BID ADDENDUM NO. 1

June 25, 2026
Alfred Almond CSD
2025 Capital Project
2028-059

SED #02-01-01-04-0-001-037 – K-12 Main Campus Building

The following Addendum items shall be considered a part of the contract documents prepared by HUNT ENGINEERS, ARCHITECTS, LAND SURVEYORS & LANDSCAPE ARCHITECT, DPC.
Bid Document date of April 7, 2026, issued for bid June 3, 2026.

Clarifications issued by this Addendum:

1. All existing floor drains in pool deck are to be demolished. New floor drains to be provided in pool deck slab behind diving board and starting blocks.
2. Please note that drawings MC-A1.2, MC-A1.6, MC-A5.6, and MC-A5.7 as issued in this addendum are for a revision in structural gridlines only.

Project Manual Sections issued by this Addendum:

08 52 00 – Wood Windows

10 11 43 – Visual Display Wall Panels

10 14 19 – Dimensional Letter Signage
19 10 00 – Performance Sound Systems

Drawings issued by this Addendum:

AD1-A1 – NATATORIUM UPPER ROOF EDGE GRIDLINE

AD1-A2 – VANITY CEILING DETAIL

AD1-A3 – POOL DECK SHOWER CEILING DETAIL

AD1-A4 – POOL EXTERIOR ELEVATION DIMENSION CLARIFICATION – A

AD1-A5 – POOL EXTERIOR ELEVATION DIMENSION CLARIFICATION – B

AD1-A6 – SCORING TABLE GUARDRAIL SECTION

MC-A1.2 – FIRST FLOOR PLAN – AREA D

MC-A1.6 – SECOND FLOOR PLAN – AREA D

MC-A1.12 – ROOF PLAN – AREA F

MC-A5.6 – ENLARGED LOCKER ROOM PLAN & DETAILS

MC-A5.7 – ENLARGED POOL & DECK PLANS

MC-A8.5 – POOL FINISH ELEVATIONS

MC-A9.1 – INTERIOR FINISH SCHEDULES

MC-E1.1 - BASEMENT FLOOR POWER PLAN - AREA D

MC-E1.3 - FIRST FLOOR POWER PLAN - AREA D

MC-E1.6 - FIRST FLOOR POWER PLAN - AREA G

MC-E2.2 - FIRST FLOOR LIGHTING & FIRE ALARM PLAN - AREA D

Revisions to Project Manual issued by this Addendum:

ITEM AD1-1 Refer to Section 00 01 12 – Table of Contents
ADD Specification Section **08 52 00 – Wood Windows to the Table of Contents**

ITEM AD1-2 Refer to Section 00 01 12 – Table of Contents
ADD Specification Section **19 10 00 – Performance Sound Systems to the Table of Contents**

ITEM AD1-3 Refer to Section 00 01 12 – Table of Contents
DELETE Specification Section 08 51 13 – Aluminum Windows for the Table of Contents

ITEM AD1-4 Refer to Section 01 10 00 – Summary
DELETE Paragraph 1.10, A, 14 in its entirety

ITEM AD1-5 Refer to Section 07 42 13.19 – Insulated Metal Wall Panels
ADD Paragraph 2.1, A, 4 to read All Weather Insulated Panels – Model FL36

ITEM AD1-6 Refer to Section 07 42 13.19 – Insulated Metal Wall Panels
AMEND Paragraph 2.2, B, 1 to read R-Value of 24 minimum

ITEM AD1-7 Refer to Section 08 43 13 – Aluminum – Framed Storefronts
DELETE Paragraph 2.3, C in its entirety

ITEM AD1-8 Refer to Section 08 51 13 – Aluminum Windows
DELETE Specification Section 08 51 13 – Aluminum Windows in its entirety

ITEM AD1-9 Refer to Section 10 11 43 – Visual Display Wall Panels
DELETE Specification Section 10 11 43 – Visual Display Wall Panels

ITEM AD1-10 Refer to Section 10 11 43 – Visual Display Wall Panels
ADD Specification Section 10 11 43 – Visual Display Wall Panels

ITEM AD1-11 Refer to Section 10 14 19 – Dimensional Letter Signage
DELETE Specification Section 10 14 19 – Dimensional Letter Signage

ITEM AD1-12 Refer to Section 10 14 19 – Dimensional Letter Signage
ADD Specification Section 10 14 19 – Dimensional Letter Signage

Revisions to Drawings issued by this Addendum:

ITEM AD1-13 Refer to MC-A1.2 – First Floor Plan – Area D
DELETE MC-A1.2 – First Floor Plan – Area D in its entirety.

ITEM AD1-14 Refer to MC-A1.2 – First Floor Plan – Area D
ADD MC-A1.2 – First Floor Plan – Area D, as issued by this addendum.

ITEM AD1-15 Refer to MC-A1.6 – Second Floor Plan – Area D
DELETE MC-A1.6 – Second Floor Plan – Area D in its entirety.

ITEM AD1-16 Refer to MC-A1.6 – Second Floor Plan – Area D
ADD MC-A1.6 – Second Floor Plan – Area D, as issued by this addendum.

ITEM AD1-17 Refer to Drawing MC-A1.13 – Roof Details
AMEND Callout in Detail #1, Detail #2, Detail #3, Detail #4, and Detail #5 which reads "5/8'' COVERBOARD" to read as follows:
"5/8'' PLYWOOD"

ITEM AD1-18 Refer to Drawing MC-A1.9 – Roof Plan – Area A
AMEND Slate roof assembly under the Roof Legend which reads "5/8" POLYISOCYANURATE HD COVER BOARD" to read as follows:
"5/8" PLYWOOD"

ITEM AD1-19 Refer to Drawing MC-A1.10 – Roof Plan – Area B
AMEND Slate roof assembly under the Roof Legend which reads "5/8" POLYISOCYANURATE HD COVER BOARD" to read as follows:
"5/8" PLYWOOD"

ITEM AD1-20 Refer to Drawing MC-A1.11 – Roof Plan – Area D
AMEND Slate roof assembly under the Roof Legend which reads "5/8" POLYISOCYANURATE HD COVER BOARD" to read as follows:
"5/8" PLYWOOD"

ITEM AD1-21 Refer to MC-A1.12 – Roof Plan – Area F
DELETE MC-A1.12 – Roof Plan – Area F in its entirety.

ITEM AD1-22 Refer to MC-A1.12 – Roof Plan – Area F
ADD MC-A1.12 – Roof Plan – Area F, as issued by this addendum.

ITEM AD1-23 Refer to Drawing MC-A1.14 – Roof Details
AMEND Detail #1 as per Detail #1 on AD1-A1 as issued by this addendum.

ITEM AD1-24 Refer to Drawing MC-A1.14 – Roof Details
AMEND Gridline in Detail #2 which reads "C" to read as follows:
"D"

ITEM AD1-25 Refer to Drawing MC-A2.9 – Reflected Ceiling Plan Details
AMEND Detail #6 as per Detail #1 on AD1-A2 as issued by this addendum.

ITEM AD1-26 Refer to Drawing MC-A2.9 – Reflected Ceiling Plan Details
AMEND Gridline in Detail #7 which reads "C" to read as follows:
"D"

ITEM AD1-27 Refer to Drawing MC-A2.9 – Reflected Ceiling Plan Details
AMEND Gridline in Detail #9 which reads "C" to read as follows:
"D"

ITEM AD1-28 Refer to Drawing MC-A2.9 – Reflected Ceiling Plan Details
AMEND Detail #10 as per Detail #1 on AD1-A3 as issued by this addendum.

ITEM AD1-29 Refer to Drawing MC-A3.4 – Exterior Elevations
AMEND Detail #7 per Detail #1 on AD1-A4 as issued by this addendum.

ITEM AD1-30 Refer to Drawing MC-A3.4 – Exterior Elevations
AMEND Detail #9 as per Detail #1 on AD1-A5 as issued by this addendum.

ITEM AD1-31 Refer to Drawing MC-A4.1 – Wall Sections
AMEND Gridline in Detail #2 which reads "C" to read as follows:
"D"

ITEM AD1-32 Refer to Drawing MC-A4.1 – Wall Sections
AMEND Level line in Detail #2 which reads "14'-4"" to read as follows:
"14'-8""

ITEM AD1-33 Refer to Drawing MC-A4.1 – Wall Sections
AMEND Gridline in Detail #3 which reads "14" to read as follows:
"13"

ITEM AD1-34 Refer to Drawing MC-A4.2 – Wall Sections
AMEND Gridline in Detail #3 which reads "14" to read as follows:
"13"

ITEM AD1-35 Refer to Drawing MC-A4.2 – Wall Sections
AMEND Gridline in Detail #4 which reads "C" to read as follows:
"D"

ITEM AD1-36 Refer to Drawing MC-A4.2 – Wall Sections
AMEND Level line in Detail #15 which reads "14'-4"" to read as follows:
"14'-8""

ITEM AD1-37 Refer to MC-A5.6 – Enlarged Locker Room Plan & Details
DELETE MC-A5.6 – Enlarged Locker Room Plan & Details in its entirety.

ITEM AD1-38 Refer to MC-A5.6 – Enlarged Locker Room Plan & Details
ADD MC-A5.6 – Enlarged Locker Room Plan & Details, as issued by this addendum.

ITEM AD1-39 Refer to MC-A5.7 – Enlarged Locker Room Plan & Details
DELETE MC-A5.7 – Enlarged Pool & Deck Plans in its entirety.

ITEM AD1-40 Refer to MC-A5.7 – Enlarged Locker Room Plan & Details
ADD MC-A5.7 – Enlarged Pool & Deck Plans, as issued by this addendum.

ITEM AD1-41 Refer to Drawing MC-A6.3 – Stair & Ramp Plans, Sections and Details
AMEND Gridline in Detail #2 which reads "B" to read as follows:
"C"

ITEM AD1-42 Refer to Drawing MC-A6.3 – Stair & Ramp Plans, Sections and Details
AMEND Gridline in Detail #2 which reads "C" to read as follows:
"D"

ITEM AD1-43 Refer to Drawing MC-A6.3 – Stair & Ramp Plans, Sections and Details
AMEND Gridline in Detail #2 which reads "12" to read as follows:
"11"

ITEM AD1-44 Refer to Drawing MC-A6.3 – Stair & Ramp Plans, Sections and Details
AMEND Gridline in Detail #2 which reads "14" to read as follows:
"13"

ITEM AD1-45 Refer to Drawing MC-A6.3 – Stair & Ramp Plans, Sections and Details
AMEND Level line in Detail #15 which reads "14'-4"" to read as follows:
"14'-8""

ITEM AD1-46 Refer to Drawing MC-A6.4 – Pool Sections & Details
DELETE 12/MC-A6.4 – SCORING TABLE GUARDRAIL

ITEM AD1-47 Refer to Drawing MC-A6.4 – Pool Sections & Details
ADD AD1-A6 – SCORING TABLE GUARDRAIL SECTION, as issued by this addendum.

ITEM AD1-48 Refer to Drawing MC-A6.4 – Pool Sections & Details
AMEND Gridline in Detail #13 which reads "C" to read as follows:
"D"

ITEM AD1-49 Refer to Drawing MC-A6.4 – Pool Sections & Details
AMEND Gridline in Detail #14 which reads "C" to read as follows:
"D"

ITEM AD1-50 Refer to Drawing MC-A7.2 – Plan Details & Section Details
AMEND Gridline in Detail #9 which reads "14" to read as follows:
"13"

ITEM AD1-51 Refer to Drawing MC-A7.2 – Plan Details & Section Details
AMEND Gridline in Detail #12 which reads "C" to read as follows:
"D"

ITEM AD1-52 Refer to Drawing MC-A7.2 – Plan Details & Section Details
AMEND Gridline in Detail #16 which reads "14" to read as follows:
"13"

ITEM AD1-53 Refer to Drawing MC-A7.2 – Plan Details & Section Details
AMEND Gridline in Detail #31 which reads "C" to read as follows:
"D"

ITEM AD1-54 Refer to Drawing MC-A8.5 – POOL FINISH ELEVATIONS
DELETE MC-A8.5 – POOL FINISH ELEVATIONS in its entirety.

ITEM AD1-55 Refer to Drawing MC-A8.5 – POOL FINISH ELEVATIONS
ADD MC-A8.5 – POOL FINISH ELEVATIONS, as issued by this addendum.

ITEM AD1-56 Refer to MC-A9.1 – INTERIOR FINISH SCHEDULES
DELETE MC-A9.1 – INTERIOR FINISH SCHEDULES in its entirety.

ITEM AD1-57 Refer to MC-A9.1 – INTERIOR FINISH SCHEDULES
ADD MC-A9.1 – INTERIOR FINISH SCHEDULES, as issued by this addendum.

ITEM AD1-58 Refer to Drawing MC-P3.1 – SCHEDULES & SCHEMATICS
AMEND SP-2 to read as follows:
"WEIL PACKAGED PUMP SYSTEM – DUPLEX. BASIN DIAMETER 48", BASIN DEPTH 78", PUMP MODEL NUMBER 1418 S, 0.75 HP, 1750 RPM, QUICK REMOVE ASSEMBLY NUMBER 2613K9122, SUB BASE ASSEMBLY 304 STAINLESS STEEL – 2613K902, , FLANGE KIT ASSEMBLY 316 STAINLESS STEEL – 2613K942, LEVEL CONTROL 8234K1004AS, 4" INLET. SIMPLEX PUMP MODEL 2613K9102, 2" FLOOR ELBOW SIZE, 316 STAINLESS STEEL SLIDING BRACKET, FLAT GUIDE PIPE BRACKET, COVER MOUNT, QTY (1) 2" DISCHARGE PIPE. SIMPLEX PUMP MODEL 2613K9122, 2" FLOOR ELBOW SIZE, 316 STAINLESS STEEL SLIDING BRACKET, ANGLE GUIDE PIPE BRACKET, SIDE MOUNT TYPE, QTY (2). 2" DISCHARGE PIPE. WEIL ROUND WET WELL COVER DUPLEX – ONE PUMP OPENING, WEIL MODEL 8804K1332, 18X30 PUMP OPENING, WEIGHT 256 LBS, OPTION NUMBER 8800K7001, GALVANIZING, QTY (1). CURB RINGS AND FRAMES WEIL MODEL NUMBER 8816K5105, 48" WET WELL SIZE, 53" COVER SIZE, 55 LBS. QTY (1), OPTION NO. 8816K7001, GALVANIZING, QTY (1). TETHERED LEVEL CONTROL INTRINSICALLY SAFE CIRCUIT FLOAT SWITCH, GOLD PLATED CONTACT MECHANICAL SWITCH WEIL MODEL 8234K1004AS, 20 FOOT CORD LENGTH, QTY (4). OPTION 304.331.096 MOUNTING PIPE – 3/4 INCH SCHEDULE 40, 10 FOOT LONG, THREADED ON ONE END, QTY (1). WEIL PRESSURE DIAPHRAGM LEVEL CONTROL TETHERED FLOAT LEVEL CONTROL, DUPLEX WITH HIGH WATER, SWITCH QTY (4). WEIL PLC DUPLEX PUMP CONTROL PANEL, 1.6-2.5 MOTOR PROTECTOR AMP RANGE, 460/3 PHASE, MODEL 8136P-T-025. WEIL MODEL 8100K7102A, HWA DOME LIGHT-LEXAN, RED FLASHING, ON TOP OF PANEL, TYPE 4X, QTY (1)."

ITEM AD1-59 Refer to MC-E1.1 - BASEMENT FLOOR POWER PLAN - AREA D
DELETE MC-E1.1 - BASEMENT FLOOR POWER PLAN - AREA D in its entirety.

ITEM AD1-60 Refer to MC-E1.1 - BASEMENT FLOOR POWER PLAN - AREA D
ADD MC-E1.1 - BASEMENT FLOOR POWER PLAN - AREA D, as issued by this addendum.

ITEM AD1-61 Refer to MC-E1.3 - FIRST FLOOR POWER PLAN - AREA D
DELETE MC-E1.3 - FIRST FLOOR POWER PLAN - AREA D in its entirety.

ITEM AD1-62 Refer to MC-E1.3 - FIRST FLOOR POWER PLAN - AREA D
ADD MC-E1.3 - FIRST FLOOR POWER PLAN - AREA D, as issued by this addendum.

ITEM AD1-63 Refer to MC-E1.6 - FIRST FLOOR POWER PLAN - AREA G
DELETE MC-E1.6 - FIRST FLOOR POWER PLAN - AREA G in its entirety.

ITEM AD1-64 Refer to MC-E1.6 - FIRST FLOOR POWER PLAN - AREA G
ADD MC-E1.6 - FIRST FLOOR POWER PLAN - AREA G, as issued by this addendum.

ITEM AD1-65 Refer to MC-E2.2 - FIRST FLOOR LIGHTING & FIRE ALARM PLAN - AREA D
DELETE MC-E2.2 - FIRST FLOOR LIGHTING & FIRE ALARM PLAN - AREA D in its entirety.

ITEM AD1-66 Refer to MC-E2.2 - FIRST FLOOR LIGHTING & FIRE ALARM PLAN - AREA D
ADD MC-E2.2 - FIRST FLOOR LIGHTING & FIRE ALARM PLAN - AREA D, as issued by this addendum.

End of Addendum #1

SECTION 08 52 00
WOOD WINDOWS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Factory-fabricated wood windows.

B. Wood trim for exterior finishing.

1.2 RELATED REQUIREMENTS

A. Section 07 92 00 - Joint Sealants: Sealing joints between frames and adjacent construction.

B. Section 08 80 00 - Glazing.

1.3 REFERENCE STANDARDS

A. AAMA 2605 - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix); 2022.

A. AAMA/WDMA/CSA 101/I.S.2/A440 - North American Fenestration Standard/Specification for Windows, Doors, and Skylights; 2022, with Errata (2023).

B. ASCE 7 - Minimum Design Loads and Associated Criteria for Buildings and Other Structures; Most Recent Edition Cited by Referring Code or Reference Standard.

C. ASTM E1996 - Standard Specification for Performance of Exterior Windows, Curtain Walls, Doors, and Impact Protective Systems Impacted by Windborne Debris in Hurricanes; 2023.

D. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards, 2nd Edition; 2014, with Errata (2016).

1.4 ADMINISTRATIVE REQUIREMENTS

A. Preinstallation Meeting: Convene one week before starting work of this section.

1.5 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements for submittal procedures.

B. Product Data: Show component dimensions, anchorage and fasteners, glass, and internal drainage details.

C. Shop Drawings: Indicate opening dimensions, framed opening tolerances, and installation requirements.

D. Test Reports: Prior to submitting shop drawings or starting fabrication, submit test report(s) by independent testing agency showing compliance with performance requirements in excess of those prescribed by specified grade.

E. Manufacturer's qualification statement.

F. Installer's qualification statement.

G. Specimen warranty.

1.6 QUALITY ASSURANCE

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

B. Installer Qualifications: Company specializing in performing work of the type specified and with at least three years of documented experience.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Protect factory finished surfaces with wrapping. Do not use adhesive papers or sprayed coatings that bond when exposed to sunlight or weather.

1.8 FIELD CONDITIONS

A. Do not install sealants when ambient temperature is less than 40 degrees F.

B. Maintain this minimum temperature during and after installation of sealants.

1.9 WARRANTY

A. See Section 01 78 00 - Closeout Submittals for additional warranty requirements.

B. Correct defective Work within a 10 year period after Date of Substantial Completion.

C. Manufacturer Warranty: Provide 20 manufacturer warranty for insulated glass units against seal failure, interpane dusting or misting, and replacement of same. Complete forms in Owner's name and register with manufacturer.

D. Manufacturer Warranty: Provide 20 manufacturer warranty against defects listed. Complete forms in Owner's name and register with manufacturer or warrantor.
   1. Degradation of color finish.
   2. Delamination or separation of finish cladding from window member.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Aluminum Clad Wood Windows:
   1. Andersen Windows, Inc: www.andersenwindows.com/#sle.
   2. Marvin; Signature Ultimate Clad Wood Windows: www.marvin.com/#sle.
   3. Pella Corp: www.pellacommercial.com/#sle.
   4. Substitutions: See Section 01 60 00 - Product Requirements.

2.2 WOOD WINDOWS

A. Wood Windows: Wood frame and sash, factory fabricated and assembled.
   1. Exterior Finish: Metal clad, painted.
   2. Interior Finish: Stained.
   3. Color: To match existing.
   4. Configuration: As indicated on drawings.
   5. Window Product Types: FW - Fixed window, in accordance with AAMA/WDMA/CSA 101/I.S.2/A440.
   6. Factory glazed
   7. Wood Species: Oak, preservative treated using treatment type suitable for required finish.
   8. Metal Cladding: Formed aluminum, factory finished, factory fit to profile of wood members.
   9. Clearances and Shim Spacing: Minimum required for installation and dynamic movement of perimeter seal.
   10. Fasteners: Concealed from view.

11. Internal Drainage of Glazing Spaces to Exterior: Weep holes.

2.3 COMPONENTS

A. Glass and Glazing Materials: See Section 08 80 00.

B. Frames: Refer to drawings

C. Sills: Extruded aluminum, with .05 inch nominal thickness; sloped for positive drainage; fits under sash and projects at least 1/2 inch beyond exterior face of wall; single piece full width of opening.

D. Muntins/Grilles: Grilles permanently installed between panes of insulating glass.
1. Pattern: Custom design, see drawings.
2. Bar Width: Match existing windows
3. Color: Match interior and exterior of frame.

E. Fasteners: Stainless steel.

F. Sealant and Backing Materials: See Section 07 92 00 of types as indicated.

G. Wood for Casings and Trim: Clear Oak, clear preservative treated, of type suitable for required finish.

H. Flashing: Provide related flashings, with necessary anchors and attachment devices.

2.4 PERFORMANCE REQUIREMENTS

A. Comply with AAMA/WDMA/CSA 101/I.S.2/A440 requirements for the specific window type in accordance with the following:
1. Performance Class (PC): AW.
2. Performance Grade (PG): 40, with minimum design pressure (DP) of 40.10 psf.

B. Design Pressure (DP): In accordance with applicable codes.

C. Overall Thermal Transmittance (U-value): 0.35, maximum, including glazing, measured on window sizes required for this project.

2.5 ALUMINUM FINISHES

A. Superior Performing Organic Coatings: AAMA 2605, multiple coat, thermally cured polyvinylidene fluoride system.

B. Color: Color to be exact match of existing windows throughout area of building.

C. Touch-Up Materials: As recommended by coating manufacturer for field application.

PART 3 EXECUTION

3.1 INSTALLATION

A. Attach window frame and shims to perimeter opening to accommodate construction tolerances and other irregularities.

B. Align window plumb and level, free of warp or twist. Maintain dimensional tolerances and alignment with adjacent work.

3.2 TOLERANCES

A. Maximum Variation from Level or Plumb: 1/16 inch per 3 ft non-cumulative or 1/8 inch per 10 ft, whichever is less.

3.3 CLEANING

A. Remove protective material from factory finished surfaces.

B. Wash surfaces by method recommended and acceptable to window manufacturer; rinse and wipe surfaces clean.

END OF SECTION

SECTION 10 11 43
VISUAL DISPLAY WALL PANELS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Large format graphic panels.

1.2 RELATED REQUIREMENTS

A. Section 06 10 00 - Rough Carpentry: Blocking and supports.

B. Section 09 21 16 - Gypsum Board Assemblies: Concealed supports in metal stud walls.

1.3 REFERENCE STANDARDS

A. ASTM B117 - Standard Practice for Operating Salt Spray (Fog) Apparatus; 2019.

B. ASTM D635 - Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position; 2022.

C. ASTM D1735 - Standard Practice for Testing Water Resistance of Coatings Using Water Fog Apparatus; 2021.

D. ASTM D1929 - Standard Test Method for Determining Ignition Temperature of Plastics; 2023.

E. ASTM D2843 - Standard Test Method for Density of Smoke from the Burning or Decomposition of Plastics; 2022.

F. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2024.

1.4 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide manufacturer's published data on panels and anchorage devices.

C. Shop Drawings: Indicate wall elevations, dimensions, joint locations , special anchor details.

D. Samples: Final scratch-off sample of smaller sized panel to illustrate print quality, colors, finishes, and mounting mechanism.

E. Panel schedule in manufacturer's format for verification of graphic image and copy.

F. Approval drawings showing materials, construction detail, lay-out, size, graphic and mounting methods.
   1. All panels, layout, and graphics shall be approved by Owner prior to fabrication.

G. Manufacturer's Qualification Statement.

1.5 QUALITY ASSURANCE

A. Manufacturer specializing in manufacturing the products specified in this section with minimum five years experience. Obtain from one source and a single manufacturer.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Package to prevent damage or deterioration during shipment, handling, storage and installation. Products should remain in original packaging until removal is necessary. Store products flat in a dry, indoor location.

1.7 WARRANTY

A. Provide manufacturer's warranty against defects in materials and workmanship for minimum 5 years.

PART 2 PRODUCTS

2.1 MANUFACTURER

A. 3Form; Varia, Costom Printing: www.3-form.com.

B. Or Architect approved equal.

C. Substitutions: See Section 01 60 00 - Product Requirements.

2.2 PANELS

A. General
1. Formable, interlayered resin panel, 40% pre-consumer recycled content.
a. Laminated images will not be accepted.
2. ASTM D2843 Smoke Density: Less than 75.
3. ASTM D635 Flame Spread: CC1, minimum.
4. ASTM D1929 Self-Ignition Temperature: Greater than 650°F.
5. Panels shall not harbor bacteria and shall withstand use of hospital grade disinfectants.

B. Materials
1. Fabricated of recycled PETG resin (94%), virgin PETG resin (3.9%), polyurethane bonding layer (1.1%), and decorative interlayers (0.7%).
2. Style: LID - 1128891
3. Material: Varia 1/2" thick.
4. Finish: Sandstone.
5. Number: SO-606910.1.

C. Graphics
1. All images shall have a minimum resolution of 300 dpi and 25% of the enlarged image size.
2. Images, graphics, and copy shall be provided by Owner, unless noted otherwise.
3. The direct print shall be first surface with protective overlay to prevent damage from moisture, UV, scratches and strong cleaning agents.
4. All panels shall be protected following printing by a UV, chemical- and scratch-resistant overlay to preserve color and protect against damage.
5. Image to be centered within the panel.

D. Panel Size: As indicated on Drawings.

2.3 ACCESSORIES

A. Mounting Hardware
1. All panels shall be provided with appropriate mounting hardware.
2. Panels shall be capable of removal from wall to facilitate painting or cleaning.
3. Panels shall be equipped with a locking mechanism to secure panel to wall. Mechanism shall be hidden from view.
4. Panel mounting should consider CMU substrate, mounting mechanisms provided as required by manufacturer.

5. Mounting mechnaisms to be exterior grade, and be designed to withstand high humidity environments.
6. Product:
    a. 3form; Point Support XT: www.3form.com.
    b. Or manufacturer's approved equal.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify that field measurements are as indicated on shop drawings.

B. Verify that internal wall blocking is ready to receive work and positioning dimensions are as indicated on shop drawings.

C. Examine panels for defects, damage and compliance with specifications. Installation shall not proceed until unsatisfactory conditions are corrected.

3.2 INSTALLATION

A. General: Installation locations shall be in accordance with approved shop drawings. Locate where indicated using mounting methods in compliance with manufacturer's written instructions:
    1. The Contractor shall coordinate installation schedules with the Owner and Construction Manager.
    2. Installation shall be performed by manufacturer’s personnel trained and certified in manufacturer’s methods and procedures.
    3. The contractor shall submit a CAD generated location plan noting the location of all graphic panels.
    4. Panels shall be level, plumb, and at locations indicated with panel surfaces free from defects.
    5. Upon completion of the work, contractor shall remove unused or discarded materials, containers and debris from site.

END OF SECTION

SECTION 10 14 19
DIMENSIONAL LETTER SIGNAGE

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Dimensional letter signage.

1.2 PRICE AND PAYMENT PROCEDURES

A. Allowances:
   1. See Section 01 21 00 - Allowances for cash allowances affecting this section.
   2. Include cash allowance for purchase and delivery but not installation.

1.3 REFERENCE STANDARDS

A. 36 CFR 1191 - Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities; Architectural Barriers Act (ABA) Accessibility Guidelines; current edition.

B. ADA Standards - 2010 ADA Standards for Accessible Design; 2010.

C. ICC A117.1 - Accessible and Usable Buildings and Facilities; 2017.

1.4 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements for submittal procedures.

B. Product Data: Manufacturer's product literature for each type of dimensional letter sign, indicating style, font, colors, locations, and overall dimensions of each sign.

C. Shop Drawings:
   1. Include dimensions, locations, elevations, materials, text and graphic layout, and attachment details.

D. Selection Samples: Submit one sample of each color available in product line for selection.

E. Samples: Submit samples of size required for project, indicating sign material, style, font, color selected, and method of attachment.

F. Manufacturer's Installation Instructions: Include installation templates and attachment devices.

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years of documented experience.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Package dimensional letter signs as required to prevent damage before installation.

B. Store under cover and elevated above grade.

1.7 FIELD CONDITIONS

A. Do not install tape adhesive when ambient temperature is lower than recommended by manufacturer.

B. Maintain minimum ambient temperature during and after installation.

PART 2 PRODUCTS

2.1 REGULATORY REQUIREMENTS

A. Accessibility Requirements: Comply with ADA Standards and ICC A117.1 and applicable building codes, unless otherwise indicated; in the event of conflicting requirements, comply with the most restrictive requirements.

2.2 DIMENSIONAL LETTERS

A. Acrylic Letters:
   1. Material: Formable resin panels.
   2. Thickness: As indicated on drawings.
   3. Letter Height: 10 inches.
   4. Text and Typeface:
      a. Character Font: Helvetica, Arial, or other sans serif font.
   5. Finish: Vellum.
   6. Color: As selected.
   7. Mounting: manufacturer's standard mounting method for high humidity environments.
   8. Construction: 1/2" Chroma Digital Print + Avalanche, Laser cut with template for applied letter installation.
   9. Basis of Design Product:
      a. 3Form; Chroma, Avalanche, Applied Lettering: www.3-form.com.
      b. Substitutions: See Section 01 60 00 - Product Requirements.

2.3 ACCESSORIES

A. Letters to be mounted as recommended by manufacturer.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify that substrate surfaces are ready to receive work.

B. Notify Architect if conditions are not suitable for installation of signs; do not proceed until conditions are satisfactory.

3.2 INSTALLATION

A. Install in accordance with manufacturer's instructions.

B. Install with horizontal edges level.

C. Locate dimensional letter signs and mount at heights indicated on drawings and in accordance with ADA Standards and ICC A117.1.

D. Protect from damage until Date of Substantial Completion; repair or replace damaged items.

3.3 CLEANING, PROTECTION AND REPAIR

A. Repair scratches and other damage which might have occurred during installation. Replace components where repairs were made but are still visible to the unaided eye from a distance of 5 feet interior and 10 feet exterior.

B. Remove temporary coverings and protection to adjacent work areas. Clean installed products in accordance with manufacturer's instructions prior to Owner's acceptance.

C. Dispose of construction debris.

3.4 SCHEDULE

A. Signage Types and Drawings for sizes, locations and layout of signage types, sign text copy and graphics.

END OF SECTION

SECTION 19 10 00
PERFORMANCE SOUND SYSTEMS

PART 1 - GENERAL

1.1 PROJECT INFORMATION:

A. Owner: Alfred Almond Central School DIstrict

6795 Route 21
Almond, NY 14804

B. Architect: Hunt Engineers, Architects & Land Surveyors P.C.

Airport Corporate Park
100 Hunt Center
Horseheads, New York 14845

C. Consultant: AVL Designs, Incorporated

1788 Penfield Rd, Suite 1
Rochester, New York 14611
Phone (585) 586-1100

D. Contractor: The successful bidder for the work described herein. Also referred to as the Theatrical Contractor (TC), the bidder, the installer, or the contractor.

E. Others: Various companies doing construction work under the general contract.

1.2 PROFESSIONAL STANDARDS

A. The contractor is expected to install all work to the appropriate industry professional standards, manufacturer recommendations, and current applicable codes. If any work required exceeds the skills of the contractor, they will employ appropriate subcontractors for the scope required.

B. The acceptability of materials and workmanship will be determined by the Architect, Consultant, and CM.

C. Any work that might be damaged, be inadvertently painted, or become dirty during construction will be protected by the contractor. All responsibility for protection shall be by the contractor. The contractor will provide final cleaning and or repair of all equipment in their scope to like new condition.

D. The contractor will attend and/or arrange meetings as required to make sure their scope is coordinated with all other trades. The contractor is responsible to make known to all other trades critically dimensioned items and locations to avoid conflicts. Where conflicts occur follow required procedures in the project manual to seek resolution.

E. Where any substandard work is provided by related trades that impedes the work of the contractor they will notify the CM, Consultant, Architect, or Engineer in writing as called for one the project manila to rectify the issue.

F. Where work is provided by others the contractor is responsible to verify installation conditions that relate to their work. If installation of related work is substandard the contractor shall generate a written RFI through proper channels based upon the project manual. The contractor shall not install their work to any substandard devices, etc. provided by others until such work has been resolved or until the contractor has received written authorization from the construction manager to proceed. If the contractor ignores substandard installation work by others and proceeds to install his devices to these items, then they accepts and bears sole responsibility to repair, reinstall and correct any found deficiencies to the satisfaction of the owner upon final inspections.

G. The contractor will comply with the AHJ (Authority having jurisdiction) as it relates to programming any and all emergency interfaces.

H. The contractor is expected to possess knowledge of the equipment of their industry and provide all required small items required install specified equipment. Provide small Items such as rack rails, din rails, power cords, connectors, wall wart power supplies, crimps, nicopress, and other items that may not be called out on drawings or in specs as required to support primary equipment.

I. When in doubt about any aspect of the work the contractor should not proceed until they obtain clarification from the appropriate entity following procedures detailed in the project manual.

1.3 DEFINITIONS

Code Requirements	Minimum requirements as specified by all applicable and published codes.
Concealed	Work installed in pipe and duct shafts, chases or recesses, inside walls, above ceilings, in slabs or below grade.
Equal or Equivalent	Equally acceptable as determined by Owner's Representative.
Extend	To increase the length(s) of any indicated conduit/wiring so as to reach a particular specified or implied point – including the provision of any misc. additional equipment as required for proper extension and to maintain full system functionality.
Final Acceptance	Owner acceptance of the project from Contractor upon certification by Owner's Representative.
Furnish	Supply and deliver to installation location to the appropriate trade responsible for installation.
Furnished by Others	Receive delivery at job site or where called for and install.
Inspection	Visual observations by Owner's site Representative
Install	Mount and connect equipment and associated items and make ready for use.
Labeled	Refers to classification by a standards agency.

Or Approved Equal	Approved equal or equivalent as determined by Owner's Representative.
Owner's Representative	The Prime Professional, Construction Management or Clerk of the Works.
Patching	Repair of holes, marks, and damage left from removals. Consult project manual for requirements.
Provide	Furnish, install and connect ready for use.
Relocate	Disassemble, disconnect, and transport equipment to new locations, then clean, test, and install ready for use.
Replace	Remove and provide new item.
Remove	Safely Disconnect including any and all wiring, hardware, conduit (except concealed), anchors, suspension hardware etc….Legally dispose of items not called out to be offered to or returned to owner.
Review	A general contractual conformance check of specified products.
Satisfactory	As specified in contract documents.

1.4 INTENT OF DRAWINGS:

A. Throughout the contract documents there are various manufacturers and products referenced. It is understood that these products establish a basis of design that all other "or equal" substitutions must meet or exceed. All submitted devices must be the referenced product or approved equal.

B. The drawings in this package are diagrammatic in nature, unless detailed dimensioned drawings are included. The drawings show the approximate locations of equipment and devices. The final and exact locations of all non-dimensioned devices are subject to the approval of the Owner or the Owner's Representative. Devices with detailed installation dimensions; however, are critically located and must be installed to those indicated dimensions unless alternate instructions have been given to the contractor in writing by the consultant.

C. The contractor(s) shall inspect the entire building(s) with the Owner's representative prior to beginning any work and shall identify the exact locations and installation methods for all devices, conduit and wiring prior to beginning work.

D. Typical details are shown for the installation of various devices. The details do not apply to all situations. Installation methods for all work shall be subject to the Owners and

construction manager's approval. Provide all work and equipment required for a professional, workmanlike installation.

1.5 SECTION INCLUDES BUT IS NOT LIMITED TO:

A. Provision of audio and AV system and related work scope as indicated on drawings..

B. Furnishing some equipment for install by others

C. Wiring, Set up, and commissioning

D. Training and closeout documents

1.6 RELATED SECTIONS & DOCUMENTS:

A. The contractor's shall examine the full set of construction drawings and specifications and ascertain all aspects of the scope of work described within this specification. The contractor will be responsible for cooperation with and adherence to the overall scope and intent of the project relative to the work being done by the contractor.

B. Drawings and general provisions of the Contract including General and Supplementary Conditions and Division 0, 1, and 16 specification sections apply to work of this section (related specification sections may vary depending upon the particular CSI format being adhered to). All related drawings, contract conditions and general requirements found in the project manual that apply to the general contract will apply to the work described in this specification. Examine all referenced documents for general project requirements relating to the work in this specification. Contact the architects, engineers and/or construction manager for any clarification required to properly bid this project. It is the contractor's responsibility to obtain necessary clarification before bidding. No change orders will be allowed for existing project conditions and contractor requirements not properly investigated by the contractor.

1.7 SECTION INCLUDES BUT IS NOT LIMITED TO: RELATED WORK NOT INCLUDED:

A. The contractor is responsible for all work on the PS series drawings and written specifications. Specific coordinated work is to be provided by the electrical contractor

1. Electrical: See Drawings

1.8 GENERAL REQUIREMENTS

A. Removals - Offer all existing portable and removed equipment to the owner prior to legally disposing of these items. Obtain written permission from the owner for all existing removed items that they do not desire to retain prior to disposal.

B. Provide all equipment outlined and described within this specification and assemble it into a complete, properly functioning system for use by the owner as described within this specification.

C. It is the contractor's responsibility to clarify any misunderstandings or drawing-drawing/drawing-spec discrepancies prior to bid. In cases of a difference between stated quantities in drawings, specs or electrical drawings, the higher quantity will prevail.

D. Check each component before installation as well as each portion of the project during installation to ensure that the intent of this specification is achieved.

E. Painting: The speakers are to be painted to match the ceiling. The contractor will be responsible for obtaining paint from the painting contractor to match the color after the room has been finished. The contractor shall be responsible for all prep work required for painting of the enclosures. The contractor shall warranty the painting of the speakers for 5 years. All mounting hardware shall be painted to match.

1.9 BIDDER QUALIFICATIONS – SUBMITTALS:

A. The bidder shall provide references of at least three (3) installations of comparable scope performed by the bidder, including location, system description, and name, address, and telephone number of the architects, consultants, and owners and the names of contract persons for each.

B. The bidder must maintain service facilities and have service available on site within 24 hours. The bidder must be a factory authorized dealer for all products submitted and may be required to submit such proof of factory authorization in writing, or in the form of copies of authorized agreements with the various vendors.

1.10 INQUIRIES AND COMMUNICATIONS:

A. All questions shall be generated as called for in the project manual.

B. Direct communications to the consultant via phone are recommended for initial discussion about intent or site issues. (unless prohibited in the project manual). No action may be taken based on verbal communications, they must be followed up in writing as called for in the project manual.

C. Where discrepancies occur and pre bid instructions have not been obtained by written request, the contractor will abide by the owners decision at no additional cost to the owner.

1.11 COORDINATION:

A. Cooperate with other trades to achieve well-coordinated progress at all times. Notify the owner and consultant as often as necessary with regards to job progress or changes in the installation schedule. All conflicts will be reported to the architect, construction manager, owner, and consultant in writing. All reasonable attempts will be made to correct any difficulties.

