Shaker/Solid	Polar White	N/A	N/A	Uppers and Lowers Throughout	Contractor's Choice	N/A
CARPET									
U-CPT-1	Carpet	Shaw Floors	Shake It Up (T)	Ornamental Gate 00122	N/A	Style No. PS808	Bedrooms, Bedroom Closets	Contractor's Choice	N/A
U-CPT-2	Carpet	Interface	Open Air 417	Oat	19.69 in x 19.69 in, Pile Height: 0.16 in	107791.0	Corridors	"Matt Bradley P:682.351.0820 E:matt.bradley@interface.com"	N/A
COUNTERTOPS									
CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH/COLOR	SIZE	PRODUCT NO.	LOCATION	VENDOR/ CONTACT	EDGE
U-CTOP-1	Quartz Countertop	MSI	N/A	Manhattan Gray	3cm	QSL-MANHATGRY-3CM	Kitchen	Amy Ravy P:214.536.1644, E:amy.ravy@msisurfaces.com	Square
U-CTOP-1 (VE ALT)	Laminate Countertop	Wilsonart	N/A	Oiled Soapstone	N/A	4882.0	ALT CTOP-1	Melissa Jones P:214.356.9176, E:melissa.jones@wilsonart.com	Square
U-CTOP-2	Quartz Countertop	MSI	N/A	Manhattan Gray	2cm	QSL-MANHATGRY-2CM	Bathroom	Amy Ravy P:214.536.1644, E:amy.ravy@msisurfaces.com	Square
U-CTOP-2 (VE ALT)	Cultured Marble Countertop	To Match Modular Vanity Tops	Lavante (LV)/ Rectangular Collection	Sprayed Granite/Pewter	2cm	N/A	ALT CTOP-2	Contractor's Choice	Square
HARDWARE									
U-HDW-1	Cabinet Pull	Republic Elite	Miami Collection	Matte Black	96mm CC	P-80572.BK	Kitchen Cabinets & Bathroom Cabinets	Contractor's Choice	Catalogue Page 15
U-HDW-2									
U-HDW-3	Towel Bar	Moen	Genta	Chrome	24"	BH3824CH	Bathroom	Contractor's Choice	N/A
U-HDW-4	Toilet Paper Holder	Moen	Genta	Chrome	L: 5"7-53/64", Center to Center: 6-1/16", Ext: 3-1/4"	BH3808CH	Bathroom	Contractor's Choice	N/A
U-HDW-5	Robe Hook	Moen	Genta	Chrome	L: 2", W: 1-3/8", D: 1-9/16"	BH3803CH	Bathroom	Contractor's Choice	N/A
U-HDW-6	Adjustable Curved Shower Rod	PROFLO	N/A	Chrome	44" - 72"	PFMCSR800	Bathroom	Jared Braun P:530.961.4995, E:jared.braun@build.com	N/A
U-HDW-6 (VE ALT)	Straight Shower Rod	PROFLO	N/A	Chrome	60"	PFSCR60	Bathroom	Jared Braun P:530.961.4995, E:jared.braun@build.com	N/A
	Shower Curtain Rod Flange	PROFLO	N/A	Chrome	N/A	PFSRFCP	Bathroom	Jared Braun P:530.961.4995, E:jared.braun@build.com	For HDW-7
U-HDW-7	Entry/Passage Door Hardware	Kwikset	Halifax (Square Rosette)	Polished Chrome	N/A	740HFLSQT-15SQT-26S	Throughout	Jared Braun P:530.961.4995, E:jared.braun@build.com	N/A
U-HDW-8	Grab Bars	Delta	Contemporary Modern Design	Chrome	Per Architect	41812.0	ADA Bathrooms	Contractor's Choice	N/A
U-HDW-9	Cabinet grade countertop support	Contractor's Choice	N/A	Matte Black	Per Architect	Contractor's Choice	Kitchen Island	Contractor's Choice	N/A
LIGHTING									
U-L-1	Ceiling Fan	Build.com	MinkaAire	Flat White	48" DIA	F671L-WHF	Bedroom	Jared Braun / Jarden.Braun@Ferguson.com / 530-961-4999	Integrated 16 watt LED module included
U-L-2	Puck light	Contractor's Choice	N/A	White	N/A	N/A	Throughout	Contractor's Choice	2700-3300K, Designer to review submittal
U-L-3	Track Light	Ellen Lighting	N/A	Black	29.5" Track, 7 1/2" H	B8829LED-04-BN-30K	Kitchen	Alan Pulaski P:832.433.9600, E:apulaski@ellenlighting.com	4 Light, LED GU10, 3000K
U-L-4	Vanity Light	Visual Comfort	Syll/Studio Collection	Midnight Black	18" W, 5.5" H, 3.88" D	4430802-112	Bathroom	Dawn Candee/ E:dawn@taylorsdallas.com / C: 214-923-4825	3W B11 E12, 2700K
U-L-5	Wall Sconce	Biltmore	N/A	Chrome	3.31" W, 18" H, 3.88 Extension	B315-LED4-CHR-30K	Unit Entry Sconce	Alan Pulaski P:832.433.9600, E:apulaski@ellenlighting.com	ADA compliant
U-L-6	Balcony Sconce	Ellen Lighting	TBD	Black	TBD	TBD	Balcony	Alan Pulaski P:832.433.9600, E:apulaski@ellenlighting.com	2700-3300K, Designer to review submittal
LVT									
U-LVT-1	LVT	IB Supply/TuffPlank	Aberdeen	Nick Papa	12mil	N/A	Floors throughout UNO	Ryan De Hoyos P:4695970085, E:ryan@ibsupply.com	N/A
MIRRORS									
U-M-1	Framed Vanity Mirror	Majestic Mirror	"Flat Framed Profile"	Styrene Matte Black	1 3/4"w x 5/8"thick	N/A	Bathrooms	Hannah Groombridge P:312.659.0930, E:hgroombridge@studiobdesigngroup.com	Installed by Contractor
PAINT									
CODE	PRODUCT	MANUFACTURER	SERIES/STYLE	FINISH	SIZE	PRODUCT NO.	LOCATION	VENDOR/ CONTACT	NOTES
U-PT-1	Paint	Sherwin Williams	Pure White	Satin Latex	N/A	SW 7005	Walls & Ceilings Throughout UNO, Corridor Walls	N/A	Submittal to be sent to designer
U-PT-2	Paint	Sherwin Williams	Pure White	Semi-Gloss Latex	N/A	SW 7005	Bathroom Walls & Ceilings, Corridor Base Trim	N/A	Submittal to be sent to designer
U-PT-3	Paint	Sherwin Williams	Anew Gray	Semi-Gloss Latex	N/A	SW 7030	Doors TYP. U.N.O & Trim	N/A	Submittal to be sent to designer
U-PT-4	Paint	Sherwin Williams	Evergreen Fog 9130	"Satin Latex (walls) Semi-Gloss (Trim)"	N/A	SW 9130	Corridor Accent Walls & Accent Trim	N/A	Submittal to be sent to designer
U-PT-5	Paint	Sherwin Williams	Tricorn Black 6258	Satin Latex	N/A	SW 6258	Unit Entry Door (corridor side)	N/A	Submittal to be sent to designer
PLUMBING									
U-PF-1	Kitchen Faucet	Moen	Genta	Chrome	Spout Height: 16", Spout Reach: 7.69", Connection Size: 3/8"	7882.0	Kitchen	Contractor's Choice	1.5 Gpm
U-PF-2	Vanity Faucet	Moen	Genta	Chrome	Spout Reach: 4.56", Connection Size: 3/8"	6702.0	Bathroom	Contractor's Choice	N/A
U-PF-3	Lavatory Sink	Kohler	Caxton	White	17-5/8"L x 13-1/8"W x 5-5/16"D	K-20000-47	Bathroom	Jared Braun P:530.961.4995, E:jared.braun@build.com	Under-mount Bathroom Sink
U-PF-4	Toilet, Seat not included	TOTO	Entrada™ Close Coupled Toilet	White/Round Bowl	17.25" Seat Hight	CST244EF#01	Bathroom	Contractor's Choice	1.28GPF
U-PF-5	Tub and Shower Trim Package	Moen	Genta	Chrome	N/A	T2473EP	Bathroom	Contractor's Choice	1.75 Gpm
U-PF-5 (ALT)	Shower Only Trim Package	Moen	Genta	Chrome	N/A	T2472EP	Bathroom	Contractor's Choice	1.75 Gpm
U-PF-5 (ADA)	Handheld Shower	Moen	Genta	Chrome	N/A	3671EP	Bathroom	Contractor's Choice	1.75 Gpm
U-PF-6	Sink	American Standard	1 Bowl 18 GA Undermount	Stainless Steel	N/A	N/A	Kitchen	Contractor's Choice	N/A
U-PF-7	Tub Surround	Sterling	Traverse	White	Per MEP	71570110-0	Bathroom	Contractor's Choice	N/A
TRIM									
U-TR-1	Paint Grade Trim Pine or Poplar	Contractor's Choice	N/A	Semi-Gloss Enamel / SW 7030 Anew Gray	1 X 4	N/A	Base Throughout	Contractor's Choice	N/A
U-TR-2	Paint Grade Pine or Poplar	Contractor's Choice	N/A	Semi-Gloss Enamel / SW 7030 Anew Gray	1 X 3	N/A	Door Trim Throughout	Contractor's Choice	N/A
TRANSITION STRIP									
U-TS-1	Transition Strip	Shaw Contract Group	Micro Transition	Onyx	Contractor's Choice	N/A	LVT to Carpet	Contractor's Choice	Contractor to verify size and code compliance
SPECIALTY PRODUCTS									
U-SP-1	Blinds	SWFcontract	Faux Wood	White Faux Wood	2"	N/A	N/A	Ashley Overstreet P:682.540.4768, E:ashley.overstreet@springswindowfashions.com	N/A

00 UNIT FINISH SCHEDULE
SCALE: N/A

STUDIO B DESIGN GROUP
4734 Calmont Ave.
Ft. Worth TX, 76107
T 214.686.4371
F 214.580.9489
ebarnes@studiobdesigngroup.com

CLIENT / DEVELOPER

Lincoln Avenue Capital
401 WILSHIRE BLVD. STE 1070
SANTA MONICA, CA 90401

PROJECT NAME

MARSHALL POINTE
5190 Marshall St.
Arvada, Colorado 80002

The interior design plans and specifications for this project have been prepared by studio b design group (SBDG) from data provided by the representative of the client. The completeness and accuracy of which has been relied upon by SBDG. Interior and product designs are subject to modifications or changes due to field verifications, existing or other conditions, and building code requirements. The client/developer shall be responsible for obtaining all required permits for the project and for compliance with all local, state, and federal codes. In the event that the plans and/or specifications are required to be sealed by a licensed professional it is the client/developer responsibility to retain a professional to sign and seal the plans. SBDG shall not be responsible for any changes or modifications to the plans and specifications unless expressly approved in writing by SBDG.

PROJECT ISSUE / DATE

IFC SET

ISSUE LOG:	ISSUE DATES:
50% ID CONSTRUCTION SET	02.09.23
100% ID CONSTRUCTION SET	05.04.23
REVISION 1	08.01.23
IFC SET	08.01.24

PROJECT CONTACTS

JUANA RODRIGUEZ (PROJECT MANAGER)
ERICA BARNES (LEAD DESIGN)

DRAWN BY: JR / EB
STUDIO B DESIGN GROUP

PROJECT	MARSHALL POINTE
DATE	AUGUST 1, 2024
SCALE	VARIES
SHEET	ID-10.0

STANDARD UNITS
23 OF23 SHEETS

KEPHART

2555 Walnut Street | Denver, CO 80205
303.832.4474 | KEPHART.com

10/9/2024

Doug Van Lerberghe
KEPHART
2555 Walnut St.
Denver, CO 80205

Attention:
RE: Ben Taylor, Lincoln Avenue

This is to certify that I am the Architect of Record for Marshall Pointe Apartments in Arvada, CO. To the best of my knowledge and belief, after reasonable investigation, I hereby certify that the above named site complies fully with all presently applicable zoning ordinances and building codes taking no exception to the interpretations and approval by the local Authority Having Jurisdiction (AHJ). I further certify that the Project, when completed, anticipates full use and occupancy of the Project for the purpose for which it is intended and to the issuance of all certificates authorizing occupancy for the Project as are issued by governmental agencies having jurisdiction over completion of improvements and readiness thereof for use and occupancy in Arvada, Colorado.

As Architect of Record, I further certify that:

1. The plans and specifications are in accordance with all applicable governmental requirements including, but not limited to, The Fair Housing Act, The Americans with Disabilities Act, Section 504 of the Rehabilitation Act of 1973 and State and local laws dealing with handicap provisions;

2. All permits necessary for the construction of the Project are expected to be issued in the ordinary course.

I, Doug Van Lerberghe certify the above information to be correct to the best of my knowledge.



Architect Signature

Housing Authority of the City of Arvada
Agreement to Enter Into Housing Assistance Payment Contract
HUD 52531A

Exhibit C- Description of Housing

Marshall Pointe Apartments, LP

Project Site: 5170 Marshall St Arvada, CO 80002

Total Number of Units in Project Covered by this Agreement: 8 units

Location of Contract Units on Site: The vouchers will be placed in eight (8) units as listed below. The unit locations will be finalized prior to execution of the HAP contract.

Unit Type	Total Units	AMI Restriction	Square Feet
1 BDRM	4	30%	612
2 BDRM	3	30%	792-937
3 BDRM	1	30%	1,179

Services, Maintenance or Equipment to be Supplied by the Owner Without Charges in Addition to the Rent to Owner: Lounge area for residents, washer/dryer access, shared garden with equipment provided, fitness center machines/equipment, outdoor eating area, playground equipment. Partnership with Family Tree, a non-profit human services agency providing services designed to end child abuse, domestic violence, and homelessness. Family Tree will have a FT casemanager assigned to Marshall Pointe to focus on residents living in the PBV units. Family Tree will offer casemanagement, education and employment services, and various other supportive services to help residents achieve economic independence.

Utilities Available to the Contract Units, Including a Specification of Utility Services to be Paid by Owner (without charges in addition to rent) and Utility Services to be Paid by the Tenant:

Owner pays-water, sewer, garbage Tenant pays-Electricity

Estimated Initial Rent to Owner for the Contract Units:

1 bedroom-$2147 2 bedroom-$2568 3 bedroom-$3353

NOTE: All rents for each project-based unit must be in accordance with 24 CFR 983.303 and may at no time exceed the reasonable rent charged for comparable units in the private unassisted market.

The reasonable rent for each contracted unit shall be determined by Arvada Housing Authority in accordance with HUD requirements and prior to the execution of the HAP.

Housing Authority of the City of Arvada
Agreement to Enter Into Housing Assistance Payments Contract
HUD 52531A

Exhibit D-HAP Contract Part 1 (unexecuted) and Part II

Marshall Pointe Apartments, LP

OMB Approval No. 2577–0169
(exp. 04/30/2026)

U.S. Department of Housing and Urban Development
Office of Public and Indian Housing

SECTION 8 PROJECT-BASED VOUCHER PROGRAM HOUSING ASSISTANCE PAYMENTS CONTRACT

NEW CONSTRUCTION OR REHABILITATION

PART 1 OF HAP CONTRACT

OMB Burden Statement. The public reporting burden for this collection of information is estimated to average 1 hour, including the time for collecting, reviewing and reporting the data. This form is required to establish terms between a PHA and owner to provide housing assistance. This contract allows a PHA to enter into a HAP contract with the owner to provide housing assistance payments for eligible families. Assurances of confidentiality are not provided under this collection. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions to reduce this burden, to the Office of Public and Indian Housing, US. Department of Housing and Urban Development, Washington, DC 20410. HUD may not conduct and sponsor, and a person is not required to respond to, a collection of information unless the collection displays a valid control number.

Privacy Notice. The Department of Housing and Urban Development (HUD) is authorized to collect the information required on this form by 24 CFR § 983.202. The information sets forth the PHA and owner's agreement to provide housing under the project-based component of the Housing Choice Voucher Program. The Personally Identifiable Information (PII) data collected on this form are not stored or retrieved within a system of record.

1. CONTRACT INFORMATION

a. Parties

This housing assistance payments (HAP) contract is entered into between:

The Housing Authority of the City of Arvada, Colorado (PHA) and

Marshall Pointe Apartments, LP (owner).

b. Contents of contract

The HAP contract consists of Part 1, Part 2, and the contract exhibits listed in paragraph c.

c. Contract exhibits

The HAP contract includes the following exhibits:

EXHIBIT A: TOTAL NUMBER OF UNITS IN PROJECT COVERED BY THIS HAP CONTRACT; INITIAL RENT TO OWNER; AND DESCRIPTION OF THE CONTRACT UNITS. (See 24 CFR 983.203 for required items.) If this is a multi-stage project, this exhibit must include a description of the units in each completed phase.

EXHIBIT B: SERVICES, MAINTENANCE AND EQUIPMENT TO BE PROVIDED BY THE OWNER WITHOUT CHARGES IN ADDITION TO RENT TO OWNER

EXHIBIT C: UTILITIES AVAILABLE IN THE CONTRACT UNITS, INCLUDING A LISTING OF UTILITY SERVICES TO BE PAID BY THE OWNER (WITHOUT CHARGES IN ADDITION TO RENT TO OWNER) AND UTILITIES TO BE PAID BY THE TENANTS

EXHIBIT D: FEATURES PROVIDED TO COMPLY WITH PROGRAM ACCESSIBILITY FEATURES OF SECTION 504 OF THE REHABILITATION ACT OF 1973 AND IMPLEMENTING REGULATIONS AT 24 CFR PART 8

EXHIBIT E: Additional Requirements and reporting by owner

ADDITIONAL EXHIBITS

d. Single-Stage and Multi-Stage Contracts (place a check mark in front of the applicable project description).

☒ **Single-Stage Project**

This is a single-stage project. For all contract units, the effective date of the HAP contract is:

_____.

☐ **Multi-Stage Project**

This is a multi-stage project. The units in each completed stage are designated in Exhibit A.

The PHA enters the effective date for each stage after completion and PHA acceptance of all units in that stage. The PHA enters the effective date for each stage in the "Execution of HAP contract for contract units completed and accepted in stages" (starting on page 9).

The annual anniversary date of the HAP contract for all contract units in this multi-stage project is the anniversary of the effective date of the HAP contract for the contract units included in the first stage. The expiration date of the HAP contract for all of the contract units completed in stages must be concurrent with the end of the HAP contract term for the units included in the first stage (see 24 CFR 983.207(c)).

e. Term of the HAP contract

1. Beginning of term

The PHA may not enter into a HAP contract for any contract unit until the PHA (or an independent entity, as applicable) has determined that the unit meets PBV inspection requirements. The term of the HAP contract for any unit begins on the effective date of the HAP contract.

2. Length of initial term

a. Subject to paragraph 2.b, the initial term of the HAP contract for any contract units is:

20 years.

b. The initial term of the HAP contract for any unit may not be less than one year, nor more than twenty years.

3. Extension of term

The PHA and owner may agree to enter into an extension of the HAP contract at the time of initial HAP contract execution, or any time prior to expiration of the contract. Any extension, including the term of such extension, must be in accordance with HUD requirements. A PHA must determine that any extension is appropriate to achieve long-term affordability of the housing or expand housing opportunities.

