

Project: River Road Elementary School – Building and Site Construction
Title: Addendum No. 2
Contract No: CIP 410 307 001
Date: March 9, 2016
From: John Stapleton, PIVOT Architecture
To: Interested Bidders

This Addendum is available at <http://www.4j.lane.edu/bids/> and modifies the Project Manual, Specifications, and Drawings in accordance with the Invitation to Bid and the Instructions to Bidders as follows:

General Information

Not Used

Changes to the Project Manual

1. Section 274116. Revisions to AV specification
2. Section 270000. 1.07.C - Revise to read “The following submittals are due with the Bid Package to the General Contractor.”
3. Section 270528. 33.2.02.B.2; “For outlets with 4 to 6 cables, use a trade size 1.25 EMT conduit
4. Section 281326.2.02.b.3 –Revise to read “Mullion mount card readers are not allowed”
5. Section 281326.2.02.F.1-5 – Delete references to 12VDC door hardware
6. Section 281326.2.02F6 – Revise to read; “Request-to-Exit Devices, Mullion mounted at Tormax doors only. Coordinate with Division 8”
7. Section 281613 2.02C – Revise to read; “Dialer DMP 893A Dual Phone Module
8. Section 281619 2.02 B1&B3 – Revise to read; “Bosch DS970 for wall mounted applications, Bosch DS 9360 for ceiling mounted applications”
9. Section 281619 2.02 D2 – Revise to read; “Altronix Maximal 33E power supply with ACM8CB andPD4CB where required”
10. Section 281619 2.02 E1– Revise to read; “Standard doors - Aritech 1078CW Series, no substitutions”
11. Section 281619.2.02 E3 – Revise to read; “Surface mount - Aritech 2505-L”
12. Section 281633.2.01.B.1.a – Revise to read; “Intrusion detection system shall be integrated with the Lenel access system
13. Section 23 2014 Prefabricated Piping Systems for HVAC
 1. Revise Article 2.01 I. to read the following: Fittings: Standard component factory prefabricated and pre-insulated to the thickness specified or field fabricated and installed.
14. Section 23 7000 Central HVAC Equipment
 1. Delete Article 2.03 entirely.
 2. Delete Article 3.01 C. entirely.

15. Section 26 0923 Lighting Control Devices

1. Revise Article 2.01 C.1. to read the following: Use WattStopper LS-301, Acuity CM ADC, or equivalent for the photoelectric sensor used to control the dimming electronic ballast.

Changes to the Drawings

1. A104 Revisions to stairs and restroom floors
2. A105 Revisions to stairs and restroom floors
3. A111 Added sunshades at clearstory windows (see schedule on A315) ; Remove light shelves from clearstory windows
4. A112 Revised stairs and railings
5. A122 Revised Stair, Railings, Door, Fire Cabinet
6. A151 Added Shades – at south clearstory windows; Added dashed line for north light shelf
7. A152 Added Shades – Media center Principal office and conference room
8. A218 Added Sunshade @ clearstory
9. A315 - Shade schedule – added roller shades sunshades; added sun shades @ classrooms; removed Light shelves
10. A347 Added Z Grit to vertical supports for metal composite panel
11. A362 Vertical circulation - Stair location, details, treads, dimensions,
12. A364 Added details
13. A401 Revised finishes
14. A443 Added Door – Relocated Fire cabinet
15. A452 Finish change to Circulation Desk countertop.
16. A457 revised finishes
17. A501. ADDED Gates G1 & G2 to hardware schedule.
18. A502. DELETE Door A207A, ADD Door B205A
19. A505. ADD Door Type O
20. Sheet T101 – Add paging zones
21. Sheet T101 – Revise text at westgate
22. Sheet T102 – Add paging zones
23. Sheet T111:
 - a. Relocate call buttons
 - b. Provide shade controller locations
 - c. Revise camera symbol
 - d. Revise projector symbol
 - e. Revise 8 button keypad symbol
 - f. Revise general notes 5 & 6
24. Sheet T112:
 - a. Provide shade controller locations
 - b. Add local shade controls in B116
 - c. Add local shade controls in rooms 103,104,105
 - d. Revise camera symbol
 - e. Revise projector symbol
 - f. Revise 8 button keypad symbol
 - g. Revise general notes 5 & 6
25. Sheet T113:
 - a. Add keyed note 15 in music C102

- b. Provide shade controller locations
 - c. Revise camera symbol
 - d. Revise projector symbol
 - e. Revise 8 button keypad symbol
 - f. Revise general notes 5 & 6
26. Sheet T114:
- a. Provide shade controller locations
 - b. Delete magnetic holders and door position sensor for cross corridor doors at grid line 8
 - c. Revise camera symbol
 - d. Revise projector symbol
 - e. Revise 8 button keypad symbol
 - f. Revise keynote 11
 - g. Revise general notes 5 & 6
27. Sheet T115:
- a. Add card reader and control wiring for Wonder door at top of stairs
 - b. Add door power supply in electrical room B202
 - c. Revise camera symbol
 - d. Revise projector symbol.
 - e. Revise 8 button keypad symbol
 - f. Revise keynote 11
 - g. Revise general notes 5 & 6
28. Sheet T116 :
- a. Add roof hatch door contact
 - b. Revise camera symbol
 - c. Revise projector symbol
 - d. Revise 8 button keypad symbol
 - e. Revise keynote 11
 - f. Revise general notes 5 & 6
29. Sheet T117:
- a. Add roof hatch door contact
 - b. Revise camera symbol
 - c. Revise projector symbol
 - d. Revise 8 button keypad symbol
 - e. Revise keynote 11
 - f. Revise general notes 5 & 6
30. Sheet T120 – No Change
31. Sheet T121 - Relocate ceiling AV enclosures to casework
32. Sheet T122 - Relocate ceiling AV enclosures to casework
33. Sheet T501 detail 1
- a. Add cable tray routing detail
 - b. Detail 2 - add 2” penetration to mezzanine above
 - c. Revise cable tray layout
 - d. Add door power supply
34. Sheet T701 Delete detail 2
35. Sheet T701 Delete detail 4
36. Sheet T701 Revise detail 6
37. Sheet T702 No change

38. Sheet T703 Revise detail 2
39. Sheet T703 Revise detail 4
40. Sheet T704 No change
41. AV 100 – Revisions at Gym
42. AV 101 – Revisions at Gym
43. AV300 – Diagram revisions
44. AV 301 – Detail revisions
45. Drawing M002
 1. Added condensate pump to FCU-MDF.
 2. Revised duct coil schedule to reflect 77.5 cooling EAT, condensate pumps and coil face velocity revision.
46. Drawing M115
 1. Added condensate drain line to FCU-ELEC.
 2. Revise CUH-HALLC to provide some supply air to restroom, relocate exhaust grille.
 3. Relocate ACCU-ELECT.
 4. Add Note 26, regarding alternate 6, chiller deletion.
47. Drawing M123
 1. Revised coil size and condensate drain line route, over beam, for DC-WORK.
 2. Move lobby slot diffusers to outer edge of ceiling cloud
48. Drawing M413
 1. Revised coil size and condensate drain line route for DC-GRP, DC-CONF, DC-PRIN and DC-RECEP
49. Drawing M415
 1. Revise CUH-101to provide some supply air to restroom, relocate exhaust grille.
 2. Relocate ACCU-ELECT.
 3. Revise EF-ELECT exhaust plenum to 26x18.
50. Drawing M601
 1. Revised sizes on DTS/R mains serving duct coils
51. Drawing E002
 1. Revised luminaire schedule with additional manufacturer.
52. Drawing E113
 1. Added power connection to mechanical equipment.
 2. Added power connections to motorized shades and shade controller.
 3. Added notes 13 and 14.
 4. Added general note G.
53. Drawing E115
 1. Added power connection to mechanical equipment.
 2. Revised circuiting.
 3. Added power connections to motorized shade controller.
 4. Added note 22.
 5. Added general note H.
54. Drawing E123
 1. Added power connections to motorized shades and shade controller.
 2. Added power connection to fire guard door controller.
 3. Added power connection to mechanical equipment.
55. Drawing E125
 1. Added power connection to door power supply

2. Added note 6.
3. Added general note H.
56. Drawing E141
 1. Revise fire alarm layout.
57. Drawing E411
 1. Revise note 2.
58. Drawing E414
 2. Added power connection to door power supply.
59. Drawing E502
 1. Revised Electrical Grounding System Detail.
 2. Revised Electrical Fire Alarm Riser Detail.
60. Drawing E601
 1. Added note 14 to EMDP grounding.
61. Drawing E604
 1. Revised panel schedules.
62. Drawing 605
 1. Revised panel schedules.
63. Drawing 607
 1. Revised panel schedules.
64. Drawing E701
 1. Revised M&E Coordination Schedule with new mechanical equipment.

Substitution Requests

Substitution requests listed below have been approved or approved as noted. All other requests not listed below have either been not approved or are pending review. NOTE: All approved substitute materials and service providers are responsible for supplying materials/services that are equal or better than specified items. Any design changes or project alterations needed to integrate substituted products are the sole responsibility of the Contractor and supplier.

Section 089100 Louvers Greenheck EHH-601D, EVH 601D APPROVED.

Section 22400 Murdock Model A132400s Drinking Fountain APPROVED

Section 230523 Nutech model 2SAS Piping Package APPROVED

Section 232014 Rehall Pre-Insulated Pex Pipe APPROVED

Section 233319 Price Industries Rectangular Silencer APPROVED

Section 016023 Luxaire Split System Air Conditioning Unit APPROVED

Section 238200 Williams LH-F Fan Coil Unit APPROVED

End of Addendum # 2

SECTION 23 2014
PREFABRICATED PIPING SYSTEMS FOR HVAC

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. The provisions of Section 23 0500, Common Work Results for HVAC apply to work specified in this Section.

1.02 SUMMARY

- A. This Section includes: Direct buried prefabricated piping systems for chilled water.
- B. Related Sections include:
 - 1. Section 23 0590, Pressure Testing for HVAC Systems
 - 2. Section 23 0700, Insulation for HVAC
 - 3. Section 23 2113, Pipe and Pipe Fittings HVAC

1.03 SUBMITTALS

- A. Submit the following:
 - 1. Product Data.
 - 2. Installation Manuals.
 - 3. Complete shop drawings for piping systems including elbows, tees, flanges, coupling locations, and anchors. Include cutting lengths and thrust block sizes.
 - 4. Report on field piping tests with signatures of Architect and manufacturer's representative witnessing.

1.04 QUALITY ASSURANCE

- A. Provide the services of a qualified manufacturer's representative to instruct the contractor on the installation procedures for piping, and to be present on site to assist during critical stages of installation and testing.
- B. Include a report consisting of the installation log indicating actual installed conditions and test certification signed by the manufacturer's representative above, the contractor, and the Architect's representative. Include certification by manufacturer's representative that the installation is in conformance with the manufacturer's recommendations.

PART 2 PRODUCTS

2.01 PREFABRICATED PEX OR HDPE CHILLED AND HEATING WATER PIPING

- A. Acceptable Manufacturers:
 - 1. Rovanco, Thermacore, Perma-Pipe, Thermal Pipe, and Insul-pipe.
 - 2. Other Manufacturers: Submit Substitution Request.
- B. General: Provide complete prefabricated underground chilled water piping system suitable for direct burial as indicated on Drawings and as specified herein. Factory prefabricated HDPE jacketed system of factory pre-insulated pipe with all necessary fittings, seals, and accessories.
- C. Pipe: Carrier pipe shall be Cross-linked PEX pipe 100 psi minimum working pressure for temperatures up to 180 degrees F and or High Density Polyethylene pipe DR-17, 100 psiminimum working pressure for temperatures up to 110 degrees F.
- D. Expansion: All components of carrier pipe, insulation, and jacket must be able to expand and contract as a unit without overstressing or adversely affecting any of the materials. The piping system supplier shall be responsible for the overall design of the expansion and contraction compensation.

- E. End Seals: All direct-buried ends of insulated pipe with exposed insulation will be sealed with polyethylene end seals.
- F. Insulation: Insulation shall be as specified in Section 23 0700, Insulation for HVAC.
- G. Jacket: The outer protective jacket shall be corrugated seamless polyethylene completely encompassing and protecting the insulation from moisture and damage, designed for H-20 loading at a burial depth of 2-ft minimum.
- H. Joints: Straight run joints shall be field-insulated per the manufacturer's instructions, using polyurethane foam poured in an HDPE sleeve and sealed with a heat shrink sleeve. All joint closures and insulation shall occur at straight sections of pipe. All insulation and jacketing materials shall be furnished by piping system supplier.
- I. Fittings: Standard component factory prefabricated and pre-insulated to the thickness specified or field fabricated and installed.
- J. Accessories: Provide all required accessories including wall sleeves, and miscellaneous materials as required for attachment to steel or copper pipe at ends and as required and detailed to a complete and total installation.
- K. Service:
 - 1. Chilled Water below grade.

ADD 2

PART 3 EXECUTION

3.01 PREPARATION

- A. Measurements, Lines and Levels:
 - 1. Check dimension at the building site and establish lines and levels for the work specified in this Section.
 - 2. Establish all inverts, slopes, and manhole elevations by instrument, working from an established datum point. Provide elevation markers for use in determining slopes and elevations in accordance with Drawings and Specifications.
 - 3. Use established grid and area lines for locating trenches in relation to building and boundaries.

3.02 EXCAVATION AND BACKFILL

- A. General: Perform all necessary excavation and backfill required for the installation of mechanical work in accord with Division 02. Repair pipelines or other work damaged during excavation and backfilling.
- B. Excavation: Excavate trenches to the necessary depth and width, removing rocks, roots, and stumps. Include additional excavation to facilitate utility crossovers, additional offsets, etc. Excavation material is unclassified. Width of trench shall be adequate for proper installation of piping. The trench shall be widened if not wide enough for a proper installation.
- C. Bedding: All piping shall be full bedded on sand. Place a minimum 4-inch deep layer on the leveled trench bottom for this purpose.
- D. Backfill:
 - 1. Immediately after all piping is installed in the ditch, make a partial backfill in the middle of each pipe length leaving the joints exposed for inspection prior to the hydrostatic tests.
 - 2. Place in layers not exceeding 8 inches deep and compact to 95 percent of standard proctor maximum density at optimum moisture content. Earth backfill shall be free of rocks over 2-inches in diameter and foreign matter. Disposal of excess material as directed.
 - 3. Interior: All backfill under interior slabs shall be bank sand or pea gravel.
 - 4. Exterior: Excavated material may be used outside of buildings at the contractor's option. The first 4 inches shall be sand, and final 12-inch layer course shall be soil in any event.

3.03 ADJUSTING AND CLEANING

A. General:

1. Clean interior of all piping before installation.
2. Flush sediment out of all installed piping systems.

3.04 INSTALLATION OF PEX AND HDPE CHILLED WATER PIPING

- A. Install piping in accordance with the Manufacturer's recommendations and installation Drawings.
- B. Install all piping as to vent and drain to building.
- C. The system shall be installed in a manner that will not require expansion loops or compensators of any type.
- D. The system shall be installed with the fewest number of underground joints possible.
- E. Make connection between PEX or HDPE and Copper or Steel pipe according to manufacturer's recommendations.
- F. Slope piping uniformly. Record exact location and depth with respect to established datum points.
- G. Test piping prior to sealing of conduits and before backfilling. Seal all leaks and retest until tight.
- H. Utility Marking: Installed over the entire length of the underground piping utilities. Install plastic tape along both sides and the center line of the trenches at the elevation of approximately 12-inches above the top of utility.
- I. Trace Wire: Install 16 gauge insulated copper tracer wire (green in color) above all buried nonmetallic piping. Tracer wire to run entire length of pipe.

END OF SECTION

SECTION 23 7000
CENTRAL HVAC EQUIPMENT

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. The provisions of Section 23 0500, Common Work Results for HVAC apply to work specified in this Section.

1.02 SUMMARY

- A. This Section includes: Air handling units.
- B. Related Sections include:
 - 1. Section 23 0514, Variable Frequency Drives for HVAC Systems
 - 2. Section 23 0548, Vibration and Seismic Controls for HVAC Piping and Equipment: For vibration isolators
 - 3. Section 23 0700, Insulation for HVAC: For acoustical liner.

1.03 SUBMITTALS

- A. Submit the following:
 - 1. Shop Drawings showing details of construction, dimensions, arrangement of components, and isolation.
 - 2. Product data showing performance data.
 - 3. Operating and Maintenance Data
 - 4. Specified testing requirements.

PART 2 PRODUCTS

2.01 MODULAR INDOOR AIR HANDLING UNITS

- A. Acceptable Manufacturers:
 - 1. Aeon M2, Trane Climatechanger, Daikin-McQuay Vision, York Solution, BasX.
 - 2. Other Manufacturers: Submit Substitution Request.
- B. Description:
 - 1. Variable volume, single zone draw-through modular air handling units consisting of plenum fan section, coil section, filter section, motor and drive, and mixing box, all contained in an insulated steel casing and mounted on a common steel base. Arrange components as specified hereafter and as shown on the Drawings.
 - 2. Air Moving and Conditioning Association rated.
- C. Unit Casing:
 - 1. Casing of 16 gauge steel, properly reinforced and braced and of sectionalized construction. Support entire unit on minimum 10-inch high continuous steel support.
 - 2. Provide access doors for inspection of fan and motor.
 - 3. Manufacturer's standard factory finish.
 - 4. Insulation of entire cabinet shall be 2-inch thick minimum, R-8 minimum. Insulation shall be 3 pounds/cubic feet faced rigid fiberglass insulation or polyurethane foam.
 - 5. Drain pan under cooling coils with 1/2-inch cellular, foam-in place insulation.
 - 6. Arranged with motor and drive inside fan casing; isolated fan and motor assembly within unit casing.

D. Fans:

1. Fan type and capacity as indicated on the drawings.
2. Statically and dynamically balanced in its own bearings with a maximum full amplitude shaft deflection at bearings not to exceed 0.001 inch at 1200 rpm.
3. Grease lubricated, self-aligning, interior mounted pillow block or flanged bearings permanently sealed.
4. Provide spherical roller bearings on units of 25 hp and larger, 80,000 hour L-10 life per AFBMA Standards.

E. Motor and Drive:

1. Integrally mounted 1800 rpm motor, with pre-lubricated sealed ball bearings.
2. Direct drive.
3. Refer to Section 23 0500, Common Work Results for HVAC for energy efficient motor requirements.

F. Vibration Isolators:

1. Provide as an integral part of each unit. Refer Section 23 0548, Vibration and Seismic Controls for HVAC Piping and Equipment.
2. Coordinated weights and location of support points with the vibration isolation equipment supplier.

G. Water Coils: See Schedule for capacities and Section 23 8200, Convection Heating and Cooling Units for specification.

1. Provide drain pan for each level of cooling coils. Drain pans constructed from stainless steel or galvanized steel coated with asphalt or approved rust inhibitor.
2. Drain Pan: Double sloped, in direction of air flow and toward drain connection.
3. Coils: Maximum 10 fins per inch.

H. Filters: Refer to Section 23 4000, HVAC Air Cleaning Devices for specification. Provide suitable access doors, slide rack, and sealant strips for filters specified. Additional pleated and carbon filters shall be furnished loose, as described in Section 23 4000, HVAC Air Cleaning Devices

I. Flexible Connections:

1. Constructed in accordance with UL 181, Class I air duct with flanged connections.
2. Flexible, neoprene-coated glass fabric not lighter than 30 ounces/sq.yd.
3. "Ventglas" by Vent-Fabrics, Inc.

J. Mixing Boxes:

1. General: Provide multi-blade dampers as shown on Drawings and as required to provide economizer cooling and morning cool-down functions.
2. Provide minimum outside air with slotted damper crank arm adjusted so that damper is closed with the motor shaft retracted and at the minimum flow position with the motor shaft fully extended.
3. Arrange return air and minimum outside air dampers to discharge against each other for maximum mixing in the mixing box prior to the coil.
4. Provide coordinated spring-return damper actuators, Belimo low-voltage.

K. Sound Requirements:

1. The manufacturer shall furnish sound power levels at the supply air connection and return air connection for each air handling unit.

2. Sound power level (re: 10-12W) when producing scheduled airflow (CFM) at scheduled static pressure shall not exceed following in any octave band:

Octave Band Center Frequency (HZ)								
	63	125	250	500	1000	2000	4000	8000
Supply Air	91	92	96	97	94	91	86	78
Return Air	87	89	89	88	87	84	80	74

2.02 SMALL INDOOR AIR HANDLERS

A. Acceptable Manufacturers:

1. Aeon H3, BasX, Thermal Corp.
2. Other Manufacturers: Submit Substitution Request.

B. General Description

1. Include filters, supply fans, chilled water coil, mixing box, and unit controls.
2. Draw-through supply fan configuration and discharge air horizontally or vertically as indicated on drawings.
3. Factory assemble and test including leak testing of the chilled water coil, and run testing of the supply fans and factory wired electrical system. Run test report shall be supplied with the unit.

C. Construction

1. All cabinet walls, access doors, and roof shall be fabricated of double wall, impact resistant, rigid polyurethane foam panels.
2. Unit insulation shall have a minimum thermal resistance R-value of 6.25. Foam insulation shall have a minimum density of 2 pounds/cubic foot and shall be tested in accordance with ASTM D1929-11 for a minimum flash ignition temperature of 610 degrees F.
3. Unit construction shall be double wall with G90 galvanized steel on both sides and a thermal break. Double wall construction with a thermal break prevents moisture accumulation on the insulation, provides a cleanable interior, prevents heat transfer through the panel, and prevents exterior condensation on the panel.
4. Design unit to reduce air leakage and infiltration through the cabinet. Include sealing between panels and between access doors and openings to reduce air leakage. Piping and electrical conduit through cabinet panels include sealing to reduce air leakage.
5. Access to filters, cooling coil, supply fans, and electrical and controls components shall be through hinged access doors.
6. Access Doors:
 - a. Flush mounted to cabinetry.
 - b. Coil access door and supply fan access door shall include quarter-turn lockable handles.
 - c. Supply fan access door includes removable pin hinges.
7. Units with a cooling coil shall include sloped 304 stainless steel drain pan. Drain pan connection shall be on the side of unit.
8. Cooling coil shall be mechanically supported above the drain pan by multiple supports that allow drain pan cleaning and coil removal.

D. Electrical

1. Provide unit with an internal control panel adjacent to blower compartment to accept low voltage and power. Adequate space shall be provided for the DDC controller to be field installed in the panel. Controller dimensions are 6-inch by 6-inch.
2. Provide with standard power block for connecting power to the unit.
3. Factory install 24V control circuit transformer, minimum 100 VA.

E. Supply Fans

1. Direct drive, unhooded, backward curved, plenum supply fan.
2. Blower and motor assembly shall be dynamically balanced.
3. Blower and motor assembly shall be isolated with neoprene gasket.
4. High efficiency electronically commutated motor (ECM).

F. Cooling Coil

1. Chilled Water Cooling Coil
 - a. Certified in accordance with AHRI Standard 410 and be hydrogen or helium leak tested.
 - b. Constructed of copper tubes with aluminum fins mechanically bonded to the tubes and galvanized steel end casings. Fin design shall be sine wave rippled.
 - c. Right hand external piping connections. Supply and return connections shall be sweat connection. Coil connections shall be labeled, extend beyond the unit casing, and be factory sealed on both the interior and exterior of the unit casing, to minimize air leakage.
 - d. Maximum of 10 fins per inch.

G. Filters

1. Refer to Section 23 4000, HVAC Air Cleaning Devices. Additional pleated and carbon filters shall be furnished loose, as described in Section 23 4000, HVAC Air Cleaning Devices.
2. Unit includes a clogged filter switch.
3. Include factory installed Magnehelic gauge measuring the pressure drop across the filter rack.

H. Mixing Box

1. Unit shall contain a mixing box with top opening and front opening, which may be used for either outside air or return air.
2. Return air opening shall contain an adjustable, motor operated return air damper assembly constructed of extruded aluminum, hollow core, airfoil blades with rubber edge seals and aluminum end seals. Damper blades shall be gear driven. Dampers shall be fixed position controlled by a fully modulating actuator. Actuator to be Belimo, low voltage.
3. Outside air opening shall contain an adjustable, motor operated outside air damper assembly constructed of extruded aluminum, hollow core, airfoil blades with rubber edge seals and aluminum end seals. Damper blades shall be gear driven. Dampers shall be fixed position controlled by a fully modulating actuator. Actuator to be Belimo, low voltage.
4. Dampers on air handlers less than 2000 cfm only require a spring return actuator on the outside air damper. Return air damper may be either spring return or non-spring. Units larger than 2000 cfm require coordinated spring return actuators on all mixed air dampers.

PART 3 EXECUTION

3.01 INSTALLATION

Deleted 2.03

ADD 2

A. Indoor Air Handling Unit:

1. Install with air filters in place before operating unit.
2. Modular air handlers shall mount on steel base which is integral with unit.
3. Pipe drain pan to as indicated with 3-inch minimum trap seal.
4. Small air handlers shall be mounted to a minimum of two six inch high 12 gauge sheet metal sleepers that are themselves secured to floor.

B. Flexible Connections:

1. Provide flexible connections between fans and the connected ducts or plenums.
2. Install with 1-inch space between the fan and connecting duct with fabric snug but not stretched tightly.
3. Provide accurate alignment between fan and duct.
4. Secure in place with flanged connections. Do not crimp into the duct construction. Ends of the screws shall not project into the duct more than 1/8-inch.

Deleted 3.01 C

END OF SECTION

ADD 2

SECTION 26 0923
LIGHTING CONTROL DEVICES

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. The provisions of Division 26 Section, Common Work Results for Electrical, apply to this section.

1.02 SUMMARY

- A. This Section includes:
 - 1. Section includes responsibilities and participation under Division 26 in the automatic dimming system installation and commissioning process.
 - 2. Installation, connection, adjustment, and testing of the equipment.
 - 3. Provide qualified personnel for participation in commissioning tests, including seasonal testing required after the initial commissioning.
 - 4. Providing equipment, materials, and labor necessary to correct deficiencies found during the commission process which fulfill contract and warranty requirements.
 - 5. Providing Operating and Maintenance Data and Record Drawings to the Test Engineer for verification, organization, and distribution.
 - 6. Providing assistance to the Test Engineer to develop and edit descriptions of system operation.
 - 7. Providing training for the systems specified in this Division with coordination by the Test Engineer and Commissioning Agent.
- B. Related Sections include:
 - 1. Section 26 2726, Wiring Devices
 - 2. Section 26 5000, Lighting

1.03 GENERAL REQUIREMENTS

- 1. Contractor shall price the lighting control package separately from the light fixture package and shall provide a unit price breakdown of all components including all deducts (lot price and all-or-none). Pricing transparent from the factory to the owner and all quotes shall be made available to the Owner, Architect, or Engineer upon request.

1.04 SYSTEM DESCRIPTION

- A. System is provided to reduce electric energy consumption during daylight hours by reducing the light output of the electric lighting system in response to measured lighting levels provided by daylight within the building interior.
- B. Areas within daylit areas shall have full daylight integration with photocells and automatic dimming and/or switching ballasts. Dimming zones will correlate with the distribution of daylight within the space.
- C. Areas near exterior glazing shall use dimming ballasts and photocells for daylight harvesting and resultant energy conservation.
 - 1. Daylight sensing equipment will be analog, full range type.
 - 2. Photocells will measure lighting levels on an affected interior surface. Illumination contribution to this measured surface will include both daylighting and electric lighting (closed-loop system) to ensure proper lighting levels with maximum energy savings.

3. Logical zones of luminaires will be controlled independently for maximum energy savings while maintaining even task illumination across the entire area between zones. Refer to drawings for control groupings.
 4. Time delay logic will be incorporated to prevent cycling due to clouds and other short-term influences to lighting levels.
- D. The control system shall accept indoor, skylight, and outdoor photo sensing heads. Photo sensing control shall permit the user to specify the actual footcandle level where desired switching shall occur.

PART 2 PRODUCTS

2.01 PHOTOCELLS

- A. The photoelectric device for the fluorescent dimming ballasts shall be a Class 2, low voltage ambient light sensor designed to connect via 18 gauge shielded cable with the electronic dimming ballast. The sensor shall have the following modes of operation:
1. Automatic dimming of indoor fluorescent lighting in response to the availability of natural daylight. The response range shall be between 0-500 footcandles with a fixed delay of at least 30 seconds.
- B. The sensor shall have a flat Fresnel lens with a cone of response to be determined by mock-up. Quantity and location of sensors shall be determined by mock-up. The wire aperture for both the interface circuit and the sensor shall be no greater than 3/8-inch outside diameter.
- C. Acceptable Manufacturers:
1. Use WattStopper LS-301, Acuity CM ADC, or equivalent for the photoelectric sensor used to control the dimming electronic ballast.
 2. ~~Other "or equivalent" Manufacturers and Products: Submit Substitution Request, complying with requirements of Section 00 1630, Product Options and Substitutions.~~

ADD 2

2.02 BALLASTS

- A. All dimming ballasts to be of same manufacturer.
- B. All dimming ballast shall be compatible with specified photocells.
- C. See Section 26 50 00 for ballast product specification.

2.03 LOW VOLTAGE CONTROL WIRING

- A. 18 gauge shielded cable or as recommended by the manufacturer.

2.04 TEST EQUIPMENT

- A. Provide multi-function digital Illuminance meter with detachable receptor head with the following characteristics:
1. Receptor: Silicon photocell type
 2. Illuminance Units: Lux or footcandles (switchable)
 3. Measuring range: 0.1 to 19,990 lux, 0.01 to 1,999 footcandles
 4. Accuracy: $\pm 4\% \pm 1$ digit of displayed value
 5. Cosine Correction Characteristics: Within $\pm 1\%$ at 10° ; within $\pm 5\%$ at 60° .
 6. Measuring functions: Illuminance, integrated illuminance, average illuminance.
 7. Temperature/humidity drift: Within $\pm 3\% \pm 1$ digit (of value displayed at $20^\circ\text{C}/ 68^\circ\text{F}$) within operating temperature/humidity range.
 8. Operating conditions: 0 to 40°C (32 to 104°F) at less than 85% humidity.
- B. Provide proof of calibration within 12 months of use. Calibration shall be performed by an independent calibration lab approved by the manufacturer of the meter.

EXECUTION

2.05 INSTALLATION

- A. Photocell shall be installed surface mounted on recessed junction box in location best suited for accurate measurement. Avoid placement in high traffic or confined spaces.
- B. Provide to Architect prior to installation layout drawings indicating proposed location of all photocells and control groups. Proceed with installation after review and acceptance by Architect.
- C. Wiring shall be installed in conduit where running through inaccessible areas. Plenum rated wiring shall be allowed in accessible ceiling spaces.
- D. Coordinate low voltage wiring connection and location with luminaires to be controlled.

2.06 WORK PRIOR TO COMMISSIONING

- A. Complete all phases of work so the system can be powered, tested, adjusted, and otherwise commissioned. Under Division 26, complete systems, including all subsystems, so they are fully functional. This includes the complete installation of all equipment, materials, wire, controls, etc., in accordance with the contract documents and related directives, clarifications, change orders, etc.
- B. A commissioning plan will be developed by the Test Engineer and approved by the Commissioning Agent. Under Division 26, assist the Test Engineer and Commissioning Agent in preparing the commissioning plan by providing all necessary information pertaining to the actual equipment and installation. If system modifications and clarifications are in the contractual requirements of this and related sections of work, they will be made at no additional cost to the Owner. If Contractor initiated system changes have been made that alter the commissioning process, the Commissioning Agent will notify the Owner.
- C. Specific pre-commissioning responsibilities under Division 26 are as follows:
 - 1. Factory startup services for the following items of equipment:
 - a. Lighting Control System
 - 2. Normal startup services required to bring each system into a fully operational state. This includes complete installation and cleaning. The Test Engineer will not begin the commissioning process until each system is documented as being installed complete.
- D. Commissioning shall begin after installation of all interior and exterior finishes including but not limited to adjacent roofing, finished floor, wall, and ceiling systems including final painting, all furniture and book stacks in place, and all other building systems which have direct or indirect influence on the performance and distribution of the daylight and electric lighting systems. Start of commissioning before such items are complete will not relieve Contractor from completing those systems in accordance with the Construction Schedule.

2.07 SEQUENCE OF COMMISSIONING

- A. Provide to Architect prior to start of commissioning layout drawings indicating proposed location of all measurement points. Proceed with commissioning after review and acceptance by Architect.
- B. All illuminance measurements shall be oriented horizontal, facing up, at 30 inches above finished floor. All measurements for a control group shall occur at the same location. Ensure constancy of local surface reflectance conditions throughout commissioning of each control group.
- C. Ensure no personnel or outside influence affects the amount of flux striking the receptor head during the recording session.
- D. Document measurements in clearly understandable format for review by the Architect. Include time of measurement, temperature, and relative humidity.
- E. Measure illuminance at least two hours after local sunset with full output of all electric lighting. Record integrated illuminance and average illuminance for a two hour period.

- F. During daylight hours, measure illuminance with all electric lighting off, including emergency and "nightlight" circuits. Record integrated illuminance and average illuminance for a two hour period. Document in clearly understandable format for review by the Architect.
- G. Set each photocell to 150 percent of electric-only lighting contribution.
- H. After initial setpoint has been set, measure illuminance in 10 minute increments from 1 hour before to 1 hour after local sunset.
- I. Submit all recorded data to Architect for review.

2.08 SEQUENCE OF OPERATIONS FOR LIGHTING CONTROLS

A. Control Approach:

- 1. Open public spaces and exterior lighting shall be controlled via the BMS and programmed timed on/off relay controls.
- 2. Enclosed spaces shall be stand-alone, controlled via occupancy or vacancy sensors.
- 3. Electrical, mechanical, IT, MDF, and IDF and rooms where personal safety is a concern will have line voltage switches only. A large sign will be placed on the back side of all doors exiting the space with the words "TURN OFF THE LIGHTS" in large contrast font. Coordinate sign with architect prior to installation.
- 4. The gymnasium shall be controlled by a local room control with digitally distributed relays for preset scene control.

B. Sequence of Operations:

1. Exterior Lighting

- a. Building mounted lighting shall turn on and off by astronomical timeclock for dusk to dawn operation. Confirm with owner and provide timeclock schedule if requested.
- b. Parking lot lighting shall turn on and off in two sequences as defined in the relay schedule. One zone turns on/off by astronomical timeclock for dusk to dawn operation. One zone turns on by astronomical timeclock and off at 10pm. Confirm with owner and provide timeclock schedule if requested. One of the two circuits of each light pole shall tie to integral occupancy sensor.
- c. Site lighting along sidewalks and pathways shall turn on and off by astronomical timeclock for dusk to dawn operation. Confirm with owner and provide timeclock schedule if requested.
- d. Accent lighting and plaza lighting shall turn on by astronomical timeclock at dusk and off by timeclock at 10pm. Confirm schedule with owner.
- e. Local override for all exterior lighting shall be located in Custodial office. Illuminated switch by Lev-Lok.

2. Public Spaces

- a. All lighting in the open seating, circulation, elevator lobbies, entrance lobbies, and two story space will operate on the BMS that will turn lighting on 30 minutes before open and shut off 30 minutes after "closed" hours. Verify Open and Closed hours of operation with owner prior to programming.
- b. Circulation areas, hallways, and open plan work will have OS/VS overrides during closed hours. These will turn emergency egress lights on to 100 percent when occupancy is detected, but will turn them off after 10 minutes without movement. OS/VS will be inactive during the day.
- c. All open spaces and circulation have manual override, where required by code (see drawings)
- d. Public Toilets will be controlled via local occupancy sensor. Auto ON/ Auto OFF. Provide keyed override switch for maintenance

- e. Storage and support spaces will have occupancy sensors and manual switch. Room controls are to be manual on, auto off with a 15 minute time delay.
- f. Electrical and mechanical spaces will have manual switch only for safety.
- 3. Classrooms:
 - a. Stand-alone room control via non-dimming switches and vacancy sensors.
 - b. Closed loop photocell to monitor lights in the indicated daylight zone for 0-10V gradual dimming. Photocells set to 30fc with a 5 minute dead-band.
- 4. Science and Makers Labs:
 - a. Stand-alone room control via non-dimming switches and vacancy sensors.
 - b. Photocells integral in the luminaire to provide individual 0-10V gradual dimming. Photocells set to 50fc with a 5 minute dead-band.
- 5. Private Offices and Admin Areas:
 - a. Each room will have a wall box dimmer and vacancy sensor.
 - b. Lights remain off until manually engaged by an occupant. Vacancy sensors do NOT automatically turn electric lights on if someone enters the room, but will turn lights off after 30 minutes of non-occupancy. Sensitivity should be set to maximum.
 - c. In offices where daylight harvesting is required, photocells shall be set to 30fc with a 5 minute dead-band.
- 6. Conference Rooms:
 - a. Stand-alone room control via non-dimming switches per zone.
 - b. Vacancy sensor time delay shall be set to 30 minutes.
- 7. Gymnasium
 - a. Lights turn on by timeclock as defined by the owner, during normal operating hours. Locked box to contain the room controller for scene definition. Five button switch located at all entries around the room for pre-set scene control and activation of lighting after hours.
 - b. Open loop photocell to monitor lights in the indicated daylight zones for 0-10V gradual dimming. Photocells shall be set to 50fc with a 5 minute dead-band.
- 8. All other spaces
 - a. Sequence of operations will be provided upon written request for all spaces not listed. Reprogramming may be required of some spaces on site after installation to tune the system and meet the owner, daylight and energy management needs. Provide additional programming for reconfiguration up to 24 hours at no additional cost to the owner or design team.

2.09 TESTING FOR SEASONAL VARIATIONS

A. Timing of Commissioning:

- 1. Initial commissioning shall be performed to best suit the current time-of-year and cloud cover conditions.
- 2. Seasonal commissioning pertains to testing under full sunlight and full overcast conditions during summer and winter solstice, as well as similar conditions at the spring or fall equinox.
- 3. Initial commissioning shall be done as soon as contract work is completed regardless of season.
- 4. Subsequent commissioning shall be undertaken thereafter to ascertain adequate performance during the four seasons.

2.10 PARTICIPATION IN COMMISSIONING

- A. Provide skilled technicians to start up all systems within Division 26. These same technicians shall be made available to assist the Test Engineer and Commissioning Agent in completing the commissioning program as it relates to each system and their technical specialty. Work schedules, time required for testing, etc., will be requested and coordinated by the Test Engineer. Under Division 26, ensure that the qualified technician(s) are available and present during the agreed upon schedules and for sufficient duration to complete the necessary tests, adjustments, and problem resolutions at no additional cost to the Owner.
- B. System problems and discrepancies may require additional technician time, Test Engineer time, Commissioning Agent time, redesign, and reconstruction of systems and system components. The additional technician time shall be made available for the subsequent commissioning periods until the required system performance is obtained at no additional cost to the Owner.
- C. The Commissioning Agent reserves the right to judge the appropriateness and qualifications of the technicians relative to each item of equipment or system. Qualifications of technicians include expert knowledge relative to the specific equipment involved, adequate documentation and tools to service the commission the equipment, and a willingness to work with the Test Engineer and Commissioning Agent to get the job done. Technicians shall be removed from the project at the request of either the Test Engineer or Commissioning Agent.

2.11 RESOLUTION OF DEFICIENCIES

- A. In some systems, misadjustments, misapplied equipment, and deficient performance will result in additional work required to commission the systems. This work will be completed under the direction of the Architect, with input from the Contractor, equipment supplier, Test Engineer, and Commissioning Agent. Whereas all members will have input and the opportunity to discuss the work and resolve problems, the Architect will have final jurisdiction on the necessary work to be done to achieve performance.
- B. Corrective work shall be completed in a timely fashion to permit timely completion of the commissioning process. Experimentation to render system performance will be permitted. If the Commissioning Agent deems the experimentation work to be ineffective or untimely as it relates to the commissioning process, the Commissioning Agent will notify the Owner, indicating the nature of the problem, expected steps to be taken, and the deadline for completion of activities.
- C. If deadlines pass without resolution of the problem, the Owner reserves the right to obtain supplementary services, equipment, or both, to resolve the problem. Costs incurred to solve the problems in an expeditious manner will be the Contractor's responsibility.

2.12 TRAINING

- A. Participate in the training of Owner's engineering and maintenance staff, as required in Divisions 1 through 28, on each system and related components. Training, in part, will be conducted in a classroom setting, with system and component documentation, and suitable classroom training aids. All training classroom sessions and file demonstrations will be videotaped and copies of this material will be provided as part of closeout requirements.
- B. Training will be conducted jointly by the Test Engineer, Commissioning Agent, the Contractor, and the equipment suppliers. The Test Engineer will be responsible for highlighting system peculiarities specific to this project.
- C. Provide one video tape training session.

2.13 SYSTEMS DOCUMENTATION

- A. In addition to the requirements of Division 1, update contract documents to incorporate field changes and revisions to system designs to account for actual constructed configurations. Division 26 Record Drawings shall include architectural floor plans and the individual daylight control systems in relation to actual building layout. These Record Drawings shall also be provided in AutoCad .Dwg format for transmittal to the Test Engineer.

END OF SECTION

INTEGRATED AUDIO VIDEO SYSTEMS

PART 1 - GENERAL**1.1 RELATED DOCUMENTS**

- A. Drawing Basics: Drawings and general provisions of Contract, including Revised General Conditions, Special Conditions and other Division 01 Specification sections apply to this section.

1.2 SUMMARY

- A. Content: Various audio and video systems, equipment and installation includes, but is not limited to:
 - 1. Gym, Cafeteria, Music Room and Media video and sound systems
- B. Nomenclature: The systems shall be called the "sound system", "audio/visual system", "sound field system" and the installer the "AV system installer" or "AV contractor".
- C. Equipment:
 - 1. Audio Mixers, Equalizers, Amplifiers, Program Sources, and other audio processing equipment.
 - 2. Loudspeakers, custom coated enclosures and speaker mounting or support hardware including speaker mounting frames and incidental steel support members.
 - 3. Video Projectors and associated routing and switching equipment.
 - 4. Equipment Racks and portable cabinets.
 - 5. Control Equipment, remote power switching
 - 6. Cables, connectors, plates and wiring.
- D. Related Sections: Division 01 and applicable Sections under Division 26.

1.3 REFERENCES:

- A. Sound System Engineering (2nd Edition), Davis and Davis, Howard W Sams, 1987
- B. Audio system – Design and Installation, Giddings, Howard W Sams, 1990
- C. ANSI S4.48-1992
- D. EIA Standard RS-160
- E. EIA Standard RS-219
- F. EIA Standard RS-460

1.4 SUBMITTALS

- A. Comply with Section 01 33 00, unless otherwise indicated.
- B. Provide simultaneously thirty (30) days after issuance of Notice to Proceed.
- C. Complete schedule of submittals.
 - 1. Chronological schedule: of Work in bar chart form (using Microsoft Project or similar program). Revise and resubmit schedule as required to reflect construction progress.

INTEGRATED AUDIO VIDEO SYSTEMS

2. Product Data Sheets: Provide a list of products (with manufacturer's data sheets) on products to be incorporated within the Work. Arrange data sheets in specification order per system.
 - a. Submit (3) three bound originals of manufacturers' product technical data for each product in sufficient detail to facilitate proper evaluation of product suitability for incorporation in the Work.
 - b. Provide tab dividers for each group of data sheets, arrange each section in alphabetical order.
 3. Shop Drawings:
 - a. Shop drawings are to be prepared in the current version of AutoCAD and submitted 30 days after submittal sheets. Subsequent revisions and Project Record Drawings are also to be generated in the current version of AutoCAD. AutoCAD 2015 or later
 - b. Installation: Special details depicting methods and means specific to each product, assembly and each product manufacturers recommended installation methods and means.
 - c. Schematic: Detailed, redrawn wiring diagrams for each system, including cable types, identification and color codes, and detailed wiring of connections and terminal strips.
 - d. Floor Plans: Drawn to scale of not less than 1/8" = 1'-0". Show AV Systems devices including wall and ceiling mounted speakers, wall and floor panels/plates, junction boxes, and terminal strip locations.
 - e. Control: Detailed wiring diagrams including pin-outs and component lists Include color codes and cable types.
 - f. Equipment: Location of Equipment in racks, consoles, tables, or cabinets, with dimensions. Wire routing and cabling within housings, AC power and terminal strip locations.
 - g. Custom Enclosure and/or Millwork: Full fabrication details indicating size, material, finish, and openings for equipment.
 - h. Speaker Mounting Details: Retain services of registered professional structural engineer, licensed to practice in the state of Oregon to review and develop mounting details. Structural information to include design calculations and copy of engineer's certification stamp. Loudspeaker location, orientation, and support systems shall be shown.
 - i. Labeling: Include representative equipment and cabling labeling scheme.
 - j. Include any other pertinent information generated which is necessary to provide the Work.
 - k. Develop a test report form to be used during the Contractor's Testing Procedures described in Part 3. Submit this form for approval as part of submittal package 30 days after notice to proceed.
- D. Submit three bound original sets of the following Project Record Manual information after substantial completion and prior to final inspection.
1. On the cover of the bound original provide the project name, year and month of substantial completion, name of contractor, address of contractor, phone number for obtaining service in the event of failure and the official end date of the system warranty.

INTEGRATED AUDIO VIDEO SYSTEMS

2. Product Data: Product actually incorporated within the Work, including manufacturers' data sheet and owners manual for each product. Include a complete list of all equipment with serial numbers of all products.
 3. Record Drawings: Final rendition of drawings depicting the actual installed system.
 4. Test Reports, as described in the Test section and approved as part of the submittal documents.
 5. System Operation and Instructions: Prepare a complete and typical procedure for the operation of the equipment as a system, organized by subsystem or activity.
 6. Service and Maintenance Manual: Provide an original copy of the service manual on every piece of equipment for which the manufacturer offers such a manual. Include phone numbers and hours of operation for all manufacturers.
 7. Warranty Manual: Include manufacturers warranty statements, date of substantial completion and ending dates for warranties for each type of product, plus any other pertinent data required for future maintenance.
- E. Project/Site Conditions:
1. Verify All Conditions At Jobsite. Promptly report variations and obstructions to the AV Consultant. All additions or corrections are to be requested prior to fabrication.
 2. Field measurements shall be taken by the AV Contractor prior to preparation of shop drawings to ensure proper fitting of work. Allow for adjustments during installation whenever taking field measurements.

1.5 QUALITY ASSURANCE

- A. AV Contractor must be experienced in installation of systems with similar complexity as those required for this project. The AV Contractor must have at least five years experience with the equipment and systems specified, must install audio/visual systems as at least 80% of their overall business, and must be able to document relevant experience with projects of similar scope installed within the past five years.
- B. Installers Qualifications: Any AV Contractor who wishes to bid must submit qualification information to the Architect and AV Consultant at least (14) fourteen days prior to the bid date. Proposal must include:
1. Names of individuals holding in excess of 33-1/3% of stock in the firm, and individuals, partnerships, or corporations with which the firm is affiliated in co-ventureships or joint ventures.
 2. List of not less than 10 projects of similar size and scope completed within the past five years. AV Contractor shall indicate responsibilities (engineering, shop drawings, fabrication, etc.). Furnish recent contact name, address, and phone number for each project.
 3. List of current projects and approximate contract value and completion dates. Include list of names, phone numbers and addressed of owner, owners representatives, and architect. Include list of personnel who are actively involved in the current projects.
 4. Provide proof of bonding capacity for an amount equal to this project. Include list of other bonded projects coinciding with this project.
 5. Evidence of ability to undertake custom product engineering to meet the specific requirements of the project specifications. Provide sample project engineering drawings for custom products and contact information for facility operators where those products have been installed.

INTEGRATED AUDIO VIDEO SYSTEMS

6. Project Manager and Staff: the AV Contractor must provide the name, title, and resume of the project manager and assigned staff for the Project. The project manager shall not be changed without written consent of the Owner.
7. The AV Contractor must be a franchised dealer and authorized service center for the major products specified (or provide acceptable documentation as to how products will be acquired and serviced).

1.6 DELIVERY HANDLING AND STORAGE

- A. Delivery: Deliver products in original unopened packaging with legible manufacturer's identification.
- B. Storage and Protection: Comply with manufacturers recommendations. Store in a cool, dry place, out of direct sunlight, and protect from damage. Provide protective covering during installation to prevent damage from dust or other foreign materials. For products not currently installed provide secure locked storage both on site and at the AV Contractors own facility.

1.7 WARRANTY

- A. In addition to manufacturers' warranties, the AV Contractor shall warrant all equipment to be free of defects in materials and workmanship for not less than one year after date of Substantial Completion. Defects occurring in labor or materials within the warranty period shall be rectified by replacement or repair within 24 hours (if parts require longer periods to obtain, provide substitute equipment during the intervening period). Provide response to service calls and requests for information within 24 hours.
- B. AV Contractor to provide Owner with exact beginning and ending dates of the warranty period, include the name and phone of the contact person as well as the procedure for obtaining service.
- C. Preventive Maintenance: At six months after system acceptance, and 30 days prior to the end of the warranty, provide a complete checkout of system components. Repair or replace defective equipment, and correct any wiring or functional problems reported by the Owner.

PART 2 - PRODUCTS**2.1 ACCEPTABLE MANUFACTURERS**

- A. Refer to Division 01.
- B. Model numbers and manufacturers included in this specification are listed as a standard of quality. Other qualified manufacturer's products will be considered subject to submission and approval of complete technical data, samples and results of laboratory tests, in accordance with Division 01. Substitutions will only be accepted if, in the opinion of the AV Consultant, the product is an equal to the specified product. No substitutions may be made without written acceptance from the AV Consultant. All substitutions made prior to this acceptance are at the sole risk of the AV Contractor. Substitution requests need to be submitted no less that (14) fourteen days prior to the bid date.
- C. See Attachment "A" for the specific equipment list for each area. The equipment list and drawings are representative of the design and do not necessarily provide all equipment and detail for a fully functioning system. It is the responsibility of the AV Contractor to ensure the system is complete and functions according to the system descriptions and design intent.

INTEGRATED AUDIO VIDEO SYSTEMS

- D. For bids to be considered complete and qualified they must be bid per the documents and specifications. If proposed system includes equipment other than that specified, submit a list of major items and quantities, with a one-line schematic diagram for review and approval. Include a list of previously installed projects with similar equipment included. This list is to be submitted as an alternate to the actual bid document.

2.2 GENERAL

- A. Provide new equipment and materials which conform with applicable UL, SCA, or ANSI provisions.
- B. Regardless of the length or completeness of the product description in this specification, each device shall meet the published manufacturer's specifications. Verify performance as required.
- C. Cable and Wire: The highest quality, lowest signal degradation cable and wire shall be used for the project. Shown below are typical cable and wire types. AV Contractor shall submit wire and cable types for approval prior to wire pull.
 - 1. Microphone: (AM) Belden 9451
 - 2. Line Level Audio: (AL) Belden 9451
 - 3. Speaker Cable: (SL, SH, SZ) West Penn C210 (main speakers), West Penn 227 (monitor speakers), West Penn 225 (70.7 V Systems)
 - 4. Control: (CG, CR) Belden 9455 (9 conductor control cable) Low Voltage AC power sequencing, (CS, CI) Belden 9451 Serial control cable.
- D. Conduit: All cable and wire shall be run through EMT conduit. Separate conduits shall be used for video, line-level and microphone level audio, control, amplified audio to speakers, and network signals.
- E. AC Power Sequencing and Distribution: Each equipment rack shall have power sequencing to supply power to each component in a sequenced manner. A power-on switch shall be provided at each rack. All AV equipment shall be supplied with transformer isolated AC power.
- F. All equipment and components shall be new and complete. No used or reconditioned equipment shall be acceptable.
- G. All mounting hardware shall be included.
- H. All equipment and components shall be factory tested prior to shipping.
- I. All bolts and fasteners must be Grade 5 or better.
- J. All bolted attachments to have lock washers or other approved self-locking hardware.
- K. All microprocessor controls shall utilize a non-volatile memory. System configuration, operating parameters, presets, etc. shall be protected against system power failure for a minimum of 48 hours.
- L. All internal rack wiring shall be factory completed and clearly marked. All field connections shall be by connector, terminal strip or other device previously specified. Any terminal strip connections shall be clearly labeled as to terminal designation.
- M. All wire sizes and insulation to comply with UL standards and local codes.
- N. All wiring to be harnessed and bound. No loose or randomly routed wires shall be permitted.

INTEGRATED AUDIO VIDEO SYSTEMS

- O. No manufacturer logo shall appear on control station face plates or any other device located in public areas.
- P. Any supplementary or auxiliary equipment necessary for the operation of the system shall be supplied with overload and short-circuit protection.
- Q. Do not purchase or fabricate any materials, components or items to be used in the sound, video and communication systems prior to review of shop drawings, unless otherwise directed by AV Consultant.
- R. Use only materials, components and items that conform with industry practice and applicable code standards. Use only components which are new and never previously used. Take care during installation to prevent scratches, dents, chips, etc.
- S. Install all rack-mounted equipment with 10-32 button head machine screws with Phillips head.
- T. Custom rack panels shall be 3/16" thick aluminum, standard EIA sizes, brushed black anodized finish unless otherwise noted. (Brush in direction of aluminum grain only.) Custom connector plates (loudspeaker, microphone, video, etc.) are typically stainless steel. It is the responsibility of the Contractor to verify plate finish with the AV Consultant. Plastic plates will not be accepted.
- U. All engraving shall be 1/8" block unless noted otherwise. Except where noted to the contrary, on dark panels or pushbuttons, letters shall be white; on stainless steel or brushed natural aluminum plates, or light-colored pushbuttons, letters shall be black.
- V. Connections shall be made with approved connectors and/or terminal blocks equal to Cinch 140 series or as indicated. Mount trim potentiometers, custom circuit cards, relays and transformers (except large 70V units) in shielded enclosures, and mark their function and connections with engraved lamacoid labels.
- W. Per IEC-268 standard, all XLR connectors, within equipment or out, shall be wired pin 2 hot (high), pin 3 low, and pin 1 shield (screen).
- X. Unless otherwise stated, all rack-mounted electronic and electrical equipment and components shall conform to EIA 19" standard. Any devices not specifically designed to be rack mountable shall be adapted, by professionally acceptable methods, to meet the EIA standard.
- Y. The rack height of all equipment and components in this specification is in 1.75" (44mm) units denoted xU", i.e., a 5.25" device, which is three rack spaces high is denoted as "3U".
- Z. All components shall be factory tested prior to shipping.
- AA. All switches used in these systems (whether or not mentioned or shown in this specification) shall have sufficient voltage and amperage rating to cover the use for which they are required with a safety factor of at least 2. All switches handling audio circuits shall use gold contacts and shall meet JAN-S-23 or MIS-S-3950A specifications or equivalent. Used LED lighted switch to indicate on, off and preset conditions.
- BB. Audio transformers shall be of appropriate impedance ratio and power handling capacity for the function intended and, unless otherwise noted herein, shall have a frequency response within +/- 1 dB from 20-20,000 Hz.
- CC. All joints and connections shall be made with rosin-core solder or with mechanical connectors approved by the AV Consultant. Where spade lugs or other crimp-type terminals are used, crimp

INTEGRATED AUDIO VIDEO SYSTEMS

properly with ratchet type tool. Between racks, cabinets, consoles or modules, all cable shall terminate in approved terminal connectors, strips, blocks or boards.

- DD. Route unbroken microphone audio line and control wiring from receptacle plate/chassis to rack. Remove spliced cables and replace without additional charge to Owner.
- EE. No splices shall exist in any length of wire run except where noted on drawings.
- FF. Connect all loudspeakers electrically in phase, using the same wire color code for loudspeaker wiring throughout the project.
- GG. All wiring and connections shall be completely visible and labeled in rack. Termination resistors shall be 1/2 watt metal film 1 % tolerance; fully visible and not concealed within equipment or connectors.
- HH. All terminations of shielded cables shall consist of a PVC or neoprene heat shrink sleeve covering the shield drain wire and an overall PVC or neoprene heat shrink sleeve covering the point at which the cable jacket and shield end.
- II. Run vertical wiring inside rack in properly sized raceway with snap-on covers (Panduit type E series). Horizontal wiring in rack to be neatly tied in manageable bundles with cable lengths cut to minimize excess cable slack but still allow for service and testing. Provide horizontal support bars for cable bundle sag. Neatly bundle excess AC power cable from rack-mounted equipment with plastic cable ties. Rack wiring to be bundled with plastic cable ties or lacing twine. Electrical tape and adhesive-backed cable tie anchors are not acceptable.
- JJ. Audio Shielding /Grounding:
 - 1. All shielded cables shall have their shields isolated from both the conduit system and any other shielded cables. Shields shall be continuous from source to input points. Shields shall be connected at input points only, with shields lifted at the source, except as noted below.
 - 2. Microphone wiring shall have continuous shields from the microphone receptacle to microphone patch jack and if normalled to a console microphone input, continuous to that point.
 - 3. Tie-line patch points shall have continuous shield connection from one patch jack to another with no permanent connection to the audio ground network.
 - 4. Unbalanced wiring, such as used in certain communication systems, shall have audio shields connected at device inputs and floated at device outputs. Strap shield to "low" side of unbalanced input.
 - 5. No "doubling up" of ground points on multi-pin connectors or terminal blocks shall be allowed.
 - 6. Shielded audio cables that normal through patch panels shall utilize a normalling type jack which has an isolated switching "break" circuit. This shall be used for sleeve normalling.
- KK. AC Power and Grounding:
 - 1. Coordinate final connection of power and ground wiring to racks. Hard wire power wiring directly to power contactors or internal AC receptacles to ensure uninterrupted
 - 2. Install approved isolated-ground receptacles in wireway in each rack. Provide a minimum of two spare outlets in each rack. Label each outlet as to which AC circuit is feeding it and provide the same information in the circuit breaker panel.

INTEGRATED AUDIO VIDEO SYSTEMS

3. Install a copper ground buss bar top to bottom in each rack, insulated from the rack. Ground equipment chassis not having a three-wire power cord to these busses. Connect green ground wire from each AC outlet in rack to this bus bar.
4. AC power for the AV Systems is distributed at 120VAC, 60Hz, on the same electrical phase, building wide.
5. Isolated-Ground (Audio Ground) Distribution:
 - a. The sound system "isolated ground", including ground source, ground conductors, and ground distribution points shall be installed by the Electrical Contractor. The isolation and ground continuity of this network, although the responsibility of the Electrical Contractor, shall be reconfirmed by the AV Contractor prior to installation of equipment.
 - b. Except at the ground source, the audio ground shall be totally isolated from all other electrical grounds. Therefore, if the connection between the audio ground network and the ground source is disconnected, no continuity between the audio ground and the building electrical ground shall exist.
 - c. All equipment racks containing active electronics shall be connected to the audio ground, except as otherwise noted in this specification. Caution must be exercised so that these racks are not permanently, or in any way during operation, capable of being accidentally connected to the building safety ground.
 - d. All conduits and back boxes containing AVC Systems wiring shall be permanently connected to the building electrical safety ground.
 - e. Note: RF video devices, being unbalanced in nature, shall not be connected to the sound system audio ground network. Care shall be taken when intermixing such video and audio equipment.

LL. Electrical Safety:

1. No voltage in excess of 25V RMS AC or 24V ripple free DC shall be exposed to touch in normal use or in any equipment by the withdrawal of modules or of any plug or connector or without the removal of suitably indelibly labeled covers.
2. Unless specifically excepted, all live electrical parts above 50V RMS AC or 60V ripple free DC, including terminals, shall remain completely shrouded by insulation or grounded metal when the main access panels are removed. The separate shrouds or covers shall require a tool to remove them to prevent inadvertent contact with live parts.
3. In addition, where enclosures or items of equipment containing predominantly control, computer, or similar low voltage signals also contain voltages in excess of 50V RMS AC or 60V ripple free DC, clear standard warning notices indicating the maximum voltage present shall be provided on all removable access panels. Similar warning notices shall be provided where voltages exceeding 120V are present in any enclosure or item of equipment and such a voltage would not reasonably be expected to be present.
4. Within enclosures, racks and panels identify with prominent, standard, and indelible signage which circuit breakers or disconnects are to be switched off in order to isolate the equipment totally. Warning notices shall also be provided on all equipment which contains live terminals after operation of its circuit breaker or disconnect. These terminals must be completely shrouded to prevent inadvertent contact.
5. All equipment, control stations, equipment racks, enclosures, and all metal cases, raceways, and conduit shall be efficiently grounded. Special hand held or portable equipment which is not double insulated shall have duplicated grounding connections. All grounding shall be in accordance with the current edition of the National Electrical Code and as identified within this specification.

INTEGRATED AUDIO VIDEO SYSTEMS

MM. Noise From Equipment

1. The residual noise and hum output of the systems shall be such that PNC-15 or below can be measured at the center of main floor, and the character of the remaining noise must be random, with no audible discrete frequency components.
2. Where a control panel or rack is to be used or located in an operational area, such as on the fly chamber, gallery, or control room, there shall be no acoustic noise associated with the panel. No internal cooling fans or similar moving or magnetic equipment shall be permitted unless approved by the AV Consultant in writing.
3. Operation of switches, pushbuttons, relays, solenoids, and similar shall not be audible to members of the audience.

2.3 GYM AND AUDITORIUM SOUND AND VIDEO SYSTEMS

A. System Description:

1. The gym and auditorium shall be provided with a sound system capable of picking up sound in the front area via microphones plugged in at the wall box and reinforcing it into the cafeteria. A fixed mix location shall be provided at the rear of the room.
2. An audio mixer shall be provided for production events. Monitor speakers shall also be provided on a single monitor channel.
3. An AV closet adjacent to the areas will store the AV equipment.
4. A switch for the screen will be located in the AV closet.
5. The mixer, CD player/iPod connection, wireless microphone receivers, monitor equalizer and a drawer for microphones shall be mounted in a portable rolling equipment rack capable of being connected and operated from the mix location or the AV closet.
6. Sound coverage shall be provided to the entire room area by two speakers mounted above the stage. The speakers shall be arrayed in such a manner as to provide seamless coverage of the intended areas. The speakers shall provide uniform sound levels of up to 98 dB (+/- 3 dB). Frequency response at every seat shall be +/- 1 dB from 50 Hz to 17 KHz. %ALCONS shall be 8% or less.
7. A fixed equipment rack shall house the amplifier and speaker processor.
8. A video projector shall project onto a large screen at the front of the room. The projector shall be front projection and the screen shall provide a suitable projection surface.
9. Video inputs for laptop and auxiliary video shall be located in the wall panels at the front and mix location, which will route to the AV closet.

2.4 LOUDSPEAKER ARRAYS – GENERAL REQUIREMENTS

- A. Design and provide all required mounting brackets, hardware and components, safety systems and rigging systems using a minimum safety factor of 7:1.
- B. Provide all integral redundancy components, such as safety cables, as required to meet these criteria.
- C. Coordinate cluster weights and hang locations with Structural Engineer to ensure sufficient structural support.

INTEGRATED AUDIO VIDEO SYSTEMS

2.5 EQUIPMENT RACKS AND ENCLOSURES

- A. EIA 19" standard racks providing up to 44 rack units or as directed on the associated drawings of panel space (overall height: 83"), 24.25" of width, and 22" of depth, minimum. This rack is supplied with rear door and adjustable front and rear mounting rails.
- B. Provide interior switched incandescent work lamp for each rack.
- C. Provide matching blank panels in all spare rack spaces. See "blank panels" section.
- D. Provide matching 1 U ventilation panels above and below all power amplifiers, and additional vent panels as shown in rack elevation drawings.
- E. Provide one (1) rack mount AC power receptacle strip for each rack group, with a minimum of one (1) 120V 20A duplex receptacle (NEMA 5-20R) for each individual rack (e.g., a group of three (3) racks requires a total of three (3) duplex receptacles). Receptacle strip shall mount to the front of one rack and be connected to an unswitched AC power circuit.
- F. Provide heavy copper busbar in each rack for connection of isolated ground circuits. Bond busbars together with 3/0 AWG welding cable in a "star" configuration. Refer to AC power grounding detail on EE drawings for further information.
- G. All racks shall have the same color finish (Textured Black).
- H. All metal cabinets connected to the sound system audio ground shall be effectively isolated from any conduit or other metallic component that is connected to the building electrical safety ground.

2.6 AV RECEPTACLE PANELS AND NEMA WALL BOXES

- A. Custom Fabrication: Single or multiple signal level and circuit receptacle panels shall be provided for connection of auditorium devices at designated locations in the facility. Panels may include any combination of circuits and connectors for these signal levels: microphone level, line level, video level, intercom level, and low volt/impedance loudspeaker level. Connectors shall be identified as to signal level, circuit type, and circuit number by clearly engraved and coordinated legends on each panel. Exceptions as noted. Refer to device plans for locations.
- B. Refer to Systems Panel & Device Schedule (Electrical Drawings) for back box type, size, and depth, and mounting information.
- C. Conduit and AV system back boxes shall be supplied and installed by others.
- D. AV system panel covers shall be provided and installed by the AV Contractor, except as noted.
- E. Wire shall be supplied, pulled, and terminated by the AV Contractor
- F. Connector: Panel or chassis types, as indicated below. Mount on AV system panel as shown on drawings and fasten with stainless steel machine screws, hex nuts, and lock washers (screw head style, color, and thread size to match connector body; slot or Phillips drive to match wall plate screws). Refer to connector specification paragraph below. Exceptions as noted.
 - Microphone level ("AM" series): Female XLR-3.
 - Line level ("AL" series): Male & female XLR-3 pairs.
 - Low volt/impedance loudspeaker ("SL, SH" series): NeutrikNL4 series.

INTEGRATED AUDIO VIDEO SYSTEMS

- G. Engraved Legend: Details as indicated below. Locate legends on AV system panel as shown on drawings. Characters shall be engraved, filled with colored enamel, and entire panel sealed. Exceptions as noted.
- H. Legends shown on drawings are typical. Refer to AV systems block diagrams and/or submit proposed layout to AV Consultant for review.
- I. Signal level title legend size shall be 0.1875" or 0.250" high characters of medium weight (as required).
- J. Termination:
1. XLR-type Connectors: Solder wire directly to connector in the field.
 2. Neutrik NL4 Series Connectors: Attach properly sized crimp-type female disconnect terminals to large gauge loudspeaker wire and mate with male disconnect terminals on the Neutrik connectors. Securely strain relief loudspeaker wires to connector body or wall plate to ensure integrity of the electrical/mechanical disconnect termination.
- K. Wall Receptacle Plates (Sizes As Shown On Drawings And Schedules):
1. All plates shall be flush type for mounting to recess back boxes or surface mount Wiremold-type boxes.
 2. Wall Plate: Standard, x-gang (size "x" to match detail drawings), type 302 stainless steel (heavy gauge), bright brushed or satin finish, flush-type electrical wall plate. Mount to back box with 6-32 stainless steel, slot or Phillips drive, oval head machine screws.
 3. Plates in public areas to have finish by Architect.
 4. AV Panels (Sizes As Shown On Drawings And Schedules): Fabricated of type 5052-H32 aluminum, 0.125" minimum thickness, lightly brushed (vertical direction), with black anodized and clear sealed finish. Panel dimensions to match back box size. Edges of panel shall be ground square and flat. Corners of panel to have small radius. Exceptions as noted below.
 5. Back Box: Provided by others, Hoffman type with a minimum depth of 6". Color: Black. Exceptions as noted below. Coordinate with Electrical Contractor.
- L. Audio Connectors
1. XLR-3 (Microphone, Line; Communication): Neutrik NC3MD-L-I (male) and NC3FD-L-I (female) panel mount connectors; Neutrik NC3MX (male) and NC3FX (female) cable connectors. Silver contacts and nickel shells throughout. Balanced mic/line: pin 1 shield, pin 2 hot, pin 3 low. Unbalanced mic/line: pin 1 shield, pin 2 hot, pin 3 tie to pin 1. Production Intercom: pin 1 shield, pin 2: +30VDC, pin 3 audio/signal.
 2. In no case shall pin 1 be tied to case of connector.
 3. XLR-4 (Production Intercom Headset/Handset): Neutrik NC4MC (male) and NC4FC (female) cable connectors. Silver contacts and nickel shells throughout.
 4. NL4 Type (Loudspeaker): Neutrik Speakon NL4MP panel mount connector; NL4MPR sealed loudspeaker cabinet chassis connector; and NL4FC cable connector.
 5. 1/4" Phone Plugs and Jacks: Plug: Neutrik NP2C 2-pole and NP3C 3-pole cable plugs. Nickel contacts and nickel shells. Jack: Neutrik NJ3FC6C latching 2- or 3-pole cable jack. Silver contacts and nickel shells. 3-pole: Sleeve = ground/shield, ring = low, tip = high (hot). 2-pole: Sleeve = common/ground/shield, tip = high.
 6. 1/8" Mini Plug: 1/8" T/R/S "Walkman-type" stereo mini plug. Metal shell required, Phono (RCA) plugs and jacks. Plug: Neutrik ProFi NF2C/2 RCA plug (available in pairs of black

INTEGRATED AUDIO VIDEO SYSTEMS

and red). Gold plated nickel contacts and brass shell. Jack: Switchcraft 3503 RCA cable jack. Nickel plated brass contacts and shell.

PART 3 - EXECUTION**3.1 GENERAL**

- A. Coordinate work with other trades to avoid causing delays in construction schedule
- B. Mount equipment and enclosures plumb and square. Permanently installed equipment to be firmly and safely held in place, with equipment supports having safety factor of 7 for speaker mounts and 3 for all other equipment
- C. Cover edges of cable pass-through holes in chassis, racks, boxes, etc, with rubber grommets or Brady GRNY nylon grommet material.
- D. Speakers mounted in acoustical tile ceilings must be properly supported with tile bridges or similar structural bracing.
- E. System Wiring: Take precautions to prevent and guard against electromagnetic and electrostatic interference (hum and buzz). Check AC power and grounding prior to AV system installation, and report any issues promptly.
- F. Equipment and Cable Labeling: Provide engraved lamicoïd labels on front and rear of active equipment mounted in racks. Include name of device, reference to drawing name, and other areas the device feeds or controls. Label cables in a consistent manner, with permanent, heat-shrunk labels. Show all equipment designations in Permanent Record Drawings.

3.2 INITIAL TESTS AND ADJUSTMENTS

- A. Preliminary: Verify the following before beginning actual tests and adjustments on the system:
 - 1. All electronic devices are properly grounded.
 - 2. All powered devices have AC power from the proper circuit. Verify all dedicated AC power circuits are properly wired, phased, and grounded.
 - 3. Insulation and shrink tubing are present where required.
 - 4. Dust, debris, solder splatter, etc. is removed.
 - 5. All cable is dressed, routed, and labeled; all connections are properly made and consistent with regard to polarity.
- B. Grounding System Tests:
 - 1. Measure the DC resistance between the technical ground in any equipment rack or console and the main building ground. Resistance should be 0.15 ohms or less.
 - 2. Temporarily lift the technical ground from the main electrical ground, and measure the DC resistance between them. Resistance should be at least 1 Megohm.
 - 3. Verify the electrical contractor has connected the technical ground to building ground at only one location with 1/0 or larger wire.
 - 4. Measure the DC resistance between the signal ground at any interface plate and the conduit system.
 - 5. Identify and correct any problems if within the Audio system scope of work; notify the General Integrator if problem is in a related area of work.

INTEGRATED AUDIO VIDEO SYSTEMS

- C. Audio System Tests: Perform the following tests and adjustments, supplying all test equipment required. Follow EIA Standards RS160 and RS219 in performing tests. Make all corrections necessary to bring system(s) into compliance with the specifications. Design goals for the system have been calculated in accordance with accepted industry standards. Actual performance may deviate slightly due to component variations, field conditions or limitations, and building interaction. Design parameters are: system frequency response shall be +/- 3dB 50 Hz -16 kHz. Evenness of coverage shall be +/- 3dB maximum at 2 kHz throughout listening area. Nominal sound pressure level shall be 95 dBA SPL at any seat in the auditorium area with a maximum continuous SPL capability of 105 dBA.
1. Measure and record the impedance of each speaker line circuit terminating at the equipment rack, with speakers connected, employing frequencies of 125, 500, 1000 Hz, and 4000 Hz and others as appropriate to the driver (use all for full range systems).
 2. Adjust the gain of each active device to provide optimum signal-to-noise ratio and 18 to 20 dB headroom. Record input and output levels at each step in the signal chain.
 3. Measure and record overall system hum and noise level of each mic or line amplifier with controls set so that -50 dBU microphone input or +4 dBU line level input would drive the system to full amplifier output. Terminate inputs with appropriately sized shielded resistors (150 ohms typ) for this test.
 4. Measure and record electrical distortion of each input through amplifiers, switching, and power amplifier for each system installed; distortion should be less than 0.5% for the overall system in each test. Observe the output waveform on an oscilloscope for freedom from clipping, parasitics, oscillation, or RF components which could indicate unacceptable system operation.
 5. Measure and record system electrical frequency response for each input channel through power amplifier output. Deviation shall not exceed +1 dB within the range 30 to 18,000 Hz.
 6. Check system to assure freedom from oscillation or stray RF pickup. Check all inputs without signal and with 1000 Hz sinewave driving system to full output. Detect unwanted signals on oscilloscope at rack termination and over single loudspeakers connected at the farthest distance from the rack for each loudspeaker line.
 7. Measure and record the output impedance of each active device operating as a source to a passive device or network. Measure and record the input impedance of each active device used to terminate passive devices.
 8. Check polarity of all loudspeakers with an electronic polarity checker and by applying music program or pink noise signal to system while walking through the transition areas of coverage from one loudspeaker to the next. Transition should be smooth with no apparent shift in source from one speaker to the next.
 9. Apply sinewave sweep signal to each loudspeaker system, sweeping from 50 to 5000 Hz at a level 10 dB below full amplifier output, and listen for rattles or objectionable noise.
- D. Report: Upon completion of initial tests and adjustments, submit written report of tests to Owner along with all documents, diagrams, and record drawings required herein. Report shall include date of each test, pertinent conditions such as control settings, etc., test circuit, and test equipment employed. In addition, submit written notification that the installation has been completed in accordance with the requirements of the Contract Documents, and is ready for acceptance testing.

3.3 TEST EQUIPMENT

- A. Provide the following test equipment on site and available to the Owner during acceptance testing. Provide and use only new test tapes for this project.

INTEGRATED AUDIO VIDEO SYSTEMS

1. Tools including screwdrivers, pliers, cutters, wire strippers, nut drivers, crimpers, heat shrink blower, controlled temperature soldering unit, ladders, flashlight, measuring tape, electric drill, etc.
2. Sine Wave Generator. Output: +4 dBu, 5 Hz to 50,000 Hz with less than 0.05% THD into any load. Acceptable: Audio Precision, Hewlett Packard, Sound Technology, or Tektronix.
3. Pink Noise Source. Equal energy per octave bandwidth 20 - 20,000 Hz, +1 dB (long-term average) @ 0 dBu output. Stability: +2 dB per day. Acceptable: Ivie IE-20.
4. Impedance Meter. Capable of testing audio lines at three frequencies, minimum, between 250 Hz and 4000 Hz. Measurement Range: 1 ohm to 100,000 ohms. Acceptable: Sennheiser ZP-3.
5. Multimeter. Measurement range, DC to 20,000 Hz, 100 mV to 300 V, 10 ma to 10A. Acceptable: Fluke 77.
6. Real Time: 1/3 Octave Audio Spectrum Analyzer. Acceptable: Ivie IE-30A or equal.
7. Harmonic Distortion Analyzer: Acceptable: Audio Precision, Sound Technology, or Hewlett Packard.
8. Sound Level meter meeting ANSI SI.4 1971 Type 2. Acceptable: GenRad 1933 or B&K.
9. Dual-trace oscilloscope: 100 MHz bandwidth, 1 mV/cm sensitivity. Acceptable: Tektronix 2445.

B. Turn over Test digital data to Owner for maintenance upon completion of Acceptance Testing.

3.4 ACCEPTANCE

- A. Acceptance testing will include operation of each major system and any other components deemed necessary. AV Contractor will assist in this testing and provide the test equipment specified herein. AV Contractor shall provide at least one technician available for the entire adjustment and testing period (day and night), to assist in tests, adjustments, and final modifications. All tools and material required to make any necessary repairs, corrections, or adjustments shall be furnished by the AV Contractor.
- B. The Owner will physically inspect the system to ensure all equipment is installed in a neat and professional manner and as required by the contract documents. An inventory will be made of all equipment.
- C. The following procedures will be performed on the System:
 1. Adjust, balance, and align all equipment for optimum performance and to meet all manufacturers' published specifications. Settings to be reviewed include gain, delay times, and nominal settings. Establish and mark normal settings for all level controls, and record these settings in the System Reference Manual.
 2. Check all control functions for proper operation, from all controlling devices to all controlled devices.
 3. The audio fidelity test will consist of driving the speaker system with pink noise and measuring the response in each 1/3 octave band from 50 to 16,000 Hz. Equalization as specified shall be used to adjust the response as necessary to fit the requirements of the space.
 4. Any other test on any piece of equipment or system the Owner deems appropriate.
- D. In the event the need for further adjustment or work becomes evident during acceptance testing, the AV Contractor will continue his work until the system is acceptable at no addition to the contract price. If approval is delayed because of defective equipment, or failure of equipment or

INTEGRATED AUDIO VIDEO SYSTEMS

installation to meet the requirements of these specifications, the AV Contractor will pay for additional time and expenses of the AV Consultant at the AV Consultant's standard rate in effect at that time, during any extension of the acceptance testing period.

3.5 INSTRUCTION OF OWNER PERSONNEL

- A. Provide 8 hours of instruction to the Owner's designated personnel on the use and operation of each of the systems. The instructor must be fully knowledgeable of all system functions and all equipment features. The System Reference Manuals shall be complete and on-site at the time of instruction. The AV Contractor shall be present at the first two formal uses of the system.

INTEGRATED AUDIO VIDEO SYSTEMS

ATTACHMENT A: EQUIPMENT LIST

Note: this equipment list specifies major systems components and equipment, and may not detail all equipment required for a complete working system.

System	Sub-System	Manufacturer	Model Num.	QTY
Gym Audio				
		JBL		
	Main Speakers	Professional	AM5212/64	4
	Speaker protection cage	AV Armour	Custom	4
Amplifiers	Main Speaker Amplifiers	Crown Audio	Xti 1002	2
Console	16 Channel Mixer	Mackie	1202VLZ4	1
	Volume / Select Control	Biamp	Volume/Select 8	2
Processing	DSP	Biamp	Audia Flex	1
	Processor Input Card	Biamp	IP-2	4
	Processor Output Card	Biamp	OP-2E	2
Microphones	Wireless Mic/Receiver	Technica Audio	ATW-3141bD	2
	Wireless Microphone lavalier	Technica	ATW-3131b	1
	Handheld Microphone	Shure	SM-58LC	1
	Assistive Listening Transmitter	Listen Tech	LT-800-072	1
	Antenna	Listen Tech	LA-123	1
	Digital Receivers	Listen Tech	LR300-072	10
	Single Ear Phone	Listen Tech	LA-161	10
	Neck Loop for T-Coil Hearing Aid	Listen Tech	LA-166	3
	ADA Signage Kit	Listen Tech	LA-304	1
Racks	Amplifier Rack	Lowell	L267	1
	AV recessed wall rack (paintable)	Lowell	LWTR3	2
	AV wall RC backbox with door	FSR	WB-3G	2
	Power Strip Relay Ctrl	Lowell	RPC-1-20A-CD	4
	Power Sequencer	Lowell	SCS-4R	1
	Custom Panel			5
Custom Plate (Stage Floor)		FSR	FL500P	2
Cafeteria Audio				
		JBL		
Speakers	Main Speakers	Professional	AM5212/64	2
Amplifiers	Main Speaker Amplifiers	Crown Audio	Xti 1002	2
	Volume / Select Control	Biamp	Volume/Select 8	2
Processing (part of gym system)	DSP	Biamp Audio	Audia Flex	0
Microphones	Wireless Mic/Receiver	Technica	ATW-3141bD	2
	Handheld Microphone	Shure	SM-58LC	1
	Custom Panel WP2			1
Rigging				

INTEGRATED AUDIO VIDEO SYSTEMS

Cable

Media Audio

Speakers	JBL	Control 29AV	2
Amplifier/Mixer	Mackie Audio	PPM 608	1
Wireless Receiver	Technica Audio	ATW-2110	1
Wireless Microphone Element	Technica	AT892-cW	1
Handheld Microphone	Shure	SM-58LC	1
Custom Plate (wall)	FSR	WPB	2
Cabling			1

Gym + Cafeteria Video

Projector		6000 Lumen cafeteria, 8000 lumen gym	2
Projector Mount	Ceiling Mount	NEC Chief	2
Projector Mount	Ceiling Mount Adapter	Chief	2
Projector Mount	Extension Pole	Chief	2
Matrix Switcher		Extron	1
PC interface HDMI transmit		EXTRON	3
PC interface HDMI Receiver		EXTRON	2
Video Control		Extron	2
Custom Plate (Wall)		FSR	2
Cabling		WPB	2

INTEGRATED AUDIO VIDEO SYSTEMS

**ADD ALTERNATE: Media
Video**

LCD Panel		Sharp	70"	1
LCD backbox and mount		Chief		1
Projector		NEC	6000 Lumen	1
Projector CART		Chief		1
Sources	Bluray player	Sony	BDP	1
			DTP T UWP	
PC interface HDMI transmit		EXTRON	232 D	1
			DTP HDMI	
PC interface HDMI Receiver		EXTRON	230 D RX	2
Video Control		Extron	MLC 226IP	1
Custom Plate (wall)		FSR		1
Cabling				1
Misc				1

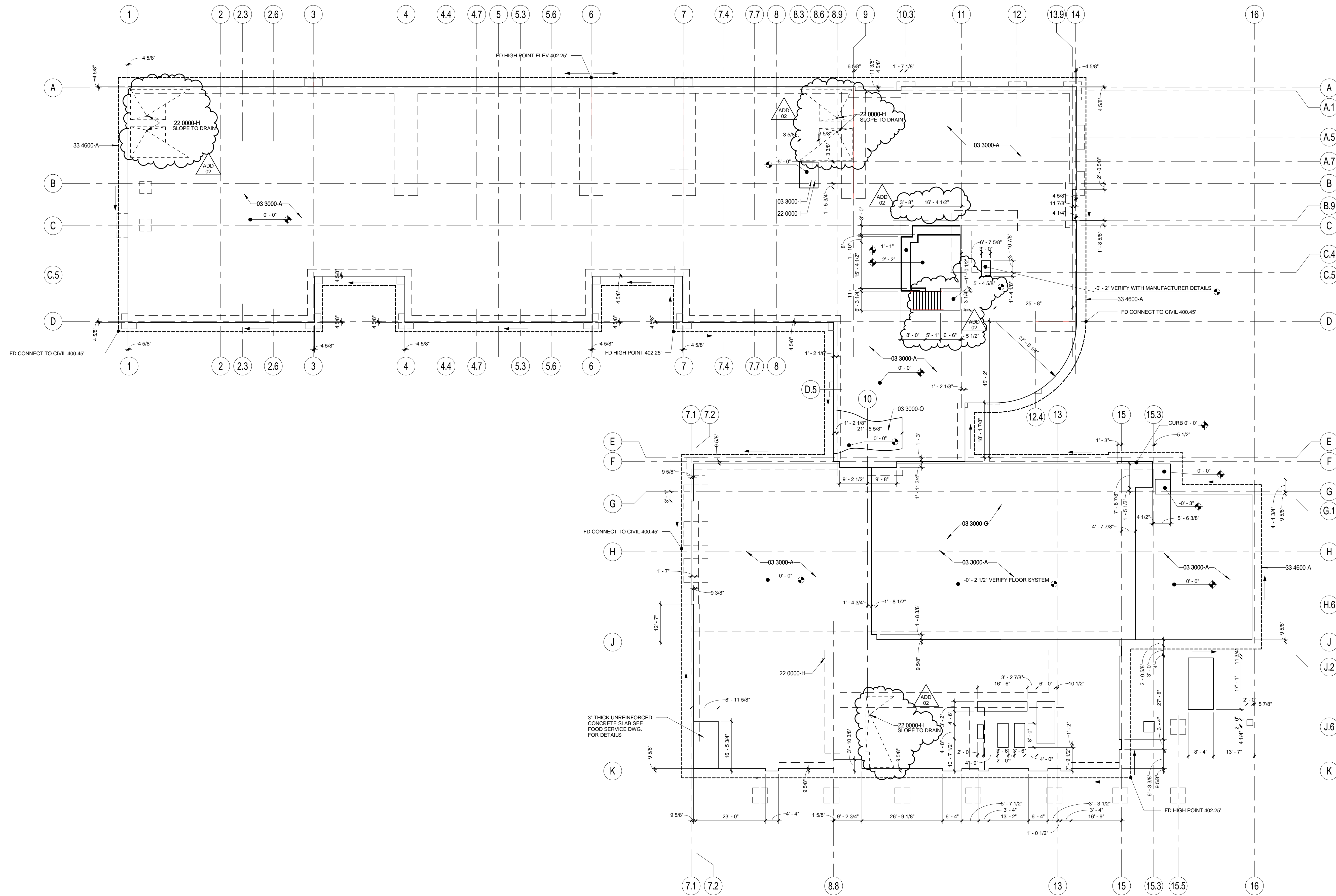
[END OF SECTION]

GENERAL NOTES - SLAB PLAN

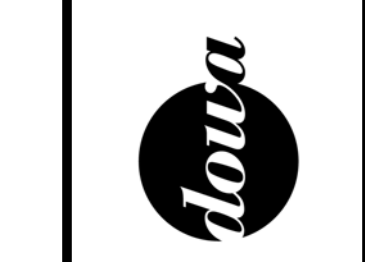
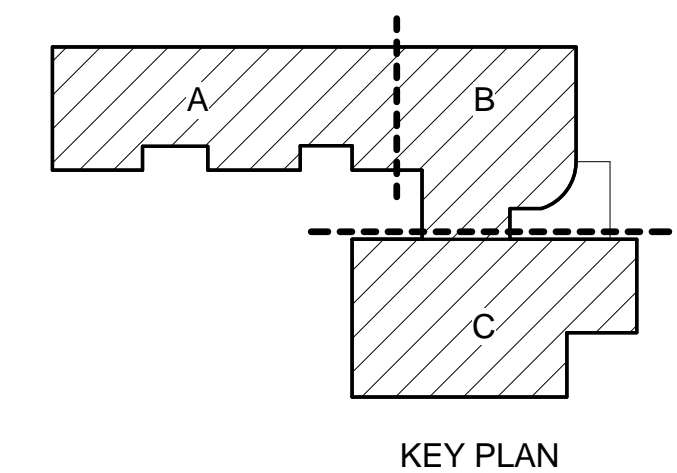
- A. REFERENCE FINISH PLANS FOR CONTROL JOINT LOCATIONS.
 - B. STRUCTURAL FOUNDATIONS SHOWN ONLY FOR COORDINATION.
 - C. CONCRETE HOUSEKEEPING PADS, 8" HIGH, ARE TO BE LOCATED AT THE FOLLOWING LOCATIONS. DIMENSIONS ARE TENTATIVE AND MAY NEED TO BE ADJUSTED IF BASIS OF DESIGN EQUIPMENT IS NOT USED - SEE MECHANICAL.
- BOILER PADS:
 EXPANSION TANK ET-1: 3' - 0" X 7' - 0"
 WATER HEATERS: 9' - 0" X 3' - 0"
 RAINWATER HARVESTING SKID: 22' - 0" X 4' - 3"
 PUMPS HCP-1 AND 2: 3' - 6" X 1' - 6"
 GENERATOR:
 CHILLER:

KEYNOTE LEGEND - SPECIFICATIONS

- 03 3000-A CONCRETE SLAB, SEE STRUCTURAL
- 03 3000-G DEPRESSED CONCRETE SLAB, SEE STRUCTURAL
- 03 3000-I CONCRETE ELEVATOR PIT
- 03 3000-O SPECIAL FINISH CONCRETE, SEE FINISH PLAN, ALIGN WITH EXTERIOR SIDEWALK JOINTS ON WEST SIDE.
- 22 0000-H FLOOR DRAIN, SEE PLUMBING
- 22 0000-I ELEVATOR CONCRETE SLUMP PIT AND GRATE, SEE PLUMBING. LOCATE DURING CONSTRUCTION
- 33 4600-A FOUNDATION DRAIN



1 OVERALL FIRST FLOOR SLAB PLAN
1/16" = 1'-0"



BID SET
 EUGENE SCHOOL DISTRICT 4J
 120 WEST HILLIARD AVENUE, EUGENE, OREGON 97404
 RIVER ROAD / EL CAMINO DEL RIO ELEMENTARY SCHOOL

SLAB PLAN - FIRST FLOOR

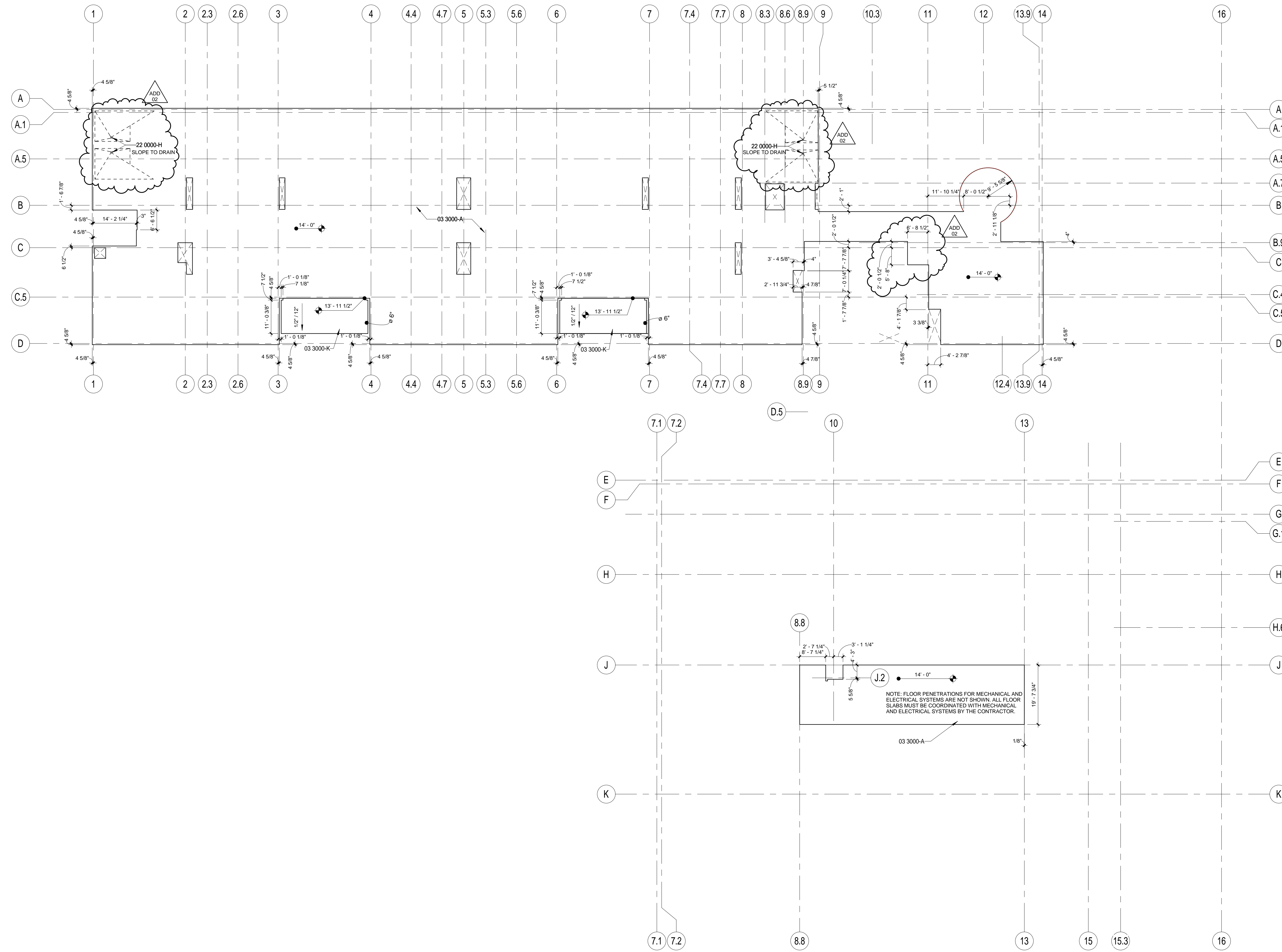
PROJECT #	1337.00	REVISIONS
ISSUE DATE	03/12/2016	
		ADD 02 - 03/05/16
A104		

GENERAL NOTES - SLAB PLAN

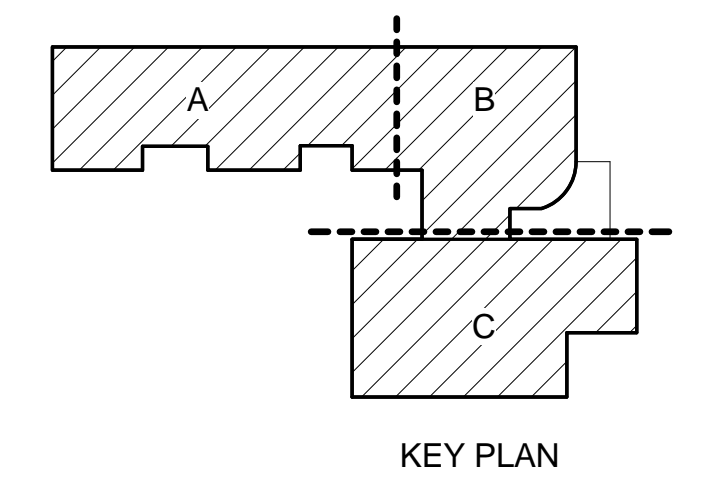
- A. REFERENCE FINISH PLANS FOR CONTROL JOINT LOCATIONS.
 - B. STRUCTURAL FOUNDATIONS SHOWN ONLY FOR COORDINATION.
 - C. CONCRETE HOUSEKEEPING PADS, 6" HIGH ARE TO BE LOCATED AT THE FOLLOWING LOCATIONS. DIMENSIONS ARE TENTATIVE AND MAY NEED TO BE ADJUSTED IF BASIS OF DESIGN EQUIPMENT IS NOT USED - SEE MECHANICAL.
- | | |
|----------------------------|--------------------|
| BOILER PADS: | 3' - 8" X 7' - 0" |
| EXPANSION TANK ET-1: | 3' - 0" X 3' - 0" |
| WATER HEATERS: | 9' - 0" X 3' - 6" |
| RAINWATER HARVESTING SKID: | 22' - 0" X 4' - 3" |
| PUMPS HCP-1 AND 2: | 3' - 6" X 1' - 6" |

KEYNOTE LEGEND - SPECIFICATIONS

- | | |
|-----------|----------------------------------|
| 03 3000-A | CONCRETE SLAB, SEE STRUCTURAL |
| 03 3000-K | CONCRETE BALCONY, SEE STRUCTURAL |
| 22 0000-H | FLOOR DRAIN, SEE PLUMBING |



1 OVERALL SECOND FLOOR SLAB PLAN
1/16" = 1'-0"



BID SET
EUGENE SCHOOL DISTRICT 4J
120 WEST HILLIARD AVENUE, EUGENE, OREGON 97404
RIVER ROAD / EL CAMINO DEL RIO ELEMENTARY SCHOOL

SLAB PLAN - SECOND FLOOR

PROJECT #	1337.00	REVISIONS	
ISSUE DATE	03/12/2016	ADD 02 -	03/05/16
			A105

GENERAL NOTES - FLOOR PLANS

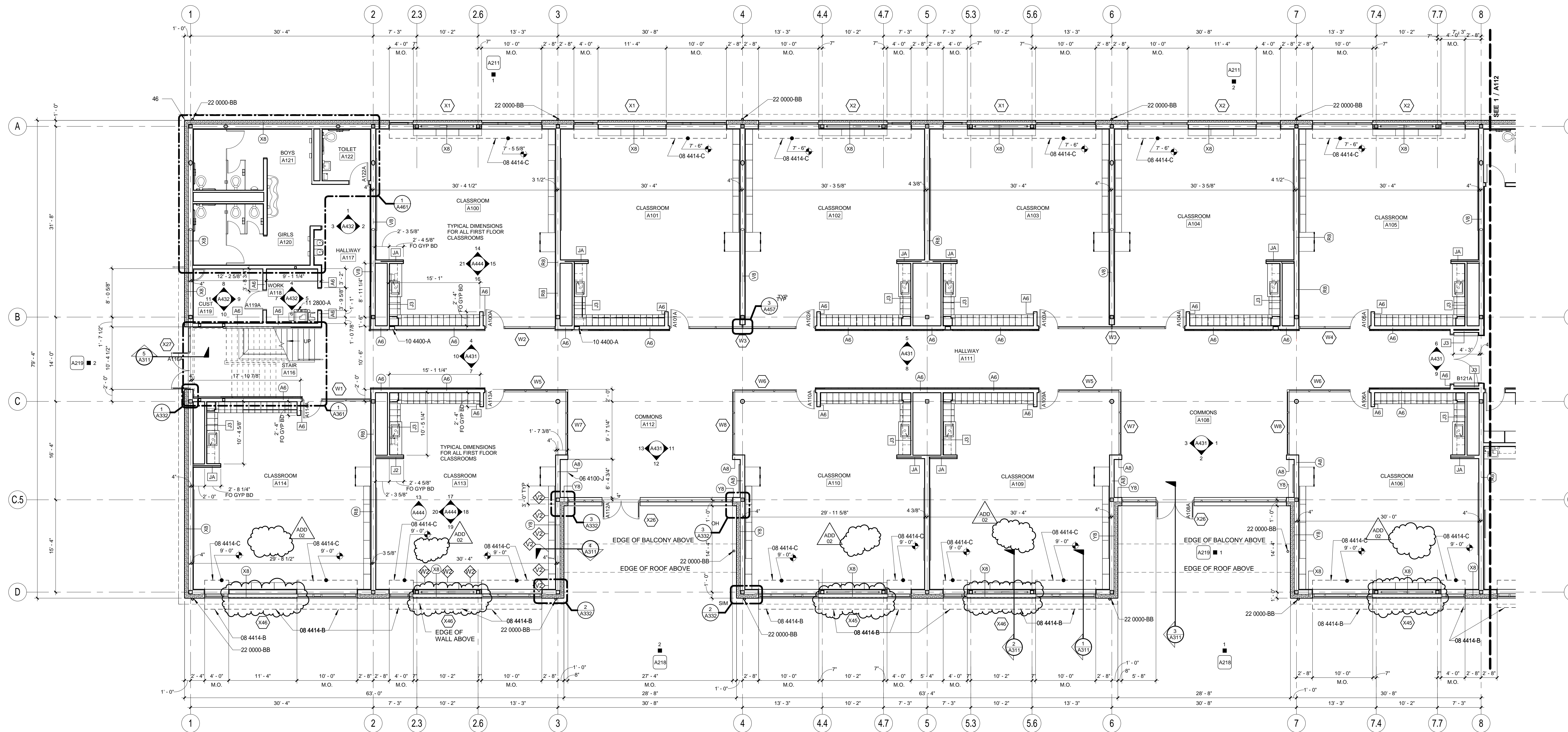
- A. DIMENSIONS ARE TO THE FACE OF STUD OR MASONRY UNLESS OTHERWISE NOTED.
- B. MASONRY DIMENSIONS ARE ACTUAL UNLESS OTHERWISE NOTED.
- C. REFER TO SHEET A100 SERIES FOR ENLARGED PLAN INFORMATION.
- D. REFER TO SHEET A200 SERIES FOR EXTERIOR ELEVATIONS.
- E. REFER TO SHEET A135 - A138 FOR WALL ASSEMBLY INFORMATION.
- F. REFER TO A500 SERIES FOR DOOR SCHEDULE AND WINDOW INFORMATION.
- G. REFER TO A400 SERIES FOR CASEWORK, MILLWORK AND INTERIOR ELEVATIONS.