B. Staff the job site adequately at all times to maintain a progress in keeping with the total project progress.

C. Provide all materials to be installed by others in a timely fashion based upon the related trades' schedules.

D. The job site will be left in a clean safe condition at the end of any workday. All cleanup and debris removal to a site designated by the owner will be the responsibility of the bidder on a daily basis.

E. All storage of tools and materials will be done by the contractor. No on site storage security will be provided by the owner.

F. The contractor will attend regular meetings with the architect, owner, general contractor, and the consultant when requested by any of the above, in order to achieve project coordination and progress.

1.12 DELIVERIES

A. It is each contractor's responsibility to receive all device shipments, equipment, deliveries, etc. for their own equipment on/at the job site personally. Each contractor shall be responsible to arrange for storage of all received materials on site until the appropriate time when they shall either turn them over to installing contractor or install them.

B. If the contractor chooses to allow a third party to receive shipments on his behalf the contractor bears sole responsibility for any missing and/or damaged parts.

C. Any equipment that is furnished by the contractor for installation by others shall be turned over to the installing contractor at a time that fits into their production schedule and the project's overall construction schedule.

1.13 STANDARDS REFERENCES:

A. The contractor is responsible for the provision of material and methods for installation of equipment conforming to the currently applicable standards of:

1. ADA - Americans with Disabilities Act
2. AISC - American Institute of Steel Construction
3. AISI - American Iron and Steel Institute
4. ANSI - American National Standards Institute
5. ASME - American Society of Mechanical Engineers
6. ASTME - American Society for Testing Materials
7. FCC - Federal Communications Commission
8. IEC - International Electronics Commission
9. NEC - The National Electric Code
10. NEMA - National Electrical Manufacturers Association
11. NFPA - National Fire Protection Association
12. OSHA - Occupational Safety and Health Association
13. SAE - Society of Automotive Engineers
14. SMPTE - Society of Motion Picture and Television Engineers
15. UL - Underwriters Laboratories (Electrical components, devices and accessories shall bear a UL label where applicable. UL listed and labeled as defined by NFPA70, article 100, by a testing agency acceptable to authorities having jurisdiction and marked for intended use.)
16. USITT- United States Institute for Theater Technology "Recommended Guidelines for stage rigging and stage machinery-specifications and practices".

B. Provide certification and labels where applicable. Comply with Federal, State, and Local regulations and applicable union regulations where required. All equipment will be furnished with the proper labels for New York State.

C. Provide only equipment that is standard new equipment, the latest model of regular stock product, and is furnished with all parts regularly used with the equipment offered for the purpose intended. The contractor guarantees that no modification of the equipment has been made contrary to the manufacturer's regular practice.

D. Review all materials and equipment prior to installation and notify owner as to any changes or discrepancies between published specifications and the actual material and equipment to be installed.

1.14 EQUIVALENTS:

A. The successful bidder shall submit any product equivalents prior to award of the contract detailing the kind, type, brand, manufacturer or equipment included in the base bid. Equivalent products must be highlighted on this list. When requested, the successful bidder shall also submit information, describing in specific detail, how the equivalent bid material differs from the appearance, quality and performance required by the base specification. Submittal of the manufacturer's advertising cut sheets alone is not acceptable for proof of equivalency.

B. Proof of equivalency may require the bidder to provide physical samples, a full-sized mockup or specific manufacturer information detailing technical equivalency. Proof of equivalency shall be the burden of the submitting contractor/bidder and not that of the consultant. Proof of equivalency relates to all pertinent functions of the specified equipment, regardless of if that information is reflected on any manufacturer’s issued cut sheets.

C. If proposing equivalents that affect the system design as shown on the drawings, the bidder must submit flow charts, and any other drawings necessary to show differences in the system operation from the primary referenced system.

D. The bidder will pay for any and all changes to related work scope required by the equivalent products.

1. This includes electrical, architectural, structural and other changes that might be needed to implement an equivalent product.
   a. Some products with virtual identical functions have varying power requirements, physical dimensions etc….

E. The risk of whether bid equivalents will be accepted is borne by the contractor. See section 2.1 “Performance Requirements” for more information.

F. No equivalents will be considered after the Contract award unless specifically provided in the Contract Documents.

G. Final judgment as to equality will be solely that of the consultant, architect, construction manager and owner.

H. The costs for any changes by other trades required to implement the equivalents proposed will be borne by the contractor.

1.15 SUBMITTALS:

A. Equipment: After bid award but before ordering any equipment or starting any work submit to the owner for approval a list of all equipment to be furnished showing types, models, quantities and manufacturer. Attach catalog sheets for all items submitted.

B. Submit seven (7) copies of submission package, unless quantity of submission packages differs in front end contract documents. Contractor shall submit quantity of submission packages for each discipline as directed in front end documentation (or as indicated here if no quantities are indicated in front end contract documentation).

C. Submit seven (7) copies of material schedules and shop drawings for approval by the architect, consultant and owner prior to any fabrication or installation as follows:

1. Manufacturers cut sheets for all equipment
2. Drawings of proposed mounting methods for all equipment.
3. Samples or cut sheets for proposed marking systems for wire and equipment labeling.
4. Rack layouts, panel layouts and proposed labeling.
5. Schedule for submission of drawings for fabrication and site work.
6. The full set of submitted drawings and data sheets must be presented in a professional manner.
7. All shop drawings for submission must be CADD drawn (created with a computer aided drafting program). Hand drawings are not allowed. Illegible drawings shall not be acceptable.
8. All cut sheets for submission must be clean electronic (pdf) copies of the manufacturer’s actual data sheets. Mark up each sheet with highlights or boxes around submitted products, options, etc. No data sheets shall be acceptable that are illegible, poorly photocopied or hand marked up with scribbles, etc.

D. Intents:

1. The intent of the submittal package is that it contain one copy of the appropriate cut sheet for each item that the contractor is proposing to use on this project as well as a complete set of shop drawings that shows flow diagrams, rack layouts, wiring label samples & intents, plan, section and elevation views and details of the entire audio and A/V systems. There should be plan view drawings detailing speaker locations & dimensions, projection screen and other device locations. There should be detail drawings that show all typical attachment details, etc. as well as all custom fabricated devices, suspension intentions, etc. The intent of the shop drawings is for the contractor to communicate to the consultant the exact

proposed locations, materials and fabrication methods of all standard and custom items for all intended audio and A/V systems equipment. Submission of this package by the contractor is proof that the contractor has reviewed the entire system design, understands the intents and concurs that the designed system will actually function as laid out in the contract documents.

1.16 SYSTEM GENERAL DESCRIPTION

A. Pool Sound System

1. Automated and Manal Controls
2. Loudspeakers and processing
3. ADA Hearing Assistance System
4. Wireless microphones
5. Under-Water Speakers
6. Bleacher and walkway speakers.
7. Racks
8. Wiring
9. Tuning, Commissioning training and closeout.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. The requirements of the referenced equipment are not generic in nature. Specific performance, control, and routing capabilities are necessary for any alternate equipment. The details set forth herein and within the functional description of the system are the critical criteria for selection of each piece of equipment.

B. In bidding equipment from manufacturers other than those referenced be aware that all functional information included in this specification as well as the manufacturer's specifications, physical size, serviceability, warranty terms, product availability, and other non technical issues may be determining factors in product equivalency. Final judgment as to equality will be solely that of the owner, architect, and consultant.

C. Substitution Criteria:

1. Loudspeakers substitutions require proof that the substituted product meets all performance requirements including but not limited to:
   a. Frequency Response – On and off axis
   b. Directivity by frequency
   c. Distortion
   d. Phase response
   e. Number of Drivers
   f. Power Handling Capacity and Maximum Output
   g. Weight
   h. Physical size
   i. Rigging options
   j. Powering method
2. Amplifiers require proof substitutions require proof that the substituted product meets all performance requirements including but not limited to:
   a. Power at all impedances.
   b. Damping Factor
   c. Slew rate
   d. Terminal types
   e. Indicator and control capabilities
   f. Ability to install with security covers
   g. Sonic Character
   h. Input Power requirements

i. Cooling Method – Fan speed and air flow direction.
j. Weight
k. Physical size
l. Heat Output

3. Digital Signal Processors substitutions require proof that the substituted product meets all performance requirements including but not limited to:
   a. A/D Converters type and sampling rate
   b. Number of Processors, Mixers, automixer, feedback Suppressors, equalizers, and dynamics devices.
   c. FIR Capability where required by design.
   d. Expandability where applicable
   e. Configuration Capability – Ability to configure as per the specified model.
   f. Interface to other devices digitally where applicable.
   g. Physical Size
   h. Terminals
   i. Input delay
   j. Control software and ability to be controlled via wireless.
4. Mixing Console substitutions require proof that the substituted product meets all performance requirements including but not limited to:
   a. A/D Converters type and sampling rate
   b. Number of inputs/outputs and types
   c. Number of EFX processors, equalizers, and dynamics devices.
   d. Ability to create custom pages and configuration via preset scene change.
   e. Input Delay
   f. Fade Rate by scene
   g. Expandability where applicable
   h. Configuration Capability – Ability to configure as per the specified model.
   i. Interface to other devices digitally where applicable.
   j. Physical Size
   k. Connect ability
   l. Control software and ability to be controlled via external computer and wireless.
5. Microphone Substitutions require proof that the substituted product meets all performance requirements including but not limited to:
   a. Frequency response
   b. Pattern Consistency
   c. Capsule Type
   d. On/Off switch (or the lack of one).
   e. Physical Size.
   f. Color options
   g. Connector size, type and connections
6. Wire substitutions require proof that the substituted product meets all performance requirements including but not limited to:
   a. Jacket Type
   b. Number of Conductors
   c. Jacket Shape – i.e. round, twisted etc…
   d. Number of strands and gauge
   e. Flexibility
   f. Capacitance and resistance conductor-to-conductor as well as single conductor.

D. No contractor-manufactured products will be acceptable in place of referenced items except for those items enumerated in this specification as "custom".

E. The current manufacturer's data sheet for each referenced piece of equipment in force at the date of printing of this specification will be the basis for the specifications of the

referenced equipment.

F. Specification details are provided only for the features required for current and intended future uses of the products.

2.2 ELECTRONICS:

A. All AC or DC powered hardwired electronic equipment is to meet the following minimum specifications unless otherwise noted:

1. All inputs and outputs will be floating active balanced or transformer balanced. All transformer balancing is to be integral not via outboard transformers. Quasi balanced, ground referenced, or other configurations are not acceptable under this specification.
2. All electronics must carry UL and or CSA approval.
3. All electronics are to employ RFI filtration on inputs and outputs.
4. Input Impedance Range: 10K - 50 K Ohms Balanced
5. Microphone Inputs: ≤150 Ohms Balanced
6. Input Levels: Line inputs +18dB with No Overload
7. Output Levels: Line Outputs + 18dB with No Overload. Output Impedance Range: 50 - 600 Ohms Balanced
8. THD + Noise: < .05 % typical. Hum & Noise > 105dB A
9. EIN: -90 dB (-128 dB Microphone inputs) typical
10. S/N Ratio: 90 dB typical
11. Phantom Power Systems: +48V typical
12. Modular Construction: All equipment is to be provided as serviceable modular style circuitry: i.e. replaceable parts, modules, etc. Devices which utilize a single circuit board for all parts without provision for socketed chips, removable sub assemblies etc. are not allowable under this specification.
13. Multi function units may not be substituted for individual equipment types. i.e. a cassette/CD unit may not be substituted for a separate cassette and CD player. Mixer amplifiers may not be substituted for mixers with separate amplifiers. multi unit (common power supply) wireless systems may not be substituted for single unit wireless systems.

2.3 DSP PROCESSORS

A. DIGITAL MATRIX PROCESSOR: REFERENCED PRODUCT ALLEN & HEATH AHM-32

1. The unit shall be a 1u rack-mountable digital matrix processor, capable of 32 input channels and 32 output channels, all independently assigned.
2. The unit shall operate at 96kHz sample rate and employ FPGA technology for digital signal processing. The system latency from analogue input to output shall not exceed 1ms.
3. All input channels shall be configurable mono/stereo and have access to any local or remote input. Output channels shall be configurable as mono/stereo zones or as speaker processing outputs with 2, 3 or 4-way Crossovers, allowing up to 32 mono zones / 16 stereo zones, or any combination of zones and speaker processing outputs not exceeding 32 total channels.
4. All input channels shall provide the following processing: Trim, Polarity, Gate, Insert point, 8- band Parametric EQ, Compressor, Delay and Automatic Mic Mixing (AMM).
5. All zones shall provide the following processing:
   a. Source Selector, Insert point, 8-band Parametric EQ, 28-band GEQ, Compressor, Delay, Ambient Noise Compensation (ANC) and Limiter.
6. All speaker processing outputs shall provide the following processing: Crossover filters with selectable filter type and slope, PEQ/GEQ, Delay and Limiter.
7. All output channels shall be routable to any local or remote output.

8. The 8-band Parametric EQ shall provide Bell, Constant Q, Shelving, LPF, HPF and Notch filter types selectable per band.
9. The unit shall have 12 balanced inputs on pluggable Phoenix terminal blocks. Each input shall have independent gain control with +60dB of gain, a -20dB active PAD and +48V phantom power.
10. The unit shall have 12 balanced outputs on pluggable Phoenix terminal blocks with a nominal level of +4dBu.
11. The routing matrix mixer shall be capable of mixing all inputs to all zones, as well as all zones to other zones.
12. The unit shall provide Automatic Mic Mixing (AMM) of up to 32 microphone sources into 1, 2 or 4 zones. The AMM shall be capable of running in classic gain sharing mode or optionally as a NOM (Number of Open Microphones) algorithm. The unit shall offer a slot for optional processing modules including Acoustic Echo Cancellation.
13. An RJ45 Control Network port shall be provided on the rear of the unit for connection to System Manager software, IP remote controllers, Custom Control app and TCP control.
14. One 128x128 I/O port for optional digital interface
15. modules shall be provided. A Dante optional module shall provide a minimum of 32x32 I/O at 96kHz, and be compliant with AES67 and Dante Domain Manager. An SLink optional module shall be available for Ethernet audio expansion, supporting multiple Audio-over-Ethernet protocols and providing access to up to 128x128 I/O.
16. The unit shall provide the facility to save 500 presets. The presets shall be nameable and a descriptive text entry per preset provided. A crossfade of up to 20 seconds shall be available to apply to any combination of Inputs, Zones, Groups, Input/Zone Crosspoints and Zone/Zone Crosspoints.
17. The unit shall provide the facility to save 50 events. The events shall be nameable and should allow for the scheduled recall of presets at a specified time on specific days, or every day, with the option for the event to be triggered repeatedly or just once.
18. The unit shall allow the creation and storage of up to 16 user profiles, each with an editable name and password.
19. The unit shall allow the connection of two general purpose inputs, and two general purpose relay outputs, via pluggable Phoenix connectors on the rear of the chassis. Each input connector shall allow analogue control of Mutes, Levels, Preset Recall, Custom MIDI via a 0-10V control signal. Output 1 shall support normally closed and normally open operation, and output 2 shall support normally open operation. The outputs shall be configurable to respond to Mutes, Preset Recalls, and Level Sensing. An optional 8x8 networkable GPIO interface shall be available for expansion of the GPIO functionality.
20. Networkable, PoE-enabled remote controllers shall be available to complement the unit, including wallplate controllers in both US and EU formats, and desktop controllers with a minimum of 8 motorised faders and 8 LCD displays.
21. The unit shall have an integrated power supply accepting AC mains voltages of 100-240V, 50/60Hz, 70W max via an earthed 3-pin IEC male connector mounted on the rear chassis.

B. MOTORIZED REMOTE FADER STATION: ALLEN & HEATH IP-8

1. The remote controller shall be compact and portable with 8 motorised faders, 8 LCD displays, 23 backlit softkeys and a dimmable pre-set control for all displays.
2. The faders shall be fully assignable, configured individually or part of a vertical strip. There shall be 6 layers of control, accessed via softkeys, allowing control of 48 individual channels.

3. There shall be a fast Ethernet connection via a locking Neutrik EtherCon connector and a 12V DC inlet connector on the rear of the unit.
4. Connection of the controller shall be direct to the dLive Mixrack/Surface, Avantis mixer or AHM-64 Matrix Processor via standard Cat5 data infrastructure.
5. Alternatively, it shall be capable of multiple parallel connections using an Ethernet switch.
6. Configuration and programming of the controller shall be via AHM System Manager or dLive Director Software (PC or Mac), or via an Avantis mixer or dLive Surface.
7. The controller shall be powered using a supplied 12V 2.1A power supply or by the Cat5 control cable via a PoE+ enabled device. The controller shall be compatible with PoE+ standard 802.3at (30W at source). The maximum power consumption of the controller shall be 25W.
8. The remote controller shall be used free standing or there shall be provision made to fix the unit permanently into furniture via six captive screws located on the underside of the unit.
9. Recommended operating temperature for the controller shall be 0 to 35 degrees Celsius.
10. The controller shall weigh no more than 2.5kg

2.4 16 PORT GIGABIT POE+ MANAGED SWITCH: REFERENCED PRODUCT LUXUL SW-505-16P-R

A. Standards

1. IEEE 802.3, IEEE 802.3u, IEEE 802.3z, IEEE 802.3ab, IEEE 802.3af, IEEE 802.1D, IEEE 802.3x IEEE 802.1P, IEEE 802.1Q, IEEE 802.1X

B. Interface

1. RJ-45
   a. 10 Base-T: Cat.5 UTP /STP
   b. 100 Base-TX: Cat.5 UTP /STP
   c. 1000Base-T: Cat.5, Cat.5e or Cat.6 UTP/STP
2. Gigabit Fiber Uplinks on SFP ports
3. Ethernet Cable Recognition for Straight-through or Crossover Cables

C. Surge Protection

1. The RJ45 port surge protection is tested to: EN61000-4-5 (for RJ45 Port, Surge 6KV)

D. LEDS

1. Front
   a. Per Unit: Power
   b. Per Port: Link/Activity
   c. Dual color, user selectable
2. Back
   a. Per Port: Link/Activity
   b. 10/100/1000

E. Power Budget

1. 250 Watts

F. Max Power Consumption

1. 337W

G. Power

1. Internal Switched Power, AC 100-240V, 50-60Hz input

H. VLAN

1. 802.1Q Max 4094 VIDs & VLAN Trunking
2. Supports 1 Management VLAN

I. Quality of Service (QoS)

1. 4 Queues per port
2. Queue Handling: Strict, Weighted Round Robin (WRR)
3. CoS Based on DCSP, 802.1P
4. Port- based Bandwidth Control

J. Network Data Transfer Rate

1. Ethernet: 10Mbps (Half-duplex)
2. Ethernet: 20Mbps (Full-duplex)
3. Fast Ethernet: 100Mbps (Half-duplex)
4. Fast Ethernet: 200Mbps (Full-duplex)
5. Gigabit Ethernet: 1000Mbps (Half-duplex)
6. Gigabit Ethernet: 2000Mbps (Full-duplex

K. Layer 3

1. Layer 3 Static Routing

L. Operating Temperature

1. 32°F to 104ºF (0°C to 40°C)

M. Operating Humidity

1. 10% to 90% (Non-condensing)

N. Dimensions LxWxH in. (mm)

1. 17.3”(439.5) x 8.25”(209.5) x 1.75”(44.5)

O. Weight lbs (kg)

1. 8.75 (3.96)

P. Certification

1. FCC, CE, RoHS

2.5 PASSIVE LOUDSPEAKERS

A. FULL RANGE TWO WAY COAXIAL LOUDSPEAKER: REFERENCED PRODUCT FULCRUM RX8-MT60-WR

1. Operating Mode
   a. Single-amplified w/ DSP
2. Operating Range
   a. 82 Hz to 20 kHz
3. Nominal Beamwidth (Rotatable)
   a. 90° x 75°
4. Transducers
   a. HF/LF: Coaxial 1.0 inch diaphragm compression driver, neodymium magnet; 8.0 inch woofer, 2.0 inch voice coil, ceramic magnet
5. Power Handling @ Nominal Impedance
   a. 57 V / 200 W @ 16 Ω)
6. Nominal Sensitivity @ Input Voltage (whole space)
   a. 102 dB @ 4 V
7. Nominal Maximum SPL (peak / continuous)
   a. LF: 131 dB / 125 dB

8. Equalized Sensitivity @ Input Voltage
   a. 93 dB @ 4 V
9. Equalized Maximum SPL (peak / continuous)
   a. 122 dB / 116 dB
10. Recommended Power Amplifiers
   a. 200 W to 400 W @ 16 Ω
11. Physical Specifications
   a. Connections
      1) (2) Neutrik NL4 Speakon
         a. Pin 1+/-: Full Range
         b. Pin 2+/-: NC
   b. Mounting / Suspension Points
      1) (2) M6 x 1.0 rear points, (2) M6 x 1.0 yoke points
      2) (4) M4 x 0.7 VESA 75 x 75 mm points
   c. Finish
      1) White painted enclosure w/ matte white grille

B. UNDERWATER SPEAKER SYSTEM: REFERENCED PRODUCT LUBELL LABS 9484

1. Transducer Type: Piezoelectric Pistonic Underwater Acoustic Transducer
2. Construction: 150 mil PVC injection molded over die-cast AL pistons, with redundant silicone and TPV seals
3. Frequency Response: 100 Hz - 23 kHz (450 Hz - 20,000 Hz +/-10 dB)
4. Maximum Output Level: 179 dB/uPa/m @ 1 kHz
5. Maximum Cable Voltage/Current: 20 Vrms / 3A (100% duty cycle)
6. Installation Depth Range: 6’ deal, 3’ for shallow-end units
7. Operating temperature: 0°C - 41°C (32°F - 105°F)
8. Dimensions: 234.95 mm (9.25 inch) diameter x 152.4 mm (6 inch) axial length
9. AMPLIFIER REQUIREMENTS & CONNECTION:
   a. Constant-Voltage amp: Connect included AC205B transformer box to 25V / COMMON speaker terminals of amplifier, allowing 37.5 watt load for each Lubell AC205B / LL916 connected in parallel. Do not connect to 70V or 100V systems.
   b. Conventional Class-AB amp: 78 watts @ 8 ohms (still 25 Vrms) for each 9484.
   c. Amplifier must be UL or ETL listed, labeled for Class 2 wiring, and connected to GFCI protected electrical outlet in dry air conditioned equipment room.
10. EACH 9484 PACKAGE INCLUDES ONE EACH OF FOLLOWING ITEMS:
   a. A9000 Pentair 78210400 stainless steel wet-niche (11.5 inch flange, 10 inch body diameter x 7.5 inch depth, 3/4 inch NPT conduit hub).
   b. A9022 stainless steel perforated grille, 11.125 inch diameter x 5/8 inch height
   c. 21007 speaker support, PVC clad stainless steel
   d. AC205B isolation & matching transformer box.
   e. LL916-100 Lubell underwater speaker with 100’ of attached cable

2.6 LOW IMPEDANCE STEREO AMPLIFIERS

A. 25V AMPLIFIER: REFERENCED PRODUCT RUSSOUND A2100

1. Continuous Output Power:
   a. 100W @ 8 Ohms < 0.1% THD+N
   b. 125W @ 4 Ohms < 0.5% THD +N
   c. 225W Bridged @ 8 Ohms < 0.2% THD+N
2. Minimum Impedance:
   a. Stereo mode - 4 ohms, Bridged mode - 8 ohms
3. Frequency Response:

a. 18Hz-25kHz (+/- 1dB) @8 ohms
4. Input Sensitivity:
a. 500mV
5. Power Requirements (Autoswitching Power Supply):
a. North American and European Models:100VAC to 240VAC 50/60Hz 2.5A IEC 320 type connector with 3 terminal detachable power cord
6. Standby Power:
a. <0.5 Watts
7. Rack Ears:
a. Included
8. Parts and Labor Warranty:
a. 2 years
9. Product Dimensions:
a. 8.5” W x 10.5” D x 1.75” H (21.59 x 26.67 x 4.45 cm)
10. Product Weight:
a. 4.10 lbs. (1.9 kg)

2.7 LOW IMPEDANCE MULTI-CHANNEL AMPLIFIERS

A. NETWORK AMPLIFIER: REFERENCED PRODUCT ASHLY NXP4004

1. The unit shall be a 4 channel multi-mode amplifier capable of driving 2 Ohm loads at full power. The maximum rated output power shall be 400W per channel at Low Z, 70V, and 100V mode. There shall be an automatic but defeatable sleep mode consuming <1W, and instant standby mode controlled by contact closure or software. A switch mode power supply shall auto-detect 110 – 120VAC or 220 – 240VAC mains, and a Neutrik® powerCON shall be used for the AC cord. Each channel shall have selectable output mode of Low Z, 70V, or 100V, an 80Hz high-pass filter, input limiter, and input gain settings of 26dB, 32dB, 38dB, or 1.4V. Each channel shall have remote DC level control. Input connectors shall be Neutrik® XLR/TRS combo jack and Euroblock, while output connectors shall be Neutrik® speakON. The unit shall have a front panel power switch and level controls that can be disabled. LEDs shall indicate Protect, Sleep, Disabled, Com, and Bridge mode status, as well as Temperature, Output Current, Output Signal, and Clipping/Mute status per channel. The unit shall have Ethernet control with a real-time clock for event scheduling. The unit shall have serial data remote control, aux preamp outputs, preset control, fault condition logic outputs, optional network audio and AES3 digital audio capability with the addition of a 4-Channel DAC card. The amplifier shall have temperature dependent variable speed forced-air cooling. The unit shall weigh <25.9 lbs (11.7kg), measure 19”W x 3.5”H x 16.8”D (483mm x 89mm x 428mm), and mount in a standard 19” rack. There shall be a five year warranty for units purchased in the US. No other unit shall be acceptable unless all specifications represented herein are met or exceeded and submitted in writing by an independent testing agent.

2.8 MICROPHONES AND ACCESSORIES:

A. UHF WIRELESS MICROPHONE SYSTEM: REFERENCED PRODUCT SENNHEISER EVOLUTION EW-D SERIES

1. UHF HANDHELD TRANSMITTER: SENNHEISER EW-D SKM-S
a. The handheld transmitter shall be for use with a companion receiver as part of a digital wireless RF transmission system.
b. The handheld transmitter shall operate within ten UHF frequency ranges, with a switching bandwidth of up to 56 MHz: 470.2 – 526 MHz, 520 – 576 MHz, 552 – 607.8 MHz, 606.2 – 662 MHz, 630 – 662 MHz, 662 – 693.8 MHz, 823.2 – 831.8 MHz, 863.2 – 846.8 MHz, 925.2 – 937.3 MHz, 1785.2 – 1799.8 MHz; selectable frequencies shall be up to 2,240.

c. The audio frequency response shall be between 20 Hz and 20 kHz (-3 dB) @ 3 dBfs. Audio total harmonic distortion (THD) shall be ≤ -60 dB for 1 kHz @ -3 dBfs input level. Dynamic range shall be 134 dB.
d. A programmable mute switch shall be provided to mute or unmute the audio signal.
e. The handheld transmitter's parameters shall be configurable in the associated receiver's menu and synchronized with the handheld transmitter via Bluetooth Low Energy (BLE).
f. Power shall be supplied to the handheld transmitter by two 1.5 V AA size batteries or by one Sennheiser BA 70 rechargeable battery pack. Operating time shall be typically 12 hours with a battery pack and up to 8 hours with AA batteries.
g. Occupied bandwidth shall be 200 kHz. Transmit power (radiated) shall be 10 mW ERP (1785.2 – 1799.8 MHz Range: 12 mW ERP).
h. The handheld transmitter shall have a rugged metal housing; dimensions shall be approximately 50 mm (1.97“) in diameter and 268 mm (10.55“) in length including a Sennheiser MMD 835 microphone module. Weight including MMD 835 microphone module shall be approximately
i. 304 grams (0.67 lbs). Operating temperature shall range from −10 °C to +55 °C (+14 °F to +131 °F).
j. A range of different microphone heads shall be available for the handheld transmitter.

2. UHF WIRELESS RECEIVER: SENNHEISER EW-D EM
a. The stationary receiver with switching diversity technology shall be for use with a companion transmitter as part of a digital wireless RF transmission system.
b. The receiver shall operate within ten UHF frequency ranges, with a switching bandwidth of up to 56 MHz: 470.2 – 526 MHz, 520 – 576 MHz, 552 – 607.8 MHz, 606.2 – 662 MHz, 630 – 662 MHz, 662 – 693.8 MHz, 823.2 – 831.8 MHz, 863.2 – 846.8 MHz, 925.2 – 937.3 MHz, 1785.2 – 1799.8 MHz; selectable frequencies shall be up to 2,240.
c. The receiver shall feature Bluetooth® Low Energy (BLE) at a frequency range between 2402 and 2480 MHz for remote controlling the devices via a control App for iOS and Android.
d. The audio frequency response shall be between 20 Hz and 20 kHz (-3 dB) @ 3 dBfs. Audio total harmonic distortion (THD) shall be ≤ -60 dB for 1 kHz @ -3 dBfs input level. Dynamic range shall be 134 dB.
e. The receiver shall be menu-driven with a backlit LC display showing the current frequency, channel number, metering of RF level, metering of AF level, lock status, muting function, mute lock status, antenna switching diversity, app connection, gain, audio output level, menu and battery status of the associated transmitter. An auto-lock feature shall be provided to prevent settings from being accidentally altered.
f. The receiver shall feature a balanced XLR-3M audio output with a maximum output of +18 dBu along with an unbalanced ¼“ (6.3 mm) audio output with a maximum output of +12 dBu. Two BNC-type input sockets shall be provided for connecting the antennas.
g. The receiver shall operate on 12 V power supplied from the power supply unit or from a Sennheiser EW-D ASA antenna splitter. Power consumption shall be ≤ 300 mA. The receiver shall have a rugged metal housing; dimensions shall be approximately 212 x 44 x 189 mm (8.35“ x 1.73“ x 7.44“). Weight shall be approximately 1000 grams (2.2 lbs) without antennas and power supply. Operating temperature shall range from −10 °C to +55 °C (+14 °F to +131 °F).

B. ACTIVE WIRELESS ANTENNA SPLITTER: REFERENCED PRODUCT SENNHEISER

EW-D ASA

1. Frequency ranges
   a. EW-D ASA (Q-R-S): 470 – 694 MHz
   b. EW-D ASA CN/ANZ (Q-R-S): 470 – 694 MHz
   c. EW-D ASA (T-U-V-W): 694 – 1075 MHz
   d. EW-D ASA (X-Y): 1350 – 1805 MHz
2. Antenna splitter
   a. 2 x 1:4 or 1 x 1:8, active
3. Gain
   a. in A – out A: 0 ± 1 dB
   b. in A – out A1 ... A4: 0 ± 1 dB
   c. in B – out B1 ... B4: 0 ± 1 dB
4. IIP3
   a. > 25 dBm
5. Impedance
   a. 50 Ω
6. Reflection loss
   a. 10 dB (all RF outputs)
7. Operating voltage
   a. DC +12 V from NT 12-35 CS power supply unit
8. Current consumption
   a. 210 mA
9. Total current consumption
   a. max. 3 A (with 4 EW-D EM and connected EW-D AB)
10. Supply for antenna boosters at ANT RF in A and ANT RF in B
    a. DC 12 V, 320 mA
11. Supply for receivers at A1 to A4
    a. DC 12 V, Typically 350 mA, max. 500 mA
12. Dimensions
    a. Approx. 212 x 168 x 43 mm
13. Weight
    a. Approx. 1100 g
14. Operating temperature range
    a. -10 °C - +55 °C (14 °F - 131 °F)
15. Storage temperature range
    a. -20 °C - +70 °C (-4 °F - 158Y °F)
16. Relative humidity
    a. 5 - 95 % (non-condensing)

2.9 BLUETOOTH AUDIO OVER CAT6 TRANSMITTER: REFERENCED PRODUCT RDL D-BT1A

A. Output: RDL Format-A (RJ45)

B. Format-A Input: RJ45 LOOP IN

C. Format-A Signal Pair Used: A, B, or C (summed mono mode, rear-panel switch-selectable); B and C (stereo mode, pair A pass through)

D. Frequency Response: 20 Hz to 20 kHz (± 0.5 dB)

E. THD+N: < 0.1%

F. Noise below -20 dBFS: < -70 dB

G. Crosstalk (channel to channel): < 70 dB

H. Audio Operating Levels: -20 dBFS = +4 dBu (balanced), nominal

I. Ambient Operating Environment: 0° C to 40° C

J. Power Requirement: 24 Vdc @ 100 mA (through RJ45)

K. Dimensions: 1.73" (4.39 cm) W; 4.11" (10.44 cm) H; 1.62" (4.11 cm) D

2.10 AUDIO OVER CAT6 RECEIVER: REFERENCED PRODUCT RDL TX-TPR2A

A. Input: RDL TP Format-A

B. Input Connection: RJ45

C. Format-A Signal Pairs Used (2): B, C

D. Outputs (4): 150 Ω Balanced (2); 1 kΩ Unbalanced (2)

E. Output Connections: Detachable Terminal Block

F. Output Level: +4 dBu Bal., +22 dBu Max; -10 dBV Unbal., nominal

G. Frequency Response: 10 Hz to 30 kHz (+/- 0.1 dB)

H. THD+N: < 0.005%

I. Noise (below +4 dBu): < -90 dB

J. Crosstalk: < -90 dB (1 kHz); < -75 dB (20 Hz to 20 kHz)

K. Headroom: > 20 dB (above +4 dBu)

L. CMRR: > 60 dB (50 Hz to 150 Hz)

M. Indicator: Power LED

N. Power Connections (2): Power Jack; RJ45

O. Power Requirement: 24 Vdc @ 30 mA

P. Dimensions: 3.0" (7.6 cm) W; 1.6" (4.08 cm) H; 1.2" (3.05 cm) D

2.11 1000VA UPS BACKUP: REFERENCED PRODUCT MID ATLANTIC UPX-1500R-2

A. Rackmount UPS shall operate on 120 VAC/60Hz current. Rackmount UPS shall have a nominal output of 120V. Rackmount UPS shall have a capacity of 1000 VA and 600 W (refer to chart). Rackmount UPS shall have 6 NEMA 5-15R receptacles on the rear of the unit. Rackmount UPS shall have a priority outlet bank consisting of 3 outlets dedicated to ensure maximum run time of critical components. Rackmount UPS shall have a non-critical outlet bank consisting of 3 outlets dedicated to load shedding. Rackmount UPS shall have a simulated sine wave output waveform. Rackmount UPS shall have an 8ms transfer time. Rackmount UPS shall be IP enabled when used with option IP Expansion card, model# UPS-IPCARD. Rackmount UPS shall include a 10’ 15A power cord with NEMA 5-15 plug. Rackmount UPS shall have surge suppression that utilizes a clean line-to-neutral design that does not pass noise contamination to ground. Rackmount UPS shall allow for a 13 minute run time at half load and a 3 minute run time at full load. Rackmount UPS shall be RoHS EU Directive 2002/95/ EC & 2011/65/EU compliant. Rackmount UPS shall utilize Middle Atlantic Power Manager™ software. Rackmount UPS shall be warrantied to be free from defects in materials and workmanship under normal use and conditions for a period of 3 years; battery shall be warrantied for a period of 2 years. Rackmount UPS shall be UL listed in US and Canada.

2.12 RF HEARING ASSISTANCE SYSTEMS: REFERENCED PRODUCT LISTEN TECHNOLOGIES LP-8-216

A. RF HEARING ASSISTANCE TRANSMITTER: REFERENCED PRODUCT LISTEN TECHNOLOGIES LT-800/216

1. The stationary FM transmitter shall be capable of broadcasting on 57 channels. The output power shall be adjustable to quarter, half or full. Channel tuning shall

be capable of being locked. The device shall broadcast on both wide and narrow band channels. The audio frequency response of the device shall be within 3dB from 30Hz to 17KHz at 72MHz, or within 3dB from 30Hz to 10kHz at 216MHz.

RF Frequency Range	216.025 - 216.975 MHz
Number of Channels	57 (17 wide, 40 narrow) 57 (19 wide, 38 narrow)
Frequency Accuracy	+/- .005% stability 0 to 50C
Transmitter Stability	50 PPM
Output Power	8,000uV at 3 m100mW (Max allowed by FCC)
Antenna Connector	Reverse BNC - BNC
System Frequency Response	50 Hz - 10 kHz (± 3dB)
System Signal to Noise Ratio	SQ enabled: 80 dB; SQ disabled 60 dB
(A-weighted)	SQ enabled: 80 dB; SQ disabled 50 dB
System Distortion	<2% total harmonic distortion (THD) at 80% deviation
Audio Input 1	Rear panel. Female-XLR and 1/4 in combo connector, balanced, 0/-55 dBu (line/mic) nominal input level adjustable, -30/+21 dBu (mic/line) maximum input level, impedance 20k/1k ohms (line/mic), phantom power +12VDC

2. The transmitter shall have two mixing audio inputs. The device shall have the following audio controls: input level, process control and an adjustable low pass shelving filter. Provide with LA122 universal antenna, antenna cabling, and accessories for rack mounting.

B. RF HEARING ASSISTANCE RECEIVER: REFERENCED PRODUCT LISTEN TECHNOLOGIES LR-4200-216

1. The RF receiver shall be capable of receiving on 57 wide and narrow band channels. The device shall tune to a single channel and user shall not be able to change the channel. The receiver shall have a signal-to-noise ratio of 70 dB or greater and shall have an audio frequency response of 50 Hz – 15 kHz (±3 dB). The device shall employ a unique DSP SQ™ noise reduction technology. The unit shall have a programmable squelch circuit. The unit shall incorporate a multi-functional display that indicates battery status, inventory number and channel. The device shall have the option of being lanyard or belt clip worn and the lanyard shall have the option of an integrated neck loop. The device shall have a USB connector used for inventory control, set up, charging and firmware upgrades. The device shall incorporate automatic battery charging circuitry and use a non-proprietary lithium ion battery. The device shall have additional charging contacts to allow multiple charging options.

C. CHARGING/CARRYING CASE: REFERENCED PRODUCT LISTEN TECHNOLOGIES LA-380

1. The charging/carrying case shall be capable of transport, charging and storing up to 12 intelligent products. The unit shall accept an input voltage of 100 to 240AC, 50/60 H and shall deliver 5.0 VCD, 8 A at 40 watts. The unit shall be capable of being locked. The unit shall have equivalent compliance with UL, CE and RoHS.

D. DUAL EARBUD HEADPHONES: REFERENCED PRODUCT LISTEN TECHNOLOGIES LA-405

1. The Universal Stereo Ear Buds shall provide an audio response of 20 Hz to 20 KHz with an impedance of 32 ohms. The device shall be easy to put on, easy to clean and shall provide a cable length of 13 in (33 cm) that reduces cable tangling. The device shall have replaceable foam cushions.

2.13 RACKS, FURNITURE, AND HARDWARE

A. SWING OUT WALL RACK: REFERENCED PRODUCT MID ATLANTIC AUDIO DWR SERIES

1. EIA compliant 19” wall mount rack. Tool-Free Quick-MountTM system enables one-person installation. Center section and backpan shall be 16-gauge steel, phosphate pre-treated and finished in a black or granite gray textured powder coat (black finish is standard, suffix part # with GY to indicate a granite gray finish) . Rackrail shall be constructed of 11-gauge steel with tapped 10-32 mounting holes in universal EIA spacing with black e-coat finish and marked rackspaces. Rack shall be constructed to swing open for component cabling access, center section shall pivot for either left or right opening. Backpan includes raised mounting embosses to mount power products and other accessories. Rack shall have 3/4”, 1”, 1-1/2”, 2” and 3” electrical knockouts, Decora R knockouts, and BNC knockouts for UHF/VHF antennas knockouts top and bottom. Large laser knockout on backpan shall have a 12-1/2” x 12-1/2” opening for cable-pass-through. Fan knockouts on top and bottom shall allow for installation of up to four 4-1/2" fans. Top, bottom and sides shall feature vertical vent pattern. Rack shall be UL Listed in the US and Canada.
2. PROVIDE WITH THE FOLLOWING OPTIONS
   a. Front doors shall be 16-gauge steel - vented.
   b. Vent Blockers used to promote active thermal management.

