

DOCUMENT 00 90 00
ADDENDUM

ADDENDUM No.: 4

DATE: March 6, 2025

RE: WESTERN TECHNICAL COLLEGE
AUTOMOTIVE TECHNOLOGY CENTER ADDITION AND REMODEL
2721 LARSON ST.
LA CROSSE, WISCONSIN 54603
PROJECT NO. 24061

FROM: HSR Associates, Inc
100 Milwaukee Street
La Crosse, WI 54603
(608) 784-1830

TO: Prospective Bidders

This addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated February 2025. Acknowledge receipt of this Addendum in the space provided on the bid form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of: 4 pages, 0 documents, 4 sections, and 30 sheets.

CHANGES TO GENERAL REQUIREMENTS:

1. Section 01 10 00 Summary
 - a. See the revised section included in this addendum. Disregard the previous version.
2. Section 01 23 00 Alternates
 - a. See the revised section included in this addendum. Disregard the previous version.
 - b. This section is presented in this addendum in markup form in an attempt to make the changes more easily interpretable by the reader. Treat wording with strikethrough font as though it has been removed from the section. Wording shown with underline has been added to the section. HSR will provide a clean copy addressing these markups either in a future addendum or in a post-bid construction set.
 - c. Revised the description of Alternate 1 and Alternate 2.

CHANGES TO SPECIFICATIONS:

3. Section 08 43 33 Aluminum-Framed Folding Glass Door Storefront
 - a. See the narrative, immediately below, describing revisions to the section.
 - b. Substitution; Addition listed manufacturers: Tilutex.
4. Section 08 16 13 Fiberglass Doors
 - a. See the new section included in this addendum.
5. Section 10 22 39 Folding Panel Partitions
 - a. See the narrative, immediately below, describing revisions to the section.
 - b. Substitution; Additional listed manufacturers: Kwik-Wall, Corflex.

6. Section 22 40 41 China & Enameled Fixtures

- a. See the revised section included in this addendum. Disregard the previous version.
- b. Added paragraphs 2.08 D & E to add urinal UR-1 and UR-2.

CHANGES TO DRAWINGS

7. Sheet G000 COVER SHEET 30"x42"

- a. See the revised sheet included in this addendum. Disregard the previous version.
- b. Revised Index of Drawings for the changes within this addendum.

8. Sheet A101 FLOOR PLAN – SEGMENT A 30"x42"

- a. See the revised sheet included in this addendum. Disregard the previous version.
- b. Added floor striping.

9. Sheet A102 FLOOR PLAN – SEGMENT B 30"x42"

- a. See the revised sheet included in this addendum. Disregard the previous version.
- b. Added frame elevation callout and designation for window P at Tire 151.
- c. Relocate call out for key note 12.
- d. Added floor striping.

10. Sheet A140 EQUIPMENT PLAN – SEGMENT A 30"x42"

- a. See the revised sheet included in this addendum. Disregard the previous version.
- b. Revised equipment callout at auto lift.
- c. Revised title of Equipment Plan to add the “- SEGMENT A”.
- d. Revised the Equipment Schedule.

11. Sheet A141 EQUIPMENT PLAN – SEGMENT B 30"x42"

- a. See the revised sheet included in this addendum. Disregard the previous version.
- b. Revised equipment callouts at auto lifts.
- c. Revised title of Equipment Plan to add the “- SEGMENT B”.
- d. Revised the Equipment Schedule.

12. Sheet A200 EXTERIOR ELEVATIONS 30"x42"

- a. See the revised sheet included in this addendum. Disregard the previous version.
- b. Added call out for door type L.

13. Sheet A201 EXTERIOR ELEVATIONS 30"x42"

- a. See the revised sheet included in this addendum. Disregard the previous version.
- b. Added call out for door types L & H.

14. Sheet A210 CASEWORK & INTERIOR ELEVATIONS 30"x42"

- a. See the revised sheet included in this addendum. Disregard the previous version.
- b. Added elevation 12 to clarify tile scope at restrooms.

15. Sheet A601 DOOR SCHEDULE 30"x42"

- a. See the revised sheet included in this addendum. Disregard the previous version.
- b. Revised a sheet reference in Door Frame General Notes.
- c. Clarified door type for 152.2.
- d. Changed door type for 181.3.
- e. Updated frame type designations to point to the intended detail.
- f. Added remarks to indicate bid alternates.
- g. Designated some elevations as “Not Used”
- h. Clarified door dimensions for type HH.

16. Sheet A602 FRAME ELEVATIONS 30"x42"
 - a. See the revised sheet included in this addendum. Disregard the previous version.
 - b. Added frame elevations 13, 14 & 15.
 - c. Added designations for window type D & F.
17. Sheet ID101 FINISH FLOOR PLANS – SEGMENT A 30"x42"
 - a. See the revised sheet included in this addendum. Disregard the previous version.
 - b. Added a description for Room Finish Remarks item 3.
 - c. Revised flooring scope in rooms, 121, 122, 123, 127, & 128.
18. Sheet ID102 FINISH FLOOR PLANS – SEGMENT A 30"x42"
 - a. See the revised sheet included in this addendum. Disregard the previous version.
 - b. Added a description for Room Finish Remarks item 3.
 - c. Revised flooring scope in rooms, 130 & 133.
19. Sheet S111 ROOF FRAMING PLAN – AREA A 30"x42"
 - a. See the revised sheet included in this addendum. Disregard the previous version.
 - b. Added a connection between canopy framing and vestibule framing.
20. Sheet S501 STEEL DETAILS & SCHEDULES 30"x42"
 - a. See the revised sheet included in this addendum. Disregard the previous version.
 - b. Added detail 17 on S501.
21. Sheet S502 ELEVATION DETAILS 30"x42"
 - a. See the revised sheet included in this addendum. Disregard the previous version.
 - b. Revised framing elevations to add connection between canopy framing and vestibule framing.
22. Sheet M091 HVAC REMOVAL PLAN – SEGMENT B 30"x42"
 - a. See the revised sheet included in this addendum. Disregard the previous version.
 - b. Add requirement to remove the existing utility blower duct in Tire 151.
23. Sheet M100 HVAC REMODEL PLAN – SEGMENT A 30"x42"
 - a. See the revised sheet included in this addendum. Disregard the previous version.
 - b. Add variable refrigerant load system to Vestibule V100.
24. Sheet M101 HVAC REMODEL PLAN – SEGMENT B 30"x42"
 - a. See the revised sheet included in this addendum. Disregard the previous version.
 - b. Shorten make-up air duct in Multi-Purpose Bay 148.
 - c. Reroute utility blower duct in Multi-Purpose Bay 148.
 - d. Add Air Filter units to Tire 151.
25. Sheet M600 HVAC SCHEDULES 30"x42"
 - a. See the revised sheet included in this addendum. Disregard the previous version.
 - b. See clouded changes to Air Distribution Devices Schedule.
26. Sheet M601 HVAC SCHEDULES 30"x42"
 - a. See the revised sheet included in this addendum. Disregard the previous version.
 - b. Added Indoor VRF Equipment Unit Schedule
 - c. Added Outdoor VRF Equipment Unit Schedule.
 - d. Added Air Filter Unit Schedule.

27. Sheet E100 ELECTRICAL SYMBOLS & LEGEND 30"x42"
 - a. See the new sheet included in this addendum.
28. Sheet E201 1ST FL. ELECTRICAL POWER PLAN – AREA A 30"x42"
 - a. See the revised sheet included in this addendum. Disregard the previous version.
 - b. Revised the entire sheet.
29. Sheet E202 1ST FL. ELECTRICAL POWER PLAN – AREA A 30"x42"
 - a. See the revised sheet included in this addendum. Disregard the previous version.
 - b. Revised the entire sheet.
30. Sheet E203 ROOF POWER PLAN – AREA A 30"x42"
 - a. See the revised sheet included in this addendum. Disregard the previous version.
 - b. Revised the entire sheet.
31. Sheet E204 ROOF POWER PLAN – AREA B 30"x42"
 - a. See the revised sheet included in this addendum. Disregard the previous version.
 - b. Revised the entire sheet.
32. Sheet E301 1ST FL. ELECTRICAL LOW VOLTAGE PLAN – AREA A 30"x42"
 - a. See the revised sheet included in this addendum. Disregard the previous version.
 - b. Added data drops and modified number of ports in data drops.
 - c. Relocated data drop for clock.
33. Sheet E302 1ST FL. ELECTRICAL LOW VOLTAGE PLAN – AREA B 30"x42"
 - a. See the revised sheet included in this addendum. Disregard the previous version.
 - b. Added data drops and modified number of ports in data drops.
 - c. Added section view callouts.
34. Sheet E500 ELECTRICAL PANELS SCHEDULES 30"x42"
 - a. See the revised sheet included in this addendum. Disregard the previous version.
 - b. Revised Panel Schedule G & G2.
35. Sheet E501 LIGHTING FIXTURE SCHEDULE 30"x42"
 - a. See the new sheet included in this addendum.
36. Sheet E502 MOTOR AND EQUIPMENT SCHEDULE 30"x42"
 - a. See the new sheet included in this addendum.
37. Sheet E702 ELEC-FIXTURE SCHEDULE AND CALC SUMMARY 30"x42"
 - a. Disregard the sheet. The sheet is hereby removed from the bidding documents.
 - b. See sheet E501 for needed information.
38. Sheet E705 ELEC. EGRESS FIXTURE SCHEDULE & CALC SUMMARY 30"x42"
 - a. Disregard the sheet. The sheet is hereby removed from the bidding documents.
 - b. See sheet E501 for needed information.

PRIOR APPROVALS

39. Section 23 35 16 VEHICLE EXHAUST SYSTEM
 - a. Klimawent

END OF DOCUMENT 00 90 00

**SECTION 01 10 00
SUMMARY**

PART 1 GENERAL

1.01 PROJECT

- A. Refer to Cover Sheet on Drawings for project title and location.
- B. Refer to 00 11 13 Advertisement for Bids for brief description of Project.

1.02 RELATED REQUIREMENTS

- A. Section 01 50 00 - Temporary Facilities: Requirements for temporary utilities.
- B. Section 01 70 00 - Administrative Requirements: Contract limits and protection of existing conditions.

1.03 CONTRACT DESCRIPTION

- A. Contract Type: A single prime contract based on a Stipulated Price as described in Document 00 52 00 - Agreement Form.

1.04 PHASED CONSTRUCTION

- A. The Work shall be conducted in a single phase.

1.05 SEPARATE CONTRACTS BY THE OWNER

- A. The Owner will secure separate contracts for the following items:
 - 1. See drawings, including schedules on A140 & A400, to see Owner procured items.
 - 2. The Owner will hire a contractor to replace a portion of the existing roof and install the roof on the additions concurrent with the Work of the project described herein. Coordinate with the Owner's contractor.

1.06 WORK BY OTHERS

- A. Items indicated "N.I.C." on the Project Drawings will be furnished and installed by others not a party to the Prime Contracts.

1.07 OWNER OCCUPANCY

- A. Owner intends to continue to occupy adjacent portions of the existing building during the entire construction period.
- B. Owner intends to occupy the Project area upon Substantial Completion.
- C. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.
- D. Schedule the Work to accommodate Owner occupancy.

1.08 CONTRACTOR USE OF SITE AND PREMISES

- A. Construction Operations: Limited to areas noted on Drawings.
- B. Arrange use of site and premises to allow:
 - 1. Owner occupancy.
 - 2. Work by Others.
 - 3. Work by Owner.
- C. Provide access to and from site as required by law and by Owner:
 - 1. Emergency Building Exits During Construction: Keep all exits required by code open during construction period; provide temporary exit signs if exit routes are temporarily altered.
 - 2. Do not obstruct roadways, sidewalks, or other public ways without permit.
- D. Time Restrictions:
 - 1. Work on the Project shall be done during normal working hours. If at any time during construction it becomes necessary to accelerate the Work in order to meet completion dates for portions or all of the Work, all trades shall work overtime at no additional cost to Owner.
- E. Utility Outages and Shutdown:
 - 1. Notify Owner within 48 hours of necessary interruptions of services including, but not limited to: HVAC systems, water service (hot & cold), electrical service, communications systems.

2. Do not disrupt or shut down life safety systems, including but not limited to fire sprinklers and fire alarm system, without 7 days notice to Owner and authorities having jurisdiction.
3. Prevent accidental disruption of utility services to other facilities.

1.09 CONSTRUCTION SCHEDULE

- A. Date of Commencement of the Work: May 1, 2025.
- B. Date of Substantial Completion for all Work except for metal cladding on the east side of the building from building line 2 to the north corner of the east side of the building and the north side of training bay D: August 22, 2025.
- C. Date of Substantial Completion for the remainder of the Work: September 19, 2025.
- D. Final Completion: The completion of all Work according to the contract Documents, approved by the AE and accepted by the Owner shall be within 30 days after the Date of Substantial Completion.
- E. Exceptions: The only exceptions to the above completion dates are delay or termination because of a national emergency and/or extension of time for completion claimed and allowed according to the General Conditions and/or Supplementary Conditions.

1.10 WORK SEQUENCE

- A. Coordinate construction schedule and operations with Architect.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

**SECTION 01 23 00
ALTERNATES**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Description of Alternates.

1.02 RELATED REQUIREMENTS

- A. Document 00 21 13 - Instructions to Bidders: Instructions for preparation of pricing for Alternates.

1.03 DESCRIPTION

- A. Conditions of the Contract and pertinent portions of Sections in Division One of this Project Manual, apply to the Work of this Section as fully as though repeated herein.
- B. This Section describes the alternates to the project. Refer to the Product/Execution Articles of the Contract Documents for information pertaining to the work of each alternate.
- C. Each proposal under an alternate shall include all incidental work and all adjustments necessary to accommodate the changes. All work shall meet the requirements of the Contract Documents.
- D. Each alternate proposal shall be submitted as an individual cost for the particular alternate and shall be proposed under the premise that no other alternates have been accepted. Should the work of an alternate called for by the Bid Form not affect the cost of the work, "No Change" shall be stated.
- E. Owner may, at Owner's option, vary the scope of the work by authorizing alternates which will add to the work, deduct from the work or substitute materials, equipment or methods.
- F. Immediately following Award of Contract, awarded Contractor shall prepare and distribute to each party involved, notification of the status of each alternate. Indicate whether alternates have been accepted, rejected, or deferred for consideration at a later date. Include a complete description of negotiated modifications to alternates, if any.

1.04 ACCEPTANCE OF ALTERNATES

- A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option. Accepted Alternates will be identified in the Owner-Contractor Agreement.

THERE ARE SEPARATE CONTRACTS BY THE OWNER AND DIRECT PURCHASES ITEMS BY THE OWNER. REFER TO SECTION 01 10 00, 01 23 00, INDIVIDUAL SECTIONS AND DRAWINGS FOR COMPLETE DESCRIPTION OF WORK.

1.01 SCHEDULE OF ALTERNATES

Entire Project Work includes interior and exterior renovations and additions to an existing single story 36,000 s.f. automotive technology training building. Work includes but is not limited to demolition, concrete, masonry, steel framing and deck, opening assemblies, plastic and mineral wool board insulation, foamed-in-place insulation, and exterior metal wall panels. Interior work includes gypsum assemblies, masonry partitions, wood casework and installation of automotive equipment. Finishes work includes resilient flooring, carpet, ceramic tile, acoustic ceilings, and linear metal ceilings. Plumbing work includes a fire protection system, new restrooms, roof drains, floor drains, and fixtures. HVAC work includes remove and replace existing systems. Electric work includes data, lighting, and power. Civil work includes pavement removal, earthwork, landscaping, paving, striping, and fencing. Coordinate construction work with Owner's roofing contractor hired under separate contract.

Base Bid – Building Additions: Erection of additions to the existing building including new 4,2000 s.f. training bay and new 200 s.f. entry vestibule. Provide concrete, stoops, masonry, steel framing, steel joists decking, canopy structure, parapet framing, and sheathing. Modify existing exterior wall assemblies and mezzanine framing to accommodate the additions. Provide cladding assemblies including metal cladding, subgirt, insulation, weather barrier, wood blocking, fascia, scuppers, soffit and roof expansion joints for the additions. Provide exterior doors, exterior windows, and vestibule doors for the additions. Install new automotive maintenance equipment in the training bay addition. Finishes in the additions include interior paint finish, carpet tile and sealed concrete slabs. Provide building services to the additions including fire protection, plumbing (restrooms, fixtures, storm drain), HVAC (roof top units, make up air units, condensing units, ventilation and vehicle exhaust

systems, diffusers, ductwork, zone control, weathersealing penetrations)and electric (data, lighting, and power).

Alternate 1 – Interior Renovation and HVAC Demo: Renovate interior of the existing building and remove existing HVAC systems. Work includes removal of existing items including cast in place concrete slabs, partitions, casework, equipment, finishes and HVAC equipment. Provide new structural masonry wall with footing. Provide steel stud and masonry partitions including hollow metal and flush wood doors. Provide folding panel room partition and architectural wood casework. Work includes removing, salvaging and reinstalling auto lifts to the adjacent building. Install new automotive maintenance equipment in the remodeled building. Provide finishes and accessories for the existing building including ceramic tiling, acoustical ceilings, resilient flooring, tile carpeting, sound absorbing units, paint, and toilet room accessories. Provide building services for the existing structure including fire protection, plumbing (restrooms, fixtures, storm drain) and electric (data, lighting, and power). ~~The work of this alternate does not include HVAC; include HVAC in Alternate 2.~~

Alternate 2 HVAC: Perform HVAC ~~work not included in Base Bid and not included in Alternate 1. work for Alternate 1.~~ Provide new equipment. Equipment includes, but is not limited to, roof top units, make up air units, condensing units, ventilation and vehicle exhaust systems, diffusers, ductwork, zone control. Weatherseal HVAC penetrations. ~~Include demolition of existing HVAC equipment in Alternate 1.~~

Alternate 3 - Exterior Upgrades: Provide cladding assemblies including metal cladding, subgirt, insulation, weather barrier, wood blocking, fascia, scuppers and soffit for the existing building. Provide exterior doors and windows for the existing building. This includes storefront, curtainwall, bi-folding door, and sectional door assemblies. Prepare exterior surfaces of the existing building for installation of new HVAC equipment including curbs, louvers and penetrations. Electrical work includes new exterior lighting, adjusting existing wall mounted items for new cladding and exterior charging stations. Perform civil work including pavement removal, earthwork, landscaping, paving, striping, and fencing. The work of this alternate does not include HVAC; include HVAC Alternate 2.

Alternate 4 – Replace Fiber Optic line between Diesel and Auto.

Alternate 5 – Lighting control replacement.

Alternate 6 – Asphalt Maintenance: Crack fill, seal coat and striping.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 08 16 13
FIBERGLASS DOORS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Fiberglass doors.

1.2 RELATED REQUIREMENTS

- A. Applicable provisions of Division 1 govern the work of this section.
- B. Section 07 27 00 - Air Barriers: Sealing assemblies to weather barrier installed on adjacent construction.
- C. Section 07 92 00 - Joint Sealants: Sealing joints between door frames and adjacent construction.
- D. Section 08 43 13 - Aluminum-Framed Storefronts: System at all aluminum frames/doors.
- E. Section 08 71 00 - Door Hardware.
- F. Division 26 and 28: Connection to related powered and access control accessories.

1.3 REFERENCE STANDARDS

- A. AAMA 611 - Voluntary Specification for Anodized Architectural Aluminum; 2020.
- B. ANSI/SDI A250.4 - Test Procedure and Acceptance Criteria for Physical Endurance for Steel Doors, Frames and Frame Anchors; 2022.
- C. ASTM B209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate; 2014.
- D. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes; 2021.
- E. ASTM D635 - Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position; 2022.
- F. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2023d.

1.4 SUBMITTALS

- A. See contract Conditions and General Requirements for procedures and requirements.
- B. Provide submittal transmittals that include all submittal items identified in each submittal group below.
- C. It is permissible for a single supplier to combine submittal items for multiple sections within Division 8 Openings. This permission applies to sections that describe requirements for glazing, hardware, any passage door and windows that are framed using the same systems as the passage doors. Identify all sections that are included in the transmittal on the coversheet.
- D. Review Submittals - Preparatory:
 - 1. Product Data: Provide manufacturer's standard details, installation instructions, hardware and anchor recommendations.
 - 2. Shop Drawings: Indicate layout and profiles; include assembly methods.
 - a. Indicate product components, including hardware reinforcement locations and preparations, accessories, finish colors, patterns, and textures.
 - b. Indicate wall conditions, door and frame elevations, sections, materials, gauges, finishes, location of door hardware by dimension, and details of openings; use same reference numbers indicated on drawings to identify details and openings.
- E. Review Submittals - Samples:
 - 1. Selection Samples: Submit two complete sets of color chips, illustrating manufacturer's available finishes, colors, and textures.

F. Closeout Submittals:

1. Warranty: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer; include detailed terms of warranty.

G. Maintenance Materials:

1. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
 - a. See contract Conditions and General Requirements for procedures and requirements, for additional provisions.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products of the type specified in this section, with not less than three years of documented experience.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
- B. Store materials in original packaging, under cover, protected from exposure to harmful weather conditions and from direct contact with water.
 1. Store at temperature and humidity conditions recommended by manufacturer.
 2. Do not use non-vented plastic or canvas shelters.
 3. Immediately remove wet wrappers.
- C. Store in position recommended by manufacturer, elevated minimum 4 inches above grade, with minimum 1/4 inch space between doors.

1.7 WARRANTY

- A. See Conditions of the Contract and General Requirements for additional warranty requirements.
- B. Provide ten (10) year manufacturer warranty covering materials and workmanship, including degradation or failure due to chemical contact. Include any required upcharge for 10 year finish warranty.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Fiberglass Reinforced Polyester Doors with Aluminum Frames:
 1. Special-Lite: www.special-lite.com.
 2. FRP Architectural Doors: www.frparch.com.
 3. Vale FRP Doors, Entrances and Hardware: www.valedoors.com.

2.2 FIBERGLASS REINFORCED POLYESTER FLUSH DOORS WITH ALUMINUM STILES AND RAILS

- A. Door Thickness: 1-3/4 inches.
- B. Stiles and Rails: Aluminum extrusions made from prime-equivalent billet that is produced from 100% reprocessed 6063-T6 alloy recovered from industrial processes, minimum of 2-5/16-inch depth.
- C. Corners: Mitered.
- D. Provide joinery of 3/8-inch diameter full-width tie rods through extruded splines top and bottom integral to standard tubular shaped stiles and rails reinforced to accept hardware as specified.
- E. Securing Internal Door Extrusions: 3/16-inch angle blocks and locking hex nuts for joinery. Welds, glue, or other methods are not acceptable.
- F. Furnish extruded stiles and rails with integral reglets to accept face sheets. Lock face sheets into place to permit flush appearance.
- G. Rail caps or other face sheet capture methods are not acceptable.
- H. Extrude top and bottom rail legs for interlocking continuous weather bar.

- I. Meeting Stiles: Pile brush weatherseals. Extrude meeting stile to include integral pocket to accept pile brush weatherseals.
- J. Bottom of Door: Install bottom weather bar with nylon brush weatherstripping into extruded interlocking edge of bottom rail.
- K. Glue: Use of glue to bond sheet to core or extrusions is not acceptable.
- L. Face Sheet:
 - 1. Material: FRP, 0.120-inch thickness, finish color throughout.
 - 2. Protective coating: Abuse-resistant engineered surface.
 - 3. Texture: Pebble.
 - 4. Color: As selected from manufacturer's standard line.
 - 5. Adhesion: The use of glue to bond face sheet to foam core is prohibited.
- M. Core:
 - 1. Material: Poured-in-place polyurethane foam.
 - 2. Density: Minimum of 5 pounds per cubic foot.
 - 3. R-Value: Minimum of 9.
- N. Hardware:
 - 1. Pre-machine doors in accordance with templates from specified hardware manufacturers and hardware schedule.
 - 2. Factory install hardware.
- O. Aluminum Members:
 - 1. Aluminum extrusions made from prime-equivalent billet that is produced from 100% reprocessed 6063-T6 alloy recovered from industrial processes ASTM B221.
 - 2. Sheet and Plate: ASTM B209.
 - 3. Alloy and Temper: As required by manufacturer for strength, corrosion resistance, application of required finish, and control of color.
- P. Components: Door and frame components from same manufacturer.
- Q. Fasteners:
 - 1. Material: Aluminum, 18-8 stainless steel, or other noncorrosive metal.
 - 2. Compatibility: Compatible with items to be fastened.
 - 3. Exposed Fasteners: Screws with finish matching items to be fastened.
- R. Tubular Framing:
 - 1. Size and Type: As indicated on the Drawings.
 - 2. Materials: Aluminum extrusions made from prime-equivalent billet that is produced from 100% reprocessed 6063-T6 alloy recovered from industrial processes, 1/8-inch minimum wall thickness.
 - 3. Applied Door Stops: 0.625-inch high, with screws and weatherstripping. Door stop shall incorporate pressure gasketing for weathering seal. Counterpunch fastener holes in door stop to preserve full metal thickness under fastener head.
 - 4. Frame Members: Box type with 4 enclosed sides. Open-back framing is not acceptable.
 - 5. Sealant: Seal joints before assembling frame members.
 - 6. Joints:
 - a. Secure joints with fasteners.
 - b. Provide hairline butt joint appearance.
 - 7. Field Fabrication: Field fabrication of framing using stick material is not acceptable.
 - 8. Applied Stops: For side, transom, and borrowed lites and panels. Applied stops shall incorporate pressure gasketing for weathering seal. Reinforce with solid bar stock fill for frame hardware attachments.
 - 9. Hardware:
 - a. Pre-machine and reinforce frame members for hardware in accordance with manufacturer's standards and hardware schedule.

- b. Factory install hardware.
10. Anchors:
- a. Anchors appropriate for wall conditions to anchor framing to wall materials.
 - b. Door Jamb and Header Mounting Holes: Maximum of 24-inch centers.
 - c. Secure head and sill members of transom, side lites, and similar conditions.

S. Fabrication:

1. Sizes and Profiles: Required sizes for door and frame units, and profile requirements shall be as indicated on the Drawings.
2. Coordination of Fabrication: Field measure before fabrication and show recorded measurements on shop drawings.
3. Assembly:
 - a. Complete cutting, fitting, forming, drilling, and grinding of metal before assembly.
 - b. Remove burrs from cut edges.
4. Welding: Welding of doors or frames is not acceptable.
5. Fit:
 - a. Maintain continuity of line and accurate relation of planes and angles.
 - b. Secure attachments and support at mechanical joints with hairline fit at contacting members.
6. Class A Flame Spread and Smoke Developed Rating:
 - a. Class A flame spread and smoke developed rating on interior faces of exterior panels and both faces of interior panels.
 - b. Flame Spread, ASTM E84: Maximum of 25.
 - c. Smoke Developed, ASTM E84: Maximum of 450.
7. Hardware:
 - a. Pre-machine doors in accordance with templates from specified hardware manufacturers and hardware schedule.
 - b. Factory install hardware.
8. Aluminum Finishes:
 - a. Kynar flouropolymer coating. Color Dark Bronze.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify actual dimensions of openings by field measurements before door fabrication; show recorded measurements on shop drawings.
- B. Do not begin installation until substrates have been properly prepared.

3.2 PREPARATION

- A. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- B. Clean and prepare substrate in accordance with manufacturer's directions.
- C. Protect adjacent work and finish surfaces from damage during installation.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions; do not penetrate frames with anchors.
- B. Set units plumb, level, and true-to-line, without warping or racking doors, and with specified clearances; anchor in place.
- C. Separate aluminum and other metal surfaces from sources of corrosion of electrolytic action at points of contact with other materials.
- D. Repair or replace damaged installed products.

3.4 ADJUSTING

- A. Lubricate, test, and adjust doors to operate easily, free from warp, twist or distortion, and to fit watertight for entire perimeter.
- B. Adjust hardware for smooth and quiet operation.
- C. Adjust doors to fit snugly and close without sticking or binding.

3.5 CLEANING

- A. Clean installed products in accordance with manufacturer's instructions prior to owner's acceptance.

END OF SECTION

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SECTION 22 40 41

CHINA AND ENAMELED FIXTURES AND TRIM

PART 1: GENERAL

1.01 RELATED DOCUMENTS

- A. Conditions of the Contract and portions of Division 00 and 01 of this Project Manual apply to this Section as though repeated herein.
- B. The requirements of Section 22 05 00 apply to this Section.

1.02 SUBMITTALS

- A. Submit descriptive product data describing all material furnished under Part 2 of this Section.
- B. Installation Instructions: Include manufacturer's rough-in dimensions, utility sizes, methods of assembly of components, anchorages, and finishes. Furnish templates for coordination of fixtures installed in countertops and cabinets which are fabricated off-site.
- C. Wiring Diagrams: Submit manufacturer's electrical requirements and wiring diagrams for power supply to units. Clearly differentiate between portions of wiring that are factory installed and portions that are field installed.
- D. Color Charts: Submit manufacturer's standard color charts for fixture and accessory colors.
- E. Quality Control Submittals: Submit certification of compliance with specified standards and performance verification requirements. Submit for products not fully documented in manufacturer's product data.

1.03 RELATED WORK

- A. Joint Sealers: Section 07 90 00.
- B. Toilet and Bath Accessories: Section 10 80 00.
- C. Domestic Water Systems and Equipment: Section 22 10 11.
- D. Drain Waste and Vent Systems: Section 22 10 12.
- E. Electrical: Division 26.

1.04 REFERENCES

- A. ADA (Americans With Disabilities Act) – Standards for Accessible Design; 2010
- B. UFAS (Uniform Federal Accessibility Standards) - Standards for Handicapped and adaptable/accessible locations.
- C. FHAG (Fair Housing Accessibility Guidelines) - Standards for accessible / adaptable dwellings.
- D. ANSI A112.6.1M - Plumbing fixture carrier supports.

- E. ANSI A112.18.1M - Lavatory, bathtub & sink fittings; supplies, stops & traps.
- F. ANSI/ASME A112.19.1M - Enameled plumbing fixtures.
- G. ANSI/ASME A112.19.2M - Vitreous china plumbing fixtures.
- H. ANSI/ASME A112.19.6 - Hydraulic Requirements for Water Closets and Urinals.
- I. ICC ANSI A117.1 – Accessible and Usable Building and Facilities; 2009
- J. ANSI/NSF Standard 61, Section nine - Drinking Water Systems Components.
- K. ASSE 1037 - Performance Requirements for Pressurized Flushing Devices for Plumbing Fixtures.

PART 2: PRODUCTS

2.01 CHINA AND ENAMELED FIXTURES

- A. Based on product by Sloan, Kohler.

2.02 WATER CLOSET SEATS

- A. Based on product by Bemis.

2.03 CARRIER SUPPORTS

- A. Based on product by J. R. Smith.
 1. Josam, Mifab, Wade, Watts, Zurn equals are acceptable.

2.04 FLUSHOMETER VALVES

- A. Based on product by Sloan.
- B. Exposed flushometer valves shall be provided with matching wall and spud flanges.
- C. Flushometer valve body and other metal parts in water stream (bronze, red brass) shall contain less than 15% zinc. Furnish factory documentation.
- D. The diaphragm, vacuum breaker, stop seat and handle seal material shall be made of chloramine resistant material.

2.05 LAVATORY FITTINGS

- A. Based on product by Sloan.
- B. Comply with ANSI/NSF Standard 61 section as follows:
 1. Provide written documentation (listing) from NSF International or Underwriters Laboratory showing product compliance.
 2. Drinking water faucets/fittings shall not contribute more than 11 micrograms (11 parts per billion) of lead to the water after the water has been standing in the fitting for 16 hours. Brass components which contact water within the faucet shall be from brass which contains no more than 3% lead by dry weight.

- a. Includes: residential kitchen faucets, lavatory faucets (including hospital patient rooms & school), commercial kitchen & bar faucets, drinking fountains and bubblers, glass fillers, supply stops, basin cocks, hot and cold water dispensers and ice makers.
- b. Excludes: metering and electronic lavatory faucets, faucets w/hose end connections, bath shower fittings, ball cocks, all drains, residential laundry fittings, shampoo fittings, laboratory fittings, backflow prevention devices and bed pan flushers.

2.06 SUPPLIES, STOPS, TRAPS

- A. American Standard, Brass Craft, Brass Products Company, Dearborn Brass, Duracraft Plastics Inc, Engineered Brass, Keeney Manufacturing Co, Kohler, McGuire, ProFlo, Tubular Brass, Wolverine Brass are acceptable.
- B. Water and waste piping, valves, traps and escutcheons exposed below fixture shall have polished chrome finish.
- C. Water and waste piping, valves, traps and escutcheons concealed within cabinet space may have rough unplated finish.
- D. Piping at walls shall have escutcheons (wall plates).
- E. Water Closets:
 - 1. BrassCraft fixture stop model OCR19Z valve with metal stem and metal handle, 1/2" nominal inlet and 3/8" O.D. riser. (Brass-Craft washerless quarter-turn fixture stops are **NOT** acceptable.)
- F. Lavatories:
 - 1. BrassCraft fixture stop model OCR19Z valve with metal stem and metal handle, 1/2" nominal inlet and 3/8" O.D. riser. (Brass-Craft washerless quarter-turn fixture stops are **NOT** acceptable.)

2.07 LAVATORY SUPPLY/WASTE COVERS

- A. Based on product by Truebro.
 - 1. McGuire, ProFlo equals are acceptable.
- B. Lav-Guard:
 - 1. Truebro Lav-Guard Model #100. One P-trap cover only and fasteners.
 - 2. Truebro Lav-Guard Model #101. P-trap cover, hot water angle valve cover and fasteners.
 - 3. Truebro Lav-Guard Model #102. P-trap cover, hot and cold water angle valve cover and fasteners.
 - 4. Truebro Lav-Guard Model #103. P-trap cover, hot and cold water angle valve cover, 5" offset wheelchair strainer cover and fasteners.
 - 5. Truebro Lav-Guard Model #103K. P-trap cover, hot and cold water angle valve cover, Kohler 6" offset wheelchair strainer cover and fasteners.
 - 6. Truebro Lav-Guard Accessory #105. 5" offset wheelchair strainer cover and fasteners.
 - 7. Truebro Lav-Guard Accessory #105K. Kohler 6" offset wheelchair strainer cover and fasteners.
 - 8. Truebro Lav-Guard Extension 100. 16" extension for waste arm or tailpiece.
 - 9. Color to be white or gray.

10. Constructed of molded closed cell vinyl, 1/8" thickness, "Snap-Clip" flush reusable fasteners, paintable with acrylic enamel, burning characteristics in compliance with ASTM D 635, thermal conductivity K value of 1.17, anti-microbial vinyl formula.
11. Lav-Guard kits will not fit schedule 40 plastic P-traps.

2.08 FIXTURE DESCRIPTION

A. L-1: Wall Hung China Lavatory:

1. Lavatory: Kohler Kingston K-2007, vitreous china, wall hung, 21-1/4" x 18-1/8" overall size, front overflow, concealed arm supports.
2. Faucet: Sloan SF-2400-CP-0.5FPM-MLM-IR-FCT infrared sensor faucet, 0.5 gpm, multi-laminar spray type, hard wired, chrome finish.
3. Mixing Valve: ASSE 1070 below deck.
4. Drain: Kohler No. K-7129-A.
5. Support: Floor mounted, concealed arm. J. R. Smith Fig. 0700. Include "M24" extension adaptor(s) as required.

B. WC-1: Water closet:

1. China: Kohler "Kingston" No. K-4325, wall hung, flushometer valve type, 1.28 or 1.6 gpf, vitreous china, siphon jet flushing, elongated bowl, 1-1/2" top spud, 2 1/8" fully glazed passageway, 11" x 8-1/4" water surface.
2. Exposed flushometer valve: Sloan "Royal Optima" No. 186 ESS-0.5-TMO-HW, dual filtered by-pass; diaphragm, stop seat and vacuum breaker of molded PERMEX rubber compound for chloramine resistance; vandal resistant stop cap; cast set screw wall flange, 1" screwdriver back check angle stop, adjustable tailpiece and vacuum breaker, spud coupling, spud flange, cover tube, chrome plated finish, dezincification resistant, sensor operated, "Optima EL-1500-L" self-adaptive infrared sensor with indicator light, 3-second flush delay, true mechanical override, hardwired.
3. Seat: Bemis No. 1655SSCT white, open front, extra heavy weight, injection molded solid plastic seat less cover, factory installed stainless steel self-sustaining and external check hinge with double sided gasket/tape and "StaTite" fastening system.
4. Support: back to back water closet carrier, **vertical adjustable** type, no-hub connections, as applicable/shown on drawings, M51 rear support lug and anchor foot, M12 exposed flush valve supply support, nipple length as required, M40 wide pipe chase support as required, 4" minimum size connection. Confirm wall/chase size.

C. WC-2: Water closet:

1. Same as WC-1.
2. Mount at ADA height.

D. UR-1: Urinal:

1. Urinal: Kohler Bardon K-4991-ETSS. White Vitreous China, Washdown flushing action, integral flushing rim, 3/4" I.P.S. rear spud inlet, 2" NPT outlet flange, Vandal resistant strainer, 100% Factory flush tested.
2. Concealed flushometer valve: Sloan "Royal Optima" No. 186 ESS-0.5-TMO-HW, dual filtered by-pass; diaphragm, stop seat and vacuum breaker of molded PERMEX rubber compound for chloramine resistance; vandal resistant stop cap; cast set screw wall flange, 3/4" screwdriver back check angle stop, adjustable tailpiece and vacuum breaker, spud coupling, spud flange, cover tube, chrome plated finish, dezincification resistant, sensor operated, "Optima EL-1500-L" self-adaptive infrared sensor with indicator light, 3-second flush delay.

E. UR-2: Urinal ADA:

1. As specified for UR-1, mount at ADA height.

2.09 FIXTURE CAULKING

- A. GE Silicone Sanitary 1700, Dow Corning 786, or equivalent, clear silicone rubber sealant, mildew resistant, 25% movement.

PART 3: EXECUTION

3.01 FIXTURE INSTALLATION

- A. Fixtures shall be installed tight to wall. Space between wall and fixture exceeding 1/16" will not be accepted. Coordinate with the general contractor prior to his beginning wall installation.
- B. Fixtures and accessory trim shall be installed as recommended by manufacturer.
- C. All fixtures shall be securely fastened and supported. All floor bolts in shoe of floor mounted supports shall be securely anchored including rear support lug and anchor foot of water closet supports. Any additional wall framing or blocking required for secure installation shall be included as part of this Section.
- D. Wall hangers, when used to support wall hung lavatories, shall have at least two bolts or lag screws of sufficient strength at each end of hanger, under or immediately adjacent to each support tab and lower holes on china fixture shall be secured to wall.
- E. Fittings shall be securely fastened with joints watertight.
- F. Water and waste rough-ins in wall shall be secure and perpendicular to wall/fixture.
- G. After installation but before acceptance by Owner, all fixtures shall be protected to prevent scratching or other construction damage and shall be cleaned only with compounds recommended by the respective manufacturer.
- H. Verify specific fixture locations with Architectural drawings.

3.02 FIXTURE CAULKING

- A. Space between fixture and wall or floor shall be **neatly** caulked with a narrow bead of clear silicone rubber sealant.
 - 1. PREPARATION
 - a. Clean joint surfaces immediately before installation of sealant. Remove dirt, insecure coatings, moisture and other substances which would interfere with bond of sealant.
 - b. Etch concrete and masonry joint surfaces as recommended by sealant manufacturer.
 - c. Roughen vitreous or glazed joint surfaces as recommended by sealant manufacturer.
 - d. Prime or seal the joint surfaces as recommended by the sealant manufacturer.
 - e. Do not allow primer/sealer to spill or migrate onto adjoining surfaces.
 - 2. APPLICATION, GENERAL
 - a. Apply sealant with a gun having proper size nozzle or with a knife, as required. Use sufficient pressure to fill all voids and joints solid. **Remove excess sealant and leave surfaces smooth, neat and clean.** Upon completion sealant shall have a smooth, even finish and all joints shall be weather tight. All work shall be in accordance with manufacturer's printed instructions.
 - b. **Do not allow sealants to overflow or spill onto adjoining surfaces, or to migrate into the voids of adjoining surfaces. Clean the adjoining surfaces by whatever means may be necessary to eliminate evidence of spillage. Sealant shall be**

confined to the space only between the fixture and wall or floor and not beyond. Temporarily tape off adjacent surfaces as required to ensure compliance. Installation not conforming to the above will not be accepted.

3.03 LAVATORY FAUCETS

- A.** Water supply and waste rough-ins shall be as high as possible below lavatories accessible for handicap use (not the standard heights).
- B.** Do not use cleaning chemicals that will be detrimental to the finish of the faucets.
- C.** Adjust the thermostatic mixing valve to discharge water at a maximum temperature of 105°F.

3.04 FLUSHOMETER VALVES

- A.** Before water in supply pipes is turned on, close stop valve to flushometer valves. Remove working parts from flush valve. Open control stop and flush out dirt, chips, and other foreign material. Replace working parts and turn on water.
- B.** Adjust to achieve optimum quietness and efficiency of operation. Adjust control stop so that rate of flow into fixture is not excessive, yet sufficient to adequately carry out waste.
- C.** Adjust flushometer valve to be plumb with fixture and wall. Mis-alignments will not be acceptable.
- D.** Secure wall water supply escutcheon to piping/tubing using set screw. (Do not secure escutcheon to chrome plated supply cover tubing.)

3.05 WATER CLOSETS

- A.** Install per manufacturer's recommendations.
- B.** Tanks shall be level, plumb, parallel to wall, & snugged down evenly against bowl surface (china to china).
- C.** Shorten length of closet bolts as required so bolt caps fit properly.
- D.** Position water closet squarely to wall and firmly seated on floor.

3.06 LAVATORY SUPPLY/WASTE COVERS/LAV-SHIELDS

- A.** Cover the tailpiece, trap, waste arm and water piping below lavatories in handicap accessible locations. Water piping need not be covered if configured in such a way to protect against contact, i.e. keeping rough-ins as high as possible.
- B.** Install according to manufacturer's recommendations.

END OF SECTION 22 40 41

WESTERN TECHNICAL COLLEGE AUTOMOTIVE TECHNOLOGY CENTER 2721 LARSON STREET LA CROSSE, WISCONSIN



ARCHITECTURE
ENGINEERING
INTERIOR DESIGN

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HSR# 24061

FEBRUARY 2025

BID SET

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- C101 PARKING AND SEAL COAT PLAN
- C200 GRADING PLAN
- C300 EROSION PLAN
- C400 SITE PLAN
- C500 DETAILS

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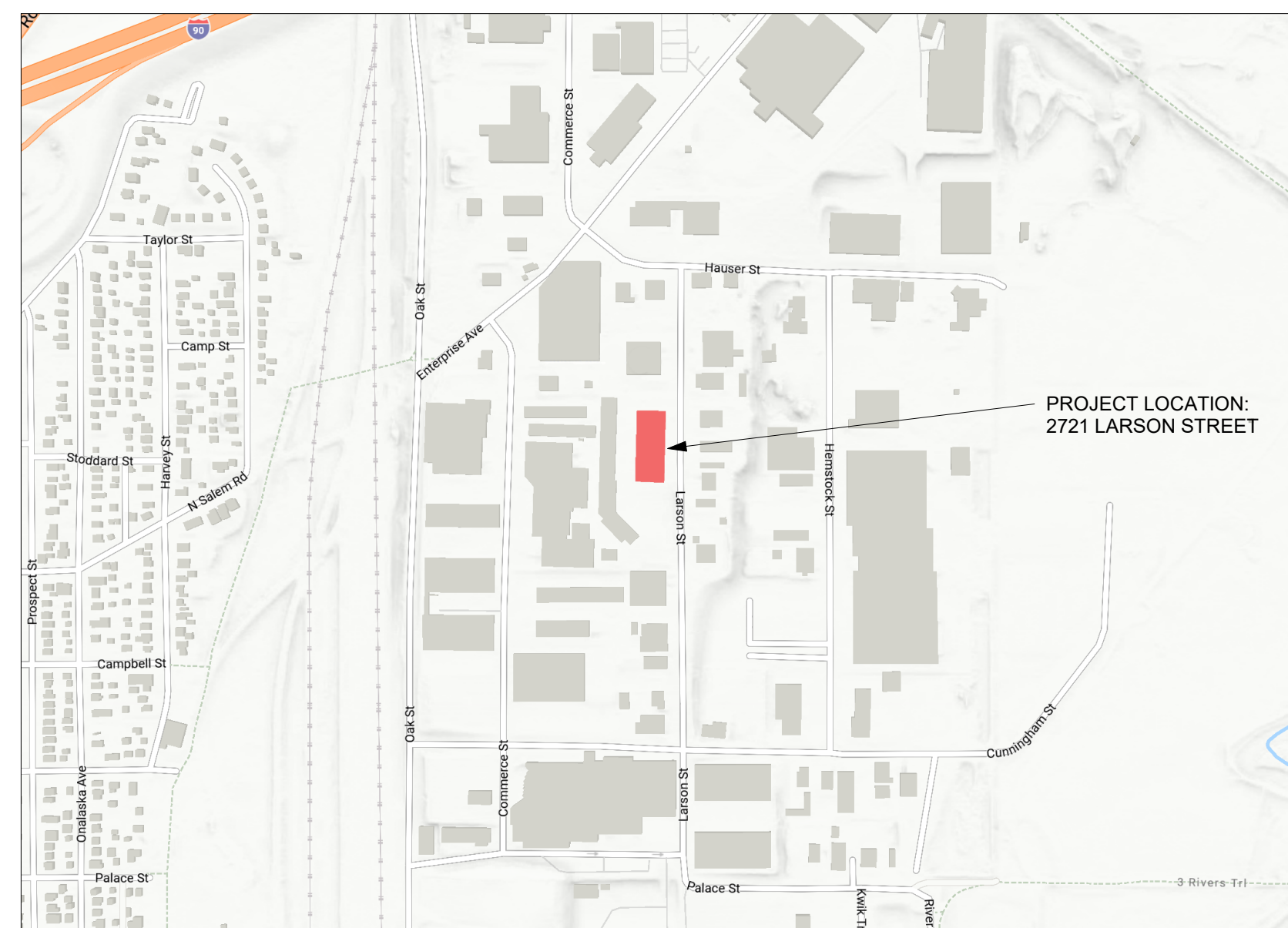
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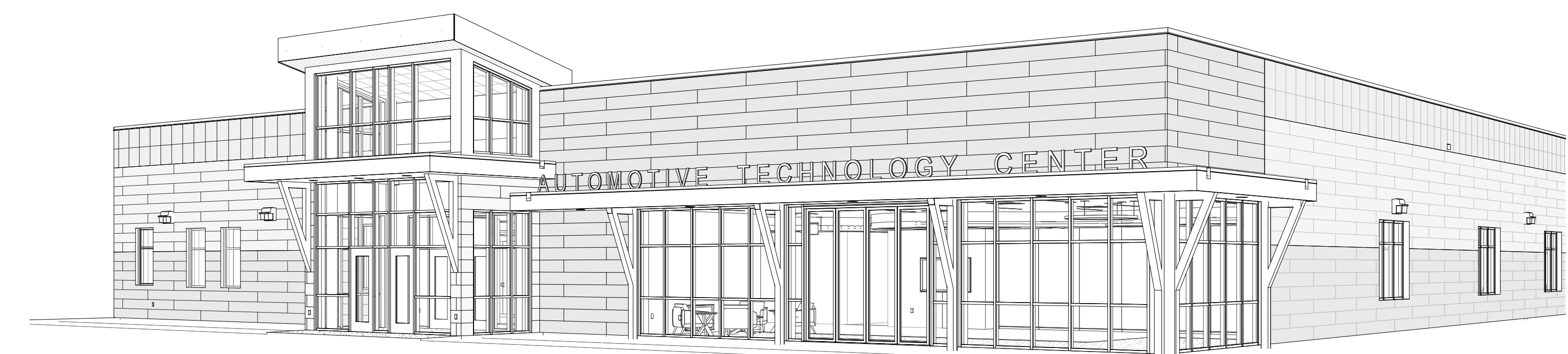
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CITY MAP
SITE LOCATION MAP



WESTERN TECHNICAL COLLEGE
AUTOMOTIVE TECHNOLOGY CENTER

Project Location: 2721 LARSON STREET
LA CROSSE, WI 54603

COVER SHEET

Project Title: WESTERN TECHNICAL COLLEGE
AUTOMOTIVE TECHNOLOGY CENTER

HSR Project Number: 24061

Project Date: FEB 2025

Drawn By: TBS / WF

Key Plan:

BID SET

No.	Description	Date
A01	ADD 01	2.24.2025
A02	ADD 02	2.27.2025
A04	ADD 04	3.05.2025

Graphic Scale:

Last Update: 3/6/2025 10:14:07 AM

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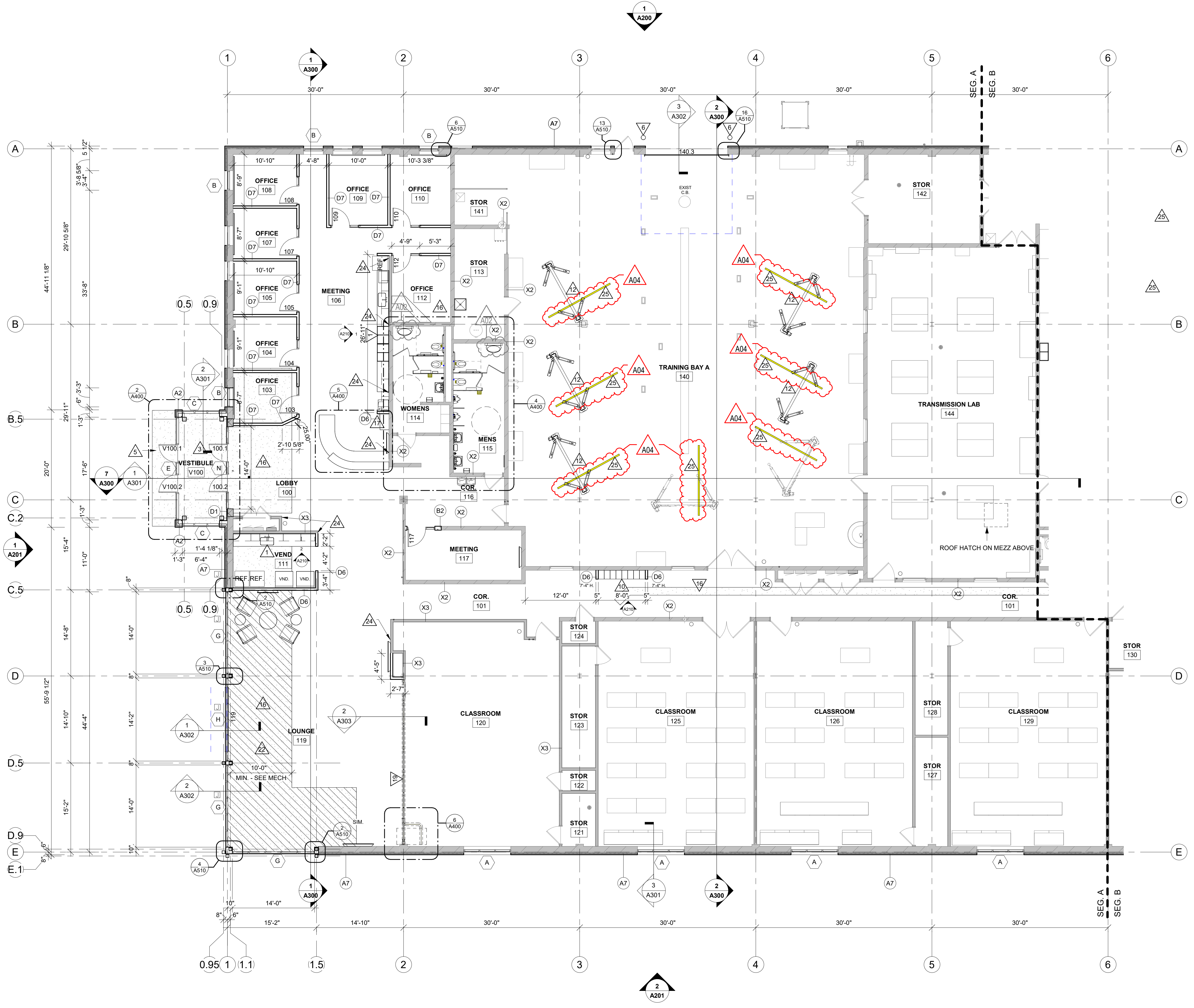


Consultant:

- PLAN GENERAL NOTES:**
- REFER TO OVERALL PLANS FOR FIRE RATING LOCATIONS AND ACCESSIBILITY ROUTES.
 - SEE ID SHEETS FOR FLOOR AND WALL FINISH LAYOUTS.
 - LOOSE FURNISHINGS EXCEPT AS NOTED SHALL BE PROVIDED AND INSTALLED BY THE OWNER.
 - FIXED EQUIPMENT IS SHOWN ON THIS PLAN FOR COORDINATION. SEE SHEETS **A1XX-A1XX** FOR ALL EQUIPMENT NOTES.
 - UNLESS NOTED OTHERWISE RESTROOM FLOORS SHALL BE SLOPED A MIN. 1/16" - 1/2" TO FLOOR DRAINS - TO "CENTER", IF NO FLOOR DRAINS.
 - PAINT ALL EXPOSED STEEL LINTELS.
 - EXTEND ALL WALLS TO DECK UNLESS NOTED OTHERWISE. SEE **ASXX** FOR TOP OF WALL DETAILS.
 - INSTALL BULLNOSE CMU AT ALL OUTSIDE CORNERS W/O TILE AND AT DOOR JAMBS AS DETAILED. NO BULLNOSE AT WINDOW JAMBS.
 - SEE **ADXX** FOR WALL CONTROL JOINT DETAILS. SEE PLANS AND ELEVATIONS FOR CJ LOCATIONS. CJ = CONTROL JOINTS.
 - SEE **ADXX** FOR TYPICAL HEAD FLASHING AND THROUGH-WALL FLASHING ISOMETRIC DETAILS.
 - SEE STRUCTURAL FOR SLAB CONTROL JOINTS.
 - GENERAL CONTRACTOR TO PROVIDE CONCRETE EQUIPMENT PADS/CURBS AS REQUIRED FOR MECHANICAL / ELECTRICAL EQUIPMENT. VERIFY SIZE, PROFILE & LOCATION WITH MECHANICAL / ELECTRICAL.
 - VERIFY EXACT SIZE AND LOCATION OF ALL MECHANICAL / PLUMB AND ELEC OPENINGS. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FINISH AT ALL VISIBLE AREAS. ALL OPENING SHALL BE SEALED AFTER UTILITY INSTALLATION.

