ADDENDUM NO. 1

NORTHERN SHORES ELEMENTARY SCHOOL ADDITION CONSTRUCTION PROJECT
IFB #1889-B

SUFFOLK PUBLIC SCHOOLS
VIRGINIA DEPARTMENT OF EDUCATION NO. 127-32-00-101
RRMM Project #23238-00

July 18, 2025
Architect of Record:
RRMM, Architects, PC
1317 Executive Boulevard
Suite 200
Chesapeake, VA 23320
Phone: 757-213-6374

This Addendum forms a part of the Construction Documents and modifies the Project Manual dated June 24, 2025, and Construction Drawings dated June 24, 2025.

The information in this Addendum supersedes any contradictory information or omission set forth in the Contract Documents.

Where any component of the Contract Documents is modified or deleted by this Addendum, the unaltered components of that Section, Article, or Drawing shall remain in effect.

Acknowledge receipt of this Addendum by inserting its number and date in the Bid Form. Failure to do so may subject Bidder to disqualification.

Bid Addendum No. 1 consists of thirty-one (31) pages of Addendum No. 1 narrative; sixty-nine (69) pages of six (6) revised or added specification sections, sixty-nine (69) revised sheets and for **a total of one-hundred sixty-nine (169) pages.**

CLARIFICATIONS

1.1 Unless otherwise changed by Addendum, all bids shall be received in the Purchasing Office, on or before 2:00 PM., Thursday, July 24, 2025.

1.2 All screenshot images included in this Addendum are not to scale.

1.3 With regard to Drawings and Specifications/Project Manual, **REVISE** all references to "ADD ALT 1" and "ADD ALT 4" to read "ADDITIVE ALTERNATE NO. 1" and ADDITIVE ALTERNATE NO. 4" respectively.

1.4 Regarding the Civil Drawings, "CONTRACT #1" is referring to Work provided under a separate Contract and is currently under construction. The term "CONTRACT #2" is referring to Work to be provided in the current IFB (Bid).

1.5 Regarding the Civil Drawings, a total of nine (9) Portable Classroom Units and associated walkways, landings, stairs, ramps and paving as noted (and as revised by this Addendum) as part of Contract #2 (current IFB) will be required to be completely removed from the site at the end of the project. Refer to Demolition Key Notes 24, 25 and 26 on **REVISED** sheet CD102 for information.

1.6 Regarding building permit costs and fees for this project, refer to General Conditions of the Contract AIA A201-2007, paragraph 3.7.1.

1.7 Regarding prevailing wages, none are required for this project.

1.8 Regarding specified Sargent Door Hardware core; it utilizes a conventional, fixed core system.

1.9 Regarding confirmation that the BDA system is to cover the entire building, both new and existing sections. As noted on sheet E-003, General Work Note #19 states in part, "PROVIDE A COMPLETE RADIATING CABLE SYSTEM CONSISTING OF COAXIAL CABLE OR EQUIVALENT ABOVE ACCESSIBLE CEILINGS (PREFERABLY CORRIDORS) IN THE EXISTING BUILDING AND THE NEW ADDITION…"

1.10 In the Civil Drawings, regarding access road marked with CRS: Refer to DEQ C-SCM02 Specification in current version of VASWMH.

1.11 In the Civil Drawings regarding grass pave base layer: Base Stone Layer: 8" 21A Stone crushed, clean, washed stone graded from 0.25-1.5" with void space after compaction >30% (AASHTO #5). Infill Mix: Sandy Loam Topsoil and Hydroseed.

1.12 Regarding employee screening (drug and background screening for Contractor personnel); refer to specification section Sample Agreement, page SA-5, Article 15 (Drug Free Workplace) and Article 16 (Contractor/Employee Background Certification) for information.

1.13 Regarding Subcontractor Parking; no fees will be required to park on-site. Refer also to specification 011000-3.4.E for additional information.

1.14 In the Structural Drawings regarding vertical reinforcing spacing on the exterior walls of the two-story existing building (Sheet S-103). Vertical reinforcement in the EXISTING CMU 2-story is unknown and would need to be field verified. The reinforcement in the existing exterior wall is estimated to be #5 at 48" o/c. Vertical reinforcement is not specified to be added to existing CMU walls. Vertical wall reinforcement for new walls is specified on sheets S-103, S104, S902 and in various sections within the documents.

1.15 In the Structural Drawings regarding Note B on plan S104; is it meant for all exterior walls for the new addition or is this note only for that wall that is called out as note B? No, wall reinforcement mark "B" is only for the wall that has the mark "B" indicated (from jog in wall on the left to the end of the wall at the existing building on the right end). All walls without a specific mark are reinforced per mark "A".

1.16 Regarding the Access Control System tying into an existing system? The Contractor is only responsible for rough-in conduit, outlet boxes and the two-pole door contacts. All other Access Control System components and wiring will be provided by the Owner's Access Control System vendor.

1.17 Regarding the Intrusion Detection System tying into an existing system? The Contractor is only responsible for rough-in conduit, outlet boxes and the two-pole door contacts. All other Intrusion Detection System components and wiring will be provided by the Owner's Intrusion Detection System vendor.

1.18 Regarding the BDA System tying into an existing system? The BDA System is completely new (currently does not existing in the existing building).

1.19 Regarding the existing Intercom System, the existing Intercom System is a Valcom Onyx System.

1.20 Regarding Drawing E-103 OS shown but not on legend. The switch with subscript "OS" is **ADDED** to the Electrical Legend on E-001 included in this Addendum.

1.21 Regarding Drawing E-201 Room A118 receptacle with subscript W not shown on legend. The "W" subscript should not appear at those symbols.

1.22 Regarding Drawing E-201 Rooms A118 & A120 receptacle with subscript G, W not shown on legend. The subscript "G" is described in the Electrical Legend on E-001. The "W" subscript should not appear at those symbols.

1.23 Regarding Drawing E202 Room B101 SRL not shown on legend. The switch with subscript "RL" is a raise/lower switch for the projection screen. The switch will be furnished by the projection screen provider.

1.24 Regarding Drawings E204 & E903 (Freezer) T/C not shown on legend. The Timeclock for the Freezer condenser will be furnished by the food service equipment provider.

1.25 Regarding Drawing E401 IDF not shown on legend. Refer to note 5 on E-501 as REVISED by this Addendum for IDF requirements.

CHANGES PERTAINING TO THE PROJECT MANUAL AND SPECIFICATIONS (revision mark *(Addendum No. 1)*

1.26 SECTION 011000 – SUMMARY:

- Page 4, subparagraph 1.9.C; **ADD** new subparagraph 13 to read as follows: "13. CCTV System.".
- Page 4, subparagraph 1.9.C; **ADD** new subparagraph 14 to read as follows:
- "14. Classroom and Teacher Workroom Telephones.".

1.27 SECTION 012200 – UNIT PRICES:

- Page 2, Schedule of Unit Prices, Unit Price Item 3: Placement and compaction of VDOT #57 stone for utility trenches, subparagraph 3.C.3; **REVISE** to read as follows**:**

  "3. Bid Quantity: 500 tons.
  4. Unit Price: $70.00/Ton."

1.28 SECTION 042000 – UNIT MASONRY:

- Page 8, subparagraph 2.6.B.7.a.2.a; **REPLACE** the word "Closure" with the word "Utility".
- Page 9, subparagraph 2.7.D.2.a; **REVISE** to read as follows**:** "a. Workrite – WR-2105, Brick and Split-Face Decorative CMU".

1.29 SECTION 055000 - METAL FABRICATIONS:

- **DELETE** section in its entirety and **REVISE** per attached revised section.

1.30 SECTION 087100 – DOOR HARDWARE:

- Pages 24, 25 and 27, Set: 15.0 and Set: 26.0. **DELETE** section in its entirety and **REPLACE** per attached revised section.

1.31 SECTION 092900 - GYPSUM BOARD:

- **DELETE** section in its entirety and **REVISE** per attached revised section.

1.32 SECTION 095426 - SUSPENDED WOOD LINEAR CEILINGS:

- Page 5, Sub-paragraph 2.2.A.2; **REVISE** "Solid Maple" to read "Solid Cherry".

1.33 SECTION 099113 FL - EXTERIOR PAINTING

- **DELETE** section in its entirety and **REVISE** per attached revised section.

1.34 SECTION 102800 - TOILET, BATH, AND LAUNDRY ACCESSORIES

- **DELETE** section in its entirety and **REVISE** per attached revised section.

1.35 SECTION 105300 - PREFABRICATED ALUMINUM CANOPIES

- **DELETE** section in its entirety and **REVISE** per attached revised section.

1.36 SECTION 114000 – FOODSERVICE EQUIPMENT

- Page 20, ITEM NO. 49 – TRAFFIC CONTROL RAIL, REVISE to read **"**Traffic Rails shall be Custom Fabricated sized and shaped as indicated on Drawing QF901, constructed of 16-gauge, 1-5/8" diameter stainless steel tubing with 6" radiused top rail to form down legs, an intermediate vertical support leg and an intermediate horizontal rail coped and welded at 18" AFF. Top rail shall be 36" AFF. Provide stainless steel escutcheon trims at floor. All surfaces shall be ground and polished to 180 grit finish. Traffic rails shall be core bored and mounted into floor**".**

1.37 SECTION 122413 – ROLLER WINDOW SHADES

- Page 3, subparagraph 2.2.E, **DELETE** this subparagraph in its entirety.
- Page 4, subparagraph 2.2.G.2, at the end of sentence **ADD** the following: "Exposed headbox is not required, unless roller shade is visible from the second level. Provide end caps and front fascia for all roller shades."
- Page 4, subparagraph 2.2.G.4, **DELETE** this subparagraph in its entirety.

1.38 SECTION 271500 – DATA COMMUNICATION SYSTEMS CABLING:

- Page 1, sub-paragraph 1.2.B, **REVISE** to read "The Data/Communication Systems Cabling shall provide **Category 6A** UTP Data Cabling Infrastructure and a Fiber Backbone to **the existing** network operating system."

- Page 3, sub-paragraph 1.5.b, **REVISE** to read "The term "data/telephone/fax/modem port" shall refer to the location where all **CAT 6A** cables are connected. All data and/or data/telephone/fax/modem ports are to be fully activated with complete network accessibility without the need to alter any cable configurations anywhere on the network."
- Page 5, sub-paragraph 2.2.A.1, **REVISE** to read "Cabling shall be unshielded twisted pair (UTP) and shall meet EIA/TIA-568, requirements for Category **6A**. The following specifications shall apply:"
- Page 6, sub-paragraph C.1.a, **REVISE** to read "Connectors shall be pigtail **LC** types that are fusion spliced.
- Page 6, sub-paragraph D, **REVISE** to read "Fiber Optic Termination Box: Fiber optics cable termination box shall be 24 port SMP P/N WTC-24A (LIU) with **LC-type** connectors.
- Page 7, sub-paragraph G, **REVISE** to read "Data and Telephone Racks: Provide 36" x 19" floor-mounted, swing-out rack, **Chatsworth Products ZA11-A1200-E**, or equal.
- Page 7, sub-paragraph H, **DELETE** this paragraph in its entirety.

1.39 SECTION 275125 – IN-BUILDING BI-DIRECTIONAL AMPLIFIER SYSTEM

- **DELETE** this section in its entirety.

1.40 SECTION 275313 – GPS WIRELESS CLOCK SYSTEMS:

- **DELETE** this section in its entirety.

1.41 SECTION 282300 – CLOSED CIRCUIT TELEVISION SYSTEMS:

- **DELETE** this section in its entirety.

CHANGES PERTAINING TO THE DRAWINGS (revision mark 'A1')

1.42 SHEET CD102 –DEMOLITION & EROSION & SEDIMENT CONTROL PLAN:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.
    - **ADD** diversion dike. Additional temporary grades added for clarity.

1.43 SHEET CD104 – DEMOLITION & EROSION & SEDIMENT CONTROL PLAN:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.
    - **SHIFT** pavement and concrete removal.
    - **REVISE** Keynote 2 (REMOVE CURB/CURB AND GUTTER TO NEAREST JOINT) x1.
    - **REVISE** Keynote 7 (REMOVE CONCRETE SIDEWALK) x1.
    - **REVISE** Keynote 15 (REMOVE ASPHALT) x1.
    - **REVISE** Keynote 22 (ERADICATE PAVMENT MARKINGS. ALL MARKINGS TO BE REPLACED) x1.

1.44 SHEET CS102 – DIMENSIONAL SITE LAYOUT PLAN:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.
    - **DELETE** Keynote #29 in two locations on this sheet.

1.45 SHEET CS104 – DIMENSIONAL SITE LAYOUT PLAN:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.
    - **SHIFT** pavement patch.
    - **REVISE** Keynote 4 (CURB AND BUTTER) x2.
    - **REVISE** Keynote 5 (ASHPALT) x2.
    - **REVISE** Keynote 7 (PAVEMENT MARKINGS) x1.
    - **SHIFT** concrete sidewalk replacement.
    - **REVISE** Keynote 1 (CONCRETE SIDEWALK) x1.

1.46 SHEET CU101 – UTILITY PLAN:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.
    - **DELETE** Fire Hydrant.
    - **DELETE** Keynote 6 (8”x 6” TAPPING SLEEVE AND VALVE) callout from sheet.
    - **DELETE** Keynote 3 (FIRE HYDRANT ASSEMBLY) callout from sheet.

1.47 SHEET CU102 – UTILITY PLAN:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.
    - **ADD** Fire Hydrant.
    - **ADD** Keynote 6 (8”x 6” TAPPING SLEEVE AND VALVE) callout to sheet.
    - **ADD** Keynote 3 (FIRE HYDRANT ASSEMBLY) callout to sheet.

1.48 SHEET CU103 – UTILTIY PLAN:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.
    - **ADD** Fire Hydrant.
    - **ADD** Keynote 6 (8”x 6” TAPPING SLEEVE AND VALVE) callout to sheet.
    - **ADD** Keynote 3 (FIRE HYDRANT ASSEMBLY) callout to sheet.

1.49 SHEET CU104 – UTILTIY PLAN:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.
    - **REVISE** Fire Hydrant.
    - **REVISE** Keynote 6 (8”x6” TAPPING SLEEVE AND VALVE) callout on sheet.
    - **REVISE** Keynote 3 (FIRE HYDRANT ASSEMBLY) callout on sheet.

1.50 SHEET CD902 – DEMOLITION & EROSION & SEDIMENT CONTROL PLAN-ADD ALT NO. 1:

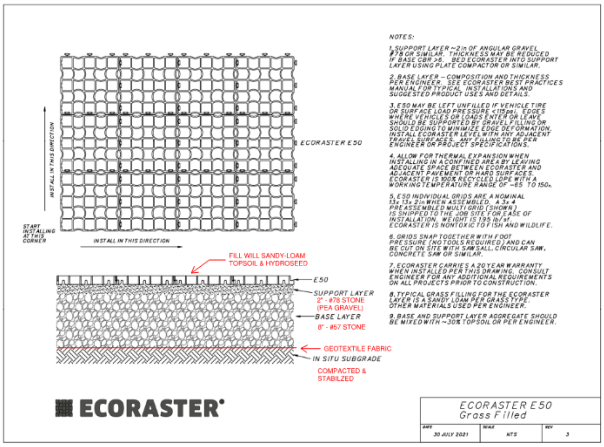
- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.
    - **ADD** diversion dike. Additional temporary grades added for clarity.

1.51 SHEET CU902 – UTILITY PLAN-ADD ALT NO. 1:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.
    - **ADD** Fire Hydrant.
    - **ADD** Keynote 6 (8”x6” TAPPING SLEEVE AND VALVE) callout to sheet.
    - **ADD** Keynote 3 (FIRE HYDRANT ASSEMBLY) callout to sheet.

1.52 SHEET C509 – DETAILS:

- **DELETE** detail “ECORASTER E50 GRASS FILLED” in its entirety and **REVISE** per revised image below.