B. VENT PANELS: REFERENCED PRODUCT MIDDLE ATLANTIC VT SERIES

1. EIA compliant 19” vent panels shall be constructed of 16-gauge perforated steel and shall have a black powdercoat finish. Vent panel shall be GREENGUARD Indoor Air Quality Certified for Children and Schools. Vent panel shall be RoHS EU Directive 2002/95/EC compliant. Vent panel shall be manufactured by an ISO 9001 and ISO 14001 registered company. Vent panel shall be warrantied to be free from defects in material or workmanship under normal use and conditions for the lifetime of the product.
2. Perforations
   a. VT perforation pattern shall be: 5/32” dia. hole, with 3/16” staggered centers Open Area 64%

C. BLANK PANELS: REFERENCED PRODUCT MIDDLE ATLANTIC BL SERIES

1. Blank panels shall be constructed of 1/16” thick aluminum. Blank panels shall be RoHS EU Directive 2002/95/EC compliant. Blank panels shall be manufactured by an ISO 9001 and ISO 14001 registered company. Blank panels shall be warrantied to be free from defects in material or workmanship under normal use and conditions for the lifetime of the panel.

D. RACK DRAWERS: REFERENCED PRODUCT MIDDLE ATLANTIC AUDIO D SERIES.

1. EIA compliant 19” rackmount drawer shall have an overall height of X”, and useable depth of 14-1/2”. Drawer base shall be 20-gauge steel, top and sides shall be 16-gauge steel. Drawer faceplate shall be .090” thick aluminum with a black brushed & anodized finish. Drawer shall use full extension, ball bearing slides. Laser knockout shall be provided for passing cables through the rear of the drawer. Drawer shall be UL Listed in the US and Canada. Provide all drawers with keylock option.

2.14 RACK WORK LIGHT: REFERENCED PRODUCT SOUNDOLIER RWL-2

A. Portable lamp with wide light diffusion provides illumination of interior rack spaces. Supplied with a "non-mar" magnetic mount, 3-wire grounded AC outlet, on-off switch, high impact clear polycarbonate lens, two 10-Watt incandescent lamps (one for replacement) and six-foot power cord. Assembly is 18 and 22-gauge CRS. Standard finish is flat black epoxy.

2.15 VOICE-ACTIVATED RELAY: REFERENCED PRODUCT BOGEN COMMUNICATIONS VAR1

A. The unit shall be a voice-activated, DPDT style relay device that is activated upon detection of a signal at the microphone pre-amp or at either of the 70V, 25V or 600-ohm line level inputs.

B. The unit shall be capable of muting a sound system, activation of accessory equipment or activation of a zone-paging module.

C. The unit shall incorporate a selectable slide switch by which the user can select either the pre-amp input or the line inputs for sensing activation.

D. The VOX detect circuit shall include volume, sensitivity and delay controls.

E. The audio output shall be an isolated 600-ohm transformer.

F. The unit shall operate on DC power from an external power supply. Contractor is to provide the appropriate power supply for this unit and locate it in the rack near the voice-activated relay device.

G. The unit shall have the following system specifications:

1. Line Input:
   a. Impedance: 600 ohms
   b. Frequency Response: 100 Hz to 10 kHz
   c. 70V Input Impedance: 200k ohms
   d. Output Level: 400 m VRMS
   e. 25V Input Impedance: 75k ohms
   f. Output Level: 420 m VRMS
2. Mic Preamp:
   a. Gain: 62 dB
   b. Sensitivity: 750 micro volts, RMS for 1 VRMS out
   c. Distortion: <2%
   d. Frequency Response: 200 Hz to 10 kHz
   e. Output Signal-to-Noise Ratio: 55 dB
   f. VOX Sensitivity: 20 mV - 150 m VRMS @ 600 ohms Line input
   g. Time Delay Range (approx.): 0.25 to 25 sec.
   h. Relay Contact Rating: 2 amps/30 VDC, 0.5 amp/120 VAC
   i.

H. The voice-activated relay shall be set to mute the sound system (via the contact closures on the sound system processor) in the auditorium during an all-call or emergency page of the building. Contractor shall obtain the paging system feed (which the EC will run to the audio rack location) and shall wire this to the voice activated relay device.

2.16 WALL PLATES

A. Wall plates shall be 1/8” stainless steel (11 gauge) and finished in white powdercoat. Standard dimensions shall be 4.50” x 2.760” (1 gang), 4.572” (2 gang), 6.384” (3 gang) 8.196” (4 gang) 8.3125” (5 gang) 10.0” (6 gang). The edges of the plates shall be double beveled, .0635 at 45 degrees. Engraving shall be 1/8” Helvetica with contrasting engravers enamel supplied where applicable. Connectors shall be fixed to the plate with screws and KEP nuts. Plates shall be installed using matching 1-1/2” mounting screws.

2.17 INSTALLATION WIRE STANDARDS: ALL WIRE IN OR OUT OF CONDUIT WILL BE TYPE CL2-CL3 UNLESS OTHERWISE REQUIRED BY NEC AND JOB SITE CONDITIONS. PORTABLE CABLE EXCLUDED.

A. WIRE - INSTALLED LINE LEVEL:

1. West Penn 293
   a. Construction
      1) Conductor Gauge: 22 AWG
      2) Strands: 7 x 26 tinned copper.
      3) Insulation: .008” Polypropylene
      4) Number of Conductors: 2
      5) Shield: Aluminum foil with 100% coverage
      6) Drain Wire: Stranded tinned copper.
      7) Jacket Material: PVC
      8) Jacket Thickness: 0.017” Nom
      9) Overall cable Diameter: 0.160” Nom
      10) Flame Rating: UL 1666 Riser Flame Test
   b. Electrical
      1) Temperature Rating: -20 C° to +60 C°
      2) Operating Voltage: 300V RMS
      3) Max Capacitance between conductors @ 1kHz: 40 pf/ft.
      4) Capacitance between Conductors to Shield @ 1kHz: 79 pF/ft
      5) DC Resistance per Conductor @ 20° C: 6.6 Ω/1M’
   c. Mechanical
      1) Min Bend Radius: 1.6”
      2) Max Pull Tension: 57.5 lbs.

B. WIRE - INSTALLED MICROPHONE LEVEL:

1. West Penn 291
   a. Construction
      1) Conductor Gauge: 22 AWG
      2) Strands: 7 x 30 tinned copper.
      3) Insulation: .007” Polypropylene
      4) Number of Conductors: 2
      5) Shield: Aluminum foil with 100% coverage
      6) Drain Wire: Stranded tinned copper.
      7) Jacket Material: PVC
      8) Jacket Thickness: 0.017” Nom
      9) Overall cable Diameter: 0.127” Nom
      10) Flame Rating: UL 1666 Riser Flame Test
   b. Electrical
      1) Temperature Rating: -20 C° to +60 C°
      2) Operating Voltage: 300V RMS
      3) Max Capacitance between conductors @ 1kHz: 34 pf/ft.
      4) Capacitance between Conductors to Shield @ 1kHz: 67 pF/ft
      5) DC Resistance per Conductor @ 20° C: 17 Ω/1M’
   c. Mechanical
      1) Min Bend Radius: 1.3”
      2) Max Pull Tension: 23.7 lbs.
2. West Penn 293
   a. Construction
      1) Conductor Gauge: 22 AWG
      2) Strands: 7 x 26 tinned copper.
      3) Insulation: .008” Polypropylene
      4) Number of Conductors: 2

5) Shield: Aluminum foil with 100% coverage
6) Drain Wire: Stranded tinned copper.
7) Jacket Material: PVC
8) Jacket Thickness: 0.017" Nom
9) Overall cable Diameter: 0.160" Nom
10) Flame Rating: UL 1666 Riser Flame Test

b. Electrical
1) Temperature Rating: -20 C° to +60 C°
2) Operating Voltage: 300V RMS
3) Max Capacitance between conductors @ 1kHz: 40 pf/ft.
4) Capacitance between Conductors to Shield @ 1kHz: 79 pF/ft
5) DC Resistance per Conductor @ 20° C: 6.6 Ω/1M'

c. Mechanical
1) Min Bend Radius: 1.6"
2) Max Pull Tension: 57.5 lbs.

3. Microphone level wiring will be run as follows: WP 291 CL3 - 22 AWG (or equal as referenced above) is to be used for runs ≤ 100 feet. WP 293 CL3 - 18 AWG (or equal as referenced above) is to be used for runs in excess of 100 feet.

C. ANTENNA CABLE: REFERENCED PRODUCT BELDEN 9913

1. Contruction:
a. Conductor Gauge: 10 AWG Solid
b. Insulation: .285" PE Semisolid
c. Jacket: PVC
d. Shield:
1) Tinned Copper Braid, 90% Coverage,
2) Trilaminate Tape, 100% Coverage
e. Overall Diameter: 0.405" Nom.

2. Electrical:
a. Nominal Capacitance Between Conductor to Shield: 24.6 pf/ft
b. Conductor DC Resistance: 0.9 Ohms/1000'
c. Shield DCResistance: 1.8 Ohms/1000'
d. Nominal Impedance: 50 Ohms

3. Mechanical
a. Minimum Bed Radius: 4" installed
b. Max Pull Tension: 292 lbs.

D. WIRE – SHIELDED CAT6A NETWORK CABLE: REFERENCED PRODUCT WEST PENN 4346AF

1. Construction:
a. Conductor Gauge: 23 AWG Solid
b. Number of Conductors: 8 (4 Pair)
c. Insulation: 0.008" Thermoplastic
d. Shield: None
e. Drain: None
f. Jacket Material: PVC
g. Overall Diameter: 0.265" Nom.

2. Electrical:
a. Temperature Rating: -20° C to +60° C
b. Operating Voltage: 300V RMS
c. DC Resistance per Conductor @ 20° C: 21 Ω/100 m
d. Mutual Capacitance: 16 pF/ft Nom
e. Nominal Impedance: 100Ω +/- 15% (1-100 Mhz)
f. Delay Skew: 45 ns/100m MAX
g. Standards: TIA/EIA568-B.2

3. Mechanical
   a. Minimum Bed Radius: 4x Cable OD or 1” min.
   b. Max Pull Tension: 25 lbs.

E. WIRE - INSTALLED SPEAKER LEVEL:

1. West Penn 226
   a. Contruction:
      1) Conductor Gauge: 2 - 14 AWG
      2) Strands: 19x27 bare copper
      3) Insulation: .012” PVC
      4) Jacket: 0.017” PVC
      5) Shield: none.
      6) Overall Diameter: 0.23” Nom.
   b. Electrical:
      1) Max Capacitance Between Conductors: 33.5 pf/ft Nom
      2) DC Resistance per conductor: 2.7 Ohms/1000’
   c. Mechanical
      1) Minimum Bed Radius: 2.07” installed
      2) Max Pull Tension: 79 lbs.

PART 3 - EXECUTION

3.1 GENERAL:

A. Contractor will adhere to all requirements of the general contract for this project as called for in the project manual.

B. Assess life safety implications of all installation methods and verify there is no compromise of life safety issues. All liability for rigging, fastening, wiring, and other installation methods will be borne by the contractor alone. If the contractor has a reason to believe that safety will be compromised in the installation of any specified equipment in the locations specified they must note this at the time of bid and offer alternatives in writing.

C. Any dangerous work areas marked or roped off in a manner that will inform all persons as to potential danger regardless of sensory handicaps.

D. Maintain M.S.D.S. for all materials used where applicable and submit same if requested upon completion.

E. Maintain integrity of all fire walls and doors during construction and upon completion.

F. Take all precautions necessary to guard against electromagnetic and electrostatic hum, RF noise, supply adequate ventilation, and install all equipment for the maximum safety of the operator.

G. The contractor will verify all on site dimensions prior to ordering or installation of critically dimensioned equipment and wiring. In a case of a discrepancy between these documents and attached drawings, construction documents, and actual on site dimensions the contractor will notify the owner and consultant before making any changes in intended work.

H. Any equipment, hardware, wiring harnesses, or other items not specifically included in this specification but required for the system to function as called for within this specification will be the responsibility of the contractor at no additional cost to the owner.

I. Provide all racks, hardware, wire, conduit, raceways, and all other required parts to provide a complete system to the extent that such items are not provided by others. Provide rack shelves or kits for all equipment to be located in equipment racks that is not inherently rack mountable. Any shelf mounted equipment will be securely attached to the associated shelf.

J. All installation methods must be cosmetically acceptable to the owner. All equipment installed neatly, with respect to level, sight lines, and finish. All wiring must be neatly run and concealed in an orderly fashion and attached to appropriate support structures.

K. Identify any equipment requiring licensing (wireless etc..) and initiate licensing procedures for all such equipment.

L. Coordinate all work with other on site trades in order to achieve a coordinated progress at all times.

3.2 WIRING AND RACKS:

A. CONNECTORS (The priority for use of connectors is as follows):

1. Wherever barrier strips or Phoenix connectors are available to connect equipment these are the preferable means for connection. Barrier connections are to be made utilizing insulated crimp connectors. Phoenix connectors may be utilized without crimp connectors if proper strain relief is provided to avoid fatigue to the connection.
2. Next in order of preference are XLR type connectors. Where no other means is available balanced 1/4" are to be used. Unbalanced 1/4" and RCA are to be use only if no other means of connection is possible. Use right angle jacks where needed for space requirements. Banana jacks are not to be used on amplifier outputs.
3. All wiring (except AC power) entering or leaving the rack will be connected via terminal strips or direct connection to the equipment terminals or connectors. No in line connectors are acceptable. Appropriate connectors and controlled cycle crimping devices will be employed. No wire nuts may be used in any system wiring except AC power.

B. All AR (audio rack) wiring shall be neatly tie wrap bundled (or as indicated otherwise on contract drawings) with wires parallel and perpendicular to rack sides and backs (i.e. no random angle wiring). All wiring shall be properly strain relieved as it exits the rear connection points on the related equipment, shall be routed out to lacing bars, shall be routed out along lacing bars to rack side areas and shall be tie wrapped to the lacing bars. Wiring shall be arranged at right angles to device wiring as it encounters lacing bars. No haphazard, loosely arranged or otherwise poorly managed wiring shall be acceptable.

C. All wiring shall be neatly tie wrap bundled (or as indicated otherwise on contract drawings) with wires parallel and perpendicular to rack sides and backs and/or control booth walls or roll top desks (i.e. no random angle wiring). All wiring shall be dressed neatly from devices to input/output plates with excess cable hidden below the countertop and secured as described below.

D. All loose audio, control or power cables & wiring must be dressed neatly with tie wraps & eyes or ring runs & tucked up against underside of control booth countertop. No dangling and loose cabling shall be allowed underneath the audio control area. This means that the contractor shall not be allowed to simply coil up excess cable and lay it on the floor or hang it from the wall or over a junction box. All cabling shall be cut to length (unless specifically indicated to be of certain lengths on the drawings) and all excess to be securely mounted so that it cannot become caught, snagged or otherwise engaged by operators, legs, chairs, etc. All cabling not handled as described above shall be fixed by the contractor at no additional cost to the owner. No excessively long cables (except those called out by length on drawings) shall be allowed.

E. Provide a single 120 V AC 60 watt lamp or LED equivalent light source within each rack, located at the top of the rack as necessary to clear equipment mounted within the rack. Provide rough duty lamps and protective lamp cages for each lamp, as well a switch assembly within each rack.

F. Provide all necessary jumper cables, turnarounds, adaptors, etc. as needed in order to interconnect all equipment as intended, even if those cables are not specifically shown on the drawings.

G. No equipment or terminal strips will be mounted to the sides, doors, top or bottom of the racks. Tie down bars will be provided by the contractor for neat wiring in adherence with industry standard practice.

H. Wiring Standards - Plenum Rated Cable: Unless specifically noted on the drawings, all low voltage wiring is to be CL2/CL3 wiring. Where specific plenum conduits exist its has been noted to use a plenum rated cable. Where wiring runs occur in concealed spaces – walls, ceilings, etc. - and are not enclosed in conduit the EC must verify the space is not being used as a plenum path. Any areas encountered that are plenums must have plenum cable or the wiring must be contained in conduit rated for the plenum application. Field verify conditions prior to ordering or installing cabling.

I. No rack rails will be allowed for equipment mounting in the rear of the rack unless otherwise noted in this specification.

J. Separate wiring paths must be maintained within each rack for microphone level, line level, AC, and speaker level signals. No bundling of dissimilar signal types is allowed.

K. No undue stress may be placed on any connection by a lack of support of the wiring within the rack.

L. Any equipment having accessible controls that are not normally used during system operation will have it's controls capped or otherwise locked such that they are not adjustable. If no other means is feasible the use of security covers is mandated. Rack doors are not acceptable as means of tamper resistance for controls.

M. Provide blank and/or vent panels as needed to complete each rack with no unfilled spaces, as per rack elevations or as required by alternates to equipment specified. No racks with unfilled panel spaces shall be allowed.

N. All conduits indicated on the drawings shall terminate directly into racks as shown – top, bottom or at any of the provided knockout locations (unless otherwise and specifically indicated on the drawings as otherwise) and so as not to obstruct access to the racks or adjacent walkways or approaches. Route conduits into racks with as few bends as possible – use sweep elbows where necessary. No loose or dangling or drooping wiring/cabling draped, dropped or festooned into the racks from dead-ended conduits or overhead cable tray systems shall be acceptable. All wiring shall be protected in conduit until it has reached the internal space of the indicated rack(s).

O. ELECTRICAL & GROUNDING:

1. All equipment to have the availability of chassis ground lifts or to be mounted with ground lift isolation washers.
2. Grounding of shields and chassis shall adhere to industry standard practice, with shields terminated at one end only on signal cables. Terminate the open shield end with plastic tape or shrink on collars.
3. All electronics' ground will be terminated to a single point within the rack. Ground this point as well as the racks to an appropriate main service ground provided by others. No AC line cord safety grounds may be lifted in an attempt to cure hum or noise problems. All such problems will be rectified by accepted industry practice such as the use of transformer isolation, ground lift rack washers, etc...
4. Any AC service shall be installed by the EC to standard Edison U-Ground style outlets at the locations noted on the electrical drawings. Where racks are located the service is to be run to the interior of the rack. This service should be capable of powering all system equipment at 100% of rated power. Two U-ground outlets

will be available for each 20 amp, single-phase circuit unless otherwise indicated or terminated into MPR style devices.

5. Internal rack AC distribution is the responsibility of the contractor. Acceptable methods: Rack mount power strips, rack mounted power distribution devices, Wiremold style outlet strip.
6. Install all internal AC rack power with all switches and controls carrying hazardous voltage housed in steel enclosures within the rack. Provide positive electrical grounding for all steel enclosures. All AC service will incorporate separate hot, neutral, and ground for each device. All grounds and neutrals will be appropriately bonded and connected to earth as required by codes and industry standard practice.
7. Provide each rack with sufficient AC isolated ground distribution for all equipment with 2 spares per rack.

P. CONDUITS:

1. Use separate conduits for microphone level (below -20dBm), video and line level (up to +30dBm) speaker level (greater than +30 dBm), control circuits and power circuits. No sharing of signal types within conduits is permissible.
2. All wiring in conduit shall be rated as necessary for full load continuous operation of the wiring within the conduit.
3. All conduits shall be concealed unless the owner has been notified in writing and accepts by written approval the location of the exposed conduits.
4. No conduit shall be allowed that is loaded beyond 50% fill. The contractor responsible for installing the indicated conduits shall upsize as needed any conduit found to be too small at no additional cost to the owner.
5. A pull string shall be left in place by the installing contractor after pulling all wiring through each conduit. This pull string shall be tied off at both ends and left for future use.
6. All lines, cabling or wiring in any conduit run must be free from any splices or junction points.
7. All lines, cabling or wiring must be free from damage. Any that exhibits stress, damage, intermittent signal problems, data errors or other anomalies due to excessive pull torque shall be replaced by the installing contractor at no additional cost to the owner.

Q. JUNCTION/GANG BOXES

1. Unless otherwise specified all controls, receptacles, user interface stations, plugs and outlets shall be located in an appropriately sized gang box. No multi-gang backboxes with raised, tile ring, extension ring or mud ring style reducers to obtain the specified faceplate gang size shall be acceptable in lieu of the indicated device backbox. Any multi-gang devices with these extension rings used shall be replaced and the specified backbox sizes provided by the EC at no additional cost to the owner.
2. Any junction (i.e. terminal blocks, punch down blocks etc.) shall be housed in metal enclosures with an attached ground. No such connections may be made in ceiling spaces or other areas without the use of a steel enclosure.
3. Any added junction boxes shall be sized and located for ease of troubleshooting access and all connections within shall be connected on terminal strips, which are clearly identified, in a logical, consistent & permanent manner.

R. ASSEMBLY & PRE-TEST

1. All equipment shall be turned on and burned in for a period of at least two weeks continuously before assembling into racks. No equipment may be delivered to the site without being fully tested and burned in off site. The equipment does not need

to be under load during this period, although the contractor should shop test each piece of equipment for signal flow integrity.

2. All sub assemblies and individual components (i.e. speakers etc.) shall be fully tested off site before delivery for installation.
3. An inspection of the system in test mode is required. This inspection must take place before any equipment is installed on site. Allow two weeks notice prior to the date requested for the inspection.
4. Failure to provide the owner and consultant an in-test inspection of the equipment will result in 10% of the total contract price being held for a period of 6 months after system completion.

3.3 FINISHES & CLEANING:

A. All finishes shall be returned to their original finish and condition after any temporary machining or other work.

B. Cover any walls, furniture, finished floors and carpeted areas to catch all metal particles, grit, etc. that may occur during installation.

C. Cover all equipment left or installed on site during construction to prevent dust, dirt, paint or other airborne debris from infiltrating equipment and to prevent contamination or damage from occurring. The contractor shall be responsible for all cleaning and damage caused to any equipment being installed before the site is safe for such installation. Typically electronic equipment should not be installed until after drywall sanding, welding, painting, use of motorized man lifts, construction debris sweeping and other such work has been completed.

D. Any audio, projection or A/V equipment that has become dirty due to installation before room finishes are complete shall be completely cleaned by the contractor (both internally & externally) and returned to an “as new” condition prior to date of acceptance. This includes over spray from painting.

E. Provide thorough cleaning of all work areas including vacuuming, spray cleansers and dust removal as required. Clean all equipment fan filters before final acceptance tests.

F. If any paint-work is to be done on sight, all overspray or drips must be contained. The contractor is responsible for any damage to any building finish caused by their work.

G. Maintain clean work areas, removing all debris daily.

H. The contractor shall wipe clean (with a clean, damp cloth) all touchscreens, faceplates, misc. input/output jacks, audio racks, control console, rack mounted equipment, etc. just prior to turning the systems over to the owner. Upon cleaning, all items shall appear in as new condition and without scratches, blemishes, dirt, dust, debris, chalking, paint marks, etc. on them.

3.4 LABELING:

A. All switches, cables, wire, controls and outlets will be permanently and logically marked during installation. Permanently mark cables with an identifying label at each end, in a consistent logical manner. Submit to the consultant for approval a listing of intended nomenclature.

B. On metal panels and plates where possible engrave directly upon the plates and assemblies. Where disassembly of the equipment would be required to achieve engraving the use of adhesive or screw on engraved labels will suffice. Engravings will be paint filled for best contrast with black or white paint.

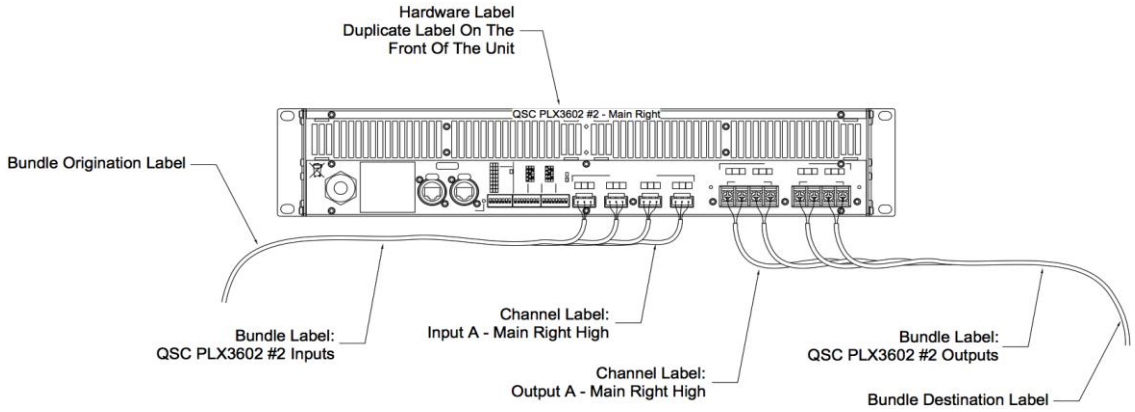
C. Do not use Dymo style labels or hand lettering. No cables will be labeled with masking tape, Gaffer tape, or other material subject to degradation. Such labeling may be done on a temporary basis during installation so long as all such labels are removed and their adhesive cleaned off when final labeling is applied. Self-laminating labels are preferable

such as laser printed labels by Panduit.

D. Color-coding of the entire system will be logical and adhere to accepted industry standards.

E. Labeling must allow the owner and potential novice users to disconnect a piece of equipment or peripheral equipment and reconnect it without the need for drawings or assistance from the installing contractor. Labeling must be done in a manner that precludes errors in connecting. If multiple inputs of the same type (such as XLR, 1/4" etc....) are present in a location the labeling must be detailed.

1. All equipment shall be labeled on the back as to it's function and where multiple units are present the unit number.
2. All input wiring shall be bundled and all output wiring shall be bundled separately with the bundle labeled with the same nomenclature of the hardware. See example below:



3. Examples: Input 1 (XLR) plugged into an XYZ mixer should be labeled "INPUT 1 XYZ Mixer" if this mixer is located in a rack with other XLR input equipment. If this was a front of house mixer with only XLR inputs to the mixer then a snake labeling system of numbers only would be acceptable.
4. At the same mix positions, any 1/4" lines used for processing, sends, etc. would need to be labeled to match the nomenclature on the mixer and the associated line or piece of equipment due to multiple 1/4" jacks being present. A jack plugged into "AUX 1 OUT" should be labeled as such. If the other end plugs into "XYZ REVERB INPUT LEFT", it should be labeled as such.
5. Where network switches are being provided as part of the audio system, the contractor shall label all wiring destinations. Labels should describe network connection locations.
6. All punchdown block wiring shall be labeled on both the input and output. Input wiring shall be labeled with its origination and output wiring shall be labeled with its destination.

F. Labeling is subject to an extended warranty as noted in the "Warranty and Service" section within these specifications.

3.5 RIGGING:

A. The following minimum standards apply in addition to the standards referenced elsewhere in the specification. These guidelines do not negate the standards referenced elsewhere in the specification.

B. All equipment not described as portable in this specification will be rigidly held in place.

C. All equipment will be supported at a minimum of three points plus a backup. Each point

must be able to carry the entire rated load with a safety margin of at least ten (10) times the rated load. All methods must incorporate an independent safety backup with a safety margin of at least ten (10) times the rated maximum load as installed in case of failure of any rigging component.

D. Speakers:

1. All speakers that are to be suspended must have factory installed and rated rigging points. No loudspeaker may be modified in any way by the contractor for installation by suspension. Speaker hanging hardware for the speaker must be furnished by the manufacturer or an approved rigging hardware manufacturer.
2. Speakers to be installed on brackets or mounts must utilize factory supplied components. No field fabricated brackets are acceptable unless authorized in writing before installation.
3. Where Omnimount brackets are used for mounting, the contractor should use the manufacture provided mounting points for the approved Omnimount. If a speaker model does not have the points where necessary, the contractor will need to drill the enclosure with the proper hole spacing. The contractor will need to internally span every 2 mounting points with 1/4” angle. No T-nuts will be accepted as mounting points.
4. For speakers utilizing flytrack to obtain the aiming angles, a duplicate set of double-stud fittings in the fly track with wire rope to structural supports is required. Wire rope to be properly dressed and tied off every 12” with nylon zip-ties with all excess cut off. Provide a safety cable from a manufacture provided hang point directly to structural steel.
5. Speakers installed with a Polar Focus Z-Beam or approved equivalent are to incorporate a safety cable from the speaker directly to main steel. All support from the Z-Beam to the speaker will be as indicated on the drawings.
6. Speaker audio cables are to be dressed along the nearest support cable. Audio cables are to have no tension and are not to alter in any way the aiming angle of the speaker. Speaker cables to be properly dressed along support cables.

E. All speakers that are suspended with overhead rigging are to be supported by 3 separate points plus a safety back-up cable. The safety back-up cable must be directly attached to structural steel. The safety cable is to have little or no slack.

F. All hardware used for rigging of speakers or other audio equipment to be installed with a torque wrench set to the manufacture settings.

G. All rigging and related fastening methods must be treated as permanent. All threads must be treated with vibration compounds such as vibratite or loctite as per manufacturer's recommendations.

H. All rigging hardware must be load rated with the load rating or approval stamped on each piece of hardware.

I. No chain of any type will be acceptable for the hanging or backup support of any equipment unless specifically called out on the drawings.

J. No fabric or plastic devices of any type will be considered as acceptable methods of hanging of any equipment.

K. No stainless steel rope may be secured with threaded compression type fittings alone (Crosby Clamps). Compression type closures such as Nicopress must be utilized. All wire rope is to have strain relief thimbles installed. All Nicopress crimps to use copper sleeves.

L. All loose ends of the wire rope will be neatly taped down after Nicopress is installed and crimped. No frayed rope ends will be allowed under this specification.

M. Where shackles are used in the rigging of speakers or other audio equipment, the shackles are to be moused with industry standard mousing wire. Mousing wire to be neatly trimmed.

N. All rigging work is to be done by an ETCP certified rigging contractor unless the sound contractor can supply documentation of their personnel having appropriate training in rigging.

O. All rigging tools such as nicopress crimping tools must have been calibrated within 6 months of the date of installation.

P. Contractor to have a go/no go Nicopress gauge on site for testing of crimps. Every 6th crimp should be tested. If a crimp tests no-go, all crimps between the last passing test and the failure to be tested. Any crimps that fail are to be replaced.

3.6 ROUGH-IN:

A. Due to small scale of Drawings, it is not possible to indicate all offsets, fittings, changes in elevation, etc. Verify final locations for rough-ins with field measurements and with the equipment being connected. Verify exact location and elevations at work site prior to any rough in work. DO NOT SCALE PLANS. If field conditions, details, changes in equipment or shop drawing information require a significant change to the original documents, contact the owners representative for approval before proceeding.

B. All equipment locations shall be coordinated with other trades to eliminate interference with required clearances for equipment maintenance and inspections.

C. Coordinate work with other trades and determine exact routing of all duct, pipe, conduit, etc., before fabrication and installation. Coordinate with Architectural Drawings. Verify with Owner's Representative exact location and mounting height of all equipment in finished areas, such as thermostats, fixtures, communication and electrical devices, including panels. Coordinate all work with the architectural reflected ceiling plans and/or existing Architecture. Mechanical and electrical drawings show design arrangement only for Diffusers, grilles, registers, air terminals, lighting fixtures, sprinklers, speakers and other items. Do not rough-in contract work without reflected ceiling location plans.

D. Before roughing for equipment furnished by Owner or in other contracts, obtain from Architect and other Contractors, approved roughing drawings giving exact location for each piece of equipment. Do not "rough in" services without final layout drawings approved for construction. Cooperate with other trades to insure proper location and size of connections to insure proper functioning of all systems and equipment. Obtain written authorization from the Owners representative or other contractor for any “rough ins” that, due to project schedule, are required before approved coordination drawings are available. Any work installed without written authorization or approved coordination drawings, causing a conflict will be relocated by the electrical contractor at no expense to the Owner.

E. For equipment and connections provided in this contract, prepare roughing drawings as follows:

1. Existing equipment being relocated: Measure the existing equipment and prepare drawings for installation in new location.
2. New equipment: Obtain equipment roughing drawings and dimensions, then prepare rough-in drawings.

F. Where more than one trade is involved in an area, space or chase, all shall cooperate and install their own work to utilize the space equally between them in proportion to their individual requirements. In general, ductwork shall be given preference except where grading of piping becomes a problem, followed by piping then electrical wiring. If, after installation of any equipment, piping, ducts, conduit, and boxes, it is determined that ample maintenance and passage space has not been provided, rearrange work and/or furnish other equipment as required for ample maintenance space. Any changes in the size or location of the material or equipment supplied, which may be necessary in order to meet field conditions or in order to avoid conflicts between trades, shall be brought to the immediate attention of the Owner's Representative and approval received before such

alterations are made.

G. Provide easy, safe, and code mandated clearances at controllers, motor starters, valve access, and other equipment requiring maintenance and operation.

3.7 CUTTING AND PATCHING:

A. Each trade shall include their required cutting and patching work unless shown as part of the General Construction work on the architectural drawings. Refer to "General Conditions of the Contract for Construction" for additional requirements. Cut and drill from both sides of walls and/or floors (if possible) to eliminate splaying (if not possible, then contractor shall do everything possible in order to minimize splaying). Patch all cut or abandoned holes left by removals of equipment or devices. Patch adjacent existing work disturbed by installation of new work including insulation, walls and wall covering, ceiling and floor covering or other finished surfaces. Patch openings and damaged areas equal to existing surface finish (i.e. “patch to match existing”). Cut openings in prefabricated construction units in accordance with manufacturer's instructions. Contractor shall also refer to any “front end” contract document sections that deal with selective structure demolition, wall excavation procedures and cutting and patching for further details and instructions as it regards the cutting, patching and refinishing of any affected surfaces related to the rigging system removals and additions as well as the limits of incidental damage liability. If no instructions exist in the contract documents addressing these issues, then the contractor shall contact the architect and construction manager in writing prior to proceeding with any work in order to obtain written instructions regarding this type of work. Patching shall include infilling with new appropriate and matching materials in kind and finishing with standard industry practices. Patched and finished surfaces shall match those existing adjacent surfaces as closely as possible in finish, texture, color and durability. If the general conditions conflict with any of the language present in this paragraph, then the general conditions language shall take precedence as to methods for cutting and patching.

3.8 PROTECTION OF WORK:

A. All hanging mic boxes, recording mics, AFC mics, AFC speakers on battens over the stage area, stage choral or distant pickup mics attached to the rigging system, wireless access points, etc. and any other related equipment shall be completely wrapped with a heavy duty protective plastic covering taped securely in place around each device until all painting and other dust creating work within the auditorium and all related cleanups have been completed (unless these devices are installed after all above mentioned work and related cleanup has been completed). Any damage done to these items or any overpainting of connectors, control inputs/outputs, display screens, etc. shall be completely repaired by the contractor and all components returned to "as new" condition prior to energization of the system and at no extra cost to the owner. The contractor shall coordinate installation of the protective plastic coverings with the installation of devices and either wrap the units in such a way that they can be hung or installed with the protective plastic covering on them or wrapped after installation but before painting or other dust creating work has commenced. This may require the contractor to make multiple trips to the jobsite in order to accomplish this task. Upon completion of all room painting, dust creating work and related cleanups the contractor shall remove all parts of the protective plastic covering, tape, etc. And shall legally dispose of the protective coverings, tape, etc. All items related to the installation and removal of the protective plastic covering shall be performed and completed at no additional cost to the owner. Any tape residue shall be cleaned from affected devices as well.

3.9 CONCEALMENT:

A. Conceal all contract work above ceilings and in walls, below slabs and elsewhere throughout building (this does not include control consoles, input stations, user interface devices, touchscreens, etc.). If concealment is impossible or impractical, notify Owner's Representative before starting that part of the work and install only after his review and

written authorization and instructions on how to proceed. In areas with no ceilings, install only after Owner's Representative reviews and comments on arrangement and appearance. Obtain and maintain written records and approvals for all work exposed work performed or devices installed.

3.10 PERFORMANCE:

A. PROCESSOR SET UP: Unless otherwise instructed within the following is the basic configuration for all processor systems:

1. Speaker Equalization: All speaker specific equalization to accomplish room preference curves, control speaker anomalies, provide high pass, low pass, or bandpass capabilities shall be accomplished on output filter banks. Limiters shall be applied to prevent system overload. Set the out put limiter to a threshold of 0 dB attack 10 MS and release of .5 seconds for main speakers and delayed speakers. Set limiters for monitor speakers as required by the application and gain structure of the system.
2. ADA system feeds - All ADA systems shall be fed with compression and auto level providing consistent gain of 0 dB +/-3dB.
3. Delay shall be applied where required to:
   a. Provide signal delay for delayed loudspeakers and ADA equipment.
   b. Provide signal delay to compensate for cluster packing frequency anomalies.
   c. Provide signal delay to integrate monitor system bleed with the main speaker systems.
   d. Provide feedback correction in monitor systems.
   e. Provide frequency shading and beam steering of low frequency systems.
4. Program inputs shall operate with no filters applied unless a preference curve is called for by the owner. All program inputs will include a compressor set to a threshold of 3dB below nominal operating level of the equipment connected. Set controls for soft knee compression, ratio of 6:1, attack time 30 Ms and release of .33 seconds unless conditions require different settings.
5. Program inputs shall incorporate gates set to eliminate background hiss of the equipment when program is not present. Set threshold and characteristics for a gradual fade out when program drops off. Low level program material must not allow gates to activate.
6. Line level inputs from manual mixers shall have similar settings applied as is utilized with program inputs except with regard to compression. Limiting for system safety shall be utilized instead of gain control style compression. Set the threshold to 6 dB below system clipping with hard knee characteristics and minimum 10:1 ratio.
7. Microphone inputs shall be set for automated functions in groups based on use. NOM attenuation shall be 3dB. Priorities will be assigned as required by use.
8. Compression shall be applied to all microphones inputs to prevent system overload. Soft knee characteristics shall be utilized. Gain structure as required by the system application for the specific microphone.
9. Auto level shall be applied to microphone inputs with the intent of providing gain riding within a 20 dB range of the target level. If feedback conditions are encountered in set up do not change NOM settings, Adjust the auto level to compensate.
10. Fade times for presets shall be set to 5 seconds unless requested otherwise by the owner or consultant.
11. All matrix settings for gain shall be adjusted to conditions and placement of microphones and speakers for specific presets.
12. Test the system with microphone applications as described within the functional descriptions of the presets. Tune all presets for optimum signal to noise and natural reproduction.

13. Final equalization will be done during acceptance testing with a variety of signal sources.

B. TEST EQUIPMENT: (All test equipment will remain the property of the contractor.)

1. AC Voltmeter with frequency response within +/- 1dB from 20Hz to 20KHz from .0001 V to 240 V.
2. Sine Wave generator continuously variable from 20Hz to 20KHz +/- 1 dB with less than .5% THD at 1 V into 600 ohms.
3. Loudspeaker phase checker.
4. CD player with library of program material and direct box.
5. Digital Multimeter - May be included with AC voltmeter.
6. SMAART, TEF or other DUAL FFT Analyzer with calibrated microphones.
7. Oscilloscope with at least 250 MHz bandwidth.
8. Impedance measuring device capable of measuring on at least 4 octaves from 125Hz to 2000Hz from 0 to 1000 ohms.
9. All cables, adaptors, etc. required for test procedures enumerated.
10. Two walkie-talkies.
11. Laptop PC loaded with all DSP control software loaded. A cable of at least 100' to interface to the DSP's must be onsite during acceptance tests.

