

MOODY•NOLAN LTD.
300 SPRUCE STREET
COLUMBUS, OHIO 43215

BID OPENING: March 22nd, 2024

ADDENDUM DATE: March 11, 2024

ADDENDUM NO. 8

TO THE PLANS AND SPECIFICATIONS FOR:

Cobblestone Manor
1050 Lamplighter Drive
Grove City, Ohio 43123

TO ALL BIDDERS:

Addendum No. 8 to the Drawings and Project Manual, dated June 8, 2023, Cobblestone Manor as prepared by Moody Nolan, Inc., 300 Spruce St. Suite 300, Columbus, OH 43215.

This Addendum shall hereby be done and become part of the Contract Documents the same as if originally bound thereto. The following clarifications, amendments, additions, revisions, changes, and modifications change the original Contract Documents only in the amount and to the extent hereinafter specified in this Addendum.

Acknowledge receipt of this Addendum on the Bid Form.

NOTE: Bidders are responsible for becoming familiar with every item of this Addendum. This is the final Addendum for this project. Any substitution request that has not been approved by Addendum has not been accepted for the project.

I. GENERAL REVISIONS

A. Response to Questions

1. *Are the Storefronts (SF1-3) receiving treatments? Please confirm if common area windows receive window treatment.*

Response: Common area / storefronts do not receive window treatments.

2. *In reference to RFI question #9 in addendum 4 – does the cost of an envelope consultant need to be carried by the GC?*

Response: An envelope consultant is not required.

3. *Please confirm if washer and dryer in common area are supposed to be part of the FFE allowance.*

Response: No, the washer and dryer in the common areas are by others.

4. *Hunter Douglas does not offer the lights out routeless ladder option any longer on cordless blinds. I do not know anyone who does. If that is a critical issue, then the architect might want to consider blackout shades as an alternate option.*

Response: Refer to revised specification 12 21 23 Horizontal Window Blinds. This has been removed from the specification.

5. *Is Metal Lath or other corrosion resistant reinforcement required for gypcrete? This is an unusual application.*

Response: It is our understanding that metal lath reinforcement is not required for the 3/4 inch gypcrete. Reinforcement note has been updated in the specifications.

6. *Please provide details and height for mechanical roof screen.*

Response: Provide a 52" high mechanical roof screen. Refer to specifications issued in Addendum 04.

7. *Please clarify if spray fireproofing is acceptable? We found conflicting notes calling for intumescent paint.*

Response: Columns are to have intumescent paint. Refer to sheet G101 for description: COLUMNS (IFRM) UL X673 / BEAMS (SFRM) UL X854.

8. *The basis of the spec by Bali/Springs window fashions does not exist.*

Response: Refer to revised specification 12 21 23 Horizontal Window Blinds. Bali and Springs Window Fashions are two separate companies.

9. *Does the FF&E allowance cover unloading the truck, distribution and installation of the furniture?*

Response: Yes.

10. *Doors CO-100, CR-100A and W-100 show wood doors on aluminum frames in the door schedule (A701). The details for these elevations show aluminum doors (A712, A722). Please clarify what type of doors these are. If these doors are wood, should hardware sets showing concealed vertical closers and concealed overhead stops be changed to surface mount?*

Response: Doors noted are to be full glass wood doors. See revised hardware for double door CR-100A. Change from vertical rods to removeable center mullion.

11. *Per Addendum 2 – 07 21 00 Thermal Insulation Spec 1.01E – Spray Polyurethane Foam Insulation. Where is this to be used? Is this to fill miscellaneous voids? I.E. Around Windows?*

Response: Product is to be used in exterior HM door frames as shown on the door details.

12. *Manufactured Wood Casework: Section 12 32 00 2.01 C.3 calls for "All parts touching floor to be pressure treated solid lumber". Please verify, is it the cabinet sides or just the toe kick?*

Response: Yes, both the sides and toe kick.

13. *The plans call for PVC well casing but the specs state steel casing. Which is required? Is there a master set of requirements that can be followed or are the spec's you attached previously it?*

Response: PVC or Steel Casing is acceptable. The specifications and plan details should be followed for installation.

14. *If the well is a non-potable recharge well, why are there requirements for EPA reporting?*

Response: If there are no requirements to report non-potable wells to the EPA, then it will not be required. Confirm with local authority for any additional permitting/reporting requirements.

15. *The spec's state no bentonite or baroid based drilling muds to be used. Why are Baroid products not acceptable for this project?*

Response: Bentonite & Baroid based drilling muds are acceptable.

16. *The specs call for sand samples. If no screen is set, are samples still required?*

Response: A screen should be provided. Samples will be required in confirming the screen design.

17. *Can the drop pipe be pvc?*

Response: PVC drop pipe is acceptable.

18. *Per the Specs, the mirrors in the restrooms are unframed, but the drawings show framed mirrors. Please advise on the correct product.*

Response: Public mirrors in restrooms are standard framed mirrors. The mirrors in the unit bathrooms should be lighted mirrors. See electrical sheets for specifications.

19. *Please provide product specifications for the soap dish and shower seats per sheet A810.*

Response: Soap dish does not need provided and shower seats are by shower manufacturer meeting ADA requirements. Remove soap dish as noted on A810 mounting heights.

20. *Please confirm if the tackboard specified is the bulletin board (coded note 22) on sheet A801. If not, please provide tackboard sizing.*

Response: See attached enclosed bulletin board product specification.

21. *Do you know what base and casing that you are wanting to be used at cobblestone?*

Response: Refer to sheets A712 and A810 for door and base details.

22. *The proposed contour lines on sheet C2.5 and C2.6 do not match up. Those sheets are also labeled Erosion Control Plan phase 1 and phase 2, with the phase 2 proposed contours matching those on the Grading plan of sheet C2.1. Is the mass excavation going to be done in 2 phases? If only done in one phase, are the contours on the grading plan sheet C2.1 the correct grades to use for proposed?*

Response: Sheet C2.5 shows initial grading with a sediment basin included while C2.6 shows the final grading and established site. Grove City required these two separate Erosion and sediment control plan "phases" to convey drainage conditions and erosion control practices prior to the installation of hardscape and final establishment of the site. The earthwork does not need to be completed in 2 separate phases, general construction sequencing can be found on sheet C2.5/C2.6. Final Grade should be established per C2.1.

23. Addendum 1 indicated an NTP to be issued in March of 24, with the revised bid date is it safe to assume that the NTP will now be in May/June of 24?

Response: The NTP date will be discussed and set with the awarded bidder.

24. E502 Detail 2 – Structured media enclosure - This detail calls for a 3/4" conduit back to the MDF/IDF. This setup will add significant cost to the project and many access panels will be needed

Response: ¾" Flexible Nonmetallic conduit "Smurf tube" may be used in lieu of metallic conduit for this pathway.

25. E502 Detail 3 – Pull cord dome light - This detail calls for the 24V wiring to be #12AWG. The Edwards manufacturer instructions says #18AWG. Can #18 be used in lieu of #12? This detail calls for 24V to be in conduit. Can the 24V cable be free air?

Response: Yes & Yes

26. E502 Detail 4 – Doorbell system - This detail calls for the 24V wiring to be #12AWG. The Edwards manufacturer instructions says #18AWG. Can #18 be used in lieu of #12? This detail calls for 24V to be in conduit. Can the 24V cable be free air?

Response: Yes & Yes

27. DIV 27, Spec 3.1(B)(3) states EMT to be used for pathways concealed above ceilings. Are j-hooks acceptable for horizontal pathways concealed above ceilings?

Response: J-hooks are acceptable.

28. DIV 28 - T501 Detail 3 – Door hardware rough-in - This detail calls out a 1" conduit from the door back to the access control panel and a box above ceiling. Are j-hooks acceptable for horizontal pathways concealed above ceilings?

Response: J-hooks are acceptable.

29. We received clarification in Addendum 5 for ¼" sound mat under gypsum cement underlayment. Please verify location of sound mat - 100% in units or only under hard surface areas? Also, will sound mat be required in corridors and common areas?

Response: Sound mat to be installed under all floor areas receiving gypcrete - which is the entire second and third floors. It is a part of the rated floor system.

30. Mineral-Fiber Cement Siding: Spec Section 07 46 46 notes the siding & trim Basis of Design manufacturer to be James Hardie pre-finished lap siding. We contend that installing "primed Hardie, then painted will keep the consistency of the finishes to the customer's overall satisfaction. We are currently finding it difficult to get subcontractors to bid the pre-finished Hardie due to their experiences of not meeting the customer's expectations for the dollars spent. Hardie is an excellent product, however in our experiences, nail touch ups on the trim boards with the Hardie touch up kits "stick out" on the walls, especially in direct sunlight. Even installed exactly by manufacturers recommendations, the prefinished Hardie does not finish as well as a primed install that is then painted. We suggest primed Hardie install, then painted, be an alternate for consideration.

Response: Project to be bid using pre-finished siding.

31. *Looking at C2.1 it does not show the top and bottom of the wall. I am guessing that the wall is about 2.5' tall but there is nothing that calls it out.*

Response: Refer to attached grading clarification sketch - for information only.

32. *Are window coverings required on unit exterior sliding glass doors?*

Response: Yes, provide vertical louver blinds. Refer to new specification section 12 21 16 Vertical Louver Blinds.

33. *Sheet A101 Floor Plan General Note FF:*

- a. *Are window coverings to be included on interior storefront in rooms CR-100 & CR-101?*
- b. *If window coverings are to be included at interior storefront, are window coverings to be included on door CR-100A?*
- c. *Are window coverings to be included on any of the transom sections of exterior/interior windows/storefront (glazing above 7'-1" AFF).*

Response: No window coverings are required for the common areas, including storefronts.

34. *Sheet A101 Floor Plan General Note MM – are corner guards required for corners in the corridor at unit door insets (examples highlighted below)?*

Response: Corner guards are only required as noted on the plans. General Note MM has been revised.

35. *Drawing Sheet E701: MDP1 Modular Meter Line Up show Note #9 as typical for residential load centers, but MDP2 Modular Meter Line Up shows Note #13 as typical for residential load centers. Please clarify.*

Response: Coded note 9 is correct for the typical residential load centers.

36. *Specification Section 26 41 13 Lightning Protection for Structures calls for this section to be an Alternate. There is no Lightning Protection Alternate on the Bid Form. Please advise.*

Response: Refer to revised bid form which includes lightning protection as an alternate.

37. *On the 2nd floor there are several cantilever areas. In these areas there are floor truss girders trusses supporting the cantilever trusses. The girder truss as shown on plans and details does not work. The concentrated load at the end of the cantilever trusses is very high and it is creating an uplift due to dead+live load of 7,476 pounds and 4,344 pounds. This must be reviewed and verified if it is expected. Also, due to the loading, the maximum deflections limits are being exceeded. This truss is already 4 plies.*

Response: The load on the 2nd floor cantilevered trusses can be reduced from what was shown prior to addendum #8 due to a G.T. that was added at the roof level that removed a significant amount of load from the exterior wall that was initially going to be picked up by the cantilevered trusses. While the G.T. was added after a progress set, detail 3/S320 did not get updated until addendum #8. Refer to revised sheet S320 for details.

38. *On the 2nd floor there are several girder trusses supporting upper floor walls. The plans indicate the loads to be applied in these trusses. Girder trusses don't work with the loading shown on plans. Also, due to the loading, the maximum deflections limits are being exceeded. This truss is already 4 plies.*

Response: Posts have been added in a few of the interior non-bearing walls to act as interior supports for the girder trusses that cannot handle the loads and spans as is. Thickened slabs have also been added to support the new posts. Refer to sheets S101A and S102A for details.

B. Substitution Requests

1. *Substitution Request: Pella Windows & Patio Doors: Encompass (Single-Hung, White option), Vinyl 250 series (Black option/Tan option)*

Response: Pella Windows is an acceptable window manufacturer.

2. *Substitution Request: MI Windows and Doors: 3500 Vinyl Single-Hung Windows*

Response: MI Windows is an acceptable window manufacturer.

3. *Substitution Request: Arbor Creek*

Response: Arbor Creek is an acceptable for manufactured wood casework.

4. *Substitution Request: ProCabinets Builder Collection Series, Madison Espresso*

Response: Request Denied

5. *Substitution Request: Casework- Schaad & Sons Custom Cabinetry*

Response: Request Denied.

6. *Substitution Request: Metal Panel Systems – MP150 panel*

Response: Request denied.

7. *Substitution Request: Astria Fireplace*

Response: Request denied.

8. *Substitution Request: Samuel Mueller Shower Systems*

Response: Request denied.

II. SPECIFICATION REVISIONS

A. 00 01 10 TABLE OF CONTENTS

1. **REVISE** for added specification section.

B. 03 54 13 GYPSUM UNDERLAYMENT

1. Paragraph 2.01.H **REVISE** note to read, "Reinforcement: Where required by manufacturer for underlayment applied to wood substrates or thicknesses, provide galvanized metal lath or other corrosion-resistant reinforcement recommended in writing by underlayment manufacturer."

C. 08 53 13 VINYL WINDOWS AND PATIO DOORS

1. Paragraph 2.01A.1 **ADD** MI Windows and Pella Windows as acceptable manufacturers.
2. Paragraph 2.01C.4 Glazing – **REVISE** 7/8 inch to 3/4 inch.
3. Paragraph 2.03A – **REVISE** to read, “Factory Glaze. Provide glazing to meet: U – 0.29 with SHGC – 0.29.

D. 08 71 00 DOOR HARDWARE

1. **REVISE** Hardware Group No. 18.

E. 10 28 13 TOILET ACCESSORIES

1. Paragraph 2.03.H **REMOVE** mirrors from the unit items list. Unit bathrooms will have lighted mirrors as provided/installed by electrical.

F. 12 21 13 HORIZONTAL LOUVER BLINDS

1. **REPLACE** specification section in its entirety.

G. 12 21 16 VERTICAL LOUVER BLINDS

1. **ADD** specification section in its entirety to the Project Manual.

H. 12 56 51 FURNITURE, FURNISHINGS AND ACCESSORIES

1. **ADD** enclosed bulletin board product specifications to the FF&E listing.

III. **DRAWING REVISIONS**

STRUCTURAL

A. S101A – FOUNDATION PLAN – AREA ‘A’

1. **ADD** (3) thickened slabs under (3) new 1st floor posts.

B. S102A – SECOND FLOOR FRAMING PLAN – AREA ‘A’

1. **ADD** (3) posts to the 1st floor to support corridor girder trusses per RFI#01 response.

C. S320 – FRAMING DETAILS

1. **REVISE** Loading on cantilevered 2nd floor trusses in section 3 per RFI#01 response.

ARCHITECTURAL

A. A101 LEVEL 01 – FLOOR PLAN - OVERALL

1. **REVISE** General Note FF to state. “PROVIDE AND INSTALL WINDOW COVERINGS AND HEAVY DUTY WINDOW SCREENS AT ALL RESIDENTIAL UNIT WINDOWS.”
2. **REVISE** General Note MM to state. “PROVIDE AND INSTALL CORNER GUARDS AT LOCATIONS AS NOTED ON THE PLANS.

3. **REVISE** General Note NN to state. "PROVIDE AND INSTALL CHAIR RAILS ON ONE SIDE AND HANDRAILS ON THE OTHER SIDE IN CORRIDORS AS SHOWN ON THE PLANS.
- B. A101A LEVEL 01 – FLOOR PLAN – AREA A
 1. **REVISE** location of Door CO-100 to pull it away from the wall.
 2. **REVISE** location of Door W-100 to center the door in the storefront system.
- C. A104 ROOF PLAN – OVERALL
 1. **REVISE** Coded Note 4 to state. "52" HIGH MECHANICAL ROOF SCREEN AND SUPPORT."
 2. **ADD** Coded Note 4 to the roof plan at the mechanical roof screen next to the elevator tower.
 3. **ADD** Coded Note 16 to state, "2'-6" WIDE x 3'-1" DEEP ROOF HATCH & SAFETY RAIL – SEE DETAIL 10/A450."
- D. A450 ROOF DETAILS
 1. **ADD** Detail 10/A450 ROOF HATCH & LADDER
- E. A602 VERTICAL CIRCULATION
 1. **ADD** Coded Note 2 to state, "GALVANIZED STEEL ACCESS LADDERS."
- F. A702 STOREFRONT & WINDOW ELEVATIONS
 1. **REVISE** storefront Elevation 20 to center the door.

IV. ATTACHMENTS

- A. Specifications: 00 01 10, 03 54 13, 08 53 13, 08 71 00, 10 28 13, 12 21 13, 12 21 16 and 12 56 51.
- B. Drawings: S101A, S102A, S320, A101, A101A, A104, A450, A602 and A702.
C2.1 Grading Clarification-FIO

END OF ADDENDUM NO. 8

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CMHA Cobblestone Manor

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SECTION 03 54 13

GYPSUM UNDERLAYMENT

PART 1 GENERAL

1.01 WORK INCLUDED

- A. Section includes gypsum-cement-based, self-leveling underlayment for application below interior floor coverings.

1.02 RELATED SECTIONS

- A. Sustainable Design Requirements: Section 01 81 13.

1.03 SUBMITTALS

- A. Product Data: For each type of product indicated
- B. Shop Drawings: Include plans indicating substrates, locations, and average depths of underlayment based on survey of substrate conditions.
- C. Qualification Data: For qualified Installer.
- B. Special Environmental Requirements: Submit the following in accordance with Section 01 81 13:
 - 1. Products shall comply with the requirements of the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers."
 - 2. Laboratory Test Reports: For liquid floor treatments, indicating compliance with requirements for low-emitting materials.

1.04 QUALITY ASSURANCE

- A. Installer Qualifications: Installer who is approved by manufacturer for application of underlayment products required for this Project.
- B. Product Compatibility: Manufacturers of underlayment and floor-covering systems certify in writing that products are compatible.
- C. Fire-Resistance Ratings: Provide gypsum-cement underlayment systems identical to those of assemblies tested for fire resistance per ASTM E119 by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.

- D. Sound Transmission Characteristics: Where indicated, provide gypsum-cement underlayment systems identical to those of assemblies tested for STC and IIC ratings per ASTM E90 and ASTM E492 by a qualified testing agency.
- E. Coordinate application of underlayment with requirements of floor-covering products and adhesives, to ensure compatibility of products.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Underlayment: Gypsum-cement-based, self-leveling product that can be applied in minimum uniform thickness of 1/8 inch and that can be feathered at edges to match adjacent floor elevations.
 - 1. Thickness 3/4"
- B. Cement Binder: Gypsum or blended gypsum cement as defined by ASTM C219.
- C. Compressive Strength: Not less than 3000 psi at 28 days when tested according to ASTM C 109.
- D. Retain subparagraph below if required. Some manufacturers recommend additives for applications over cutback adhesive or wood and metal substrates.
- E. Underlayment Additive: Resilient-emulsion product of underlayment manufacturer, formulated for use with underlayment when applied to substrate and conditions indicated.
- F. Aggregate: Well-graded, washed gravel, 1/8 to 1/4 inch; or coarse sand as recommended by underlayment manufacturer.
 - 1. Provide aggregate when recommended in writing by underlayment manufacturer for underlayment thickness required
- G. Water: Potable and at a temperature of not more than 70 deg F.
- H. Reinforcement: **Where required by manufacturer for underlayment applied to wood substrates or thicknesses**, provide galvanized metal lath or other corrosion-resistant reinforcement recommended in writing by underlayment manufacturer.
- I. Primer: Product of underlayment manufacturer recommended in writing for substrate, conditions, and application indicated.

2.02 ACCESSORIES

- A. Sound Mat: **1/8"** thick entangled polymeric filament mat.

1. Basis of Design: Manufacturer and Product: MAXXON Acousti-Mat I.
2. Other Acceptable Manufacturers: Sound Mats manufactured by USG CORPORATION or DURACOUSTICS will be considered if materials meet the requirements of the Basis of Design and the performance is an acceptable match as approved by the Architect.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine substrates, with Installer present, for conditions affecting performance.
- B. Proceed with application only after unsatisfactory conditions have been corrected.

3.02 PREPARATION

- A. General: Prepare and clean substrate according to manufacturer's written instructions.
- B. Treat nonmoving substrate cracks according to manufacturer's written instructions to prevent cracks from telegraphing (reflecting) through underlayment.
- C. Fill substrate voids to prevent underlayment from leaking.
- D. Wood Substrates: Mechanically fasten loose boards and panels to eliminate substrate movement and squeaks. Sand to remove coatings that might impair underlayment bond and remove sanding dust.
- E. Install underlayment reinforcement recommended in writing by manufacturer.
- F. Adhesion Tests: After substrate preparation, test substrate for adhesion with underlayment according to manufacturer's written instructions.
- G. Sound Control Mat: Install sound control materials according to manufacturer's written instructions.
- H. Do not install mechanical fasteners that penetrate through the sound control materials.

3.03 INSTALLATION

- A. General: Mix and apply underlayment components according to manufacturer's written instructions.
 1. Close areas to traffic during underlayment application and for time period after application recommended in writing by manufacturer.

2. Coordinate application of components to provide optimum underlayment-to-substrate and intercoat adhesion.
 3. At substrate expansion, isolation, and other moving joints, allow joint of same width to continue through underlayment.
- B. Apply primer over prepared substrate at manufacturer's recommended spreading rate.
- C. Apply underlayment to produce uniform, level surface in thicknesses indicated.
1. Apply a final layer without aggregate to product surface.
 2. Feather edges to match adjacent floor elevations.
- D. Cure underlayment according to manufacturer's written instructions. Prevent contamination during application and curing processes.
- E. Do not install floor coverings over underlayment until after time period recommended in writing by underlayment manufacturer.
- F. Remove and replace underlayment areas that evidence lack of bond with substrate, including areas that emit a "hollow" sound when tapped.

END OF SECTION

SECTION 08 53 13

VINYL WINDOWS AND PATIO DOORS

PART 1 GENERAL

1.01 SCOPE

- A. Provide exterior single hung vinyl windows and sliding patio doors.
 - 1. Glass and glazing of the various window systems.
 - 2. Anchors, **nailing flange**, fasteners, flashings, receptors, trim and accessories to complete the work.

1.02 RELATED SECTIONS

- A. Sealant: Section 07 92 00.
- B. Alternates: Section 01 23 00.

1.03 QUALITY ASSURANCE

- A. Standards: Comply with the applicable provisions of American Architectural Manufacturers Association (AAMA) "Voluntary Specifications for Aluminum and Poly (Vinyl Chloride) (PVC) Prime Windows and Glass Doors, AAMA 101".
- B. Reference Standards: Wherever the following abbreviations are shown herein, they shall refer to the corresponding standard:
 - 1. AAMA: American Architectural Manufacturers Association.
 - 2. ASTM: American Society for Testing and Materials.
- C. Manufacturer: Products to be rated in accordance to NFRC
- D. Windows that require additional opening for egress are to be equipped with an ASTM F2090-10 compliant device, such as a Window Opening Control Device, which initially limits the opening of the window to no more than 4" as defined above, and provides a two-step mechanism allowing further operation to full egress.
 - 1. Verify requirement with Architect.
- E. Installer Qualifications: An installer acceptable to window manufacturer for installation of units required for this Project, not less than five (5) years of successful experience with a minimum of 5 projects similar in scope and complexity to this project.
- F. Manufacturer: Windows to be manufactured by a single firm with minimum five

years experience in fabrication of windows with a minimum of 5 projects similar in scope and complexity to this project.

1.04 SUBMITTALS

- A. Submit the following in accordance with the General Conditions and Section 01 33 23.
 - 1. Submit manufacturer's product data and installation instructions. Submit shop drawings for fabrication and installation of windows. Include elevations and detail sections of every typical member.
 - 2. Submit finish samples.

1.05 SAMPLE INSTALLATION

- A. Provide sample installation of windows and doors to determine acceptability of installation methods. Adjustments may be required by the Architect for compliance with the intent of the Contract Documents.
- B. Once the approval process is complete, the approved sample installation, modified as needed, will represent minimum installation quality for the work.
- C. Sample installation can be used in the finished work, when approved as such by the Architect.
- D. Window and door unit used for sample installation to be selected by Architect.

1.06 DELIVERY AND STORAGE OF MATERIALS

- A. Pack, load, ship, unload, store and protect windows in a manner which will avoid abuse, damage and defacement in accordance with AAMA CW-10.
- B. Store all materials delivered to the site in locations designated by the Architect. Spaces will be located where stored materials will not be exposed to wetting or damage, and will permit easy access to and handling of the materials.
 - 1. Stack vertically or on edge so that water cannot accumulate on or within components.
 - 2. Use nonstaining wood or plastic shims between components to provide water drainage and air circulation.
- C. Deliver other materials, except bulk materials, to project site in manufacturer's unopened containers with name, brand type, grade and color fully indicated thereon. Store bulk materials as required to avoid any deleterious effects of weather, soiling or contamination.

1.07 WARRANTY

- A. Warranty for all work in this Section to operate properly and be weathertight for the standard manufacturer's warranty.

- B. Provide Contractor's guarantee for all work under this Section to be free from defects of workmanship for a period on one year.

PART 2 PRODUCTS

2.01 SINGLE HUNG WINDOW

- A. Manufacturer: Drawings and specifications are based on Series 3000 windows by LINDSAY.

- 1. **Other Manufacturers: Windows by other manufacturers is acceptable, however substitutions must be approved by the Owner, through the Architect, during bidding. Approval process includes submission of product data, catalog cuts, design information and, where requested, a full size sample.**

- 2. Other Acceptable Manufacturers:

- a. **MI WINDOWS**
- b. **PELLA WINDOWS**

- B. Type: Single hung units complying to AAMA 101 for DH-R40 specifications.

- 1. Design Pressure (Performance Class): 40 psf.
- 2. Structural Test Pressure (Design Pressure x 1.5): 45 psf.
- 3. Water Resistance Test Pressure - ASTM E547: 4.5 psf.

- C. Frame and Window

- 1. Member: Main frame and window members designed specifically for manufacturers of vinyl windows using hollow extrusions of rigid PVC.
- 2. Minimum Wall Thickness:
 - a. Main Frame: .062".
 - b. Fixed Meeting Rail: .07".
- 3. Main Frame Corners: Welded construction.
- 4. Glazing: Extruded snap-in type PVC bead, allowing exterior glazing. Units to accept **3/4** inch thick insulating glass.
- 5. Weatherstripping: Provide around entire perimeter of all operating sash.
- 6. Screens: Fiberglass fabric, roll formed aluminum frame, finish to match window.

- D. Hardware

- 1. Sash Balance: Stainless steel constant force springs or similar type as approved by Architect.
- 2. Locks: Two cam-type on each operable sash.
- 3. Screws, Clips and Other Fasteners: Manufacturer's standard non-corrosive type materials compatible with aluminum.
- 4. Limit stops
- 5. **ADA units: Must be provided with windows with pull cord acuator**

and autolocks. WINDOWEASE or equal

E. Color:

1. **Base Bid Exterior Driftwood (Tan), Interior White**
2. **Alternate – Exterior Black, Interior White**

F. Muntins:

1. Matching material, located between glass panes within the sealed insulated glass unit.
2. Muntins shall have finish to match color of window frame.
3. ~~Simulated~~ Divided Lite Muntins: **As indicated.**
 - a. **System located between glass panes within the sealed insulated glass unit. Finish to match interior and exterior unit.**

2.02 SLIDING PATIO DOORS

A. Manufacturer: Drawings and specifications are based on **425 Series patio doors by LINDSAY Windows**. Doors by other manufacturers must be approved by the Owner, through the Architect, during bidding. Approval process includes submission of product data, catalog cuts, design information and, where requested, a full size sample.

B. Frames

1. Member: Fabricated from extruded aluminum 6063-T5. Provide with polyurethane thermal break. Clad head and jamb frame members with .05" rigid vinyl extrusion. Provide weep slots in sill.
2. Minimum Wall Thickness
 - a. Sill: .062".
 - b. Head and Jambs: .05".
3. Sills in Wheelchair Accessible Units: Provide extruded aluminum threshold extension for wheelchair access. Similar to # CM-92033 and CM-92034.

C. Door Panels: Vinyl extrusions; mechanically fasten at corners using welded construction.

D. Weatherstripping: Provide around entire perimeter and meeting stiles; interlock endseals are adjustable.

E. Hardware

1. Roller Assembly: Corrosive resistant adjustable, ball-bearing type.
2. Lock: Clam type latch.
3. Pulls: Manufacturer's standard.

F. Screen: Rolling type fabricated from roll-formed sections; corners mitered and

fitted. Finish to match door.

1. Fabric: Fiberglass mesh.
2. Wheels: Adjustable; mounted in top and bottom rails.

G. Colors: Custom as selected by Architect..

F. Muntins:

1. Matching material, located between glass panes within the sealed insulated glass unit.
2. Muntins shall have finish to match color of window frame.
3. Simulated Divided Lite Muntins:
 - a. **System located between glass panes within the sealed insulated glass unit. Finish to match interior and exterior unit.**

2.03 GLAZING

A. Factory glaze. Conform with section 08 81 00 ~~for type and performance values.~~

1. **Provide glazing to meet: U – 0.29 with SHGC – 0.29.**

- B. General: Preassembled units consisting of organically sealed panes of glass enclosing a hermetically sealed dehydrated air space and complying with ASTM E774 for performance classification indicated as well as with other requirements specified for glass characteristics, air space, sealing system, sealant, spacer material, corner design and desiccant.
- C. Windows - Glass Type: Provide manufacturer's standard insulating glass; Type I, Class 1 for clear glass, Quality q³, conforming to ASTM C1036.
- D. Patio Doors: Provide tempered insulating glass; Kind FT, Condition A, Type I, Class 1 for clear glass, conforming to ASTM C1048.

2.04 FABRICATION

- A. Manufacture each window and door to fit tightly within existing rough opening. Maximum allowable shim space is 1/2" per side jamb and 3/4" at head. Shim at sill to level low side with high side touching at the sill.
- B. Provide window and door members and components with joints neatly made, free of burrs and tight fitting to provide hairline joints with ends capped, mitered, milled or machined as appropriate and approved and develop full structural value of members and provide permanent water tight joints.
- C. Fasteners: Provide manufacturers perimeter nail flange Conceal fasteners wherever possible.
1. No through fasteners short circuiting thermal barrier permitted.

2. No bolts, screws or other components, metallic fastenings, etc., to impair independent frame movement.
3. All bolts, screws, fastenings, fillers, etc. bridging thermal barrier to be reinforced nylon or suitable low conductivity non-metallic materials.

PART 3 EXECUTION

3.01 INSPECTION

- A. Examine substrates, supporting structure and installation conditions. Do not proceed with window or door erection until unsatisfactory conditions have been corrected.
- B. Installation constitutes acceptance of existing conditions and responsibility for satisfactory performance.

3.02 INSTALLATION

- A. General
 1. Do not install component parts which are observed to be defective, including warped, bowed, dented, abraded, and broken members. Remove and replace members which have been damaged during installation or thereafter before time of acceptance.
 2. Do not cut or trim component parts during erection, in a manner which would damage finish, decrease strength or result in a visual imperfection of a failure in performance of the work.
- B. Install windows and doors in accordance with the manufacturer's instructions and recommendations for the installation of window components.
- C. Install component parts level, plumb, true to line and with uniform joints and reveals. Secure to structure with non-staining and non-corrosive shims, anchors, fasteners, spacers and fillers. Use erection equipment which will not mar or stain finished surfaces, and will not damage component parts.
- D. Assembly and Anchorage: Anchor component parts securely in place by bolting or other permanent mechanical attachment system which will comply with performance requirements and permit movements as required.
- E. Set sill members in a bed of sealant compound or with joint fillers or gaskets to provide weathertight requirements. Do not seal drainage holes (slots).

3.03 CLEANING AND PROTECTION

- A. Protect glass from breakage immediately upon installation, by attachment of streamers to framing held away from glass.
 1. Do not apply markings of any type on surfaces of glass.

- B. Immediately before acceptance of the work, clean the window thoroughly, inside and out.

END OF SECTION

SECTION 087100
DOOR HARDWARE

PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:

1. Mechanical and electrified door hardware
2. Electronic access control system components

B. Section excludes:

1. Windows
2. Cabinets (casework), including locks in cabinets
3. Signage
4. Toilet accessories
5. Overhead doors

C. Related Sections:

1. Division 01 Section "Alternates" for alternates affecting this section.
2. Division 06 Section "Rough Carpentry"
3. Division 06 Section "Finish Carpentry"
4. Division 07 Section "Joint Sealants" for sealant requirements applicable to threshold installation specified in this section.
5. Division 08 Sections:
 - a. "Metal Doors and Frames"
 - b. "Flush Wood Doors"
 - c. "Stile and Rail Wood Doors"
 - d. "Interior Aluminum Doors and Frames"
 - e. "Aluminum-Framed Entrances and Storefronts"
 - f. "Stainless Steel Doors and Frames"
 - g. "Special Function Doors"
 - h. "Entrances"
6. Division 26 "Electrical" sections for connections to electrical power system and for low-voltage wiring.
7. Division 28 "Electronic Safety and Security" sections for coordination with other components of electronic access control system and fire alarm system.