- PLAN LEGEND:**
- (A) SYMBOL INDICATES WALL TYPE - SEE SHEET A600 FOR WALL TYPE DETAILS.
 - (A) SYMBOL INDICATES WINDOW TYPE. SEE SHEET A600 FOR WINDOW FRAME ELEVATIONS.
 - (X) SYMBOL INDICATES CONSTRUCTION NOTE THIS SHEET
 - (X) DEMOLISHED FLOOR PATCH AND FINISH

- KEY NOTES PLAN**
- INSTALL NEW PLUMBING FIXTURE
 - PATCH EXISTING CONCRETE FLOOR AT CMU WALL REMOVAL & APPLY NEW FLOOR SEALER
 - INSTALL NEW CONCRETE SLAB-ON-GRADE - SEE STRUCTURAL SHEETS.
 - SEE CIVIL PLANS FOR SITE REQUIREMENTS
 - INSTALL NEW CONCRETE FROST STOOP - SEE STRUCTURAL SHEETS.
 - INSTALL NEW BOLLARD
 - INSTALL NEW TRENCH DRAIN - SEE PLUMBING SHEETS
 - CLEAN EXISTING CONCRETE FLOOR. APPLY NEW FLOOR SEALER
 - BRACKET MOUNTED FIRE EXTINGUISHER
 - INSTALL NEW LOCKERS (SUPPLIED AND INSTALLED BY CONTRACTOR)
 - PATCH CONCRETE FLOOR TO EXISTING CONCRETE FLOOR. APPLY NEW FLOOR SEALER
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 - TIRE CHANGING EQUIPMENT - SEE EQUIPMENT PLAN
 - WRAP COLUMN WITH GIP AND SHEET ROCK CLIP
 - EXISTING JOB CRANE TO REMAIN
 - PATCH CONC FLOOR SLAB - SLAB THICKNESS TO MATCH EXISTING. PREPARE FOR AND APPLY NEW FLOOR FINISH
 - PARTS CART BY OWNER
 - MODIFY EXISTING FENCE FOR NEW CONSTRUCTION
 - OPERABLE WALL SYSTEM: SEE SECTION 10 22 39 FOLDING PANEL PARTITIONS. PROVIDE UNENCLOSED PANEL STORAGE AGAINST EAST WALL
 - PARTS STORAGE RACKS - BY OWNER
 - PARTS DESK FURNITURE - BY OWNER
 - RIGID INSULATION UNDER FLOOR SLAB AT HATCHED AREA FOR IN-FLOOR RADIANT HEAT - SEE MECHANICAL
 - INFILL AT REMOVED DOOR/WINDOW. MATCH ADJACENT MASONRY.
 - PATCH EXISTING WALL AT REMOVED PARTITION
 - YELLOW PAINTED ALIGNMENT STRIP
 - YELLOW PAINTED STRIPE AT PERIMETER OF FLOOR PIT



1 FLOOR PLAN - SEGMENT A
1/8" = 1'-0"

Project Title: **WESTERN TECHNICAL COLLEGE
AUTOMOTIVE TECHNOLOGY CENTER**
Project Location: 2721 LARSON STREET
LA CROSSE, WI 54603
Sheet Title: **FLOOR PLAN - SEGMENT A**

HSR Project Number: **24061**
Project Date: **FEB 2025**
Drawn By: **TBS**
Key Plan:

KEY PLAN

BID SET

Revisions:

No.	Description	Date
A02	ADD 02	2.27.2025
A04	ADD 04	3.05.2025

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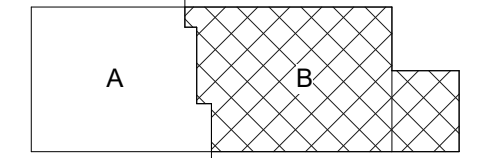
Project Title: **WESTERN TECHNICAL COLLEGE
AUTOMOTIVE TECHNOLOGY CENTER**
Project Location: 2721 LARSON STREET
LA CROSSE, WI 54603
Sheet Title: **FLOOR PLAN - SEGMENT B**

HSR Project Number: **24061**

Project Date: **FEB 2025**

Drawn By: **TBS**

Key Plan:



KEY PLAN

BID SET

No.	Description	Date
A02	ADD 02	2.27.2025
A04	ADD 04	3.05.2025

Graphic Scale: **VARIES**

Last Update: **3/6/2025 10:15:10 AM**

A102

KEY NOTES PLAN

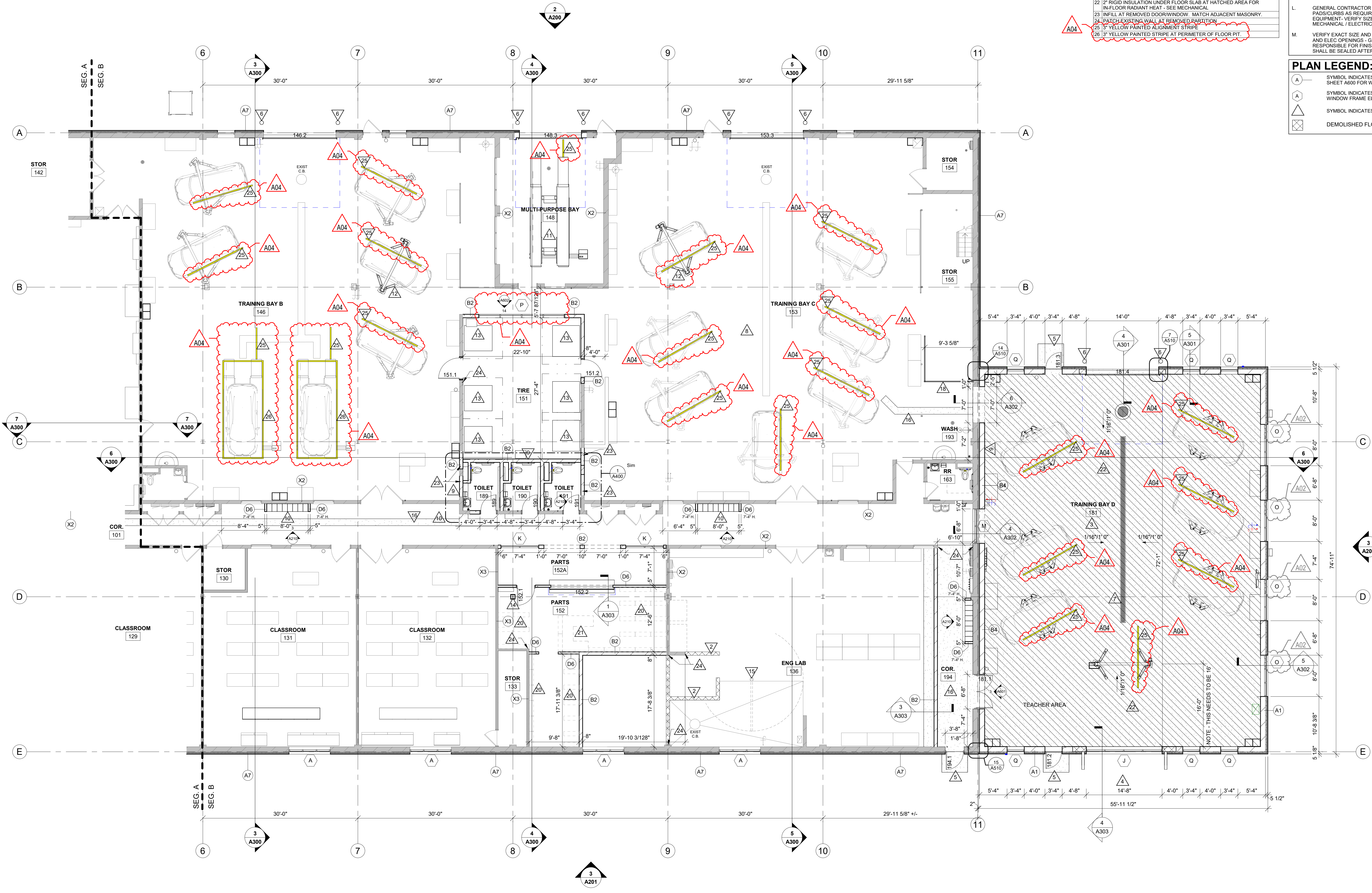
1. INSTALL NEW PLUMBING FIXTURE
2. PATCH EXISTING CONCRETE FLOOR AT CMU WALL REMOVAL & APPLY NEW FLOOR SEALER
3. INSTALL NEW CONCRETE SLAB-ON-GRADE - SEE STRUCTURAL SHEETS
4. SEE CIVIL PLANS FOR SITE REQUIREMENTS
5. INSTALL NEW CONCRETE FROST STOOP - SEE STRUCTURAL SHEETS
6. INSTALL NEW BOLLARD
7. INSTALL NEW TRENCH DRAIN - SEE PLUMBING SHEETS
8. CLEAN EXISTING CONCRETE FLOOR. APPLY NEW FLOOR SEALER
9. BRACKET MOUNTED FIRE EXTINGUISHER
10. INSTALL NEW LOCKERS (SUPPLIED AND INSTALLED BY CONTRACTOR)
11. PATCH CONCRETE FLOOR TO EXISTING CONCRETE FLOOR. APPLY NEW FLOOR SEALER
12. INSTALL NEW LIFTS - SEE EQUIPMENT PLAN
13. TIRE CHANGING EQUIPMENT - SEE EQUIPMENT PLAN
14. WRAP COLUMN WITH GYP. AND SHEET ROCK CLIP
15. EXISTING JIB CRANE TO REMAIN
16. PATCH CONC FLOOR SLAB - SLAB THICKNESS TO MATCH EXISTING. PREPARE FOR AND APPLY NEW FLOOR FINISH
17. PARTS CART BY OWNER
18. MODIFY EXISTING FENCE FOR NEW CONSTRUCTION
19. OPERABLE WALL SYSTEM. SEE SECTION 10 22 38 FOLDING PANEL PARTITIONS. PROVIDE UNENCLOSED PANEL STORAGE AGAINST EAST WALL
20. PARTS STORAGE RACKS - BY OWNER
21. PARTS DESK FURNITURE - BY OWNER
22. 2" RIGID INSULATION UNDER FLOOR SLAB AT HATCHED AREA FOR IN-FLOOR RADIANT HEAT - SEE MECHANICAL
23. INFILL AT REMOVED DOOR/WINDOW. MATCH ADJACENT MASONRY.
24. PATCH EXISTING WALL AT REMOVED PARTITION
25. 1" YELLOW PAINTED ALIGNMENT STRIPE
26. 3" YELLOW PAINTED STRIPE AT PERIMETER OF FLOOR PIT.

PLAN GENERAL NOTES:

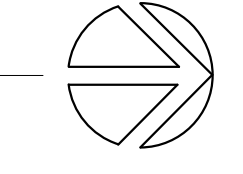
- A. REFER TO OVERALL PLANS FOR FIRE RATINGS LOCATIONS AND ACCESSIBILITY ROUTES.
- B. SEE ID SHEETS FOR FLOOR AND WALL FINISH LAYOUTS.
- C. LOOSE FURNISHINGS EXCEPT AS NOTED SHALL BE PROVIDED AND INSTALLED BY THE OWNER.
- D. FIXED EQUIPMENT IS SHOWN ON THIS PLAN FOR COORDINATION. SEE SHEETS A1XX-A1XX FOR ALL EQUIPMENT NOTES.
- E. UNLESS NOTED OTHERWISE RESTROOM FLOORS SHALL BE SLOPED A MIN. 1/16" - 1/2" TO FLOOR DRAINS - TO "CENTER", IF NO FLOOR DRAINS.
- F. PAINT ALL EXPOSED STEEL LINTELS.
- G. EXTEND ALL WALLS TO DECK UNLESS NOTED OTHERWISE. SEE A5XX FOR TOP OF WALL DETAILS.
- H. INSTALL BULLNOSE CMU AT ALL OUTSIDE CORNERS W/O TILE AND AT DOOR JAMBS AS DETAILED. NO BULLNOSE AT WINDOW JAMBS.
- I. SEE A8XX FOR WALL CONTROL JOINT DETAILS. SEE PLANS AND ELEVATIONS FOR CJ LOCATIONS. CJ = CONTROL JOINTS.
- J. SEE A8XX FOR TYPICAL HEAD FLASHING AND THROUGH-WALL FLASHING ISOMETRIC DETAILS.
- K. SEE STRUCTURAL FOR SLAB CONTROL JOINTS.
- L. GENERAL CONTRACTOR TO PROVIDE CONCRETE EQUIPMENT PADS/CURBS AS REQUIRED FOR MECHANICAL / ELECTRICAL EQUIPMENT. VERIFY SIZE, PROFILE & LOCATION WITH MECHANICAL / ELECTRICAL.
- M. VERIFY EXACT SIZE AND LOCATION OF ALL MECHANICAL / PLUMB AND ELEC OPENINGS. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FINISH AT ALL VISIBLE AREAS. ALL OPENING SHALL BE SEALED AFTER UTILITY INSTALLATION.

PLAN LEGEND:

- A - SYMBOL INDICATES WALL TYPE - SEE SHEET A600 FOR WALL TYPE DETAILS.
- △ - SYMBOL INDICATES WINDOW TYPE. SEE SHEET A600 FOR WINDOW FRAME ELEVATIONS.
- ⊗ - SYMBOL INDICATES CONSTRUCTION NOTE THIS SHEET
- ⊗ - DEMOLISHED FLOOR PATCH AND FINISH



1 FLOOR PLAN - SEGMENT B
1/8" = 1'-0"



EQUIPMENT SCHEDULE

MARK	DESCRIPTION	ROOM # LOCATION	UTILITY CONNECT.	FURNISHED		INSTALLED		REMARKS
				OWNER	CONTRACT.	OWNER	CONTRACT.	
2	AUTO LIFT - ROTARY SL210-RA	181	NONE	Yes	No	Yes	No	NEW
3	AUTO LIFT - ROTARY SPO12	140, 148, 150	NONE	Yes	No	Yes	No	NEW
4	LOCKER	105	NONE	No	Yes	Yes	Yes	NEW
5	PARTS CART	108	NONE	Yes	No	Yes	No	NEW
6	TOOL BENCH	181	NONE	Yes	No	No	Yes	NEW
7	STORAGE CABINET	181	NONE	Yes	No	No	Yes	NEW
9	LEVITON EV CHARGER	140, 146, 153, 181	NONE	Yes	No	No	Yes	NEW
10	TCA34R CENTER-CLAMP TIRE CHANGER	151	NONE	Yes	No	No	Yes	NEW
11	ROAD FORCE ELITE WHEEL BALANCER	151	NONE	Yes	No	No	Yes	NEW
12	HUNTER SURFACE MOUNT SCISSOR LIFT RACK RX12: K	145	NONE	Yes	No	Yes	No	NEW
13	ROTARY LIFT: SPO10-NS10	140	NONE	Yes	No	Yes	No	NEW

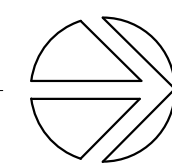


Consultant:



1 EQUIPMENT PLAN - SEGMENT A

1" = 10'-0"



WESTERN TECHNICAL COLLEGE
AUTOMOTIVE TECHNOLOGY CENTER
EQUIPMENT PLAN - SEGMENT A

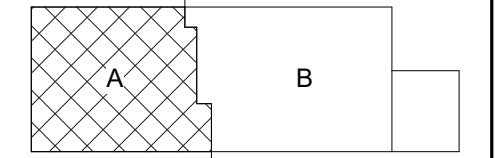
Project Title: WESTERN TECHNICAL COLLEGE
AUTOMOTIVE TECHNOLOGY CENTER
Project Location: 2721 LARSON STREET
LA CROSSE, WI 54603
Sheet Title: EQUIPMENT PLAN - SEGMENT A

HSR Project Number: 24061

Project Date: FEB 2025

Drawn By: TBS

Key Plan:



KEY PLAN

BID SET

No.	Description	Date
A04	ADD 04	3.05.2025

Graphic Scale: VARIES

Last Update: 3/6/2025 9:30:56 AM

A140



Consultant:

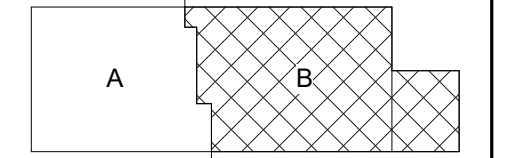
Project Title: **WESTERN TECHNICAL COLLEGE
AUTOMOTIVE TECHNOLOGY CENTER**
Project Location: 2721 LARSON STREET
LA CROSSE, WI 54603
Sheet Title: **EQUIPMENT PLAN - SEGMENT B**

HSR Project Number: **24061**

Project Date: **FEB 2025**

Drawn By: **TBS**

Key Plan:



KEY PLAN

BID SET

No.	Description	Date
A04	ADD 04	3.05.2025

Graphic Scale:

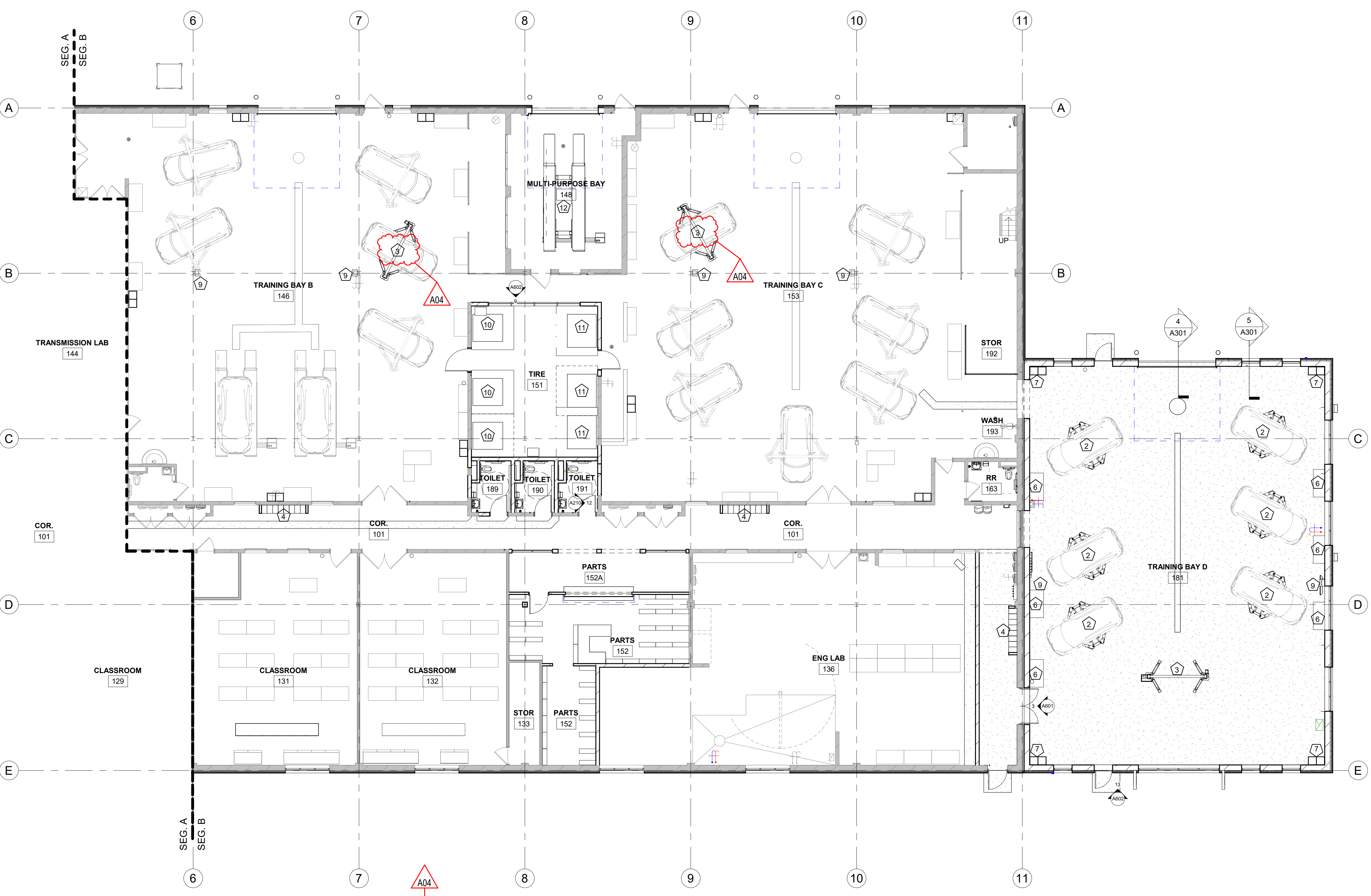
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Last Update:

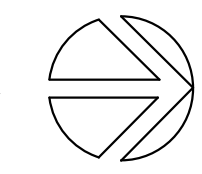
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A141

MARK	DESCRIPTION	ROOM # LOCATION	UTILITY CONNECT.	FURNISHED		INSTALLED		REMARKS
				OWNER	CONTRACT.	OWNER	CONTRACT.	
2	AUTO LIFT - ROTARY SL210-RA	181	NONE	Yes	No	Yes	No	NEW
3	AUTO LIFT - ROTARY SPO12	140, 148, 153	NONE	Yes	No	Yes	No	NEW
4	LOCKER	10	NONE	Yes	No	Yes	Yes	NEW
5	PARTS CART	106	NONE	Yes	No	Yes	No	NEW
6	TOOL BENCH	181	NONE	Yes	No	Yes	Yes	NEW
7	STORAGE CABINET	283	NONE	Yes	No	Yes	Yes	NEW
9	LEVITON EV CHARGER	140, 148, 153, 181	NONE	Yes	No	Yes	Yes	NEW
10	TC34R CENTER-CLAMP TIRE CHANGER	151	NONE	Yes	No	Yes	Yes	NEW
11	ROAD FORCE ELITE WHEEL BALANCER	151	NONE	Yes	No	Yes	Yes	NEW
12	HUNTER SURFACE-MOUNT SCISSOR LIFT RACK RX12-K	148	NONE	Yes	No	Yes	No	NEW
13	ROTARY LIFT: SPO10-NS10	140	NONE	Yes	No	Yes	No	NEW



1 EQUIPMENT PLAN - SEGMENT B
1" = 10'-0"





Consultant:

ELEVATION GENERAL NOTES:

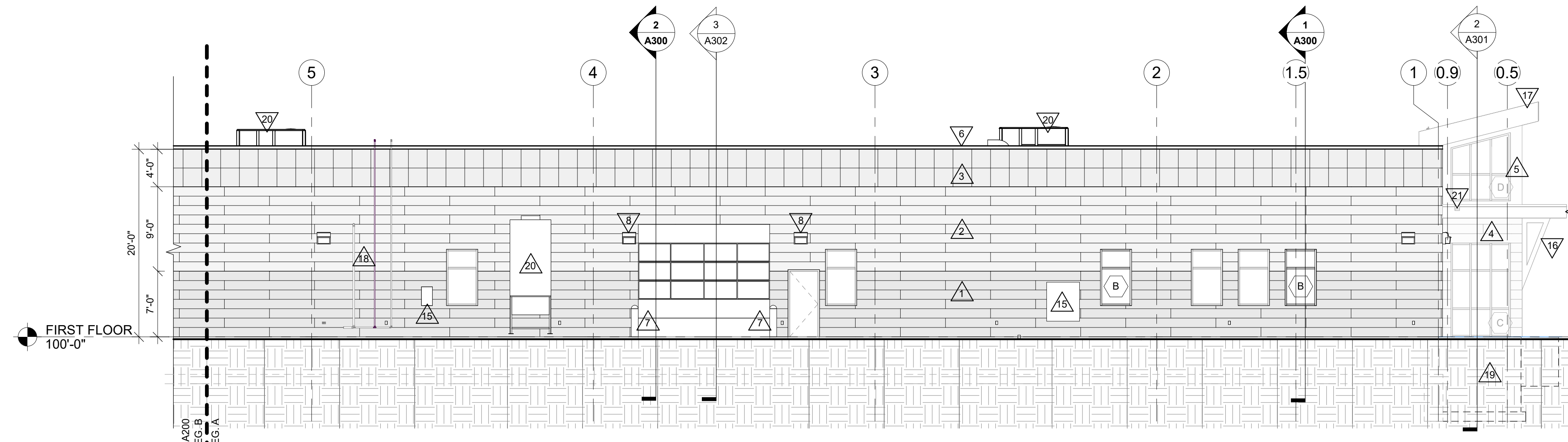
A SEE SPECIFICATION FOR MATERIAL TYPE.

ELEVATION LEGEND:

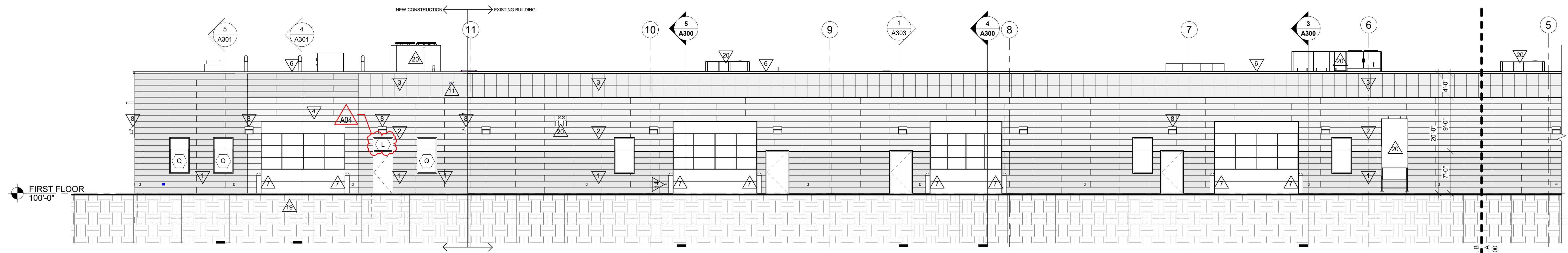
- KEYNOTE TAG
- WINDOW TAG - SEE SHEET A603 FOR FRAME ELEVATIONS
- MATERIAL TYPE 1
12" HIGH METAL PANEL - CARMINE BLUSH COLOR
- MATERIAL TYPE 2
12" HIGH METAL PANEL - LIGHT BRONZE COLOR
- MATERIAL TYPE 3
2'-0" X 2'-0" METAL PANEL - ALMOND SUEDE COLOR
- MATERIAL TYPE 4 - METAL PANEL - CARDINAL RED
- MATERIAL TYPE 5 - METAL PANEL - PLATINUM SILVER

KEY NOTES ELEVATION

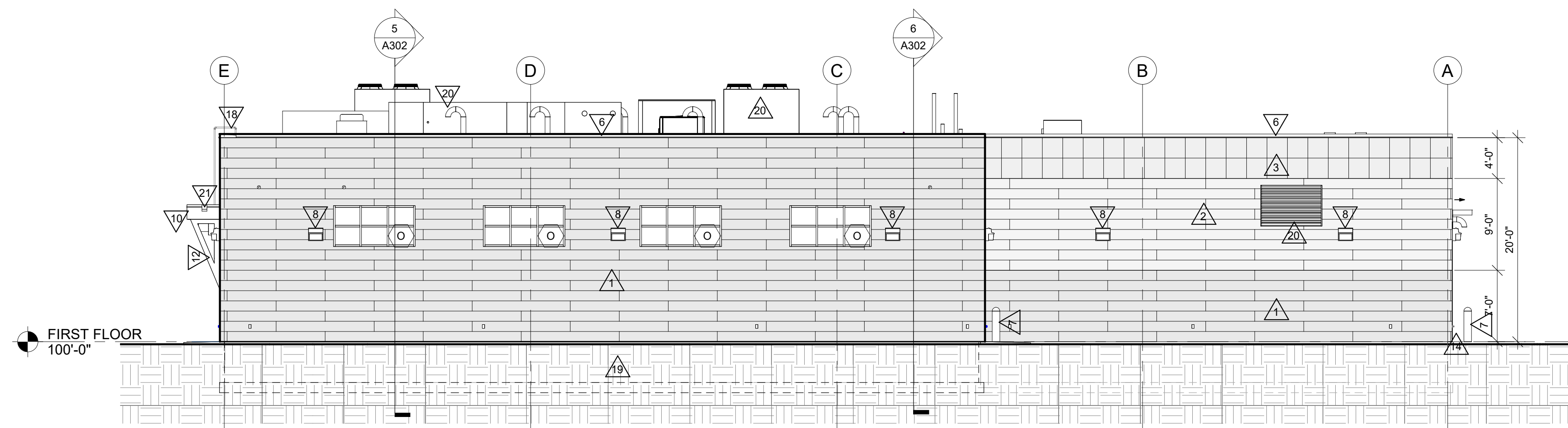
- 1 MATERIAL TYPE 1 - 12" HIGH METAL PANEL - CARMINE BLUSH
- 2 MATERIAL TYPE 2 - 12" HIGH METAL PANEL - LIGHT BRONZE
- 3 MATERIAL TYPE 3 - 2'-0" X 2'-0" METAL PANEL - ALMOND SUEDE
- 4 MATERIAL TYPE 4 - METAL PANEL - CARDINAL RED
- 5 MATERIAL TYPE 5 - METAL PANEL - PLATINUM SILVER
- 6 METAL CAP
- 7 BOLLARD - SEE CIVIL
- 8 EXTERIOR LIGHTING - SEE ELECTRICAL
- 9 "H" CAPS ALUMINUM SIGN LETTERS MOUNTED TO STEEL TUBE. SEE DETAIL A201.
- 10 CANOPY - SEE ROOF PLAN
- 11 THROUGH WALL SCUPPER
- 12 CANOPY SUPPORT (PAINT) - SEE STRUCTURAL
- 13 NOT USED
- 14 PLUMBING FIXTURE - SEE PLUMBING
- 15 EV CHARGER - SEE ELECTRICAL
- 16 DECORATIVE STEEL BRACKET (PAINT)
- 17 PREFINISHED METAL FASCIA
- 18 PIPING - SEE PLUMBING
- 19 CONC FOUNDATION AND FOOTING - SEE STRUCTURAL
- 20 MECHANICAL EQUIPMENT - SEE MECHANICAL
- 21 CANOPY SCUPPER



1 WEST ELEVATION - SEGMENT A
1/8" = 1'-0"



2 WEST ELEVATION - SEGMENT B
1/8" = 1'-0"

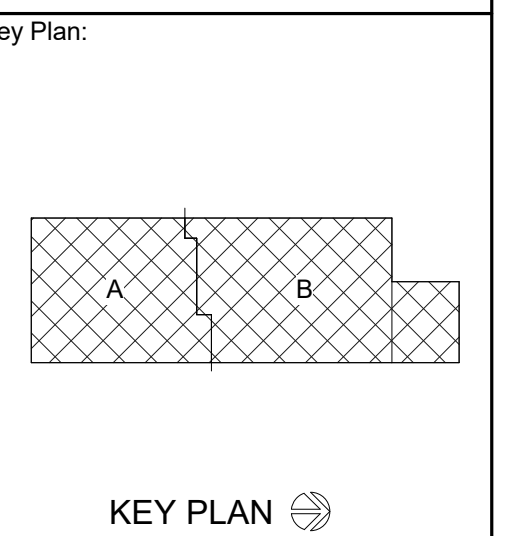


3 NORTH ELEVATION
1/8" = 1'-0"

**WESTERN TECHNICAL COLLEGE
AUTOMOTIVE TECHNOLOGY CENTER**
 Project Location: 2721 LARSON STREET
LA CROSSE, WI 54603
 Sheet Title: **EXTERIOR ELEVATIONS**

Project Title:
Project Number:
Project Date:
Drawn By:

HSR Project Number: **24061**
 Project Date: **FEB 2025**
 Drawn By: **TBS**



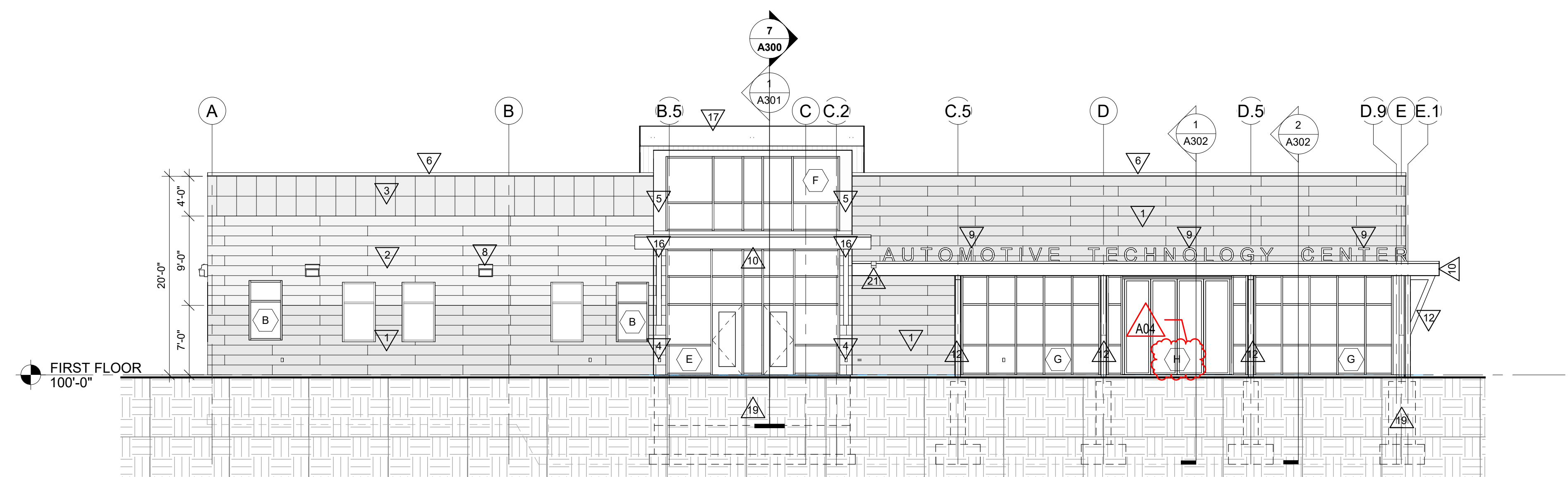
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No.	Description	Date
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A04	ADD 04	3.05.2025

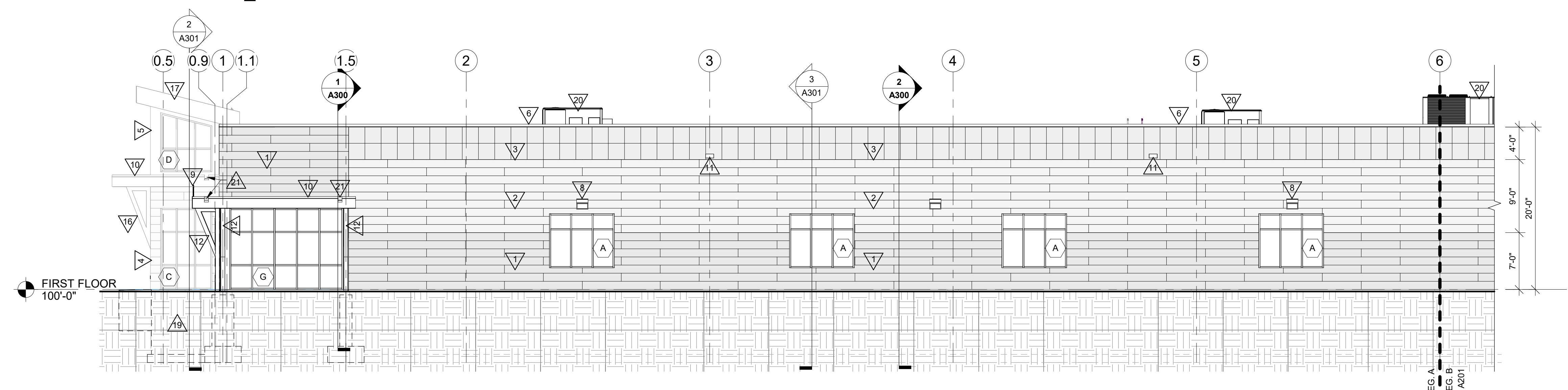
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Last Update:
3/6/2025 9:31:46 AM

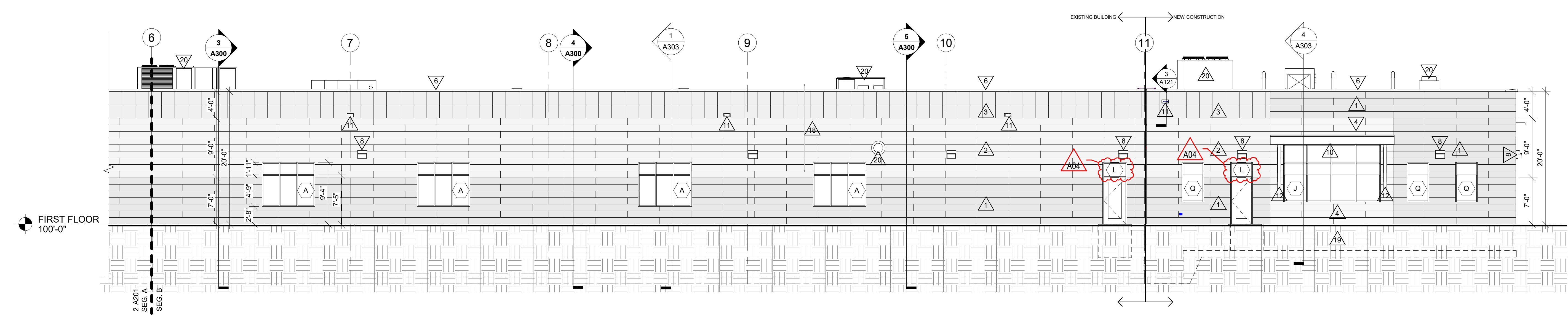
A200



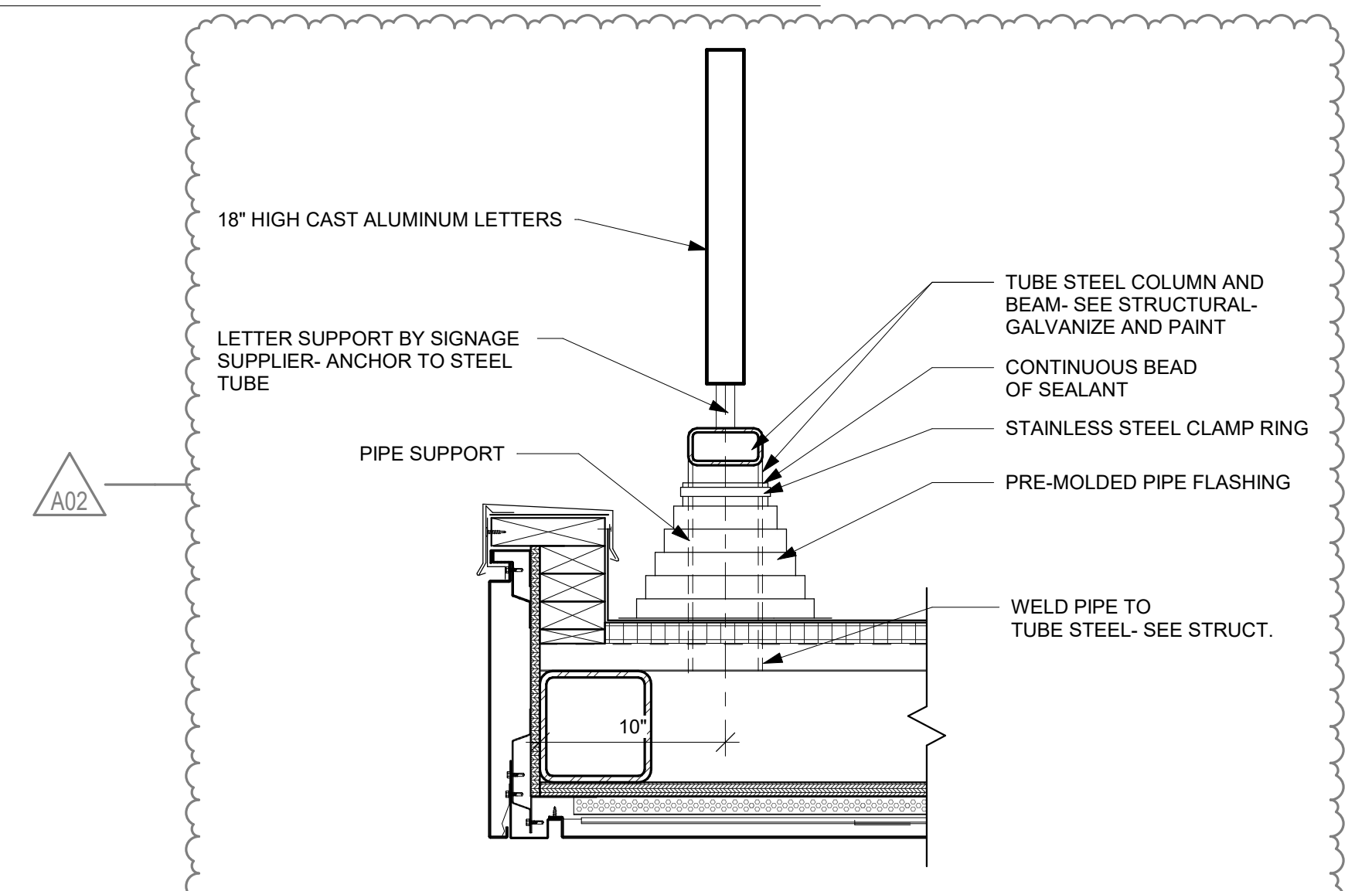
1 SOUTH ELEVATION
1/8" = 1'-0"



2 EAST ELEVATION - SEGMENT A
1/8" = 1'-0"



3 EAST ELEVATION - SEGMENT B
1/8" = 1'-0"



4 SIGN SUPPORT DETAIL
1 1/2" = 1'-0"

ELEVATION GENERAL NOTES:

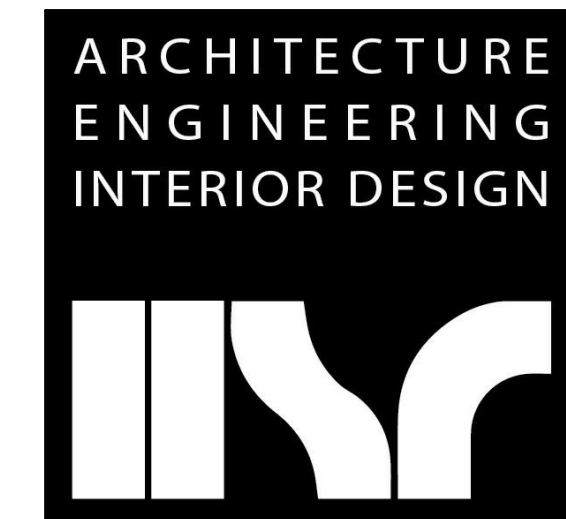
A SEE SPECIFICATION FOR MATERIAL TYPE.

ELEVATION LEGEND:

- △ KEYNOTE TAG
- ◊ WINDOW TAG - SEE SHEET A603 FOR FRAME ELEVATIONS
- MATERIAL TYPE 1
12" HIGH METAL PANEL - CARMINE BLUSH COLOR
- MATERIAL TYPE 2
12" HIGH METAL PANEL - LIGHT BRONZE COLOR
- MATERIAL TYPE 3
2'-0" X 2'-0" METAL PANEL - ALMOND SUEDE COLOR
- MATERIAL TYPE 4 - METAL PANEL - CARDINAL RED
- MATERIAL TYPE 5 - METAL PANEL - PLATINUM SILVER

KEY NOTES ELEVATION

- 1 MATERIAL TYPE 1 - 12" HIGH METAL PANEL - CARMINE BLUSH
- 2 MATERIAL TYPE 2 - 12" HIGH METAL PANEL - LIGHT BRONZE
- 3 MATERIAL TYPE 3 - 2'-0" X 2'-0" METAL PANEL - ALMOND SUEDE
- 4 MATERIAL TYPE 4 - METAL PANEL - CARDINAL RED
- 5 MATERIAL TYPE 5 - METAL PANEL - PLATINUM SILVER
- 6 METAL CAP
- 7 BOLLARD - SEE CIVIL
- 8 EXTERIOR LIGHTING - SEE ELECTRICAL
- 9 18" CAST ALUMINUM SIGN LETTERS MOUNTED TO STEEL TUBE - SEE DETAIL A201
- 10 CANOPY - SEE ROOF PLAN
- 11 THROUGH WALL SCUPPER
- 12 CANOPY SUPPORT (PAINT) - SEE STRUCTURAL
- 13 (NOT USED)
- 14 PLUMBING FIXTURE - SEE PLUMBING
- 15 EV CHARGER - SEE ELECTRICAL
- 16 DECORATIVE STEEL BRACKET (PAINT)
- 17 PREFINISHED METAL FASCIA
- 18 PIPING - SEE PLUMBING
- 19 CONC FOUNDATION AND FOOTING - SEE STRUCTURAL
- 20 MECHANICAL EQUIPMENT - SEE MECHANICAL
- 21 CANOPY SCUPPER



**ARCHITECTURE
ENGINEERING
INTERIOR DESIGN**

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Consultant:

**WESTERN TECHNICAL COLLEGE
AUTOMOTIVE TECHNOLOGY CENTER**

Project Title: WESTERN TECHNICAL COLLEGE
AUTOMOTIVE TECHNOLOGY CENTER

Project Location: 2721 LARSON STREET
LA CROSSE, WI 54603

Sheet Title: EXTERIOR ELEVATIONS

Project Number: **24061**

Project Date: **FEB 2025**

Drawn By: **TBS**

Key Plan:

Revisions:

No.	Description	Date
A02	ADD 02	2.27.2025
A04	ADD 04	3.05.2025

BID SET

Graphic Scale: **VARIES**

Last Update: **3/6/2025 9:32:31 AM**

A201



Consultant:

HSR Project Number: 24061

Project Date: FEB 2025

Drawn By: TBS

Key Plan:

BID SET

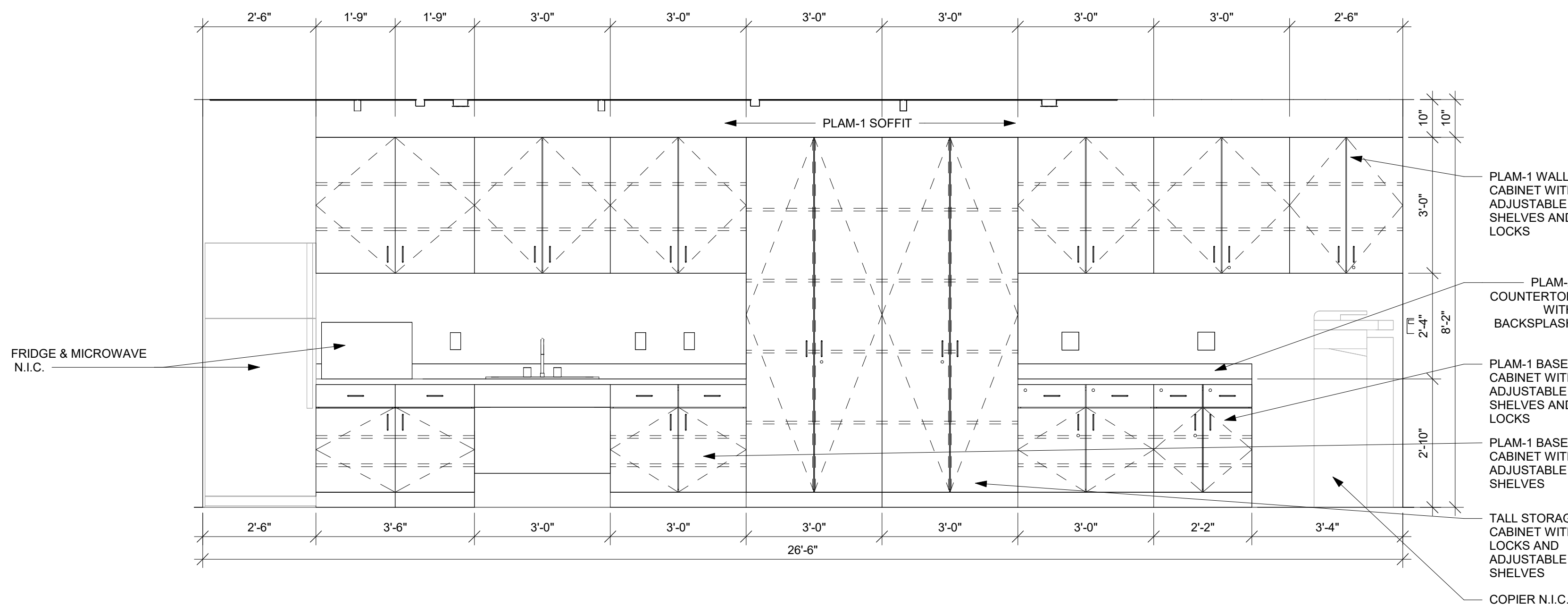
No.	Description	Date
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A04	ADD 04	3.05.2025

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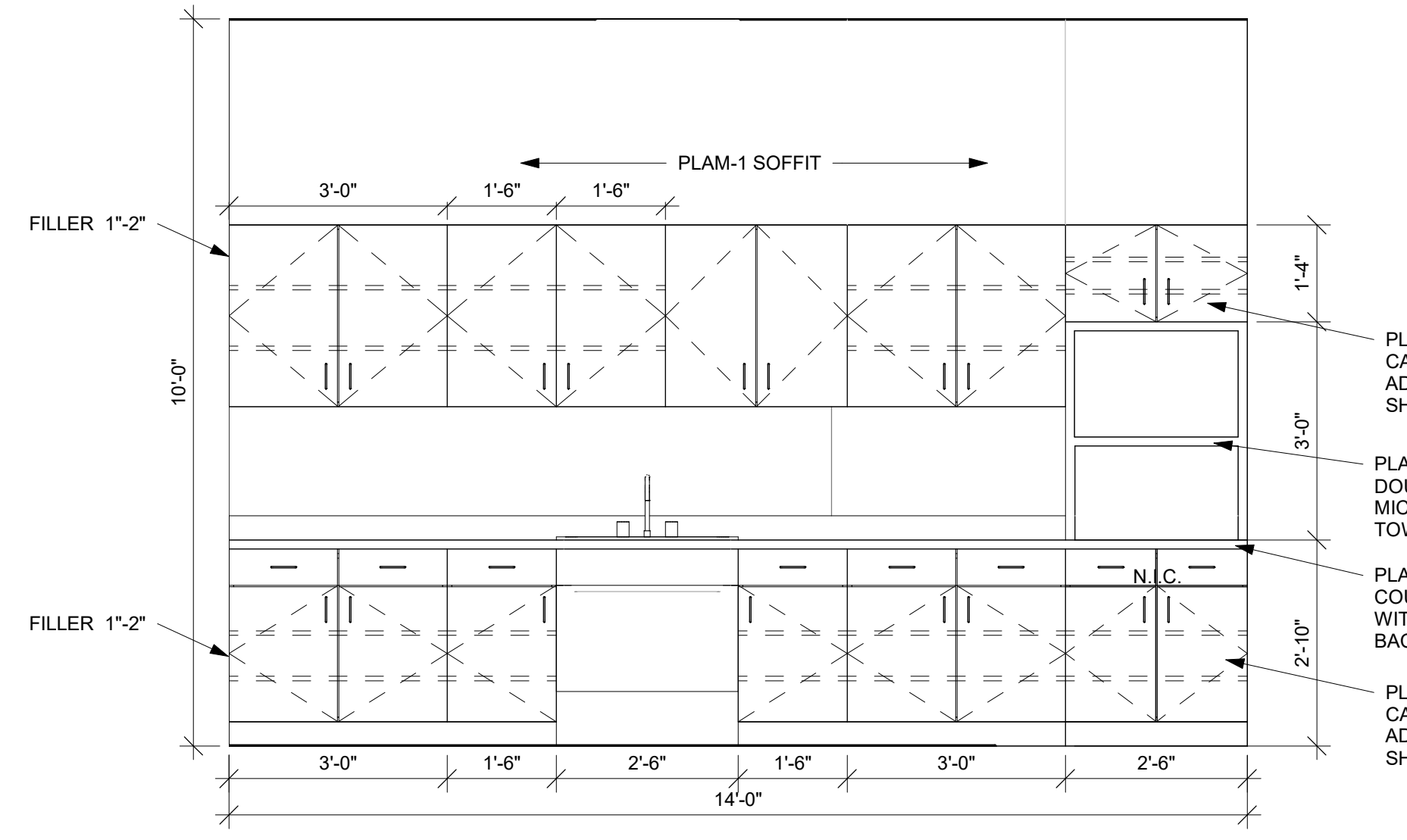
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A210

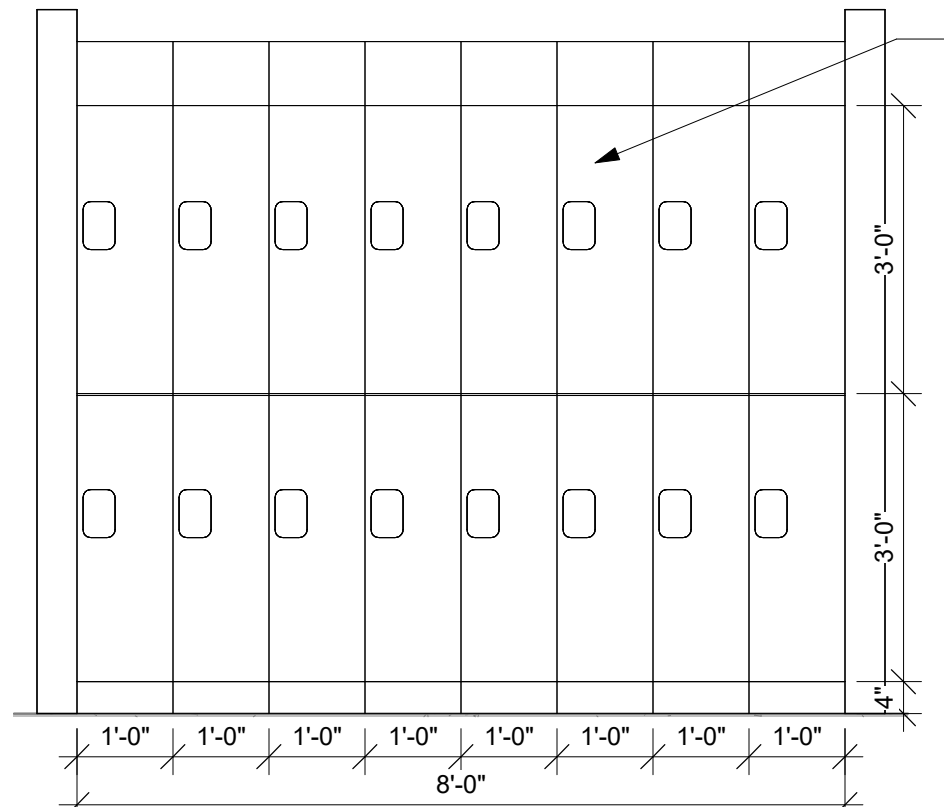
- CASEWORK GENERAL NOTES:**
- A. ALL CABINET LOCKS SHALL BE KEYPED ALIKE.
 - B. CASEWORK MANUFACTURER SHALL FIELD VERIFY ALL CASEWORK DIMENSIONS & CONDITIONS PRIOR TO FABRICATION OF CASEWORK.
 - C. PROVIDE FINISHED END PANELS AT ALL KNEE SPACE, ALCOVES, AND EXPOSED CABINET ENDS.
 - D. INSTALL 1-1/2" WOOD BLOCKING BETWEEN STUDS FOR CASEWORK MOUNTING AT TOP AND BOTTOM OF ALL WALL CABINETS AND AT TOP OF ALL BASE CABINETS.
 - E. ALL BASE CABINET KNOBS, ALCOVES, KNEE SPACE AND END PANELS SHALL RECEIVE BASE UNLESS OTHERWISE NOTED. SEE MASTER COLOR SCHEDULE FOR SIZE AND COLOR.
 - F. SEAL EDGE OF COUNTER/BACKSPLASH TO ALL WALL LOCATIONS W/ CLEAR SEALANT.
 - G. PROVIDE CORN GROMMETS AT ALL WORK STATIONS - COORDINATE W/ OWNER FOR LOCATIONS.
 - H. REFER TO MASTER COLOR SCHEDULE FOR PLASTIC LAMINATE SELECTIONS. ALL PLAM COUNTERTOPS TO BE PLAM-2. ALL LOWERUPPER CASEWORK TO BE PLAM-1. UNLESS OTHERWISE NOTED. [CONFIRM PLAM SELECTION W/ INTERIORS]
 - I. INSTALL TWO MAGNETIC CATCHES FOR ALL TALL CABINETS, TOP AND BOTTOM AT EACH DOOR. TALL CABINETS WITH LOCKS SHALL ALSO HAVE AN ELBOW LATCH INSTALLED AT A CENTER FIXED SHELF. ALL OTHER SHELVES SHALL BE ADJUSTABLE.
 - J. WALL CABINETS SHALL BE 13 1/2" DEEP (CLEAR INSIDE) AND BASE CABINETS SHALL BE 24" DEEP UNLESS NOTED OTHERWISE. COUNTERTOPS TO EXTEND 1" BEYOND THE FINISHED EDGE OF BASE CABINET UNLESS NOTED OTHERWISE.
 - K. LAMINATE GRAIN TO ALIGN VERTICALLY ON ALL CASEWORK.
 - L. REFER TO ACCESSORY SCHEDULE.