3.11 INITIAL POST COMPLETION TESTS & SET UP:

A. Parasitic oscillation and RF pickup: Verify that the system is free from RF pickup and oscillation with no input as well as normal operating levels.

B. Loudspeaker phasing: Check each loudspeaker with a phase measuring device for proper polarity.

C. Proceed to equalize all systems to conform to the specified initial performance criteria.

D. Uniformity: Measure each speaker system on axis within direct field coverage. Equalize to +- 3dB 150 Hz – 8000 Hz using impulse sweeps. Where delay or down fill elements are included perform direct field measurements of each area with all system pertain and

E. Distortion, rattles, and buzzes: With high quality digital program material set the equalized systems for average levels of 90 dB check for unusual distortions or rattles. Also apply a constant sine wave sweep from 80 Hz - 8000 Hz at a level providing average levels of 86 dB measured at standing ear height. Walk through all systems and check for unusual distortions or rattles. Correct any problems. If the problem is outside of the system, bring the source to the attention of the owner. (ceiling tiles etc….)

F. Gain Control Settings: Adjust controls for optimum signal to noise of the all systems relative to the performance requirements of this specification.

G. After initial tests have been made, proceed to equalize the system for feedback control as per normal practice.

H. Verify all systems inputs, outputs, equipment and functions.

3.12 WARRANTY AND SERVICE:

A. The contractor guarantees all equipment, materials, and workmanship to be free from defects for a period of one year from the date of owner acceptance. This warranty supersedes all manufacturers warranties for the one-year period. Any manufacturer's warranty that exceeds the one year will continue to be applicable. The contractor will replace any defective materials at no charge to owner. Any equipment replaced during the one-year warranty will have a new one year warranty to the owner.

B. The contractor guarantees all labeling to be free from defects for a period of two years from the date of owner acceptance. In cases where the label's adhesive fails, or the label suffers from degradation causing it to become unreadable, the label will be considered defective

and will be replaced at no cost to the owner.

C. The contractor will respond by phone to requests for service within 2 business hours and respond with a technician being sent (if needed) within 1 business day.

D. Any equipment that tends to "drift" or whose performance deteriorates during the warranty period will be considered defective, even if such drifting is normal during break in. This equipment will be readjusted at no charge to the owner.

E. Provide all service at the owners location regardless of any manufacturer warranty terms regarding carry in service.

F. During the warranty period if any equipment failed will take more than 24 hours to repair, the contractor will make available and interconnect at no cost to the owner suitable temporary equipment to maintain a fully operational system until repairs are complete.

3.13 OWNER INSTRUCTION:

A. The contractor shall provide a training program at the project location. Total training time not to exceed 12 hours. No training block to be less than 4 hours in duration. All training hours are exclusive of travel time.

3.14 TRAINING

A. Training must provide useful information that covers the majority of how a system will be used by the owner. This also applies to documentation and video training.

B. On a job by job basis this training may vary significantly. The hours allotted may be used by the owner as required for any purpose related to the system.

3.15 QUALIFICATIONS OF TRAINERS

A. All persons performing training must be experienced operators of the specific equipment in the project. If no one on the contractor staff has experience on a specific device they will need to provide outside personnel to perform training.

3.16 SCHEDULING FOR TRAINING

A. Initial Training must be scheduled by the contractor with at least two weeks advance notice.

B. If the contractor arrives for a scheduled training session and owner personnel do not the contractor must notify the owner that a four hour segment has been used up.

C. If a scheduled session lasts less than four hour it will still expend four hours of allotted training.

3.17 INITIAL TRAINING

A. Walk through the facility and familiarize the owner with where primary equipment is and what it does. This should include a walk to the power panels feeding the systems and show what breakers operate various power feeds.

B. Train on primary control surfaces (Consoles, touchscreens etc….) for the most commonly used functions.

C. It is recommended that most training be hands on with the owner’s personnel operating the equipment.

3.18 FOLLOW UP SESSIONS

A. Often this will be used for in rehearsal or show sessions where the contractor is an assistant to the operates during actual use.

B. Some operators may want to schedule session on higher level functions.

C. Sessions may also be used to change configurations for the owner. Often once as system

is used or a while changes are requested for default presets and controls.

D. Provide training only at the request of the owners authorized representative (s). Track all training hours and provide copies to the owner of who attended and what general topics were covered.

3.19 VIDEO RECORDING OF TRAINING WITH OWNER – INITIAL TRAINING

A. The camera should be placed on a tripod in a location that offers a good view of the console and screens. Lighting must be adequate, provide portable lighting if needed.

B. Provide Simple explanations of what each piece of equipment does, what would occur if it was shut down etc…..

C. Console Initial Training shall also be video recorded. During this training an operator from the owner can operate equipment.

D. A live training session by default will be interrupted with questions. The camera should record through the entire session.

E. This training will be converted by the contractor to a DVD.

F. Edit and title into chapters based on general content.

3.20 DEVICE SPECIFIC TRAINING SHOULD BE RECORDED BY THE CONTRACTOR INDEPENDENT OF THE INITIAL TRAINING SESSION. THIS RECORDING CAN BE DONE IN THE CONTRACTORS SHOP, AT THE SITE WITHOUT THE OWNER, OR OTHER LOCATIONS AS APPROPRIATE.

A. This second DVD video is to provide two levels of information:

1. Basics - A walk around of the site should be video recorded that shows the owner where primary equipemnt is located, and what screens and indicator lights look like when everything is working properly.
2. This should include a walk to the power panels feeding the systems and show what breakers operate various power feeds.
3. Record a quick start guide for someone who has to use the system who has no idea how to do anything.
4. Example:
    a. How to boot up the console
    b. How to access a scene file
    c. How to unmute microphones
    d. Basics of console navigation
        1) Select
        2) Toggle Screens
        3) EQ Screens
    e. How to shut down the console without saving

B. A second level for anyone who need to do the following:

1. Use gates and compressors to automate channels
2. How to use internal spectrum analyzers to assist with EQ
3. EQ functions – filter types, bandwidth etc…..
4. How to load libraries on the fly
5. Perform digital patching - Access remote stage boxes.

C. Edit the DVD into chapters for an end user to quickly find what they need.

D. Also provide to the owner links to factory training video series for higher end functions.

E. Provide both training videos in DVD and USB stick formats

F. On the USB include a PDF document with active links to factory training videos an sites

G. In subsequent sessions of training with the owners personnel higher level functions may be covered. Some owners will not require this some will. The contractor is not required to video record subsequent sessions. The owner can record in audio or video any session they want using their own equipment.

3.21 SIGNAGE:

A. A sign shall be posted in an accessible location (typically on the rack(s) or in the control booth) providing the name, address and phone number of the primary system contractor, manufacturer and supplier (if not already listed) of the system equipment.

3.22 DEMONSTRATION AND ACCEPTANCE:

A. CONDITIONS FOR SCHEDULING FINAL ACCEPTANCE:

1. The system is required to be complete and fully tested. Any failure that may have occurred between the contractor's final tests and the date of acceptance will be noted and can be corrected after that date. All of the following conditions must be met before scheduling an acceptance tests:

B. PROCEDURE FOR SCHEDULING FINAL ACCEPTANCE:

1. The contractor shall notify the owner and consultant of a proposed date and time for the final acceptance tests. The contractor shall include two alternate dates and times. The dates proposed will be a minimum of fourteen (14) calendar days from the date of the proposal.
2. The owner and consultant will respond within two (2) business days as to whether the date and time for final acceptance tests has been approved.
3. If none of the dates and times are acceptable, the owner and/or consultant will submit two alternate dates and/or times to the contractor.
4. If the dates and/or times proposed by the owner and/or consultant are not accepted, the contractor, owner, and/or consultant will continue to alternate per these procedures until an acceptable date and time has been found.

C. DATE OF TESTS:

1. Test equipment as enumerated above must be set up and operational. A technician familiar with the equipment must be on hand.
2. Tools must be on hand to remove connector plates and provide for other possible inspections.
3. All racks must be open and all security covers removed.
4. Documentation for all wiring must be completed in at least a neat draft form and on site. This must include as built nomenclature and wiring schedules.
5. The control software must be programmed and all equalization completed for the presets and scenarios as indicated.
6. The control laptop computer must be located in the middle of the seating area for the room to be tested. The technician who performed the programming must be on hand for the testing and acceptance.
7. Any return trips to correct any of the above conditions will be wholly billed to the contractor and deducted from the contractor's remaining balances with the owner at the same rate.
8. Changes to the tuning accommodate subjective assessments will be done during acceptance. These adjustments will incur no costs to the contractor.

D. CONDITIONS OF ACCEPTANCE:

1. It is understood that the consultant cannot inspect every aspect of the installation. The contractor is responsible for installation quality and methods, fabrication quality and methods, and performance of their work. Acceptance of the project will constitute an acceptance of the following:

a. All specified equipment is installed and the system is operating in an acceptable manner from a functional standpoint.

2. Upon completion and acceptance of the project the contractor will provide to the owner a letter stating that all of the equipment and installation methods meet or exceed the specification requirements in all respects, and that the system as installed meets all of the applicable standards and codes required under the specification and meets applicable federal, state, and local codes and laws.
3. Final adjustments for the sound system presets will likely need to be changed in the days following completion. This will require the participation of the contractor at several events over as much as forty-five (45) days after system acceptance. These adjustments will be made at no additional charge and upon reasonable notice by the owner. These visits will not exceed a total of (8) eight manhours on site (including any travel time).
4. Prior to acceptance testing there are a number of conditions that need to be verified. There are also site conditions required for the consultant to perform tests as indicated. The contractor shall ensure that every item on this checklist has been performed and verified prior to the consultant's acceptance tests can begin. Scheduling of the consultant to perform final acceptance tests must be coordinated with the owner, the project's construction manager (or clerk of the works), the contractor and the consultant (See paragraphs above for detailed requirements).
5. GENERAL:
   a. No other contractors may be working within the rooms to be tested during tests.
   b. No rehearsals or other activities may take place during tests.
   c. The contractor must verify these conditions can be maintained during testing.

E. AUDIO – TYPICALLY TAKES 4-8 HOURS:

1. Required Attendance – Personnel from the sound contractor equipped with test equipment as required within specifications. All test equipment set up and ready for use.
2. All room finishes complete. The sound systems may not be tested until carpeting, chairs, acoustical panels, stage curtains, etc. are all installed.
3. System Status:
   a. All labeling complete
   b. Front of equipment faces
   c. Rear of equipment panels
   d. Cabling & cable dress
   e. Plates installed with all trim rings present
   f. Snakes and output cabling
4. All security covers removed, but on site ready for reinstallation after tests.
5. All systems must be fully wired and gain structured – free from buzzes, hum and noise.
6. The system must be equalized as required within specifications. Additional tuning will be done during acceptance, but primary equalization should be done prior to acceptance.
7. All microphone inputs and line level outputs tested for continuity and operation.
8. All intercoms tested on all circuits and able to be verified.
9. Hearing assistance system tested and ready to be verified.
10. Recording systems set up and calibrated for expected gain.
11. All wireless systems must be coordinated for frequencies with no interference in the locality they are installed. Units should not unsquelch or exhibit any noise issues even if all transmitters are not in use.
12. All wireless must be walk tested for dropouts and set up for drop out free performance and frequency coordinated.

13. Automixer must be set up and operational with appropriate gain structure for each input type. All aux sends routed and gain structured for monitor feeds and ADA.
14. All auxiliary gear and record systems tested.
15. HVAC system operational and able to be controlled if needed.
16. Interface at the booth location to all DSP and digital consoles with software and laptop must be set up and operating. A programmer from the sound contractor must be on site fully versed in all DSP and console operations and programming. Adjusting the system from the rack or backstage is not acceptable. Speakers shall be grouped by function in the processor for ease of changes.
17. Speakers shall all be wired properly, in phase and aimed and steered as per the contract documents.
18. Processors must be programmed with all factory parameters for each loudspeaker type. This includes stage monitors.
19. Each speaker and each section of biamp/triamp speakers needs to be able to be fully controlled during testing, as well as all processor setting. If this requires additional personnel at the amp racks with walkie-talkies or cell phones these persons need to be available.
20. Audio control console must be set up with the proper cards installed and all addressing, programming and patching fully complete.
21. The ADA system must be fully functioning with levels set, source selection and a quality signal present at each receiver and throughout the room.
22. All green room feeds shall be present, tested and without hums, buzzes, ground bars, etc.
23. Verification in the form of signed documents that all portable equipment has been delivered to the owner per specs and drawings. Portable equipment must be available for visual inspection as well.

3.23 CLOSEOUT DOCUMENTATION

A. All closeout documentation including training videos must provide the owner with usable training. The determination of acceptability will be determined by the Consultant. Poor quality training videos and documents will be rejected.

B. Closeout Documentation is to be submitted within two weeks of system completion.

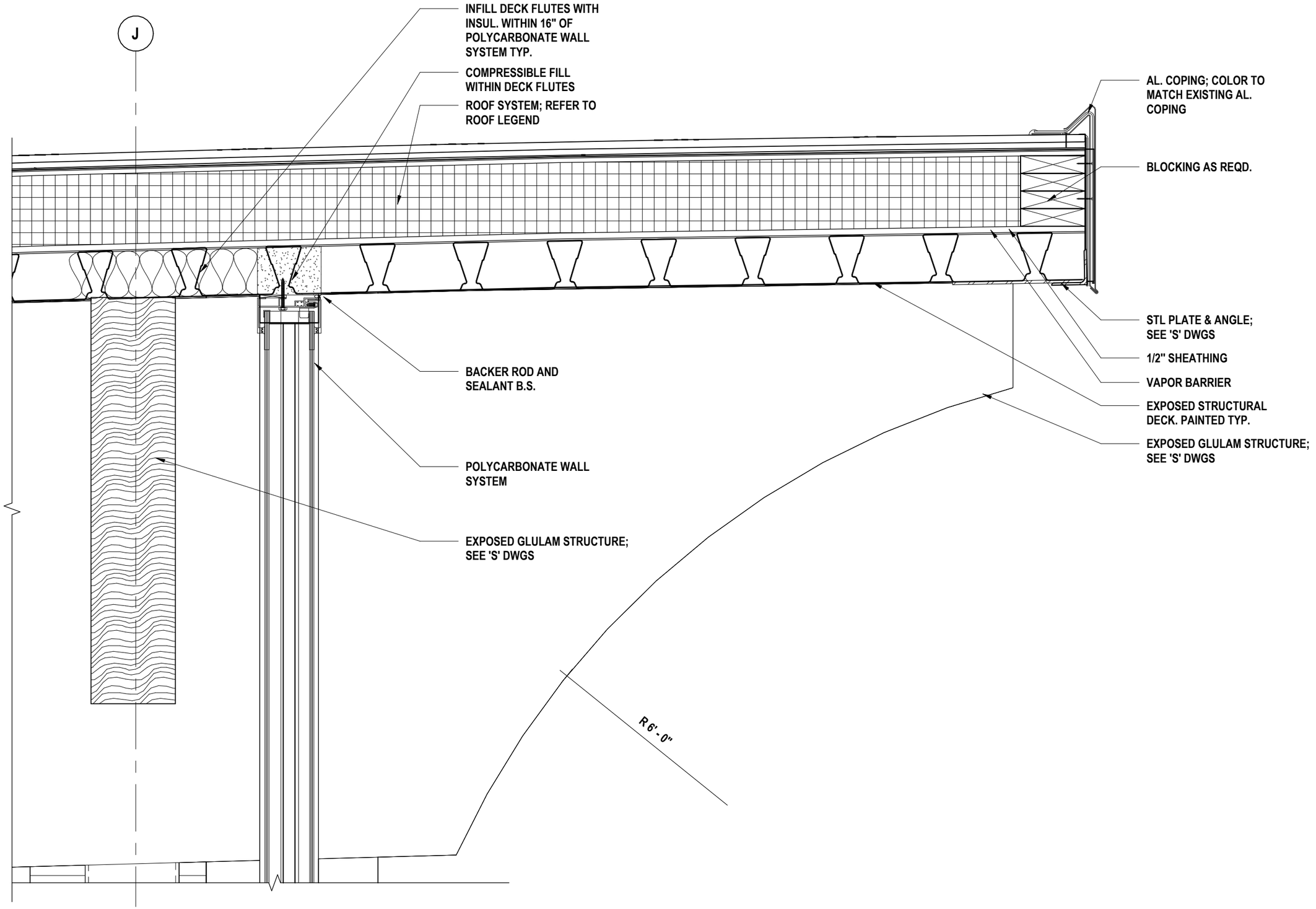
C. Contractor must submit the following items. All items should be part of the O&M Manual. Provide the quantity and form (paper and/or electronic) of these closeout documents as is indicated in the contract front-end documentation. Physical copies shall only be required if front-end documentation requires them.

D. System testing documentation as required by final testing and acceptance procedures outlined in this document.

1. ALL paper copy O&M Manual submissions shall be in heavy-duty, D-Ring style, 3-Ring binders All electronic copies shall be “bound” in an Adobe Acrobat style portfolio (see below for more complete information).
2. Complete technical manuals for all equipment installed.
3. List of serial numbers of all equipment
4. Warranty cards for all equipment.
5. Manufacturer MSDS sheets for all applicable equipment.
6. Operations & Maintenance Manuals shall include English and Spanish only.
7. Operations & Maintenance Manual: An operations and maintenance manual (or “Systems Manual”) written in English on the safe use of a that particular sites audio and AV system shall be provided by the contractor to the owner. (provide separate manual sections for different spaces included in this project – each to be a separate, complete and distinct section in the manual for each differing or multiple system and location). This manual should include the following:
   a. Table of contents.

b. A contractor written simplified guide to operating the system Include at minimum.
   1) A contractor written simplified troubleshooting guide or what to check and where to check if there is no sound.
   2) Power up power down of console
   3) Changing between auto and manual modes
   4) A key stroke guide on how to get to menus to check routing, access effects etc.
   5) Constructing and editing scenes
   6) file saves, file loads.
   7) A short list of the required software reset procedures for all audio system related subsystems.
c. Emergency contact number(s) and procedures to follow in the event of a catastrophic system failure.
d. Maintenance procedures and recommended schedules required for equipment installed that requires regular scheduled maintenance.
e. A DVD (or set of DVD's, depending on requirements listed Under Training Sections above)

E. O&M Manual pdf requirements: The contractor shall provide a pdf copy (with appropriate titles) for each piece of documentation listed above and bound together in a pdf portfolio/binder, labeled with the owner's name and with the submitting contractor's information. All electronic manuals shall contain only equipment and information that pertains to the project Where factory manuals are available the contractor shall provide these. Where factory manuals are not available, the contractor shall provide high resolution (150 dpi minimum and fully optimized in Acrobat or equal), full page, properly and consistently oriented pages in a consecutive ascending order. All pdf portfolio and binders produced and submitted shall be professionally put together and presented well. All manuals shall be saved as standard Adobe Portable Document Format (PDF).



1 **NATATORIUM UPPER ROOF EDGE DETAIL**
1 1/2" = 1'-0"

DRAWN BY:	CAM
CHECKED BY:	MLS
DATE:	06/25/2026

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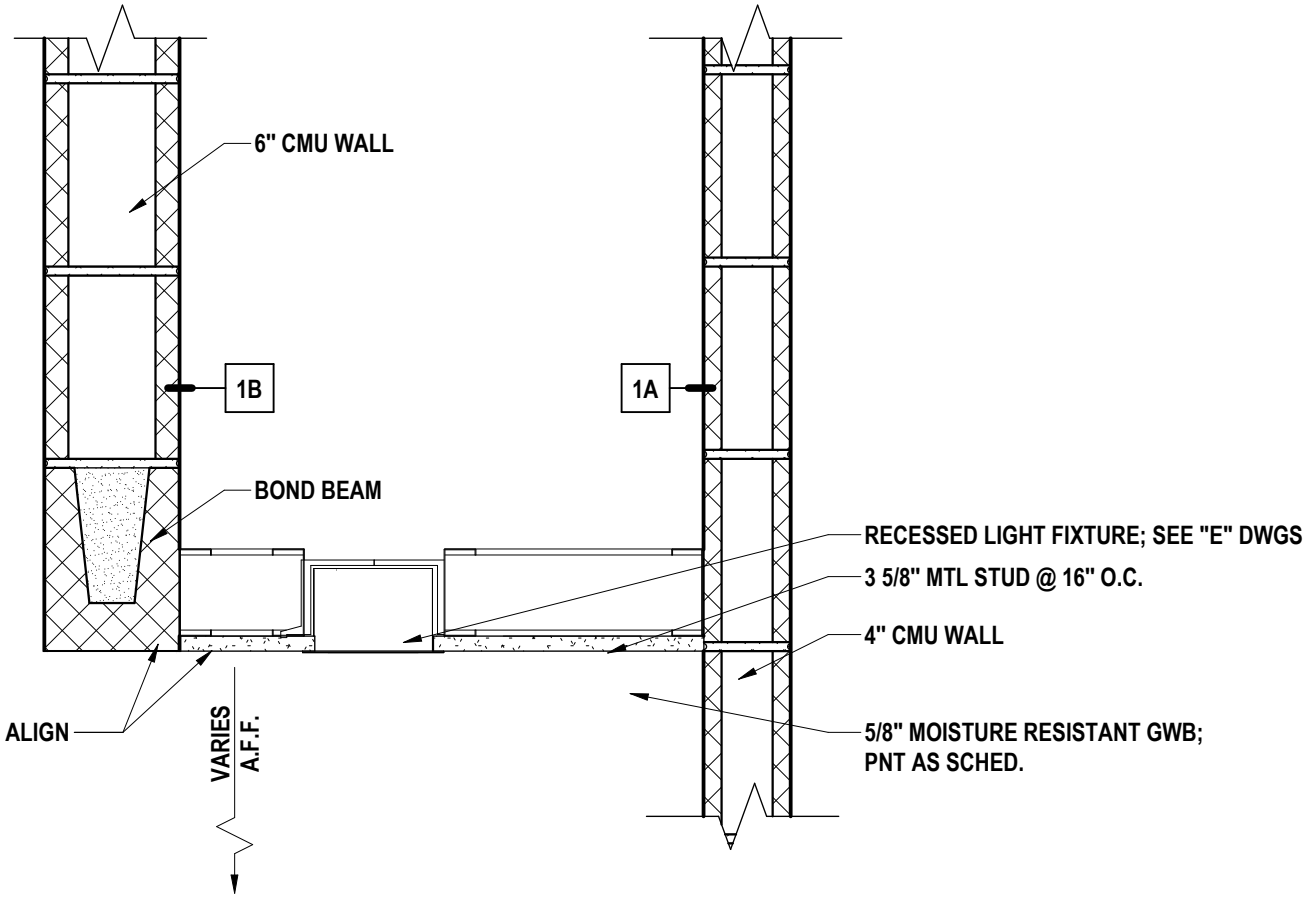
NATATROIUM UPPER ROOF EDGE GRIDLINE

2025 CAPITAL PROJECT
ALFRED-ALMOND CSD
6795 ROUTE 21 ALMOND, NY 14804

AD1-A1

PROJECT NO: 2028-059



1 PARTIAL VANITY CEILING DETAIL
1 1/2" = 1'-0"

VANITY CEILING DETAIL

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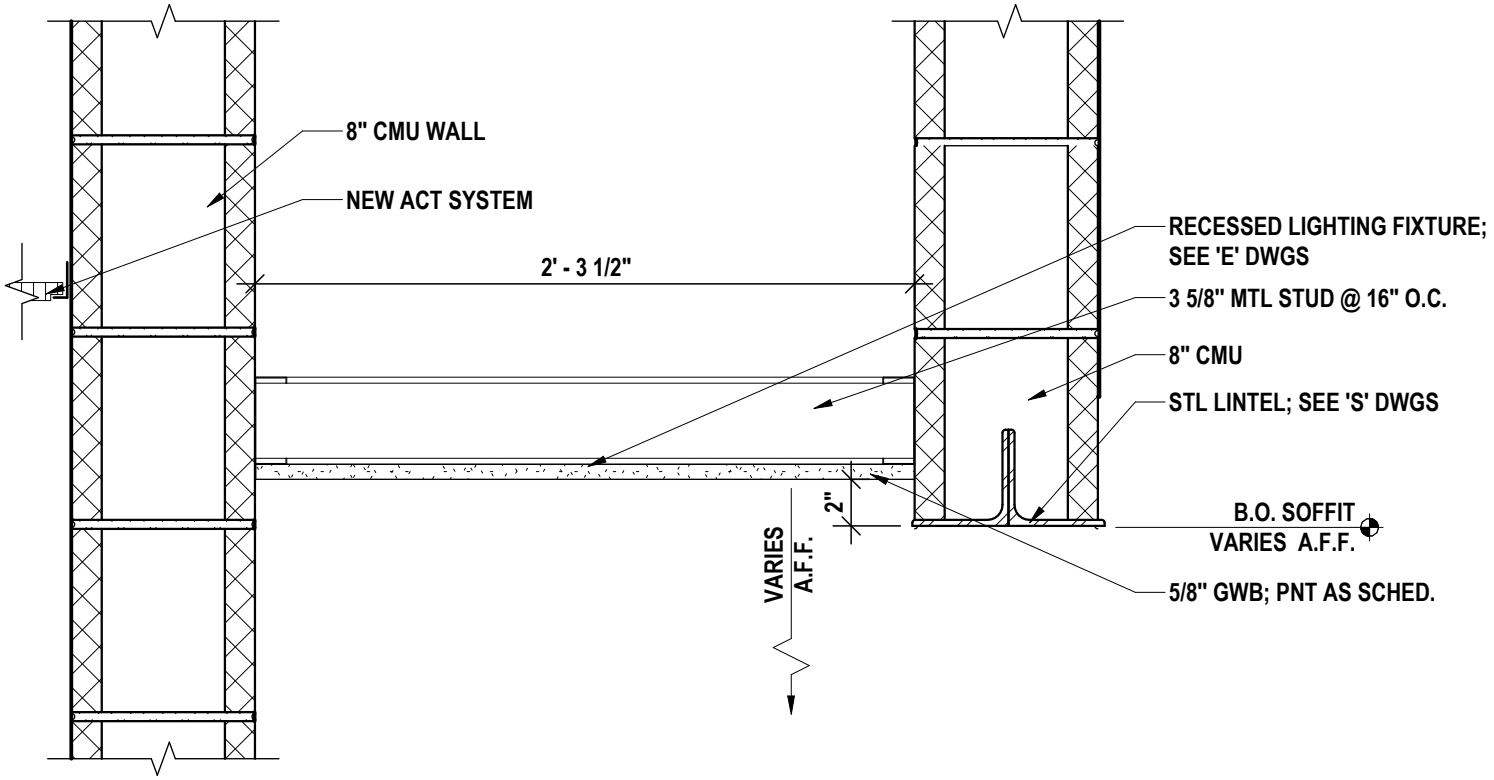
PROJECT NO: 2028-059



1 CEILING DETAIL @ POOL DECK SHOWER

1 1/2" = 1'-0"

POOL DECK SHOWER CEILING DETAIL

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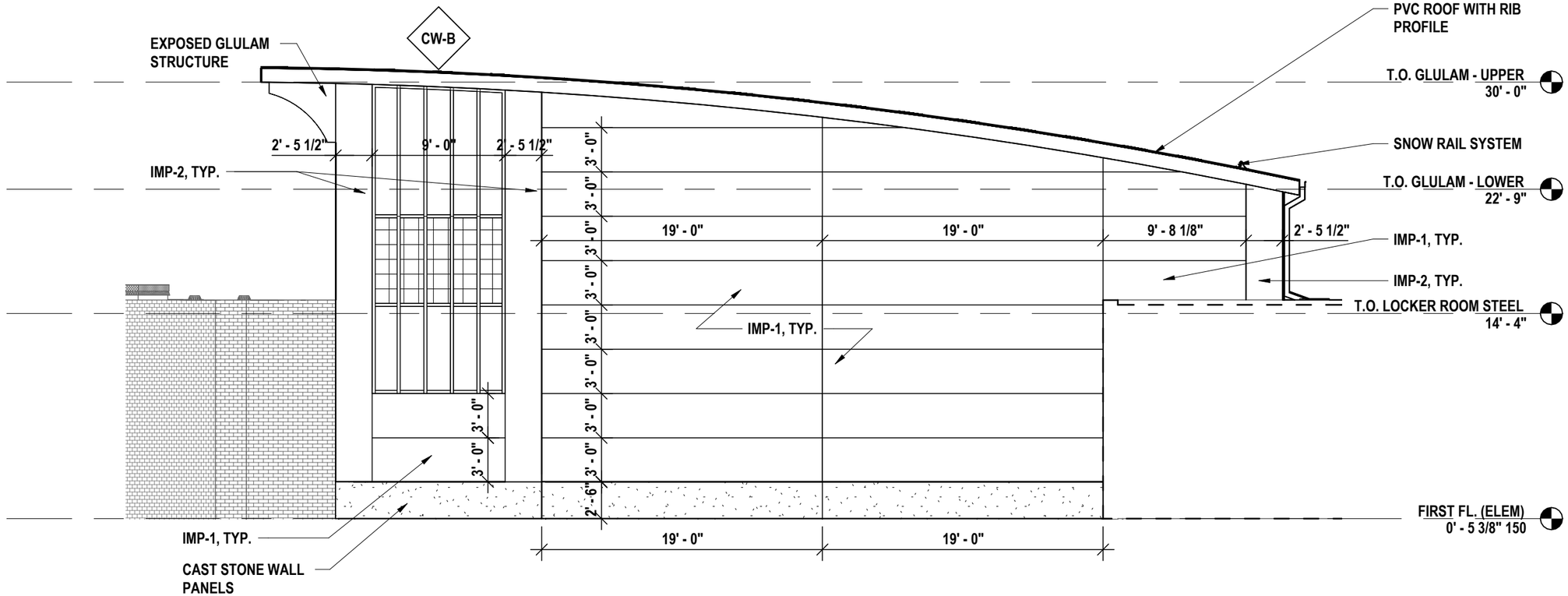

1 **POOL EXTERIOR ELEVATION DIMENSION CLARIFICATION - A**
1/8" = 1'-0"

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POOL EXTERIOR ELEVATION DIMENSION CLARIFICATION - A

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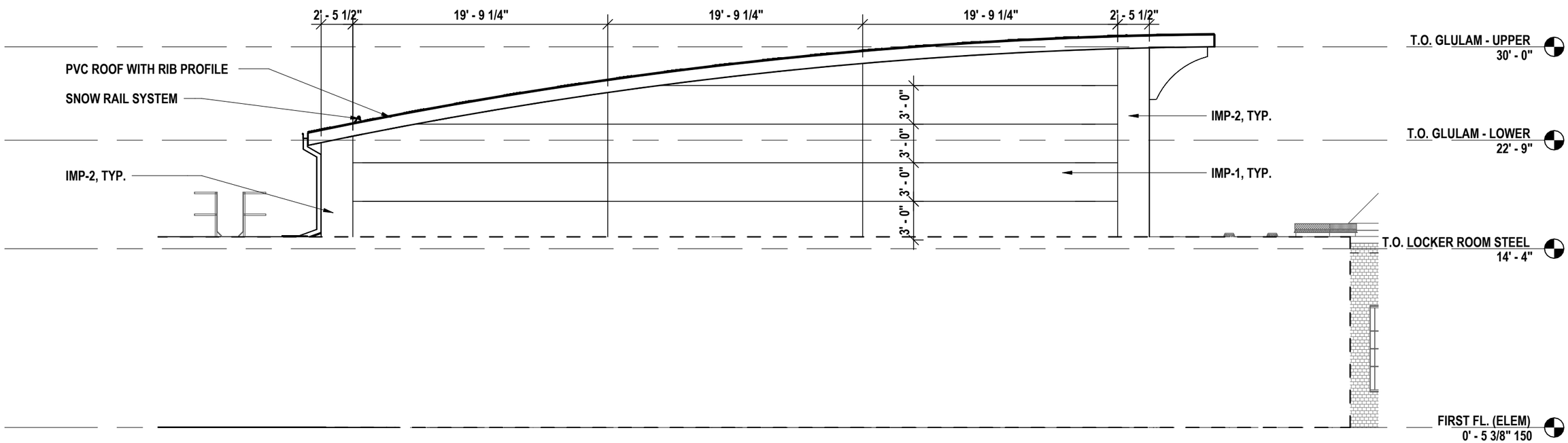
AD1-A4

PROJECT NO: 2028-059



1 **POOL EXTERIOR ELEVATION DIMENSION CLARIFICATION - B**
1/8" = 1'-0"

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POOL EXTERIOR ELEVATION DIMENSION CLARIFICATION - B

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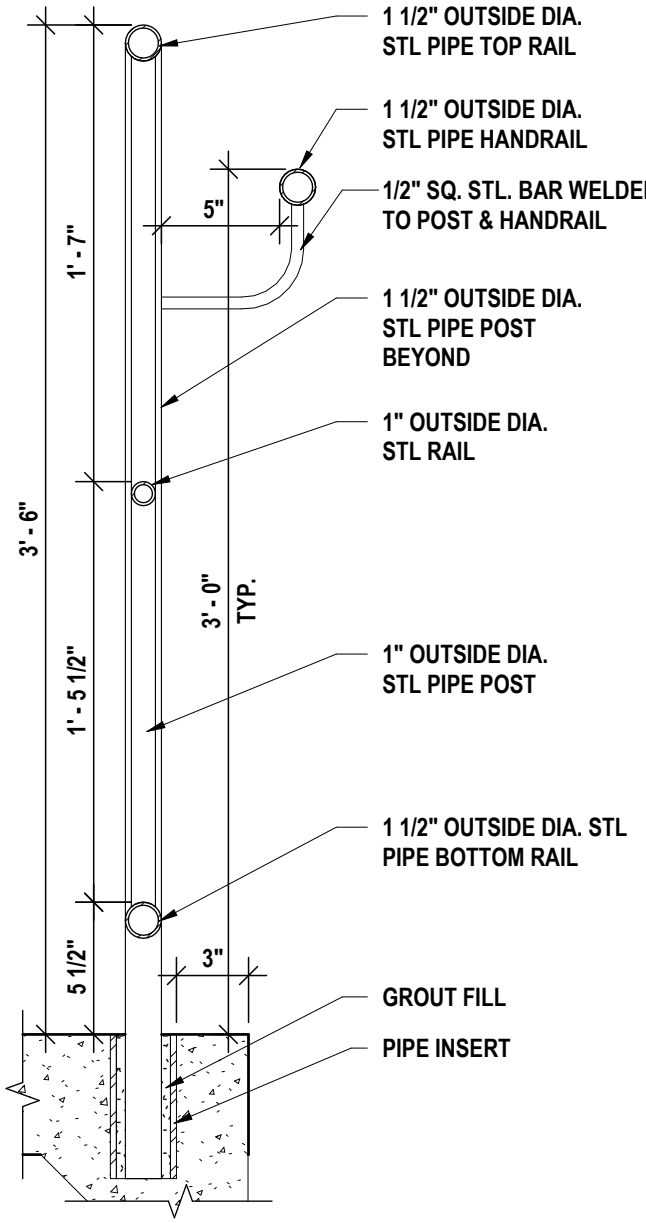
AD1-A5

PROJECT NO: 2028-059



1 SCORING TABLE GUARDRAIL SECTION

1 1/2" = 1'-0"

SCORING TABLE GUARDRAIL SECTION

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AD1-A6

DATE: 06/25/2026

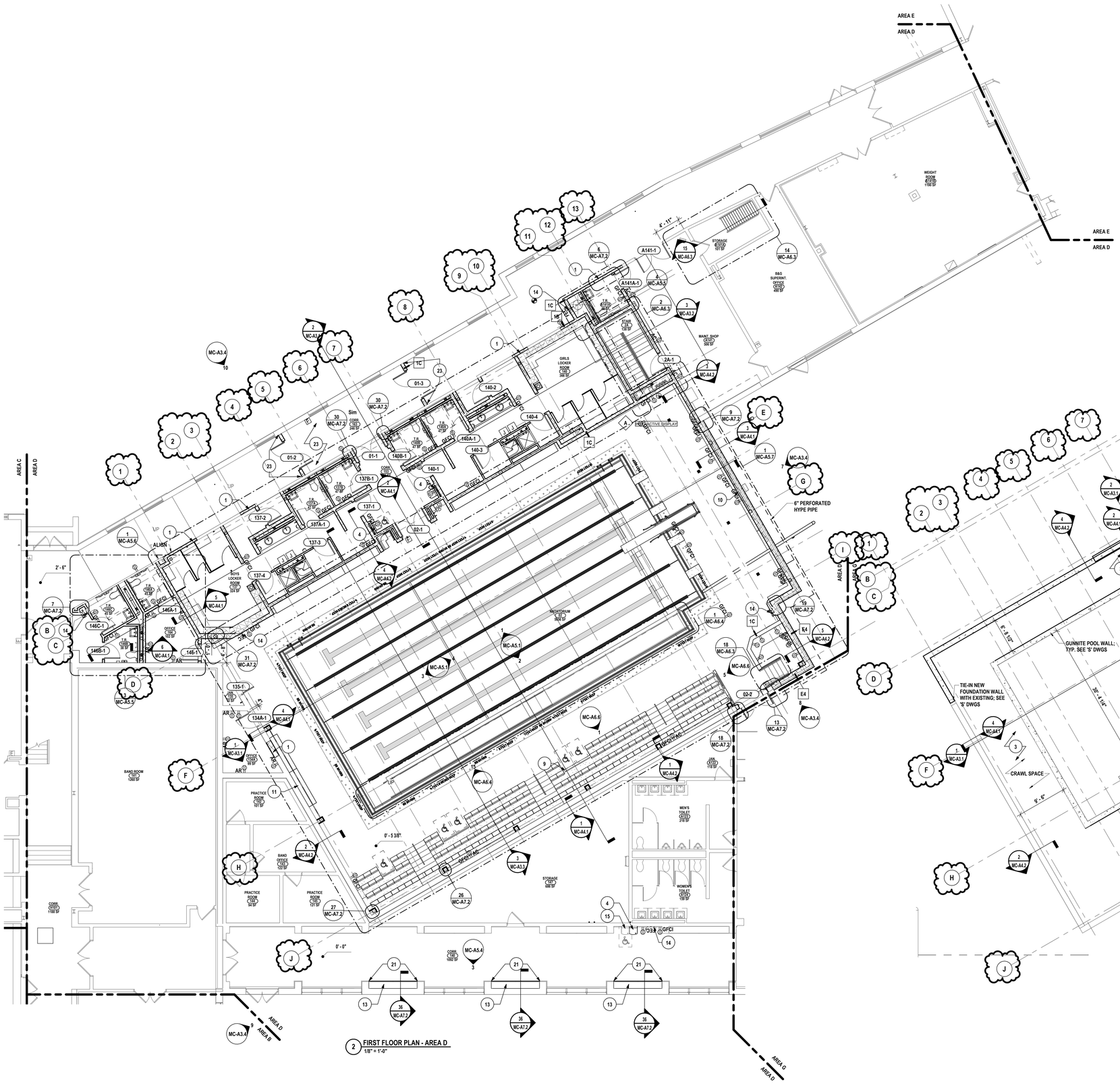
PROJECT NO: 2028-059

GENERAL NOTES:

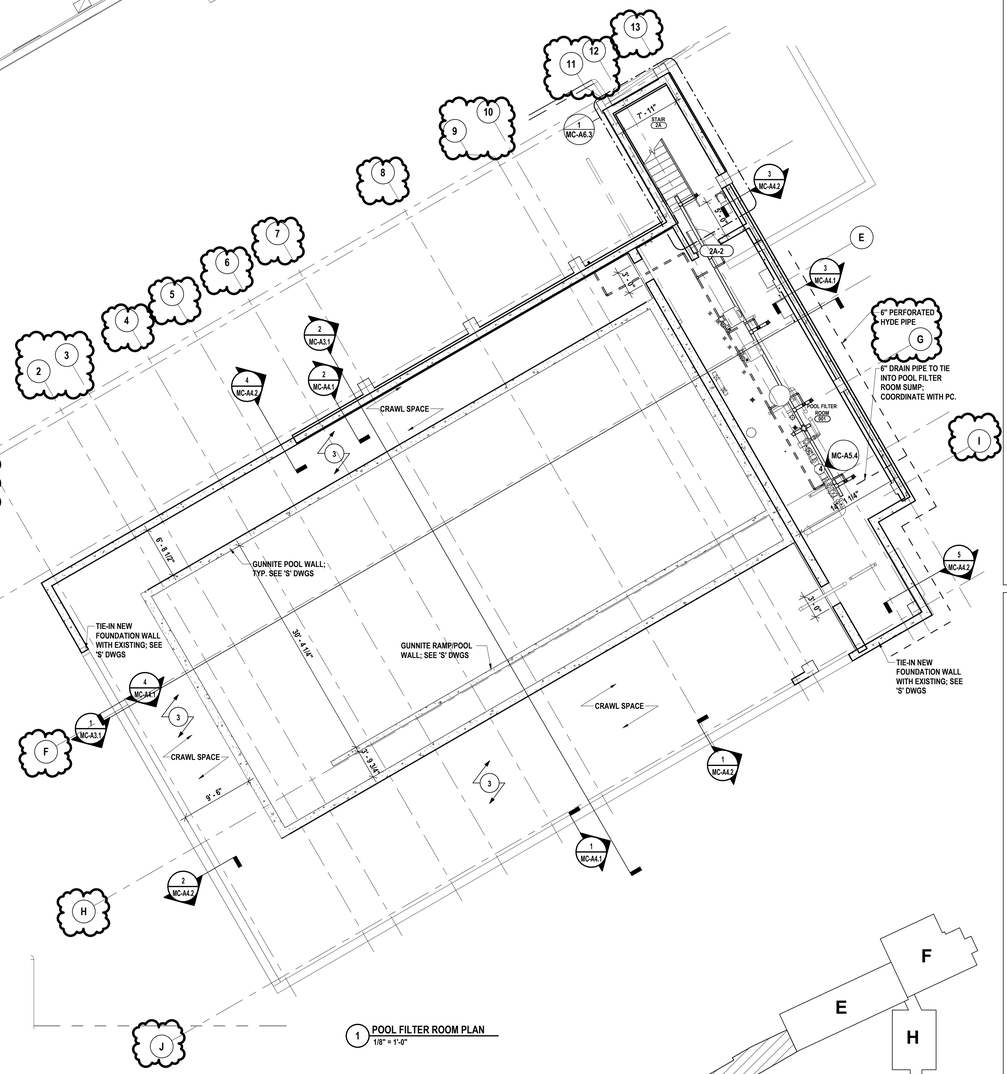
REFER TO DRAWING MC-A1.1 FOR GENERAL PLAN NOTES.