1.53 SHEET LS101 - LIFE SAFETY PLAN:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.54 SHEET LS102 - LIFE SAFETY PLAN - BUILDING CODE DATA & ADDITIVE ALTERNATE NO.1:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.55 SHEET PH101 - PHASING PLAN GENERAL NOTES AND INFORMATION:

- Electrical Provisions – **REVISE** note 1 to read **“DUE TO PROJECT CONSTRUCTION SCHEDULE, THE CONTRACTOR SHALL COMMISSION THE ARC-FLASH STUDY AND SUBMIT TO THE ARCHITECT FOR REVIEW AS EARLY AS PRACTICAL FROM THE NOTICE TO PROCEED SO AS TO NOT DELAY ACQUISITION OF REQUIRED ELECTRICAL EQUIPMENT.”**

1.56 SHEET PH102 - FIRST FLOOR PLAN – PHASING

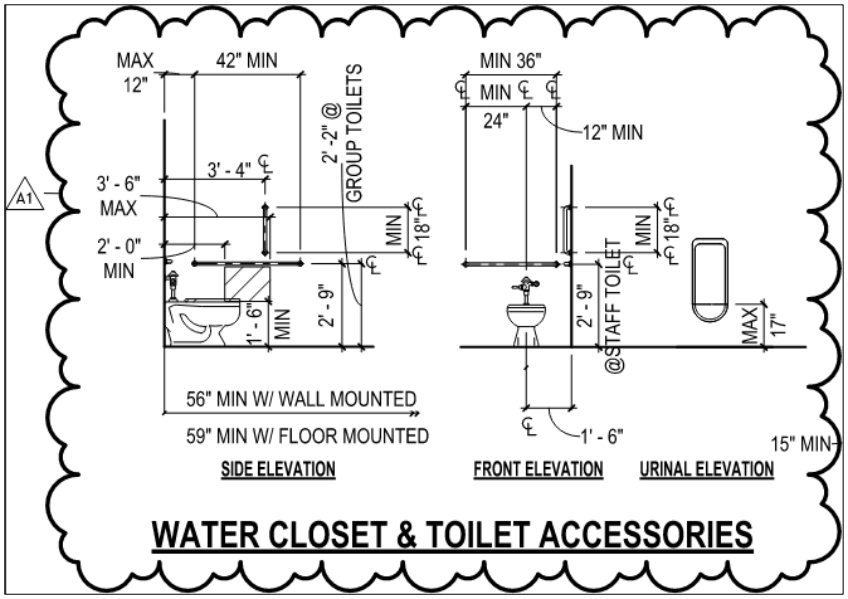
- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.
    - Overall First Floor Plan – **ADD** note regarding sitework for Additive Alternate No. 1 per attached revised sheet.

1.57 SHEET A-001 - ARCHITECTURAL GENERAL INFORMATION:

- Architectural Graphic Symbols – **DELETE** Graphic Symbol Curtain Wall Types.
- Abbreviations – **REVISE** SS Abbreviation to read **"SOLID SURFACE, STAINLESS STEEL".**

1.58 SHEET A-003 - CONTROL JOINT DETAILS:

- Typical Accessibility Guidelines – **REVISE** Water Closet & Toilet Accessories and per revised image below.

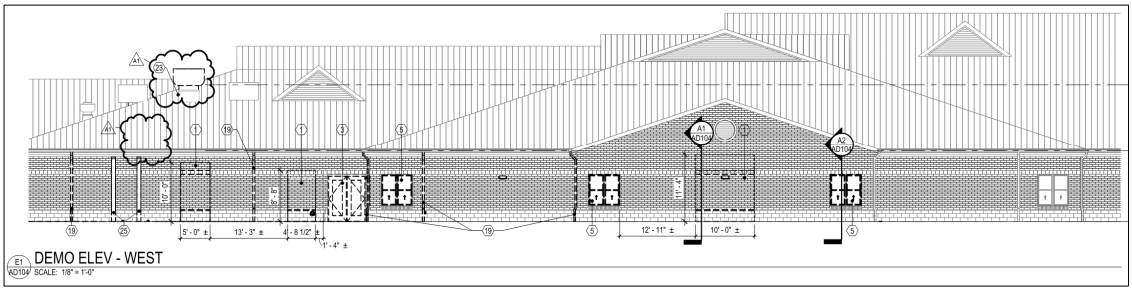


1.59 SHEET AD103 - DEMOLITION ROOF PLAN:

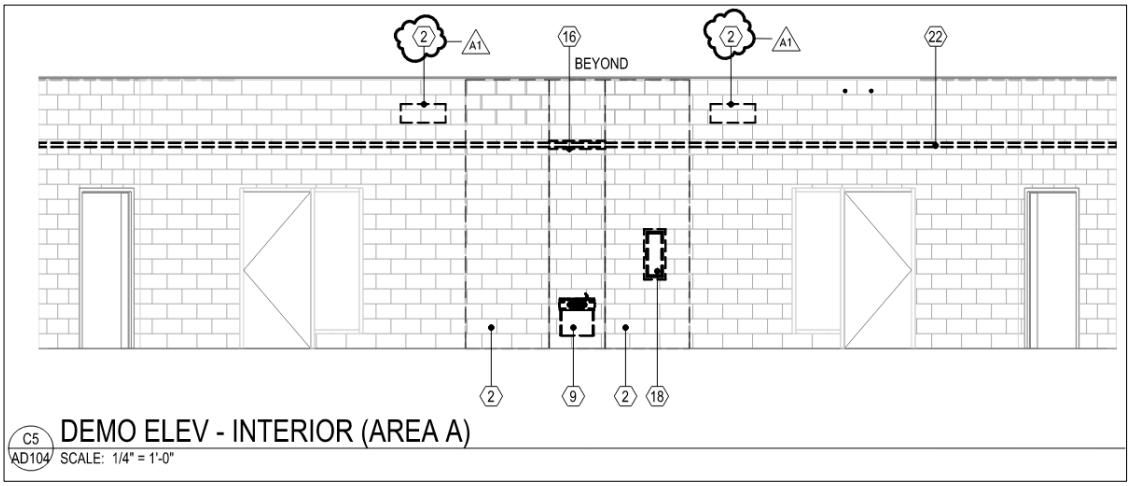
- Keynotes – Demo Plan – **REVISE** note 2 to read **"SAWCUT AND REMOVE MASONRY PARTITION SYSTEM TO EXTENTS SHOWN DASHED (INCLUDING DOOR, WINDOW AND FRAME, AND PME SYSTEMS WITHIN PARTITION IF APPLICABLE). LOCATE NEAREST MORTAR JT. COORDINATE W/ NEW WORK REQUIREMENTS. PATCH AND REPAIR ADJACENT WALLS AND FLOORS TO REMAIN. PREPARE EXISTING SURFACES FOR NEW WORK."**
- Keynotes – Demo Plan – **REVISE** note 22 to read **"REMOVE EXISTING CEILING TILE AND GRID SYSTEM COMPLETE AND REPLACE WITH NEW CEILING TILES AND GRID TO EXTENTS SHOWN (GREY TONE) TO ALLOW FOR OVERHEAD UTILITIES INSTALLATION. REFER TO NEW WORK CEILING PLAN."**

1.60 SHEET AD104 - DEMOLITION ELEVATIONS, SECTIONS AND DETAILS:

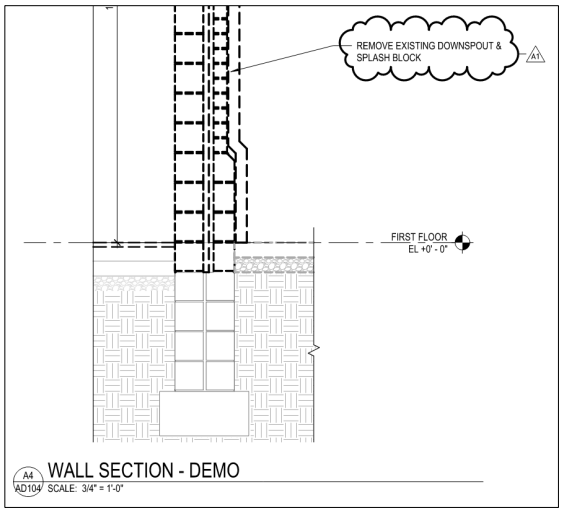
- Demo Elev – West (E1/AD104) – **DELETE** keynote 23 and **ADD** keynote 23 to Exhaust Hood per revised image below.



- Demo Elev – North (E5/AD104) – **DELETE** keynote 23.
- Demo Elev – Interior (Area A) (C5/AD104) – **ADD** keynote 2 per revised image below.



- Wall Section – Demo (A4/AD104) – **ADD** note to read **"REMOVE EXISTING DOWNSPOUT & SPLASH BLOCK"** per revised image below.

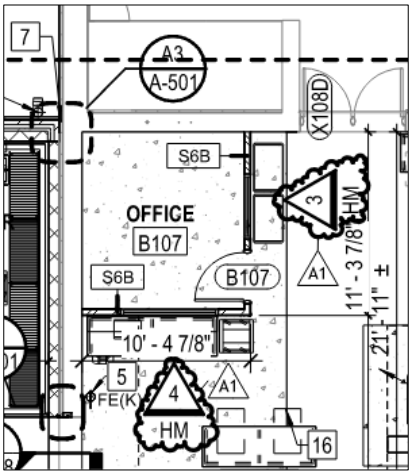


1.61 SHEET A-101 - FIRST FLOOR PLAN - AREA A:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.62 SHEET A-102 - FIRST FLOOR PLAN - AREA B

- First Floor Plan – Area B (Base Bid) – **ADD** HM frames per revised image below.



1.63 SHEET A-103 - SECOND FLOOR PLAN - AREA A

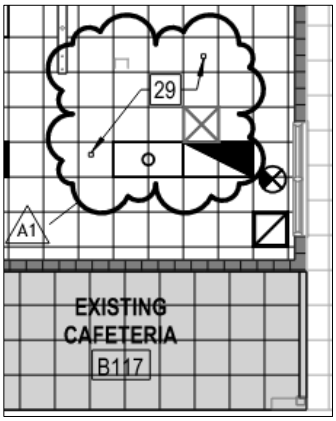
- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.64 SHEET A-104 - FIRST FLOOR REFLECTED CEILING PLAN - AREA A:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.65 SHEET A-105 - FIRST FLOOR REFLECTED CEILING PLAN - AREA B:

- First Floor RCP- Area B (Base Bid) – **REVISE** per revised image below.



1.66 SHEET A-106 - SECOND FLOOR REFLECTED CEILING PLAN - AREA A:

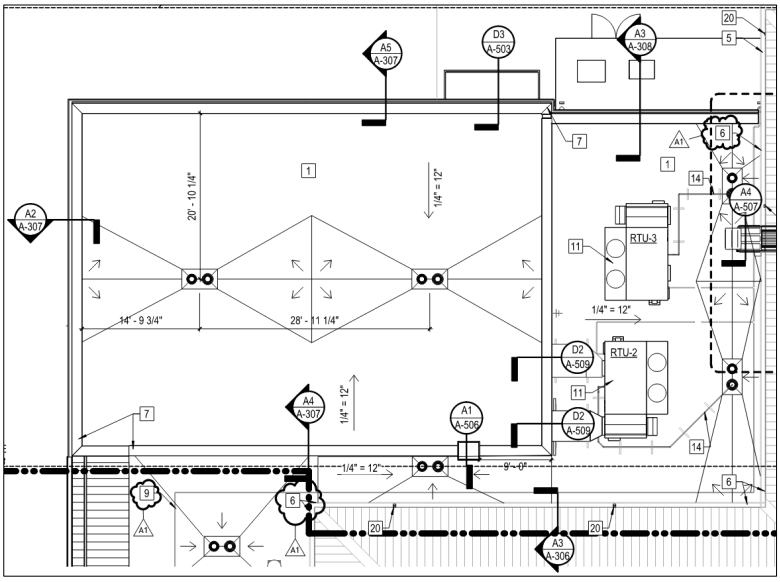
- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.67 SHEET A-108 - ROOF PLAN - AREA A:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

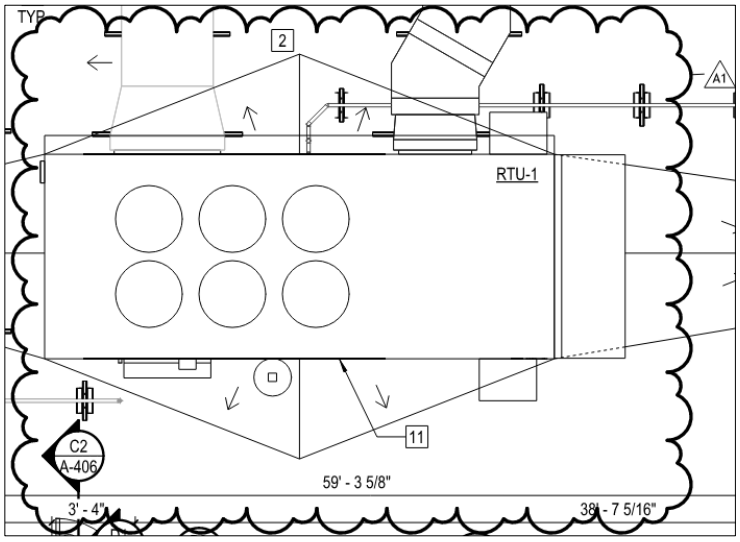
1.68 SHEET A-109 – ROOF PLAN - AREA B

- Roof Plan - Area B (Base Bid) – **ADD** keynotes per revised image below.

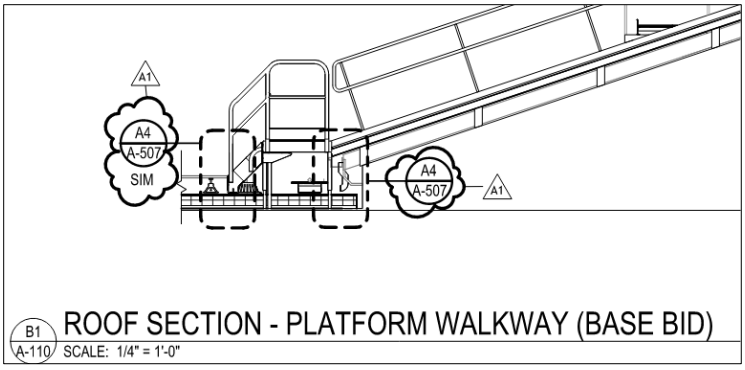


1.69 SHEET A-110 - ENLARGED ROOF PLANS, SECTIONS, DETAILS:

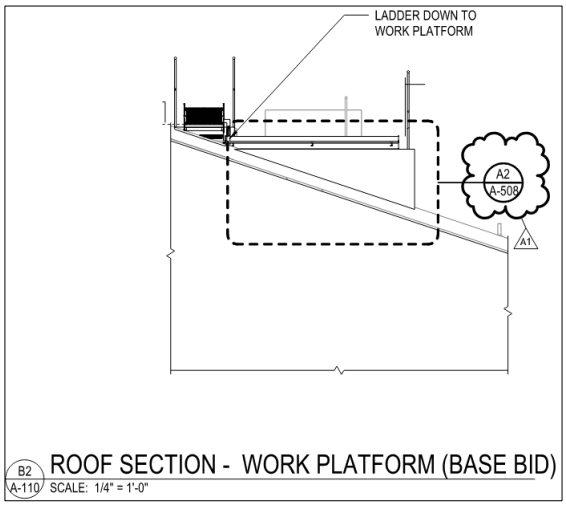
- Enlarged Plan – Roof (A1/A-110) - **REVISE** per revised image below.



- Roof Section – Platform Walkway (Base Bid) (B1/A-110) – **ADD** detail reference A4/A-507 per revised image below.



- Roof Section – Work Platform (Base Bid) (B2/A-110) – **ADD** detail reference A2/A-508 per revised image below.

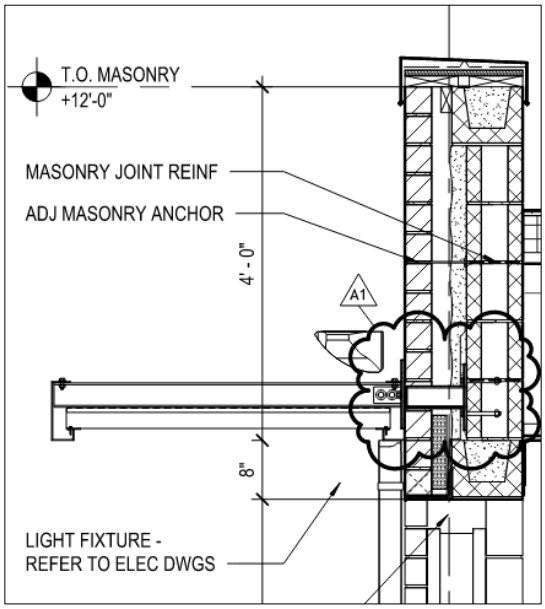


1.70 SHEET A-202 - EXTERIOR BUILDING ELEVATIONS:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

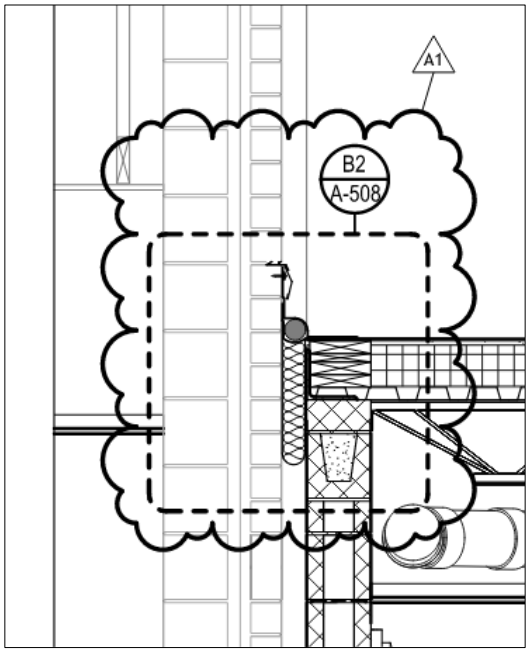
1.71 SHEET A-303 - WALL SECTIONS:

- Wall Section (A4/A-303) – **REVISE** Galv Steel plate and Steel Tube per revised image below.

