



Addendum No. 01

Issued: **9/6/2024**

Project Name: JORDAN LEARNING CENTER
 Project No.: 2024528.00
 Bid Package: 1

Addendum No. 01 to the Construction Contract for the above referenced project:

All Contractors submitting proposals on the above captioned project shall be governed by the following changes and explanations to the Bid Documents, dated August 29, 2024, and shall submit their bids in accordance therewith:

A. Changes to the Project Manual

Changes to attached specification sections are indicated in red text with deleted text, if applicable, removed from the section.

DIVISIONS 00 through 14

- A1.1 Section 051213 – Architecturally Exposed Structural Steel Framing
 - Add this section (attached) to the Project Manual.
- A1.2 Section 075419 – Polyvinyl-Chloride (PVC) Roofing
 - Delete this section.
- A1.3 Section 075523 – Thermoplastic-Polyolefin (TPO) Roofing
 - Add this section (attached) to the Project Manual.
- A1.4 Section 087100 – Door Hardware
 - Revise this section as indicated in the attached file.
- A1.5 Section 113013 – Residential Appliances
 - Revise this section as indicated in the attached file.

DIVISIONS 21 through 23

- A1.6 Section 220000 – PLUMBING
 - ADD – Sink Fixture:

S-7	Sink:	Elkay LR2219 17" x 20" x 5-1/2", 18 ga. 304 stainless steel, single compartment stainless steel, drilled for 3-hole 8" centerset faucet, self-rimming, sound dampening, cup strainer, Chicago 786-E29-369ABCP faucet with swing spout, ADA levers, and aerator, flexible supplies, Zurn Model Z1180 solids interceptor.
-----	-------	---

DIVISIONS 26 through 28

A1.7 Section 251000 – AUTOMATIC TEMPERATURE CONTROLS

- Change – the following:

b. Ceiling type; toilet room exhaust fans shall be individually operated by pre-determined schedules from the building DDC system. Fan status shall be monitored, and an alarm sent to District personnel if the status does not meet the command.

A1.8 Section 260532 – CONDUIT RACEWAY

- Change – the following:

Paragraph 2.1.K. Flexible Metal conduit (non-liquid tight) is NOT allowed in Mechanical Spaces or Boiler Rooms.

B. Changes to the Drawings

Changes to the attached drawings are indicated with clouds around the revised areas and a revision number. Changes to the entire sheet are indicated with a cloud around the sheet number and a revision number.

CIVIL

B1.1 None.

LANDSCAPE

B1.2 None.

STRUCTURAL

B1.3 Sheet SB101A – Footing and Foundation Plan-Area A

- Updated detail cut reference for typical slab and depressed slab infill.
- Added size tag for exterior canopy column.

B1.4 Sheet SB101B – Footing and Foundation Plan-Area B:

- Updated detail cut reference for typical slab and depressed slab infill.

B1.5 Sheet SB502 – Typical Footing and Foundation Details:

- Updated detail C4 for furring concrete wall clarification.

B1.6 Sheet SF101A – Roof Framing Plan-Area A:

- Relocated secondary roof member for eyebolt kicker bracing

B1.7 Sheet SF502 – Roof Framing Detail:

- Updated detail B3 for stud overlapping and typical edge distance for screw pattern.
- Updated detail C4 for eyebolt reinforcing angle placement

B1.8 Sheet SF503 – Roof Framing Detail:

- Revised detail B1 on connection information.

B1.9 Sheet SF504 – Roof Framing Detail:

- Revised detail D3 and D4 epoxy anchor information.

B1.10 Sheet SF602 – Steel Deck Schedule:

- Revised note#5 on Steel Deck Schedule.

ARCHITECTURAL

B1.11 Sheet – A101B

- Bollards added adjacent to door B135-D and details referenced. See the attached revised sheet.

B1.12 Sheet – A318

- Revised drawing E1 to coordinate with Structural Detail C1/SF503.

B1.13 Sheet – A413

- Changed keynot from “Metal Countertops” to “1-1/2” Scheduled Stainless Steel Countertop w/ 4” Backsplash”

B1.14 Sheet – A430

- Revised finish of CDC Reception Desk toe kick
- Revised countertop at level change

B1.15 Sheet – A433

- Revised base cabinet location and size

B1.16 Sheet – A450

- Bollard Details B1 and B2 added. See the attached revised sheet.

B1.17 Sheet – A600

- Door A100; Revised hardware set.
- Door A161; Added hardware set.

B1.18 Sheet – A701A

- Tagged gyp ceilings

MECHANICAL

B1.19 Sheet - M501

- Change cooling capacity on RT-6
- Change note 4 on exhaust fan schedule

PLUMBING

B1.20 Sheet - P102A

- Remove gas line to dryer.

B1.21 Sheet - P102B

- Remove gas line and associated regulator running to dryer.

B1.22 Sheet - P402

- Add notes 21 & 22
- Contractor to tie dishwasher into sink in prep room.

B1.23 Sheet –P501

- Add ‘S-7’

FIRE PROTECTION

B1.24 Sheet – FP101

- Add General note:
The existing fire system is to be updated to new building requirements. Any existing systems not to NFPA Requirements and applicable to the new building requirements are to be removed.

ELECTRICAL

B1.25 Sheet E002

- Refer to the Equipment Schedule:
- Change the EUH-1 to 5000VA, with a 25A circuit breaker and #10 wire.
- EUH-2 is exactly the same loads as EUH-1.
- FH-1 is a Fume Hood. 10A with a 20A circuit breaker

B1.26 SHEET E101

- Provide conduit and wire from the west new pole in the east-west line to the existing pole directly south and Sheet Keynote S12 applies. Connect to circuit HM2-26 (RP1-8).

B1.27 SHEET E211A

- Connect the center light fixture in Electrical A142 to circuit EHL-1.
- Connect the egress light fixtures in Teacher Team A122 to EHL-1.
- Delete the ceiling lighting sensor from Storage A137.
- Provide an occupancy sensor in Corridor A161 for lighting control.
- Delete the ceiling lighting sensor from Storage A121.
- Connect light fixture in Print A153 to H1-8.
- Connect light fixture in Conference A108, Admin. A107 and Admin. A106 to H1-16.

B1.28 SHEET E211B

- Provide a room controller in Processing B135A for lighting control.

B1.29 SHEET E311A

- Electrical A142. Delete the circuit shown for ACI-2 and provide conduit and wire to connect to ACO-2, on the roof. Connect ACO-2 to circuit LM1-9,11.
- Change the floor boxes in Teacher Team A132 to FBO1.
- Relocate the duplex receptacle in Storage A134 adjacent to the door.
- MDF A147. Delete the circuit shown for ACI-1 and provide conduit and wire to connect to ACO-1, on the roof. Connect ACO-1 to circuit LM1-13,15.
- Toddler A138. Connect the duplex receptacle and J-box on the south wall to L1-30.
- Toddler A131. Connect the duplex receptacle and J-box on the north wall to L1-2.
- Toddler A122. Connect the duplex receptacle and J-box on the south wall to L2-4.
- Communication A112. Connect the duplex receptacle and J-box on the south wall to L2-11.
- Conference A155. Provide 2 data drops at the DP.

- Reception A103. Connect the fourplex for the copy machine to circuit L6-30 and the adjacent above counter receptacle to circuit L6-13.
- W/C A101. Replace the fused disconnect on EF-7 to a thermal switch.
- Waiting A100. Provide 2 data drops at the DP.
- Conference A108. Provide 2 data drops at the DP.

B1.30 SHEET E311B

- Processing B135A. Connect the three door motors to circuits L1-32, L1-34 and L1-36.
- Mount the duplex receptacle on the west wall at +48".
- Storage B130. Change the thermal switch on EUH-1 to a fused disconnect switch. Connect the T-stat for EUH-1 to circuit LM2-5.
- Mech B134. Connect the T-stat for EUH-2 to circuit LM2-5.
- Prep & Storage B129. EF-12 is on the roof, provide a WP thermal switch.
- Science B127. Provide a single data drop on both CP's, connect the clg. Box J-box to L4-6 and delete the 4 data drop outlet.
- Learning Studio B126. Provide a single data drop on both CP's, connect the clg. Box J-box to L4-4 and delete the 4 data drop outlet.
- Learning Studio B125. Provide a single data drop on both CP's, connect the clg. Box J-box to L4-7 and delete the 4 data drop outlet.
- Learning Studio B123. Provide a single data drop on both CP's, connect the clg. Box J-box to L7 -25 and delete the 4 data drop outlet.
- Testing B105. Relocate the center fourplex and data outlet to the right knee space and relocate the sidewall fourplex to the left knee space and add a 2 data drop outlet in the left knee space.
- Virtual Schools Reception B103. Add and relocate devices as required to accomplish the following: provide a fourplex receptacle and 2 data drop outlets at each of six knee spaces.
- Multipurpose b119. Provide a single data drop outlet on the eight CP's.
- Conference B118. Provide a single data drop outlet on CP and connect to L5-19.

B1.31 SHEET E360

- The transformer pad is existing Division 26 is not providing a Pad/Vault.
- Diagram F023/E501 does not exist. Coordinate ground requirements with the specifications.
- Change the feeder from 'MDP' to ATS-1 and ATS-1 to the generator to 42X.
- Change the feeder from ATS-1 to 'EHL' to 42X.
- Change the feeder from 'EHL' to the fused disconnect and to Transformer 'ELL' to 30.
- Provide #4 BC to ground for the generator.

B1.32 SHEET E370

- Panelboard 'L3'. Provide 20A 3Pole spares at circuit numbers 22, 24, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36. Provide space for 37-42.

B1.33 SHEET E371

- Panelboard 'EHL'. Change ET1 to ELL. Provide 20A 1Pole spares at circuit numbers 16, 18, 20.
- Panelboard 'ELL'. Provide a 20A 1Pole circuit breaker at #3 for FACP.
- Panelboard 'LM2'. Provide 20A 1Pole spare breakers at circuit numbers 19, 21, 22, 23,24,26. Change the circuit breakers at 9,11 and 8,10 to 25A with #10 wire.

B1.34 SHEET E411A

- Change the Clg. Strobe shown adjacent to the generator to a wall mounted horn strobe.
- Remove the smoke detectors in Womens A149 and Mens A150. Change the Clg. Strobes to horn strobes.
- Reception A103. Relocate the horn strobe in the center to the south end the wall. Provide a smoke detector at the north end.

B1.35 SHEET E411B

- Lobby B100. Provide a smoke detector in the hallway north of grid E.

C. Prior Approvals

The following manufacturers, trade names, and products are approved with the provision that they shall completely satisfy all and every requirement of the Drawings, Specifications, and all Addenda, and shall conform to the design, quality, and standards specified, established, and required for the complete and satisfactory installation and performance of the building and all its respective parts.

<u>Item</u>	<u>Manufacturer</u>
-------------	---------------------

Electrical Product Approvals:

Pending compliance to all specified requirements, the following manufacturers are approved to bid this project in addition to those shown on the electrical drawings or the electrical specifications. Approval does not relieve the contractor of fulfilling all specified requirements regardless of what is contained in the prior approval packages submitted by various lighting agencies to the electrical engineer. Light fixtures specified on drawings shall be considered basis-of-design products; all light fixtures approved by addendum shall be equivalent in every respect to those currently specified on the drawings. Non-compliance to these requirements may later result in disapproval in which case the contractor shall be required to provide specified products at no additional cost to the Owner:

- Lighting Fixtures:
-
- | | |
|-------------|----------------------|
| <u>Type</u> | <u>Manufacturers</u> |
| • XXX | XXX |
| • XXX | XXX |

Attachments

Project Manual:

051213 – Architecturally Exposed Structural Steel Framing_add1.pdf

074523 – Thermoplastic-Polyolefin (TPO) Roofing_add1.pdf

087100 – Door Hardware_V2_add1.pdf

113013 – Residential Appliances_add1.pdf

Drawings:

Civil

None

Landscape

None

Structural

SB101A

SB101B

SB502

SF101A

SF502

SF503

SF504

SF602

Architectural

A101B

A318

A413

A430

A433

A450

A600

A701A

Mechanical

M501

Plumbing

P102A

P102B

P402

P501

FP101

Electrical

None

End of Addendum 01

SECTION 051213 - ARCHITECTURALLY EXPOSED STRUCTURAL STEEL FRAMING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Architecturally exposed structural steel (AESS).
2. Section 051200 "Structural Steel Framing" requirements that also apply to AESS.

B. Related Requirements:

1. Section 099113 "Exterior Painting" for surface preparation and priming requirements.

1.2 DEFINITIONS

A. AESS: Architecturally exposed structural steel.

B. Category AESS 2: Structural steel that is categorized by ANSI/AISC 303, Section 10, as AESS 2 and is designated as AESS 2 or Category AESS 2 in the Contract Documents.

1.3 COORDINATION

A. Coordinate surface preparation requirements for shop-primed items.

B. Coordinate selection of shop primers with topcoats to be applied over them. Comply with paint and coating manufacturers' written recommendations to ensure that shop primers and topcoats are compatible with one another.

1.4 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.5 ACTION SUBMITTALS

A. Product Data:

1. Tension-control, high-strength, bolt-nut-washer assemblies.
2. Filler.
3. Primer.
4. Galvanized-steel primer.
5. Etching cleaner.
6. Galvanized repair paint.

B. Shop Drawings: Show fabrication of AESS components. Shop Drawings for structural steel may be used for AESS.

1. Identify AESS category for each steel member and connection, including transitions between AESS categories and between AESS and non-AESS.
2. Include details of cuts, connections, splices, camber, holes, and other pertinent data.
3. Include embedment Drawings.
4. Indicate orientation of mill marks and HSS seams.
5. Indicate welds by standard AWS symbols, distinguishing between shop and field welds, and show size, length, and type of each weld. Show backing bars that are to be removed and supplemental fillet welds where backing bars are to remain. Indicate grinding, finish, and profile of welds.
6. Indicate type, size, and length of bolts, distinguishing between shop and field bolts. Identify pretensioned and slip-critical, high-strength bolted connections. Indicate orientation and location of bolt heads.
7. Indicate exposed surfaces and edges and surface preparation being used.
8. Indicate special tolerances and erection requirements.
9. Indicate weep holes for HSS and vent holes for galvanized HSS.
10. Indicate surface preparation, primer, and coating requirements, including systems specified in other Sections.

C. Samples: Submit Samples to set quality standards for AESS.

1. Two steel plates, 3/8 by 8 by 4 inches, with long edges joined by a groove weld and with weld ground smooth.
2. Steel plate, 3/8 by 8 by 8 inches, with one end of a short length of rectangular steel tube, 4 by 6 by 3/8 inches, welded to plate with a continuous fillet weld and with weld ground smooth and blended.
3. Round steel tube or pipe, minimum 8 inches in diameter, with end of another round steel tube or pipe, approximately 4 inches in diameter, welded to its side at a 45-degree angle with a continuous fillet weld and with weld ground smooth and blended.

1.6 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer, fabricator, and shop-painting applicator.
- B. Paint Compatibility Certificates: From manufacturers of topcoats applied over shop primers, certifying that shop primers are compatible with topcoats.

1.7 QUALITY ASSURANCE

- A. Fabricator Qualifications: A qualified fabricator that 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 (AC 172) and is experienced in fabricating AESS similar to that indicated on this Project.
- B. Installer Qualifications: A qualified Installer who participates in the AISC Quality Certification Program, is designated an AISC-Certified Erector, and is experienced in erecting AESS similar to that indicated on this Project.
- C. Shop-Painting Applicators: Qualified according to AISC's Sophisticated Paint Endorsement P3 or SSPC-QP 3.
- D. Mockups: Build mockups of AESS to set quality standards for fabrication and installation.

1. Build mockup of typical portion of AESS as shown on Drawings.
2. Coordinate painting requirements with Section 099113 "Exterior Painting."
3. Coordinate high-performance coatings requirements with Section 099600 "High-Performance Coatings."
4. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Use special care in handling AESS to prevent twisting, warping, nicking, and other damage during fabrication, delivery, and erection. Store materials to permit easy access for inspection and identification. Keep AESS members off ground and spaced by using pallets, dunnage, or other supports and spacers. Protect AESS members and packaged materials from corrosion and deterioration.
 1. Do not store AESS materials on structure in a manner that might cause distortion, damage, or overload to members or supporting structures. Repair or replace damaged materials or structures as directed.

1.9 FIELD CONDITIONS

- A. Field Measurements: Where AESS is indicated to fit against other construction, verify actual dimensions by field measurements before fabrication.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Comply with requirements of ANSI/AISC 303, Sections 1 through 9 and as modified in Section 10, "Architecturally Exposed Structural Steel."

2.2 FILLER

- A. Polyester filler intended for use in repairing dents in automobile bodies.

2.3 PRIMER

- A. Steel Primer:
 1. Comply with Section 099113 "Exterior Painting."
 2. SSPC-Paint 23, latex primer.
 3. Fabricator's standard lead- and chromate-free, nonasphaltic, rust-inhibiting primer complying with MPI#79 and compatible with topcoat.
- B. Galvanized-Steel Primer: MPI#80.
 1. Etching Cleaner: MPI#25, for galvanized steel.

2. Galvanizing Repair Paint: MPI#18, MPI#19, or SSPC-Paint 20.

2.4 FABRICATION

- A. Shop fabricate and assemble AESS to the maximum extent possible. Locate field joints at concealed locations if possible. Detail assemblies to minimize handling and to expedite erection.
 1. Use special care handling and fabricating AESS before and after shop painting to minimize damage to shop finish.
- B. Category AESS 2:
 1. Comply with overall profile dimensions of AWS D1.1/D1.1M for welded built-up members. Keep appearance and quality of welds consistent. Maintain true alignment of members without warp exceeding specified tolerances.
 2. Prepare surfaces according to Part 2 "Shop Priming" Article and SSPC-SP 6 (WAB)/NACE WAB-3.
 3. Grind sheared, punched, and flame-cut edges to remove burrs and provide smooth surfaces and eased edges.
 4. Make intermittent welds appear continuous, using filler or additional welding.
 5. Seal weld open ends of hollow structural sections with 3/8-inch closure plates.
 6. Limit butt and plug weld projections to 1/16 inch.
 7. Install bolt heads on the same side of each connection and maintain orientation consistently from one connection to another.
 8. Remove weld spatter, slivers, and similar surface discontinuities.
 9. Remove blemishes and surface irregularities resulting from temporary braces or fixtures by filling or grinding, before cleaning, treating, and shop priming.
 10. Grind tack welds smooth unless incorporated into final welds.
 11. Remove backing and runoff tabs, and grind welds smooth.
 12. Limit as-fabricated straightness tolerance to one-half that permitted for structural-steel materials in ANSI/AISC 303.
 13. Limit as-fabricated curved structural steel tolerance to that permitted for structural-steel materials in ANSI/AISC 303.
 14. Limit as-fabricated straightness tolerance of welded built-up members to one-half that permitted by AWS D1.1/D1.1M.
 15. Conceal fabrication and erection markings from view in the completed structure.
 16. Make welds uniform and smooth.
- C. Erection marks, painted marks, and other marks are permitted on galvanized- steel surfaces of completed structure.

2.5 SHOP CONNECTIONS

- A. Refer to Section 051200 "Structural Steel Framing."
- B. Weld Connections: Comply with AWS D1.1/D1.1M and AWS D1.8/D1.8M for tolerances, appearances, welding procedure specifications, weld quality, and methods used in correcting welding work.

2.6 GALVANIZING

- A. Hot-Dip Galvanized Finish: Apply zinc coating by the hot-dip process to structural steel according to ASTM A123/A123M.
1. Do not quench or apply post-galvanizing treatments that might interfere with paint adhesion.
 2. Fill vent and drain holes that are exposed in the finished Work, unless indicated to remain as weep holes, by plugging with zinc solder and filing off smooth.

2.7 SHOP PRIMING

- A. Shop prime steel surfaces, except the following:
1. Surfaces embedded in concrete or mortar. Extend priming of partially embedded members to a depth of 2 inches.
 2. Surfaces to be field welded.
 3. Surfaces to be high-strength bolted with slip-critical connections.
 4. Corrosion-resisting (weathering) steel surfaces.
 5. Galvanized surfaces unless indicated to be painted.
- B. Surface Preparation: Clean nongalvanized surfaces to be painted. Remove loose rust and mill scale and spatter, slag, or flux deposits. Prepare surfaces according to the following specifications and standards:
1. SSPC-SP 5 (WAB)/NACE WAB-1.
- C. Preparing Galvanized Steel for Shop Priming: After galvanizing, thoroughly clean steel of grease, dirt, oil, flux, and other foreign matter, and treat with etching cleaner.
- D. Priming: Immediately after surface preparation, apply primer according to manufacturer's written instructions and at rate recommended by SSPC to provide a minimum dry film thickness of 1.5 mils. Use priming methods that result in full coverage of joints, corners, edges, and exposed surfaces.
1. Stripe paint corners, crevices, bolts, welds, and eased edges.
 2. Apply two coats of shop paint to surfaces that are inaccessible after assembly or erection. Change color of second coat to distinguish it from first.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify, with steel erector present, elevations of concrete- and masonry-bearing surfaces and locations of anchor rods, bearing plates, and other embedments for compliance with requirements.
1. Prepare a certified survey of bearing surfaces, anchor rods, bearing plates, and other embedments, showing dimensions, locations, angles, and elevations.
- B. Examine AESS for twists, kinks, warping, gouges, and other imperfections before erecting.

- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Provide temporary shores, guys, braces, and other supports during erection to keep AESS secure, plumb, and in alignment against temporary construction loads and loads equal in intensity to design loads. Remove temporary supports when permanent structural steel, connections, and bracing are in place unless otherwise indicated.

3.3 ERECTION

- A. Take special care during erection to avoid marking or distorting the AESS and to minimize damage to shop painting. Set AESS accurately in locations and to elevations indicated and according to ANSI/AISC 303 and ANSI/AISC 360.
 - 1. Remove welded tabs that were used for attaching temporary bracing and safety cabling and that are exposed to view in the completed Work. Take care to avoid any blemishes, holes, or unsightly surfaces resulting from the use or removal of temporary elements.
 - 2. Grind tack welds smooth.
 - 3. Remove backing and runoff tabs, and grind welds smooth.
 - 4. Orient bolt heads on the same side of each connection and maintain orientation consistently from one connection to another.
 - 5. Remove erection bolts in Category AESS 2, fill holes with weld metal or filler, and grind or sand smooth to achieve surface quality approved by Architect.
 - 6. Fill weld access holes in Category AESS 2 AESS with weld metal or filler and grind, or sand smooth to achieve surface quality as approved by Architect.
 - 7. Conceal fabrication and erection markings from view in the completed structure.

3.4 FIELD CONNECTIONS

- A. High-Strength Bolts: Install high-strength bolts according to RCSC's "Specification for Structural Joints Using High-Strength Bolts" for type of bolt and type of joint specified.
- B. Weld Connections: Comply with AWS D1.1/D1.1M and AWS D1.8/D1.8M for tolerances, appearances, welding procedure specifications, weld quality, and methods used in correcting welding work.

3.5 REPAIR

- A. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas, and touchup galvanizing to comply with ASTM A780/A780M.
- B. Touchup Painting:
 - 1. Immediately after erection, clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with the same material as used for shop painting, to comply with SSPC-PA 1 for touching up shop-painted surfaces.
 - a. Clean and prepare surfaces by SSPC-SP 2 hand-tool cleaning or SSPC-SP 3 power-tool cleaning.

2. Cleaning and touchup painting are specified in Section 099113 "Exterior Painting."

C. Touchup Priming: Cleaning and touchup priming are specified in Section 099600 "High-Performance Coatings."

3.6 FIELD QUALITY CONTROL

A. Testing Agency: Owner will engage a qualified testing agency to inspect AEES as specified in Section 051200 "Structural Steel Framing." The testing agency is not responsible for enforcing requirements relating to aesthetic effect.

B. Architect will observe AEES in place to determine acceptability relating to aesthetic effect.

END OF SECTION 051213

SECTION 075423 - THERMOPLASTIC-POLYOLEFIN (TPO) ROOFING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Thermoplastic polyolefin (TPO) roofing system.
 - a. Including new roofing, and patch and repair of existing roofing system.
2. Accessory roofing system materials.
3. Substrate board.
4. Vapor retarder.
5. Roof insulation and accessories.
6. Cover board.
7. Walkways.

B. Related Requirements:

1. Section 061000 "Rough Carpentry" for wood nailers, curbs, and blocking.
2. Section 076200 "Sheet Metal Flashing and Trim" for metal roof flashings and counterflashings.
3. Section 079200 "Joint Sealants" for joint sealants, joint fillers, and joint preparation.

1.2 DEFINITIONS

- ##### A. Roofing Terminology: Definitions in ASTM D1079 and glossary in NRCA's "Roofing Manual: Membrane Roof Systems" apply to Work of this Section.

1.3 PREINSTALLATION MEETINGS

- ##### A. Preliminary Roofing Conference: Before starting roof deck construction, conduct conference at Project site.

1. Meet with Owner, Architect, Owner's insurer if applicable, testing and inspecting agency representative, Roofing System Installer, roofing system manufacturer's representative, deck Installer, air barrier Installer, and installers whose work interfaces with or affects roofing, including installers of roof accessories and roof-mounted equipment.
2. Review methods and procedures related to roofing installation, including manufacturer's written instructions.
3. Review and finalize construction schedule, and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
4. Review deck substrate requirements for conditions and finishes, including flatness and fastening.
5. Review structural loading limitations of roof deck during and after roofing.
6. Review base flashings, special roofing details, roof drainage, roof penetrations, equipment curbs, and condition of other construction that affects roofing system.

7. Review governing regulations and requirements for insurance and certificates if applicable.
8. Review temporary protection requirements for roofing system during and after installation.
9. Review roof observation and repair procedures after roofing installation.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: Include roof plans, sections, details, and attachments to other work, including the following:
 1. Layout and thickness of insulation.
 2. Base and sheet flashings and membrane termination details.
 3. Flashing details at penetrations.
 4. Tapered insulation layout, thickness, and slopes.
 5. Roof plan showing orientation of roof deck and orientation of roofing membrane, fastening spacings, and pattern for corner, perimeter, and field-of-roof locations.
 6. Crickets, saddles, and tapered edge strips, including slopes.
 7. Tie-in with adjoining wall system air barrier.
- C. Samples for Verification: For the following products:
 1. Roofing membrane and flashings, of color required.
 2. Walkways, of color required.
- D. Wind-Uplift-Resistance Submittal: For roofing system indicating compliance with wind-uplift performance requirements.

1.5 INFORMATIONAL SUBMITTALS

- A. Manufacturer Certificates:
 1. Performance Requirement Certificate: Signed by roofing membrane manufacturer, certifying that roofing system complies with requirements specified in "Performance Requirements" Article.
 - a. Submit evidence of compliance with specified performance requirements.
 2. Special Warranty Certificate: Signed by roofing membrane manufacturer, certifying that all materials supplied under this Section are acceptable for special warranty.
- B. Product Test Reports: For roofing membrane and insulation, tests performed by an independent qualified testing agency indicating compliance with specified requirements.
- C. Research Reports: For components of roofing system, from ICC-ES showing compliance with specified performance requirements.
- D. Qualification Data: For roofing system Installer.
- E. Sample warranties.

1.6 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For roofing system.
- B. Certified statement from existing roofing system manufacturer stating that existing roof warranty has not been affected by the Work performed under this Section.

1.7 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A qualified manufacturer that is UL listed for roofing system identical to that used for this Project.
- B. Installer Qualifications: A qualified firm that is approved, authorized, certified, or licensed by roofing system manufacturer to install manufacturer's product and that is eligible to receive manufacturer's special warranty.
 - 1. A minimum of ten years of experience is required on similar sized projects.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Deliver roofing system materials to Project site in original containers with seals unbroken and labeled with manufacturer's name, product brand name and type, date of manufacture, approval or listing agency markings, and directions for storing and mixing with other components.
- B. Store liquid materials in their original undamaged containers in a clean, dry, protected location and within the temperature range required by roofing system manufacturer.
 - 1. Protect stored liquid material from direct sunlight.
 - 2. Discard and legally dispose of liquid material that cannot be applied within its stated shelf life.
- C. Protect roof insulation materials from physical damage and from deterioration by sunlight, moisture, soiling, and other sources.
 - 1. Store in a dry location.
 - 2. Comply with insulation manufacturer's written instructions for handling, storing, and protecting during installation.
- D. Handle and store roofing system materials, and place equipment in a manner to avoid permanent deflection of deck.

1.9 FIELD CONDITIONS

- A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit roofing system to be installed in accordance with manufacturer's written installation instructions and warranty requirements.

1.10 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace components of roofing system that

fail in materials or workmanship within specified warranty period.

1. Special warranty to include all components of roofing system, such as vapor retarder, roof insulation, fasteners, adhesives, cover board, roofing membrane, base flashing sheet, walkways, and other components of roofing system.
 2. Warranty Period: 25 years from date of Substantial Completion.
- B. Roofing System Installer's Warranty: Submit Roofing System Installer's warranty, on warranty form at end of this Section, signed by Roofing System Installer, covering the Work of this Section, including all components of roofing system, such as vapor retarder, roof insulation, fasteners, adhesives, cover board, roofing membrane, base flashing sheet, walkways and other components of roofing system.
1. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 SOURCE LIMITATIONS

- A. Obtain components for roofing system from roofing membrane manufacturer or manufacturer approved by roofing membrane manufacturer.

2.2 PERFORMANCE REQUIREMENTS

- A. General Performance: Installed roofing system and flashings to withstand specified uplift pressures, thermally induced movement, and exposure to weather without failure due to defective manufacture, fabrication, installation, or other defects in construction. Roofing system and flashings to remain watertight.
1. Accelerated Weathering: Roofing membrane to withstand 2000 hours of exposure when tested in accordance with ASTM G152, ASTM G154, or ASTM G155.
 2. Impact Resistance: Roofing membrane to resist impact damage when tested in accordance with ASTM D3746/D3746M, ASTM D4272/D4272M, or the Resistance to Foot Traffic Test in FM Approvals 4470.
- B. Material Compatibility: Roofing system materials to be compatible with one another and adjacent materials under conditions of service and application required, as demonstrated by roofing membrane manufacturer based on testing and field experience.
- C. Wind-Uplift Resistance: Design roofing system to resist the following wind-uplift pressures when tested in accordance with FM Approvals 4474, UL 580, or UL 1897:
1. Zone 1 (Roof Area Field): As indicated in General Structural Notes.
 2. Zone 2 (Roof Area Perimeter): As indicated in General Structural Notes.
 3. Zone 3 (Roof Area Corners): As indicated in General Structural Notes.
- D. SPRI's "Directory of Roof Assemblies" Listing: Roofing membrane, base flashings, and component materials to comply with requirements in FM Approvals 4450 or FM Approvals 4470 as part of a roofing system and are listed in SPRI's "Directory of Roof Assemblies" for roof assembly identical for that specified for this Project.

1. Wind-Uplift Load Capacity: 105 psf.
- E. Exterior Fire-Test Exposure: Class A; for application and roof slopes indicated; when tested by a qualified testing agency in accordance with ASTM E108 or UL 790.
 1. Identify products with appropriate markings of applicable testing agency.

2.3 THERMOPLASTIC POLYOLEFIN (TPO) ROOFING SYSTEM

- A. TPO Roofing Membrane Sheet: ASTM D6878/D6878M, internally fabric- or scrim-reinforced, TPO sheet.
 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Carlisle Syntec Systems
 - b. Elevate; Holcim Building Envelope
 - c. GAF
 - d. Johns Manville; a Berkshire Hathaway company
 2. Thickness: 80 mil, nominal.
 3. Exposed Face Color: White.

2.4 ACCESSORY ROOFING SYSTEM MATERIALS

- A. General: Accessory materials as recommended in writing by roofing membrane manufacturer for intended use and compatible with other roofing system components.
 1. Adhesive and Sealants: Comply with VOC limits of authorities having jurisdiction.
- B. Base and Sheet Flashings: Manufacturer's standard sheet flashing of same material, type, reinforcement, thickness, and color as roofing membrane.
- C. Prefabricated Pipe Flashings: As recommended in writing by roofing membrane manufacturer.
- D. Roof Vents: As recommended in writing by roofing membrane manufacturer.
 1. Size: Not less than 4-inch diameter.
- E. Bonding Adhesive: Roofing membrane manufacturer's standard, water based.
- F. Metal Termination Bars: Manufacturer's standard, predrilled stainless steel or aluminum bars, approximately 1 by 1/8 inch thick; with anchors.
- G. Metal Battens: Manufacturer's standard, aluminum-zinc-alloy-coated or zinc-coated steel sheet, approximately 1 inch wide by 0.05 inch thick, prepunched.
- H. Fasteners: Factory-coated steel fasteners and metal or plastic plates complying with corrosion-resistance provisions in FM Approvals 4470, designed for fastening roofing system components to substrate; tested for required pullout strength, and acceptable to roofing membrane manufacturer.

- I. Safety Accessories: Roofing membrane manufacturer's standard yellow seaming tape for designating safety perimeters and rooftop hazards.
- J. Miscellaneous Accessories: As recommended in writing by roofing membrane manufacturer.

2.5 VAPOR RETARDER

- A. Butyl-Rubber-Sheet Vapor Retarder, Self-Adhering: Polyethylene film laminated to layer of butyl rubber adhesive, minimum 30-mil total thickness; maximum permeance rating of 0.1 perm; cold applied, with slip-resisting surface and release paper backing. Provide primer when recommended by vapor retarder manufacturer.
 - 1. Provide product suitable for direct application to steel roof deck.

2.6 ROOF INSULATION AND ACCESSORIES

- A. General: Preformed roof insulation boards manufactured or approved by roofing membrane manufacturer, approved for use in SPRI's "Directory of Roof Assemblies" listed roof assemblies.
- B. Polyisocyanurate Board Insulation: ASTM C1289, Type II, Class 2 coated glass-fiber facer on both major surfaces.
 - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Atlas Polyiso Roof and Wall Insulation
 - b. Carlisle Syntec Systems
 - c. Elevate; Holcim Building Envelope
 - d. GAF
 - e. Hunter Panels; a Carlisle company
 - f. Johns Manville; a Berkshire Hathaway company
 - 2. Compressive Strength: Grade 3, 25 psi.
 - 3. Size: 48 by 96 inches.
 - 4. Thickness:
 - a. Base Layer: 2-1/2 inches.
 - b. Upper Layer: As required to achieve overall R-value on Drawings.
- C. Tapered Insulation: Provide factory-tapered insulation boards.
 - 1. Material: Match roof insulation.
 - 2. Minimum Thickness: 1/4 inch.
 - 3. Slope:
 - a. Roof Field: 1/4 inch per foot unless otherwise indicated on Drawings.
 - b. Saddles and Crickets: 1/2 inch per foot unless otherwise indicated on Drawings.
- D. Roof Insulation Accessories, General: As recommended in writing by insulation manufacturer for intended use and compatibility with other roofing system components.

1. Insulation Adhesive: Insulation manufacturer's recommended adhesive formulated to attach roof insulation to another insulation layer as follows:
 - a. Full-spread, spray-applied, low-rise, two-component urethane adhesive.
2. Insulation Fasteners: Insulation manufacturer's standard factory-coated steel fasteners with metal or plastic plates complying with corrosion-resistance provisions in FM Approvals 4470, designed for fastening roof insulation to substrate, and acceptable to roofing system manufacturer.

2.7 COVER BOARD

- A. General: Cover board as recommended in writing by roofing membrane manufacturer for intended use and compatible with other roofing system components.
- B. Glass-Mat Gypsum Cover Board: ASTM C1177/C1177M, water-resistant gypsum board.
 1. Basis-of-Design Product: Subject to compliance with requirements, provide Georgia-Pacific Gypsum LLC; DensDeck Prime Roof Board or comparable product by one of the following:
 - a. Gold Bond Building Products, LLC provided by National Gypsum Company
 - b. USG Corporation
 2. Thickness: 1/2 inch.
 3. Surface Finish: Factory primed.

2.8 WALKWAYS

- A. Flexible Walkways: Factory-formed, nonporous, heavy-duty, slip-resisting, surface-textured walkway rolls, approximately 3/16 inch thick and acceptable to roofing system manufacturer.
 1. Size: Approximately 30 inches wide.
 2. Color: Contrasting with roofing membrane.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Roofing System Installer present, for compliance with requirements and other conditions affecting performance of the Work.
 1. Verify that roof openings and penetrations are in place, curbs are set and braced, and roof-drain bodies are securely clamped in place.
 2. Verify that wood blocking, curbs, and nailers are securely anchored to roof deck at penetrations and terminations and that nailers match thicknesses of insulation.
 3. Verify that surface plane flatness and fastening of steel roof deck complies with requirements in Section 053100 "Steel Decking."
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Clean substrate of dust, debris, moisture, and other substances detrimental to roofing system installation in accordance with roofing system manufacturer's written instructions. Remove sharp projections.
- B. Prevent materials from entering and clogging roof drains and conductors and from spilling or migrating onto surfaces of other construction. Remove roof-drain plugs when no work is taking place or when rain is forecast.

3.3 INSTALLATION OF NAILERS

- A. Continuous treated wood nailers shall be installed at the perimeter of the entire roof and around roof projections and penetrations as indicated and as shown on project drawings.
- B. Nailers shall be anchored to resist a minimum force of 300 pounds per lineal foot in any direction. A 1/2-inch space shall be provided between nailer lengths. Individual nailer lengths shall not be less than 3 feet long. Nailer fastener spacing shall be at 12 inches on center. Fasteners shall be staggered 1/3 the nailer width, and installed within 6 inches of each end. Nailer attachment shall meet this requirement and that of the current Factory Mutual Loss Prevention Data Sheet 1-49.
- C. Thickness shall be as required to match substrate or insulation height to allow a smooth transition.

3.4 INSTALLATION OF THERMOPLASTIC-POLYOLEFIN (TPO) ROOFING SYSTEM, GENERAL

- A. Install roofing system materials and components in accordance with roofing system manufacturer's written installation instructions, SPRI's "Directory of Roof Assemblies" listed roof assembly requirements, and FM Global Property Loss Prevention Data Sheet 1-29.
- B. Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing system at end of workday or when rain is forecast. Remove and discard temporary seals before beginning Work on adjoining roofing.
- C. Install roofing membrane and auxiliary materials to tie in to existing roofing to maintain weathertightness of transition and to not void warranty for existing roofing system.
- D. Coordinate installation and transition of roofing system component serving as an air barrier with wall system air barrier specified under Section 072726 "Fluid-Applied Membrane Air Barriers."

3.5 INSTALLATION OF VAPOR RETARDER

- A. Install vapor retarder in a single layer over roof area in accordance with manufacturer's written installation instructions, side and end lapping each sheet a minimum of 3-1/2 and 6 inches, respectively.
 - 1. Extend vertically up parapet walls and projections to a minimum height equal to height of insulation and cover board.
 - 2. Continuously seal side and end laps with tape.

- B. Completely seal vapor retarder at terminations, obstructions, and penetrations to prevent air movement into roofing system.

3.6 INSTALLATION OF ROOF INSULATION AND ACCESSORIES

- A. Coordinate installation of roofing system components so insulation is not exposed to precipitation or left exposed at end of workday.
- B. Comply with roofing system and insulation manufacturer's written installation instructions. Install minimum of two layers of insulation under area of roofing to achieve required thickness.
- C. Install each layer of insulation with end joints staggered not less than 12 inches in adjacent rows and offset not less than 12 inches from previous layer.
 - 1. Trim insulation neatly to fit around penetrations and projections, and to fit tightly to intersecting sloping roof decks.
 - 2. Make joints between adjacent insulation boards not more than 1/4 inch in width.
 - 3. At internal roof drains, slope insulation to create a square drain sump, with each side equal to the diameter of the drain bowl plus 24 inches.
 - 4. Trim insulation, so that water flow is unrestricted.
 - 5. Fill gaps exceeding 1/4 inch with insulation.
 - 6. Cut and fit insulation within 1/4 inch of nailers, projections, and penetrations.
 - 7. Secure insulation in accordance with SPRI's "Directory of Roof Assemblies" for specified wind-uplift load capacity.
 - 8. Secure insulation to resist specified uplift pressure at corners, perimeter, and field of roof.

3.7 INSTALLATION OF COVER BOARD

- A. Install cover board over insulation with long joints in continuous straight lines with end joints staggered between rows. Offset joints of insulation below a minimum of 6 inches in each direction.
 - 1. Trim cover board neatly to fit around penetrations and projections, and to fit tight to intersecting sloping roof decks.
 - 2. At internal roof drains, conform to slope of drain sump.
 - a. Trim cover board so that water flow is unrestricted.
 - 3. Cut and fit cover board tight to nailers, projections, and penetrations.
 - 4. Adhere cover board to substrate in accordance with SPRI's "Directory of Roof Assemblies" listed roof assembly requirements for specified wind-uplift load capacity and FM Global Property Loss Prevention Data Sheet 1-29.

3.8 INSTALLATION OF TPO ROOFING MEMBRANE

- A. Install roofing membrane over roof area for mechanically attached application method in accordance with roofing system manufacturer's written installation instructions.
- B. Unroll roofing membrane and allow it to relax before installing.
- C. Start installation in presence of roofing system manufacturer's technical personnel and Owner's

testing and inspection agency.

- D. Accurately align roofing membrane and maintain uniform side and end laps of minimum dimensions required by manufacturer. Stagger end laps. Apply roofing membrane with side laps shingled with slope of roof deck where possible.
- E. Mechanically Attached Application: Secure roofing membrane over area to receive roofing in accordance with roofing system manufacturer's written installation instructions.
 - 1. Mechanically fasten or adhere roof membrane securely at terminations, penetrations, and perimeter of roofing.
- F. Seams and End Laps: Clean seam areas, overlap membrane, and hot-air-weld side seams and end laps of roofing membrane and sheet flashings to ensure a watertight installation.
 - 1. Test lap edges with probe to verify seam weld continuity. Apply lap sealant to seal cut edges of roofing membrane and sheet flashings.
 - 2. Verify field strength of seams a minimum of twice daily, and repair seam sample areas.
 - 3. Repair tears, voids, and lapped seams in roofing membrane that do not comply with requirements.
- G. Spread sealant bed over deck-drain flange at roof drains, and securely seal roofing membrane in place with clamping ring.

3.9 INSTALLATION OF BASE AND SHEET FLASHINGS

- A. General: Install and adhere base and sheet flashing and preformed flashing accessories to substrates in accordance with roofing system manufacturer's written installation instructions.
- B. Apply bonding adhesive to substrate and underside of flashings at required rate and allow to partially dry. Do not apply to seam area of flashing.
- C. Flash penetrations and field-formed inside and outside corners.
- D. Clean seam areas, overlap, and firmly roll flashings into the adhesive. Hot-air-weld side seams and end laps to ensure a watertight installation.
- E. Terminate and seal top of flashings and mechanically anchor to substrate through termination bars.

3.10 INSTALLATION OF WALKWAYS

- A. Flexible Walkways: Install walkway products in accordance with manufacturer's written installation instructions.
 - 1. Install flexible walkways at the following locations:
 - a. Between each roof access ladder and each rooftop unit location or path connecting rooftop unit locations.
 - b. Locations indicated on Drawings.
 - c. As required by roofing membrane manufacturer's warranty requirements.

2. Provide 6-inch clearance between adjoining pads.
3. Heat weld to substrate or adhere walkway products to substrate with compatible adhesive in accordance with roofing system manufacturer's written instructions.

3.11 FIELD QUALITY CONTROL

- A. Final Roof Inspection: Arrange for roofing system manufacturer's technical personnel to inspect roofing installation on completion, in presence of Architect, and to prepare inspection report.
 1. Notify Architect and Owner 48 hours in advance of date and time of inspection.
- B. Repair or remove and replace components of roofing system where inspections indicate that they do not comply with specified requirements.
- C. Additional testing and inspecting, at Contractor's expense, will be performed to determine if replaced or additional work complies with specified requirements.

3.12 PROTECTING AND CLEANING

- A. Protect roofing system from damage and wear during remainder of construction period. When remaining construction does not affect or endanger roofing system, inspect roofing system for deterioration and damage, describing its nature and extent in a written report, with copies to Architect and Owner.
- B. Correct deficiencies in or remove roofing system that does not comply with requirements, repair substrates, and repair or reinstall roofing system to a condition free of damage and deterioration at time of Substantial Completion and according to warranty requirements.
- C. Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

3.13 ROOFING SYSTEM INSTALLER'S WARRANTY

- A. WHEREAS _____ of _____, herein called the "Roofing System Installer," has performed roofing and associated Work on the following Project:
 1. Owner: Jordan School District.
 2. Owner Address: 7387 S Campus View Drive, West Jordan, UT 84084.
 3. Building Name/Type: Jordan Learning Center.
 4. Building Address: 3706 W 9800 S, South Jordan, UT 84009.
 5. Area of Work: Partial Roof on Building and Patching, as indicated on Drawings.
 6. Acceptance Date: _____.
 7. Warranty Period: Five years from date of Substantial Completion.
 8. Date of Substantial Completion: _____.
- B. AND WHEREAS Roofing System Installer has contracted (either directly with Owner or indirectly as a subcontractor) to warrant said Work against leaks and faulty or defective materials and workmanship for designated Warranty Period,
- C. NOW THEREFORE Roofing System Installer hereby warrants, subject to terms and conditions

herein set forth, that during Warranty Period Roofing Installer will, at Roofing System Installer's own cost and expense, make or cause to be made such repairs to or replacements of said Work as are necessary to correct faulty and defective work and as are necessary to maintain said Work in a watertight condition.

D. This Warranty is made subject to the following terms and conditions:

1. Specifically excluded from this Warranty are damages to Work and other parts of the building, and to building contents, caused by:
 - a. lightning;
 - b. peak gust wind speed exceeding **90 mph**;
 - c. fire;
 - d. failure of roofing system substrate, including cracking, settlement, excessive deflection, deterioration, and decomposition;
 - e. faulty construction of parapet walls, copings, chimneys, skylights, vents, equipment supports, and other edge conditions and penetrations of the Work;
 - f. vapor condensation on bottom of roofing; and
 - g. activity on roofing by others, including construction contractors, maintenance personnel, other persons, and animals, whether authorized or unauthorized by Owner.
2. When Work has been damaged by any of foregoing causes, Warranty will be null and void until such damage has been repaired by Roofing System Installer and until cost and expense thereof have been paid by Owner or by another responsible party so designated.
3. Roofing System Installer is responsible for damage to Work covered by this Warranty but is not liable for consequential damages to building or building contents resulting from leaks or faults or defects of Work.
4. During Warranty Period, if Owner allows alteration of Work by anyone other than Roofing System Installer, including cutting, patching, and maintenance in connection with penetrations, attachment of other work, and positioning of anything on roof, this Warranty will become null and void on date of said alterations, but only to the extent said alterations affect Work covered by this Warranty. If Owner engages Roofing System Installer to perform said alterations, Warranty will not become null and void unless Roofing System Installer, before starting said Work, will have notified Owner in writing, showing reasonable cause for claim, that said alterations would likely damage or deteriorate Work, thereby reasonably justifying a limitation or termination of this Warranty.
5. During Warranty Period, if original use of roof is changed and it becomes used for, but was not originally specified for, a promenade, work deck, spray-cooled surface, flooded basin, or other use or service more severe than originally specified, this Warranty will become null and void on date of said change, but only to the extent said change affects Work covered by this Warranty.
6. Owner will promptly notify Roofing System Installer of observed, known, or suspected leaks, defects, or deterioration and afford reasonable opportunity for Roofing System Installer to inspect Work and to examine evidence of such leaks, defects, or deterioration.
7. This Warranty is recognized to be the only warranty of Roofing System Installer on said Work and will not operate to restrict or cut off Owner from other remedies and resources lawfully available to Owner in cases of roofing failure. Specifically, this Warranty will not operate to relieve Roofing System Installer of responsibility for performance of original Work in accordance with requirements of the Contract Documents, regardless of whether Contract was a contract directly with Owner or a subcontract with Owner's General Contractor.

E. IN WITNESS THEREOF, this instrument has been duly executed this _____ day of _____, _____.

1. Authorized Signature: _____.
2. Name: _____.
3. Title: _____.

END OF SECTION 07 5423

SECTION 087100 - DOOR HARDWARE

PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:

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

B. Section excludes:

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

C. Related Sections:

1. Section 061000 "Rough Carpentry."
2. Section 079200 "Joint Sealants" for sealant requirements applicable to threshold installation specified in this section.
3. Section 081113 "Hollow Metal Doors and Frames."
4. Section 081416 "Flush Wood Doors."
5. Section 084113 "Aluminum-Framed Entrances and Storefronts."
6. Division 26 "Electrical" sections for connections to electrical power system and for low-voltage wiring.
7. Division 28 "Electronic Safety and Security" sections for coordination with other components of electronic access control system and fire alarm system.

1.02 REFERENCES

A. UL LLC

1. UL 10B - Fire Test of Door Assemblies
2. UL 10C - Positive Pressure Test of Fire Door Assemblies
3. UL 1784 - Air Leakage Tests of Door Assemblies
4. UL 305 - Panic Hardware

B. DHI - Door and Hardware Institute

1. Sequence and Format for the Hardware Schedule
2. Recommended Locations for Builders Hardware
3. Keying Systems and Nomenclature
4. Installation Guide for Doors and Hardware

C. NFPA – National Fire Protection Association

1. NFPA 70 – National Electric Code
2. NFPA 80 – 2016 Edition – Standard for Fire Doors and Other Opening Protectives

3. NFPA 101 – Life Safety Code
4. NFPA 105 – Smoke and Draft Control Door Assemblies
5. NFPA 252 – Fire Tests of Door Assemblies

D. ANSI - American National Standards Institute

1. ANSI A117.1 – 2017 Edition – Accessible and Usable Buildings and Facilities
2. ANSI/BHMA A156.1 - A156.29, and ANSI/BHMA A156.31 - Standards for Hardware and Specialties
3. ANSI/BHMA A156.28 - Recommended Practices for Keying Systems
4. ANSI/WDMA I.S. 1A - Interior Architectural Wood Flush Doors
5. ANSI/SDI A250.8 - Standard Steel Doors and Frames

1.03 SUBMITTALS

A. General:

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

B. Action Submittals:

1. Product Data: Submit technical product data for each item of door hardware, installation instructions, maintenance of operating parts and finish, and other information necessary to show compliance with requirements.
2. Riser and Wiring Diagrams: After final approval of hardware schedule, submit details of electrified door hardware, indicating:
 - a. Wiring Diagrams: For power, signal, and control wiring and including:
 - 1) Details of interface of electrified door hardware and building safety and security systems.
 - 2) Schematic diagram of systems that interface with electrified door hardware.
 - 3) Point-to-point wiring.
 - 4) Risers.
3. Samples for Verification: If requested by Architect, submit production sample of requested door hardware unit in finish indicated and tagged with full description for coordination with schedule.
 - a. Samples will be returned to supplier. Units that are acceptable to Architect may, after final check of operations, be incorporated into Work, within limitations of key coordination requirements.
4. Door Hardware Schedule:
 - a. Submit concurrent with submissions of Product Data, Samples, and Shop Drawings. Coordinate submission of door hardware schedule with scheduling requirements of other work to facilitate fabrication of other work critical in Project construction schedule.

- b. Submit under direct supervision of a Door Hardware Institute (DHI) certified Architectural Hardware Consultant (AHC) or Door Hardware Consultant (DHC) with hardware sets in vertical format as illustrated by Sequence of Format for the Hardware Schedule published by DHI.
 - c. Indicate complete designations of each item required for each opening, include:
 - 1) Door Index: door number, heading number, and Architect's hardware set number.
 - 2) Quantity, type, style, function, size, and finish of each hardware item.
 - 3) Name and manufacturer of each item.
 - 4) Fastenings and other pertinent information.
 - 5) Location of each hardware set cross-referenced to indications on Drawings.
 - 6) Explanation of all abbreviations, symbols, and codes contained in schedule.
 - 7) Mounting locations for hardware.
 - 8) Door and frame sizes and materials.
 - 9) Degree of door swing and handing.
 - 10) Operational Description of openings with electrified hardware covering egress, ingress (access), and fire/smoke alarm connections.
5. Key Schedule:
- a. After Keying Conference, provide keying schedule that includes levels of keying, explanations of key system's function, key symbols used, and door numbers controlled.
 - b. Use ANSI/BHMA A156.28 "Recommended Practices for Keying Systems" as guideline for nomenclature, definitions, and approach for selecting optimal keying system.
 - c. Provide 3 copies of keying schedule for review prepared and detailed in accordance with referenced DHI publication. Include schematic keying diagram and index each key to unique door designations.
 - d. Index keying schedule by door number, keyset, hardware heading number, cross keying instructions, and special key stamping instructions.
 - e. Provide one complete bitting list of key cuts and one key system schematic illustrating system usage and expansion. Forward bitting list, key cuts and key system schematic directly to Owner, by means as directed by Owner.
 - f. Prepare key schedule by or under supervision of supplier, detailing Owner's final keying instructions for locks.
- C. Informational Submittals:
- 1. Provide Qualification Data for Supplier, Installer and Architectural Hardware Consultant.
 - 2. Provide Product Data:
 - a. Certify that door hardware approved for use on types and sizes of labeled fire-rated doors complies with listed fire-rated door assemblies.
 - b. Include warranties for specified door hardware.
- D. Closeout Submittals:
- 1. Operations and Maintenance Data: Provide in accordance with Division 01 and include:
 - a. Complete information on care, maintenance, and adjustment; data on repair and replacement parts, and information on preservation of finishes.
 - b. Catalog pages for each product.
 - c. Final approved hardware schedule edited to reflect conditions as installed.
 - d. Final keying schedule
 - e. Copy of warranties including appropriate reference numbers for manufacturers to identify project.
 - f. As-installed wiring diagrams for each opening connected to power, both low voltage and 110 volts.

E. Inspection and Testing:

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

1.04 QUALITY ASSURANCE

A. Qualifications and Responsibilities:

1. Supplier: Recognized architectural hardware supplier with a minimum of 5 years documented experience supplying both mechanical and electromechanical door hardware similar in quantity, type, and quality to that indicated for this Project. Supplier to be recognized as a factory direct distributor by the manufacturer of the primary materials with a warehousing facility in the Project's vicinity. Supplier to have on staff, a certified Architectural Hardware Consultant (AHC) or Door Hardware Consultant (DHC) available to Owner, Architect, and Contractor, at reasonable times during the Work for consultation.
2. Installer: Qualified tradesperson skilled in the application of commercial grade hardware with experience installing door hardware similar in quantity, type, and quality as indicated for this Project.
3. Architectural Hardware Consultant: Person who is experienced in providing consulting services for door hardware installations that are comparable in material, design, and extent to that indicated for this Project and meets these requirements:
 - a. For door hardware: DHI certified AHC or DHC.
 - b. Can provide installation and technical data to Architect and other related subcontractors.
 - c. Can inspect and verify components are in working order upon completion of installation.
 - d. Capable of producing wiring diagram and coordinating installation of electrified hardware with Architect and electrical engineers.
4. Single Source Responsibility: Obtain each type of door hardware from single manufacturer.

B. Certifications:

1. Fire-Rated Door Openings:
 - a. Provide door hardware for fire-rated openings that complies with NFPA 80 and requirements of authorities having jurisdiction.
 - b. Provide only items of door hardware that are listed products tested by UL LLC, Intertek Testing Services, or other testing and inspecting organizations acceptable to authorities having jurisdiction for use on types and sizes of doors indicated, based on testing at positive pressure and according to NFPA 252 or UL 10C and in compliance with requirements of fire-rated door and door frame labels.
2. Smoke and Draft Control Door Assemblies:
 - a. Provide door hardware that meets requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105
 - b. Comply with the maximum air leakage of 0.3 cfm/sq. ft. (3 cu. m per minute/sq. m) at tested pressure differential of 0.3-inch wg (75 Pa) of water.
3. Electrified Door Hardware

- a. Listed and labeled as defined in NFPA 70, Article 100, by testing agency acceptable to authorities having jurisdiction.
- 4. Accessibility Requirements:
 - a. Comply with governing accessibility regulations cited in "REFERENCES" article 087100, 1.02.D3 herein for door hardware on doors in an accessible route. This project must comply with all Federal Americans with Disability Act regulations and all Local Accessibility Regulations.
- C. Pre-Installation Meetings
 - 1. Keying Conference
 - a. Incorporate keying conference decisions into final keying schedule after reviewing door hardware keying system including:
 - 1) Function of building, flow of traffic, purpose of each area, degree of security required, and plans for future expansion.
 - 2) Preliminary key system schematic diagram.
 - 3) Requirements for key control system.
 - 4) Requirements for access control.
 - 5) Address for delivery of keys.
 - 2. Pre-installation Conference
 - a. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
 - b. Inspect and discuss preparatory work performed by other trades.
 - c. Inspect and discuss electrical roughing-in for electrified door hardware.
 - d. Review sequence of operation for each type of electrified door hardware.
 - e. Review required testing, inspecting, and certifying procedures.
 - f. Review questions or concerns related to proper installation and adjustment of door hardware.
 - 3. Electrified Hardware Coordination Conference:
 - a. Prior to ordering electrified hardware, schedule and hold meeting to coordinate door hardware with security, electrical, doors and frames, and other related suppliers.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up for hardware delivered to Project site. Promptly replace products damaged during shipping.
- B. Tag each item or package separately with identification coordinated with final door hardware schedule, and include installation instructions, templates, and necessary fasteners with each item or package. Deliver each article of hardware in manufacturer's original packaging.
- C. Maintain manufacturer-recommended environmental conditions throughout storage and installation periods.
- D. Provide secure lock-up for door hardware delivered to Project. Control handling and installation of hardware items so that completion of Work will not be delayed by hardware losses both before and after installation.

- E. Handle hardware in manner to avoid damage, marring, or scratching. Correct, replace or repair products damaged during Work. Protect products against malfunction due to paint, solvent, cleanser, or any chemical agent.
- F. Deliver keys to manufacturer of key control system for subsequent delivery to Owner.

1.06 COORDINATION

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

1.07 WARRANTY

- A. Manufacturer's standard form in which manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within published warranty period.
 - 1. Warranty does not cover damage or faulty operation due to improper installation, improper use or abuse.
 - 2. Warranty Period: Beginning from date of Substantial Completion, for durations indicated in manufacturer's published listings.
 - a. Mechanical Warranty
 - 1) Locks
 - a) Schlage ND Series: 10 years
 - 2) Exit Devices
 - a) Von Duprin: 10 years
 - 3) Closers
 - a) LCN 4000 Series: 30 years
 - 4) Automatic Operators
 - a) LCN: 2 years
 - b. Electrical Warranty
 - 1) Locks
 - a) Schlage: 3 years
 - 2) Exit Devices
 - a) Von Duprin: 3 years

1.08 MAINTENANCE

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

PART 2 - PRODUCTS

2.01 MANUFACTURERS

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

2.02 MATERIALS

- A. Fabrication
 - 1. Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. provide screws according to manufacturer's recognized installation standards for application intended.
 - 2. Finish exposed screws to match hardware finish, or, if exposed in surfaces of other work, to match finish of this other work including prepared for paint surfaces to receive painted finish.
 - 3. Provide concealed fasteners wherever possible for hardware units exposed when door is closed. Coordinate with "Metal Doors and Frames", "Flush Wood Doors", "Stile and Rail Wood Doors" to ensure proper reinforcements. Advise the Architect where visible fasteners, such as thru bolts, are required.
- B. Provide screws, bolts, expansion shields, drop plates and other devices necessary for hardware installation.
 - 1. Where fasteners are exposed to view: Finish to match adjacent door hardware material.
- C. Cable and Connectors:
 - 1. Where scheduled in the hardware sets, provide each item of electrified hardware and wire harnesses with number and gage of wires enough to accommodate electric function of specified hardware.
 - 2. Provide Molex connectors that plug directly into connectors from harnesses, electric locking and power transfer devices.

3. Provide through-door wire harness for each electrified locking device installed in a door and wire harness for each electrified hinge, electrified continuous hinge, electrified pivot, and electric power transfer for connection to power supplies.

2.03 HINGES

A. Manufacturers and Products:

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

B. Requirements:

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

2.04 CONTINUOUS HINGES

A. Manufacturers:

1. Scheduled Manufacturer:
 - a. Ives
2. Acceptable Manufacturers:

- a. Select
- b. Best
- c. Hager

B. Requirements:

1. Provide aluminum geared continuous hinges conforming to ANSI/BHMA A156.26, Grade 1.
2. Provide aluminum geared continuous hinges, where specified in the hardware sets, fabricated from 6063-T6 aluminum.
3. Provide split nylon bearings at each hinge knuckle for quiet, smooth, self-lubricating operation.
4. Provide hinges capable of supporting door weights up to 450 pounds, and successfully tested for 1,500,000 cycles.
5. On fire-rated doors, provide aluminum geared continuous hinges classified for use on rated doors by testing agency acceptable to authority having jurisdiction.
6. Provide aluminum geared continuous hinges with electrified option scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware.
7. Provide hinges 1 inch (25 mm) shorter in length than nominal height of door, unless otherwise noted or door details require shorter length and with symmetrical hole pattern.

2.05 ELECTRIC POWER TRANSFER

A. Manufacturers:

1. Scheduled Manufacturer and Product:
 - a. Von Duprin EPT-10
2. Acceptable Manufacturers and Products:
 - a. No Substitute

B. Requirements:

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

2.06 FLUSH BOLTS

A. Manufacturers:

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

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.

2.07 CYLINDRICAL LOCKS – GRADE 1

A. Manufacturers and Products:

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

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. Indicators: Where specified, provide escutcheon with lock status indicator window on top of lockset rose:
 - a. Escutcheon height (including rose) 6.05 inches high by 3.68 inches wide.
 - b. Indicator window measuring a minimum 3.52-inch by .60 inch with 1.92 square-inches of front facing viewing area and 180-degree visibility with a total of .236 square-inches of total viewable area.
 - c. Provide snap-in serviceable window to prevent tampering. Lock must function if indicator is compromised.
 - d. Provide messages color-coded with full text and symbol, as scheduled, for easy visibility.
 - e. Unlocked and Unoccupied message will display on white background, and Locked and Occupied message will display on red background.
3. Cylinders: Refer to "KEYING" article, herein.
4. 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.
5. Provide locksets with separate anti-rotation thru-bolts, and no exposed screws.
6. Provide independently operating levers with two external return spring cassettes mounted under roses to prevent lever sag.
7. Provide standard ASA strikes unless extended lip strikes are necessary to protect trim.
8. Provide electrified options as scheduled in the hardware sets.
9. Lever Trim: Solid cast levers without plastic inserts and wrought roses on both sides.
 - a. Vandlgard: Provide levers with vandal resistant technology for use at heavy traffic or abusive applications.
 - b. Lever Design: RHODES(RHO)

2.08 EXIT DEVICES

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
 - a. Von Duprin 98/35A series

2. Acceptable Manufacturers and Products:
 - a. No Substitute

- B. Requirements:
 1. Provide exit devices tested to ANSI/BHMA A156.3 Grade 1 and UL listed for Panic Exit or Fire Exit Hardware.
 2. Cylinders: Refer to "KEYING" article, herein.
 3. Provide smooth 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 or hex-key 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 factory drilled weep holes for exit devices used in full exterior application, highly corrosive areas, and where noted in hardware sets.
 14. Provide electrified options as scheduled.
 15. Top latch mounting: double- or single-tab mount for steel doors, face mount for aluminum doors eliminating requirement of tabs, and double tab mount for wood doors.
 16. Provide exit devices with optional trim designs to match other lever and pull designs used on the project.
 17. Special Options:
 - a. SI
 - 1) Provide dogging indicators for visible indication of dogging status.
 - b. XP
 - 1) Rim Exit Devices: provide devices with non-tapered smart latchbolt with 90° latchbolt to strike engagement under stress and Static Load Resistance of 2000 pounds.
 - c. QM
 - 1) Rim Exit Devices: provide devices with damper-controlled re-latching to reduce operational noise. Where lever trim is specified, provide damper controlled lever return.
 - d. HH
 - 1) Provide wind and impact rated hurricane exit devices and mullions certified to comply with Florida Building Code (FBC) TAS 201, 202, 203.
 - e. HW
 - 1) Provide wind rated hurricane exit devices and mullions certified to comply with ANSI-ASTM E330.
 - f. CX

- 1) Provide delayed egress devices, where scheduled, that are UL 294 listed, meet National Fire Protection Association (NFPA) and International Building Code (IBC) governing delayed egress, and/or other local and national fire codes acceptable to authority having jurisdiction as required.
 - a) Provide non-handed and field sizeable device with 3/4 (19mm) throw deadlocking latch bolt. Device incorporates an internal RX switch that detects attempt to exit from applying less than 15lbs to the push pad, which causes this switch to start an irreversible alarm cycle. Key switch in device is capable of arming, disarming, or resetting the device; and indicator lamp determines status of the device.
 - b) Provide devices capable of standard 15 second release delay and indefinite release delay as required by code, when tied into fire alarm system will release immediately when an alarm condition exists.
 - c) Provide devices with all control inputs – door position input, external inhibit input, fire alarm input; auxiliary locking; nuisance alarm and internal horn; and, remote signaling output self-contained in the device assembly.
- g. CVC
 - 1) Provide cable-actuated concealed vertical latch system in two-point for non-rated or fire rated wood doors up to a 90 minute rating and less bottom latch (LBL) configuration for non-rated or fire rated wood doors up to 20 minute rating. Vertical rods not permitted.
 - a) Cable: Stainless steel with abrasive resistant coating. Conduit and core wire ends snap into latch and center slides without use of tools.
 - b) Wood Door Prep: Maximum 1 inch x 1.1875 inch x 3.875 inches top latch pocket and 1 inch x 1.1875 inch x 5 inches bottom latch pocket which does not require the use of a metal wrap or edge for non-rated or fire rated wood doors up to a 45 minute rating.
 - c) Latchbolts and Blocking Cams: Manufactured from sintered metal low carbon copper- infiltrated steel, with molybdenum disulfide low friction coating.
 - d) Top Latchbolt: Minimum 0.38 inch (10 mm) and greater than 90-degree engagement with strike to prevent door and frame separation under high static load.
 - e) Bottom Latchbolt: Minimum of 0.44-inch (11 mm) engagement with strike.
 - f) Product Cycle Life: 1,000,000 cycles.
 - g) Latch Operation: Top and bottom latch operate independently of each other. Top latch fully engages top strike even when bottom latch is compromised. Separate trigger mechanisms not permitted.
 - h) Latch release does not require separate trigger mechanism.
 - i) Cable and latching system characteristics:
 - i. Installed independently of exit device installation, and capable of functioning on door prior to device and trim installation.
 - ii. Connected to exit device at single point in steel and aluminum doors, and two points for top and bottom latches in wood doors.
 - iii. Bottom latch height adjusted, from single point for steel and aluminum doors and two points for wood doors, after system is installed and connected to exit device, while door is hanging
 - iv. Bottom latch position altered up and down minimum of 2 inches (51 mm) in steel and aluminum doors without additional adjustment. Bottom latch deadlocks in every adjustment position in wood doors.
 - v. Top and bottom latches in steel and aluminum doors and top latch in wood doors may be removed while door is hanging.

2.09 ELECTRONIC ACCESS CONTROL LOCKSETS AND EXIT DEVICE TRIM

- A. Manufacturers:
1. Scheduled Manufacturer and Product:
 - a. Schlage AD Series
 2. Acceptable Manufacturers and Products:
 - a. No Substitute
- B. Requirements:
1. Provide adaptable electronic access control products that comply with the following requirements:
 - a. Listed, UL 294 - The Standard of Safety for Access Control System Units.
 - b. Compliant with ANSI/BHMA A156.25 Grade 1 Operation and Security.
 - c. Certified to UL10C, FCC Part15, Florida Building Code Standards TAS 201 large missile impact, TAS 202 and TAS 203.
 - d. Compliant with ASTM E330 for door assemblies.
 - e. Compliant with ICC / ANSI A117.1, NFPA 101, NFPA 80, and Industry Canada IC.
 2. Functions: Provide functions as scheduled that are field configurable without taking the adaptable electronic product off the door.
 3. Emergency Override: Provide mechanical key override; cylinders: Refer to "KEYING" article, herein.
 4. Levers:
 - a. Vandal Resistance: Exterior (secure side) lever rotates freely while door remains locked, preventing damage to internal lock components from vandalism by excessive force.
 - b. Provide non-handed lever trim that operates independently of non-locking levers.
 - c. Style: <INSERT LEVER DESIGN>
 - d. Tactile Warning (Knurling): Where required by authority having jurisdiction. Provide on levers on exterior (secure side) of doors serving rooms considered to be hazardous.
 5. Features:
 - a. Audible feedback that can be enabled or disabled.
 - b. Tamper-Resistant Screws: Tamper torx screws on inside escutcheon for increased security.
 - c. Visual tri-colored LED indicators that indicate activation, additional PIN code credential required, operational systems status, system error conditions and low power conditions.
 - d. Door Position Switch
 - e. Interior Cover Tamper Guard
 - f. Mechanical Key Override
 - g. Request to Exit
 - h. Request to Enter
 - i. Lock/Unlock Status
 6. Credential Reader
 - a. Credential Reader Configuration: Provide credential reader modules in the following configurations as indicated in door hardware sets.
 - b. Credential Reader Capabilities: Provide credential readers capable of operating with the following integrated software partners.
 - 1) 13.56 MHz Smart card credentials:
 - a) Secure section (Multi-Technology and Smartcard): Schlage MIFARE Classic, Schlage MIFARE DESFire EV1/EV3, PIV and PIV-I Compatible

- b) 13.56 MHz Serial number only (Multi-Technology and Smartcard): MIFARE, DESFire, HID iClass, MIFARE DESFire EV1/EV3
 - c) 125 kHz Proximity card credentials: Schlage, XceedID, HID, GE/CASI ProxLite and AWID.
 - 2) Multi-Technology readers that read both 13.56 MHz Smart Cards and 125 kHz Prox cards.
 - 3) Dual credential reading capabilities credential card or fob and PIN.
 - 4) 12 button keypad with backlit buttons.
 - 5) Magnetic Card Reader:
 - a) Full insertion or swipe reader capable of reading information along full length of magnetic stripe.
 - b) Magnetic card triple track reader capable of reading tracks 1, 2 or 3 per configuration in field.
7. Operation:
- a. Offline – access control rights stored on device
 - 1) Provide adaptable electronic access control products with the ability to be configured at door by handheld programming device the length of time device is unlocked upon access grant.
 - 2) Provide adaptable electronic access control products with the ability to communicate identifying information such as firmware versions, hardware versions, serial numbers, and manufacturing dates by handheld programming device.
 - b. Networked – hardwired
 - 1) Adaptable electronic access control product system interface:
 - 2) Adaptable electronic access control products to have real-time bidirectional communication between access control system and lock.
 - 3) Credential Verification Time: less than 1 second.
 - 4) When Utilized with Partner Integrated Access Control Network Software with Remote Commanding Capability: Provide adaptable electronic access control product with the ability to be remotely locked down or unlocked within 10 seconds or less, without user interface at the device.
 - 5) Upon Loss of Power to Device: Provide adaptable electronic access control product with the ability to manage access control offline in one of three methods below that can be configured in the field at lockset by handheld programming device and remotely by Partner integrated software:
 - a) Fail locked (secured)
 - b) Fail unlocked (unsecured)
 - c) Fail As-Is
 - 6) Upon Loss of Communication Between Device and Network: Provide adaptable electronic access control product with the ability to manage access control offline in one of four methods below that can be configured in the field at device by handheld programming device and remotely by Partner integrated software:
 - a) Fail locked (secured)
 - b) Fail unlocked (unsecured)
 - c) Fail As-Is
 - d) Fail to Degraded/cache mode utilizing cache memory with following selectable options:
 - i. Grant access up to the last 1,000 unique previously accepted User IDs.
 - ii. Grant access up to the last 1,000 unique previously accepted facility/site codes.
 - iii. Remove from cache previously stored User IDs or facility/site codes that have not been presented to lock within the last 5 days.