PLAN DRAWING NOTES:

1. INFILL DOOR, WINDOW, OR WALL OPENING AS SHOWN ON PLAN TO MATCH EXISTING WALL CONSTRUCTION AND THICKNESS, AND PREPARE FOR NEW FINISHES.
2. WALL PADS ON EXPOSED WALLS AS INDICATED (NO WALL PADS BEHIND BLEACHERS). PROVIDE APPROXIMATELY (22) CUTOUTS IN HIGH SCHOOL GYM AND (10) CUTOUTS IN ELEMENTARY SCHOOL GYM FOR ALL WALL MOUNTED EQUIPMENT/FIXTURES AS REQUIRED.
3. 15 MIL VAPOR BARRIER OVER DIRT IN CRAWL SPACE AND TERMINATE ON ADJACENT WALLS/COLUMN BASES WITH TERMINATION BAR. PRIOR TO INSTALLING VAPOR BARRIER, THE CONTRACTOR SHALL LEVEL AND REMOVE LARGE DEBRIS WHICH COULD PUNCTURE VAPOR BARRIER. DEBRIS MAY BE USED TO FILL LARGE DEPRESSIONS AS LONG AS THEY ARE COVERED BY 6 INCHES OF CLEAN FILL. TAPE AND SEAL ALL VAPOR BARRIER SEAMS, JOINTS AND TERMINATION TO WALL. PROVIDE 4" MIN. THICK CONCRETE OVER 15 MIL VAPOR BARRIER.
4. WATER COOLER; SEE 'P' DWGS.
5. SAND, RELINE, AND REFINISH WOOD GYM FLOOR IN ITS ENTIRETY. VERIFY NEW LINES ALIGN WITH EXISTING FIXTURES INCLUDING BUT NOT LIMITED TO BACKSTOPS AND VOLLEYBALL NET SLEEVES. COORDINATE WITH INSTALLATION OF TELESCOPING BLEACHERS IN HS GYM.
6. TRANSLUCENT WINDOW FILM ON EXISTING WINDOW UNITS (TOTAL AREA: 736 SF)
7. NEW TWO STOP ELEVATOR. BASIS OF DESIGN: TKE ENDURA MRL PASSENGER (2100lbs)
8. INFILL EXISTING SERVICE ELEVATOR PIT TO MATCH SURROUNDING FLOOR LEVEL. PROVIDE EXPANSION JOINTS WHERE INFILL MEETS EXISTING CONCRETE. SEE 'S' DWGS.
9. BLEACHERS FIXED TO PRECAST CONCRETE RISERS.
10. SCOREBOARD FURNISHED BY E.C. AND INSTALLED BY G.C. FINAL HOOK-UP SHALL BE DONE BY E.C.
11. RECORD BOARD FURNISHED BY OWNER AND INSTALLED BY G.C.
12. TELESCOPING BLEACHERS.
13. DISPLAY CASE.
14. FEC. REF. SPECS
15. EXISTING ADA WATER COOLER; PROTECT IN PLACE.
16. ELEVATOR MODERNIZATION.
17. INFILL FLOOR PENETRATIONS TO MATCH EXISTING FLOOR CONSTRUCTION.
18. INFILL CONCRETE SLAB IN SERVICE ELEVATOR OPENING TO MATCH SURROUNDING LEVEL. SEE 'S' DWGS.
19. FORWARD FOLDING RETRACTABLE BASKETBALL BACKSTOP.
20. INFILL MASONRY WALL WHERE ABANDONED MECHANICAL LOUVER WAS REMOVED TO MATCH EXISTING WALL THICKNESS.
21. UPPER AND LOWER MILLWORK TO MATCH EXISTING PROFILE AND COLOR.
22. CLEAN BRICK THAT WILL BECOME THE INTERIOR WALL OF THE NEW ELEVATOR VESTIBULE.
23. PROVIDE (1) LAYER OF GWB ON ALL EXPOSED CMU TO MATCH EXG GWB THICKNESS. GWB TO EXTEND ABOVE CEILING SYSTEM.
24. PROVIDE (1) LAYER OF GWB ON ALL EXPOSED EXG. WALL TILE. GWB TO EXTEND ABOVE CEILING SYSTEM.



2 FIRST FLOOR PLAN - AREA D
1/8" = 1'-0"



1 POOL FILTER ROOM PLAN
1/8" = 1'-0"

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CHECKED BY:	MLS
DATE:	06/25/2026
PHASE:	CD

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#	DATE:	REVISION:
1	06/03/2026	ISSUE FOR BID

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FIRST FLOOR PLAN - AREA D

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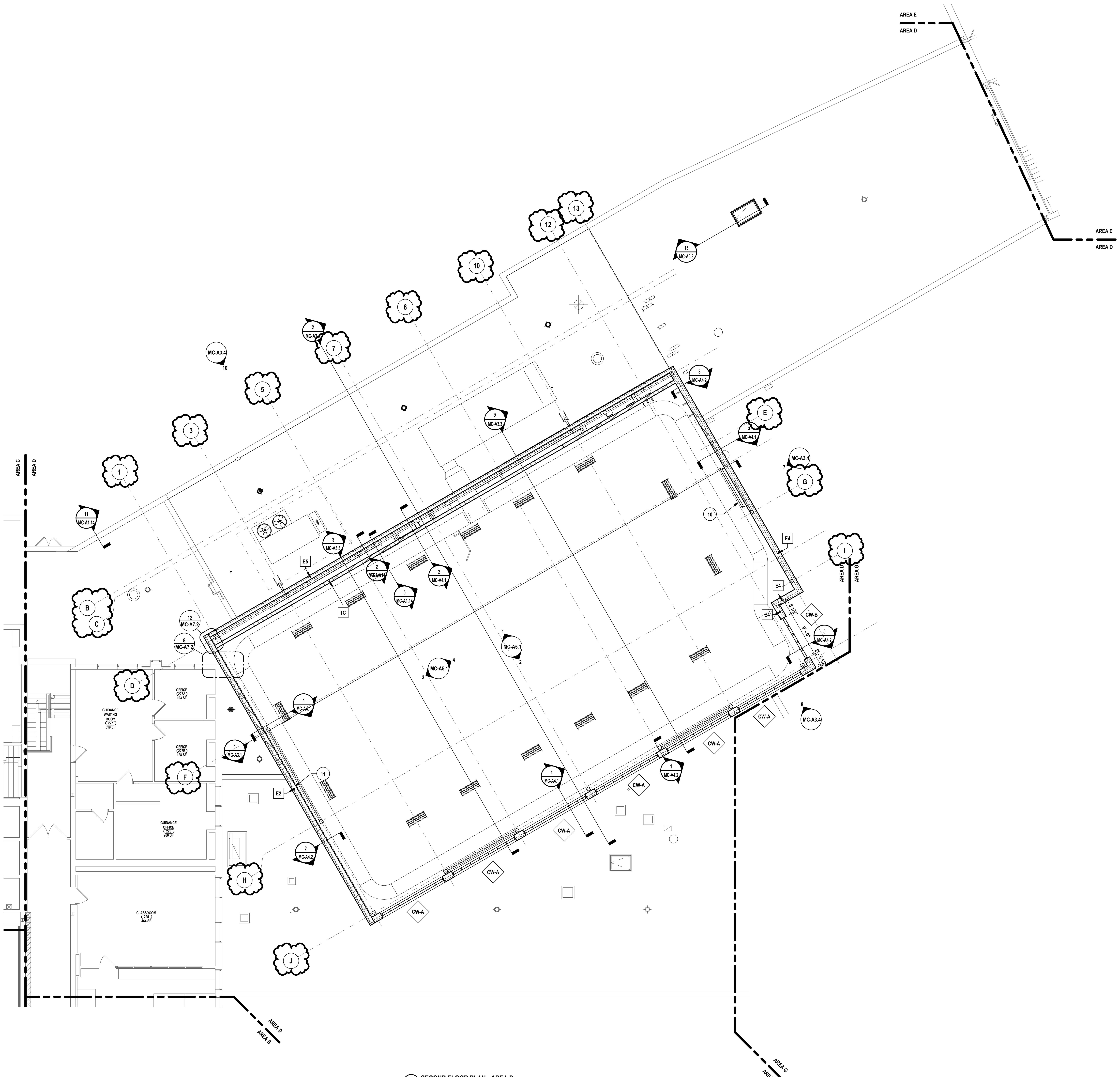
6795 ROUTE 21 ALMOND, NY 14804

BSD#: 02-01-01-04-0-001-037

MC-A1.2

PROJECT NO: 2026-059



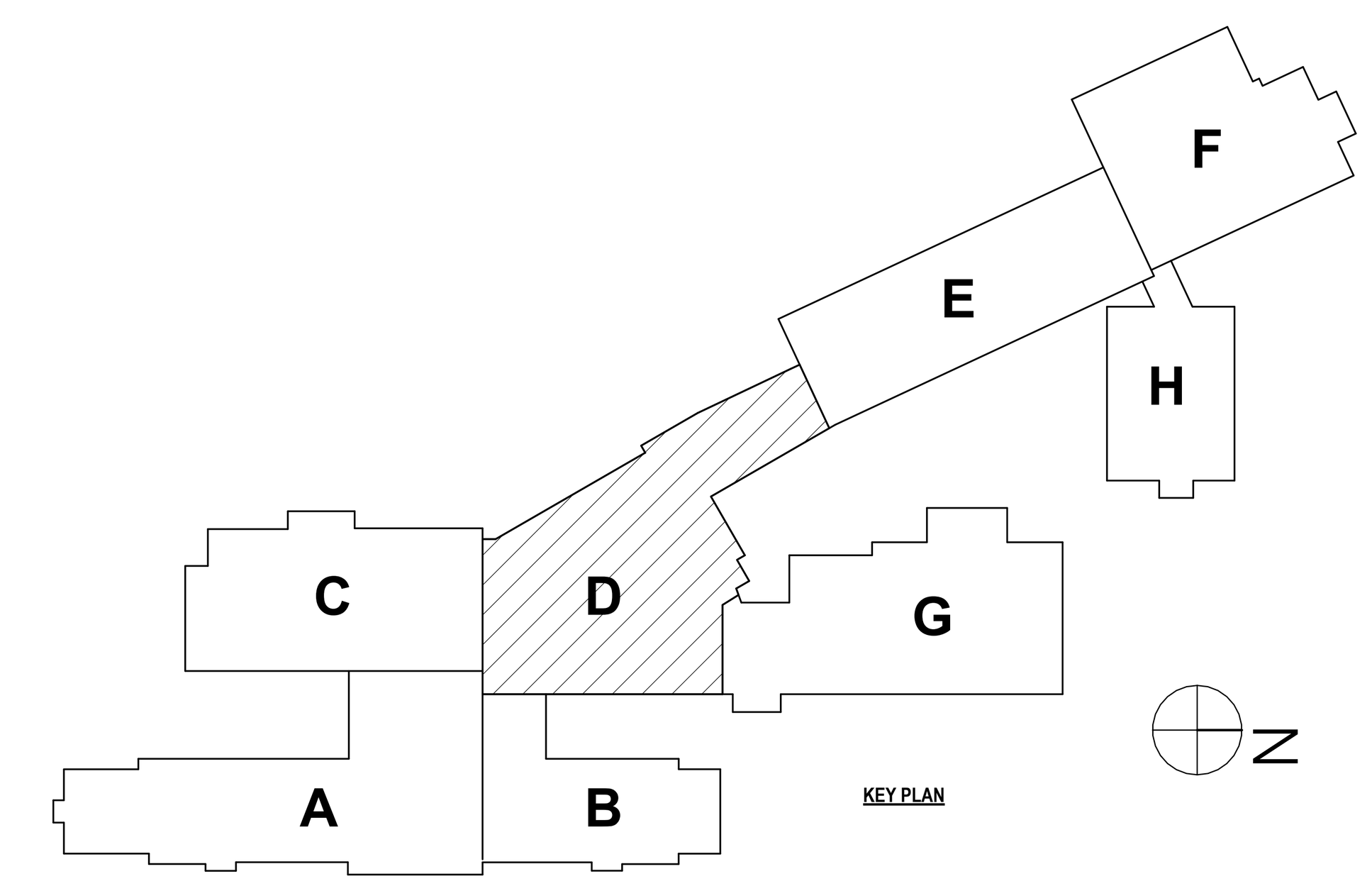
1 SECOND FLOOR PLAN - AREA D
1/8" = 1'-0"

GENERAL NOTES:

REFER TO DRAWING MC-A1.1 FOR GENERAL PLAN NOTES.

PLAN DRAWING NOTES:

1 INFILL DOOR, WINDOW, OR WALL OPENING AS SHOWN ON PLAN TO MATCH EXISTING WALL CONSTRUCTION AND THICKNESS, AND PREPARE FOR NEW FINISHES.
2 WALL PADS ON EXPOSED WALLS AS INDICATED (NO WALL PADS BEHIND BLEACHERS). PROVIDE APPROXIMATELY (22) CUTOUTS IN HIGH SCHOOL GYM AND (10) CUTOUTS IN ELEMENTARY SCHOOL GYM FOR ALL WALL MOUNTED EQUIPMENT/FIXTURES AS REQUIRED.
3 15 MIL VAPOR BARRIER OVER DIRT IN CRAWL SPACE AND TERMINATE ON ADJACENT WALLS/COLUMN BASES WITH TERMINATION BAR. PRIOR TO INSTALLING VAPOR BARRIER, THE CONTRACTOR SHALL LEVEL AND REMOVE LARGE DEBRIS WHICH COULD PUNCTURE VAPOR BARRIER. DEBRIS MAY BE USED TO FILL LARGE DEPRESSIONS AS LONG AS THEY ARE COVERED BY 6 INCHES OF CLEAN FILL. TAPE AND SEAL ALL VAPOR BARRIER SEAMS, JOINTS AND TERMINATION TO WALL. PROVIDE 4" MIN. THICK CONCRETE OVER 15 MIL VAPOR BARRIER.
4 WATER COOLER; SEE 'P' DWGS.
5 SAND, RELINE, AND REFINISH WOOD GYM FLOOR IN ITS ENTIRETY. VERIFY NEW LINES ALIGN WITH EXISTING FIXTURES INCLUDING BUT NOT LIMITED TO BACKSTOPS AND VOLLEYBALL NET SLEEVES. COORDINATE WITH INSTALLATION OF TELESCOPING BLEACHERS IN HS GYM.
6 TRANSLUCENT WINDOW FILM ON EXISTING WINDOW UNITS (TOTAL AREA: 736 SF)
7 NEW TWO STOP ELEVATOR. BASIS OF DESIGN: TKE ENDURA MRL PASSENGER (2100lbs)
8 INFILL EXISTING SERVICE ELEVATOR PIT TO MATCH SURROUNDING FLOOR LEVEL. PROVIDE EXPANSION JOINTS WHERE INFILL MEETS EXISTING CONCRETE. SEE 'S' DWGS.
9 BLEACHERS FIXED TO PRECAST CONCRETE RISERS.
10 SCOREBOARD FURNISHED BY E.C. AND INSTALLED BY G.C. FINAL HOOK-UP SHALL BE DONE BY E.C.
11 RECORD BOARD FURNISHED BY OWNER AND INSTALLED BY G.C.
12 TELESCOPING BLEACHERS.
13 DISPLAY CASE.
14 FEC. REF. SPECS
15 EXISTING ADA WATER COOLER; PROTECT IN PLACE.
16 ELEVATOR MODERNIZATION.
17 INFILL FLOOR PENETRATIONS TO MATCH EXISTING FLOOR CONSTRUCTION.
18 INFILL CONCRETE SLAB IN SERVICE ELEVATOR OPENING TO MATCH SURROUNDING LEVEL. SEE 'S' DWGS.
19 FORWARD FOLDING RETRACTABLE BASKETBALL BACKSTOP.
20 INFILL MASONRY WALL WHERE ABANDONED MECHANICAL LOUVER WAS REMOVED TO MATCH EXISTING WALL THICKNESS.
21 UPPER AND LOWER MILLWORK TO MATCH EXISTING PROFILE AND COLOR.
22 CLEAN BRICK THAT WILL BECOME THE INTERIOR WALL OF THE NEW ELEVATOR VESTIBULE.
23 PROVIDE (1) LAYER OF GWB ON ALL EXPOSED CMU TO MATCH EXG GWB THICKNESS. GWB TO EXTEND ABOVE CEILING SYSTEM.
24 PROVIDE (1) LAYER OF GWB ON ALL EXPOSED EXG. WALL TILE. GWB TO EXTEND ABOVE CEILING SYSTEM.



KEY PLAN

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SECOND FLOOR PLAN - AREA D
2025 CAPITAL PROJECT
ALFRED-ALMOND CSD
6795 ROUTE 21 ALMOND, NY 14804

SED #: 02-01-01-04-0-001-037

MC-A1.6

PROJECT NO: 2028-059

GENERAL ROOF NOTES:

A THE CONTRACTOR SHALL PROTECT EXISTING CONSTRUCTION TO REMAIN. ALL EXISTING ROOFING SYSTEMS DAMAGED DURING THE COURSE OF CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.
B A TAPERED INSULATION SHOP DRAWING SUBMISSION IS REQUIRED TO IDENTIFY INSULATION LAYOUT, DRAINAGE PATTERN, SLOPE AND MINIMUM "R" VALUE.
C PROVIDE ALL MATERIALS TO MAKE SMOOTH TRANSITIONS AT ROOF EDGES AND INTERSECTIONS.
D PROVIDE FLASHING AT ALL PENETRATIONS.
E PROVIDE ADDITIONAL BLOCKING AT ALL ROOF PENETRATIONS WHERE REQUIRED TO PROVIDE A MINIMUM CURB HEIGHT OF 12" ABOVE THE FINISHED ROOF SURFACE.
F PROVIDE ALL ROOF OPENINGS REQUIRED FOR ALL PENETRATIONS, COORDINATE WITH ALL OTHER CONTRACTED WORK FOR EXACT SIZE AND LOCATION.
G PREVENT DIRT AND ROOFING DEBRIS FROM ENTERING THE ROOF DRAINS AND DRAIN LINES (LEADERS) DURING CONSTRUCTION. THE CONTRACTOR SHALL SNAKE DRAIN LINES AT COMPLETION OF WORK IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE.
H IF EXISTING ROOF DECK OR STRUCTURAL SYSTEM DAMAGE IS SUSPECTED OR EXPOSED DURING THE COURSE OF CONSTRUCTION, NOTIFY THE OWNER'S REPRESENTATIVE IMMEDIATELY.

ROOF DRAWING NOTES:

1 PROVIDE REPLACEMENT FOR DAMAGED SLATE SHINGLES AND COPPER FLASHINGS AT BASE OF SLATE ROOF. ESTIMATED 40% OF TOTAL SLATE ROOF AREA NEEDS REPLACEMENT. REAL SLATE TO BE USED AS REPLACEMENT. (BASE BID)
2 PROVIDE SECONDARY ROOF DRAIN. SEE 'P' DWGS.
3 PROVIDE NEW SYNTHETIC SLATE ROOF TO EXTENTS SHOWN. (ALTERNATE #1)
4 PROVIDE SNOW GUARD RAIL SYSTEM ON LOWER EDGE OF NATATORIUM ROOF TO EXTENTS AND QUANTITIES SHOWN.
5 PROVIDE NEW ROOF HATCH. PATCH IN NEW ROOF MEMBRANE AROUND NEW ROOF HATCH.
6 4"X4" PRE-FINISHED ALUMINUM DOWNSPOUT.
7 MECHANICAL AIR HANDLING UNIT - SEE MECHANICAL DRAWINGS
8 ROOF DRAIN - SEE PLUMBING DRAWINGS
9 PROVIDE SPLASH BLOCK UNDER DOWNSPOUTS
10 PROVIDE CRICKETS AT ALL CURBS, RAILS, ETC. WHICH RUN IN LENGTH GREATER THAN 24" PERPENDICULAR TO THE SLOPE OF ROOF INSULATION. SLOPE OF CRICKETS SHALL BE 1/2" VERTICAL PER 12" HORIZONTAL.
11 PATCH AND INFILL REMOVED FAN HOLE. SEE TYPICAL ROOF INFILL DETAIL.
12 ROOF DRAIN INSTALLED IN PLACE OF REMOVED VENT PIPE - SEE PLUMBING DRAWINGS
13 MECHANICAL INTAKE HOOD. PROVIDE NEW CURB FLASH PER TYPICAL CURB DETAIL. PATCH ROOF SYSTEM AND INSTALL NEW MEMBRANE FLASHING. TIE-IN SHALL NOT VOID WARRANTY.
14 PLUMBING VENT; SEE PLUMBING DRAWINGS. PROVIDE NEW VENT HOOD PER TYPICAL VENT PIPE DETAIL.
15 NEW MECHANICAL FAN; SEE MECHANICAL DRAWINGS
16 10" WIDE ROOF SCUPPER. SEE TYPICAL ROOF SCUPPER DETAIL.

ROOF LEGEND

FULLY ADHERED
- MECHANICALLY FASTENED COMPOSITE SLATE ROOFING
- ICE & WATER SHIELD
- 1/2" PLYWOOD
- POLYISOCYANURATE RIGID INSULATION (R-36)
- EXISTING WOOD DECK

FULLY ADHERED
- KEE PVC MEMBRANE WITH RIB PROFILE
- 3/8" COVERBOARD
- 6" RIGID INSULATION (R-36)
- VAPOR BARRIER
- 1/2" ROOF SHEATHING TO BE MECHANICALLY FASTENED
- ACOUSTICAL METAL DECK

FULLY ADHERED
- EPDM MEMBRANE
- 3/8" COVERBOARD
- 6" POLYISOCYANURATE RIGID INSULATION (R-36)
- VAPOR BARRIER
- 1/2" ROOF SHEATHING TO BE MECHANICALLY FASTENED
- METAL DECK

FULLY ADHERED
- EPDM MEMBRANE
- 3/8" COVERBOARD
- 6" POLYISOCYANURATE RIGID INSULATION (R-36)
- VAPOR BARRIER
- 1/2" ROOF SHEATHING TO BE MECHANICALLY FASTENED
- ACOUSTICAL METAL DECK

EPDM MEMBRANE TO BE PATCHED IN TO PROVIDE TRANSITION FROM EXISTING TO NEW CONSTRUCTION

EXISTING ROOF SYSTEM TO REMAIN PROTECT IN PLACE

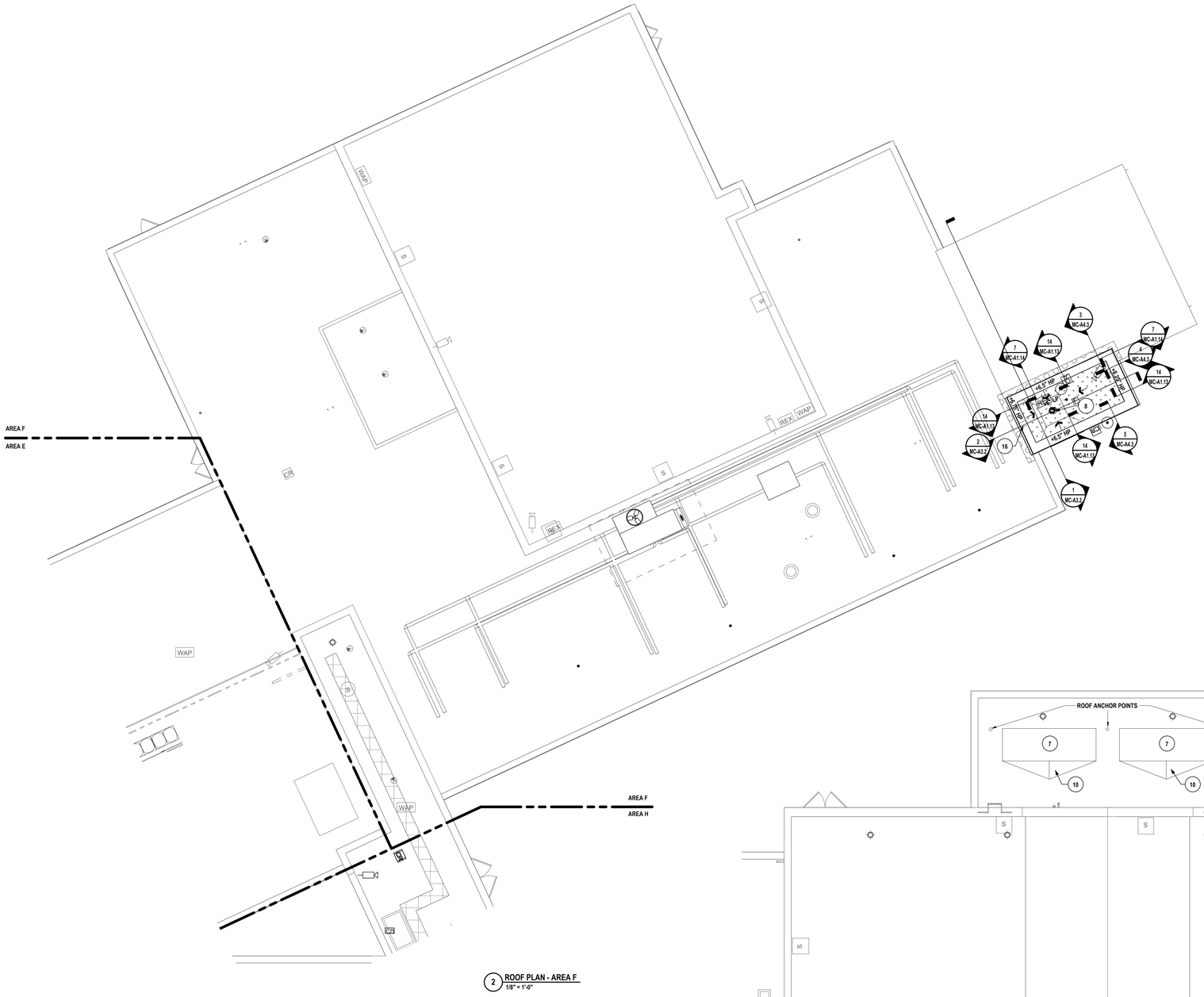
RD NEW ROOF DRAIN

V VENT PIPE

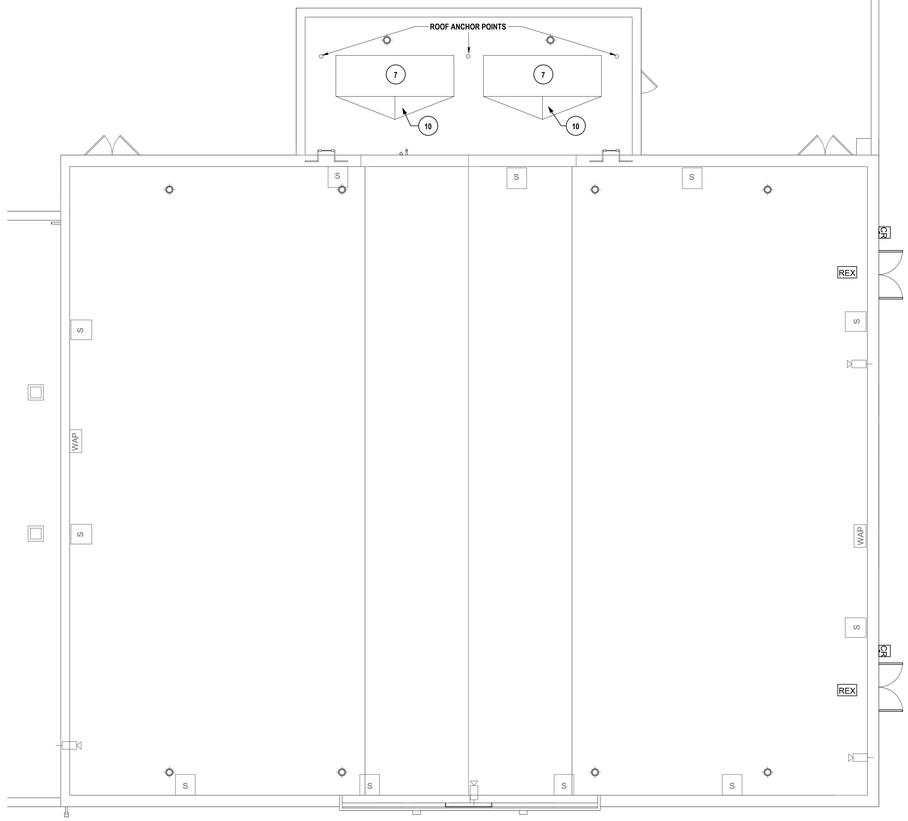
ARROW INDICATES DIRECTION OF SLOPE FOR THE ROOF STRUCTURE OR TAPERED INSULATION (SEE STRUCTURAL DRAWINGS)

+8" HP INSULATION THK @ HIGH POINT

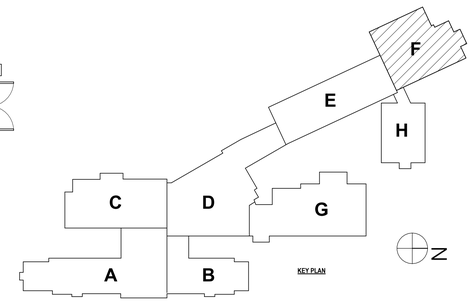
+2" LP INSULATION THK @ LOW POINT



2 ROOF PLAN - AREA F
1/8" = 1'-0"



1 ROOF PLAN - AREA G
1/8" = 1'-0"



KEY PLAN

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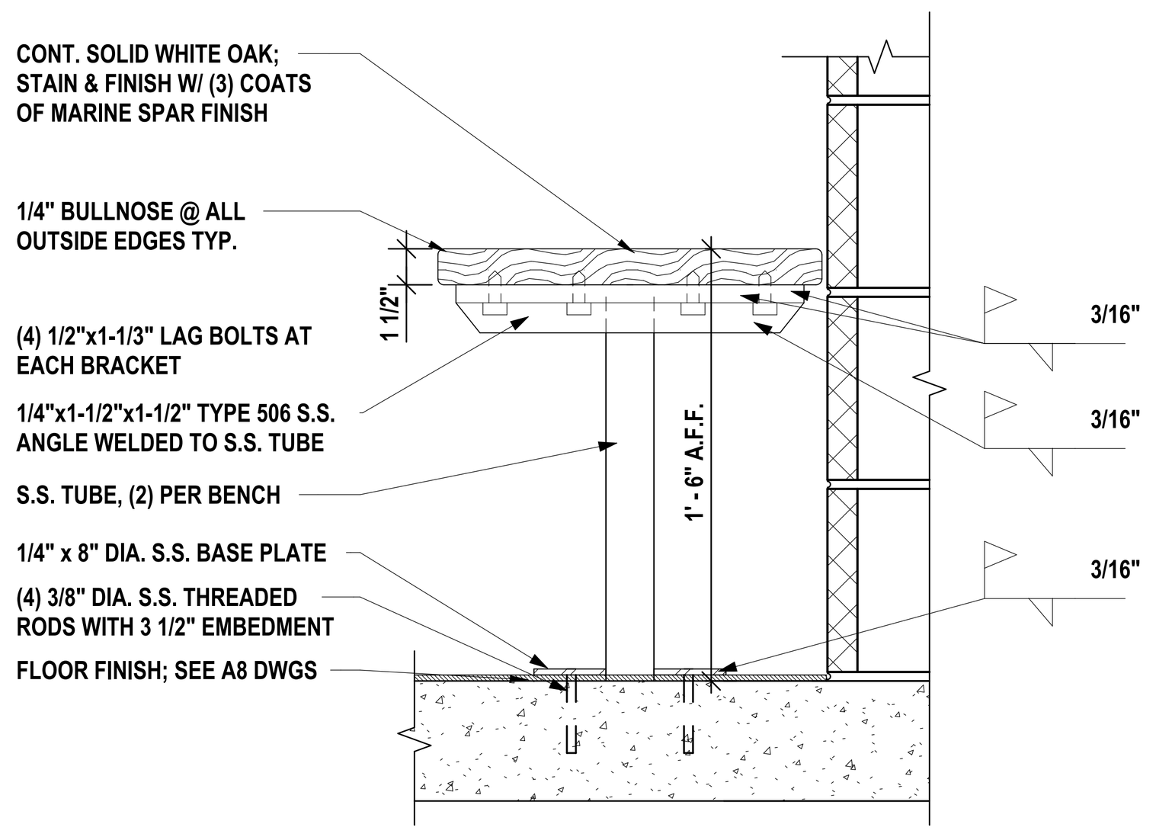
ROOF PLAN - AREA F
2025 CAPITAL PROJECT
ALFRED-ALMOND CSD
6795 ROUTE 21 ALMOND, NY 14804

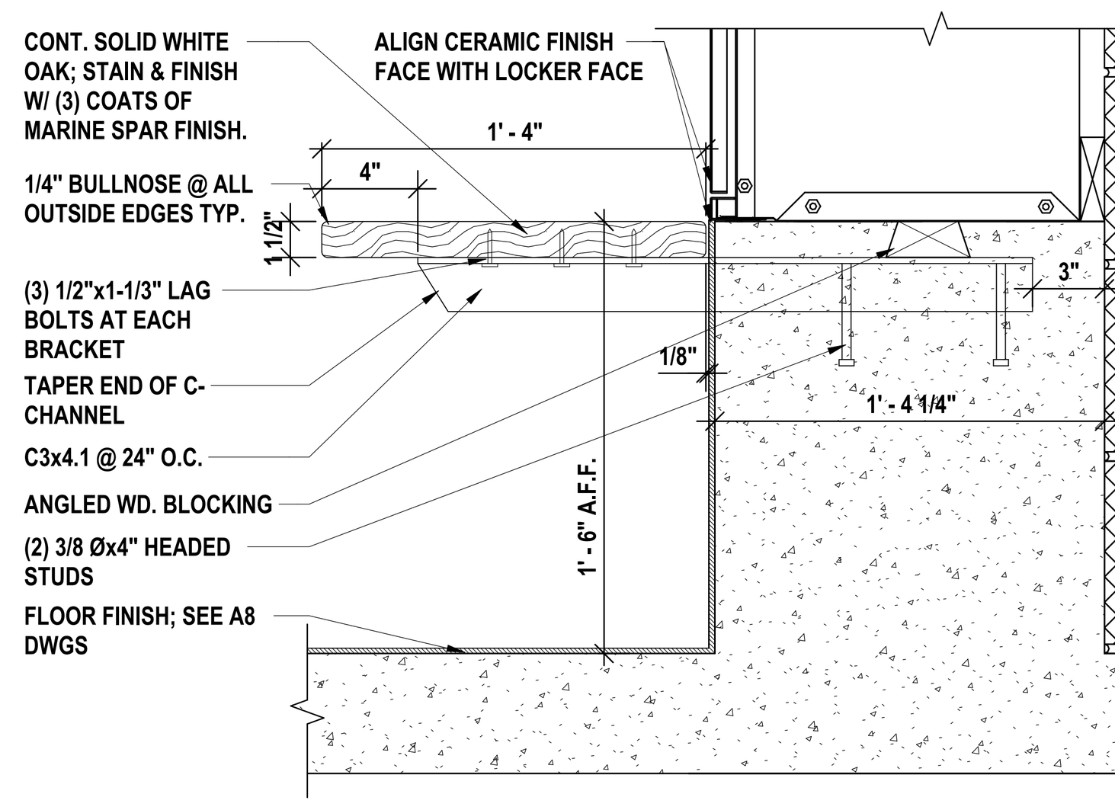
SED # 02-01-01-04-0-001-037

MC-A1.12

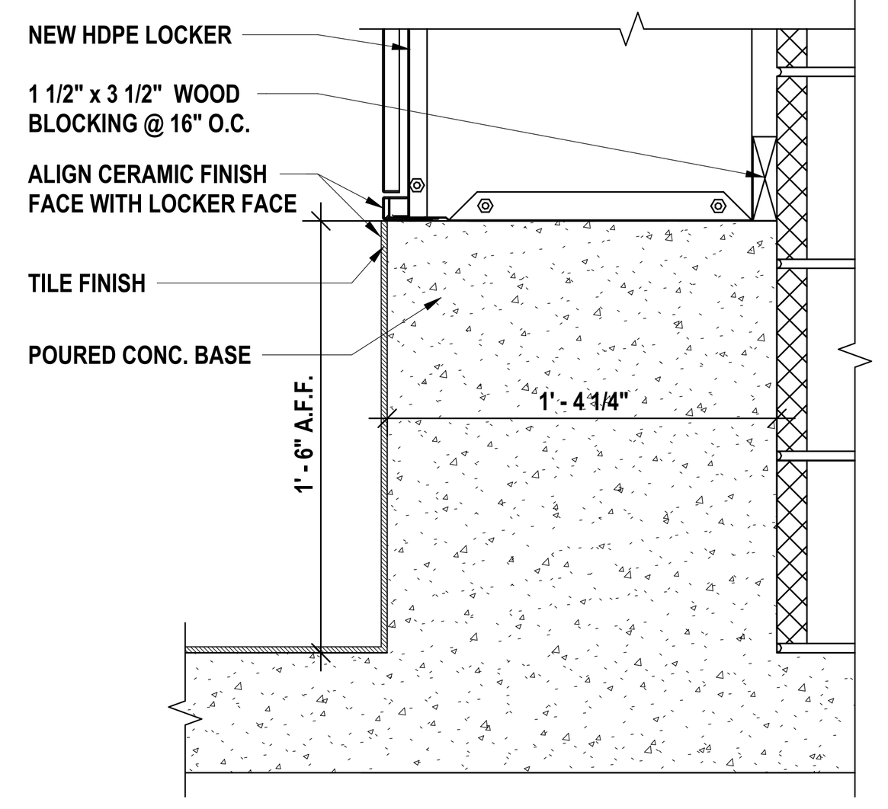
PROJECT NO: 2028-059



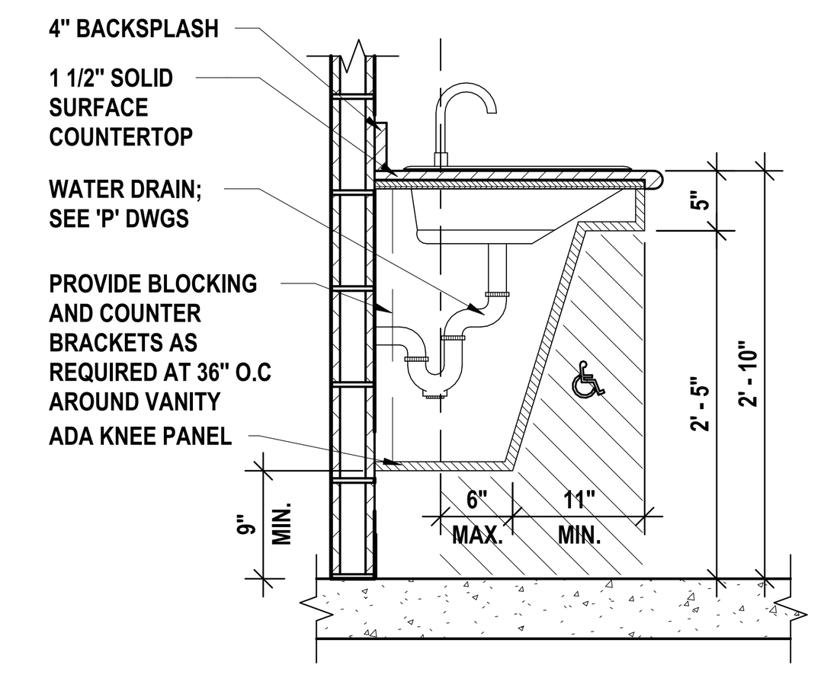
7 LOCKER BENCH DETAIL - B
1 1/2" = 1'-0"