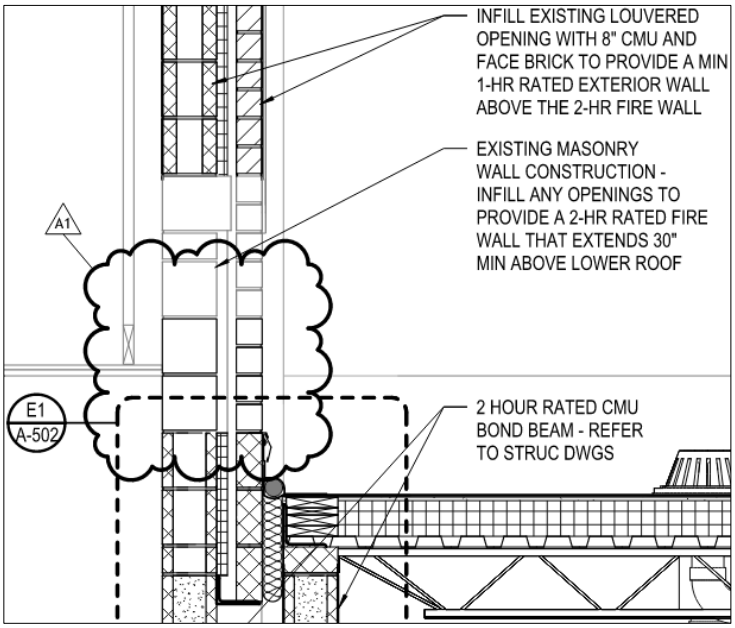


1.72 SHEET A-305 - WALL SECTIONS:

- Wall Section (A1/A-305) – **ADD** detail reference B2/A-508 per revised image below.

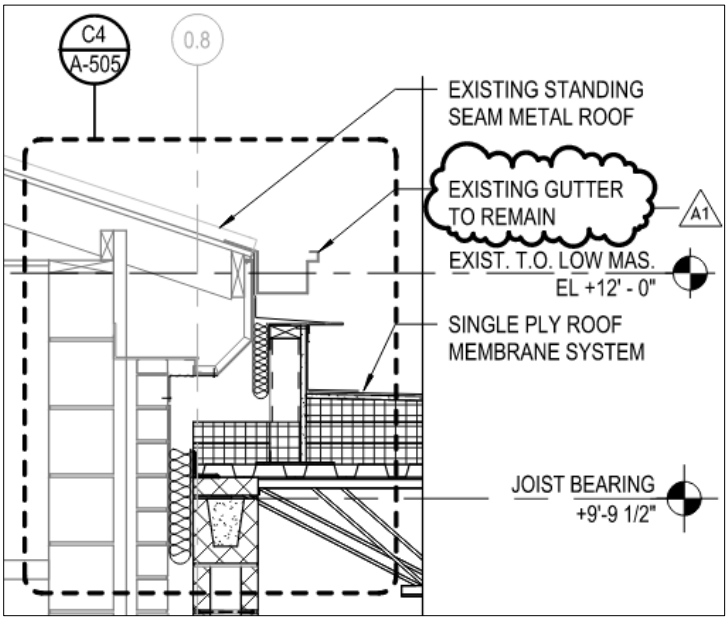


- Wall Section (A4/A-305) - **REVISE** for demolition and new infill at bond beam per revised image below.

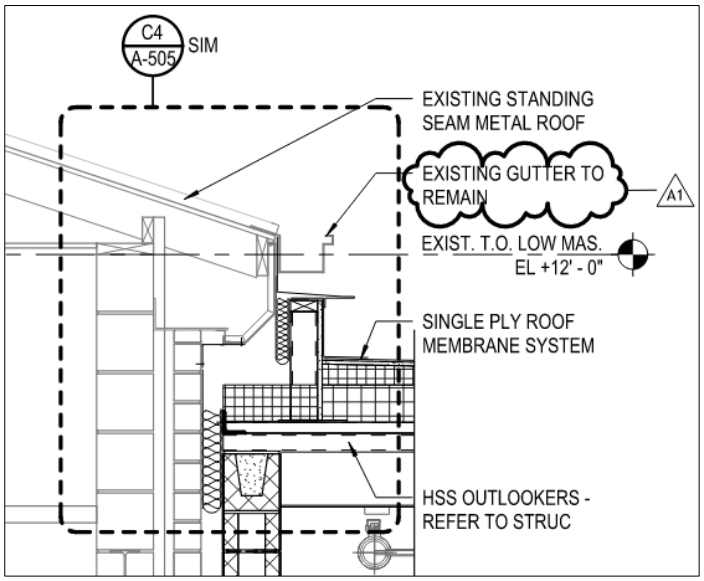


1.73 SHEET A-306 - WALL SECTIONS:

- Wall Section (A2/A-306) – REVISE note to read **"EXISTING GUTTER TO REMAIN"** per revised image below.

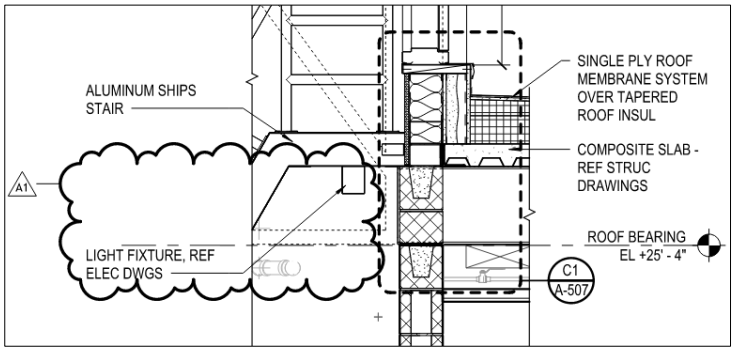


- Wall Section (A3/A-306) – REVISE note to read **"EXISTING GUTTER TO REMAIN"** per revised image below.



1.74 SHEET A-308 - WALL SECTIONS:

- Wall Section – Mech Well (D1/A-308) – **ADD** note to read **"LIGHT FIXTURE, REF ELEC DWGS"** per revised image below.



1.75 SHEET A-401 - ENLARGED TOILET PLANS AND INTERIOR ELEVATIONS:

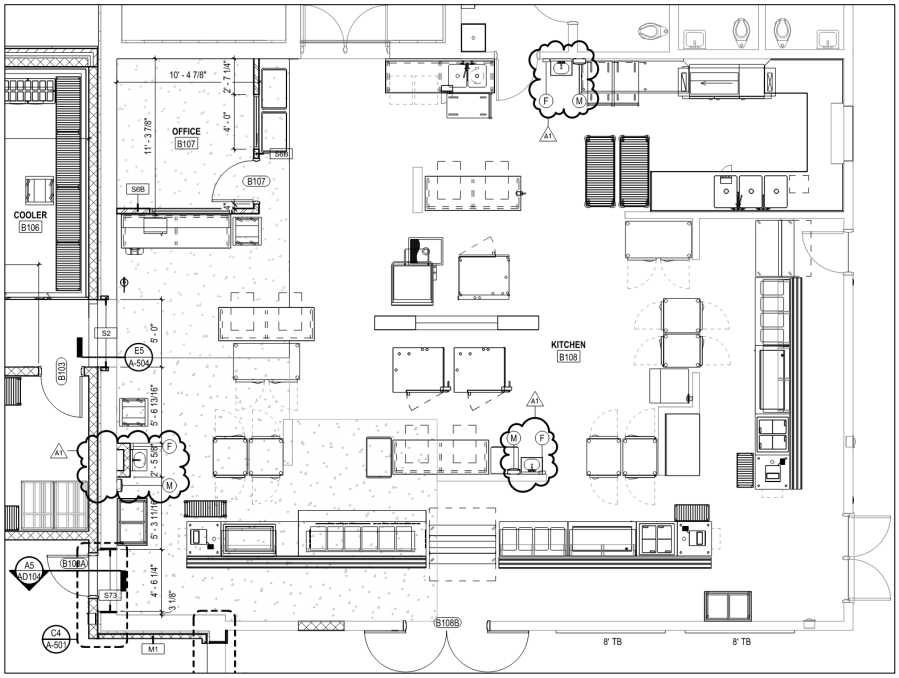
- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.76 SHEET A-402 - ENLARGED TYPICAL CLASSROOM PLAN, INTERIOR ELEVATIONS AND RCP:

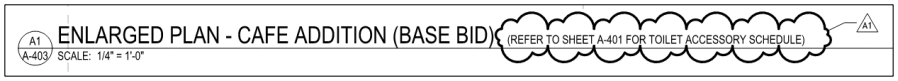
- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.77 SHEET A-403 - ENLARGED CAFE PLANS AND INTERIOR ELEVATIONS

- Enlarged Plan – Café Addition (Base Bid) - **ADD** Soap Dispenser and Paper Towel Dispenser per the revised image below.

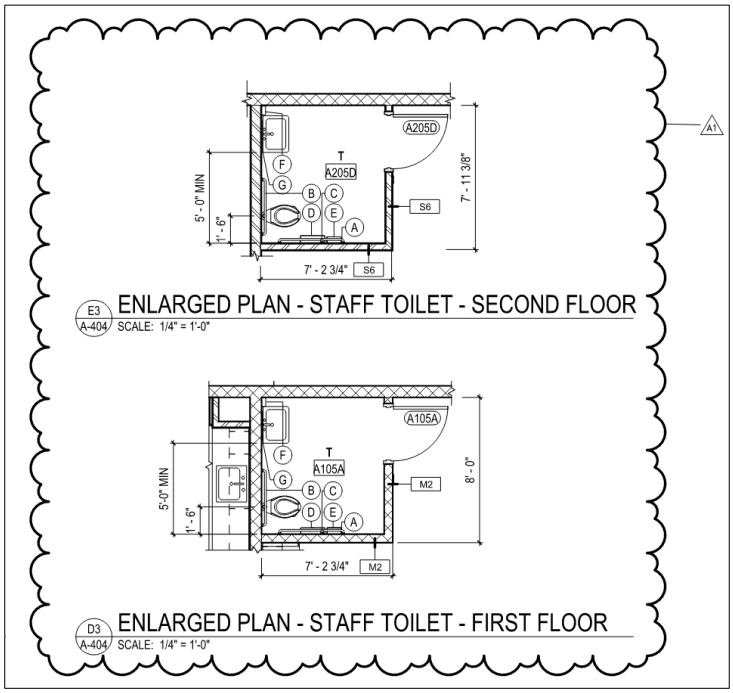


- Enlarged Plan – Café Addition (Base Bid) - **ADD** note to read **"REFER TO SHEET A-401 FOR TOILET ACCESSORY SCHEDULE"** per revised image below.



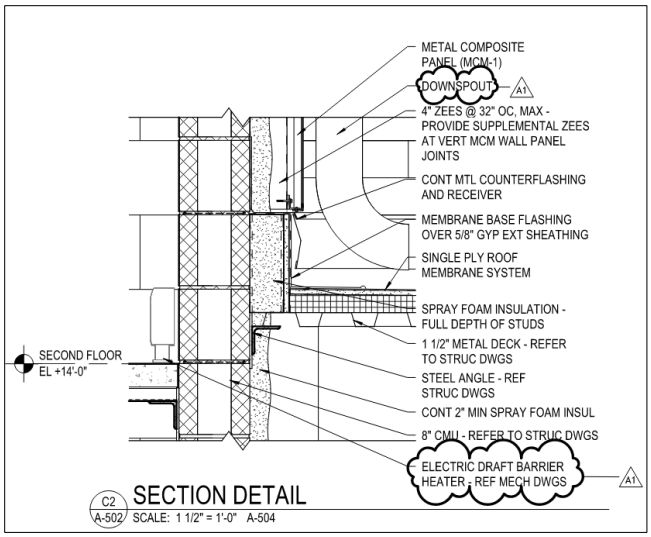
1.78 SHEET A-404 - ENLARGED CORRIDOR PLANS AND INTERIOR ELEVATIONS:

- Enlarged Plan – Staff Toilet – First Floor (D3/A-404) and Enlarged Plan – Staff Toilet – Second Floor (E3/A-404) – **ADD** details per revised image below.

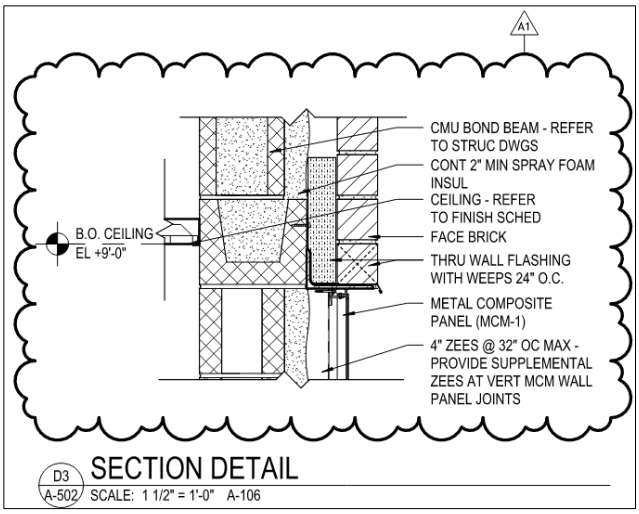


1.79 SHEET A-502 - SECTION DETAILS:

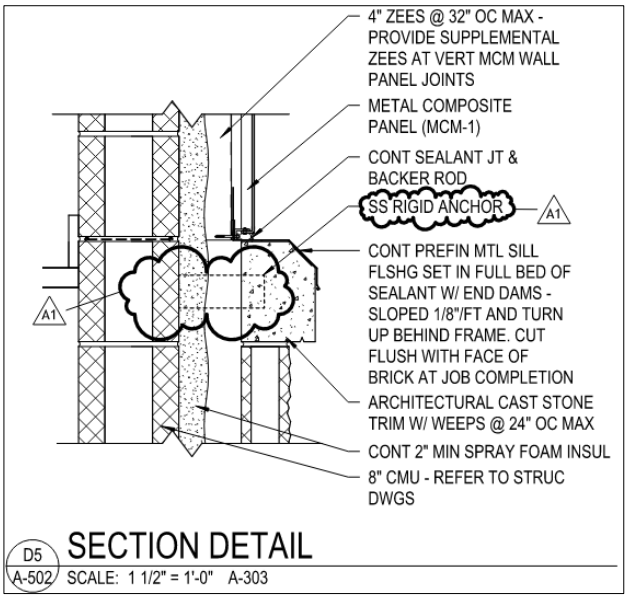
- Section Detail (C2/A-502) – **ADD** notes per revised image below.



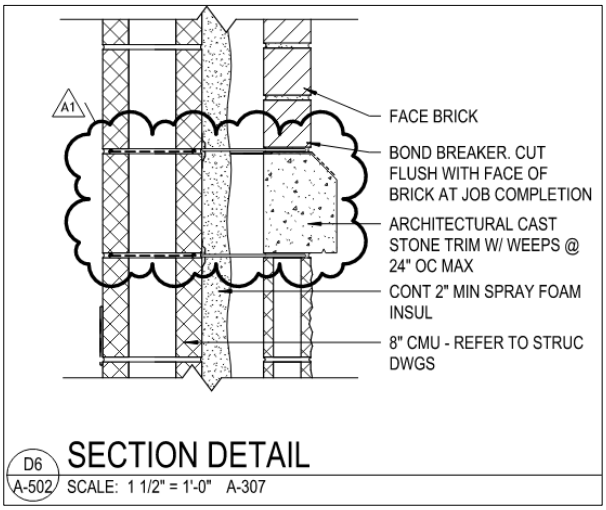
- Section Detail (D3/A-502) – **REVISE** detail per revised image below.



- Section Detail (D5/A-502) – **REVISE** detail per attached revised image below.