4. Requirement for sufficient appropriated funding

a. The length of the initial term and any extension term shall be subject to availability, as determined by HUD, or by the PHA in accordance with HUD requirements, of sufficient appropriated funding (budget authority), as provided in appropriations acts and in the PHA's annual contributions contract (ACC) with HUD, to make full payment of housing assistance payments due to the

owner for any contract year in accordance with the HAP contract.

b. The availability of sufficient funding must be determined by HUD or by the PHA in accordance with HUD requirements. If it is determined that there may not be sufficient funding to continue housing assistance payments for all contract units and for the full term of the HAP contract, the PHA has the right to terminate the HAP contract by notice to the owner for all or any of the contract units. Such action by the PHA shall be implemented in accordance with HUD requirements.

f. Occupancy and payment

1. Payment for occupied unit

During the term of the HAP contract, the PHA shall make housing assistance payments to the owner for the months during which a contract unit is leased to and occupied by an eligible family. If an assisted family moves out of a contract unit, the owner may keep the housing assistance payment for the calendar month when the family moves out ("move-out month"). However, the owner may not keep the payment if the PHA determines that the vacancy is the owner's fault.

~~2. Vacancy payment~~

~~THE PHA HAS DISCRETION WHETHER TO INCLUDE THE VACANCY PAYMENT PROVISION (PARAGRAPH f.2), OR TO STRIKE THIS PROVISION FROM THE HAP CONTRACT FORM.~~

~~a. If an assisted family moves out of a contract unit, the PHA may provide vacancy payments to the owner for a PHA-determined vacancy period extending from the beginning of the first calendar month after the move-out month for a period not exceeding two full months following the move-out month.~~

~~b. The vacancy payment to the owner for each month of the maximum two-month period will be determined by the PHA, and cannot exceed the monthly rent to owner under the assisted lease, minus any portion of the rental payment received by the owner (including amounts available from the tenant's security deposit). Any vacancy payment may cover only the period the unit remains vacant.~~

~~c. The PHA may make vacancy payments to the owner only if:~~

~~1. The owner gives the PHA prompt, written notice certifying that the family has vacated the unit and the date when the family moved out (to the best of the owner's knowledge and belief);~~

~~2. The owner certifies that the vacancy is not the fault of the owner and that the unit was vacant during the period for which payment is claimed;~~

~~3. The owner certifies that it has taken every reasonable action to minimize the likelihood and length of vacancy; and~~

~~4. The owner provides any additional information required and requested by the PHA to verify that the owner is entitled to the vacancy payment.~~

~~d. The PHA must take every reasonable action to minimize the likelihood and length of vacancy.~~

~~e. The owner may refer families to the PHA for placement on the PBV waiting list.~~

~~f. The owner must submit a request for vacancy payments in the form and manner required by the PHA and must provide any information or substantiation required by the PHA to determine the amount of any vacancy payments.~~

3. PHA is not responsible for family damage or debt to owner

Except as provided in this paragraph f (Occupancy and Payment), the PHA will not make any other payment to the owner under the HAP contract. The PHA will not make any payment to the owner for any damages to the unit, or for any other amounts owed by a family under the family's lease.

g. Income-mixing requirement

1. Except as provided in paragraphs g.2 through g.5 below, the PHA will not make housing assistance payments under the HAP contract for more than

the greater of 25 units or 25 percent of the total number of dwelling units (assisted or unassisted) in any project. The term "project" means a single building, multiple contiguous buildings, or multiple buildings on contiguous parcels of land assisted under this HAP contract.

2. The limitation in paragraph g.1 does not apply to single-family buildings.

3. In referring eligible families to the owner for admission to the number of contract units in any project exceeding the 25 unit or 25 percent limitation under paragraph g.1, the PHA shall give preference to the applicable families as listed in g.8 below, for the number of contract units exclusively made available for occupancy by such families. The owner shall rent that number of contract units to such families referred by the PHA from the PHA waiting list.

4. Up to the greater of 25 units or 40 percent of units (instead of the greater of 25 units or 25 percent of units) in a project may be project-based if the project is located in a census tract with a poverty rate of 20 percent or less.

5. Units that were previously subject to certain federal rent restrictions or receiving another type of long-term housing subsidy provided by HUD do not count toward the income-mixing requirement if, in the five years prior to issuance of the Request for Proposal or notice of owner selection (for projects selected based on a prior competition or without competition), the unit received one of the forms of HUD assistance or was under a federal rent restriction as described in g.6 and g.7, below.

6. The following specifies the number of contract units (if any) that received one of the following forms of HUD assistance:

☐ Public Housing or Operating Funds;

☐ Project-Based Rental Assistance (including Mod Rehab and Mod Rehab Single-Room Occupancy);

☐ Housing for the Elderly (Section 202 or the Housing Act of 1959);

☐ Housing for Persons with Disabilities (Section 811 of the Cranston-Gonzalez Affordable Housing Act);

☐ Rent Supplement Program;

☐ Rental Assistance Program;

☐ Flexible Subsidy Program.

Place a check mark in front of the form of assistance received by any of the contract units. The following total number of contract units received a form of HUD assistance listed above:

0_____.

If all of the units in the project received such assistance, then skip number g.8, below.

7. The following specifies the number of contract units (if any) that were under any of the following federal rent restrictions:

☐ Section 236;

☐ Section 221(d)(3) or (d)(4) BMIR (below-market interest rate);

☐ Housing for the Elderly (Section 202 or the Housing Act of 1959);

☐ Housing for Persons with Disabilities (Section 811 of the Cranston-Gonzalez Affordable Housing Act);

☐ Flexible Subsidy Program.

Place a check mark in front of the type of federal rent restriction that applied to any of the contract units. The following total number of contract units were subject to a federal rent restriction listed above:

0_____.

If all of the units in the project were subject to a federal rent restriction, then skip number g.8, below.

8. The following specifies the number of contract units (if any) exclusively made available to elderly families, families eligible for supportive services, or eligible youth receiving Family Unification Program or Foster Youth to Independence (FUP/FYI) assistance:

a Place a check mark here ☐ if any contract units are exclusively made available for occupancy by elderly families; The following number of contract units shall be rented to elderly families:

_____.

b. Place a check mark here ☐ if any contract units are exclusively made available for occupancy by families eligible for supportive services. The following number of contract units shall be rented to families eligible for supportive services:

_____.

c. Place a check mark here ☐ if any contract units are exclusively made available for occupancy by eligible youth receiving FUP/FYI assistance. The following number of contract units shall be rented to eligible youth receiving FUP/FYI assistance:

_____.

9. The PHA and owner must comply with all HUD requirements regarding income mixing.

EXECUTION OF HAP CONTRACT FOR SINGLE-STAGE PROJECT

I/We, the undersigned, certify under penalty of perjury that the information provided above is true and correct. WARNING: Anyone who knowingly submits a false claim or makes a false statement is subject to criminal and/or civil penalties, including confinement for up to 5 years, fines, and civil and administrative penalties. (18 U.S.C. §§ 287, 1001, 1010, 1012; 31 U.S.C. §3729, 3802).

PUBLIC HOUSING AGENCY (PHA) **Name of PHA (Print)** Arvada Housing Authority
By:
Signature of authorized representative
Lauren Simpson, Chair Arvada Housing Authority
Name and official title (Print)
Date
OWNER **Name of Owner (Print)**
By:
Signature of authorized representative
Name and official title (Print)
Date

EXECUTION OF HAP CONTRACT FOR CONTRACT UNITS COMPLETED AND ACCEPTED IN STAGES

(For multi-stage projects, at acceptance of each stage, the PHA and the owner sign the HAP contract execution for the completed stage.)

I/We, the undersigned, certify under penalty of perjury that the information provided above is true and correct. WARNING: Anyone who knowingly submits a false claim or makes a false statement is subject to criminal and/or civil penalties, including confinement for up to 5 years, fines, and civil and administrative penalties. (18 U.S.C. §§ 287, 1001, 1010, 1012; 31 U.S.C. §3729, 3802).

STAGE NO. 1: The Contract is hereby executed for the contract units in this stage. **STAGE EFFECTIVE DATE:** The effective date of the Contract for this stage is:
Date
PUBLIC HOUSING AGENCY (PHA) **Name of PHA (Print)**
By:
Signature of authorized representative
Name and official title (Print)
Date
OWNER **Name of Owner (Print)**
By:
Signature of authorized representative
Name and official title (Print)
Date

STAGE NO. 2: The Contract is hereby executed for the contract units in this stage. **STAGE EFFECTIVE DATE:** The effective date of the Contract for this stage is:
Date
PUBLIC HOUSING AGENCY (PHA) **Name of PHA (Print)**
By:
Signature of authorized representative
Name and official title (Print)
Date
OWNER **Name of Owner (Print)**
By:
Signature of authorized representative
Name and official title (Print)
Date

STAGE NO. 3: The Contract is hereby executed for the contract units in this stage. **STAGE EFFECTIVE DATE:** The effective date of the Contract for this stage is:
Date
PUBLIC HOUSING AGENCY (PHA) **Name of PHA (Print)**
By:
Signature of authorized representative
Name and official title (Print)
Date
OWNER **Name of Owner (Print)**
By:
Signature of authorized representative
Name and official title (Print)
Date

STAGE NO. __: The Contract is hereby executed for the contract units in this stage. **STAGE EFFECTIVE DATE:** The effective date of the Contract for this stage is:
Date
PUBLIC HOUSING AGENCY (PHA) **Name of PHA (Print)**
By:
Signature of authorized representative
Name and official title (Print)
Date
OWNER **Name of Owner (Print)**
By:
Signature of authorized representative
Name and official title (Print)
Date

U.S. Department of Housing and Urban Development
Office of Public and Indian Housing

SECTION 8 PROJECT-BASED VOUCHER PROGRAM

HOUSING ASSISTANCE PAYMENTS CONTRACT NEW CONSTRUCTION OR REHABILITATION

PART 2 OF HAP CONTRACT

OMB Burden Statement. The public reporting burden for this collection of information is estimated to average 1 hour. This form is required to establish terms between a PHA and owner to provide housing assistance. This contract allows a PHA to enter into a HAP contract with the owner to provide housing assistance payments for eligible families. Assurances of confidentiality are not provided under this collection. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions to reduce this burden, to the Office of Public and Indian Housing, US. Department of Housing and Urban Development, Washington, DC 20410. HUD may not conduct and sponsor, and a person is not required to respond to, a collection of information unless the collection displays a valid control number.

2. DEFINITIONS

Agreement. Agreement to enter into HAP Contract between the owner and the PHA. The HAP contract was entered into following new construction or rehabilitation of the contract units by the owner pursuant to an Agreement.

Contract units. The housing units covered by this HAP contract. The contract units are described in Exhibit A.

Controlling interest. In the context of PHA-owned units (see definition below), controlling interest means:

(a) Holding more than 50 percent of the stock of any corporation; or

(b) Having the power to appoint more than 50 percent of the members of the board of directors of a non-stock corporation (such as a non-profit corporation); or

(c) Where more than 50 percent of the members of the board of directors of any corporation also serve as directors, officers, or employees of the PHA; or

(d) Holding more than 50 percent of all managing member interests in an LLC; or

(e) Holding more than 50 percent of all general partner interests in a partnership; or

(f) Having equivalent levels of control in other ownership structures.

Family. The persons approved by the PHA to reside in a contract unit with assistance under the program.

HAP contract. This housing assistance payments contract between the PHA and the owner. The contract consists of Part 1, Part 2, and the contract exhibits (listed in section 1.c of the HAP contract).

Household. The family and any PHA-approved live-in aide.

Housing assistance payment. The monthly assistance payment by the PHA for a contract unit, which includes: (1) a payment to the owner for rent to the owner under the family's lease minus the tenant rent; and (2) an additional payment to or on behalf of the family if the utility allowance exceeds total tenant payment.

Housing quality standards (HQS). The HUD minimum quality standards for dwelling units occupied by families receiving project-based voucher program assistance.

HUD. U.S. Department of Housing and Urban Development.

HUD requirements. HUD requirements which apply to the project-based voucher program. HUD requirements are issued by HUD headquarters, as regulations, Federal Register notices or other binding program directives.

Newly constructed housing. Housing units that do not exist on the proposal selection date and are developed after the date of selection pursuant to an Agreement between the PHA and owner for use under the project-based voucher program.

Owner. Any person or entity who has the legal right to lease or sublease a unit to a participant.

PHA. Public Housing Agency. The agency that has entered into the HAP contract with the owner. The agency is a public housing agency as defined in the United States Housing Act of 1937 (42 U.S.C. 1437a(b)(6)).

PHA-owned units. A unit is "owned by a PHA" if the unit is in a project that is:

(a) Owned by the PHA (which includes a PHA having a "controlling interest" in the entity that owns the unit; see definition above);

(b) Owned by an entity wholly controlled by the PHA; or

(c) Owned by a limited liability company (LLC) or limited partnership in which the PHA (or an entity wholly controlled by the PHA) holds a controlling interest in the managing member or general partner.

Premises. The building or complex in which a contract unit is located, including common areas or grounds.

Principal or interested party. This term includes a management agent and other persons or entities participating in project management, and the officers and principal members, shareholders, investors, and other parties having a substantial interest in the HAP contract, or in any proceeds or benefits arising from the HAP contract.

Program. The project-based voucher program (see authorization for project-based assistance at 42 U.S.C. 1437f(o)(13)).

Proposal selection date. The date the PHA gives written notice of proposal selection to the owner whose proposal is selected in accordance with the criteria established in the PHA's administrative plan.

Rehabilitated housing. Housing units that exist on the proposal selection date but do not substantially comply with the HQS on that date and are developed pursuant to an Agreement between the PHA and owner for use under the project-based voucher program.

Rent to owner. The total monthly rent payable to the owner under the lease for a contract unit. Rent to owner includes payment for any housing services, maintenance and utilities to be provided by the owner in accordance with the lease.

Tenant. The person or persons (other than a live-in aide) who executes the lease as a lessee of the dwelling unit.

Tenant rent. The portion of the rent to owner payable by the family, as determined by the PHA in accordance with HUD requirements. The PHA is not responsible for paying any part of the tenant rent.

3. PURPOSE

a. This is a HAP contract between the PHA and the owner.

b. The purpose of the HAP contract is to provide housing assistance payments for eligible families who lease contract units that comply with

the HUD HQS from the owner.

c. The PHA must make housing assistance payments to the owner in accordance with the HAP contract for contract units leased and occupied by eligible families during the HAP contract term. HUD provides funds to the PHA to make housing assistance payments to owners for eligible families.

4. RENT TO OWNER; HOUSING ASSISTANCE PAYMENTS

a. Amount of initial rent to owner

The initial rent to owner for each contract unit is stated in Exhibit A, which is attached to and made a part of the HAP contract. At the beginning of the HAP contract term, and until rent to owner is adjusted in accordance with section 5 of the HAP contract, the rent to owner for each bedroom size (number of bedrooms) shall be the initial rent to owner amount listed in Exhibit A.

Place a check mark here ☐ if the PHA has elected not to reduce rents below the initial rent to owner.

b. HUD rent requirements

Notwithstanding any other provision of the HAP contract, the rent to owner may in no event exceed the amount authorized in accordance with HUD requirements. The PHA has the right to reduce the rent to owner, at any time, to correct any errors in establishing or adjusting the rent to owner in accordance with HUD requirements. The PHA may recover any overpayment from the owner.

c. PHA payment to owner

1. Each month the PHA must make a housing assistance payment to the owner for a unit under lease to and occupied by an eligible family in accordance with the HAP contract.

2. The monthly housing assistance payment to the owner for a contract unit is equal to the amount by which the rent to owner exceeds the tenant rent.

3. Payment of the tenant rent is the responsibility of the family. The PHA is not responsible for paying any part of the tenant rent, or for paying any other claim by the owner against a family. The PHA is responsible only for making housing assistance payments to the

owner on behalf of a family in accordance with the HAP contract.

4. The owner will be paid the housing assistance payment under the HAP contract on or about the first day of the month for which payment is due, unless the owner and the PHA agree on a later date.

5. To receive housing assistance payments in accordance with the HAP contract, the owner must comply with all the provisions of the HAP contract. Unless the owner complies with all the provisions of the HAP contract, the owner does not have a right to receive housing assistance payments.

6. If the PHA determines that the owner is not entitled to the payment or any part of it, the PHA, in addition to other remedies, may deduct the amount of the overpayment from any amounts due the owner, including amounts due under any other housing assistance payments contract.

7. The owner will notify the PHA promptly of any change of circumstances that would affect the amount of the monthly housing assistance payment, and will return any payment that does not conform to the changed circumstances.

d. Termination of assistance for family

The PHA may terminate housing assistance for a family under the HAP contract in accordance with HUD requirements. The PHA must notify the owner in writing of its decision to terminate housing assistance for the family in such case.

5. ADJUSTMENT OF RENT TO OWNER

a. PHA determination of adjusted rent

1. At each annual anniversary during the term of the HAP contract, the PHA shall adjust the amount of rent to owner, upon request to the PHA by the owner, in accordance with law and HUD requirements. In addition, the PHA shall adjust the rent to owner when there is a ten percent decrease in the published, applicable Fair Market Rent in accordance with 24 CFR 983.302. However, if the PHA has elected within the HAP contract not to reduce rents

below the initial rent to owner, the rent to owner shall not be reduced below the initial rent to owner except in those cases described in 24 CFR 983.302(c)(2).

2. The adjustment of rent to owner shall always be determined in accordance with all HUD requirements. The amount of the rent to owner may be adjusted up or down, in the amount defined by the PHA in accordance with HUD requirements.

b. Reasonable rent

The rent to owner for each contract unit, as adjusted by the PHA in accordance with 24 CFR 983.303, may at no time exceed the reasonable rent charged for comparable units in the private unassisted market, except in cases where the PHA has elected within the HAP contract not to reduce rents below the initial rent to owner. The reasonable rent shall be determined by the PHA in accordance with HUD requirements.

c. No special adjustments

The PHA will not make any special adjustments of the rent to owner.

d. Owner compliance with HAP contract

The PHA shall not approve, and the owner shall not receive, any increase of rent to owner unless all contract units are in accordance with the HQS, and the owner has complied with the terms of the assisted leases and the HAP contract.

e. Notice of rent adjustment

Rent to owner shall be adjusted by written notice by the PHA to the owner in accordance with this section. Such notice constitutes an amendment of the rents specified in Exhibit A.

6. OWNER RESPONSIBILITY

The owner is responsible for:

a. Performing all management and rental functions for the contract units.

b. Maintaining the units in accordance with HQS.

c. Complying with equal opportunity requirements.

d. Enforcing tenant obligations under the lease.

e. Paying for utilities and housing services (unless paid by the family under the lease).

f. Collecting from the tenant:

1. Any security deposit;

2. The tenant rent; and

3. Any charge for unit damage by the family.

7. OWNER CERTIFICATION

The owner certifies that at all times during the term of the HAP contract:

a. All contract units are in good and tenantable condition. The owner is maintaining the premises and all contract units in accordance with the HQS.

b. The owner is providing all the services, maintenance and utilities as agreed to under the HAP contract and the leases with assisted families.

c. Each contract unit for which the owner is receiving housing assistance payments is leased to an eligible family referred by the PHA, and the lease is in accordance with the HAP contract and HUD requirements.

d. To the best of the owner's knowledge, the members of the family reside in each contract unit for which the owner is receiving housing assistance payments, and the unit is the family's only residence.

e. The owner (including a principal or other interested party) is not the parent, child, grandparent, grandchild, sister, or brother of any member of a family residing in a contract unit unless the PHA has determined that approving leasing of the unit would provide a reasonable accommodation for a family member who is a person with disabilities.

f. The amount of the housing assistance payment is the correct amount due under the HAP contract.

g. The rent to owner for each contract unit does not exceed rents charged by the owner for other comparable unassisted units.

h. Except for the housing assistance payment and the tenant rent as provided

under the HAP contract, the owner has not received and will not receive any payments or other consideration (from the family, the PHA, HUD, or any other public or private source) for rental of the contract unit.

i. The family does not own, or have any interest in the contract unit. If the owner is a cooperative, the family may be a member of the cooperative.