- 7) Provide adaptable electronic access control product with the ability to be configured at door by handheld programming device and remotely by Partner integrated software the length of time device is unlocked upon access grant.
- 8) Provide adaptable electronic access control product with the ability to communicate identifying information such as firmware versions, hardware versions, serial numbers, and manufacturing dates by handheld programming device and remotely by Partner integrated software.
- c. Networked – wireless
 - 1) Adaptable electronic access control product system interface:
 - 2) Adaptable electronic access control products to have real-time bidirectional communication between access control system and lock.
 - 3) Remote Commanding By Partner Integrated Access Control Network Software: Battery-powered lockset shall have "Wake on Radio" feature causing activation of remote, wireless access control devices, enabling activated devices to be configured, locked or unlocked from a centralized location within 10 seconds or less without user interface at the device.
 - 4) Local Commanding: Provide adaptable electronic access control product with the ability to be configured, locked or unlocked locally by handheld programming device, in real-time.
 - 5) When Utilized with Access Control Network Software with Remote Commanding Capability: Provide adaptable electronic access control product with the ability to be remotely locked down or unlocked within 10 seconds or less while battery powered without user interface at the device.
 - 6) Real-time response of battery powered device capable of being configured at door by handheld programming device and remotely by Partner integrated software.
 - 7) Upon Loss of Power to Device: Provide adaptable electronic access control product with the ability to manage access control offline in one of three methods below that can be configured in the field at device by handheld programming device and remotely by Partner integrated software:
 - a) Fail locked (secured)
 - b) Fail unlocked (unsecured)
 - c) Fail As-Is
 - 8) Upon Loss of Communication Between Device and Network: Provide adaptable electronic access control product with the ability to manage access control offline in one of four methods below that can be configured in the field at lockset by handheld programming device and remotely by Partner integrated software:
 - a) Fail locked (secured)
 - b) Fail unlocked (unsecured)
 - c) Fail As-Is
 - d) Fail to Degraded/cache mode utilizing cache memory with following selectable options:
 - i. Grant access up to the last 1,000 unique previously accepted User IDs.
 - ii. Grant access up to the last 1,000 unique previously accepted facility/site codes
 - iii. Remove from cache previously stored User IDs or facility/site codes that have not been presented to lock within the last 5 days.
 - 9) Provide adaptable electronic access control product with the ability to be configured at door by handheld programming device and remotely by Partner integrated software the length of time device is unlocked upon access grant.
 - 10) Provide adaptable electronic access control product with the ability to communicate identifying information such as firmware versions, hardware versions, serial numbers, and manufacturing dates by handheld programming device and remotely by Partner integrated software.
 - 11) Wireless Transmission:

- a) Modulation: 900 MHz spread spectrum, direct sequence, 10 channels.
- b) Encryption: AES-128-bit Key minimum.

C. Components

1. Product: Schlage HHD series with Utility Software. (OFFLINE)
 - a. Provide Handheld Programming Device for adaptable electronic access control products capable of the following minimum requirements.
 - 1) Capable of initializing lock and accessories using preloaded software.
 - 2) Utilized to field configure electronic access control devices, to download firmware updates and door files to device, and to download audit files from device.
2. Provide Panel Interface for adaptable electronic access control products.
 - a. Product: Schlage PIB300-2D Panel Interface Board. (AD-300)
 - b. Product: Schlage PIM400-485 or PIM400-TD2 Panel Interface Module as required. (AD-400)
 - c. Product: Schlage PIM400-1501 Panel Interface Module. (AD-400)

2.10 POWER SUPPLIES

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
 - a. Schlage/Von Duprin PS900 Series
2. Acceptable Manufacturers and Products:
 - a. No Substitute

B. Requirements:

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

2.11 CYLINDERS

A. Manufacturers: **VERIFY WITH OWNER**

1. Scheduled Manufacturer and Product:
 - a. SCHALGE

B. Requirements:

1. Provide 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.

2.12 KEYING

A. Scheduled System: **VERIFY WITH OWNER**

1. New factory registered system:
 - a. Provide a factory registered keying system, complying with guidelines in ANSI/BHMA A156.28, incorporating decisions made at keying conference.
2. 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. Temporary Construction Cylinder Keying.
 - 1) Provide construction cores that permit voiding construction keys without cylinder removal, furnished in accordance with the following requirements.
 - a) Split Key or Lost Ball Construction Keying System.
 - b) 3 construction control keys, and extractor tools or keys as required to void construction keying.
 - c) 12 construction change (day) keys.
 - 2) Owner or Owner's Representative will void operation of temporary construction keys.
 - b. Replaceable Construction Cores.
 - 1) Provide temporary construction cores replaceable by permanent cores, furnished in accordance with the following requirements.
 - a) 3 construction control keys
 - b) 12 construction change (day) keys.
 - 2) Owner or Owner's Representative will replace temporary construction cores with permanent cores.
2. Permanent Keying:
 - a. Provide permanent cylinders/cores keyed by the manufacturer according to the following key system.
 - 1) Master Keying system as directed by the Owner.
 - b. Forward biting list and keys separately from cylinders, by means as directed by Owner. Failure to comply with forwarding requirements will be cause for replacement of cylinders/cores involved at no additional cost to Owner.
 - c. Provide keys with the following features:
 - 1) Material: Nickel silver; minimum thickness of .107-inch (2.3mm)
 - 2) Patent Protection: Keys and blanks protected by one or more utility patent(s).

- 3) Geographically Exclusive: Where High Security or Security cylinders/cores are indicated, provide nationwide, geographically exclusive key system complying with the following restrictions.
- 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) Permanent Control Keys: 3.
 - 2) Master Keys: 6.
 - 3) Change (Day) Keys: 3 per cylinder/core that is keyed differently
 - 4) Key Blanks: Quantity as determined in the keying meeting.

2.13 KEY CONTROL SYSTEM

A. Manufacturers:

1. Scheduled Manufacturer:
 - a. Telkee
2. Acceptable Manufacturers:
 - a. HPC
 - b. Lund

B. Requirements:

1. Provide key control system, including envelopes, labels, tags with self-locking key clips, receipt forms, 3-way visible card index, temporary markers, permanent markers, and standard metal cabinet, all as recommended by system manufacturer, with capacity for 150% of number of locks required for Project.
 - a. Provide complete cross index system set up by hardware supplier, and place keys on markers and hooks in cabinet as determined by final key schedule.
 - b. Provide hinged-panel type cabinet for wall mounting.

2.14 DOOR CLOSERS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
 - a. LCN 4040XP series
2. Acceptable Manufacturers and Products:
 - a. No Substitute

B. Requirements:

1. Provide door closers conforming to ANSI/BHMA A156.4 Grade 1 requirements by BHMA certified independent testing laboratory. ISO 9000 certify closers. Stamp units with date of manufacture code.
2. Provide door closers with fully hydraulic, full rack and pinion action with 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.
11. Closers shall be capable of being upgraded by adding modular mechanical or electronic components in the field.

2.15 ELECTRO-HYDRAULIC AUTOMATIC OPERATORS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
 - a. LCN 4600 series
2. Acceptable Manufacturers and Products:
 - a. No Substitute

B. Requirements:

1. Provide low energy automatic operator units with hydraulic closer complying with ANSI/BHMA A156.19.
2. Hydraulic Fluid: Fireproof, passing requirements of UL10C, and requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F.
3. Provide units with conventional door closer opening and closing forces unless power operator motor is activated. Provide door closer assembly with adjustable spring size, back-check, and opening and closing speed adjustment valves to control door
4. Provide units with on/off switch for manual operation, motor start up delay, vestibule interface delay, electric lock delay, and door hold open delay.
5. Provide drop plates, brackets, and adapters for arms as required for details.
6. Provide actuator switches and receivers for operation as specified.
7. Provide weather-resistant actuators at exterior applications.

8. Provide key switches with LED's, recommended and approved by manufacturer of automatic operator as required for function described in operation description of hardware group below. Cylinders: Refer to "KEYING" article, herein.
9. Provide complete assemblies of controls, switches, power supplies, relays, and parts/material recommended and approved by manufacturer of automatic operator for each individual leaf. Actuators control both doors simultaneously at pairs. Sequence operation of exterior and vestibule doors with automatic operators to allow ingress or egress through both sets of openings as directed by Architect. Locate actuators, key switches, and other controls as directed by Architect.
10. Provide units with vestibule inputs that allow sequencing operation of two units, and SPDT relay for interfacing with latching or locking devices.

2.16 DOOR TRIM

A. Manufacturers:

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

B. Requirements:

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

2.17 PROTECTION PLATES

A. Manufacturers:

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

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. 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.
3. At fire rated doors, provide protection plates over 16 inches high with UL label.

2.18 OVERHEAD STOPS AND OVERHEAD STOP/HOLDERS

A. Manufacturers:

1. Scheduled Manufacturers:
 - a. Glynn-Johnson
 2. Acceptable Manufacturers:
 - a. No Substitute
- B. Requirements:
1. Provide overhead stop at any door where conditions do not allow for a wall stop or floor stop presents tripping hazard.

2.19 DOOR STOPS AND HOLDERS

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

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

- A. Manufacturers:
1. Scheduled Manufacturer:
 - a. Zero International
 2. Acceptable Manufacturers:
 - a. National Guard
 - b. Pemko
- 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.

2.21 SILENCERS

A. Manufacturers:

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

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.

2.22 DOOR POSITION SWITCHES

A. Manufacturers:

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

B. Requirements:

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

2.23 COAT HOOKS

A. Manufacturers:

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

B. Provide coat hooks as specified.

2.24 FINISHES

- A. FINISH: BHMA 626/652 (US26D); EXCEPT:
 - 1. Hinges at Exterior Doors: BHMA 630 (US32D)
 - 2. Aluminum Geared Continuous Hinges: BHMA 628 (US28)
 - 3. Push Plates, Pulls, and Push Bars: BHMA 630 (US32D)
 - 4. Protection Plates: BHMA 630 (US32D)
 - 5. Overhead Stops and Holders: BHMA 630 (US32D)
 - 6. Door Closers: Powder Coat to Match
 - 7. Wall Stops: BHMA 630 (US32D)
 - 8. Latch Protectors: BHMA 630 (US32D)
 - 9. Weatherstripping: Clear Anodized Aluminum
 - 10. Thresholds: Mill Finish Aluminum

PART 3 - EXECUTION

3.01 EXAMINATION

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

3.02 INSTALLATION

- A. Mount door hardware units at heights to comply with the following, unless otherwise indicated or required to comply with governing regulations.
 - 1. Standard Steel Doors and Frames: ANSI/SDI A250.8.
 - 2. Custom Steel Doors and Frames: HMMA 831.
 - 3. Interior Architectural Wood Flush Doors: ANSI/WDMA I.S. 1A
 - 4. Installation Guide for Doors and Hardware: DHI TDH-007-20
- B. Install door hardware in accordance with NFPA 80, NFPA 101 and provide post-install inspection, testing as specified in section 1.03.E unless otherwise required to comply with governing regulations.
- C. Install each hardware item in compliance with manufacturer's instructions and recommendations, using only fasteners provided by manufacturer.
- D. Do not install surface mounted items until finishes have been completed on substrate. Protect all installed hardware during painting.

- E. Set units level, plumb and true to line and location. Adjust and reinforce attachment substrate as necessary for proper installation and operation.
- F. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.
- G. Install operating parts so they move freely and smoothly without binding, sticking, or excessive clearance.
- H. Hinges: Install types and in quantities indicated in door hardware schedule but not fewer than quantity recommended by manufacturer for application indicated.
- I. Lock Cylinders:
 - 1. 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. Wiring: Coordinate with Division 26, ELECTRICAL and Division 28 ELECTRONIC SAFETY AND SECURITY sections for:
 - 1. Conduit, junction boxes and wire pulls.
 - 2. Connections to and from power supplies to electrified hardware.
 - 3. Connections to fire/smoke alarm system and smoke evacuation system.
 - 4. Connection of wire to door position switches and wire runs to central room or area, as directed by Architect.
 - 5. Connections to panel interface modules, controllers, and gateways.
 - 6. Testing and labeling wires with Architect's opening number.
- K. Key Control System: Tag keys and place them on markers and hooks in key control system cabinet, as determined by final keying schedule.
- L. Continuous Hinges: Re-locate the door and frame fire rating labels where they will remain visible so that the hinge does not cover the label once installed.
- M. Door Closers & Auto Operators: Mount closers/operators on room side of corridor doors, inside of exterior doors, and stair side of stairway doors from corridors. Mount closers/operators so they are not visible in corridors, lobbies and other public spaces unless approved by Architect.
- N. Overhead Stops/holders: Mount overhead stops/holders on room side of corridor doors, inside of exterior doors, and stair side of stairway doors.
- O. Power Supplies: Locate power supplies as indicated or, if not indicated, above accessible ceilings or in equipment room, or alternate location as directed by Architect.
- P. Thresholds: Set thresholds in full bed of sealant complying with requirements specified in Division 07 Section "Joint Sealants."
- Q. 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.
- R. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.

- S. Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.
- T. Door Bottoms and Sweeps: Apply to bottom of door, forming seal with threshold when door is closed.

3.03 ADJUSTING

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



3.04 CLEANING AND PROTECTION

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

3.05 DOOR HARDWARE SCHEDULE

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

Legend:





-  Link to catalog cut sheet
-  Electrified Opening

Hardware Group No. 01

For use on Door #(s):

A130 A133 B136

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	VANDL OFFICE LOCK	ND91 RHO (VERIFY KEYWAY)		626	SCH
1	EA	WALL STOP	WS406/407CCV		630	IVE
3	EA	SILENCER	SR64		GRY	IVE

Hardware Group No. 02

For use on Door #(s):

A117 A118 A119 A123 A124 A125
A127 A128

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	VANDL OFFICE LOCK	ND91 RHO (VERIFY KEYWAY)		626	SCH
1	EA	WALL STOP	WS406/407CCV		630	IVE
1	SET	GASKETING	870AA-S		AA	ZER
1	EA	DOOR BOTTOM	364AA		AA	ZER
1	EA	THRESHOLD	VERIFY SILL CONDITION		A	ZER

Hardware Group No. 03

For use on Door #(s):

A112 A122 A131 A138-A B123-B B125-A
B126-A B127

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	VANDL OFFICE LOCK W/ INSIDE INDICATOR	ND91P6D RHO IS-LOC		626	SCH
1	EA	SURFACE CLOSER	4040XP EDA TBWMS		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406/407CCV		630	IVE
3	EA	SILENCER	SR64		GRY	IVE

Hardware Group No. 04

For use on Door #(s):

A157 B103-B B103-C B105

Provide each SGL door(s) with the following:





QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 NRP		652	IVE
1	EA	VANDL CLASSROOM LOCK	ND94 RHO (VERIFY KEYWAY)		626	SCH
1	EA	SURFACE CLOSER	4040XP EDA TBWMS		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406/407CCV		630	IVE
3	EA	SILENCER	SR64		GRY	IVE

Hardware Group No. 05

For use on Door #(s):

A106 A107 A113 A114-A A114-B A115
A129 A143 A152 B101 B106 B109
B111 B112 B113 B114 B117

Provide each SGL door(s) with the following:







QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5		652	IVE
1	EA	VANDL OFFICE LOCK	ND91 RHO (VERIFY KEYWAY)		626	SCH
1	EA	WALL STOP	WS406/407CCV		630	IVE
3	EA	SILENCER	SR64		GRY	IVE

Hardware Group No. 06

For use on Door #(s):

A109 A121-A A121-B A134 A135 A137-A
A137-B A151 B116 B124 B129-B B130
B133







Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5		652	IVE
1	EA	VANDL STOREROOM LOCK	ND96 RHO (VERIFY KEYWAY)		626	SCH
1	EA	SURFACE CLOSER	4040XP TBWMS		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406/407CCV		630	IVE
3	EA	SILENCER	SR64		GRY	IVE

Hardware Group No. 07

For use on Door #(s):
B123-A

Provide each SGL door(s) with the following:






QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 NRP		652	IVE
1	EA	VANDL CLASSROOM LOCK	ND94 RHO (VERIFY KEYWAY)		626	SCH
1	EA	OH STOP	90S		689	GLY
1	EA	SURFACE CLOSER	4040XP TBWMS		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
3	EA	SILENCER	SR64		GRY	IVE

Hardware Group No. 08

For use on Door #(s):

A101 A120 A136 A145 B131 B132

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	PRIVACY LOCK W/ OUTSIDE INDICATOR	ND40S RHO OS-OCC		626	SCH
1	EA	WALL STOP	WS406/407CCV		630	IVE
1	EA	SET GASKETING	488SBK		BK	ZER
1	EA	COAT AND HAT HOOK	582		626	IVE

Hardware Group No. 09

For use on Door #(s):

A149 A150

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 NRP		652	IVE
1	EA	PUSH PLATE	8200 6" X 16"		630	IVE
1	EA	PULL PLATE	8303 10" 6" X 16"		630	IVE
1	EA	SURFACE CLOSER	4040XP EDA TBWMS		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406/407CCV		630	IVE
3	EA	SILENCER	SR64		GRY	IVE

Hardware Group No. 10

For use on Door #(s):

A132-A A132-B A140-A B128-A B128-B

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 NRP		652	IVE
1	EA	POWER TRANSFER	EPT10 CON		⚡ 689	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-98-L-NL-06-CON 24 VDC		⚡ 626	VON
1	EA	RIM CYLINDER	AS REQUIRED		626	SCH
1	EA	SURFACE CLOSER	4040XP EDA TBWMS		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406/407CCV		630	IVE
3	EA	SILENCER	SR64		GRY	IVE
1	EA	WIRE HARNESS	CON-XX AS REQUIRED		⚡	SCH
1	EA	CARD READER	BY SECURITY CONTRACTOR		⚡ BLK	SCE
1	EA	DOOR CONTACT	7764 / 679-05 AS REQUIRED		⚡ 628	SCE
1	EA	POWER / LOW VOLTAGE POWER	BY SECURITY CONTRACTOR		⚡	VON

DOOR IS NORMALLY LOCKED. RESTRICTING ENTRY.
AUTHORIZED CREDENTIAL AT OUTSIDE CARD READER MOMENTARILY RETRACTS LATCH TO ALLOW ENTRY OR BY KEY.
INSIDE TOUCHBAR ALWAYS ALLOWS EGRESS.

Hardware Group No. 11

For use on Door #(s):
A139

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 NRP		652	IVE
1	EA	POWER TRANSFER	EPT10 CON		⚡ 689	VON
1	EA	VANDL EU STOREROOM	ND96EU RHO RX CON 12V/24V DC (VERIFY KEYWAY)		⚡ 626	SCH
1	EA	SURFACE CLOSER	4040XP EDA TBWMS		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406/407CCV		630	IVE
3	EA	SILENCER	SR64		GRY	IVE
2	EA	WIRE HARNESS	CON-XX AS REQUIRED		⚡	SCH
1	EA	CARD READER	BY SECURITY CONTRACTOR		⚡ BLK	SCE
1	EA	DOOR CONTACT	7764 / 679-05 AS REQUIRED		⚡ 628	SCE
1	EA	POWER / LOW VOLTAGE POWER	BY SECURITY CONTRACTOR		⚡	VON

DOOR IS NORMALLY LOCKED. RESTRICTING ENTRY.
AUTHORIZED CREDENTIAL AT OUTSIDE CARD READER MOMENTARILY UNLOCKS LEVER TO
ALLOW ENTRY OR BY KEY.
INSIDE LEVER ALWAYS ALLOWS EGRESS.

Hardware Group No. 12

For use on Door #(s):

A146 A147 B134

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 NRP		652	IVE
1	EA	POWER TRANSFER	EPT10 CON		⚡ 689	VON
1	EA	VANDL EU STOREROOM	ND96EU RHO RX CON 12V/24V DC (VERIFY KEYWAY)		⚡ 626	SCH
1	EA	SURFACE CLOSER	4040XP TBWMS		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406/407CCV		630	IVE
3	EA	SILENCER	SR64		GRY	IVE
2	EA	WIRE HARNESS	CON-XX AS REQUIRED		⚡	SCH
1	EA	CARD READER	BY SECURITY CONTRACTOR		⚡ BLK	SCE
1	EA	DOOR CONTACT	7764 / 679-05 AS REQUIRED		⚡ 628	SCE
1	EA	POWER / LOW VOLTAGE POWER	BY SECURITY CONTRACTOR		⚡	VON

DOOR IS NORMALLY LOCKED. RESTRICTING ENTRY.
AUTHORIZED CREDENTIAL AT OUTSIDE CARD READER MOMENTARILY UNLOCKS LEVER TO
ALLOW ENTRY OR BY KEY.
INSIDE LEVER ALWAYS ALLOWS EGRESS.

Hardware Group No. 13

For use on Door #(s):

A140-B B135-A B137

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	CONT. HINGE	157XY		628	IVE
1	EA	POWER TRANSFER	EPT10 CON	⚡	689	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-XP98-NL-CON 24 VDC	⚡	626	VON
1	EA	RIM CYLINDER	AS REQUIRED		626	SCH
1	EA	SURFACE CLOSER	4040XP SCUSH TBWMS		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	VERIFY SILL CONDITION		A	ZER
2	EA	WIRE HARNESS	CON-XX AS REQUIRED	⚡		SCH
1	EA	CARD READER	BY SECURITY CONTRACTOR	⚡	BLK	SCE
1	EA	DOOR CONTACT	7764 / 679-05 AS REQUIRED	⚡	628	SCE
1	EA	POWER / LOW VOLTAGE POWER	BY SECURITY CONTRACTOR	⚡		VON

DOOR IS NORMALLY LOCKED. RESTRICTING ENTRY.
AUTHORIZED CREDENTIAL AT OUTSIDE CARD READER MOMENTARILY RETRACTS LATCH TO
ALLOW ENTRY OR BY KEY.
INSIDE TOUCHBAR ALWAYS ALLOWS EGRESS.

Hardware Group No. 14

For use on Door #(s):

A103

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 NRP		652	IVE
1	EA	VANDL OFFICE LOCK	ND91 RHO (VERIFY KEYWAY)		626	SCH
1	EA	SURFACE CLOSER	4040XP SCUSH TBWMS		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
3	EA	SILENCER	SR64		GRY	IVE

Hardware Group No. 15

For use on Door #(s):
A104

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5		652	IVE
1	EA	ELEC CLASSROOM LOCK	AD-200-CY-70-KP-RHO-P6-RH		626	SCE
			4AA BATTERY			
1	EA	OH STOP	90S		689	GLY
1	EA	SURFACE CLOSER	4040XP TBWMS		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
3	EA	SILENCER	SR64		GRY	IVE

Hardware Group No. 16

For use on Door #(s):
A141

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 NRP		652	IVE
1	EA	VANDL OFFICE LOCK	ND91 RHO (VERIFY KEYWAY)		626	SCH
1	EA	SURFACE CLOSER	4040XP EDA TBWMS		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406/407CCV		630	IVE
3	EA	SILENCER	SR64		GRY	IVE

Hardware Group No. 17

For use on Door #(s):
A144








Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5		652	IVE
1	EA	VANDL STOREROOM LOCK	ND96 RHO (VERIFY KEYWAY)		626	SCH
1	EA	OH STOP	90S		689	GLY
1	EA	SURFACE CLOSER	4040XP TBWMS		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
3	EA	SILENCER	SR64		GRY	IVE

Hardware Group No. 18

For use on Door #(s):
A142

Provide each SGL door(s) with the following:







QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 NRP		652	IVE
1	EA	PANIC HARDWARE	98-L-NL-06		626	VON
1	EA	RIM CYLINDER	AS REQUIRED		626	SCH
1	EA	SURFACE CLOSER	4040XP EDA TBWMS		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406/407CCV		630	IVE
3	EA	SILENCER	SR64		GRY	IVE

Hardware Group No. 19 – Not Used

Hardware Group No. 20

For use on Door #(s):
A110-A A111 A116 A126 A148 ~~B102~~






Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 NRP		652	IVE
1	EA	VANDL STOREROOM LOCK	ND96 RHO (VERIFY KEYWAY)		626	SCH
1	EA	SURFACE CLOSER	4040XP EDA TBWMS		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406/407CCV		630	IVE
3	EA	SILENCER	SR64		GRY	IVE

Hardware Group No. 21

For use on Door #(s):
B129-A

Provide each SGL door(s) with the following:





QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 NRP		652	IVE
1	EA	INSTITUTION LOCK	ND82 RHO(VERIFY KEYWAY)		626	SCH
1	EA	SURFACE CLOSER	4040XP HW/PA TBWMS		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
3	EA	SILENCER	SR64		GRY	IVE

Hardware Group No. 22

For use on Door #(s):

B110 B115

Provide each SGL door(s) with the following:








QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5		652	IVE
1	EA	VANDL STOREROOM LOCK	ND96 RHO (VERIFY KEYWAY)		626	SCH
1	EA	WALL STOP	WS406/407CCV		630	IVE
3	EA	SILENCER	SR64		GRY	IVE

Hardware Group No. 23

For use on Door #(s):

B120 B121

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
6	EA	HINGE	5BB1HW 4.5 X 4.5 NRP		652	IVE
2	EA	MANUAL FLUSH BOLT	FB358 / FB458 AS REQ'D BY DOOR MATERIAL		626	IVE
1	EA	DUST PROOF STRIKE	DP1/DP2 AS REQUIRED		626	IVE
1	EA	VANDL STOREROOM LOCK	ND96 RHO (VERIFY KEYWAY)		626	SCH
2	EA	OH STOP	90S		689	GLY
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS		630	IVE
2	EA	SILENCER	SR64		GRY	IVE

Hardware Group No. 24

For use on Door #(s):
B122

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
6	EA	HINGE	5BB1HW 4.5 X 4.5 NRP		652	IVE
2	EA	POWER TRANSFER	EPT10 CON	⚡	689	VON
1	EA	REMOVABLE MULLION	KR4954 STAB		689	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-98-L-DT-06-CON 24 VDC	⚡	626	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-98-L-NL-06-CON 24 VDC	⚡	626	VON
1	EA	MULLION STABILIZER	154		SP28	VON
1	EA	MORTISE CYLINDER	AS REQUIRED		626	SCH
1	EA	RIM CYLINDER	AS REQUIRED		626	SCH
2	EA	SURFACE CLOSER	4040XP EDA TBWMS		689	LCN
2	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
2	EA	WALL STOP	WS406/407CCV		630	IVE
2	EA	MULLION SEAL	8780NBK PSA		BK	ZER
2	EA	SILENCER	SR64		GRY	IVE
4	EA	WIRE HARNESS	CON-XX AS REQUIRED		⚡	SCH
2	EA	DOOR CONTACT	7764 / 679-05 AS REQUIRED	⚡	628	SCE
1	EA	POWER / LOW VOLTAGE POWER	BY SECURITY CONTRACTOR	⚡		VON

DOOR IS NORMALLY LOCKED. RESTRICTING ENTRY.
ACCESS CONTROL SYSTEM MAY HAVE LATCH RETRACTED DURING OPEN HOURS TO ALLOW FREE PUBLIC ENTRY.
INSIDE TOUCHBAR ALWAYS ALLOWS EGRESS.

Hardware Group No. 25 – Not Used

Hardware Group No. 26

For use on Door #(s):
B135-E

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
6	EA	HINGE	5BB1HW 4.5 X 4.5 NRP		652	IVE
2	EA	POWER TRANSFER	EPT10 CON	⚡	689	VON
1	EA	REMOVABLE MULLION	KR4954 STAB		689	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-98-L-DT-06-CON 24 VDC	⚡	626	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-98-L-NL-06-CON 24 VDC	⚡	626	VON
1	EA	MULLION STABILIZER	154		SP28	VON
1	EA	MORTISE CYLINDER	AS REQUIRED		626	SCH
1	EA	RIM CYLINDER	AS REQUIRED		626	SCH
2	EA	SURFACE CLOSER	4040XP EDA TBWMS		689	LCN
2	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
2	EA	WALL STOP	WS406/407CCV		630	IVE
2	EA	MULLION SEAL	8780NBK PSA		BK	ZER
2	EA	SILENCER	SR64		GRY	IVE
4	EA	WIRE HARNESS	CON-XX AS REQUIRED	⚡		SCH
1	EA	CARD READER	BY SECURITY CONTRACTOR	⚡	BLK	SCE
2	EA	DOOR CONTACT	7764 / 679-05 AS REQUIRED	⚡	628	SCE
1	EA	POWER / LOW VOLTAGE POWER	BY SECURITY CONTRACTOR	⚡		VON

DOOR IS NORMALLY LOCKED. RESTRICTING ENTRY.
AUTHORIZED CREDENTIAL AT OUTSIDE CARD READER MOMENTARILY RETRACTS LATCH TO ALLOW ENTRY OR BY KEY.
INSIDE TOUCHBAR ALWAYS ALLOWS EGRESS.

Hardware Group No. 27

For use on Door #(s):
B125-B B126-B

Provide each SL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	MORTISE CYLINDER	AS REQUIRED		626	SCH
1			HARDWARE BY MANUFACTURER			

Hardware Group No. AL01

For use on Door #(s):

~~A105~~ A100 A161

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	CONT. HINGE	157XY		628	IVE
1	EA	POWER TRANSFER	EPT10 CON		⚡ 689	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-XP98-NL-OP-110MD- CON 24 VDC		⚡ 626	VON
1	EA	RIM CYLINDER	AS REQUIRED		626	SCH
1	EA	OFFSET PULL	8190HD 10"		630	IVE
1	EA	OH STOP	100S ADJ		630	GLY
1	EA	SURFACE CLOSER	4040XP EDA TBWMS		689	LCN
1	SET	SEALS	BY DOOR / FRAME MANUFACTURER			
1	EA	DOOR SWEEP	39A		A	ZER
1	EA	THRESHOLD	VERIFY SILL CONDITION		A	ZER
1	EA	WIRE HARNESS	CON-XX AS REQUIRED		⚡	SCH
1	EA	CARD READER	BY SECURITY CONTRACTOR		⚡ BLK	SCE
1	EA	DOOR CONTACT	7764 / 679-05 AS REQUIRED		⚡ 628	SCE
1	EA	POWER / LOW VOLTAGE POWER	BY SECURITY CONTRACTOR		⚡	VON

DOOR IS NORMALLY LOCKED. RESTRICTING ENTRY.
AUTHORIZED CREDENTIAL AT OUTSIDE CARD READER MOMENTARILY RETRACTS LATCH TO
ALLOW ENTRY OR BY KEY.
INSIDE TOUCHBAR ALWAYS ALLOWS EGRESS.

Hardware Group No. AL02

For use on Door #(s):

A110-B A154

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	CONT. HINGE	157XY		628	IVE
1	EA	POWER TRANSFER	EPT10 CON		⚡ 689	VON
1	EA	VANDL EU STOREROOM	ND96EU RHO RX CON 12V/24V DC (VERIFY KEYWAY)		⚡ 626	SCH
1	EA	LOCK GUARD	LG12		630	IVE
1	EA	OH STOP	100S ADJ		630	GLY
1	EA	SURFACE CLOSER	4040XP EDA TBWMS		689	LCN
1	SET	SEALS	BY DOOR / FRAME MANUFACTURER			
1	EA	DOOR SWEEP	39A		A	ZER
1	EA	THRESHOLD	VERIFY SILL CONDITION		A	ZER
2	EA	WIRE HARNESS	CON-XX AS REQUIRED		⚡	SCH
1	EA	CARD READER	BY SECURITY CONTRACTOR		⚡ BLK	SCE
1	EA	DOOR CONTACT	7764 / 679-05 AS REQUIRED		⚡ 628	SCE
1	EA	POWER / LOW VOLTAGE POWER	BY SECURITY CONTRACTOR		⚡	VON

DOOR IS NORMALLY LOCKED. RESTRICTING ENTRY.
AUTHORIZED CREDENTIAL AT OUTSIDE CARD READER MOMENTARILY UNLOCKS LEVER TO
ALLOW ENTRY OR BY KEY.
INSIDE LEVER ALWAYS ALLOWS EGRESS.

Hardware Group No. AL03

For use on Door #(s):
B103-A

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	CONT. HINGE	157XY		628	IVE
1	EA	POWER TRANSFER	EPT10 CON		⚡ 689	VON
1	EA	VANDL EU STOREROOM	ND96EU RHO RX CON 12V/24V DC (VERIFY KEYWAY)		⚡ 626	SCH
1	EA	OH STOP	100S ADJ		630	GLY
1	EA	SURFACE CLOSER	4040XP EDA TBWMS		689	LCN
1	SET	SEALS	BY DOOR / FRAME MANUFACTURER			
2	EA	WIRE HARNESS	CON-XX AS REQUIRED		⚡	SCH
1	EA	CARD READER	BY SECURITY CONTRACTOR		⚡ BLK	SCE
1	EA	DOOR CONTACT	7764 / 679-05 AS REQUIRED		⚡ 628	SCE
1	EA	POWER / LOW VOLTAGE POWER	BY SECURITY CONTRACTOR		⚡	VON

DOOR IS NORMALLY LOCKED. RESTRICTING ENTRY.
AUTHORIZED CREDENTIAL AT OUTSIDE CARD READER MOMENTARILY UNLOCKS LEVER TO
ALLOW ENTRY OR BY KEY.
INSIDE LEVER ALWAYS ALLOWS EGRESS.

Hardware Group No. AL04

For use on Door #(s):
A108 A155 B118

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	CONT. HINGE	157XY		628	IVE
1	EA	VANDL OFFICE LOCK	ND91 RHO (VERIFY KEYWAY)		626	SCH
1	EA	WALL STOP	WS406/407CCV		630	IVE
1	SET	SEALS	BY DOOR / FRAME MANUFACTURER			

Hardware Group No. AL05

For use on Door #(s):

~~A100~~ B100-B

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
2	EA	CONT. HINGE	157XY		628	IVE
2	EA	POWER TRANSFER	EPT10 CON		⚡ 689	VON
1	EA	REMOVABLE MULLION	KR4954 STAB		689	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-XP98-EO-CON 24 VDC		⚡ 626	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-XP98-NL-OP-110MD-CON 24 VDC		⚡ 626	VON
1	EA	MULLION STABILIZER	154		SP28	VON
1	EA	MORTISE CYLINDER	AS REQUIRED		626	SCH
1	EA	RIM CYLINDER	AS REQUIRED		626	SCH
2	EA	OFFSET PULL	8190HD 10"		630	IVE
2	EA	OH STOP	100S ADJ		630	GLY
2	EA	SURFACE CLOSER	4040XP EDA TBWMS		689	LCN
2	EA	MULLION SEAL	8780NBK PSA		BK	ZER
1	SET	SEALS	BY DOOR / FRAME MANUFACTURER			
2	EA	DOOR SWEEP	39A		A	ZER
1	EA	THRESHOLD	VERIFY SILL CONDITION		A	ZER
4	EA	WIRE HARNESS	CON-XX AS REQUIRED		⚡	SCH
1	EA	CARD READER	BY SECURITY CONTRACTOR		⚡ BLK	SCE
2	EA	DOOR CONTACT	7764 / 679-05 AS REQUIRED		⚡ 628	SCE
1	EA	POWER / LOW VOLTAGE POWER	BY SECURITY CONTRACTOR		⚡	VON

DOOR IS NORMALLY LOCKED. RESTRICTING ENTRY.
AUTHORIZED CREDENTIAL AT OUTSIDE CARD READER MOMENTARILY RETRACTS LATCH TO ALLOW ENTRY OR BY KEY.
INSIDE TOUCHBAR ALWAYS ALLOWS EGRESS.

Hardware Group No. AL06

For use on Door #(s):
B119-A

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
2	EA	CONT. HINGE	157XY		628	IVE
2	EA	POWER TRANSFER	EPT10 CON	⚡	689	VON
1	EA	REMOVABLE MULLION	KR4954 STAB		689	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-98-EO-CON 24 VDC	⚡	626	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-98-NL-OP-110MD-CON 24 VDC	⚡	626	VON
1	EA	MULLION STABILIZER	154		SP28	VON
1	EA	MORTISE CYLINDER	AS REQUIRED		626	SCH
1	EA	RIM CYLINDER	AS REQUIRED		626	SCH
2	EA	OFFSET PULL	8190HD 10"		630	IVE
2	EA	OH STOP	100S ADJ		630	GLY
2	EA	SURFACE CLOSER	4040XP EDA TBWMS		689	LCN
2	EA	MULLION SEAL	8780NBK PSA		BK	ZER
1	SET	SEALS	BY DOOR / FRAME MANUFACTURER			
4	EA	WIRE HARNESS	CON-XX AS REQUIRED		⚡	SCH
1	EA	CARD READER	BY SECURITY CONTRACTOR	⚡	BLK	SCE
2	EA	DOOR CONTACT	7764 / 679-05 AS REQUIRED	⚡	628	SCE
1	EA	POWER / LOW VOLTAGE POWER	BY SECURITY CONTRACTOR	⚡		VON

DOOR IS NORMALLY LOCKED. RESTRICTING ENTRY.
AUTHORIZED CREDENTIAL AT OUTSIDE CARD READER MOMENTARILY RETRACTS LATCH TO
ALLOW ENTRY OR BY KEY.
INSIDE TOUCHBAR ALWAYS ALLOWS EGRESS.

Hardware Group No. AL07

For use on Door #(s):
B100-A

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
2	EA	CONT. HINGE	157XY		628	IVE
2	EA	POWER TRANSFER	EPT10 CON		⚡ 689	VON
1	EA	REMOVABLE MULLION	KR4954 STAB		689	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-XP98-EO-CON 24 VDC		⚡ 626	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-XP98-NL-OP-110MD- CON 24 VDC		⚡ 626	VON
1	EA	MULLION STABILIZER	154		SP28	VON
1	EA	MORTISE CYLINDER	AS REQUIRED		626	SCH
1	EA	RIM CYLINDER	AS REQUIRED		626	SCH
2	EA	OFFSET PULL	8190HD 10"		630	IVE
1	EA	OH STOP	100S ADJ		630	GLY
1	EA	OH STOP	100SE ADJ		630	GLY
1	EA	SURFACE CLOSER	4040XP EDA TBWMS		689	LCN
1	EA	SURF. AUTO OPERATOR	4642 WMS 120 VAC		⚡ 689	LCN
1	EA	ACTUATOR PKG	8310-3857T		630	LCN
1	EA	WEATHER RING	8310-801			LCN
2	EA	MULLION SEAL	8780NBK PSA		BK	ZER
1	SET	SEALS	BY DOOR / FRAME MANUFACTURER			
2	EA	DOOR SWEEP	39A		A	ZER
1	EA	THRESHOLD	VERIFY SILL CONDITION		A	ZER
4	EA	WIRE HARNESS	CON-XX AS REQUIRED		⚡	SCH
1	EA	CARD READER	BY SECURITY CONTRACTOR		⚡ BLK	SCE
2	EA	DOOR CONTACT	7764 / 679-05 AS REQUIRED		⚡ 628	SCE
1	EA	POWER / LOW VOLTAGE POWER	BY SECURITY CONTRACTOR		⚡	VON

DOOR IS NORMALLY LOCKED. RESTRICTING ENTRY.
AUTHORIZED CREDENTIAL AT OUTSIDE CARD READER MOMENTARILY RETRACTS LATCH TO
ALLOW ENTRY OR BY KEY.
AUTHORIZED CREDENTIAL AT OUTSIDE CARD READER TO ALLOW ADA PUSH BUTTON TO
ACTIVATE AUTO OPERATOR AND OPEN DOOR INSIDE ADA PUSH BUTTON ALWAYS ACTIVE.
INSIDE TOUCHBAR ALWAYS ALLOWS EGRESS.

Hardware Group No. AL25

For use on Door #(s):

B119-B B119-C B119-E

Provide each PR door(s) with the following:

QTY	EA	DESCRIPTION	CATALOG NUMBER		FINISH	MFR
2	EA	CONT. HINGE	157XY	☰	628	IVE
1	EA	REMOVABLE MULLION	KR4954 STAB	☰	689	VON
2	EA	PANIC HARDWARE	LD-98-L-2SI-06	☰	626	VON
1	EA	MULLION STABILIZER	154		SP28	VON
3	EA	MORTISE CYLINDER	AS REQUIRED		626	SCH
2	EA	RIM CYLINDER	AS REQUIRED	☰	626	SCH
2	EA	SURFACE CLOSER	4040XP EDA TBWMS	☰	689	LCN
2	EA	WALL STOP	WS406/407CCV	☰	630	IVE
2	EA	MULLION SEAL	8780NBK PSA	☰	BK	ZER
1	SET	SEALS	BY DOOR / FRAME MANUFACTURER			

Hardware Group No. OH01

For use on Door #(s):

B119-F B135-B B135-C B135-D

Provide each RU door(s) with the following:

QTY	EA	DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1			HARDWARE BY MANUFACTURER		

END OF SECTION

SECTION 113013 - RESIDENTIAL APPLIANCES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Cooking appliances.
 - 2. Refrigeration appliances.
 - 3. Cleaning appliances.

1.2 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.3 ACTION SUBMITTALS

- A. Product Data:
 - 1. Cooking appliances.
 - 2. Refrigeration appliances.
 - 3. Cleaning appliances.
- B. Product Data Submittals: For each product.
 - 1. Include installation details, material descriptions, dimensions of individual components, and finishes for each appliance.
 - 2. Include rated capacities, operating characteristics, electrical characteristics, and furnished accessories.
- C. Samples: For each exposed product and for each color and texture specified, in manufacturer's standard size.
- D. Product Schedule: For appliances. Use same designations indicated on Drawings.

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For manufacturer.
- B. Product Certificates: For each type of appliance.
- C. Sample Warranties: For manufacturers' special warranties.

1.5 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For each residential appliance to include in operation and maintenance manuals.

1.6 WARRANTY

- A. General Warranty: Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.
- B. Special Warranties: Manufacturer agrees to repair or replace residential appliances or components that fail in materials or workmanship within specified warranty period.

~~1. Electric Cooktop and Range: Limited warranty, including parts and labor for first year and parts thereafter, <Insert description> for on-site service on surface-burner elements.~~

~~a. Warranty Period: Five years from date of Substantial Completion.~~

2. Microwave Oven: Limited warranty, including parts and labor for first year and parts thereafter, for on-site service on the magnetron tube.

a. Warranty Period: Five years from date of Substantial Completion.

3. Refrigerator/Freezer, Freezer, and Icemaker, Sealed System: Limited warranty, including parts and labor for first year and parts thereafter, for on-site service on the product.

a. Warranty Period for Sealed Refrigeration System: Five years from date of Substantial Completion.

b. Warranty Period for Other Components: Five years from date of Substantial Completion.

4. Dishwasher: Limited warranty, including parts and labor for first year and parts thereafter, for on-site service on the product.

a. Warranty Period for Deterioration of Tub and Metal Door Liner: 10 years from date of Substantial Completion.

b. Warranty Period for Other Components: Two years from date of Substantial Completion.

5. Clothes Washer and Dryer: Full warranty, including parts and labor, for on-site service on the product.

a. Warranty Period: Five years from date of Substantial Completion.

6. Ice Maker: Full warranty, including parts and labor:

- a. Warranty Period: Three years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 SOURCE LIMITATIONS

- A. Obtain residential appliances from single source.

2.2 PERFORMANCE REQUIREMENTS

- A. Electrical Appliances: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- B. Accessibility: Where residential appliances are indicated to comply with accessibility requirements, comply with applicable provisions in the DOJ's 2010 ADA Standards for Accessible Design, and ICC A117.1.

2.3 COOKING APPLIANCES

- ~~A. Electric Range: Freestanding range with one oven(s) and complying with AHAM ER-1.~~

- ~~1. Basis of Design Product: Subject to compliance with requirements, provide Whirlpool Corporation; Model No. WFE550S0HZ or comparable product by one of the following:~~

- ~~a. GE Appliances; Haier Group~~
- ~~b. Maytag; Whirlpool Corporation~~

- ~~2. Width: 30 inches.~~

- ~~3. Electric Burner Elements: Four.~~

- ~~a. Coil Type: Two 6-inch 1200 W, one 9-inch 2500 W and one 6/9-inch 3000 W.~~

- ~~b. Controls: Digital panel controls, located on splash panel at rear of rangetop.~~

- ~~4. Oven Features:~~

- ~~a. Capacity: 5.3 cu. ft.~~
- ~~b. Operation: convection.~~
- ~~c. Oven Door(s): Counterbalanced, removable, with observation window, and towel-bar type handle.~~
- ~~d. Electric Power Rating:~~

- ~~1) Oven(s): Manufacturer's standard.~~
- ~~2) Broiler: Manufacturer's standard.~~

- ~~e. Controls: Digital panel controls and timer display, located on splash panel~~

~~at rear of rangetop.~~

- ~~5. Anti-Tip Device: Manufacturer's standard.~~
- ~~6. Electric Power Supply: 240 V, 60 Hz, 1 phase, 30 A.~~
- ~~7. Material: Stainless steel with black ceramic-glass cooktop.~~

B. Microwave Oven:

1. Basis-of-Design Product: Subject to compliance with requirements, provide Whirlpool Corporation; Model No. WMCS7022PZ or comparable product by one of the following:
 - a. GE Appliances; Haier Group
 - b. Maytag; Whirlpool Corporation
2. Mounting: Countertop or wall cabinet.
3. Type: Conventional.
4. Dimensions:
 - a. Width: 21-3/4 inches.
 - b. Depth: 18-5/16 inches.
 - c. Height: 12-3/4 inches.
5. Capacity: 1.6 cu. ft.
6. Oven Door: Door with observation window and pushbutton latch release.
7. Microwave Power Rating: 1200 W.
8. Electric Power Supply: 120 V, 60 Hz, 1 phase, 15 A.
9. Controls: Digital panel controls and timer display.
10. Other Features: Turntable, lock-out feature, and sensor cooking.
11. Material: Stainless steel.

2.4 REFRIGERATION APPLIANCES

A. Refrigerator/Freezer: Two-door refrigerator/freezer with freezer on top and complying with AHAM HRF-1.

1. Basis-of-Design Product: Subject to compliance with requirements, provide Whirlpool Corporation; Model No. WRT541SZDZ or comparable product by one of the following:
 - a. GE Appliances; Haier Group
 - b. Maytag; Whirlpool Corporation
2. Type: Freestanding.
3. Dimensions:
 - a. Width: 33 inches.
 - b. Depth: 34 inches.
 - c. Height: 66-1/4 inches.

4. Storage Capacity:
 - a. Refrigeration Compartment Volume: 15 cu. ft.
 - b. Freezer Volume: 6 cu. ft.
 - c. Shelves: Three adjustable glass shelves.
 5. Refrigerator Features:
 - a. Interior light in refrigeration compartment.
 - b. Compartment Storage: Vegetable crisper, and meat compartment.
 - c. Door Storage: Modular compartments.
 - d. Temperature-controlled meat/deli bin.
 - e. Fingerprint resistant.
 6. Freezer Features: One freezer compartment with door.
 - a. Automatic defrost.
 - b. Interior light in freezer compartment.
 - c. Automatic icemaker and storage bin.
 - d. "EZ connect Icemaker Kit."
 7. Appliance Color/Finish: Stainless steel.
- B. Undercounter Refrigerator: Two-door refrigerator/freezer with freezer on top and complying with AHAM HRF-1.
1. Basis-of-Design Product: Subject to compliance with requirements, provide Whirlpool Corporation; Model No. WUR35X24HZ or comparable product by one of the following:
 - a. GE Appliances; Haier Group
 - b. Maytag; Whirlpool Corporation
 2. Dimensions:
 - a. Width: 24 inches.
 - b. Depth: 26 inches.
 - c. Height: 35 inches.
 3. Storage Capacity:
 - a. Refrigeration Compartment Volume: 5.1 cu. ft.
 - b. Shelves: Three glass shelves, one fixed, two adjustable.
 4. Refrigerator Features:
 - a. Automatic defrost.
 - b. Temperature sensor.
 - c. Door Storage: Two removable bins.
 - d. Fingerprint resistant.

5. Appliance Color/Finish: Stainless steel.

C. Icemaker:

1. Basis-of-Design Product: Subject to compliance with requirements, provide Scotsman HID525A-1 with HST21-A Stand with 6-inch adjustable legs. or comparable product by one of the following:

a. Manitowoc Ice.

2. Type: Freestanding.

3. Dimensions:

a. Width: 24-1/4 inches.

b. Depth: 24-1/2 inches.

c. Height: 35 inches.

4. Ice Capacity:

a. Production: 500 lb per day.

5. Features:

a. Self-cleaning cycle.

6. Appliance Color/Finish: Stainless steel.

2.5 CLEANING APPLIANCES

A. Dishwasher: Complying with AHAM DW-1.

1. Basis-of-Design Product: Subject to compliance with requirements, provide Whirlpool Corporation; Model No. WDF330PAHS or comparable product by one of the following:

a. GE Appliances; Haier Group

b. Maytag; Whirlpool Corporation

2. Type: Built-in undercounter.

3. Dimensions:

a. Width: 24 inches.

b. Depth: 24-1/2 inches.

c. Height: 34-1/2 inches.

4. Sound Level: Maximum 55 dB.

5. Tub and Door Liner: Manufacturer's standard with sealed detergent and automatic rinsing-aid dispensers.

6. Controls: Push button controls with three wash cycles and hot-air and heat-off drying cycle options.

7. Features:
 - a. Detergent dispenser.
 - b. High temperature wash system.
 - c. Delay-wash option.
 - d. Digital display panel.
 8. Appliance Color/Finish: Stainless steel.
- B. Clothes Washer: Complying with AHAM HLW-1.
1. Basis-of-Design Product: Subject to compliance with requirements, provide Speed Queen; Model No. TC5003WN or comparable product by one of the following:
 - a. GE Appliances; Haier Group
 - b. Maytag; Whirlpool Corporation
 - c. Whirlpool Corporation
 2. Type: Freestanding, top-loading unit.
 3. Dimensions:
 - a. Width: 25-5/8 inches.
 - b. Depth: 28 inches.
 - c. Height: 42-3/4 inches.
 4. Drum: Perforated stainless steel.
 - a. Capacity: 3.2 cu. ft.
 5. Controls: Rotary-dial controls for water-fill levels, wash/rinse water temperatures, load size, and variable-speed and fabric selectors.
 - a. Wash Cycles: Six wash cycles, including regular, delicate, and permanent press.
 - b. Wash Temperatures: Four settings.
 - c. Speed Combinations: Two.
 6. Electrical Power: 120 V, 60 Hz, 1 phase, 15 A.
 7. Motor: Manufacturer's standard with built-in overload protector.
 8. Features:
 - a. Self-cleaning lint filter.
 - b. Unbalanced-load compensator.
 - c. Self-leveling legs.
 - d. Spin-cycle safety switch.
 - e. End-of-cycle signal.
 - f. Extra-rinse option.
 - g. Water levels automatically set.
 9. Appliance Finish: Enamel.

- a. Color: White.
- C. Clothes Dryer: Complying with AHAM HLD-1.
1. Basis-of-Design Product: Subject to compliance with requirements, provide Speed Queen; **Model No. DC5003WE** or comparable product by one of the following:
 - a. GE Appliances; Haier Group
 - b. Maytag; Whirlpool Corporation
 - c. Whirlpool Corporation
 2. Type: Freestanding, frontloading, **electric unit.**
 3. Dimensions:
 - a. Width: 27 inches.
 - b. Depth: 28 inches.
 - c. Height: 42-3/4 inches.
 4. Drum: Manufacturer's standard.
 - a. Capacity: 7.0 cu. ft.
 5. Controls: Rotary-dial controls for drying cycle, temperatures, and fabric selectors.
 6. **Electric-Dryer Power: 240 V, 60 Hz, 1 phase, 30 A.**
 7. Features:
 - a. Removable lint filter.
 - b. End-of-cycle signal.
 - c. Interior drum light.
 - d. Self-leveling legs.
 - e. Antibacterial cycle.
 8. Appliance Finish: Enamel.
 - a. Color: White.

2.6 ACCESSORIES

- A. Provide hoses, power cords and other accessories required to connect the appliances to building utilities.

2.7 GENERAL FINISH REQUIREMENTS

- A. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- B. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the

range of approved Samples and are assembled or installed to minimize contrast.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, power connections, and other conditions affecting installation and performance of residential appliances.
- B. Examine roughing-in for piping systems to verify actual locations of piping connections before appliance installation.
- C. Prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

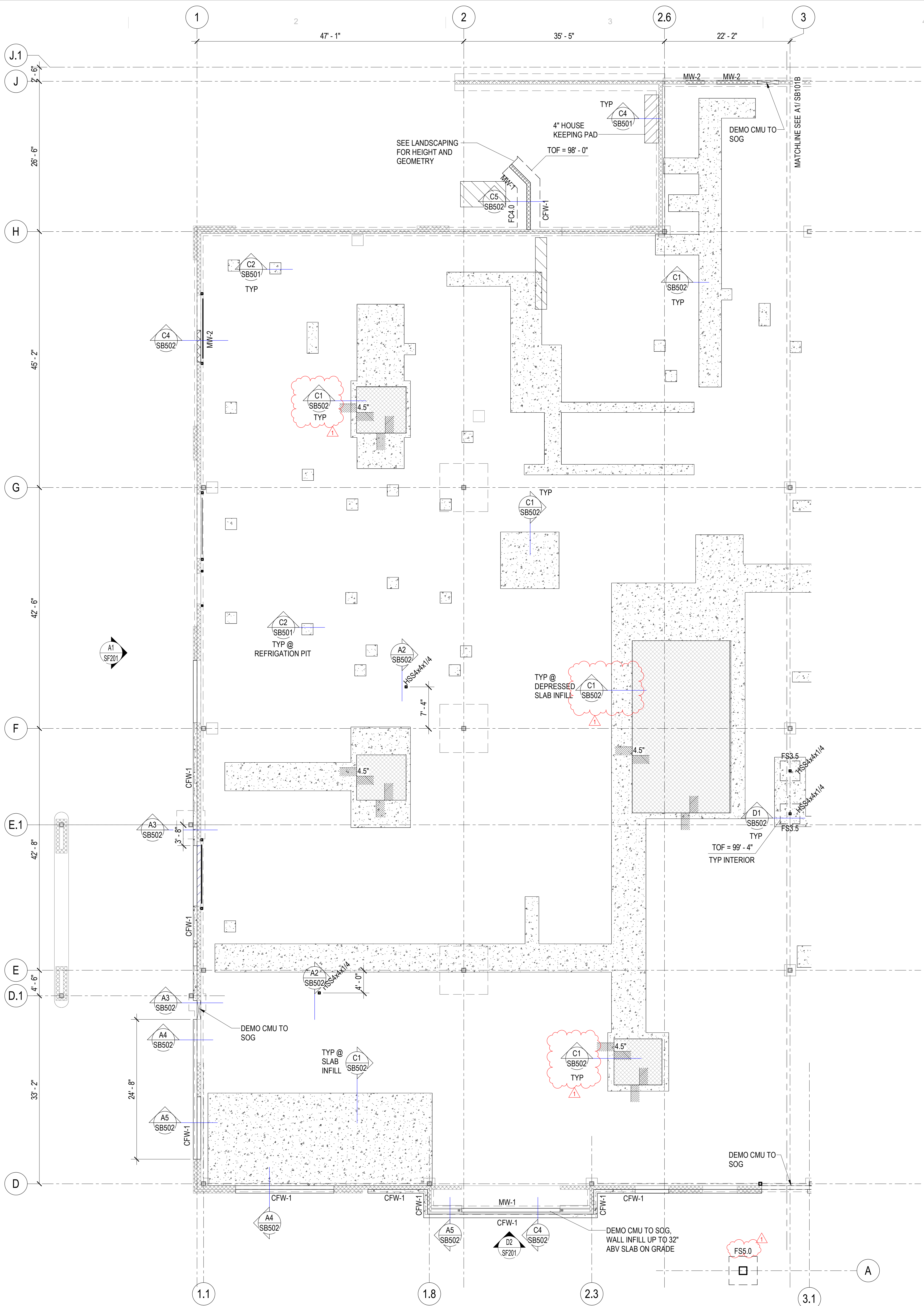
- A. Install appliances according to manufacturer's written instructions.
- B. Built-in Equipment: Securely anchor units to supporting cabinets or countertops with concealed fasteners. Verify that clearances are adequate for proper functioning and that rough openings are completely concealed.
- C. Freestanding Equipment: Place units in final locations after finishes have been completed in each area. Verify that clearances are adequate to properly operate equipment.
- D. Range Anti-Tip Device: Install at each range according to manufacturer's written instructions.

3.3 FIELD QUALITY CONTROL

- A. Perform the following tests and inspections:
 - 1. Perform visual, mechanical, and electrical inspection and testing for each appliance according to manufacturers' written recommendations. Certify compliance with each manufacturer's appliance-performance parameters.
 - 2. Leak Test: After installation, test for leaks. Repair leaks and retest until no leaks exist.
 - 3. Operational Test: After installation, start units to confirm proper operation.
 - 4. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and components.
- B. An appliance will be considered defective if it does not pass tests and inspections.

- C. Prepare test and inspection reports.

END OF SECTION 113013



A1 FOOTING & FOUNDATION PLAN-AREA A
SCALE: 1/8" = 1'-0"

FOOTING & FOUNDATION PLAN NOTES

1. SEE ARCHITECTURAL, CIVIL AND LANDSCAPE DRAWINGS FOR EXTERIOR CONCRETE RETAINING AND / OR SITE WALLS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
2. SEE TYPICAL STEP DETAIL AT CONTINUOUS FOOTING AND TYPICAL STEP DETAIL AT MAT FOOTING FOR REINFORCING REQUIREMENTS D1/SB501.
3. PROVIDE REINFORCEMENT AT WALL ENDS, INTERSECTIONS AND OPENINGS PER TYPICAL DETAILS D2/SB601 AND C2/SB601.
4. DOWEL ALL CONCRETE WALLS TO FOOTING PER TYPICAL DETAIL C4/SB501.
5. PROVIDE COMPACTED STRUCTURAL FILL UNDER ALL CONCRETE FOOTINGS PER TYPICAL DETAIL A5/SB501.
6. WHERE REQUIRED, DEMO THE EXISTING SLAB ON GRADE AND REPLACE WITH NEW CONCRETE MATCHING THE THICKNESS OF THE EXISTING SLAB PER DETAIL C1/SB502.
7. SBP# INDICATES THE COLUMN BASEPLATE TYPE. SEE SCHEDULE ON SF602

EXISTING BUILDING NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO DETAILING, FABRICATING, ERECTING OR INSTALLING ANY STRUCTURAL ELEMENT. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN TEAM IN A TIMELY MANNER SUCH THAT WORK WILL NOT BE DELAYED.
2. THE CONTRACTOR SHALL PROVIDE ADEQUATE SHORING OF EXISTING STRUCTURE DURING CONSTRUCTION.
3. INFILL ROOF DECK OPENINGS, SEE TYP DETAIL B3/SF503.



MHTN Architects, Inc.
260 South 400 West
Suite 250
Salt Lake City, Utah 84101
Telephone (801) 595-6700
www.mhtn.com



JORDAN SCHOOL DISTRICT
JORDAN LEARNING CENTER
3706 WEST 9800 SOUTH
SOUTH JORDAN, UT 84009

©2024 MHTN ARCHITECTS, INC.
Confidentiality Notice
This document is intended for use on the Project identified herein by individuals and companies involved in the design, permitting, bidding and construction of the Project. All rights are reserved. No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of MHTN Architects, Inc. If a digital copy of this document is received in error, please delete it.

MHTN PROJECT NO. 2024528

Original drawing is 36" x 42". Do not scale contents of this drawing.

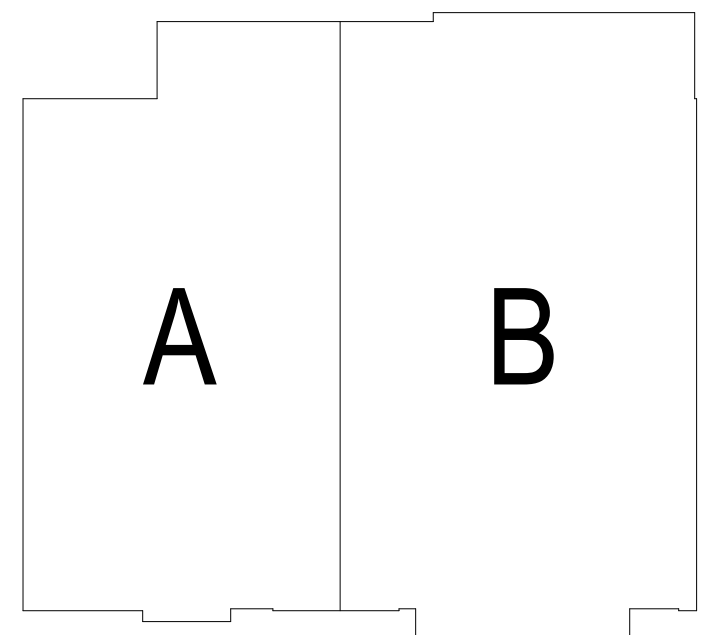
REVISIONS:
CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

NO.	DATE	DESCRIPTION
1	08/29/24	ISSUE

ISSUE
CONSTRUCTION DOCUMENTS 100%
08/29/24

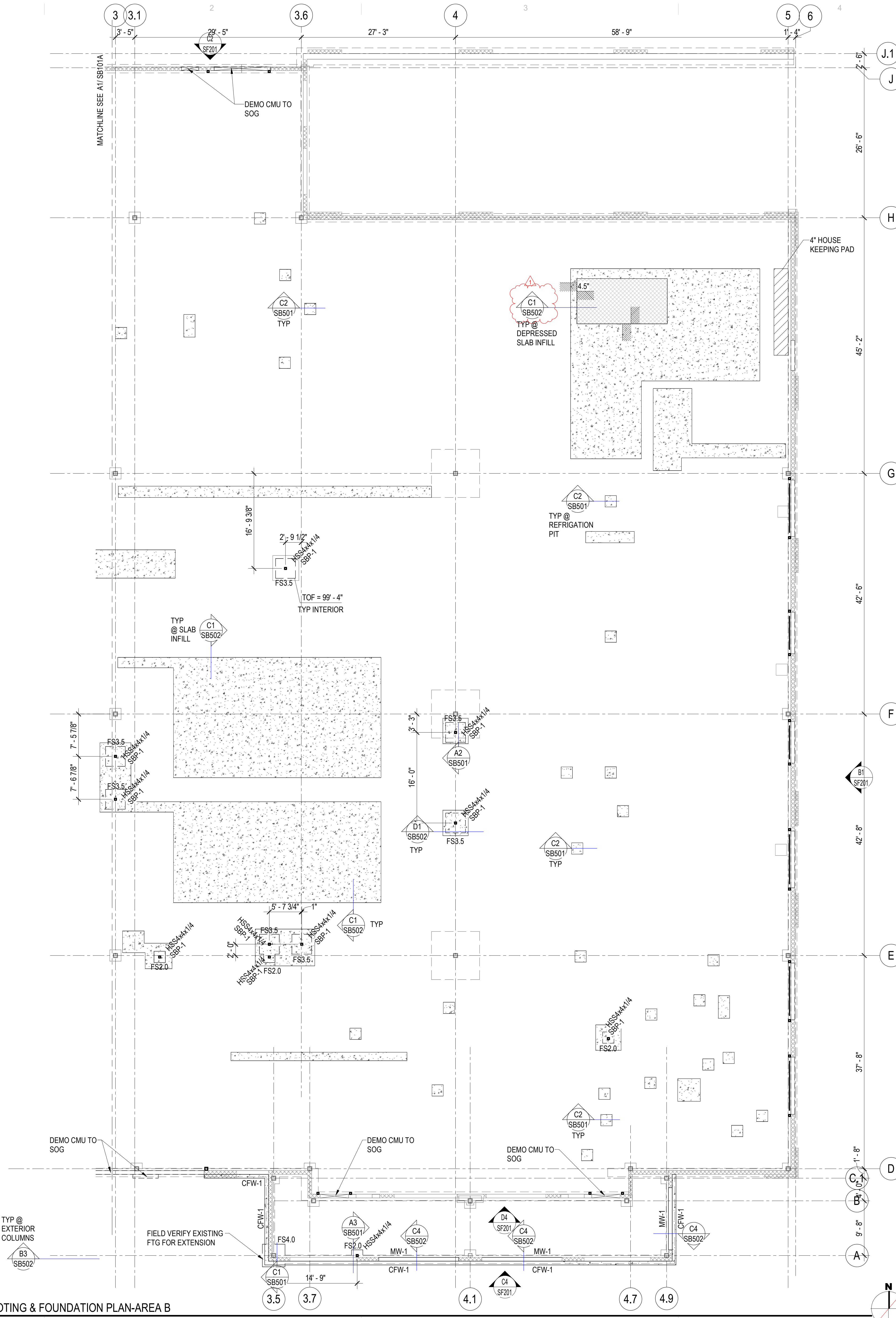
SHEET NAME
FOOTING AND FOUNDATION PLAN-AREA A

SHEET NUMBER
SB101A



KEY PLAN

Autodesk Civil 3D 2024.528 - BDD Retail Remodel.dwg 2024.528 - BDD Retail Remodel.rvt 8/30/2024 11:28:55 AM



FOOTING & FOUNDATION PLAN NOTES

- SEE ARCHITECTURAL, CIVIL AND LANDSCAPE DRAWINGS FOR EXTERIOR CONCRETE RETAINING AND / OR SITE WALLS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
- SEE TYPICAL STEP DETAIL AT CONTINUOUS FOOTING AND TYPICAL STEP DETAIL AT MAT FOOTING FOR REINFORCING REQUIREMENTS D1/SB501.
- PROVIDE REINFORCEMENT AT WALL ENDS, INTERSECTIONS AND OPENINGS PER TYPICAL DETAILS D2/SB601 AND C2/SB601.
- DOWEL ALL CONCRETE WALLS TO FOOTING PER TYPICAL DETAIL C4/SB501.
- PROVIDE COMPACTED STRUCTURAL FILL UNDER ALL CONCRETE FOOTINGS PER TYPICAL DETAIL A5/SB501.
- WHERE REQUIRED, DEMO THE EXISTING SLAB ON GRADE AND REPLACE WITH NEW CONCRETE MATCHING THE THICKNESS OF THE EXISTING SLAB PER DETAIL C1/SB502.
- SBP-# INDICATES THE COLUMN BASEPLATE TYPE. SEE SCHEDULE ON SF602.

EXISTING BUILDING NOTES

- THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO DETAILING, FABRICATING, ERECTING OR INSTALLING ANY STRUCTURAL ELEMENT. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN TEAM IN A TIMELY MANNER SUCH THAT WORK WILL NOT BE DELAYED.
- THE CONTRACTOR SHALL PROVIDE ADEQUATE SHORING OF EXISTING STRUCTURE DURING CONSTRUCTION.
- INFILL ROOF DECK OPENINGS. SEE TYP DETAIL B3/SF503.



JORDAN SCHOOL DISTRICT
JORDAN LEARNING CENTER
 3706 WEST 9800 SOUTH
 SOUTH JORDAN, UT 84009

©2024 MHTN ARCHITECTS, INC.
 Confidentiality Notice
 This document is intended for use on the Project identified herein by individuals and companies involved in the design, permitting, bidding and construction of the Project. All rights are reserved. No part of this document may be distributed or reproduced in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without the prior written permission of MHTN Architects, Inc. If a digital copy of this document is received in error, please delete it.
 SEAL

MHTN PROJECT NO. 2024528

Original drawing is 30" x 42". Do not scale contents of this drawing.