KEYNOTE LEGEND - SPECIFICATIONS

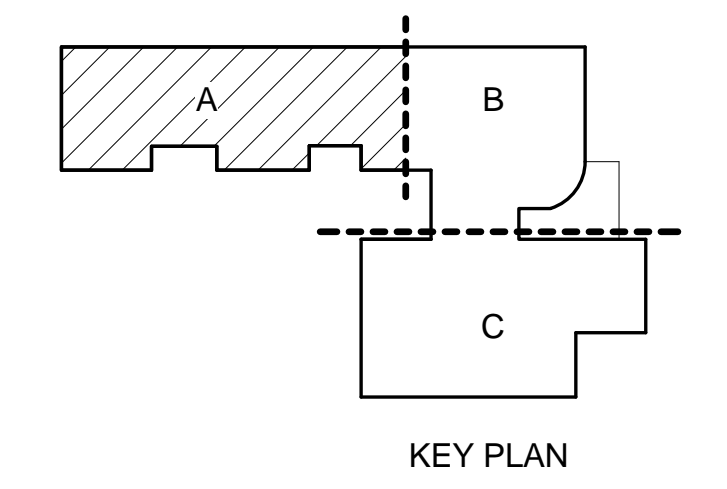
- 08 4100-J DISPLAY CASE, SEE INTERIOR ELEVATIONS UNLESS OTHERWISE NOTED.
- 08 4414-B ALUMINUM EXTERIOR SUNSHADES
- 08 4414-C ALUMINUM INTERIOR LIGHT SHELVES
- 10 4400-A FIRE EXTINGUISHER CABINET, SEMI-RECESSED
- 11 2800-A COPIER, OF01
- 22 0000-BB 4" STAINLESS STEEL PIPE DOWNSPOUT, SEE PLUMBING FOR CONNECTION, PAINT HPC-3 WHERE EXPOSED

KEYNOTE LEGEND

- 46 START OF METAL PANEL PATTERN REFER TO SEE A175



1 SECTOR A PLAN - FIRST FLOOR
1/8" = 1'-0"



GENERAL NOTES - FLOOR PLANS

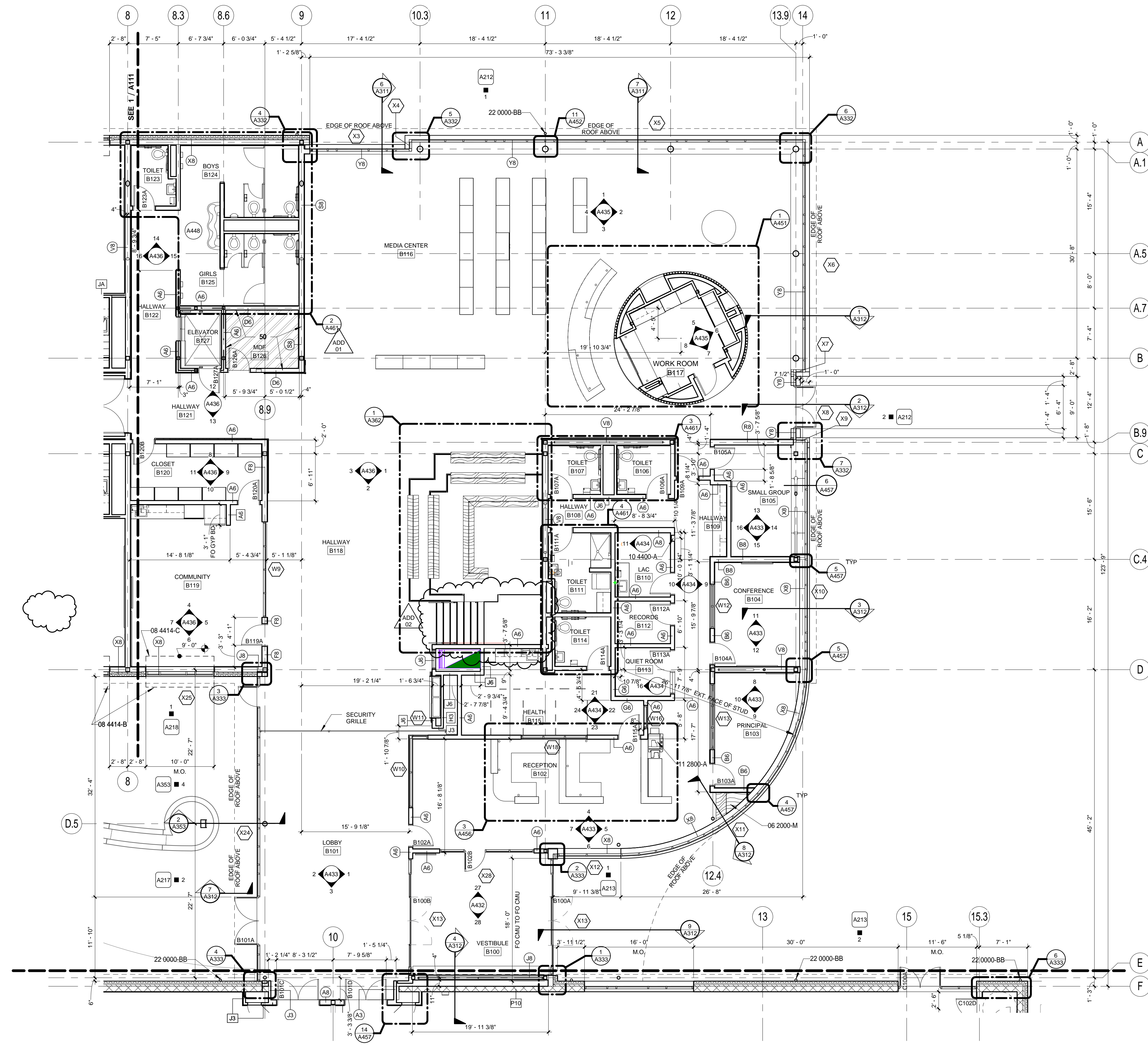
- A. DIMENSIONS ARE TO THE FACE OF STUD OR MASONRY UNLESS OTHERWISE NOTED.
- B. MASONRY DIMENSIONS ARE ACTUAL UNLESS OTHERWISE NOTED.
- C. REFER TO SHEET A100 SERIES FOR ENLARGED PLAN INFORMATION.
- D. REFER TO A200 SERIES FOR EXTERIOR ELEVATIONS.
- E. REFER TO SHEET A135 - A138 FOR WALL ASSEMBLY INFORMATION.
- F. REFER TO A300 SERIES FOR DOOR SCHEDULE AND WINDOW INFORMATION.
- G. REFER TO A400 SERIES FOR CASEWORK, MILLWORK AND INTERIOR ELEVATIONS.

KEYNOTE LEGEND - SPECIFICATIONS

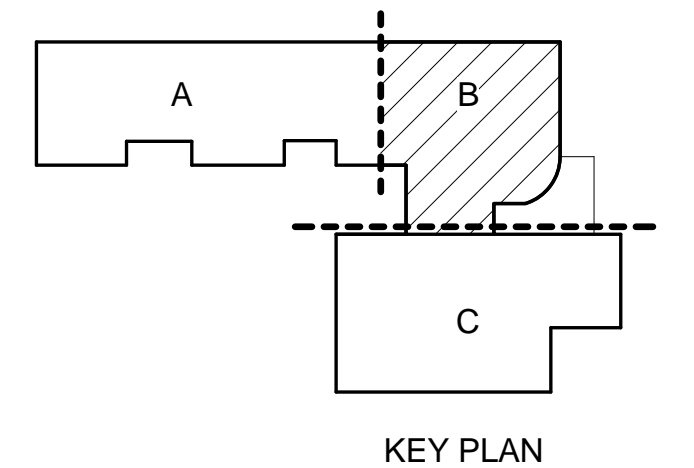
- 06 2000-M BENCH, SEE INTERIOR DETAIL SHEET
- 08 4414-B ALUMINUM EXTERIOR SUNSHADES
- 08 4414-C ALUMINUM INTERIOR LIGHT SHELVES
- 10 4400-A FIRE EXTINGUISHER CABINET, SEMI-RECESSED
- 11 2800-A COPPER, OF 01
- 22 0000-BB 4" STAINLESS STEEL PIPE DOWNSPOUT, SEE PLUMBING FOR CONNECTION, PAINT HPC-3 WHERE EXPOSED

KEYNOTE LEGEND

- 47 SEE SHEET A423 FOR GYM STRIPING, VOLLEY BALL AND FOUR SQUARE COURTS NOT SHOWN FOR DRAWING CLARITY.
- 50 APPLY 1/2" PLYWOOD LIEU OF GYP BD ON NORTH, EAST AND SOUTH WALLS IN ROOM. APPLY 1/2" PLYWOOD OVER GYP ON WEST (ELEVATOR) WALL



1 SECTOR B PLAN - FIRST FLOOR
1/8" = 1'-0"

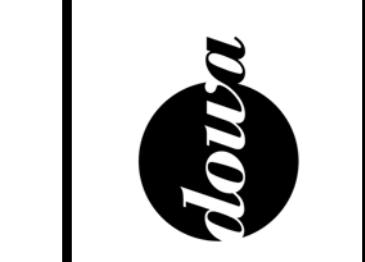
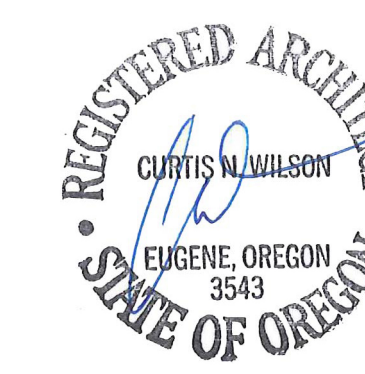


GENERAL NOTES - FLOOR PLANS

- A. DIMENSIONS ARE TO THE FACE OF STUD OR MASONRY UNLESS OTHERWISE NOTED.
- B. MASONRY DIMENSIONS ARE ACTUAL UNLESS OTHERWISE NOTED.
- C. REFER TO SHEET A100 SERIES FOR ENLARGED PLAN INFORMATION.
- D. REFER TO A200 SERIES FOR EXTERIOR ELEVATIONS.
- E. REFER TO SHEET A135 - A138 FOR WALL ASSEMBLY INFORMATION.
- F. REFER TO A500 SERIES FOR DOOR SCHEDULE AND WINDOW INFORMATION.
- G. REFER TO A400 SERIES FOR CASEWORK, MILLWORK AND INTERIOR ELEVATIONS.

KEYNOTE LEGEND - SPECIFICATIONS

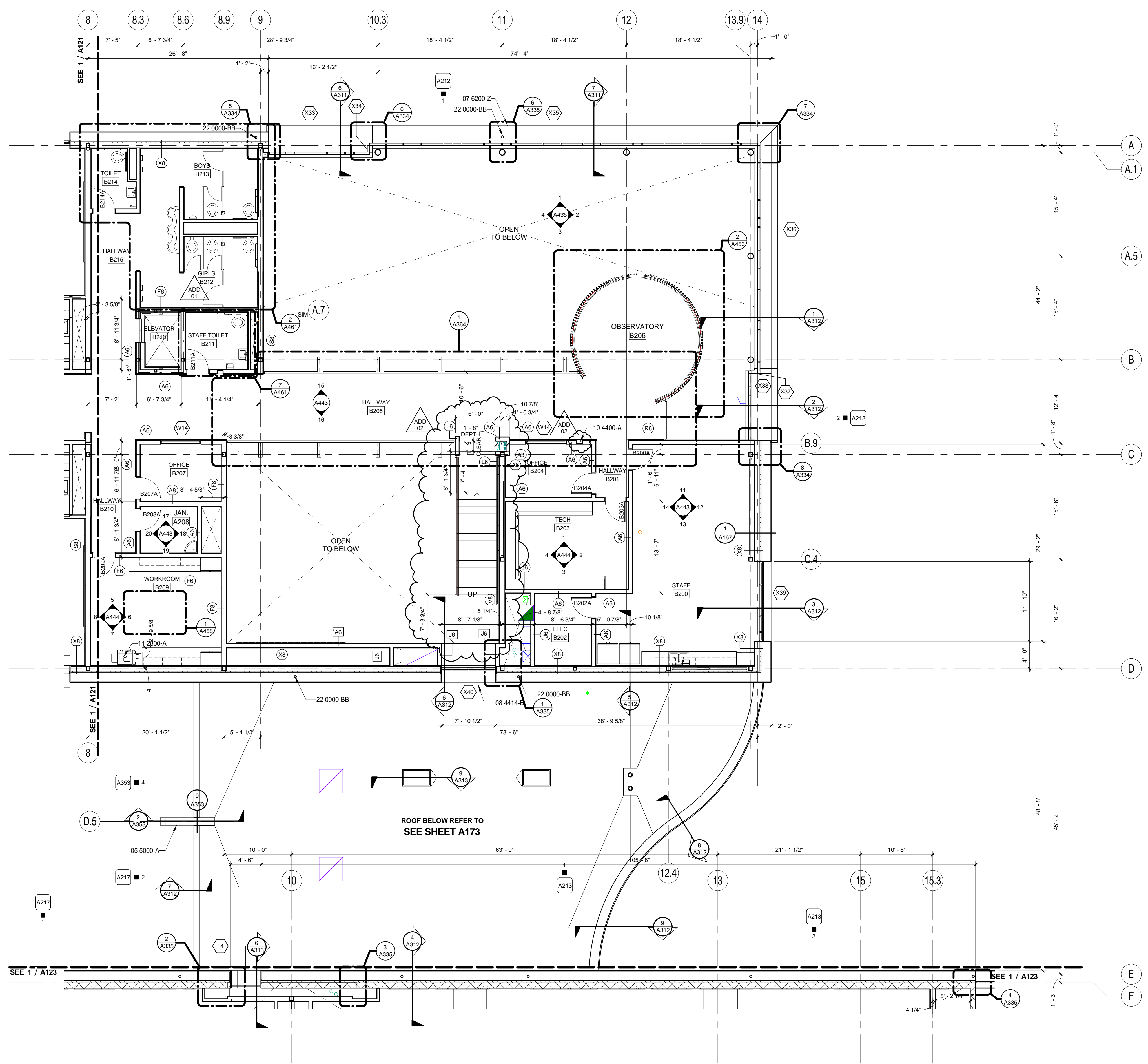
- | | |
|------------|---|
| 05 5000-A | STEEL RAIN WATER RUNNEL, HPC |
| 07 6200-Z | 1 GA WINDOW SURROUND HPC ALL SIDES |
| 08 4414-B | ALUMINUM EXTERIOR SUNSHADES |
| 10 4400-A | FIRE EXTINGUISHER CABINET, SEMI-RECESSED |
| 11 2800-A | COPPER, OF01 |
| 22 0000-BB | 4" STAINLESS STEEL PIPE DOWNSPOUT, SEE PLUMBING FOR CONNECTION, PAINT HPC-3 WHERE EXPOSED |



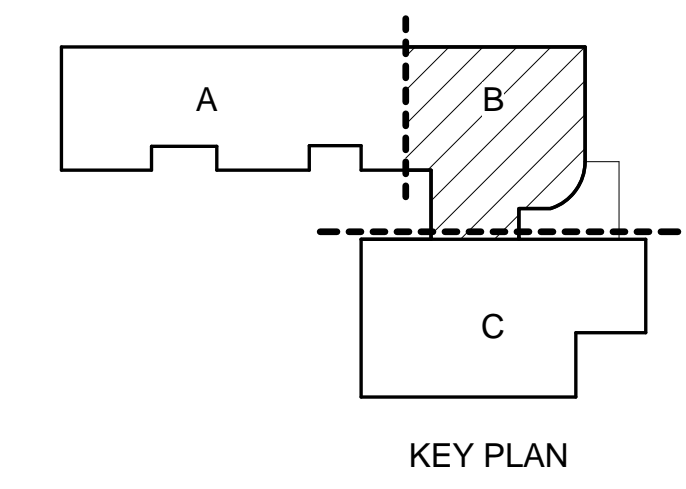
BID SET
 EUGENE SCHOOL DISTRICT 4J
 120 WEST HILLIARD AVENUE, EUGENE, OREGON 97404
 RIVER ROAD / EL CAMINO DEL RIO ELEMENTARY SCHOOL

SECTOR B PLAN - SECOND FLOOR

PROJECT #	1337.00	REVISIONS	
ISSUE DATE	03/12/2016		
ADD 02 -	03/08/16		
A122			



1 SECTOR B PLAN - SECOND FLOOR
 1/8" = 1'-0"



GENERAL NOTES - RCP

- A. SEE ELECTRICAL AND MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- B. SLOPED SURFACES WILL APPEAR LESS THAN TRUE LENGTH. SEE SECTIONS AND DETAILS FOR ACTUAL DIMENSIONS.
- C. ALL CEILING HEIGHTS ARE FORM FINISHED FLOOR UNLESS NOTED OTHERWISE.
- D. ALL DIMENSIONS FROM FACE OF STUD OR MASONRY WALL UNLESS NOTED OTHERWISE.
- E. ALL OPEN TO STRUCTURE CEILINGS TO BE PAINTED P-1, U.O.
- F. IN CASES OF OPEN TO STRUCTURE CEILINGS WITH SUSPENDED CEILING CLOUDS, PAINT TO EXTEND ABOVE ENTIRE AREAS OF CEILING CLOUDS.
- G. SOME ELEMENTS NOT SHOWN IN OVERALL PLANS. SEE ENLARGED PLANS FOR COORDINATION OF CEILING ELEMENTS.

KEYNOTE LEGEND - SPECIFICATIONS

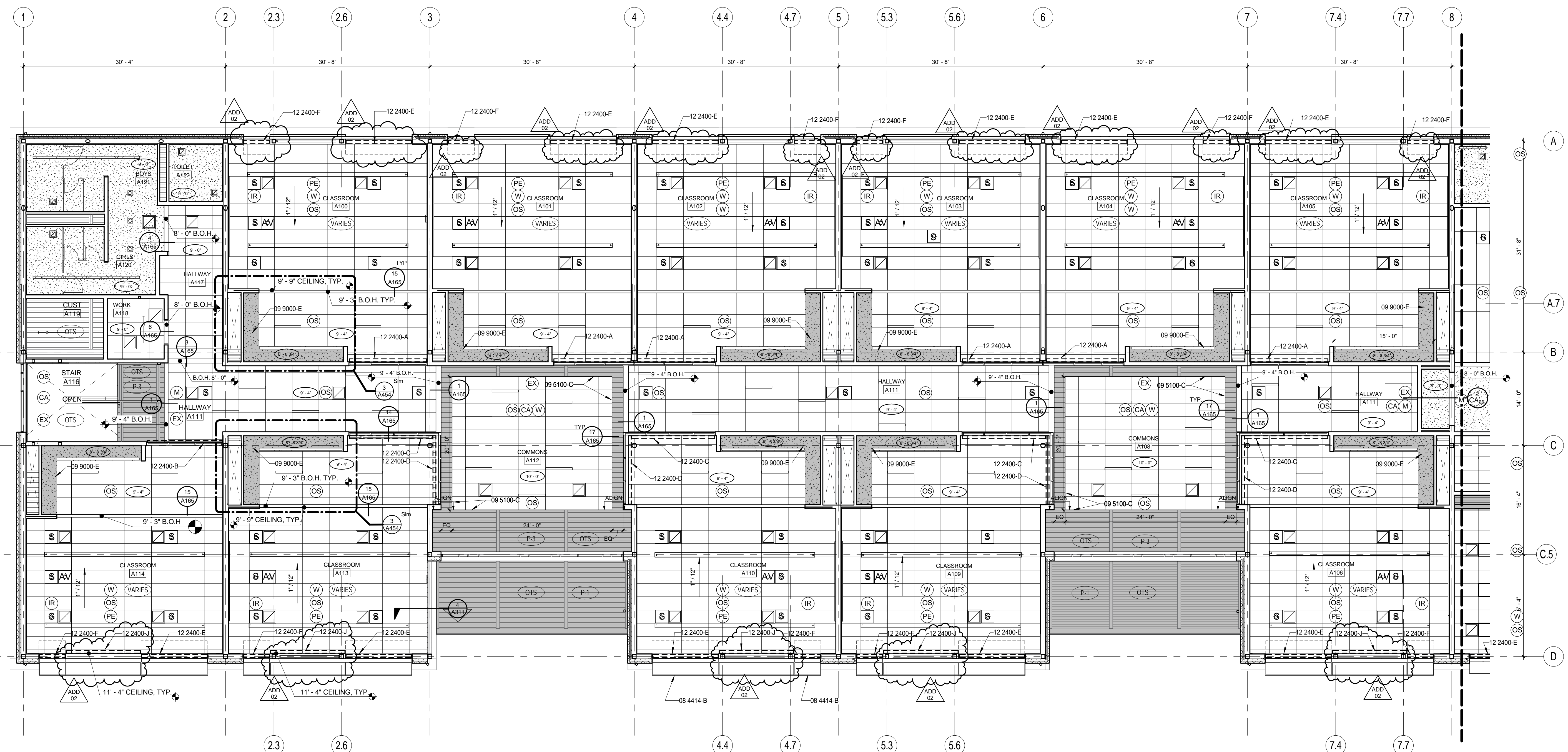
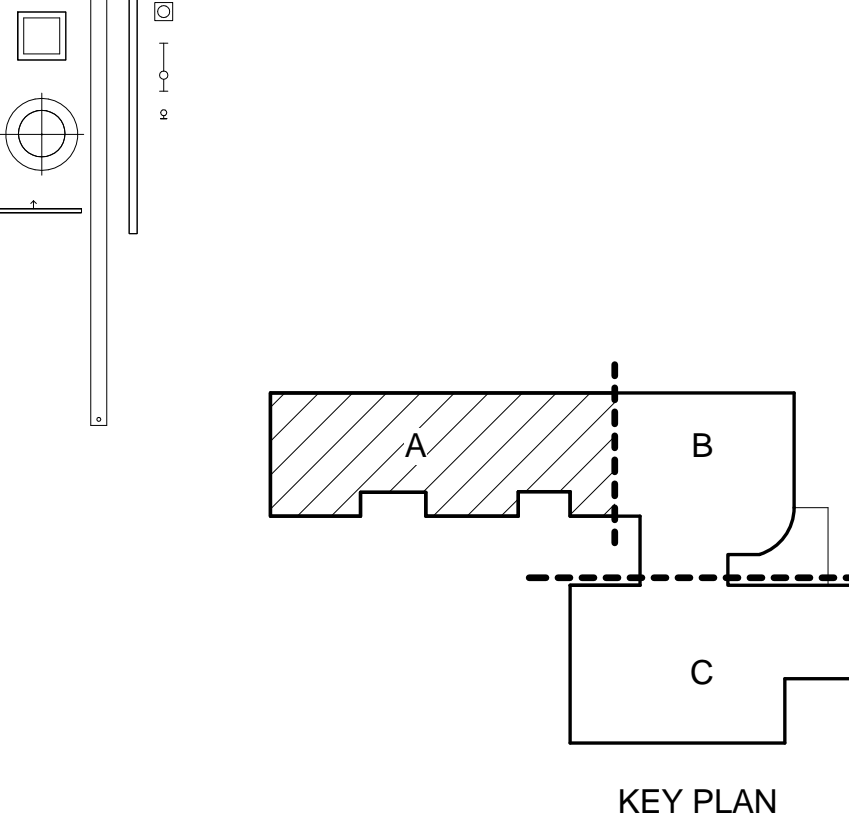
- 08 4414-B ALUMINUM EXTERIOR SUNSHADES
- 09 5100-C ACOUSTICAL CEILING TRIM
- 09 9000-E ACCENT PAINT COLOR. SEE FINISH PLANS FOR COLOR
- 12 2400-A ROLLER SHADES TYPE A - LENGTH 11'-9"
- 12 2400-B ROLLER SHADES TYPE B - LENGTH 11'-9"
- 12 2400-C ROLLER SHADES TYPE C - LENGTH 12'-6"
- 12 2400-D ROLLER SHADES TYPE D - LENGTH 10'-4"
- 12 2400-E ROLLER SHADES TYPE E - LENGTH 10'-4"
- 12 2400-F ROLLER SHADES TYPE F - LENGTH 4'-0"
- 12 2400-J ROLLER SHADES TYPE J - LENGTH 11'-4"

CEILING MATERIAL LEGEND

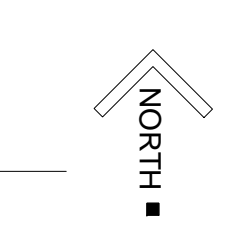
- ACT - 1:2 x 4 LAY-IN ACOUSTIC TILE
- ACT - 2:2 x 4 LAY-IN VINYL ACOUSTIC TILE
- GYPSUM BOARD CEILING. PAINT U.O.N.
- METAL SOFFIT PANELS (EXTERIOR)
- EXPOSED ACOUSTIC DECK WITH EXPOSED STEEL STRUCTURE PAINT. U.O.N.
- WOOD CEILING (LOBBY)
- ACOUSTIC CEILING PANEL
A) 2' x 6' D) 4' x 4'
B) 4' x 8' E) 2' x 6'
C) 2' x 4'
- PAINT CEILING ACCENT COLOR
- WP-1, WOOD PANEL TYPE - 1

CEILING SYMBOLS

- SEE MECHANICAL
- CEILING ELEVATION
- OPEN TO STRUCTURE
- PAINT COLOR OF CEILING. SEE A401 ROOM FINISH LEGEND.
- P.X. SEE A401 ROOM FINISH LEGEND.
- WP-1. WOOD PANELS TYPE - 1. SEE A401 ROOM FINISH LEGEND.
- S. SPEAKER. SEE LOW VOLTAGE AND AV DRAWINGS.
- AV. AV ENCLOSURE. SEE LOW VOLTAGE AND AV DRAWINGS.
- W. WIRELESS POINT - SEE T DRAWINGS.
- PE. PHOTO CELL - SEE ELECTRICAL.
- OS. OCCUPANCY SENSOR - SEE ELECTRICAL.
- CA. CAMERA - SEE T DRAWINGS.
- EX. EXIT - SEE ELECTRICAL.
- IR. IR DOME - SEE T DRAWINGS.
- M. MOTION DETECTOR - SEE T DRAWINGS.
- L. LIGHT FIXTURES, SEE ELECTRICAL.



1 SECTOR A RCP - FIRST FLOOR
1/8" = 1'-0"



GENERAL NOTES - RCP

- A. SEE ELECTRICAL AND MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION
- B. SLOPED SURFACES WILL APPEAR LESS THAN TRUE LENGTH. SEE SECTIONS AND DETAILS FOR ACTUAL DIMENSIONS
- C. ALL CEILING HEIGHTS ARE FORM FINISHED FLOOR UNLESS NOTED OTHERWISE
- D. ALL DIMENSIONS FROM FACE OF STUD OR MASONRY WALL UNLESS NOTED OTHERWISE
- E. ALL OPEN TO STRUCTURE CEILINGS TO BE PAINTED P-1, U.N.O.
- F. IN CASES OF OPEN TO STRUCTURE CEILINGS WITH SUSPENDED CEILING CLOUDS, PAINT TO EXTEND ABOVE ENTIRE AREAS OF CEILING CLOUDS.
- G. SOME ELEMENTS NOT SHOWN IN OVERALL PLANS, SEE ENLARGED PLANS FOR COORDINATION OF CEILING ELEMENTS.

KEYNOTE LEGEND - SPECIFICATIONS

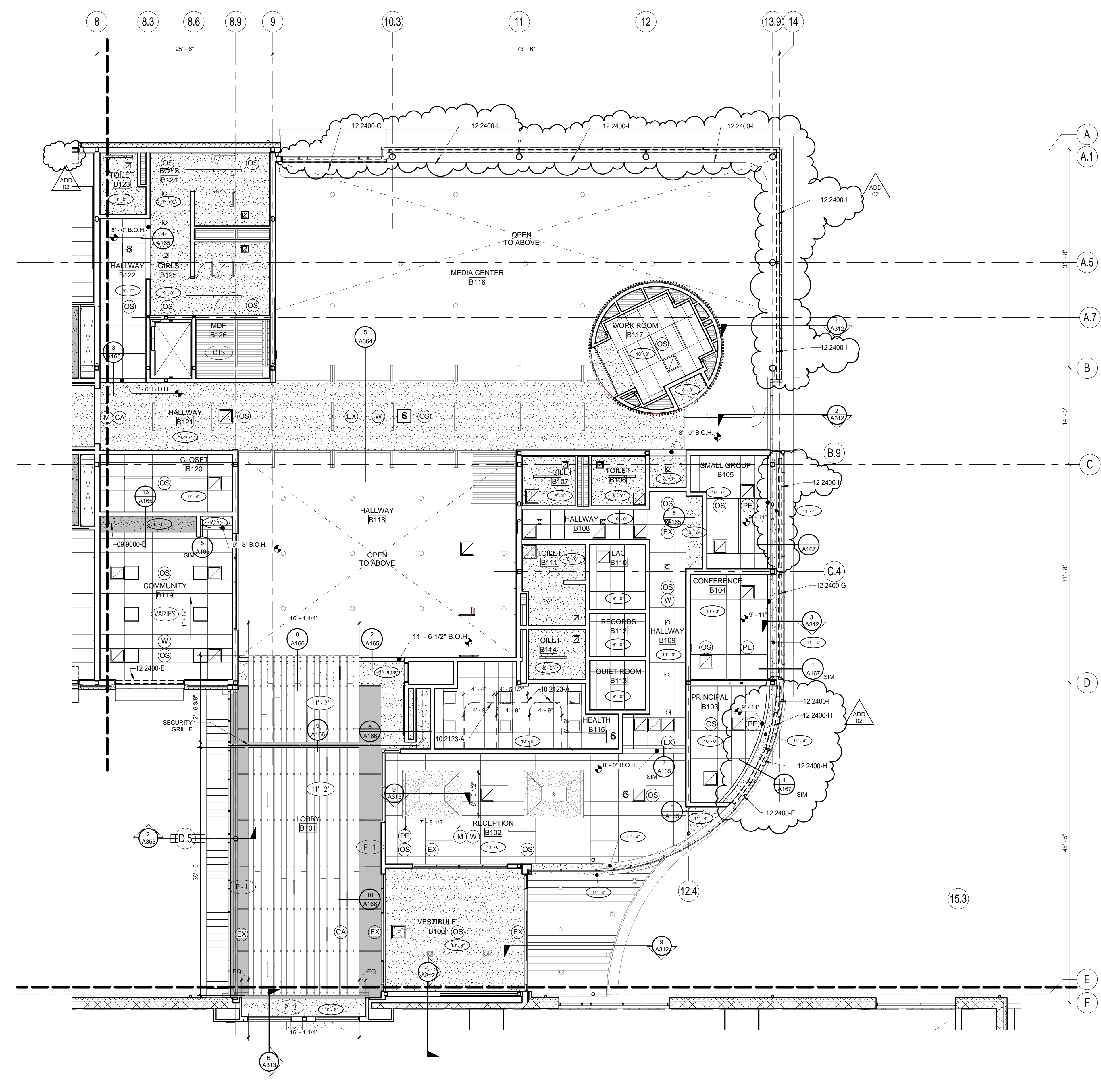
09 9000-E	ACCENT PAINT COLOR, SEE FINISH PLANS FOR COLOR
10 2123-A	CUBICLE TRACK
12 2400-E	ROLLER SHADES TYPE E - LENGTH 10'-0"
12 2400-F	ROLLER SHADES TYPE F - LENGTH 4'-0"
12 2400-G	ROLLER SHADES TYPE G - LENGTH 15'-4"
12 2400-H	ROLLER SHADES TYPE H - LENGTH 1'-7"
12 2400-I	ROLLER SHADES TYPE I - LENGTH 16'-0"
12 2400-L	ROLLER SHADES TYPE J - LENGTH 19'-0"

CEILING MATERIAL LEGEND

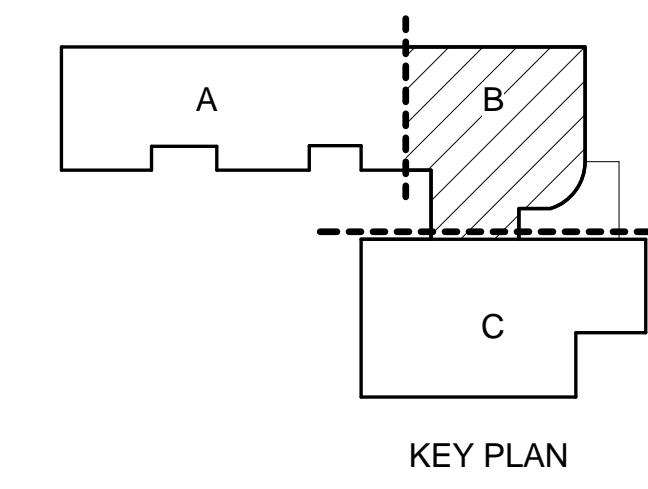
- ACT - 1: 2 x 4 LAY-IN ACOUSTIC TILE
- ACT - 2: 2 x 4 LAY-IN VINYL ACOUSTIC TILE
- GYPSUM BOARD CEILING, PAINT U.O.N.
- METAL SOFFIT PANELS (EXTERIOR)
- EXPOSED ACOUSTIC DECK WITH EXPOSED STEEL STRUCTURE PAINT, U.O.N.
- WOOD CEILING (LOBBY)
- ACOUSTIC CEILING PANEL
 (A) 2' x 8' (B) 4' x 4'
 (C) 4' x 8' (D) 2' x 6'
 (E) 2' x 4'
- PAINT CEILING ACCENT COLOR
- WP-1, WOOD PANEL TYPE - 1

CEILING SYMBOLS

- SEE MECHANICAL
- CEILING ELEVATION
- OPEN TO STRUCTURE
- OS: OPEN TO STRUCTURE
- P-X: PAINT COLOR OF CEILING, SEE A401 ROOM FINISH LEGEND.
- WP-1: WOOD PANELS TYPE - 1, SEE A401 ROOM FINISH LEGEND.
- S: SPEAKER, SEE LOW VOLTAGE AND AV DRAWINGS
- AV: AV ENCLOSURE, SEE LOW VOLTAGE AND AV DRAWINGS
- W: WIRELESS POINT - SEE T DRAWINGS
- PE: PHOTO CELL - SEE ELECTRICAL
- OS: OCCUPANCY SENSOR - SEE ELECTRICAL
- CA: CAMERA - SEE T DRAWINGS
- EX: EXIT - SEE ELECTRICAL
- IR: IR DOME - SEE T DRAWINGS
- M: MOTION DETECTOR - SEE T DRAWINGS
- LIGHT FIXTURES, SEE ELECTRICAL



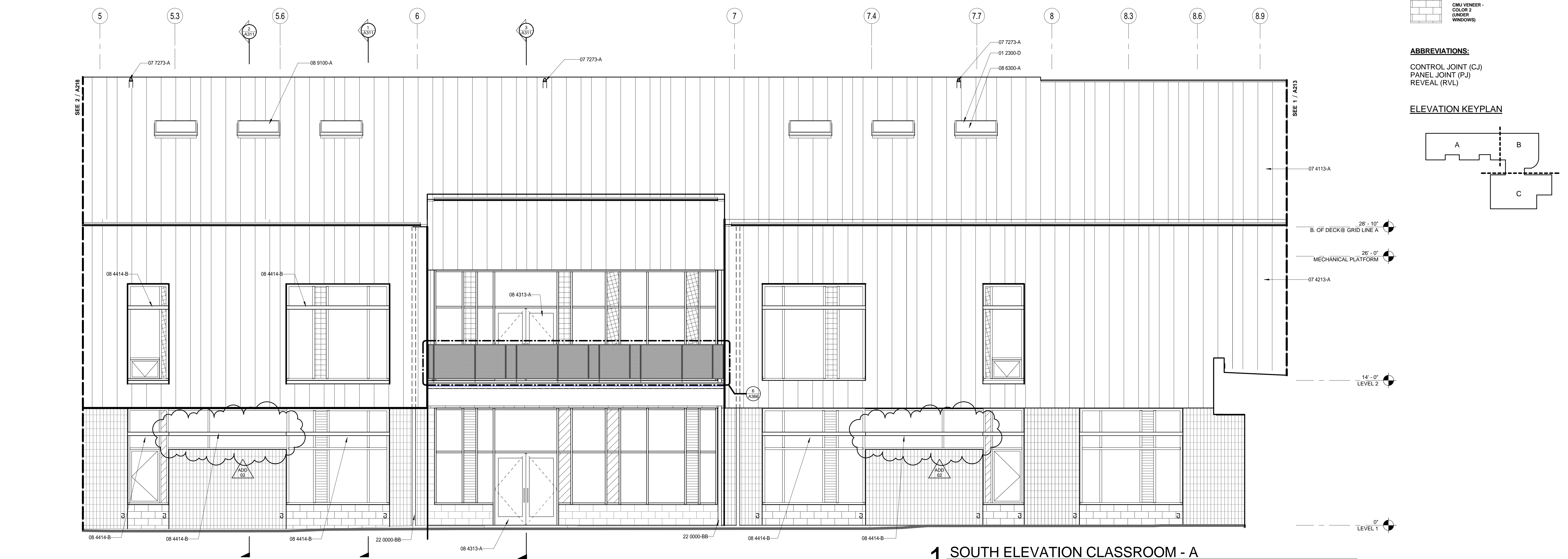
1 SECTOR B RCP - FIRST FLOOR
 1/8" = 1'-0"



© 2016 PIVOT ARCHITECTURE
PRINTED ON: 3/22/2016 7:24:14 PM FROM FILE: C:\pivot_architecture\Revit_2015\1337_BRBS_Arch_Bk4_15.dwg (plot) not



2 SOUTH ELEVATION CLASSROOM - B
1/4" = 1'-0"



1 SOUTH ELEVATION CLASSROOM - A
1/4" = 1'-0"

GENERAL NOTES - EXTERIOR ELEV.

- A. REFER TO SHEET A200 FOR EXTERIOR FINISH LEGEND
- B. ALL EXTERIOR WINDOWS TO BE ALUMINUM UNLESS NOTED OTHERWISE.
- C. DASHED LINE AT WINDOWS DRAWN TO ILLUSTRATE X BRACING FOR COORDINATION.
- D. REFER TO SHEET A550 FOR EXTERIOR LOUVER ELEVATIONS AND DETAILS.
- E. TYPICAL WALL SECTIONS AT THE CLASSROOM WINGS ARE INDICATED AT THE NORTH CLASSROOM WING OF SECTOR B. REFER TO EXTERIOR ELEVATION SHEETS A213, AND A214 REGARDING TYPICAL/SIMILAR DETAIL CONDITIONS LOCATED AT THE SOUTH CLASSROOM WING OF SECTOR B AND SECTOR C.
- F. SEE SPEC SECTION 08 FOR GLAZING TYPES

KEYNOTE LEGEND - SPECIFICATIONS

- 01 2300-D ALTERNATE 4: DELETE SKYLIGHTS IN CLASSROOM WING. THIS WILL DOCUMENTED ON ARCHITECTURAL. ALL ASSOCIATED WORK AS OUTLINED IN SECTION 01 2300
- 01 2300-E ALTERNATE 5: REPLACE METAL ROOF PANEL WITH TPO ROOF ENTIRE BUILDING. THIS WILL BE DOCUMENTED IN ARCHITECTURAL DRAWINGS. ALL ASSOCIATED WORK AS OUTLINED IN SECTION 01 2300
- 04 2000-A CONCRETE MASONRY UNIT, 4" VENEER
- 07 4113-A METAL ROOF PANELS
- 07 4213-A METAL WALL PANELS
- 07 7273-A FALL ARREST ANCHOR POST, TYP.
- 08 4313-A ALUMINUM STOREFRONT SYSTEM
- 08 4414-A ALUMINUM CURTAIN WALL SYSTEM
- 08 4414-B ALUMINUM EXTERIOR SUNSHADES
- 08 6300-A METAL-FRAMED SKYLIGHTS 4'x4', TYP.
- 08 9100-A STATIONARY LOUVERS
- 22 0000-BB 4" STAINLESS STEEL PIPE DOWNSPOUT. SEE PLUMBING FOR CONNECTION, PAINT HPC-3 WHERE EXPOSED

KEYNOTE LEGEND

- 45 ALIGN PATTERN OF METAL PANEL WALL AND ROOF REFER TO 1/4" TYPICAL
- 46 START OF METAL PANEL PATTERN REFER TO SEE A175

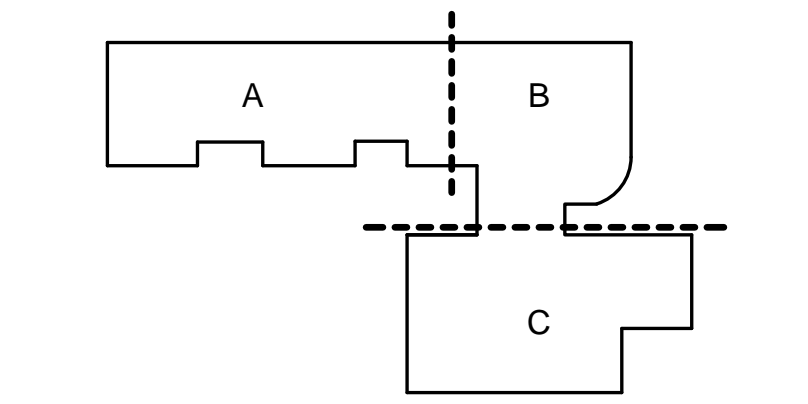
EXTERIOR MATERIAL LEGEND:

GLASS	CERAMIC COATED VISION GLASS - COLOR 1 - WHITE
CERAMIC COATED VISION GLASS - COLOR 2 - PURPLE	CERAMIC COATED VISION GLASS - COLOR 3 - YELLOW
CERAMIC COATED VISION GLASS - COLOR 4 - BLUE	CERAMIC COATED VISION GLASS - COLOR 5 - GREEN
METAL WALL AND ROOF PANELS	CMU VENEER - COLOR 1
CMU VENEER - COLOR 2 (UNDER WINDOWS)	

ABBREVIATIONS:

- CONTROL JOINT (CJ)
- PANEL JOINT (PJ)
- REVEAL (RVL)

ELEVATION KEYPLAN



BID SET
EUGENE SCHOOL DISTRICT 4J
120 WEST HILLIARD AVENUE, EUGENE, OREGON 97404
RIVER ROAD / EL CAMINO DEL RIO ELEMENTARY SCHOOL

ENLARGED EXTERIOR ELEVATIONS
- CLASSROOM SOUTH

PROJECT #	133730	REVISIONS	
ISSUE DATE	03/12/2016	ADD 02 -	03/08/16

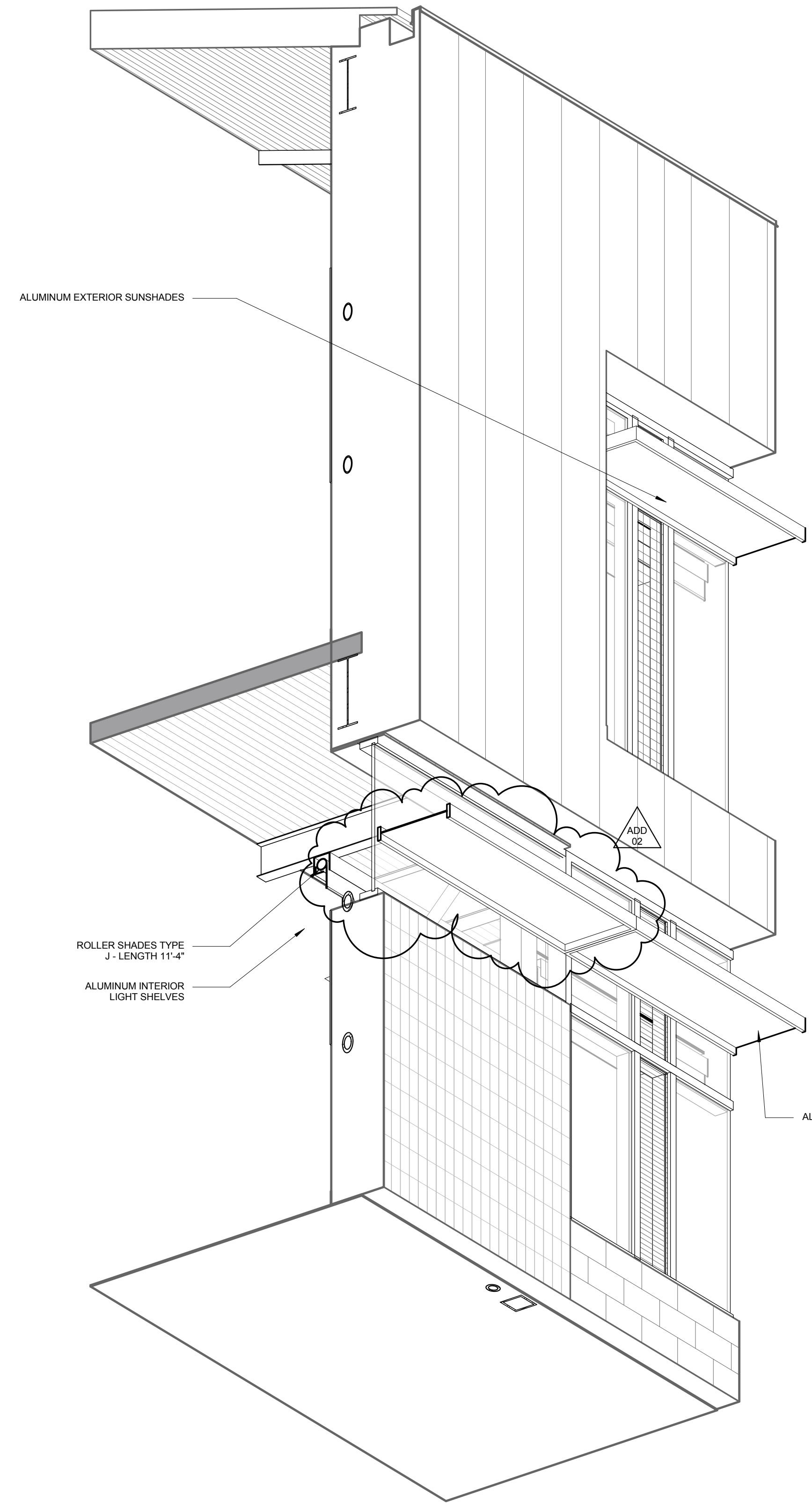
A218

ROLLER SHADE SCHEDULE						
REVISION	LEVEL	ROOM: LEVEL	ROOM: NUMBER	ROOM: NAME	OPENING SIZE	COMMENTS
	LEVEL 1	LEVEL 1	A100	CLASSROOM	4'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 1	LEVEL 1	A100	CLASSROOM	11'-9" WINDOW OPENING	MOUNT IN ACT CEILING INTERIOR
	LEVEL 1	LEVEL 1	A100	CLASSROOM	10'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 1	LEVEL 1	A101	CLASSROOM	10'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 1	LEVEL 1	A101	CLASSROOM	4'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 1	LEVEL 1	A101	CLASSROOM	11'-9" WINDOW OPENING	MOUNT IN ACT CEILING INTERIOR
	LEVEL 1	LEVEL 1	A102	CLASSROOM	10'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 1	LEVEL 1	A102	CLASSROOM	4'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 1	LEVEL 1	A102	CLASSROOM	11'-9" WINDOW OPENING	MOUNT IN ACT CEILING INTERIOR
	LEVEL 1	LEVEL 1	A103	CLASSROOM	10'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 1	LEVEL 1	A103	CLASSROOM	4'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 1	LEVEL 1	A103	CLASSROOM	11'-9" WINDOW OPENING	MOUNT IN ACT CEILING INTERIOR
	LEVEL 1	LEVEL 1	A104	CLASSROOM	10'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 1	LEVEL 1	A104	CLASSROOM	4'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 1	LEVEL 1	A104	CLASSROOM	11'-9" WINDOW OPENING	MOUNT IN ACT CEILING INTERIOR
	LEVEL 1	LEVEL 1	A105	CLASSROOM	10'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 1	LEVEL 1	A105	CLASSROOM	4'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 1	LEVEL 1	A105	CLASSROOM	11'-9" WINDOW OPENING	MOUNT IN ACT CEILING INTERIOR
	LEVEL 1	LEVEL 1	A106	CLASSROOM	12'-6" WINDOW OPENING	MOUNT IN ACT CEILING INTERIOR
	LEVEL 1	LEVEL 1	A106	CLASSROOM	10'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 1	LEVEL 1	A106	CLASSROOM	4'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 1	LEVEL 1	A108	COMMONS	10'-4" WINDOW OPENING	MOUNT IN ACT CEILING INTERIOR
	LEVEL 1	LEVEL 1	A109	CLASSROOM	10'-4" WINDOW OPENING	MOUNT IN ACT CEILING INTERIOR
	LEVEL 1	LEVEL 1	A109	CLASSROOM	12'-6" WINDOW OPENING	MOUNT IN ACT CEILING INTERIOR
	LEVEL 1	LEVEL 1	A109	CLASSROOM	4'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 1	LEVEL 1	A109	CLASSROOM	10'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 1	LEVEL 1	A110	CLASSROOM	12'-6" WINDOW OPENING	MOUNT IN ACT CEILING INTERIOR
	LEVEL 1	LEVEL 1	A110	CLASSROOM	10'-4" WINDOW OPENING	MOUNT IN ACT CEILING INTERIOR
	LEVEL 1	LEVEL 1	A110	CLASSROOM	10'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 1	LEVEL 1	A110	CLASSROOM	4'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 1	LEVEL 1	A113	CLASSROOM	4'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 1	LEVEL 1	A113	CLASSROOM	12'-6" WINDOW OPENING	MOUNT IN ACT CEILING INTERIOR
	LEVEL 1	LEVEL 1	A113	CLASSROOM	10'-4" WINDOW OPENING	MOUNT IN ACT CEILING INTERIOR
	LEVEL 1	LEVEL 1	A113	CLASSROOM	10'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 1	LEVEL 1	A114	CLASSROOM	11'-9" WINDOW OPENING	MOUNT IN ACT CEILING INTERIOR
	LEVEL 1	LEVEL 1	A114	CLASSROOM	10'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 1	LEVEL 1	A114	CLASSROOM	4'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 1	LEVEL 1	B103	PRINCIPAL	4'-0" WINDOW OPENING	MOUNT IN CEILING EXTERIOR
	LEVEL 1	LEVEL 1	B103	PRINCIPAL	5'-4" WINDOW OPENING	MOUNT IN CEILING EXTERIOR
	LEVEL 1	LEVEL 1	B103	PRINCIPAL	4'-0" WINDOW OPENING	MOUNT IN CEILING EXTERIOR
	LEVEL 1	LEVEL 1	B103	PRINCIPAL	5'-4" WINDOW OPENING	MOUNT IN CEILING EXTERIOR
	LEVEL 1	LEVEL 1	B104	CONFERENCE	15'-4" WINDOW OPENING	MOUNT IN CEILING EXTERIOR
	LEVEL 1	LEVEL 1	B105	SMALL GROUP	16'-0" WINDOW OPENING	MOUNT IN CEILING EXTERIOR
	LEVEL 1	LEVEL 1	B116	MEDIA CENTER	17'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 1	LEVEL 1	B116	MEDIA CENTER	16'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 1	LEVEL 1	B116	MEDIA CENTER	19'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 1	LEVEL 1	B116	MEDIA CENTER	19'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 1	LEVEL 1	B116	MEDIA CENTER	16'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 1	LEVEL 1	B116	MEDIA CENTER	15'-4" WINDOW OPENING	MOUNT IN GYPSUM CEILING INTERIOR
	LEVEL 1	LEVEL 1	B119	COMMUNITY	10'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 2	LEVEL 2	A200	CLASSROOM	4'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 2	LEVEL 2	A200	CLASSROOM	11'-9" WINDOW OPENING	MOUNT IN GYPSUM CEILING INTERIOR
	LEVEL 2	LEVEL 2	A200	CLASSROOM	10'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 2	LEVEL 2	A201	CLASSROOM	4'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 2	LEVEL 2	A201	CLASSROOM	11'-9" WINDOW OPENING	MOUNT IN GYPSUM CEILING INTERIOR
	LEVEL 2	LEVEL 2	A201	CLASSROOM	10'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 2	LEVEL 2	A202	CLASSROOM	4'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 2	LEVEL 2	A202	CLASSROOM	11'-9" WINDOW OPENING	MOUNT IN GYPSUM CEILING INTERIOR
	LEVEL 2	LEVEL 2	A202	CLASSROOM	10'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 2	LEVEL 2	A203	CLASSROOM	4'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 2	LEVEL 2	A203	CLASSROOM	11'-9" WINDOW OPENING	MOUNT IN GYPSUM CEILING INTERIOR
	LEVEL 2	LEVEL 2	A203	CLASSROOM	10'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 2	LEVEL 2	A204	CLASSROOM	4'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 2	LEVEL 2	A204	CLASSROOM	11'-9" WINDOW OPENING	MOUNT IN GYPSUM CEILING INTERIOR
	LEVEL 2	LEVEL 2	A204	CLASSROOM	10'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 2	LEVEL 2	A205	CLASSROOM	4'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 2	LEVEL 2	A205	CLASSROOM	11'-9" WINDOW OPENING	MOUNT IN GYPSUM CEILING INTERIOR
	LEVEL 2	LEVEL 2	A205	CLASSROOM	10'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 2	LEVEL 2	A206	CLASSROOM	12'-6" WINDOW OPENING	MOUNT IN GYPSUM CEILING INTERIOR
	LEVEL 2	LEVEL 2	A206	CLASSROOM	10'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 2	LEVEL 2	A206	CLASSROOM	4'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 2	LEVEL 2	A206	CLASSROOM	10'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 2	LEVEL 2	A209	CLASSROOM	10'-4" WINDOW OPENING	MOUNT IN GYPSUM CEILING INTERIOR
	LEVEL 2	LEVEL 2	A209	CLASSROOM	12'-6" WINDOW OPENING	MOUNT IN GYPSUM CEILING INTERIOR
	LEVEL 2	LEVEL 2	A209	CLASSROOM	10'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 2	LEVEL 2	A209	CLASSROOM	4'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 2	LEVEL 2	A210	CLASSROOM	12'-6" WINDOW OPENING	MOUNT IN GYPSUM CEILING INTERIOR
	LEVEL 2	LEVEL 2	A210	CLASSROOM	10'-4" WINDOW OPENING	MOUNT IN GYPSUM CEILING INTERIOR
	LEVEL 2	LEVEL 2	A210	CLASSROOM	10'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 2	LEVEL 2	A210	CLASSROOM	4'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 2	LEVEL 2	A213	CLASSROOM	12'-6" WINDOW OPENING	MOUNT IN GYPSUM CEILING INTERIOR
	LEVEL 2	LEVEL 2	A213	CLASSROOM	10'-4" WINDOW OPENING	MOUNT IN GYPSUM CEILING INTERIOR
	LEVEL 2	LEVEL 2	A213	CLASSROOM	10'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 2	LEVEL 2	A213	CLASSROOM	4'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 2	LEVEL 2	A214	ELL	4'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR
	LEVEL 2	LEVEL 2	A214	ELL	10'-0" WINDOW OPENING	MOUNT TO WINDOW FRAME EXTERIOR

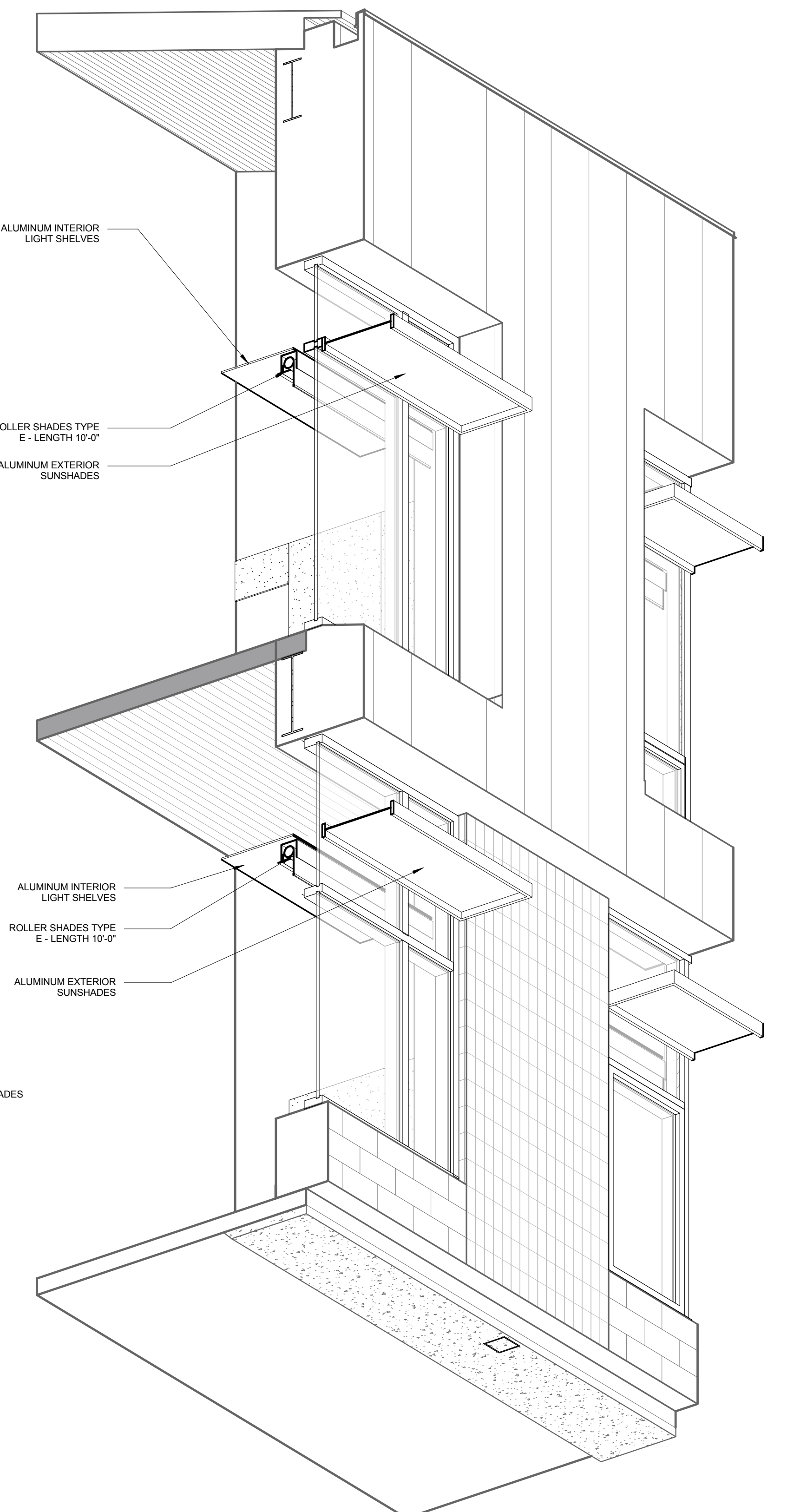
LIGHT SHELF SCHEDULE				
ROOM: LEVEL	ROOM: NUMBER	ROOM: NAME	DESCRIPTION	COMMENTS
LEVEL 1	A100	CLASSROOM	25'-4" LONG	
LEVEL 1	A101	CLASSROOM	25'-4" LONG	
LEVEL 1	A102	CLASSROOM	25'-4" LONG	
LEVEL 1	A103	CLASSROOM	25'-4" LONG	
LEVEL 1	A104	CLASSROOM	25'-4" LONG	
LEVEL 1	A105	CLASSROOM	25'-4" LONG	
LEVEL 1	A106	CLASSROOM	10'-0" LONG	
LEVEL 1	A106	CLASSROOM	4'-0" LONG	
LEVEL 1	A109	CLASSROOM	10'-0" LONG	
LEVEL 1	A109	CLASSROOM	4'-0" LONG	
LEVEL 1	A110	CLASSROOM	10'-0" LONG	
LEVEL 1	A110	CLASSROOM	4'-0" LONG	
LEVEL 1	A113	CLASSROOM	10'-0" LONG	
LEVEL 1	A113	CLASSROOM	4'-0" LONG	
LEVEL 1	A114	CLASSROOM	10'-0" LONG	
LEVEL 1	A114	CLASSROOM	4'-0" LONG	
LEVEL 1	B119	COMMUNITY	10'-0" LONG	
LEVEL 2	A200	CLASSROOM	10'-0" LONG	
LEVEL 2	A200	CLASSROOM	4'-0" LONG	
LEVEL 2	A201	CLASSROOM	10'-0" LONG	
LEVEL 2	A201	CLASSROOM	4'-0" LONG	
LEVEL 2	A202	CLASSROOM	10'-0" LONG	
LEVEL 2	A202	CLASSROOM	4'-0" LONG	
LEVEL 2	A203	CLASSROOM	10'-0" LONG	
LEVEL 2	A203	CLASSROOM	4'-0" LONG	
LEVEL 2	A204	CLASSROOM	10'-0" LONG	
LEVEL 2	A204	CLASSROOM	4'-0" LONG	
LEVEL 2	A205	CLASSROOM	10'-0" LONG	
LEVEL 2	A205	CLASSROOM	4'-0" LONG	
LEVEL 2	A206	CLASSROOM	10'-0" LONG	
LEVEL 2	A206	CLASSROOM	4'-0" LONG	
LEVEL 2	A209	CLASSROOM	10'-0" LONG	
LEVEL 2	A209	CLASSROOM	4'-0" LONG	
LEVEL 2	A210	CLASSROOM	10'-0" LONG	
LEVEL 2	A210	CLASSROOM	4'-0" LONG	
LEVEL 2	A213	CLASSROOM	10'-0" LONG	
LEVEL 2	A213	CLASSROOM	4'-0" LONG	
LEVEL 2	A214	ELL	10'-0" LONG	
LEVEL 2	A214	ELL	4'-0" LONG	

EXTERIOR WINDOW SUN SHADE SCHEDULE					
REVISION	LEVEL	ROOM: NAME	ROOM: NUMBER	DESCRIPTION	COMMENTS
	LEVEL 1	CLASSROOM	A106	4'-0"	
	LEVEL 1	CLASSROOM	A106	10'-0"	
	LEVEL 1	CLASSROOM	A106	11'-4"	
	LEVEL 1	CLASSROOM	A109	4'-0"	
	LEVEL 1	CLASSROOM	A109	10'-0"	
	LEVEL 1	CLASSROOM	A109	11'-4"	
	LEVEL 1	CLASSROOM	A110	10'-0"	
	LEVEL 1	CLASSROOM	A110	4'-0"	
	LEVEL 1	CLASSROOM	A110	11'-4"	
	LEVEL 1	CLASSROOM	A113	4'-0"	
	LEVEL 1	CLASSROOM	A113	10'-0"	
	LEVEL 1	CLASSROOM	A113	11'-4"	
	LEVEL 1	CLASSROOM	A114	4'-0"	
	LEVEL 1	CLASSROOM	A114	11'-4"	
	LEVEL 1	COMMUNITY	B119	10'-0"	
	LEVEL 2	HALL	B118	8'-0"	
	LEVEL 2	CLASSROOM	A206	4'-0"	
	LEVEL 2	CLASSROOM	A206	10'-0"	
	LEVEL 2	CLASSROOM	A209	4'-0"	
	LEVEL 2	CLASSROOM	A209	10'-0"	
	LEVEL 2	CLASSROOM	A210	4'-0"	
	LEVEL 2	CLASSROOM	A210	10'-0"	
	LEVEL 2	CLASSROOM	A213	10'-0"	
	LEVEL 2	CLASSROOM	A213	4'-0"	
	LEVEL 2	ELL	A214	10'-0"	
	LEVEL 2	ELL	A214	4'-0"	

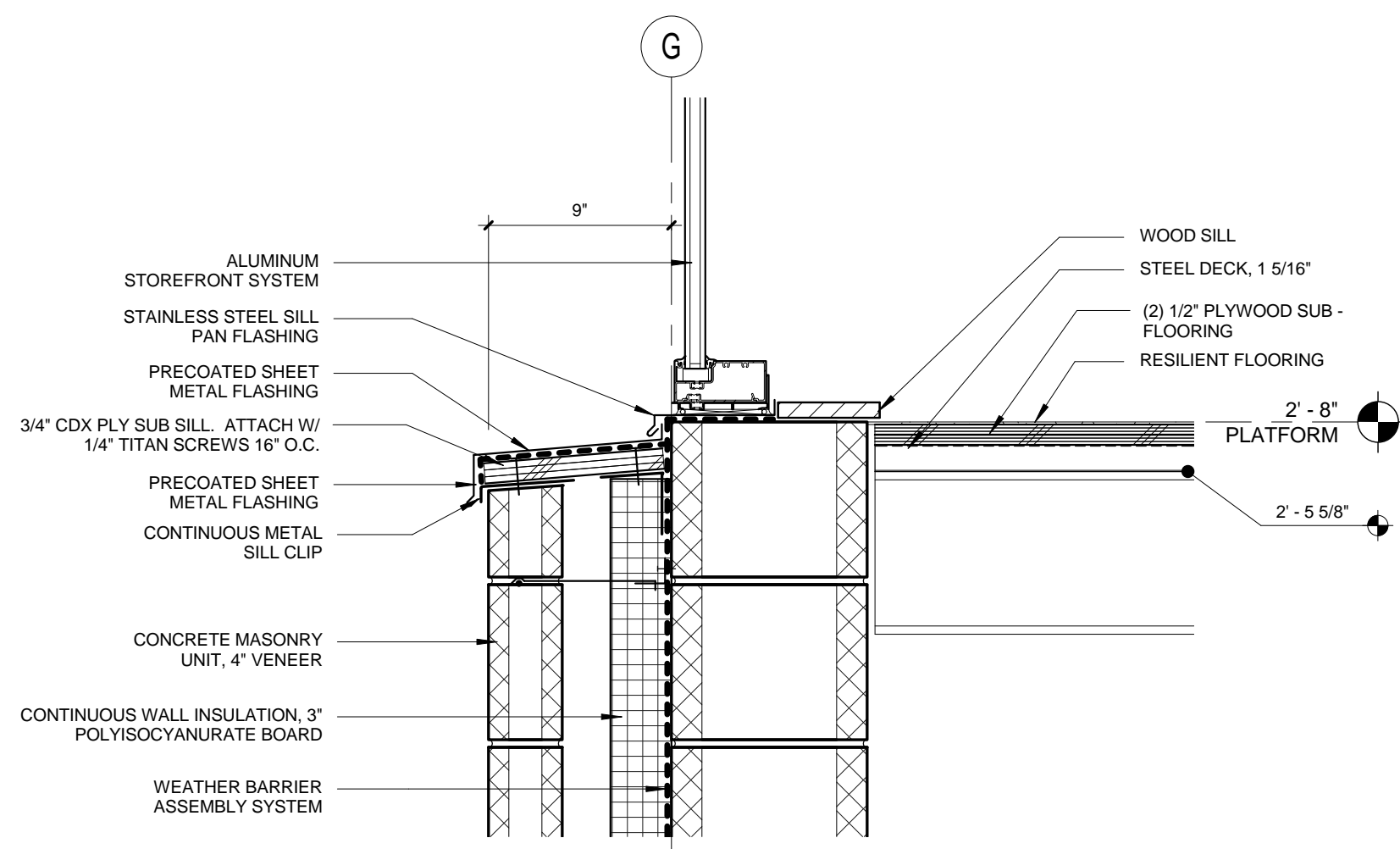
GENERAL NOTE
 ■ INDICATES ITEMS THAT HAVE BEEN MODIFIED SINCE THE LAST ISSUE



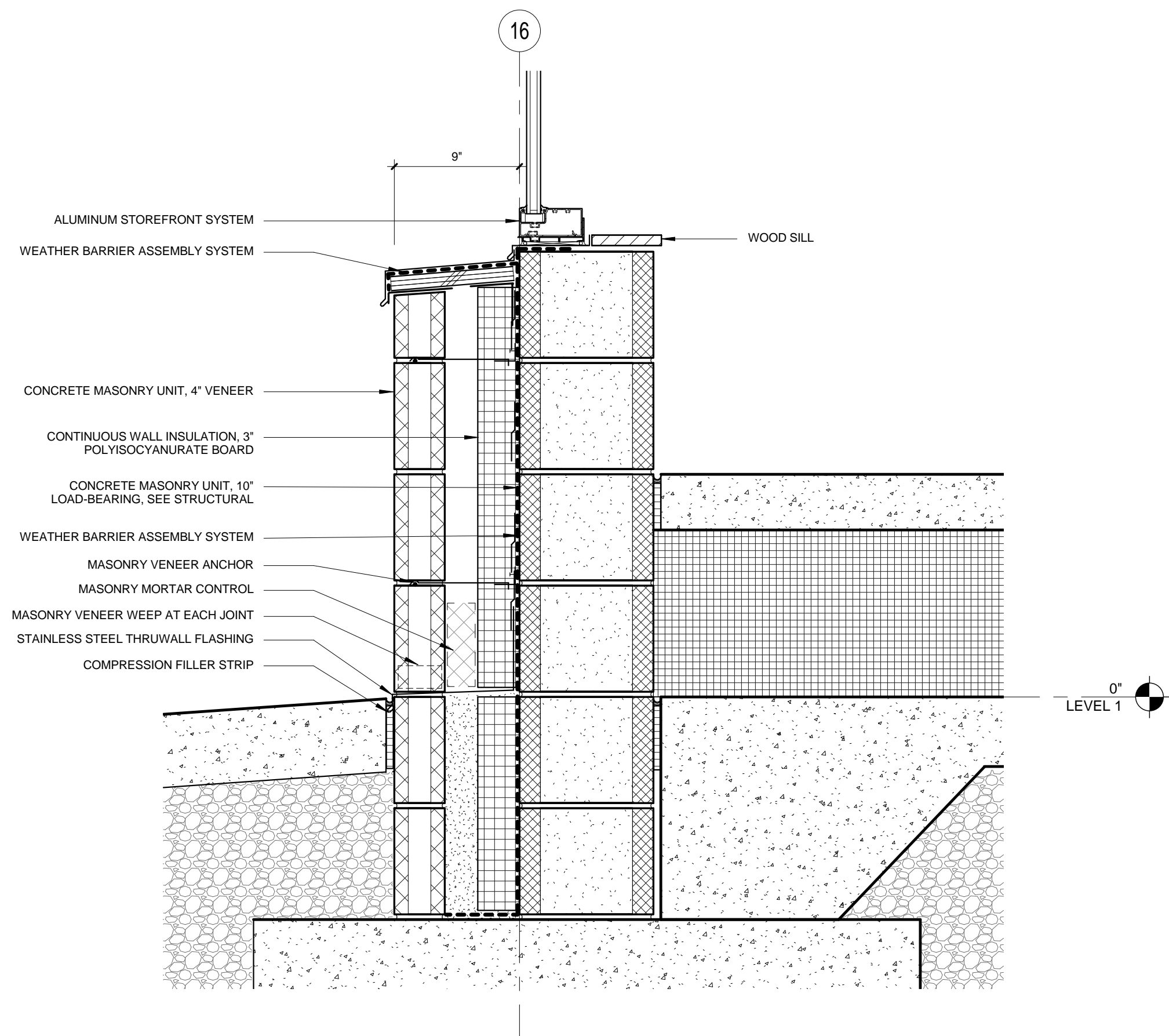
2 LIGHT SHADE AND SUNSHADE - CLEARSTORY WINDOW



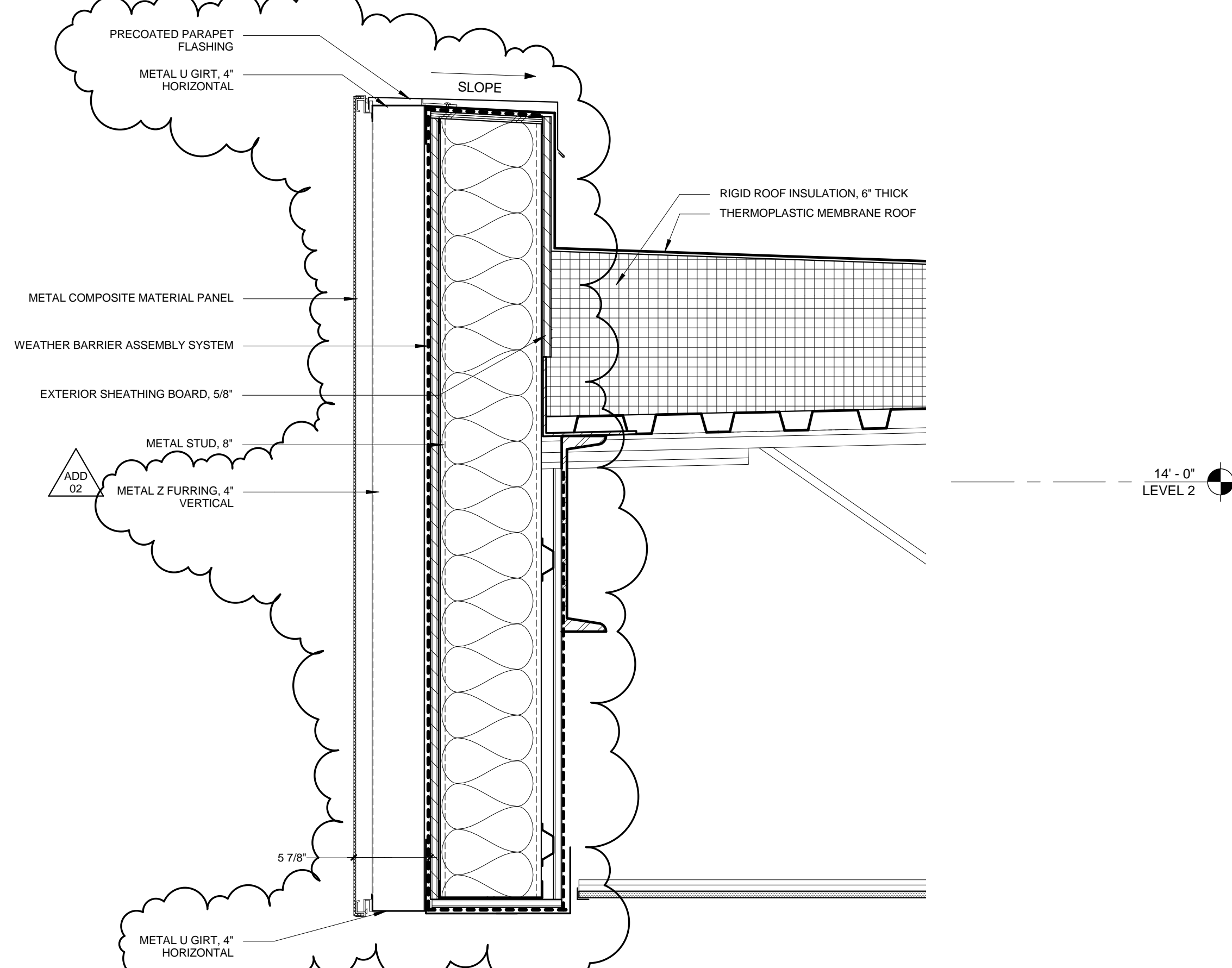
1 LIGHT SHADE AND SUNSHADE - TYPICAL WINDOW



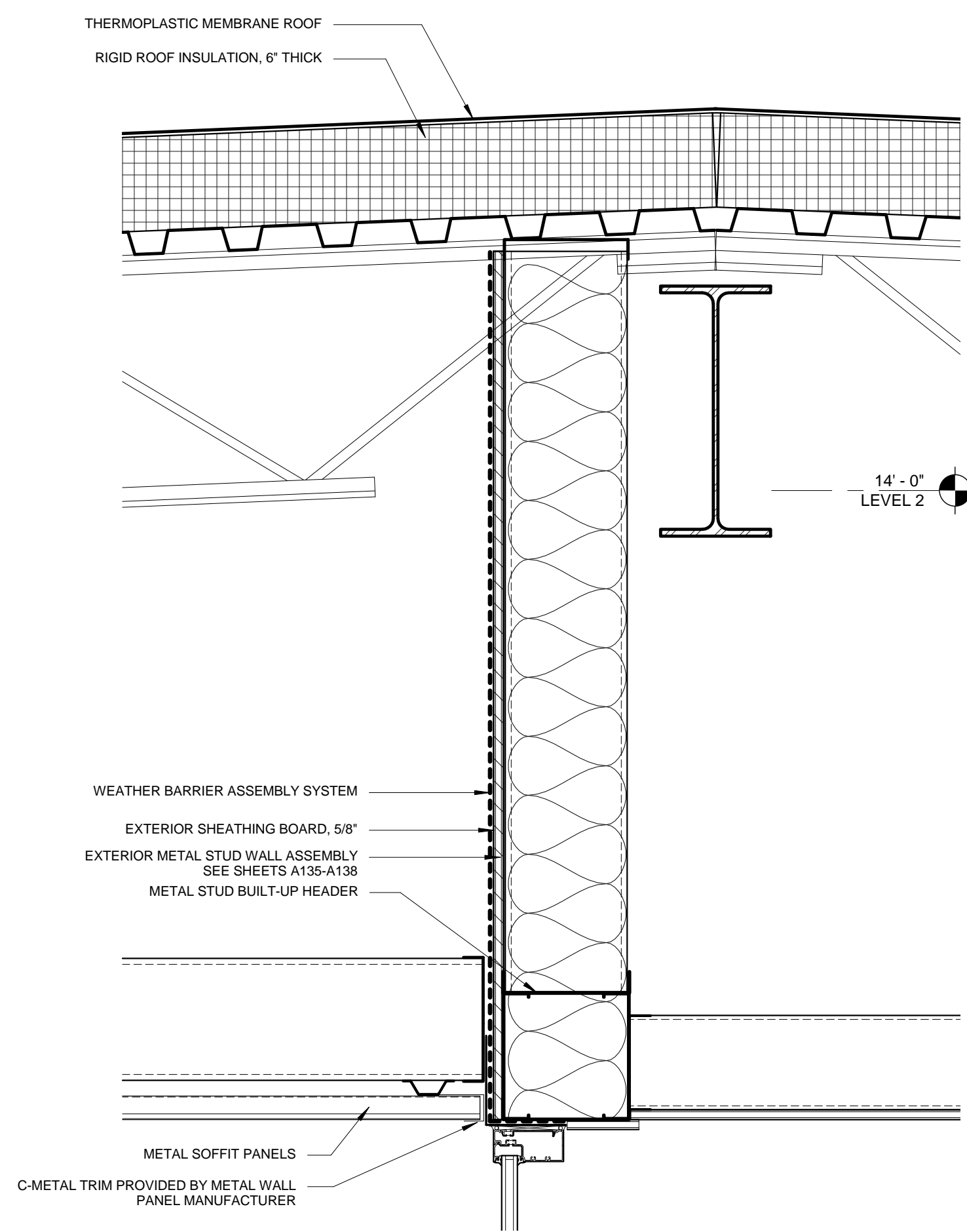
7 SILL DETAIL AT MUSIC ROOM
1 1/2" = 1'-0"



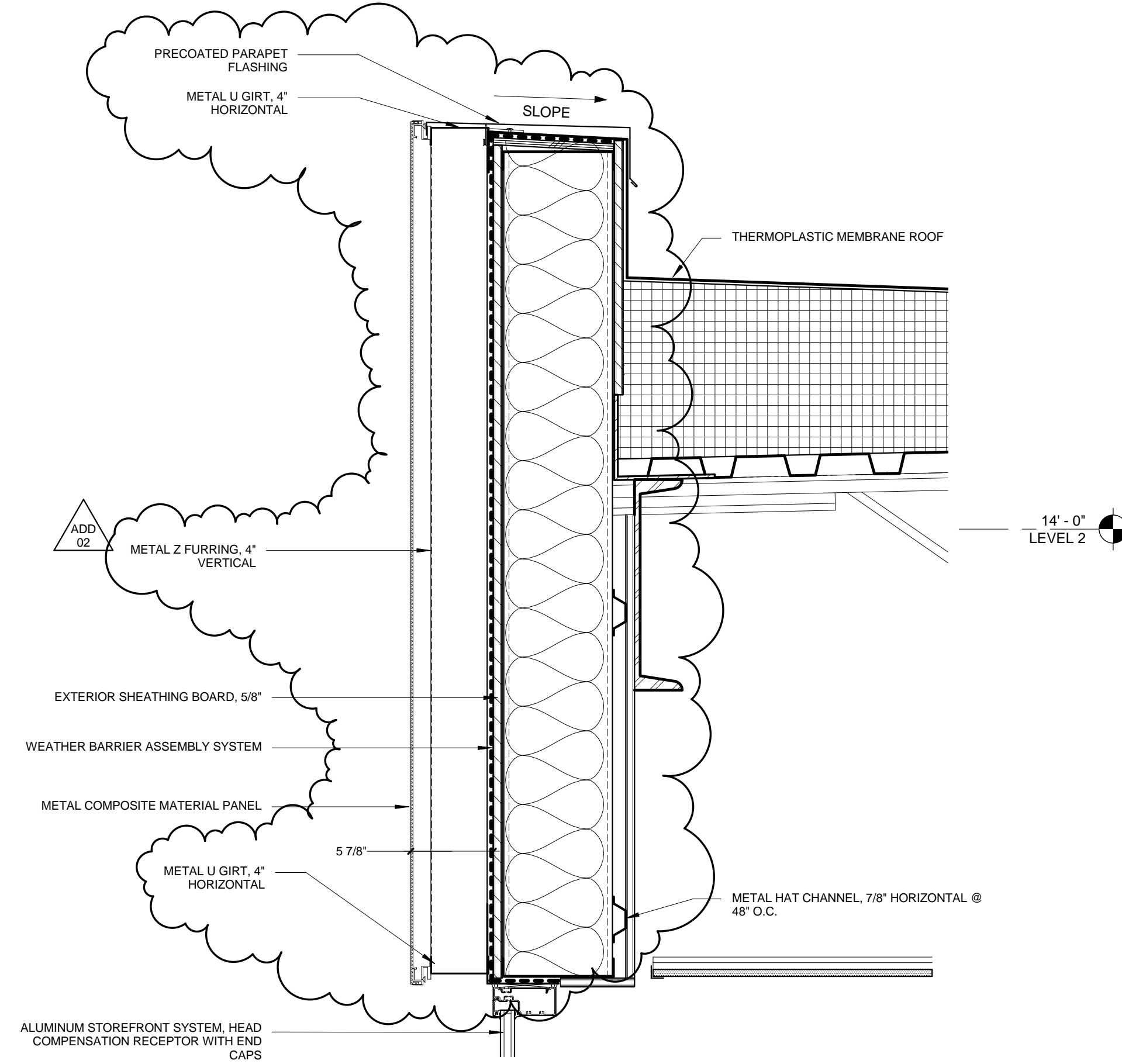
6 RAMP TO MUSIC ROOM
1 1/2" = 1'-0"



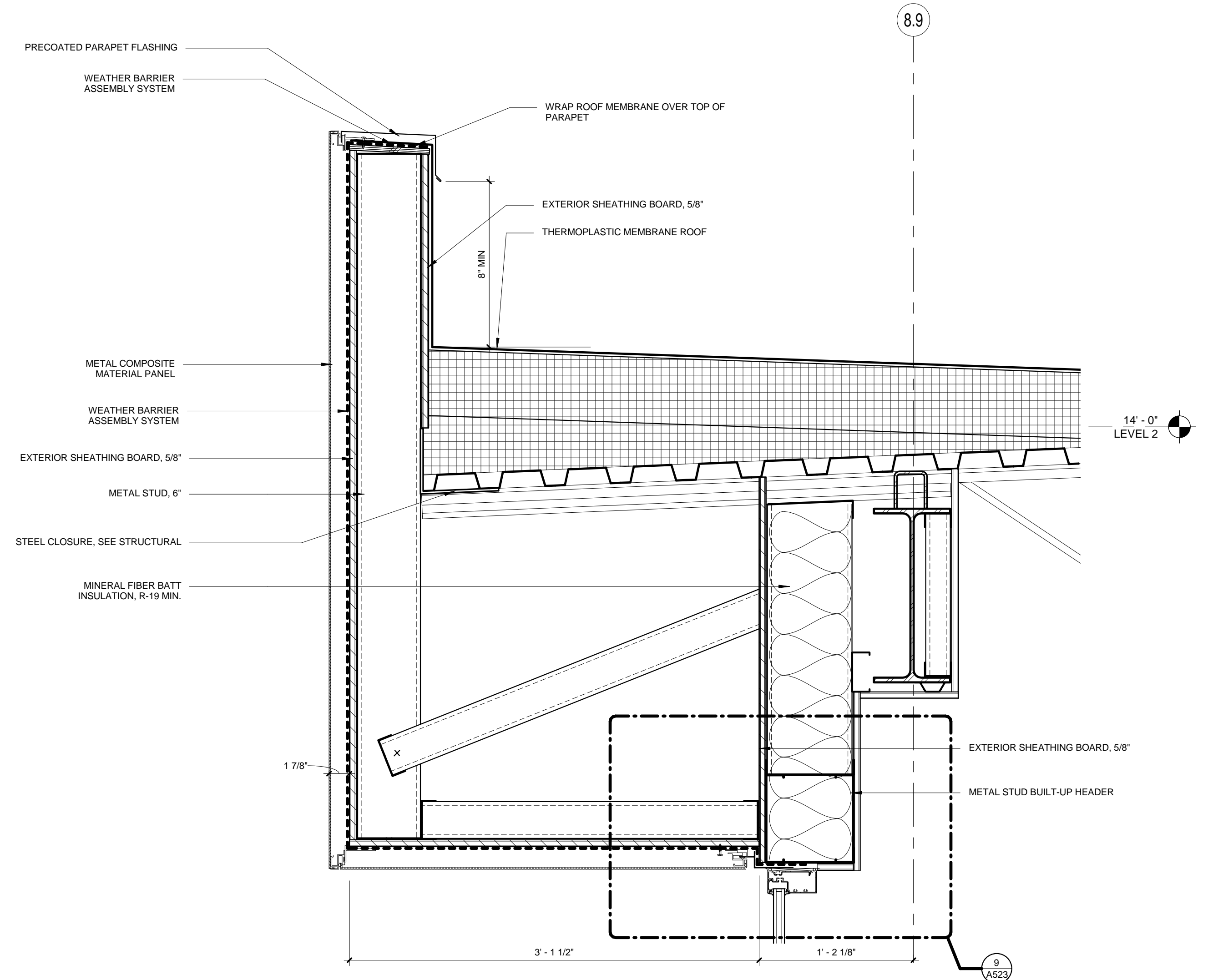
5 ROOF AT CURVED WALL OVER ENTRANCE
1 1/2" = 1'-0"



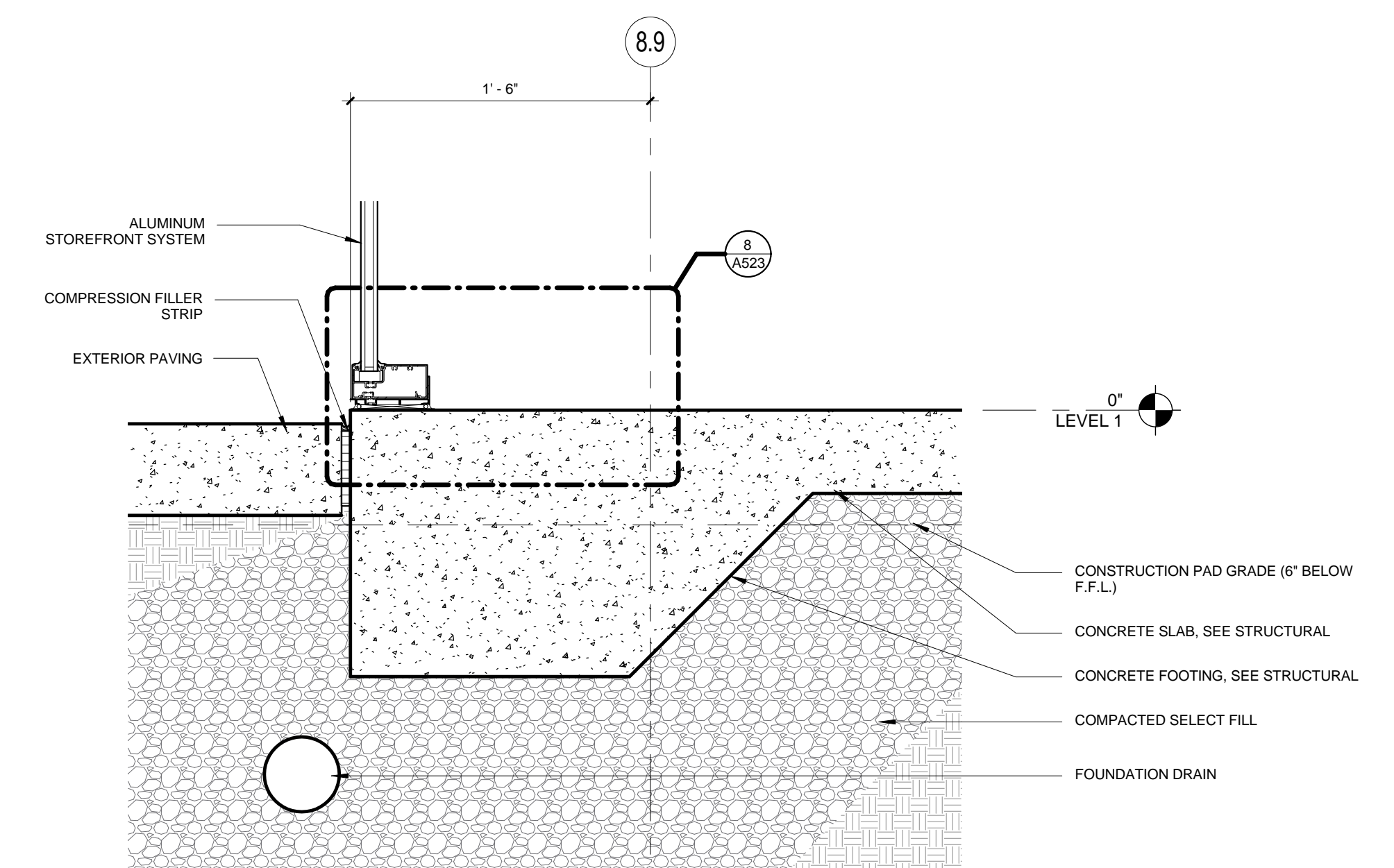
4 ENCLOSURE AT MAIN ENTRANCE
1 1/2" = 1'-0"



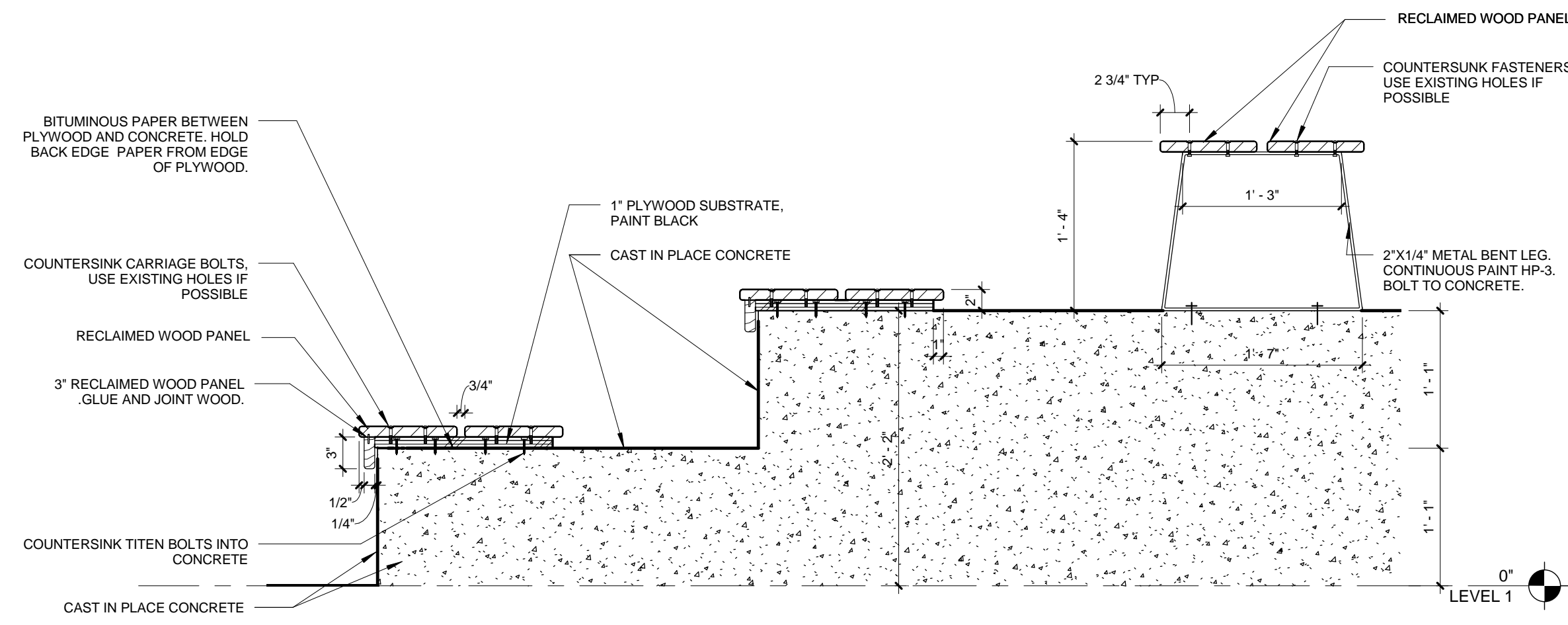
3 LOW ROOF PARAPET AT ADMINISTRATION
1 1/2" = 1'-0"



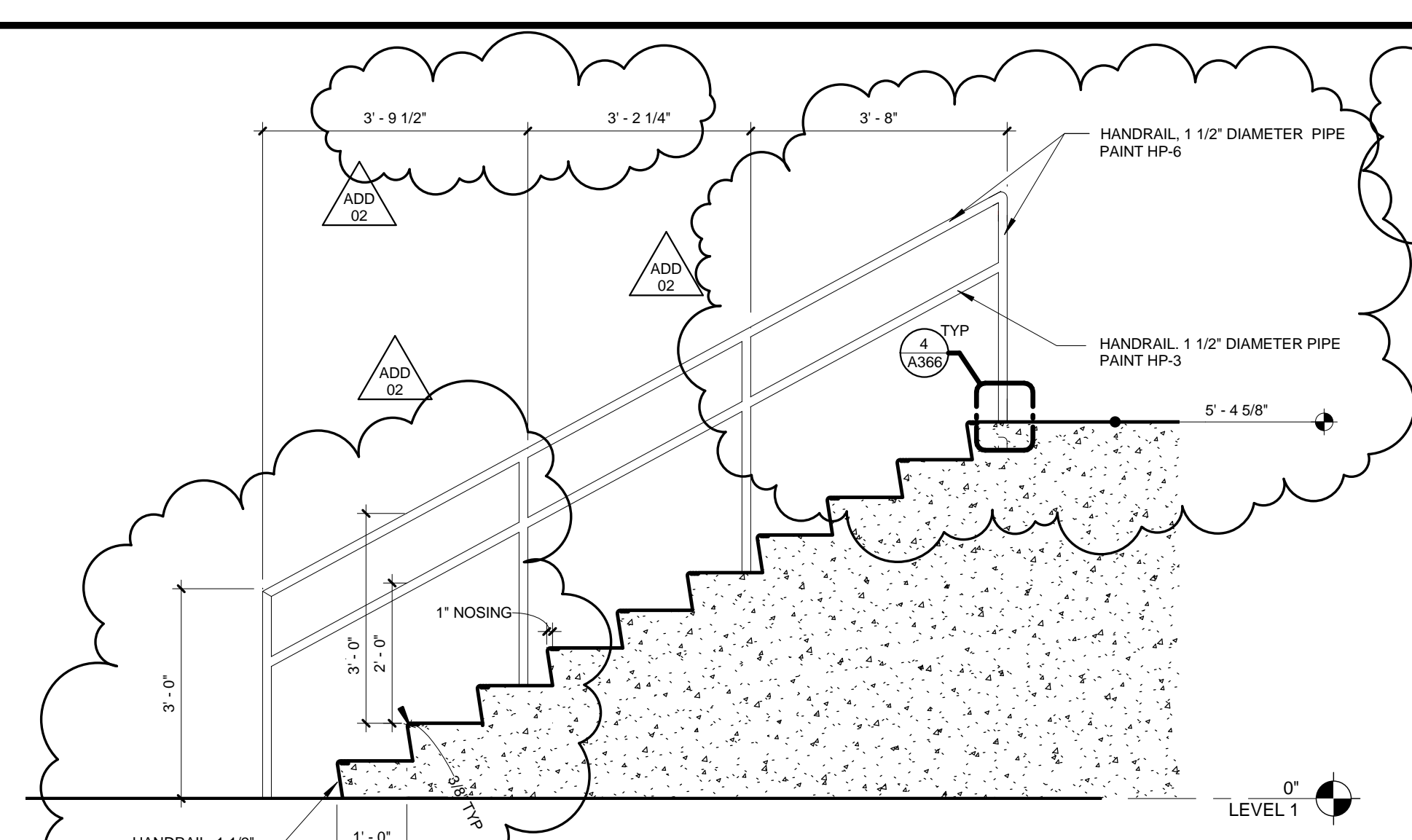
2 TYPICAL LOW ROOF AT WEST ELEVATION
1 1/2" = 1'-0"



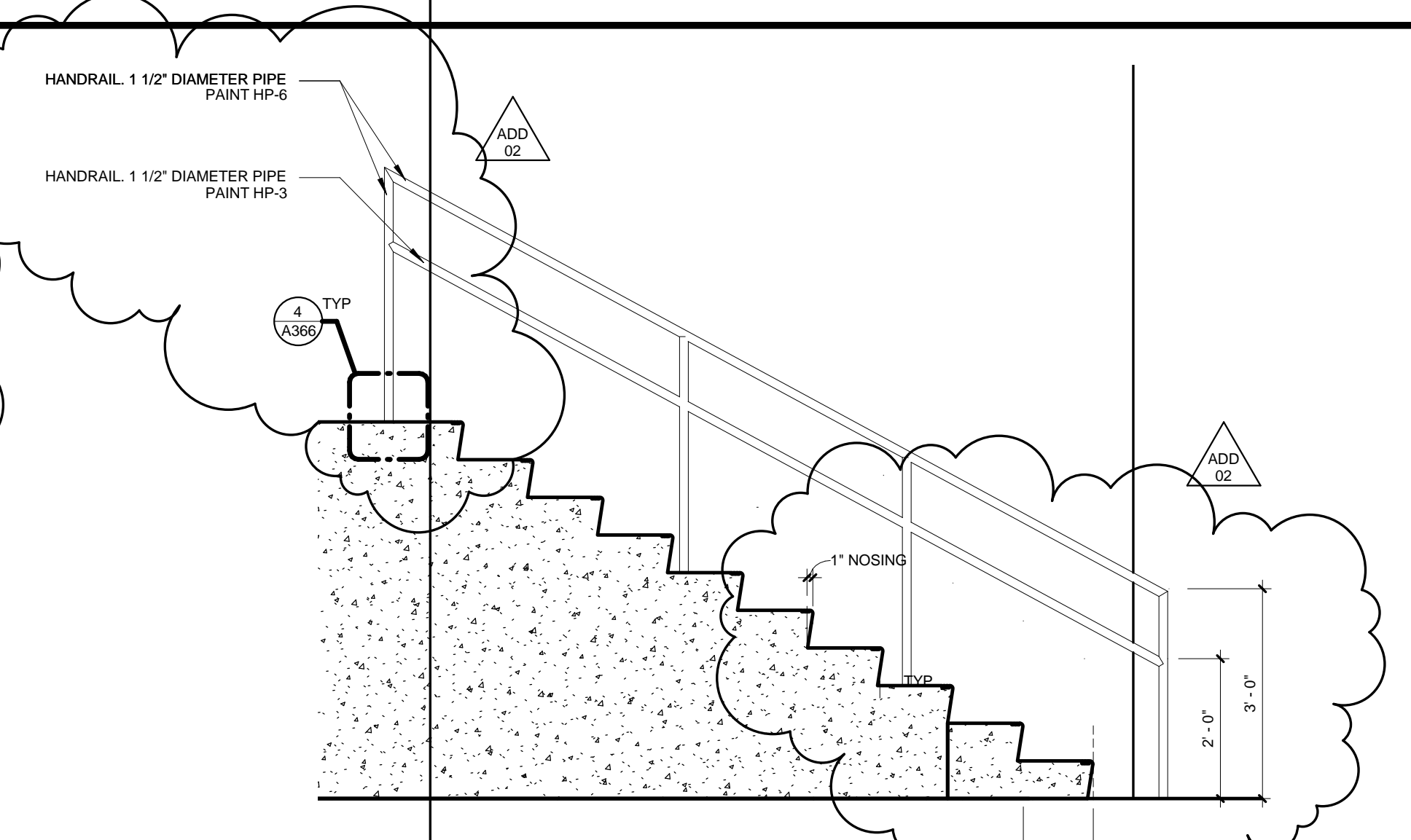
1 STOREFRONT SILL AT SLAB
1 1/2" = 1'-0"



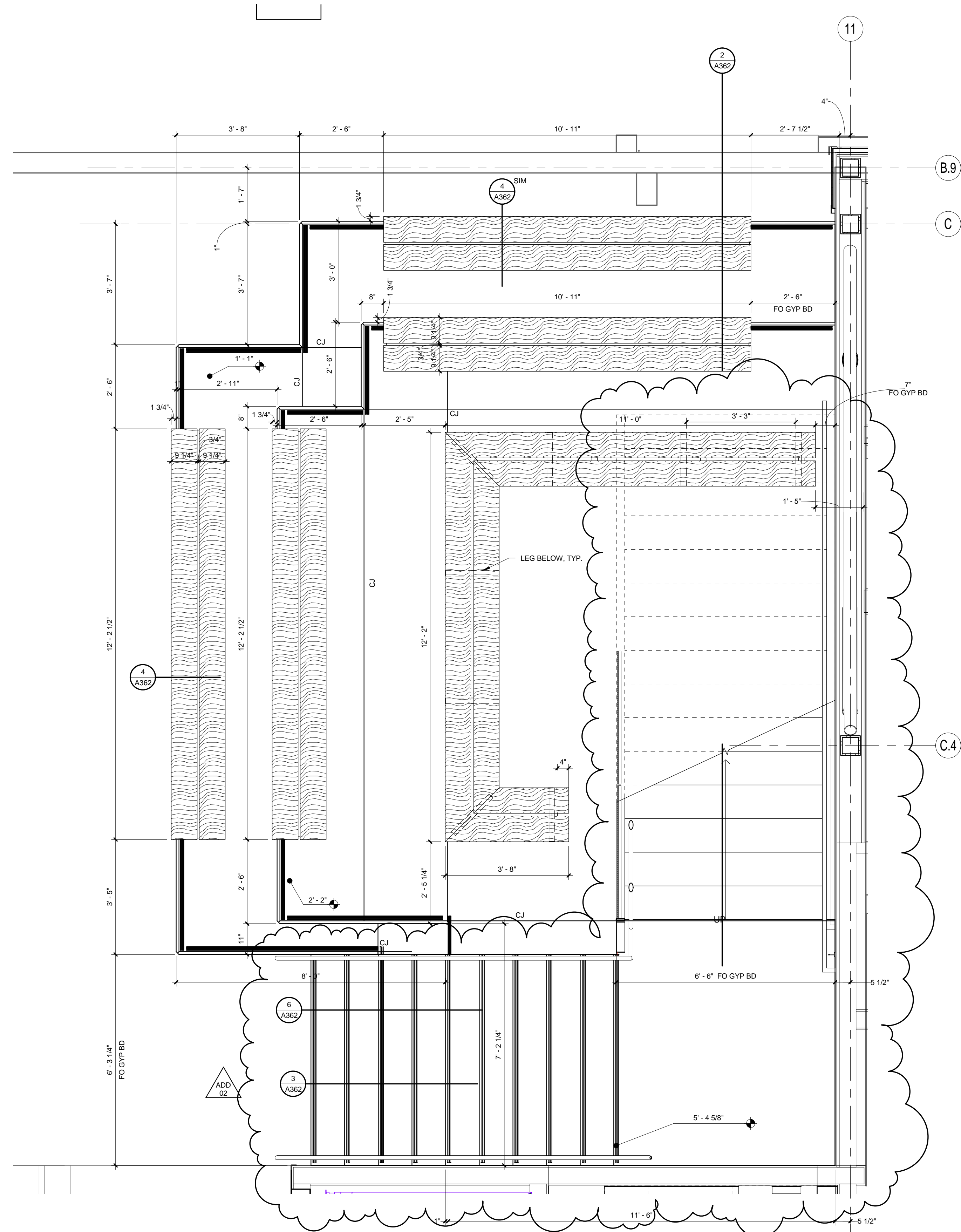
4 DETAIL STAIR SEATING SECTION
1" = 1'-0"