8. CONDITION OF UNITS

a. Owner maintenance and operation

The owner must maintain and operate the contract units and premises to provide decent, safe and sanitary housing in accordance with the HQS, including performance of ordinary and extraordinary maintenance. The owner must provide all the services, maintenance and utilities set forth in Exhibits B and C, and in the lease with each assisted family.

b. PHA inspections

1. The PHA must inspect each contract unit before execution of the HAP contract. The PHA may not enter into a HAP contract covering a unit until the unit fully complies with the HQS.

2. Before providing assistance to a new family in a contract unit, the PHA must inspect the unit. The PHA may not provide assistance on behalf of the family until the unit fully complies with the HQS.

3. At least biennially during the term of the HAP contract, the PHA must inspect a random sample, consisting of at least 20 percent of the contract units in each building, to determine if the contract units and the premises are maintained in accordance with the HQS. Turnover inspections pursuant to paragraph 2 of this section are not counted toward meeting this biennial inspection requirement.

4. If more than 20 percent of the sample of inspected contract units in a building fail the initial inspection, the PHA must reinspect 100 percent of the contract units in the building.

5. The PHA must inspect contract units whenever needed to determine that the contract units comply with the HQS and that the owner is providing maintenance, utilities, and other services in accordance with the HAP contract. The PHA must take into account complaints and any other information that comes to its attention in scheduling inspections.

c. Violation of the housing quality standards

1. If the PHA determines a contract unit is not in accordance with the HQS, the PHA may exercise any of its remedies under the HAP contract for all or any contract units. Such remedies include termination, suspension or reduction of housing assistance payments, and termination of the HAP contract.

2. The PHA may exercise any such contractual remedy respecting a contract unit even if the family continues to occupy the unit.

3. The PHA shall not make any housing assistance for a dwelling unit that fails to meet the HQS, unless the owner corrects the defect within the period specified by the PHA and the PHA verifies the correction. If a defect is life threatening, the owner must correct the defect within no more than 24 hours. For other defects, the owner must correct the defect within no more than 30 calendar days (or any PHA-approved extension).

d. Maintenance and replacement—owner's standard practice

Maintenance and replacement (including redecoration) must be in accordance with the standard practice for the building concerned as established by the owner.

9. LEASING CONTRACT UNITS

a. Selection of tenants

1. During the term of the HAP contract, the owner must lease all contract units to eligible families selected and referred by the PHA from the PHA waiting list. (See 24 CFR 983.251.)

2. The owner is responsible for adopting written tenant selection procedures that are consistent with the purpose of improving housing opportunities for very low-income families and reasonably related to program eligibility and an applicant's ability to perform the lease obligations.

3. Consistent with HUD requirements, and Federal civil rights and fair housing requirements, the owner may apply its own nondiscriminatory tenant selection procedures in determining whether to admit a family referred by the PHA for occupancy of a

contract unit. The owner may refer families to the PHA for placement on the PBV waiting list.

4. The owner must promptly notify in writing any rejected applicant of the grounds for rejection.

5. The PHA must determine family eligibility in accordance with HUD requirements.

6. The contract unit leased to each family must be appropriate for the size of the family under the PHA's subsidy standards.

7. If a contract unit was occupied by an eligible family at the time the unit was selected by the PHA, or is so occupied on the effective date of the HAP contract, the owner must offer the family the opportunity to lease the same or another appropriately-sized contract unit with assistance under the HAP contract.

8. The owner is responsible for screening and selecting tenants from the families referred by the PHA from its waiting list.

b. Vacancies

1. The owner must promptly notify the PHA of any vacancy in a contract unit. After receiving the owner notice, the PHA shall make every reasonable effort to refer a sufficient number of families for owner to fill the vacancy..

2. The owner must rent vacant contract units to eligible families on the PHA waiting list referred by the PHA.

3. The PHA and the owner must make reasonable, good faith efforts to minimize the likelihood and length of any vacancy.

4. If any contract units have been vacant for a period of 120 or more days since owner notice of vacancy (and notwithstanding the reasonable good faith efforts of the PHA to fill such vacancies), the PHA may give notice to the owner amending the HAP contract to reduce the number of contract units by subtracting the number of contract units (by number of bedrooms) that have been vacant for such period.

10. TENANCY

a. Lease

The lease between the owner and each assisted family must be in accordance with HUD requirements. In all cases, the lease must include the HUD-required tenancy addendum. The tenancy addendum must include, word-for-word, all provisions required by HUD.

b. Termination of tenancy

1. The owner may only terminate the tenancy in accordance with the lease and HUD requirements.

2. The owner must give the PHA a copy of any owner eviction notice to the tenant at the same time that the owner gives notice to the tenant. Owner eviction notice means a notice to vacate, or a complaint or other initial pleading used to commence an eviction action under State or local law.

c. Family payment

1. The portion of the monthly rent to owner payable by the family ("tenant rent") will be determined by the PHA in accordance with HUD requirements. The amount of the tenant rent is subject to change during the term of the HAP contract. Any changes in the amount of the tenant rent will be effective on the date stated in a notice by the PHA to the family and the owner.

2. The amount of the tenant rent as determined by the PHA is the maximum amount the owner may charge the family for rent of a contract unit, including all housing services, maintenance and utilities to be provided by the owner in accordance with the HAP contract and the lease.

3. The owner may not demand or accept any rent payment from the tenant in excess of the tenant rent as determined by the PHA. The owner must immediately return any excess rent payment to the tenant.

4. The family is not responsible for payment of the portion of the contract rent covered by the housing assistance payment under the HAP contract. The owner may not terminate the tenancy of an

assisted family for nonpayment of the PHA housing assistance payment.

5. The PHA is responsible only for making the housing assistance payments to the owner on behalf of the family in accordance with the HAP contract. The PHA is not responsible for paying the tenant rent, or any other claim by the owner.

d. Other owner charges

1. Except as provided in paragraph 2, the owner may not require the tenant or family members to pay charges for meals or supportive services. Nonpayment of such charges is not grounds for termination of tenancy.

2. In assisted living developments receiving project-based voucher assistance, owners may charge tenants, family members, or both for meals or supportive services. These charges may not be included in the rent to owner, nor may the value of meals and supportive services be included in the calculation of reasonable rent. Non-payment of such charges is grounds for termination of the lease by the owner in an assisted living development.

3. The owner may not charge the tenant or family members extra amounts for items customarily included in rent in the locality or provided at no additional cost to the unsubsidized tenant in the premises.

e. Security deposit

1. The owner may collect a security deposit from the family.

2. The owner must comply with HUD and PHA requirements, which may change from time to time, regarding security deposits from a tenant.

3. The PHA may prohibit security deposits in excess of private market practice, or in excess of amounts charged by the owner to unassisted families.

4. When the family moves out of the contract unit, the owner, subject to State and local law, may use the security deposit, including any interest on the deposit, in accordance with the lease, as reimbursement for any unpaid tenant rent, damages to the unit or

other amounts which the family owes under the lease. The owner must give the family a written list of all items charged against the security deposit and the amount of each item. After deducting the amount used as reimbursement to the owner, the owner must promptly refund the full amount of the balance to the family.

5. If the security deposit is not sufficient to cover amounts the family owes under the lease, the owner may seek to collect the balance from the family. However, the PHA has no liability or responsibility for payment of any amount owed by the family to the owner.

11. FAMILY RIGHT TO MOVE

a. The family may terminate its lease at any time after the first year of occupancy. The family must give the owner advance written notice of intent to vacate (with a copy to the PHA) in accordance with the lease. If the family has elected to terminate the lease in this manner, the PHA must offer the family the opportunity for tenant-based rental assistance in accordance with HUD requirements.

b. Before providing notice to terminate the lease under paragraph a, the family must first contact the PHA to request tenant-based rental assistance if the family wishes to move with continued assistance. If tenant-based rental assistance is not immediately available upon lease termination, the PHA shall give the family priority to receive the next available opportunity for tenant-based rental assistance.

12. OVERCROWDED, UNDER-OCCUPIED, AND ACCESSIBLE UNITS

The PHA subsidy standards determine the appropriate unit size for the family size and composition. The PHA and owner must comply with the requirements in 24 CFR 983.260. If the PHA determines that a family is occupying a wrong-size unit, or a unit with accessibility features that the family does not require, and the unit is needed by a family that requires the accessibility features, the PHA must promptly notify the family and the owner of this determination, and of the PHA's offer of continued assistance in another unit. 24 CFR 983.260(a).

13. PROHIBITION OF DISCRIMINATION

a. The owner may not refuse to lease contract units to, or otherwise discriminate against any person or family in leasing of a contract unit, because of race, color, religion, sex (including sexual orientation and gender identity), national origin, disability, age or familial status.

b. The owner must comply with the following requirements: The Fair Housing Act (42 U.S.C. 3601–19) and implementing regulations at 24 CFR part 100 *et seq.*; Executive Order 11063, as amended by Executive Order 12259 (3 CFR, 1959–1963 Comp., p. 652 and 3 CFR, 1980 Comp., p. 307) (Equal Opportunity in Housing Programs) and implementing regulations at 24 CFR part 107; title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d-2000d-4) (Nondiscrimination in Federally Assisted Programs) and implementing regulations at 24 CFR part 1; the Age Discrimination Act of 1975 (42 U.S.C. 6101–6107) and implementing regulations at 24 CFR part 146; section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and implementing regulations at 24 CFR part 8; title II of the Americans with Disabilities Act, 42 U.S.C. 12101 *et seq.* ; 28 CFR part 35; Executive Order 11246, as amended by Executive Orders 113 75, 11478, 12086, and 12107 (3 CFR, 1964–1965 Comp., p. 339; 3 CFR, 1966–1970 Comp., p. 684; 3 CFR, 1966–1970 Comp., p. 803; 3 CFR, 1978 Comp., p. 230; and 3 CFR, 1978 Comp., p. 264, respectively) (Equal Employment Opportunity Programs) and implementing regulations at 41 CFR chapter 60; Executive Order 11625, as amended by Executive Order 12007 (3 CFR, 1971–1975 Comp., p. 616 and 3 CFR, 1977 Comp., p. 139) (Minority Business Enterprises); Executive Order 12432 (3 CFR, 1983 Comp., p. 198) (Minority Business Enterprise Development); and Executive Order 12138, as amended by Executive Order 12608 (3 CFR, 1977 Comp., p. 393 and 3 CFR, 1987 Comp., p. 245) (Women's Business Enterprise).

c. The owner must comply with HUD's Equal Access to HUD-assisted or -insured housing rule (24 CFR 5.105(a)(2)).

d. The owner must comply with the Violence Against Women Act, as amended, and HUD's implementing regulation at 24 CFR part 5, Subpart L, and program regulations.

e. The PHA and the owner must cooperate with HUD in the conducting of compliance reviews and complaint investigations pursuant to all applicable civil rights statutes, Executive Orders, and all related rules and regulations.

14. PHA DEFAULT AND HUD REMEDIES

If HUD determines that the PHA has failed to comply with the HAP contract, or has failed to take appropriate action to HUD's satisfaction or as directed by HUD, for enforcement of the PHA's rights under the HAP contract, HUD may assume

the PHA's rights and obligations under the HAP contract, and may perform the obligations and enforce the rights of the PHA under the HAP contract.

15. OWNER DEFAULT AND PHA REMEDIES

a. Owner default

Any of the following is a default by the owner under the HAP contract:

1. The owner has failed to comply with any obligation under the HAP contract, including the owner's obligations to maintain all contract units in accordance with the housing quality standards.

2. The owner has violated any obligation under any other housing assistance payments contract under Section 8 of the United States Housing Act of 1937 (42 U.S.C. 1437f).

3. The owner has committed any fraud or made any false statement to the PHA or HUD in connection with the HAP contract.

4. The owner has committed fraud, bribery or any other corrupt or criminal act in connection with any Federal housing assistance program.

5. If the property where the contract units are located is subject to a lien or security interest securing a HUD loan or a mortgage insured by HUD and:

   i. The owner has failed to comply with the regulations for the applicable mortgage insurance or loan program, with the mortgage or mortgage note, or with the regulatory agreement; or

   ii. The owner has committed fraud, bribery or any other corrupt or criminal act in connection with the HUD loan or HUD-insured mortgage.

6. The owner has engaged in any drug-related criminal activity or any violent criminal activity.

b. PHA remedies

1. If the PHA determines that a breach has occurred, the PHA may exercise any of its rights or remedies under the HAP contract.

2. The PHA must notify the owner in writing of such determination. The notice by the PHA to the owner may require the owner to take corrective action (as verified by the PHA) by a time prescribed in the notice.

3. The PHA's rights and remedies under the HAP contract include recovery of overpayments, termination or reduction of housing assistance payments, and termination of the HAP contract.

c. PHA remedy is not waived

The PHA's exercise or non-exercise of any remedy for owner breach of the HAP contract is not a waiver of the right to exercise that remedy or any other right or remedy at any time.

16. OWNER DUTY TO PROVIDE INFORMATION AND ACCESS REQUIRED BY HUD OR PHA

a. Required information

The owner must prepare and furnish any information pertinent to the HAP contract as may reasonably be required from time to time by the PHA or HUD. The owner shall furnish such information in the form and manner required by the PHA or HUD.

b. PHA and HUD access to premises

The owner must permit the PHA or HUD or any of their authorized representatives to have access to the premises during normal business hours and, for the purpose of audit and examination, to have access to any books, documents, papers and records of the owner to the extent necessary to determine compliance with the HAP contract, including the verification of information pertinent to the housing assistance payments or the HAP contract.

17. PHA AND OWNER RELATION TO THIRD PARTIES

a. Injury because of owner action or failure to act

The PHA has no responsibility for or liability to any person injured as a result of the owner's action or failure to act in connection with the implementation of the HAP contract, or as a result of any other action or failure to act by the owner.

b. Legal relationship

The owner is not the agent of the PHA. The HAP contract does not create or affect any relationship between the PHA and any lender to the owner or any suppliers, employees, contractors or subcontractors used by the owner in connection with the implementation of the HAP contract.

c. Exclusion of third-party claims

Nothing in the HAP contract shall be construed as creating any right of a family or other third party (other than HUD) to enforce any provision of the HAP contract, or to assert any claim against HUD, the PHA or the owner under the HAP contract.

d. Exclusion of owner claims against HUD

Nothing in the HAP contract shall be construed as creating any right of the owner to assert any claim against HUD.

18. PHA-OWNED UNITS

Notwithstanding Section 17 of this HAP contract, a PHA may own units assisted under the project-based voucher program, subject to the special requirements in 24 CFR 983.59 regarding PHA-owned units.

19. CONFLICT OF INTEREST

a. Interest of members, officers, or employees of PHA, members of local governing body, or other public officials

1. No present or former member or officer of the PHA (except tenant-commissioners), no employee of the PHA who formulates policy or influences decisions with respect to the housing choice voucher program or project-based voucher program, and no public official or member of a governing body or State or local legislator who exercises functions or responsibilities with respect to these programs, shall have any direct or indirect interest, during his or her tenure or for one year thereafter, in the HAP contract.

2. HUD may waive this provision for good cause.

b. Disclosure

The owner has disclosed to the PHA any interest that would be a violation of the HAP contract. The owner must fully and promptly update such

disclosures.

c. Interest of member of or delegate to Congress

No member of or delegate to the Congress of the United States of America or resident-commissioner shall be admitted to any share or part of this HAP Contract or to any benefits arising from the contract.

20. EXCLUSION FROM FEDERAL PROGRAMS

a. Federal requirements

The owner must comply with and is subject to requirements of 2 CFR part 2424.

b. Disclosure

The owner certifies that:

1. The owner has disclosed to the PHA the identity of the owner and any principal or interested party.

2. Neither the owner nor any principal or interested party is listed on the U.S. General Services Administration list of parties excluded from Federal procurement and nonprocurement programs; and none of such parties are debarred, suspended, subject to a limited denial of participation or otherwise excluded under 2 CFR part 2424.

21. TRANSFER OF THE CONTRACT OR PROPERTY

a. When consent is required

1. The owner agrees that neither the HAP contract nor the property may be transferred without the advance written consent of the PHA in accordance with HUD requirements.

2. "Transfer" includes:

   a. Any sale or assignment or other transfer of ownership, in any form, of the HAP contract or the property;

   b. The transfer of any right to receive housing assistance payments that may be payable pursuant to the HAP contract;

c. The creation of a security interest in the HAP contract or the property;

d. Foreclosure or other execution on a security interest; or

e. A creditor's lien, or transfer in bankruptcy.

3. If the owner is a corporation, partnership, trust or joint venture, the owner is not required to obtain advance consent of the PHA pursuant to paragraph a for transfer of a passive and non-controlling interest in the ownership entity (such as a stock transfer or transfer of the interest of a limited partner), if any interests so transferred cumulatively represent less than half the beneficial interest in the HAP contract or the property. The owner must obtain advance consent pursuant to paragraph a for transfer of any interest of a general partner.

b. Transferee assumption of HAP contract

No transferee (including the holder of a security interest, the security holder's transferee or successor in interest, or the transferee upon exercise of a security interest) shall have any right to receive any payment of housing assistance payments pursuant to the HAP contract, or to exercise any rights or remedies under the HAP contract, unless the PHA has consented in advance, in writing to such transfer, and the transferee has agreed in writing, in a form acceptable to the PHA in accordance with HUD requirements, to assume the obligations of the owner under the HAP contract, and to comply with all the terms of the HAP contract.

c. Effect of consent to transfer

1. The creation or transfer of any security interest in the HAP contract is limited to amounts payable under the HAP contract in accordance with the terms of the HAP contract.

2. The PHA's consent to transfer of the HAP contract or the property does not to change the terms of the HAP contract in any way, and does not change the rights or obligations of the PHA or the owner under the HAP contract.

3. The PHA's consent to transfer of the HAP contract or the property to any transferee does not constitute consent to any further transfers of the HAP contract or the property, including further transfers to any successors or assigns of an approved transferee.

d. When transfer is prohibited

The PHA will not consent to the transfer if any transferee, or any principal or interested party is debarred, suspended subject to a limited denial of participation, or otherwise excluded under 2 CFR part 2424, or is listed on the U.S. General Services Administration list of parties excluded from Federal procurement or nonprocurement programs.

22. SUBSIDY LAYERING

a. Owner disclosure

The owner must disclose to the PHA, in accordance with HUD requirements, information regarding any related assistance from the Federal Government, a State, or a unit of general local government, or any agency or instrumentality thereof, that is made available or is expected to be made available with respect to the contract units. Such related assistance includes, but is not limited to, any loan, grant, guarantee, insurance, payment, rebate, subsidy, credit, tax benefit, or any other form of direct or indirect assistance.

b. Limit of payments

Housing assistance payments under the HAP contract must be no more than is necessary, as determined in accordance with HUD requirements, to provide affordable housing after taking account of such related assistance. The PHA will adjust in accordance with HUD requirements the amount of the housing assistance payments to the owner to compensate in whole or in part for such related assistance.

