

To: ALL BIDDERS

Ref: **New River Community and Technical College Hangar Renovation and Addition**

Subj.: **ADDENDUM BULLETIN NO. 2**

This Addendum Bulletin shall be incorporated in the Construction Documents including the Drawings and Specifications for the Project referenced above. All work amended as listed herein shall be included in your Bid Proposal and the bidder shall acknowledge this addendum bulletin on the Bid Form.

The work shall be amended as follows:

1. SPECIFICATIONS (see enclosures):

- a. **Section 083323 Overhead Coiling Doors:** REPLACE section in its entirety. See Enclosures.
- b. **Section 084313 Aluminum Frames Storefronts:** DELETE section from Table of Contents.
- c. **Section 096723 Resinous Flooring:** REPLACE section in its entirety. See Enclosures.
- d. **Section 102800 Toilet Accessories:** REVISE section 2.2 G2 to be "Frameless Mirror."

2. DRAWINGS (see enclosures):

- a. **Drawing G-1.0:** REPLACE sheet in its entirety, see Enclosures. Updates have been clouded and tagged.
- b. **Drawing A-3.3:** REPLACE sheet in its entirety, see Enclosures. Updates have been clouded and tagged. Updated note for Concrete Faced insulated perimeter wall panel.
- c. **Drawing A-6.0:** REPLACE sheet in its entirety, see Enclosures. Updates have been clouded and tagged. Updated Sill and Jamb details for Overhead Coiling Door.
- d. **Drawing A-7.1:** REPLACE sheet in its entirety, see Enclosures. Updates have been clouded and tagged. Revised Finish Schedule and tag removal of T01.
- e. **Drawing A-8.0:** REPLACE sheet in its entirety, see Enclosures. Updates have been clouded and tagged. Add signage to Room 104 and remove Type V01 signage.

3. FOR CLARIFICATION:

- a. **FOR CLARIFICATION:** The exterior painting, as shown on the drawings, for the existing Hangar walls, roof, and bifold door are part of the base bid. Bifold Hangar Door and NRCTC Logo on the roof are to be included in the Alternate #1.
- b. **FOR CLARIFICATION:** Wayne Dalton substitution request for Model 800 Rolling Service Door is denied, Model 800C Insulated Coiling Service door would be acceptable as long as the warranties match or exceed updated spec 083323.
- c. **FOR CLARIFICATION:** Owner furnished equipment to be installed by owner
- d. **FOR CLARIFICATION:** Concrete Faced Insulated Panels can be found on A-3.3 Detail 2. Wall panels to be applied around addition perimeter under Metal Siding and to be extended down past slab insulation.
- e. **FOR CLAIRIFICATION:** Note E13 no longer apply as they were eliminated during the value engineering process.
- f. **FOR CLARIFICATION:** Existing hangar drawings are not available. The Contractor will field verify the existing foundation size and depth as needed for construction of the new addition. The Contractor will also field verify and match the existing hangar thickness and sub-base for any slab removal and replacement within the hangar.
- g. **FOR CLARIFICATION:** Ceiling Framing for Room 104 to be 6" Metal Ceiling Joist 16" o.c. Walls to go up to underside of joists and gypsum wallboard to wrap from walls over top ceiling joists.
- h. **FOR CLARIFICATION:** The proposed Man Hole MH#1 rim elevation should be 2501.8'
- i. **FOR CLARIFICATION:** Details 2/S500, 12/S500, and 13/S500 no longer apply as they were eliminated during the value engineering process.
- j. **FOR CLARIFICATION:** Pilasters to be CMU as shown on S100.
- k. **FOR CLARIFICATION:** Resinous integral flooring base is not to be used. Use Rubber base with resinous flooring as scheduled. see Finish Note 5 on Sheet A-7.1 where resinous flooring meets metal panel.
- l. Questions submitted via the Bid Phase RFI Portal are all reviewed. If your question has not been included in the Bid Phase RFI Log (see Enclosures)

END OF ADDENDUM

Submitted by:
THE OMNI ASSOCIATES - ARCHITECTS

Richard T. Forren, AIA
Principal



Enclosures:

- A Bid Phase RFI Log
- B **083323 Overhead Coiling Doors**
- C **096723 Resinous Flooring**
- D G-1.0 COVER SHEET
- E A-3.3 WALL SECTIONS AND DETAILS
- F A-6.0 DOOR AND WINDOW SCHEDULE
- G A-7.1 FINISH PLAN
- H A-8.0 SIGNAGE PLAN, SCHEDULE AND TYPES

Bid Phase RFI Log

	RFI Auto Number	Question	Response
1	031	Would it be possible to extend the bid date by a couple of days or a week? We're having trouble getting pricing for the painting scope, the PEMB scope, and for the exterior paneling.	The bid date will remain unchanged.
2	030	Could the name of the current controls contractor be provided for the existing Trane TRACER BMS system?	Casto Technical Services was the installing contractor
3	029	Resinous epoxy base is called for in the existing hangar area on the finish schedule. Installing epoxy base on the existing metal panels and around the steel columns would be incredibly difficult and time consuming. Was this actually the intent? The existing hangar doesn't currently have any base. Can this be deleted?	Resinous integral flooring base is not to be used. Use Rubber base with resinous flooring as schedule. Where resinous flooring meets metal panel, see Finish Note 5 on Sheet A-7.1
4	028	What type of traffic is the hangar floor going to be seeing? I am being told that the resinous flooring BOD "Resufloor Deco Flake BC" will not handle anything besides foot traffic.	See updated 096723 Resinous Flooring Specification and Sheet A-7.1 in Addendum #2
5	027	Sheet S100 calls for CMU below grade at the 2 pilasters and Sheet A-5.1 shows concrete above grade. Would it be acceptable to just use CMU for the full height of them?	ADS RESPONSE: Use CMU as shown on S100
6	026	Are Details 2/S500, 12/S500, and 13/S500 necessary?	These details no longer apply as they were eliminated during the value engineering process - ADS
7	025	Can you provide a top elevation on the proposed sanitary sewer manhole?	The proposed MH #1 rim elevation should be 2501.8'.
8	024	Please clarify what material is to go over the ceiling framing for Room #104. Interior elevations do not show this wall framing going to deck.	Ceiling Framing for Room 104 to be 6" Metal Ceiling Joist 16" o.c. Walls to go up to underside of joists and gypsum wallboard to wrap from walls over top ceiling joists.
9	023	Project Manual lists Spec Section 088300 Mirrors. Please confirm if this spec is applicable to the project as Spec Section 102800 Toilet Accessories already lists 'MR' mirrors that is shown on Sheet A-4.1.	Yes, spec section 088300 Mirrors is applicable for project. Spec section 102800 2.2 G2 to be Frameless Mirror as specified in 088300
10	022	Project Manual lists Spec Section 084313 Aluminum-Framed Storefronts but drawings only show Aluminum Windows. Please confirm if this spec is applicable to the project.	Delete Spec section 084313 Aluminum-Framed Storefronts from the Table of Contents
11	021	Referring to Sheet A-8.0 - Plan does not show mezzanine level. Please confirm signage is not needed at Room #104.	Type R03 signage to be added beside door for Room 104 Air Compressor Room.
12	020	Referring to Sheet A-8.0 - Could the location(s) of Sign Type V01 be clarified?	Remove Type V01, not used in project.
13	019	Referring to Sheet A-7.1 - Interior Materials Legend lists T01 and is tagged in Rooms #110 & 111 but schedule states LVT01. Please clarify what T01 is referring to & which is correct.	Disregard T01 tag. LVT to be used in room 110 and 111.
14	018	Referring to Sheet A-7.1 - Finish Schedule states EXP in Room #102 but RCP on Sheet A-1.1 states ACT. Please clarify.	Office 102 to be ACT.
15	017	Could the existing hangar floor slab thickness be confirmed? Sheet A-3.1 indicates roughly 4" but typically hangar slabs are much thicker.	Existing hangar drawings are not available. The Contractor will field verify the existing foundation size and depth as needed for construction of the new addition. The Contractor will also field verify and match the existing hangar thickness and sub-base for any slab removal and replacement within the hangar.
16	016	Referring to Sheet A-2.1/Note #E13 - references metal grate stairs/landing but is not depicted on drawings. Please clarify if there is to be an exterior set of stairs.	Note E13 no longer apply as they were eliminated during the value engineering process

	RFI Auto Number	Question	Response
17	015	Project Manual lists Spec Section 074400 Concrete Faced Panels - these are not shown on building elevations. Please clarify if applicable to project.	See A-3.3 Detail 2 Foundation Detail, TYP. for location of Concrete Faced Insulated Perimeter Wall Panel. Insulated Perimeter Wall Panel to be extended down past slab insulation.
18	014	Referring to Sheet A-2.1/Note #E01 - states painting of existing exterior metal panels. Should base bid include painting bifold door without logo/scheme?	Painting of existing hangar consists of walls, bifold door, and roof is part of the base bid. Logo on roof and bifold door are part of the alternate.
19	013	Referring to Sheet A-1.1 - There is mention of Owner furnished equipment. Please confirm these are also Owner installed.	Yes, owner to install furnished equipment.
20	012	Referring to Addendum #1, Q/A #6 - mentions painting of existing hangar roof entirely. Please confirm this is to be base bid and addendum is just addition of logo.	Painting of existing hangar consists of walls, bifold door, and roof is part of the base bid. Logo on roof and bifold door are part of the alternate.
21	011	Could the attached manufacturer be approved for: 083323 Overhead Coiling Doors?	See Revised spec section 083323 Overhead Coiling Doors and Sheet A-6.0 for revised J6 and T3 details. Attached manufacturer is approved if overhead door matches updated spec and warranty.

SECTION 083323 - OVERHEAD COILING DOORS**1.1 SUMMARY****A. Section Includes:**

1. Insulated Rolling Service doors.

1.2 ACTION SUBMITTALS**A. Product Data:** For each type and size of overhead coiling door and accessory.

1. Include construction details, material descriptions, dimensions of individual components, profiles for slats, and finishes.