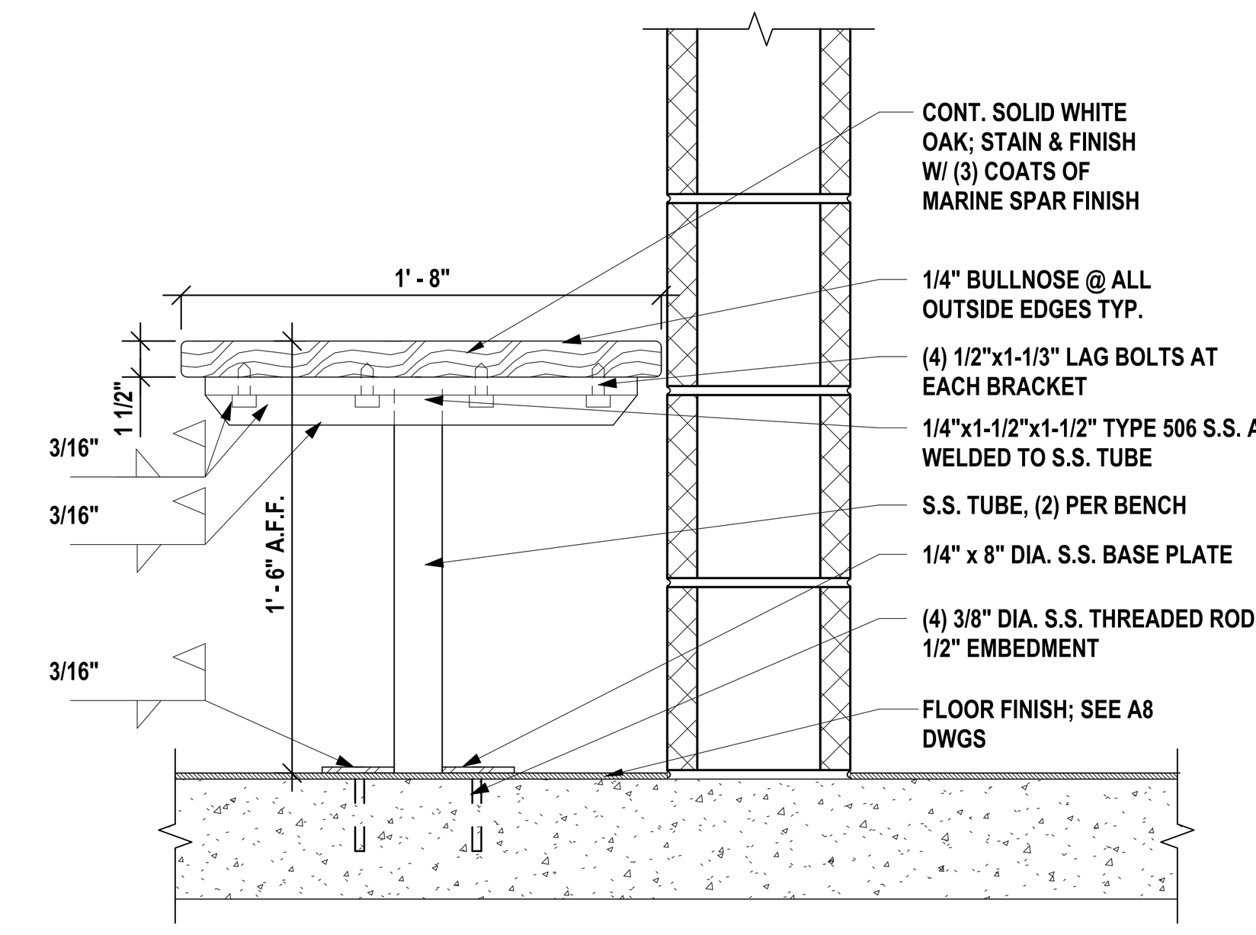
6 LOCKER BENCH DETAIL - A
1 1/2" = 1'-0"



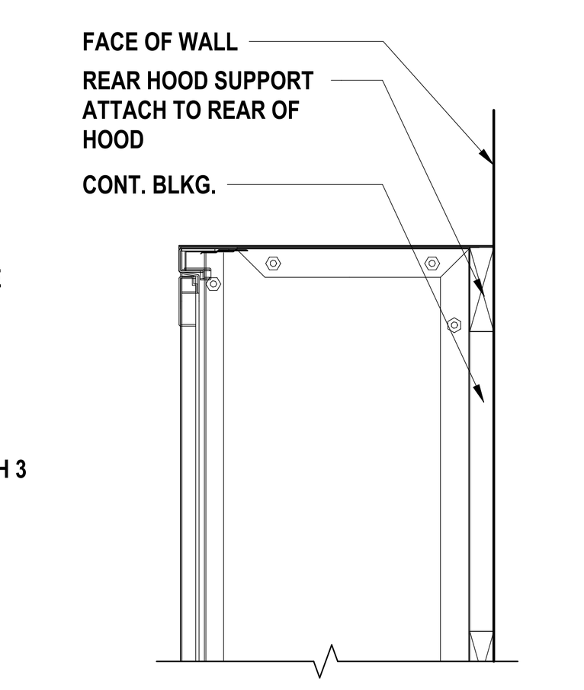
5 POOL LOCKER BASE DETAIL
1 1/2" = 1'-0"



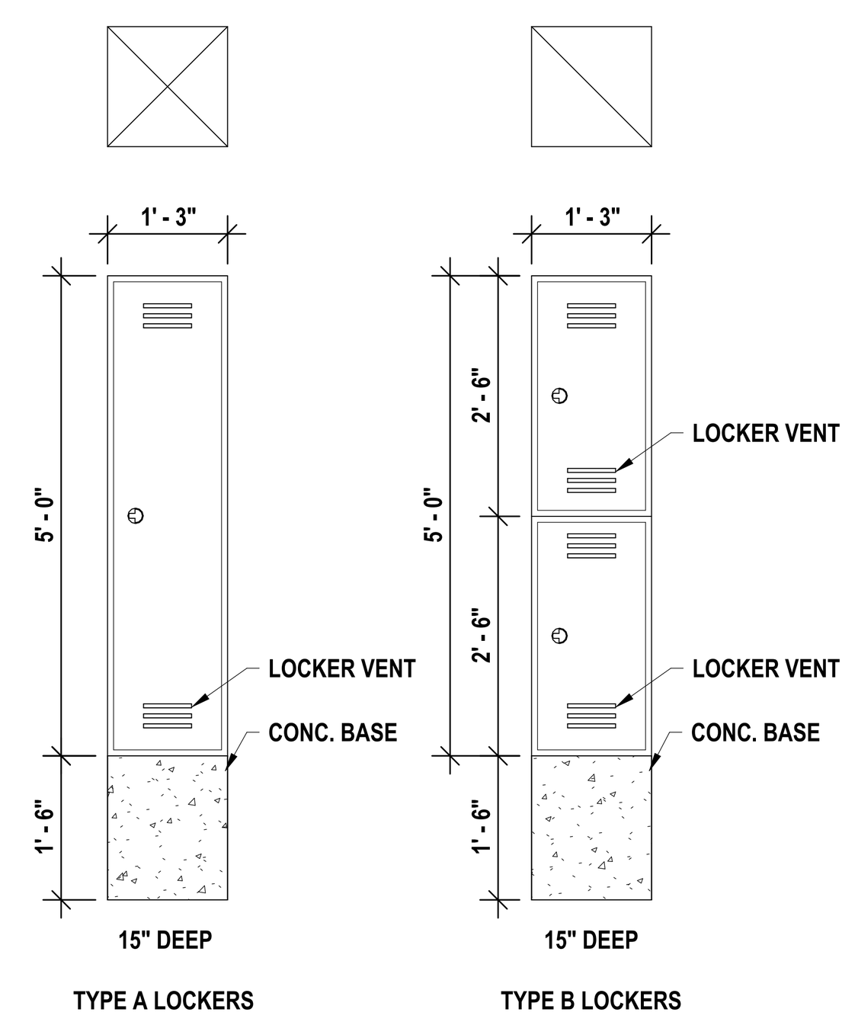
4 VANITY SECTION
3/4" = 1'-0"



3 ADA LOCKER ROOM BENCH DETAIL
1 1/2" = 1'-0"



2 LOCKER HOOD DETAIL - SECTION
1 1/2" = 1'-0"



NOTE: REFER TO FLOOR PLANS FOR LOCKER QUANTITIES
= HANDICAPPED ACCESSIBLE LOCKER
BOD: PSISC NFPA 286 POLYLIFE HDPE LOCKERS

LOCKER TYPES
1/2" = 1'-0"

1 ENLARGED LOCKER ROOM PLAN
1/4" = 1'-0"

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ENLARGED LOCKER ROOM PLAN & DETAILS

2025 CAPITAL PROJECT

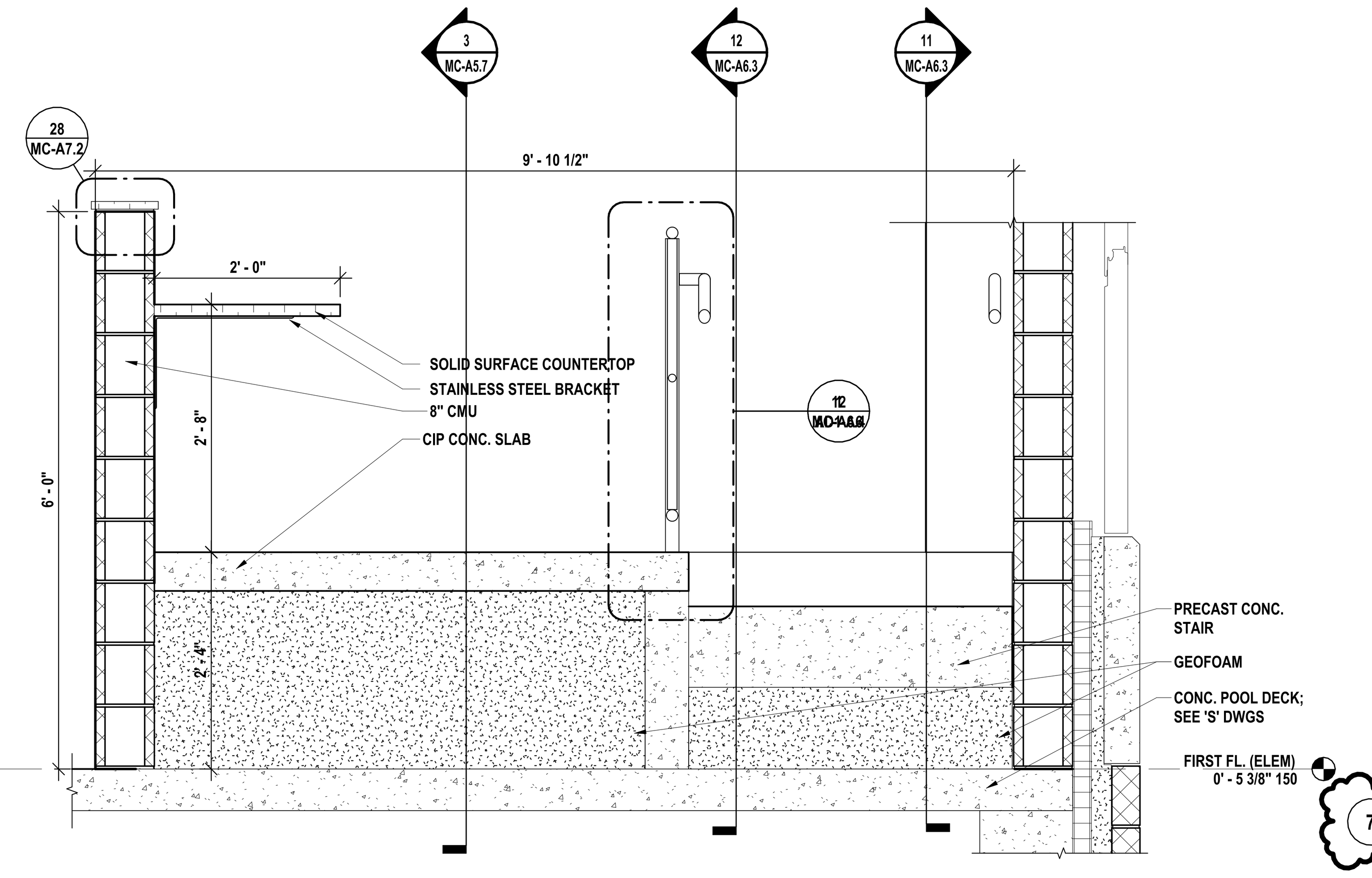
ALFRED-ALMOND CSD

6795 ROUTE 21 ALMOND, NY 14804

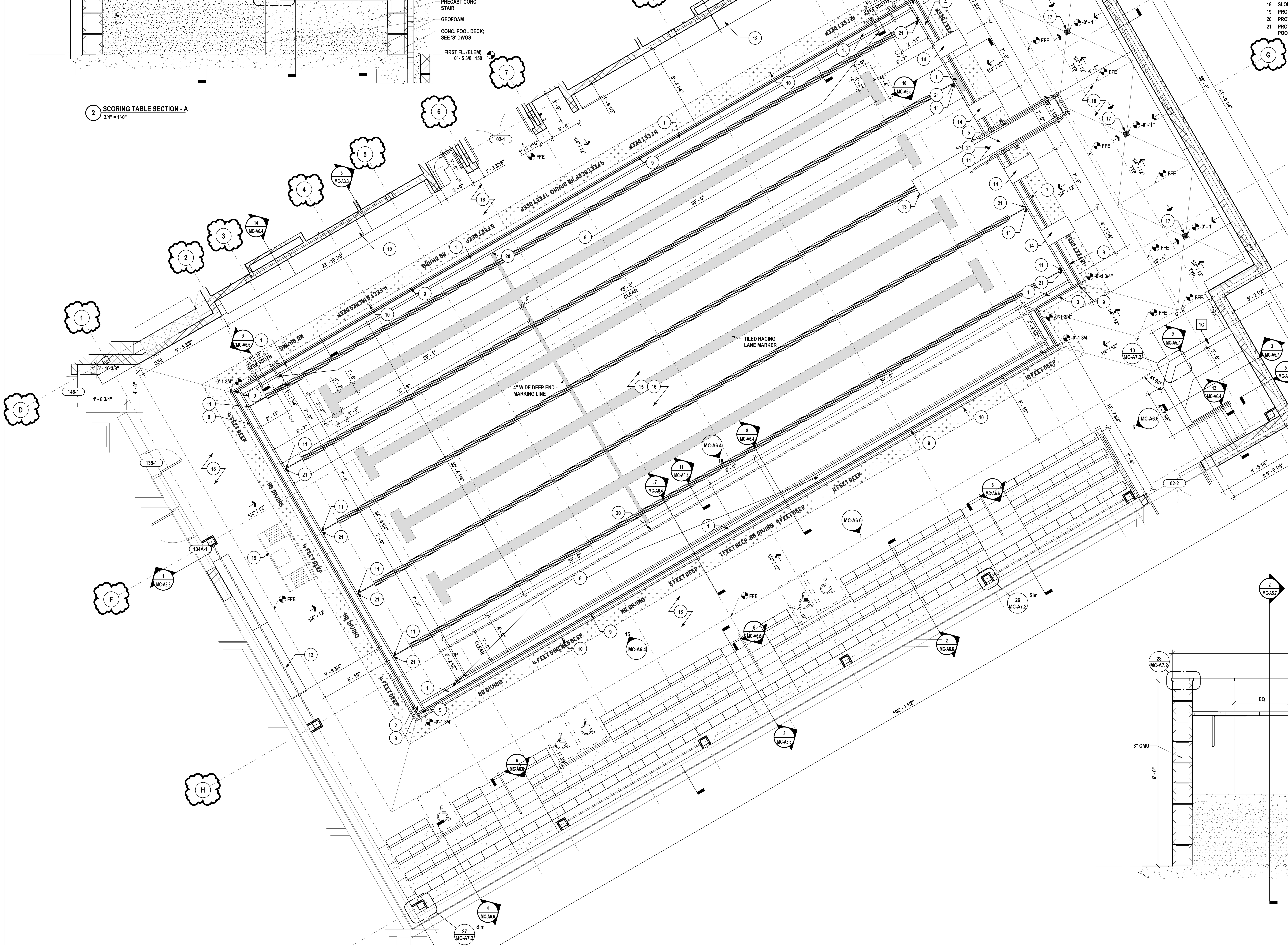
SED #: 02-01-01-04-0-001-037

MC-A5.6

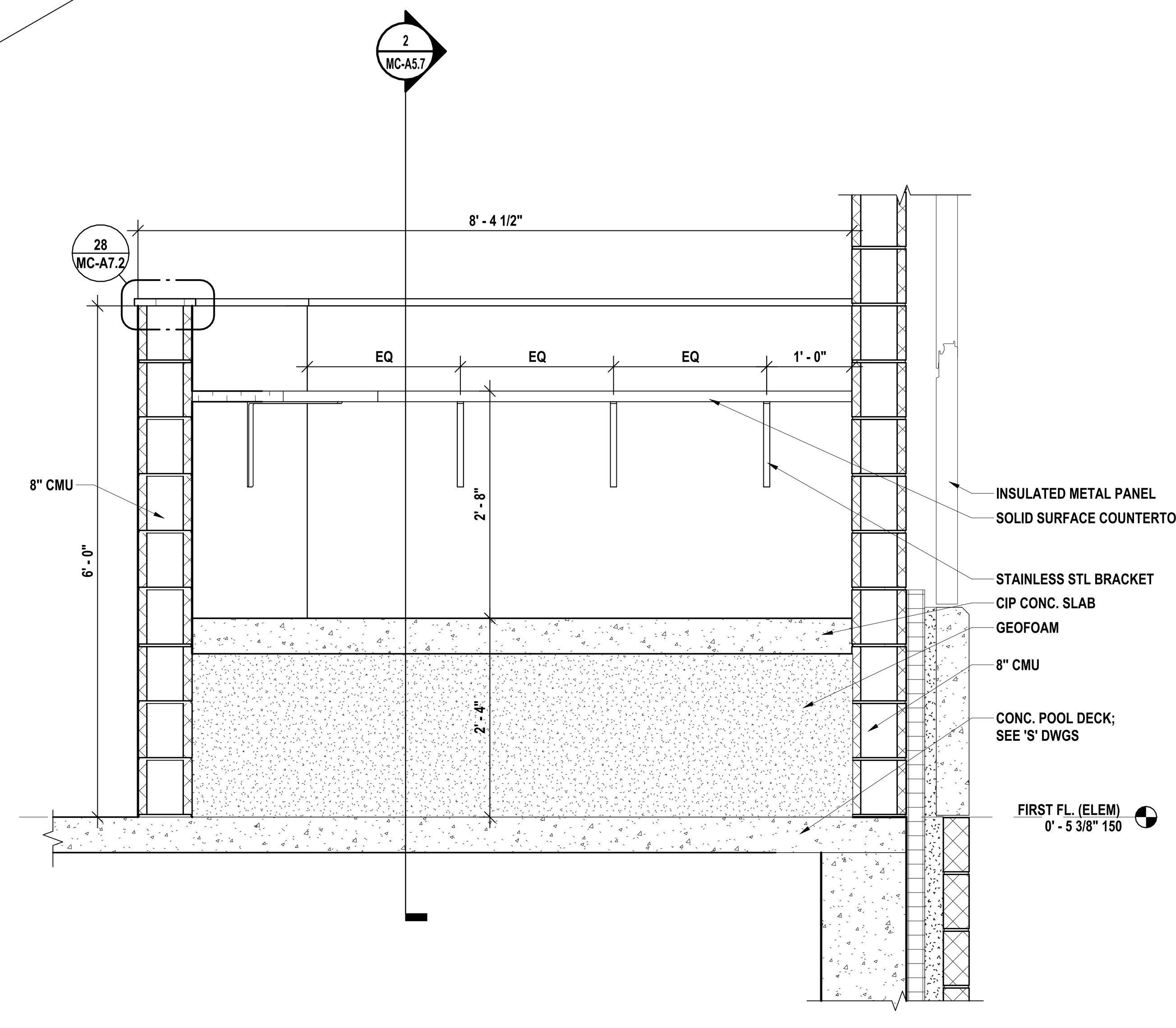
PROJECT NO: 2028-059



2 SCORING TABLE SECTION - A
3/4" = 1'-0"



1 ENLARGED POOL & DECK PLAN
1/4" = 1'-0"



3 SCORING TABLE SECTION - B
3/4" = 1'-0"

POOL PLAN DRAWING NOTES:

1. PROVIDE SURGE WEIR INSTALLED INTEGRAL TO PERIMETER GUTTER SYSTEM, 1 7/8" ACTIVE INLET HEIGHT. 50 GPM, TYPICAL 12. REFER TO DETAIL.
2. PROVIDE PERIMETER GUTTER DRAIN AND INLET SYSTEM SIMILAR TO PADDOCK C300 PERIMETER, CATALOG NO. 9620-ASR FOR COMPETITION POOL. STAINLESS STEEL SECTIONS TO BE WELDED IN THE FIELD WITH INTEGRAL CHANNELS FOR PERIMETER OVERFLOW, FILTERED INLET, AND PERIMETER SANITARY DECK DRAINAGE. REFER TO DETAILS.
3. PROVIDE PERIMETER GUTTER DRAIN CONVERTER BOX AT THIS LOCATION FOR PIPING CONNECTION. REFER TO DETAIL.
4. PROVIDE FILTERED RETURN WATER CONVERTER BOX AT THIS LOCATION FOR PIPING CONNECTION. REFER TO DETAIL.
5. PROVIDE SPRAY AGITATOR BENEATH DIVING BOARD.
6. PROVIDE INLET NOZZLES FOR FILTERED POOL WATER RETURN. NOZZLES TO BE SPACED 3 FT ON CENTER AROUND ENTIRE PERIMETER. REFER TO DETAIL FOR MOUNTING LOCATION IN GUTTER SYSTEM.
7. PROVIDE CONNECTION AT CONTINUOUS DECK DRAIN FOR SANITARY PIPING.
8. PROVIDE JET WASH FITTING INTEGRAL TO PERIMETER DRAIN SYSTEM. QUANTITY PER MANUFACTURERS RECOMENDATIONS. REFER TO DETAIL.
9. PROVIDE DECK DRAIN CLEANOUT INTEGRAL TO PERIMETER DRAIN SYSTEM. QUANTITY PER MANUFACTURERS RECOMENDATIONS. REFER TO DETAIL.
10. PROVIDE SLEEVE FOR BACKSTROKE MARKER POSTS.
11. PROVIDE ANCHORS FOR RACE LANE ROPES.
12. PROVIDE BENCH SEATING WITH WET STORAGE UNDER SEATING. REF. SPECS
13. PROVIDE DIVING BOARD AND STAND AS SHOWN.
14. PROVIDE STARTING PLATFORM.
15. PROVIDE NEW GUNITE POOL SHELL WITH 1/2" THICK MARCITE FINISH AND TILED RACING LINE MARKERS (BASE BID).
16. PROVIDE NEW GUNITE POOL SHELL WITH FULLY TILED POOL SHELL (ALT. #6)
17. PROVIDE FLOOR DRAIN AT LOCATIONS NOTED ON PLANS. SEE 'P' DWGS.
18. SLOPE POOL DECK AS INDICATED ON ENLARGED POOL DECK PLAN.
19. PROVIDE ELEVATED LIFEGUARD CHAIR. REF. SPECS
20. PROVIDE ANCHORS FOR LIFELINE ROPE. COORDINATE ACHOR WITH POOL RAMP HANDRAIL POST.
21. PROVIDE GROUPED (3) INLET NOZLES FOR FILTERED POOL WATER RETURN. NOZZLES TO BE CENTERED ON ANCHORS AT POOL END WALLS. REFER TO DETAIL FOR MOUNTING LOCATION IN GUTTER SYSTEM.

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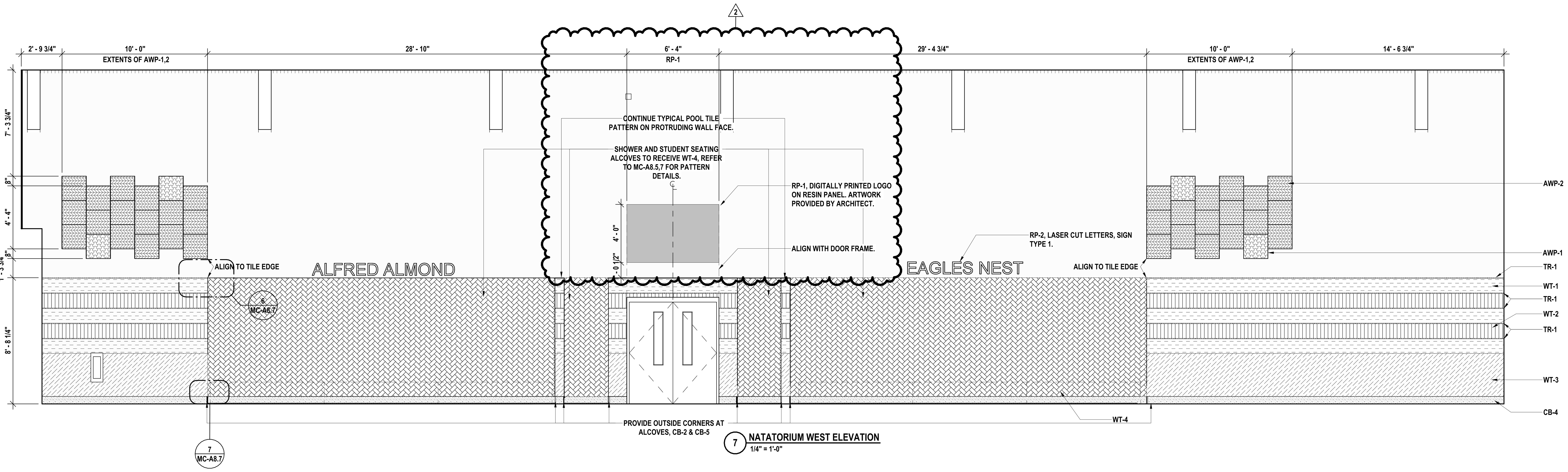
ENLARGED POOL & DECK PLANS

2025 CAPITAL PROJECT
ALFRED-ALMOND CSD
6795 ROUTE 21 ALMOND, NY 14804

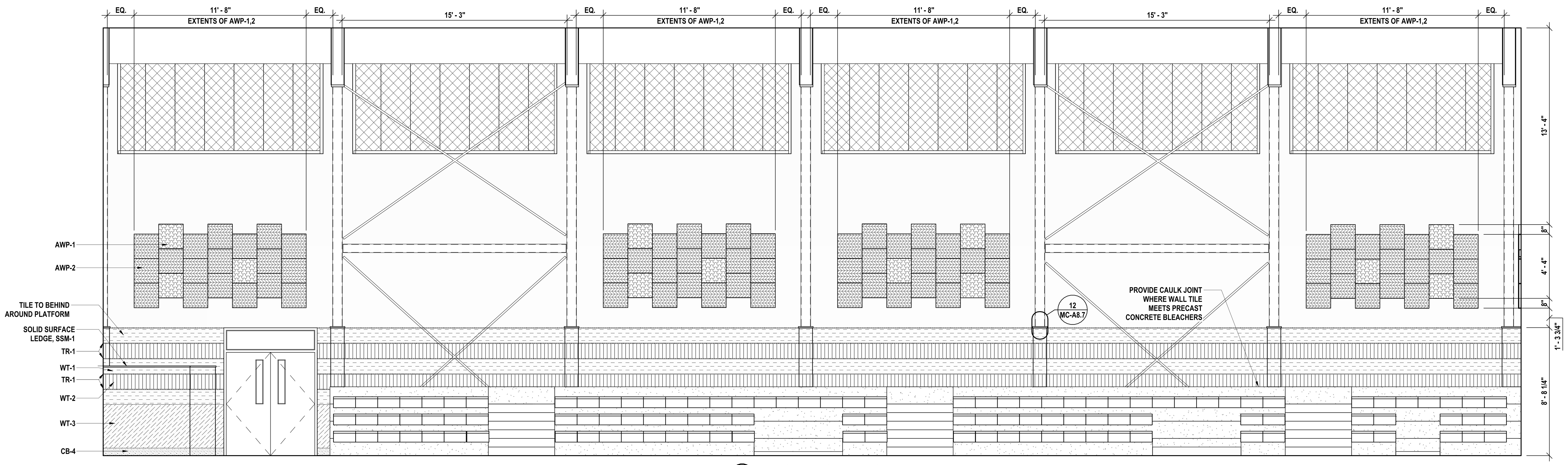
SED #: 02-01-01-04-0-001-037

MC-A5.7

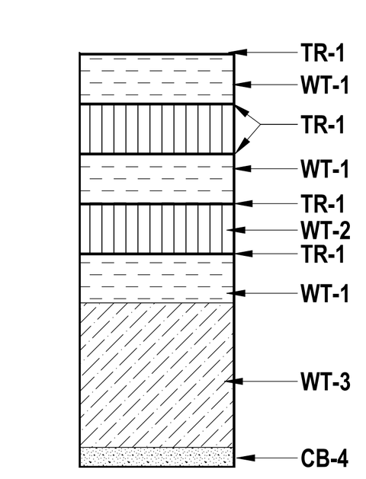
PROJECT NO: 2028-059



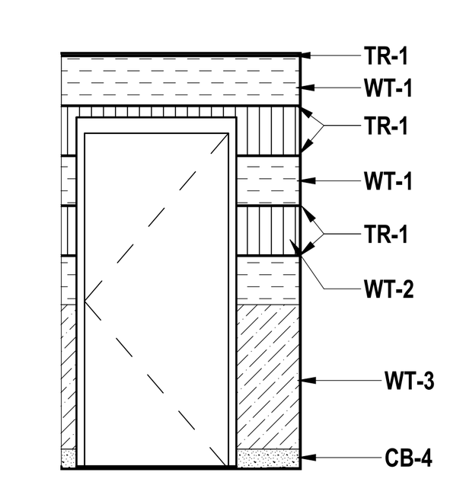
7 **NATATORIUM WEST ELEVATION**
1/4" = 1'-0"



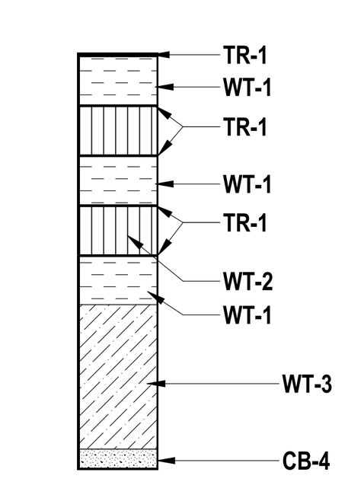
6 **NATATORIUM EAST ELEVATION**
1/4" = 1'-0"



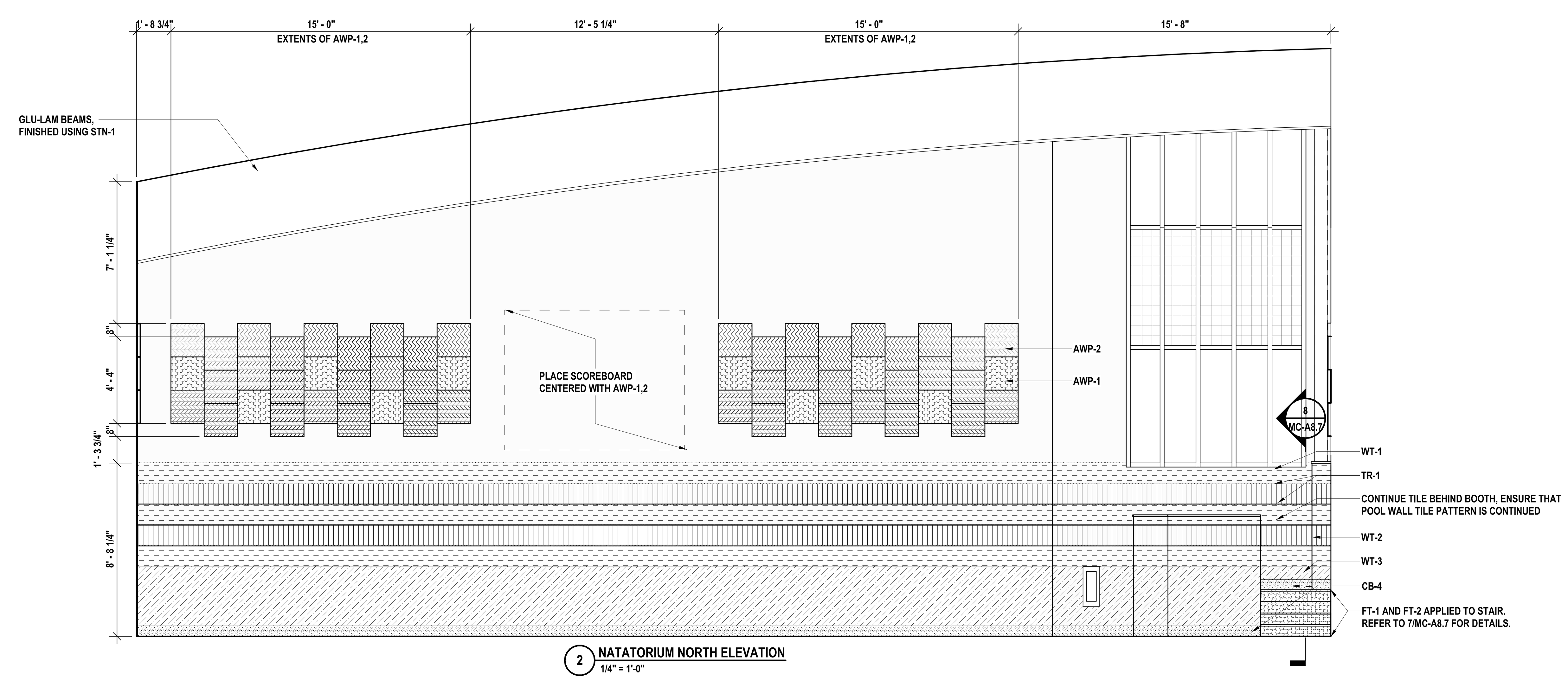
5 **OFFICE 146 ENTRANCE - ELEVATION C**
1/4" = 1'-0"



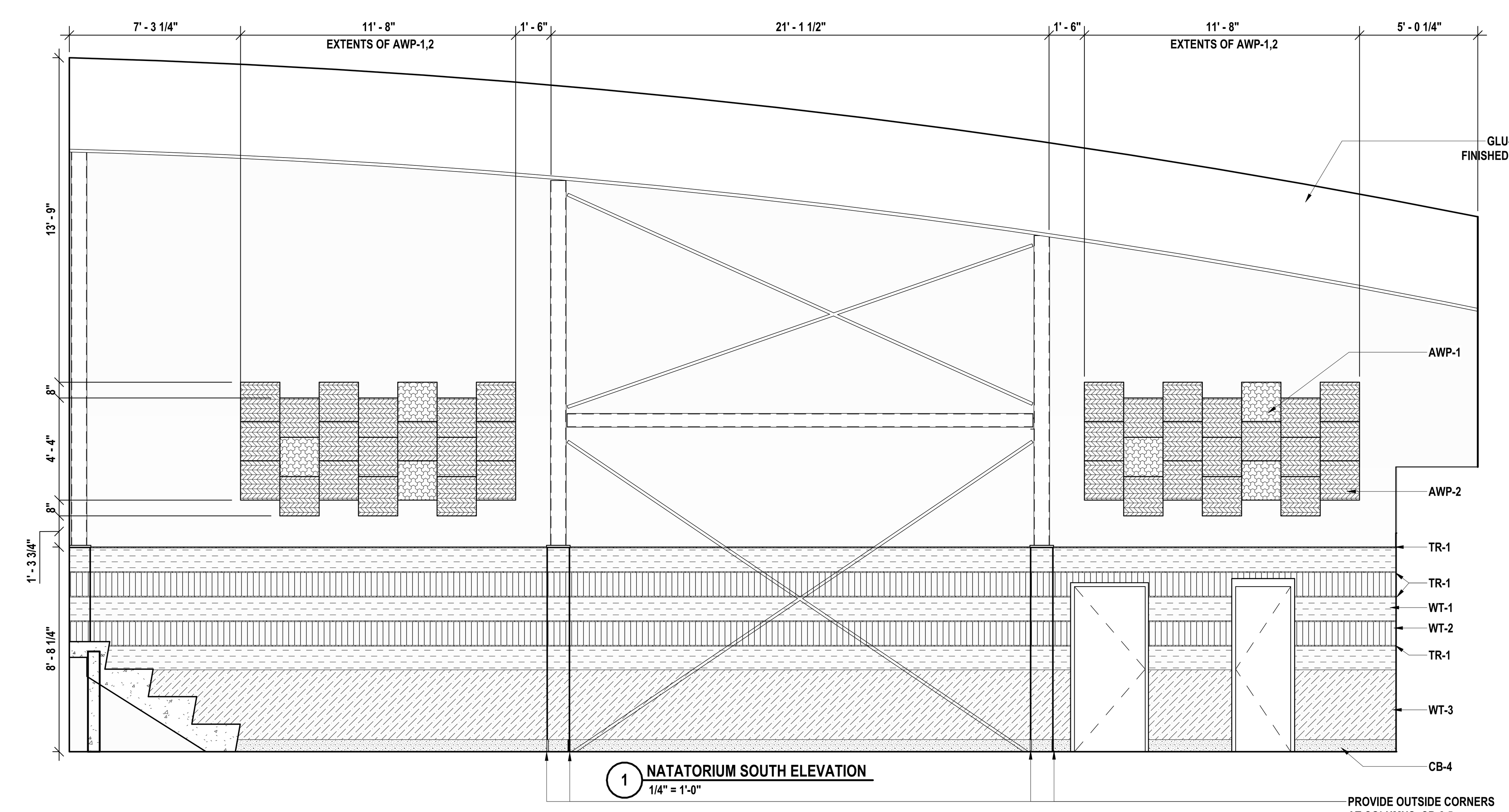
4 **OFFICE 146 ENTRANCE - ELEVATION B**
1/4" = 1'-0"