23. OWNER LOBBYING CERTIFICATIONS

a. The owner certifies, to the best of owner's knowledge and belief, that:

1. No Federally appropriated funds have been paid or will be paid, by or on behalf of the owner, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of the HAP contract, or the extension, continuation, renewal, amendment, or modification of the HAP contract.

2. If any funds other than Federally appropriated funds have been paid or will be paid to any person for influencing or attempting to

influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the HAP contract, the owner must complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

b. This certification by the owner is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352.

24. TERMINATION OF HAP CONTRACT FOR WRONGFUL SELECTION OF CONTRACT UNITS

The HAP contract may be terminated upon at least 30 days notice to the owner by the PHA or HUD if the PHA or HUD determines that the contract units were not eligible for selection in conformity with HUD requirements.

25. NOTICES AND OWNER CERTIFICATIONS

a. Where the owner is required to give any notice to the PHA pursuant to the HAP contract or any other provision of law, such notice must be in writing and must be given in the form and manner required by the PHA.

b. Any certification or warranty by the owner pursuant to the HAP contract shall be deemed a material representation of fact upon which reliance was placed when this transaction was made or entered into.

26. NOTICE OF TERMINATION OR EXPIRATION WITHOUT EXTENSION

a. An owner must provide notice to the PHA, and to the affected tenants, not less than 1 year prior to the termination or expiration without extension of a HAP contract.

b. An owner who fails to provide such notice must permit tenants to remain in their units for the required notice period with no increase in the tenant portion of the rent. During this time period, an owner may not evict a tenant as a result of the owner's inability to collect an increased tenant portion of rent. With PHA agreement, an owner may extend the terminating contract for a period of time sufficient to give tenants 1 years's advance notice.

27. FAMILY'S RIGHT TO REMAIN

Upon termination or expiration of the contract without extension, each family assisted under the contract may elect to use its assistance to remain in the project

if the family's unit complies with the inspection requirements under section 8(o)(8) (42 U.S.C. 1437f(o)(8) of the U.S. Housing Act of 1937 ("the 1937 Act")), the rent for the unit is reasonable as required by section 8(o)(10)(A) of the 1937 Act, and the family pays its required share of the rent and the amount, if any, by which the unit rent (including the amount allowed for tenant-paid utilities) exceeds the applicable payment standard.

28. ENTIRE AGREEMENT; INTERPRETATION

a. The HAP contract, including the exhibits, is the entire agreement between the PHA and the owner.

b. The HAP contract must be interpreted and implemented in accordance with all statutory requirements, and with all HUD requirements, including amendments or changes in HUD requirements during the term of the HAP contract. The owner agrees to comply with all such laws and HUD requirements. Any regulatory citation specifically included in this HAP contract is subject to any subsequent revision of such citation.

Housing Authority of the City of Arvada
Housing Assistance Payment Contract
HUD 52530A

Marshall Pointe Apartments, LP

Exhibit A

Total number of Units in Project Covered by this HAP Contract; Initial Rent to Owner; and the Number and Description of the Contract Units:

Project Site: **5170 Marshall St Arvada, CO 80002**

Total Number of Units in Project Covered by this Agreement: 8 **units**

Location of Contract Units by Area (size), Initial Rent and Number of Bedrooms and Bathrooms:
The unit locations will be finalized prior to execution of the HAP

Unit Type	Total Bedrooms	Total Bathrooms	Initial Rent	Square Feet
1 Bdrm	1	1		612
2 Bdrm	2	1		792
2 Bdrm	2	2		937
3 Bdrm	3	2		1,179

***Initial Rents will be set prior to execution of HAP Contract in accordance with HUD regulations.**

Housing Authority of the City of Arvada
Housing Assistance Payment Contract
HUD 52530A

Marshall Pointe Apartments, LP

Exhibit B

Services, Maintenance and Equipment to be Provided by the Owner Without Charges in Addition to Rent to Owner: Lounge area for residents, washer/dryer access, shared garden with equipment provided, fitness center machines/equipment, outdoor eating area, playground equipment. Partnership with Family Tree, a non-profit human services agency providing services designed to end child abuse, domestic violence, and homelessness. Family Tree will have a FT casemanager assigned to Marshall Pointe to focus on residents living in the PBV units. Family Tree will offer casemanagement, education and employment services, and various other supportive services to help residents achieve economic independence.

Exhibit C

Utilities Available in the Contract Units, including a Listing of Utility Services to be Paid by the Owner (Without Charges in Addition to Rent to Owner) and Utilities to be Paid by the Tenants

Owner will pay –Water, Sewer and trash Tenant will pay – Electric

Exhibit D

Features Provided to Comply with Program Accessibility Features of Section 504 of the Rehabilitation Act of 1973:

The property will meet all Section 504 (accessibility) requirements

Housing Authority of the City of Arvada
Housing Assistance Payment Contract
HUD 52530A

Marshall Pointe Apartments, LP

Exhibit E – Additional Requirements and Reporting by the Owner

One-Time Requirements and Reporting:	**Due:**
Certificate of Occupancy (CO) and/or Temporary Certificate of HAP Occupancy (TCO). Note: If TCO initially provided, then CO to be provided when issued	Prior to execution of HAP Contract
Architects certification that building meet codes and zoning	Prior to execution of HAP Contract
Owner's certification that units meet HQS	Prior to execution of HAP Contract
Architect substantial completion (AIA G704) with punch list	30 days after Execution of HAP Contract
Architect certification that punch list items completed	90 days after execution of HAP Contract
Submission of Minority, Women and Disadvantaged Business Enterprise (MBE/WBE/DBE) Opportunities Report – HUD Form 2516	120 days after execution of HAP Contract

Ongoing Requirement:

Owner agrees to follow the City of Arvada Housing Authority's PBV policies and procedures as outlined in the Adminstrative Plan.

Revenue				
Gross Potential Rent				$ 5,014,932.00
Total Gross Income				**$ 5,014,932**
Vacancy				(383,478)
Vacancy %				***7.0%***
Total Rental Income				**$ 4,631,454**
	Units	**Cost / Month**		
W/D Rental	260	$ 65		$ 202,800
Internet	260	$ 55		$ 171,600
Storage Lockers	74	$ 65		$ 57,720
Tenant Charges	260	$ 10		$ 31,200
Other Income			**$ 1,782**	**$ 463,320**
Total Revenue				**$ 5,094,774**
Expenses			**Per Unit**	
G&A			$ 250	$ 65,000
Payroll			1,155	300,300
PSH Services			308	80,000
Electricity			30	7,800
Water & Sewer			300	78,000
Trash			130	33,800
Contract Services			240	62,400
Repairs & Maintenance			225	58,500
Turnover			150	39,000
Marketing			38	9,880
Total Controllable Expenses			**$ 2,826**	**$ 734,680**
Management Fee			2.75 %	$ 140,106
Insurance			$ 500	130,000
Arvada Housing Authority Interest Payment			$ 114	29,750
Total Expenses (Pre-RR)			**$ 3,979**	**$ 1,034,536**
Replacement Reserves			$ 300	78,000
Total Expenses (Including RR)			**$ 4,279**	**$ 1,112,536**
Net Operating Income			**$ 15,316**	**$ 3,982,238**

CITY OF ARVADA

REPORT TO HOUSING AUTHORITY

AGENDA ITEM V.2.

TO: THE HONORABLE CITY COUNCIL DATE: November 4, 2024

SUBJECT: R-HA-24-05, A Resolution Authorizing A Subordination Agreement Between the Arvada Housing Authority and the State of Colorado for Loans to Legacy-Arvada Partners, LP for the Legacy Senior Residences Development and Authorizing the First Amendment to the Deed of Trust, Promissory Note and Loan Agreement Recognizing the State of Colorado's Senior Encumbrance

Report in Brief

Presenter: Carrie Espinosa

Legacy Senior Residences is an affordable senior housing development located at 5353 W. 63rd Avenue, Arvada, Colorado 80003, which is under construction and will provide 72 units of affordable housing to the community. Legacy Senior Residences received a $1,800,000 loan from the State of Colorado, Division of Housing in order to complete the development. The State of Colorado requires that Arvada's $840,000 loan be subordinate to its loan to Legacy-Arvada Partners, LP. The Arvada Housing Authority finds it is beneficial to continue its support of the development in order to increase affordable senior housing within Arvada and recommends approval of this resolution.

The City team recommends approval of R-HA-24-05, A Resolution Authorizing A Subordination Agreement Between the Arvada Housing Authority and the State of Colorado for Loans to Legacy-Arvada Partners, LP for the Legacy Senior Residences Development and Authorizing the First Amendment to the Deed of Trust, Promissory Note and Loan Agreement Recognizing the State of Colorado's Senior Encumbrance.

Financial Impact

The $840,000 loan was paid from the Arvada Affordable Housing Fund in December 2023.

Background

Legacy Senior Residences is a tax credit approved affordable housing development that will provide 72 units of affordable senior housing located at 5353 W 63rd Ave, Arvada, Colorado 80003. As part of the low-income housing tax credit (LIHTC) application, the Arvada Housing Authority committed to become a Special Limited Partner for the purpose of providing a property and sales tax exemption, provide eight Housing Choice Vouchers to this site to serve households at 30% area median income as well as an $840,000 loan. The Arvada Housing Authority Board approved these commitments during a Special Meeting of the Arvada Housing Authority on December 18, 2023.

Legacy-Arvada Partners, LP has received a loan from the State of Colorado, Division of Housing in the amount of $1,800,000. In order to secure the loan, the State of Colorado is requesting that the Arvada Housing Authority agree to subordinate its $840,000 loan to the State.

Discussion

The Arvada City Council identified affordable housing as a priority area in the 2024-2030 City of Arvada Strategic Plan. Additionally, the 2024 City of Arvada Housing Needs Assessment and Housing Strategic Plan identified the following top three housing needs:

1. Need for additional affordable rentals

2. Starter homes and family homes priced near $450,000
3. Increased diversity in housing stock with a focus on missing middle ownership options and the need for housing stability options

Legacy Senior Apartments will provide 260 units of much-needed affordable housing in Arvada and address the priority area and needs identified in the Arvada Housing Strategic Plan.

Public Contact

Posting of the City Council Agenda

Commission Recommendation

N/A

Strategic Alignment

The recommended action aligns with the following City Council Strategic Result-
Prioritize opportunities to expand affordable housing options in collaboration with the community, development, and funding partners.

Alternative Courses of Action

N/A

Recommendation for Action

The Arvada team recommends that the City Council approve R-HA-24-05, A Resolution Authorizing A Subordination Agreement Between the Arvada Housing Authority and the State of Colorado for Loans to Legacy-Arvada Partners, LP for the Legacy Senior Residences Development and Authorizing the First Amendment to the Deed of Trust, Promissory Note and Loan Agreement Recognizing the State of Colorado's Senior Encumbrance.

Suggested Motion:

I move that R-HA-24-05, A Resolution Authorizing A Subordination Agreement Between the Arvada Housing Authority and the State of Colorado for Loans to Legacy-Arvada Partners, LP for the Legacy Senior Residences Development and Authorizing the First Amendment to the Deed of Trust, Promissory Note and Loan Agreement Recognizing the State of Colorado's Senior Encumbrance, be (approved) (rejected).

Prepared by:
Carrie Espinosa, Manager of Housing Preservation and Resources

Reviewed by:

Approved by:

Carrie Espinosa, Manager of Housing Preservation and Resources 10/16/2024

Jessica Garner, Director of Community and Economic Development	10/16/2024
Bryan Archer, Director of Finance	10/16/2024
Gail Walker, Legal Specialist-Contracts	10/16/2024
Janelle Miller, Assistant City Attorney	10/16/2024
Rachel Morris, City Attorney	10/24/2024
Linda Haley, Acting City Manager	10/24/2024

Enclosure, exhibits & attachments required to support the report

RESOLUTION NO. R-HA-24-05

A RESOLUTION AUTHORIZING A SUBORDINATION AGREEMENT BETWEEN THE ARVADA HOUSING AUTHORITY AND THE STATE OF COLORADO FOR LOANS TO LEGACY-ARVADA PARTNERS, LP FOR THE LEGACY SENIOR RESIDENCES DEVELOPMENT AND AUTHORIZING THE FIRST AMENDMENT TO THE DEED OF TRUST, PROMISSORY NOTE, AND LOAN AGREEMENT RECOGNIZING THE STATE OF COLORADO'S SENIOR ENCUMBRANCE

WHEREAS, the Arvada Housing Authority ("the Authority") has participated in increasing affordable housing options in the Arvada community through its financial support of and partnership with the Legacy Senior Residences development; and

WHEREAS, Legacy Senior Residences is an affordable senior housing development located at 5353 W. 63rd Avenue, Arvada, Colorado 80003, which is under construction and will provide 72 units of affordable housing to the community; and

WHEREAS, Legacy Senior Residences received a $1,8000,000.00 loan from the State of Colorado, Division of Housing in order to complete the development; and

WHEREAS, the State of Colorado requires that Arvada's $840,000.00 loan be subordinate to its loan to Legacy-Arvada Partners, LP; and

WHEREAS, the Authority finds that it is beneficial to continue its support of the development in order to increase affordable senior housing within Arvada.

NOW, THEREFORE, BE IT RESOLVED BY THE ARVADA HOUSING AUTHORITY:

Section 1. The Chairperson or Vice Chairperson is authorized to sign and the City Clerk to attest, in form approved by the City Attorney, the Subordination Agreement with the State of Colorado and corresponding First Amendment to the Promissory Note, Deed of Trust, and Loan Agreement that are in substantially the same form as those attached hereto.

Section 2. This resolution shall be effective upon its approval by the Arvada Housing Authority.

APPROVED AND ADOPTED this 4th day of November, 2024.

_____
Lauren Simpson, Chairperson

ATTEST:

_____
City Clerk

APPROVED AS TO FORM:
Rachel A. Morris, City Attorney:

BY: _____

FIRST AMENDMENT TO A PROMISSORY NOTE, LOAN AGREEMENT, AND DEED OF TRUST BY AND BETWEEN THE ARVADA HOUSING AUTHORITY AND LEGACY-ARVADA PARTNERS, LP FOR A LOAN OF $840,000 FOR THE COMPLETION OF THE LEGACY SENIOR RESIDENCES DEVELOPMENT

1.0 RECITALS AND PURPOSE.

1.1 On or about December 29, 2023, the Arvada Housing Authority ("Authority") and Legacy-Arvada Partners, LP ("Borrower") executed a Promissory Note, Deed of Trust, and Loan Agreement whereby the Authority loaned Borrower $840,000.00 for the completion of Legacy Senior Residences (the "Loan Documents" or **Exhibit A**).

1.2 Borrower has now received a $1,800,000.00 loan from the State of Colorado, Division of Housing ("State Loan"). The State of Colorado requires subordination of the Authority's loan described in the Loan Documents.

1.3 The purpose of this First Amendment is to amend the Loan Documents to reflect that the State Loan is a permitted senior encumbrance.

2.0 FIRST AMENDMENT.

2.1 The Loan Documents shall be amended to state and reflect that the State Loan is a permitted senior encumbrance to the Authority's loan.

3.0 FULL FORCE AND EFFECT. All other terms and conditions shall be as set forth as stated in the Loan Documents and shall remain otherwise unchanged.

EFFECTIVE this _____ day of _____, 2024.

ARVADA HOUSING AUTHORITY

_____
Lauren Simpson, Chairperson
8101 Ralston Road
Arvada, CO 80002

ATTEST:

_____
City Clerk

APPROVED AS TO FORM BY:

_____
For Rachel A. Morris, City Attorney

LEGACY-ARVADA PARTNERS, LP
By: Leg Arvada, LLC
A Nebraska Limited Liability Company
Its General Partner

_____
Bobbi Jo Lucas
President

ATTEST:

_____
Name:
Title:

Exhibit A

FIRST AMENDMENT TO A PROMISSORY NOTE, LOAN AGREEMENT, AND DEED OF TRUST BY AND BETWEEN THE ARVADA HOUSING AUTHORITY AND LEGACY-ARVADA PARTNERS, LP FOR A LOAN OF $840,000 FOR THE COMPLETION OF THE LEGACY SENIOR RESIDENCES DEVELOPMENT

PROMISSORY NOTE

Borrower: Legacy-Arvada Partners, LP
209 S. 19th Street, Suite 100
Omaha, NE 68102

Note Date: December 29, 2023

Location: Arvada, Colorado

Principal Amount: $840,000.00

1.0 PRINCIPAL AND INTEREST.

1.1 FOR VALUE RECEIVED, Borrower promises to pay to the order of the Arvada Housing Authority, 8101 Ralston Road, Arvada, CO 80002 ("Authority"), the principal sum of Eight-Hundred and Forty Thousand Dollars ($840,000.00), advanced by the Authority for the completion of the affordable housing development, Legacy Senior Residences, located at 5353 W. 63rd Ave., Arvada, Colorado 80003 (the "Project"), pursuant to the terms and conditions provided herein.

1.2 The principal amount of this Promissory Note, together with interest at a rate of 4% per annum, compounding annually, shall be due and payable through the maturity date of this Note, which shall be March 1, 2055, (the "Maturity Date"), on which date the entire outstanding principal balance together with any accrued and unpaid interest shall be due and payable in full.

1.2.1 Loan Year 0. Lender agrees that in Loan Year 0, all funds will be disbursable and available, however no interest shall accrue, and no payments shall be due or owing until Loan Year 1.

1.2.2 **Loan Years 1-7.** Lender agrees that in Loan Years 1 through 7, payments shall be interest only. Commencing on March 1, 2026, through March 1, 2032, the Borrower shall pay equal annual interest-only payments of $33,600.00 for the previous Loan Year.

1.2.3 **Loan Years 8-30.** Loan Years 8 through 30, Borrower agrees to pay both the deferred principal and interest. Commencing on March 1, 2033, through the Maturity Date, the Borrower shall pay equal annual payments of $56,539.61 for the previous Loan Year, which shall be due and payable within 30 calendar days from March 1st, provided there is sufficient Cash Flow for the borrower to pay such payment.

1.3 On the Maturity Date, the entire outstanding principal balance together with any accrued and unpaid interest shall be due and payable in full.

2.0 **DEFINITIONS.** For the purposes of this Note, the listed terms have the following meanings:

2.1 "Cash Flow" is defined as the gross cash receipts (gross receipts, determined on a cash basis, derived from the operations of the Project, including all rent revenues, vending, laundry and other incidental service revenue, but excluding tenant security deposits, debt proceeds, equity contributions, and earnings on any replacement or operating deficit reserve accounts) reduced by:

2.1.1 All principal and interest payments and other sums paid on or with respect to any Construction or Permanent Loan incurred in connection with the acquisition or development of the Project, including any loans to the Borrower by the First Bank of Wyoming and Cedar Rapids Bank & Trust Company;

2.1.2 Payments due on the senior encumbrances listed in **Exhibit B** to the Deed of Trust;

2.1.3 The rights of MCI Legacy Senior Residences, LLC, or MPC CO Arvada PCFd, LLC or its successors (herein referred to as the "Investors") to any distribution in the event of a tax credit shortfall, as determined under the Borrower's Partnership Agreement, to repayment of any loans made to Borrower by the Investors, and to payment of asset management fees payable to the Investors pursuant to Borrower's Partnership Agreement;

2.1.4 All cash expenditures incurred incident to the operation of the Borrower's business (including capital expenditures);

2.1.5 The payment of current and accrued Management Fees, including the Authority's PILOT, but excluding any deferred developer fee; and

2.1.6 Expenses of the Borrower as permitted by the Partnership Agreement, including, without limitation, any such cash as is necessary to:

(i) Fund any Replacement Reserve Accounts,

(ii) Pay all outstanding trade payables,

(iii) Fund and/or replenish any Operating Reserve Accounts,

(iv) Fund and/or replenish any Operating Deficit Loans or Guaranty

Loans; and

(v) Fund any additional reserves required by any Construction or Permanent Loan, or any state or federal housing agency with respect to the Project.