REVISIONS:
 CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

NO.	DATE	DESCRIPTION	ADDENDUM #
1	08/29/24		

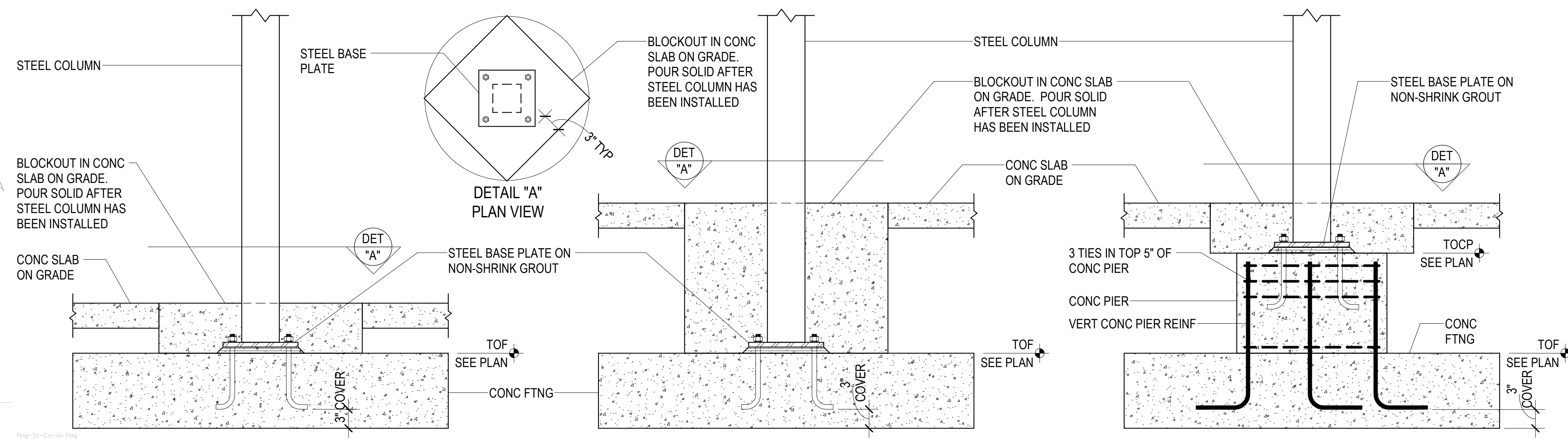
ISSUE:
CONSTRUCTION DOCUMENTS 100%
 08/29/24

SHEET NAME:
FOOTING & FOUNDATION PLAN-AREA B

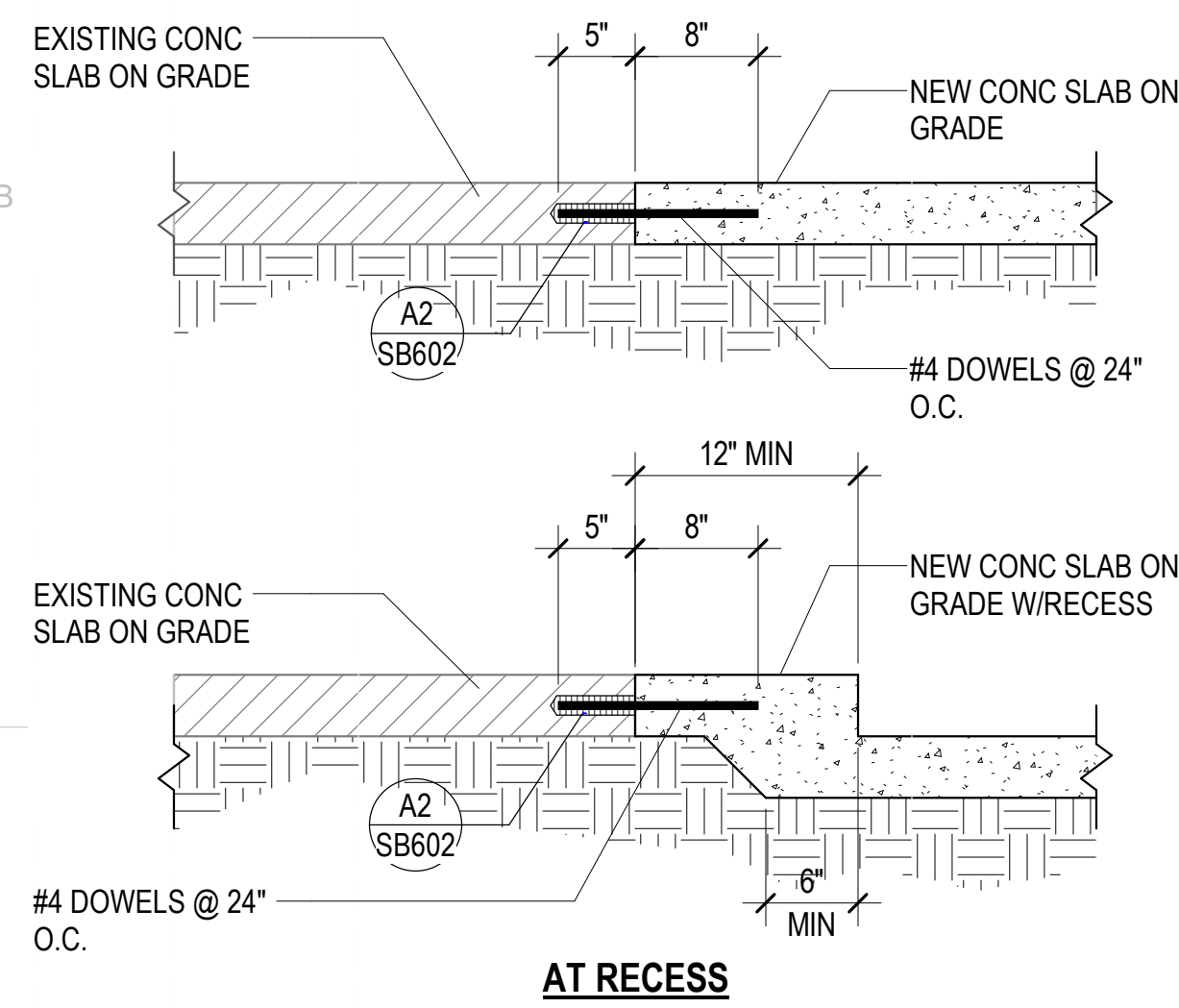
SHEET NUMBER:
SB101B

Autodesk Civil 3D 2024.528 ASD Retail Remodel/SJK 2024.528 ASD Retail Remodel.rvt
 9/10/2024 11:26:56 AM

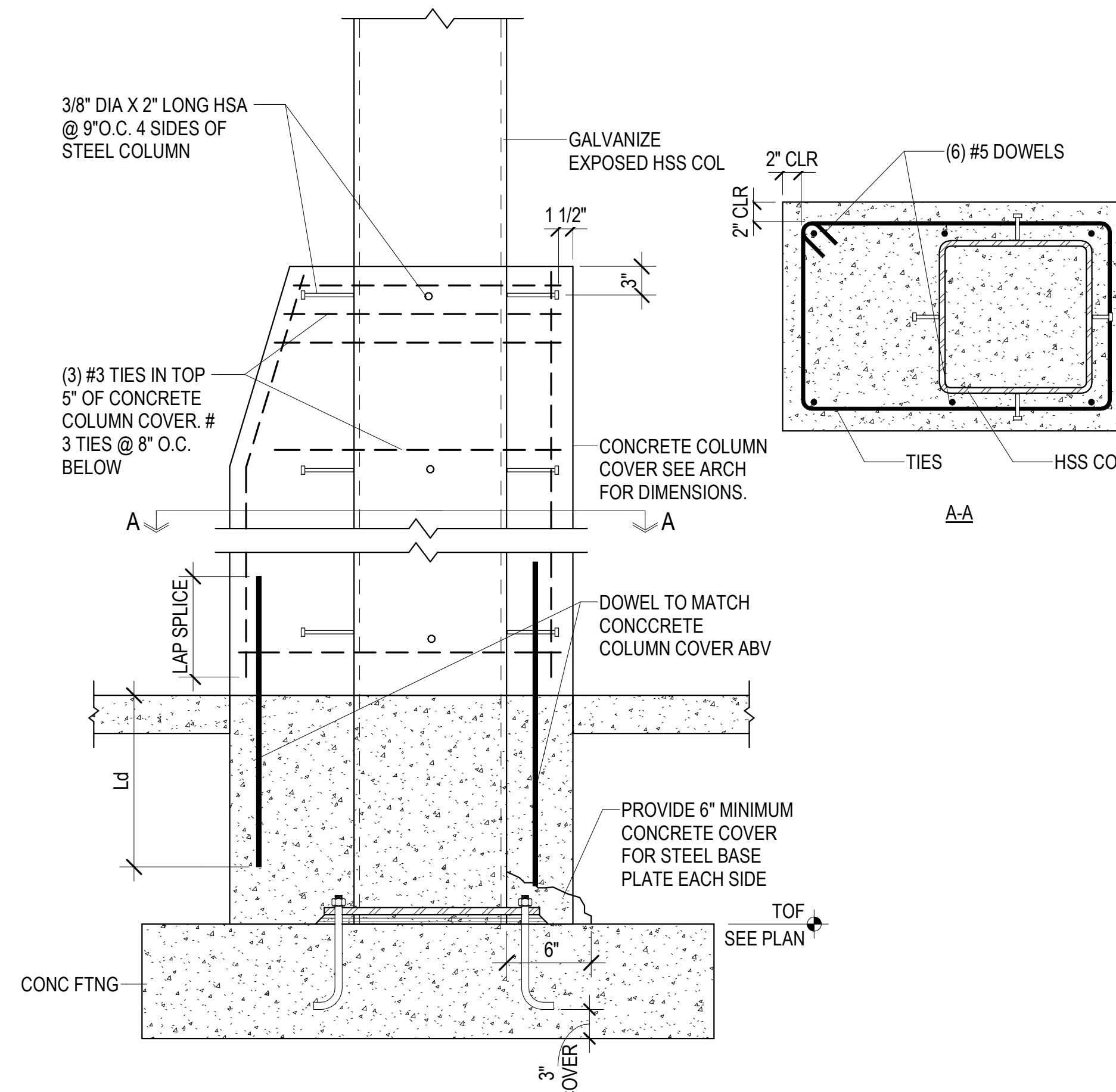
A1 FOOTING & FOUNDATION PLAN-AREA B
 SCALE: 1/8" = 1'-0"



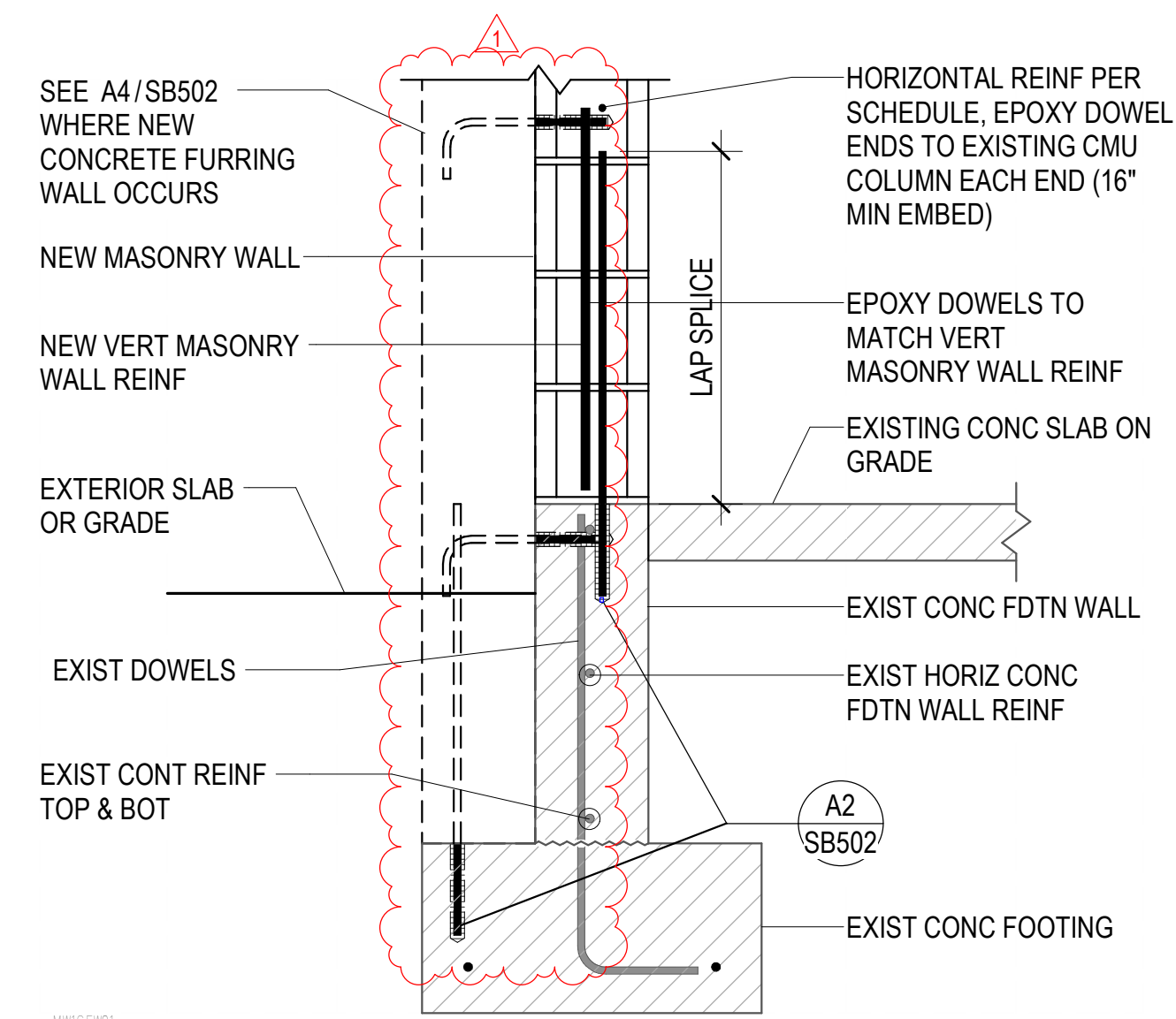
D1
SB502
TYPICAL STEEL COLUMN CONNECTION TO CONCRETE FOOTING/CONCRETE PIER
NO SCALE



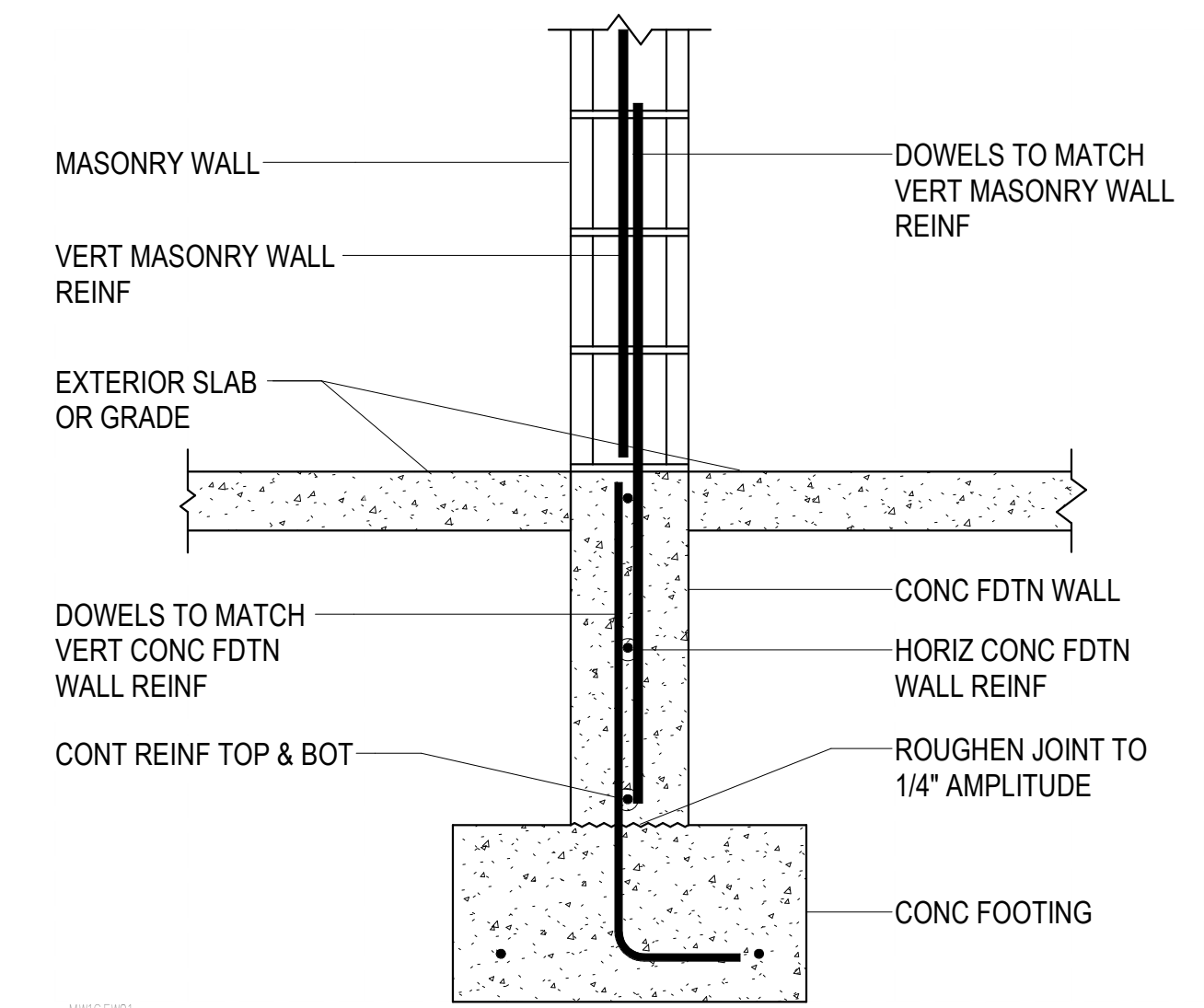
C1
SB502
TYPICAL NEW SLAB ON GRADE CONNECTION TO EXISTING CONCRETE SLAB ON GRADE
NO SCALE



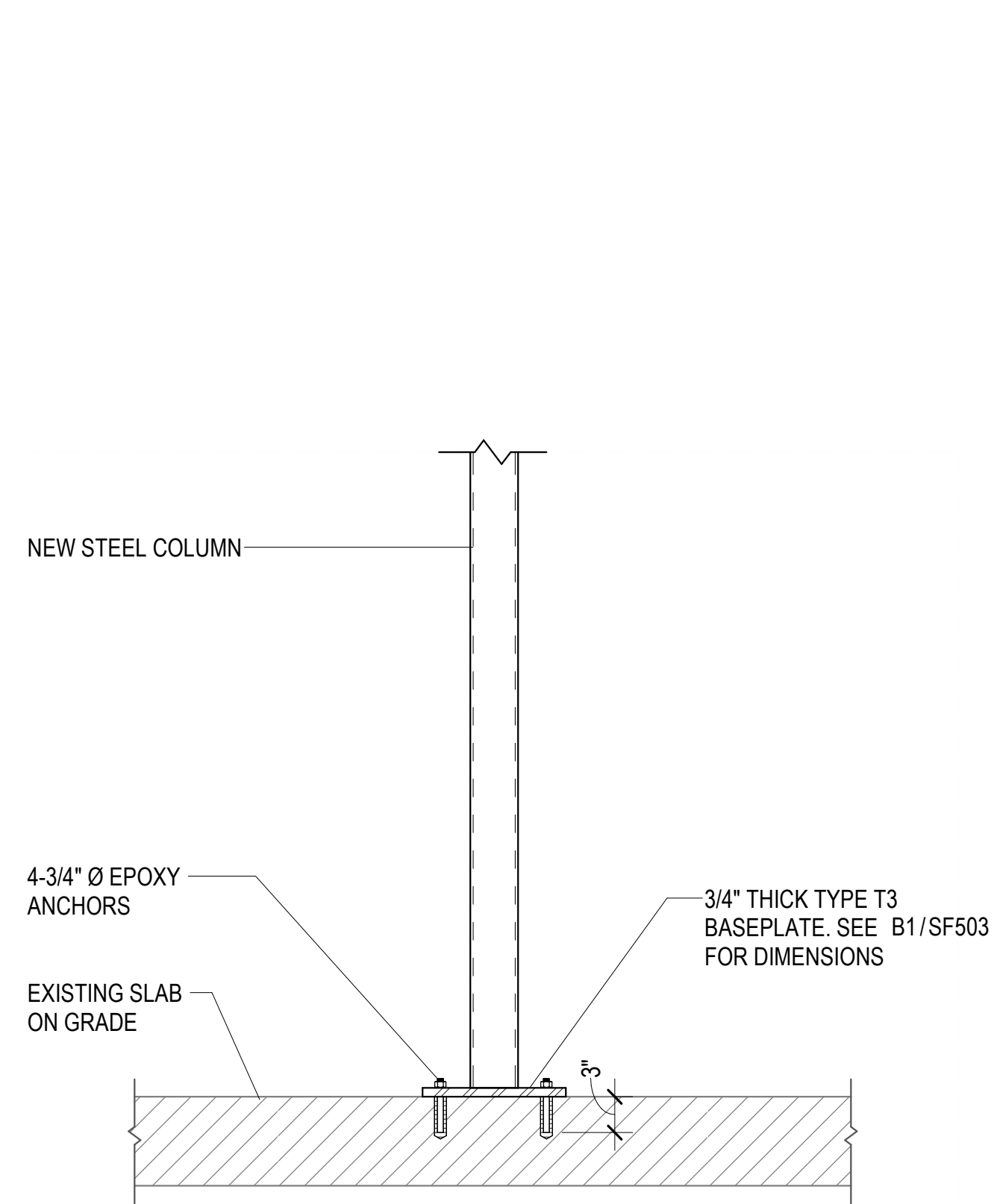
B3
SB502
TYPICAL STEEL COLUMN CONNECTION TO CONCRETE FOOTING/CONCRETE PIER
NO SCALE



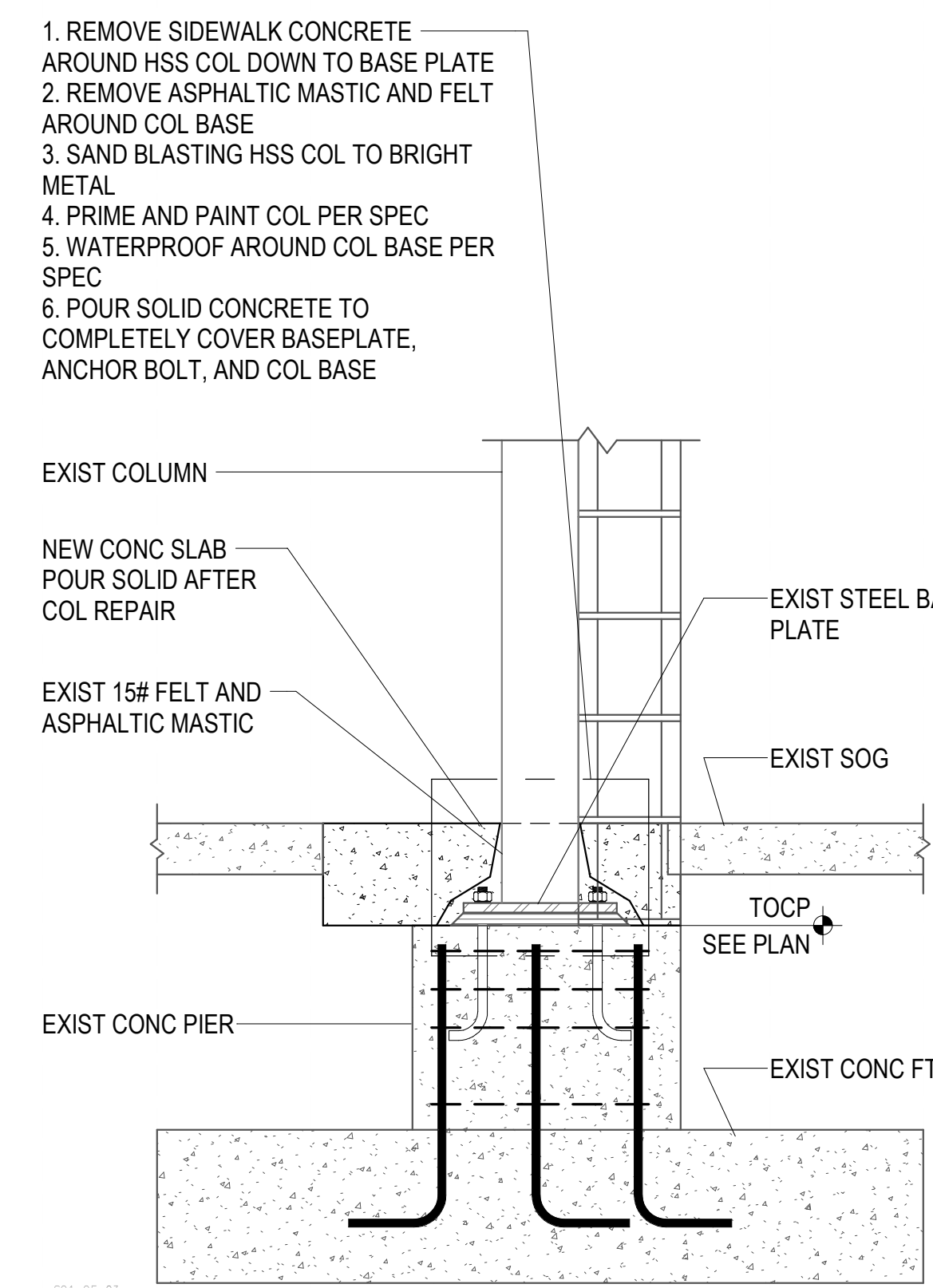
C4
SB502
TYPICAL NEW MASONRY WALL ON EXIST FOUNDATION WALL
NO SCALE



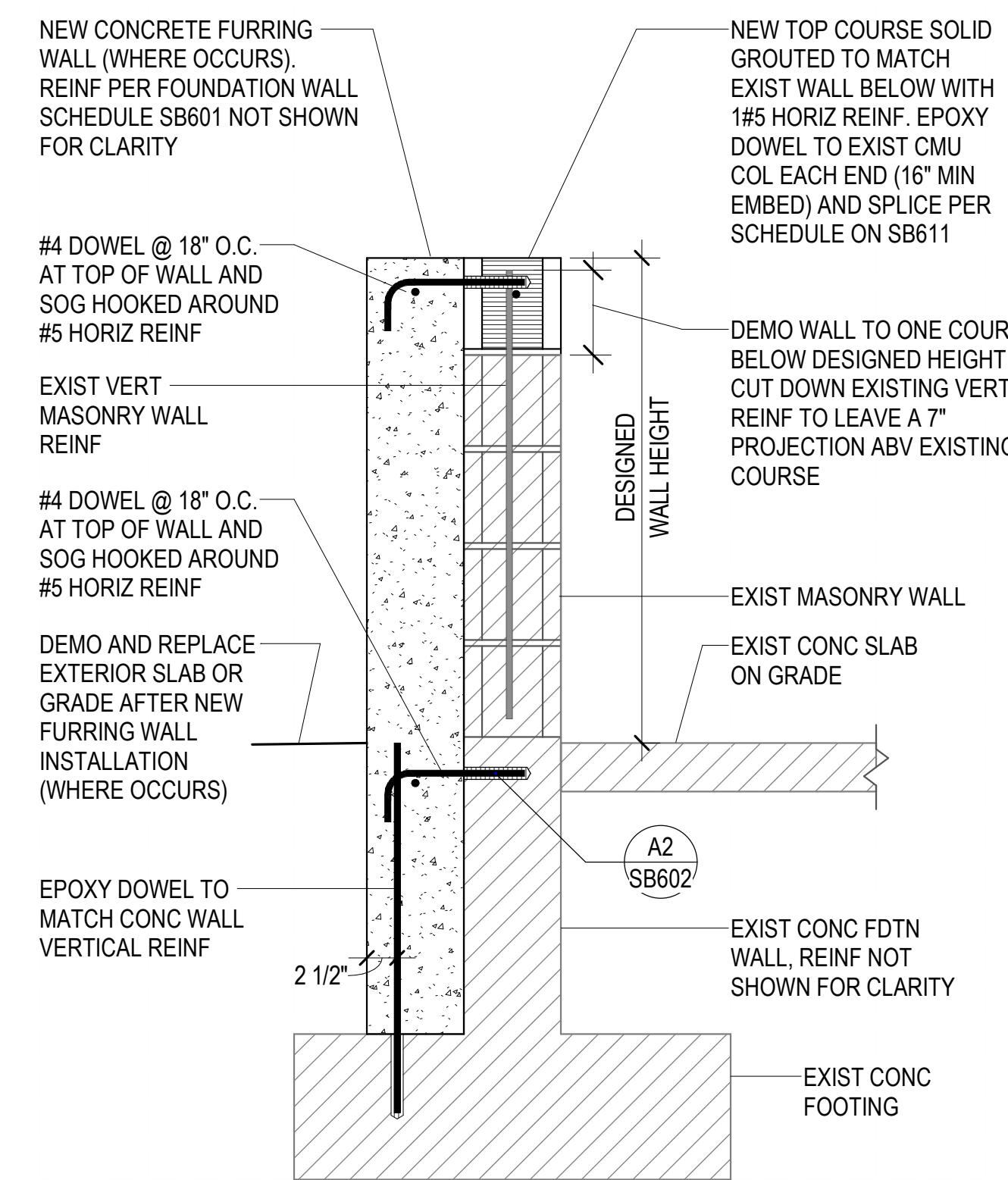
C5
SB502
TYPICAL MASONRY WALL ON FOUNDATION WALL
NO SCALE



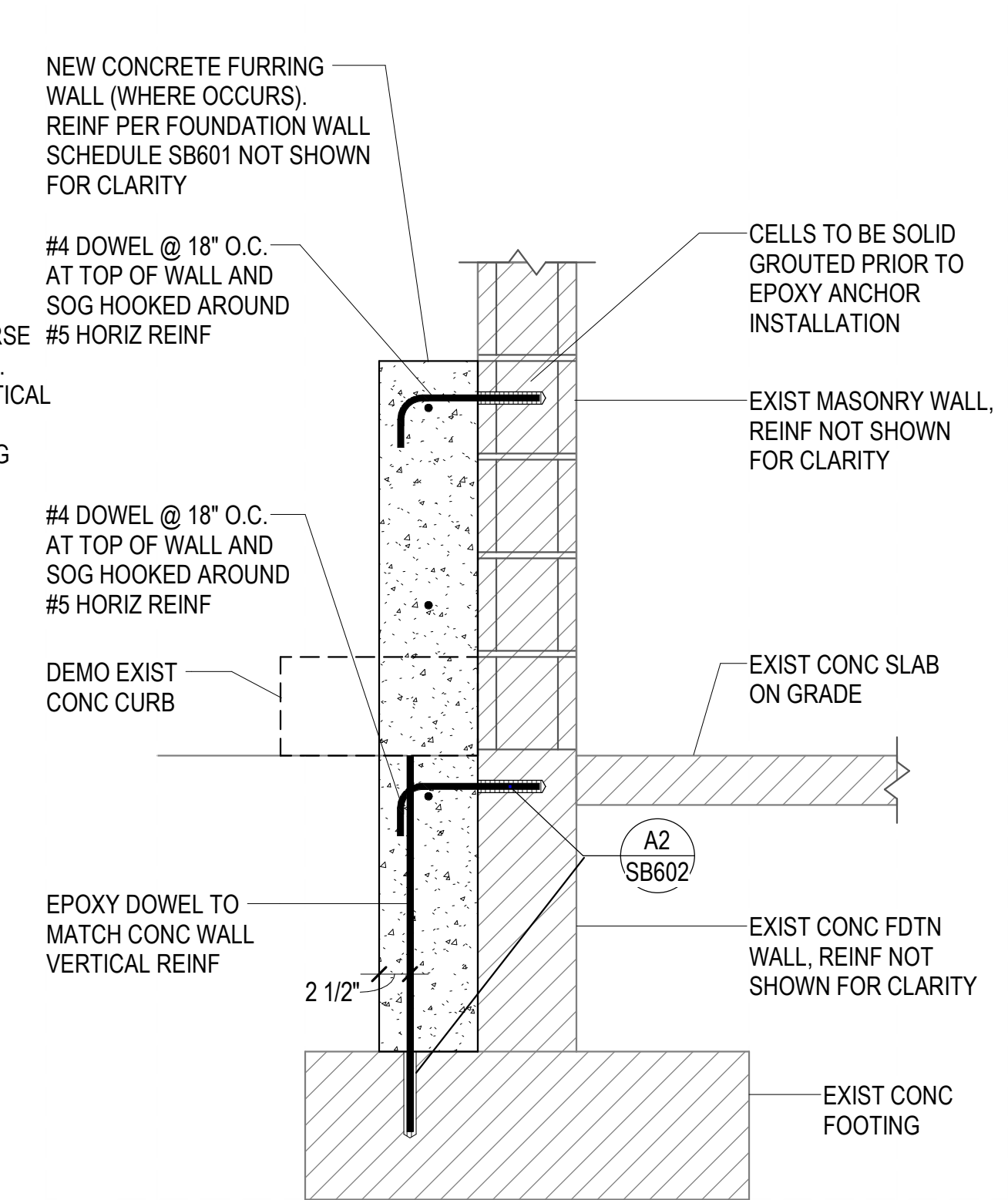
A2
SB502
NEW TUBE COLUMN CONNECTION TO EXISTING SLAB ON GRADE
NO SCALE



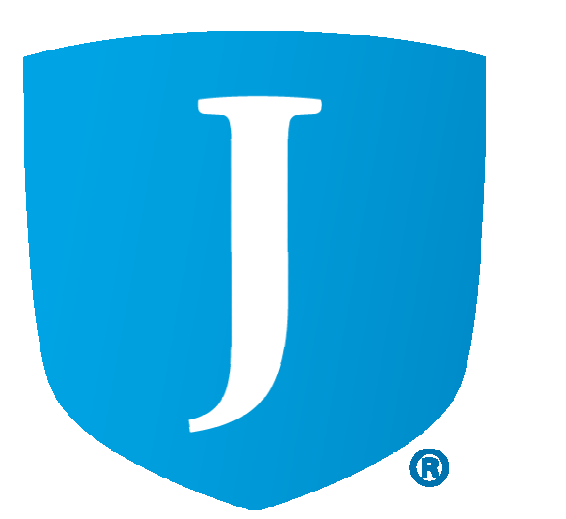
A3
SB502
RUST REPAIR ON EXIST EXTERIOR HSS COLUMN
NO SCALE



A4
SB502
MASONRY WALL CUT DOWN ON EXIST FOUNDATION WALL
NO SCALE



A5
SB502
NEW FURRING CONC WALL TO EXISTING CMU WALL
NO SCALE



JORDAN SCHOOL DISTRICT
JORDAN LEARNING CENTER
3706 WEST 9800 SOUTH
SOUTH JORDAN, UT 84009

SB502 MHTN ARCHITECTS, INC.
Confidentiality Notice
This document is intended for use on the Project identified herein by individuals and companies involved in the design, permitting, bidding and construction of the Project. It is not to be distributed, copied, reproduced, printed or otherwise used for any other purpose without the express written consent of MHTN Architects, Inc. Any unauthorized use of this document is strictly prohibited. If a digital copy of this document is received in error, please delete it.

MHTN PROJECT NO. 2024528
Original drawing is 36 x 42. Do not scale contents of this drawing.
CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

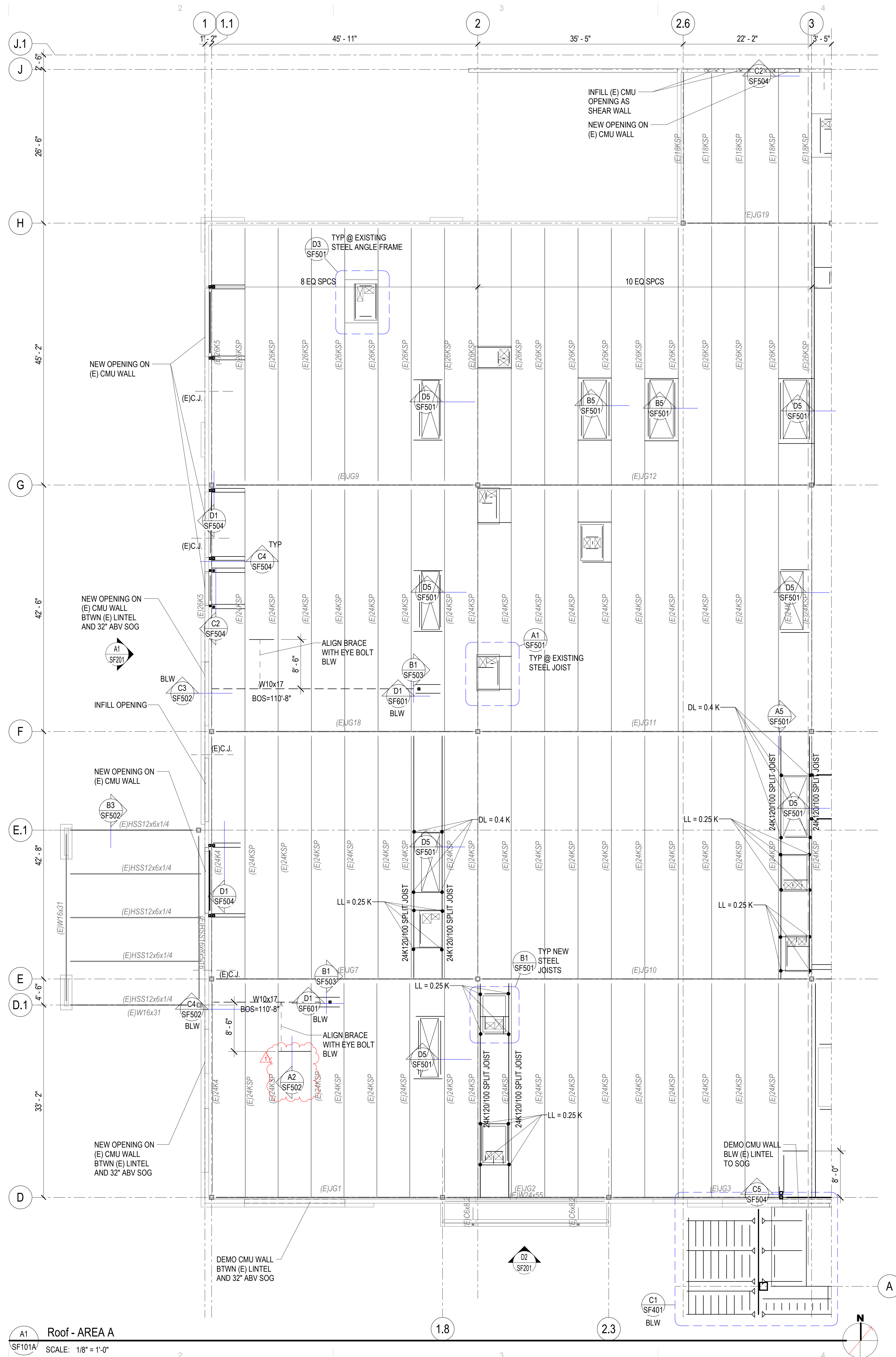
NO.	DATE	DESCRIPTION	APPROVED BY
1			

ISSUE
CONSTRUCTION DOCUMENTS 100%
08/29/24

SHEET NAME
TYPICAL FOOTING & FOUNDATION DETAILS
SHEET NUMBER

SB502

Autodesk Civil 3D 2024.5.38 - RD Retail Remodel.dwg - 2024.5.38 - RD Retail Remodel.rvt
 9/8/2024 11:28:58 AM



A1 Roof - AREA A
 SF101A SCALE: 1/8" = 1'-0"

- | ROOF FRAMING PLAN NOTES |
|--|
| 1. SEE ARCHITECTURAL FOR ROOF SLOPES AND DRAINS. |
-
- | EXISTING BUILDING NOTES |
|--|
| 1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO DETAILING, FABRICATING, ERECTING OR INSTALLING ANY STRUCTURAL ELEMENT. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN TEAM IN A TIMELY MANNER SUCH THAT WORK WILL NOT BE DELAYED. |
| 2. THE CONTRACTOR SHALL PROVIDE ADEQUATE SHORING OF EXISTING STRUCTURE DURING CONSTRUCTION. |
| 3. INFILL ROOF DECK OPENINGS. SEE TYP DETAIL B3/SF503. |
-
- | NON-COMPOSITE FRAMING PLAN NOTES |
|---|
| 1. SEE STEEL DECK SCHEDULE ON SHEET SF602 FOR DECK PROFILE AND DECK ATTACHMENT REQUIREMENTS. |
| 2. FOR ROUND OPENINGS LESS THAN 12 INCHES IN DIAMETER SEE DETAIL D2/SF501 |
| 3. VERIFY SIZE, WEIGHT, LOCATION AND CONFIGURATION OF ALL ROOF TOP EQUIPMENT WITH ARCHITECT AND MECHANICAL ENGINEER. PROVIDE STEEL FRAMES FOR SUPPORT OF ROOF TOP EQUIPMENT PER DETAIL. D3/SF501 AT EXISTING STEEL ANGLE FRAMES, B1/SF501 AT NEW JOISTS, AND A1/SF501 AT EXISTING JOISTS. COORDINATE OPENINGS WITH MECHANICAL & ELECTRICAL. |
-
- | OPEN WEB JOIST FRAMING PLAN NOTES |
|---|
| 1. OPEN WEB STEEL JOISTS AND JOIST GIRDERS SHALL BE DESIGNED BY THE MANUFACTURER TO SUPPORT THE MECHANICAL AND LATERAL LOADS SHOWN ON THE ROOF FRAMING PLANS IN ADDITION TO THE UNIFORM AND POINT LOADS SHOWN. LOADS SHOWN ARE ASD UNO |
| 2. ±#### - INDICATES POINT LOAD ON STEEL JOIST IN ADDITION TO UNIFORM LOADING SHOWN. + INDICATES DOWNWARD AND - INDICATES UPWARD LOADS. LOADS SHOWN ARE UNFACTORED, UNO. |
| 3. T/C XXX INDICATES ADDITIONAL TOP CHORD AXIAL FORCE ON STEEL JOIST OR GIRDER. THIS FORCE IS A FACTORED SEISMIC LOAD THAT SHALL BE CONSIDERED IN BOTH TENSION AND COMPRESSION AND INCLUDES APPLICABLE OVERSTRENGTH FACTORS PER THE GOVERNING BUILDING CODE. STEEL JOISTS AND GIRDERS WITH T/C FORCE SHALL BE DESIGNED AS COLLECTOR ELEMENTS. |
| 4. ALL LOADS SUPPORTED BY OPEN WEB STEEL JOISTS AND GIRDERS SHALL BE LOCATED WITHIN 6" OF JOIST OR GIRDER PANEL POINT OR THE JOIST OR GIRDER SHALL BE REINFORCED PER DETAIL B4/SF501. |
| 5. HORIZONTAL CROSS BRIDGING SHALL BE SIZED AND SUPPLIED BY THE JOIST MANUFACTURER. CONNECT TO WALLS AS INDICATED ON DETAILS |
| 6. WHERE SKYLIGHTS OR MECHANICAL UNITS INTERRUPT HORIZONTAL BRIDGING, PROVIDE CROSS BRIDGING AT JOIST SPACES ON EACH SIDE, TYP. |
| 7. ALL OPEN WEB STEEL JOISTS WITH A SLOPE OF 3/8" PER FOOT OR LARGER SHALL HAVE SLOPED BEARING SEATS. |
| 8. OPEN WEB STEEL JOISTS AT ROOF AREAS SHALL BE DESIGNED FOR THE FOLLOWING WIND ASD NET UPLIFT LOADS: 19 PSF WITHIN 11.4 FT OF ROOF EDGES, 11 PSF AT ALL OTHER AREAS. |
| 9. PROVIDE SPLICE CONNECTION NEAR MIDSPAN OF NEW JOISTS FOR INSTALLATION. |



JORDAN SCHOOL DISTRICT
JORDAN LEARNING CENTER
 3706 WEST 9800 SOUTH
 SOUTH JORDAN, UT 84009

©2023 MHTN ARCHITECTS, INC.
 Confidentiality Notice:
 This document is intended for use on the Project identified herein by individuals and companies involved in the design, permitting, bidding and construction of the Project. It is the property of MHTN Architects, Inc. and shall remain confidential and not be reproduced or distributed in any form without the written consent of MHTN Architects, Inc. If a digital copy of this document is received in error, please delete it.

MHTN PROJECT NO: 2024528

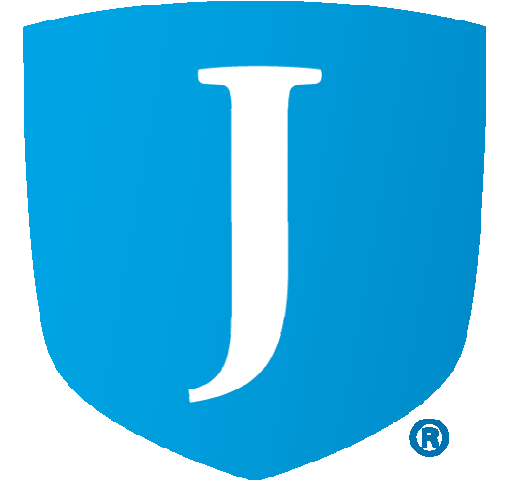
Original Drawing is 36" x 42". Do not scale contents of the drawing.

NO.	DATE	DESCRIPTION
1	08/29/24	ISSUE FOR CONSTRUCTION

ISSUE:
 CONSTRUCTION DOCUMENTS 100%
 08/29/24

SHEET NAME:
ROOF FRAMING PLAN- AREA A

SHEET NUMBER:
SF101A



JORDAN SCHOOL DISTRICT
JORDAN LEARNING CENTER
 3706 WEST 9800 SOUTH
 SOUTH JORDAN, UT 84009

©2023 MHTN ARCHITECTS, INC.
 Confidentiality Notice
 This document is intended for use on the Project identified herein by individuals and companies involved in the design, permitting, bidding and construction of the Project. All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without the prior written permission of MHTN Architects, Inc. If a digital copy of this document is received in error, please delete it.

MHTN PROJECT NO. 2024528
 Original Drawing is 36" x 42". Do not scale contents of this drawing.

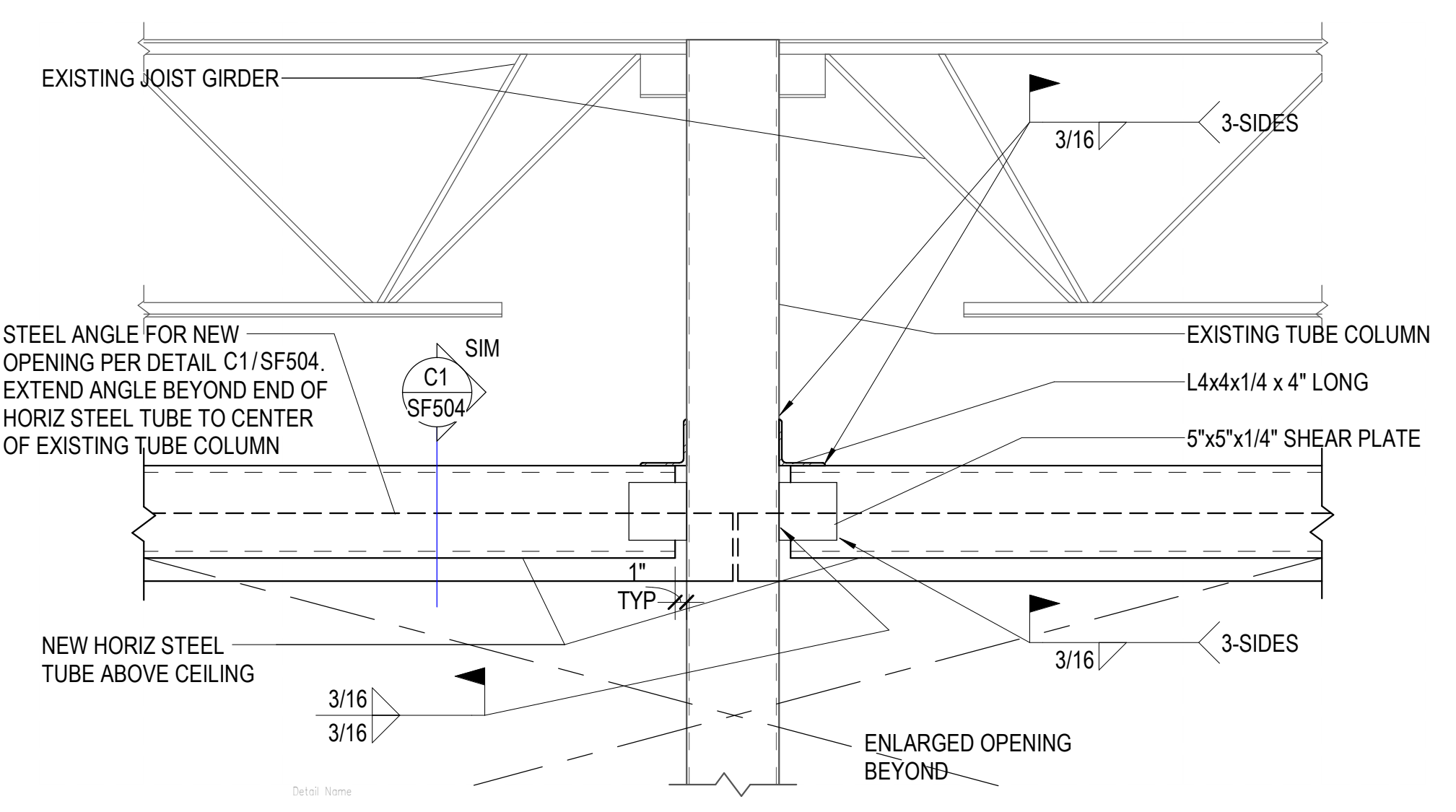
REVISIONS

NO.	DATE	DESCRIPTION	APPROVED BY
1	08/29/24	CONSTRUCTION DOCUMENTS 100%	

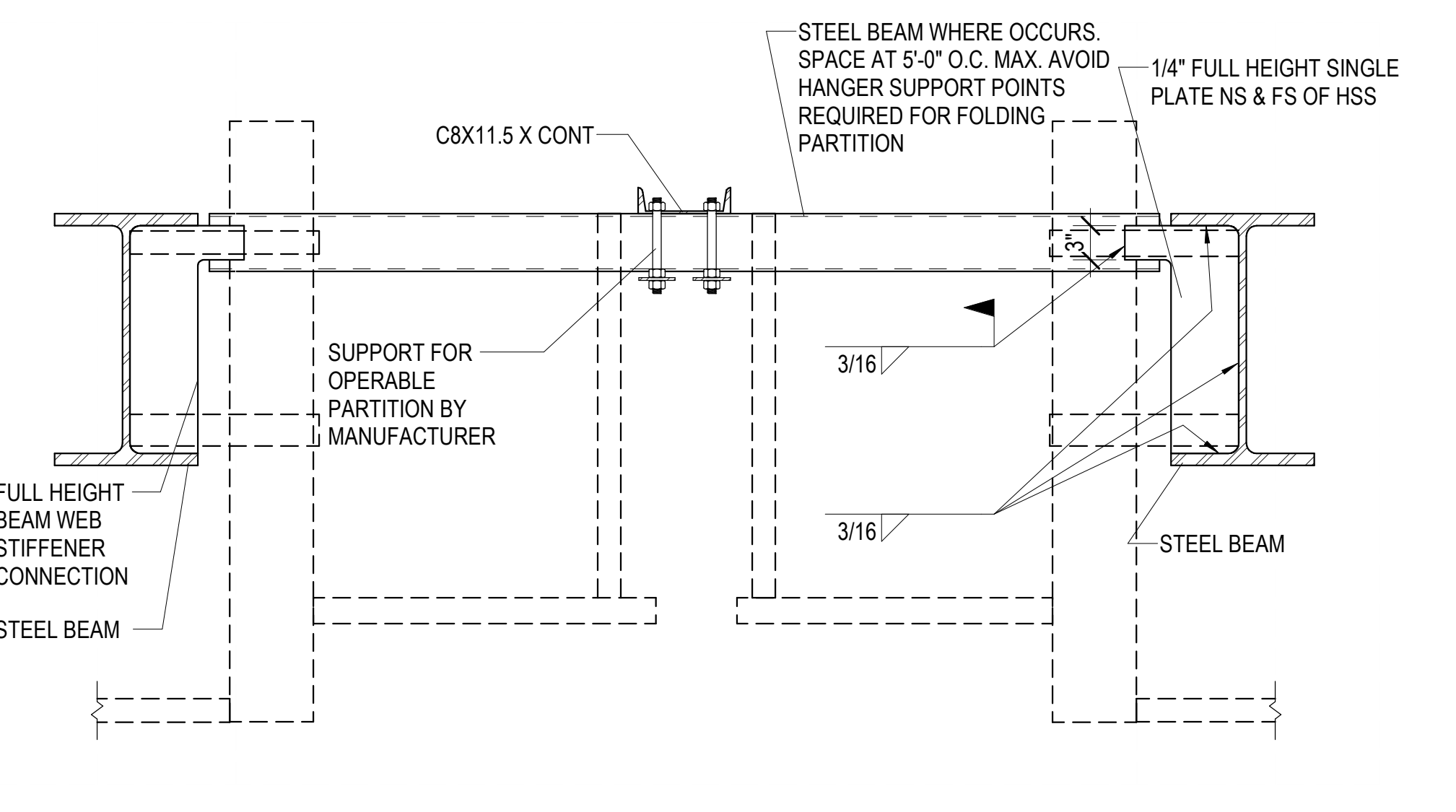
ISSUE
 CONSTRUCTION DOCUMENTS 100%
 08/29/24

SHEET NAME
ROOF FRAMING DETAILS

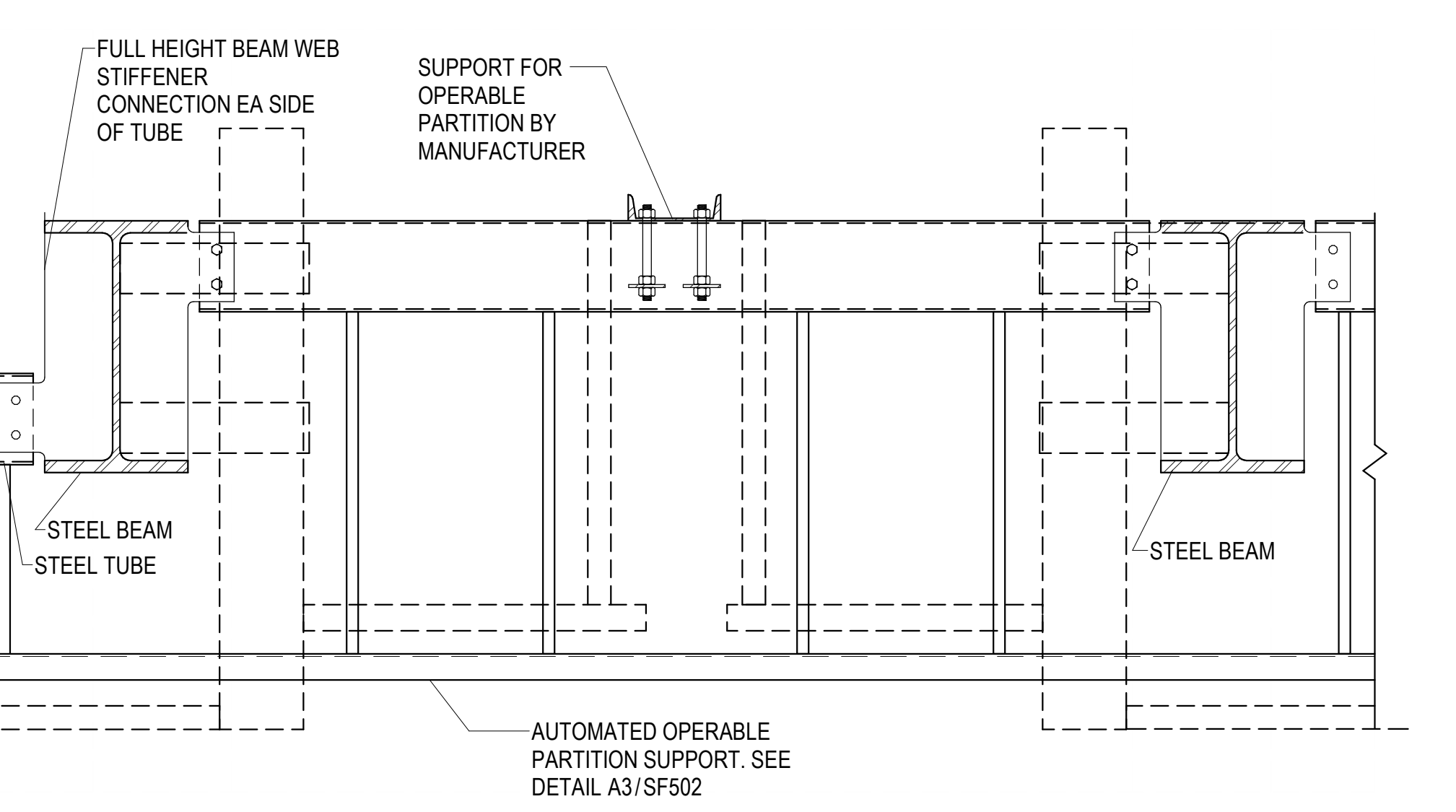
SHEET NUMBER
SF502



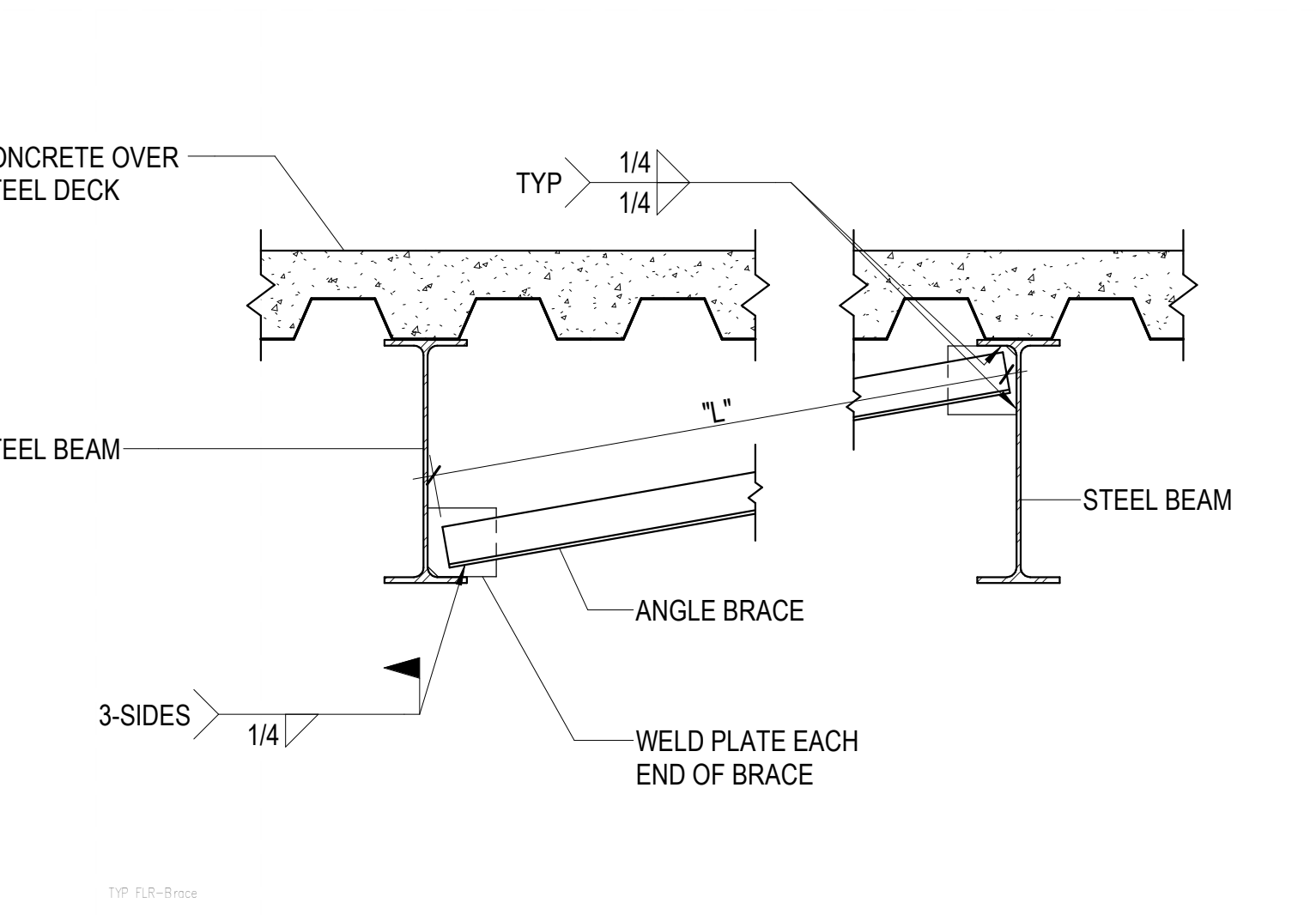
D1 OPENING RE-SUPPORT TUBE FRAME TO EXISTING COLUMN CONNECTION
 SF502 NO SCALE



D3 OPERABLE PARTITION SUPPORT AT INTERSECTION
 SF502 NO SCALE



D4 OPERABLE PARTITION SUPPORT AT INTERSECTION
 SF502 NO SCALE

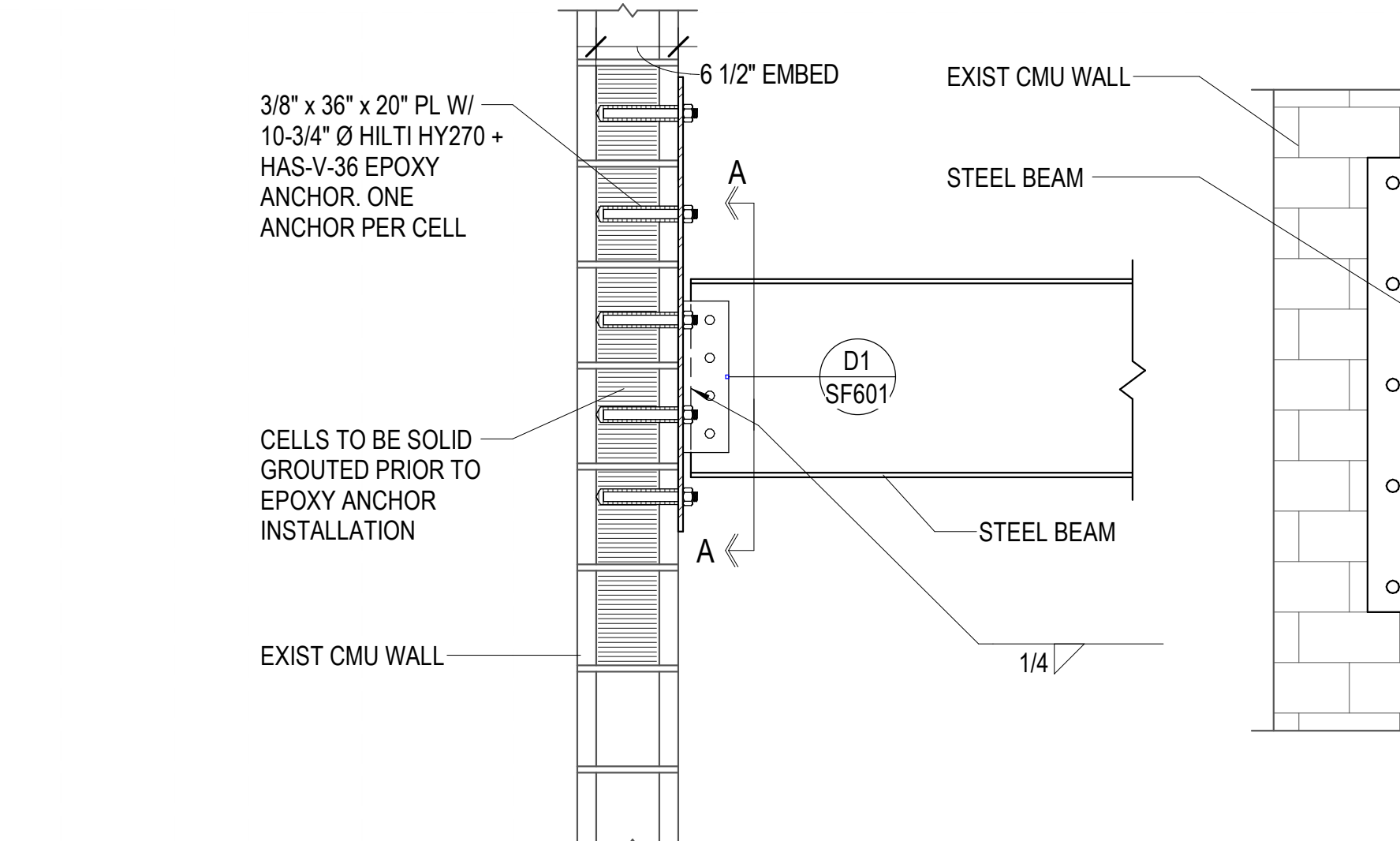


C1 TYPICAL STEEL BEAM BOTTOM FLANGE BRACE DETAIL
 SF502 NO SCALE

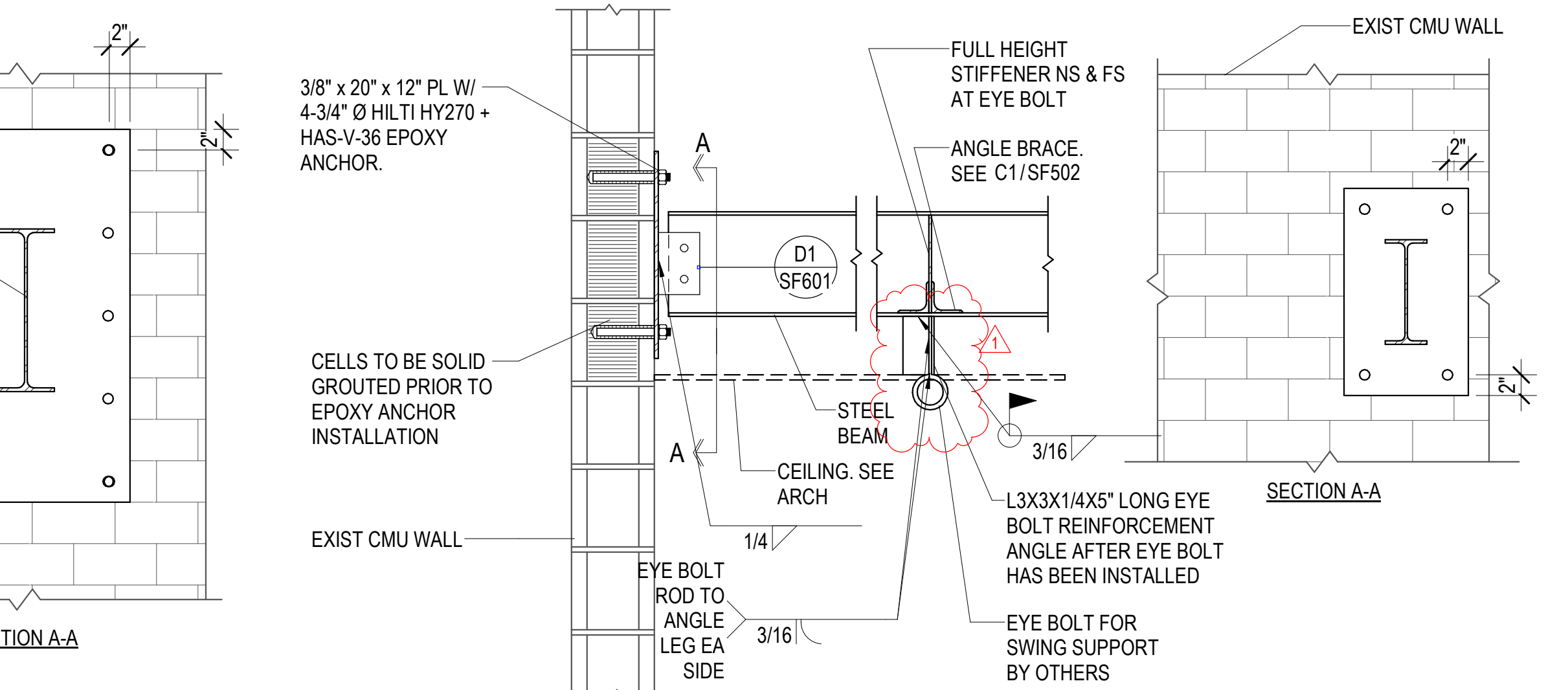
ANGLE BRACE SCHEDULE

BRACE LENGTH "L"	ANGLE BRACE SIZE	WELD PLATE SIZE
UP TO 4'-0"	L2x2x1/4	4"x1/4"x4"
4'-0" TO 8'-0"	L3x3x1/4	4"x1/4"x4"
8'-0" TO 12'-0"	2-L2 1/2x2 1/2x1/4	4"x3/8"x4"
12'-0" TO 16'-0"	2-L3x3x1/4	5"x3/8"x5"

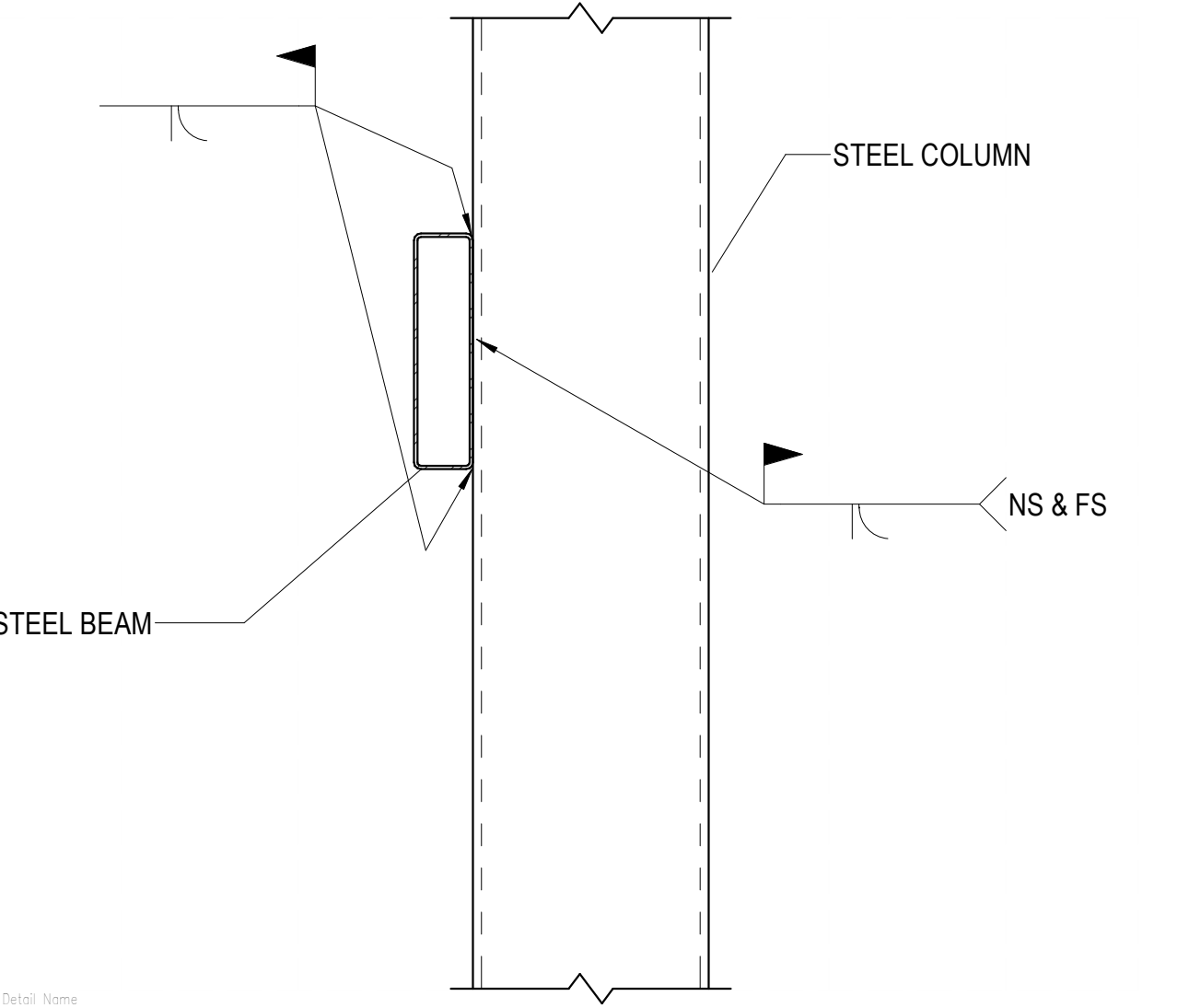
NOTE:
 1. WHERE DOUBLE ANGLES ARE USED PROVIDE 3"x3/8" SPACER PLATES AT THIRD POINTS.