1.02 REFERENCES

A. UL LLC

1. UL 10B - Fire Test of Door Assemblies

2. UL 10C - Positive Pressure Test of Fire Door Assemblies
 3. UL 1784 - Air Leakage Tests of Door Assemblies
 4. UL 305 - Panic Hardware
- B. DHI - Door and Hardware Institute
1. Sequence and Format for the Hardware Schedule
 2. Recommended Locations for Builders Hardware
 3. Keying Systems and Nomenclature
 4. Installation Guide for Doors and Hardware
- C. NFPA – National Fire Protection Association
1. NFPA 70 – National Electric Code
 2. NFPA 80 – 2016 Edition – Standard for Fire Doors and Other Opening Protectives
 3. NFPA 101 – Life Safety Code
 4. NFPA 105 – Smoke and Draft Control Door Assemblies
 5. NFPA 252 – Fire Tests of Door Assemblies
- D. ANSI - American National Standards Institute
1. ANSI A117.1 – 2017 Edition – Accessible and Usable Buildings and Facilities
 2. ANSI/BHMA A156.1 - A156.29, and ANSI/BHMA A156.31 - Standards for Hardware and Specialties
 3. ANSI/BHMA A156.28 - Recommended Practices for Keying Systems
 4. ANSI/WDMA I.S. 1A - Interior Architectural Wood Flush Doors
 5. ANSI/SDI A250.8 - Standard Steel Doors and Frames

1.03 SUBMITTALS

A. General:

1. Submit in accordance with Conditions of Contract and Division 01 Submittal Procedures.
2. Prior to forwarding submittal:
 - a. Review drawings and Sections from related trades to verify compatibility with specified hardware.
 - b. Highlight, encircle, or otherwise specifically identify on submittals: deviations from Contract Documents, issues of incompatibility or other issues which may detrimentally affect the Work.

B. Action Submittals:

1. Product Data: Submit technical product data for each item of door hardware, installation instructions, maintenance of operating parts and finish, and other information necessary to show compliance with requirements.
2. Riser and Wiring Diagrams: After final approval of hardware schedule, submit details of electrified door hardware, indicating:
 - a. Wiring Diagrams: For power, signal, and control wiring and including:

- 1) Details of interface of electrified door hardware and building safety and security systems.
 - 2) Schematic diagram of systems that interface with electrified door hardware.
 - 3) Point-to-point wiring.
 - 4) Risers.
3. Samples for Verification: If requested by Architect, submit production sample of requested door hardware unit in finish indicated and tagged with full description for coordination with schedule.
 - a. Samples will be returned to supplier. Units that are acceptable to Architect may, after final check of operations, be incorporated into Work, within limitations of key coordination requirements.
4. Door Hardware Schedule:
 - a. Submit concurrent with submissions of Product Data, Samples, and Shop Drawings. Coordinate submission of door hardware schedule with scheduling requirements of other work to facilitate fabrication of other work critical in Project construction schedule.
 - b. Submit under direct supervision of a Door Hardware Institute (DHI) certified Architectural Hardware Consultant (AHC) or Door Hardware Consultant (DHC) with hardware sets in vertical format as illustrated by Sequence of Format for the Hardware Schedule published by DHI.
 - c. Indicate complete designations of each item required for each opening, include:
 - 1) Door Index: door number, heading number, and Architect's hardware set number.
 - 2) Quantity, type, style, function, size, and finish of each hardware item.
 - 3) Name and manufacturer of each item.
 - 4) Fastenings and other pertinent information.
 - 5) Location of each hardware set cross-referenced to indications on Drawings.
 - 6) Explanation of all abbreviations, symbols, and codes contained in schedule.
 - 7) Mounting locations for hardware.
 - 8) Door and frame sizes and materials.
 - 9) Degree of door swing and handing.
 - 10) Operational Description of openings with electrified hardware covering egress, ingress (access), and fire/smoke alarm connections.
5. Key Schedule:
 - a. After Keying Conference, provide keying schedule that includes levels of keying, explanations of key system's function, key symbols used, and door numbers controlled.
 - b. Use ANSI/BHMA A156.28 "Recommended Practices for Keying Systems" as guideline for nomenclature, definitions, and approach for selecting optimal keying system.
 - c. Provide 3 copies of keying schedule for review prepared and detailed in accordance with referenced DHI publication. Include schematic keying diagram and index each key to unique door designations.

- d. Index keying schedule by door number, keyset, hardware heading number, cross keying instructions, and special key stamping instructions.
- e. Provide one complete bitting list of key cuts and one key system schematic illustrating system usage and expansion. Forward bitting list, key cuts and key system schematic directly to Owner, by means as directed by Owner.
- f. Prepare key schedule by or under supervision of supplier, detailing Owner's final keying instructions for locks.

C. Informational Submittals:

- 1. Provide Qualification Data for Supplier, Installer and Architectural Hardware Consultant.
- 2. Provide Product Data:
 - a. Certify that door hardware approved for use on types and sizes of labeled fire-rated doors complies with listed fire-rated door assemblies.
 - b. Include warranties for specified door hardware.

D. Closeout Submittals:

- 1. Operations and Maintenance Data: Provide in accordance with Division 01 and include:
 - a. Complete information on care, maintenance, and adjustment; data on repair and replacement parts, and information on preservation of finishes.
 - b. Catalog pages for each product.
 - c. Final approved hardware schedule edited to reflect conditions as installed.
 - d. Final keying schedule
 - e. Copy of warranties including appropriate reference numbers for manufacturers to identify project.
 - f. As-installed wiring diagrams for each opening connected to power, both low voltage and 110 volts.

E. Inspection and Testing:

- 1. Submit written reports to the Owner and Authority Having Jurisdiction (AHJ) of the results of functional testing and inspection for:
 - a. Fire door assemblies, in compliance with NFPA 80.
 - b. Required egress door assemblies, in compliance with NFPA 101.

1.04 QUALITY ASSURANCE

A. Qualifications and Responsibilities:

- 1. Supplier: Recognized architectural hardware supplier with a minimum of 5 years documented experience supplying both mechanical and electromechanical door hardware similar in quantity, type, and quality to that indicated for this Project. Supplier to be recognized as a factory direct distributor by the manufacturer of the primary materials with a warehousing facility in the Project's vicinity. Supplier to have on staff, a certified Architectural Hardware Consultant (AHC) or Door Hardware Consultant (DHC) available to Owner, Architect, and Contractor, at reasonable times during the Work for consultation.

2. Installer: Qualified tradesperson skilled in the application of commercial grade hardware with experience installing door hardware similar in quantity, type, and quality as indicated for this Project.
3. Architectural Hardware Consultant: Person who is experienced in providing consulting services for door hardware installations that are comparable in material, design, and extent to that indicated for this Project and meets these requirements:
 - a. For door hardware: DHI certified AHC or DHC.
 - b. Can provide installation and technical data to Architect and other related subcontractors.
 - c. Can inspect and verify components are in working order upon completion of installation.
 - d. Capable of producing wiring diagram and coordinating installation of electrified hardware with Architect and electrical engineers.
4. Single Source Responsibility: Obtain each type of door hardware from single manufacturer.

B. Certifications:

1. Fire-Rated Door Openings:
 - a. Provide door hardware for fire-rated openings that complies with NFPA 80 and requirements of authorities having jurisdiction.
 - b. Provide only items of door hardware that are listed products tested by UL LLC, Intertek Testing Services, or other testing and inspecting organizations acceptable to authorities having jurisdiction for use on types and sizes of doors indicated, based on testing at positive pressure and according to NFPA 252 or UL 10C and in compliance with requirements of fire-rated door and door frame labels.
2. Smoke and Draft Control Door Assemblies:
 - a. Provide door hardware that meets requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105
 - b. Comply with the maximum air leakage of 0.3 cfm/sq. ft. (3 cu. m per minute/sq. m) at tested pressure differential of 0.3-inch wg (75 Pa) of water.
3. Electrified Door Hardware
 - a. Listed and labeled as defined in NFPA 70, Article 100, by testing agency acceptable to authorities having jurisdiction.
4. Accessibility Requirements:
 - a. Comply with governing accessibility regulations cited in "REFERENCES" article 087100, 1.02.D3 herein for door hardware on doors in an accessible route. This project must comply with all Federal Americans with Disability Act regulations and all Local Accessibility Regulations.

C. Pre-Installation Meetings

1. Keying Conference
 - a. Incorporate keying conference decisions into final keying schedule after reviewing door hardware keying system including:

- 1) Function of building, flow of traffic, purpose of each area, degree of security required, and plans for future expansion.
 - 2) Preliminary key system schematic diagram.
 - 3) Requirements for key control system.
 - 4) Requirements for access control.
 - 5) Address for delivery of keys.
2. Pre-installation Conference
 - a. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
 - b. Inspect and discuss preparatory work performed by other trades.
 - c. Inspect and discuss electrical roughing-in for electrified door hardware.
 - d. Review sequence of operation for each type of electrified door hardware.
 - e. Review required testing, inspecting, and certifying procedures.
 - f. Review questions or concerns related to proper installation and adjustment of door hardware.
 3. Electrified Hardware Coordination Conference:
 - a. Prior to ordering electrified hardware, schedule and hold meeting to coordinate door hardware with security, electrical, doors and frames, and other related suppliers.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up for hardware delivered to Project site. Promptly replace products damaged during shipping.
- B. Tag each item or package separately with identification coordinated with final door hardware schedule, and include installation instructions, templates, and necessary fasteners with each item or package. Deliver each article of hardware in manufacturer's original packaging.
- C. Maintain manufacturer-recommended environmental conditions throughout storage and installation periods.
- D. Provide secure lock-up for door hardware delivered to Project. Control handling and installation of hardware items so that completion of Work will not be delayed by hardware losses both before and after installation.
- E. Handle hardware in manner to avoid damage, marring, or scratching. Correct, replace or repair products damaged during Work. Protect products against malfunction due to paint, solvent, cleanser, or any chemical agent.
- F. Deliver keys to manufacturer of key control system for subsequent delivery to Owner.

1.06 COORDINATION

- A. Coordinate layout and installation of floor-recessed door hardware with floor construction. Cast anchoring inserts into concrete.
- B. Installation Templates: Distribute for doors, frames, and other work specified to be factory or shop prepared. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.
- C. Security: Coordinate installation of door hardware, keying, and access control with Owner's security consultant.
- D. Electrical System Roughing-In: Coordinate layout and installation of electrified door hardware with connections to power supplies and building safety and security systems.

1.07 WARRANTY

- A. Manufacturer's standard form in which manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within published warranty period.
 - 1. Warranty does not cover damage or faulty operation due to improper installation, improper use or abuse.
 - 2. Warranty Period: Beginning from date of Substantial Completion, for durations indicated in manufacturer's published listings.
 - a. Mechanical Warranty
 - 1) Locks
 - a) Mortise - 3 years
 - b) Cylindrical - 10 years
 - 2) Exit Devices
 - a) 10 years
 - 3) Closers
 - a) 10 years
 - 4) Automatic Operators
 - a) 2 years
 - b. Electrical Warranty
 - 1) Locks
 - a) 1 year
 - 2) Exit Devices
 - a) 1 year

1.08 MAINTENANCE

- A. Furnish complete set of special tools required for maintenance and adjustment of hardware, including changing of cylinders.
- B. Turn over unused materials to Owner for maintenance purposes.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. The Owner requires use of certain products for their unique characteristics and project suitability to ensure continuity of existing and future performance and maintenance standards. After investigating available product offerings, the Awarding Authority has elected to prepare proprietary specifications. These products are specified with the notation: "No Substitute."
 - 1. Where "No Substitute" is noted, submittals and substitution requests for other products will not be considered.
- B. Approval of alternate manufacturers and/or products other than those listed as "Scheduled Manufacturer" or "Acceptable Manufacturers" in the individual article for the product category are only to be considered by official substitution request in accordance with section 01 25 00.
- C. Approval of products from manufacturers indicated in "Acceptable Manufacturers" is contingent upon those products providing all functions and features and meeting all requirements of scheduled manufacturer's product.
- D. Where specified hardware is not adaptable to finished shape or size of members requiring hardware, furnish suitable types having same operation and quality as type specified, subject to Architect's approval.

2.02 MATERIALS

- A. Fabrication
 - 1. Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. provide screws according to manufacturer's recognized installation standards for application intended.
 - 2. Finish exposed screws to match hardware finish, or, if exposed in surfaces of other work, to match finish of this other work including prepared for paint surfaces to receive painted finish.
 - 3. Provide concealed fasteners wherever possible for hardware units exposed when door is closed. Coordinate with "Metal Doors and Frames", "Flush Wood Doors", "Stile and Rail Wood Doors" to ensure proper reinforcements. Advise the Architect where visible fasteners, such as thru bolts, are required.
- B. Provide screws, bolts, expansion shields, drop plates and other devices necessary for hardware installation.
 - 1. Where fasteners are exposed to view: Finish to match adjacent door hardware material.
- C. Cable and Connectors:

1. Where scheduled in the hardware sets, provide each item of electrified hardware and wire harnesses with number and gage of wires enough to accommodate electric function of specified hardware.
2. Provide Molex connectors that plug directly into connectors from harnesses, electric locking and power transfer devices.
3. Provide through-door wire harness for each electrified locking device installed in a door and wire harness for each electrified hinge, electrified continuous hinge, electrified pivot, and electric power transfer for connection to power supplies.

2.03 HINGES

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
 - a. Ives 5BB series
2. Acceptable Manufacturers and Products:
 - a. Hager BB1191/1279 series
 - b. McKinney TB series

B. Requirements:

1. Provide hinges conforming to ANSI/BHMA A156.1.
2. Provide five knuckle, ball bearing hinges.
3. 1-3/4 inch (44 mm) thick doors, up to and including 36 inches (914 mm) wide:
 - a. Exterior: Standard weight, bronze or stainless steel, 4-1/2 inches (114 mm) high
 - b. Interior: Standard weight, steel, 4-1/2 inches (114 mm) high
4. 1-3/4 inch (44 mm) thick doors over 36 inches (914 mm) wide:
 - a. Exterior: Heavy weight, bronze/stainless steel, 5 inches (127 mm) high
 - b. Interior: Heavy weight, steel, 5 inches (127 mm) high
5. 2 inches or thicker doors:
 - a. Exterior: Heavy weight, bronze or stainless steel, 5 inches (127 mm) high
 - b. Interior: Heavy weight, steel, 5 inches (127 mm) high
6. Adjust hinge width for door, frame, and wall conditions to allow proper degree of opening.
7. Provide three hinges per door leaf for doors 90 inches (2286 mm) or less in height, and one additional hinge for each 30 inches (762 mm) of additional door height.
8. Hinge Pins: Except as otherwise indicated, provide hinge pins as follows:
 - a. Steel Hinges: Steel pins
 - b. Non-Ferrous Hinges: Stainless steel pins
 - c. Out-Swinging Exterior Doors: Non-removable pins
 - d. Out-Swinging Interior Lockable Doors: Non-removable pins
 - e. Interior Non-lockable Doors: Non-rising pins

9. Provide hinges with electrified options as scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware. Locate electric hinge at second hinge from bottom or nearest to electrified locking component. Provide mortar guard for each electrified hinge specified.

2.04 SPRING HINGES

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
 - a. Ives 3SP series
2. Acceptable Manufacturers and Products:
 - a. Hager 1250 series
 - b. McKinney 1502 series

B. Requirements:

1. Provide hinges conforming to ANSI/BHMA A156.1.
2. Provide 3 knuckle, steel based, spring full mortise hinges.
3. Adjust hinge width for door, frame, and wall conditions to allow proper degree of opening.
4. Provide two spring hinges and one bearing hinge per door leaf for doors 90 inches (2286 mm) or less in height. Do not use spring hinges of door 96 inches and greater in height.

2.05 CONTINUOUS HINGES

A. Manufacturers:

1. Scheduled Manufacturer:
 - a. Ives
2. Acceptable Manufacturers:
 - a. Select
 - b. Best

B. Requirements:

1. Provide aluminum geared continuous hinges conforming to ANSI/BHMA A156.26, Grade 1.
2. Provide aluminum geared continuous hinges, where specified in the hardware sets, fabricated from 6063-T6 aluminum.
3. Provide split nylon bearings at each hinge knuckle for quiet, smooth, self-lubricating operation.
4. Provide hinges capable of supporting door weights up to 450 pounds, and successfully tested for 1,500,000 cycles.
5. On fire-rated doors, provide aluminum geared continuous hinges classified for use on rated doors by testing agency acceptable to authority having jurisdiction.

6. Provide aluminum geared continuous hinges with electrified option scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware.
7. Provide hinges 1 inch (25 mm) shorter in length than nominal height of door, unless otherwise noted or door details require shorter length and with symmetrical hole pattern.

2.06 ELECTRIC POWER TRANSFER

A. Manufacturers:

1. Scheduled Manufacturer and Product:
 - a. Von Duprin EPT-10
2. Acceptable Manufacturers and Products:
 - a. Securitron CEPT-10
 - b. Security Door Controls PTM

B. Requirements:

1. Provide power transfer with electrified options as scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware.
2. Locate electric power transfer per manufacturer's template and UL requirements, unless interference with operation of door or other hardware items.

2.07 FLUSH BOLTS

A. Manufacturers:

1. Scheduled Manufacturer:
 - a. Ives
2. Acceptable Manufacturers:
 - a. Burns
 - b. Rockwood

B. Requirements:

1. Provide automatic, constant latching, and manual flush bolts with forged bronze or stainless-steel face plates, extruded brass levers, and with wrought brass guides and strikes. Provide 12 inch (305 mm) steel or brass rods at doors up to 90 inches (2286 mm) in height. For doors over 90 inches (2286 mm) in height increase top rods by 6 inches (152 mm) for each additional 6 inches (152 mm) of door height. Provide dust-proof strikes at each bottom flush bolt.

2.08 COORDINATORS

A. Manufacturers:

1. Scheduled Manufacturer:
 - a. Ives
2. Acceptable Manufacturers:
 - a. Burns
 - b. Rockwood

B. Requirements:

1. Where pairs of doors are equipped with automatic flush bolts, an astragal, or other hardware that requires synchronized closing of the doors, provide bar-type coordinating device, surface applied to underside of stop at frame head.
2. Provide filler bar of correct length for unit to span entire width of opening, and appropriate brackets for parallel arm door closers, surface vertical rod exit device strikes, or other stop mounted hardware. Factory-prepared coordinators for vertical rod devices as specified.

2.09 MORTISE LOCKS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
 - a. Falcon MA series
2. Acceptable Manufacturers and Products:
 - a. No Substitute

B. Requirements:

1. Provide mortise locks conforming to ANSI/BHMA A156.13 Series 1000, Grade 1, and UL Listed for 3-hour fire doors.
2. Provide locks manufactured from heavy gauge steel, containing components of steel with a zinc dichromate plating for corrosion resistance.
3. Provide lock case that is multi-function and field reversible for handing without opening case. Cylinders: Refer to "KEYING" article, herein.
4. Provide locks with standard 2-3/4 inches (70 mm) backset with full 3/4 inch (19 mm) throw stainless steel mechanical anti-friction latchbolt. Provide deadbolt with full 1-inch (25 mm) throw, constructed of stainless steel.
5. Provide standard ASA strikes unless extended lip strikes are necessary to protect trim.
6. Provide electrified options as scheduled in the hardware sets. Where scheduled, provide a request to exit (RX) switch that is actuated with rotation of inside lever.
7. Lever Trim: Solid brass, bronze, or stainless steel, cast or forged in design specified, with wrought roses and external lever spring cages. Provide thru-bolted levers with 2-piece spindles.
 - a. Lever Design: LAT.

2.10 CYLINDRICAL LOCKS – GRADE 2

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
 - a. Falcon W series
2. Acceptable Manufacturers and Products:
 - a. No Substitute

B. Requirements:

1. Provide cylindrical locks conforming to ANSI/BHMA A156.2 Series 4000, Grade 2, and UL Listed for 3-hour fire doors.
2. Cylinders: Refer to "KEYING" article, herein.
3. Provide locks with standard 2-3/4 inches (70 mm) backset, unless noted otherwise, with 1/2-inch latch throw. Provide proper latch throw for UL listing at pairs.
4. Provide locksets with separate anti-rotation thru-bolts, and no exposed screws.
5. Provide independently operating levers with two external return spring cassettes mounted under roses to prevent lever sag.
6. Provide standard ASA strikes unless extended lip strikes are necessary to protect trim.
7. Lever Trim: Solid cast levers without plastic inserts and wrought roses on both sides.
 - a. Lever Design: LAT.

2.11 TUBULAR LOCKS – GRADE 2

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
 - a. Schlage F series
2. Acceptable Manufacturers and Products:
 - a. No Substitute

B. Requirements:

1. Provide tubular locks conforming to ANSI/BHMA A156.2 Series 4000, Grade 2, Grade 2 and ANSI/BHMA A156.39 Residential Grade AAA, and UL Listed for 3-hour fire doors.
2. Cylinders: Refer to "KEYING" article, herein.
3. Provide locks with standard 2-3/8 inches (60 mm) adjustable to 2-3/4 inches (70 mm) backset with 1/2-inch (13 mm) latch throw. Provide 2-3/4 inches (70 mm) backset, unless 2-3/8 inches (60 mm) is required by door or frame detail or noted otherwise.
4. Provide locksets that fit standard 2-1/8 inches (54 mm) diameter bore without use of thru bolts.
5. Door Thickness: Locksets adjustable to fit in 1-3/8 inches (35 mm) or 1-3/4 inches (44 mm) door thickness.
6. Provide standard T-strikes unless extended lip strikes are necessary to protect trim.

7. Lever Trim: Solid cast levers without plastic inserts and wrought roses on both sides.
 - a. Lever Design: LAT.

2.12 DEADBOLTS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
 - a. Schlage B500 Series
2. Acceptable Manufacturers and Products:
 - a. No Substitute

B. Requirements:

1. Provide grade 2 deadbolt series conforming to ANSI/BHMA A156.
2. Cylinders: Refer to "KEYING" article, herein.
3. Provide deadbolts with standard 2-3/4 inches (70 mm) backset. Provide 2-3/8 inches (60 mm) where noted or if door or frame detail requires. Provide deadbolt with full 1-inch (25 mm) throw, constructed of steel alloy.
4. Provide manufacturer's standard strike.

2.13 EXIT DEVICES

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
 - a. Falcon 24/25 series
2. Acceptable Manufacturers and Products:
 - a. No Substitute

B. Requirements:

1. Provide exit devices tested to ANSI/BHMA A156.3 Grade 1 and UL listed for Panic Exit or Fire Exit Hardware.
2. Cylinders: Refer to "KEYING" article, herein.
3. Provide touchpad type exit devices, fabricated of brass, bronze, stainless steel, or aluminum, plated to standard architectural finishes to match balance of door hardware.
4. Touchpad must extend a minimum of one half of door width. No plastic inserts are allowed in touchpads.
5. Provide exit devices with deadlatching feature for security and for future addition of alarm kits and/or other electrified requirements.
6. Provide flush end caps for exit devices.
7. Provide exit devices with manufacturer's approved strikes.
8. Provide exit devices cut to door width and height. Install exit devices at height recommended by exit device manufacturer, allowable by governing building codes, and approved by Architect.

9. Mount mechanism case flush on face of doors or provide spacers to fill gaps behind devices. Where glass trim or molding projects off face of door, provide glass bead kits.
10. Provide cylinder or hex-key dogging as specified at non fire-rated openings.
11. Removable Mullions: 2 inches (51 mm) x 3 inches (76 mm) steel tube. Where scheduled as keyed removable mullion, provide type that can be removed by use of a keyed cylinder, which is self-locking when re-installed.
12. Provide factory drilled weep holes for exit devices used in full exterior application, highly corrosive areas, and where noted in hardware sets.
13. Provide electrified options as scheduled.
14. Provide exit devices with optional trim designs to match other lever and pull designs used on the project.

2.14 POWER SUPPLIES

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
 - a. Schlage/Von Duprin PS900 Series
2. Acceptable Manufacturers and Products:
 - a. Precision ELR series
 - b. Sargent 3500 series

B. Requirements:

1. Provide power supplies approved by manufacturer of supplied electrified hardware.
2. Provide appropriate quantity of power supplies necessary for proper operation of electrified locking components as recommended by manufacturer of electrified locking components with consideration for each electrified component using power supply, location of power supply, and approved wiring diagrams. Locate power supplies as directed by Architect.
3. Provide regulated and filtered 24 VDC power supply, and UL class 2 listed.
4. Provide power supplies with the following features:
 - a. 12/24 VDC Output, field selectable.
 - b. Class 2 Rated power limited output.
 - c. Universal 120-240 VAC input.
 - d. Low voltage DC, regulated and filtered.
 - e. Polarized connector for distribution boards.
 - f. Fused primary input.
 - g. AC input and DC output monitoring circuit w/LED indicators.
 - h. Cover mounted AC Input indication.
 - i. Tested and certified to meet UL294.
 - j. NEMA 1 enclosure.
 - k. Hinged cover w/lock down screws.
 - l. High voltage protective cover.

2.15 CYLINDERS (Unit Openings)

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
 - a. Instakey
2. Acceptable Manufacturers and Products:
 - a. No Substitute

B. Requirements:

1. Provide cylinders/cores compliant with ANSI/BHMA A156.5; latest revision; cylinder face finished to match lockset; manufacturer's series as indicated. Refer to "KEYING" article, herein.
2. Provide cylinders in the below-listed configuration(s), distributed throughout the Project as indicated.
 - a. Patented Restricted Small Format: cylinder with small format interchangeable cores (SFIC) with restricted, patented keyway.
3. Patent Protection: Cylinders/cores requiring use of restricted, patented keys, patent protected.
4. Nickel silver bottom pins.

2.16 CYLINDERS (Common Openings)

A. Manufacturers and Products:

1. Scheduled Manufacturer:
 - a. Falcon
2. Acceptable Manufacturers and Products:
 - a. No Substitute

B. Requirements:

1. Provide cylinders/cores compliant with ANSI/BHMA A156.5; latest revision; cylinder face finished to match lockset; manufacturer's series as indicated. Refer to "KEYING" article, herein.
2. Provide cylinders in the below-listed configuration(s), distributed throughout the Project as indicated.
 - a. Open: cylinder with small format interchangeable core (SFIC) core with open keyway

2.17 KEYING

A. Scheduled System:

1. Existing factory registered system:
 - a. Provide cylinders/cores keyed into Owner's existing factory registered keying system. Comply with guidelines in ANSI/BHMA A156.28, incorporating decisions made at keying conference.

B. Requirements:

1. Construction Keying:
 - a. Replaceable Construction Cores.
 - 1) Provide temporary construction cores replaceable by permanent cores, furnished in accordance with the following requirements.
 - a) 3 construction control keys
 - b) 12 construction change (day) keys.
 - 2) Owner or Owner's Representative will replace temporary construction cores with permanent cores.
2. Permanent Keying:
 - a. Provide permanent cylinders/cores keyed by the manufacturer according to the following key system.
 - 1) Master Keying system as directed by the Owner.
 - b. Forward biting list and keys separately from cylinders, by means as directed by Owner. Failure to comply with forwarding requirements will be cause for replacement of cylinders/cores involved at no additional cost to Owner.
 - c. Provide keys with the following features:
 - 1) Material: Nickel silver; minimum thickness of .107-inch (2.3mm)
 - d. Identification:
 - 1) Mark permanent cylinders/cores and keys with applicable blind code for identification. Do not provide blind code marks with actual key cuts.
 - 2) Identification stamping provisions must be approved by the Architect and Owner.
 - 3) Stamp cylinders/cores and keys with Owner's unique key system facility code as established by the manufacturer; key symbol and embossed or stamped with "DO NOT DUPLICATE" along with the "PATENTED" or patent number to enforce the patent protection.
 - 4) Failure to comply with stamping requirements will be cause for replacement of keys involved at no additional cost to Owner.
 - 5) Forward permanent cylinders/cores to Owner, separately from keys, by means as directed by Owner.
 - e. Quantity: Furnish in the following quantities.
 - 1) Change (Day) Keys: 3 per cylinder/core.
 - 2) Permanent Control Keys: 3.
 - 3) Master Keys: 6.

2.18 DOOR CLOSERS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
 - a. Falcon SC70A series
2. Acceptable Manufacturers and Products:
 - a. No Substitute

B. Requirements:

1. Provide door closers conforming to ANSI/BHMA A156.4 Grade 1 requirements by BHMA certified independent testing laboratory. ISO 9000 certify closers. Stamp units with date of manufacture code.
2. Provide door closers with fully hydraulic, full rack and pinion action with aluminum cylinder.
3. Closer Body: 1-1/2-inch (38 mm) diameter with 5/8-inch (16 mm) diameter heat-treated pinion journal.
4. Hydraulic Fluid: Fireproof, passing requirements of UL10C, and requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F.
5. Spring Power: Continuously adjustable over full range of closer sizes, and providing reduced opening force as required by accessibility codes and standards.
6. Hydraulic Regulation: By tamper-proof, non-critical valves, with separate adjustment for latch speed, general speed, and backcheck.
7. Pressure Relief Valve (PRV) Technology: Not permitted.
8. Provide special templates, drop plates, mounting brackets, or adapters for arms as required for details, overhead stops, and other door hardware items interfering with closer mounting.

2.19 DOOR CLOSERS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
 - a. Falcon SC80A series
2. Acceptable Manufacturers and Products:
 - a. No Substitute

B. Requirements:

1. Provide door closers conforming to ANSI/BHMA A156.4 Grade 1 requirements by BHMA certified independent testing laboratory.
2. Provide door closers with fully hydraulic, full rack and pinion action with aluminum cylinder.
3. Closer Body: 1-1/4-inch (32 mm) diameter, with 5/8-inch (16 mm) diameter heat-treated pinion journal.
4. Hydraulic Fluid: Fireproof, passing requirements of UL10C, and requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F.
5. Spring Power: Continuously adjustable over full range of closer sizes, and providing reduced opening force as required by accessibility codes and standards.
6. Hydraulic Regulation: By tamper-proof, non-critical valves, with separate adjustment for latch speed, general speed, and backcheck.
7. Pressure Relief Valve (PRV) Technology: Not permitted.
8. Provide special templates, drop plates, mounting brackets, or adapters for arms as required for details, overhead stops, and other door hardware items interfering with closer mounting.

2.20 ELECTRO-HYDRAULIC AUTOMATIC OPERATORS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
 - a. LCN 4600 series
2. Acceptable Manufacturers and Products:
 - a. Norton 6000 series
 - b. Precision D4990 series

B. Requirements:

1. Provide low energy automatic operator units with hydraulic closer complying with ANSI/BHMA A156.19.
2. Hydraulic Fluid: Fireproof, passing requirements of UL10C, and requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F.
3. Provide units with conventional door closer opening and closing forces unless power operator motor is activated. Provide door closer assembly with adjustable spring size, back-check, and opening and closing speed adjustment valves to control door
4. Provide units with on/off switch for manual operation, motor start up delay, vestibule interface delay, electric lock delay, and door hold open delay.
5. Provide drop plates, brackets, and adapters for arms as required for details.
6. Provide actuator switches and receivers for operation as specified.
7. Provide weather-resistant actuators at exterior applications.
8. Provide key switches with LED's, recommended and approved by manufacturer of automatic operator as required for function described in operation description of hardware group below. Cylinders: Refer to "KEYING" article, herein.
9. Provide complete assemblies of controls, switches, power supplies, relays, and parts/material recommended and approved by manufacturer of automatic operator for each individual leaf. Actuators control both doors simultaneously at pairs. Sequence operation of exterior and vestibule doors with automatic operators to allow ingress or egress through both sets of openings as directed by Architect. Locate actuators, key switches, and other controls as directed by Architect.
10. Provide units with vestibule inputs that allow sequencing operation of two units, and SPDT relay for interfacing with latching or locking devices.

2.21 DOOR TRIM

A. Manufacturers:

1. Scheduled Manufacturer:
 - a. Ives
2. Acceptable Manufacturers:
 - a. Elmes
 - b. Trimco

B. Requirements:

1. Provide push plates, push bars, pull plates, pulls, and hands-free reversible door pulls with diameter and length as scheduled.

2.22 PROTECTION PLATES

A. Manufacturers:

1. Scheduled Manufacturer:
 - a. Ives
2. Acceptable Manufacturers:
 - a. Burns
 - b. Trimco

B. Requirements:

1. Provide protection plates with a minimum of 0.050 inch (1 mm) thick, beveled four edges as scheduled. Furnish with sheet metal or wood screws, finished to match plates.
2. Size plates 2 inches (51 mm) less width of door on single doors, pairs of doors with a mullion, and doors with edge guards. Size plates 1 inch (25 mm) less width of door on pairs without a mullion or edge guards.
3. At fire rated doors, provide protection plates over 16 inches high with UL label.

2.23 OVERHEAD STOPS AND OVERHEAD STOP/HOLDERS

A. Manufacturers:

1. Scheduled Manufacturers:
 - a. Glynn-Johnson
2. Acceptable Manufacturers:
 - a. Rixson
 - b. Sargent

B. Requirements:

1. Provide overhead stop at any door where conditions do not allow for a wall stop or floor stop presents tripping hazard.
2. Provide friction type at doors without closer and positive type at doors with closer.

2.24 DOOR STOPS AND HOLDERS

A. Manufacturers:

1. Scheduled Manufacturer:

- a. Ives
 - 2. Acceptable Manufacturers:
 - a. Trimco
 - b. Burns
- B. Provide door stops at each door leaf:
- 1. Provide wall stops wherever possible. Provide concave type where lockset has a push button or thumbturn.
 - 2. Where a wall stop cannot be used, provide universal floor stops.
 - 3. Where wall or floor stop cannot be used, provide overhead stop.
 - 4. Provide roller bumper where doors open into each other and overhead stop cannot be used.

2.25 THRESHOLDS, SEALS, DOOR SWEEPS, AUTOMATIC DOOR BOTTOMS, AND GASKETING

- A. Manufacturers:
- 1. Scheduled Manufacturer:
 - a. Zero International
 - 2. Acceptable Manufacturers:
 - a. National Guard
 - b. Reese
- B. Requirements:
- 1. Provide thresholds, weather-stripping, and gasketing systems as specified and per architectural details. Match finish of other items.
 - 2. Smoke- and Draft-Control Door Assemblies: Where smoke- and draft-control door assemblies are required, provide door hardware that meets requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105.
 - 3. Provide door sweeps, seals, astragals, and auto door bottoms only of type where resilient or flexible seal strip is easily replaceable and readily available.
 - 4. Size thresholds 1/2 inch (13 mm) high by 5 inches (127 mm) wide by door width unless otherwise specified in the hardware sets or detailed in the drawings.

