

Addendum

Florida Gateway College
New Building 102 – STEM Two
FGC ITB # ST-24-01-06
Lake City, Florida

Project

ST-24-01-06

FGC Project Number

2314

Architect's Project Number

02

Addendum Number

May 14, 2024

Date

Page 1 of 4
and 9 Attachments

Pages and Attachments

This Addendum is considered part of the Contract Documents and is incorporated integrally into them. Where provisions of the following supplementary data differ from those of the original Contract Documents, this Addendum takes precedence. Bidders are to acknowledge receipt of this Addendum on their Bid Form.

1. **PROJECT MANUAL, SECTION 00 2113 – INSTRUCTIONS TO BIDDERS:** For clarification, a Bid Guarantee "Bid Bond" is required for this project. Please refer to PART 7 – BID GUARANTEE, Paragraph 7.1 and Subparagraph A is changed to the following:

"Bids shall be accompanied by a Bid Guarantee which shall be a bid bond, cashier's check or certified check in the amount of five percent (5%) of the base bid made payable to the Owner. Such Bid Guarantee shall be submitted with the understanding that it shall guarantee the bidder will not withdraw their bid for a period of thirty calendar days after the scheduled closing time for the receipt of bid and that, if the bid is accepted, bidder will enter into a construction contract with the Owner and the required bonds will be submitted within the time set forth below; and that in the event of the withdrawal of the bid within the thirty calendar day period, or failure to enter into contract and submit all the required bonds and insurance certificates within ten calendar days after receipt of the Owner/Contractor Contract the bidder shall be liable to the Owner for the full amount of the Bid Guarantee as representing the damage to the Owner on account of the default of the bidder. The checks or bid bonds shall be returned to all bidders, except the three lowest bidders until after the Owner and the accepted bidder have executed the contract and bonds have been approved by the Owner. If the required contract and bonds have not been executed within thirty calendar days after the bid date, then the check or bid bond of any bidder will be returned upon request, provided they have not been notified of the acceptance of their bid."

2. **PROJECT MANUAL, SECTION 01 3000 – ADMINISTRATIVE REQUIREMENTS:** Refer to the Davis-Bacon Act Requirements attached at the end of Section 01 3000. For clarification, the attachment lists certain trades but not all, and if a trade is not specifically listed then the contractor is to use the most similar trade and wage of those that are listed. Also for clarification, Davis-Bacon wages are required to be certified payroll.
3. **PROJECT MANUAL, SECTION 05 5202 – ALUMINUM HANDRAILS AND RAILINGS:** For clarification, this Section is for the stair railings.

4. **PROJECT MANUAL, SECTION 07 1100 – DAMPPROOFING AND SECTION 07 2726 – FLUID APPLIED MEMBRANE AIR BARRIERS:** For clarification, dampproofing is to be applied to all exterior surfaces of CMU below grade and fluid applied membrane air barriers are to be applied behind the Metal Walls specified in Section 07 4213 and the Composite Wall Panels specified in Section 07 4243.
5. **PROJECT MANUAL, SECTION 08 1113 - HOLLOW METAL DOORS AND FRAMES:** Doors and frames manufactured by Daybar are an acceptable substitution.
6. **PROJECT MANUAL, SECTION 08 1416 – FLUSH WOOD DOORS:** Doors manufactured by Five Lakes Manufacturing are an acceptable substitution.
7. **PROJECT MANUAL, SECTION 08 7100 – DOOR HARDWARE:** For clarification, the manufacturers listed in the Hardware Sets are to be provided and installed with no substitutions allowed.
8. **PROJECT MANUAL, SECTION 09 6723 – RESINOUS FLOORING:**
 1. Refer to the attached reissued Section.
 2. For clarification, the wall base is to be 4" high.
 3. Resinous flooring manufactured by Plexi-Chemie, Neogard, Sikafloor and Sherwin-Williams are acceptable substitutions.
9. **PROJECT MANUAL, SECTION 09 9000 – PAINTING AND COATING:** Refer to Paragraph 2.3 and Subparagraph J. Stonclear CS100, Stonkote CE4 and Stonseal SK6 are each acceptable products for sealed concrete flooring.
10. **PROJECT MANUAL, SECTION 12 4920 – MANUAL ROLLER SHADES:** For clarification, the manual roller shade locations are indicated on Drawing Sheets A-1 and A-1A.
11. **PROJECT MANUAL - GENERAL:**
 1. For clarification, the fire extinguisher cabinets are specified in Section 10 0000.
 2. For clarification, the white boards are specified in Section 10 0000.
 3. For clarification, the corner guards are specified in Section 10 0000. The corner guard locations are shown on Drawings A-1 and A-1A.
 4. For clarification, the metal storage shelving is specified in Section 10 0000.
12. **DRAWINGS, SHEET C5.0 – PAVING, GRADING AND DRAINAGE PLAN:** For clarification, the removal or replacement of wheel stops shall be by the Owner. In addition, all new striping shall be by the Owner. These items are not to be included in the contractor's bid.
13. **DRAWINGS, CIVIL – GENERAL:** For clarification, there is no landscaping plan.
14. **DRAWINGS, SHEET A-1 – FIRST FLOOR - FLOOR PLAN:** Refer to the Interior Elevation tag at Door 117 and revise the tag to 3/A-9B.
15. **DRAWINGS, SHEET A-1 – FIRST FLOOR – FLOOR PLAN AND A-1A – SECOND FLOOR – FLOOR PLAN:** For clarification, the elevator door frame is to be installed directly to the CMU and be coordinated between the supplied elevator and the masonry subcontractor.
16. **DRAWINGS, SHEET A-1A – SECOND FLOOR – FLOOR PLAN:** For clarification, all non-fire-rated framed walls and all fire-rated framed walls are to extend to the underside of the roof deck. Also, all framed walls located on top of CMU walls are to extend to the underside of the roof deck.

17. **DRAWINGS, SHEET A-5 – EXTERIOR ELEVATIONS:** For clarification, the vertical aluminum siding specified in Section 07 4213 and the vertical composite wall panels specified in Section 07 4243 are to be complete systems and during the construction submittal phase, the manufacturer is to provide their shop drawings showing their systems, joints, openings, transitions and details to suit the conditions required specifically for this project for review.
18. **DRAWINGS, SHEET A-8 – FIRST FLOOR REFLECTED CEILING PLAN AND A-8A – SECOND FLOOR REFLECTED CEILING PLAN:** Refer to Women 105, Men 106, Women 204 and Men 205. The ceilings of these rooms shall be impervious with an epoxy finish coating on a 5/8" solid moisture resistant gypsum board over metal stud horizontal framing at 24" on center. The metal stud framing gauge and depth shall be as required as a delegated design provided by the metal stud subcontractor. The finish ceiling height shall be 9'-0" throughout each room. One 24" x 24" ceiling access panel shall be provided at each room with final location to be determined on site during construction during the metal stud horizontal framing install.
19. **DRAWINGS, SHEET A-9 - ENLARGED PLAND AND INTERIOR ELEVATIONS:** For clarification, wall tile at the restrooms is to be installed per the Finish Diagrams in Section 09 1000 of the Project Manual.
20. **DRAWINGS, SHEET S-5 - SECOND FLOOR PLAN:** For clarification, a pre-bid RFI asked: "Please clarify what the [6,3,6] and [8,3,8] for the W18x35 and W21x24 around 3E/3H and 4B." and the response is: "The numbers in brackets are the shear stud counts on that girder span. That is the number of studs in each 'bay' between cross beams, i.e. the studs are not uniformly spaced along the girder. Also, see 1/S-16 for further details and definitions and specifically note #3."
21. **DRAWINGS, SHEET S-11 – ELEVATOR FRAMING SECTIONS AND DETAILS:** For clarification, a pre-bid RFI asked: "What is the depth of the elevator pit? Detail 1/S-11 says to see plan, but the foundation plan doesn't specify." and the response is: "Elevator pit is assumed to be 4'-0" deep but shall be verified with actual elevator supplied."
22. **DRAWINGS, SHEET S-15 – FLOOR SECTIONS AND DETAILS:** For clarification, a pre-bid RFI asked: "Detail 1/S-15 calls for a 10' #4 centered over the steel beams at 12" o.c. On S-5 this detail is shown over a beam that runs north and south and a beam that runs east and west. Is this typical over all steel beams?" and the response is: "The added bars go only over the girders."
23. **DRAWINGS, SHEET M302 – HVAC DETAILS:** Refer to the attached reissued Sheet. AHU connection detail added to Drawing.
24. **DRAWINGS, MECHANICAL - GENERAL:** For clarification, a pre-bid RFI asked: "We need to know what underground system they are wanting, whether it be a carbon steel pipe in a HDPE jacket with foam around it? How deep the pipe needs to be? What pressure test needs to be done after completion?" and the response is: "Refer to specification Section 23 2113 – Hydronic Piping for HVAC piping and pressure requirements. Site piping needs to be installed a minimum of 3'-0" below finished grade. It is acceptable to match the pipe material of the existing chilled water main and provide with an HDPE jacket."
25. **DRAWINGS, MECHANICAL – GENERAL:** For clarification, a pre-bid RFI asked: "How long do we need to flush for and what's the water spec need to be?" and the response is: "Refer to specification Section 23 2113 – Hydronic Piping 3.8 – Chemical Treatment for flushing requirements."
26. **DRAWINGS, SHEET E101 – ELECTRICAL SITE PLAN:** Refer to the attached reissued Sheets. Generator pad dimensions were changed and the reference to "diesel" generator was replaced with "natural gas".
27. **DRAWINGS, SHEET E201 - LIGHTING PLAN - FIRST FLOOR, E202 - LIGHTING PLAN - SECOND FLOOR, E211 - POWER AND SYSTEMS PLAN - FIRST FLOOR AND E212 - POWER AND SYSTEMS PLAN - SECOND FLOOR:** Refer to the attached reissued Sheets. Added notes regarding location of boxes with respect to hard ceiling. Added some circuiting arcs which did not plot on original Drawings.

28. **DRAWINGS, SHEET E211 - POWER AND SYSTEMS PLAN - FIRST FLOOR:** Refer to the attached reissued Sheet. Electric strike from door to room #112 was added to plan.
29. **DRAWINGS, SHEET E211 - POWER AND SYSTEMS PLAN - FIRST FLOOR:** For clarification, a pre-bid RFI asked: "The simulation rooms on the first floor show cameras, but there is no specification or description of this system. Please advise on what is to be included?" and the response is: "See keynote 9 on E211, and notes T11 and T15 on E701. The contractor is responsible for the back boxes at each camera location and cables from the camera locations back to the I.T. room. The cameras will Owner-Furnished and Owner-Installed.
30. **DRAWINGS, SHEET E211 - POWER AND SYSTEMS PLAN - FIRST FLOOR AND E212 – POWER AND SYSTEMS PLAN – SECOND FLOOR:** Refer to the attached reissued Sheets. Security camera locations were added to plans. Contractor shall provide rough-in and CAT6 POE (power over Ethernet) cable for each location; camera will be provided by the Owner's security vendor.
31. **DRAWINGS, SHEET E401 – LIGHTING SCHEDULE AND DETAILS:** Refer to the attached reissued Sheet. Added note to fixture schedule regarding provisions of flange kits as required for hard ceilings.
32. **DRAWINGS, SHEET E701 – SYSTEMS RISER AND DETAILS:** Refer to the attached reissued Sheet. PACS details and telecom riser diagram were revised, to clarify general contractor versus security vendor scope.
33. **GENERAL – SECURITY ACCESS CONTROL CLARIFICATION:** For clarification.

The winning contractor (GC), as part of this project, shall provide:

- Conduit and back box rough-ins for the PACS (physical access control system) components.
- 120V homeruns for control panel and door operator locations as required.
- Fire Alarm output relay as first floor PACS control panel for interconnection with fire alarm system.
- CAT6 cables to PACS control panel locations for interconnection to network.
- Empty wall space in I.T. rooms for PACS control panels.
- Coordination with the Owner-Supplied security vendor during construction.
- All door hardware including: doors, locks, auto-door operators, latches, electric strikes, panic bars, etc.

The Owner will contract separately with a security vendor. The Owner's Owner-Supplied security vendor will:

- Provide specific rough-in details to GC.
- Furnish and install PACS control panels, PACS system cables from control panels to doors, PACS power supplies, door position switches, request to exit sensors and card readers.
- Provide PACS programming and integration into the campus-wide system.
- Coordinate with GC's team during construction.

END OF ADDENDUM 02

ATTACHMENTS INCLUDE REISSUED SECTION 09 6723 AND REISSUED SHEETS M302, E101, E201, E202, E211, E212, E401 AND E701

SECTION 09 6723
RESINOUS FLOORING

PART 1 - GENERAL

1.1 RELATED REQUIREMENTS

- A. Refer to the Division 00 and 01 Sections of these specifications.
- B. Coordinate with Section 09 1000 Finish Schedule and Finish Diagrams for locations.

1.2 SUMMARY

- A. This Section includes one resinous flooring system, one with epoxy body.
 - 1. Application Method (RES-1): Squeegee, screed and broadcast.
 - 2. Application Method (RES-2): Flat Metal, power or hand troweled.

1.3 SUBMITTALS

- A. Product Data: Include manufacturer's technical data, application instructions and recommendations.
- B. Samples for Verification: 6 inches square, applied to a rigid backing.
- C. Product Schedule: Use resinous flooring designations indicated in Part 2 and room designations indicated in Section 09 1000.
- D. Installer Certificates: Signed by manufacturer certifying that installers comply with specified requirements.
- E. Maintenance Data: For resinous flooring to include in maintenance manuals.

1.4 QUALITY ASSURANCE

- A. Equivalent materials of other manufactures may be substituted for consideration prior to the Bid Date.
- B. Installer Qualifications: Engage an experienced installer experienced in applying resinous flooring systems similar in material, design and extent, whose work has resulted in applications with a record of successful in-service performance and who is acceptable to resinous flooring manufacturer.
 - 1. Engage an installer who is certified by resinous flooring manufacturer as qualified to apply resinous flooring systems.
- C. Source Limitations: Obtain primary resinous flooring materials, including primers, resins, hardening agents, grouting coats and topcoats, through one source from a single manufacturer. Provide secondary materials, including patching and fill material, joint sealant and repair materials, of type and from source recommended by manufacturer of primary materials.
- D. Manufacturer Field Technical Service Representatives: Resinous flooring manufacture is to retain the services of Field Technical Service Representatives who are trained on installing the system to be used.
 - 1. Field Technical Services Representatives are to be employed by the system manufacture to assist in the quality assurance and quality control process of the installation and be available to perform field problem solving issues with the installer.

- E. Mockups: Apply mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
 - 1. Apply full-thickness mockups on 48-inch square floor area.
 - a. Include 48-inch length of integral cove base.
 - 2. Approved mockups may become part of the completed work if undisturbed at time of Substantial Completion.

1.5 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. Store materials to prevent deterioration from moisture, heat, cold, direct sunlight or other detrimental effects.
- C. Materials used are to be factory pre-weighed and pre-packaged in single, easy to manage batches to eliminate on site mixing errors. No on site weighing or volumetric measurements allowed.

1.6 PROJECT CONDITIONS

- A. Environmental Limitations: Comply with resinous flooring manufacturer's instructions for substrate temperature, ambient temperature, moisture, ventilation and other conditions affecting resinous flooring application.
 - 1. Maintain material and substrate temperature between 65 and 85 deg F during resinous flooring application and for not less than 24 hours after application.
- B. Lighting: Provide permanent lighting or, if permanent lighting is not in place, simulate permanent lighting conditions during resinous flooring application.
- C. Close spaces to traffic during resinous flooring application and for not less than 24 hours after application, unless manufacturer recommends a longer period.
- D. Concrete substrate to be properly cured for a minimum of 30 days. A vapor barrier must be present for concrete subfloors on grade.

1.7 WARRANTY

- A. Manufacturer is to furnish a warranty covering both material and workmanship for a period of one year from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 RESINOUS FLOORING (RES-1)

- A. Available Products: Subject to compliance with requirements.
 - 1. Confirm inclusion of 25mil body coat and broadcast quartz into primer increasing bond strength.
- B. Products: Subject to compliance with requirements:
 - 1. Stonhard, Inc.; Stontec ERF®. Basis of Design.
- C. System Characteristics:
 - 1. Color and Pattern: Select from manufactures standards
 - 2. Wearing Surface: Standard
 - 3. Integral Cove Base

4. Overall System Thickness: 2mm
- D. System Components: Manufacturer's standard components that are compatible with each other and as follows:
1. Primer:
 - a. Material Basis: Stonhard Standard Primer.
 - b. Resin: Epoxy.
 - c. Formulation Description: Two component 100 percent solids.
 - d. Application Method: Squeegee and roller.
 - e. Number of Coats: One.
 - f. Aggregates: Broadcast quartz into wet primer coat.
 2. Body Coat(s):
 - a. Material Basis: Stonshield Undercoat.
 - b. Resin: Epoxy.
 - c. Formulation Description: Three component solvent free epoxy.
 - d. Application Method: Notched squeegee.
 - 1). Thickness of Coats: 25-30 mils with standard primer coat.
 - 2). Number of Coats: One.
 3. Broadcast:
 - a. Material Basis: Stontec Flakes.
 - b. Formulation Description: Decorative flake.
 - c. Type: Tweed (chips to be mixed in Mfg. facility).
 - d. Finish: Broadcast to rejection.
 - e. Number of Coats: One.
 4. Topcoat:
 - a. Material Basis: CE4.
 - b. Resin: Epoxy.
 - c. Formulation Description: Two component, UV stable, solvent free epoxy.
 - d. Type: Clear.
 - e. Finish: Gloss.
 - f. Number of Coats: Two.

2.2 RESINOUS FLOORING (RES-2)

- A. Available Products: Subject to compliance with requirements:
- B. Acceptable Manufactures,
 1. Stonhard Basis of design.
- C. Products: Subject to compliance with requirements:
 1. Stonhard, Inc.; Stonclad GS®. With top coat Stonkote GS4 and Stonseal SK6.
- D. System Characteristics:
 1. Color and Pattern: Choose from Mfg. Standards.
 2. Wearing Surface: Standard smooth.
 3. Integral Cove Base.
 4. Overall System Thickness: nominal 1/4".
- E. System Components: Manufacturer's standard components that are compatible with each other and as follows:

1. Primer:
 - a. Material Basis: Stonhard Standard Primer.
 - b. Resin: Epoxy.
 - c. Formulation Description: Two component, 100 percent solids.
 - d. Application Method: Squeegee and roller.
 - e. Number of Coats: One.
2. Mortar Base:
 - a. Material design basis: Stonclad GS.
 - b. Resin: Epoxy.
 - c. Formulation Description: Three component, 100 percent solids.
 - d. Application Method: Metal Trowel.
 - 1). Thickness of Coats: nominal 1/4 inch.
 - 2). Number of Coats: One.
 - e. Aggregates: Pigmented Blended aggregate.
3. Top Coat:
 - a. Material design basis: Stonkote GS4.
 - b. Resin: Epoxy.
 - c. Formulation Description: Two component 100 percent solids.
 - d. Type: Pigmented.
 - e. Finish: Standard.
 - f. Number of Coats: One.
4. Sealer Coat:
 - a. Material basis: Stonseal SK6.
 - b. Resin: Urethane.
 - c. Style: Clear.
 - d. Number of coats: One.

2.3 ACCESSORY MATERIALS

- A. Patching and Fill Material: Resinous product of or approved by resinous flooring manufacturer and recommended by manufacturer for application indicated. No Single component or cementitious materials.
- B. Joint Sealant: Type recommended or produced by resinous flooring manufacturer for type of service and joint conditions.