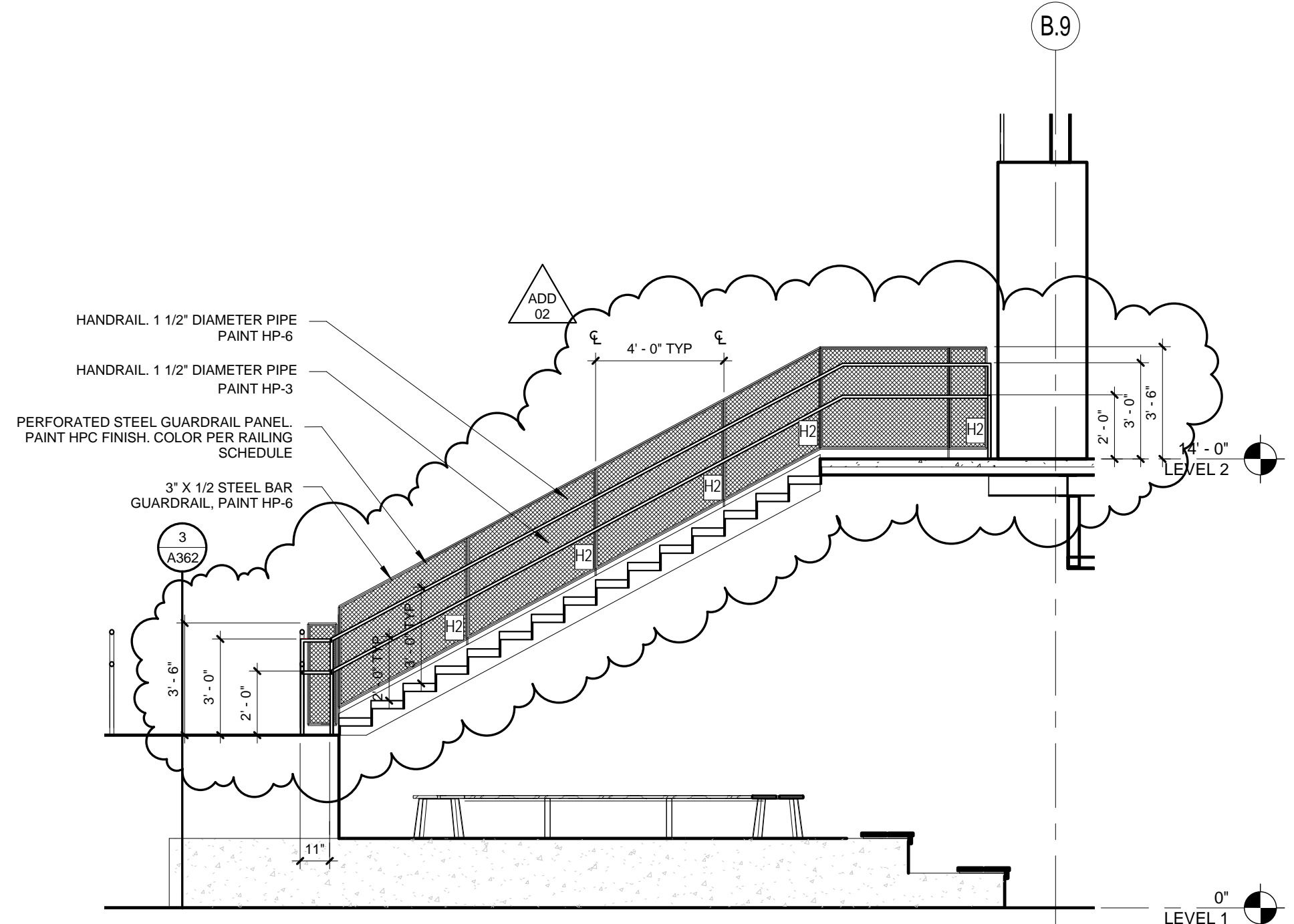
6 STAIR SECTION B118 - NORTH LOW RUN
1/2" = 1'-0"



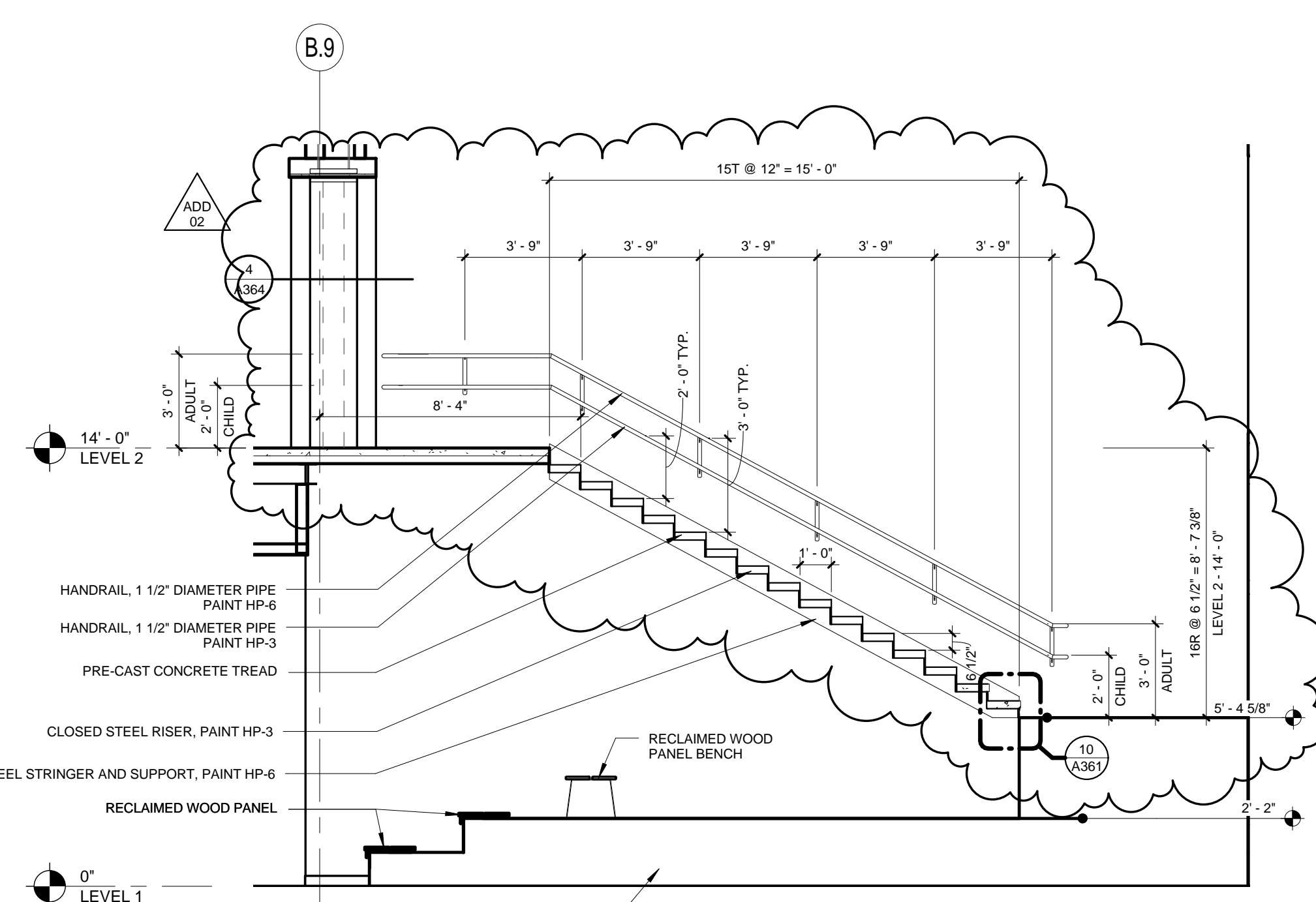
3 STAIR SECTION B118 - SOUTH LOW RUN
1/2" = 1'-0"



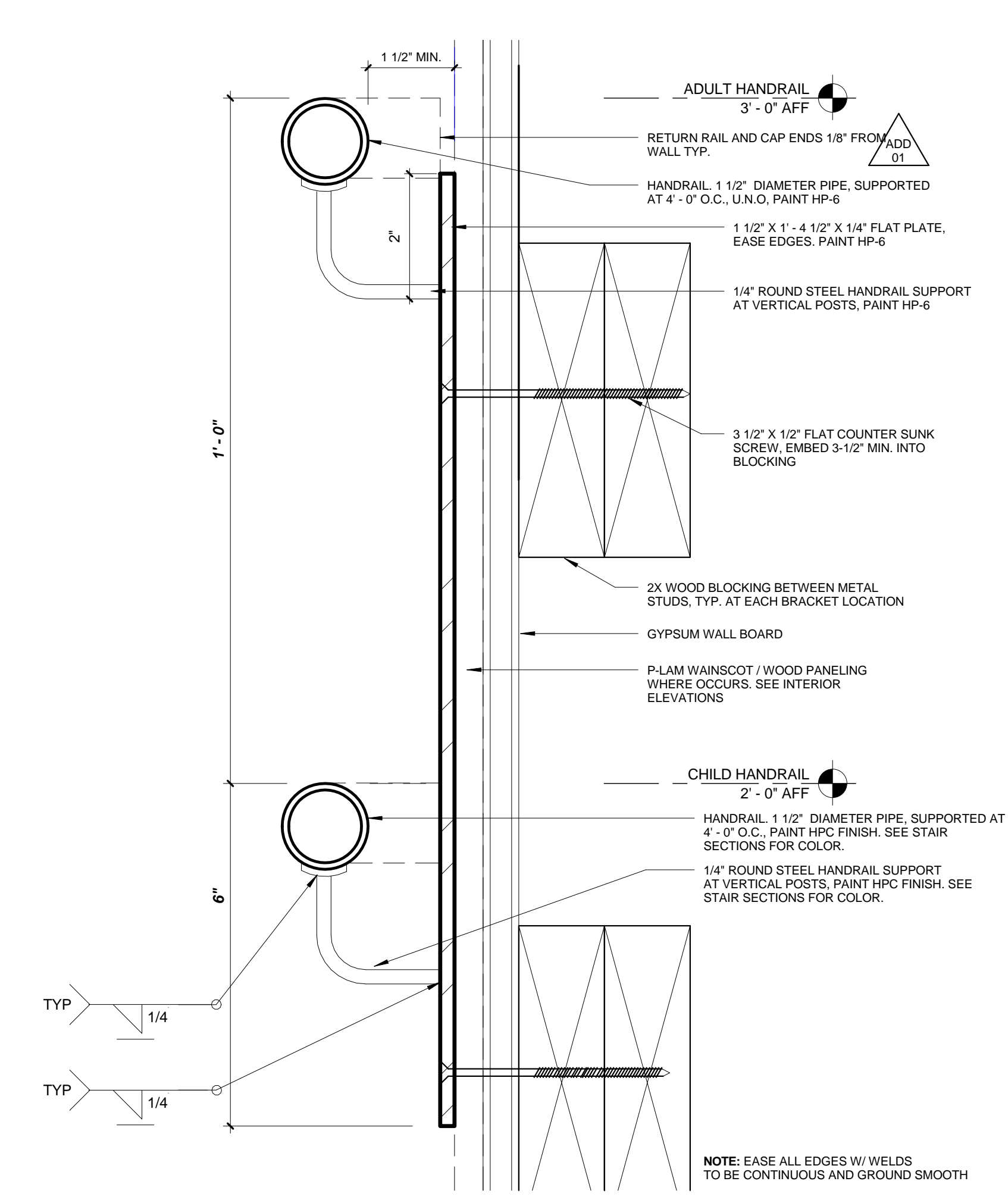
1 ENLARGED STAIR PLAN - B118 HALLWAY
1/2" = 1'-0"



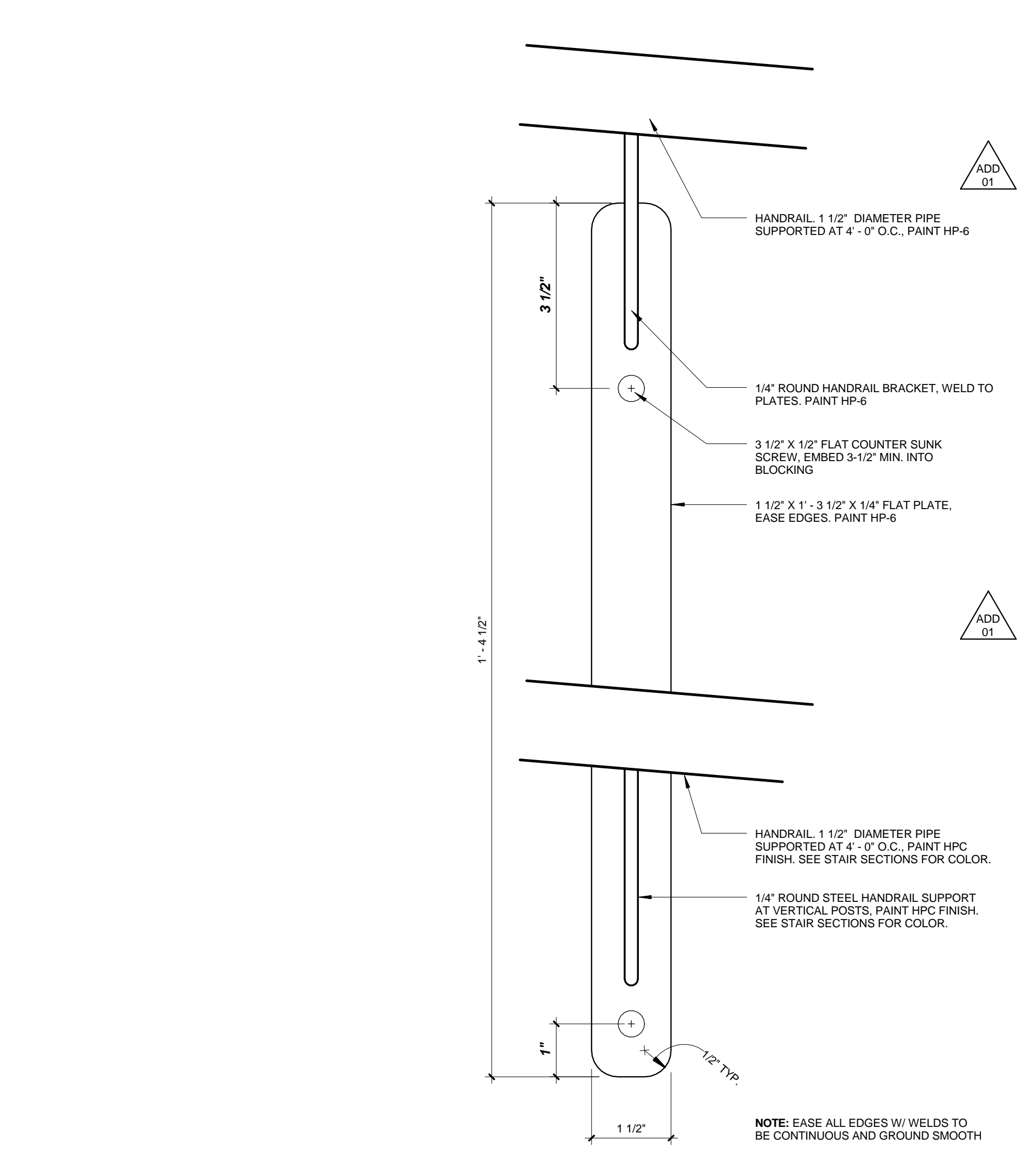
5 STAIR SECTION B118 - WEST TOP RUN
1/4" = 1'-0"



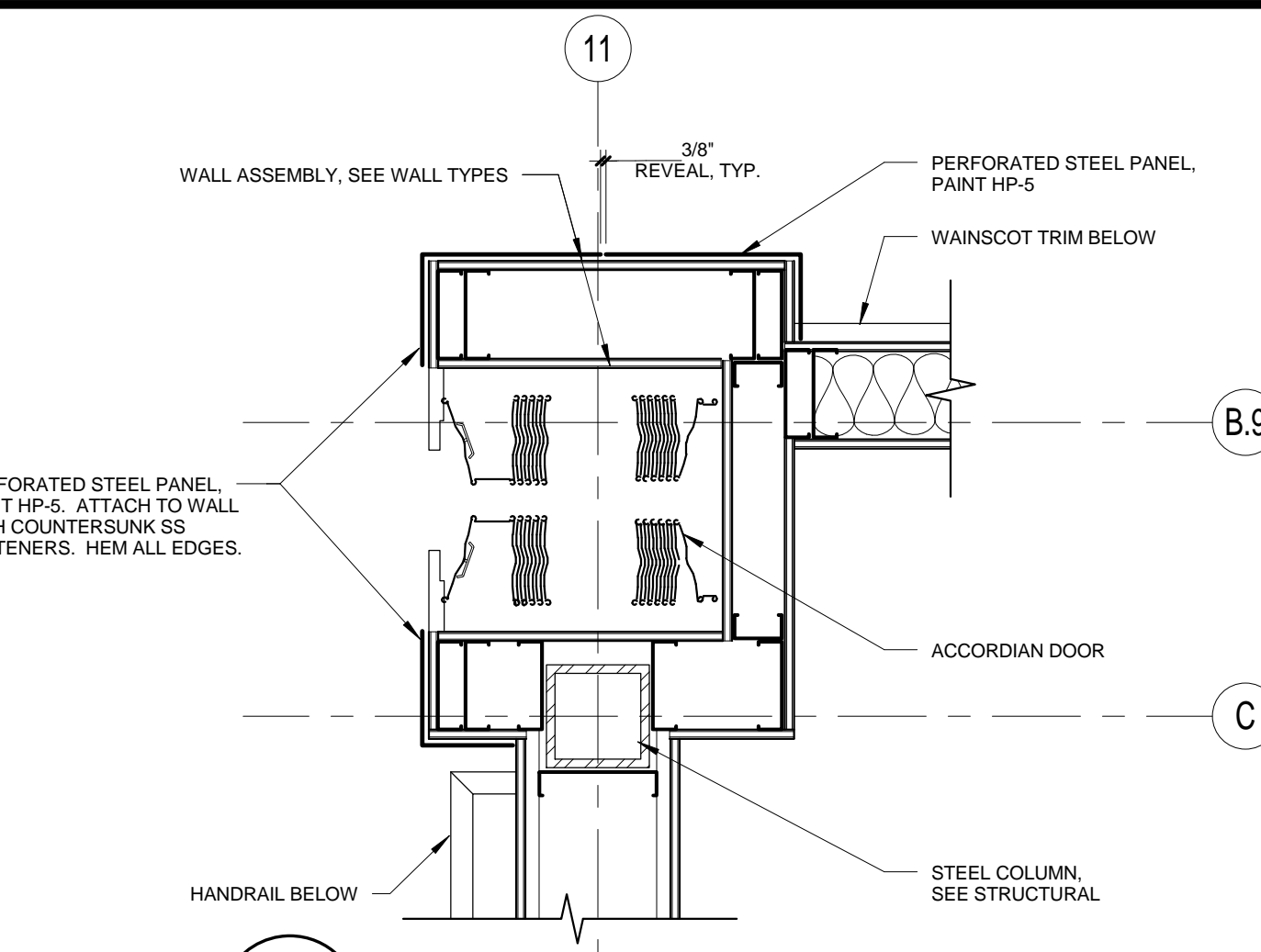
2 STAIR SECTION B118 - EAST TOP RUN
1/4" = 1'-0"



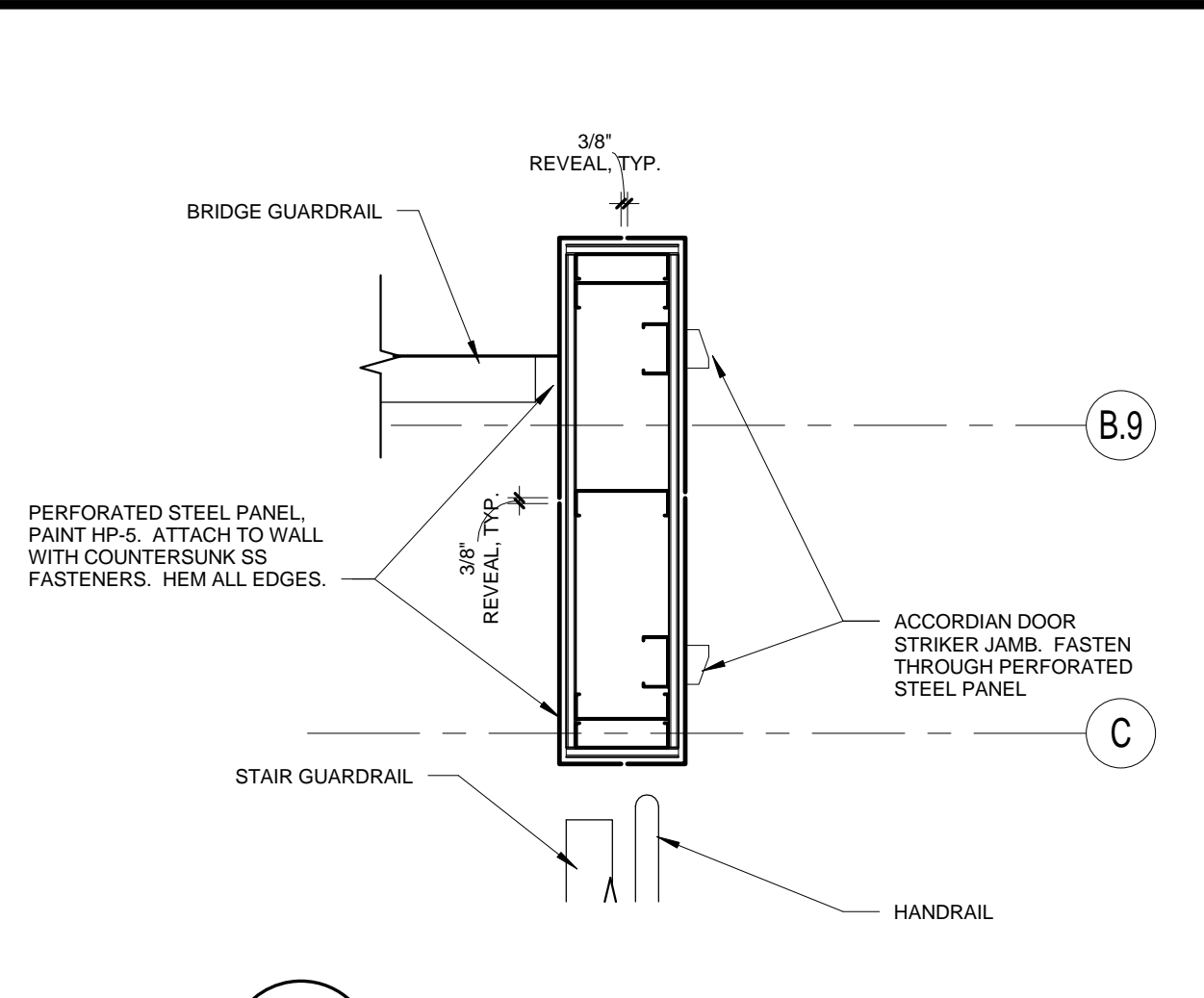
7 HANDRAIL SECTION AT METAL FRAMING
6" = 1'-0"



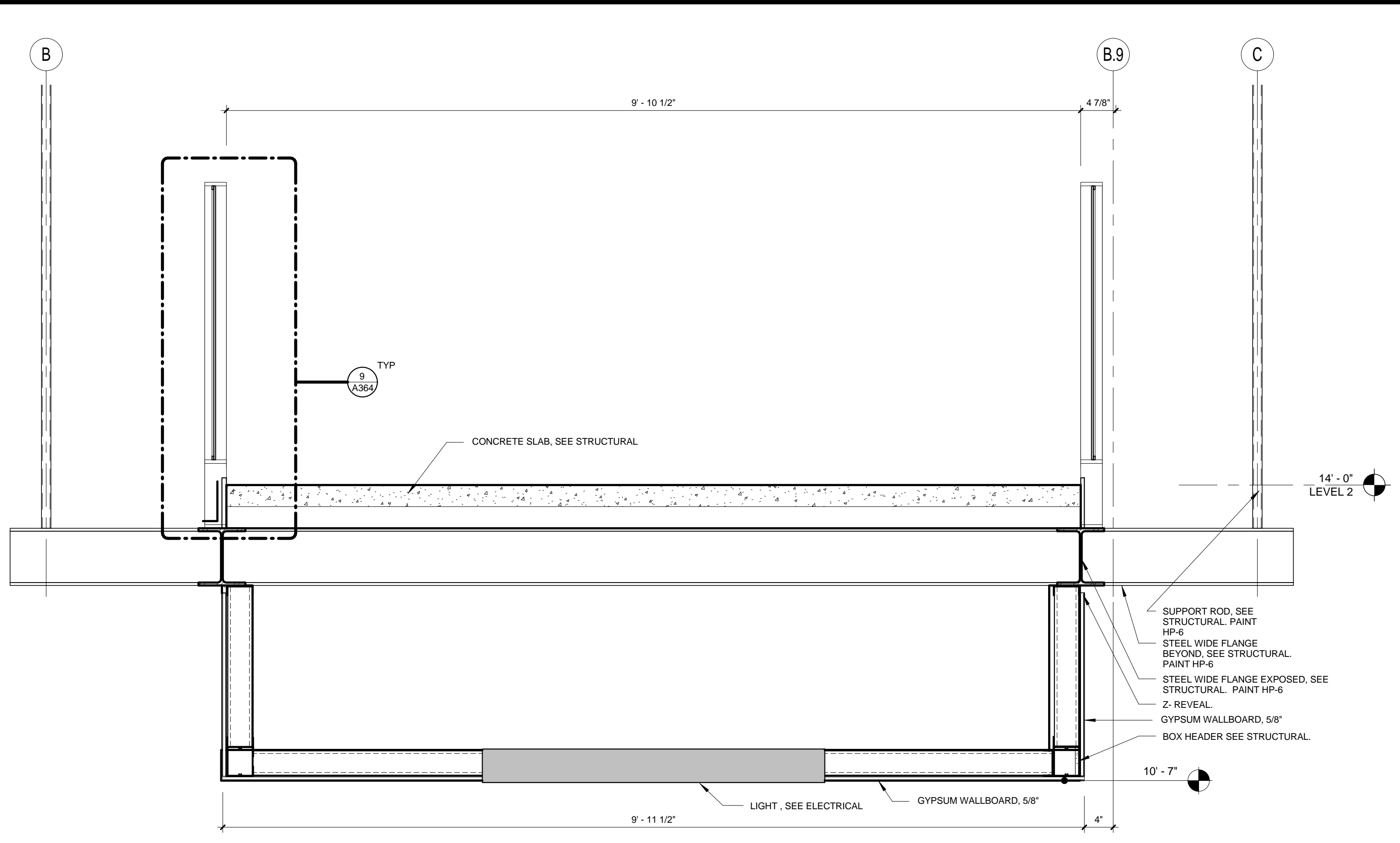
8 HANDRAIL DETAIL, TYP.
6" = 1'-0"



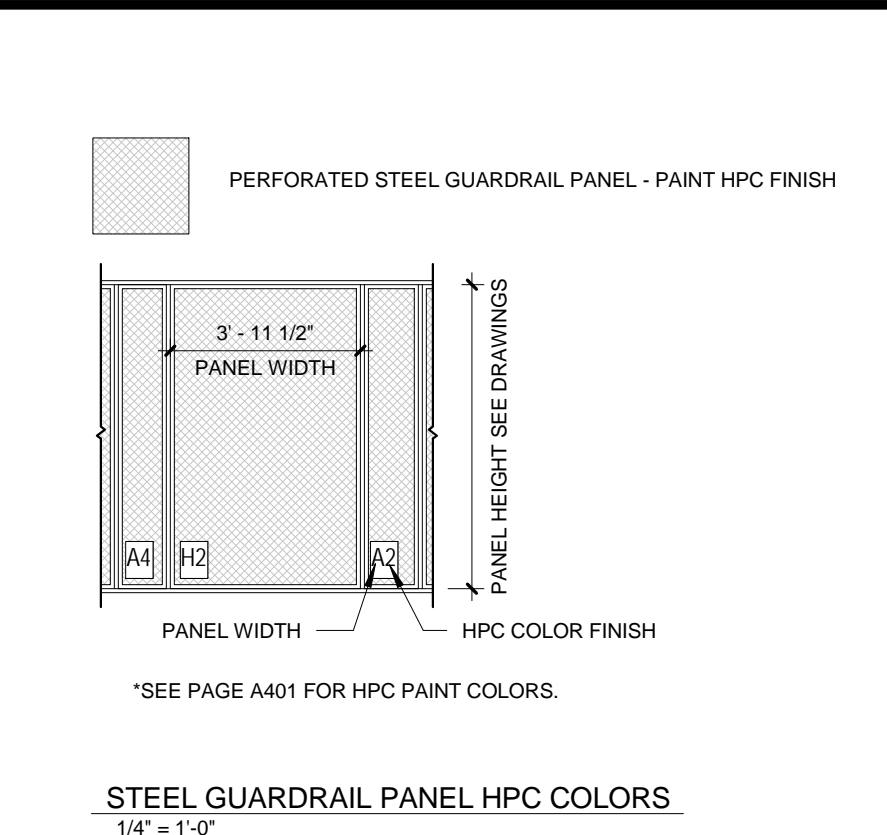
4 PORTAL DETAIL 2
1" = 1'-0"



3 PORTAL DETAIL 1
1" = 1'-0"

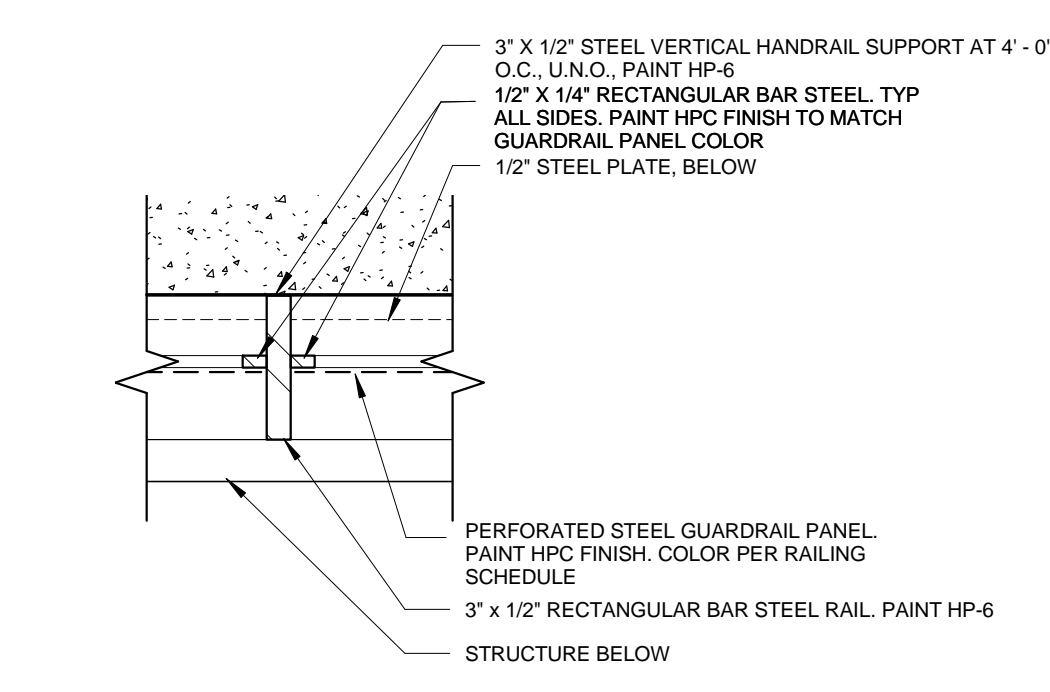


5 B205 HALLWAY BRIDGE SECTION
1" = 1'-0"

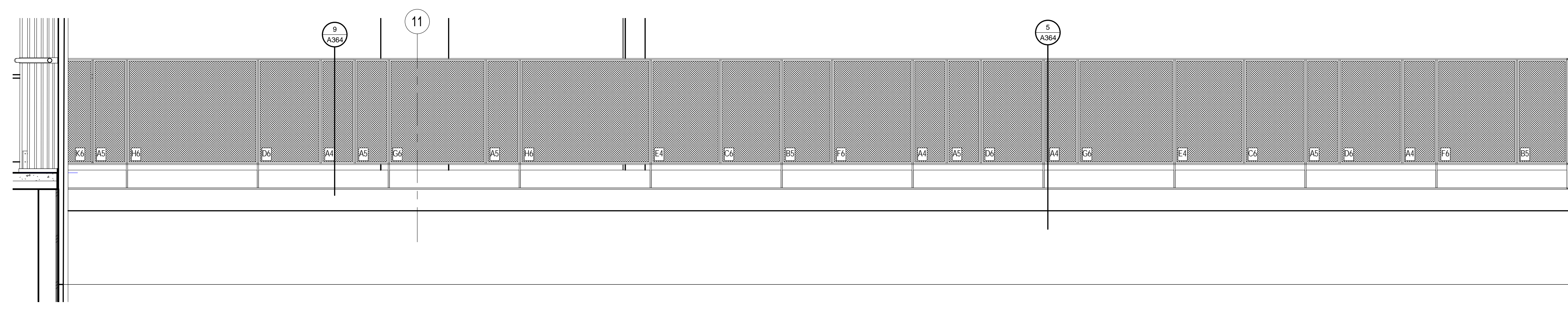


RAILING SCHEDULE

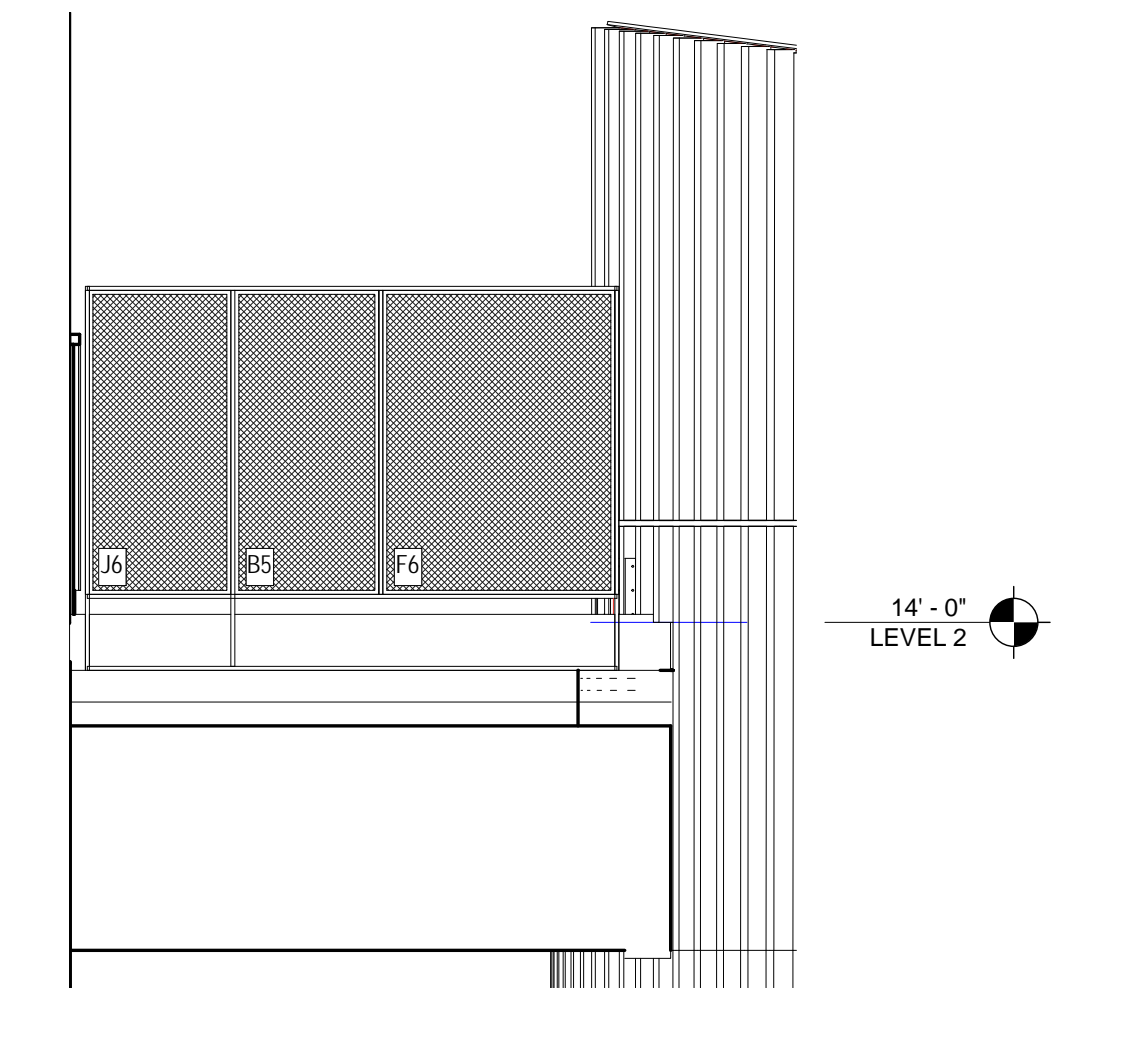
LETTER	PANEL COLOR	PANEL WIDTH	Comments
A4	HP-4	1'-0"	
B4	HP-4	1'-6"	
B5	HP-5	1'-6"	
B5	HP-5	1'-6"	
C6	HP-6	1'-10"	
D6	HP-6	1'-10 1/2"	
E4	HP-4	2'-11"	
F6	HP-6	2'-5"	
G6	HP-6	2'-11"	
H6	HP-6	3'-11 1/2"	
J6	HP-6	1'-5 3/4"	
K6	HP-6	1'-2 3/4"	
M6	HP-6	5 3/4"	
Q6	HP-6	2'-8"	
R6	HP-6	1'-9 1/4"	
S6	HP-6	1'-5"	
T6	HP-6	3'-10"	



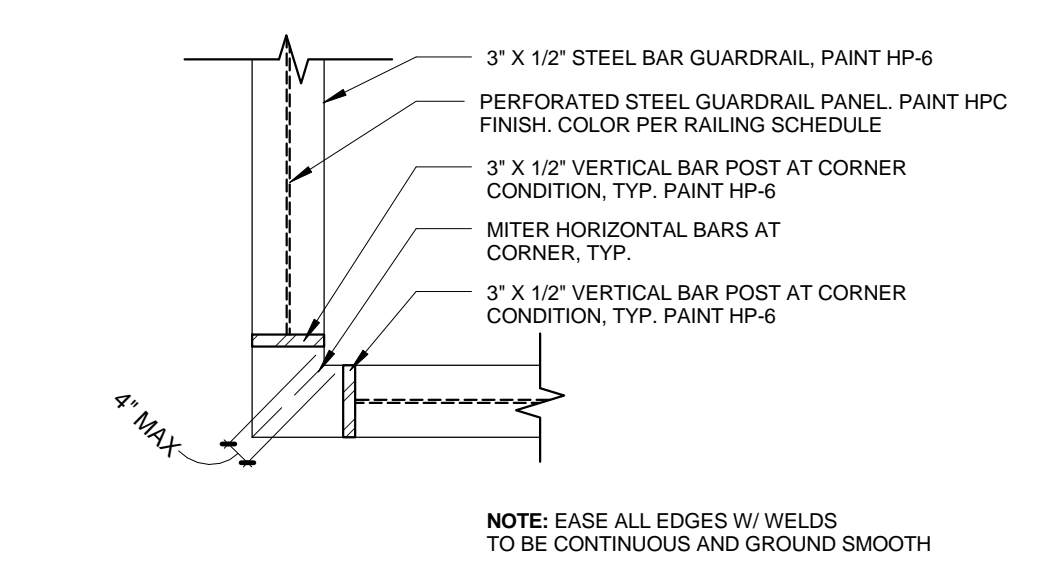
2 GUARDRAIL PLAN DETAIL
3" = 1'-0"



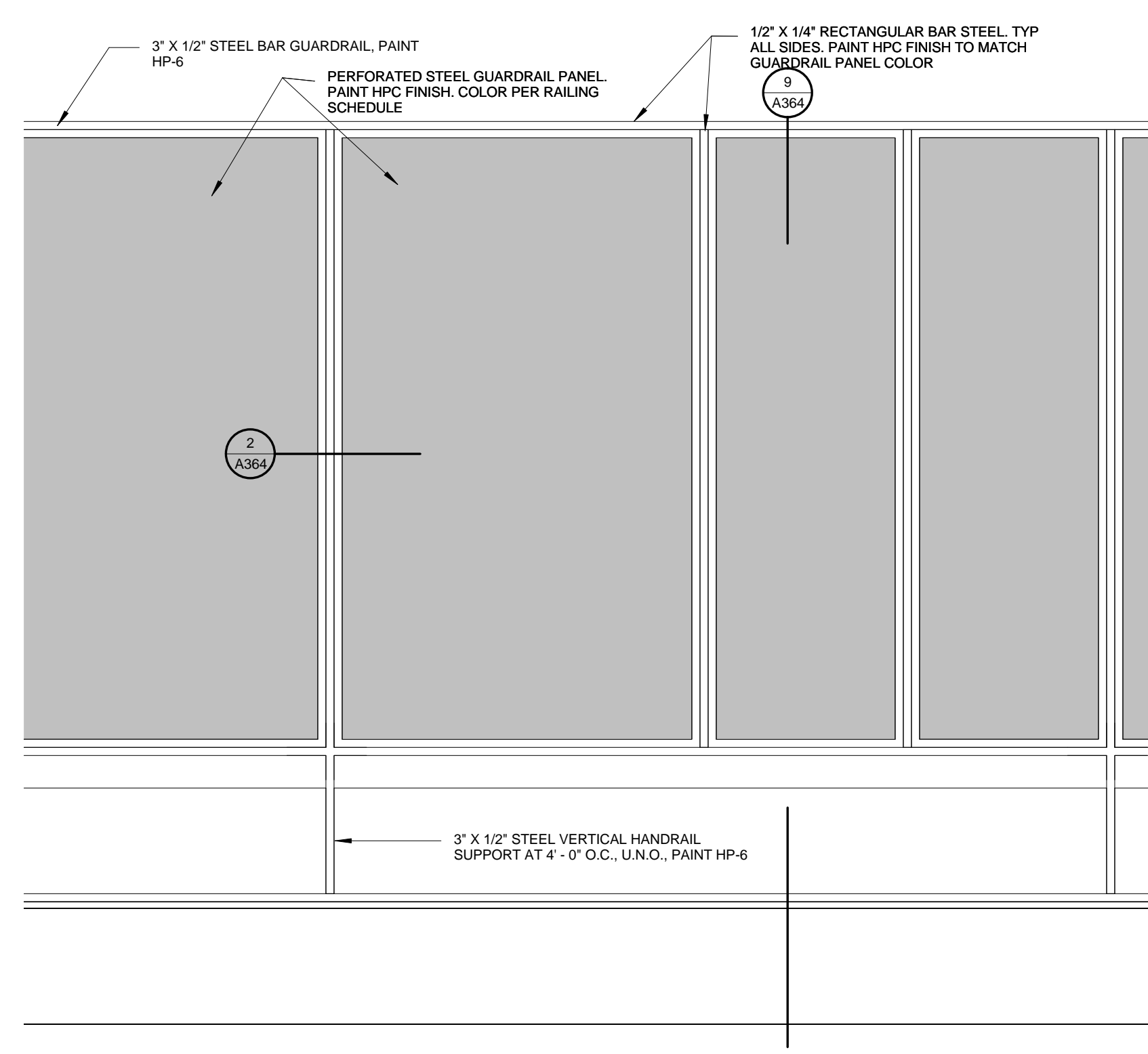
11 BRIDGE ELEVATION SOUTH
1/2" = 1'-0"



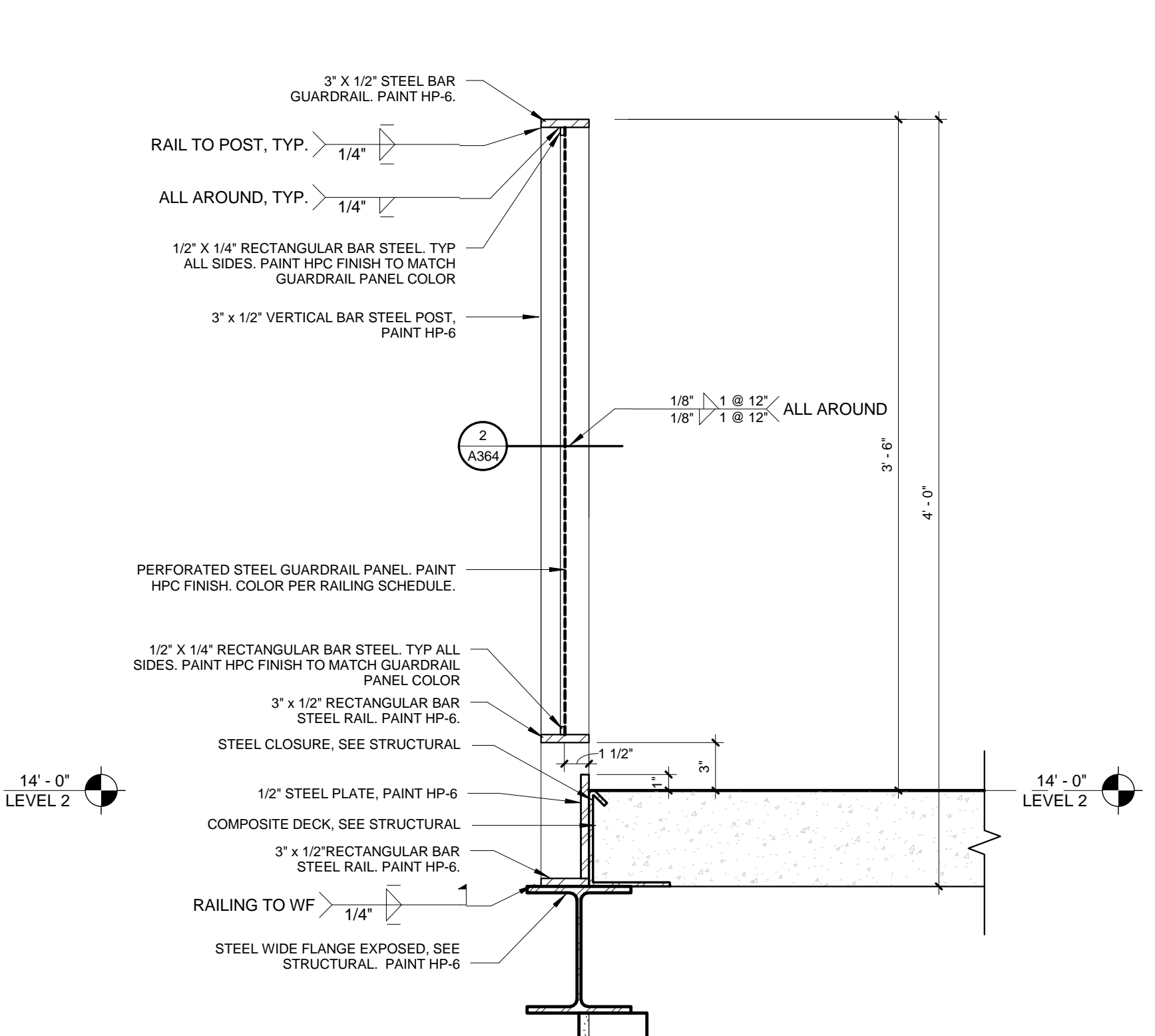
12 BRIDGE ELEVATION WEST
1/2" = 1'-0"



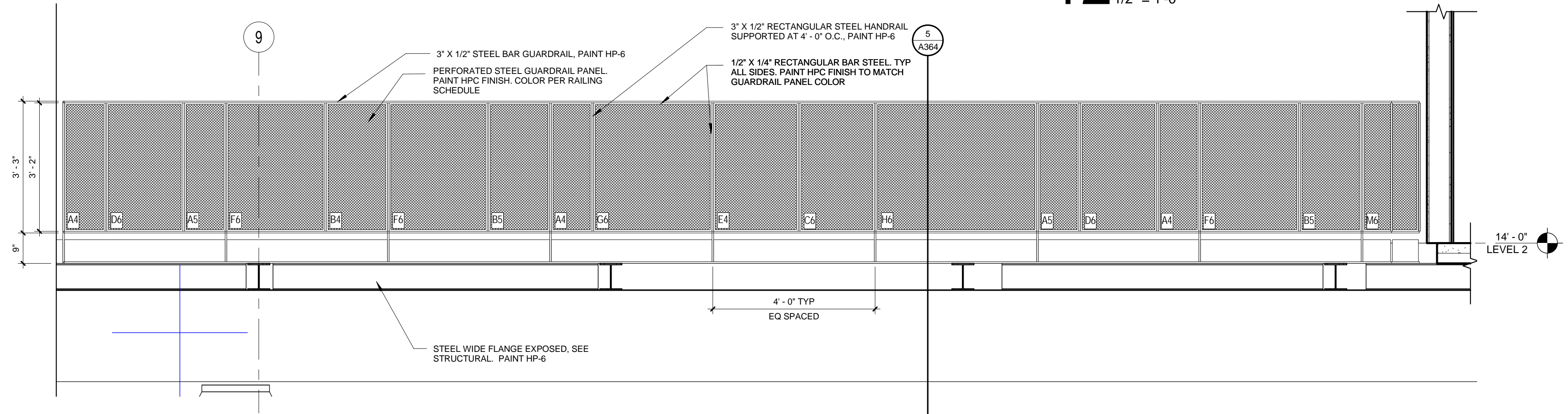
8 GUARDRAIL AT CORNER
1 1/2" = 1'-0"



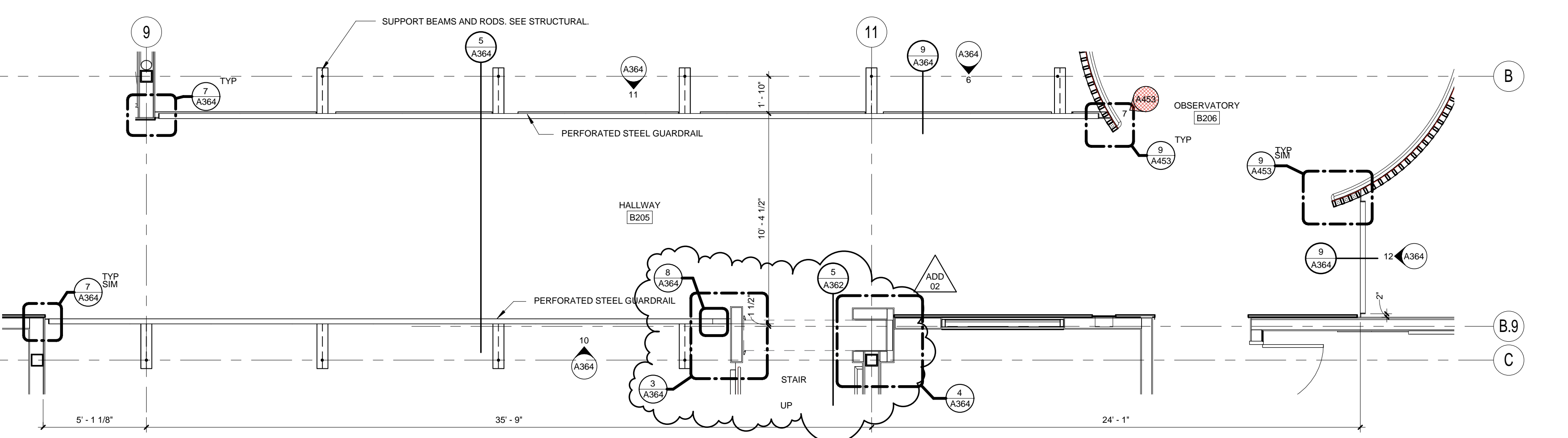
6 TYPICAL GUARDRAIL ELEVATION AT BRIDGE
1 1/2" = 1'-0"



9 GUARDRAIL DETAIL - AT BRIDGE
1 1/2" = 1'-0"



10 BRIDGE ELEVATION NORTH
1/2" = 1'-0"



1 ENLARGED PLAN - BRIDGE AT MEDIA CENTER
1/4" = 1'-0"

ROOM FINISH AND MATERIALS LEGEND

ACT - 1	ACOUSTICAL CEILINGS TYPE - 1 2X4 LAY-IN-ACOUSTICAL CEILING
ACT - 2	ACOUSTICAL CEILINGS TYPE - 2 2X4 LAY-IN-ACOUSTICAL CEILING TILE (FOOD SERVICE AREAS)

AWP - 1	ACOUSTICAL WALL PANELS TYPE - 1 TYPICAL FABRIC WRAPPED ACOUSTIC PANEL. MOMENTUM TEXTILES: MILLENNIUM COLOR STEEL
AWP - 2	ACOUSTICAL WALL PANELS TYPE - 2 FABRIC WRAPPED ACOUSTIC PANEL AT GYM. MOMENTUM TEXTILES: MILLENNIUM COLOR SPARK
AWP - 3	ACOUSTICAL WALL PANELS TYPE - 3 FABRIC WRAPPED ACOUSTIC PANEL AT GYM. MOMENTUM TEXTILES: INFINITY, COLOR TYRIAN
AWP - 4	ACOUSTICAL WALL PANELS TYPE - 3 FABRIC WRAPPED ACOUSTIC PANEL AT GYM. MOMENTUM TEXTILES: ODYSSEY, COLOR INK
AWP - 5	ACOUSTICAL WALL PANELS TYPE - 3 FABRIC WRAPPED ACOUSTIC PANEL AT GYM. MOMENTUM TEXTILES: INFINITY, COLOR LINKS

B - 1	BASE TYPE - 1 4" RUBBER BASE JOHNSONITE-63 BURNT UMBER
B - 2	BASE TYPE - 2 NOT USED
B - 3	BASE TYPE - 3 4" VENTED BASE AT GYMNASIUMS
B - 4	BASE TYPE - 4 6" COVED QUARRY TILE AT KITCHEN

CMU - 1	CMU TYPE - 1 WILLAMETTE GRAYSTONE: MIDNIGHT 225 GROUND FACE
CMU - 2	CMU TYPE - 2 WILLAMETTE GRAYSTONE: PEWTER 234 GROUND FACE

CPT - 1	TILE CARPETING TYPE - 1 TANDUS: SQUARED UP TILE. COLOR: 1017920-002-00
---------	---

EM - 1	ENTRY MAT TYPE - 1 MATS INC: SUPER NOP IN "CHARCOAL"
--------	---

EM - 2	ENTRY MAT TYPE - 1 MATS INC: SUPER NOP IN "STERLING"
--------	---

FA - 1	FABRICS TYPE - 1 CUBICLE CURTAIN: (HEALTH ROOM) MAHARAM: MODERATE IN 005 "LAGOON"
--------	---

FA - 2	FABRICS TYPE - 2 PLATFORM CURTAIN: COLOR BLACK
--------	---

FRP - 1	PLASTIC PANELING (FRP) KITCHEN: ALL EXPOSED GYPSUM WALLBOARD AREAS NOT TO RECEIVE TILE FINISH WILL RECEIVE FRP-1 UP TO 7'-2" WITH P-1 ABOVE. ALL OTHER LOCATIONS FRP UP TO 4'-0" WITH P-1 ABOVE. CRANE COMPOSITES: LINEN IN "COTTON WHITE"
---------	---

HP - 1	HIGH PERFORMANCE PAINT COLOR 1: WHITE HIGH PERFORMANCE COATING - (USED ON ALL INTERIOR AND EXTERIOR METALS. EXTERIOR METALS ALSO TO BE GALVANIZED.) COLOR TO MATCH P-1.
--------	--

HP - 2	HIGH PERFORMANCE PAINT COLOR 2: PURPLE HIGH PERFORMANCE COATING - (USED ON ALL INTERIOR AND EXTERIOR METALS. EXTERIOR METALS ALSO TO BE GALVANIZED.) COLOR TO MATCH P-2.
--------	---

HP - 3	HIGH PERFORMANCE PAINT COLOR 3: YELLOW HIGH PERFORMANCE COATING - (USED ON ALL INTERIOR AND EXTERIOR METALS. EXTERIOR METALS ALSO TO BE GALVANIZED.) COLOR TO MATCH P-3.
--------	---

HP - 4	HIGH PERFORMANCE PAINT COLOR 4: BLUE HIGH PERFORMANCE COATING - (USED ON ALL INTERIOR AND EXTERIOR METALS. EXTERIOR METALS ALSO TO BE GALVANIZED.) COLOR TO MATCH P-4.
--------	---

HP - 5	HIGH PERFORMANCE PAINT COLOR 5: GREEN HIGH PERFORMANCE COATING - (USED ON ALL INTERIOR AND EXTERIOR METALS. EXTERIOR METALS ALSO TO BE GALVANIZED.) COLOR TO MATCH P-5.
--------	--

HP - 6	HIGH PERFORMANCE PAINT COLOR 6: LIGHT GREY HIGH PERFORMANCE COATING - (USED ON ALL INTERIOR AND EXTERIOR METALS. EXTERIOR METALS ALSO TO BE GALVANIZED.) BENJAMIN MOORE 2125-50 "SWEET INNOCENCE"
--------	---

HP - 7	HIGH PERFORMANCE PAINT: DARK GREY HIGH PERFORMANCE COATING - (USED ON ALL INTERIOR AND EXTERIOR METALS. EXTERIOR METALS ALSO TO BE GALVANIZED.) BENJAMIN MOORE 2125-20 "DEEP SPACE"
--------	---

LIN - 1	LINOLEUM FORBO: MARMOLEUM CONCRETE
---------	---------------------------------------

P - 1	PAINT COLOR 1: WHITE FIELD PAINT BENJAMIN MOORE OC-117 SIMPLY WHITE
-------	---

P - 2	PAINT COLOR 2: PURPLE SHERWIN WILLIAMS: SW6980 "GUTSY GRAPE"
-------	---

P - 3	PAINT COLOR 3: YELLOW SHERWIN WILLIAMS SW 6911 "CONFIDENT YELLOW"
-------	--

P - 4	PAINT COLOR 4: BLUE BENJAMIN MOORE: 2065-30 "BRILLIANT BLUE"
-------	---

P - 5	PAINT COLOR 5: GREEN SHERWIN WILLIAMS: SW 6718 "OVERT GREEN"
-------	---

P - 6	PAINT COLOR 6 PROJECTOR PAINT
-------	----------------------------------

P - 7	PAINT COLOR 7: DARK GREY BENJAMIN MOORE 2125-20 "DEEP SPACE"
-------	---

PL - X	PLASTIC LAMINATE PL-A: Formica "Fog" 061-58 PL-B: Formica "Fog Monoch" 961-1MC PL-C: Newmar "Island Orchard" S90017 PL-D: Plonite "Primary Yellow" S1914 PL-E: Plonite "Royal Blue" S8009 PL-F: Wilsonart "Island" D488-60 PL-G: Formica "Storm" 912-59
--------	--

PLY - 1	PLYWOOD TYPE - 1 FIRE TREATED PLYWOOD
---------	--

POL	POLISHED CONCRETE X
-----	------------------------

QT - 1	QUARRY TILE TYPE - 2 METROPOLITAN CERAMICS: QUARRYBASICS IN 507 PURITAN
--------	--

RS - 1	RUBBER STAIR TREAD
--------	--------------------

SLR	SEALED CONCRETE SEALED CONCRETE
-----	------------------------------------

SSM - 1	SOLID SURFACE MATERIAL CORIAN "ANTARTICA"
---------	--

SSM - 2	SOLID SURFACE MATERIAL CORIAN: "SILVER BIRCH"
---------	--

T - 1	WALL TILE TYPE - 1 FIELD TILE: MOSA COLORS BY MOSA
-------	---

T - 2	WALL TILE TYPE - 2 ACCENT TILE: MOSA COLORS BY MOSA T-2A: 17930 Clover T-2B: 17990 Spectra Yellow T-2C: 18910 Brilliant Blue T-2D: 17900 Macaw
-------	---

TB - 1	TACK BOARD TYPE - 1 FRAMED TACK PANELS T-1: 16900 Accent White
--------	--

TC - 1	TOILET COMPARTMENTS TYPE - 1 BOBRICK DURALINE SERIES: GREY GRIT
--------	--

TS - 1	TACK SURFACE TYPE - 1 FABRIC WRAPPED TACK PANELS: MOMENTUM TEXTILES: MILLENNIUM IN "STEEL"
--------	---

UF - 1	UPHOLSTERY FABRIC TYPE - 1 UF-1A: NOT USED UF-1B: MOMENTUM TEXTILES ROW IN "FUSION" UF-1C: MOMENTUM TEXTILES ROW IN "LEAF"
--------	---

WAF - 1	WOOD FLOORING TYPE - 1 WOOD ATHLETIC FLOORING
---------	--

WC - 1	WOOD CEILING TYPE - 1 RECLAIMED BLEACHER WOOD
--------	--

WSCOT - 1	WAINSCOT TYPE - 1: P-LAM WAINSCOT 1/2" SUBSTRATE WITH PLASTIC LAMINATE FACE (PL-B) AND ALUMINUM J-MOLD TRIM AND SOLID HARDWOOD TRIM UP TO 3'-0" WITH P-1 ABOVE. SEE SHEET A459 FOR TYPICAL DETAILS.
-----------	--

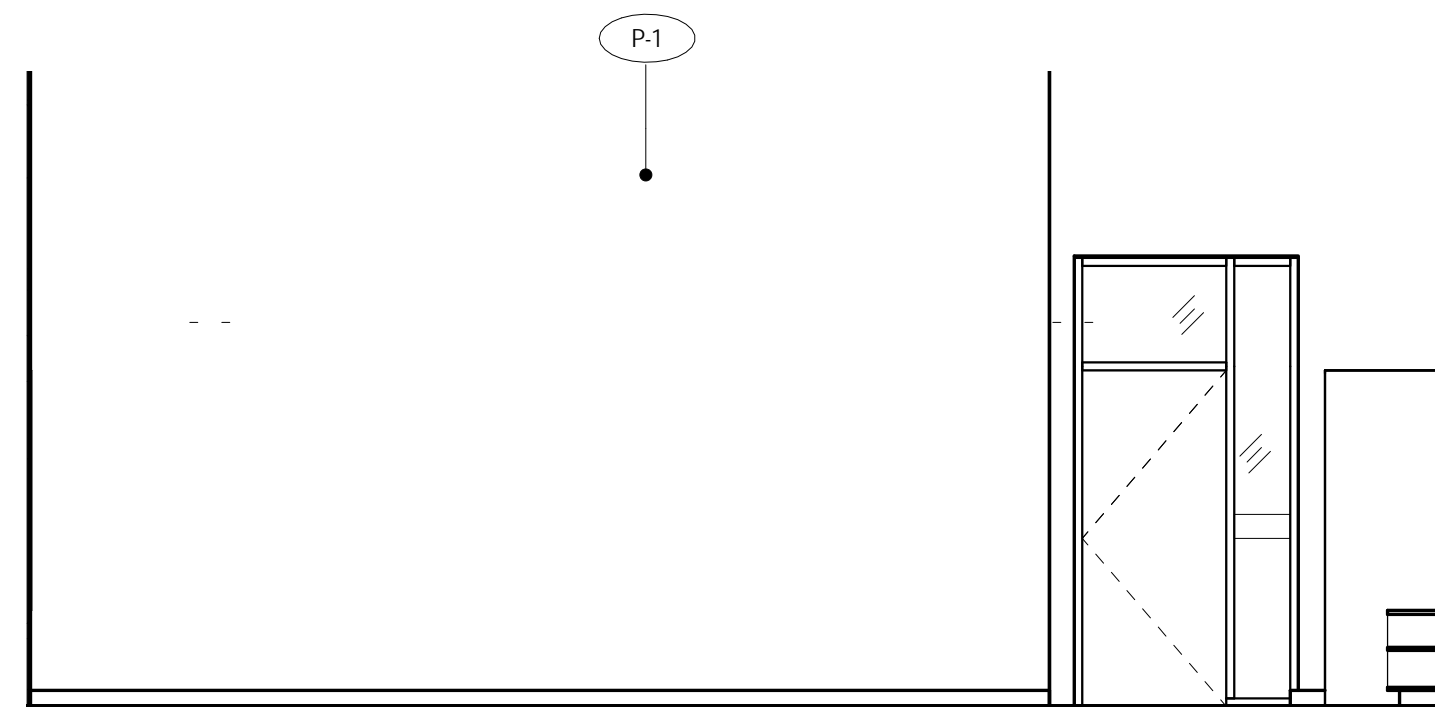
WSCOT - 2	WAINSCOT TYPE - 2: TILE WAINSCOT TILE (T-1, T-2) UP TO 6' 6" WITH P-1 ABOVE
-----------	--

WSCOT - 3	WAINSCOT TYPE - 3: WOOD WAINSCOT 1/2" WP-1 PANELS AND STAINLESS STEEL SILL UP TO 3'-0" WITH P-1 ABOVE. SEE SHEET A459 FOR TYPICAL DETAILS.
-----------	---

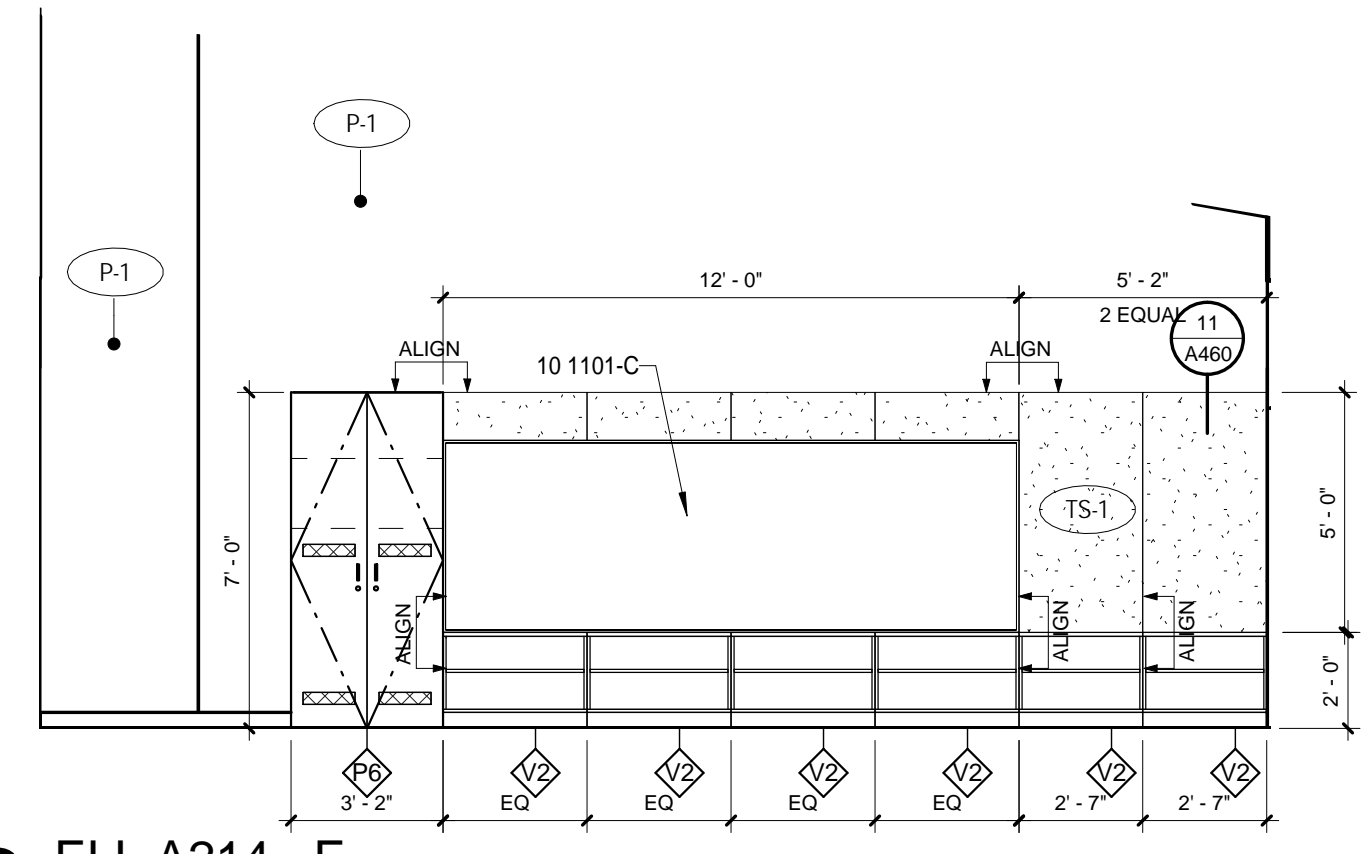
WP - 1	WOOD PANELS HARDWOOD VENEER PLYWOOD WITH WHITE MAPLE FACE
--------	--

WP - 2	WOOD PANELS APPLEPLY WITH WHITE MAPLE FACE
--------	---

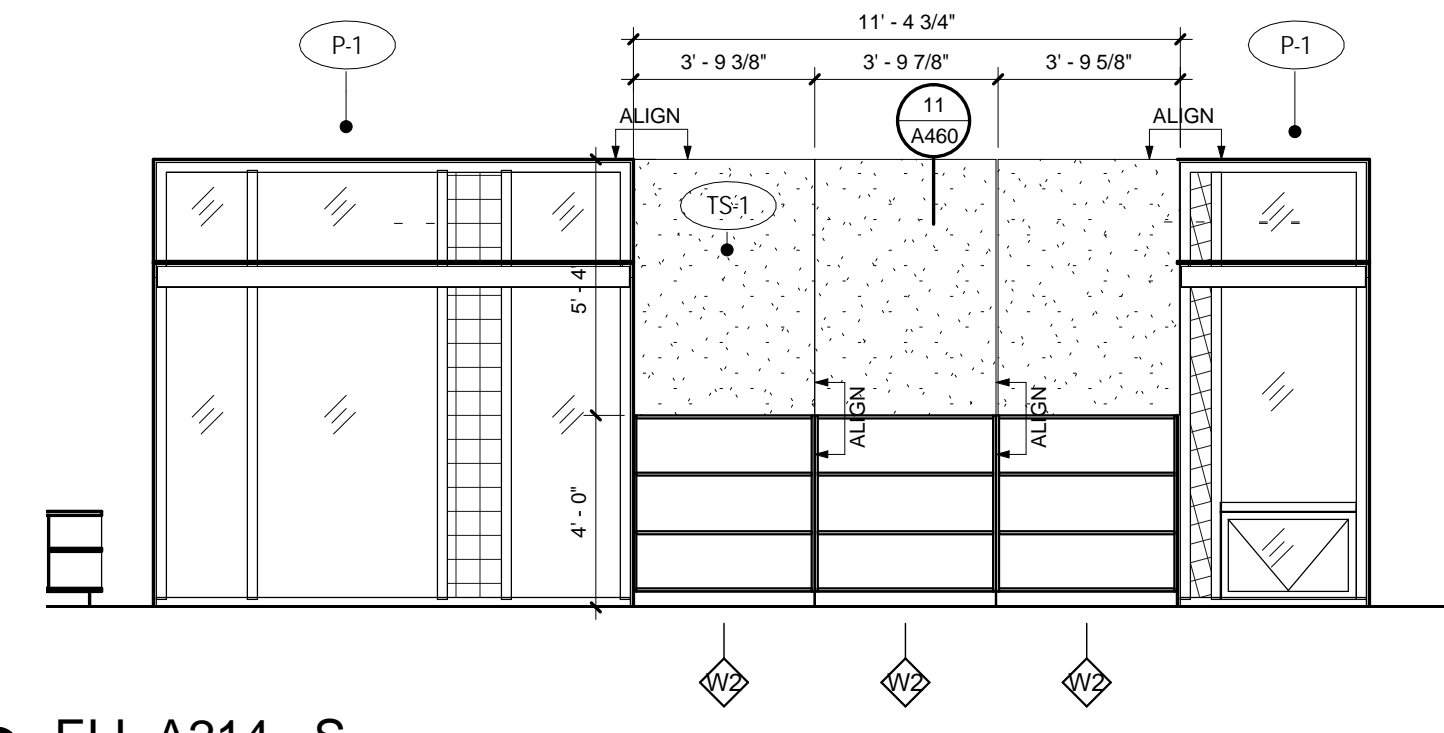
VC - 1	VINYL WALL COVERING TYPE-1 MAHARAM "PIXEL" IN 002 (USED ON FOLDING PANEL PARTITIONS)
--------	---



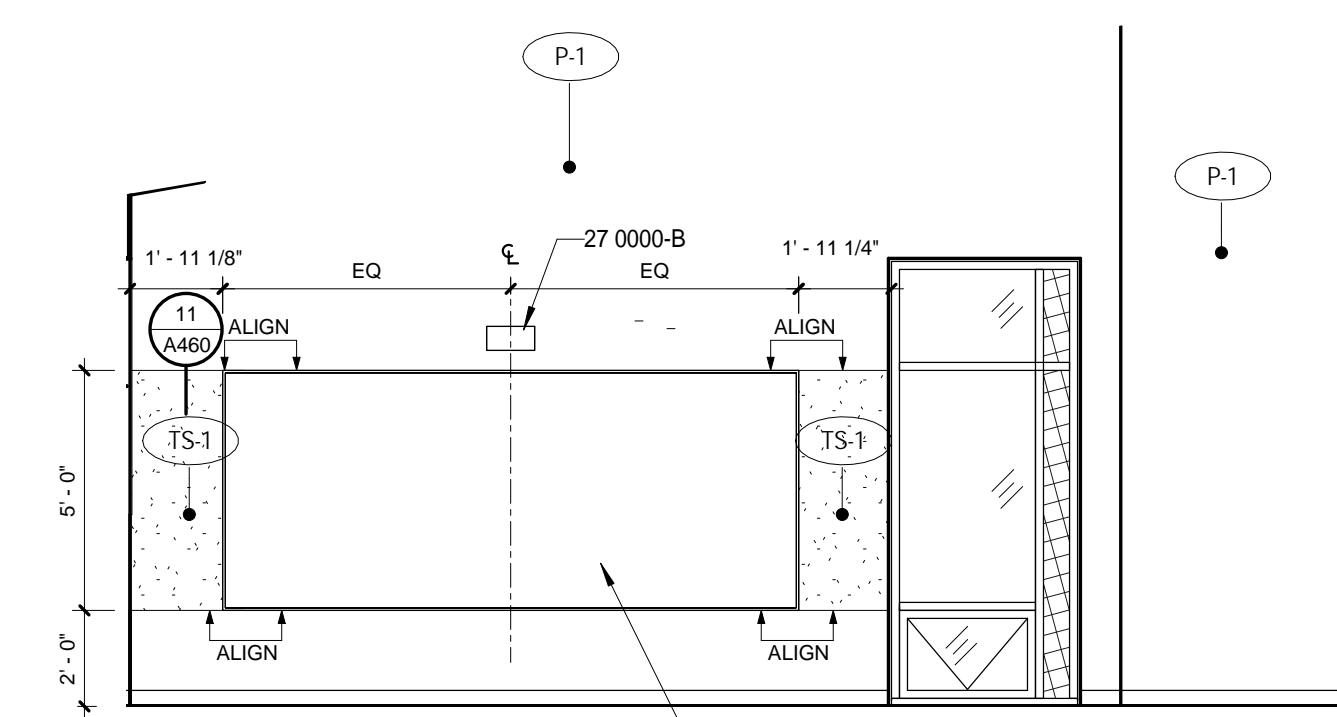
1 ELL A214 - N
1/4" = 1'-0"



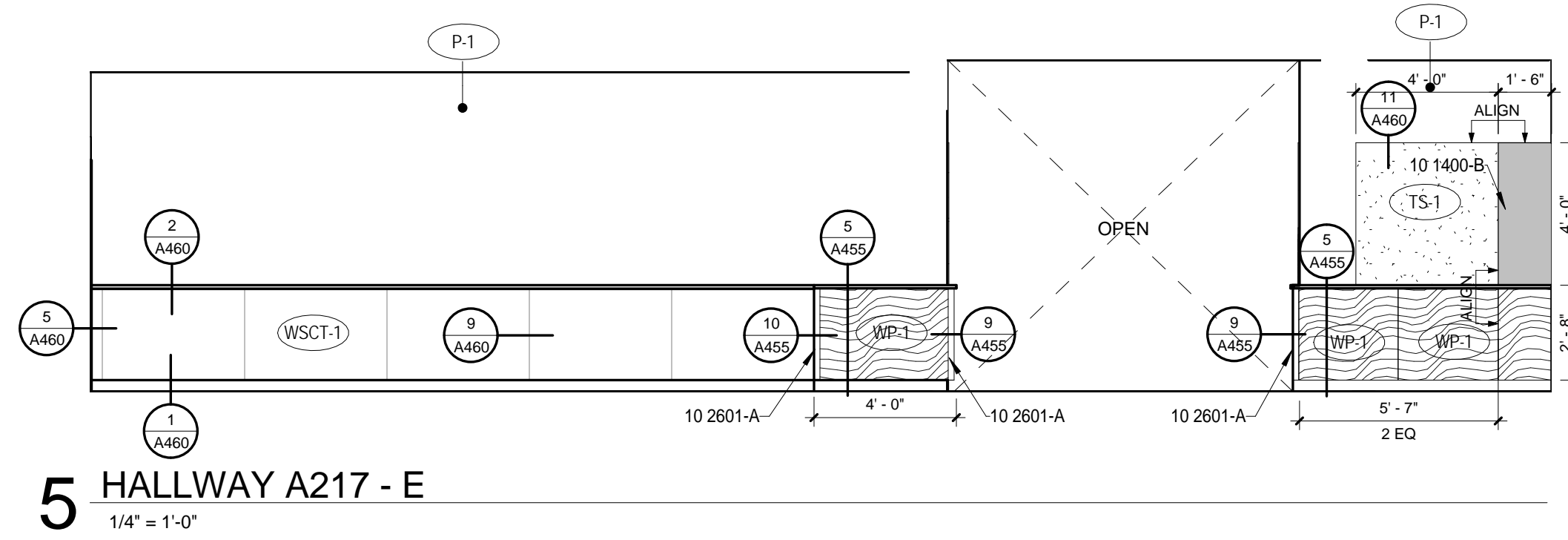
2 ELL A214 - E
1/4" = 1'-0"



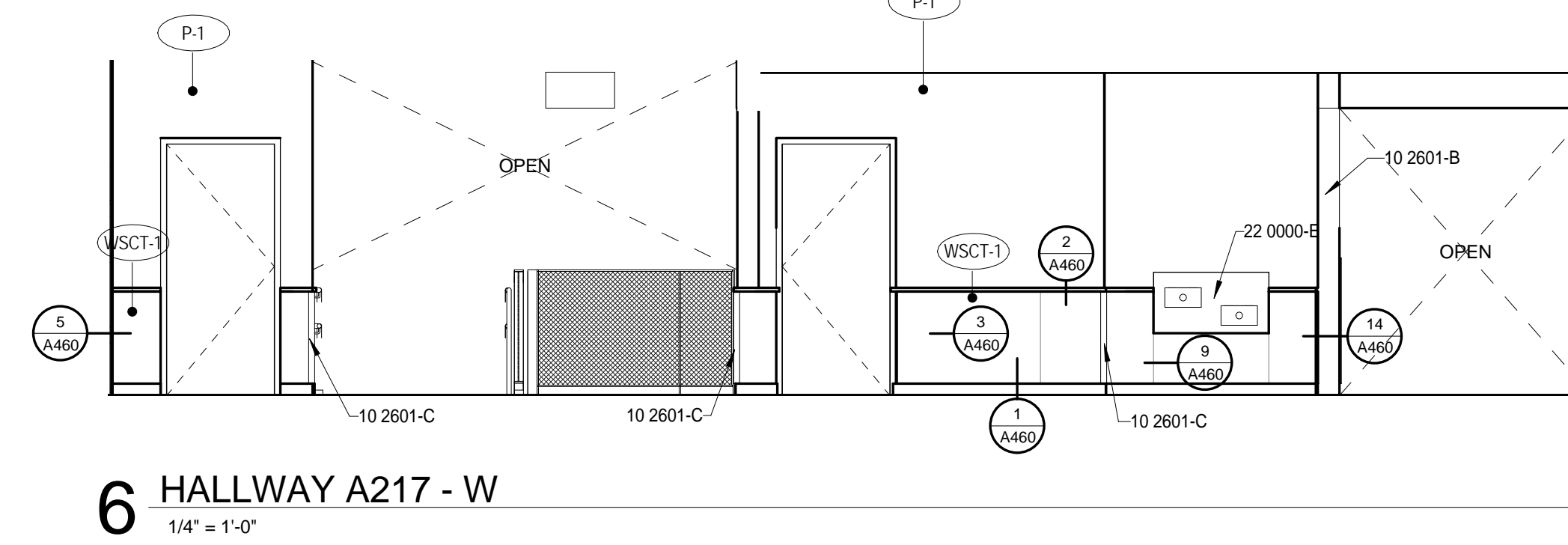
3 ELL A214 - S
1/4" = 1'-0"



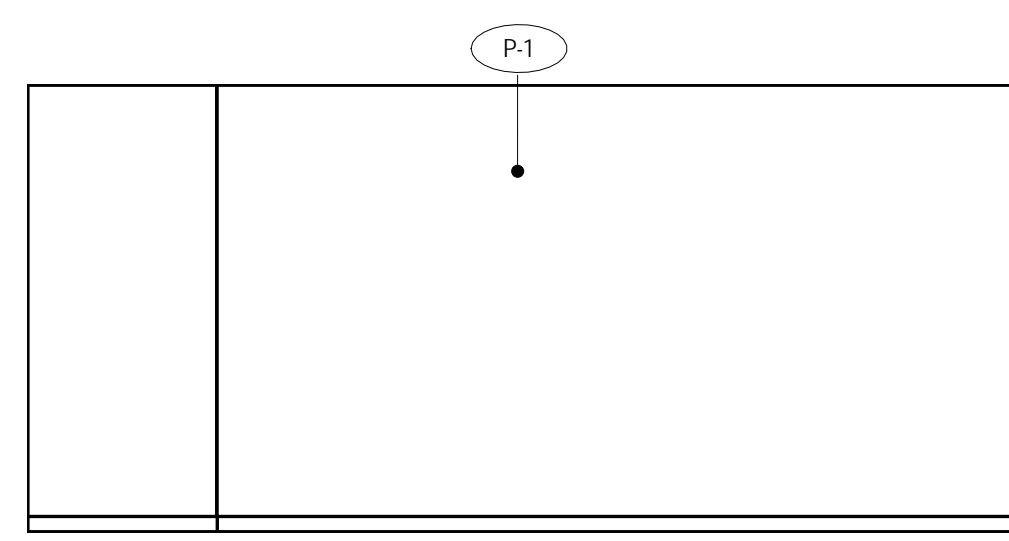
4 ELL A214 - W
1/4" = 1'-0"



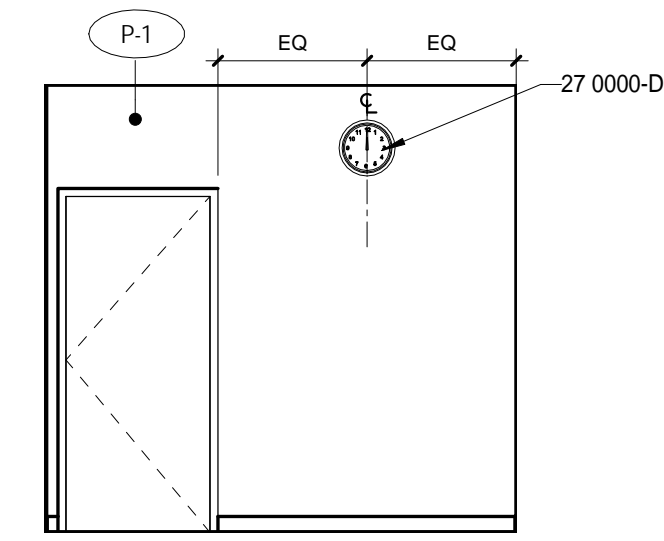
5 HALLWAY A217 - E
1/4" = 1'-0"



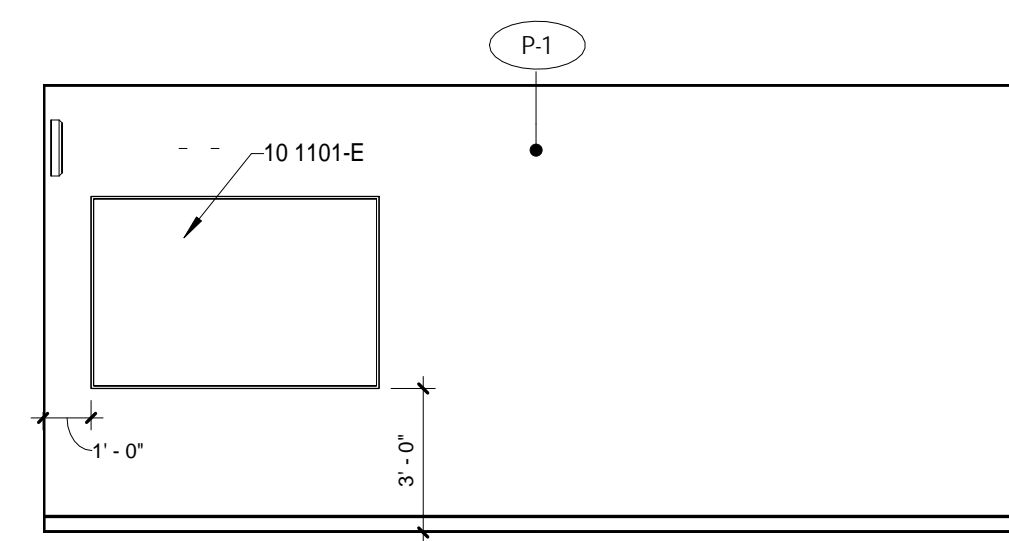
6 HALLWAY A217 - W
1/4" = 1'-0"



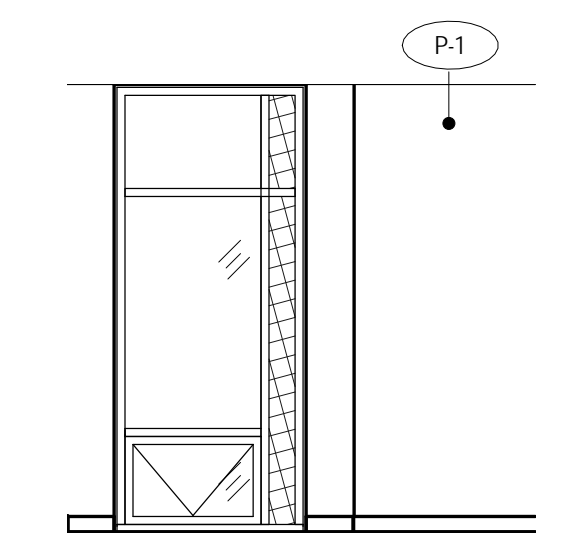
7 SPEECH A223 - N
1/4" = 1'-0"



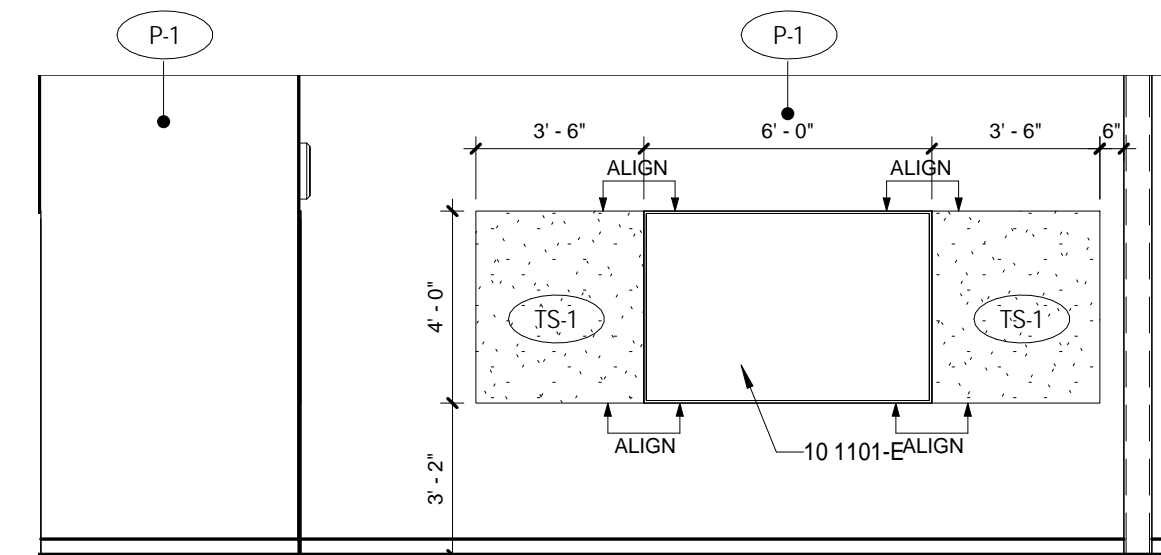
8 SPEECH A223 - E
1/4" = 1'-0"



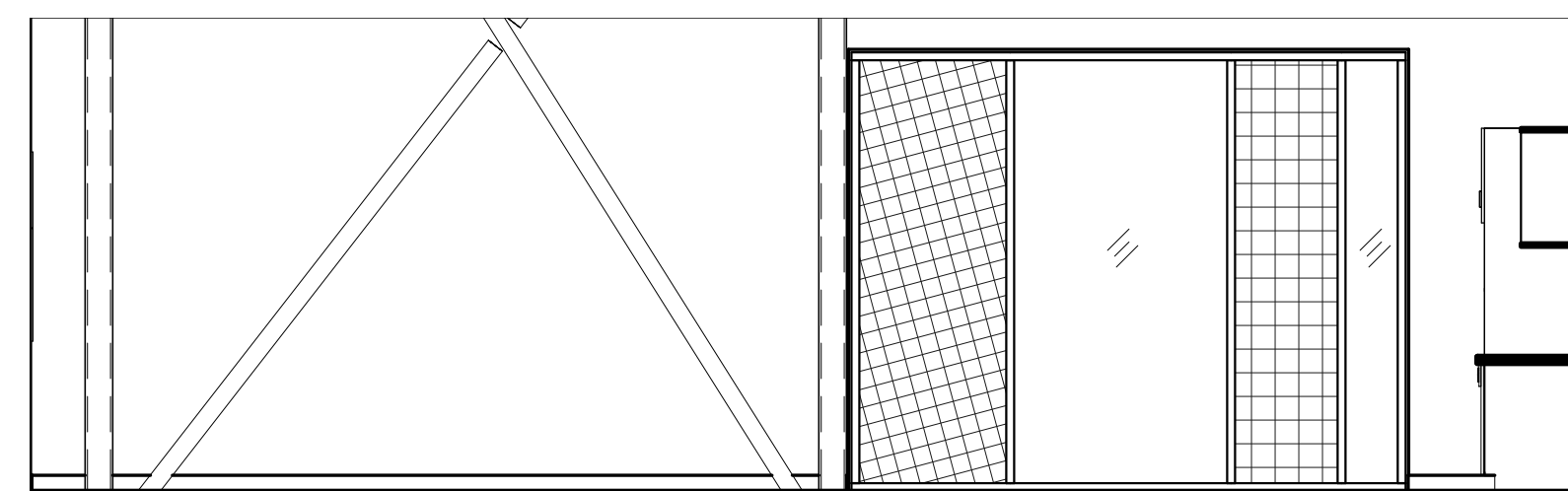
9 SPEECH A223 - S
1/4" = 1'-0"



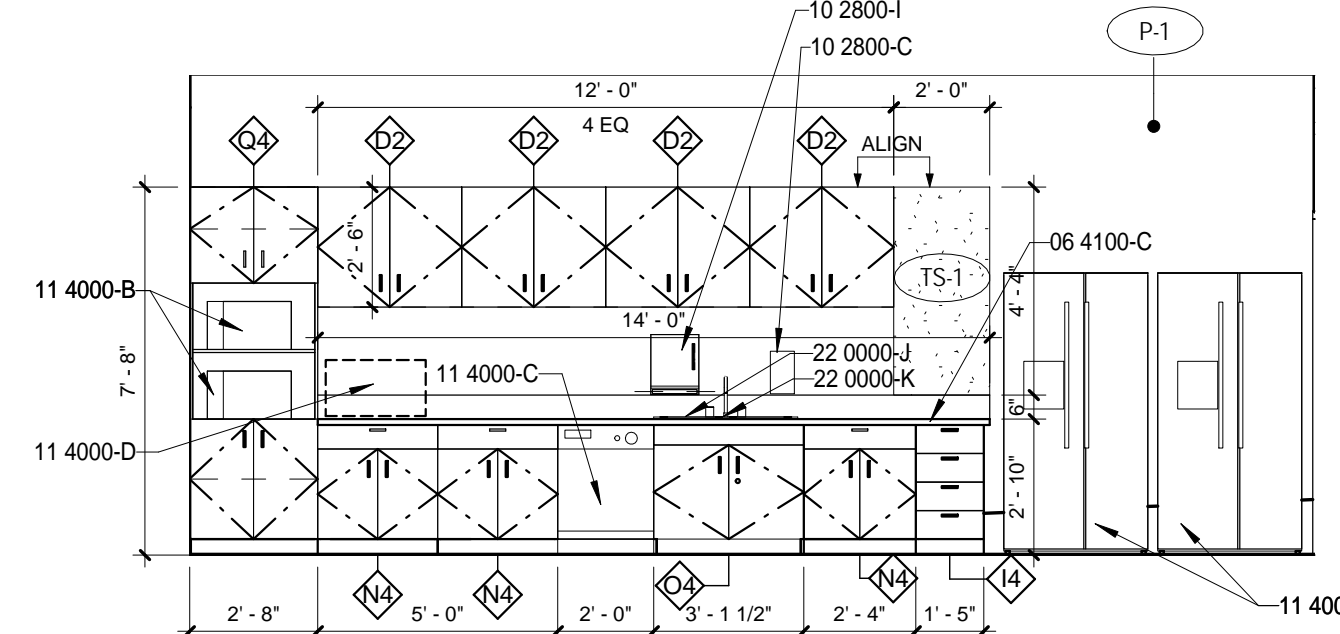
10 SPEECH A223 - W
1/4" = 1'-0"



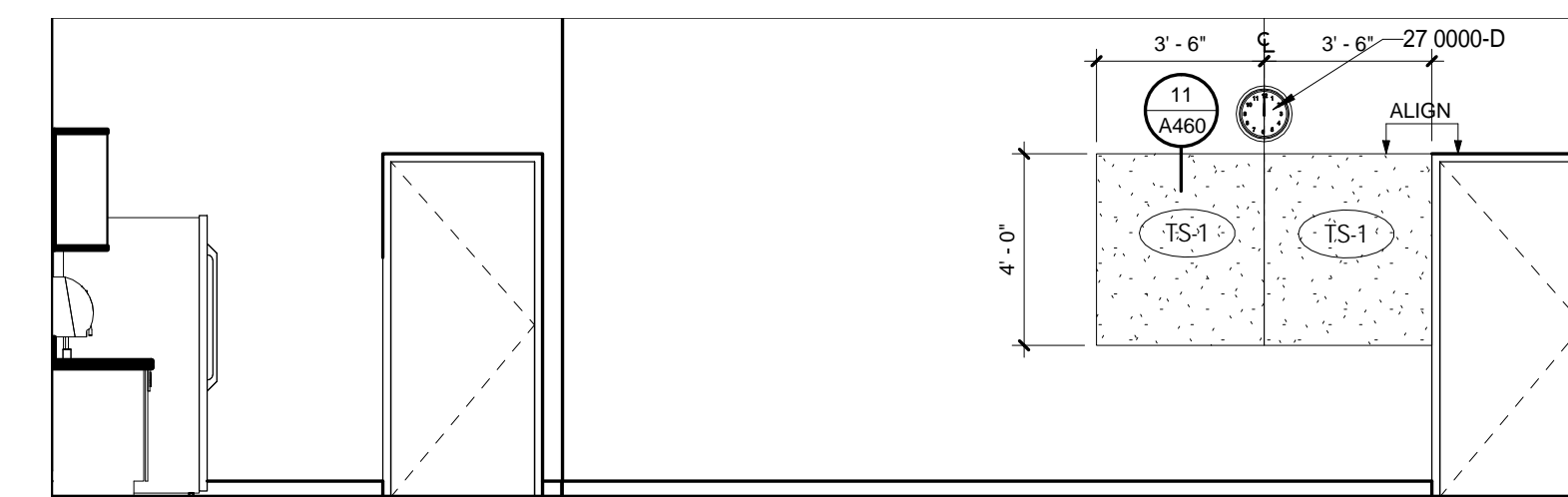
11 STAFF B200 - N
1/4" = 1'-0"



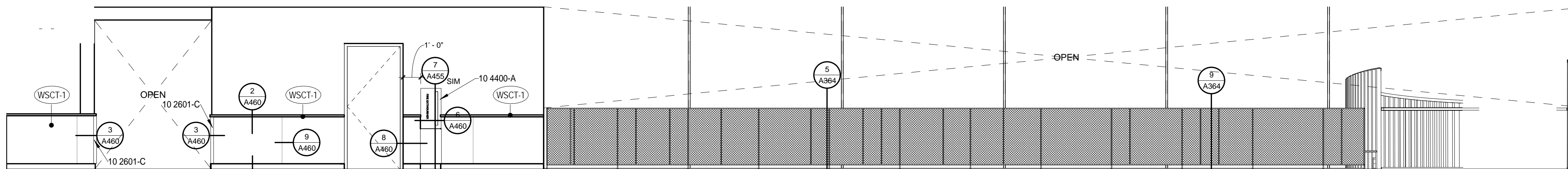
12 STAFF B200 - E
1/4" = 1'-0"



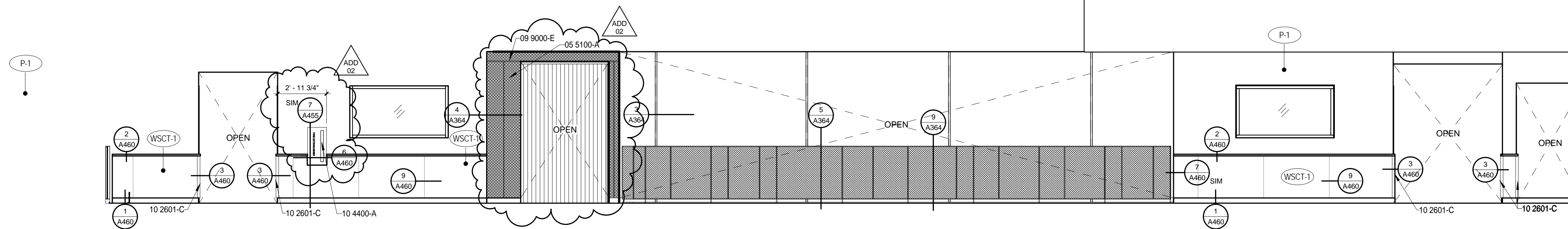
13 STAFF B200 - S
1/4" = 1'-0"



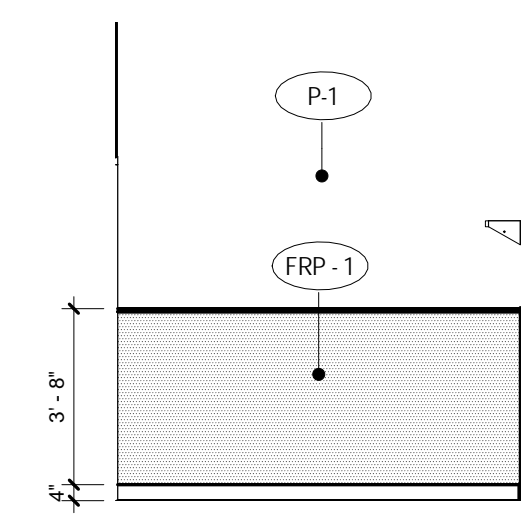
14 STAFF B200 - W
1/4" = 1'-0"



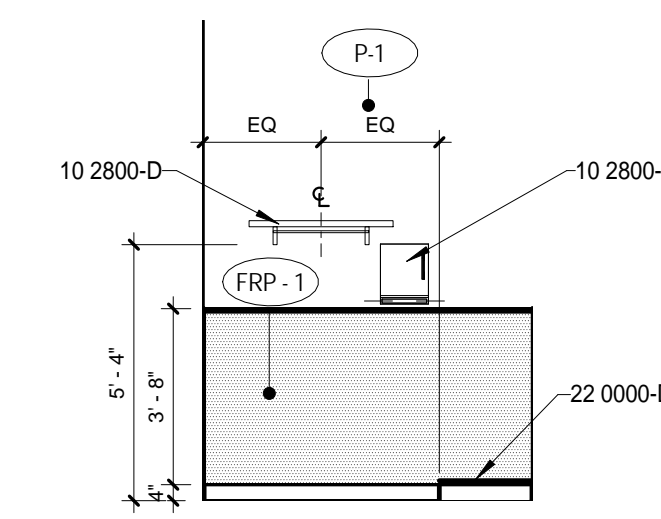
15 HALLWAY B205 - N
1/4" = 1'-0"



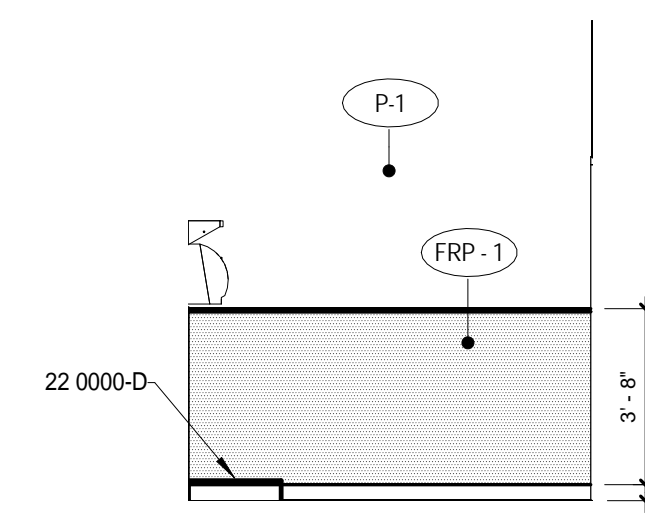
16 HALLWAY B205 - S
1/4" = 1'-0"



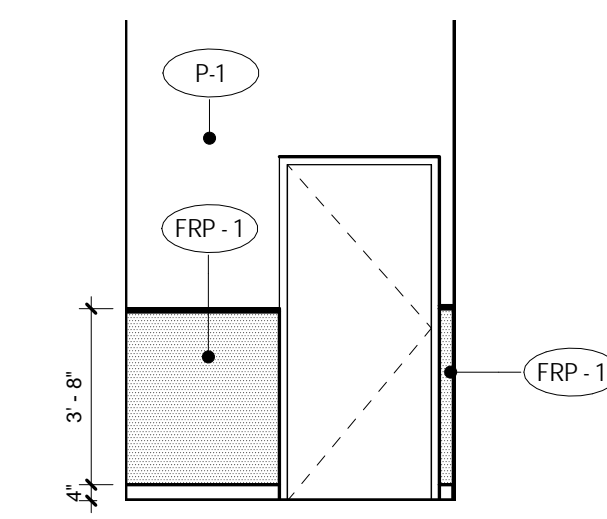
17 CUST B208 - N
1/4" = 1'-0"



18 CUST B208 - E
1/4" = 1'-0"



19 CUST B208 - S
1/4" = 1'-0"



20 CUST B208 - W
1/4" = 1'-0"

GENERAL NOTES - INTERIOR ELEV.

