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Addendum #1

March 25, 2025

Re: **Addendum No. 1**
Richmond Community College
Hendrick Center for Automotive Training
1042 West Hamlet Avenue
Hamlet, NC 28345
ADW Project Number: #23014

These clarifications constitute Addendum No. 1 and considered part of the Bid Documents. General Contractor shall see that their sub-contractors are in full receipt of the information contained herein.

General Clarifications:

1.) See attached Pre-Bid meeting Agenda and sign-in sheet.

Project Manual:

1.) Section 00 11 13 - Advertisement for Bids
   a. Revised information on how to access construction documents.
2.) Section 08 71 00 – Door Hardware
   a. Add Exhaust Port info to Hardware Set #1.
3.) Section 07 42 13 – Metal Wall Panels
   a. Add to section 2.2.1: Basis of design product: Pac-Clad Precision Series Wall Panels Highline B1, 24ga. steel, Color – Weathered Zinc.
4.) Section 04 20 00 – Unit Masonry
   a. Add to section 2.2.C.7: Basis of Design Product: Triangle Brick, Cambridge, Modular.
   b. Add to section 2.3.D.3: Basis of Design Product: Holcim Rainbow Mortamix, Color - Sandpebble.
5.) Section 08 44 13 – Glazed Aluminum Curtain Walls
   a. Delete section. All aluminum windows are storefront, see section 08 41 13.
6.) Section 08 41 13 – Aluminum-Framed Entrances and Storefronts
   a. Section 2.1.A: Change basis of design product to EFCO Series 433 Triple Set™ (T), Front Set.
7.) Section 09 94 00 – Special Coatings
   a. Section added.
8.) Section 08 14 16 – Flush Wood Doors
   a. Section revised for door finish.
9.) Section 32 31 13 - Commercial Louvered Fences and Gates
   a. Section added.
10.) Section 09 51 00 – Acoustical Ceilings
   a. Section 2.1.A.1.a: Change Type 1 ceiling basis of design to Armstrong No. 2822 with 15/16” grid width.

Drawings:

suite 500
2815 coliseum centre drive
charlotte, north carolina 28217
t] 704.379.1919
f] 704.379.1920
www.adwarchitects.com

1.) C300 and C301
    a. Revised to include temporary construction fence.
2.) S001
    a. Revised note 4.4 under Foundations.
3.) A100
    a. Added concrete housekeeping pad under compressor and air dryer in Equip Stor 113.
    b. Added tags to storefront in Admin 102.
    c. Added General Note #7 regarding wall furring.
4.) A110
    a. Detail 2: Revised downspout size in note.
5.) A200
    a. Detail 1: Added tags to storefront in Admin 102.
    b. Detail 3: Revised note to say storefront instead of curtain wall.
6.) A110, A200, A400, A401, A402, A403, A404, A501: Exterior wall sections and details.
    a. Z-furring strips behind exterior corrugated metal wall panels changed to 2 ½".
    b. Where interior furring of exterior walls is shown, change 1" Z-furring strips to 2" and delete rigid insulation. Also, stop gypsum board and furring 6" above finished ceilings. Only the exterior walls of the toilet rooms will have 1" Z-furring strips, also without insulation and stopping furring and gypsum board 6" above ceiling.
7.) A401
    a. Detail 7 added to show canopy signage attachment.
8.) A404
    a. Detail 1: Steel angle added to storefront sill detail.
    b. Detail 9: Drainage mesh shown in front of flashing down to weep.
9.) A501
    a. Detail 10: Information added to surface mounted bollard note.
10.)A600
    a. Detail 1: Location of exhaust port shown on overhead door elevation.
    b. Door Schedule: Door finish changed on interior wood doors.
11.)A700
    a. Interior Finish Legend: P-10 added for interior wood doors.
12.)A701
    a. Detail 1:
        i. Two finish tags were changed from CR-1 to CG-1.
        ii. Sim Labs floor finish pattern changed.
13.)A1200
    a. Detail 1: Several sign notes changed to better identify signs.
    b. Details 2 and 3:
        i. Title changed to identify sign.
        ii. Note changed to clarify scope.
    c. Detail 4:
        i. Title changed to identify sign
        ii. Section tag added for attachment detail.
        iii. Clarifications made to notes.
    d. A1201
        i. Detail 1: Two elevation tags added.

RFI's:

1) Structural sheet S001, General Notes, Foundations note 4.4 mentions that sand (or) gravel may be used as an acceptable base material for under concrete slabs, but details show gravel. Is sand acceptable?
    a. Sand will not be allowed. Only washed stone will be accepted as a base material under concrete slabs, 4" at 4" slabs and 6" at 6" slabs. See revised sheet S001.
2) Questions regarding plumbing fixture type P3.
    a. Faucet type is listed in schedule.
    b. Basin color is listed in finish schedule.
    c. Provide stainless steel access panel.
3) Questions regarding bollards.
    a. There should be 8 exterior bollards and 6 interior bollards as shown on A100.
    b. Interior bolt-down bollards have been described in detail 10/A501, see above.
4) Provide information on temporary construction fence.
    a. See revised sheets C300 and C301.
5) Question about brick and mortar colors matching adjacent Student Dining building.
    a. See above regarding revised Unit Masonry specification section.
6) Are TV's provided/installed by Owner or GC?
    a. GC is to provide blocking and outlet connections at each TV location per the drawings. Owner will provide and install TV's.
7) Can roof access ladder be painted steel?
    a. Ladder is to be prefabricated aluminum per 2.8 in spec section 05 50 00.
8) What length are the stainless steel corner guards?
    a. Corner guards should extend from the top of wall base to 8'-0" AFF. See specification section 10 26 13 for more information.
9) Question about compatibility of spray applied insulating air barrier with construction details.
    a. This product is a two-component, closed-cell spray-applied rigid polyurethane foam that we have used with success in the past in similar applications. It serves as both air barrier and insulation in one product. For more information, see spec section 07 27 29.
10) Question regarding overhead door material.
    a. Aluminum, please follow specifications.
11) Can ¾" plywood be removed from over metal decking at canopy sections?
    a. No, please install FRT plywood where shown.
12) Question about fence and alternate screen wall foundation structural detail information.
    a. Please see Note 8 on sheet S100.
13) Question about location of equipment pad detail 9/S300.
    a. See revised drawing showing pad beneath air compressor and air dryer.
14) Questions about storefront system.
    a. Basis of design system changed in section 08 41 13, see above.
    b. This should be a front set system to match other storefront on campus.
    c. Finish should be clear anodized to match other storefront on campus.
    d. Color of tint and spandrel will be selected during the submittal process.
    e. Both types of sunshades shown on the drawings will be used in the project.
15) Questions regarding signage.
    a. Where are details 5 and 6 on A1201 to be installed?
        i. See revised plan on A1201, showing elevation tags.
    b. Connection details will be determined by signage vendor and confirmed in shop drawings.

c. All signage is provided and installed by GC. See revised notes on A1200.
d. Sign at Tool Room should be Type #2, see revised plan.

16) 1. Type 1 ceiling tile #2824 requires 9/16" grid, specs list 15/16 grid which would be #2822 please clarify your intentions?
    a. Please change Type 1 to #2822, see revised spec section above.
17) Have the plans been approved by the local inspection department? We need to get a cost for the building permits.
    a. Plans have been approved pending State Construction Office approval and review of final documents. SCO approved Plans and specs have been sent to Richmond County permitting for review.
18) Will the owner designate a classroom to conduct monthly meetings since the site has limited space to house a large enough trailer for conference room meetings?
    a. A construction trailer is not required and the owner will provide a classroom for monthly OAC meetings.
19) Please provide a contact number and email to Alerton the preferred alternate for the BACnet DDC control system.
    a. Please contact:
    Joe Clardy
    Service Sales Engineer
    joe.clardy@hbtech.com
    M: 704-608-5623
    1133 Upper Asbury Ave,
    Charlotte, NC 28206
    Toll Free Service: 1-877-382-9669
20) Is there a Spec for the oil/water separator that ties to the sewer system? Capacity, Manufacturer, etc.?
    a. See notes on the drainage plan, sheet P101, as well as info on P002.
21) The new curb-n-gutter is 18” wide but I believe the existing curb-n-gutter is 24”. Should the new 24” to match?
    a. New curb and gutter should match existing curb and gutter dimensions.
22) There is a detail for heavy duty concrete pavement. Is there any on the outside of the building to be installed?
    a. Yes, at the main lobby entrance to support a potential stock car for lobby display.
23) Is any heavy-duty asphalt pavement required in lieu of the light duty pavement detail for heavy loading?
    a. No
24) Question about four missing storefront tags.
    a. Please see revised plan and elevation.
25) On E002 section 8 paragraph H, it requires the use of A/C exterior plywood to be used for the telephone backboards and for it to be painted with gray fire retardant paint. The standard is to use ¾” A/C fire retardant plywood. Can this be used? It negates the additional labor and cost of painting the plywood.
    a. Yes, AC fire retardant plywood is acceptable, as long as the label is not concealed by paint.

Richmond Community College
Hendrick Center for Automotive Training
1042 W Hamlet Ave Hamlet, NC 28345
SCO ID#22-25472-01A
ADW Project Number: 23014

Pre-Bid Meeting Agenda

Meeting Date: March 13, 2025, 2:00 pm
Location: Grimsley Health Science Building Room #102

A. Introduction of Team Members and Roles
1. Owner's Representatives
   - **i)** Brent Barbee — RCC President
   - **ii)** Scotty Mabe — Director of Facility Services

2. Architect– ADW Architects
   - **i)** Robert Caddell, R.A. — Project Manager
   - **ii)** Phillip Steele — Managing Principal

B. Review of HUB Goals
1. The State's minimum requirements are specifically outlined on the State Construction Office website (http://www.nc-sco.com/default.aspx) and in the MBE Guidelines included as part of the Project Manual.
2. Bidders are reminded that they must submit Affidavit A or Affidavit B with their Bid.
3. The lowest responsible bidder will provide Affidavit C or Affidavit D. Documentation of Good Faith Effort will be thoroughly reviewed.

C. Temporary Close of Pre-Bid Meeting to conduct Owner Preferred Alternates Meeting

In accordance with GS133-3 and SCO procedures, the following owner preferred brand items have been identified as alternates by the owner for this project:

Preferred Alternates:

Alternate No. 1 - Provide Schlage Everest keying system. See Specification Section 08 71 00.

Alternate No. 2 - Provide BACnet DDC system from Alerton. See Specification 23 09 00 Direct Digital Control System.

Alternate No. 3- Provide modified bitumen roofing, as manufactured by SOPREMA. See Specification 07 51 00.

Alternates:

Alternate No. 4 - Masonry/Metal screen wall in lieu of fixed louver screen. See Sheet A900.

D. Close Owner Preferred Alternates Meeting and resume Pre-Bid Meeting.

suite 270
101 west worthington avenue
charlotte, north carolina 28203
t] 704.379.1919
f] 704.379.1920
www.adwarchitects.com

E. Review of Bid Documents

1. General overview of scope:

A. Located on Richmond Community College's main campus in Hamlet, NC, the project reflects RCC's vision for a state of the art signature building that showcases the Automotive Training program. The Hendrick Automotive - sponsored programs will train students in basic and advanced automotive maintenance and repair. In addition, the building contains two simulation labs, administrative area, a three-bay auto garage with equipment, entry lobby, and storage rooms. The building itself is a single story, 9,885 s.f. facility with steel structure, exterior metal panels and brick veneer.

2. Review of Contract Documents

i) Construction Time/Schedule - The Contractor shall commence work to be performed under this agreement on a date to be specified in a written order from the designer and shall fully complete all work within 365 consecutive calendar days from, and including said date. For each day in excess of the above number of days, the Contractor shall pay to the Owner the sum of *Seven Hundred Fifty Dollars $750.00* as liquidated damages reasonably estimated in advance to cover the losses to be incurred by the Owner by reason of failure of said Contractor to complete the work within the time specified, such time being in the essence of this contract and a material consideration thereof.

ii) Unit Prices are indicated in Spec Section 01 22 00. Note: multiple Unit Prices require allotments of work/materials to be included in the Base Bid – please review and familiarize yourselves with those amounts.

iii) Any permit fees are to be paid for by the general contractor.

iv) The General Contractor is responsible for their own facilities for water, electricity, gas, oil, sewer, and other utility services required for the project. See Spec Section 00 72 00 General Conditions, Article 40.

3. Plan Rooms:

i) Duncan Parnell

ii) ConstructConnect.com

iii) TheBlueBook.com

F. Bidding Information

1. Date/Time: 1:00 pm Tuesday, April 8, 2025

2. Location: Grimsley Health Science Building Room #102 at Richmond Community College

3. Receipt of Bids

i) Hand delivering to Grimsley Health Science Building Room #102

ii) Mailing Bids: Attention of Brent Barbee, Richmond Community College -1042 W Hamlet Ave Hamlet, NC 28345

4. Each proposal shall be accompanied by a cash deposit or a certified check drawn on some bank or trust company, insured by the Federal Deposit Insurance Corporation, of an amount equal to not less than five percent (5%) of the proposal, or in lieu thereof a bidder may offer a bid bond of five percent (5%) of the bid executed by a surety company licensed under the laws of North Carolina to execute the contract in accordance with the bid bond. Said deposit shall be retained by the owner as liquidated damages in event of failure of the successful bidder to execute the contract within ten days after the award or to give satisfactory surety as required by law.

5. No bid may be withdrawn after the scheduled closing time for the receipt of bids for a period of 60 days.

6. Processing of Addenda prior to bid opening:

i) Requests for Information for Project Document questions may be submitted in writing to rcaddell@adwarchitects.com. Please include "RichmondCC-HCAT BID RFI" in the subject header. All questions must be submitted no later than March 31, 2025, 5:00 pm to allow time to respond and incorporate into addendum as necessary.

G. Site Visitation during Bidding
   1. Site will be open during the bidding.

H. Questions

Please be sure to sign Attendance sheet before leaving.

Richmond Community College
Hendrick Center for Automotive Training

Pre-Bid Meeting Sign-in Sheet

ADW Architects

3.13.2025 2:00 PM

Attendee	Company	Prime GC? (Y/N)	Phone #	Email
RANDY NANCE	DCS	Y	(336) 613-4835	RNANCE@DCSDAVE.com
Joseph Locklear	Driven Contractors, LLC	Y	(910) 521-4535	joseph@driventractors.com
Teresa Walls	Concrete Service Fayblock / JAL	n	910 988-6419	TWalls@concreteservice.com
Clay Vaughn	Hoss Contracting	Y	704 506-3615	hoss@hosscontracting.com
Kelly Alderman	Kna Contracting	Y	336-470-4813	estimating@Knacontracting.com
Evan Hawks	Hawks Builders Inc	Y	(910) 895-7070	evan@hawksbuilders.net
Kimberly Chappell	Hawks Builders, Inc.	Y	(910) 895-7070	Kimberly@hawksbuilders.net
Dalton Quesinberry	Hayco Construction	Y	336-401-0055	dalton@hayco-construction.com
Ford Schwing	Liles Construction	Y	713-805-7840	fschwing@lilesconstruction.com
Dennis Holloway	Pinnacle Southeast	Y	910.494.4208	dholloway@pinnaclesoutheast.com
ALAN PACE	HEARTLAND CONTR	Y	704-507-0031	APACE@HEARTLANDNC.COM
Samantha Locklear	MSquare Construction	Y	910-585-3395	estimating@msquareus.com

ADVERTISEMENT FOR BIDS
Richmond Community College – Hendrick Center for Automotive Training

Sealed proposals for Base Bid will be received until **1:00 pm Tuesday, April 8, 2025** in the Grimsley Health Science Building Room #102 at Richmond Community College to the Attention of Brent Barbee, Richmond Community College -1042 W Hamlet Ave Hamlet, NC 28345 & **1:00 pm** bid opening in the Grimsley Health Science Building Room #102, for the construction of the Hendrick Center for Automotive Training at which time and place bids will be opened and read.

Bidding Documents may be viewed and ordered online by registering with Duncan Parnell via their bid room https://bidroom.duncan-parnell.com/. Registration with Duncan Parnell is required to obtain the bid documents and be added to the official Plan Holder's List. Addenda notification will be sent to those buying full sets from Duncan Parnell via their bid room. The cost of bid documents and shipping is non-refundable. Neither OWNER nor ENGINEER will be responsible for copies of the bid documents obtained from sources other than from Duncan Parnell. If you need any assistance ordering or getting registered on https://bidroom.duncan-parnell.com/ please contact: Michaela Bruinius at constech@duncan-parnell.com or 704-526-1856.

Drawings may be viewed at ConstructConnect, Inc., www.constructconnect.com (and sister companies Construction Market Data (CMD), iSqFt, Reed, Smartbid, Bidclerk) and the Blue Book Building and Construction Network, www.thebluebook.com

An open, non-mandatory pre-bid conference will be held at Richmond Community College in the Grimsley Health Science Building Room #102 on **Thursday, March 13, 2025 at 2:00 PM.** The preferred alternates will be identified at the pre-bid conference. In accordance with GS133-3 and SCO procedures the following preferred brand items are being considered as Alternates by the Owner for this project:

Preferred Alternates:
Alternate No. 1 - Provide Schlage Everest keying system. See Specification Section 08 71 00.
Alternate No. 2 - Provide BACnet DDC system from Alerton. See Specification 23 09 00 Direct Digital Control System.
Alternate No. 3- Provide modified bitumen roofing, as manufactured by SOPREMA. See Specification 07 51 00.

Alternates:
Alternate No. 4 - Masonry/Metal screen wall in lieu of fixed louver screen. See Sheet A900.

The state reserves the unqualified right to reject any and all proposals.

Signed: Brent Barbee, MPA
President
Richmond Community College
1042 W. Hamlet Ave
Hamlet, NC 28345

SECTION 08 14 16 - FLUSH WOOD DOORS

PART 1 - GENERAL

1.1 SCOPE:

A. Provide all labor, materials, equipment and services to furnish and install the flush wood doors.

1.2 QUALITY ASSURANCE:

A. Comply with the applicable requirements of the following standards unless otherwise indicated.
   1. ANSI/WDMA I.S. 1-78, "Industry Standard for Wood Flush Doors".
   2. UL10-C fire test for mineral core fire doors.
   3. Provide doors with fire-resistance ratings indicated or required to comply with governing regulations.
   4. All labeled doors shall be manufactured in accordance with the specifications procedures of the Underwriter's Laboratories. All labeled doors shall physically bear the U.L. label showing the rating required.

1.3 SUBMITTALS:

A. Prior to fabrication, submit the following to the Architect for review:
   1. Complete and fully descriptive manufacturer's literature.
   2. Shop drawings: Sizes, face veneer, edge construction, core construction, necessary details, and factory finishing.
   3. Door schedule: Show door sizes, opening numbers or designations and elevations, door type, fire classification marking, swing, light and louver cutout sizes and locations, and undercut.
   4. Physical sample: Cross section at door corner.
   5. Certification: Submit written certification signed by an officer of the manufacturing firm that shall certify that the materials delivered to this work comply in all respects with the requirements of the Contract Documents.

1.4 GUARANTEE:

A. Submit written guarantee for use for the life of the installation, including repair and/or replacement, and refinishing of defective material in accordance with the standard door guarantee of the National Woodwork Manufacturer's Association.

1.5 PRODUCT HANDLING:

A. Package each door at the factory in separate heavy paper-type carton or poly bag. Mark each carton or door for location to correspond with opening number on Drawings.

PART 2 – PRODUCTS

2.0 INTERIOR SOLID CORE FLUSH WOOD DOORS FOR OPAQUE FINISH – PREMIUM PAINTED

A. Basis of Design: Aspiro™ Series | Marshfield-Algoma™ by Forte Opening Solutions.

1. Approved Manufacturers
   a. Eggers Industries; Architectural Door Division.
   b. Oshkosh Architectural Door Company.
   c. Graham Manufacturing.

B. Solid Core Premium Painted Flush Doors: D-1

1. WDMA Quality grade: Premium.
2. WDMA Performance Level: Extra Heavy Duty
3. Faces: Medium density overlay (MDO).
4. Vertical Edges: Hardwood over Structural composite lumber. Matching 1/8 inch (3.2mm) high impact edge bonded to structural composite lumber.
5. Horizontal Edges: Structural composite lumber. Clean Edge-Bond smooth PVC edge band to structural composite lumber (top), (bottom), (top & bottom).
6. Core: Extra heavy duty wood-based particleboard
7. Thickness: 1-3/4 inch.

2.2 LIGHTS AND LOUVERS:

A. Provide openings with stops for lights and louvers.

B. Provide the manufacturer's standard wood louvers if indicated.

2.3 PRE-FITTING AND PRE-MACHINING:

A. Pre-fit doors at the factory in accordance with tolerance requirements of the WDMA standards with allowances for undercuts (if any). Provide standard bevel or radius to edge of door as required for the installation.

B. Machine doors for butts, locksets, concealed closers, concealed holders, concealed exit hardware and flush bolts. Machine in accordance with templates of approved hardware manufacturer.

PART 3 - EXECUTION

3.1 INSPECTION:

A. Examine door frames and verify that frames are correct type and have been installed as required for proper hanging of corresponding doors. Correct any conditions that will be detrimental to proper and timely installation of wood doors. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.2 INSTALLATION:

A. Condition doors to average prevailing humidity in installation area prior to hanging.

B. Hardware: See Section 08 71 00, "Door Hardware".

C. Install wood doors in accordance with manufacturer's instructions and as shown.

D. Pre-fit doors: Fit to frames and machine for hardware to whatever extent not previously worked at factory as required for proper fit and uniform clearance at each edge.

E. Clearance:
1. Non-rated doors: Provide clearances of 1/8" at jambs and heads; 1/8" at meeting stiles for pairs of doors; and ½" from bottom of door to top of finish floor material or covering. At thresholds, provide 1/4" clearance from bottom of door to top of threshold.
2. Fire-rated doors: Provide clearances complying with NFPA.

3.3 ADJUST AND CLEAN:

A. Re-hang or replace doors which do not swing or operate freely.

B. Refinish or replace doors damaged during installation.

END OF SECTION 08 14 16

SECTION 08 71 00 – DOOR HARDWARE

PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:

1. Mechanical door hardware

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. “Interior Aluminum Doors and Frames”
d. "Aluminum-Framed Entrances and Storefronts"
e. "Entrances”

6. Division 09 sections for touchup, finishing or refinishing of existing openings modified by this section.

1.02 REFERENCES

A. UL, ULC

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 – 2019 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. Comply with procedures for verifying existing door and frame compatibility for new hardware, as specified in PART 3, "EXAMINATION" article, herein.
    b. Review drawings and Sections from related trades to verify compatibility with specified hardware.
    c. 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. 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.

3. 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.

4. 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.

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.

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. 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) 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. Review required testing, inspecting, and certifying procedures.
    d. Review questions or concerns related to proper installation and adjustment of door hardware.

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.

1.06 COORDINATION

A. 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.

B. Security: Coordinate installation of door hardware and keying with Owner's security consultant.

WARRANTY

C. 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) 10 years
            2) Exit Devices
                a) 10 years
            3) Closers

a) 30 years

4) Overhead Stops
   a) 10 years

1.07 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. 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 in section 01 25 00.

B. 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.

C. 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”, and “Flush 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.

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. Best FBB series

B. Requirements:

1. Provide hinges conforming to ANSI/BHMA A156.1.
2. Provide five knuckle, ball bearing hinges.
3. Provide hinge weights and sizes as specified in hardware sets.
4. Adjust hinge width for door, frame, and wall conditions to allow proper degree of opening.
5. 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.
6. 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

2.04CONTINUOUS HINGES

A. Manufacturers:

1. Scheduled Manufacturer:

a. Ives

2. Acceptable Manufacturers:

a. Select
b. ABH

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 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.

2.05FLUSH BOLTS

A. Manufacturers:

1. Scheduled Manufacturer:

a. Ives

2. Acceptable Manufacturers:

a. Burns
b. DCI

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.

2.06COORDINATORS

A. Manufacturers:

1. Scheduled Manufacturer:

a. Ives

2. Acceptable Manufacturers:

a. Burns
b. DCI

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.

2.07CYLINDRICAL LOCKS – GRADE 1

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:

a. Schlage ND series (Owner Preferred)

2. Acceptable Manufacturers and Products:

a. Sargent 11-Line
b. Corbin-Russwin CL3100 series

B. Requirements:

1. Provide cylindrical locks conforming to ANSI/BHMA A156.2 Series 4000, Grade 1, 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: Rhodes (RHO).

2.08EXIT DEVICES

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:

    a. Von Duprin 99/33A series (Owner Preferred)

2. Acceptable Manufacturers and Products:

    a. Detex Advantex series
    b. Precision APEX 2000 series

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 grooved 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 exit devices with weather resistant components that can withstand harsh conditions of various climates and corrosive cleaners used in outdoor pool environments.
7. Provide flush end caps for exit devices.
8. Provide exit devices with manufacturer’s approved strikes.
9. 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.
10. 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.
11. Provide cylinder dogging as specified at non fire-rated openings.
12. 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.
13. Provide exit devices with optional trim designs to match other lever and pull designs used on the project.
14. Special Options:

    a. SI: Provide dogging indicators for visible indication of dogging status.

2.09CYLINDERS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:

a. Exterior Doors: Schlage Everest 29 Primus XP, to match existing key system.
b. Interior Doors: Schlage Everest 29, to match existing key system.

2. Acceptable Manufacturers and Products:

a. No Substitute

B. Requirements:

1. Provide cylinders for locking devices, whether called out in hardware sets or not.
2. Provide full-size interchangeable cylinders/cores to match Owner's existing key system, compliant with ANSI/BHMA A156.5; latest revision; cylinder face finished to match lockset, manufacturer's series as indicated. Refer to "KEYING" article, herein.
3. Provide cylinders in the below-listed configuration(s), distributed throughout the Project as indicated.

a. Exterior: High Security, dual-locking cylinder with full size interchangeable core (FSIC) requiring restricted, patented keyway to match existing. Dual-locking mechanism with interlocking finger pin(s) to check for patented features on keys.
b. Interior: Patented Restricted cylinder with full size interchangeable core (FSIC) with patented, restricted keyway to match existing.

4. Patent Protection: Cylinders/cores requiring use of restricted, patented keys, patent protected.
5. Nickel silver bottom pins.

2.10KEYING

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 bitting 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)
   2) Patent Protection: Keys and blanks protected by one or more utility patent(s).

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.

2.11 DOOR CLOSERS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:

   a. LCN 4040XP series (Owner Preferred)

2. Acceptable Manufacturers and Products:

   a. Corbin-Russwin DC8000 series
   b. Sargent 281 series

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 high strength cast iron cylinder, and full complement bearings at shaft.
3. Cylinder Body: 1-1/2-inch (38 mm) diameter piston with 5/8-inch (16 mm) diameter double heat-treated pinion journal. QR code with a direct link to maintenance instructions.
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. Provide snap-on cover clip, with plastic covers, that secures cover to spring tube.

6. Hydraulic Regulation: By tamper-proof, non-critical valves, with separate adjustment for latch speed, general speed, and backcheck. Provide graphically labelled instructions on the closer body adjacent to each adjustment valve. Provide positive stop on reg valve that prevents reg screw from being backed out.
7. Provide closers with solid forged steel main arms and factory assembled heavy-duty forged forearms for parallel arm closers.
8. Pressure Relief Valve (PRV) Technology: Not permitted.
9. Finish for Closer Cylinders, Arms, Adapter Plates, and Metal Covers: Powder coating finish which has been certified to exceed 100 hours salt spray testing as described in ANSI Standard A156.4 and ASTM B117, or has special rust inhibitor (SRI).
10. 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.

2.12 DOOR TRIM

A. Manufacturers:

1. Scheduled Manufacturer:

a. Ives.

2. Acceptable Manufacturers:

a. Trimco
b. Burns

B. Requirements:

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

2.13 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. Provide protection plates with countersunk screw holes.
3. Sizes 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.
4. At fire rated doors, provide protection plates over 16 inches high with UL label.

2.14OVERHEAD STOPS AND OVERHEAD STOP/HOLDERS

A. Manufacturers:

1. Scheduled Manufacturers:

a. Glynn-Johnson

2. Acceptable Manufacturers:

a. Rixson
b. ABH

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.

2.15DOOR 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 of 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.

2.16THRESHOLDS, 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.

2.17SILENCERS

A. Manufacturers:

1. Scheduled Manufacturer:

a. Ives

2. Acceptable Manufacturers:

a. Steelcraft
b. Republic

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.

2.18FINISHES

A. Finish: Standard: Designations used in the Hardware Sets and elsewhere indicate hardware finishes complying with ANSI/BHMA A156.18, including coordination with traditional U.S. finishes indicated by certain manufacturers for their products.

B. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware.

PART 3 - EXECUTION

3.01EXAMINATION

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. Submit a list of deficiencies in writing and proceed with installation only after unsatisfactory conditions have been corrected.

3.02INSTALLATION

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. Install construction cores to secure building and areas during construction period.
2. Replace construction cores with permanent cores as indicated in keying section.
3. Furnish permanent cores to Owner for installation.

J. 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.

K. Thresholds: Set thresholds in full bed of sealant complying with requirements specified in Division 07 Section "Joint Sealants."

L. 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.

M. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.

N. Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.

O. 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. 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:

HARDWARE GROUP NO. 01

Provide each RU door(s) with the following:

QTY	DESCRIPTION	CATALOG NUMBER	FINISH	MFR
	EXHAUST PORTS OWNER PROVIDED, GC TO INSTALL			
	REMAINING HARDWARE:	BY DOOR SUPPLIER		

HARDWARE GROUP NO. 02

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
4	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	ENTRANCE LOCK	ND53TD RHO	626	SCH
1	EA	FSIC CORE	23-030 EV D	626	SCH
1	EA	WALL STOP	WS406/407CVX	630	IVE
3	EA	SILENCER	SR64	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	652	IVE
1	EA	CLASSROOM LOCK	ND70TD RHO	626	SCH
1	EA	FSIC CORE	23-030 EV D	626	SCH
1	EA	WALL STOP	WS406/407CVX	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

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	652	IVE
1	EA	STOREROOM LOCK	ND80TD RHO	626	SCH
1	EA	FSIC CORE	23-030 EV D	626	SCH
1	EA	WALL STOP	WS406/407CVX	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 05

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
8	EA	HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
2	EA	MANUAL FLUSH BOLT	FB458 24"	626	IVE
1	EA	DUST PROOF STRIKE	DP1	626	IVE
1	EA	CLASSROOM LOCK	ND70TD RHO	626	SCH
1	EA	FSIC CORE	23-030 EV D	626	SCH
2	EA	WALL STOP	WS406/407CVX	630	IVE
1	EA	MEETING STILE	383AA	AA	ZER
2	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 06

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
2	EA	MANUAL FLUSH BOLT	FB458	626	IVE
1	EA	DUST PROOF STRIKE	DP1	626	IVE
1	EA	STOREROOM LOCK	ND80TD RHO	626	SCH
1	EA	FSIC CORE	23-030 EV D	626	SCH
2	EA	SURFACE CLOSER	4040XP SHCUSH	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
2	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 07

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
1	EA	CLASSROOM LOCK	ND70TD RHO	626	SCH
1	EA	FSIC CORE	23-030 EV D	626	SCH
1	EA	SURFACE CLOSER	4040XP EDA WMS	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS406/407CVX	630	IVE
1	EA	GASKETING	488SBK PSA	BK	ZER
1	EA	DOOR BOTTOM	369AA	AA	ZER

HARDWARE GROUP NO. 08

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
1	EA	CLASSROOM LOCK	ND70TD RHO	626	SCH
1	EA	FSIC CORE	23-030 EV D	626	SCH
1	EA	SURFACE CLOSER	4040XP CUSH	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	GASKETING	488SBK PSA	BK	ZER
1	EA	DOOR BOTTOM	369AA	AA	ZER

HARDWARE GROUP NO. 09

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
8	EA	HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
1	EA	CONST LATCHING BOLT	FB51P 24"	630	IVE
1	EA	DUST PROOF STRIKE	DP1	626	IVE
1	EA	CLASSROOM LOCK	ND70TD RHO	626	SCH
1	EA	FSIC CORE	23-030 EV D	626	SCH
1	EA	COORDINATOR	COR X FL	US26D	IVE
2	EA	SURFACE CLOSER	4040XP EDA WMS	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
2	EA	WALL STOP	WS406/407CVX	630	IVE
1	EA	GASKETING	488SBK PSA	BK	ZER
2	EA	DOOR BOTTOM	367AA	AA	ZER
1	EA	MEETING STILE	383AA	AA	ZER

HARDWARE GROUP NO. 10

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
8	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	CONST LATCHING BOLT	FB51P	630	IVE
1	EA	DUST PROOF STRIKE	DP1	626	IVE
1	EA	STOREROOM LOCK	ND80TD RHO	626	SCH
1	EA	FSIC CORE	23-030 EV D	626	SCH
1	EA	COORDINATOR	COR X FL	US26D	IVE
2	EA	OH STOP	90S	630	GLY
2	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
1	EA	GASKETING	488SBK PSA	BK	ZER
1	EA	MEETING STILE	383AA	AA	ZER

HARDWARE GROUP NO. 11

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 NRP	630	IVE
1	EA	PANIC HARDWARE	CDSI-99-NL	626	VON
1	EA	RIM CYLINDER	20-057 ICX	626	SCH
1	EA	MORTISE CYLINDER	20-061 ICX 36-083	626	SCH
2	EA	PRIMUS CORE	20-740-XP	626	SCH
1	EA	SURFACE CLOSER	4040XP SHCUSH	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	RAIN DRIP	142AA	AA	ZER
1	SET	GASKETING	429AA-S	AA	ZER
1	EA	DOOR SWEEP	39A	A	ZER
1	EA	THRESHOLD	655A-223	A	ZER

HARDWARE GROUP NO. 12

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
1	EA	RIM CYLINDER	20-057 ICX	626	SCH
1	EA	FSIC CORE	23-030 EV D	626	SCH
1	EA	SURFACE CLOSER	4040XP CUSH	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	GASKETING	488SBK PSA	BK	ZER

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	652	IVE
1	EA	PUSH PLATE	8200 6" X 16"	630	IVE
1	EA	PULL PLATE	8303 10" 4" X 16"	630	IVE
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS406/407CVX	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

Operational Description: Doors normally closed and unlocked. Push/pull operation.

HARDWARE GROUP NO. 14

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	112XY	628	IVE
1	EA	PANIC HARDWARE	CDSI-99-NL-OP-110MD	626	VON
1	EA	RIM CYLINDER	20-057 ICX	626	SCH
1	EA	MORTISE CYLINDER	20-061 ICX 36-083	626	SCH
2	EA	PRIMUS CORE	20-740-XP	626	SCH
1	EA	90 DEG OFFSET PULL	8190EZHD 10" O	630-316	IVE
1	EA	OH STOP	100S	630	GLY
1	EA	SURFACE CLOSER	4040XP EDA	689	LCN
1	EA	DOOR SWEEP	39A	A	ZER
1	EA	THRESHOLD	655A-223	A	ZER
			SEALS BY DOOR SUPPLIER		

HARDWARE GROUP NO. 15

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	112XY	628	IVE
1	EA	REMOVABLE MULLION	KR4954 STAB	689	VON
1	EA	PANIC HARDWARE	CDSI-99-EO	626	VON
1	EA	PANIC HARDWARE	CDSI-99-NL-OP-110MD	626	VON
1	EA	RIM CYLINDER	20-057 ICX	626	SCH
3	EA	MORTISE CYLINDER	20-061 ICX 36-083	626	SCH
4	EA	PRIMUS CORE	20-740-XP	626	SCH
2	EA	90 DEG OFFSET PULL	8190EZHD 10" O	630-316	IVE
2	EA	OH STOP	100S	630	GLY
2	EA	SURFACE CLOSER	4040XP EDA	689	LCN
1	EA	MULLION SEAL	8780NBK PSA	BK	ZER
2	EA	DOOR SWEEP	39A	A	ZER
1	EA	THRESHOLD	655A-223	A	ZER
			SEALS BY DOOR SUPPLIER		

END OF SECTION

SECTION 09 94 00 - SPECIAL COATINGS – DECORATIVE FINISH

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Division 01—General Requirements, and other applicable specification sections in the Project Manual apply to the work specified in this Section.