PART 3 - EXECUTION

3.1 PREPARATION

- A. General: Prepare and clean substrates according to resinous flooring manufacturer's instructions. Provide clean, dry and neutral Ph substrate for resinous flooring application.
- B. Concrete Substrates: Provide sound concrete surfaces free of laitance, glaze, efflorescence, curing compounds, form-release agents, dust, dirt, grease, oil and other contaminants incompatible with resinous flooring.
 1. Mechanically prepare substrates as follows:
 - a. Mechanically prepare with the use of Diamond grinding equipment to provide surface sound concrete surfaces free of laitance, glaze, efflorescence, curing compounds, form-release agents, dust, dirt, grease, oil and other contaminants incompatible with resinous flooring. Or,

- b. Shot-blast surfaces with an apparatus that abrades the concrete surface, contains the dispensed shot within the apparatus and recirculates the shot by vacuum pickup.
 - c. Comply with ASTM C 811 requirements, unless manufacturer's instructions are more stringent.
 - 2. Repair damaged and deteriorated concrete according to resinous flooring manufacturer's recommendations.
 - 3. Verify that concrete substrates are dry.
 - a. Perform in situ probe test, ASTM F 2170. Proceed with application only after substrates do not exceed a maximum potential equilibrium relative humidity of 80 percent.
 - b. For applying impermeable resinous flooring systems, 3 lb of water/1000 sq. ft. of slab in 24 hours is generally considered a safe moisture-vapor-emission rate. Consult manufacturers for appropriate rates for permeable systems that will allow moisture vapor to continue through them once cured.
 - c. Perform anhydrous calcium chloride test, ASTM F 1869. Proceed with application only after substrates have maximum moisture-vapor-emission rate of 3 lb of water/1000 sq. ft. of slab in 24 hours.
 - d. Perform additional moisture tests recommended by manufacturer. Proceed with application only after substrates pass testing.
 - 4. Verify that concrete substrates have neutral Ph and that resinous flooring will adhere to them. Perform tests recommended by manufacturer. Proceed with application only after substrates pass testing.
- C. Resinous Materials: Mix components and prepare materials according to resinous flooring manufacturer's instructions.
- D. Use patching and fill material to fill holes and depressions in substrates according to manufacturer's instructions.
- E. Treat control joints and other nonmoving substrate cracks to prevent cracks from reflecting through resinous flooring according to manufacturer's recommendations. Stonflex MP7 joint fill material.

3.2 APPLICATION (RES-1)

- A. General: Apply components of resinous flooring system according to manufacturer's instructions to produce a uniform, monolithic wearing surface.
 - 1. Coordinate application of components to provide optimum adhesion of resinous flooring system to substrate and optimum intercoat adhesion.
 - 2. Cure resinous flooring components according to manufacturer's instructions. Prevent contamination during application and curing processes.
 - 3. At substrate expansion and isolation joints, provide joint in resinous flooring to comply with resinous flooring manufacturer's recommendations.
 - a. Apply joint sealant to comply with manufacturer's recommendations.
- B. Mix and apply primer over properly prepared substrate with adherence to manufacturer's installation procedures and coverage rates.
- C. Broadcast: Immediately broadcast quartz silica aggregate into the primer using manufacturer's specially designed spray caster. Adherence to manufacturer's installation procedures and coverage rates is imperative.
- D. Integral Cove Base: Apply cove base mix to wall surfaces before applying flooring. Apply according to manufacturer's instructions and details including those for taping, mixing, priming, troweling, sanding and top coating of cove base. Round internal and external corners.

- E. Body Coat: Mix base material according to manufacturer's recommended procedures. Uniformly spread mixed material over previously primed substrate using manufacturer's installation tool. Roll material with adherence to manufacturer's installation procedures and coverage rates.
- F. Broadcast: Immediately broadcast decorative flakes into the body coat. Adherence to manufacturer's installation procedures and coverage rates is imperative.
- G. First Sealer: Remove excess un-bonded flakes by lightly brushing and vacuuming the floor surface. Mix and apply sealer with adherence to manufacturer's installation procedures.
- H. Second Sealer: Lightly sand first sealer coat. Mix and apply second sealer coat with adherence to manufacturer's installation procedures.

3.3 APPLICATION (RES-2)

- A. General: Apply components of resinous flooring system according to manufacturer's instructions to produce a uniform, monolithic wearing surface.
 - 1. Coordinate application of components to provide optimum adhesion of resinous flooring system to substrate and optimum intercoat adhesion.
 - 2. Cure resinous flooring components according to manufacturer's instructions. Prevent contamination during application and curing processes.
 - 3. At substrate expansion and isolation joints, provide joint in resinous flooring to comply with resinous flooring manufacturer's recommendations.
 - a. Apply joint sealant to comply with manufacturer's recommendations.
- B. Apply primer where required by resinous system over prepared substrate at manufacturer's recommended spreading rate.
- C. Integral Cove Base: Stonclad GS mortar, apply cove base mix to wall surfaces before applying flooring. Apply according to manufacturer's instructions and details including those for taping, mixing, priming, troweling and sanding of cove base. Round internal and external corners.
 - 1. Integral Cove Base.
- D. Apply metal trowel single mortar coat in thickness required for flooring system. Hand or power trowel and grout to fill voids. When cured, sand to remove trowel marks and roughness.
- E. Apply topcoat(s) in number of coats required for flooring system and at spreading rates recommended by manufacturer.

3.4 TERMINATIONS

- A. Chase edges to "lock" the coating system into the concrete substrate along lines of termination.
- B. Penetration Treatment: Lap and seal coating onto the perimeter of the penetrating item by bridging over compatible elastomer at the interface to compensate for possible movement.
- C. Trenches: Continue coating system into trenches to maintain monolithic protection. Treat cold joints to assure bridging of potential cracks.
- D. Treat floor drains by chasing the coating to lock in place at point of termination.

3.5 JOINTS AND CRACKS

- A. Treat control joints to bridge potential cracks and to maintain monolithic protection.
- B. Treat cold joints and construction joints to bridge potential cracks and to maintain monolithic protection on horizontal and vertical surfaces as well as horizontal and vertical interfaces.

- C. Discontinue floor coating system at vertical and horizontal contraction and expansion joints by installing backer rod and compatible sealant after coating installation is completed. Provide sealant type recommended by manufacturer for traffic conditions and chemical exposures to be encountered.

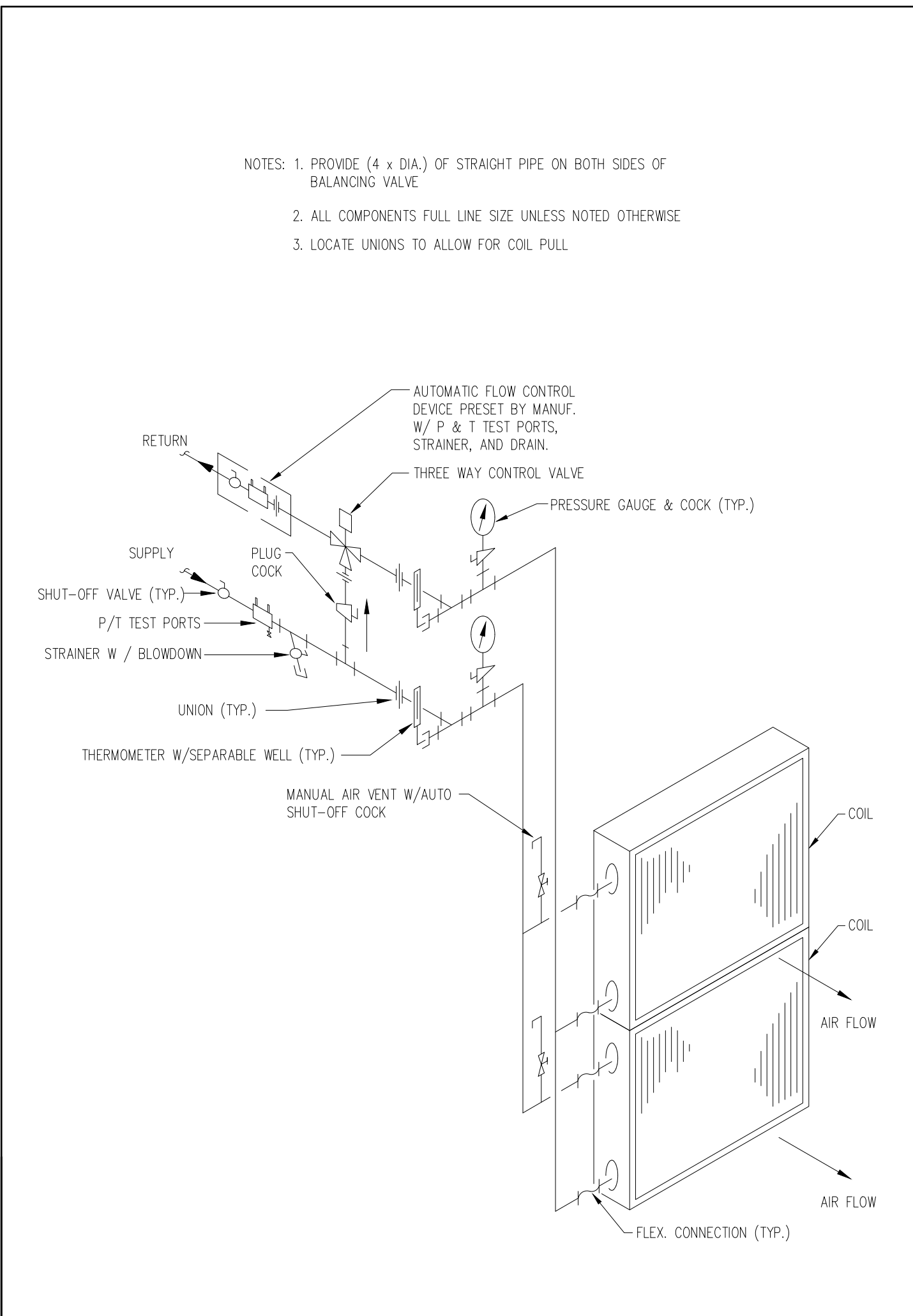
3.6 FIELD QUALITY CONTROL

- A. Material Sampling: Owner may at any time and any numbers of times during resinous flooring application require material samples for testing for compliance with requirements.
 - 1. Owner will engage an independent testing agency to take samples of materials being used. Material samples will be taken, identified, sealed and certified in presence of contractor.
 - 2. Testing agency will test samples for compliance with requirements, using applicable referenced testing procedures or, if not referenced, using testing procedures listed in manufacturer's product data.
 - 3. If test results show applied materials do not comply with specified requirements, the contractor is to pay for testing, remove noncomplying materials, prepare surfaces coated with unacceptable materials and reapply flooring materials to comply with requirements.

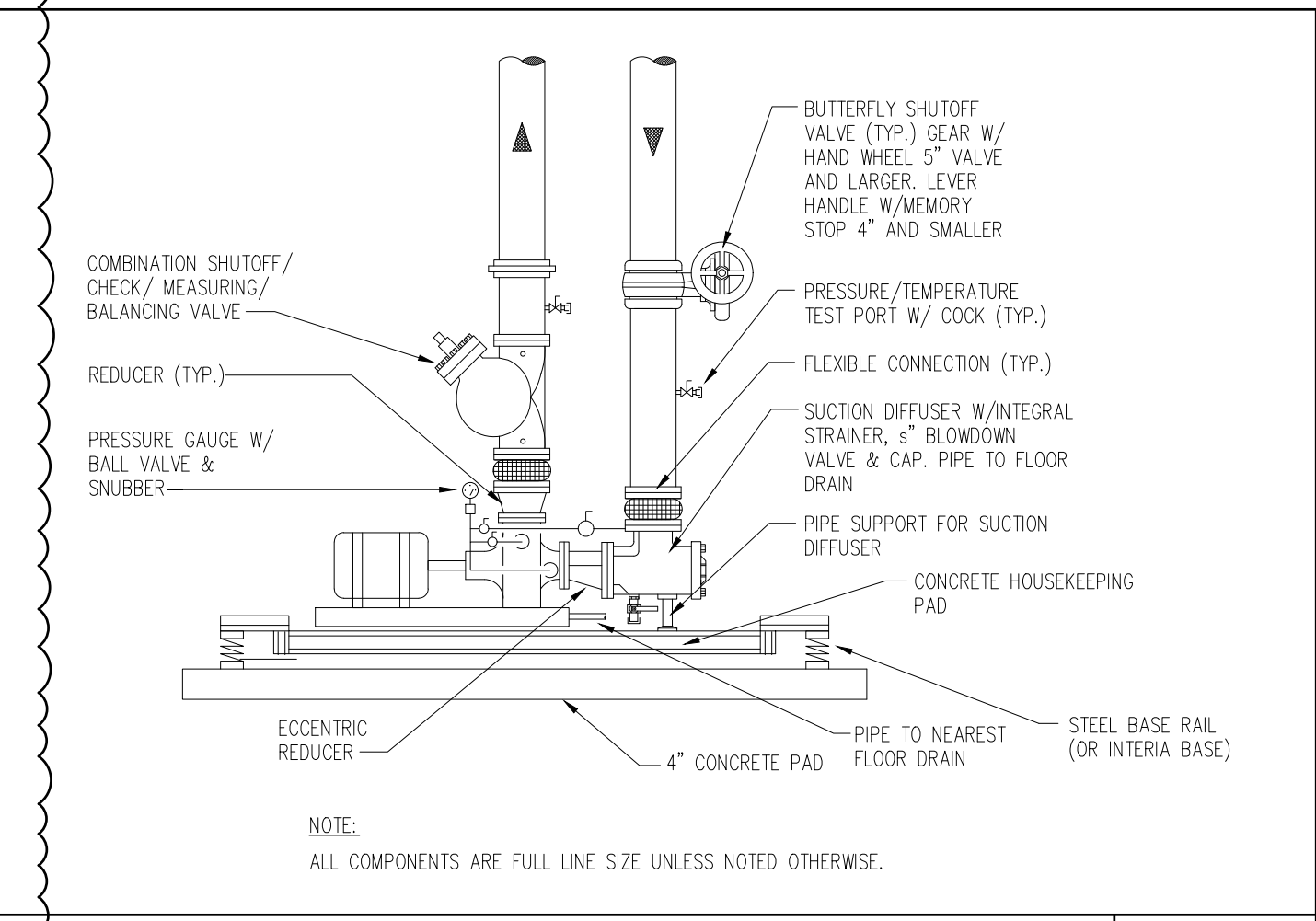
3.7 CLEANING, PROTECTING, AND CURING

- A. Cure resinous flooring materials in compliance with manufacturer's directions, taking care to prevent contamination during stages of application and prior to completion of curing process. Close area of application for a minimum of 18 hours.
- B. Protect resinous flooring materials from damage and wear during construction operation. Where temporary covering is required for this purpose, comply with manufacturer's recommendations for protective materials and method of application. Contractor is responsible for protection and cleaning of surfaces after final coats.
- C. Cleaning: Remove temporary covering and clean resinous flooring just prior to final inspection. Use cleaning materials and procedures recommended by resinous flooring manufacturer.

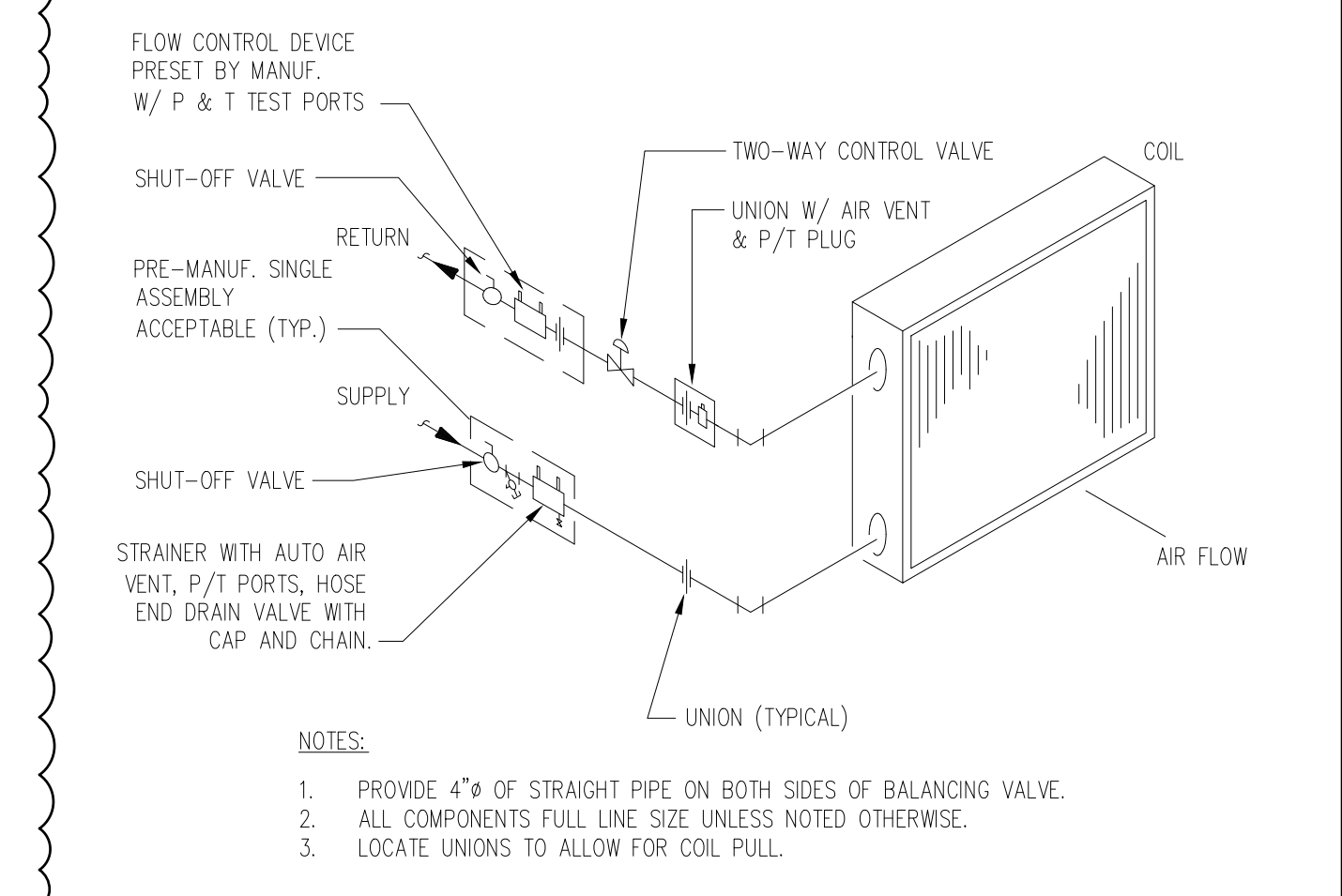
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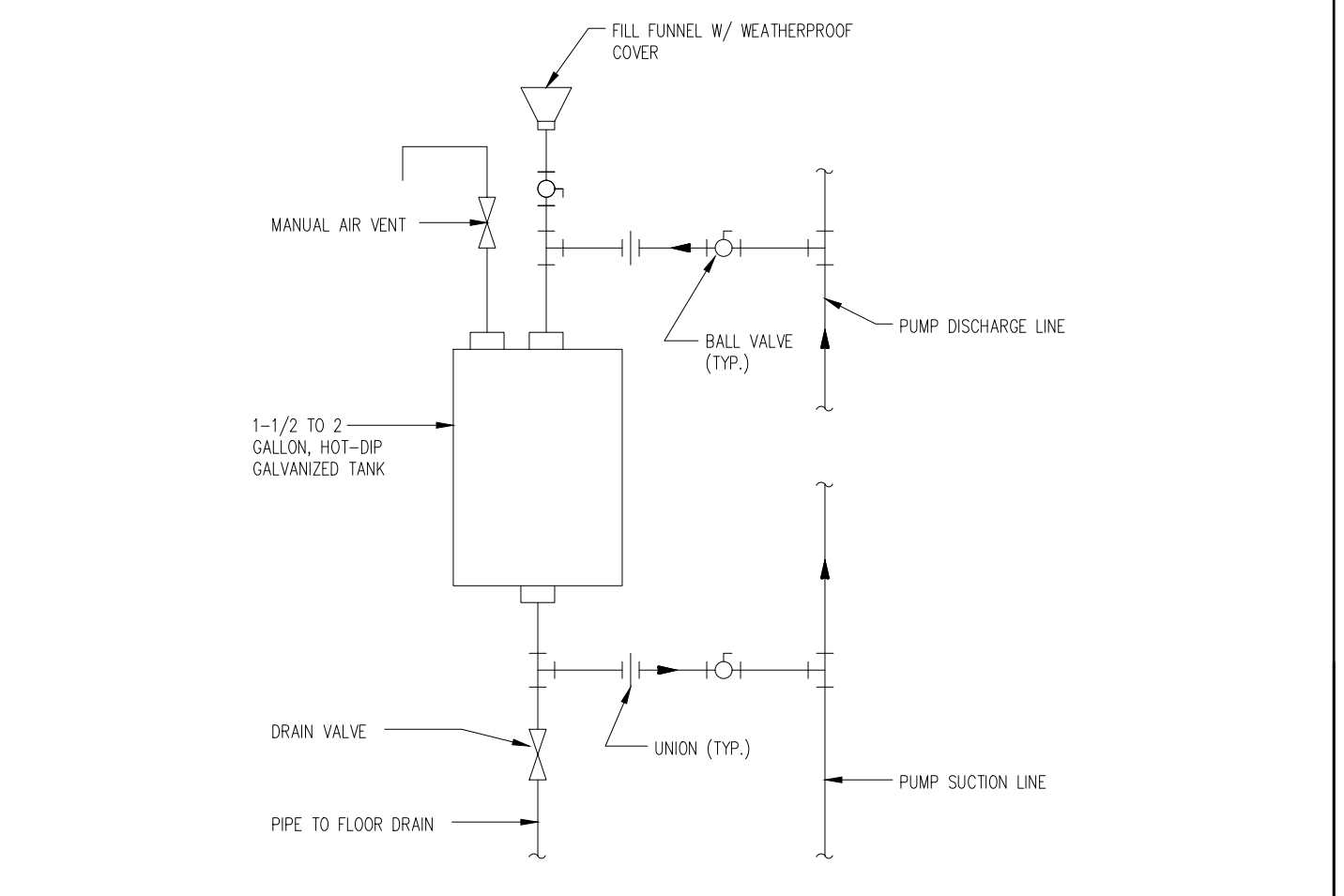
3-WAY COOLING COIL PIPING NTS 5