- A. SEE FINISH PLANS FOR CORNER GUARD LOCATIONS.
- B. MECH/DIF ROOMS RECEIVE 3/4" FIRE-TREATED PLYWOOD FULL-HEIGHT ON ALL WALLS, TYP. PAINT P-1
- C. ALL ROOMS TO RECEIVE P-1 PAINT, B-1 RUBBER BASE, EXCEPT AT RESTROOM WALLS OR UNOD.
- D. MATERIALS WHICH ARE IN SIMILAR LOCATIONS ARE NOT NOTED AT EVERY OCCURRENCE
- E. SEE FINISH PLANS, REFLECTED CEILING PLANS, INTERIOR ELEVATIONS, AND INTERIOR FINISH LEGEND FOR ADDITIONAL FINISH INFORMATION
- F. SEE DOOR AND FRAME TYPES FOR ADDITIONAL INFORMATION AND REFERENCE TO DETAILS. DOOR SWINGS SHOWN ON ELEVATIONS ARE FOR REFERENCE ONLY - SEE FLOOR PLANS
- G. PROVIDE BLOCKING FOR ALL WALL-MOUNTED EQUIPMENT AND FIXTURES THAT ARE INCLUDED IN CONTRACT OR OWNER FURNISHED. SEE ALSO ELECTRICAL, MECHANICAL, AND TECHNOLOGY FOR ALL EQUIPMENT AND FIXTURES.
- H. FOR ALL KITCHEN WALLS THAT ARE NOT SHOWN IN ELEVATION, PROVIDE FRP UP TO 7'-2" ELEVATION. PROVIDE EPOXY PAINT COLOR P-1 ABOVE. PROVIDE STAINLESS STEEL END-CAPS AND CORNER GUARDS UP TO 7'-2" ON ALL KITCHEN WALLS. SEE FOODSERVICE FOR EQUIPMENT ELEVATIONS AND BLOCKING REQUIREMENTS.
- I. SEE A461 FOR MOUNTING HEIGHT SCHEDULE
- J. PIPE WRAP @ ADA SINK, TYP.
- K. FOR COLOR INFORMATION SEE A401

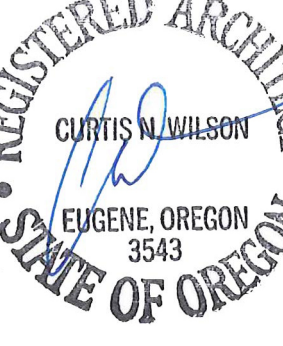
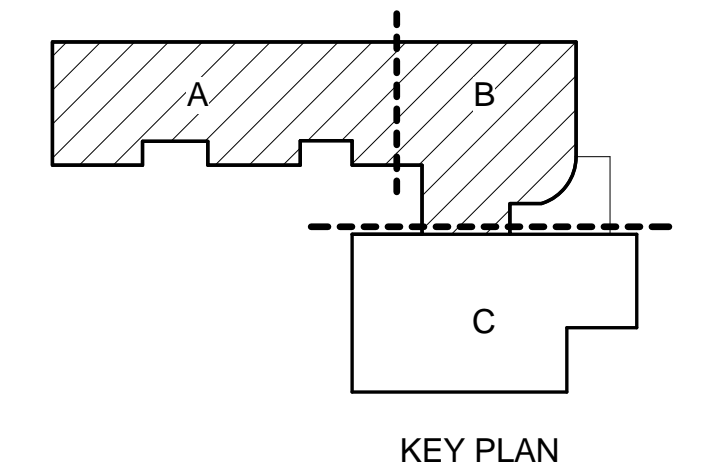
KEYNOTE LEGEND

KEYNOTE LEGEND - SPECIFICATIONS

- 05 5100-A PERFORATED STEEL PANELS, 16 GAGE
- 06 4100-C COUNTERTOP WITH 6" BACKSLASH, TYP
- 09 9000-E ACCENT PAINT COLOR, SEE FINISH PLANS FOR COLOR
- 10 1101-C MARKERBOARD 5' X 12'
- 10 1101-E MARKERBOARD 4' X 6'
- 10 1400-B SIGNAGE, SEE SIGNAGE SHEETS
- 10 2601-A CORNER GUARD - SURFACE MOUNTED
- 10 2601-B END GUARD - FLUSH MOUNTED, EXTEND TO CEILING
- 10 2601-C CORNER GUARD - FLUSH MOUNTED
- 10 2800-C SOAP DISPENSER, OFCI
- 10 2800-D MOP RACK
- 10 2800-I PAPER TOWEL DISPENSER, OFCI
- 10 4400-A FIRE EXTINGUISHER CABINET, SEMI-RECESSED
- 11 4000-A REFRIGERATOR, OFCI
- 11 4000-B MICROWAVE, OFCI
- 11 4000-C DISHWASHER, OFCI
- 11 4000-D TOASTER OVEN, OFCI
- 22 0000-D MOP SINK, SEE PLUMBING
- 22 0000-E DRINKING FOUNTAIN, SEE MOUNTING HEIGHT SCHEDULE.
- 22 0000-J HOT WATER, SEE PLUMBING
- 22 0000-K GARBAGE DISPOSAL, SEE PLUMBING
- 27 0000-B VIDEO PROJECTOR SYSTEM, OFCI
- 27 0000-D WALL CLOCK, SEE LOW VOLTAGE

FINISH KEYNOTE

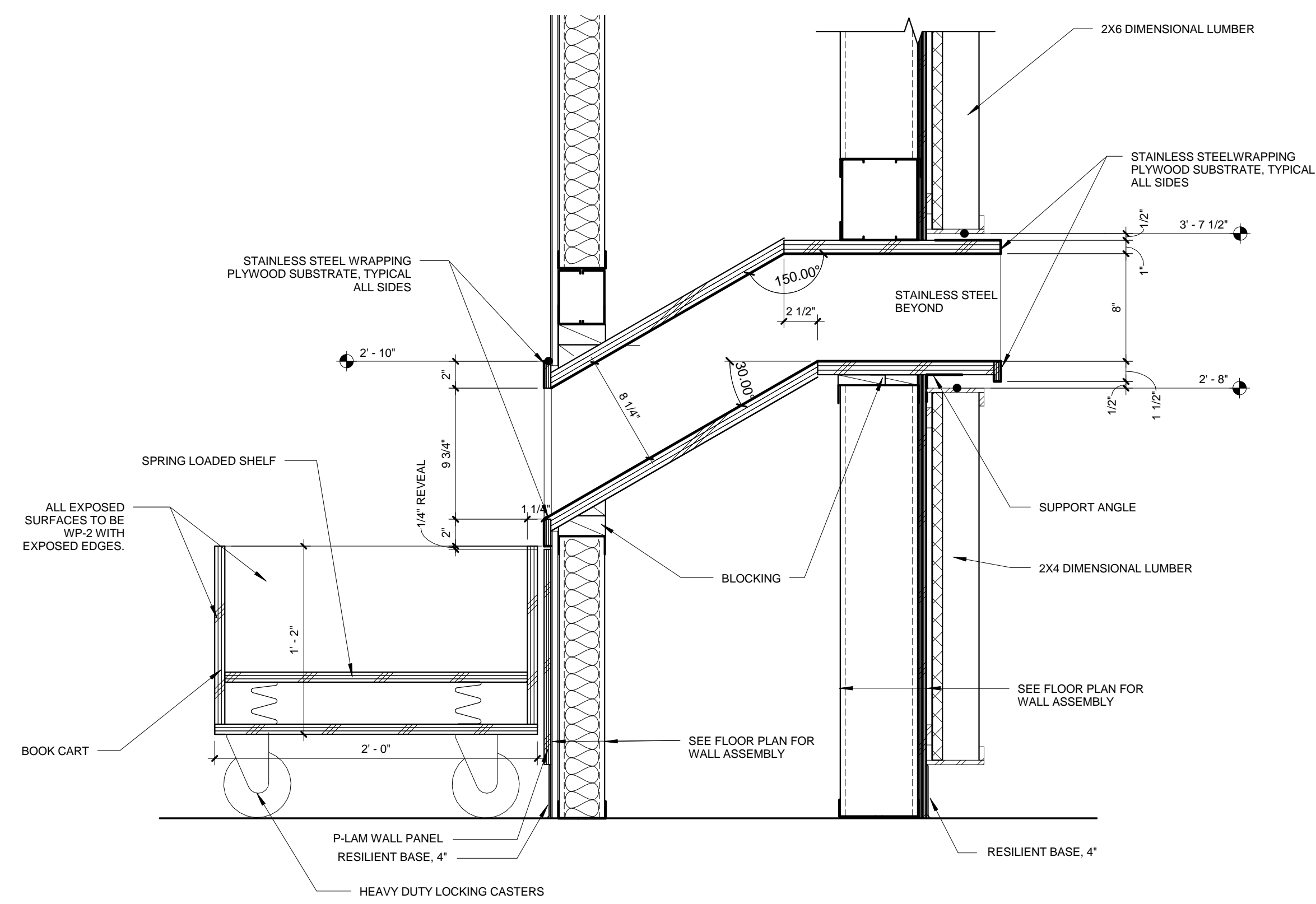
- (AWP-1) ACOUSTICAL WALL PANEL TYPE-1
- (AWP-2) ACOUSTICAL WALL PANEL TYPE-2
- (R-1) 4" RUBBER BASE
- (CMU-1) CMU TYPE - GROUND FACE
- (CMU-2) CMU TYPE - PLAIN FACE
- (FRP-1) PLASTIC PANELING TYPE-1
- (HP-3) HIGH PERFORMANCE PAINT
- (P-X) PAINT COLOR TYPE-2
- (P-1) PAINT COLOR TYPE-1
- (P-2) PAINT COLOR TYPE-2
- (P-3) PAINT COLOR TYPE-3
- (P-4) PAINT COLOR TYPE-4
- (P-5) PAINT COLOR TYPE-5
- (P-6) PAINT COLOR TYPE-6
- (PL-1) PLASTIC LAMINATE TYPE-1
- (PL-2) PLASTIC LAMINATE TYPE-2
- (SIM-1) SOLID SURFACE TYPE-1
- (SIM-2) SOLID SURFACE TYPE-2
- (T-1) WALL TILE TYPE-1
- (T-2) WALL TILE TYPE-2
- (TB-1) TACK BOARD TYPE-1
- (TS-1) TACK SURFACE TYPE-1
- (TS-2) TACK SURFACE TYPE-2
- (TS-3) TACK SURFACE TYPE-3
- (WAINSCOT-1) WAINSCOT TYPE-1
- (WAINSCOT-2) WAINSCOT TYPE-2
- (WP-1) WOOD PANELS TYPE-1
- (WP-2) WOOD PANELS TYPE-2



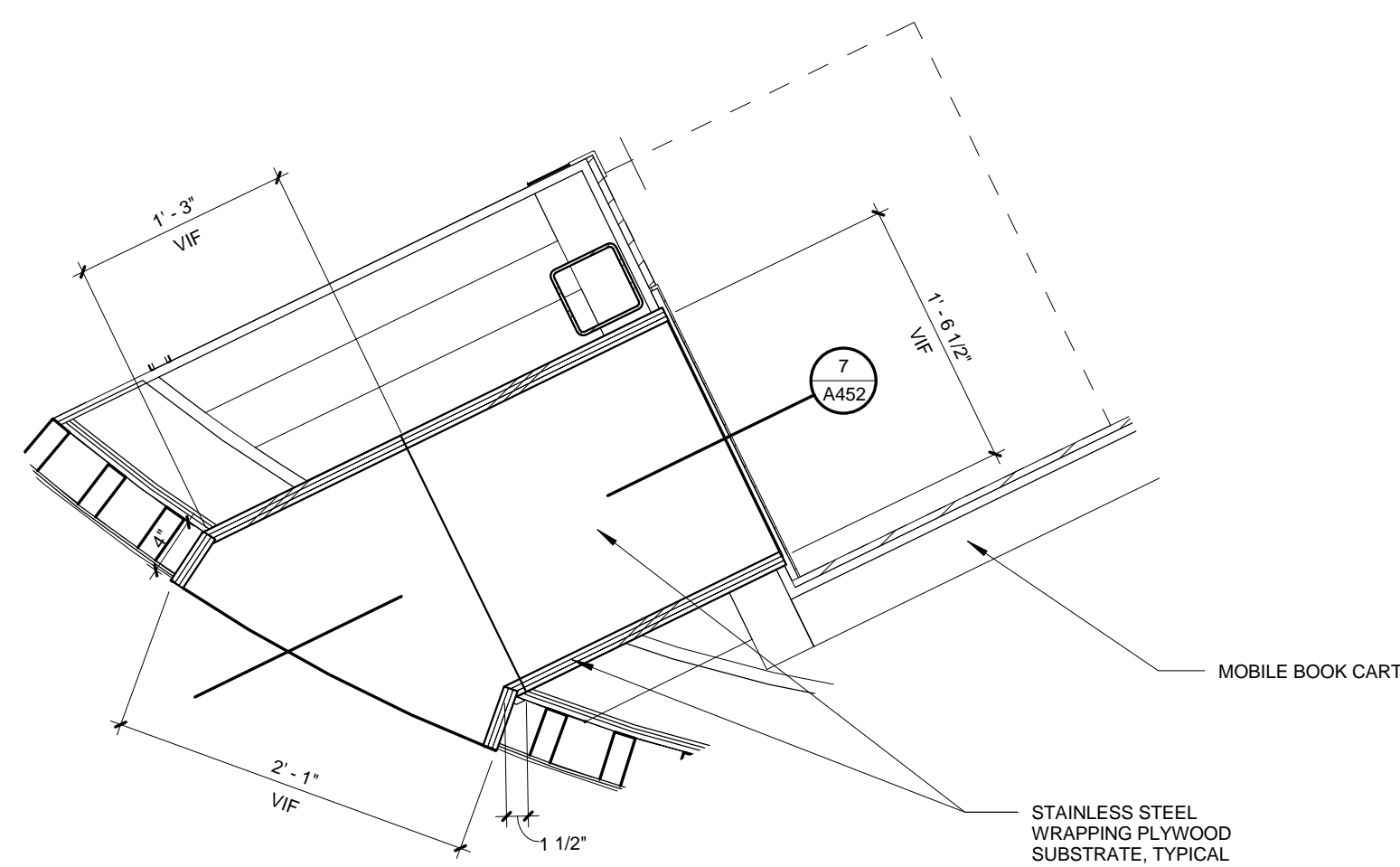
BID SET
EUGENE SCHOOL DISTRICT 4J
120 WEST HILLIARD AVENUE, EUGENE, OREGON 97404
RIVER ROAD / EL CAMINO DEL RIO ELEMENTARY SCHOOL

INTERIOR ELEVATIONS

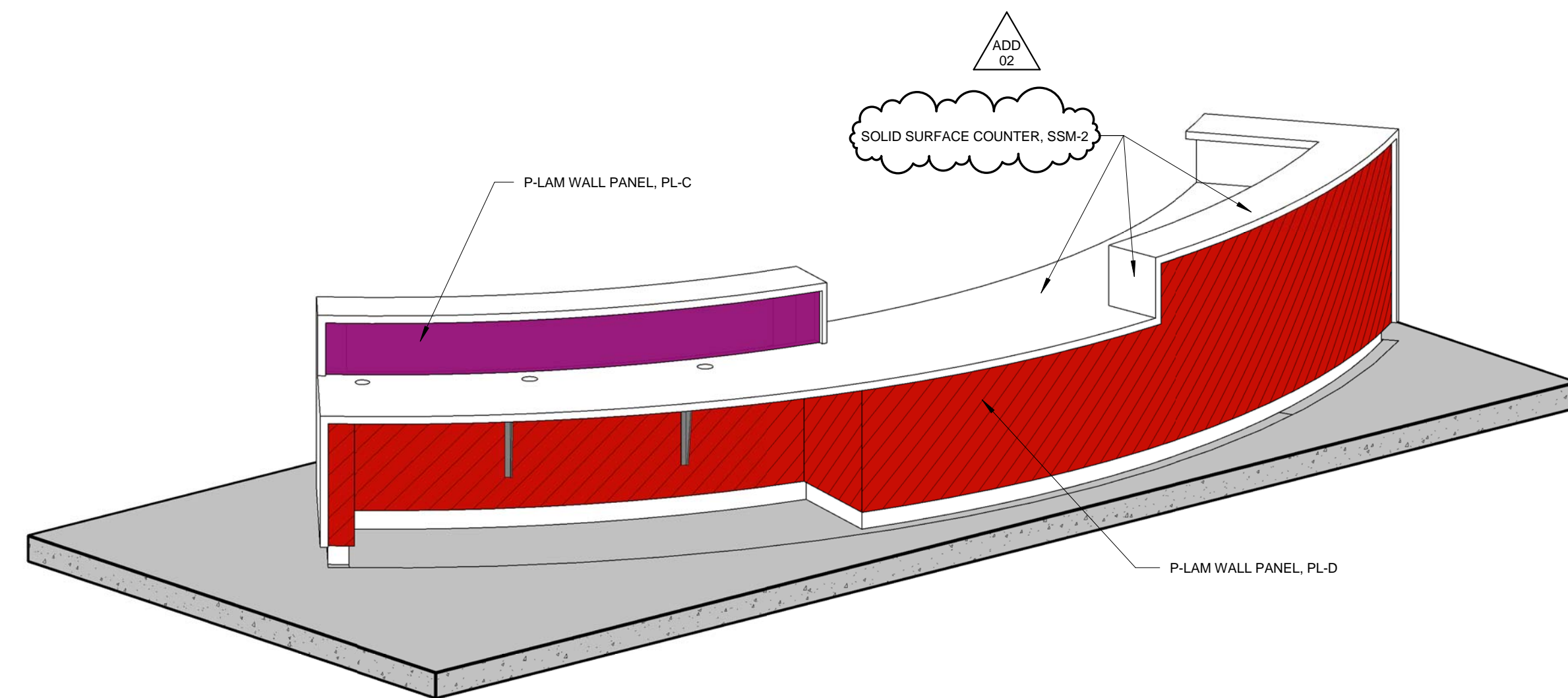
PROJECT #	133730	REVISIONS	
ISSUE DATE	03/12/16	ADD 02 -	03.05.16
A443			



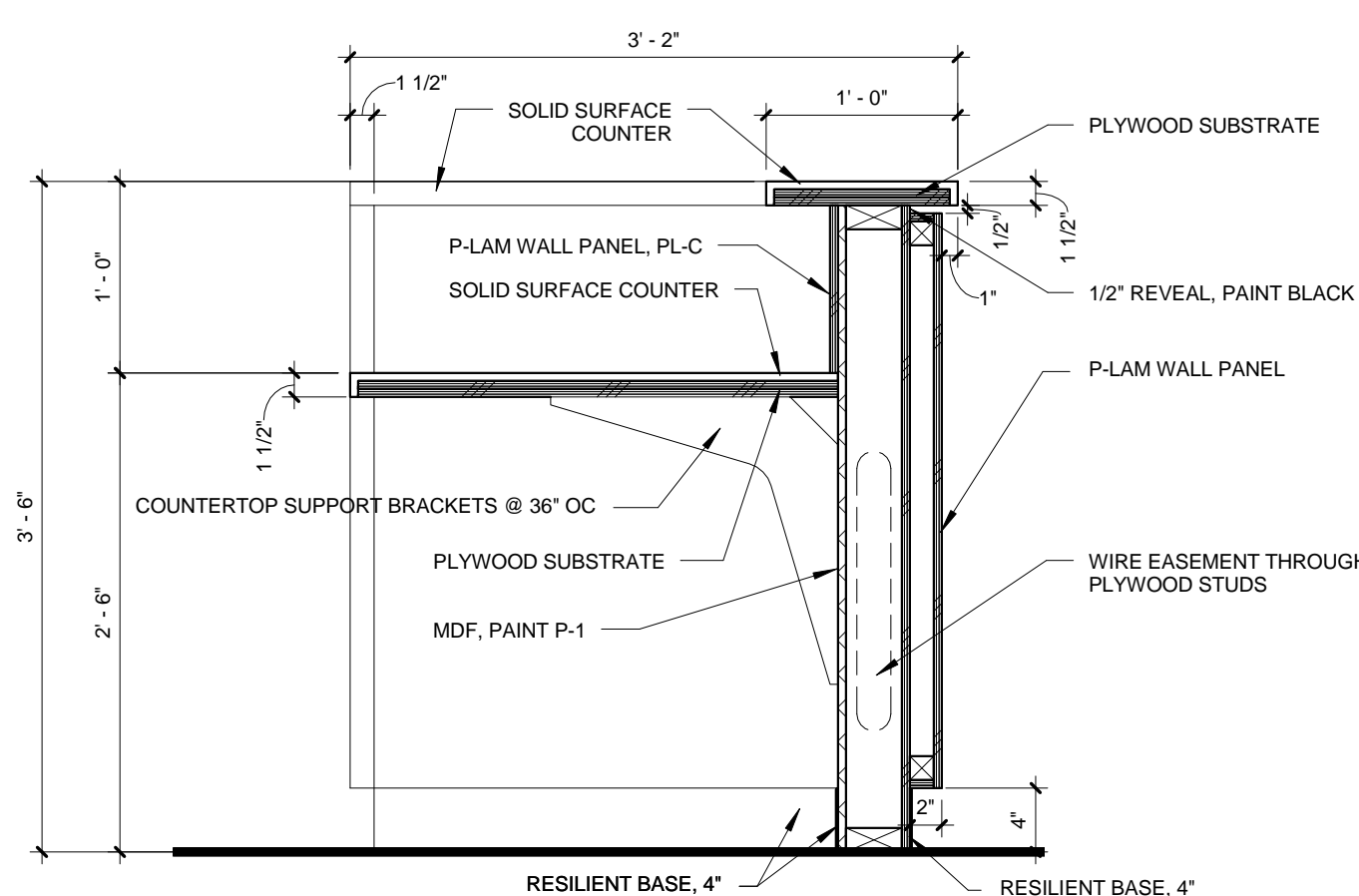
7 WORK ROOM SECTION BOOK DROP
1 1/2" = 1'-0"



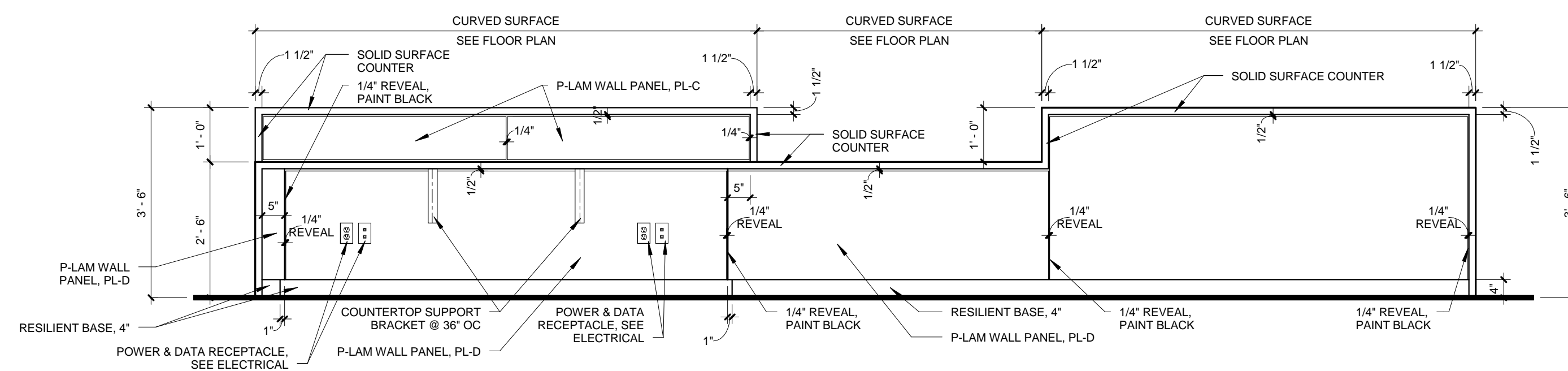
9 ENLARGED PLAN - BOOK DROP
1" = 1'-0"



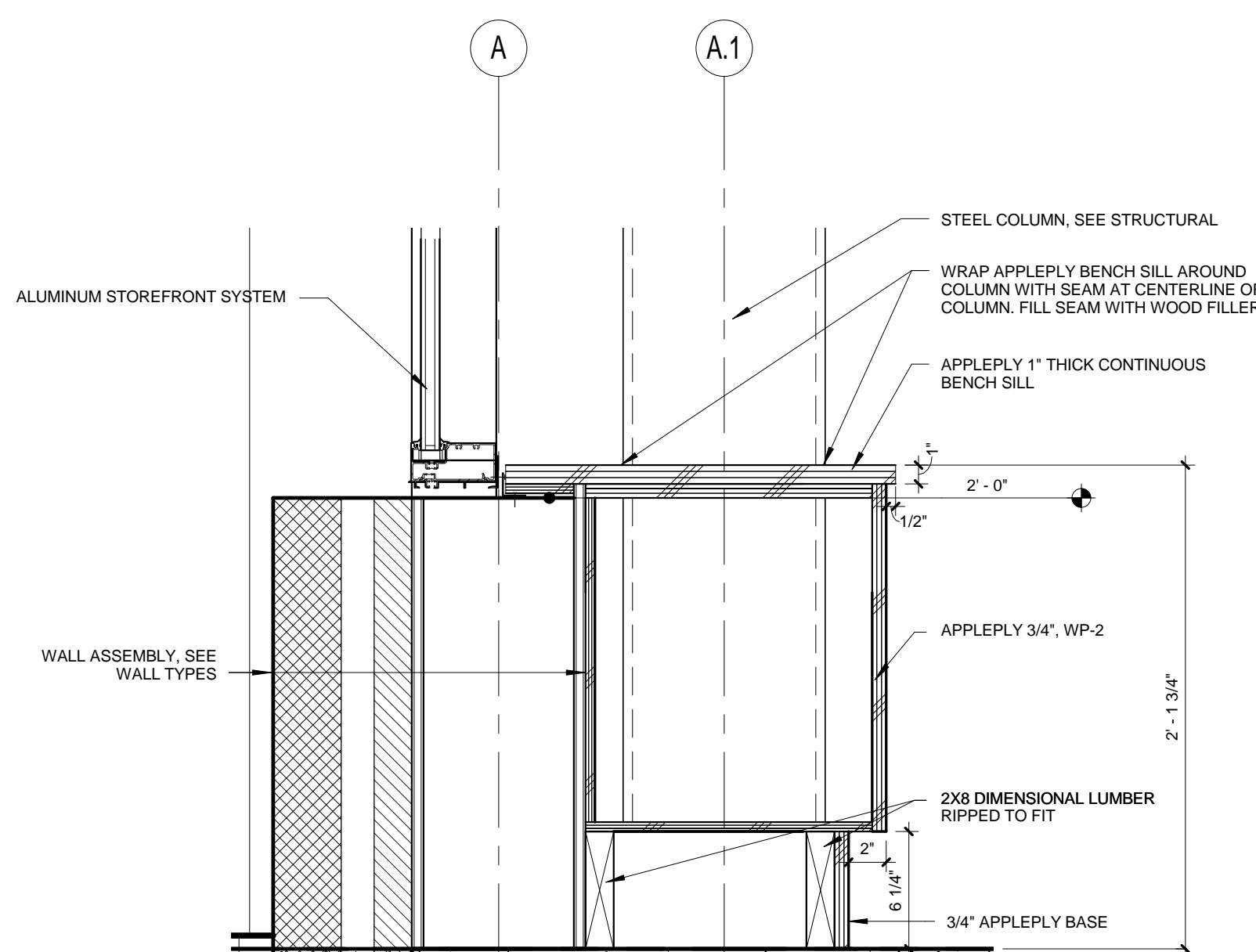
8 MEDIA CENTER DESK



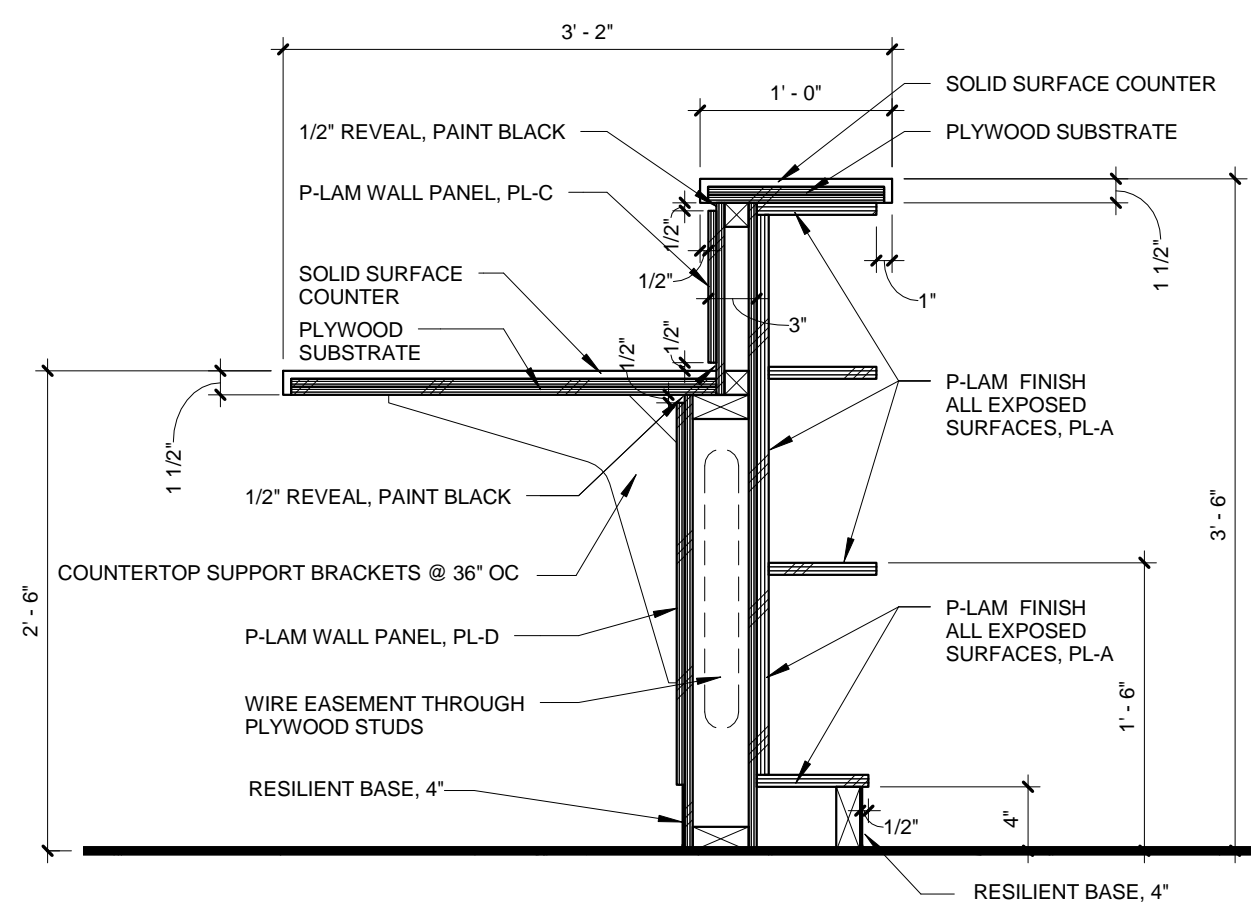
1 MEDIA CENTER REP DESK SECTION 1
1" = 1'-0"



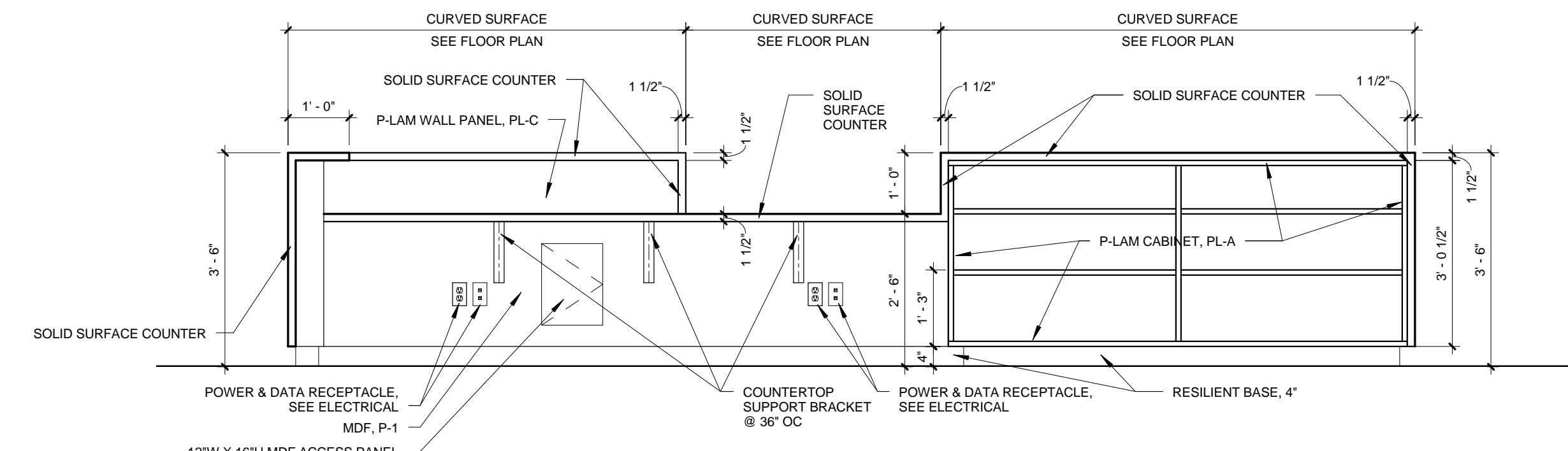
4 B116 MEDIA CENTER DESK - E
1/2" = 1'-0"



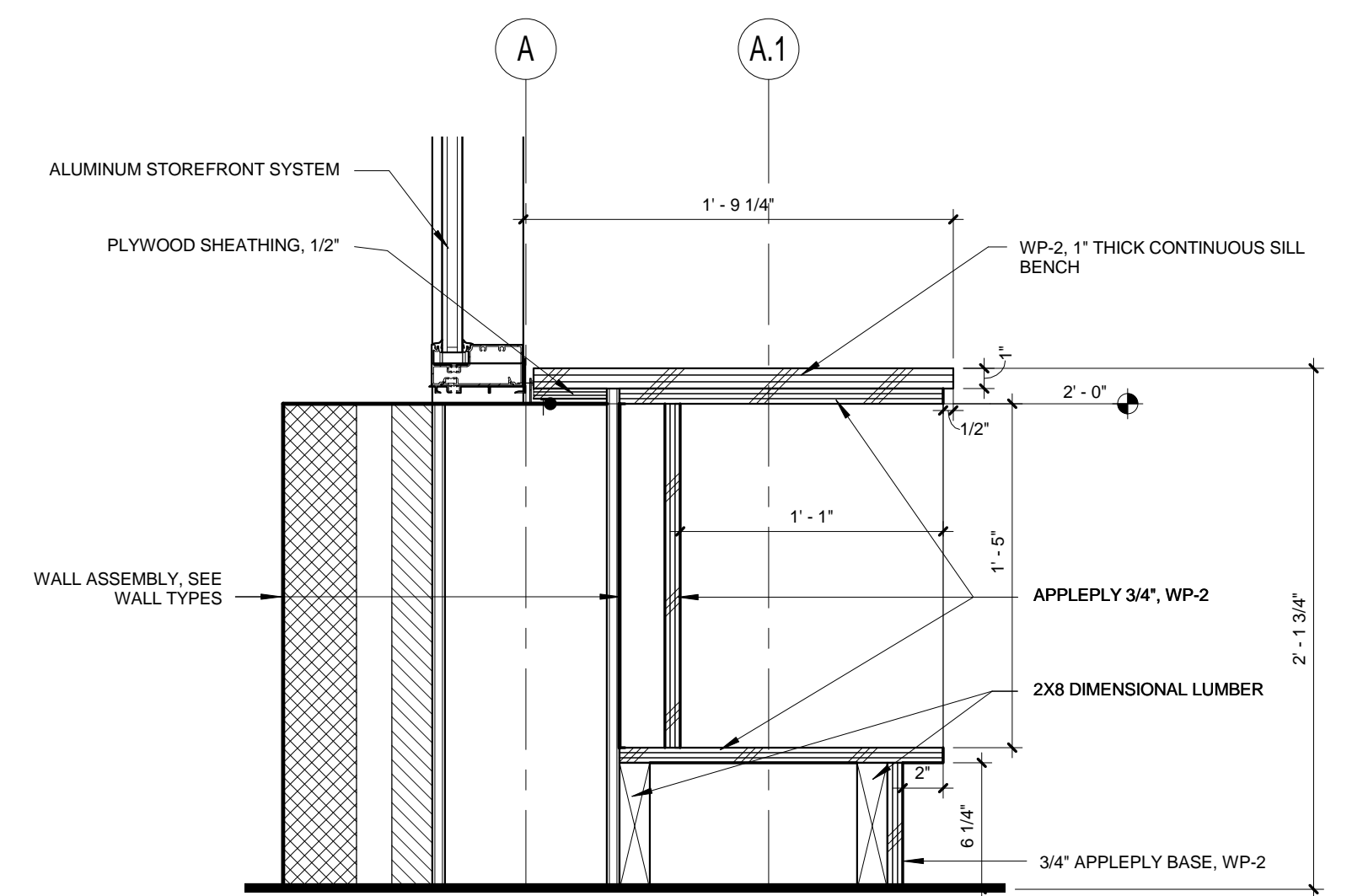
12 MEDIA CENTER BOOKCASE @ COLUMN
1 1/2" = 1'-0"



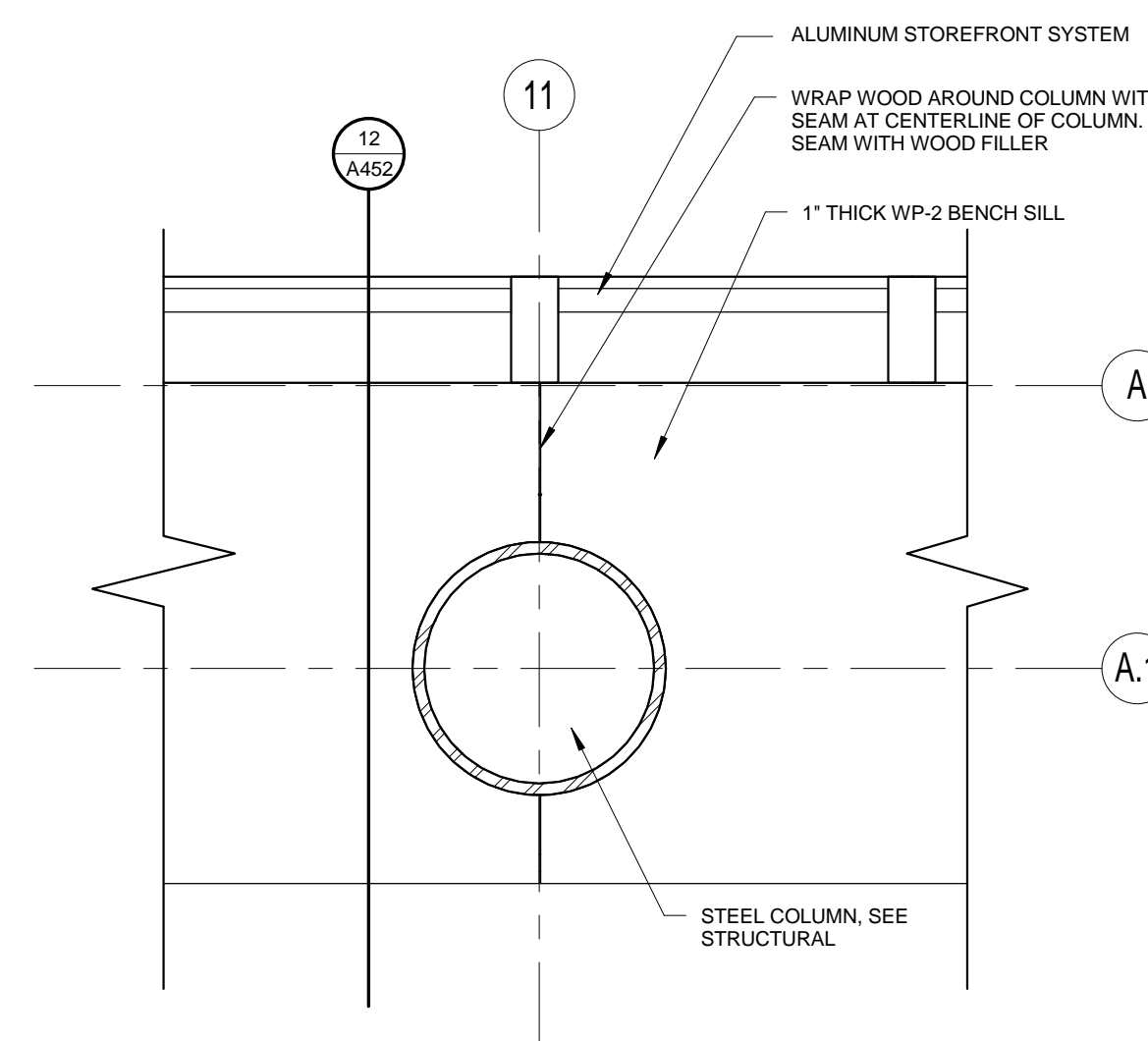
2 MEDIA CENTER REP DESK SECTION 2
1" = 1'-0"



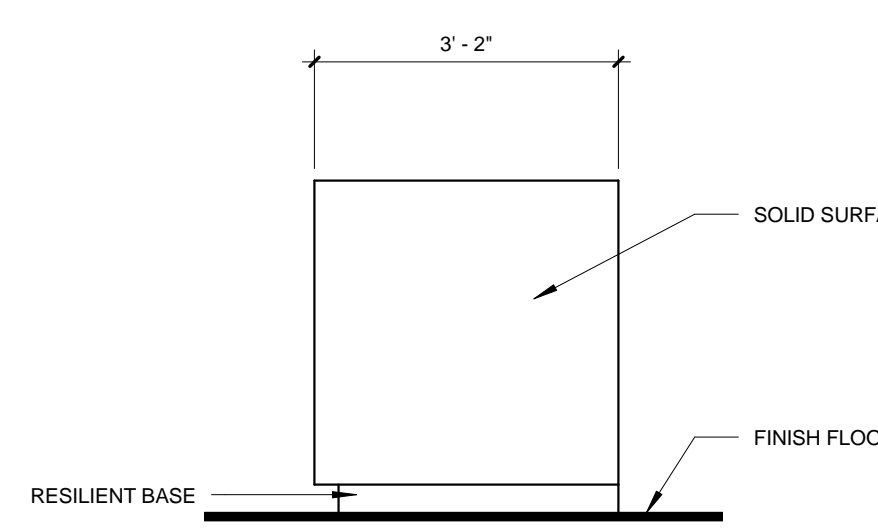
6 B116 MEDIA CENTER DESK - W
1/2" = 1'-0"



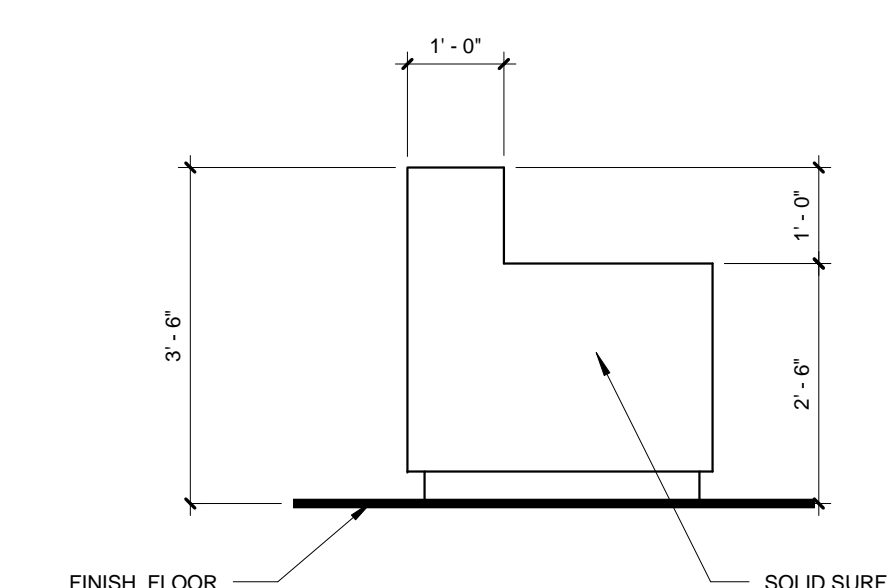
10 MEDIA CENTER BOOKCASE @ SILL
1 1/2" = 1'-0"



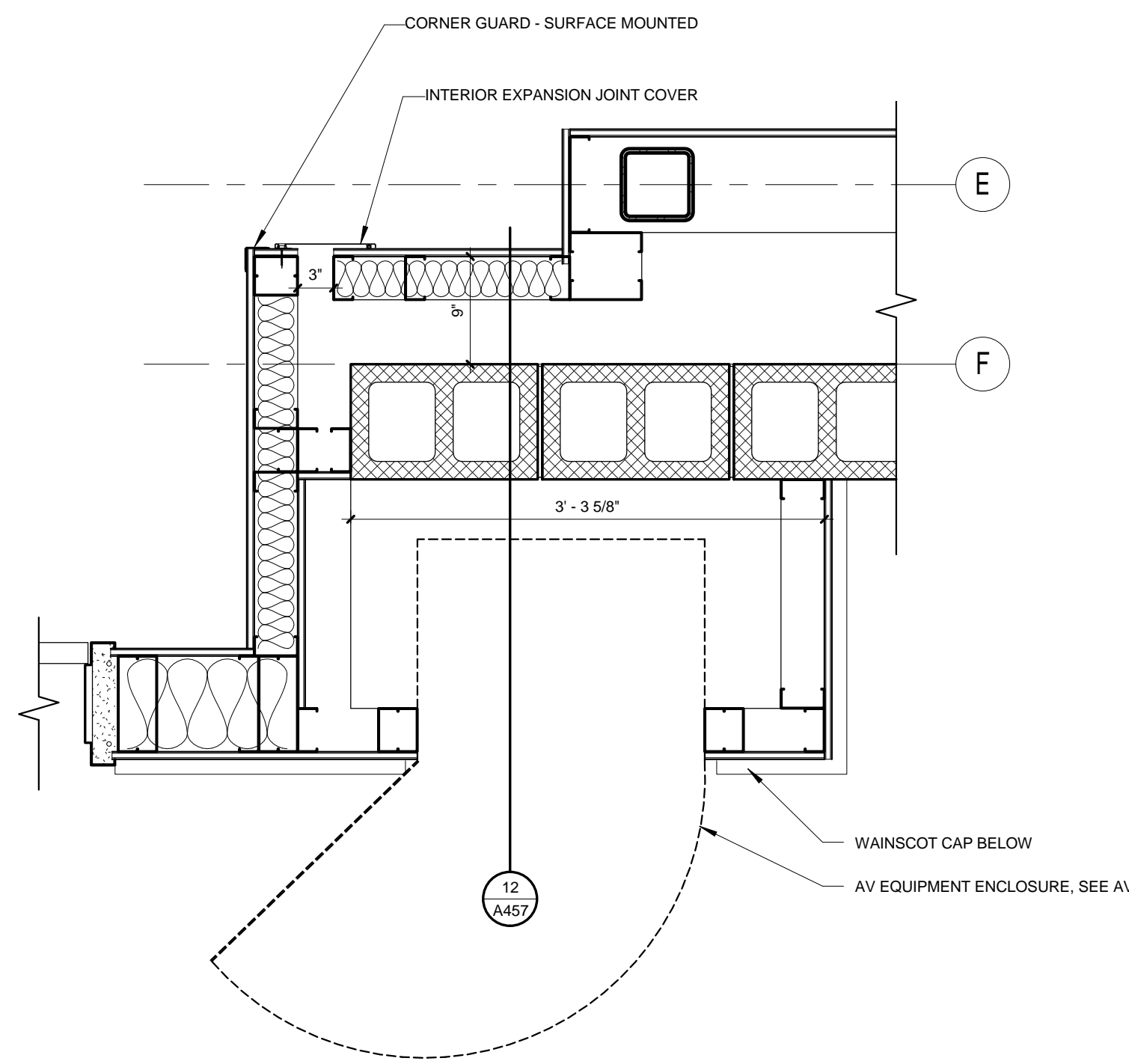
11 MEDIA CENTER BOOKCASE @ SILL - PLAN
1 1/2" = 1'-0"



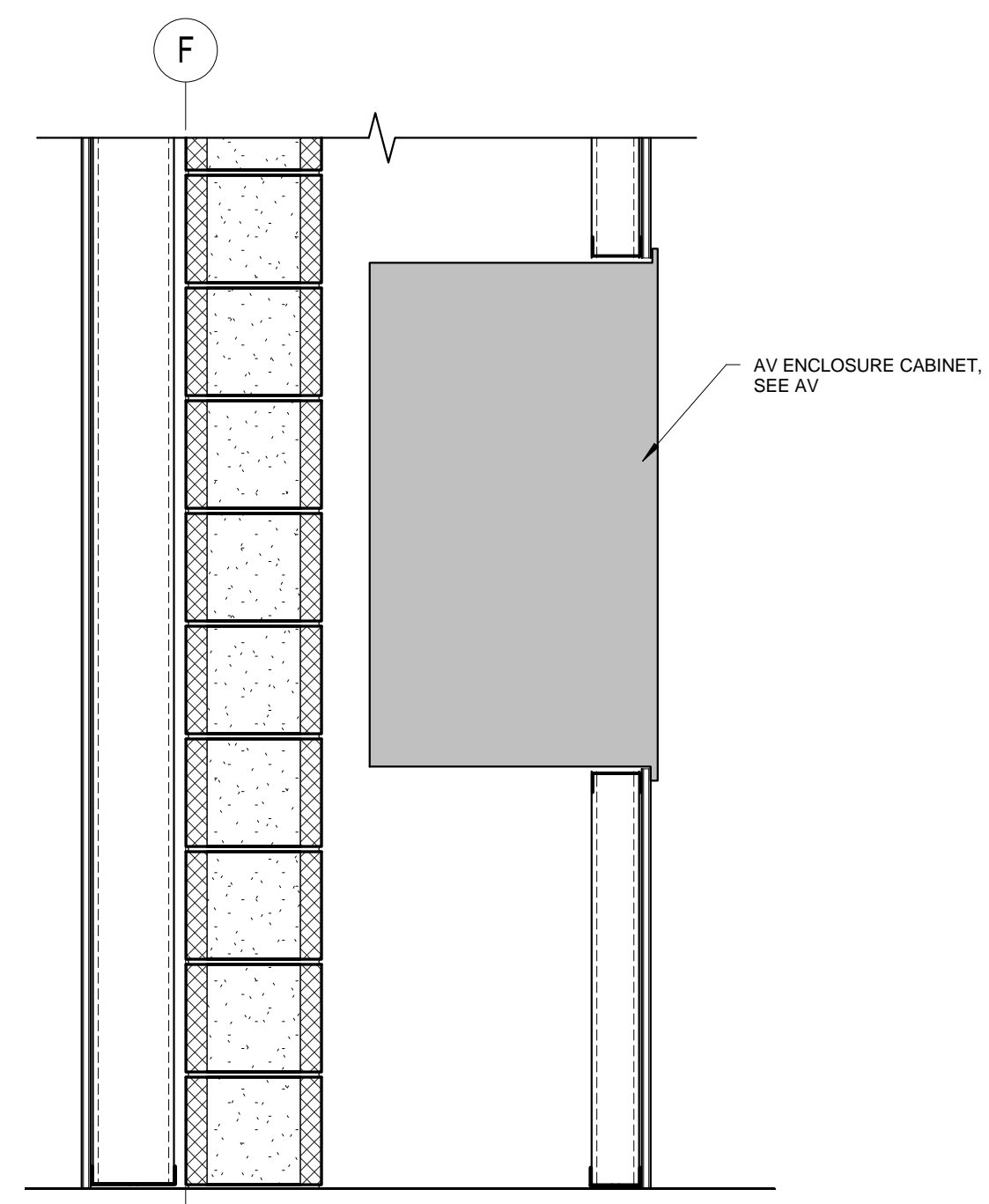
3 B116 MEDIA CENTER DESK - N
1/2" = 1'-0"



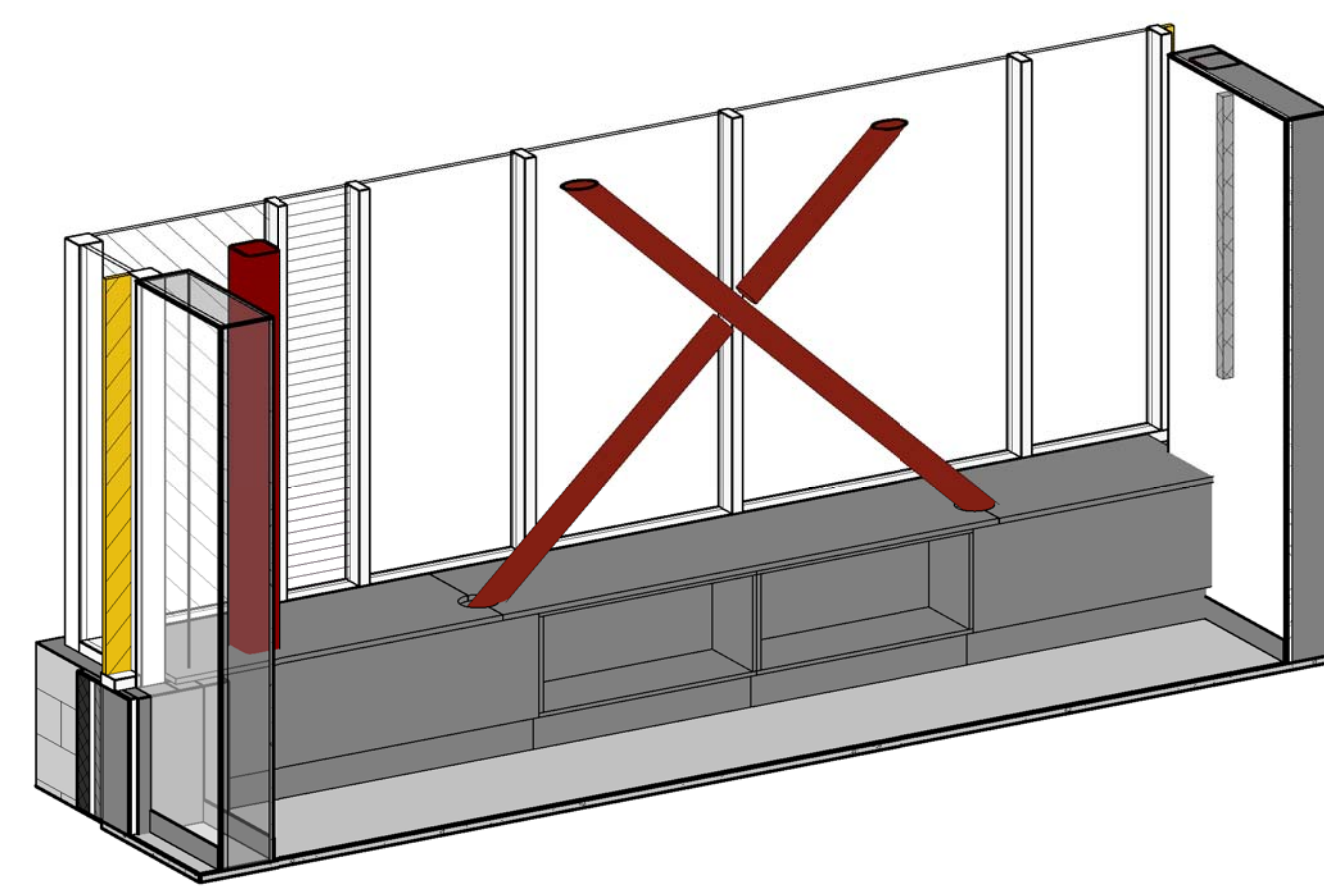
5 B116 MEDIA CENTER DESK - S
1/2" = 1'-0"



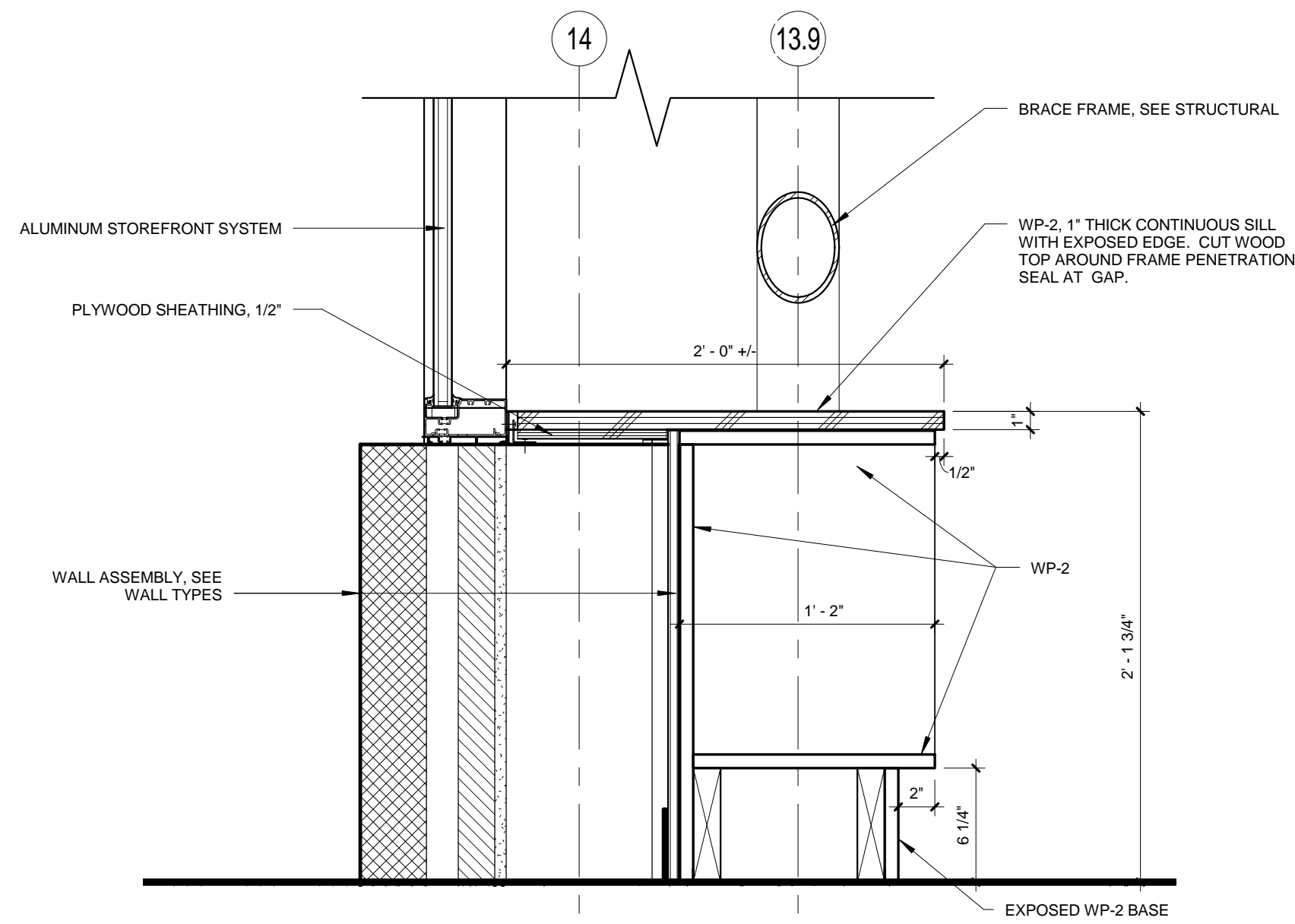
14 GYM AV STORAGE
1/2" = 1'-0"



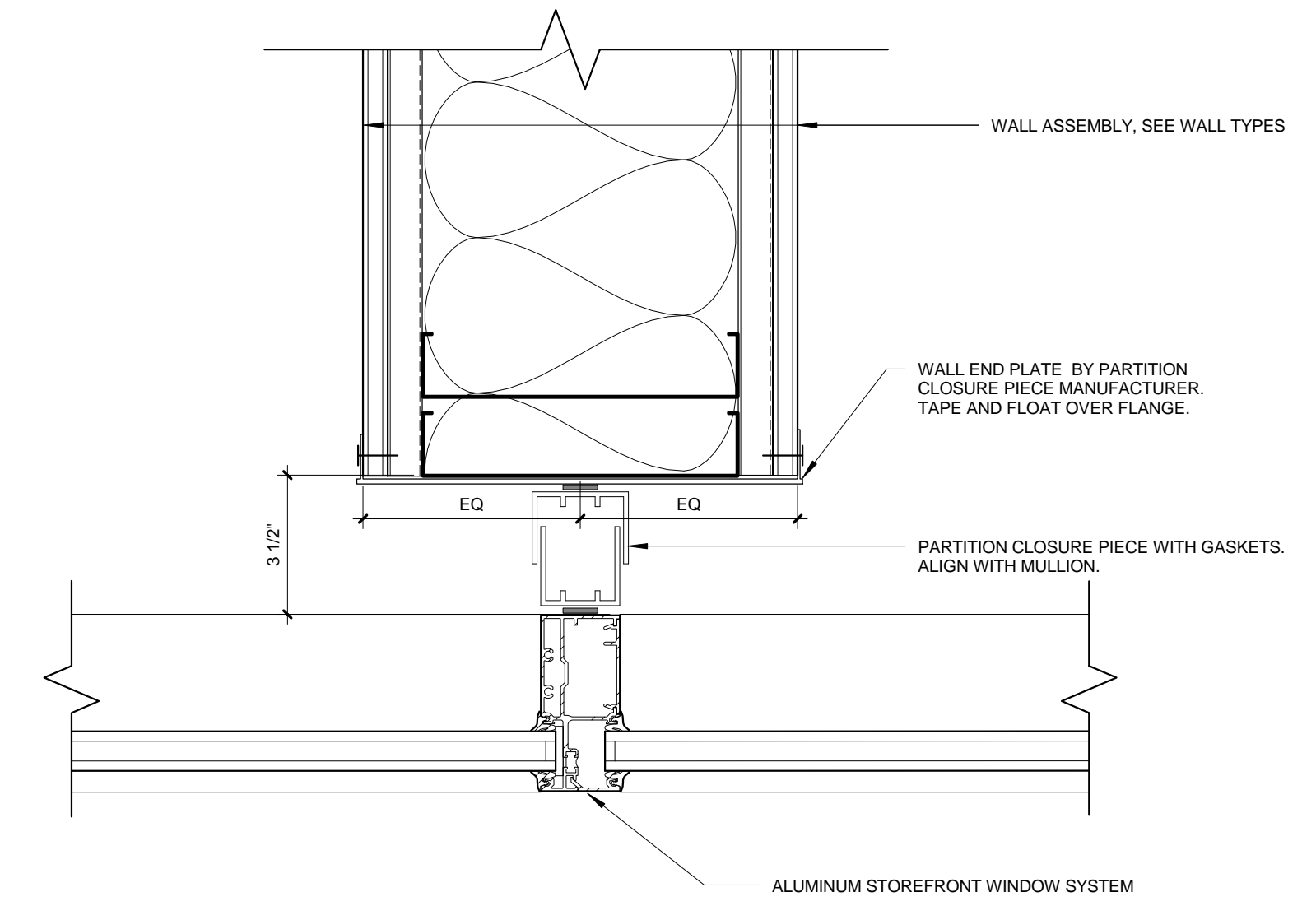
12 GYM AV STORAGE SECTION
1/2" = 1'-0"



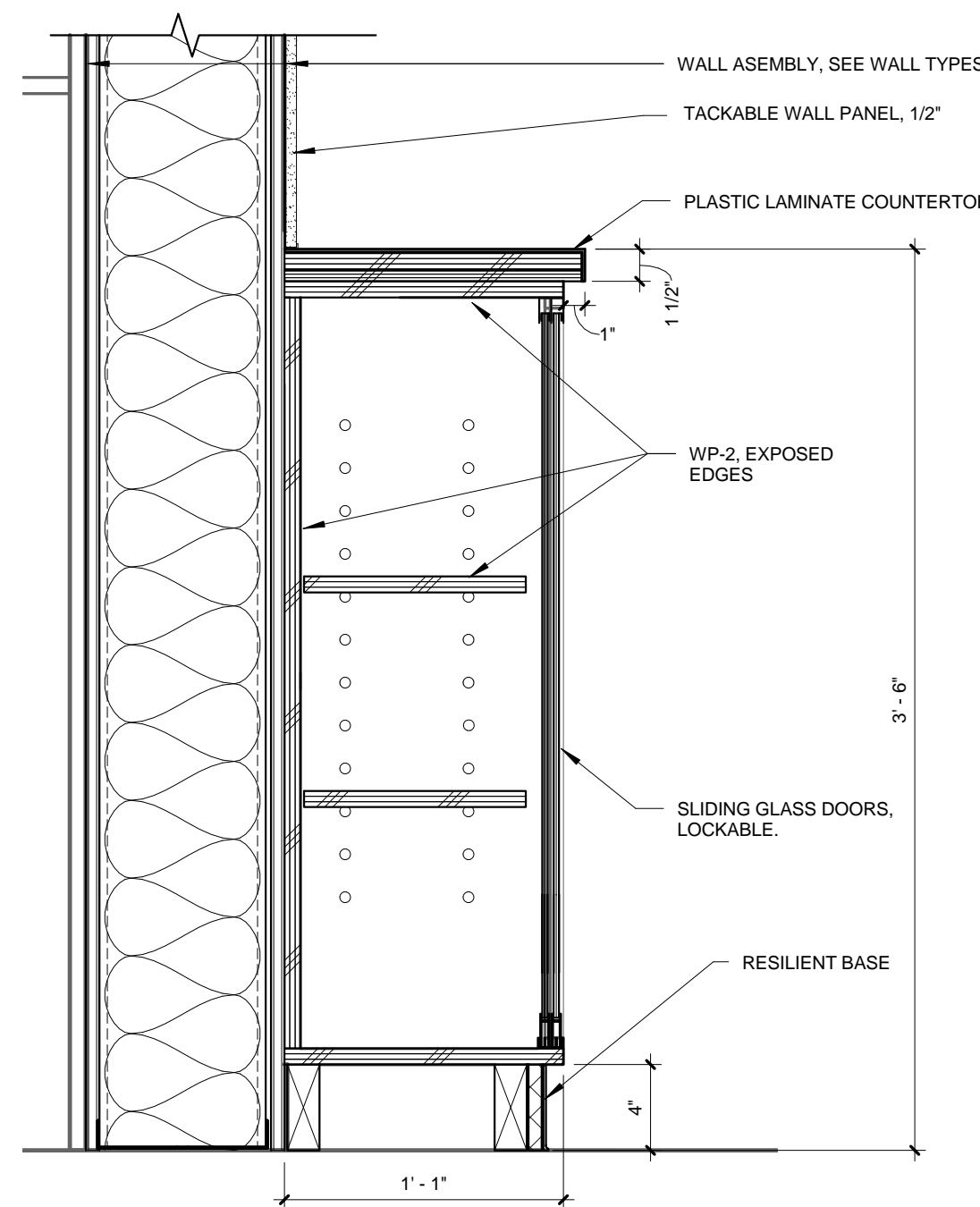
7 SMALL GROUP BUILT-IN AXON
3" = 1'-0"



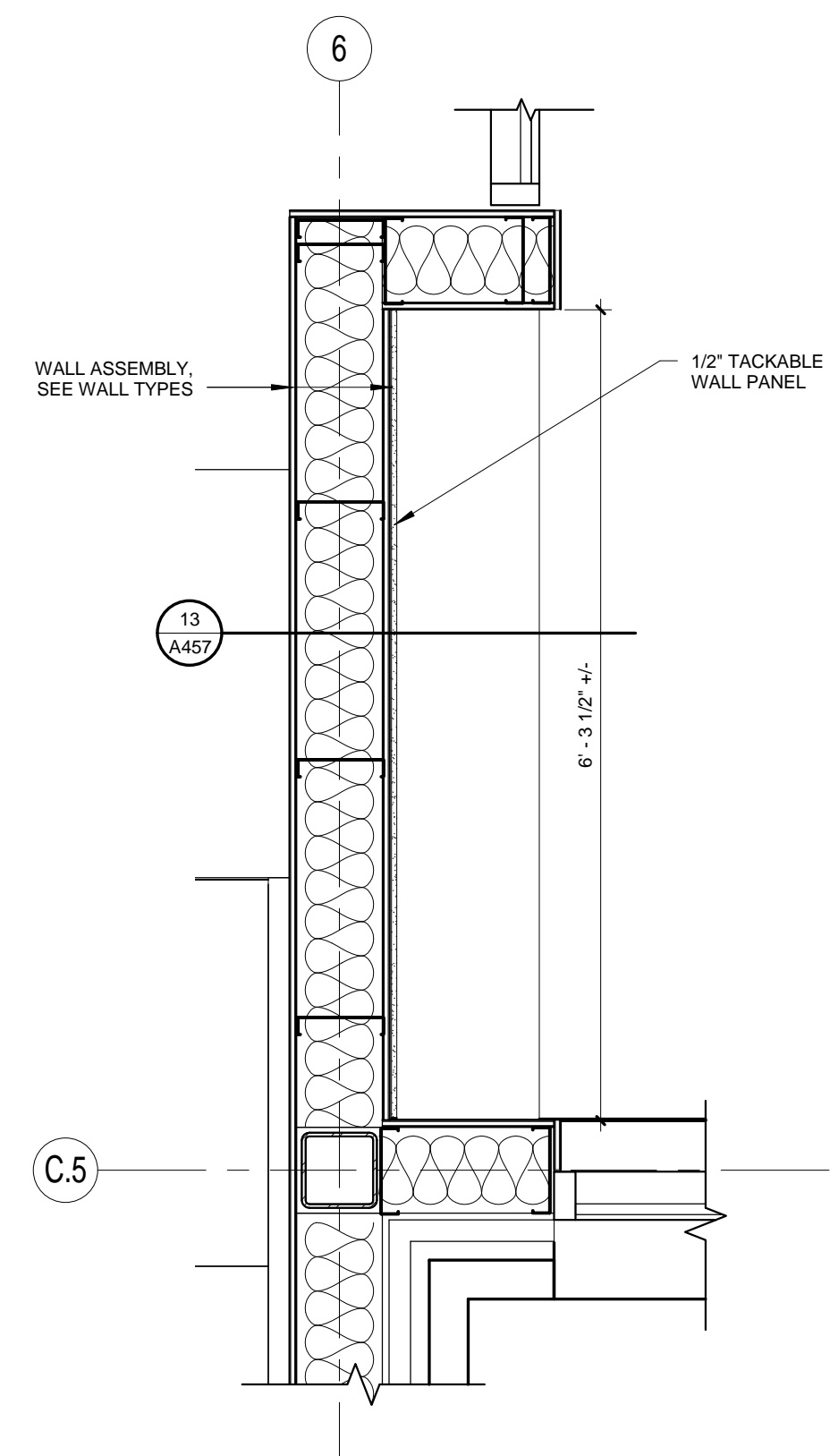
6 SMALL GROUP B105 SECTION
1 1/2" = 1'-0"



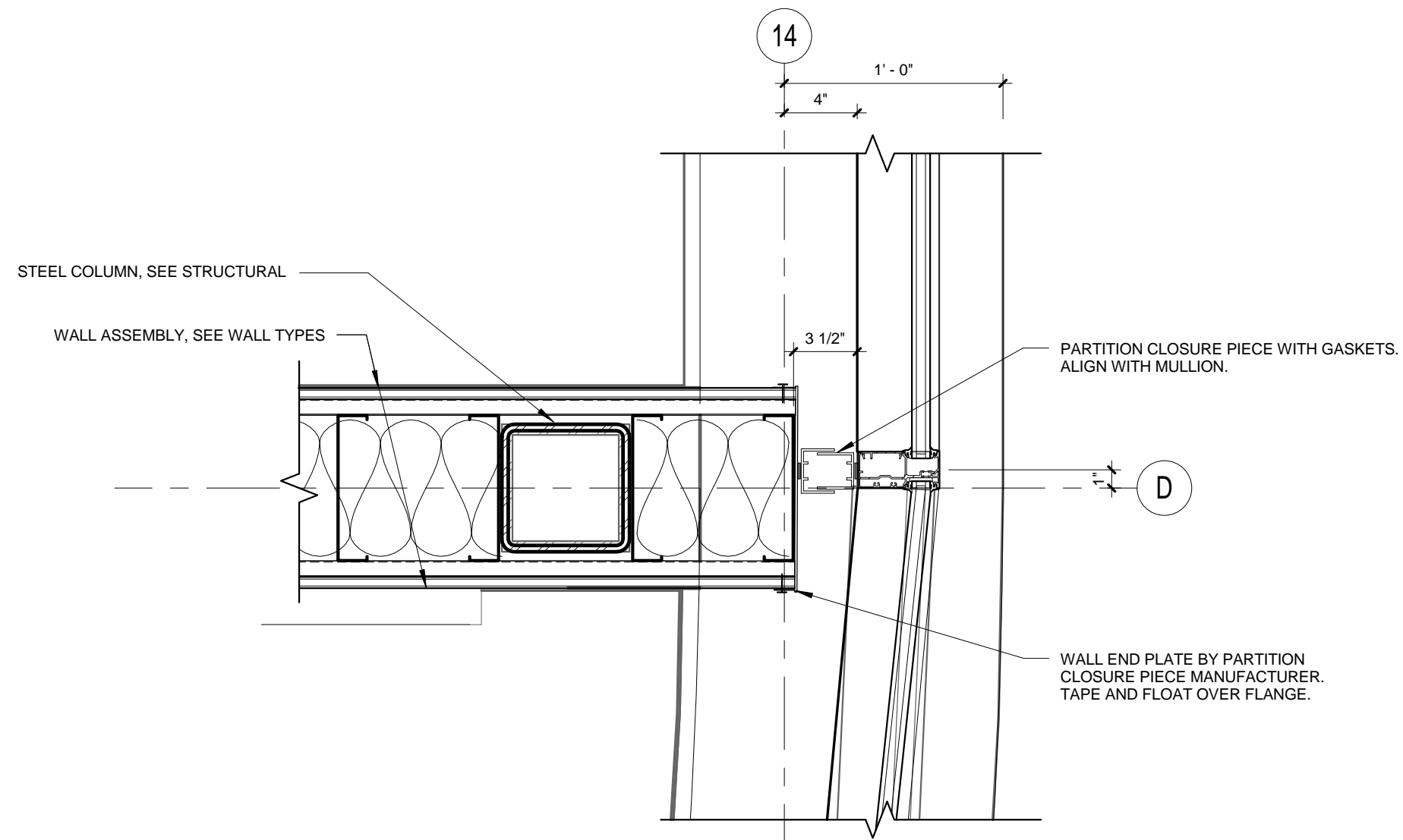
3 WALL TO STOREFRONT PLAN DETAIL
3" = 1'-0"



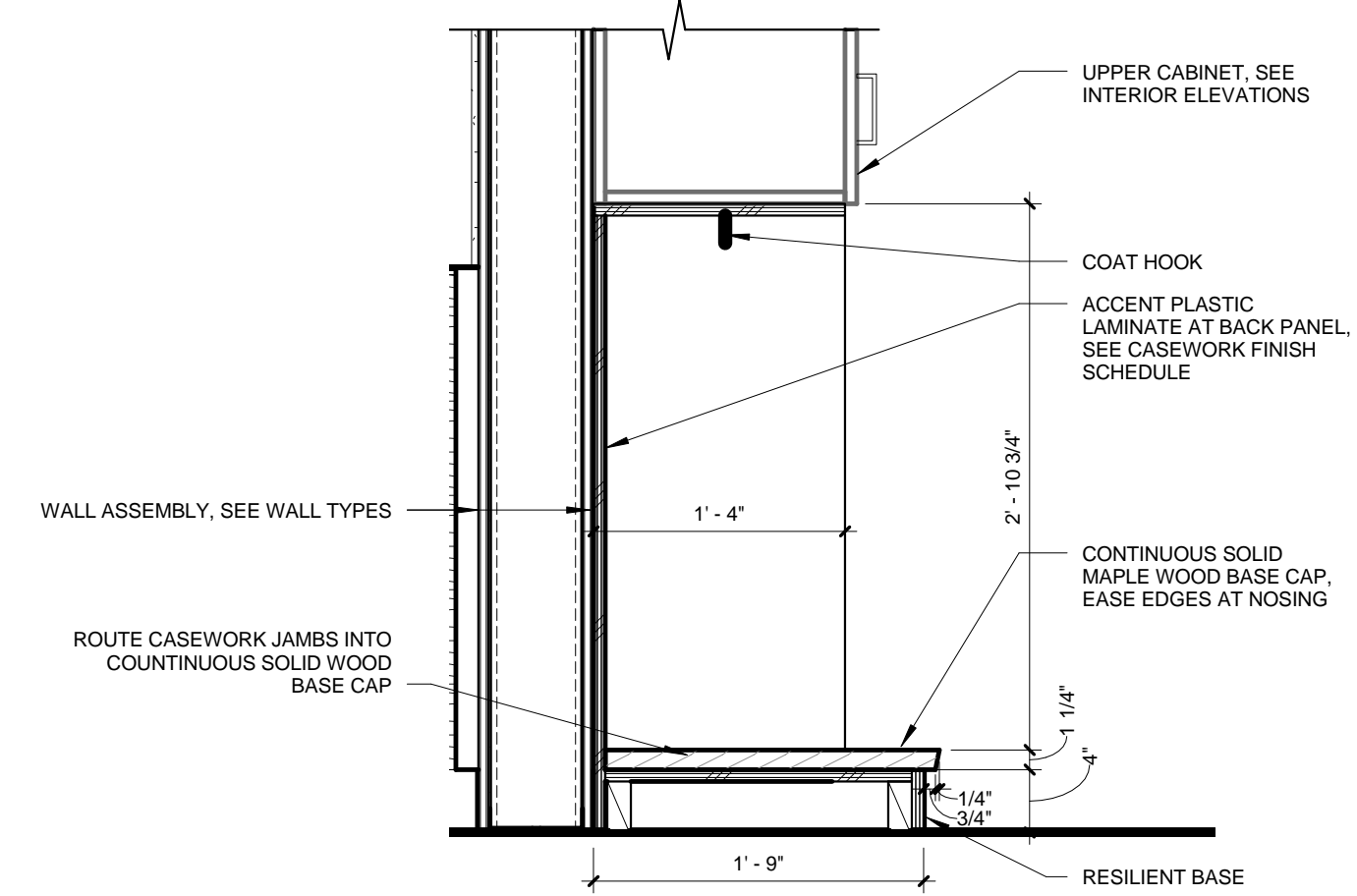
13 COMMONS CASEWORK SECTION
1 1/2" = 1'-0"



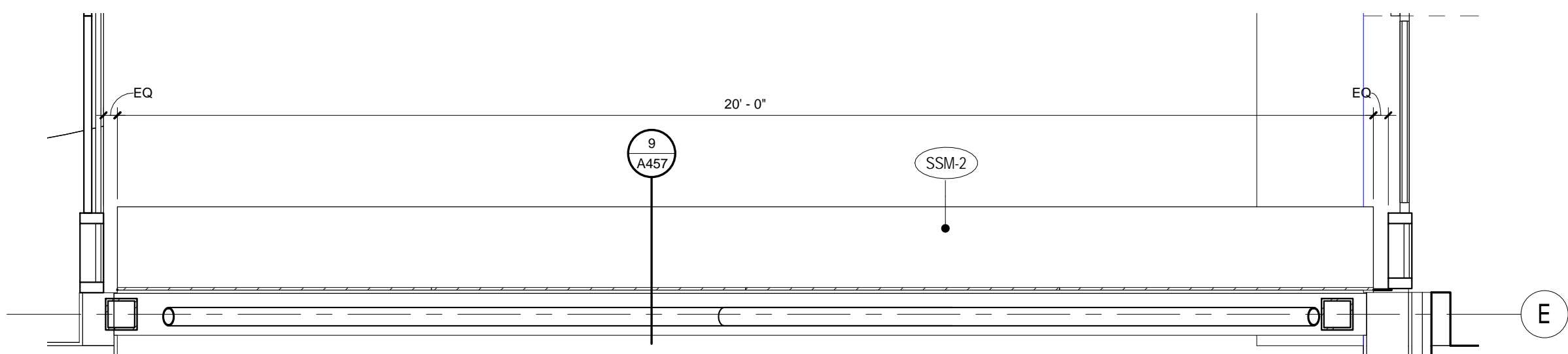
11 COMMONS CASEWORK PLAN
3/4" = 1'-0"



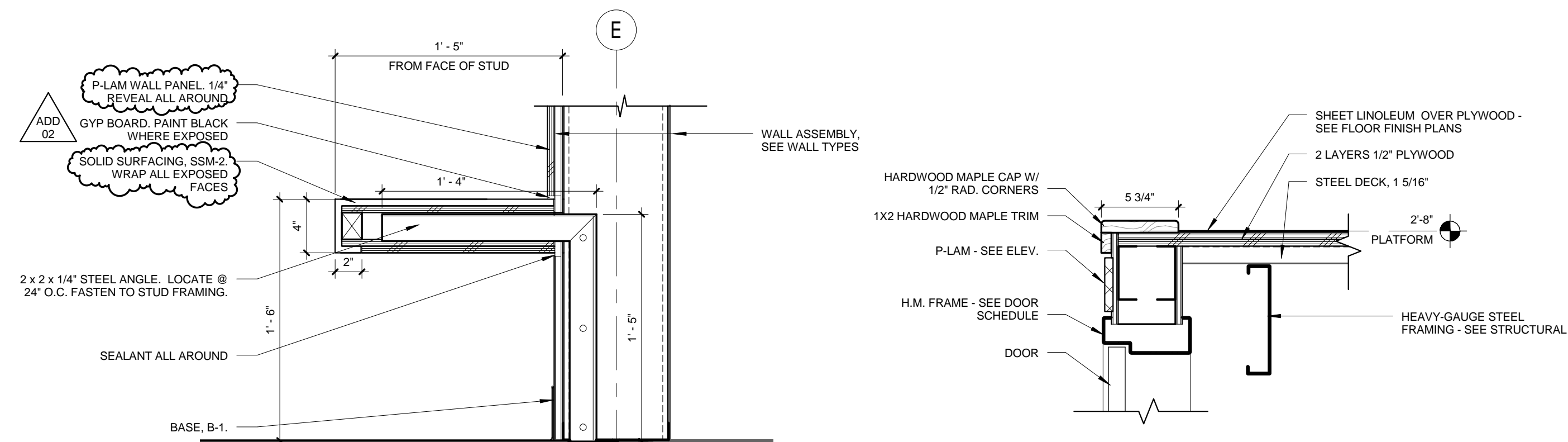
5 ADMIN COLUMN AT CURVED CURTAIN WALL
1 1/2" = 1'-0"



2 CLASSROOM CUBBY SECTION
1" = 1'-0"

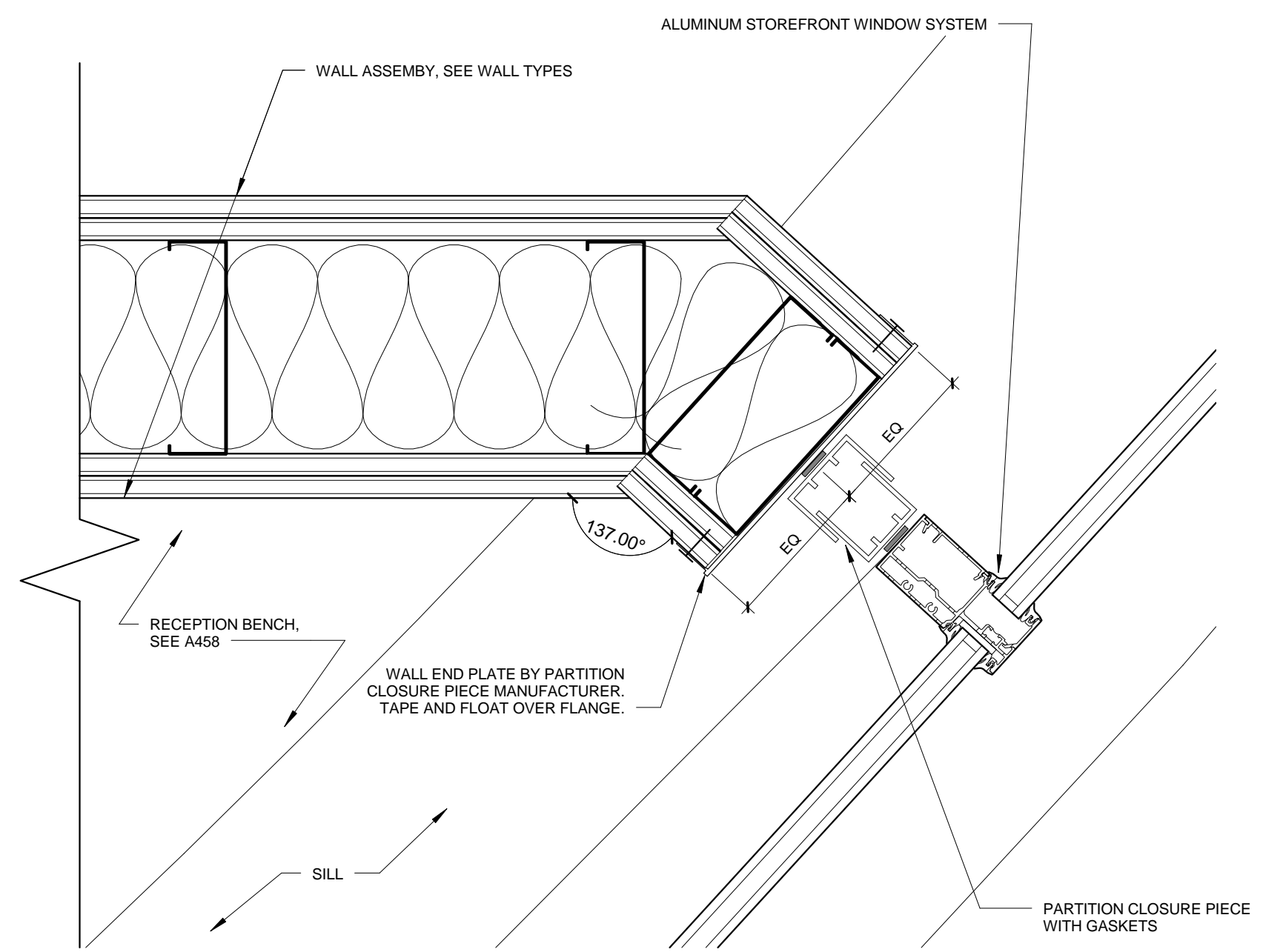


10 VESTIBULE BENCH ENLARGED PLAN
1/2" = 1'-0"

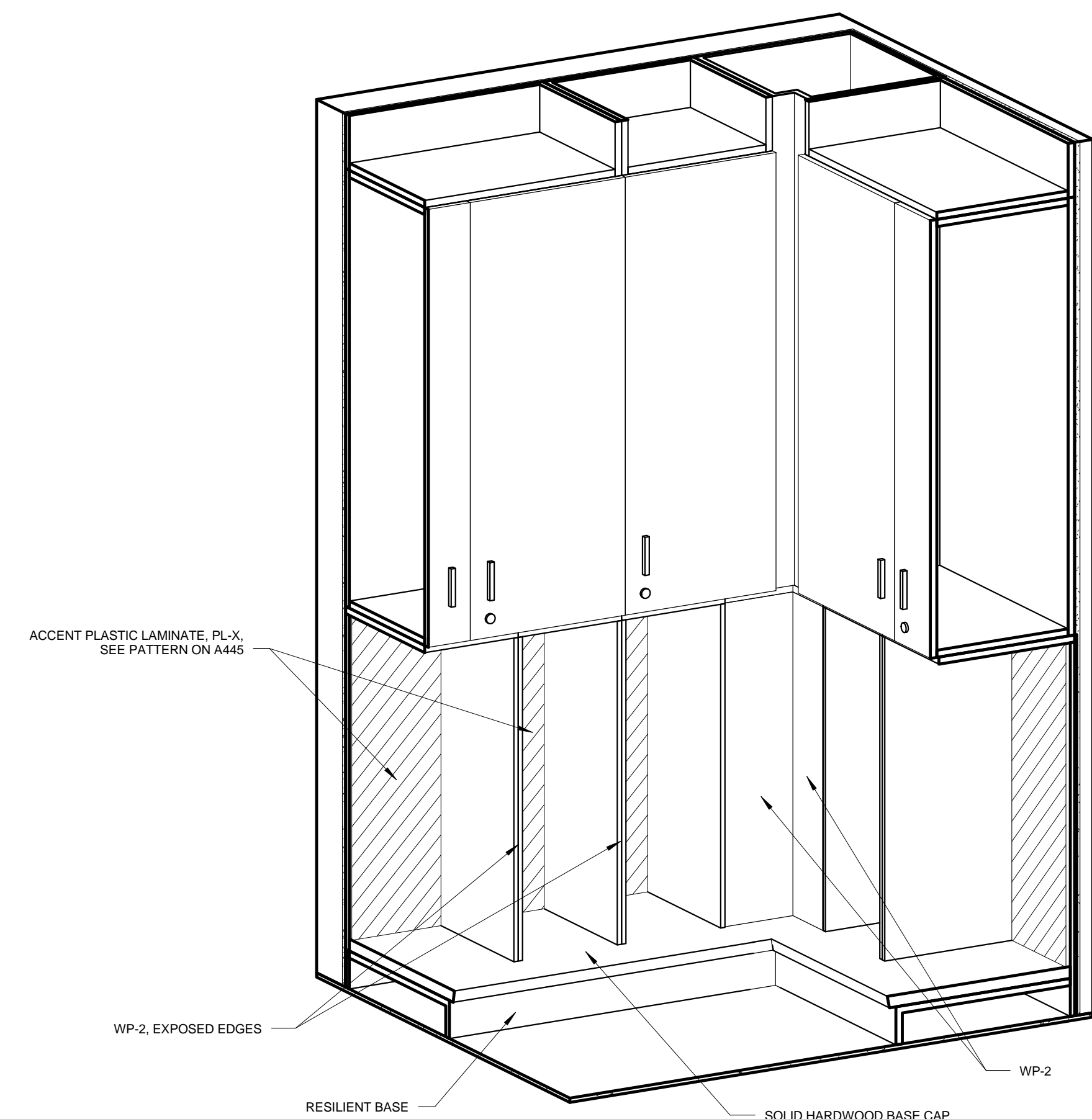


9 VESTIBULE BENCH SECTION
1 1/2" = 1'-0"

8 PLATFORM NOSING
1 1/2" = 1'-0"



4 B103 WALL TO STOREFRONT PLAN DETAIL
3" = 1'-0"



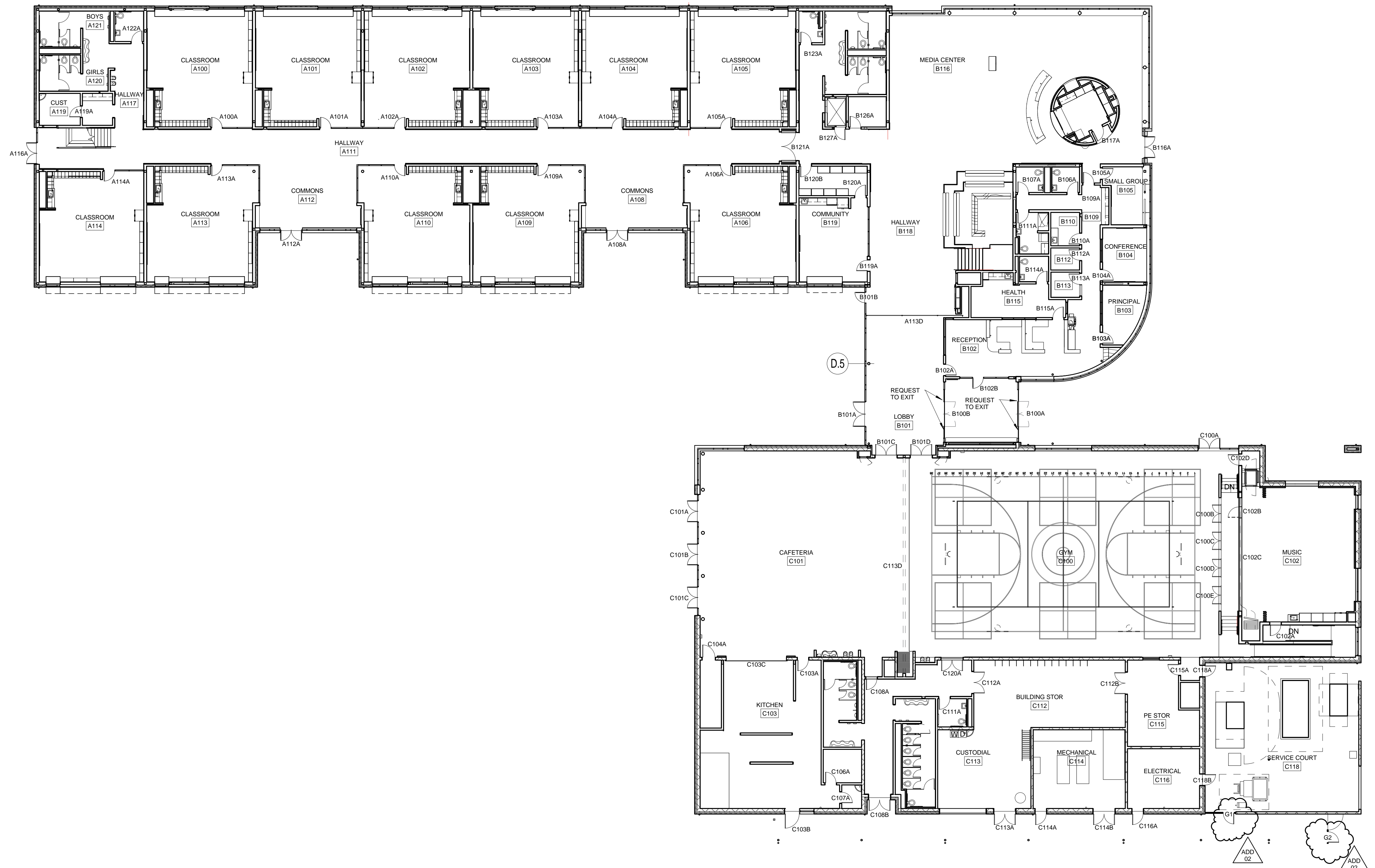
1 CLASSROOM CUBBY AXON
1" = 1'-0"

DOOR SCHEDULE - FIRST FLOOR

Level	MARK	DOOR ROOM NAME	WIDTH	HEIGHT	FIRE RATING	TYPE	DOOR PANEL		FRAME		HARDWARE GROUP	COMMENTS	
							MATERIAL	FINISH	TYPE	MATERIAL			FINISH
LEVEL 1	A100A	CLASSROOM	3'-0"	7'-0"	None	A	Wood	CLEAR	W2	Aluminum Storefront	CLEAR ANODIZED	Group 1	
LEVEL 1	A101A	CLASSROOM	3'-0"	7'-0"	None	A	Wood	CLEAR	W4	Aluminum Storefront	CLEAR ANODIZED	Group 1	
LEVEL 1	A102A	CLASSROOM	3'-0"	7'-0"	None	A	Wood	CLEAR	W3	Aluminum Storefront	CLEAR ANODIZED	Group 1	
LEVEL 1	A103A	CLASSROOM	3'-0"	7'-0"	None	A	Wood	CLEAR	W3	Aluminum Storefront	CLEAR ANODIZED	Group 1	
LEVEL 1	A104A	CLASSROOM	3'-0"	7'-0"	None	A	Wood	CLEAR	W3	Aluminum Storefront	CLEAR ANODIZED	Group 1	
LEVEL 1	A105A	CLASSROOM	3'-0"	7'-0"	None	A	Wood	CLEAR	W4	Aluminum Storefront	CLEAR ANODIZED	Group 1	
LEVEL 1	A106A	CLASSROOM	3'-0"	7'-0"	None	A	Wood	CLEAR	W6	Aluminum Storefront	CLEAR ANODIZED	Group 1	
LEVEL 1	A108A	COMMONS	6'-0"	7'-0"	None	B	Aluminum	CLEAR ANODIZED	X26	Aluminum	CLEAR ANODIZED	Group 2	
LEVEL 1	A109A	CLASSROOM	3'-0"	7'-0"	None	A	Wood	CLEAR	W5	Aluminum Storefront	CLEAR ANODIZED	Group 1	
LEVEL 1	A110A	CLASSROOM	3'-0"	7'-0"	None	A	Wood	CLEAR	W6	Aluminum Storefront	CLEAR ANODIZED	Group 1	
LEVEL 1	A112A	COMMONS	6'-0"	7'-0"	None	B	Aluminum	CLEAR ANODIZED	X26	Aluminum	CLEAR ANODIZED	Group 2	
LEVEL 1	A113A	CLASSROOM	3'-0"	7'-0"	None	A	Wood	CLEAR	W5	Aluminum Storefront	CLEAR ANODIZED	Group 1	
LEVEL 1	A113D	LOBBY	27'-8"	13'-2"	None	L	Aluminum	FAC	NA	Steel	FAC	BY MFGR.	Hardware by door manufacturer
LEVEL 1	A114A	CLASSROOM	3'-0"	7'-0"	None	A	Wood	CLEAR	W1	Aluminum Storefront	CLEAR ANODIZED	Group 1	
LEVEL 1	A116A	STAIR	6'-0"	7'-0"	None	B	Aluminum	CLEAR ANODIZED	X27	Aluminum	CLEAR ANODIZED	Group 2	
LEVEL 1	A119A	CUST	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 4	
LEVEL 1	A122A	TOILET	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 3	
LEVEL 1	B100A	VESTIBULE	3'-6"	8'-0"	None	B	Aluminum	CLEAR ANODIZED	X13	Aluminum Storefront	CLEAR ANODIZED	Group 28	Hardware by door manufacturer
LEVEL 1	B100B	VESTIBULE	3'-5"	8'-0"	None	B	Aluminum	CLEAR ANODIZED	X13	Aluminum Storefront	CLEAR ANODIZED	Group 28	Hardware by door manufacturer
LEVEL 1	B101A	LOBBY	7'-0"	7'-0"	None	B	Aluminum	CLEAR ANODIZED	X24	Aluminum	CLEAR ANODIZED	Group 2	
LEVEL 1	B101B	LOBBY	3'-0"	7'-0"	None	D	Aluminum	CLEAR ANODIZED	X24	Aluminum	CLEAR ANODIZED	Group 10	
LEVEL 1	B101C	LOBBY	6'-0"	7'-0"	None	B	Wood	CLEAR	HME	Hollow Metal	PAINT	Group 16	
LEVEL 1	B101D	LOBBY	6'-0"	7'-0"	None	B	Wood	CLEAR	HME	Hollow Metal	PAINT	Group 16	
LEVEL 1	B102A	RECEPTION	3'-0"	7'-0"	None	D	Wood	CLEAR	HMC	Hollow Metal	PAINT	Group 31	
LEVEL 1	B102B	VESTIBULE	3'-0"	7'-0"	None	D	Aluminum	CLEAR ANODIZED	X28	Aluminum	CLEAR ANODIZED	Group 25	
LEVEL 1	B103A	PRINCIPAL	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 7	
LEVEL 1	B104A	CONFERENCE	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 7	
LEVEL 1	B105A	SMALL GROUP	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 7	
LEVEL 1	B106A	TOILET	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 3	
LEVEL 1	B107A	TOILET	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 3	
LEVEL 1	B109A	HALL	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 25	
LEVEL 1	B110A	RECORDS	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 3	
LEVEL 1	B111A	TOILET	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 3	
LEVEL 1	B112A	RECORDS	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 12	
LEVEL 1	B113A	QUIET ROOM	3'-0"	7'-0"	None	A	Wood	CLEAR	HMD	Hollow Metal	PAINT	Group 1	
LEVEL 1	B114A	TOILET	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 3	
LEVEL 1	B115A	HEALTH	3'-0"	7'-0"	None	D	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 7	
LEVEL 1	B116A	MEDIA CENTER	6'-0"	7'-0"	None	B	Aluminum	CLEAR ANODIZED	X8	Aluminum	CLEAR ANODIZED	Group 2	