B. Shop Drawings: For each installation and for special components not dimensioned or detailed in manufacturer's product data.

1. Include plans, elevations, sections, and mounting details.
2. Include details of equipment assemblies, and indicate dimensions, required clearances, method of field assembly, components, and location and size of each field connection.
3. Include points of attachment and their corresponding static and dynamic loads imposed on structure.
4. For exterior components, include details of provisions for assembly expansion and contraction and for excluding and draining moisture to the exterior.

C. Samples for Initial Selection: Manufacturer's finish charts showing full range of colors and textures available for units with factory-applied finishes.

1. Include similar Samples of accessories involving color selection.

D. Samples for Verification: For each type of exposed finish on the following components, in manufacturer's standard sizes:

1. Curtain slats.
2. Hood.
3. Locking device(s).

1.3 INFORMATIONAL SUBMITTALS**A. Qualification Data:**

1. Installer Qualification.
2. Manufacturer's Qualification.

B. Sample Warranty: For special warranty.

1.4 CLOSEOUT SUBMITTALS

- A. Special warranty.
- B. Maintenance Data: For overhead coiling doors to include in maintenance manuals.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: An entity that employs installers and supervisors with a minimum three years and who are approved by manufacturer for both installation and maintenance of units required for this Project.
- B. Manufacturer's Qualification. Company specializing in performing Work of this section with a minimum of five years experience in the fabrication and installation of security closures.
- C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 - 1. Finish areas designated by Architect.
 - 2. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
 - 3. Refinish mock-up area as required to produce acceptable work

1.6 WARRANTY

- A. Warranty: Manufacturer's limited door and operator system, except the counterbalance spring and finish, to be free from defects in materials and workmanship for 3 years or 20,000 cycles, whichever occurs first
- B. Warranty: Manufacturer's limited door system warranty for 2 years for all parts and components.
- C. PowderGuard Finish
 - 1. PowderGuard Premium Applied to curtain, guides, bottom bar, headplates: Manufacturer's limited Premium Finish warranty for 2 years.
 - 2. PowderGuard Zinc Base Coat applied to guides, bottom bar, headplates plus PowderGuard Premium applied to curtain and top coat for guides, bottom bar, headplates: Manufacturer's limited Zinc Finish warranty for 4 years.
 - 3. PowderGuard Textured: Applied to curtain, guides, bottom bar, headplates: Manufacturer's limited Textured Finish warranty for 3 years.
 - 4. PowderGuard Zinc Base Coat applied to guides, bottom bar, headplates plus PowderGuard Textured applied to curtain and top coat for guides, bottom bar, headplates: Manufacturer's limited Zinc Finish warranty for 4 years.
 - 5. PowderGuard Max: Applied to curtain, guides, bottom bar, headplates: Manufacturer's limited Max Finish warranty for 5 years.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Source Limitations: Obtain overhead coiling doors from single source from single manufacturer.
 - 1. Obtain operators and controls from overhead coiling-door manufacturer.

2.2 PERFORMANCE REQUIREMENTS

- A. Accessibility Standard: Comply with applicable provisions in the USDOJ's "2010 ADA Standards for Accessible Design" and ICC A117.1.
- B. Structural Performance, Exterior Doors: Capable of withstanding the following design wind loads:
 - 1. Design Wind Load: Standard wind load shall be 20 PSF Revise "Deflection Limits" Subparagraph below to suit Project; verify deflection limits with manufacturer. If using doors as storm shutters to protect glass, stricter deflection limits may be required.
 - 2. Deflection Limits: Design overhead coiling doors to withstand design wind load without evidencing permanent deformation or disengagement of door components.

2.3 DOOR ASSEMBLY – OC – 100D

In Insulated Rolling Service Door: Overhead coiling door formed with curtain of interlocking metal slats.

- 1. Acceptable Manufacturer: Overhead Door Corporation or a pre-approved comparable product.
- 2. Requests for substitutions will be considered in accordance with provisions of Section 01600.
- B. **Basis-of-Design Product:** Subject to compliance with requirements, Stormtite Advanced Performance Insulated Rolling Service Doors: Overhead Door Corporation Stormtite AP Model 627.
 - 1. Curtain: Interlocking roll-formed slats as specified following. Endlocks shall be attached to each end of alternate slats to prevent lateral movement.
 - A. Flat profile type FIT-265 for doors up to 40 feet (12.19 m) wide.
 - B. Front slat fabricated of:
 - 1) Aluminum .040 inch (1 mm).
 - C. Back slat fabricated of:
 - 1) Aluminum .024 inch (.06 mm).
 - D. Slat cavity filled with CFC-free foamed-in-place, polyurethane insulation.

- 1) R-Value: 10.9, U-Value: 0.09.
2. Performance:
 - A. Through Curtain Sound Rating: Sound Rating: STC-28 (STC-30+ with HZ noise generator) as per ASTM E 90.
 - B. Installed System Sound Rating: STC-21 as per ASTM E 90.
 - C. U-factor: 0.84 NFRC test report, maximum U-factor of no higher than 1.00.
 - D. Air Infiltration: Meets ASHRAE 90.1 and IECC 2012/2015 C402.4.3 Air leakage <1.00 cfm/ft².
3. Slats and Hood Finish:
 - A. Aluminum: Slats and hood shall be aluminum finished as follows.
 - 1) Finish: Powder Coat:
 - (a) PowderGuard Premium powder coat color as selected by the Architect.
4. Weatherseals:
 - A. Vinyl bottom seal and internal hood seals.
 - B. Interior and exterior EPDM triple-seal finned guide weatherseal.
 - C. Lintel weatherseal.
 - D. Air Infiltration Package: IECC 2012/2015 listed; product to meet C402.4.3 2012 Air leakage <1.00 cfm/ft².
 - 1) Air infiltration perimeter seal package includes: guide cover, guide cap, PVC weatherseal on exterior of guide, EPDM triple finned weatherseal on interior of guide, lintel weatherseal and vinyl bottom seal.
5. Bottom Bar:
 - A. Two aluminum angles minimum thickness 1/8 inch (3 mm) bolted back to back to reinforce curtain in the guides.
6. Guides: Three structural steel angles.
7. Brackets:
 - A. Hot rolled powder coated black steel to support counterbalance, curtain and hood.
8. Finish; Guides, Headplate and Brackets:
 - A. PowderGuard Premium powder coat color as selected by the Architect.
9. Counterbalance: Helical torsion spring type housed in a steel tube or pipe barrel, supporting the curtain with deflection limited to 0.03 inch per foot of span. Counterbalance is adjustable by means of an adjusting tension wheel.
10. Hood: Provide with internal hood baffle weatherseal.
 - A. Aluminum hood with intermediate supports as required.
11. Manual Operation:
 - A. Chain hoist.
12. Electric Motor Operation: Provide UL listed electric operator, size as recommended by manufacturer to move door in either direction at not less than 2/3 foot nor more than 1 foot per second.
 - A. Sensing Edge Protection:
 - 1) Electric sensing edge.
 - B. Operator Controls:
 - 1) Push-button and key operated control stations with open, close, and stop buttons.
 - 2) Controls for interior location.
 - 3) Controls surface mounted.
 - C. Special Operation:

- 1) Vehicle detector operation.
- 2) Radio control operation.
- 3) Card reader control.
- 4) Photocell operation.
- 5) Door timer operation.
- 6) Commercial light package.
- 7) Explosion and dust ignition proof control wiring.
- D. Motor Voltage: 115/230 single phase, 60 Hz.
- 13. Operation: Design door assembly, including operator, to operate for not less than 20,000 cycles.
- 14. Locking:
 - A. Chain keeper locks for chain hoist operation.
- 15. Wall Mounting Condition:
 - A. Face-of-wall mounting.
- 16. Insulated Vision Lites: 10 inches by 1 inch (254 mm by 25.4 mm) uniformly spaced openings.
 - A. Provide with dual-wall polycarbonate.

PART 3 EXECUTION

3.1 EXAMINATION

- B. Examine substrates areas and conditions, with Installer present, for compliance with requirements for substrate construction and other conditions affecting performance of the Work.
- C. Examine locations of electrical connections.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

1.2 INSTALLATION, GENERAL

- A. Install overhead coiling doors and operating equipment complete with necessary hardware, anchors, inserts, hangers, and equipment supports; according to manufacturer's written instructions and as specified.
- B. Install overhead coiling doors, hoods, controls, and operators at the mounting locations indicated for each door.
- C. Accessibility: Install overhead coiling doors, switches, and controls along accessible routes in compliance with the accessibility standard.

1.3 ADJUSTING

- A. Adjust hardware and moving parts to function smoothly so that doors operate easily, free of warp, twist, or distortion.
 - 1) Adjust exterior doors and components to be weather resistant.
- B. Lubricate bearings and sliding parts as recommended by manufacturer.
- C. Adjust seals to provide tight fit around entire perimeter.

1.4 CLEANING

- A. Clean surfaces soiled by work as recommended by manufacturer
- B. Remove surplus materials and debris from the site.

1.5 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain overhead coiling doors.

END OF SECTION 083323

SECTION 096723 - RESINOUS FLOORING**PART 1 - GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Resinous flooring.
- B. Related Sections:
 - 1. Division 3 Section for "Cast-in-Place Concrete" for concrete finish.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
 - 1. Review manufacturer's written instructions for substrate preparation and environmental conditions affecting resinous flooring installation.

1.4 ACTION SUBMITTALS

- A. Product Data: Submit manufacturer's technical data for each type of flooring material required.
- B. Samples for Initial Selection: Submit manufacturer's standard color charts in form of actual sections of flooring material showing full range of textures, and colors (solid and variegated) available.
- C. Samples for Verification: Submit a 6" x 6" cured system sample which the contractor has made for verification purposes and finish texture approval.
- D. Maintenance Data: Submit manufacturer's written instructions for epoxy/polyurethane flooring for recommended maintenance practices as specified in Division 1.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: An authorized representative who is trained and approved by manufacturer.