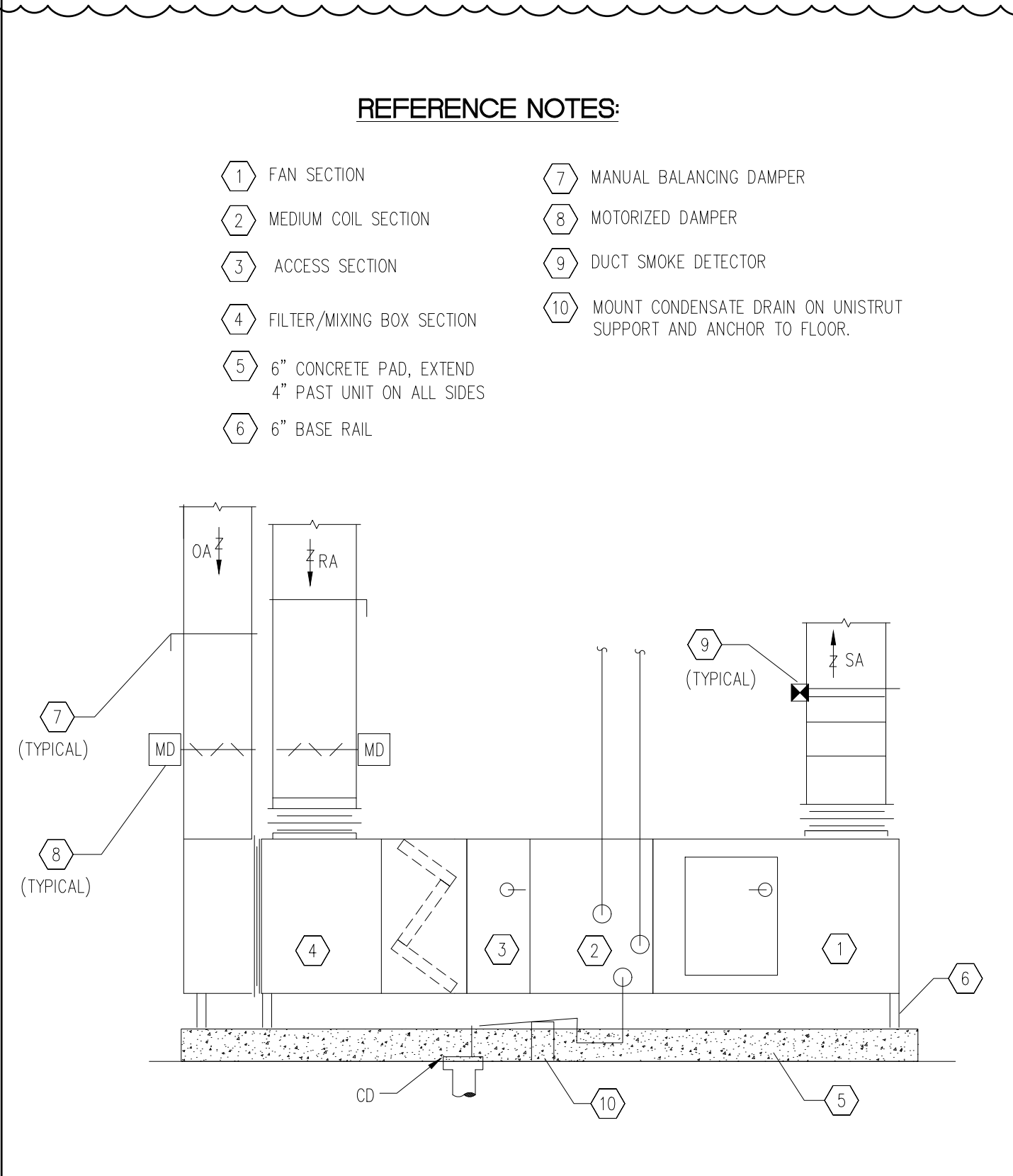
END SUCTION PUMP NTS 3



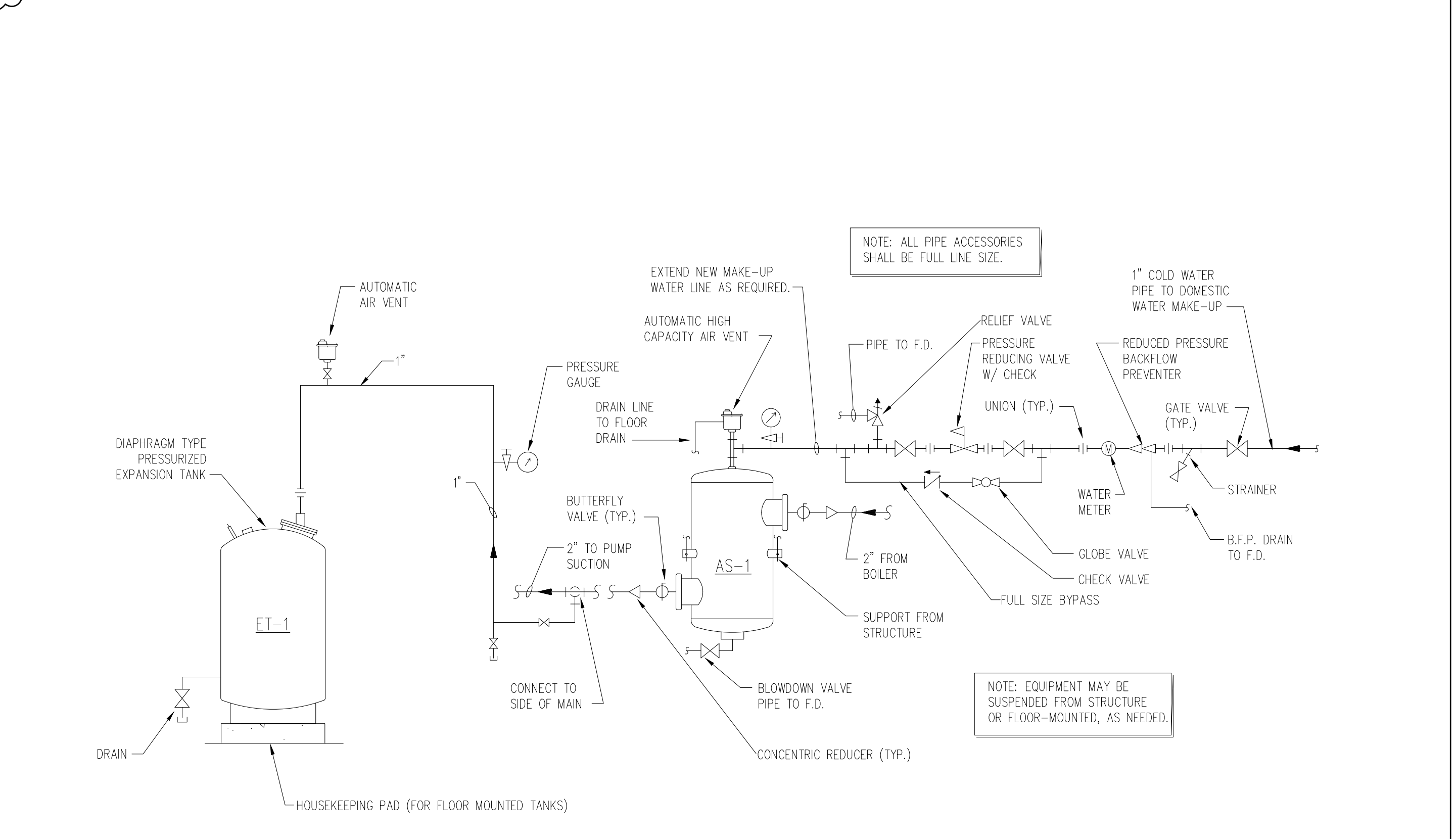
REHEAT 2-WAY COIL PIPING NTS 4



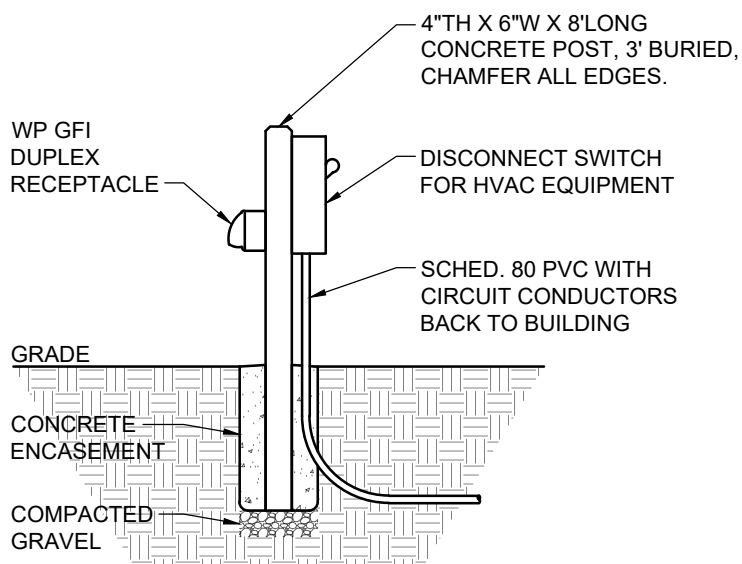
CHEMICAL SHOT FEEDER NTS 1



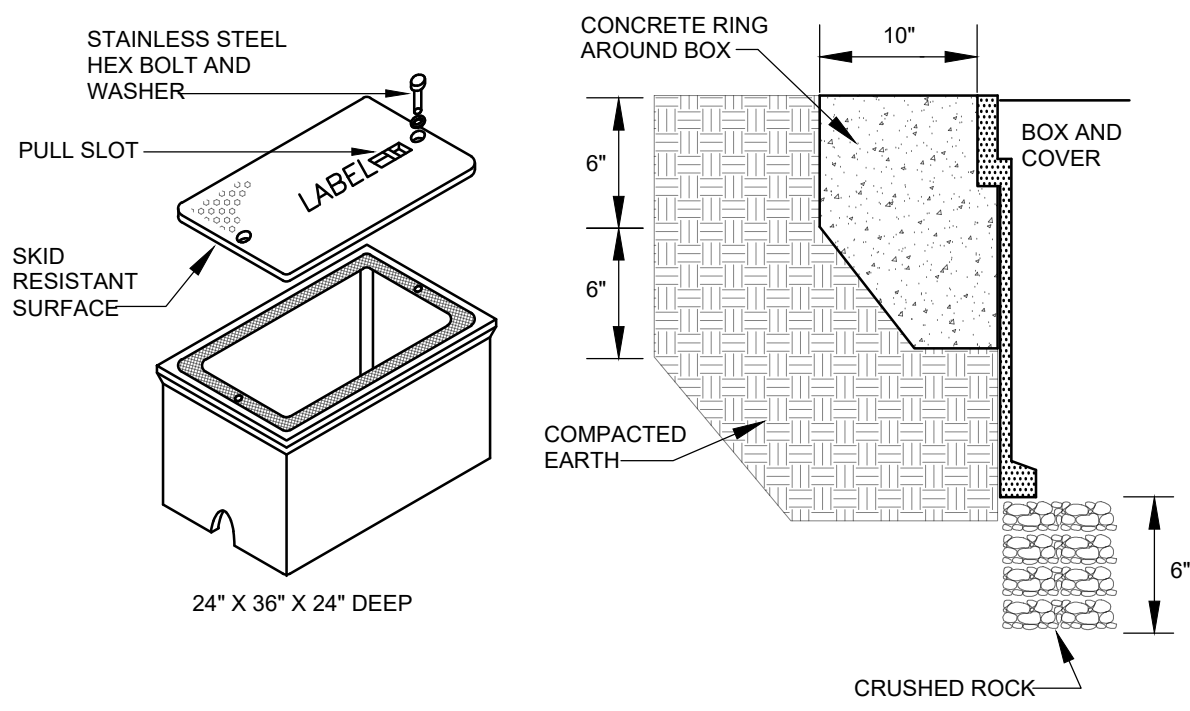
TYPICAL AHU INSTALLATION NTS 6



AIR SEPARATOR/ELIMINATION + EXPANSION TANK PIPING NTS 2



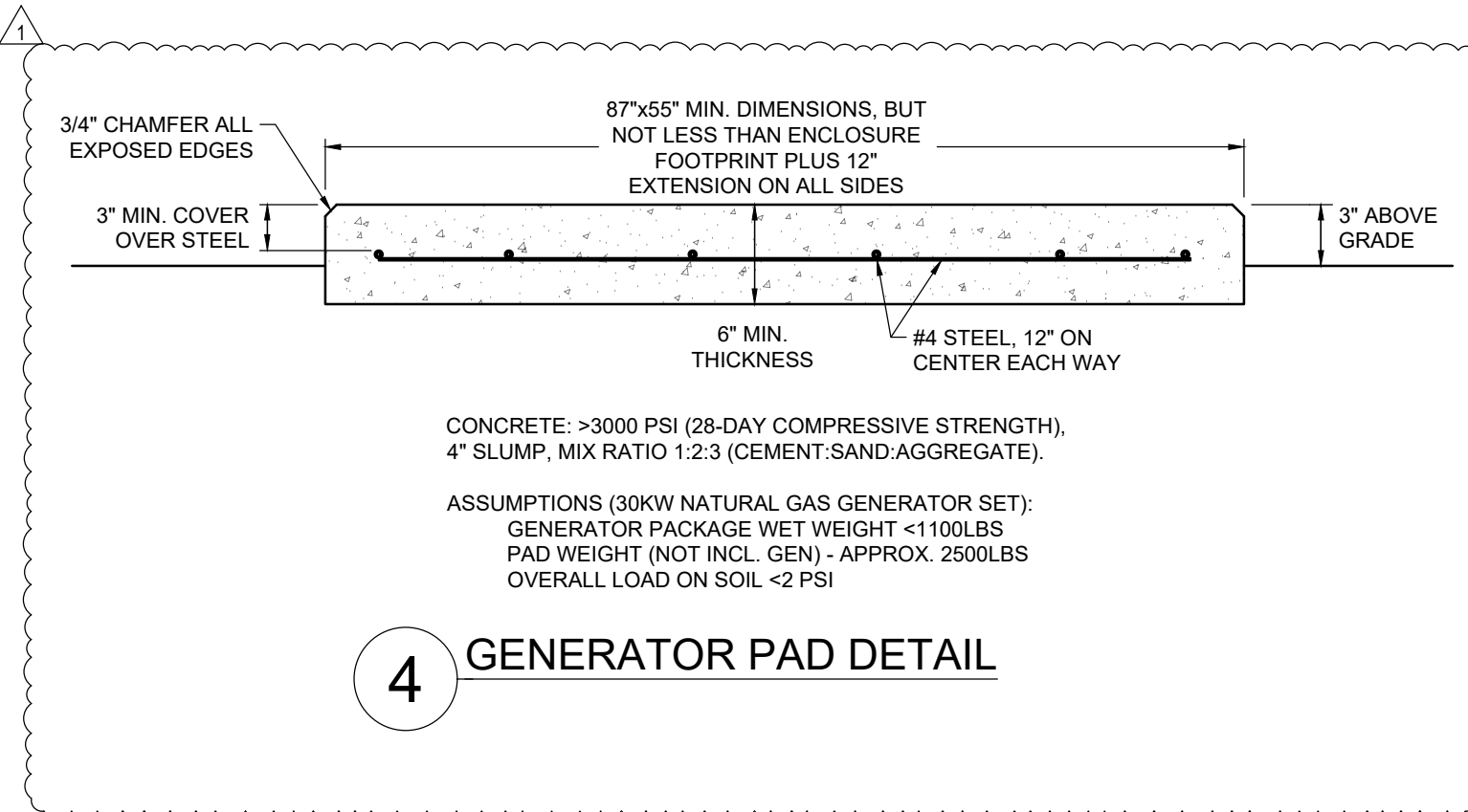
2 HVAC UTILITY POST DETAIL
SCALE: N.T.S.



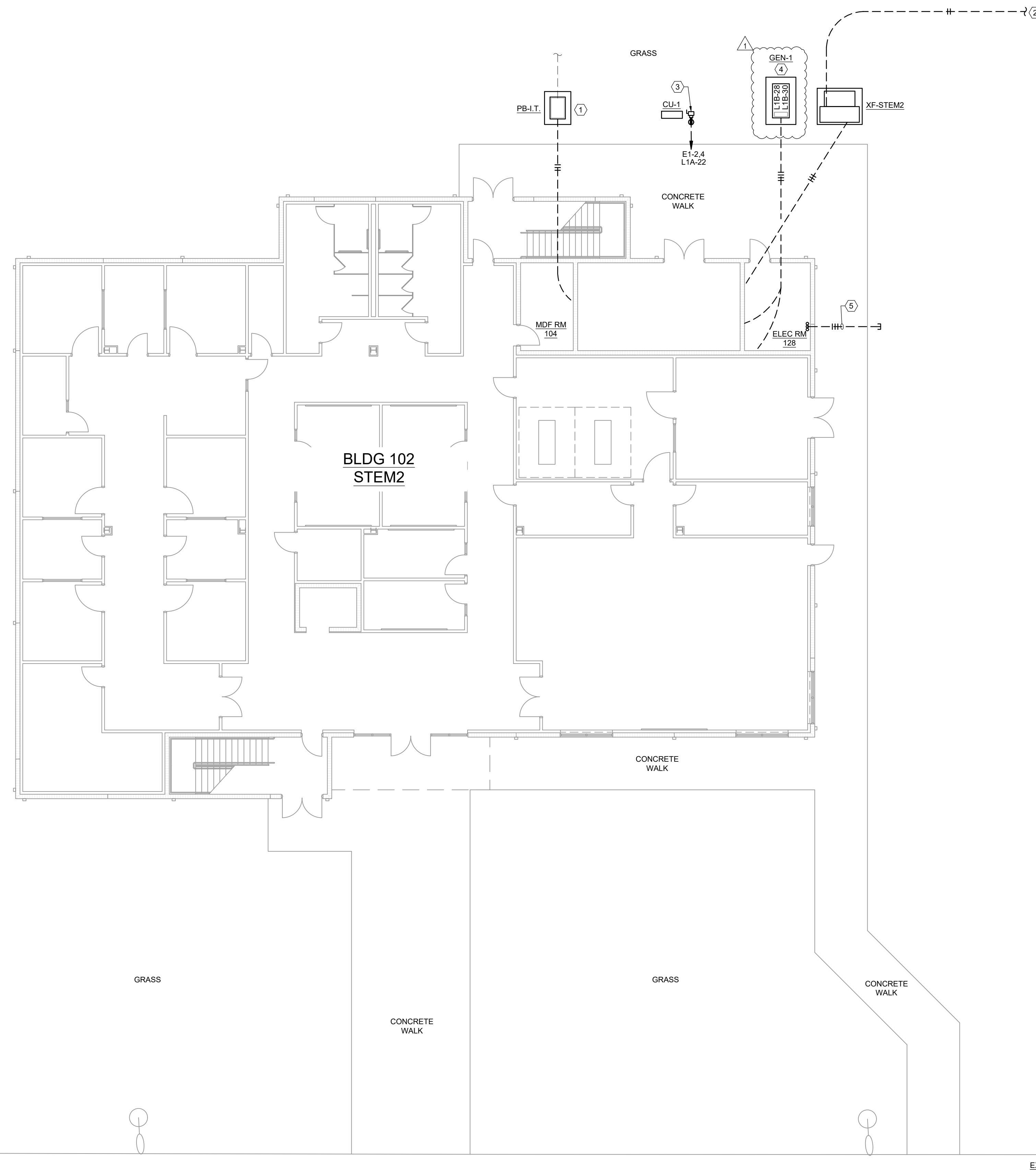
HANDHOLE (PULLBOX) REQUIREMENTS

1. HOUSING SHALL BE A POLYMER CONCRETE REINFORCED WITH A HEAVY WEAVE FIBERGLASS REINFORCING WITH COMPRESSIVE STRENGTH OF NO LESS THAN 10,000 PSI.
2. COVER AND BOX SHALL WITHSTAND A SERVICE LOAD OF NO LESS THAN 15,000 LBS OVER A 10' x 10' AREA.
3. PROVIDE STAINLESS STEEL BOLTS AND INSERTS.
4. PROVIDE WITH (2) 2 1/2" MOUSEHOLES.
5. PROVIDE LABEL "ELECTRICAL" FOR POWER HANDHOLES OR "COMMUNICATIONS" FOR TELECOM HANDHOLES, OR AS INDICATED.