2.26 SILENCERS

- A. Manufacturers:
- 1. Scheduled Manufacturer:
 - a. Ives
 - 2. Acceptable Manufacturers:
 - a. Burns
 - b. Rockwood

B. Requirements:

1. Provide "push-in" type silencers for hollow metal or wood frames.
2. Provide one silencer per 30 inches (762 mm) of height on each single frame, and two for each pair frame.
3. Omit where gasketing is specified.

2.27 BALL CATCHES

A. Manufacturers:

1. Scheduled Manufacturer:
 - a. Ives
2. Acceptable Manufacturers:
 - a. Burns
 - b. Rockwood

B. Requirements:

1. Provide ball catches at single doors with strike to fit ANSI frame prep. If dummy levers are used in conjunction with ball catch, mount ball catch at a height as to not interfere with proper mounting and height of dummy lever.
2. Provide ball catches with full lip strike at pair doors. Mount rolling ball in top rail of each leaf per manufacturer's template.

2.28 DOOR POSITION SWITCHES

A. Manufacturers:

1. Scheduled Manufacturer:
 - a. Schlage
2. Acceptable Manufacturers:
 - a. GE-Interlogix
 - b. Sargent

B. Requirements:

1. Provide recessed or surface mounted type door position switches as specified.
2. Coordinate door and frame preparations with door and frame suppliers. If switches are being used with magnetic locking device, provide minimum of 4 inches (102 mm) between switch and magnetic locking device.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Prior to installation of hardware, examine doors and frames, with Installer present, for compliance with requirements for installation tolerances, labeled fire-rated door assembly construction, wall and floor construction, and other conditions affecting performance. Verify doors, frames, and walls have been properly reinforced for hardware installation.
- B. Examine roughing-in for electrical power systems to verify actual locations of wiring connections before electrified door hardware installation.
- C. Submit a list of deficiencies in writing and proceed with installation only after unsatisfactory conditions have been corrected.

3.02 INSTALLATION

- A. Mount door hardware units at heights to comply with the following, unless otherwise indicated or required to comply with governing regulations.
 - 1. Standard Steel Doors and Frames: ANSI/SDI A250.8.
 - 2. Custom Steel Doors and Frames: HMMA 831.
 - 3. Interior Architectural Wood Flush Doors: ANSI/WDMA I.S. 1A
 - 4. Installation Guide for Doors and Hardware: DHI TDH-007-20
- B. Install door hardware in accordance with NFPA 80, NFPA 101 and provide post-install inspection, testing as specified in section 1.03.E unless otherwise required to comply with governing regulations.
- C. Install each hardware item in compliance with manufacturer's instructions and recommendations, using only fasteners provided by manufacturer.
- D. Do not install surface mounted items until finishes have been completed on substrate. Protect all installed hardware during painting.
- E. Set units level, plumb and true to line and location. Adjust and reinforce attachment substrate as necessary for proper installation and operation.
- F. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.
- G. Install operating parts so they move freely and smoothly without binding, sticking, or excessive clearance.
- H. Hinges: Install types and in quantities indicated in door hardware schedule but not fewer than quantity recommended by manufacturer for application indicated.
- I. Lock Cylinders:
 - 1. Furnish permanent cores to Owner for installation.
- J. Wiring: Coordinate with Division 26, ELECTRICAL and Division 28 ELECTRONIC SAFETY AND SECURITY sections for:

1. Conduit, junction boxes and wire pulls.
 2. Connections to and from power supplies to electrified hardware.
 3. Connections to fire/smoke alarm system and smoke evacuation system.
 4. Connection of wire to door position switches and wire runs to central room or area, as directed by Architect.
 5. Connections to panel interface modules, controllers, and gateways.
 6. Testing and labeling wires with Architect's opening number.
- K. Door Closers: Mount closers on room side of corridor doors, inside of exterior doors, and stair side of stairway doors from corridors. Mount closers so they are not visible in corridors, lobbies and other public spaces unless approved by Architect.
- L. Closer/Holders: Mount closer/holders on room side of corridor doors, inside of exterior doors, and stair side of stairway doors.
- M. Power Supplies: Locate power supplies as indicated or, if not indicated, above accessible ceilings or in equipment room, or alternate location as directed by Architect.
- N. Thresholds: Set thresholds in full bed of sealant complying with requirements specified in Division 07 Section "Joint Sealants."
- O. Stops: Provide floor stops for doors unless wall or other type stops are indicated in door hardware schedule. Do not mount floor stops where they may impede traffic or present tripping hazard.
- P. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.
- Q. Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.
- R. Door Bottoms and Sweeps: Apply to bottom of door, forming seal with threshold when door is closed.

3.03 ADJUSTING

- A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.
1. Spring Hinges: Adjust to achieve positive latching when door can close freely from an open position of 30 degrees.
 2. Electric Strikes: Adjust horizontal and vertical alignment of keeper to properly engage lock bolt.
 3. Door Closers: Adjust sweep period to comply with accessibility requirements and requirements of authorities having jurisdiction.

- B. Occupancy Adjustment: Approximately three to six months after date of Substantial Completion, examine and readjust each item of door hardware, including adjusting operating forces, as necessary to ensure function of doors and door hardware.

3.04 CLEANING AND PROTECTION

- A. Clean adjacent surfaces soiled by door hardware installation.
- B. Clean operating items per manufacturer's instructions to restore proper function and finish.
- C. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of Substantial Completion.

3.05 DOOR HARDWARE SCHEDULE

- A. The intent of the hardware specification is to specify the hardware for interior and exterior doors, and to establish a type, continuity, and standard of quality. However, it is the door hardware supplier's responsibility to thoroughly review existing conditions, schedules, specifications, drawings, and other Contract Documents to verify the suitability of the hardware specified.
- B. Discrepancies, conflicting hardware, and missing items are to be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application.
- C. Hardware items are referenced in the following hardware schedule. Refer to the above specifications for special features, options, cylinders/keying, and other requirements.
- D. Hardware Sets:

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Hardware Group No. 01

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	112XY EPT	710	IVE
1	EA	POWER TRANSFER	EPT10 CON	695	VON
1	EA	ELEC PANIC HARDWARE	RX-MEL-25-R-NL-CON 24 VDC	643E	FAL
1	EA	MORTISE CYLINDER HOUSING	C987	643e	FAL
1	EA	SFIC CORE	C607	606	FAL
1	EA	OH STOP	100S	643E/7 16	GLY
1	EA	SURFACE CLOSER	SC71A RW/PA	695	FAL
1	EA	KICK PLATE	8400 8" X 2" LDW B-CS	BLK	IVE
1	EA	RAIN DRIP	142D	D	ZER
1	SET	GASKETING	429D-S	D	ZER
1	EA	DOOR SWEEP	8197D	D	ZER
1	EA	THRESHOLD	65D	D	ZER
1	EA	WIRE HARNESS	CON-XX-P (LENGTH AS REQUIRED)		SCH
2	EA	WIRE HARNESS	BY ACCESS CONTROL PROVIDER		SCH
1	EA	MULTITECH READER	MTB11/MTB15 - BY ACCESS CONTROL PROVIDER (COORDINATE WITH HEAD END & CREDENTIAL TYPE)	BLK	SCE
1	EA	DOOR CONTACT	679 SERIES	BLK	SCE
1	EA	POWER SUPPLY	PS902 900-2RS 120/240 VAC	LGR	SCE

DOORS REQUIRE SPECIAL 3/8 INCH UNDERCUT FOR ADA TYPE THRESHOLD.

ELECTRICAL OPERATIONAL DESCRIPTION:

DOOR IS NORMALLY CLOSED AND LOCKED. FROM THE SECURE SIDE PRESENTING VALID CREDENTIALS TO THE CREDENTIAL READER WILL MOMENTARILY RETRACT THE LATCH, ALLOWING ENTRY. AFTER ENTRY THE DOOR RETURNS TO THE CLOSED AND LATCHED POSITION. A KEY OVERRIDE ALSO ENABLES ENTRY. FROM THE NON-SECURE SIDE, PRESSING THE PUSH PAD RETRACTS LATCH ALLOWING EGRESS. DURING A POWER OUTAGE, THE DOOR WILL REMAIN LOCKED AND WILL CONTINUE TO ALLOW FREE EGRESS AT ALL TIMES. DOOR POSITION SWITCH MONITORS DOOR FOR OPEN/CLOSED POSITION. REQUEST TO EXIT (RX) FOR REMOTE MONITORING.

Hardware Group No. 02

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 [PER 08 71 00]	F643E/ 716	IVE
1	EA	CLASSROOM LOCK	W561BDC LAT	643e	FAL
1	EA	SFIC CORE	C607	606	FAL
1	EA	SURFACE CLOSER	SC81A REG OR PA AS REQ	695	FAL
1	EA	KICK PLATE	8400 8" X 2" LDW B-CS	BLK	IVE
1	EA	WALL STOP	WS406/407CVX	643E/7 16	IVE
3	EA	SILENCER	SR64/SR65 AS REQ'D	GRY	IVE

Hardware Group No. 03

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 [PER 08 71 00]	F643E/ 716	IVE
1	EA	CLASSROOM LOCK	W561BDC LAT	643e	FAL
1	EA	SFIC CORE	C607	606	FAL
1	EA	SURFACE CLOSER	SC81A RW/PA	695	FAL
1	EA	KICK PLATE	8400 8" X 2" LDW B-CS	BLK	IVE
1	EA	WALL STOP	WS406/407CCV	643E/7 16	IVE
1	EA	GASKETING	488SBK PSA	BK	ZER

Hardware Group No. 04

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 [PER 08 71 00]	F643E/ 716	IVE
1	EA	STOREROOM LOCK	W581BDC LAT	643e	FAL
1	EA	SFIC CORE	C607	606	FAL
1	EA	SURF OH STOP	450S	613	GLY
1	EA	SURFACE CLOSER	SC81A REG OR PA AS REQ	695	FAL
1	EA	KICK PLATE	8400 8" X 2" LDW B-CS	BLK	IVE
3	EA	SILENCER	SR64/SR65 AS REQ'D	GRY	IVE

Hardware Group No. 05

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	112XY	710	IVE
1	EA	FIRE EXIT HDWE	F-25-R-L-BE-LAT	643E	FAL
1	EA	SURFACE CLOSER	SC71A RW/PA	695	FAL
1	EA	KICK PLATE	8400 8" X 2" LDW B-CS	BLK	IVE
1	EA	MAGNET	SEM7850 12V/24V/120V	695	LCN
1	EA	GASKETING	488SBK PSA	BK	ZER

TIE TO FIRE ALARM

OPERATION: UPON POWER LOSS OR FIRE ALARM SIGNAL DOORS TO RELEASE FROM MAGNETIC HOLDERS, CLOSE AND LATCH.

Hardware Group No. 06

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 [PER 08 71 00]	F643E/ 716	IVE
1	EA	CLASSROOM LOCK	W561BDC LAT	643e	FAL
1	EA	SFIC CORE	C607	606	FAL
1	EA	OH STOP	410S	613	GLY
1	EA	SURFACE CLOSER	SC81A REG OR PA AS REQ	695	FAL
1	EA	KICK PLATE	8400 8" X 2" LDW B-CS	BLK	IVE
3	EA	SILENCER	SR64/SR65 AS REQ'D	GRY	IVE

Hardware Group No. 07

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	112XY	710	IVE
1	EA	STOREROOM LOCK	W581BDC LAT	643e	FAL
1	EA	SFIC CORE	C607	606	FAL
1	EA	SURFACE CLOSER	SC71A SS	695	FAL
1	EA	KICK PLATE	8400 8" X 2" LDW B-CS	BLK	IVE
1	EA	RAIN DRIP	142D	D	ZER
1	SET	GASKETING	429D-S	D	ZER
1	EA	GASKETING	488SBK PSA	BK	ZER
1	EA	DOOR SWEEP	8197D	D	ZER
1	EA	THRESHOLD	65D	D	ZER

DOORS REQUIRE SPECIAL 3/8 INCH UNDERCUT FOR ADA TYPE THRESHOLD.

Hardware Group No. 08

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	112XY EPT	710	IVE
2	EA	POWER TRANSFER	EPT10 CON	695	VON
1	EA	REMOVABLE MULLION	KR4954 STAB	695	VON
1	EA	ELEC PANIC HARDWARE	RX-MEL-25-R-EO-CON 24 VDC	643E	FAL
1	EA	ELEC PANIC HARDWARE	RX-MEL-25-R-NL-OP-CON 24 VDC	643E	FAL
1	EA	RIM CYLINDER HOUSING	C953-7CCA	643e	FAL
1	EA	MORTISE CYLINDER HOUSING	C987	643e	FAL
2	EA	SFIC CORE	C607	606	FAL
2	EA	90 DEG OFFSET PULL	8190EZHD 12" O	643E/7 16	IVE
1	EA	OH STOP	100S	643E/7 16	GLY
1	EA	OH STOP	100SE	643E/7 16	GLY
1	EA	SURFACE CLOSER	SC71A RW/PA	695	FAL
1	EA	AUTO OPERATOR	4642 TBWMS 120 VAC	695	LCN
2	EA	ACTUATOR, TOUCH	8310-852T/8310-818T AS REQ'D	630	LCN
1	EA	MOUNTING PLATE	SC70A-18PA AS REQ.	695	FAL
1	EA	BLADE STOP SPACER	SC70A-61 AS REQ	695	FAL
1	SET	WEATHER STRIPPING	BY DOOR/FRAME MANUFACTURER		
1	SET	WEATHER STRIPPING	BY DOOR/FRAME MANUFACTURER		
2	EA	DOOR SWEEP	8197D	D	ZER
1	EA	THRESHOLD	65D	D	ZER
2	EA	WIRE HARNESS	CON-XX-P (LENGTH AS REQUIRED)		SCH
2	EA	WIRE HARNESS	BY ACCESS CONTROL PROVIDER		SCH
1	EA	MULTITECH READER	MTB11/MTB15 - BY ACCESS CONTROL PROVIDER (COORDINATE WITH HEAD END & CREDENTIAL TYPE)	BLK	SCE
2	EA	DOOR CONTACT	679 SERIES	BLK	SCE
1	EA	POWER SUPPLY	PS902 900-4RL 120/240 VAC	LGR	SCE

DOORS REQUIRE SPECIAL 3/8 INCH UNDERCUT FOR ADA TYPE THRESHOLD.

OPERATIONAL DESCRIPTION:

DOOR IS NORMALLY CLOSED AND LOCKED. FROM THE SECURE SIDE, PRESENTING VALID CREDENTIALS TO THE CREDENTIAL READER WILL MOMENTARILY RETRACT THE LATCH AND ACTIVATE THE OUTSIDE ACTUATOR. PUSHING THE ACTUATOR ENGAGES AUTOMATIC OPERATOR, ALLOWING ENTRY. AFTER ENTRY THE DOOR RETURNS TO THE CLOSED AND LATCHED POSITION. A KEY OVERRIDE ALSO ENABLES ENTRY. FROM THE NON-SECURE SIDE, PRESSING THE PUSH PAD RETRACTS LATCH ALLOWING EGRESS. INSIDE ACTUATOR ALWAYS ACTIVE. DURING A POWER OUTAGE, THE DOOR WILL REMAIN LOCKED AND WILL CONTINUE TO ALLOW FREE EGRESS AT ALL TIMES. DOOR POSITION SWITCH MONITORS DOOR FOR OPEN/CLOSED POSITION. REQUEST TO EXIT (RX) FOR REMOTE MONITORING.

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DOOR HARDWARE

Hardware Group No. 09

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 [PER 08 71 00]	F643E/ 716	IVE
1	EA	FIRE EXIT HDWE	F-25-R-L-BE-LAT	643E	FAL
1	EA	SURFACE CLOSER	SC71A REG OR PA AS REQ	695	FAL
1	EA	KICK PLATE	8400 8" X 2" LDW B-CS	BLK	IVE
1	EA	WALL STOP	WS406/407CVX	643E/7 16	IVE
1	EA	GASKETING	488SBK PSA	BK	ZER

Hardware Group No. 10

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	112XY	710	IVE
2	EA	PUSH/PULL BAR	9103EZHD-12"-NS	643E/7 16	IVE
2	EA	OH STOP	100S	643E/7 16	GLY
1	EA	OH STOP	100SE	643E/7 16	GLY
1	EA	SURFACE CLOSER	SC71A RW/PA	695	FAL
1	EA	AUTO OPERATOR	4642 TBWMS 120 VAC	695	LCN
2	EA	ACTUATOR, TOUCH	8310-852T/8310-818T AS REQ'D	630	LCN
1	EA	MOUNTING PLATE	SC70A-18PA AS REQ.	695	FAL
1	EA	BLADE STOP SPACER	SC70A-61 AS REQ	695	FAL

OPERATIONAL DESCRIPTION:

DOOR IS NORMALLY CLOSED PUSHING ACTUATOR ENGAGES AUTOMATIC OPERATOR, ALLOWING ENTRY. AFTER ENTRY THE DOOR RETURNS TO THE CLOSED POSITION.

Hardware Group No. 11

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 [PER 08 71 00]	F643E/ 716	IVE
1	EA	PASSAGE SET	W101S LAT	643e	FAL
1	EA	SURFACE CLOSER	SC81A SS	695	FAL
1	EA	KICK PLATE	8400 8" X 2" LDW B-CS	BLK	IVE
1	EA	GASKETING	488SBK PSA	BK	ZER

Hardware Group No. 12

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	112XY	710	IVE
1	EA	CLASSROOM LOCK	W561BDC LAT	643e	FAL
1	EA	SFIC CORE	C607	606	FAL
1	EA	SURFACE CLOSER	SC81A RW/PA	695	FAL
1	EA	KICK PLATE	8400 8" X 2" LDW B-CS	BLK	IVE
1	EA	WALL STOP	WS406/407CVX	643E/7 16	IVE

Hardware Group No. 13

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 NRP [PER 08 71 00]	F643E/ 716	IVE
1	EA	STOREROOM LOCK	W581BDC LAT	643e	FAL
1	EA	SFIC CORE	C607	606	FAL
1	EA	WALL STOP	WS406/407CVX	643E/7 16	IVE
3	EA	SILENCER	SR64/SR65 AS REQ'D	GRY	IVE

Hardware Group No. 14

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	112XY	710	IVE
1	EA	STOREROOM LOCK	W581BDC LAT	643e	FAL
1	EA	SFIC CORE	C607	606	FAL
1	EA	SURFACE CLOSER	SC71A SS	695	FAL
1	EA	KICK PLATE	8400 8" X 2" LDW B-CS	BLK	IVE
1	EA	RAIN DRIP	142D	D	ZER
1	SET	GASKETING	429D-S	D	ZER
1	EA	DOOR SWEEP	8197D	D	ZER
1	EA	THRESHOLD	65D	D	ZER

DOORS REQUIRE SPECIAL 3/8 INCH UNDERCUT FOR ADA TYPE THRESHOLD.

Hardware Group No. 15

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	SPRING HINGE	3SP1 4 X 4	F643E/ 716	IVE
1	EA	HINGE	5BB1 4 X 4	F643E/ 716	IVE
1	EA	PASSAGE SET	F10CF LAT	716	SCH
1	EA	SGL CYL DEADBOLT	B560BDC	643E	SCH
1	EA	SFIC CORE	AS REQUIRED	606	INS
1	EA	KICK PLATE	8400 8" X 2" LDW B-CS	BLK	IVE
1	EA	DOOR STOP	060 OR 70 AS REQ'D	F643E/ 716	IVE
1	EA	GASKETING	8303D	D	ZER
1	EA	DOOR SWEEP	153A(UNLESS FURNISHED BY PRE-HUNG DOOR MFR)	D	ZER
1	EA	THRESHOLD	625D	D	ZER
1	EA	KNOCKWER W/ VIEWER	02-3125 U700	643E/7 16	IVE
1	EA	VIEWER	U700[PROVIDE @ ACCESSIBLE UNITS ONLY]	B643E/ 716	IVE

Hardware Group No. 16

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	1011 3.5 X 3.5	F716E	IVE
2	EA	BALL CATCH	349	B643E/ 716	IVE
2	EA	SINGLE DUMMY TRIM	F170 LAT	716	SCH
2	EA	DOOR STOP	060 OR 70 AS REQ'D	F643E/ 716	IVE

Hardware Group No. 17

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	1011 3.5 X 3.5	F716E	IVE
1	EA	PRIVACY LOCK	F40 LAT	716	SCH
1	EA	DOOR STOP	060 OR 70 AS REQ'D	F643E/ 716	IVE

Hardware Group No. 18

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	112XY	710	IVE
1	EA	REMOVABLE MULLION	KR4954 STAB	695	VON
1	EA	PANIC HARDWARE	CD-25-R-EO	643E	FAL
1	EA	PANIC HARDWARE	CD-25-R-NL-OP-1439	643E	FAL
1	EA	RIM CYLINDER HOUSING	C953-7CCA	643e	FAL
3	EA	MORTISE CYLINDER HOUSING	C987	643e	FAL
4	EA	SFIC CORE	C607	606	FAL
2	EA	90 DEG OFFSET PULL	8190EZHD 12" O	643E/716	IVE
2	EA	OH STOP & HOLDER	100H	643E/716	GLY
2	EA	SURFACE CLOSER	SC71A REG OR PA AS REQ	695	FAL
2	EA	BLADE STOP SPACER	SC70A-61 AS REQ	695	FAL
2	EA	KICK PLATE	8400 8" X 1" LDW B-CS	BLK	IVE

Hardware Group No. 19

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	1011 3.5 X 3.5	F716E	IVE
1	EA	PASSAGE SET	F10 LAT	716	SCH
1	EA	DOOR STOP	060 OR 70 AS REQ'D	F643E/ 716	IVE

Hardware Group No. 20

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 [PER 08 71 00]	F643E/ 716	IVE
1	EA	CLASSROOM LOCK	W561BDC LAT	643e	FAL
1	EA	SFIC CORE	C607	606	FAL
1	EA	SURFACE CLOSER	SC81A REG OR PA AS REQ	695	FAL
1	EA	KICK PLATE	8400 8" X 2" LDW B-CS	BLK	IVE
1	EA	WALL STOP	WS406/407CVX	643E/7 16	IVE
1	EA	GASKETING	488SBK PSA	BK	ZER

Hardware Group No. 21

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 [PER 08 71 00]	F643E/ 716	IVE
1	EA	STOREROOM LOCK	W581BDC LAT	643e	FAL
1	EA	SFIC CORE	C607	606	FAL
1	EA	SURFACE CLOSER	SC81A REG OR PA AS REQ	695	FAL
1	EA	KICK PLATE	8400 8" X 2" LDW B-CS	BLK	IVE
1	EA	WALL STOP	WS406/407CVX	643E/7 16	IVE
1	EA	GASKETING	488SBK PSA	BK	ZER

Hardware Group No. 22

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 [PER 08 71 00]	F643E/ 716	IVE
1	EA	STOREROOM LOCK	W581BDC LAT	643e	FAL
1	EA	SFIC CORE	C607	606	FAL
1	EA	WALL STOP	WS406/407CVX	643E/7 16	IVE
3	EA	SILENCER	SR64/SR65 AS REQ'D	GRY	IVE

Hardware Group No. 23

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 [PER 08 71 00]	F643E/ 716	IVE
1	EA	ENTRY / OFFICE LOCK	W511BDC LAT	643e	FAL
1	EA	SFIC CORE	C607	606	FAL
1	EA	WALL STOP	WS406/407CVX	643E/7 16	IVE
3	EA	SILENCER	SR64/SR65 AS REQ'D	GRY	IVE

Hardware Group No. 24

Provide each PD door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	SET	POCKET DOOR	111PD SERIES	628	JOH
1	EA	SLIDING DOOR PULL	990	B643E/ 716	IVE
1	EA	POCKET DOOR BOLT	42	B643E/ 716	IVE

Hardware Group No. 25

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	112XY	710	IVE
1	EA	PANIC HARDWARE	CD-25-R-NL-OP-1439	643E	FAL
1	EA	RIM CYLINDER HOUSING	C953-7CCA	643e	FAL
1	EA	MORTISE CYLINDER HOUSING	C987	643e	FAL
2	EA	SFIC CORE	C607	606	FAL
1	EA	90 DEG OFFSET PULL	8190EZHD 12" O	643E/7 16	IVE
1	EA	OH STOP	100S	643E/7 16	GLY
1	EA	SURFACE CLOSER	SC71A RW/PA	695	FAL
1	EA	MOUNTING PLATE	SC70A-18PA AS REQ.	695	FAL
1	EA	BLADE STOP SPACER	SC70A-61 AS REQ	695	FAL
1	EA	DOOR SWEEP	8197D	D	ZER
1	EA	THRESHOLD	65D	D	ZER
1	EA	DOOR CONTACT	679 SERIES	BLK	SCE

DOORS REQUIRE SPECIAL 3/8 INCH UNDERCUT FOR ADA TYPE THRESHOLD.

PERIMETER WEATHER SEALS PROVIDED BY ALUMINUM SECTION.

DOOR POSITION SWITCH MONITORS DOOR FOR OPEN/CLOSED POSITION. REQUEST TO EXIT (RX) FOR REMOTE MONITORING.

Hardware Group No. 26

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 NRP [PER 08 71 00]	F643E/ 716	IVE
1	EA	STOREROOM LOCK	W581BDC LAT	643e	FAL
1	EA	SFIC CORE	C607	606	FAL
1	EA	SURFACE CLOSER	SC81A RW/PA	695	FAL
1	EA	KICK PLATE	8400 8" X 2" LDW B-CS	BLK	IVE
1	EA	WALL STOP	WS406/407CVX	643E/7 16	IVE
1	EA	GASKETING	488SBK PSA	BK	ZER

Hardware Group No. 27

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 NRP [PER 08 71 00]	F643E/ 716	IVE
1	EA	STOREROOM LOCK	W581BDC LAT	643e	FAL
1	EA	SFIC CORE	C607	606	FAL
1	EA	SURFACE CLOSER	SC81A SS	695	FAL
1	EA	KICK PLATE	8400 8" X 2" LDW B-CS	BLK	IVE
1	EA	GASKETING	488SBK PSA	BK	ZER

Hardware Group No. 28

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 [PER 08 71 00]	F643E/ 716	IVE
1	EA	PRIVACY LOCK	L9040 LATA L583-363 L283-722	643e	SCH
1	EA	SURFACE CLOSER	SC71A REG OR PA AS REQ	695	FAL
1	EA	MOP PLATE	8400 4" X 1" LDW B-CS	BLK	IVE
1	EA	KICK PLATE	8400 8" X 2" LDW B-CS	BLK	IVE
1	EA	WALL STOP	WS406/407CCV	643E/7 16	IVE
1	EA	GASKETING	488SBK PSA	BK	ZER

Hardware Group No. 29

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 [PER 08 71 00]	F643E/ 716	IVE
1	EA	PASSAGE SET	W101S LAT	643e	FAL
1	EA	WALL STOP	WS406/407CVX	643E/7 16	IVE
3	EA	SILENCER	SR64/SR65 AS REQ'D	GRY	IVE

Hardware Group No. 30

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	112XY	710	IVE
1	EA	PANIC HARDWARE	LD-25-R-EO	643E	FAL
1	EA	OH STOP	100S	643E/716	GLY
1	EA	SURFACE CLOSER	SC71A RW/PA	695	FAL
1	EA	KICK PLATE	8400 8" X 2" LDW B-CS	BLK	IVE
1	EA	RAIN DRIP	142D	D	ZER
1	EA	DOOR SWEEP	8197D	D	ZER
1	EA	THRESHOLD	65D	D	ZER
1	EA	DOOR CONTACT	679 SERIES	BLK	SCE

DOORS REQUIRE SPECIAL 3/8 INCH UNDERCUT FOR ADA TYPE THRESHOLD.

DOOR POSITION SWITCH MONITORS DOOR FOR OPEN/CLOSED POSITION.

Hardware Group No. 32

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 [PER 08 71 00]	F643E/716	IVE
1	EA	FIRE EXIT HARDWARE	F-25-R-L-NL-LAT	643E	FAL
1	EA	RIM CYLINDER HOUSING	C953-7CCA	643e	FAL
1	EA	SFIC CORE	C607	606	FAL
1	EA	SURFACE CLOSER	SC71A SS	695	FAL
1	EA	KICK PLATE	8400 8" X 2" LDW B-CS	BLK	IVE
1	EA	GASKETING	488SBK PSA	BK	ZER

Hardware Group No. 33

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	112XY	710	IVE
1	EA	STOREROOM LOCK	W581BDC LAT	643e	FAL
1	EA	SFIC CORE	C607	606	FAL
1	EA	SURFACE CLOSER	SC71A REG OR PA AS REQ	695	FAL
1	EA	KICK PLATE	8400 8" X 2" LDW B-CS	BLK	IVE
1	EA	WALL STOP	WS11	613	IVE
1	EA	RAIN DRIP	142D	D	ZER
1	SET	GASKETING	429D-S	D	ZER
1	EA	GASKETING	488SBK PSA	BK	ZER
1	EA	DOOR BOTTOM	365D	D	ZER
1	EA	THRESHOLD	655D	D	ZER
1	EA	DOOR CONTACT	679 SERIES	BLK	SCE

S-400 & S-401 - LOCKED ON THE STAIRWELL SIDE PREVENTING ACCESS TO ROOF.

DOOR POSITION SWITCH MONITORS DOOR FOR OPEN/CLOSED POSITION.

Hardware Group No. 34

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	112XY EPT	710	IVE
1	EA	POWER TRANSFER	EPT10 CON	695	VON
1	EA	ELEC PANIC HARDWARE	RX-MEL-25-R-NL-OP-1439-CON 24 VDC	643E	FAL
1	EA	RIM CYLINDER HOUSING	C953-7CCA	643e	FAL
1	EA	SFIC CORE	C607	606	FAL
1	EA	OH STOP	100S	643E/716	GLY
1	EA	SURFACE CLOSER	SC71A RW/PA	695	FAL
1	EA	MOUNTING PLATE	SC70A-18PA AS REQ.	695	FAL
1	EA	BLADE STOP SPACER	SC70A-61 AS REQ	695	FAL
1	EA	DOOR SWEEP	8197D	D	ZER
1	EA	THRESHOLD	65D	D	ZER
1	EA	WIRE HARNESS	CON-XX-P (LENGTH AS REQUIRED)		SCH
2	EA	WIRE HARNESS	BY ACCESS CONTROL PROVIDER		SCH
1	EA	MULTITECH READER	MTB11/MTB15 - BY ACCESS CONTROL PROVIDER (COORDINATE WITH HEAD END & CREDENTIAL TYPE)	BLK	SCE
1	EA	DOOR CONTACT	679 SERIES	BLK	SCE
1	EA	POWER SUPPLY	PS902 900-2RS 120/240 VAC	LGR	SCE

DOORS REQUIRE SPECIAL 3/8 INCH UNDERCUT FOR ADA TYPE THRESHOLD.

PERIMETER WEATHER SEALS PROVIDED BY ALUMINUM SECTION.

ELECTRICAL OPERATIONAL DESCRIPTION:

DOOR IS NORMALLY CLOSED AND LOCKED. FROM THE SECURE SIDE PRESENTING VALID CREDENTIALS TO THE CREDENTIAL READER WILL MOMENTARILY RETRACT THE LATCH, ALLOWING ENTRY. AFTER ENTRY THE DOOR RETURNS TO THE CLOSED AND LATCHED POSITION. A KEY OVERRIDE ALSO ENABLES ENTRY. FROM THE NON-SECURE SIDE, PRESSING THE PUSH PAD RETRACTS LATCH ALLOWING EGRESS. DURING A POWER OUTAGE, THE DOOR WILL REMAIN LOCKED AND WILL CONTINUE TO ALLOW FREE EGRESS AT ALL TIMES. DOOR POSITION SWITCH MONITORS DOOR FOR OPEN/CLOSED POSITION. REQUEST TO EXIT (RX) FOR REMOTE MONITORING.

Hardware Group No. 35

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	112XY	710	IVE
1	EA	AUTO FLUSH BOLT	FB31P/41P AS REQ	613	IVE
1	EA	DUST PROOF STRIKE	DP2	643E/7 16	IVE
1	EA	STOREROOM LOCK	W581BDC LAT	643e	FAL
1	EA	SFIC CORE	C607	606	FAL
1	EA	COORDINATOR	COR X FL (MB AS REQ)	711	IVE
2	EA	SURFACE CLOSER	SC71A SS	695	FAL
2	EA	KICK PLATE	8400 8" X 1" LDW B-CS	BLK	IVE
1	EA	RAIN DRIP	142D	D	ZER
1	SET	GASKETING	429D-S	D	ZER
1	EA	MEETING STILE	383D	D	ZER
2	EA	DOOR SWEEP	8197D	D	ZER
1	EA	THRESHOLD	65D	D	ZER

Hardware Group No. SL-01

Provide each SL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	SLIDING DOOR	ALL HARDWARE BY SLIDING DOOR MFR.		

SECTION 10 28 13
TOILET ACCESSORIES

PART 1 GENERAL

1.01 SCOPE

- A. This section covers all toilet accessories. Extent of each type of accessory is indicated on the drawing and specified herein.
- B. Included are accessories for:
 - 1. Public toilet rooms.
 - 2. Unit bath rooms.

1.02 WORK SPECIFIED IN OTHER SECTION

- A. Unframed Mirrors: Section 08 81 00.

B. Lighted Mirrors: Division 26

1.03 QUALITY ASSURANCE

- A. Provide each type of products of one manufacturer. Provide locks with same keying for all accessory units in the project.
- B. Stamped names or labels on exposed faces of units not permitted.

1.04 SUBMITTALS

- A. Submit manufacturer's product data and installation instructions for each type of toilet accessory required.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Delivery accessory items in manufacturer's original, unopened packaging.
- B. Store and handle materials in accordance with manufacturer's recommendations. Protect against soiling, damage and wetting.

1.06 PROJECT CONDITIONS

- A. Furnish anchoring devices and inserts for installation of toilet accessories. Coordinate delivery of items which must be set or built into other work.
- B. Provide setting drawings, templates and instructions for installation of anchorage

devices.