1. Engage an installer who is certified in writing by resinous flooring manufacturer as qualified to apply resinous flooring systems indicated.
- B. Source Limitations: Obtain flooring system materials including primers, base coat, and finish coats from a single manufacturer with resources to provide products of consistent quality in appearance and physical properties without delaying the Work.
- C. Comply with manufacturer's requirements for substrate moisture levels and moisture control.
- D. Floor System Thickness Verification:
 1. The installing contractor must use a mil gauge after each coat to verify system thickness.
 2. Perform a minimum of 30 tests within the Aircraft Hangar.
 3. No test shall be made within 15 ft. of another in any direction.
 4. Measure and record the thickness of the coating system.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in original packages and containers, with seals unbroken, bearing manufacturer's labels indicating brand name and directions for storage and mixing with other components.
- B. Deliver products to Project site in manufacturer's original, unopened cartons and containers, each bearing:
 1. Name or title of product.
 2. Manufacturer's batch number.
 3. Manufacturer's name.
 4. Generic type of material.
 5. Component designation (A, B, etc.)
 6. Application and mixing instructions.
 7. Hazardous material identification label.
 8. Health and Safety Information.
 9. CHEMTREC Emergency Response Information.
 10. Shelf life date.
- C. All materials shall be handled and stored to prevent damage or loss of label.
- D. The contractor shall promptly inspect direct jobsite material deliveries to assure that quantities are correct, comply with requirements and are not damaged.
- E. Do not use or retain contaminated, outdated, prematurely opened, diluted materials, or materials which have exceeded their shelf life.
- F. Store materials to comply with manufacturer's directions to prevent deterioration from moisture, heat, cold, direct sunlight, or other causes.

- G. Move products into spaces where they will be installed at least 48 hours before installation, unless longer conditioning period is recommended in writing by manufacturer.
- H. Mix all coating materials in a designated enclosed mixing area. This enclosed area must protect the mixing operation and materials from direct sunlight, inclement weather, freezing, or other means of damage or contamination. Protect all other concrete and metallic surfaces and finishes from any spillage of material within the mixing area.
- I. Do not use drain piping for disposal of coating materials.
- J. The Contractor shall take all precautions and implement all measures necessary to avert potential hazards associated with the epoxy/polyurethane flooring system materials as described on the pertinent Material Safety Data Sheets or container labels.

1.7 FIELD CONDITIONS

- A. Environmental Limitations: Comply with resinous flooring manufacturer's written instructions for substrate temperature, ambient temperature, moisture, ventilation, and other conditions affecting resinous flooring installation.
- B. Lighting: Provide permanent lighting or, if permanent lighting is not in place, simulate permanent lighting conditions during resinous flooring installation.
- C. Close spaces to traffic during resinous flooring installation and for 24 hours after installation unless manufacturer recommends a longer period.
- D. Applicator's representative shall visit job site prior to beginning application of epoxy/polyurethane flooring to evaluate extent of repairs and preparation required to concrete substrate.
- E. Maintain substrate temperature and room temperature before, during and after installation in compliance with flooring manufacturer's instructions.
- F. Provide adequate ventilation during application and curing periods.
- G. Flooring system shall be installed when Project is essentially complete. No painting, heavy construction work, rolling loads, scaffolding, or similar work shall be performed in areas which have received the flooring system after flooring system has been installed.
- H. Close spaces to traffic during flooring installation and for time period after installation recommended in writing by manufacturer.
- I. Do not apply coating materials when dust is being generated.
- J. Do not install flooring over concrete slabs until slabs have cured and are sufficiently dry to bond with primers, as determined by flooring manufacturer's recommended bond and moisture test.
- K. The contractor shall exercise care during surface preparation and system installation to protect surrounding substrates and surfaces, as well as in-place equipment.

- L. The system must be protected by the General Contractor or by the installing contractor until it is inspected and turned over to the owner.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Flammability: Self-extinguishing in accordance with ASTM D635.

2.2 RESINOUS FLOORING

- A. Resinous Flooring System: Abrasion-, impact-, and chemical-resistant, aggregate-filled, resin-based monolithic floor surfacing designed to produce a seamless floor.
 - 1. Epoxy/Polyurethane Coating Floor System.
 - a. Sherwin Williams, Resuflor™ Performance HTS
 - b. StrataShield by Tnemec, High-Solids Thin Film Epoxy. Series 247 Everthane
 - c. Dex-O-Tex, Div of Crossfield Products Corp. Aero-Flor Coating.
- B. Source Limitations: Obtain primary resinous flooring materials, including primers, resins, hardening agents, grouting coats, and topcoats, from single source from single manufacturer. Obtain secondary materials, including patching and fill material, joint sealant, and repair materials, of type and from manufacturer recommended in writing by manufacturer of primary materials.
- C. System Characteristics:
 - 1. Provide colors selected by Architect from manufacturer's full range of standard solid colors.
 - 2. Primer: Epoxy prime and seal.
 - 3. Top Coat/s: Polyurethane finish coat/s to obtain desired finish and total system thickness.
- D. System Physical Properties: Provide resinous flooring system with the following minimum physical property requirements when tested in accordance with test methods indicated:
 - A. Abrasion Resistance (ASTM D 4060): .35 mg lost
 - B. Resistance to Elevated Temperatures (MIL-D-3134J): No slip or flow at required temperature of 158°F
 - C. Adhesion (ASTM D 4541): 350 psi 100% concrete failure.
 - D. Flammability (ASTM D 635): Self-extinguishing over concrete.
 - E. Gloss (60° Gloss Meter @ 73°F, 50% RH): 90 millage pts.

- F. Impact Resistance (MIL-D-3134J): Direct, inch pound greater than 160 passes, Reverse, inch pound greater than 160 passes.
- G. Chemical Resistance:
 - 1. 10% acetic acid – No effect.
 - 2. 10% nitric acid – No effect.
 - 3. 50% sodium hydroxide – No effect.
 - 4. Skydrol-500 – No effect.
 - 5. 10% hydrochloric acid – No effect.
 - 6. 25% sulfuric acid – No effect.
 - 7. Isopropyl alcohol – No effect.
 - 8. Jet fuel – No effect.
- H. Electrical Conductivity: Non-conductive.

2.3 SUPPLEMENTAL MATERIALS

- A. All other materials not specifically described, but required for a complete installation, shall be only those recommended by the Manufacturer of the flooring system.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, with Installer present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
 - 1. Verify that finishes of substrates comply with tolerances and other requirements specified in other Sections and that substrates are free of cracks, ridges, depressions, scale, and foreign deposits that might interfere with adhesion of resinous flooring systems.
- B. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Prepare and clean substrates in accordance with resinous flooring manufacturer's written instructions for substrate indicated to ensure adhesion.
- B. Removal of existing floor resinous hangar floor to comply with resinous flooring manufacturer's written instructions for correct substrate conditions to apply new resinous flooring.
- C. Remove coatings, including curing compounds, and other substances that are incompatible with flooring adhesives and that contain soap, wax, oil, or silicone, using mechanical methods recommended by manufacturer. Do not use solvents.

- D. Broom and vacuum clean substrates to be covered immediately before product installation. After cleaning, examine substrates for moisture, alkaline salts, carbonation, or dust. Do not proceed with installation until unsatisfactory conditions have been corrected.
- E. Concrete pH test: Perform pH tests on concrete floors. If the pH is not within the manufacturer's acceptable range, it must be neutralized prior to beginning the installation.