DOOR SCHEDULE - FIRST FLOOR

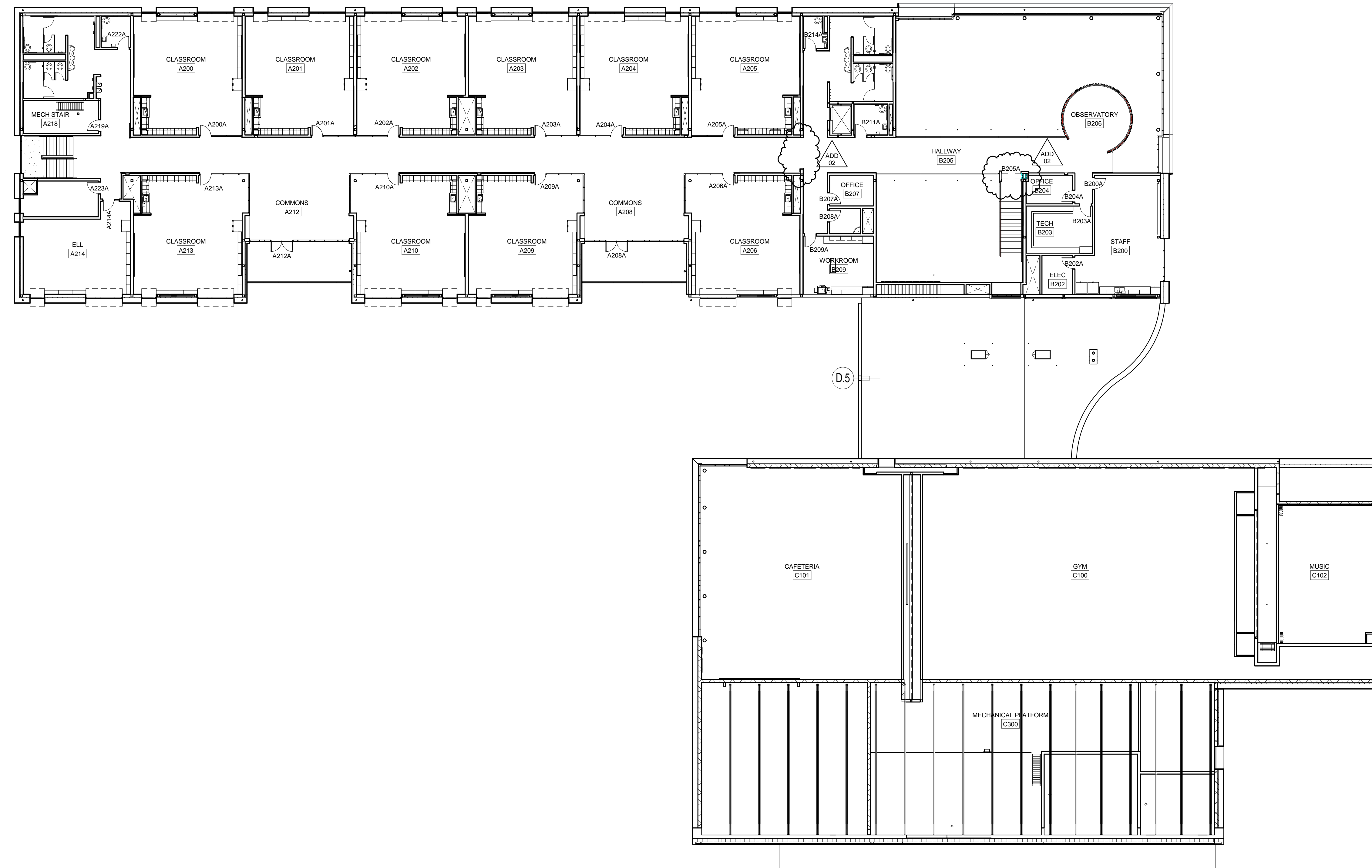
Level	MARK	DOOR ROOM NAME	WIDTH	HEIGHT	FIRE RATING	TYPE	DOOR PANEL		FRAME		HARDWARE GROUP	COMMENTS	
							MATERIAL	FINISH	TYPE	MATERIAL			FINISH
LEVEL 1	B117A	WORK ROOM	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 15	
LEVEL 1	B119A	COMMUNITY	3'-0"	7'-0"	None	D	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 38	
LEVEL 1	B120A	CLOSET	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 12	
LEVEL 1	B120B	CLOSET	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 12	
LEVEL 1	B121A	HALLWAY	8'-0"	7'-0"	None	C	Wood	CLEAR	HMB	Hollow Metal	PAINT	Group 6	
LEVEL 1	B123A	TOILET	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 3	
LEVEL 1	B126A	MOF	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 5	
LEVEL 1	B127A	ELEVATOR	3'-0"	7'-0"	60 MIN	HH	Hollow Metal	PAINT	HMA	Hollow Metal	PAINT	Group 29	
LEVEL 1	C100A	GYM	6'-0"	7'-0"	None	B	Aluminum	CLEAR ANODIZED	X15	Aluminum	CLEAR ANODIZED	Group 2	
LEVEL 1	C100B	GYM	5'-0"	2'-0"	None	H	HM	CLEAR	HMH	Hollow Metal	PAINT	Group 17	
LEVEL 1	C100C	GYM	5'-0"	2'-0"	None	H	HM	CLEAR	HMH	Hollow Metal	PAINT	Group 17	
LEVEL 1	C100D	GYM	5'-0"	2'-0"	None	H	HM	CLEAR	HMH	Hollow Metal	PAINT	Group 17	
LEVEL 1	C100E	GYM	5'-0"	2'-0"	None	H	HM	CLEAR	HMH	Hollow Metal	PAINT	Group 17	
LEVEL 1	C101A	CAFETERIA	6'-0"	7'-0"	None	B	Aluminum	CLEAR ANODIZED	X21	Aluminum	CLEAR ANODIZED	Group 2	
LEVEL 1	C101B	CAFETERIA	6'-0"	7'-0"	None	B	Aluminum	CLEAR ANODIZED	X21	Aluminum	CLEAR ANODIZED	Group 2	
LEVEL 1	C101C	CAFETERIA	6'-0"	7'-0"	None	B	Aluminum	CLEAR ANODIZED	X21	Aluminum	CLEAR ANODIZED	Group 2	
LEVEL 1	C102A	MUSIC	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 41	
LEVEL 1	C102B	MUSIC	3'-0"	7'-0"	None	J	Fabric Wall Panel	FAC	BY MFGR.	Steel	FAC	Group 41	
LEVEL 1	C102D	GYM	3'-0"	7'-0"	None	A	HM	PAINT	HMA	Hollow Metal	PAINT	Group 41	
LEVEL 1	C103A	KITCHEN	3'-0"	7'-0"	None	A	Wood	CLEAR	HMG	Hollow Metal	PAINT	Group 18	
LEVEL 1	C103B	KITCHEN	4'-0"	7'-10"	None	CC	Hollow Metal	PAINT	HMI	Hollow Metal	PAINT	Group 32	
LEVEL 1	C103C	KITCHEN	17'-0"	9'-4"	None	R	Aluminum Bar	FAC	BY MFGR.	Steel	FAC	BY MFGR.	
LEVEL 1	C104A	TBL STOR	3'-6"	7'-0"	None	G	Wood	CLEAR	HMF	Hollow Metal	PAINT	Group 4	
LEVEL 1	C106A	KITCHEN	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 19	
LEVEL 1	C107A	CUST	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 4	
LEVEL 1	C108A	HALLWAY	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 21	
LEVEL 1	C108B	HALLWAY	6'-0"	7'-10"	None	M	Hollow Metal	PAINT	HMK	Hollow Metal	PAINT	Group 22	
LEVEL 1	C111A	FAMILY TOILET	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 3	
LEVEL 1	C112A	BUILDING STOR	6'-0"	7'-0"	None	F	Wood	CLEAR	HMF	Hollow Metal	PAINT	Group 24	
LEVEL 1	C112B	BUILDING STOR	6'-0"	7'-0"	None	F	Wood	CLEAR	HMF	Hollow Metal	PAINT	Group 24	
LEVEL 1	C113A	CUSTODIAL	6'-0"	7'-10"	None	M	Hollow Metal	PAINT	HMK	Hollow Metal	PAINT	Group 33	
LEVEL 1	C113D	CAFETERIA	60'-10"	16'-0"	None	K	Aluminum	FAC	BY MFGR.	Steel	FAC	Field Verify door size	
LEVEL 1	C114A	MECHANICAL	3'-0"	7'-10"	None	N	Hollow Metal	PAINT	HMG	Hollow Metal	PAINT	Group 32	
LEVEL 1	C114B	MECHANICAL	6'-0"	7'-10"	None	M	Hollow Metal	PAINT	HMA	Hollow Metal	PAINT	Group 33	
LEVEL 1	C115A	PE STOR	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 18	
LEVEL 1	C116A	ELECTRICAL	3'-0"	7'-10"	None	N	Hollow Metal	PAINT	HMG	Hollow Metal	PAINT	Group 39	
LEVEL 1	C118A	SERVICE COURT	3'-0"	7'-10"	None	N	Hollow Metal	PAINT	HMG	Hollow Metal	PAINT	Group 34	
LEVEL 1	C118B	SERVICE COURT	3'-0"	7'-10"	None	N	Hollow Metal	PAINT	HMG	Hollow Metal	PAINT	Group 40	
LEVEL 1	C120A	HALLWAY	6'-0"	7'-0"	None	F	Wood	CLEAR	HML	Hollow Metal	PAINT	Group 20	
LEVEL 1	G1	UTILITY COURT	3'-0"	6'-0"	None	Gate	Steel	FAC	BY MFGR.	Steel	FAC	Group 30	
LEVEL 1	G2	UTILITY COURT	3'-0"	6'-0"	None	Gate	Steel	FAC	BY MFGR.	Steel	FAC	Group 30	



1 DOOR PLAN - FIRST FLOOR
1/16" = 1'-0"

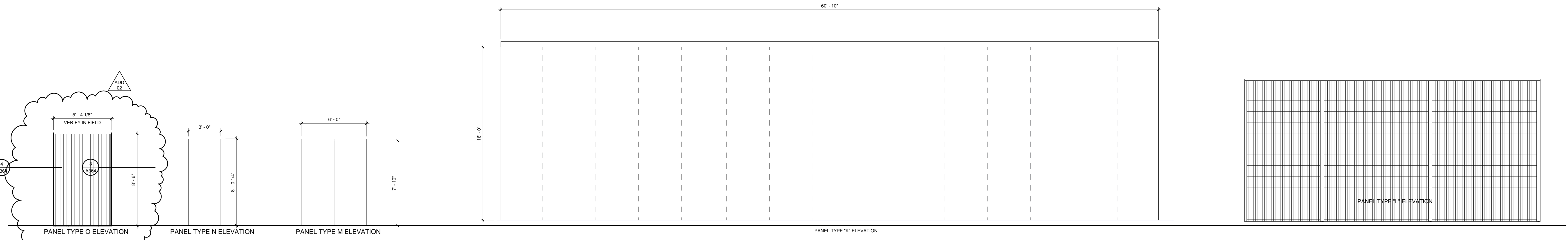
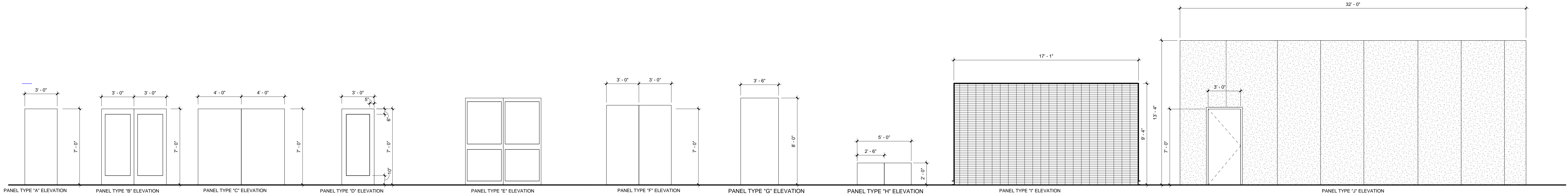
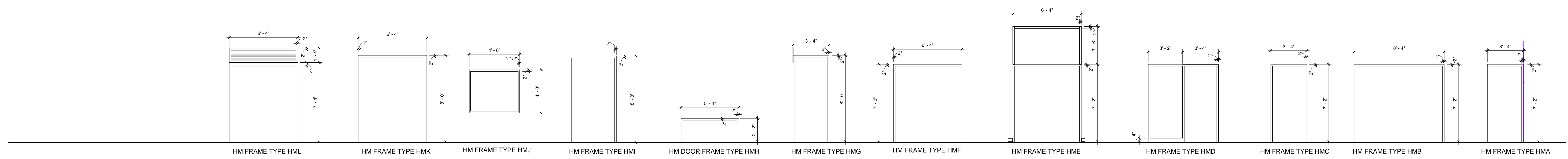
© 2016 P.V.O.T ARCHITECTURE
FROM FILE: C:\Pivot Architecture\Revit\2015\1307_ERES_Arch_Bldg_15_dwgplan.rvt
PRINTED ON: 3/9/2016 7:27:37 PM

Level	MARK	DOOR ROOM NAME	WIDTH	HEIGHT	FIRE RATING	DOOR PANEL			FRAME			HARDWARE GROUP	COMMENTS
						TYPE	MATERIAL	FINISH	TYPE	MATERIAL	FINISH		
LEVEL 2	A200A	CLASSROOM	3'-0"	7'-0"	None	A	Wood	CLEAR	W4	Aluminum Storefront	CLEAR ANODIZED	Group 1	
LEVEL 2	A201A	CLASSROOM	3'-0"	7'-0"	None	A	Wood	CLEAR	W3	Aluminum Storefront	CLEAR ANODIZED	Group 1	
LEVEL 2	A202A	CLASSROOM	3'-0"	7'-0"	None	A	Wood	CLEAR	W3	Aluminum Storefront	CLEAR ANODIZED	Group 1	
LEVEL 2	A203A	CLASSROOM	3'-0"	7'-0"	None	A	Wood	CLEAR	W3	Aluminum Storefront	CLEAR ANODIZED	Group 1	
LEVEL 2	A204A	CLASSROOM	3'-0"	7'-0"	None	A	Wood	CLEAR	W3	Aluminum Storefront	CLEAR ANODIZED	Group 1	
LEVEL 2	A205A	CLASSROOM	3'-0"	7'-0"	None	A	Wood	CLEAR	W4	Aluminum Storefront	CLEAR ANODIZED	Group 1	
LEVEL 2	A206A	CLASSROOM	3'-0"	7'-0"	None	A	Wood	CLEAR	W6	Aluminum Storefront	CLEAR ANODIZED	Group 1	
LEVEL 2	A208A	COMMONS	6'-0"	7'-0"	None	B	Aluminium	CLEAR ANODIZED	X26	Aluminum	CLEAR ANODIZED	Group 2	
LEVEL 2	A209A	CLASSROOM	3'-0"	7'-0"	None	A	Wood	CLEAR	W5	Aluminum Storefront	CLEAR ANODIZED	Group 1	
LEVEL 2	A210A	CLASSROOM	3'-0"	7'-0"	None	A	Wood	CLEAR	W6	Aluminum Storefront	CLEAR ANODIZED	Group 1	
LEVEL 2	A212A	COMMONS	6'-0"	7'-0"	None	B	Aluminium	CLEAR ANODIZED	X26	Aluminum	CLEAR ANODIZED	Group 2	
LEVEL 2	A213A	CLASSROOM	3'-0"	7'-0"	None	A	Wood	CLEAR	W5	Aluminum Storefront	CLEAR ANODIZED	Group 1	
LEVEL 2	A214A	ELL	3'-0"	7'-0"	None	A	Wood	CLEAR	W15	Aluminum Storefront	CLEAR ANODIZED	Group 1	
LEVEL 2	A219A	IDF	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 5	
LEVEL 2	A222A	TOILET	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 3	
LEVEL 2	A223A	SPEECH	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 1	
MECHANICAL PLATFORM	A301A	MECH STAIR	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 5	
LEVEL 2	B200A	STAFF	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 8	
LEVEL 2	B202A	ELEC	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 8	
LEVEL 2	B203A	TECH	3'-0"	7'-0"	None	D	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 1	
LEVEL 2	B204A	OFFICE	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 7	
LEVEL 2	B205A	HALL	5'-6"	8'-6"	1 Hour	O	Fac	BY MFR.	BY MFR.	BY MFR.	BY MFR.	Group 7	See specifications for door finishes
LEVEL 2	B207A	OFFICE	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 7	
LEVEL 2	B208A	TECH	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 4	
LEVEL 2	B209A	WORKROOM	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 8	
LEVEL 2	B211A	TOILET	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 3	
LEVEL 2	B214A	TOILET	3'-0"	7'-0"	None	A	Wood	CLEAR	HMA	Hollow Metal	PAINT	Group 3	



1 DOOR PLAN - SECOND FLOOR
1/16" = 1'-0"





Tag	Description	Size	Watts	Lamp(s)	Ballast/Driver	Voltage	Product	Mounting	Finish	Notes
L1A	SUSPENDED LED LINEAR DIRECT/INDIRECT	NOMINAL 8 INCH WIDE X 2 INCH DEEP X AS SHOWN ON DRAWINGS	41W/4FT	LED, 3500K 4500 DELIVERED LUMENS PER FOUR FOOT SECTION	0-10 DIMMING ELECTRONIC	UNIVERSAL VOLTAGE	PEERLESS STAPLE SERIES, LEDALITE, AXIS, COOPER OR APPROVED	SUSPENDED AIRCRAFT CABLE	STANDARD AS SELECTED BY ARCHITECT	NOMINAL DISTRIBUTION IS TO BE 60% INDIRECT 40% DIRECT. WITH DUST COVER
L1B	SUSPENDED LED LINEAR DIRECT/INDIRECT	NOMINAL 8 INCH WIDE X 2 INCH DEEP X AS SHOWN ON DRAWINGS	41W/4FT	LED, 3500K 4500 DELIVERED LUMENS PER FOUR FOOT SECTION	0-10 DIMMING ELECTRONIC	UNIVERSAL VOLTAGE	PEERLESS STAPLE SERIES, LEDALITE, AXIS, COOPER OR APPROVED	SUSPENDED AIRCRAFT CABLE	STANDARD AS SELECTED BY ARCHITECT	NOMINAL DISTRIBUTION IS TO BE 40% INDIRECT 60% DIRECT. WITH DUST COVER
L2A	RECESSED LENSED LED	4 INCH X 4 INCH X 4 FEET LONG	32W/4FT	LED 3500 K 3000 LUMENS PER FOUR FOOT SECTION	0-10 DIMMING ELECTRONIC	UNIVERSAL VOLTAGE	AXIS BEAM SERIES, NUJITE, NEO RAY OR APPROVED	CEILING RECESSED	STANDARD AS SELECTED BY ARCHITECT	ACP CEILING FLUSHED MOUNT INSTALLATION
L2B	SAME AS TYPE L2A EXCEPT WALL MOUNT - FLANGELESS	4 INCH X 4 INCH X 4 FEET LONG	32W/4FT	LED 3500 K 3000 LUMENS PER FOUR FOOT SECTION	0-10 DIMMING ELECTRONIC	UNIVERSAL VOLTAGE	AXIS BEAM SERIES, NUJITE, NEO RAY OR APPROVED	WALL SURFACE (11' AFF)	STANDARD AS SELECTED BY ARCHITECT	SURFACE WALL MOUNT INSTALLATION
L2C	SAME AS TYPE L2A EXCEPT WALL WASH MOUNT - FLANGELESS	4 INCH X 4 INCH X 4 FEET LONG	32W/4FT	LED 3500 K 3000 LUMENS PER FOUR FOOT SECTION	0-10 DIMMING ELECTRONIC	UNIVERSAL VOLTAGE	AXIS BEAM SERIES, NUJITE, NEO RAY OR APPROVED	CEILING RECESSED	STANDARD AS SELECTED BY ARCHITECT	FLANGELESS CEILING FLUSHED MOUNT INSTALLATION
L2D	SAME AS TYPE L2A EXCEPT 2" WIDE	4 INCH X 2 INCH X 4 FEET LONG	30W/4FT	LED 3500 K 3000 LUMENS PER FOUR FOOT SECTION	0-10 DIMMING ELECTRONIC	UNIVERSAL VOLTAGE	AXIS BEAM SERIES, NUJITE, NEO RAY OR APPROVED	CEILING RECESSED	STANDARD AS SELECTED BY ARCHITECT	FLANGELESS WOOD LATH CEILING FLUSHED MOUNT INSTALLATION
L2E	SAME AS TYPE L2A	4 INCH X 4 INCH X 4 FEET LONG	32W/4FT	LED 3500 K 3000 LUMENS PER FOUR FOOT SECTION	0-10 DIMMING ELECTRONIC	UNIVERSAL VOLTAGE	AXIS BEAM SERIES, NUJITE, NEO RAY OR APPROVED	CEILING RECESSED	STANDARD AS SELECTED BY ARCHITECT	GYP CEILING FLUSHED MOUNT INSTALLATION
L2F	SAME AS TYPE L2A EXCEPT VERTICAL WALL WASH MOUNT - FLANGELESS	4 INCH X 4 INCH X 4 FEET LONG	32W/4FT	LED 3500 K 3000 LUMENS PER FOUR FOOT SECTION	0-10 DIMMING ELECTRONIC	UNIVERSAL VOLTAGE	AXIS BEAM SERIES, NUJITE, NEO RAY OR APPROVED	WALL RECESSED	STANDARD AS SELECTED BY ARCHITECT	FLANGELESS VERTICAL WALL MOUNT INSTALLATION
L3	NOT USED									
L4A	RECESSED LED 2X2	2X2 FEET SQUARE	37	LED, 3500 K 3700 LUMENS	0-10 DIMMING ELECTRONIC	UNIVERSAL VOLTAGE	LITHONIA ZALL SERIES, CORELITE ENCOUNTER SERIES, LEDALITE PURE FX SERIES, AXIS DAYBRITE	CEILING RECESSED	STANDARD AS SELECTED BY ARCHITECT	
L4B	RECESSED LED 2X2, FOOD SERVICE RATED	2X2 FEET SQUARE	45	LED, 3500K 4400 LUMENS	0-10 DIMMING ELECTRONIC	UNIVERSAL VOLTAGE	KURTZON FP SERIES PARAMOUNT APPROVED PENDING VERIFICATION OF SPEC COMPLIANCE	CEILING RECESSED	STANDARD AS SELECTED BY ARCHITECT	FOOD SERVICE RATED. GYP CEILING INSTALLATION
L4C	RECESSED LED 2X2, FOOD SERVICE RATED	2X2 FEET SQUARE	45	LED, 3500K 4400 LUMENS	0-10 DIMMING ELECTRONIC	UNIVERSAL VOLTAGE	KURTZON FP SERIES PARAMOUNT APPROVED PENDING VERIFICATION OF SPEC COMPLIANCE	CEILING RECESSED	STANDARD AS SELECTED BY ARCHITECT	FOOD SERVICE RATED. ACP CEILING INSTALLATION
L5A	RECESSED LED DOWNLIGHT	6 INCH ROUND APERTURE	28	LED, 3500K 1800 LUMENS	0-10 DIMMING ELECTRONIC	UNIVERSAL VOLTAGE	GOTHAM EVO SERIES PORTFOLIO LD6A SERIES, INDY, LIGHTOLIER CALCULYTE	CEILING RECESSED	CLEAR ALZAK REFLECTOR	GYP CEILING FLUSHED MOUNT INSTALLATION
L5B	RECESSED LED DOWNLIGHT	6 INCH ROUND APERTURE	28	LED, 3500K 1800 LUMENS	0-10 DIMMING ELECTRONIC	UNIVERSAL VOLTAGE	GOTHAM EVO SERIES PORTFOLIO LD6A SERIES, INDY, LIGHTOLIER CALCULYTE	CEILING RECESSED	CLEAR ALZAK REFLECTOR	ACP CEILING FLUSHED MOUNT INSTALLATION
L5C	RECESSED LED DOWNLIGHT	6 INCH ROUND APERTURE	28	LED, 3500K 1800 LUMENS	0-10 DIMMING ELECTRONIC	UNIVERSAL VOLTAGE	GOTHAM EVO SERIES PORTFOLIO LD6A SERIES, INDY, LIGHTOLIER CALCULYTE	CEILING RECESSED	CLEAR ALZAK REFLECTOR	WOOD LATH CEILING FLUSHED MOUNT INSTALLATION - WET LISTED.
L6A	SURFACE MOUNTED LINEAR LED	NOMINAL 8 INCH WIDE X FOUR FEET LONG	40	LED, 3500K 4000 LUMENS	0-10 DIMMING ELECTRONIC	UNIVERSAL VOLTAGE	HE WILLIAMS ASM SERIES, LITHONIA STL SERIES, OR PRE-BID APPROVED	SURFACE CEILING	STANDARD AS SELECTED BY ARCHITECT	GYP CEILING FLUSHED MOUNT INSTALLATION
L6B	SURFACE MOUNTED LINEAR LED	NOMINAL 8 INCH WIDE X FOUR FEET LONG	40	LED, 3500K 4000 LUMENS	0-10 DIMMING ELECTRONIC	UNIVERSAL VOLTAGE	HE WILLIAMS ASM SERIES, LITHONIA STL SERIES, OR PRE-BID APPROVED	SURFACE CEILING	STANDARD AS SELECTED BY ARCHITECT	ACP CEILING FLUSHED MOUNT INSTALLATION

Tag	Description	Size	Watts	Lamp(s)	Ballast/Driver	Voltage	Product	Mounting	Finish	Notes
L7A	SURFACE OR SUSPENDED LED LENSED STRIP	NOMINAL 3 INCH WIDE X 4 FEET LONG	32	LED 3500K 2000 LUMENS	0-10 DIMMING ELECTRONIC	UNIVERSAL VOLTAGE	LITHONIA ZL2N SERIES, METALLUX SLED SERIES WILLIAMS DAYBRITE LF SERIES OR PRE-BID APPROVED	SURFACE CEILING OR CHAIN HUNG	STANDARD AS SELECTED BY ARCHITECT	GYP CEILING FLUSHED MOUNT INSTALLATION
L7B	SURFACE OR SUSPENDED LED LENSED STRIP	NOMINAL 3 INCH WIDE X 4 FEET LONG	32	LED 3500K 2000 LUMENS	0-10 DIMMING ELECTRONIC	UNIVERSAL VOLTAGE	LITHONIA ZL2N SERIES, METALLUX SLED SERIES WILLIAMS DAYBRITE LF SERIES OR PRE-BID APPROVED	SURFACE CEILING OR CHAIN HUNG	STANDARD AS SELECTED BY ARCHITECT	ACP CEILING FLUSHED MOUNT INSTALLATION
L8A	LED HIGH-BAY DIRECT/INDIRECT	19 INCH HIGH X 22 INCH DIAMETER	250	80 CRI 4000K 27000 LUMENS WIDE DISTRIBUTION	INTEGRAL 0-10 DIMMING ELECTRONIC WITH DIMMING TERMINAL AT EACH LUMINAIRE	UNIVERSAL VOLTAGE	HOLOPHANE PHUZION SERIES	SUSPENDED WITH SWIVEL MOUNT PENDANT AND HOOK AND CORD TO LUMINAIRE	STANDARD AS SELECTED BY ARCHITECT	PROVIDE WIRE GUARD FROSTED LENS. PROVIDE STEM LENGTH AS NECESSARY TO MOUNT LUMINAIRE AT 25' AFF.
L9	NOT USED									
L10A	LED CYLINDER - SURFACE MOUNTED	6.1 INCH HIGH X 6 INCH DIAMETER	39.1	LED 3500K 4000 LUMEN 41 DEGREE	0-10 DIMMING ELECTRONIC	UNIVERSAL VOLTAGE	V2 LIGHTING CORE SERIES, PORTFOLIO.	SURFACE CEILING	STANDARD AS SELECTED BY ARCHITECT	ACP CEILING MOUNT INSTALLATION
L10B	LED CYLINDER - PENDANT	15.4 INCH HIGH X 6 INCH DIAMETER	46.8	LED 3500K 5000 LUMEN 41 DEGREE	0-10 DIMMING ELECTRONIC	UNIVERSAL VOLTAGE	V2 LIGHTING CORE SERIES, PORTFOLIO.	SUSPENDED AIRCRAFT CABLE	STANDARD AS SELECTED BY ARCHITECT	PROVIDE STEM LENGTH AS NECESSARY TO MOUNT LUMINAIRE AT 25' AFF.
L11	LED STEP LIGHT	5 1/4 X 2 7/8 X 4	1.1	LED 4000K, 36 LUMEN	ELECTRONIC NON DIM	120 V	BEGA 1325 LED, V6-EF OR PRE BID APPROVED	RECESSED WALL	STANDARD AS SELECTED BY ARCHITECT	
L12	NOT USED									
L13	LINEAR WET LOCATION LED	NOMINAL 8 INCH WIDE X 4 FEET LONG	39 WATT	LED 2975 LUMEN 4100 K	ELECTRONIC	277V	LITHONIA VAP SERIES, BEGHELLI OR PRE BID APPROVED	CEILING MOUNT OR SUSPENDED	STANDARD AS SELECTED BY ARCHITECT	
X	UNIVERSAL LED EXIT SIGN	13-7/8 X 8.5	3 WATT	GREEN LED	ELECTRONIC	277V	LITHONIA EXTREME SERIES, UNIVERSAL MOUNT, EMERG-LITE SVX SERIES		STANDARD AS SELECTED BY ARCHITECT	WHITE WITH GREEN LETTERS UNIVERSAL MOUNT, UNIVERSAL FIELD ADJUSTABLE DIRECTIONAL ARROWS
XI	WEATHERPROOF EXIT SIGN	13-7/8 X 8.5	3 WATT	GREEN LED	ELECTRONIC	277V	LITHONIA EXTREME SERIES, UNIVERSAL MOUNT, EMERG-LITE SVX SERIES		STANDARD AS SELECTED BY ARCHITECT	WEATHERPROOF ENCLOSURE WHITE WITH GREEN LETTERS UNIVERSAL MOUNT, UNIVERSAL FIELD ADJUSTABLE DIRECTIONAL ARROWS
SI A	SITE AREA LED POLE LIGHT	20 INCH DIAMETER	135	LED 4000K 14000 LUMEN	DUAL DRIVER FOR LIGHT REDUCTION	UNIVERSAL VOLTAGE	LITHONIA OMEGA SERIES TYPE III DISTRIBUTION, OR PRE BID APPROVED		STANDARD AS SELECTED BY ARCHITECT	18 FOOT POLE ON FLUSH BASE SEE DETAIL. PROVIDE DUAL-CHANNEL SEPARATION FOR LINE VOLTAGE AND COMMUNICATIONS CABLE. PROVIDE ACCESS HOLE FOR FUTURE CAMERA.
SI B	SITE AREA LED POLE LIGHT	20 INCH DIAMETER	135	LED 4000K 14000 LUMEN	DUAL DRIVER FOR LIGHT REDUCTION	UNIVERSAL VOLTAGE	LITHONIA OMEGA SERIES TYPE IV DISTRIBUTION, OR PRE BID APPROVED		STANDARD AS SELECTED BY ARCHITECT	18 FOOT POLE ON FLUSH BASE SEE DETAIL. PROVIDE DUAL-CHANNEL SEPARATION FOR LINE VOLTAGE AND COMMUNICATIONS CABLE. PROVIDE ACCESS HOLE FOR FUTURE CAMERA.
SI C	SITE AREA LED POLE LIGHT	20 INCH DIAMETER	135	LED 4000K 14000 LUMEN	DUAL DRIVER FOR LIGHT REDUCTION	UNIVERSAL VOLTAGE	LITHONIA OMEGA SERIES TYPE V DISTRIBUTION, OR PRE BID APPROVED		STANDARD AS SELECTED BY ARCHITECT	18 FOOT POLE ON FLUSH BASE SEE DETAIL. PROVIDE DUAL-CHANNEL SEPARATION FOR LINE VOLTAGE AND COMMUNICATIONS CABLE. PROVIDE ACCESS HOLE FOR FUTURE CAMERA.
S2	SITE AREA LED POLE LIGHT	20 INCH DIAMETER	135	LED 4000K 14000 LUMEN	DUAL DRIVER FOR LIGHT REDUCTION	UNIVERSAL VOLTAGE	LITHONIA OMEGA SERIES TYPE IV DISTRIBUTION, OR PRE BID APPROVED		STANDARD AS SELECTED BY ARCHITECT	12 FOOT POLE ON FLUSH BASE SEE DETAIL. PROVIDE DUAL-CHANNEL SEPARATION FOR LINE VOLTAGE AND COMMUNICATIONS CABLE. PROVIDE ACCESS HOLE FOR FUTURE CAMERA.
S3A	SITE LED LIGHT COLUMN	6.5 INCH WIDE X 4 FEET TALL	19.6	LED 416 LUMEN 4000K	ELECTRONIC	277V	BEGA 8619 SERIES, OR PRE BID APPROVED		STANDARD AS SELECTED BY ARCHITECT	FLUSH BASE
S4	WALL MOUNTED LED BUILDING MOUNTED	16 INCH WIDE X 8 INCH HIGH	24	2000 LUMEN TYPE III 4000 K	ELECTRONIC	277V	LITHONIA VST, GARDCO OR PRE BID APPROVED		STANDARD AS SELECTED BY ARCHITECT	

GENERAL NOTES:
A. CONTRACTOR TO COORDINATE LUMINAIRE WITH CEILING TYPE PRIOR TO PURCHASE.

Pivot
ARCHITECTURE

REGISTERED PROFESSIONAL ENGINEER
1994 0614
EUGENE, OREGON
PIVOT ARCHITECTURE
120 WEST HILLIARD AVENUE, SUITE 100
EUGENE, OREGON 97404
PHONE: 541.325.1111
FAX: 541.325.1112
WWW.PIVOTARCHITECTURE.COM

IBI GROUP

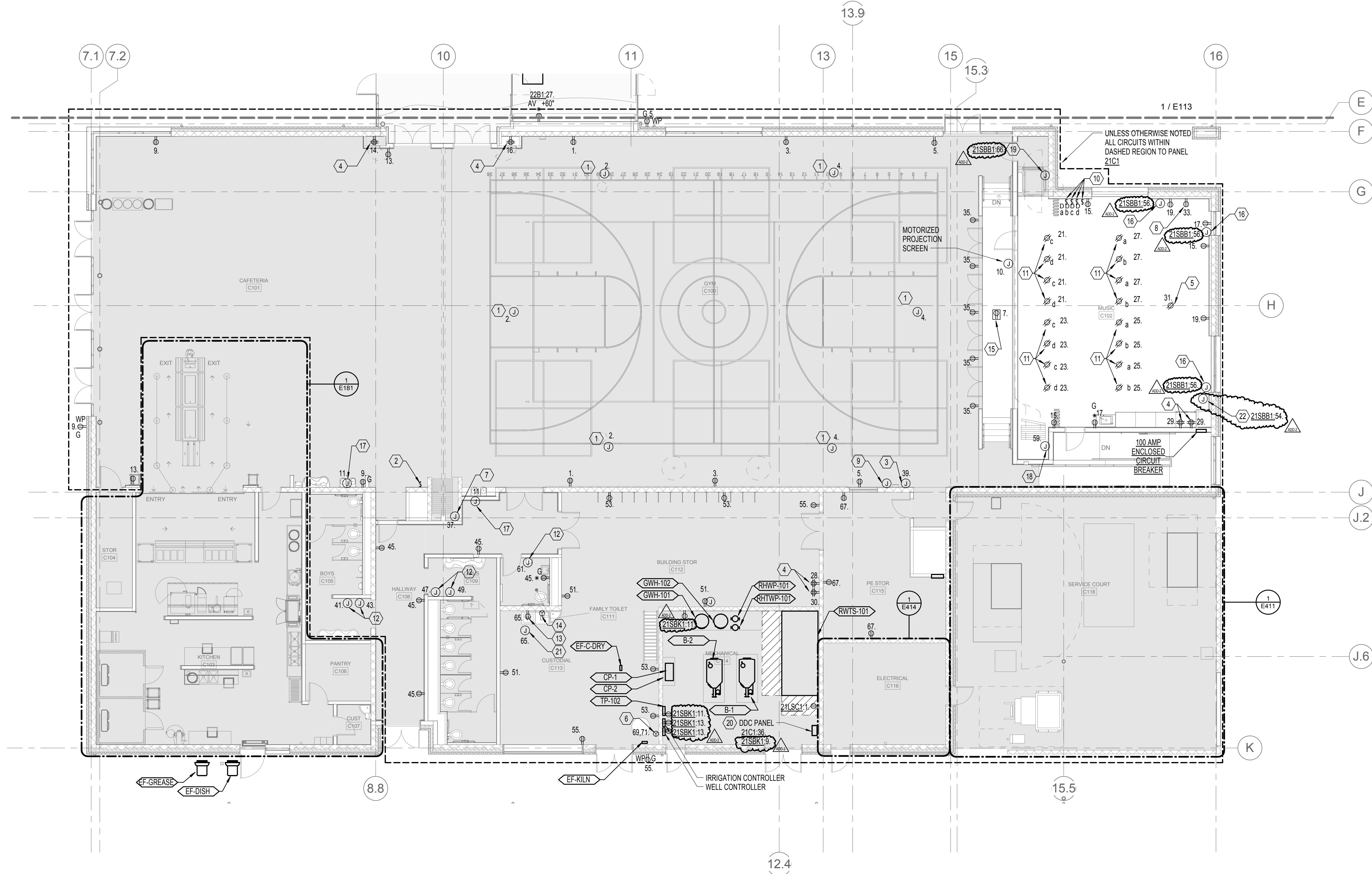
Toba

PAE
Portland | San Francisco | Seattle
pea-engineers.com

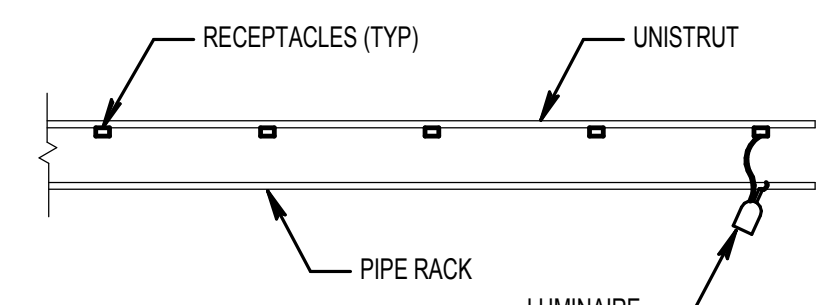
BID SET
EUGENE SCHOOL DISTRICT 4J
120 WEST HILLIARD AVENUE, EUGENE, OREGON 97404
RIVER ROAD / EL CAMINO DEL RIO ELEMENTARY SCHOOL

LUMINAIRE SCHEDULE

PROJECT # 133720 REVISION
ISSUE DATE 2/12/16
DRAWN SC ADD-2 - 03/09/2016
CHECKED PJC



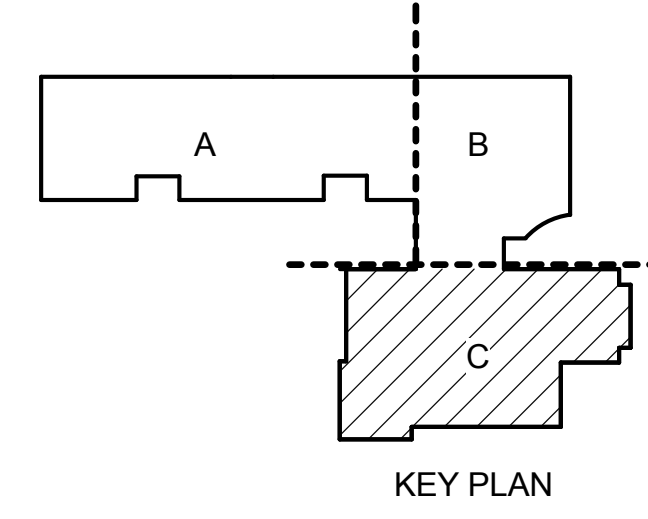
1 SECTOR C POWER PLAN - FIRST FLOOR
1/8" = 1'-0"



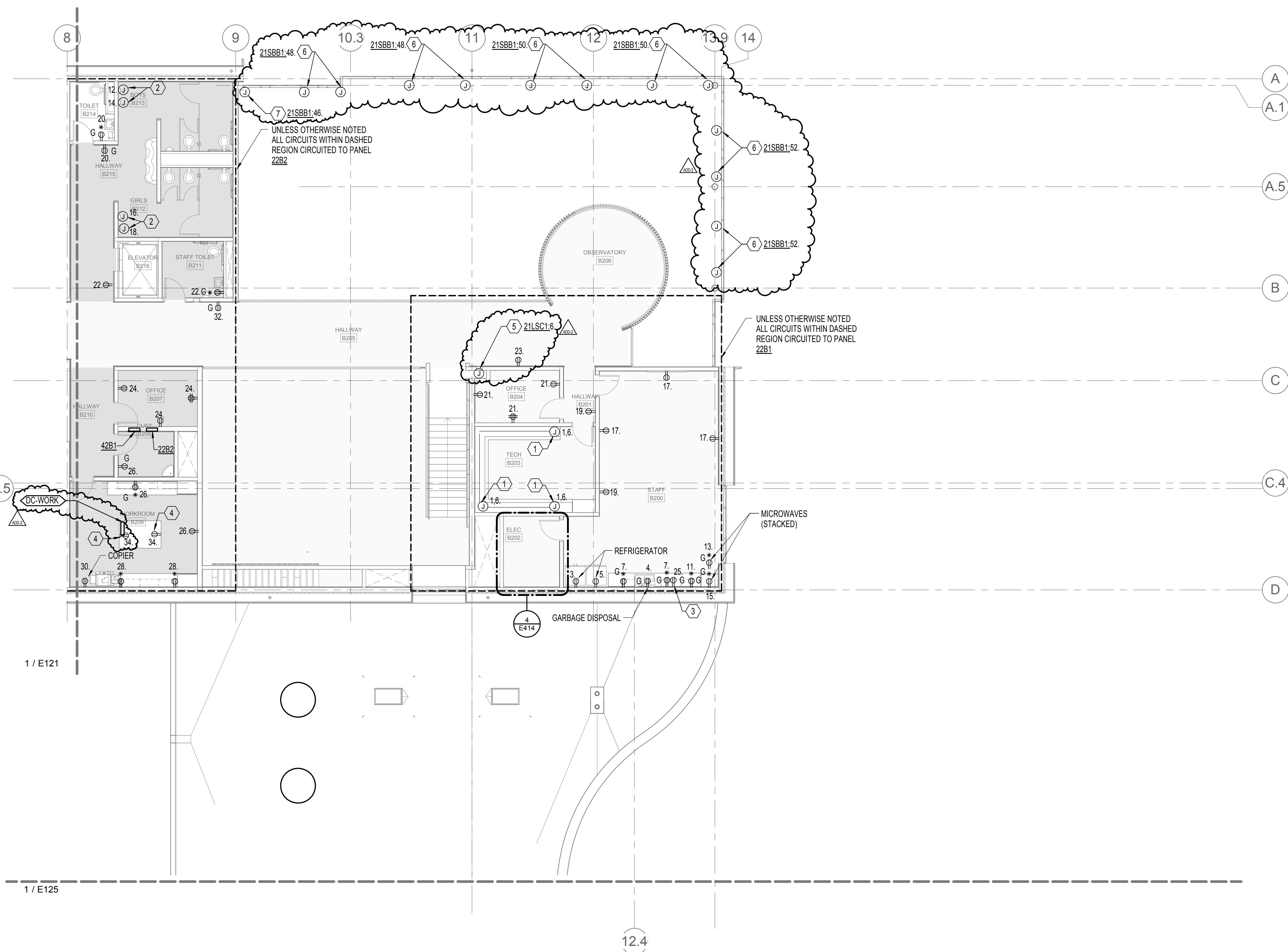
2 STAGE LIGHTING DETAIL
NONE

- GENERAL NOTES:**
- A. AREA ABOVE ALL ELECTRICAL PANELS AND SWITCH BOARDS SHALL BE KEPT CLEAR OF ALL EQUIPMENT FOREIGN TO THE ELECTRICAL INSTALLATION INCLUDING PIPING, DUCTWORK, SUPPORTS, ETC. COORDINATE INSTALLATION WITH ALL OTHER TRADES.
 - B. ALL PENETRATIONS AND ROUTING PATHS OF EXPOSED CONDUIT SHALL BE COORDINATED AND REVIEWED BY ARCHITECT AND ENGINEER PRIOR TO INSTALLATION.
 - C. PROVIDE SEPARATE NEUTRAL CONDUCTOR FOR EACH BRANCH CIRCUIT, SHARED NEUTRALS ARE NOT PERMITTED.
 - D. PROVIDE NO MORE THAN (6) CURRENT CARRYING CONDUCTORS PER HOMERUN.
 - E. ALL BRANCH CIRCUITING SHALL BE #10AWG., UNLESS OTHERWISE NOTED.
 - F. REFER TO MECHANICAL EQUIPMENT CONNECTION SCHEDULE ON SHEET E701 FOR ADDITIONAL INFORMATION.
 - G. DEVICE AND EQUIPMENT CONNECTION LOCATIONS ARE SHOWN SCHEMATIC AND APPROXIMATE. REFER TO ARCHITECTURAL CEILING PLANS, FLOOR PLANS, ELEVATIONS AND SECTIONS FOR ADDITIONAL INFORMATION IMPACTING DEVICE ROUGH-IN. TYPICAL DIMENSIONED DEVICE LOCATIONS SHALL BE CONFIRMED WITH THE ARCHITECT PRIOR TO ROUGH-IN. WHERE CONFLICT OCCURS, DECISION OF THE ARCHITECT SHALL GOVERN.
 - H. PROVIDE WALL ROUGH-IN AT WALL CAVITY WHERE T-STATS ARE INDICATED (SEE MECHANICAL DRAWINGS). SINGLE GANG BOX WITH MUD RING, 1/2" CONDUIT TO ACCESSIBLE CEILING SPACE. COORDINATE WITH ALL OTHER TRADES TO AVOID CONFLICTS. MUST BE 18" AWAY FROM DOOR JAMBS. T-STAT ON SOUTH WALL OF GYM (SEE MECHANICAL DRAWINGS) FEED CONDUIT DOWN SOUTH SIDE OF WALL AND POME THROUGH WALL TO BACK OF SINGLE GANG BOX FOR T-STAT (NO CONDUIT ON GYM SIDE OF WALL).

- NOTES:**
- 1. PROVIDE CONNECTION TO MOTORIZED RETRACTABLE BASKETBALL HOOP. COORDINATE EXACT LOCATION WITH ARCHITECTURAL DRAWINGS. COORDINATE ANY ADDITIONAL CONTROL WIRING REQUIREMENTS WITH VENDOR.
 - 2. PROVIDE CONNECTION TO SWITCH SKYLIGHT SHADES. COORDINATE WITH IT/AV DRAWINGS FOR ADDITIONAL REQUIREMENTS OF CAFETERIA SKYLIGHT SHADE CONTROL.
 - 3. BASKETBALL HOOP CONTROLLERS, COORDINATE EXACT LOCATION WITH ARCHITECTURAL DRAWINGS.
 - 4. RECEPTACLE TO SERVE AUDIO EQUIPMENT. AUDIO EQUIPMENT TO BE INSTALLED IN A FREE STANDING RACK. RECEPTACLES TO BE MOUNTED WITHIN CABINETY.
 - 5. RECEPTACLE FOR PROJECTOR. COORDINATE EXACT HEIGHT WITH ARCHITECTURAL DRAWINGS AND CONTROL REQUIREMENTS WITH AV DRAWINGS.
 - 6. KILN. PROVIDE 50A/2P, NEMA 6-50 RECEPTACLE, 2-#6 CU, 1-#10 CU GRD IN 1" CU VIA SDP.
 - 7. PROVIDE CONNECTION AND CONTROL FOR MOTORIZED GYM WALL PARTITION.
 - 8. PROVIDE CONNECTION FOR 27" DISPLAY SCREEN. RECEPTACLE SHALL BE MOUNTED BEHIND CENTER OF DISPLAY. COORDINATE EXACT LOCATION WITH AV DRAWINGS.
 - 9. PROVIDE CONNECTION TO SWITCH FOR GYM SKYLIGHT SHADE CONTROL.
 - 10. DIMMER SWITCHES TO CONTROL THEATRICAL PIPE RACK RECEPTACLE.
 - 11. POWER FOR THEATRICAL PIPE RACK. PROVIDE NEMA 5-15R TWIST LOCK SINGLE OUTLET. COORDINATE EXACT LOCATION AND ADDITIONAL REQUIREMENTS WITH ARCHITECT. REFER TO DETAIL 2/E115 FOR MOUNTING REQUIREMENTS.
 - 12. PROVIDE CONNECTIONS FOR HAND DRYERS. COORDINATE EXACT MOUNTING LOCATION WITH MANUFACTURER.
 - 13. PROVIDE CONNECTION FOR WASHER. COORDINATE EXACT LOCATION WITH ARCHITECT.
 - 14. PROVIDE COMPLETE ELECTRICAL CONNECTION FOR DRYER FROM AVAILABLE SPACE IN PANEL 21C1. COORDINATE EXACT MANUFACTURER REQUIREMENTS WITH AV PRIOR TO ROUGH-IN. COORDINATE EXACT LOCATION WITH ARCHITECT.
 - 15. COMBINED POWER/DATA/AV FLOORBOX. PROVIDE LEGRAND 6-GANG FLOORBOX RFB6 OR APPROVED EQUAL. PROVIDE 3 RFB6DP PLATE FOR AV, 1 RFB6DP PLATE FOR DATA, 1 RFB6B, 1 RFB6DP FOR ELECTRICAL, AND COVER RFB7CB-NA. COORDINATE ADDITIONAL REQUIREMENTS WITH AV DRAWINGS.
 - 16. PROVIDE CONNECTION AND CONTROL TO MOTORIZED ROLLER SHADES. COORDINATE WITH MANUFACTURER FOR ADDITIONAL REQUIREMENTS.
 - 17. PROVIDE CONNECTION TO BOTTLE FILLER.
 - 18. PROVIDE CONNECTION AND INSTALL CONTROL TO PARTITION WALL. COORDINATE ADDITIONAL CONTROL AS REQUIREMENTS WITH MANUFACTURERS AND LOCATION WITH ARCHITECT.
 - 19. PROVIDE CONNECTION TO ADA LIFT. COORDINATE ADDITIONAL REQUIREMENTS WITH VENDOR.
 - 20. PROVIDE BOTH NORMAL AND OPTIONAL STANDBY POWER CONNECTIONS TO DDC PANEL. COORDINATE EXACT LOCATION WITH ARCHITECT.
 - 21. PROVIDE CONNECTION TO DRYER BOOSTER FAN. COORDINATE EXACT LOCATION AND CONTROL REQUIREMENTS WITH VENDOR AND ARCHITECT.
 - 22. PROVIDE CONNECTION TO SHADE MOTOR TRANSFORMER. COORDINATE WITH MANUFACTURER FOR ADDITIONAL REQUIREMENTS.



© 2014 PIVOT ARCHITECTURE
PRINTED ON: 3/20/16 9:58:08 AM FROM FILE: C:\Revit\Local\Files\15-1533\MEP\15-1533-MEP-15-1533-01.dwg



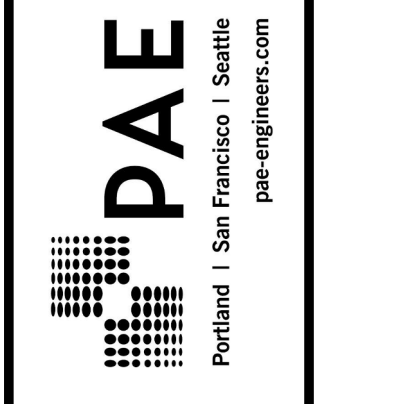
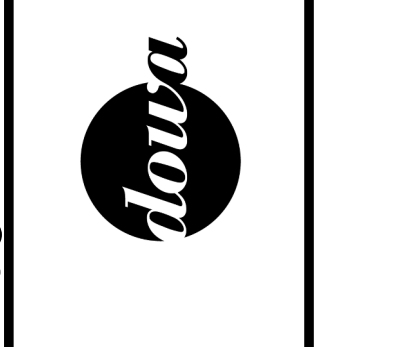
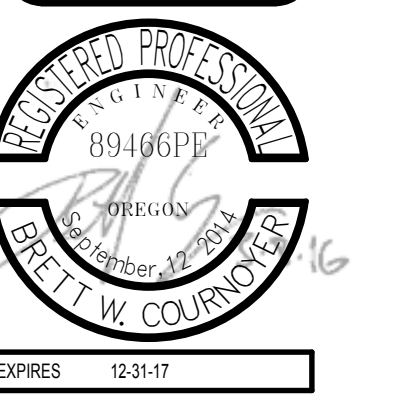
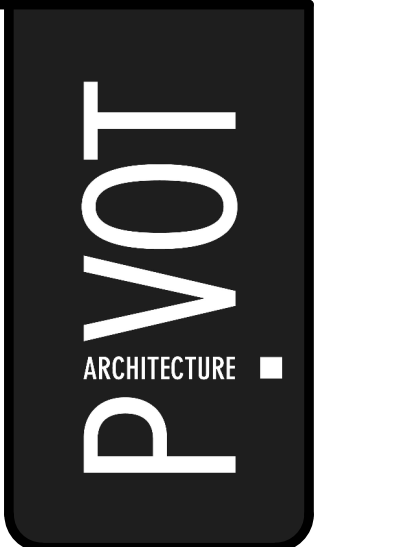
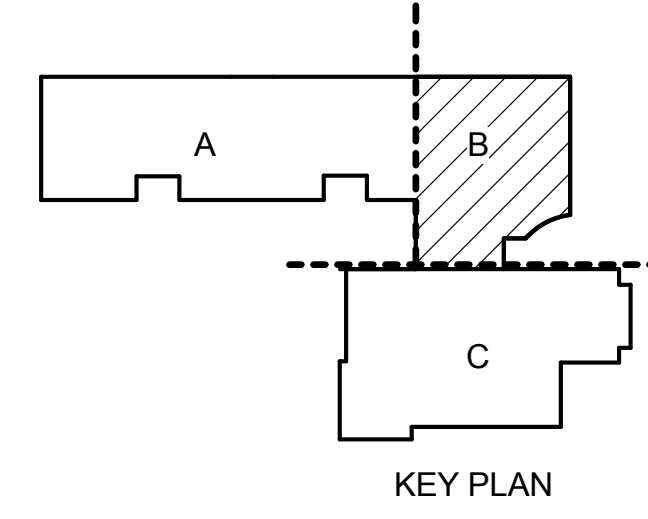
1 SECTOR B POWER PLAN - SECOND FLOOR
1/8" = 1'-0"

GENERAL NOTES:

- A. AREA ABOVE ALL ELECTRICAL PANELS AND SWITCH BOARDS SHALL BE KEPT CLEAR OF ALL EQUIPMENT FOREIGN TO THE ELECTRICAL INSTALLATION INCLUDING PIPING, DUCTWORK, SUPPORTS, ETC. COORDINATE INSTALLATION WITH ALL OTHER TRADES.
- B. ALL PENETRATIONS AND ROUTING PATHS OF EXPOSED CONDUIT SHALL BE COORDINATED AND REVIEWED BY ARCHITECT AND ENGINEER PRIOR TO INSTALLATION.
- C. PROVIDE SEPARATE NEUTRAL CONDUCTOR FOR EACH BRANCH CIRCUIT. SHARED NEUTRALS ARE NOT PERMITTED.
- D. PROVIDE NO MORE THAN (6) CURRENT CARRYING CONDUCTORS PER HOMERUN.
- E. REFER TO MECHANICAL EQUIPMENT CONNECTION SCHEDULE ON SHEET E701 FOR ADDITIONAL INFORMATION.
- F. DEVICE AND EQUIPMENT CONNECTION LOCATIONS ARE SHOWN SCHEMATIC AND APPROXIMATE. REFER TO ARCHITECTURAL CEILING PLANS, FLOOR PLANS, ELEVATIONS AND SECTIONS FOR ADDITIONAL INFORMATION IMPACTING DEVICE ROUGH-IN. TYPICAL DIMENSIONED DEVICE LOCATIONS SHALL BE CONFIRMED WITH THE ARCHITECT PRIOR TO ROUGH-IN. WHERE CONFLICT OCCURS, DECISION OF THE ARCHITECT SHALL GOVERN.
- G. PROVIDE WALL ROUGH-IN AT WALL CAVITY WHERE T-STATS ARE INDICATED (SEE MECHANICAL DRAWINGS). SINGLE GANG BOX WITH MUD RING, 1/2" CONDUIT TO ACCESSIBLE CEILING SPACE. COORDINATE WITH ALL OTHER TRADES TO AVOID CONFLICTS. MUST BE 18" AWAY FROM DOOR JAMBS.

NOTES:

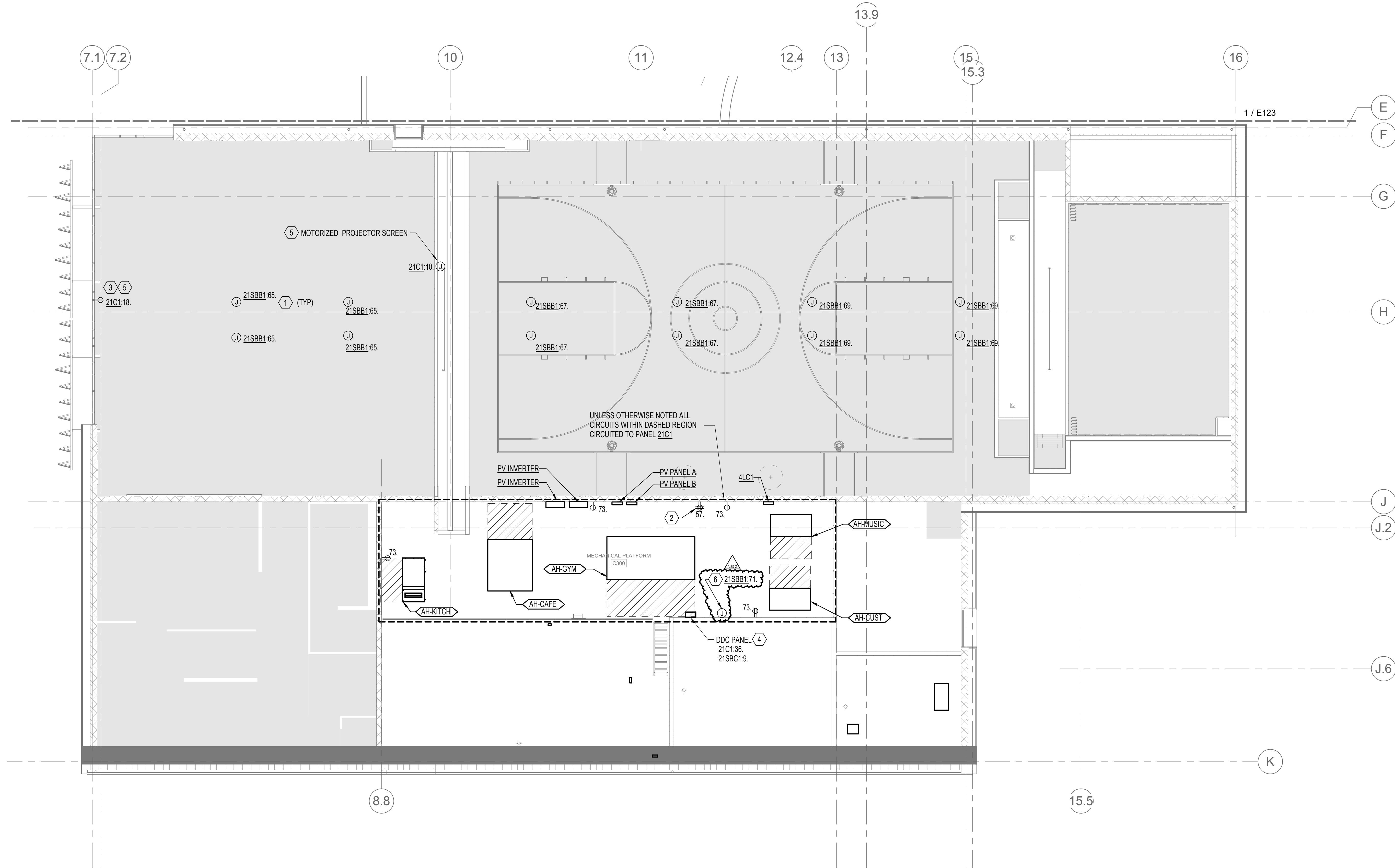
- 1. PROVIDE TWO SURFACE RACEWAY ONE AT 40" AFF AND ONE AT 56" AFF AS SHOWN. RECEPTACLES 6" SPACING FROM CENTER. WIREMOLD 4000 OR APPROVED EQUAL.
- 2. PROVIDE CONNECTIONS FOR HAND DRYERS. COORDINATE EXACT MOUNTING LOCATION WITH ARCHITECTURAL DRAWINGS.
- 3. DISHWASHER. PROVIDE APPLIANCE CONDUIT AND CAP PER MANUFACTURERS RECOMMENDATION.
- 4. MOUNTED RECEPTACLE IN CABINERY. COORDINATE WITH ARCHITECT AND MANUFACTURE FOR ADDITIONAL REQUIREMENTS.
- 5. PROVIDE CONNECTION TO WON-DOOR FIRE GUARD CONTROLLER. COORDINATE EXACT LOCATION AND ADDITIONAL REQUIREMENTS WITH ARCHITECT AND MANUFACTURE.
- 6. PROVIDE CONNECTION TO MOTORIZED ROLLER SHADES. COORDINATE WITH MANUFACTURES FOR ADDITIONAL REQUIREMENTS.
- 7. PROVIDE CONNECTION TO SHADE MOTOR TRANSFORMER. COORDINATE WITH MANUFACTURER FOR ADDITIONAL REQUIREMENTS.



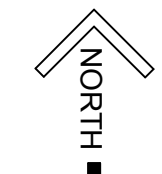
BID SET
EUGENE SCHOOL DISTRICT 4J
120 WEST HILLIARD AVENUE, EUGENE, OREGON 97404
RIVER ROAD / EL CAMINO DEL RIO ELEMENTARY SCHOOL

SECTOR B POWER PLAN - SECOND FLOOR

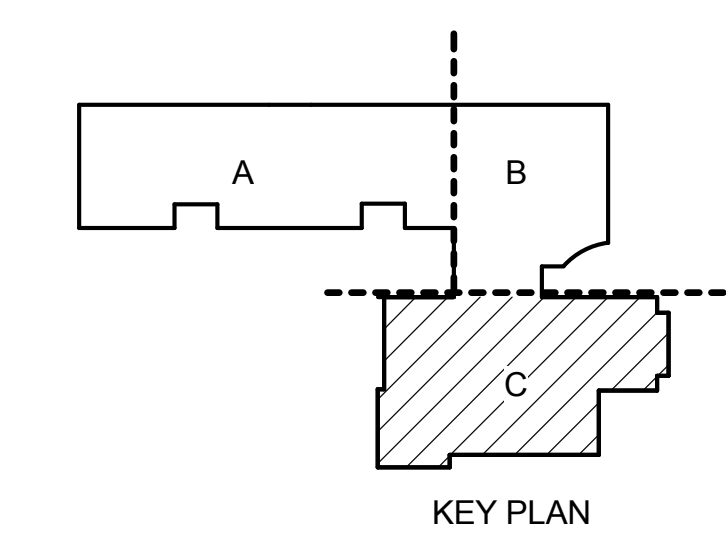
PROJECT#	133720	REVISION	
ISSUE DATE	2/12/16		
DRAWN	SC	ADD 2 -	03/09/2016
CHECKED	PKC		
E123			

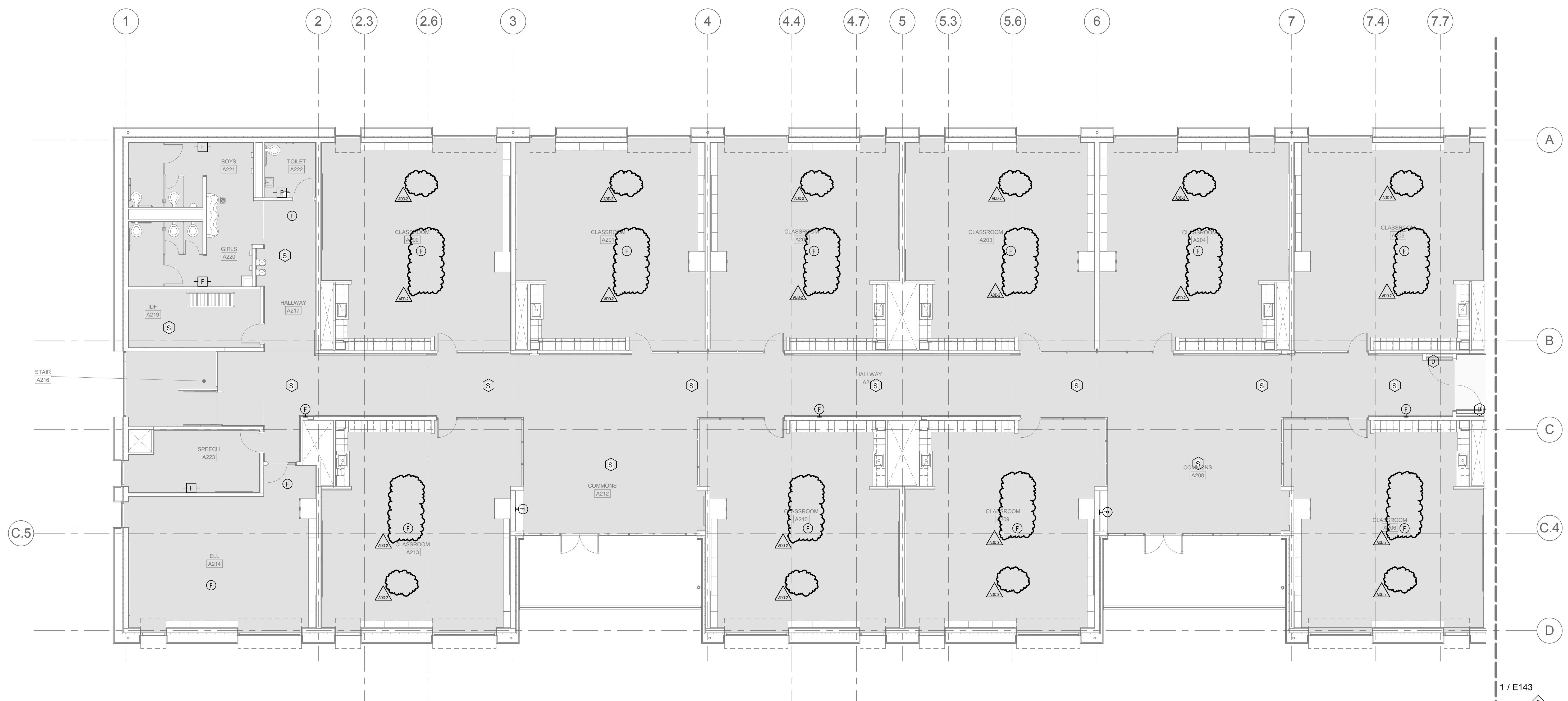


1 SECTOR C POWER PLAN - SECOND FLOOR
1/8" = 1'-0"



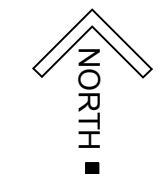
- GENERAL NOTES:**
- A. AREA ABOVE ALL ELECTRICAL PANELS AND SWITCH BOARDS SHALL BE KEPT CLEAR OF ALL EQUIPMENT FOREIGN TO THE ELECTRICAL INSTALLATION INCLUDING PIPING, DUCTWORK, SUPPORTS, ETC. COORDINATE INSTALLATION WITH ALL OTHER TRADES.
 - B. ALL PENETRATIONS AND ROUTING PATHS OF EXPOSED CONDUIT SHALL BE COORDINATED AND REVIEWED BY ARCHITECT AND ENGINEER PRIOR TO INSTALLATION.
 - C. PROVIDE SEPARATE NEUTRAL CONDUCTOR FOR EACH BRANCH CIRCUIT. SHARED NEUTRALS ARE NOT PERMITTED.
 - D. PROVIDE NO MORE THAN (6) CURRENT CARRYING CONDUCTORS PER HOMERUN.
 - E. ALL BRANCH CIRCUITING SHALL BE #10AWG, UNLESS OTHERWISE NOTED.
 - F. REFER TO MECHANICAL EQUIPMENT CONNECTION SCHEDULE ON SHEET E701 FOR ADDITIONAL INFORMATION.
 - G. DEVICE AND EQUIPMENT CONNECTION LOCATIONS ARE SHOWN SCHEMATIC AND APPROXIMATE. REFER TO ARCHITECTURAL CEILING PLANS, FLOOR PLANS, ELEVATIONS AND SECTIONS FOR ADDITIONAL INFORMATION IMPACTING DEVICE ROUGH-IN. TYPICAL DIMENSIONED DEVICE LOCATIONS SHALL BE CONFIRMED WITH THE ARCHITECT PRIOR TO ROUGH-IN. WHERE CONFLICT OCCURS, DECISION OF THE ARCHITECT SHALL GOVERN.
- NOTES:**
- 1. PROVIDE POWER CONNECTION TO SKYLIGHT MOTORIZED SHADES. REFER TO IT/AV DRAWING FOR CONTROL REQUIREMENTS.
 - 2. PROVIDE DEDICATED CIRCUIT FOR IDF 4-POST RACK. VERIFY EXACT LOCATION WITH TECHNOLOGY DRAWINGS.
 - 3. WALL MOUNTED RECEPTACLE AT 16" AFF FOR PROJECTOR. COORDINATE EXACT LOCATION WITH AV DRAWINGS.
 - 4. PROVIDE BOTH NORMAL AND OPTIONAL STANDBY POWER CONNECTIONS TO DDC PANEL. COORDINATE EXACT LOCATION WITH ARCHITECT.
 - 5. REFER TO AV DRAWINGS FOR CONTROL INTENT AND ADDITIONAL REQUIREMENTS.
 - 6. PROVIDE CONNECTION TO 24VDC POWER SUPPLY FOR MAGNETIC HOLD OPEN DOORS. COORDINATE EXACT LOCATION WITH IT CONSULTANT.





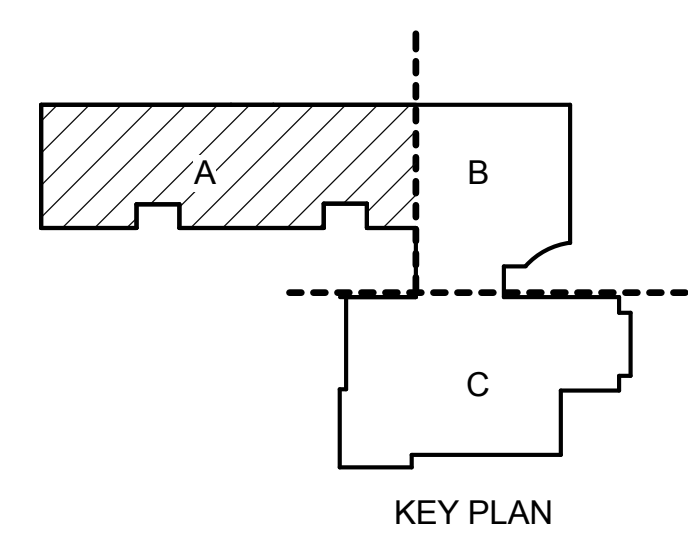
1 SECTOR A FIRE ALARM PLAN - SECOND FLOOR
 1/8" = 1'-0"

1 / E143

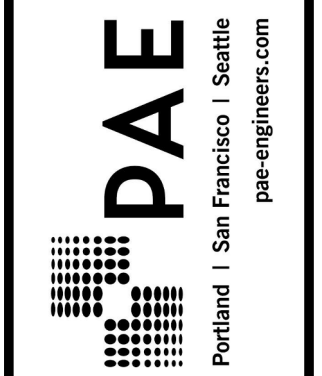
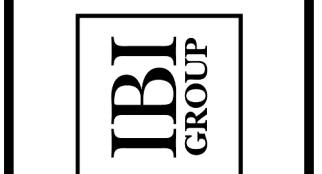


GENERAL NOTES:

- A. THE FIRE ALARM IS A CONTRACTOR DESIGN-BUILD SYSTEM. ADDITIONAL DEVICES MAY BE REQUIRED TO COMPLY WITH CODE. CONTRACTOR SHALL PROVIDE ADDITIONAL FIRE ALARM DEVICES, ACCESSORIES AND ANY ADDITIONAL ITEMS REQUIRED FOR A COMPLETE AND OPERATIONAL CODE COMPLIANT SYSTEM. REFERENCE SPECIFICATION DIVISION 28 30 00 FOR ADDITIONAL INFORMATION.
- B. IN ADDITION TO CODE MINIMUM FIRE ALARM COVERAGE THE CONTRACTOR SHALL PROVIDE SMOKE DETECTION SPOT COVERAGE IN CORRIDORS AND COMMON AREAS, AND MANUAL PULL STATIONS AT EXITS PER THE OWNERS DIRECTION.
- C. THE FIRE ALARM SYSTEM SHALL BE DESIGNED TO OFC 907 AND NFPA 72 STANDARDS. SHOP DRAWING WITH EQUIPMENT CUTSHEETS, BATTERY CALCS AND VOLTAGE DROP CALCS SHALL BE SUBMITTED TO LOCAL JURISDICTIONS FOR APPROVAL PRIOR TO INSTALLATION OF THE FIRE ALARM SYSTEM.



EX-103 12-31-17



BID SET
 EUGENE SCHOOL DISTRICT 4J
 120 WEST HILLVIEW AVENUE, EUGENE, OREGON 97404
 RIVER ROAD / EL CAMINO DEL RIO ELEMENTARY SCHOOL

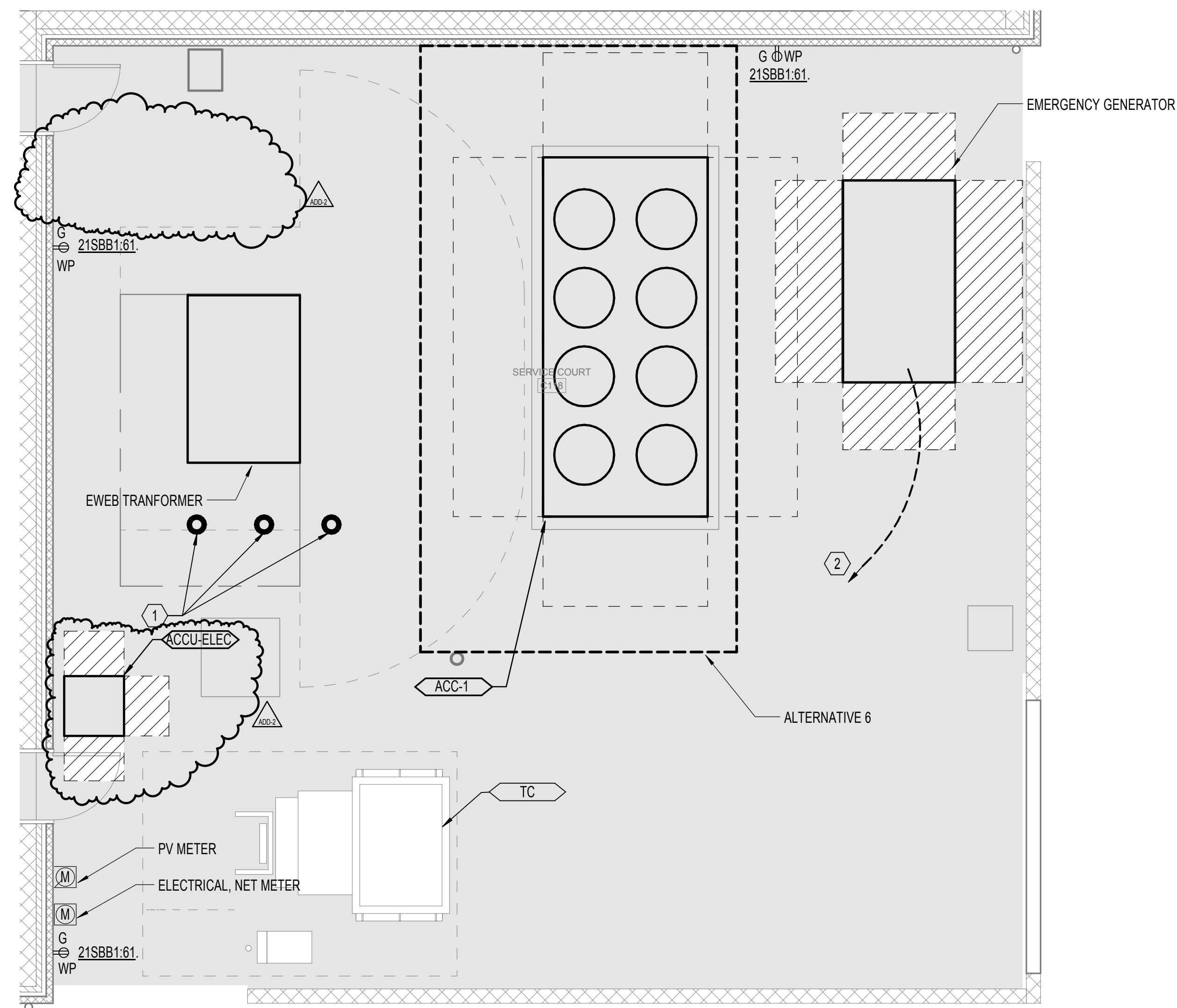
SECTOR A FIRE ALARM PLAN -
 SECOND FLOOR

PROJECT#	133720	REVISION	
ISSUE DATE	2/12/16	DATE	
DESIGN	SC	ADD-2	03/09/2016
CHECKED	PKC		

E141

1 ENLARGED PLAN - YARD

1/4" = 1'-0"

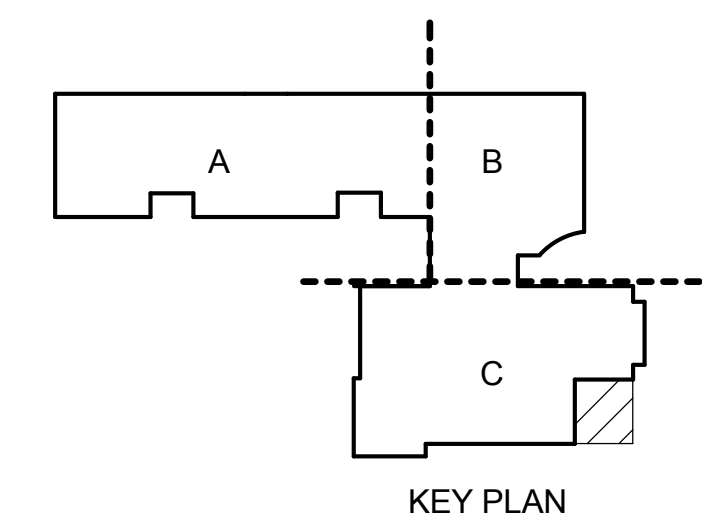


GENERAL NOTES:

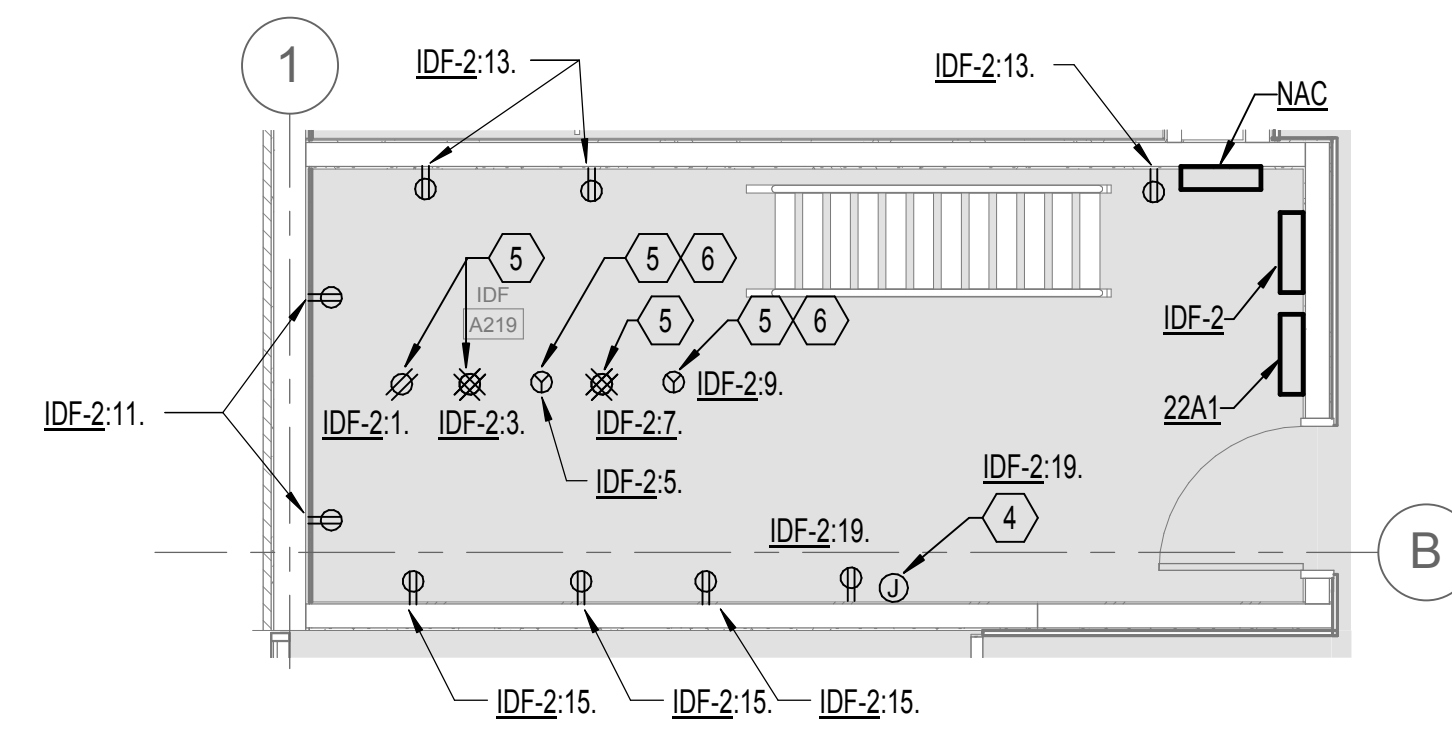
- A. AREA ABOVE ALL ELECTRICAL PANELS AND SWITCH BOARDS SHALL BE KEPT CLEAR OF ALL EQUIPMENT FOREIGN TO THE ELECTRICAL INSTALLATION INCLUDING PIPING, DUCTWORK, SUPPORTS, ETC. COORDINATE INSTALLATION WITH ALL OTHER TRADES.
- B. ALL PENETRATIONS AND ROUTING PATHS OF EXPOSED CONDUITS SHALL BE COORDINATED AND REVIEWED BY ARCHITECT AND ENGINEER PRIOR TO INSTALLATION.
- C. PROVIDE SEPARATE NEUTRALS CONDUCTOR FOR EACH BRANCH CIRCUIT, SHARED NEUTRALS ARE NOT PERMITTED.
- D. PROVIDE NO MORE THAN (6) CURRENT CARRYING CONDUCTOR PER HOMERUN.
- E. REFER TO ONE-LINE DIAGRAM ON SHEET E601 FOR FEEDER SCHEDULE AND ADDITIONAL REQUIREMENTS. ALL EQUIPMENT'S FEEDERS IN COURTYARD SHALL BE UNDERGROUND UNLESS OTHERWISE NOTED.

NOTES:

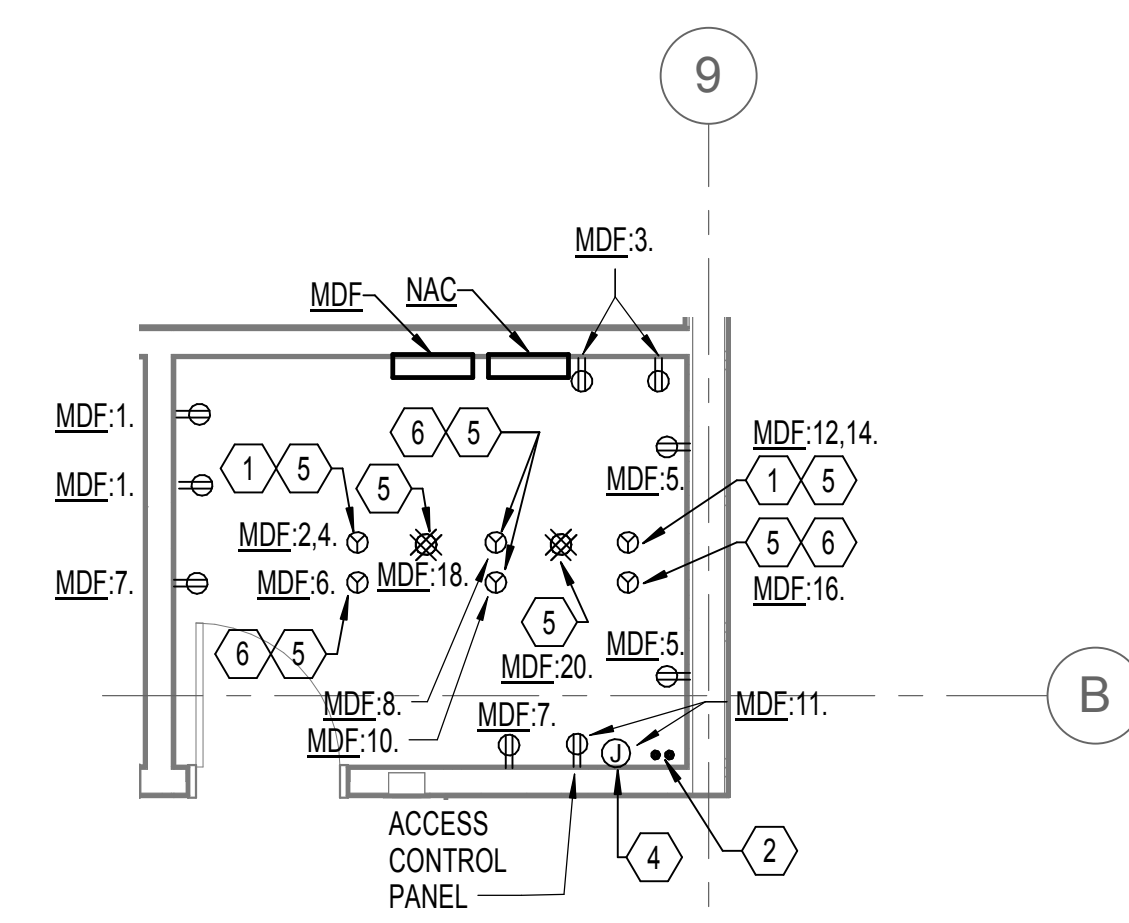
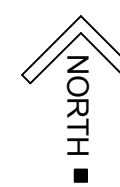
- 1. PROVIDE EWEB BOLLARDS PER EWEB REQUIREMENTS.
- 2. PROVIDE CONNECTION TO GENERATOR BATTERY CHARGING LIGHT, RCPT AND CONTROL. PROVIDE 8#10 CU, 4#10 CU GRD IN (2)3/4" C BACK TO PANEL 21SBB1 IN HALLWAY B108. PROVIDE NO MORE THAN (6) CURRENT CARRYING CONDUCTORS PER HOMERUN.



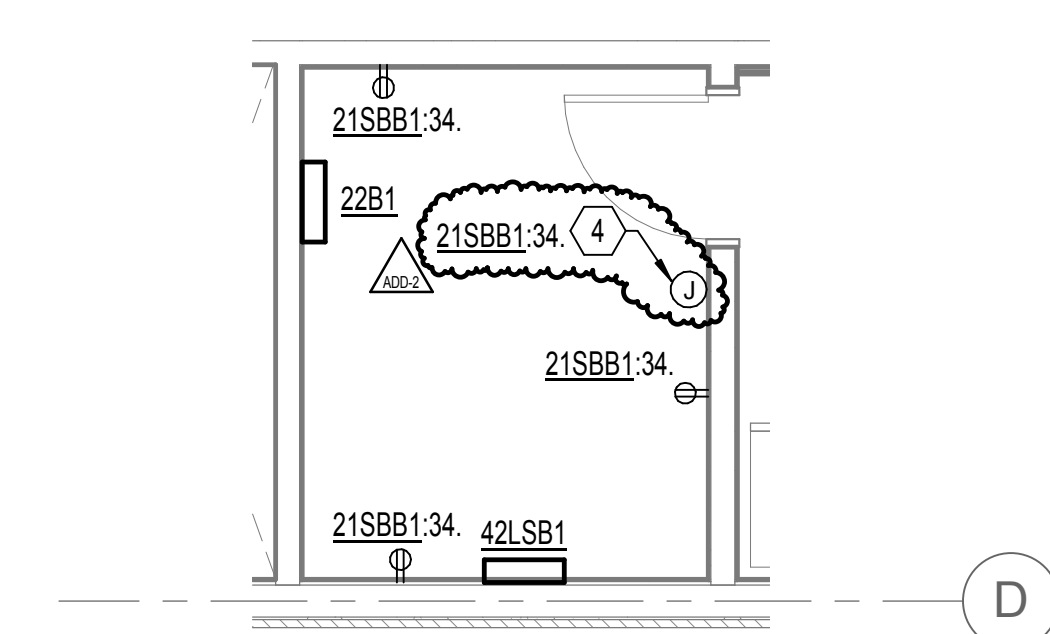
PROJECT #	150720	REVISION	
ISSUE DATE	2/12/2016	DATE	2/12/2016
DRAWN	SC	ADD 2 -	03/09/2016
CHECKED	PKC		



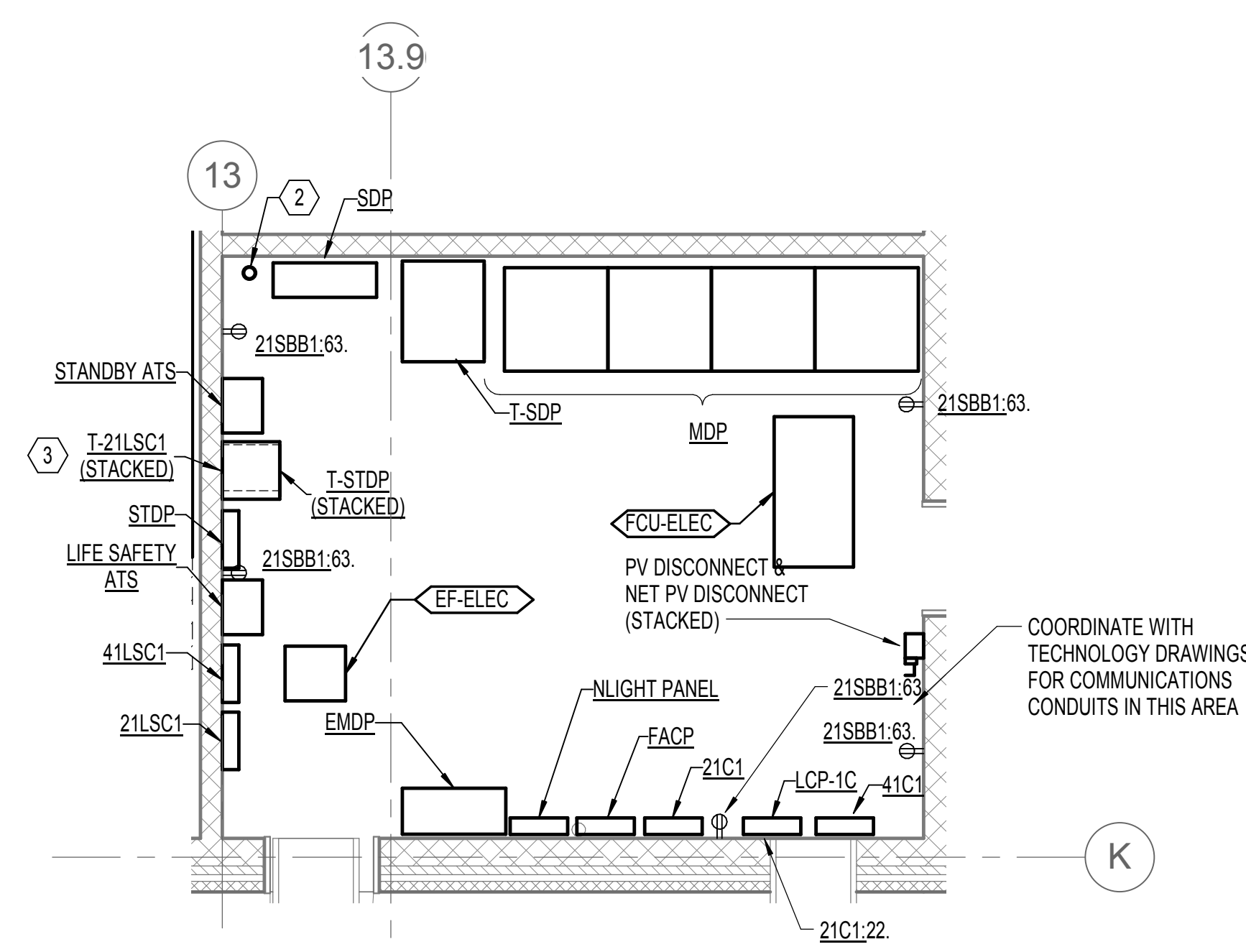
3 ENLARGED PLAN - 2ND FLOOR IDF ROOM A219
1/4" = 1'-0"



2 ENLARGED PLAN - MDF ROOM B126
1/4" = 1'-0"



4 ENLARGED PLAN - ELECTRICAL ROOM B202
1/4" = 1'-0"



1 ENLARGED PLAN - ELECTRICAL ROOM C116
1/4" = 1'-0"



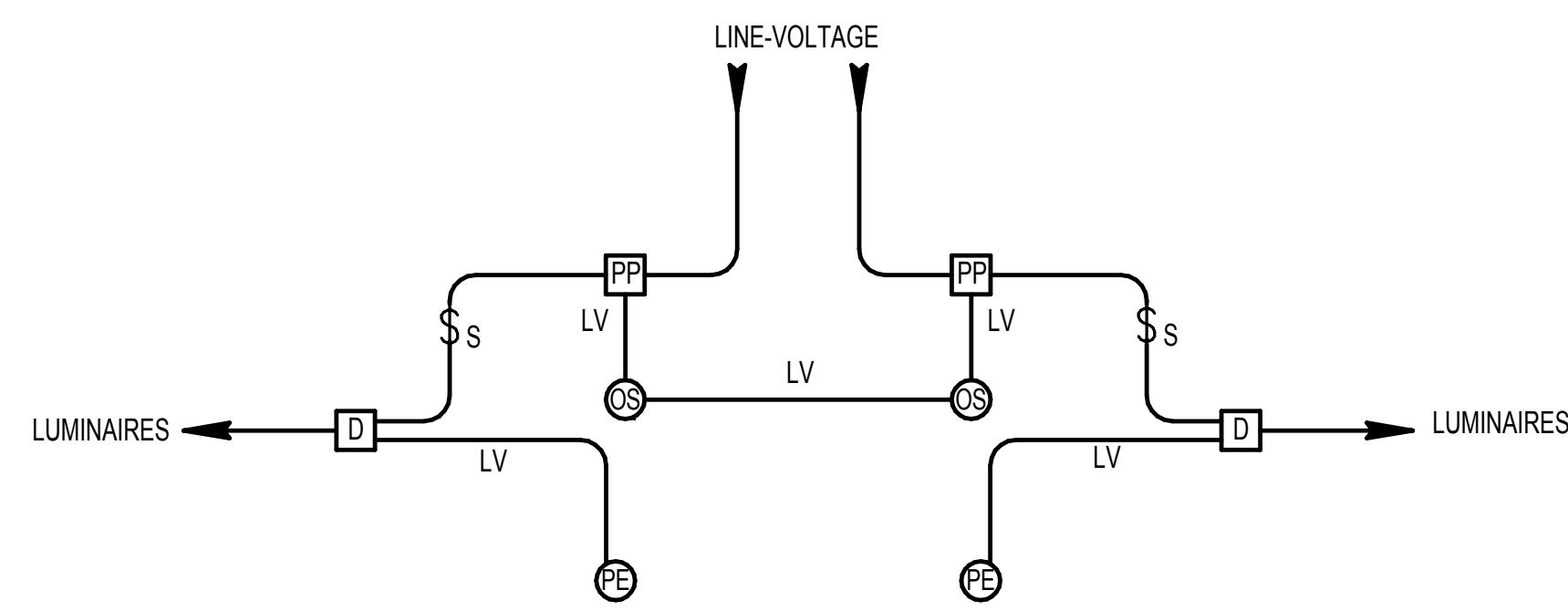
GENERAL NOTES:

- A. AREA ABOVE ALL ELECTRICAL PANELS AND SWITCH BOARDS SHALL BE KEPT CLEAR OF ALL EQUIPMENT FOREIGN TO THE ELECTRICAL INSTALLATION INCLUDING PIPING, DUCTWORK, SUPPORTS, ETC. COORDINATE INSTALLATION WITH ALL OTHER TRADES.
- B. ALL PENETRATIONS AND ROUTING PATHS OF EXPOSED CONDUITS SHALL BE COORDINATED AND REVIEWED BY ARCHITECT AND ENGINEER PRIOR TO INSTALLATION.
- C. PROVIDE SEPARATE NEUTRALS CONDUCTOR FOR EACH BRANCH CIRCUIT. SHARED NEUTRALS ARE NOT PERMITTED.
- D. PROVIDE NO MORE THAN (6) CURRENT CARRYING CONDUCTOR PER HOMERUN.

NOTES:

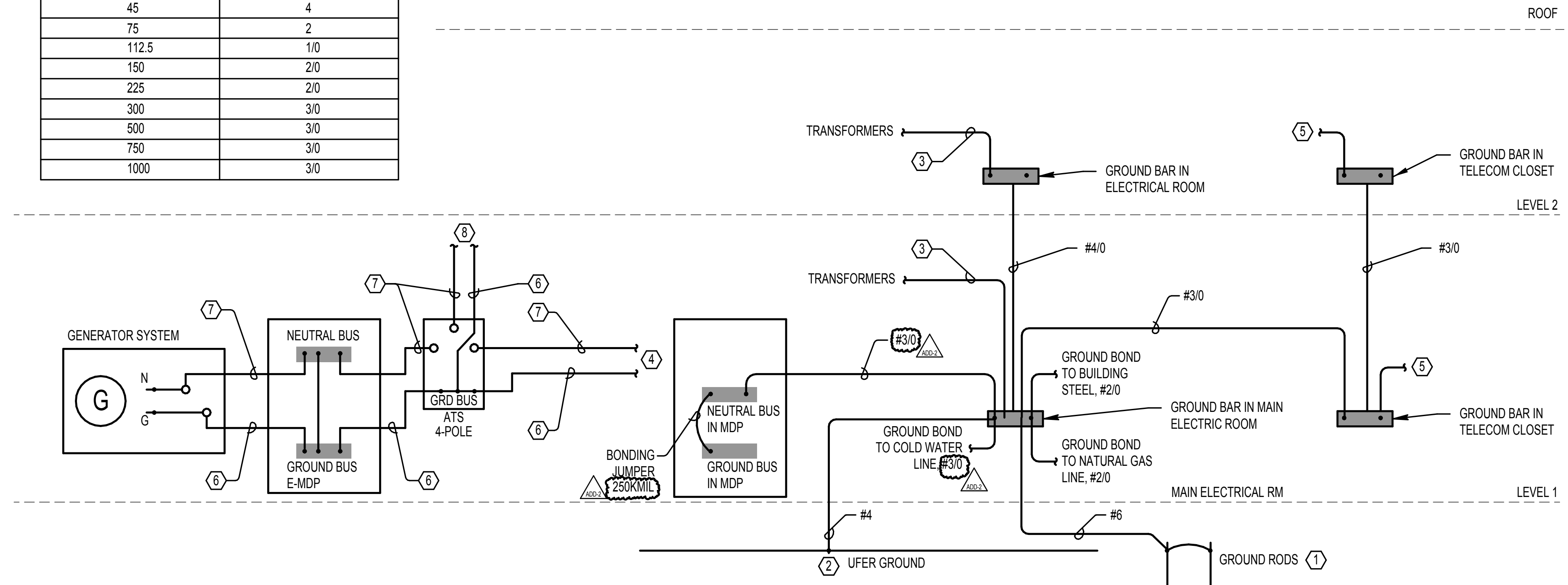
- 1. PROVIDE A NEMA L5-30R CENTER ABOVE THE I.T. RACK MOUNTED TO BOTTOM SIDE OF CABLE TRAY. COORDINATE EXACT LOCATION WITH IT CONSULTANT.
- 2. 1-1/2" CONDUIT STUB-UP. REFER TO SHEET E011 FOR PATHWAY FOR FUTURE EXPANSION RACEWAY.
- 3. PROVIDE TRANSFORMER RACK TO STACK TRANSFORMER.
- 4. PROVIDE CONNECTION TO 24VDC POWER SUPPLY FOR MAGNETIC HOLD OPEN DOORS. COORDINATE EXACT LOCATION WITH IT CONSULTANT.
- 5. RECEPTACLE TO BE FRAME MOUNTED. COORDINATE EXACT LOCATION AND ADDITIONAL REQUIREMENTS WITH IT CONSULTANT.
- 6. PROVIDE A NEMA L5-30R CENTER ABOVE IT RACK MOUNTED TO BOTTOM SIDE OF CABLE TRAY. COORDINATE EXACT LOCATION WITH IT CONSULTANT.

PROJECT #	1537-05	REVISION	
ISSUE DATE	2/12/16	DATE	
DRAWN	SC	ADD'D -	03/09/2016
CHECKED	PKC		



4 TYPICAL CLASSROOM LIGHTING CONTROL DIAGRAM
12" = 1'-0"

TABLE 1, TRANSFORMER GROUND ELECTRODE CONDUCTOR SIZE (PER NEC TABLE 250.66) 480 - 208/120V VAC, 3 PHASE	
TRANSFORMER KVA	GROUND ELECTRODE SIZE AWG
3	8
6	8
9	8
15	8
30	8
45	4
75	2
112.5	1/0
150	2/0
225	2/0
300	3/0
500	3/0
750	3/0
1000	3/0



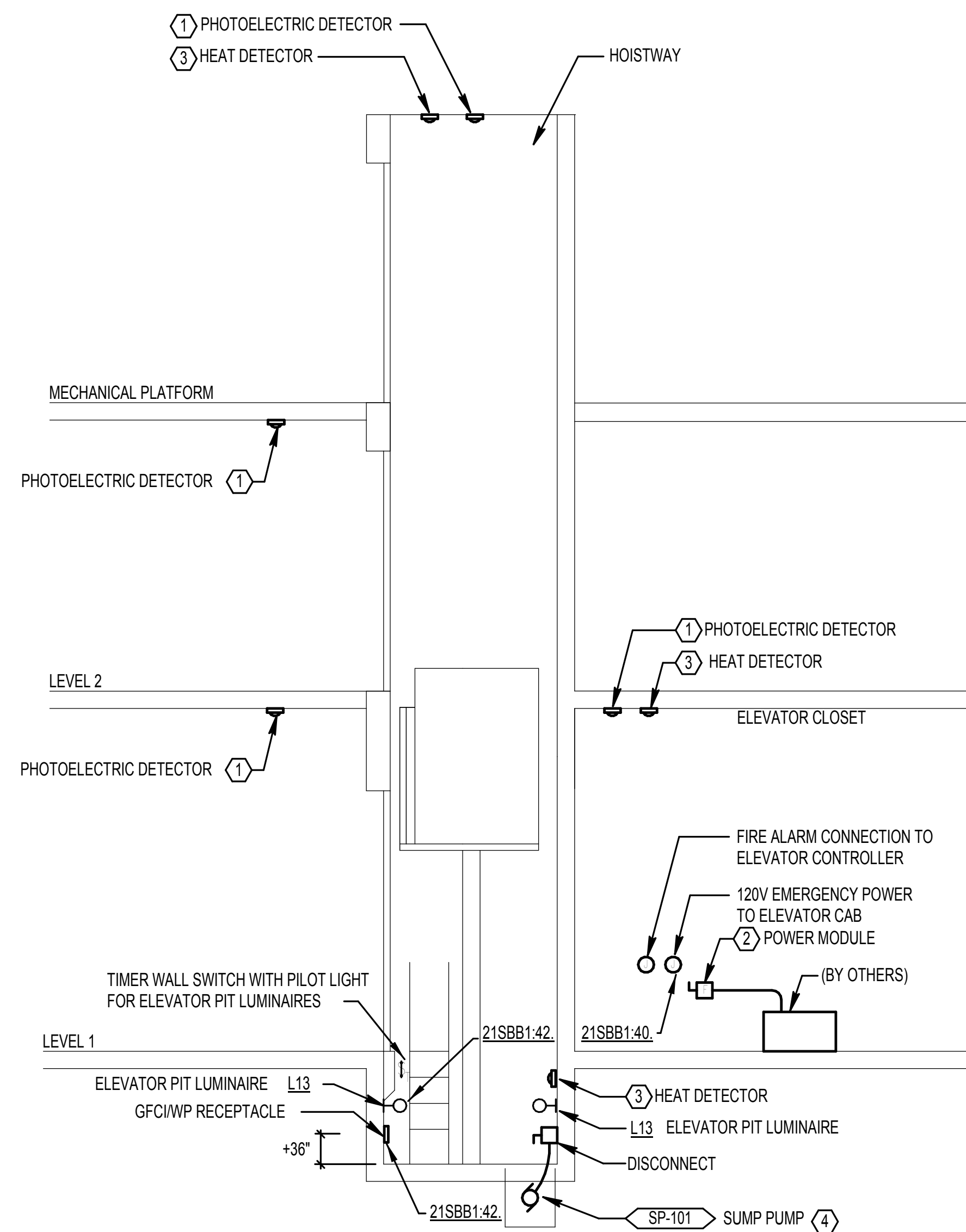
GENERAL NOTES:

- A. ALL GROUNDING CONDUCTORS SHALL BE BARE COPPER CONDUCTORS. PROVIDE PVC RACEWAY AS NEEDED FOR PROTECTION.
- B. DETAIL IS TYPICAL FOR EACH ELECTRICAL AND TELECOM ROOM.