1.07 WARRANTY

- A. Submit mirror manufacturer's written ten year warranty against silver spoilage.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Public Items Basis of Design: ASI and BRADLEY as indicated below.

1. Other Acceptable Manufacturers: Similar products by BOBRICK, A & J WASHROOM ACCESSORIES, AMERICAN SPECIALTIES are acceptable if materials meet the requirements of the Basis of Design and the types and styles are acceptable matches as approved by the Architect.

- B. Unit Items Basis of Design: As indicated below.

1. Other Acceptable Manufacturers: Similar products by others are acceptable if materials meet the requirements of the Basis of Design and the types and styles are acceptable matches as approved by the Architect.

2.02 PUBLIC ITEMS

- A. 2.02 PUBLIC ITEMS

- A. Toilet Paper Holder: ADA compliant, open controlled.

1. Double Roll: BOBRICK Model Classic Series B-265.
 - a. Type: Surface Mount.
 - b. Finish: Chrome plated.

- B. Soap Dispenser - Tank Type: BOBRICK Model Contura Series 818615

1. Type: Surface mounted, liquid dispenser.
2. Material: Stainless Steel, 20 ga., type 304.
3. Finish: Satin.
4. Capacity: 40 oz.

- C. Handicap Bars: MOEN Series 8900

1. Diameter: 1-1/2 inch.
2. Material: Stainless steel, standard satin finish.
3. Fasteners: Concealed.
4. Style and Length
 - a. As indicated; where not indicated provide 42" long horizontal and 18" vertical bars.
 - b. Provide both horizontal and vertical bars in conformance with ANSI

A117.1, 604, 608 and 609.

- D. Paper Towel Dispenser: BOBRICK Model ClassicSeries B-262
1. Type: Dispenses C-fold and multifold paper towels 3-1/8" to 3-13/16" deep. Slots in sides of cabinet indicate refill time.
 2. Capacity: 400 C-fold or 525 multifold paper towels.
 3. Material: 22-gauge (0.8mm) stainless steel.
- E. Robe/Towel Hook: BOBRICK Model B-211
1. Type: Wall mounted, exposed fastener.
 2. Material: Plated brass. Satin nickel finish.
- F. Mirrors
1. Standard Framed Type: BOBRICK Model B-290
 - a. Frame: Stainless steel angle, theft resistant concealed fasteners.
 - b. Glass: Tempered 1/4" thick with full silver coating, copper coating and organic coating. Warranted by manufacturer 10 years against silver spoilage.
 - c. Size: 18" wide x 36" high, unless otherwise indicated or scheduled on the drawings.
- G. Mop Strip/Shelf: BOBRICK Model B-224 x 36.
1. Description: Stainless steel, satin finish back plate with four spring activated rubber cam mop holders and hooks.
 2. Location: Provide at each janitors sink. Coordinate height with Architect.
- H. Sanitary Napkin Disposal: BOBRICK Model ConturaSeries B-270
1. Type: Surface mounted. Hinged bottom for disposable liner removal.
 2. Material: Stainless steel, satin finish.
- J. Infant Changing Table: Stainless Steel
1. Description: Surface mount, fold down type. Concave molded polyethylene changing surface with safety strap. Folds up flat against wall when not in use. Provide with integral sanitary liner holder.
 - a. Sanitary Liners: Provide 2 cases (approximately 2,800) disposable liners.
 2. Manufacturer: KB110-SSWM Koala Bear Kare Horizontal Baby Changing Station by KOALA CORPORATION or equal by BROCAR PRODUCTS, FOUR D, INC. or other manufacturers listed in Article 2.01.

2.03 UNIT ITEMS

A. Toilet Paper Holder: MOEN Mason Models: YB8000CH (Mounting Posts) & YB8099CH (Roller)

1. Single Roll - post
2. Finish: Selected

B. Towel Bar: MOEN Models: YB8000CH (Mounting Posts), YB8098CH (18" Towel Bar), YB8094CH (24" Towel Bar)

1. Finish: Selected
2. Size: 18 and 24"

C. Towel Ring: MOEN Model: Mason YB8086CH

1. Finish: Selected
2. Size: 6.4 wide"

D. Shower Curtain Rod: 5' Decorative Curved MOEN Model: CSR2165CH.

1. Material: 22 gauge stainless steel
2. Rod Dimension: Rod 1" thick, 5.8" curve.

E. Handicap Bars: MOEN Series 8900

1. Diameter: 1-1/2 inch.
2. Material: Stainless steel, standard satin finish.
3. Fasteners: Concealed.
4. Style and Length
 - a. As indicated; where not indicated provide 42" long horizontal.
 - b. Provide both horizontal and vertical bars in conformance with ANSI A117.1, 604.5.

F. Medicine Cabinet: JENSEN / AMERICAN PRIDE AP Horizon: 940M22R Mirrored, Finish: Frameless, Material: Plastic

G. Robe Hook: MOEN Model: Mason YB8003CH

1. Finish: Selected
2. Location: Back of all full bathroom doors

2.04 FABRICATION

A. Edges: All throat openings and similar type exposed edges of towel dispensers, seat cover dispensers, waste receptacles and similar type accessories to be hemmed or sufficiently rounded to preclude accidental cuts to users.

- B. Miters: Provide one-piece seamless beveled or return flange; open miters, if not welded, must be worked to eliminate sharp edges; edges which may cut or snag are not acceptable.

2.05 SCHEDULE OF ACCESSORIES

- A. Location, quantity and mounting height of accessories as indicated on drawings.
- B. Keyed Units: Key all similar types of units alike. Provide two keys per unit.

PART 3 EXECUTION

3.01 INSPECTION

- A. Installer: Examine substrates, previously installed inserts anchorages necessary for mounting of accessories and other conditions under which installation is to occur.
 - 1. Notify Contractor in writing of conditions detrimental to proper and time completion of the work.
 - 2. Do not proceed with work until satisfactory conditions have been corrected.

3.02 INSTALLATION

- A. Install in accordance with manufacturer's instructions using fasteners which are appropriate for substrate and recommended by manufacturer of unit. Install units and plumb and level, firmly anchored in positions indicated.
- B. Provide concealed fasteners wherever possible of types required for substrate conditions encountered.
 - 1. Stud and Gypsum Board: Screws or bolts anchored to 16 gage (minimum) metal plate blocking or wood blocking located within stud space. See Section 09 21 16 or 06 10 50.
- C. Lead, plastic or fiber plugs are not acceptable.
- D. Grab Bars: Coordinate grab bar locations as to right hand or left hand installations with field conditions.
 - 1. Install to withstand a downward load of at least 250 lbf, when tested according to ASTM F446.
- E. Upon completion of installation, adjust each accessory unit for proper operation and clean exposed surfaces. Turn over keys to designated Owner's personnel.

END OF SECTION

SECTION 12 21 13

HORIZONTAL LOUVER BLINDS

PART 1 GENERAL

1.01 SCOPE OF WORK

- A. Provide and install materials, and all related accessories required for complete blind installation on all windows indicated on drawings to receive blinds.

1.02 WORK SPECIFIED IN OTHER SECTIONS

- A. Wood Blocking: Section 06 10 50

1.03 SUBMITTALS

- A. Submit manufacturer's product data and full range of color samples.

1.04 QUALITY ASSURANCE

- A. Safety Certification: WCMA A100.1 - Safety of Window Covering Products; Window Covering Manufacturers Association. (ANSI/WCMA A100.1-2018)
- B. Light Fastness: 500 hours UV-A in a Q-U-C chamber or equivalent.**
- C. Tilt Operation: 5000 cycles.**
- D. Lift/Lock System: 4000 cycles.**
- E. Fire: Slats meet the requirement of NFPA 701 Test Method 1-2004 edition.**

1.05 EXTRA MATERIAL

- A. Provide (3) full-size units for each blind type, size and color installed.

PART 2 PRODUCTS

2.01 CORDLESS BLINDS

- A. Materials
 - 1. Extruded PVC 2" wide x .114" thick with faux wood coating.
 - 2. Provide engineered bottom rail with **cordless double spooled lift spring** push up system.
 - 3. **Headrail shall be 1.56" high x 2.29" wide x .024" thick U-shaped with steel polyester baked enamel finish**

4. Tilt Wand: PVC, color coordinated to the slats
 5. Tilt Rod shall be electro-zinc coated solid steel measuring .158" across the flats.
 6. Valance/Valance Return: coextruded PVC.
 7. Braided Ladder shall be made of 100% polyester, color coordinated to the slats. Standard ladder spacing 45mm x 54mm. Maximum spacing between ladders is 12".
- B. Basis of Design: **SWF CONTRACT Semi-Custom Cordless Faux Wood Blinds**
1. Other Manufacturers.: Products manufactured by NORMAN, BALI, SPRINGS WINDOW FASHIONS, KIRSCH or HUNTER DOUGLAS, INC. are acceptable upon Architects review and acceptance.
- C. Lift Cord: Cordless.
- D. Provide hold-down clips for blinds installed on half and full-lite doors

PART 3 EXECUTION

3.01 INSTALLATION

- A. Field measure each window for correct dimensions.
- B. Blinds to be installed between window jambs, set ½" off face of window frame.
- C. Provide a single blind for each window unit. For double and triple windows, provide multiple blinds on a single head rail.
- D. Following installation, shorten lift cord to proper length
- E. Replace any bent or damaged slats or other defective items prior to installation.
- F. Install level and of proper length and width to fit all windows designated to be treated.
- G. Adjust for smooth operation.

END OF SECTION

SECTION 12 21 16

VERTICAL LOUVER BLINDS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Interior Window Coverings:
 - 1. Vertical louver blinds.

1.2 RELATED SECTIONS

- A. Wood Blocking: Section 06 10 50

1.3 REFERENCES

- A. ASTM International (ASTM):
 - 1. ASTM E 21 - Standard Test Method for Elevated Temperature Tension Tests of Metallic Materials.
 - 2. ASTM E 22 - Recommended Practice for Conducting Long Time High Temperature Tension Test of Metallic Materials.
 - 3. ASTM G 21 - Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi.
 - 4. ASTM G 22 - Standard Practice for Determining Resistance of Plastics to Bacteria.
- B. National Fire Protection Association (NFPA):
 - 1. NFPA 70 - National Electrical Code.
 - 2. NFPA 701 - Fire Tests for Flame-Resistant Textiles and Films.
- C. Underwriters Laboratories Inc. (UL).

1.4 SUBMITTALS

- A. Submit under provisions of Section 01 33 23 – Shop Drawings, Product Data, Samples.
- B. Product Data: Submit manufacturer's product data sheets, including installation details, styles, material descriptions, profiles, features, finishes and operating instructions.
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Mounting details and Installation methods.
- C. Maintenance Data: Submit instructions and precautions for cleaning and maintenance, operating hardware and controls as applicable.

- D. Selection Samples:
 - 1. Frame and Component Finishes: Submit 2 sets of samples, representing manufacturer's standard range of finishes specified for aluminum.
 - 2. PVC Slats: Submit 2 sets of samples, 6 inches long, representing manufacturer's standard range of finishes specified for PVC slats.

1.5 QUALITY ASSURANCE

- A. Manufacturer's Qualifications: Engaged in manufacturing of products of similar type to that specified, with a minimum of 10 years successful experience.
- B. Installer Qualifications: Minimum 2 years successful experience installing similar products.
- C. Single Source Requirements: To the greatest extent possible, provide products specified in this section from a single manufacturer.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver materials to site protected from damage.
- B. Storage: Store materials in clean, dry area indoors in manufacturer's unopened packaging until ready for installation and in accordance with manufacturer's instructions. Store in a clean, dry area, laid flat to prevent sagging and twisting of packaging.
- C. Handling: Protect materials and finish from damage during handling and installation.

1.7 PROJECT CONDITIONS, COORDINATION AND SEQUENCING

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.
 - 1. Building shall be enclosed; windows, frames and sills shall be installed and glazed.
 - 2. Wet work shall be complete and dry.
 - 3. Ceilings, window pockets, electrical and mechanical work above window covering shall be complete.

1.8 TYPE OF WARRANTY

- A. Manufacturer's Warranty:
 - 1. Provide Limited lifetime warranty, other than the products listed below, which have the limited warranty periods as indicated:
 - a. Vertical louvers (vanes): Three years

1.9 EXTRA MATERIALS

- A. Attic Stock: Provide two extra blinds of primary size used for Owner's replacement stock.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Basis of Design: SWFcontract,
- B. Other Manufacturers.: Products manufactured by BALI, SPRINGS WINDOW FASHIONS, KIRSCH or HUNTER DOUGLAS, INC. are acceptable upon Architects review and acceptance.

2.2 SHADING SYSTEMS - GENERAL

- A. Shade Configuration: As scheduled and indicated on Drawings.

2.3 VERTICAL BLINDS

- A. Window Coverings: SWFcontract G-85 Dura-View Vertical Blinds.
 - 1. Louvers: As selected by Architects from the Graber line of PVC offerings.
 - a. Type: 3-1/2 inch PVC.
 - b. Louver Color: Standard colors as selected by the Architect.
 - 2. Components:
 - a. Headrails: Roll formed, phosphate-treated recycled steel.
 - 1) Size: 1-1/2 inches (38 mm) wide x 1-1/4 inches (32 mm) high.
 - 2) Thickness: .027 inches (0.7 mm).
 - 3) Finish: With baked enamel finish in Ivory Gloss.
 - b. Carriers: Carriers shall be centrally located making the headrail reversible; carriers and stems are replaceable without demounting the headrail.
 - 1) Description: Traverses on self-lubricated wheels.
 - 2) Detachable Stems: Clear, non-yellowing, UV-stabilized nylon; impact-resistant.
 - c. Rotation Controls: Standard, bead chain, No. 6 nickel-plated steel.
 - 1) Dual Rack and Pinion Gear System: Provides 180 degrees direct rotation.
 - 2) Pinion Rods: Extruded aluminum 0.30 inch (7.6 mm) diameter.
 - 3) Control Type: Standard, bead chain, No. 6 nickel-plated steel.
 - 4) Control Type: One Touch wand control, one way draw only, not available with 2 inch louvers.
 - d. Traversing Control: Nylon strap system.
 - 1) Traverse Cord: No. 3 braided polyester with a fiberglass core, 0.094 inch (2.4 mm) and is equipped with a tension cord weight and cord clip.
 - 2) Cord Clip: Anchored to the wall or window jamb during installation in accordance with CPSC recommendations.
 - e. Valances: Provide optional valances.

PART 3 EXECUTION

3.1 PREPARATION

- A. Inspect mounting surfaces, blocking for shade brackets or pocket assemblies, suspended acoustical or gypsum ceiling for recessed shades and verify field measurements. Prepare substrates using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- B. Do not proceed with installation until substrates have been prepared using the methods recommended by the manufacturer and deviations from manufacturer's recommended tolerances are corrected. Commencement of installation constitutes acceptance of conditions.
- C. If preparation is the responsibility of another installer, notify Architect in writing of deviations from manufacturer's recommended installation tolerances and conditions.

3.2 INSTALLATION

- A. Install window treatments in accordance with manufacturer's instructions including the following.
 - 1. Install with adequate clearance to permit smooth operation of the shades throughout entire operational range.
 - 2. Adjust and balance window coverings to operate smoothly, easily, safely, and free from binding or malfunction throughout entire operational range.
 - 3. Wire motors and controllers according to specifications and wiring diagrams prior to installation of motorized shades.
 - 4. Test electrically operated shades for proper operation.

3.3 CLEANING AND PROTECTION

- A. Clean surfaces after installation in accordance with manufacturer's written instructions. Do not use cleaning methods involving heat, bleach, abrasives, or solvents.
- B. Protect installed products until completion of project. Repair damaged or improperly installed before Substantial Completion.

END OF SECTION

PRODUCT SPECIFICATION

Project Name / Number: **Cobblestone Manor / 22172**

March 7, 2024

Plan Tag: **TB2**
Item Name: Enclos. Fabric Bulletin Board

Manufacturer: Ghent
Rep:
Tel: 800.543.0550

Style/Series: PA2
Product #: PA23648F-91

Dimensions: 4' W x 3' H

Finishes: Aluminum Frame, Satin Finish
Gray (91) fabric

Upholstery Mfg.:
Pattern:
Color:
COM Yardage/Sq. Ft.:

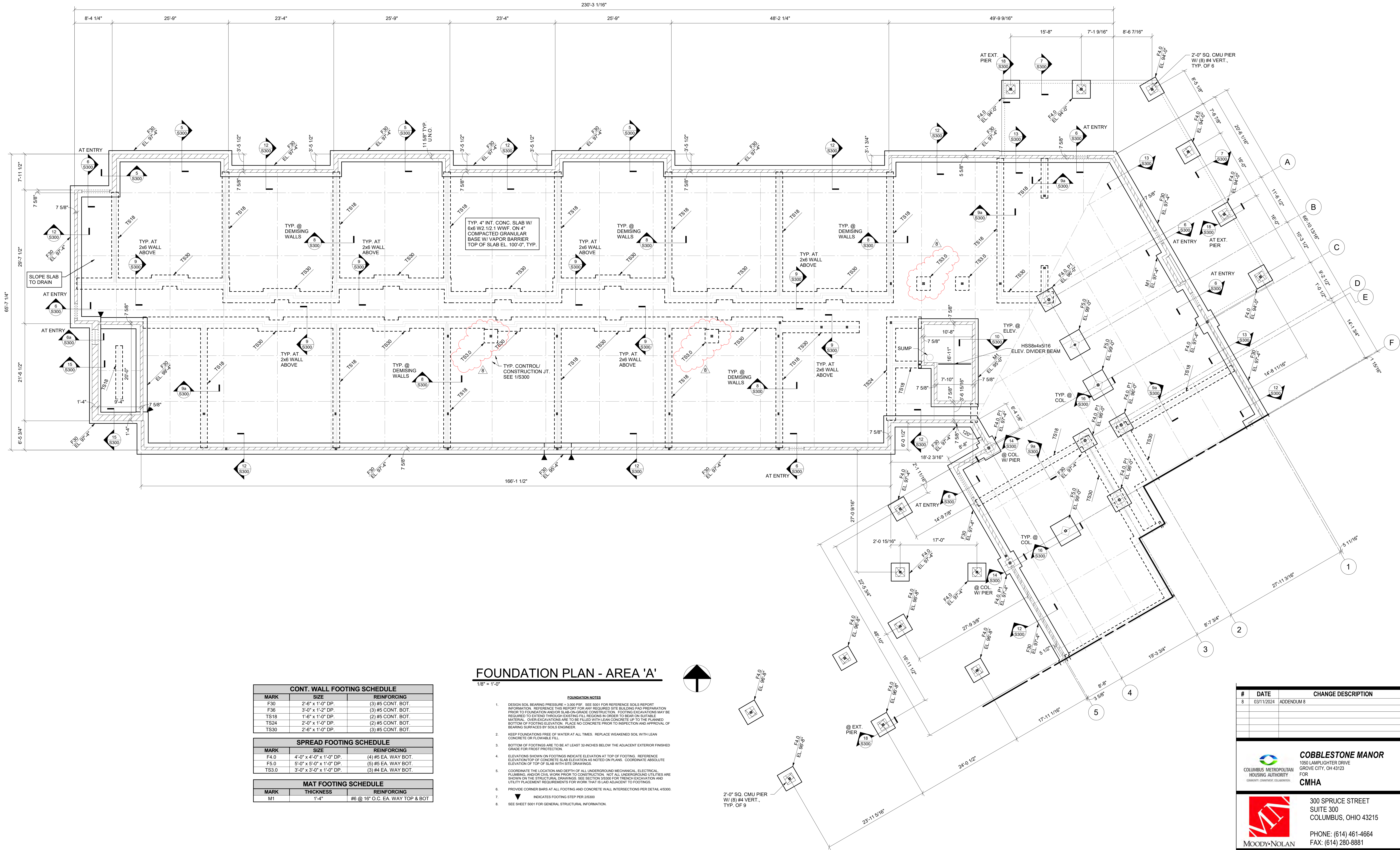
Description: Ghent PA2 Series Enclosed Fabric Bulletin Board w/ Lock
2-Door, Shatter Resistant Acrylic Panels. Fabric interior panel.
Long-lasting fabric hides pin holes
Aluminum frame, Satin finish
4' W x 3' H



PRODUCT IMAGE MAY NOT REFLECT EXACT SPECIFICATIONS

Room/Quantity: M-100 MAIL (1)

Total Quantity: 1



FOUNDATION PLAN - AREA 'A'

1/8" = 1'-0"

FOUNDATION NOTES

- DESIGN SOIL BEARING PRESSURE = 3,000 PSF. SEE 5001 FOR REFERENCE SOILS REPORT INFORMATION. REFERENCE THIS REPORT FOR ANY REQUIRED SITE BUILDING PAD PREPARATION PRIOR TO FOUNDATION AND/OR SLAB-ON-GRADE CONSTRUCTION. FOOTING EXCAVATIONS MAY BE REQUIRED TO EXTEND THROUGH EXISTING FILL REGIONS IN ORDER TO REACH ON SUITABLE MATERIAL. OVER EXCAVATIONS ARE TO BE FILLED WITH LEAN CONCRETE UP TO THE PLANNED BOTTOM OF FOOTING ELEVATION. PLACE AND CONCRETE PRIOR TO INSPECTION AND APPROVAL OF BEARING SURFACES BY SOILS ENGINEER.
- KEEP FOUNDATIONS FREE OF WATER AT ALL TIMES. REPLACE WEAKENED SOIL WITH LEAN CONCRETE OR FLOWABLE FILL.
- BOTTOM OF FOOTINGS ARE TO BE AT LEAST 32-INCHES BELOW THE ADJACENT EXTERIOR FINISHED GRADE FOR FROST PROTECTION.
- ELEVATIONS SHOWN ON FOOTINGS INDICATE ELEVATION AT TOP OF FOOTING. REFERENCE ELEVATION/TOP OF CONCRETE SLAB ELEVATION AS NOTED ON PLANS. COORDINATE ABSOLUTE ELEVATION/TOP OF SLAB WITH SITE DRAWINGS.
- COORDINATE THE LOCATION AND DEPTH OF ALL UNDERGROUND MECHANICAL, ELECTRICAL, PLUMBING, AND/OR CIVIL WORK PRIOR TO CONSTRUCTION. NOT ALL UNDERGROUND UTILITIES ARE SHOWN ON THE STRUCTURAL DRAWINGS. SEE SECTION 53300 FOR TRENCH EXCAVATION AND UTILITY PLACEMENT REQUIREMENTS FOR WORK THAT IS LAID ADJACENT TO FOOTINGS.
- PROVIDE CORNER BARS AT ALL FOOTING AND CONCRETE WALL INTERSECTIONS PER DETAIL 4/S300.
- INDICATES FOOTING STEP PER 2/S300.
- SEE SHEET 5001 FOR GENERAL STRUCTURAL INFORMATION.

CONT. WALL FOOTING SCHEDULE		
MARK	SIZE	REINFORCING
F30	2'-6" x 1'-0" DP.	(3) #5 CONT. BOT.
F36	3'-0" x 1'-2" DP.	(3) #5 CONT. BOT.
TS18	1'-6" x 1'-0" DP.	(2) #5 CONT. BOT.
TS24	2'-0" x 1'-0" DP.	(2) #5 CONT. BOT.
TS30	2'-6" x 1'-0" DP.	(3) #5 CONT. BOT.

SPREAD FOOTING SCHEDULE		
MARK	SIZE	REINFORCING
F4.0	4'-0" x 4'-0" x 1'-0" DP.	(4) #5 EA. WAY BOT.
F5.0	5'-0" x 5'-0" x 1'-0" DP.	(5) #5 EA. WAY BOT.
TS3.0	3'-0" x 3'-0" x 1'-0" DP.	(3) #4 EA. WAY BOT.

MAT FOOTING SCHEDULE		
MARK	THICKNESS	REINFORCING
M1	1'-4"	#5 @ 16" O.C. EA. WAY TOP & BOT


#	DATE	CHANGE DESCRIPTION
8	03/11/2024	ADDENDUM 8

COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA

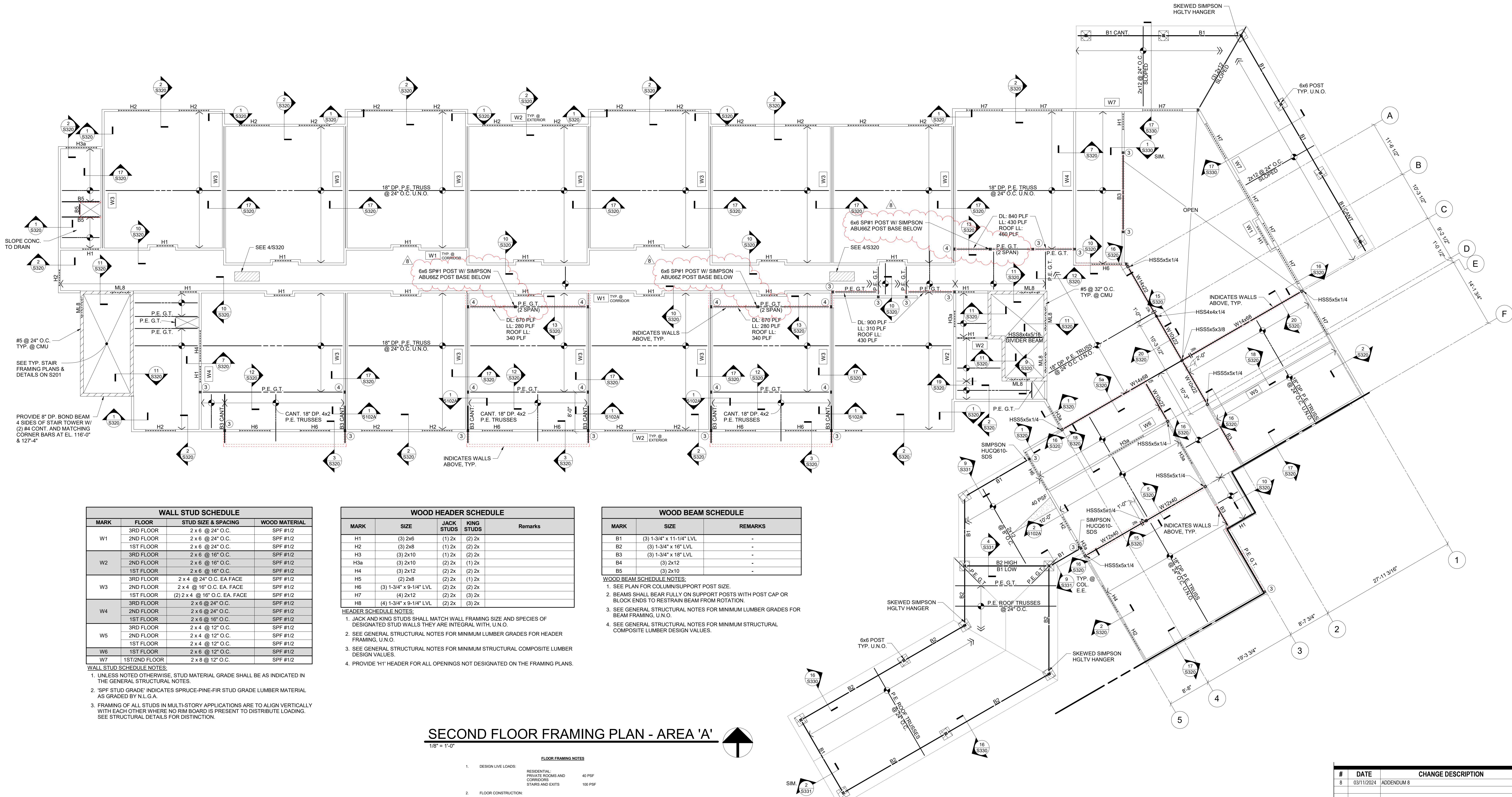
MOODY-NOLAN
300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215
PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:

FOUNDATION PLAN - AREA 'A'

	06/08/2023	
	DRAWN BY: Author	CHECKED BY: Checker
	#22172.01	
	S101A	
	OHFA FINAL SUBMISSION	

Jezerinac Geers
Structural Engineering
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5640 Franitz Road, Dublin, OH 43077
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www.jgeeng.com



WALL STUD SCHEDULE			
MARK	FLOOR	STUD SIZE & SPACING	WOOD MATERIAL
W1	3RD FLOOR	2 x 6 @ 24" O.C.	SPF #1/2
	2ND FLOOR	2 x 6 @ 24" O.C.	SPF #1/2
	1ST FLOOR	2 x 6 @ 24" O.C.	SPF #1/2
W2	3RD FLOOR	2 x 6 @ 16" O.C.	SPF #1/2
	2ND FLOOR	2 x 6 @ 16" O.C.	SPF #1/2
	1ST FLOOR	2 x 6 @ 16" O.C.	SPF #1/2
W3	3RD FLOOR	2 x 4 @ 24" O.C. EA. FACE	SPF #1/2
	2ND FLOOR	2 x 4 @ 16" O.C. EA. FACE	SPF #1/2
	1ST FLOOR	(2) 2 x 4 @ 16" O.C. EA. FACE	SPF #1/2
W4	3RD FLOOR	2 x 6 @ 24" O.C.	SPF #1/2
	2ND FLOOR	2 x 6 @ 24" O.C.	SPF #1/2
	1ST FLOOR	2 x 6 @ 16" O.C.	SPF #1/2
W5	3RD FLOOR	2 x 4 @ 12" O.C.	SPF #1/2
	2ND FLOOR	2 x 4 @ 12" O.C.	SPF #1/2
	1ST FLOOR	2 x 4 @ 12" O.C.	SPF #1/2
W6	1ST FLOOR	2 x 6 @ 12" O.C.	SPF #1/2
W7	1ST/2ND FLOOR	2 x 8 @ 12" O.C.	SPF #1/2

WALL STUD SCHEDULE NOTES:
1. UNLESS NOTED OTHERWISE, STUD MATERIAL GRADE SHALL BE AS INDICATED IN THE GENERAL STRUCTURAL NOTES.
2. 'SPF' STUD GRADE INDICATES SPRUCE-PINE-FIR STUD GRADE LUMBER MATERIAL AS GRADED BY N.L.G.A.
3. FRAMING OF ALL STUDS IN MULTI-STORY APPLICATIONS ARE TO ALIGN VERTICALLY WITH EACH OTHER WHERE NO RIM BOARD IS PRESENT TO DISTRIBUTE LOADING. SEE STRUCTURAL DETAILS FOR DISTINCTION.

WOOD HEADER SCHEDULE				
MARK	SIZE	JACK STUDS	KING STUDS	Remarks
H1	(3) 2x6	(1) 2x	(2) 2x	
H2	(3) 2x6	(1) 2x	(2) 2x	
H3	(3) 2x10	(1) 2x	(2) 2x	
H3a	(3) 2x10	(2) 2x	(1) 2x	
H4	(3) 2x12	(2) 2x	(2) 2x	
H5	(2) 2x6	(2) 2x	(1) 2x	
H6	(3) 1-3/4" x 9-1/4" LVL	(2) 2x	(2) 2x	
H7	(4) 2x12	(2) 2x	(3) 2x	
H8	(4) 1-3/4" x 9-1/4" LVL	(2) 2x	(3) 2x	

HEADER SCHEDULE NOTES:
1. JACK AND KING STUDS SHALL MATCH WALL FRAMING SIZE AND SPECIES OF DESIGNATED STUD WALLS THEY ARE INTEGRAL WITH. U.N.O.
2. SEE GENERAL STRUCTURAL NOTES FOR MINIMUM LUMBER GRADES FOR HEADER FRAMING, U.N.O.
3. SEE GENERAL STRUCTURAL NOTES FOR MINIMUM STRUCTURAL COMPOSITE LUMBER DESIGN VALUES.
4. PROVIDE 'H1' HEADER FOR ALL OPENINGS NOT DESIGNATED ON THE FRAMING PLANS.