3.3 INSTALLATION

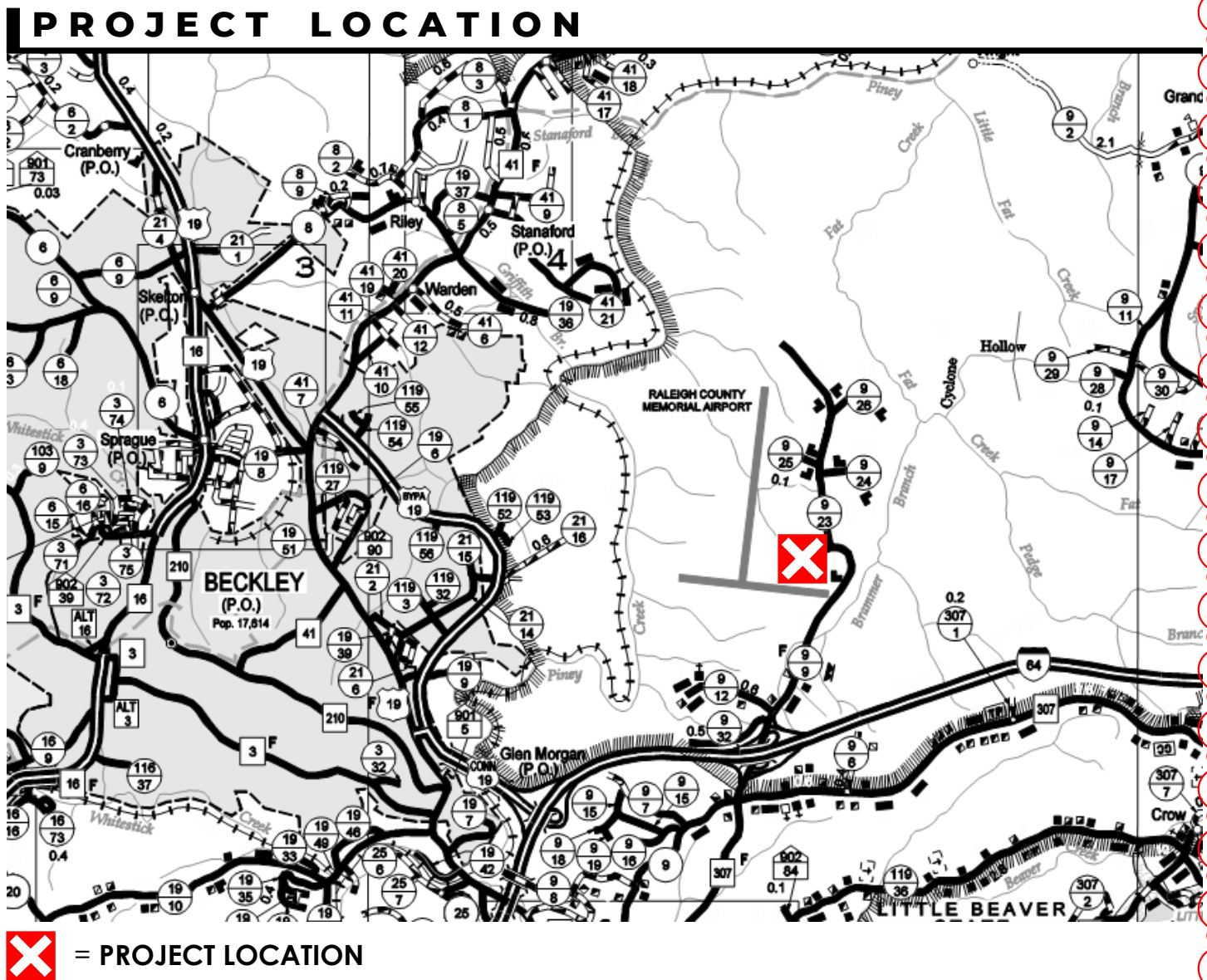
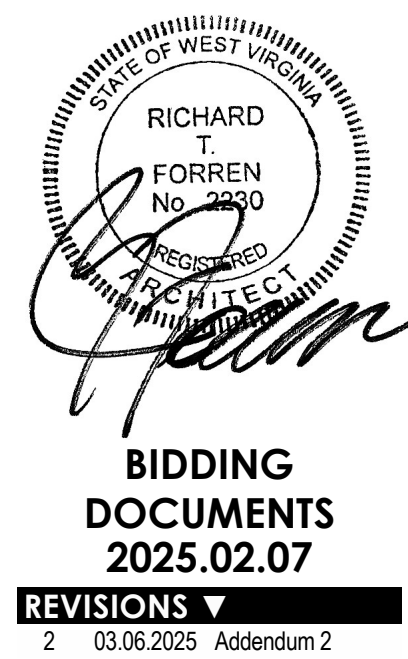
- A. General: Apply each component of epoxy/polyurethane flooring system in compliance with manufacturer's directions to produce a uniform monolithic wearing surface uninterrupted except at divider strips, sawn joints or other types of joints, indicated or required.
- B. Bond Coat: Apply bond coat over prepared substrate at manufacturer's recommended spreading rate.
- C. Finish or Sealing Coats: After body coat has cured sufficiently, apply finish coats of type recommended by flooring manufacturer to produce finish matching approved sample and in number of coats and spreading rates recommended by the manufacturer.
 - 1. Finished floor shall be 10 mils min. thickness or thicker if recommended by the system manufacturer to insure a smooth uniform finish without telegraphing of substrate, uniform in color and free of trowel marks.

3.4 CLEANING AND PROTECTION

- A. Protect resinous flooring from damage and wear during the remainder of construction period. Use protective methods and materials, including temporary covering, recommended in writing by resinous flooring manufacturer.
- B. Protect the completed work from water, airborne particles or other surface contaminants until cured for a minimum of 24 hours after application.
- C. Remove surface blemishes from installed surfaces using neutral cleaners and procedures as recommended by manufacturer of flooring materials. Protect installed flooring from damage by use of coverings as recommended by the manufacturer.
- D. Clean the Epoxy/Polyurethane Coating System just prior to final inspection, using materials and procedures suitable to the system manufacturer.

END OF SECTION 096723

New River Community and Technical College Hangar Renovation and Addition



DRAWING INDEX			
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A-6.0	DOOR AND WINDOW SCHEDULES	•	•
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FIRE PROTECTION			
FP-0.1	FIRE PROTECTION LEGEND, SCHEDULES, NOTES, AND DETAILS	•	
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E-3.3	POWER & SYSTEMS SCHEDULES & DETAILS	•	
E-3.4	POWER & SYSTEMS SCHEDULES & DETAILS	•	

PROJECT TEAM	
OWNER:	
New River Community and Technology College	
280 University Drive	
Beaver, WV 25813	
(304) 929-5450	
ARCHITECTURAL SERVICES:	
Omni Associates, Architects	
207 Jefferson Street	
Fairmont, WV 26554	
(304) 367-1417	
CIVIL \ SITE DESIGN:	
Ascent Engineering	
1700 Anmoore Road	
Bridgeport, WV 26330	
(304)-933-3463	
MECHANICAL, ELECTRICAL, AND PLUMBING DESIGN:	
Tower Engineering	
115 Evergreen Height Drive, Suite 400	
Pittsburgh, PA 15229	
(412) 939-1743	
STRUCTURAL DESIGN:	
Allegheny Design Services	
102 Leeway Street	
Morgantown, WV 26505	
(304) 599-0771	

PROJECT INFORMATION	
BUILDING ADDRESS:	OWNER ADDRESS:
176 Airport Circle	New River Technical College
Beaver, WV 25813	
Raleigh County	
TYPE OF WORK:	TYPE(S) OF CONSTRUCTION:
Addition and Renovation	TYPE II(000), IIB
USE/ OCCUPANCY CLASSIFICATION(S):	FIRE SUPPRESSION:
Business and Group III Aircraft Hangar	Full
Number of Stories above grade	1
Does this building have a basement?	No
Building Footprint Area	8,272 SF
Total Floor Area (SQ. FT.)	8,824 SF
Floor Area of Addition	1609 SF
Floor Area of Renovation	8,824 SF
Applicable International Building Code (IBC)	2018 IBC
Applicable Life Safety Code	2021 NFPA 101