3 PULLBOX "PB-I.T." DETAIL
SCALE: N.T.S.



4 GENERATOR PAD DETAIL



1 ELECTRICAL SITE PLAN
SCALE: 1" = 10'

SHEET NOTES

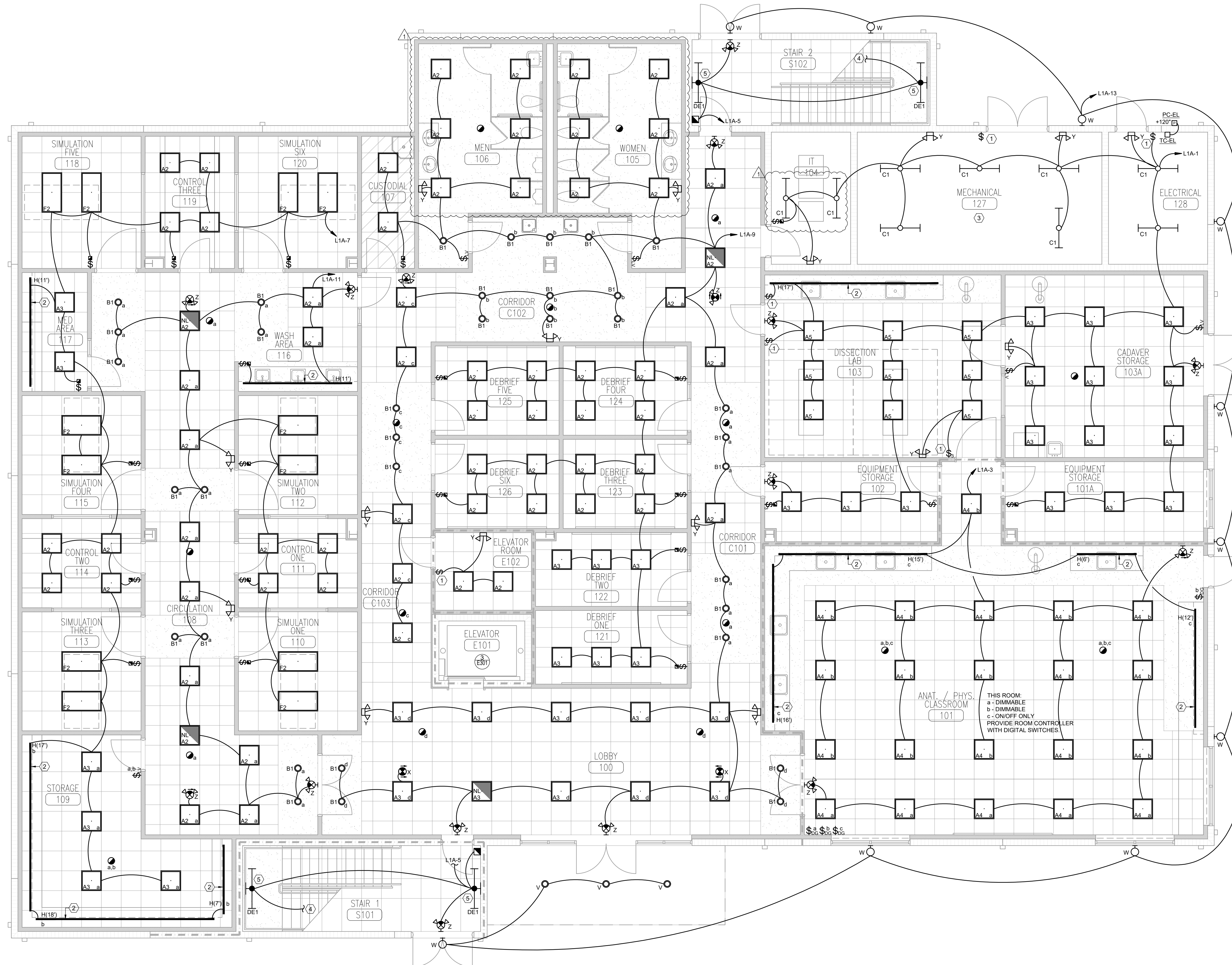
- A. REFER TO CIVIL PLANS FOR ADDITIONAL SITE INFORMATION.

SHEET KEYNOTES

1. CONTRACTOR SHALL PROVIDE PULLBOX AND CONDUITS TO I.T. MDF ROOM. SEE DETAIL THIS SHEET AND TELECOM RISER.
2. MEDIUM VOLTAGE PRIMARY CONDUIT AND SPARE CONDUIT FROM NEW "PJC-STEM2" IN VAULT NORTH OF BLDG 006. SEE RISER DIAGRAM. ROUTING SHALL BE COORDINATED WITH OWNER DUE TO ONGOING CONSTRUCTION BY OTHERS.
3. PROVIDE DISCONNECT SWITCH AND WP GFI RECEPTACLE ON CONCRETE POST ADJACENT TO CU-1. SEE DETAIL ON THIS SHEET.
4. PROVIDE 120V CIRCUITS TO GENERATOR FOR JACKET HEATER AND BATTERY CHARGER.
5. GROUP OF (1)2" & (2)1" SPARES FOR FUTURE USE. STUB UP IN ELECTRICAL ROOM, 6" ABOVE FINISHED FLOOR. STUB OUT UNDERGROUND, 24" BEYOND CONCRETE WALK, CAP BOTH ENDS.



#	Date	Note
1	05/14/2024	ADD#02

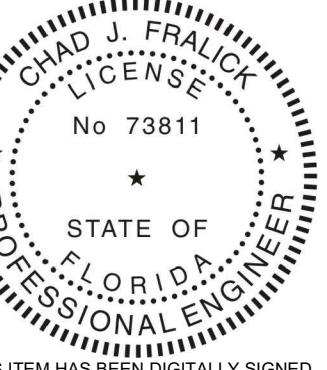


SHEET NOTES

- A. TYPE X, Y, AND Z FIXTURES, AND FIXTURES NOTED AS 'NL' SHALL BE CONNECTED TO NON-SWITCHED CIRCUIT CONDUCTOR DIRECTLY FROM THE BREAKER. PROVIDE ADDITIONAL NON-SWITCHED CONDUCTOR IN LIGHTING RUN FOR THIS PURPOSE.
- B. SEE LIGHTING CONTROL DETAILS FOR ADDITIONAL COMPONENTS NOT DEPICTED ON PLANS, SUCH AS POWER PACKS, ROOM CONTROLLERS, AND INTERCONNECTIONS BETWEEN DEVICES.
- C. LOW VOLTAGE CONDUCTORS FOR LOW VOLTAGE MOMENTARY AND DIGITAL SWITCHES SHALL BE INSTALLED IN CONDUIT FROM SWITCH TO STUB-OUT ABOUT CEILING.
- D. JUNCTION BOXES AND CONDUIT FITTINGS SHALL NOT BE RENDERED INACCESSIBLE BY HARD CEILING. CONTRACTOR SHALL PLAN ROUTINGS ACCORDINGLY.

SHEET KEYNOTES

- 1. MANUAL-ONLY LIGHTING CONTROL FOR SAFETY. TO COMPLY WITH NEC 110.26(D), OR OTHERWISE EXEMPT FROM AUTOMATIC CONTROL.
- 2. UNDER CABINET LIGHTING, CONTINUOUS ROW, LENGTH AS NOTED. COORDINATE WITH CASEWORK.
- 3. FIELD-COORDINATE MECHANICAL ROOM LIGHTING FIXTURE LOCATIONS WITH EQUIPMENT, PIPING, AND DUCTWORK.
- 4. SEE E202 FOR CIRCUIT CONTINUATION.



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FLORIDA GATEWAY COLLEGE
 NEW BUILDING 102 - STEM TWO
 FCC ITB # ST-21-01-06
 LAKE CITY, FLORIDA

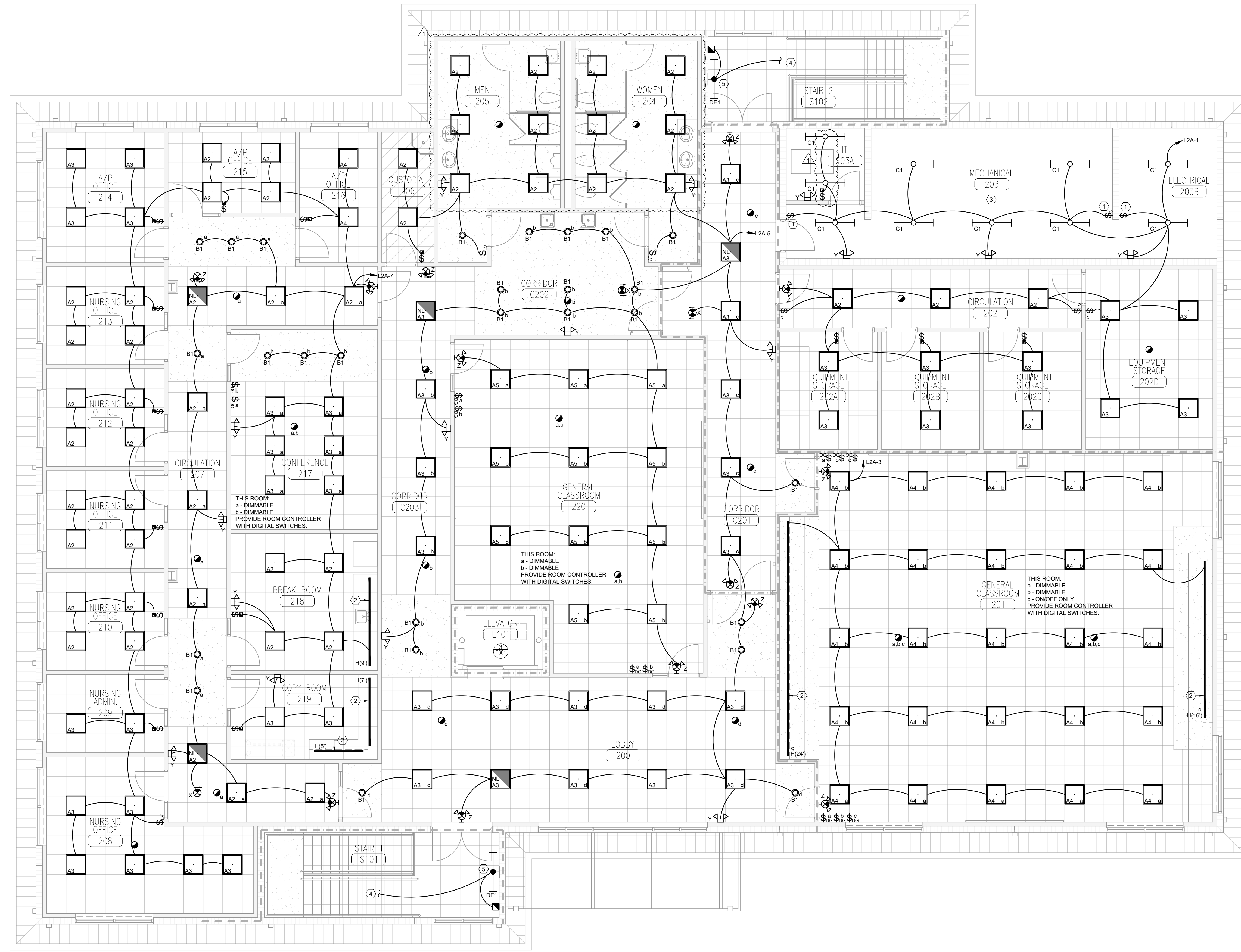
#	Date	Note
1	05/14/2024	ADD#02

LIGHTING - FIRST FLOOR
 CONSTRUCTION DOCUMENTS

COBURN AND ASSOCIATES
 CONSULTING ENGINEERS
 P.O. BOX 577
 HIGH SPRINGS, FLORIDA 32655-0577
 (386)454-3748
 FLORIDA LICENSED ENGINEERS EB 0003687
 CA JOB NUMBER 2311

LIGHTING PLAN - FIRST FLOOR
 SCALE: 3/16" = 1'-0"

DATE
 3/25/2024
2314
E201



- SHEET NOTES**
- A. TYPE X, Y, AND Z FIXTURES, AND FIXTURES NOTED AS 'NL' SHALL BE CONNECTED TO NON-SWITCHED CIRCUIT CONDUCTOR DIRECTLY FROM THE BREAKER. PROVIDE ADDITIONAL NON-SWITCHED CONDUCTOR IN LIGHTING RUN FOR THIS PURPOSE.
 - B. SEE LIGHTING CONTROL DETAILS FOR ADDITIONAL COMPONENTS NOT DEPICTED ON PLANS, SUCH AS POWER PACKS, ROOM CONTROLLERS, AND INTERCONNECTIONS BETWEEN DEVICES.
 - C. LOW VOLTAGE CONDUCTORS FOR LOW VOLTAGE MOMENTARY AND DIGITAL SWITCHES SHALL BE INSTALLED IN CONDUIT FROM SWITCH TO STUB-OUT ABOUT CEILING.
 - D. JUNCTION BOXES AND CONDUIT FITTINGS SHALL NOT BE RENDERED INACCESSIBLE BY HARD CEILING. CONTRACTOR SHALL PLAN ROUTINGS ACCORDINGLY.

- # SHEET KEYNOTES**
1. MANUAL-ONLY LIGHTING CONTROL FOR SAFETY. TO COMPLY WITH NEC 110.20(D), OR OTHERWISE EXEMPT FROM AUTOMATIC CONTROL.
 2. UNDER CABINET LIGHTING, CONTINUOUS ROW, LENGTH AS NOTED. COORDINATE WITH CASEWORK.
 3. FIELD-COORDINATE MECHANICAL ROOM LIGHTING FIXTURE LOCATIONS WITH EQUIPMENT, PIPING, AND DUCTWORK.
 4. CONTINUE CIRCUIT FROM FLOOR BELOW. SEE E201.
 5. WALL MOUNTED 8" ABOVE LANDING.

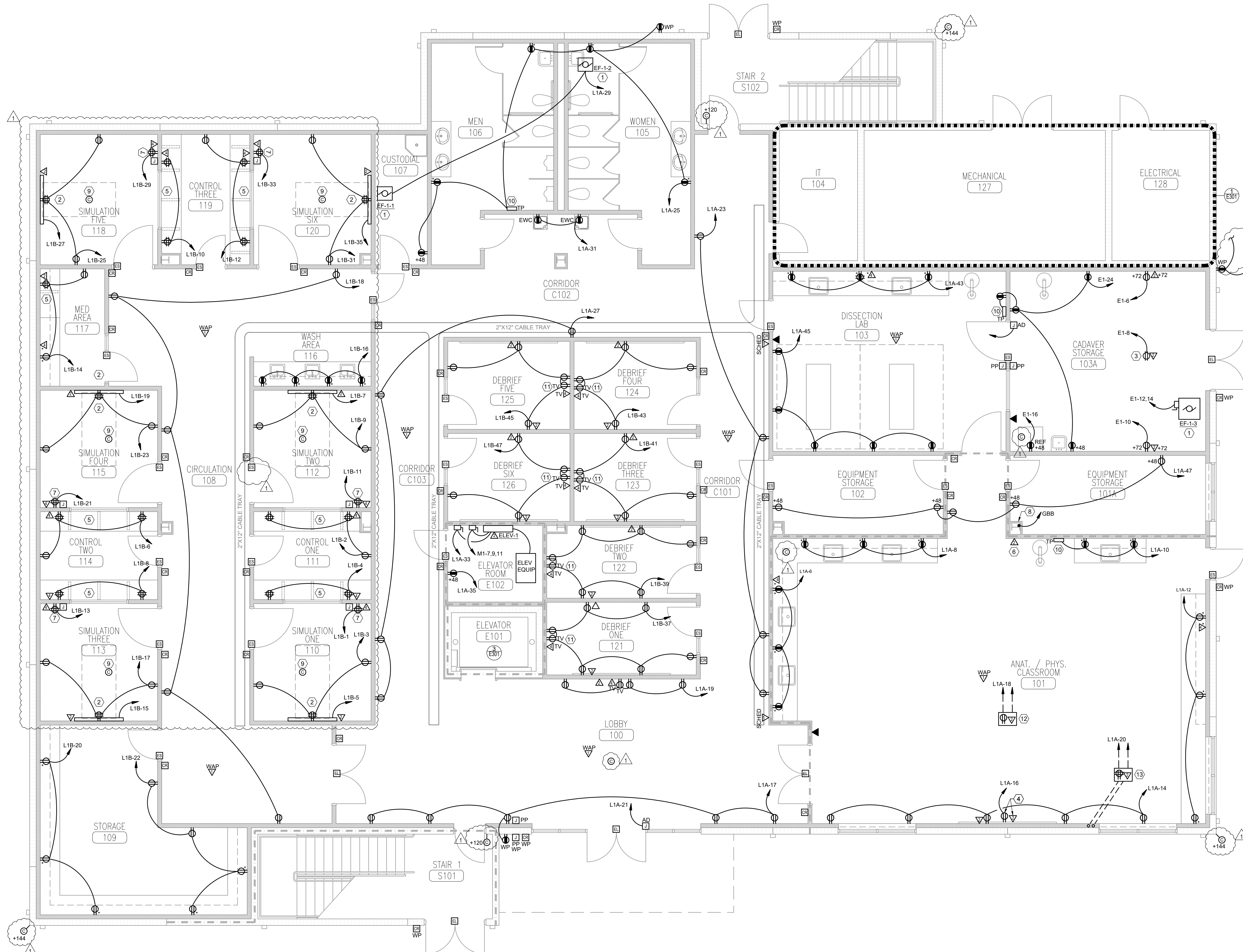


#	Date	Note
1	05/14/2024	ADD#02

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FLORIDA LICENSED ENGINEERS EB 0003687
CA JOB NUMBER 2321

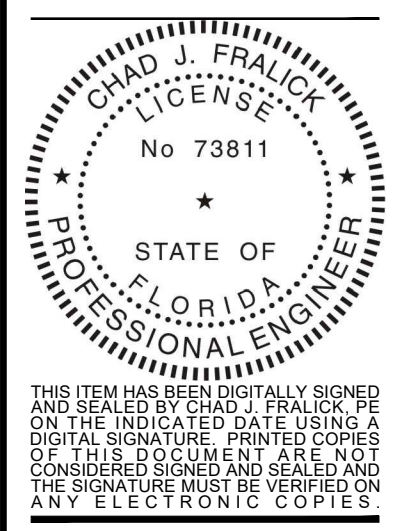
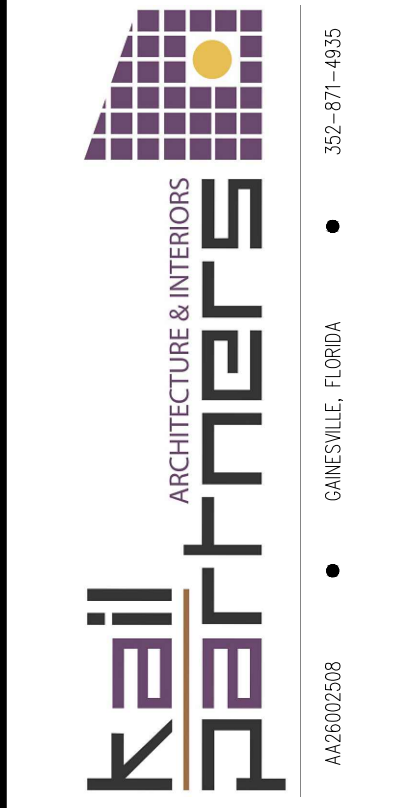
LIGHTING PLAN - SECOND FLOOR
SCALE: 3/16" = 1'-0"

CA PROJ NO 2321, PLOTTED: 5/4/2024 12:21 AM



- ### SHEET NOTES
- REFER TO MECHANICAL DRAWINGS FOR LOW VOLTAGE POWER TO VAV BOXES.
 - WAP LOCATIONS SHALL BE FIELD-COORDINATED WITH OWNER'S I.T. DEPARTMENT.
 - CABLE TRAY INSTALLATION SHALL BE CLOSELY COORDINATED WITH DUCTWORK INSTALLATION.
 - NO SHARED NEUTRALS.
 - CONTRACTOR SHALL COORDINATE WITH OWNER'S LOW VOLTAGE VENDOR TO PROVIDE CABLING AND ROUGH-INS AS REQUIRED FOR INTERIOR AND EXTERIOR SECURITY CAMERAS.
 - JUNCTION BOXES AND CONDUIT FITTINGS SHALL NOT BE RENDERED INACCESSIBLE BY HARD CEILING. CONTRACTOR SHALL PLAN ROUTINGS ACCORDINGLY.