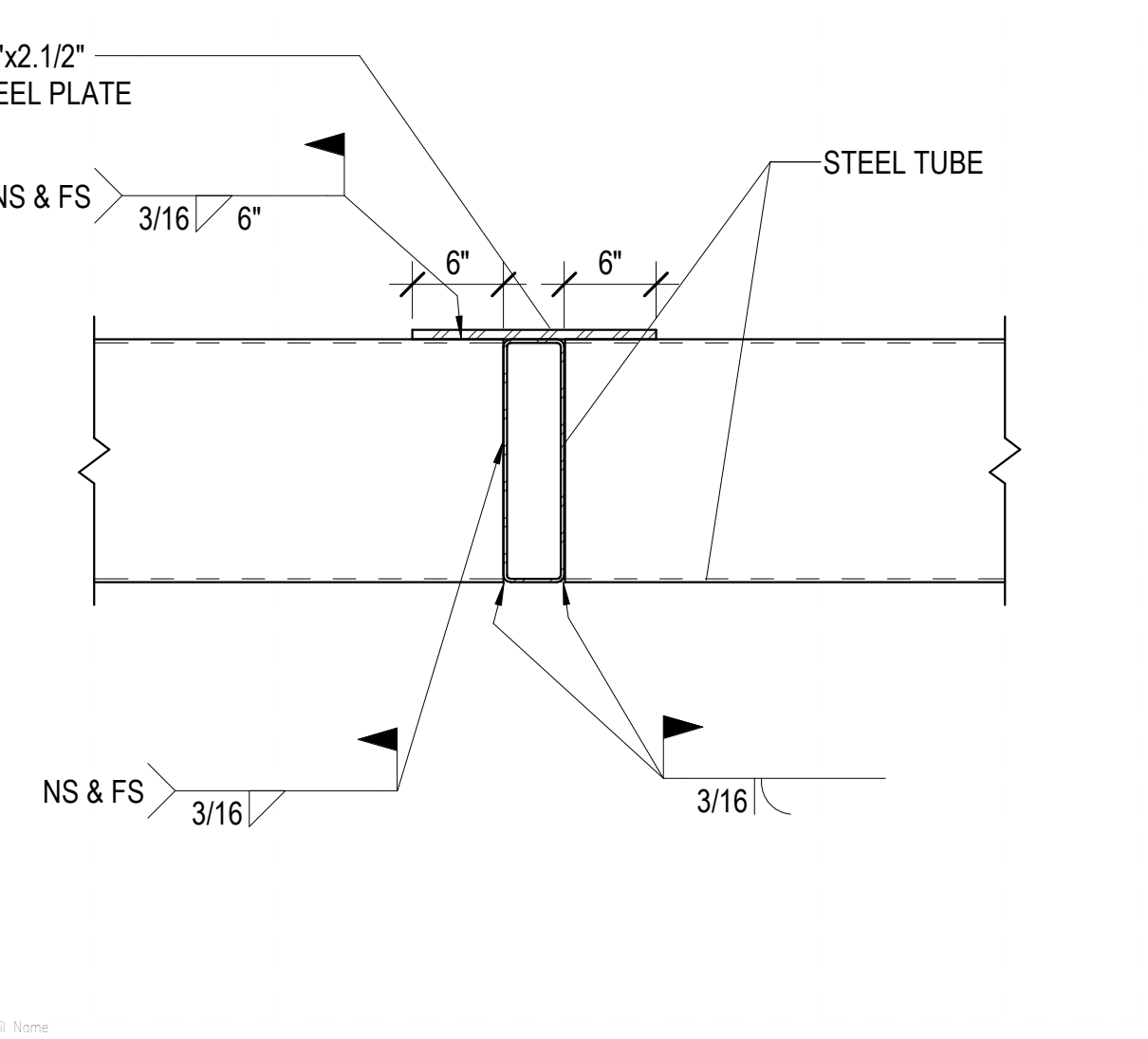
C3 STEEL TUBE TO STEEL MOMENT CONNECTION
 SF502 NO SCALE



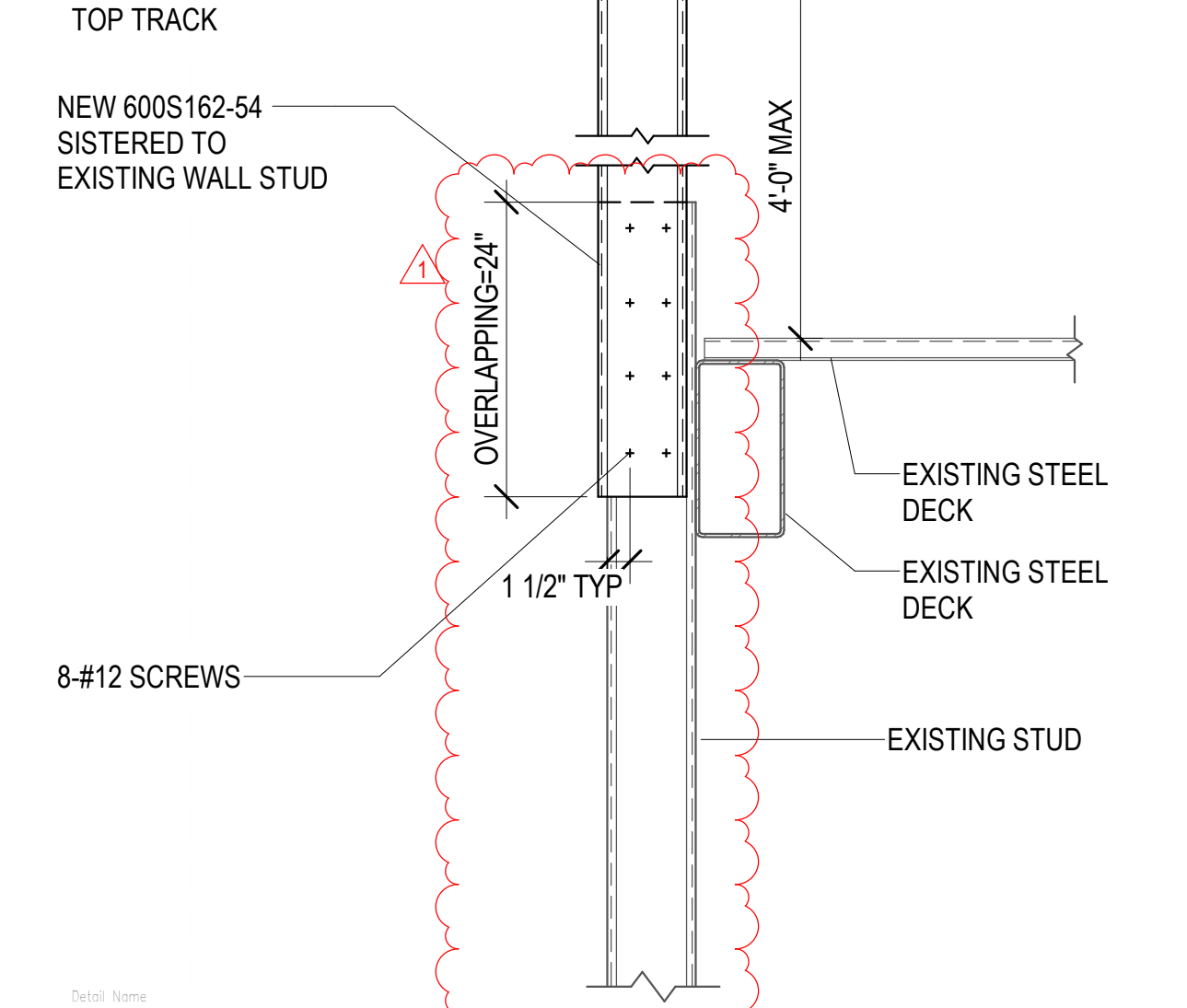
C4 SWING SUPPORT CONNECTION TO EXISTING MASONRY
 SF502 NO SCALE



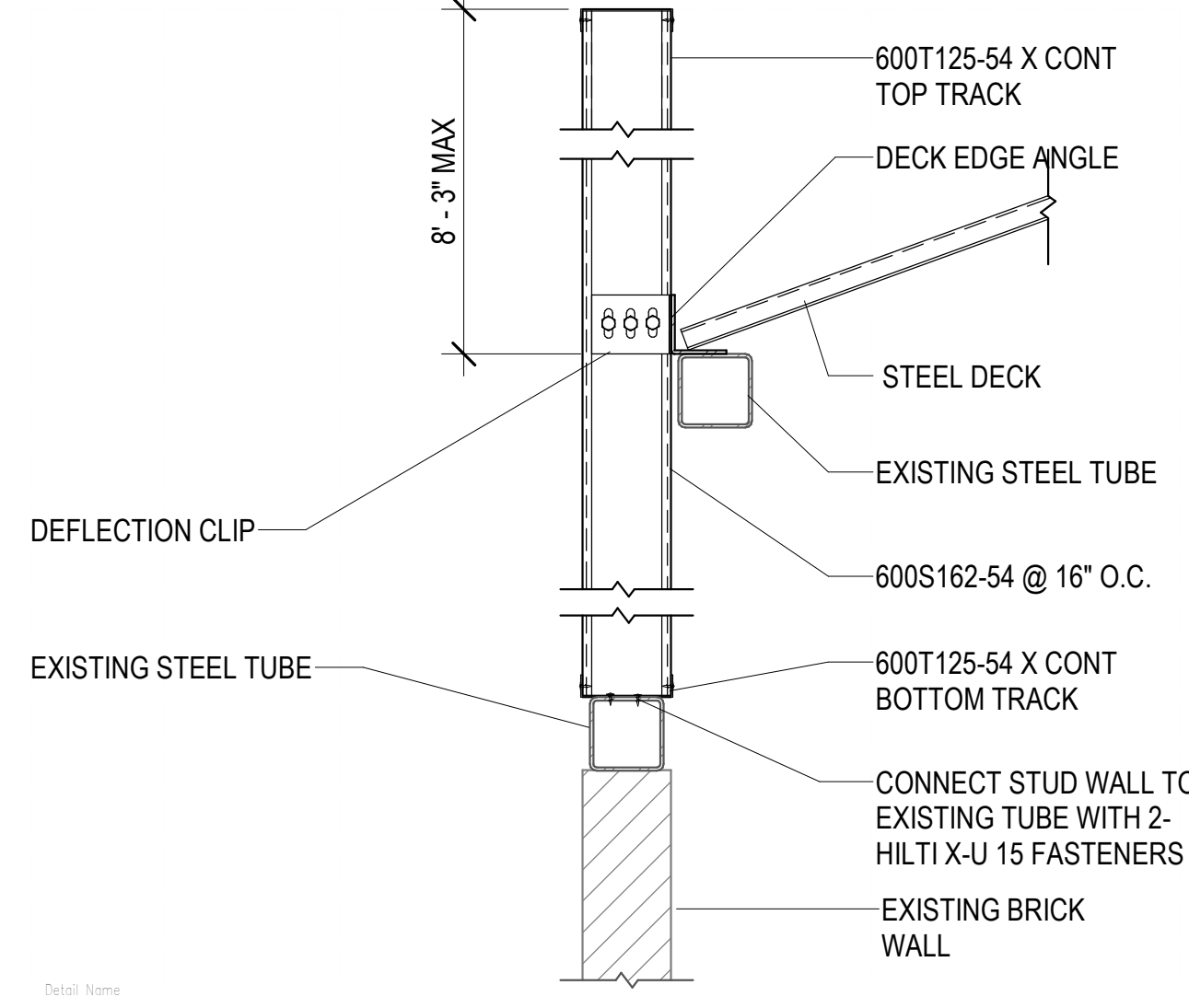
B1 STEEL TUBE TO SIDE OF COLUMN
 SF502 NO SCALE



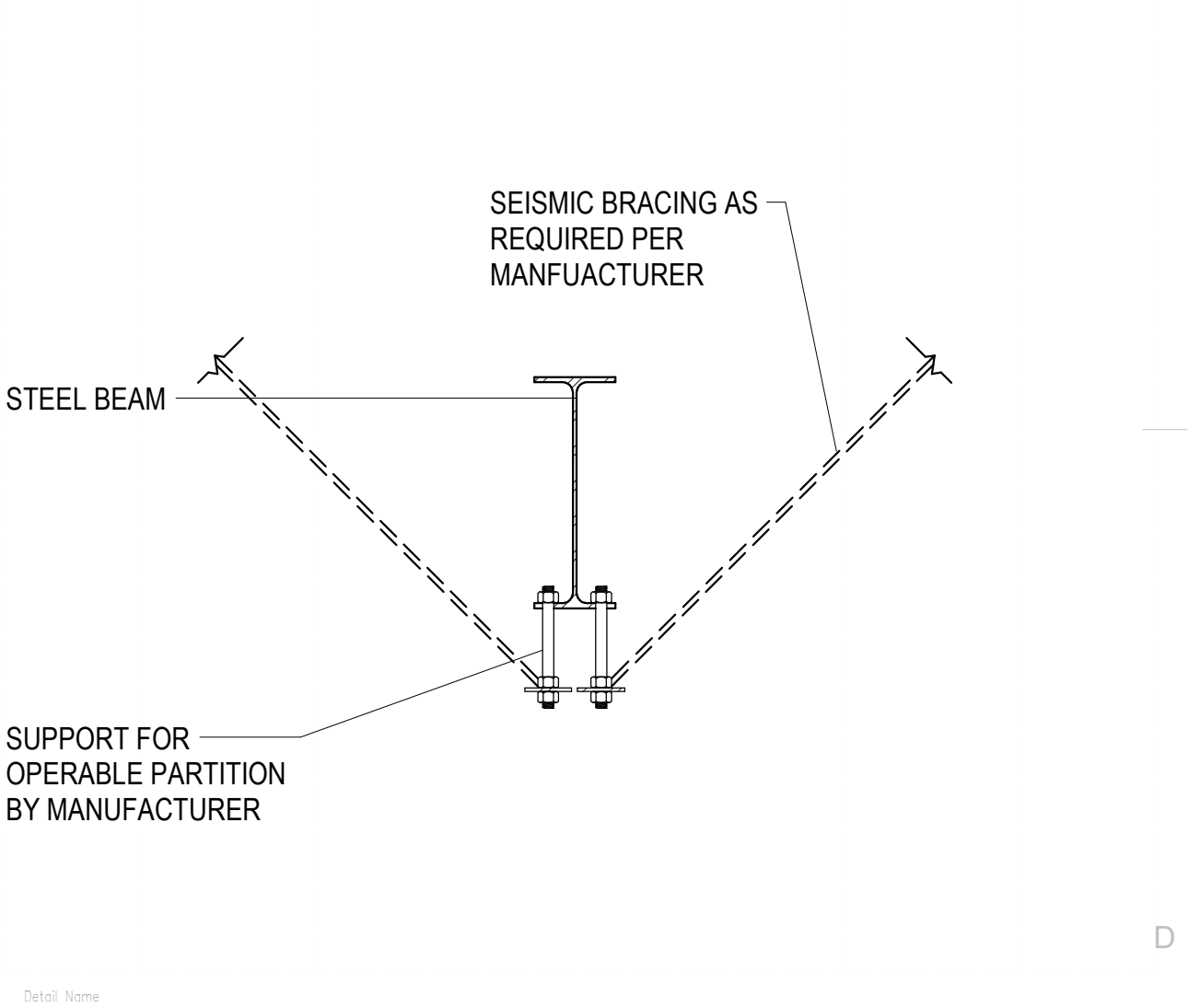
B2 STEEL TUBE TO STEEL MOMENT CONNECTION
 SF502 NO SCALE



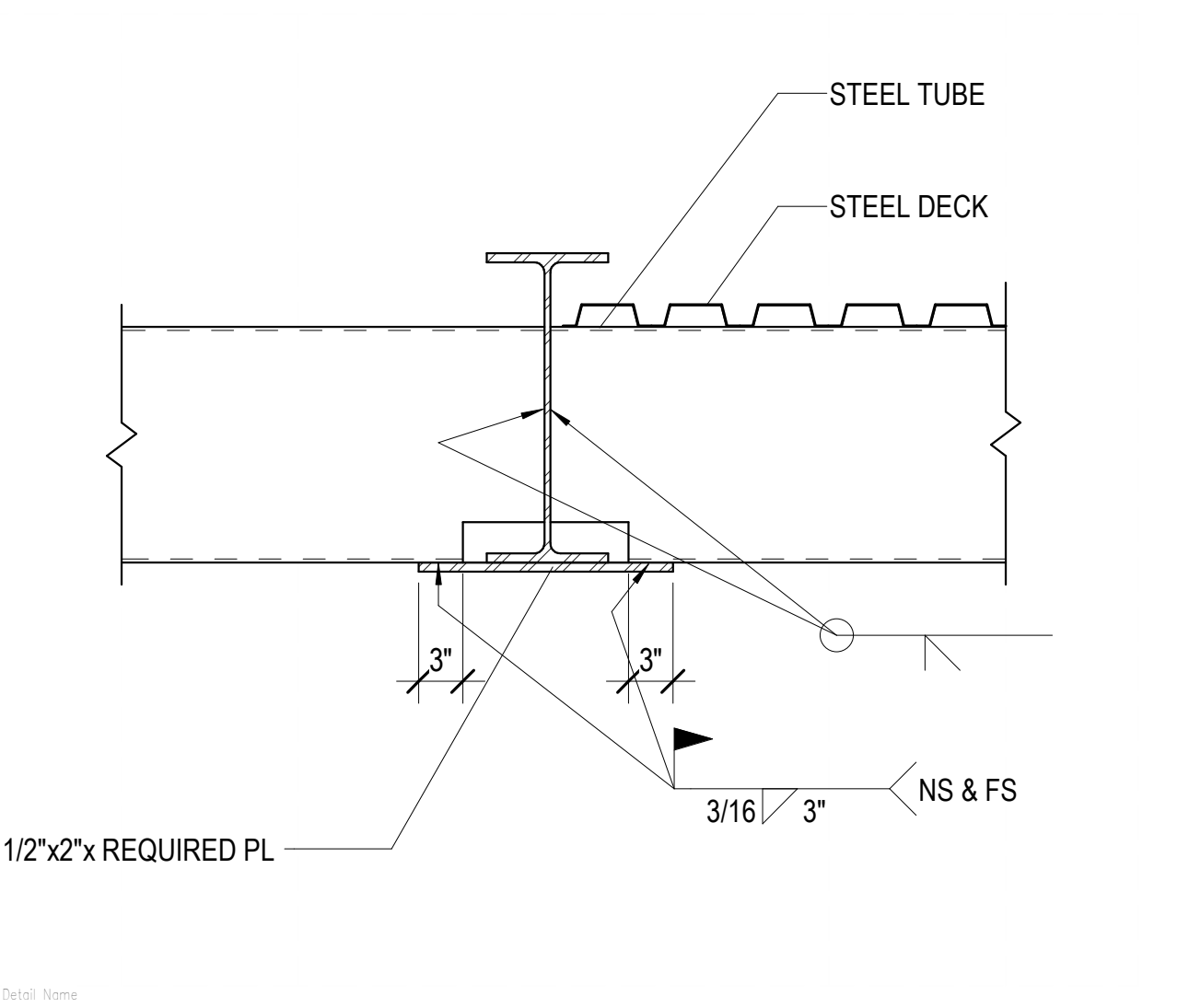
B3 PARAPET AT OUTDOOR PLAY
 SF502 NO SCALE



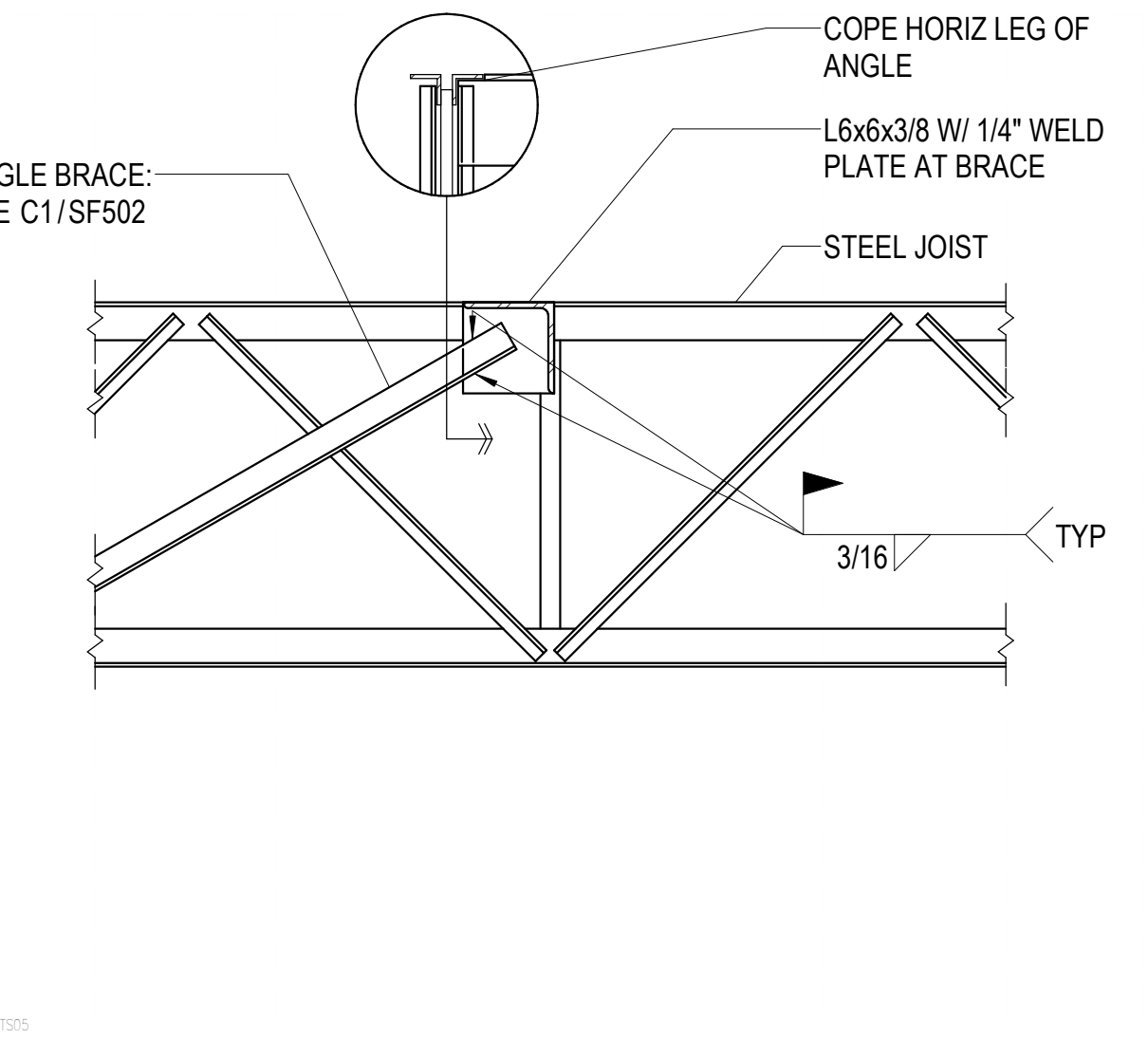
B4 NEW PARAPET STUDS
 SF502 NO SCALE



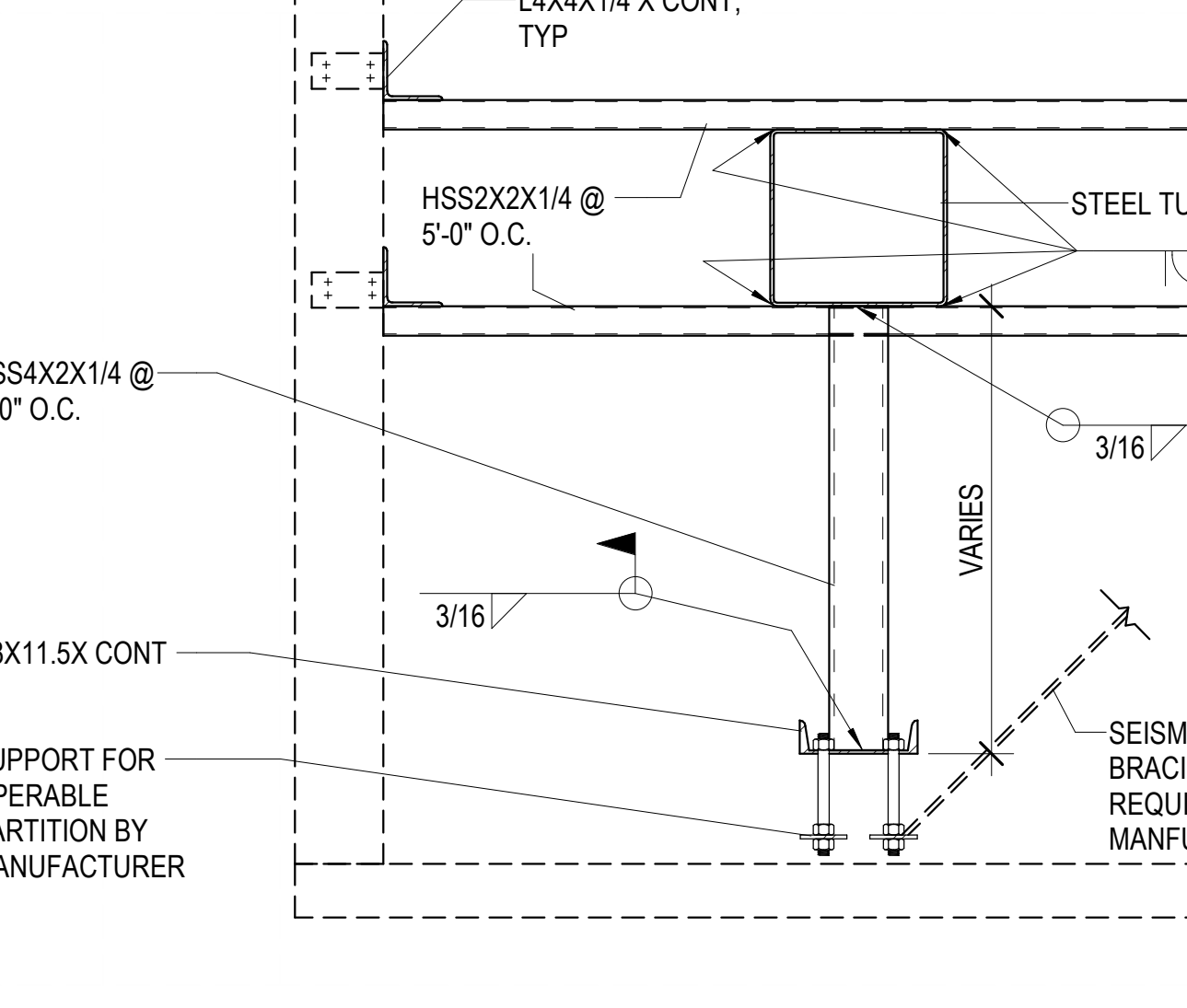
B5 MANUAL PARTITION SUPPORT
 SF502 NO SCALE



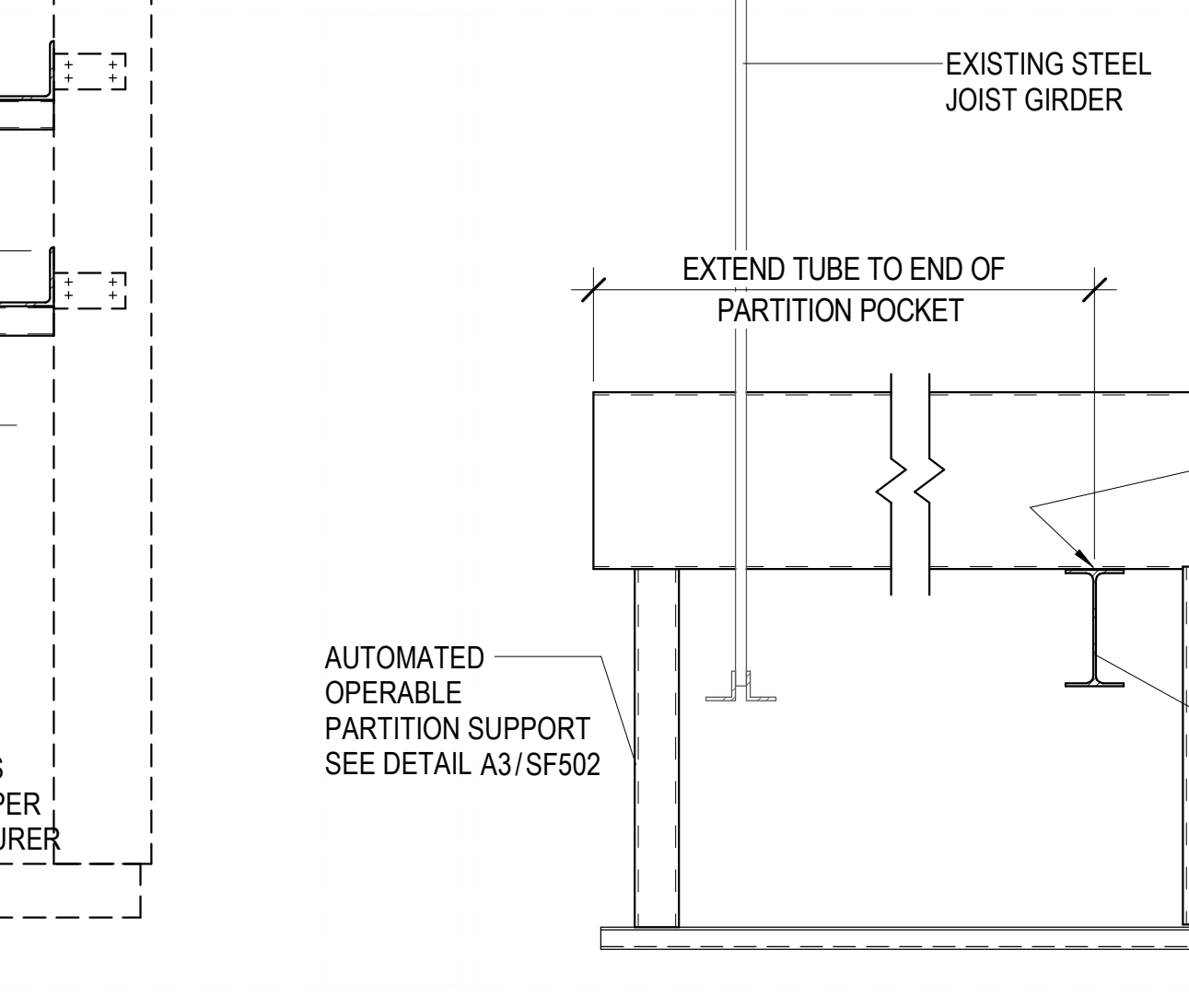
A1 STEEL TUBE TO STEEL MOMENT CONNECTION
 SF502 NO SCALE



A2 TYPICAL BRACE TO TOP CHORD DETAIL
 SF502 NO SCALE



A3 AUTOMATED OPERABLE PARTITION SUPPORT
 SF502 NO SCALE



A4 STEEL TUBE BEARING DETAIL
 SF502 NO SCALE

Autodesk Cloud (2024)528 - RD Retail Remodel (24) 2024528 - RD Retail Remodel.rvt
 8/30/2024 11:26:59 AM



JORDAN SCHOOL DISTRICT
JORDAN LEARNING CENTER
3706 WEST 9800 SOUTH
SOUTH JORDAN, UT 84009

©2023 MHTN ARCHITECTS, INC.
Confidentiality Notice:
This document is intended for use on the Project identified herein by individuals and companies involved in the design, permitting, bidding and construction of the Project. All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without the prior written permission of MHTN Architects, Inc. Any unauthorized use, distribution, or reproduction of this document for purposes other than those intended is strictly prohibited. If a digital copy of this document is received in error, please delete it.
SEAL

MHTN PROJECT NO. 2024528
Original drawing is 36" x 42". Do not scale contents of this drawing.

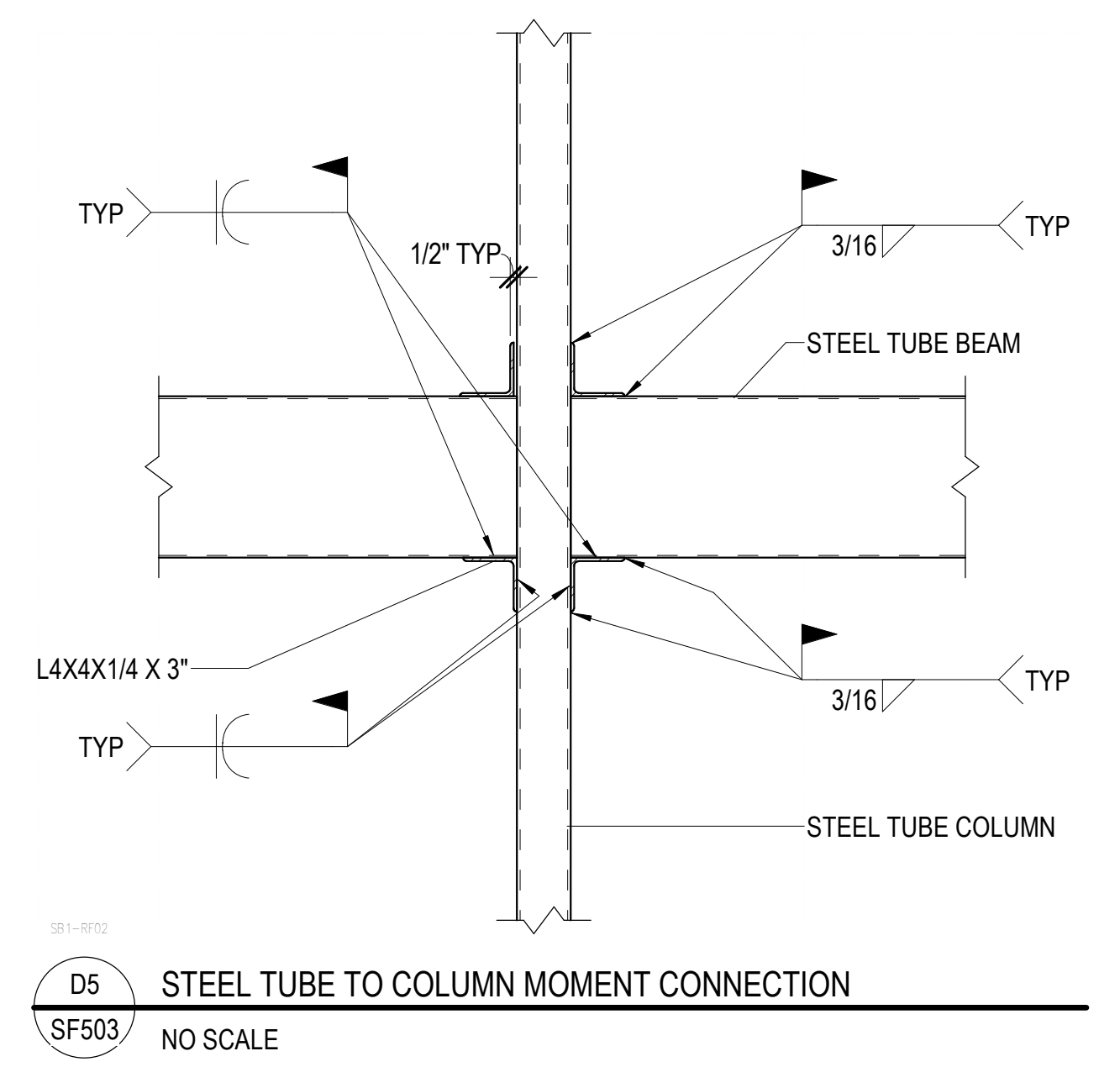
REVISIONS:
CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

NO.	DATE	DESCRIPTION
1	08/29/24	ADDITIONAL R1

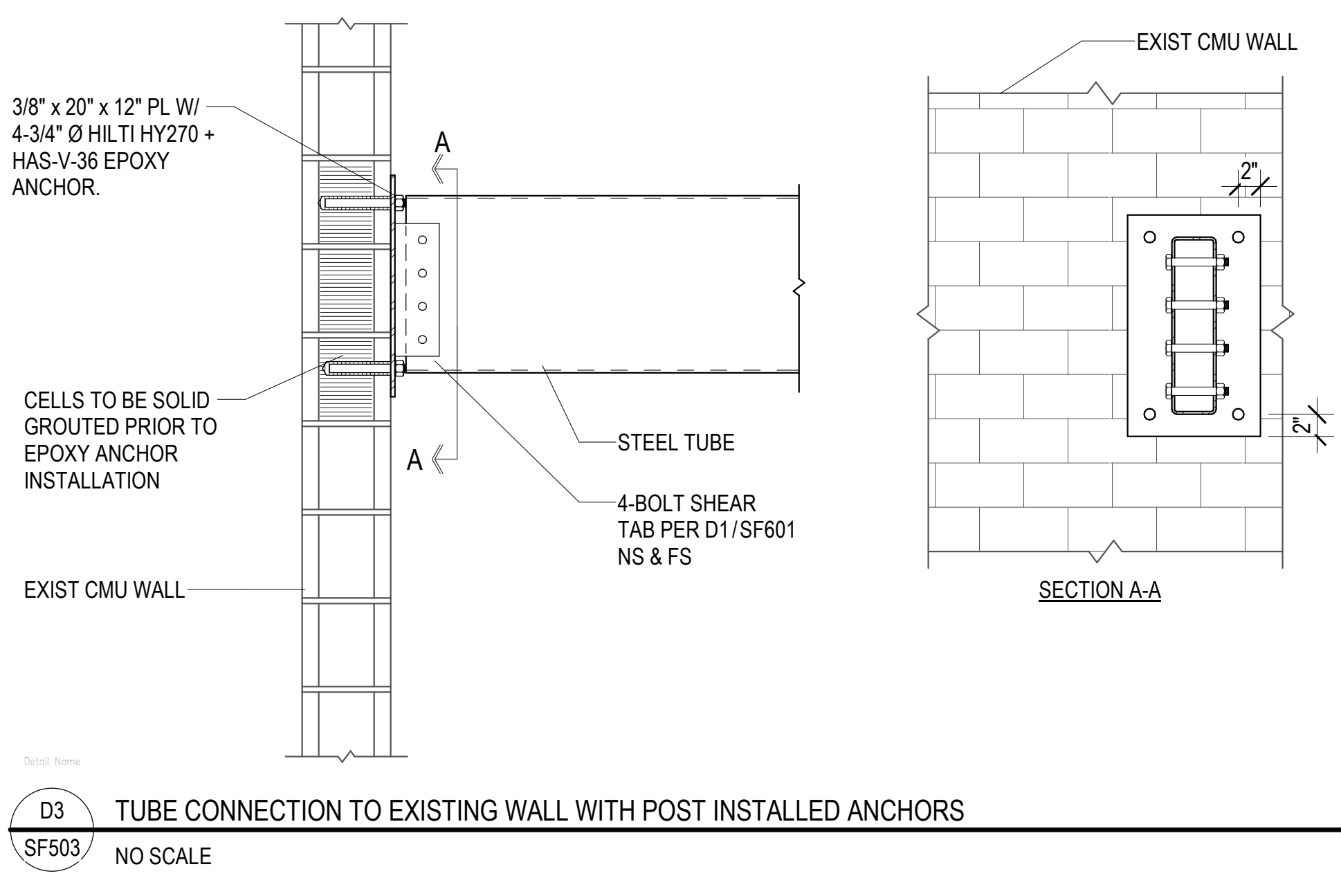
ISSUE
CONSTRUCTION DOCUMENTS 100%
08/29/24

SHEET NAME
ROOF FRAMING DETAILS

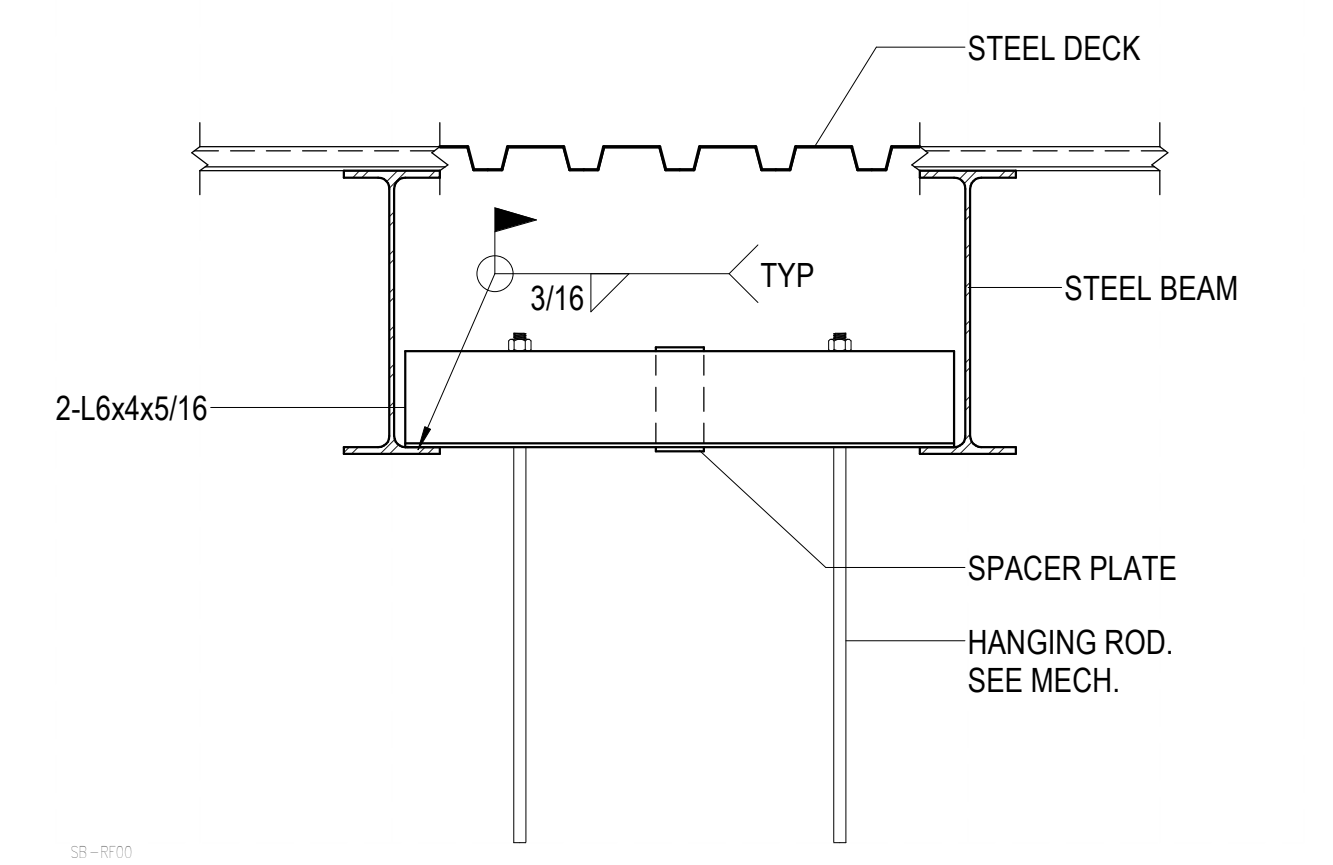
SHEET NUMBER
SF503



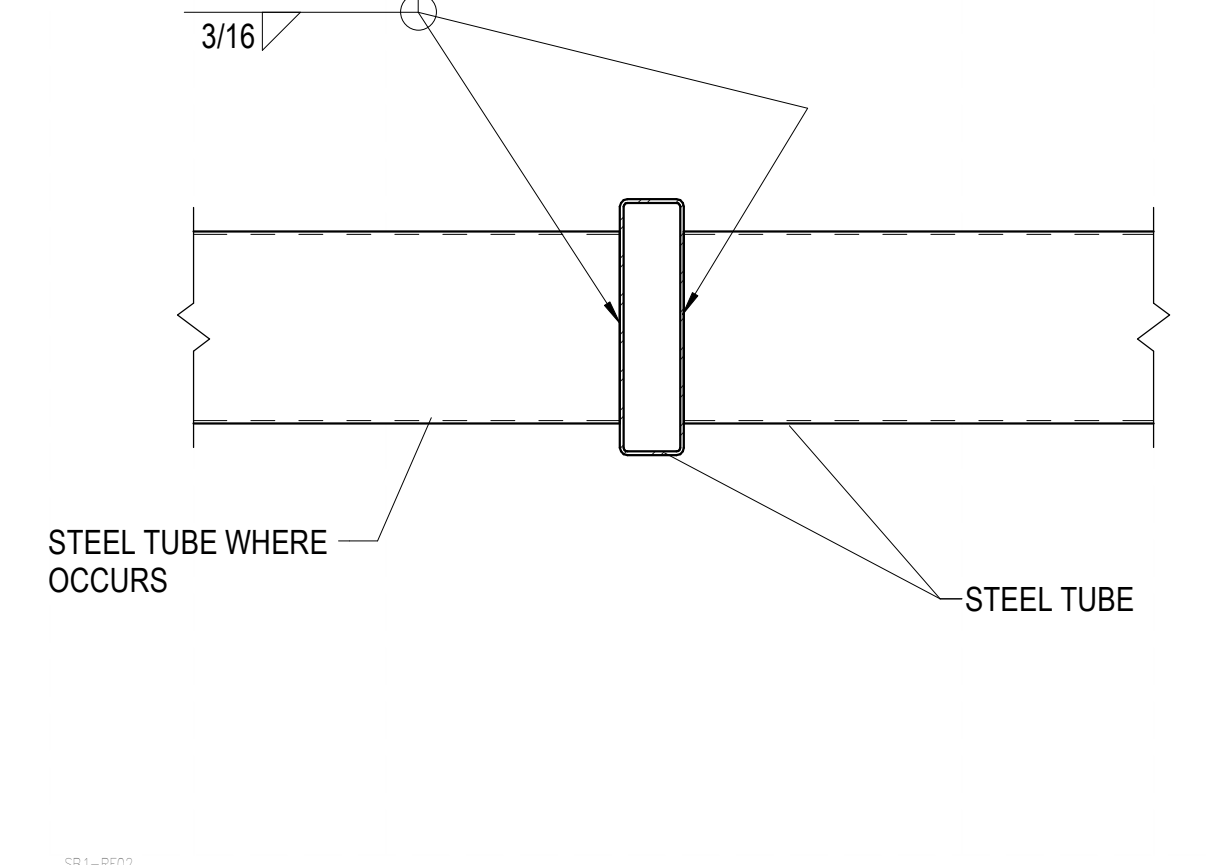
D5 STEEL TUBE TO COLUMN MOMENT CONNECTION
NO SCALE



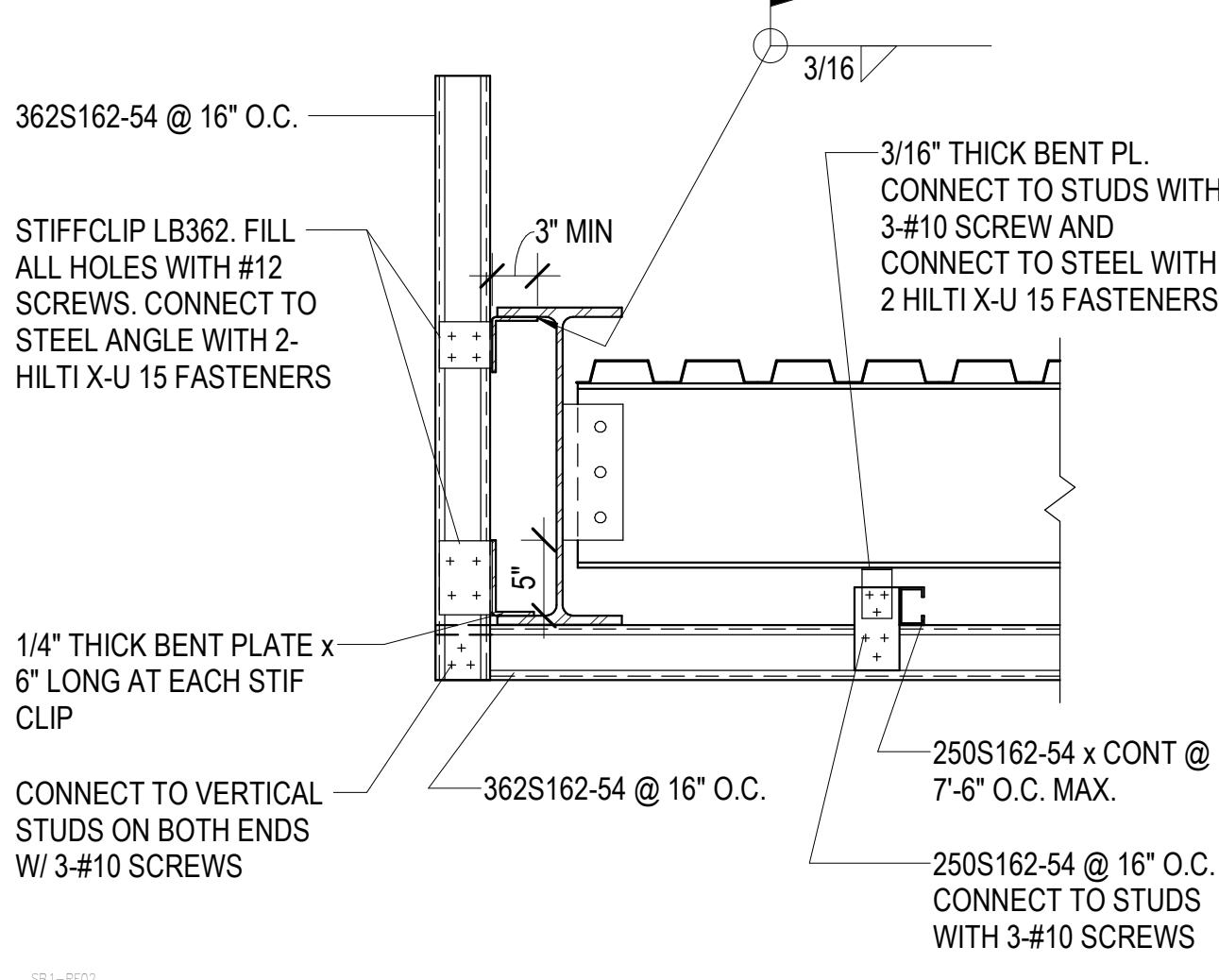
D3 TUBE CONNECTION TO EXISTING WALL WITH POST INSTALLED ANCHORS
NO SCALE



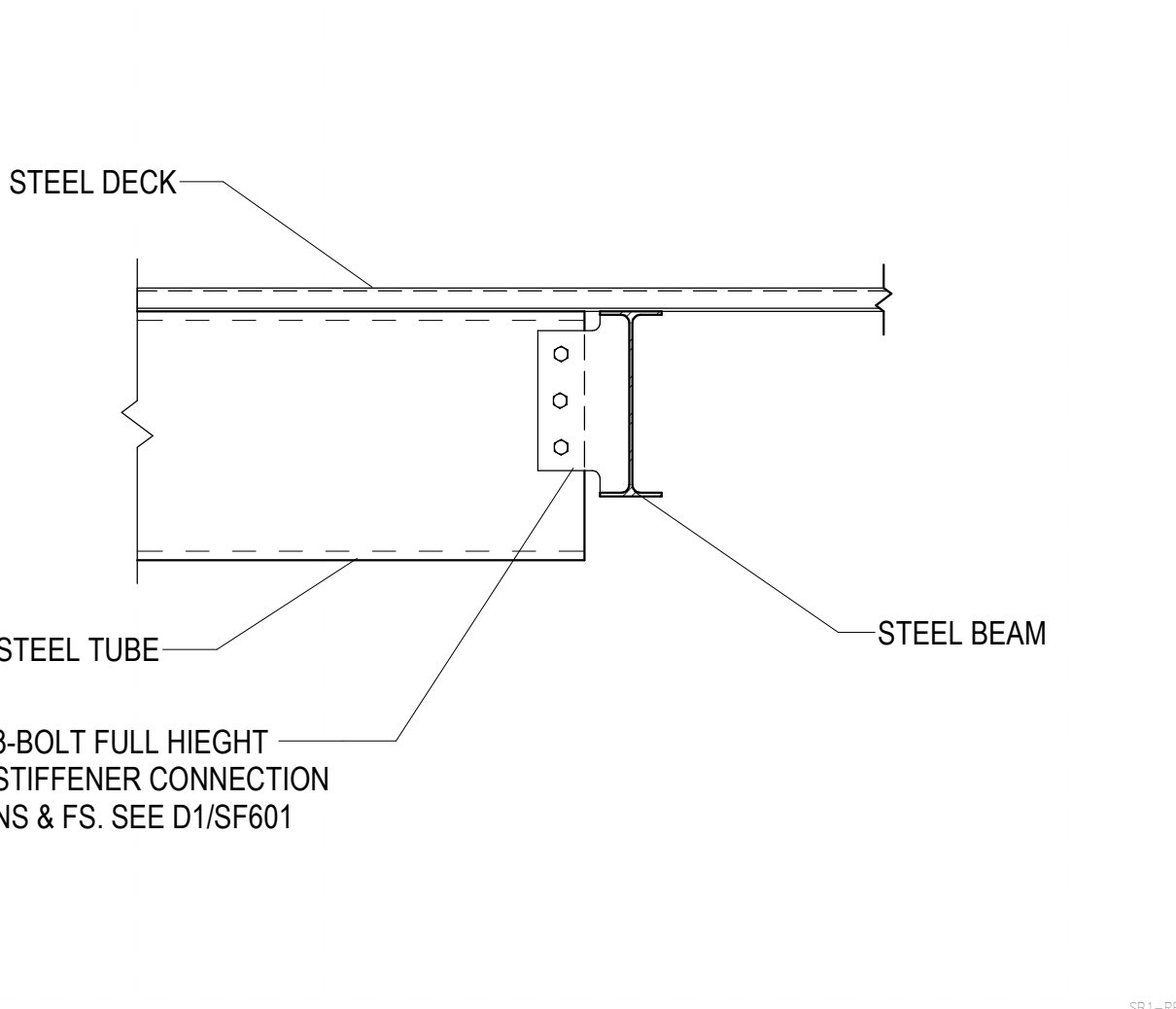
C5 TYPICAL HANGING MECHANICAL UNIT SUPPORT DETAIL
NO SCALE



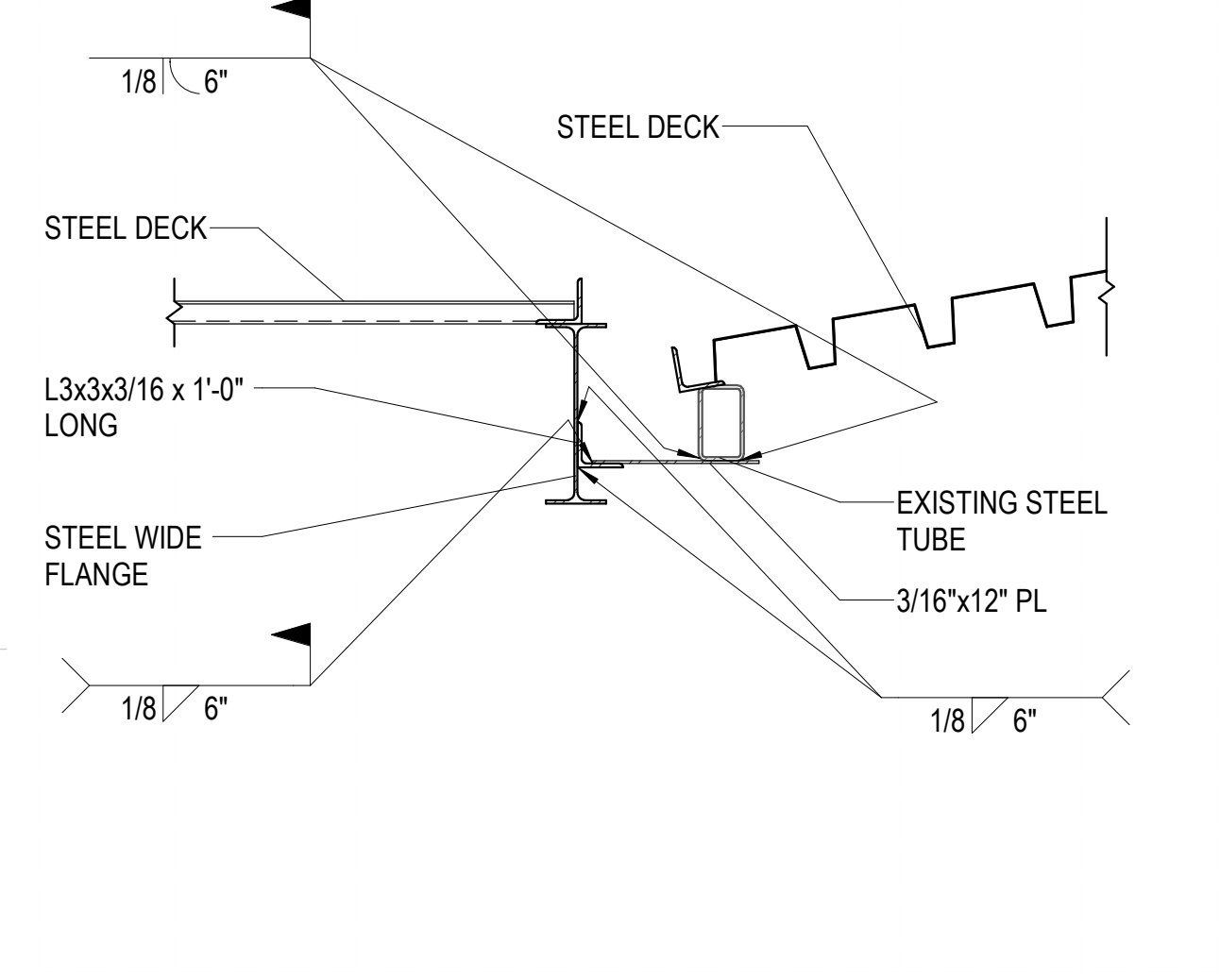
C4 TYPICAL TRELLIS MEMBER CONNECTION
NO SCALE



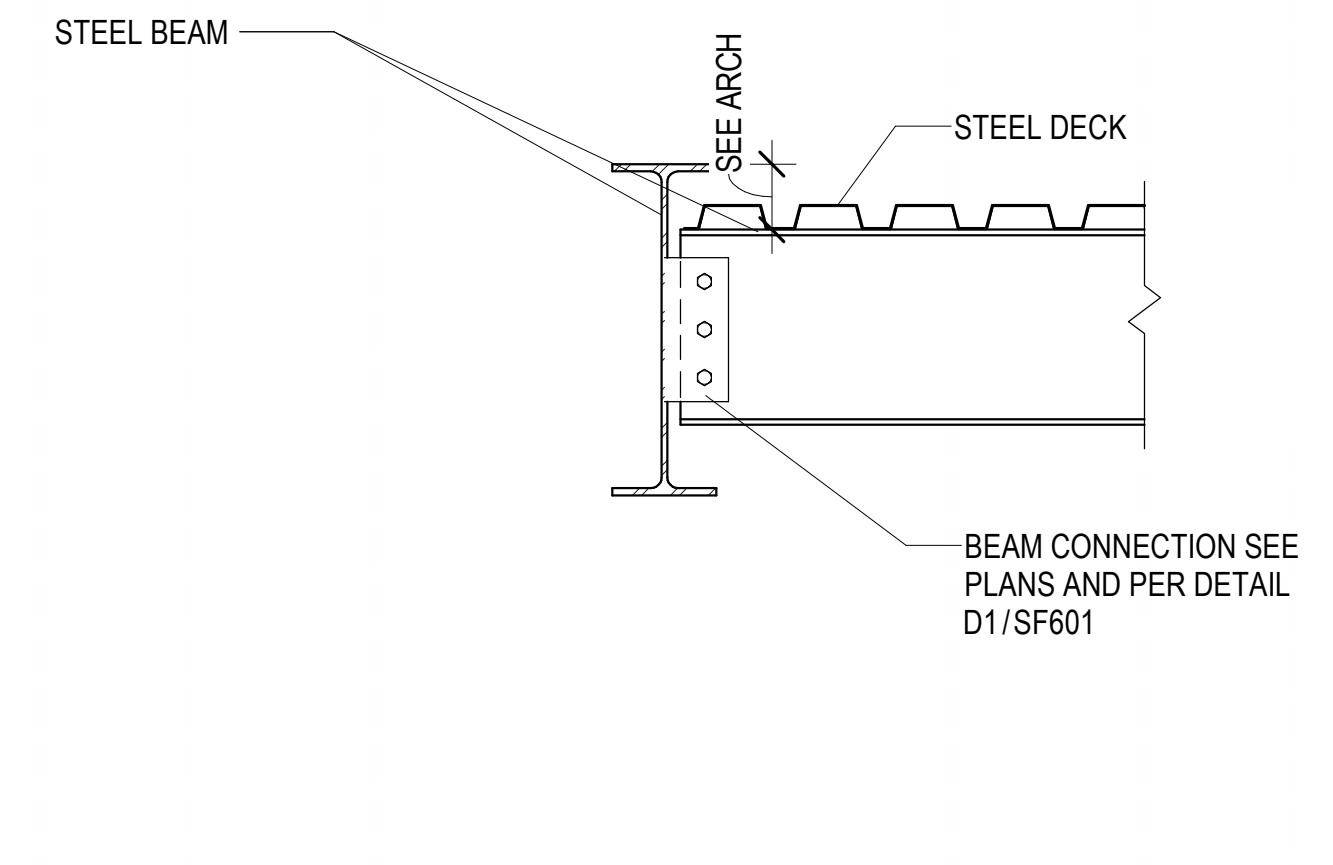
C3 SOFFIT CONNECTION
NO SCALE



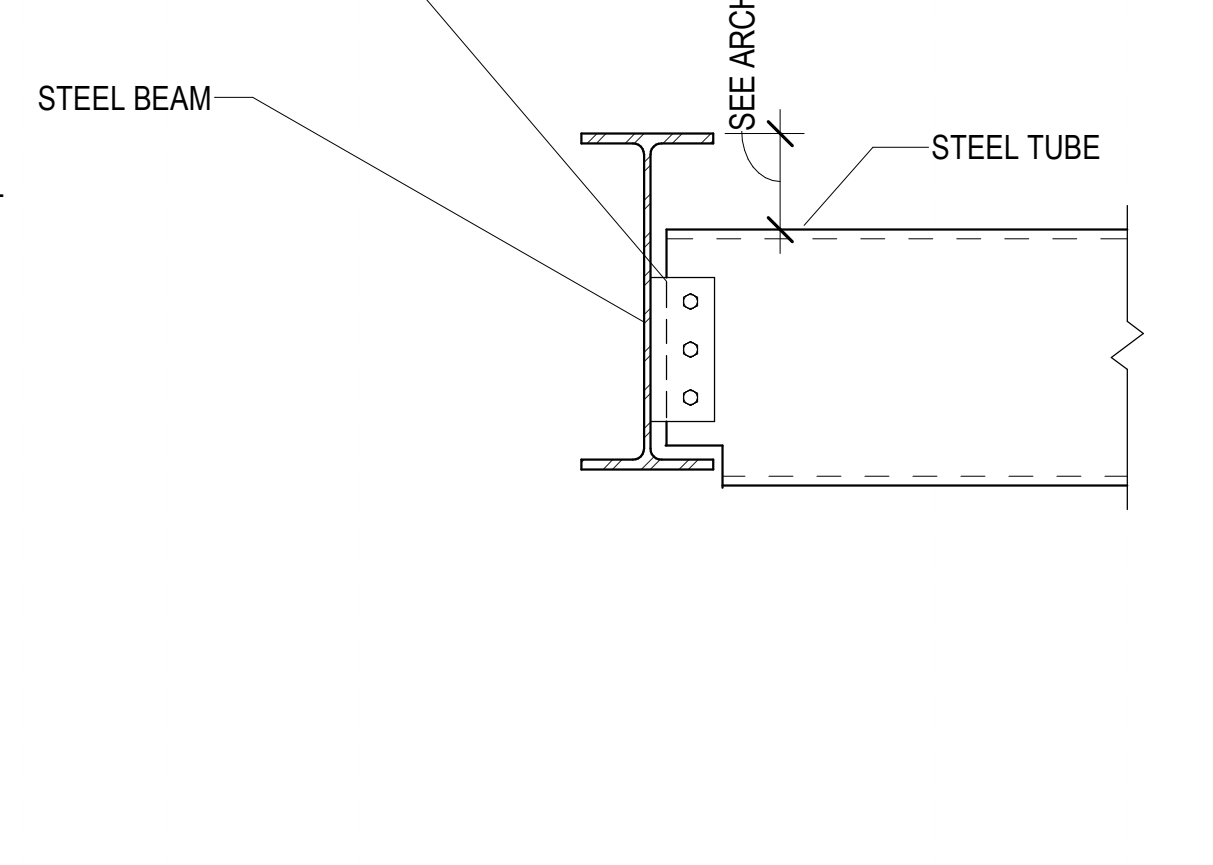
C2 STEEL TUBE CONNECTION TO WF BEAM
NO SCALE



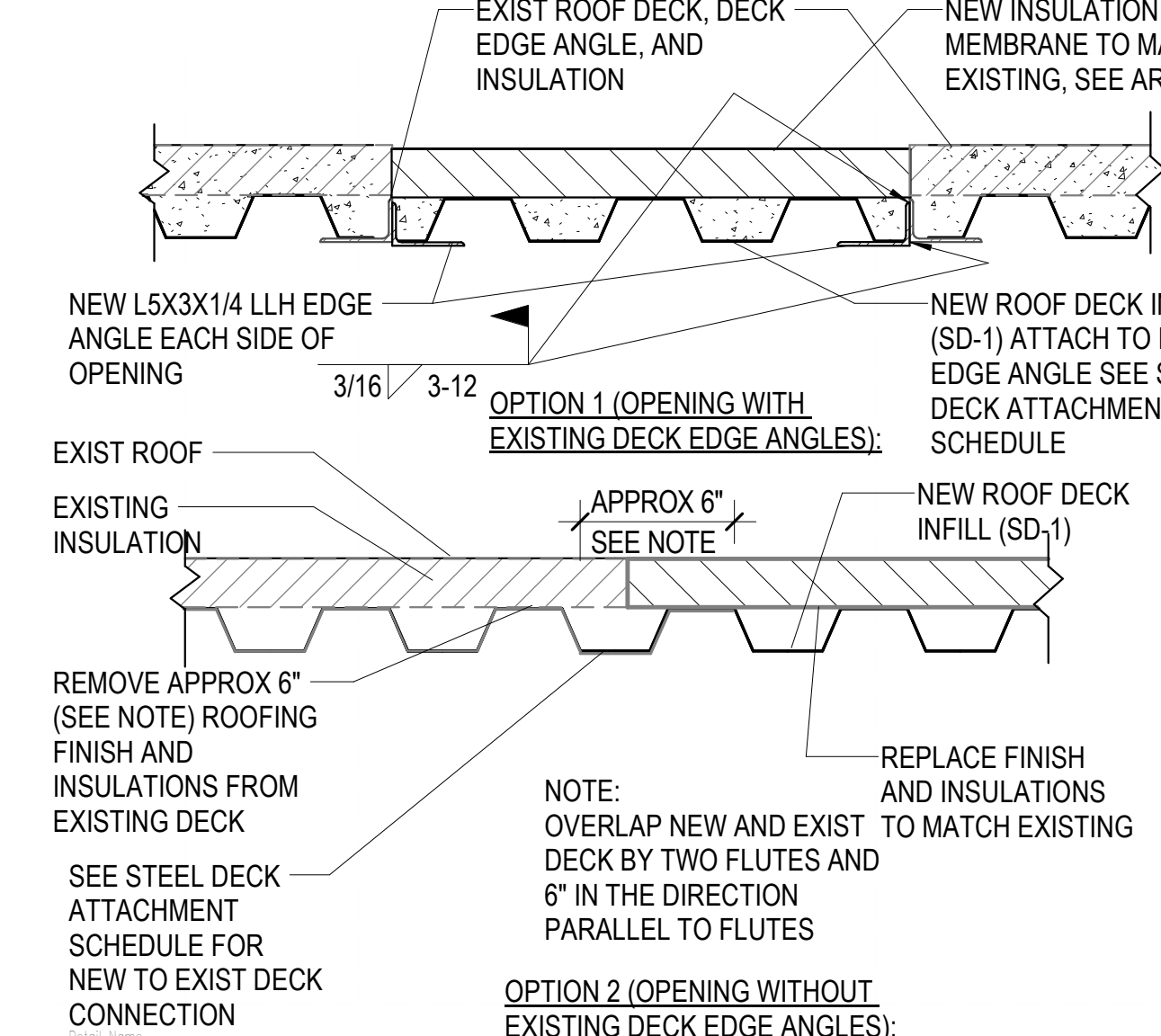
C1 CANOPY DIAPHRAGM CONNECT TO EXISTING ROOF
NO SCALE