NOTES:

- 1. PROVIDE TWO 5/8" GROUND RODS, 10' APART.
- 2. PROVIDE A 20 FOOT LENGTH OF #4 BARE COPPER CONDUCTOR, EMBEDDED IN THE BOTTOM PORTION OF THE CONCRETE SLAB. ELECTRODE TO BE ENCASED BY A MINIMUM OF 2" CONCRETE - OR - CONNECT TO A STEEL REINFORCING BAR WITH A MINIMUM OF 20 FOOT LENGTH AND 1/2" SIZE.
- 3. SIZE THE TRANSFORMER GROUNDING ELECTRODE CONDUCTOR PER TABLE 1.
- 4. EQUIPMENT GROUND CONDUCTOR AND NEUTRAL CONDUCTOR ROUTED TO NORMAL POWER SOURCE PANEL. REFER TO ONE-LINE DRAWING.
- 5. PROVIDE GROUND BOND CONNECTIONS TO THE TELECOM ROOM, CABLE TRAY, EQUIPMENT RACKS, SIGNAL CONDUITS AND MISC EQUIPMENT PER BICSI STANDARDS.
- 6. EQUIPMENT GROUNDING CONDUCTOR (INSULATED) INCLUDED WITH THE FEEDER.
- 7. NEUTRAL CONDUCTOR INCLUDED WITH THE FEEDER.
- 8. EQUIPMENT GROUND CONDUCTOR AND NEUTRAL CONDUCTOR INCLUDED IN FEEDER TO PANEL.

2 ELECTRICAL GROUNDING SYSTEM DETAIL
12" = 1'-0"



GENERAL NOTES:

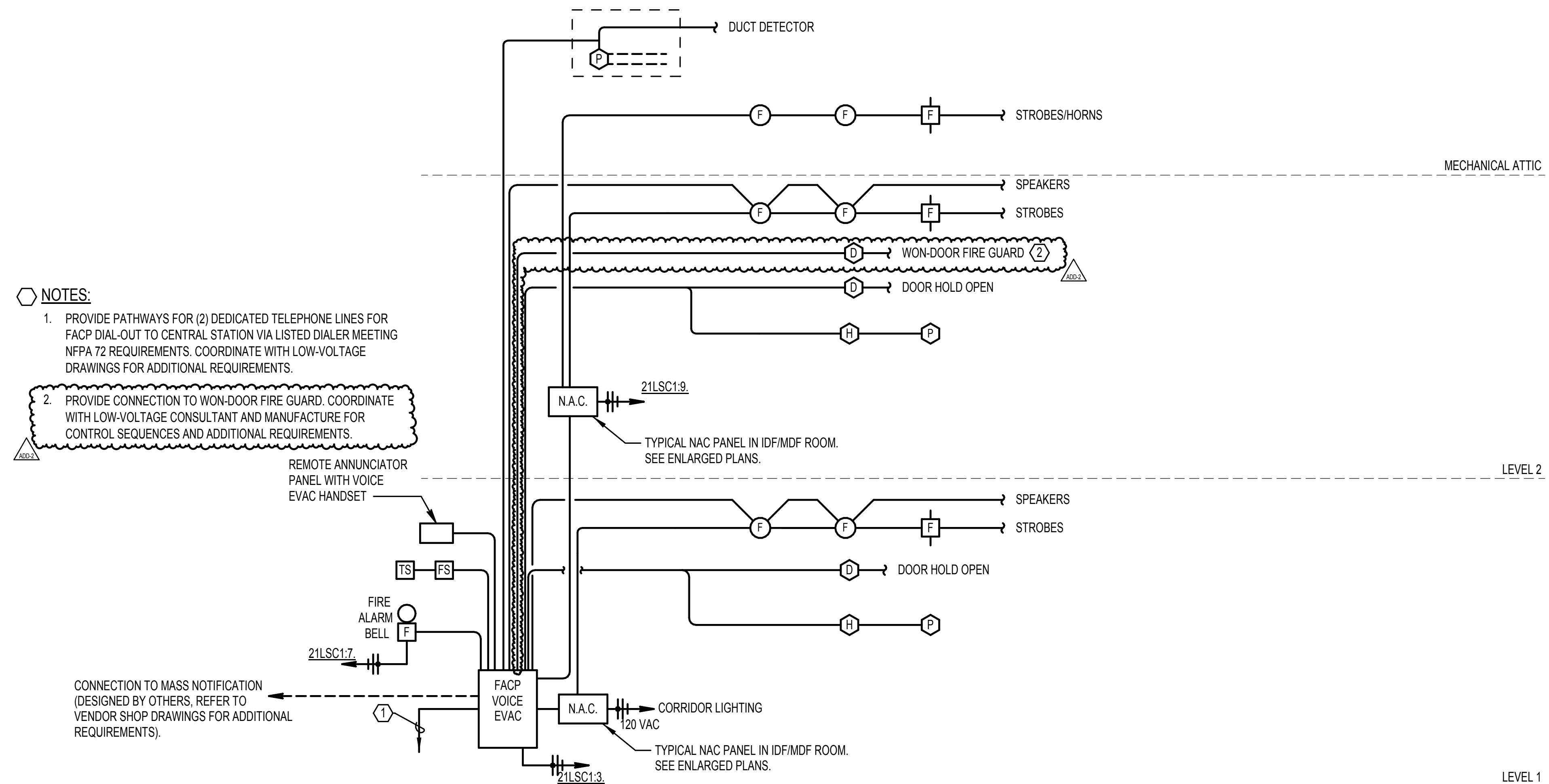
- A. COMMUNICATION CONNECTION TO ELEVATOR IS SHOWN ON LOW VOLTAGE DRAWINGS

NOTES:

- 1. CONNECT AUXILIARY CONTACTS IN DETECTOR TO ELEVATOR CONTROLLER FOR ELEVATOR RECALL.
- 2. PROVIDE ELEVATOR POWER MODULE (WITH INTEGRAL SHUNT TRIP). CONNECT SHUNT TRIP CONTROL VIA HEAT DETECTORS' AUXILIARY CONTACTS IN HOISTWAY, EQUIPMENT ROOM AND PIT TO POWER MODULE. POWER SHALL BE AUTOMATICALLY DISCONNECTED UPON INITIATION OF ANY OF THESE HEAT DETECTORS.
- 3. CONNECT AUXILIARY CONTACTS IN HEAT DETECTOR TO POWER MODULE IN EQUIPMENT ROOM FOR ELEVATOR POWER SHUTDOWN.
- 4. PROVIDE CONNECTION TO SUMP PUMP CONTROLLER LOCATED IN ROOM A119. COORDINATE ADDITIONAL REQUIREMENTS WITH VENDOR.

3 ELECTRICAL ELEVATOR DETAIL
12" = 1'-0"

1 ELECTRICAL FIRE ALARM RISER DETAIL
12" = 1'-0"



NOTES:

- 1. PROVIDE PATHWAYS FOR (2) DEDICATED TELEPHONE LINES FOR FACP DIAL-OUT TO CENTRAL STATION VIA LISTED DIALER MEETING NFPA 72 REQUIREMENTS. COORDINATE WITH LOW-VOLTAGE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

- 2. PROVIDE CONNECTION TO WON-DOOR FIRE GUARD. COORDINATE WITH LOW-VOLTAGE CONSULTANT AND MANUFACTURE FOR CONTROL SEQUENCES AND ADDITIONAL REQUIREMENTS.

NOMINAL AMPACITY	FEEDER SCHEDULE COPPER: 3 PHASE, 3 WIRE + GROUND				FEEDER SCHEDULE COPPER: 3 PHASE, 4 WIRE + GROUND			
	TAG	CONDUIT SIZE (MIN)	PHASE CONDUCTORS	GROUND CONDUCTOR	TAG	CONDUIT SIZE (MIN)	PHASE & NEUTRAL CONDUCTORS	GROUND CONDUCTOR
20	203	1/2"	(3) #12	#12	204	1/2"	(4) #12	#12
25	253	1/2"	(3) #10	#10	254	3/4"	(4) #10	#10
30	303	1/2"	(3) #10	#10	304	3/4"	(4) #10	#10
40	403	3/4"	(3) #8	#10	404	3/4"	(4) #8	#10
50	503	3/4"	(3) #6	#10	504	1"	(4) #6	#10
60	603	1"	(3) #4	#10	604	1 1/4"	(4) #4	#8
70	703	1"	(3) #4	#8	704	1 1/4"	(4) #4	#8
80	803	1 1/4"	(3) #3	#8	804	1 1/4"	(4) #3	#8
90	903	1 1/4"	(3) #2	#8	904	1 1/4"	(4) #2	#8
100	1003	1 1/4"	(3) #2	#8	1004	1 1/2"	(4) #2	#8
110	1103	1 1/4"	(3) #1	#6	1104	1 1/2"	(4) #1	#6
125	1253	1 1/4"	(3) #1	#6	1254	2"	(4) #1/0	#4
150	1503	1 1/2"	(3) #1/0	#6	1504	2"	(4) #2/0	#4
175	1753	1 1/2"	(3) #2/0	#6	1754	2"	(4) #3/0	#4
200	2003	2"	(3) #3/0	#6	2004	2 1/2"	(4) #4/0	#4
225	2253	2"	(3) #4/0	#4	2254	2 1/2"	(4) 250KCM	#3
250	2503	2 1/2"	(3) 250KCM	#4	2504	3"	(4) 350KCM	#2
300	3003	2 1/2"	(3) 350KCM	#4	3004	3 1/2"	(4) 500KCM	#2
350	3503	3"	(3) 500KCM	#3	3504	(2) 2"	(8) #3/0	(2) #3
400	4003	(2) 2"	(6) #3/0	(2) #3	4004	(2) 2 1/2"	(8) #4/0	(2) #2
450	4503	(2) 2"	(6) #4/0	(2) #2	4504	(2) 3"	(8) 250KCM	(2) #1
500	5003	(2) 2 1/2"	(6) 250KCM	(2) #2	5004	(3) 2 1/2"	(12) #3/0	(3) #1
600	6003	(2) 3"	(6) 350KCM	(2) #1	6004	(2) 3 1/2"	(8) 500KCM	(2) #2/0
800	8003	(3) 3"	(9) 350KCM	(3) #1/0	8004	(3) 3"	(12) 350KCM	(3) #2/0
1000	10003	(3) 3"	(9) 500KCM	(3) #2/0	10004	(4) 3"	(16) 350KCM	(4) #2/0
1200	12003	(4) 3"	(12) 350KCM	(4) #3/0	12004	(4) 3 1/2"	(16) 500KCM	(4) #3/0
1600	16003	(5) 3"	(15) 500KCM	(5) #4/0	16004	(6) 3"	(24) 350KCM	(6) 250KCM
2000	20003	(6) 3"	(18) 500KCM	(6) 250KCM	20004	(6) 3 1/2"	(24) 500KCM	(6) 250KCM

NOTES (3WIRE & GROUND SCHEDULE ONLY):
 1. REFER TO SPECIFICATIONS FOR INSULATION TYPE PER WIRE SIZE.
 2. MINIMUM CONDUIT SIZES IDENTIFIED MEET MAXIMUM 40% FILL FOR EMT, RMC AND PVC SCHEDULE 40.
 3. FOR FEEDER RATINGS 100AMPS OR LESS, ACTUAL AMPACITY IS CALCULATED BY THOSE GIVEN IN NEC 310.15(B)(16), 60DEG C.
 4. FOR FEEDER RATINGS GREATER THAN 100AMPS, ACTUAL AMPACITY IS CALCULATED BY THOSE GIVEN IN NEC 310.15(B)(16), 75DEG C.

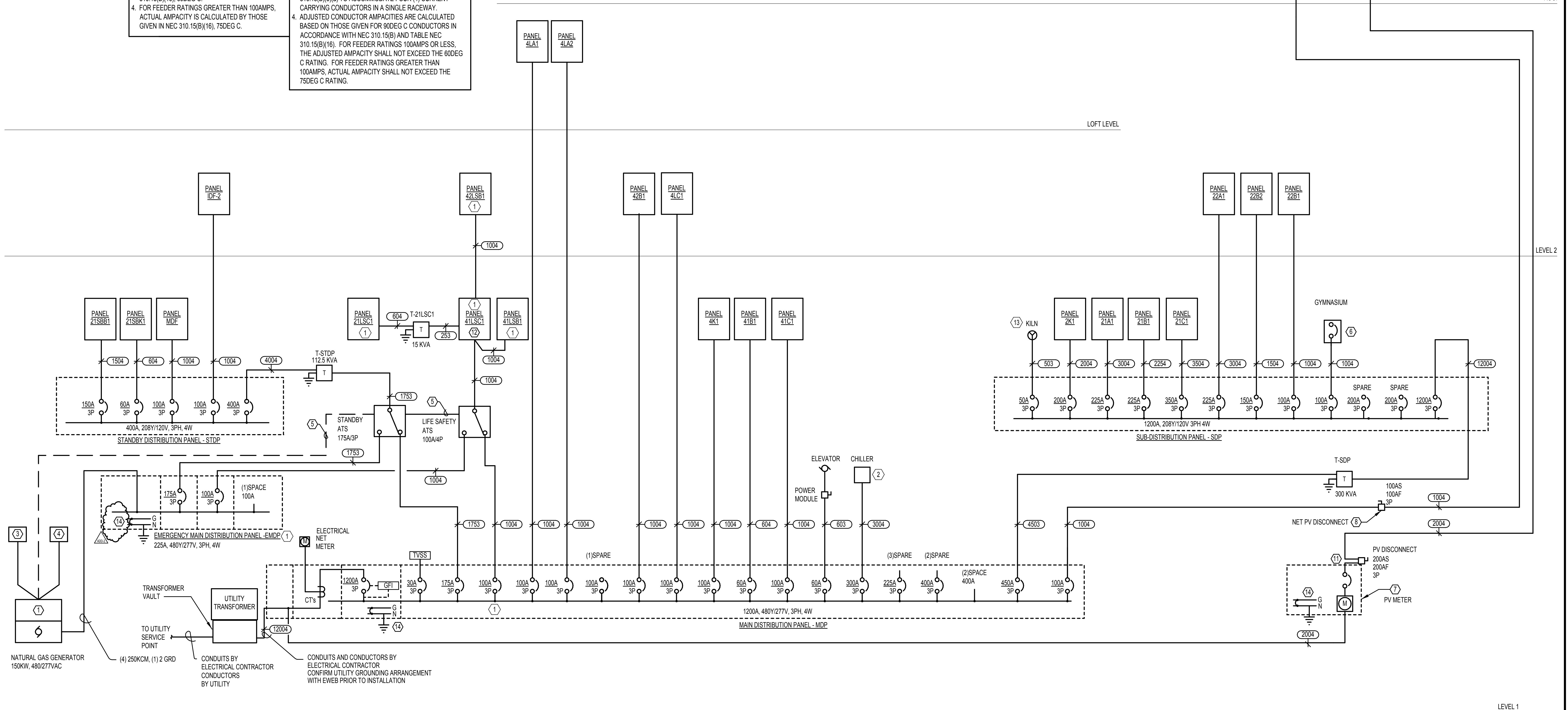
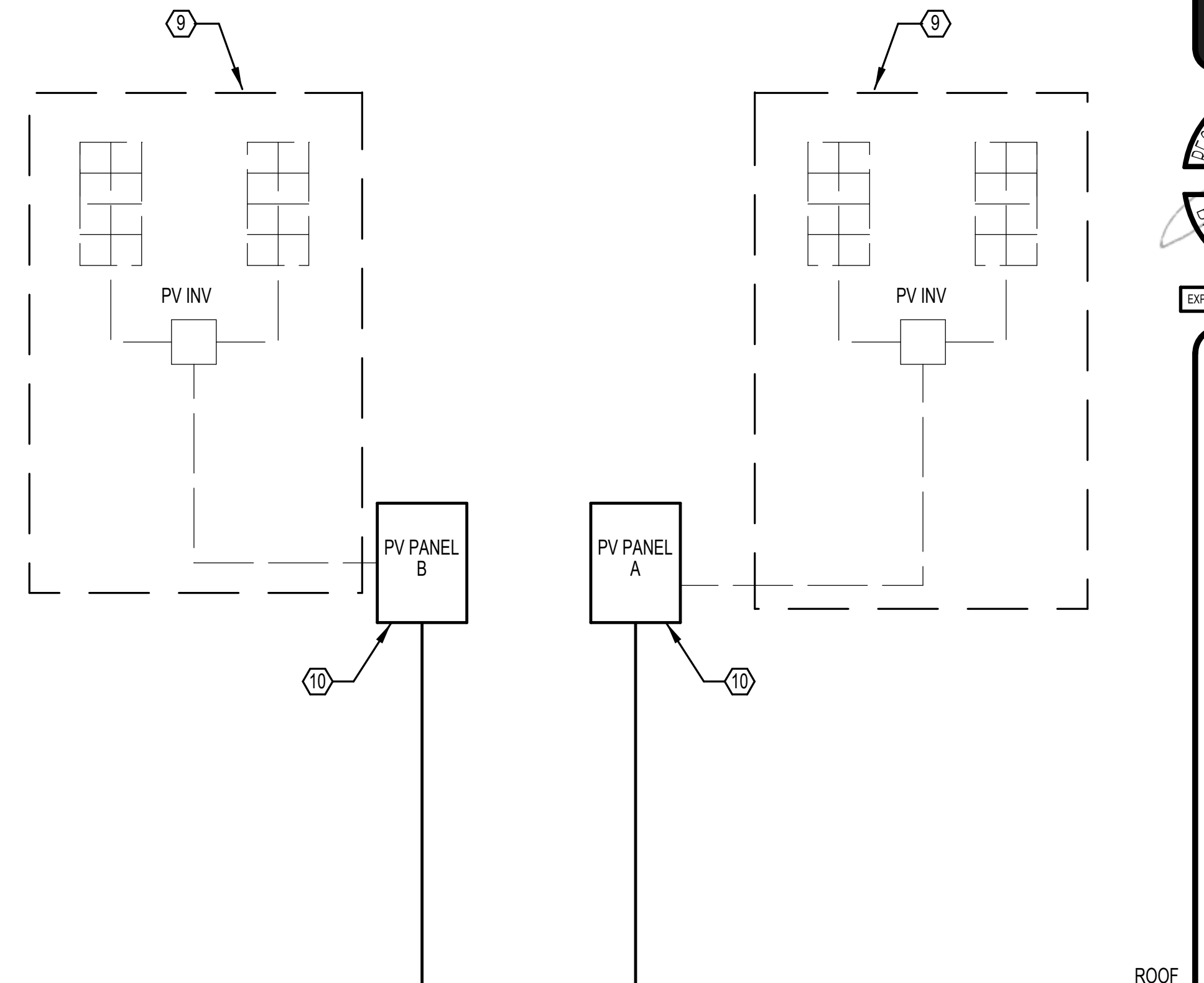
NOTES (4WIRE & GROUND SCHEDULE ONLY):
 1. REFER TO SPECIFICATIONS FOR INSULATION TYPE PER WIRE SIZE.
 2. MINIMUM CONDUIT SIZES IDENTIFIED MEET MAXIMUM 40% FILL FOR EMT, RMC AND PVC SCHEDULE 40.
 3. ALL NEUTRAL CONDUCTORS ARE CONSIDERED CURRENT CARRYING, THEREFORE AMPACITY ADJUSTMENTS HAVE BEEN INCLUDED IN ACCORDANCE WITH NEC TABLE 310.15(B)(3)(a) TO ACCOMMODATE FOUR (4) CURRENT CARRYING CONDUCTORS IN A SINGLE RACEWAY.
 4. ADJUSTED CONDUCTOR AMPACITIES ARE CALCULATED BASED ON THOSE GIVEN FOR 90DEG C CONDUCTORS IN ACCORDANCE WITH NEC 310.15(B) AND TABLE NEC 310.15(B)(16). FOR FEEDER RATINGS 100AMPS OR LESS, THE ADJUSTED AMPACITY SHALL NOT EXCEED THE 60DEG C RATING. FOR FEEDER RATINGS GREATER THAN 100AMPS, ACTUAL AMPACITY SHALL NOT EXCEED THE 75DEG C RATING.

GENERAL NOTES:

A. ALL PANELS MOUNTED RECESSED IN WALLS SHALL HAVE SPARE CONDUITS INSTALLED AS INDICATED IN SPECIFICATIONS.
 B. THE EMERGENCY POWER SYSTEM SHALL BE DESIGNED TO NFPA 37 AND 110 STANDARDS. SHOP DRAWINGS AND EQUIPMENT LISTING SHEETS MUST BE SUBMITTED TO LOCAL JURISDICTIONS FOR APPROVED BEFORE INSTALLATION OF THE GENERATOR.

NOTES:

- PROVIDE DEVICES FOR SELECTIVE COORDINATION OF SYSTEM PER NEC 700.28. PROVIDE NECESSARY CONDUITS AND WIRINGS FROM GENERATOR TO PANEL 21LSC1 PER MANUFACTURER REQUIREMENTS FOR BATTERY CHARGER, BLOCK HEATER, ETC. PROVIDE CIRCUIT BREAKERS IN PANEL 21LSC1 AS REQUIRED FOR A COMPLETE SYSTEM PER NEC AND MANUFACTURER.
- INSTALLATION OF CHILLER IS AN ALTERNATE. INSTALLATION OF CIRCUIT BREAKER AND CONDUITS IS PART OF BASE BID.
- REMOTE ANNUNCIATOR #1 LOCATED IN CUSTODIAL C113.
- REMOTE ANNUNCIATOR #2 (IN WEATHERPROOF ENCLOSURE) LOCATED ON WALL ADJACENT TO EMERGENCY GENERATOR. ANNUNCIATOR SHALL NOT BE INSTALLED ON THE GENERATOR.
- PROVIDE 1" CONDUIT AND CONTROL WIRING AS REQUIRED.
- PROVIDE 100A/3P CIRCUIT BREAKER IN NEMA 1 ENCLOSURE.
- METERED MAIN AND VIEWABLE FUSED SAFETY SERVICE RATED DISCONNECT SWITCH PER EWEB REQUIREMENTS. VERIFY EQUIPMENT REQUIREMENTS AND LOCATION WITH EWEB REPRESENTATIVE, ARCHITECT AND ENGINEER PRIOR TO SUBMITTALS AND INSTALLATION.
- VIEWABLE FUSED SAFETY SERVICE RATED DISCONNECT SWITCH PER EWEB REQUIREMENTS. VERIFY EQUIPMENTS AND LOCATION WITH EWEB REPRESENTATIVE, ARCHITECT AND ENGINEER PRIOR TO SUBMITTALS AND INSTALLATION.
- CONTRACTOR SHALL PROVIDE SOLAR PHOTOVOLTAIC SYSTEM DESIGN AND INSTALLATION. COORDINATE WITH SOLAR PV DESIGN BUILD DRAWINGS FOR EXACT EQUIPMENT REQUIREMENTS. COORDINATE LOCATION WITH OWNER AND ARCHITECT.
- LOCATE NEAR SOLAR PV SYSTEM INVERTER EQUIPMENT. VERIFY LOCATION WITH APPROVED PV SYSTEM PLANS. PROVIDE 225A MAIN CIRCUIT BREAKER, NEMA 1, 42CKTS, 14KAIC FOR PANEL A. PROVIDE 100A MAIN CIRCUIT BREAKER, NEMA 1, 42CKTS, 14KAIC FOR PANEL B. COORDINATE EXACT REQUIREMENTS (TYPE, NUMBER OF BREAKERS, ETC.) WITH PV SHOP DRAWINGS.
- UTILITY TERMINATION SECTION AND METERING PROVISIONS SHALL MEET EWEB REQUIREMENTS. VERIFY UTILITY COMPANY REQUIREMENTS ARE MET PRIOR TO INSTALLATION.
- PROVIDE DOUBLE LUGS AND FEED THROUGH.
- PROVIDE KILN DISCONNECT IF KILN DO NOT HAVE A BUILT-IN DISCONNECT.
- PROVIDE MAIN BONDING JUMPER BETWEEN ELECTRICAL SERVICES AS REQUIRED BY NATIONAL ELECTRICAL CODE.



ONE LINE DIAGRAM - ELECTRICAL

PIVOT ARCHITECTURE
 REGISTERED PROFESSIONAL ARCHITECT
 894667P
 1200 W. COVINGTON ST.
 EUGENE, OREGON 97404
 (503) 344-1177

IBI GROUP
 Iona
 Portland, OR
 PAE
 Portland, OR
 PERMITS: 1. Sun Forward, 1. Seattle
 pac-engineers.com

BID SET
 EUGENE SCHOOL DISTRICT 4J
 120 WEST HILLIARD AVENUE, EUGENE, OREGON 97404
 RIVER ROAD / EL CAMINO DEL RIO ELEMENTARY SCHOOL

ONE LINE DIAGRAM - ELECTRICAL
 PROJECT # 133720 - REVISED
 ISSUE DATE 2/12/16
 DRAWN SC
 CHECKED PJC
 ADD 2 - 03/09/2016

E601

DESIGNATION: PANEL 2K1 VOLTAGE: 208Y/120V - 3 Ph - 4 Wire PROJECT NAME: EUGENE RIVER ROAD. Table with columns for Description, Demand Category, VA, BKR, A/P, CKT, PH, CKT, BKR, A/P, VA, Demand Category, Description. Includes sub-tables for Total Connected Load and Total Design Load.

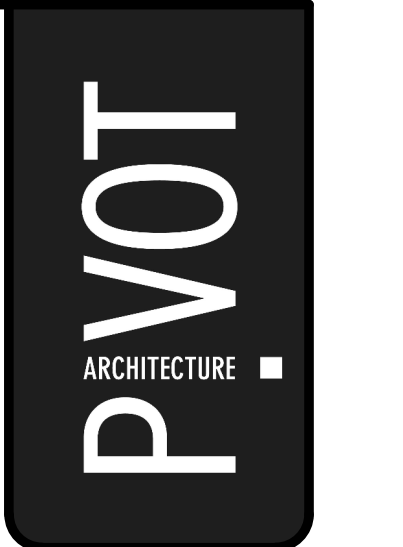
DESIGNATION: PANEL 221 VOLTAGE: 208Y/120V - 3 Ph - 4 Wire PROJECT NAME: EUGENE RIVER ROAD. Table with columns for Description, Demand Category, VA, BKR, A/P, CKT, PH, CKT, BKR, A/P, VA, Demand Category, Description. Includes sub-tables for Total Connected Load and Total Design Load.

DESIGNATION: PANEL MDF VOLTAGE: 208Y/120V - 3 Ph - 4 Wire PROJECT NAME: EUGENE RIVER ROAD. Table with columns for Description, Demand Category, VA, BKR, A/P, CKT, PH, CKT, BKR, A/P, VA, Demand Category, Description. Includes sub-tables for Total Connected Load and Total Design Load.

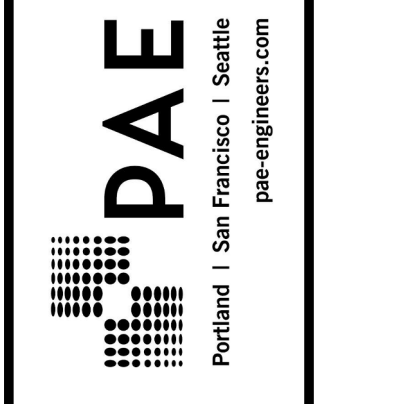
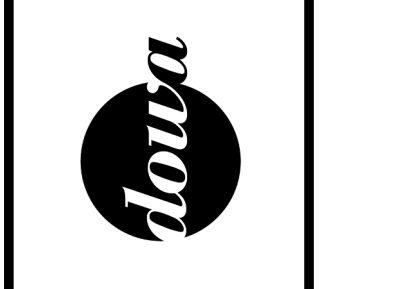
DESIGNATION: PANEL 222 VOLTAGE: 208Y/120V - 3 Ph - 4 Wire PROJECT NAME: EUGENE RIVER ROAD. Table with columns for Description, Demand Category, VA, BKR, A/P, CKT, PH, CKT, BKR, A/P, VA, Demand Category, Description. Includes sub-tables for Total Connected Load and Total Design Load.

DESIGNATION: PANEL IDF-2 VOLTAGE: 208Y/120V - 3 Ph - 4 Wire PROJECT NAME: EUGENE RIVER ROAD. Table with columns for Description, Demand Category, VA, BKR, A/P, CKT, PH, CKT, BKR, A/P, VA, Demand Category, Description. Includes sub-tables for Total Connected Load and Total Design Load.

DESIGNATION: PANEL 22B1 VOLTAGE: 208Y/120V - 3 Ph - 4 Wire PROJECT NAME: EUGENE RIVER ROAD. Table with columns for Description, Demand Category, VA, BKR, A/P, CKT, PH, CKT, BKR, A/P, VA, Demand Category, Description. Includes sub-tables for Total Connected Load and Total Design Load.



EXPIRES: 03-31-17



Portland | San Francisco | Seattle | phoenix

BID SET EUGENE SCHOOL DISTRICT 4J 120 WEST HILLIARD AVENUE, EUGENE, OREGON 97404 RIVER ROAD / EL CAMINO DEL RIO ELEMENTARY SCHOOL

PANEL SCHEDULES table with columns for Designation and Description. Lists 2K1, 22A1, MDF, 22B2, IDF-2, 22B1.

Summary table with columns for Designation and Description. Lists 2K1, 22A1, MDF, 22B2, IDF-2, 22B1.

DESIGNATION: PANEL 21SBK1 VOLTAGE: 208Y120V - 3 Ph - 4 Wire PROJECT NAME: EUGENE RIVER ROAD
BUS RATINGS(A): 60 MAIN BREAKER (A): 60 AVAILABLE FAULT(A): 2056 MOUNTING: Surface ENCLOSURE: NEMA 1
DESCRIPTION DEMAND CATEGORY VA BKR AP CRT PH CRT BKR AP VA DEMAND CATEGORY DESCRIPTION
ES- WALK-IN DOOR HEATER Kitchen Equip 500 201 1 A 2 201 500 Kitchen Equip EB- WALK-IN DRAIN LINE HEATER

DESIGNATION: PANEL 41LSB1 VOLTAGE: 480Y277V - 3 Ph - 4 Wire PROJECT NAME: EUGENE RIVER ROAD
BUS RATINGS(A): 100 MAIN BREAKER (A): MLO AVAILABLE FAULT(A): 5776 MOUNTING: Surface ENCLOSURE: NEMA 1
DESCRIPTION DEMAND CATEGORY VA BKR AP CRT PH CRT BKR AP VA DEMAND CATEGORY DESCRIPTION
RM A10811112117 LUMINAIRES Lighting 326 201 1 A 2 201 252 Lighting RM B108109 LUMINAIRES

DESIGNATION: PANEL 21LSC1 VOLTAGE: 208Y120V - 3 Ph - 4 Wire PROJECT NAME: EUGENE RIVER ROAD
BUS RATINGS(A): 60 MAIN BREAKER (A): 60 AVAILABLE FAULT(A): 680 MOUNTING: Surface ENCLOSURE: NEMA 1
DESCRIPTION DEMAND CATEGORY VA BKR AP CRT PH CRT BKR AP VA DEMAND CATEGORY DESCRIPTION
SPARE 201 1 A 2 201 500 Equipment B101 LOBBY- MOTORIZED GATE

DESIGNATION: PANEL 42LSB1 VOLTAGE: 480Y277V - 3 Ph - 4 Wire PROJECT NAME: EUGENE RIVER ROAD
BUS RATINGS(A): 100 MAIN BREAKER (A): MLO AVAILABLE FAULT(A): 6488 MOUNTING: Surface ENCLOSURE: NEMA 1
DESCRIPTION DEMAND CATEGORY VA BKR AP CRT PH CRT BKR AP VA DEMAND CATEGORY DESCRIPTION
RM B206211212217 LUMINAIRES Lighting 323 201 1 A 2 201 252 Lighting RM B206211212217 LUMINAIRES

DESIGNATION: PANEL 4K1 VOLTAGE: 480Y277V - 3 Ph - 4 Wire PROJECT NAME: EUGENE RIVER ROAD
BUS RATINGS(A): 100 MAIN BREAKER (A): 100 AVAILABLE FAULT(A): 6553 MOUNTING: Surface ENCLOSURE: NEMA 1
DESCRIPTION DEMAND CATEGORY VA BKR AP CRT PH CRT BKR AP VA DEMAND CATEGORY DESCRIPTION
WAREWASHER (TANK HEAT/MOTOR) Kitchen Equip 314 203 1 A 2 201 314 SPARE

DESIGNATION: PANEL 42B1 VOLTAGE: 480Y277V - 3 Ph - 4 Wire PROJECT NAME: EUGENE RIVER ROAD
BUS RATINGS(A): 100 MAIN BREAKER (A): 100 AVAILABLE FAULT(A): 6640 MOUNTING: Surface ENCLOSURE: NEMA 1
DESCRIPTION DEMAND CATEGORY VA BKR AP CRT PH CRT BKR AP VA DEMAND CATEGORY DESCRIPTION
RM A206211212217 LUMINAIRES Lighting 1460 201 1 A 2 201 250 Lighting RM B206211212217 LUMINAIRES

DESIGNATION: PANEL 4LSC1 VOLTAGE: 480Y277V - 3 Ph - 4 Wire PROJECT NAME: EUGENE RIVER ROAD
BUS RATINGS(A): 100 MAIN BREAKER (A): MLO AVAILABLE FAULT(A): 15526 MOUNTING: Surface ENCLOSURE: NEMA 1
DESCRIPTION DEMAND CATEGORY VA BKR AP CRT PH CRT BKR AP VA DEMAND CATEGORY DESCRIPTION
RM C100101010101 LUMINAIRES Lighting 80 201 1 A 2 201 336 Lighting SOUTH EXTERIOR WALL LIGHTS

DESIGNATION: PANEL 42S1 VOLTAGE: 480Y277V - 3 Ph - 4 Wire PROJECT NAME: EUGENE RIVER ROAD
BUS RATINGS(A): 100 MAIN BREAKER (A): 100 AVAILABLE FAULT(A): 6640 MOUNTING: Surface ENCLOSURE: NEMA 1
DESCRIPTION DEMAND CATEGORY VA BKR AP CRT PH CRT BKR AP VA DEMAND CATEGORY DESCRIPTION
RM A206211212217 LUMINAIRES Lighting 1176 201 1 A 2 201 151 Lighting RM B206211212217 LUMINAIRES

Table with 2 columns and 4 rows: 21SBK1, 41LSB1, 21LSC1, 42LSB1, 4K1, 42B1, 41LSC1

Vertical sidebar containing logos for PIVOT ARCHITECTURE, IBI GROUP, Jova, PAE, and BID SET. Includes project information: EUGENE SCHOOL DISTRICT 4J, 120 WEST HILLIARD AVENUE, EUGENE, OREGON 97404, RIVER ROAD / EL CAMINO DEL RIO ELEMENTARY SCHOOL, and panel schedule details.

DESIGN CONDITIONS - EUGENE, OR

Table with columns for SPACE, WINTER (TEMPERATURE, HUMIDITY), and SUMMER (TEMPERATURE, HUMIDITY). Includes general notes for outdoor conditions based on ASHRAE fundamentals.

CONDENSING UNIT SCHEDULE

Table with columns for TAG NUMBER, LOCATION, SERVICE, TYPE, CAPACITY, VOLT/PHASE, AMBIENT TEMP, MCA, COMP FLA, MANUFACTURER & MODEL, NOTES.

BOILER SCHEDULE

Table with columns for TAG NUMBER, LOCATION, SERVICE, TYPE, FUEL (INPUT/OUTPUT CAPACITY), FLUID (SUPPLY/RETURN TEMP, DESIGN FLOW, MIN/MAX WPD), ELECTRICAL (FLA, VOLT/PHASE), MINIMUM EFFICIENCY, APPROX. WEIGHT, MANUFACTURER & MODEL, NOTES.

GENERAL NOTES: A. UNITS MOUNTED ON HOUSEKEEPING PAD. PAD TO BE 8" HIGH, LENGTH AND WIDTH AS REQUIRED TO ACCOMMODATE BOLTDOWN OF BOILER TO PAD WITHOUT SPALLING OF CONCRETE.

B. MINIMUM EFFICIENCY IS AT 100% FIRE, 100 DEG F RETURN WATER TEMPERATURE AND 140 DEG F SUPPLY WATER TEMPERATURE. C. NOT USED. D. PROVIDE A MINIMUM SIDE CLEARANCE OF 36 INCHES FOR EACH BOILER. E. PROVIDE 36 INCHES TOP CLEARANCE ABOVE BOILER.

NOTES: 1. MINIMUM FLOW LISTED IS ABSOLUTE MINIMUM FLOW, ALL LOADS.

FAN COIL UNIT SCHEDULE

Table with columns for TAG NUMBER, LOCATION, SERVICE, TYPE, MATCHING OUTDOOR UNIT, DX COOLING, FAN (CFM, ESP, FLA, VOLT/PHASE), MANUFACTURER & MODEL, NOTES.

NOTES: 1. INSTALL WITH MANUFACTURER'S MIXING BOX FOR ECONOMIZER OPERATION. 2. UNIT TO BE PROVIDED WITH CONDENSATE PUMP.

RETURN/EXHAUST GRILLES (C-2)

Table with columns for CFM RANGE, SQUARE NECK SIZE (BASED ON: TITUS 50F), FACE SIZE (T-BAR, SURFACE).

GENERAL NOTES:

AIR COOLED CHILLER SCHEDULE

Table with columns for TAG NUMBER, LOCATION, SERVICE, DESIGN CAPACITY, EWT, LWT, FLUID, DESIGN FLOW RATE, MAX WPD, MINIMUM FLOW RATE, COMPRESSORS, FANS, SINGLE POINT CONNECTION, DESIGN EFFICIENCY, CODE AHRI EFFICIENCY, REFRIGERANT, APPROX. WEIGHT, MANUFACTURER & MODEL, NOTES.

GENERAL NOTES: A. DESIGN EFFICIENCIES ARE AT DESIGN CONDITIONS LISTED IN THE SCHEDULE. B. AHRI EFFICIENCIES ARE AT ARI STANDARD CONDITIONS. C. CODE AHRI EFFICIENCY REQUIREMENTS PROVIDED FOR REFERENCE. D. PROVIDE SCRR SUFFICIENT TO MEET THE AVAILABLE FAULT CURRENT AT THE PANELBOARD OR SWITCHBOARD FROM WHICH THE UNIT IS FED. COORDINATE WITH ELECTRICAL DRAWINGS AND ELECTRICAL CONTRACTOR. E. PROVIDE CHILLER CAPABLE OF MINIMUM FLOW OF ATLEAST 50% OF DESIGN FLOW.

NOTES: 1. MOUNT TO CONCRETE PAD, TO BE 6" HIGH, LENGTH AND WIDTH AS REQUIRED TO ACCOMMODATE BOLTDOWN OF CHILLER TO PAD.

TERMINAL UNIT SCHEDULE

Table with columns for TAG NUMBER, LOCATION, SERVICE, TYPE, PRIMARY AIR (INLET, MAX CFM, MIN CFM), MANUFACTURER & MODEL, NOTES.

GENERAL NOTES: A. AIR PRESSURE DROP THROUGH TERMINAL UNIT TO BE NO GREATER THAN 0.2 IN.WG. B. HYDRONIC COIL TO BE MOUNTED EXTERNALLY IN DUCTWORK DOWNSTREAM OF TERMINAL UNIT.

NOTES: 1. PROVIDE COMBINED TEMPERATURE AND CO2 SENSORS.

KEY: VV = VARIABLE AIR VOLUME TERMINAL UNIT

SUPPLY AIR SLOT DIFFUSERS (S-1)

Table with columns for CFM RANGE, PLENUM INLET SIZE (BASED ON: TITUS T8DI-10), # OF SLOTS, SLOT WIDTH (IN), SLOT LENGTH (IN), FACE SIZE.

ROOF VENTILATOR SCHEDULE

Table with columns for TAG NUMBER, LOCATION, SERVICE, TYPE, AIRFLOW (CFM, TSP), THROAT SIZE, APPROX. WEIGHT, MANUFACTURER & MODEL, NOTES.

GENERAL NOTES: A. NONE. NOTES: 1. PROVIDE LOW LEAKAGE MOTORIZED DAMPER - BELIMO LOW VOLTAGE ACTUATOR

PUMP SCHEDULE

Table with columns for TAG NUMBER, LOCATION, SERVICE, TYPE, FLUID, PERFORMANCE (MAX FLOW, MIN FLOW, HEAD, SHUTOFF HEAD, PUMP EFFICIENCY), MOTOR (TYPE, HP, RPM, VFD, VOLT/PHASE), APPROX. WEIGHT, MANUFACTURER & MODEL, NOTES.

GENERAL NOTES: A. NOTES:

Table with columns for TAG NUMBER, LOCATION, SERVICE, SIZE HxW (IN), ECONOMIZER AIRFLOW (CFM), HYDRONIC COIL - COOLING (COOLING, TOTAL CAPACITY, SENSIBLE CAPACITY, DB EAT, WB EAT, LAT, WB LAT, EWT, MIN WTD, FLOW RATE), HEATING (CAPACITY, EAT, LAT, EWT, WTD, FLOW RATE), RUNOUT, MANUFACTURER, NOTES.

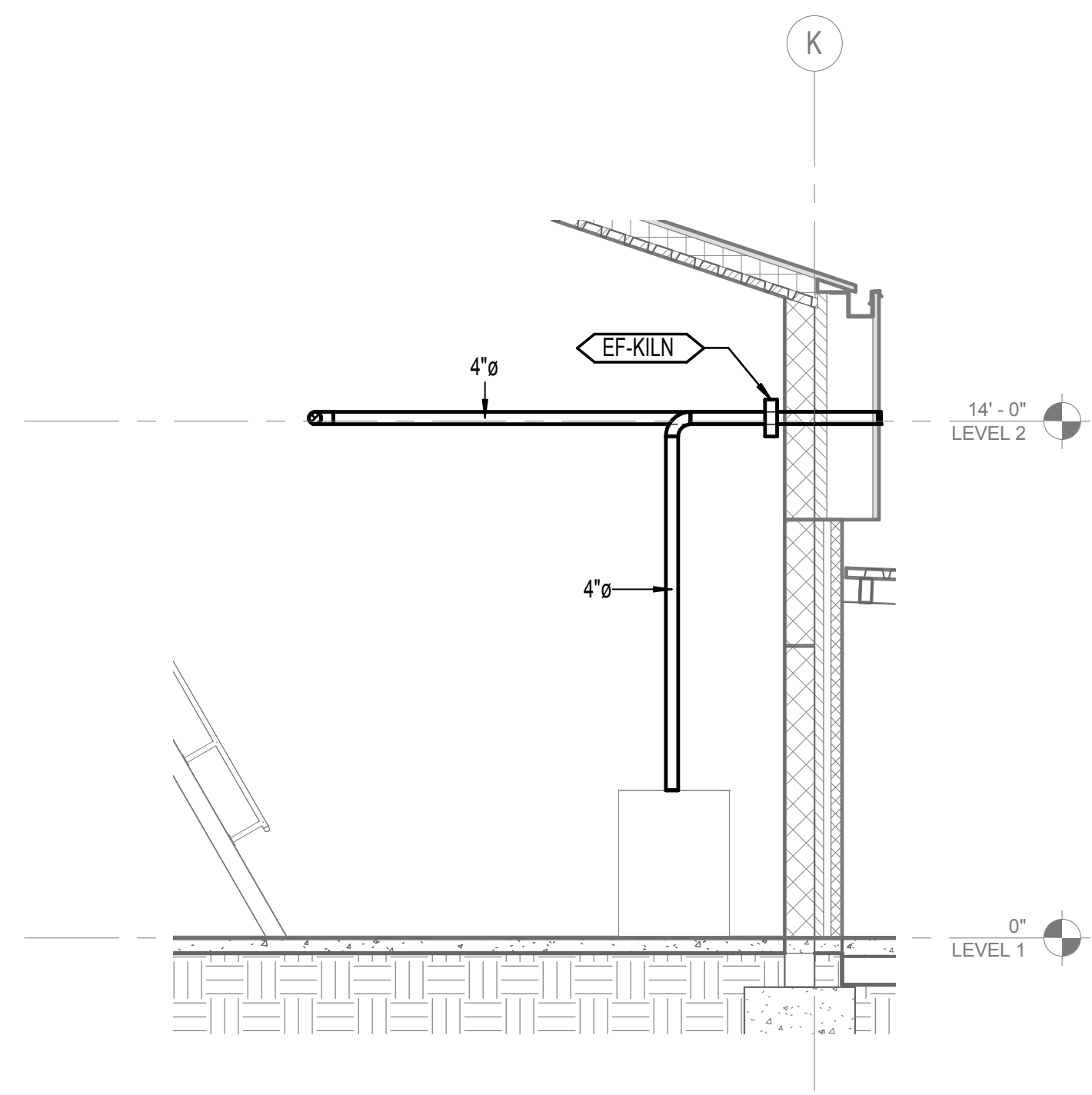
GENERAL NOTES: A. HYDRONIC COIL TO BE MOUNTED EXTERNALLY IN THE DUCTWORK DOWNSTREAM OF THE TERMINAL UNIT. B. AIR PRESSURE DROP THROUGH COIL TO BE NO GREATER THAN 0.40 IN.WG. C. WATER PRESSURE DROP THROUGH COIL NOT TO EXCEED 10 FT. D. AIR VELOCITY ACROSS COIL NOT TO EXCEED 400 FPM. E. MAX 10 FPI, 4 ROWS.

NOTES: 1. PROVIDE CONDENSATE PUMP.

CEILING SUPPLY DIFFUSERS (C-1)

Table with columns for CFM RANGE, SQUARE NECK SIZE (BASED ON: TITUS MCD), FACE SIZE (T-BAR, SURFACE).

Vertical sidebar containing logos for PIVOT ARCHITECTURE, IBI GROUP, Jova, PAE, and project information: EUGENE SCHOOL DISTRICT 4J, 120 WEST HILLIARD AVENUE, EUGENE, OREGON 97404, RIVER ROAD / EL CAMINO DEL RIO ELEMENTARY SCHOOL, BID SET, EQUIPMENT SCHEDULE - MECHANICAL, M002.



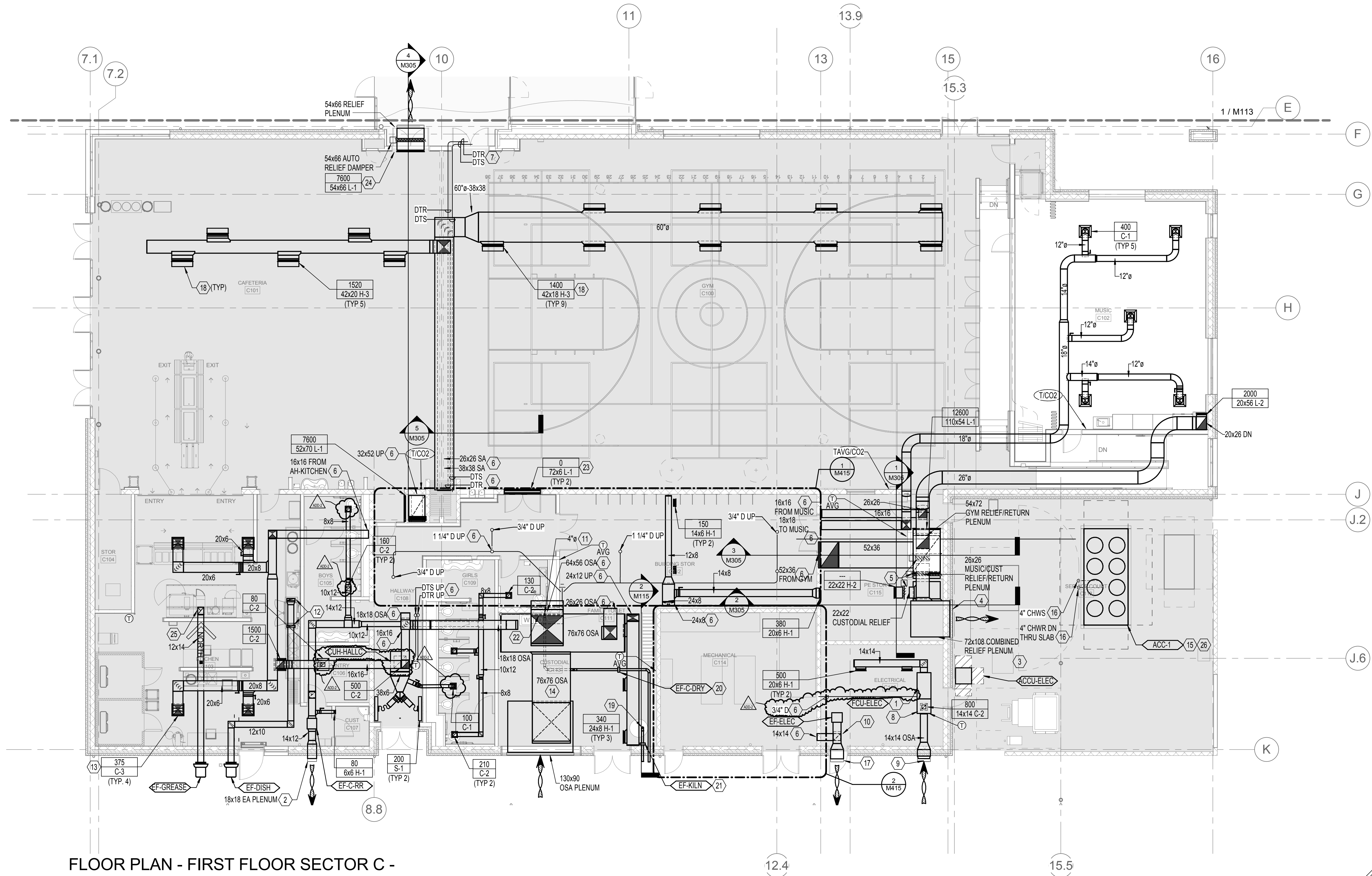
2 Section EF-C-DRYER SECTION DETAIL
1/4" = 1'-0"

GENERAL NOTES:

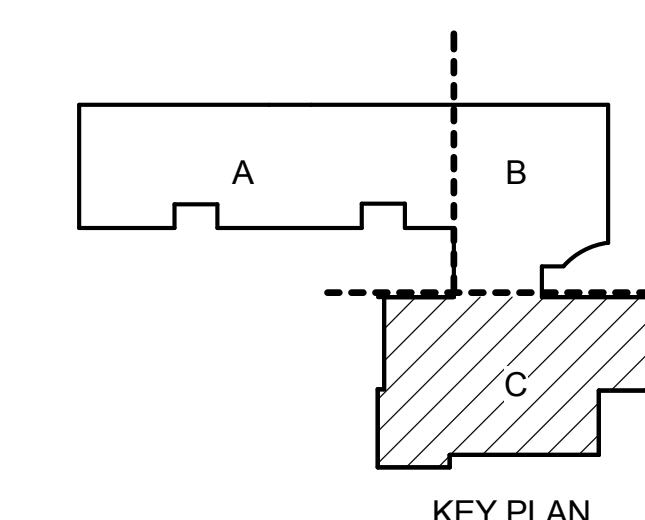
- A. BRANCH RUNOUT PIPING TO TU HEATING COILS AND CABINET UNIT HEATERS TO BE 3/4-INCH UNLESS OTHERWISE NOTED.
- B. PROVIDE VOLUME DAMPER AT EACH BRANCH OUTLET/INLET.
- C. RUN DUCTS AND PIPING CONCEALED, UNLESS SPECIFIED OTHERWISE, AND CLEAR OF CEILING INSERTS. ALL DUCTWORK SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO WALL AND UNDERSIDE OF BEAMS AND JOISTS.
- D. ALL WORK SHALL BE COORDINATED WITH ALL TRADES INVOLVED. OFFSETS IN PIPING AND DUCTS (INCLUDING DIVIDED DUCTS) AND TRANSITIONS AROUND OBSTRUCTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
- E. VERIFY ALL EQUIPMENT CONNECTIONS WITH MANUFACTURER'S CERTIFIED DRAWINGS. VERIFY AND PROVIDE DUCT TRANSITIONS TO FURNISHED EQUIPMENT. FIELD VERIFY AND COORDINATE ALL DIMENSIONS BEFORE FABRICATION.
- F. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF AIR DEVICES.
- G. ALL DETAILS APPLY TO THIS SHEET WHETHER TAGGED OR NOT.
- H. PIPING SHALL BE LARGEST SIZE SHOWN UNTIL SMALLER PIPE SIZE IS INDICATED INCLUDING MAINS AND BRANCH PIPING.

NOTES:

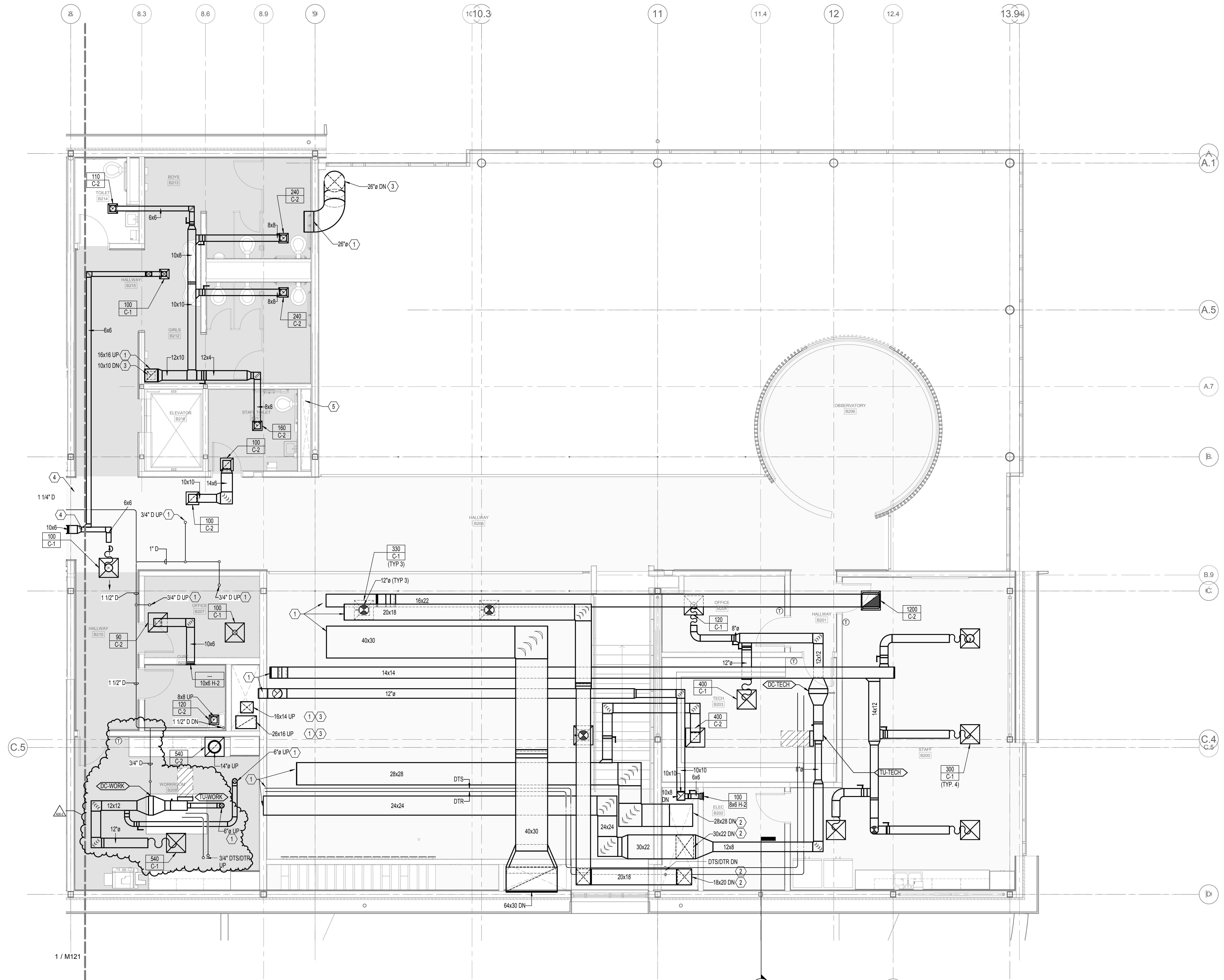
- 1. ROUTE RS AND RL PIPING INDOORS, ALONG EAST WALL OF PE STORAGE.
- 2. LOCATE ABOVE CANOPY.
- 3. PROVIDE HORIZONTAL SHEET METAL SEPARATION, LOCATED 82 INCHES FROM BOTTOM OF PLENUM. GYM RELIEF CONNECTED TO LOWER -82 INCHES OF PLENUM. MUSIC ROOM AND CUSTODIAL RELIEF CONNECTED TO UPPER 26 INCHES OF PLENUM.
- 4. RELIEF LOUVER TO BE DIVIDED HORIZONTALLY BY SHEET METAL SEPARATION LOCATED -82 INCHES FROM BOTTOM OF LOUVER AS DESCRIBED BY NOTE 3.
- 5. PROVIDE AUTOMATIC CONTROL DAMPER AND BACK DRAFT DAMPER.
- 6. CONTINUED ON 1/M415.
- 7. CONTINUED ON M413.
- 8. MIXING BOX 14x14 WITH RETURN AND OSA AUTO DAMPER. RETURN GRILLE ON BOTTOM, AT DAMPER.
- 9. 26x18 OSA PLENUM AT LOUVER. 18" PLENUM DEPTH.
- 10. MIXING BOX WITH 14x14 RELIEF AND SUPPLY DAMPER.
- 11. 4" DRYER EXHAUST UP.
- 12. 4x16 EXHAUST DUCT CONNECTION TO DISHWASHER HOOD (TYP. 2), 200 CFM AT ENTRY SIDE, 400 CFM AT EXIT SIDE. PROVIDE VOLUME DAMPER AT EACH DUCT.
- 13. DIFFUSER SIZED TO LIMIT AIR VELOCITY TO 150 FPM AT DISCHARGE. PROVIDE LINED PLENUM. SEE DETAIL 6/M501.
- 14. ROUTE ABOVE BETWEEN TRUSSES.
- 15. ACC-1 COMPRESSOR SECTION TO BE ORIENTED FACING SOUTH.
- 16. PROVIDE HEAT TAPE ON EXPOSED CHWR/S FROM FROSTLINE TO POINT OF CHILLER CONNECTION.
- 17. 26x18 RELIEF PLENUM. 18" PLENUM DEPTH.
- 18. INSTALL DRUM LOUVER AT 30 DEGREE ANGLE DOWN.
- 19. 4" EXHAUST DUCT DN TO KILN.
- 20. TERMINATE AT DOWNTURNED ELBOW. PROVIDE BACKDRAFT DAMPER W/O SCREEN.
- 21. TERMINATE AT DOWNTURNED ELBOW W/ SCREEN.
- 22. MOUNT GRILLE ABOVE DOORS.
- 23. MOUNT W/ BOTTOM OF GRILLE AT 10 FT AFF. PROVIDE HINGED FRAME FOR GRILLE TO ENABLE ACCESS TO RELIEF DAMPER AND ACTUATOR LOCATED BEHIND GRILLE.
- 24. 12x14 GREASE EXHAUST CONNECTION AT HOOD. SLOPE DUCT FROM FAN TO HOOD. PROVIDE DUCT CLEANOUTS AS REQUIRED BY CODE.
- 25. ALTERNATE 6: DELETE CHILLER. PROVIDE ALL PIPING AND CONTROLS TO 2 FT ABOVE GRADE, CAP FOR FUTURE CHILLER CONNECTIONS.



1 FLOOR PLAN - FIRST FLOOR SECTOR C - MECHANICAL
1/8" = 1'-0"



PIVOT ARCHITECTURE
 REGISTERED PROFESSIONAL ARCHITECT
 LICENSE NO. 18320018
 EUGENE, OREGON
 IBI GROUP
 Jova
 PAE
 EUGENE SCHOOL DISTRICT 4J
 120 WEST HILLIARD AVENUE, EUGENE, OREGON 97404
 PROJECT: RIVER ROAD / EL CAMINO DEL RIO ELEMENTARY SCHOOL
 BID SET
 SECTOR C MECHANICAL PLAN - FIRST FLOOR
 PROJECT NO: 151533 REVISED: 2/12/2016
 DRAWN: SC CHECKED: PNC
 ADDD - 03/09/2016
 M115

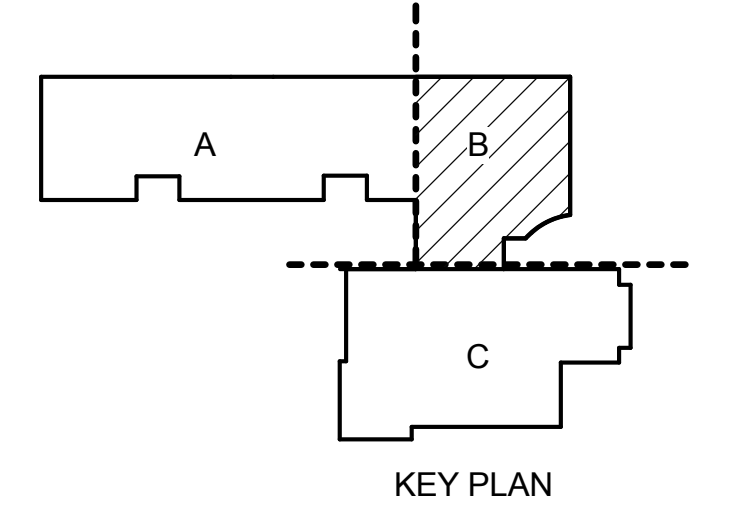


GENERAL NOTES:

- A. BRANCH RUNOUT PIPING TO TU HEATING COILS AND CABINET UNIT HEATERS TO BE 3/4-INCH UNLESS OTHERWISE NOTED.
- B. PROVIDE VOLUME DAMPER AT EACH BRANCH OUTLET/INLET.
- C. RUN DUCTS AND PIPING CONCEALED, UNLESS SPECIFIED OTHERWISE, AND CLEAR OF CEILING INSERTS. ALL DUCTWORK SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO WALL AND UNDERSIDE OF BEAMS AND JOISTS.
- D. ALL WORK SHALL BE COORDINATED WITH ALL TRADES INVOLVED. OFFSETS IN PIPING AND DUCTS (INCLUDING DIVIDED DUCTS) AND TRANSITIONS AROUND OBSTRUCTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
- E. VERIFY ALL EQUIPMENT CONNECTIONS WITH MANUFACTURER'S CERTIFIED DRAWINGS. VERIFY AND PROVIDE DUCT TRANSITIONS TO FURNISHED EQUIPMENT. FIELD VERIFY AND COORDINATE ALL DIMENSIONS BEFORE FABRICATION.
- F. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF AIR DEVICES.
- G. ALL DETAILS APPLY TO THIS SHEET WHETHER TAGGED OR NOT.
- H. PIPING SHALL BE LARGEST SIZE SHOWN UNTIL SMALLER PIPE SIZE IS INDICATED INCLUDING MAINS AND BRANCH PIPING.

NOTES:

- 1. CONTINUED ON 1/M413.
- 2. CONTINUED ON 2/M413.
- 3. CONTINUED ON M113.
- 4. CONTINUED ON M111.
- 5. PUMPED CONDENSATE DRAIN FROM FCU-MDF TO TERMINATE AT FLOOR SINK ON MECH PLATFORM.



1 FLOOR PLAN - SECOND FLOOR SECTOR B - MECHANICAL
 1/4" = 1'-0"

Portland | San Francisco | Seattle
pea-engineers.com

BID SET

SECTOR B MECHANICAL PLAN - SECOND FLOOR

PROJECT# 133720

REVISION#

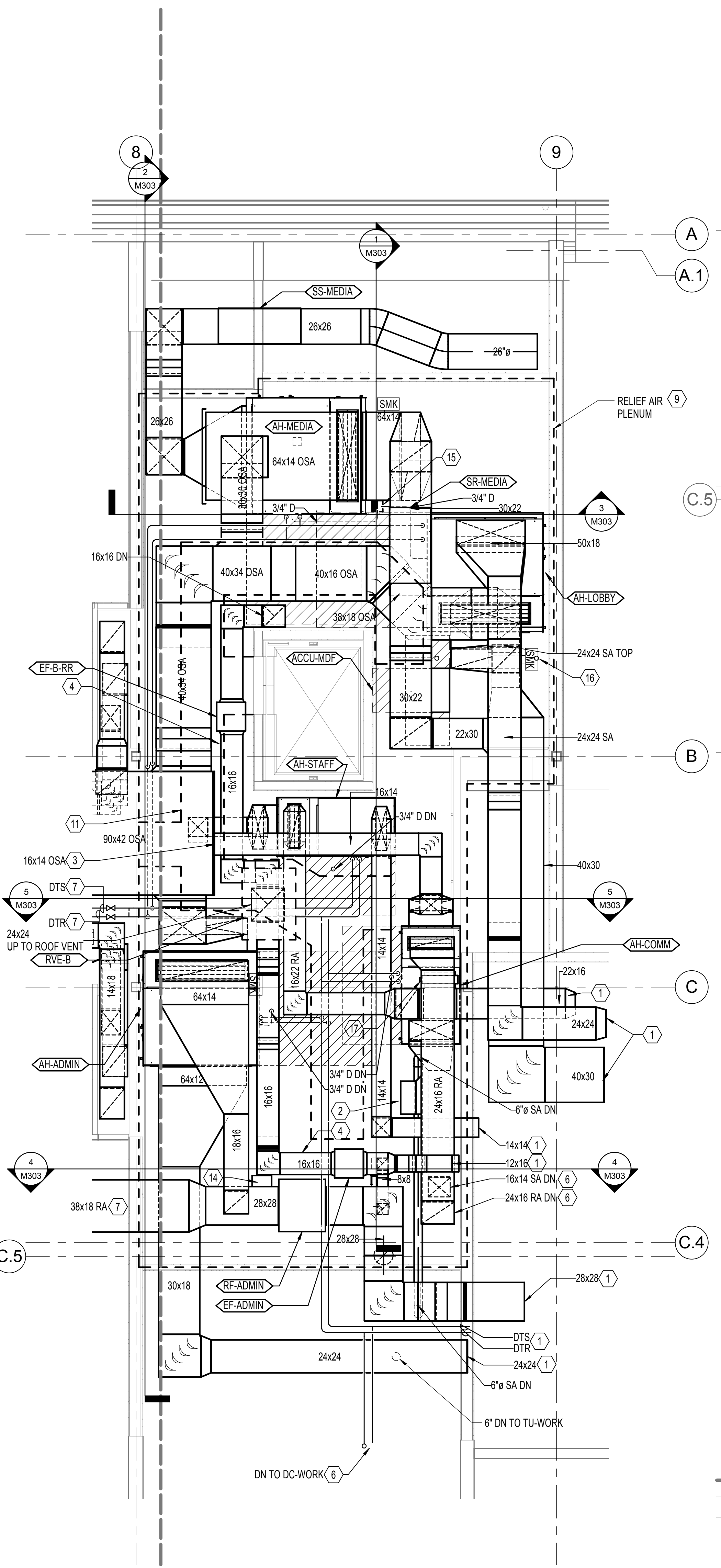
2/12/16

SC

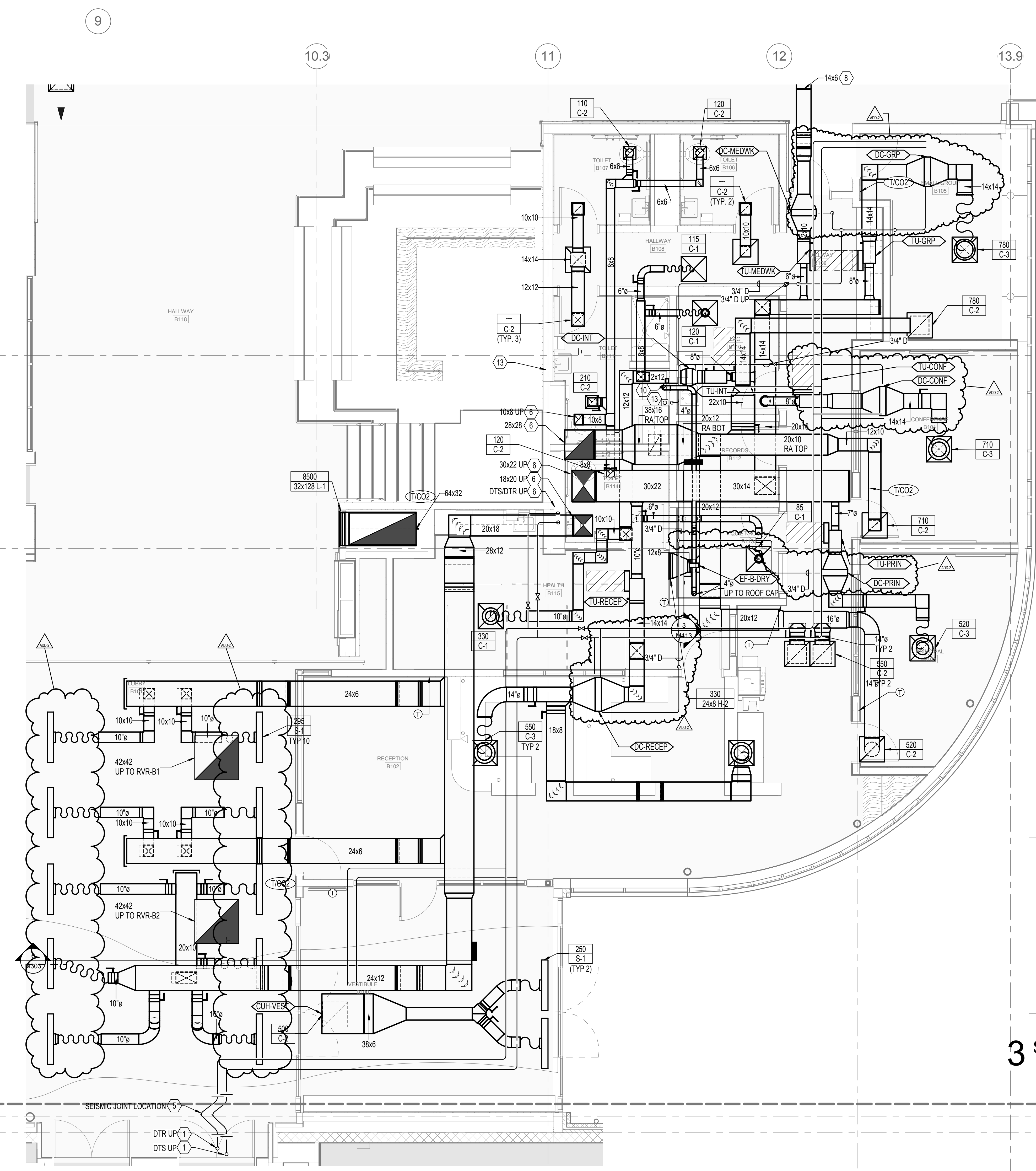
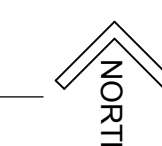
ADD-2 - 03/09/2016

PKC

M123



1 SECTOR B MECHANICAL PLATFORM
1/4" = 1'-0"



2 ENLARGED PLAN - SECTOR B ADMIN
1/4" = 1'-0"



GENERAL NOTES:

- A. ARRANGE EQUIPMENT, PIPING, CONDUIT AND DUCTWORK TO MAINTAIN A 3 FT. WIDE MAINTENANCE PATHWAY THRU MECH. PLATFORM WITH MIN. 6" CLEAR VERTICAL HT.
 - B. COORDINATE WORK WITH ALL TRADES INVOLVED. PROVIDE OFFSETS IN PIPING AND DUCTS AS REQUIRED TO AVOID OBSTRUCTIONS AT NO ADDITIONAL COST TO OWNER.
 - C. ALL DETAILS APPLY TO THIS SHEET WHETHER TAGGED OR NOT.
 - D. VERIFY EQUIPMENT CONNECTIONS WITH MANUFACTURER'S CERTIFIED DRAWINGS. PROVIDED DUCT TRANSITIONS TO EQUIPMENT. FIELD VERIFY DIMENSIONS PRIOR TO FABRICATION.
 - E. PROVIDE VOLUME DAMPER AT EACH BRANCH SUPPLY, RETURN, OR EXHAUST DUCT WHETHER INDICATED OR NOT.
 - F. REFER TO ARCH REFLECTED CEILING PLANS FOR EXACT LOCATION OF CEILING-MOUNTED DEVICES.
- NOTES:**
1. CONTINUED ON M123.
 2. PROVIDE AUTOMATIC DAMPER AND BACKDRAFT DAMPER.
 3. CONNECT TO END OF OSA PLENUM.
 4. PROVIDE BACKDRAFT DAMPER.
 5. PROVIDE SEISMIC V-LOOPS, SIZED SO THAT ONE PIPE NESTS WITHIN THE OTHER. COORDINATE WITH LAYOUT OF SIMILAR PLUMBING SEISMIC LOOPS IN THE SAME LOCATION.
 6. CONTINUED ON M123.
 7. CONTINUED ON M412.
 8. CONTINUED ON M113.
 9. ENTIRE MECH. PLATFORM FUNCTIONS AS A RELIEF AIR PLENUM. MATERIALS CONTAINED WITHIN SHALL BE NON-COMBUSTIBLE.
 10. EF-C-DRY ANNUNCIATOR PANEL.
 11. OUTLINE OF MAINTENANCE PATH. PROVIDE 3' x 6' 8" AFF MAINTENANCE ACCESS CLEARANCE ALONG THIS ROUTE.
 13. CONDENSATE DRAIN DN IN WALL. TERMINATE AT FLOOR SINK W/ AIR GAP.
 14. VFD FOR RF-ADMIN. MOUNT NEAR FAN W/ STRUT SUPPORTS.
 15. TERMINATE CONDENSATE DRAINS AT FLOOR SINK.
 16. PUMPED CONDENSATE FROM MDF ROOM UP. DN. TERMINATE AT FLOOR SINK ON PLATFORM.
 17. PROVIDE AUTOMATIC DAMPER AND BACKDRAFT DAMPER, SIZE 34X16.

C

C.4

D

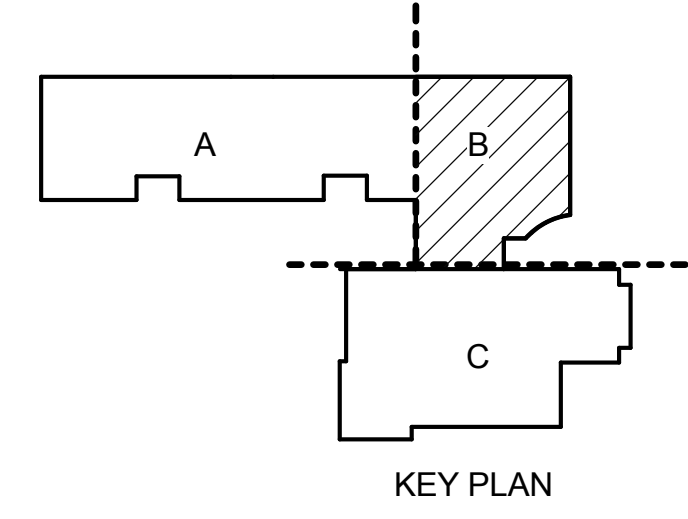
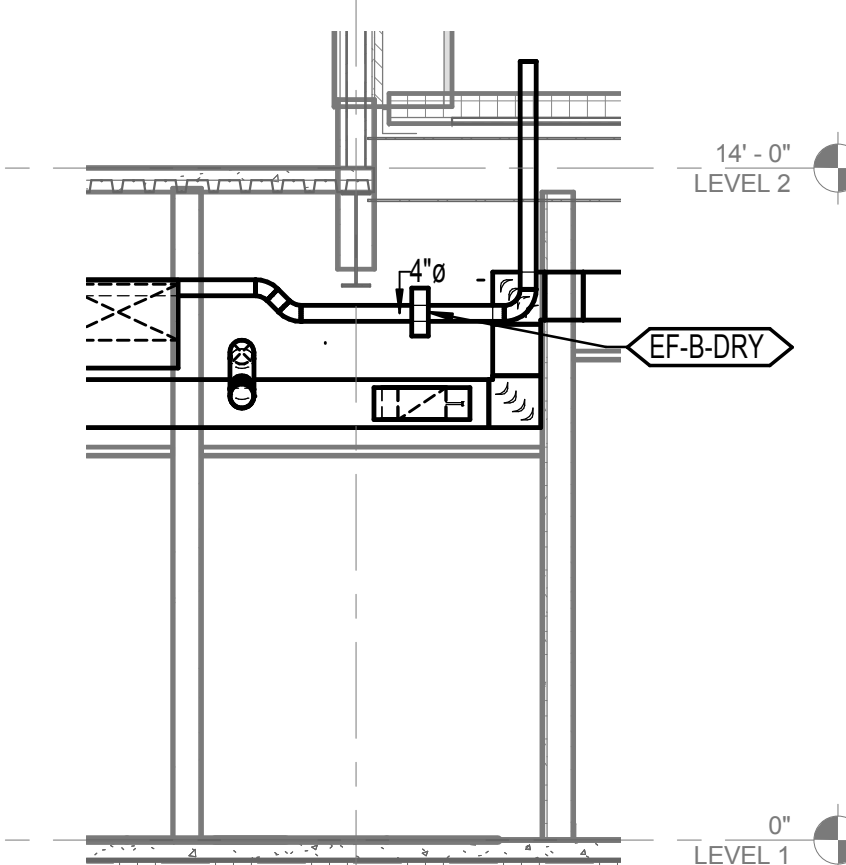
D

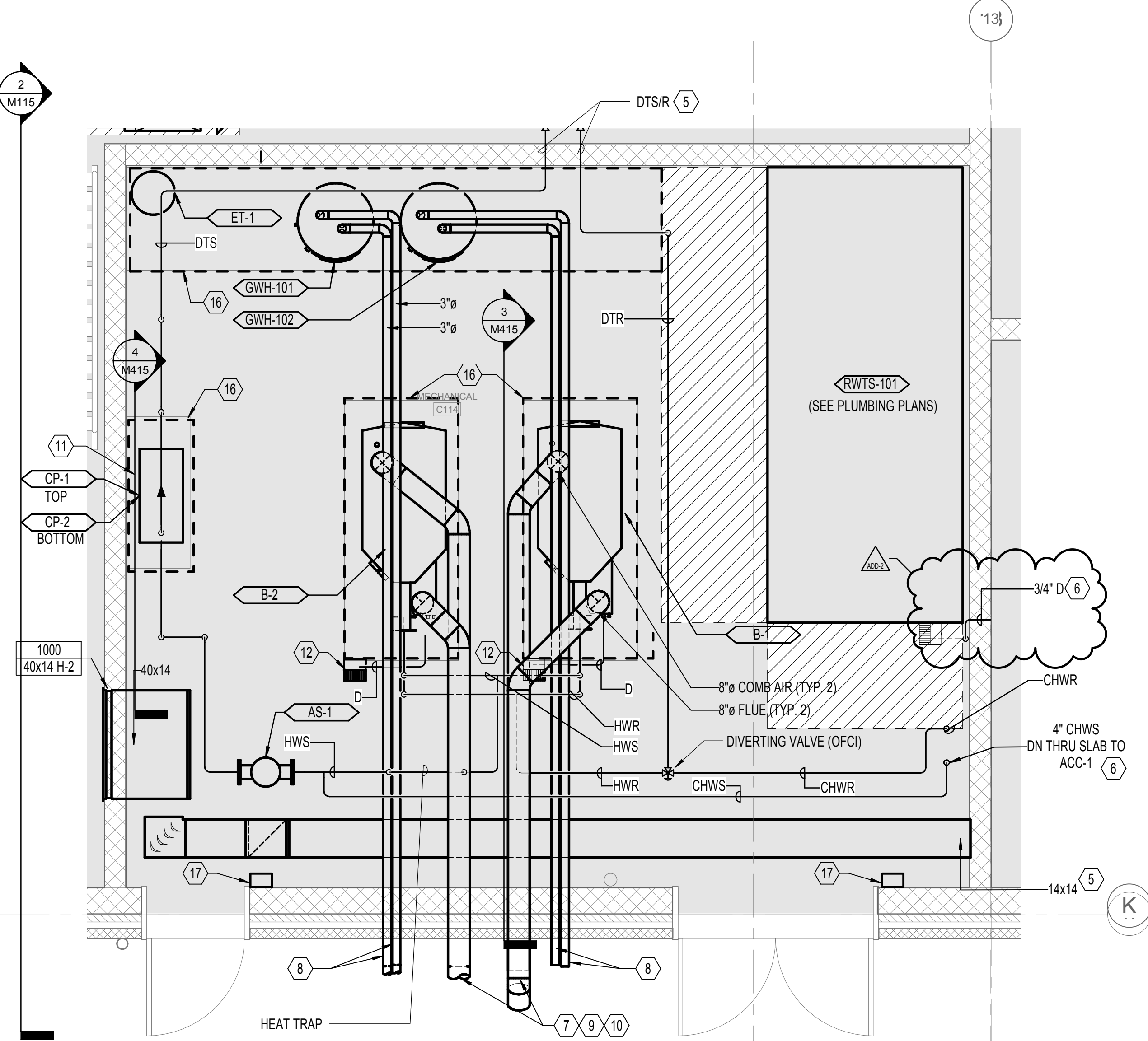
D

E

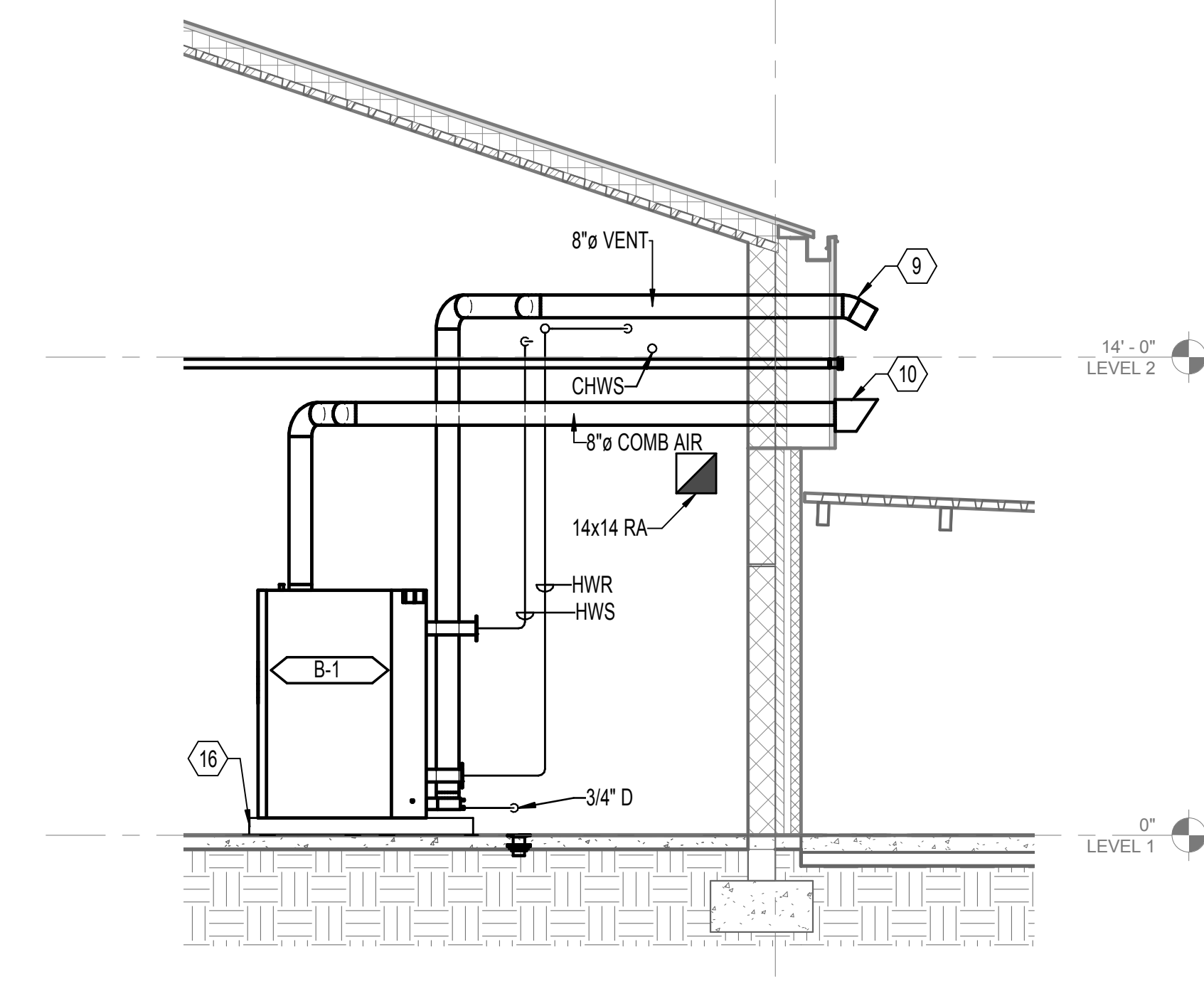
F

3 Section EF-B-DRYER SECTION DETAIL
1/4" = 1'-0"

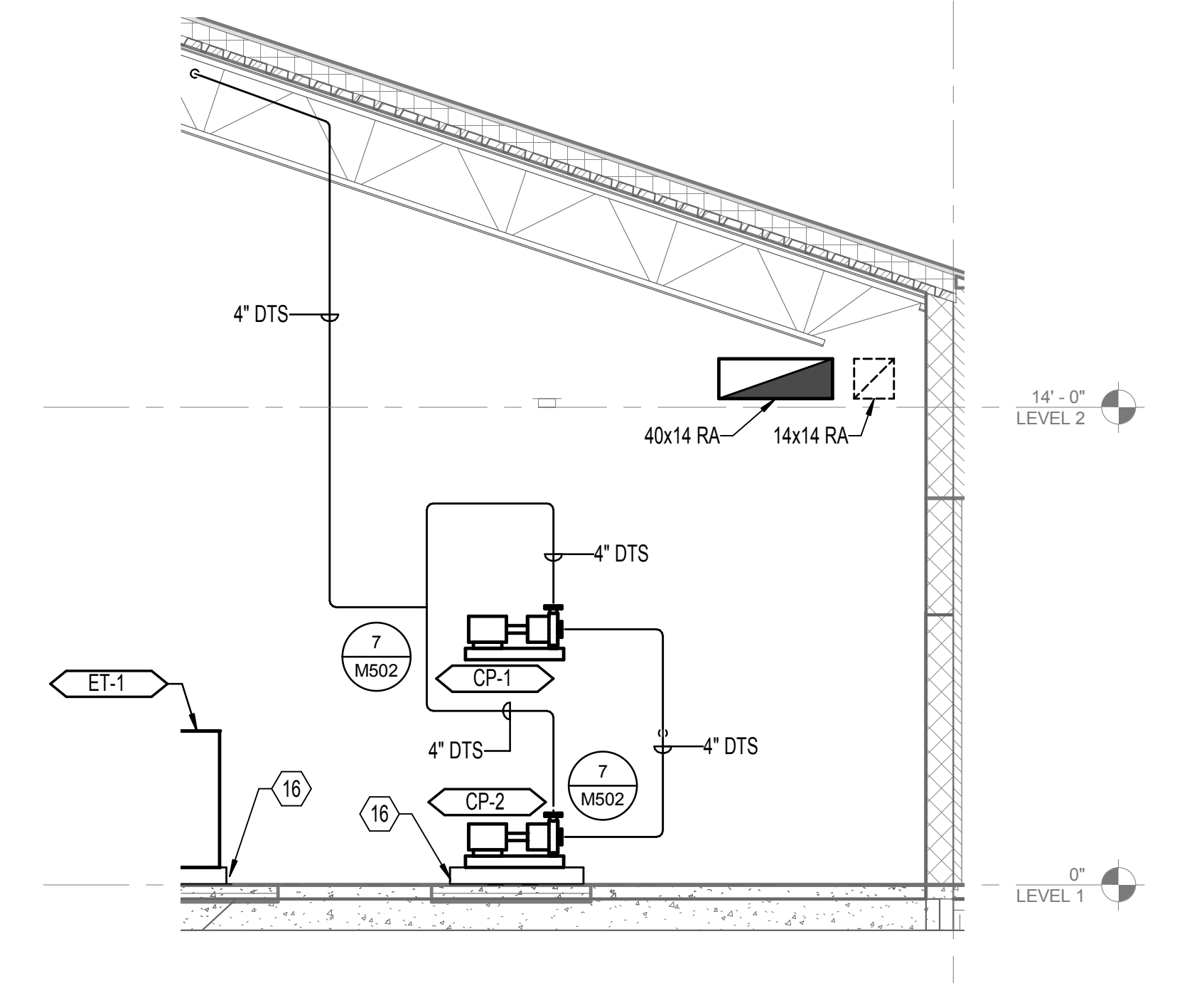




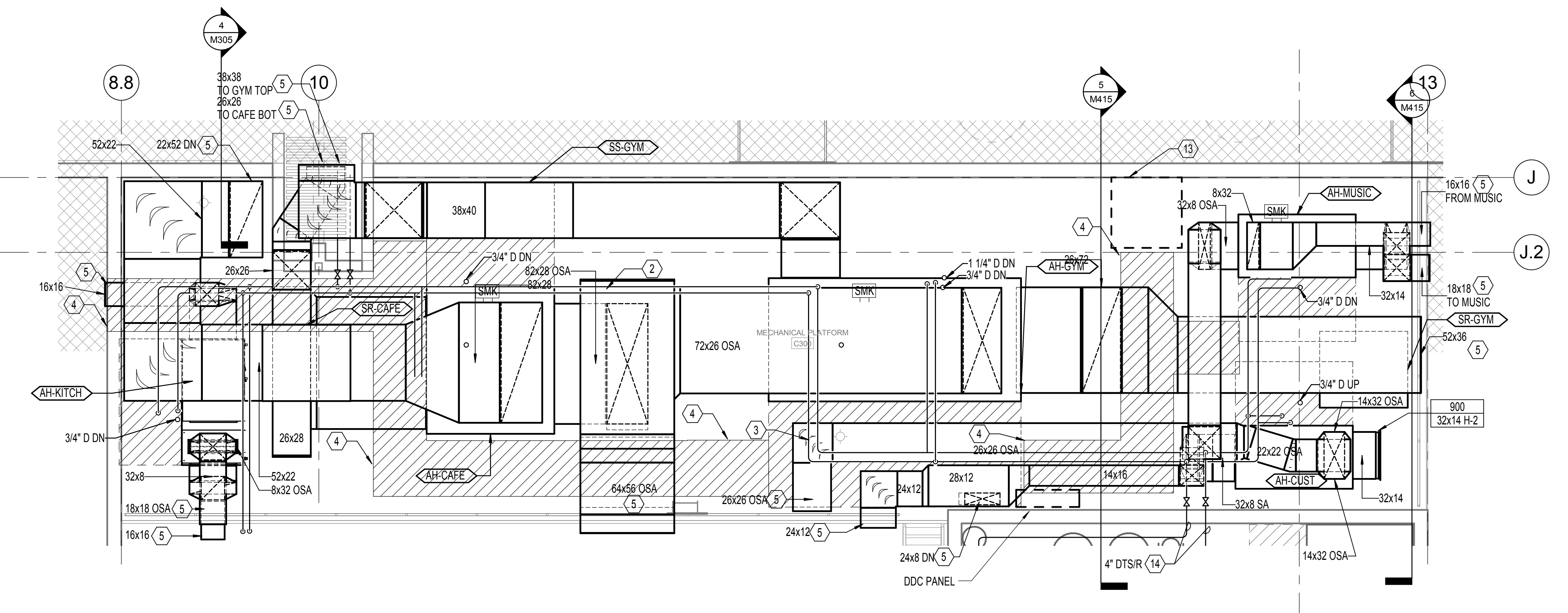
2 ENLARGED PLAN - SECTOR C BOILER ROOM
3/8" = 1'-0"



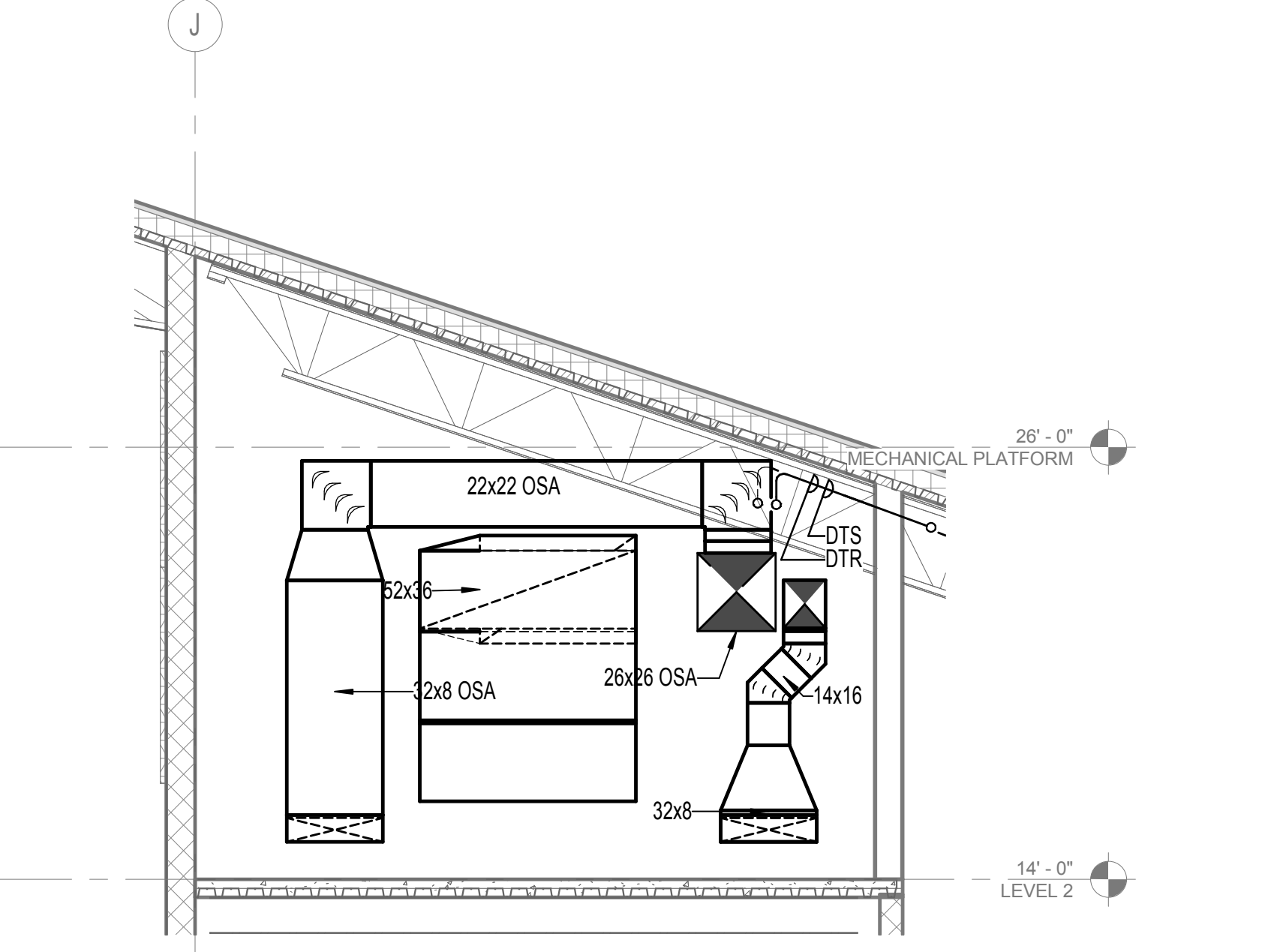
3 BOILER ROOM B-1 FACING EAST
1/4" = 1'-0"



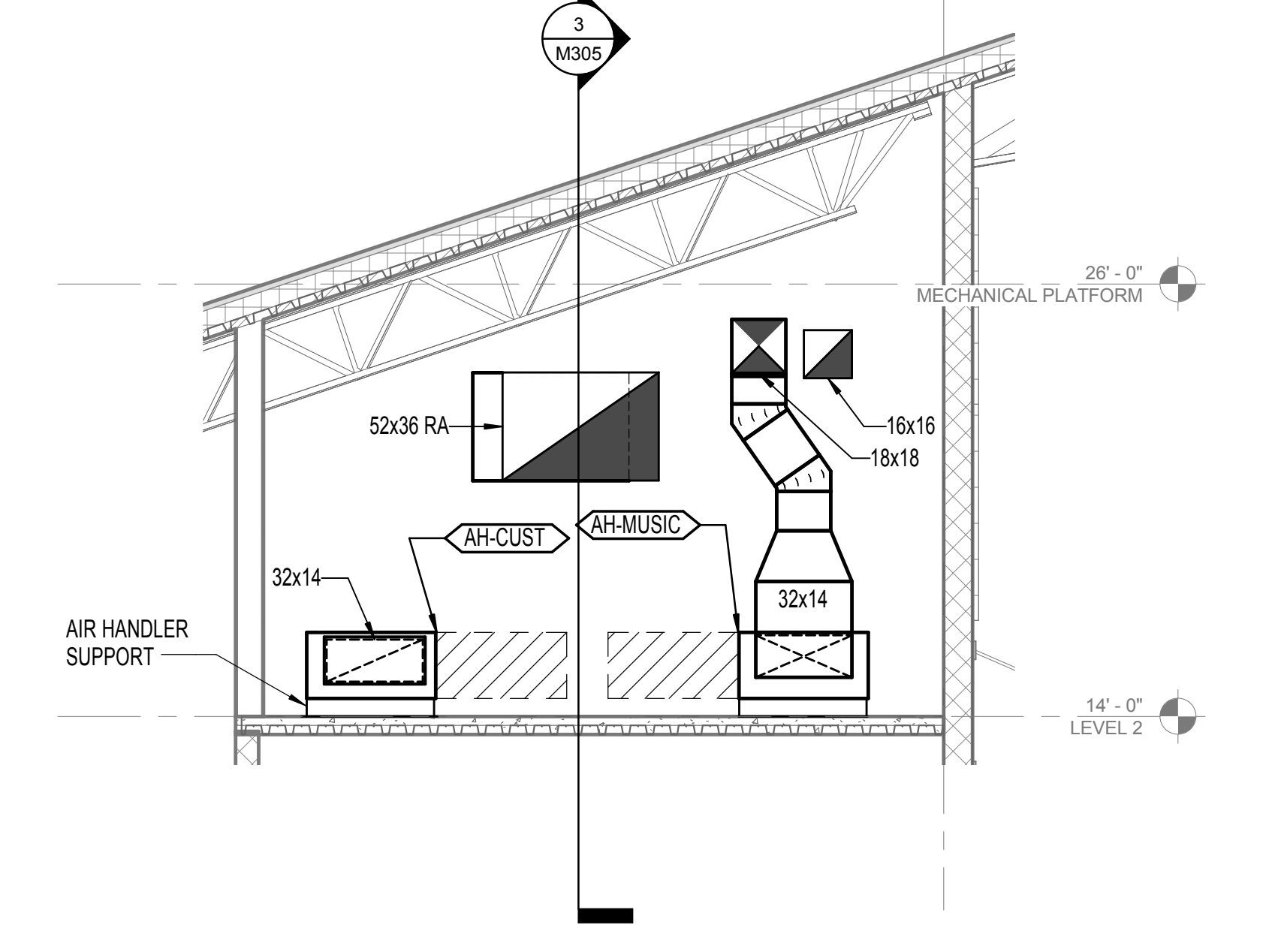
4 BOILER ROOM PUMPS FACING WEST
1/4" = 1'-0"



1 ENLARGED PLAN - SECTOR C MECHANICAL PLATFORM
1/4" = 1'-0"

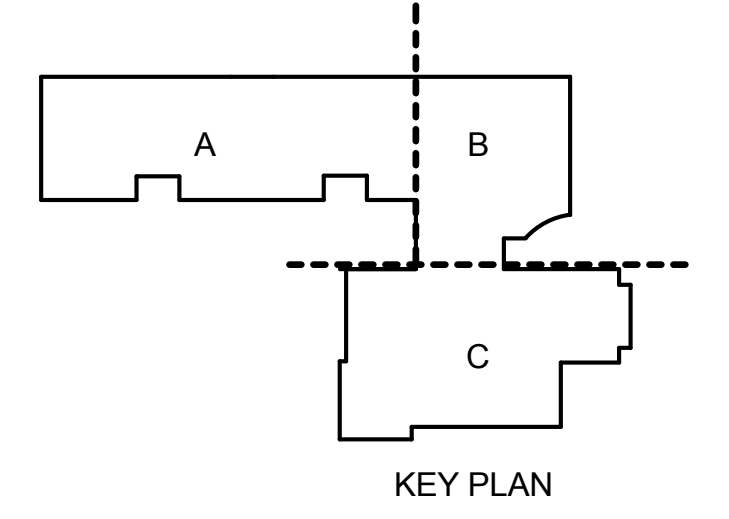


5 SECTOR C PLATFORM EAST SECTION LOOKING EAST
1/4" = 1'-0"



6 SECTOR C PLATFORM EAST SECTION LOOKING WEST
1/4" = 1'-0"

- GENERAL NOTES:**
- A. CONTRACTOR RESPONSIBLE FOR COORDINATING W/ OTHER TRADES. INCLUDE NECESSARY OFFSETS AND ROUTE CHANGES REQUIRED FOR COORDINATION.
- NOTES:**
1. TERMINATE AT EXTERIOR WALL, ABOVE CANOPY.
 2. ROUTE ABOVE, THROUGH TRUSS OPENINGS.
 3. ROUTE ABOVE, BETWEEN TRUSSES.
 4. PROVIDE MINIMUM OF 3' x 6' 8" AFF MAINTENANCE CLEARANCE.
 5. CONTINUED ON M115.
 6. CONTINUED ON M105.
 7. BOILER VENT (ABOVE) AND COMBUSTION AIR (BELOW) (TYP. 2).
 8. WATER HEATER SIDEWALL TERMINATION KIT WITH SIDE BY SIDE VENTS AND COMBUSTION AIR CONNECTIONS. MAINTAIN MIN. 12" DISTANCE FROM BOILER VENT TERMINATION. MOUNT AT 14" AFF.
 9. BOILER VENT TERMINATION TO HAVE A 30 DEGREE ELBOW DOWN WITH BIRD SCREEN. PROVIDE MIN 12" HORIZONTAL SEPARATION BETWEEN ADJACENT VENTS. MAINTAIN MAX POSSIBLE HORIZONTAL DISTANCE FROM DOORS. SLOPE BACK TO BOILER AT MIN 1/4" PER FOOT.
 10. BOILER COMBUSTION AIR OPENING WITH WEATHER HOOD AND SCREEN. INSTALL 36" DIRECTLY BENEATH CORRESPONDING BOILER VENT TERMINATION.
 11. PROVIDE STEEL SUPPORT RACK FOR UPPER PUMP.
 12. TERMINATE CONDENSATE DRAIN AT FLOOR SINK. SEE PLUMBING PLANS.
 13. TECH PANEL AND CONDUIT AT THIS LOCATION. COORDINATE W/ TECHNOLOGY CONTRACTOR TO PROVIDE CLEARANCE.
 14. CONTINUED ON 1/M415.
 15. CONTINUED ON 2/M415.
 16. SEE ARCH DWGS FOR CONCRETE HOUSEKEEPING PAD. COORDINATE DIMENSIONS W/ FINAL EQUIPMENT REQUIREMENTS.
 17. LOCATION OF EPO (EMERGENCY POWER OFF) SWITCH TO BE PROVIDED BY DIV. 26 FOR SHUT DOWN OF POWER TO BOILERS. SEE NOTE 1 ON E701. COORDINATE METHOD OF SHUTDOWN WITH BOILER MANUFACTURER AND DIV 26.