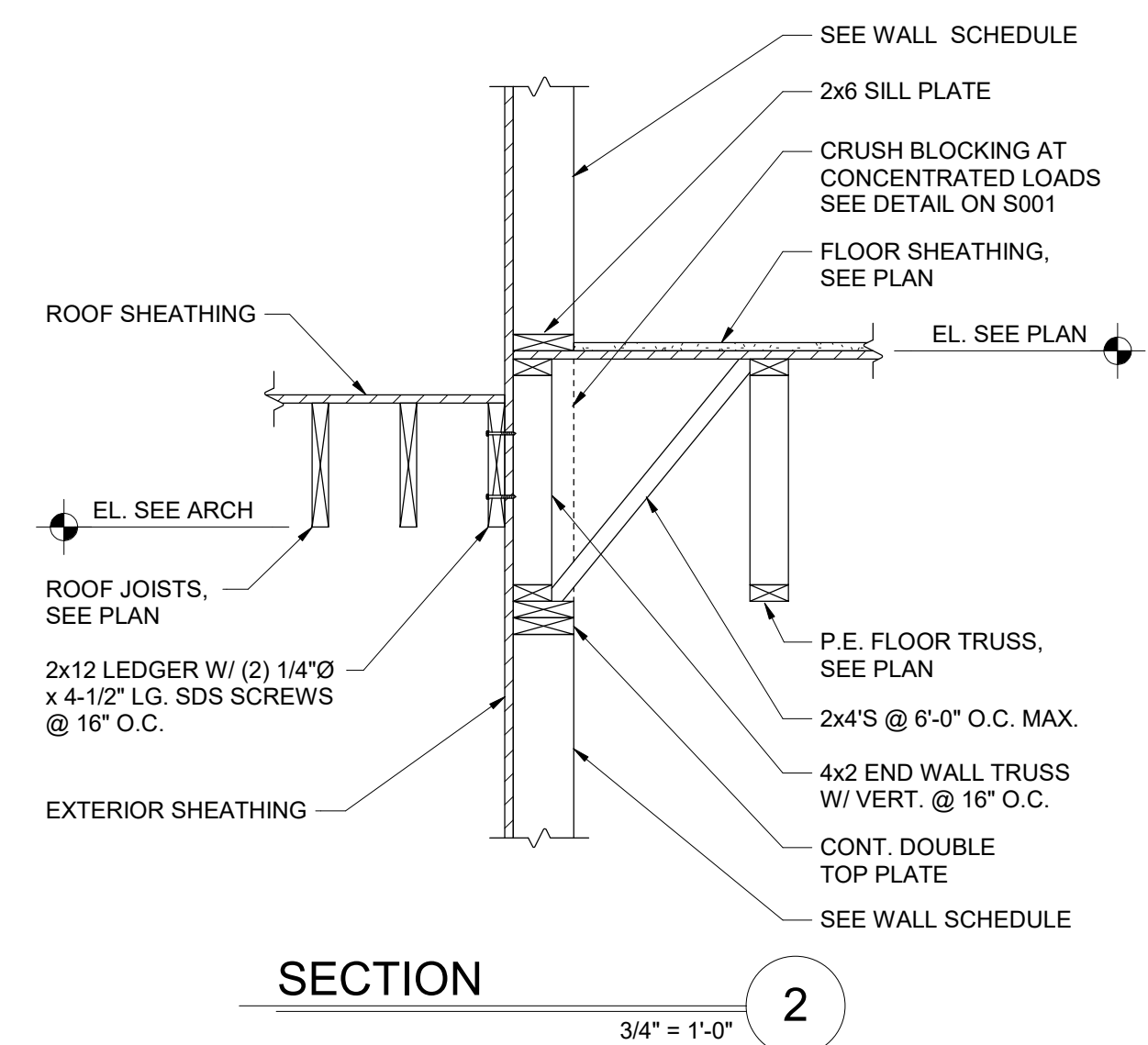
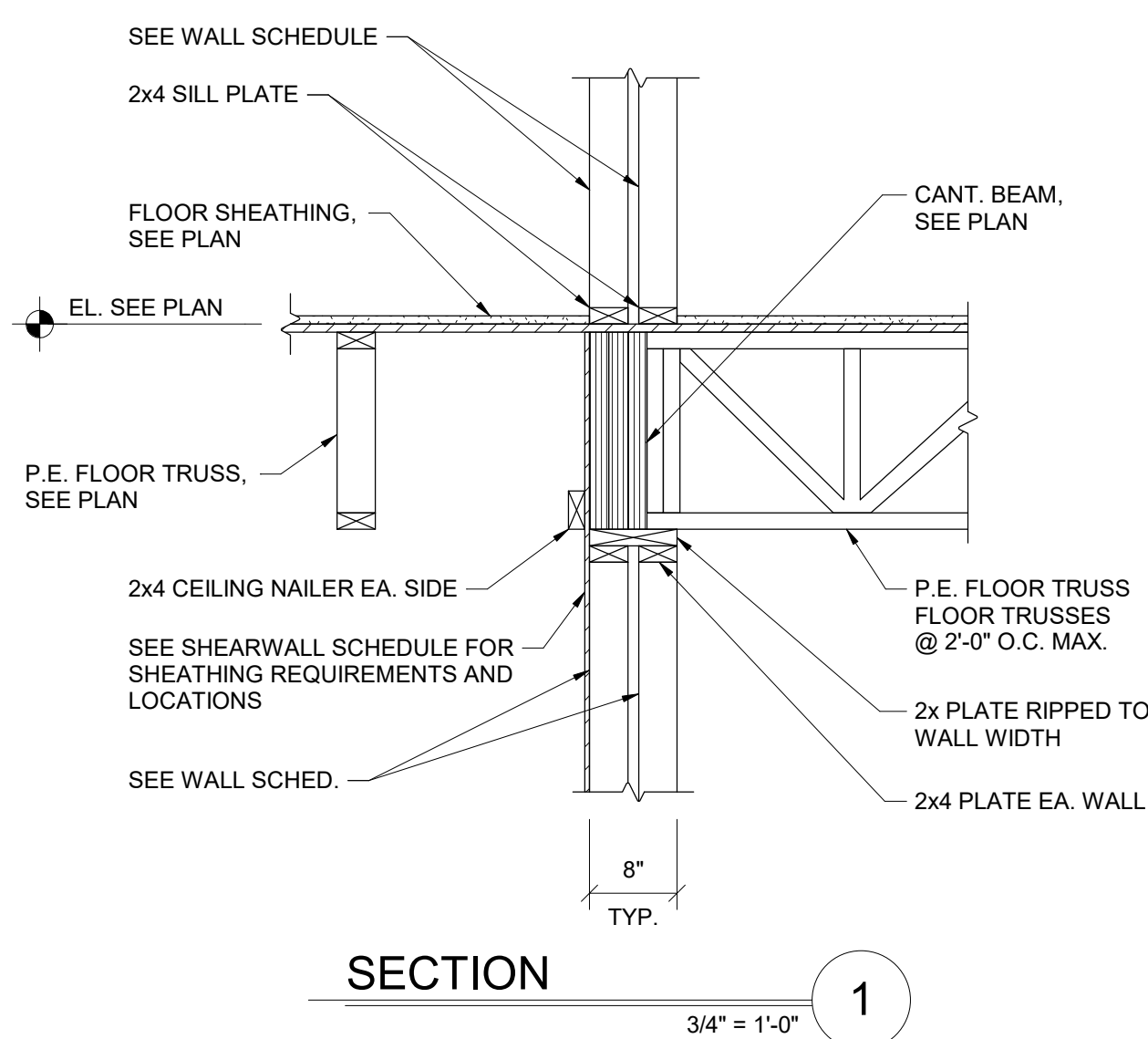
WOOD BEAM SCHEDULE		
MARK	SIZE	REMARKS
B1	(3) 1-3/4" x 11-1/4" LVL	-
B2	(3) 1-3/4" x 16" LVL	-
B3	(3) 1-3/4" x 18" LVL	-
B4	(3) 2x12	-
B5	(3) 2x10	-

WOOD BEAM SCHEDULE NOTES:
1. SEE PLAN FOR COLUMN/SUPPORT POST SIZE.
2. BEAMS SHALL BEAR FULLY ON SUPPORT POSTS WITH POST CAP OR BLOCK ENDS TO RESTRAIN BEAM FROM ROTATION.
3. SEE GENERAL STRUCTURAL NOTES FOR MINIMUM LUMBER GRADES FOR BEAM FRAMING, U.N.O.
4. SEE GENERAL STRUCTURAL NOTES FOR MINIMUM STRUCTURAL COMPOSITE LUMBER DESIGN VALUES.

SECOND FLOOR FRAMING PLAN - AREA 'A'

1/8" = 1'-0"

- FLOOR FRAMING NOTES**
- DESIGN LIVE LOADS:
RESIDENTIAL PRIVATE ROOMS AND CORRIDORS 40 PSF
STAIRS AND EXITS 100 PSF
 - FLOOR CONSTRUCTION:
3/4" DRYCRETE SEE ARCH. FOR LOCATIONS OF 1/4" SOUND/MAT OVER 3/4" NOMINAL TONGUE-AND-GROOVE, APA RATED STUDS (40% EXPOSURE 1, WITH A MINIMUM SPAN RATING), GLUE AND NAIL WITH ADHESIVES MEETING APA SPECIFICATIONS AND 6:1 AND APPLIED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. PROVIDE TWO COMMON NAILS AT 6" O.C. AT ALL PANEL EDGES AND 12" O.C. AT ALL INTERMEDIATE SUPPORTS UNLESS NOTED OTHERWISE. PANEL EDGES NEED NOT BE BLOCKED UNLESS NOTED OTHERWISE.
 - REFERENCE ELEVATION IS 100'-0" = TOP OF FIRST FLOOR SLAB ON GRADE. REFERENCE CIVIL DRAWINGS FOR ABSOLUTE ELEVATION. TOP OF FLOOR SHEATHING FOR EACH LEVEL IS AS FOLLOWS:
2ND FLOOR: EL. = 109'-3 3/4"
3RD FLOOR: EL. = 121'-5 1/2"
 - ML# INDICATES MASONRY LOOSE UNTEL FOR WALL OPENINGS. SEE ARCHITECTURAL DRAWINGS FOR OPENING DIMENSIONS AND SHEET S302 FOR MASONRY UNTEL TYPES AND SCHEDULE.
 - BW INDICATES WOOD BEAM PER SCHEDULE. SEE DETAILS S302 FOR TYPICAL BEAM CONNECTIONS.
 - H# INDICATES WOOD HEADER FOR WALL OPENINGS PER SCHEDULE. SEE ARCHITECTURAL DRAWINGS FOR OPENING DIMENSIONS AND DETAILS ON S302 FOR STANDARD HEADER CONSTRUCTION.
 - # INDICATES THE NUMBER OF 2x4 WOOD STUDS REQUIRED TO CREATE A STUD COLUMN SUPPORT UNDER BEAM OR GIRDER BEARING. PROVIDE A MINIMUM OF (2) 2x4 STUDS AT ALL BEAMS AND GIRDER TRUSSES, UNLESS NOTED OTHERWISE.
 - SEE ARCHITECTURAL DRAWINGS FOR ANY DIMENSIONS NOT INDICATED HEREIN.
 - SEE SHEET S301 FOR GENERAL STRUCTURAL INFORMATION AND S305 FOR SHEAR WALL INFORMATION.



#	DATE	CHANGE DESCRIPTION
8	03/11/2024	ADDENDUM 8




COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA



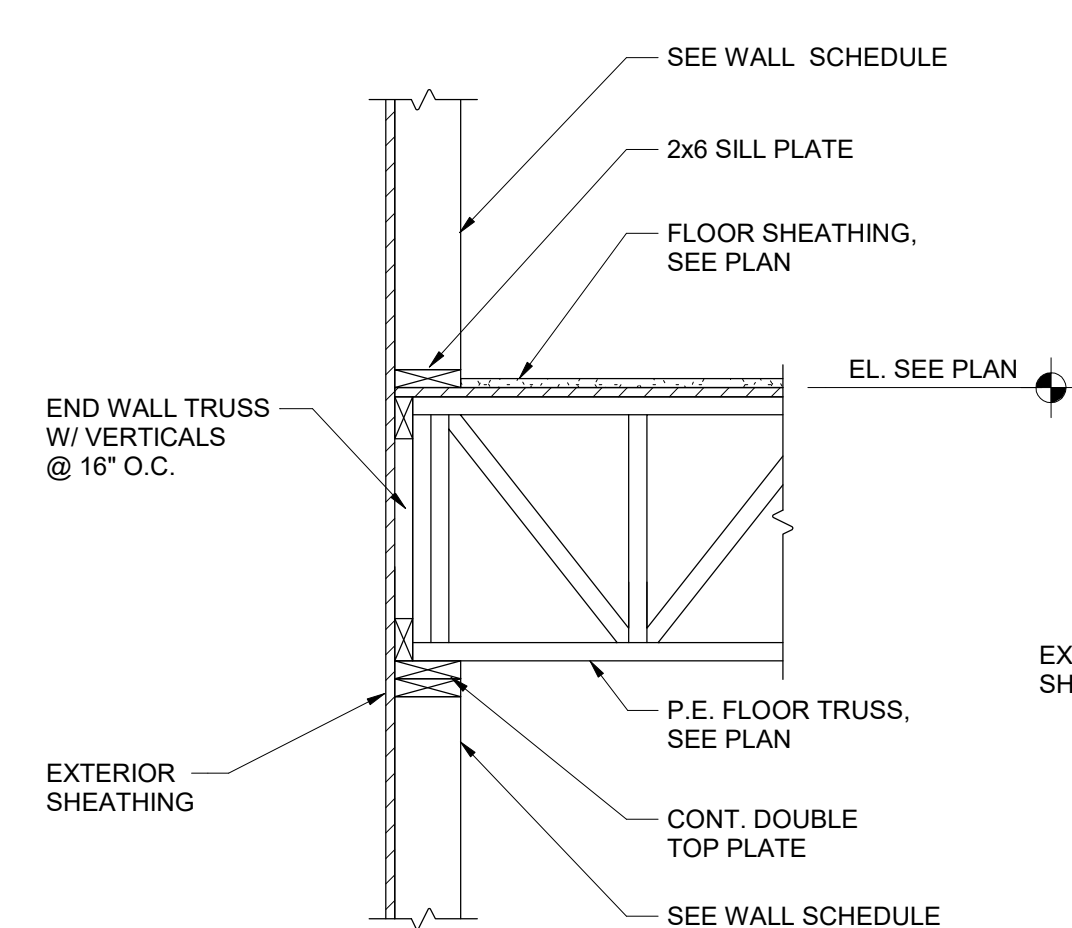
300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215
PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE: SECOND FLOOR FRAMING PLAN - AREA 'A'

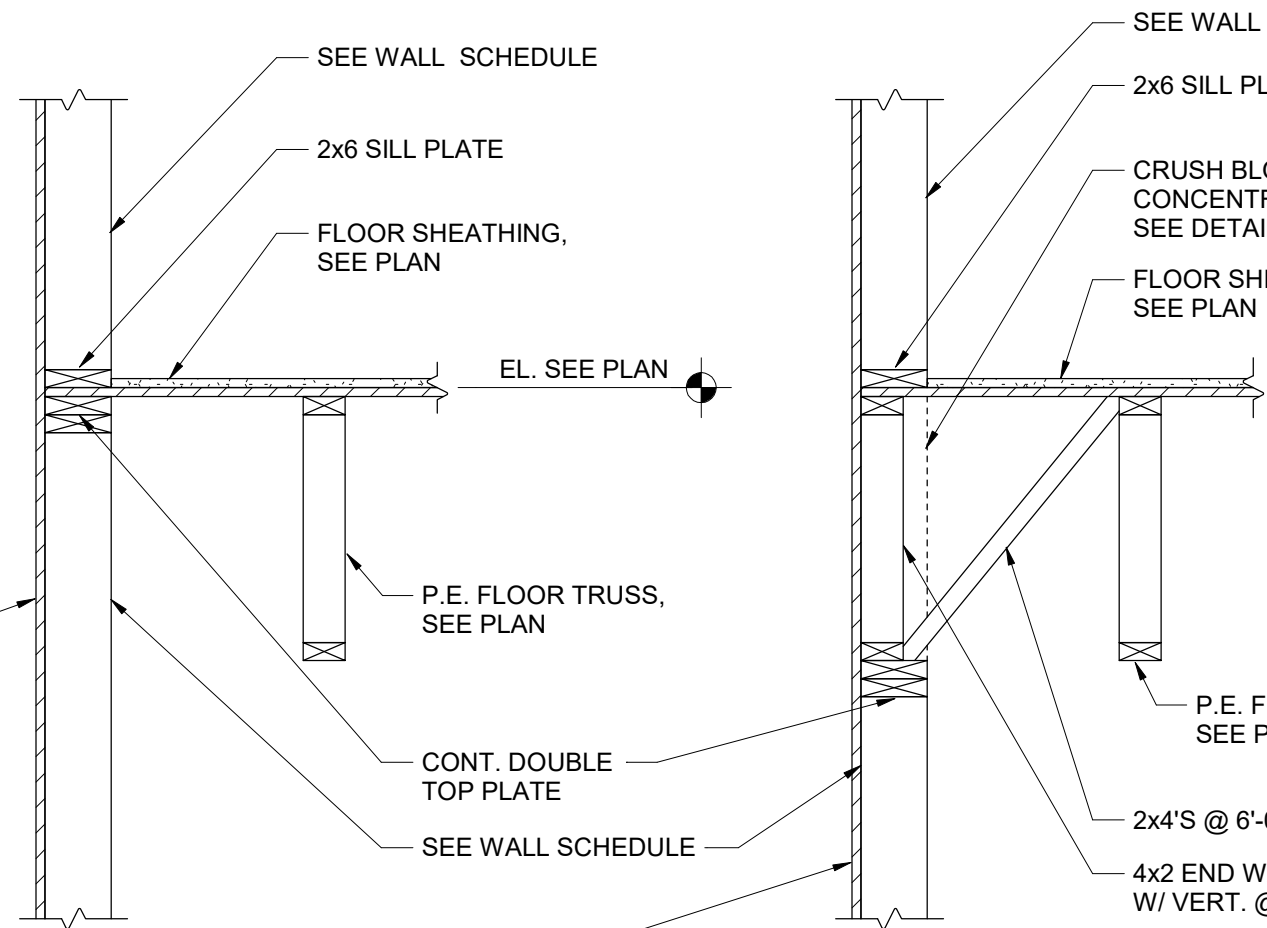


STATE OF OHIO
ROBERT L. JOHNSON, JR.
E-71804
REGISTERED PROFESSIONAL ENGINEER

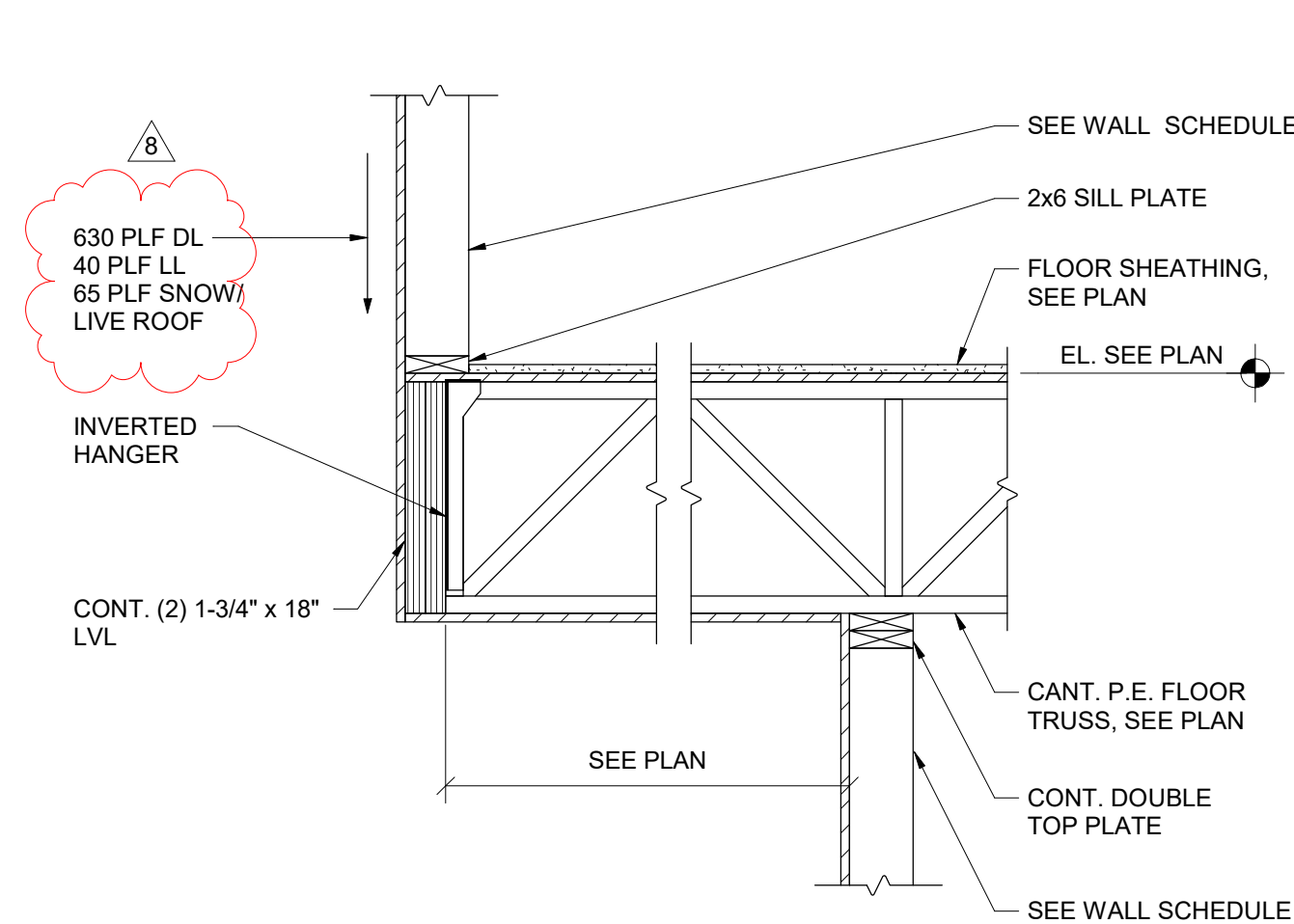
06/08/2023
DRAWN BY: Author
CHECKED BY: Checker
#22172.01
S102A
OHFA FINAL SUBMISSION



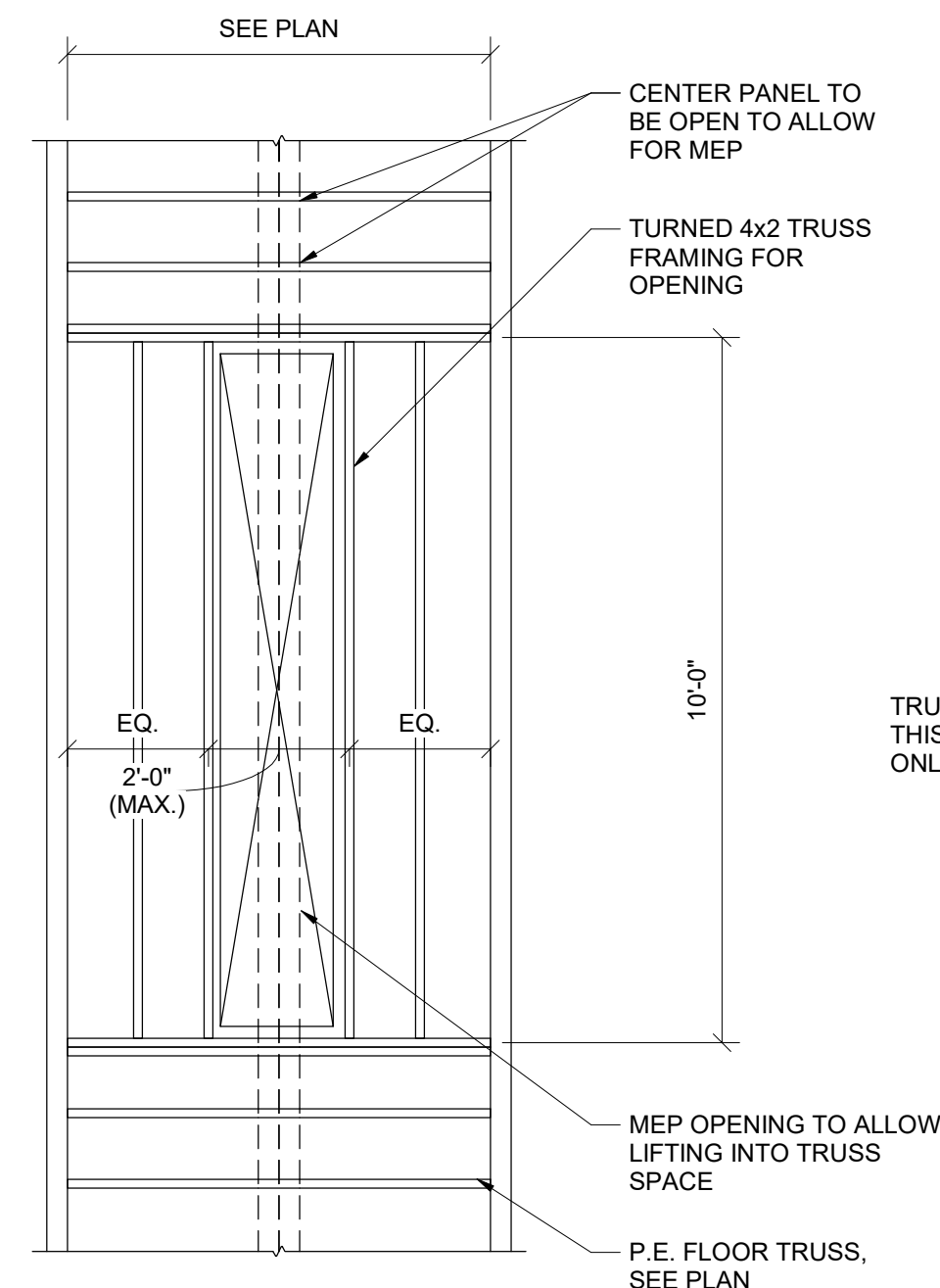
SECTION 1
3/4" = 1'-0"



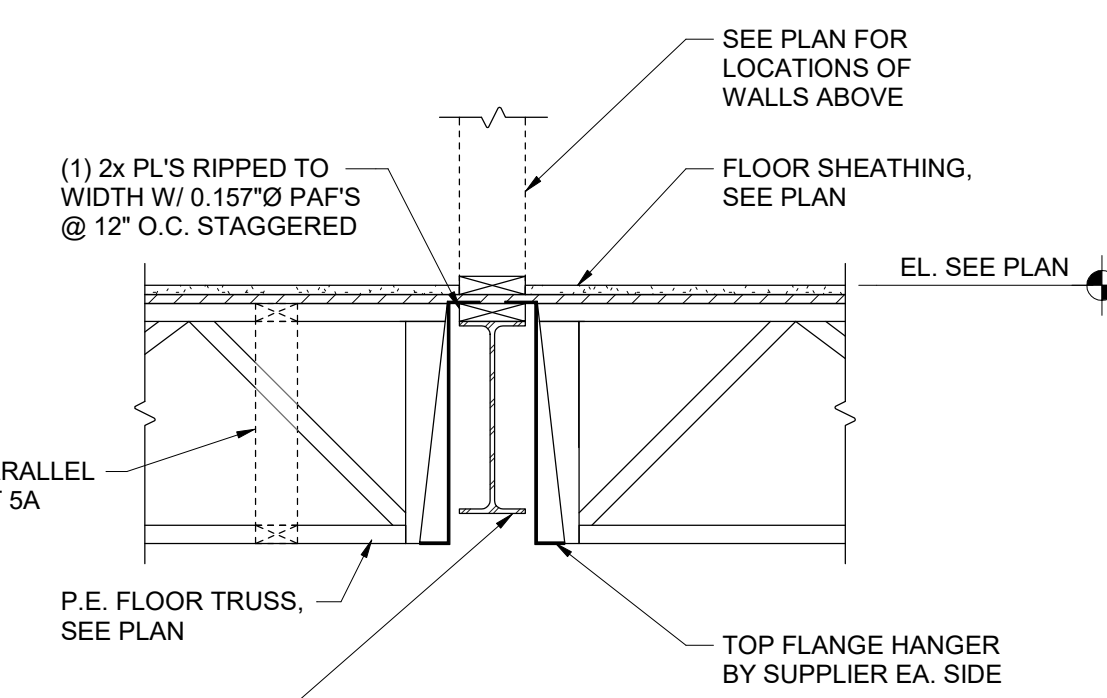
SECTION 2
3/4" = 1'-0"



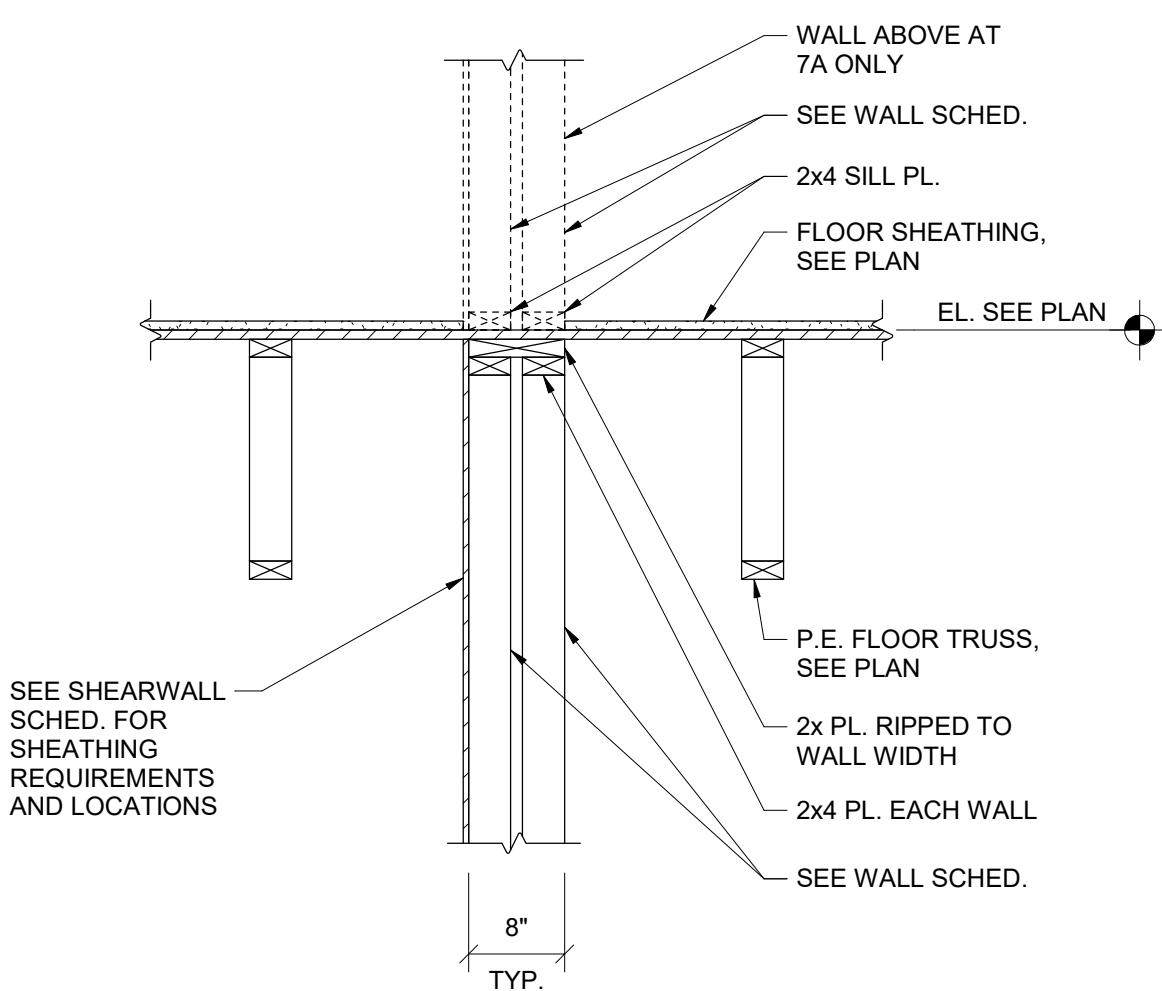
SECTION 3
3/4" = 1'-0"



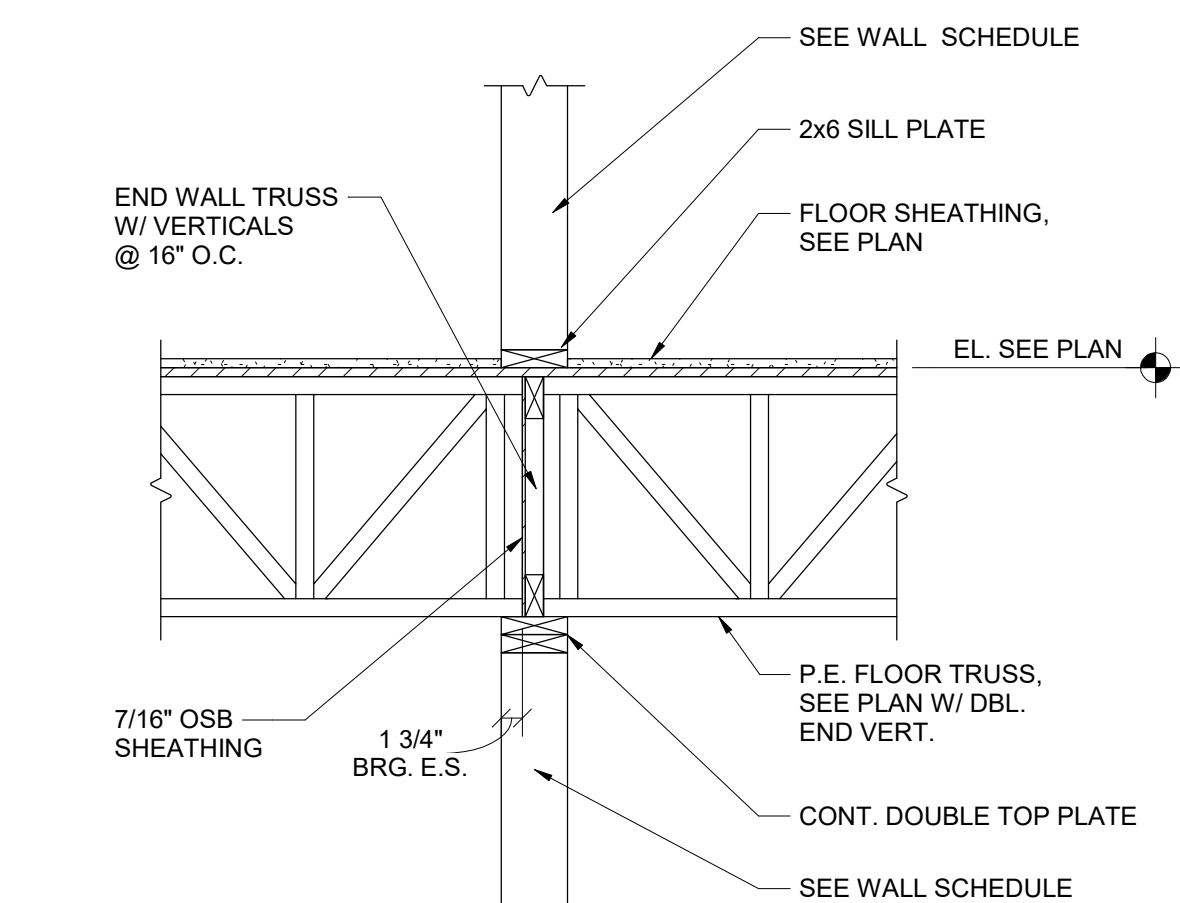
SECTION 4
3/8" = 1'-0"