2.2 "Construction or Permanent Loan" shall mean any loan incurred in connection with the purchase or development of the land underlying the Project (as well as any off site development required by any governmental entity in connection with the development of the Project) and the construction and development of the Project, or any loan incurred to refinance, in whole or in part, any construction loan.

2.3 "Deed of Trust" shall mean the mortgage or deed of trust for the benefit of the Authority securing the repayment of the Loan.

2.4 "Default Rate" shall mean 12% percent per annum.

2.5 "Developer Fees" shall mean any fees payable to Cornerstone Housing Group, LLC, a Nebraska limited liability company, by the Borrower in connection with the development of the Project.

2.6 "Eligible Costs" shall mean those costs payable to the city of Arvada for purposes of plans, approvals, and other costs of associated with construction of the Project.

2.7 "Loan Year" is defined as a period of twelve months (January 1 – December 31) following the expiration of the prior "Loan Year," with the exception of the first loan year beginning on the date of execution of this Note and ending on December 31, 2025. Payments shall be due on March 1 for each previous loan year.

2.8 "Maturity Date" shall mean March 1, 2055 (date payment due for the prior and final loan year – January 1 – December 31, 2054).

2.9 "Management Fees" shall mean fees payable to any asset or project manager, including leasing agent fees, management and administrative fees, and fees for overseeing compliance with rules, regulations, covenants, and agreements relating to the Project.

2.10 "Partnership Agreement" shall mean the Amended and Restated Agreement of Limited Partnership dated December 29, 2023.

2.11 "Operating Reserve Account" shall mean any account funded by the Borrower out of operating profits or other funds to pay for operating deficits

generated by the Project, but only to the extent such Operating Reserve is required to be funded by any Construction or Permanent Loan, pursuant to Borrower's Partnership Agreement, or by any state or federal housing agency with respect to the Project.

2.12 "Replacement Reserve Account" shall mean any account funded by the by the Borrower out of operating profits or other funds to pay for the replacement and repair of the Project, but only to the extent such Replacement Reserve is required to by funded by any Construction or Permanent Loan, pursuant to Borrower's Partnership Agreement, or any state or federal housing agency with respect to the Project.

3.0 PAYMENT AMOUNTS AND DUE DATE.

1.1 **Loan Years 1-7.** Lender agrees that in Loan Years 1 through 7, payments shall be interest only. Commencing on March 1, 2026, through March 1, 2032, the Borrower shall pay equal annual interest-only payments of $33,600.00 for the previous Loan Year.

1.2 **Loan Years 8-30.** Loan Years 8 through 30, Borrower agrees to pay both the deferred principal and interest. Commencing on March 1, 2033, through the Maturity Date, the Borrower shall pay equal annual payments of $56,539.61 for the previous Loan Year, which shall be due and payable within 30 calendar days from March 1st, provided there is sufficient Cash Flow for the borrower to pay such payment.

3.1 If there is inadequate Cash Flow in any year to make the payments of principal and interest specified hereunder, such amount shall be due and payable in the next succeeding year to the extent Cash Flow is available to repay such accrued payments.

3.2 Regardless of Cash Flow availability under Sec. 3.2, the entire outstanding principal balance and all accrued interest shall be due and payable on the Maturity Date.

3.3 In the event that Borrower shall fail to make any payment due to the Authority within 15 days after the due date thereof, the Authority may, at its option, impose a late charge upon Borrower in an amount not to exceed 5% of said payment. Any such late charge shall be separately charged to and collected from Borrower and shall not be applied to, or be deducted from, any payment.

3.4 Subject to the terms in the Subordination Agreement described in Sec. 7.0, this Note may be prepaid in whole or in part, at any time, without notice or penalty. Partial prepayments will not, unless agreed to by the Authority in writing, relieve Borrower of Borrower's obligation to continue to make payments under the

payment schedule.

3.5 The Authority has secured this Note by a Deed of Trust dated the same date. Reference the Deed of Trust for a description of the property covered and the rights, remedies, and obligations of the Authority.

4.0 DEFAULT.

4.1 In the event of (i) any default in any payment of the principal of or interest on this Note when due and payable, or (ii) any default or event of default under the provisions of the Loan Agreement dated as of the date hereof between Borrower and Lender (the "Loan Agreement") or Deed of Trust, in either event subject to applicable notice and cure periods set forth in the Loan Agreement, then:

4.1.1 The unpaid principal balance of this Note shall bear interest from the date of any such event of default until such balance has been paid in full at the rate of 8% per annum; and

4.1.2 The unpaid principal balance of this Note, plus accrued interest and all other obligations of Borrower to the Authority, direct or indirect, absolute or contingent, now existing or hereafter arising, shall, at the option of the Authority, become immediately due and payable without notice or demand, and the Authority shall have and may exercise any and all of the rights and remedies provided herein or in the Loan Agreement and Deed of Trust.

4.1.3 In the event of any such default, Borrower agrees to pay on demand all of the Authority's reasonable costs and expenses incurred for the recovery of all or any part of or for the protection of the indebtedness, or to enforce the Authority's rights under this Note, the Loan Agreement or Deed of Trust, including, without limitation, reasonable attorneys' fees.

4.2 Borrower waives presentment, notice of dishonor, notice of acceleration and protest, and assents to any extensions of time with respect to any payment due under this Note, to any substitution or release of collateral, and to the addition or release of any party.

4.3 No failure on the part of the Authority to exercise, and no delay in exercising any right hereunder shall operate as a waiver of such right; nor shall any single or partial exercise by the Authority of any right hereunder preclude the exercise of any other right. No waiver of any payment or other right under this Note shall operate as a waiver of any other payment or right. The remedies herein provided for are cumulative and not exclusive of any remedies provided by law.

5.0 **HOW PAYMENTS ARE MADE.** All payments of principal and interest shall be made to the Authority at the address shown above by check or wire. If Borrower wishes to wire funds to the Authority, Borrower shall contact the City of Arvada's finance department for instructions.

6.0 **SUBORDINATION.** The indebtedness evidenced by this Note is and shall be subordinate in right of payment to the indebtedness evidenced by each of the promissory notes ("Senior Notes") made by Borrower and payable to the following entities in the described amounts:

1) First Bank of Wyoming (tax exempt loan): $15,800,000 – recorded at Reception No. _____ in _____ County, _____(state)

2) First Bank of Wyoming (taxable loan): $12,500,000 – recorded at Reception No. _____ in _____ County, _____(state)

3) Cedar Rapids Bank & Trust Company: $9,795,000 – recorded at Reception No. _____ in _____ County, _____(state)

7.0 The Deed of Trust securing this Note is and shall be subject and subordinate in all respects to the liens, terms, covenants, and conditions of the Deeds of Trust securing the Senior Notes as set forth in **Sec. 6.0**. Further, Lender agrees that the Deed of Trust shall remain subject and subordinate to any deeds of trust or mortgages securing any loan obtained for the purpose of refinancing any such senior loans. The rights and remedies of the Authority and each subsequent holder of this Note under the Deed of Trust securing this Note are subject to the restrictions and limitations set forth in that certain Subordination and Standstill Agreement ("Subordination Agreement") dated of even date herewith among Merchants Capital Corporation and First Bank of Wyoming, as senior lenders, the Authority, as subordinate lender, and Borrower. Each subsequent holder of this Note shall be deemed, by virtue of such holder's acquisition of the Note, to have agreed to subordinate the interests and rights secured by this Note and Deed of Trust to the senior liens described in **Sec. 6.0** and any deeds of trust or mortgages evidencing the refinancing thereof, and shall perform and observe all of the terms, restrictions, covenants, and conditions to be performed or observed by the Authority under the Subordination Agreement.

8.0 This Note is made and dated as of the date above and is to be governed by and construed according to the laws of the State of Colorado.

9.0 This Note and the sums payable by Borrower hereunder shall be non-recourse obligations, and in the event of a default hereunder or under the Loan Agreement or Deed of Trust, Lender shall look solely to the collateral secured by the Deed of Trust and shall have no

other recourse against Borrower or its partners.

[Signature page follows]

LEGACY-ARVADA PARTNERS, LP
A Colorado limited partnership

By: Leg Arvada, LLC
A Nebraska limited liability company
Its General Partner

By: _____
Bobbi Jo Lucas
President

Address: 5353 W. 63rd Ave., Arvada, Colorado 80003

STATE OF ~~NEBRASKA~~ OKLAHOMA)
) ss.
COUNTY OF Canadian)

The foregoing instrument was acknowledged before me this 29 day of December, 2023, by Bobbi Jo Lucas President of Leg Arvada LLC, general partner of Legacy-Arvada Partners, LP, a Colorado limited partnership.

Witness my hand and official seal.

(SEAL)

_____
Notary Public

My commission expires _____

TRACY J. ANDERSON NOTARY # 01002174 EXP. 02/06/25 PUBLIC STATE OF OKLAHOMA

DEED OF TRUST

This Agreement is made this 29th day of December, 2023, by and between Legacy-Arvada Partners, LP, a Colorado limited partnership ("Borrower"), whose address is 209 S. 19th Street, Suite 100, Omaha, NE 68102 and the Public Trustee for the County of Jefferson ("Trustee"), for the benefit of the Arvada Housing Authority, 8101 Ralston Road, Arvada, CO 80002 ("Lender").

The Borrower and Lender covenant and agree as follows:

1. **PROPERTY IN TRUST.** The Borrower, in consideration of the indebtedness herein recited and described, hereby grants, bargains, sells, transfers, assigns, and conveys to the Trustee in trust with power of sale, all of that certain property located in the City of Arvada, Jefferson County, Colorado, and described in attached **Exhibit A** (the "Property"), together with all of the Borrower's right, title, and interest in and to: (i) all privileges, easements, rights-of-way, licenses, franchises, tenements, and appurtenances belonging or in any way appertaining to the Property; (ii) all rents, issues, profits, condemnation awards, and option payments in regard to the Property; (iii) all furniture, furnishings, fixtures, maintenance equipment, and all other personal property owned by Borrower now or hereafter located in, or on, used, or intended to be used in connection with the Property (excluding, however, personal property owned by tenants occupying space in the Property); (iv) all of the estates, rights, and interests of the Borrower, whether now owned or hereafter acquired in the Property; and (v) the proceeds of any of the above. All of the foregoing are hereinafter referred to as the "Mortgaged Property."

2. **NOTE: This Deed of Trust is given to secure to Lender:**

2.1 The repayment of:

2.1.1 All sums advanced by Lender to Borrower under that certain Promissory Note dated of even date herewith, payable to the order of Lender in the original principal amount of $840,000.00 (the "Note"), and to secure Borrower's obligation to pay interest at the rate of 4% per annum (except for Loan Year 0) prior to default, and upon default at a rate of 8% (the "Default Rate"), all of which sums are payable to Lender at 8101 Ralston Road, Arvada, CO 80002 in the following amounts: (i) for Loan Year 0, funds will be disbursable and available, however no interest shall accrue, and no payments shall be due or owing until Loan Year 1; (ii) for Loan Years 1-7, annual equal interest-only payments of $36,600.00 due within 30 calendar days of March 1st for each prior Loan Year; and (iii) for Loan Years 8-30, annual equal payments of principal and interest in the amount of $56,539.61 due within 30 calendar days of March 1st for each prior Loan Year. Payments are further detailed in Exhibit C, Loan Amortization Schedule. Payments are to be made by Borrower to the extent of available Cash Flow (as defined in the Loan Agreement), as set forth in the Note and Loan

Agreement; such payments to continue until the entire indebtedness evidenced by said Note is fully paid; however, if not sooner paid, the entire principal amount outstanding and accrued interest thereon shall be due and payable on March 1, 2055; and Borrower is to pay to Lender a late charge of 5% of any payment not received by Lender within 15 days after payment is due (from available Cash Flow); and Borrower has the right to prepay the principal amount outstanding under said Note, in whole or in part, at any time without penalty;

2.1.2 Prompt and complete performance and observing of all covenants and conditions to be performed by Borrower under the loan agreement dated of even date herewith, made between Borrower and Lender (the "Loan Agreement");

2.1.3 The payment of all other sums with interest at the Default Rate thereon (if not timely paid), as may be advanced or expended by Lender in accordance with this Deed of Trust or any other instrument or agreement securing the Note (the indebtedness of the Borrower evidenced by the Note and all such other sums are hereinafter collectively referred to as the "Indebtedness"); and

2.1.4 The performance of all the covenants and agreements of the Borrower contained herein.

2.2 This Deed of Trust is upon the express condition that, if Borrower shall pay to the Lender, as and when due and payable, all of its Indebtedness evidenced by the Note, and all other Indebtedness, and Borrower shall also keep and perform each and every covenant and agreement herein-contained, then this Deed of Trust and the estate hereby granted shall cease to be and become void, and shall be released of record at the expense of the Borrower; otherwise this Deed of Trust shall be and remain in full force and effect.

3. **TITLE.** Borrower represents, warrants, and covenants to the Lender and the Trustee that is the lawful owner of the Mortgaged Property in fee simple, has the right to grant and convey the Mortgaged Property, and has good right and full power and authority under all applicable provisions of law to execute this Deed of Trust; that the Mortgaged Property is free from all liens, security interests, and encumbrances except as listed in **Exhibit B** attached hereto; and that the Borrower will warrant and defend the title to the Mortgaged Property and the lien and priority of this Deed of Trust against all claims and demands of all persons whomsoever, whether now existing or hereafter arising, not listed in **Exhibit B**; and that no claims or liens are outstanding or threatened against the Mortgaged Property. The covenants and warranties of this paragraph shall survive foreclosure of this Deed of Trust and shall run with the Land.

4. **PAYMENT OF PRINCIPAL AND INTEREST.** Borrower shall promptly pay when due the principal of and interest on the indebtedness evidenced by the Note, and late charges as provided in the Note and shall perform all of Borrower's other covenants

contained in the Note. All payments received by the Lender from Borrower under the Note or this Deed of Trust shall be applied by the Lender in such order of application as the Lender deems appropriate.

5. **PAYMENT OF TAXES, ASSESSMENTS, OTHER CHARGES, AND LIENS.** Borrower shall pay, before the date when due, all taxes and assessments, utility charges, and all other charges whatsoever levied upon or assessed or placed against the Mortgaged Property, and shall give to Lender, upon demand, a receipt or receipts evidencing such payment. Borrower shall not create, incur, or suffer to exist any lien, security interest, encumbrance, or charge on the Mortgaged Property or any part thereof, other than the lien of current real estate taxes and installments of special assessments with respect to which no penalty is yet payable, and any permitted encumbrance listed in **Exhibit B** (and any encumbrances entered into in connection with any refinancing thereof). The Borrower shall pay, when due, the claims of all persons supplying labor or materials to or in connection with the Mortgaged Property.

6. **COMPLIANCE WITH LAWS.** Borrower shall comply promptly and fully with all present and future statutes, laws, rules, orders, regulations, and ordinances, and any easements, protective covenants, or other private restrictions affecting the Mortgaged Property, any part thereof or the use thereof, including, without limitation, laws, ordinances, rules, or regulations relating to hazardous wastes, hazardous materials, or oil.

7. **ENVIRONMENTAL MATTERS.** Borrower covenants and represents that, to the best of its knowledge, there are no Hazardous Materials generated, released, incorporated, stored, buried, or deposited over, beneath, in, or upon the Mortgaged Property, nor will there be, for so long as any of the Indebtedness secured hereby remains outstanding. For purposes of this Deed of Trust, "Hazardous Materials," shall mean and include any flammable explosives, petroleum (including crude oil) or any fraction thereof, radioactive materials, hazardous wastes, toxic substances, or related materials, including, without limitation, any substances defined as or included in the definition of toxic or hazardous substances, wastes, or materials under any federal applicable state or local laws, ordinances, or regulations dealing with or otherwise pertaining to toxic or hazardous substances, wastes, or materials. Such laws, ordinances, and regulations are hereinafter collectively referred to as the "Hazardous Materials Laws."

8. **INDEMNIFICATION FOR HAZARDOUS MATERIALS.** Borrower shall be solely responsible for, and shall indemnify and hold harmless Lender, its directors, officers, employees, agents, successors, and assigns (the "Lender Indemnified Parties") from and against any loss, damage, cost, expense, or liability directly or indirectly arising out of or attributable to the use, generation, storage, release, threatened release, discharge, disposal, or presence (whether prior to or during the term of the Loan and otherwise and regardless of by whom caused, whether by Borrower or any predecessor in title or any owner of land adjacent to the Mortgaged Property or any other third party, or any employee, agent, contractor, or subcontractor of Borrower or any predecessor in title or any such adjacent land owner or any third person) of Hazardous Materials in, on, under, or about the

Mortgaged Property; except that Borrower shall not be required to indemnify Lender or any Lender Indemnified Parties to the extent that such loss, damage, cost, expense, or liability arises due to the negligence or willful misconduct of Lender or any Lender Indemnified Parties.

9. INSURANCE.

9.1 Borrower, at its sole cost and expense, will maintain insurance of the following character:

9.1.1 Insurance on any buildings and other improvements now existing or hereafter erected on the Mortgaged Property and on the fixtures and personal property contents included in the Mortgaged Property against loss by fire, other hazards covered by the so-called "all-risk" form of policy, and such other perils as Lender shall, from time to time, require, including water damage coverage, in an amount not less than the replacement cost of the Mortgaged Property.

9.1.2 If the Property, or any part thereof, is at any time located in a designated official flood-hazardous area, flood insurance insuring any buildings and improvements now existing or hereafter erected on the Land, and the personal property used in the operation thereof in an amount equal to the lesser of the amount required in **Sec. 9.1.1** or the maximum limit of coverage made available with respect to such buildings and improvements and personal property under applicable federal laws and regulations issued thereunder.

9.1.3 Comprehensive general liability insurance protecting against claims arising from any accident or occurrence in or upon the Mortgaged Property, in such amounts as Lender may, from time to time, require, but in no event having less than a combined single limit of $1,000,000.00 per occurrence/$2,000,000.00 general aggregate, naming the City of Arvada and Arvada Housing Authority, its officials, officers, and employees as additional insureds.

9.2 POLICY PROVISIONS. All insurance policies and renewals thereof maintained by Borrower pursuant to **Sec. 9.1.1 – 9.1.3** above shall be written by an insurance carrier qualified to write insurance in Colorado, and satisfactory to Lender (with the exception of flood insurance provided by the National Flood Insurance Program), contain a standard mortgagee clause and a loss payee clause and other endorsements in favor of and in form and content acceptable to Lender, and contain an agreement that the policy will not be amended, modified, or canceled by either party except after 30 days prior written notice to Lender.

9.3 DELIVERY OF POLICY. Borrower will deliver to the Lender an original certificate evidencing the insurance that is required under **Sec. 9.1.1 – 9.1.3**, and the Borrower shall promptly furnish to the Lender copies of all renewal notices. Prior to the expiration date of a required policy, Borrower shall deliver to the Lender a copy of a

renewal policy in form satisfactory to the Lender.