B. Painting, Section 09 91 00

1.02 SUMMARY

A. Scope: Provide labor, material, equipment, related services, and supervision required, including, but not limited to, manufacturing, fabrication, erection, and application for decorative finishes as required for the complete performance of the work, and as shown on the Drawings and as herein specified.

B. Section Includes: The work specified in this Section includes, but shall not be limited to, the following:
   1. Surface preparation.
   2. Waterbased polyurethane/acrylic metallic paint finish system.

1.03 QUALITY ASSURANCE:

A. Qualifications:

1. Manufacturer Qualifications: The manufacturer shall be a firm engaged in the manufacture of decorative finishes of types and sizes required, and whose products have been in satisfactory use in similar service for a minimum of five years.
   a. Manufacturer is to certify that they make all materials in this Section.
   b. All materials within the special coatings section, including, but not limited to, finishes, and primers, shall be supplied by one manufacturer.

B. Mockups: Apply benchmark samples of each coating system indicated to verify preliminary selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
   a. Architect will select one surface to represent surfaces and conditions for application of each coating system and type of substrate.
   b. Wall Surfaces: Provide samples of at least 100 sq. ft.
   c. Other Items: Architect will designate items or areas required.

2. Apply benchmark samples after permanent lighting and other environmental services have been activated.

3. Final approval of color and pattern selections will be based on benchmark samples.

   a. If preliminary color and pattern selections are not approved, apply additional benchmark samples of additional colors and patterns selected by Architect at no added cost to Owner.

C. Fire Rating
   1. Underwriters Laboratory 723
      Class A Fire Hazard Classification
      Test Procedure ASTM E84-61
      U.L. Tested and Listed

D. Applicator (certified by manufacturer)
   1. Applicator shall certify in writing that the manufacturer has trained technicians utilized for work in this section. Applicator shall include in his certification that specialized equipment as required by the manufacturer will be used for work in this section.

D. Manufacturer
   1. Manufacturer to certify they make all materials in specification.
   2. All materials within special coatings section will be supplied by one manufacturer.

E. Master Painters Institute (MPI) Standards: Comply with recommendations in "MPI Architectural Painting Specification Manual" applicable to products and coating systems indicated

1.04 REFERENCES

A. General: The publications listed below form a part of this Specification to the extent referenced. The publications are referred to in the text by the basic designation only. The edition/revision of the referenced publications shall be the latest date as of the date of the Contract Documents unless otherwise specified.

B. ASTM (ASTM)
   1. ASTM D 2486, “Standard Test Method for Scrub Resistance of Interior Latex Flat Wall Paints.”
   2. ASTM E 84, “Standard Test Method for Surface Burning Characteristics of Building Materials.”

C. Gypsum Association (GA)
   1. GA 214, “Recommended Specification: Levels of Gypsum Board Finish.”

D. Painting and Decorating Contractors of America (PDCA):
   1. PDCA P5, “Benchmark Sample Procedures for Paint and Other Decorative Coating Systems.”

E. South Coast Air Quality Management District (SCAQMD):
   1. SCAQMD Rule #1168, “Adhesive and Sealant Applications,” including most recent amendments.

1.05 SYSTEM DESCRIPTION

A. Performance:

b. VOC: Flat coatings shall have 150 g/l of VOCs, satin coatings shall have 140 g/l of VOCs, and gloss coatings shall have 150 g/l of VOCs.
c. Fire Rating: Coatings shall be Type I or Class A fire rated, ASTM E 84.

1.05 SUBMITTALS:

A. Color Samples: Four swatches of each color and coating system.
B. Manufacturer's Literature: Descriptive data and recommendations for mixing, application and curing.
C. Quality Control Submittals: Submit a letter from the manufacturer stating that the applicator has completed the manufacturer's training program.

1.06 PRODUCT DELIVERY, STORAGE AND HANDLING:

A. Deliver materials in sealed containers with manufacturer's labels intact.

B. Store materials in protected area at a temperature not less than 50 degrees F.

C. Maintain containers in clean conditions, free of foreign materials and residue.

1.07 PRODUCT DELIVERY, STORAGE AND HANDLING:

A. Apply coating under the following conditions:

1. The temperature of air and substrate is between 50 degrees F (10 degrees C) and 80 degrees F (27 degrees C). Relative humidity shall be less than 50 percent.

2. Prevent wide temperature fluctuations that could cause moisture condensation on freshly coated surfaces.

3. Application areas shall be free of excessive dust.

B. Maintain a minimum of 80 footcandles (861 lx) on surfaces to be coated.

C. Provide adequate fresh air and ventilation during application.

PART 2 – PRODUCTS

2.01 MANUFACTURERS:

A. Products Acceptable manufacturers include, but are not limited to the following:
a. Wolf Gordon (Scuffmaster) – Basis of Design
b. Approved equal

2.01 MATERIALS:

B. Metallic Finish System Components:
1. Base Coat: Waterbased polyurethane/acrylic base coat and cross-linker.
   a. Basis of Design: Scuffmaster “Solid Metal Metallic Coat.”
2. Clear Coat: Waterbased polyurethane protective clear coat with cross-linker.
   1. Basis of Design: “Scuffmaster UltraClear Flat”, “Scuffmaster UltraClear Satin”, or “Scuffmaster UltraClear Gloss.”
3. Miscellaneous Materials: Surface patching compounds and other materials necessary for application of the finish system shall be of high quality and compatible with the coating system.

C. Material Compatibility: Provide materials for use within each coating system that are compatible with one another and substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience. Include primers, sealers, fillers, and intermediated and finish coats.

D. Colors and Patterns: Match Architect's samples, as indicated in color schedule.

PART 3 – EXECUTION

A. Protection: Mask adjacent surfaces to protect from overspray. Protect floors and other surfaces with drop cloths.

1. Remove items that are not to be coated from surfaces that are to be coated. Tag and protect removed items and store them until re-installation. Re-install items after completion of coating application. Items that are not to be coated include, but shall not be limited to, operating hardware, electrical device plates, and factory-finished Items.

2. Patch and repair substrates as specified in applicable specifications sections. Clean substrates. Remove dirt, grit, loose materials, grease, oil, temporary protective coatings, contamination, other foreign materials, etc. Sand with 100 grit or finer sandpaper, spackle, putty, and caulk existing surfaces to produce smooth and uniform substrates. Spot-prime existing water-soluble stains with alcohol or oil- based stain-killing primer. Touch up painted or primed surfaces with compatible paint or specified primer.

END OF SECTION 09 94 00

SECTION 32 31 13 - COMMERCIAL LOUVERED FENCE AND GATES

PART 1 – GENERAL

1.1. DESCRIPTION

A. This section describes the following fence system:

1. Fixed louver modular fencing panels fabricated with extruded aluminum louvers and flat aluminum bars including extruded aluminum fence posts and aluminum louver gates. Louvered security fence and gates shall be furnished and installed as shown on the plans and specified herein, overall height of vertical louver framework shall be 5’-0” tall.

1.2. REQUIREMENTS

A. Furnish materials, labor, expertise and equipment necessary to complete all work specified in this section and as shown on the drawings.
B. Structural Performance: Provide product and installation capable of withstanding the effects of gravity lads and the following loads and stresses within limits and under conditions indicated.
   i. Uniform pressure of 30 lbf/sq. ft. acting inward or outward.
   ii. Thermal Movements resulting from a temperature change (range) of 120 degrees Fahrenheit ambient and 180 degrees Fahrenheit material surfaces.

1.3. SUBMITTALS

A. Shop drawings and manufacturer's literature: Provide specifications and construction detail drawings to substantiate quality of materials and provide details of fabrication and installation.

B. Submittals shall be in accordance with standard construction practices to include complete detailed layout of all panels, posts, gates. Submittals shall include plan layout, elevations and section views of panels, posts and gates.

C. Certificate: manufacturer's certification that materials meet specification requirements.

1.4. REFERENCES

A. ASTM B 209 – Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.

B. ASTM B 221 – Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles and Tubes.

C. ASTM D3363 – Standard Test Method for Film Hardness by Pencil Test.

D. ASTM D2794 – Standard Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation.

E. ASTM B117 – Standard Practice for Operating Salt Spray Apparatus.

F. ASTM D822 – Standard Practice for Filtered Open-Flame Carbon-Arc Exposures of Paint and Related Coatings.

G. AWS D1.2 - Structural Welding Code – Aluminum.

1.5. QUALITY ASSURANCE

A. Installation of fence and materials shall conform to the requirements of the fence manufacturer.

B. The fence shall be warranted from any defects in materials and workmanship for a period of (10) years from the date of purchase.

PART 2 – PRODUCTS

2.1. ACCEPTABLE MANUFACTURERS

1. Basis of Design: Ametco® Manufacturing Corporation, 4326 Hamann Parkway, P.O. Box 1210, Willoughby, Ohio 44096; 800-362-1360.
   a. System: Phoenix

2. Other Manufacturers
   a. PalmSHIELD
   b. Latitude

2.2. MATERIALS

a. Extruded Aluminum: ASTM B221, Alloy 6061 – Temper T-6.

b. Sheet Aluminum: ASTM B209, Alloy 6061 – Temper T6.

c. Powder Coating Material Hardness: ASTM 3363 2H.

3. Louver Panel Description:

   a. Louver Panel Height: 5’-0”

   b. Louver Panel Width: Not to exceed 8’.

   c. Fixed louver blades: Extruded tubular aluminum louver blades, inclined at 45 degrees, and spaced at 2.83 inches and to provide 100 percent direct visual screening.

   d. Size: 1/2 by 4 inches

   e. Material thickness: 0.09 inch

   f. Framing bars: Extruded aluminum flat bars welded to ends of louvers.

4. Fence Posts:

   a. Panel posts shall be 3" square by 1/8" minimum extruded tubular aluminum sections with solid aluminum caps. Length as specified on the contract drawings.

5. Fittings and accessories: All fittings and accessories shall be stainless steel and sized as specified by the fence manufacturer.

6. Anchor Bolts: Anchor bolts shall be (*state means of anchoring posts to adjoining surface*) and adequate to support loads based on screening height, exposures and loading.

2.3. Factory Finish

a) Aluminum fence panels and posts shall receive polyester powder coating.

b) Polyester powder coating: Electrostatically applied colored polyester powder coating heat cured to chemically bond finish to metal substrate.

c) Minimum hardness measured in accordance with ASTM D3363: 2H.

d) Direct impact resistance tested in accordance with ASTM D2794. Withstand 160 inch-pounds.

e) Salt spray resistance tested in accordance with ASTM B117: No undercutting, rusting, or blistering after 500 hours in 5 percent salt spray at 95 degrees F and 95 percent relative humidity and after 1000 hours less than [3/16 inch] [5 mm] undercutting.

f) Weatherability tested in accordance with ASTM D822: No film failure and 88 percent gloss retention after 1 year exposure in South Florida with test panels tilted at 45 degrees.

g) Color: Custom color as selected by Architect.

PART 3 – EXECUTION

3.1 INSPECTION

A. Verify that final grading in fence location is completed and without irregularities which will interfere with fence installation.

B. Field verify all fence dimensions and layout prior to commencing installation.

C. Do not commence work until unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Install fence in accordance with manufacturer's installation instructions.

B. Install fence plumb and level. Posts are plated and mounted to top of surface.

C. Do not install bent, bowed or otherwise damaged panels. Remove damaged

components from site and replace.

D. Cast concrete footings in accordance with Section 03 30 00 - Cast-in-Place Concrete as detailed on Drawings and approved shop drawings.

a. Minimum footing diameter:
i. Terminal and gate posts: [12 inches.] [305 mm.]
ii. Intermediate line posts: [10 inches.] [254 mm.]
iii. Allow [8 inches] [203 mm] minimum embedment of posts.
iv. Allow [6 inches] [152 mm] minimum concrete beneath post bottom.

E. Touch-up damaged finish with paint supplied by manufacturer and matching original coating.

END OF SECTION 32 31 13

GROUND STABILIZATION

SITE AREA DESCRIPTION	STABILIZATION TIME FRAME	STABILIZATION TIME EXCEPTIONS
• PERIMETER DIKES, SWALES, DITCHES, AND SLOPES	7 DAYS	NONE
• HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
• SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1 14 DAYS ARE ALLOWED
• SLOPES 3:1 OR FLATTER	14 DAYS	7-DAYS FOR SLOPES GREATER THAN 50 FEET IN LENGTH
• ALL OTHER AREA WITH SLOPE FLATTER THAN 4:1	14 DAYS	NONE (EXCEPT FOR PERIMETERS AND HQW ZONES)

* "EXTENSIONS OF TIME MAY BE APPROVED BY THE PERMITTING AUTHORITY BASED ON WEATHER OR OTHER SITE-SPECIFIC CONDITIONS THAT MAKE COMPLIANCE IMPRACTICABLE." (SECTION II. B (2)(b))

NPDES GROUND STABILIZATION:

SOIL STABILIZATION SHALL BE ACHIEVED ON ANY AREA OF A SITE WHERE LAND-DISTURBING ACTIVITIES HAVE TEMPORARY OR PERMANENTLY CEASED ACCORDING TO THE FOLLOWING SCHEDULE:

1. ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEPPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 7 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.
2. ALL OTHER DISTURBED AREAS SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 14 CALENDAR DAYS FROM THE LAST LAND-DISTURBANCE ACTIVITY.

NOTE:

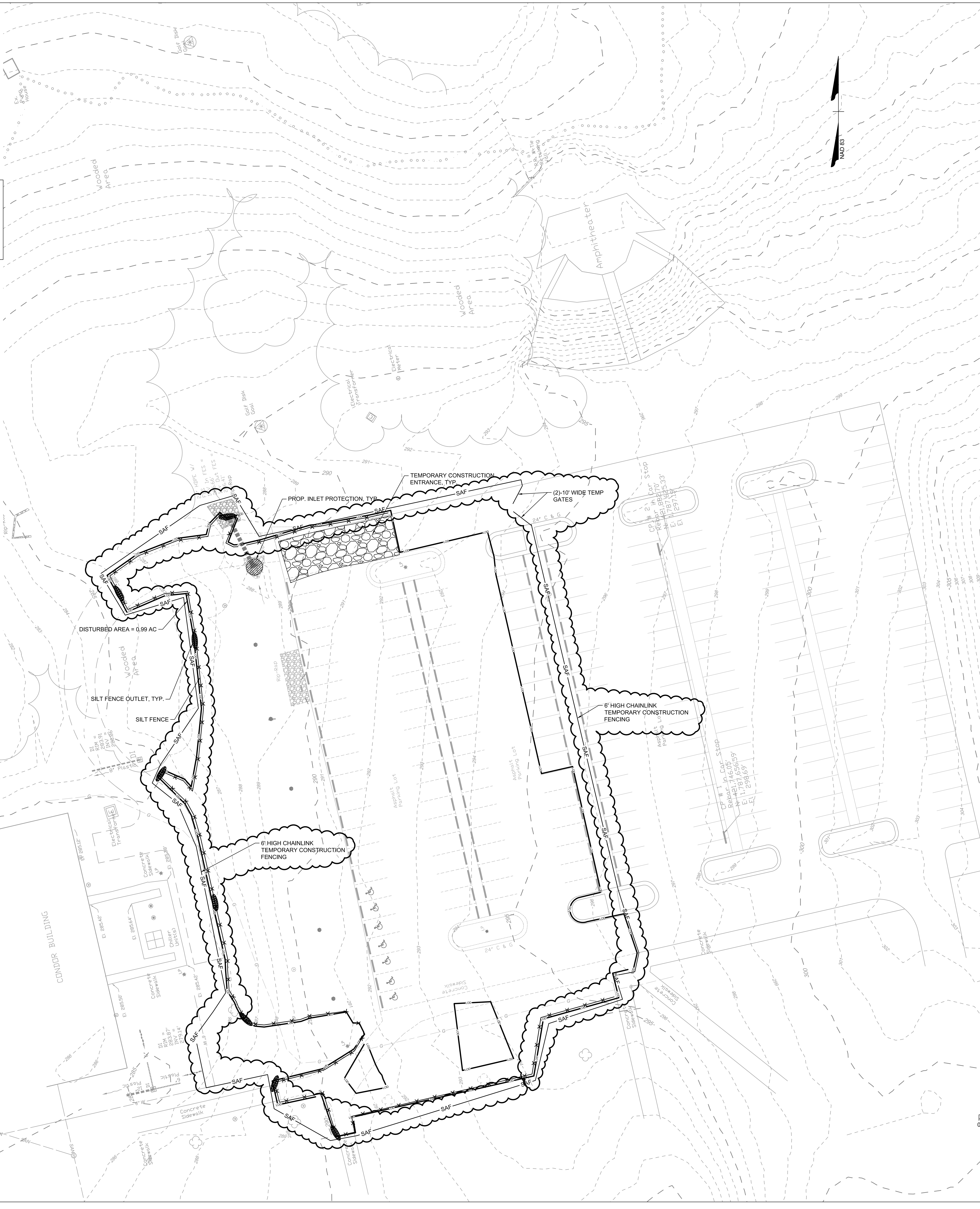
1. SILT FENCE OUTLETS SHALL BE PROVIDED ALONG ALL LOW POINTS OF SILT FENCE AND AREAS WHERE RUNOFF MAY CONCENTRATE CAUSING DAMAGE TO SILT FENCE. CONTRACTOR SHALL INSTALL OUTLETS AS NECESSARY TO ENSURE SILT FENCE IS FULLY FUNCTIONAL THROUGHOUT THE DURATION OF CONSTRUCTION.
2. THE NPDES CONSTRUCTION PERMIT REQUIRES EROSION AND SEDIMENT CONTROL DEVICES AND STORM WATER OUTFALLS BE INSPECTED WEEKLY (EVERY 7 CALENDAR DAYS) AND WITHIN 24 HRS OF A .5 INCH RAIN EVENT. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT THESE INSPECTIONS AND MAINTAIN RECORDS UNTIL THE AREA HAS STABILIZED, EVIDENT BY 80% VEGETATIVE GROWTH FOR AREAS PROVIDED SEEDING. TO FACILITATE RAINFALL MONITORING A RAIN GAUGE IS REQUIRED TO BE ON SITE. ADDITIONALLY THE CONTRACTOR IS RESPONSIBLE FOR CONDUCTING "SELF INSPECTIONS" INDICATING THE DATE BMPS ARE INSTALLED AND STABILIZATION MEASURES (SEEDING/MULCHING OR SOD) ARE INITIATED. THE "SELF INSPECTION" REPORTS WILL BE MAINTAINED ALONG WITH THE "NPDES" INSPECTION REPORTS. ONCE STABILIZATION HAS BEEN ACCOMPLISHED INSPECTION RECORDS ARE TO BE FORWARDED TO EAD AND ALL TEMPORARY EROSION/SEDIMENTATION CONTROL DEVICES REMOVED. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING COMPLIANCE WITH ALL PERMITS AND PLANS, ANY CHANGES WILL BE APPROVED BY THE STATE PRIOR TO EXECUTION. A COPY OF THE EROSION AND SEDIMENTATION CONTROL PLAN, LETTER OF APPROVAL, AND NPDES CONSTRUCTION PERMIT WILL BE MAINTAINED BY THE CONTRACTOR AT THE ONSITE OFFICE. IF SOIL IS REMOVED FROM OR BROUGHT ONSITE, THE APPLICABLE SOLID WASTE MANAGEMENT PERMIT NUMBER, EROSION SEDIMENTATION PERMIT NUMBER OR MINE PERMIT NUMBER WILL BE DISCLOSED.

GENERAL EROSION AND SEDIMENT CONTROL NOTES

1. REFER TO EXISTING CONDITIONS AND DEMOLITION PLAN.
2. EXCAVATION AND EARTH MOVING OPERATIONS SHALL BE CONDUCTED UNDER THE SUPERVISION OF THE GEOTECHNICAL ENGINEER.
3. ALL CONSTRUCTION SHALL COMPLY WITH NCDENR STANDARDS AND SPECIFICATIONS.
4. FOOTING EXCAVATION SHALL BE CONTINUOUSLY DETWATERED TO PREVENT SETTLEMENT AND SEDIMENT DEPOSITION. ENSURE THAT THE BUILDING PAD IS CONSTRUCTED WITH SUITABLE MATERIAL AS PER THE GEOTECHNICAL ENGINEERS DIRECTION.
5. VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. EXISTING UTILITIES SHOWN ARE FROM THE BEST AVAILABLE RECORDS AND FROM A SURVEY OF THE ABOVE GROUND FEATURES. NO WARRANTY IS GIVEN OR IMPLIED AS TO THE ACCURACY OF THE INFORMATION. ALL EXISTING UTILITIES SHOULD BE CONSIDERED APPROXIMATE IN LOCATION AND VERIFIED PRIOR TO COMMENCING ACTIVITY ON SITE.
6. STABILIZE DISTURBED AREAS WITH TEMPORARY VEGETATION. DENUDED AREA MUST BE SEEDED WITH FOURTEEN (14) DAYS OF COMPLETION OF ANY PHASE OF CONSTRUCTION. HYDROSEEDING REQUIRED ON ALL SLOPES 3:1 OR GREATER.
7. ENSURE THAT ALL TEMPORARY DIVERSIONS ARE INSTALLED WITH POSITIVE DRAINAGE AND SHALL OPPOSE EXISTING GRADE WHEN NECESSARY TO PROVIDE A MINIMUM OF 0.5% LONGITUDINAL SLOPE.
8. ALL ADJACENT ROADS TO THE SITE SHALL BE SWEPT AND WASHED AT THE END OF EACH WORK DAY TO ENSURE NO SEDIMENT COLLECTS ON THE ROADWAYS.
9. INSPECT AND PROPERLY MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES WEEKLY AND AFTER EACH RAINFALL EVENT.
10. INSTALL ANY ADDITIONAL EROSION CONTROL MEASURE AS NECESSARY TO PREVENT SEDIMENT RUNOFF.

EROSION CONTROL SEQUENCE - PHASE 1

1. OBTAIN ALL NECESSARY PERMITS FROM THE PROPER AUTHORITIES.
2. INSTALL CONSTRUCTION ENTRANCE AND EROSION CONTROL MEASURES AS SHOWN ON THE PLAN IN ACCORDANCE WITH THE LATEST NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING DESIGN MANUAL. ANY SEDIMENT ACCUMULATION ON ADJACENT PUBLIC ROADS AS A RESULT OF THE PROJECT AND TRAFFIC FROM THE PROJECT SHALL BE IMMEDIATELY CLEANED OFF BY THE CONTRACTOR.
3. DEMO SIDEWALKS AND PARKING AS INDICATED ON THE SITE DEMO PLAN.
4. INSTALL ADDITIONAL PERMANENT SWALES AND TEMPORARY DIVERSION SWALES AS REQUIRED TO INTERSECT RUNOFF AS SITE IS BROUGHT UP TO GRADE. MAINTAIN POSITIVE DRAINAGE ALONG SWALES AND DIVERSIONS AT ALL TIMES DURING CONSTRUCTION. PROVIDE PUMPS TO DIVERT WATER TO APPROPRIATE EROSION CONTROL MEASURE AS NECESSARY IF POSITIVE SLOPE CAN NOT BE ACHIEVED. TEMPORARY SLOPE DRAINS ARE TO BE INSTALLED TO CONNECT PERMANENT SWALES AND TEMPORARY DIVERSION SWALES OVER STEEP SLOPES.
5. ONCE ALL DEMOLITION HAS BEEN COMPLETED CONTACT OWNER'S ENGINEER AND EROSION CONTROL INSPECTOR FOR SITE INSPECTION. AFTER APPROVAL, BEGIN CONSTRUCTION OF PHASE 2. DO NOT BEGIN PHASE 2 CONSTRUCTION WITHOUT APPROVAL OF OWNER'S ENGINEER.



EROSION CONTROL LEGEND

TEMPORARY CONSTRUCTION ENTRANCE
SILT FENCE
SAF — TEMP CONSTRUCTION FENCE
LOD — LIMITS OF DISTURBANCE
DRAINAGE AREA
800 — EXISTING CONTOUR
800 — EXISTING CONTOUR
INLET PROTECTION
STONE OUTLET
EROSION CONTROL MATTING

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BID DOCUMENTS

EROSION CONTROL
PHASE 1

DATE: 3-3-2025
PROJECT NO: 61085

REVISIONS

NO:	DATE:	DESCRIPTION:
1	3/14/25	ADDENDUM 1

SHEET NUMBER

C300

GROUND STABILIZATION		
SITE AREA DESCRIPTION	STABILIZATION TIME FRAME	STABILIZATION TIME EXCEPTIONS
• PERIMETER DIKES, SWALES, DITCHES, AND SLOPES	7 DAYS	NONE
• HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
• SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1 14 DAYS ARE ALLOWED
• SLOPES 3:1 OR FLATTER	14 DAYS	7-DAYS FOR SLOPES GREATER THAN 50 FEET IN LENGTH
• ALL OTHER AREA WITH SLOPE FLATTER THAN 4:1	14 DAYS	NONE (EXCEPT FOR PERIMETERS AND HQW ZONES)

* "EXTENSIONS OF TIME MAY BE APPROVED BY THE PERMITTING AUTHORITY BASED ON WEATHER OR OTHER SITE-SPECIFIC CONDITIONS THAT MAKE COMPLIANCE IMPRACTICABLE." (SECTION II. B (2)(b))

NPDES GROUND STABILIZATION:

SOIL STABILIZATION SHALL BE ACHIEVED ON ANY AREA OF A SITE WHERE LAND-DISTURBING ACTIVITIES HAVE TEMPORARY OR PERMANENTLY CEASED ACCORDING TO THE FOLLOWING SCHEDULE:

1. ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEPPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 7 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.

2. ALL OTHER DISTURBED AREAS SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 14 CALENDAR DAYS FROM THE LAST LAND-DISTURBANCE ACTIVITY.

NOTE:

1. SILT FENCE OUTLETS SHALL BE PROVIDED ALONG ALL LOW POINTS OF SILT FENCE AND AREAS WHERE RUNOFF MAY CONCENTRATE CAUSING DAMAGE TO SILT FENCE. CONTRACTOR SHALL INSTALL OUTLETS AS NECESSARY TO ENSURE SILT FENCE IS FULLY FUNCTIONAL THROUGHOUT THE DURATION OF CONSTRUCTION.

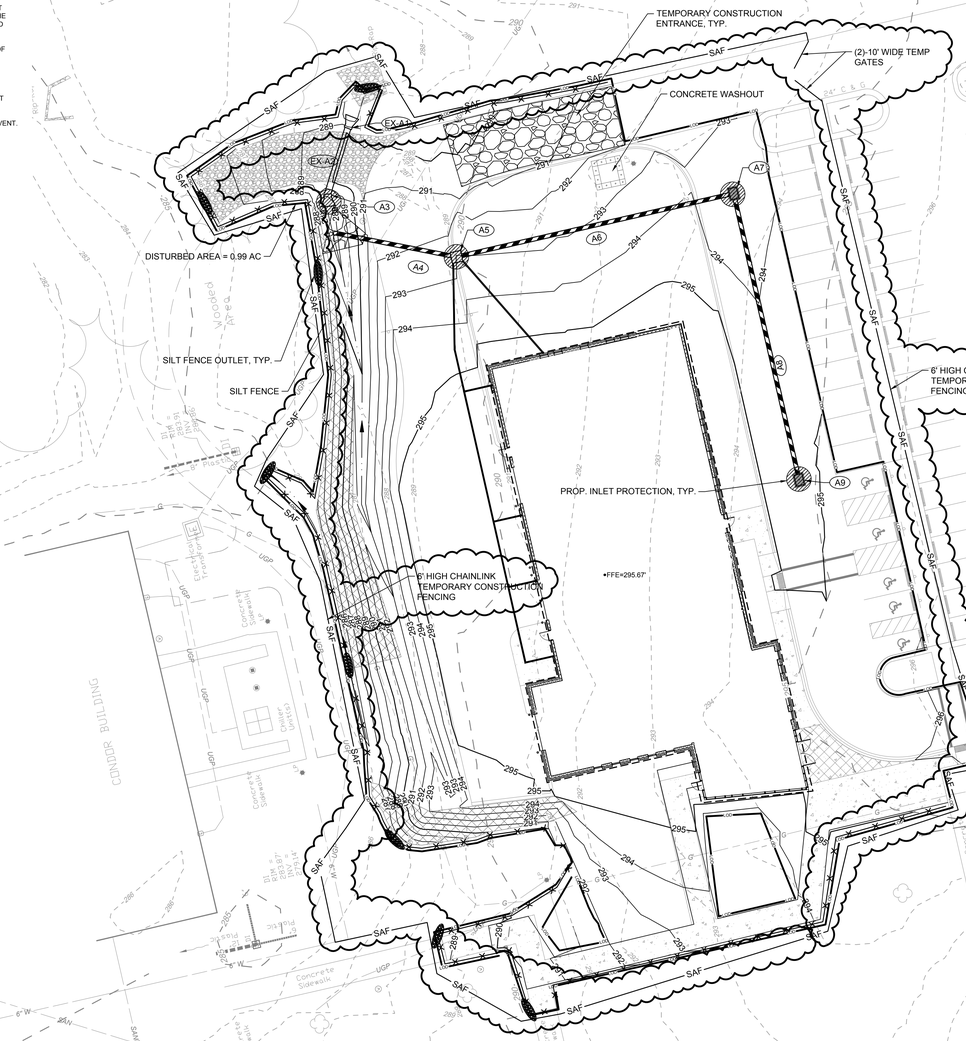
2. THE NPDES CONSTRUCTION PERMIT REQUIRES EROSION AND SEDIMENT CONTROL DEVICES AND STORM WATER OUTFALLS BE INSPECTED WEEKLY (EVERY 7 CALENDAR DAYS) AND WITHIN 24 HRS OF A .5 INCH RAIN EVENT. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT THESE INSPECTIONS AND MAINTAIN RECORDS UNTIL THE AREA HAS STABILIZED, EVIDENT BY 80% VEGETATIVE GROWTH FOR AREAS PROVIDED SEEDING. TO FACILITATE RAINFALL MONITORING A RAIN GAUGE IS REQUIRED TO BE ON SITE. ADDITIONALLY THE CONTRACTOR IS RESPONSIBLE FOR CONDUCTING "SELF INSPECTIONS" INDICATING THE DATE BMPS ARE INSTALLED AND STABILIZATION MEASURES (SEEDING/MULCHING OR SOD) ARE INITIATED. THE "SELF INSPECTION" REPORTS WILL BE MAINTAINED ALONG WITH THE "NPDES" INSPECTION REPORTS. ONCE STABILIZATION HAS BEEN ACCOMPLISHED INSPECTION RECORDS ARE TO BE FORWARDED TO EAD AND ALL TEMPORARY EROSION/SEDIMENTATION CONTROL DEVICES REMOVED. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING COMPLIANCE WITH ALL PERMITS AND PLANS, ANY CHANGES WILL BE APPROVED BY THE STATE PRIOR TO EXECUTION. A COPY OF THE EROSION AND SEDIMENTATION CONTROL PLAN, LETTER OF APPROVAL, AND NPDES CONSTRUCTION PERMIT WILL BE MAINTAINED BY THE CONTRACTOR AT THE ONSITE OFFICE. IF SOIL IS REMOVED FROM OR BROUGHT ONSITE, THE APPLICABLE SOLID WASTE MANAGEMENT PERMIT NUMBER, EROSION SEDIMENTATION PERMIT NUMBER OR MINE PERMIT NUMBER WILL BE DISCLOSED.

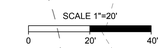
GENERAL EROSION AND SEDIMENT CONTROL NOTES

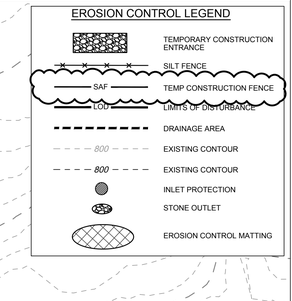
1. REFER TO EXISTING CONDITIONS AND DEMOLITION PLAN.
2. EXCAVATION AND EARTH MOVING OPERATIONS SHALL BE CONDUCTED UNDER THE SUPERVISION OF THE GEOTECHNICAL ENGINEER.
3. ALL CONSTRUCTION SHALL COMPLY WITH NCDENR STANDARDS AND SPECIFICATIONS.
4. FOOTING EXCAVATION SHALL BE CONTINUOUSLY DETWATERED TO PREVENT SETTLEMENT AND SEDIMENT DEPOSITION. ENSURE THAT THE BUILDING PAD IS CONSTRUCTED WITH SUITABLE MATERIAL AS PER THE GEOTECHNICAL ENGINEERS DIRECTION.
5. VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. EXISTING UTILITIES SHOWN ARE FROM THE BEST AVAILABLE RECORDS AND FROM A SURVEY OF THE ABOVE GROUND FEATURES. NO WARRANTY IS GIVEN OR IMPLIED AS TO THE ACCURACY OF THE INFORMATION. ALL EXISTING UTILITIES SHOULD BE CONSIDERED APPROXIMATE IN LOCATION AND VERIFIED PRIOR TO COMMENCING ACTIVITY ON SITE.
6. STABILIZE DISTURBED AREAS WITH TEMPORARY VEGETATION. DENUDED AREA MUST BE SEEDED WITH FOURTEEN (14) DAYS OF COMPLETION OF ANY PHASE OF CONSTRUCTION. HYDROSEEDING REQUIRED ON ALL SLOPES 3:1 OR GREATER.
7. ENSURE THAT ALL TEMPORARY DIVERSIONS ARE INSTALLED WITH POSITIVE DRAINAGE AND SHALL OPPOSE EXISTING GRADE WHEN NECESSARY TO PROVIDE A MINIMUM OF 0.5% LONGITUDINAL SLOPE.
8. ALL ADJACENT ROADS TO THE SITE SHALL BE SWEPT AND WASHED AT THE END OF EACH WORK DAY TO ENSURE NO SEDIMENT COLLECTS ON THE ROADWAYS.
9. INSPECT AND PROPERLY MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES WEEKLY AND AFTER EACH RAINFALL EVENT.
10. INSTALL ANY ADDITIONAL EROSION CONTROL MEASURE AS NECESSARY TO PREVENT SEDIMENT RUNOFF.

EROSION CONTROL PHASE 2 CONSTRUCTION SEQUENCE:

1. DO NOT BEGIN PHASE 2 CONSTRUCTION UNTIL PHASE 1 HAS BEEN APPROVED BY ENGINEER AND LOCAL INSPECTOR.
2. GRADE SITE PER GRADING PLAN AND BEGIN INSTALLATION OF SITE UTILITIES AND SITE DRAINAGE.
3. MAINTAIN INLET PROTECTION ON STORM SEWER.
4. CONTINUE SITE GRADING FOR THE BUILDINGS, SIDEWALKS, SWALES, ETC.
5. INSTALL SIDEWALKS AND BUILDING CONNECTIONS AND CONSTRUCT BUILDING.
6. PLACE TOPSOIL OVER DISTURBED SITE AREAS AND PROVIDE PERMANENT SEEDING AS INDICATED IN THE SEEDING SPECIFICATIONS.
7. ONCE ALL AREAS HAVE BEEN STABILIZED, CONTACT OWNER'S ENGINEER AND LOCAL INSPECTOR FOR SITE CLOSEOUT INSPECTION.
8. AFTER APPROVAL FROM THE ENGINEER AND LOCAL INSPECTOR, REMOVE ALL REMAINING EROSION CONTROL MEASURES AND STABILIZE ANY REMAINING DISTURBED AREAS. DO NOT REMOVE ANY EROSION CONTROL MEASURES WITHOUT APPROVAL OF THE ENGINEER AND INSPECTOR.
9. PROVIDE OWNER, ENGINEER, AND CITY OF HAMLET ANY REQUIRED PROJECT AS-BUILTS AND/OR OTHER PROJECT CLOSEOUT DOCUMENTS AS MAY BE REQUIRED.







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Hamlet, NC 28345

SEAL 34288 ENGINEER BRYAN V. CRUTCHFIELD

BID DOCUMENTS

EROSION CONTROL PHASE 2

DATE: 3-3-2025
PROJECT NO: 61085

REVISIONS

NO:	DATE:	DESCRIPTION:
1	3/14/25	ADDENDUM 1

SHEET NUMBER

C301

GENERAL SHEET NOTES

1. ALL ARCHITECTURAL COMPONENTS ARE TO BE ATTACHED AS REQUIRED BY ASCE 7-05 CHAPTER 13 SEISMIC DESIGN FOR NONSTRUCTURAL COMPONENTS. EACH INDIVIDUAL CONTRACTOR RESPONSIBLE FOR THE COMPONENT MUST PROVIDE PROJECT SPECIFIC DESIGN AND DOCUMENTATION PREPARED BY A LICENSED ENGINEER. CHAPTER 13 DEFINES THE FORCE REQUIRED TO SUPPORT THE COMPONENT FOR THE ANCHORAGE AND BRACING. THE COST OF PREPARING THIS INFORMATION AND DESIGN SHALL BE INCLUDED IN EACH CONTRACTOR'S BID PROVIDING THE COMPONENT.