NEW RIVER C&TC HANGAR
NEW RIVER COMMUNITY AND TECHNICAL COLLEGE
176 Airport Rd, Beaver, WV 25813

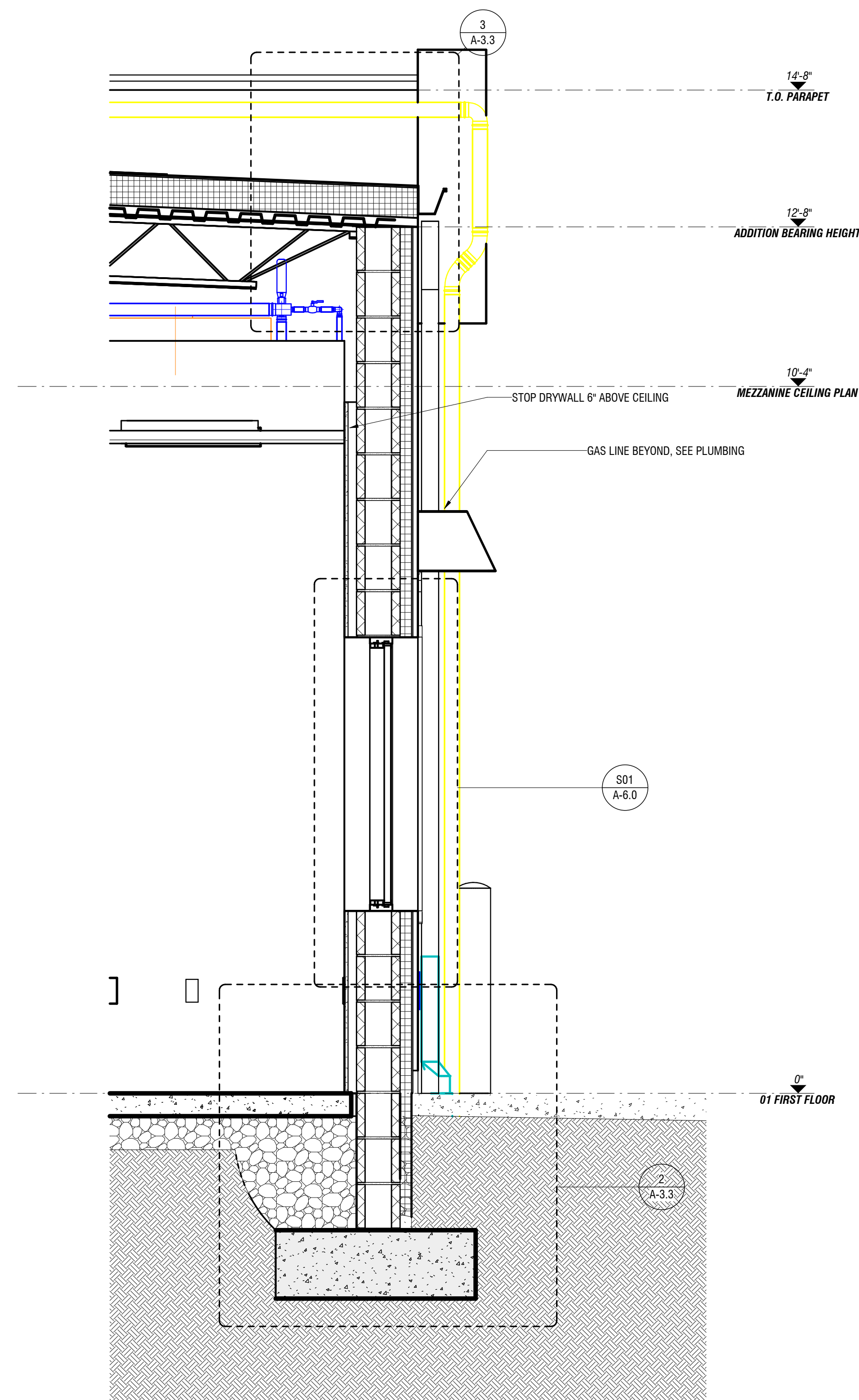
COVER SHEET



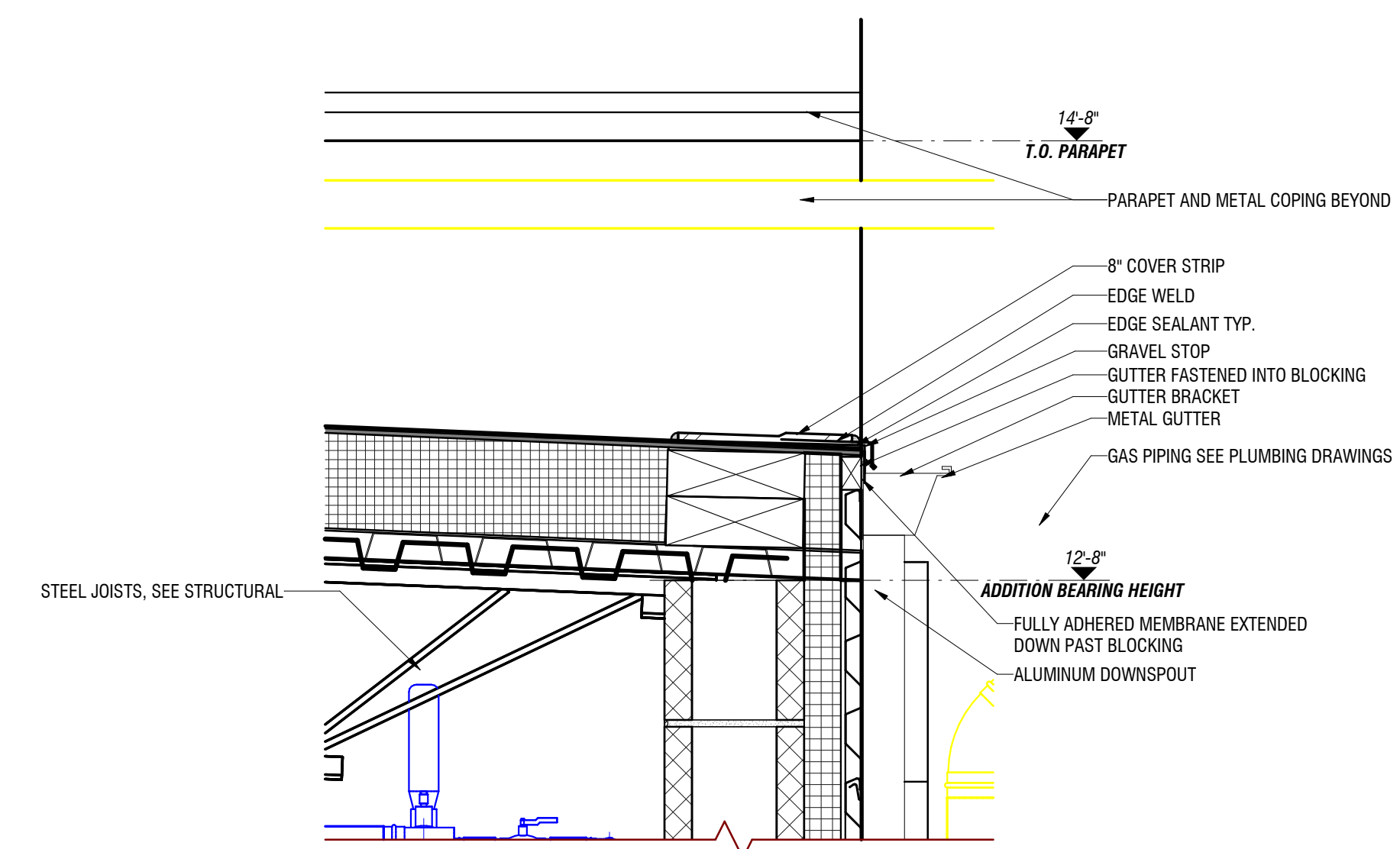
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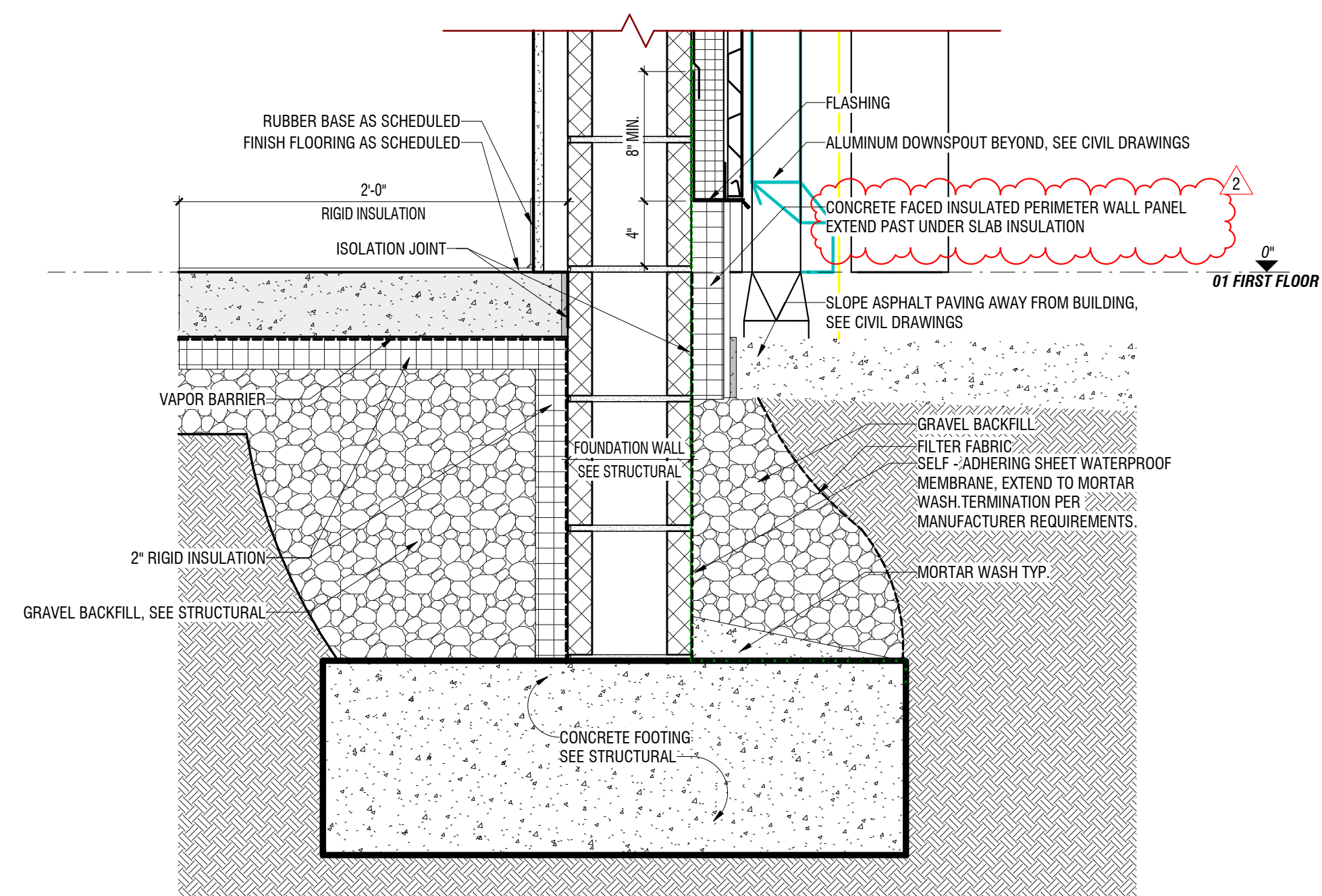
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Project No: 2022067 Drawn by: ---