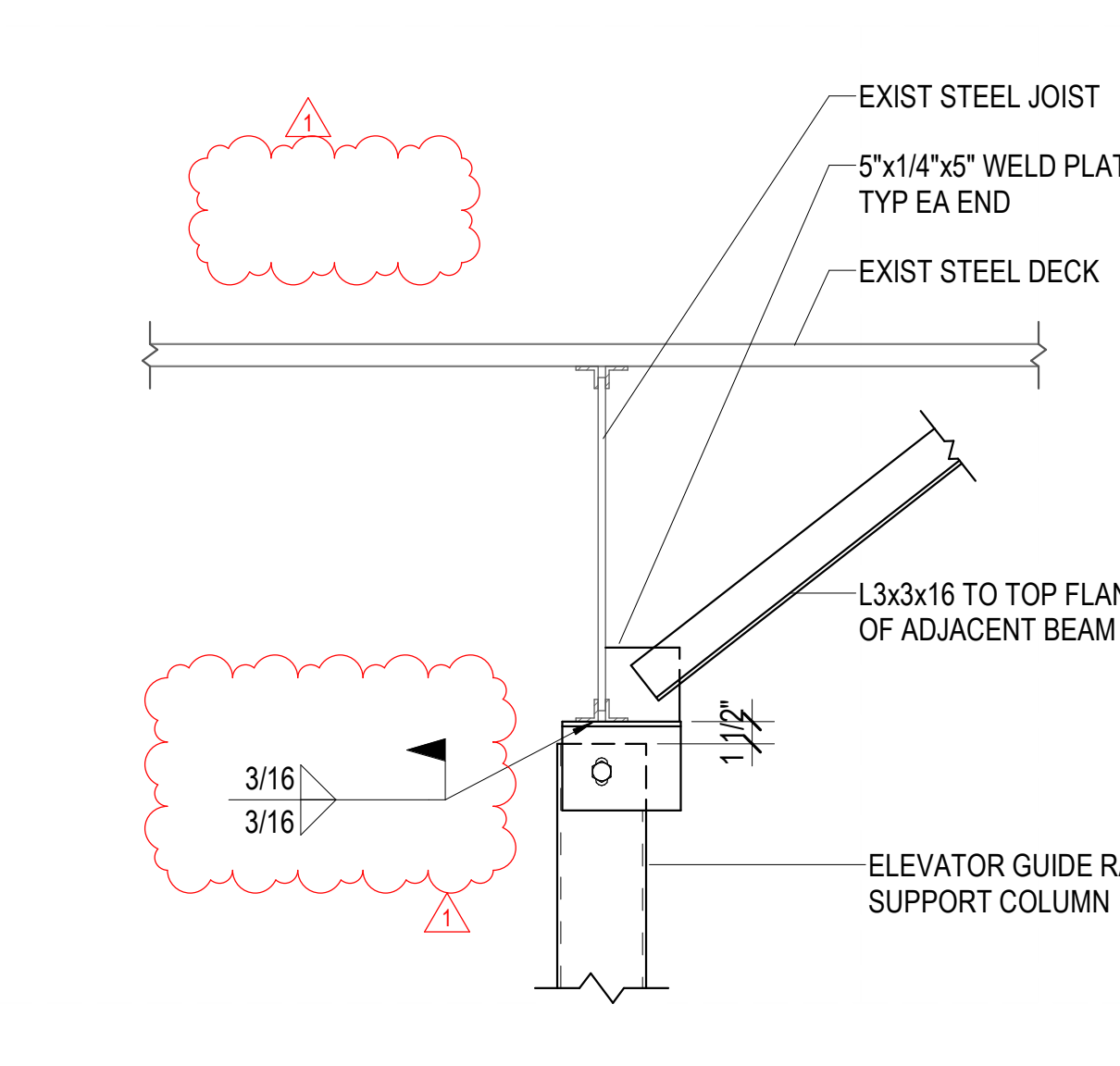
B5 STEEL BEAM CONNECTION AT CANOPY
NO SCALE



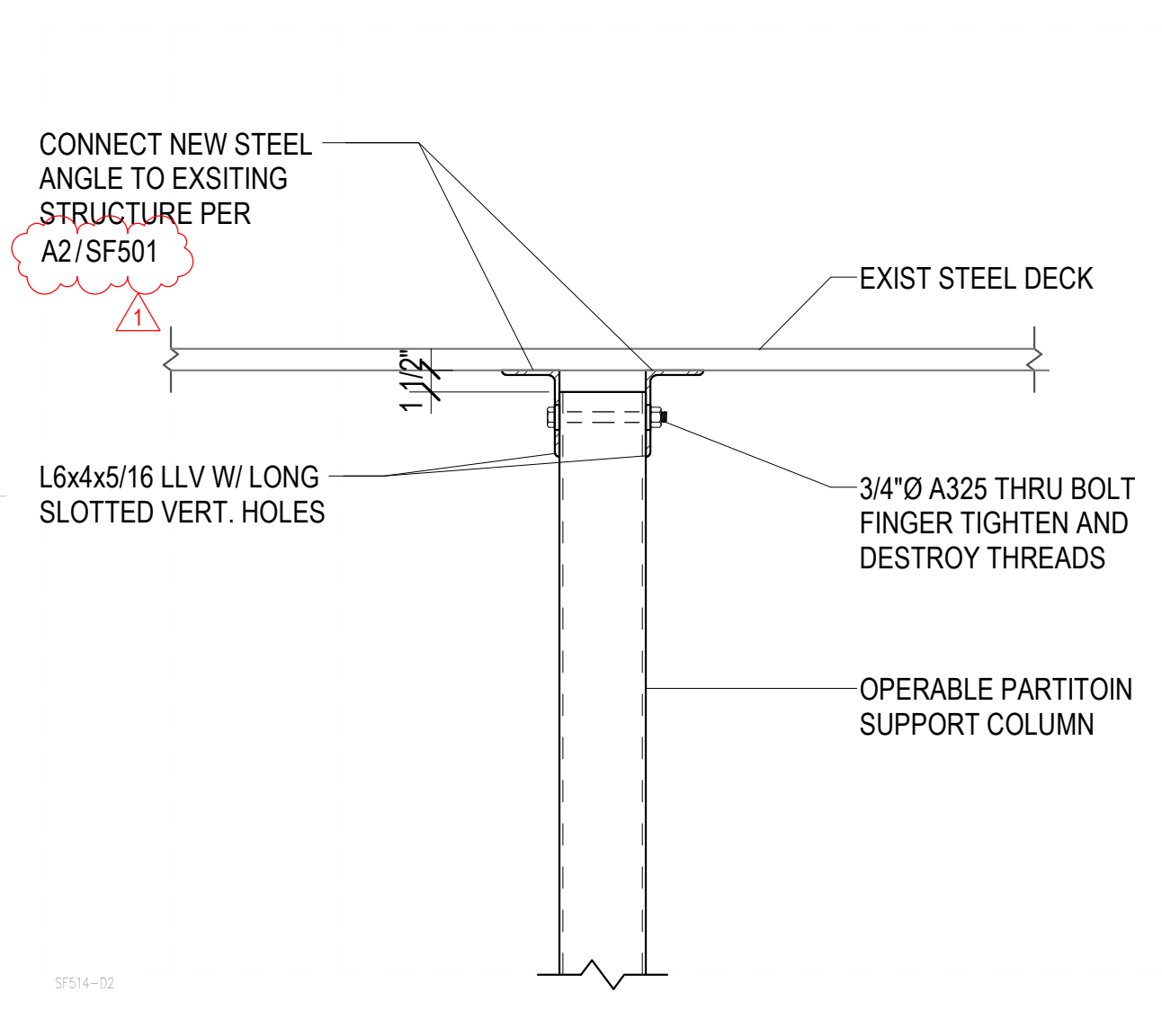
B4 STEEL TUBE TO STEEL BEAM
NO SCALE



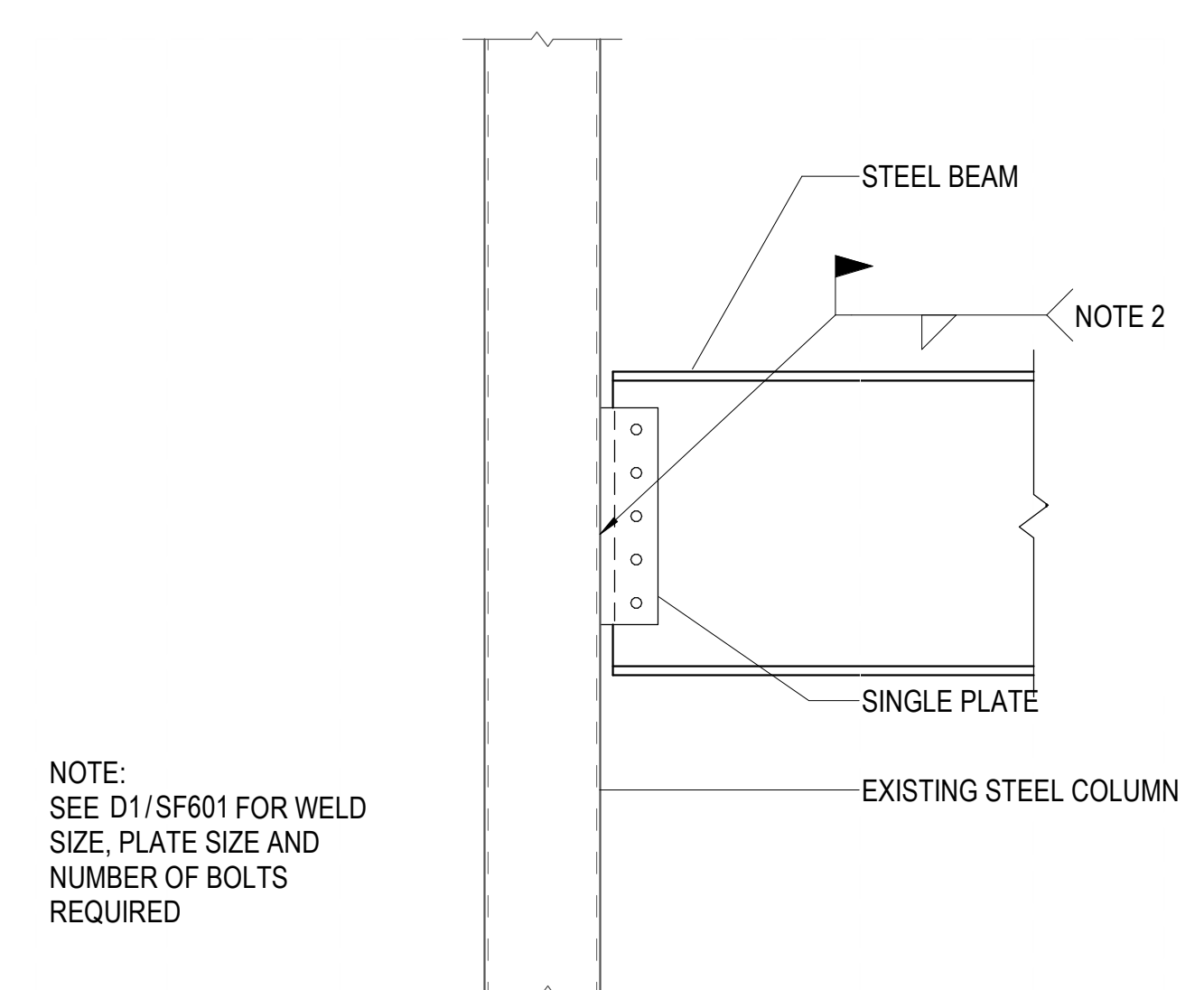
B3 TYP ROOF DECK INFILL DETAIL
NO SCALE



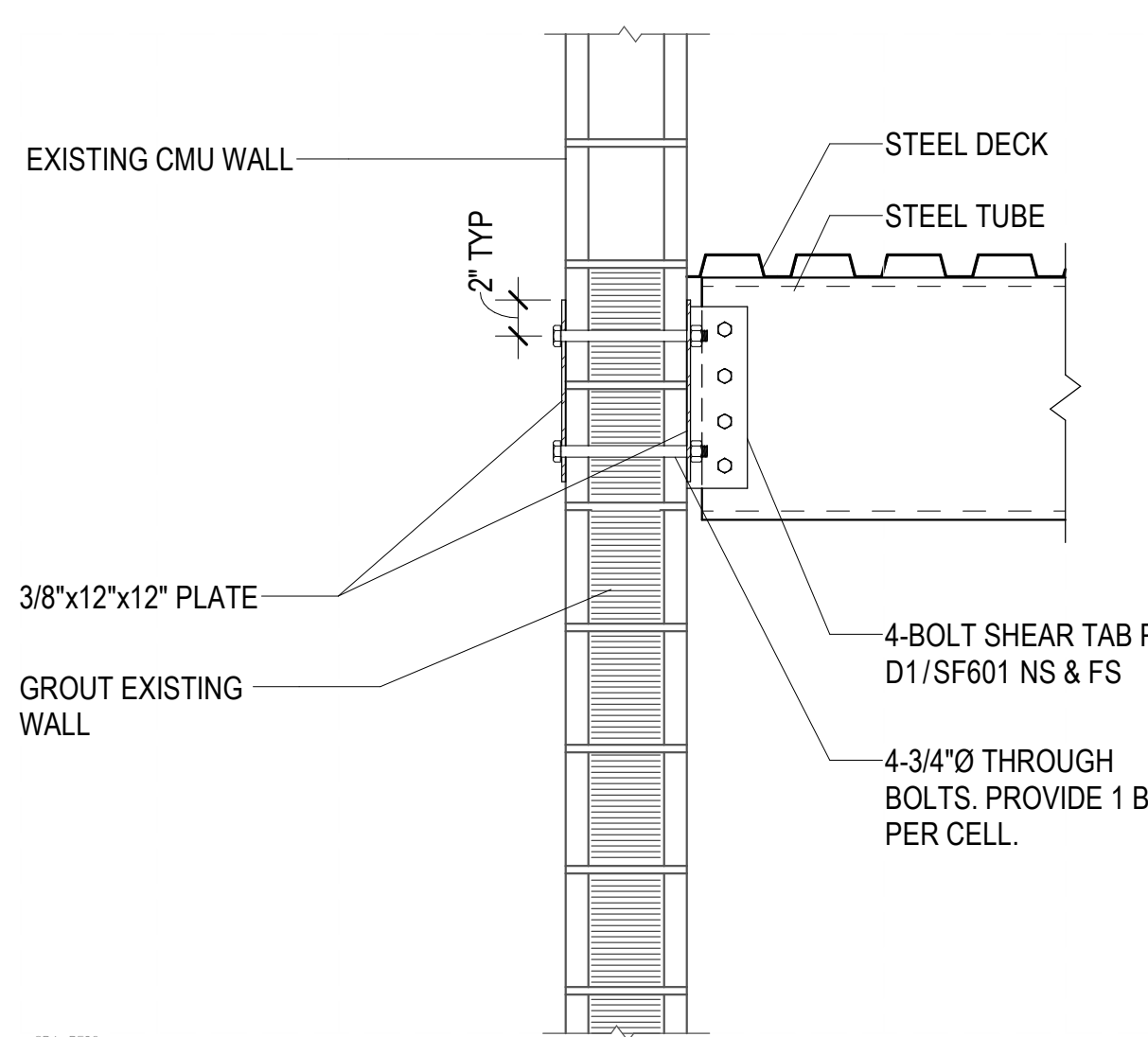
B1 TYPICAL OPERABLE PARTITION SUPPORT COLUMN BRACING AT TOP
NO SCALE



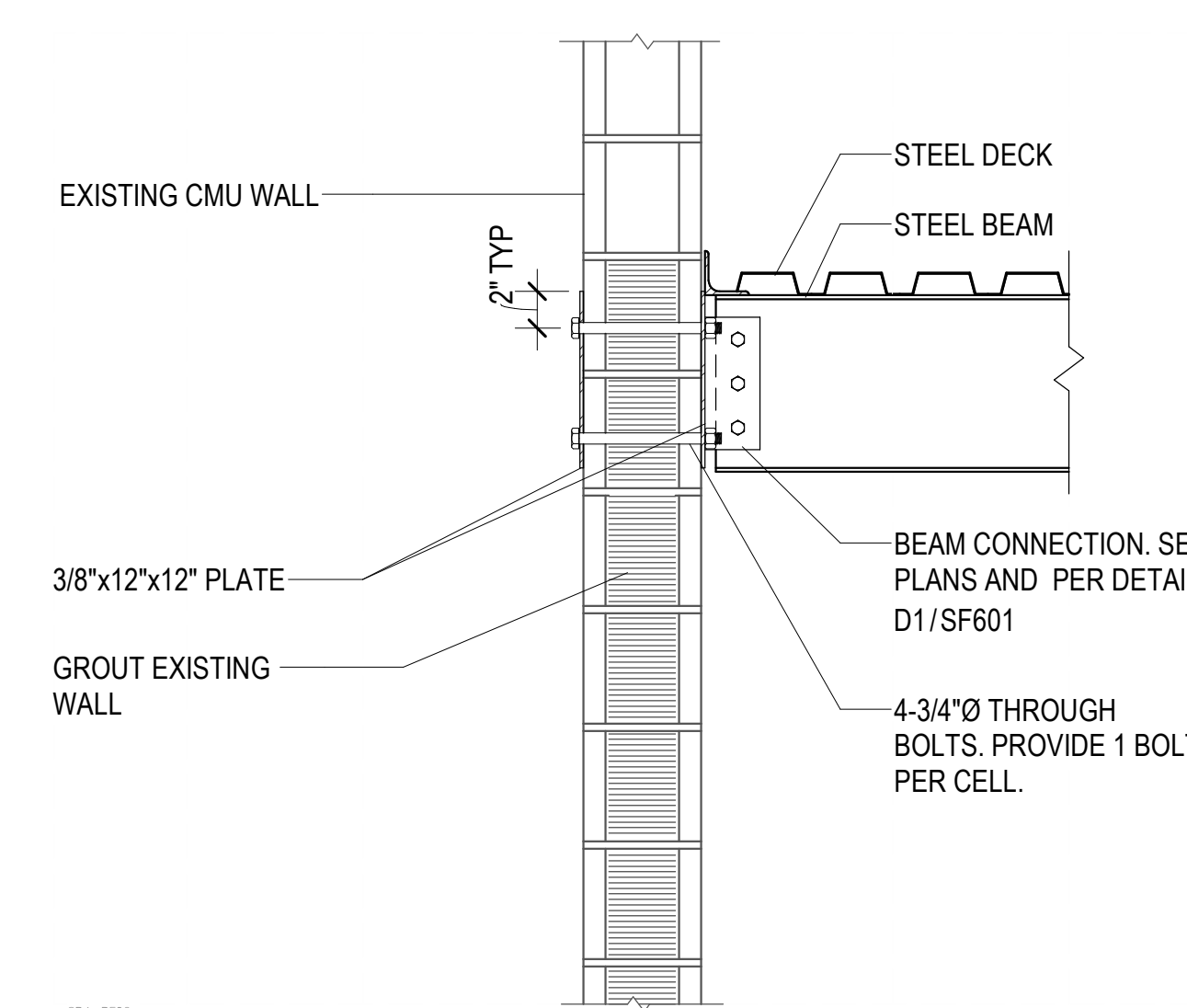
B2 STEEL TUBE TO STEEL BEAM
NO SCALE



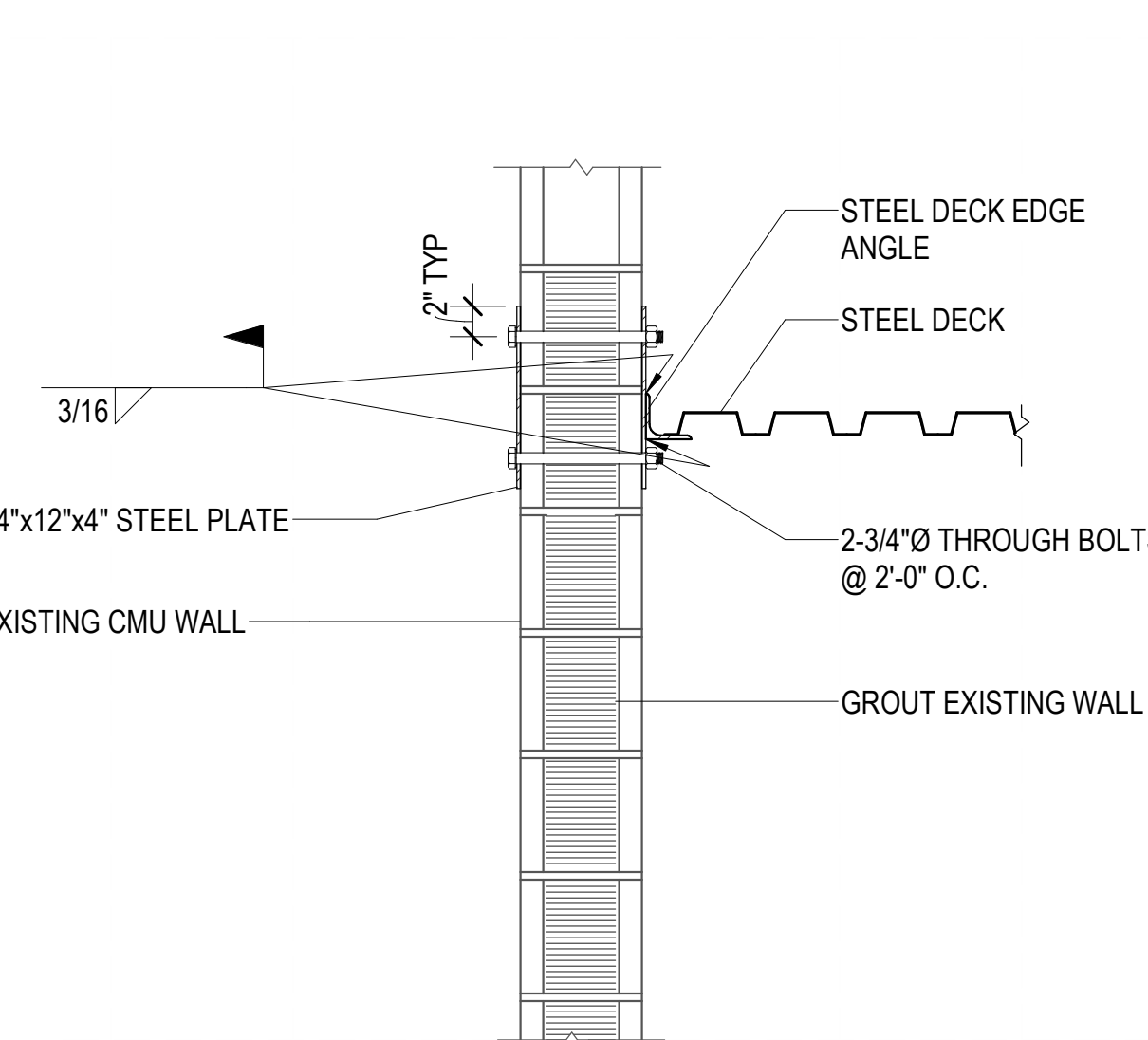
A5 NEW STEEL BEAM TO EXISTING COLUMN
NO SCALE



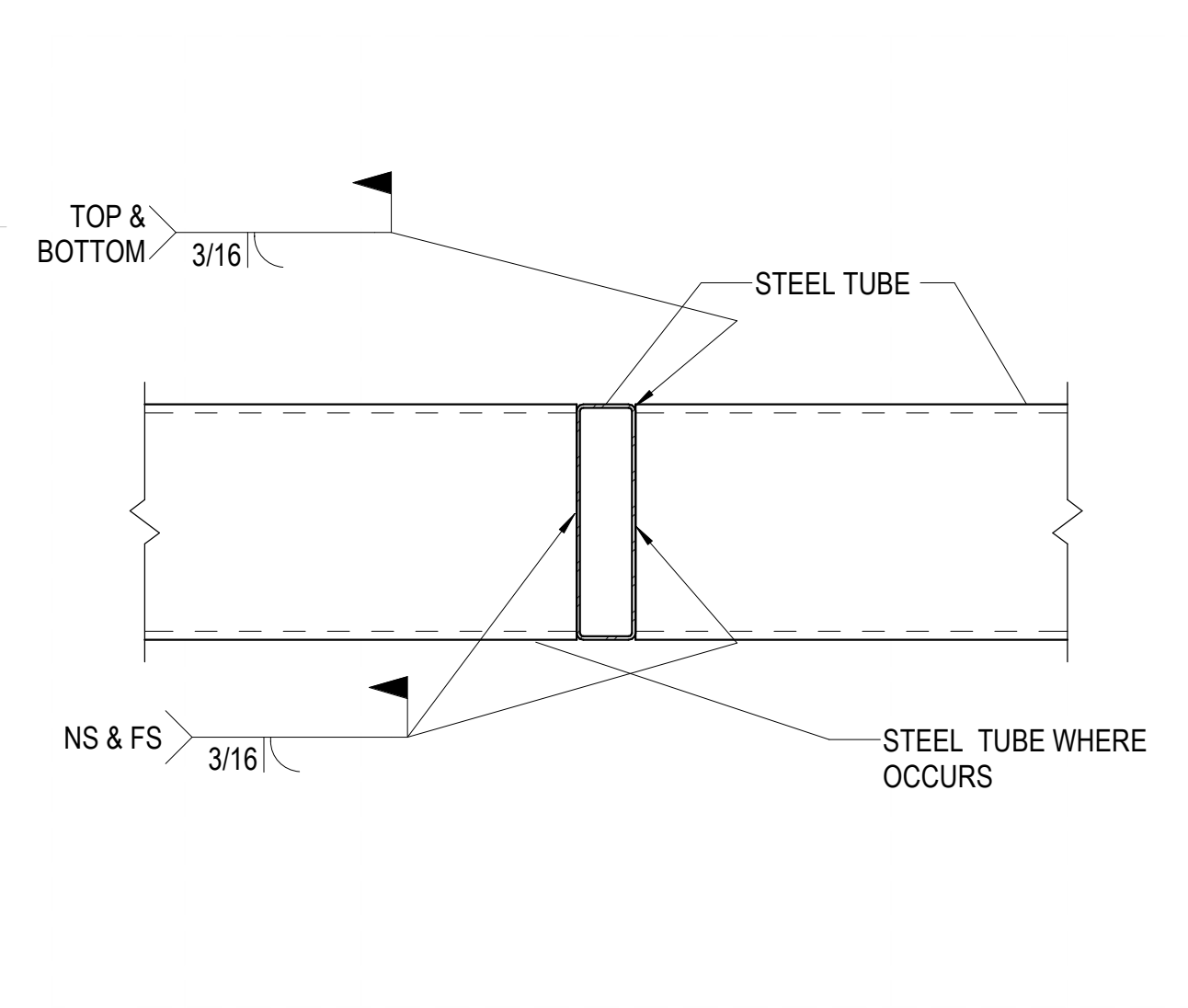
A4 NEW STEEL TUBE TO EXISTING CMU WALL
NO SCALE



A3 NEW STEEL BEAM TO EXISTING CMU WALL
NO SCALE

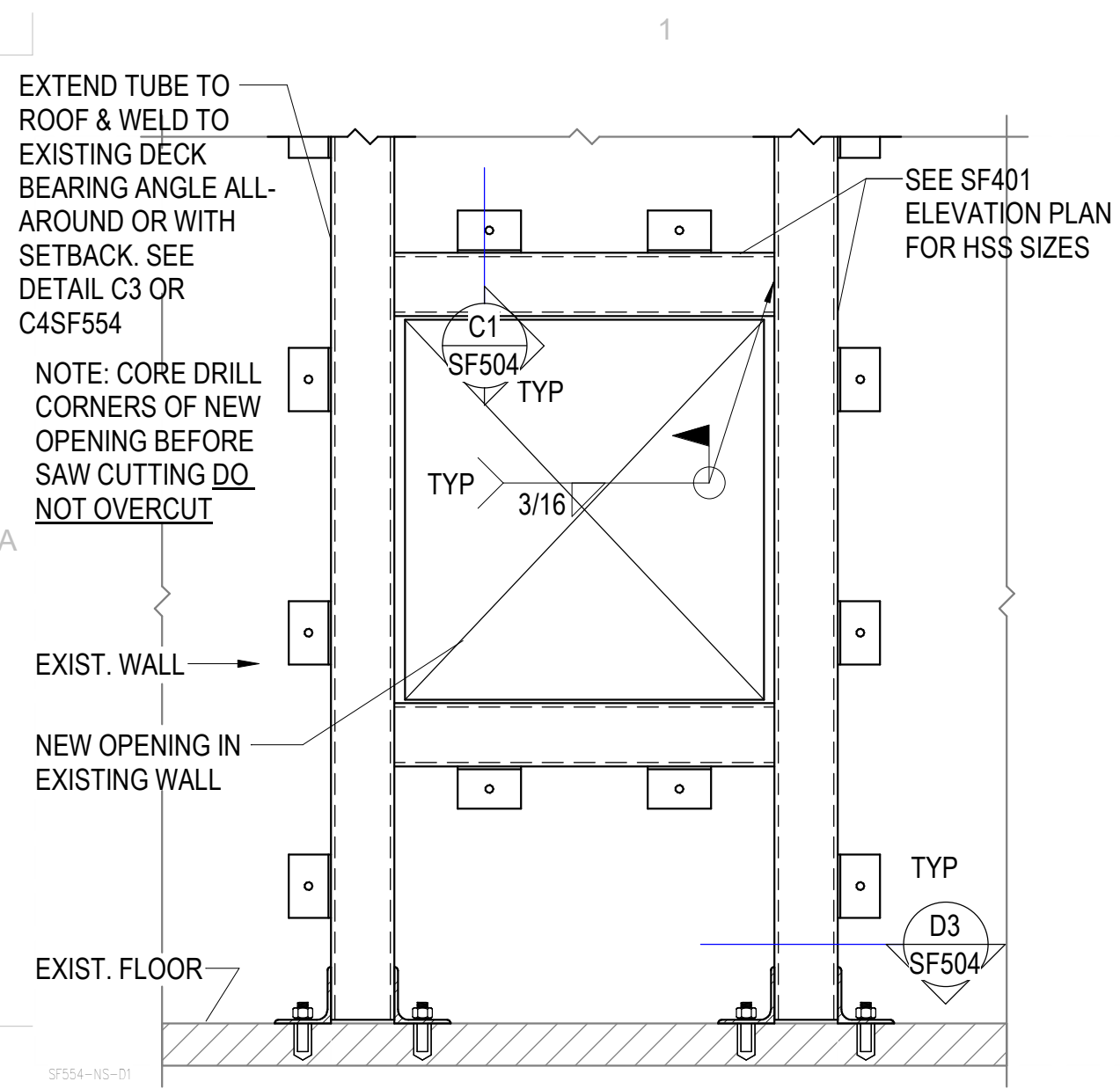


A2 DECK EDGE TO EXISTING CMU WALL
NO SCALE

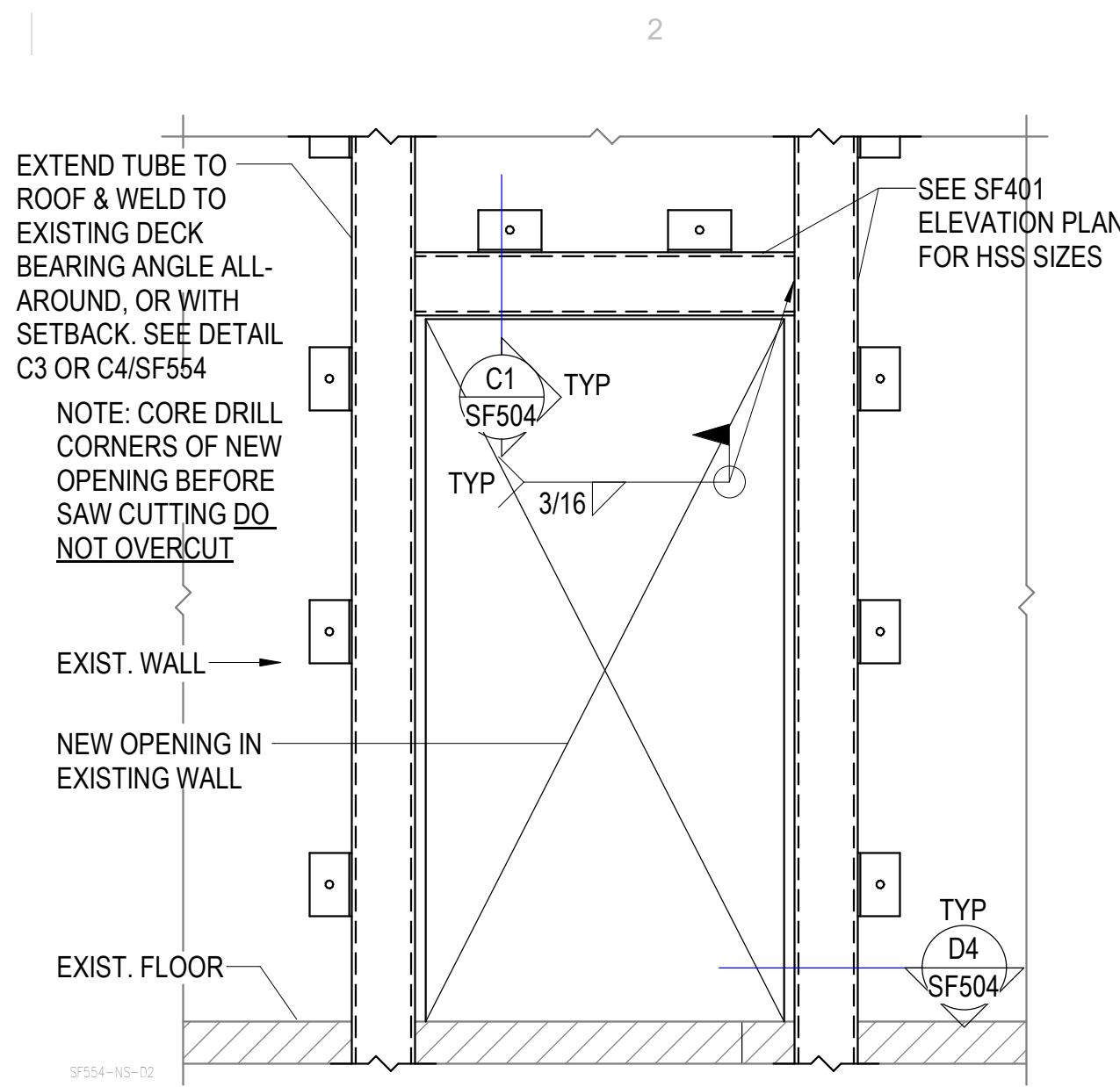


A1 STEEL TUBE TO STEEL BEAM
NO SCALE

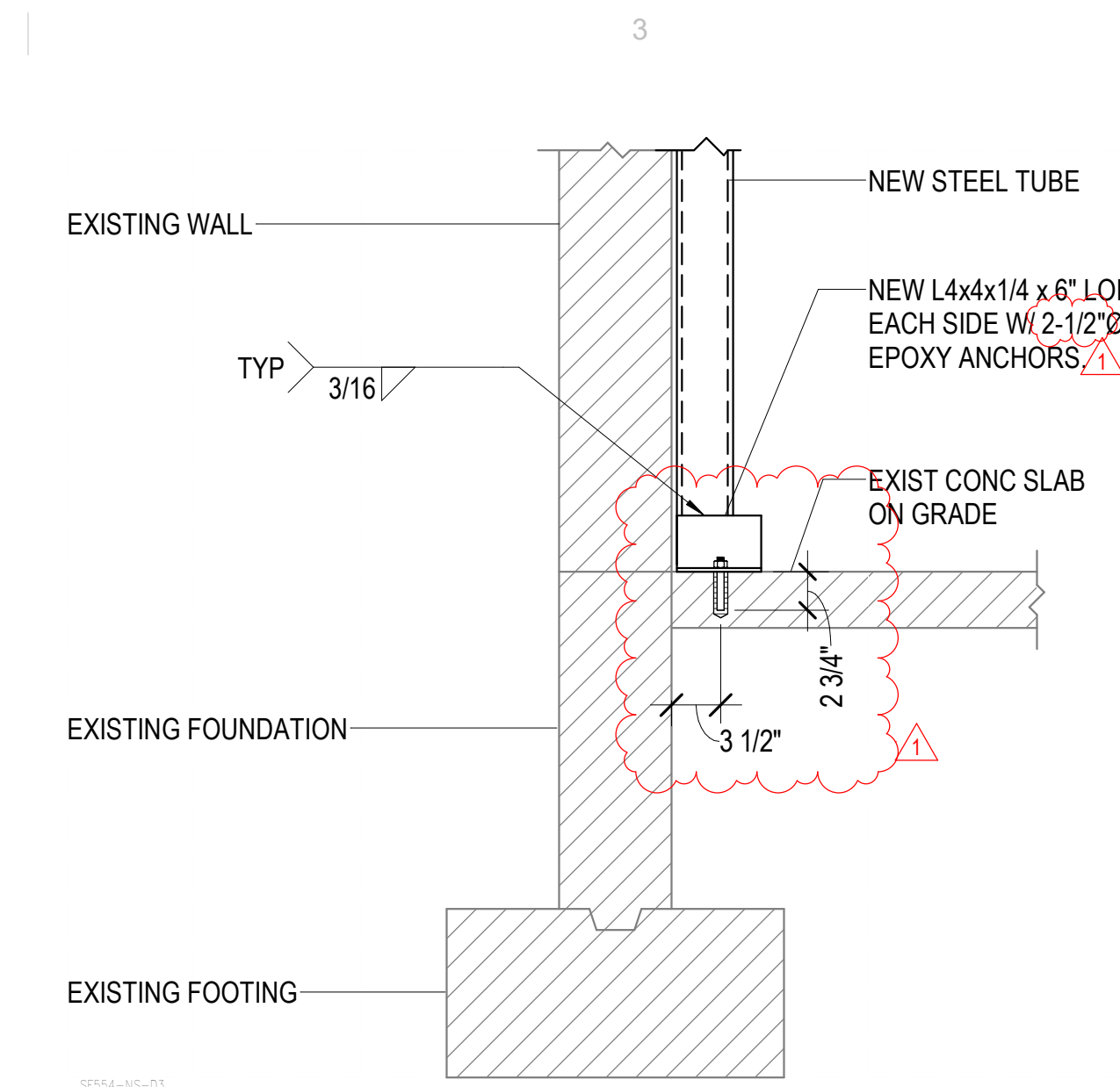
Autodesk Civil 3D 2024.528 - IBD Retail Remodel.dwg 2024.528 - IBD Retail Remodel.rvt 8/30/2024 11:26:59 AM



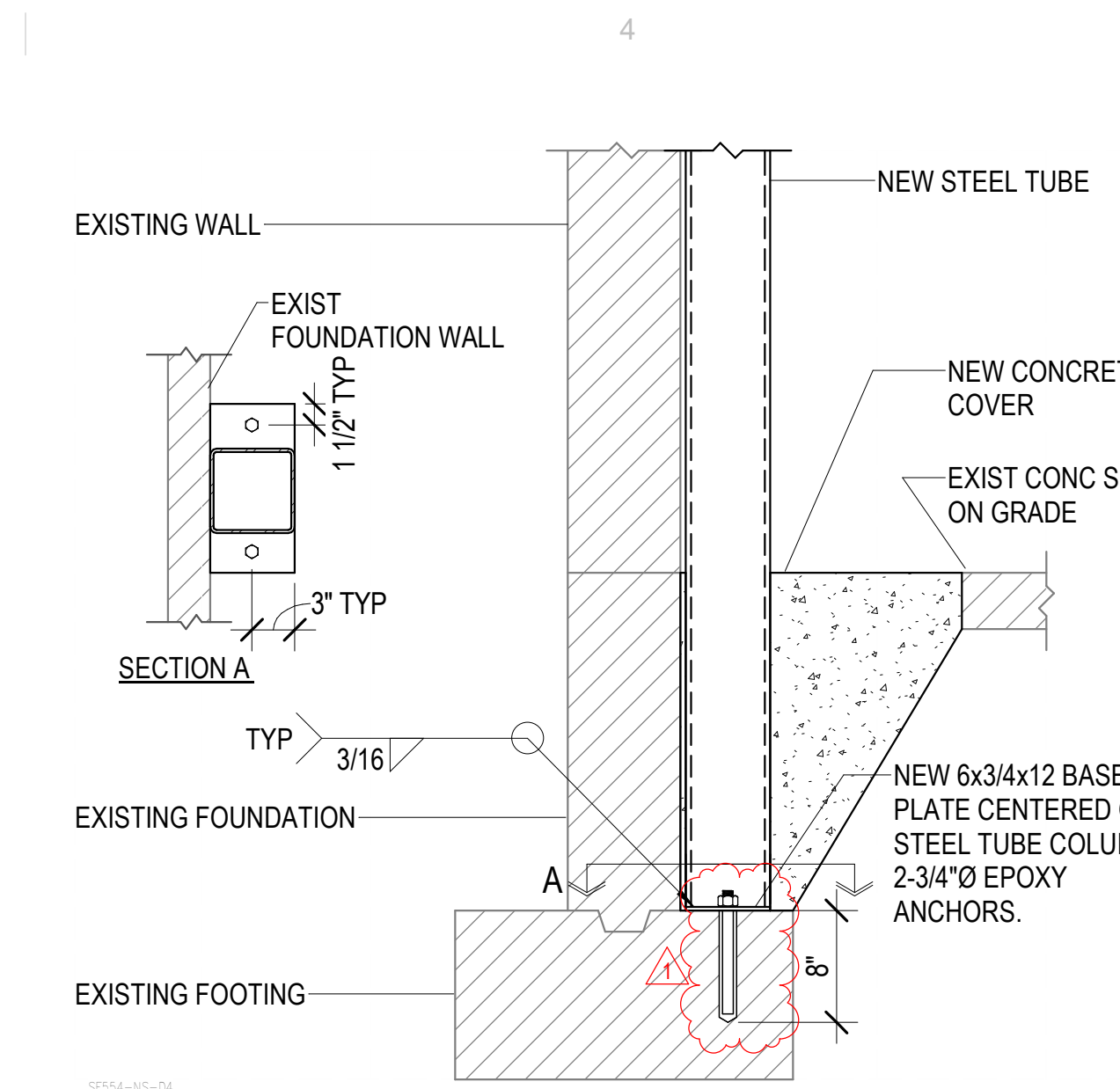
D1
SF504
NO SCALE
TYPICAL NEW OPENING REINFORCING IN EXISTING WALL USING STEEL TUBES



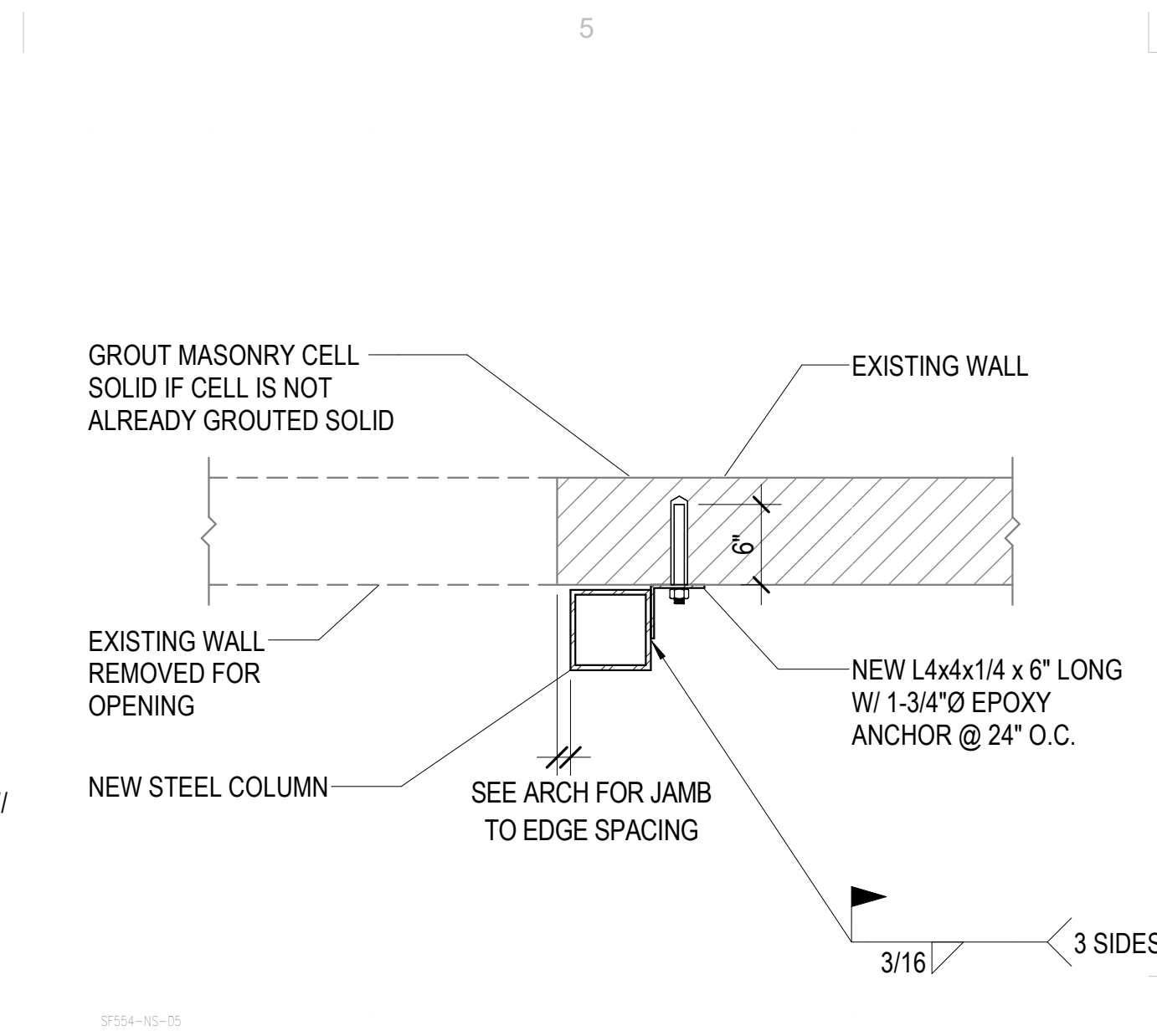
D2
SF504
NO SCALE
TYPICAL NEW OPENING REINFORCING IN EXISTING WALL USING STEEL TUBES



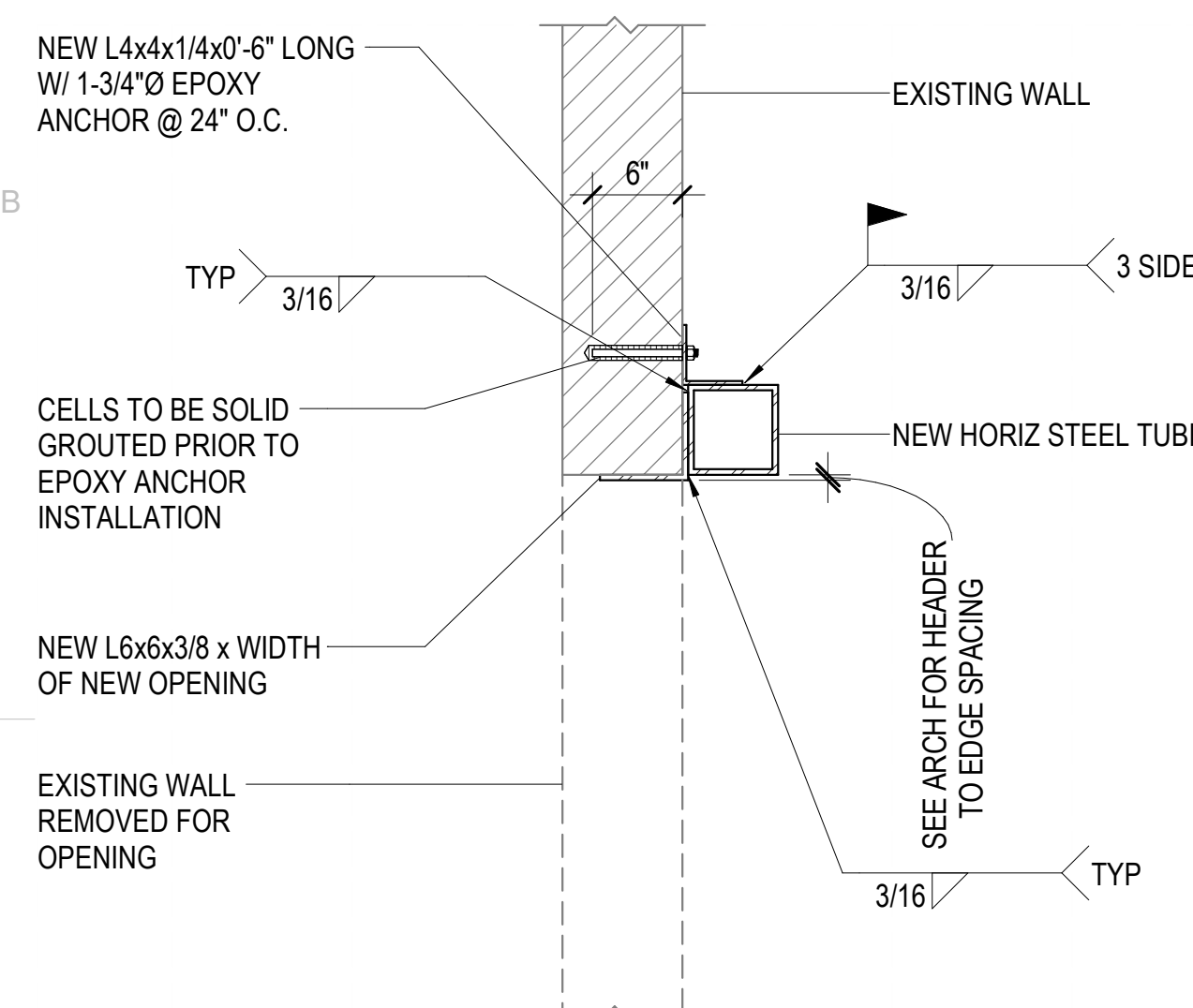
D3
SF504
NO SCALE
TYPICAL CONNECTION OF NEW STEEL TUBE TO EXISTING CONCRETE SALB ON GRADE



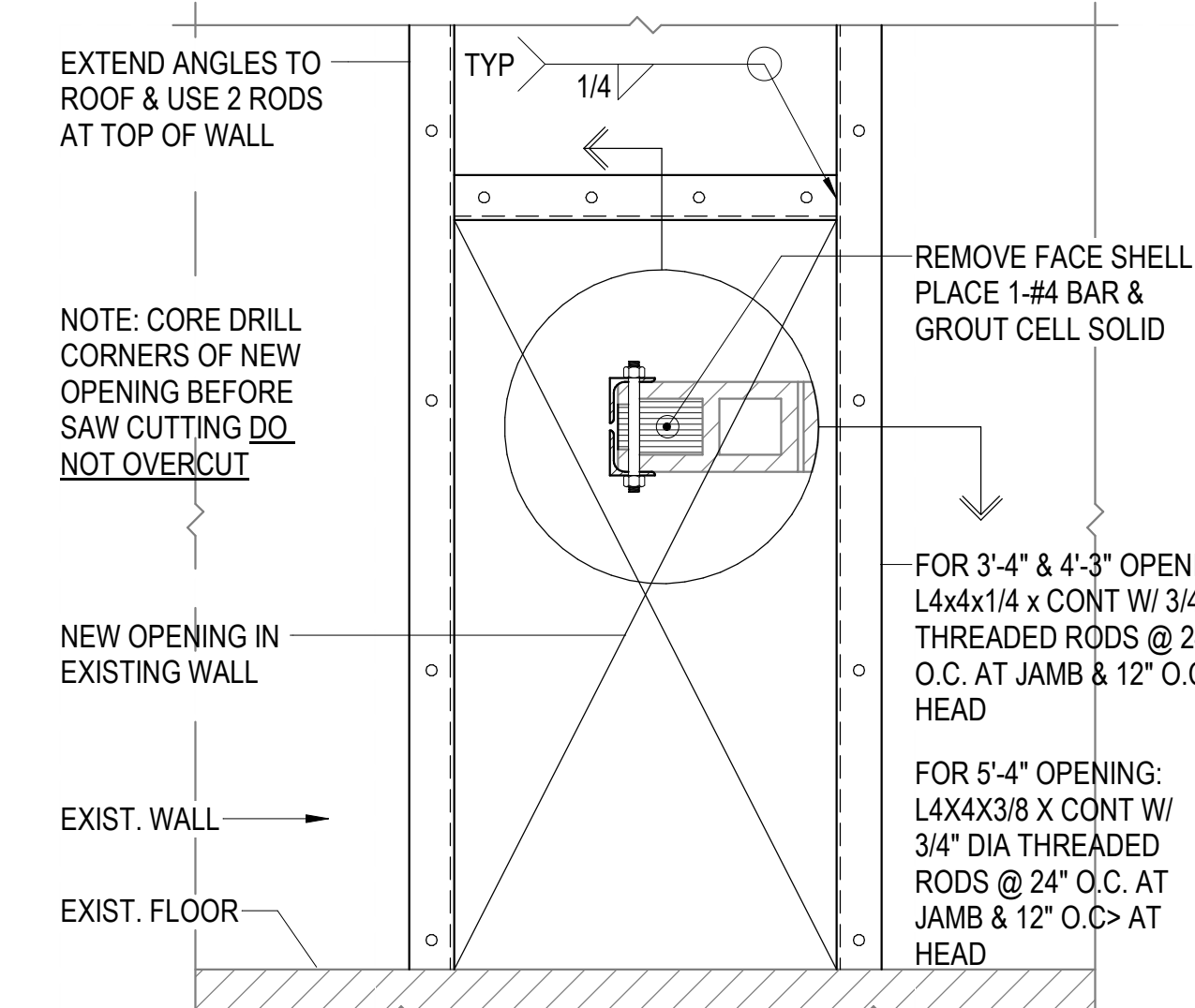
D4
SF504
NO SCALE
TYPICAL CONNECTION OF NEW STEEL TUBE TO EXISTING CONCRETE SALB ON GRADE



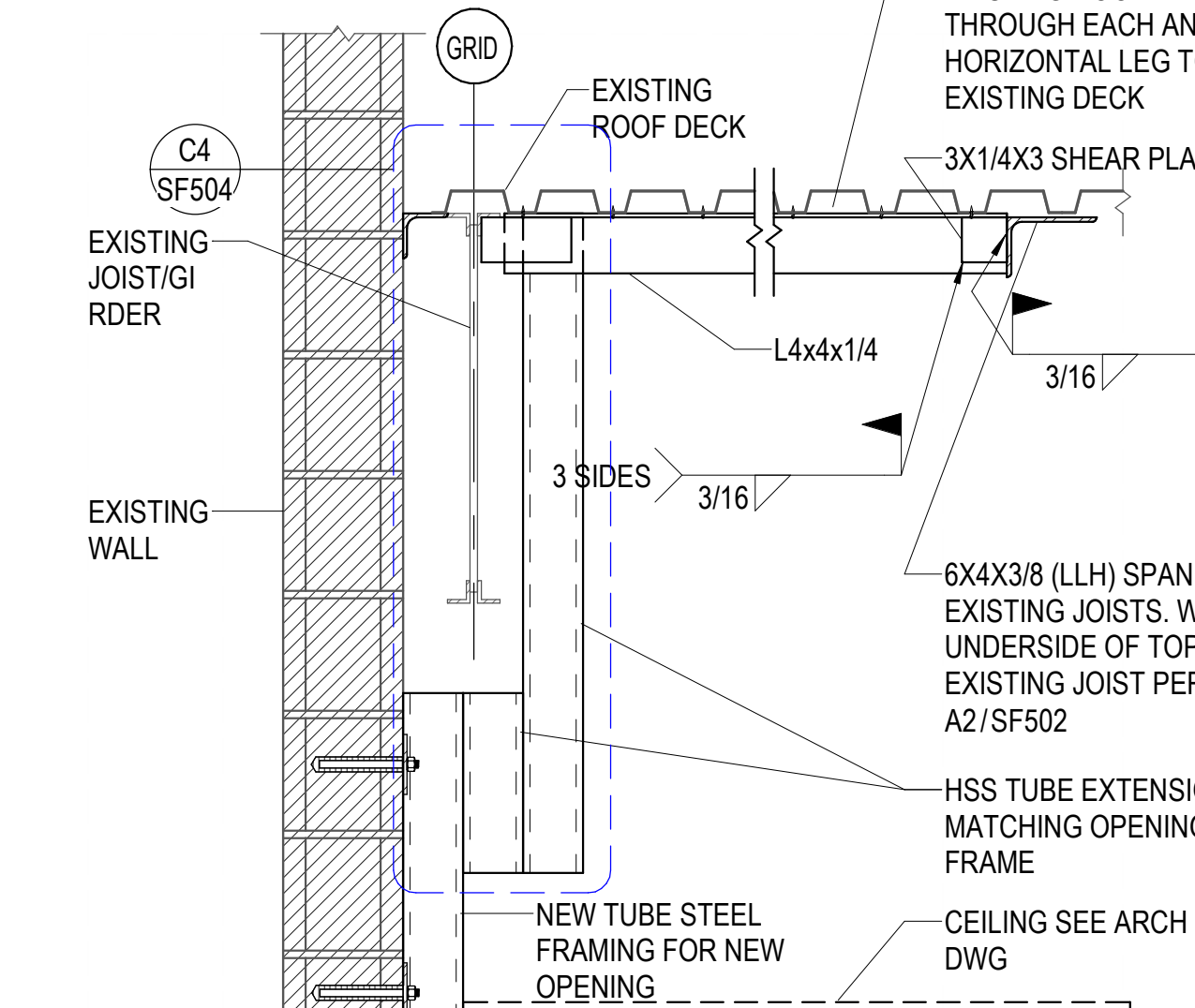
D5
SF504
NO SCALE
TYPICAL NEW STEEL TUBE CONNECTION TO EXISTING WALL (JAMB, PLAN VIEW)



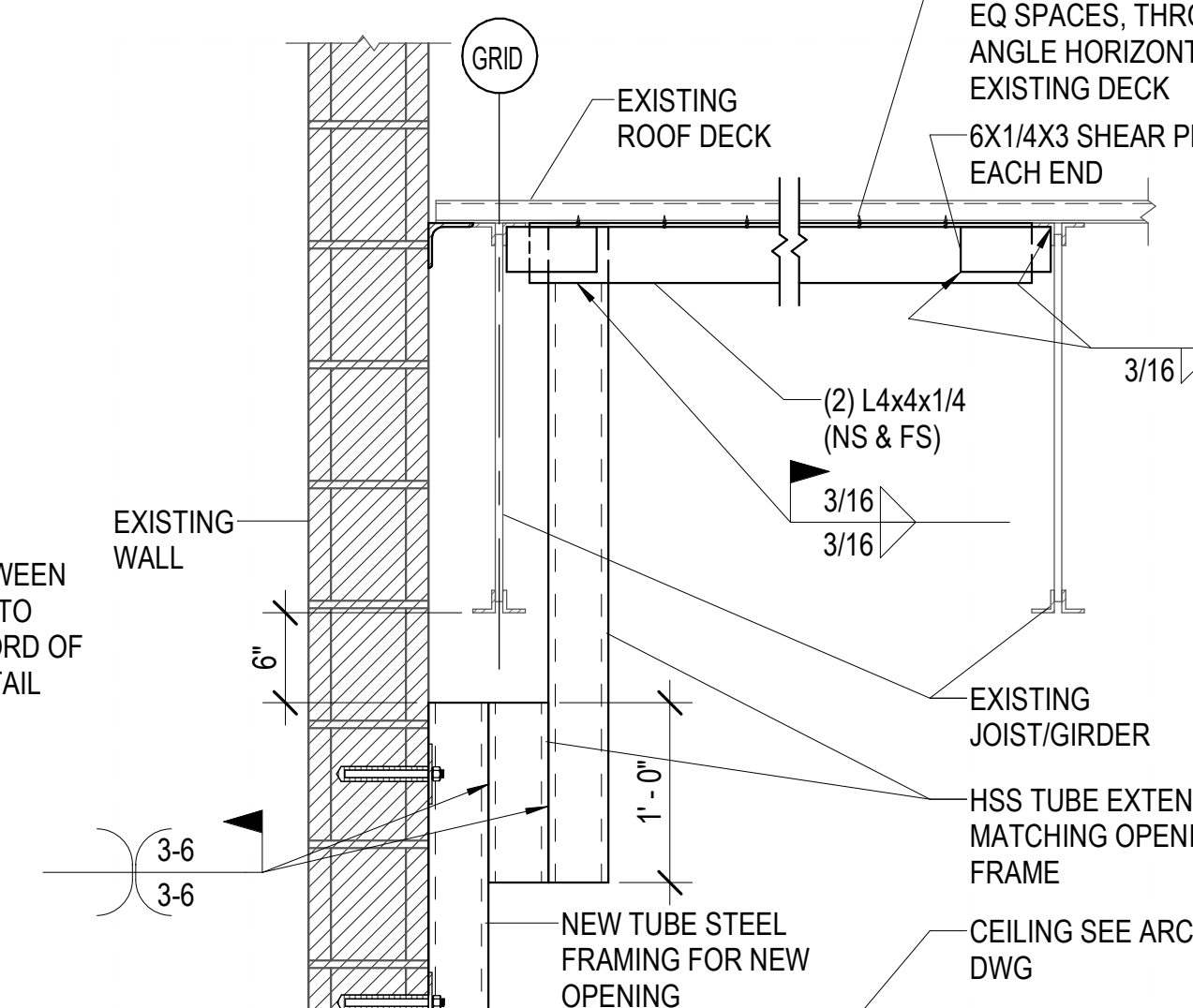
C1
SF504
NO SCALE
TYPICAL NEW STEEL TUBE CONNECTION TO EXISTING WALL (HEAD)



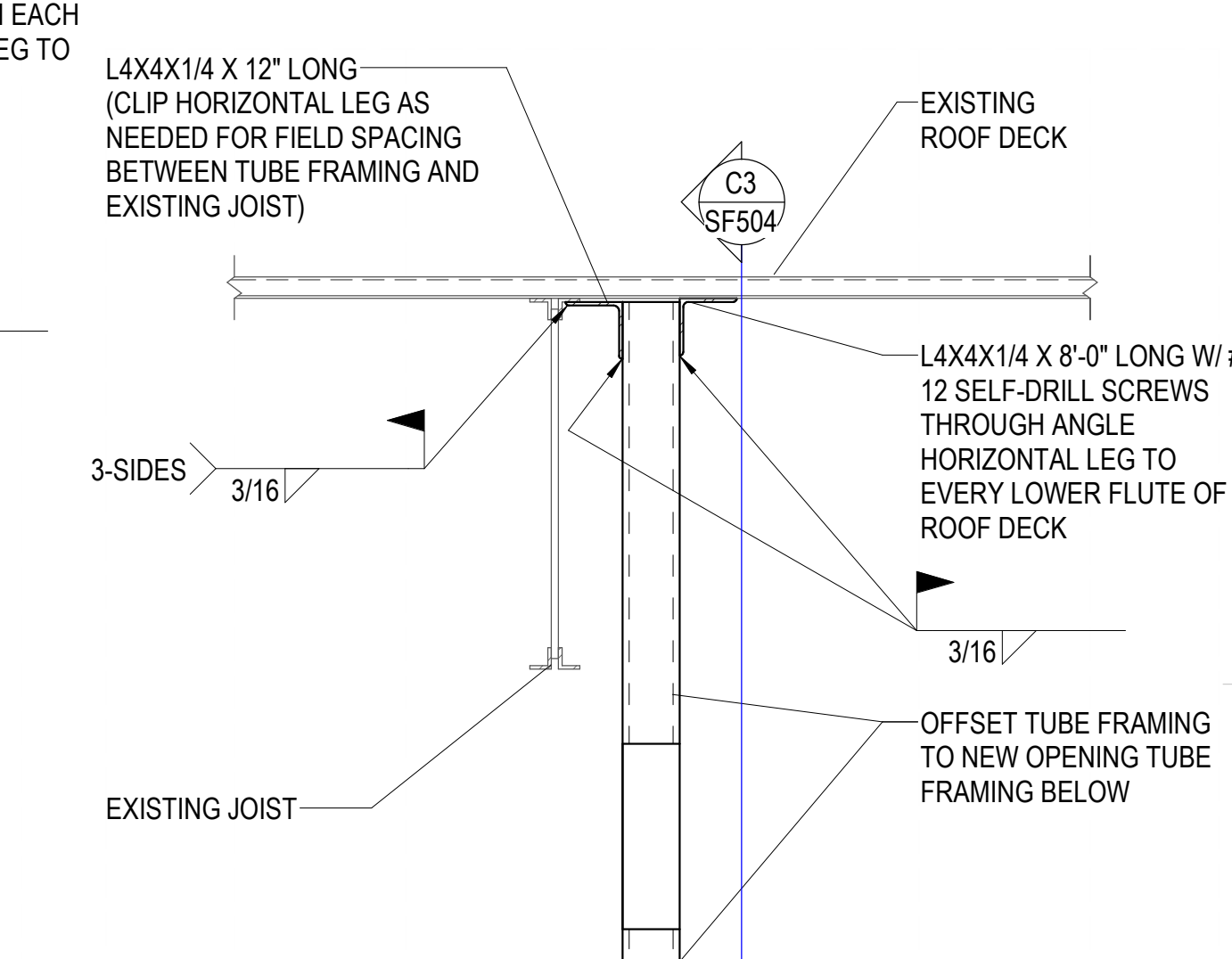
C2
SF504
NO SCALE
TYPICAL NEW OPENING REINFORCING IN EXISTING WALL USING STEEL ANGLES



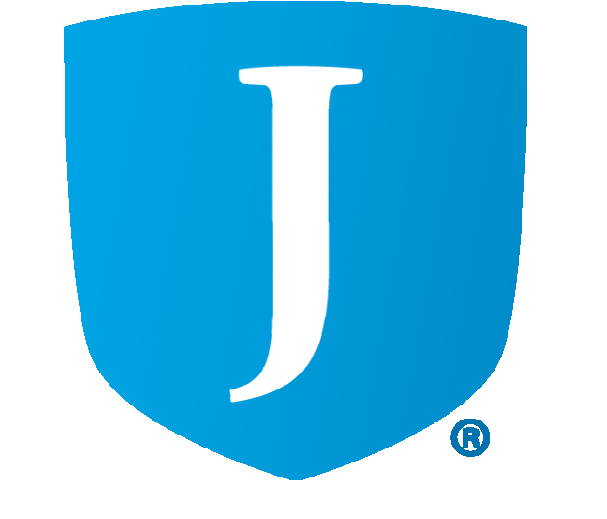
C3
SF504
NO SCALE
TOP OF NEW OPENING FRAMING TO EXISTING ROOF DECK CONNECTIONS



C4
SF504
NO SCALE
TOP OF NEW OPENING FRAMING TO EXISTING ROOF DECK CONNECTIONS



C5
SF504
NO SCALE
NEW FRAMING AT NEW STEEL JOIST



©2023 MHTN ARCHITECTS, INC.
Confidentiality Notice
This document is intended for use on the Project identified herein by individuals and companies involved in the design, permitting, bidding and construction of the Project. All rights reserved. No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of MHTN Architects, Inc. All rights reserved. If a digital copy of this document is received in error, please delete it.
SEAL

MHTN PROJECT NO. 2024528

Original drawing is 36" x 42". Do not scale contents of this drawing.