3 **OFFICE 146 ENTRANCE - ELEVATION A**
1/4" = 1'-0"



2 **NATATORIUM NORTH ELEVATION**
1/4" = 1'-0"



1 **NATATORIUM SOUTH ELEVATION**
1/4" = 1'-0"

FLOOR FINISH LEGEND

RF-1, RF-2, RF-3, RF-4, CPT-1, CPT-2, RAF-1, FT-1, FT-2, FT-3, FT-4, FT-5, FT-6, FT-7, PTM EXISTING TERRAZZO FLOOR TZ-1, TS-1

WALL FINISH LEGEND:

AWP-1, AWP-2, WP-1, CB-2, CB-3, CB-4, WT-1, WT-2, RB-2, CB-5, TR-1, TR-2, WT-3, WT-4, WT-5, TR-3, TR-4, WT-6, WT-7, CB-1, PNT-1, PNT-2, PNT-3

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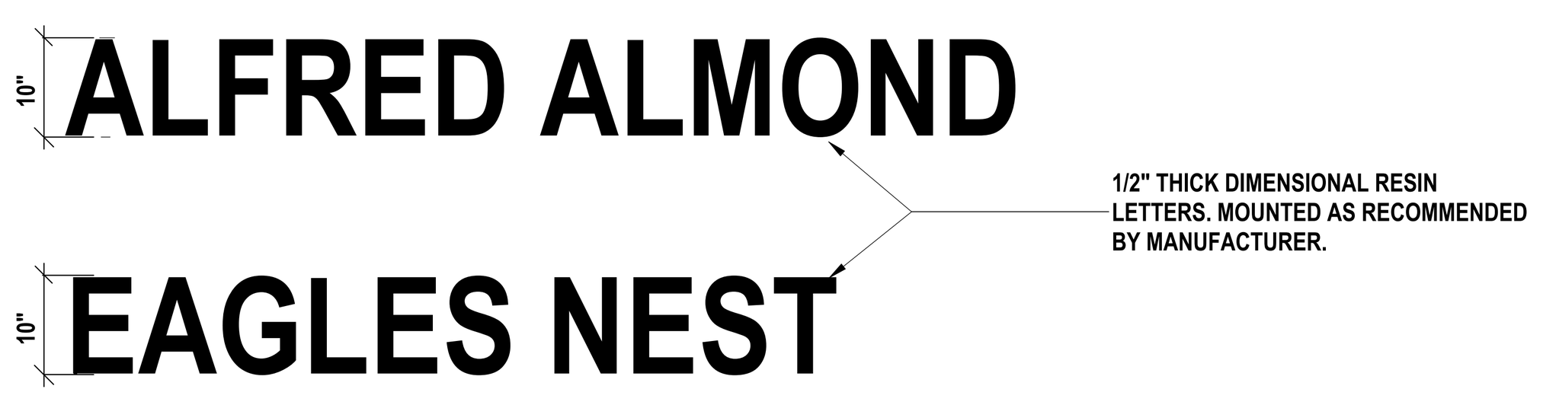
POOL FINISH ELEVATIONS
2025 CAPITAL PROJECT
ALFRED-ALMOND CSD
6795 ROUTE 21 ALMOND, NY 14804

MC-A8.5

PROJECT NO: 2026-059

SED #: 02-01-01-04-0-001-037



1 SIGN TYPE 1 - DIMENSIONAL LETTERS
3/4" = 1'-0"

ALTERNATE ROOM FINISH SCHEDULE

ROOM #	ROOM NAME	FLOOR FINISH	BASE FINISH	WALL FINISH	DOOR FRAME COLOR	CEILING FINISH	COUNTERTOP FINISH	REMARKS
FIRST FLOOR - AREA D								
02	NATATORIUM	ALT #6: FT-1,2,3,4,5, G-2	CB-2,4,5	PNT-5,6, WT-1,2,3,4, AWP-1,2, RP-1, G-1, SSM-1, TR-1	PNT-4	ACOUSTIC DECK: PNT-5, GLU-LAM BEAMS: STN-1	SSM-1	ALT #6: POOL BASIN TO RECEIVE MOSAIC TILE, FT-4,5. FT-5 TO INDICATE RACING LANES, RACING TARGETS, AND 4" BREAK LINE AS SHOWN ON FLOOR FINISH PLAN.
FIRST FLOOR - AREA H								
024	PASSAGE	ALT #3: FT-6, G-3, TS-1	ALT #3: CB-3.	ALT #3: WT-5,6,7, TR-3,4, G-1, PNT-1	ALT #3: PNT-4.	ALT #3: ACT-1.	-	ALT #3: PROVIDE ALL WORK ASSOCIATED WITH THE COMPLETE RENOVATIONS OF THE FIRST AND SECOND FLOOR TOILET ROOMS AS INDICATED ON CONTRACT DOCUMENTS.
024A	T.R.	ALT #3: FT-6, G-3	ALT #3: CB-1.	ALT #3: WT-5,6,7, TR-3,4, G-1, PNT-1	ALT #3: PNT-4.	ALT #3: ACT-1.	-	ALT #3: PROVIDE ALL WORK ASSOCIATED WITH THE COMPLETE RENOVATIONS OF THE FIRST AND SECOND FLOOR TOILET ROOMS AS INDICATED ON CONTRACT DOCUMENTS.
024B	T.R.	ALT #3: FT-6, G-3	ALT #3: CB-1.	ALT #3: WT-5,6,7, TR-3,4, G-1, PNT-1	ALT #3: PNT-4.	ALT #3: ACT-1.	-	ALT #3: PROVIDE ALL WORK ASSOCIATED WITH THE COMPLETE RENOVATIONS OF THE FIRST AND SECOND FLOOR TOILET ROOMS AS INDICATED ON CONTRACT DOCUMENTS.
024C	T.R.	ALT #3: FT-6, G-3	ALT #3: CB-1.	ALT #3: WT-5,6,7, TR-3,4, G-1, PNT-1	ALT #3: PNT-4.	ALT #3: ACT-1.	-	ALT #3: PROVIDE ALL WORK ASSOCIATED WITH THE COMPLETE RENOVATIONS OF THE FIRST AND SECOND FLOOR TOILET ROOMS AS INDICATED ON CONTRACT DOCUMENTS.
SECOND FLOOR - AREA H								
051	PASSAGE	ALT #3: FT-6, G-3, TS-1	ALT #3: CB-3.	ALT #3: WT-5,6,7, TR-3,4, G-1, PNT-1	ALT #3: PNT-4.	ALT #3: ACT-1.	-	ALT #3: PROVIDE ALL WORK ASSOCIATED WITH THE COMPLETE RENOVATIONS OF THE FIRST AND SECOND FLOOR TOILET ROOMS AS INDICATED ON CONTRACT DOCUMENTS.
051A	T.R.	ALT #3: FT-6, G-3	ALT #3: CB-1.	ALT #3: WT-5,6,7, TR-3,4, G-1, PNT-1	ALT #3: PNT-4.	ALT #3: ACT-1.	-	ALT #3: PROVIDE ALL WORK ASSOCIATED WITH THE COMPLETE RENOVATIONS OF THE FIRST AND SECOND FLOOR TOILET ROOMS AS INDICATED ON CONTRACT DOCUMENTS.
051B	T.R.	ALT #3: FT-6, G-3	ALT #3: CB-1.	ALT #3: WT-5,6,7, TR-3,4, G-1, PNT-1	ALT #3: PNT-4.	ALT #3: ACT-1.	-	ALT #3: PROVIDE ALL WORK ASSOCIATED WITH THE COMPLETE RENOVATIONS OF THE FIRST AND SECOND FLOOR TOILET ROOMS AS INDICATED ON CONTRACT DOCUMENTS.
051C	T.R.	ALT #3: FT-6, G-3	ALT #3: CB-1.	ALT #3: WT-5,6,7, TR-3,4, G-1, PNT-1	ALT #3: PNT-4.	ALT #3: ACT-1.	-	ALT #3: PROVIDE ALL WORK ASSOCIATED WITH THE COMPLETE RENOVATIONS OF THE FIRST AND SECOND FLOOR TOILET ROOMS AS INDICATED ON CONTRACT DOCUMENTS.

ROOM FINISH SCHEDULE

ROOM #	ROOM NAME	FLOOR FINISH	BASE FINISH	WALL FINISH	DOOR FRAME COLOR	CEILING FINISH	COUNTERTOP FINISH	REMARKS
FIRST FLOOR - AREA B								
133	CORR.	FT-6, G-3	CB-3	PNT-1	PNT-4	ACT-1	-	
133A	T.R.	FT-6, G-3	CB-1	WT-5,6,7, TR-3,4, G-1, PNT-1	PNT-4	ACT-1	-	
133B	T.R.	FT-6, G-3	CB-1	WT-5,6,7, TR-3,4, G-1, PNT-1	PNT-4	ACT-1	-	
133C	T.R.	FT-6, G-3	CB-1	WT-5,6,7, TR-3,4, G-1, PNT-1	PNT-4	ACT-1	-	
133D	T.R.	FT-6, G-3, TS-1	CB-1	WT-5,6,7, TR-3,4, G-1, PNT-1	PNT-4	ACT-1, PNT-1	-	PAINT GWB SOFFIT PNT-1 U.N.O. PROVIDE TS-1 AS EDGE PROTECTION FOR TILE.
FIRST FLOOR - AREA D								
02	NATATORIUM	FT-1,2,3,4,5, G-2	CB-2,4,5	PNT-5,6, WT-1,2,3,4, AWP-1,2, RP-1,2, G-1, SSM-1, TR-1	PNT-4	ACOUSTIC DECK: PNT-5, GLU-LAM BEAMS: STN-1	SSM-1	PROVIDE SSM-1 TO CAP ALL COLUMN COVERS AND HALF-WALL COVERS. BASE BID: POOL BASIN TO RECEIVE MARCITE FINISH, MC-1. REFER TO FINISH KEY AND SPECIFICATION 13 11 00 FOR FINISH DETAILS. RAMP TO RECEIVE FT-4,5.
2A	STAIR	SC-1	RB-1	PNT-1	PNT-4	PNT-1	-	PAINT ALL EXPOSED STRUCTURE AND ANY CEILING MOUNTED ELEMENTS PNT-1 U.N.O.
134A	OFFICE	FT-1, G-2	CB-3	PNT-5	PNT-4	ACT-1	-	
135	JAN.	FT-1, G-2	CB-3	PNT-5	PNT-4	PNT-5	-	DECK TO RECEIVE PNT-5.
137	BOYS LOCKER ROOM	FT-1,7, G-3, TS-1	CB-3,6	PNT-5, LK-1,2, TP-1, STN-1	PNT-4	PNT-5	SSM-1	PAINT ALL EXPOSED STRUCTURE AND ANY CEILING MOUNTED ELEMENTS PNT-5 U.N.O. WHERE TILE FT-1 IS APPLIED TO CONCRETE LOCKER BASE, PROVIDE CB-6 WHERE FLOOR TILE MEETS WALL TILE.
137A	T.R.	FT-1, G-3	CB-1	WT-5,6,7, TR-3,4, G-1, PNT-1	PNT-4	PNT-5	-	CEILING TO RECEIVE PAINT, PNT-5.
137B	T.R.	FT-1, G-3	CB-1	WT-5,6,7, TR-3,4, G-1, PNT-1	PNT-4	PNT-5	-	CEILING TO RECEIVE PAINT, PNT-5.
140	GIRLS LOCKER ROOM	FT-1,7, G-3, TS-1	CB-3,6	PNT-1, LK-1,2, TP-1, STN-1	PNT-4	PNT-5	SSM-1	PAINT ALL EXPOSED STRUCTURE AND ANY CEILING MOUNTED ELEMENTS PNT-5 U.N.O. WHERE TILE FT-1 IS APPLIED TO CONCRETE LOCKER BASE, PROVIDE CB-6 WHERE FLOOR TILE MEETS WALL TILE.
140A	T.R.	FT-1, G-3	CB-1	WT-5,6,7, TR-3,4, G-1, PNT-1	PNT-4	PNT-5	-	CEILING TO RECEIVE PAINT, PNT-5.
140B	T.R.	FT-1, G-3	CB-1	WT-5,6,7, TR-3,4, G-1, PNT-1	PNT-4	PNT-5	-	CEILING TO RECEIVE PAINT, PNT-5.
142	PRACTICE ROOM	ETR	ETR	ETR	ETR	ETR	-	EXISTING FINISHES TO REMAIN ENTIRELY.
143	BAND OFFICE	ETR	ETR	ETR	ETR	ETR	-	EXISTING FINISHES TO REMAIN ENTIRELY.
144	PRACTICE ROOM	ETR	ETR	ETR	ETR	ETR	-	EXISTING FINISHES TO REMAIN ENTIRELY.
145	PRACTICE ROOM	ETR	ETR	ETR	ETR	ETR	-	EXISTING FINISHES TO REMAIN ENTIRELY.
146A	T.R.	FT-6, G-3	CB-1	WT-5,6,7, TR-3,4, G-1, PNT-1	PNT-4	ACT-1	-	PROVIDE TS-1 AS EDGE PROTECTION FOR TILE. PATCH TO MATCH TERRAZZO OUTSIDE OF TOILET ROOMS USING TZ-1. PROVIDE TERRAZZO BASE TO MATCH EXISTING.
146B	T.R.	FT-6, G-3, TS-1	CB-1	WT-5,6,7, TR-3,4, G-1, PNT-1	PNT-4	ACT-1	-	PROVIDE TS-1 AS EDGE PROTECTION FOR TILE. PATCH TO MATCH TERRAZZO OUTSIDE OF TOILET ROOMS USING TZ-1. PROVIDE TERRAZZO BASE TO MATCH EXISTING.
146C	T.R.	FT-6, G-3, TS-1	CB-1	WT-5,6,7, TR-3,4, G-1, PNT-1	PNT-4	ACT-1	-	PROVIDE TS-1 AS EDGE PROTECTION FOR TILE. PATCH TO MATCH TERRAZZO OUTSIDE OF TOILET ROOMS USING TZ-1. PROVIDE TERRAZZO BASE TO MATCH EXISTING.
147	STORAGE	ETR	ETR	ETR	ETR	ETR	-	EXISTING FINISHES TO REMAIN ENTIRELY.
153	CORR.	FT-1, G-3, TS-1	CB-3	PNT-6	PNT-4	PNT-6	-	PAINT ALL EXPOSED STRUCTURE AND ANY CEILING MOUNTED ELEMENTS PNT-6 U.N.O. PROVIDE TS-1 AS EDGE PROTECTION FOR TILE.
163	CORR.	PTM, TZ-1	PTM, TZ-1	WC-1, PNT-1, PTM EXISTING	PNT-4	ETR, ACT-2	-	PROVIDE NEW ACOUSTIC CEILING TILE, ACT-2. STUDENT ENTRANCE TO POOL TO RECEIVE CUSTOM WALL COVERING.
164	OFFICE	FT-1, G-2	CB-3	PNT-5	PNT-4	ACT-1	-	
A141	MAINT. SHOP	ETR	ETR	ETR.PTM	PNT-4	PNT-1	-	PAINT ALL EXPOSED STRUCTURE AND ANY CEILING MOUNTED ELEMENTS PNT-1 U.N.O.
A141A	T.R.	FT-6, G-3, TS-1	CB-1	WT-5,6,7, TR-3,4, G-1, PNT-1	PNT-4	ACT-1	-	PROVIDE TS-1 AS EDGE PROTECTION FOR TILE.
FIRST FLOOR - AREA F								
29	STAIRS	CPT-1,2, TS-1	RB-1	PNT-1, PTM	PREFABRICATED	ACT-2	-	TERMINATE CARPET, CPT-1 AT STAIRS, STAIR TO REMAIN AS TERRAZZO. PROTECT CARPET TILE EDGE WITH TS-1.
31	MULTI-PURPOSE ROOM	WD-1	RB-2	WP-1, PNT-1,2,3	PNT-4	PNT-1	-	PROVIDE GAME LINES AS DETAILED ON A DRAWINGS, COLORS TO BE SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE. PAINT ALL EXPOSED DUCTWORK, STRUCTURAL ELEMENTS, AND BOXES PNT-1 U.N.O.
FIRST FLOOR - AREA G								
149	POOL LOBBY	FT-1, G-3	CB-3	PNT-1, WC-2	PNT-4	ACT-2	-	
A111	GYMNASIUM	WD-1,2	RB-2	WP-1, PNT-1,2,3	PNT-4	ETR	-	PROVIDE GAME LINES AS DETAILED ON A DRAWINGS, COLORS TO BE SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE. PAINT EXISTING GRAY BOXES PNT-1 U.N.O.
SECOND FLOOR - AREA B								
217	CORR.	FT-6, G-3, TS-1	CB-3	PNT-1	PNT-4	ACT-1	-	
217A	T.R.	FT-6, G-3	CB-1	WT-5,6,7, TR-3,4, G-1, PNT-1	PNT-4	ACT-1	-	
217B	T.R.	FT-6, G-3	CB-1	WT-5,6,7, TR-3,4, G-1, PNT-1	PNT-4	ACT-1	-	
217C	T.R.	FT-6, G-3	CB-1	WT-5,6,7, TR-3,4, G-1, PNT-1	PNT-4	ACT-1	-	
217D	T.R.	FT-6, G-3	CB-1	WT-5,6,7, TR-3,4, G-1, PNT-1	PNT-4	ACT-1	-	
SECOND FLOOR - AREA F								
101	VEST.	CPT-1,2, TS-1	RB-1	PNT-1, PTM	ETR	ACT-2	-	TERMINATE CARPET, CPT-1 AT STAIRS, STAIR TO REMAIN AS TERRAZZO. PROTECT CARPET TILE EDGE WITH TS-1.

FINISH KEY

ABBR.	MATERIAL TYPE	MANUFACTURER	SERIES	SIZE	NUMBER	COLOR	SECTION #	LOCATION/REMARKS
ACOUSTIC WALL TREATMENTS								
AWP-1	FABRIC WRAPPED PET-CORE	CARNEGIE	XOREL ARTFORM / XOREL 6427	20" X 20" X 2"	2003	METEOR	09 84 30	POOL WALLS
AWP-2	FABRIC WRAPPED PET-CORE	CARNEGIE	XOREL ARTFORM / XOREL 6149	20" X 20" X 2"	25	NEBULA	09 84 30	POOL WALLS
CARPET								
CPT-1	VINYL WALK OFF MAT	FORBO FLOORING SYSTEMS	CORAL BRUSH TILES	19.69" x 19.69"	5727	STRATOS BLUE	09 68 13	VESTIBULE
CPT-2	WALK-OFF CARPET TILE	INTERFACE	STEP REPEAT COLLECTION	19.69" x 19.69"	SR799 - 104922	MIDNIGHT	09 68 13	ELEVATOR
CEILING SYSTEM								
ACT-1	ACOUSTICAL CEILING TILE	ARMSTRONG WORLD INDUSTRIES	ULTIMA	24" x 24"	1910	WHITE (WH)	09 51 00	TOILET ROOMS, OFFICES, WET AREAS
ACT-2	ACOUSTICAL CEILING TILE	ARMSTRONG WORLD INDUSTRIES	CALLA HIGH NRC	24" x 24"	2844	WHITE (WH)	09 51 00	GENERAL CEILING TILE
CERAMIC TRIM								
CB-1	COVE BASE	DALTILE	COLOR WHEEL CLASSIC	4" X 4"	A3401	ARCTIC WHITE	09 30 00	TOILET ROOM COVE BASE
CB-2	COVE CORNER RIGHT	DALTILE - AMERICAN OLEAN	COLOR STORY WALL	6" X 6"	SCR3601	SAPPHIRE SKY	09 30 00	OUTSIDE RIGHT CORNERS OF CB-4
CB-3	CERAMIC MOSAIC BUILD UP COVE BASE	DALTILE	KEYSTONES	2" X 2" - 5" X 12" SHEET	MB5B	NAVY SPECKLE	09 30 00	POOL LOBBY ENTRANCE, LOCKER ROOM ENTRANCE, LOCKER ROOMS, OFFICES, AND TOILET ROOM PASSAGES - BUILD UP COVE BASE
CB-4	FLAT TOP COVE BASE	DALTILE - AMERICAN OLEAN	COLOR STORY WALL	6" X 6"	A3601	SAPPHIRE SKY	09 30 00	GENERAL POOL COVE BASE
CB-5	COVE CORNER LEFT	DALTILE - AMERICAN OLEAN	COLOR STORY WALL	6" X 6"	SCL3601	SAPPHIRE SKY	09 30 00	OUTSIDE LEFT CORNERS OF CB-4
CB-6	CERAMIC MOSAIC BUILD UP BASE	DALTILE	KEYSTONES	2" X 2" - 5" X 12" SHEET	MB5A	NAVY SPECKLE	09 30 00	WHERE WALL TILE CONTINUES UP CONCRETE LOCKER BASE IN LOCKER ROOMS.
TR-1	TILE EDGE PROTECTION	DALTILE	LUMINIQUE - JOLLY	1/2" X 12"	S1 / 212J	ARCTIC WHITE	09 30 00	NATATORIUM - WALL TILE PATTERN AND EXPOSED TILE EDGES
TR-2	TILE EDGE PROTECTION	DALTILE	COLOR WHEEL CLASSIC	3" X 6" - BULLNOSE 3" SIDE	S4639MOD	MUSTARD	09 30 00	POOL ALCOVES (SEATING) BULLNOSE TILE EDGE
TR-3	TILE EDGE PROTECTION	DALTILE - AMERICAN OLEAN	COLOR STORY WALL	4" X 4" - BULLNOSE	S4449	SAPPHIRE SKY	09 30 00	SINGLE USE TOILET ROOM BULLNOSE TILE
TR-4	TILE EDGE PROTECTION	DALTILE	COLOR WHEEL CLASSIC	4" X 4" - BULLNOSE	S4449	ARCTIC WHITE	09 30 00	SINGLE USE TOILET ROOM BULLNOSE TILE
FLOOR TILE								
FT-1	CERAMIC MOSAIC TILE	DALTILE	KEYSTONES	2" X 2"	D209	NAVY SPECKLE	09 30 00	POOL DECK - GENERAL, POOL LOBBY FLOOR TILE
FT-2	CERAMIC MOSAIC TILE	DALTILE	KEYSTONES	2" X 2"	D181	MUSTARD	09 30 00	POOL DECK - LANE MARKERS, COMMENTING PLATFORM RISERS
FT-3	CERAMIC MOSAIC TILE	DALTILE	KEYSTONES	2" X 2"	CUSTOM MIX	MUSTARD, NAVY SPECKLE, URBAN PUTTY SPECKLE	09 30 00	POOL DECK - GENERAL BORDER PATTERN AROUND DECK, REFER TO 1/A8.9, POOL LOBBY, POOL OFFICES, JANITOR'S CLOSET.
FT-4	CERAMIC MOSAIC TILE	DALTILE	KEYSTONES	1" X 1"	D138	GOLDEN GRANITE	09 30 00	POOL DECK - DEPTH MARKER BORDER AROUND POOL - GENERAL, REFER TO 3/A8.2. ALT. #6 - POOL BASIN FINISH (GENERAL), POOL RAMP
FT-5	CERAMIC MOSAIC TILE	DALTILE	KEYSTONES	1" X 1"	D311	NAVY SPECKLE	09 30 00	POOL DECK - DEPTH MARKER BORDER AROUND POOL - NUMBERING, REFER TO 3/A8.2. ALT. #6 - POOL BASIN FINISH (ACCENT - RACING LANES, TACING TARGET, AND 4" BREAK LINE), POOL RAMP
FT-6	CERAMIC MOSAIC TILE	DALTILE	KEYSTONES	2" X 2"	CUSTOM MIX	WATERFALL, CORNSILK,MUSTARD, NAVY SPECKLE	09 30 00	TOILET ROOM FLOOR PATTERN, REFER TO 2/A8.9
FT-7	CERAMIC MOSAIC TILE	DALTILE	KEYSTONES	2" X 2"	CUSTOM MIX	GOLDEN GRANITE, NAVY SPECKLE, WATERFALL	09 30 00	LOCKER ROOM FLOOR PATTERN, REFER TO 3/A8.9
GROUT								
G-1	PREMIXED GROUT	MAPEI	ULTRACOLOR PLUS FA	-	5093	WARM GRAY	09 30 00	NATATORIUM AND TOILET ROOM WALLS
G-2	EPOXY GROUT	MAPEI	KERAPOXY CQ	-	5011	SAHARA BEIGE	09 30 00	NATATORIUM, OFFICES, AND JAN. FLOORS
G-3	EPOXY GROUT	MAPEI	KERAPOXY CQ	-	5231	DEEP OCEAN	09 30 00	TOILET ROOM AND LOCKER ROOM FLOORS
LOCKERS								
LK-1	HDPE PLASTIC LOCKERS	SCRANTON PRODUCTS	DURALIFE LOCKERS	15" X 15" X 60"	-	GREY	10 51 26	1-TIER LOCKERS (LOCKER ROOMS)
LK-2	HDPE PLASTIC LOCKERS	SCRANTON PRODUCTS	DURALIFE LOCKERS	15" X 15" X 60"	-	GREY	10 51 26	2-TIER LOCKERS (LOCKER ROOMS)
PAINT								
PNT-1	PAINT	SHERWIN WILLIAMS	-	-	SW 7006	EXTRA WHITE	09 91 23	FIELD - GENERAL / GWB SOFFIT / CEILINGS
PNT-2	PAINT	SHERWIN WILLIAMS	-	-	SW 6965	HYPER BLUE	09 91 23	ACCENT
PNT-3	PAINT	SHERWIN WILLIAMS	-	-	SW 6677	GOLDENROD	09 91 23	ACCENT
PNT-4	PAINT	SHERWIN WILLIAMS	-	-	SW 6258	TRICORN BLACK	09 91 23	GENERAL HM DOOR FRAMES
PNT-5	HIGH PERFORMANCE EPOXY COATING	SHERWIN WILLIAMS	PRO INDUSTRIAL WATER-BASED CATALYZED EPOXY	-	SW 7006	EXTRA WHITE	09 91 23	GENERAL WALL AND CEILING PAINT IN POOL AND LOCKER ROOMS
PNT-6	HIGH PERFORMANCE EPOXY COATING	SHERWIN WILLIAMS	PRO INDUSTRIAL WATER-BASED CATALYZED EPOXY	-	SW 6965	HYPER BLUE	09 91 23	GENERAL RAILINGS IN POOL AREA, CORR (153) WALL PAINT
POOL LINER								
MC-1	MARCITE	MARCITE	-	-	-	WHITE	13 11 00	POOL LINER
RESILIENT BASE								
RB-1	VINYL WALL BASE	JOHNSONITE	TRADITIONAL VINYL WALL BASE 1/8" (TYPE TV)	4" H	40	BLACK	09 65 00	GENERAL COVE WALL BASE
RB-2	RUBBER WALL BASE	JOHNSONITE	VENT COVE	4" H	40	BLACK	09 64 30	VENTILATED COVE BASE - GYMNASIUM AND MULTI-PURPOSE ROOM
RESIN PANEL (SIGNAGE)								
RP-1	DIGITALLY PRINTED RESIN PANEL	3FORM	VARIA - DIGITAL PRINT LOGO WITH XT SUPPORTS	4' X 6'-4" PANEL 1/2" THICK	LID - 1128891	CLEAR - ARTWORK PROVIDED BY ARCHITECT	10 11 43	NATATORIUM - EAGLE LOGO PANEL
RP-2	LASER CUT LETTERING	3FORM	CHROMA LASER CUT WITH TEMPLATE	10"H X 1/2" THICK	-	AS SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE	10 14 19	NATATORIUM - ABOVE STUDENT SEATING ALCOVES (SIGNAGE TYPE 1)
SEALED CONCRETE								
SC-1	SEALED CONCRETE	SHERWIN WILLIAMS	ARMORSEAL 8100	-	-	CLEAR	09 91 23	STAIR (2A)
SOLID SURFACE								
SSM-1	SOLID -SURFACE POLYMER RESIN	CORTERRA	-	-	OCC19	COTTON TAIL	12 36 00	LOCKER ROOM SINKS AND NATATORIUM COMMENTING PLATFORM COUNTERTOP AND WALL CAP
TERRAZZO								
TZ-1	RESINOUS MATRIX TERRAZZO	T&M SUPPLY	-	-	PTM	PATCH TO MATCH	09 66 23	TERRAZZO FLOORING - CORRIDORS, AREA D FIRST FLOOR, PATCH TO MATCH
TERRAZZO BASE								
TZB-1	RESINOUS MATRIX TERRAZZO	T&M SUPPLY	-	PRECAST	PTM	PATCH TO MATCH	09 66 23	TERRAZZO BASE - CORRIDORS, AREA D FIRST FLOOR, PATCH TO MATCH
TOILET PARTITIONS								
TP-1	SOLID PLASTIC (HPDE) TOILET PARTITIONS	SCRANTON PRODUCTS	AS SELECTED BY ARCHITECT	-	-	GREY	10 21 13.19	LOCKER ROOM TOILET COMPARTMENTS
TRANSITION STRIPS								
TS-1	EDGE PROTECTION PROFILE	SCHLUTER SYSTEMS	SCHIENE	AS REQUIRED BY FLOORING THICKNESS AND ADA REGULATIONS	-	BRUSHED NICKEL ANODUZED ALUMINUM	09 30 00	WHERE NEW FLOORING MEETS EXISTING FLOORING - EDGE PROTECTION PROFILE
WALL COVERING								
WC-1	CUSTOM PRINTED VINYL WALLCOVERING	LEVEL	IMO TYPE II VINYL WALLCOVERING	-	CUSTOM: ARCHITECT TO PROVIDE ARTWORK	CUSTOM: ARCHITECT TO PROVIDE ARTWORK	09 72 00	POOL LOCKER ROOM ENTRANCE WALL COVERING
WC-2	CUSTOM PRINTED VINYL WALLCOVERING	LEVEL	IMO TYPE II VINYL WALLCOVERING	-	CUSTOM: ARCHITECT TO PROVIDE ARTWORK	CUSTOM: ARCHITECT TO PROVIDE ARTWORK	09 72 00	POOL ENTRANCE WALL COVERING
WALL PADS								
WP-1	WALL MOUNTED PROTECTION PADS	DRAPER, INC	CLASS A FIRE RETARDANT WALL PADS	VARIES - REFER TO INTERIOR ELEVATIONS	-	ROYAL BLUE	11 66 23	GYM VINYL WALL PADS
WALL TILE								
WT-1	LARGE FORMAT GLAZED WALL TILE	DALTILE	LUMINIQUE - HANDCRAFTED	12" X 24"	0190	ARCTIC WHITE	09 30 00	FIELD - GENERAL WALL TILE - POOL WALLS
WT-2	LARGE FORMAT GLAZED WALL TILE	DALTILE	LUMINIQUE - FLUTED	12" X 24"	0190	ARCTIC WHITE	09 30 00	FLUTED ACCENT WALL TILE - POOL WALLS
WT-3	LARGE FORMAT GLAZED WALL TILE	DALTILE - AMERICAN OLEAN	LUMINIQUE - HANDCRAFTED - MADE TO ORDER WITH COLOR STORY WALL GLAZE	12" X 24"	0070	SAPPHIRE SKY	09 30 00	ACCENT WALL TILE - POOL WALLS
WT-4	GLAZED CERAMIC WALL TILE	DALTILE	COLOR WHEEL CLASSIC	3" X 6"	1012	MUSTARD	09 30 00	POOL ALCOVES (SEATING)
WT-5	GLAZED CERAMIC WALL TILE	DALTILE	COLOR WHEEL CLASSIC	4" X 4"	0190	ARCTIC WHITE	09 30 00	TOILET ROOMS (GENERAL)
WT-6	GLAZED CERAMIC WALL TILE	DALTILE - AMERICAN OLEAN	COLOR STORY WALL	4" X 4"	0070	SAPPHIRE SKY	09 30 00	TOILET ROOMS (ACCENT)
WT-7	GLAZED CERAMIC WALL TILE	DALTILE	COLOR WHEEL CLASSIC	4" X 4"	1012	MUSTARD	09 30 00	TOILET ROOMS (ACCENT)
WOOD STAIN								
STN-1	FACTORY FINISHED ITEMS TO RECEIVE STAIN TO MATCH STN-1	MINWAX	-	-	STAIN TO MATCH MW 455	PINE RIDGE	09 91 23	GLU-LAM BEAMS, LOCKER ROOM BENCHES, FACTORY FINISH TO MATCH STN-1.
WD-1	GYMNASIUM WOOD FLOOR REFINISHING	DURASEAL	-	-	STAIN TO MATCH MW 455	PINE RIDGE	09 64 30	REFINISHING EXISTING WOOD ATHLETIC FLOORING (GENERAL STAIN)
WD-2	GYMNASIUM WOOD FLOOR REFINISHING	DURASEAL	-	-	STAIN TO MATCH MW 443	HEDGEWOOD	09 64 30	REFINISHING EXISTING WOOD ATHLETIC FLOORING (ACCENT STAIN) - HS GYM

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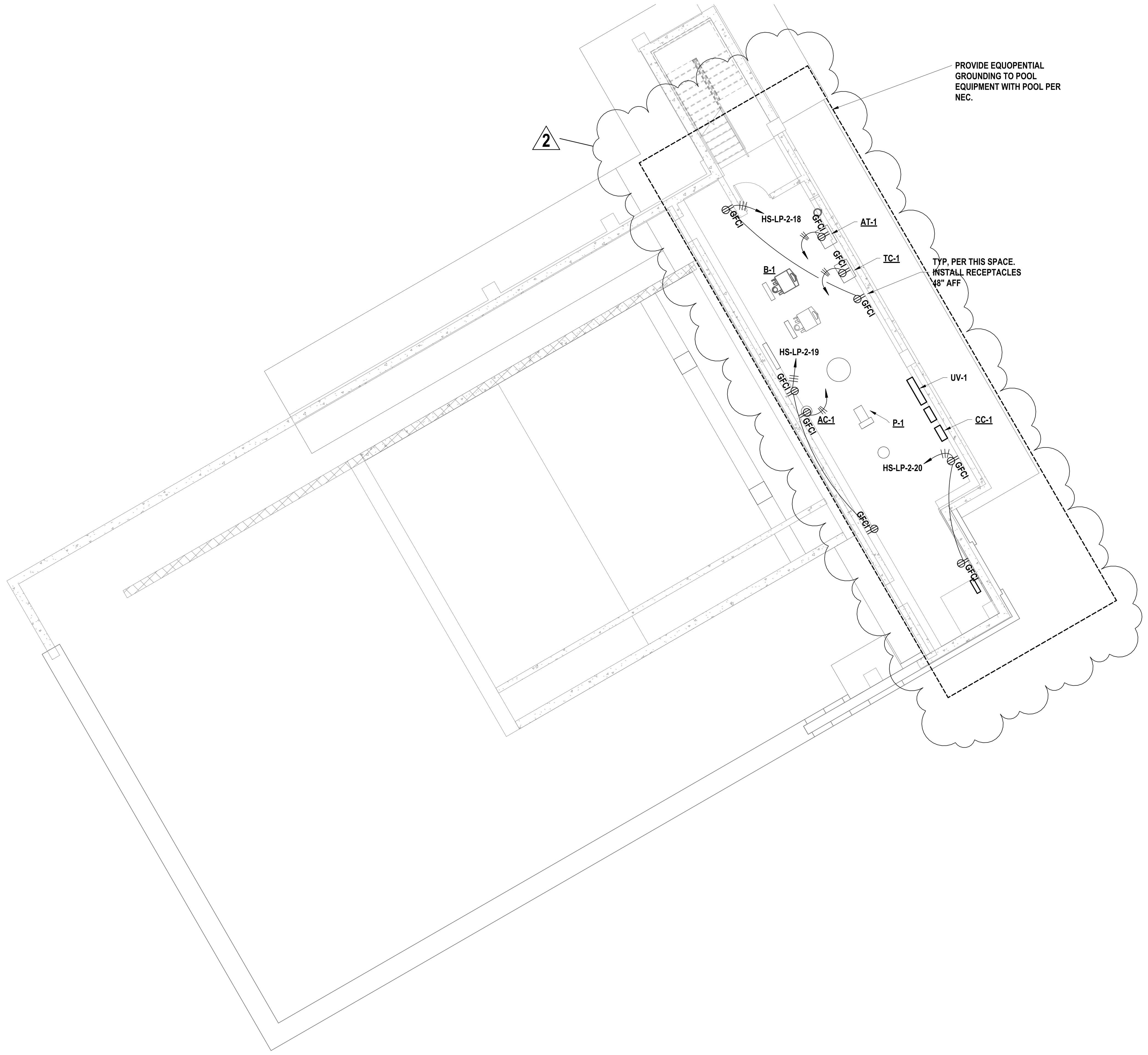
NY CERTIFICATE NO. 0018220 PA CERTIFICATE NO. TSC2203131464-1