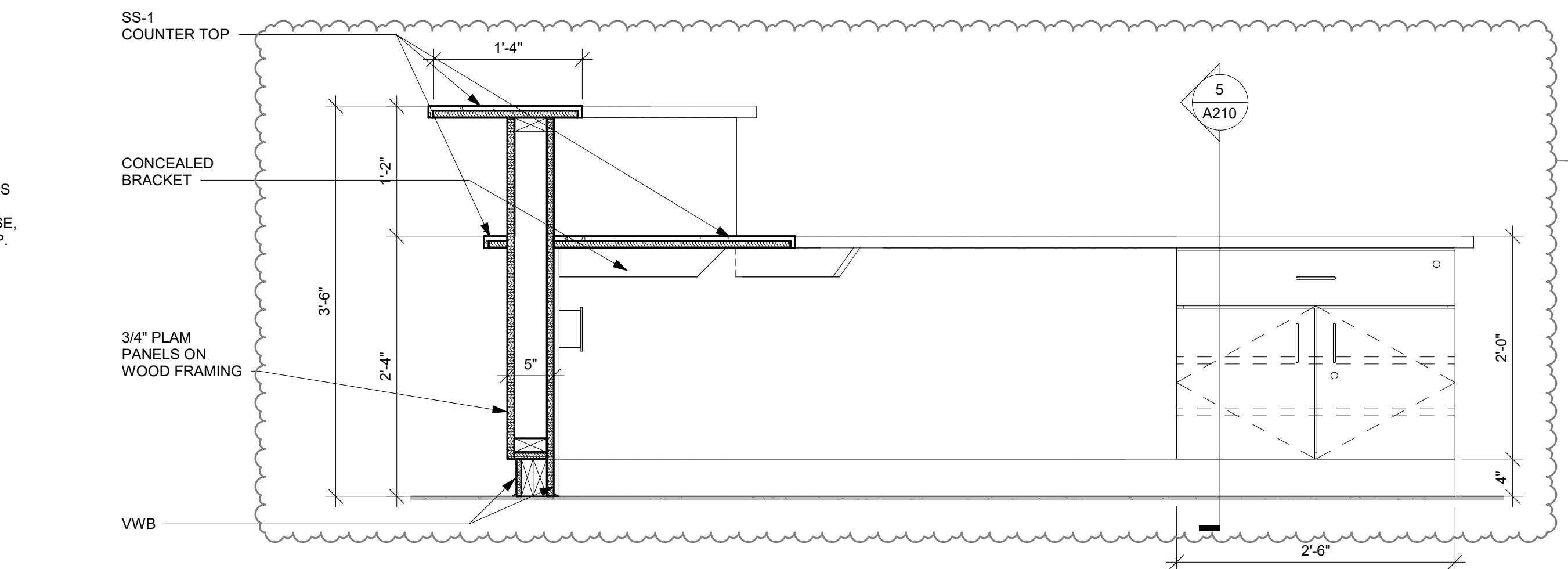
1 CSWK RM 106
1/2" = 1'-0"



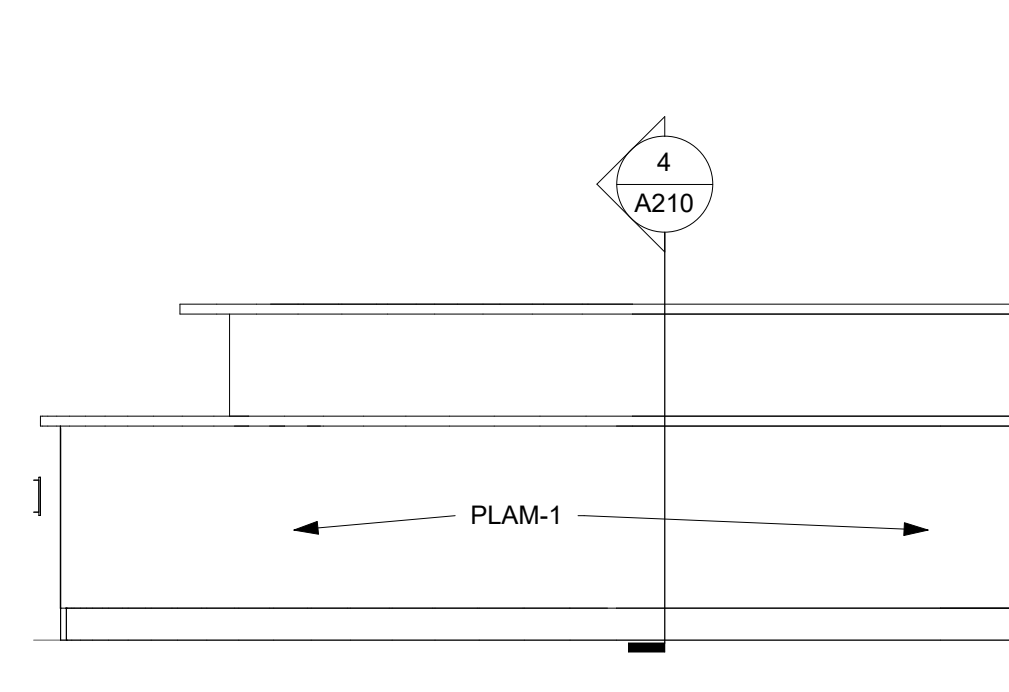
2 CSWK RM 119
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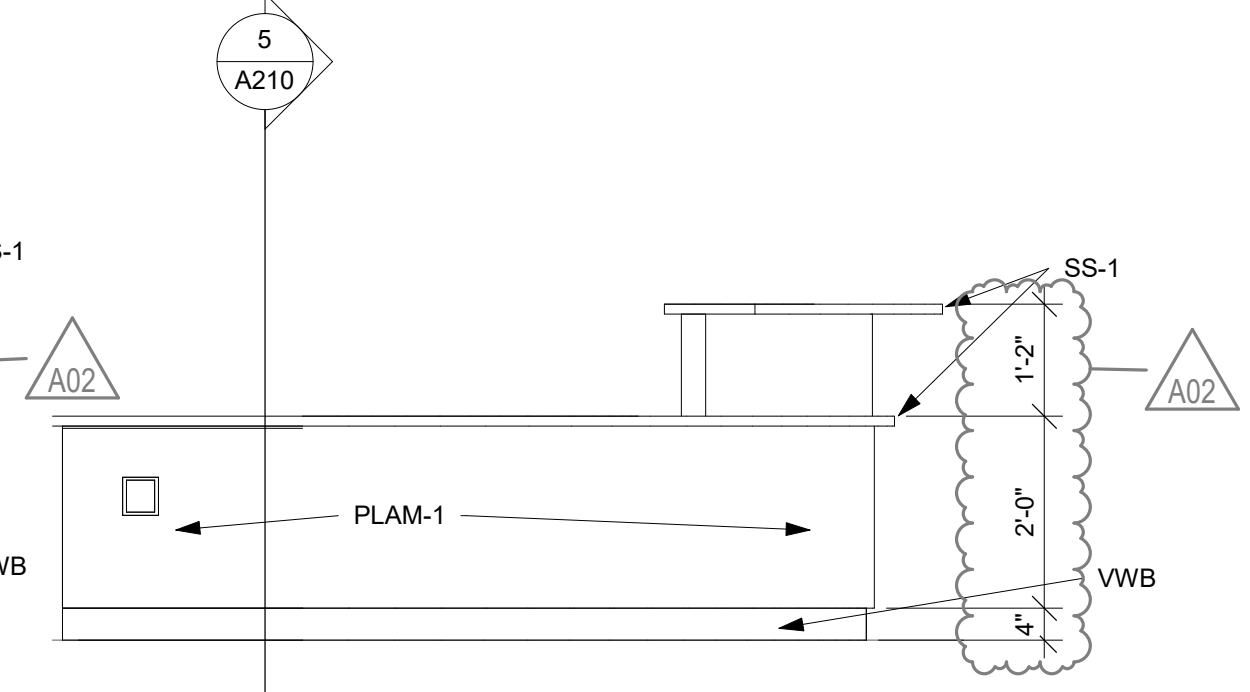
3 LOCKER ELEVATION
1/2" = 1'-0"



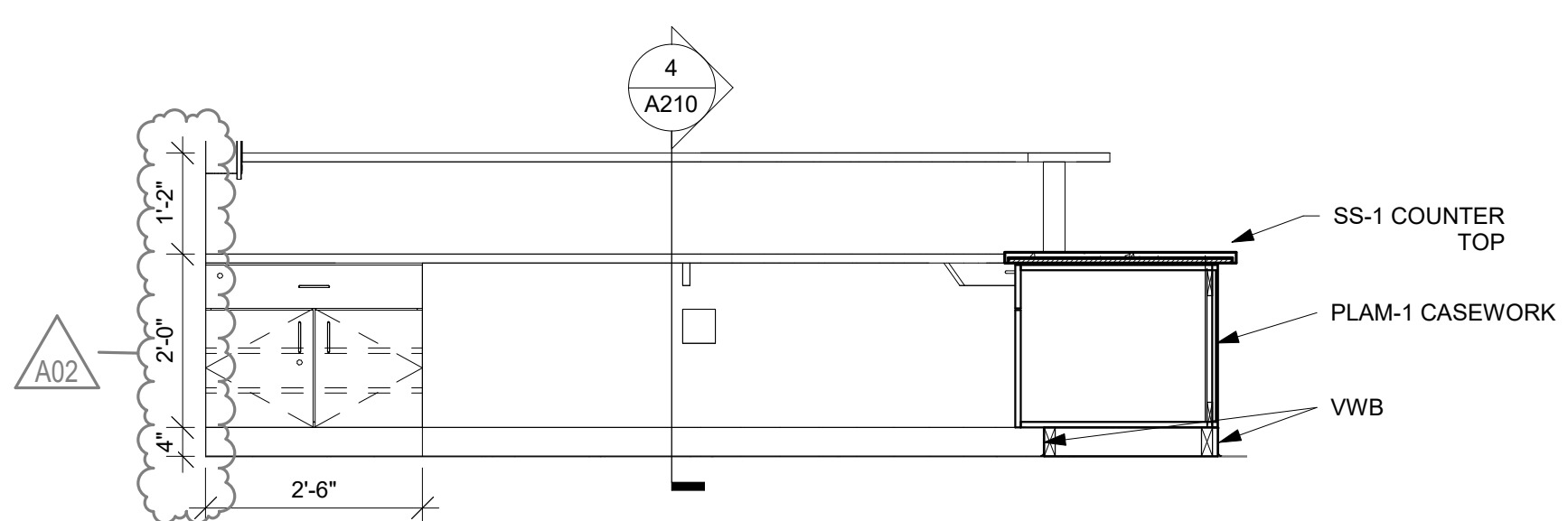
4 FRONT DESK SECTION
1" = 1'-0"



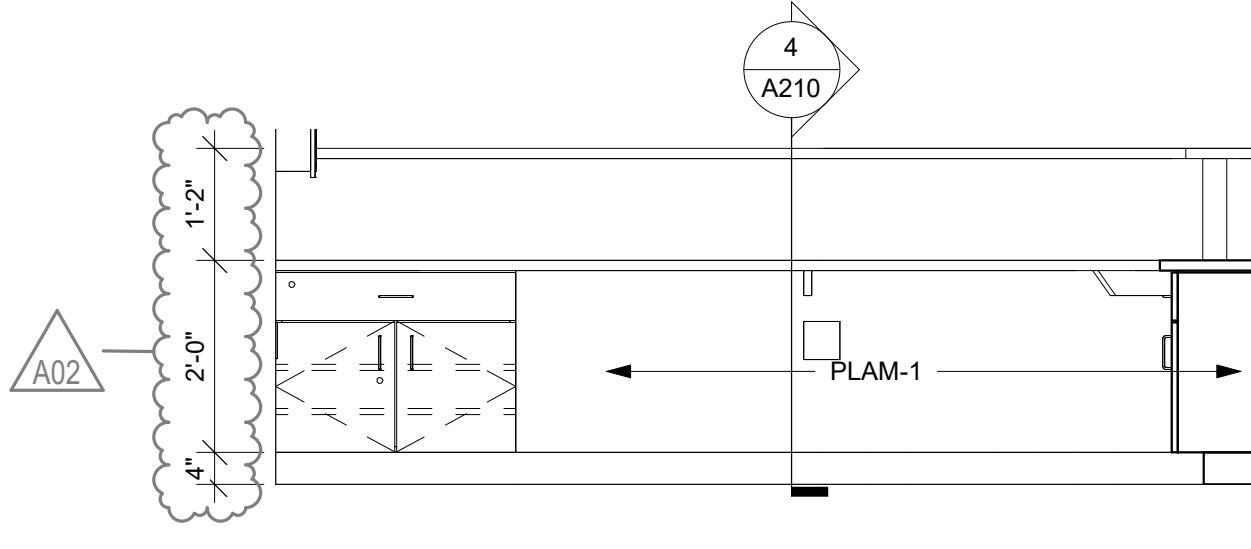
6 FRONT DESK ELEV
1/2" = 1'-0"



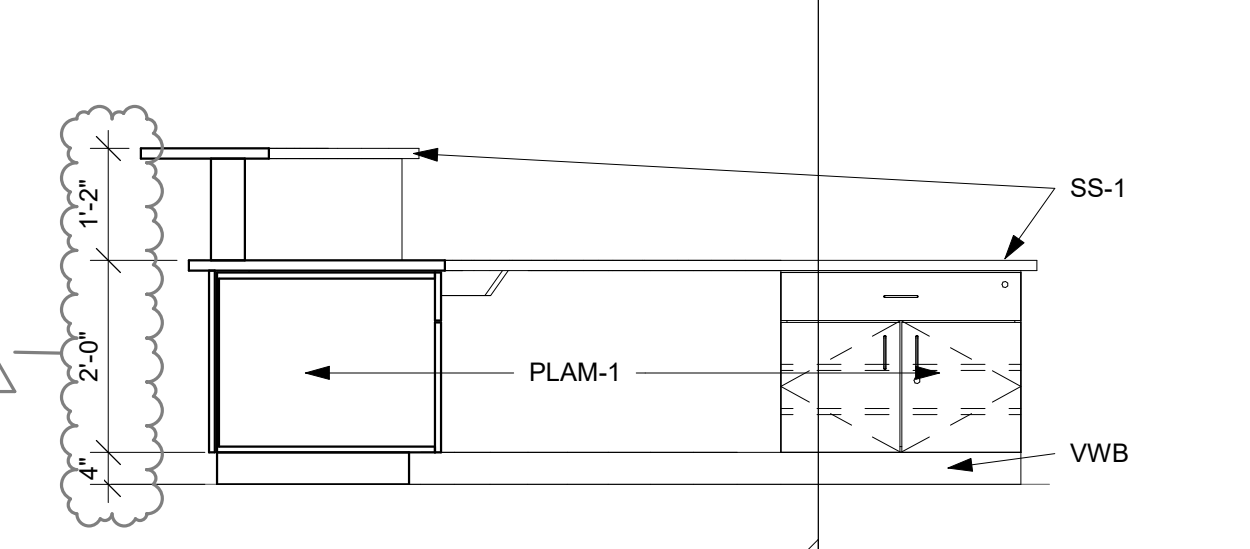
7 FRONT DESK ELEV
1/2" = 1'-0"



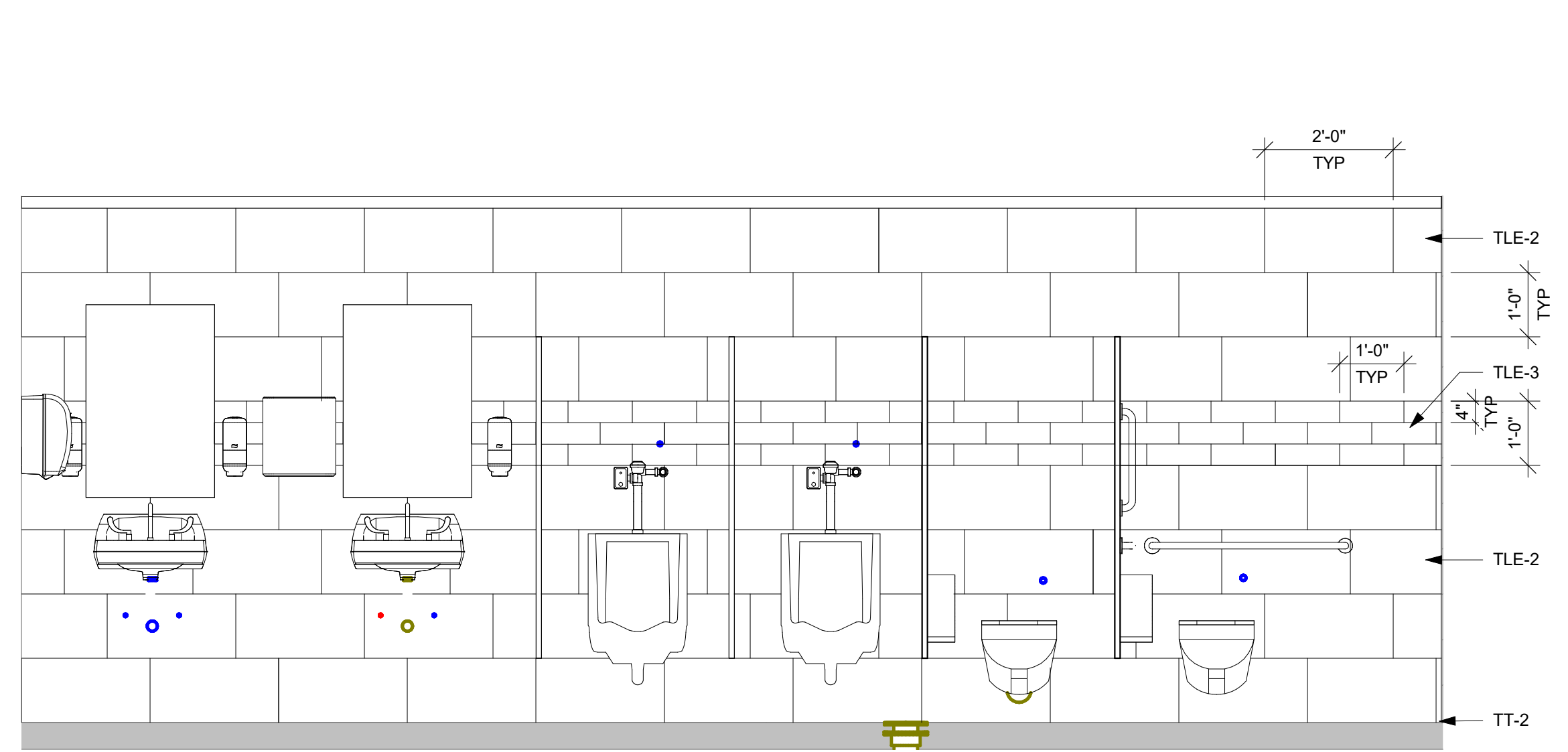
5 FRONT DESK SECTION
1/2" = 1'-0"



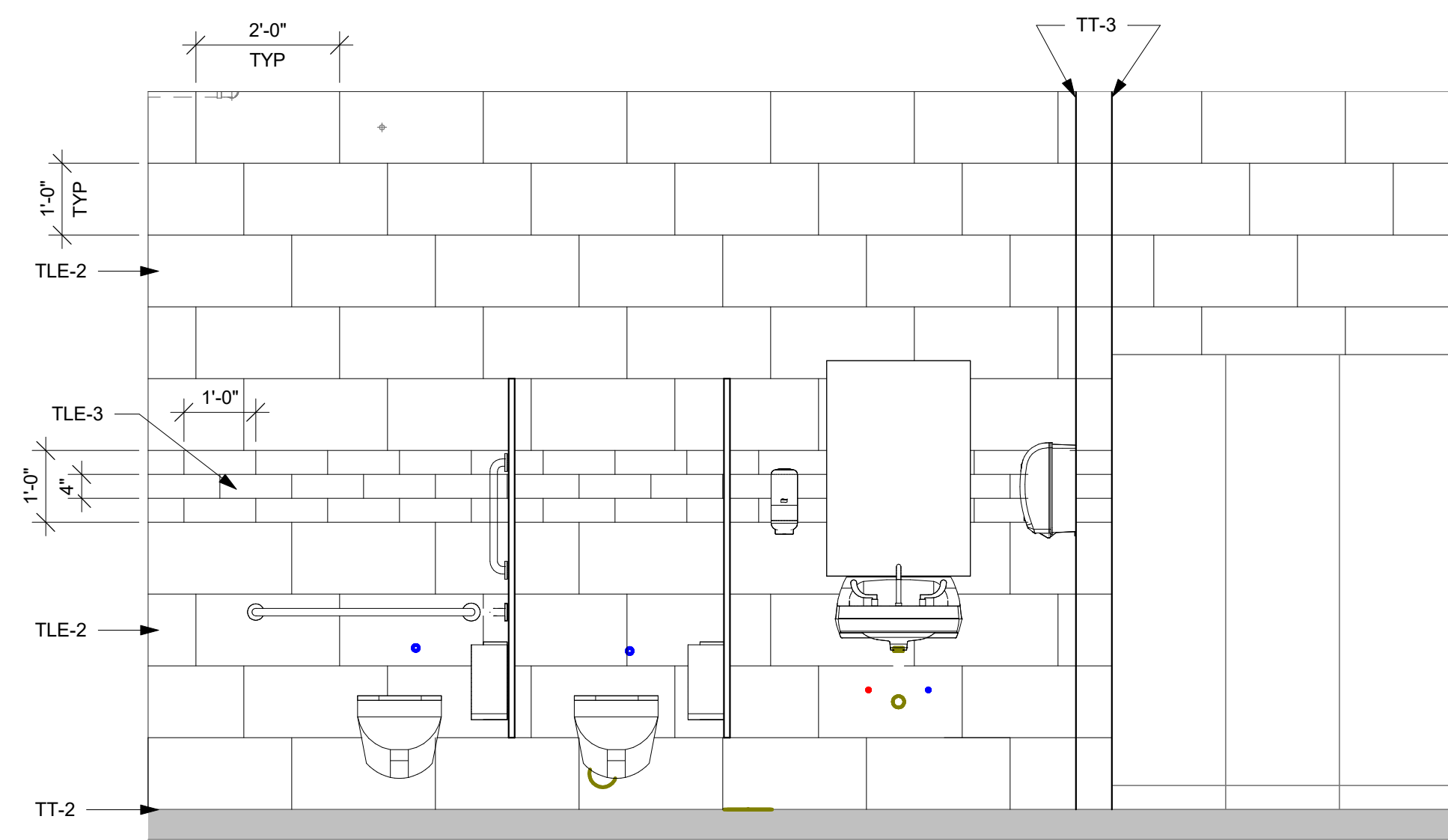
8 FRONT DESK ELEV
1/2" = 1'-0"



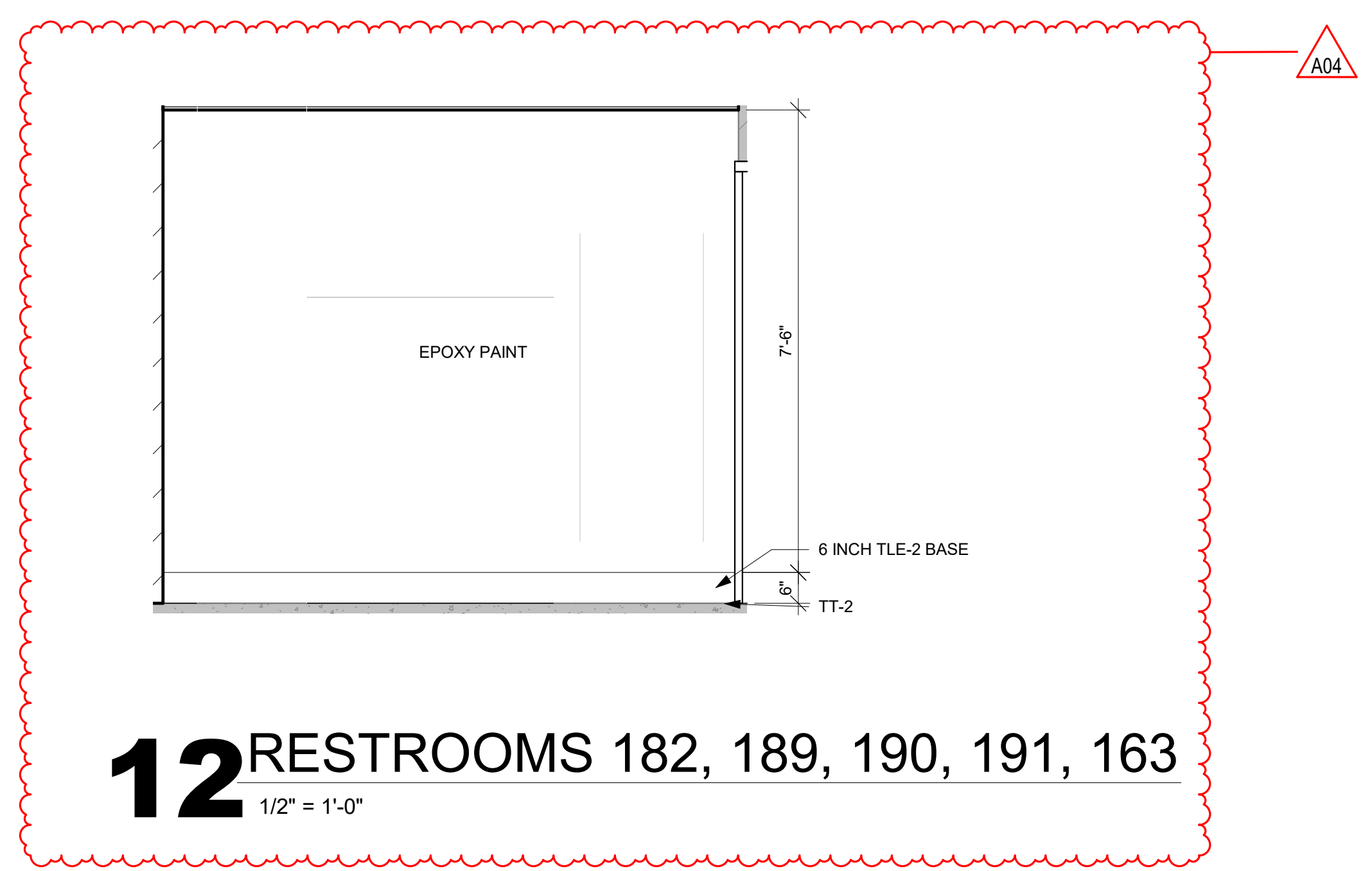
9 FRONT DESK ELEV
1/2" = 1'-0"



10 Mens 115
1/2" = 1'-0"



11 Womens 114
1/2" = 1'-0"



12 RESTROOMS 182, 189, 190, 191, 163
1/2" = 1'-0"



Consultant:

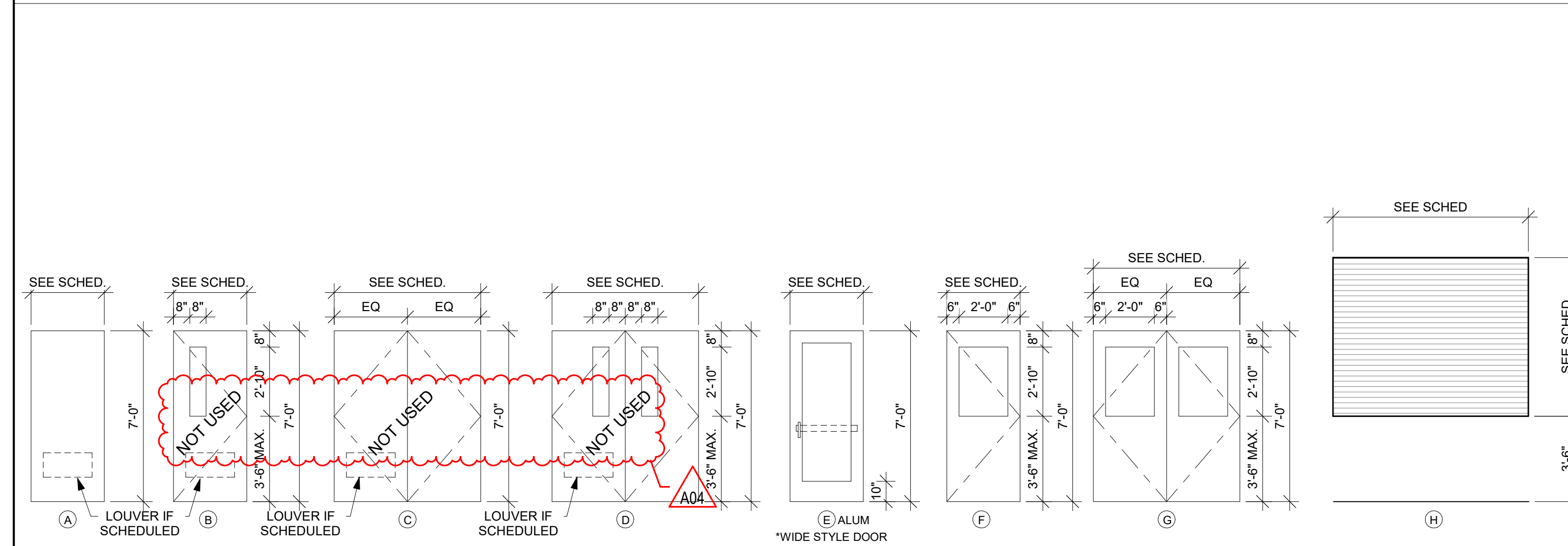
MARK	DOOR				FRAME				DETAILS			HDWR	REMARKS		
	SIZE			DOOR TYPE	DOOR MATERIAL	GLASS TYPE	FRAME TYPE	FRAME DEPTH	FRAME MATERIAL	GLASS TYPE	HEAD			JAMB	SILL
	W	H	T												
100.1	3'-0"	7'-0"	1 1/2"	DOOR E	ALUM	GLT-4	WINDOW N	4 1/2"	ALUM	GLT-4				1	1
100.2	3'-0"	7'-0"	1 1/2"	DOOR E	ALUM	GLT-4	WINDOW N	4 1/2"	ALUM	GLT-4				1	1
103	3'-0"	7'-0"	1 1/2"	DOOR A	SCWD		FRAME JJ	5 7/8"	HM	GLT-4		1/A500		4	9
104	3'-0"	7'-0"	1 1/2"	DOOR A	SCWD		FRAME JJ	5 7/8"	HM	GLT-4		1/A500		4	9
105	3'-0"	7'-0"	1 1/2"	DOOR A	SCWD		FRAME JJ	5 7/8"	HM	GLT-4		1/A500		4	9
107	3'-0"	7'-0"	1 1/2"	DOOR A	SCWD		FRAME JJ	5 7/8"	HM	GLT-4		1/A500		4	9
108	3'-0"	7'-0"	1 1/2"	DOOR A	SCWD		FRAME JJ	5 7/8"	HM	GLT-4		1/A500		4	9
109	3'-0"	7'-0"	1 1/2"	DOOR A	SCWD		FRAME JJ	5 7/8"	HM	GLT-4		1/A500		4	9
110	3'-0"	7'-0"	1 1/2"	DOOR A	SCWD		FRAME JJ	5 7/8"	HM	GLT-4		1/A500		4	9
112	3'-0"	7'-0"	1 1/2"	DOOR A	SCWD		FRAME JJ	5 7/8"	HM	GLT-4		1/A500		4	9
117	3'-0"	7'-0"	1 1/2"	DOOR A	SCWD		FRAME HH	8 3/4"	HM	GLT-4		7/A500		4	9
119	11'-0"	10'-0"	1 3/4"	DOOR J	ALUM	GLT-13	WINDOW H		ALUM	GLT-13		8/A500	18/A500	-	10
140.3	14'-0"	12'-0"	1 1/2"	DOOR J	STEEL	GLT-13	FRAME-CH-TRACK	1'-1 5/8"	STEEL		6/A500	16/A510		-	3, 4, 10
140.2	14'-0"	12'-0"	1 1/2"	DOOR J	STEEL	GLT-13	FRAME-CH-TRACK	1'-1 5/8"	STEEL		6/A500	16/A510		-	3, 4, 10
148.3	12'-0"	12'-0"	1 1/2"	DOOR J	STEEL	GLT-13	FRAME-CH-TRACK	1'-1 5/8"	STEEL		6/A500	16/A510		-	3, 4, 6, 10
151.1	4'-0"	7'-0"	1 3/4"	DOOR F	HM		FRAME BB	8 3/4"	HM					5	2, 9
151.2	3'-4"	7'-0"	1 3/4"	DOOR F	HM		FRAME BB	8 3/4"	HM					5	2, 9
152.1	3'-4"	7'-0"	1 3/4"	DOOR F	SCWD		FRAME AA	5 7/8"	HM		8/A500	7/A500		6	1, 2, 9
152.2	12'-0"	5'-0"	1 1/2"	DOOR H	ALUM		FRAME-CH-ROLLI	5"	ALUM					-	5, 9
153.3	14'-0"	12'-0"	1 1/2"	DOOR J	STEEL	GLT-13	FRAME-CH-TRACK	1'-1 5/8"	STEEL		6/A500	16/A510		-	3, 4, 10
181.1	6'-4"	7'-0"	1 1/2"	DOOR G	HM	GLT-4	FRAME KK	8 3/4"	HM	GLT-4		16/A500 SIM		8	2
181.2	6'-4"	7'-0"	1 1/2"	DOOR E	ALUM	GLT-13	WINDOW L	4 1/2"	ALUM	GLT-13			13/A500	2	1, 6
181.3	3'-0"	7'-0"	1 1/2"	DOOR A	FRP		WINDOW L	4 1/2"	ALUM	GLT-13			13/A500	3	1, 2, 6
181.4	14'-0"	12'-0"	1 1/2"	DOOR J	STEEL	GLT-13	FRAME-CH-TRACK	1'-5 1/8"	STEEL		11/A500	7/A510	12/A500	-	3, 4
189	3'-0"	7'-0"	1 3/4"	DOOR A	SCWD		FRAME BB	8 3/4"	HM		8/A500	7/A500		7	2, 9
190	3'-0"	7'-0"	1 3/4"	DOOR A	SCWD		FRAME BB	8 3/4"	HM		3/A500	2/A500		7	2, 9
191	3'-0"	7'-0"	1 3/4"	DOOR A	SCWD		FRAME BB	8 3/4"	HM		3/A500	2/A500		7	2, 9
194.1	3'-4"	7'-0"	1 1/2"	DOOR E	ALUM	GLT-13	WINDOW L	4 1/2"	ALUM	GLT-13	9/A500 SIM		13/A500 SIM	2	1, 6, 10
V100.1	3'-0"	7'-0"	1 1/2"	DOOR E	ALUM	GLT-13	WINDOW E	6"	ALUM	GLT-13			13/A500	1	1, 6
V100.2	3'-0"	7'-0"	1 1/2"	DOOR E	ALUM	GLT-13	WINDOW E	6"	ALUM	GLT-13			13/A500	1	1, 6, 7

DOOR SCHEDULE GENERAL NOTES

- HM = HOLLOW METAL ALUM = ALUMINUM SCWD = SOLID CORE WOOD DOOR
- A. SEE SPECIFICATIONS FOR DOOR HARDWARE GROUPS
- B. ALL HM (HOLLOW METAL) DOORS AND FRAMES SHALL BE PAINTED
- C. ALL DOUBLE DOORS TO HAVE TWO EQUAL LEAFS UNLESS NOTED OTHERWISE

FRP = FIBERGLASS REINFORCED POLYMER

DOOR TYPES



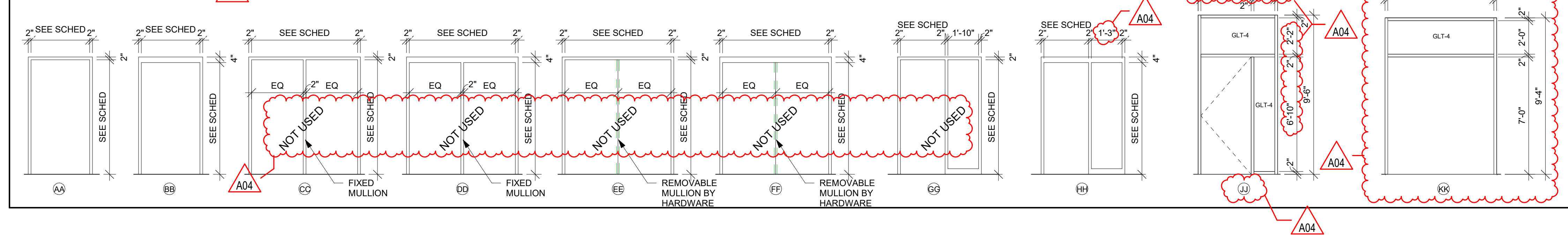
DOOR SCHEDULE REMARKS

- ELECTRONIC CARD ACCESS AND ELECTRIC STRIKE REQUIRED
- STANDARD KICK PLATE
- SECTIONAL DOOR TO BE MOTORIZED
- INSULATED GLAZING PER MANUFACTURER STANDARD. SEE SPECIFIED GLASS TYPE IN 08 56 13
- DOOR TO BE CHAIN OPERATED DOOR POSITION SWITCH
- DOOR POSITION SWITCH
- AUTO OPERATOR
- HIGH-LIFT OVERHEAD DOOR TRACK-MOUNT TRACK AS CLOSE TO ROOF STRUCTURE AS POSSIBLE
- BID UNDER ALTERNATE BID 1
- BID UNDER ALTERNATE BID 3

DOOR FRAME GENERAL NOTES

- HM = HOLLOW METAL ALUM = ALUMINUM
- A. SEE SHEET A602 FOR ADDITIONAL FRAME TYPES
- B. ALL HM (HOLLOW METAL) FRAMES SHALL BE PAINTED.

DOOR FRAME TYPES

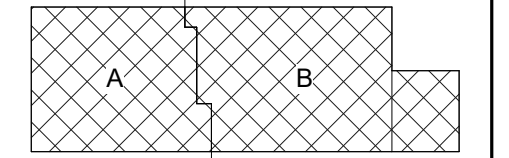


HSR Project Number: 24061

Project Date: FEB 2025

Drawn By: TBS

Key Plan:



KEY PLAN

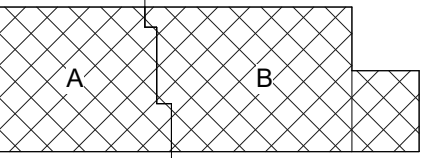
BID SET

No.	Description	Date
A02	ADD 02	2.27.2025
A04	ADD 04	3.05.2025

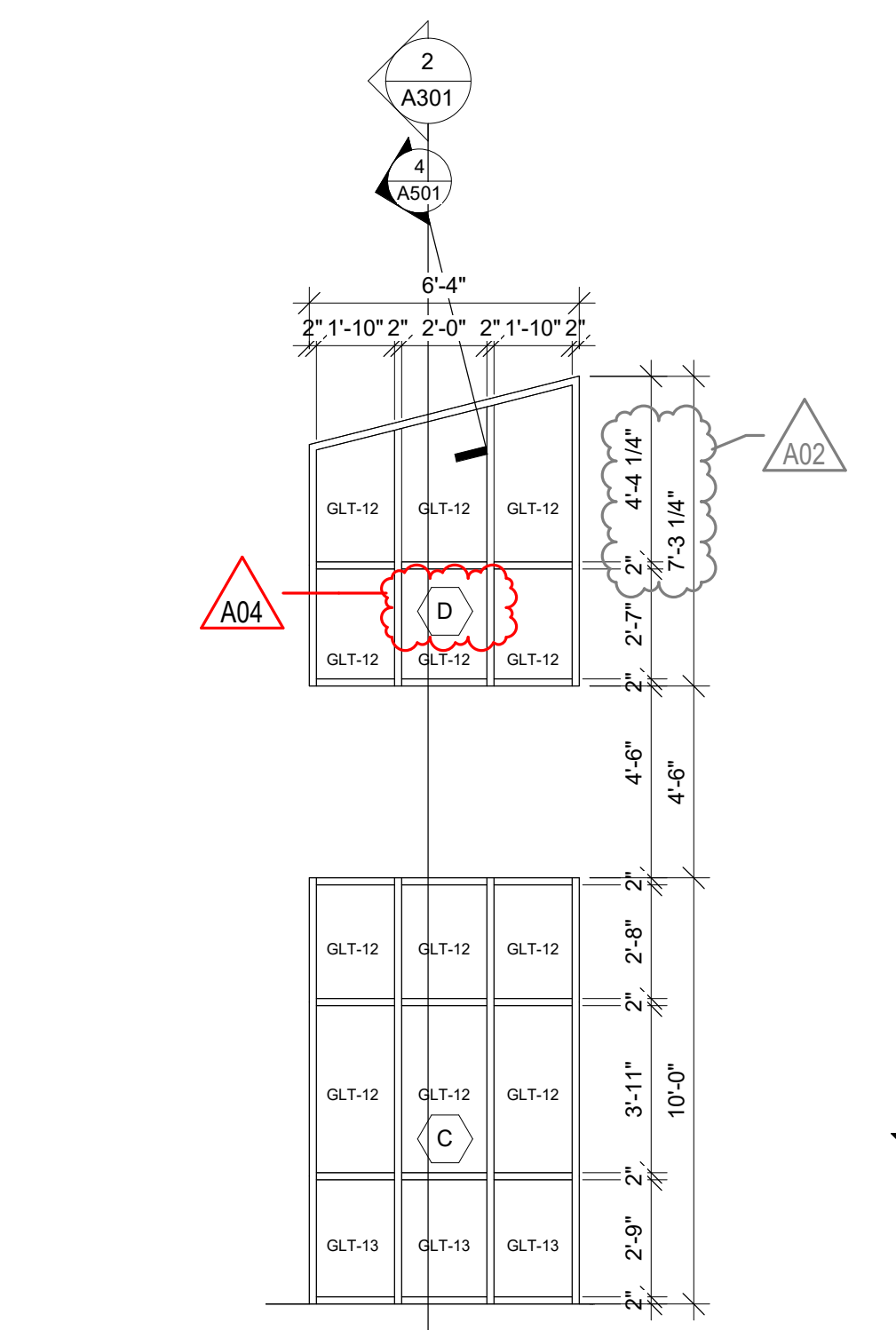
Graphic Scale: VARIES

Last Update: 3/6/2025 10:37:59 AM

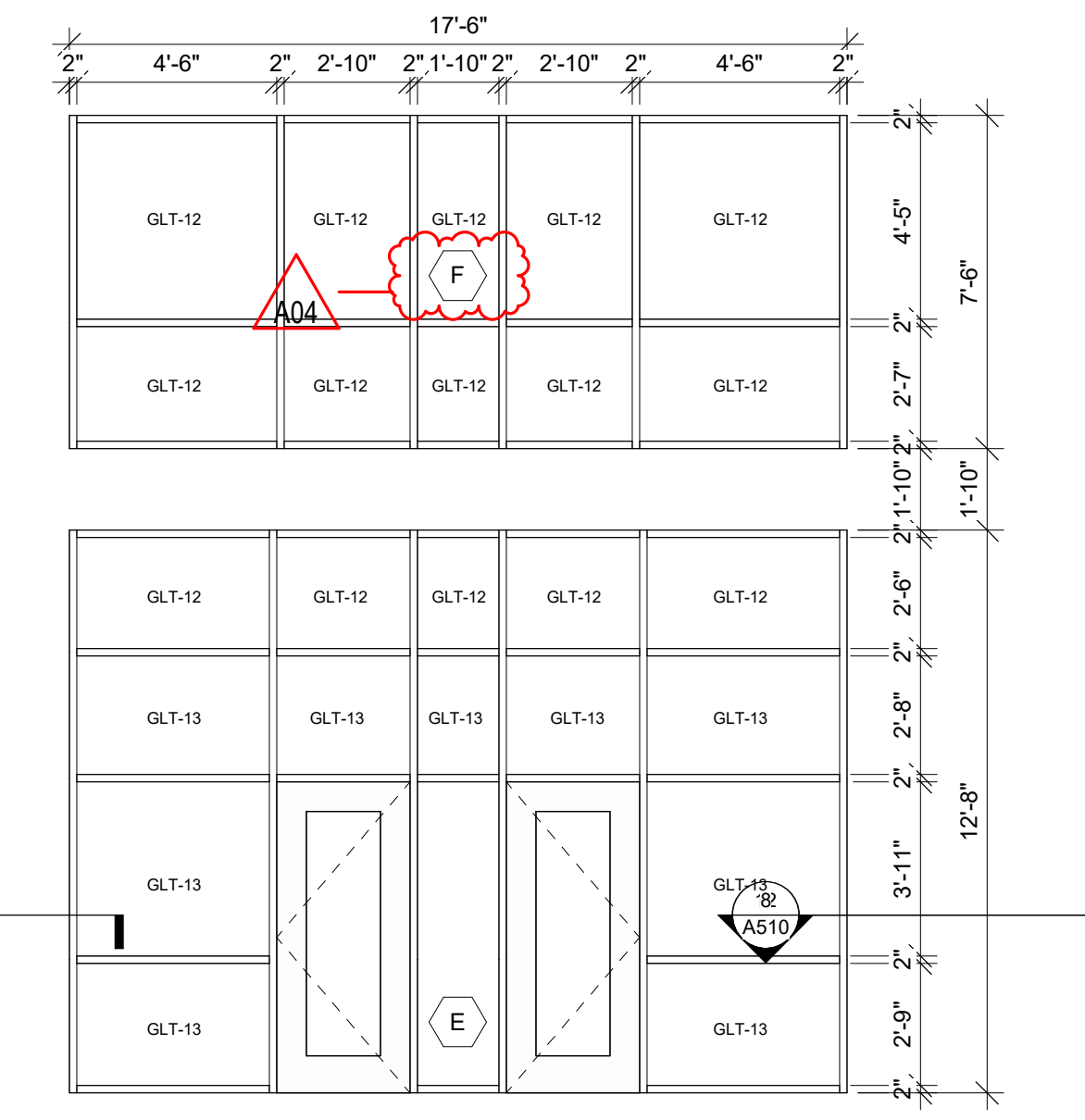
A601



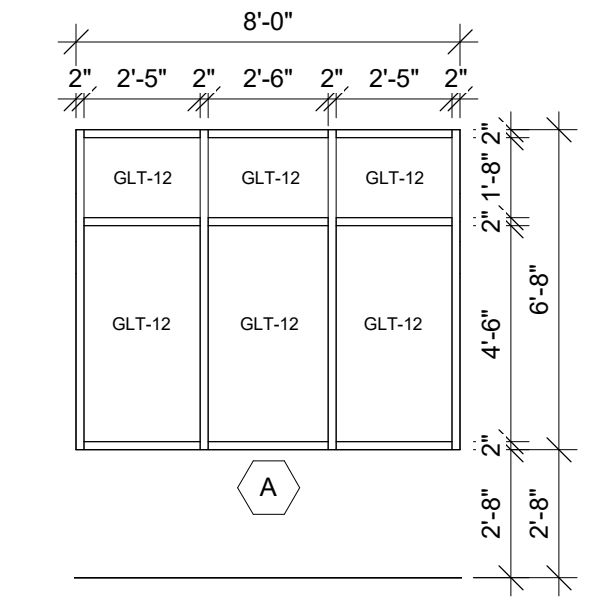
No.	Description	Date
A02	ADD 02	2.27.2025
A04	ADD 04	3.05.2025