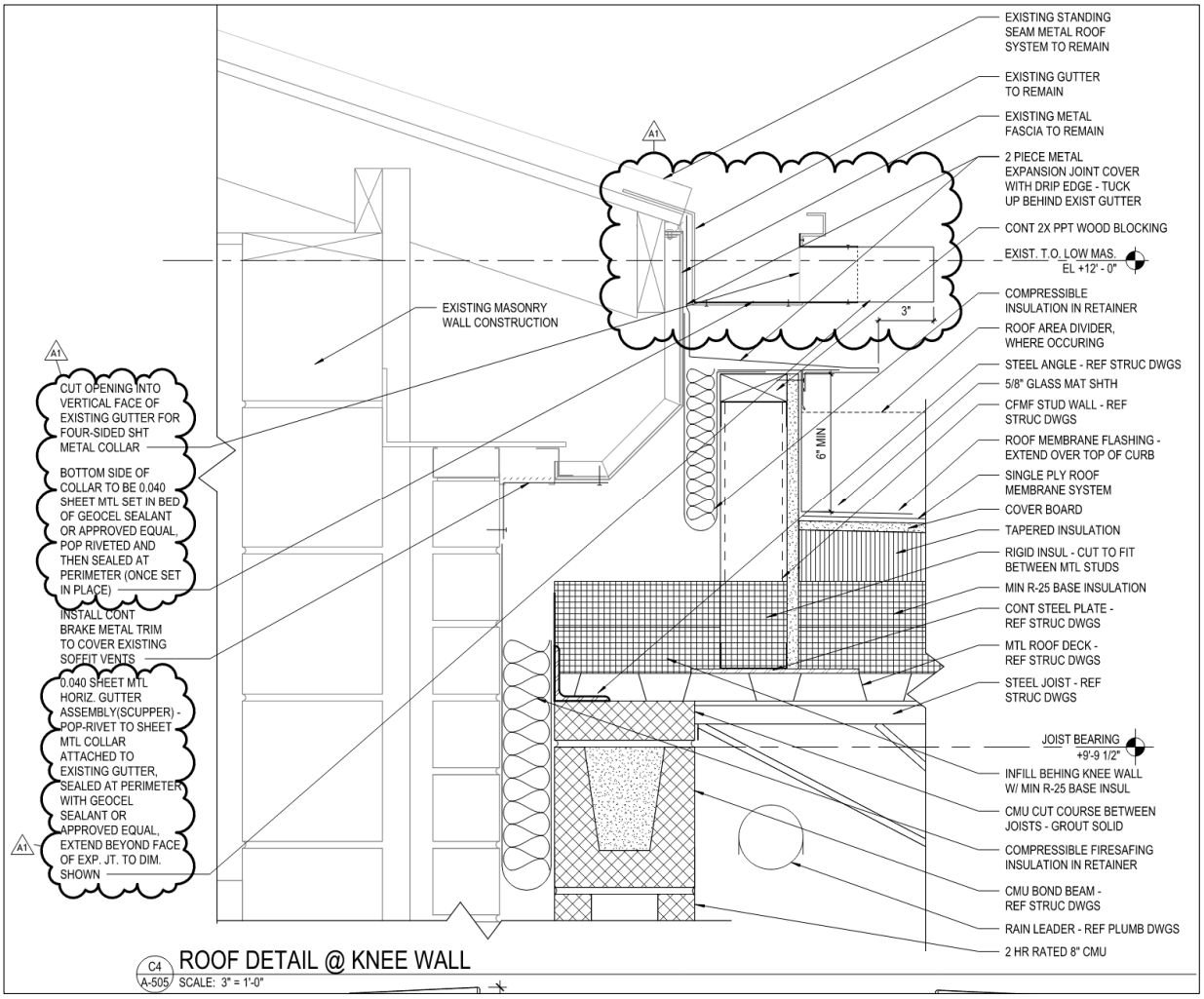


- Section Detail (D6/A-502) – **REVISE** detail per revised image below.

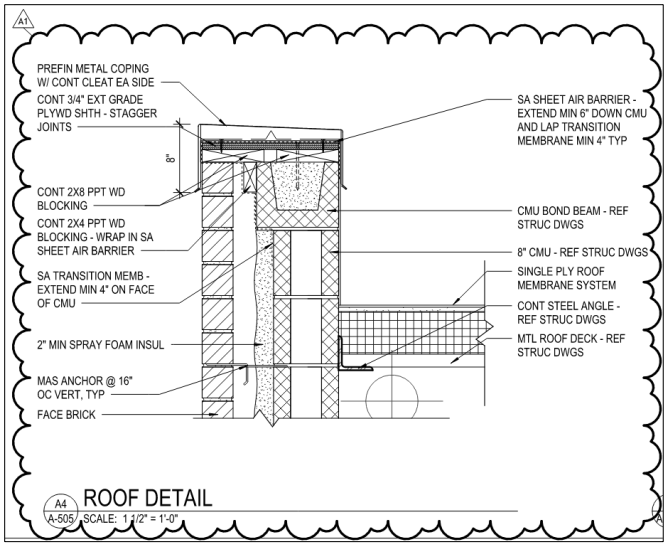


1.80 SHEET A-505 – ROOF DETAILS:

- Roof Detail @ Knee Wall (C4/A-505) – **REVISE** detail per revised image below.

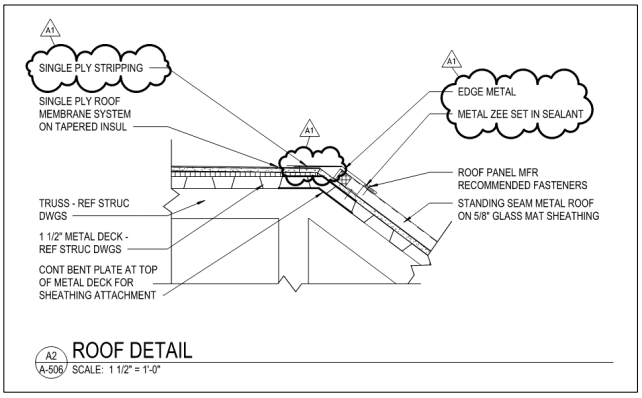


- Roof Detail (A4/A-505) - **REVISE** detail per revised image below.

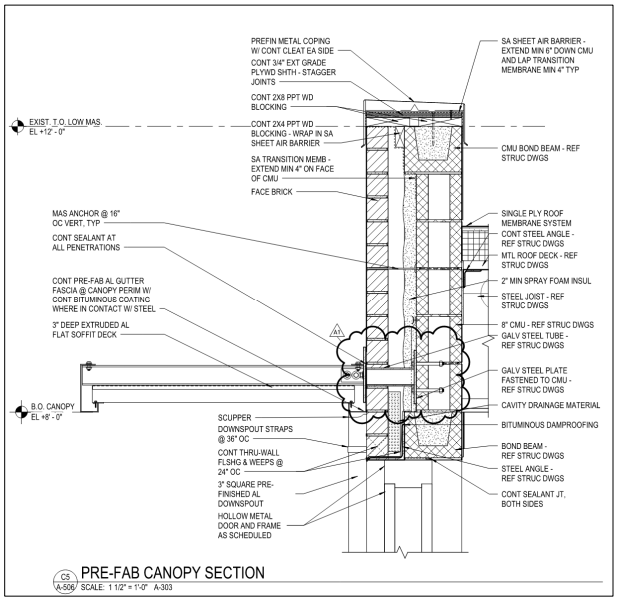


1.81 SHEET A-506 - ROOF DETAILS:

- Roof Detail (A2/A-506) – **REVISE** detail per revised image below.

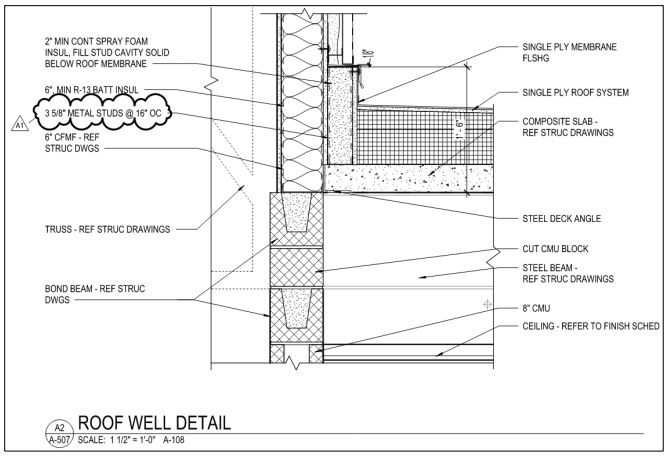


- Pre-Fab Canopy Section (A4/A-303) – **REVISE** Galv Steel plate and Steel Tube per revised image below.



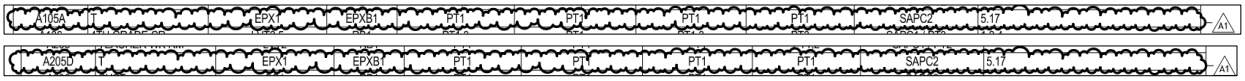
1.82 SHEET A-507 - ROOF DETAILS:

- Roof Well Detail (A2/A-507) – **ADD** note **"3 5/8" METAL STUDS @ 16" OC"** per revised image below.

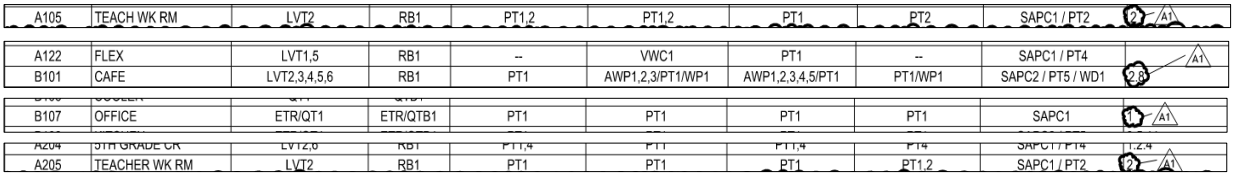


1.83 SHEET A-601 - FINISH SCHEDULE, LEGEND AND NOTES:

- Finish Schedule – **ADD** finishes for rooms A105A and A205D per revised image below.



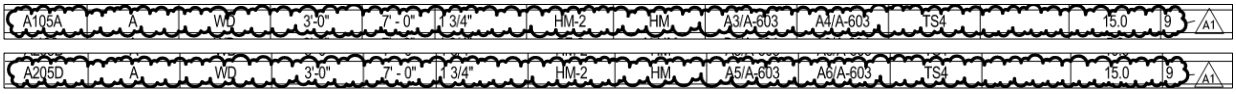
- Finish Schedule – **REVISE** Finish Schedule per revised image below.



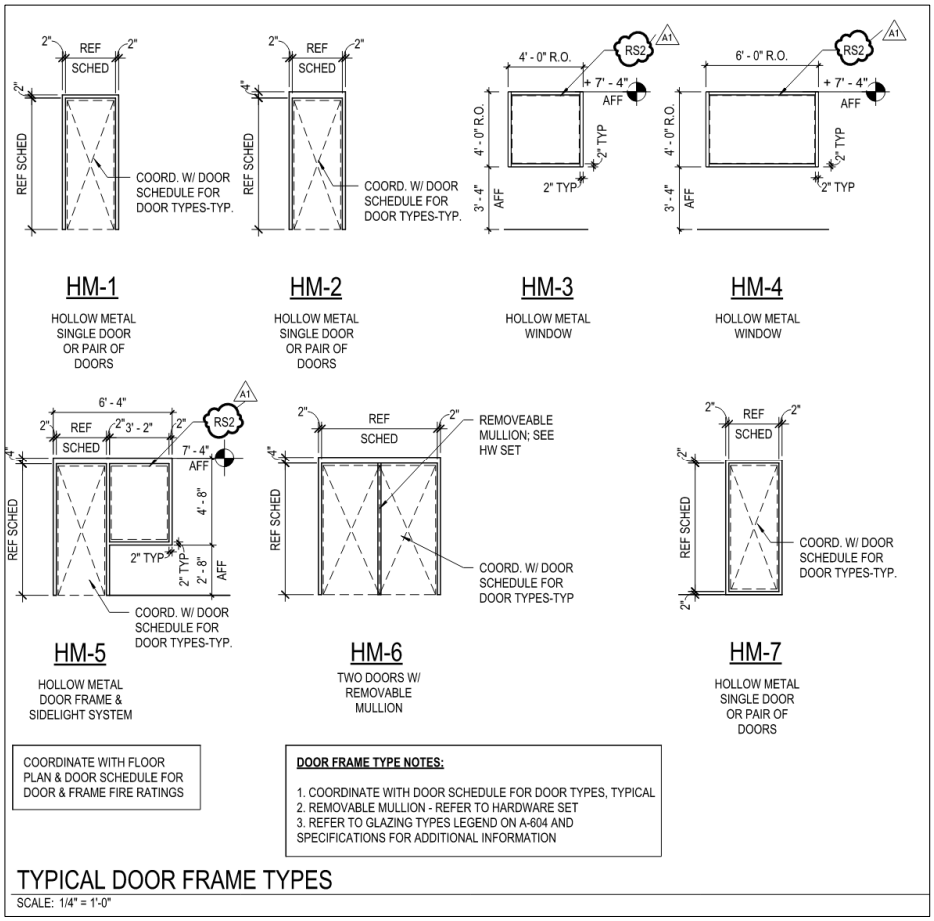
- General Finish Notes – REVISE note P to read **"PROVIDE RS1 AT ALL EXTERIOR WINDOWS AND RS2 AT ALL INTERIOR WINDOWS. ALL WINDOWS SHALL HAVE ROLLER SHADES EXCEPT SF2 AND SF3".**

1.84 SHEET A-602 - DOOR SCHEDULE, DOOR TYPES, FRAME TYPES, DOOR SCHEDULE NOTES:

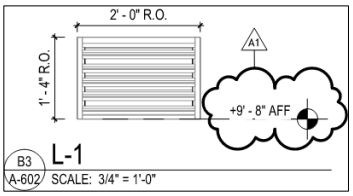
- Door Schedule – **ADD** doors A105A and A205D per revised image below.



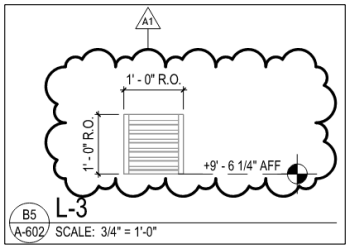
- Typical Door Frame Types – REVISE per revised image below.



- L-1 (B3/A-602) – **REVISE** the Elevation from AFF as per revised image below.

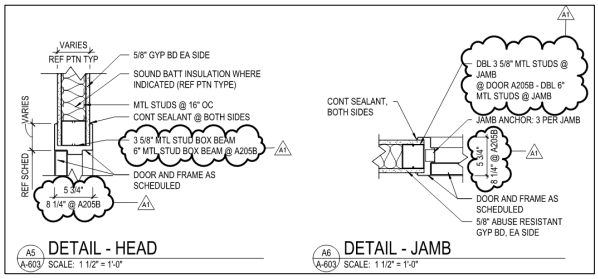


- L-3 (B5/A-602) – **ADD** detail B5/A-602 as per revised image below.



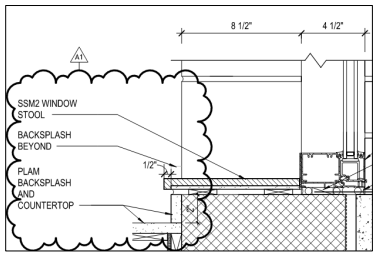
1.85 <u>SHEET A-603 - DOOR DETAILS:</u>

- Detail – Head (A5/A-603) and Detail – Jamb (A6/A-603) – **REVISE** per revised image below.

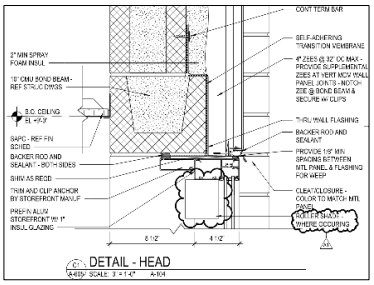


1.86 <u>SHEET A-605 - STOREFRONT DETAILS:</u>

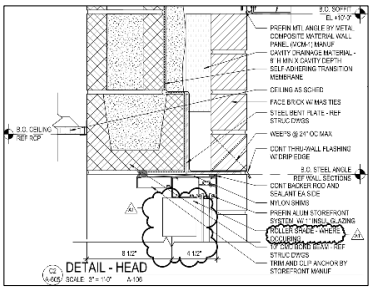
- Detail – Sill (A1/A-605) – **ADD** notes per revised image below.



- Detail – Head (C1/A-605) – **REVISE** detail per revised image below.



- Detail – Head (C2/A-605) – **REVISE** detail per revised image below.

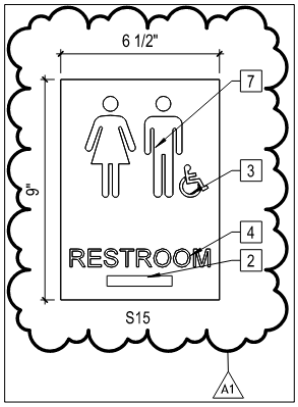


1.87 SHEET A-607 - SIGNAGE SCHEDULE, LEGEND AND NOTES:

- Room Signage Schedule – **REVISE** Signage Schedule per revised image below.

A103	IDF	S1	IDF	--	
A105A	T	S15	RESTROOM	--	4
B108	KITCHEN	S7	EXIT	--	
A205	TEACHER WK RM	S1	WORK ROOM	--	
A205D	T	S15	RESTROOM	--	4

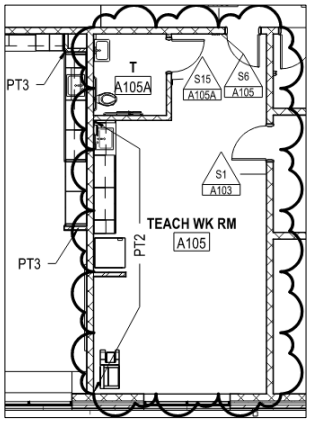
- Signage Legend – **REVISE** per revised image below.