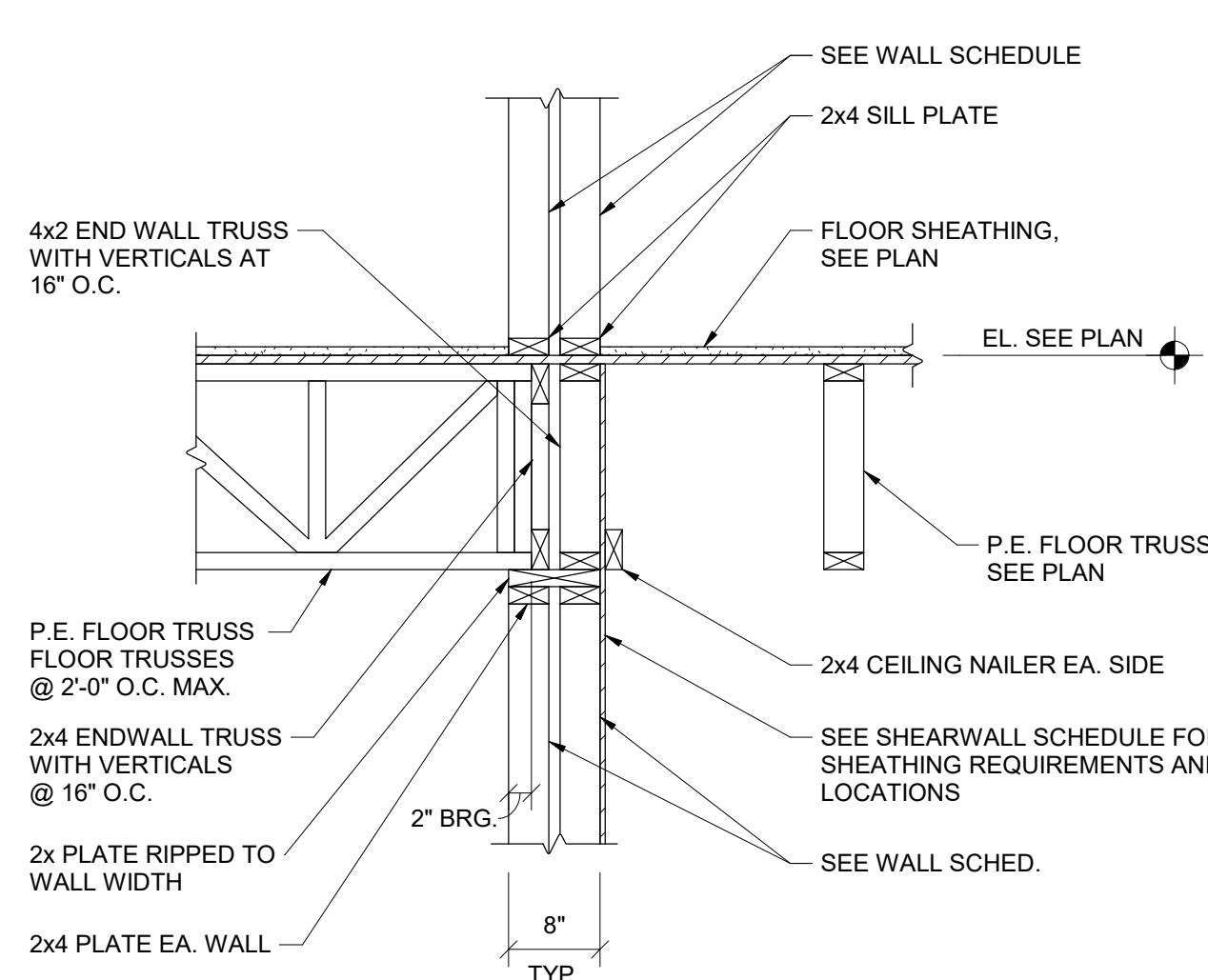
SECTION 5
3/4" = 1'-0"



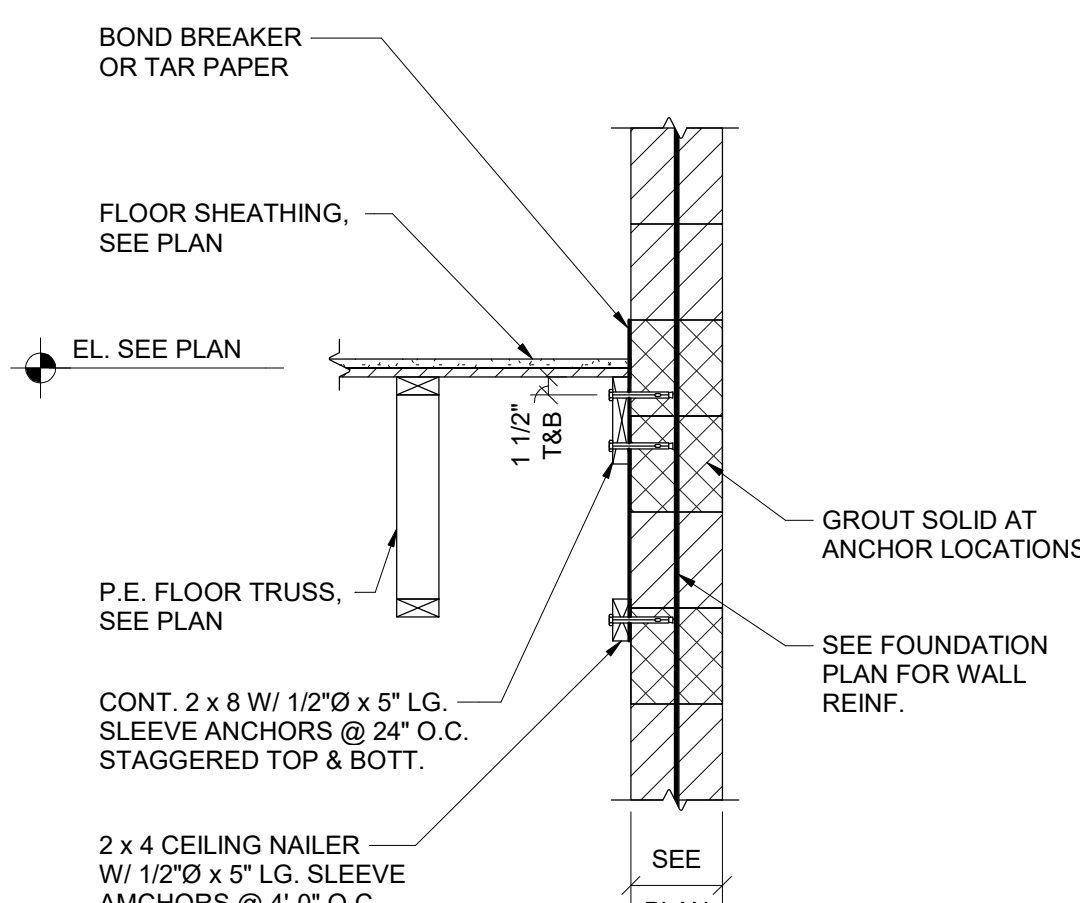
SECTION 6
3/4" = 1'-0"



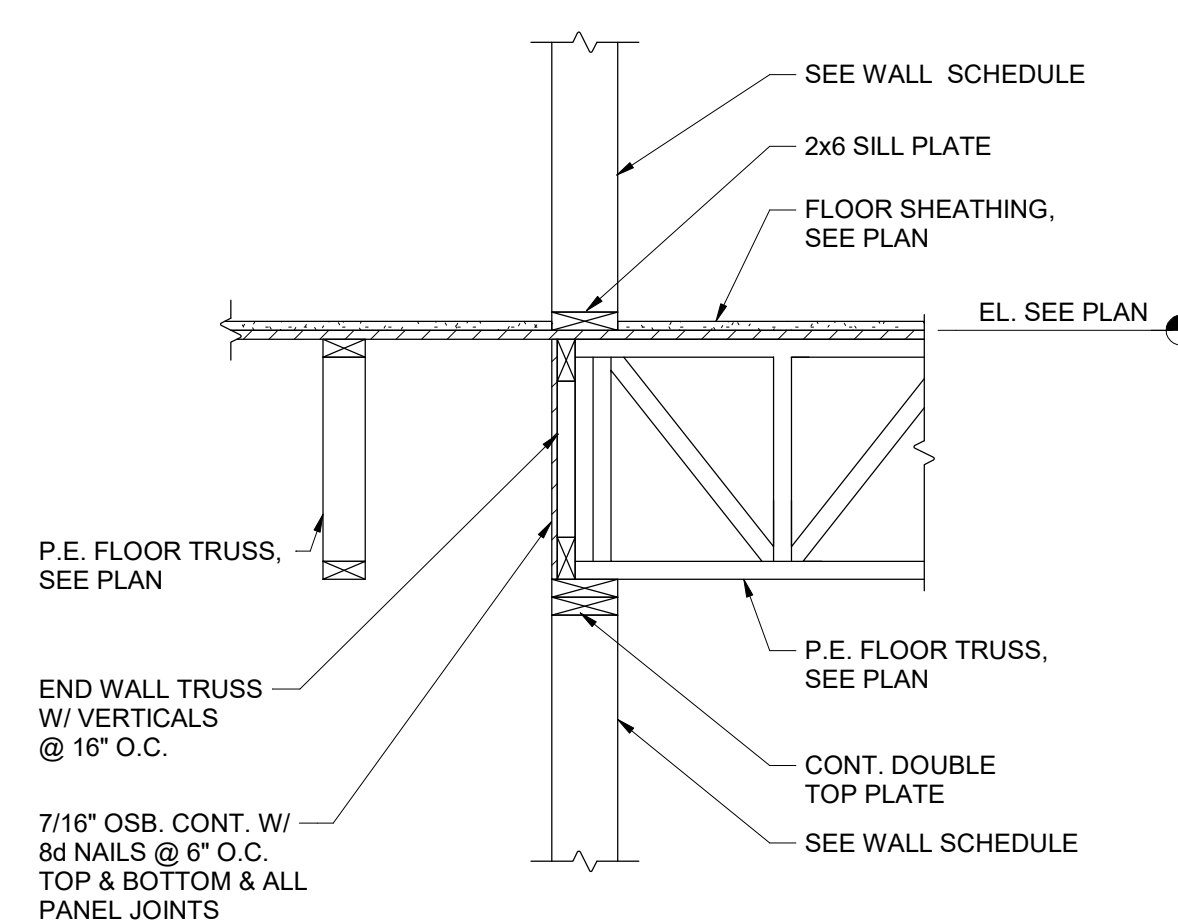
SECTION 7
3/4" = 1'-0"



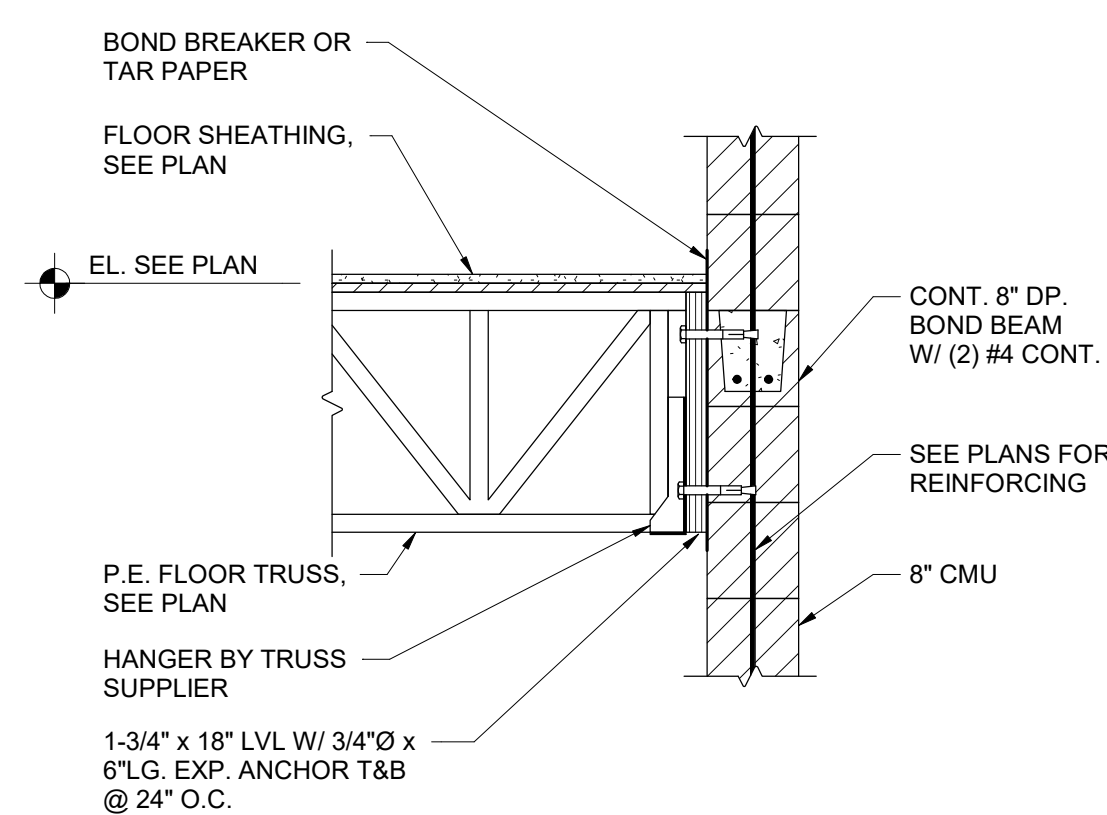
SECTION 8
3/4" = 1'-0"



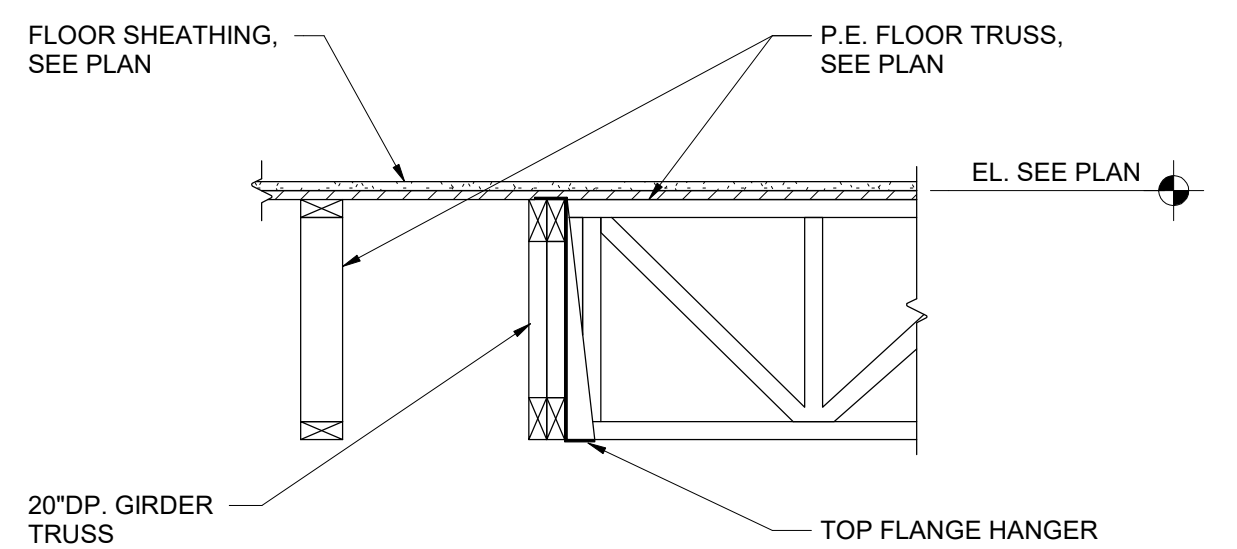
SECTION 9
3/4" = 1'-0"



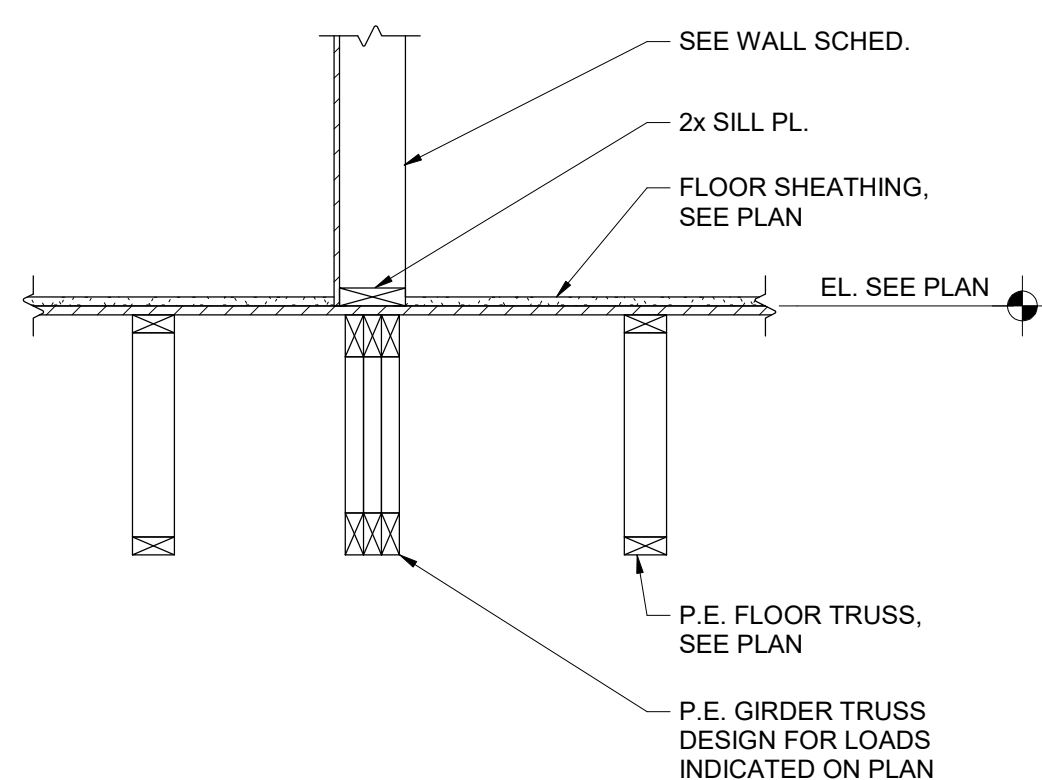
SECTION 10
3/4" = 1'-0"



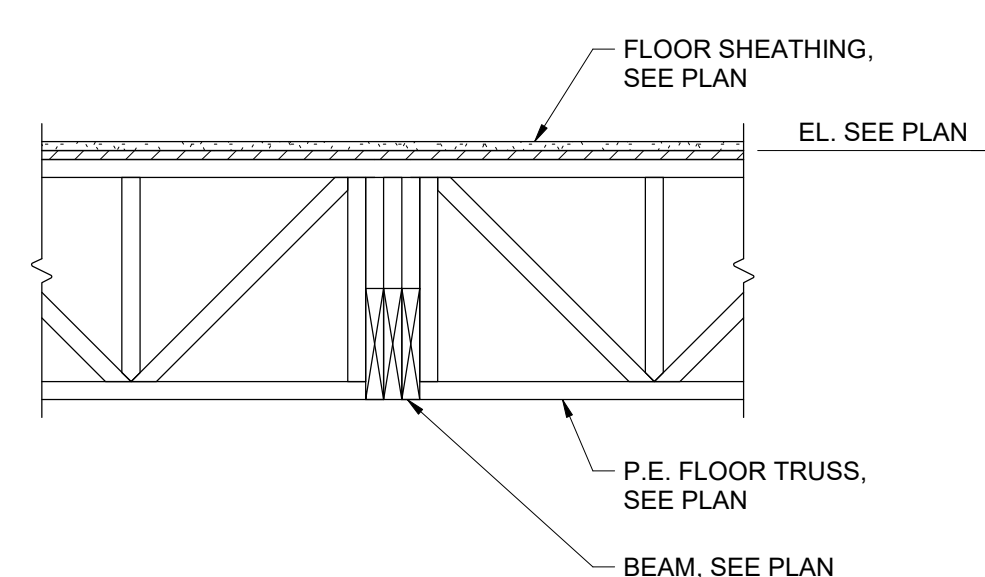
SECTION 11
3/4" = 1'-0"



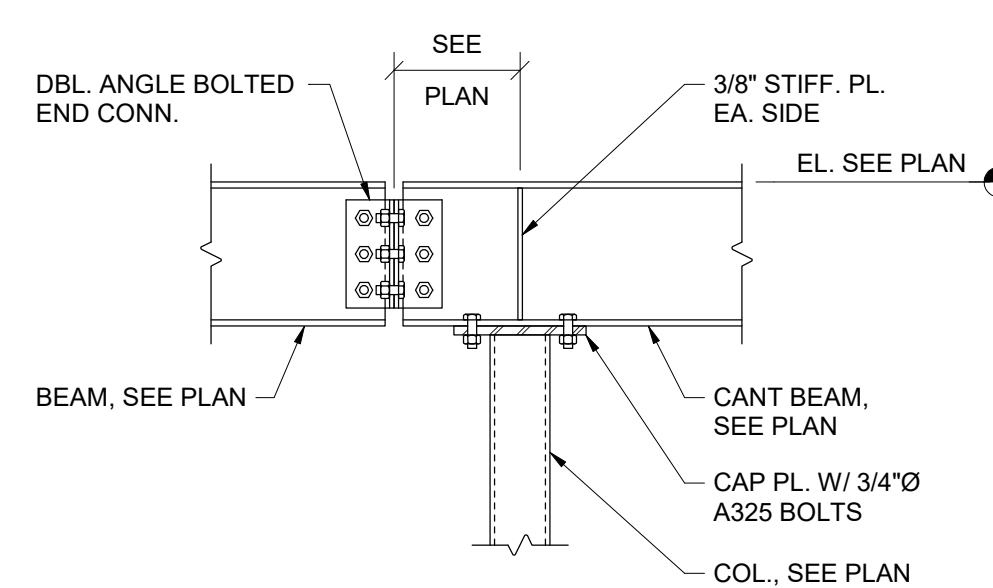
SECTION 12
3/4" = 1'-0"



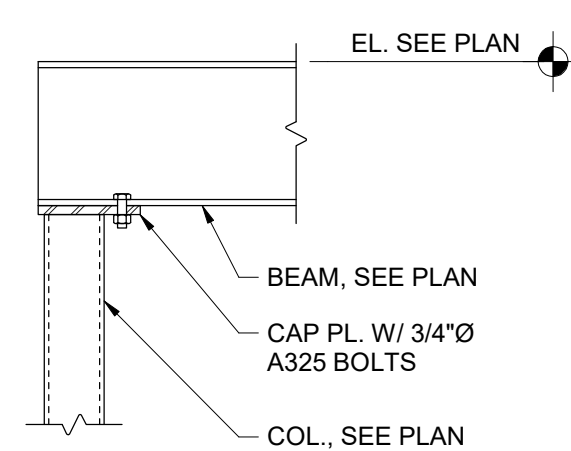
SECTION 13
3/4" = 1'-0"



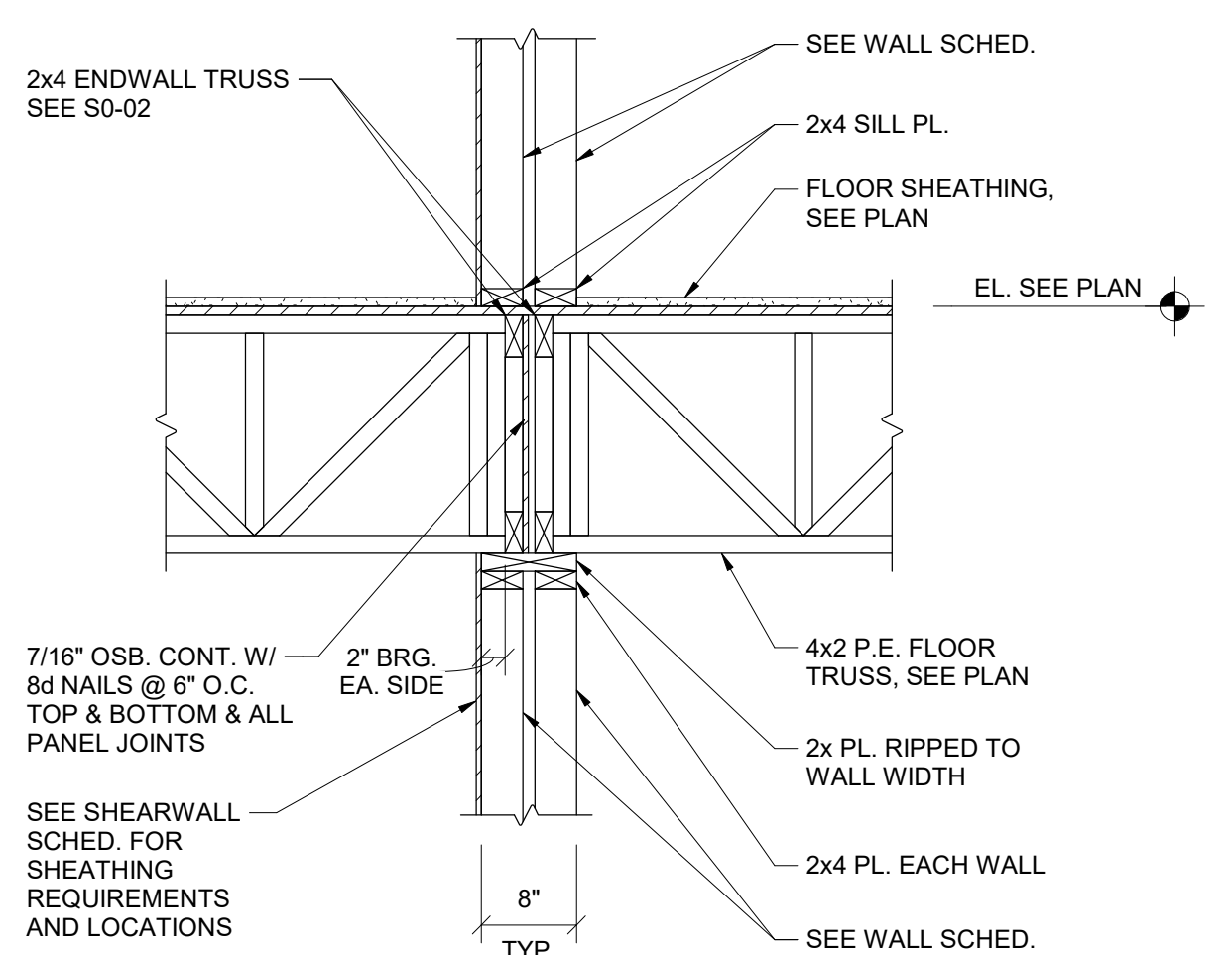
SECTION 14
3/4" = 1'-0"



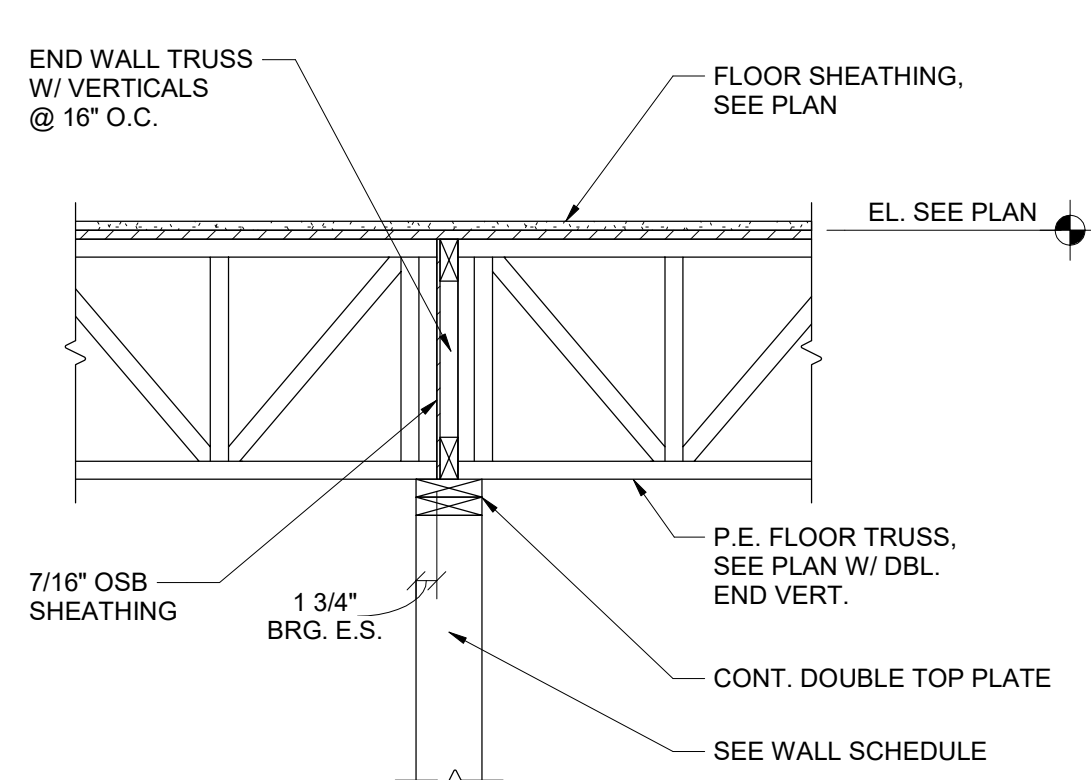
SECTION 15
3/4" = 1'-0"



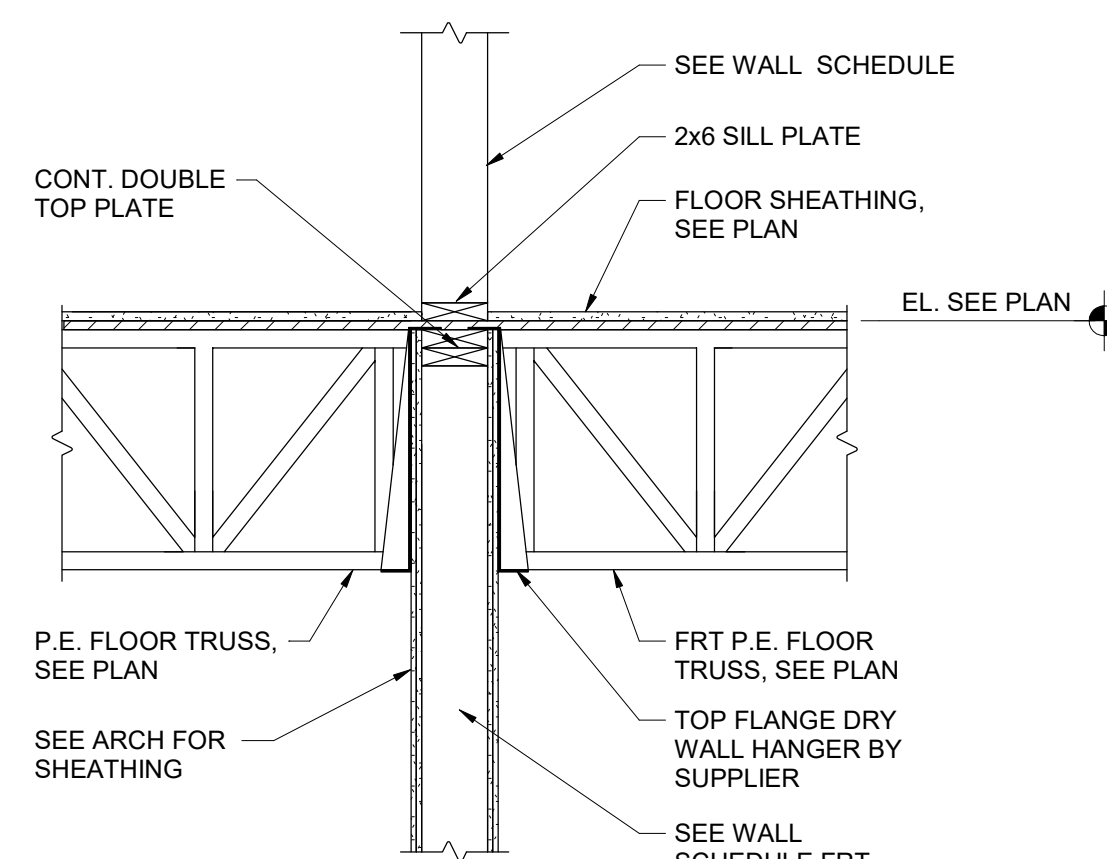
SECTION 16
3/4" = 1'-0"



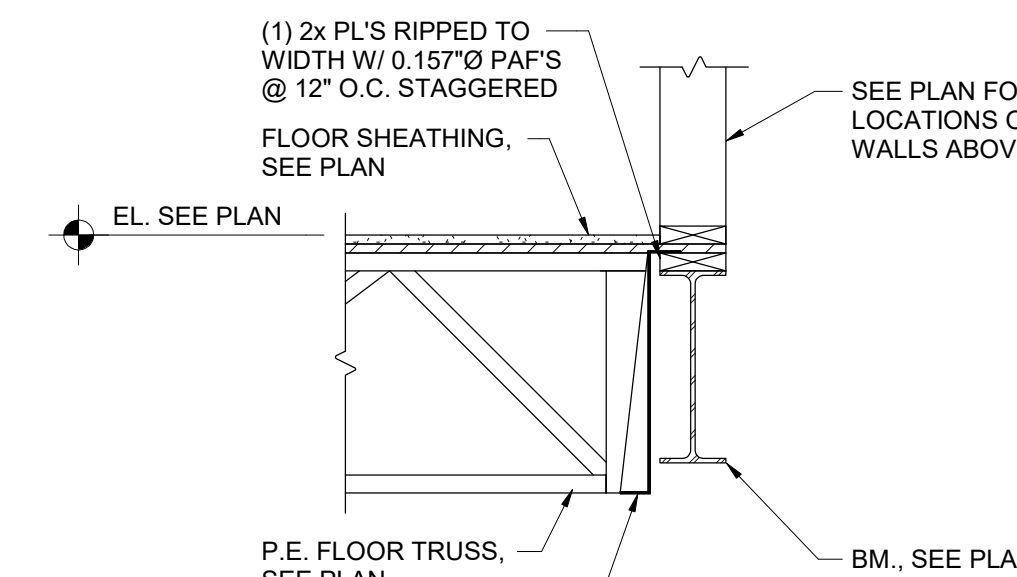
SECTION 17
3/4" = 1'-0"