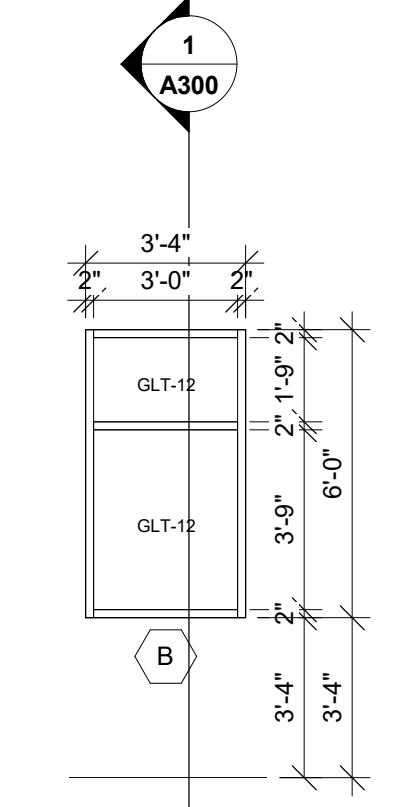
1 FRAME ELEVATION
1/4" = 1'-0"



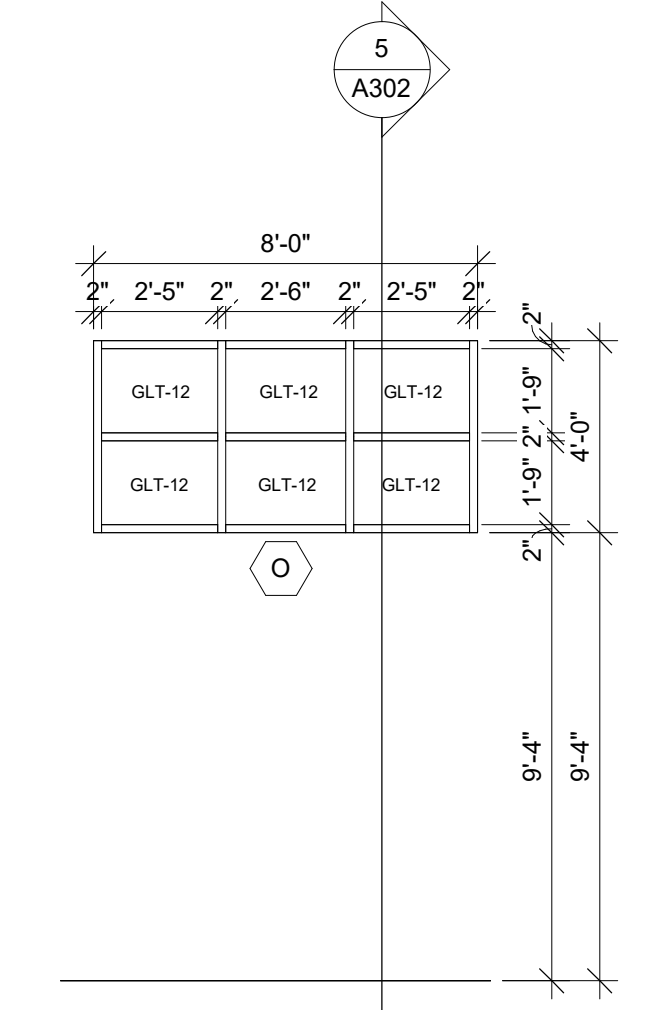
2 FRAME ELEVATION
1/4" = 1'-0"



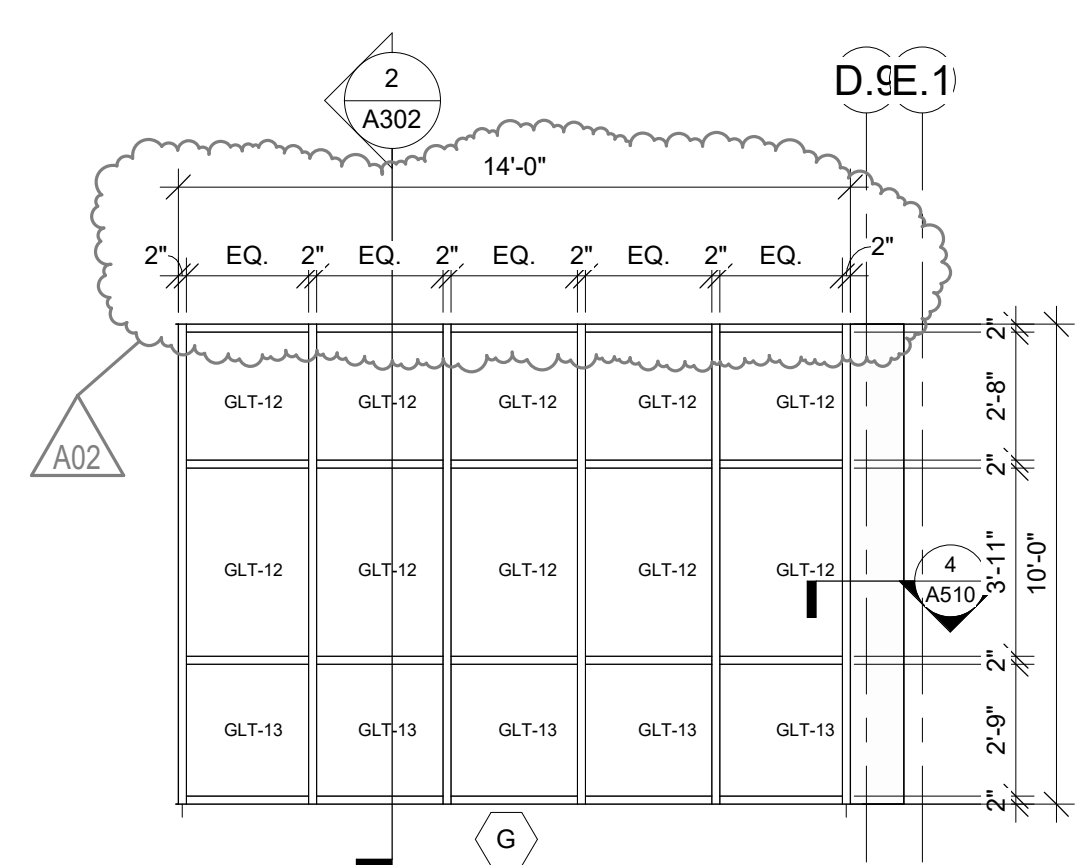
3 FRAME ELEVATION
1/4" = 1'-0"



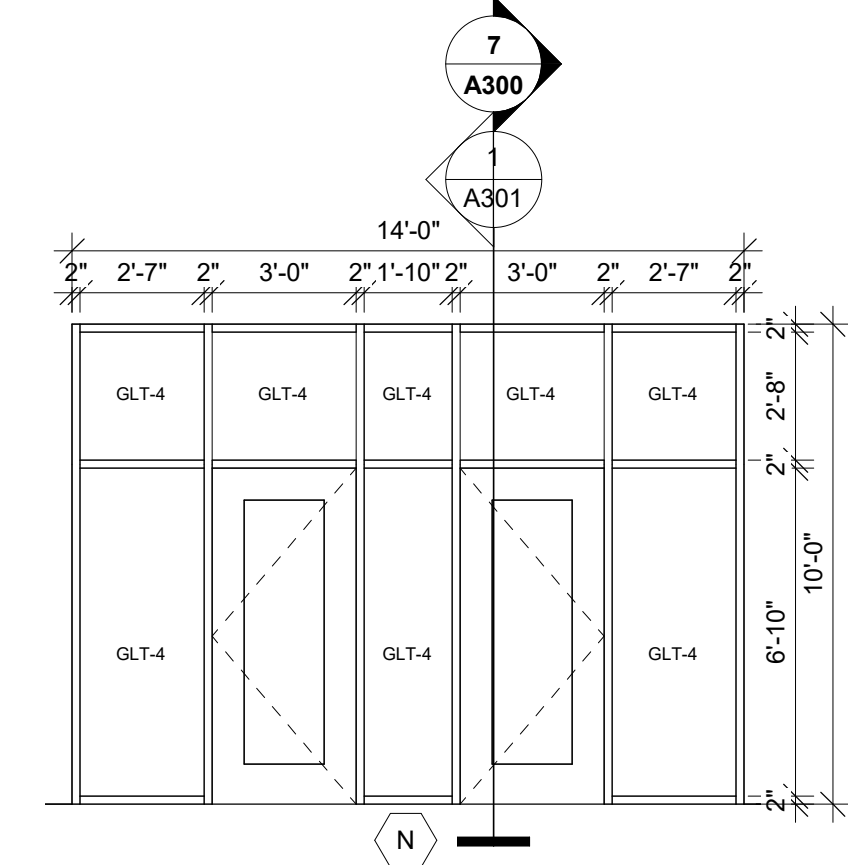
4 FRAME ELEVATION
1/4" = 1'-0"



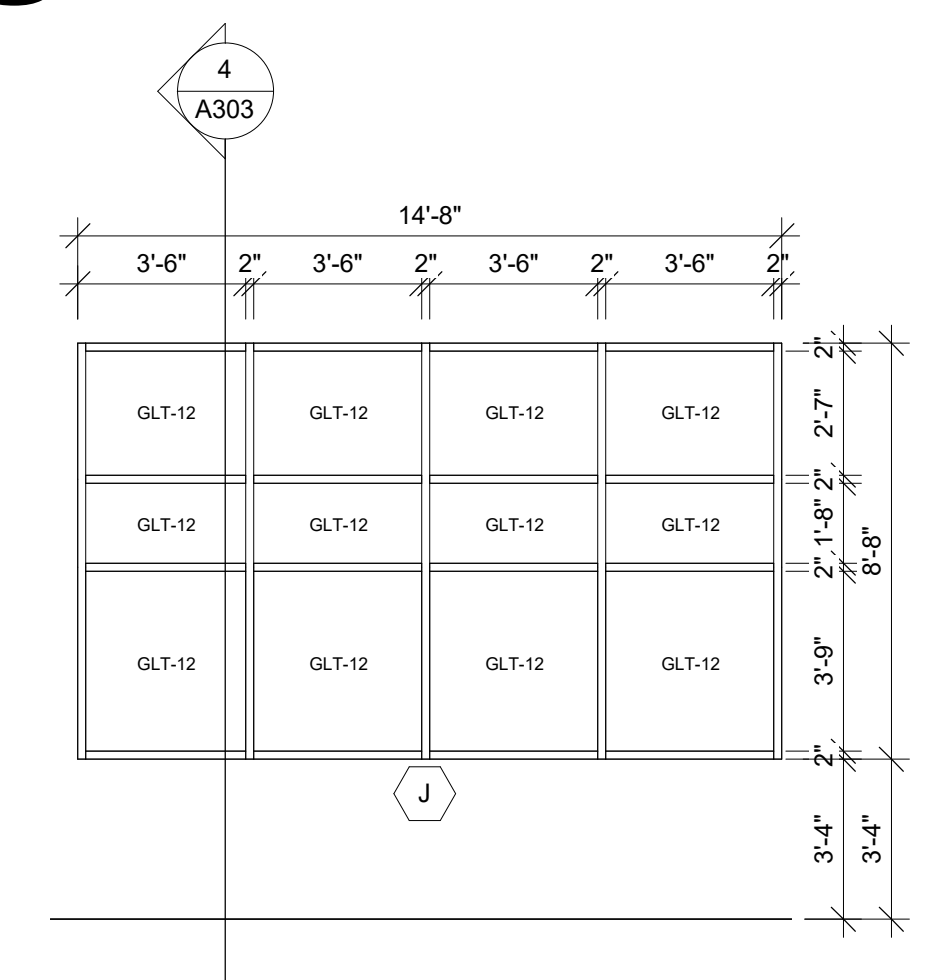
5 FRAME ELEVATION
1/4" = 1'-0"



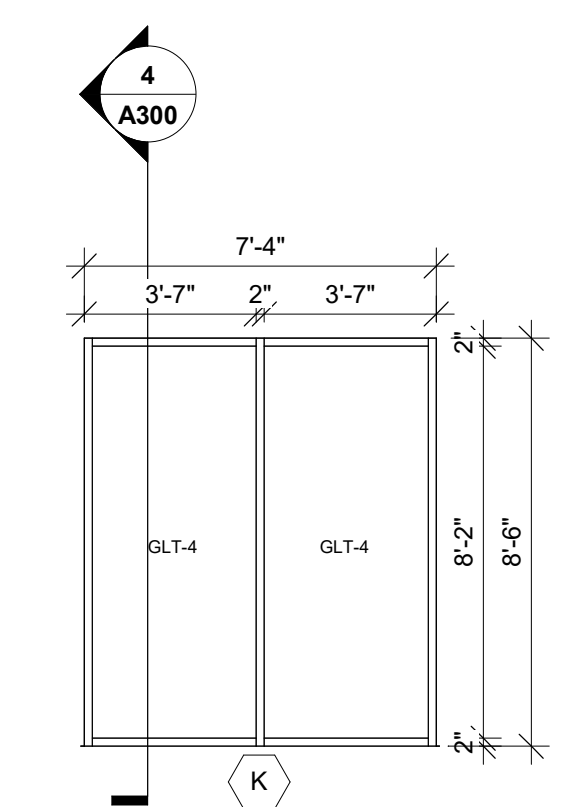
6 FRAME ELEVATION
1/4" = 1'-0"



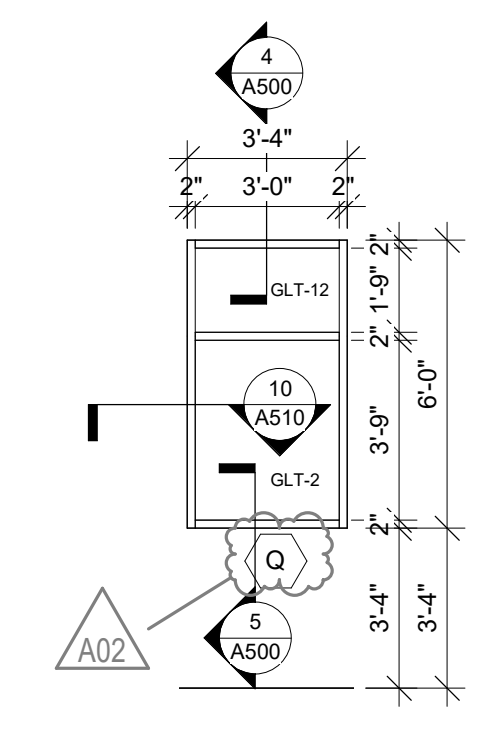
7 FRAME ELEVATION
1/4" = 1'-0"



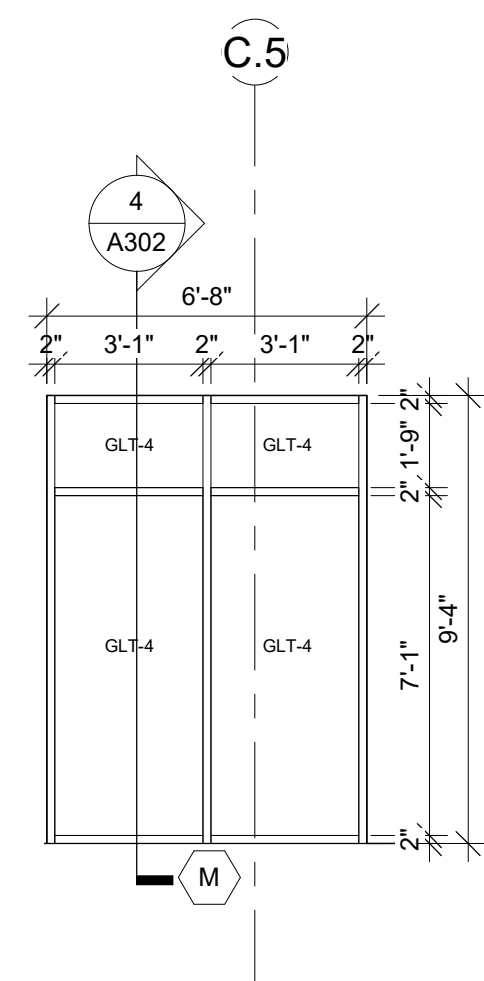
8 FRAME ELEVATION
1/4" = 1'-0"



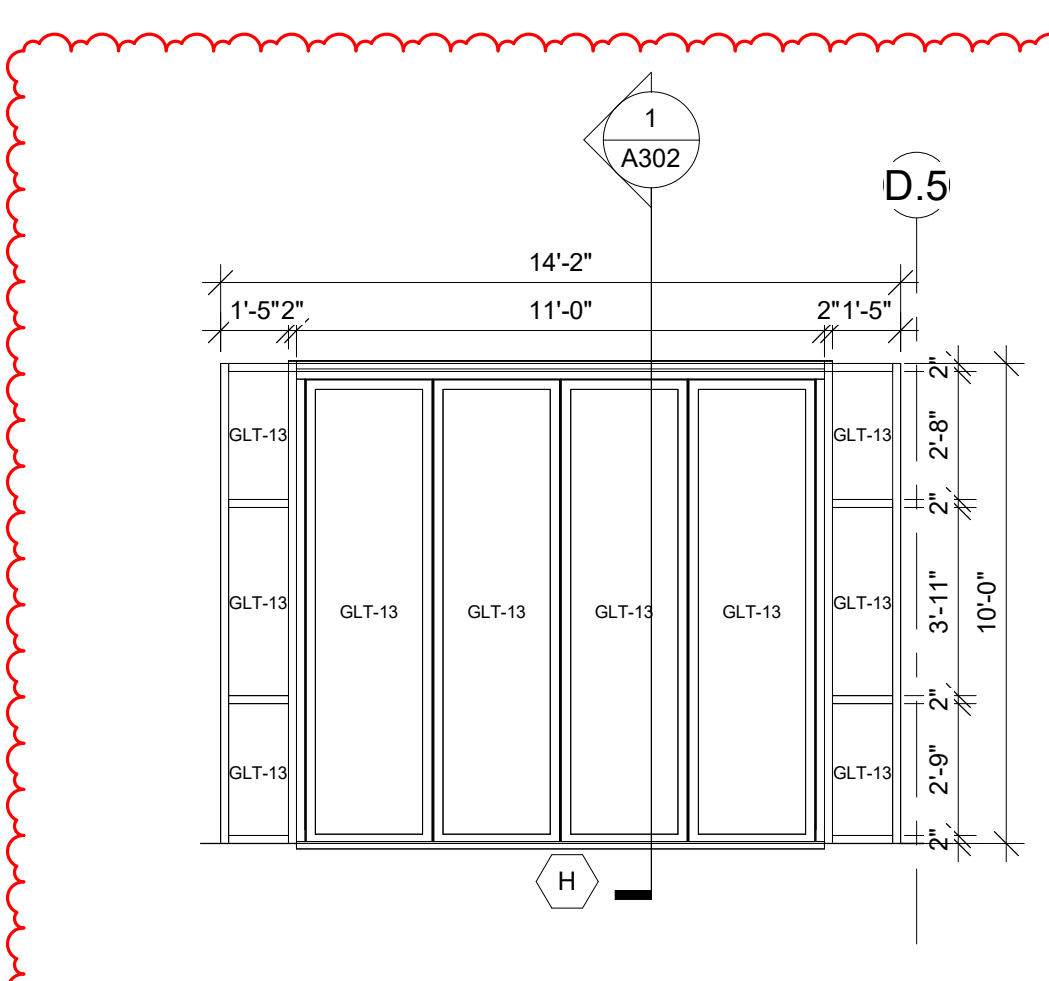
10 FRAME ELEVATION
1/4" = 1'-0"



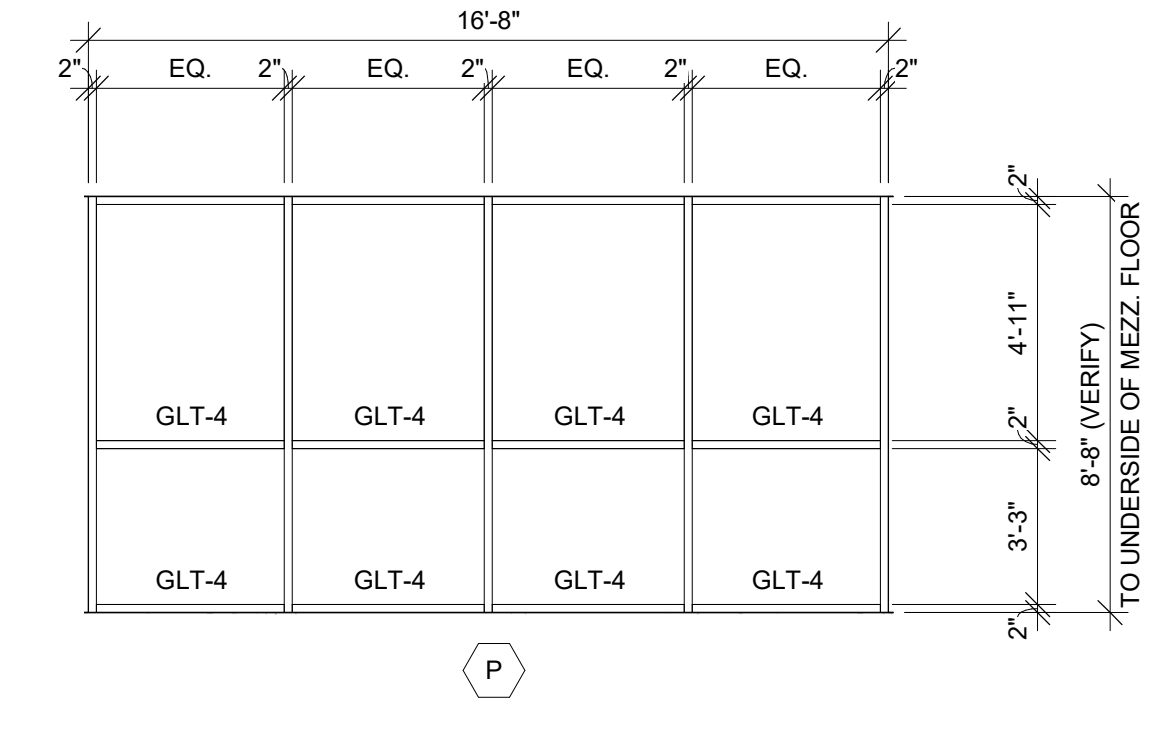
11 FRAME ELEVATION
1/4" = 1'-0"



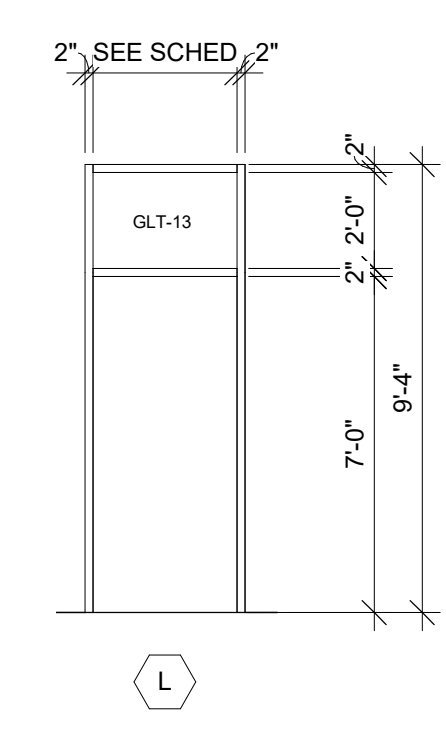
12 FRAME ELEVATION
1/4" = 1'-0"



13 FRAME ELEVATION
1/4" = 1'-0"



14 FRAME ELEVATION
1/4" = 1'-0"



15 FRAME ELEV.
1/4" = 1'-0"





Consultant:

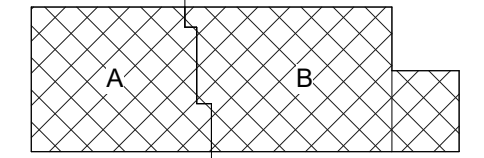
Project Title: **WESTERN TECHNICAL COLLEGE
AUTOMOTIVE TECHNOLOGY CENTER**
Project Location: 2721 LARSON STREET
LA CROSSE, WI 54603
Sheet Title: **FINISH FLOOR PLAN-SEGMENT A**

HSR Project Number: **24061**

Project Date: **FEB 2025**

Drawn By: **BME**

Key Plan:



KEY PLAN

BID SET

No.	Description	Date
A04	ADD 04	3.05.2025

Graphic Scale: **VARIES**

Last Update: **3/6/2025 2:13:43 PM**

ID101

INTERIOR GENERAL NOTES:

- A. REFERENCES TO PAINT PERTAIN TO COLOR ONLY; PAINT TYPE SHALL BE IDENTIFIED IN THE ARCHITECTURAL SPECIFICATIONS.
- B. PNT-1 FIELD PAINT; ACCENT PAINT AS INDICATED. SEE ID SHEETS.
- C. REFER TO MASTER COLOR SCHEDULE ON ID600 FOR MATERIAL FINISH SPECIFICATIONS, ANNOTATIONS, AND ADDITIONAL INFORMATION.
- D. TOILET ROOM WALL AND FLOOR GROUT LINES SHALL ALIGN TO CONTINUE PATTERN THROUGHOUT. SEE XXXX FOR ELEVATED PATTERNING.
- E. VINYL COMPOSITE EDGE (VCE) TO BE INSTALLED AT DISSIMILAR FINISH AREAS. REFER TO ID SHEETS. INSTALL APPROPRIATE EDGE PROFILE TO PROTECT FINISH EDGES. COLOR AS SELECTED BY AE.
- F. AT DISSIMILAR FLOORING FINISHES, SET JOINT OF MATERIALS AT CENTER OF DOOR. TRANSITIONS TO BE ADA COMPLIANT.

INTERIOR FINISH KEY PLAN:

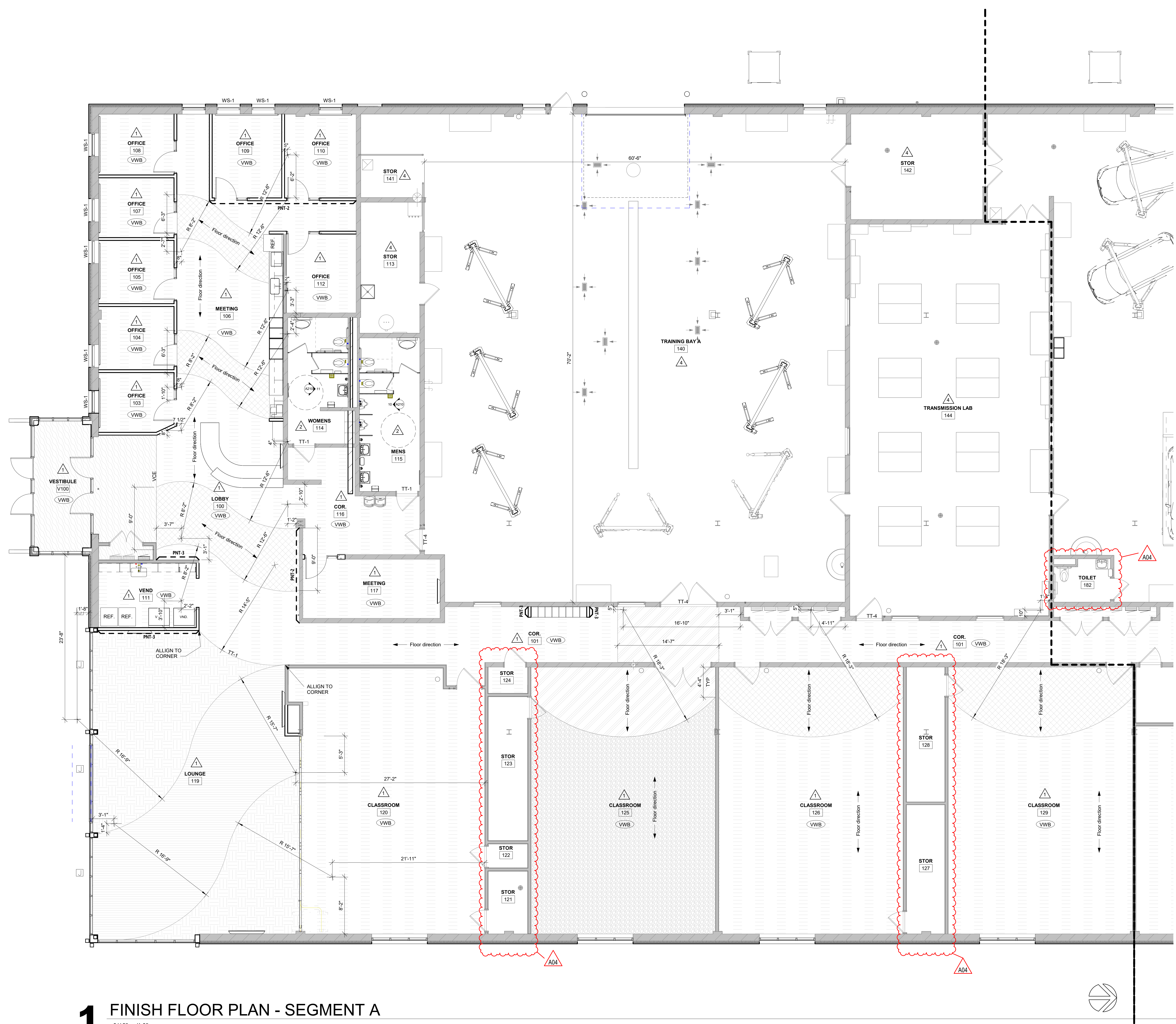
- SEE ROOM FINISH REMARKS
- WALL BASE
- ACCENT PAINT
- FLOOR GRAIN DIRECTION
- TRANSITION STRIP

INTERIOR FINISH LEGEND:

- TLE-1
- TLE-2
- LVT-1
- LVT-2
- WCPT-1
- Rubber-1
- Rubber-2

ROOM FINISH REMARKS

1. PAINT ALL WALLS PNT-1. ACCENT AS INDICATED ON PLANS
2. TILE ALL WALLS. PATTERN AS SHOWN ON ELEVATIONS 10 & 11 ON A04
3. PAINT ALL WALLS EPOXY PAINT PNT-1 SEE ELEVATION 12 ON A210
4. RESEAL EXISTING CONCRETE
5. SEAL NEW CONCRETE



1 FINISH FLOOR PLAN - SEGMENT A
3/16" = 1'-0"



Consultant:

Project Title: **WESTERN TECHNICAL COLLEGE
AUTOMOTIVE TECHNOLOGY CENTER**
Project Location: 2721 LARSON STREET
LA CROSSE, WI 54603
Sheet Title: **FINISH FLOOR PLAN-SEGMENT B**

HSR Project Number: **24061**

Project Date: **FEB 2025**

Drawn By: **BME**

Key Plan:

BID SET

No.	Description	Date
A04	ADD 04	3.05.2025

Graphic Scale: **VARIES**

Last Update: **3/6/2025 2:13:21 PM**

ID102

INTERIOR GENERAL NOTES:

- A. REFERENCES TO PAINT PERTAIN TO COLOR ONLY; PAINT TYPE SHALL BE IDENTIFIED IN THE ARCHITECTURAL SPECIFICATIONS.
- B. PNT-1 FIELD PAINT; ACCENT PAINT AS INDICATED. SEE ID SHEETS.
- C. REFER TO MASTER COLOR SCHEDULE ON ID000 FOR MATERIAL FINISH SPECIFICATIONS, ANNOTATIONS, AND ADDITIONAL INFORMATION.
- D. TOILET ROOM WALL AND FLOOR GROUT LINES SHALL ALIGN TO CONTINUE PATTERN THROUGHOUT. SEE AXXX FOR ELEVATED PATTERNING.
- E. VINYL COMPOSITE EDGE (VCE) TO BE INSTALLED AT DISSIMILAR FINISH AREAS. REFER TO ID SHEETS. INSTALL APPROPRIATE EDGE PROFILE TO PROTECT FINISH EDGES. COLOR AS SELECTED BY AE.
- F. AT DISSIMILAR FLOORING FINISHES, SET JOINT OF MATERIALS AT CENTER OF DOOR. TRANSITIONS TO BE ADA COMPLIANT.

INTERIOR FINISH KEY PLAN:

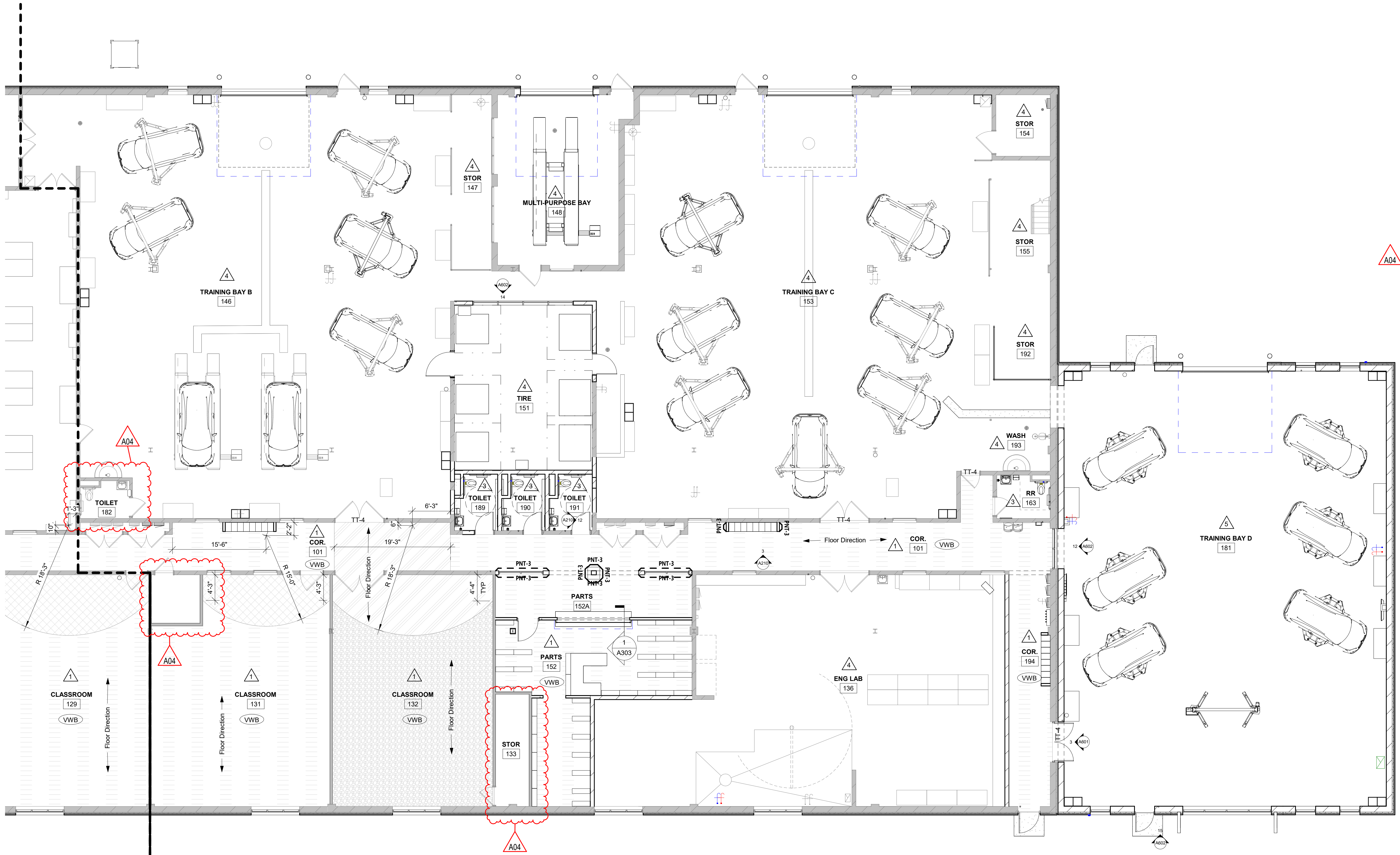
- SEE ROOM FINISH REMARKS
- XXX WALL BASE
- PE-X ACCENT PAINT
- FLOOR GRAIN DIRECTION
- TS-? TRANSITION STRIP

INTERIOR FINISH LEGEND:

- TLE-1 LVT-1 Rubber-1
- TLE-2 LVT-2 Rubber-2
- WCPT-1

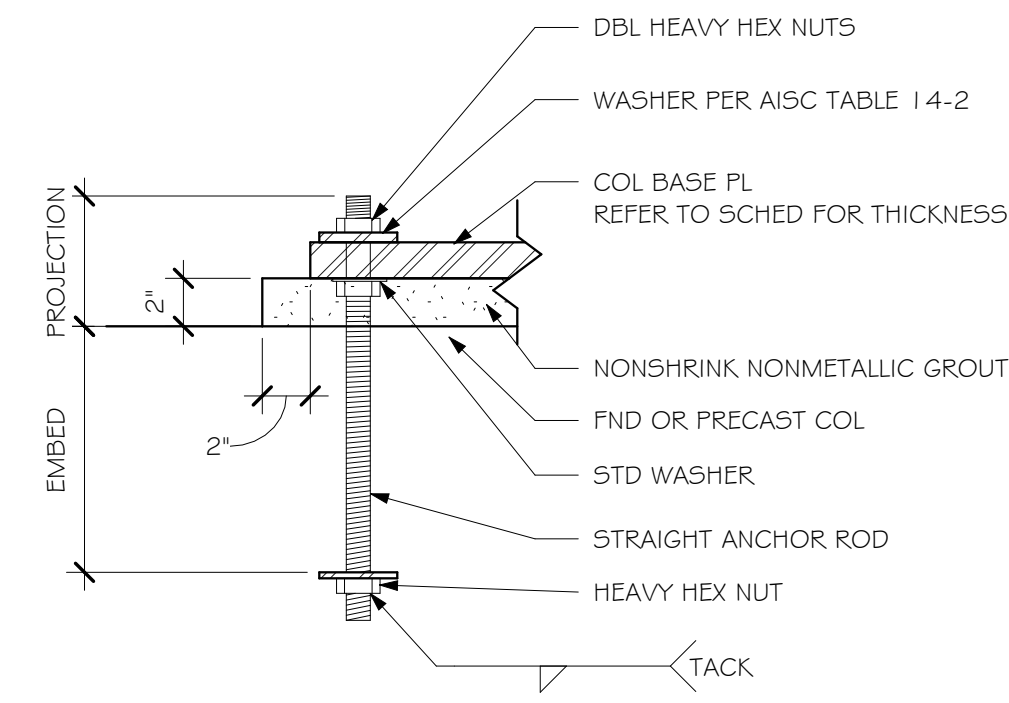
ROOM FINISH REMARKS

1. PAINT ALL WALLS PNT-1. ACCENT AS INDICATED ON PLANS
2. TILE ALL WALLS. PATTERN AS SHOWN ON ELEVATIONS TO ON WET WALLS
3. PAINT ALL WALLS EPOXY PAINT PNT-1 SEE ELEVATION 12 ON A210
4. RESEAL EXISTING CONCRETE
5. SEAL NEW CONCRETE

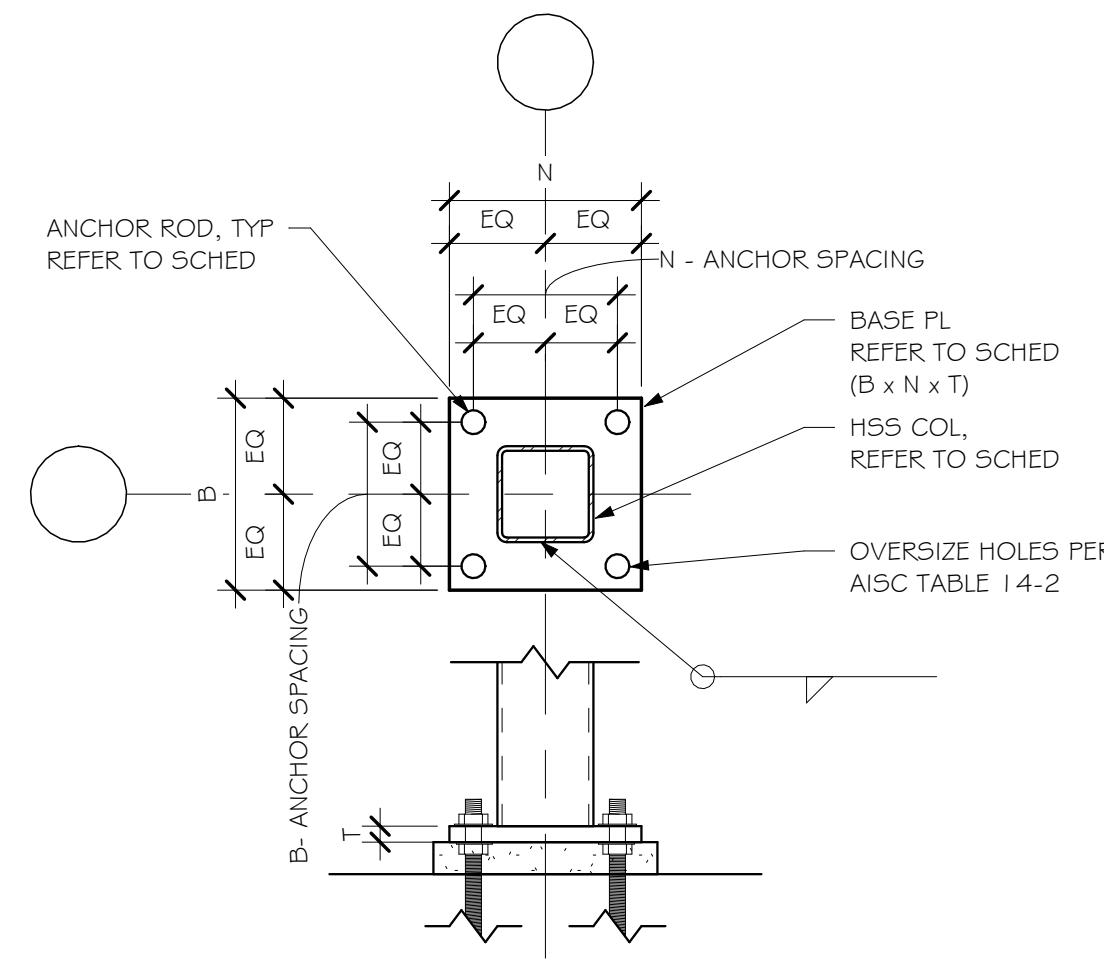


1 FINISH FLOOR PLAN - SEGMENT B
1/8" = 1'-0"

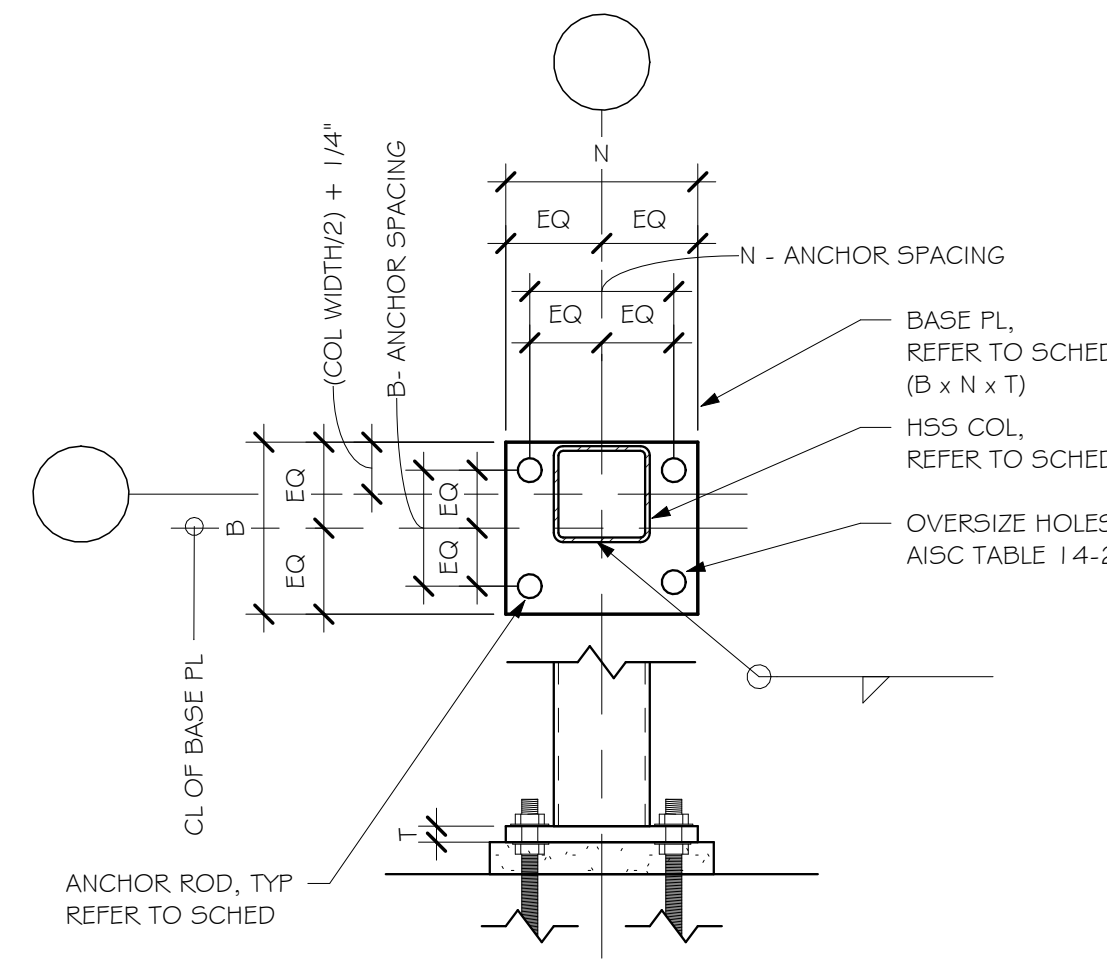
- BASE PLATE SCHEDULE NOTES:**
- ANCHOR ROD MATERIAL SHALL BE F1554 GRADE 3G, TYP
 - PROVIDE 1-Ø" ANCHOR ROD EMBED @ CIP CONC BELOW, UNO
 - PROVIDE 0-Ø" ANCHOR ROD EMBED, EPOXY SET @ PRECAST CONC BELOW, UNO



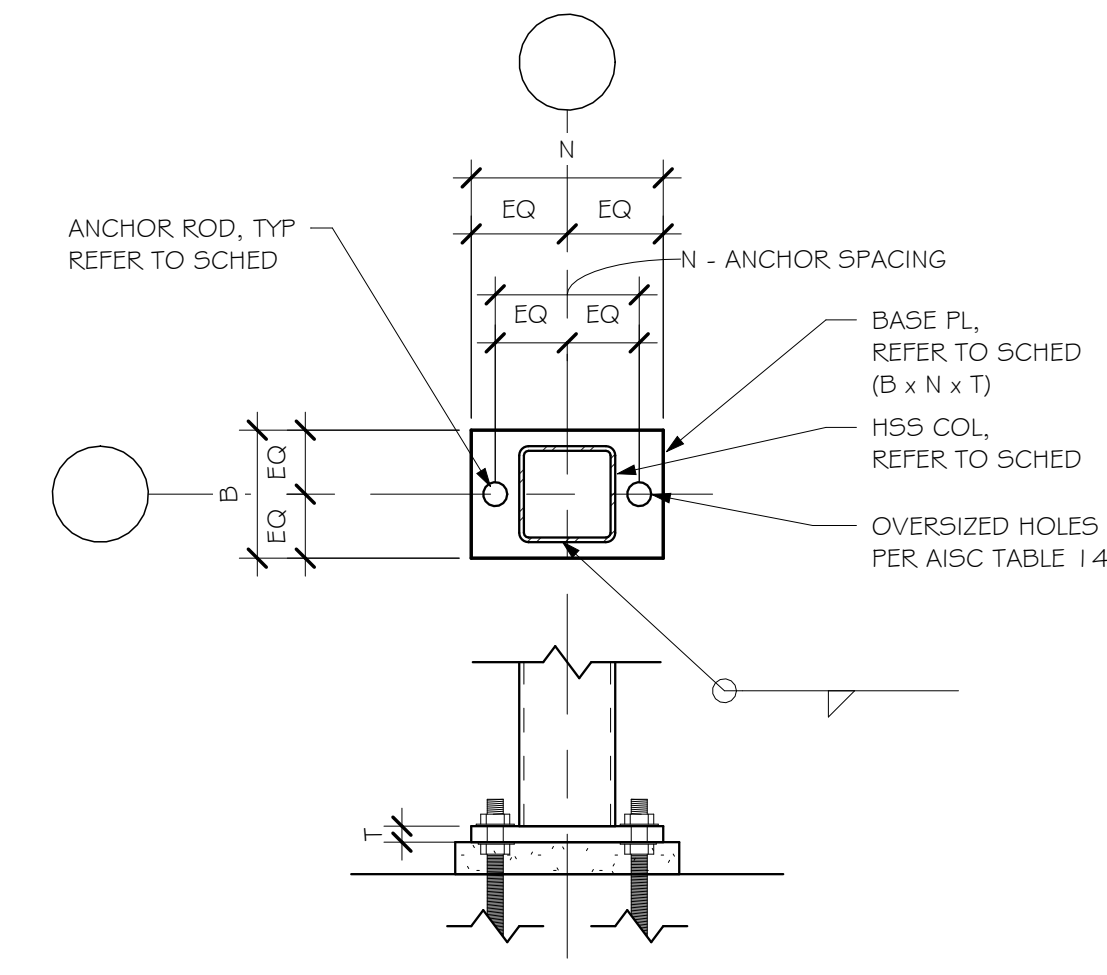
1 TYPICAL ANCHOR ROD DETAIL
SCALE: N.T.S.