9.4 APPLICATION OF INSURANCE PROCEEDS. Subject to the rights of any lender with a superior interest under a recorded Deed of Trust or similar document or instrument, all sums paid under any insurance policy required in **Sec. 9.1.1** and **9.1.2** shall be paid to the Lender (after application of such proceeds to prior lienholders, to the extent of the Indebtedness secured by their liens). Lender shall apply such amounts (after first deducting therefrom its expenses incurred in collecting the same, including, but not limited to, reasonable attorneys' fees) to the restoration of the Mortgaged Property pursuant to such conditions as the Lender shall, in its reasonable discretion require, unless the senior lienholder has applied such proceeds solely to the payment of its lien, in which case Lender may do likewise. No application of insurance proceeds shall extend or postpone the due dates of the installments payable under the Note or change the amount of such installments.

10. PRESERVATION AND MAINTENANCE OF MORTGAGED PROPERTY. Borrower shall: (i) keep the Mortgaged Property in safe and good repair and condition; (ii) upon damage to or destruction of the Mortgaged Property, or any part thereof, by fire or other casualty, restore, repair, replace, or rebuild the Mortgaged Property that is damaged or destroyed to the condition it was in immediately prior to such damage or destruction, whether or not any insurance proceeds are available or sufficient for such purpose; (iii) not commit waste or permit impairment or deterioration of the Mortgaged Property; and (iv) not remove any of the of the fixtures or personal property included in the Mortgaged Property unless the same is immediately replaced with property of at least equal value and utility, and this Deed of Trust becomes a valid lien on such property.

11. INSPECTION. Borrower shall permit the Lender or its agents to enter upon the Mortgaged Property at all reasonable times for the purposes of inspecting the Mortgaged Property or any part thereof. However, Lender shall have no duty to make such inspection.

12. BOOKS AND RECORDS. Borrower shall keep and maintain at all times at the Borrower's address stated below or at the Mortgaged Property or at such other place as the Lender may approve in writing, complete and accurate books of accounts and records in sufficient detail to reflect correctly the results of the operation of the Mortgaged Property, and copies of any and all written contracts, leases, and other instruments that affect the Mortgaged Property. Borrower shall permit Lender or its representative to examine and inspect such books, records, contracts, leases, and other instruments during ordinary business hours.

13. PROTECTION OF THE LENDER'S SECURITY. Subject to the rights of any lender with a superior interest under any prior recorded Deed of Trust or similar documents or instruments, if the Borrower fails within 30 days after receiving a written demand from the Lender, to perform or comply with any of the covenants and agreements contained in this Deed of Trust or if any action or proceeding is commenced that affects the Mortgaged Property or the interest of the Trustee or the Lender, or the title thereto, then the Lender, at the Lender's option, may perform such covenants and agreements, defend against and/or

investigate such action or proceedings, and/or take such other action as the Lender reasonably deems necessary to protect its interests. Lender shall be the sole judge of the legality, validity, and priority of any claim, lien, encumbrance, tax, assessment, charge, and premium paid by it and of the amount necessary to be paid in satisfaction thereof. Lender is hereby given the irrevocable power of attorney (which power is coupled with an interest) to enter upon the Mortgaged Property as the Borrower's agent in the Borrower's name to perform any and all covenants and agreements to be performed by the Borrower as herein provided after an event of default hereunder. Any amounts or expenses disbursed or incurred by the Lender pursuant to this paragraph, or to otherwise enforce any provision of this Deed of Trust or to preserve any of the rights, powers, or privileges of the Lender granted or created hereby, including, without limitation, costs incurred in any appeal, with interest thereon as hereinafter stated, shall become additional Indebtedness of the Borrower secured by this Deed of Trust. Unless the Borrower and the Lender agree in writing to other terms of repayment, such amounts shall be immediately due and payable, and shall bear interest from the date of disbursement at the Default Rate of interest stated in the Note. Lender shall, at its option, be subrogated to the lien of any mortgage or other lien, discharged in whole or in part by the Indebtedness or by the Lender under the provisions hereof, and any such subrogation rights shall be additional and cumulative security for this Deed of Trust. Nothing contained in this paragraph shall require the Lender to incur any expense or do any act hereunder, and the Lender shall not be liable to Borrower for any damages or claims arising out of action taken by the Lender pursuant to this paragraph, except as a result of the Lender's willful misconduct or gross negligence.

14. **TAKING.** Subject to the rights of any lender with a superior interest under a recorded Deed of Trust or similar document or instrument, and the obligations of Borrower thereunder, the Borrower hereby irrevocably assigns to the Lender any award or payment up to the amount of the Borrower's Indebtedness under the Note that becomes payable by reason of any taking of the Mortgaged Property, or any part thereof, whether directly or indirectly or temporarily or permanently, in or by condemnation or the eminent domain proceedings or the settlement thereof ("Taking"). All awards or payments payable as a result of a Taking shall be paid to the Lender (in order of the priority of liens encumbering the Mortgaged Property), which after first deducting the Lender's expenses incurred in the collection thereof shall be applied to the repair or restoration of the Mortgaged Property, pursuant to such conditions as the Lender in its reasonable discretion may require, unless the senior lienholder has applied the same solely to payment of its lien, in which case, Lender may do likewise. No application of any Taking award or payment to repayment of Indebtedness shall postpone the due dates of Borrower's payments due under the Note or change the amount of such payments.

15. **SECURITY INTEREST.** This Deed of Trust shall constitute a security agreement with respect to (and the Borrower hereby grants the Trustee and the Lender a security interest in) all fixtures and personal property included in the Mortgaged Property as more specifically described in the granting clause above. Borrower will, from time to time, at the request of the Lender, execute any and all financing statements or other documents covering such fixtures or personal property (in a form satisfactory to the Lender) that the

Lender may consider necessary or appropriate to confirm, evidence, or perfect the Trustee's and/or the Lender's security interest.

16. **NOTICE OF DEFAULT.** Borrower will prepare, or cause to be prepared, at its expense, and will deliver to Lender, immediately upon becoming aware of the existence of any condition or event that constitutes an Event of Default (as defined **Sec. 17** below), written notice specifying the nature and period of existence the Event of Default and what action the Borrower has taken or proposes to take with respect to the Event of Default.

17. **EVENTS OF DEFAULT.** Each of the following occurrences is an event of default ("Event of Default") The Investor (as defined in the Loan Agreement) shall have the right, but not the obligation, to cure any default of Borrower hereunder, which cure shall be accepted by Lender as if tendered by Borrower.

17.1 Borrower fails to pay any portion of the Indebtedness when due and payable (after the expiration of applicable notice and cure periods described in the Loan Agreement);

17.2 Borrower fails duly to perform or observe any of the covenants or agreements contained in the Loan Agreement or in this Deed of Trust (after the expiration of applicable notice and cure periods described in the Loan Agreement);

17.3 A judgment, writ, or warrant of attachment or execution, or similar process is entered and becomes a lien on, issued against, or levied against, the Mortgaged Property or any part thereof and is not released, vacated, or fully bonded 30 days after its entry, issue, or levy, and Lender's written notice and demand therefor;

17.4 Borrower sells or conveys the Mortgaged Property, provided that a conveyance to one of Borrower's partners or a wholly owned affiliate, or a transfer of a partnership interest shall not constitute an Event of Default ;

17.5 Borrower is unable to pay its debts as they become due, or makes an assignment for the benefit of creditors; or Borrower applies for or consents to the appointment of any receiver, trustee, or similar officer for it or for all or any substantial part of its property; or such a receiver, trustee, or similar officer is appointed without the application or consent of the Borrower, and such appointment continues undischarged for a period of 90 days; or Borrower institutes (by petition, application, answer, or otherwise) any bankruptcy, insolvency, reorganization, readjustment of debt, dissolution, liquidation, or similar proceedings under the laws of any jurisdiction; or any such proceeding is instituted against the Borrower; or the Borrower terminates or dissolves;

17.6 Any representation of the Borrower made herein or made by the Borrower or any employee of the Borrower in any submission or document delivered by or on behalf of the Borrower in connection with the Indebtedness that is materially untrue; and/or

17.7 A default or an Event of Default, however defined, occurs under any other document or instrument now or hereafter securing repayment of the Note or issued in connection therewith, or evidencing or securing a loan made by any other lender with regard to the Mortgaged Property.

18. POWER OF SALE; REMEDIES.

18.1 If an Event of Default occurs, Borrower hereby authorizes and empowers Trustee and/or Lender to do the following:

18.1.1 Lender may, by written notice to Borrower, declare all amounts payable under the Note and all other Indebtedness to be immediately due and payable, and the same shall be immediately due and payable without further notice or demand of any kind.

18.1.2 Lender is authorized and empowered, without further notice, to file a written Notice of Election and Demand for Sale with Trustee, as provided by law, it being then lawful for the Trustee to foreclose, and the Trustee shall foreclose this Deed of Trust. The Trustee shall apply the proceeds of the sale in the following order: (i) to all reasonable costs and expenses of the sale, including, without limitation, reasonable Trustee's and attorneys' fees and costs of evidence of title; (ii) to the Indebtedness; and (iii) the excess, if any, to the person or persons legally entitled to such proceeds.

18.1.3 If any of the Indebtedness hereby secured becomes due and payable, the Trustee or Lender have the right and power to proceed by a suit or suits in equity or at law for: (i) the specific performance of any covenant or agreement; (ii) the aid of the execution of any power herein granted; (iii) any foreclosure hereunder; (iv) the sale of the Mortgaged Property under the judgment or decree of any court or courts of competent jurisdiction; (v) executory or other legal process; or (vi) the enforcement of any other appropriate legal or equitable remedy.

18.1.4 Lender has the right to the appointment of a receiver, whether before or after maturity of the Indebtedness hereby secured, as a matter of strict right and regardless of the value of the security for the amount of the Indebtedness or of the solvency of Borrower or any party obligated for the payment of the Indebtedness. Such receiver may be appointed on Lender's ex parte application, by any court of competent jurisdiction, to manage, preserve, protect, and operate the Mortgaged Property and any business or businesses located thereon, to collect the rents, issues, profits, and income thereof, to make all necessary repairs, and to pay all taxes and assessments against the Mortgaged Property and insurance premiums for insurance thereon, and after the payment of the expenses of the receivership, including reasonable attorneys' fees, to apply the net proceeds in reduction of the Indebtedness or in such manner as the court or receiver shall direct.

18.1.5 The Lender may exercise, with respect to all fixtures and personal property that are part of the Mortgaged Property, all the rights and remedies accorded upon default to a secured party under the Uniform Commercial Code, as in effect in the State of Colorado. If notice to the Borrower of intended disposition of such property is required by law in a particular instance, such notice shall be deemed commercially reasonable, if given to the Borrower at least 10 calendar days prior to the date of intended disposition. Borrower shall pay on demand, all reasonable costs and expenses incurred by the Lender in exercising such rights and remedies, including, without limitation, reasonable attorneys' fees and legal expenses.

18.2 In the exercise of any of the foregoing rights and powers, the Lender shall not be liable to the Borrower for any loss or damage thereby sustained unless due solely to the willful misconduct or gross negligence of the Lender.

19. FORBEARANCE NOT A WAIVER; RIGHTS AND REMEDIES CUMULATIVE. No delay by the Trustee or Lender in exercising any right or remedy provided herein or otherwise afforded by law or equity shall be deemed a waiver of or preclude the exercise of such right or remedy. No waiver by the Trustee or Lender of any particular provision of this Deed of Trust shall be deemed effective unless in writing signed by the party making such rights and remedies provided for herein. Any right or remedy that the Trustee or Lender may have at provided in this Deed of Trust or otherwise shall not preclude the pursuit on any other right or remedy available in law or in equity. Such rights or remedies shall be distinct, separate, and cumulative.

20. SUCCESSORS AND ASSIGNS BOUND; NUMBER; GENDER; AGENTS; CAPTIONS. The covenants and agreements herein shall bind, and the rights hereunder shall inure to the benefit of, the respective successors and assigns of the Lender and the Borrower. References to the Borrower or Lender are deemed to include such successors and assigns. Wherever used, the singular number shall include the plural, and the plural the singular, and use of any gender shall apply to all genders. The captions and headings of the paragraphs of this Deed of Trust are for convenience only and are not to be used to limit, interpret or define the provisions hereof.

21. NOTICE. Any notice from the Lender or the Trustee to the Borrower under this Deed of Trust shall be deemed to have been given by the party giving the notice and received by the Borrower 3 days after being sent by certified mail, return receipt requested, to the Borrower at the following address:

Legacy-Arvada Partners, LP
209 S. 19th Street, Suite 100
Omaha, Nebraska 68102

with a copy to:

Registered Agent
725 S. Weber

Colorado Springs, CO 80903

With additional copies to:
MCI Legacy Senior Residences LLC
410 Monon Blvd.
Carmel, IN 46032
Attn: Asset Management - Equity

MPC CO Arvada PCFd, LLC
3414 Peachtree Road Suite 825
Atlanta, GA 30326

or at such other address as the Borrower may designate in writing to the Lender. Any notices required to be given to Lender shall be delivered to the following address:

Arvada Housing Authority
Attn: Executive Director
8101 Ralston Road
Arvada, CO 80002

With a copy to:

Arvada Housing Authority
Attn: City Attorney
8101 Ralston Road
Arvada, CO 80002

or at such other address as the Lender may designate in writing to the Borrower.

22. GOVERNING LAW; SEVERABILITY. This Deed of Trust shall be governed by the laws of the State of Colorado. In the event that any provision or clause of this Deed of Trust conflicts with applicable law or the application thereof under any particular circumstance to any particular person or entity conflicts with applicable law, such conflict shall not affect other provisions of this Deed of Trust that can be given effect without the conflicting provisions or the applicability of such provision to other persons or entities or to such persons or entities under other circumstances and to this end, the provisions of the Deed of Trust are declared to be severable.

IN WITNESS WHEREOF, Borrower has caused this Deed of Trust to be duly executed as of the day and year first above written.

LEGACY-ARVADA PARTNERS, LP
A Colorado limited partnership

By: Leg Arvada, LLC
A Nebraska limited liability company
Its General Partner

By: _____
Bobbi Jo Lucas
President

Address: 5353 W. 63rd Ave., Arvada, Colorado 80003

STATE OF ~~NEBRASKA~~ OKLAHOMA)
) ss.
COUNTY OF Canadian)

The foregoing instrument was acknowledged before me this 29 day of December, 2023, by Bobbi Jo Lucas, President of Leg Arvada, LLC, general partner of Legacy-Arvada Partners, LP, a Colorado limited partnership.

Witness my hand and official seal.

(SEAL)

_____
Notary Public

My commission expires_____

TRACY J. ANDERSON NOTARY # 01002174 EXP. 02/06/25 PUBLIC STATE OF OKLAHOMA

EXHIBIT A

TO
DEED OF TRUST

Legal Description

Borrower: Legacy-Arvada Partners, LP

Lender: Arvada Housing Authority

The following real estate located in the City of Arvada, County of Jefferson, State of Colorado:

LOT 2A, RAVINIA PARK LEGACY SUBDIVISION AMENDMENT NO. 1, ARVADA, CO 80003

Street Address (informational only): 5353 W. 63rd Ave., Arvada, Colorado 80003

EXHIBIT B
TO
DEED OF TRUST

Permitted senior encumbrances:

First Bank of Wyoming (tax exempt loan): $15,800,000 – recorded at Reception No. _____ in _____ County, _____Colorado

First Bank of Wyoming (taxable loan): $12,500,000 – recorded at Reception No. _____ in _____ County, _____Colorado

Cedar Rapids Bank & Trust Company Loan: $9,795,000 – recorded at Reception No. _____ in _____ County, _____Colorado

EXHIBIT C
TO
DEED OF TRUST

Loan Amortization Schedule

30818837_v5

Principle	$ 840,000
Interest Rate	4.00%

Year	Principal	Interest	Total Payment	Remaining Principal
1	$ -	$ 33,600.00	$ 33,600.00	$ 840,000.00
2	$ -	$ 33,600.00	$ 33,600.00	$ 840,000.00
3	$ -	$ 33,600.00	$ 33,600.00	$ 840,000.00
4	$ -	$ 33,600.00	$ 33,600.00	$ 840,000.00
5	$ -	$ 33,600.00	$ 33,600.00	$ 840,000.00
6	$ -	$ 33,600.00	$ 33,600.00	$ 840,000.00
7	$ -	$ 33,600.00	$ 33,600.00	$ 840,000.00
8	$ 22,939.61	$ 33,600.00	$ 56,539.61	$ 817,060.39
9	$ 23,857.19	$ 32,682.42	$ 56,539.61	$ 793,203.20
10	$ 24,811.48	$ 31,728.13	$ 56,539.61	$ 768,391.72
11	$ 25,803.94	$ 30,735.67	$ 56,539.61	$ 742,587.78
12	$ 26,836.10	$ 29,703.51	$ 56,539.61	$ 715,751.69
13	$ 27,909.54	$ 28,630.07	$ 56,539.61	$ 687,842.14
14	$ 29,025.92	$ 27,513.69	$ 56,539.61	$ 658,816.22
15	$ 30,186.96	$ 26,352.65	$ 56,539.61	$ 628,629.26
16	$ 31,394.44	$ 25,145.17	$ 56,539.61	$ 597,234.83
17	$ 32,650.21	$ 23,889.39	$ 56,539.61	$ 564,584.61
18	$ 33,956.22	$ 22,583.38	$ 56,539.61	$ 530,628.39
19	$ 35,314.47	$ 21,225.14	$ 56,539.61	$ 495,313.92
20	$ 36,727.05	$ 19,812.56	$ 56,539.61	$ 458,586.87
21	$ 38,196.13	$ 18,343.47	$ 56,539.61	$ 420,390.73
22	$ 39,723.98	$ 16,815.63	$ 56,539.61	$ 380,666.75
23	$ 41,312.94	$ 15,226.67	$ 56,539.61	$ 339,353.82
24	$ 42,965.46	$ 13,574.15	$ 56,539.61	$ 296,388.36
25	$ 44,684.07	$ 11,855.53	$ 56,539.61	$ 251,704.29
26	$ 46,471.44	$ 10,068.17	$ 56,539.61	$ 205,232.85
27	$ 48,330.29	$ 8,209.31	$ 56,539.61	$ 156,902.56
28	$ 50,263.51	$ 6,276.10	$ 56,539.61	$ 106,639.05
29	$ 52,274.05	$ 4,265.56	$ 56,539.61	$ 54,365.01
30	$ 54,365.01	$ 2,174.60	$ 56,539.61	$ 0.00

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LOAN AGREEMENT
BY AND BETWEEN THE ARVADA HOUSING AUTHORITY AND LEGACY-ARVADA PARTNERS, LP

This Loan Agreement (this "Loan Agreement") is made this 29th day of December, 2023, by and between Legacy-Arvada Partners, LP, a Colorado limited partnership ("Borrower"), whose address is 5353 W. 63rd Ave. Arvada, CO, and the Arvada Housing Authority, 8101 Ralston Road, Arvada, CO 80002 ("Authority" or "Lender").

1.0 RECITALS.

1.1 The Authority desires to financially assist with the development of an affordable senior housing development, Legacy Senior Residences, to be located at 5353 W. 63rd Ave., Arvada, CO, Arvada, CO 80003 (the "Project").

1.2 The Authority wants to increase the senior affordable housing opportunities in Arvada and in exchange for the loan to Borrower, Borrower has agreed that the Property will remain affordable under the provisions described herein.