SECTION 18
3/4" = 1'-0"



SECTION 19
3/4" = 1'-0"



SECTION 20
3/4" = 1'-0"

#	DATE	CHANGE DESCRIPTION
8	03/11/2024	ADDENDUM 8




COBBLESTONE MANOR
100 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA



300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215
PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:

FRAMING DETAILS



06/08/2023
DRAWN BY: Author
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#22172.01
S320
OHFA FINAL SUBMISSION

LEGEND - FLOOR PLAN

- 1 HOUR FIRE RATING - INCLUDING BUT NOT LIMITED TO EXTERIOR WALLS, UNIT DEMISING WALLS, STAIR & ELEVATOR WALLS, SHAFT WALLS.
- 1 HOUR FIRE RATING - CORRIDOR WALLS
- 2 HOUR FIRE RATING
- INTERIOR PARTITION
- SENSORY (HEARING / VISUALLY IMPAIRED) UNIT** - SEE OVERALL FLOOR PLANS FOR LOCATIONS. LOCATE MEP EQUIPMENT AND DEVICES TO MAINTAIN CLEARANCES AS NOTED AND AS DASHED IN FLOOR PLANS. SEE MEP DRAWINGS FOR ADDITIONAL INFO.
- ANSI TYPE A UNIT** - SEE OVERALL FLOOR PLANS FOR LOCATIONS. LOCATE MEP EQUIPMENT AND DEVICES TO MAINTAIN CLEARANCES AS NOTED AND AS DASHED IN FLOOR PLANS. UNITS TO ALSO INCLUDE SENSORY (HEARING / VISUALLY IMPAIRED) UNIT FEATURES. SEE MEP DRAWINGS FOR ADDITIONAL INFO.
- DIRECTION OF INSTALLATION OF LVT FLOORING. SEE FINISH SCHEDULE FOR ADDITIONAL INFO.
- DOOR TYPE
- REQUIRED 30"x48" CLEAR FLOOR SPACE - 48" SHALL BE CENTERED AT APPLIANCES AND SINKS
- UNOBSTRUCTED CLEARANCE FOR PATH OF ACCESSIBLE MEANS OF EGRESS, MIN. 36" REQUIRED

CODED NOTE LEGEND

- METAL ROOFING SYSTEM
- MEMBRANE ROOFING SYSTEM
- PROJECTION OF FLOOR ABOVE (DASHED)
- WOOD HANDRAIL ONE 1-SIDE OF CORRIDORS @36"-38" MAX. A.F.F. SEE PLAN FOR EXTENT AND LOCATION. SEE DETAIL 10A820.
- WOOD CHAIR RAIL ONE 1-SIDE OF CORRIDORS @36"-38" MAX. A.F.F. SEE PLAN FOR EXTENT AND LOCATION. SEE DETAIL 10A820.
- MECHANICAL ROOF SCREEN AND SUPPORT.
- MECHANICAL ROOF-TOP UNITS. SEE MECHANICAL DRAWINGS & SPECIFICATIONS.
- FIRE EXTINGUISHER IN SEMI-RECESSED CABINET. PROVIDE RATED CABINETS AT RATED WALL LOCATIONS.
- TOP OF LAUNDRY ROOM COUNTER TO BE AT 34 INCHES MAXIMUM AFF. PROVIDE AND INSTALL PLAIN COUNTER WITH COUNTERTOP METAL SUPPORTS. PROVIDE INTERMEDIATE SUPPORTS AS REQUIRED.
- MAXIMUM OCCUPANCY SIGNAGE PLATE IN COMMUNITY RM. WELLNESS RM. FLEX SPACE (TYPE C). REFER SIGNAGE LEGEND AND SCHEDULE ON SHEET A831.
- ACCESSIBLE UNISEX RESTROOM SIGNAGE PLATE (TYPE A). REFER SIGNAGE LEGEND AND SCHEDULE ON SHEET A831.
- FIRE EXIT IDENTIFIER ELEVATOR SIGNAGE PLATE (TYPE D). REFER SIGNAGE LEGEND AND SCHEDULE ON SHEET A831.
- SMOKE FREE AND WEAPONS FREE VINYL DECAL APPLIED ON GLASS STAFF FRONT IN THE VESTIBULE (TYPE F). REFER SIGNAGE LEGEND AND SCHEDULE ON SHEET A831.
- ELECTRICAL CONTROL PANEL ROOM IDENTIFIER SIGNAGE PLATE ON THE DOOR OF THE E-100 (TYPE E).
- STAIR EXIT IDENTIFIER SIGNAGE PLATE (TYPE B). REFER SIGNAGE LEGEND AND SCHEDULE ON SHEET A831.
- 3" ACROVYN CORNER GUARD. SEE SPECIFICATIONS.
- SET DUMPSTER ENCLOSURE WALL 4" OFF OF THE BUILDING - RETURN BRICK TO THE INSIDE.
- SLOPE ENTIRE TRASH ROOM SLAB TO FLOOR DRAIN.

FLOOR PLAN GENERAL NOTES

- A. EXTERIOR WALL DIMENSIONS ARE TO EXTERIOR FACE OF EXTERIOR SHEATHING OR EXTERIOR FACE OF BRICK. ALL OTHER DIMENSIONS ARE TO FINISH FACE OF WALL (UNLESS NOTED OTHERWISE).
- B. SEE STRUCTURAL DRAWINGS FOR LOCATIONS OF ALL STEEL REINFORCING IN WALL & FLOOR CONSTRUCTION.
- C. SEE ENLARGED PLANS AND FINISH SCHEDULE FOR ADDITIONAL INFORMATION OF LOCATIONS AND TYPES OF FINISH MATERIALS.
- D. ALL UNITS ARE TYPICAL (ANSI TYPE B). UNO. SEE ENLARGED UNIT FLOOR PLANS FOR UNIT TYPE AND ADDITIONAL INFORMATION.
- E. SEE ELEVATIONS & STRUCTURAL DRAWINGS FOR LOCATIONS OF EXPANSION & CONTROL JOINTS. CONTRACTOR SHALL PROVIDE ADDITIONAL INTERIOR CONTROL JOINTS AS REQUIRED TO COMPLY WITH MAXIMUM SPACING REQUIREMENTS IN SPECIFICATIONS AND NATIONAL MASONRY INSTITUTE MECHANICAL & ELECTRICAL EQUIPMENT SHALL BE ON HOUSEKEEPING PADS. PADS ARE TO BE PROVIDED BY THE TRADE SUPPLYING THE EQUIPMENT. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION. WORK TO BE COORDINATED THROUGH THE GENERAL TRADES CONTRACTOR. PADS 4" MIN. 4" THICK W/ W.W.F. UNLESS NOTED OTHERWISE. PROVIDE AND INSTALL BY GC.
- F. ALL INTERIOR GYPSUM BOARD PARTITIONS TO INCLUDE THE USE OF 5/8" GYPSUM BOARD WHERE NEW SHOWERS & SURROUNDS, ALL SINKS, WATER HEATERS AND CLOTHES WASHERS ARE BEING PROVIDED AND INSTALLED. GYPSUM BOARD / SUBSTRATE IS TO BE MOISTURE-RESISTANT SUBSTRATE (NON-PAPER FACED), WITHIN 4 FEET OF ANY WATER SOURCES WHERE DRYWALL CAN BE SPLASHED.
- G. DRYWALL CAN BE SPLASHED.
- H. FOR 1-PIECE SHOWER UNIT, IT IS NOT REQUIRED TO INSTALL DRYWALL OR TYPE BEHIND UNIT EXCEPT AT FIRE RATED WALL ASSEMBLIES. INSTALL GYPSUM BOARD AS REQUIRED.
- I. ALL DOORS LOCATED FOR PUBLIC ACCESS, ALL RESIDENTIAL ENTRANCES AND ALL USABLE DOORS IN ANSI TYPE A UNITS SHALL BE INSTALLED TO MAINTAIN THE DOOR CLEARANCE (32" MINIMUM) REQUIREMENTS OUTLINED ON THE TYPICAL PROJECT DETAILS SHEETS ON A810820.
- J. ACCESSIBLE ROUTE WITH SHALL BE 36" MINIMUM. CONTINUOUS AND UNOBSTRUCTED, CONNECTING ACCESSIBLE ELEMENTS AND SPACES.
- K. THRESHOLDS, IF PROVIDED AT PUBLIC DOORWAYS AND IN ANSI TYPE A UNITS, MUST BE 1/2 INCH-HIGH MAXIMUM. CHANGES IN LEVEL OF 1/4 INCH HIGH MAXIMUM ARE PERMITTED TO BE VERTICAL. CHANGES IN LEVEL BETWEEN 1/4 INCH HIGH MINIMUM AND 1/2 INCH HIGH MAXIMUM MUST BE BEVELED WITH A SLOPE NOT STEEPER THAN 1:2.
- L. COORDINATE TRUSS LAYOUT AND DESIGN WITH MECHANICAL, ELECTRICAL AND PLUMBING LAYOUT PRIOR TO FABRICATION. TRUSS SHOP DRAWINGS SHALL INDICATE PLUMBING LINES AND HVAC DUCTS. PROVIDE COORDINATION DRAWING TO ARCHITECT. FRAMING CONTRACTOR SHALL COORDINATE TRUSS FRAMING OFFSETS AS REQUIRED TO ACCOMMODATE SANITARY LINES AND OTHER MEP EQUIPMENT / FIXTURES.
- M. INSTALL ACOUSTIC BATT INSULATION AT PARTITIONS WITH PLUMBING STACKS, DEMISING WALLS AND FLOOR/CEILING ASSEMBLIES.
- N. WATER SUPPLY AND DRAIN PIPES UNDER LAVATORIES AND SINKS MUST BE INSULATED TO PROTECT AGAINST CONTACT, INCLUDING COLD WATER SUPPLIES. PROVIDE SPRAY FOAM INSULATION AT DEMISING AND EXTERIOR WALLS AT LOCATIONS AROUND PLUMBING INSTALLATIONS. PROVIDE A VALANCE AT AREAS WITH EXPOSED SINK DRAINS. SEE TYPICAL PROJECT DETAILS SHEETS ON A810820 FOR REQUIREMENTS.
- O. HORIZONTAL OFFSETS IN PLUMBING DRAIN PIPES: PROVIDE ACOUSTIC PIPE INSULATION. REFER TO PLUMBING DRAWINGS.
- P. **GYPSUM UNDERLAYMENT**: SHALL BE PROVIDED AT ALL FLOOR / CEILING ASSEMBLIES EXCEPT STAIR TREADS. ALL GYPSUM UNDERLAYMENT SHALL RECEIVE A FLOORING MATERIAL. GYPSUM UNDERLAYMENT SHALL NOT BE VISIBLE TO VIEW. FLOORING MATERIAL IS NOT REQUIRED UNDERNEATH BASE CABINETS BUT REQUIRED UNDER REMOVABLE BASE CABINETS.
- Q. **ACOUSTICAL MAT**: SHALL BE PROVIDED ON ALL WOOD FLOOR / CEILING ASSEMBLIES.
- R. WHERE STANDARD SHOWERS ARE LOCATED, PROVIDE AND INSTALL WOOD BLOCKING IN WALLS AROUND SHOWER FOR FUTURE INSTALLATION OF GRAB BARS. WHERE ROLL-IN SHOWERS ARE LOCATED, PROVIDE AND INSTALL WOOD BLOCKING AND GRAB BARS IN WALLS AROUND SHOWER. SEE TYPICAL PROJECT DETAILS ON SHEET A810820 AND MEP DRAWINGS FOR ADDITIONAL INFORMATION.
- T. PROVIDE BLOCKING FOR CURVED SHOWER RODS, LOCATED DIRECTLY ABOVE THE TOP OF THE SHOWER ENCLOSURE.
- U. PROVIDE WOOD BLOCKING NOT SHOWN OR SHOWN AS REQUIRED TO MOUNT MILLWORK, MEP DEVICES AND ALL FIXTURES.
- V. ALL MEP OPERABLE CONTROLS, FIXTURES, OUTLETS AND TOILET ACCESSORIES SHALL NOT BE MOUNTED LOWER THAN 18 INCHES AFF AND HIGHER THAN 48 INCHES. SEE TYPICAL PROJECT DETAILS FOR ADDITIONAL MOUNTING REQUIREMENTS.
- W. REFER TO MOUNTING HEIGHTS SCHEDULE ON SHEET A810820 FOR MOUNTING HEIGHTS.
- X. FOR KITCHEN ELECTRIC OUTLET RECEPTACLES, THE MAXIMUM ALLOWABLE HEIGHT TO THE CENTERLINE OF AN OUTLET IS 48 INCHES AFF WHEN REACHING OVER AN OBSTRUCTION 36 INCHES HIGH MAXIMUM AND 25-1/2 INCHES DEEP MAXIMUM. OUTLETS MUST BE A MINIMUM OF 36 INCHES FROM AN INSIDE CORNER OR 12 INCHES FROM END WALL. DM 5.3, 5.8.
- Y. THERMOSTATS, SWITCHES, ELECTRIC OUTLETS, ELECTRICAL PANELBOARDS AND OTHER OPERABLE PARTS MUST BE LOCATED WITHIN AN ACCESSIBLE REACH. DM 5.3, 5.5 ANSI 1003.9, 1004.9, 209.3, 308.
- Z. KITCHEN SINKS AT COMMUNITY ROOM KITCHEN SHALL INCLUDE REAR DRAINED SINKS TO ACCOMMODATE DISPOSALS. SINK BOWL SHALL NOT BE DEEPER THAN 6 1/2 INCHES.
- AA. WHERE REQUIRED, INSTALL ANY MEP DEVICES / FIXTURES SO THE INTEGRITY OF RATED WALL IS MAINTAINED. CONTINUE TYPE X GYPSUM BOARD ASSEMBLY BEHIND MEP DEVICE / FIXTURE.
- BB. EXTEND FINISH FLOOR MATERIAL UNDER COMMUNITY ROOM KITCHEN APPLIANCES, VANITY IN ALL PUBLIC BATHS AND UNDERNEATH REMOVABLE UNIVERSAL BASE CABINETS. ALL CABINETS SURFACES VISIBLE INCLUDING AREAS EXPOSED AFTER REMOVING REMOVABLE BASE CABINETS MUST BE COVERED BY FINISHED END PANELS TO MATCH ADJACENT CASEWORK. EXPOSED SIDES OF CABINETS MUST BE COVERED BY FINISHED END PANELS TO MATCH ADJACENT CASEWORK.
- CC. SIDES OF RANGE OR OPEN WORK AREAS BELOW BASE CABINETS MUST BE COVERED BY FINISHED END PANELS TO MATCH ADJACENT CASEWORK. EXPOSED SIDES OF WALL AND BASE CABINETS SHALL HAVE FINISH PANELS ON ALL EXPOSED TO VIEW.
- DD. ALL PLUMBING FIXTURES IN PUBLIC AREAS TO BE WATERSENSE-RATED.
- EE. ALL APPLIANCES IN PUBLIC AREAS TO BE ENERGY STAR-RATED.
- FF. PROVIDE AND INSTALL WINDOW COVERINGS AND HEAVY DUTY WINDOW SCREENS AT ALL RESIDENTIAL UNIT WINDOWS.
- GG. COMMUNITY ROOM KITCHENS AND ALL OTHER PUBLIC AREAS (WHERE PROVIDED) TO RECEIVE QUARTZ COUNTERTOPS.
- HH. IN PUBLIC AREAS, ALL COUNTERTOPS TO BE SET AT 34 INCHES MAXIMUM HEIGHT TO THE TOP OF KITCHEN OR BATH / TOILET SINK RIM.
- II. AT PUBLIC AREAS WITH TOP SET BACKSPLASH, 1 INCH THICK SQUARE EDGE RECEPTACLES TO BE LOCATED HORIZONTALLY ON FACE OF BACKSPLASH. BACKSPLASH TO BE 6 INCHES HIGH AT THESE LOCATIONS.
- JJ. CALLK ALL EXTERIOR PENETRATIONS. REFER TO SPEC SECTION 07 92 00 JOINT SEALANTS FOR DETAILS.
- KK. ANY PENETRATIONS AT FIRE RATED WALLS ARE TO BE FIRESTOPPED.
- LL. PROVIDE AND INSTALL PASSIVE RADON REMEDIATION SYSTEM AS NOTED. REFER TO TYPICAL PROJECT DETAILS, PLUMBING PLANS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- MM. PROVIDE AND INSTALL CORNER GUARDS AT LOCATIONS AS NOTED ON THE PLANS.
- NN. PROVIDE AND INSTALL CHAIR RAILS ON ONE SIDE AND HAND RAILS ON THE OTHER SIDE IN CORRIDORS AS SHOWN ON THE PLANS.
- OO. SEE SHEET A720 FOR WINDOW ELEVATIONS AND DETAILS.

#	DATE	CHANGE DESCRIPTION
1	12/7/2023	ADDENDUM NO 2
2	12/21/2023	ADDENDUM NO 5
3	03/11/2024	ADDENDUM NO 8

COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA

MOODY-NOLAN
300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215
PHONE: (614) 461-4664
FAX: (614) 280-8881





DRAWING TITLE:
**LEVEL 01 - FLOOR PLAN -
OVERALL**

06/08/2023
DRAWN BY: XXXX
CHECKED BY: XXXX
#22172.01
A101
PERMIT & BID SET

JAY W BOONE, LIC. #10740
EXP. DATE: 12/31/2023


1 PLAN OVERALL FIRST FLOOR PLAN
1/16" = 1'-0"

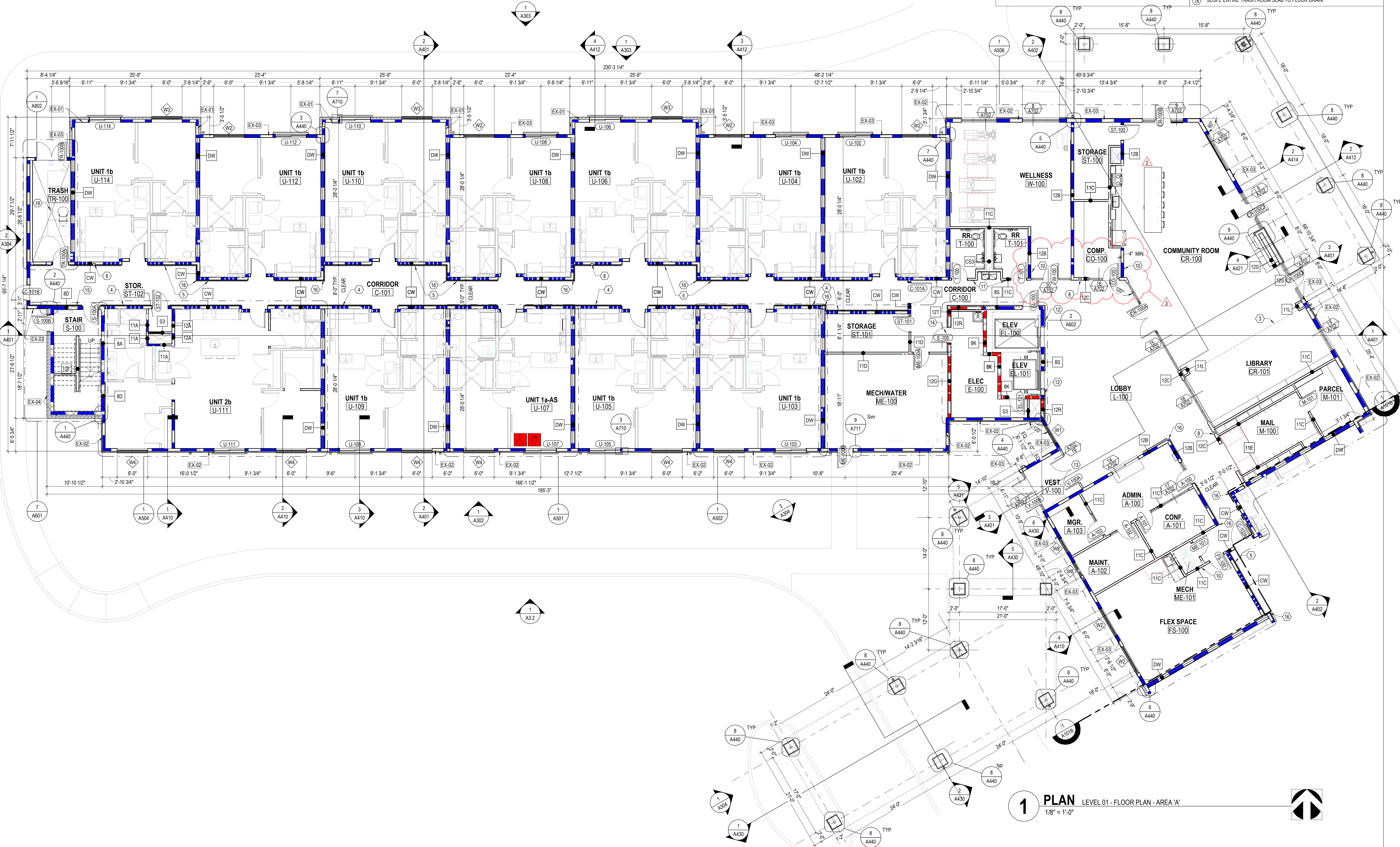
LEGEND - FLOOR PLAN

	1 HOUR FIRE RATING - INCLUDING NOT LIMITED TO EXTERIOR WALL, UNIT DEMISING WALLS, STAIR & ELEVATOR WALLS, SHAFT WALL
	1 HOUR FIRE RATING - CORRIDOR
	2 HOUR FIRE RATING
	INTERIOR PARTITION

[illegible]

DRAWING TITLE:
**LEVEL 01 - FLOOR PLAN -
AREA 'A'**

	06/08/2023	
	DRAWN BY: XXX	CHECKED BY: XXX
	#22172.01	
	<h1>A101A</h1>	
JAY W BOONE, LIC. #10740 EXP. DATE: 12/31/2023		PERMIT & BID SET







- CODED NOTE LEGEND**

- ## ROOF VENTILATION

ROOF VENTILATION: THE NET FREE CROSS-VENTILATION AREA SHALL NOT BE LESS THAN 1/150 OF THE AREA OF THE SPACE VENTILATED.

ROOF PLAN LEGEND

-  PROVIDE & INSTALL WALKWAY PADS IN SHADED AREA FOR
ACCESS TO ROOFTOP UNITS.
-  TAPERED ROOF INSULATION MINIMUM SLOPE 1/4":12"

#	DATE	CHANGE DESCRIPTION
1	12/7/2023	ADDENDUM NO 2
2	03/11/2024	ADDENDUM NO 8



COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA

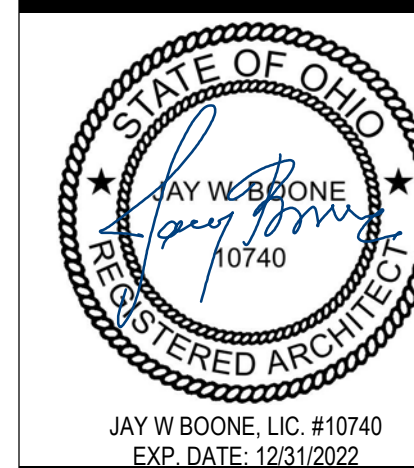


300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215

PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:

ROOF PLAN - OVERALL



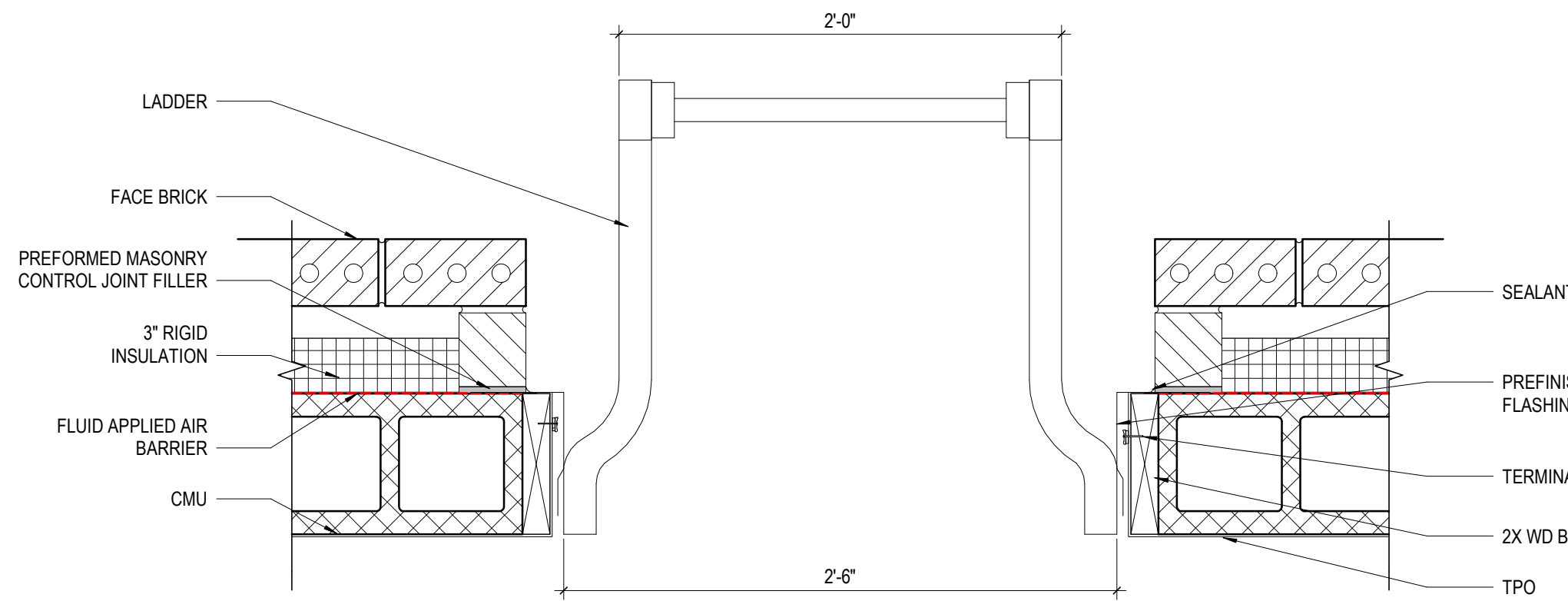
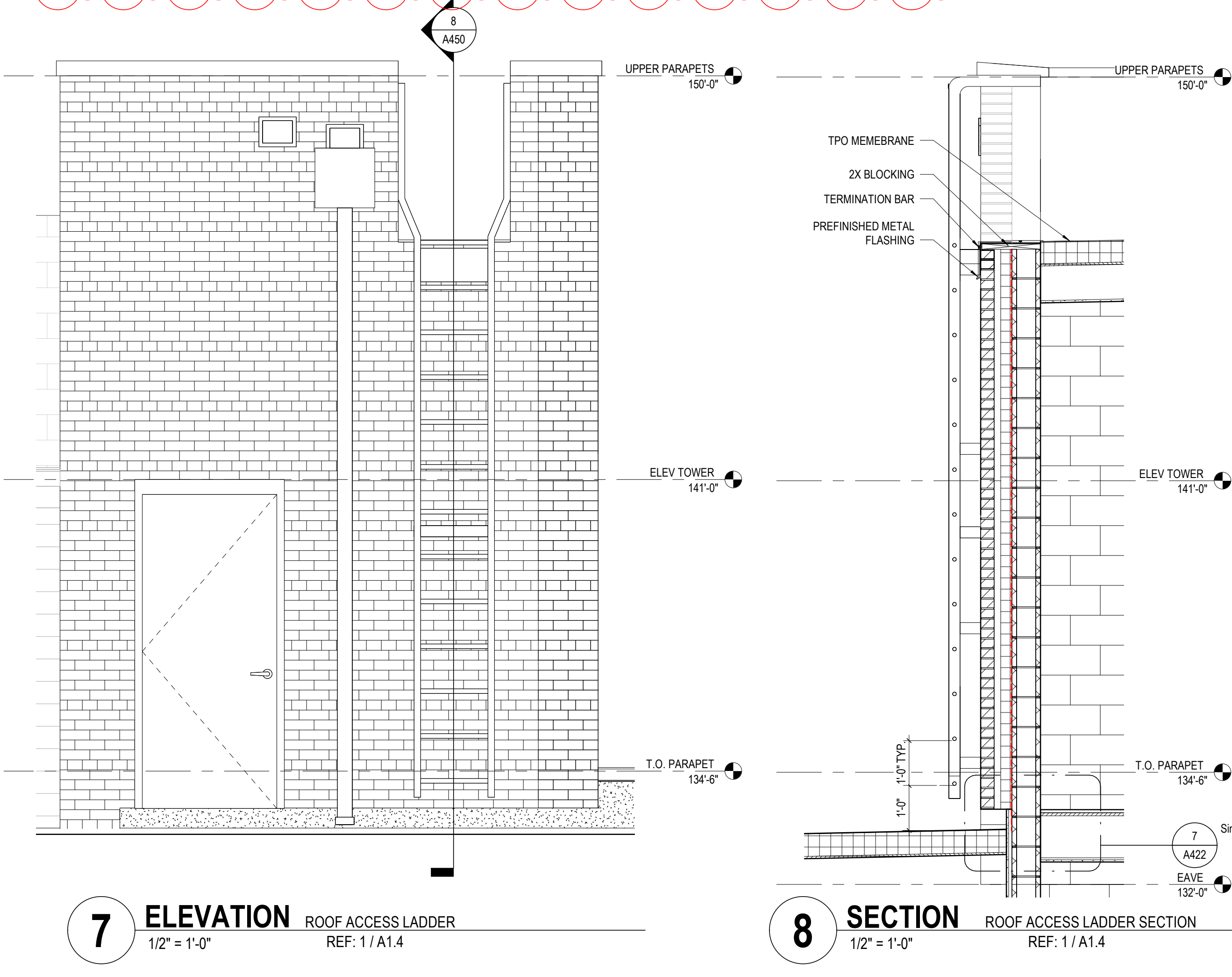
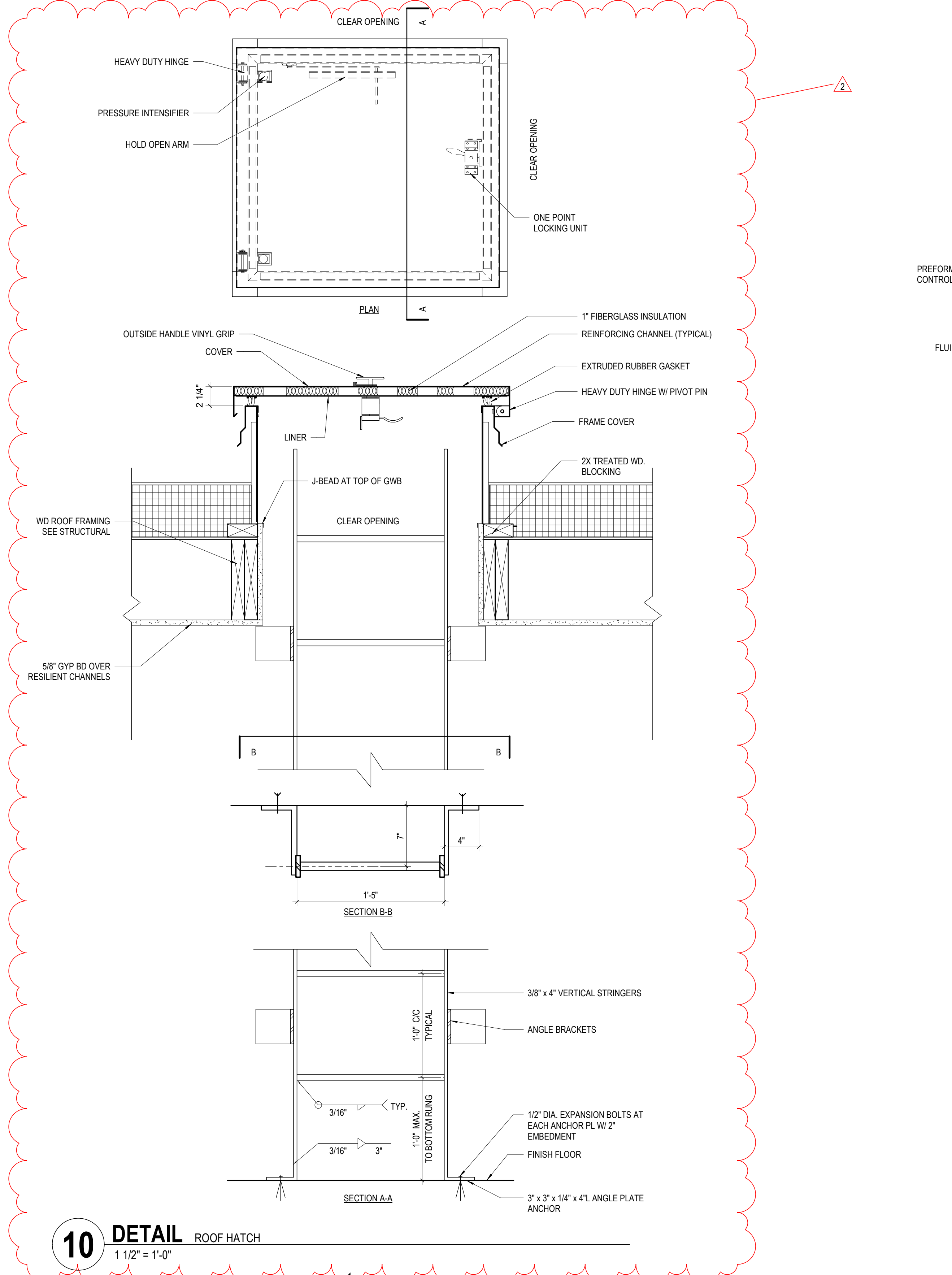
06/08/2023