2 STEEL COLUMN BASE PLATE - TYPE A
SCALE: N.T.S.

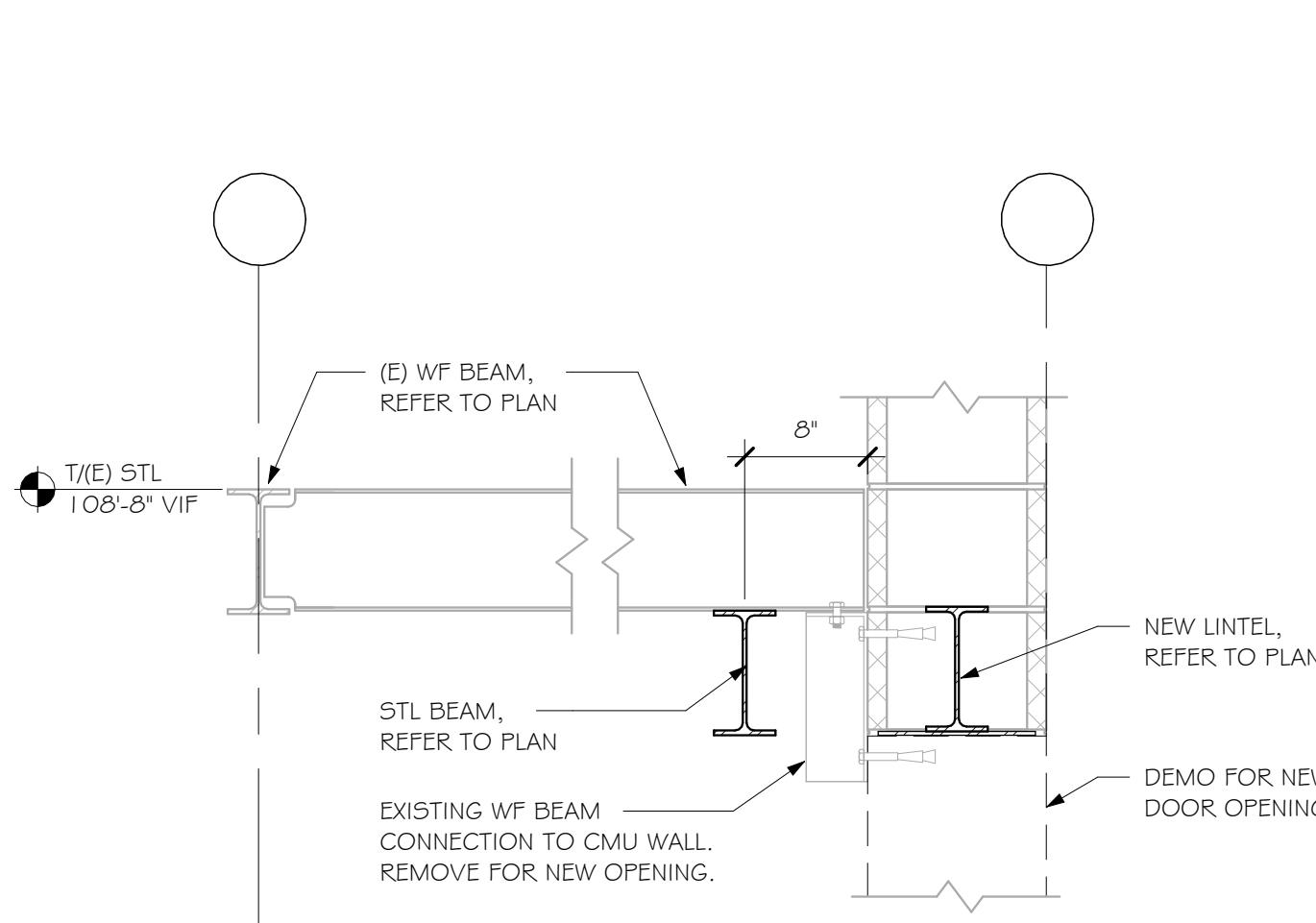


3 STEEL COLUMN BASE PLATE - TYPE B
SCALE: N.T.S.

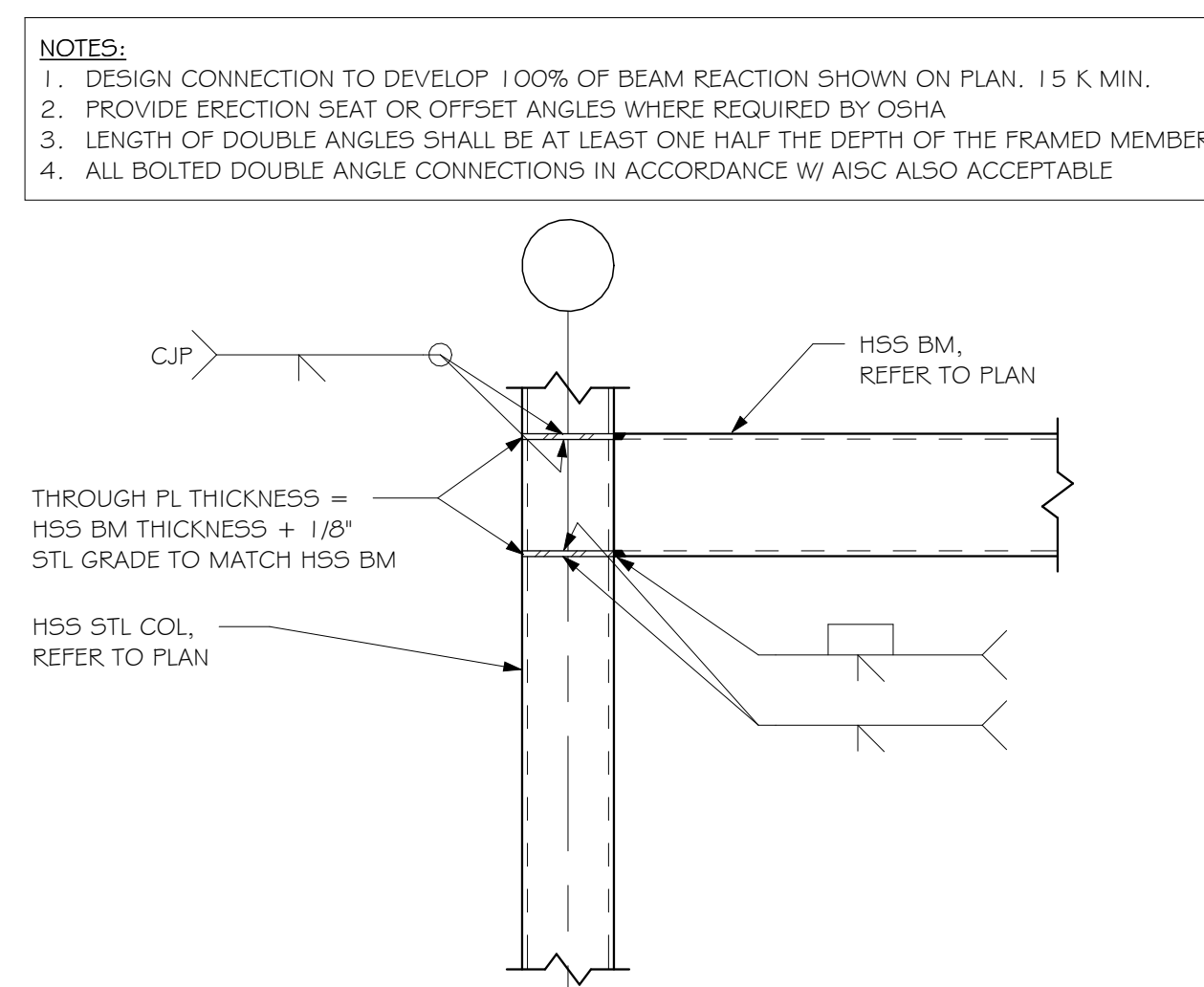


4 STEEL COLUMN BASE PLATE - TYPE C
SCALE: N.T.S.

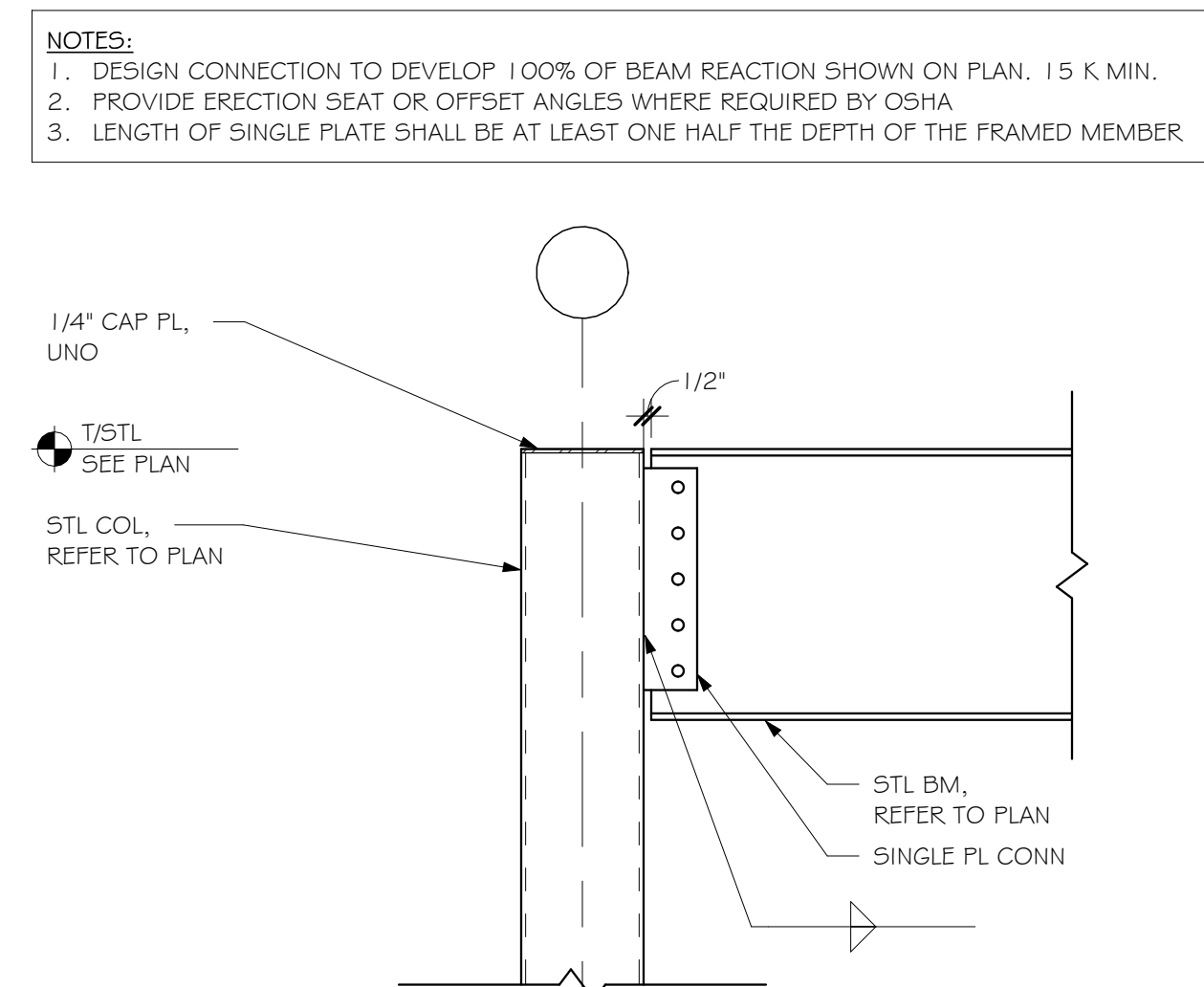
BASE PLATE SCHEDULE						
TAG	TYPE	SIZE	ANCHOR RODS	B ANCHOR SPACING	N ANCHOR SPACING	COMMENTS
BP1	A	16"x16"x1"	(4) 1"Ø	12"	12"	
BP2	A	14"x14"x1"	(4) 1"Ø	9"	9"	
BP3	B	10"x14"x1"	(4) 1"Ø	6"	9"	
BP4	C	4"x10"x1/2"	(2) 1/2"Ø	-	7"	HILTI Kwik HUS E2, 2-1/4" MIN EMBED.
BP5	A	11"x11"x1/2"	(4) 1/2"Ø	8"	8"	HIT-HY 270 + THREADED ROD
BP6	A	12"x16"x1/2"	(4) 1/2"Ø	12"	9"	HIT-HY 270 + THREADED ROD



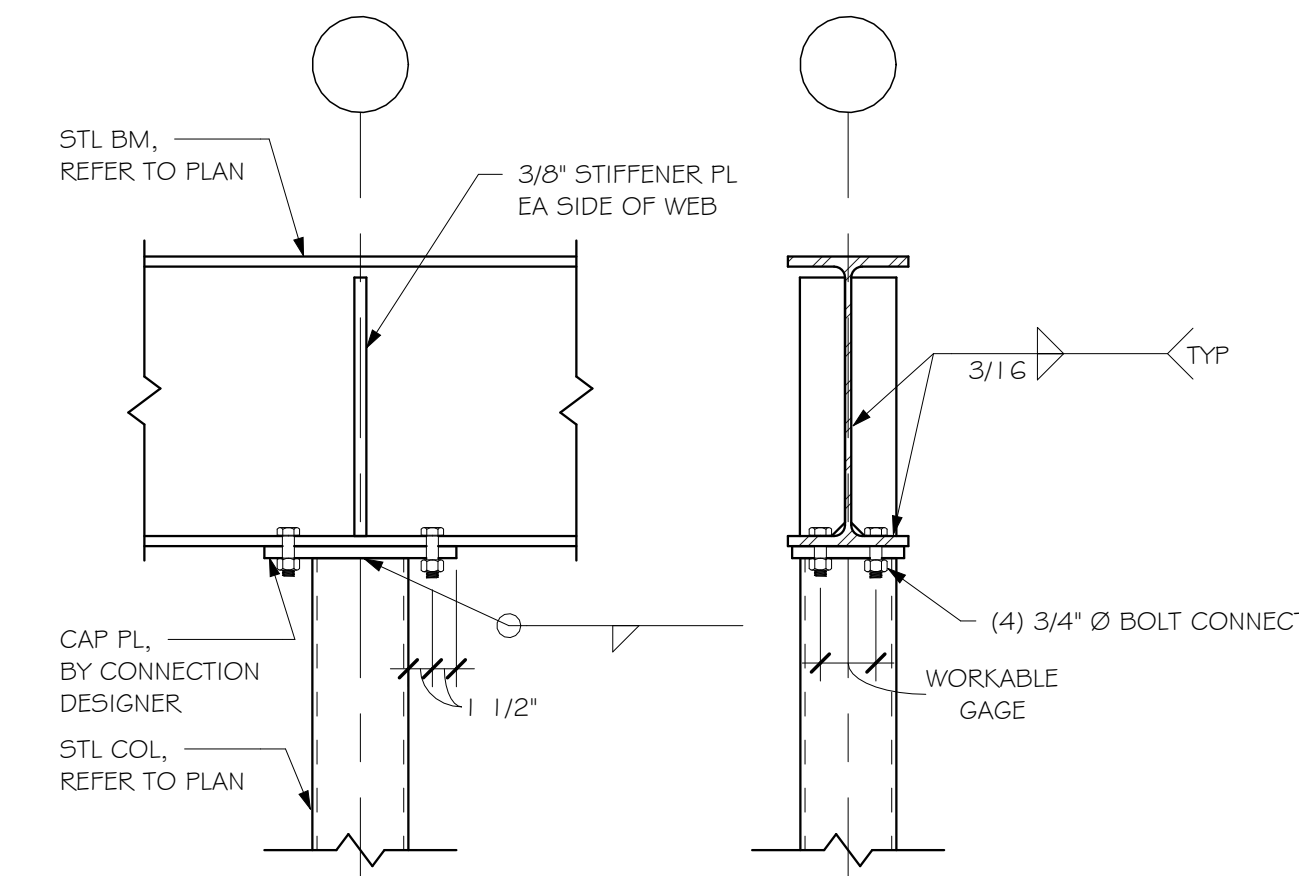
5 BEAM @ MEZZANINE
SCALE: N.T.S.



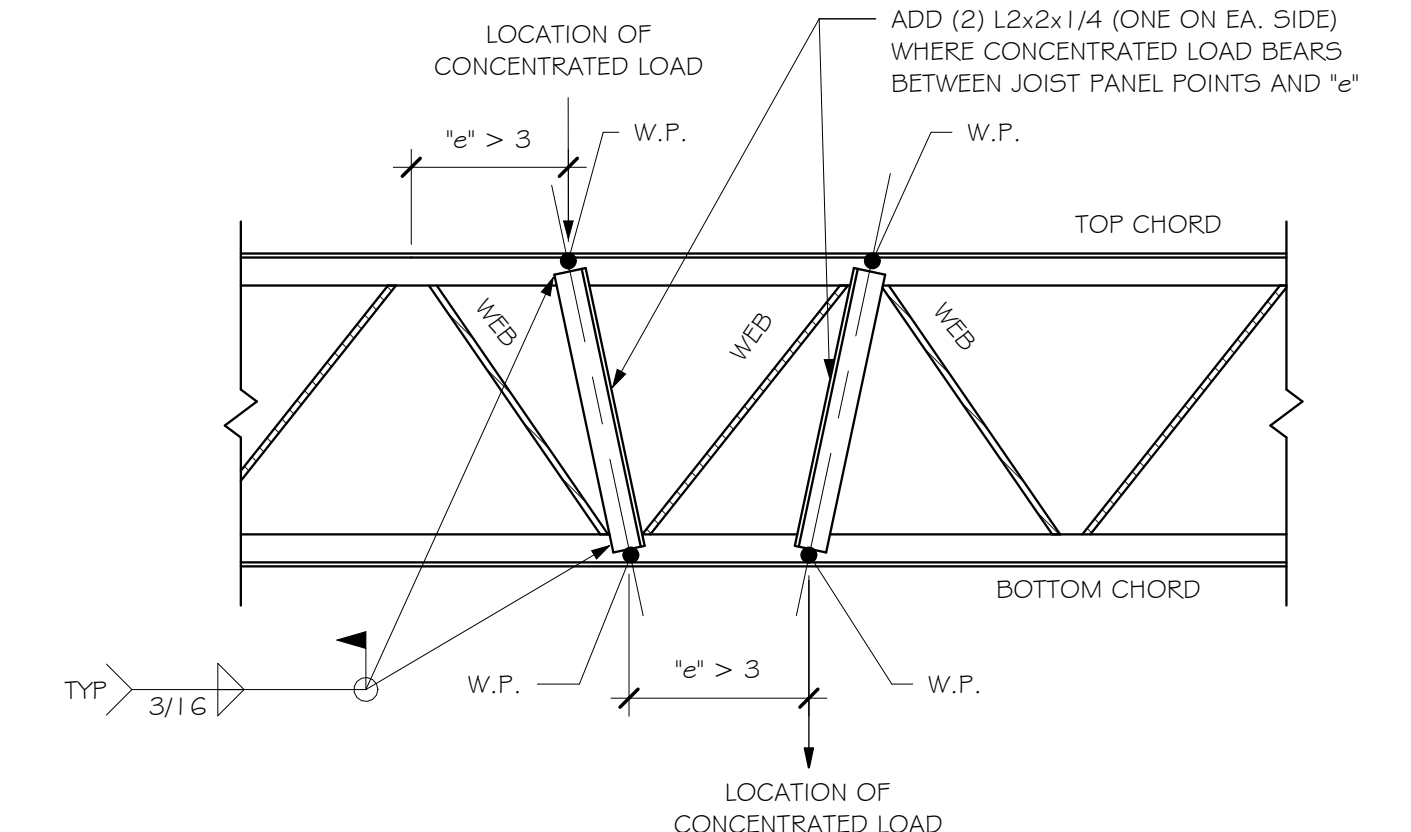
6 TYPICAL HSS BEAM TO HSS COLUMN MOMENT CONNECTION
SCALE: N.T.S.



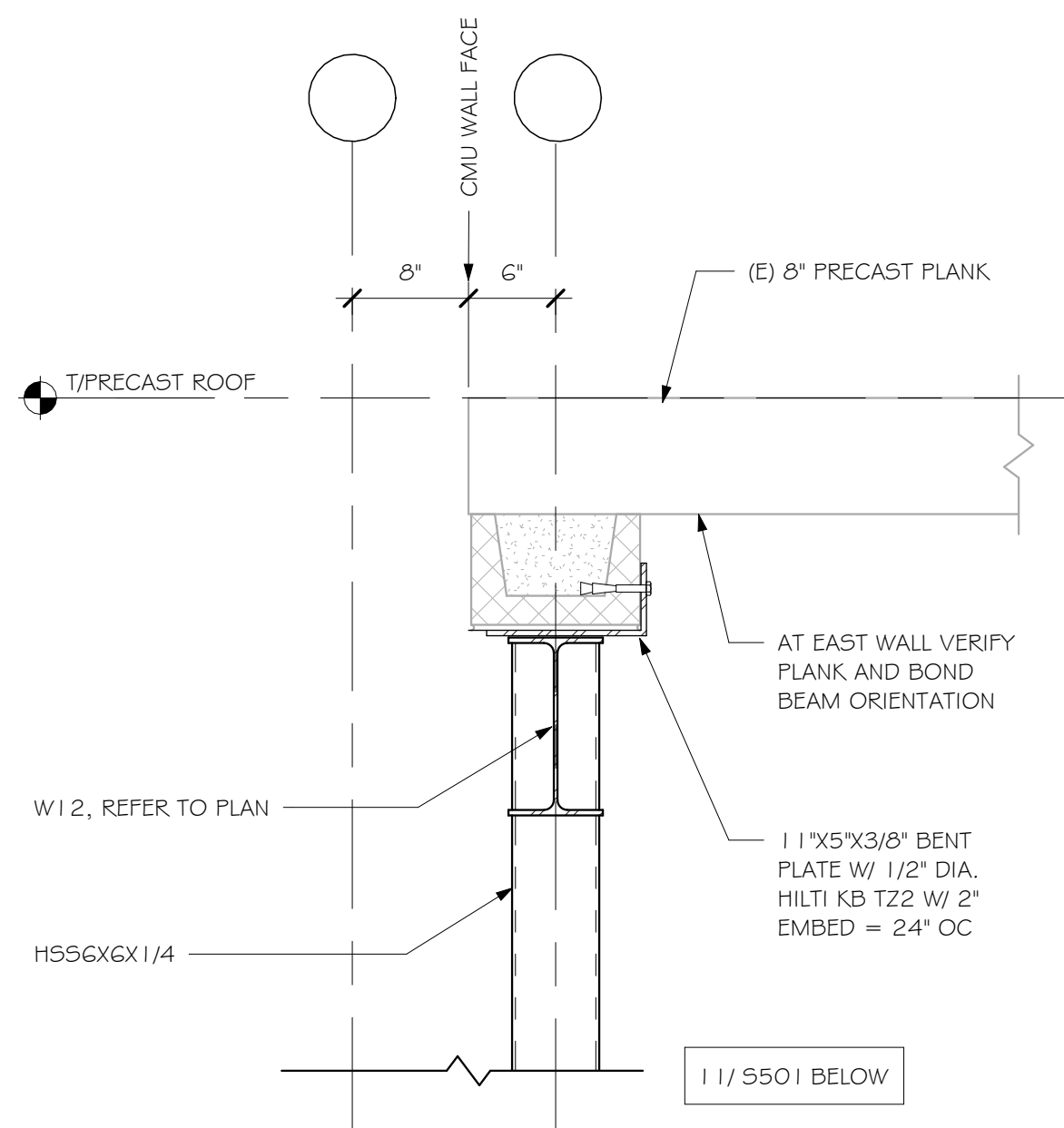
7 TYPICAL WF BEAM TO HSS COLUMN CONNECTION
SCALE: N.T.S.



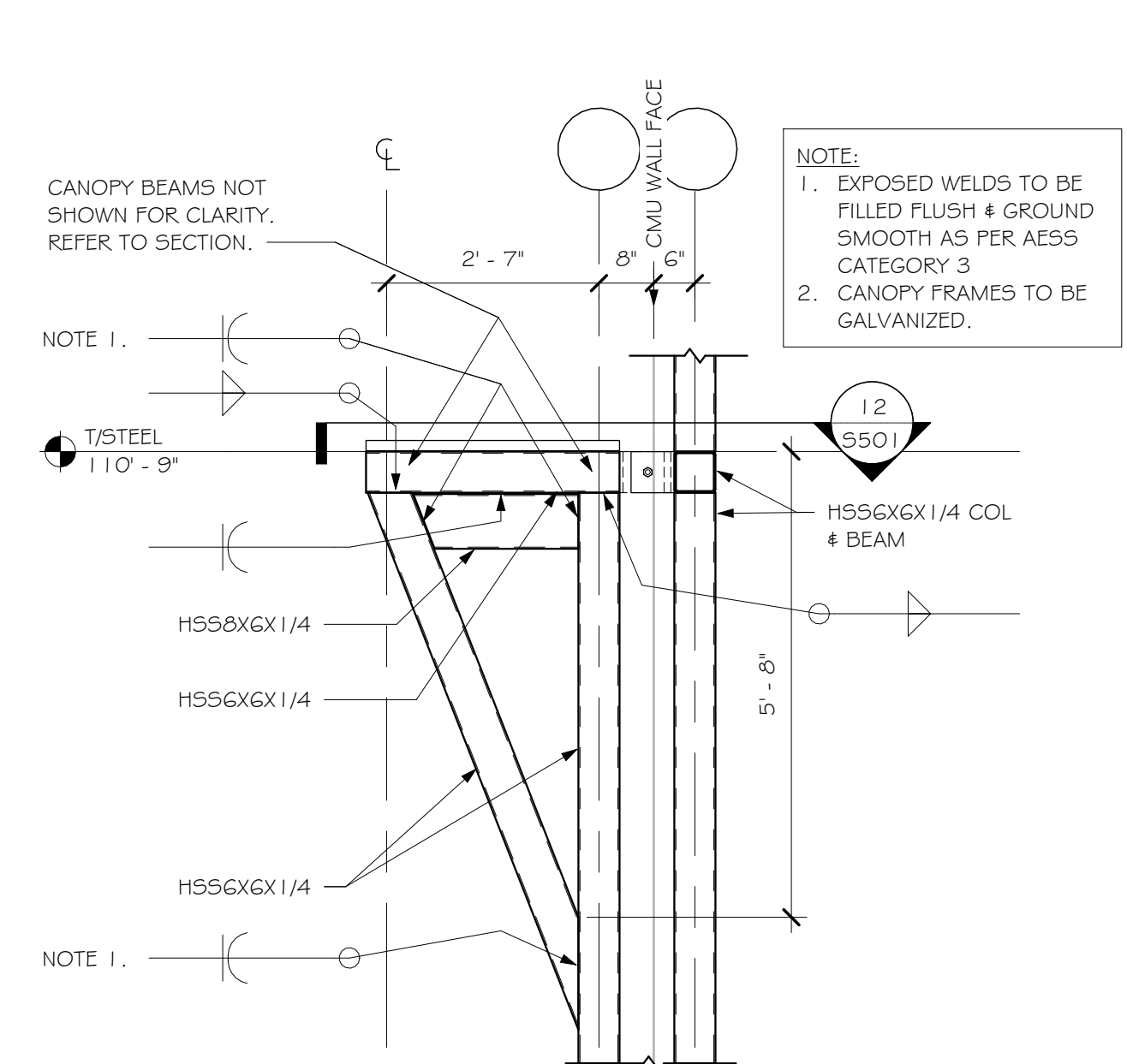
8 TYPICAL WF BEAM OVER HSS COLUMN CONNECTION
SCALE: N.T.S.



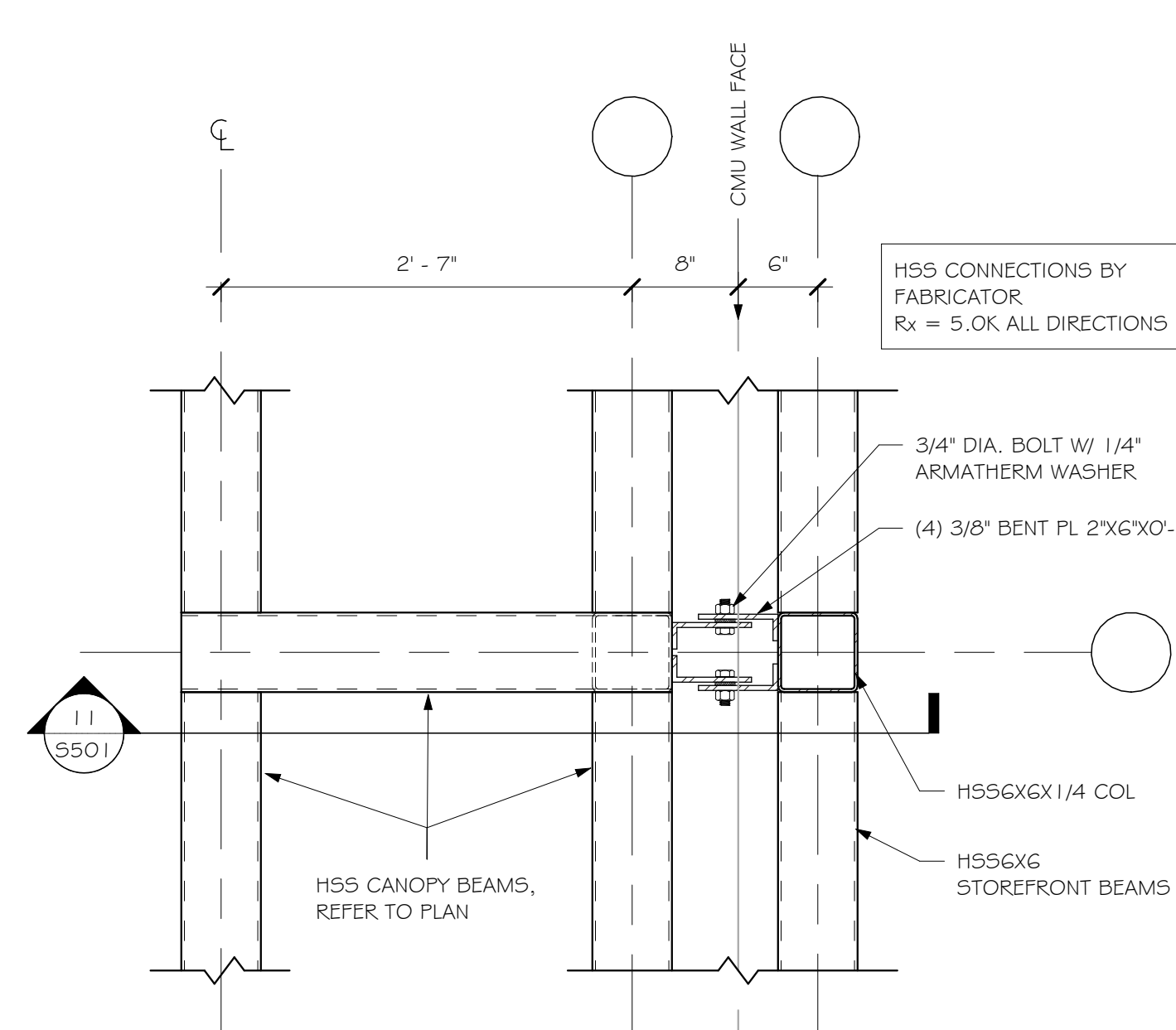
9 JOIST REINF @ POINT LOAD
SCALE: N.T.S.



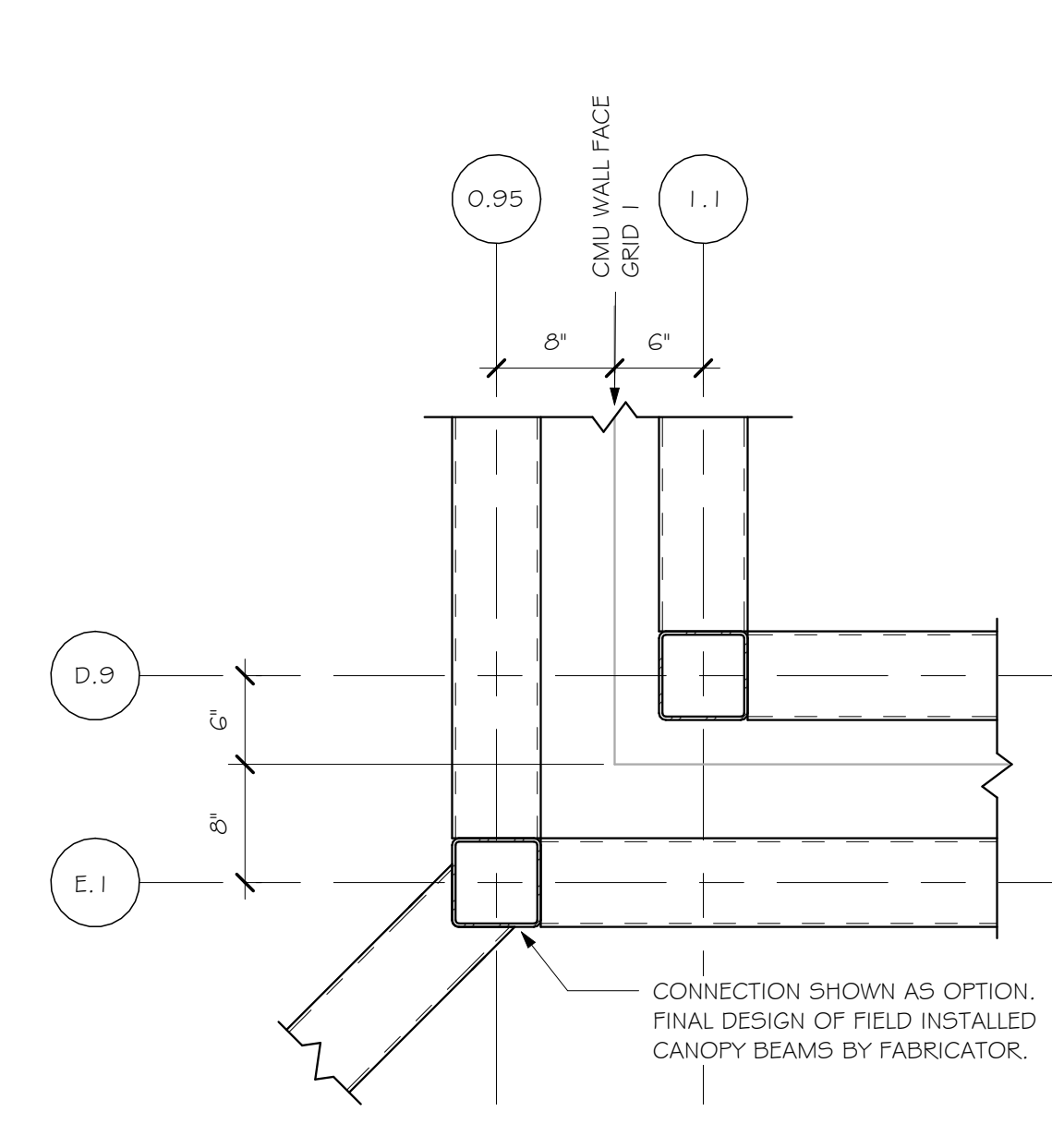
10 SOUTH & EAST STORE FRONT LINTEL HEADERS
SCALE: N.T.S.



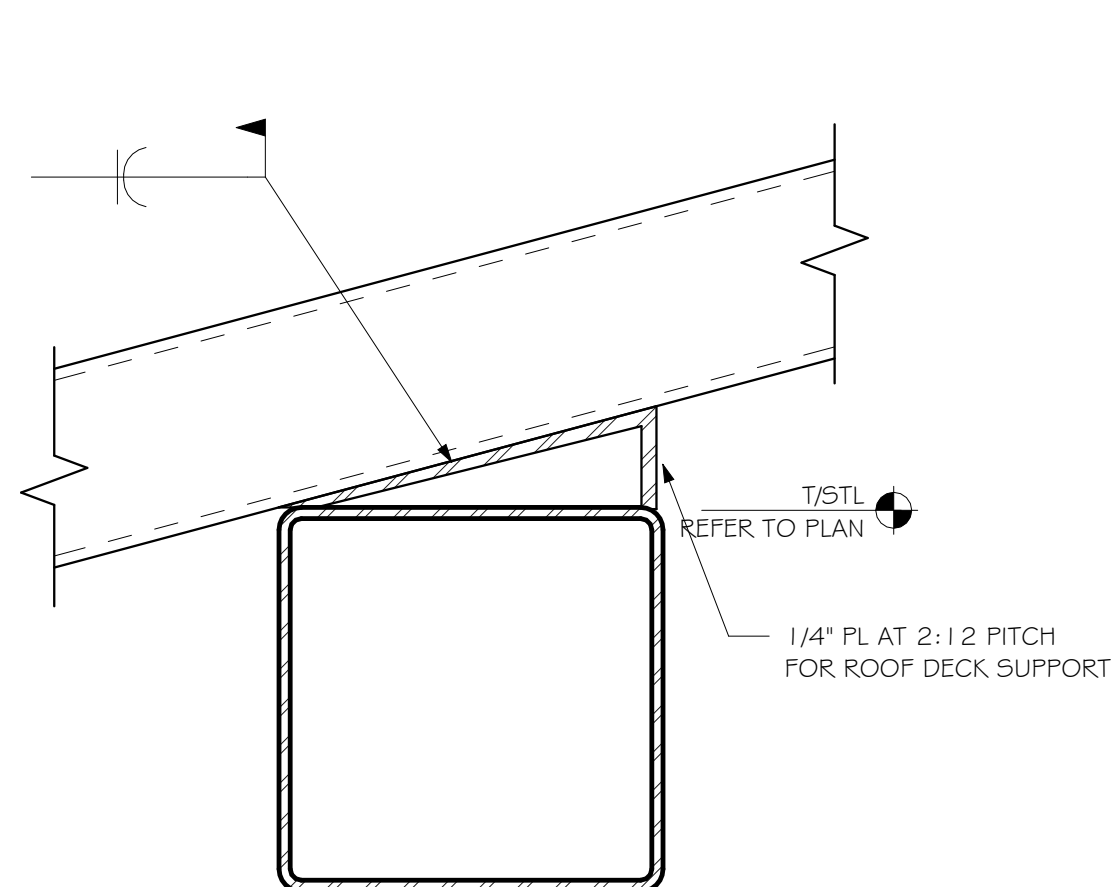
11 CANOPY FRAMES
SCALE: N.T.S.



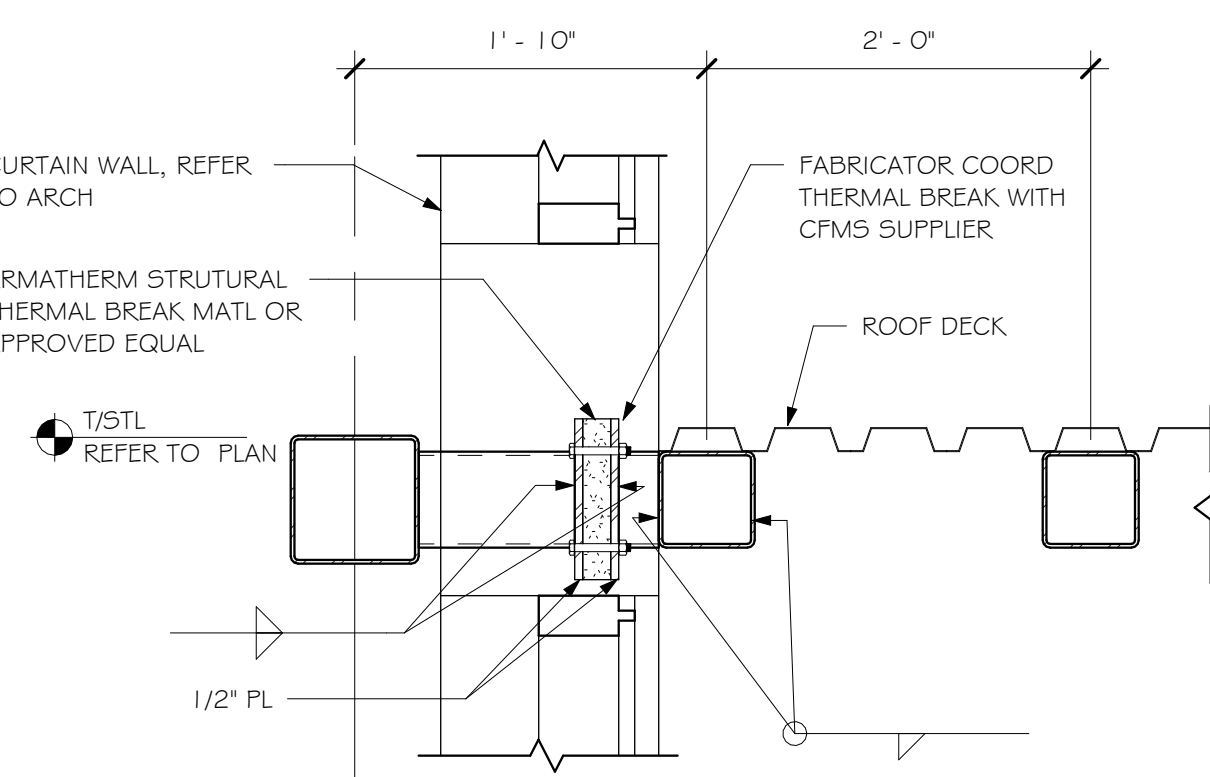
12 CANOPY FRAMES DETAIL
SCALE: N.T.S.



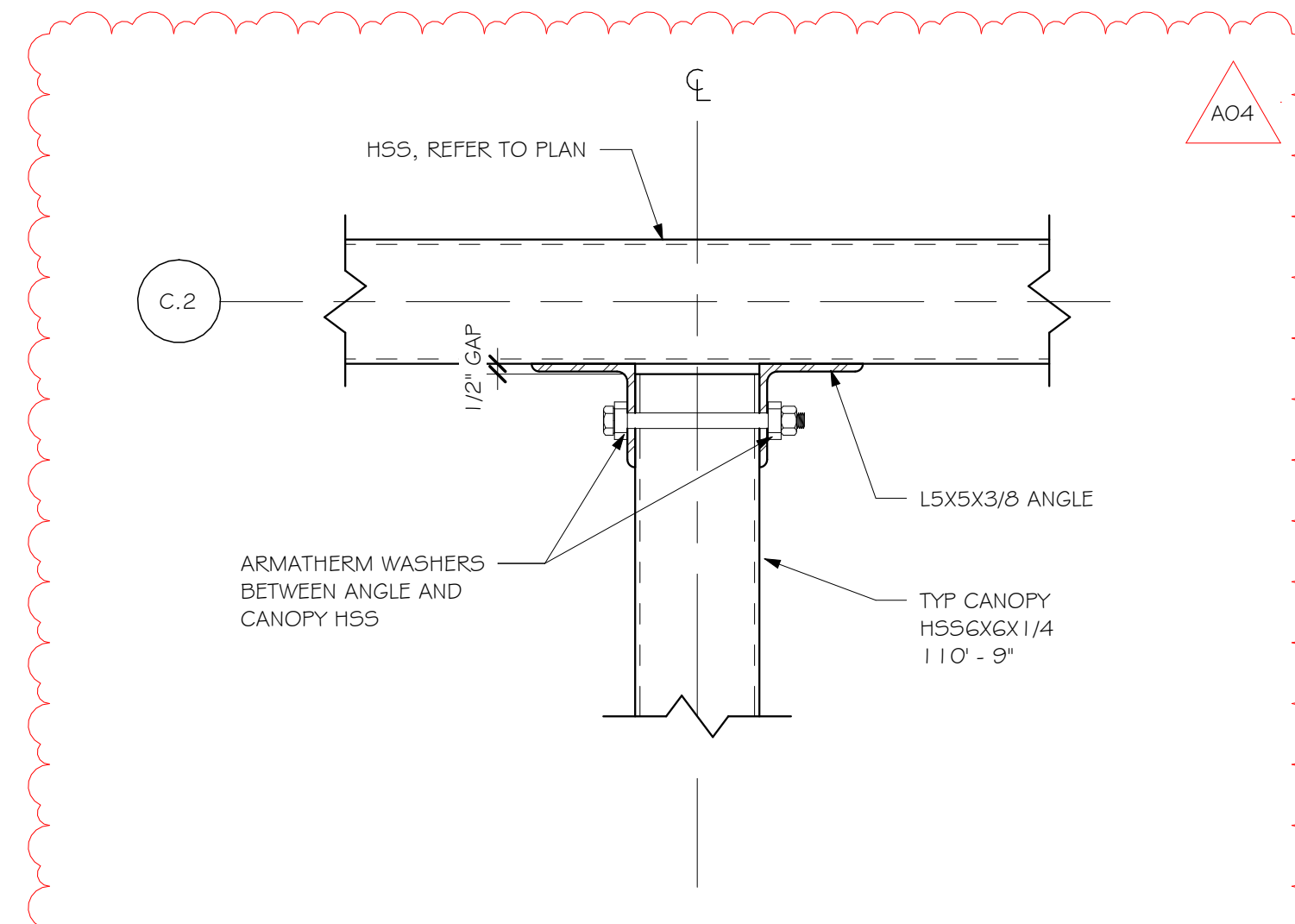
13 CANOPY FRAME DETAIL @ CORNER
SCALE: N.T.S.



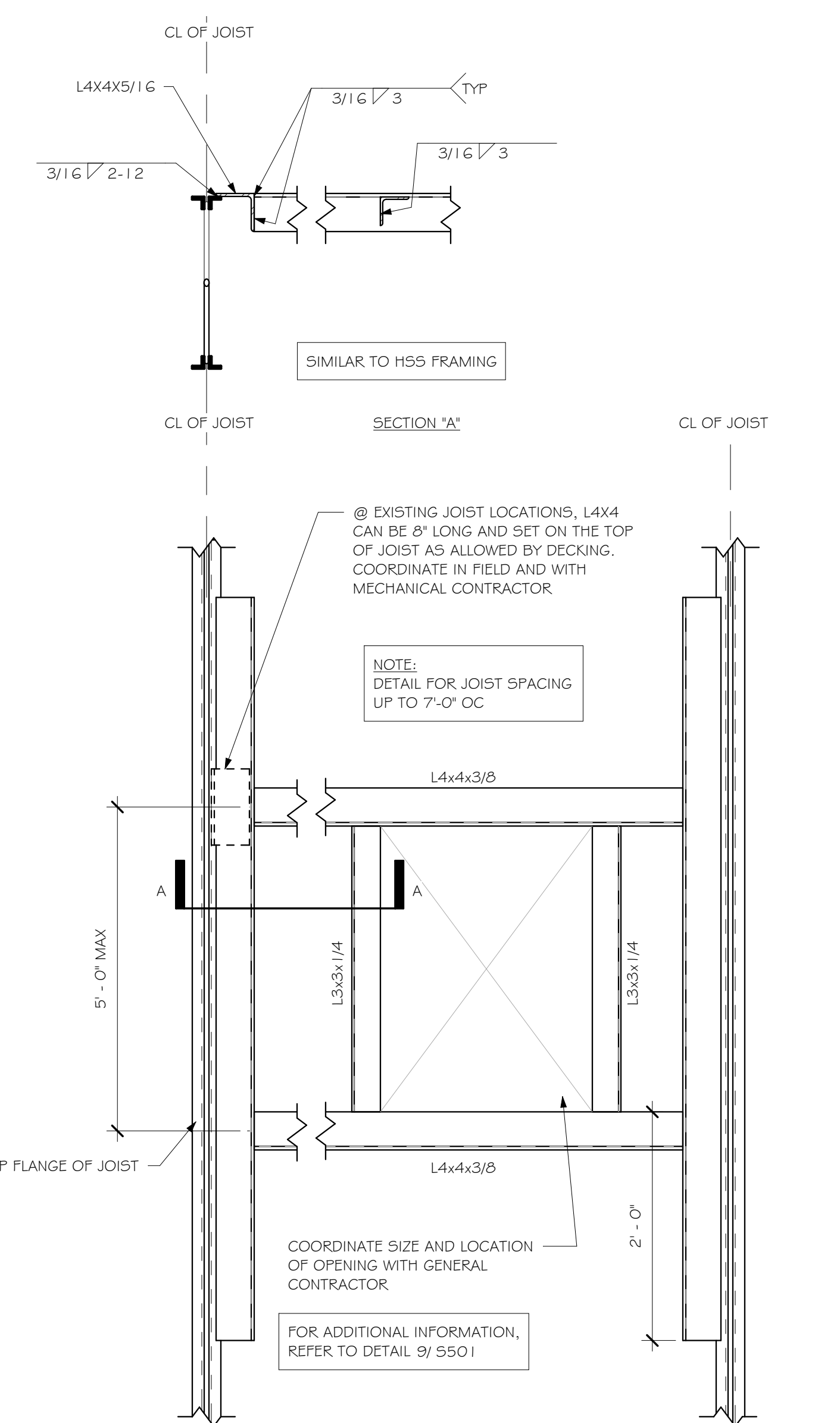
14 BEAM DECK PLATE
SCALE: N.T.S.



15 VESTIBULE THERMAL ISOLATION CONNECTION
SCALE: N.T.S.



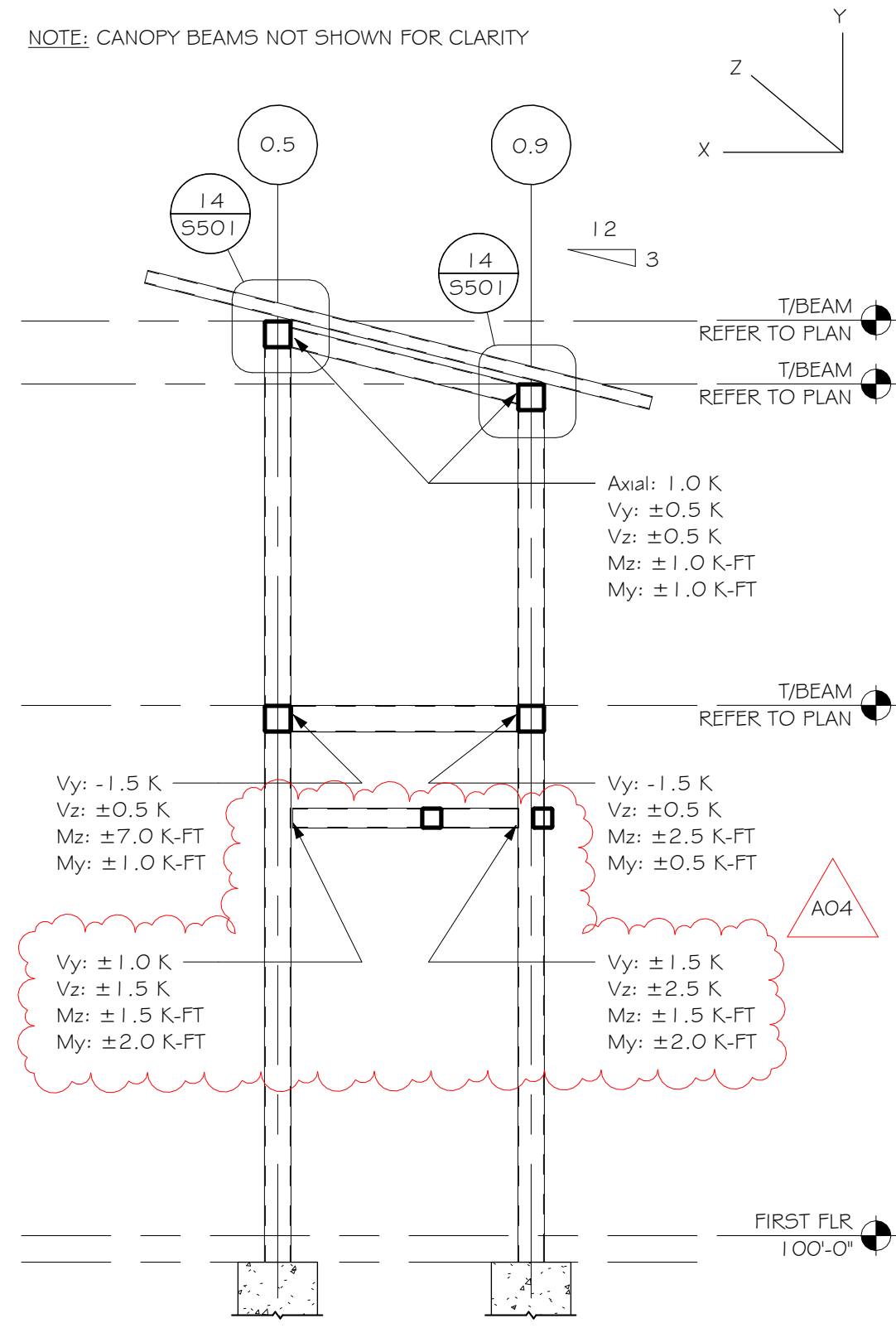
17 CANOPY CONNECTION TO VESTIBULE HSS
SCALE: N.T.S.