2. FIELD VERIFY ALL CONDITIONS. GENERAL CONTRACTOR MUST NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO START OF WORK AFFECTED BY SUCH DISCREPANCY.

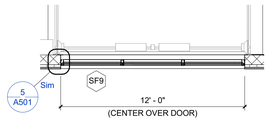
3. DO NOT SCALE DRAWINGS. IF DIMENSIONS ARE IN QUESTION, OBTAIN CLARIFICATION FROM ARCHITECT.

4. PROVIDE BLOCKING WITHIN STUD WALLS AS REQUIRED FOR SUPPORT OF CABINETS, SHELVING, WALL STOPS, COUNTERTOPS, MARKERBOARDS, TACKBOARDS, AV EQUIPMENT AND SIMILAR.

5. PLACE CONTROL JOINTS IN SIDEWALK AND PAVING PER MINIMUM REQUIREMENTS STATED IN CIVIL DOCUMENTS. GENERAL LAYOUT TO BE COORDINATED BY G.C.

6. ALL INTERIOR DIMENSIONS ARE TO FACE OF STUD OR FACE OF MASONRY U.N.O.

7. INTERIOR OF EXTERIOR TOILET ROOM WALLS TO HAVE 5/8" GYP ON 1" Z-FURRING. ALL OTHER INTERIOR FURRING TO BE 5/8" GYP ON 2" Z-FURRING.

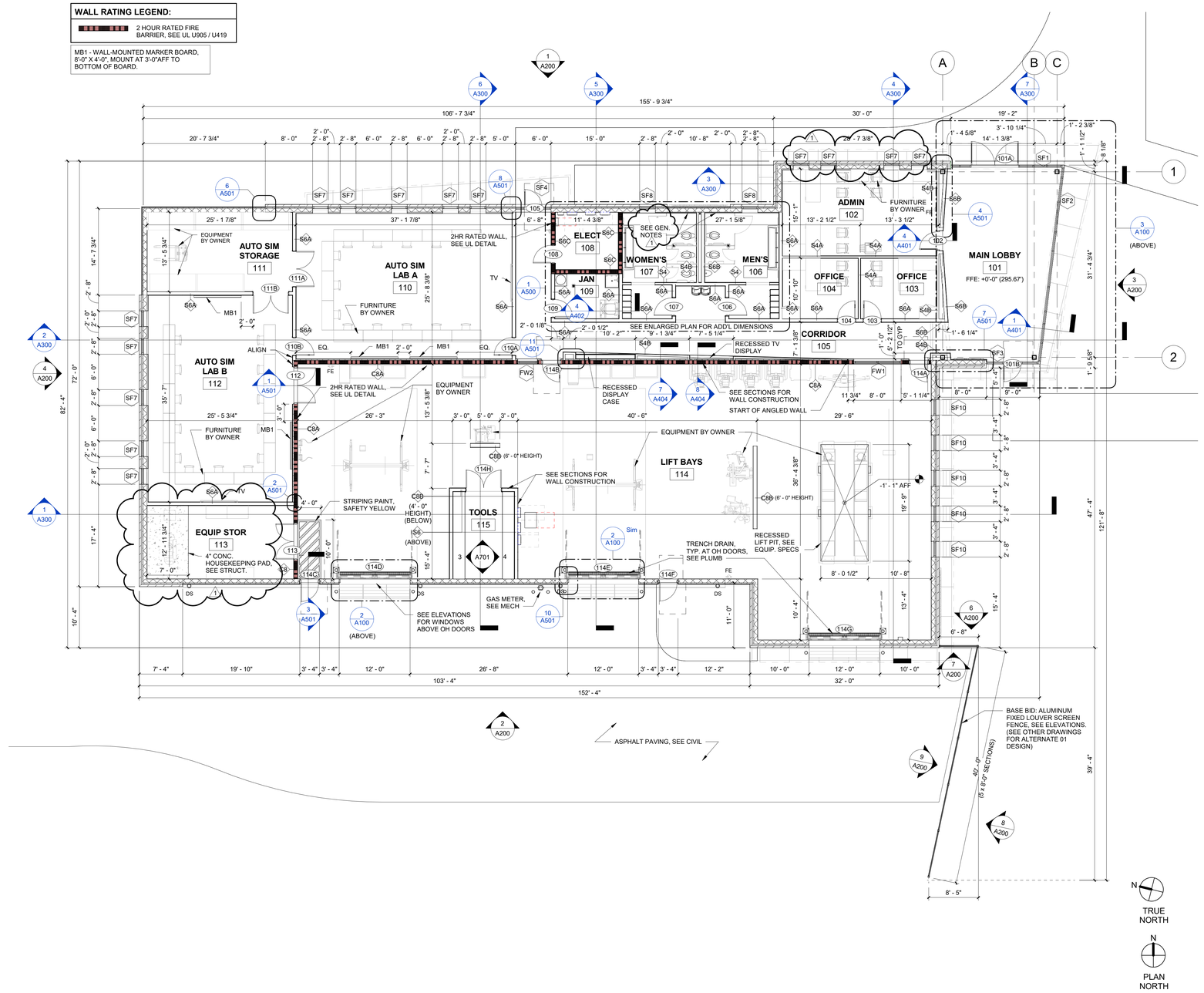


PLAN AT CLERESTORY | 1/4" = 1'-0" | 2

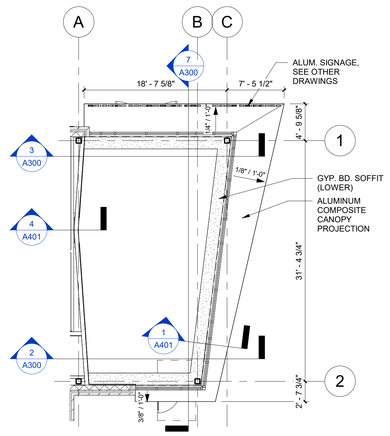
WALL RATING LEGEND:

2 HOUR RATED FIRE BARRIER, SEE UL U905 / U419

MB1 - WALL-MOUNTED MARKER BOARD, 8'-0" X 4'-0", MOUNT AT 3'-0"AFF TO BOTTOM OF BOARD.



FLOOR PLAN | 1/8" = 1'-0" | 1



UPPER LOBBY PLAN | 1/8" = 1'-0" | 3

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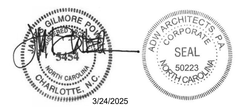
FLOOR PLAN

DATE: 3/24/2025
PROJECT NO: 23014

REVISIONS

NO:	DATE:	DESCRIPTION:
1	3/5/25	ADDENDUM 01



3/24/2025

SHEET NUMBER

A100

ROOF GENERAL NOTES

1. ALL DIMENSIONS TO BE FIELD VERIFIED. DO NOT SCALE DRAWINGS. IF DIMENSIONS ARE IN QUESTION, OBTAIN CLARIFICATION FROM ARCHITECT.
2. COORDINATE EXHAUST FAN AND MECHANICAL UNIT LOCATIONS WITH MECHANICAL AND ELECTRICAL CONTRACTORS.
3. SEE PLUMBING DRAWINGS FOR LOCATIONS OF ALL PLUMBING VENTS AND GAS PIPING (COORDINATE WITH ALL TRADES)
4. COORDINATE ALL PENETRATIONS THROUGH ROOF W/ STRUCTURAL, PLUMBING, MECHANICAL, AND ELECTRICAL. PROVIDE ALL FLASHING AT PENETRATIONS PER SMACNA DETAILS UNLESS OTHERWISE NOTED.
5. ROOF CURBS FOR ALL MECHANICAL UNITS AND EQUIPMENT TO BE FURNISHED BY M.C. AND INSTALLED AND FLASHED BY G.C. UNLESS OTHERWISE NOTED.
6. G.C. TO COORDINATE, LOCATE, AND INSTALL DRAINS AND CURBS. ROOFING CONTRACTOR SHALL FLASH AND SEAL ALL DRAINS, ROOF PENETRATIONS, ROOF EDGES, AND TERMINATIONS AS PART OF THIS CONTRACT, INCLUSIVE OF WARRANTY AS LISTED IN THE PROJECT MANUAL.
7. ROOF PLAN AND DETAILS ARE FOR GENERAL DESIGN INTENT. G.C. TO SUBMIT COMPLETE SHOP DRAWINGS SHOWING ALL CONSTRUCTION DETAILS AND LAYOUTS FOR A COMPLETE JOB ADHERING TO MANUFACTURERS' WARRANTIES.
8. PROVIDE ALL TAPERS AND CRICKETS FOR PROPER DRAINAGE.
9. SLOPE ALL ROOF AREAS AT A MIN. OF 1/4" PER FOOT UNLESS OTHERWISE NOTED.
10. ALL CONCEALED WOOD BLOCKING SHALL BE P.T. SECURE TO DECKING AND SUBSTRATE WITH ANCHOR BOLTS.
11. UNLESS OTHERWISE NOTED, PRIME & PAINT ALL EXPOSED STEEL MEMBERS W/ EXTERIOR GRADE HIGH PERFORMANCE COATINGS. SEE SPECIFICATIONS.
12. UTILIZE METAL WALL FLASHING AND COUNTER FLASHING ON BACKSIDE OF ALL PARAPETS WITH A HEIGHT OF 2'-0" OR GREATER.
13. ALL SHEET METAL APPLICATIONS SHALL BE INSTALLED PER NRCA's "THE ROOFING MANUAL" AND SMACNA's "ARCHITECTURAL SHEET METAL MANUAL" SEVENTH EDITION APPROVED DETAILING, INCLUDING (BUT NOT LIMITED TO) COPING, STEP-FLASHING, METAL WALL FLASHING, ROOF PENETRATION FLASHING, STANDING SEAM METAL ROOFS, GUTTERS, SCUPPERS, GUTTER STOPS, CONDUCTOR HEADS, AND MISC. JOINTS BETWEEN SHEET METAL MEMBERS.
14. ALL RIGID INSULATION USED IN ROOF ASSEMBLIES SHALL MEET THE REQUIREMENTS OF UL 1256 AND FMG 4450.
15. ROOF ACCESS LADDERS SHALL MEET OSHA AND BUILDING CODE REQUIREMENTS.
16. METAL GAUGES SHALL COMPLY WITH ANSI/SPRI ES-1 REQUIREMENTS FOR SHOP FORMED METAL COPINGS.
17. ALL WOOD MEMBERS SHALL BE PRESERVATIVE TREATED.
18. ALL MECHANICAL EQUIPMENT & EXHAUST FANS SHALL BE ON ROOF CURBS. ALL ROOF CURBS SHALL BE INSULATED AND THE VOID BENEATH ITEMS WITHIN THE CURB SPACE SHALL BE FILLED WITH INSULATION.
19. ALL CRICKETS ARE ANGLED 30 DEGREES MIN, UNLESS NOTED OTHERWISE.
20. ALL CRICKET SLOPES ARE 1/4" PER 1'-0" UNLESS NOTED OTHERWISE.
21. ALL OBJECTS GREATER THAN 24" IN WIDTH ACROSS SLOPE SHALL HAVE CRICKETS TO DIVERT WATER AROUND THEM.
22. ANYWHERE EXPOSED FASTENERS ARE USED IN THE ROOFING SYSTEM, COPING SYSTEM, EXPANSION JOINT SYSTEM, OR FLASHING SYSTEM, THEY SHALL UTILIZE SEALING WASHERS.

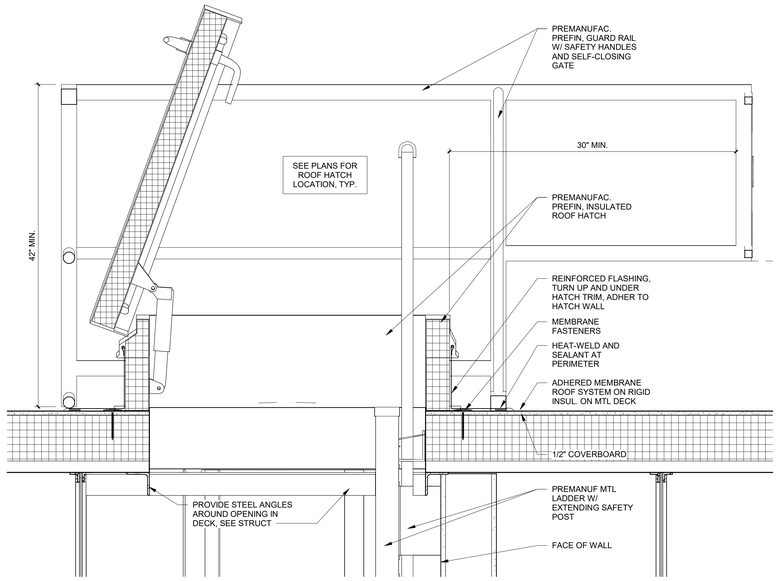
ROOF DRAINAGE CALCULATIONS:

ROOF DRAINAGE:

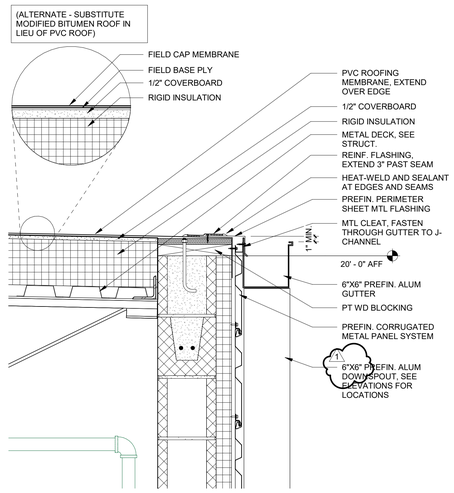
PRIMARY ROOF AREA
9,363 SF (ROOF) + 852 SF (PARAPET) = 10,195 SF
ROOF AREA/4 = 2,548 SF PER DOWNSPOUT

HORIZONTAL GUTTER: 6"X6"

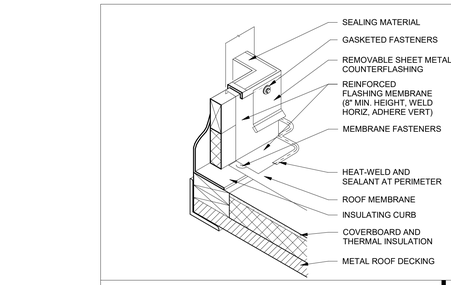
NCPC FIGURE 1106.1(a) FOR 100 YR 60 MINUTE PRECIPITATION (4.0"):
FOUR (4) 2 3/4" x 4 1/4" DOWNSPOUTS REQUIRED PER TABLE 1106.2(2)
FOUR (4) 6" x 6" DOWNSPOUTS PROVIDED



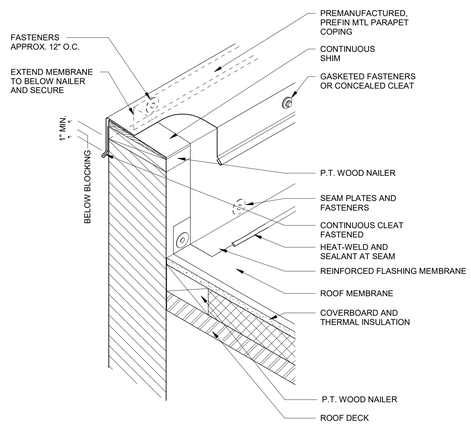
ROOF HATCH AND RAIL DETAIL | 1 1/2" = 1'-0" | 3



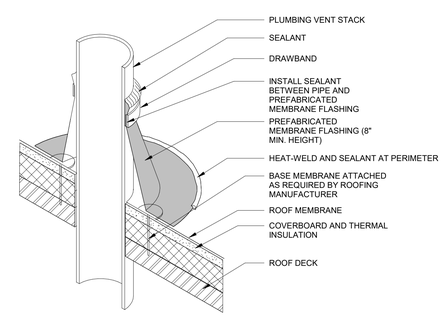
ROOF DETAIL @ GUTTER | 1 1/2" = 1'-0" | 2



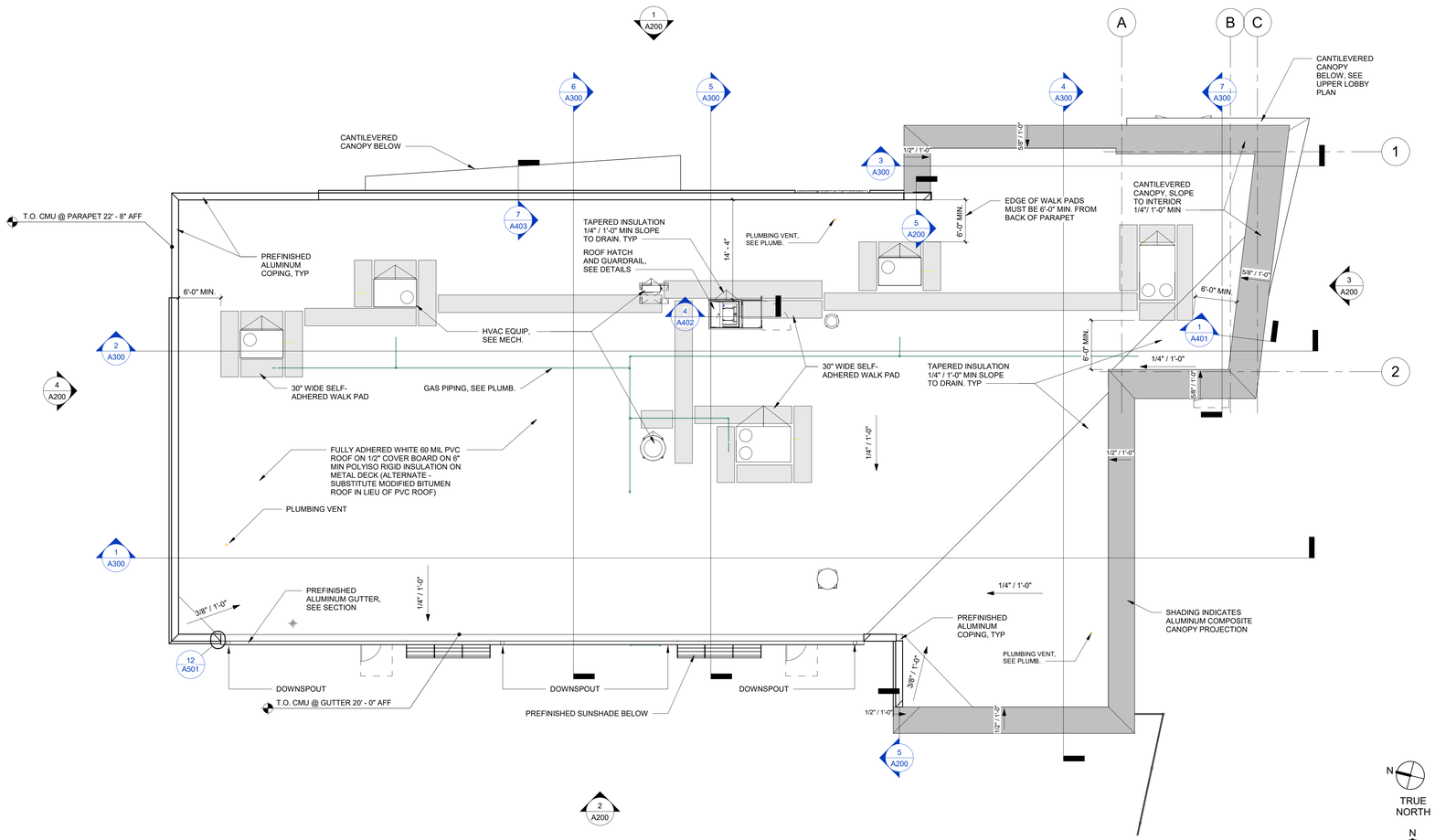
MECH. CURB - ISOMETRIC | 3" = 1'-0" | 4



ROOF PARAPET FLASHING | 3" = 1'-0" | 6



ROOF VENT PIPE - ISOMETRIC | 3" = 1'-0" | 5



ROOF PLAN | 1/8" = 1'-0" | 1

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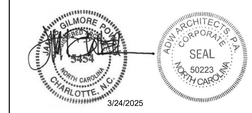
ROOF PLAN

DATE: 3/24/2025
PROJECT NO: 23014

REVISIONS

NO:	DATE:	DESCRIPTION:
1	3/5/25	ADDENDUM 01



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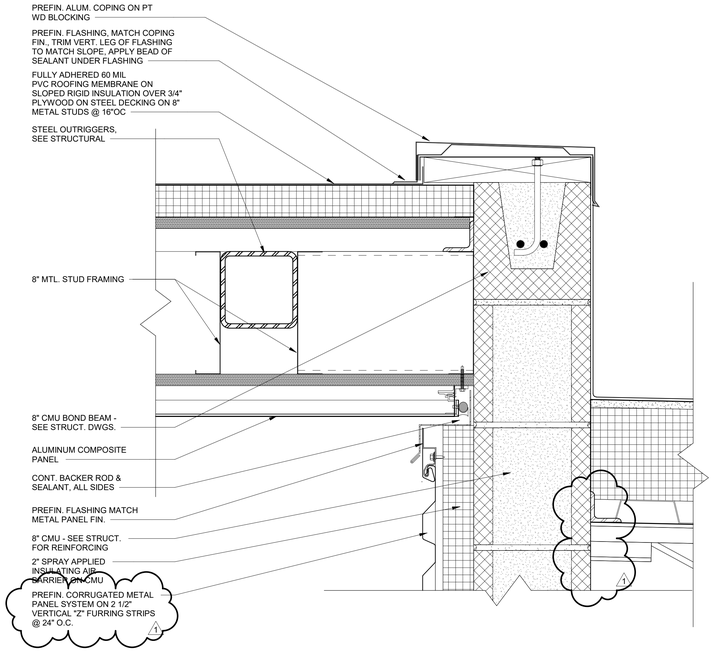
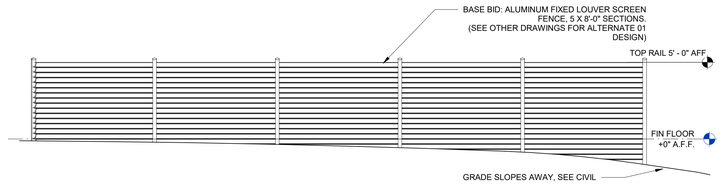
SHEET NUMBER

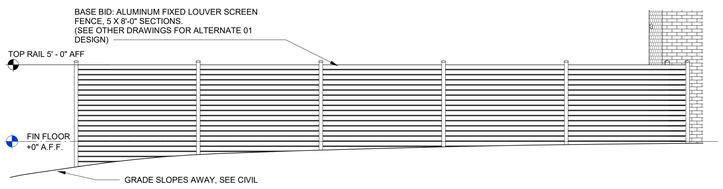
A110



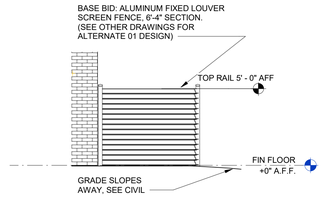
SECTION DETAIL AT ACM/PARAPET | 3" = 1'-0" | 5



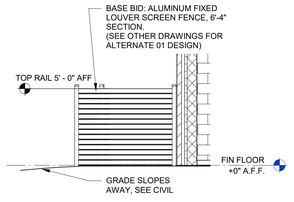
SCREEN FENCE - WEST ELEVATION | 1/4" = 1'-0" | 9



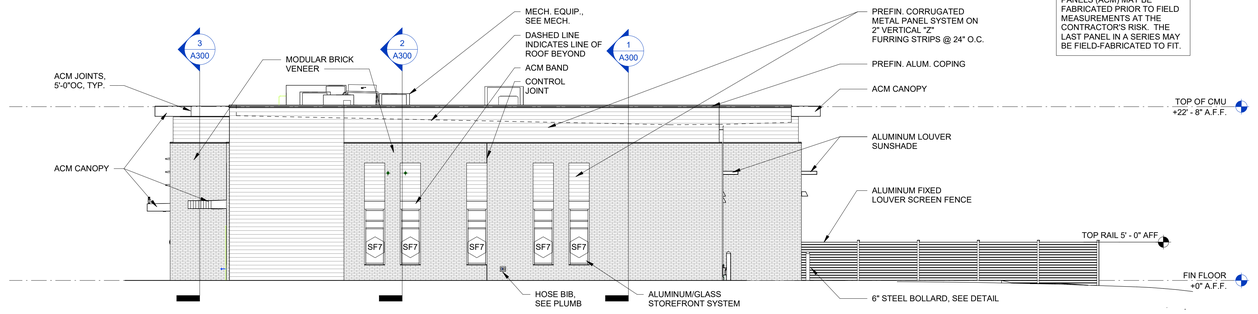
SCREEN FENCE - EAST ELEVATION | 1/4" = 1'-0" | 8



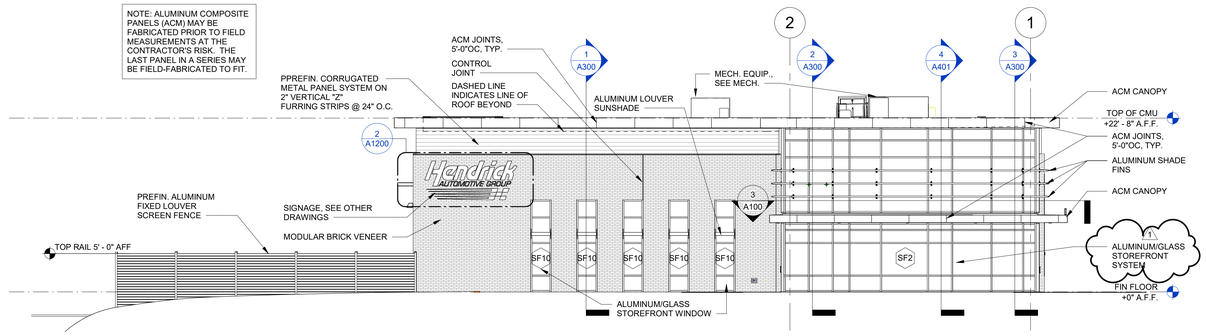
SCRN FENCE - S. ELEV. | 1/4" = 1'-0" | 7



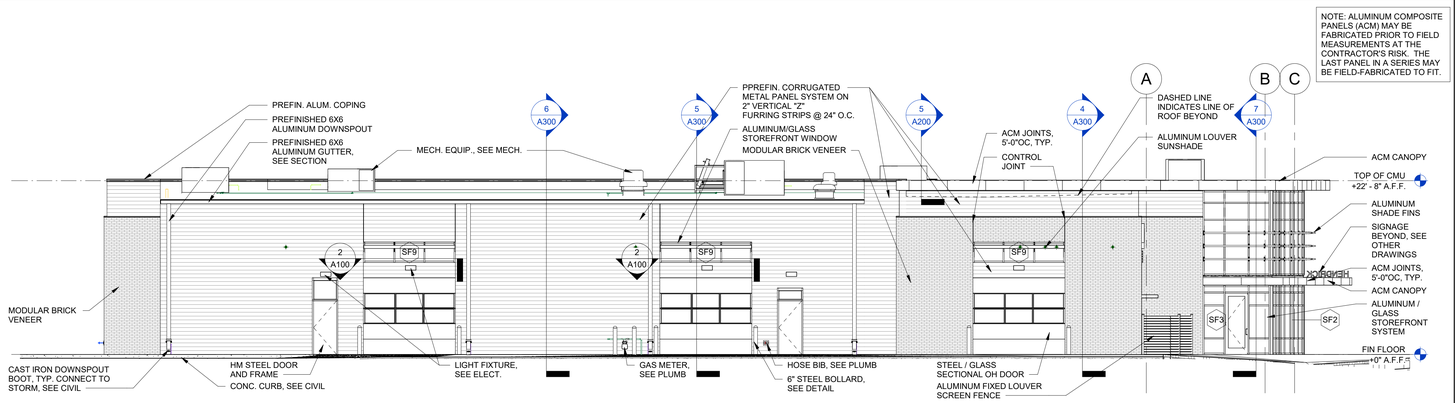
SCRN FENCE - N. ELEV. | 1/4" = 1'-0" | 6



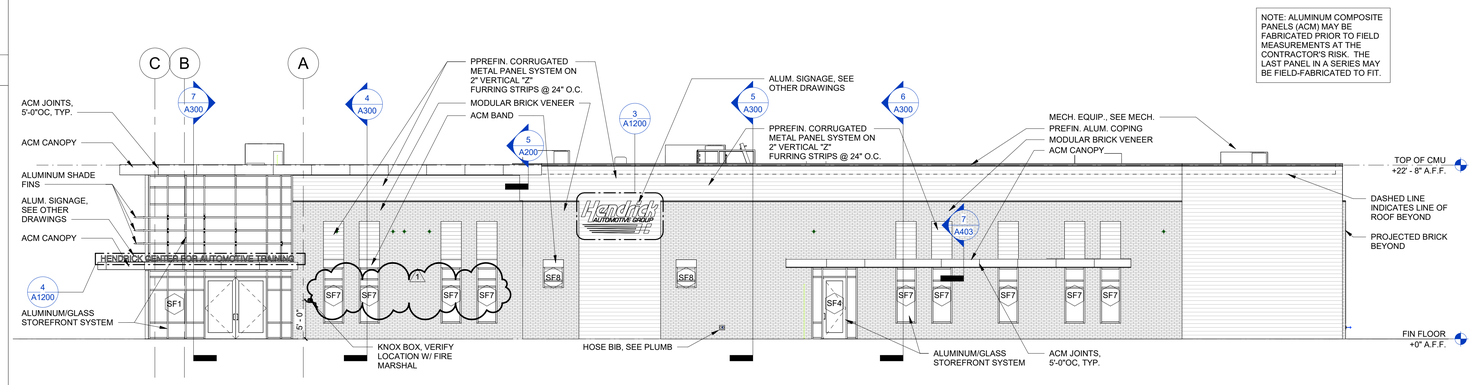
WEST ELEVATION | 1/8" = 1'-0" | 4



EAST ELEVATION | 1/8" = 1'-0" | 3



SOUTH ELEVATION | 1/8" = 1'-0" | 2



NORTH ELEVATION | 1/8" = 1'-0" | 1

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EXTERIOR ELEVATIONS

DATE: 3/24/2025
PROJECT NO: 23014

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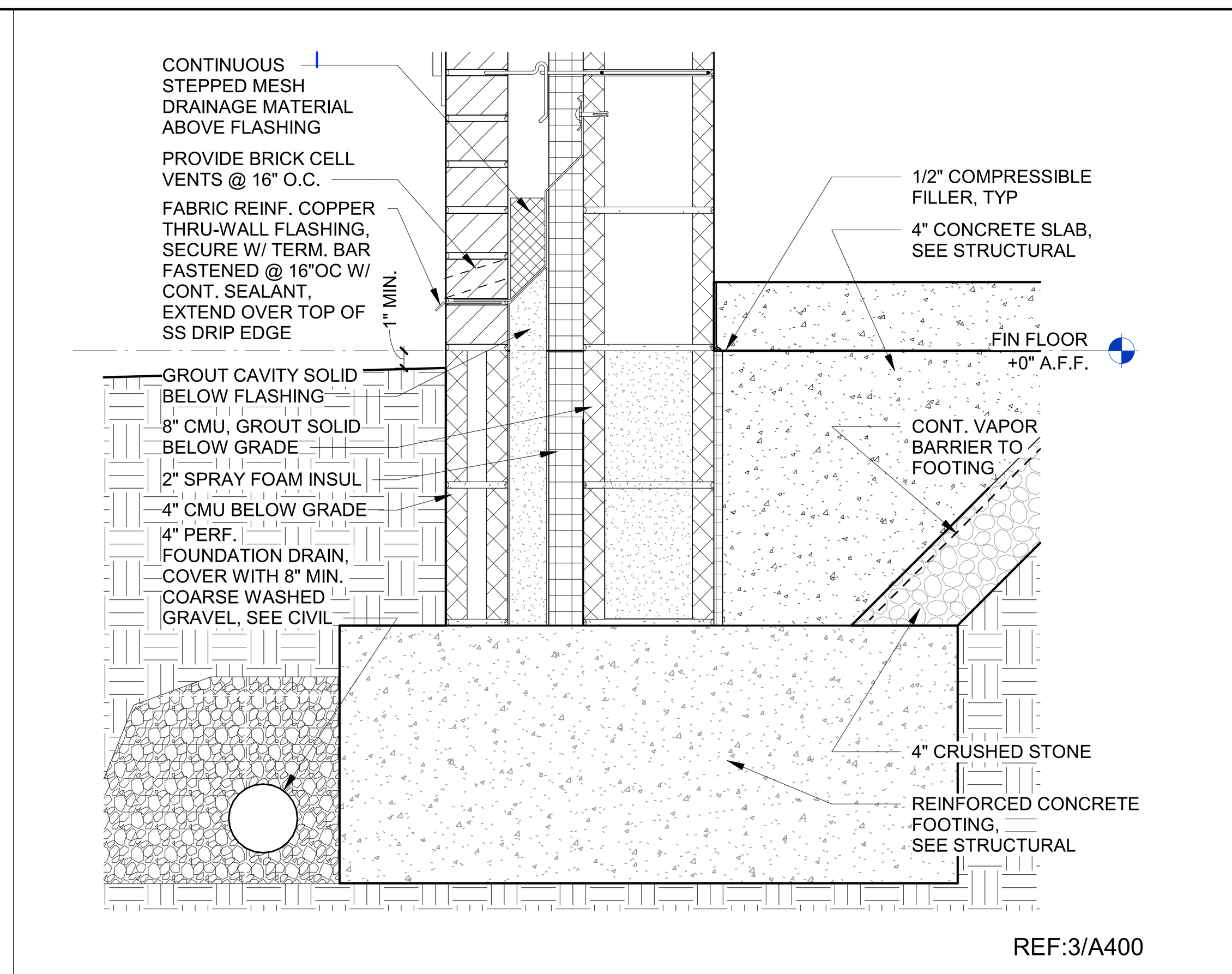
NO:	DATE:	DESCRIPTION:
1	3/5/25	ADDENDUM 01