NOW, THEREFORE, for under the terms and conditions described herein, the Parties agree as follows:

2.0 LOAN TO BORROWER. Subject to the terms of this Loan Agreement, the Deed of Trust executed by Borrower to the Public Trustee for the County of Jefferson, as trustee for Lender on or about the date hereof (the "Deed of Trust"), and the Promissory Note executed by Borrower in favor of Lender on or about the date hereof (the "Note"), the Authority agrees to lend Borrower $840,000.00 (the "Loan"), which will be repaid to the Authority, together with compounded interest at the rate of 4% per annum, in accordance with the Loan Amortization Schedule, **Exhibit A**, as set forth herein, subject to the availability of Cash Flow as described herein.

3.0 DEFINITIONS. For the purposes of this Agreement, the listed terms have the following meanings:

3.1 "Cash Flow" is defined as the gross cash receipts (gross receipts, determined on a cash basis, derived from the operations of the Project, including all rent revenues, vending, laundry and other incidental service revenue, but excluding tenant security deposits, debt proceeds, equity contributions, and earnings on any replacement or operating deficit reserve accounts) reduced by:

3.1.1 All principal and interest payments and other sums paid on or with respect to any Construction or Permanent Loan incurred in connection with the acquisition or development of the Project, including any loans to the Borrower by the First Bank of Wyoming and Cedar Rapids Bank & Trust Company;

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3.1.2 Payments due on the senior encumbrances listed in **Exhibit B** to the Deed of Trust;

3.1.3 The rights of MCI Legacy Senior Residence, LLC or MPC CO Arvada PCFd, LLC or their respective successors (herein referred to as the "Investors") to any distribution in the event of a tax credit shortfall or adjusters or other amounts payable to the Investors, as determined under the Borrower's Partnership Agreement, to repayment of any loans made to Borrower by the Investors, and to payment of asset management fees payable to the Investors pursuant to Borrower's Partnership Agreement;

3.1.4 All cash expenditures incurred incident to the operation of the Borrower's business (including capital expenditures);

3.1.5 The payment of current and accrued Management Fees, including the Authority's Asset Management Fee, but excluding any deferred developer fee; and

3.1.6 All items defined as Expenses in the Partnership Agreement, including without limitation, any such cash as is necessary to:

(i) Fund any Replacement Reserve Accounts,

(ii) Pay all outstanding trade payables,

(iii) Fund and/or replenish any Operating Reserve Accounts,

(iv) Fund and/or replenish any Operating Deficit Loans or Guaranty Loans; and

(v) Fund any additional reserves required by any Construction or Permanent Loan, or any state or federal housing agency with respect to the Project.

3.2 "Construction or Permanent Loan" shall mean any loan incurred in connection with the purchase or development of the land underlying the Project (as well as any off site development required by any governmental entity in connection with the development of the Project) and the construction and development of the Project, or any loan incurred to refinance, in whole or in part, any construction loan.

3.3 "Deed of Trust" shall mean the mortgage or deed of trust for the benefit of the Authority securing the repayment of the Loan.

3.4 "Default Rate" shall mean 8% percent per annum.

3.5 "Developer Fees" shall mean any fees payable to Cornerstone Housing Group, LLC, by the Borrower in connection with the development of the Project.

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3.6 "Eligible Costs" shall mean those costs payable to the city of Arvada for purposes of plans, approvals, and other costs associated with construction of the Project.

3.7 "Loan Year" is defined as a period of twelve months (January 1 – December 31) following the expiration of the prior "Loan Year," with the exception of the first loan year beginning on the date of execution of this Note and ending on December 31, 2025. Payments shall be due on March 1 for each previous loan year.

3.8 "Maturity Date" shall mean March 1, 2055 (date payment due for the prior and final loan year – January 1 – December 31, 2054).

3.9 "Management Fees" shall mean fees payable to any asset or project manager, including leasing agent fees, management and administrative fees, and fees for overseeing compliance with rules, regulations, covenants, and agreements relating to the Project.

3.10 "Partnership Agreement" shall mean the Amended and Restated Agreement of Limited Partnership dated December 29, *2023*.

3.11 "Operating Reserve Account" shall mean any account funded by the Borrower out of operating profits or other funds to pay for operating deficits generated by the Project, but only to the extent such Operating Reserve is required to be funded by any Construction or Permanent Loan, pursuant to Borrower's Partnership Agreement, or by any state or federal housing agency with respect to the Project.

3.12 "Replacement Reserve Account" shall mean any account funded by the by the Borrower out of operating profits or other funds to pay for the replacement and repair of the Project, but only to the extent such Replacement Reserve is required to by funded by any Construction or Permanent Loan, pursuant to Borrower's Partnership Agreement, or any state or federal housing agency with respect to the Project.

4.0 PAYMENT AMOUNTS AND DUE DATE.

4.1.1 **Loan Year 0.** Lender agrees that in Loan Year 0, all funds will be disbursable and available, however no interest shall accrue, and no payments shall be due or owing until Loan Year 1.

4.2 **Loan Years 1-7.** Lender agrees that in Loan Years 1 through 7, payments shall be interest only. Commencing on March 1, 2026, through March 1, 2032, the Borrower shall pay equal annual interest-only payments of $33,600.00 for the previous Loan Year.

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4.3 **Loan Years 8-30.** Loan Years 8 through 30, Borrower agrees to pay both the deferred principal and interest. Commencing on March 1, 2033, through the Maturity Date, the Borrower shall pay equal annual payments of $56,539.61 for the previous Loan Year, which shall be due and payable within 30 calendar days from March 1st, provided there is sufficient Cash Flow for the borrower to pay such payment.

4.4 In the event that Borrower shall fail to make any payment due to the Authority from available Cash Flow within 15 days after the due date thereof, the Authority may, at its option, impose a late charge upon Borrower in an amount not to exceed 5% of said payment. Any such late charge shall be separately charged to and collected from Borrower and shall not be applied to, or be deducted from, any Loan payment.

4.5 The Note may be prepaid in whole or in part, at any time, without notice or penalty. Partial prepayments will not, unless agreed to by the Authority in writing, relieve Borrower of Borrower's obligation to continue to make payments under the payment schedule for the portion of the Loan that remains unpaid.

4.6 The Authority has secured the Note by a Deed of Trust dated the same date. Reference the Deed of Trust for a description of the property covered and the rights, remedies, and obligations of the Authority.

5.0 LIMITATION TO CASH FLOW.

5.1 If there is inadequate Cash Flow in any year to make the payments of principal and interest specified hereunder, such amount shall be due and payable in the next succeeding year to the extent Cash Flow is available to repay such accrued payments.

5.2 Regardless of Cash Flow availability under Sec. 5.1, the entire outstanding principal balance and all accrued interest shall be due and payable on the Maturity Date.

6.0 DEFAULT.

6.1 In the event of (i) any default in any payment of the principal of or interest on this Note when due and payable, or (ii) any default or event of default under the provisions of this Agreement or Deed of Trust, in either event subject to the applicable notice and cure periods described in Section 19 below, then:

6.1.1 The unpaid principal balance of the Note shall bear interest from the date of any such event of default until such balance has been paid in full at the rate of 8% per annum; and

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6.1.2 The unpaid principal balance of the Note, plus accrued interest and all other obligations of Borrower to the Authority, direct or indirect, absolute or contingent, now existing or hereafter arising, shall, at the option of the Authority, become immediately due and payable without notice or demand, and the Authority shall have and may exercise any and all of the rights and remedies provided herein or in the Note and Deed of Trust.

6.1.3 In the event of any such default, Borrower agrees to pay on demand all of the Authority's reasonable costs and expenses incurred for the recovery of al l or any part of or for the protection of the indebtedness, or to enforce the Authority's rights under this Loan Agreement, the Note, or the Deed of Trust, including, without limitation, reasonable attorneys' fees.

6.2 Borrower waives presentment, notice of dishonor, notice of acceleration and protest, and assents to any extensions of time with respect to any payment due under the Note, to any substitution or release of collateral, and to the addition or release of any party.

6.3 No failure on the part of the Authority to exercise, and no delay in exercising any right hereunder shall operate as a waiver of such right; nor shall any single or partial exercise by the Authority of any right hereunder preclude the exercise of any other right. No waiver of any payment or other right under the Note shall operate as a waiver of any other payment or right. The remedies herein provided for are cumulative and not exclusive of any remedies provided by law.

6.4 Lender agrees that Investors shall have the right, but not the obligation, to cure any default or Event of Default of Borrower hereunder, and/or under the Note and Deed of Trust, and any such cure shall be accepted by Lender as if tendered by Borrower.

7.0 SECURITY. Repayment of the Note shall be secured by the Deed of Trust, in form satisfactory to the Authority, on real property known and numbered as 5353 W. 63rd Ave. Arvada, CO and as described in **Exhibit C** attached (the "Property"), subject to prior encumbrances listed in **Exhibit B**.

8.0 SUBORDINATION. The indebtedness evidenced by the Note is and shall be subordinate in right of payment to the indebtedness evidenced by promissory notes between Borrower and the following entities in the described amounts:

1) First Bank of Wyoming (tax exempt loan): $15,800,000 – recorded at Reception No. _____ in _____ County, _____Colorado
2) First Bank of Wyoming (taxable loan): $12,500,000 – recorded at Reception No.

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_____ in _____ County, _____Colorado

3) Cedar Rapids Bank & Trust Company: $9,795,000 – recorded at Reception No. _____ in _____ County, _____Colorado

9.0 USE OF FUNDS. Loan proceeds will be used to finance Eligible Costs. Eligible Costs may be revised with the written approval of the Executive Director of the Authority, so long as the total Loan amount is not thereby exceeded.

10.0 DEADLINE FOR DISBURSEMENT OF FUNDS. All funds shall be immediately disbursable for the payment of Eligible Costs and may be drawn by Borrower prior to, or simultaneously withdrawing on any other source of funds.

11.0 RESTRICTIONS ON USE OF PROPERTY. In exchange for the loan to Borrower, Borrower agrees to the following low-income unit rent restrictions and occupancy limitations which shall fun with the land and constitute a restrictive covenant and run with the land:

11.1 The Authority has granted the Project 8 housing choice vouchers; therefore, as long as the vouchers are awarded, no less than 8 of the units at the Property shall be restricted to households not exceeding the 30% of area median income ("AMI") as established by the U.S. Department of Housing and Urban Development ("HUD").

11.2 All units will be restricted to *senior* (as defined by HUD) tenants.

11.3 1 one-bedroom and 3 two-bedroom units shall be restricted to tenants at 50% or less AMI.

11.4 33 one-bedroom and 27 two-bedroom units shall be restricted to tenants at less 60% or less AMI.

12.0 PERIOD OF AFFORDABILITY. The restrictions listed in **Sec. 11** shall apply and restrict the Property until the later of the following: (i) the expiration of the extended use period for any state or federally granted low income tax credit, (ii) the loss of the housing vouchers described in Sec. 11.1; or (iii) the Maturity Date of the loan; provided, however, that if the housing vouchers described in Section 11.1 are lost or terminated, the 8 units restricted to occupancy by households at or less than 30% of AMI as established by HUD shall be permitted to be occupied by households at or less than 60% of AMI as established by HUD after such loss or termination.

13.0 PROHIBITED LEASE TERMS. Leases or other instruments pursuant to which the units described in **Sec. 11.0** are occupied may not contain any of the following provisions:

13.1 AGREEMENT TO BE SUED. Agreement by the tenant to be sued, admit guilt, or to a judgment in favor of the owner in a lawsuit brought in connection

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with the lease.

13.2 TREATMENT OF PROPERTY. Agreement by the tenant that the owner may take, hold or sell personal property of household members without notice to the tenant and a court decision on the rights of the parties. However, the owner may dispose of personal property remaining in the unit after the tenant has moved out, in accordance with Colorado law.

13.3 EXCUSING OWNER FROM RESPONSIBILITY. Agreement by the tenant not to hold the owner or the owner's agents legally responsible for actions or failure to act, whether intentional or negligent.

13.4 WAIVER OF NOTICE. Agreement by the tenant that the Owner may institute a lawsuit without notice to the tenant.

13.5 WAIVER OF LEGAL PROCEEDINGS. Agreement by the tenant that the owner may evict the tenant or household members without instituting a civil court proceeding in which the tenant has the opportunity to present a defense, or before a court decision on the rights of the parties.

13.6 WAIVER OF JURY TRIAL. Agreement by the tenant to waive any right to a trial by jury.

13.7 WAIVER OF RIGHT TO APPEAL. Agreement by the tenant to waive the tenant's right to appeal, or to otherwise challenge a court decision in connection with the lease.

13.8 TENANT CHARGEABLE WITH COST OF LEGAL ACTIONS REGARDLESS OF OUTCOME. Agreement by tenant to pay attorney fees or other legal costs even if the tenant wins in a court proceeding by the owner against the tenant.

14.0 MAINTENANCE AND REPLACEMENT. Borrower shall maintain the Property in compliance with all applicable housing quality standards and local code requirements. Newly constructed or substantially rehabilitated housing must meet applicable requirements referenced at 24 CFR § 92.251.

15.0 TENANT SELECTION. Borrower must adopt written tenant selection policies and criteria that:

15.1 Are consistent with the purpose of providing affordable senior housing;

15.2 Are reasonably related to program eligibility and the applicant's ability to perform the obligations of the lease;

15.3 Give reasonable consideration to the housing needs of families that would have a preference under federal selection preferences for admission to public

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housing;

15.4 Provide for the selection of tenants from a written waiting list in the chronological order of their application, insofar as is practicable, with prompt written notification to any rejected applicant of the grounds for any rejection;

15.5 Afford the Authority a preference regarding clients receiving assistance through the Section 8 Housing Assistance Payments Program disbursed through the Authority.

16.0 LEAD BASED PAINT. Borrower will not use lead based paint in the Project.

17.0 AFFIRMATIVE MARKETING. Borrower shall market to provide information and otherwise attract eligible tenants from all racial, ethnic, and gender groups in the Property's housing market area.

18.0 NOTICE OF DEFAULT. Borrower will prepare, or cause to be prepared, at its expense, and will deliver to Lender (with a copy to the Investor), immediately upon becoming aware of the existence of any condition or event that constitutes an Event of Default (as defined **Sec. 19** below), written notice specifying the nature and period of existence the Event of Default and what action the Borrower has taken or proposes to take with respect to the Event of Default.

19.0 EVENTS OF DEFAULT. Each of the following occurrences is an event of default ("Event of Default"):

19.1 Borrower fails to pay any portion of the Indebtedness (as defined in the Deed of Trust) when due and payable after notice from Lender and the expiration of a 15 day cure period;

19.2 Borrower fails duly to perform or observe any of the covenants or agreements contained in this Loan Agreement, the Note, or Deed of Trust after notice from Lender and the expiration of a 30 day cure period, provided, however, that if such default cannot reasonably be cured within 30 days, the cure period shall be extended for so long as is reasonably necessary for Borrower to effectuate the cure, so long as Borrower commences the cure within said 30 day period and diligently prosecutes such cure to completion;

19.3 A judgment, writ, or warrant of attachment or execution, or similar process is entered and becomes a lien on, issued against, or levied against, the Mortgaged Property (as defined in the Deed of Trust) or any part thereof and is not released, vacated, or fully bonded 30 days after its entry, issue, or levy, and Lender's written notice and demand therefor;

19.4 Borrower sells or conveys the Mortgaged Property to a third party without giving the Authority's affiliate, Arvada Housing Participation LLC, the Right of First Offer described in the Addendum to the Partnership Agreement, except that sale in whole or in part to another partner (or its wholly owned affiliate)

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within Legacy-Arvada Partners, LP shall not be considered a default;

19.5 Borrower is unable to pay its debts as they become due, or makes an assignment for the benefit of creditors; or Borrower applies for or consents to the appointment of any receiver, trustee, or similar officer for it or for all or any substantial part of its property; or such a receiver, trustee, or similar officer is appointed without the application or consent of the Borrower, and such appointment continues undischarged for a period of 90 days; or Borrower institutes (by petition, application, answer, or otherwise) any bankruptcy, insolvency, reorganization, readjustment of debt, dissolution, liquidation, or similar proceedings under the laws of any jurisdiction; or any such proceeding is instituted against the Borrower; or the Borrower terminates or dissolves;

19.6 Any representation of the Borrower made herein or made by the Borrower or any employee of the Borrower in any submission or document delivered by or on behalf of the Borrower in connection with the Indebtedness that is materially untrue; and/or

19.7 A default or an Event of Default, however defined, occurs under any other document or instrument now or hereafter securing repayment of the Note or issued in connection therewith, or evidencing or securing a loan made by any other lender with regard to the Mortgaged Property, after the expiration of applicable notice and cure periods.

19.8 As stated in Section 6.4 above, the Investor shall have the right, but not the obligation to cure any default or Event of Default of Borrower under this Loan Agreement, the Deed of Trust, and the Note, which cure shall be accepted by Lender as if tendered by Borrower. A copy of any notice sent to Borrower under this Loan Agreement, the Note, or the Deed of Trust shall be sent to:

Notice Address for Investors:

Merchants Capital Corporation
410 Monon Blvd.
Carmel, IN 46032
Attn: Asset Management – Equity

MPC CO Arvada PCFd, LLC
3414 Peachtree Road Suite 825
Atlanta, GA 30326

20.0 POWER OF SALE; REMEDIES.

20.1 If an Event of Default occurs, Borrower hereby authorizes and empowers Trustee and/or Lender to do the following:

20.1.1 Lender may, by written notice to Borrower, declare all amounts payable under the Note and all other Indebtedness to be immediately due and

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payable, and the same shall be immediately due and payable without further notice or demand of any kind.

20.1.2 Lender is authorized and empowered, without further notice, to file a written Notice of Election and Demand for Sale with Trustee, as provided by law, it being then lawful for the Trustee to foreclose, and the Trustee shall foreclose the Deed of Trust. The Trustee shall apply the proceeds of the sale in the following order: (i) to all reasonable costs and expenses of the sale, including, without limitation, reasonable Trustee's and attorneys' fees and costs of evidence of title; (ii) to the Indebtedness; and (iii) the excess, if any, to the person or persons legally entitled to such proceeds.

20.1.3 If any of the Indebtedness hereby secured becomes due and payable, the Trustee or Lender have the right and power to proceed by a suit or suits in equity or at law for: (i) the specific performance of any covenant or agreement; (ii) the aid of the execution of any power herein granted; (iii) any foreclosure hereunder; (iv) the sale of the Mortgaged Property under the judgment or decree of any court or courts of competent jurisdiction; (v) executory or other legal process; or (vi) the enforcement of any other appropriate legal or equitable remedy.

20.1.4 Lender has the right to the appointment of a receiver, whether before or after maturity of the Indebtedness hereby secured, as a matter of strict right and regardless of the value of the security for the amount of the Indebtedness or of the solvency of Borrower or any party obligated for the payment of the Indebtedness. Such receiver may be appointed on Lender's ex parte application, by any court of competent jurisdiction, to manage, preserve, protect, and operate the Mortgaged Property and any business or businesses located thereon, to collect the rents, issues, profits, and income thereof, to make all necessary repairs, and to pay all taxes and assessments against the Mortgaged Property and insurance premiums for insurance thereon, and after the payment of the expenses of the receivership, including reasonable attorneys' fees, to apply the net proceeds in reduction of the Indebtedness or in such manner as the court or receiver shall direct.

20.1.5 The Lender may exercise, with respect to all fixtures and personal property that are part of the Mortgaged Property, all the rights and remedies accorded upon default to a secured party under the Uniform Commercial Code, as in effect in the State of Colorado. If notice to the Borrower of intended disposition of such property is required by law in a particular instance, such notice shall be deemed commercially reasonable, if given to the Borrower at least 10 calendar days prior to the date of intended disposition. Borrower shall pay on demand, all reasonable costs and expenses incurred by the Lender in exercising such rights and remedies, including, without limitation, reasonable attorneys' fees and legal expenses.