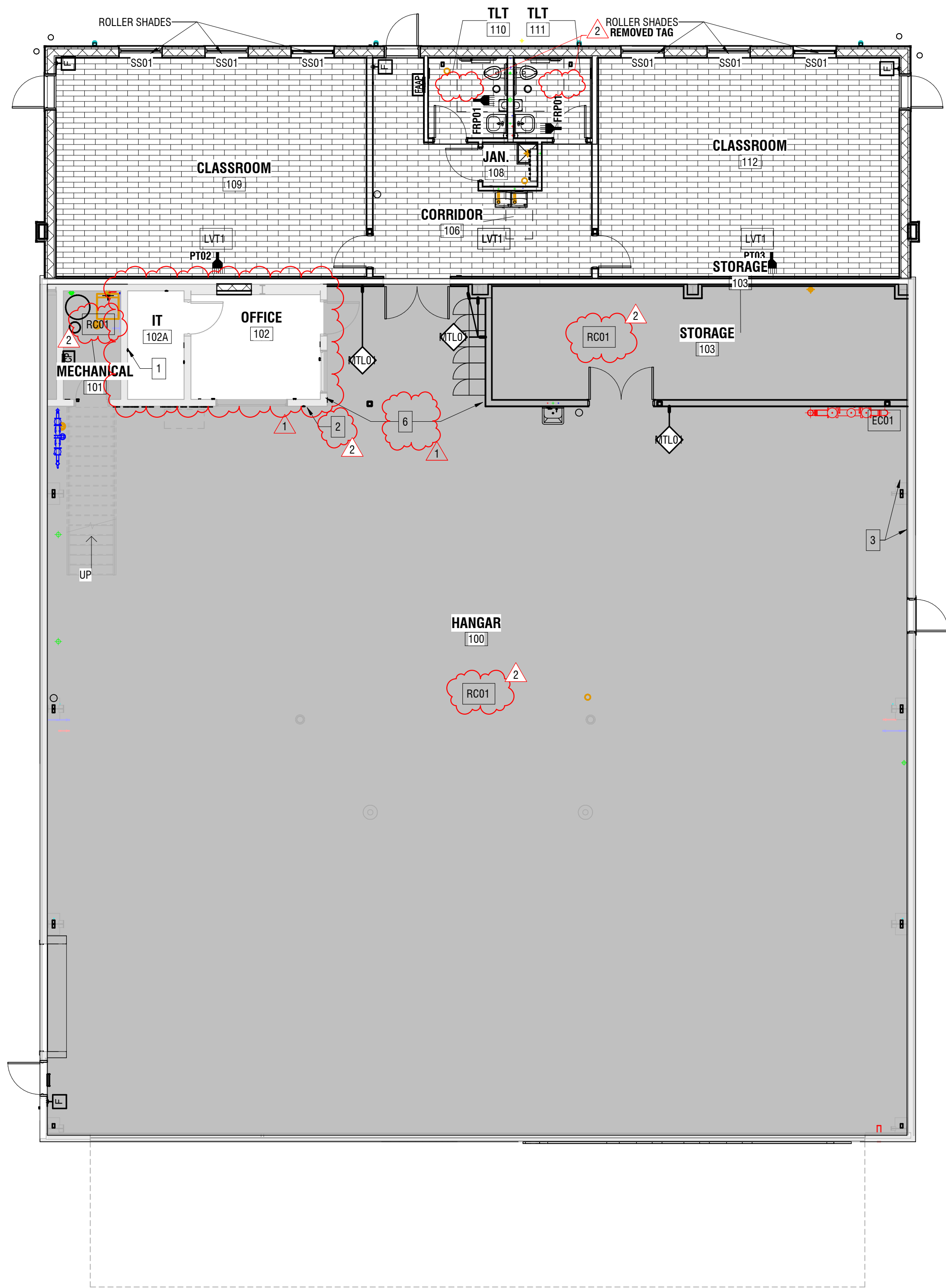
1 WALL SECTION 2



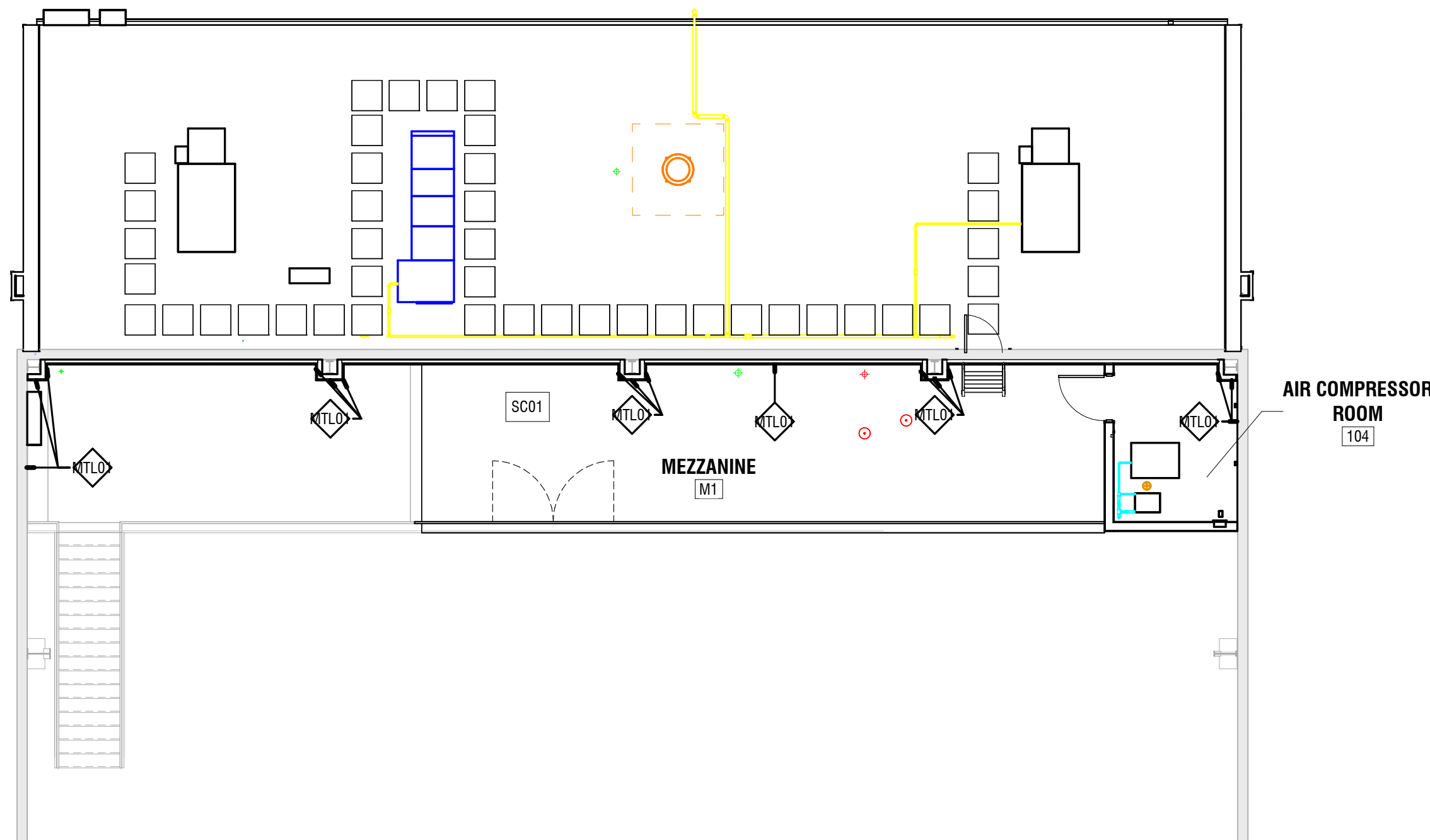
3 ROOF DETAIL



2 FOUNDATION DETAIL, TYP.



01 FIRST FLOOR FINISH PLAN
SCALE: 1/8" = 1'-0" SHEET: A-7.1



02 MEZZANINE FINISH PLAN
SCALE: 1/8" = 1'-0" SHEET: A-7.1

INTERIOR FINISH SCHEDULE

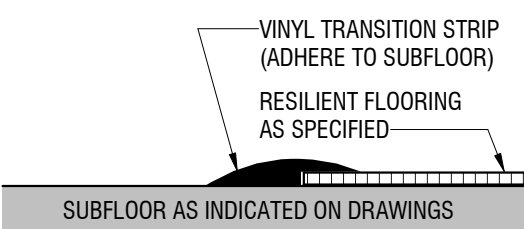
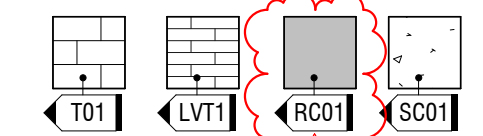
Number	SPACE Name	WALL FINISH	FLOOR FINISH	BASE FINISH	CEILING FINISH	REMARKS
01 FIRST FLOOR						
100	HANGAR	PT01	RC01	EXP	EXP	SEE NOTE 3.5 ON FINISH NOTES
101	MECHANICAL	PT01	RC01	EXP	EXP	
102	OFFICE	EXISTING	EXISTING FLOORS	EXISTING	ACT01	SEE NOTES 2.3, 4 ON FINISH NOTES
102A	IT	PT01	EXISTING FLOORS	RB01	ACT01	SEE NOTE 4 ON FINISH NOTES
103	STORAGE	PT01	RC01	RB01	EXP	
106	CORRIDOR	PT01	LV101	RB01	ACT01	
108	JAN.	PT01	LV101	RB01	ACT01	
109	CLASSROOM	PT01, PT02	LV101	RB01	ACT01	SEE FINISH PLAN FOR ACCENT LOCATIONS
110	TLT	PT01, FRP01	LV101	RB01	ACT01	SEE FINISH PLAN FOR ACCENT LOCATIONS
111	TLT	PT01, FRP01	LV101	RB01	ACT01	SEE FINISH PLAN FOR ACCENT LOCATIONS
112	CLASSROOM	PT01, PT03	LV101	RB01	ACT01	SEE FINISH PLAN FOR ACCENT LOCATIONS
MEZZANINE CEILING PLAN						
104	AIR COMPRESSOR ROOM	PT01	SC01	RB01	GWB	SEE NOTE 3 ON FINISH NOTES
M1	MEZZANINE	MT01, PT01	SC01		EXP	SEE FINISH PLAN FOR MT01 LOCATIONS, SEE NOTE 3 ON FINISH NOTES

FINISH NOTES

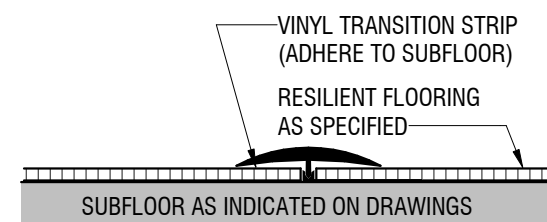
- Finish notes apply to all finish sheets.
- Ceiling heights, as noted on the reflected ceiling plans or in the room finish schedule, are measured from finish floor of scheduled room.
- Where floor finish changes from one room to another, set joint of the materials at the center of the communicating door.

- Paint existing block walls field color.
- Paint existing block field color.
- Paint new and existing interior 8'-0" metal panel PT02.
- Protect existing floors in office during construction.
- Where resinous flooring meets interior metal panel MT01 no base is required. Remove existing MT01 as necessary when applying resinous floor to ensure clean application. Protect existing interior metal panels during construction.
- Only Paint exposed ceiling black at open area under mezzanine by lockers other exposed ceiling to remain unpainted.