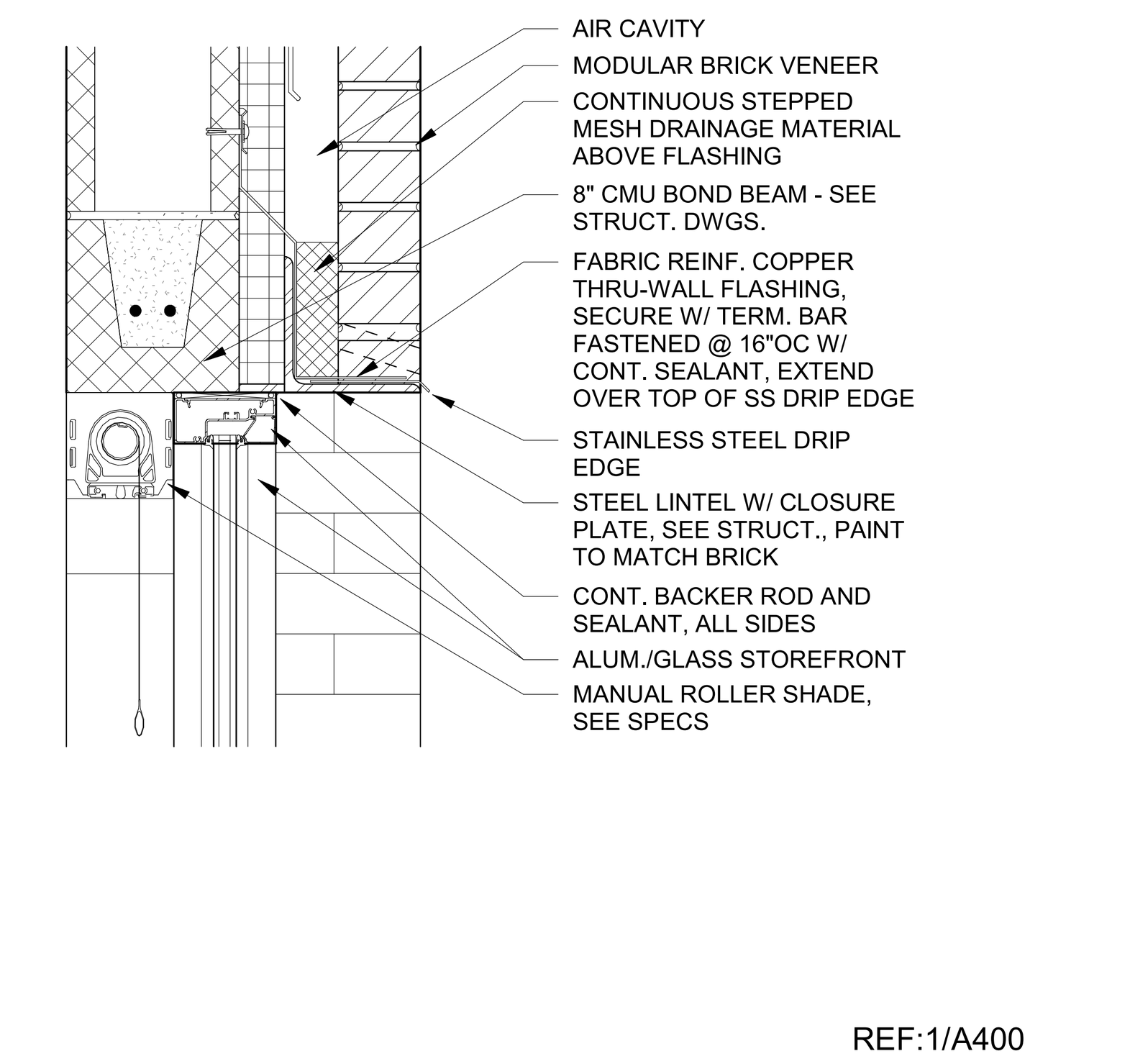
3/24/2025

SHEET NUMBER

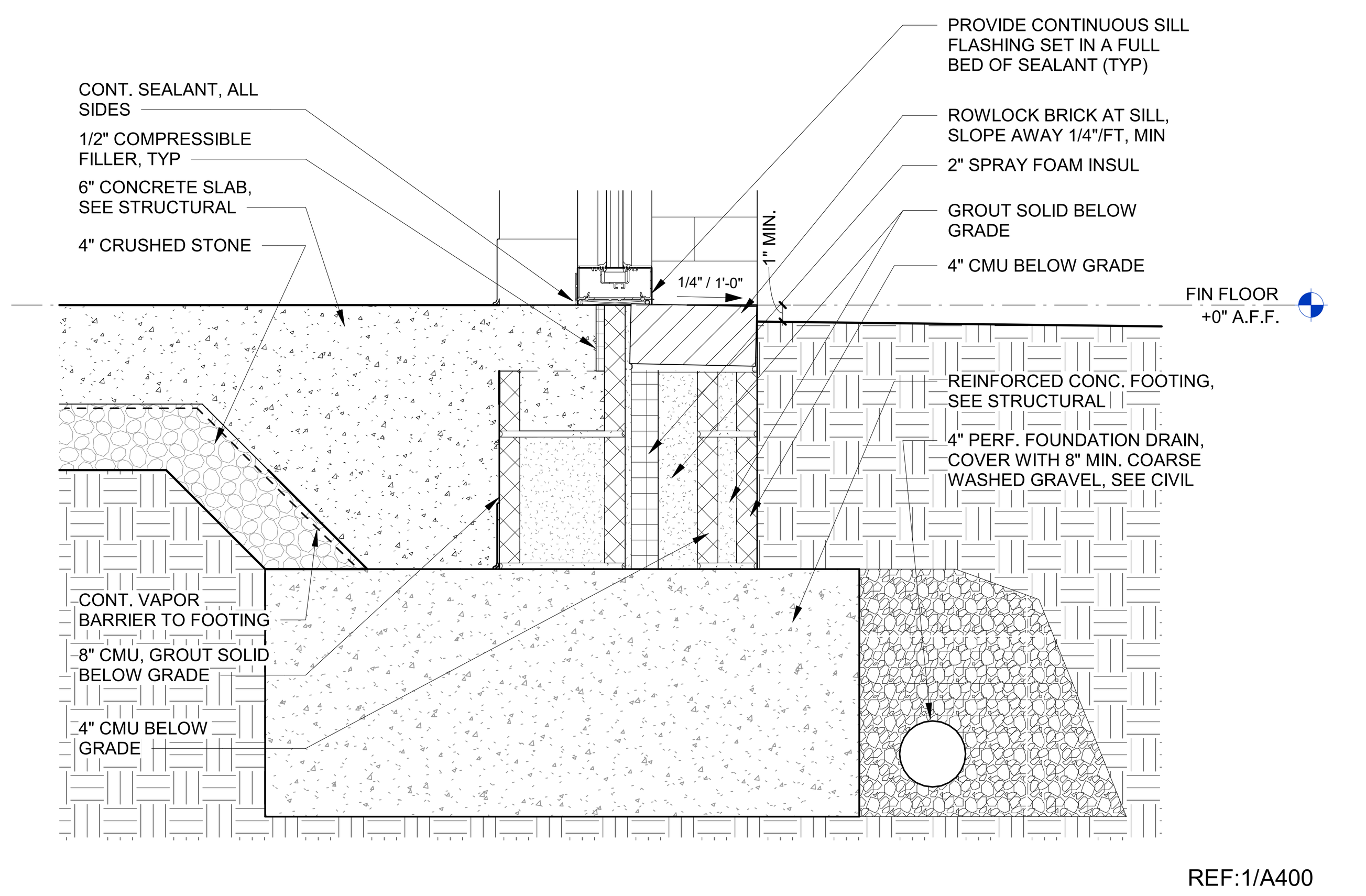
A200



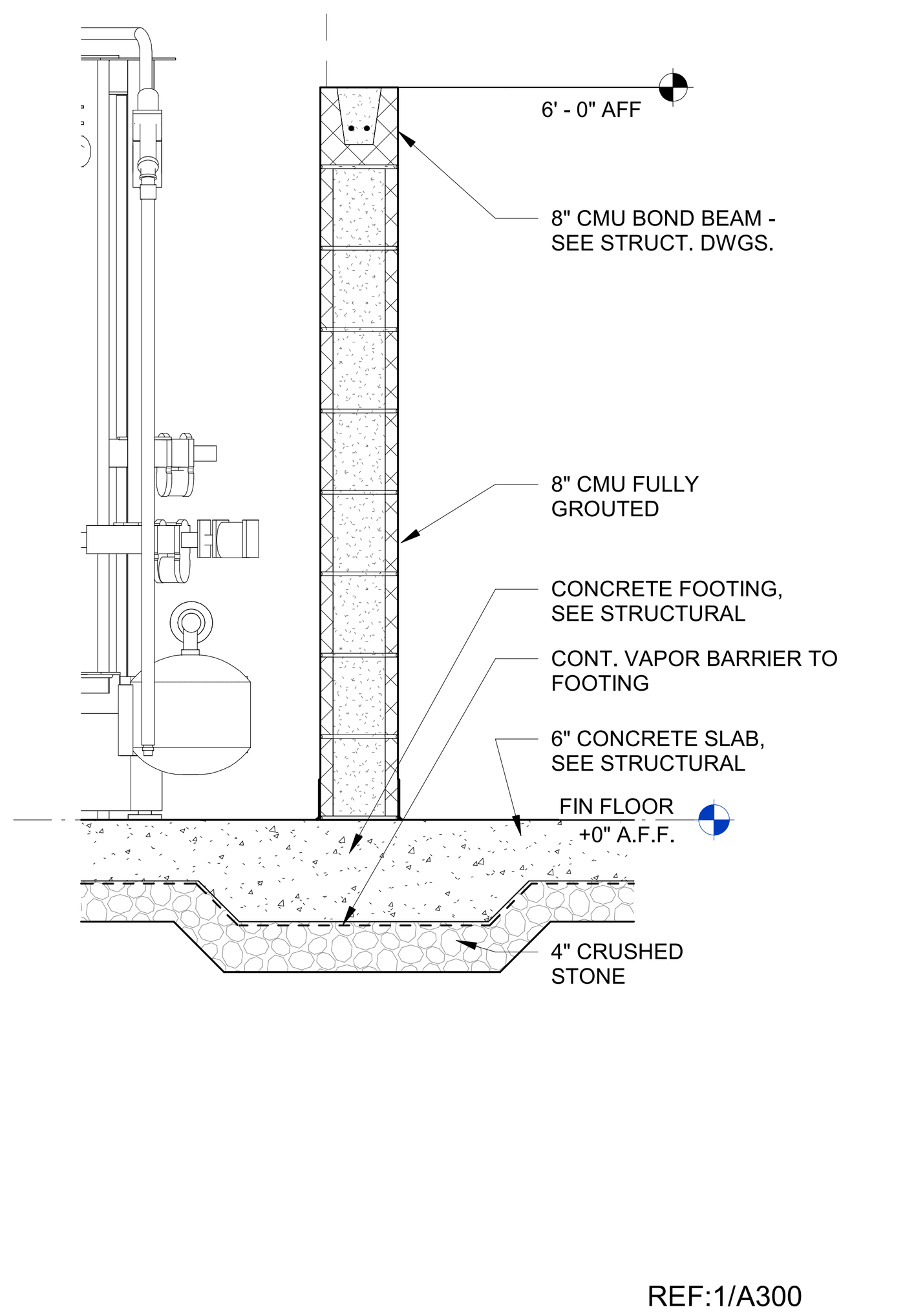
DETAIL AT TYP WALL FOOTING | 1 1/2" = 1'-0" | 8



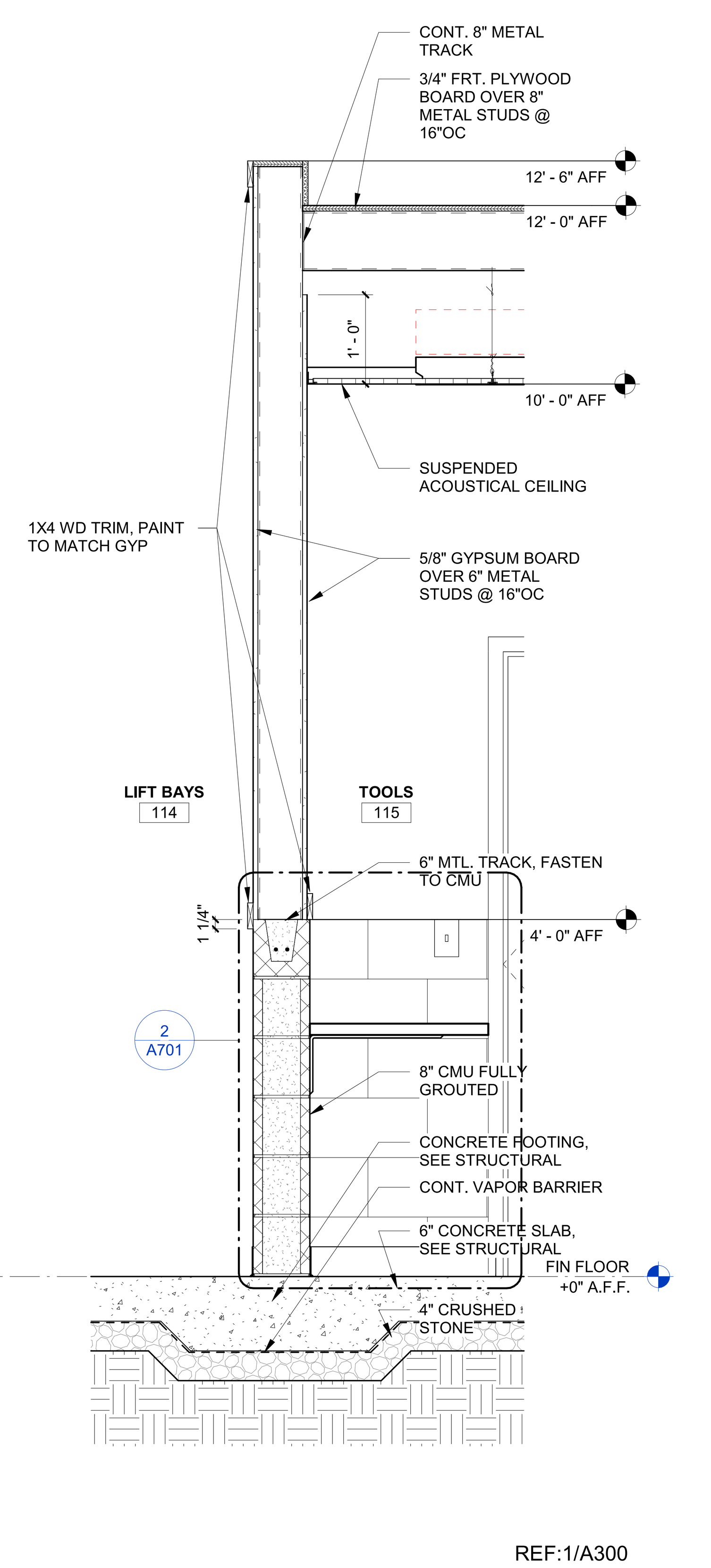
HEAD DETAIL AT LIFT BAY WINDOWS | 1 1/2" = 1'-0" | 7



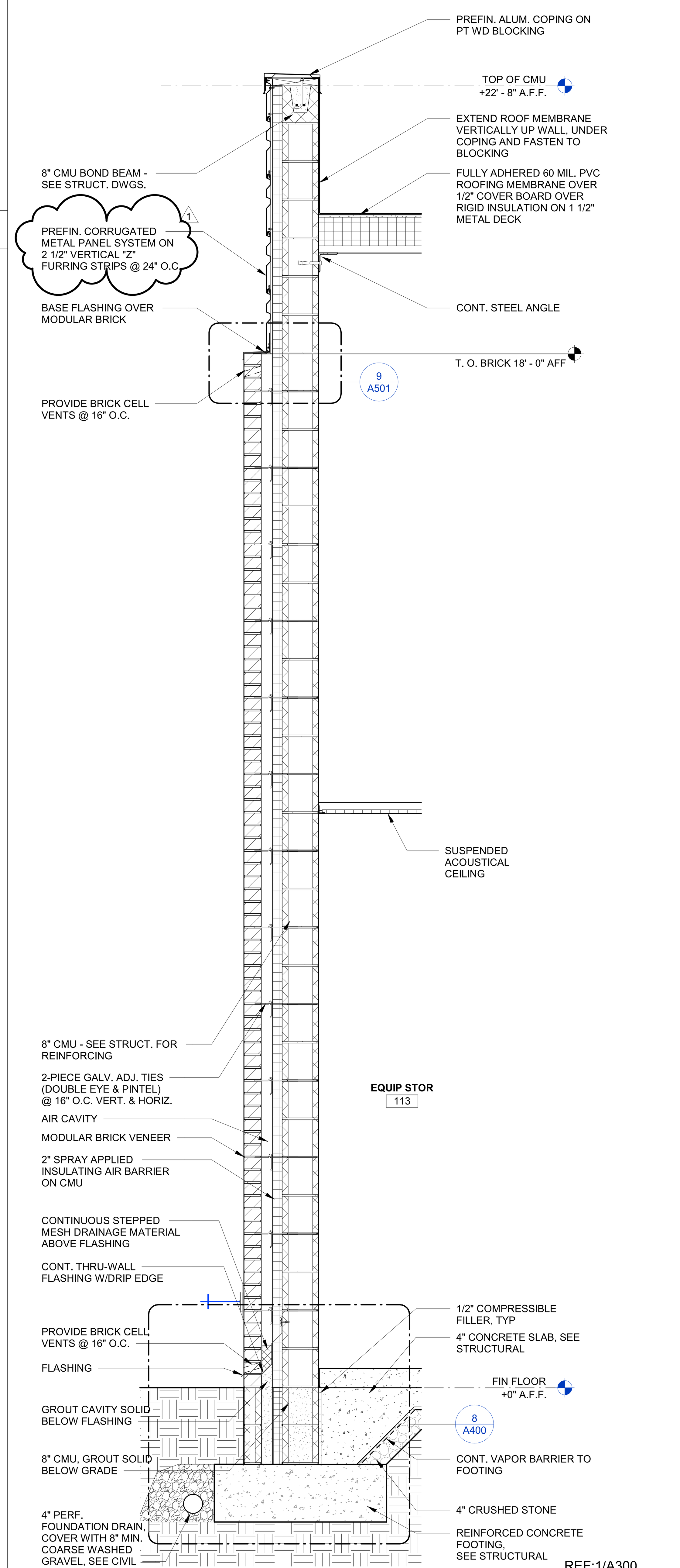
FOUNDATION DETAIL AT LIFT BAY WINDOW | 1 1/2" = 1'-0" | 5



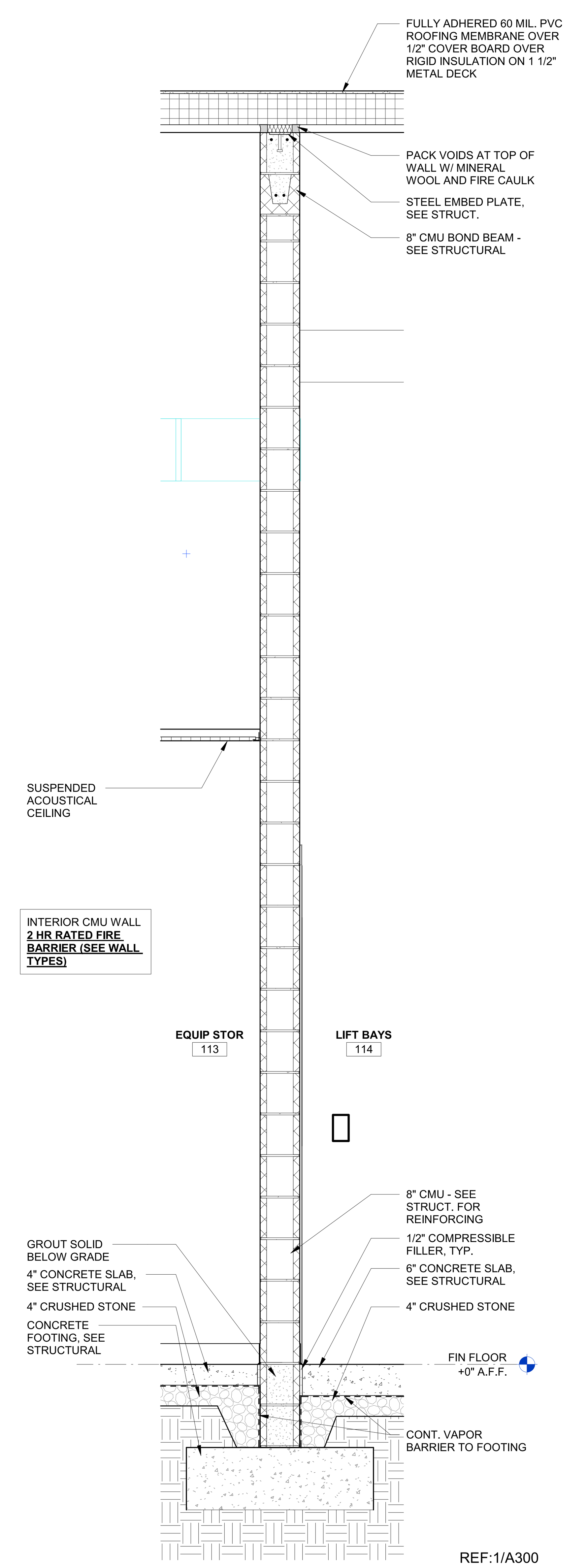
LOW WALL - LIFT BAYS (114) | 3/4" = 1'-0" | 6



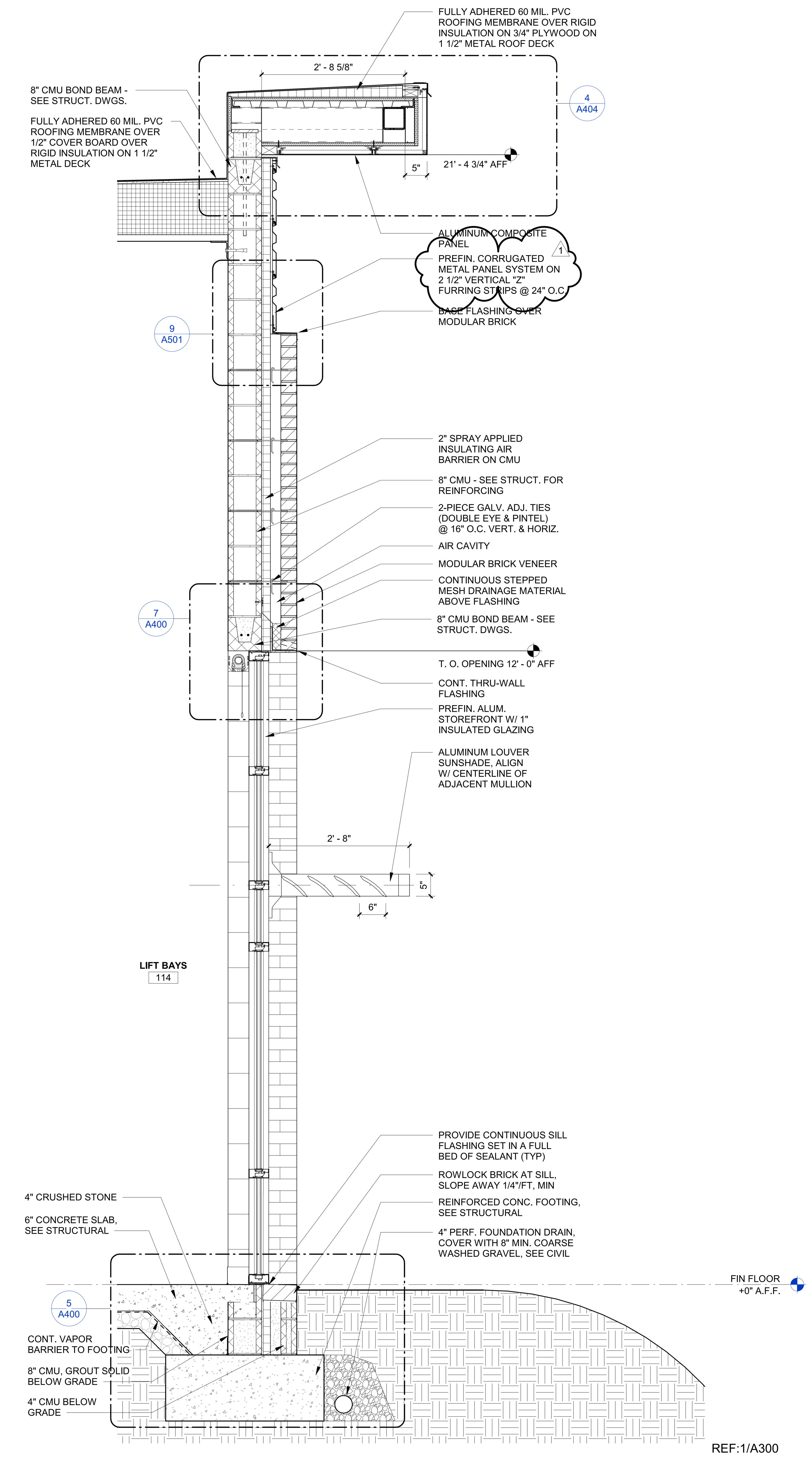
WEST WALL - TOOLS (115) | 3/4" = 1'-0" | 4



WEST WALL - EQUIP STOR (113) | 3/4" = 1'-0" | 3



WEST WALL - LIFT BAYS (114) | 3/4" = 1'-0" | 2



EAST WALL - LIFT BAYS (114) | 3/4" = 1'-0" | 1

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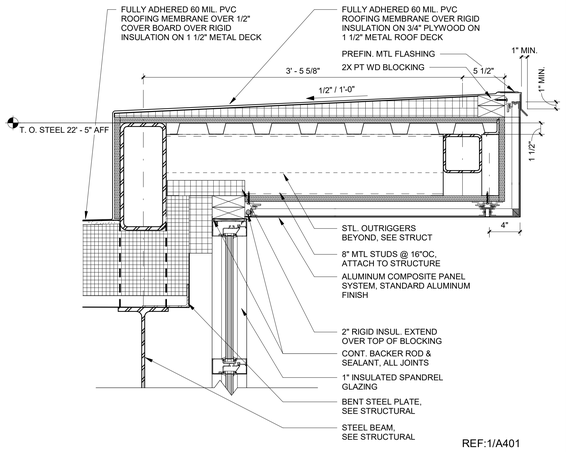
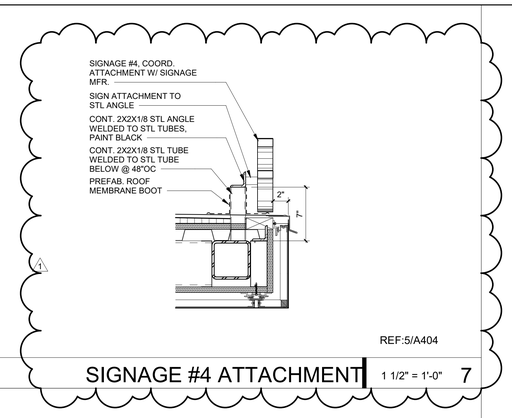
GILMORE 5454 NORTH CAROLINA CHARLOTTE, N.C.
3/24/2025
ADW ARCHITECTS, P.A. CORPORATE SEAL 50223 NORTH CAROLINA

SHEET NUMBER

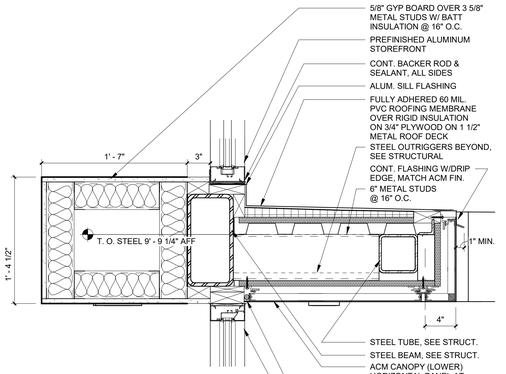
A400



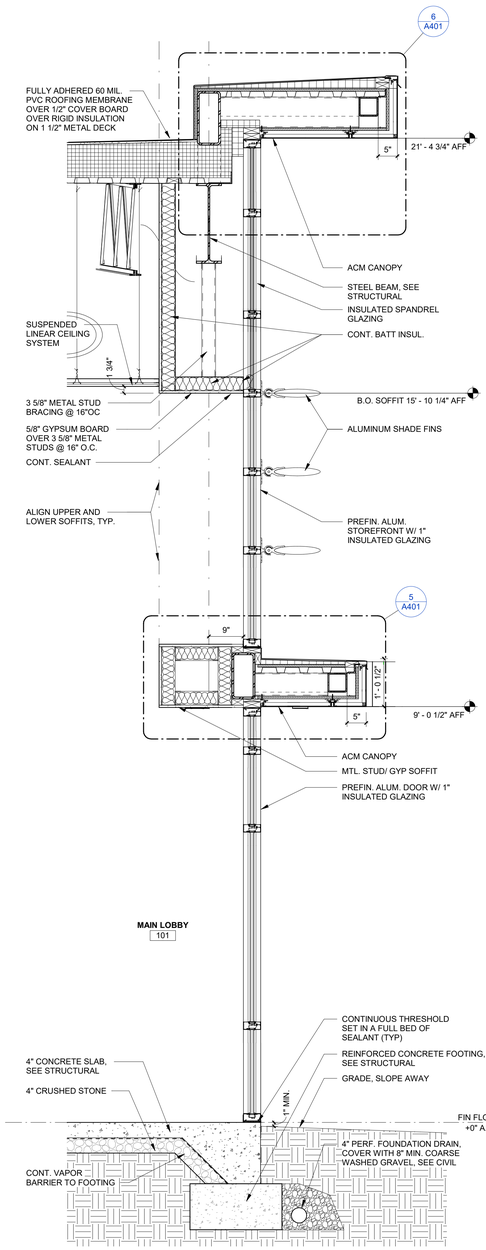
UPPER CANOPY - MAIN LOBBY (101) 1 1/2" = 1'-0" 6



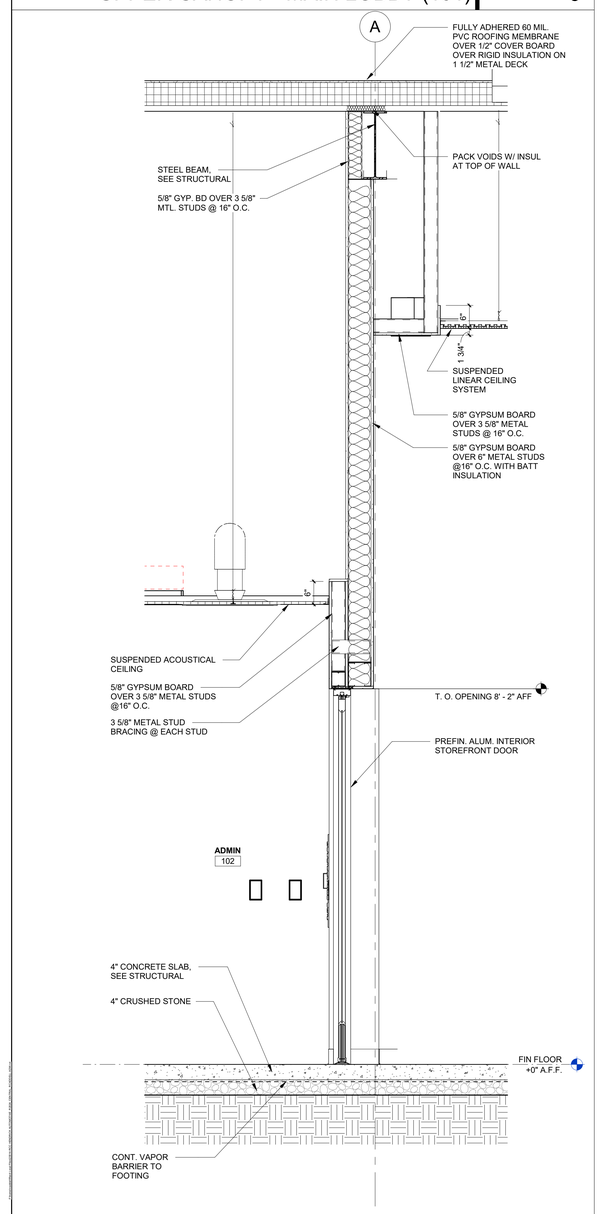
SIGNAGE #4 ATTACHMENT 1 1/2" = 1'-0" 7



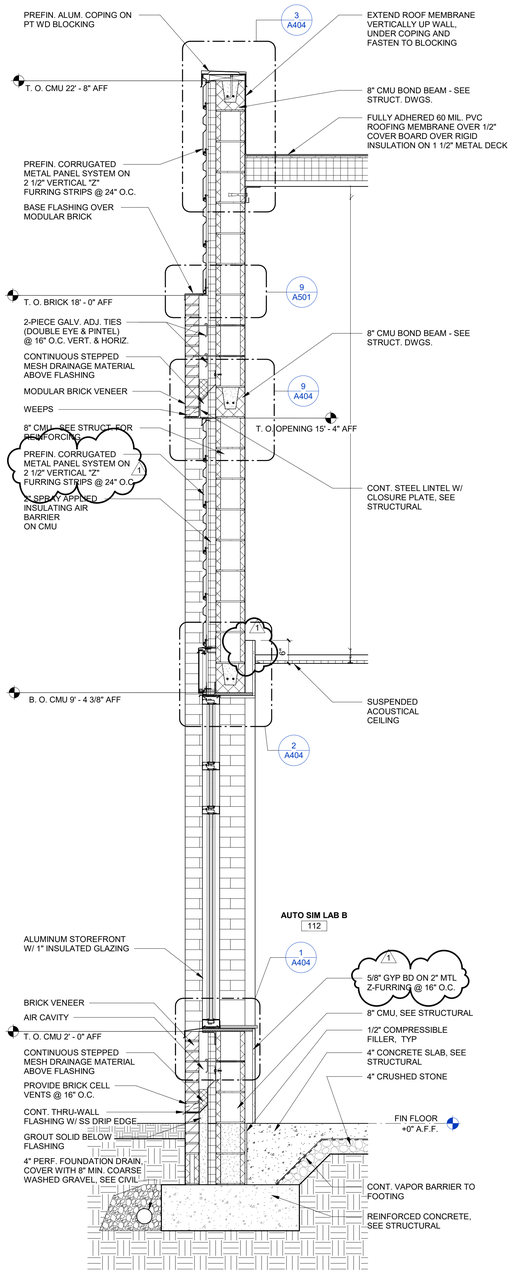
LOW CANOPY - MAIN LOBBY (101) 1 1/2" = 1'-0" 5



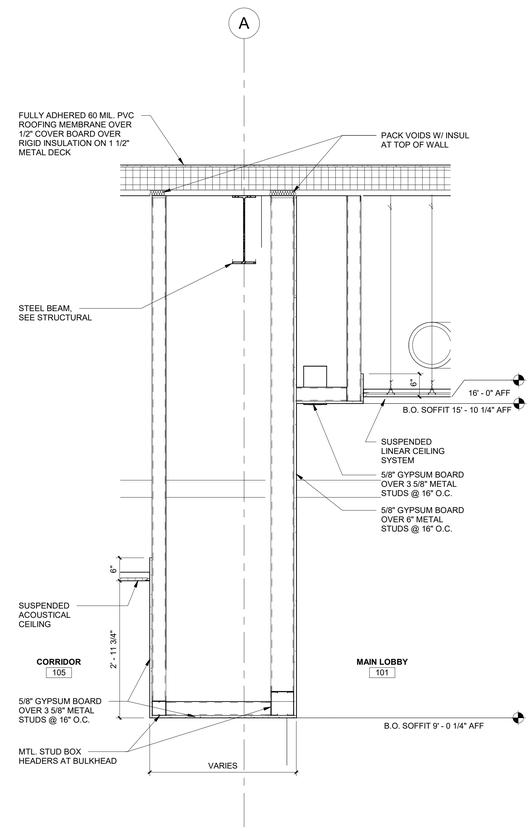
EAST WALL - MAIN LOBBY (101) 3/4" = 1'-0" 1