DRAWN BY: Author	CHECKED BY: Chec
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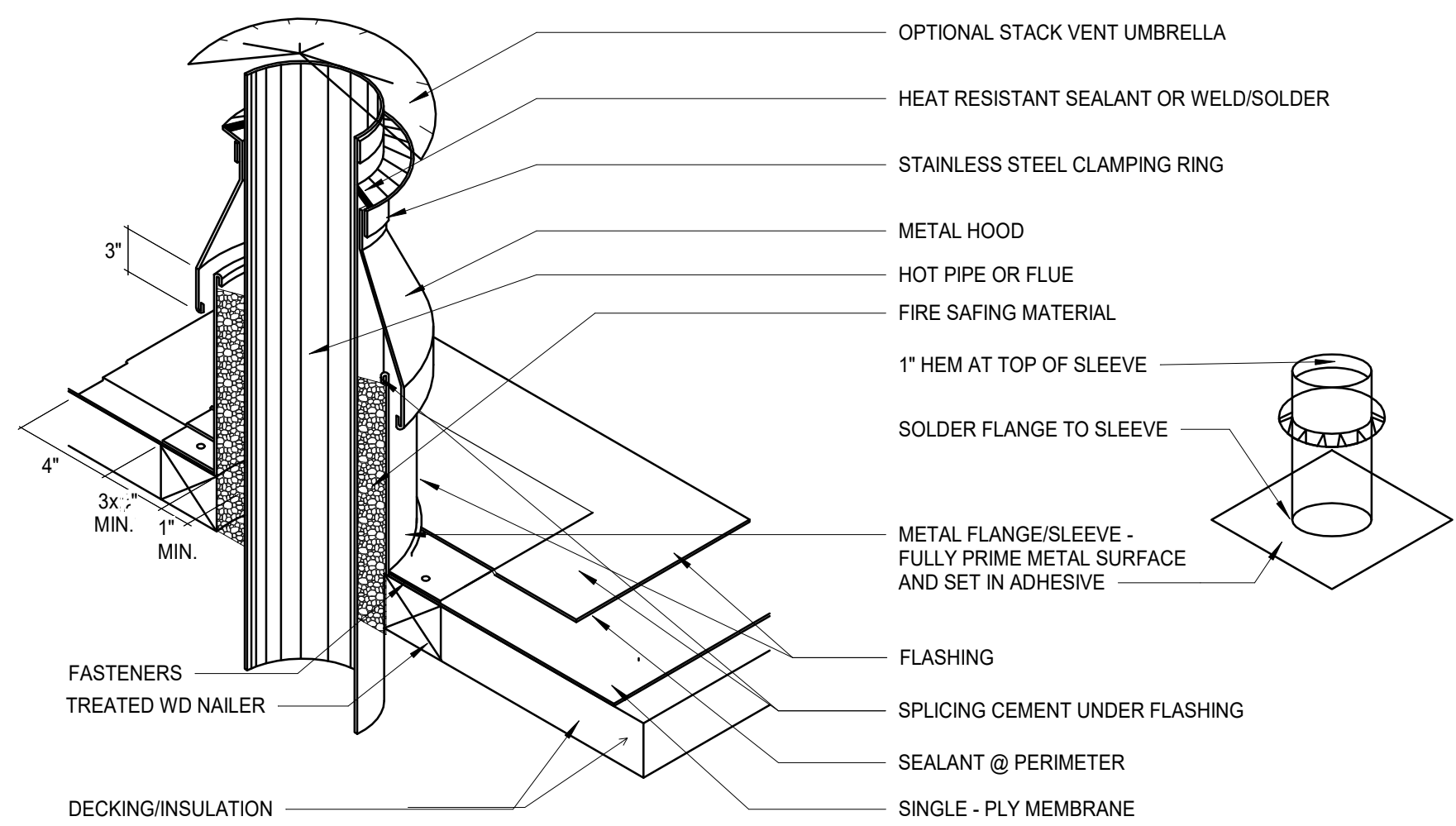
#22172.01

A104

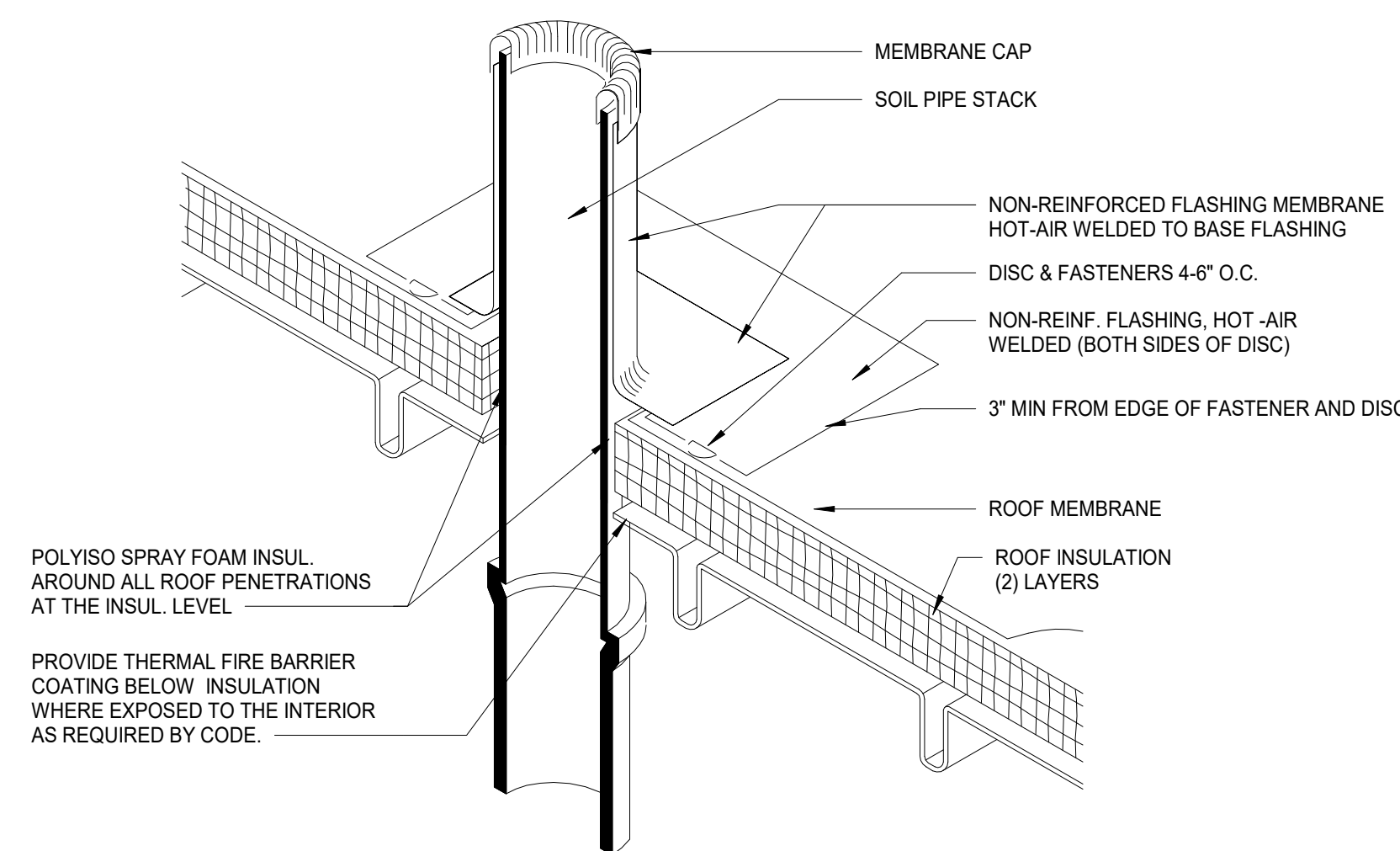
PERMIT & BID SET



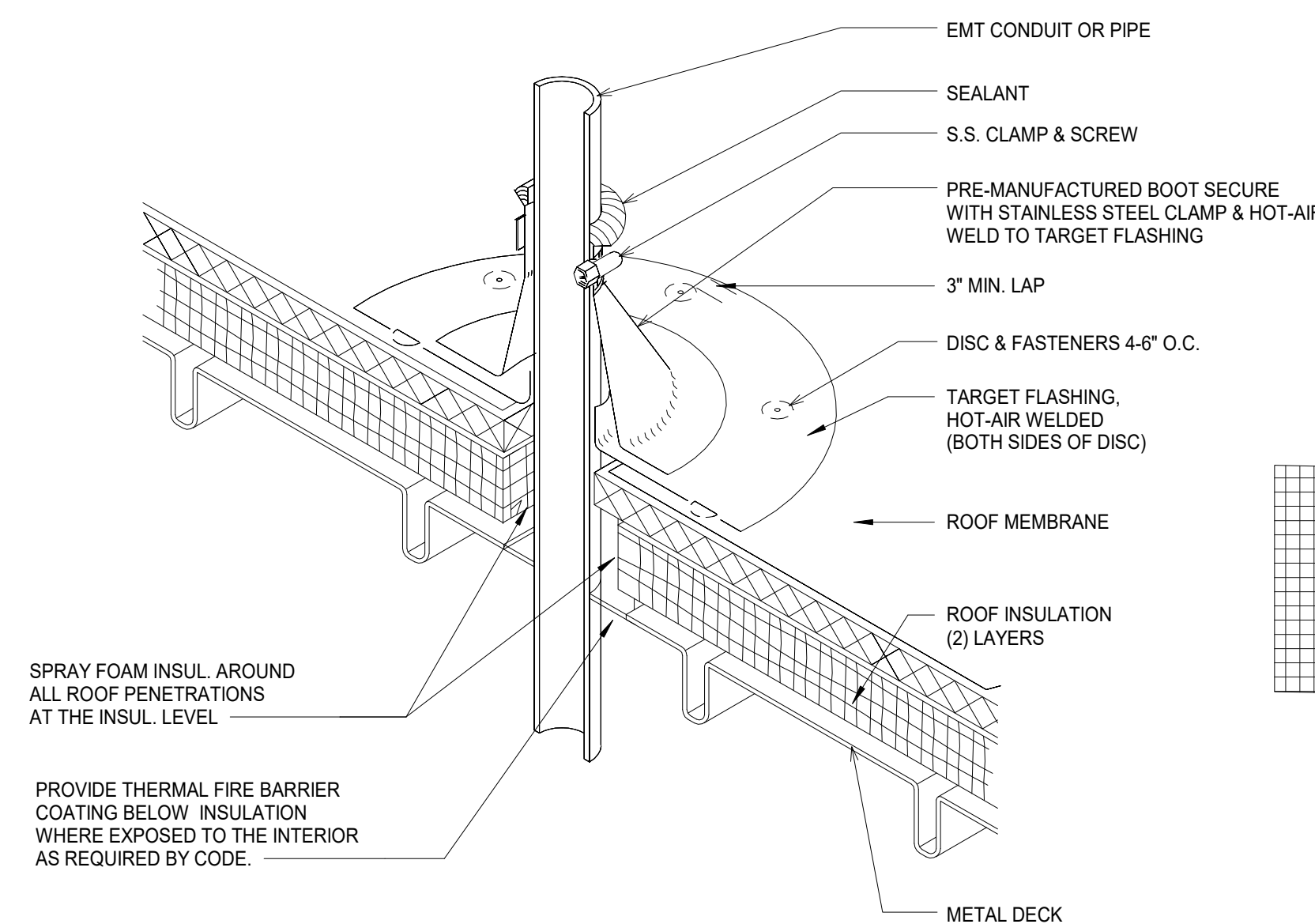
9 ENLARGED PLAN ROOF ACCESS LADDER
1 1/2" = 1'-0"



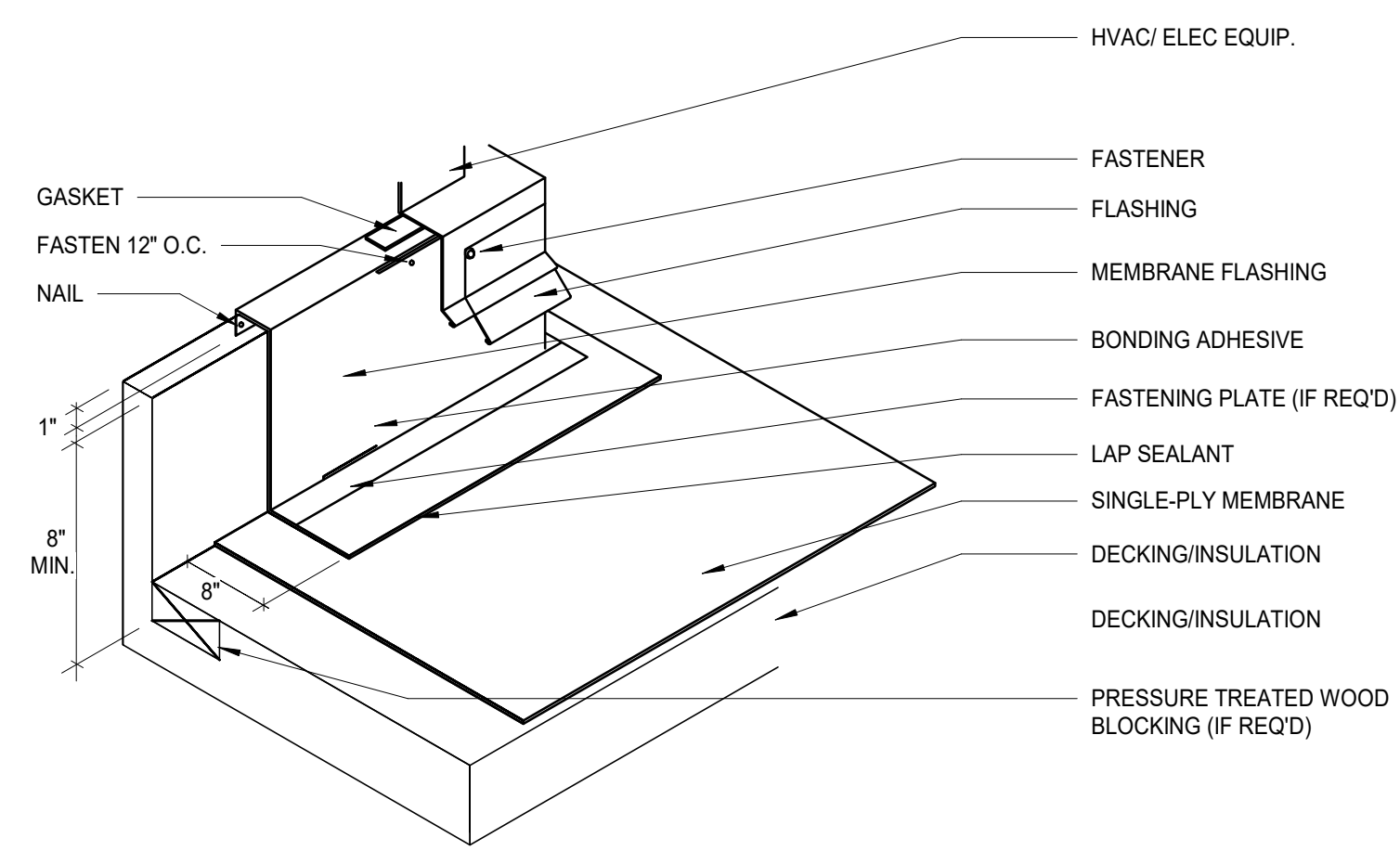
6 DETAIL HOT PIPE - MEMBRANE ROOFING
N.T.S.



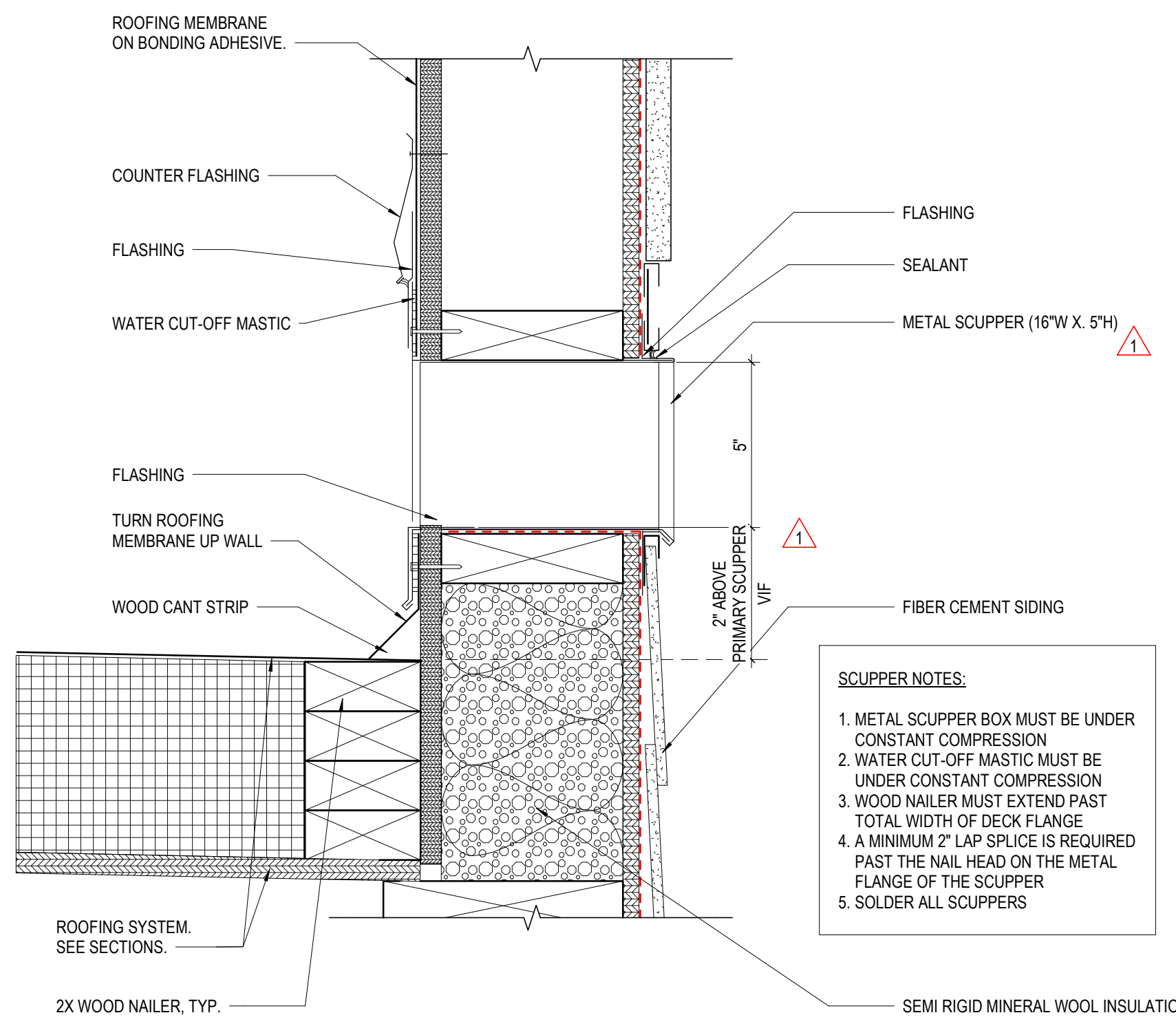
5 DETAIL VENT PIPE
12" = 1'-0"



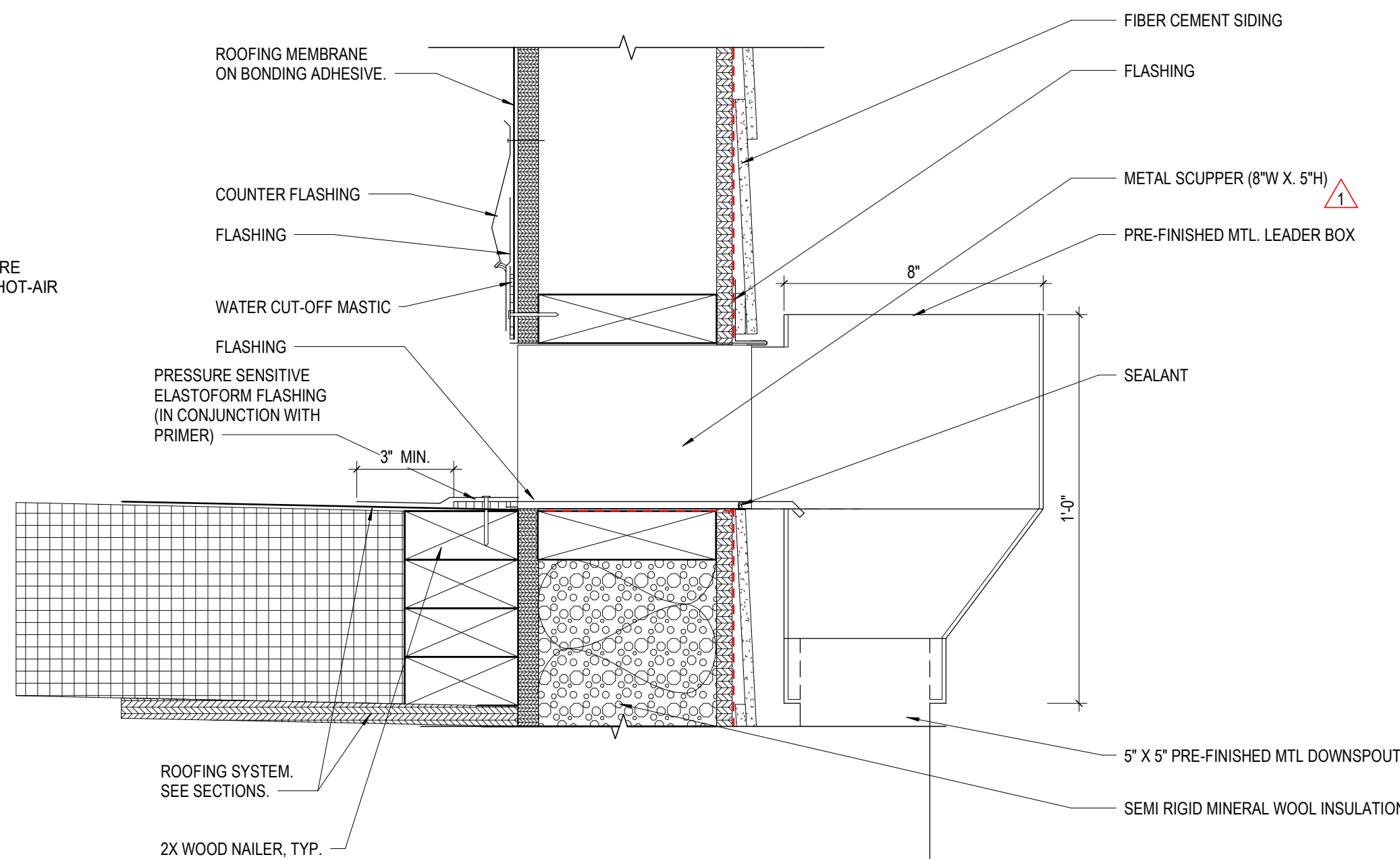
4 DETAIL SMALL PIPE PENETRATION
12" = 1'-0"



3 DETAIL DETAIL - HVAC/ELEC CURB - MEMBRANE ROOFING
N.T.S.



2 DETAIL OVERFLOW
3" = 1'-0"



1 DETAIL PRIMARY SCUPPER & COLLECTION BOX
3" = 1'-0"

#	DATE	CHANGE DESCRIPTION
1	12/21/2023	ADDENDUM NO 5
2	03/11/2024	ADDENDUM NO 6



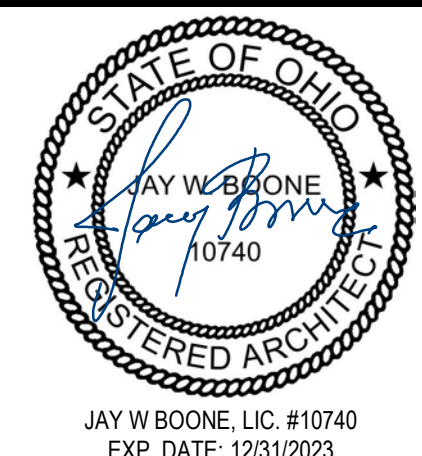
COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR



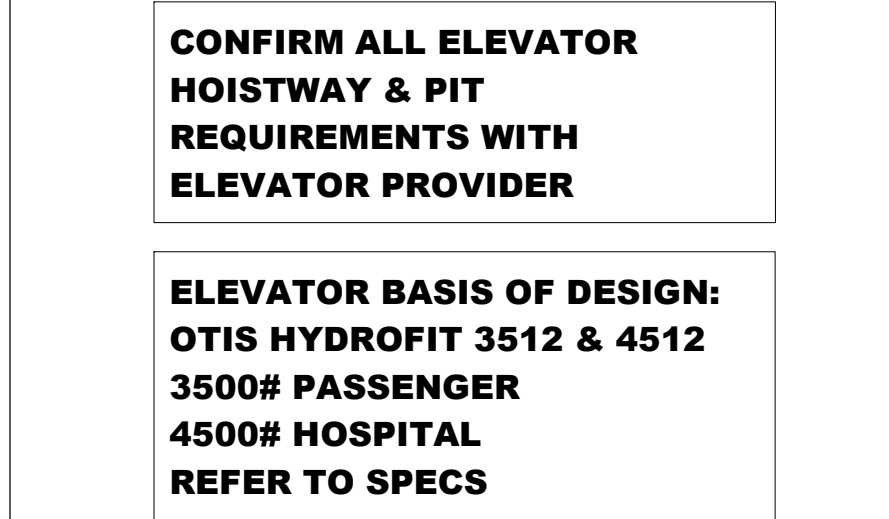
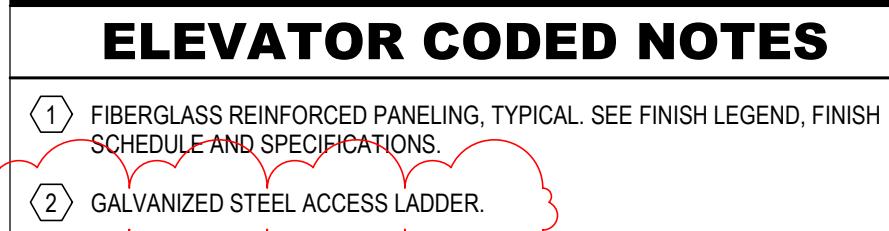
300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215
PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:

ROOF DETAILS



06/08/2023
DRAWN BY: Author CHECKED BY: Checker
#22172.01
A450
PERMIT & BID SET



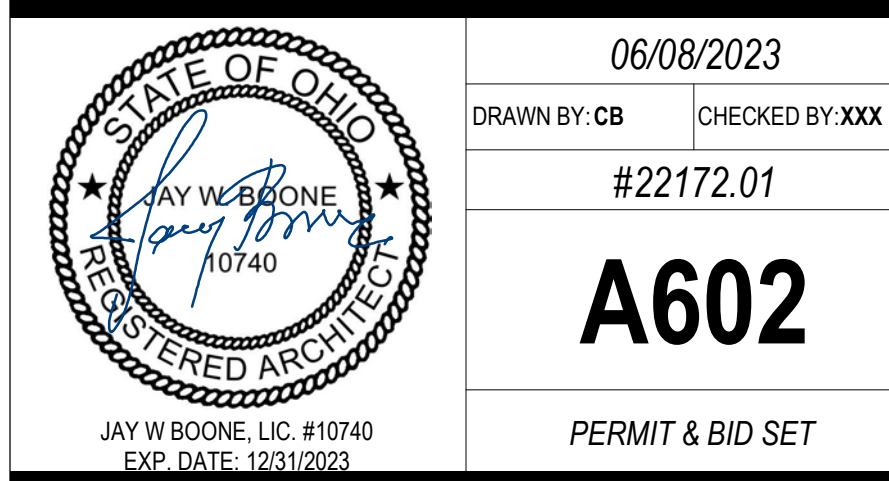
#	DATE	CHANGE DESCRIPTION
1	03/11/2024	ADDENDUM NO 8

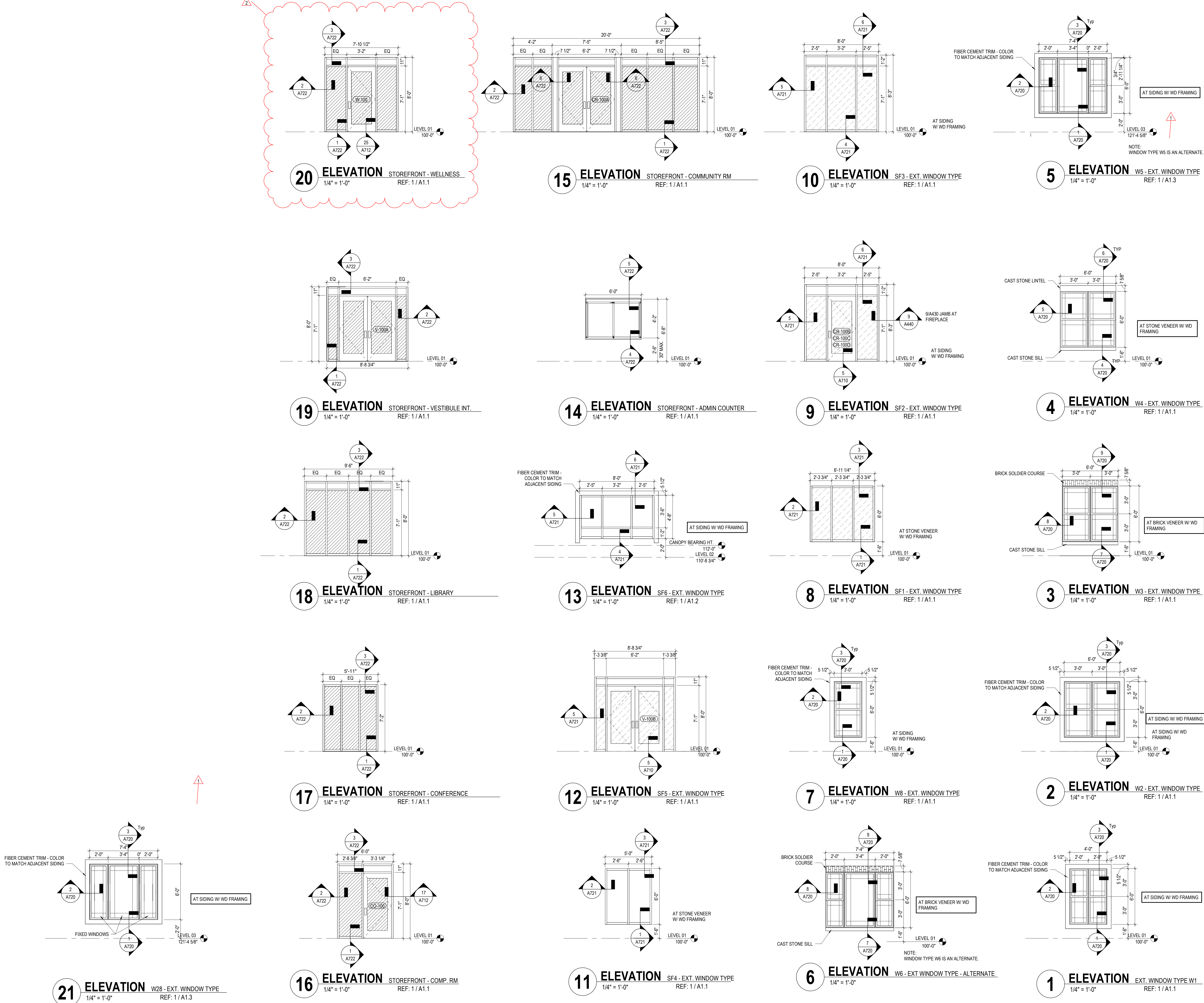
 **COBBLESTONE MANOR**
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA

 300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215

PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:
**VERTICAL CIRCULATION -
ELEVATOR**





CURTAINWALL GENERAL NOTES

1. TBD

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT

EXTERIOR GLAZING TYPES

GL-1 EXTERIOR INSULATED GLAZING

GL-2 EXTERIOR INSULATED GLAZING (CLEAR TEMPERED)

INTERIOR GLAZING TYPES

IG-1 INTERIOR INSULATED GLAZING

IG-2 INTERIOR GLAZING (CLEAR TEMPERED)

SAFETY GLAZING
Based on 2006 IBC

All glazing, including plastic glazing shall meet all applicable codes and regulations. As a **MINIMUM** all glazing at the following locations shall be safety glazing.

DOORS - Glazing in doors (swinging, sliding, storm, or other, except curved glazing at revolving doors).

SIDELIGHTS - Glazing in sidelights adjacent to a door.

ADJACENT TO DOORS - All glazing within 24" of a closed door if the glazing is within 60" of the floor measured vertically.

WALKING SURFACE - Glazing greater than 9 square feet in area if the bottom of the glazing is less than 18" AFF, and the top of the glazing is more than 36" AFF, and there is a walking surface within 36" of the glazing measured horizontally.

MIRRORS - Glazing at mirrors without continuous backing.

ELEVATORS - All glazing at the elevator shafts and elevator cabs shall be laminated safety glazing.

#	DATE	CHANGE DESCRIPTION
1	12/21/2023	ADDENDUM NO 5
2	03/11/2024	ADDENDUM NO 6

COBBLESTONE MANOR
COLUMBUS METROPOLITAN HOUSING AUTHORITY
COLUMBUS, OH 43212
FOR CMHA

300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215
PHONE: (614) 461-4664
FAX: (614) 280-8881

MOODY-NOLAN

STOREFRONT & WINDOW ELEVATIONS

A702

06/08/2023
DRAWN BY: XXXX
CHECKED BY: XXXX
#22172.01
PERMIT & BID SET