INTERIOR MATERIALS



T4 TRANSITION VCT TO SUBFLOOR
SCALE: 6" = 1'-0" SHEET: A-7.1



T5 TRANSITION VCT TO VCT
SCALE: 6" = 1'-0" SHEET: A-7.1

PAINT

PT01 FIELD COLOR
MANF: SHERWIN WILLIAMS
TYPE: SHOJI WHITE SW7042
NOTES:

PT02 ACCENT COLOR
MANF: SHERWIN WILLIAMS
TYPE: ESCAPE GRAY SW6185
NOTES:

PT03 ACCENT COLOR
MANF: SHERWIN WILLIAMS
TYPE: DEBONAIR 9139
NOTES:

PT04 INTERIOR HM DOOR FRAMES
MANF: SHERWIN WILLIAMS
TYPE: INTELLECTUAL GRAY SW7045
NOTES: FOR ALL INTERIOR HM FRAMES

RESILIENT BASE

RB01 RUBBER BASE
MANF: MOHAWK
TYPE: 4" COVE BASE, 63 BUFF
NOTES:

LVT

LV101 LVT
MANF: SHAWCONTRACT
TYPE: TERRAZO II RIGID CORE, ECHO 00775
NOTES: PATTERN LAY, STAGGER

SEALED CONCRETE

SC01 SEALED CONCRETE
NOTES: CLASS B, LEVEL 2 FINISH, SEE SPECIFICATION FOR MORE INFORMATION

SOLID SURFACE

SS01 SOLID SURFACE
MANF: FORMICA, TRADITIONS
TYPE: ASHEN CONCRETE, 1/8 ROUND OVER
NOTES: SEE FINISH PLAN FOR LOCATIONS

RESINIOUS FLOORING COATING

RC01 RESINIOUS FLOORING COATING
MANF: SHERWIN WILLIAMS
TYPE: RESUFLOTM PERFORMANCE HTS OR PROVEN EQUAL
NOTES: COLOR - WHITE

MISCELLANEOUS

ACT01 ACOUSTIC CEILING TILE
MANF: ARMSTRONG
TYPE: LEDGES 8013
NOTES:

ROLLER SHADES

RS01 ROLLER SHADES
MANF: DRAPER FLEXSHADES
TYPE: 007020, PEARL LINEN, 3%OPENNESS
NOTES:

MTL01 METAL PANEL

NOTES: MATCH EXISTING INTERIOR PANEL IN HANGAR. PAINT EXISTING AND NEW PT02

FRP01 FIBERGLASS REINFORCED PANELS

MANF: INPRO
TYPE: PRISM, ACRYLIC SURFACE WALL PANELS, LINEAR MIS
NOTES: 9' HIGH, RESTROOM WET WALLS

NEW RIVER C&TC HANGAR
NEW RIVER COMMUNITY AND TECHNICAL COLLEGE
176 Airport Rd, Beaver, WV 25813

FINISH PLAN

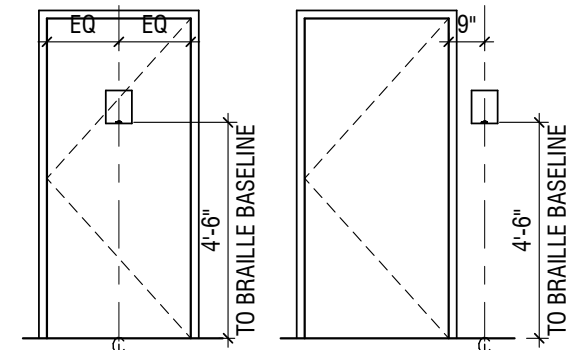
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A-7.1

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Project No: 2022067 Drawn by: Author

INTERIOR SIGNAGE NOTES

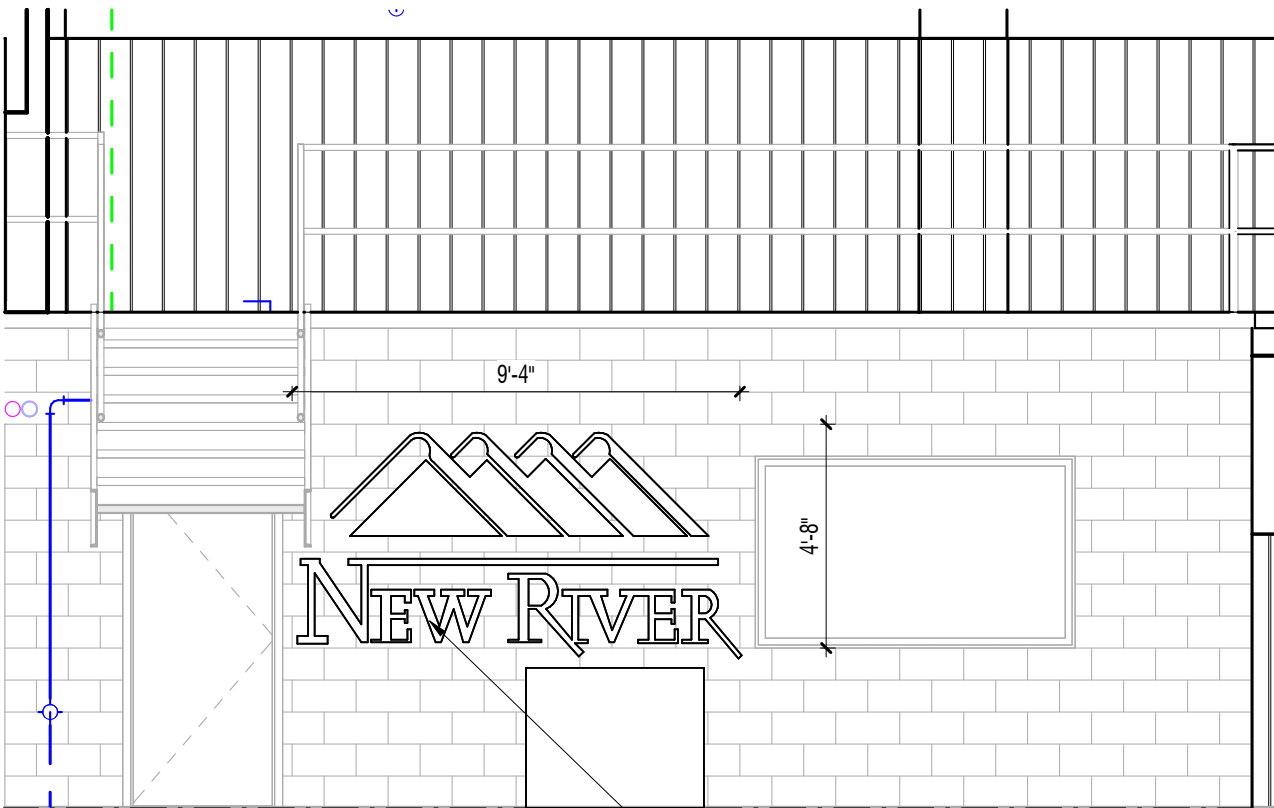
- Contrasting colors to be selected by architect.
- Stair signage to be placed on inside and outside of stairwell at each floor.
- Provide restroom signs at every restroom.
- Dimensions indicated are a general guide, exact dimensions dependent on selected product.
- Sample text shown for layout only. Fonts and styles are dependent on selected product.
- See project specifications for signage requirements.
- Signs to be customized per floor/area.
- Signage vendor is responsible for verifying compliance with all applicable codes (background and letter contrast, character, width, mounting heights) and biohazard requirements.
- Signage vendor is responsible for reviewing and coordinating all signs, locations, copy, message schedule and mounting heights with owner prior to signage fabrication.
- Signage vendor is responsible for confirming all maximum occupancy numbers and required locations of occupancy signs.
- Signage vendor to provide shop drawings, sign and message layouts, and color samples for all signs for approval prior to signage fabrication.
- Signage vendor to field verify all sign installation locations prior to sign fabrication and installation. Signs must be installed in compliance with all ADA and code requirements.
- Signage vendor to include artwork setup and template creation in pricing.
- Mount signs with VHB tape unless otherwise noted. Where sign is mounted on glass, provide 1/8" opaque backer panel on opposite side of glass. Color to match sign face.
- Mount ADA signs at 60" A.F.F. maximum to bottom of tactile room numbers.
- Sign room numbers may not be the same as architectural plan numbers. Signage vendor to coordinate with owner prior to signage fabrication.
- Mount room identification signs on latch side of door with edge of sign 3" from edge of door frame unless otherwise noted.
- Acrylic signs are to have eased edges.



MINIMUM HEIGHT: Baseline of lowest copy mounted no lower than 48" above floor
MAXIMUM HEIGHT: Baseline of highest copy mounted no higher than 60" above floor

ROOM SIGNAGE LOCATIONS

SCALE: 1/4" = 1'-0"