WEST WALL - MAIN LOBBY (101) 3/4" = 1'-0" 4



WEST WALL - AUTO SIM LAB B (112) 3/4" = 1'-0" 3



WEST SOFFIT - MAIN LOBBY (101) 3/4" = 1'-0" 2

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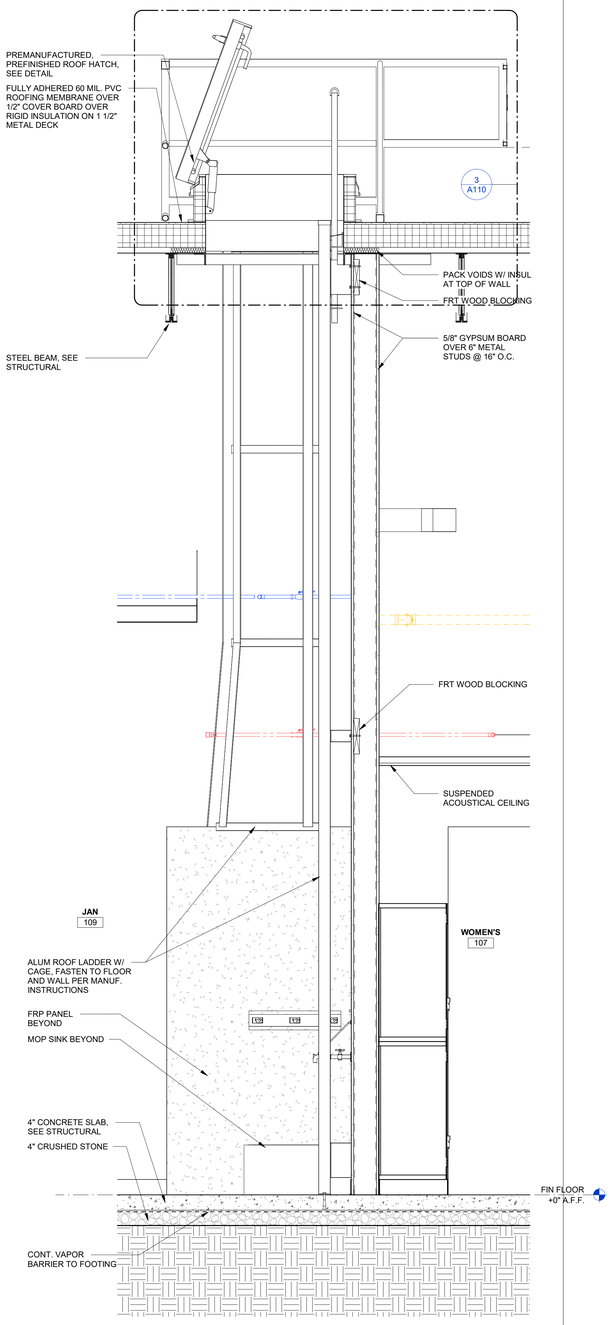
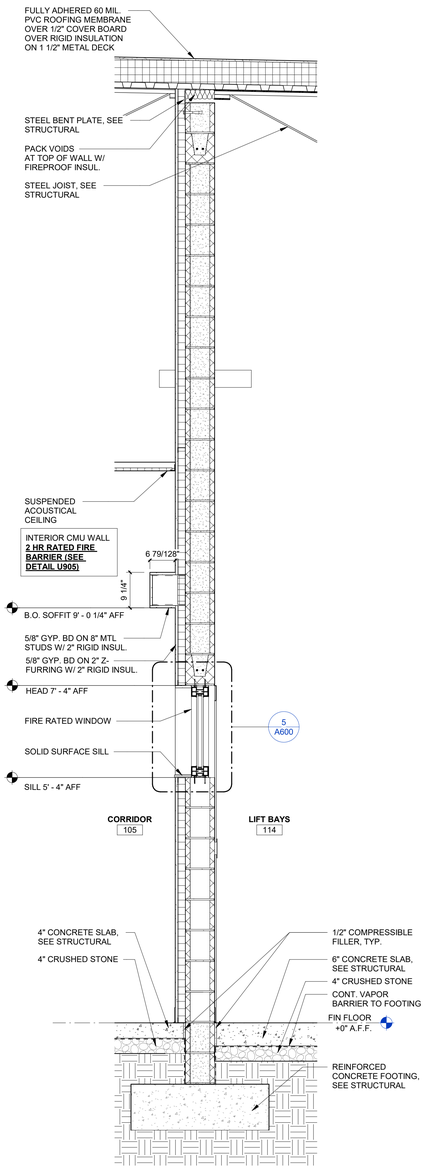
A401



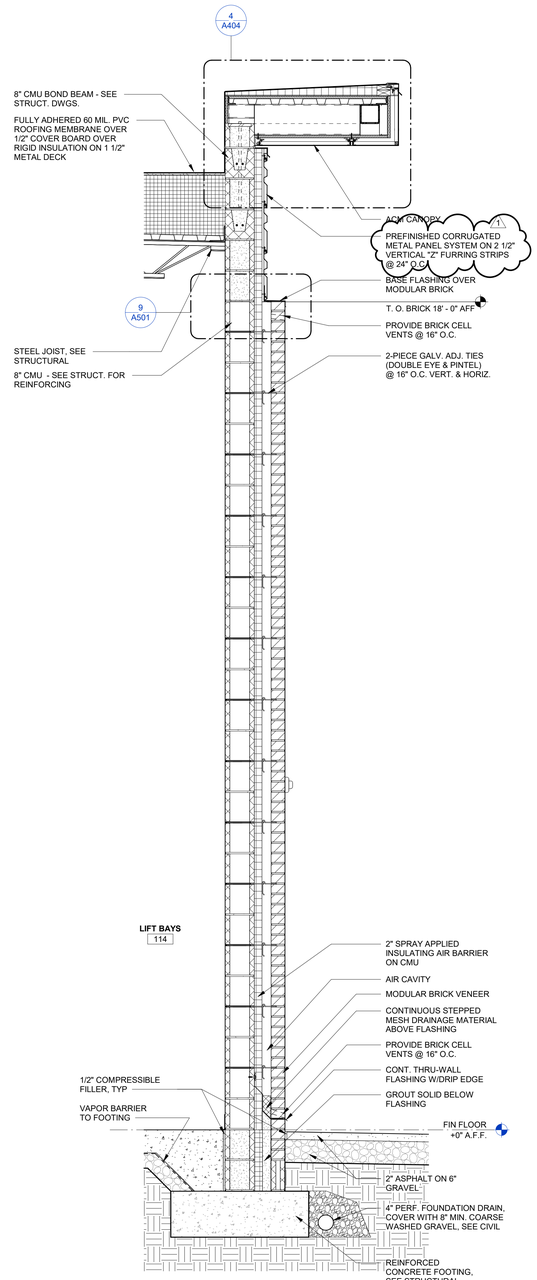
REF:1/A100

ROOF LADDER / HATCH - JANITOR (109) 3/4" = 1'-0" 4



REF:4/A300

NORTH WALL - LIFT BAYS (114) 3/4" = 1'-0" 3



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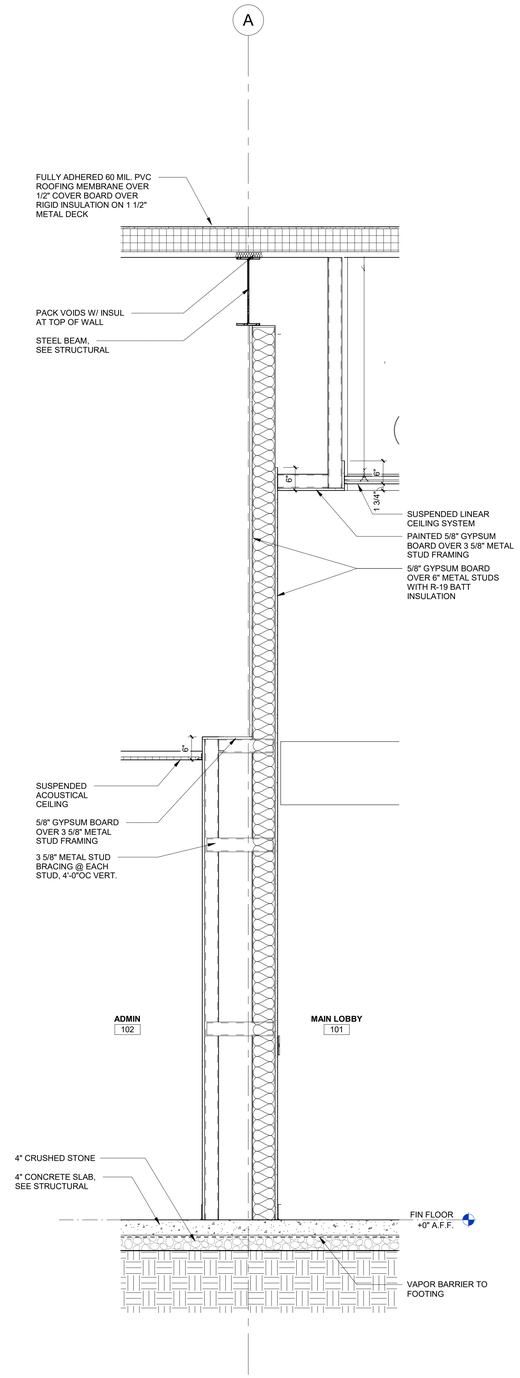
SOUTH WALL AT ALIGNMENT LIFT 3/4" = 1'-0" 2



REF:3/A300

WEST WALL - MAIN LOBBY / ADMIN 3/4" = 1'-0" 1

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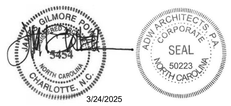

3/24/2025

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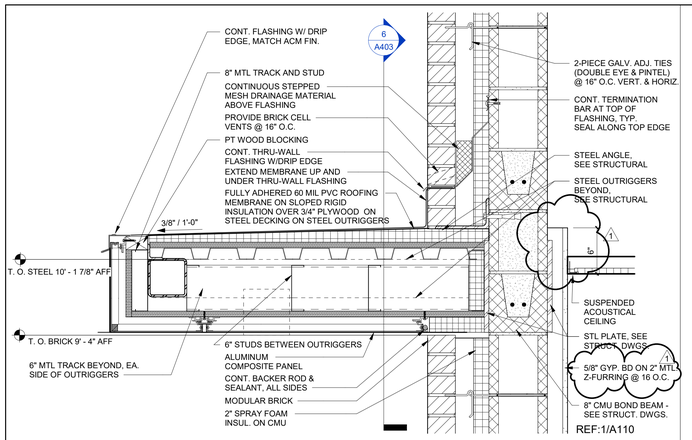
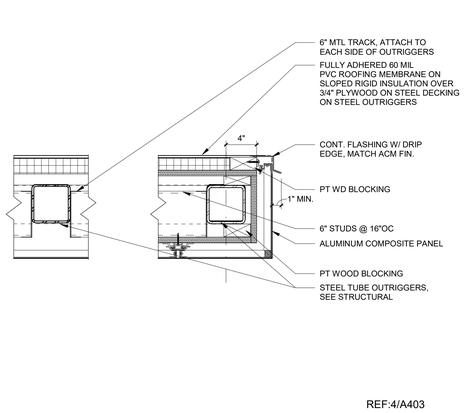
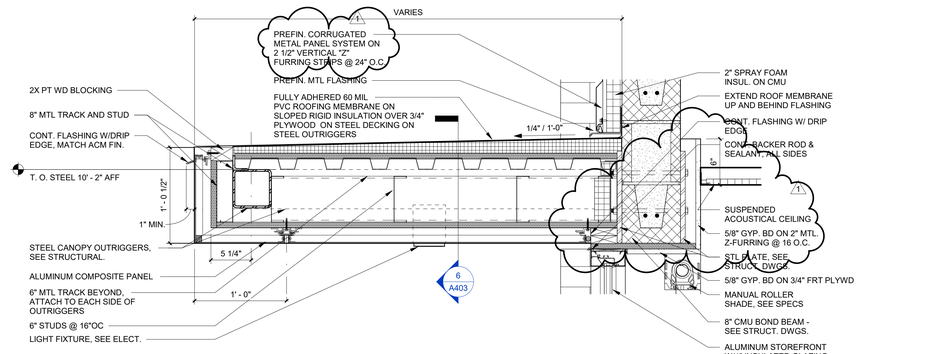
A402



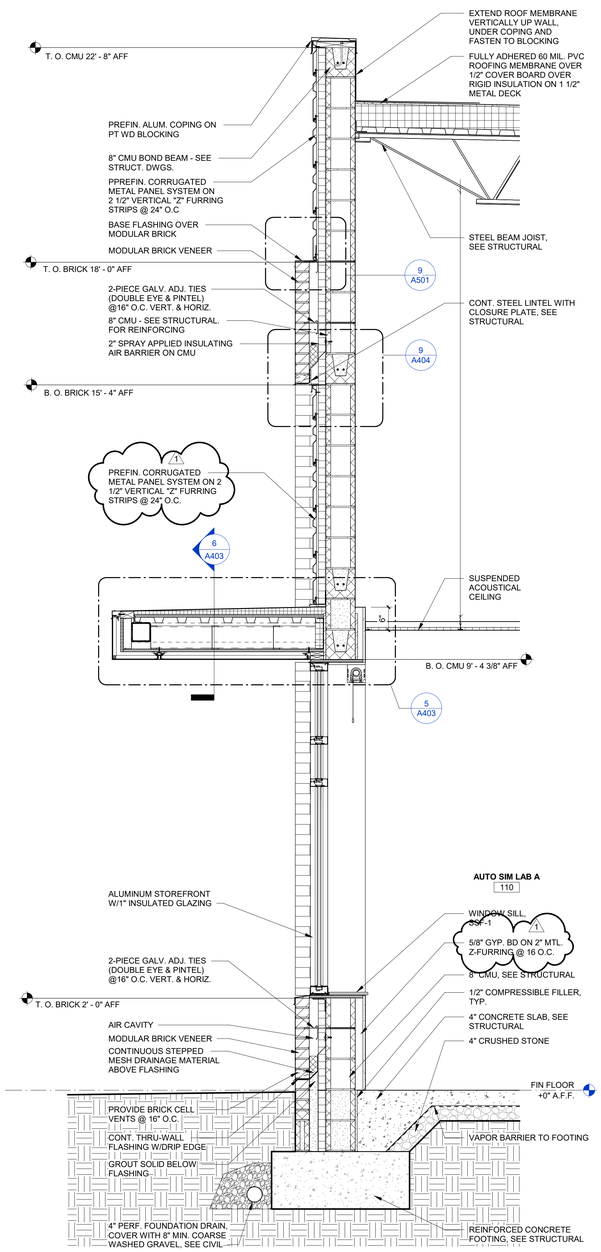
NORTH CANOPY @ BRICK | 1 1/2" = 1'-0" | 7



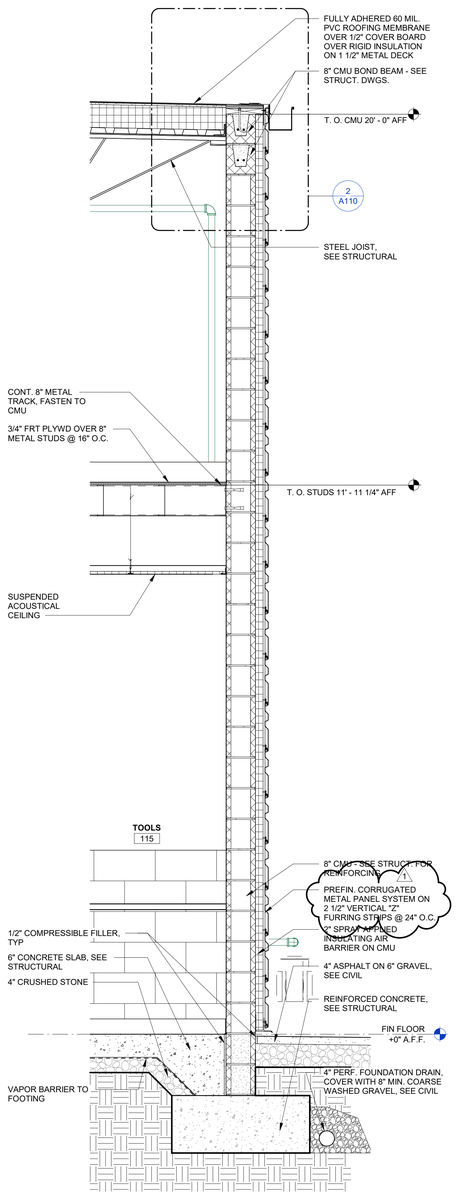
NORTH CANOPY RAKE EDGE | 1 1/2" = 1'-0" | 6



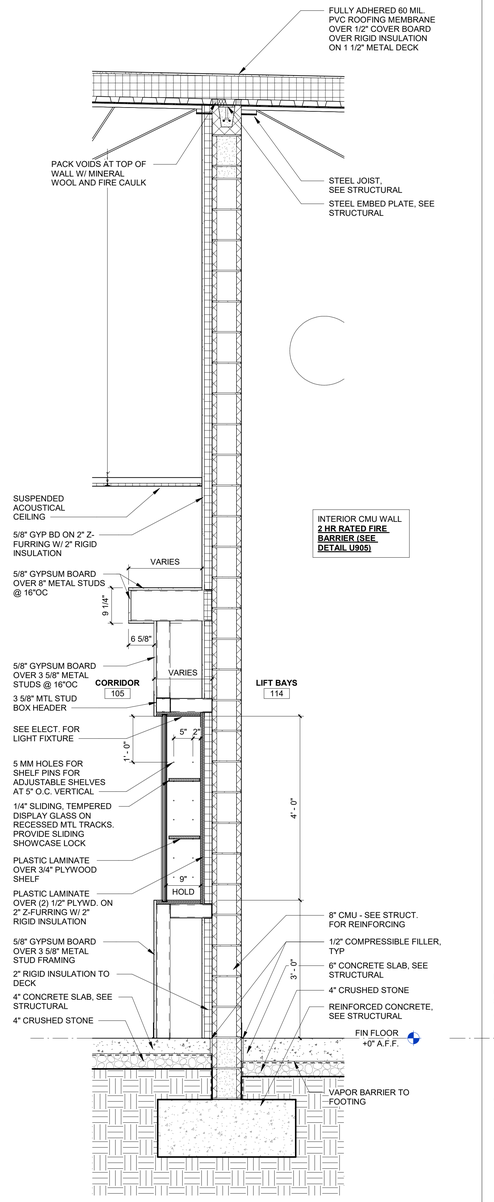
NORTH CANOPY @ METAL PANEL | 1 1/2" = 1'-0" | 5



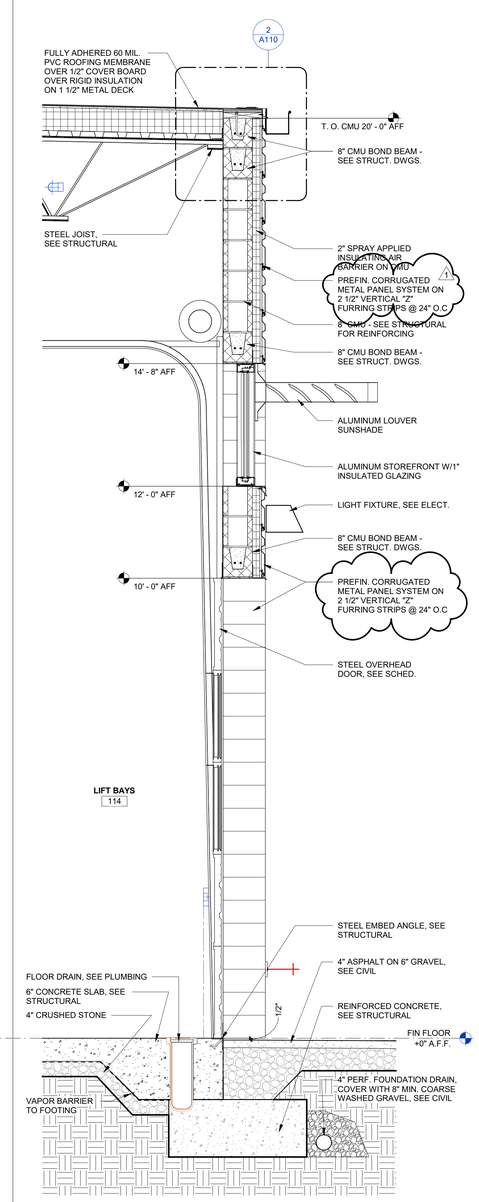
NORTH WALL - SIM LAB A (110) | 3/4" = 1'-0" | 4



SOUTH WALL - LIFT BAYS (114) | 3/4" = 1'-0" | 3



SOUTH WALL - CORRIDOR (105) | 3/4" = 1'-0" | 2



OH DOOR - LIFT BAYS (114) | 3/4" = 1'-0" | 1

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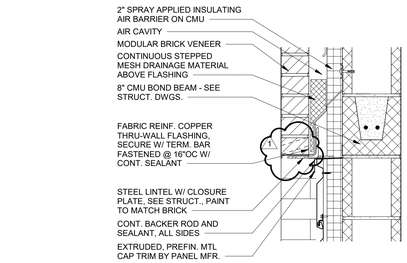
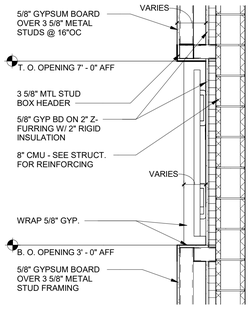
A403



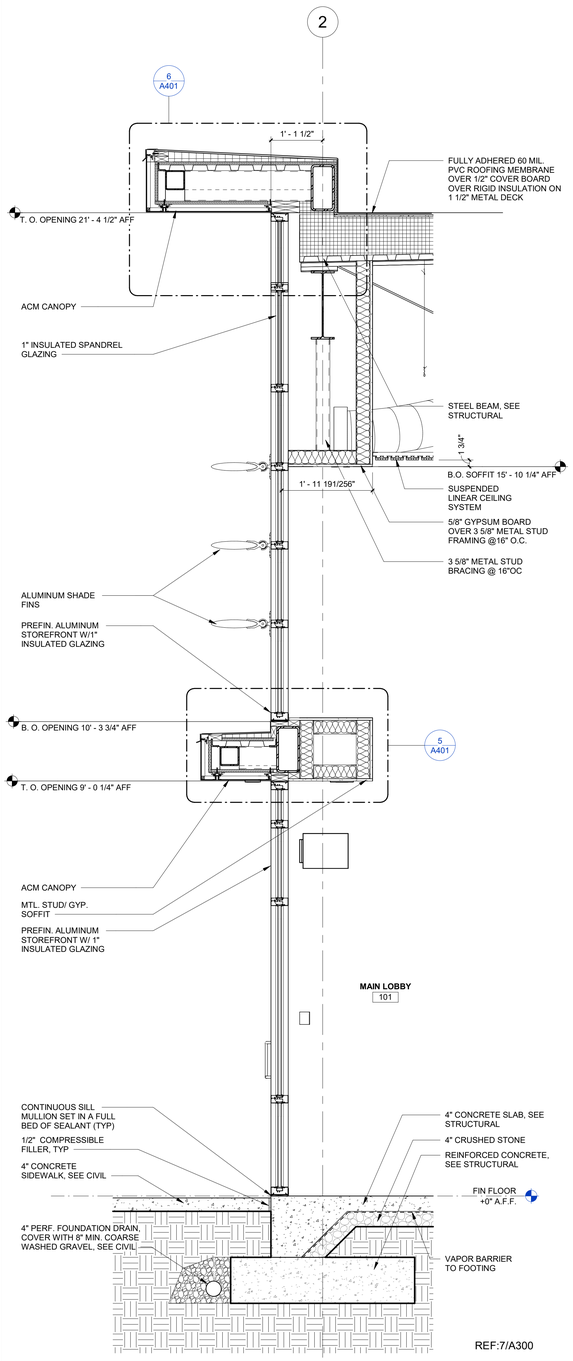
REF:3/A401

BRICK OVER MTL PANEL | 1 1/2" = 1'-0" | 9



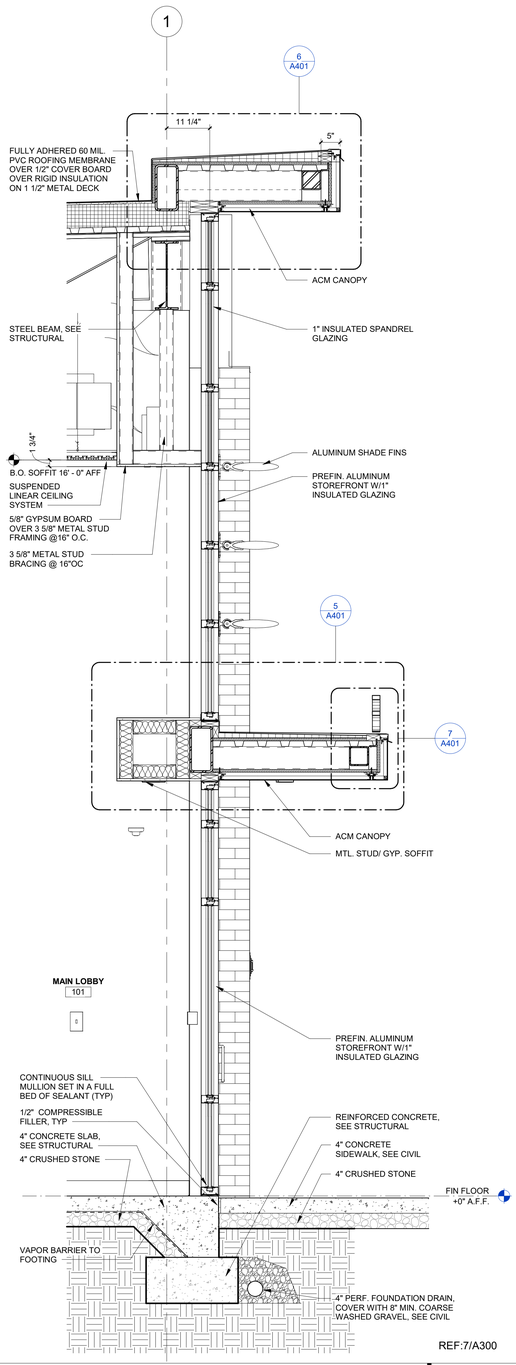
REF:1/A100

TV RECESS - CORRIDOR (105) | 3/4" = 1'-0" | 8



REF:7/A300

SOUTH WALL - LOBBY (101) | 3/4" = 1'-0" | 6



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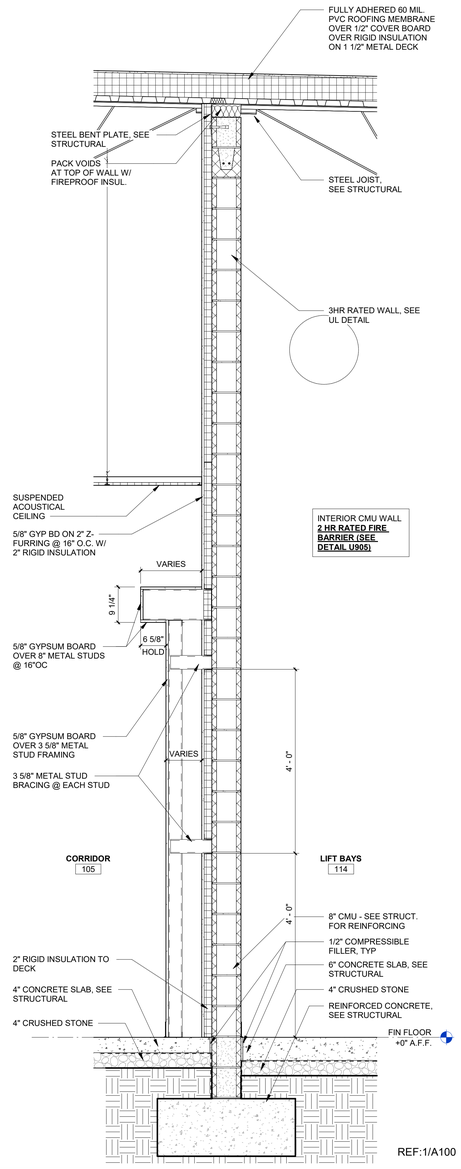
NORTH WALL - LOBBY (101) | 3/4" = 1'-0" | 5



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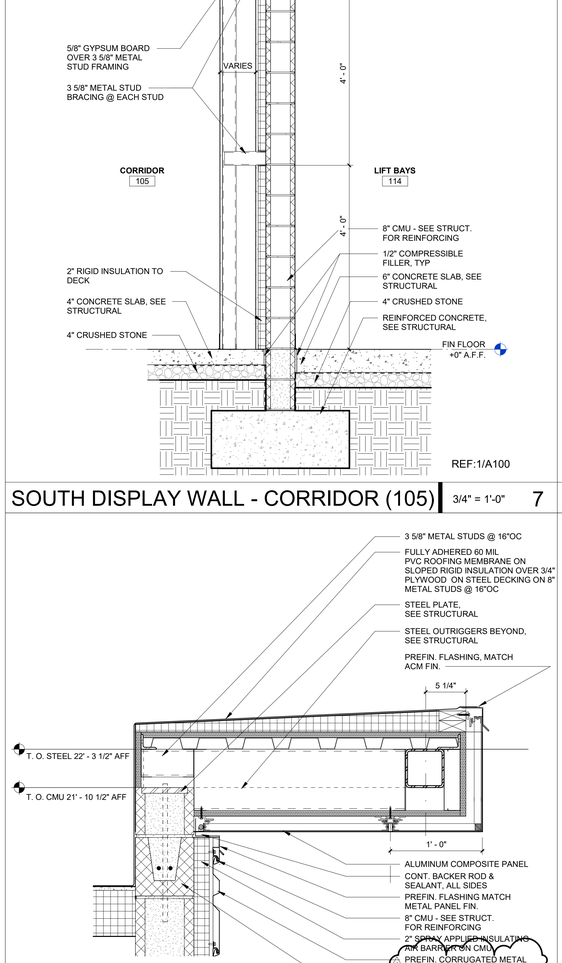
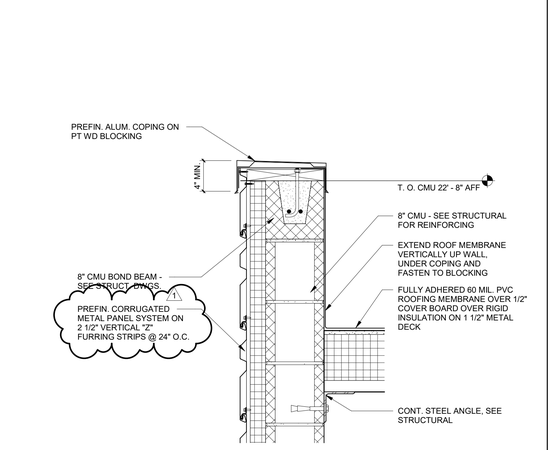
SOUTH DISPLAY WALL - CORRIDOR (105) | 3/4" = 1'-0" | 7



REF:4/A300

NORTH WALL - UPPER CANOPY | 1 1/2" = 1'-0" | 4



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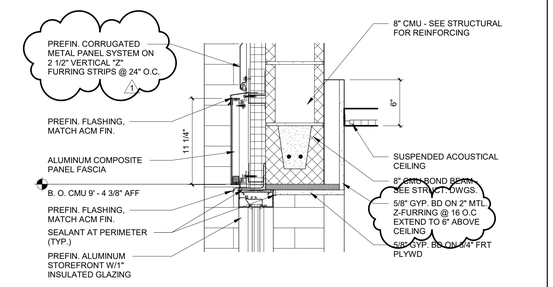
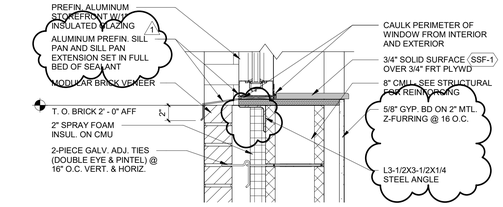
SECTION AT PARAPET | 1 1/2" = 1'-0" | 3



REF:3/A401

TYPICAL STOREFRONT HEAD/BRICK | 1 1/2" = 1'-0" | 2



REF:3/A401

TYPICAL STOREFRONT SILL/BRICK | 1 1/2" = 1'-0" | 1

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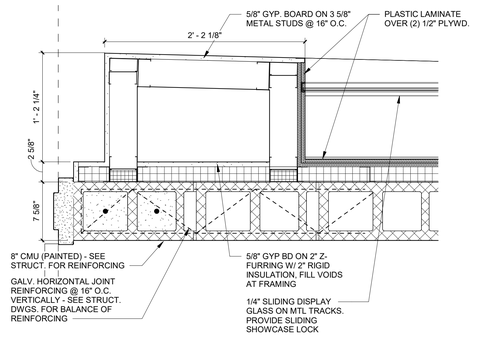
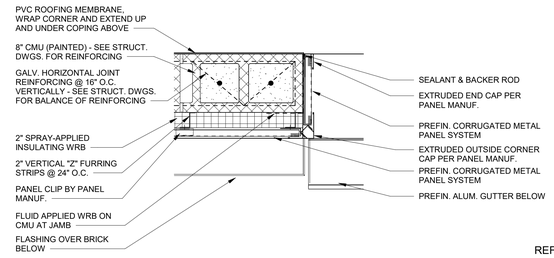


REF:1/A100

WEST END, DISPLAY WALL - CORR. (105) 1 1/2" = 1'-0" 11



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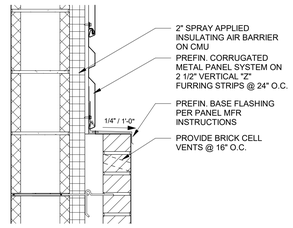
PLAN DETAIL AT PARAPET END 1 1/2" = 1'-0" 12



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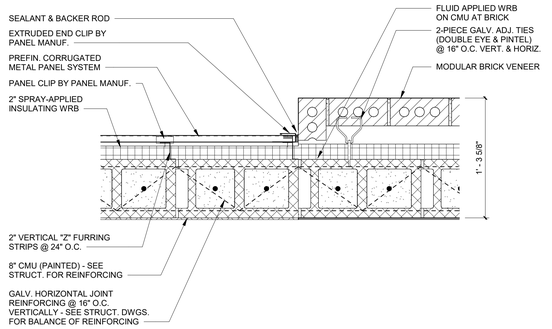
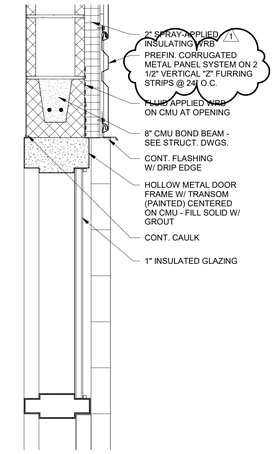
MTL PANEL OVER BRICK 1 1/2" = 1'-0" 9



REF:1/A100

BRICK / MTL PANEL 1 1/2" = 1'-0" 6



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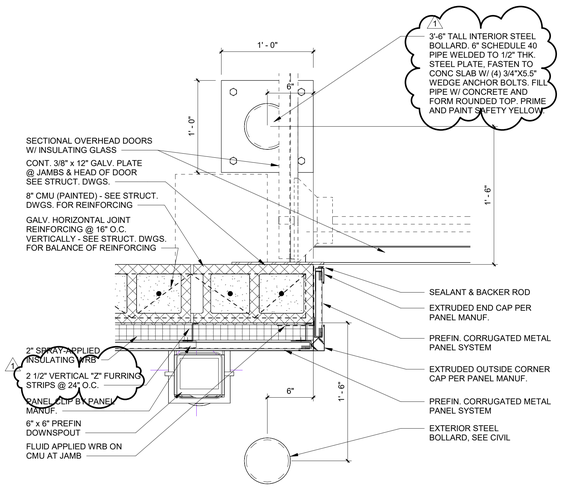
HEAD @ MTL PNL 1 1/2" = 1'-0" 3



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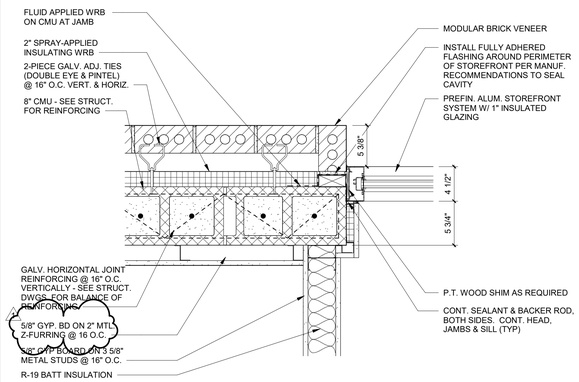
OH DOOR JAMB 1 1/2" = 1'-0" 10



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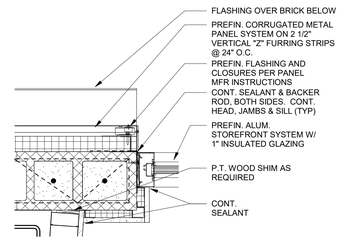
STOREFRONT JAMB AT BRICK 1 1/2" = 1'-0" 8



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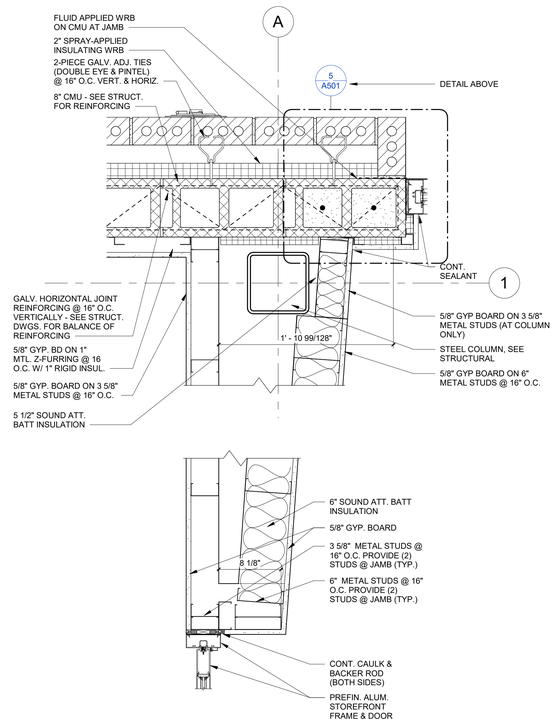
STOREFRONT JAMB AT MTL PANEL 1 1/2" = 1'-0" 5