- ### # SHEET KEYNOTES
- EXHAUST FAN LOCATED ABOVE CEILING.
 - TYPICAL SIMULATION ROOM PATIENT HEADWALL; SEE DETAIL.
 - CEILING RECEPTACLE AND DROP CORD FOR CADAVER COOLER. SEE DETAIL. ALSO PROVE CEILING-MTD TCO.
 - PROVIDE DUPLEX POWER RECEPTACLE AND TELECOM OUTLET FOR SHORT-THROW WALL-MOUNTED PROJECTOR, ABOVE WHITEBOARD ON TEACHING WALL. SEE DETAIL.
 - COORDINATE ROUGH-IN LOCATION FOR BOXES UNDER COUNTERTOP TO AVOID CONFLICT WITH COUNTERTOP SUPPORT BRACKETS. REFER TO ARCHITECTURAL DETAILS.
 - PROVIDE DATA OUTLET FOR POE CLASSROOM AUTO-TRACKING CLASSROOM CAMERA. CONFIRM ROUGH-IN LOCATION AND MOUNTING HEIGHT WITH OWNER'S I.T. DEPARTMENT. CAMERA BY OWNER.
 - PROVIDE POWER OUTLET, DATA OUTLET, AND EMPTY JUNCTION BOX WITH BLANK PLATE AT 18" BELOW CEILING FOR OWNER-PROVIDED AV CABINET. PROVIDE 1-1/2" FROM EMPTY JUNCTION BOX TO STUB-OUT 6" ABOVE CEILING (FOR FUTURE ROUTING OF AV CABLING WITHIN SAME ROOM). COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.
 - BOND BUILDING STEEL TO G.E. SYSTEM PER GROUNDING DIAGRAM. PROVIDE SMALL ACCESS PANEL IN COLUMN WALL TO ENABLE INSPECTION ACCESS TO GROUNDING BOND LOCATION AT COLUMN.
 - PROVIDE CAT6E CABLE FROM I.T. ROOM. 6' SPARE COILED ABOVE CEILING, WITH RJ45 CONNECTOR. FOR OWNER-PROVIDED SIM ROOM CAMERA.
 - PROVIDE 120V POWER FOR TRAP PRIMER. COORDINATE WITH PLUMBING CONTRACTOR.
 - PROVIDE DEBRIEF TV OUTLET AND TV TCO AT 48" AFF. VERIFY ROUGH-IN HEIGHT AND LOCATION WITH OWNER.
 - PROVIDE DATA/POWER FLOOR BOX FOR MOBILE ANATOMY DISPLAY TABLE. CONFIRM ROUGH-IN LOCATION WITH OWNER DURING CONSTRUCTION. PROVIDE SEPARATE 1" HOMERUNS UNDERSLAB FOR POWER AND DATA. SEE SPECS FOR B.O.D.
 - PROVIDE DATA/POWER/SYSTEMS FLOORBOX FOR TEACHER PODIUM. LOCATION SHALL BE FIELD-CONFIRMED WITH OWNER. PROVIDE 1" POWER HOMERUN UNDERSLAB, 1" DATA HOMERUN UNDERSLAB, AND (2) 1-1/2" UNDERSLAB FROM BOX TO NEARBY WALL TO STUB OUT ABOVE CEILING (FOR OWNER'S AV CABLING WITHIN THE SAME ROOM). SEE SPECS FOR B.O.D.



FLORIDA GATEWAY COLLEGE
 NEW BUILDING 102 - STEM TWO
 FCC ITB # ST-2-1-01-06
 LAKE CITY, FLORIDA

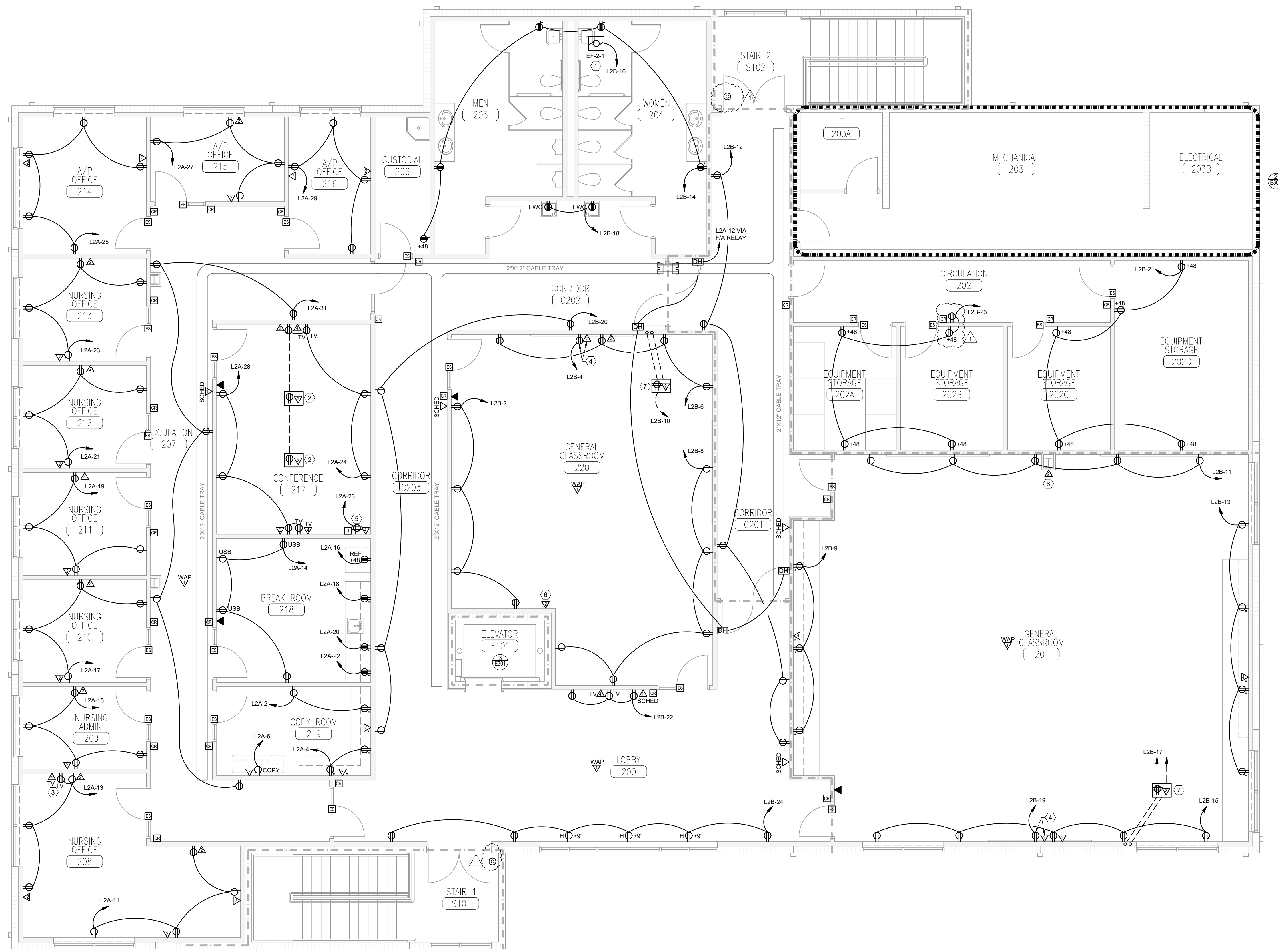
#	Date	Note
1	05/14/2024	ADD#02

POWER & SYSTEMS - FIRST FLOOR
 CONSTRUCTION DOCUMENTS

COBURN AND ASSOCIATES
 CONSULTING ENGINEERS
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 HIGH SPRINGS, FLORIDA 32655-0577
 (386)454-3748
 FLORIDA LICENSED ENGINEERS EB 0003687
 CA JOB NUMBER 2311

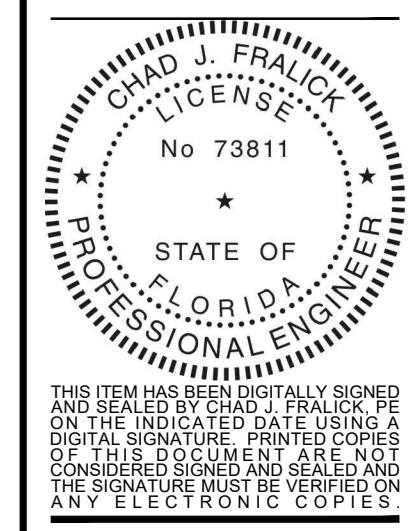
POWER & SYSTEMS PLAN - FIRST FLOOR
 SCALE: 3/16" = 1'-0"

DATE: 3/25/2024
2314
E211



- ### SHEET NOTES
- A. REFER TO MECHANICAL DRAWINGS FOR LOW VOLTAGE POWER TO VAV BOXES.
 - B. WAP LOCATIONS SHALL BE FIELD-COORDINATED WITH OWNER'S I.T. DEPARTMENT.
 - C. CABLE TRAY INSTALLATION SHALL BE CLOSELY COORDINATED WITH DUCTWORK INSTALLATION.
 - D. NO SHARED NEUTRALS.
 - E. CONTRACTOR SHALL COORDINATE WITH OWNER'S LOW VOLTAGE VENDOR TO PROVIDE CABLING AND ROUGH-INS AS REQUIRED FOR INTERIOR AND EXTERIOR SECURITY CAMERAS.
 - F. JUNCTION BOXES AND CONDUIT FITTINGS SHALL NOT BE RENDERED INACCESSIBLE BY HARD CEILING. CONTRACTOR SHALL PLAN ROUTINGS ACCORDINGLY.

- ### SHEET KEYNOTES
1. EXHAUST FAN LOCATED ABOVE CEILING.
 2. ROUND, FIRE-RATED, POKE-THRU TYPE BOX (SEE DETAIL), OFFSET BOX FROM CENTER AS NECESSARY TO AVOID CONFLICT WITH BEAM BELOW (SEE STRUCTURAL DRAWINGS). OFFSET BOTH FLOOR BOXES IN ROOM SAME AMOUNT.
 3. VERIFY TV ROUGH-IN LOCATION WITH OWNER.
 4. PROVIDE DUPLEX POWER RECEPTACLE AND TELECOM OUTLET FOR SHORT-THROW WALL-MOUNTED PROJECTOR, ABOVE WHITE-BOARD ON TEACHING WALL. SEE DETAIL.
 5. PROVIDE (1) QUAD OUTLET AND (2) 4X4 BLANK-COVERED JUNCTION BOXES IN WALL 6\"/>



FLORIDA GATEWAY COLLEGE
 NEW BUILDING 102 - STEM TWO
 FGC ITB # ST-2-1-01-06
 LAKE CITY, FLORIDA

#	Date	Note
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POWER & SYSTEMS - SECOND FLOOR
 CONSTRUCTION DOCUMENTS

COBURN AND ASSOCIATES
 CONSULTING ENGINEERS
 P.O. BOX 577
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 (386)454-3748
 FLORIDA LICENSED ENGINEERS EB 0003687
 CA JOB NUMBER 2321

POWER & SYSTEMS PLAN - SECOND FLOOR
 SCALE: 3/16" = 1'-0"

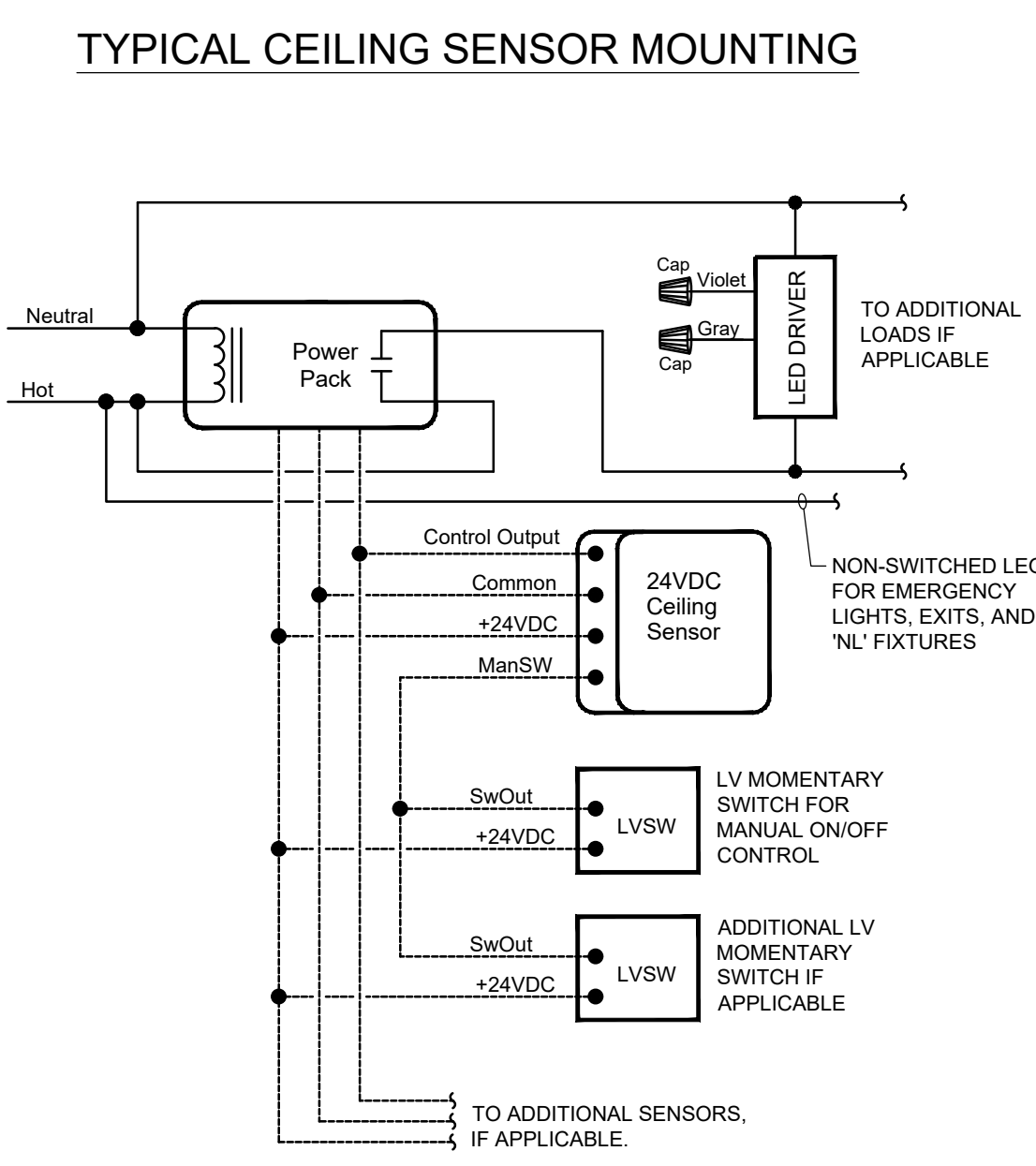
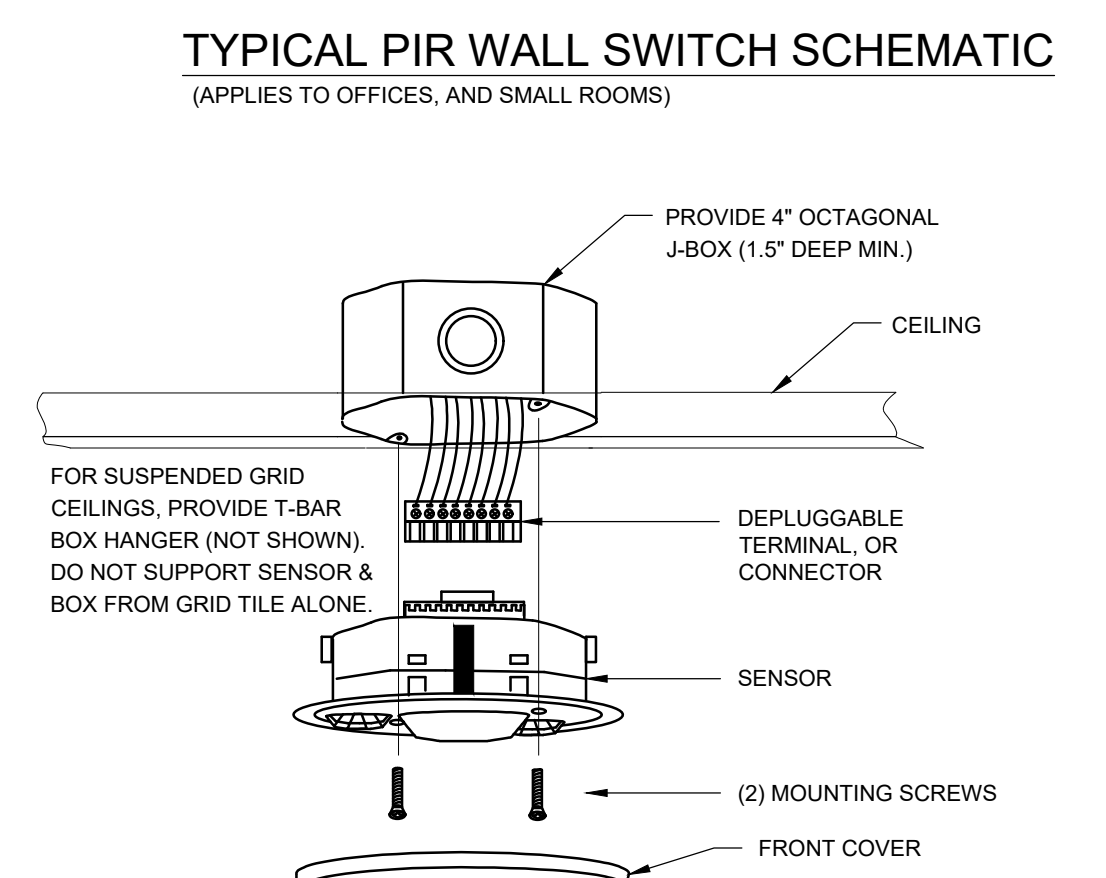
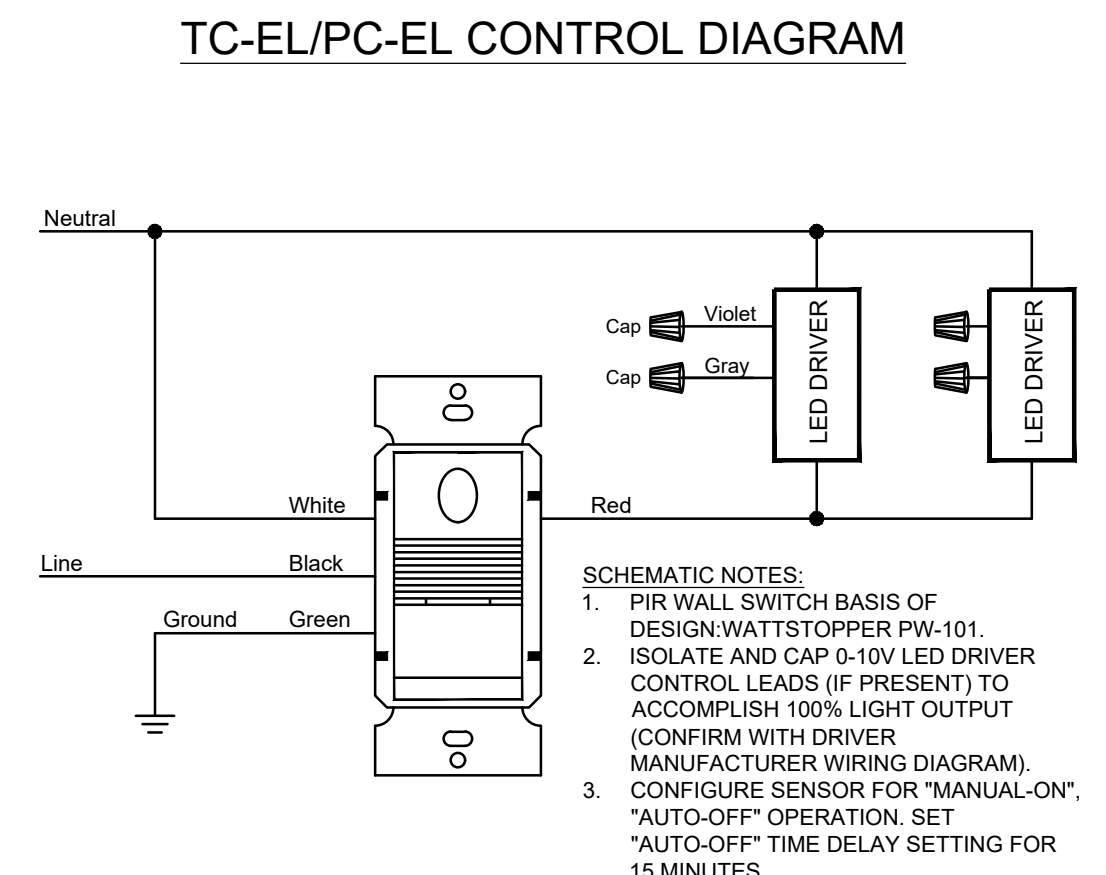
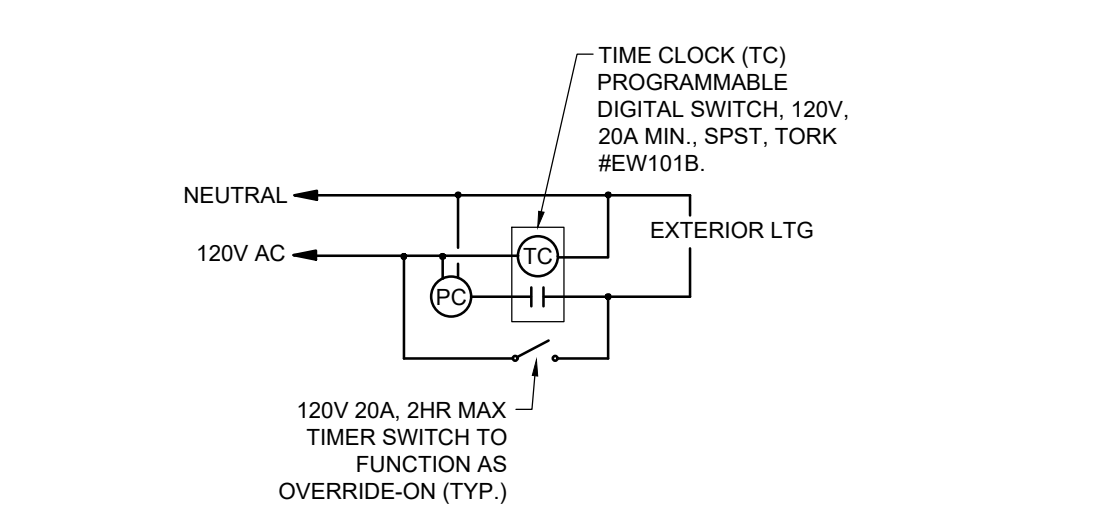
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2314
E212