- Signage Schedule Notes – **ADD** note 4 to read **"PROVIDE RAISED MALE, FEMALE, AND HANDICAPPED SYMBOLS FOR UNISEX RESTROOM SIGNS."**

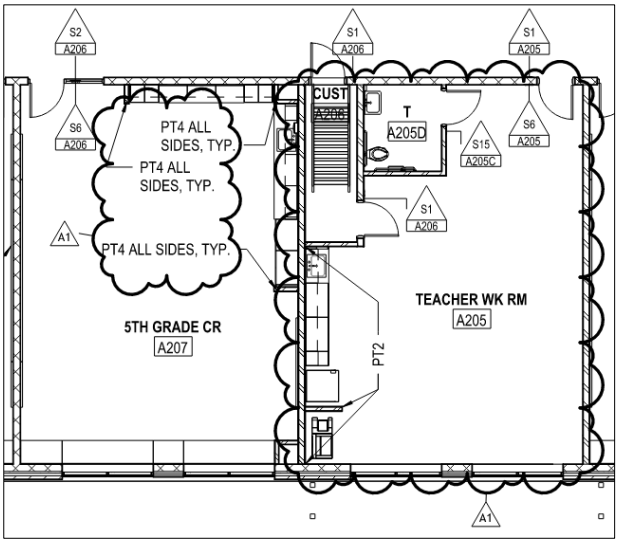
1.88 SHEET A-608 - FINISH AND SIGNAGE PLAN - FIRST FLOOR AREA A:

- First Floor – Finish and Signage Plan – Area A- **REVISE** finish and signage at rooms A105 and A105A per revised image below.



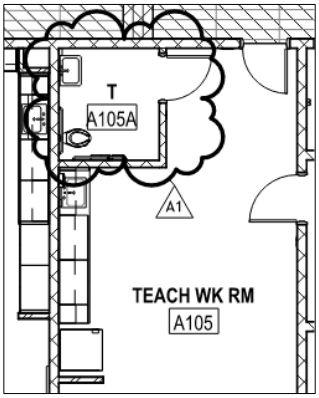
1.89 SHEET A-610 - FINISH AND SIGNAGE PLAN - SECOND FLOOR AREA A:

- Second Floor – Finish and Signage Plan – Area A – **REVISE** finish and signage for rooms A205, A205D, A206 and A207 per revised image below.



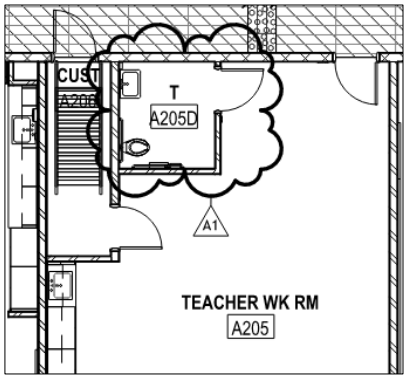
1.90 SHEET A-701 - FLOOR PATTERN PLAN - FIRST FLOOR AREA A

- First Floor Plan – Area A – **REVISE** per revised image below.



1.91 SHEET A-703 - FLOOR PATTERN PLAN - SECOND FLOOR - AREA A

- Second Floor - Floor Pattern Plan - Area A – **REVISE** per revised image below.



1.92 SHEET A-801 - CASEWORK ELEVATIONS:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.93 SHEET A-802 - CASEWORK SECTIONS:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.94 SHEET AD901 - DEMOLITION FLOOR PLANS, ELEVATIONS AND NOTES -ADDITIVE ALTERNATE NO. 1:

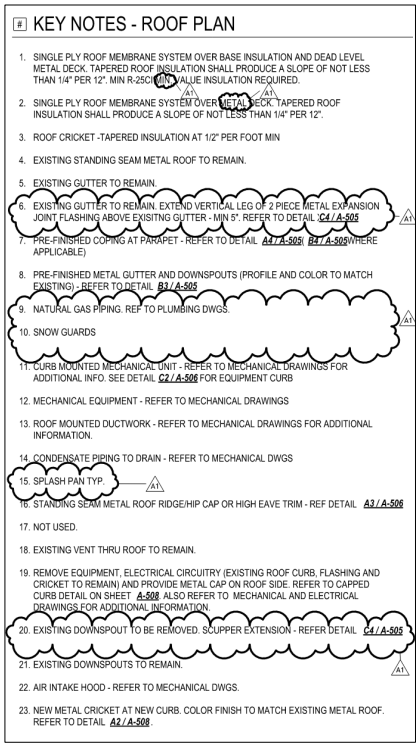
- Keynotes – Demo Plan – **REVISE** note 2 to read **"SAWCUT AND REMOVE MASONRY PARTITION SYSTEM TO EXTENTS SHOWN DASHED (INCLUDING DOOR, WINDOW AND FRAME, AND PME SYSTEMS WITHIN PARTITION IF APPLICABLE). LOCATE NEAREST MORTAR JT. COORDINATE W/ NEW WORK REQUIREMENTS. PATCH AND REPAIR ADJACENT WALLS AND FLOORS TO REMAIN. PREPARE EXISTING SURFACES FOR NEW WORK."**
- Keynotes – Demo Plan – **REVISE** note 22 to read **"REMOVE EXISTING CEILING TILE AND GRID SYSTEM COMPLETE AND REPLACE WITH NEW CEILING TILES AND GRID TO EXTENTS SHOWN (GREY TONE) TO ALLOW FOR OVERHEAD UTILITIES INSTALLATION. REFER TO NEW WORK CEILING PLAN."**

1.95 SHEET A-902 - FIRST FLOOR REFLECTED CEILING PLAN - AREA B -ADDITIVE ALTERNATE NO. 1

- Key Notes – Ref Clg Plan – **ADD** note 29 to read **"POWER POLE. REFER ELEC DWGS"**.

1.96 SHEET A-903 - ROOF PLAN - AREA B - ADDITIVE ALTERNATE NO. 1

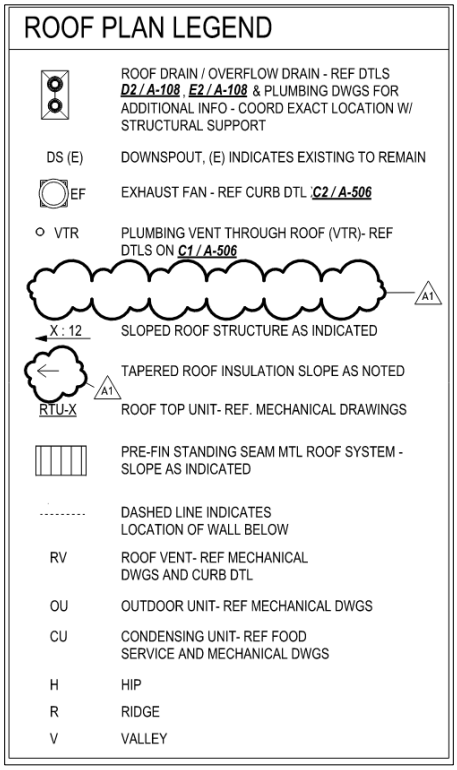
- Key Notes – Roof Plan – **REVISE** per revised image below.



KEY NOTES - ROOF PLAN

1. SINGLE PLY ROOF MEMBRANE SYSTEM OVER BASE INSULATION AND DEAD LEVEL METAL DECK. TAPERED ROOF INSULATION SHALL PRODUCE A SLOPE OF NOT LESS THAN 1/4" PER 12". MIN R-25CI (MIN) VALUE INSULATION REQUIRED.
2. SINGLE PLY ROOF MEMBRANE SYSTEM OVER METAL DECK. TAPERED ROOF INSULATION SHALL PRODUCE A SLOPE OF NOT LESS THAN 1/4" PER 12".
3. ROOF CRICKET -TAPERED INSULATION AT 1/2" PER FOOT MIN
4. EXISTING STANDING SEAM METAL ROOF TO REMAIN.
5. EXISTING GUTTER TO REMAIN.
6. EXISTING GUTTER TO REMAIN. EXTEND VERTICAL LEG OF 2 PIECE METAL EXPANSION JOINT FLASHING ABOVE EXISITNG GUTTER - MIN 5". REFER TO DETAIL *C4 / A-505*
7. PRE-FINISHED COPING AT PARAPET - REFER TO DETAIL *A4 / A-505* (*B4 / A-505* WHERE APPLICABLE)
8. PRE-FINISHED METAL GUTTER AND DOWNSPOUTS (PROFILE AND COLOR TO MATCH EXISTING) - REFER TO DETAIL *B3 / A-505*
9. NATURAL GAS PIPING. REF TO PLUMBING DWGS.
10. SNOW GUARDS
11. CURB MOUNTED MECHANICAL UNIT - REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFO. SEE DETAIL *C2 / A-506* FOR EQUIPMENT CURB
12. MECHANICAL EQUIPMENT - REFER TO MECHANICAL DRAWINGS
13. ROOF MOUNTED DUCTWORK - REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
14. CONDENSATE PIPING TO DRAIN - REFER TO MECHANICAL DWGS
15. SPLASH PAN TYP.
16. STANDING SEAM METAL ROOF RIDGE/HIP CAP OR HIGH EAVE TRIM - REF DETAIL *A3 / A-506*
17. NOT USED.
18. EXISTING VENT THRU ROOF TO REMAIN.
19. REMOVE EQUIPMENT, ELECTRICAL CIRCUITRY (EXISTING ROOF CURB, FLASHING AND CRICKET TO REMAIN) AND PROVIDE METAL CAP ON ROOF SIDE. REFER TO CAPPED CURB DETAIL ON SHEET *A-508*. ALSO REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
20. EXISTING DOWNSPOUT TO BE REMOVED. SCUPPER EXTENSION - REFER DETAIL *C4 / A-505*
21. EXISTING DOWNSPOUTS TO REMAIN.
22. AIR INTAKE HOOD - REFER TO MECHANICAL DWGS.
23. NEW METAL CRICKET AT NEW CURB. COLOR FINISH TO MATCH EXISTING METAL ROOF. REFER TO DETAIL *A2 / A-508*.

- Roof Plan Legend – **REVISE** per revised image below.



ROOF PLAN LEGEND

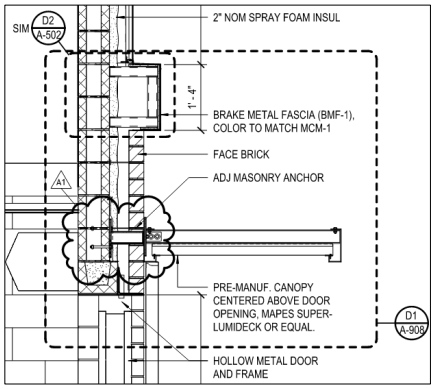
	ROOF DRAIN / OVERFLOW DRAIN - REF DTLS *D2 / A-108* , *E2 / A-108* & PLUMBING DWGS FOR ADDITIONAL INFO - COORD EXACT LOCATION W/ STRUCTURAL SUPPORT
DS (E)	DOWNSPOUT, (E) INDICATES EXISTING TO REMAIN
EF	EXHAUST FAN - REF CURB DTL *C2 / A-506*
VTR	PLUMBING VENT THROUGH ROOF (VTR)- REF DTLS ON *C1 / A-506*
	A1
X : 12	SLOPED ROOF STRUCTURE AS INDICATED
A1	TAPERED ROOF INSULATION SLOPE AS NOTED
RTU-X	ROOF TOP UNIT- REF. MECHANICAL DRAWINGS
	PRE-FIN STANDING SEAM MTL ROOF SYSTEM - SLOPE AS INDICATED
---------	DASHED LINE INDICATES LOCATION OF WALL BELOW
RV	ROOF VENT- REF MECHANICAL DWGS AND CURB DTL
OU	OUTDOOR UNIT- REF MECHANICAL DWGS
CU	CONDENSING UNIT- REF FOOD SERVICE AND MECHANICAL DWGS
H	HIP
R	RIDGE
V	VALLEY

1.97 SHEET A-905 - EXTERIOR BUILDING ELEVATIONS – ADDITIVE ALTERNATE NO. 1:

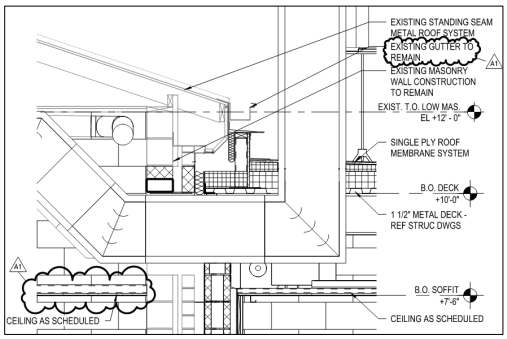
- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.98 SHEET A-907 - WALL SECTIONS - ADDITIVE ALTERNATE NO. 1:

- Wall Section (A2/A-907)– **REVISE** Galv Steel plate and Steel Tube per revised image below.

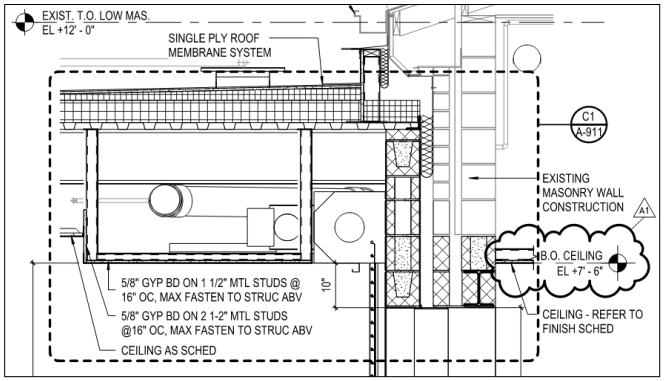


- Wall Section (A3/A-907) – **REVISE** ceiling per revised image below.

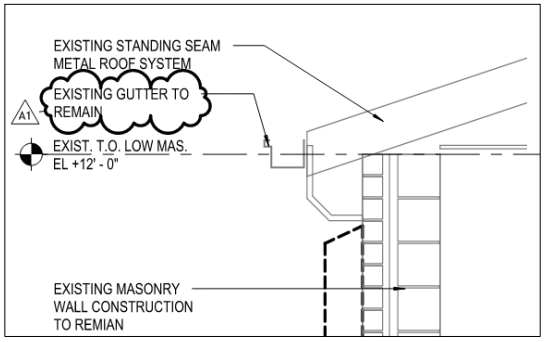


1.99 SHEET A-908 - WALL SECTIONS - ADDITIVE ALTERNATE NO. 1:

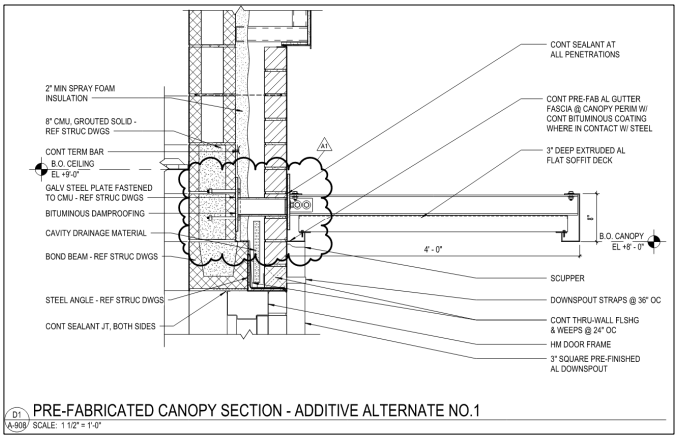
- Wall Section (A1/A-908) – **REVISE** ceiling per revised image below.



- Wall Section – Demo – **REVISE** note per revised image below.



- Pre-Fabricated Canopy Section – Additive Alternate No.1 (D1/A-908) – **REVISE** Galv Steel plate and Steel Tube per revised image below.



1.100 <u>SHEET A-909 - ENLARGED CAFE PLANS AND INTERIOR ELEVATIONS -ADDITIVE ALTERNATE NO. 1:</u>

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.101 <u>SHEET A-910 - DOOR, FINISH SCHEDULE, AND FLOOR PATTERN PLAN -ADDITIVE ALTERNATE NO. 1:</u>

- Finish Schedule Additive Alternate No.1 - **REVISE** per revised image below.

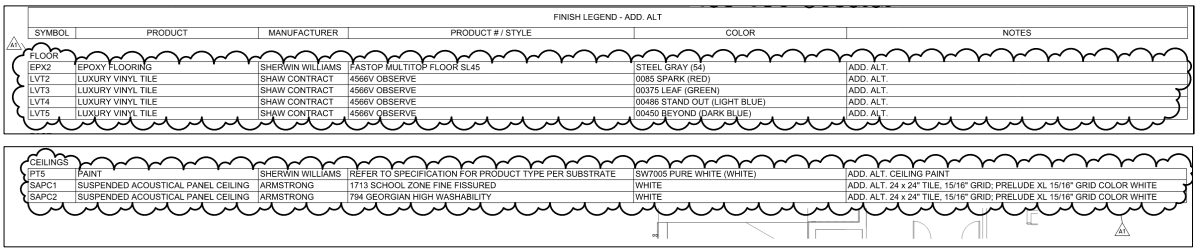
FINISH SCHEDULE ADDITIVE ALTERNATE NO. 1

ROOM NUMBER	ROOM NAME	FLOOR	WALL BASE	WALLS N	WALLS S	WALLS E	WALLS W	CEILING	NOTES
B101	CORRIDOR	LVT2,6 A1	RB1	PT1	PT1	PT1	PT1	SAPC1/PT5	3
B103	OFFICE	EPX2	EPXB2	PT1	PT1	PT1	PT1	SAPC2	1,5,7 A1

- Finish Schedule Notes Additive Alternate No. 1- **REVISE** note 1 to read **"EXISTING QUARRY TILE AND QUARRY TILE BASE TO REMAIN. PREP FLOOR W/ SELF-LEVELING COMPOUND TO PROVIDE SMOOTH FINISH THROUGHOUT AND AT ADJACENT SURFACES."**
- Finish Schedule Notes Additive Alternate No. 1 – **ADD** note 7 to read **"PROVIDE RS2 AT INTERIOR WINDOWS IN THIS SPACE"**
- Floor Pattern Legend Add Alt. – **REVISE** per revised image below.