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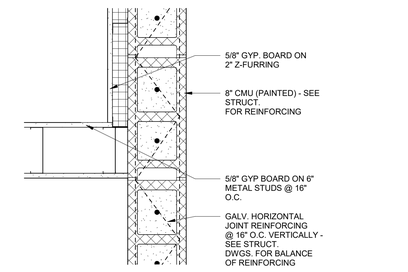
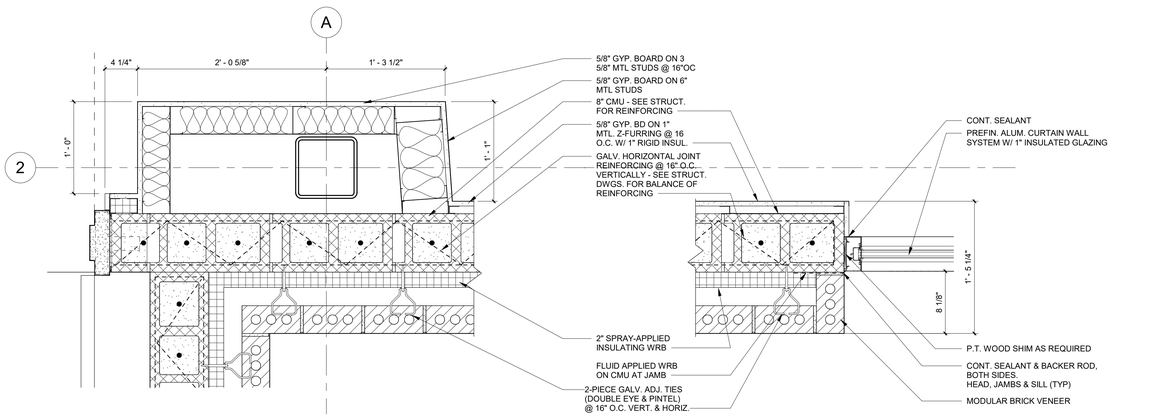
ANGLED WALL / SF - LOBBY (101) 1 1/2" = 1'-0" 4



REF:1/A100

GYPSUM FURRING 1 1/2" = 1'-0" 2



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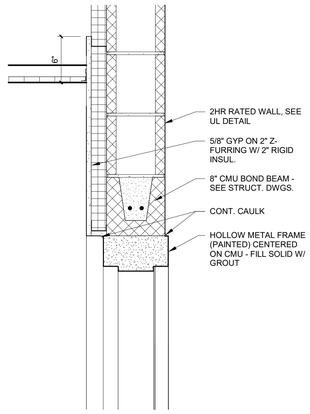
SOUTHEAST CORNER - LOBBY (101) 1 1/2" = 1'-0" 7



REF:1/A100

INT. DOOR HEAD @ CMU 1 1/2" = 1'-0" 1

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1042 West Hamlet Ave,
Hamlet, NC 28345

BID DOCUMENTS

ENLARGED PLANS & DETAILS

DATE: 3/24/2025
PROJECT NO: 23014

REVISIONS

NO:	DATE:	DESCRIPTION:
1	3/5/25	ADDENDUM 01

3/24/2025

SHEET NUMBER

A501

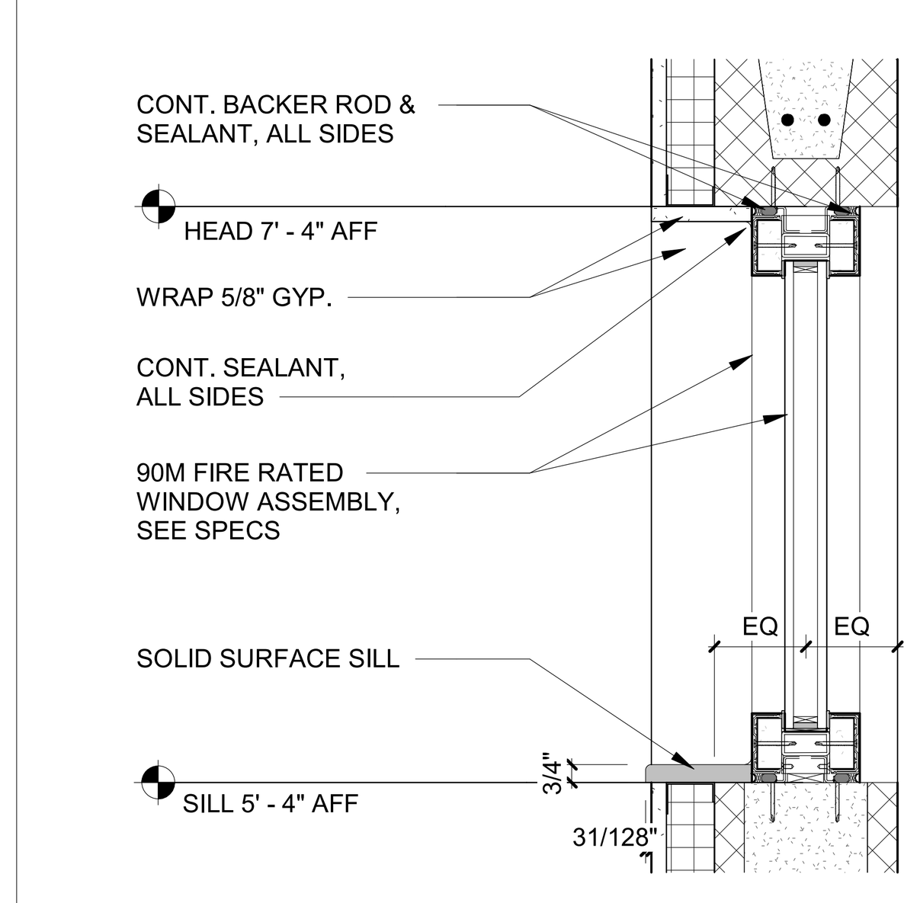
DOOR , FRAME AND HARDWARE SCHEDULE

DOOR #	ROOM NAME	DOOR					FRAME					HARDWARE				RATING	REMARKS
		TYPE	SIZE: WIDTH	SIZE: HEIGHT	MATERIAL	FINISH	TYPE	MATERIAL	FINISH	HEAD	JAMB	THRESHOLD	CLOSER	PANIC	HW SET		
101A	MAIN LOBBY	1	8' - 0"	8' - 0"	ALUM/GLASS	PREFINISHED	SF1	ALUM.	PREFIN.	N/A	N/A	YES	YES	—	15		
101B	MAIN LOBBY	1	3' - 0"	8' - 0"	ALUM/GLASS	PREFINISHED	SF3	ALUM.	PREFIN.	N/A	N/A	YES	YES	—	14		
102	ADMIN	1	3' - 0"	8' - 0"	ALUM/GLASS	PREFINISHED	A	ALUM.	PREFIN.	N/A	N/A	—	YES	—	02		
103	OFFICE	2	3' - 0"	7' - 0"	S.C. WOOD	PAINTED P-10	C	H.M.	PAINT	H1	J1	—	—	—	02		
104	OFFICE	2	3' - 0"	7' - 0"	S.C. WOOD	PAINTED P-10	C	H.M.	PAINT	H1	J1	—	—	—	02		
105	CORRIDOR	1	3' - 0"	8' - 0"	ALUM/GLASS	PREFINISHED	SF4	ALUM.	PREFIN.	N/A	4/A501	YES	YES	—	14		
106	MEN'S	4	3' - 0"	7' - 0"	S.C. WOOD	PAINTED P-10	A	H.M.	PAINT	H1	J1	—	YES	—	13		
107	WOMEN'S	4	3' - 0"	7' - 0"	S.C. WOOD	PAINTED P-10	A	H.M.	PAINT	H1	J1	—	YES	—	13		
108	ELECT	4	3' - 0"	7' - 0"	S.C. WOOD	PAINTED P-10	A	H.M.	PAINT	H1	J1	—	YES	—	12	90M	
109	JAN	4	3' - 0"	7' - 0"	S.C. WOOD	PAINTED P-10	A	H.M.	PAINT	H1	J1	—	—	—	04		
110A	AUTO SIM LAB A	2	3' - 0"	7' - 0"	S.C. WOOD	PAINTED P-10	A	H.M.	PAINT	H1	J1	—	—	—	03		
110B	AUTO SIM LAB B	2	3' - 0"	7' - 0"	S.C. WOOD	PAINTED P-10	A	H.M.	PAINT	H1	J1		—	—	03		
111A	AUTO SIM STORAGE	4	6' - 0"	8' - 0"	S.C. WOOD	PAINTED P-10	A	H.M.	PAINT	H1	J1	—	—	—	05		
111B	AUTO SIM STORAGE	4	6' - 0"	8' - 0"	S.C. WOOD	PAINTED P-10	A	H.M.	PAINT	H1	J1	—	—	—	05		
112	AUTO SIM LAB B	5	6' - 0"	8' - 0"	H.M.	PAINTED	B	H.M.	PAINT	5/A600	J2	—	YES	—	09	90M	
113	EQUIP STOR	5	6' - 0"	8' - 0"	H.M.	PAINTED	B	H.M.	PAINT	H2	J2	—	YES	—	10	90M	
114A	LIFT BAYS	3	3' - 0"	7' - 0"	H.M.	PAINTED	B	H.M.	PAINT	H2	J2	—	YES	—	07	90M	
114B	CORRIDOR	3	3' - 0"	7' - 0"	H.M.	PAINTED	B	H.M.	PAINT	H2	J2	—	YES	—	08	90M	
114C	LIFT BAYS	5	3' - 0"	7' - 0"	H.M.	PAINTED	C	H.M.	PAINT	3/A501	J2(SIM)	YES	YES	YES	11		
114D	LIFT BAYS	6	12' - 0"	10' - 0"	STL./GLASS	PREFINISHED	NA	STL.	PREFIN.	10/A501	1/A403	—	—	—	01		SECTIONAL OVERHEAD DOOR
114E	LIFT BAYS	6	12' - 0"	10' - 0"	STL./GLASS	PREFINISHED	NA	STL.	PREFIN.	10/A501	1/A403	—	—	—	01		SECTIONAL OVERHEAD DOOR
114F	LIFT BAYS	5	3' - 0"	7' - 0"	H.M.	PAINTED	C	H.M.	PAINT	3/A501	J2(SIM)	YES	YES	YES	11		
114G	LIFT BAYS	6	12' - 0"	10' - 0"	STL./GLASS	PREFINISHED	NA	STL.	PREFIN.	10/A501	1/A403	—	—	—	01		SECTIONAL OVERHEAD DOOR
114H	TOOLS	5	6' - 0"	7' - 0"	H.M.	PAINTED	A	H.M.	PAINT	H1	J1	—	—	—	06		

NOTES

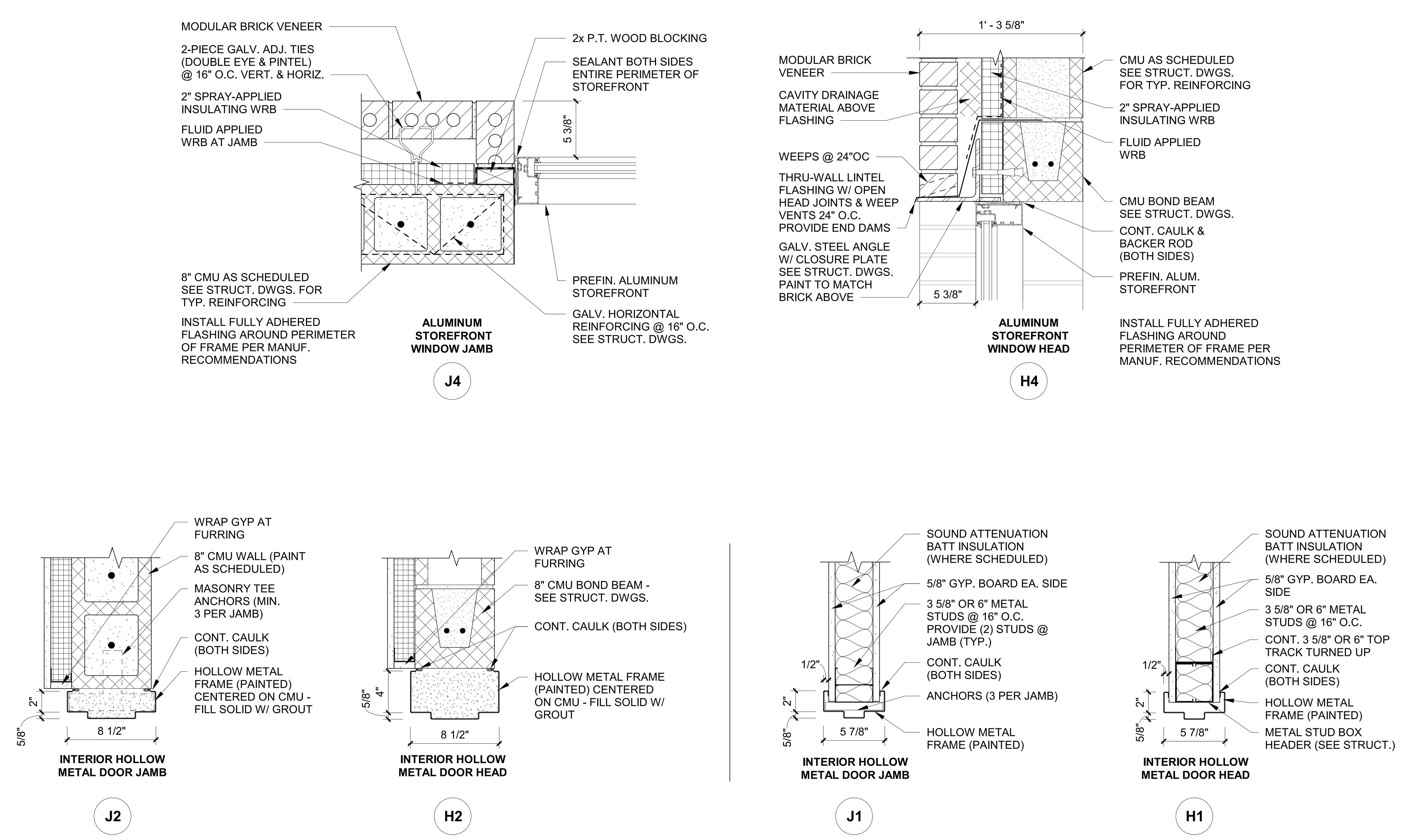
1. PROVIDE NON-REMOVABLE PINS AT EXTERIOR DOORS (U.N.O.).
2. CAULK CONT. AT INTERIOR & EXTERIOR PERIMETER FRAMES IN EXTERIOR WALLS.
3. PROVIDE SOFT FILLER MATERIAL INSIDE METAL FRAME TO ACCOMMODATE ATTACHMENT OF WEATHER STRIPPING & METAL DRIP.
4. ALL THRESHOLDS TO BE ADA COMPLIANT: THE FINISHED FLOOR ELEVATION ON BOTH SIDES OF A DOOR SHALL NOT BE MORE THAN 1/2" LOWER THAN THE THRESHOLD OF THE DOORWAY.
5. SEE STRUCTURAL DRAWINGS FOR REINFORCING AT DOOR HEADS.
6. FILL JAMB & HEADER STUDS W/ INSULATION (TYP. IN WALLS SCHEDULED TO RECEIVE INSULATION).
7. MAXIMUM DOOR OPENING EFFORTS (2018 NCSBC SECTION 1010.1.3):
   1. A 15 LB. FORCE SHALL RELEASE A LATCH
   2. A 30 LB. FORCE SHALL SET DOOR IN MOTION
   3. A 15 LB. FORCE SHALL SWING DOOR FULLY OPEN
   4. A 5 LB. FORCE FOR INTERIOR DOORS
8. ALL DOORS PROVIDED W/ LATCHING HARDWARE SHALL BE EQUIPPED W/ SINGLE-EFFORT, NON GRASP HARDWARE (IE LEVER - UNLESS PROVIDED W/ PANIC HARDWARE).
9. LEVER & PANIC HARDWARE SHOULD BE MOUNTED BETWEEN 34" & 48" ABOVE THE FINISH FLOOR.
10. ALL REQUIRED EXIT DOOR HARDWARE SHALL COMPLY WITH THE NCSBC & CHAPTER 10 OF THE NCSFC.
11. ALL EXTERIOR THRESHOLDS TO HAVE INTEGRAL WATER STOPS.
12. PANIC DEVICES AT RATED DOORS TO COMPLY WITH UL 10C AND 305.

DOOR SCHEDULE | 12" = 1'-0" | 3

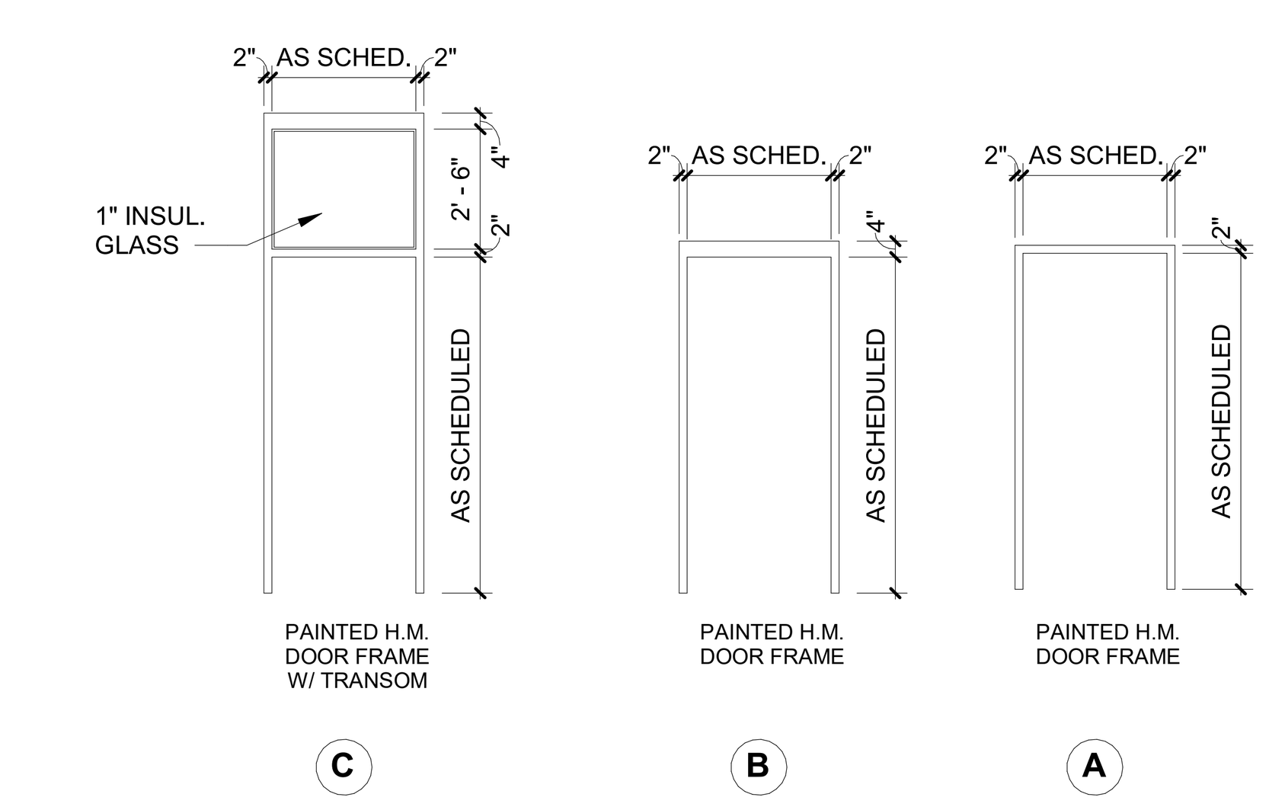


REF:3/A402

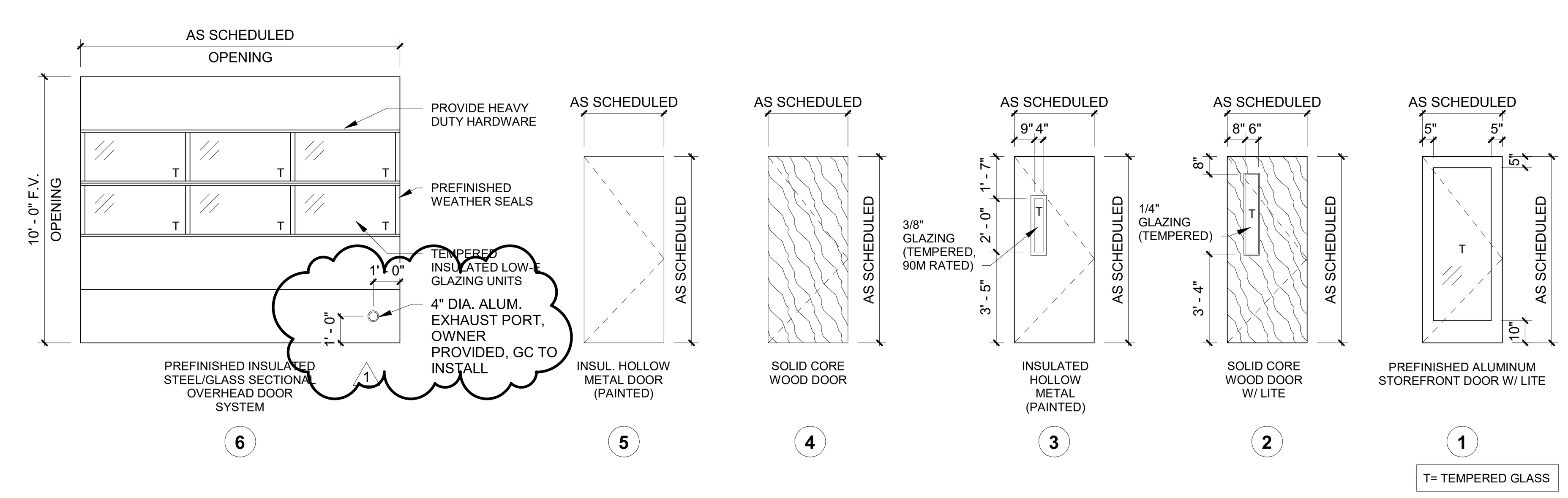
FIRE WINDOW SECT. | 1 1/2" = 1'-0" | 5



HEAD & JAMB DETAILS | 1 1/2" = 1'-0" | 4



DOOR FRAME ELEVATIONS | 1/4" = 1'-0" | 2



DOOR ELEVATIONS | 1/4" = 1'-0" | 1

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DOOR SCHEDULE AND TYPES

DATE: 3/24/2025
PROJECT NO: 23014

REVISIONS

NO:	DATE:	DESCRIPTION:
1	3/5/25	ADDENDUM 01

3/24/2025

SHEET NUMBER

A600

INTERIOR FINISH LEGEND

ALL MATERIALS ARE BASIS OF DESIGN, SEE SPECIFICATIONS FOR APPROVED EQUALS.

FINISH CODE	MANUFACTURER	PRODUCT NAME	PRODUCT NUMBER	COLOR	SIZE / WIDTH	DESCRIPTION	REMARKS
BASE							
B-1	ROPPE	PROFILE RUBBER BASE	670	ASPHALT	6" H	COVE BASE	SEE SPECIFICATION 09 65 19
B-2	FLORIDA TILE	DIVINITY	P43C9-AT	DAWN	3" x 24"	UNPOLISHED PORCELAIN FLOOR, BULLNOSE	GR-1, TR-1 @ FLOOR TO WALL TRANSITION
FLOORING							
CPT-1	SHAW CARPET	CROSS WEAVE TILE	5T526	VIBRANT MOLE 25485	18" X 36"	CARPET - TILE	INSTALLATION DIRECTION - ASHLAR
VET-1	PATCRAFT	ADMIX	1508V	SOAR 00437	18" X 36"	VINYL ENHANCED TILES	INSTALLATION DIRECTION - MONOLITHIC / GRID
SVT-1	KAHRS	QUARTZ LINES	8202	CONGLOMERATE GRAY	12" x 24"	HOMOGENEOUS QUARTZ VINYL TILE	INSTALLATION DIRECTION - MONOLITHIC / GRID
SVT-2	KAHRS	QUARTZ LINES	8257	BLUE	12" x 24"	HOMOGENEOUS QUARTZ VINYL TILE	INSTALLATION DIRECTION - MONOLITHIC / GRID
SC-1	SEE SPECIFICATION	SEALED CONCRETE	-	-	-	-	SEE SPECIFICATION 03 30 00
PT-1	FLORIDA TILES	DIVINITY	FTIDIV10112X24	DAWN	12" x 24"	UNPOLISHED PORCELAIN FLOOR TILE	GR-2 , SEE SPECS 09 30 00
WALLS							
P-1	PPG PAINTS	TRIM PAINT	PPG0998-4	SHADOWY	SEMI-GLOSS	TRIM AND HANDRAIL PAINT	SEE SPECIFICATION 09 91 00
P-2	SHERWIN WILLIAM	STANDARD PAINT	SW7671	ON THE ROCKS	EG SHEL	STANDARD WALL PAINT	SEE FINISH SCHEDULE, SEE SPECIFICATION 09 91 00
P-3	PPG PAINTS	ACCENT PAINT	PPG1158-7	STUNNING SAPPHIRE	EG SHEL	ACCENT WALL, HENDRIK LOGO: (RGB - 0, 85,140)	COLOR FOR SIGNAGE
P-4	PPG PAINTS	ACCENT PAINT	PPG 1155-7	BLUE LAVA	EG SHEL	ACCENT WALL, WALL (GRAPHICS-DARK BLUE)	SEE SPECIFICATION 09 91 00 AND COLOR FOR SIGNAGE
P-5	PPG PAINTS	ACCENT PAINT	PPG1236-6	JAMAICAN SEA	-	ACCENT WALL (GRAPHICS-LIGHT BLUE)	SEE SPECIFICATION 09 91 00 AND COLOR FOR SIGNAGE
P-6	PPG PAINTS	ACCENT PAINT	PPG 1010-6	UP IN SMOKE	EG SHEL	ACCENT WALL (GRAPHICS- GRAY)	SEE SPECIFICATION 09 91 00 AND COLOR FOR SIGNAGE
P-7	PPG PAINT	ACCENT PAINT	PPG0998-6	ON THE EDGE	EG SHEL	ACCENT WALL	SEE SPECIFICATION 09 91 00
P-8	SHERWIN WILLIAM	EPOXY PAINT	SW7671	ON THE ROCKS	EPOXY	TOILET PAINT (EPOXY)	SEE FINISH SCHEDULE, EPOXY PAINT
P-9	SHERWIN WILLIAM	CEILING PAINT	SW7757	HIGH REFLECTIVE WHITE	FLAT	CEILING PAINT	SEE SPECIFICATION 09 91 00
P-10	SCUFFMASTER (WOLF GORDON)	DOOR PAINT	GOH 34367084	SM10250	SOLID METAL	SPECIAL COATING-DOOR PAINT	SEE SPECIFICATION 09 94 00
WT-1	FLORIDA TILE	WALL TILE - AVENTIS	FTIAT3RE12X24	TITANIUM	12" X 24"	PORCELAIN WALL TILE	GR-1, SEE SPECS 09 30 00
SURFACES							
PL-1	WILSONART	PLASTIC LAMINATE	5058K-18	TITAIUM ALLOY (LINEARITY FINISH)	4'X8'	COUNTER TOP SUPPORT	SEE SPECIFICATION AND A701 FOR INTERIOR ELEV.
QTZ-1	BRADLEY - EVERO	CAST FORMEDI | NAT QUARTZ	GEO SERIES	ANTARCTICA	1/2" THK.	PERFORMED LAVATORY COUNTER TOP SYSTEM BY BREADLEY CORP.	SEE SPECIFICATION 12 36 61
SSF-1	WILSONART	SOLID SURFACE	9116GS	SMOOTH GRAY	3/4" THK.	WINDOW SILLS, COUNTERTOPS	SEE SPECIFICATION 06 22 00
SS-1	CONTRACTOR'S CHOICE	STAINLESS STEEL	-	BRUSHED FINISH	14 GA.	COUNTER TOP	SEE SEPCIFICATION AND INTERIOR ELEV. 3/A701, 4/A701
MISCELLANEOUS							
CG-1	CS-ACROVYN	CORNER GUARD	CO-8	STAINLESS STEEL		-	SEE SPECIFICATION 10-26-13, SEE A701
FRP-1	CRANE COMPOSITES	VERIETEX	SATIN SANDSTONE TEXTURE	PEPPER DUST 8044	.09" (4'X10')	FRP PANELS, SANITARY WALL PANELS W ALL TRIM PIECES	SEE SPECIFICATION 09-98-60, SEE A701
GR-1	LATICRETE	SPECTRALOCK PREMIX	33109-0001-2	60 DUSTY GREY	-	EPOXY WALL GROUT	SEE SPECIFICATION 09 30 00
GR-2	LATICRETE	SPECTRALOCK PRO PREMIUM	#1267-0409-2	60 DUSTY GREY		EPOXY FLOOR GROUT	SEE SPECIFICATION 09 30 00
D-1	MASONITE	DOOR - SPECIAL COATING	ASPIRO SERIES	-	-	SOLID CORE FLUSHED WOOD DOOR -PREMIUM PAINT	SEE SPECIFICATION 08 14 16
MB-1	CLARIDGE PROD & EQIP	WHITE MARKER BOARD	N/A	WHITE W/ALUM.FRAME	4 ' H X 8' L	PORCELAIN STEEL WHITEBOARD	SEE SPECIFICATION 10 11 00, SEE FINISH PLAN A701 FOR LOCATION
TP-1	ASI GLOBAL PARTITION	SOLID PLASTIC	#9509	BLUE	-	TOILET PARTITION	SEE SPECIFICATION 10 2113
TR-1	SCHULTER	COVE TRANSITION	DILEX-AHX	STAINLESS STEEL	SIZE APPROPRIATELY	TRANSITION - FLOOR TO WALL TILES	1/A705
TR-2	KUBERIT	METAL EDGE	KT-D-025-C	A1, ANODIZED ALUMINIUM	SIZE APPROPRIATELY	TRANSITION - CARPET TO RESILIENT	2/A705
TR-3	DALTILE	THRESHOLD	DOUBLE BEVEL	CARRA WHITE M701	4" x 36" x 5/8"	ADA COMPLIENT THRESHOLD	SEE SPECIFICATION 09 30 00
TR-4	SCHULTER	EDGE CAP OF WALL TILE	JOLLY	STAINLESS STEEL	SIZE APPROPRIATELY	TRANSITION - EDGE CAP	4/A705
TR-5	KUBERIT	EDGE TRIM	KT- F- 030-C	A1, ANODIZED ALUMINIUM	1/8"	TRANSITION- RESILIENT TO CONCRETE (SEALED AND POLISHED)	5/A705
TR-6	KUBERIT	SVT TO RESILIENT	KT- I - 030-S	A1, ANODIZED ALUMINIUM	1-3/16"	TRANSITION - VET TO SVT	-
WC-1	MECHO SHADES	SOHO (5% OPENNESS)	1900 SERIES	DOVE GREY 1905	-	MANUALLY OPERATED SOLAR ROLLER SHADES	SEE SPECIFICATION 12 24 00

ROOM FINISH SCHEDULE

RM NO.	NAME	FLOOR	BASE	WALLS: STANDARD WALL	WALLS: ACCENT WALL	MILLWORK - CABINETS: COUNTERTOP	MILLWORK - CABINETS: FRONT	COMMENTS
101	MAIN LOBBY	VET-1	B-1	P-2	P-4, P-5, P-6			
102	ADMIN	CPT-1	B-1	P-2	P-7			
103	OFFICE	CPT-1	B-1	P-2	P-7			
104	OFFICE	CPT-1	B-1	P-2	P-7			
105	CORRIDOR	VET-1	B-1	P-2				
106	MEN'S	PT-1	B-2	P-8 / WT-1		QTZ-1		PORCELAIN TILE UP TO FIN. CEILING ON WET WALLS, SEE ELEVATIONS
107	WOMEN'S	PT-1	B-2	P-8 / WT-1		QTZ-1		PORCELAIN TILE UP TO FIN. CEILING ON WET WALLS, SEE ELEVATIONS
108	ELECT	SC-1	B-1	P-2				
109	JAN	SC-1	B-1	P-8/FRP-1				
110	AUTO SIM LAB A	SVT-1/SVT-2	B-1	P-2	MB-1			
111	AUTO SIM STORAGE	SC-1	B-1	P-8				
112	AUTO SIM LAB B	SVT-1/SVT-2	B-1	P-2				
113	EQUIP STOR	SC-1	B-1	P-8	MB-1			
114	LIFT BAYS	SC-1	B-1	P-8				
115	TOOLS	SC-1	B-1	P-8				

INTERIOR FINISH GENERAL NOTES

1. REFER TO OR REFERENCE INTERIOR SECTIONS, ELEVATIONS, DETAILS AND REFLECTED CEILING PLANS FOR ADDITIONAL INFORMATION (SEE COVER SHEET INDEX AND/OR SHEET SERIES).
2. VERIFY LOCATION OF CONTROL JOINTS IN ROOMS RECEIVING TILE FLOORS. SEE WRITTEN SPECIFICATIONS **SECTION # 09 30 00.**
3. ALL INTERIOR WALL & CEILING FINISHES SHALL COMPLY WITH ***NCSBC CHAPTER 8, SECTION 803, TABLE 803.11***
   NONSPRINKLERED:.
   A. INTERIOR EXIT STAIRWAYS, RAMPS AND EXIT PASSAGEWAYS: ***CLASS A***
   B. CORRIDORS & ENCLOSURES FOR EXIT ACCESS STAIRWAYS AND RAMPS: ***CLASS A***
   C. ROOM AND ENCLOSED SPACES ***CLASS C***
4. INTERIOR FLOOR FINISHES COMPLY WITH ***NCSBC CHAPTER 8***, ***SECTION 804***
5. ALL INTERIOR FINISHES IN TOILET AND BATHROOMS SHALL COMPLY WITH ***NCSBC CHAPTER 12, SECTION 1210.2, 1210.2.1 THROUGH 1210.2.4.***
6. REFER TO DOOR SCHEDULE (A600 SERIES) FOR DOOR & FRAME FINISHES.
7. FOR MISCELLANEOUS INTERIOR TRIM FINISHES (WALL CAPS, RAILINGS, SILLS, ETC. SEE REMARKS COLUMN IN ROOM FINISH SCHEDULE. ELEMENTS SUCH AS GRILLE AND LOUVER COLORS TO MATCH ADJACENT WALL OR CEILING PAINT COLOR UNLESS OTHERWISE NOTED.