INTERIOR FINISH SCHEDULES
2025 CAPITAL PROJECT
ALFRED-ALMOND CSD
6795 ROUTE 21 ALMOND, NY 14804

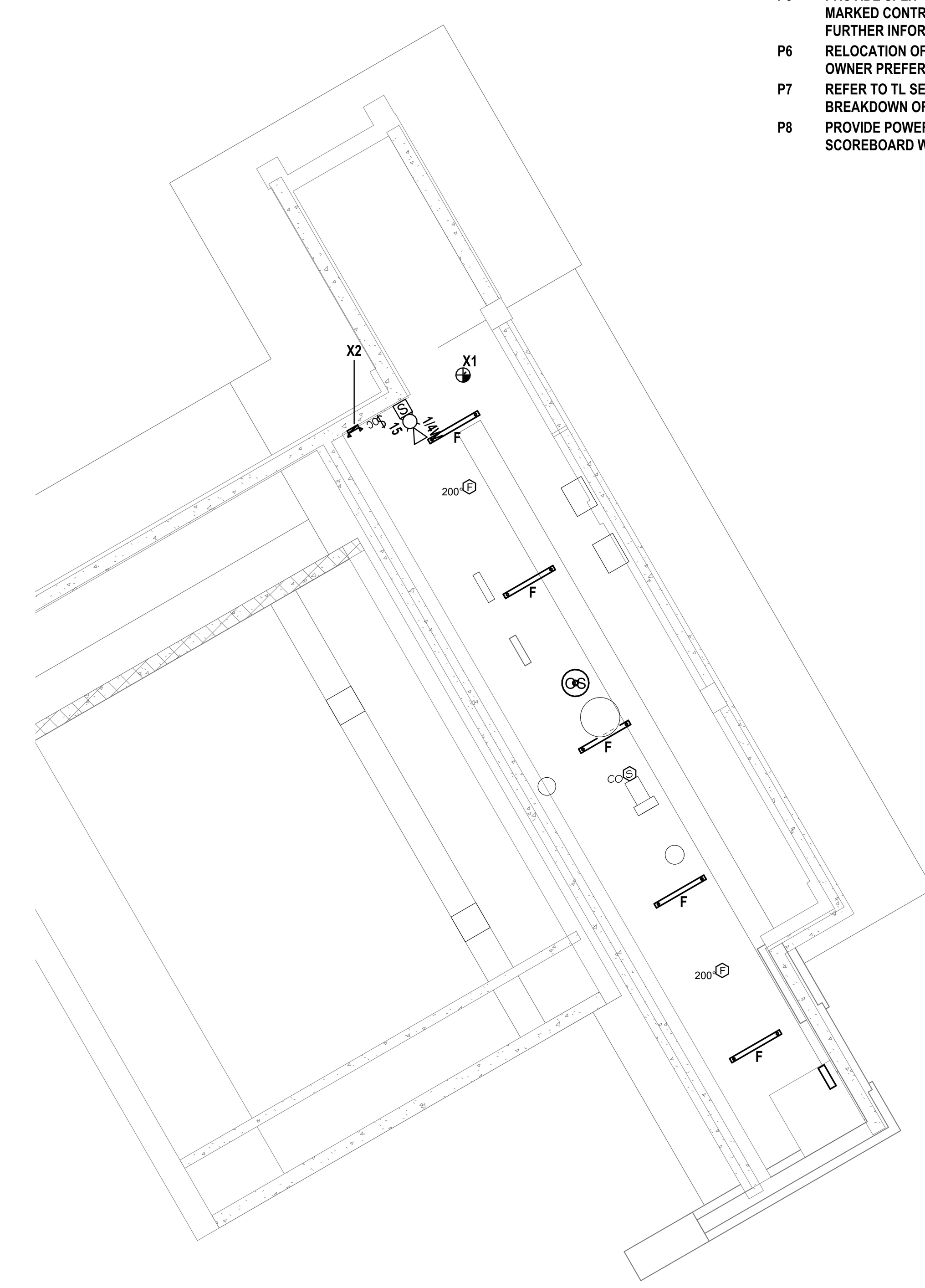
SED #: 02-01-01-04-0-001-037

MC-A9.1

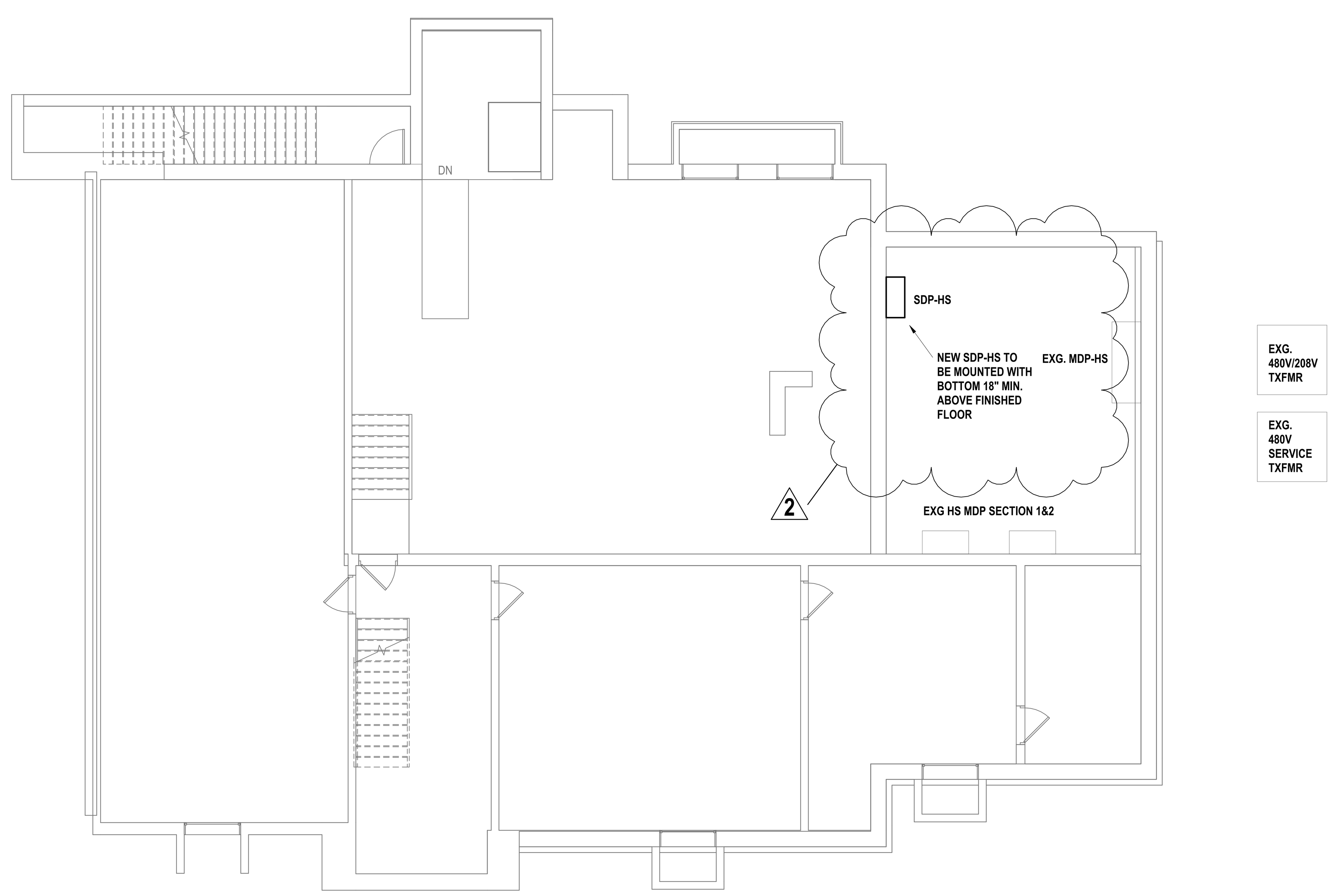
PROJECT NO: 2028-059



2 BASEMENT POWER PLAN - AREA D
1/8" = 1'-0"



3 BASEMENT LIGHTING & FA PLAN PLAN
1/8" = 1'-0"



1 BASEMENT POWER PLAN - AREA B
1/8" = 1'-0"

GENERAL NOTES - ELECTRICAL

REFER TO E0.1

CONSTRUCTION NOTES - POWER

- P1 PROVIDE A DEDICATED 20A, 1P BREAKER IN EXISTING PANEL USING EXISTING CIRCUIT. CIRCUIT TO PANEL USING 2-#12, 1-#12G, IN 3/4"C.
- P2 MODIFY/EXTEND EXISTING CIRCUITRY TO SERVE RELOCATED MECHANICAL UNIT IN THIS LOCATION ON ROOF. COORDINATE FINAL LOCATION WITH OTHERS PRIOR TO STARTING WORK.
- P3 PROVIDE EQUIPOTENTIAL BONDING RING AROUND POOL TO MEET NEC 680.26 REQUIREMENTS. BOND ALL CONDUCTIVE POOL SHELLS, METALLIC COMPONENTS, METAL FITTINGS, ELECTRICAL EQUIPMENT, FIXED METAL PARTS, COORDINATE ALL LOCATIONS WITH OTHER TRADES. MINIMUM #8AWG BARE COPPER RING TO BE USED TO CONNECT ALL COMPONENTS IN A RING AROUND POOL.
- P4 PROVIDE A DEDICATED 20A, 1P BREAKER TO NEAREST PANEL FOR EACH HAIR DRYER. CIRCUIT TO PANEL USING 2-#12, 1-#12G, IN 3/4"C.
- P5 PROVIDE SPLIT CONTROLLED RECEPTACLES IN THIS LOCATION. CONTROLED RECEPTACLES ARE TO BE MARKED CONTROLLED AND CONTROLLED BY OCCUPANCY SENSOR. REFER TO DRAWING MC-E3.1 FOR FURTHER INFORMATION.
- P6 RELOCATION OF PANEL LP-6 LOCATION. FINAL LOCATION TO BE DETERMINED IN THE FIELD BASED ON OWNER PREFERED LOCATION WITHIN EXISTING SPACE.
- P7 REFER TO TL SERIES OF DRAWINGS FOR SCOPE RELATED TO AUDITORIUM. REFER TO TL-4.1 FOR BREAKDOWN OF SCOPE BETWEEN TC AND EC MATRIX.
- P8 PROVIDE POWER NEW SCOREBOARD FOR POOL IN THIS LOCATION. COORDINATE MOUNTING OF SCOREBOARD WITH OTHER TRADES. PROVIDE (3 SETS) 2#10, 1#10G, 3/4"C FROM PANEL HS-LP-2.

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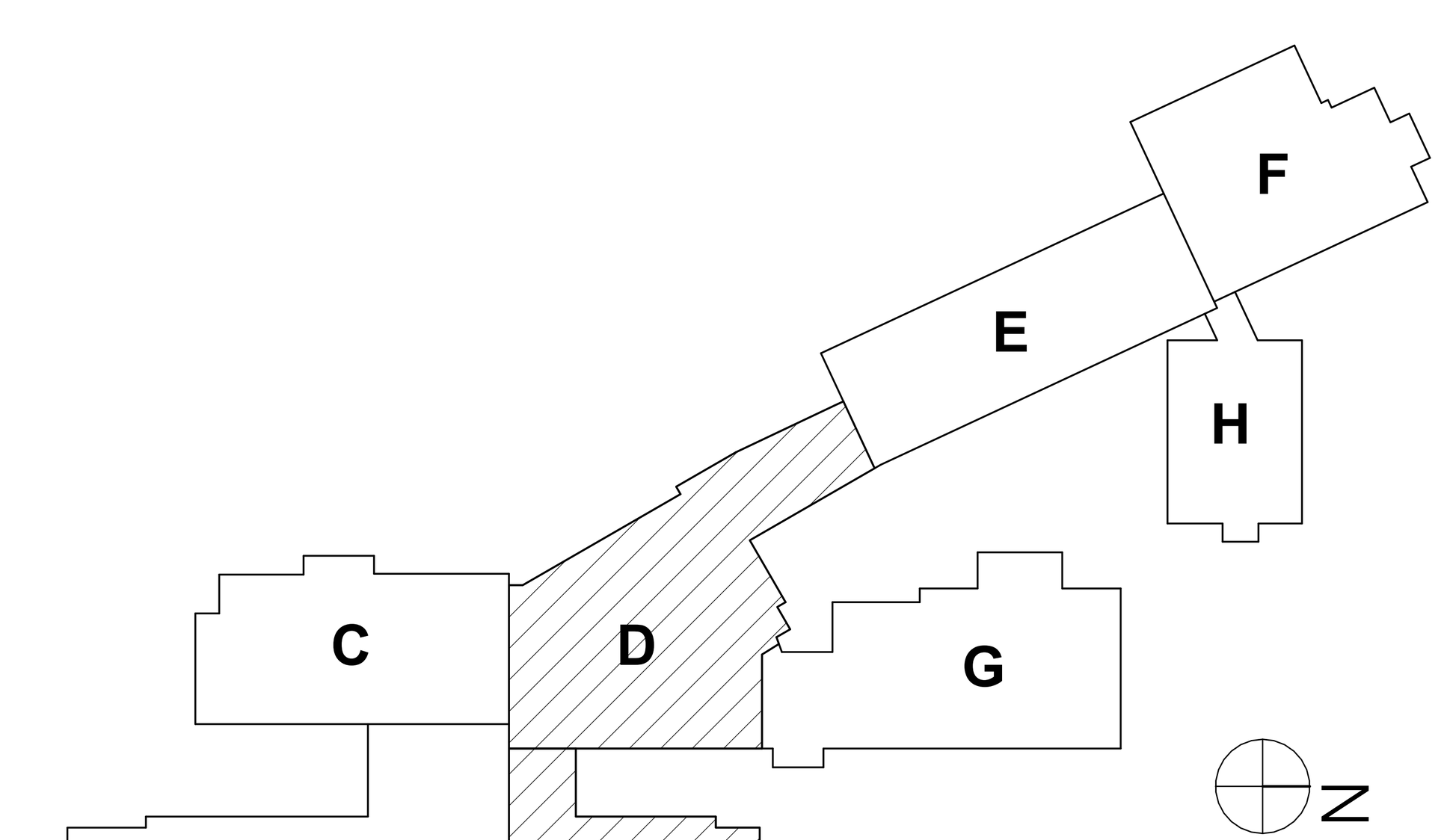


KEY PLAN

BASEMENT FLOOR POWER PLAN - AREA D

2025 CAPITAL PROJECT
ALFRED-ALMOND CSD
6795 ROUTE 21, ALMOND, NY 14804

SED# MC: 02-01-01-04-0-001-037

MC-E1.1

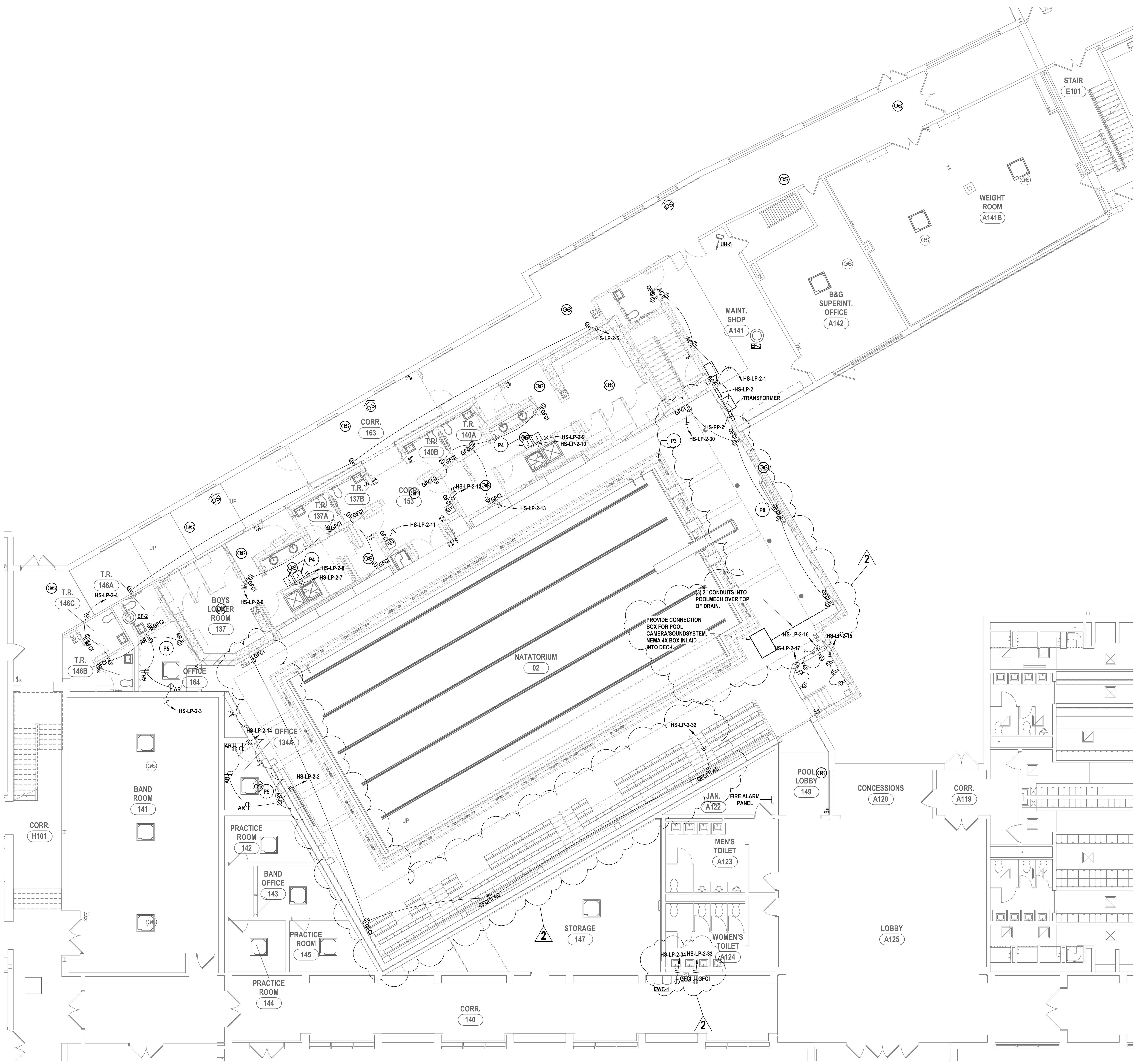
PROJECT NO: 2028-059

GENERAL NOTES - ELECTRICAL

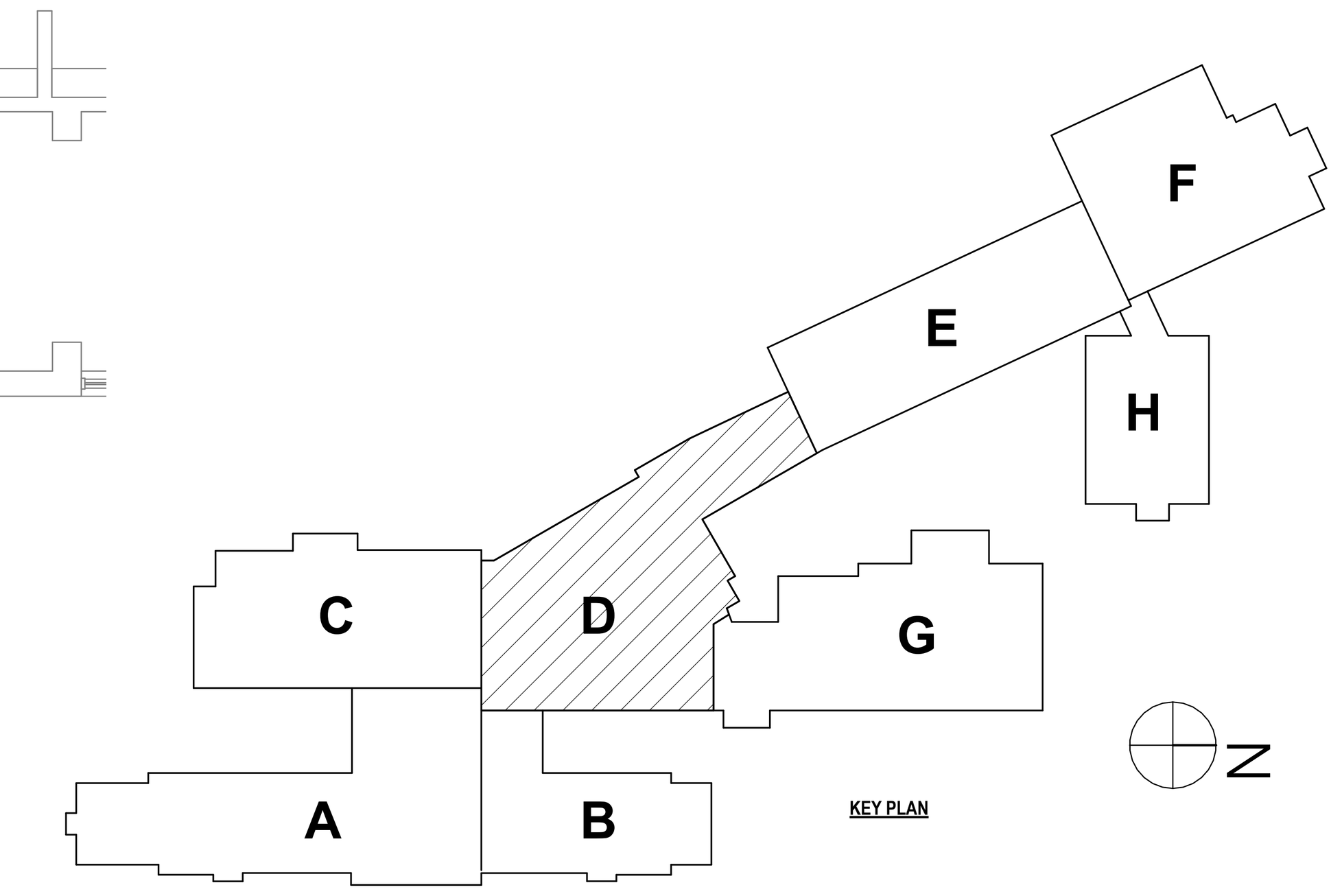
REFER TO E0.1

CONSTRUCTION NOTES - POWER

- P1 PROVIDE A DEDICATED 20A, 1P BREAKER IN EXISTING PANEL USING EXISTING CIRCUIT. CIRCUIT TO PANEL USING 2-#12, 1-#12G, IN 3/4"C.
- P2 MODIFY/EXTEND EXISTING CIRCUITRY TO SERVE RELOCATED MECHANICAL UNIT IN THIS LOCATION ON ROOF. COORDINATE FINAL LOCATION WITH OTHERS PRIOR TO STARTING WORK.
- P3 PROVIDE EQUIPOTENTIAL BONDING RING AROUND POOL TO MEET NEC 680.26 REQUIREMENTS. BOND ALL CONDUCTIVE POOL SHELLS, METALLIC COMPONENTS, METAL FITTINGS, ELECTRICAL EQUIPMENT, FIXED METAL PARTS, COORDINATE ALL LOCATIONS WITH OTHER TRADES. MINIMUM #8AWG BARE COPPER RING TO BE USED TO CONNECT ALL COMPONENTS IN A RING AROUND POOL.
- P4 PROVIDE A DEDICATED 20A, 1P BREAKER TO NEAREST PANEL FOR EACH HAIR DRYER. CIRCUIT TO PANEL USING 2-#12, 1-#12G, IN 3/4"C.
- P5 PROVIDE SPLIT CONTROLLED RECEPTACLES IN THIS LOCATION. CONTROLED RECEPTACLES ARE TO BE MARKED CONTROLLED AND CONTROLLED BY OCCUPANCY SENSOR. REFER TO DRAWING MC-E3.1 FOR FURTHER INFORMATION.
- P6 RELOCATION OF PANEL LP-6 LOCATION. FINAL LOCATION TO BE DETERMINED IN THE FIELD BASED ON OWNER PREFERED LOCATION WITHIN EXISTING SPACE.
- P7 REFER TO TL SERIES OF DRAWINGS FOR SCOPE RELATED TO AUDITORIUM. REFER TO TL-4.1 FOR BREAKDOWN OF SCOPE BETWEEN TC AND EC MATRIX.
- P8 PROVIDE POWER NEW SCOREBOARD FOR POOL IN THIS LOCATION. COORDINATE MOUNTING OF SCOREBOARD WITH OTHER TRADES. PROVIDE (3 SETS) 2#10, 1#10G, 3/4"C FROM PANEL HS-LP-2.



1 FIRST FLOOR POWER PLAN - AREA D
1/8" = 1'-0"



KEY PLAN

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FIRST FLOOR POWER PLAN - AREA D

2025 CAPITAL PROJECT
ALFRED-ALMOND CSD
6795 ROUTE 21, ALMOND, NY 14804

SED# MC: 02-01-01-04-0-001-037

MC-E1.3

PROJECT NO: 2028-059

GENERAL NOTES - ELECTRICAL

REFER TO E0.1

CONSTRUCTION NOTES - POWER

P1 PROVIDE A DEDICATED 20A, 1P BREAKER IN EXISTING PANEL USING EXISTING CIRCUIT. CIRCUIT TO PANEL USING 2-#12, 1-#12G, IN 3/4"C.

P2 MODIFY/EXTEND EXISTING CIRCUITRY TO SERVE RELOCATED MECHANICAL UNIT IN THIS LOCATION ON ROOF. COORDINATE FINAL LOCATION WITH OTHERS PRIOR TO STARTING WORK.

P3 PROVIDE EQUIPOTENTIAL BONDING RING AROUND POOL TO MEET NEC 680.26 REQUIREMENTS. BOND ALL CONDUCTIVE POOL SHELLS, METALLIC COMPONENTS, METAL FITTINGS, ELECTRICAL EQUIPMENT, FIXED METAL PARTS, COORDINATE ALL LOCATIONS WITH OTHER TRADES. MINIMUM #6AWG BARE COPPER RING TO BE USED TO CONNECT ALL COMPONENTS IN A RING AROUND POOL.

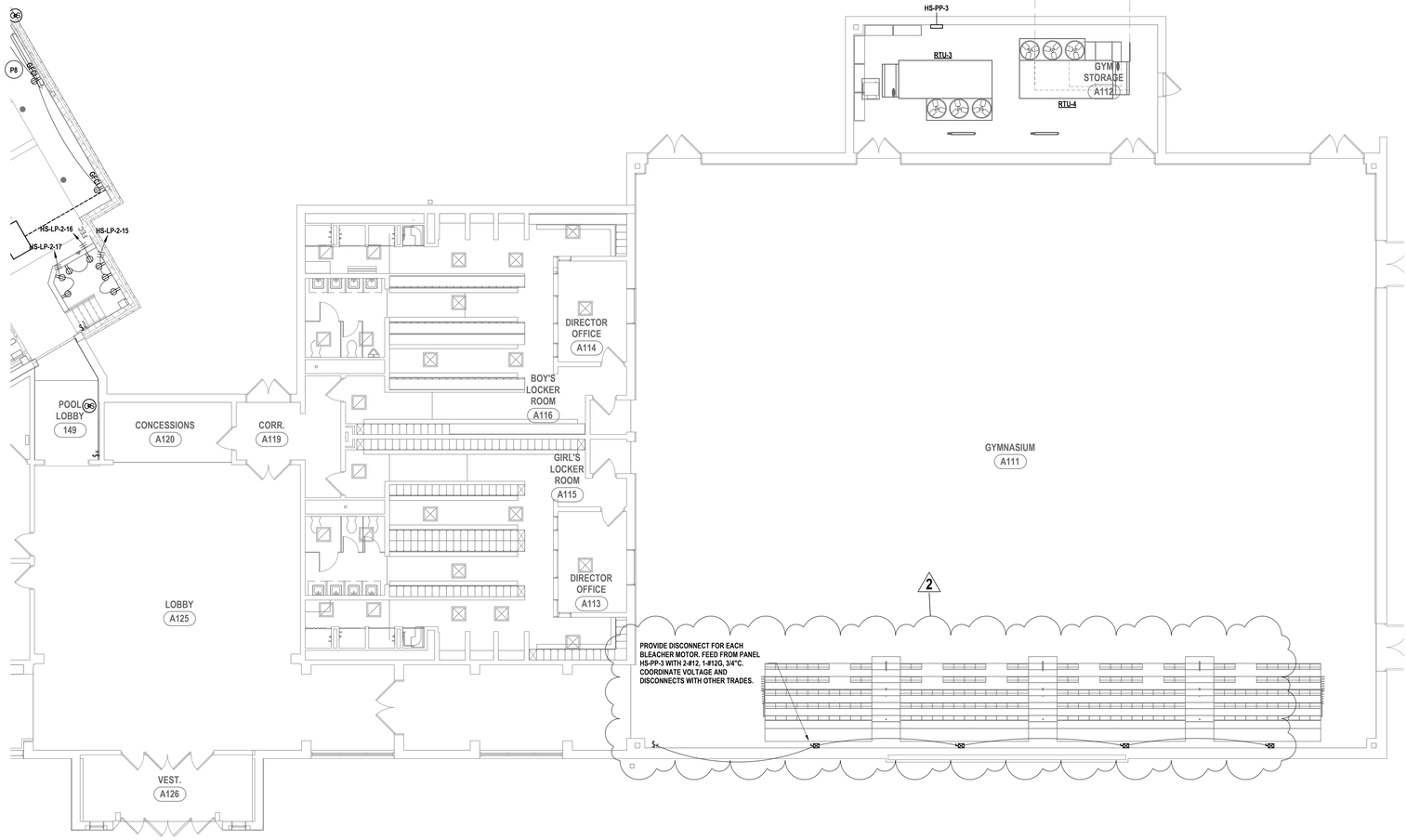
P4 PROVIDE A DEDICATED 20A, 1P BREAKER TO NEAREST PANEL FOR EACH HAIR DRYER. CIRCUIT TO PANEL USING 2-#12, 1-#12G, IN 3/4"C.

P5 PROVIDE SPLIT CONTROLLED RECEPTACLES IN THIS LOCATION. CONTROLED RECEPTACLES ARE TO BE MARKED CONTROLLED AND CONTROLLED BY OCCUPANCY SENSOR. REFER TO DRAWING MC-E3.1 FOR FURTHER INFORMATION.

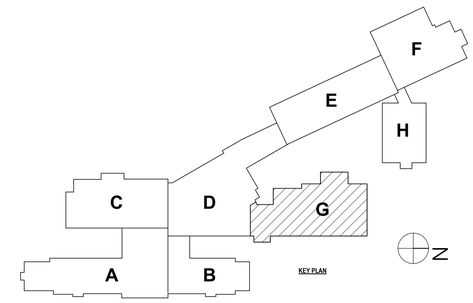
P6 RELOCATION OF PANEL LP-5 LOCATION. FINAL LOCATION TO BE DETERMINED IN THE FIELD BASED ON OWNER PREFERED LOCATION WITHIN EXISTING SPACE.

P7 REFER TO TL SERIES OF DRAWINGS FOR SCOPE RELATED TO AUDITORIUM. REFER TO TL-4.1 FOR BREAKDOWN OF SCOPE BETWEEN TC AND EC MATRIX.

P8 PROVIDE POWER NEW SCOREBOARD FOR POOL IN THIS LOCATION. COORDINATE MOUNTING OF SCOREBOARD WITH OTHER TRADES. PROVIDE (3 SETS) 2#10, 1#10G, 3/4"C FROM PANEL HS-LP-2.



1 FIRST FLOOR POWER PLAN - AREA G
1/8" = 1'-0"



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FIRST FLOOR POWER PLAN - AREA G

2025 CAPITAL PROJECT
ALFRED-ALMOND CSD
6795 ROUTE 21, ALMOND, NY 14804

SED# MC: 02-01-01-04-0-001-037

MC-E1.6

PROJECT NO: 2028-059

GENERAL NOTES - ELECTRICAL

REFER TO E0.1

CONSTRUCTION NOTES -LIGHTING & FIRE ALARM

L1 RE-INSTALL EXISTING LIGHTING AND FIRE ALARM DEVICES BACK INTO EXISTING LOCATIONS. PROVIDE EXTENSION RING TO MATCH NEW TILE DEPTH.

L2 PROVIDE QUANTITIES AND LOCATIONS OF LIGHTING FIXTURES AND LIGHTING CONTROL DEVICES AS SHOWN. RECONNECT NEW LIGHT FIXTURES TO EXISTING HOMERUN CIRCUIT.

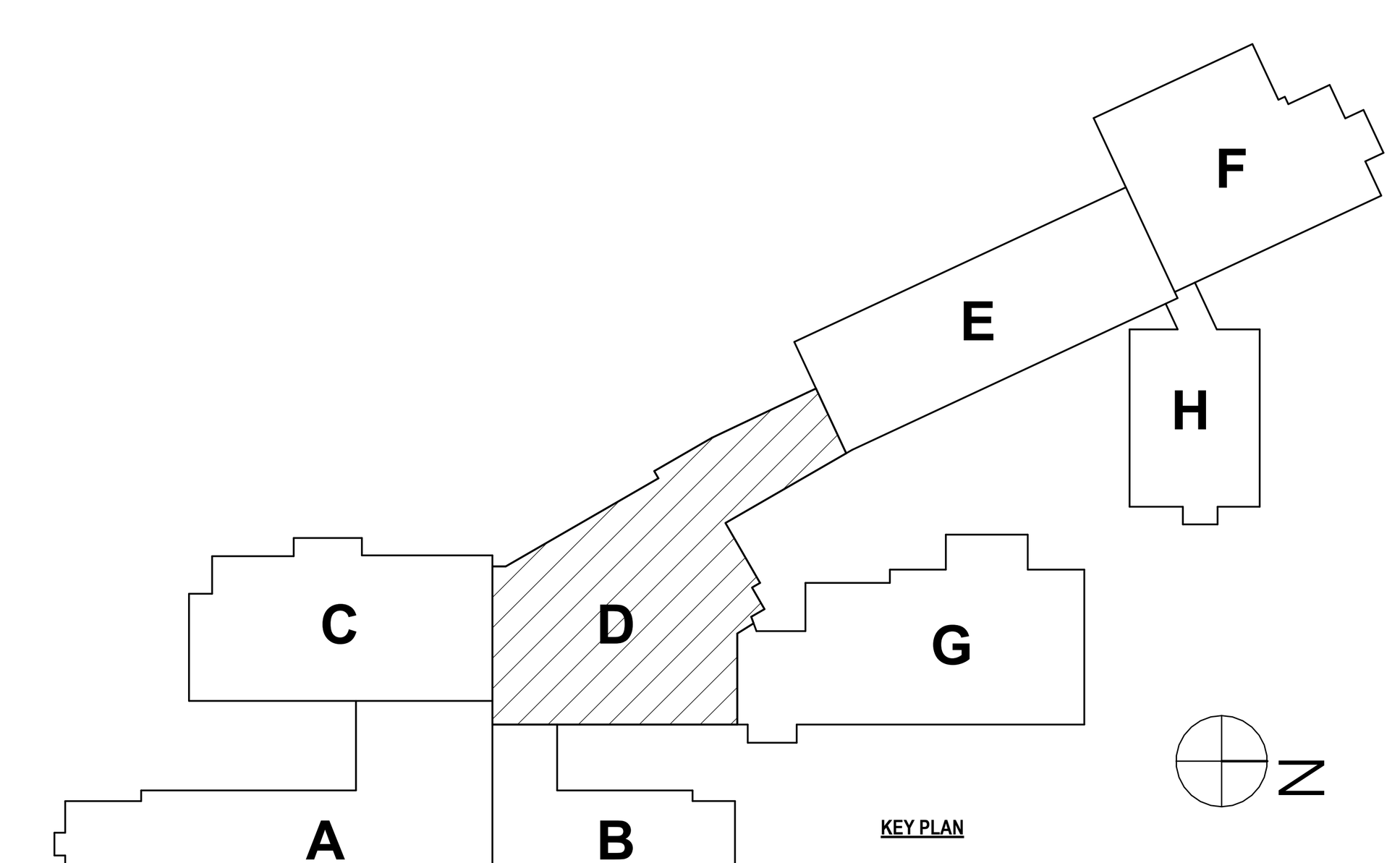
L3 PROVIDE LIGHTING FIXTURES AND LIGHTING CONTROL DEVICES IN QUANTITIES SHOWN ON LIGHTING PLAN. RECONNECT NEW LIGHT FIXTURES TO EXISTING HOMERUN CIRCUIT. PROVIDE DAYLIGHT PHOTOCELL FOR CONTROL OF FIXTURES WITHIN SPACE. COORDINATE EXACT PHOTOCELL LOCATION WITH MANUFACTURER'S RECOMMENDATIONS AND FIELD CONDITIONS. PHOTOCELL OPERATION TO TURN ON LIGHTS IN NIGHTTIME/LOW LIGHT CONDITION AND DIM/TURN LIGHTS OFF IN DAYTIME/HIGH LIGHT CONDITION.

L4 PROVIDE LIGHTING FIXTURE TYPE "WP" IN QUANTITIES SHOWN ON LIGHTING PLAN. PROVIDE INTEGRAL 7-PIN DALYLIGHT PHOTOCELL FOR CONTROL OF EXTERIOR MOUNTED FIXTURE. EXTERIOR PHOTOCELL TO BE SUITABLE FOR OUTDOOR ENVIRONMENTS AND TO BE MOUNTED TO BUILDING FACADE. PHTOCELL OPERATION TO TURN ON LIGHTS IN NIGHTTIME/LOW LIGHT CONDITION AND TURN LIGHTS OFF IN DAYTIME/HIGH LIGHT CONDITION. PROVIDE ALSO QTY (1X) EXTERIOR RATED OCCUPANCY SENSOR DEVICES AS SHOWN ON LIGHTING PLAN TO CONTROL EXTERIOR MOUNTED LIGHT FIXTURES. OCCUPANCY SENSORS TO AUTOMATICALLY REDUCE LIGHT OUTPUT OF EXTERIOR LIGHT FIXTURES TO 50% OF MAXIMUM LIGHT OUTPUT AFTER NO MORE THAN 15 MINUTES OF SENSED VACANCY.

L5 BY ALTERNATE #2. PROVIDE (6) NEW ON/OFF SWITCHES TO CONTROL LIGHTS. CONTRACTOR TO INVESTIAGE EXISTING LIGHTING PATHWAYS FOR LIGHTING IN LIBRARY. INTENT IS IF EXISTING PATHWAY ARE VIABLE TO PULL THROUGH NEW 2#12, 1#12G WIRE THROUGH EXISTING PATHWAY TO RE-WIRE EXISTING PENDANT LIGHTING IN THE SPACE. IF THE FIRST OPTION IS NOT VIABLE CONTRACTOR TO VERIFY EXISTING WOODEN BEAMING AT THE CEILING FOR HOLLOWNESS TO ALLOW NEW PATHWAY TO BE CREATED TO EXISTING PENDANT LIGHTING TO WIRE WITH 2#12, 1#12G. IF THE FIRST AND SECOND OPTION ARE NOT AVAILABLE FOR USE. CONTRACTOR TO PROVIDE SURFACE MOUNTED CONDUIT AND PAINT TO MATCH EXISTING WOOD BEAMS AND HIDE SURFACE CONDUIT BEHIND BEAMS, THIS EFFORT TO BE COORDINATED WITH ARCHITECT ONSITE IF THIS IS THE ONLY OPTION TO RE-WIRE LIGHTING.

STORAGE A141A
T.R. A141A
MAINT. SHOP A141
B&G SUPERINT. OFFICE A142
GIRLS LOCKER ROOM 140
STAIR 2A
T.R. 140A
T.R. 140B
CORR. 163
CORR. 153
T.R. 137B
T.R. 137A
BOYS LOCKER ROOM 137
T.R. 146A
T.R. 146C
OFFICE 164
T.R. 146B
NATATORIUM 02
BAND ROOM 141
CORR. H101
OFFICE 134A
PRACTICE ROOM 142
BAND OFFICE 143
PRACTICE ROOM 144
PRACTICE ROOM 145
FIRE ALARM PANEL
JAN. A122
MEN'S TOILET A123
WOMEN'S TOILET A124
STORAGE 147
POOL LOBBY 149
CONCESSIONS A120
LOBBY A125
CORR. 140
HS-PP-2
PROVIDE NEW 5KW 90 MIN INVERTER FOR POOL AREA LIGHTING EM/NL. ALL EM/NL IN AREA TO BE FED OFF THIS INVERTER. EM TO BE DONE WITH TRANSFORMER DEVICE FROM THIS INVERTER AS THE EM CIRCUIT.
CIRCUIT SERVING MAIN LIGHTING
CIRCUIT SERVING MAIN LIGHTING
CIRCUIT SERVING MAIN LIGHTING
CIRCUIT SERVING MAIN LIGHTING

1 FIRST FLOOR LIGHTING & FIRE ALARM PLAN - AREA D
1/8" = 1'-0"



KEY PLAN

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FIRST FLOOR LIGHTING & FIRE ALARM PLAN - AREA D

2025 CAPITAL PROJECT
ALFRED-ALMOND CSD
6795 ROUTE 21, ALMOND, NY 14804

SED# MC: 02-01-01-04-0-001-037

MC-E2.2

PROJECT NO: 2028-059