- Finish Legend Add Alt. – **REVISE** floor and ceiling legend per revised image below.

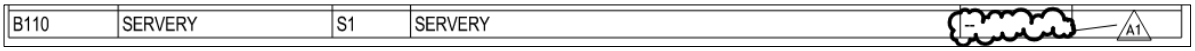


FINISH LEGEND - ADD. ALT

SYMBOL	PRODUCT	MANUFACTURER	PRODUCT # / STYLE	COLOR	NOTES
FLOOR					
EPX2	EPOXY FLOORING	SHERWIN WILLIAMS	FASTOP MULTITOP FLOOR SL45	STEEL GRAY (54)	ADD. ALT.
LVT2	LUXURY VINYL TILE	SHAW CONTRACT	4566V OBSERVE	0085 SPARK (RED)	ADD. ALT.
LVT3	LUXURY VINYL TILE	SHAW CONTRACT	4566V OBSERVE	00375 LEAF (GREEN)	ADD. ALT.
LVT4	LUXURY VINYL TILE	SHAW CONTRACT	4566V OBSERVE	00486 STAND OUT (LIGHT BLUE)	ADD. ALT.
LVT5	LUXURY VINYL TILE	SHAW CONTRACT	4566V OBSERVE	00450 BEYOND (DARK BLUE)	ADD. ALT.
CEILINGS					
PT5	PAINT	SHERWIN WILLIAMS	REFER TO SPECIFICATION FOR PRODUCT TYPE PER SUBSTRATE	SW7005 PURE WHITE (WHITE)	ADD. ALT. CEILING PAINT
SAPC1	SUSPENDED ACOUSTICAL PANEL CEILING	ARMSTRONG	1713 SCHOOL ZONE FINE FISSURED	WHITE	ADD. ALT. 24 x 24" TILE, 15/16" GRID; PRELUDE XL 15/16" GRID COLOR WHITE
SAPC2	SUSPENDED ACOUSTICAL PANEL CEILING	ARMSTRONG	794 GEORGIAN HIGH WASHABILITY	WHITE	ADD. ALT. 24 x 24" TILE, 15/16" GRID; PRELUDE XL 15/16" GRID COLOR WHITE

1.102 SHEET A-912 - SIGNAGE PLAN AND SCHEDULE - ADDITIVE ALTERNATE NO. 1:

- Room Signage Schedule Add Alt – **REVISE** schedule per revised image below.



B110	SERVERY	S1	SERVERY

1.103 SHEET S-003 – PLAN NOTES, LEGEND AND SCHEDULE:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.104 SHEET S-122 – LOW ROOF FRAMING PLAN – AREA B:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.105 SHEET S-131 – ROOF FRAMING PLAN – AREA A:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.106 SHEET S-301 – FOUNDATION SECTIONS:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.107 SHEET S-312 – FRAMING SECTIONS:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.108 SHEET S-321 – FRAMING SECTIONS:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.109 SHEET S-322 – FRAMING SECTIONS:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.110 SHEET S-323 – FRAMING SECTIONS:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.111 SHEET S-324 – FRAMING SECTIONS:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.112 SHEET S-501 – TYPICAL DETAILS:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.113 SHEET S-511 – TYPICAL DETAILS:

- Typical Steel Beam Bearing on Existing Masonry Details - **REVISE** weld symbol in 'Parallel to Wall' detail from 1/8 to ¼.

1.114 SHEET S-521 – TYPICAL DETAILS:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.115 SHEET S-523 – TYPICAL DETAILS:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.116 SHEET S-902 – VERTICAL WALL REINFORCEMENT PLAN – AREA B – ADDITIVE ALTERNATE NO. 1:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.117 SHEET S-911 – FOUNDATION PLAN – AREA B – ADDITIVE ALTERNATE NO. 1:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.118 SHEET P-002 – PLUMBING SCHEDULES AND DETAILS:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.119 SHEET P-101 – FIRST FLOOR PLAN – AREA A – NEW WORK – DRAIN , WASTE & VENT:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.120 SHEET P-103 – SECOND FLOOR PLAN – AREA A – NEW WORK – DRAIN , WASTE & VENT:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.121 SHEET P-201 – FIRST FLOOR PLAN – AREA A – NEW WORK – DOMESTIC WATER AND GAS:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.122 SHEET P-203 – SECOND FLOOR PLAN – AREA A – NEW WORK – DOMESTIC WATER AND GAS:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.123 SHEET P-302 – ROOF PLAN – AREA B – NEW WORK – PLUMBING:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.124 SHEET P-401 – ENLARGED PLANS – NEW WORK – PLUMBING:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.125 SHEET P-501 – ENLARGED PLANS – NEW WORK – PLUMBING:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.126 SHEET P-502 – ENLARGED PLANS – NEW WORK – PLUMBING:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.127 SHEET P-901 – FIRST FLOOR PLAN – AREA B – NEW WORK – DRAIN , WASTE & VENT (ADDITIVE ALTERNATE NO. 1):

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.128 SHEET P-903 – ROOF PLAN – AREA B – NEW WORK – PLUMBING (ADDITIVE ALTERNATE NO.1):

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.129 SHEET M-101 – FIRST FLOOR PLAN – AREA A – NEW WORK – DUCTWORK AND PIPING:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.130 SHEET M-103 – SECOND FLOOR PLAN – AREA A:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.131 SHEET M-104 – ROOF PLAN – AREA A:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.132 SHEET M-202 – MECHANICAL DETAILS:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.133 SHEET E-001 – ELECTRICAL LEGEND:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.134 SHEET E-002 – LIGHT FIXTURE SCHEDULE, NOTES AND DETAILS:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.135 SHEET E-003 – GENERAL NOTES AND DETAILS:

- **DELETE sheet in its entirety and REPLACE per attached revised sheet.**

1.136 SHEET E-101 – FIRST FLOOR PLAN – AREA A - LIGHTING:

- **DELETE sheet in its entirety and REPLACE per attached revised sheet.**

1.137 SHEET E-103 – SECOND FLOOR PLAN – AREA A - LIGHTING:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.138 SHEET E-201 – FIRST FLOOR PLAN – AREA A - POWER:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.139 SHEET E-203 – SECOND FLOOR PLAN – AREA A - POWER:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.140 SHEET E-301 – FIRST FLOOR PLAN – AREA A – HVAC POWER:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.141 SHEET E-401 – FIRST FLOOR PLAN – AREA A – AUXILIARY SYSTEMS:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.142 SHEET E-402 – FIRST FLOOR PLAN – AREA B – AUXILIARY SYSTEMS:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.143 SHEET E-403 – SECOND FLOOR PLAN – AREA A – AUXILIARY SYSTEMS:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.144 SHEET E-601 – PANELBOARD SCHEDULES:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.145 SHEET E-602 – PANELBOARD SCHEDULES:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.146 SHEET E-701 – POWER RISER DIAGRAM AND NOTES:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

1.147 SHEET E-908 – POWER RISER DIAGRAM, NOTES AND SCHEDULES – ADDITIVE ALTERNATE NO. 1:

- **DELETE** sheet in its entirety and **REPLACE** per attached revised sheet.

END OF ADDENDUM NO. 1

SECTION 055000 - METAL FABRICATIONS *(ADDENDUM NO. 1)*

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Miscellaneous framing and supports.
2. Shelf angles.
3. Metal ladders.
4. *Metal ships' ladders.*
5. Elevator pit sump covers.
6. Metal downspout boots.
7. Loose bearing and leveling plates.

B. Products furnished, but not installed, under this Section include the following:

1. Loose steel lintels.
2. Steel weld plates and angles for casting into concrete for applications where they are not specified in other Sections.
3. Anchor bolts, steel pipe sleeves, slotted-channel inserts, and wedge-type inserts indicated to be cast into concrete or built into unit masonry.

C. Related Requirements:

1. Section 018113 "Sustainable Design Requirements" for Green Globes requirements.
2. Section 042000 "Unit Masonry" for installing loose lintels, anchor bolts, and other items built into unit masonry.
3. Section 051200 "Structural Steel Framing" for steel framing, supports, elevator machine beams, hoist beams, divider beams, door frames, and other steel items attached to the structural-steel framing.
4. Section 077200 "Roof Accessories" for manufactured metal roof walkways and metal roof stairs.

1.2 COORDINATION

A. Coordinate selection of shop primers with topcoats to be applied over them. Comply with paint and coating manufacturers' written instructions to ensure that shop primers and topcoats are compatible with one another.

B. Coordinate installation of metal fabrications that are anchored to or that receive other work. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

1.3 ACTION SUBMITTALS

A. Product Data:

1. Fasteners.
2. Shop primers.
3. Shrinkage-resisting grout.
4. Slotted channel framing.
5. Manufactured metal ladders.
6. *Metal ships' ladders.*
7. Metal downspout boots.

B. Shop Drawings: Show fabrication and installation details. Include plans, elevations, sections, and details of metal fabrications and their connections. Show anchorage and accessory items. Provide Shop Drawings for the following:

1. Miscellaneous framing and supports for applications where framing and supports are not specified in other Sections.
2. Elevator machine beams, hoist beams, and divider beams.
3. Steel shapes for supporting elevator door sills.
4. Shelf angles.
5. Metal ladders.
6. *Metal ships' ladders.*
7. Elevator pit sump covers.
8. Loose steel lintels.

C. Delegated Design Submittals: For ladders, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

D. Sustainable Design Submittals:

1. Comply with Section 018113 "Sustainable Design Requirements.

1.4 INFORMATIONAL SUBMITTALS

A. Welding certificates.

B. Research Reports: For post-installed anchors.

C. Delegated design engineer qualifications.

1.5 QUALITY ASSURANCE

A. Welding Qualifications: Qualify procedures and personnel in accordance with the following welding codes:

1. AWS D1.1/D1.1M, "Structural Welding Code - Steel."
2. AWS D1.2/D1.2M, "Structural Welding Code - Aluminum."

3. AWS D1.6/D1.6M, "Structural Welding Code - Stainless Steel."

1.6 FIELD CONDITIONS

A. Field Measurements: Verify actual locations of walls, floor slabs, decks, and other construction contiguous with metal fabrications by field measurements before fabrication.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Delegated Design: Engage a qualified professional engineer, as defined in Section 014000 "Quality Requirements," to design ladders.

B. Structural Performance of Aluminum Ladders: Ladders, including landings, are to withstand the effects of loads and stresses within limits and under conditions specified in ANSI/ASC A14.3.

C. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes.

1. Temperature Change: 120 deg F, ambient; 180 deg F, material surfaces.

2.2 METALS

A. Metal Surfaces, General: Provide materials with smooth, flat surfaces unless otherwise indicated. For metal fabrications exposed to view in the completed Work, provide materials without seam marks, roller marks, rolled trade names, or blemishes.

B. Steel Plates, Shapes, and Bars: ASTM A36/A36M.

C. Steel Tubing: ASTM A500/A500M, cold-formed steel tubing.

D. Steel Pipe: ASTM A53/A53M, Standard Weight (Schedule 40) unless otherwise indicated.

E. Slotted Channel Framing: Cold-formed metal box channels (struts) complying with MFMA-4.

1. Size of Channels: 1-5/8 by 1-5/8 inches.
2. Galvanized Steel: ASTM A653/A653M, structural steel, Grade 33, with G90 coating; 0.108-inch nominal thickness.

F. Cast Iron: Either gray iron, ASTM A48/A48M, or malleable iron, ASTM A47/A47M, unless otherwise indicated.

2.3 FASTENERS

A. General: Unless otherwise indicated, provide Type 304 stainless steel fasteners for exterior use

and zinc-plated fasteners with coating complying with ASTM B633 or ASTM F1941/F1941M, Class Fe/Zn 5, at exterior walls. Select fasteners for type, grade, and class required.

1. Provide stainless steel fasteners for fastening aluminum.
2. Provide bronze fasteners for fastening bronze.

B. Steel Bolts and Nuts: Regular hexagon-head bolts, ASTM A307, Grade A; with hex nuts, ASTM A563; and, where indicated, flat washers.

C. Stainless Steel Bolts and Nuts: Regular hexagon-head annealed stainless steel bolts, ASTM F593; with hex nuts, ASTM F594; and, where indicated, flat washers; Alloy Group 1.

D. Anchor Bolts: ASTM F1554, Grade 36, of dimensions indicated; with nuts, ASTM A563; and, where indicated, flat washers.

1. Hot-dip galvanize or provide mechanically deposited, zinc coating where item being fastened is indicated to be galvanized.

E. Anchors, General: Capable of sustaining, without failure, a load equal to six times the load imposed when installed in unit masonry and four times the load imposed when installed in concrete, as determined by testing in accordance with ASTM E488/E488M, conducted by a qualified independent testing agency.

F. Post-Installed Anchors: Torque-controlled expansion anchors or chemical anchors.

1. Material for Interior Locations: Carbon-steel components zinc plated to comply with ASTM B633 or ASTM F1941/F1941M, Class Fe/Zn 5, unless otherwise indicated.
2. Material for Exterior Locations and Where Stainless Steel Is Indicated: Alloy Group 1 stainless steel bolts, ASTM F593, and nuts, ASTM F594.

G. Slotted-Channel Inserts: Cold-formed, hot-dip galvanized-steel box channels (struts) complying with MFMA-4, 1-5/8 by 7/8 inches by length indicated with anchor straps or studs not less than 3 inches long at not more than 8 inches o.c. Provide with temporary filler and tee-head bolts, complete with washers and nuts, all zinc-plated to comply with ASTM B633, Class Fe/Zn 5, as needed for fastening to inserts.

2.4 MISCELLANEOUS MATERIALS

A. Shop Primers: Provide primers that comply with Section 099113 "Exterior Painting." Section 099123 "Interior Painting."

B. Galvanizing Repair Paint: High-zinc-dust-content paint complying with SSPC-Paint 20 and compatible with paints specified to be used over it.

C. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D1187/D1187M.

D. Shrinkage-Resistant Grout: Factory-packaged, nonmetallic, nonstaining, noncorrosive, nongaseous grout complying with ASTM C1107/C1107M. Provide grout specifically recommended by manufacturer for interior and exterior applications.

2.5 FABRICATION, GENERAL

A. Shop Assembly: Preassemble items in the shop to greatest extent possible. Disassemble units only as necessary for shipping and handling limitations. Use connections that maintain structural value of joined pieces. Clearly mark units for reassembly and coordinated installation.

B. Cut, drill, and punch metals cleanly and accurately. Remove burrs and ease edges to a radius of approximately 1/32 inch unless otherwise indicated. Remove sharp or rough areas on exposed surfaces.

C. Form bent-metal corners to smallest radius possible without causing grain separation or otherwise impairing work.

D. Form exposed work with accurate angles and surfaces and straight edges.

E. Weld corners and seams continuously to comply with the following:

1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
2. Obtain fusion without undercut or overlap.
3. Remove welding flux immediately.
4. At exposed connections, finish exposed welds and surfaces smooth and blended so no roughness shows after finishing and contour of welded surface matches that of adjacent surface.

F. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners or welds where possible. Where exposed fasteners are required, use Phillips flat-head (countersunk) fasteners unless otherwise indicated. Locate joints where least conspicuous.

G. Fabricate seams and other connections that are exposed to weather in a manner to exclude water. Provide weep holes where water may accumulate.

H. Cut, reinforce, drill, and tap metal fabrications as indicated to receive finish hardware, screws, and similar items.

I. Provide for anchorage of type indicated; coordinate with supporting structure. Space anchoring devices to secure metal fabrications rigidly in place and to support indicated loads.

J. Where units are indicated to be cast into concrete or built into masonry, equip with integrally welded steel strap anchors, 1/8 by 1-1/2 inches, with a minimum 6-inch embedment and 2-inch hook, not less than 8 inches from ends and corners of units and 24 inches o.c., unless otherwise indicated.

2.6 MISCELLANEOUS FRAMING AND SUPPORTS

A. General: Provide steel framing and supports not specified in other Sections as needed to complete the Work.

B. Fabricate units from steel shapes, plates, and bars of welded construction unless otherwise

indicated. Fabricate to sizes, shapes, and profiles indicated and as necessary to receive adjacent construction.