16 WELDED ANGLE FRAME AT STEEL JOISTS & BEAMS
SCALE: N.T.S.

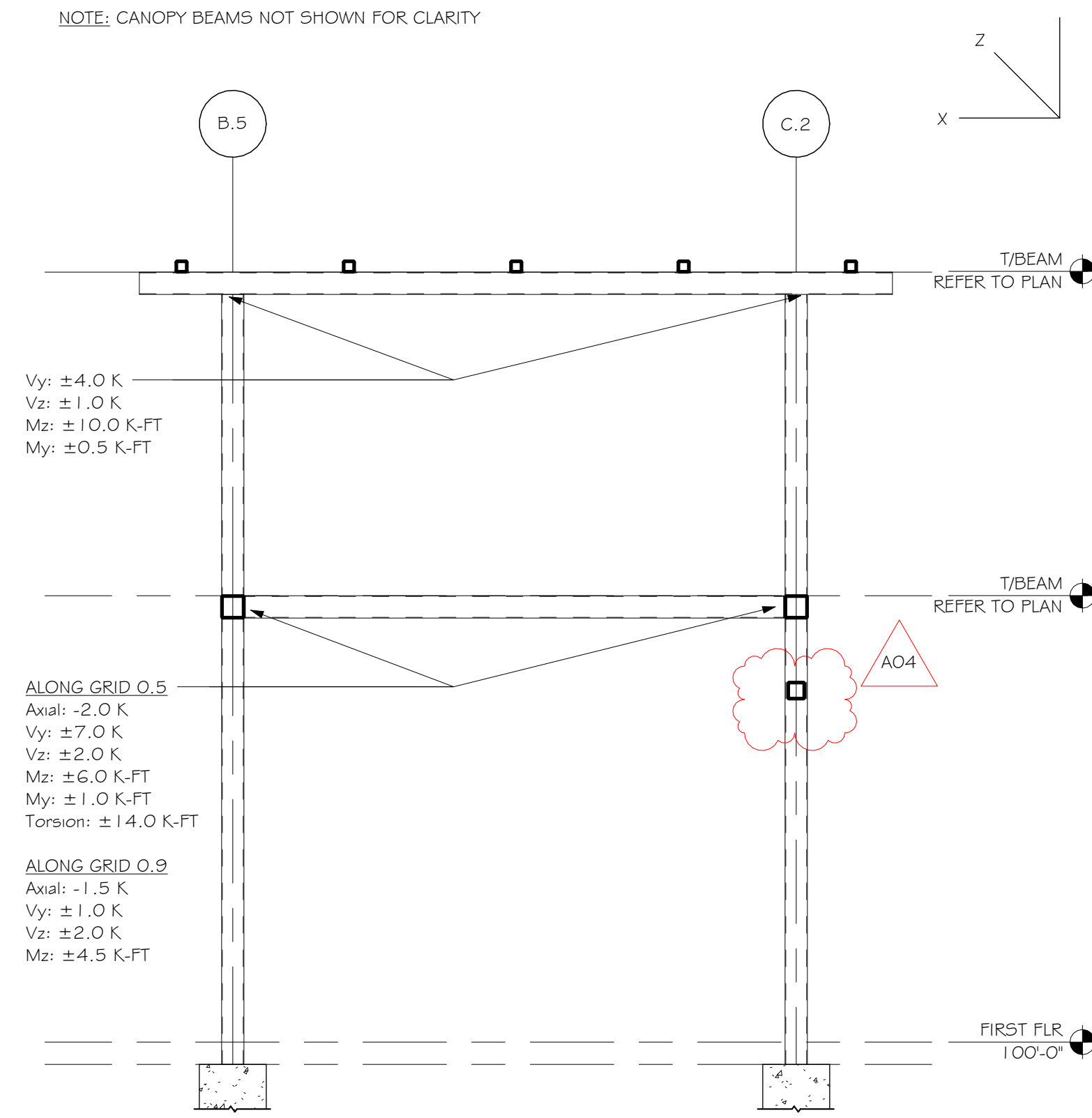
No.	Description	Date
A04	ADDENDUM #4	03/05/2025

NOTE: CANOPY BEAMS NOT SHOWN FOR CLARITY

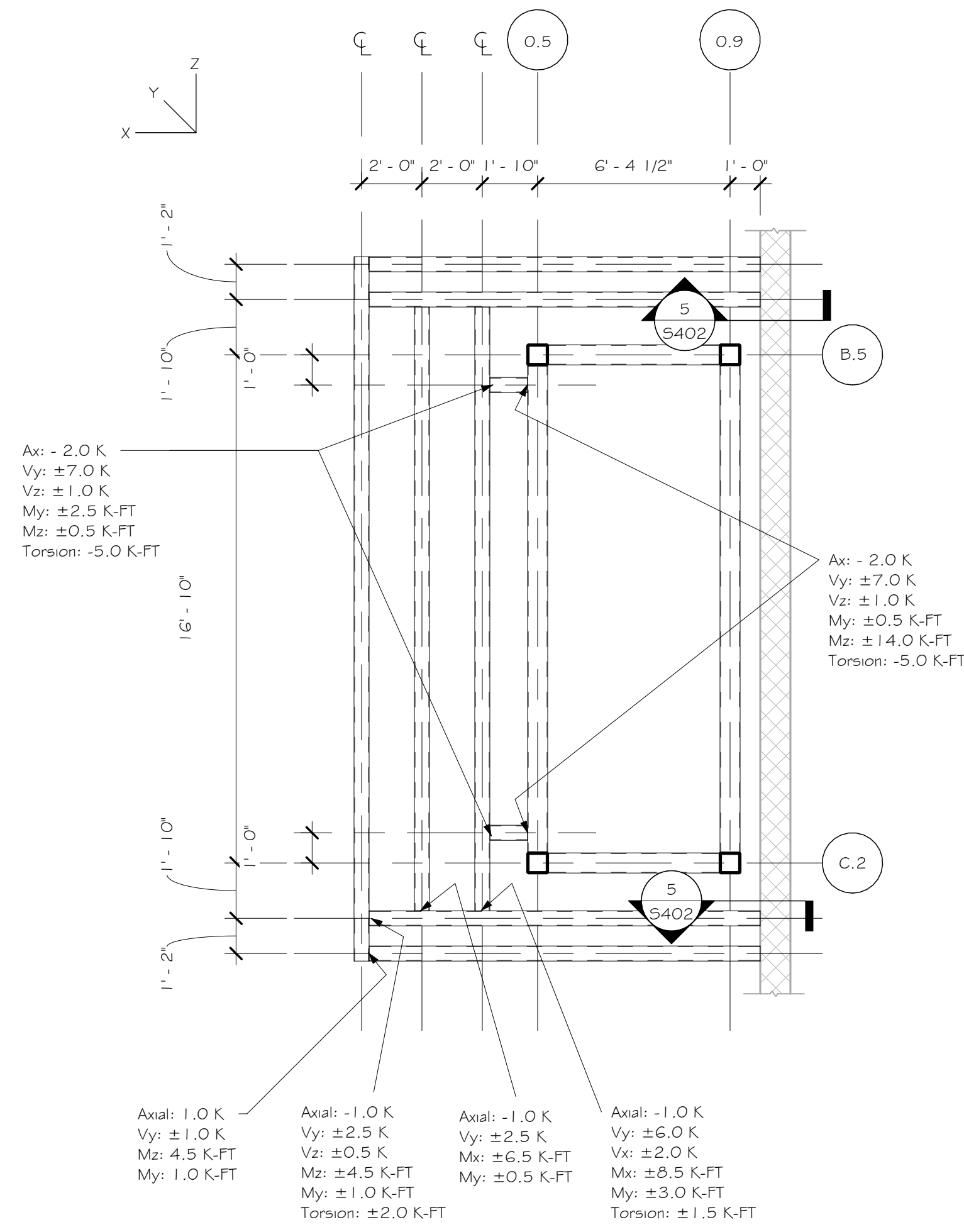


1 VESTIBULE E-W
SCALE: N.T.S.

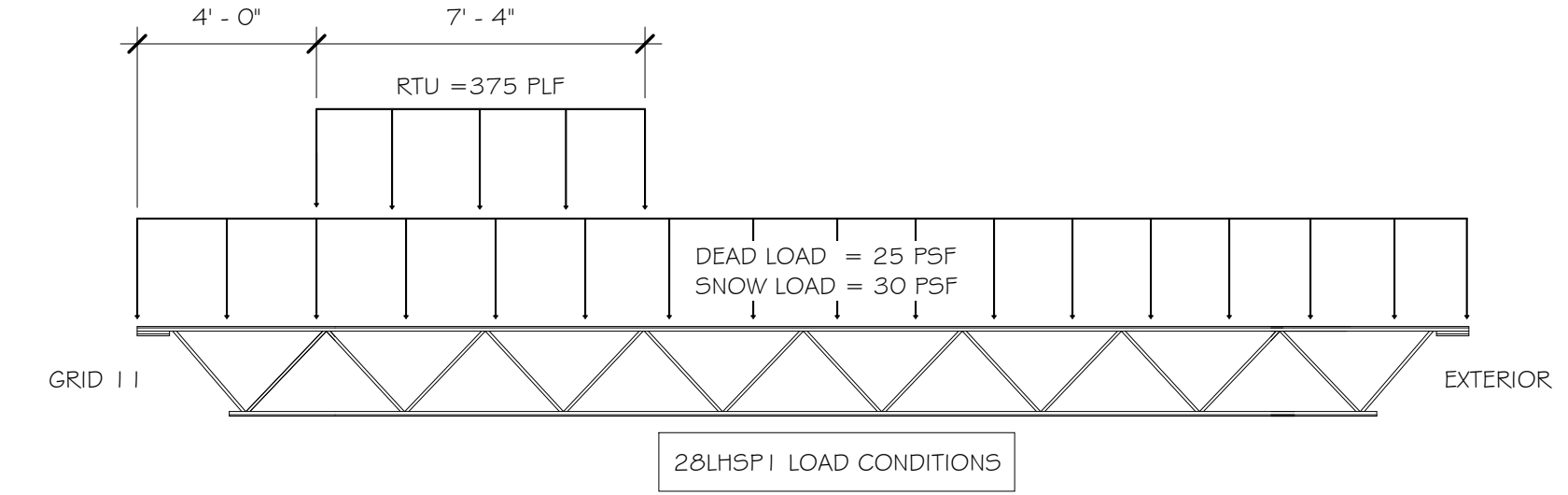
NOTE: CANOPY BEAMS NOT SHOWN FOR CLARITY



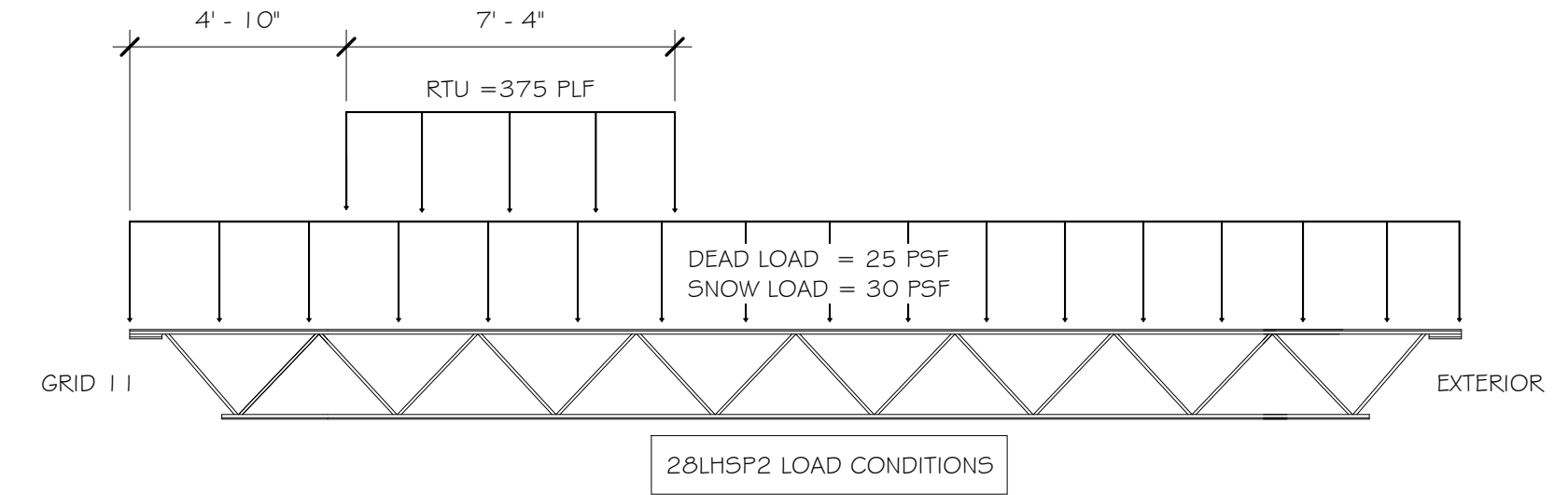
2 VESTIBULE N-S
SCALE: N.T.S.



3 LOWER CANOPY
SCALE: N.T.S.



4 SP1 JOIST LOADING W/ RTU - SEGMENT B
SCALE: N.T.S.



5 SP2 JOIST LOADING W/ RTU - SEGMENT B
SCALE: N.T.S.



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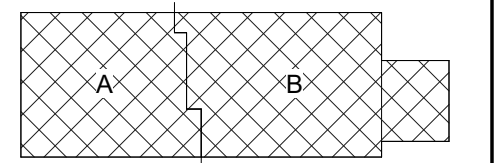
(608) 643-4100 www.ramaker.com

RAMAKER / HSR Project Number:
61583 / 24061

Project Date:
FEB 2025

Drawn By:
KLC

Key Plan:



KEY PLAN

BID SET

No.	Description	Date
A04	ADDENDUM #4	03/05/2025

Graphic Scale:
VARIES

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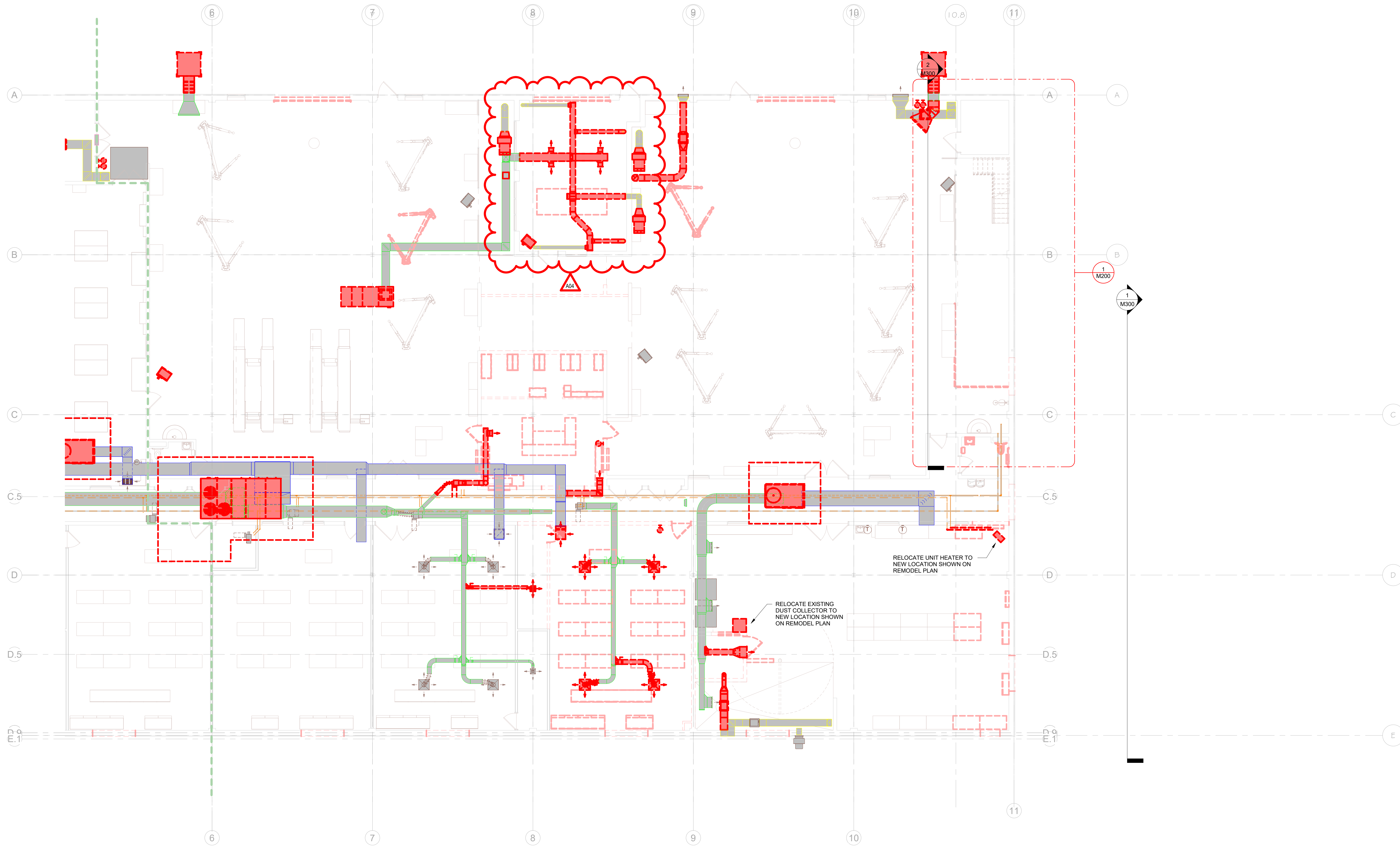
S502

KEYNOTES - DEMO	
Keynote Number	Keynote Description
#	ALL REMOVED ITEMS THAT THE OWNER WANTS SHALL BE REMOVED AND TURNED OVER TO THE OWNER AT DESIGNATED STORAGE SPACE ON SITE. ALL REMAINING ITEMS REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.



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NORTH
1 MECHANICAL REMOVAL PLAN - SEGMENT B
1/8" = 1'-0"

Project Title: WESTERN TECHNICAL COLLEGE
AUTOMOTIVE TECHNOLOGY CENTER
Project Location: 2721 LARSON STREET
LA CROSSE, WI 54603
Sheet Title: HVAC REMOVAL PLAN - SEGMENT B

HSR Project Number: 24061
Project Date: FEB 2025
Drawn By: JB/GA

Key Plan:

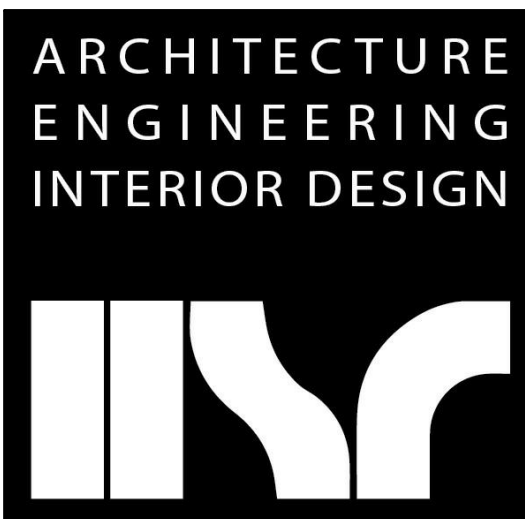
No.	Description	Date
A04	ADDENDUM #04	03-05-2025

Graphic Scale: VARIES

Last Update: 3/3/2025 10:38:49 AM

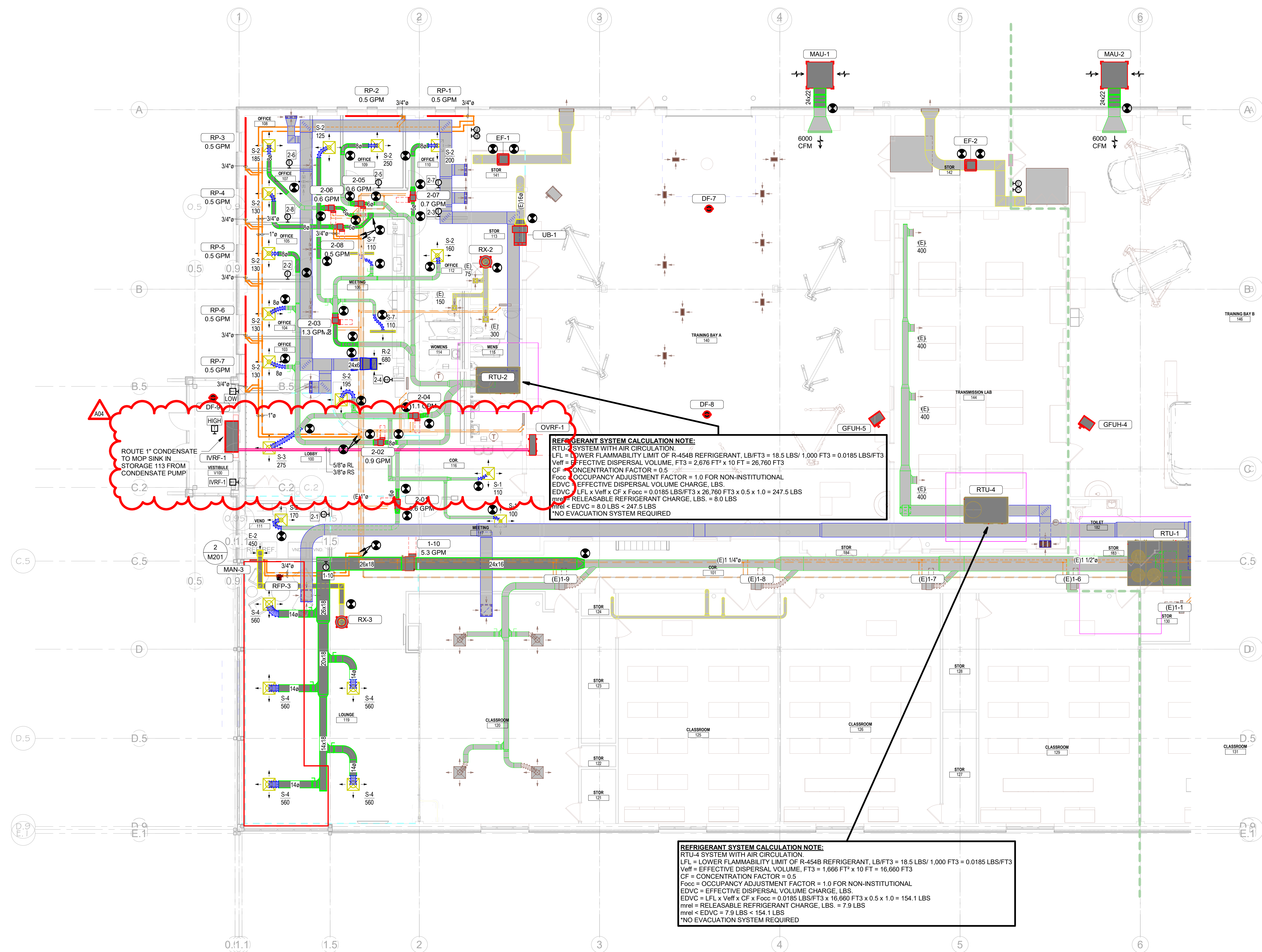
M091

KEYNOTES - REMODEL	
Keynote Number	Keynote Description
#	COORDINATE EXACT LOCATION OF ALL CEILING MOUNTED GRILLES AND DIFFUSERS WITH CEILING GRID, SPRINKLER HEADS, RECESSED LIGHTING AND ALL OTHER CEILING MOUNTED EQUIPMENT.



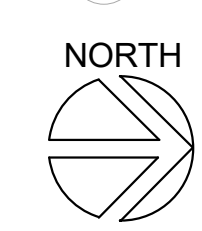
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REFRIGERANT SYSTEM CALCULATION NOTE:
 RTU-2 SYSTEM WITH AIR CIRCULATION
 LFL = LOWER FLAMMABILITY LIMIT OF R-454B REFRIGERANT, LB/FT³ = 18.5 LBS/ 1,000 FT³ = 0.0185 LBS/FT³
 Veff = EFFECTIVE DISPERSAL VOLUME, FT³ = 2,676 FT³ x 10 FT = 26,760 FT³
 CF = CONCENTRATION FACTOR = 0.5
 Focc = OCCUPANCY ADJUSTMENT FACTOR = 1.0 FOR NON-INSTITUTIONAL
 EDVC = EFFECTIVE DISPERSAL VOLUME CHARGE, LBS
 EDVC = LFL x Veff x CF x Focc = 0.0185 LBS/FT³ x 26,760 FT³ x 0.5 x 1.0 = 247.5 LBS
 mrel = RELEASABLE REFRIGERANT CHARGE, LBS. = 8.0 LBS
 mrel < EDVC = 8.0 LBS < 247.5 LBS
 NO EVACUATION SYSTEM REQUIRED

REFRIGERANT SYSTEM CALCULATION NOTE:
 RTU-4 SYSTEM WITH AIR CIRCULATION
 LFL = LOWER FLAMMABILITY LIMIT OF R-454B REFRIGERANT, LB/FT³ = 18.5 LBS/ 1,000 FT³ = 0.0185 LBS/FT³
 Veff = EFFECTIVE DISPERSAL VOLUME, FT³ = 1,666 FT³ x 10 FT = 16,660 FT³
 CF = CONCENTRATION FACTOR = 0.5
 Focc = OCCUPANCY ADJUSTMENT FACTOR = 1.0 FOR NON-INSTITUTIONAL
 EDVC = EFFECTIVE DISPERSAL VOLUME CHARGE, LBS
 EDVC = LFL x Veff x CF x Focc = 0.0185 LBS/FT³ x 16,660 FT³ x 0.5 x 1.0 = 154.1 LBS
 mrel = RELEASABLE REFRIGERANT CHARGE, LBS. = 7.9 LBS
 mrel < EDVC = 7.9 LBS < 154.1 LBS
 NO EVACUATION SYSTEM REQUIRED



MECHANICAL REMODEL PLAN - SEGMENT A

1/8" = 1'-0"

Project Title: **WESTERN TECHNICAL COLLEGE
 AUTOMOTIVE TECHNOLOGY CENTER**
 Project Location: 2721 LARSON STREET
 LA CROSSE, WI 54603
 Sheet Title: **HVAC REMODEL PLAN - SEGMENT A**

HSR Project Number: **24061**
 Project Date: **FEB 2025**
 Drawn By: **JB/GA**

Key Plan:

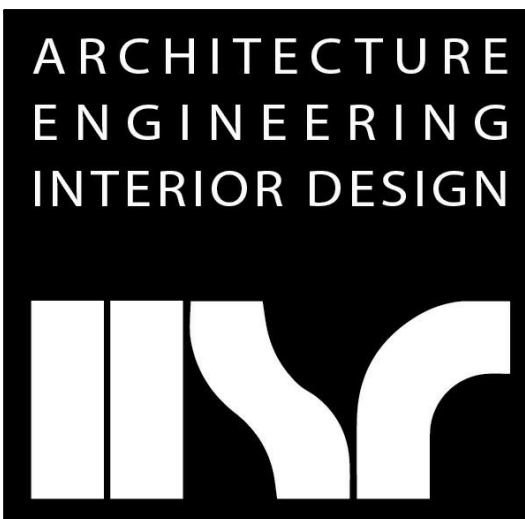
No.	Description	Date
A04	ADDENDUM #04	03-05-2025

Graphic Scale: **VARIES**

Last Update: **3/3/2025 10:39:06 AM**

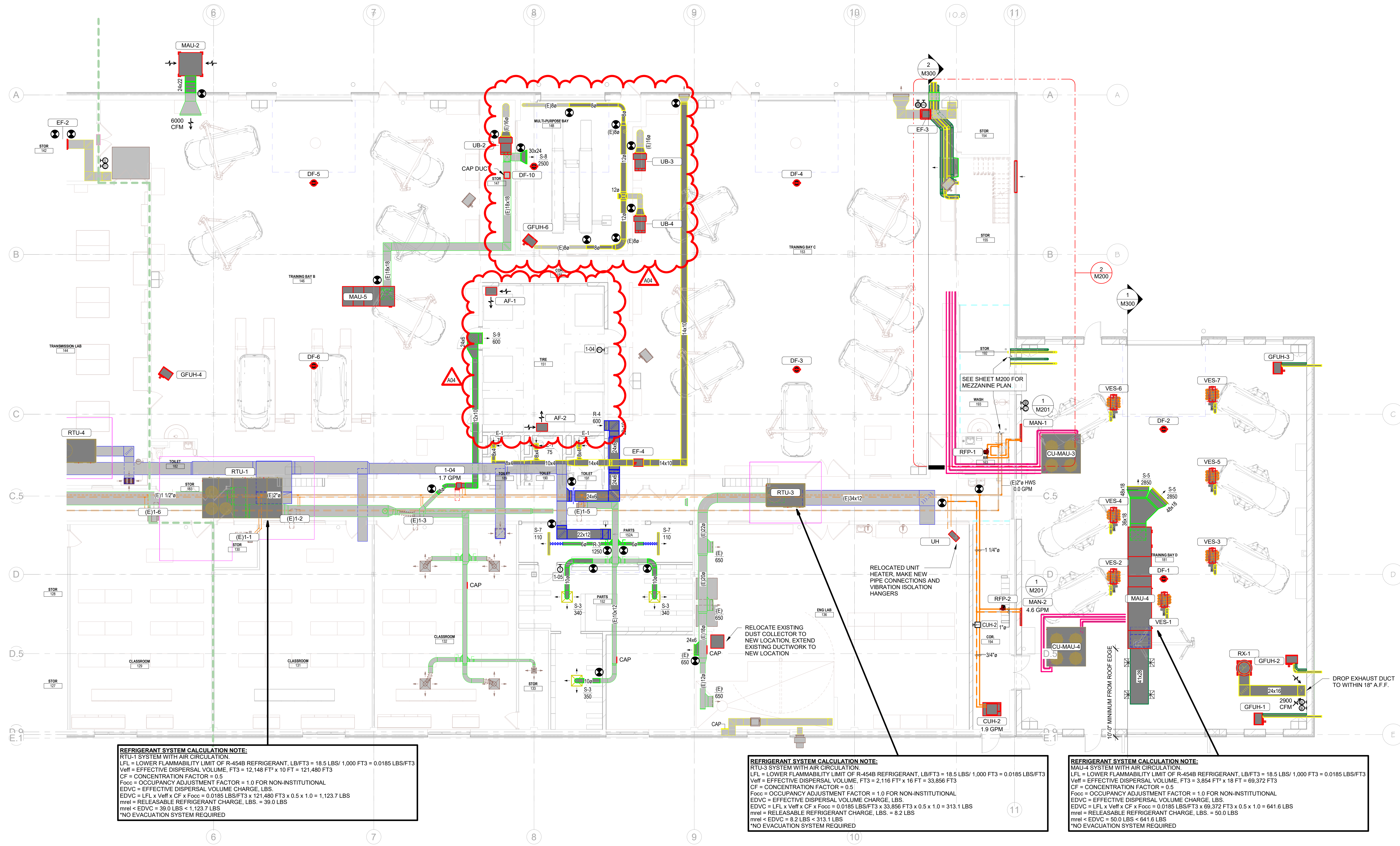
M100

KEYNOTES - REMODEL	
Keynote Number	Keynote Description
#	COORDINATE EXACT LOCATION OF ALL CEILING MOUNTED GRILLES AND DIFFUSERS WITH CEILING GRID, SPRINKLER HEADS, RECESSED LIGHTING AND ALL OTHER CEILING MOUNTED EQUIPMENT.



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REFRIGERANT SYSTEM CALCULATION NOTE:
 RTU-1 SYSTEM WITH AIR CIRCULATION.
 LFL = LOWER FLAMMABILITY LIMIT OF R-454B REFRIGERANT, LB/FT³ = 18.5 LBS/ 1,000 FT³ = 0.0185 LBS/FT³
 Veff = EFFECTIVE DISPERSAL VOLUME, FT³ = 12,148 FT³ x 10 FT = 121,480 FT³
 CF = CONCENTRATION FACTOR = 0.5
 Focc = OCCUPANCY ADJUSTMENT FACTOR = 1.0 FOR NON-INSTITUTIONAL
 EDVC = EFFECTIVE DISPERSAL VOLUME CHARGE, LBS.
 EDVC = LFL x Veff x CF x Focc = 0.0185 LBS/FT³ x 121,480 FT³ x 0.5 x 1.0 = 1,123.7 LBS
 mrel = RELEASABLE REFRIGERANT CHARGE, LBS. = 39.0 LBS
 mrel < EDVC = 39.0 LBS < 1,123.7 LBS
 *NO EVACUATION SYSTEM REQUIRED

REFRIGERANT SYSTEM CALCULATION NOTE:
 RTU-3 SYSTEM WITH AIR CIRCULATION.
 LFL = LOWER FLAMMABILITY LIMIT OF R-454B REFRIGERANT, LB/FT³ = 18.5 LBS/ 1,000 FT³ = 0.0185 LBS/FT³
 Veff = EFFECTIVE DISPERSAL VOLUME, FT³ = 2,116 FT³ x 16 FT = 33,856 FT³
 CF = CONCENTRATION FACTOR = 0.5
 Focc = OCCUPANCY ADJUSTMENT FACTOR = 1.0 FOR NON-INSTITUTIONAL
 EDVC = EFFECTIVE DISPERSAL VOLUME CHARGE, LBS.
 EDVC = LFL x Veff x CF x Focc = 0.0185 LBS/FT³ x 33,856 FT³ x 0.5 x 1.0 = 313.1 LBS
 mrel = RELEASABLE REFRIGERANT CHARGE, LBS. = 8.2 LBS
 mrel < EDVC = 8.2 LBS < 313.1 LBS
 *NO EVACUATION SYSTEM REQUIRED

REFRIGERANT SYSTEM CALCULATION NOTE:
 MAU-4 SYSTEM WITH AIR CIRCULATION.
 LFL = LOWER FLAMMABILITY LIMIT OF R-454B REFRIGERANT, LB/FT³ = 18.5 LBS/ 1,000 FT³ = 0.0185 LBS/FT³
 Veff = EFFECTIVE DISPERSAL VOLUME, FT³ = 3,854 FT³ x 18 FT = 69,372 FT³
 CF = CONCENTRATION FACTOR = 0.5
 Focc = OCCUPANCY ADJUSTMENT FACTOR = 1.0 FOR NON-INSTITUTIONAL
 EDVC = EFFECTIVE DISPERSAL VOLUME CHARGE, LBS.
 EDVC = LFL x Veff x CF x Focc = 0.0185 LBS/FT³ x 69,372 FT³ x 0.5 x 1.0 = 641.6 LBS
 mrel = RELEASABLE REFRIGERANT CHARGE, LBS. = 50.0 LBS
 mrel < EDVC = 50.0 LBS < 641.6 LBS
 *NO EVACUATION SYSTEM REQUIRED

MECHANICAL REMODEL PLAN - SEGMENT B
 1/8" = 1'-0"

Project Title: **WESTERN TECHNICAL COLLEGE
 AUTOMOTIVE TECHNOLOGY CENTER**
 Project Location: 2721 LARSON STREET
 LA CROSSE, WI 54603
 Sheet Title: **HVAC REMODEL PLAN - SEGMENT B**

HSR Project Number: **24061**
 Project Date: **FEB 2025**
 Drawn By: **JB/GA**

Key Plan:

No.	Description	Date
A04	ADDENDUM #04	03-05-2025

Graphic Scale:
VARIES
 Last Update:
3/3/2025 10:42:10 AM

M101

GAS FIRED BOILER SCHEDULE

UNIT NO.	MANUFACTURER	MODEL NO.	TYPE	GAS BURNER				GAS FIRED HEAT EXCHANGER				WATERSIDE				EFFICIENCY AHR1 RATED THERMAL EFFICIENCY	RELIEF VALVE	UNIT WEIGHT	ELECTRICAL			REFERENCE	REMARKS		
				MAX INPUT	MAX OUTPUT	INPUT @ MIN. FIRE	MIN. BURNER TURNDOWN	FUEL TYPE	MAX PRESSURE	FLOW	MIN. FLOW @ MAX. FIRE	ENTERING WATER TEMP.	LEAVING WATER TEMP.	PRESS. DROP	WATER VOLUME				GLYCOL TYPE	GLYCOL (%)	FLA			VOLTAGE	PHASE
BLR-1	Lochinvar	KBX0400N	CONDENSING, SEALED COMBUSTION	399,000 Btu/h	387,030 Btu/h	39,900 Btu/h	10:1	NG	0.50 psi	0.0 GPM	38.0 GPM	160 °F	180 °F	10.0 FH2O	4 gal	WATER	0	97%	50.0 psig	400 lbf	3 A	120 V	1	2M502	PROVIDE VARIABLE SPEED CIRCULATING PUMP
BLR-2	Lochinvar	KBX0400N	CONDENSING, SEALED COMBUSTION	399,000 Btu/h	387,030 Btu/h	39,900 Btu/h	10:1	NG	0.50 psi	0.0 GPM	38.0 GPM	160 °F	180 °F	10.0 FH2O	4 gal	WATER	0	97%	50.0 psig	400 lbf	3 A	120 V	1	2M502	PROVIDE VARIABLE SPEED CIRCULATING PUMP

Grand total: 2

GAS FIRED UNIT HEATER SCHEDULE

UNIT NO.	MANUFACTURER	MODEL NO.	TYPE	SUPPLY FAN			GAS FIRED HEAT EXCHANGER				ELECTRICAL				REFERENCE	REMARKS				
				AIRFLOW	QTY	POWER	INPUT	OUTPUT	NO. OF STAGES	FUEL TYPE	MAX. GAS PRESSURE	AIR SIDE EAT DB	LAT DB	EFFICIENCY			UNIT WEIGHT	FLA	VOLTAGE	PHASE
GFUH-1	Modine	PTC55	SEALED COMBUSTION	1097 CFM	1	0.125 hp	55,000 Btu/h	51,150 Btu/h	1	NG	0.50 psi	60 °F	103 °F	93	93 lbf	4 A	115 V	1	9M501	PROVIDE VERTICAL CONCENTRIC VENTING, VIBRATION ISOLATION HANGERS
GFUH-2	Modine	PTC55	SEALED COMBUSTION	1097 CFM	1	0.125 hp	55,000 Btu/h	51,150 Btu/h	1	NG	0.50 psi	60 °F	103 °F	93	93 lbf	4 A	115 V	1	9M501	PROVIDE VERTICAL CONCENTRIC VENTING, VIBRATION ISOLATION HANGERS
GFUH-3	Modine	PTC55	SEALED COMBUSTION	1097 CFM	1	0.125 hp	55,000 Btu/h	51,150 Btu/h	1	NG	0.50 psi	60 °F	103 °F	93	93 lbf	4 A	115 V	1	9M501	PROVIDE VERTICAL CONCENTRIC VENTING, VIBRATION ISOLATION HANGERS
GFUH-4	Modine	PTC55	SEALED COMBUSTION	1097 CFM	1	0.125 hp	55,000 Btu/h	51,150 Btu/h	1	NG	0.50 psi	60 °F	103 °F	93	93 lbf	4 A	115 V	1	9M501	PROVIDE VERTICAL CONCENTRIC VENTING, VIBRATION ISOLATION HANGERS
GFUH-5	Modine	PTC55	SEALED COMBUSTION	1097 CFM	1	0.125 hp	55,000 Btu/h	51,150 Btu/h	1	NG	0.50 psi	60 °F	103 °F	93	93 lbf	4 A	115 V	1	9M501	PROVIDE VERTICAL CONCENTRIC VENTING, VIBRATION ISOLATION HANGERS
GFUH-6	Modine	PTC55	SEALED COMBUSTION	1097 CFM	1	0.125 hp	55,000 Btu/h	51,150 Btu/h	1	NG	0.50 psi	60 °F	103 °F	93	93 lbf	4 A	115 V	1	9M501	PROVIDE VERTICAL CONCENTRIC VENTING, VIBRATION ISOLATION HANGERS

Grand total: 6

CIRCULATING PUMP SCHEDULE

UNIT NO.	MANUFACTURER	MODEL NO.	SYSTEM	PUMP			IMPELLER				MOTOR				FLUID PROPERTIES				ELECTRICAL			REFERENCE	REMARKS
				FLOW	TYPE	HEAD	PUMP EFFICIENCY	IMPELLER DIA.	QTY	POWER	RPM	BHP	TYPE	GLYCOL %	UNIT WEIGHT	VOLTAGE	PHASE	DETAIL NO.	CONTROL VALVE				
BGP-1	Grundfos	MAGNA 3 40-80	BOILER PUMP	38.0 GPM	INLINE WET ROTOR ECM	10 FH2O	56.3%	10	45737	2929	0.17	WATER	0	36 lbf	120 V	1	2M502	0-10V BOILER CONTROLLER	PROVIDED WITH BOILER				
BGP-2	Grundfos	MAGNA 3 40-80	BOILER PUMP	38.0 GPM	INLINE WET ROTOR ECM	10 FH2O	56.3%	1	45737	2929	0.17	WATER	0	36 lbf	120 V	1	2M502	0-10V BOILER CONTROLLER	PROVIDED WITH BOILER				
HWP-1	Grundfos	TP 80-240	HEATING SYSTEM	50.0 GPM	INLINE SINGLE STAGE	60 FH2O	56.5%	1	300 hp	3530	1.51	WATER	0	158 lbf	208 V	3		BAS	PROVIDE NEW PUMP ISOLATION & CHECK VALVES				
HWP-2	Grundfos	TP 80-240	HEATING SYSTEM	50.0 GPM	INLINE SINGLE STAGE	60 FH2O	56.5%	1	300 hp	3530	1.51	WATER	0	158 lbf	208 V	3		BAS	PROVIDE NEW PUMP ISOLATION & CHECK VALVES				
RFP-1	GRUNDFOS	UPS 43-100 F	RADIANT FLOOR MANIFOLD	5.0 GPM	INLINE WET ROTOR	20 FH2O	16.3%	1	0.50 hp	0	0.23	WATER	0	18 lbf	120 V	1	8M501	BAS					
RFP-2	GRUNDFOS	UPS 43-100 F	RADIANT FLOOR MANIFOLD	5.0 GPM	INLINE WET ROTOR	20 FH2O	16.3%	1	0.50 hp	0	0.23	WATER	0	18 lbf	120 V	1	8M501	BAS					
RFP-3	GRUNDFOS	UPS 43-100 F	RADIANT FLOOR MANIFOLD	3.0 GPM	INLINE WET ROTOR	20 FH2O	16.3%	1	0.50 hp	0	0.23	WATER	0	18 lbf	120 V	1	8M501	BAS					

Grand total: 7

HYDRONIC RADIANT FLOOR PIPING MANIFOLD SCHEDULE

UNIT NO.	MANUFACTURER	MODEL NO.	TYPE	HOT WATER				MANIFOLD				REMARKS				
				HEATING CAP.	FLOW	EWT	LWT	PRESS. DROP	GLYCOL TYPE	GLYCOL	AREA		LOOP PIPE DIAMETER	CONTROLS	TEMP. DIFFERENTIAL	MAX LOOP LENGTH
MAN-1	Uponor	A2720702	7 LOOP SS 1-1/4" MANIFOLD	45,737 Btu/h	4.6 GPM	103 °F	83 °F	5.00 FH2O	WATER	0%	1905	5/8"	BAS	20 °F	380' - 0"	7
MAN-2	Uponor	A2720702	7 LOOP SS 1-1/4" MANIFOLD	45,737 Btu/h	4.6 GPM	103 °F	83 °F	5.00 FH2O	WATER	0%	1905	5/8"	BAS	20 °F	380' - 0"	7
MAN-3	Uponor	A2720302	3 LOOP SS 1-1/4" MANIFOLD	11,259 Btu/h	1.2 GPM	93 °F	73 °F	5.00 FH2O	WATER	0%	500	5/8"	BAS	20 °F	295' - 0"	3

Grand total: 3

HYDRONIC RADIANT PANEL SCHEDULE

UNIT NO.	MANUFACTURER	MODEL NO.	TYPE	HOT WATER HEATING COIL				HOT WATER				DIMENSIONS				REFERENCE		REMARKS: PROVIDE ALL REQUIRED TRIM PANELS TO CONCEAL PIPING FOR A CONTINUOUS PANEL APPEARANCE		
				HEATING CAP.	HEATING CAP. PER LENGTH	EAT DB	ROWS	TUBE DIA.	FLOW	EWT	LWT	PRESS. DROP	GLYCOL TYPE	GLYCOL	LENGTH	ENCLOSURE HEIGHT	BOTTOM MOUNTING HEIGHT		ZONE	DETAIL NO.
RP-1	RUNTAL	RF-3	WALL MOUNTED	3,180 Btu/h	530.0 Btu/(h-ft)	65 °F	3	3/4"	0.5 GPM	160 °F	140 °F	0.21 FH2O	WATER	0%	6' - 0"	9"	4"	RP-1	5M501	2-WAY
RP-2	RUNTAL	RF-3	WALL MOUNTED	4,770 Btu/h	530.0 Btu/(h-ft)	65 °F	3	3/4"	0.5 GPM	160 °F	140 °F	0.21 FH2O	WATER	0%	8' - 0"	9"	4"	RP-2	5M501	2-WAY
RP-3	RUNTAL	RF-3	WALL MOUNTED	4,240 Btu/h	530.0 Btu/(h-ft)	65 °F	3	3/4"	0.5 GPM	160 °F	140 °F	0.21 FH2O	WATER	0%	8' - 0"	9"	4"	RP-3	5M501	2-WAY
RP-4	RUNTAL	RF-3	WALL MOUNTED	3,710 Btu/h	530.0 Btu/(h-ft)	65 °F	3	3/4"	0.5 GPM	160 °F	140 °F	0.21 FH2O	WATER	0%	7' - 0"	9"	4"	RP-4	5M501	2-WAY
RP-5	RUNTAL	RF-3	WALL MOUNTED	4,240 Btu/h	530.0 Btu/(h-ft)	65 °F	3	3/4"	0.5 GPM	160 °F	140 °F	0.21 FH2O	WATER	0%	8' - 0"	9"	4"	RP-5	5M501	2-WAY
RP-6	RUNTAL	RF-3	WALL MOUNTED	3,180 Btu/h	530.0 Btu/(h-ft)	65 °F	3	3/4"	0.5 GPM	160 °F	140 °F	0.21 FH2O	WATER	0%	6' - 0"	9"	4"	RP-6	5M501	2-WAY
RP-7	RUNTAL	RF-3	WALL MOUNTED	3,710 Btu/h	530.0 Btu/(h-ft)	65 °F	3	3/4"	0.5 GPM	160 °F	140 °F	0.21 FH2O	WATER	0%	7' - 0"	9"	4"	RP-7	5M501	2-WAY

Grand total: 7

HYDRONIC CABINET UNIT HEATER SCHEDULE

UNIT NO.	MANUFACTURER	MODEL NO.	TYPE	SUPPLY FAN			HOT WATER HEATING COIL				ELECTRICAL				REFERENCE		REMARKS								
				AIRFLOW	SPEED	DRIVE TYPE	QTY	POWER	HEATING CAP.	EAT DB	LAT DB	FLOW	EWT	LWT	PRESS. DROP	GLYCOL TYPE		GLYCOL	UNIT WEIGHT	MCA	MOP	VOLTAGE	PHASE	DETAIL NO.	CONTROL VALVE
CUH-2	TRANE	FFED40	HORIZONTAL CEILING RECESSED	400 CFM	HIGH	DIRECT ECM	1	0.06 hp	18,086 Btu/h	60 °F	102 °F	1.9 GPM	140 °F	120 °F	3.37 FH2O	WATER	0%	88 lbf	3 A	15 A	120 V	1	6M502	3-WAY	PROVIDE HANGING VIBRATION ISOLATORS, DISCONNECT SWITCH

Grand total: 1

VARIABLE AIR VOLUME TERMINAL UNIT SCHEDULE

UNIT NO.	SYSTEM	MANUFACTURER	MODEL NO.	PRIMARY		HOT WATER HEATING COIL				HOT WATER				NC LEVEL DISCHARGE / RADIATED AHRI 885-98/08	UNIT WEIGHT	REFERENCE		REMARKS: PROVIDE ULTRA LOW AIR LEAKAGE, 1" DUAL WALL INSULATION		
				MAXIMUM AIRFLOW	MINIMUM AIRFLOW	MAX. HEATING AIRFLOW	HEATING CAP.	EAT DB	LAT DB	PRESS. DROP	ROWS	FLOW	EWT			DELTA T	PRESS. DROP		GLYCOL TYPE	GLYCOL
1-04	RTU-1	TRANE	VCWF08	600 CFM	180 CFM	600 CFM	22,770 Btu/h	55 °F	90 °F	0.56 in-wg	3	1.7 GPM	140 °F	112 °F	0.26 FH2O	NONE	0%	26 / 15	28 lbf	7M502
1-10	RTU-1	TRANE	VCWF24	2800 CFM	840 CFM	2800 CFM	106,380 Btu/h	55 °F	90 °F	0.59 in-wg	3	5.3 GPM	140 °F	41 °F	1.59 FH2O	NONE	0%	25 / 15	116 lbf	7M502
2-01	RTU-2	TRANE	VCWF06	170 CFM	85 CFM	170 CFM	7,370 Btu/h	55 °F	95 °F	0.10 in-wg	2	0.6 GPM	140 °F	29 °F	0.19 FH2O	NONE	0%	23 / 15	25 lbf	7M502
2-02	RTU-2	TRANE	VCWF08	390 CFM	120 CFM	390 CFM	16,920 Btu/h	55 °F	95 °F	0.37 in-wg	4	0.9 GPM	140 °F	39 °F	0.11 FH2O	NONE	0%	21 / 15	28 lbf	7M502
2-03	RTU-2	TRANE	VCWF08	505 CFM	165 CFM	505 CFM	19,170 Btu/h	55 °F	90 °F	0.42 in-wg	3	1.3 GPM	140 °F	31 °F	0.17 FH2O	NONE	0%	26 / 15	28 lbf	7M502
2-04	RTU-2	TRANE	VCWF08	470 CFM	145 CFM	470 CFM	20,390 Btu/h	55 °F	95 °F	0.50 in-wg	4	1.1 GPM	140 °F	38 °F	0.17 FH2O	NONE	0%	22 / 15	28 lbf	7M502
2-05	RTU-2	TRANE	VCWF06	250 CFM	85 CFM	250 CFM	10,850 Btu/h	55 °F	95 °F	0.26 in-wg	3	0.6 GPM	140 °F	42 °F	0.30 FH2O	NONE	0%	24 / 15	25 lbf	7M502
2-06	RTU-2	TRANE	VCWF06	185 CFM	85 CFM	185 CFM	8,030 Btu/h	55 °F	95 °F	0.11 in-wg	2	0.6 GPM	140 °F	28 °F	0.24 FH2O	NONE	0%	23 / 15	25 lbf	7M502
2-07	RTU-2	TRANE	VCWF06	200 CFM	85 CFM	200 CFM	8,680 Btu/h	55 °F	95 °F	0.13 in-wg	2	0.7 GPM	140 °F	27 °F	0.29 FH2O	NONE	0%	24 / 15	25 lbf	7M502
2-08	RTU-2	TRANE	VCWF06	130 CFM	85 CFM	130 CFM	6,450 Btu/h	55 °F	101 °F	0.06 in-wg	2	0.5 GPM	140 °F	26 °F	0.18 FH2O	NONE	0%	21 / 15	25 lbf	7M502
RTU-2-8				2300 CFM	855 CFM	2300 CFM	97,860 Btu/h					6.3 GPM								
Grand total:	10			5700 CFM	1875 CFM	5700 CFM	226,910 Btu/h					13.3 GPM								

INDOOR VRF EQUIPMENT UNIT SCHEDULE

UNIT NO.	MANUFACTURER	MODEL NO.	TYPE	SUPPLY FAN			FILTERS	COOLING PERFORMANCE @ 95 DEG F				HEATING PERFORMANCE @ 47 DEG F				ELECTRICAL		
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Consultant:



Project Location: 2721 LARSON STREET
LA CROSSE, WI 54603

Project Title: **WESTERN TECHNICAL COLLEGE
WTC VEHICLE TECHNOLOGY CENTER**
1ST FL. ELECTRICAL POWER PLAN - AREA A

Project Number: **24061**
Project Date: **FEB 2025**
Drawn By: **PCP**

Key Plan:

Revisions:

No.	Description	Date
2	ADDENDUM #2	02-27-2025
4	ADDENDUM #4	03-04-2025

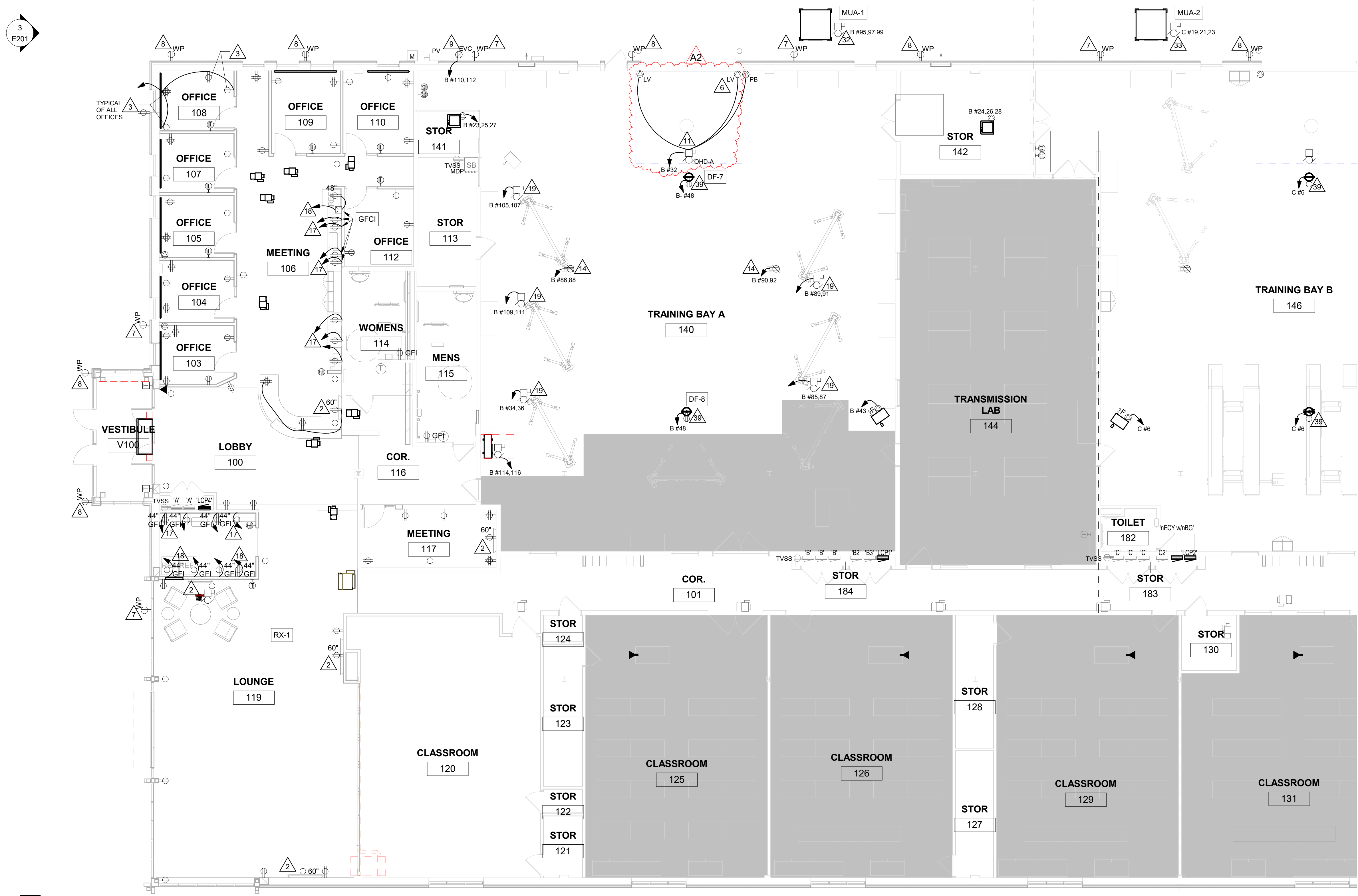
Graphic Scale: **VARIES**

Last Update: **3/5/2025 11:55:16 AM**

E201

GENERAL NOTES - POWER	
#	DESCRIPTION
A	PERFORM UPDATED ARC FLASH STUDY BEFORE ORDERING GEAR AND PANELS TO MEET REQUIRED KAIC.
B	*** NOTE *** FEEDERS SHOWN MAY BE OVERSIZED TO COMPENSATE FOR VOLTAGE DROP.
C	PROVIDE SQUARE 'D' PANELBOARDS ONLY, NO EQUALS ACCEPTED.
D	WORK PERFORMED IN NON-REMODELED AREAS, THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR CLEAN-UP AND PATCHING OF WALLS AND CEILINGS. TYPICAL
E	REUSE EXISTING CIRCUITS, RACEWAY, AND WIRING IF POSSIBLE. VERIFY SUITABILITY OF ALL COMPONENTS WITH THE NEW EQUIPMENT. CIRCUIT NUMBERS ARE REPRESENTATIVE. IF NEW EQUIPMENT RATING DOES NOT MATCH EQUIPMENT BEING REPLACED, FOLLOW ALL NEC, NFPA, AND ALL OTHER STATE AND LOCAL CODES INSTALLING NEW RACEWAYS, WIRING, AND CIRCUIT PROTECTION.