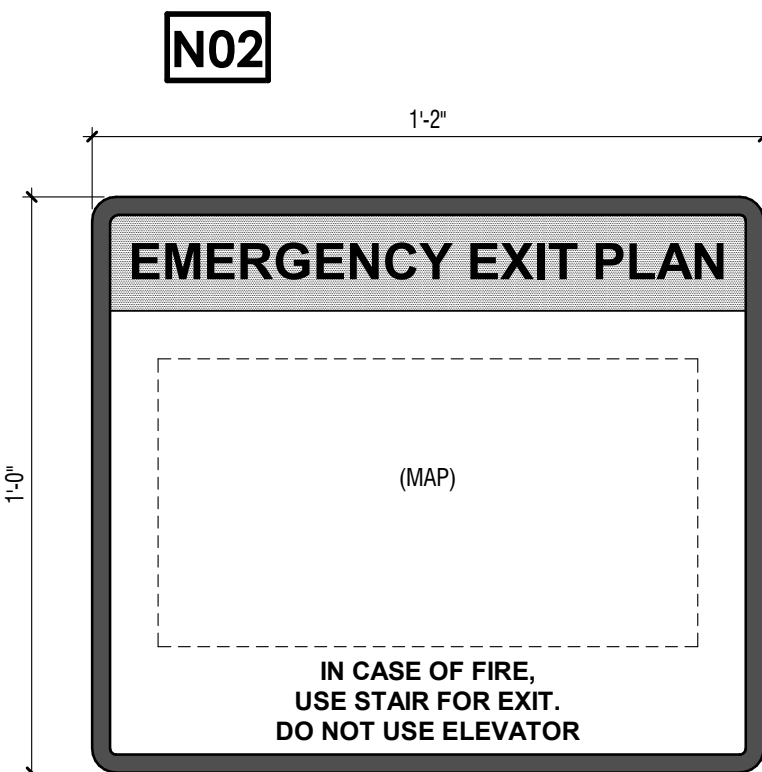
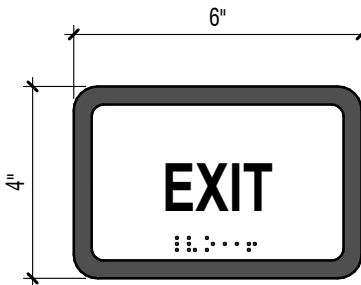
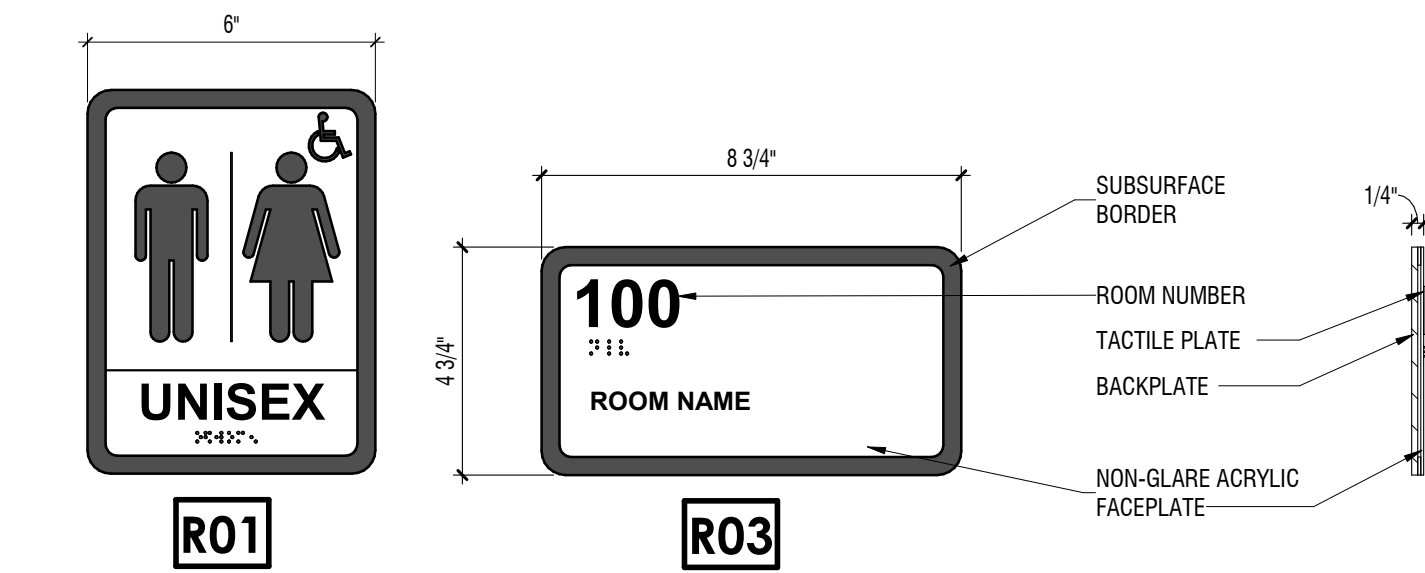


SINAGE CONTRACTOR TO PROVIDE A TO SCALE SHOP DRAWING FOR ALL SPECIALIZED PAINT SCHEMES AND LOGOS FOR ARCHITECTS APPROVAL

02 INTERIOR LOGO SIGNAGE

SCALE: 1/4" = 1'-0" SHEET: A-8.0

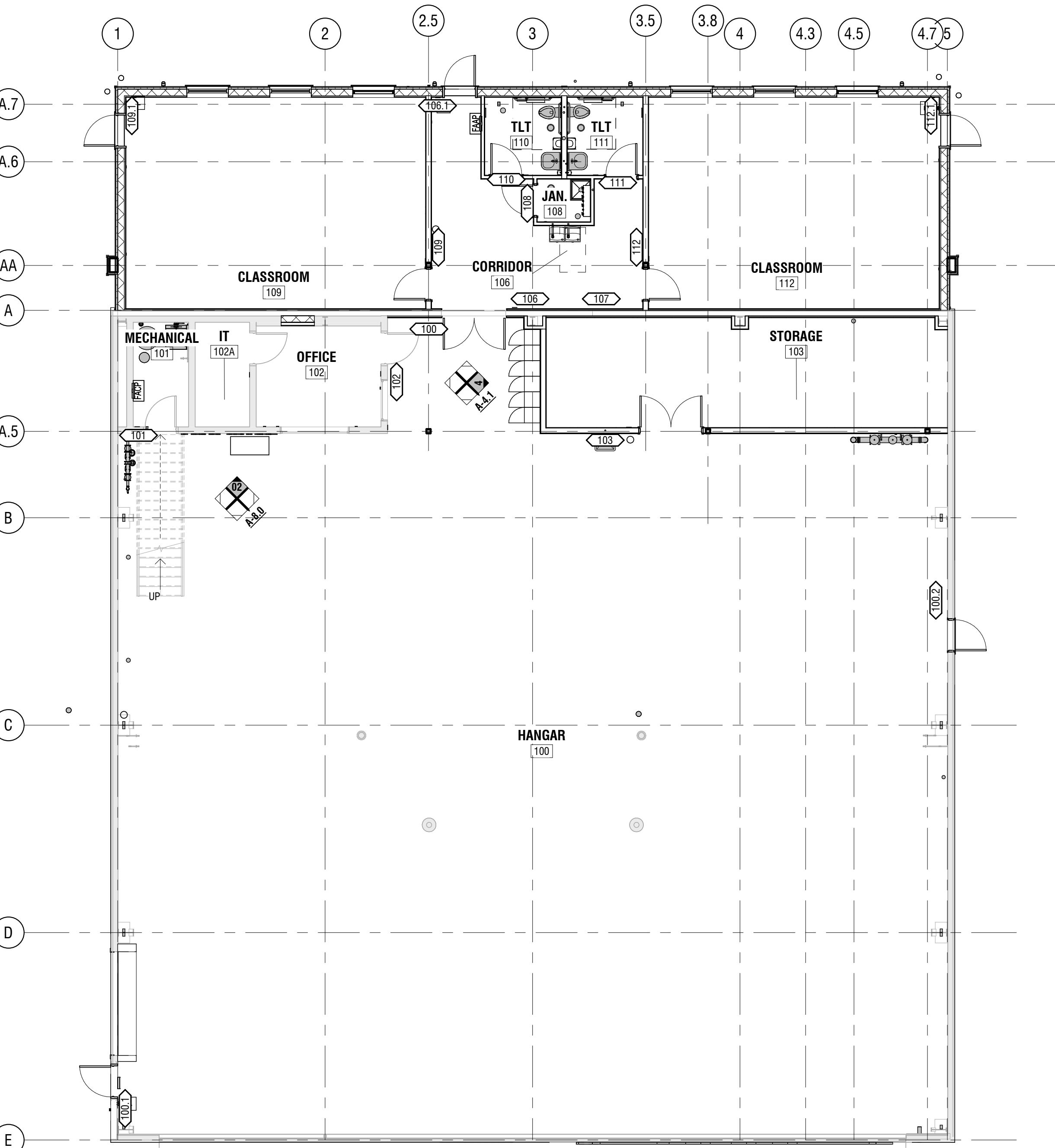
INTERIOR SIGNAGE TYPES



- Type V01 Notes:
- COMPUTER-CUT WHITE VINYL LETTERS
 - EXACT PLACEMENT T.B.D. PER ARCHITECT
 - FONT AND SIZE AS CHOSEN BY ARCHITECT
 - VERIFY LOCATION AND SIGN SIZE FOR MAXIMUM LINE LENGTH AND HEIGHT
 - PROVIDE LAYOUT TO OWNER AND ARCHITECT FOR APPROVAL

VOID NOT USED IN PROJECT

SIGNAGE SCHEDULE					
Sign Number	Sign Type	Purpose	Mounting Location	Wording	Comments
100	R03	ROOM IDENTIFICATION	WALL	(CHANGEABLE MESSAGE BY OWNER)	
100.1	N02	INFORMATIONAL	WALL	EXIT	
100.2	N02	INFORMATIONAL	WALL	EXIT	
101	R03	ROOM IDENTIFICATION	WALL	(CHANGEABLE MESSAGE BY OWNER)	
102	R03	ROOM IDENTIFICATION	WALL	(CHANGEABLE MESSAGE BY OWNER)	
103	R03	ROOM IDENTIFICATION	WALL	(CHANGEABLE MESSAGE BY OWNER)	
104	R03	ROOM IDENTIFICATION	WALL	(CHANGEABLE MESSAGE BY OWNER)	
106	D01	DIRECTIONAL WAYFINDING	WALL	EMERGENCY EXIT PLAN	
106.1	N02	INFORMATIONAL	WALL	EXIT	
107	R03	ROOM IDENTIFICATION	WALL	(CHANGEABLE MESSAGE BY OWNER)	VERTICAL PLATFORM LIFT
108	R03	ROOM IDENTIFICATION	WALL	(CHANGEABLE MESSAGE BY OWNER)	ON DOOR
109	R03	ROOM IDENTIFICATION	WALL	(CHANGEABLE MESSAGE BY OWNER)	
109.1	N02	INFORMATIONAL	WALL	EXIT	
110	R01	ROOM IDENTIFICATION	DOOR	UNISEX	ON DOOR
111	R01	ROOM IDENTIFICATION	DOOR	UNISEX	ON DOOR
112	R03	ROOM IDENTIFICATION	WALL	(CHANGEABLE MESSAGE BY OWNER)	
112.1	N02	INFORMATIONAL	WALL	EXIT	



01 FIRST FLOOR SIGNAGE PLAN

SCALE: 1/8" = 1'-0" SHEET: A-8.0