1. Fabricate units from slotted channel framing where indicated.
2. Furnish inserts for units installed after concrete is placed.

C. Galvanize miscellaneous framing and supports where indicated.

D. Prime miscellaneous framing and supports with zinc-rich primer where indicated.

2.7 SHELF ANGLES

A. Fabricate shelf angles from steel angles of sizes indicated and for attachment to concrete framing. Provide horizontally slotted holes to receive 3/4-inch bolts, spaced not more than 6 inches from ends and 24 inches o.c., unless otherwise indicated.

1. Provide mitered and welded units at corners.
2. Provide open joints in shelf angles at expansion and control joints. Make open joint approximately 2 inches larger than expansion or control joint.

B. For cavity walls, provide vertical channel brackets to support angles from backup masonry and concrete.

C. Galvanize and prime shelf angles located in exterior walls.

D. Prime shelf angles located in exterior walls with zinc-rich primer.

2.8 METAL LADDERS

A. General:

1. Comply with ANSI A14.3, except for elevator pit ladders.
2. For elevator pit ladders, comply with ASME A17.1/CSA B44.

B. Steel Ladders:

1. Space siderails 18 inches apart unless otherwise indicated.
2. Siderails: Continuous, 1/2-by-2-1/2-inch steel flat bars, with eased edges.
3. Rungs: 3/4-inch- diameter, steel bars.
4. Fit rungs in centerline of siderails; plug-weld and grind smooth on outer rail faces.
5. Provide nonslip surfaces on top of each rung, either by coating rung with aluminum-oxide granules set in epoxy-resin adhesive or by using a type of manufactured rung filled with aluminum-oxide grout.
6. Source Limitations: Obtain nonslip surfaces from single source from single manufacturer.
7. Provide platforms as indicated fabricated from welded or pressure-locked steel bar grating, supported by steel angles. Limit openings in gratings to no more than 3/4 inchin least dimension.
8. Support each ladder at top and bottom and not more than 60 inches o.c. with welded or

bolted steel brackets.

9. Galvanize ladders, including brackets.

2.9 METAL SHIPS' LADDERS

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

a. Kattsafe.
b. O'Keeffe's Inc.
c. Precision Ladders, LLC.

2. Source Limitations: Obtain aluminum ladders from single source from single manufacturer.

B. Provide metal ships' ladders where indicated. Fabricate of open-type construction with channel stringers and pipe and tube railings unless otherwise indicated. Provide brackets and fittings for installation.

1. Treads are not to be less than 5 inches exclusive of nosing or less than 8-1/2 inches including the nosing, and riser height is not to be more than 9-1/2 inches.
2. Fabricate ships' ladders, including railings from aluminum. Pipe railing size as indicated on the Drawings.
3. Fabricate treads and platforms from extruded-aluminum plank grating. Limit openings in gratings to no more than 3/4 inch in least dimension.

2.10 ELEVATOR PIT SUMP COVERS

A. Fabricate from welded or pressure-locked steel bar grating. Limit openings in gratings to no more than 3/4 inch in least dimension.

B. Provide steel angle supports unless otherwise indicated.

2.11 MISCELLANEOUS STEEL TRIM

A. Unless otherwise indicated, fabricate units from steel shapes, plates, and bars of profiles shown with continuously welded joints and smooth exposed edges. Miter corners and use concealed field splices where possible.

B. Provide cutouts, fittings, and anchorages as needed to coordinate assembly and installation with other work.

1. Provide with integrally welded steel strap anchors for embedding in concrete or masonry construction.

C. Prime miscellaneous steel trim with zinc-rich primer.

2.12 METAL DOWNSPOUT BOOTS

A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

1. J.R. Hoe & Sons Inc.
2. Neenah Foundry Company

B. Source Limitations: Obtain downspout boots from single source from single manufacturer.

C. Provide downspout boots made from cast iron in heights indicated with inlets of size and shape to suit downspouts. Provide units with flanges and holes for countersunk anchor bolts.

1. Outlet: Vertical, to discharge into pipe.

D. Prime cast-iron downspout boots with zinc-rich primer.

2.13 LOOSE BEARING AND LEVELING PLATES

A. Provide loose bearing and leveling plates for steel items bearing on masonry or concrete construction. Drill plates to receive anchor bolts and for grouting.

B. Prime plates with zinc-rich primer.

2.14 LOOSE STEEL LINTELS

A. Fabricate loose steel lintels from steel angles and shapes of size indicated for openings and recesses in masonry walls and partitions at locations indicated. Fabricate in single lengths for each opening unless otherwise indicated. Weld adjoining members together to form a single unit where indicated.

B. Size loose lintels to provide bearing length at each side of openings equal to one-twelfth of clear span, but not less than 8 inches unless otherwise indicated.

C. Galvanize loose steel lintels located in exterior walls.

2.15 STEEL WELD PLATES AND ANGLES

A. Provide steel weld plates and angles not specified in other Sections, for items supported from concrete construction as needed to complete the Work. Provide each unit with no fewer than two integrally welded steel strap anchors for embedding in concrete.

2.16 GENERAL FINISH REQUIREMENTS

A. Finish metal fabrications after assembly.

B. Finish exposed surfaces to remove tool and die marks and stretch lines, and to blend into

surrounding surface.

2.17 STEEL AND IRON FINISHES

A. Galvanizing: Hot-dip galvanize items as indicated to comply with ASTM A153/A153M for steel and iron hardware and with ASTM A123/A123M for other steel and iron products.

1. Do not quench or apply post galvanizing treatments that might interfere with paint adhesion.

B. Preparation for Shop Priming Galvanized Items: After galvanizing, thoroughly clean galvanized surfaces of grease, dirt, oil, flux, and other foreign matter, and treat with metallic phosphate process.

C. Shop prime iron and steel items not indicated to be galvanized unless they are to be embedded in concrete, sprayed-on fireproofing, or masonry, or unless otherwise indicated.

1. Shop prime with primers specified in Section 099113 "Exterior Painting" primers specified in Section 099123 "Interior Painting" unless zinc-rich primer is indicated.

D. Preparation for Shop Priming: Prepare surfaces to comply with SSPC-SP 3, "Power Tool Cleaning."

E. Shop Priming: Apply shop primer to comply with SSPC-PA 1, "Paint Application Specification No. 1: Shop, Field, and Maintenance Painting of Steel," for shop painting.

2.18 ALUMINUM FINISHES

A. As-Fabricated Finish: AA-M12.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

A. Cutting, Fitting, and Placement: Perform cutting, drilling, and fitting required for installing metal fabrications. Set metal fabrications accurately in location, alignment, and elevation; with edges and surfaces level, plumb, true, and free of rack; and measured from established lines and levels.

B. Fit exposed connections accurately together to form hairline joints. Weld connections that are not to be left as exposed joints but cannot be shop welded because of shipping size limitations. Do not weld, cut, or abrade surfaces of exterior units that have been hot-dip galvanized after fabrication and are for bolted or screwed field connections.

C. Field Welding: Comply with the following requirements:

1. Use materials and methods that minimize distortion and develop strength and corrosion

resistance of base metals.
2. Obtain fusion without undercut or overlap.
3. Remove welding flux immediately.
4. At exposed connections, finish exposed welds and surfaces smooth and blended so no roughness shows after finishing and contour of welded surface matches that of adjacent surface.

D. Fastening to In-Place Construction: Provide anchorage devices and fasteners where metal fabrications are required to be fastened to in-place construction. Provide threaded fasteners for use with concrete and masonry inserts, toggle bolts, through bolts, lag screws, wood screws, and other connectors.

E. Provide temporary bracing or anchors in formwork for items that are to be built into concrete, masonry, or similar construction.

F. Corrosion Protection: Coat concealed surfaces of aluminum that come into contact with grout, concrete, masonry, wood, or dissimilar metals with the following:

3.2 INSTALLATION OF MISCELLANEOUS FRAMING AND SUPPORTS

A. General: Install framing and supports to comply with requirements of items being supported, including manufacturers' written instructions and requirements indicated on Shop Drawings.

B. Anchor supports for ceiling hung toilet partitions and overhead doors securely to, and rigidly brace from, building structure.

3.3 INSTALLATION OF SHELF ANGLES

A. Install shelf angles as required to keep masonry level, at correct elevation, and flush with vertical plane.

3.4 INSTALLATION OF METAL LADDERS

A. Secure ladders to adjacent construction with the clip angles attached to the stringer.

B. Install brackets as required for securing of ladders welded or bolted to structural steel or built into masonry or concrete.

3.5 INSTALLATION OF METAL SHIPS' LADDERS

A. Secure top and bottom of ships' ladders to construction to comply with manufacturer's written instructions.

3.6 INSTALLATION OF ELEVATOR PIT SUMP COVERS

A. Install tops of elevator sump pit cover plates and frames flush with finished surface. Adjust as required to avoid lippage that could present a tripping hazard.

3.7 INSTALLATION OF MISCELLANEOUS STEEL TRIM

A. Anchor to concrete construction to comply with manufacturer's written instructions.

3.8 INSTALLATION OF METAL DOWNSPOUT BOOTS

A. Anchor metal downspout boots to concrete or masonry construction to comply with manufacturer's written instructions.

B. Secure downspouts terminations to downspouts and substrate per manufacturer's instructions.

3.9 INSTALLATION OF LOOSE BEARING AND LEVELING PLATES

A. Clean concrete and masonry bearing surfaces of bond-reducing materials, and roughen to improve bond to surfaces. Clean bottom surface of plates.

B. Set bearing and leveling plates on wedges, shims, or leveling nuts. After bearing members have been positioned and plumbed, tighten anchor bolts. Do not remove wedges or shims but, if protruding, cut off flush with edge of bearing plate before packing with shrinkage-resistant grout. Pack grout solidly between bearing surfaces and plates to ensure that no voids remain.

3.10 REPAIRS

A. Touchup Painting:

1. Cleaning and touchup painting of field welds, bolted connections, and abraded areas of shop paint are specified in Section 099113 "Exterior Painting." Section 099123 "Interior Painting."

B. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas and repair galvanizing to comply with ASTM A780/A780M.

END OF SECTION 055000

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SECTION 087100 - DOOR HARDWARE ***(ADDENDUM NO. 1)***

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes commercial door hardware for the following:

1. Swinging doors.
2. Other doors to the extent indicated.

B. Door hardware includes, but is not necessarily limited to, the following:

1. Mechanical door hardware.
2. Electromechanical door hardware.
3. Cylinders specified for doors in other sections.

C. Related Sections:

1. Division 08 Section “Door Schedule”.
2. Division 08 Section “Hollow Metal Doors and Frames”.
3. Division 08 Section “Flush Wood Doors”.
4. Division 08 Section “Aluminum-Framed Entrances and Storefronts”.

D. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.

1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
2. ICC/IBC - International Building Code.
3. NFPA 70 - National Electrical Code.
4. NFPA 80 - Fire Doors and Windows.
5. NFPA 101 - Life Safety Code.
6. NFPA 105 - Installation of Smoke Door Assemblies.
7. State Building Codes, Local Amendments.

E. Standards: All hardware specified herein shall comply with the following industry standards as applicable. Any undated reference to a standard shall be interpreted as referring to the latest edition of that standard:

1. ANSI/BHMA Certified Product Standards - A156 Series.
2. UL10C - Positive Pressure Fire Tests of Door Assemblies.
3. ANSI/UL 294 - Access Control System Units.

4. UL 305 - Panic Hardware.
5. ANSI/UL 437- Key Locks.

1.3 SUBMITTALS

A. Product Data: Manufacturer's product data sheets including installation details, material descriptions, dimensions of individual components and profiles, operational descriptions and finishes.

B. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing, fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.

1. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."
2. Organization: Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening. Organize door hardware sets in same order as in the Door Hardware Sets at the end of Part 3. Submittals that do not follow the same format and order as the Door Hardware Sets will be rejected and subject to resubmission.
3. Content: Include the following information:

    a. Type, style, function, size, label, hand, and finish of each door hardware item.
    b. Manufacturer of each item.
    c. Fastenings and other pertinent information.
    d. Location of door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
    e. Explanation of abbreviations, symbols, and codes contained in schedule.
    f. Mounting locations for door hardware.
    g. Door and frame sizes and materials.
    h. Warranty information for each product.

4. Submittal Sequence: Submit the final Door Hardware Schedule at earliest possible date, particularly where approval of the Door Hardware Schedule must precede fabrication of other work that is critical in the Project construction schedule. Include Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the Door Hardware Schedule.

C. Shop Drawings: Details of electrified access control hardware indicating the following:

1. Wiring Diagrams: Upon receipt of approved schedules, submit detailed system wiring diagrams for power, signaling, monitoring, communication, and control of the access control system electrified hardware. Differentiate between manufacturer-installed and field-installed wiring. Include the following:

    a. Elevation diagram of each unique access controlled opening showing location and interconnection of major system components with respect to their placement in the respective door openings.

b. Complete (risers, point-to-point) access control system block wiring diagrams.
c. Wiring instructions for each electronic component scheduled herein.

2. Electrical Coordination: Coordinate with related sections the voltages and wiring details required at electrically controlled and operated hardware openings.

D. Keying Schedule: After a keying meeting with the owner has taken place prepare a separate keying schedule detailing final instructions. Submit the keying schedule in electronic format. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions. Owner must approve submitted keying schedule prior to the ordering of permanent cylinders/cores.

E. Informational Submittals:

1. Product Test Reports: Indicating compliance with cycle testing requirements, based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified independent testing agency.

1.4 CLOSEOUT SUBMITTALS

A. Operating and Maintenance Manuals: Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in Division 01, Closeout Procedures.

B. Project Record Documents: Provide record documentation of as-built door hardware sets in digital format (.pdf, .docx, .xlsx, .csv) and as required in Division 01, Project Record Documents.

1.5 QUALITY ASSURANCE

A. Manufacturers Qualifications: Engage qualified manufacturers with a minimum 5 years of documented experience in producing hardware and equipment similar to that indicated for this Project and that have a proven record of successful in-service performance.

B. Certified Products: Where specified, products must maintain a current listing in the Builders Hardware Manufacturers Association (BHMA) Certified Products Directory (CPD).

C. Installer Qualifications: A minimum 3 years documented experience installing both standard and electrified door hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.

D. Door Hardware Supplier Qualifications: Experienced commercial door hardware distributors with a minimum 5 years documented experience supplying both mechanical and electromechanical hardware installations comparable in material, design, and extent to that indicated for this Project. Supplier recognized as a factory direct distributor by the manufacturers of the primary materials with a warehousing facility in Project's vicinity. Supplier to have on staff a certified Architectural Hardware Consultant (AHC) available during

the course of the Work to consult with Contractor, Architect, and Owner concerning both standard and electromechanical door hardware and keying.

E. Source Limitations: Obtain each type and variety of door hardware specified in this section from a single source unless otherwise indicated.

1. Electrified modifications or enhancements made to a source manufacturer's product line by a secondary or third party source will not be accepted.
2. Provide electromechanical door hardware from the same manufacturer as mechanical door hardware, unless otherwise indicated.

F. Each unit to bear third party permanent label indicating compliance with the referenced testing standards.

G. Keying Conference: Conduct conference to comply with requirements in Division 01 Section "Project Meetings." Keying conference to incorporate the following criteria into the final keying schedule document:

1. Function of building, purpose of each area and degree of security required.
2. Plans for existing and future key system expansion.
3. Requirements for key control storage and software.
4. Installation of permanent keys, cylinder cores and software.
5. Address and requirements for delivery of keys.

H. Pre-Submittal Conference: Conduct coordination conference in compliance with requirements in Division 01 Section "Project Meetings" with attendance by representatives of Supplier(s), Installer(s), and Contractor(s) to review proper methods and the procedures for receiving, handling, and installing door hardware.

1. Prior to installation of door hardware, conduct a project specific training meeting to instruct the installing contractors' personnel on the proper installation and adjustment of their respective products. Product training to be attended by installers of door hardware (including electromechanical hardware) for aluminum, hollow metal and wood doors. Training will include the use of installation manuals, hardware schedules, templates and physical product samples as required.
2. Inspect and discuss electrical roughing-in, power supply connections, and other preparatory work performed by other trades.
3. Review sequence of operation narratives for each unique access controlled opening.
4. Review and finalize construction schedule and verify availability of materials.
5. Review the required inspecting, testing, commissioning, and demonstration procedures

I. At completion of installation, provide written documentation that components were applied according to manufacturer's instructions and recommendations and according to approved schedule.

1.6 DELIVERY, STORAGE AND HANDLING

A. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.

B. Tag each item or package separately with identification related to the final Door Hardware Schedule, and include basic installation instructions with each item or package.

C. Deliver, as applicable, permanent keys, cylinders, cores, access control credentials, software and related accessories directly to Owner via registered mail or overnight package service. Instructions for delivery to the Owner shall be established at the "Keying Conference".

1.7 COORDINATION

A. Templates: Obtain and distribute to the parties involved templates for doors, frames, and other work specified to be factory prepared for installing standard and electrified hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing hardware to comply with indicated requirements.