REVISIONS:
CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

NO.	DATE	DESCRIPTION
1	08/29/24	ADDENDUM #1

ISSUE:
CONSTRUCTION DOCUMENTS 100%
08/29/24

SHEET NAME:
NEW WALL OPENINGS

SHEET NUMBER:
SF504

STEEL DECK SCHEDULE								SEE DECK ATTACHMENT SCHEDULE		
MARK	STEEL DECK				CONCRETE FILL			STEEL DECK ATTACHMENT	MIN. ALLOWABLE SHEAR CAPACITY	NOTES
	PROFILE	MIN I (in ² /ft)	MIN S (in ² /ft)	FINISH	THICKNESS (t)	TYPE	REINFORCEMENT			
SD-1	TYPE B 1.1/2" DEEP x 20 GA	0.219	0.230	GALVANIZED (G60)	-	-	-	SDA-1	1304 PLF @ 6'-0"	-
SD-2	TYPE N 3" DEEP x 20 GA	0.890	0.452	GALVANIZED (G60)	-	-	-	SDA-2	964 PLF @ 7'-0"	-

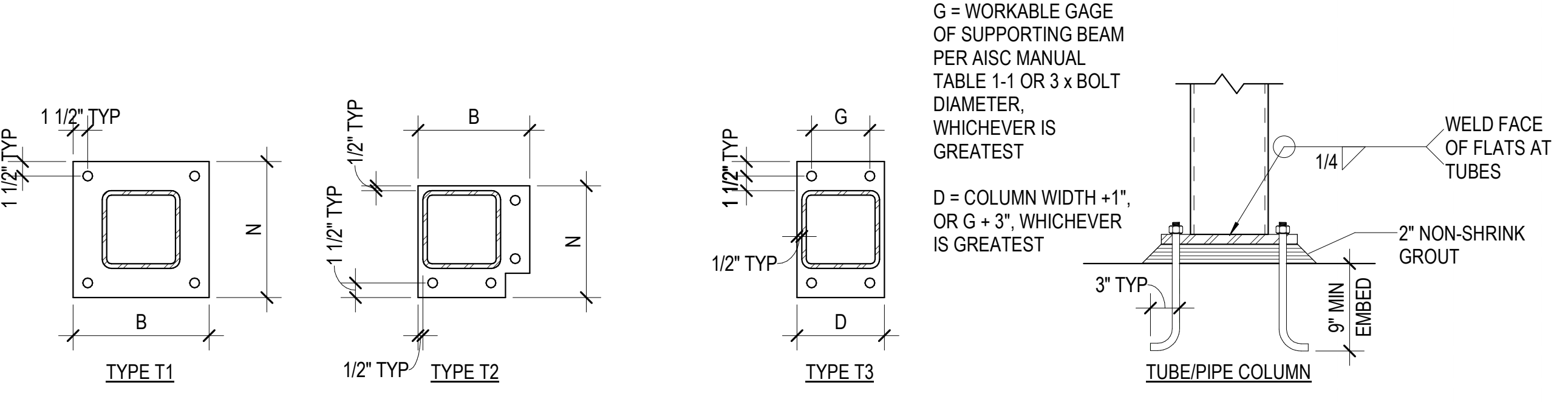
NOTES:
 1. STEEL DECK SHALL COMPLY WITH LATEST REQUIREMENTS OF THE STEEL DECK INSTITUTE (SDI).
 2. SUBMIT CURRENT CODE EVALUATION REPORT (ICC OR IAPMO) WITH LOAD AND LATERAL SHEAR CAPACITIES WITH SHOP DRAWINGS.
 3. FIBER REINFORCEMENT, WHEN REQUIRED IN SCHEDULE, SHALL BE MACROSYNTHETIC FIBER REINFORCEMENT PER THE CONCRETE MATERIALS SECTION OF THE GENERAL STRUCTURAL NOTES.
 4. ALL DECK SHALL BE 3-SPAN CONTINUOUS MINIMUM WHERE POSSIBLE. IN AREAS WHERE 3-SPAN CONDITIONS ARE NOT POSSIBLE THE CONTRACTOR SHALL VERIFY UN-SHORED DECK IS PERMITTED BY THE DECK MANUFACTURER FOR THE SPAN CONDITION, SPAN LENGTH, AND DECK GAUGE. WHERE DECK DOES NOT MEET THE REQUIREMENTS FOR UN-SHORED DECK, THE CONTRACTOR SHALL EITHER PROVIDE HEAVIER GAUGE DECK TO ALLOW FOR UN-SHORED DECK OR PROVIDE SHORING.
 5. STEEL DECK WITHOUT CONCRETE FILL SHALL NOT BE USED TO SUPPORT LOADS FROM PLUMBING, HVAC DUCTS, LIGHT FIXTURES, ARCHITECTURAL ELEMENTS OR EQUIPMENT OF ANY KIND, UNLESS SPECIFICALLY NOTED OTHERWISE.
 6. DECK SHALL HAVE 2" MINIMUM BEARING ON ALL SUPPORTING MEMBERS (MEMBERS PERPENDICULAR TO DECK) UNO. DECKS SHALL HAVE 1-1/2" MINIMUM BEARING AT PARALLEL MEMBERS.
 7. DO NOT EMBED CONDUITS OR PIPES IN CONCRETE FILL OVER STEEL DECKS WITHOUT APPROVAL OF STRUCTURAL ENGINEER.
 8. SEE TYPICAL DETAILS FOR REINFORCEMENT REQUIRED AT OPENINGS THROUGH STEEL DECK. OPENING REINFORCING SHALL BE INSTALLED PRIOR TO SAW CUTTING OPENINGS.
 9. PROVIDE GALVANIZED STEEL DECK ABOVE & BELOW MECHANICAL ROOMS.
 10. SEE PLANS AND DETAILS FOR LOCATIONS WHERE ADDITIONAL SLAB REINFORCEMENT IS REQUIRED.

STEEL DECK ATTACHMENT SCHEDULE						SEE DECK ATTACHMENT SCHEDULE
MARK	WELDED			MECHANICAL		
	SUPPORTS	PARALLEL	SIDE LAP	SUPPORTS	PARALLEL	SIDE LAP
SDA-1	PW @ 36/7	PW @ 12" O.C.	1.1/2" TSW @ 18" O.C.	PAF @ 36/7	PAF @ 12" O.C.	PSC @ 12" O.C.
SDA-2	PW @ 32/5	PW @ 18" O.C.	1.1/2" TSW @ 18" O.C.	PAF @ 32/5	PAF @ 18" O.C.	PSC @ 18" O.C.

NOTES:
 1. PW = PUDDLE WELD - 1/2" EFFECTIVE DIAMETER ARC SPOT WELD AT INTERIOR FLUTES, 1" X 3/8" EFFECTIVE ARC SEAM WELD AT SUPPORTS ADJACENT TO SIDELAP.
 2. TSW = TOP SEAM WELD - 1.1/2" LONG TOP SEAM WELDS BETWEEN ADJACENT PIECES OF DECKING. CRIMP SIDE SEAMS BEFORE WELDING INTERLOCKING SEAMS.
 3. BP = BUTTON PUNCH - 3/16" BUTTON PUNCH BETWEEN ADJACENT PIECES OF DECK. CRIMP SEAMS BEFORE BUTTON PUNCHING INTERLOCKING SEAMS.
 4. PAF = POWDER ACTUATED FASTENER -
 HILTI X-HSN 24 AT SUPPORTS 3/16" THROUGH 3/8" THICK PNEUTEK SDK61075 AT SUPPORTS 0.113" THROUGH 0.155" THICK
 HILTI X-ENP-19 L15 AT SUPPORTS 1/4" THICK AND GREATER PNEUTEK SDK63075 AT SUPPORTS 0.155" THROUGH 0.250" THICK
 PNEUTEK K64062 AT SUPPORTS 0.187" THROUGH 0.312" THICK
 PNEUTEK K66062 OR K66075 AT SUPPORTS 0.281" THICK AND GREATER
 5. SDS = SELF DRILLING SCREW. WHERE SIDELAPS HAVE SCREWED CONNECTION, THE DECK PROVIDED SHALL HAVE A SCREWABLE SIDE SEAM, UNO.
 6. PSC = PROPRIETARY SIDELAP CONNECTION - VERCO SIDELAP CONNECTION 2 FOR VERCO PUNCHLOK II SYSTEM, ASC DELTA GRIP FOR ASC DECKS.
 7. SPACING AT SUPPORTS IS NOTED AS (DECK PANEL WIDTH)/(ATTACHMENTS PER PANEL). FOR EXAMPLE: PW @ 36/4 INDICATES A 36" WIDE DECK SHEET WITH 4 PUDDLE WELDS AT EACH SUPPORT.
 8. HEADED STUD ANCHORS WELDED THROUGH DECK WITH 1" MINIMUM COVER FROM EDGE OF DECK TO STUD CENTERLINE MAY BE SUBSTITUTED ONE FOR ONE FOR PW. ALIGN AND SECURE DECK IN POSITION BEFORE INSTALLING STUDS.
 9. SEE PLANS AND SFRS SHEETS FOR ADDITIONAL FASTENERS REQUIRED AT MEMBERS DENOTED AS SFRS. OMIT ATTACHMENTS WHERE DENOTED AS PROTECTED ZONES IN SFRS.
 10. ALL WELDED SURFACES SHALL BE DRY BEFORE WELDING DECK OR STUDS TO SUPPORTS.
 11. ALIGN AND SECURE DECK IN POSITION BEFORE WELDING OR INSTALLING FASTENERS OR STUDS.
 12. ALTERNATE MEANS OF DECK ATTACHMENT ARE PERMITTED WITH APPROVAL OF THE ENGINEER. THE CONTRACTOR SHALL SUBMIT THE PROPOSED ATTACHMENT SYSTEM AND THE CODE EVALUATION REPORT DEMONSTRATING THE SYSTEM HAS THE STRENGTH TO MEET THE SPECIFIED DECK SHEAR. IF THE ALTERNATE METHOD IS APPROVED, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT THE DECK TYPE AND PROFILE IS COMPATIBLE WITH THE FASTENING SYSTEM.

STEEL BASE PLATE SCHEDULE						
BASE PLATE MARK	N	B	THICKNESS	C	TYPE	REMARKS
SBP-1	--	--	3/4"	--	T3	
SBP-2	22"	22"	3/4"	--	T1	

NOTES:
 1. BASE PLATES BEARING ON CONCRETE SHALL BE INSTALLED W/ 4-3/4"Ø ANCHOR RODS UNO. PROJECT ANCHOR RODS 3" MIN. ABOVE THE TOP OF THE BASE PLATE. ALL BOLTS SHALL BE INSTALLED W/ HARDENED WASHERS BENEATH THE NUT. ANY BOLT HOLES LARGER THAN THE BOLT DIAMETER PLUS 5/16" SHALL HAVE 5/16" PLATE WASHERS INSTALLED BENEATH THE HARDENED WASHERS.
 2. BASE PLATES BEARING ON STEEL SHALL BE INSTALLED W/ 4-7/8"Ø A325 BOLTS, UNLESS NOTED OTHERWISE.
 3. DO NOT WELD ANCHOR RODS



C1 TYPICAL STEEL BASE PLATE SCHEDULE & DETAILS FOR GRAVITY COLUMNS
 SF602 NO SCALE



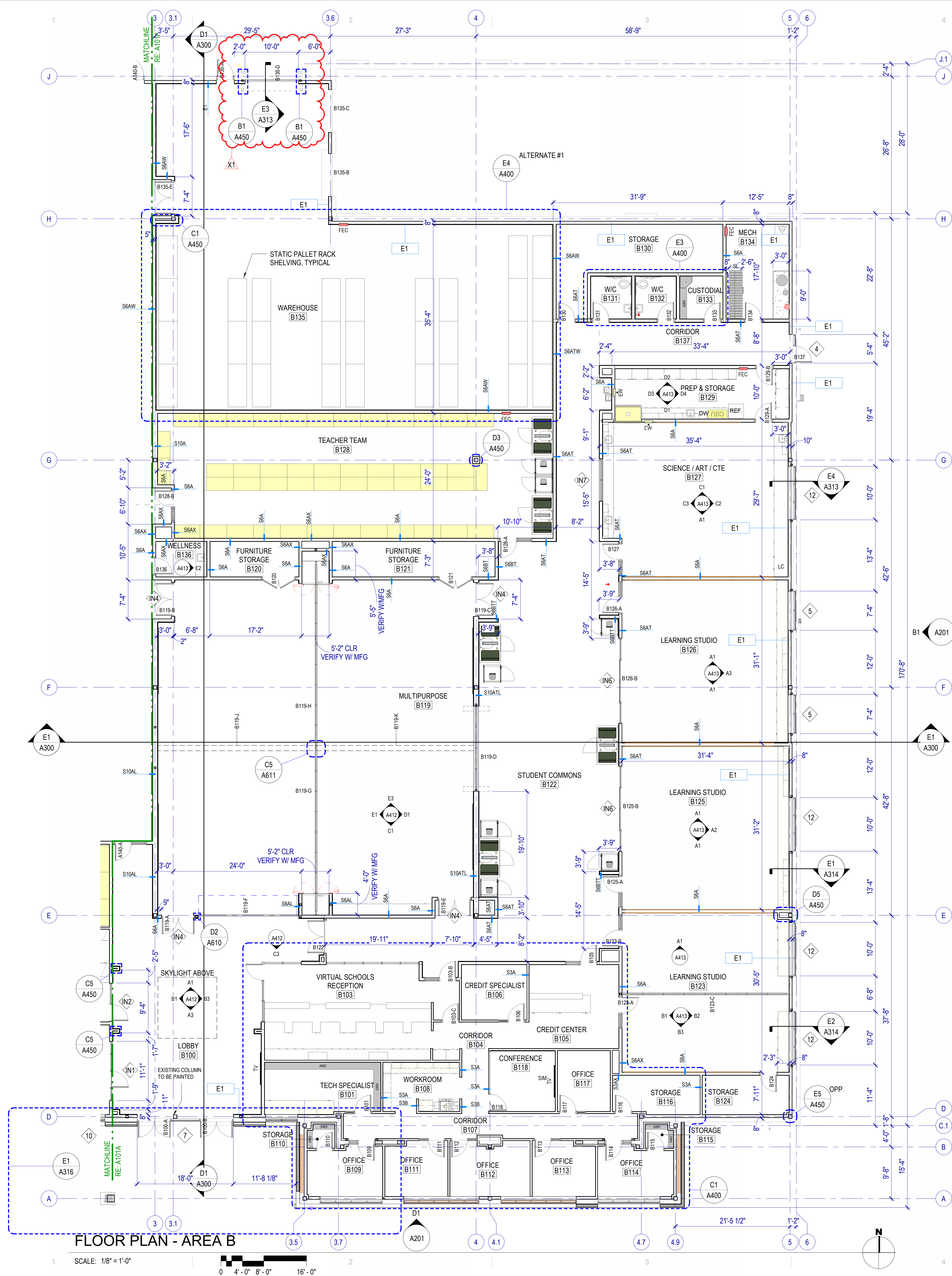
©2023 MHTN ARCHITECTS, INC.
 Confidentiality Notice:
 This document is intended for use on the Project identified herein by individuals and companies involved in the design, permitting, bidding and construction of the Project. It is the intellectual property of MHTN Architects, Inc. and its affiliates. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or by any information storage and retrieval system, without prior written permission of MHTN Architects, Inc. If you are not an intended recipient, you should not disseminate or act on the contents of this document. If you have received this document in error, please delete it.

MHTN PROJECT NO. 2024528

Original drawing is 36" x 42". Do not scale contents of this drawing.

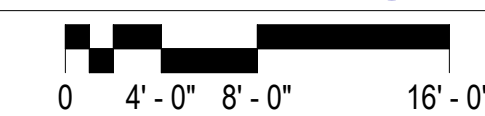
REVISIONS:
 CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE

NO.	DATE	DESCRIPTION
1	08/29/24	ADDENDUM #1



FLOOR PLAN - AREA B

SCALE: 1/8" = 1'-0"



FLOOR PLAN GENERAL NOTES

- References to sheets below are provided to aid in navigating the drawings.
- RE: G001 for General Project notes.
- RE: G200 for Fixture Mounting Heights.
- RE: G400 for Floor, Roof and Exterior Wall Types.
- RE: G500 for Interior Wall Types.
- RE: A111 for slab edges, recesses and other transitions.
- RE: A600 for the Door Schedule.
- RE: A620 drawings for Window Types.
- RE: A640A & A640B for wall finishes.
- RE: Structural for slab recesses.
- RE: Structural for concrete scoring, except where decorative scoring is shown.
- Unless noted otherwise all dimensions are to face of metal stud.
- When floor height varies in a room, the ceiling height shown is the height above the floor at the entry.
- All outside gypsum board corners to be finished with corner guards. Refer to A641 Finish Legend for product.

Rated Construction: Provide as shown on the plans, the Life Safety Plans and elsewhere in the documents. Seal penetrations with systems applicable to the application and that have UL or other testing agency certifications.

Keynotes: Not all keynotes apply to this sheet.

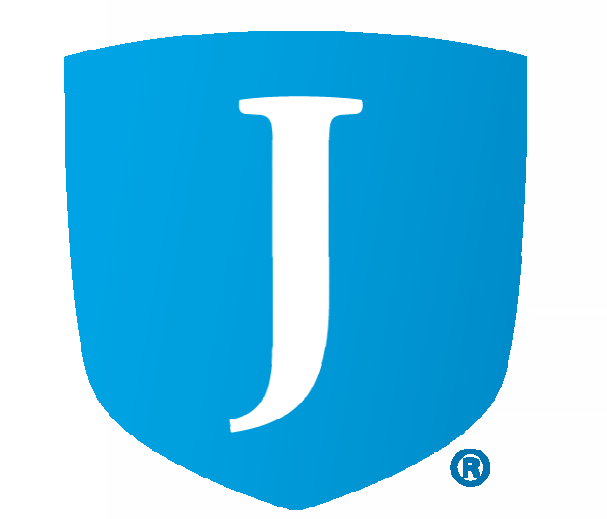
LEGEND - FLOOR PLAN

- FEC FIRE EXTINGUISHER + CABINET SEMI-RECESSED
- AED AUTOMATED EXTERNAL DEFIBRILLATOR
- WALL MOUNTED TOILET RE: PLUMBING
- FLOOR MOUNTED TOILET RE: PLUMBING
- URINAL RE: PLUMBING
- WALL HUNG LAVATORY RE: PLUMBING
- COUNTER MOUNTED SINK RE: PLUMBING
- ELECTRICAL WATER COOLER RE: PLUMBING
- MOP SINK RE: C4/G201 & PLUMBING
- ADJUSTABLE WALL SHELVING - 16" DEEP SHELVES, RE: D5/A435
- WASHING MACHINE RE: PLUMBING
- DRYER RE: PLUMBING
- REFRIDGERATOR, CFCI
- REFRIDGERATOR, OFOI
- ICE MACHINE RE: PLUMBING
- RECORDING SOUND BOOTH, OFOI
- RECORDING SOUND BOOTH, OFOI
- TEACHER WORK DESKS, OFOI
- SHIPS LADDER, RE: E1/A340
- WALL MOUNTED TV
- THERAPY SWING LOCATION, OFOI, SEE RCP FOR MOUNTING DETAIL
- COUNTERTOP LASER CUTTER, OFCI
- HOUSEKEEPING PAD - 4" CONCRETE - COORDINATE WITH EQUIPMENT DIMENSIONS

NOTE: PROVIDE ITEMS INDICATED IN THE LEGEND IN THE QUANTITIES SHOWN ON THE PLAN.



MHTN Architects, Inc.
260 South 400 West
Suite 250
Salt Lake City, Utah 84101
Telephone (801) 595-6700
www.mhtn.com



JORDAN SCHOOL DISTRICT
JORDAN LEARNING CENTER
3706 WEST 9800 SOUTH
SOUTH JORDAN, UT 84009

©2023 MHTN ARCHITECTS, INC.
Confidentiality Notice
This document is intended for use on the Project identified herein by individuals and companies involved in the design, permitting, bidding and construction of the Project. It is the property of MHTN Architects, Inc. and its use, distribution and reproduction is restricted to the Project. It is not to be used for any other Project without the written consent of MHTN Architects, Inc. If you are not an intended recipient, you should not disseminate, distribute or copy this document. If you have received this document by mistake, please notify the sender immediately by e-mail at info@mhtn.com. If a digital copy of this document is received in error, please delete it.

MHTN PROJECT NO. 2024528

Original drawing is 36" x 42". Do not scale contents of this drawing.

REVISIONS:

NO.	DATE	DESCRIPTION	APPROVED BY
1	5/14/24		

ISSUE
CONSTRUCTION DOCUMENTS
AUGUST 29, 2024

SHEET NAME
FIRST FLOOR
PLAN - AREA B

SHEET NUMBER
A101B

Autodesk Civil 3D 2024.528 - BDD Retail Remodel/03/24 - 2024.528 - BDD Retail Remodel.rvt
9/8/2024 3:44:54 PM



JORDAN SCHOOL DISTRICT
JORDAN LEARNING CENTER
3706 WEST 9800 SOUTH
SOUTH JORDAN, UT 84009

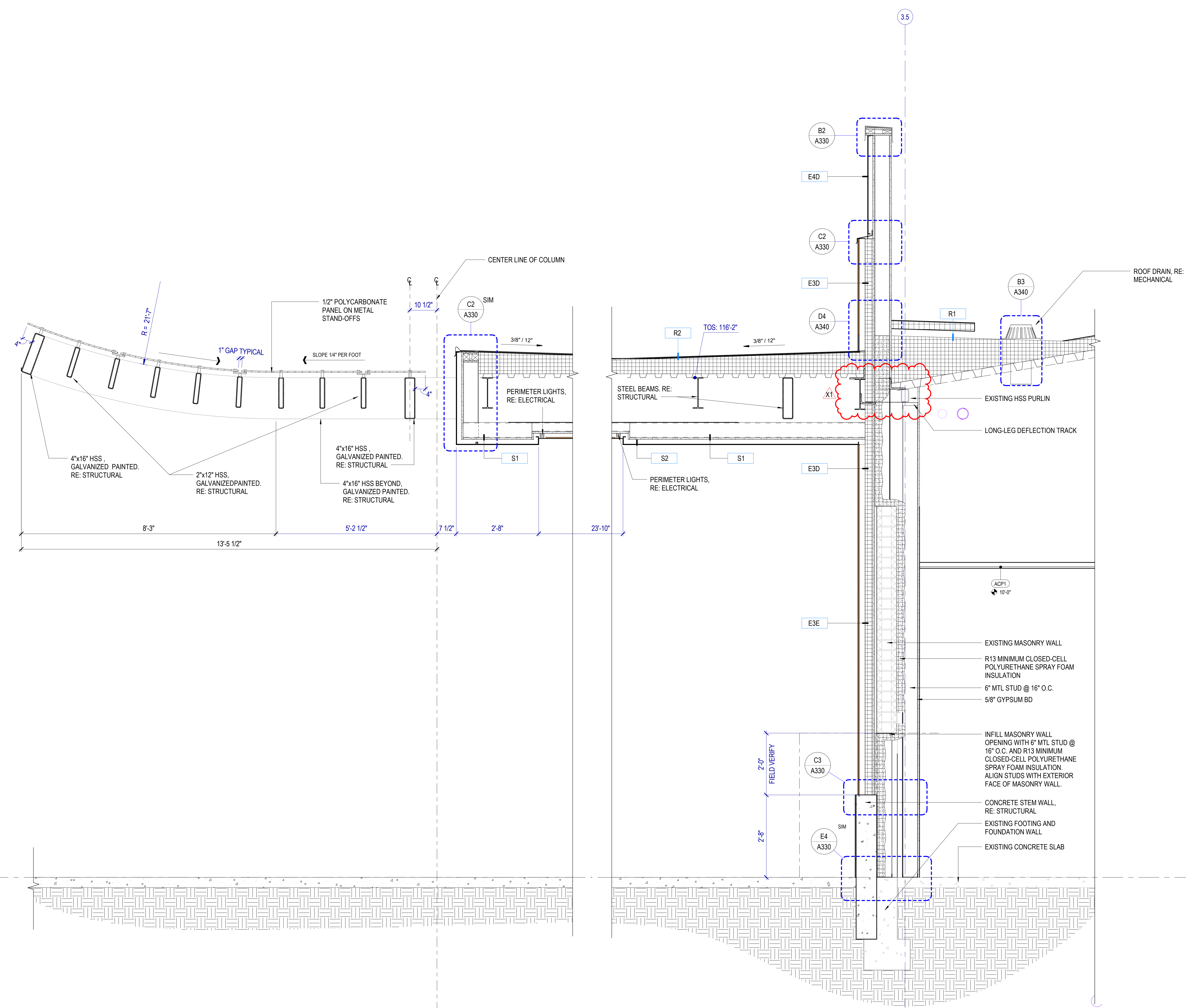
WALL SECTION GENERAL NOTES

RE: Structural for concrete slab on grade thickness.

RE: G400 for Exterior Wall, Floor and Roof Types.

Air Barrier: Seal penetrations through the air barrier per manufacturer's details.

Spray-Applied Fireproofing: Where spray-applied fireproofing is removed for attachment of walls, hangers, clip angles, etc., re-apply the fireproofing material to re-establish the required level of protection.



©2024 MHTN ARCHITECTS, INC.
Confidentiality Notice
This document is intended for use on the Project identified herein by individuals and companies involved in the design, permitting, bidding and construction of the project. All rights reserved. No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of MHTN Architects, Inc. If a digital copy of this document is received in error, please delete it.

MHTN PROJECT NO. 2024528
VIEW AND PRINT THIS DRAWING IN COLOR
Original drawing is 36" x 42". Do not scale contents of this drawing.

REVISIONS:
CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

NO.	DATE	DESCRIPTION	ADDENDUM #1
X1	5-8-24		

ISSUE:
CONSTRUCTION DOCUMENTS
August 29, 2024

SHEET NAME:
ENTRY CANOPY

SHEET NUMBER:
A318

Autodesk Civil 3D 2024.528 - ASD Retail Remodel.dwg 2024.528 - ASD Retail Remodel.rvt 9/10/2024 3:44:58 PM

E1 CANOPY & WALL SECTION
SCALE: 3/4" = 1'-0"

INTERIOR ELEVATIONS GENERAL NOTES

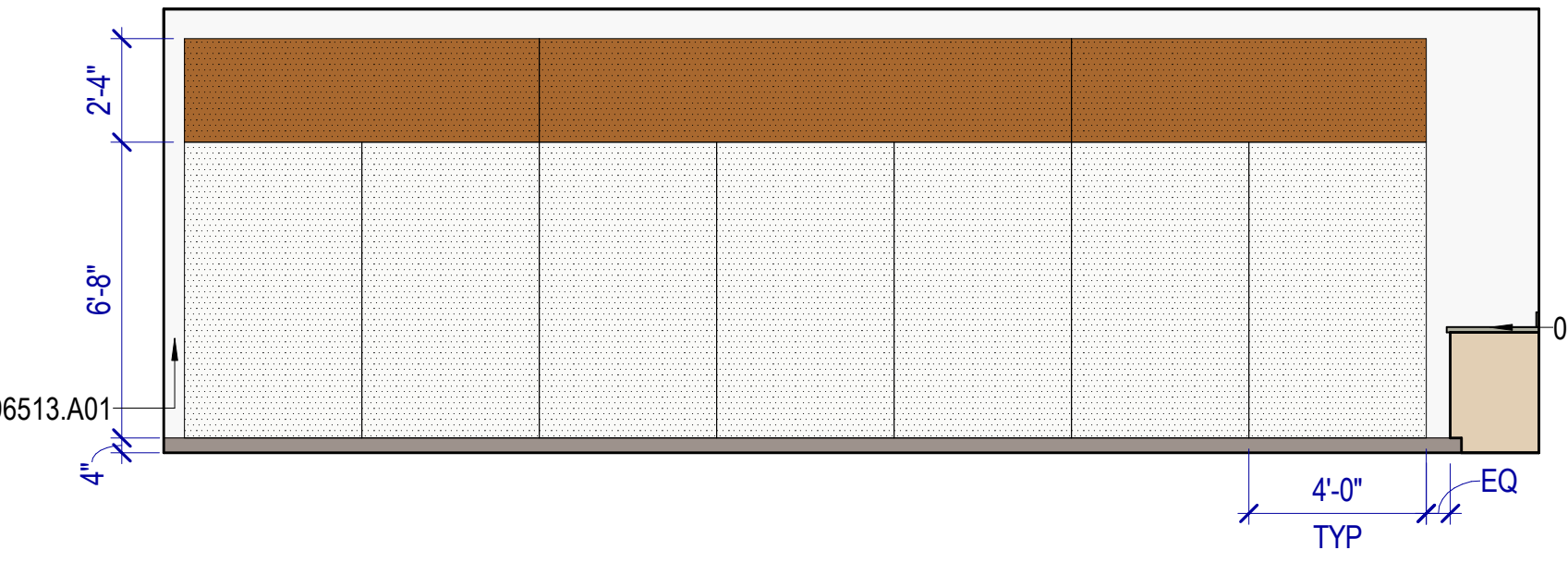
RE: North American Architectural Woodwork Standards v3.0 (NAAWS), Cabinet Design Series for cabinet types.
RE: G500 for Interior Wall Types.
RE: A640A & A640B for the Finish Schedule.
Dimensions shown to walls or casework are to finished face of wall or cabinet, UNO.
Equipment indicated by dashed lines is a general representation and shown for coordination purposes only.
Mechanical, electrical, plumbing and telecom rough-in locations are shown for general coordination purposes only. Refer to mechanical, electrical, plumbing and telecom drawings.
Countertops: 25" deep with 4" high backsplash, UNO. Provide sidesplashes at walls, tall cabinets or similar transitions.
Blocking: Provide blocking in walls at cabinets, wall-mounted accessories, equipment, display boards and similar items.
Finishes: Finishes are required on all exposed and semi-exposed surfaces, UNO. Wall elevations are not shown for walls where the Finish Schedule is deemed adequate to convey the intent.
Cabinet Locks: Provide locks on cabinet drawers and doors, keyed alike by room, UNO.
Casework Finishes: Provide laminate finishes on all exposed and semi-exposed surfaces as required by the specifications. Provide laminate finishes on concealed surfaces if required by the specifications. Refer to NAAWS Section 10.4.4 for definitions of exposed, semi-exposed and concealed surfaces.

LEGEND - INTERIOR ELEVATION

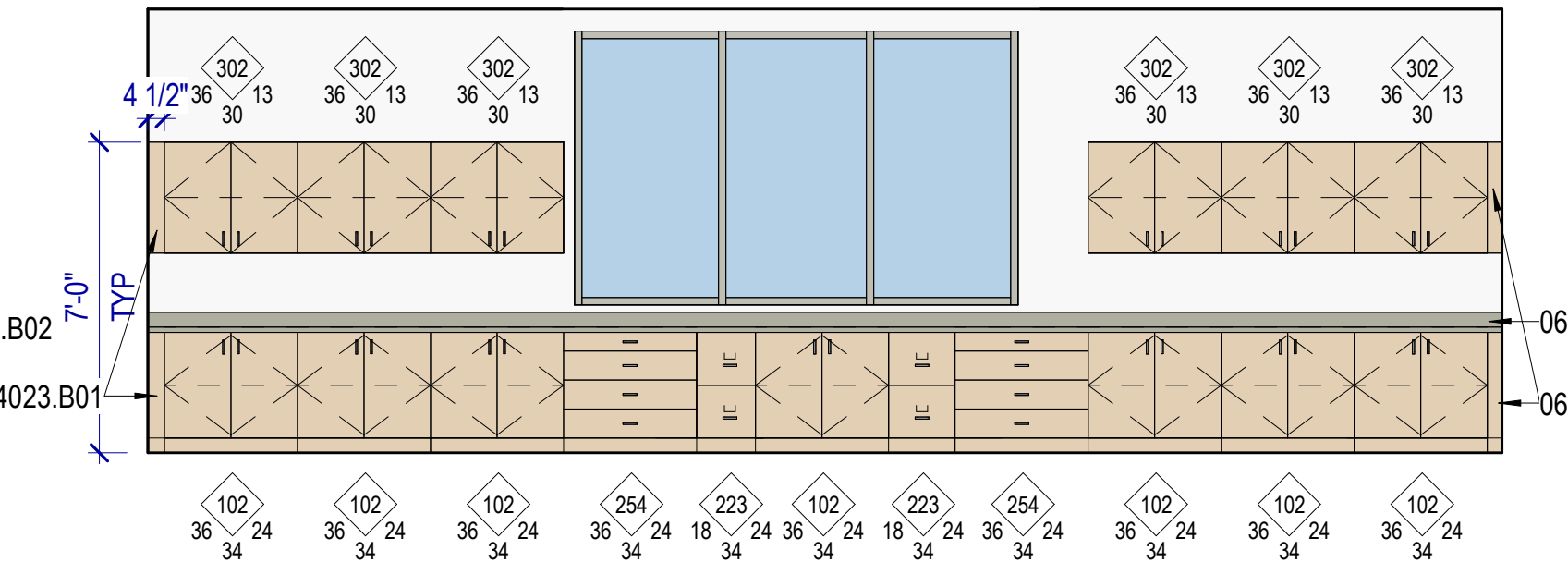
	TACKABLE WALL COVERING, TCK1 SEE DETAIL A3 / A435		DISHWASHER, CFCI
	TACKABLE WALL COVERING, TCK2 SEE DETAIL A3 / A435		MICROWAVE, CFCI
	MARKERBOARD, SEE DETAIL A3 / A435		EYEWASH, RE: PLUMBING
	WALL TILE WT2		REFRIGERATOR, OFOI
	GLAZING		REFRIGERATOR, CFCI
	PLASTIC LAMINATE PL1		CHEMICAL STORAGE CABINETS
	PLASTIC LAMINATE PL2		COPIER, OFOI
	PLASTIC LAMINATE PL3		SINK, RE: PLUMBING
	WALLCOVERING WC2		DRINKING FOUNTAIN, RE: PLUMBING
	RIBBED WALL PANEL WP1		UNDERCOUNTER REFRIGERATOR, CFCI
	WALLCOVERING WC1		TV MONITOR, RE: ELECTRICAL
	WALL TILE WT7		METAL LATERAL FILE STORAGE, OFOI
	TILE BASE TB1		DRYER & WASHER, CFCI

KEYNOTES

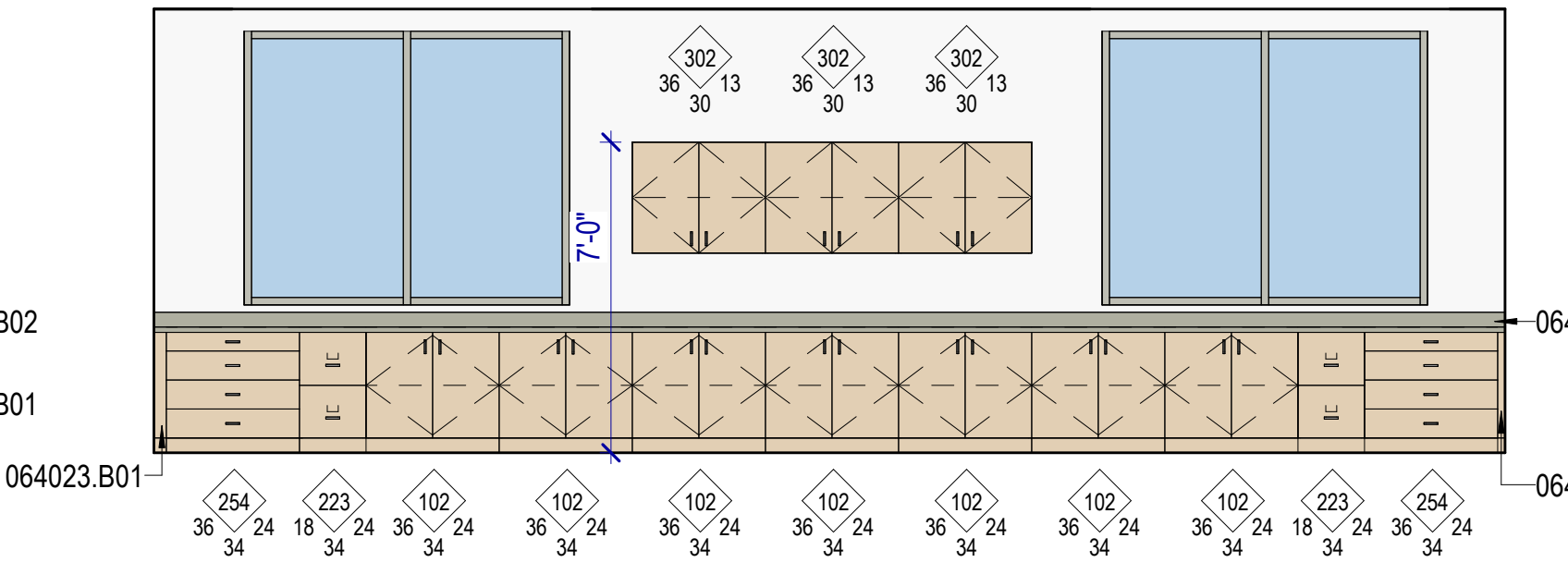
064023.B01	Filler panel
064023.B02	1-1/2" scheduled plastic laminate countertop w/ 4" backsplash
064023.J01	1-1/2" scheduled solid surface countertop w/ 4" backsplash
064023.J03	1-1/2" scheduled solid surface countertop w/o backsplash
096513.A01	RESILIENT BASE
113013.A01	Ice machine, floor mounted cfi
123616.A00	1-1/2" scheduled epoxy resin countertop w/ 4" backsplash
123616.A00	1-1/2" scheduled stainless steel countertop w/ 4" backsplash



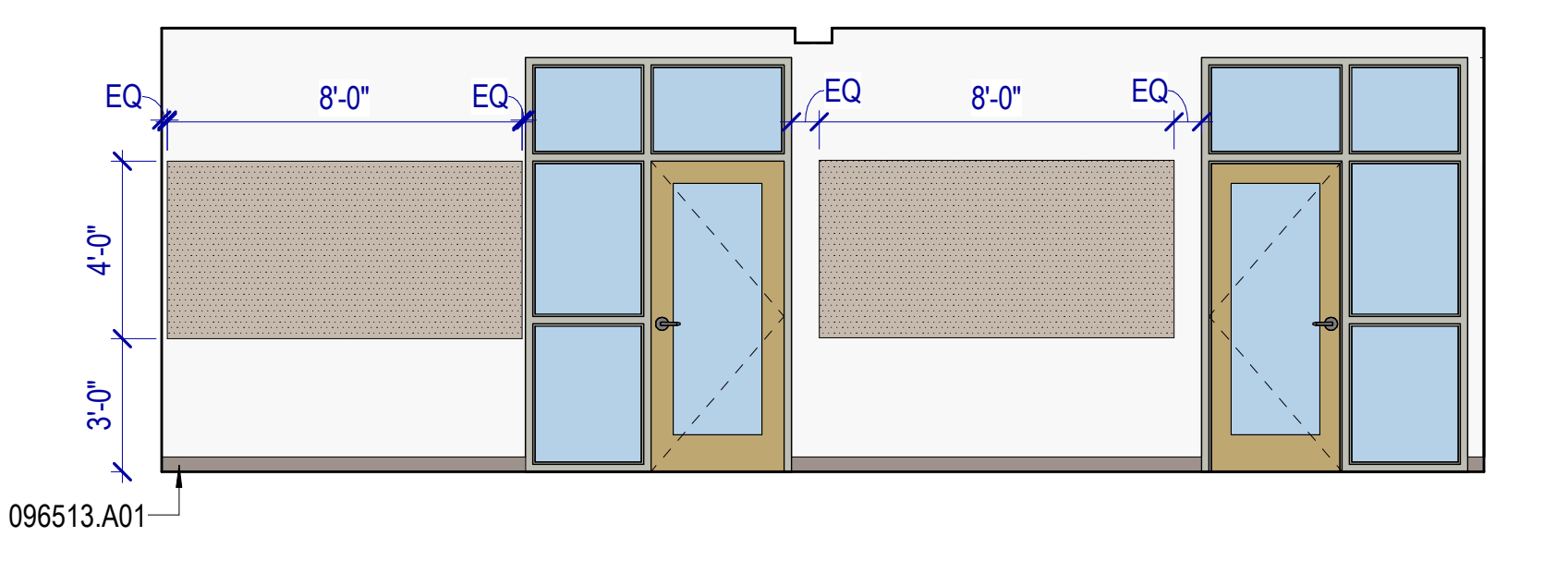
A1 TEACHING WALL - TYPICAL
SCALE: 1/4" = 1'-0"



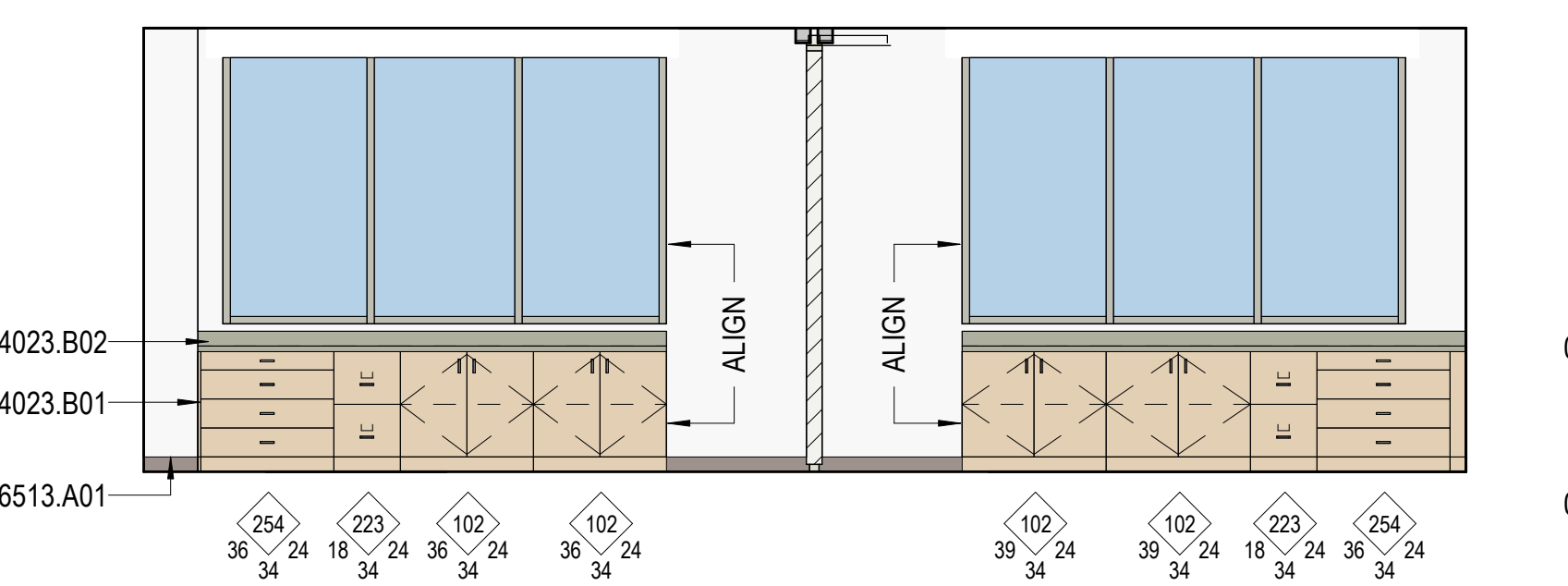
A2 LEARNING STUDIO B125 - EAST
SCALE: 1/4" = 1'-0"



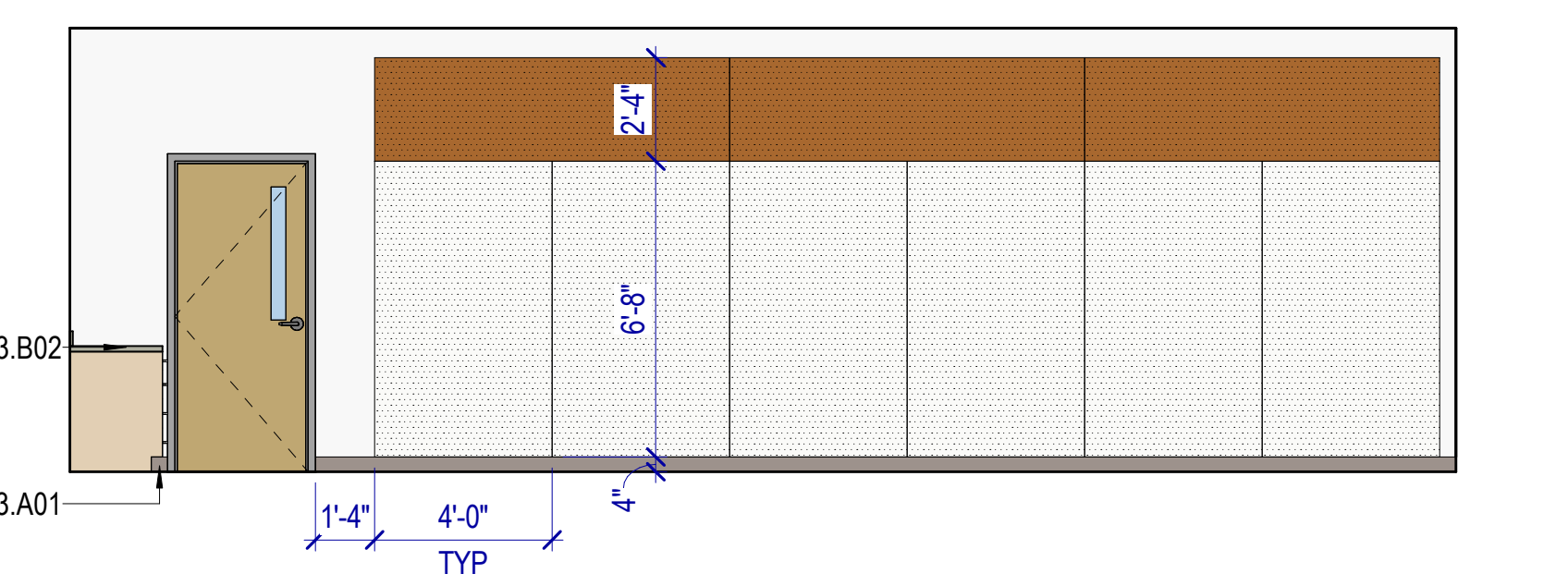
A3 LEARNING STUDIO B126 - EAST
SCALE: 1/4" = 1'-0"



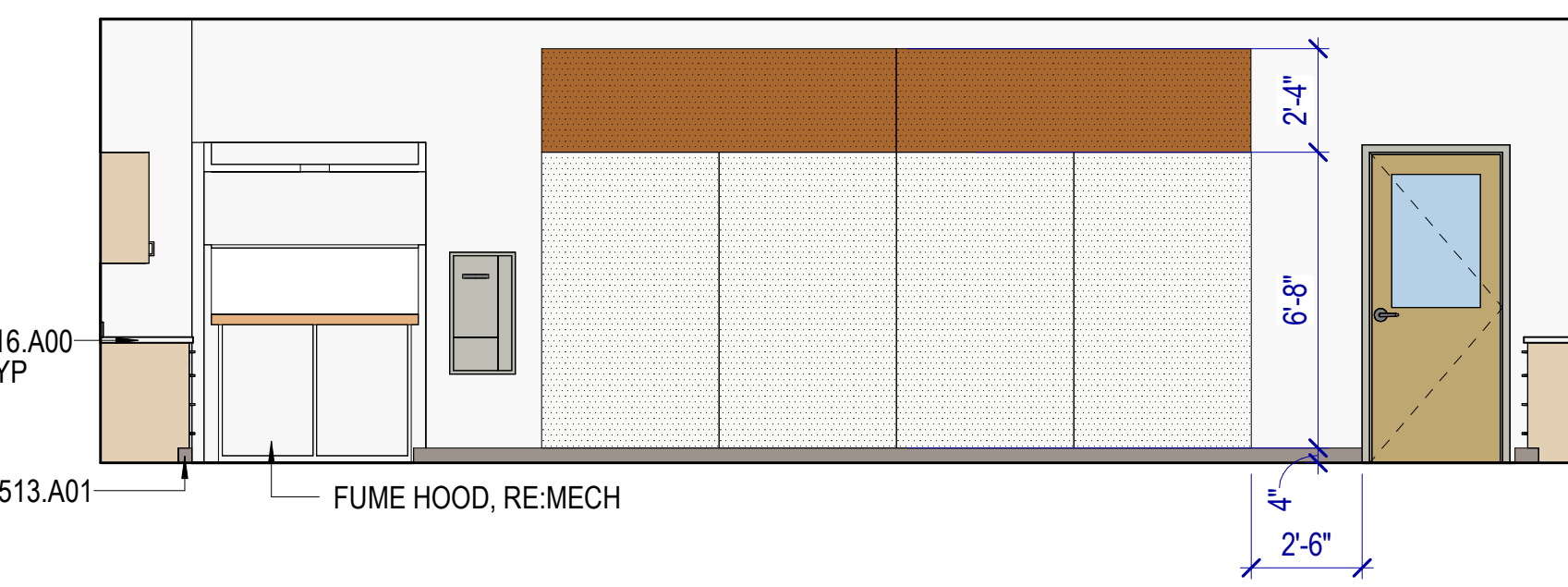
B1 LEARNING STUDIO B123 - W
SCALE: 1/4" = 1'-0"



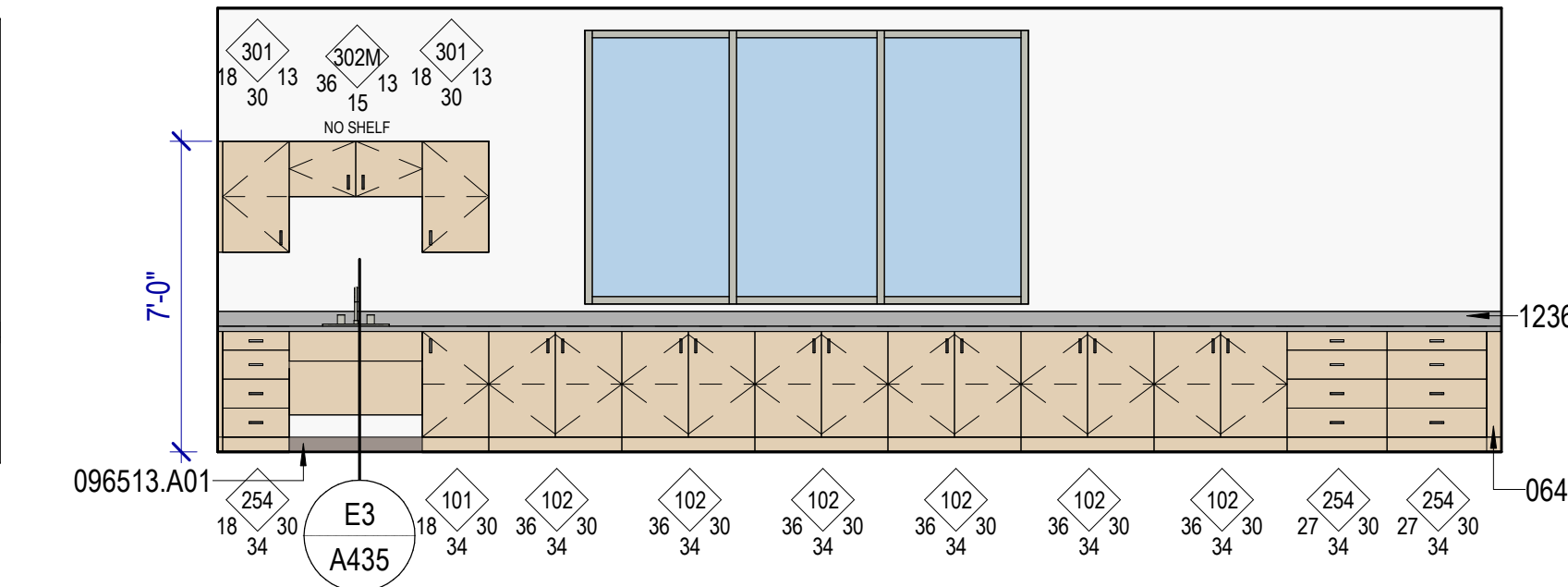
B2 LEARNING STUDIO B123 - EAST
SCALE: 1/4" = 1'-0"



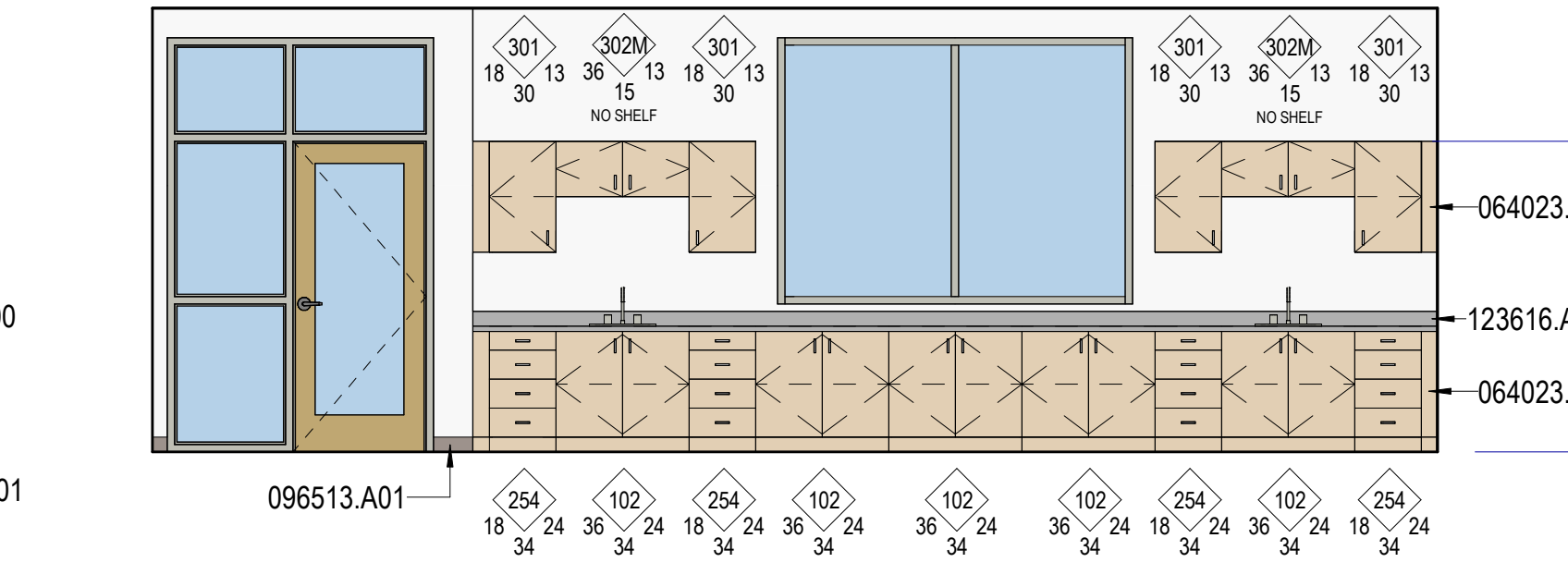
B3 LEARNING STUDIO B123 - S
SCALE: 1/4" = 1'-0"



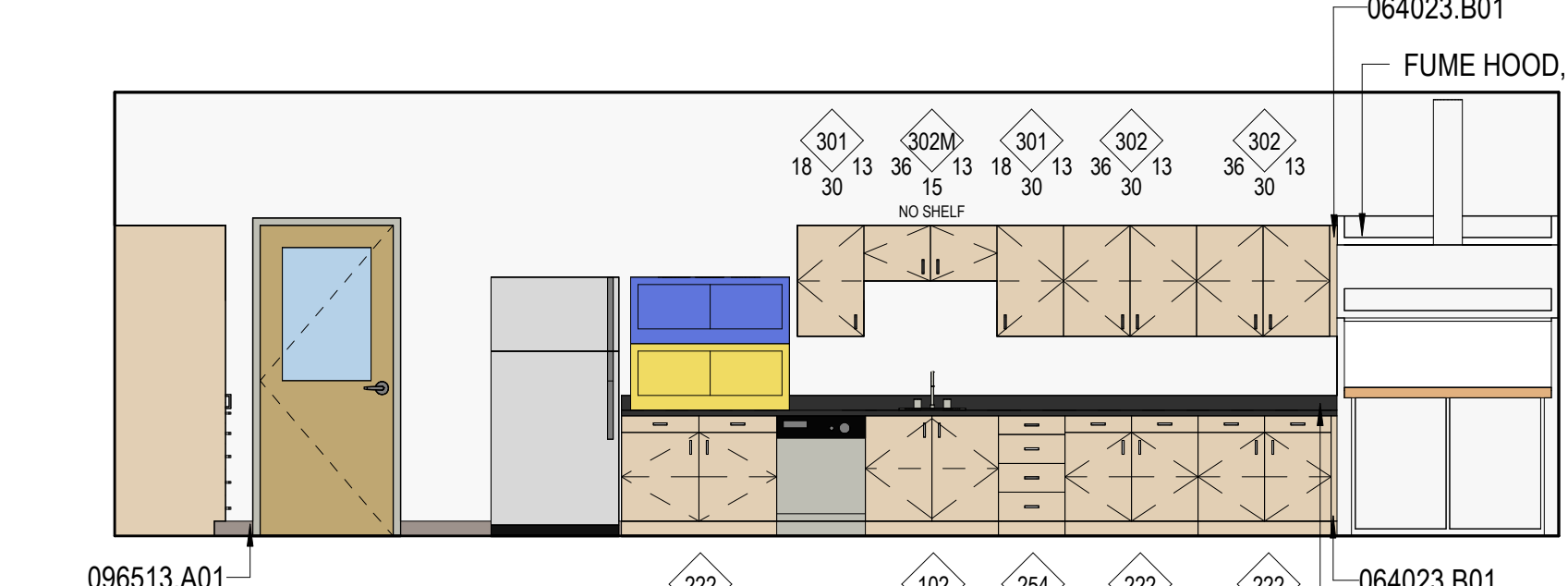
C1 SCIENCE / ART / CTE - TEACHING WALL
SCALE: 1/4" = 1'-0"



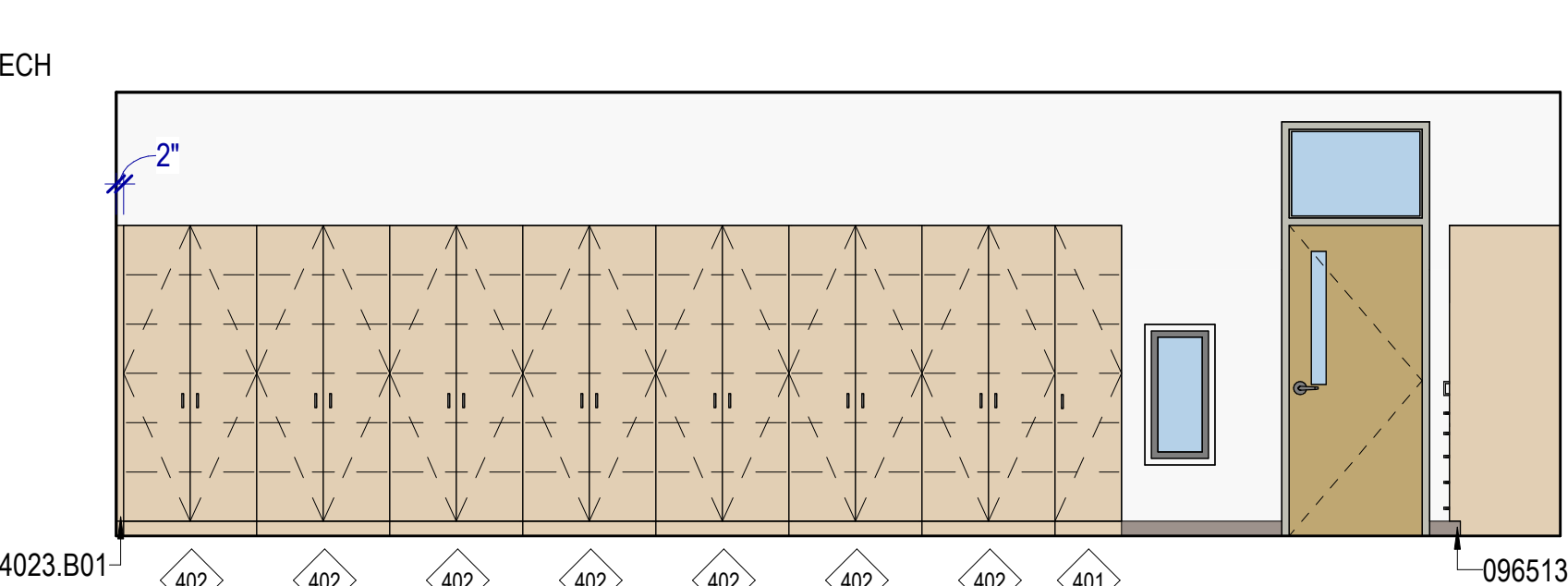
C2 SCIENCE/ART/CTE B127 - EAST
SCALE: 1/4" = 1'-0"



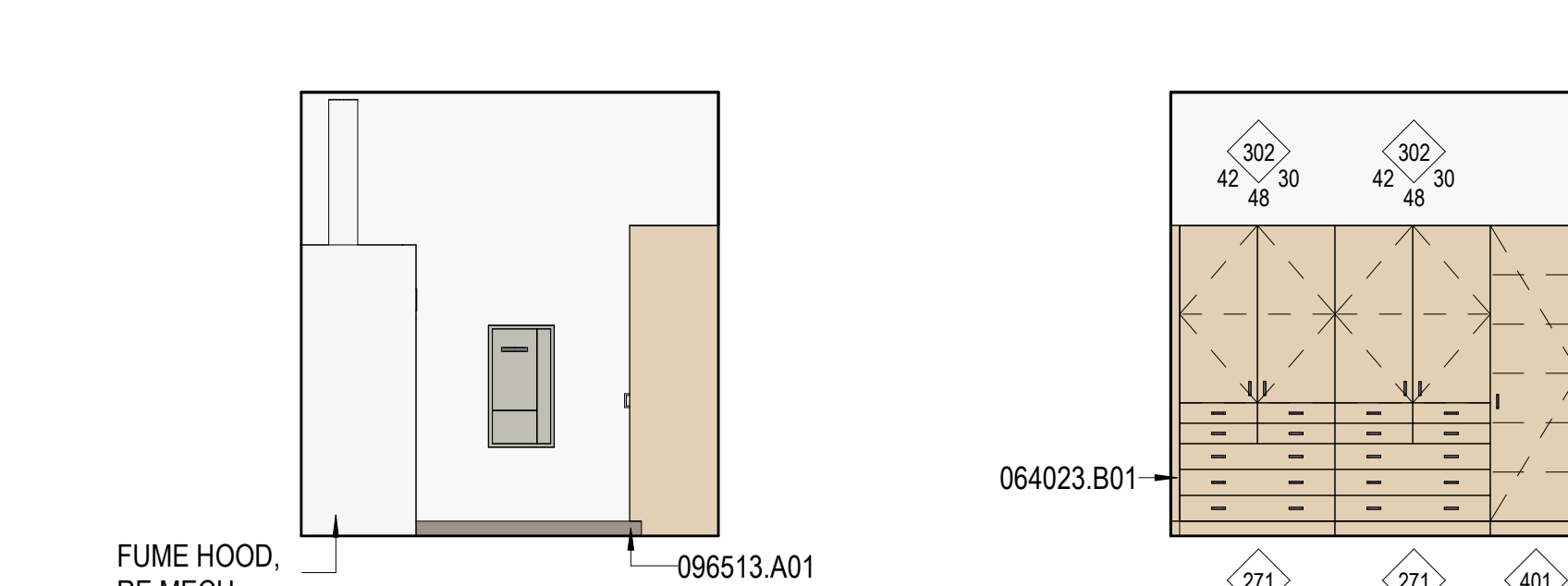
C3 SCIENCE/ART/CTE B127 - WEST
SCALE: 1/4" = 1'-0"



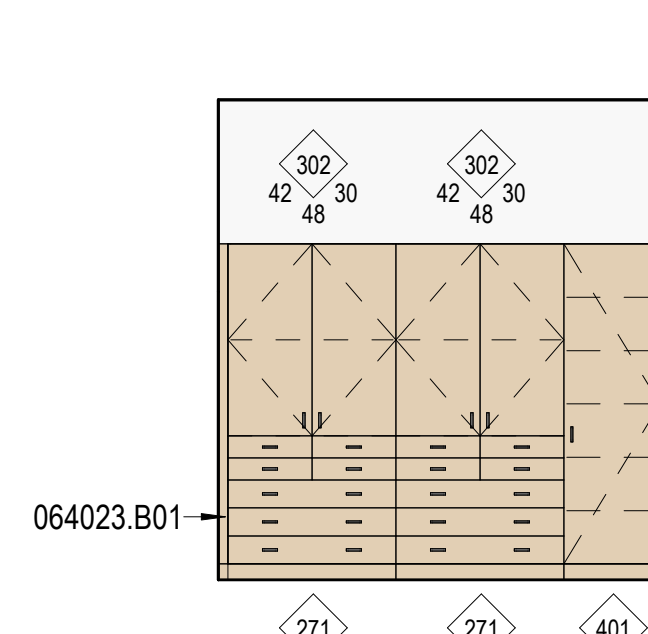
D1 PREP & STORAGE - S
SCALE: 1/4" = 1'-0"



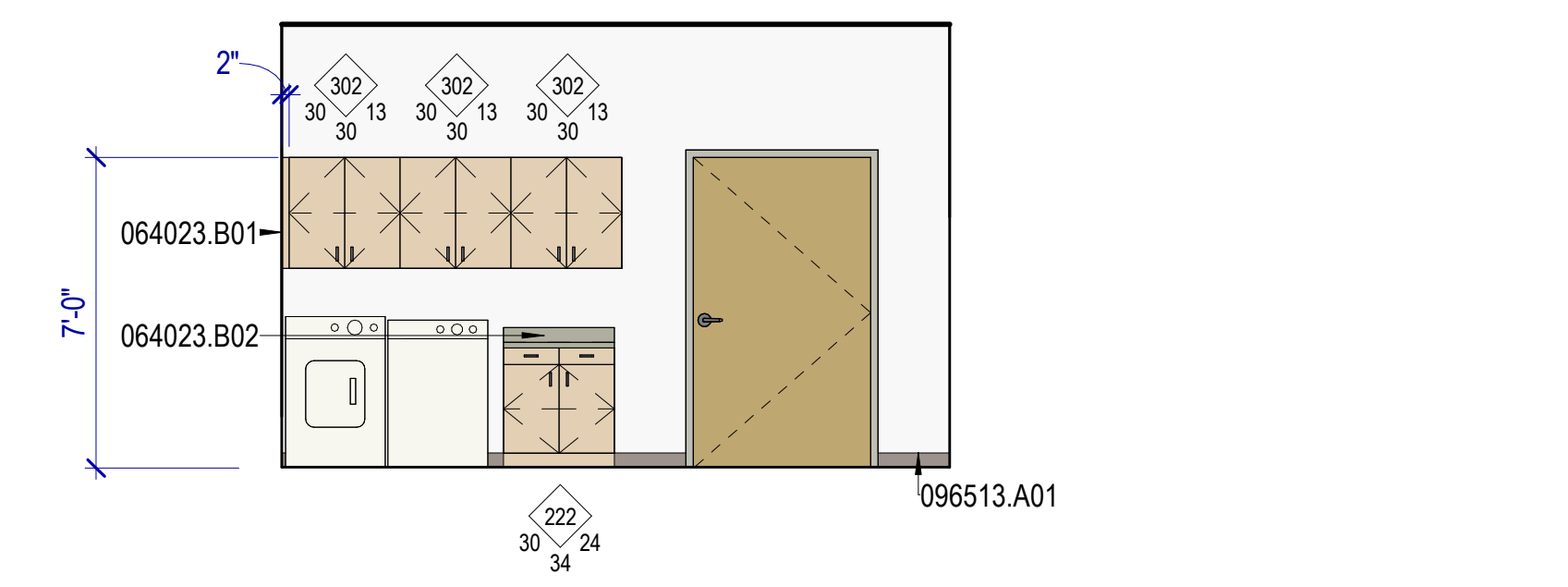
D2 PREP & STORAGE - N
SCALE: 1/4" = 1'-0"



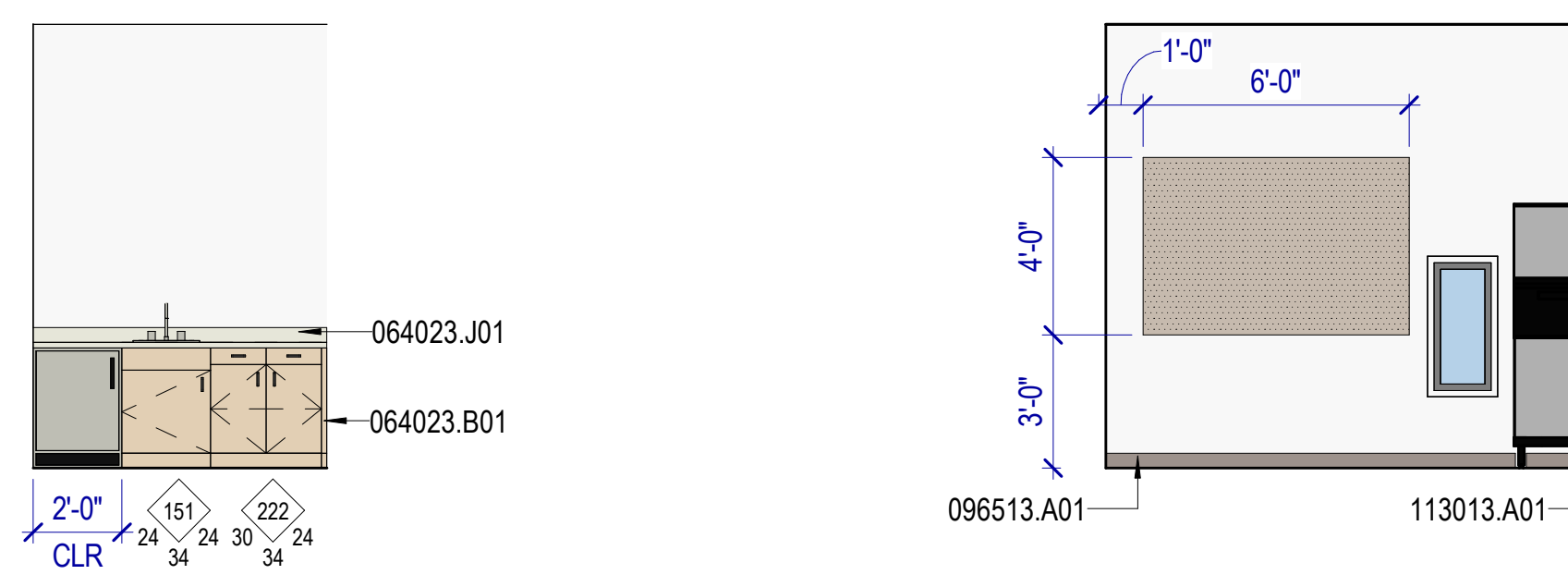
D3 PREP & STORAGE - W
SCALE: 1/4" = 1'-0"



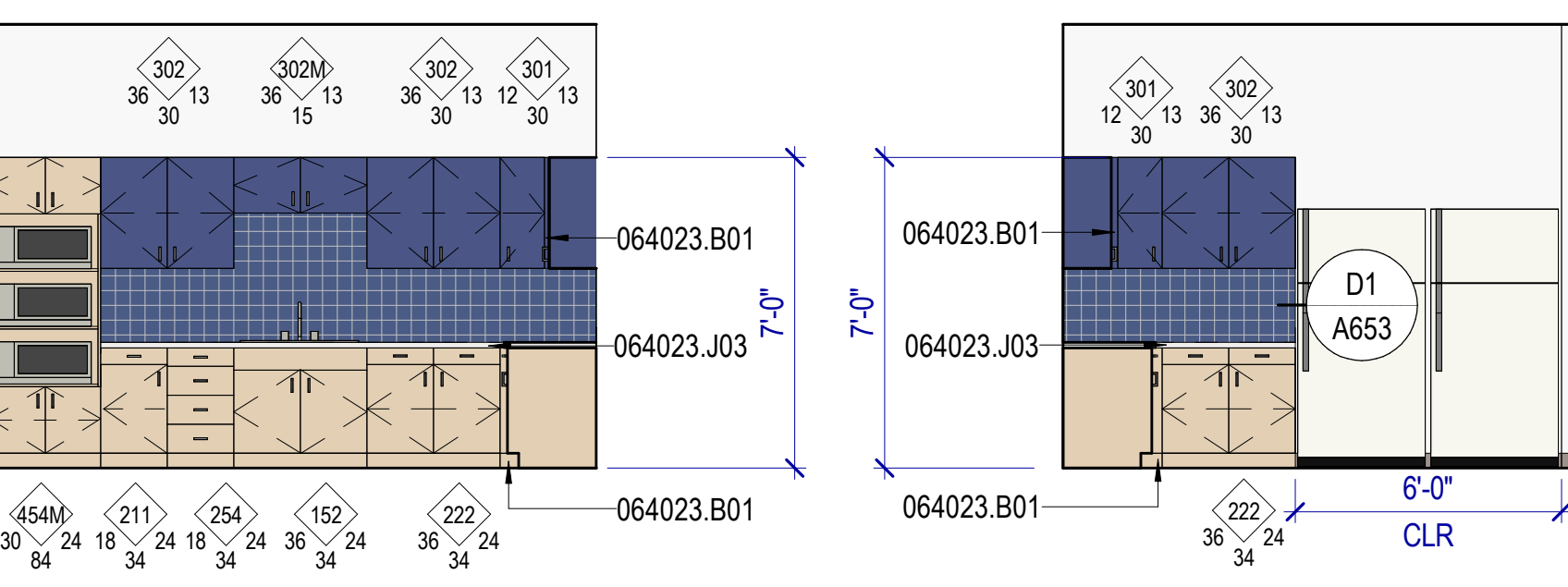
D4 PREP & STORAGE - E
SCALE: 1/4" = 1'-0"



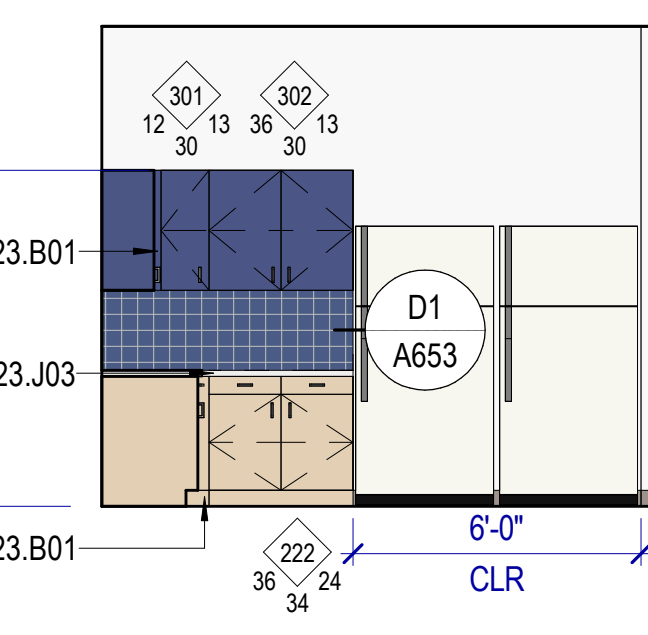
E1 LAUNDRY/RECEIVING A144 - WEST 1
SCALE: 1/4" = 1'-0"



E2 WELLNESS B136 - EAST
SCALE: 1/4" = 1'-0"



E3 BREAK ROOM - N
SCALE: 1/4" = 1'-0"



E4 BREAK ROOM - E
SCALE: 1/4" = 1'-0"



JORDAN SCHOOL DISTRICT
JORDAN LEARNING CENTER
3706 WEST 9800 SOUTH
SOUTH JORDAN, UT 84009

©2023 MHTN ARCHITECTS, INC.
Confidentiality Notice:
This document is intended for use on the Project identified herein by individual and companies involved in the design, permitting, bidding and construction of the Project. It is the property of MHTN ARCHITECTS, INC. and its distribution and reproduction of this document for any other purpose is strictly prohibited. If a digital copy of this document is received in error, please delete it.