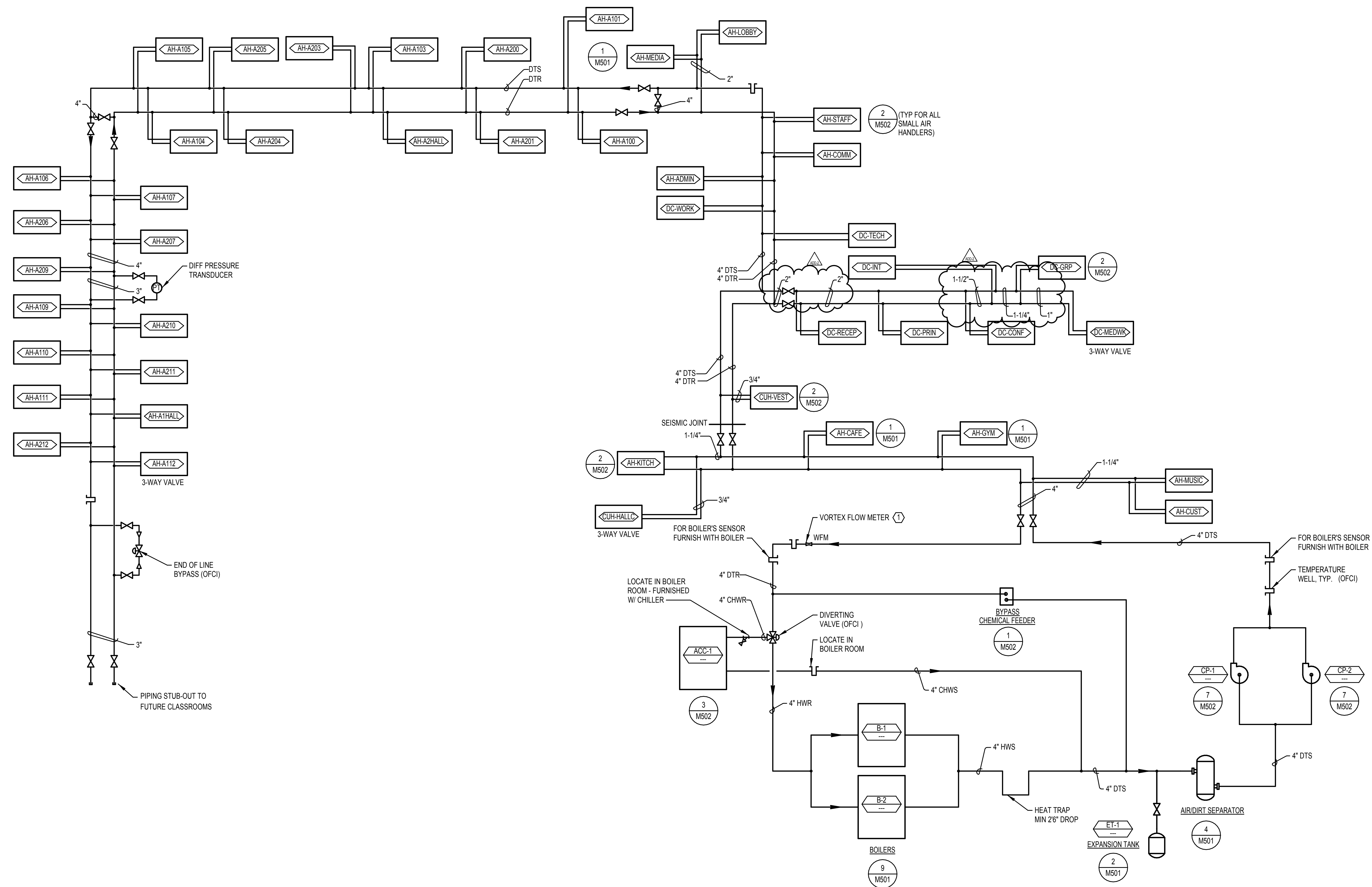


GENERAL NOTES:

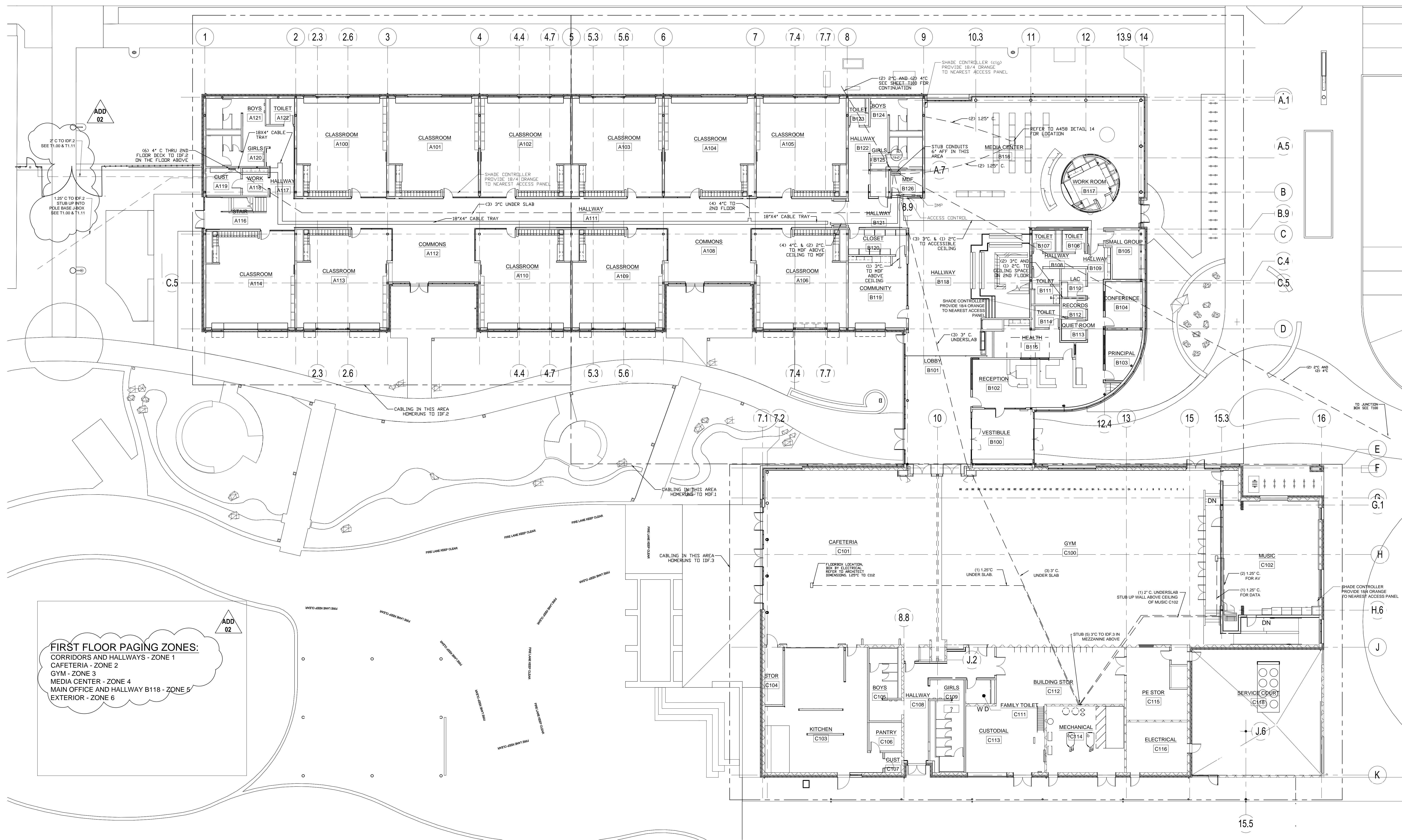
- A. FOR RUNOUT SIZES TO AIR HANDLER COILS, SEE AIR HANDLER SCHEDULE.
- B. FOR RUNOUT SIZES TO DUCT-MOUNTED COILS, SEE DUCT COIL SCHEDULE.
- C. SEE PLANS FOR ADDITIONAL ISOLATION VALVES.

NOTES:

- 1. PROVIDE STRAIGHT PIPE UPSTREAM AND DOWNSTREAM PER MANUFACTURER'S REQUIREMENTS

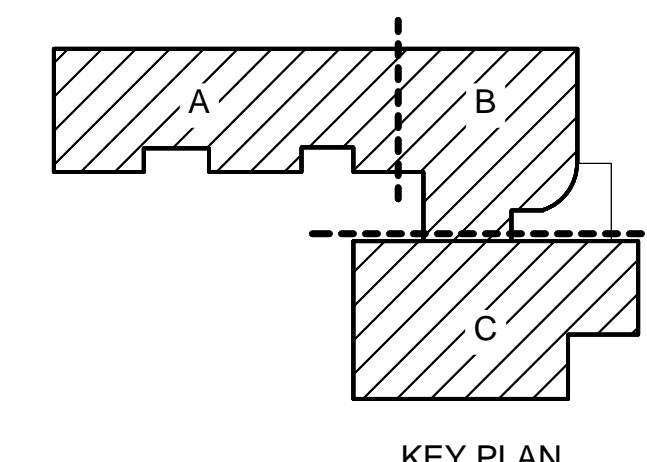


1 DUAL TEMPERATURE WATER SYSTEM DIAGRAM
NONE



FIRST FLOOR PAGING ZONES:
CORRIDORS AND HALLWAYS - ZONE 1
CAFETERIA - ZONE 2
GYM - ZONE 3
MEDIA CENTER - ZONE 4
MAIN OFFICE AND HALLWAY B118 - ZONE 5
EXTERIOR - ZONE 6

OVERALL FIRST FLOOR PLAN
5/6" = 1'-0"

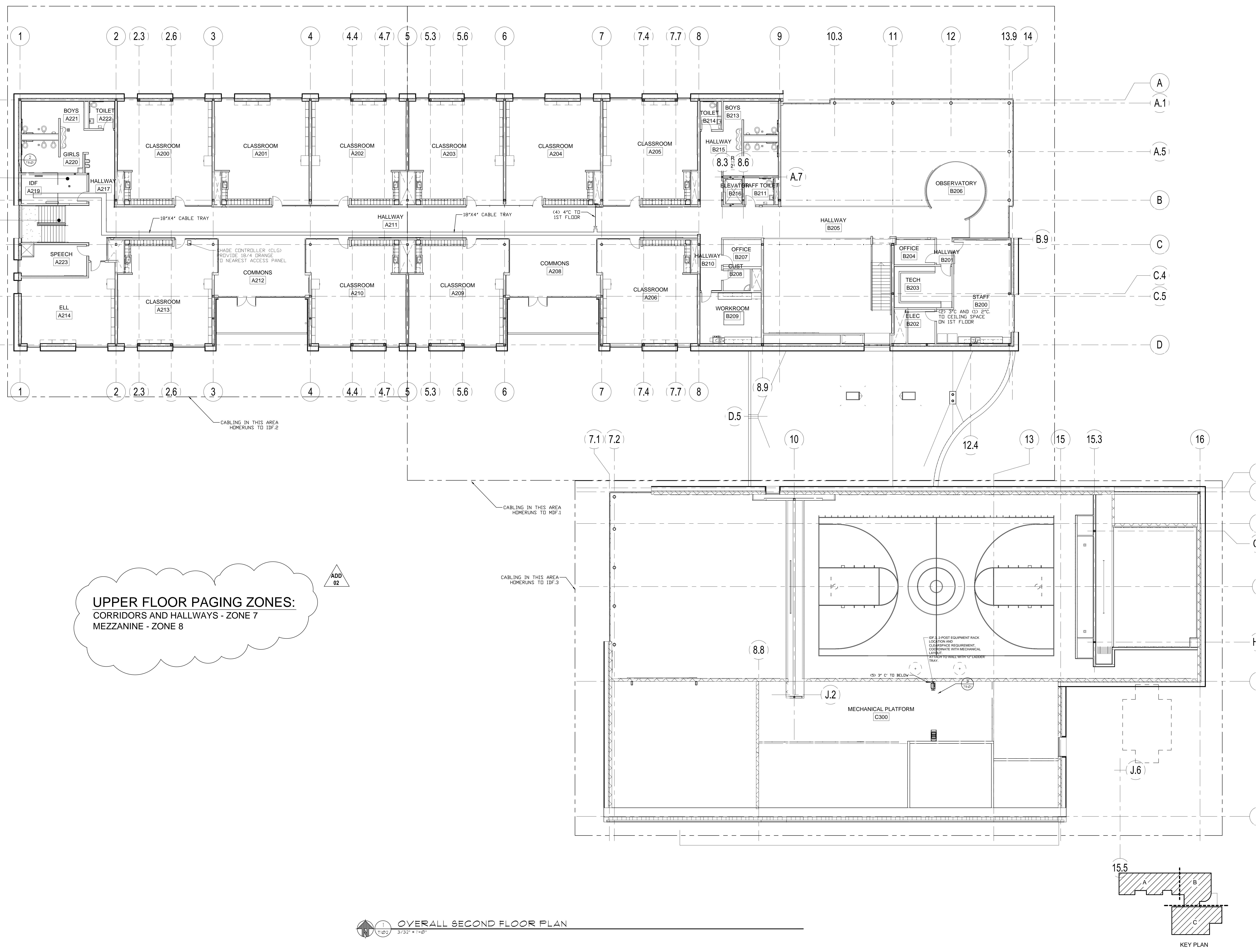


BID DOCUMENT SET

Eugene School District
44 W. BROADWAY ST. EUGENE, OREGON
River Road / El Camino del Rio Elementary

OVERALL FIRST FLOOR

PROJECT #	REVISIONS
1337.00	REVISIONS
ISSUE DATE:	15 FEB 2016
DRAWN:	DDH
CHECKED:	GES



UPPER FLOOR PAGING ZONES:
CORRIDORS AND HALLWAYS - ZONE 7
MEZZANINE - ZONE 8

ADD
02

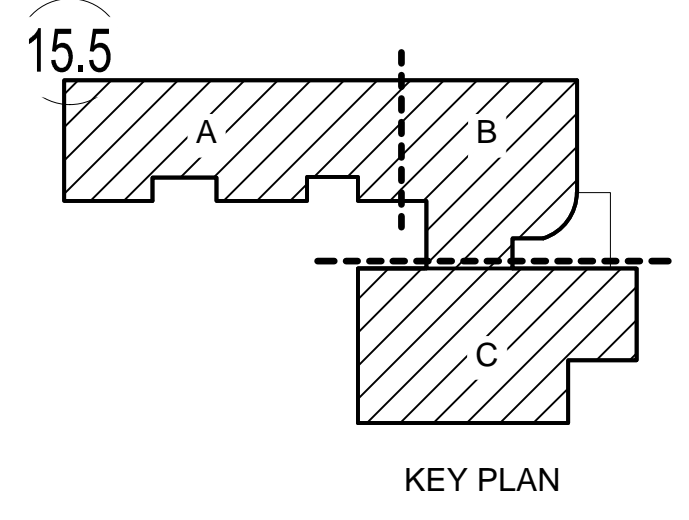
CABLING IN THIS AREA
HOMERUNS TO IDF.2

CABLING IN THIS AREA
HOMERUNS TO IDF.1

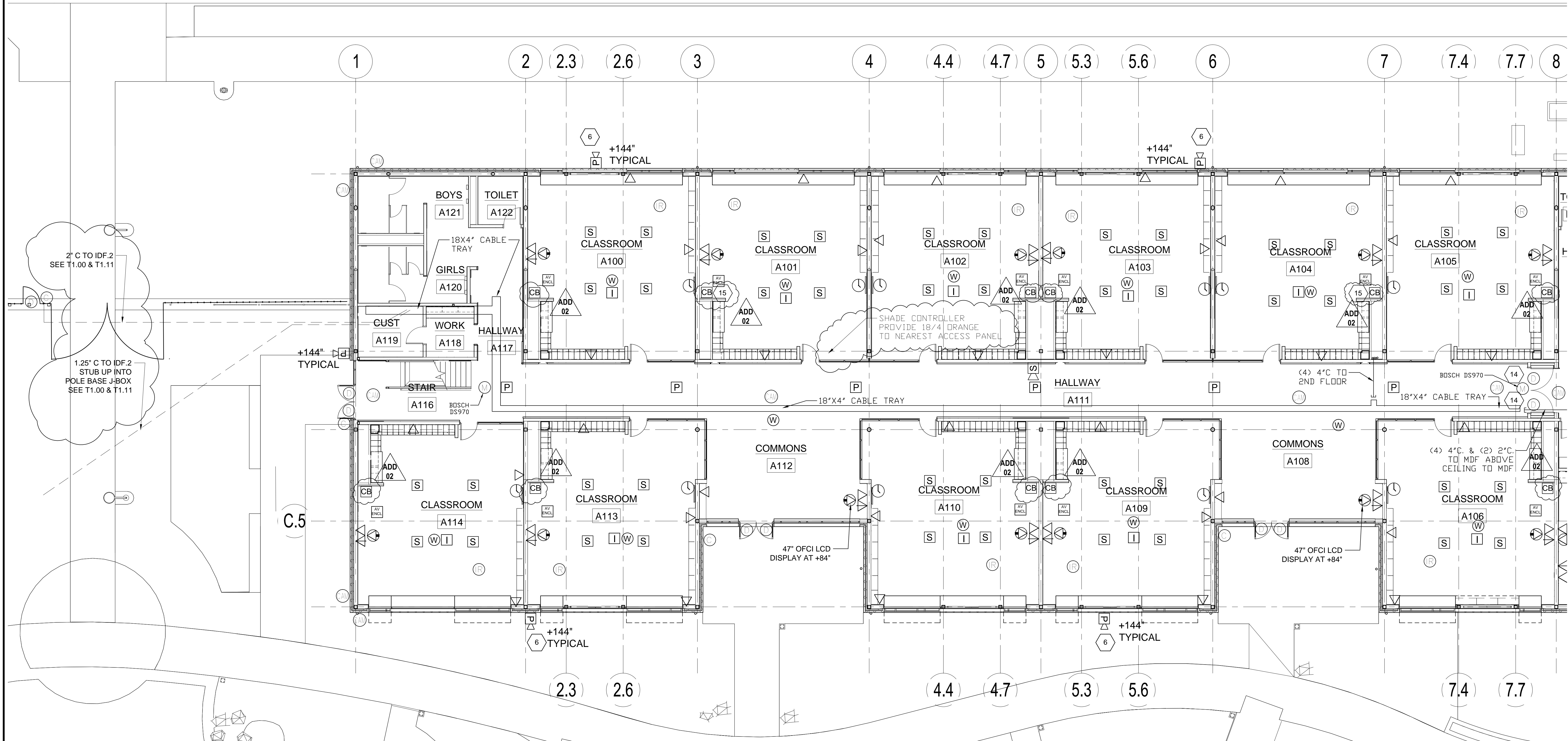
CABLING IN THIS AREA
HOMERUNS TO IDF.3

IDF. 2 POST EQUIPMENT RACK
LOCATION AND
CLEARANCE REQUIREMENT.
COORDINATE WITH MECHANICAL
LAYOUT.
PARTICULAR TO WALL WITH 12" LADDER
TRAY.

MECHANICAL PLATFORM
C300



OVERALL SECOND FLOOR PLAN
3/32" = 1'-0"



PARTIAL FIRST FLOORPLAN - SECTOR A 1/8" = 1'-0"

PLAN SYMBOL LEGEND

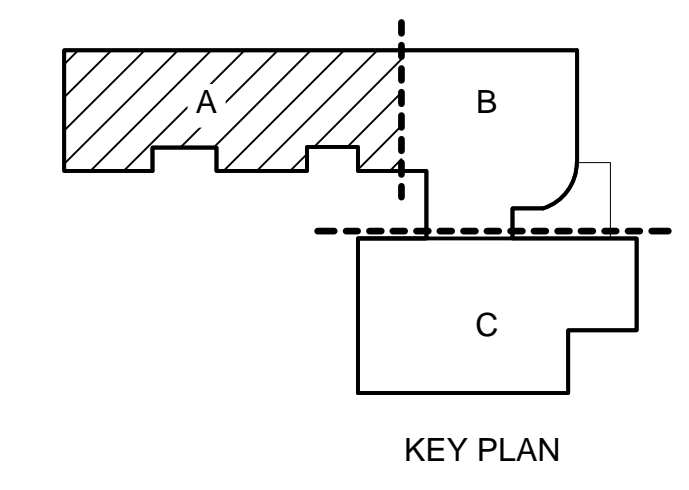
- ▲ SINGLE DATA LOCATION FOR CCTV. MOUNT AT 15'-0" UNLESS OTHERWISE NOTED. PROVIDE (1) CATEGORY 6A BLUE CABLE.
▲ DUAL DATA LOCATION. PROVIDE (2) CATEGORY 6A BLUE CABLES.
▲ TRIPLE DATA LOCATION. (3) CATEGORY 6A BLUE CABLES.
▲ PRESENTER LOCATION. PROVIDE (1) PRE-TERMINATED MINI-AUDIO, VGA VIDEO CABLE TO SHORT THROW PROJECTOR. PROVIDE (1) PRE-TERMINATED HDMI CABLE TO SHORT THROW PROJECTOR AND LCD FLAT PANEL.
▲ WIRELESS ACCESS POINT. (2) CATEGORY 6A YELLOW CABLE. COIL 20' SLACK LOOP AT LOCATION INDICATED. TERMINATE IN 2-PORT MODULAR JACK BOX AMP # 1116697-1 OR EQUAL. CEILING MOUNTED UNLESS OTHERWISE NOTED.
▲ CAMERA LOCATION AT 16' AFF FOR EXTERIOR. CEILING MOUNT FOR INTERIOR UNLESS OTHERWISE NOTED. PROVIDE (1) CATEGORY 6A GREEN CABLE. PROVIDE WP COVER AND COIL 12' SLACK IN EXTERIOR BOXES.
▲ OWNER FURNISHED SHORT-THROW DISPLAY. OWNER FURNISHED AND INSTALLED PROJECTOR AND MOUNT. PROVIDE (1) CATEGORY 6A BLUE CABLE TO THE NEAREST IDF/MDF. SEE TELECOM DETAILS.
▲ 24x24 CEILING ENCLOSURE FOR AV PAGING CONTROLS. PROVIDE (4) CATEGORY 6A CABLES TO NEAREST TELECOM ROOM.
▲ WALL MOUNT PAGING SPEAKER PROVIDE 18AWG GRAY SHIELDED TWISTED PAIR CABLE. UP TO 10 SPEAKERS MAY BE CONNECTED IN SERIES.
▲ CEILING MOUNT PAGING SPEAKER PROVIDE 18AWG GRAY SHIELDED TWISTED PAIR CABLE. UP TO 10 SPEAKERS MAY BE CONNECTED IN SERIES. REFER TO ARCHITECT REFLECTED CEILING PLAN FOR EXACT PLACEMENT.
▲ CEILING MOUNT INTERCOM SPEAKER PROVIDE 22/4 GRAY SHIELDED CABLE TO THE AMX ENCLOSURE. REFER TO ARCHITECT REFLECTED CEILING PLAN FOR EXACT PLACEMENT.
▲ 8-BUTTON AMX KEYPAD CONTROL CALL BUTTON AND SHADE CONTROL SWITCH. CONNECT USING AX-LINK CABLE TP THE 8-BUTTON KEYPAD TO ADJACENT CLASSROOM 8-BUTTON AMX KEYPAD OR AS NOTED. REFER TO TO ARCHITECT SPECIFICATION FOR SHADE CONTROL SWITCH.
▲ CEILING MOUNTED VOICE RE-ENFORCEMENT SPEAKER. REFER TO ARCHITECT REFLECTED CEILING PLAN FOR EXACT PLACEMENT.
▲ SURFACE MOUNTED 12" ANALOG CLOCK AT 96" AFF. UNLESS OTHERWISE NOTED.
▲ CEILING MOUNTED IR SENSOR FOR CLASSROOM SOUND SYSTEMS. PROVIDE CATEGORY 6 CABLE TO THE CLASSROOM AMPLIFIER.
○ DOOR CONTACT - PROVIDE 1/2" CONDUIT TO DOOR FRAME. INSTALL OWNER FURNISHED ORANGE 22/2 CABLE TO THE SECURITY PANEL OR ZONE EXPANDER.
○ ACCESS PINPAD PROVIDE 1/2" CONDUIT TO DOUBLE GANG BOX AT +48" AFF. INSTALL OWNER FURNISHED ORANGE 22AWG 3-PAIR, CONNECT-AIR OR APPROVED TO THE ACCESS PANEL OR ZONE EXPANDER. REFER TO KEYED NOTE FOR PINPAD TYPE. PIN PAD LOCATIONS MUST BE SEPARATED BY A MINIMUM OF 12" O.C. TO PREVENT FALSE CARD READS.
○ MOTION SENSOR - PROVIDE 1/2" CONDUIT TO SINGLE GANG BOX AT +108" AFF. INSTALL OWNER FURNISHED ORANGE 22/4 TO THE INTRUSION PANEL OR ZONE EXPANDER.
○ CARD READER - PROVIDE 3/4" CONDUIT TO SINGLE GANG BOX AT +48" AFF. COORDINATE DEVICES PLACEMENT WITH DOOR INSTALLER AS SOME DEVICES MAY BE LOCATED ON DOOR MULLIONS. INSTALL OWNER FURNISHED ORANGE 22AWG 4-PAIR SHIELDED TO THE ACCESS PANEL.
○ SECURITY SYSTEM SIREN. INSTALL OWNER FURNISHED ORANGE 16/2 TO INTRUSION PANEL.
○ DMP SECURITY KEYPAD PROVIDE 1/2" CONDUIT TO DOUBLE GANG BOX AT +48" AFF. INSTALL OWNER FURNISHED ORANGE 18/4 TO THE SECURITY PANEL.

KEYED NOTES:

- 1. INSTALL OWNER FURNISHED NON-METALLIC COVER
2. ARMING/DISARMING KEYPAD LOCATION, GREY. HIDS355AGK09. MAINTAIN 12" CLEAR BETWEEN ARMING AND DOOR CONTROL PINPADS.
3. DOOR CONTROL KEYPAD LOCATION, WHITE. HIDS355ABK09. PINPAD CONTROL OF LOCK AT MAIN OFFICE VESTIBULE ENTRY.
4. LOCK DOWN INITIATION BUTTON.
5. PROVIDE RACEWAY TO ACCESSIBLE CEILING SPACE IN B115
6. PROVIDE 12X12X4 BACKBOX AND 1/2" C. TO ACCESSIBLE SPACE FOR WALL MOUNTED PAGING SPEAKER. MOUNT AT 108" AFF UNLESS OTHERWISE NOTED.
7. FLOORBOX LOCATION. CONNECT HDMI AND VGA TO PRESENTER LOCATION. PROVIDE (2) CAT 6A CABLES TO MDF. REFER TO ARCHITECT ELEVATIONS FOR DEVICE PLACEMENT ON MEDIA CENTER WALL.
8. MULTI-PURPOSE VIDEO CONNECTION.
9. TORIMAX MOTORIZED SLIDING DOOR. PROVIDE DOOR CONTACTS AND CONNECTION. PROVIDE CAMDEN CM25/3 AND LOCAL REX FOR DOORS (4) TOTAL AT VESTIBULE B100.
10. PROVIDE (2) 1" C FROM PRESENTER LOCATION TO CEILING OF MUSIC ROOM FOR PROJECTOR AV CABLEING.
11. PROVIDE CAT 6A TO NEAREST TELECOM ROOM. INSTALL OWNER FURNISHED MOUNT AND LCD TV.
12. DOORS SHALL BE CONNECTED TO A TIMED UNLOCK.
13. MAGNETICALLY HELD DOOR. 16/2 ORANGE TO NEAREST ACCESS CONTROL PANEL. HOLD OPEN POWER SUPPLY AND MAGNETIC DOOR HOLDER BY ELECTRICAL AND DIVISION 8. LOCATE POWER SUPPLY IN MFD/IDF AS SHOWN ON TS.01.
14. HOMERUN AMX AX-LINK CABLE TO NEAREST NX-1200 CONTROLLER.

GENERAL NOTES:

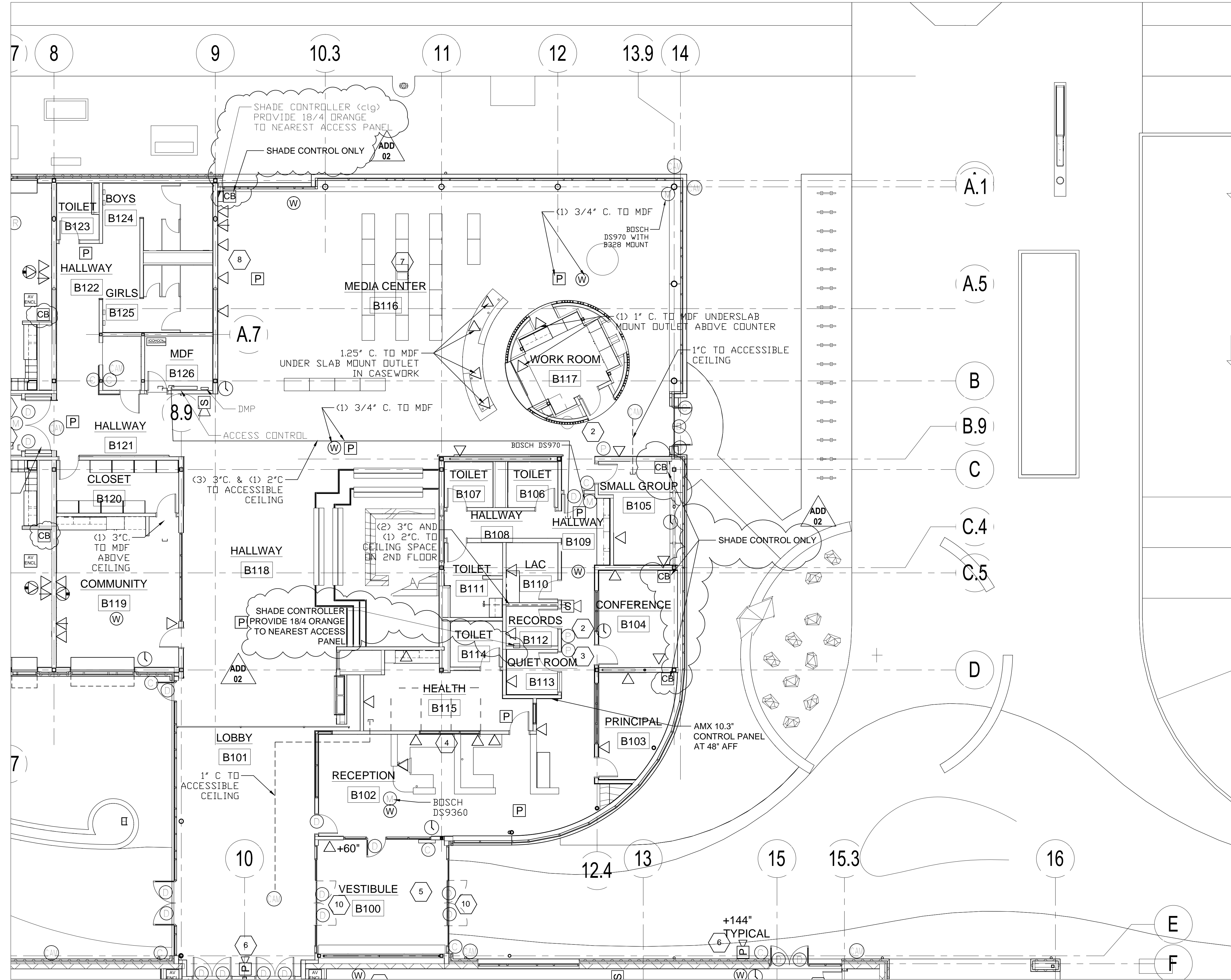
- 1. CCTV SECURITY CAMERAS AS SHOWN CABLING AND ROUGH IN ONLY. CAMERA, HARDWARE AND SOFTWARE IS BY OTHERS.
2. CLASSROOM SOUND SYSTEMS INCLUDE A CEILING OR WALL MOUNTED INFRA RED SENSOR. PROVIDE 1 PER EQUIPPED ROOM. COORDINATE WITH ARCHITECT REFLECTED CEILING PLANS. AVOID PLACEMENT WHERE INTERFERENCE FROM OTHER CLASSROOM SPACES WILL OCCUR.
3. PROVIDE (1) 20AWG 4 CONDUCTOR CABLE BETWEEN MOTORIZED SHADE CONTROLLERS. PROVIDE (1) 20 AWG 4 CONDUCTOR FROM SHADE GROUP CONTROLLERS TO THE NEAREST ACCESS CONTROL PANEL.
4. ALL EXTERIOR DOORS SHALL RECEIVE A DOOR POSITION INDICATOR (DOOR CONTACT) WITH 22AWG 2 CONDUCTOR ORANGE CABLE TO THE NEAREST ACCESS PANEL.
5. PROVIDE (2) 8" SLEEVE FROM CORRIDORS TO EACH CLASSROOM CEILING SPACE FOR DATA AND INTERCOM CABLING. PROVIDE (1) 2" SLEEVE FROM CORRIDOR TO EACH CLASSROOM CEILING FOR SECURITY, ACCESS, INTERCOM AND AMX CABLING.
6. PROVIDE (1) 2" SLEEVE FROM CORRIDORS TO EACH STAFF OFFICE, WORK AREA AND AS REQUIRED FOR PATHWAY FOR INTERCOM, ACCESS, SECURITY AND DATA LOCATIONS.



BID DOCUMENT SET Eugene School District 44 W. BROADWAY ST. EUGENE, OREGON River Road / El Camino del Rio Elementary

FIRST FLOOR PLAN SECTOR - A

Table with columns: PROJECT #, ISSUE DATE, DRAWN, CHECKED, REVISION, DATE, REVISION, DATE. Includes project number T1.11.



PARTIAL FIRST FLOORPLAN - SECTOR B

PLAN SYMBOL LEGEND

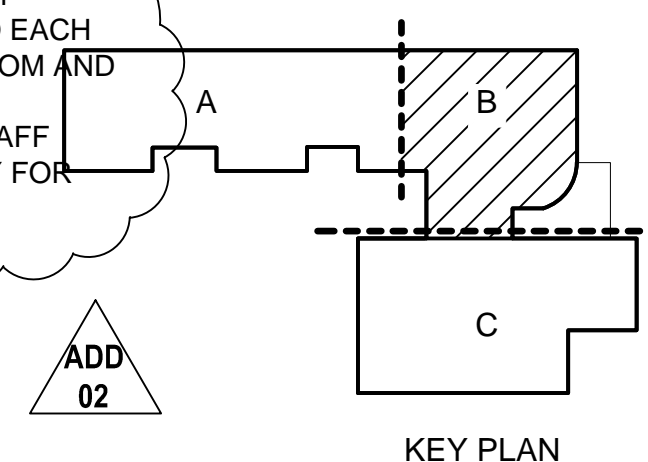
- Single data location for CCTV... Dual data location... Triple data location... Presenter location... Wireless access point... Camera location... Owner furnished short throw display... Wall mount paging speaker... Ceiling mount paging speaker... Ceiling mount intercom speaker... Ceiling mounted voice re-enforcement speaker... Ceiling mounted IR sensor... Door contact... Access pinpad... Motion sensor... Card reader... DMP security keypad... Security system siren.

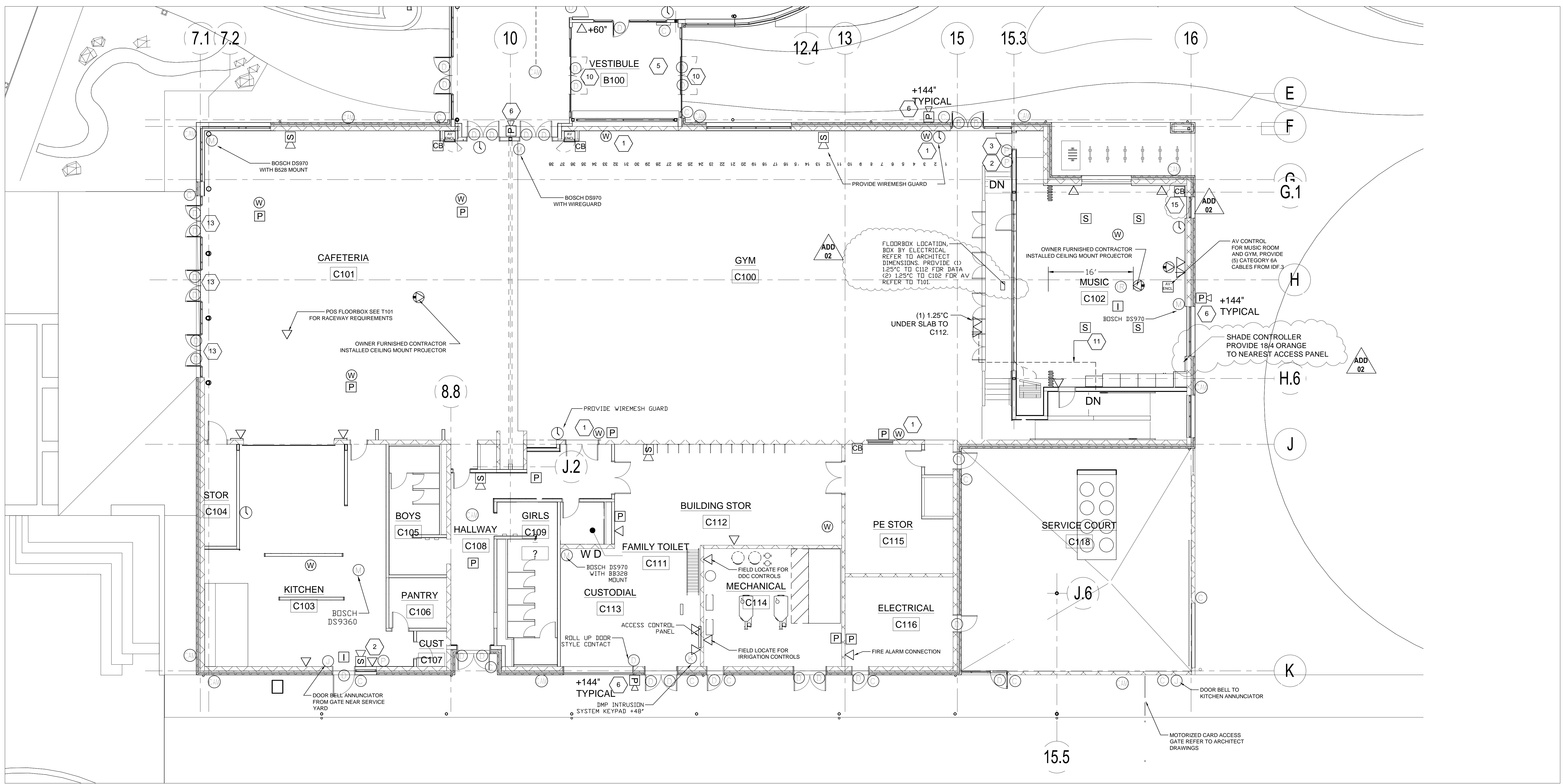
KEYED NOTES:

- 1. INSTALL OWNER FURNISHED NON-METALLIC COVER ARMING/DISARMING KEYPAD LOCATION... 2. MAINTAIN 12" CLEAR BETWEEN ARMING AND DOOR CONTROL PINPADS... 3. DOOR CONTROL KEYPAD LOCATION... 4. LOCK DOWN INITIATION BUTTON... 5. PROVIDE RACEWAY TO ACCESSIBLE CEILING SPACE... 6. PROVIDE 12X12X4 BACKBOX AND 1/2" C. TO ACCESSIBLE SPACE FOR WALL MOUNTED PAGING SPEAKER... 7. FLOORBOX LOCATION... 8. REFER TO ARCHITECT ELEVATIONS FOR DEVICE PLACEMENT ON MEDIA CENTER WALL... 9. MULTI-PURPOSE VIDEO CONNECTION... 10. TORMAX MOTORIZED SLIDING DOOR... 11. PROVIDE (2) 1" C. FROM PRESENTER LOCATION TO CEILING OF MUSIC ROOM... 12. PROVIDE CAT 6A TO NEAREST TELECOM ROOM... 13. DOORS SHALL BE CONNECTED TO A TIMED UNLOCK... 14. MAGNETICALLY HELD DOOR... 15. HOMERUN AMX AX-LINK CABLE TO NEAREST NX-1200 CONTROLLER.

GENERAL NOTES:

- 1. CCTV SECURITY CAMERAS AS SHOWN CABLING AND ROUGH IN ONLY... 2. CLASSROOM SOUND SYSTEMS INCLUDE A CEILING OR WALL MOUNTED INFRARED SENSOR... 3. PROVIDE (1) 20AWG 4 CONDUCTOR CABLE BETWEEN MOTORIZED SHADE CONTROLLERS... 4. ALL EXTERIOR DOORS SHALL RECEIVE A DOOR POSITION INDICATOR... 5. PROVIDE (2) 2" SLEEVE FROM CORRIDORS TO EACH CLASSROOM CEILING SPACE... 6. PROVIDE (1) 2" SLEEVE FROM CORRIDORS TO EACH STAFF OFFICE, WORK AREA AND AS REQUIRED FOR PATHWAY FOR INTERCOM, ACCESS, SECURITY AND DATA LOCATIONS.





PARTIAL FIRST FLOORPLAN - SECTOR C

PLAN SYMBOL LEGEND

- ▲ SINGLE DATA LOCATION FOR CCTV MOUNT AT 15'-0" UNLESS OTHERWISE NOTED. PROVIDE (1) CATEGORY 6A BLUE CABLE.
▲ DUAL DATA LOCATION. PROVIDE (2) CATEGORY 6A BLUE CABLES.
▲ TRIPLE DATA LOCATION. (3) CATEGORY 6A BLUE CABLES.
▲ PRESENTER LOCATION. PROVIDE (1) PRE-TERMINATED MINI-AUDIO, VGA VIDEO CABLE TO SHORT THROW PROJECTOR. PROVIDE (1) PRE-TERMINATED HDMI CABLE TO SHORT THROW PROJECTOR AND LCD FLAT PANEL.
W WIRELESS ACCESS POINT. (2) CATEGORY 6A YELLOW CABLE. COIL 20' SLACK LOOP AT LOCATION INDICATED. TERMINATE IN 2-PORT MODULAR JACK BOX AMP # 1116697-1 OR EQUAL. CEILING MOUNTED UNLESS OTHERWISE NOTED.
CAMERA LOCATION AT 16' AFF FOR EXTERIOR. CEILING MOUNT FOR INTERIOR UNLESS OTHERWISE NOTED. PROVIDE (1) CATEGORY 6A GREEN CABLE. PROVIDE WP COVER AND COIL 12' SLACK IN EXTERIOR BOXES.
OWNER FURNISHED SHORT THROW DISPLAY. INSTALL OWNER FURNISHED PROJECTOR AND MOUNT. PROVIDE (1) CATEGORY 6A BLUE CABLE TO THE NEAREST IDF/MDF. SEE TELECOM DETAILS.
24x24 CEILING ENCLOSURE FOR AV/PAGING/CONTROLS. PROVIDE (4) CATEGORY 6A CABLES TO NEAREST TELECOM ROOM.

- P WALL MOUNT PAGING SPEAKER PROVIDE 18AWG GRAY SHIELDED TWISTED PAIR CABLE. UP TO 10 SPEAKERS MAY BE CONNECTED IN SERIES.
P CEILING MOUNT PAGING SPEAKER PROVIDE 18AWG GRAY SHIELDED TWISTED PAIR CABLE. UP TO 10 SPEAKERS MAY BE CONNECTED IN SERIES. REFER TO ARCHITECT REFLECTED CEILING PLAN FOR EXACT PLACEMENT.
I CEILING MOUNT INTERCOM SPEAKER PROVIDE 22/4 GRAY SHIELDED CABLE TO THE AMX ENCLOSURE. REFER TO ARCHITECT REFLECTED CEILING PLAN FOR EXACT PLACEMENT.
CB 8-BUTTON AMX KEYPAD CONTROL, CALL BUTTON AND SHADE CONTROL SWITCH. CONNECT USING AX-LINK CABLE TO THE 8-BUTTON KEYPAD TO ADJACENT CLASSROOM 8-BUTTON AMX KEYPAD OR AS NOTED. REFER TO TO ARCHITECT SPECIFICATION FOR SHADE CONTROL SWITCH.
S CEILING MOUNTED VOICE RE-ENFORCEMENT SPEAKER. REFER TO ARCHITECT REFLECTED CEILING PLAN FOR EXACT PLACEMENT.
L SURFACE MOUNTED 12" ANALOG CLOCK AT 96" AFF. UNLESS OTHERWISE NOTED
C CEILING MOUNTED IR SENSOR FOR CLASSROOM SOUND SYSTEMS. PROVIDE CATEGORY 6 CABLE TO THE CLASSROOM AMPLIFIER.

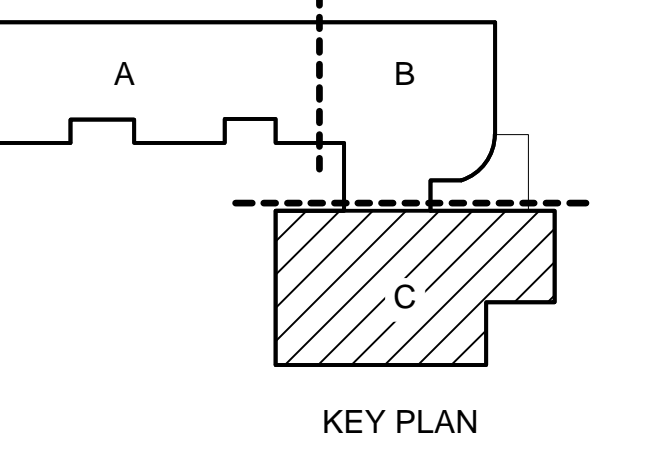
- D DOOR CONTACT - PROVIDE 1/2" CONDUIT TO DOOR FRAME. INSTALL OWNER FURNISHED ORANGE 22/2 CABLE TO THE SECURITY PANEL OR ZONE EXPANDER.
A ACCESS PINPAD PROVIDE 1/2" CONDUIT TO DOUBLE GANG BOX AT +48" AFF. INSTALL OWNER FURNISHED ORANGE 22AWG 3-PAIR. CONNECT-AIR OR APPROVED TO THE ACCESS PANEL OR ZONE EXPANDER. REFER TO KEYED NOTE FOR PINPAD TYPE. PIN PAD LOCATIONS MUST BE SEPARATED BY A MINIMUM OF 12" O.C. TO PREVENT FALSE CARD READS.
M MOTION SENSOR - PROVIDE 1/2" CONDUIT TO SINGLE GANG BOX AT +108" AFF. INSTALL OWNER FURNISHED ORANGE 22/4 TO THE INTRUSION PANEL OR ZONE EXPANDER.
C CARD READER - PROVIDE 3/4" CONDUIT TO SINGLE GANG BOX AT +48" AFF. COORDINATE DEVICES PLACEMENT WITH DOOR INSTALLER AS SOME DEVICES MAY BE LOCATED ON DOOR MULLIONS. INSTALL OWNER FURNISHED ORANGE 22AWG 4-PAIR SHIELDED TO THE ACCESS PANEL. SECURITY SYSTEM SIREN. INSTALL OWNER FURNISHED ORANGE 16/2 TO INTRUSION PANEL
DMP SECURITY KEYPAD PROVIDE 1/2" CONDUIT TO DOUBLE GANG BOX AT +48" AFF. INSTALL OWNER FURNISHED ORANGE 18/4 TO THE SECURITY PANEL.

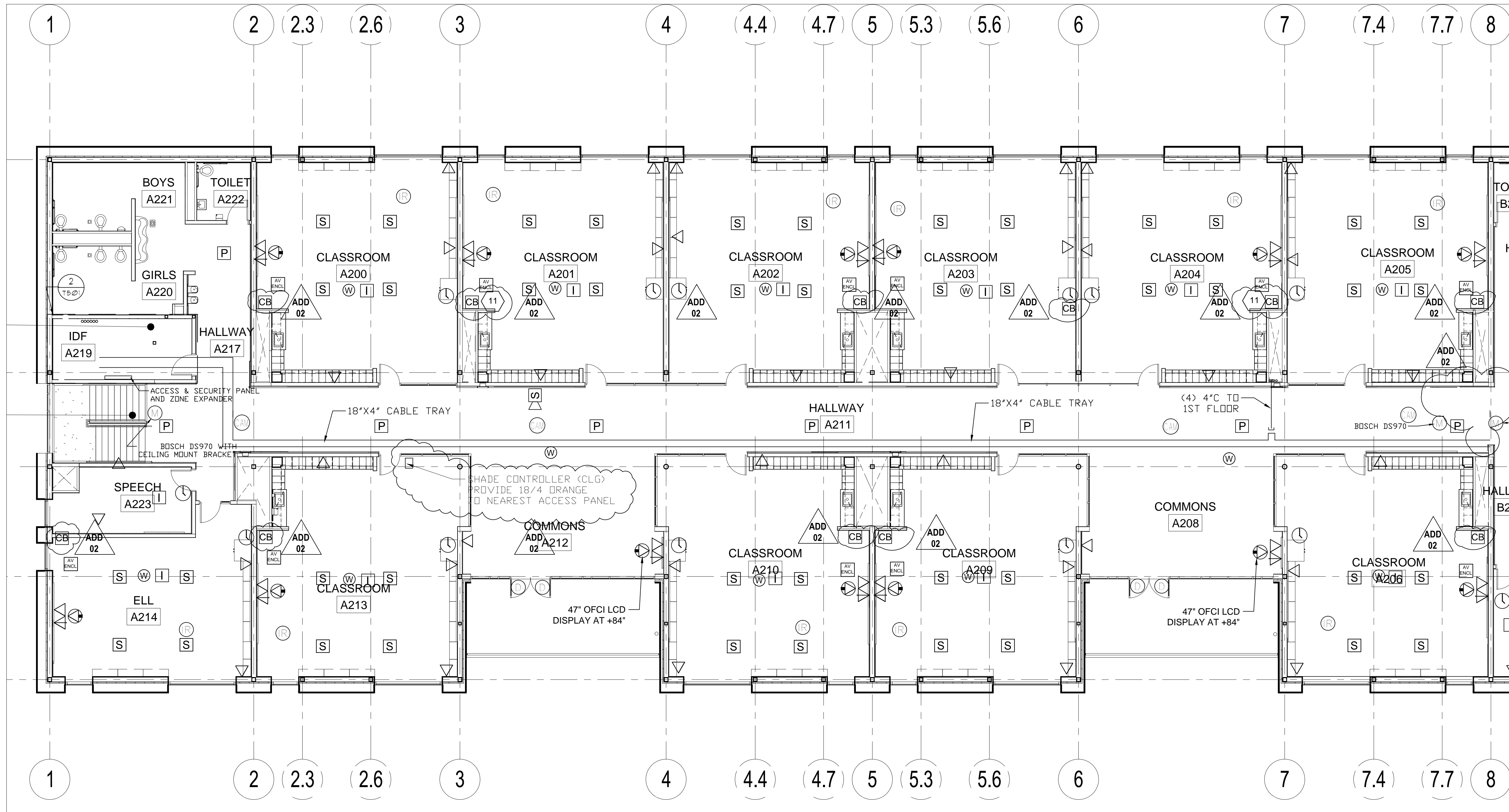
KEYED NOTES:

- 1. INSTALL OWNER FURNISHED NON-METALLIC COVER
2. ARMING/DISARMING KEYPAD LOCATION, GREY. HID5355AGK09. MAINTAIN 12" CLEAR BETWEEN ARMING AND DOOR CONTROL PINPADS.
3. DOOR CONTROL KEYPAD LOCATION, WHITE. HID5355ABK09. PINPAD CONTROL OF LOCK AT MAIN OFFICE VESTIBULE ENTRY.
4. LOCK DOWN INITIATION BUTTON.
5. PROVIDE RACEWAY TO ACCESSIBLE CEILING SPACE IN B115
6. PROVIDE 12X12X4 BACKBOX AND 1/2" C. TO ACCESSIBLE SPACE FOR WALL MOUNTED PAGING SPEAKER. MOUNT AT 108" AFF UNLESS OTHERWISE NOTED.
7. FLOORBOX LOCATION. CONNECT HDMI AND VGA TO PRESENTER LOCATION. PROVIDE (2) CAT 6A CABLES TO MDF. REFER TO ARCHITECT ELEVATIONS FOR DEVICE PLACEMENT ON MEDIA CENTER WALL.
9. MULTI-PURPOSE VIDEO CONNECTION.
10. TORMAX MOTORIZED SLIDING DOOR, PROVIDE DOOR CONTACTS AND CONNECTION. PROVIDE CAMDEN CM25/3 AND LOCAL REX FOR DOORS (4) TOTAL AT VESTIBULE B100.
11. PROVIDE (2) 1" C FROM PRESENTER LOCATION TO CEILING OF MUSIC ROOM FOR PROJECTOR AV CABLING.
12. PROVIDE CAT 6A TO NEAREST TELECOM ROOM. INSTALL OWNER FURNISHED MOUNT AND LCD TV.
13. DOORS SHALL BE CONNECTED TO A TIMED UNLOCK.
14. MAGNETICALLY HELD DOOR, 16/2 ORANGE TO NEAREST ACCESS CONTROL PANEL. HOLD OPEN POWER SUPPLY AND MAGNETIC DOOR HOLDER BY ELECTRICAL AND DIVISION 8. LOCATE POWER SUPPLY IN MDF/IDF AS SHOWN ON T5.01.
15. HOMERUN AMX AX-LINK CABLE TO NEAREST NX-1200 CONTROLLER.

GENERAL NOTES:

- 1. CCTV SECURITY CAMERAS AS SHOWN CABLING AND ROUGH IN ONLY. CAMERA, HARDWARE AND SOFTWARE IS BY OTHERS.
2. CLASSROOM SOUND SYSTEMS INCLUDE A CEILING OR WALL MOUNTED INFRARED SENSOR. PROVIDED 1 PER EQUIPPED ROOM. COORDINATE WITH ARCHITECT REFLECTED CEILING PLANS. AVOID PLACEMENT WHERE INTERFERENCE FROM OTHER CLASSROOM SPACES WILL OCCUR.
3. PROVIDE (1) 20AWG 4 CONDUCTOR CABLE BETWEEN MOTORIZED SHADE CONTROLLERS. PROVIDE (1) 20 AWG 4 CONDUCTOR FROM SHADE GROUP CONTROLLERS TO THE NEAREST ACCESS CONTROL PANEL.
4. ALL EXTERIOR DOORS SHALL RECEIVE A DOOR POSITION INDICATOR (DOOR CONTACT) WITH 22AWG 2 CONDUCTOR ORANGE CABLE TO THE NEAREST ACCESS PANEL.
5. PROVIDE (2) 2" SLEEVE FROM CORRIDORS TO EACH CLASSROOM CEILING SPACE FOR DATA AND INTERCOM CABLING. PROVIDE (1) 2" SLEEVE FROM CORRIDOR TO EACH CLASSROOM CEILING FOR SECURITY, ACCESS, INTERCOM AND AMX CABLING.
6. PROVIDE (1) 2" SLEEVE FROM CORRIDORS TO EACH STAFF OFFICE WORK AREA AND AS REQUIRED FOR PATHWAY FOR INTERCOM, ACCESS, SECURITY AND DATA LOCATIONS.





PARTIAL SECOND FLOOR PLAN - SECTOR A
1/8" = 1'-0"

PLAN SYMBOL LEGEND

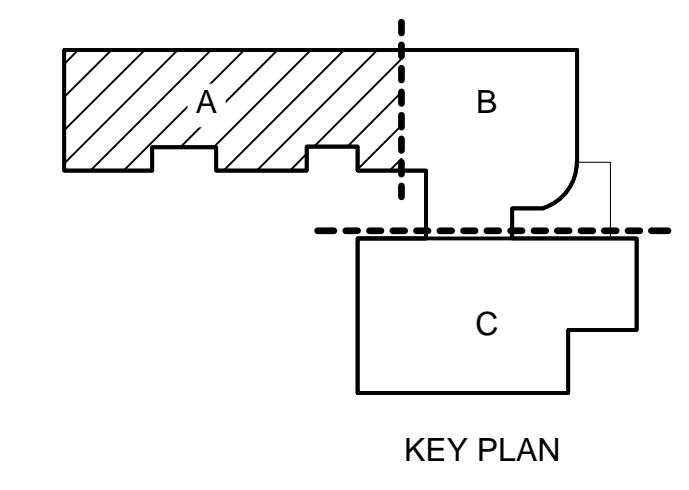
- ▲ SINGLE DATA LOCATION FOR CCTV MOUNT AT 15'-0" UNLESS OTHERWISE NOTED. PROVIDE (1) CATEGORY 6A BLUE CABLE.
- ▲ DUAL DATA LOCATION. PROVIDE (2) CATEGORY 6A BLUE CABLES.
- ▲ TRIPLE DATA LOCATION. (3) CATEGORY 6A BLUE CABLES.
- ▲ PRESENTER LOCATION. PROVIDE (1) PRE-TERMINATED MINI-AUDIO, VGA VIDEO CABLE TO SHORT THROW PROJECTOR. PROVIDE (1) PRE-TERMINATED HDMI CABLE TO SHORT THROW PROJECTOR AND LCD FLAT PANEL.
- W WIRELESS ACCESS POINT. (2) CATEGORY 6A YELLOW CABLE. COIL 20' SLACK LOOP AT LOCATION INDICATED. TERMINATE IN 2-PORT MODULAR JACK BOX AMP # 1116897-1 OR EQUAL. CEILING MOUNTED UNLESS OTHERWISE NOTED.
- CAMERA LOCATION AT 16' AFF FOR EXTERIOR. CEILING MOUNT FOR INTERIOR UNLESS OTHERWISE NOTED. PROVIDE (1) CATEGORY 6A GREEN CABLE. PROVIDE WP COVER AND COIL 12' SLACK IN EXTERIOR BOXES.
- OWNER-FURNISHED SHORT THROW DISPLAY. OWNER FURNISHED. OWNER INSTALLED PROJECTOR AND MOUNT. PROVIDE (1) CATEGORY 6A BLUE CABLE TO THE NEAREST IDF/MDF. SEE TELECOM DETAILS.
- AV ENCL 24x24 CEILING ENCLOSURE FOR AV/PAGING CONTROLS. PROVIDE (4) CATEGORY 6A CABLES TO NEAREST TELECOM ROOM.
- P-1 WALL MOUNT PAGING SPEAKER PROVIDE 18AWG GRAY SHIELDED TWISTED PAIR CABLE. UP TO 10 SPEAKERS MAY BE CONNECTED IN SERIES.
- P CEILING MOUNT PAGING SPEAKER PROVIDE 18AWG GRAY SHIELDED TWISTED PAIR CABLE. UP TO 10 SPEAKERS MAY BE CONNECTED IN SERIES. REFER TO ARCHITECT REFLECTED CEILING PLAN FOR EXACT PLACEMENT.
- I CEILING MOUNT INTERCOM SPEAKER PROVIDE 22/4 GRAY SHIELDED CABLE TO THE AMX ENCLOSURE OR NEAREST IDF/MDF ROOM. REFER TO ARCHITECT REFLECTED CEILING PLAN FOR EXACT PLACEMENT.
- ADD 02 8-BUTTON AMX KEYPAD CONTROL. CALL BUTTON AND SHADE CONTROL SWITCH. CONNECT USING AX-LINK CABLE THE 8-BUTTON KEYPAD TO ADJACENT CLASSROOM 8-BUTTON AMX KEYPAD OR AS NOTED. REFER TO TO ARCHITECT SPECIFICATION FOR SHADE CONTROL SWITCH.
- S CEILING MOUNTED VOICE RE-ENFORCEMENT SPEAKER. REFER TO ARCHITECT REFLECTED CEILING PLAN FOR EXACT PLACEMENT.
- SURFACE MOUNTED 12" ANALOG CLOCK AT 96" AFF. UNLESS OTHERWISE NOTED
- CEILING MOUNTED IR SENSOR FOR CLASSROOM SOUND SYSTEMS. PROVIDE CATEGORY 6 CABLE TO THE CLASSROOM AMPLIFIER.
- DOOR CONTACT - PROVIDE 1/2" CONDUIT TO DOOR FRAME. INSTALL OWNER FURNISHED ORANGE 22/2 CABLE TO THE SECURITY PANEL OR ZONE EXPANDER.
- ACCESS PINPAD PROVIDE 1/2" CONDUIT TO DOUBLE GANG BOX AT +48" AFF. INSTALL OWNER FURNISHED ORANGE 22AWG 3-PAIR. CONNECT-AIR OR APPROVED TO THE ACCESS PANEL OR ZONE EXPANDER. REFER TO KEYED NOTE FOR PINPAD TYPE. PIN PAD LOCATIONS MUST BE SEPARATED BY A MINIMUM OF 12" O.C. TO PREVENT FALSE CARD READS.
- MOTION SENSOR - PROVIDE 1/2" CONDUIT TO SINGLE GANG BOX AT +108" AFF. INSTALL OWNER FURNISHED ORANGE 22/4 TO THE INTRUSION PANEL OR ZONE EXPANDER.
- CARD READER - PROVIDE 3/4" CONDUIT TO SINGLE GANG BOX AT +48" AFF. COORDINATE DEVICES PLACEMENT WITH DOOR INSTALLER AS SOME DEVICES MAY BE LOCATED ON DOOR MULLIONS. INSTALL OWNER FURNISHED ORANGE 22AWG 4-PAIR SHIELDED TO THE ACCESS PANEL.
- SECURITY SYSTEM SIREN. INSTALL OWNER FURNISHED ORANGE 16/2 TO INTRUSION PANEL.
- DMP SECURITY KEYPAD PROVIDE 1/2" CONDUIT TO DOUBLE GANG BOX AT +48" AFF. INSTALL OWNER FURNISHED ORANGE 18/4 TO THE SECURITY PANEL.

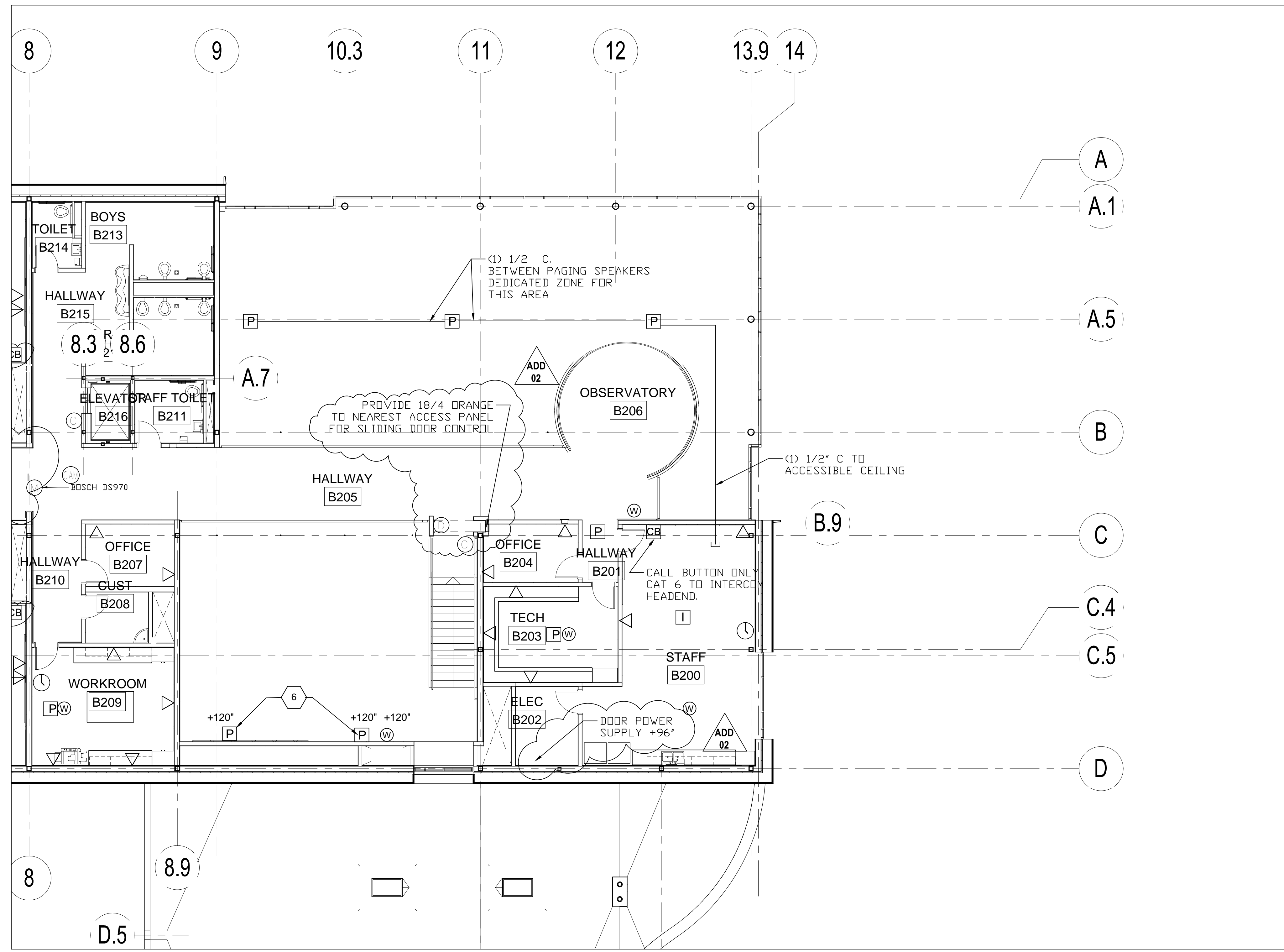
KEYED NOTES:

1. PROVIDE PROTECTIVE NON-METALLIC COVER
2. ARMING/DISARMING KEYPAD LOCATION. GREY. HID5355AGK09.
3. DOOR CONTROL KEYPAD LOCATION. WHITE. HID5355ABK09.
4. LOOK DOWN INITIATION BUTTON.
5. PROVIDE RACEWAY TO ACCESSIBLE CEILING SPACE IN B115
6. PROVIDE 12X12X4 BACKBOX AND 1/2" C. TO ACCESSIBLE SPACE FOR WALL MOUNTED PAGING SPEAKER AT 108" AFF. UNLESS NOTED.
7. FLOORBOX LOCATION. CONNECT HDMI AND VGA TO PRESENTER LOCATION. PROVIDE (2) CAT 6A CABLES TO MDF. REFER TO ARCHITECT ELEVATIONS FOR DEVICE PLACEMENT ON MEDIA CENTER WALL.
8. MULTI-PURPOSE VIDEO CONNECTION.
9. TORMAX MOTORIZED SLIDING DOOR. PROVIDE DOOR CONTACTS AND CONNECTION.
10. HOMERUN AX-LINK CABLE FROM 8-BUTTON KEYPAD TO NEAREST NX-1200 CONTROLLER.
11. PROVIDE CAT 6A TO NEAREST TELECOM ROOM. INSTALL OWNER FURNISHED MOUNT AND LCD TV.
12. MAGNETICALLY HELD DOOR. 18/2 ORANGE TO NEAREST ACCESS CONTROL PANEL. HOLD OPEN POWER SUPPLY AND MAGNETIC DOOR HOLDER BY ELECTRICAL AND DIVISION 8. LOCATE POWER SUPPLY IN AS SHOWN ON SHEET T5.01.

GENERAL NOTES:

1. CCTV SECURITY CAMERAS AS SHOWN CABLING AND ROUGH IN ONLY. CAMERA, HARDWARE AND SOFTWARE IS BY OTHERS.
2. CLASSROOM SOUND SYSTEMS INCLUDE A CEILING OR WALL MOUNTED INFRA RED SENSOR. PROVIDED 1 PER EQUIPPED ROOM. COORDINATE WITH ARCHITECT REFLECTED CEILING PLANS. AVOID PLACEMENT WHERE INTERFERENCE FROM OTHER CLASSROOM SPACES WILL OCCUR.
3. PROVIDE (1) 20AWG 4 CONDUCTOR CABLE BETWEEN MOTORIZED SHADE CONTROLLERS. PROVIDE (1) 20 AWG 4 CONDUCTOR FROM SHADE GROUP CONTROLLERS TO THE NEAREST ACCESS CONTROL PANEL.
4. ALL EXTERIOR DOORS SHALL RECEIVE A DOOR POSITION INDICATOR (DOOR CONTACT) WITH 22AWG 2 CONDUCTOR ORANGE CABLE TO THE NEAREST ACCESS PANEL.
5. PROVIDE (2) 2" SLEEVE FROM CORRIDORS TO EACH CLASSROOM CEILING SPACE FOR DATA AND INTERCOM CABLING. PROVIDE (1) 2" SLEEVE FROM CORRIDOR TO EACH CLASSROOM CEILING FOR SECURITY, ACCESS, INTERCOM AND AMX CABLING.
6. PROVIDE (1) 2" SLEEVE FROM CORRIDORS TO EACH STAFF OFFICE, WORK AREA AND AS REQUIRED FOR PATHWAY FOR INTERCOM, ACCESS, SECURITY AND DATA LOCATIONS.





PARTIAL SECOND FLOORPLAN - SECTOR B
1/8" = 1'-0"

PLAN SYMBOL LEGEND

- ▲ SINGLE DATA LOCATION FOR CCTV MOUNT AT 15'-0" UNLESS OTHERWISE NOTED. PROVIDE (1) CATEGORY 6A BLUE CABLE.
- ▲ DUAL DATA LOCATION. PROVIDE (2) CATEGORY 6A BLUE CABLES.
- ▲ TRIPLE DATA LOCATION. (3) CATEGORY 6A BLUE CABLES.
- ▲ PRESENTER LOCATION. PROVIDE (1) PRE-TERMINATED MINI-AUDIO, VGA VIDEO CABLE TO SHORT THROW PROJECTOR. PROVIDE (1) PRE-TERMINATED HDMI CABLE TO SHORT THROW PROJECTOR AND LCD FLAT PANEL.
- ▲ WIRELESS ACCESS POINT. (2) CATEGORY 6A YELLOW CABLE. COIL 2' SLACK LOOP AT LOCATION INDICATED. TERMINATE IN 2-PORT MODULAR JACK BOX AMP # 1116697-1 OR EQUAL. CEILING MOUNTED UNLESS OTHERWISE NOTED.
- ▲ CAMERA LOCATION AT 16' AFF FOR EXTERIOR, CEILING MOUNT FOR INTERIOR UNLESS OTHERWISE NOTED. PROVIDE (1) CATEGORY 6A GREEN CABLE. PROVIDE WP COVER AND COIL 12' SLACK IN EXTERIOR BOXES.
- ▲ OWNER FURNISHED SHORT THROW DISPLAY. OWNER FURNISHED OWNER INSTALLED PROJECTOR AND MOUNT. PROVIDE (1) CATEGORY 6A BLUE CABLE TO THE NEAREST IDF/MDF. SEE TELECOM DETAILS.
- ▲ 24X24 CEILING ENCLOSURE FOR AV/PAGING CONTROLS. PROVIDE (4) CATEGORY 6A CABLES TO NEAREST TELECOM ROOM.

- ▲ WALL MOUNT PAGING SPEAKER PROVIDE 18AWG GRAY SHIELDED TWISTED PAIR CABLE. UP TO 10 SPEAKERS MAY BE CONNECTED IN SERIES.
- ▲ CEILING MOUNT PAGING SPEAKER PROVIDE 18AWG GRAY SHIELDED TWISTED PAIR CABLE. UP TO 10 SPEAKERS MAY BE CONNECTED IN SERIES. REFER TO ARCHITECT REFLECTED CEILING PLAN FOR EXACT PLACEMENT.
- ▲ CEILING MOUNT INTERCOM SPEAKER PROVIDE 22/4 GRAY SHIELDED CABLE TO THE AMX ENCLOSURE OR NEAREST IDF/MDF ROOM. REFER TO ARCHITECT REFLECTED CEILING PLAN FOR EXACT PLACEMENT.
- ▲ 8-BUTTON AMX KEYPAD CONTROL, CALL BUTTON AND SHADE CONTROL SWITCH. CONNECT USING AX-LINK CABLE THE 8-BUTTON KEYPAD TO ADJACENT CLASSROOM 8-BUTTON AMX KEYPAD OR AS NOTED. REFER TO ARCHITECT SPECIFICATION FOR SHADE CONTROL SWITCH.
- ▲ CEILING MOUNTED VOICE RE-ENFORCEMENT SPEAKER. REFER TO ARCHITECT REFLECTED CEILING PLAN FOR EXACT PLACEMENT.
- ▲ SURFACE MOUNTED 12" ANALOG CLOCK AT 96" AFF. UNLESS OTHERWISE NOTED.
- ▲ CEILING MOUNTED IR SENSOR FOR CLASSROOM SOUND SYSTEMS. PROVIDE CATEGORY 6 CABLE TO THE CLASSROOM AMPLIFIER.

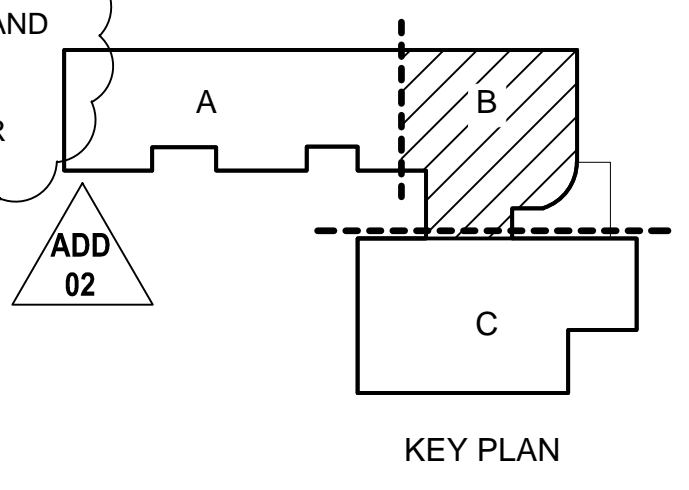
- ▲ DOOR CONTACT - PROVIDE 1/2" CONDUIT TO DOOR FRAME. INSTALL OWNER FURNISHED ORANGE 22/2 CABLE TO THE SECURITY PANEL OR ZONE EXPANDER.
- ▲ ACCESS PINPAD PROVIDE 1/2" CONDUIT TO DOUBLE GANG BOX AT +48" AFF. INSTALL OWNER FURNISHED ORANGE 22AWG 3-PAIR, CONNECT-AIR OR APPROVED TO THE ACCESS PANEL OR ZONE EXPANDER. REFER TO KEYED NOTE FOR PINPAD TYPE. PIN PAD LOCATIONS MUST BE SEPARATED BY A MINIMUM OF 12" O.C. TO PREVENT FALSE CARD READS.
- ▲ MOTION SENSOR - PROVIDE 1/2" CONDUIT TO SINGLE GANG BOX AT +108" AFF. INSTALL OWNER FURNISHED ORANGE 22/4 TO THE INTRUSION PANEL OR ZONE EXPANDER.
- ▲ CARD READER - PROVIDE 3/4" CONDUIT TO SINGLE GANG BOX AT +48" AFF. COORDINATE DEVICES PLACEMENT WITH DOOR INSTALLER AS SOME DEVICES MAY BE LOCATED ON DOOR MULLIONS. INSTALL OWNER FURNISHED ORANGE 22AWG 4-PAIR SHIELDED TO THE ACCESS PANEL.
- ▲ SECURITY SYSTEM SIREN. INSTALL OWNER FURNISHED ORANGE 16/2 TO INTRUSION PANEL.
- ▲ DMP SECURITY KEYPAD PROVIDE 1/2" CONDUIT TO DOUBLE GANG BOX AT +48" AFF. INSTALL OWNER FURNISHED ORANGE 18/4 TO THE SECURITY PANEL.

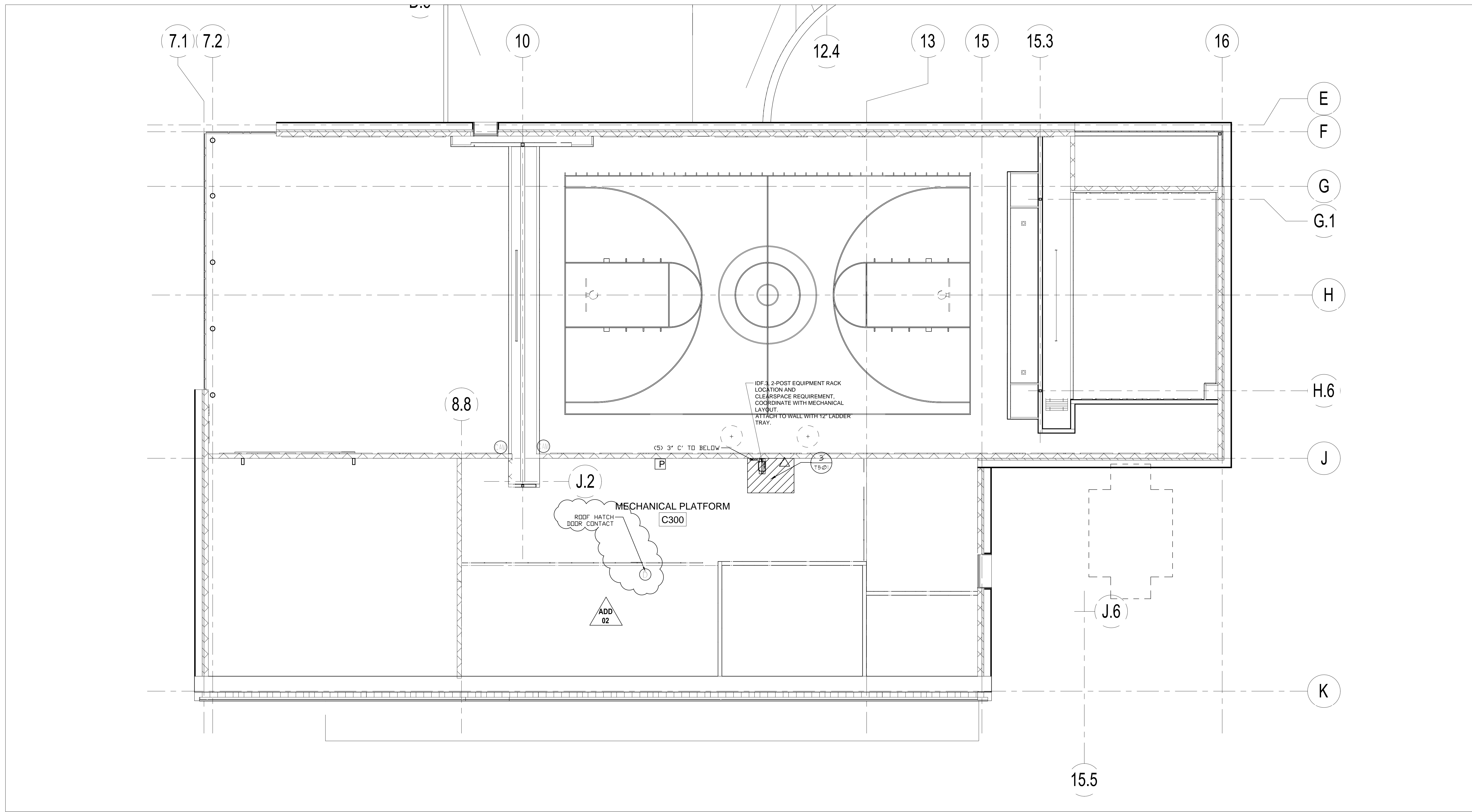
KEYED NOTES:

1. PROVIDE PROTECTIVE NON-METALLIC COVER
2. ARMING/DISARMING KEYPAD LOCATION, GREY. HID5355AGK09.
3. DOOR CONTROL KEYPAD LOCATION, WHITE. HID5355ABK09.
4. LOCK DOWN INITIATION BUTTON.
5. PROVIDE RACEWAY TO ACCESSIBLE CEILING SPACE IN B115
6. PROVIDE 12X12X4 BACKBOX AND 1/2" C. TO ACCESSIBLE SPACE FOR WALL MOUNTED PAGING SPEAKER AT 108" AFF, UNLESS NOTED.
7. FLOORBOX LOCATION. CONNECT HDMI AND VGA TO PRESENTER LOCATION. PROVIDE (2) CAT 6A CABLES TO MDF. REFER TO ARCHITECT ELEVATIONS FOR DEVICE PLACEMENT ON MEDIA CENTER WALL.
8. MULTI-PURPOSE VIDEO CONNECTION.
9. TORMAX MOTORIZED SLIDING DOOR, PROVIDE DOOR CONTACTS AND CONNECTION.
10. HOMERUN AX-LINK CABLE FROM 8-BUTTON KEYPAD TO NEAREST NX-1200 CONTROLLER.
11. PROVIDE CAT 6A TO NEAREST TELECOM ROOM. INSTALL OWNER FURNISHED MOUNT AND LCD TV.
12. DOORS SHALL BE CONNECTED TO A TIMED UNLOCK.
13. MAGNETICALLY HELD DOOR, 18/2 ORANGE TO NEAREST ACCESS CONTROL PANEL, HOLD OPEN POWER SUPPLY AND MAGNETIC DOOR HOLDER BY ELECTRICAL AND DIVISION 8. LOCATE POWER SUPPLY IN AS SHOWN ON SHEET T5.01.

GENERAL NOTES:

1. CCTV SECURITY CAMERAS AS SHOWN CABLING AND ROUGH IN ONLY. CAMERA, HARDWARE AND SOFTWARE IS BY OTHERS.
2. CLASSROOM SOUND SYSTEMS INCLUDE A CEILING OR WALL MOUNTED INFRARED SENSOR. PROVIDED 1 PER EQUIPPED ROOM. COORDINATE WITH ARCHITECT REFLECTED CEILING PLANS. AVOID PLACEMENT WHERE INTERFERENCE FROM OTHER CLASSROOM SPACES WILL OCCUR.
3. PROVIDE (1) 20AWG 4 CONDUCTOR CABLE BETWEEN MOTORIZED SHADE CONTROLLERS. PROVIDE (1) 20 AWG 4 CONDUCTOR FROM SHADE GROUP CONTROLLERS TO THE NEAREST ACCESS CONTROL PANEL.
4. ALL EXTERIOR DOORS SHALL RECEIVE A DOOR POSITION INDICATOR (DOOR CONTACT) WITH 22AWG 2 CONDUCTOR ORANGE CABLE TO THE NEAREST ACCESS PANEL.
5. PROVIDE (2) 2" SLEEVE FROM CORRIDORS TO EACH CLASSROOM CEILING SPACE FOR DATA AND INTERCOM CABLING. PROVIDE (1) 2" SLEEVE FROM CORRIDOR TO EACH CLASSROOM CEILING FOR SECURITY, ACCESS, INTERCOM AND AMX CABLING.
6. PROVIDE (1) 2" SLEEVE FROM CORRIDORS TO EACH STAFF OFFICE, WORK AREA AND AS REQUIRED FOR PATHWAY FOR INTERCOM, ACCESS, SECURITY AND DATA LOCATIONS.





PARTIAL SECOND FLOORPLAN - SECTOR C
1/8" = 1'-0"

PLAN SYMBOL LEGEND

- ▲ SINGLE DATA LOCATION FOR CCTV. MOUNT AT 15'-0" UNLESS OTHERWISE NOTED. PROVIDE (1) CATEGORY 6A BLUE CABLE.
- ▲ DUAL DATA LOCATION. PROVIDE (2) CATEGORY 6A BLUE CABLES.
- ▲ TRIPLE DATA LOCATION. (3) CATEGORY 6A BLUE CABLES.
- ▲ PRESENTER LOCATION. PROVIDE (1) PRE-TERMINATED MINI-AUDIO, VGA VIDEO CABLE TO SHORT THROW PROJECTOR. PROVIDE (1) PRE-TERMINATED HDMI CABLE TO SHORT THROW PROJECTOR AND LCD FLAT PANEL.
- ▲ WIRELESS ACCESS POINT. (2) CATEGORY 6A YELLOW CABLE. COIL 20' SLACK LOOP AT LOCATION INDICATED. TERMINATE IN 2-PORT MODULAR JACK BOX AMP # 1116697-1 OR EQUAL. CEILING MOUNTED UNLESS OTHERWISE NOTED.
- ▲ CAMERA LOCATION AT 16" AFF FOR EXTERIOR. CEILING MOUNT FOR INTERIOR UNLESS OTHERWISE NOTED. PROVIDE (1) CATEGORY 6A GREEN CABLE. PROVIDE WP COVER AND COIL 12' SLACK IN EXTERIOR BOXES.
- ▲ OWNER FURNISHED SHORT THROW DISPLAY. OWNER FURNISHED OWNER INSTALLED PROJECTOR AND MOUNT. PROVIDE (1) CATEGORY 6A BLUE CABLE TO THE NEAREST IDF/MDF. SEE TELECOM DETAILS.
- ▲ 24x24 CEILING ENCLOSURE FOR AV/PAGING CONTROLS. PROVIDE (4) CATEGORY 6A CABLES TO NEAREST TELECOM ROOM.

- [P] WALL MOUNT PAGING SPEAKER PROVIDE 18AWG GRAY SHIELDED TWISTED PAIR CABLE. UP TO 10 SPEAKERS MAY BE CONNECTED IN SERIES.
- [P] CEILING MOUNT PAGING SPEAKER PROVIDE 18AWG GRAY SHIELDED TWISTED PAIR CABLE. UP TO 10 SPEAKERS MAY BE CONNECTED IN SERIES. REFER TO ARCHITECT REFLECTED CEILING PLAN FOR EXACT PLACEMENT.
- [I] CEILING MOUNT INTERCOM SPEAKER PROVIDE 22/4 GRAY SHIELDED CABLE TO THE AMX ENCLOSURE OR NEAREST IDF/MDF ROOM. REFER TO ARCHITECT REFLECTED CEILING PLAN FOR EXACT PLACEMENT.
- [S] 8-BUTTON AMX KEYPAD CONTROL. CABLE BUTTON AND SHADE CONTROL SWITCH. CONNECT USING AX-LINK CABLE THE 8-BUTTON KEYPAD TO ADJACENT CLASSROOM 8-BUTTON AMX KEYPAD OR AS NOTED. REFER TO ARCHITECT SPECIFICATION FOR SHADE CONTROL SWITCH.
- [S] CEILING MOUNTED VOICE RE-ENFORCEMENT SPEAKER. REFER TO ARCHITECT REFLECTED CEILING PLAN FOR EXACT PLACEMENT.
- [S] SURFACE MOUNTED 12" ANALOG CLOCK AT 96" AFF. UNLESS OTHERWISE NOTED
- [S] CEILING MOUNTED IR SENSOR FOR CLASSROOM SOUND SYSTEMS. PROVIDE CATEGORY 6 CABLE TO THE CLASSROOM AMPLIFIER.

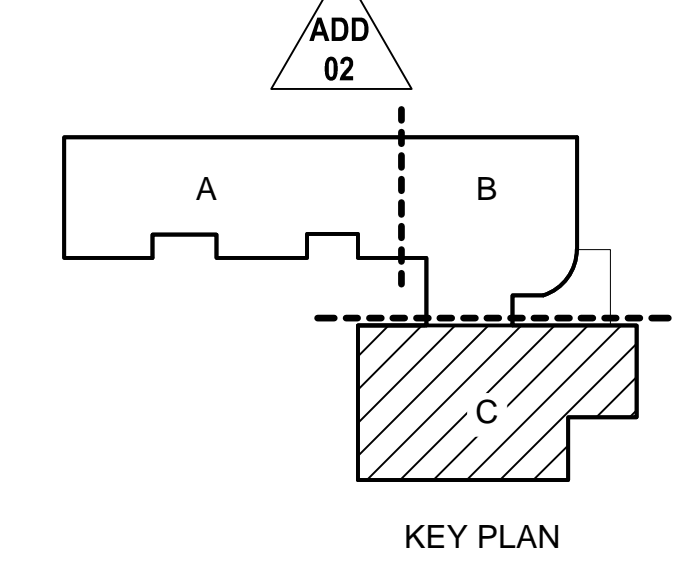
- ① DOOR CONTACT - PROVIDE 1/2" CONDUIT TO DOOR FRAME. INSTALL OWNER FURNISHED ORANGE 22/2 CABLE TO THE SECURITY PANEL OR ZONE EXPANDER.
- ② ACCESS PINPAD PROVIDE 1/2" CONDUIT TO DOUBLE GANG BOX AT +48" AFF. INSTALL OWNER FURNISHED ORANGE 22AWG 3-PAIR. CONNECT AIR OR APPROVED TO THE ACCESS PANEL OR ZONE EXPANDER. REFER TO KEYED NOTE FOR PINPAD TYPE. PIN PAD LOCATIONS MUST BE SEPARATED BY A MINIMUM OF 12" O.C TO PREVENT FALSE CARD READS.
- ③ MOTION SENSOR - PROVIDE 1/2" CONDUIT TO SINGLE GANG BOX AT +108" AFF. INSTALL OWNER FURNISHED ORANGE 22/4 TO THE INTRUSION PANEL OR ZONE EXPANDER.
- ④ CARD READER - PROVIDE 3/4" CONDUIT TO SINGLE GANG BOX AT +48" AFF. COORDINATE DEVICES PLACEMENT WITH DOOR INSTALLER AS SOME DEVICES MAY BE LOCATED ON DOOR MULLIONS. INSTALL OWNER FURNISHED ORANGE 22AWG 4-PAIR SHIELDED TO THE ACCESS PANEL.
- [S] SECURITY SYSTEM SIREN. INSTALL OWNER FURNISHED ORANGE 16/2 TO INTRUSION PANEL
- ⑤ DMP SECURITY KEYPAD PROVIDE 1/2" CONDUIT TO DOUBLE GANG BOX AT +48" AFF. INSTALL OWNER FURNISHED ORANGE 18/4 TO THE SECURITY PANEL.

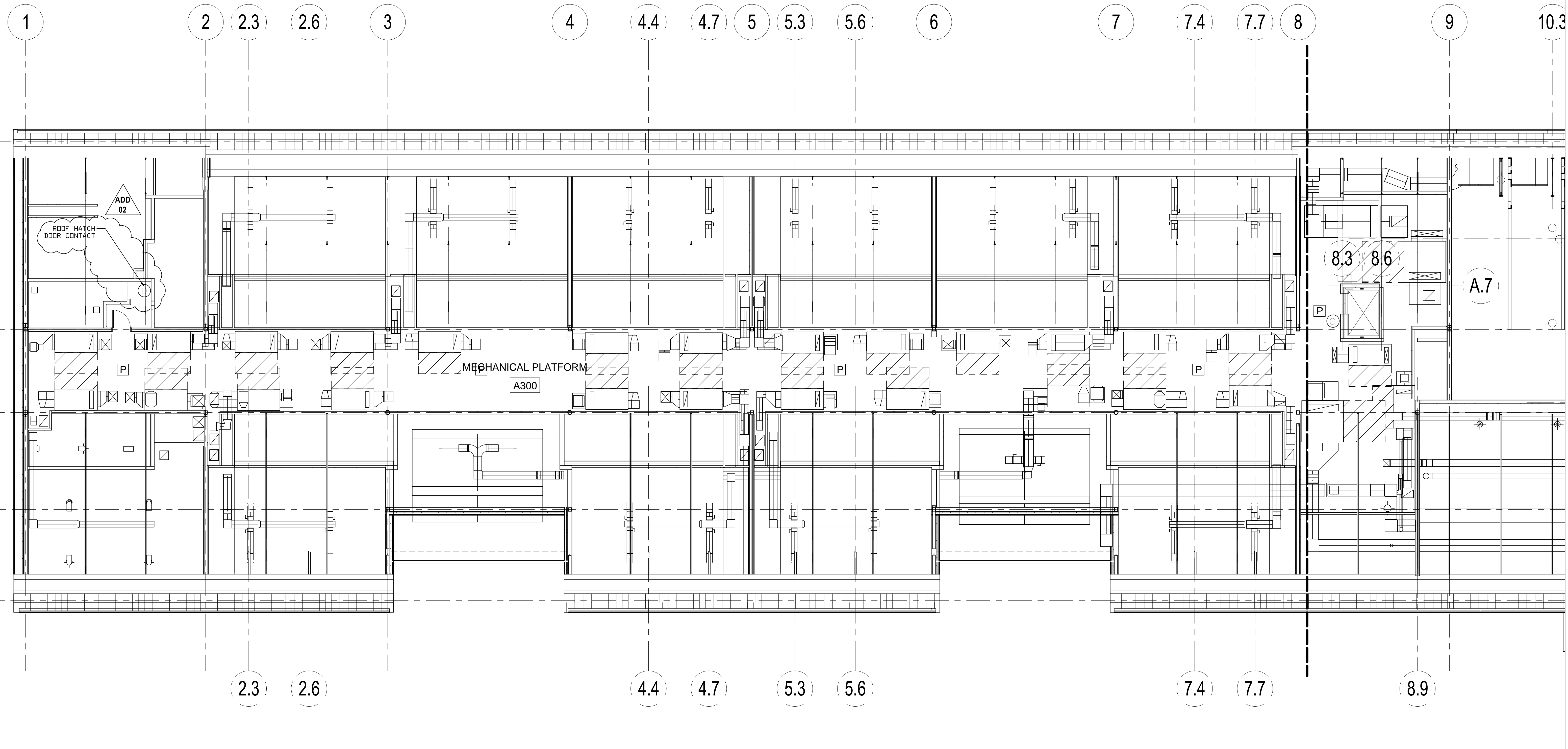
KEYED NOTES:

- PROVIDE PROTECTIVE NON-METALLIC COVER
- ARMING/DISARMING KEYPAD LOCATION. GREY. HID5355AGK09.
- DOOR CONTROL KEYPAD LOCATION. WHITE. HID5355ABK09.
- LOCK DOWN INITIATION BUTTON.
- PROVIDE RACEWAY TO ACCESSIBLE CEILING SPACE IN B115
- PROVIDE 12X12X4 BACKBOX AND 1/2" C. TO ACCESSIBLE SPACE FOR WALL MOUNTED PAGING SPEAKER AT 108" AFF. UNLESS NOTED.
- FLOORBOX LOCATION. CONNECT HDMI AND VGA TO PRESENTER LOCATION. PROVIDE (2) CAT 6A CABLES TO MDF. REFER TO ARCHITECT ELEVATIONS FOR DEVICE PLACEMENT ON MEDIA CENTER WALL.
- MULTI-PURPOSE VIDEO CONNECTION.
- TORXMAX MOTORIZED SLIDING DOOR. PROVIDE DOOR CONTACTS AND CONNECTION.
- HOMERUN AX-LINK CABLE FROM 8-BUTTON KEYPAD TO NEAREST NX-1200 CONTROLLER.
- PROVIDE CAT 6A TO NEAREST TELECOM ROOM. INSTALL OWNER FURNISHED MOUNT AND LCD TV.
- DOORS SHALL BE CONNECTED TO A TIMED UNLOCK. MAGNETICALLY HELD DOOR, 18/2 ORANGE TO NEAREST ACCESS CONTROL PANEL, HOLD OPEN POWER SUPPLY AND MAGNETIC DOOR HOLDER BY ELECTRICAL AND DIVISION 8. LOCATE POWER SUPPLY IN AS SHOWN ON SHEET T5.01.

GENERAL NOTES:

- CCTV SECURITY CAMERAS AS SHOWN CABLING AND ROUGH IN ONLY. CAMERA, HARDWARE AND SOFTWARE IS BY OTHERS.
- CLASSROOM SOUND SYSTEMS INCLUDE A CEILING OR WALL MOUNTED INFRA RED SENSOR. PROVIDED 1 PER EQUIPPED ROOM. COORDINATE WITH ARCHITECT REFLECTED CEILING PLANS. AVOID PLACEMENT WHERE INTERFERENCE FROM OTHER CLASSROOM SPACES WILL OCCUR.
- PROVIDE (1) 20AWG 4 CONDUCTOR CABLE BETWEEN MOTORIZED SHADE CONTROLLERS. PROVIDE (1) 20 AWG 4 CONDUCTOR FROM SHADE GROUP CONTROLLERS TO THE NEAREST ACCESS CONTROL PANEL.
- ALL EXTERIOR DOORS SHALL RECEIVE A DOOR POSITION INDICATOR (DOOR CONTACT) WITH 22AWG 2 CONDUCTOR ORANGE CABLE TO THE NEAREST ACCESS PANEL.
- PROVIDE (2) 2" SLEEVE FROM CORRIDORS TO EACH CLASSROOM CEILING SPACE FOR DATA AND INTERCOM CABLING. PROVIDE (1) 2" SLEEVE FROM CORRIDOR TO EACH CLASSROOM CEILING FOR SECURITY, ACCESS, INTERCOM AND AMX CABLING.
- PROVIDE (1) 2" SLEEVE FROM CORRIDORS TO EACH STAFF OFFICE, WORK AREA AND AS REQUIRED FOR PATHWAY FOR INTERCOM, ACCESS, SECURITY AND DATA LOCATIONS.





PLAN SYMBOL LEGEND

- SINGLE DATA LOCATION FOR CCTV. MOUNT AT 15'-0" UNLESS OTHERWISE NOTED. PROVIDE (1) CATEGORY 6A BLUE CABLE.
- DUAL DATA LOCATION. PROVIDE (2) CATEGORY 6A BLUE CABLES.
- TRIPLE DATA LOCATION. (3) CATEGORY 6A BLUE CABLES.
- PRESENTER LOCATION. PROVIDE (1) PRE-TERMINATED MINI-AUDIO, VGA VIDEO CABLE TO SHORT THROW PROJECTOR. PROVIDE (1) PRE-TERMINATED HDMI CABLE TO SHORT THROW PROJECTOR AND LCD FLAT PANEL.
- WIRELESS ACCESS POINT. (2) CATEGORY 6A YELLOW CABLE. COIL 20' SLACK LOOP AT LOCATION INDICATED. TERMINATE IN 2-PORT MODULAR JACK BOX AMP # 1116697-1 OR EQUAL. CEILING MOUNTED UNLESS OTHERWISE NOTED.
- CAMERA LOCATION AT 16" AFF FOR EXTERIOR. CEILING MOUNT FOR INTERIOR UNLESS OTHERWISE NOTED. PROVIDE (1) CATEGORY 6A GREEN CABLE. PROVIDE WP COVER AND COIL 12' SLACK IN EXTERIOR BOXES.
- OWNER PROVIDED SHORT THROW DISPLAY. OWNER FURNISHED OWNER INSTALLED PROJECTOR AND MOUNT. PROVIDE (1) CATEGORY 6A BLUE CABLE TO THE NEAREST IDF/MDF. SEE TELECOM DETAILS.
- 24x24 CEILING ENCLOSURE FOR AV/PAGING CONTROLS. PROVIDE (4) CATEGORY 6A CABLES TO NEAREST TELECOM ROOM.

- WALL MOUNT PAGING SPEAKER PROVIDE 18AWG GRAY SHIELDED TWISTED PAIR CABLE. UP TO 10 SPEAKERS MAY BE CONNECTED IN SERIES.
- CEILING MOUNT PAGING SPEAKER PROVIDE 18AWG GRAY SHIELDED TWISTED PAIR CABLE. UP TO 10 SPEAKERS MAY BE CONNECTED IN SERIES. REFER TO ARCHITECT REFLECTED CEILING PLAN FOR EXACT PLACEMENT.
- CEILING MOUNT INTERCOM SPEAKER PROVIDE 22/4 GRAY SHIELDED CABLE TO THE AMX ENCLOSURE OR NEAREST IDF/MDF ROOM. REFER TO ARCHITECT REFLECTED CEILING PLAN FOR EXACT PLACEMENT.
- 8-BUTTON AMX KEYPAD CONTROL. CABLE BUTTON AND SHADE CONTROL SWITCH. CONNECT USING AX-LINK CABLE THE 8-BUTTON KEYPAD TO ADJACENT CLASSROOM 8-BUTTON AMX KEYPAD OR AS NOTED. REFER TO ARCHITECT SPECIFICATION FOR SHADE CONTROL SWITCH.
- CEILING MOUNTED VOICE RE-ENFORCEMENT SPEAKER. REFER TO ARCHITECT REFLECTED CEILING PLAN FOR EXACT PLACEMENT.
- SURFACE MOUNTED 12" ANALOG CLOCK AT 96" AFF. UNLESS OTHERWISE NOTED.
- CEILING MOUNTED IR SENSOR FOR CLASSROOM SOUND SYSTEMS. PROVIDE CATEGORY 6 CABLE TO THE CLASSROOM AMPLIFIER.

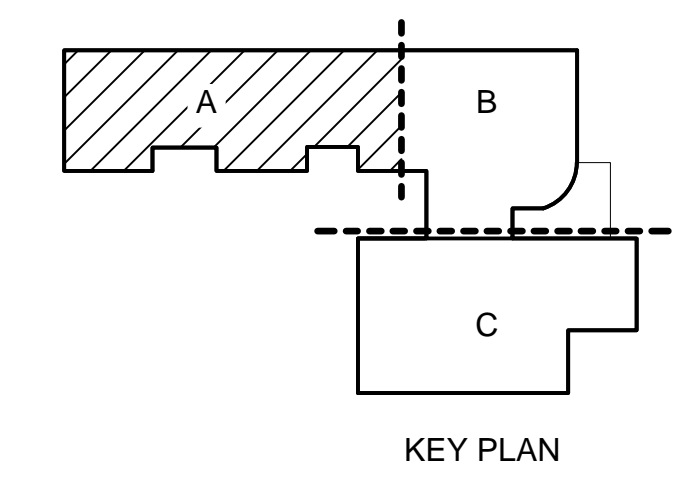
- DOOR CONTACT - PROVIDE 1/2" CONDUIT TO DOOR FRAME. INSTALL OWNER FURNISHED ORANGE 22/2 CABLE TO THE SECURITY PANEL OR ZONE EXPANDER.
- ACCESS PINPAD PROVIDE 1/2" CONDUIT TO DOUBLE GANG BOX AT +48" AFF. INSTALL OWNER FURNISHED ORANGE 22AWG 3-PAIR. CONNECT AIR OR APPROVED TO THE ACCESS PANEL OR ZONE EXPANDER. REFER TO KEYED NOTE FOR PINPAD TYPE. PIN PAD LOCATIONS MUST BE SEPARATED BY A MINIMUM OF 12" O.C TO PREVENT FALSE CARD READS.
- MOTION SENSOR - PROVIDE 1/2" CONDUIT TO SINGLE GANG BOX AT +108" AFF. INSTALL OWNER FURNISHED ORANGE 22/4 TO THE INTRUSION PANEL OR ZONE EXPANDER.
- CARD READER - PROVIDE 3/4" CONDUIT TO SINGLE GANG BOX AT +48" AFF. COORDINATE DEVICES PLACEMENT WITH DOOR INSTALLER AS SOME DEVICES MAY BE LOCATED ON DOOR MULLIONS. INSTALL OWNER FURNISHED ORANGE 22AWG 4-PAIR SHIELDED TO THE ACCESS PANEL.
- SECURITY SYSTEM SIREN. INSTALL OWNER FURNISHED ORANGE 16/2 TO INTRUSION PANEL.
- DMP SECURITY KEYPAD PROVIDE 1/2" CONDUIT TO DOUBLE GANG BOX AT +48" AFF. INSTALL OWNER FURNISHED ORANGE 18/4 TO THE SECURITY PANEL.