20.2 In the exercise of any of the foregoing rights and powers, the Lender shall not be

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liable to the Borrower for any loss or damage thereby sustained unless due solely to the willful misconduct or gross negligence of the Lender.

21.0 EXPENSE. The Borrower agrees to pay all direct costs, expenses and attorney fees reasonably incurred by the Authority in connection with the Borrower's breach or default of this Loan Agreement, or the Note, or Deed of Trust, and agrees to pay reasonable loan closing costs, including the costs of title insurance or guarantee as determined by the Authority.

22.0 EXAMINATION OF RECORDS/ANNUAL MONITORING. The Borrower agrees that the Comptroller General of the United States, the U.S. Department of Housing and Urban Development, the Authority, or any of their duly authorized representatives shall, until the expiration of 5 years after the final payment received under this Loan Agreement, have access to and the right to examine any directly pertinent books, documents, papers, and records of the Borrower involving transactions related to this Loan Agreement. Borrower must also require its contractors and subcontractors to allow access to such records when requested. Borrower shall fully cooperate with the Authority in an annual monitoring of Borrower's performance and site inspection to verify compliance with the requirements of this Loan Agreement.

23.0 NO DISCRIMINATION IN EMPLOYMENT. In connection with the performance of work under this Agreement, the Borrower agrees not to refuse to hire, discharge, promote or demote, or to discriminate in matters of compensation against any person otherwise qualified, solely because of race, color, religion, national origin, gender, age, military status, sexual orientation, marital status, or physical or mental disability; and further agrees to insert the foregoing provision in all subcontracts hereunder.

24.0 INSURANCE. Borrower or its contractor shall procure and maintain insurance in the following types and amounts:

24.1 Builders Risk Insurance in the amount of the value of the Property as improved and renovated, with the Arvada Housing Authority named as mortgagee.

24.2 Commercial General Liability Insurance with limits not less than One Million and No/100 Dollars ($1,000,000.00) per occurrence/Two Million and No/100 Dollars ($2,000,000.00) general aggregate, with the City of Arvada and the Authority, its officers, officials and employees listed as additional insured by endorsement. Borrower's contractor shall include all subcontractors as insureds under its policy or shall furnish separate certificates and endorsements naming the City of Arvada and the Authority as Additional Insured by endorsement for each subcontractor.

24.3 Worker's Compensation Insurance at statutory limits and otherwise sufficient to ensure the responsibilities of Borrower and its contractor under Colorado law.

24.4 Special cause of loss form property insurance satisfactory to the Authority in the amount of the value of the Property as improved and renovated, with the Authority

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named as mortgagee.

24.5 Certificates of Insurance evidencing the above shall be submitted to Arvada's Risk Management Division, 8101 Ralston Rd., Arvada, CO 80002, prior to the disbursement of funds hereunder. Insurance companies providing the above referenced coverage must be rated B+ or better according to *Best's Key Rating Guide.*

25.0 INDEMNITY. The Borrower shall defend, indemnify and save harmless the Authority and the City Arvada from any and all claims, demands, suits, actions or proceedings of any kind or nature, including Worker's Compensation claims, in any way resulting from or arising out of this Agreement, however, that the Borrower need not indemnify or save harmless the Authority and the City of Arvada, its officers, agents, and employees from damages resulting from the negligence or willful misconduct of the Authority or the City of Arvada or its officers, agents, and employees.

26.0 INSURANCE IS NOT A LIMITATION. The insurance coverage specified constitutes the minimum requirements, and these requirements do not lessen or limit the liability of the Borrower under this Agreement. The Borrower shall maintain, at its own expense, any additional kinds and amounts of insurance that it may deem necessary.

27.0 ASSIGNMENT AND SUBCONTRACTING. The Authority is not obligated or liable under this Loan Agreement to any party other than the Borrower (except that the Investor shall be deemed a third party beneficiary with respect only to express rights granted to it hereunder). Borrower shall not assign, sublet, or subcontract with respect to any of the rights, benefits, obligations or duties under this Loan Agreement except upon prior written consent of the Authority.

28.0 WAIVER. No waiver of any breach or default under this Loan Agreement shall be held to be a waiver of any other or later breach or default. All remedies afforded in this Loan Agreement shall be construed as cumulative, in addition to every other remedy provided herein or by law.

29.0 CITY NOT PARTY TO CONSTRUCTION CONTRACT. The Authority and the City of Arvada are not, and nothing in this Loan Agreement shall be construed to constitute the Authority or the City of Arvada as parties to any construction contract pursuant to which the loan proceeds hereof are expended.

30.0 DURATION/BINDING EFFECT. This Loan Agreement shall remain in effect for the period of affordability specified in **Sec. 12**, and shall be binding upon the parties and shall inure to the benefit of their respective successors, assignees, representatives, and heirs.

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IN WITNESS WHEREOF, the parties have executed through their respective lawfully empowered and authorized representatives, this Loan Agreement as of the day and year first above written.

Arvada Housing Authority

Lauren Simpson

Lauren Simpson, Chairperson of the
Authority/Mayor of Arvada
8101 Ralston Road
Arvada, CO 80002

CITY OF ARVADA SEAL COLORADO

ATTEST/WITNESS:

Kristen R. Rush

City Clerk

APPROVED AS TO FORM:

Rachel A. Morris, City Attorney

By: Kylie Justus

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LEGACY-ARVADA PARTNERS, LP
A Colorado limited partnership

By: Leg Arvada, LLC
A Nebraska limited liability company
Its General Partner

By: _____
Bobbi Jo Lucas
President

Address: 5353 W. 63rd Ave. Arvada, CO

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EXHIBIT A

TO
LOAN AGREEMENT

Loan Amortization Schedule

Principle	$ 840,000
Interest Rate	4.00%

Year	Principal	Interest	Total Payment	Remaining Principal
1	$ -	$ 33,600.00	$ 33,600.00	$ 840,000.00
2	$ -	$ 33,600.00	$ 33,600.00	$ 840,000.00
3	$ -	$ 33,600.00	$ 33,600.00	$ 840,000.00
4	$ -	$ 33,600.00	$ 33,600.00	$ 840,000.00
5	$ -	$ 33,600.00	$ 33,600.00	$ 840,000.00
6	$ -	$ 33,600.00	$ 33,600.00	$ 840,000.00
7	$ -	$ 33,600.00	$ 33,600.00	$ 840,000.00
8	$ 22,939.61	$ 33,600.00	$ 56,539.61	$ 817,060.39
9	$ 23,857.19	$ 32,682.42	$ 56,539.61	$ 793,203.20
10	$ 24,811.48	$ 31,728.13	$ 56,539.61	$ 768,391.72
11	$ 25,803.94	$ 30,735.67	$ 56,539.61	$ 742,587.78
12	$ 26,836.10	$ 29,703.51	$ 56,539.61	$ 715,751.69
13	$ 27,909.54	$ 28,630.07	$ 56,539.61	$ 687,842.14
14	$ 29,025.92	$ 27,513.69	$ 56,539.61	$ 658,816.22
15	$ 30,186.96	$ 26,352.65	$ 56,539.61	$ 628,629.26
16	$ 31,394.44	$ 25,145.17	$ 56,539.61	$ 597,234.83
17	$ 32,650.21	$ 23,889.39	$ 56,539.61	$ 564,584.61
18	$ 33,956.22	$ 22,583.38	$ 56,539.61	$ 530,628.39
19	$ 35,314.47	$ 21,225.14	$ 56,539.61	$ 495,313.92
20	$ 36,727.05	$ 19,812.56	$ 56,539.61	$ 458,586.87
21	$ 38,196.13	$ 18,343.47	$ 56,539.61	$ 420,390.73
22	$ 39,723.98	$ 16,815.63	$ 56,539.61	$ 380,666.75
23	$ 41,312.94	$ 15,226.67	$ 56,539.61	$ 339,353.82
24	$ 42,965.46	$ 13,574.15	$ 56,539.61	$ 296,388.36
25	$ 44,684.07	$ 11,855.53	$ 56,539.61	$ 251,704.29
26	$ 46,471.44	$ 10,068.17	$ 56,539.61	$ 205,232.85
27	$ 48,330.29	$ 8,209.31	$ 56,539.61	$ 156,902.56
28	$ 50,263.51	$ 6,276.10	$ 56,539.61	$ 106,639.05
29	$ 52,274.05	$ 4,265.56	$ 56,539.61	$ 54,365.01
30	$ 54,365.01	$ 2,174.60	$ 56,539.61	$ 0.00

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EXHIBIT B
TO
LOAN AGREEMENT

Permitted senior encumbrances:

First Bank of Wyoming (tax exempt loan): $15,800,000 – recorded at Reception No. _____ in _____ County, _____Colorado

First Bank of Wyoming (taxable loan): $12,500,000 – recorded at Reception No. _____ in _____ County, _____ Colorado

Cedar Rapids Bank & Trust Company Loan: $9,795,000 – recorded at Reception No. _____ in _____ County, _____Colorado

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EXHIBIT C
TO
LOAN AGREEMENT

Legal Description

Borrower: Legacy-Arvada Partners, LP

Lender: Arvada Housing Authority

The following real estate located in the City of Arvada, County of Jefferson, State of Colorado:

LOT 2A, RAVINIA PARK LEGACY SUBDIVISION AMENDMENT NO. 1, ARVADA, CO 80003

Street Address (informational only): 5353 W. 63rd Ave., Arvada, Colorado 80003

30818775_v2

SUBORDINATION AGREEMENT

THIS SUBORDINATION AGREEMENT (this "Agreement") is made by ARVADA HOUSING AUTHORITY, Colorado housing authority created pursuant to Colorado Housing Authority Laws C.R.S. § 29-4-201 et. seq., located at 8101 Ralston Road, Arvada, CO 80002 (the "Junior Lender") for the benefit of the STATE OF COLORADO, by and through the Department of Local Affairs for the benefit of the Division of Housing, 1313 Sherman Street, Room 320, Denver, Colorado 80203 (the "Senior Lender").

RECITALS

A. The Senior Lender, pursuant to Contract Encumbrance #H5HDG31370, has made the following loan to Legacy-Arvada Partners, LP, a Colorado limited partnership (the "Borrower"), in the principal amount of **One Million Eight Hundred Thousand and no/100 dollars ($1,800,000.00)** (the "Senior Loan"), evidenced by that certain loan agreement and promissory note made by the Borrower and payable to the Senior Lender (the "Promissory Note"), and secured by that certain Deed of Trust (the "Senior Deed of Trust") intended to be recorded in the official records of Jefferson County, State of Colorado, subsequent hereto, encumbering the following described property (the "Property"):

SEE LEGAL DESCRIPTION – ATTACHMENT A

B. The Junior Lender has granted Borrower a loan of **Eight Hundred Forty Thousand and no/100 dollars ($840,000.00)**, and has executed a deed of trust ("Junior Deed of Trust") that covers and encumbers all or part of the Property and secured a note in same amount, and the Junior Deed of Trust has been recorded in the records of the office of the Clerk and Recorder of Jefferson County, State of Colorado on January 3, 2024 at Reception No. 20024000778.

C. It is the desire of the parties and to the mutual benefit of all parties that the lien of the Junior Deed of Trust be subordinated to the lien of the Senior Deed of Trust.

AGREEMENT

For and in consideration of the mutual benefits accruing to the parties hereto, and the promises set forth, and other valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. Definitions. Capitalized terms not otherwise defined in this Agreement shall have the meanings given such terms in the Senior Deed of Trust. The following terms shall have the meanings assigned to them:

"Senior Obligations" means each and every debt, liability and obligation of every type and description that the Borrower may now or at any time hereafter owe to the Senior Lender in connection with the Senior Deed of Trust, whether such debt, liability or

obligation now exists or is hereafter assumed, created or incurred and whether it is or may be direct or indirect, due or to become due, or absolute or contingent.

"Junior Obligations" means any deed of trust or other mortgage, lien or encumbrance made by the Borrower to and for the benefit of the Junior Lender in connection with the Junior Loan, including, without limitation, the Junior Deed of Trust and any and all security interests, liens or other encumbrances granted in connection with the Junior Loan by the Borrower and in favor of the Junior Lender.

2. Subordination. All Junior Obligations are expressly subordinated to the extent and in the manner hereinafter set forth to the payment in full of the Senior Obligations. The Junior Lender agrees that (regardless of any priority otherwise available to the Junior Lender by agreement) any security interest that the Junior Lender might now hold in the Property, is fully subordinate to any security interest that the Senior Lender may now or hereafter hold in the Property.

3. Collateral and Security Interest. Until all of the Senior Obligations have been paid in full, the Junior Lender shall not demand, receive or accept (i) except for the Junior Deed of Trust, a pledge of any of the Property as security for the Junior Obligations, or (ii) except for the Junior Deed of Trust, a grant of any security interest in any of the Property.

4. Proceeds of Collateral. [Reserved]

5. Waiver and Consent. The Senior Lender shall have no obligation to the Junior Lender with respect to the Property or the Senior Obligations. The Senior Lender may in accordance with the Senior Deed of Trust (a) exercise collection rights, (b) take possession of, sell or dispose of, and otherwise deal with, the Property, (c) in the Senior Lender's name, the Junior Lender's name or in the Borrower's name, demand, sue for, collect or receive any money or property at any time payable or receivable on account of, the Property; (d) prosecute, settle and receive proceeds on any insurance claims relating to the Property, and (e) exercise and enforce any right or remedy available to the Senior Lender with respect to the Property, whether available before or after the occurrence of any default; all without notice to or consent by anyone except as specifically required by law. The Senior Lender may apply the proceeds of the Property in any order the Senior Lender deems appropriate in its sole discretion, and may remit or release such proceeds or any other sums or amounts to the Borrower without being obligated to assure that any such proceeds or sums are applied to the satisfaction of the Junior Obligations or Junior Lender's subordinated security interest, if any, in any Property, except as required by law.

6. No Action. Except to the extent that Junior Lender obtains Senior Lender's permission pursuant to the following sentence, the Junior Lender will not commence any action or proceeding with respect to the Property or against the Borrower, will not take possession of, sell or dispose of, or otherwise deal with, the Property, and will not exercise or enforce any other right or remedy that may be available to the Junior Lender against the Borrower or with respect to the Property upon Borrower's default with respect to the Junior Obligations, without the Senior Lender's prior written consent, which shall not be

unreasonably withheld or delayed. If the Borrower is in default under the Senior Deed of Trust, any credit agreement or other agreement in favor of the Senior Lender (the "Senior Loan Documents") and the Senior Lender forecloses on the Property or accepts a deed in lieu of foreclosure, the Junior Lender shall, upon the Senior Lender's request, promptly execute and deliver such instruments as may reasonably be necessary to terminate and release any security interest or lien the Junior Lender acquired in connection with the Junior Loan.

7. Notice of Default to Senior Lender. Any notice provided to Borrower by the Junior Lender of any default under the Junior Deed of Trust or Junior Loan Documents shall also be sent to Senior Lender.

8. Notice of Default to Junior Lender. Senior Lender shall deliver to the Junior Lender a default notice within ten (10) business days in each case where Senior Lender has given a default notice to the Borrower under the Senior Deed of Trust. The Junior Lender shall have the right, but not the obligation, to cure any default under the Senior Loan Documents within the same time, and the same manner, as the Borrower pursuant to the Senior Loan Documents. All amounts paid by the Junior Lender to Senior Lender to cure a default under the Senior Loan Documents shall be deemed to have been advanced by the Junior Lender pursuant to, and shall be secured by the lien of, the Junior Deed of Trust.

9. No Representations or Warranties. Neither the Junior Lender nor the Senior Lender (i) makes any representation or warranty concerning the Property or the validity, perfection or priority of any security interest therein, or (ii) shall have any duty to preserve, protect, care for, insure, take possession of, collect or dispose of the Property.

10. Binding Effect; Miscellaneous. This Agreement shall be binding upon the Junior Lender and its respective successors and assigns and shall inure to the benefit of the Senior Lender and its participants, successors and assigns, but neither the Borrower nor any other secured party shall be entitled to rely on or enforce this Agreement. This Agreement cannot be waived or changed or ended, except by a writing signed by the party to be bound thereby. This Agreement shall be governed by and construed in accordance with the laws of the State of Colorado. Each party consents to the personal jurisdiction of the state and federal courts located in the State of Colorado in connection with any controversy related to this Agreement, waives any argument that venue in any such forum is not convenient, and agrees that venue for any litigation initiated by either of them in connection with this Agreement shall be in the City and County of Denver except as otherwise required by Colorado law. This Agreement may be executed in any number of counterparts, each of which shall be an original, but all of which together shall constitute one instrument. The Junior Lender waives notice of the Senior Lender's acceptance hereof.

11. Notice. Any notice required under this Agreement shall be deemed to have been given when mailed by certified mail, return receipt requested, or by overnight express mail or courier service, to the addresses of the Junior Lender or the Senior Lender, as the case may be, set out in the first paragraph of this Agreement.

12. Term. This Agreement shall continue until the earliest to occur of the following events: (i) the payment of all principal, interest, and other amounts payable under the Senior Obligations; (ii) the payment of all principal, interest, and other amounts payable under the Junior Obligations; (iii) the acquisition by Senior Lender of title to the Property pursuant to a foreclosure, or a deed in lieu of foreclosure, or the exercise of a power of sale contained in the Senior Deed of Trust; or (iv) the acquisition by Junior Lender of title to the Property pursuant to a foreclosure, or a deed in lieu of foreclosure, or the exercise of a power of sale contained in the Junior Deed of Trust, but only if such acquisition of title does not violate any of the terms of this Agreement.

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IN WITNESS WHEREOF, the parties have executed this Agreement as of the date written below the State Controller's signature (the "Effective Date").

"SENIOR LENDER"

STATE OF COLORADO, by and through the Department of Local Affairs for the benefit of the Division of Housing

By:_____
Maria De Cambra, Executive Director,
Department of Local Affairs

State of Colorado)
) ss.
County of)

The foregoing instrument was subscribed to and acknowledged before me this _____ day of _____, 2024, by _____ as _____ of _____.

Witness my hand and official seal.

_____
Notary Public

"JUNIOR LENDER"

ARVADA HOUSING AUTHORITY, a Colorado housing authority created pursuant to Colorado Housing Authority Laws C.R.S. § 29-4-201 et. seq

By: _____

Lauren Simpson,
Chairperson of the Authority/Mayor of Arvada
8101 Ralston Rd
Arvada, CO 80002

ATTEST/WITNESS:

_____
City Clerk

APPROVED AS TO FORM:

Rachel A. Morris, City Attorney

By: _____

Acknowledged by BORROWER:

LEGACY-ARVADA PARTNERS, LP, A COLORADO LIMITED PARTNERSHIP
BY: LEG ARVADA, LLC,
A NEBRASKA LIMITED LIABILITY COMPANY,
ITS GENERAL PARTNER
BY: CORNERSTONE HOUSING GROUP, LLC, A NEBRASKA LIMITED LIABILITY COMPANY
ITS: SOLE MEMBER

By: _____
Bobbi Jo Lucas, President
Date: _____

ATTACHMENT A
Legal Description

LOT 2RAVINIA PARK LEGACY SUBDIVISION, RECEPTION 2018066170CITY OF ARVADA, COUNTY OF JEFFERSONSTATE OF COLORADO