MHTN PROJECT NO: 2024528
Original drawing is 36" x 42". Do not scale contents of this drawing.

REVISIONS:
CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

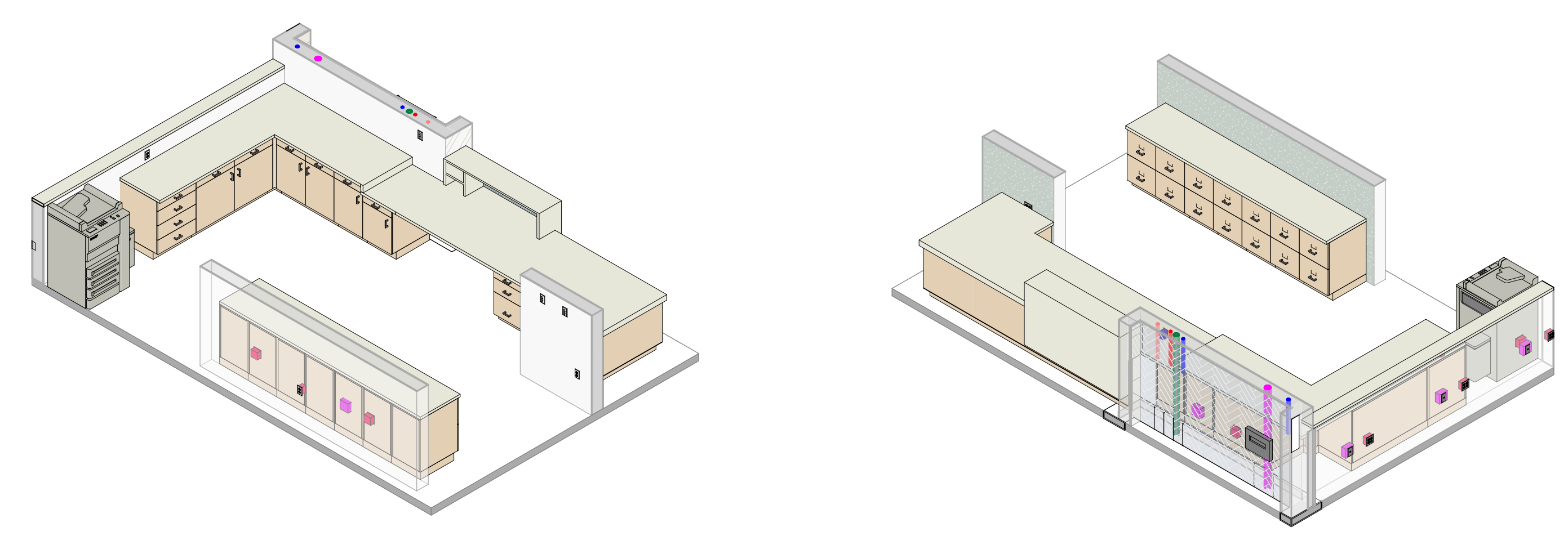
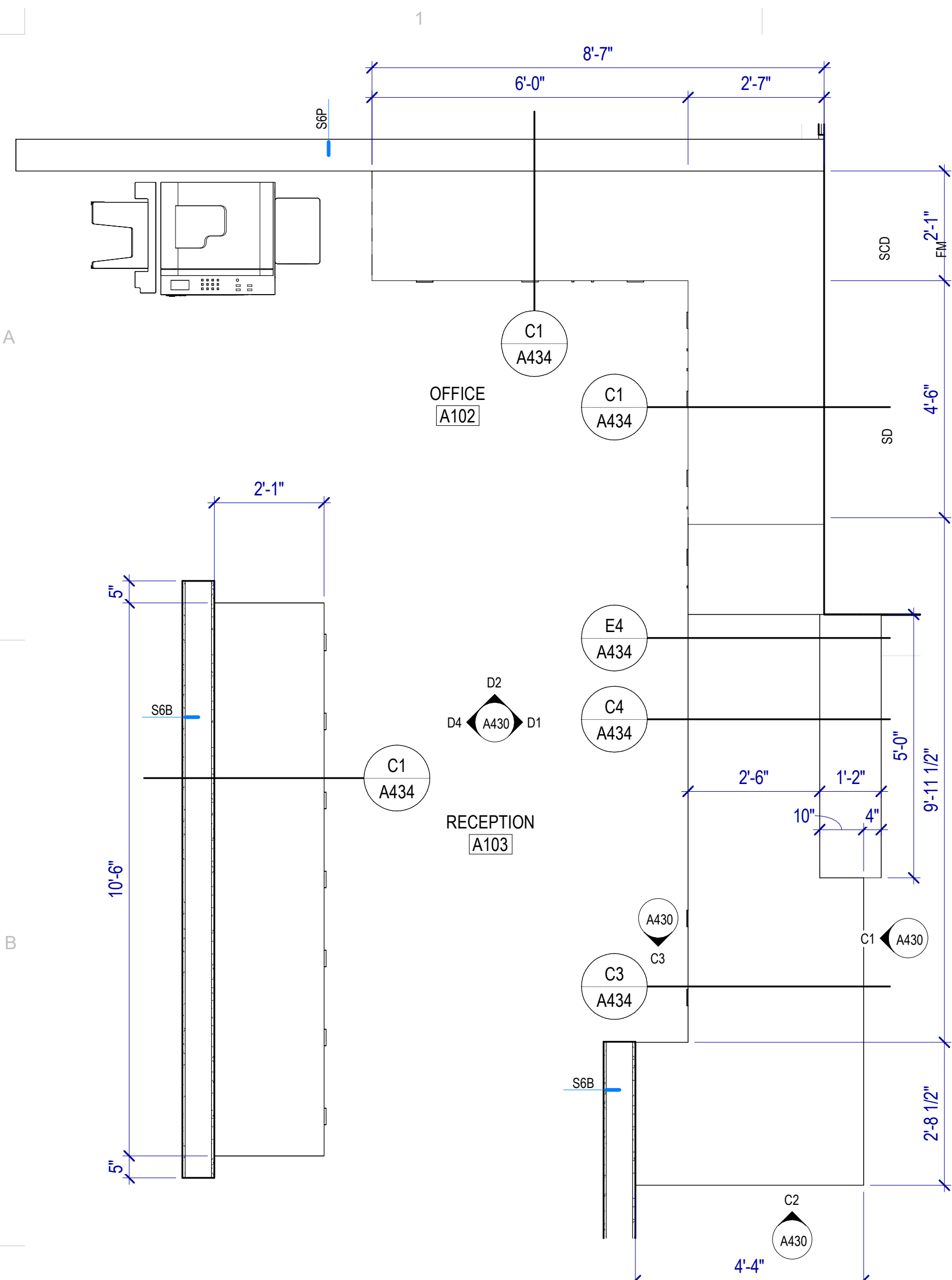
NO.	DATE	DESCRIPTION
X1	5-8-24	ADDendum #1

ISSUE:
CONSTRUCTION DOCUMENTS
AUGUST 29, 2024

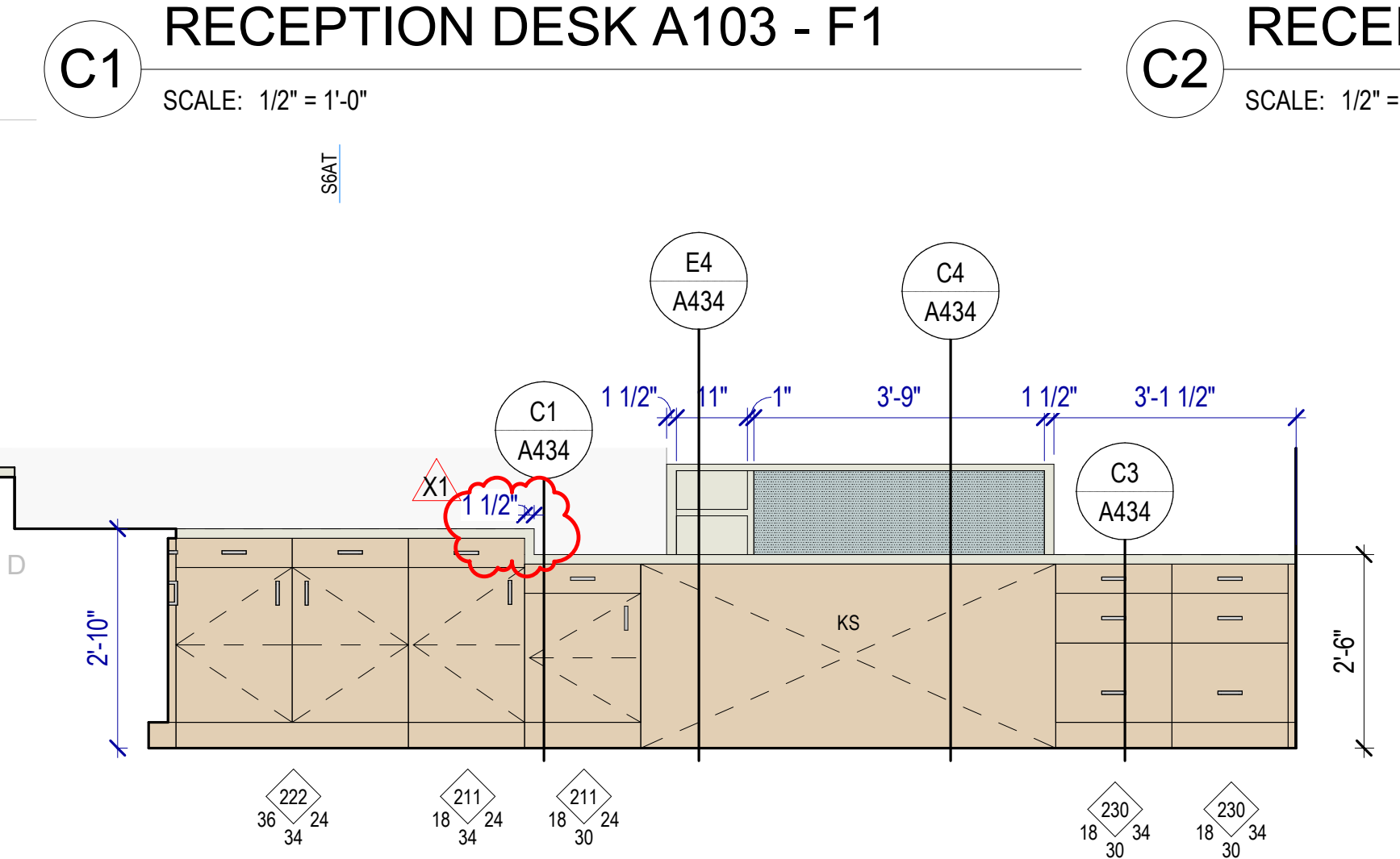
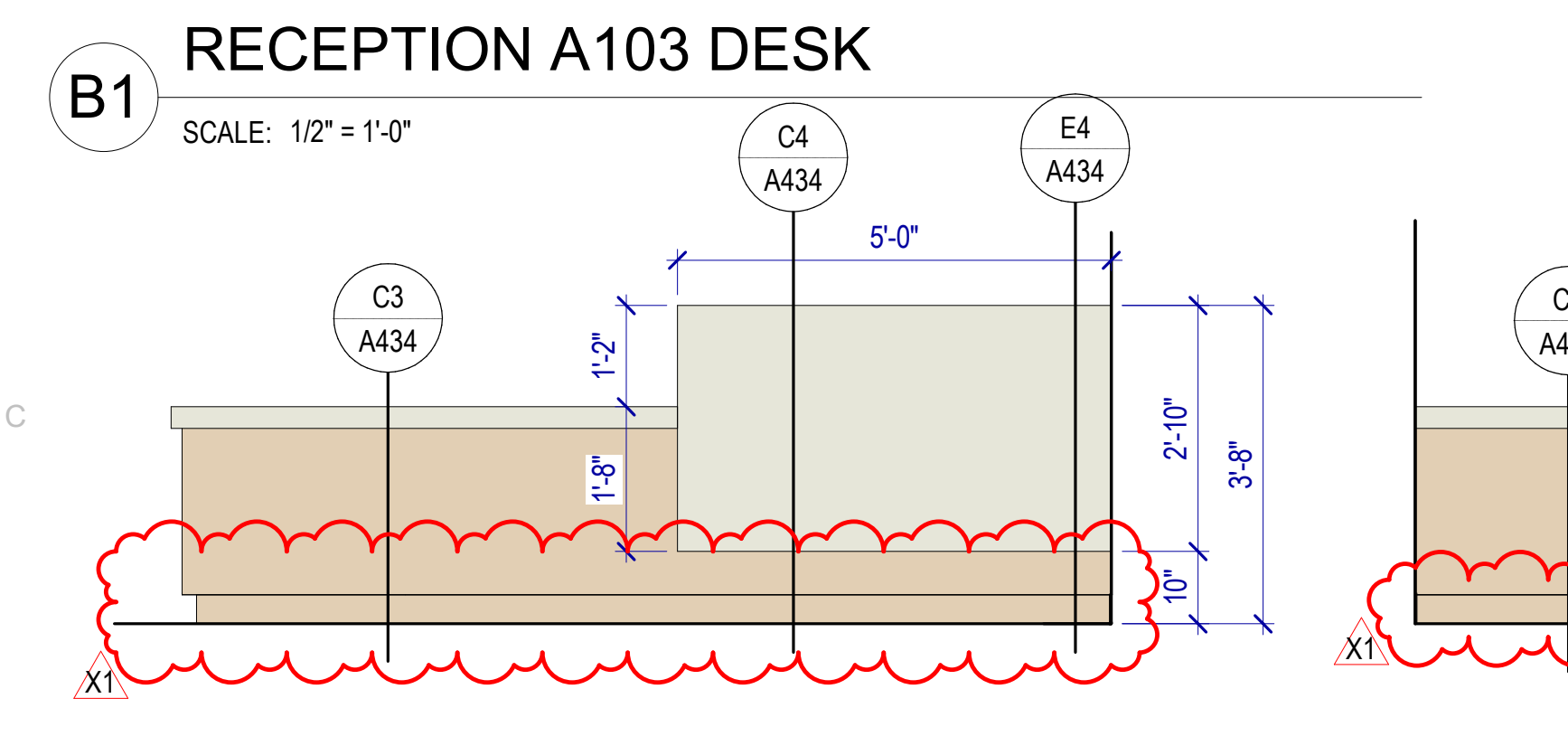
SHEET NAME:
INTERIOR ELEVATIONS

SHEET NUMBER

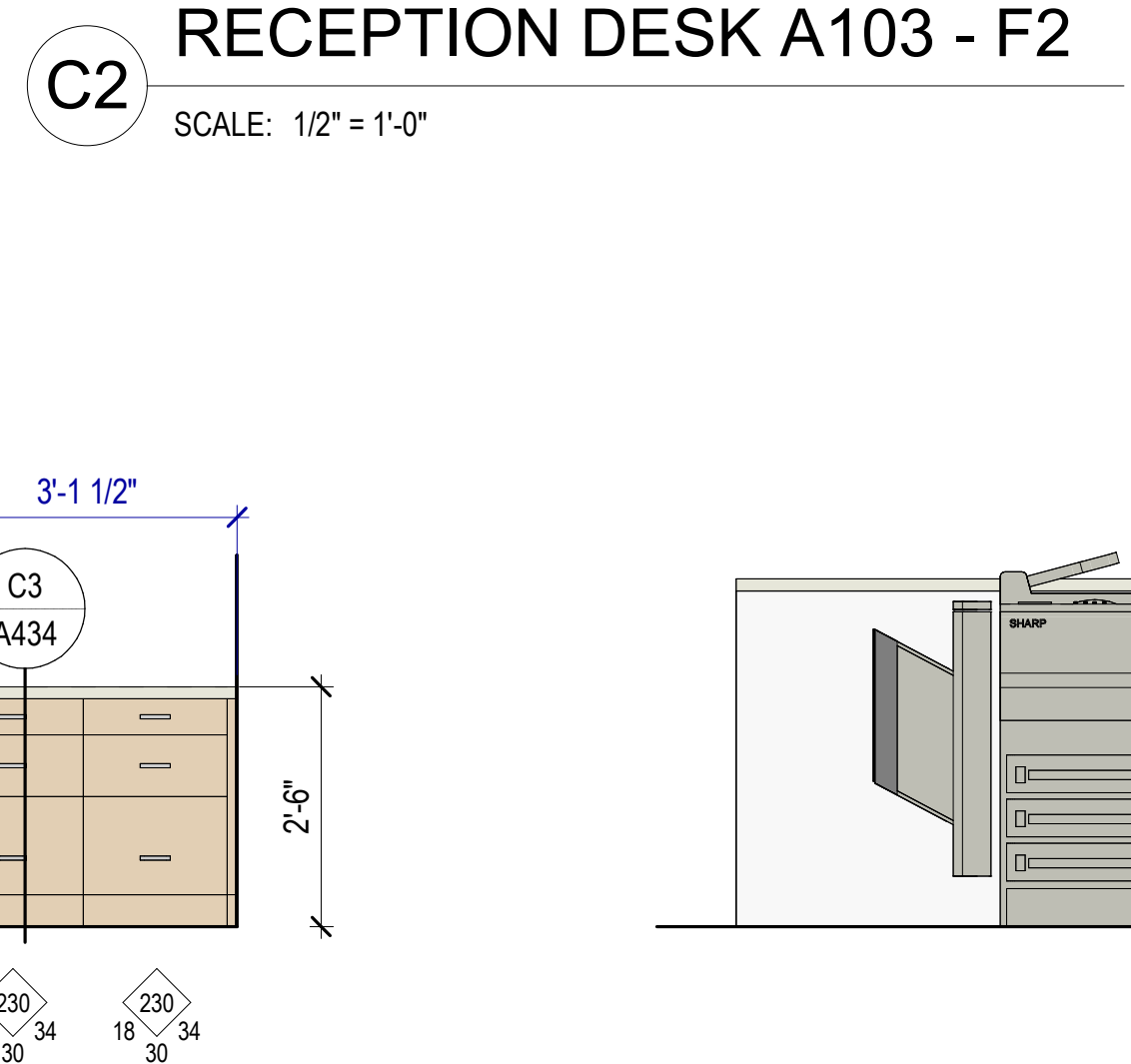
A413



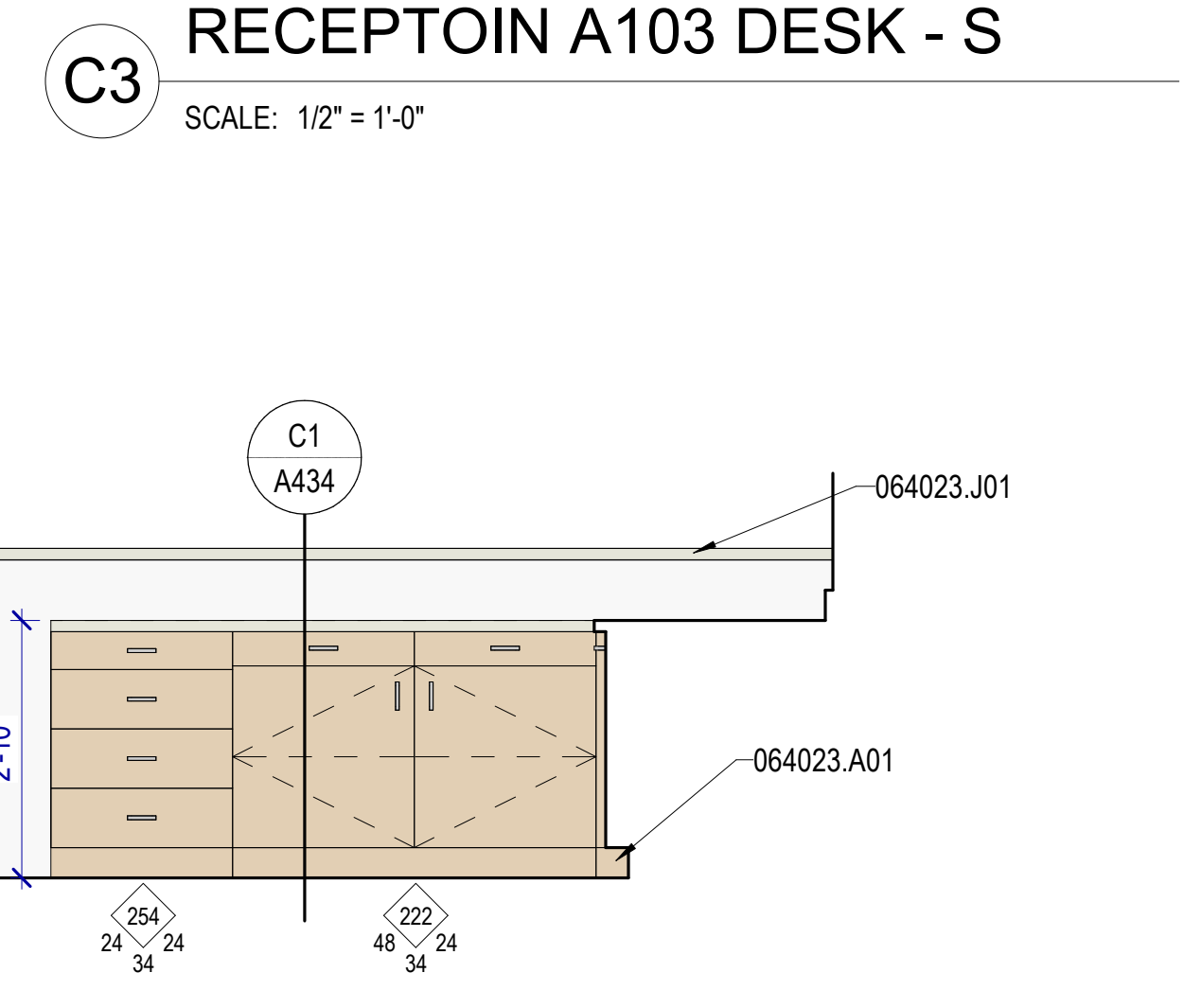
RECEPTION DESK A103 AXONOMETRIC



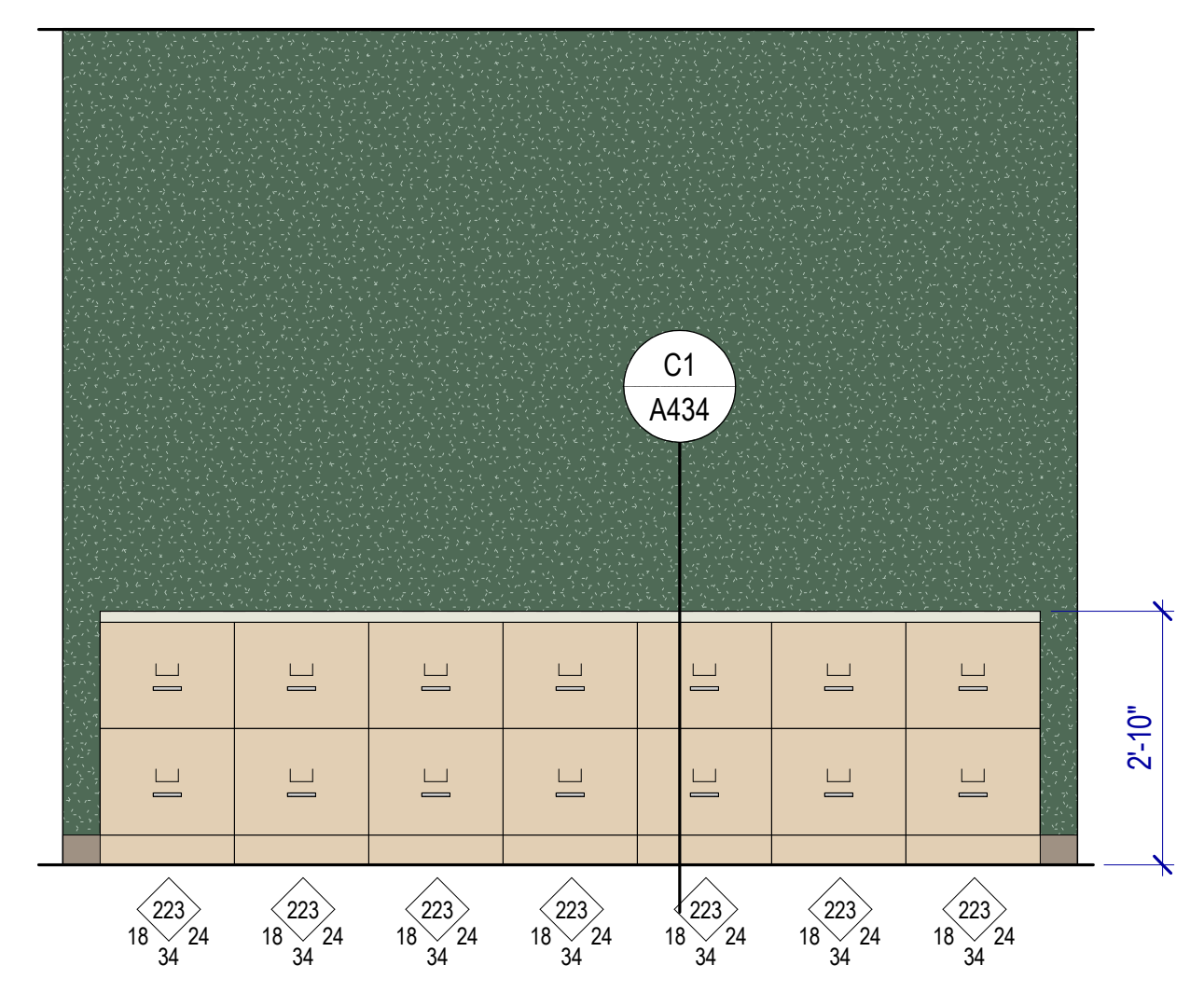
D1 RECEPTION A103 DESK - E
SCALE: 1/2" = 1'-0"



D2 RECEPTION A102 DESK - N
SCALE: 1/2" = 1'-0"



D4 RECEPTION A103 DESK - W
SCALE: 1/2" = 1'-0"



D4 RECEPTION A103 DESK - W
SCALE: 1/2" = 1'-0"

CASEWORK GENERAL NOTES

- Verify in Field (VIF): Field verify all dimensions and conditions before fabrication.
- Upper Cabinet Clearance: 12" minimum clear inside dimension, UNO.
- Electrical and Data Coordination: Coordinate electrical and data device locations with millwork.
- Locks: Provide locks on cabinet drawers and doors, keyed alike by room, UNO.
- Grommets: Locate as directed by Owner after installation.

Cabinet Design Series

- Provide cabinets with integral finished ends and scribes at wall to wall installations not exceeding 1-1/2 inches in width.
- Where cabinets meet walls or other cabinets, provide filler panels, of sufficient width, but not exceeding 1-1/2 inches, to allow doors with pulls to swing a minimum of 90 degrees and to prevent drawers from hitting adjacent door or drawer pulls.
- Hardware and accessories shall be as provided for in these standards.

CDS are subdivided as follows:

Base Cabinets w/o Drawers	100 Series
Base Cabinets w/ Drawers	200 Series
Wall Hung Cabinets	300 Series
Tall Storage Cabinets	400 Series
Tall Wardrobe Cabinets	500 Series
Library Cabinets	600 Series
Moveable Cabinets	700 Series

- General Notes:
- 100 or 200 Series cabinets may be converted into moveable cabinets by prefixing a "7" to the number. (Example: 7-102-36"x 30"x 18" [7-102-914 mm x 762 mm x 457 mm]).
 - Moveable cabinets shall be equipped with adequate approved casters for the intended load capacity.
 - CDS #s 728, 729, 735, 736, 737, 738, and 739 require metal angle reinforced corners.
 - Carts and rolling tall storage cabinets with doors, lacking any horizontal and/or vertical stabilizing dividers, require a diaphragm bottom; specifically CDS #s 702, 712, 716, 722, 743, 744, 746, 747, 750, and 751.
 - Wardrobe cabinets (500 Series) with doors require a framed mirror on one door, and cabinets # 533 and 534 require a paper roller/cutter and slide out tilting paper shelves.
 - Cart storage cabinets are required to have hardwood side guides, specifically CDS #s 160, 161, and 162.
 - Ceramics drying cabinets are required to have galvanized metal frame shelves with wire mesh, specifically CDS #s 158, 159, and 459.
 - File drawers require full extension slides and a file hanging system, specifically CDS #s 223, 224, 230, 231, 240, 242, 253, 255, 531, 532, and 533.
 - Wardrobe cabinets are required to have a shelf, pole, and framed mirror (without pin tray) when closed with hinged doors, specifically CDS #s 501, 511, 512, 522, 530, 531, 532, and 552.
 - Wardrobe cabinets are required to have a roll paper dispenser/cutter, specifically CDS #s 533 and 534.

	SS1		TK1
	PL1		PL2
	QT1		WP2
	KS		KNEE SPACE



©2023 MHTN ARCHITECTS, INC.
Confidentiality Notice:
This document is intended for use on the Project identified herein by individuals and companies involved in the design, permitting, bidding and construction of the Project. MHTN ARCHITECTS, INC. grants limited rights to distribute and reproduce this document for the express purposes only. Distribution, printing or copying this document for purposes other than those indicated is strictly prohibited. If a digital copy of this document is received in error, please delete it.
SEAL

MHTN PROJECT NO: 2024528

Original drawing is 36" x 42". Do not scale contents of this drawing.

REVISIONS:
CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

NO.	DATE	DESCRIPTION
X1	5-8-24	ADDendum #1

CASEWORK GENERAL NOTES

Verify in Field (VIF): Field verify all dimensions and conditions before fabrication.

Upper Cabinet Clearance: 12" minimum clear inside dimension, UNO.

Electrical and Data Coordination: Coordinate electrical and data device locations with millwork.

Locks: Provide locks on cabinet drawers and doors, keyed alike by room, UNO.

Grommets: Locate as directed by Owner after installation.

Cabinet Design Series

- Provide cabinets with integral finished ends and scribes at wall to wall installations not exceeding 1-1/2 inches in width.
- Where cabinets meet walls or other cabinets, provide filler panels, of sufficient width, but not exceeding 1-1/2 inches, to allow doors with pulls to swing a minimum of 90 degrees and to prevent drawers from hitting adjacent door or drawer pulls.
- Hardware and accessories shall be as provided for in these standards.

CDS are subdivided as follows:

Base Cabinets w/o Drawers	100 Series
Base Cabinets w/ Drawers	200 Series
Wall Hung Cabinets	300 Series
Tall Storage Cabinets	400 Series
Tall Wardrobe Cabinets	500 Series
Library Cabinets	600 Series
Moveable Cabinets	700 Series

General Notes

- 100 or 200 Series cabinets may be converted into moveable cabinets by prefixing a "7" to the number. (Example: 7-102-36"x 30"x 18" [7-102-914 mm x 762 mm x 457 mm]).
- Moveable cabinets shall be equipped with adequate approved casters for the intended load capacity.
- CDS #'s 728, 729, 735, 736, 737, 738, and 739 require metal angle reinforced corners.
- Carts and rolling tall storage cabinets with doors, lacking any horizontal and/or vertical stabilizing dividers, require a diaphragm bottom; specifically CDS #'s 702, 712, 716, 722, 743, 744, 746, 747, 750, and 751.
- Wardrobe cabinets (500 Series) with doors require a framed mirror on one door, and cabinets # 533 and 534 require a paper roller/cutter and slide out tilting paper shelves.
- Cart storage cabinets are required to have hardwood side guides, specifically CDS #'s 160, 161, and 162.
- Ceramic drying cabinets are required to have galvanized metal frame shelves with wire mesh, specifically CDS #'s 198, 199, and 459.
- File drawers require full extension slides and a file hanging system, specifically CDS #'s 223, 224, 230, 231, 240, 242, 253, 255, 531, 532, and 533.
- Wardrobe cabinets are required to have a shelf, pole, and framed mirror (without pin tray) when closed with hinged doors, specifically CDS #'s 501, 511, 512, 522, 530, 531, 532, and 552.
- Wardrobe cabinets are required to have a roll paper dispenser/cutter, specifically CDS #'s 533 and 534.

	SS1		TK1
	PL1		PL2
	QT1		WP2
	KS	KNEE SPACE	



JORDAN SCHOOL DISTRICT
JORDAN LEARNING CENTER
 3706 WEST 9800 SOUTH
 SOUTH JORDAN, UT 84009

©2023 MHTN ARCHITECTS, INC.
 Confidentiality Notice
 This document is intended for use on the Project identified herein by individual and companies involved in the design, permitting, bidding and construction of the Project. All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without the prior written permission of MHTN Architects, Inc. If a digital copy of this document is received in error, please delete it.

MHTN PROJECT NO. 2024528

Original drawing is 30" x 42". Do not scale contents of this drawing.

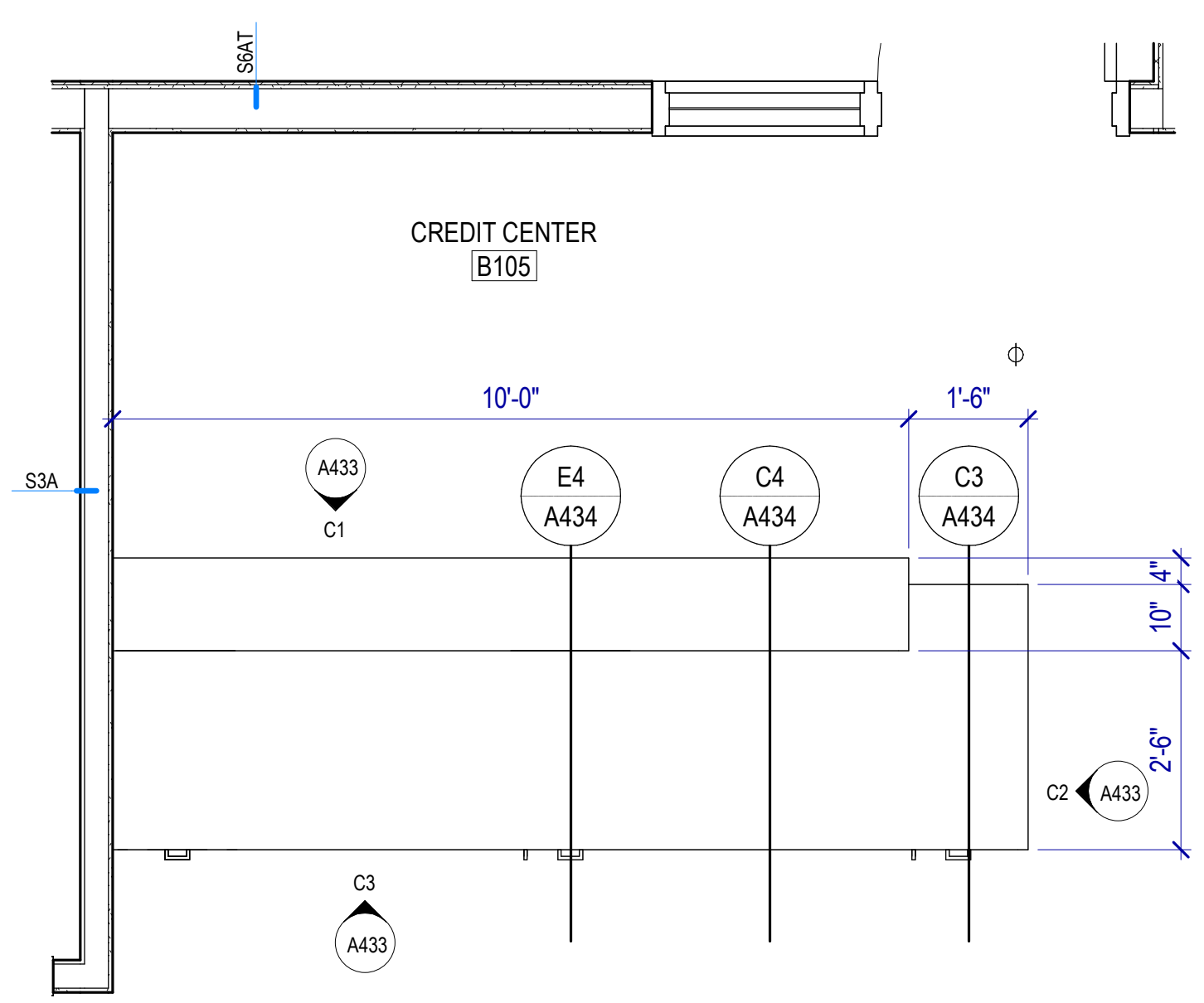
REVISIONS:
 CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

NO.	DATE	DESCRIPTION
X1	5-8-24	ADDENDUM #1

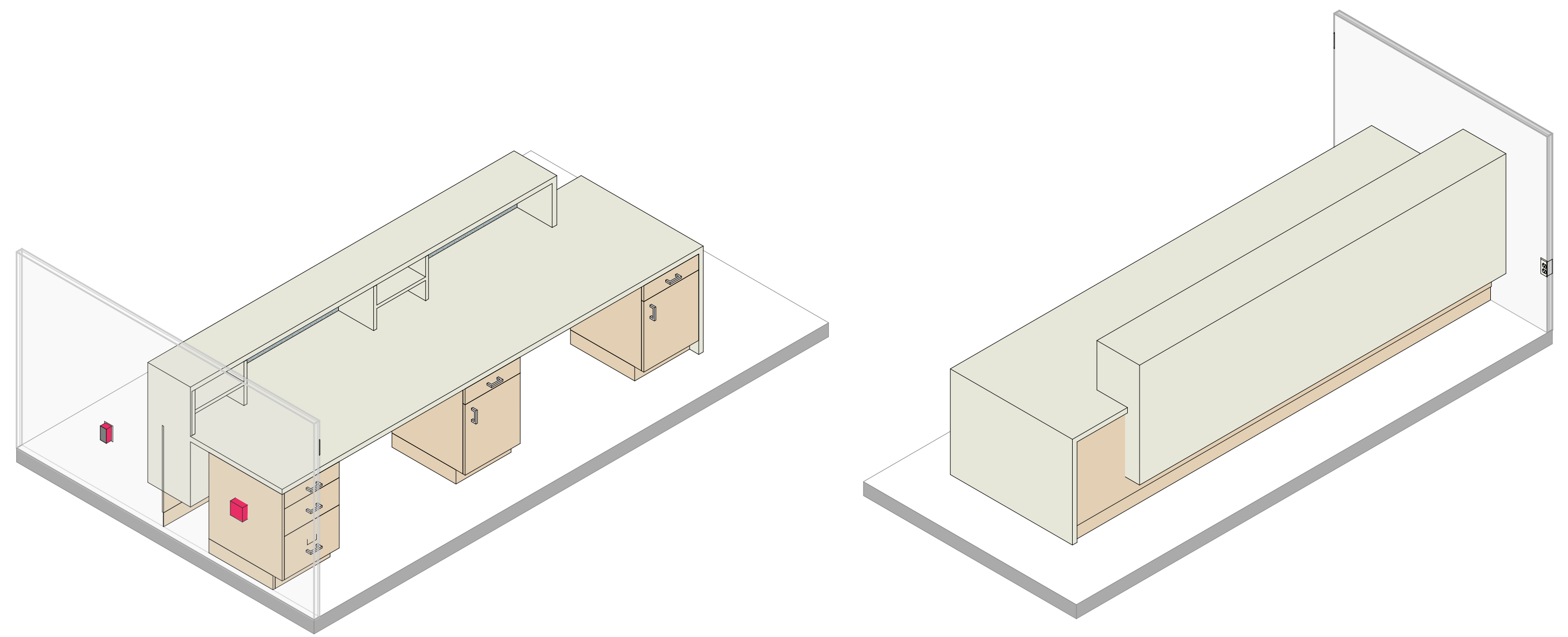
ISSUE:
 CONSTRUCTION DOCUMENTS
 AUGUST 29, 2024

SHEET NAME:
CASEWORK DETAILS

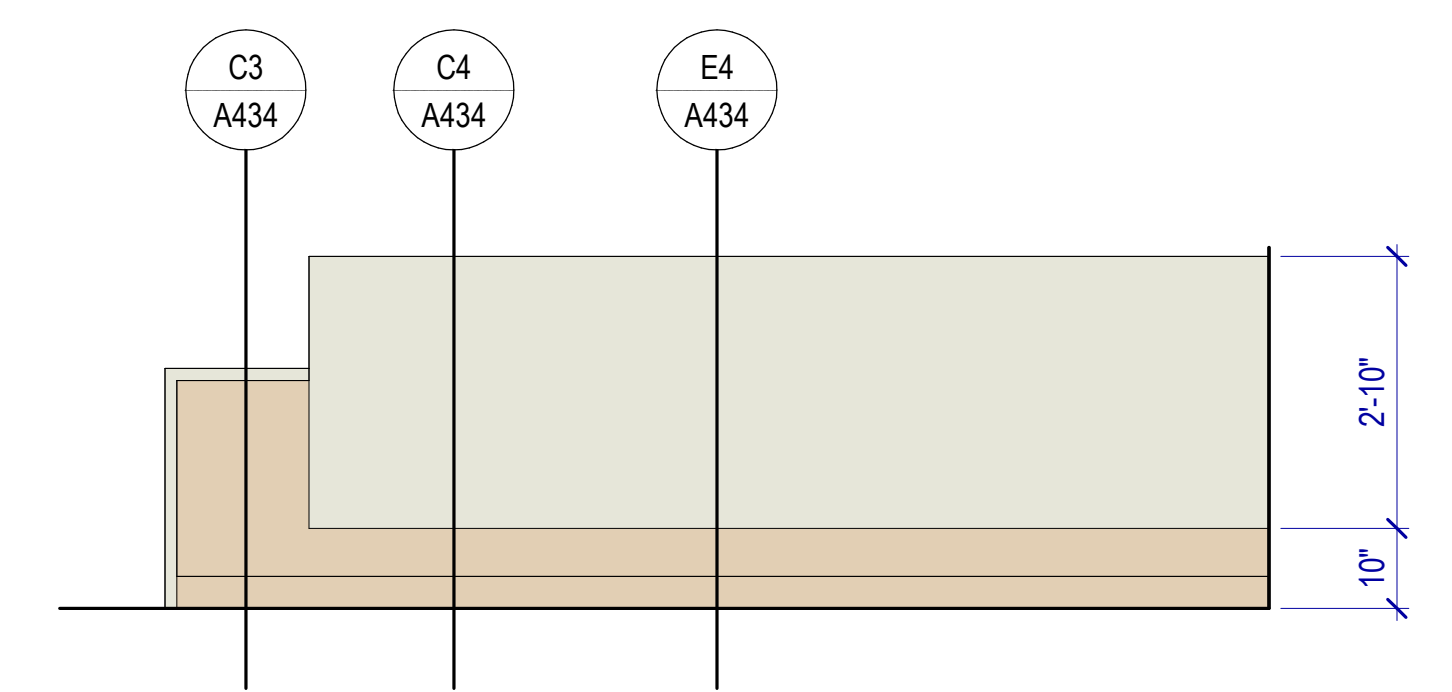
SHEET NUMBER:
A433



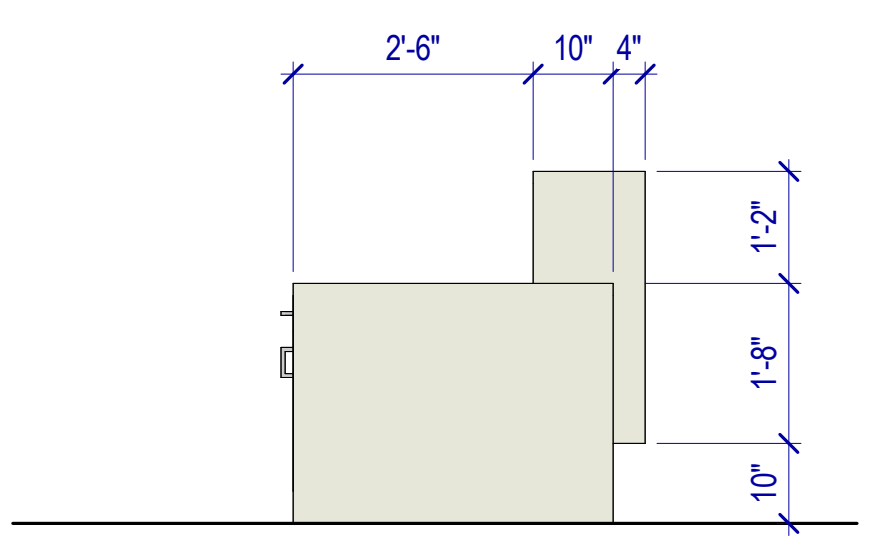
B1 RECEPTION DESK B105
 SCALE: 1/2" = 1'-0"



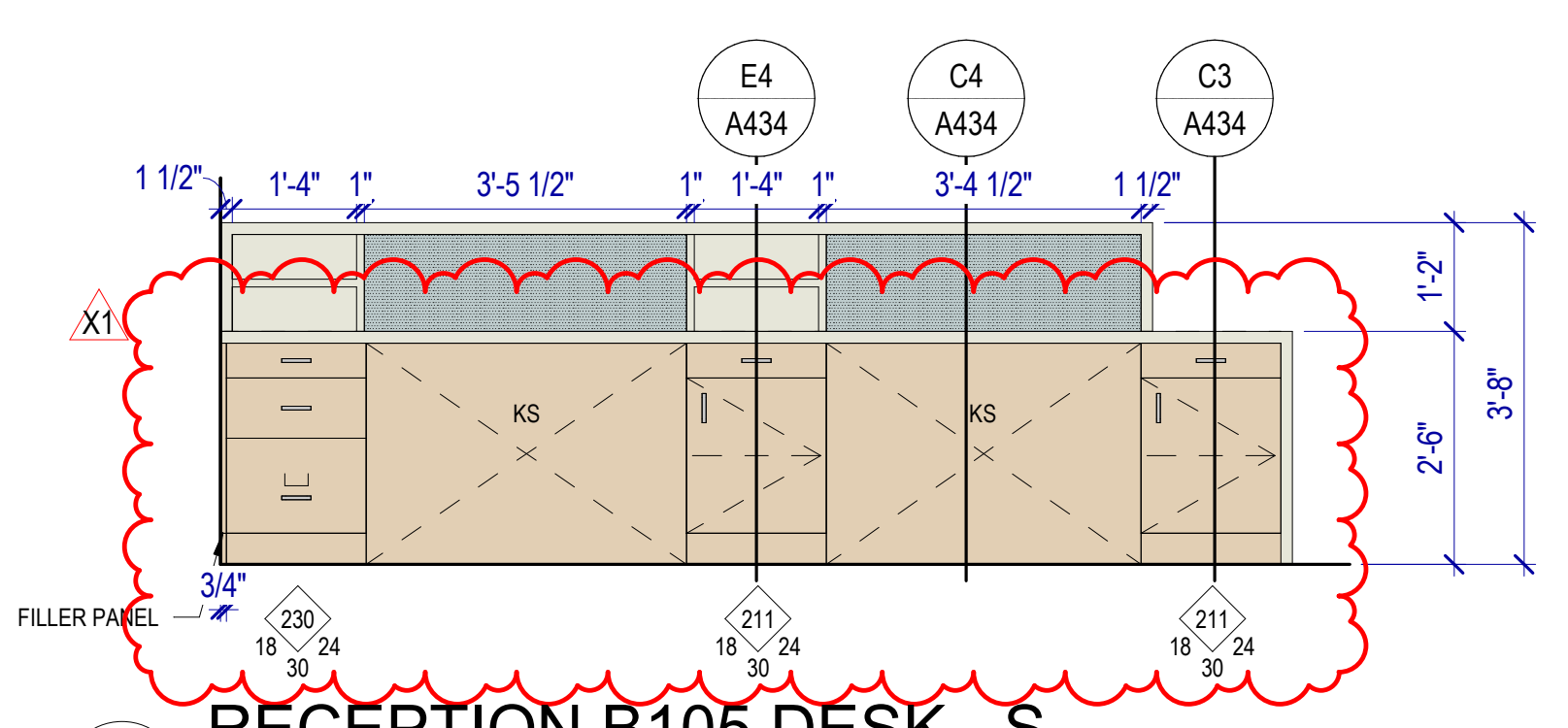
RECEPTION DESK B105 AXONOMETRIC



C1 RECEPTION B105 DESK - N
 SCALE: 1/2" = 1'-0"



C2 RECEPTION B105 DESK - E
 SCALE: 1/2" = 1'-0"



C3 RECEPTION B105 DESK - S
 SCALE: 1/2" = 1'-0"



JORDAN SCHOOL DISTRICT
JORDAN LEARNING CENTER
3706 WEST 9800 SOUTH
SOUTH JORDAN, UT 84009

©2024 MHTN ARCHITECTS, INC.
Confidentiality Notice:
This document is intended for use on the Project identified herein by individuals and companies involved in the design, permitting, bidding and construction of the Project. All rights are reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without the prior written permission of MHTN Architects, Inc. All rights reserved. If a digital copy of this document is received in error, please delete it.

MHTN PROJECT NO. 2024528

Original drawing is 36 x 42. Do not scale contents of the drawing.

REVISIONS:
CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

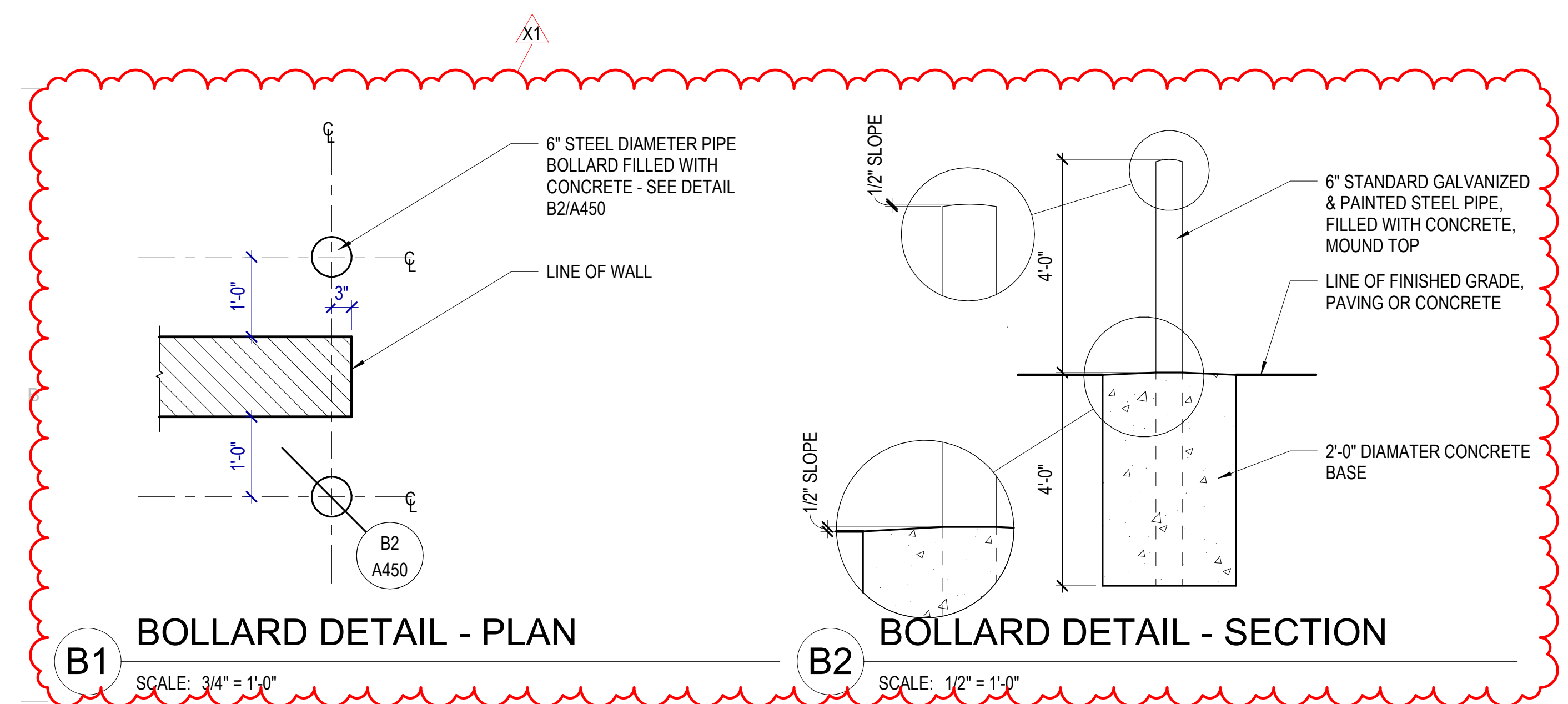
NO.	DATE	DESCRIPTION	ADDENDUM #1
X1	5-8-24		

ISSUE
CONSTRUCTION DOCUMENTS
AUGUST 29, 2024

SHEET NAME
PLAN DETAILS

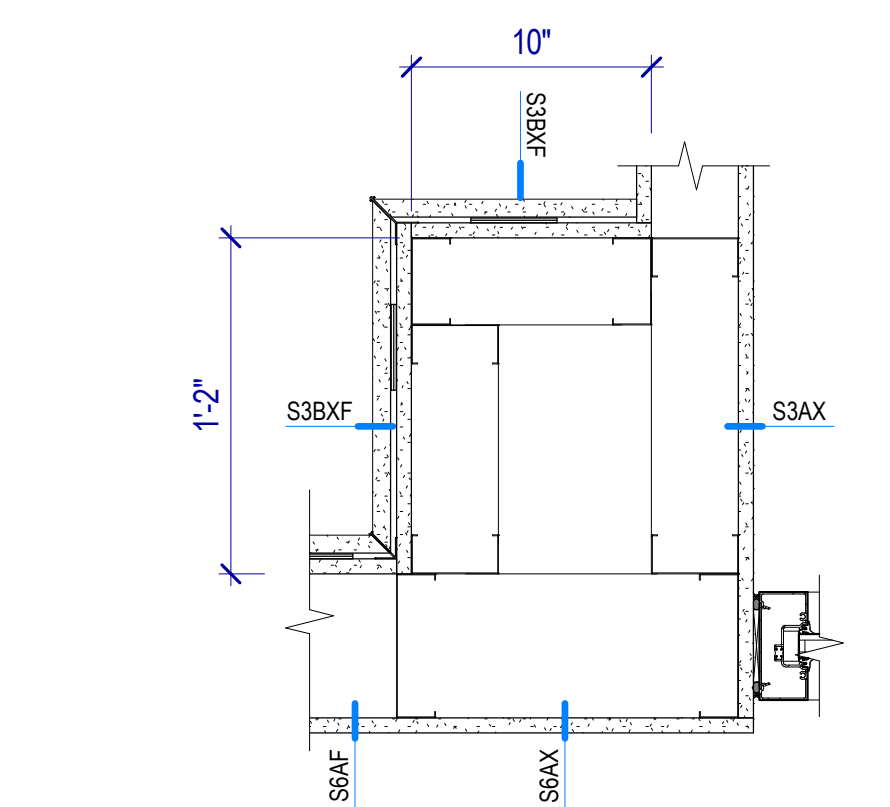
SHEET NUMBER

A450

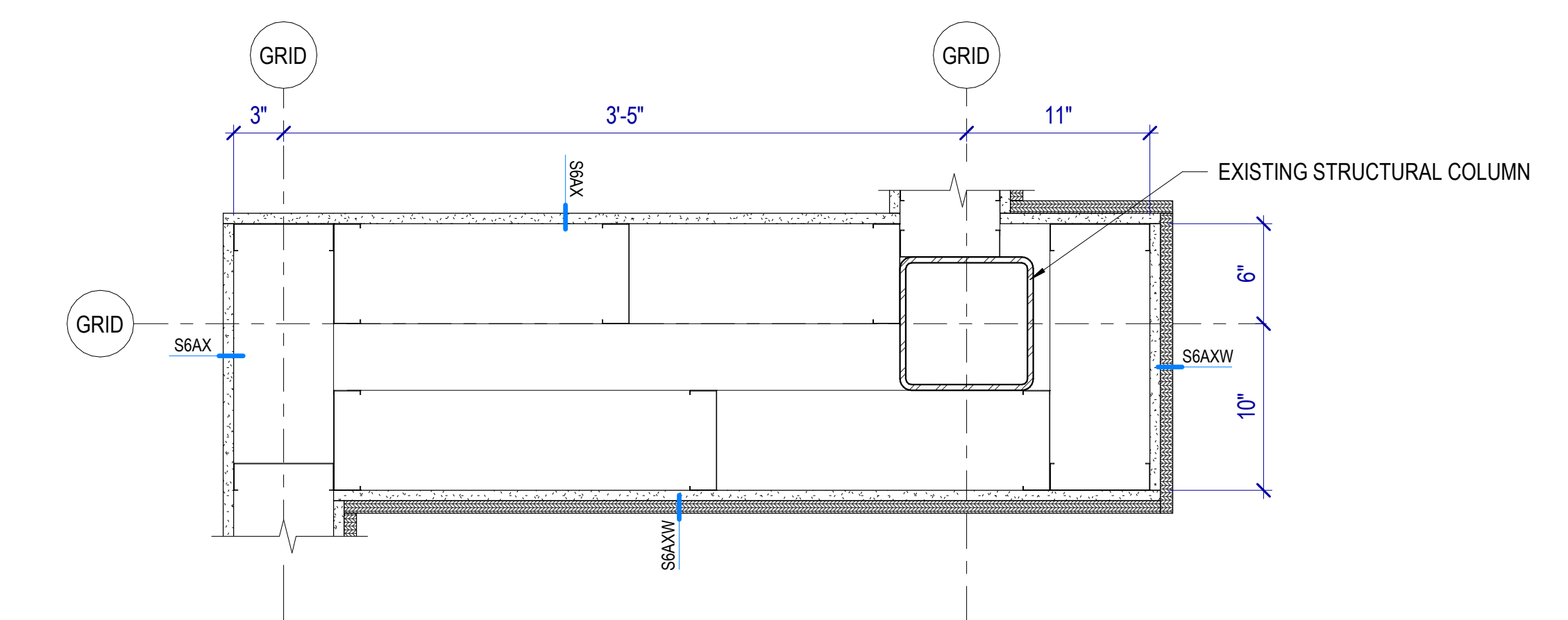


B1 BOLLARD DETAIL - PLAN
SCALE: 3/4" = 1'-0"

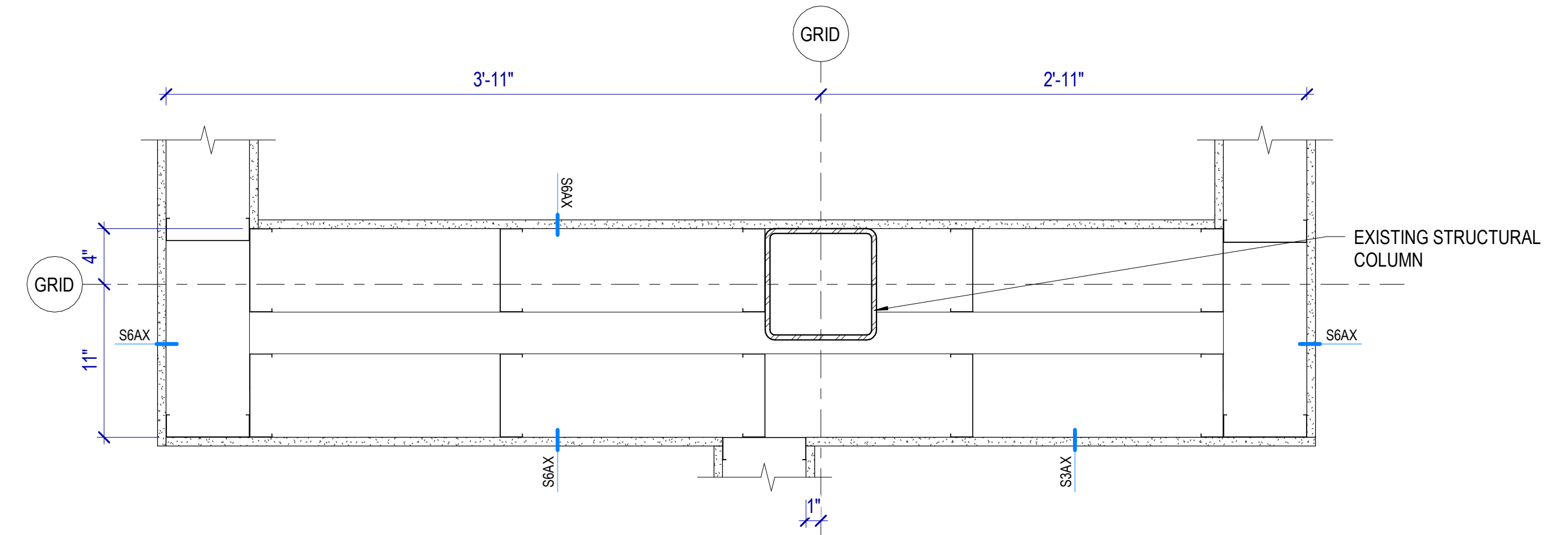
B2 BOLLARD DETAIL - SECTION
SCALE: 1/2" = 1'-0"



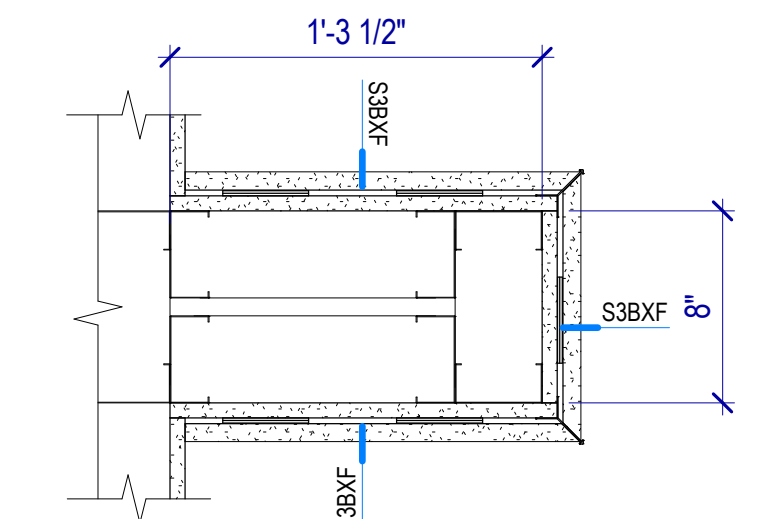
C2 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



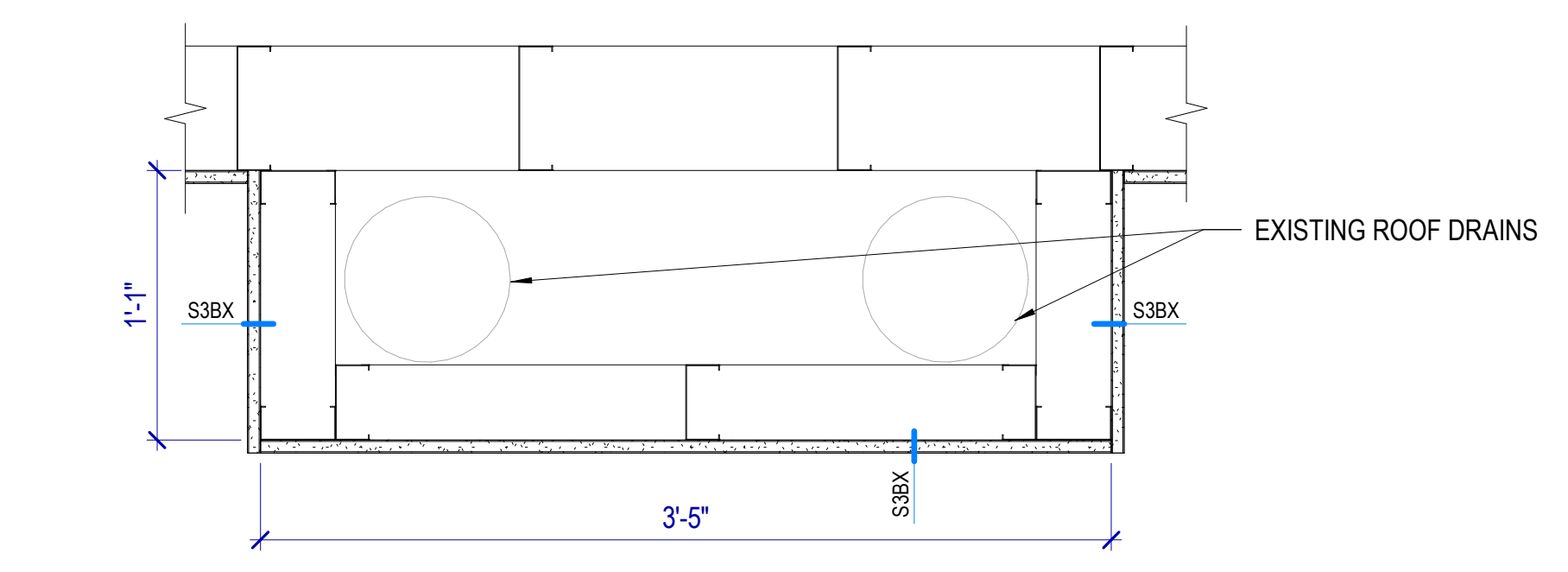
C1 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