CA PROJ NO 2321, PLOTTED: 5/14/2024 8:23 AM

INTERIOR LIGHTING COMPLIANCE						
PER 2023 FBC - ENERGY CONSERVATION, 8TH EDITION - TABLE C405.3.2(2) SPACE-BY-SPACE METHOD						
SPACE	CLASSIFICATION	AREA	ALLOW. W/SQFT	ALLOW. WATTS	INSTALLED	CONTROL
100 LOBBY	LOBBY (OTHER)	676	0.84	568	270	MULT. CLG DT, AUTO ON/OFF
101 ANAT./PHYS. CLASS	LAB (CLASS)	1,300	1.11	1,443	714	MULT. CLG DT, MANUAL ON/AUTO OFF
101A EQUIP STOR	HEALTHCARE (MED SUPPLY RM)	160	0.62	99	69	WALL SW PIR, MANUAL ON/AUTO OFF
102 EQUIP STOR	HEALTHCARE (MED SUPPLY RM)	139	0.62	86	69	WALL SW PIR, MANUAL ON/AUTO OFF
103 DISSECTION LAB	LAB (CLASS)	439	1.11	487	324	MANUAL ONLY
103A CADAVER STORAGE	HEALTHCARE (MED SUPPLY RM)	368	0.62	228	207	MANUAL ONLY
104 LT.	ELEC/MECH ROOM	107	0.43	46	52	WALL SW PIR, MANUAL ON/AUTO OFF
105 WOMEN	RESTROOM (OTHERWISE)	241	0.63	152	106	CLG DT, AUTO ON/OFF
106 MEN	RESTROOM (OTHERWISE)	241	0.63	152	106	CLG DT, AUTO ON/OFF
107 CUSTODIAL	STORAGE ROOM	71	0.38	27	32	WALL SW PIR, MANUAL ON/AUTO OFF
108 CIRCULATION	CORRIDOR (OTHERWISE)	720	0.41	295	276	MULT. CLG DT, AUTO ON/OFF
109 STORAGE	STORAGE ROOM	315	0.38	120	92	CLG DT, MANUAL ON/AUTO OFF
110 SIM ONE	HEALTHCARE (EXAM/TREATMENT)	144	1.4	202	94	MANUAL ONLY
111 CONTROL ONE	HEALTHCARE (IMAGING RM)	105	0.94	99	64	WALL SW PIR, MANUAL ON/AUTO OFF
112 SIM TWO	HEALTHCARE (EXAM/TREATMENT)	144	1.4	202	94	MANUAL ONLY
113 SIM THREE	HEALTHCARE (EXAM/TREATMENT)	144	1.4	202	94	MANUAL ONLY
114 CONTROL TWO	HEALTHCARE (IMAGING RM)	108	0.94	102	64	WALL SW PIR, MANUAL ON/AUTO OFF
115 SIM FOUR	HEALTHCARE (EXAM/TREATMENT)	144	1.4	202	94	MANUAL ONLY
116 WASH AREA	LAUNDRY/WASHING AREA	88	0.53	47	26	SEE PLAN
117 MED AREA	PHARMACY AREA	79	1.66	131	46	WALL SW PIR, MANUAL ON/AUTO OFF
118 SIM FIVE	HEALTHCARE (EXAM/TREATMENT)	160	1.4	224	94	MANUAL ONLY
119 CONTROL THREE	HEALTHCARE (IMAGING RM)	118	0.94	111	64	WALL SW PIR, MANUAL ON/AUTO OFF
120 SIM SIX	HEALTHCARE (EXAM/TREATMENT)	160	1.4	224	94	MANUAL ONLY
121 DEBRIEF ONE	OFFICE (ENCLOSED)	114	0.74	84	69	WALL SW PIR, MANUAL ON/AUTO OFF
122 DEBRIEF TWO	OFFICE (ENCLOSED)	114	0.74	84	69	WALL SW PIR, MANUAL ON/AUTO OFF
123 DEBRIEF THREE	OFFICE (ENCLOSED)	113	0.74	84	64	WALL SW PIR, MANUAL ON/AUTO OFF
124 DEBRIEF FOUR	OFFICE (ENCLOSED)	113	0.74	84	64	WALL SW PIR, MANUAL ON/AUTO OFF
125 DEBRIEF FIVE	OFFICE (ENCLOSED)	113	0.74	84	64	WALL SW PIR, MANUAL ON/AUTO OFF
126 DEBRIEF SIX	OFFICE (ENCLOSED)	112	0.74	83	64	WALL SW PIR, MANUAL ON/AUTO OFF
127 MECHANICAL	ELEC/MECH ROOM	329	0.43	141	130	MANUAL ONLY
128 ELECTRICAL	ELEC/MECH ROOM	133	0.43	57	52	MANUAL ONLY
C101 CORRIDOR	CORRIDOR (OTHERWISE)	400	0.41	164	124	MULT. CLG DT, AUTO ON/OFF
C102 CORRIDOR	CORRIDOR (OTHERWISE)	269	0.41	110	106	CLG DT, AUTO ON/OFF
C103 CORRIDOR	CORRIDOR (OTHERWISE)	294	0.41	121	110	CLG DT, AUTO ON/OFF
E102 ELEVATOR RM	ELEC/MECH ROOM	76	0.43	33	32	MANUAL ONLY
S101 STAIR 1	STAIRWELL	208	0.49	102	130	MULT. WALL DT, AUTO ON/OFF
S102 STAIR 2	STAIRWELL	208	0.49	102	130	MULT. WALL DT, AUTO ON/OFF
200 LOBBY	LOBBY (OTHER)	703	0.84	591	250	MULT. CLG DT, AUTO ON/OFF
201 GEN CLASS	CLASS/LECT/TRAIN (OTHERWISE)	1,613	0.71	1,145	850	MULT. CLG DT, MANUAL ON/AUTO OFF
202 CIRCULATION	CORRIDOR (OTHERWISE)	185	0.41	76	48	CLG DT, AUTO ON/OFF
202A EQUIP STOR	HEALTHCARE (MED SUPPLY RM)	120	0.62	74	46	WALL SW PIR, MANUAL ON/AUTO OFF
202B EQUIP STOR	HEALTHCARE (MED SUPPLY RM)	120	0.62	74	46	WALL SW PIR, MANUAL ON/AUTO OFF
202C EQUIP STOR	HEALTHCARE (MED SUPPLY RM)	120	0.62	74	46	WALL SW PIR, MANUAL ON/AUTO OFF
202D EQUIP STOR	HEALTHCARE (MED SUPPLY RM)	239	0.62	148	92	CLG DT, MANUAL ON/AUTO OFF
203 MECHANICAL	ELEC/MECH ROOM	378	0.43	163	156	MANUAL ONLY
203A LT.	ELEC/MECH ROOM	59	0.43	25	52	WALL SW PIR, MANUAL ON/AUTO OFF
203B ELECTRICAL	ELEC/MECH ROOM	133	0.43	57	52	MANUAL ONLY
204 WOMEN	RESTROOM (OTHERWISE)	241	0.63	152	106	CLG DT, AUTO ON/OFF
205 MEN	RESTROOM (OTHERWISE)	241	0.63	152	106	CLG DT, AUTO ON/OFF
206 CUSTODIAL	STORAGE ROOM	71	0.38	27	32	WALL SW PIR, MANUAL ON/AUTO OFF
207 CIRCULATION	CORRIDOR (OTHERWISE)	568	0.41	233	204	MULT. CLG DT, AUTO ON/OFF
208 NURSING OFFICE	OFFICE (ENCLOSED)	274	0.74	203	138	CLG DT, MANUAL ON/AUTO OFF
209 NURSING ADMIN	OFFICE (ENCLOSED)	96	0.74	71	46	WALL SW PIR, MANUAL ON/AUTO OFF
210 NURSING OFFICE	OFFICE (ENCLOSED)	120	0.74	89	64	WALL SW PIR, MANUAL ON/AUTO OFF
211 NURSING OFFICE	OFFICE (ENCLOSED)	120	0.74	89	64	WALL SW PIR, MANUAL ON/AUTO OFF
212 NURSING OFFICE	OFFICE (ENCLOSED)	120	0.74	89	64	WALL SW PIR, MANUAL ON/AUTO OFF
213 NURSING OFFICE	OFFICE (ENCLOSED)	120	0.74	89	64	WALL SW PIR, MANUAL ON/AUTO OFF
214 A/P OFFICE	OFFICE (ENCLOSED)	160	0.74	118	92	WALL SW PIR, MANUAL ON/AUTO OFF
215 A/P OFFICE	OFFICE (ENCLOSED)	107	0.74	79	64	WALL SW PIR, MANUAL ON/AUTO OFF
216 A/P OFFICE	OFFICE (ENCLOSED)	107	0.74	79	64	WALL SW PIR, MANUAL ON/AUTO OFF
217 CONFERENCE	CONF/MTG/MULTIPURPOSE	306	0.97	297	168	CLG DT, MANUAL ON/AUTO OFF
218 BREAK ROOM	LOUNGE/BREAKROOM (OTHERWISE)	210	0.59	124	64	WALL SW PIR, MANUAL ON/AUTO OFF
219 COPY ROOM	COPY/PRINT ROOM	130	0.31	40	46	WALL SW PIR, MANUAL ON/AUTO OFF
220 GENERAL CLASS	CLASS/LECT/TRAIN (OTHERWISE)	792	0.71	562	396	MULT. CLG DT, MANUAL ON/AUTO OFF
C201 CORRIDOR	CORRIDOR (OTHERWISE)	392	0.41	161	138	MULT. CLG DT, AUTO ON/OFF
C202 CORRIDOR	CORRIDOR (OTHERWISE)	285	0.41	117	113	CLG DT, AUTO ON/OFF
C203 CORRIDOR	CORRIDOR (OTHERWISE)	245	0.41	100	89	CLG DT, AUTO ON/OFF
S101 STAIR 1	STAIRWELL	208	0.49	102	65	MULT. WALL DT, AUTO ON/OFF
S102 STAIR 2	STAIRWELL	208	0.49	102	65	MULT. WALL DT, AUTO ON/OFF
TOTALS (WATTS)			12,282	8,247		