KEYED NOTES:

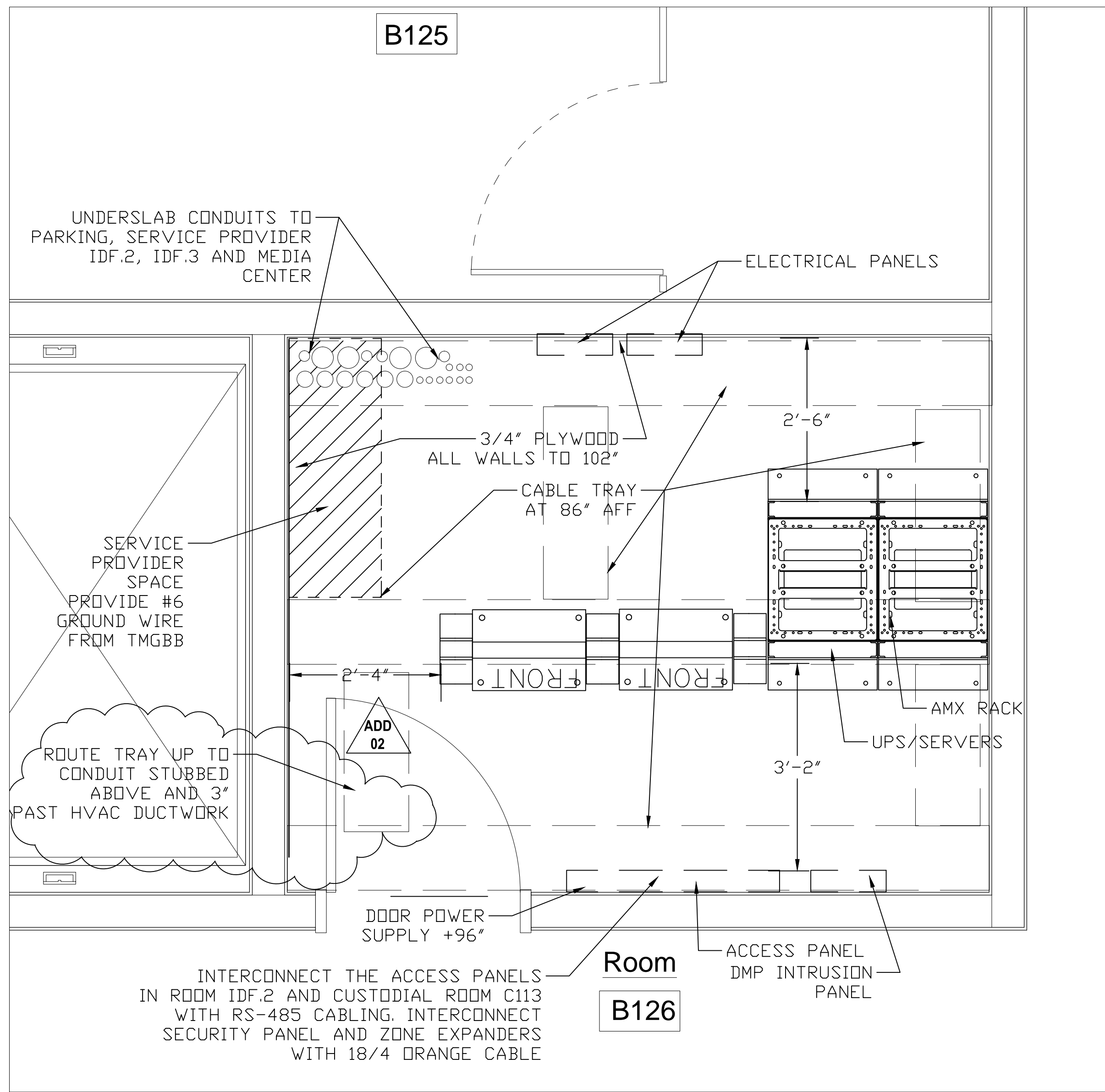
1. PROVIDE PROTECTIVE NON-METALLIC COVER
2. ARMING/DISARMING KEYPAD LOCATION. GREY. HID5355AGK09.
3. DOOR CONTROL KEYPAD LOCATION. WHITE. HID5355ABK09.
4. LOCK DOWN INITIATION BUTTON.
5. PROVIDE RACEWAY TO ACCESSIBLE CEILING SPACE IN B115
6. PROVIDE 12X12X4 BACKBOX AND 1/2" C. TO ACCESSIBLE SPACE FOR WALL MOUNTED PAGING SPEAKER AT 108" AFF. UNLESS NOTED.
7. FLOORBOX LOCATION. CONNECT HDMI AND VGA TO PRESENTER LOCATION. PROVIDE (2) CAT 6A CABLES TO MDF.
8. REFER TO ARCHITECT ELEVATIONS FOR DEVICE PLACEMENT ON MEDIA CENTER WALL.
9. MULTI-PURPOSE VIDEO CONNECTION.
10. TORMAX MOTORIZED SLIDING DOOR. PROVIDE DOOR CONTACTS AND CONNECTION.
11. HOMERUN AX-LINK CABLE FROM 8-BUTTON KEYPAD TO NEAREST NX-1200 CONTROLLER.
12. PROVIDE CAT 6A TO NEAREST TELECOM ROOM. INSTALL OWNER FURNISHED MOUNT AND LCD TV.
13. DOORS SHALL BE CONNECTED TO A TIMED UNLOCK. MAGNETICALLY HELD DOOR. 18/2 ORANGE TO NEAREST ACCESS CONTROL PANEL. HOLD OPEN POWER SUPPLY AND MAGNETIC DOOR HOLDER BY ELECTRICAL AND DIVISION 8. LOCATE POWER SUPPLY IN AS SHOWN ON SHEET TS.01.

GENERAL NOTES:

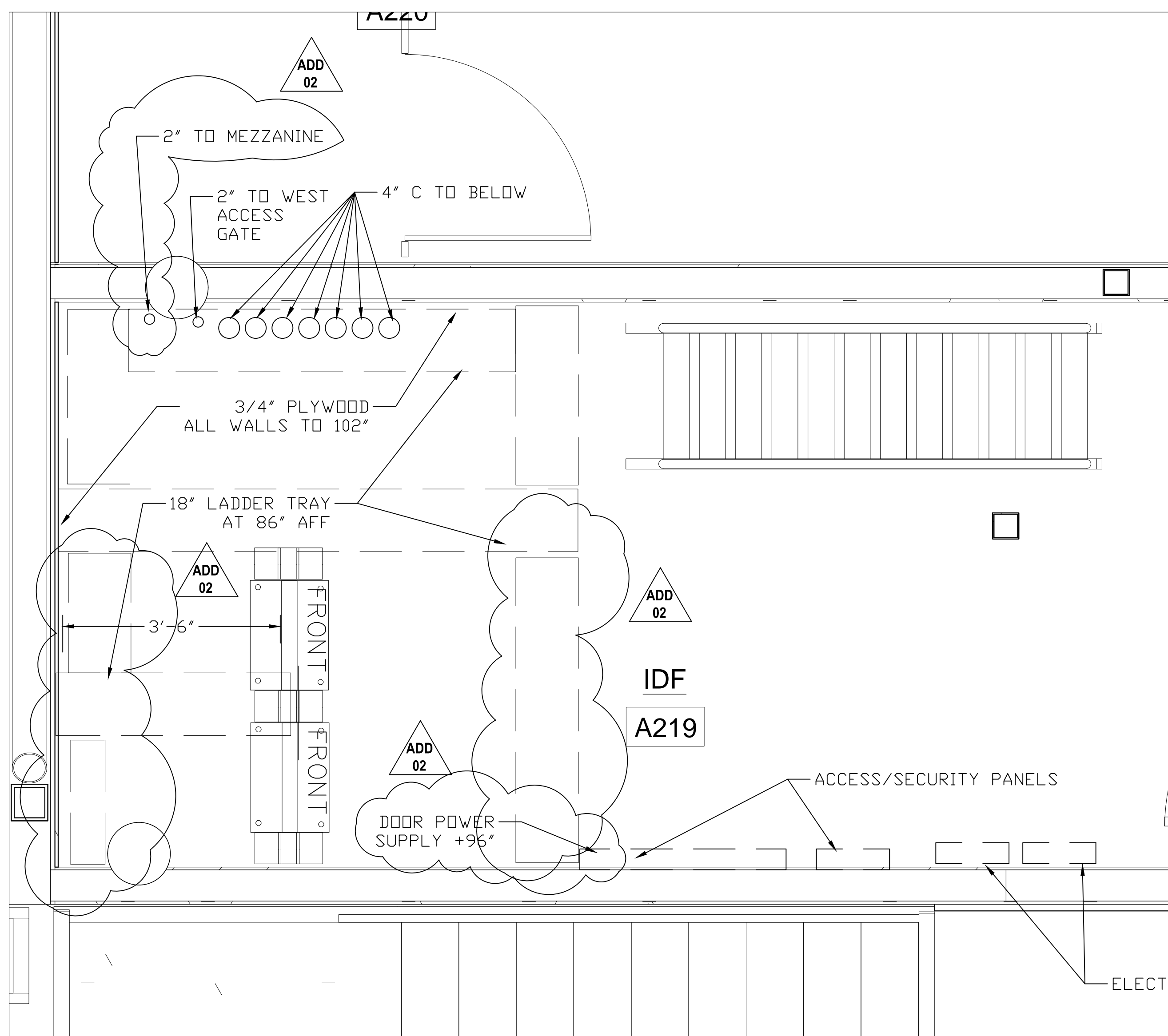
1. CCTV SECURITY CAMERAS AS SHOWN CABLING AND ROUGH IN ONLY. CAMERA, HARDWARE AND SOFTWARE IS BY OTHERS.
2. CLASSROOM SOUND SYSTEMS INCLUDE A CEILING OR WALL MOUNTED INFRARED SENSOR. PROVIDED 1 PER EQUIPPED ROOM. COORDINATE WITH ARCHITECT REFLECTED CEILING PLANS. AVOID PLACEMENT WHERE INTERFERENCE FROM OTHER CLASSROOM SPACES WILL OCCUR.
3. PROVIDE (1) 20AWG 4 CONDUCTOR CABLE BETWEEN MOTORIZED SHADE CONTROLLERS. PROVIDE (1) 20 AWG 4 CONDUCTOR FROM SHADE GROUP CONTROLLERS TO THE NEAREST ACCESS CONTROL PANEL.
4. ALL EXTERIOR DOORS SHALL RECEIVE A DOOR POSITION INDICATOR (DOOR CONTACT) WITH 22AWG 2 CONDUCTOR ORANGE CABLE TO THE NEAREST ACCESS PANEL.
5. PROVIDE (2) 2" SLEEVE FROM CORRIDORS TO EACH CLASSROOM CEILING SPACE FOR DATA AND INTERCOM CABLING. PROVIDE (1) 2" SLEEVE FROM CORRIDOR TO EACH CLASSROOM CEILING FOR SECURITY, ACCESS, INTERCOM AND AMX CABLING.
6. PROVIDE (1) 2" SLEEVE FROM CORRIDORS TO EACH STAFF OFFICE, WORK AREA AND AS REQUIRED FOR PATHWAY FOR INTERCOM, ACCESS, SECURITY AND DATA LOCATIONS.



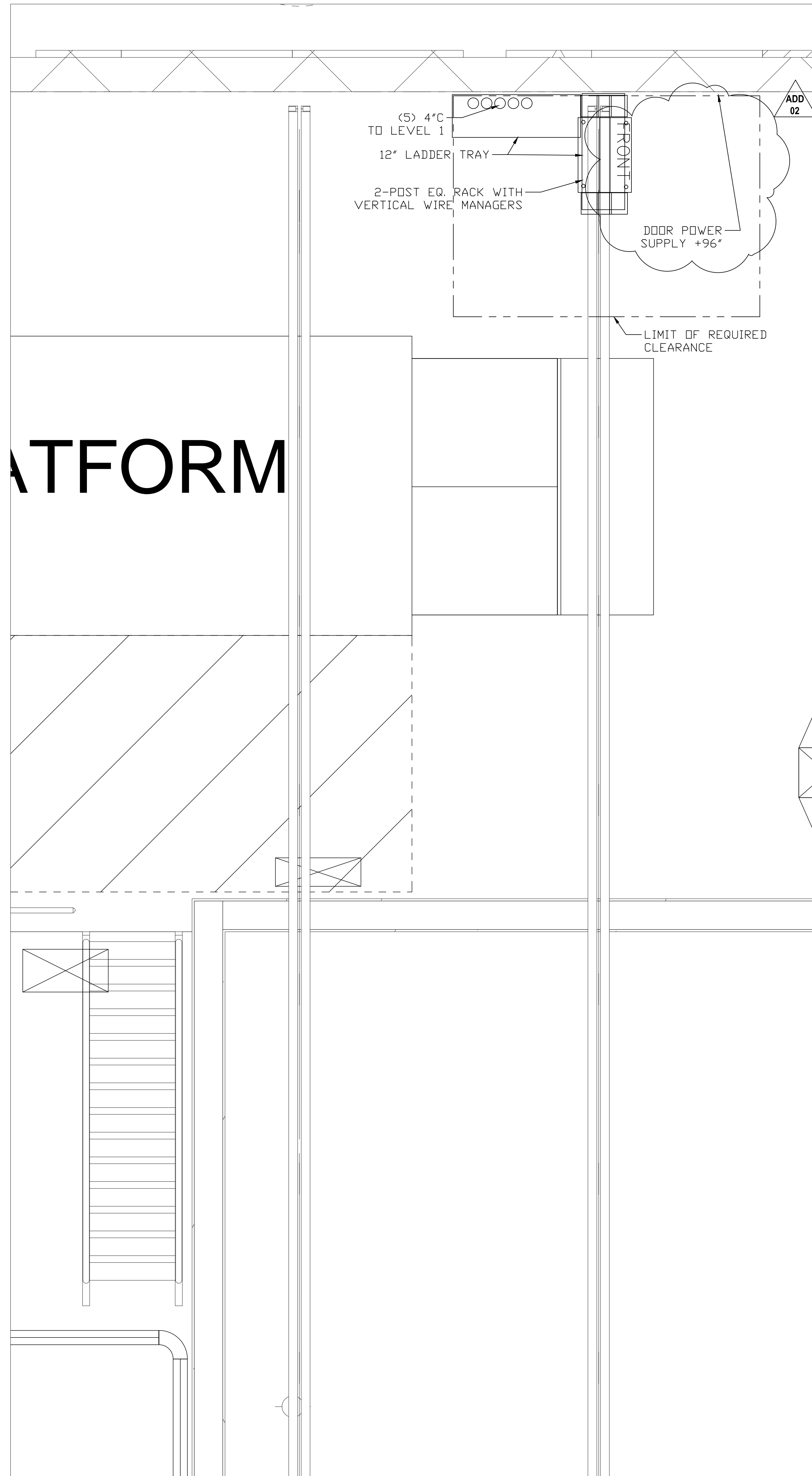
KEY PLAN



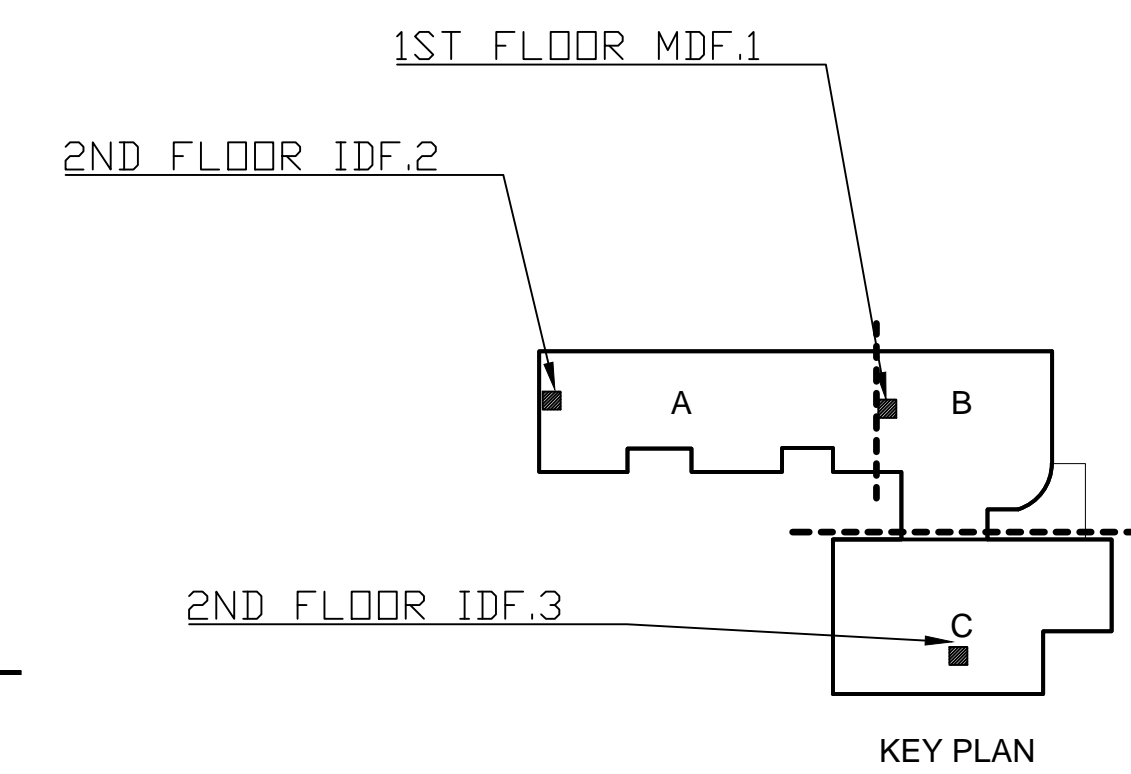
1 PARTIAL FIRST FLOOR PLAN MDF 1

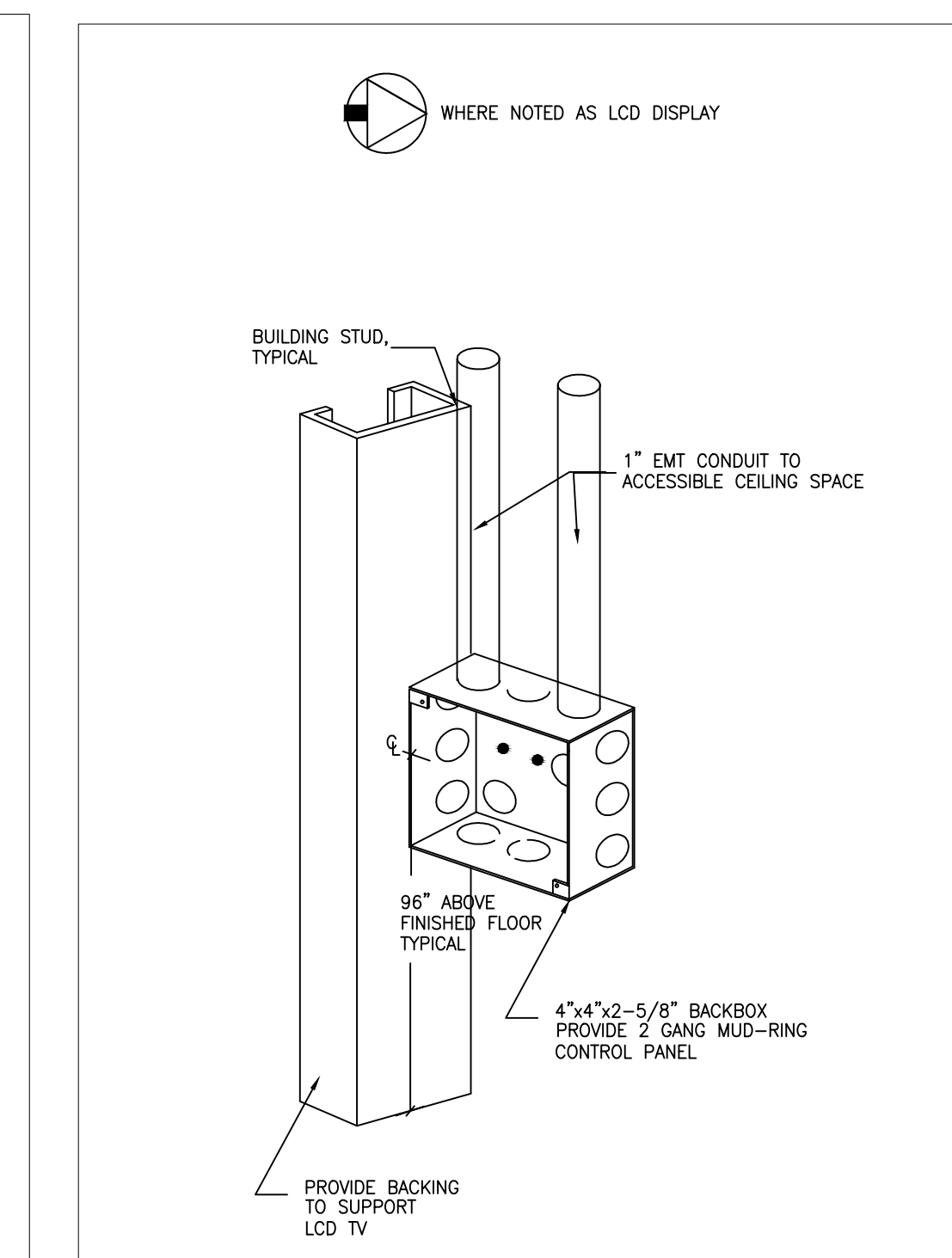
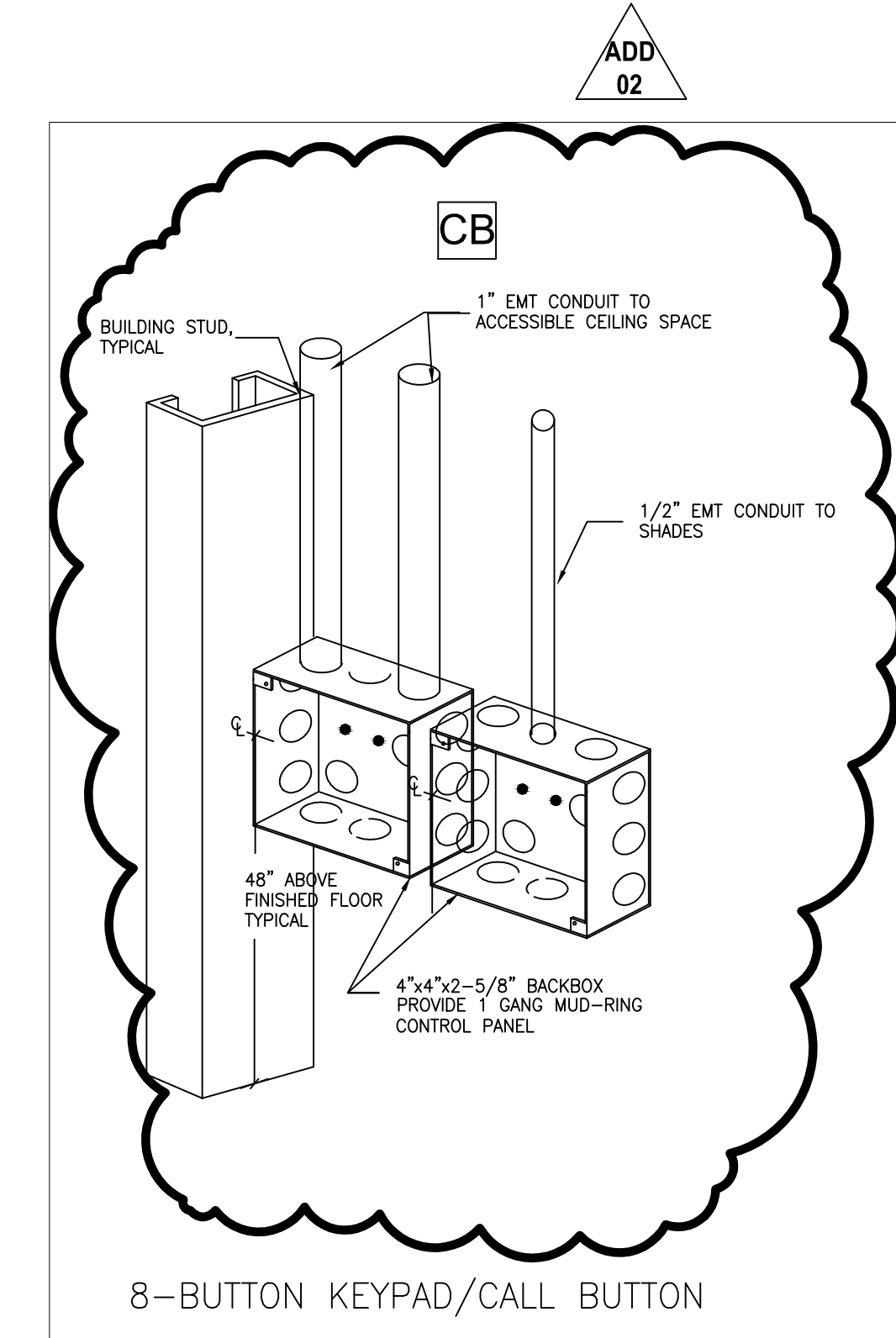
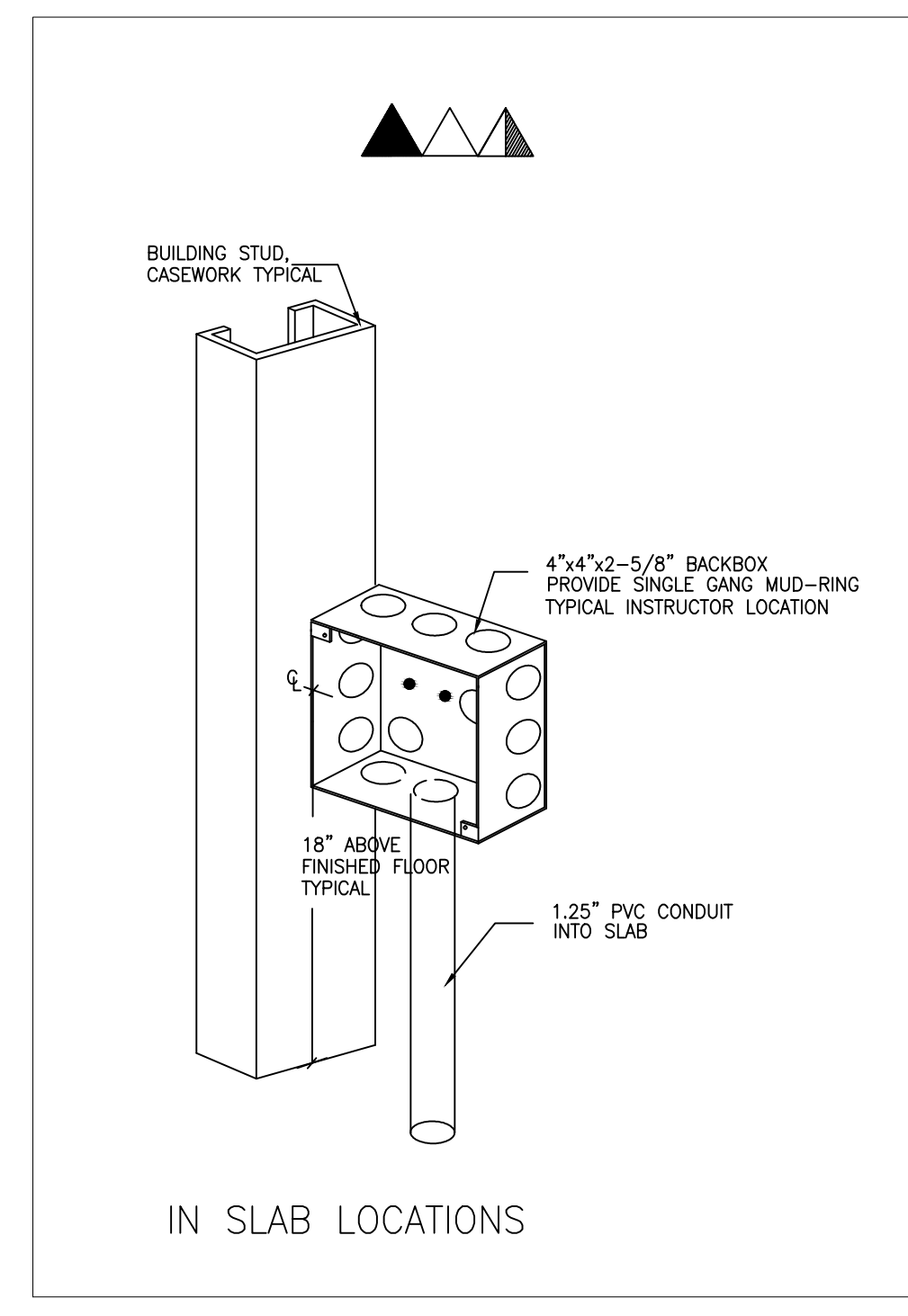
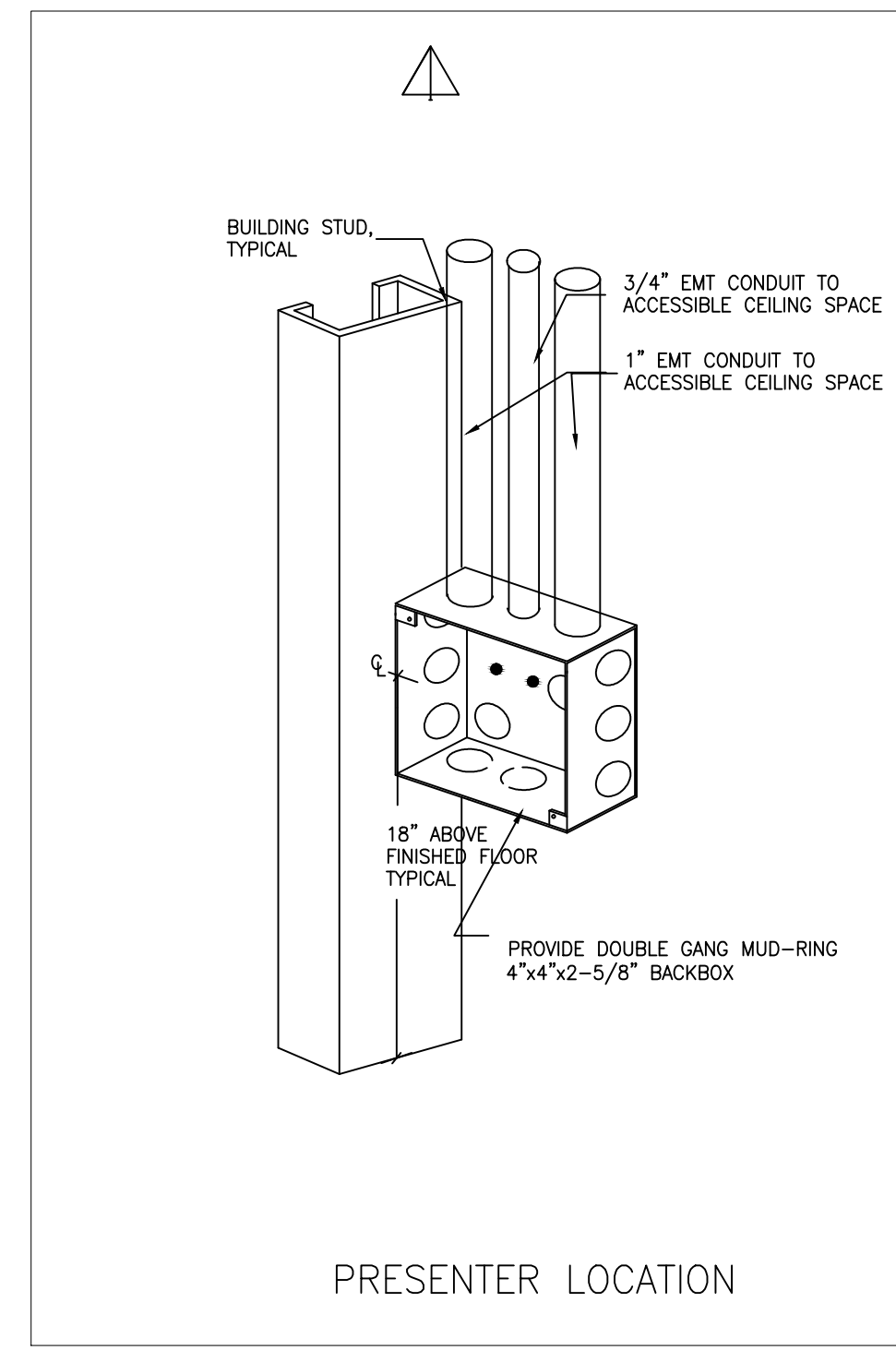
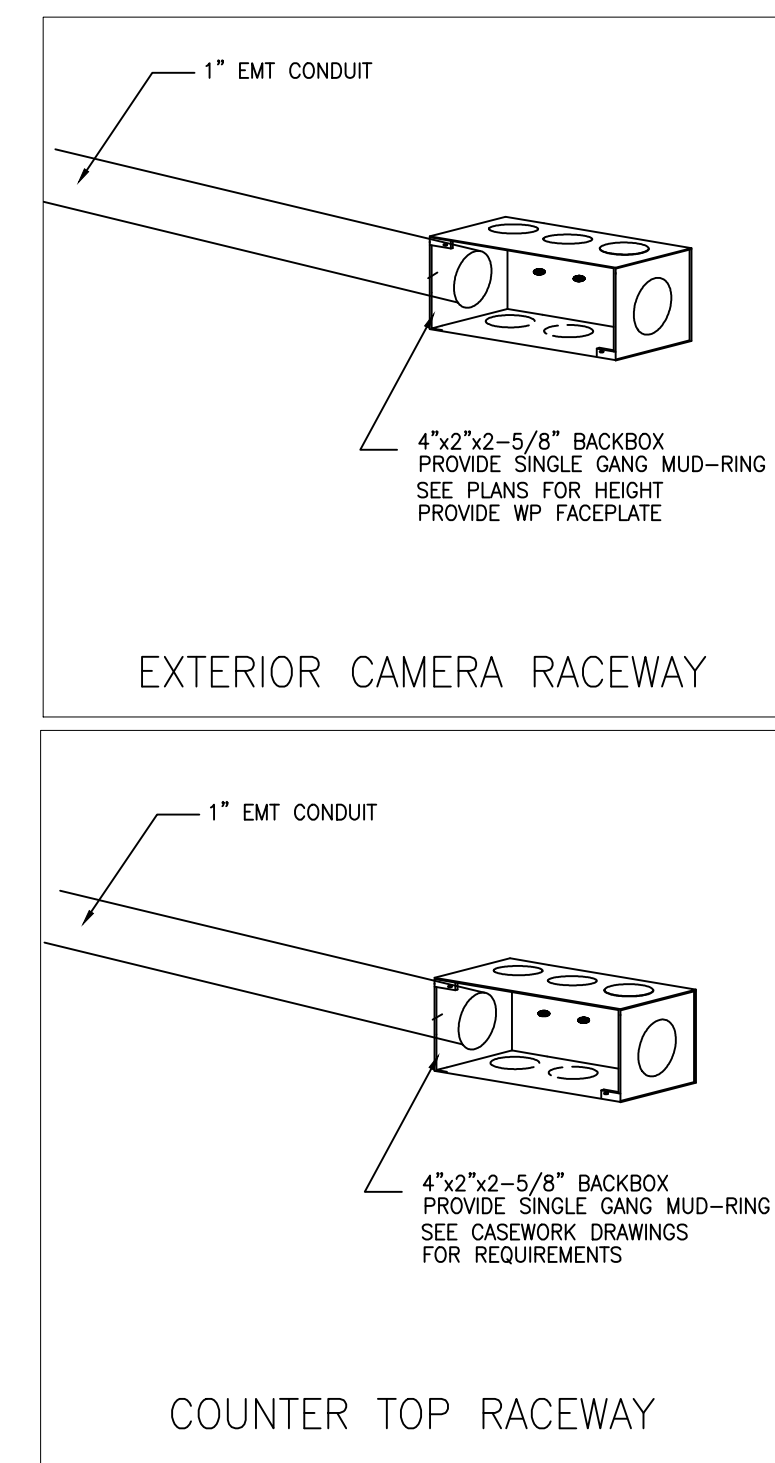
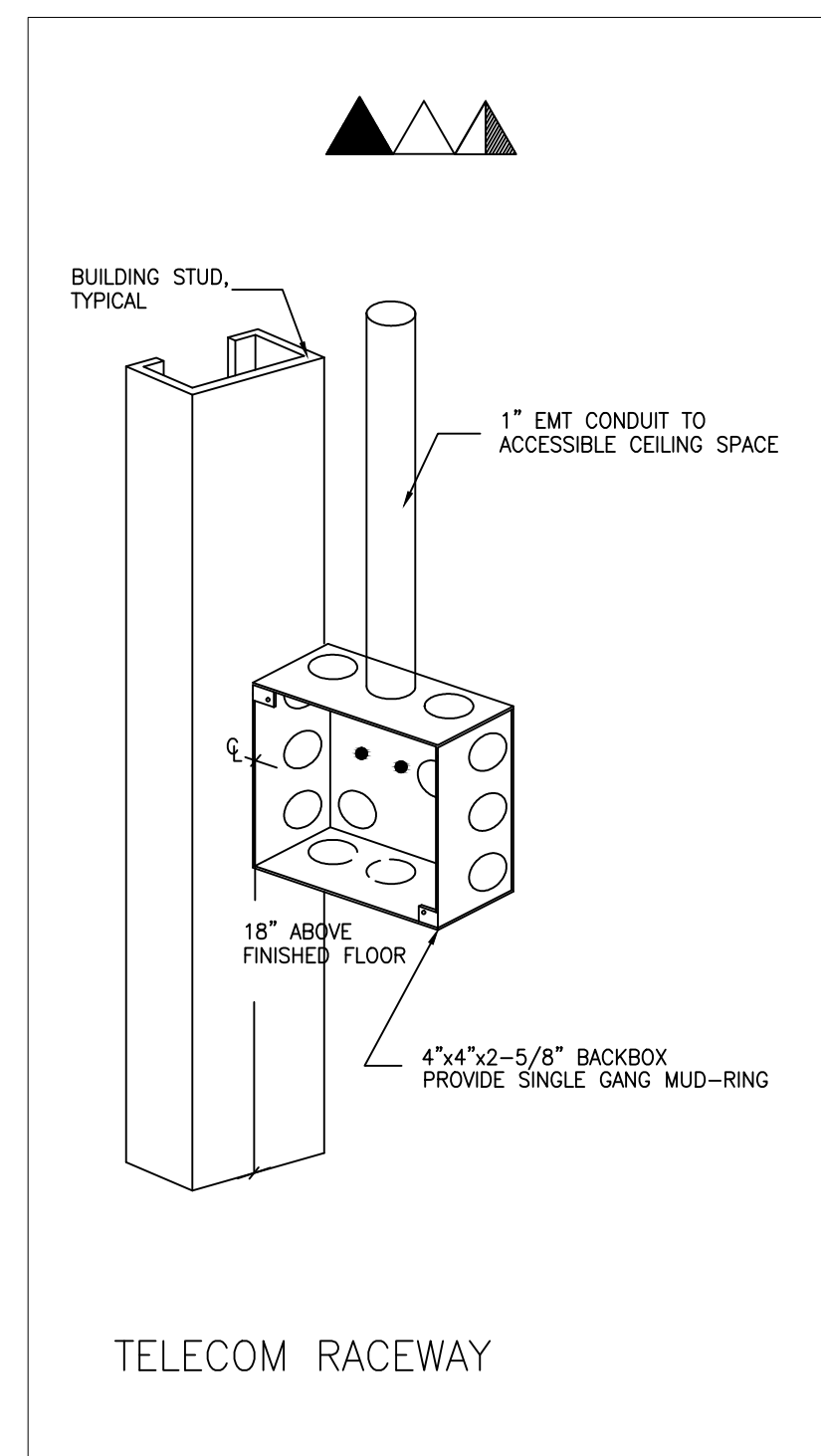
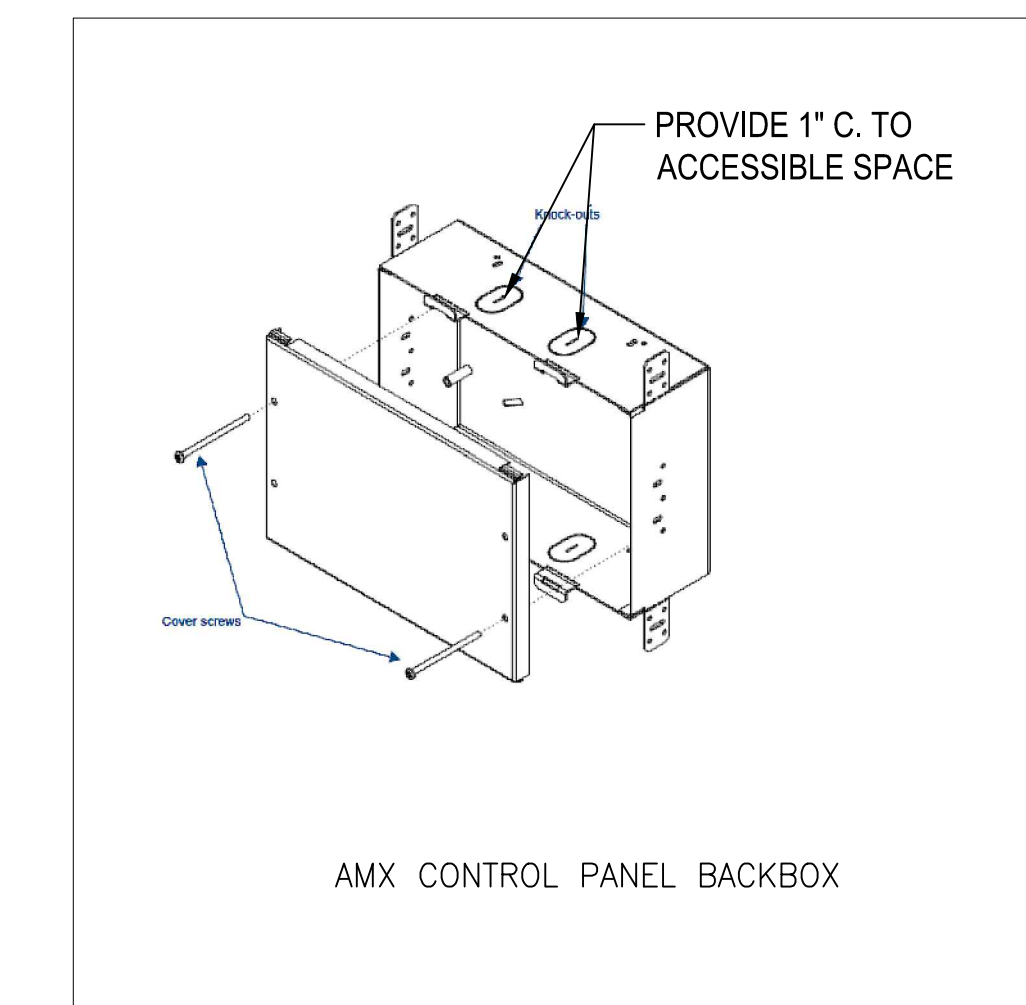
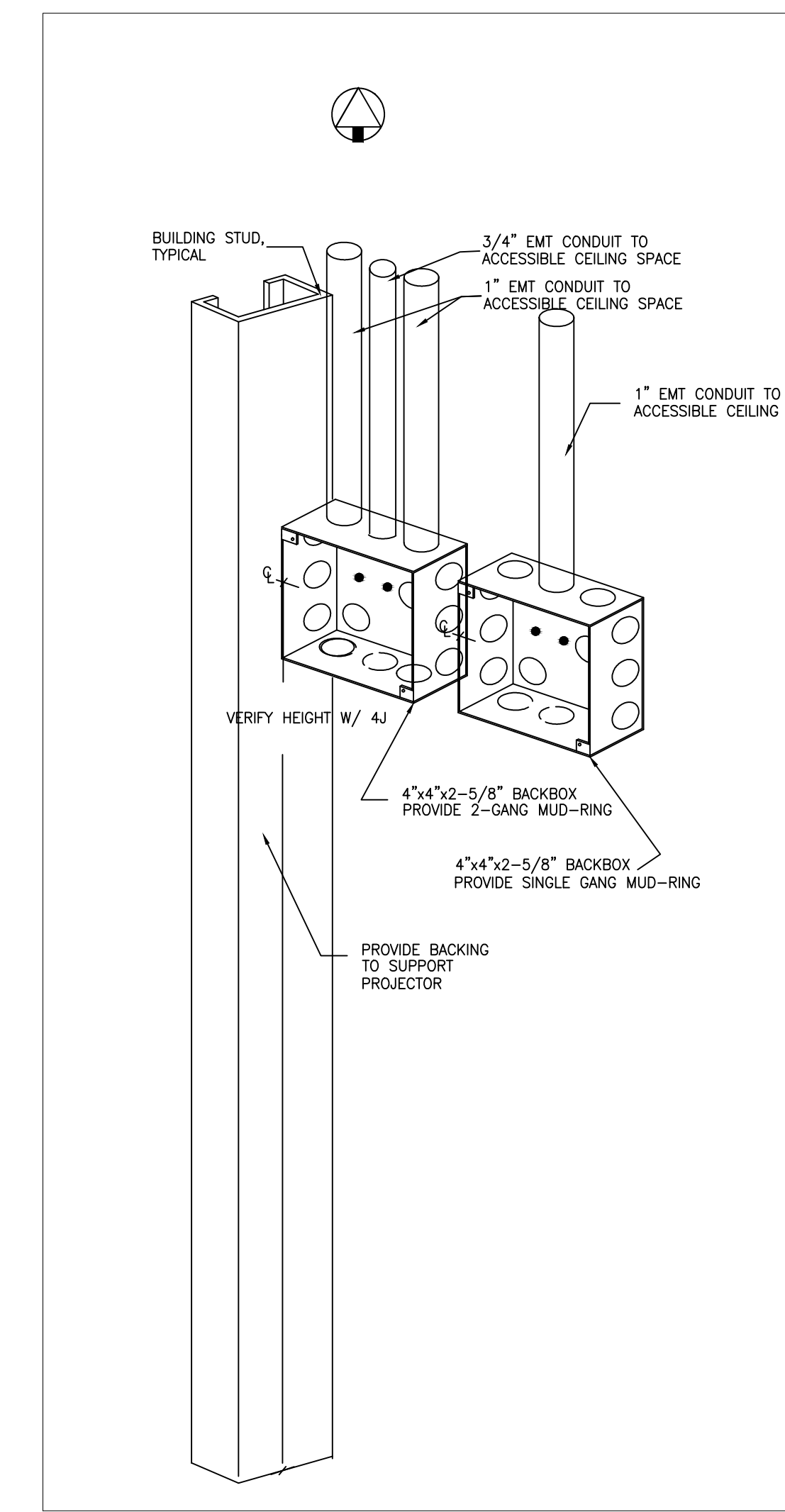
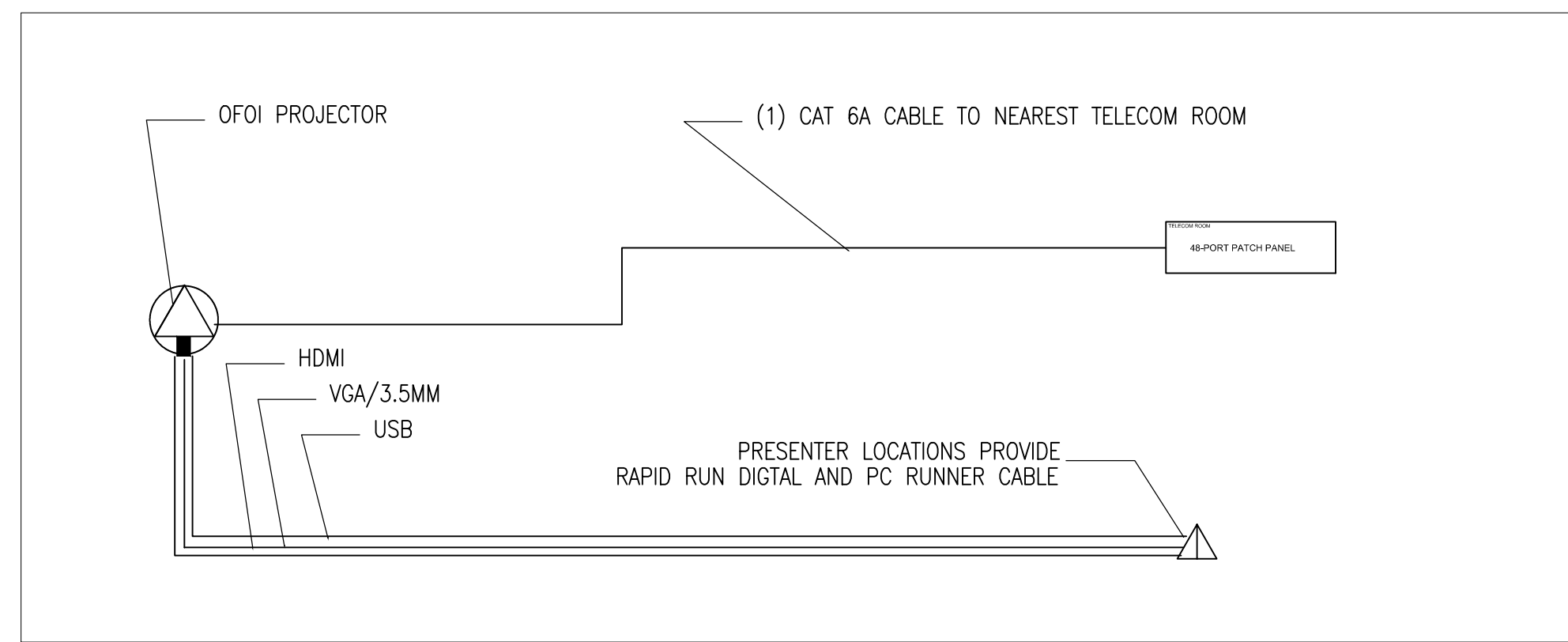
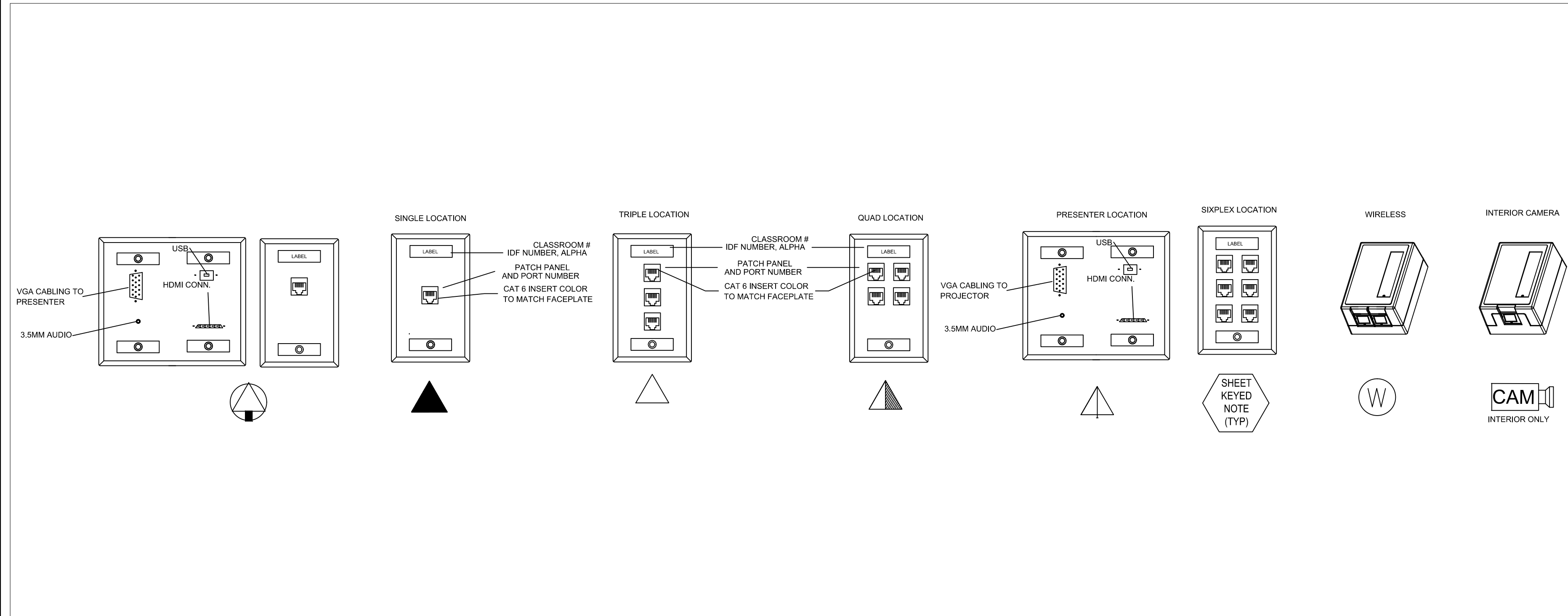


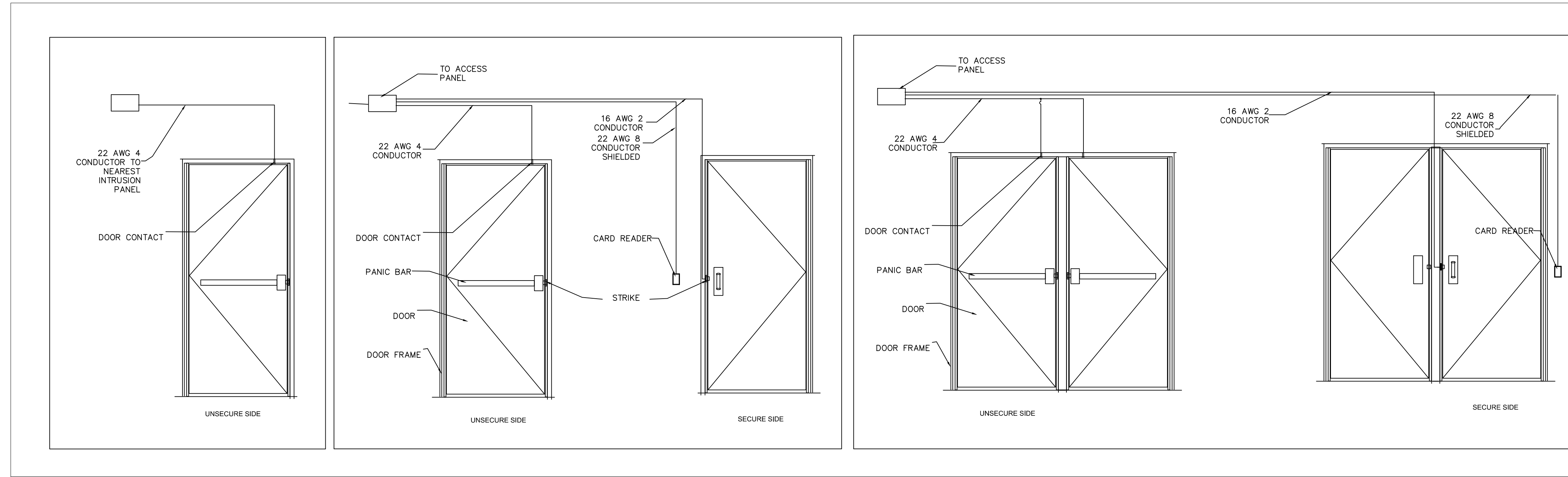
2 PARTIAL SECOND FLOOR PLAN IDF.2



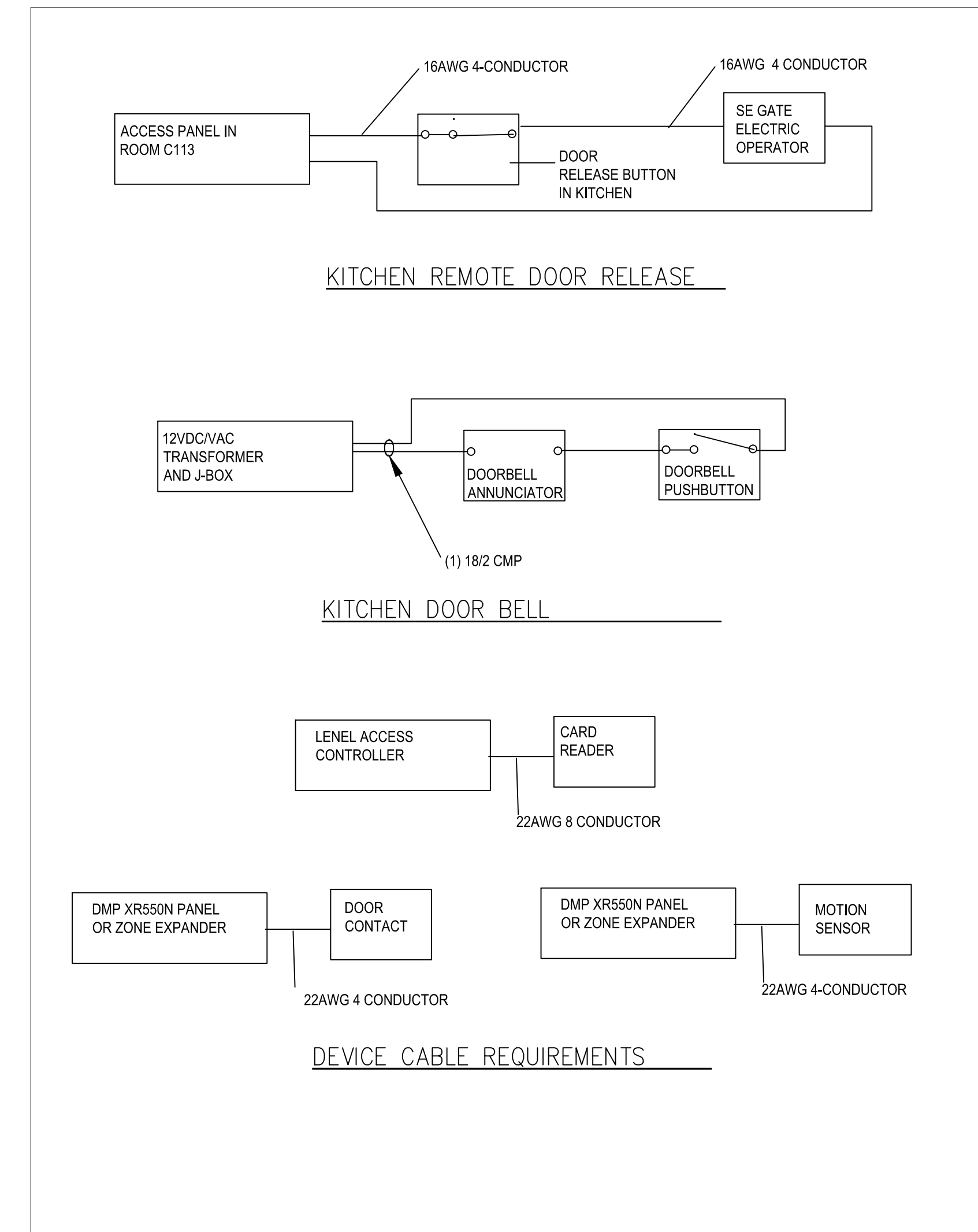
3 PARTIAL SECOND FLOOR PLAN IDF.3



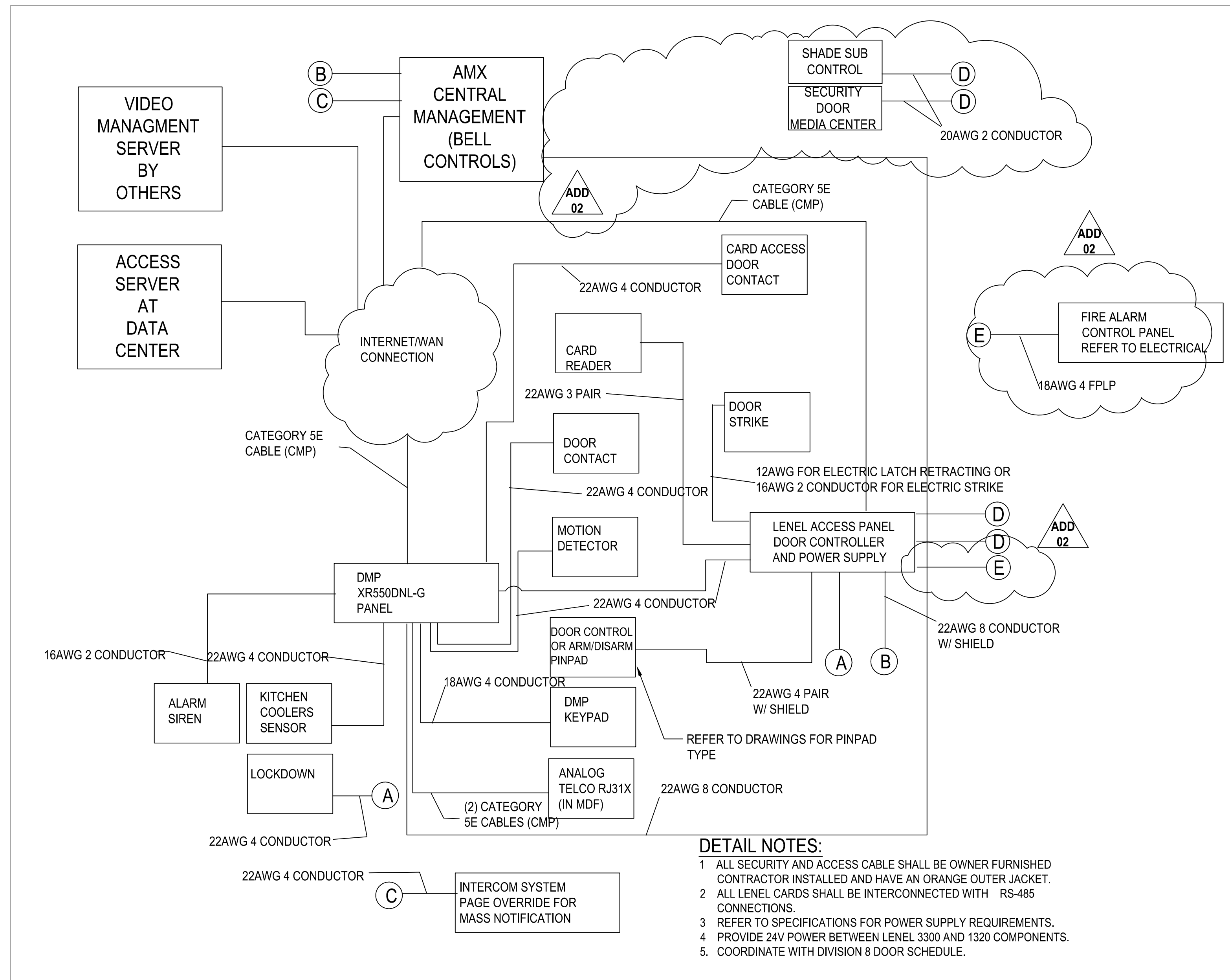




1 DOOR SECURITY CABLE REQUIREMENTS - COORDINATE WITH DIVISION 8
NTS

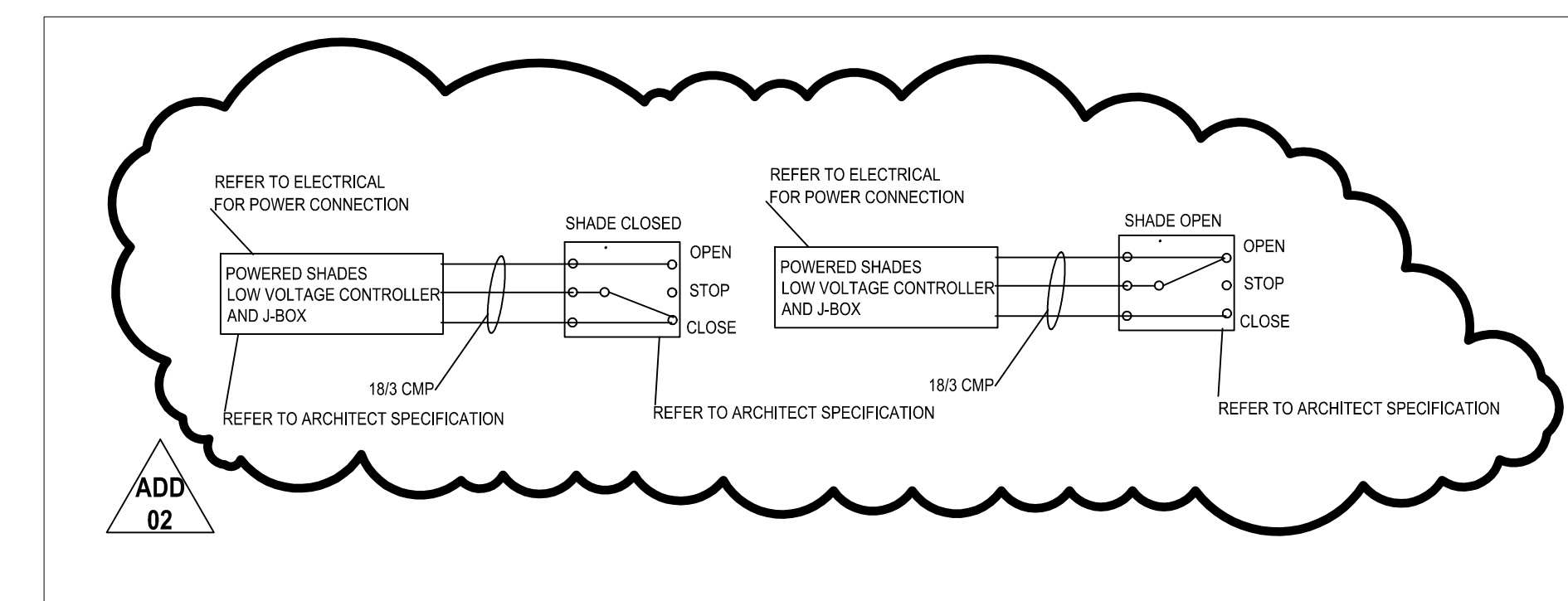


3 MISCELLANEOUS DEVICE CABLING
NTS



DETAIL NOTES:
 1. ALL SECURITY AND ACCESS CABLE SHALL BE OWNER FURNISHED CONTRACTOR INSTALLED AND HAVE AN ORANGE OUTER JACKET.
 2. ALL LENEL CARDS SHALL BE INTERCONNECTED WITH RS-485 CONNECTIONS.
 3. REFER TO SPECIFICATIONS FOR POWER SUPPLY REQUIREMENTS.
 4. PROVIDE 24V POWER BETWEEN LENEL 3300 AND 1320 COMPONENTS.
 5. COORDINATE WITH DIVISION 8 DOOR SCHEDULE.

2 SECURITY AND ACCESS SYSTEM ONLINE DIAGRAM
NTS



4 CLASSROOM LOCAL SHADE CONTROL
NTS

PROJECT #	1337.00	REVISION	
ISSUE DATE	15 FEB 2016	ADVISOR'S DRAWING	
DRAWN	DDH	CHECKED	GES
CHECKED			

BACKBOX SCHEDULE

SYMBOL	FUNCTION (PANEL NAME)	BOX SIZE	MOUNTING LOCATION
AVJB	AUDIOVISUAL MEDIA JUNCTION BOX	SIZE PER NEC (APPROX 8X8X4)	BEHIND EQUIP. RACK
EQUIP RACK	AUDIO-VISUAL EQUIPMENT RACK	PROVIDED BY AV CONTRACTOR	AS SHOWN
FB1	FLOOR BOX	FSR FL-500P +FL-FRK-500P	FLUSH IN FLOOR AS DIRECTED ON PLANS
ANT	REMOTE ANTENNA	1-GANG	MOUNT AT CEILING
WP1	WALL PANEL	FSR FL 600P	MOUNT 18" AFF AT LOCATION SHOWN
WP2	WALL PANEL	FSR WB-RXG 4-GANG WITH COVER	MOUNT 18" AFF AT LOCATION SHOWN
S1	SPEAKER CLUSTER	4-GANG DEEP BOX	MOUNT AT 18' AFF
S2	SPEAKER TYPE 2	2-GANG DEEP BOX	MOUNT AT 96" AFF
SC	ELECTRIC SCREEN CONTROL	2-GANG DEEP BOX	AT SCREEN AND AT 48" AFF FOR SWITCH
S	CEILING SPEAKER	1-GANG	FLUSH IN CEILING
CP1	CEILING PROJECTOR PANEL	FSR CB-22	FLUSH IN ACT CEILING
MIX	AUDIO MIX LOCATION	FSR FL 700 WITH COVER	MOUNT 18" AFF
RC	REMOTE CONTROL	FSR WB 3G WITH COVER	MOUNT 48" AFF

GENERAL NOTES:
 1. MOUNTING LOCATIONS ARE NOTED TO THE BOTTOM OF THE BACK BOX OR ARE NOTED ON DRAWINGS. ALL BOXES ARE RECESSED FOR FLUSH MOUNTING (TO FINISHED WALL/CEILING +0"/-1/8") UNLESS OTHERWISE NOTED.
 2. COORDINATE ALL EQUIPMENT AND BACK BOX LOCATIONS WITH ELECTRICAL AND ARCHITECTURAL
 3. POWER NEXT TO FLOOR BOXES SHOULD BE LOCATED IN THE FLOOR BOX

GENERAL INSTALLATION NOTES

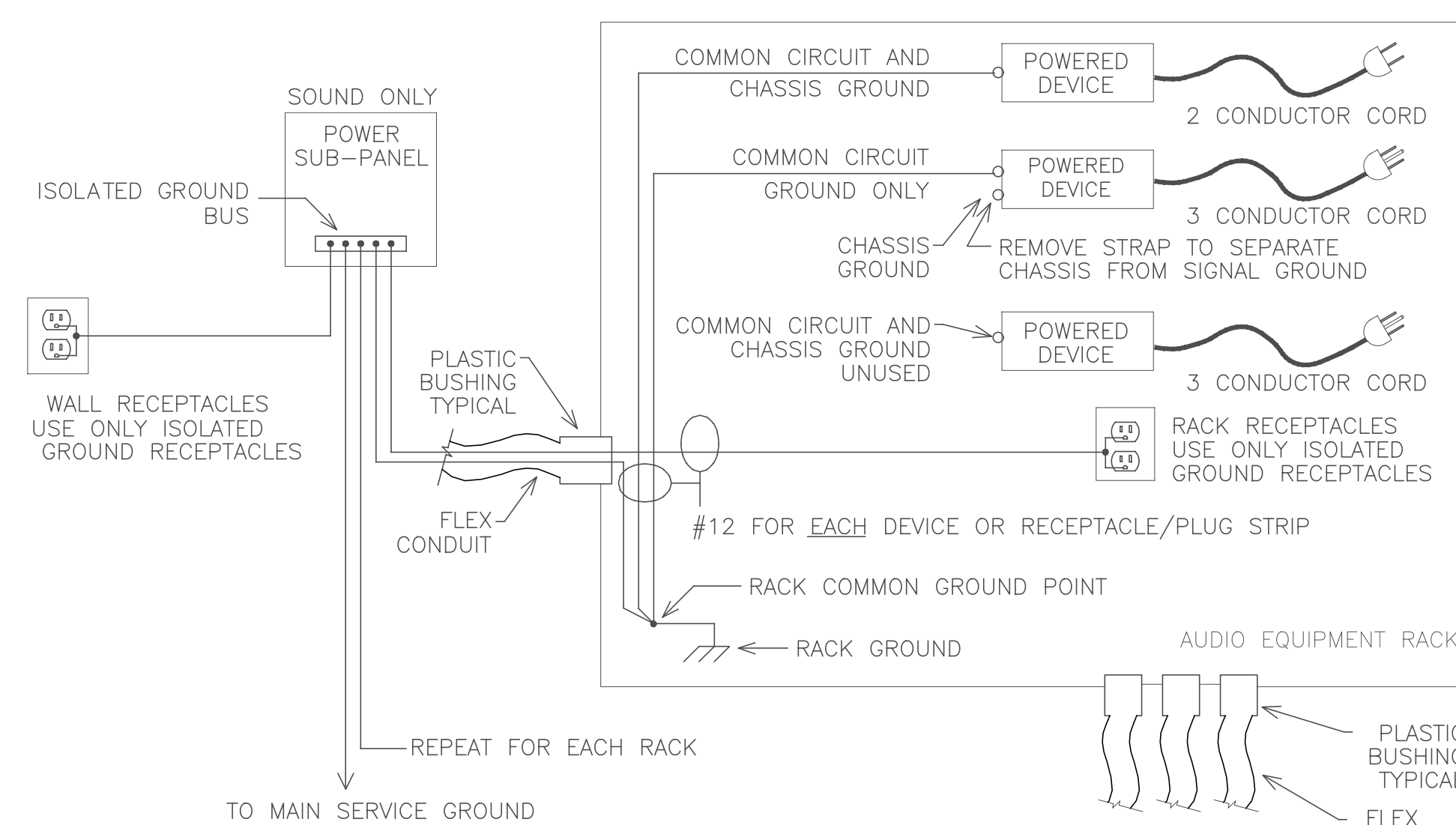
THE CATEGORY AV DRAWINGS INDICATE INFRASTRUCTURE ONLY INCLUDING CONDUIT, PULL-BOXES, BACK BOXES, COLLECTOR BOXES, AND/OR TERMINAL CABINETS. AV EQUIPMENT AND SIGNAL CABLE IS IN A SEPARATE AV CONTRACT.

AC POWER FOR THE A/V SYSTEMS TO BE PROVIDED BY ELECTRICAL CONTRACTOR PER DIVISION 26 IN ACCORDANCE WITH PROJECT DRAWINGS AND SPECIFICATIONS.

- I. AV CONDUIT SYSTEM:
 - A. ALL CONDUIT, WIREWAYS, PULL BOXES, BACK BOXES, COLLECTOR BOXES, AND ANCILLARY FITTINGS, CONNECTORS, AND MOUNTING ACCESSORIES ASSOCIATED WITH THE AV INFRASTRUCTURE TO BE INSTALLED PER DIVISION 26.
 - B. USE ALL FERROUS METAL CONDUIT. NO PVC UNLESS NOTED.
 - C. IN EACH CONDUIT RUN BETWEEN SUCCESSIVE BACK BOXES AND PULL BOXES, INSTALL A LENGTH OF YELLOW PULL LINE. PULL LINE SHALL HAVE SEQUENTIAL NUMBERING AT EACH ONE FOOT MARK.
 - D. REFER TO A/V SPECIFICATION FOR WIRE TYPES. REFER TO THE SINGLE LINE DRAWINGS FOR QUANTITIES.
 - E. PULL BOXES ARE NOT SHOWN ON THE RISERS, BUT MUST BE INSTALLED AFTER EACH 270 DEGREES OF BEND. EVERY 50 FEET OF STRAIGHT CONDUIT LENGTH SHALL BE CONSIDERED EQUIVALENT TO 90 DEGREES OF CONDUIT BEND.
 - F. TERMINATE ALL CONDUITS IN BACK BOXES, COLLECTOR BOXES, OR WIREWAYS AS SHOWN ON DRAWINGS. THE ELECTRICAL CONTRACTOR SHALL PROVIDE PLASTIC OR RUBBER BUSHINGS AS EDGE PROTECTION WHEN CONDUITS TERMINATE AT WIREWAYS AS SHOWN. EXPOSED CONDUIT EDGES ARE UNACCEPTABLE.
 - G. THE ELECTRICAL CONTRACTOR SHALL INCREASE THE SIZE OF BOX KNOCKOUTS AS REQUIRED AND PROVIDE APPROPRIATE FITTINGS, CONNECTORS, AND MOUNTING ACCESSORIES FOR A COMPLETE INSTALLATION IN COMPLIANCE WITH DIVISION 26.
 - H. RACKS TO BE PROVIDED BY ELECTRICAL CONTRACTOR PER DIVISION 16 IF INDICATED ON DRAWINGS. TAKE CARE TO ISOLATE ALL CONDUITS FROM THE TECHNICAL GROUND SYSTEM. BE SURE ALL CONDUITS ENTERING THE RACKS ARE INSULATED FROM THE RACKS.
 - I. ELECTRICAL CONTRACTOR SHALL DEMONSTRATE CONTINUITY OF ALL CONDUITS BY PASSING A MOUSE OR PLUG OF APPROPRIATE SIZE THROUGH EACH CONDUIT RUN.
 - J. ELECTRICAL CONTRACTOR SHALL MAKE AVAILABLE A FIELD REPRESENTATIVE FOR THE INSTALLER OF THE A/V EQUIPMENT DURING THE A/V INSTALLATION.
 - K. LEAVE NO CONDUIT ENTERING RACKS FROM TOP AND/OR SIDES EXPOSED TO FRONT VIEW OF RACKS. PLACE TRIM OR PANELS TO HIDE CONDUIT RUNS FOR A NEAT APPEARANCE.
 - L. WHERE CONDUIT IS TO BE SURFACE RUN, THE CONTRACTOR SHALL FINISH THE CONDUIT TO MATCH THE WALL FINISH.
 - M. ALL NEMA STYLE BACKBOXES ARE TYPE I, INDOOR, SCREW COVER ENCLOSURES UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
- II. BACK BOX LOCATIONS AND MOUNTING:
 - A. REFER TO ARCHITECTURAL ELEVATIONS FOR EXACT MOUNTING LOCATIONS OF ALL BACK BOXES.
 - B. BASED ON THE DRAWING LOCATIONS PER A, CONTRACTOR SHALL VERIFY LOCATION OF ALL BACK BOXES WITH OWNER'S REPRESENTATIVE IN THE FIELD.
 - C. ALL BOXES SHALL HAVE A BLANK COVER PLATE WITH THE STENCILED AV BACK BOX LABEL PAINTED ON THE INSIDE OF THE COVER PLATE FOR IDENTIFICATION.
 - D. COORDINATE ALL FINISHES WITH ARCHITECT. SUBMIT SAMPLE OF FINISHED PANEL TO ARCHITECT FOR REVIEW AND APPROVAL.

WIRE LEGEND

TYPE	QTY	DESCRIPTION	MANUFACTURER	PART NUMBER	CONDUCTORS
AD	X	AUDIO (DIGITAL)	BELDEN	1800B	1 PR W/SHLD
AL	X	AUDIO (LINE)	BELDEN	9451	1 PR W/SHLD
AM	X	AUDIO (MICROPHONE)	BELDEN	9451	1 PR W/SHLD
AP	X	MULTIPAIR AUDIO	BELDEN	1817R	8 PR W/SHLD
CS	X	CONTROL (SERIAL)	BELDEN	9451	1 PR W/SHLD
CR	X	CONTROL (IR)	BELDEN	9451	1 PR W/SHLD
CG	X	CONTROL (GENERAL)	BELDEN	9455	9 COND 20 GA
D	X	DATA	BELDEN	1700A	4 PR CAT 5
IM	X	PRODUCTION INTERCOM	WEST PENN	D-510	2 PR W/SHLD
P	X	LOW VOLTAGE POWER	BELDEN	8461	1B/2
R	X	RGBHV 5 WIRE	BELDEN	7789A	5 WIRE HI RES
SL	X	SPEAKER (8 OHM) LONG	WEST PENN	C-210	10/2
SH	X	SPEAKER (8 OHM) SHORT	WEST PENN	227	12/2
SZ	X	SPEAKER (70 VOLT)	WEST PENN	225	16/2
T	X	TELEPHONE/DATA	BELDEN	1700A	4 PR CAT 5
V	X	COMPOSITE VIDEO	BELDEN	1694A	RG-6/U
Y	X	S-VIDEO (Y/C)	BELDEN	QTY (2) 1505A	(2) RG-59/U



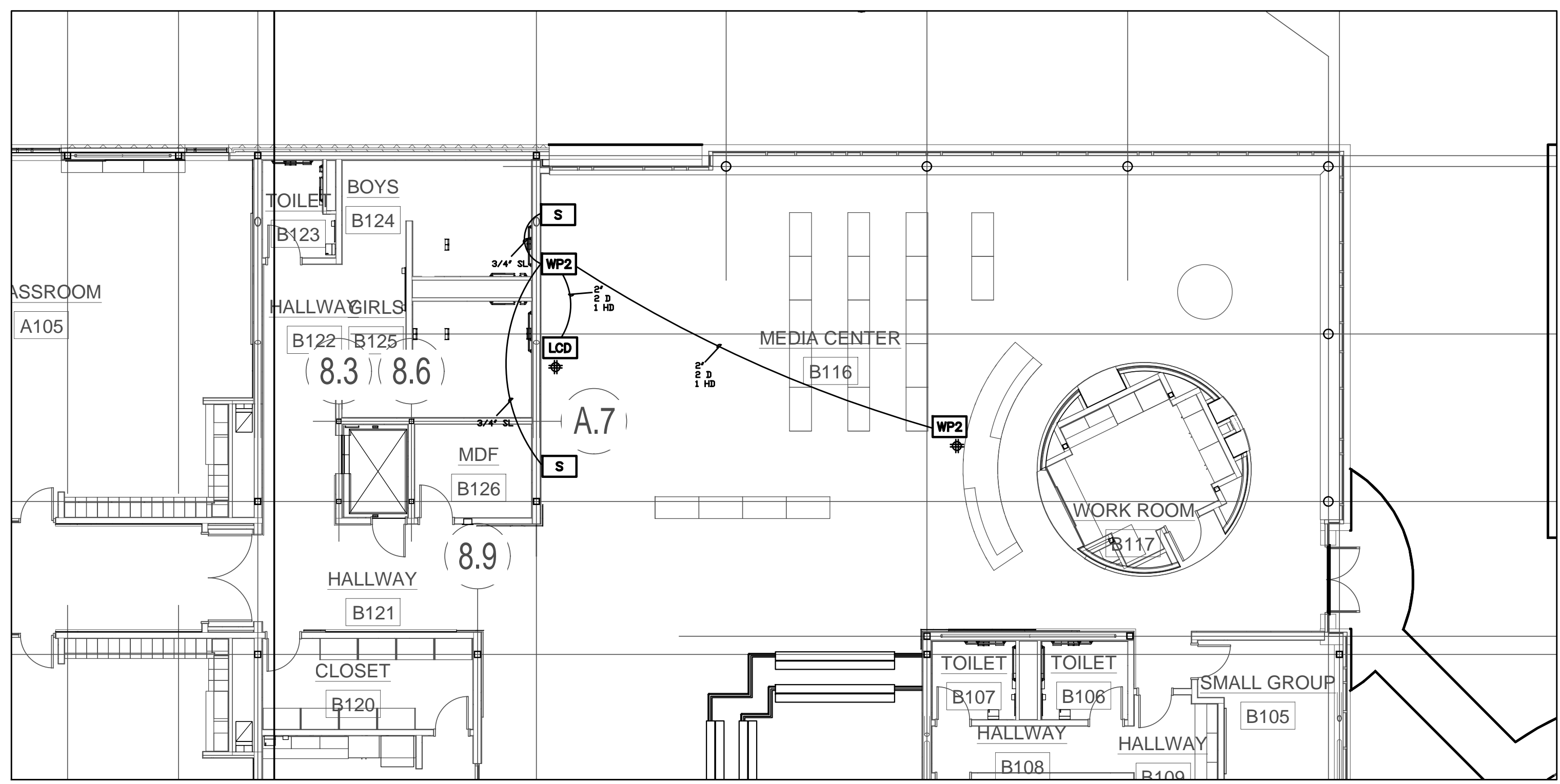
1. ALL GROUND LINES MEET AT ONE POINT WITHIN EACH EQUIPMENT RACK.
2. DO NOT BUS GROUND LINES EXCEPT AS SHOWN.
3. DO NOT CONNECT ELECTRICAL BOX OR CONDUIT TO PIN #1 OR CABLE SHIELD AT RECEPTACLES.
4. ISOLATED GROUND RECEPTACLES TYPICAL FOR ALL POWER RECEPTACLES IN SOUND EQUIPMENT AREAS.
5. ISOLATE ALL CONDUIT FROM EQUIPMENT RACKS USING PLASTIC BUSHINGS OR OTHER MEANS.
6. ISOLATE EACH RACK FROM THE OTHER RACKS, BOLT TOGETHER WITH PLASTIC BOLTS
7. ALL GROUND CONDUCTORS INSULATED COPPER OF GAUGE INDICATED.

1 POWER GROUNDING DETAIL
SCALE: NO SCALE

BACKBOX SCHEDULE

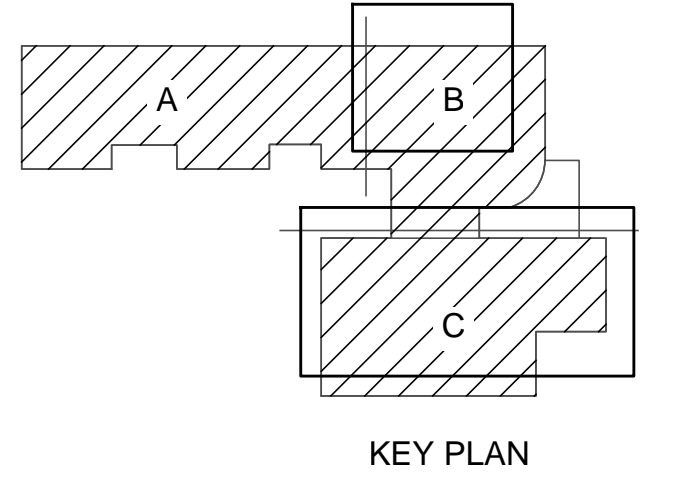
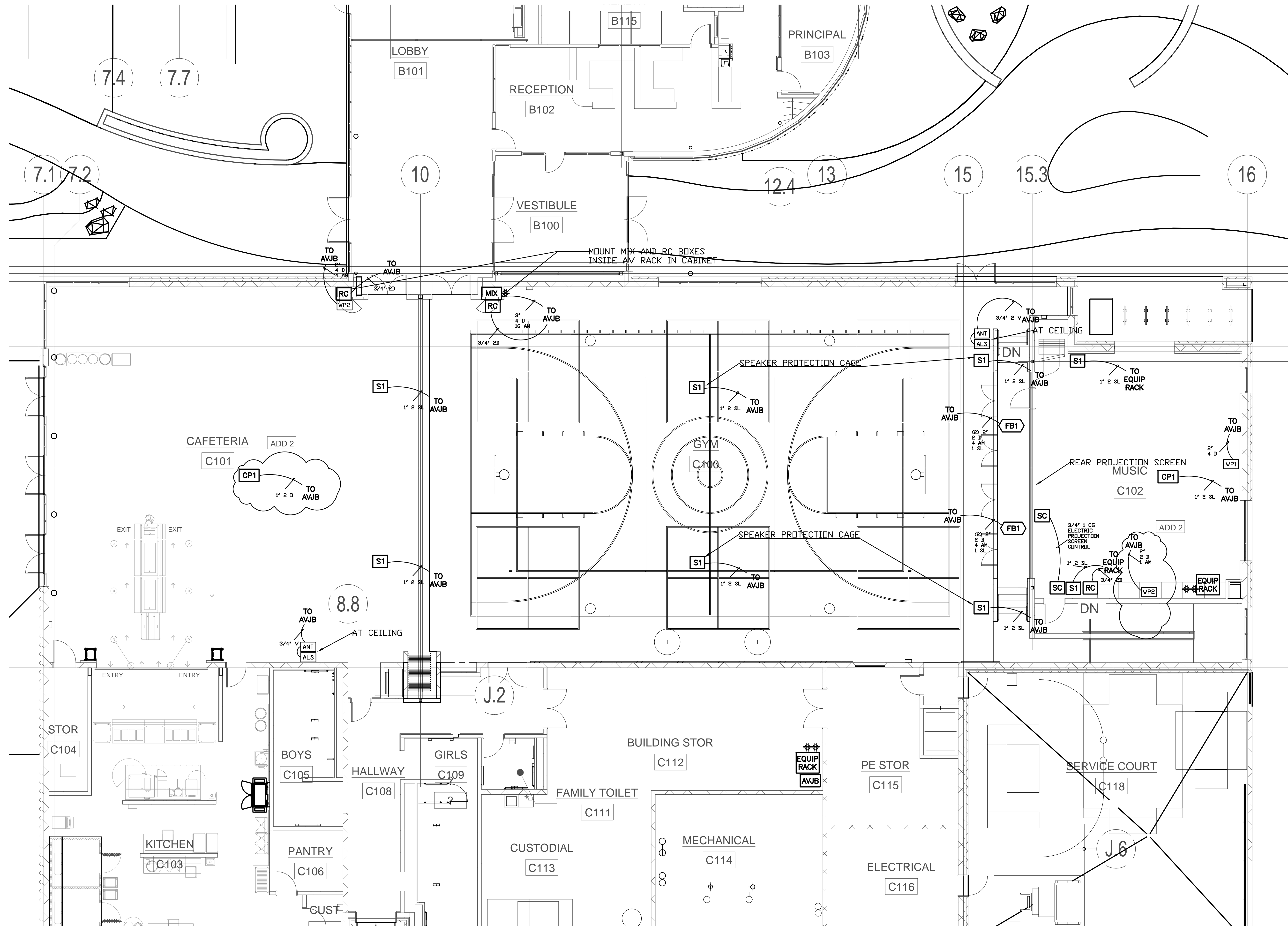
SYMBOL	FUNCTION (PANEL NAME)	BOX SIZE	MOUNTING LOCATION
AVJB	AUDIOVISUAL MEDIA JUNCTION BOX	SIZE PER NEC (APPROX 8X8X4)	BEHIND EQUIP. RACK
EQUIP RACK	AUDIO-VISUAL EQUIPMENT	PROVIDED BY AV CONTRACTOR	AS SHOWN
FB1	FLOOR BOX	FSR FL-500P +FL-FRK-500P	FLUSH IN FLOOR AS DIRECTED ON PLANS
ANT	REMOTE ANTENNA	1-GANG	MOUNT AT CEILING
WP1	WALL PANEL	FSR FL 600P	MOUNT 18" AFF AT LOCATION SHOWN
WP2	WALL PANEL	FSR WB-RXG 4-GANG WITH COVER	MOUNT 18" AFF AT LOCATION SHOWN
S1	SPEAKER CLUSTER	4-GANG DEEP BOX	MOUNT AT 18" AFF
S2	SPEAKER TYPE 2	2-GANG DEEP BOX	MOUNT AT 96" AFF
SC	ELECTRIC SCREEN CONTROL	2-GANG DEEP BOX	AT SCREEN AND AT 48" AFF FOR SWITCH
S	CEILING SPEAKER	1-GANG	FLUSH IN CEILING
CP1	CEILING PROJECTOR PANEL	FSR CB-22	FLUSH IN ACT CEILING
MIX	AUDIO MIX LOCATION	FSR FL 700 WITH COVER	MOUNT 18" AFF
RC	REMOTE CONTROL	FSR WB 3G WITH COVER	MOUNT 48" AFF

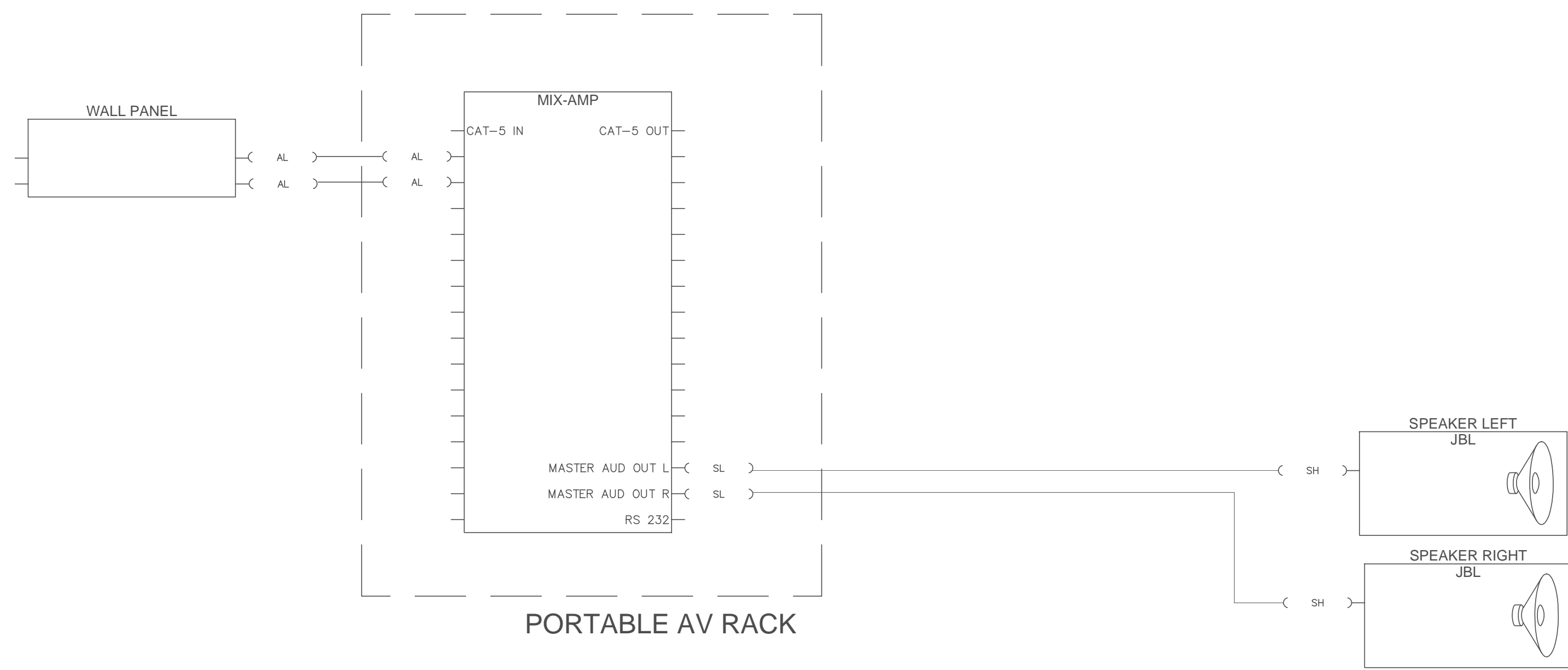
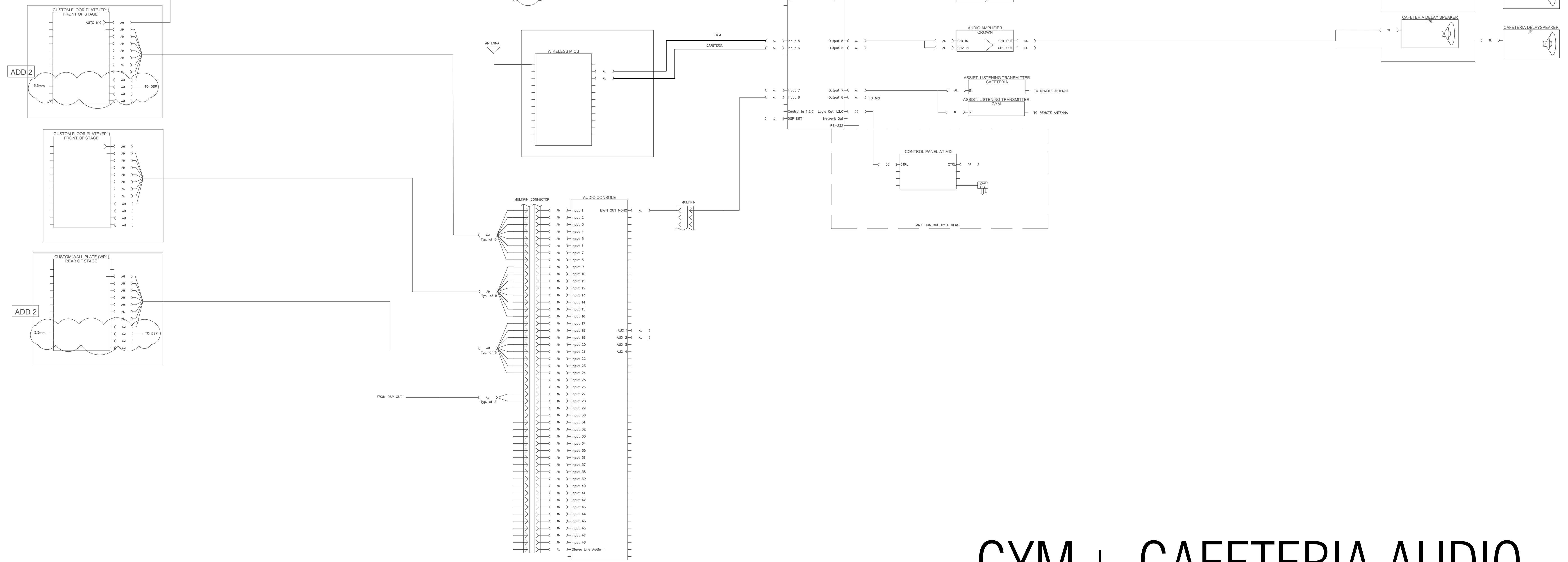
GENERAL NOTES:
 1. MOUNTING LOCATIONS ARE NOTED TO THE BOTTOM OF THE BACK BOX OR ARE NOTED ON DRAWINGS. ALL BOXES ARE RECESSED FOR FLUSH MOUNTING (TO FINISHED WALL/CEILING +0"/-1/8") UNLESS OTHERWISE NOTED.
 2. COORDINATE ALL EQUIPMENT AND BACK BOX LOCATIONS WITH ELECTRICAL AND ARCHITECTURAL
 3. POWER NEXT TO FLOOR BOXES SHOULD BE LOCATED IN THE FLOOR BOX



WIRE LEGEND

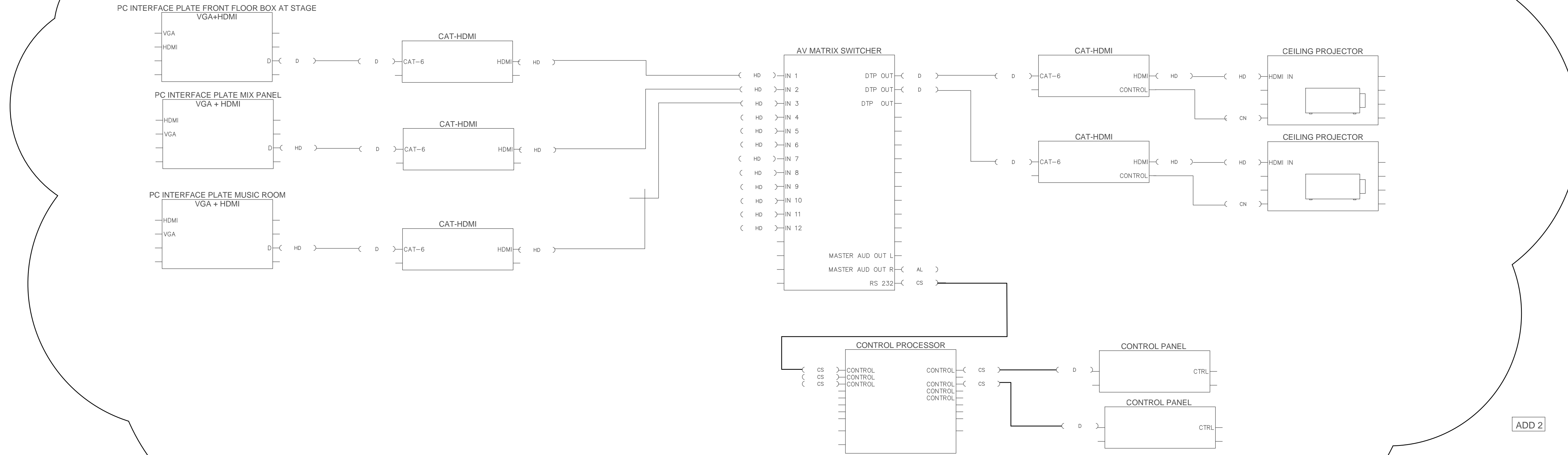
TYPE	QTY	DESCRIPTION	MANUFACTURER	PART NUMBER	CONDUCTORS
AD	X	AUDIO (DIGITAL)	BELDEN	1800B	1 PR W/SHLD
AL	X	AUDIO (LINE)	BELDEN	9451	1 PR W/SHLD
AM	X	AUDIO (MICROPHONE)	BELDEN	9451	1 PR W/SHLD
AP	X	MULTIPAIR AUDIO	BELDEN	1817R	8 PR W/SHLD
CS	X	CONTROL (SERIAL)	BELDEN	9451	1 PR W/SHLD
CR	X	CONTROL (IR)	BELDEN	9451	1 PR W/SHLD
CG	X	CONTROL (GENERAL)	BELDEN	9455	9 COND 20 GA
D	X	DATA	BELDEN	1700A	4 PR CAT 5
IM	X	PRODUCTION INTERCOM	WEST PENN	D-510	2 PR W/SHLD
P	X	LOW VOLTAGE POWER	BELDEN	8461	18/2
R	X	RGBHV 5 WIRE	BELDEN	7789A	5 WIRE HI RES
SL	X	SPEAKER (8 OHM) LONG	WEST PENN	C-210	10/2
SH	X	SPEAKER (8 OHM) SHORT	WEST PENN	227	12/2
SZ	X	SPEAKER (70 VOLT)	WEST PENN	225	16/2
T	X	TELEPHONE/DATA	BELDEN	1700A	4 PR CAT 5
V	X	COMPOSITE VIDEO	BELDEN	1694A	RG-6/U
Y	X	S-VIDEO (Y/C)	BELDEN	QTY (2) 1505A (2) RG-59/U	





GYM + CAFETERIA AUDIO

MEDIA AUDIO



GYM + CAFETERIA VIDEO

PROJECT #	1337-00	REVISIONS
ISSUE DATE	03.08.2015	
AV GYM + CAFETERIA VIDEO		
ADD 2		

ADD 2
 EUGENE SCHOOL DISTRICT 4J
 120 WEST HILLIARD AVENUE, EUGENE, OREGON 97404
 RIVER ROAD / EL CAMINO DEL RIO ELEMENTARY SCHOOL



LISTEN ACOUSTICS
 1001 SW 5TH AVE
 SUITE 1100
 EUGENE, OREGON 97404
 503.241.5221