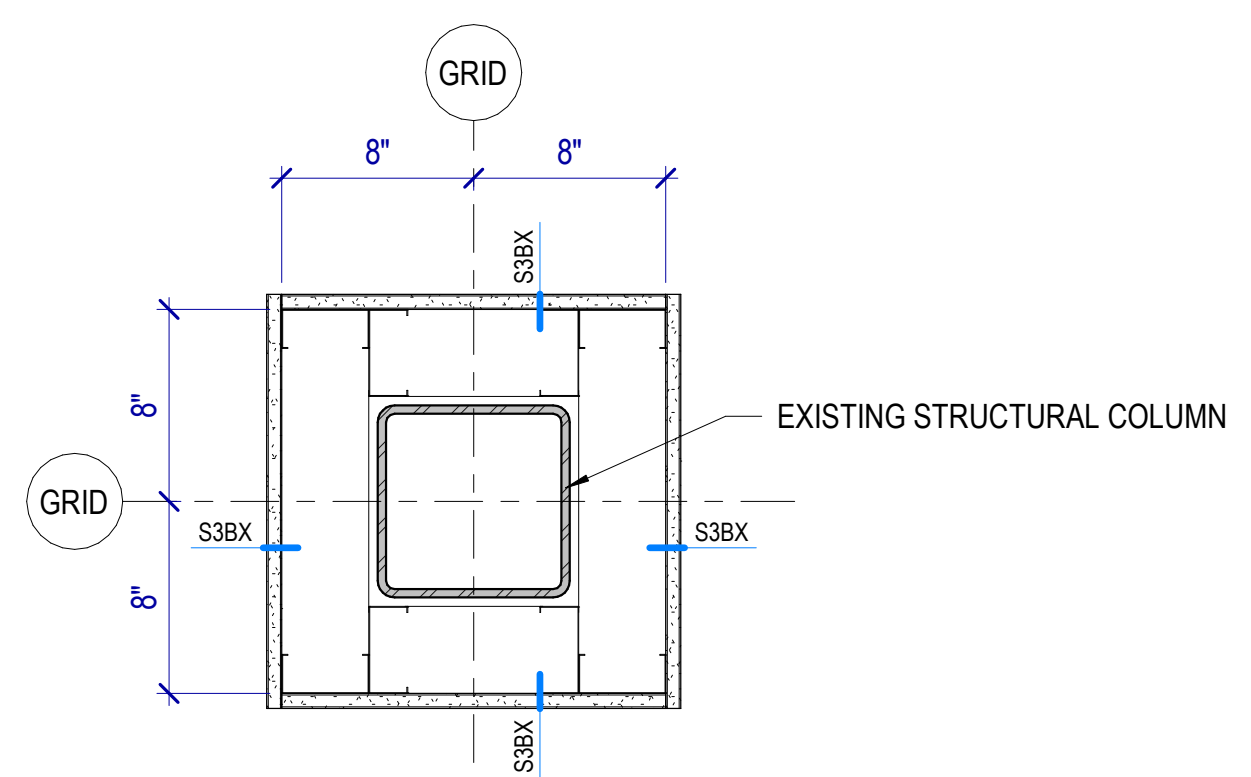
C3 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



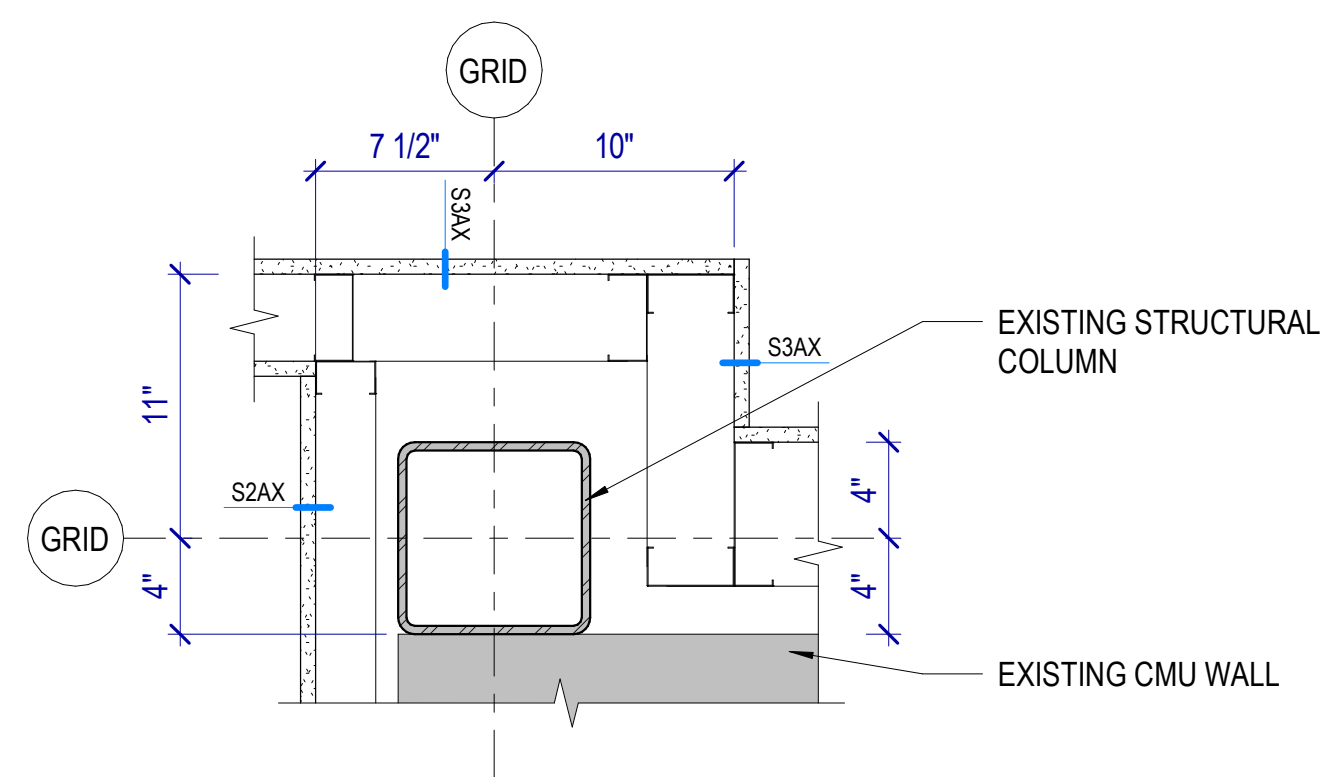
C5 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



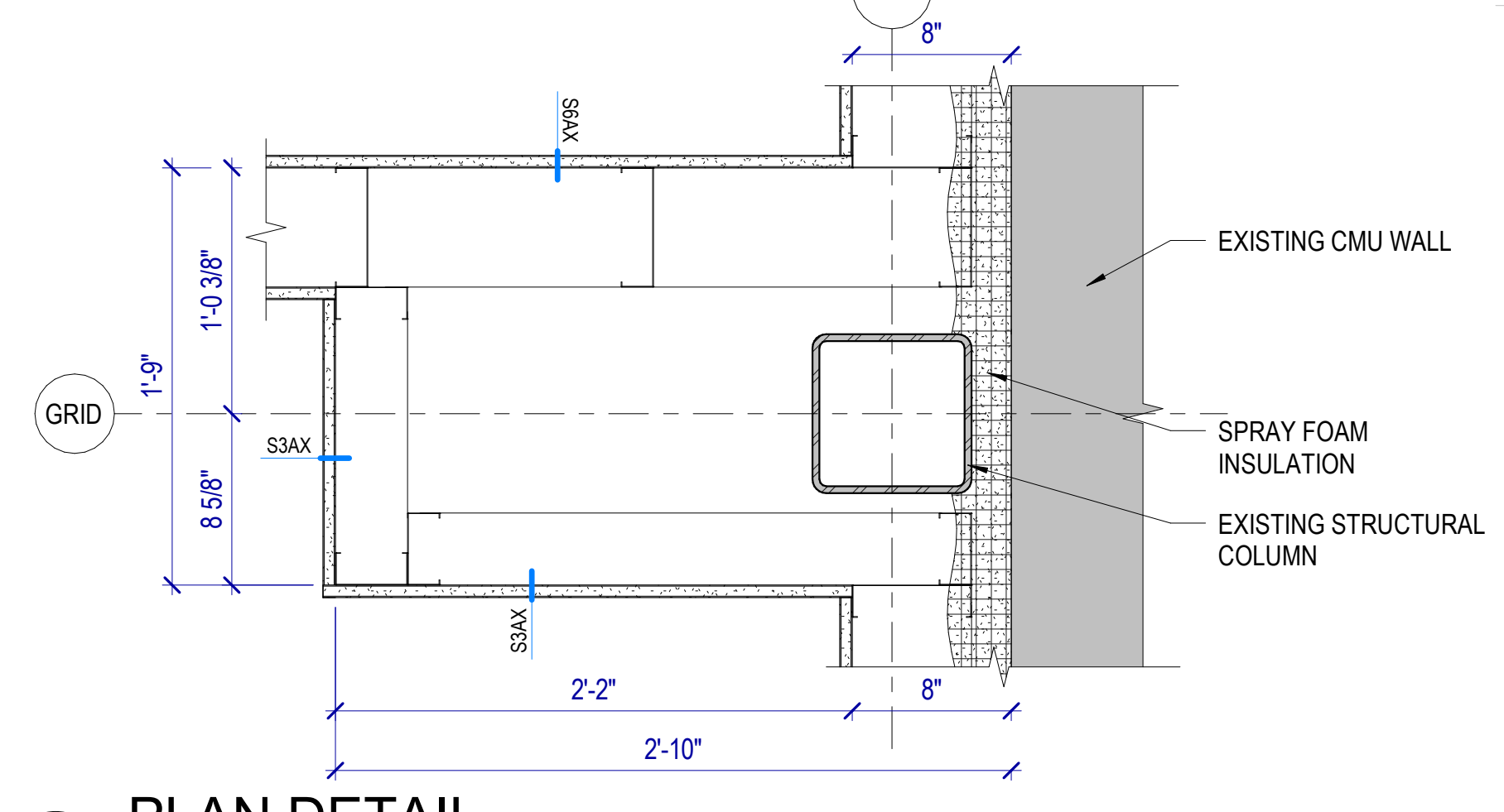
D1 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



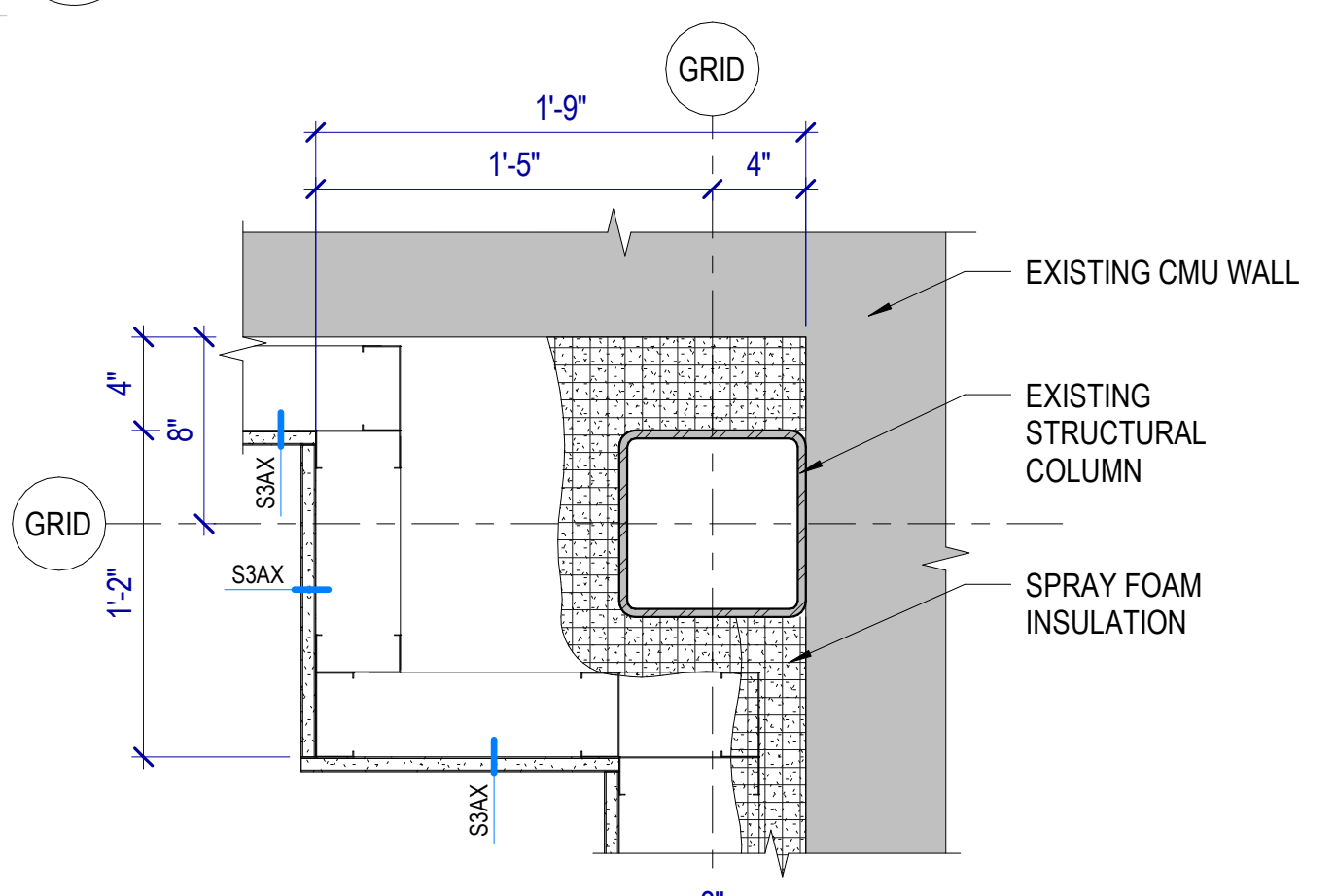
D3 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



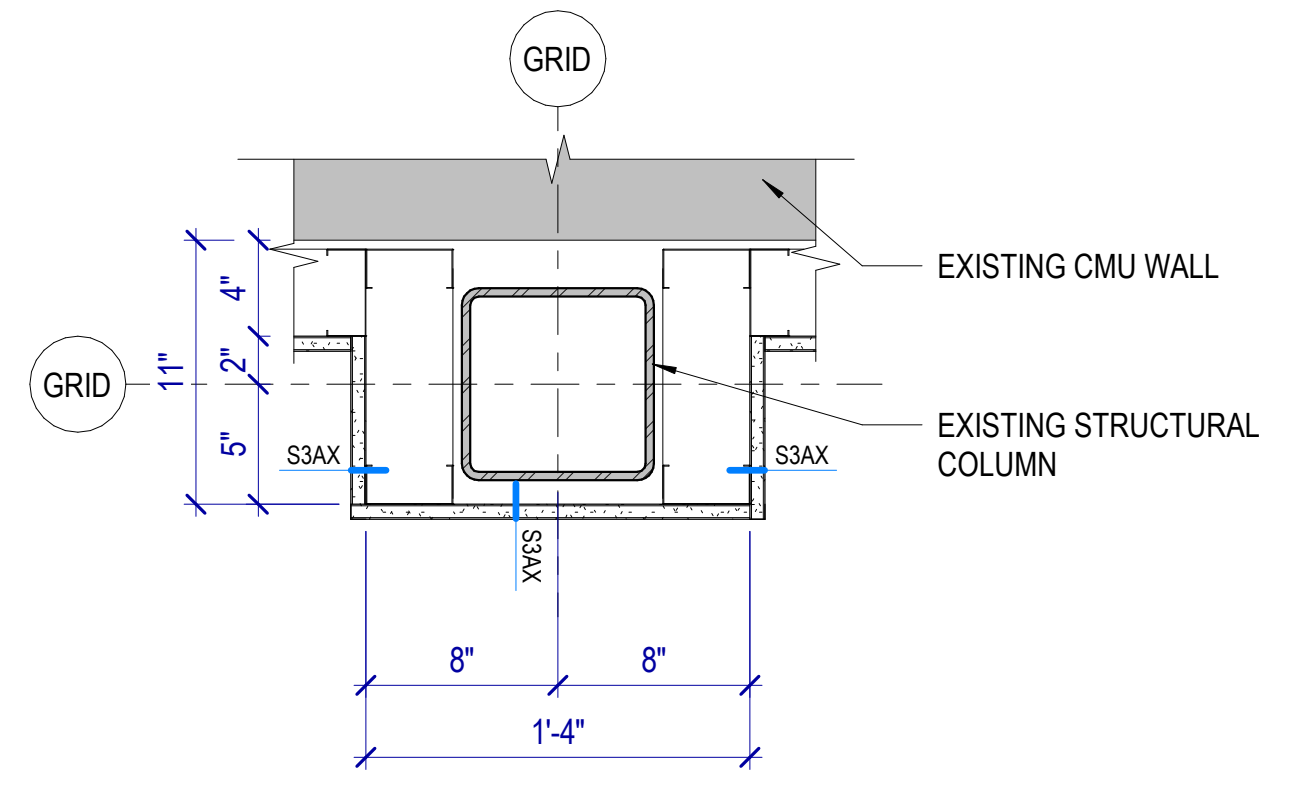
D4 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



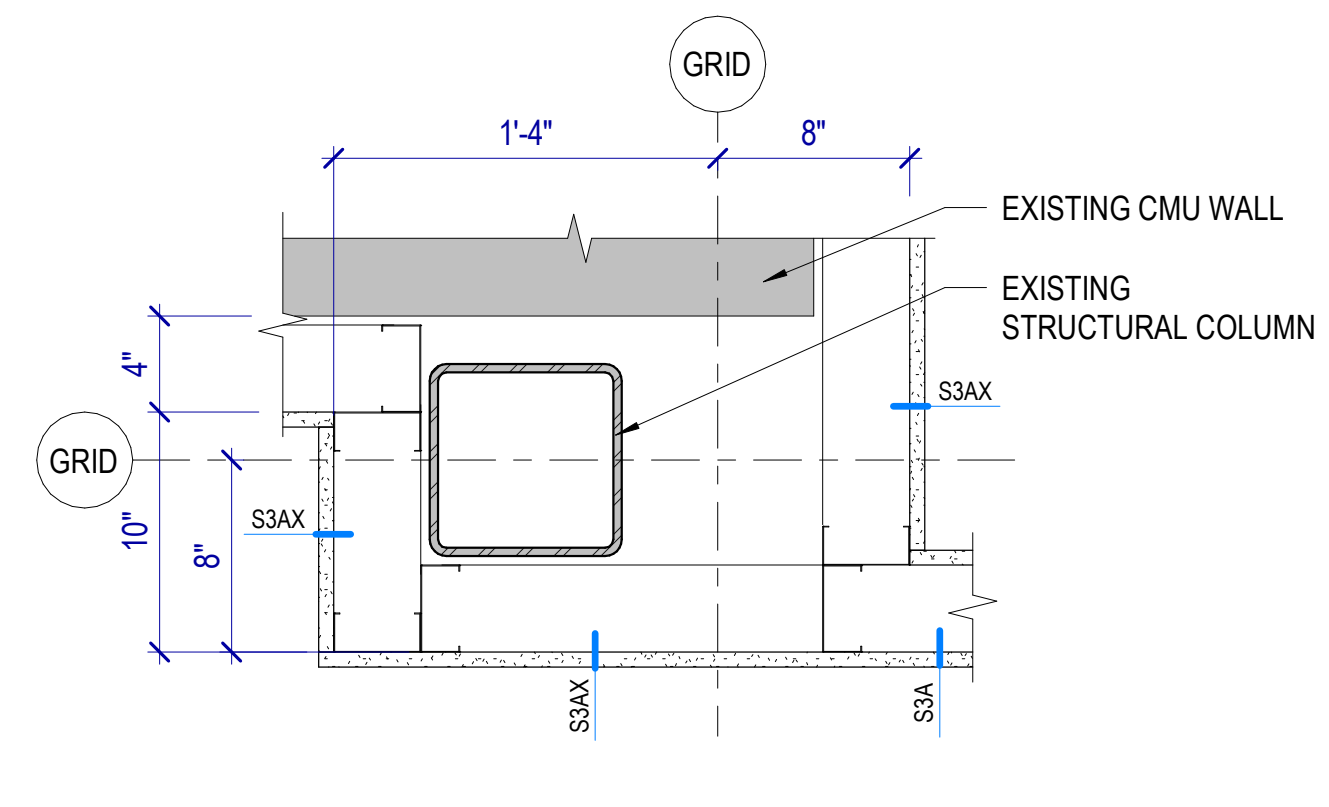
D5 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



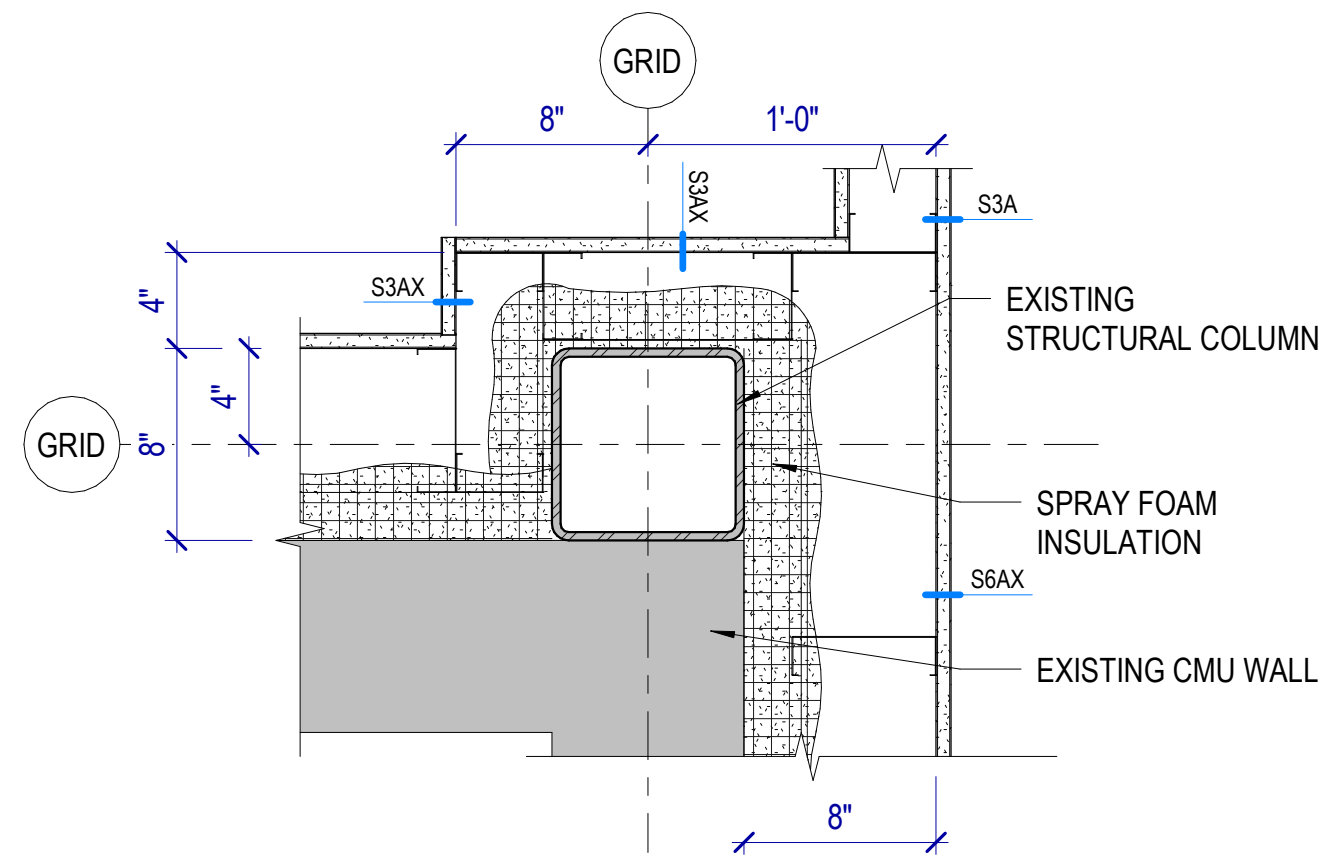
E1 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



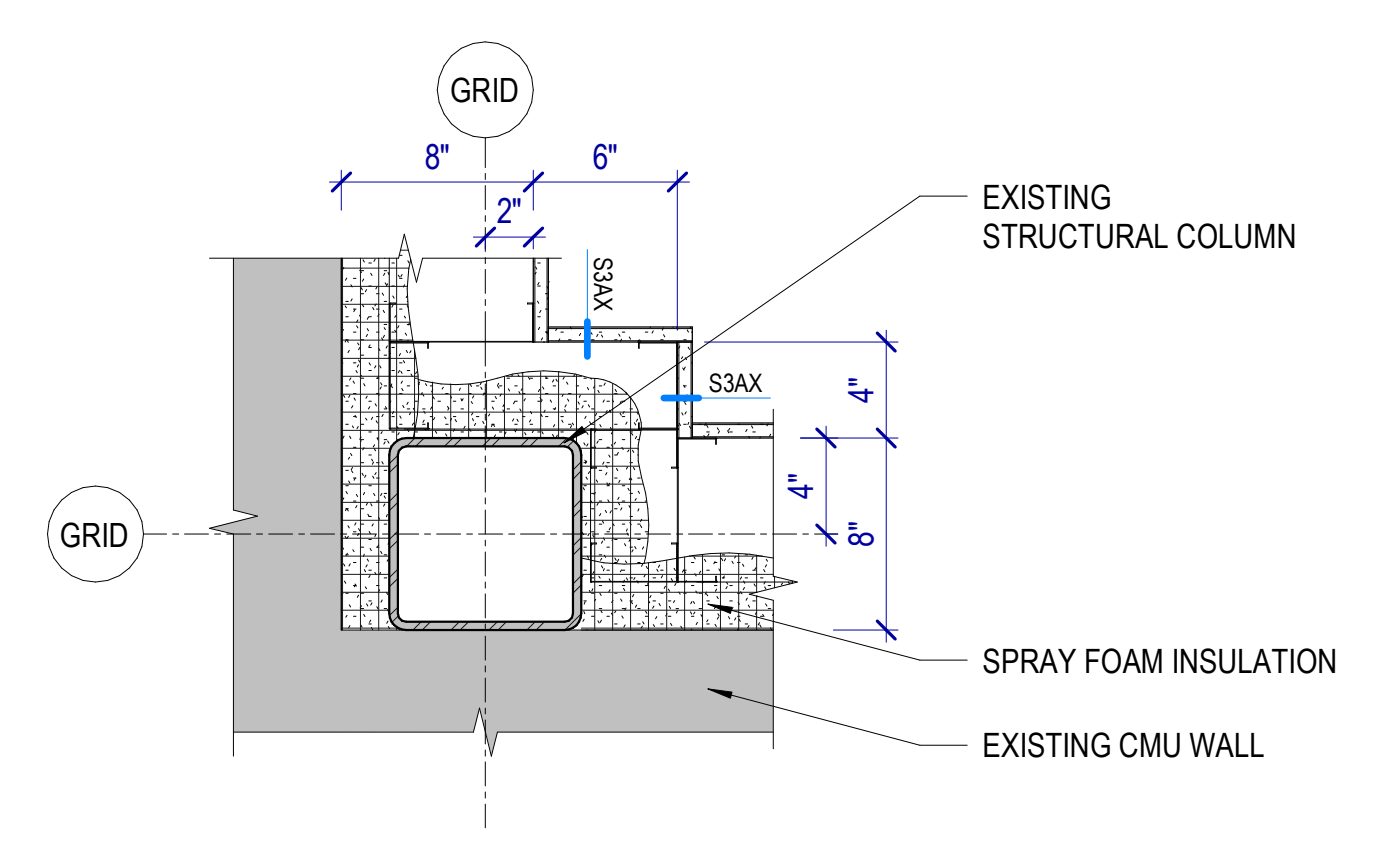
E2 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



E3 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



E4 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



E5 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"

Autodesk Civil 3D 2024.5.28. IBD Retail Remodel\031_2024528_IBD Retail Remodel.rvt
9/8/2024 3:45:11 PM



JORDAN SCHOOL DISTRICT
JORDAN LEARNING CENTER
3706 WEST 9800 SOUTH
SOUTH JORDAN, UT 84009

©2023 MHTN ARCHITECTS, INC.
Confidentiality Notice:
This document is intended for use on the Project identified herein by individual and companies involved in the design, permitting, bidding and construction of the Project. It is the property of MHTN Architects, Inc. and its content is confidential. No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of MHTN Architects, Inc. If a digital copy of this document is received in error, please delete it and notify the sender.

MHTN PROJECT NO: 2024528
Original drawing is 30" x 42". Do not scale contents of this drawing.
REVISIONS:
CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

NO.	DATE	DESCRIPTION	APPROVED BY
X1	5-8-24		

ISSUE
CONSTRUCTION DOCUMENTS
AUGUST 29, 2024

SHEET NAME
FIRST FLOOR REFLECTED CEILING PLAN - AREA A

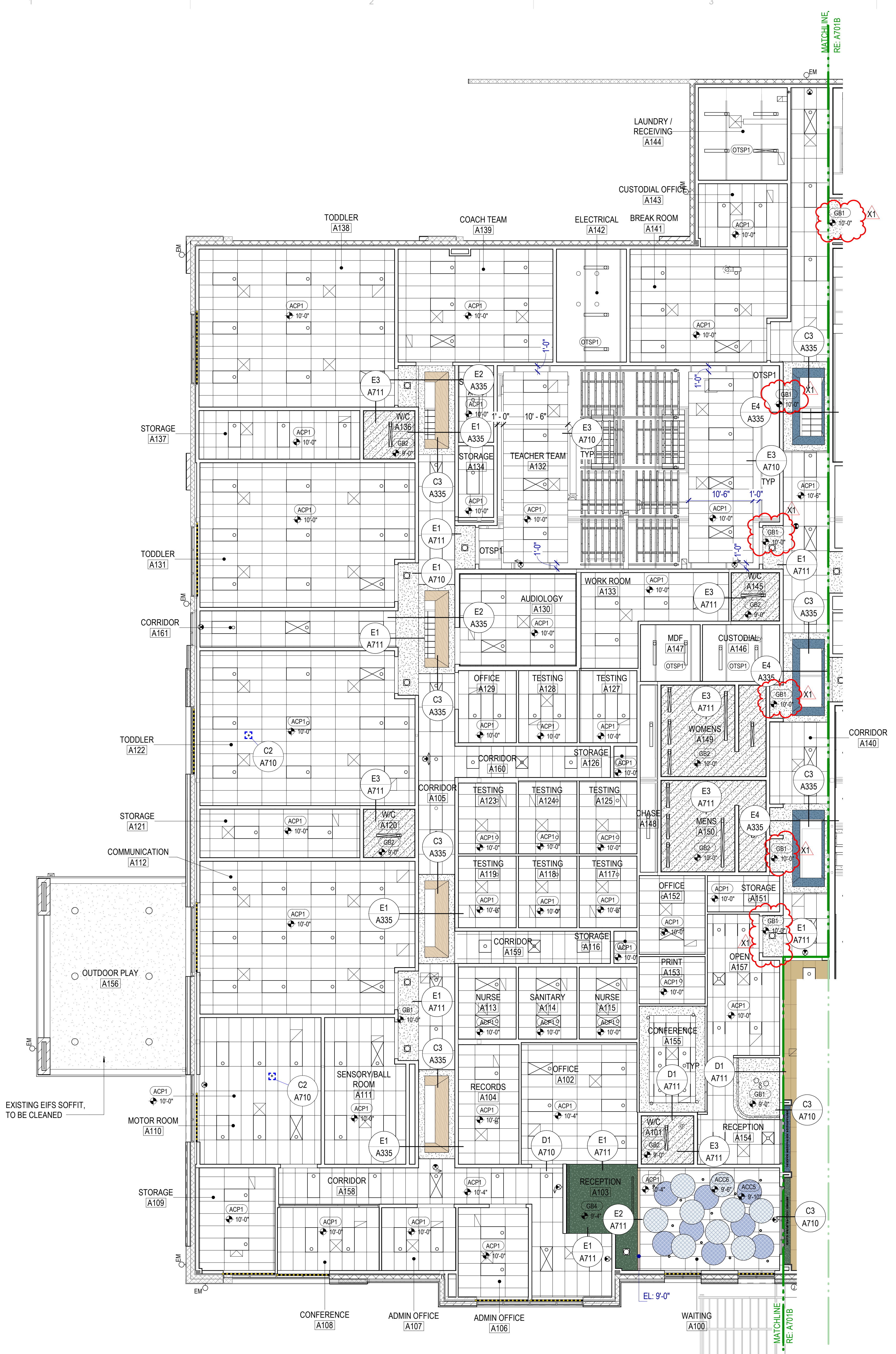
SHEET NUMBER
A701A

REFLECTED CEILING PLAN GENERAL NOTES

- RE: A710 for typical suspended ceiling details, including seismic bracing.
- Ceiling Height:** 10'-0" UNO. Where floor height varies in a room, ceiling height is shown at the entry to the room, UNO.
- Ceiling Grid/Panel Alignment:** The design intent of the Reflected Ceiling Plans is center ceiling grids or acoustical panels between walls in both directions, or to center grids in one direction, panels in the other. If the grid does not comply with the design intent, then coordinate with Architect to adjust the ceiling layout prior to installation.
- Seismic Design Category:** D: Heavy-duty suspension system required / Refer to Specifications.
- Seismic Bracing:** Rigid bracing required at ceilings over 1,000 SF and at all ceilings with fire sprinklers and other penetrations.
- Seismic Control Joints:** Provide seismic control joints in suspended acoustical ceilings greater than 2,500 SF.
- Control Joints:** Provide control joints in gypsum board ceilings at 30'-0" max spacing. Coordinate locations with Architect to align joints with other elements in the ceilings or on the walls.
- Exposed Elements:** Paint exposed structure, pipe, conduit and HVAC duct at open ceilings and at open areas around ceiling clouds. Color: As selected by Architect.
- Walls to Deck:** Extend all walls to deck, including all components of the wall assembly, UNO.
- Fire Sprinklers:** Center sprinkler heads in acoustical panels; run in straight lines in orthogonal, rectangular spaces.
- Electrical, Mechanical and other Devices:** Center in acoustical panels. Coordinate feature lighting layout with Architect prior to rough-in.
- Keynotes:** Not all keynotes apply to this sheet.

LEGEND - REFLECTED CEILING PLANS

- ACP1 - 24" X 48" ACOUSTICAL CEILING PANEL
SEE DETAIL C4 / A710
- ACP2 - 24" X 48" WOOD VENEER ACOUSTICAL CEILING PANEL A1 / A701B & C4 / A710
- GB1 - PAINTED GYPSUM BOARD
SEE RCP FOR SUSPENSION DETAILS
- GB2 - PAINTED GYPSUM BOARD
SEE RCP FOR SUSPENSION DETAILS
- GB3 - PAINTED GYPSUM BOARD
SEE RCP FOR SUSPENSION DETAILS
- GB4 - PAINTED GYPSUM BOARD
SEE RCP FOR SUSPENSION DETAILS
- GB5 - PAINTED GYPSUM BOARD
SEE RCP FOR SUSPENSION DETAILS
- GB6 - EPOXY PAINTED GYPSUM BOARD
SEE RCP FOR SUSPENSION DETAILS
- PL1 - PLASTIC LAMINATE OVER 3/4" SUBSTRATE
- ACC7&8 - ACOUSTIC CEILING BAFFLE,
SEE DETAIL B4 / A710, UNO
- ACC1, ACC2, ACC3 & ACC4
ACOUSTIC CEILING BAFFLE,
SEE DETAIL C4 / A711
- 12'-0" AFF TYPICAL
- 9'-6" AFF TYPICAL
- ACC5 & ACC6 ACOUSTIC CEILING BAFFLE ATTACHED TO CEILING GRID ABOVE
- 9'-10" AFF TYPICAL
- OTSP1 OPEN TO STRUCTURE - PAINTED
- OTSP2 OPEN TO STRUCTURE - PAINTED
- MECHANICAL DIFFUSERS
SEE MECHANICAL
- LIGHT FIXTURES
SEE ELECTRICAL
- MANUAL ROLLER SHADE



FIRST FLOOR REFLECTED CEILING PLAN - AREA A

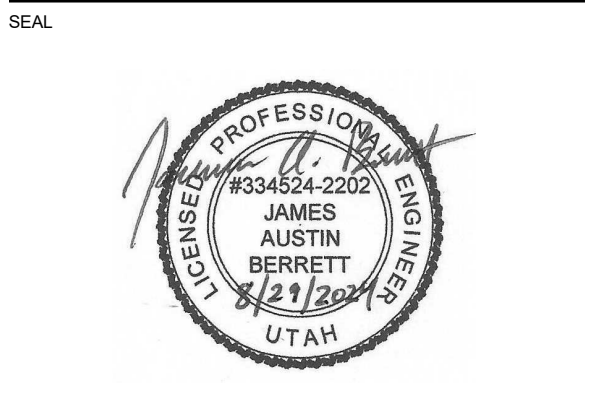


Autodesk Civil 3D 2024.5.28 - RD Retail Remodel\A701A - 2024.5.28 - RD Retail Remodel.rvt
8/8/2024 3:45:19 PM



JORDAN SCHOOL DISTRICT
JORDAN LEARNING CENTER
3706 WEST 9800 SOUTH
SOUTH JORDAN, UT 84009

©2023 MHTN ARCHITECTS, INC.
Confidentiality Notice:
This document is intended for use on the Project identified herein by individuals and companies involved in the design, permitting, bidding and construction of the Project. All other uses, including reproduction, distribution, or any other use, without the written consent of MHTN Architects, Inc. is prohibited. If a digital copy of this document is received in error, please delete it.



MHTN PROJECT NO. 2024528

Original Drawing is 36" x 42". Do not scale contents of this drawing.

REVISIONS:
CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT
LAST REVISION DATE.

NO.	DATE	DESCRIPTION	APPROVED BY
1	5/8/24	As Issued	

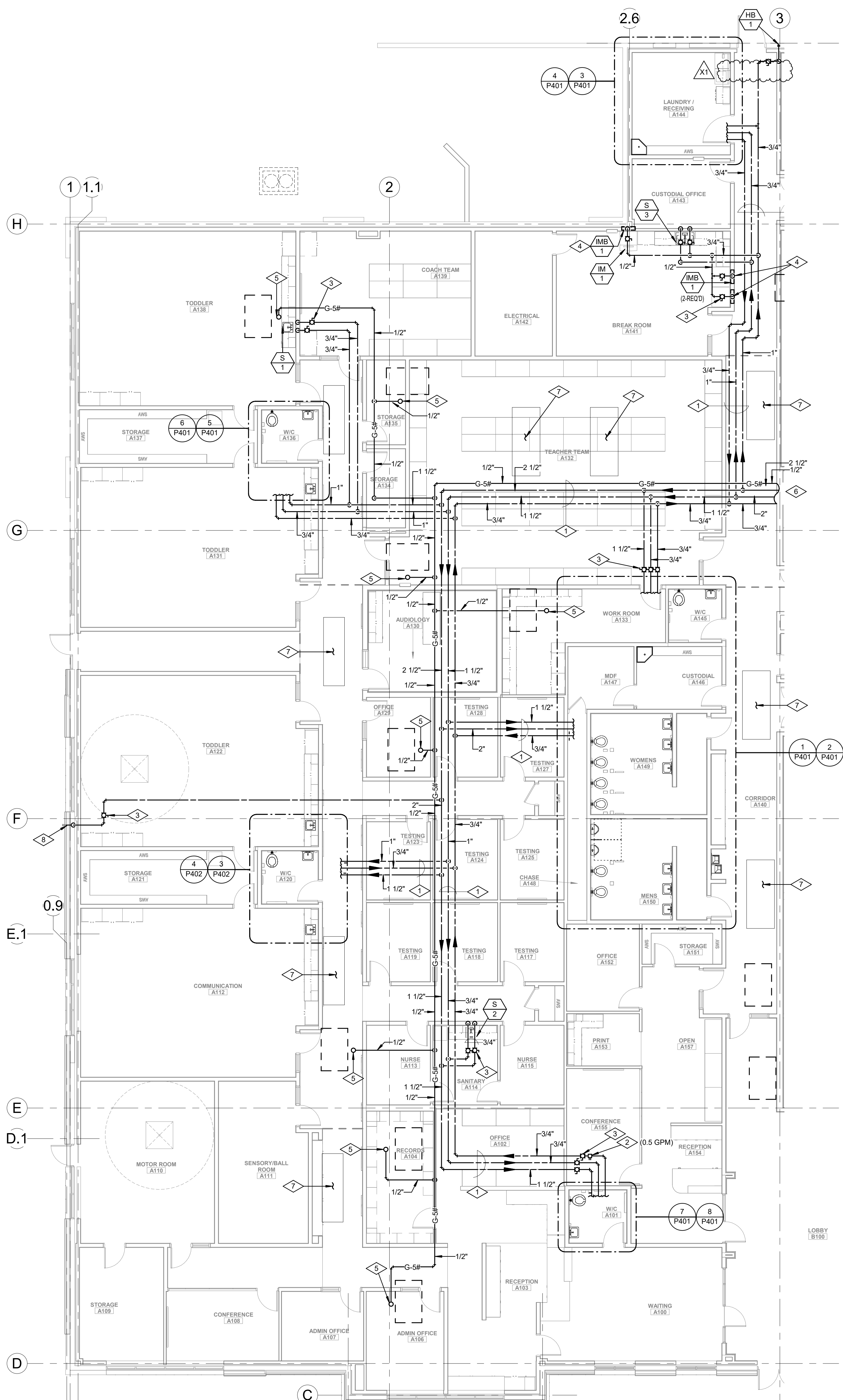
ISSUE
CONSTRUCTION DOCUMENTS
AUGUST 29, 2024

SHEET NAME
FIRST FLOOR PLUMBING PLAN AREA A

SHEET NUMBER
P102A

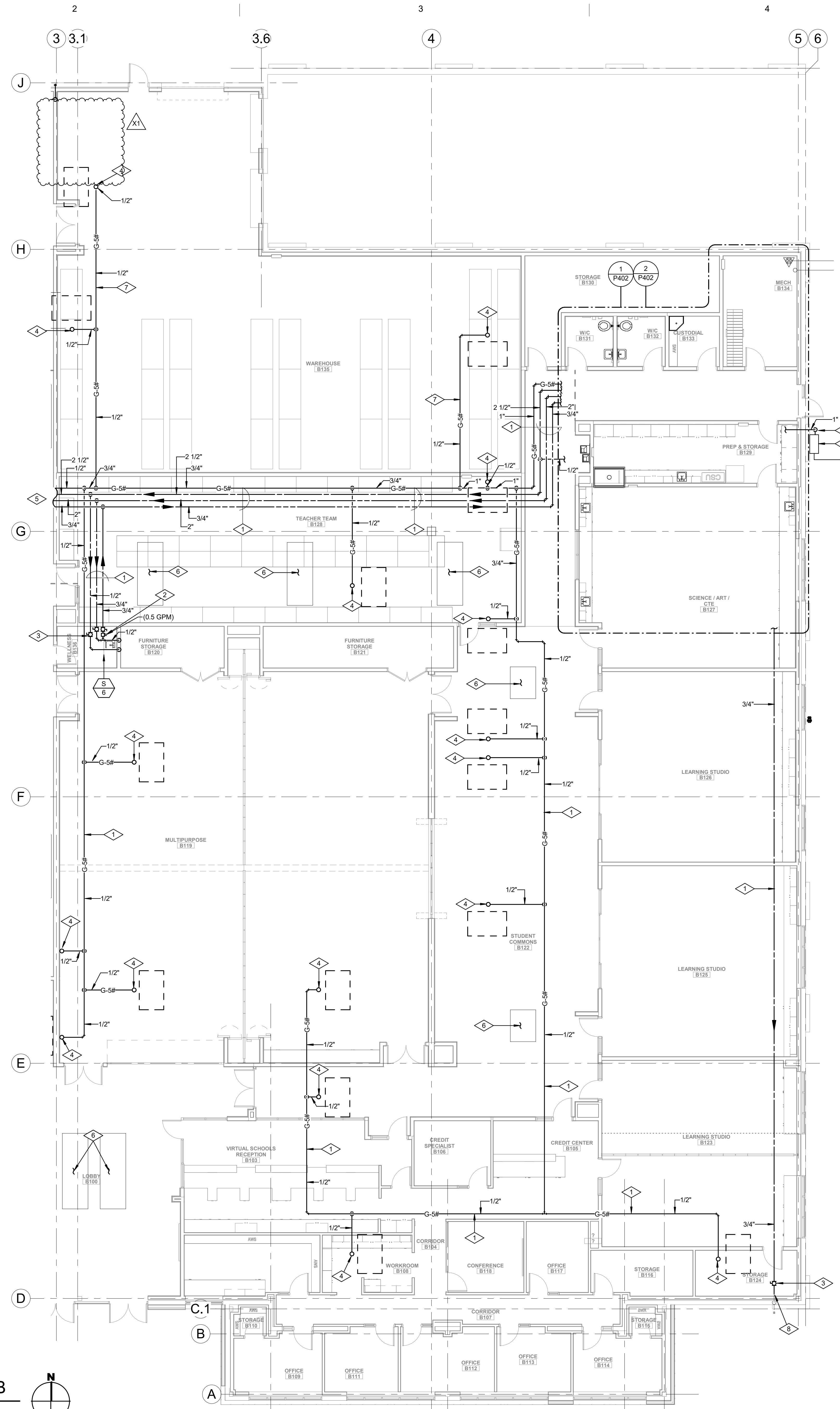
REFERENCE NOTES

- 1 PIPING TO RUN AS HIGH AS POSSIBLE ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES (TYPICAL).
- 2 CALIBRATED BALANCING VALVE ON HOT WATER RECIRCULATING LINE. BALANCE FLOW TO GPM SHOWN.
- 3 BALL VALVE (TYPICAL). VALVE MUST BE ACCESSIBLE.
- 4 1/2" CW TO SERVE ICE MAKER BOX. RUN PIPING IN WALL.
- 5 GAS LINE UP THRU ROOF TO EQUIPMENT. PROVIDE GAS RATED BALL VALVE, DIRT LEG, TEST PORTS AND PRESSURE REGULATOR. SEE DETAIL 3/P602.
- 6 FOR CONTINUATION OF PIPING SEE SHEET P102B
- 7 SKYLIGHT. NO PIPING TO RUN IN THIS AREA. COORDINATE WITH ARCHITECTURAL PLANS.
- 8 CONNECT CW LINE TO EXISTING PIPING SERVING EXISTING HOSE BIBB.



1.8 **FIRST FLOOR PLUMBING PLAN AREA A** **2.3**
SCALE: 1/8" = 1'-0"
WATER SUPPLY & GAS

Autodesk, AutoCAD 2024, Revit 2024, JSD Retail Remodel/MECH/ELEC, JSD Retail Remodel/Remodel/IT, 8/8/2024 10:29:13 AM



- REFERENCE NOTES**
- 1 PIPING TO RUN AS HIGH AS POSSIBLE ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES (TYPICAL).
 - 2 CALIBRATED BALANCING VALVE ON HOT WATER RECIRCULATING LINE. BALANCE FLOW TO GPM SHOWN.
 - 3 BALL VALVE (TYPICAL). VALVE MUST BE ACCESSIBLE.
 - 4 GAS LINE UP THRU ROOF TO EQUIPMENT. PROVIDE GAS RATED BALL VALVE, DIRT LEG, TEST PORTS AND PRESSURE REGULATOR. SEE DETAIL 9/P102.
 - 5 FOR CONTINUATION OF PIPING SEE SHEET P102A.
 - 6 SKYLIGHT. NO PIPING TO RUN IN THIS AREA. COORDINATE WITH ARCHITECTURAL PLANS.
 - 7 PIPING TO RUN EXPOSED AS HIGH AS POSSIBLE ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES (TYPICAL).
 - 8 CONNECT CW LINE TO EXISTING PIPING SERVING EXISTING HOSE BIBB.
 - 9 UPSIZE THE EXISTING 5/8 GAS METER AS NEED FOR NEW BUILDING GAS LOAD. COORDIANTE WITH LOCAL GAS COMPANY.
 - 10 PIPE SEISMIC GAS VALVE PER SEE DETAIL 9/P101

1 FIRST FLOOR PLUMBING PLAN AREA B
 SCALE: 1/8" = 1'-0"
 WATER SUPPLY & GAS



JORDAN SCHOOL DISTRICT
JORDAN LEARNING CENTER
 3706 WEST 9800 SOUTH
 SOUTH JORDAN, UT 84009

©2023 MHTN ARCHITECTS, INC.
 Confidentiality Notice
 This document is intended for use on the Project identified herein by individuals and companies involved in the design, permitting, bidding and construction of the Project. It is the property of MHTN Architects, Inc. and shall remain confidential and not be reproduced or distributed in any form without the written consent of MHTN Architects, Inc. If a digital copy of this document is received in error, please delete it.



MHTN PROJECT NO. 2024528

Original Drawing is 36" x 42". Do not scale contents of this drawing.

REVISIONS:
 CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

NO.	DATE	DESCRIPTION
1	5/8/24	As Issued 5/7

ISSUE
 CONSTRUCTION DOCUMENTS
 AUGUST 29, 2024

SHEET NAME
FIRST FLOOR PLUMBING PLAN AREA B

SHEET NUMBER
P102B

Autodesk Civil 3D 2024.528 JSD Retail Remodel\MECH\CD\JSD Retail Remodel.dwg
 P102B.dwg 10/29/24 10:29:15 AM



JORDAN SCHOOL DISTRICT
JORDAN LEARNING CENTER
3706 WEST 9800 SOUTH
SOUTH JORDAN, UT 84009

©2023 MHTN ARCHITECTS, INC.
Confidentiality Notice:
This document is intended for use on the Project identified herein by individuals and companies included in the design, permitting, bidding and construction of the Project. All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without the prior written permission of MHTN Architects, Inc. If a digital copy of this document is received in error, please delete it.

SEAL



MHTN PROJECT NO. 2024528

Original drawing is 36 x 42. Do not scale contents of this drawing.

REVISIONS:
CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

NO.	DATE	DESCRIPTION
1	5/8/24	As Issued (S)

ISSUE

CONSTRUCTION DOCUMENTS

AUGUST 29, 2024

SHEET NAME

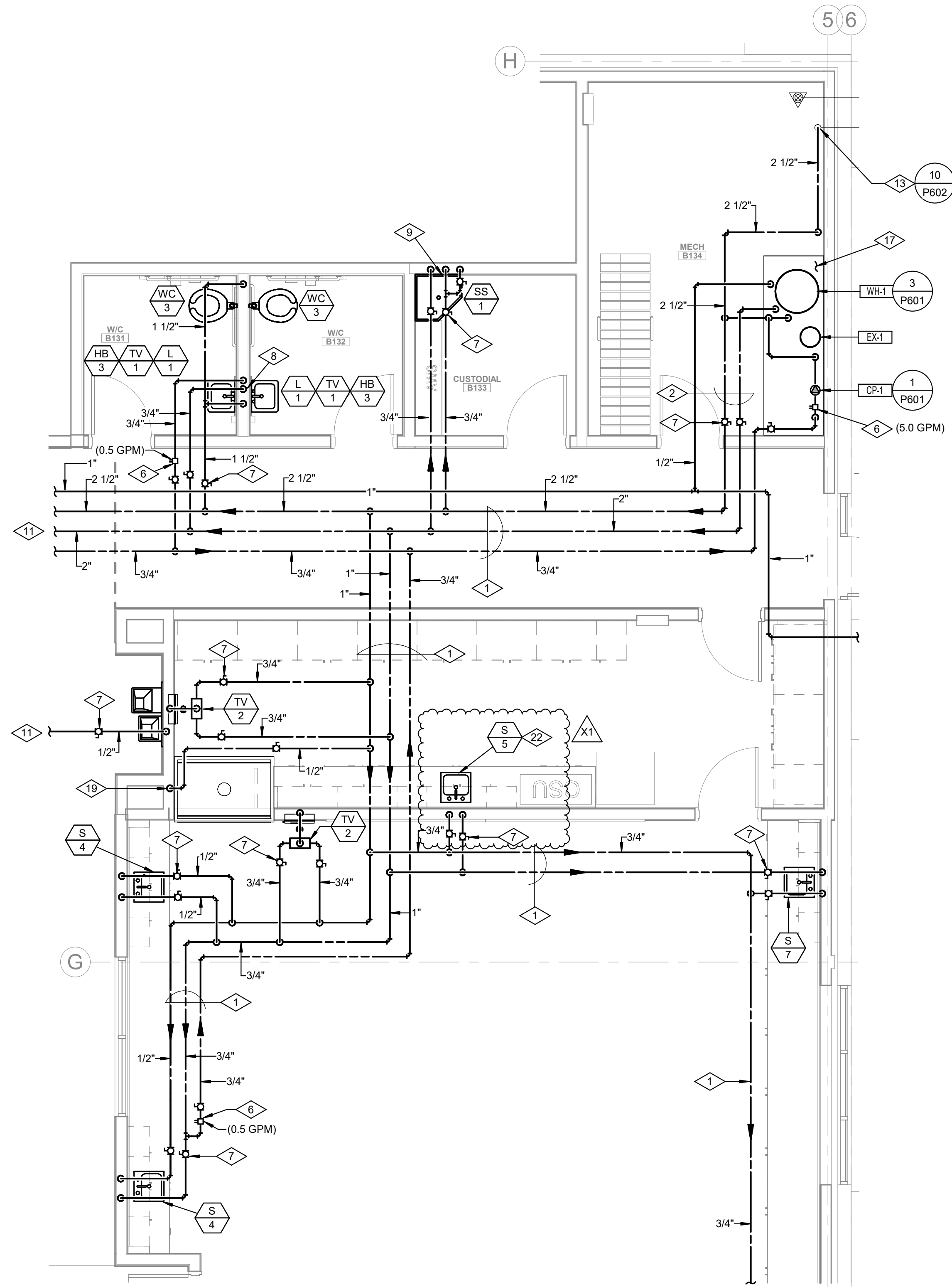
E ENLARGED PLUMBING PLANS

SHEET NUMBER

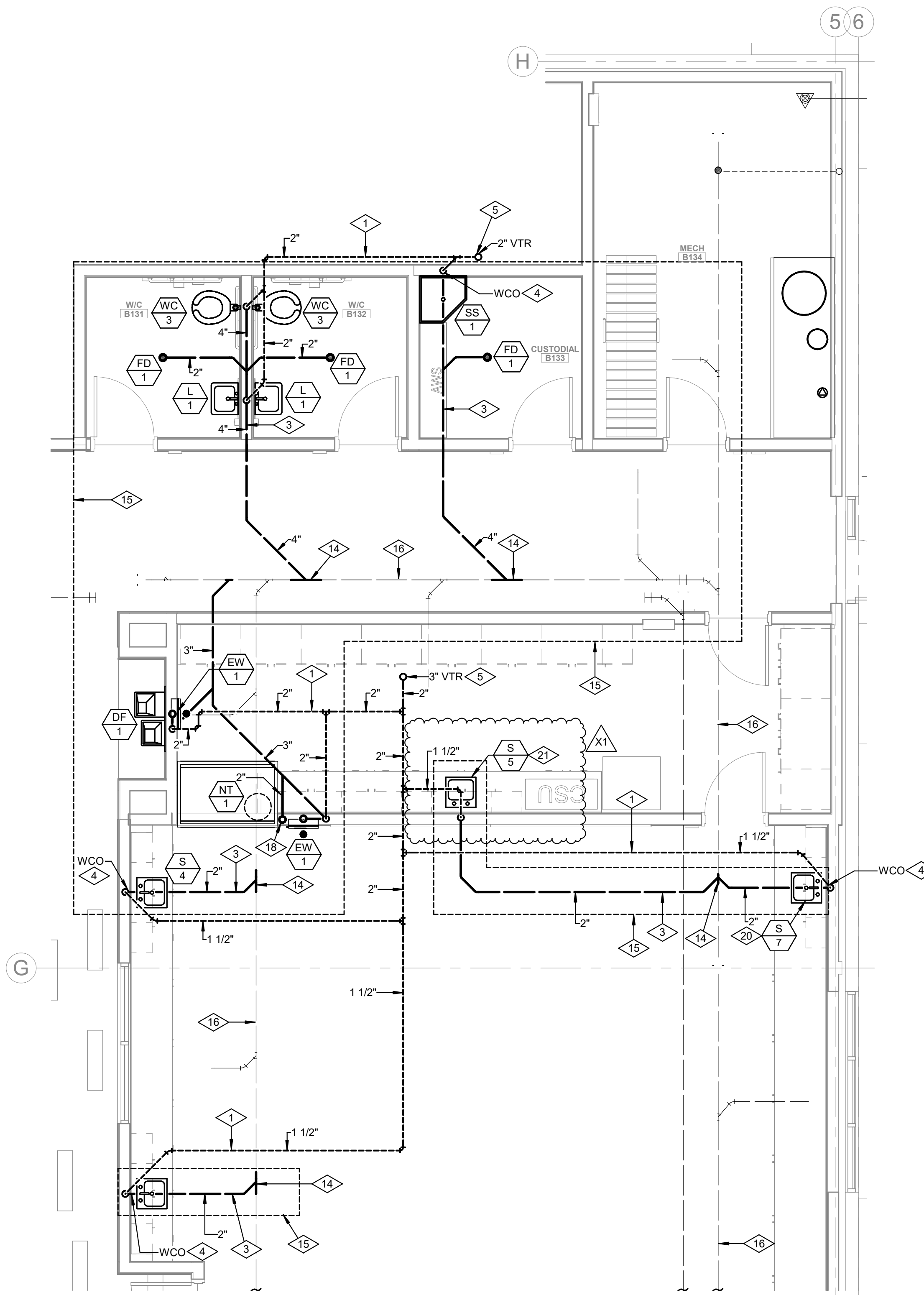
P402

REFERENCE NOTES

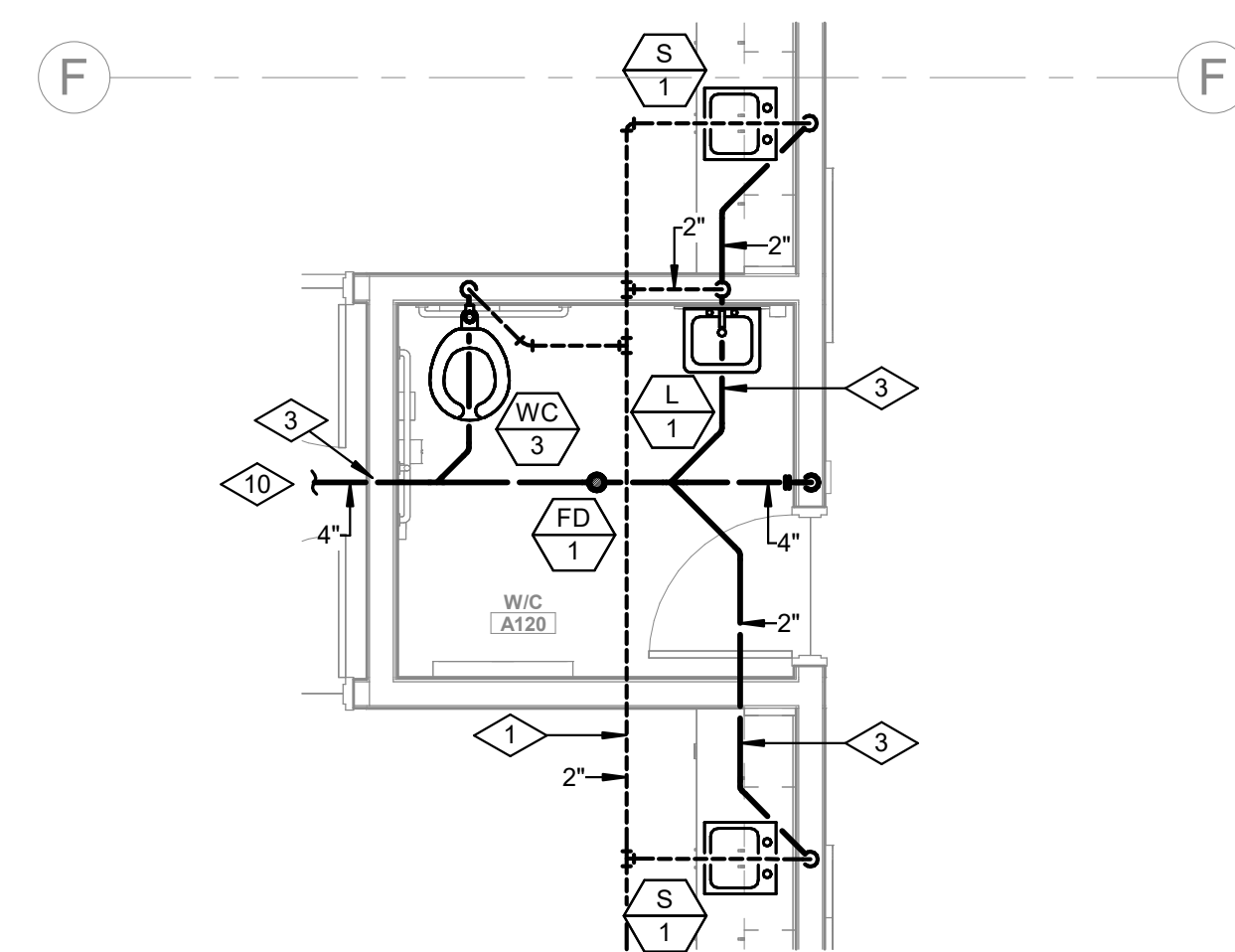
- 1 PIPING TO RUN AS HIGH AS POSSIBLE ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES (TYPICAL).
- 2 PIPING TO RUN EXPOSED AS HIGH AS POSSIBLE. COORDINATE ROUTING WITH ALL TRADES (TYPICAL).
- 3 PIPING TO RUN BELOW FINISHED FLOOR. COORDINATE ROUTING WITH STRUCTURAL FOOTINGS (TYPICAL).
- 4 WALL CLEANOUT (WCO) (TYPICAL).
- 5 VENT THRU ROOF (VTR). MAINTAIN A MINIMUM OF 15'-0" FROM ALL OUTSIDE AIR INTAKES. SEE DETAIL 6/P602.
- 6 CALIBRATED BALANCING VALVE ON HOT WATER RECIRCULATING LINE. BALANCE FLOW TO GPM SHOWN.
- 7 BALL VALVE (TYPICAL). VALVE MUST BE ACCESSIBLE.
- 8 3/4" COLD, 1/2" HOT AND HOT WATER RECIRCULATING PIPING TO DROP IN WALL TO SERVE LAVATORY (TYPICAL).
- 9 PROVIDE 1/2" CW LINE TO HOSE BIBB "HB-4" SEE DETAIL 1/P603.
- 10 FOR CONTINUATION OF PIPING SEE SHEET P101A.
- 11 FOR CONTINUATION OF PIPING SEE SHEET P102B.
- 12 FOR CONTINUATION OF PIPING SEE SHEET P102A.
- 13 CONNECT NEW 2 1/2" WATER LINE TO EXISTING. SEE DETAIL 10/P602 FOR INSTALLATION OF NEW PRV.
- 14 THE NEW WASTE LINE TO EXISTING WASTE LINE LOCATED IN THIS APPROXIMATE LOCATION. CONTRACTOR TO VERIFY LOCATION OF EXISTING WASTE LINE PRIOR TO ANY WORK.
- 15 CONTRACTOR TO SAW CUT EXISTING FLOOR SLAB FOR INSTALLATION OF NEW PLUMBING WASTE LINES. CONTRACTOR TO VERIFY LOCATION OF EXISTING WASTE LINE PRIOR TO CUTTING.
- 16 EXISTING WASTE LINE.
- 17 INSTALL WATER HEATER ON 4" HOUSEKEEPING PAD.
- 18 PIPE NEUTRALIZATION TANK TO CUP SINK LOCATED IN FUME HOOD "FH-1". LOCATE "NH-1" IN CABINET.
- 19 THE CW LINE INTO FUME HOOD "FH-1". COORDINATE LOCATIN OF TIE IN WITH FUME HOOD.
- 20 INSTALL SOLIDS INTERCEPTOR FROM ADA SINK IN ADJACENT CABINET.
- 21 THE DISHWASHER WASTE HOSE TO TALL PIECE AT SINK.
- 22 RUN HOT WATER LINE FROM SINK TO DISHWASHER.



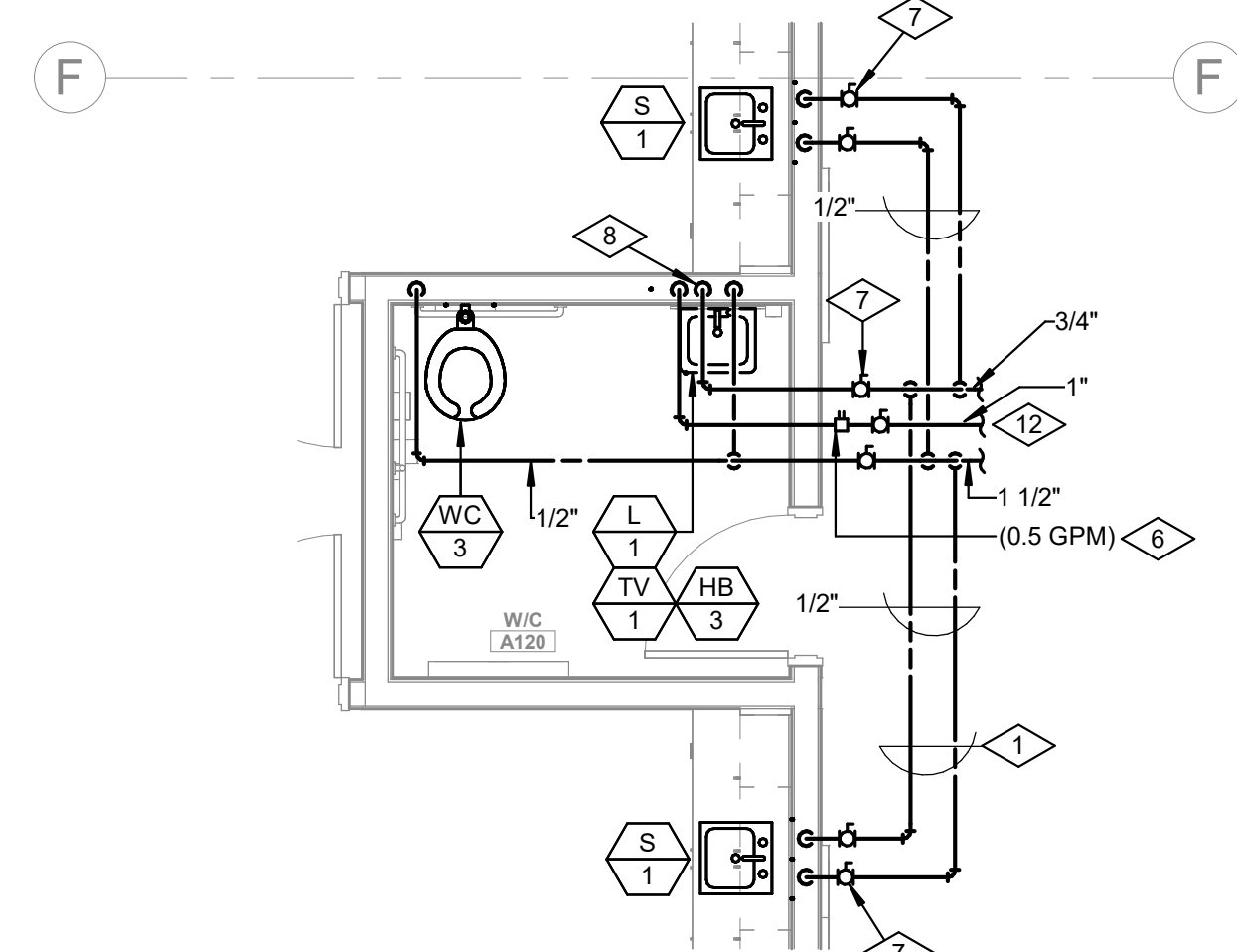
1 ENLARGED PLUMBING PLAN AREA B
SCALE: 1/4" = 1'-0"
WATER SUPPLY



2 ENLARGED PLUMBING PLAN AREA B
SCALE: 1/4" = 1'-0"
WASTE & VENT



3 ENLARGED PLUMBING PLAN AREA A
SCALE: 1/4" = 1'-0"
WASTE & VENT



4 ENLARGED PLUMBING PLAN AREA A
SCALE: 1/4" = 1'-0"
WATER SUPPLY

Autodesk Civil 3D 2024.5.28 JSD Retail Remodel\MECH\JSD Retail Remodel\14
 P:\2024\10-29-21 AM



GENERAL NOTE
 ALL COVER PLATE FINISHES ON FULL CONCEALED HEADS ARE TO BE COORDINATE WITH ARCHITECT PRIOR TO INSTALL. SUBMIT SAMPLES TO ARCHITECT PRIOR TO ORDERING.
 THE EXISTING FIRE SYSTEM IS TO BE UPDATED TO NEW BUILDING REQUIREMENTS. ANY EXISTING SYSTEMS NOT TO NFPA REQUIREMENTS AND APPLICABLE TO THE NEW BUILDING REQUIREMENTS ARE TO BE REMOVED.

- REFERENCE NOTES**
- 1 UPDATE EXISTING FIRE RISER AS REQUIRED BY NFPA
 - 2 PROVIDE KNOXCAPS AT EXISTING FIRE DEPARTMENT CONNECTION.
 - 3 ELECTRICAL SERVICE OR DATA STORAGE ROOM. TRANSITING FIRE PROTECTION, PIPING OVER OR THROUGH THIS AREA IS PROHIBITED.
 - 4 CLOUD CEILINGS. VERIFY WITH ARCHITECTURAL PLANS FOR ALL LOCATIONS. PROVIDE SPRINKLER PROTECTION ABOVE & BELOW CEILING CLOUDS AS REQUIRED BY NFPA. ALL HEADS LOCATED IN CEILING CLOUD ARE TO BE RIGIDLY PIPED, NO FLEX HOSE WILL BE ACCEPTABLE.
 - 5 SKYLIGHT. PROVIDE SIDEWALL HEAD AS REQUIRED BY NFPA. COORDINATE WITH ARCHITECTURAL PLANS.
 - 6 ARCHITECTURAL CEILING BAFFLES PROVIDE FIRE PROTECTION AS REQUIRED BY NFPA.
 - 7 CONTRACTOR TO TIE INTO AUDIOLOGY BOOTH. COORDINATE WITH BOOTH MANUFACTURER FOR REQUIREMENTS.

1 LEVEL 1 FIRE PROTECTION PLAN
 SCALE: 1/8" = 1'-0"



JORDAN SCHOOL DISTRICT
JORDAN LEARNING CENTER
 3706 WEST 9800 SOUTH
 SOUTH JORDAN, UT 84009

©2024 MHTN ARCHITECTS, INC.
 Confidentiality Notice:
 This document is intended for use on the Project identified herein by individuals and companies involved in the design, permitting, bidding and construction of the project. All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without the prior written permission of MHTN Architects, Inc. If a digital copy of this document is received in error, please delete it.



MHTN PROJECT NO. 2024528

Original Drawing is 36 x 42. Do not scale contents of this drawing.

REVISIONS:
 CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

NO.	DATE	DESCRIPTION
1	08/21/24	ADDITIONAL SP

ISSUE
 CONSTRUCTION DOCUMENTS
 AUGUST 29, 2024
 SHEET NAME
OVERALL FIRE PROTECTION PLAN

SHEET NUMBER
FP101