KEY NOTES - POWER	
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2	PROVIDE A DUPLEX RECEPTACLE FOR WALL-MOUNTED MONITOR. FISH WIRING INSIDE EXISTING WALL IF POSSIBLE. OTHERWISE PROVIDE WIREMOLD 500/700 AND INSTALL VERTICALLY FROM ABOVE SUSPENDED CEILING. FIELD VERIFY MOUNTING HEIGHT WITH WTC IT DEPARTMENT.
3	PROVIDE A NEW 20 AMP, 120VAC DUPLEX RECEPTACLE TO REPLACE EXISTING. INSTALL IN EXISTING JUNCTION BOX. REUSE EXISTING CONDUIT INSTALLED IN WALL TO THE EXTENT POSSIBLE. REUSE EXISTING BRANCH-CIRCUIT WIRING TO DEVICE. PROVIDE A NEW STAINLESS STEEL COVER PLATE. PROVIDE GFI RECEPTACLE WHERE NOTED.
4	ELECTRICAL CONTRACTOR SHALL INSTALL 40VA TYPE OF TRANSFORMER PROVIDED BY PLUMBING CONTRACTOR FOR AUTOMATIC FLUSH VALVE CONTROL. COORDINATE WITH PLUMBING CONTRACTOR.
5	PROVIDE A SINGLE-POLE SWITCH TO CONTROL AUTOMATIC FLUSH VALVE TRANSFORMERS, CLEARLY LABEL AS DIRECTED BY WTC FACILITY MAINTENANCE DEPARTMENT.
6	ELECTRICAL CONTRACTOR SHALL MAKE FINAL CONNECTION TO LOW VOLTAGE CONTROL SYSTEM FOR OVERHEAD DOOR SENSORS AND START/STOP STATION. INSTALL LOW VOLTAGE WIRING INSIDE EMT CONDUIT RACEWAY SYSTEM, DO NOT INSTALL LOW VOLTAGE WIRING 'FREE-AIR'.
7	REUSE EXISTING RACEWAY, CONDUIT, AND WIRING TO THE EXTENT POSSIBLE. PROVIDE AND INSTALL A NEW WP GFCI RECEPTACLE AND METAL HEAVY DUTY WEATHER PROOF IN-USE COVER PLATE.
8	PROVIDE AND INSTALL NEW BRANCH-CIRCUIT WIRING, CONDUIT AND JUNCTION BOXES. PROVIDE AND INSTALL A NEW WP GFI RECEPTACLE AND METAL HEAVY DUTY WEATHER PROOF IN-USE COVER PLATE.
9	PROVIDE AND INSTALL NEW BRANCH-CIRCUIT WIRING, CONDUIT AND JUNCTION BOX AS NECESSARY. EXTERIOR EV CHARGER TO BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS.
10	INSTALL NEW BRANCH-CIRCUIT WIRING, RACEWAY AND CIRCUIT BREAKER TO NEW BAY 'D' OVERHEAD GARAGE DOOR OPERATOR. COORDINATE WITH OVERHEAD DOOR CONTRACTOR. SEE NOTE #7 FOR LV OPERATOR CONNECTION DETAILS.
11	MODIFY AND REUSE EXISTING BRANCH-CIRCUIT WIRING AND RACEWAY TO THE EXTENT POSSIBLE ON OVERHEAD GARAGE DOOR OPERATORS. VERIFY THAT EXISTING WIRING AND BREAKER MATCH SPECIFICATIONS OF NEW DOOR OPERATORS. COORDINATE WITH OVERHEAD DOOR CONTRACTOR. SEE NOTE #7 FOR LV OPERATOR CONNECTION DETAILS.
12	COORDINATE WITH OVERHEAD DOOR CONTRACTOR AND VEHICLE HOIST CONTRACTOR TO RAISE AND MODIFY EXISTING OVERHEAD GARAGE DOOR BRANCH-CIRCUIT WIRING AND RACEWAY TO ACCOMMODATE ADDITIONAL HEIGHT REQUIREMENTS OF A VEHICLE ON A DRIVE-ON HOIST. SEE NOTE #7 FOR LV OPERATOR CONNECTION DETAILS.
13	INSTALL L6-20R, 208V 2POLE, 3 WIRE, TIRE MACHINE / WHEEL BALANCER RECEPTACLE. RECONFIGURE AND REUSE EXISTING CIRCUITS TO THE EXTENT POSSIBLE. INSTALL ADDITIONAL CONDUIT, WIRING, & BREAKERS AS NECESSARY FOR ADDITIONAL EQUIPMENT.
14	INSTALL NEMA 5-50R RECEPTACLE FOR LEVEL 2 EV CHARGER.
15	INSTALL NEMA 5-50R RECEPTACLE FOR WELDING EQUIPMENT.
16	ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL (1) 20A RECEPTACLE AT CEILING FOR AN INDUSTRIAL GRADE 'WHITE' RETRACTABLE CORD REEL WITH A 20 AMP, GFCI DUPLEX RECEPTACLE. HUBBELL, MODEL #HBL145123GF220M1. SET RETRACTABLE CORD TO APPROXIMATELY 4'-0" ABOVE FINISH FLOOR. CORD REEL SHALL BE CONSTRUCTED OF ALUMINUM MATERIAL. FIELD VERIFY MOUNTING LOCATION WITH WTC INSTRUCTOR'S. REFER TO DETAIL 1/E401. HUBBELL CORD REEL. CORD REEL HAS IN INTEGRAL GFCI, DO NOT USE GFCI RECEPTACLE OR BREAKER.
17	ALL RECEPTACLES SERVING A COUNTERTOP SHALL BE CONNECTED ON THEIR OWN DEDICATED CIRCUIT.
18	ALL REFRIGERATOR AND VENDING MACHINE RECEPTACLES SHALL BE CONNECTED ON THEIR OWN DEDICATED CIRCUIT. RECEPTACLES REQUIRING GFCI PROTECTION CAN BE GFCI RECEPTACLE, GFCI BREAKER, OR REMOTE DEAD-FRONT GFCI RECEPTACLE. SEE PLAN FOR PREFERRED DEVICE.
19	PROVIDE AND INSTALL NEW NON-FUSED 'SWITCH-STYLE' (I.E. U065NA1010) OR 'PULLOUT-STYLE' (I.E. U065P010) AC DISCONNECT WITH INTEGRATED GFCI RECEPTACLE AT EACH NEW AUTO HOIST. REUSE EXISTING RACEWAY AND WIRING FROM PANEL TO JUNCTION BOX AT CEILING. INSTALL NEW CONDUIT DROP TO FEED DISCONNECT AND HOIST.
20	INSTALL NEW CEILING FAN IN SAME LOCATION. INSTALL TOGGLE SWITCH DISCONNECT AT FAN LOCATION IF NOT CORD-AND-PLUG CONNECTED. INSTALL NEW FAN SPEED CONTROL AT ALL NEW FAN LOCATIONS. (TYP OF 3)
21	COORDINATE WITH WTC AUTO INSTRUCTORS, WTC FACILITIES, AND CAMERA/MONITOR MANUFACTURER FOR PLACEMENT OF LIGHT FIXTURE, CONDUITS, VES STARTERS, AND MONITOR & CAMERA SYSTEM. SEE DETAIL 3/E202.
22	INSTALL MOTOR STARTERS WITH OVERLOADS AND START-STOP BUTTONS FOR VEHICLE EXHAUST SYSTEM FANS. STARTER CONTACTOR COILS RATED AT 24V. INSTALL TRANSFORMERS FOR CONTROL POWER AS NECESSARY. CAN BE MOUNTED ON OR NEAR THE WIRING TROUGH ABOVE. RUN CONTROL WIRING TO EACH VEHICLE EXHAUST SYSTEM TO WORK IN CONJUNCTION WITH THE CONTROL PENDANT.



2 Section Main Entrance - Side
1/8" = 1'-0"

3 Section Main Entrance - Front
1/8" = 1'-0"

ENTIRE SHEET UPDATED VIA ADDENDUM #4



Consultant:



Project Title: **WESTERN TECHNICAL COLLEGE
WTC VEHICLE TECHNOLOGY CENTER**
Project Location: 2721 LARSON STREET
LA CROSSE, WI 54603
Sheet Title: **1ST FL. ELECTRICAL POWER PLAN - AREA B**

HSR Project Number: **24061**

Project Date: **FEB 2025**

Drawn By: **JMH**

Key Plan:

No.	Description	Date
2	ADDENDUM #2	02-27-2025
4	ADDENDUM #4	03-04-2025

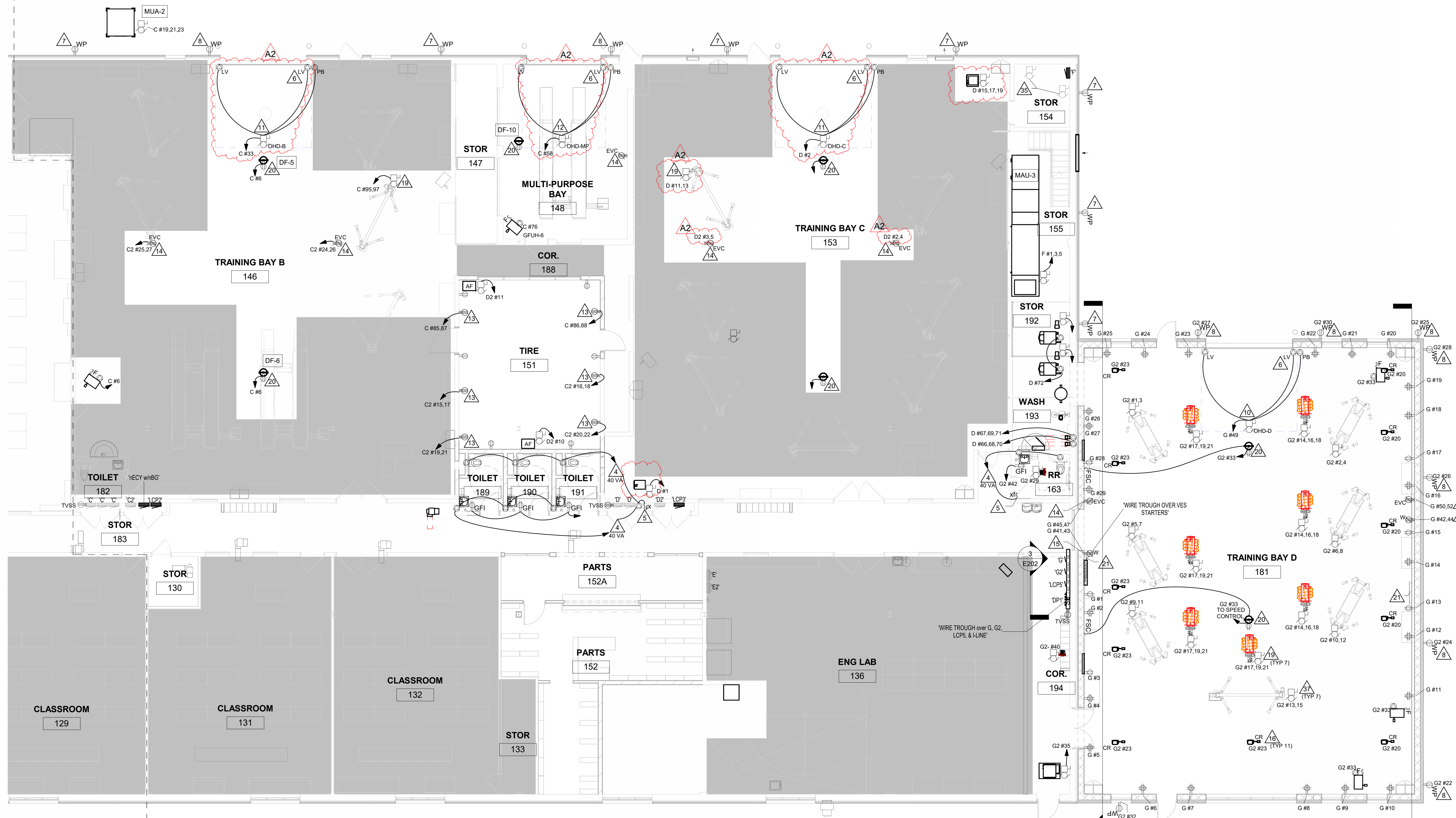
Graphic Scale: **VARIES**

Last Update: **3/5/2025 11:55:48 AM**

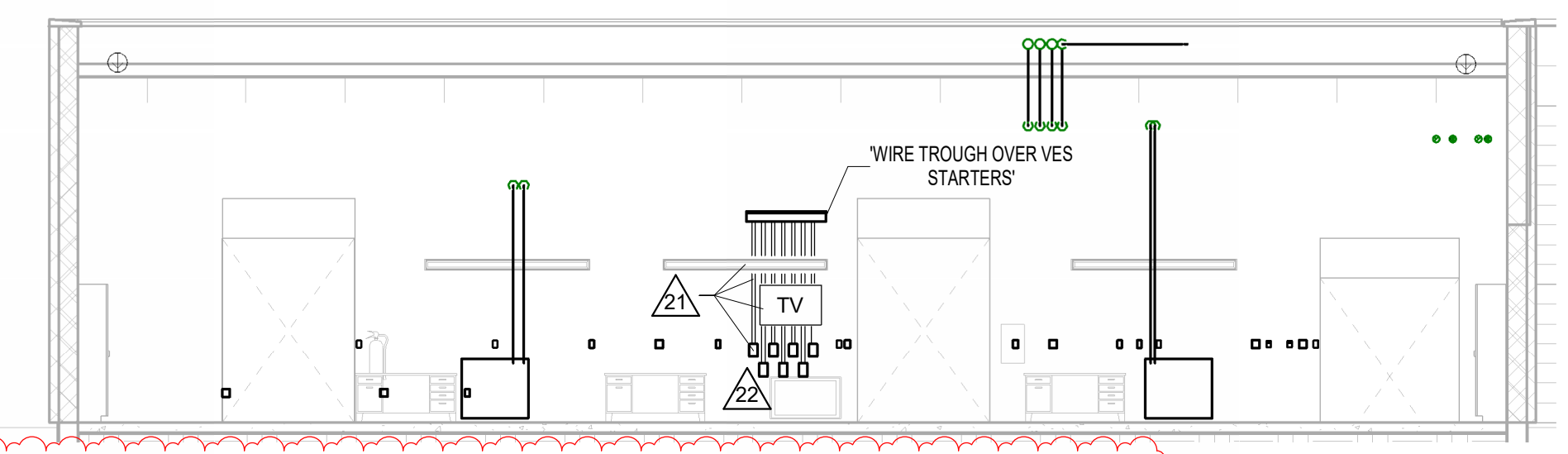
E202

GENERAL NOTES - POWER	
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B	*** NOTE *** FEEDERS SHOWN MAY BE OVERSIZED TO COMPENSATE FOR VOLTAGE DROP.
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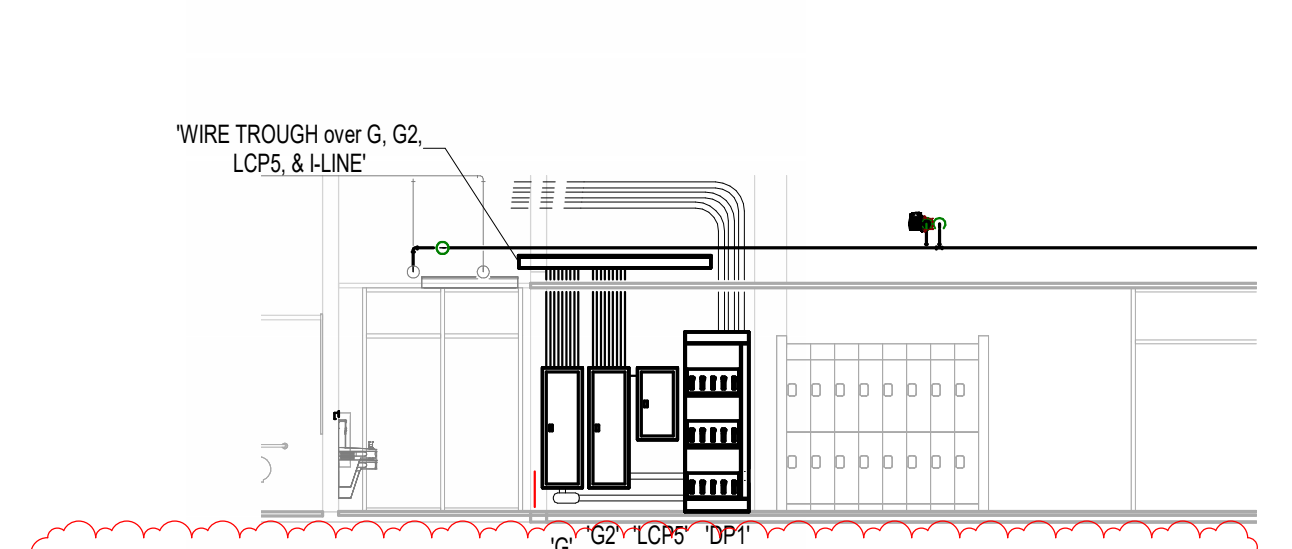
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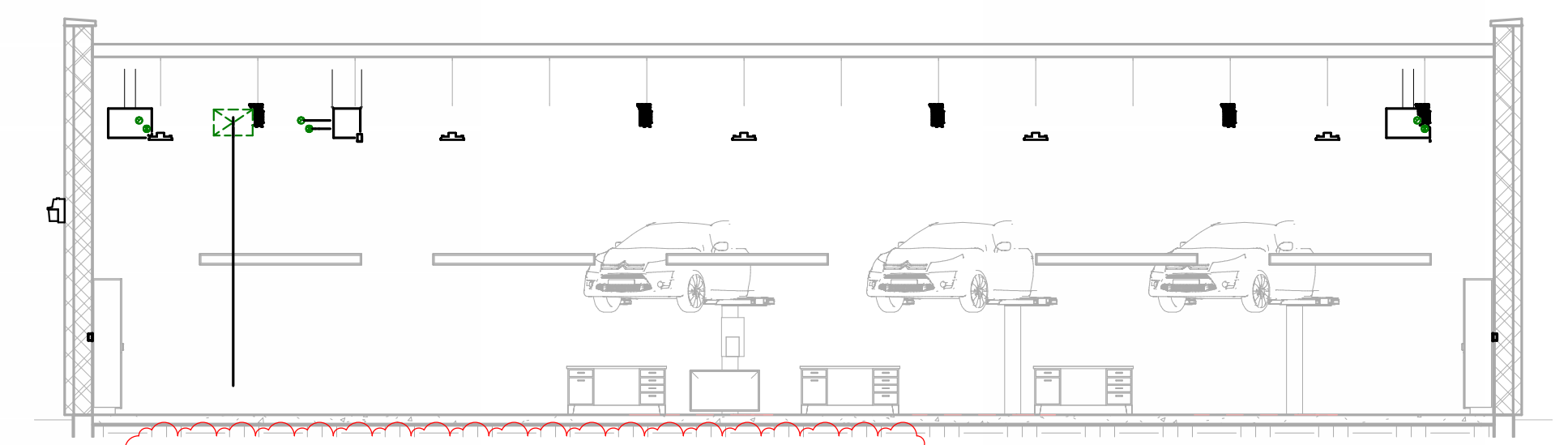
1 1ST FLOOR-POWER - AREA B
1/8" = 1'-0"



2 Bay D, South Wall
1/8" = 1'-0"



3 Panels, Corridor 194
1/8" = 1'-0"



4 Bay D
1/8" = 1'-0"

ENTIRE SHEET UPDATED VIA ADDENDUM #4



Consultant:



Project Title: WESTERN TECHNICAL COLLEGE
WTC VEHICLE TECHNOLOGY CENTER

Project Location: 2721 LARSON STREET
LA CROSSE, WI 54603

Sheet Title: ROOF POWER PLAN - AREA A

HSR Project Number: 24061

Project Date: FEB 2025

Drawn By: Author

Key Plan:

No.	Description	Date
1	ADDENDUM #1	02-24-2025
4	ADDENDUM #4	03-04-2025

Graphic Scale: VARIES

Last Update: 3/5/2025 11:55:49 AM

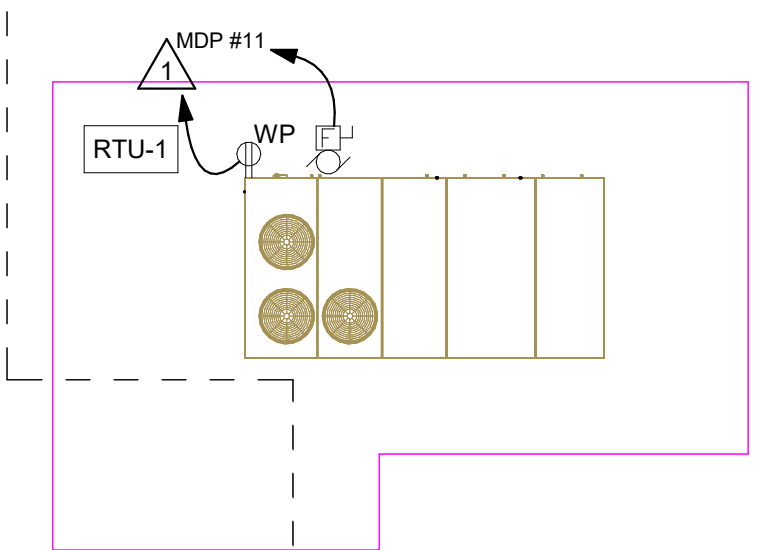
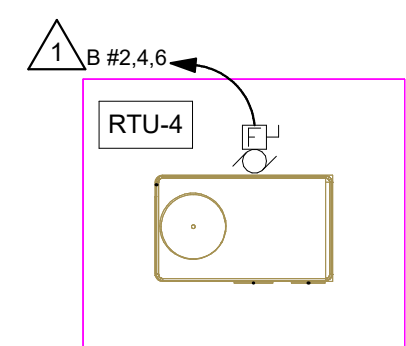
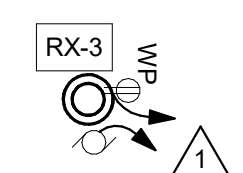
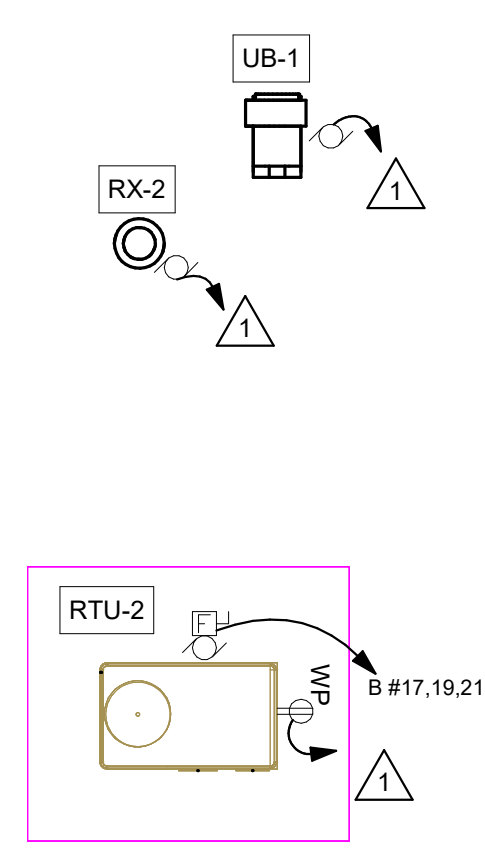
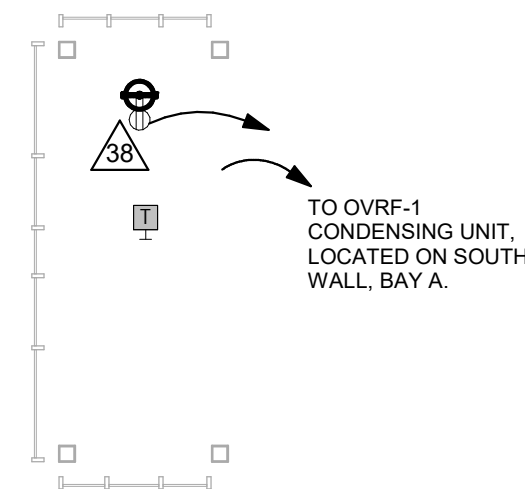


1 ROOF - POWER - AREA A

1/8" = 1'-0"

3
E201

2
E201



ENTIRE SHEET E203 UPDATED VIA ADDENDUM #4

A1 SHEET E204 ADDED VIA ADDENDUM #1

E203



HSR ASSOCIATES INC.
100 MILWAUKEE STREET
LA CROSSE, WISCONSIN
PHONE: 608.784.1830
FAX: 608.782.5844
www.hsrassociates.com

Consultant:



Project Title: **WESTERN TECHNICAL COLLEGE
WTC VEHICLE TECHNOLOGY CENTER**

Project Location: **2721 LARSON STREET
LA CROSSE, WI 54603**

Sheet Title: **ROOF POWER PLAN - AREA B**

HSR Project Number: **24061**

Project Date: **FEB 2025**

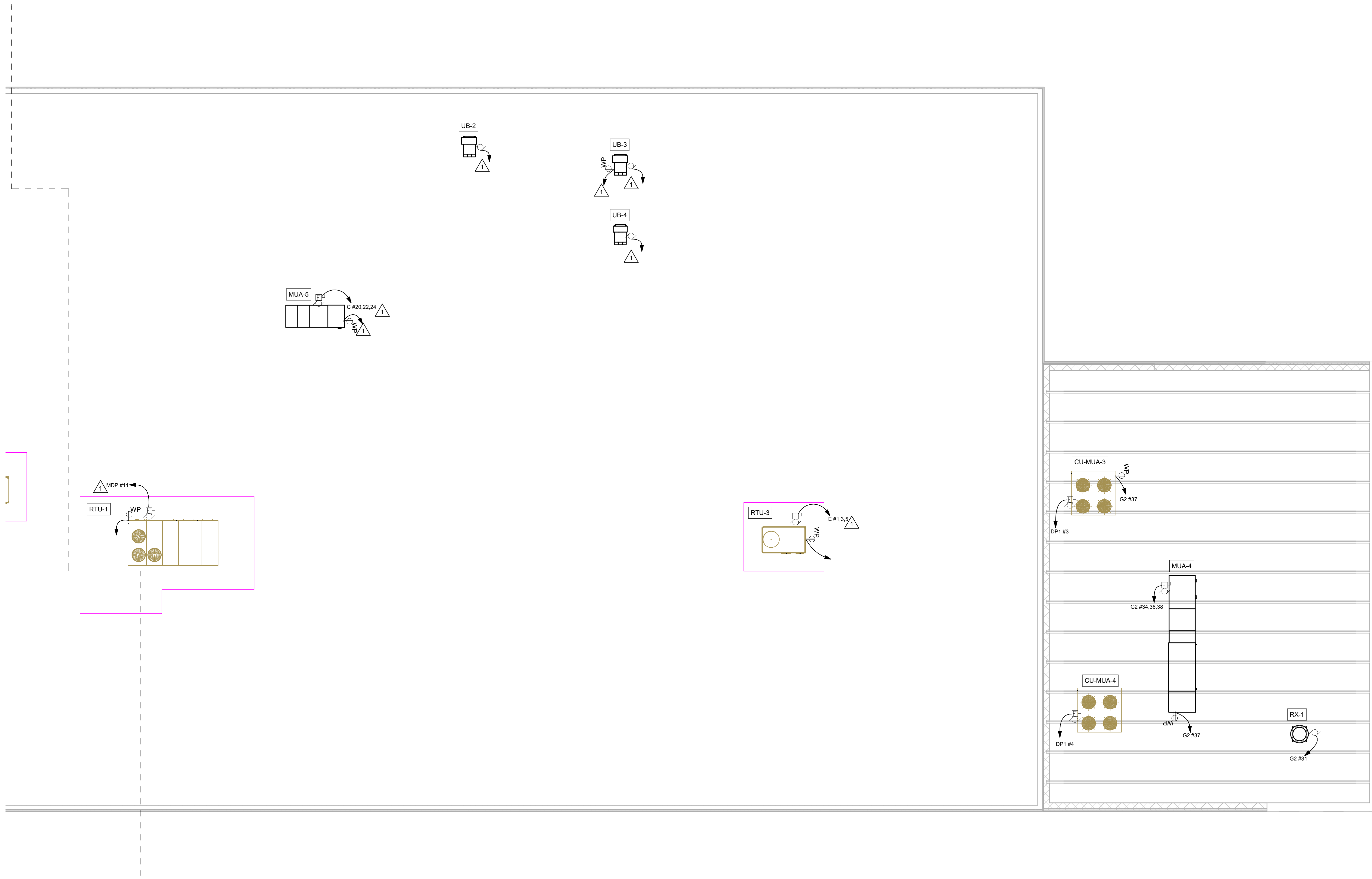
Drawn By: **Author**

Key Plan:

No.	Description	Date
1	ADDENDUM #1	02-24-2025
4	ADDENDUM #4	03-04-2025

Graphic Scale: **VARIES**

Last Update: **3/5/2025 11:55:51 AM**



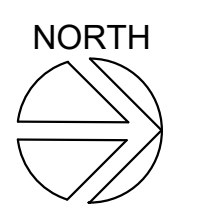
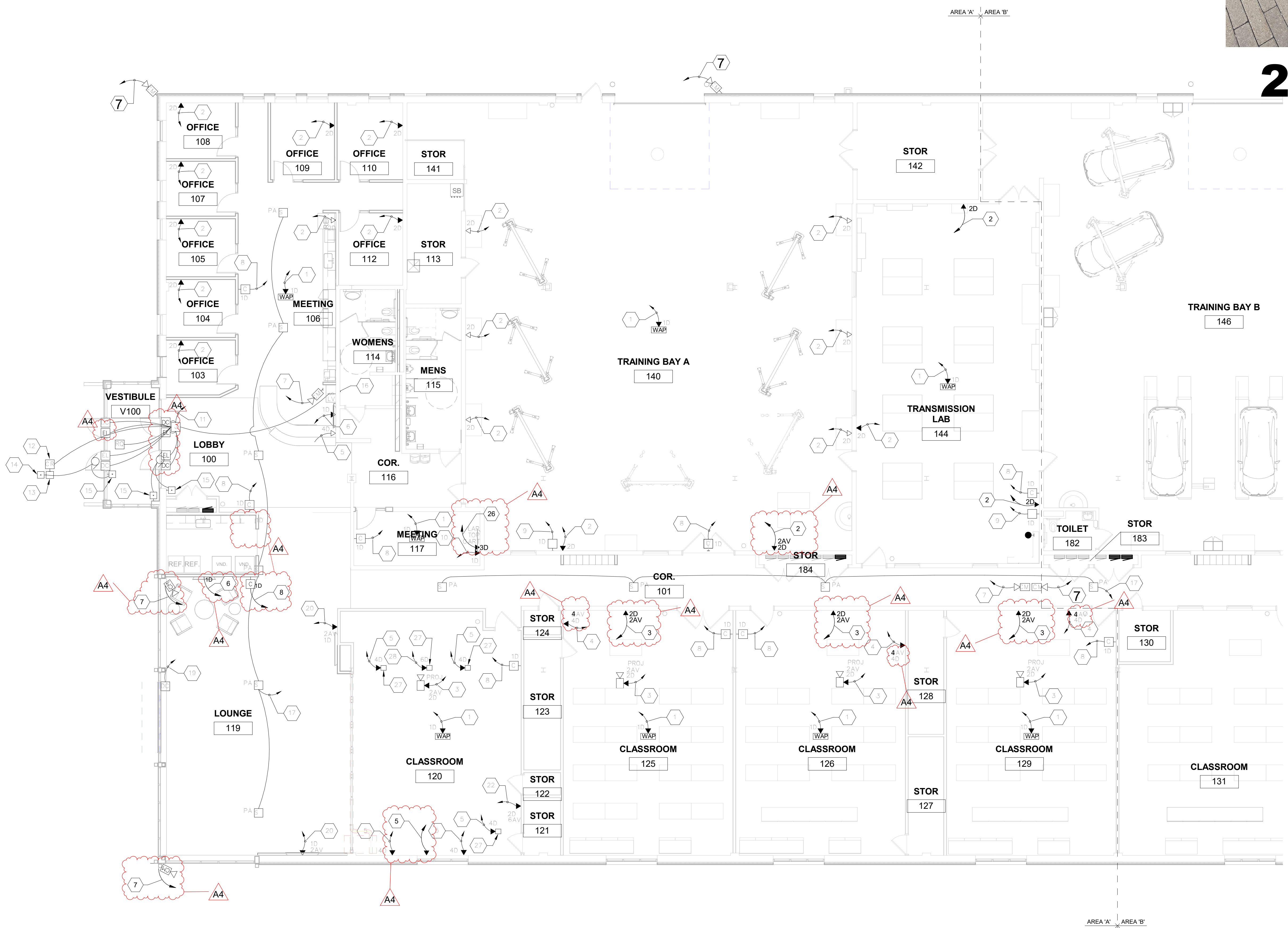
ENTIRE SHEET E203 UPDATED VIA ADDENDUM #4

SHEET E204 ADDED VIA ADDENDUM #1

E204

KEYED NOTES - LOW VOLTAGE	
NUMBER	DESCRIPTION
1	APPROXIMATE LOCATION OF NEW WIRELESS ACCESS POINT PROVIDED AND INSTALLED BY WTC IT DEPARTMENT. ELECTRICAL CONTRACTOR SHALL PROVIDE ONE (1) NETWORK CAT6A CABLE BETWEEN WIRELESS ACCESS POINT AND EXISTING IT NETWORK EQUIPMENT RACK LOCATED IN STORAGE ROOM #130 AND TERMINATE BOTH ENDS. PROVIDE JUNCTION BOXES AS REQUIRED IN CEILING OR WALL. COORDINATE WITH WTC IT DEPARTMENT.
2	ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL A TWO (2) PORT DATA JACK. PROVIDE TWO (2) NETWORK CAT6A CABLES BETWEEN TWO-PORT DATA JACK AND EXISTING IT NETWORK EQUIPMENT RACK LOCATED IN STORAGE ROOM #130 AND TERMINATE BOTH ENDS. PROVIDE A DOUBLE GANG JUNCTION BOX WITH SINGLE GANG MULDING. STUB ONE (1) EMT CONDUIT TO J HOOKS ABOVE SUSPENDED CEILING. VERIFY MOUNTING HEIGHT OF DATA JACKS WITH WTC IT DEPARTMENT PRIOR TO ROUGH-IN. IF EXISTING JUNCTION BOXES AND CONDUIT ARE AVAILABLE IT SHALL BE ALLOWED TO REUSE.
3	ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL A FOUR-PORT COMBINATION DATA/AV JACKS AT THIS APPROXIMATE LOCATION FOR WALL-MOUNTED AND/OR OVERHEAD PROJECTOR. PROVIDE TWO (2) NETWORK CAT 6A CABLES TO IT EQUIPMENT RACK LOCATED IN STORAGE ROOM #130. PROVIDE TWO (2) SHIELDED CAT6A AV CABLES BETWEEN WALL-MOUNT MONITOR JUNCTION BOX AND TEACHER'S STATION JUNCTION BOX. PROVIDE A DOUBLE GANG JUNCTION BOX AS REQUIRED FOR DATA/AV WIRING.
4	ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL A EIGHT-PORT COMBINATION DATA/AV JACKS AT THIS APPROXIMATE LOCATION FOR TEACHER'S STATION. PROVIDE FOUR (4) NETWORK CAT 6A CABLES TO IT NETWORK EQUIPMENT RACK LOCATED IN STORAGE ROOM #130. PROVIDE FOUR (4) SHIELDED CAT 6A AV CABLES BETWEEN TEACHER'S STATION DATA/AV JACKS AND WALL-MOUNT JUNCTION BOX AND OVERHEAD PROJECTOR. PROVIDE SURFACE WIREMOLD JUNCTION BOX AND RACEWAY SIZED AS REQUIRED AND INSTALL ABOVE SUSPENDED CEILING FOR CABLE ROUTING AS REQUIRED.
5	ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL A FOUR-PORT DATA JACK AT THIS APPROXIMATE LOCATION. PROVIDE FOUR (4) NETWORK CAT 6A CABLES TO IT EQUIPMENT RACK LOCATED IN STORAGE ROOM #130. PROVIDE A DOUBLE GANG JUNCTION BOX AS REQUIRED MOUNTED FLUSH IN WALL FOR DATA WIRING. STUB TWO (2) 1" EMT CONDUITS TO ABOVE SUSPENDED CEILING. PROVIDE PLASTIC BUSHINGS ON END OF CONDUIT ABOVE CEILING.
6	ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL A ONE (1) PORT DATA JACK FOR WALL-MOUNTED MONITOR. PROVIDE ONE (1) NETWORK CAT6A CABLE BETWEEN ONE-PORT DATA JACK AND IT NETWORK EQUIPMENT RACK LOCATED IN STORAGE ROOM #130 AND TERMINATE BOTH ENDS.
7	ELECTRICAL CONTRACTOR SHALL INSTALL A SECURITY IP CCTV CAMERA WITH BACKBOX PROVIDED BY WTC IT DEPARTMENT IN THIS LOCATION. PROVIDE ONE (1) CAT6A CABLE TO IT NETWORK EQUIPMENT RACK LOCATED IN STORAGE ROOM #130. COORDINATE MOUNTING LOCATION AND MOUNTING HEIGHT WITH WTC IT DEPARTMENT.
8	ELECTRICAL CONTRACTOR SHALL INSTALL A DIGITAL CLOCK WITH BACKBOX PROVIDED BY WTC IT DEPARTMENT IN THIS LOCATION. PROVIDE ONE (1) CAT6A CABLE TO IT NETWORK EQUIPMENT RACK LOCATED IN STORAGE ROOM #130 AND TERMINATE BOTH ENDS. COORDINATE MOUNTING LOCATION AND MOUNTING HEIGHT WITH WTC IT DEPARTMENT. REUSE EXISTING BACKBOX FROM PREVIOUSLY REMOVED CLOCK IF AVAILABLE. PROVIDE A CUSTOM COVER PLATE AS REQUIRED.
9	ELECTRICAL CONTRACTOR SHALL RECONNECT AN EXISTING 'ALERTIS' SYSTEM DEVICE IN THIS APPROXIMATE LOCATION. PROVIDE ONE (1) CAT6A CABLE TO IT NETWORK EQUIPMENT RACK LOCATED IN STORAGE ROOM #130 AND TERMINATE BOTH ENDS. COORDINATE MOUNTING LOCATION AND MOUNTING HEIGHT WITH WTC IT DEPARTMENT.
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11	ELECTRICAL CONTRACTOR SHALL PROVIDE A 'SMART CABLE' HOMERUN TO EXISTING ELECTRONIC DOOR ACCESS CONTROL PANEL LOCATED IN STORAGE ROOM #130. SMART CABLE SHALL BE BELDEN, MODEL #688AFJ OR EQUAL, 16 CONDUCTOR, 4 ELEMENT, ACCESS CONTROL CABLE, 18-04 + 22-3P + 22-02 + 22-04 PLENUM YELLOW COLOR. REFER TO ELECTRONIC DOOR ACCESS CONTROL DETAIL 3E401. PLEASE NOTE ELECTRICAL CONTRACTOR TO ROUGH-IN CONDUIT AND LOW VOLTAGE WIRING FOR FUTURE DOOR ACCESS CONTROL DEVICES TO BE INSTALLED AT A LATE DATE.
12	INSTALL CARD READER ON EXTERIOR METAL PEDESTAL. REFER TO PHOTO #1E301 FOR EXAMPLE.
13	EXTERIOR METAL POST PROVIDED AND INSTALLED BY GENERAL CONTRACTOR.
14	ELECTRICAL CONTRACTOR SHALL INSTALL A 'HARD-WIRED' LOW VOLTAGE PADDLE SWITCH ON EXTERIOR METAL PEDESTAL FOR MOTORIZED ASSISTED DOOR OPENER PROVIDED BY GENERAL CONTRACTOR. PROVIDE LOW VOLTAGE WIRING AS REQUIRED BETWEEN PADDLE SWITCH AND DOOR CONTROLLER.
15	ELECTRICAL CONTRACTOR SHALL INSTALL A 'HARD-WIRED' LOW VOLTAGE PADDLE SWITCH ON INTERIOR WALL FOR MOTORIZED ASSISTED DOOR OPENER PROVIDED BY GENERAL CONTRACTOR. PROVIDE LOW VOLTAGE WIRING AS REQUIRED BETWEEN PADDLE SWITCH AND DOOR CONTROLLER.
16	REINSTALL PREVIOUSLY REMOVED LOW VOLTAGE SWITCH TO UNLOCK AND LOCK FRONT EXTERIOR DOOR. INSTALLATION SHALL MATCH ORIGINAL INSTALLATION PRIOR TO REMOVAL. PROVIDE LOW VOLTAGE AS REQUIRED BETWEEN SWITCH AND EXISTING ELECTRONIC ACCESS DOOR CONTROL PANEL.
17	PROVIDE #182 PLENUM RATED LOW VOLTAGE CABLE AS RECOMMENDED BY PUBLIC ADDRESS SPEAKER MANUFACTURER AND CONNECT TO EXISTING AMPLIFIER LOCATED IN STORAGE ROOM #130.
18	ELECTRICAL CONTRACTOR SHALL PROVIDE A 'SMART CABLE' HOMERUN TO EXISTING ELECTRONIC DOOR ACCESS CONTROL PANEL LOCATED IN STORAGE ROOM #130. SMART CABLE SHALL BE BELDEN, MODEL #688AFJ OR EQUAL, 16 CONDUCTOR, 4 ELEMENT, ACCESS CONTROL CABLE, 18-04 + 22-3P + 22-02 + 22-04 PLENUM YELLOW COLOR. REFER TO ELECTRONIC DOOR ACCESS CONTROL DETAIL 3E401. PLEASE NOTE ELECTRICAL CONTRACTOR TO ROUGH-IN CONDUIT AND LOW VOLTAGE WIRING FOR FUTURE DOOR ACCESS CONTROL DEVICES TO BE INSTALLED AT A LATE DATE.
19	PROVIDE A #184 LOW VOLTAGE CABLE AS RECOMMENDED BY DOOR ACCESS CONTROL SYSTEM SUB-CONTRACTOR FOR SWITCH AND TERMINATE AT EXISTING ELECTRONIC DOOR ACCESS CONTROL PANEL LOCATED IN STORAGE ROOM #130.
20	ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL A THREE-PORT COMBINATION DATA/AV JACKS AT THIS APPROXIMATE LOCATION FOR WALL-MOUNT. PROVIDE ONE (1) NETWORK CAT6A CABLE TO IT EQUIPMENT RACK LOCATED IN STORAGE ROOM #130. PROVIDE TWO (2) SHIELDED CAT6A AV CABLES BETWEEN WALL-MOUNT MONITOR JUNCTION BOX AND TEACHER'S STATION JUNCTION BOX LOCATED IN CLASSROOM 120. PROVIDE A DOUBLE GANG JUNCTION BOX AS REQUIRED FOR DATA/AV WIRING.
21	EXISTING NETWORK EQUIPMENT RACK TO REMAIN. IT WILL BE REQUIRED FOR THE ELECTRICAL CONTRACTOR TO UPGRADE EXISTING CAT5E PATCH PANELS WITH NEW CAT6A PATCH PANELS AS REQUIRED FOR REMODEL PROJECT.
22	ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL AN EIGHT-PORT COMBINATION DATA/AV JACKS AT THIS APPROXIMATE LOCATION FOR TEACHER'S STATION. PROVIDE TWO (2) NETWORK CAT6A CABLES TO IT NETWORK EQUIPMENT RACK LOCATED IN STORAGE ROOM #130. PROVIDE SIX (6) SHIELDED CAT 6A AV CABLES BETWEEN TEACHER'S STATION DATA/AV JACKS AND WALL-MOUNT JUNCTION BOXES LOCATED IN LOUNGE 119 AND CLASSROOM 120 OVERHEAD PROJECTOR. PROVIDE SURFACE WIREMOLD JUNCTION BOX AND RACEWAY SIZED AS REQUIRED AND INSTALL ABOVE SUSPENDED CEILING FOR CABLE ROUTING AS REQUIRED. COORDINATE WITH WTC IT DEPARTMENT.
23	LOCATION OF EXISTING ELECTRONIC DOOR ACCESS CONTROL PANEL AN POWER SUPPLIES.
24	LOCATION OF EXISTING EDWARDS (EST) FIRE ALARM CONTROL PANEL AND ASSOCIATED NAC PANEL.
25	LOCATION OF EXISTING MITEL PUBLIC ADDRESS SYSTEM PAGING, ALERTIS AND VALCOM HEAD-END EQUIPMENT.
26	ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL A THREE-PORT DATA JACK AT THIS APPROXIMATE LOCATION. PROVIDE THREE (3) NETWORK CAT 6A CABLES TO IT EQUIPMENT RACK LOCATED IN STORAGE ROOM #130. PROVIDE A DOUBLE GANG JUNCTION BOX AS REQUIRED MOUNTED FLUSH IN WALL FOR DATA WIRING. STUB TWO (2) 1" EMT CONDUITS TO ABOVE SUSPENDED CEILING. PROVIDE PLASTIC BUSHINGS ON END OF CONDUIT ABOVE CEILING.
27	REUSE EXISTING POWER POLE TO THE EXTENT POSSIBLE. PROVIDE A NEW POWER POLE ADJACENT TO EXISTING ONE IF MORE RACEWAY IS REQUIRED FOR CABLE FILL.
28	ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL A SIX - PORT DATA JACK AT THIS APPROXIMATE LOCATION. PROVIDE SIX (6) NETWORK CAT 6A CABLES TO IT EQUIPMENT RACK LOCATED IN STORAGE ROOM #130.
29	ELECTRICAL CONTRACTOR SHALL INCLUDE IN BID TO PROVIDE 415'-0" OR NEW REPLACEMENT 12-STRAND, SINGLE-MODE FIBER-OPTIC CABLE. THIS CABLE SHALL BE ROUTED UNDERGROUND IN EXISTING CONDUIT BETWEEN WTC AUTOMOTIVE STORAGE ROOM #130 AND WTC DIESEL BUILDING MDF ROOM. IT SHALL BE REQUIRED FOR BIDDING CONTRACTOR TO VISIT SITE PRIOR TO SUBMITTING BID TO DETERMINE SCOPE OF WORK PRIOR TO BIDDING PROJECT. COORDINATE WITH WTC IT DEPARTMENT. INCLUDE AS AN ALTERNATE BID.
30	LOCATION OF NEW WALL-MOUNTED IT EQUIPMENT RACK PROVIDED BY WTC IT DEPARTMENT, INSTALLED BY ELECTRICAL CONTRACTOR.
31	ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL THIRTEEN (13) COMBINATION DATA/AV CABLES AT THIS WALL-MOUNTED IT EQUIPMENT RACK FOR TEACHER'S CUSTOM PAN-ZOOM-TILT (PZT) CAMERA SYSTEM. PROVIDE FIVE (5) NETWORK CAT6A CABLES TO IT NETWORK EQUIPMENT RACK LOCATED IN STORAGE ROOM #130. PROVIDE TWO (2) SHIELDED CAT 6A AV CABLES BETWEEN WALL-MOUNTED IT EQUIPMENT RACK AND EACH CEILING MOUNTED PAN-ZOOM-TILT (PZT) CAMERAS (2-CAMERAS TOTAL). TWO (2) SHIELDED CAT6 AV CABLES BETWEEN WALL-MOUNTED IT EQUIPMENT RACK AND EACH WALL-MOUNTED MONITOR (2-TOTAL). ONE LOCATED ON NORTH WALL AND ONE LOCATED ON SOUTH WALL. PROVIDE SURFACE WIREMOLD AND/OR EMT CONDUIT, JUNCTION BOXES AND RACEWAY SIZED AS REQUIRED FOR CABLE ROUTING. COORDINATE WITH WTC IT DEPARTMENT. TERMINATE EACH END OF CABLES.
32	LOCATION OF CUSTOM PAN-ZOOM-TILT (PZT) CAMERA SYSTEM TOUCH SCREEN PROVIDED BY WTC IT DEPARTMENT, INSTALLED BY EC. PROVIDE ONE (1) CAT6A DATA CABLE BETWEEN TOUCH SCREEN AND WALL-MOUNTED IT EQUIPMENT RACK LOCATED IN THIS ROOM. TERMINATE BOTH ENDS OF CABLE. PROVIDE JUNCTION BOX AND 1" EMT CONDUIT BETWEEN TOUCH SCREEN AND WALL-MOUNTED IT EQUIPMENT RACK.
33	ELECTRICAL CONTRACTOR SHALL INSTALL A PAN-ZOOM-TILT (PZT) CAMERA PROVIDED BY WTC IT DEPARTMENT. PROVIDE TWO (2) CAT6A SHIELDED CABLES BETWEEN PZT CAMERA AND WALL-MOUNTED IT EQUIPMENT RACK IN THIS ROOM AND TERMINATE BOTH ENDS OF EACH CABLE. PROVIDE EMT CONDUIT RACEWAY AS REQUIRED.
34	ELECTRICAL CONTRACTOR SHALL INSTALL A LARGE SCREEN MONITOR PROVIDED BY WTC IT DEPARTMENT. PROVIDE TWO (2) CAT6A SHIELDED CABLES BETWEEN LARGE SCREEN MONITOR AND WALL-MOUNTED IT EQUIPMENT RACK IN THIS ROOM AND TERMINATE BOTH ENDS OF EACH CABLE. PROVIDE EMT CONDUIT RACEWAY AS REQUIRED.
35	PROVIDE A QUAM, 8" DIAMETER, PUBLIC ADDRESS SPEAKER, MODEL NUMBER AS FOLLOWS: LOUDSPEAKER - 8C10PAX TRANSFORMER - 5 WAT, 25/70 VOLT WITH TAPS BAFFLE - BRWIS BACKBOX - ERDBU MOUNTING SUPPORT - SSB-3
36	PROVIDE A QUAM, PUBLIC ADDRESS SYSTEM PAGING HORN WITH UNIVERSAL MOUNT, BEIGE FINISH COLOR, 16 WATT, 25/70 VOLTS, MODEL #QH16.