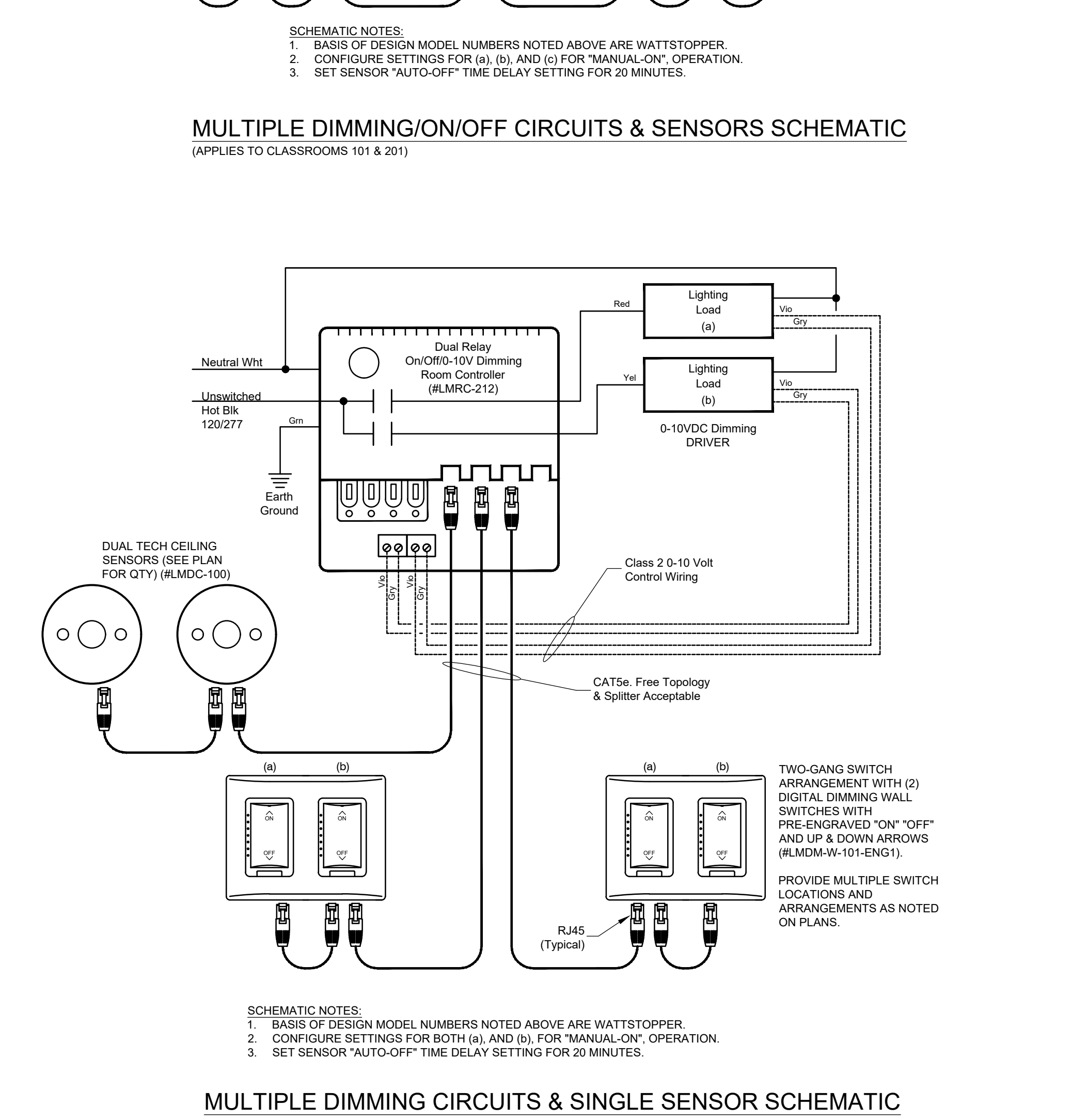
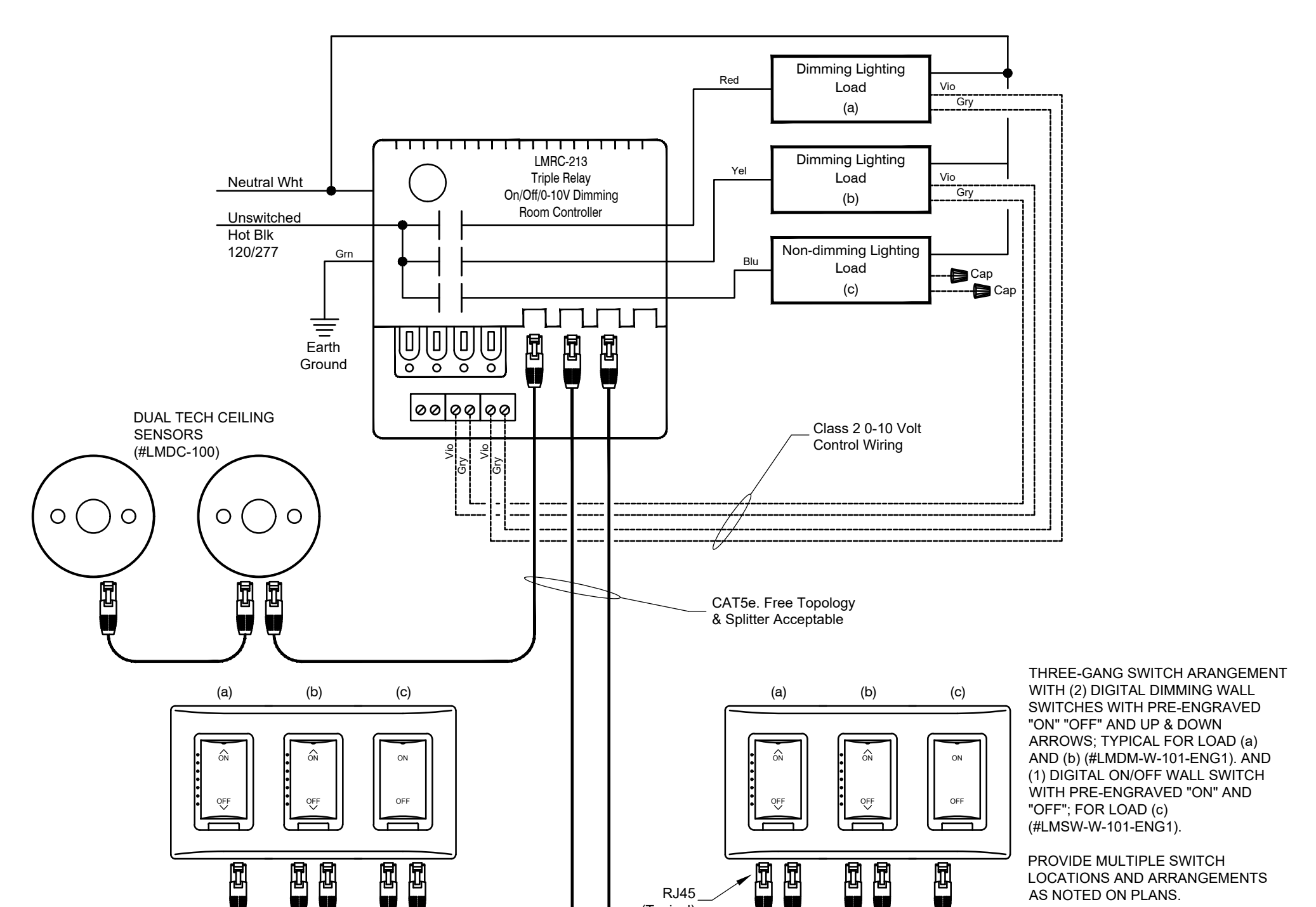
LIGHTING FIXTURE SCHEDULE						
MARK	WATTS	LUMENS	CCT	DESCRIPTION		
A2	16	2,000	4,000	2X2 LED FLAT PANEL LAY-IN FIXTURE, SMOOTH DIFFUSE LENS, 0-10V DIMMABLE. SIGNIFY DAYBRITE #ZP220L840-2-05-UNV-DIM, OR EQUIVALENT.		
A3	23	3,000	4,000	SIMILAR TO A2, EXCEPT FOR WATTS & LUMENS.		
A4	34	3,800	4,000	SIMILAR TO A2, EXCEPT FOR WATTS & LUMENS.		
A5	36	4,500	4,000	SIMILAR TO A2, EXCEPT FOR WATTS & LUMENS.		
B1	10	1,000	4,000	6" ROUND LED DOWNLIGHT, 0-10V DIMMABLE, WIDE BEAM, OPEN TRIM, CLEAR DIFFUSE REFLECTOR, WHITE FLANGE, 90CRI. LIGHTTOLLER #BRN(FRAME) #PRDL0940WCDD10U(ENGINE/TRIM), OR EQUIV.		
C1	26	3000	4000K	4' LED LINEAR STRIP LIGHT, FROSTED ACRYLIC LENS, SUSPND VIA CHAIN. SIGNIFY DAYBRITE# PS430L840-UNV-0IM, OR EQUIV.		
DE1	65	8,040	4,000	4' WALL-MOUNTED FIXTURE FOR STAIRS, UP/DOWN LIGHT, FROSTED .125" THICK ACRYLIC LENS, INTEGRAL LOW EMERGENCY BACKUP. H.E. WILLIAMS #WMAUD-4-L40/840U/40/840-AP-EM/10W-DRVU/DRVD-UNV, OR EQUIV.		
F1	23	3,000	4,000	2X4 LED FLAT PANEL LAY-IN FIXTURE, SMOOTH DIFFUSE LENS, 0-10V DIMMABLE. SIGNIFY DAY-BRITE #ZP220L840-4-05-UNV-DIM, OR EQUIVALENT.		
F2	47	6,000	4,000	SIMILAR TO F1, EXCEPT FOR WATTS & LUMENS.		
G	30	4,000	5,000	4' FULLY ENCLOSED AND GASKETED FIXTURE FOR ELEVATOR SHAFT, SURFACE MOUNTED. H.E. WILLIAMS #96-4-L40/850-HI/FR, OR EQUIV.		
H	6	600	4,000	1" DEEP UNDERCABINET LIGHTING, SOLID FRONT, WHITE, FROSTED ACRYLIC LENS. 125" THICK. WATTS AND LUMENS ARE PER FT. PROVIDE CONTINUOUS ROW OF TOTAL LENGTH AS NOTED ON PLANS WITH MANUAL KOCKER SWITCH AT FIRST SEGMENT OF EACH CONTINUOUS RUN, COMPRISED OF 4, 3, & 2 FT SEGMENT LENGTHS AS NECESSARY. H.E. WILLIAMS #45F-L24/840-AF12125, OR EQUIV. H.E. WILLIAMS #35F-L18/840-AF12125, OR EQUIV. H.E. WILLIAMS #25F-L6/840-AF12125, OR EQUIV.		
V	10	1,000	5,000	EXTERIOR SHALLOW RECESSED 6" DOWN LIGHT IN CANOPY, SUITABLE FOR WET COVERED CEILING LOCATION, CLEAR SPECULAR REFLECTOR, STANDARD FLANGE, WIDE DISTRIBUTION, FLUSH LENS. H.E. WILLIAMS #6PR-TL-L10/850-DIM-UNV-LW-OF-CS-WET/CC-R, OR EQUIV.		
W	26	2,700	5,000	EXTERIOR WALL SCENCE, 0% UPLIGHT, VERTICAL FORM, TYPE 3 DISTRIBUTION, **FINISH TO BE SELECTED BY ARCHITECT AT SHOP DRAWING PHASE**, CLEAR GLASS LENS, 70CRI MIN., LISTED FOR WET LOCATION, 10' AFF TO TOP OF FIXTURE. H.E. WILLIAMS #VWVW-L20/750-T3-**-CGL, OR EQUIV.		
X	<5	N/A	N/A	EXIT SIGN, GREEN LETTERS, SELF-POWERED WITH RECHARGEABLE NI-CAD BATTERY UPON LOSS OF NORMAL VOLTAGE, DIE-CAST ALUM, WHITE HOUSING, WHITE FACES. PROVIDE WITH AUTOTEST. BEGHELLI #LCE3-SA-LG-U-W-W-AT, OR EQUIV.		
Y	<5	N/A	N/A	EMERGENCY LIGHT, 2 GIMBALED SW WHITE LED, HEADS, WHITE THERMOPLASTIC HOUSING, SELF-POWERED WITH RECHARGEABLE BATTERY UPON LOSS OF NORMAL VOLTAGE. PROVIDE WITH AUTOTEST. BEGHELLI #XMR-SL-HO, OR EQUIV.		
Z	<5	N/A	N/A	COMBINATION EXIT SIGN AND EMERGENCY LIGHTS, GREEN LETTERS, 2 HIGH OUTPUT 2W LED HEADS, SELF-POWERED WITH RECHARGEABLE BATTERY UPON LOSS OF NORMAL VOLTAGE. PROVIDE WITH AUTOTEST. BEGHELLI #EPC-ATG-HO, OR EQUIV.		

LIGHTING FIXTURE SCHEDULE NOTES:
1. FIXTURES SHALL HAVE 80 CRI (MIN.), UNLESS OTHER CRI IS NOTED.
2. FIXTURES SHALL BE SUITABLE FOR CONNECTION TO 120V CIRCUITS, U.N.O.
3. FIXTURES SHALL HAVE LED LIGHT SOURCE
4. FIXTURES TO BE INSTALLED IN HARD CEILINGS SHALL BE PROVIDED WITH THE APPROPRIATE FLANGE KITS FOR A COMPLETE INSTALLATION.

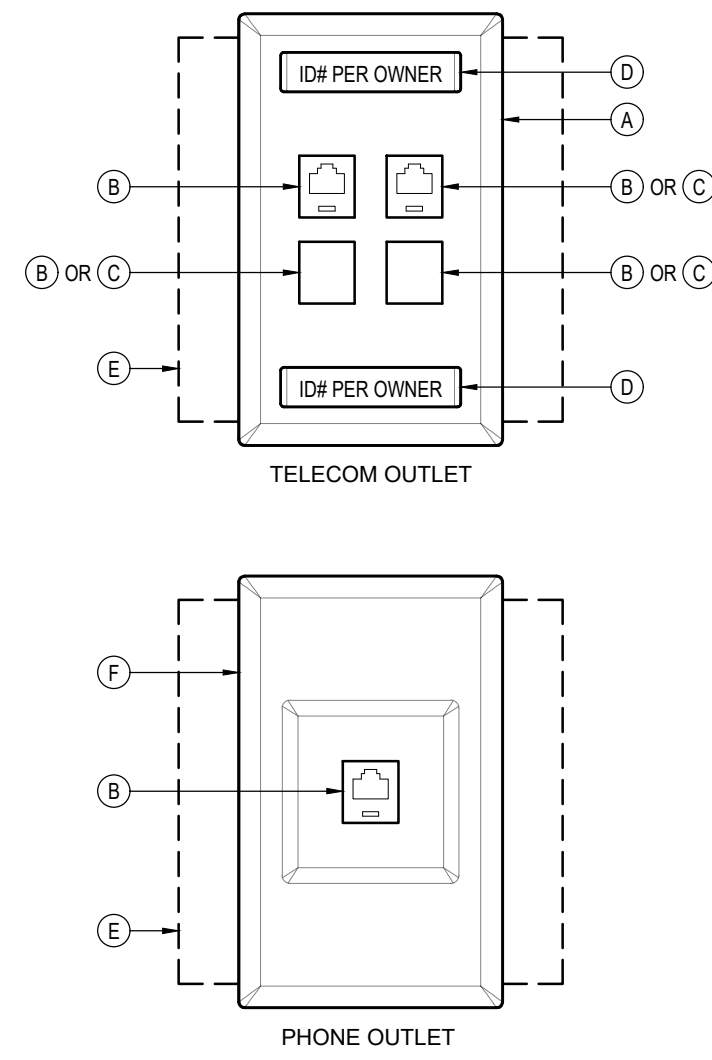


SCHEMATIC NOTES:
1. BASIS OF DESIGN MODEL NUMBERS (WATTSTOPPER):
1.1. DUAL TECHNOLOGY (SONAR AND PASSIVE INFRARED) CEILING SENSOR: DT-300
1.2. 24VDC POWER PACK: BZ-200
1.3. MOMENTARY SWITCH: LVSW-101
2. ISOLATE AND CAP 0-10V LED DRIVER CONTROL LEADS (IF PRESENT) TO ACCOMPLISH 100% LIGHT OUTPUT (CONFIRM WITH DRIVER MANUFACTURER WIRING DIAGRAM).
3. CONFIGURE SETTINGS FOR "MANUAL-ON" OPERATION, EXCEPT RESTROOMS, STAIRS, LOBBY, AND CORRIDORS SHALL BE SET FOR "AUTO-ON" OPERATION.
4. SET SENSOR "AUTO-OFF" TIME DELAY SETTING FOR 20 MINUTES.
5. WHITE DEVICES AND FACEPLATES, UNLESS DIRECTED OTHERWISE BY ARCHITECT OR OWNER.
6. SEE PLAN FOR SWITCH AND SENSOR QUANTITIES.

TYPICAL NON-DIMMING CEILING SENSOR SCHEMATIC (APPLIES TO LARGER OFFICES, CORRIDORS, LOBBY, STAIRS, AND RESTROOMS)

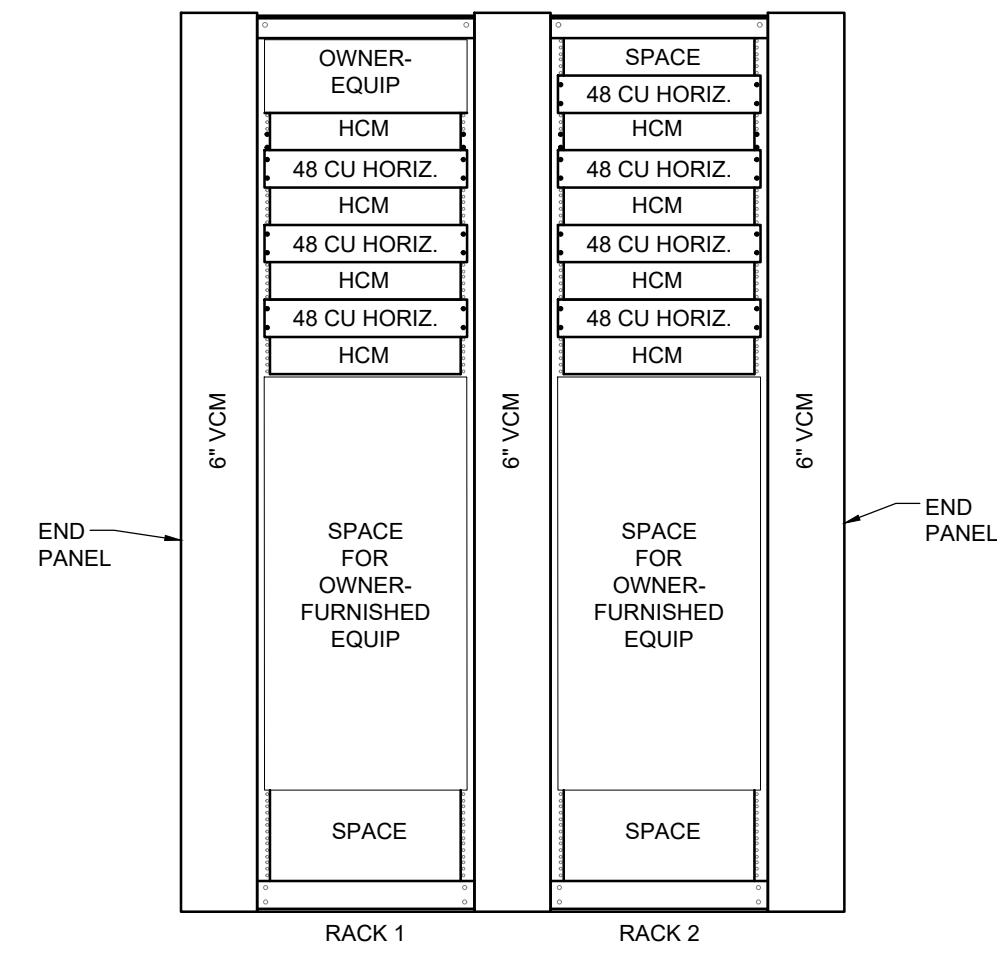


MULTIPLE DIMMING CIRCUITS & SINGLE SENSOR SCHEMATIC (CONF ROOM 217, AND CLASSROOM 220)



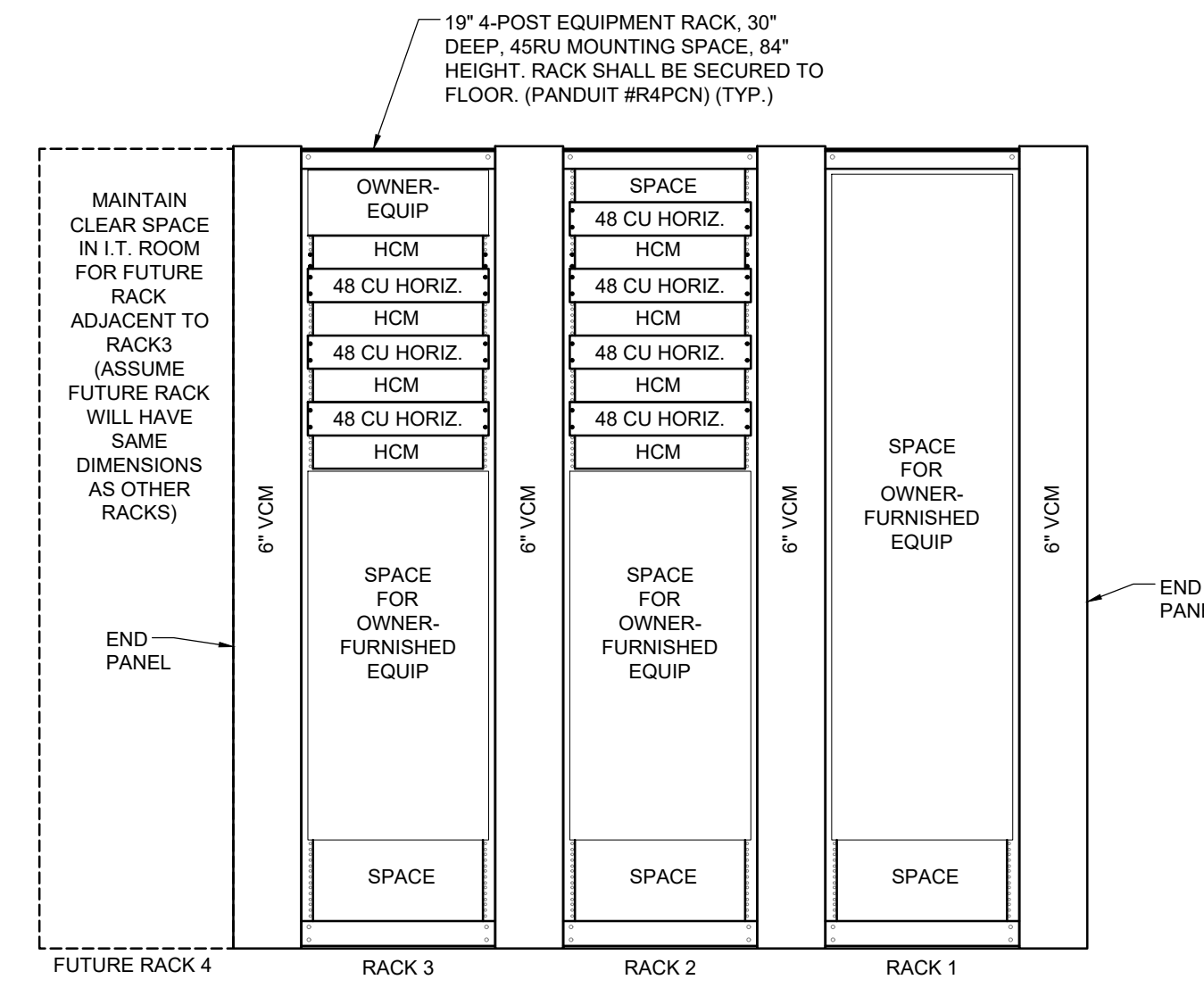
PHONE AND TELECOM OUTLET DETAILS (CAT6)

- A COMMUNICATIONS FACEPLATE, 4-PORT, WHITE COLOR, WITH LABEL WINDOWS. (PANDUIT NETKEY #NK4FWY)
 - B SNAP-IN 8-PIN MODULAR PUNCHDOWN JACK ASSEMBLY, CAT 6, WHITE COLOR, T568B PIN ASSIGNMENTS (PANDUIT NETKEY #NK688MWH). SEE PLANS FOR QUANTITY OF CABLES (AND COUPLERS) AT EACH OUTLET LOCATION.
 - C SNAP-IN BLANK TAB MODULE, WHITE (PANDUIT NETKEY #NK6MWH-X). EACH UNUSED PORT ON THE 4-PORT FACEPLATE SHALL BE PROVIDED WITH BLANK TAB, AS APPLICABLE.
 - D COMMUNICATIONS OUTLET IDENTIFIER ON LASER PRINTED INSERT UNDER FACTORY PLASTIC COVER. COORD. WITH OWNER FOR EXACT NOMENCLATURE.
 - E BACKBOX SHALL BE 4" SQUARE 2-1/8" DEEP WITH SINGLE-GANG MUD RING.
 - F S.S. PHONE PLATE, SINGLE PORT, SINGLE-GANG, WITH MOUNTING STUDS FOR WALL-MOUNT TELEPHONE. (PANDUIT #KWPK6).
- MODEL NUMBERS AND COLORS ABOVE ARE BASIS OF DESIGN. SUBMIT FOR A/E AND OWNER'S I.T. DEPARTMENT APPROVAL PRIOR TO INSTALLATION. PANDUIT BRAND IS REQUIRED.