INTERIOR FINISH CODES

ACT	ACOUSTICAL CEILING TILE	QT	QUARRY TILE
AWC	ACOUSTICAL WALL CARPET	QTZ	QUARTZ
AWP	ACOUSTICAL WALL PANEL FINISH	RC	RESINOUS COUNTER
B	BASE	RF	RUBBER FLOOR
BRK	BRICK VENEER	RP	RESIN PANEL
CC	COLUMN COVER	SC	SEALED CONCRETE
CG	CORNER GUARD	SSF	SOLID SURFACE
CR	CHAIR RAIL	SS	STAINLESS STEEL
CPT	CARPET (TILES, BROADLOOM, WALKOFF)	ST	STAIN
CRT	CURTAIN (SHOWER, STAGE)	STC	STAINED CONCRETE
CSM	CAST STONE MASONRY	SDT	STATIC DISSIPATIVE TILE
D	DOOR	STR	STAIR TREAD
ELV	ELEVATOR FINISHES	TB	TACK BOARD
EPF	EPOXY FLOOR SYSTEM FINISH	TP	TOILET PARTITION
EPW	EPOXY WALL SYSTEM FINISH	TR	TRANSITIONS (FLOOR/WALL)
FRP	FIBERGLASS REINFORCED PANEL	TZ	TERRAZZO
FLM	FILM PRODUCT	VCT	VINYL COMPOSITION TILE
GL	GLASS	VET	VINYL ENHANCED TILE
GR	GROUT	VS	VINYL SHEET FLOORING
LCK	LOCKERS	VWC	VINYL WALLCOVERING
LV	LUXURY VINYL (TILE, PLANK)	WP	WALL PROTECTION
MB	MARKER BOARD/ GLASS BOARD	WC	WINDOW COVERING
N	NOSING (WOOD, RUBBER, METAL)		(BLINDS, SOLAR ROLLER SHADE, DRAPES)
OWP	OPERABLE WALL PARTITION	WT	WALL TILE
P	PAINT	WPS	WALL PANEL SYSTEM
PC	POLISHED CONCRETE	WFS	WOOD FLOOR SYSTEM
PL	PLASTIC LAMINATE		
PT	PORCELAIN TILE		

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FINISH LEGEND, SCHEDULE, NOTES & CODES

DATE: 3/24/2025
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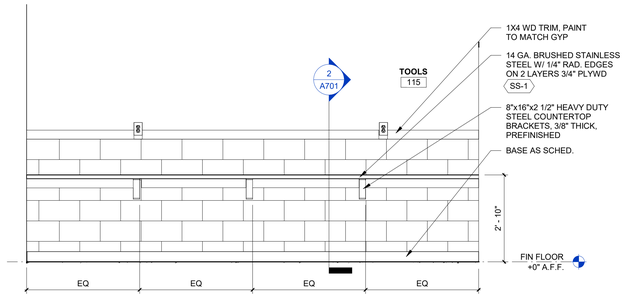
3/24/2025

SHEET NUMBER

A700



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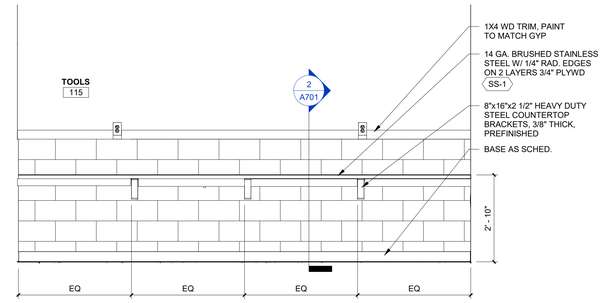
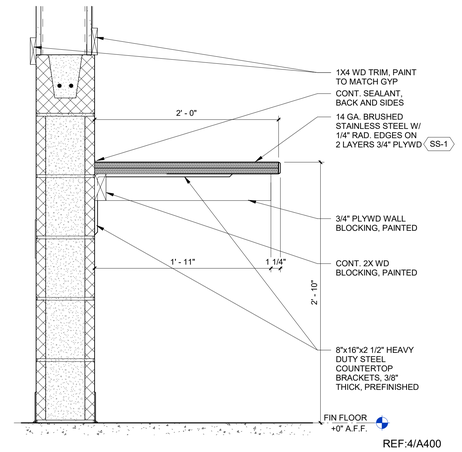
COUNTER @ TOOLS-EAST 1/2" = 1'-0" 3



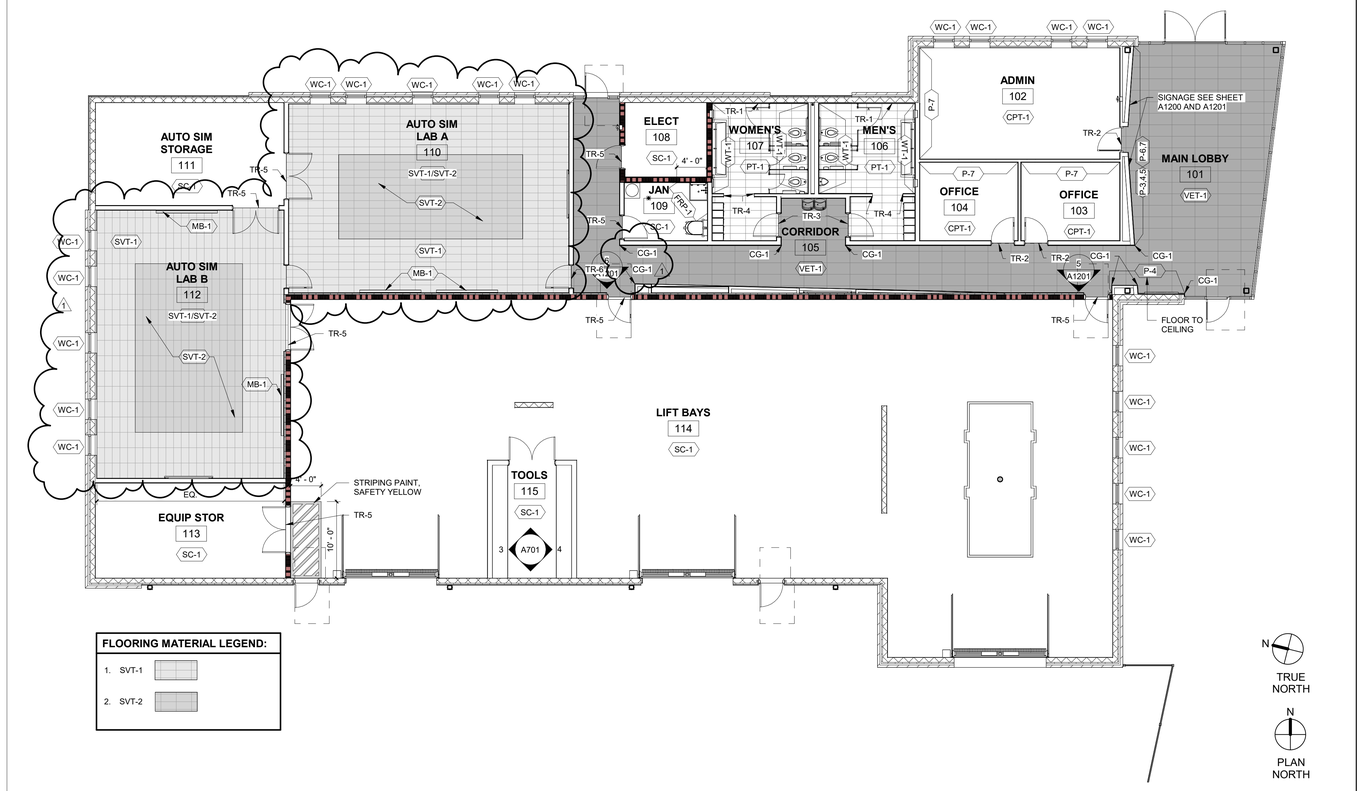
REF:1/A100

COUNTER @ TOOLS-WEST 1/2" = 1'-0" 4



REF:4/A400

SECTION AT TOOL ROOM COUNTER 1 1/2" = 1'-0" 2



OVERALL FIRST FLOOR FINISH PLAN 1/8" = 1'-0" 1

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Hamlet, NC 28345

BID DOCUMENTS

FIRST FLOOR FINISH PLAN

DATE: 3/24/2025
PROJECT NO: 23014

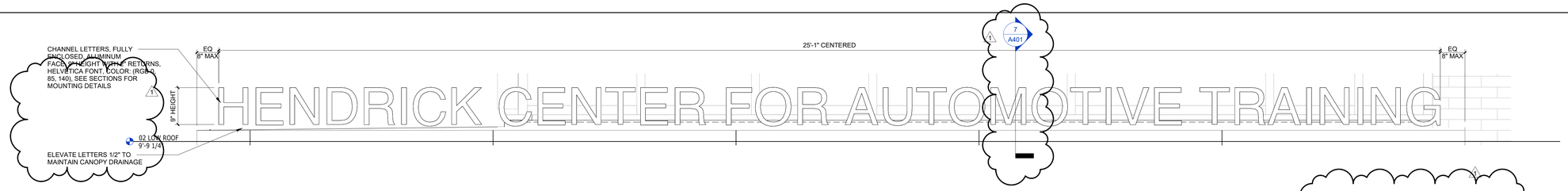
REVISIONS

NO:	DATE:	DESCRIPTION:
1	3/5/25	ADDENDUM 01

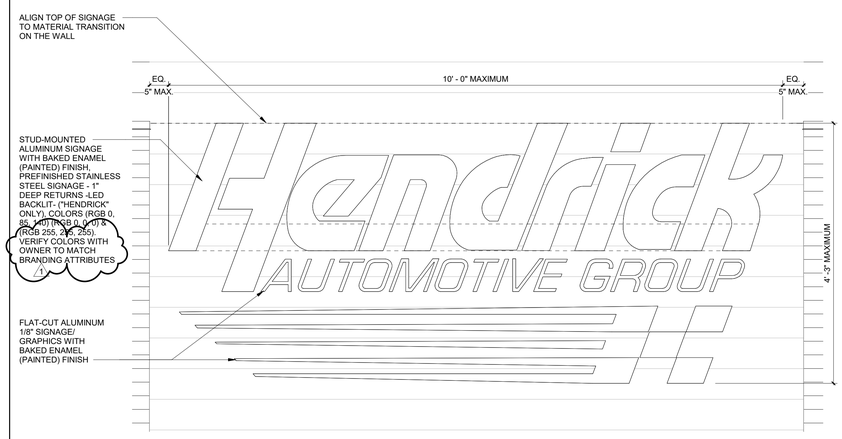
3/24/2025

SHEET NUMBER

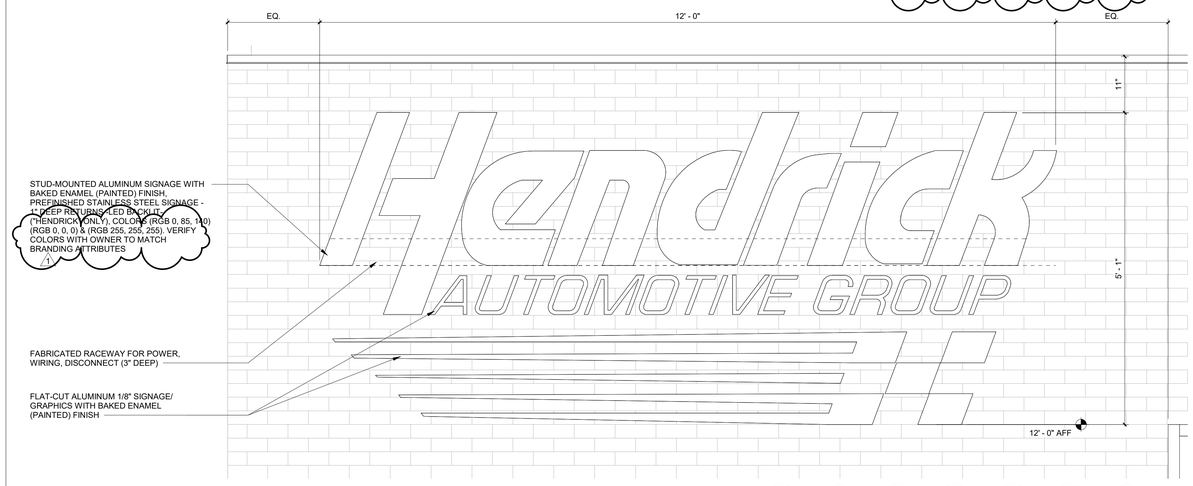
A701



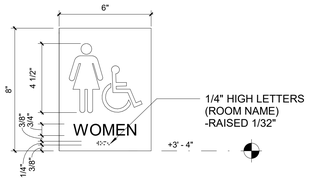
CANOPY SIGNAGE #4 | 1" = 1'-0" | 4



NORTH ELEVATION LOGO SIGNAGE #6 | 1" = 1'-0" | 3

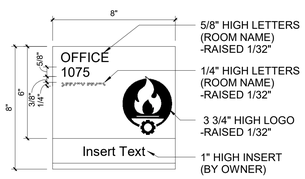


EAST ELEVATION LOGO SIGNAGE #5 | 1" = 1'-0" | 2



-MATERIAL: 1/4" P95 ACRYLIC, SUBSURFACE PAINTED. SURFACE-APPLIED ADA RAISED GRAPHICS AND BRAILLE. FLAT DIRECT IMAGED SURFACE APPLIED SYMBOL.
-DEPTH: 1/4"
-FONT: ARIAL
-GRAPHIC + BACKGROUND COLOR: SELECTED FROM MANUFACTURER SELECTION.

SIGN TYPE #3 | 3" = 1'-0" | 7



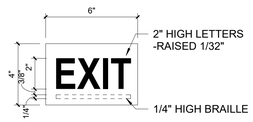
-BACKPLATE MATERIAL: 1/8" CLEAR ACRYLIC SECOND SURFACE PAINTED WITH THUMBHOLES (BACKGROUND COLOR: BLACK)

-GRAPHIC WINDOW: 1/4" P95 ACRYLIC HEAVY MATTE PAPER MASKED FACE WITH 1/16" SPACERS. SURFACE PAINT T+B BOTTOM TO HIDE SPACERS .

-BACKER 1/4" BACKER UNDERSIZED FROM EDGES

-GRAPHIC + BACKGROUND COLOR: SELECTED FROM MANUFACTURER SELECTION

SIGN TYPE #2 | 3" = 1'-0" | 6



MATERIAL: 1/4" P95 ACRYLIC

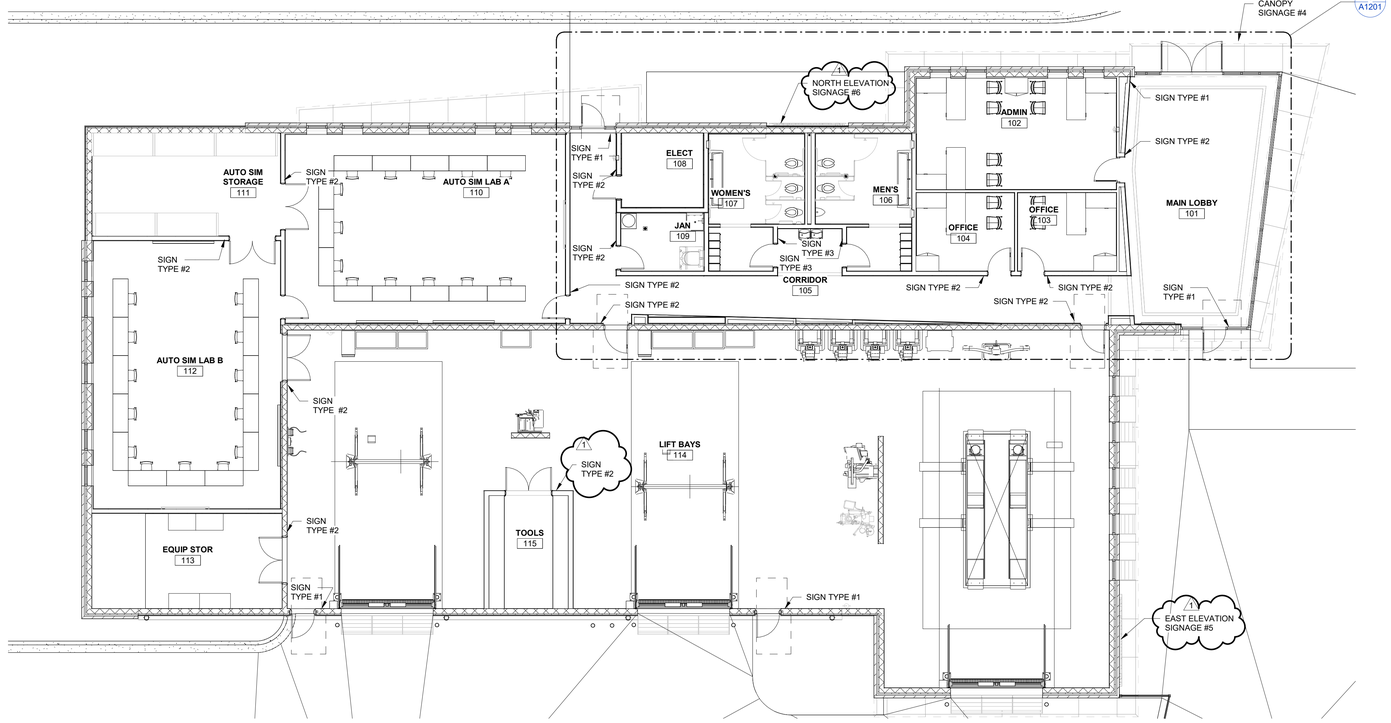
GRAPHIC + BACKGROUND COLOR: SELECTED FROM MANUFACTURER SELECTION

SIGN TYPE #1 | 3" = 1'-0" | 5

NOTES

1) See Signage Plans A1200 + A1201 for sign type.
2) Signs shall be mounted on the corridor wall at the strike side of the door. Locate the edge of the sign 2" from the edge of the door frame. Notify architect of any conflicts prior to installation.
3) All signs shall have non-glare finish. Characters + symbols shall contrast with the background (per NSCBE Vol. I-C 18.1.4).
4) All letters shall be upper case only with sharply defined edges. Sans serif or simple serif font shall be used (per NSCBE Vol. I-C 18.3.1).
5) No signs shall be mounted on glass. Coordinate with architect for alternate mounting locations if not specified.
6) All signs shall be mounted at +40" A.F.F. to centerline unless noted otherwise.
7) Confirm all proposed room names/numbers with Owner prior to fabrication.

ROOM DESIGNATION	SIGN COPY
LOBBY 101	LOBBY 101
ADMIN 102	ADMINISTRATION 102
OFFICE 103	OFFICE 103
OFFICE 104	OFFICE 104
MEN'S 106	MEN 105
WOMEN'S 107	WOMEN 106
JANITOR 109	JANITOR 107
ELECT 108	ELECTRICAL 108
AUTO SIM LAB A 110	AUTOMOTIVE SIMULATION LAB A 109
AUTO SIM STORAGE 111	AUTOMOTIVE SIMULATION STORAGE 110
AUTO SIM LAB B 112	AUTOMOTIVE SIMULATION LAB B 111
EQUIP STOR 113	EQUIPMENT STORAGE 112
LIFT BAYS 114	LIFT BAYS 113
TOOLS 114	TOOLS 114



SIGNAGE FLOOR PLAN | 1/8" = 1'-0" | 1

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RICHMOND COMMUNITY COLLEGE

SCO #22-25472-01A
NCCCS #2689

RICHMOND COMMUNITY COLLEGE

HENDRICK CENTER FOR AUTOMOTIVE TRAINING

1042 West Hamlet Ave,
Hamlet, NC 28345

BID DOCUMENTS

SIGNAGE PLAN

DATE: 3/24/2025
PROJECT NO: 23014

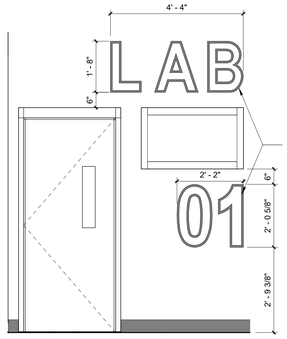
REVISIONS

NO:	DATE:	DESCRIPTION:
1	3/5/25	ADDENDUM 01

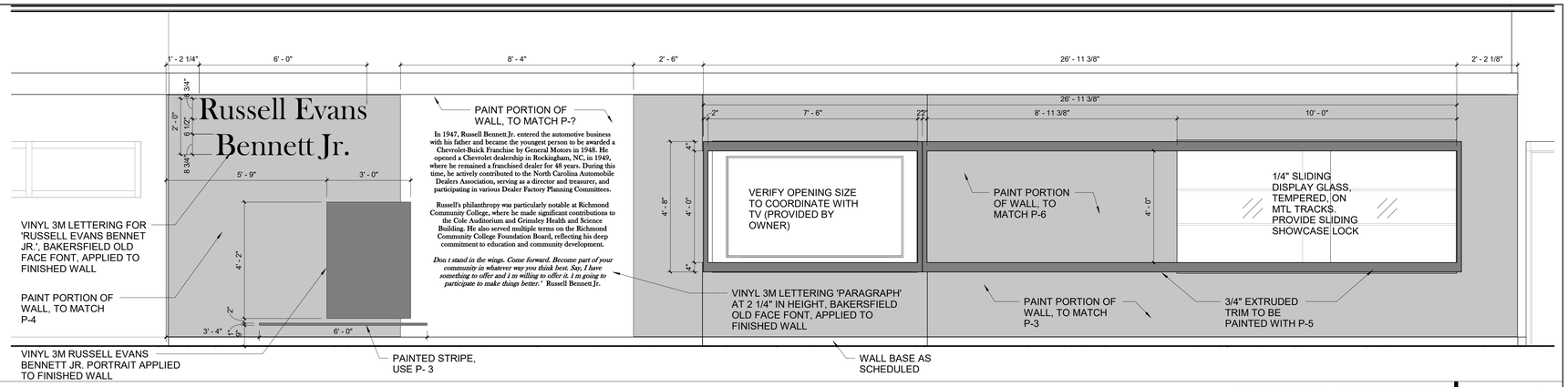
3/24/2025

SHEET NUMBER

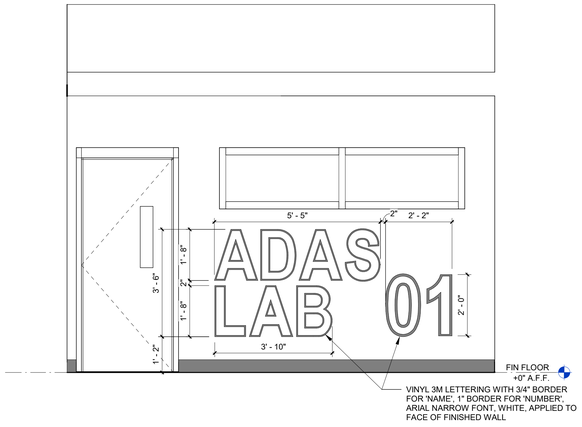
A1200



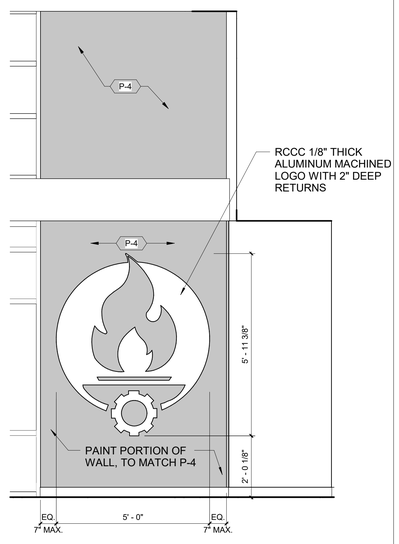
INTERIOR ELEVATION | 1/2" = 1'-0" | 6



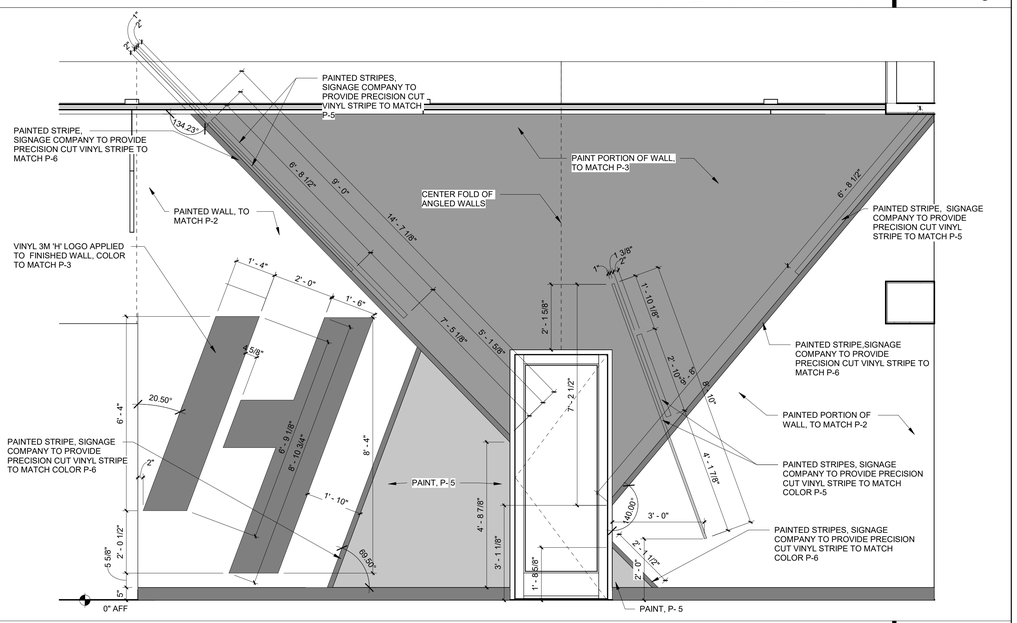
INTERIOR ELEVATION | 1/2" = 1'-0" | 3



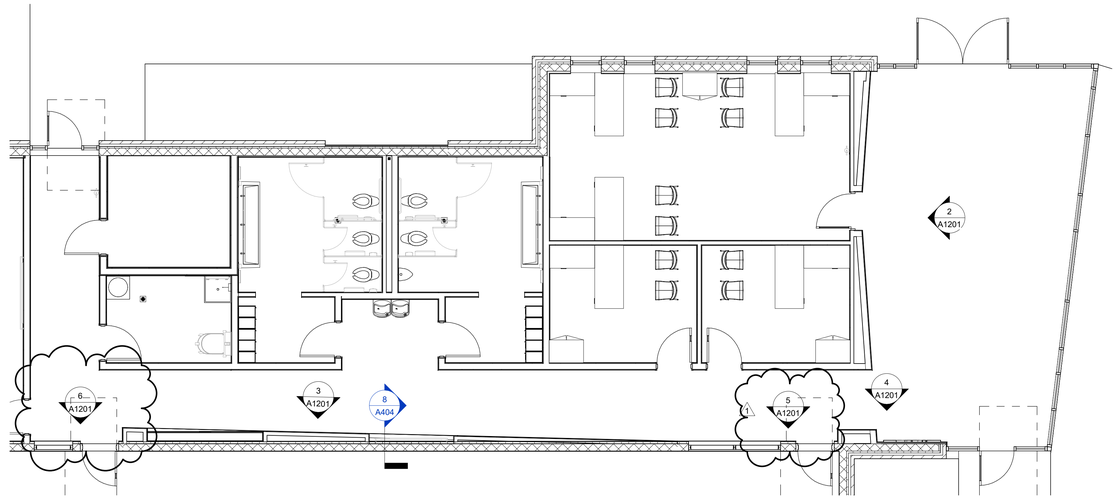
INTERIOR ELEVATION | 1/2" = 1'-0" | 5



INTERIOR ELEVATION | 1/2" = 1'-0" | 4



INTERIOR ELEVATION | 1/2" = 1'-0" | 2



SIGNAGE PLAN | 3/16" = 1'-0" | 1

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Hamlet, NC 28345

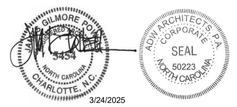
BID DOCUMENTS

SIGNAGE ENLARGED PLAN & WALL GRAPHICS

DATE: 3/24/2025
PROJECT NO: 23014

REVISIONS

NO:	DATE:	DESCRIPTION:
1	3/5/25	ADDENDUM 01



3/24/2025

SHEET NUMBER

A1201

GENERAL

1. THESE GENERAL NOTES ARE NOT INTENDED TO REPLACE SPECIFICATIONS (IF PROVIDED). SEE SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO THE GENERAL NOTES.
2. DO NOT SCALE DIMENSIONS FROM DRAWINGS. THE CONTRACTOR SHALL REQUEST NECESSARY DIMENSIONS NOT SHOWN ON THE DRAWINGS.
3. WHERE A DETAIL IS SHOWN FOR ONE CONDITION, IT SHALL APPLY FOR ALL LIKE OR SIMILAR CONDITIONS EVEN THOUGH NOT SPECIFICALLY REFERENCED ON THE DRAWINGS.
4. WHERE A CONFLICT BETWEEN DRAWINGS AND SPECIFICATIONS OCCURS THE MORE STRINGENT REQUIREMENT SHALL APPLY.
5. IF ANY BIDDER IS IN DOUBT AS TO THE INTENT OF THE DRAWINGS OR SPECIFICATIONS, THEY SHALL REQUEST AN INTERPRETATION IN WRITING PRIOR TO THE SCHEDULED BID DATE.
6. THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND GRADE CONDITIONS (BOTH NEW AND EXISTING), REPORTING ANY DISCREPANCIES TO THE ENGINEER OF RECORD PRIOR TO FABRICATION OR PROCEEDING WITH STRUCTURAL WORK.
7. THE CONTRACTOR SHALL COMPARE THE STRUCTURAL DRAWINGS WITH THE ARCHITECTURAL DRAWINGS, AND REPORT ANY DISCREPANCIES TO THE ENGINEER OF RECORD PRIOR TO FABRICATION OR PROCEEDING WITH STRUCTURAL WORK.
8. SEE ARCHITECTURAL DRAWINGS FOR FLOOR ELEVATIONS, FLOOR SLOPES, AND THE LOCATION OF DEPRESSED FLOOR AREAS.

CONTRACTOR RESPONSIBILITY

1. THE STRUCTURAL DRAWINGS AND SPECIFICATIONS (IF PROVIDED) REPRESENT THE FINISHED STRUCTURE, AND, EXCEPT WHERE SPECIFICALLY SHOWN, DO NOT INDICATE THE METHOD OR MEANS OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, PROCEDURES, TECHNIQUES, AND SEQUENCE. ALL APPLICABLE SAFETY REGULATIONS TO BE FOLLOWED STRICTLY.
2. THE STRUCTURE HAS BEEN DESIGNED TO RESIST DESIGN LOADS ONLY AS A COMPLETED STRUCTURE. APPLICATIONS OF CONSTRUCTION LOADS TO THE PARTIALLY COMPLETED STRUCTURE SHALL BE CONSIDERED BY THE CONTRACTOR AND SO INCLUDED IN THE DESIGN OF SHORING, BRACING, FORMWORK, AND ANY OTHER SUPPORTING ELEMENTS PROVIDED FOR CONSTRUCTION OF THE STRUCTURE. DURING ERECTION AND UNTIL ALL PERMANENT CONNECTIONS ARE MADE, THE CONTRACTOR MUST PROVIDE TEMPORARY BRACING FOR THE STRUCTURE IN ALL DIRECTIONS UNTIL THE STRUCTURAL WORK IS COMPLETE.
3. ALL INTERIOR HANGING COMPONENTS (CEILING, DUCTWORK, PIPING, EQUIPMENT, ETC.) SHALL BE COORDINATED BY THE CONTRACTOR TO ENSURE LOADS APPLIED TO THE STRUCTURE DO NOT EXCEED THE LIMITS SHOWN IN THE DESIGN CRITERIA OR ELSEWHERE IN THE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ADEQUACY OF THE CONNECTIONS TO THE SUPPORTING STRUCTURAL ELEMENTS AND THE ADEQUACY OF THE HANGING SYSTEM TO SUPPORT THE COMPONENTS.
4. ALL ARCHITECTURAL, ELECTRICAL, MECHANICAL, AND PLUMBING COMPONENTS NOT SHOWN ON THE STRUCTURAL DRAWINGS, THAT FRAME TO THE UNDERSIDE OF STRUCTURE ABOVE, SHALL BE DETAILED AND FRAMED BY THE CONTRACTOR TO ALLOW FOR DEFLECTION OF THE STRUCTURAL FRAMING. SEE THE DESIGN CRITERIA FOR THE LIMITS USED IN THE DESIGN.
5. PRINCIPAL OPENINGS IN THE STRUCTURE ARE SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL EXAMINE THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR ALL REQUIRED OPENINGS. SUPPORT FRAMING FOR ALL OPENINGS SHALL BE PROVIDED AND INSTALLED PER TYPICAL DETAILS HEREIN WHETHER SHOWN ON THESE DRAWINGS OR NOT. THE CONTRACTOR SHALL VERIFY SIZE AND LOCATION OF ALL OPENINGS WITH ALL SUBCONTRACTORS AND THEIR APPROVED SHOP DRAWINGS PRIOR TO CONSTRUCTION.
6. ALL EXTERIOR WALL AND ROOF COMPONENTS AND CLADDING ENGINEERED BY THE COMPONENT MANUFACTURER ARE TO BE DESIGNED BY THE MANUFACTURER'S ENGINEER FOR COMPONENTS AND CLADDING WIND LOADS NOTED IN THE DESIGN CRITERIA.
7. ALL ARCHITECTURAL, ELECTRICAL, MECHANICAL, AND PLUMBING COMPONENTS ARE TO BE ATTACHED AS REQUIRED BY ASCE/SEI 7 CHAPTER 13, "SEISMIC DESIGN REQUIREMENTS FOR NONSTRUCTURAL COMPONENTS". EACH INDIVIDUAL CONTRACTOR RESPONSIBLE FOR THE COMPONENT MUST PROVIDE PROJECT SPECIFIC DESIGN AND DOCUMENTATION PREPARED BY AN ENGINEER LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED. CHAPTER 13 DEFINES THE FORCE REQUIRED TO SUPPORT THE COMPONENT FOR THE ANCHORAGE AND BRACING. THE COST OF PREPARING THIS INFORMATION AND DESIGN SHALL BE INCLUDED IN EACH CONTRACTOR'S BID THAT IS PROVIDING THE COMPONENT.
8. SEVERAL ITEMS NOTED HEREIN (WHERE CHECKED) AND IN THE SPECIFICATIONS REQUIRE THE CONTRACTOR TO ENGAGE A PROFESSIONAL ENGINEER LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED, TO PROVIDE DESIGN AND/OR DETAILING OF STRUCTURAL ELEMENTS. SEE INDIVIDUAL NOTES AND SPECIFICATION SECTIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS. DELEGATED DESIGN ELEMENTS INCLUDE, BUT ARE NOT LIMITED TO:
   - ☐ SPECIALTY FOUNDATION SYSTEM
   - ☐ POST-TENSIONED CONCRETE (LAYOUT AND STRESSING)
   - ☐ STRUCTURAL PRECAST CONCRETE
   - ☐ ARCHITECTURAL PRECAST CONCRETE
   - ☒ STRUCTURAL STEEL (CONNECTIONS)
   - ☐ PREFABRICATED METAL BUILDING
   - ☐ STEEL STAIRS AND RAILINGS
   - ☒ STEEL JOISTS AND STEEL JOIST GIRDERS
   - ☐ ROOF ANCHORS
   - ☐ NON-LOAD BEARING COLD-FORMED STEEL
   - ☐ LOAD BEARING COLD-FORMED STEEL
   - ☐ LIGHT GAUGE COLD-FORMED STEEL TRUSSES
   - ☐ PREFABRICATED WOOD TRUSSES
   - ☐ ANCHOR TIE-DOWN SYSTEM FOR WOOD SHEAR WALLS

DESIGN CRITERIA

1. PROJECT LOCATION: 1042 WEST HAMLET AVE, HAMLET, NC 28345
2. APPLICABLE CODES:
   2018 NORTH CAROLINA BUILDING CODE (2015 INTERNATIONAL BUILDING CODE WITH REVISIONS)
   MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES (ASCE/SEI 7-10)
   BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318-14)
   BUILDING CODE REQUIREMENTS|SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530|530.1-13)
   SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS (AISC 360-10)
   NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS (AISI S100-12)

3. RISK CATEGORY: II
4. DEFLECTION:

FLOOR FRAMING	L/240 FOR TOTAL LOADING (1.50" FOR 30' SPAN), L/360 FOR LIVE LOADING (1.00" FOR 30' SPAN)
ROOF FRAMING	L/180 FOR TOTAL LOADING (2.00" FOR 30' SPAN), L/240 FOR LIVE LOADING (1.50" FOR 30' SPAN)
MEMBERS SUPPORTING BRICK	L/600 FOR LIVE LOADING (0.60" FOR 30' SPAN)
STRUCTURAL DRIFT LIMITS	WIND, H/400 (USING V = 90 MPH AND MEAN RECURRENCE INTERVAL OF 50 YEARS) SEISMIC, PER ASCE 7 12.12

5. LIVE LOADS:

	UNIFORM (PSF)	CONCENTRATED (LB)
LIFT BAYS	150	2,000
CORRIDORS (GROUND)	100	2,000
MECHANICAL	150	NA
OFFICE	65*	2,000
PUBLIC AREAS, LOBBIES	100	2,000
ROOF	20	300
STORAGE	125	NA

* ADDITIONAL 15 PSF PARTITION LOAD INCLUDED

6. SNOW LOAD:

GROUND SNOW LOAD	p_g = 10 PSF
IMPORTANCE FACTOR	I_s = 1.00
SNOW EXPOSURE FACTOR	C_e = 1.00
THERMAL FACTOR	C_t = 1.00
FLAT SNOW ROOF LOAD	p_f = 7.0 PSF
MINIMUM SNOW LOAD	p_M = 10.0 PSF
RAIN ON SNOW SURCHARGE	5.0 PSF
DESIGN SNOW LOAD	12 PSF

7. WIND LOAD:

BASIC DESIGN WIND SPEED	V = 116 MPH (ALLOWABLE STRESS DESIGN WIND SPEED, V_{asd} = 90 MPH)	
EXPOSURE CATEGORY	B	
INTERNAL PRESSURE COEFFICIENTS	±0.18	
BASE SHEAR (1.0xW)	V_x = 27k	V_y = 56k