GENERAL NOTES - LOW VOLTAGE	
NUMBER	DESCRIPTION
A	COLOR CODING SHALL BE AS FOLLOWS: 1 NETWORKING (DATA) = ORANGE DATA JACKS WITH BLUE CAT6A CABLES. 2 IP PHONE = ORANGE DATA JACKS WITH BLUE CAT6A CABLES 3 AUDIO/VIDEO (AV) = GREEN DATA JACKS WITH GREEN CAT6A CABLE 4 SECURITY CAMERAS = WHITE JACKS WITH WHITE CAT6A CABLE 5 ELECTRONIC DOOR ACCESS SYSTEM = YELLOW MULTIELEMENT SMART CABLE 6 HVAC CONTROLS = PURPLE JACKS WITH PURPLE CAT6A CABLES. 7 NETWORKING (DATA) FOR STUDENTS = GRAY DATA JACKS WITH GRAY CAT6A CABLES. 8 NETWORKING (DATA) FOR NCC = BLUE DATA JACKS WITH BLUE CAT6A CABLES. 9 THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE 'J' HOOKS AND CONDUIT SLEEVES THROUGH WALLS FOR LOW VOLTAGE CABLE ROUTING AS REQUIRED.
B	ALL LOW VOLTAGE WIRING SHALL BE 'PLENUM' RATED.
C	ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL 'L-HOOK' TYPE LOW VOLTAGE CABLE WIRING SUPPORT ON 4'-0" CENTERS ABOVE SUSPENDED ACOUSTIC CEILINGS BETWEEN CONDUIT WALL STUBS AND CABLE TRAY. ETC. ALL LOW VOLTAGE WIRING SHALL BE INDEPENDANTLY SUPPORTED SEPARATE FROM GRID TYPE CEILINGS, NO EXCEPTIONS.
D	ELECTRICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL LOW VOLTAGE WIRING, DATA JACKS, ETC. FOR A COMPLETE SYSTEM FOR THIS PROJECT.
E	ELECTRICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL DATA AND AV SYSTEM PATCH CORDS.



1 1ST FLOOR-LOW VOLTAGE - AREA A

1/8" = 1'-0"



2 PHOTO #1 NTS



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Project Title:
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PLP

Key Plan:

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Graphic Scale:
VARIES

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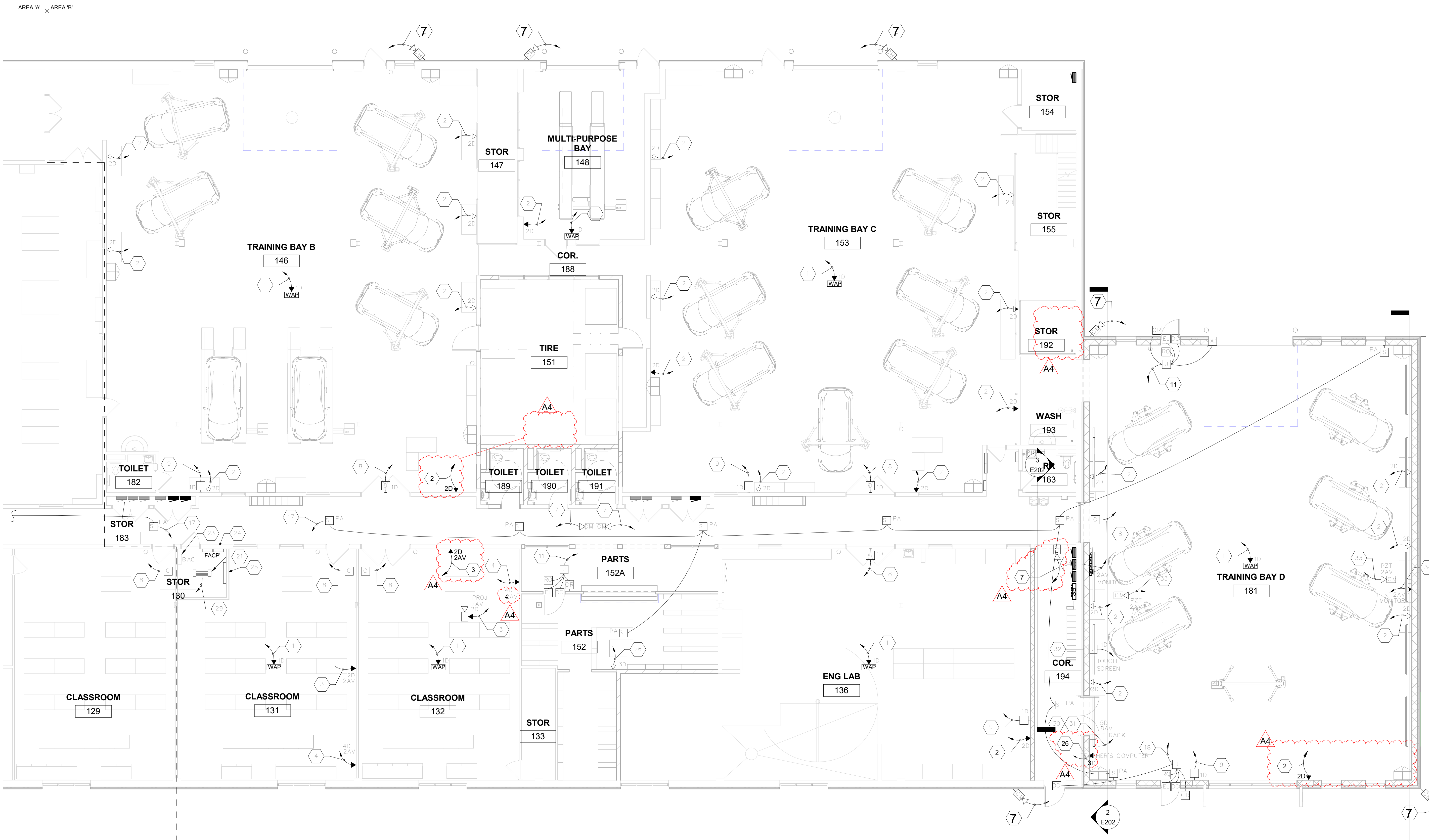
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GENERAL NOTES - LOW VOLTAGE	
NUMBER	DESCRIPTION
A	COLOR CODING SHALL BE AS FOLLOWS: 1. NETWORKING (DATA) = ORANGE DATA JACKS WITH BLUE CAT6A CABLES. 2. IP PHONE = ORANGE DATA JACKS WITH BLUE CAT6A CABLES 3. AUDIO/VIDEO (AV) = GREEN DATA JACKS WITH GREEN CAT6A CABLE 4. SECURITY CAMERAS = WHITE JACKS WITH WHITE CAT6A CABLE 5. ELECTRONIC DOOR ACCESS SYSTEM = YELLOW MULTI-ELEMENT SMART CABLE 6. HVAC CONTROLS = PURPLE JACKS WITH PURPLE CAT6A CABLES 7. NETWORKING (DATA) FOR STUDENTS = GRAY DATA JACKS WITH GRAY CAT6A CABLES. 8. NETWORKING (DATA) FOR NCC = BLUE DATA JACKS WITH BLUE CAT6A CABLES. 9. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE 'J' HOOKS AND CONDUIT SLEEVES THROUGH WALLS FOR LOW VOLTAGE CABLE ROUTING AS REQUIRED.
B	ALL LOW VOLTAGE WIRING SHALL BE 'PLENUM' RATED.
C	ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL 'J-HOOK' TYPE LOW VOLTAGE CABLE WIRING SUPPORT ON 4'-0" CENTERS ABOVE SUSPENDED ACOUSTIC CEILING. ALL LOW VOLTAGE WIRING SHALL BE INDEPENDENTLY SUPPORTED SEPARATE FROM GRID TYPE CEILING. NO EXCEPTIONS.
D	ELECTRICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL LOW VOLTAGE WIRING, DATA JACKS, ETC. FOR A COMPLETE SYSTEM FOR THIS PROJECT.
E	ELECTRICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL DATA AND AV SYSTEM PATCH CORDS.

KEYED NOTES - LOW VOLTAGE	
NUMBER	DESCRIPTION
1	APPROXIMATE LOCATION OF NEW WIRELESS ACCESS POINT PROVIDED AND INSTALLED BY WTC IT DEPARTMENT. ELECTRICAL CONTRACTOR SHALL PROVIDE ONE (1) NETWORK CAT6A CABLE BETWEEN WIRELESS ACCESS POINT AND EXISTING IT NETWORK EQUIPMENT RACK LOCATED IN STORAGE ROOM #130 AND TERMINATE BOTH ENDS. PROVIDE JUNCTION BOXES AS REQUIRED IN CEILING OR WALL. COORDINATE WITH WTC IT DEPARTMENT.
2	ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL A TWO (2) PORT DATA JACK. PROVIDE TWO (2) NETWORK CAT6A CABLES BETWEEN TWO PORT DATA JACK AND EXISTING IT NETWORK EQUIPMENT RACK LOCATED IN STORAGE ROOM #130 AND TERMINATE BOTH ENDS. PROVIDE A DOUBLE GANG JUNCTION BOX WITH SINGLE GANG MOUNTING. STUB ONE (1) EMT CONDUIT TO 'J' HOOKS ABOVE SUSPENDED CEILING. VERIFY MOUNTING HEIGHT OF DATA JACKS WITH WTC IT DEPARTMENT PRIOR TO ROUGH-IN. IF EXISTING JUNCTION BOXES AND CONDUIT ARE AVAILABLE IT SHALL BE ALLOWED TO REUSE.
3	ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL A FOUR-PORT COMBINATION DATA/AV JACKS AT THIS APPROXIMATE LOCATION FOR WALL-MOUNTED AND/OR OVERHEAD PROJECTOR. PROVIDE TWO (2) NETWORK CAT6A CABLES TO IT EQUIPMENT RACK LOCATED IN STORAGE ROOM #130. PROVIDE TWO (2) SHIELDED CAT6A AV CABLES BETWEEN WALL-MOUNT MONITOR JUNCTION BOX AND TEACHER'S STATION JUNCTION BOX. PROVIDE A DOUBLE GANG JUNCTION BOX AS REQUIRED FOR DATA/AV WIRING.
4	ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL A EIGHT-PORT COMBINATION DATA/AV JACKS AT THIS APPROXIMATE LOCATION FOR TEACHER'S STATION. PROVIDE FOUR (4) NETWORK CAT6A CABLES TO IT NETWORK EQUIPMENT RACK LOCATED IN STORAGE ROOM #130. PROVIDE FOUR (4) SHIELDED CAT6A AV CABLES BETWEEN TEACHER'S STATION DATA/AV JACKS AND WALL-MOUNT MONITOR JUNCTION BOX AND OVERHEAD PROJECTOR. PROVIDE SURFACE WIREMOLD JUNCTION BOX AND RACEWAY SIZED AS REQUIRED AND INSTALL ABOVE SUSPENDED CEILING FOR CABLE ROUTING AS REQUIRED.
5	ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL A FOUR-PORT DATA JACK AT THIS APPROXIMATE LOCATION. PROVIDE FOUR (4) NETWORK CAT6A CABLES TO IT EQUIPMENT RACK LOCATED IN STORAGE ROOM #130. PROVIDE A DOUBLE GANG JUNCTION BOX AS REQUIRED MOUNTED FLUSH IN WALL FOR DATA WIRING. STUB TWO (2) 1" EMT CONDUITS TO ABOVE SUSPENDED CEILING. PROVIDE PLASTIC BUSHINGS ON END OF CONDUIT ABOVE CEILING.
6	ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL A ONE (1) PORT DATA JACK FOR WALL-MOUNTED MONITOR. PROVIDE ONE (1) NETWORK CAT6A CABLE BETWEEN ONE-PORT DATA JACK AND IT NETWORK EQUIPMENT RACK LOCATED IN STORAGE ROOM #130 AND TERMINATE BOTH ENDS.
7	ELECTRICAL CONTRACTOR SHALL INSTALL A SECURITY IP CCTV CAMERA WITH BACKBOX PROVIDED BY WTC IT DEPARTMENT IN THIS LOCATION. PROVIDE ONE (1) CAT6A CABLE TO IT NETWORK EQUIPMENT RACK LOCATED IN STORAGE ROOM #130. COORDINATE MOUNTING LOCATION AND MOUNTING HEIGHT WITH WTC IT DEPARTMENT.
8	ELECTRICAL CONTRACTOR SHALL INSTALL A DIGITAL CLOCK WITH BACKBOX PROVIDED BY WTC IT DEPARTMENT IN THIS LOCATION. PROVIDE ONE (1) CAT6A CABLE TO IT NETWORK EQUIPMENT RACK LOCATED IN STORAGE ROOM #130 AND TERMINATE BOTH ENDS. COORDINATE MOUNTING LOCATION AND MOUNTING HEIGHT WITH WTC IT DEPARTMENT. REUSE EXISTING BACKBOX FROM PREVIOUSLY REMOVED CLOCK IF AVAILABLE. PROVIDE A CUSTOM COVER PLATE AS REQUIRED.
9	ELECTRICAL CONTRACTOR SHALL RECONNECT AN EXISTING 'ALERTS' SYSTEM DEVICE IN THIS APPROXIMATE LOCATION. PROVIDE ONE (1) NETWORK CAT6A CABLE TO IT NETWORK EQUIPMENT RACK LOCATED IN STORAGE ROOM #130 AND TERMINATE BOTH ENDS. COORDINATE MOUNTING LOCATION AND MOUNTING HEIGHT WITH WTC IT DEPARTMENT.
10	ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL A ONE (1) PORT DATA JACK. PROVIDE ONE (1) NETWORK CAT6A CABLE TO IT NETWORK EQUIPMENT RACK LOCATED IN STORAGE ROOM #130 AND TERMINATE BOTH ENDS. PROVIDE A DOUBLE GANG JUNCTION BOX WITH SINGLE GANG MOUNTING. STUB ONE (1) EMT CONDUIT TO 'J' HOOKS ABOVE SUSPENDED CEILING. VERIFY MOUNTING HEIGHT OF DATA JACKS WITH WTC IT DEPARTMENT PRIOR TO ROUGH-IN.
11	ELECTRICAL CONTRACTOR SHALL PROVIDE A 'SMART CABLE' HOMERUN TO EXISTING ELECTRONIC DOOR ACCESS CONTROL PANEL LOCATED IN STORAGE ROOM #130. SMART CABLE SHALL BE BELDEN, MODEL #858AFJ OR EQUAL, 16 CONDUCTOR, 4 ELEMENT, ACCESS CONTROL CABLE, 18-04 + 22-3P + 22-02 + 22-04 PLENUM YELLOW COLOR. REFER TO ELECTRONIC DOOR ACCESS CONTROL DETAIL #E301. PLEASE NOTE ELECTRICAL CONTRACTOR TO ROUGH-IN CONDUIT AND LOW VOLTAGE WIRING FOR FUTURE DOOR ACCESS CONTROL DEVICES TO BE INSTALLED AT A LATE DATE.
12	INSTALL CARD READER ON EXTERIOR METAL PEDESTAL. REFER TO PHOTO #1/E301 FOR EXAMPLE.
13	EXTERIOR METAL POST PROVIDED AND INSTALLED BY GENERAL CONTRACTOR.
14	ELECTRICAL CONTRACTOR SHALL INSTALL A LOW VOLTAGE PADDLE SWITCH ON EXTERIOR METAL PEDESTAL FOR MOTORIZED ASSISTED DOOR OPENER PROVIDED BY GENERAL CONTRACTOR. PROVIDE LOW VOLTAGE WIRING AS REQUIRED BETWEEN PADDLE SWITCH AND DOOR CONTROLLER.
15	ELECTRICAL CONTRACTOR SHALL INSTALL A 'HARD-WIRED' LOW VOLTAGE PADDLE SWITCH ON INTERIOR WALL FOR MOTORIZED ASSISTED DOOR OPENER PROVIDED BY GENERAL CONTRACTOR. PROVIDE LOW VOLTAGE WIRING AS REQUIRED BETWEEN PADDLE SWITCH AND DOOR CONTROLLER.
16	REINSTALL PREVIOUSLY REMOVED LOW VOLTAGE SWITCH TO UNLOCK AND LOCK FRONT EXTERIOR DOOR. INSTALLATION SHALL MATCH ORIGINAL INSTALLATION PRIOR TO REMOVAL. PROVIDE LOW VOLTAGE WIRING AS REQUIRED BETWEEN SWITCH AND EXISTING ELECTRONIC ACCESS DOOR CONTROL PANEL.
17	PROVIDE #182 PLENUM RATED LOW VOLTAGE CABLE AS RECOMMENDED BY PUBLIC ADDRESS SPEAKER MANUFACTURER AND CONNECT TO EXISTING AMPLIFIER LOCATED IN STORAGE ROOM #130.
18	ELECTRICAL CONTRACTOR SHALL PROVIDE A 'SMART CABLE' HOMERUN TO EXISTING ELECTRONIC DOOR ACCESS CONTROL PANEL LOCATED IN STORAGE ROOM #130. SMART CABLE SHALL BE BELDEN, MODEL #858AFJ OR EQUAL, 16 CONDUCTOR, 4 ELEMENT, ACCESS CONTROL CABLE, 18-04 + 22-3P + 22-02 + 22-04 PLENUM YELLOW COLOR. REFER TO ELECTRONIC DOOR ACCESS CONTROL DETAIL #E301. PLEASE NOTE ELECTRICAL CONTRACTOR TO ROUGH-IN CONDUIT AND LOW VOLTAGE WIRING FOR FUTURE DOOR ACCESS CONTROL DEVICES TO BE INSTALLED AT A LATE DATE.
19	PROVIDE A 184 LOW VOLTAGE CABLE AS RECOMMENDED BY DOOR ACCESS CONTROL SYSTEM MANUFACTURER FOR DOOR CONTACT SWITCH AND TERMINATE AT EXISTING ELECTRONIC DOOR ACCESS CONTROL PANEL LOCATED IN STORAGE ROOM #130.
20	ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL A THREE-PORT COMBINATION DATA/AV JACKS AT THIS APPROXIMATE LOCATION FOR WALL-MOUNT MONITOR. PROVIDE ONE (1) NETWORK CAT6A CABLE TO IT EQUIPMENT RACK LOCATED IN STORAGE ROOM #130. PROVIDE TWO (2) SHIELDED CAT6A AV CABLES BETWEEN WALL-MOUNT MONITOR JUNCTION BOX AND TEACHER'S STATION JUNCTION BOX LOCATED IN CLASSROOM #120. PROVIDE A DOUBLE GANG JUNCTION BOX AS REQUIRED FOR DATA/AV WIRING.
21	EXISTING NETWORK EQUIPMENT RACK TO REMAIN. IT WILL BE REQUIRED FOR THE ELECTRICAL CONTRACTOR TO UPGRADE EXISTING CAT5E PATCH PANELS WITH 'NEW' CAT6A PATCH PANELS AS REQUIRED FOR THIS PROJECT.
22	ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL AN EIGHT-PORT COMBINATION DATA/AV JACKS AT THIS APPROXIMATE LOCATION FOR TEACHER'S STATION. PROVIDE TWO (2) NETWORK CAT6A CABLES TO IT NETWORK EQUIPMENT RACK LOCATED IN STORAGE ROOM #130. PROVIDE SIX (6) SHIELDED CAT6A AV CABLES BETWEEN TEACHER'S STATION DATA/AV JACKS AND WALL-MOUNT MONITOR JUNCTION BOXES LOCATED IN LOUNGE #119 AND CLASSROOM #120 OVERHEAD PROJECTOR. PROVIDE SURFACE WIREMOLD JUNCTION BOX AND RACEWAY SIZED AS REQUIRED AND INSTALL ABOVE SUSPENDED CEILING FOR CABLE ROUTING AS REQUIRED. COORDINATE WITH WTC IT DEPARTMENT.
23	LOCATION OF EXISTING ELECTRONIC DOOR ACCESS CONTROL PANEL AN POWER SUPPLIES.
24	LOCATION OF EXISTING EDWARDS (EST) FIRE ALARM CONTROL PANEL AND ASSOCIATED NAC PANEL.
25	LOCATION OF EXISTING MITEL PUBLIC ADDRESS SYSTEM PAGING, ALERTS AND VALCOM HEAD-END EQUIPMENT.
26	ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL A THREE-PORT DATA JACK AT THIS APPROXIMATE LOCATION. PROVIDE THREE (3) NETWORK CAT6A CABLES TO IT EQUIPMENT RACK LOCATED IN STORAGE ROOM #130. PROVIDE A DOUBLE GANG JUNCTION BOX AS REQUIRED MOUNTED FLUSH IN WALL FOR DATA WIRING. STUB TWO (2) 1" EMT CONDUITS TO ABOVE SUSPENDED CEILING. PROVIDE PLASTIC BUSHINGS ON END OF CONDUIT ABOVE CEILING.
27	REUSE EXISTING POWER POLE TO THE EXTENT POSSIBLE. PROVIDE A NEW POWER POLE ADJACENT TO EXISTING ONE IF MORE RACEWAY IS REQUIRED FOR CABLE FILL.
28	ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL A SIX-PORT DATA JACK AT THIS APPROXIMATE LOCATION. PROVIDE SIX (6) NETWORK CAT6A CABLES TO IT EQUIPMENT RACK LOCATED IN STORAGE ROOM #130.
29	ELECTRICAL CONTRACTOR SHALL INCLUDE IN BID TO PROVIDE 415'-0" OF NEW REPLACEMENT 12-STRAND, SINGLE-MODE FIBER-OPTIC CABLE. THIS CABLE SHALL BE ROUTED UNDERGROUND IN EXISTING CONDUIT BETWEEN WTC AUTOMOTIVE STORAGE ROOM #130 AND WTC DIESEL BUILDING MFR ROOM. IT SHALL BE REQUIRED FOR BIDDING CONTRACTOR TO VISIT SITE PRIOR TO SUBMITTING BID TO DETERMINE SCOPE OF WORK PRIOR TO BIDDING PROJECT. COORDINATE WITH WTC IT DEPARTMENT. INCLUDE AS AN ALTERNATE BID.
30	LOCATION OF NEW WALL-MOUNTED IT EQUIPMENT RACK PROVIDED BY WTC IT DEPARTMENT. INSTALLED BY ELECTRICAL CONTRACTOR.
31	ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL THIRTEEN (13) COMBINATION DATA/AV CABLES AT THIS WALL-MOUNTED IT EQUIPMENT RACK FOR TEACHER'S CUSTOM PAN-ZOOM-TILT (PZT) CAMERA SYSTEM. PROVIDE FIVE (5) NETWORK CAT6A CABLES TO IT NETWORK EQUIPMENT RACK LOCATED IN STORAGE ROOM #130. PROVIDE TWO (2) SHIELDED CAT6A AV CABLES BETWEEN WALL-MOUNTED IT EQUIPMENT RACK AND EACH CEILING MOUNTED PAN-ZOOM-TILT (PZT) CAMERAS (2-CAMERAS TOTAL). TWO (2) SHIELDED CAT6A AV CABLES BETWEEN WALL-MOUNTED IT EQUIPMENT RACK AND EACH WALL-MOUNTED MONITOR (2-TOTAL ONE LOCATED ON NORTH WALL AND ONE LOCATED ON SOUTH WALL. PROVIDE SURFACE WIREMOLD AND/OR EMT CONDUIT. JUNCTION BOXES AND RACEWAY SIZED AS REQUIRED FOR CABLE ROUTING. COORDINATE WITH WTC IT DEPARTMENT. TERMINATE EACH END OF CABLES.
32	LOCATION OF CUSTOM PAN-ZOOM-TILT (PZT) CAMERA SYSTEM TOUCH SCREEN PROVIDED BY WTC IT DEPARTMENT. INSTALLED BY EC. PROVIDE ONE (1) CAT6A DATA CABLE BETWEEN TOUCH SCREEN AND WALL-MOUNTED IT EQUIPMENT RACK LOCATED IN THIS ROOM. TERMINATE BOTH ENDS OF CABLE. PROVIDE JUNCTION BOX AND 1" EMT CONDUIT BETWEEN TOUCH SCREEN AND WALL-MOUNTED IT EQUIPMENT RACK.
33	ELECTRICAL CONTRACTOR SHALL INSTALL A PAN-ZOOM-TILT (PZT) CAMERA PROVIDED BY WTC IT DEPARTMENT. PROVIDE TWO (2) CAT6A SHIELDED CABLES BETWEEN PZT CAMERA AND WALL-MOUNTED IT EQUIPMENT RACK IN THIS ROOM AND TERMINATE BOTH ENDS OF EACH CABLE. PROVIDE EMT CONDUIT RACEWAY AS REQUIRED.
34	ELECTRICAL CONTRACTOR SHALL INSTALL A LARGE SCREEN MONITOR PROVIDED BY WTC IT DEPARTMENT. PROVIDE TWO (2) CAT6A SHIELDED CABLES BETWEEN LARGE SCREEN MONITOR AND WALL-MOUNTED IT EQUIPMENT RACK IN THIS ROOM AND TERMINATE BOTH ENDS OF EACH CABLE. PROVIDE EMT CONDUIT RACEWAY AS REQUIRED.
35	PROVIDE A QUAM, 8" DIAMETER, PUBLIC ADDRESS SPEAKER. MODEL NUMBER AS FOLLOWS: LOUDSPEAKER - 8C10PAX TRANSFORMER - 5 WAT, 25/70 VOLT WITH TAPS BAFFLE - 88WS BACKBOX - ERDBU MOUNTING SUPPORT - SSB-3
36	PROVIDE A QUAM, PUBLIC ADDRESS SYSTEM PAGING HORN WITH UNIVERSAL MOUNT, BEIGE FINISH COLOR, 16 WATT, 25/70 VOLTS, MODEL #QH16T.



1 1ST FLOOR-LOW VOLTAGE - AREA B
1/8" = 1'-0"

Revisions:		
No.	Description	Date
4	ADDENDUM #4	03-04-2025

Graphic Scale: VARIES
Last Update: 3/5/2025 11:59:10 AM

E302

Switchboard: MDP

Location: STOR 113
Supply From:
Mounting:
Enclosure:

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type:
Mains Rating:
MCB Rating: 2000 A

Notes:

CKT	Circuit Description	# of Poles	Frame Size	Trip Rating	Load	Remarks
1						
2	PANEL B -- EXISTING	3	800 A	400 A	117137 VA	
3	PANEL C -- EXISTING	3	800 A	400 A	32575 VA	
4	PANEL D -- EXISTING	3	800 A	400 A	23236 VA	
5	PANEL E -- EXISTING	3	400 A	225 A	17640 VA	
6	TVSS MDP -- EXISTING	3	250 A	60 A	0 VA	
7	PANEL F -- EXISTING	3	400 A	175 A	11250 VA	
8	AIR COMPRESSOR - EXISTING	3	250 A	175 A	0 VA	
9	CU 20 BAY A -- EXISTING	3	250 A	150 A	0 VA	
10	CU 21 BAY B -- EXISTING	3	250 A	150 A	0 VA	
11	NEW--RTU-1 -- EXISTING BREAKER	3	400 A	250 A	64800 VA	
12	PANEL A -- EXISTING, RELOCATED FROM #1	3	250 A	225 A	18000 VA	
13						
14						
15						
					Total Conn. Load: 438 VA	
					Total Amps: 788 A	

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Lighting - Exterior	350 VA	125.00%	438 VA	
Motor	64800 VA	125.00%	81000 VA	Total Conn. Load: 283808 VA
Other	153694 VA	100.00%	153694 VA	Total Est. Demand: 272180 VA
Receptacle	67913 VA	57.36%	38956 VA	Total Conn.: 788 A
				Total Est. Demand: 755 A

Notes:

Branch Panel: G

Location: COR 194
Supply From: DP1
Mounting:
Enclosure:

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type:
Mains Rating:
MCB Rating: 1 A

Notes:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT		
1	Receptacle	20 A	1	180 VA	360 VA			1	20 A	Receptacle	2	
3	Receptacle	20 A	1		180 VA	360 VA		1	20 A	Receptacle	4	
5	Receptacle	20 A	1			360 VA	360 VA	1	20 A	Receptacle	6	
7	Receptacle	20 A	1	360 VA	360 VA			1	20 A	Receptacle	8	
9	Receptacle	20 A	1		360 VA	360 VA		1	20 A	Receptacle	10	
11	Receptacle	20 A	1			360 VA	360 VA	1	20 A	Receptacle	12	
13	Receptacle	20 A	1	180 VA	360 VA			1	20 A	Receptacle	14	
15	Receptacle	20 A	1		180 VA	360 VA		1	20 A	Receptacle	16	
17	Receptacle	20 A	1			180 VA	360 VA	1	20 A	Receptacle	18	
19	Receptacle	20 A	1	360 VA	360 VA			1	20 A	Receptacle	20	
21	Receptacle	20 A	1		360 VA	360 VA		1	20 A	Receptacle	22	
23	Receptacle	20 A	1	360 VA	360 VA		360 VA	360 VA	1	20 A	Receptacle	24
25	Receptacle	20 A	1	360 VA	360 VA			1	20 A	Receptacle	26	
27	Receptacle	20 A	1		360 VA	180 VA		1	20 A	Receptacle	28	
29	Receptacle	20 A	1		360 VA	180 VA		1	20 A	Receptacle	30	
31											32	
33											34	
35											36	
37											38	
39											40	
41	Welding Receptacle D-South	50 A	2			7200...	7200...	2	50 A	Welding Receptacle D-North	42	
43	--	--	--	7200...	7200...			--	--	--	44	
45	EV Level 2 Charger Receptacle Bay D, South	50 A	2		7100...						46	
47	--	--	--			7100...					48	
49	Overhead Door Operator D	20 A	1	1656...	7100...			2	50 A	EV Level 2 Charger Receptacle Bay D, North	50	
51						7100...		--	--	--	52	
53											54	
55											56	
57											58	
59											60	
61											62	
63											64	
65											66	
67											68	
69											70	
71											72	
				Total Load: 25994 VA	17006 VA	24291 VA						
				Total Amps: 226 A	142 A	212 A						

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Motor	1656 VA	125.00%	2070 VA	
Receptacle	65751 VA	57.60%	37875 VA	Total Conn. Load: 67286 VA
				Total Est. Demand: 39798 VA
				Total Conn.: 187 A
				Total Est. Demand: 110 A

Notes:

Switchboard: DP1

Location: COR 194
Supply From:
Mounting:
Enclosure:

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 65000
Mains Type:
Mains Rating: 800 A
MCB Rating: 400 A

Notes:

CKT	Circuit Description	# of Poles	Frame Size	Trip Rating	Load	Remarks
1	G				67286 VA	
2	G2	3	400 A	400 A	52402 VA	
3	CU-MUA-3, Roof of Bay D, West	3	400 A	250 A	75960 VA	
4	CU-MUA-4, Roof of Bay D, East	3	400 A	250 A	75960 VA	
5						
6						
7						
8						
					Total Conn. Load: 267980 VA	
					Total Amps: 744 A	

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Motor	75960 VA	125.00%	94950 VA	
Other	127678 VA	100.00%	127678 VA	Total Conn. Load: 267980 VA
Receptacle	67922 VA	57.36%	38961 VA	Total Est. Demand: 259264 VA
				Total Conn.: 744 A
				Total Est. Demand: 720 A

Notes:

Branch Panel: G2

Location: COR 194
Supply From: DP1
Mounting:
Enclosure:

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type:
Mains Rating:
MCB Rating: 1 A

Notes:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT	
1	Hoist, South West, Bay D	20 A	2	1664...	1664...			2	20 A	Hoist, North West, Bay D	2
3	--	--	--		1664...	1664...		--	--	--	4
5	Hoist, South Center, Bay D	20 A	2			1664...	1664...	2	20 A	Hoist, North Center, Bay D	6
7	--	--	--	1664...	1664...			--	--	--	8
9	Hoist, South East, Bay D	20 A	2	1664...	1664...			2	20 A	Hoist, North East, Bay D	10
11	--	--	--			1664...	1664...	--	--	--	12
13	Hoist, East Center, Bay D	20 A	2	1664...	1152...			3	20 A	Veh Exh Sys, North Hoists, Bay D	14
15	--	--	--		1664...	1152...		--	--	--	16
17	Veh Exh Sys, South Hoists & East-Center, Bay D	20 A	3			1536...	1152...	--	--	--	18
19	--	--	--	1536...	1800...			1	20 A	Cord Reels, North Stalls, Bay D	20
21	--	--	--		1536...	180 VA		1	20 A	Receptacle - Exterior North East, Bay D	22
23	Cord Reels, East Center & South Stalls, Bay D	20 A	1			2160...	180 VA	1	20 A	Receptacle - Exterior North, Bay D	24
25	Receptacle - Exterior West North, Bay D	20 A	1	180 VA	180 VA			1	20 A	Receptacle - Exterior North, Bay D	26
27	Receptacle - Exterior West South, Bay D	20 A	1		180 VA	180 VA		1	20 A	Receptacle - Exterior North West, Bay D	28
29	Pump, RFP-1 - Ceiling, Restroom #163	20 A	1			1176...	180 VA	1	20 A	Receptacle - Exterior West Center, Bay D	30
31	RX-1, NE Roof, Bay D	20 A	1	1950...	180 VA			1	20 A	Receptacle - Exterior East, Bay D	32
33	Unit Heaters (GFUH), Bay D (3x)	20 A	1	1440...	3000...			3	40 A	MUA-4 (Bay D roof)	34
35	CUH-2, Ceiling, Corridor 194, East	20 A	1			360 VA	3000...	--	--	--	36
37	Receptacle	20 A	1	360 VA	3000...			--	--	--	38
39								1	20 A	Pump, RFP-2 - Ceiling Corridor #194	40
41								1	20 A	Receptacle, GFCL, Restroom #163	42
43											44
45											46
47											48
49											50
51											52
53											54
55											56
57											58
59											60
61											62
63											64
65											66
67											68
69											70
71											72
				Total Load: 18658 VA	17164 VA	16580 VA					
				Total Amps: 156 A	144 A	138 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Motor	9000 VA	125.00%	11250 VA	
Other	41062 VA	100.00%	41062 VA	Total Conn. Load: 52402 VA
Receptacle	2340 VA	100.00%	2340 VA	Total Est. Demand: 54652 VA
				Total Conn.: 145 A
				Total Est. Demand: 152 A

Notes:



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Project Title: WESTERN TECHNICAL COLLEGE
WTC VEHICLE TECHNOLOGY CENTER
Project Location: 2721 LARSON STREET
LA CROSSE, WI 54603
Sheet Title: ELECTRICAL PANEL SCHEDULES

HSR Project Number:
24061

Project Date:
FEB 2025

Drawn By:
PCP

Key Plan:

No.	Description	Date
1	ADDENDUM #1	02-24-2025

Graphic Scale:
VARIES

Last Update:
3/5/2025 11:59:11 AM



Revisions:

Graphic Scale:
VARIES

Last Update:
3/5/2025 11:59:11 AM

Sheet Title:
E500

SHEET E500 ADDED VIA ADDENDUM #1



Consultant:



WESTERN TECHNICAL COLLEGE
WTC VEHICLE TECHNOLOGY CENTER

Project Location: 2721 LARSON STREET
LA CROSSE, WI 54603

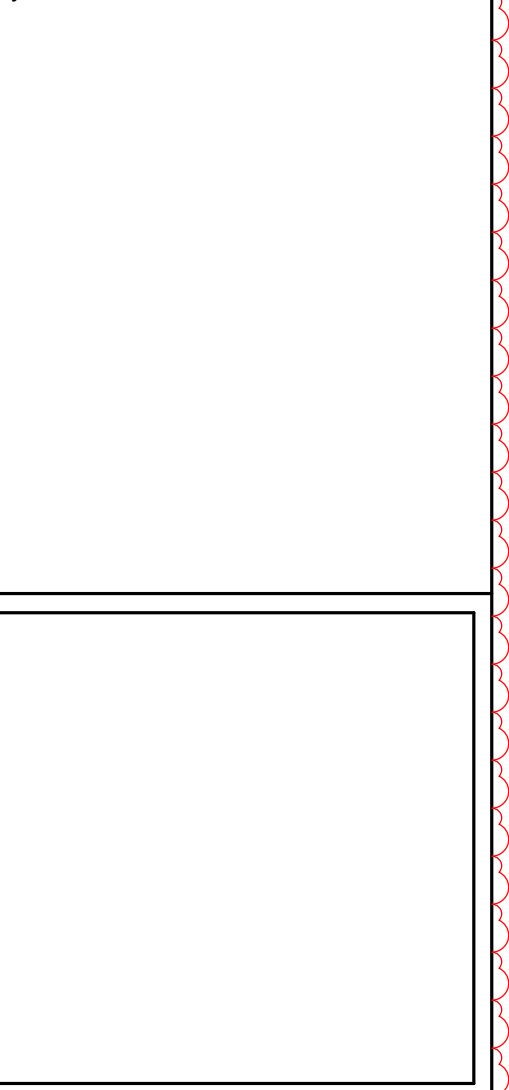
Project Title:

HSR Project Number:
24061

Project Date:
FEB 2025

Drawn By:
Author

Key Plan:



No.	Description	Date
1	ADDENDUM #1	02-24-2025
4	ADDENDUM #4	03-04-2025

Graphic Scale:
VARIES

Last Update:
3/5/2025 11:59:11 AM

E501

LIGHTING FIXTURE SCHEDULE													
TYPE	QTY	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	VOLT	MOUNTING			LAMPS/LIGHT SOURCE			WATTS/ FIXTURE	REMARKS
						F	S	*	COLOR	LUMENS	TYPE		
A		LITHONIA	FEM-L48-8000LM-IMAFL-WD-MVOLT-GZ10-40K-80CRI-ANGBKT	4'-0" LED LOW PROFILE ENCLOSED GASKETED WITH 45 DEGREE ANGLE BRACKET	MVLT	X			40K	8000	LED 0-10VDC DIMMING	51	1
B		LITHONIA	STAKS-2X2-ALO3-SWW7	2'X2' LED LAYIN TROFFER, CURVED RIBBED CENTER BASKET, UNIVERSAL VOLTAGE, DIMMING, ADJUSTABLE LUMEN, ADJUSTABLE COLOR TEMPERATURE	MVLT	X			35-50	30/40/50	LED 0-10VDC DIMMING	26-45	1
BE		LITHONIA	STAKS-2X2-ALO3-SWW7-EMERG. BATTERY	2'X2' LED LAYIN TROFFER, CURVED RIBBED CENTER BASKET, UNIVERSAL VOLTAGE, DIMMING, ADJUSTABLE LUMEN, ADJUSTABLE COLOR TEMPERATURE, BATTERY	MVLT	X			35-50	30/40/50	LED 0-10VDC DIMMING	26-45	1
C6/CX		LITHONIA	LDN6-40-20-L06-AR-LSS-TRW-MVOLT-GZ10	6" RECESSED DOWNLIGHT, 40K, 2000LUMENS, DOWNLIGHT, CLEAR TRIM COLOR, SEMI SPECULAR TRIM COLOR, WHITE FLANGE, 0-10V DIMMING	MVLT	X			4000K	2000	LED 0-10VDC DIMMING	20	1
DE		LITHONIA	LDN8CYL-40/80-LO8BR-120-GZ10-FCM-DWHG	8" DIA. CYLINDER, WHITE FINISH, CEILING MOUNT (INCLUDE EMERGENCY BATTERY PACK)	120		X		4000K	8000	LED	110	1
F		EUREKA, ARENA 8200	8200-54-120-DV-RDP-AC-60-RC1-WHE-WH-WHE	54" DIAMETER SUSPENDED LED RING	MVLT		X		4000K	TBD	LED	90	1
SL4		MARK LIGHTING	SL4L LOP 4FT FLP (CEIL) 80CRI 40K 800LMF MIN1 120 ZT	4'-0 RECESSED LINEAR LED SLOT, WHITE	120	X			4000K	3000	LED 0-10VDC DIMMING	30	1
SL4E		MARK LIGHTING	SL4L LOP 4FT FLP (CEIL) 80CRI 40K 800LMF MIN1 120 ZT-EMERG BATT PACK	4'-0 RECESSED LINEAR LED SLOT, WHITE, EMERGENCY BATTERY PACK	120	X			4000K	3000	LED 0-10VDC DIMMING	30	1
SSL4		MARK LIGHTING	S4PD LLP 4FT MSL2 80CRI 40K 800LMF SCT MIN1 FLL MVOLT SLVT ZT F2/72A RDCY SLVCY WCRD	4'-0 SUSPENDED LINEAR LED SLOT, SILVER FINISH	MVLT	X			4000K	3000	LED 0-10VDC DIMMING	30	1
SSL4E		MARK LIGHTING	S4PD LLP 4FT MSL2 80CRI 40K 800LMF SCT MIN1 FLL MVOLT SLVT ZT F2/72A RDCY SLVCY WCRD	4'-0 SUSPENDED LINEAR LED SLOT, SILVER FINISH, EMERGENCY BATTERY PACK	MVLT	X			4000K	3000	LED 0-10VDC DIMMING	30	1
SSL6		MARK LIGHTING	S4PD LLP 6FT MSL2 80CRI 40K 800LMF SCT MIN1 FLL MVOLT SLVT ZT F2/72A RDCY SLVCY WCRD	6'-0 SUSPENDED LINEAR LED SLOT, SILVER FINISH	MVLT	X			4000K	4,500	LED 0-10VDC DIMMING	45	1
HB		LITHONIA	IBE-L24-22000LM-ATC-MD-MVOLT-GZ10-40K-80CRI-DWH	2'X4' LED HIGH BAY, WHITE FINISH, MEDIUM DISTRIBUTION	MVLT		X		4000K	22,000	LED 0-10VDC DIMMING	166	1
HBE		LITHONIA	IBE-L24-22000LM-ATC-MD-MVOLT-GZ10-40K-80CRI-DWH-EMERG. BATTERY	2'X4' LED HIGH BAY, WHITE FINISH, MEDIUM DISTRIBUTION (EMERGENCY BATTERY PACK)	MVLT		X		4000K	22,000	LED 0-10VDC DIMMING	166	1
OA		LITHONIA	WDGE2LED-18W-P3-80CRI-VW-MVOLT-SBM-DDBXD	EXTERIOR WEDGE WALL PACK, LED, DARK BRONZE	MVLT		X		4000K	3,000	LED 0-10VDC DIMMING	18	1
OAE		LITHONIA	WDGE2LED-18W-P3-80CRI-VW-MVOLT-SBM-DDBXD-E20WC	EXTERIOR WEDGE WALL PACK, LED, DARK BRONZE, EMERGENCY BATTERY PACK	MVLT		X		4000K	3,000	LED 0-10VDC DIMMING	18	1
X1/X2		LITHONIA	LHQM LED R	LED EXIT LIGHT, RED LETTERS, WHITE HOUSING, THERMO-PLASTIC, BATTERY BACKUP, TWO 1.5 WATT EGRESS LIGHTS, UNIVERSAL MONTING.	120/ 277		X				LED	<5	1

REMARKS: 1 EQUALS WILL BE ACCEPTED FOR THIS LIGHTING FIXTURE.

A1

SHEET E202 ADDED VIA ADDENDUM #1

A4



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WESTERN TECHNICAL COLLEGE
 WTC VEHICLE TECHNOLOGY CENTER
 MOTOR & EQUIPMENT SCHEDULE

Project Location: 2721 LARSON STREET
 LA CROSSE, WI 54603
 Project Title:

HSR Project Number: 24061

Project Date: FEB 2025

Drawn By: Author

Key Plan:

No.	Description	Date
4	ADDENDUM #4	03-04-2025

Graphic Scale: VARIES

Last Update: 3/5/2025 11:59:11 AM

E502

MOTOR NO.	EQUIPMENT	PLBG / HVAC EQUIP NO.	LOCATION ROOM NUMBER	MOTOR RATING				DISCONNECT BY			CONTROL WIRING BY		MOTOR WIRING SIZE	REMARK NUMBER	
				MCA	MOP	HP	VOLT	MECH	ELEC	TYPE	MECH	ELEC			
1	ROOF-TOP UNIT	RTU-1	ROOF (BAY B)	190A	225A		208V	3	X		VFD	X	3 #4/0	#4	1
2	ROOF-TOP UNIT	RTU-2	ROOF (115)	44A	50A		208V	3	X		VFD	X	3 #6	#10	1
3	ROOF-TOP UNIT	RTU-3	ROOF (BAY C)	49A	60A		208V	3	X		VFD	X	3 #6	#10	1
4	ROOF-TOP UNIT	RTU-4	ROOF (144)	34A	45A		208V	3	X		VFD	X	3 #8	#10	1
5	MAKE-UP AIR UNIT	MAU-1	GROUND (W OF BAY A)	23A	35A		208V	3		X	TG	X	3 #10	#10	2
6	MAKE-UP AIR UNIT	MAU-2	GROUND (W OF BAY B)	23A	35A		208V	3		X	TG	X	3 #10	#10	2
7	MAKE-UP AIR UNIT	MAU-3	ROOF (155)	25A	40A		208V	3		X	TG	X	3 #8	#10	2
1	MAKE-UP AIR UNIT	MAU-4	ROOF (BAY D)	25A	40A		208V	3	X		VFD	X	3 #8	#10	1
2	MAKE-UP AIR UNIT	MAU-5	ROOF (BAY B)	11A	15A		208V	3	X		VFD	X	3 #12	#12	1
3	CONDENSING UNIT, MAU	CU-MAU-3	ROOF (BAY D, WEST)	211A	250A		208V	3	X		VFD	X	3 #250	#4	1
4	CONDENSING UNIT, MAU	CU-MAU-4	ROOF (BAY D, EAST)	211A	250A		208V	3	X		VFD	X	3 #250	#4	1
5	ROOF EXHAUSTER	RX-1	ROOF (BAY D, NW)	13A	20A	1.0	120V	1		X	TG	X	2 #12	#12	2
6	ROOF EXHAUSTER	RX-2	ROOF (113)	4A	15A	0.25	120V	1		X	TG	X	2 #12	#12	2
7	ROOF EXHAUSTER	RX-3	ROOF (LOUNGE)	4A	15A	0.25	120V	1		X	TG	X	2 #12	#12	2
8	EXHAUST FAN	EF-1	STORAGE 141	4A	15A	0.75	208V	3	X		VFD	X	3 #12	#12	1
9	EXHAUST FAN	EF-2	STORAGE 142	4A	15A	0.75	208V	3	X		VFD	X	3 #12	#12	1
10	EXHAUST FAN	EF-3	BAY C	4A	15A	0.75	208V	3	X		VFD	X	3 #12	#12	1
11	EXHAUST FAN	EF-4	BAY C	4A	15A	0.25	120V	1		X	VFD	X	3 #12	#12	1
12	UTILITY BLOWER	UB-1	ROOF (ABOVE 113)	21A	25A	5.0	208V	3		X	TG	X	3 #10	#10	2
13	UTILITY BLOWER	UB-2	ROOF (ABOVE 147)	21A	25A	5.0	120V	3		X	TG	X	3 #10	#10	2
14	UTILITY BLOWER	UB-3	ROOF (ABOVE MP BAY)	21A	25A	5.0	120V	3		X	TG	X	3 #10	#10	2
15	UTILITY BLOWER	UB-4	ROOF (ABOVE MP BAY)	13A	15A	3.0	208V	3	X		VFD	X	3 #12	#12	1
16	VEHICLE EXHAUST SYSTEM	VES-1	BAY D EAST		20A	1.0	208V	3		X	CS	X	3 #12	#12	1
17	VEHICLE EXHAUST SYSTEM	VES-2	BAY D SE		20A	1.0	208V	3		X	CS	X	3 #12	#12	1
18	VEHICLE EXHAUST SYSTEM	VES-3	BAY D NE		20A	1.0	208V	3		X	CS	X	3 #12	#12	1
19	VEHICLE EXHAUST SYSTEM	VES-4	BAY D S CENTER		20A	1.0	208V	3		X	CS	X	3 #12	#12	2
20	VEHICLE EXHAUST SYSTEM	VES-5	BAY D N CENTER		20A	1.0	208V	3		X	CS	X	3 #12	#12	2
21	VEHICLE EXHAUST SYSTEM	VES-6	BAY D SW		20A	1.0	208V	3		X	CS	X	3 #12	#12	2
22	VEHICLE EXHAUST SYSTEM	VES-7	BAY D NW		20A	1.0	208V	3		X	CS	X	3 #12	#12	1
23	DESTRATIFICATION FAN	DF-1	BAY D EAST	0.5A	20A		120V	1		X	TG	X	2 #12	#12	2
24	DESTRATIFICATION FAN	DF-2	BAY D WEST	0.5A	20A		120V	1		X	TG	X	2 #12	#12	2
25	DESTRATIFICATION FAN	DF-3	BAY C EAST	0.5A	20A		120V	1		X	TG	X	2 #12	#12	2
26	DESTRATIFICATION FAN	DF-4	BAY C WEST	0.5A	20A		120V	1		X	TG	X	2 #12	#12	2
27	DESTRATIFICATION FAN	DF-5	BAY B WEST	0.5A	20A		120V	1		X	TG	X	2 #12	#12	2
28	DESTRATIFICATION FAN	DF-6	BAY B EAST	0.5A	20A		120V	1		X	TG	X	2 #12	#12	2
29	DESTRATIFICATION FAN	DF-7	BAY A WEST	0.5A	20A		120V	1		X	TG	X	2 #12	#12	2
30	DESTRATIFICATION FAN	DF-8	BAY A EAST	0.5A	20A		120V	1		X	TG	X	2 #12	#12	2
31	DESTRATIFICATION FAN	DF-9	VESTIBULE V100	0.5A	20A		120V	1		X	TG	X	2 #12	#12	2
32	DESTRATIFICATION FAN	DF-10	MULTI-PURPOSE BAY 148	0.5A	20A		120V	1		X	TG	X	2 #12	#12	2
33	MINI-SPLIT - CONDENSING UNIT	IVRF-1	BAY A, SOUTH WALL	25A	30A		208V	1		X	TG	X	2 #10	#10	1
34	MINI-SPLIT - EVAP UNIT	IVRF-1	VESTIBULE V100	2A	15A	---	208V	1		X	TG	X	MANUF CABLE (14-4)	3	
35	AIR FILTER SYSTEM	AF-1	TIRE BAY 151		20A	1.0	120V	1		X	TG	X	2 #12	#12	2
36	AIR FILTER SYSTEM	AF-2	TIRE BAY 151		20A	1.0	120V	1		X	TG	X	2 #12	#12	2
37	CIRCULATING PUMP	BCP-1	MEZZANINE 192		20A	0.38	120V	1		X	TG	X	2 #12	#12	2
38	CIRCULATING PUMP	BCP-2	MEZZANINE 192		20A	0.38	120V	1		X	TG	X	2 #12	#12	2
39	CIRCULATING PUMP	HWP-1	MEZZANINE 193		20A	3.0	208V	3		X	TG	X	3 #12	#12	1
40	CIRCULATING PUMP	HWP-2	MEZZANINE 193		20A	3.0	208V	3	X		VFD	X	3 #12	#12	1
41	CIRCULATING PUMP	RFP-1	MEZZANINE 163		20A	0.5	208V	3	X		VFD	X	3 #12	#12	2
42	CIRCULATING PUMP	RFP-2	COORIDR 194		20A	0.5	208V	3	X		VFD	X	3 #12	#12	2
43	CIRCULATING PUMP	RFP-3	LOUNGE 119		20A	0.5	208V	3	X		VFD	X	3 #12	#12	2

SEE REMARKS
 -- (CB) CIRCUIT BREAKER; (CS) COMBINATION STARTER/DISCONNECT; (F) FUSED SAFETY SWITCH; (NF) NON FUSED SAFETY SWITCH; (TG) TOGGLE SWITCH
 --- (FVNR) FULL VOLTAGE NON-REVERSING MAGNETIC STARTER; (FVR) FULL VOLTAGE REVERSING MAGNETIC STARTER; (MS) MANUAL STARTER WITH OVERLOAD PROTECTION; (MSW) MANUAL SWITCH WITHOUT OVERLOAD PROTECTION; (MCC) MOTOR CONTROL CENTER; (PB) PUSH BUTTON STARTER; (VFD) VARIABLE FREQUENCY DRIVE

MOTOR SCHEDULE REMARKS:
 1. VARIABLE FREQUENCY DRIVE UNIT IS FURNISHED BY MECHANICAL CONTRACTOR AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
 2. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL A PILOT LIGHT SWITCH TO SERVE AS DISCONNECT.
 3. MINI-SPLIT INDOOR UNIT IVRF-1 IS POWERED DIRECTLY FROM THE OUTDOOR UNIT OVRF-1.

SHEET E502 ADDED VIA ADDENDUM #4

A4