SECOND FLOOR I.T. ROOM RACK DETAIL

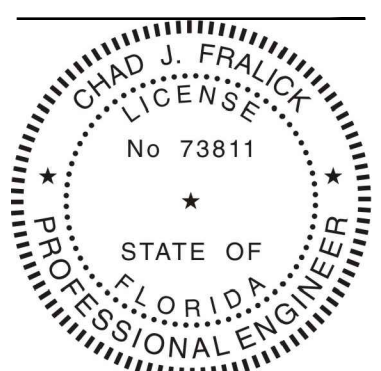
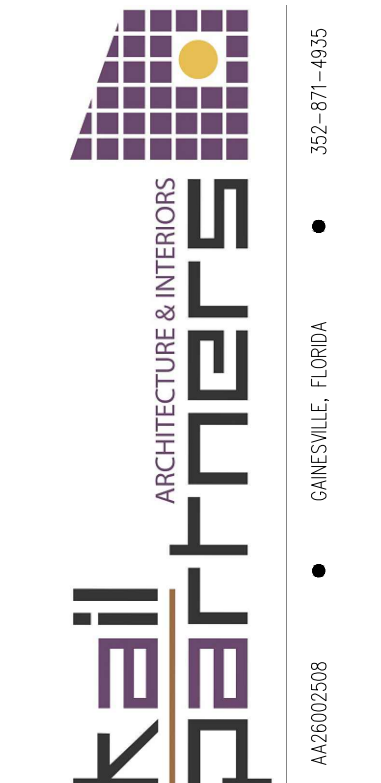
- EQUIPMENT RACK ABBREVIATIONS**
- 24 CU HORIZ 1RU 24-PORT CAT6 COPPER HORIZONTAL CABLE PATCH PANEL (PANDUIT #DP24688TGY)
 - 48 CU HORIZ 2RU 48-PORT CAT6 COPPER HORIZONTAL CABLE PATCH PANEL (PANDUIT #DP48688TGY)
 - HCM HORIZONTAL CABLE MANAGEMENT (2RU, UNLESS NOTED OTHERWISE)
 - VCM VERTICAL CABLE MANAGEMENT WITH DOORS
- RACK DETAIL NOTES (FIRST AND SECOND FLOOR):**
- OWNER SHALL FURNISH & INSTALL FIBER BOXES, BACKBONE CABLE, NETWORK SWITCHES, ROUTERS, POE SWITCHES, AND PATCH CABLES FOR I.T. ROOMS.
 - CONTRACTOR SHALL PROVIDE RACKS, CABLE MANAGEMENT ACCESSORIES, PATCH PANELS, HORIZONTAL CABLES, AND SHALL MAKE ALL FINAL TERMINATIONS OF HORIZONTAL CABLES TO PATCH PANELS AND TELECOM OUTLETS. COMPONENTS SHALL BE PANDUIT BRAND TO MATCH CAMPUS STANDARDS.
 - I.T. ROOM RACK DETAILS ARE BASIS OF DESIGN. CONTRACTOR SHALL SUBMIT RACK LAYOUT DRAWINGS FOR COLLEGE I.T. DEPARTMENT REVIEW AND APPROVAL PRIOR TO COMMENCING WORK.
 - CONTRACTOR SHALL COORDINATE ALL I.T. WORK WITH COLLEGE I.T. DEPARTMENT.



FIRST FLOOR I.T. ROOM RACK DETAIL

SHEET NOTES

- A. CAT6 OUTER JACKET COLORS SHALL BE BASED ON CABLE APPLICATION AS FOLLOWS:
 - A.A. GREEN - WIRELESS ACCESS POINTS
 - A.B. RED - SECURITY/LIFE-SAFETY/FIRE
 - A.C. YELLOW - ENERGY MANAGEMENT SYSTEM/BUILDING CONTROLS
 - A.D. BLUE - VOICE/DATA
- B. REFER TO FLOOR PLANS FOR DEVICE LOCATIONS AND QUANTITIES.
- C. DOOR SECURITY ROUGH-IN DETAILS PROVIDED ON THIS SHEET ARE BASIS OF DESIGN. FOR BIDDING PURPOSES, CONTRACTOR SHALL COORDINATE WITH SECURITY VENDOR ROUGH-IN SHOP DRAWINGS DURING CONSTRUCTION. ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUITS AND JUNCTION BOXES AS REQUIRED FOR ROUGH-IN. OWNER'S SECURITY VENDOR WILL PROVIDE CABLES AND INSTALLATION OF SECURITY DEVICES.



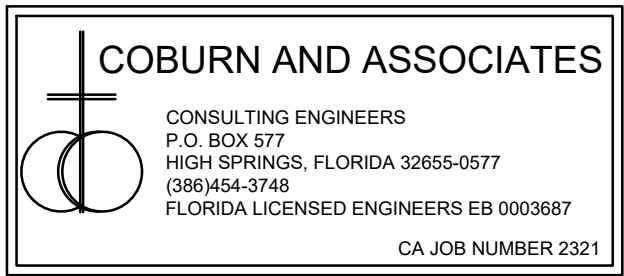
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FLORIDA GATEWAY COLLEGE
 NEW BUILDING 102 - STEM TWO
 FGCI TB # ST-2-1-01-06
 LAKE CITY, FLORIDA

#	Date	Note
1	05/14/2024	ADD#02

SYSTEMS RISER AND DETAILS
 CONSTRUCTION DOCUMENTS

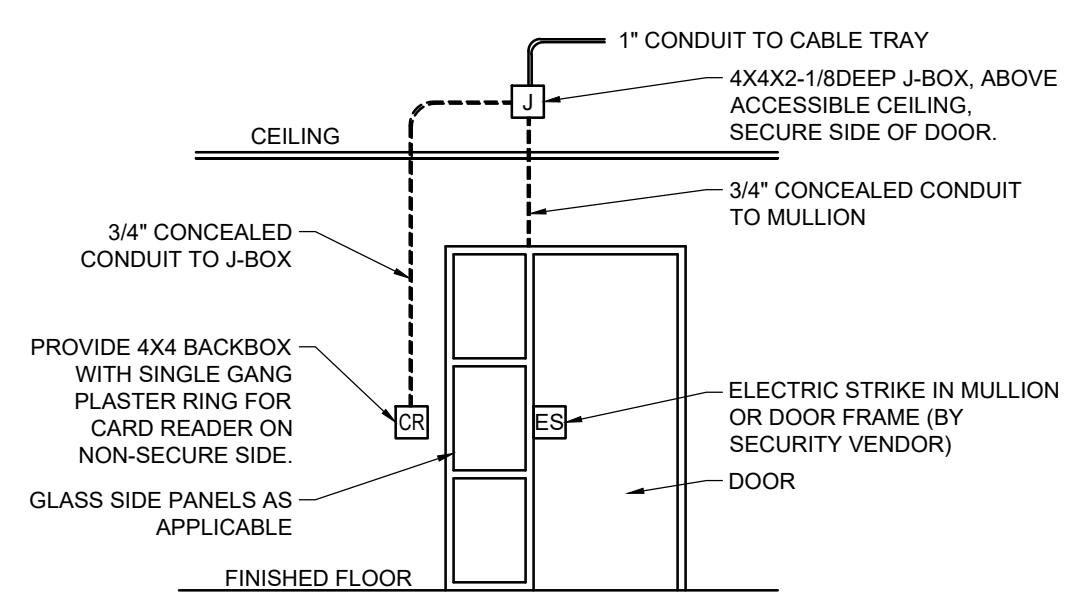
DATE
 3/25/2024
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 CA JOB NUMBER 2321

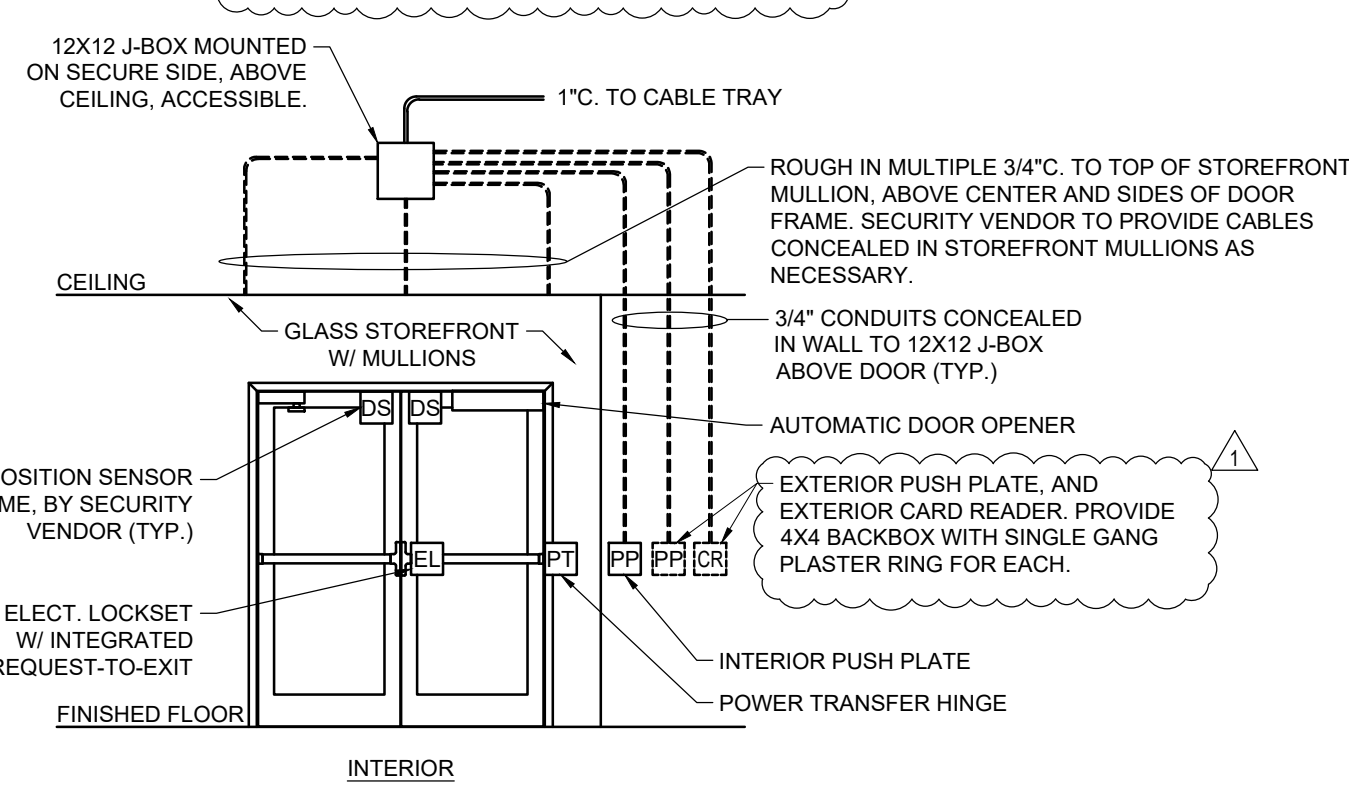
TELECOM RISER KEYED NOTES:

- (T1) SPACE FOR FUTURE RACK.
- (T2) RACK, SEE DETAIL.
- (T3) TERMINATE ALL HORIZONTAL CABLES TO PATCH PANELS, COORDINATE WITH OWNER'S I.T. DEPARTMENT.
- (T4) FIBER OPTIC CABLE AND CONDUIT NORTH OF PB-I.T. WILL BE PROVIDED BY OWNER.
- (T5) PROVIDE (3) 4" C. WITH PULL-STRING. OWNER TO PROVIDE FIBER IN SELECTED CONDUIT(S) AND TERMINATE IN MDF ROOM.
- (T6) 1" C. (MIN.) WITH OTY. OF CABLES PER LOCATION AS INDICATED ON PLANS. PROVIDE NON-METALLIC BUSHING ON CONDUIT END. STUB OUT 6" MIN. ABOVE CEILING.
- (T7) PROVIDE SLEEVE THRU WALL, 12" BEYOND FACE OF WALL ON BOTH SIDES.
- (T8) FOR AREAS WITHOUT CABLE TRAY, SUPPORT CABLES ABOVE CEILING VIA LOOPS OR J-HOOKS AT INTERVALS AS NOTED IN SPECS.
- (T9) HORIZONTAL CABLING FROM OUTLET (OR DEVICE) TO I.T. ROOM SHALL HAVE SUFFICIENT LENGTH TO ENABLE TERMINATION AT OWNER-DIRECTED PATCH PANEL LOCATION.
- (T10) OVERHEAD CABLE TRAY. SEE PLANS FOR ROUTING.
- (T11) PROVIDE CABLE WITH RJ45 CONNECTOR FOR WIRELESS ACCESS POINT OR CAMERA LOCATIONS. PROVIDE 6' SPARE CABLE LENGTH, COILED ABOVE CEILING.
- (T12) PROVIDE (2) 4" SLEEVES THRU FLOOR, EXTENDING FROM 9" ABOVE FIRST FLOOR TO 6" ABOVE SECOND FLOOR, FOR ROUTING OF CABLES BETWEEN FLOORS. PROVIDE BUSHINGS ON BOTH ENDS.
- (T13) PROVIDE 4X4X2-1/8" BACKBOX AT 48" AFF (VERIFY HEIGHT WITH OWNER). PROVIDE RJ45 CONNECTOR ON CABLE AT BOX. OWNER'S VENDOR WILL PROVIDE BACK-PLATE AND WALL-MOUNTED CLASS SCHEDULE POE DISPLAY.
- (T14) BOND RACKS, TRAY, CHASES, AND OTHER METALLIC ITEMS TO TELECOM GROUND BUS BAR WITH #6 CU BONDING JUMPERS. REFER TO GROUNDING DIAGRAM FOR BONDING JUMPERS BETWEEN GROUNDING BUS BARS.
- (T15) PROVIDE RECESSED BACKBOX IN WALL OR CEILING. IF IN CEILING, PROVIDE MEANS TO SUPPORT BOX FROM GRID STRUCTURE. IF IN WALL, PROVIDE CONDUIT TO TURN-OUT ABOVE CEILING.
- (T16) 1ST FLOOR PODIUM FLOOR BOX. PROVIDE CONDUIT BACK TO TELECOM ROOM AND CONDUITS TO ABOVE CLASSROOM CEILING PER PLAN.
- (T17) 2ND FLOOR PODIUM FLOOR BOX. PROVIDE CABLE BACK TO I.T. ROOM AND CONDUITS TO ABOVE CLASSROOM CEILING, PER PLAN.
- (T18) 2ND FLOOR ROUND POKE-THRU BOX PER DETAIL AND PLAN.
- (T19) CABLES FROM 2ND FLOOR BOXES SHALL BE ROUTED TO 2ND FLOOR I.T. ROOM PATCH PANELS, UNLESS DIRECTED OTHERWISE BY OWNER.
- (T20) FOR EXTERIOR CAMERA LOCATIONS: PROVIDE BOX ON INTERIOR. CONDUIT TO EXTERIOR, AND WP BOX ON EXTERIOR (WITH WP COVER). COORDINATE ROUGH-IN LOCATIONS WITH OWNER'S SECURITY VENDOR. OWNER'S VENDOR TO PROVIDE CAMERA, AND FLEX CONNECTION TO WP BOX.

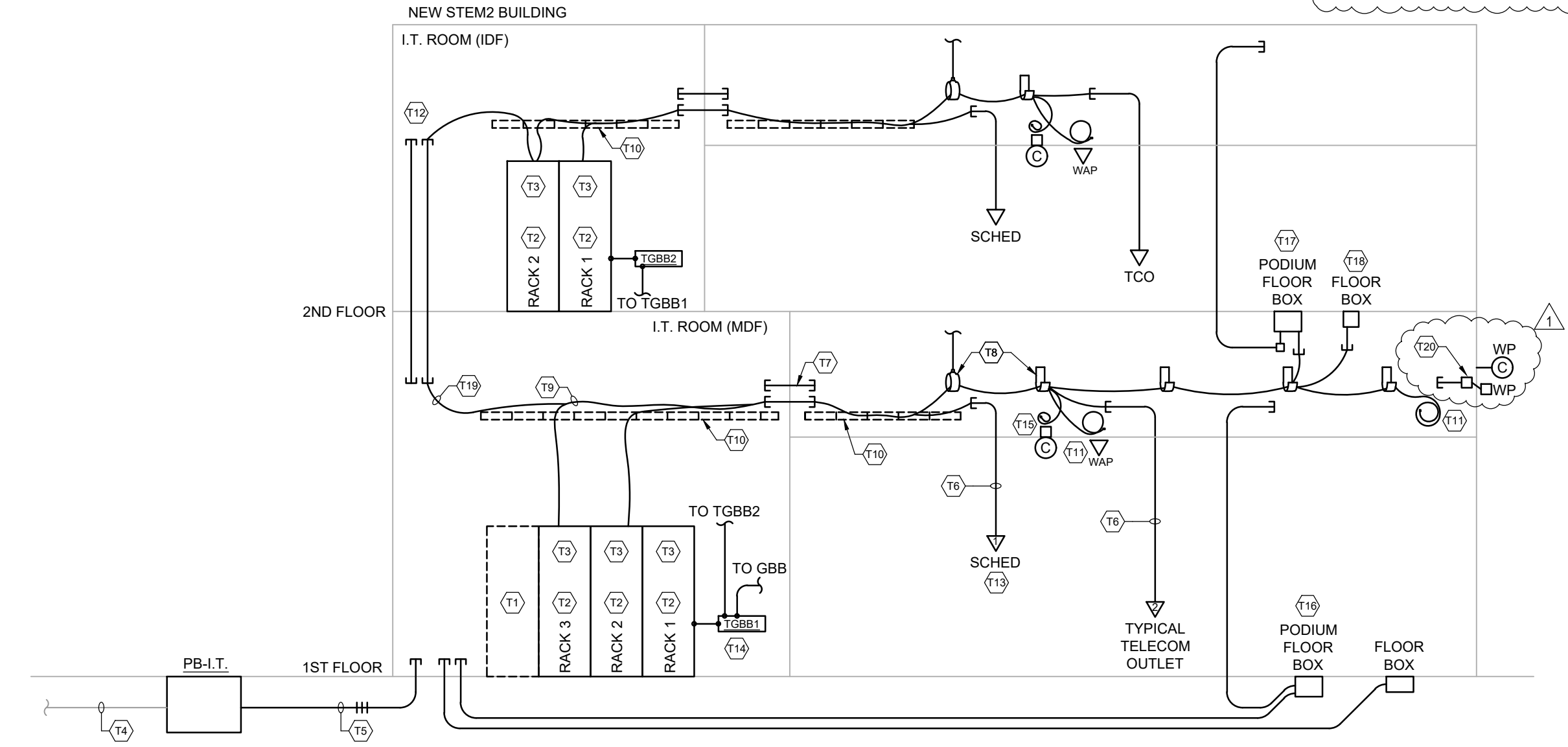


SINGLE-DOOR CONTROL DETAIL
 N.T.S. (APPLIES TO TYPICAL INTERIOR DOORS WITH OR WITHOUT SIDE GLASS)

CONTRACTOR SHALL COORDINATE WITH OWNER'S SECURITY VENDOR TO PROVIDE ROUGH-IN AS REQUIRED. DIMENSIONED ROUGH-IN DETAILS SHALL BE OBTAINED FROM OWNER'S SECURITY VENDOR.



DOUBLE-DOOR CONTROL DETAIL
 N.T.S. (APPLIES TO MAIN ENTRY DOOR)



TELECOM RISER DIAGRAM

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