COMPONENTS AND CLADDING -

ALL EXTERIOR WALL AND ROOF COMPONENTS AND CLADDING ENGINEERED BY THE COMPONENT MANUFACTURER ARE TO BE DESIGNED BY THE MANUFACTURER'S ENGINEER FOR COMPONENTS AND CLADDING WIND LOADS AS DETERMINED PER THE GOVERNING BUILDING CODE FOR THE ULTIMATE DESIGN WIND SPEED AND EXPOSURE CATEGORY LISTED ABOVE. ALTERNATIVELY, THE COMPONENT MANUFACTURER MAY USE THE WORST-CASE PRESSURES (PSF) BELOW:

ZONE		EFFECTIVE WIND AREA (SF)			
		10	50	100	500
ROOF	1	+16 -39	+16 -32	+16 -30	+16 -24
	2	+16 -51	+16 -43	+16 -40	+16 -32
	3	+16 -69	+16 -54	+16 -47	+16 -32
WALL	4	+24 -26	+22 -24	+20 -22	+18 -20
	5	+24 -32	+22 -27	+20 -25	+18 -20

8. SEISMIC LOAD:
   DESIGN METHOD - EQUIVALENT LATERAL FORCE PROCEDURE

S_S	28.7 %g	
S_1	11.6 %g	
S_{DS}	30.1 %g	
S_{D1}	18.0 %g	
IMPORTANCE FACTOR	I_e = 1.00	
SITE CLASS	D (BASED ON GEOTECHNICAL REPORT)	
SEISMIC DESIGN CATEGORY	C	
SEISMIC FORCE-RESISTING SYSTEM - INTERMEDIATE MASONRY SHEAR WALLS (BEARING WALL SYSTEM)		
RESPONSE MODIFICATION COEFFICIENT	R_x = 3.5	R_y = 3.5
DEFLECTION AMPLIFICATION FACTOR	C_{dx} = 2.25	C_{dy} = 2.25
SEISMIC RESPONSE COEFFICIENT	C_{sx} = 0.086	C_{sy} = 0.086
BASE SHEAR (1.0xE)	V_x = 31k	V_y = 31k

9. FUTURE LOADS:
   UNLESS SPECIFICALLY NOTED, THERE ARE NO PROVISIONS MADE FOR FUTURE FLOORS, ROOFS, OR OTHER LOADS.

FOUNDATIONS

1. FOUNDATION DESIGN IS BASED ON THE GEOTECHNICAL INVESTIGATION REPORT BY:
   ECS SOUTHEAST, LLP DATED OCTOBER 4, 2023 (PROJECT #33:6568)
   THE DESIGN NET ALLOWABLE SOIL BEARING PRESSURE IS 2,500 PSF BASED ON THIS REPORT.
2. ALL RECOMMENDATIONS AS OUTLINED IN THE GEOTECHNICAL INVESTIGATION REPORT AND AS NOTED ON THE DRAWINGS MUST BE FOLLOWED IN PREPARATION OF THE SUBGRADE, UNLESS OTHERWISE DIRECTED BY THE ENGINEER OF RECORD. THE CONTRACTOR SHALL OBTAIN THE REPORT FROM THE OWNER AND BE FAMILIAR WITH THE RECOMMENDATIONS CONTAINED THEREIN PRIOR TO THE START OF CONSTRUCTION. IF CONDITIONS ENCOUNTERED DURING CONSTRUCTION DIFFER FROM THOSE DESCRIBED IN THE REPORT, THE OWNER SHALL NOTIFY THE GEOTECHNICAL ENGINEER OF RECORD SO THE RECOMMENDATIONS CAN BE REEVALUATED.
3. FOOTINGS SHALL BE CARRIED TO LOWER ELEVATIONS THAN THOSE SHOWN ON THE DRAWINGS IF REQUIRED BY THE GEOTECHNICAL ENGINEER OR TESTING LAB TO REACH SOIL CAPABLE OF PROVIDING THE DESIGN NET ALLOWABLE SOIL BEARING PRESSURE. ALL EXPANSIVE AND/OR LOOSE SOILS BELOW STRUCTURAL FOUNDATIONS SHALL BE REMOVED AND REPLACED AS DIRECTED HEREIN.
4. MINIMUM SUBGRADE PREPARATION REQUIREMENTS ARE AS FOLLOWS:
   1. PREPARE SUBGRADE AND UNDERFLOOR FILL TO A POINT THAT EXTENDS 10'-0" (MINIMUM) BEYOND THE LIMITS OF THE FOUNDATIONS.
   2. COMPACT ALL FILL UNDER BUILDING TO 95% MAXIMUM DRY DENSITY, 98% FOR UPPER 12", AS DETERMINED BY ASTM D698.
   3. PLACE IN LIFTS OF 8" (MAXIMUM) LOOSE THICKNESS WHEN USING LARGE RIDING COMPACTORS (REDUCE THICKNESS AS NECESSARY FOR SMALLER EQUIPMENT).
   4. SLABS ON GRADE SHALL BE SUPPORTED ON A BASE LAYER OF POROUS FILL (WASHED STONE) WITH A MINIMUM THICKNESS OF 4" AT 4" SLAB ON GRADE AND 6" AT 6" SLAB ON GRADE.
5. FIELD COMPACTION SHALL BE VERIFIED WITH AT LEAST ONE TEST PER 2,000 SQUARE FEET PER LIFT (AT LEAST ONE PER LIFT), IN ACCORDANCE WITH ASTM D1556 (SAND-CONE METHOD), ASTM D6938 (NUCLEAR METHODS, SHALLOW DEPTH), ASTM D2167 (RUBBER BALLOON METHOD), AND/OR ASTM D2937 (DRIVE-CYLINDER METHOD). SEE SPECIFICATIONS FOR OTHER TESTING REQUIREMENTS.
6. WALLS RETAINING SOIL SHALL BE TEMPORARILY BRACED DURING BACKFILLING AND UNTIL ALL SUPPORTING SOIL AND SLABS ARE IN PLACE AND ARE AT DESIGN STRENGTH UNLESS NOTED OTHERWISE ON PLANS AND DETAILS.
7. UTILITY LINES SHALL NOT BE PLACED THROUGH OR BELOW FOUNDATIONS WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER. CONTRACTOR SHALL SUBMIT DETAILED DRAWINGS OF ALL SUCH CONDITIONS PRIOR TO CONSTRUCTION.

CONCRETE | REINFORCING STEEL

1. ALL CONCRETE DESIGN AND CONSTRUCTION SHALL CONFORM TO THE REFERENCED EDITION OF THE BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318).
2. CONCRETE MIXTURES AS REQUIRED (BASED ON CLASS DESIGNATION):

CLASS A - FOOTINGS	NWC	3,000 PSI
CLASS B - FOUNDATION WALLS, PEDESTALS	NWC	4,500 PSI
CLASS C - INTERIOR SLABS ON GRADE	NWC	3,000 PSI
CLASS F - EXTERIOR SLABS ON GRADE, PADS, TOPPINGS	NWC	4,500 PSI
CLASS J - EXTERIOR RETAINING WALLS	NWC	4,500 PSI

3. REINFORCING:
   TYPICAL - ASTM A615, GRADE 60
   REINFORCING TO BE WELDED - ASTM A706
   DEFORMED BAR ANCHORS - ASTM A496
   WELDED WIRE FABRIC - ASTM A1064 (FLAT SHEETS ONLY)
4. GROUT UNDER BASE PLATES TO BE HIGH STRENGTH (5,000 PSI), NON-SHRINK.
5. REFER TO THE DRAWINGS FOR REINFORCING LAP REQUIREMENTS. WHERE LAP SPLICES ARE NOT SHOWN, LAP PER ACI 318 OR CRSI STANDARDS.
6. LAP WELDED WIRE FABRIC SHEETS 12" MINIMUM.
7. CLEAR COVER FROM FACE OF CONCRETE:
   CAST IN PLACE CONCRETE (MEASURE TO OUTERMOST REINFORCING) -

CONCRETE CAST AGAINST AND EXPOSED TO EARTH	3"
CONCRETE EXPOSED TO EARTH/WEATHER	2" FOR #6 BARS AND LARGER, 1 1/2" ELSE
CONCRETE NOT EXPOSED TO EARTH/WEATHER	3/4" FOR SLABS AND WALLS, 1 1/2" (TO TIES) FOR BEAMS AND COLUMNS

8. PROVIDE REINFORCING IN SLABS ON GRADE, 1-1/2" FROM TOP OF SLAB:

4" SLABS	6x6-W2.1xW2.1
5" SLABS	6x6-W2.9xW2.9
6" SLABS	#3@12"OC EACH WAY
8" SLABS	#4@12"OC EACH WAY

9. WHERE SCHEDULED BARS ARE NOT PRESENT, PROVIDE CONTINUOUS #5 TOP AND BOTTOM BARS TO SUPPORT STIRRUPS AS REQUIRED FOR THE LENGTH OF THE STIRRUP SPACING IN ALL BEAMS.
10. WALL FOOTING REINFORCING SHALL BE CONTINUOUS THROUGH ADJACENT COLUMN FOOTINGS.
11. PROVIDE VERTICAL DOVETAIL SLOTS AT 24"OC WITH TIES AT 16"OC VERTICALLY IN ALL CONCRETE WALLS BACKING-UP MASONRY VENEER.
12. BAR SUPPORTS FOR CONCRETE EXPOSED TO VIEW SHALL HAVE PLASTIC COATED LEGS OR BE HOT-DIP GALVANIZED AFTER FABRICATION.
13. MECHANICAL AND ELECTRICAL CONDUIT IN SLABS ON GRADE SHALL RUN UNDER TOP LAYER OF SLAB REINFORCING. PROVIDE A MINIMUM OF 1-1/2" CLEAR BETWEEN INDIVIDUAL CONDUITS AND REINFORCING. IF MAXIMUM SIZE OF CONDUIT EXCEEDS ONE THIRD OF THE SLAB DEPTH, ADDITIONAL FRAMING OR REINFORCING MAY BE NECESSARY AT ENGINEER'S DISCRETION.
14. MECHANICAL AND ELECTRICAL CONDUIT IN ELEVATED SLABS IS NOT ALLOWED UNLESS SPECIFICALLY REVIEWED AND APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO PLACEMENT.
15. HEADED CONCRETE ANCHORS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A108, GRADES 1010, 1015, 1017, OR 1020. STUDS SHALL BE AUTOMATICALLY END WELDED IN THE SHOP OR FIELD IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
16. EMBED PLATES MUST BE SET IN THE FORM BEFORE POURING CONCRETE, NOT PLACED INTO TOP OF WET CONCRETE. THE CONTRACTOR SHALL CONTACT THE ARCHITECT FOR CORRECTIVE DETAILS FOR ANY EMBED PLATES LEFT OUT OF CONCRETE POURS.
17. FOR SLABS ON GRADE, SLAB AND FOOTING REINFORCING SHALL BE HELD IN PLACE BY BAR SUPPORTS WITH SAND PLATES, OR PRECAST CONCRETE BAR SUPPORTS AS DESCRIBED IN CHAPTER 3 OF THE CRSI MANUAL OF STANDARD PRACTICE. BAR SUPPORTS SHALL BE SPACED AT A MAXIMUM OF 4'-0"OC BOTH WAYS. ROCKS, CMU, OR CLAY BRICK WILL NOT BE USED AS SUPPORTS.
18. THE CONTRACTOR SHALL ASSUME CONCRETE OVERAGES IN ELEVATED DECK POURS DUE TO MEMBER AND DECK DEFLECTIONS. UNLESS SHOWN ON PLANS, BEAMS ARE NOT CAMBERED. CONCRETE OVERAGES MAY BE CALCULATED BY THE CONTRACTOR FOR BEAM DEFLECTIONS EQUALING L/300 INCLUDING ADDITIONAL DEFLECTIONS DUE TO PONDING AND DECK DEFLECTIONS PER SDI.
19. REBAR SHALL NOT BE HEATED WITH A TORCH IN THE FIELD.
20. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER FAR ENOUGH IN ADVANCE (48 HOURS) OF EACH CONCRETE POUR TO ALLOW AMPLE TIME TO CHECK THE LAYOUT OF THE STEEL BEFORE THE BEGINNING OF THE ACTUAL POUR, BUT NOT PRIOR TO 90% OF THE STEEL HAVING BEEN PLACED.

CONCRETE CONSTRUCTION JOINTS

1. CONTRACTOR SHALL PROVIDE NECESSARY CONSTRUCTION JOINTS IN MONOLITHIC CONCRETE POURS SO THAT THE QUALITY OF PLACEMENT AND FINISH MEETS THE REQUIREMENTS OF PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL SUBMIT A PLAN SHOWING THE LOCATION OF ALL CONSTRUCTION JOINTS TO THE STRUCTURAL ENGINEER FOR APPROVAL.
2. THERE SHALL BE NO HORIZONTAL CONSTRUCTION JOINTS IN CONCRETE POURS. ALL VERTICAL CONSTRUCTION JOINTS IN SLABS AND BEAMS SHALL BE MADE WITH BULKHEADS. ADDITIONAL REINFORCING AT CONSTRUCTION JOINTS SHALL BE AS SPECIFIED BY THE STRUCTURAL ENGINEER. SEE TYPICAL CONSTRUCTION JOINT DETAILS.

STRUCTURAL MASONRY

1. ALL MASONRY DESIGN AND CONSTRUCTION SHALL CONFORM TO THE REFERENCED EDITION OF THE BUILDING CODE REQUIREMENTS|SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530|530.1).
2. LOAD BEARING MASONRY WALLS, PILASTERS, PIERS, RETAINING WALLS, FOUNDATION WALLS AND ANY OTHER MASONRY SO DESIGNATED ON DRAWINGS IS CONSIDERED HERE TO BE STRUCTURAL MASONRY.
3. REQUIRED COMPRESSIVE STRENGTH OF MASONRY UNITS:
   SOLID CLAY UNITS - 6,200 PSI
   CONCRETE UNITS - 2,000 PSI ON NET AREA
4. CONCRETE MASONRY UNITS (CMU) SHALL BE LIGHT WEIGHT (105 PCF) CONFORMING TO ASTM C90. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR UNIT SIZE, FACE, COLOR, JOINTING, ETC.
5. MORTAR SHALL BE TYPE S, ASTM C270.
6. GROUT FOR REINFORCED MASONRY SHALL BE FINE GROUT, ASTM C476. MINIMUM 28-DAY COMPRESSIVE STRENGTH SHALL BE 2,000 PSI.
7. MINIMUM 28-DAY COMPRESSIVE STRENGTH (f'_m) OF THE MASONRY WALLS SHALL BE 2,000 PSI. MASONRY STRENGTH SHALL BE DETERMINED BY THE UNIT STRENGTH METHOD OR THE PRISM TEST METHOD AS DESCRIBED BY ACI 530.
8. REINFORCING:
   TYPICAL - ASTM A615, GRADE 60
   ALL REINFORCING TO BE WELDED - ASTM A706
9. REFER TO THE DRAWINGS FOR REINFORCING LAP TYPICAL DETAIL AND SCHEDULE REQUIREMENTS.
10. MAXIMUM HEIGHT TO WHICH MASONRY SHALL BE LAID BEFORE GROUTING IS 5 FEET ABOVE CONSTRUCTION SURFACE OR PREVIOUSLY GROUTED MASONRY. IF GROUT POUR HEIGHT EXCEEDS 5 FEET, THEN "HIGH LIFT" GROUTING PROCEDURE MUST BE FOLLOWED. PROVIDE CLEANOUT OPENINGS AT THE BOTTOM OF EACH GROUT POUR HEIGHT. CLEANOUT OPENINGS SHALL BE PROVIDED AT EACH CELL TO BE FILLED WITH GROUT.
11. ALL GROUT PLACED OVER 12" IN HEIGHT SHALL BE MECHANICALLY CONSOLIDATED DURING GROUTING. GROUT SHALL BE RECONSOLIDATED BY MECHANICAL VIBRATION AFTER INITIAL WATER LOSS AND SETTLEMENT HAS OCCURRED.
12. MAXIMUM GROUT LIFT (GROUT POURED IN ONE CONTINUOUS OPERATION) IS 5 FEET. THIS LIMIT ALSO APPLIES TO "HIGH LIFT" GROUTING.
13. REINFORCE MASONRY WHERE SHOWN ON STRUCTURAL DRAWINGS. TIE REINFORCING IN POSITION AND PLACE GROUT AROUND REINFORCING. DO NOT PUSH REINFORCING DOWN INTO PREVIOUSLY PLACED GROUT FILL. SET BOLTS SIMILARLY.
14. TIE MASONRY WYTHES WITH HORIZONTAL REINFORCING AS SPECIFIED.
15. PROVIDE VERTICAL BARS, SIZE MATCHING WALL REINFORCING, AT ALL CORNERS, ENDS OF WALLS, EACH SIDE OF CONTROL JOINTS AND EACH SIDE OF WALL OPENINGS. TIE EACH BAR TO THE FOUNDATION WITH A MATCHING DOWEL.
16. ALL CORNERS OF STRUCTURAL MASONRY WALLS SHALL BE CONSTRUCTED BY INTERLOCKING COURSES. AT INTERSECTIONS WHERE SEQUENCING OR BLOCK COURSING PROHIBITS INTERLOCKED CONSTRUCTION SEE ALTERNATE DETAILS HEREIN.
17. ALL LINTELS TO BEAR 8" MINIMUM EACH SIDE OF OPENING, UNLESS NOTED OTHERWISE.
18. GROUT ALL MASONRY WALLS AND CAVITY BELOW GRADE SOLID. GROUT ALL WALLS ABOVE GRADE AT THE REINFORCED CELLS (MINIMUM) OR AS INDICATED IN SPECIFIC SECTIONS.
19. ONE 3/4"Ø (MAXIMUM) VERTICAL CONDUIT ALLOWED IN ANY REINFORCED CELL PROVIDED 1" CLEAR IS MAINTAINED BETWEEN REINFORCING AND CONDUIT. NO OTHER VERTICAL OR HORIZONTAL CONDUITS, PIPES, OR SLEEVES SHALL BE LOCATED IN REINFORCED CELLS UNLESS OTHERWISE APPROVED BY THE STRUCTURAL ENGINEER. CONTRACTOR SHALL COORDINATE LAYOUT TO AVOID REINFORCED CELLS.

STRUCTURAL STEEL

1. DESIGN, FABRICATION, AND ERECTION SHALL BE PER THE SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS (ANSI/AISC 360).
2. STRUCTURAL STEEL MATERIALS:
   WIDE FLANGE SHAPES (W SECTIONS) - ASTM A992, GRADE 50 (FY=50 KSI)
   CHANNELS AND ANGLES - ASTM A36 (FY=36 KSI)
   PLATES AND BARS - ASTM A36 (FY=36 KSI) OR ASTM A572, GRADE 50 (FY=50 KSI) AS INDICATED ON THE DRAWINGS.
   SQUARE AND RECTANGULAR TUBES - ASTM A500, GRADE B (FY=46 KSI)
   PIPES OR ROUND TUBES - ASTM A53, GRADE B (FY=35 KSI) OR ASTM A500, GRADE B (FY=42 KSI)
3. A QUALIFIED FABRICATOR SHALL HAVE A MINIMUM OF 5 YEARS OF EXPERIENCE IN FABRICATING STRUCTURAL STEEL LIKE THAT INDICATED FOR THIS PROJECT AND SUFFICIENT CAPACITY TO FABRICATE THE STRUCTURAL STEEL WITHOUT DELAYING THE WORK, AND SHALL MEET ONE OF THE FOLLOWING:
   A. FABRICATOR PARTICIPATES IN THE AISC QUALITY CERTIFICATION PROGRAM AND IS DESIGNATED AN AISC-CERTIFIED PLANT, CATEGORY (BU) OR IS ACCREDITED BY THE IAS FABRICATOR INSPECTION PROGRAM FOR STRUCTURAL STEEL (ACCREDITATION CRITERIA 172).
   B. FABRICATOR HAS AN ESTABLISHED AND MAINTAINED QUALITY CONTROL PROGRAM TO ENSURE THAT THE WORK IS PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS IN ANSI/AISC 303, ANSI/AISC 360, AND THE CONTRACT DOCUMENTS. PROGRAM SHALL AT A MINIMUM ADDRESS INSPECTION OF THE ITEMS NOTED IN ANSI/AISC 360 N2.
4. A QUALIFIED ERECTOR SHALL HAVE A MINIMUM OF 5 YEARS OF EXPERIENCE IN ERECTING STRUCTURAL STEEL LIKE THAT INDICATED FOR THIS PROJECT AND SUFFICIENT CAPACITY TO ERECT THE STRUCTURAL STEEL WITHOUT DELAYING THE WORK, AND SHALL MEET ONE OF THE FOLLOWING:
   A. ERECTOR PARTICIPATES IN THE AISC QUALITY CERTIFICATION PROGRAM AND IS DESIGNATED AN AISC-CERTIFIED ERECTOR, CATEGORY (CSE).
   B. ERECTOR HAS AN ESTABLISHED AND MAINTAINED QUALITY CONTROL PROGRAM TO ENSURE THAT THE WORK IS PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS IN ANSI/AISC 303, ANSI/AISC 360, AND THE CONTRACT DOCUMENTS. PROGRAM SHALL AT A MINIMUM ADDRESS INSPECTION OF THE ITEMS NOTED IN ANSI/AISC 360 N2.
5. BEAM SIMPLE SHEAR, BRACED FRAME, AND ALL MOMENT CONNECTIONS NOT DETAILED ON STRUCTURAL DRAWINGS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER RETAINED BY THE STEEL SUPPLIER AND REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED. THE CONNECTION ENGINEER SHALL SUBMIT A SIGNED AND SEALED LETTER STATING THEY HAVE REVIEWED THE STEEL SHOP DRAWINGS AND THE CONNECTIONS ARE CONSISTENT WITH THEIR CALCULATIONS AND INTENT.
6. THE CONNECTIONS FOR NON-COMPOSITE BEAMS SHALL BE DESIGNED FOR REACTIONS SHOWN ON DRAWINGS OR FOR REACTIONS DETERMINED BY USING THE MAXIMUM TOTAL UNIFORM LOAD TABULATED IN PART 3 OF THE AISC STEEL CONSTRUCTION MANUAL FOR THE SECTION, SPAN, AND STRENGTH OF STEEL SPECIFIED. THE CONNECTIONS FOR COMPOSITE BEAMS SHALL BE DESIGNED FOR REACTIONS SHOWN ON DRAWINGS OR AS DICTATED BY THE TYPICAL COMPOSITE SLAB DETAIL.
7. SIMPLE SHEAR CONNECTIONS SHALL BE MADE WITH ASTM A325 3/4"Ø BOLTS (MINIMUM), TIGHTENED TO A SNUG-TIGHT CONDITION PER AISC REQUIREMENTS.
8. ALL WELDING SHALL CONFORM TO THE AMERICAN WELDING SOCIETY CODE. USE E70 SERIES ELECTRODES FOR ALL STRUCTURAL STEEL WELDS. WHERE STEEL MEMBERS ARE WELDED AND NO SIZE IS SPECIFIED, PROVIDE FULL LENGTH FILLET WELDS BOTH SIDES OF MEMBER. SIZE OF FILLETS SHALL BE 3/16" FOR MEMBER THICKNESS UP TO 5/16", AND THE MEMBER THICKNESS MINUS 3/16" FOR ALL THICKER MATERIALS.
9. ANCHOR AND THREADED RODS SHALL CONFORM TO ASTM F1554, GRADE 36, 55, OR 105 AS INDICATED ON THE DRAWINGS. CONTRACTOR TO COORDINATE INSTALLATION OF ITEMS TO BE EMBEDDED IN OR ATTACHED TO OTHER CONSTRUCTION WITHOUT DELAYING THE WORK.
10. STEEL SHALL BE PRIMED WITH FABRICATOR'S STANDARD LEAD- AND CHROMATE-FREE, NON-ASPHALTIC, RUST-INHIBITING PRIMER COMPLYING WITH MPI#79 (MINIMUM COAT OF 3 MILS, MAXIMUM OF 5 MILS). CONTRACTOR TO COORDINATE SELECTION OF PRIMER WITH TOPCOATS TO BE APPLIED TO ENSURE THE TWO ARE COMPATIBLE. MEMBERS TO RECEIVE FIREPROOFING OR TO BE ENCASED IN CONCRETE SHALL NOT BE PRIMED.
11. SEE THE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR ALL ITEMS REQUIRED TO BE HOT-DIP GALVANIZED AFTER FABRICATION.
12. STRUCTURAL STEEL SHALL BE PUNCHED FOR WOOD BLOCKING, NAILERS, CLIPS AND TIES IN ACCORDANCE WITH THE ARCHITECTURAL AND STRUCTURAL DRAWINGS.
13. CAP ALL OPEN HSS OR PIPE MEMBERS OUTSIDE THE BUILDING ENVELOPE WITH A 1/4" (MINIMUM) FITTED PLATE, UNO.
14. ERECTOR SHALL SET STRUCTURAL STEEL IN LOCATIONS AND TO ELEVATIONS IN ACCORDANCE WITH ANSI/AISC 303 AND 360. MAINTAIN THE FRAME WITHIN ERECTION TOLERANCES PER ANSI/AISC 303.
15. PROMPTLY PACK SHRINKAGE-RESISTANT GROUT SOLIDLY BETWEEN BEARING SURFACES AND PLATES SO NO VOIDS REMAIN.
16. SPLICING OF STRUCTURAL STEEL MEMBERS IS PROHIBITED WITHOUT PRIOR APPROVAL OF THE ENGINEER AS TO LOCATION AND TYPE OF SPLICE TO BE MADE. ANY MEMBER HAVING A SPLICE NOT SHOWN AND DETAILED ON SHOP DRAWINGS WILL BE REJECTED. THERMAL CUTTING MAY NOT BE USED IN THE FIELD DURING ERECTION.
17. QUALITY CONTROL INSPECTION TASKS SHALL BE PERFORMED BY BOTH THE FABRICATOR AND ERECTOR IN ACCORDANCE WITH ANSI/AISC 360 N5. NON-DESTRUCTIVE TESTING (NDT) OF WELDED JOINTS PROVIDED DURING FABRICATION SHALL BE IN ACCORDANCE WITH N5.5 AND PERFORMED BY AN INDEPENDENT AND QUALIFIED TESTING AGENCY OR THE FABRICATOR'S QCI. ALL TESTING REPORTS SHALL BE SUBMITTED TO THE OWNER FOR REVIEW.
18. AT THE COMPLETION OF FABRICATION AND ERECTION, THE FABRICATOR AND ERECTOR SHALL EACH SUBMIT A CERTIFICATE OF COMPLIANCE TO THE OWNER STATING THE MATERIALS SUPPLIED AND WORK PERFORMED ARE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
19. NON-DESTRUCTIVE TESTING (NDT) OF WELDED JOINTS PROVIDED DURING ERECTION SHALL BE IN ACCORDANCE WITH N5.5 AND PERFORMED BY AN INDEPENDENT AND QUALIFIED TESTING AGENCY. ALL TESTING REPORTS SHALL BE SUBMITTED TO THE OWNER FOR REVIEW.

STEEL JOISTS

1. ALL STEEL JOISTS SHALL BE OPEN-WEB TYPE CONFORMING TO THE LATEST EDITION OF "STANDARD SPECIFICATIONS, LOAD TABLES AND WEIGHT TABLES FOR STEEL JOISTS AND JOIST GIRDERS" PUBLISHED BY THE STEEL JOIST INSTITUTE.
2. PROVIDE BRIDGING PER STEEL JOIST INSTITUTE STANDARD SPECIFICATION. ALL BRIDGING SHALL BE BOLTED OR WELDED AT ALL JOISTS AND AT ALL CROSSINGS AND ANCHORED TO SPANDREL MEMBERS. ALL BRIDGING FOR JOISTS USED AS SPANDREL MEMBERS (AT EDGE OF DECK) SHALL BE "X" BRIDGING. SIZE OF BRIDGING SHALL BE DETERMINED BY THE JOIST SUPPLIER. JOIST SUPPLIER TO PROVIDE ADDITIONAL BRIDGING AS REQUIRED FOR UPLIFT LOADS.
3. ALL JOISTS SHALL HAVE ANGLE BOTTOM CHORD MEMBERS UNLESS OTHERWISE APPROVED.
4. ALL K-SERIES JOISTS SHALL BE WELDED TO SUPPORT STEEL WITH A MINIMUM OF 2" OF 1/8" FILLET WELD AT BOTH SIDES OF JOIST SEAT.
5. WHERE JOISTS FRAME TO COLUMNS, JOISTS SHALL BE FIELD BOLTED TO COLUMNS WITH (2)1/2"Ø A307 BOLTS AT EACH END OF THE JOIST TO PROVIDE LATERAL STABILITY DURING CONSTRUCTION.
6. PROVIDE BOLTED DIAGONAL BRIDGING WHERE REQUIRED PER STEEL JOIST INSTITUTE STANDARD SPECIFICATIONS. JOIST SHOP DRAWINGS SHALL INDICATE ALL JOISTS WHICH SHALL HAVE A ROW OF BOLTED BRIDGING IN PLACE BEFORE SLACKENING OF HOISTING LINES.
7. JOIST MANUFACTURER SHALL BE PREPARED TO SUBMIT CALCULATIONS FOR ALL JOISTS AT ARCHITECT'S OR ENGINEER'S REQUEST. CALCULATIONS SHALL HAVE LOAD DIAGRAMS FOR EACH MEMBER CLEARLY INDICATING SPAN, UNIFORM AND CONCENTRATED LOADS. ALL CALCULATIONS SHALL BEAR THE SEAL OF A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED.
8. JOISTS SHALL BE DESIGNED FOR A NET WIND UPLIFT LOAD OF 32 PSF (ULTIMATE) UNLESS NOTED OTHERWISE.

ADHESIVE AND MECHANICAL POST-INSTALLED ANCHORS

1. ANCHOR BOLTS, REINFORCING STEEL, THREADED RODS, STAIR HANDRAILS, AND OTHER EMBEDDED STEEL ITEMS SHALL BE SET INTO HARDENED CONCRETE WITH ADHESIVE OR MECHANICAL POST-INSTALLED ANCHORS ONLY WHERE DETAILED ON THE DRAWINGS OR WHERE APPROVED BY THE ENGINEER OF RECORD.
2. PRE-APPROVED MANUFACTURERS ARE HILTI, SIMPSON STRONG-TIE, AND DEWALT. WHERE DETAILS INDICATE SPECIFIC ADHESIVE OR MECHANICAL POST-INSTALLED ANCHORS, IT IS ACCEPTABLE AT THE CONTRACTOR'S OPTION TO SUBMIT AN ALTERNATE SIMILAR PRODUCT PROVIDED BY A DIFFERENT MANUFACTURER AS LONG AS THE MANUFACTURER'S DATA PROVIDES EQUIVALENT LOAD CAPACITY TO THE ANCHOR SPECIFIED. THE CONTRACTOR SHALL PROVIDE SIGNED AND SEALED CALCULATIONS THAT DEMONSTRATE THE ALTERNATE PRODUCT IS CAPABLE OF MEETING THE PERFORMANCE OF THE SPECIFIED ANCHOR. SUBSTITUTIONS WILL BE EVALUATED BY THEIR HAVING AN ICC-ESR SHOWING COMPLIANCE WITH THE GOVERNING BUILDING CODE FOR SEISMIC USE, LOAD RESISTANCE, INSTALLATION CATEGORY, AND THE AVAILABILITY OF COMPREHENSIVE INSTALLATION INSTRUCTIONS. ADHESIVE ANCHOR EVALUATION WILL ALSO CONSIDER CREEP, IN-SERVICE TEMPERATURE, INSTALLATION TEMPERATURE, MOISTURE CONDITION OF CONCRETE, AND DRILLING METHODS.
3. BASIS OF DESIGN FOR ADHESIVE ANCHORS DETAILED ON THE DRAWINGS INCLUDES THE FOLLOWING PARAMETERS: CRACKED CONCRETE; WATER-SATURATED CONCRETE; BASE MATERIAL BETWEEN 25 AND 100 DEGREES FAHRENHEIT; AND HOLES MADE BY HAMMER DRILL, HOLLOW DRILL BIT SYSTEM, OR CORE-DRILLING.
4. INSTALL ANCHORS PER THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS, AS INCLUDED IN THE ANCHOR PACKAGING. HEED ALL LABEL WARNINGS. INSTALL IN ACCORDANCE WITH APPLICABLE SAFETY LAWS. ALL HOLES SHALL BE DRILLED WITH A DIAMETER NO LARGER THAN 1/8" GREATER THAN THE DIAMETER OF THE ANCHOR BEING INSTALLED. ALL HOLES SHALL BE CLEANED WITH COMPRESSED AIR AND SHALL BE DRY PRIOR TO INSTALLATION OF ADHESIVE. HOLES SHALL BE FREE OF ALL DELETERIOUS MATERIAL SUCH AS LAITANCE, DUST, DIRT, AND OIL.
5. ANCHOR CAPACITY IS DEPENDENT UPON SPACING BETWEEN ADJACENT ANCHORS AND PROXIMITY OF ANCHORS TO EDGE OF CONCRETE. INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON THE DRAWINGS.
6. WHERE ADHESIVE ANCHORS ARE TO BE INSTALLED IN HOLLOW MATERIAL WITH UNKNOWN CAPACITY, THE CONTRACTOR SHALL INSTALL THE ANCHOR IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. THE ADHESIVE SHALL BE INSTALLED IN THE HOLLOW BASE MATERIAL USING SCREEN TUBES SUPPLIED BY THE MANUFACTURER. THE ADHESIVE SHALL BE CAPABLE OF SUSTAINING MINIMUM TENSION AND SHEAR LOAD CAPACITIES NOTED ON THE DRAWINGS MULTIPLIED BY A FACTOR OF SAFETY OF 4. ALL HARDWARE AND MATERIAL SHALL BE SUPPLIED BY THE ANCHOR MANUFACTURER.
7. CONTRACTOR PERFORMING ADHESIVE WORK SHALL BE AN APPROVED CONTRACTOR BY THE MANUFACTURER FURNISHING THE ADHESIVE MATERIALS, AND SHALL HAVE NO LESS THAN FIVE YEARS EXPERIENCE IN THE VARIOUS TYPES OF ADHESIVE RELATED WORK REQUIRED IN THIS PROJECT. ALTERNATIVELY, THE CONTRACTOR SHALL ARRANGE FOR A REPRESENTATIVE OF THE ANCHOR MANUFACTURER TO PROVIDE ONSITE INSTALLATION TRAINING FOR ALL ANCHOR PRODUCTS SPECIFIED. DOCUMENTATION THAT ALL PERSONNEL INSTALLING ANCHORS ARE TRAINED SHALL BE SUBMITTED TO THE ENGINEER OF RECORD PRIOR TO THE COMMENCEMENT OF ANCHOR INSTALLATION.
8. THE ULTIMATE TENSION AND SHEAR CAPACITIES SHALL BE DETERMINED BY A JOB SITE TEST PERFORMED ON A MINIMUM OF FIVE INSTALLED SAMPLES WHICH ARE REPRESENTATIVE OF THE ACTUAL INSTALLATIONS. TESTING SHALL BE PERFORMED BY THE ADHESIVE ANCHOR MANUFACTURER OR HIS APPROVED REPRESENTATIVE AND SHALL BE DOCUMENTED FOR THE DESIGN PROFESSIONAL.

REPRODUCTION

1. THE USE OF REPRODUCTIONS OF THESE CONTRACT DRAWINGS BY ANY CONTRACTOR, SUBCONTRACTOR, ERECTOR, FABRICATOR, OR MATERIAL SUPPLIER IN LIEU OF PREPARATION OF SHOP DRAWINGS SIGNIFIES HIS ACCEPTANCE OF ALL INFORMATION SHOWN HEREIN AS CORRECT, AND OBLIGATES HIMSELF TO ANY JOB EXPENSE, REAL OR IMPLIED, ARISING DUE TO ANY ERRORS THAT MAY OCCUR HERE ON.

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BID DOCUMENTS

GENERAL NOTES

DATE: 3-3-2025
PROJECT NO: 23014

REVISIONS

NO:	DATE:	DESCRIPTION:
1	3/14/25	Addendum 1

036929
KIRSTEN A BALDWIN METZGER

03/14/2025

SHEET NUMBER

S001