B. Door and Frame Preparation: Doors and corresponding frames are to be prepared, reinforced and pre-wired (if applicable) to receive the installation of the specified electrified, monitoring, signaling and access control system hardware without additional in-field modifications.

1.8 WARRANTY

A. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.

B. Warranty Period: Written warranty, executed by manufacturer(s), agreeing to repair or replace components of standard and electrified door hardware that fails in materials or workmanship within specified warranty period after final acceptance by the Owner. Failures include, but are not limited to, the following:

1. Structural failures including excessive deflection, cracking, or breakage.
2. Faulty operation of the hardware.
3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
4. Electrical component defects and failures within the systems operation.

C. Warranty Period: Unless otherwise indicated, warranty shall be one year from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 BUTT HINGES

A. Hinges: ANSI/BHMA A156.1 butt hinges with number of hinge knuckles and other options as specified in the Door Hardware Sets.

1. Quantity: Provide the following hinge quantity:

a. Two Hinges: For doors with heights up to 60 inches.
b. Three Hinges: For doors with heights 61 to 90 inches.
c. Four Hinges: For doors with heights 91 to 120 inches.
d. For doors with heights more than 120 inches, provide 4 hinges, plus 1 hinge for every 30 inches of door height greater than 120 inches.

2. Hinge Size: Provide the following, unless otherwise indicated, with hinge widths sized for door thickness and clearances required:

a. Widths up to 3’0”: 4-1/2” standard or heavy weight as specified.
b. Sizes from 3’1” to 4’0”: 5” standard or heavy weight as specified.

3. Hinge Weight and Base Material: Unless otherwise indicated, provide the following:

a. Exterior Doors: Heavy weight, non-ferrous, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate standard weight.
b. Interior Doors: Standard weight, steel, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate heavy weight.

4. Hinge Options: Comply with the following:

a. Non-removable Pins: With the exception of electric through wire hinges, provide set screw in hinge barrel that, when tightened into a groove in hinge pin, prevents removal of pin while door is closed; for all out-swinging lockable doors.

5. Manufacturers:

a. Hager Companies (HA) - BB Series, 5-knuckle.
b. McKinney (MK) - TA/T4A Series, 5-knuckle.
c. dormakaba BEST (ST) - F/FBB Series, 5-knuckle.

2.2 CONTINUOUS HINGES

A. Continuous Geared Hinges: ANSI/BHMA A156.26 Grade 1-600 continuous geared hinge. with minimum 0.120-inch thick extruded 6063-T6 aluminum alloy hinge leaves and a minimum overall width of 4 inches. Hinges are non-handed, reversible and fabricated to template screw locations. Factory trim hinges to suit door height and prepare for electrical cut-outs.

1. Manufacturers:.

a. Hager Companies (HA).
b. Pemko (PE).
c. dormakaba BEST (ST).

2.3 POWER TRANSFER DEVICES

A. Electrified Quick Connect Transfer Hinges: Provide electrified transfer hinges with Molex™ standardized plug connectors and sufficient number of concealed wires (up to 12) to accommodate the electrified functions specified in the Door Hardware Sets with a 1-year warranty. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Wire nut connections are not acceptable.

1. Manufacturers:

a. Hager Companies (HA) - ETW-QC (# wires) Option.
b. McKinney (MK) - QC (# wires) Option.
c. dormakaba BEST (ST) - C Option.

B. Concealed Quick Connect Electric Power Transfers: Provide concealed wiring pathway housing mortised into the door and frame for low voltage electrified door hardware. Furnish with Molex™ standardized plug connectors and sufficient number of concealed wires (up to 12) to accommodate the electrified functions specified in the Door Hardware Sets. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Wire nut connections are not acceptable.

1. Manufacturers:

a. Pemko (PE) - EL-CEPT Series.
b. Securitron (SU) - EL-CEPT Series.
c. Von Duprin (VD) - EPT-10 Series.

C. Electric Door Wire Harnesses: Provide electric/data transfer wiring harnesses with standardized plug connectors to accommodate up to twelve (12) wires. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Provide sufficient number and type of concealed wires to accommodate electric function of specified hardware. Provide a connector for through-door electronic locking devices and from hinge to junction box above the opening. Wire nut connections are not acceptable. Determine the length required for each electrified hardware component for the door type, size and construction, minimum of two per electrified opening.

1. Provide one each of the following tools as part of the base bid contract:

a. McKinney (MK) - Electrical Connecting Kit: QC-R001.
b. McKinney (MK) - Connector Hand Tool: QC-R003.

2. Manufacturers:

a. Hager Companies (HA) - Quick Connect.
b. McKinney (MK) - QC-C Series.

c. dormakaba BEST (ST) - WH Series.

2.4 DOOR OPERATING TRIM

A. Door Push Plates and Pulls: ANSI/BHMA A156.6 door pushes and pull units of type and design specified in the Hardware Sets. Coordinate and provide proper width and height as required where conflicting hardware dictates.

1. Push/Pull Plates: Minimum .050 inch thick, size as indicated in hardware sets, with beveled edges, secured with exposed screws unless otherwise indicated.
2. Door Pull and Push Bar Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door unless otherwise indicated.
3. Offset Pull Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door and offset of 90 degrees unless otherwise indicated.
4. Pulls, where applicable, shall be provided with a 10” clearance from the finished floor on the push side to accommodate wheelchair accessibility.
5. Fasteners: Provide manufacturer's designated fastener type as indicated in Hardware Sets. When through-bolt fasteners are in the same location as a push plate, countersink the fasteners flush with the door face allowing the push plate to sit flat against the door.
6. Manufacturers:

    a. Hiawatha, Inc. (HI).
    b. Rockwood (RO).
    c. Trimco (TC).

2.5 CYLINDERS AND KEYING

A. General: Cylinder manufacturer to have minimum (10) years experience designing secured master key systems and have on record a published security keying system policy.

1. Manufacturers:

    a. Sargent Manufacturing (SA).

B. Cylinder Types: Original manufacturer cylinders able to supply the following cylinder formats and types:

1. Threaded mortise cylinders with rings and cams to suit hardware application.
2. Rim cylinders with back plate, flat-type vertical or horizontal tailpiece, and raised trim ring.
3. Bored or cylindrical lock cylinders with tailpieces as required to suit locks.
4. Tubular deadlocks and other auxiliary locks.
5. Mortise and rim cylinder collars to be solid and recessed to allow the cylinder face to be flush and be free spinning with matching finishes.
6. Keyway: Match Facility Standard.

C. Keying System: Each type of lock and cylinders to be factory keyed.

1. Supplier shall conduct a "Keying Conference" to define and document keying system instructions and requirements.
2. Furnish factory cut, nickel-silver large bow permanently inscribed with a visual key control number as directed by Owner.
3. Existing System: Field verify and key cylinders to match Owner's existing system.

D. Key Quantity: Provide the following minimum number of keys:

1. Change Keys per Cylinder: Two (2)
2. Master Keys (per Master Key Level/Group): Five (5).
3. Construction Keys (where required): Ten (10).

E. Construction Keying: Provide construction master keyed cylinders.

F. Key Registration List (Bitting List):

1. Provide keying transcript list to Owner's representative in the proper format for importing into key control software.
2. Provide transcript list in writing or electronic file as directed by the Owner.

2.6 MORTISE LOCKS AND LATCHING DEVICES

A. Mortise Locksets, Grade 1 (Heavy Duty): Provide ANSI/BHMA A156.13, Series 1000, Operational Grade 1 Certified Products Directory (CPD) listed mortise locksets. Listed manufacturers shall meet all functions and features as specified herein.

1. Manufacturers:

a. Corbin Russwin Hardware (RU) - ML2000 Series.
b. Sargent Manufacturing (SA) - 8200 Series.
c. Schlage (SC) - L9000 Series.

2.7 CYLINDRICAL LOCKS AND LATCHING DEVICES

A. Cylindrical Locksets, Grade 1 (Heavy Duty): ANSI/BHMA A156.2, Series 4000, Operational Grade 1 Certified Products Directory (CPD) listed cylindrical locksets. Listed manufacturers shall meet all functions and features as specified herein.

1. Electromechanical locksets shall have the following functions and features:

a. Universal Molex plug-in connectors that have standardized color-coded wiring and are field configurable in fail safe or fail secure and operate from 12vdc to 24vdc regulated.
b. EcoFlex or equivalent technology that reduces energy consumption up to 92% as certified by GreenCircle.
c. Options to be available for request-to-exit or enter signaling, latchbolt and deadbolt monitoring.
d. Two-year limited warranty on electrified functions.

2. Manufacturers:

    a. Corbin Russwin Hardware (RU) - CLX3300 Series.
    b. Sargent Manufacturing (SA) - 10X Line.
    c. Schlage (SC) - ND Series.

2.8 LOCK AND LATCH STRIKES

A. Strikes: Provide manufacturer's standard strike with strike box for each latch or lock bolt, with curved lip extended to protect frame, finished to match door hardware set, unless otherwise indicated, and as follows:

1. Flat-Lip Strikes: For locks with three-piece antifriction latchbolts, as recommended by manufacturer.
2. Extra-Long-Lip Strikes: For locks used on frames with applied wood casing trim.
3. Aluminum-Frame Strike Box: Provide manufacturer's special strike box fabricated for aluminum framing.
4. Double-lipped strikes: For locks at double acting doors. Furnish with retractable stop for rescue hardware applications.

B. Standards: Comply with the following:

1. Strikes for Mortise Locks and Latches: BHMA A156.13.
2. Strikes for Bored Locks and Latches: BHMA A156.2.
3. Strikes for Auxiliary Deadlocks: BHMA A156.36.
4. Dustproof Strikes: BHMA A156.16.

2.9 CONVENTIONAL EXIT DEVICES

A. General Requirements: All exit devices specified herein shall meet or exceed the following criteria:

1. Exit devices shall have a five-year warranty.
2. At doors not requiring a fire rating, provide devices complying with NFPA 101 and listed and labeled for "Panic Hardware" according to UL305. Provide proper fasteners as required by manufacturer including sex nuts and bolts at openings specified in the Hardware Sets.
3. Where exit devices are required on fire rated doors, provide devices complying with NFPA 80 and with UL labeling indicating "Fire Exit Hardware". Provide devices with the proper fasteners for installation as tested and listed by UL. Consult manufacturer’s catalog and template book for specific requirements.
4. Except on fire rated doors, provide exit devices with hex key dogging device to hold the pushbar and latch in a retracted position. Provide optional keyed cylinder dogging on devices where specified in Hardware Sets.
5. Devices must fit flat against the door face with no gap that permits unauthorized dogging of the push bar. The addition of filler strips is required in any case where the door light extends behind the device as in a full glass configuration.
6. Lever Operating Trim: Where exit devices require lever trim, furnish manufacturer's heavy duty escutcheon trim with threaded studs for thru-bolts.

a. Lock Trim Design: As indicated in Hardware Sets, provide finishes and designs to match that of the specified locksets.
b. Where function of exit device requires a cylinder, provide a cylinder (Rim or Mortise) as specified in Hardware Sets.

7. Vertical Rod Exit Devices: Where surface or concealed vertical rod exit devices are used at interior openings, provide as less bottom rod (LBR) unless otherwise indicated. Provide dust proof strikes where thermal pins are required to project into the floor.
8. Narrow Stile Applications: At doors constructed with narrow stiles, or as specified in Hardware Sets, provide devices designed for maximum 2" wide stiles.
9. Dummy Push Bar: Nonfunctioning push bar matching functional push bar.
10. Rail Sizing: Provide exit device rails factory sized for proper door width application.
11. Through Bolt Installation: For exit devices and trim as indicated in Door Hardware Sets.

B. Conventional Push Rail Exit Devices (Heavy Duty): ANSI/BHMA A156.3, Grade 1 Certified Products Directory (CPD) listed exit devices. Listed manufacturers shall meet all functions and features as specified herein.

1. Electromechanical exit devices shall have the following functions and features:

a. Universal Molex plug-in connectors that have standardized color-coded wiring and are field configurable in fail safe or fail secure and operate from 12vdc to 24vdc regulated.
b. EcoFlex or equivalent technology that reduces energy consumption up to 92% as certified by GreenCircle.
c. Options to be available for request-to-exit or enter signaling, latchbolt and touchbar monitoring.
d. Field configurable electrified trim to fail-safe or fail-secure that operates from 12-24VDC.
e. Five-year limited warranty for electromechanical features.

2. Manufacturers:

a. Corbin Russwin Hardware (RU) - ED4000 / ED5000 Series.
b. Sargent Manufacturing (SA) - 80 Series.
c. dormakaba BEST (PR) - Apex 2000 Series.

2.10 SURFACE DOOR CLOSERS

A. All door closers specified herein shall meet or exceed the following criteria:

1. General: Door closers to be from one manufacturer, matching in design and style, with the same type door preparations and templates regardless of application or spring size. Closers to be non-handed with full sized covers.
2. Standards: Closers to comply with UL-10C for Positive Pressure Fire Test and be U.L. listed for use of fire rated doors.
3. Size of Units: Comply with manufacturer's written recommendations for sizing of door closers depending on size of door, exposure to weather, and anticipated frequency of use.

Where closers are indicated for doors required to be accessible to the Americans with Disabilities Act, provide units complying with ANSI ICC/A117.1.

4. Closer Arms: Provide heavy duty, forged steel closer arms unless otherwise indicated in Hardware Sets.
5. Closers shall not be installed on exterior or corridor side of doors; where possible install closers on door for optimum aesthetics.
6. Closer Accessories: Provide door closer accessories including custom templates, special mounting brackets, spacers and drop plates as required for proper installation. Provide through-bolt and security type fasteners as specified in the hardware sets.

B. Door Closers, Surface Mounted (Heavy Duty): ANSI/BHMA A156.4, Grade 1 Certified Products Directory (CPD) listed surface mounted, heavy duty door closers with complete spring power adjustment, sizes 1 thru 6; and fully operational adjustable according to door size, frequency of use, and opening force. Closers to be rack and pinion type, one piece cast iron or aluminum alloy body construction, with adjustable backcheck and separate non-critical valves for closing sweep and latch speed control. Provide non-handed units standard.

1. Heavy duty surface mounted door closers shall have a 30-year warranty.

2. Manufacturers:

   a. LCN Closers (LC) - 4040 Series.
   b. Norton Rixson (NO) - 7500 Series.
   c. Sargent Manufacturing (SA) - 351 Series.

2.11 SURFACE MOUNTED CLOSER HOLDERS

A. Electromagnetic Door Holders: ANSI A156.15 electromagnetic door holder/releases with a minimum 20 to 40 pounds holding power and single coil construction able to accommodate.12VDC, 24VAC, 24VDC and 120VAC. Coils to be independently wound, employing an integral fuse and armatures to include a positive release button.

1. Manufacturers:

   a. LCN Door Closers (LC) - SEM7800 Series.
   b. Norton Rixson (RF) - 980/990 Series.
   c. Sargent Manufacturing (SA) - 1560 Series.

2.12 ARCHITECTURAL TRIM

A. Door Protective Trim

1. General: Door protective trim units to be of type and design as specified below or in the Hardware Sets.
2. Size: Fabricate protection plates (kick, armor, or mop) not more than 2" less than door width (LDW) on stop side of single doors and 1” LDW on stop side of pairs of doors, and not more than 1" less than door width on pull side. Coordinate and provide proper width

and height as required where conflicting hardware dictates. Height to be as specified in the Hardware Sets.

3. Where plates are applied to fire rated doors with the top of the plate more than 16" above the bottom of the door, provide plates complying with NFPA 80. Consult manufacturer's catalog and template book for specific requirements for size and applications.
4. Protection Plates: ANSI/BHMA A156.6 protection plates (kick, armor, or mop), fabricated from the following:

    a. Stainless Steel: 300 grade, 050-inch thick.

5. Options and fasteners: Provide manufacturer's designated fastener type as specified in the Hardware Sets. Provide countersunk screw holes.
6. Manufacturers:

    a. Hiawatha, Inc. (HI).
    b. Rockwood (RO).
    c. Trimco (TC).

2.13 DOOR STOPS AND HOLDERS

A. General: Door stops and holders to be of type and design as specified below or in the Hardware Sets.

B. Door Stops and Bumpers: ANSI/BHMA A156.16, Grade 1 door stops and wall bumpers. Provide wall bumpers, either convex or concave types with anchorage as indicated, unless floor or other types of door stops are specified in Hardware Sets. Do not mount floor stops where they will impede traffic. Where floor or wall bumpers are not appropriate, provide overhead type stops and holders.

1. Manufacturers:

    a. Hiawatha, Inc. (HI).
    b. Rockwood (RO).
    c. Trimco (TC).

2.14 ARCHITECTURAL SEALS

A. General: Thresholds, weatherstripping, and gasket seals to be of type and design as specified below or in the Hardware Sets. Provide continuous weatherstrip gasketing on exterior doors and provide smoke, light, or sound gasketing on interior doors where indicated. At exterior applications provide non-corrosive fasteners and elsewhere where indicated.

B. Smoke Labeled Gasketing: Assemblies complying with NFPA 105 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for smoke control ratings indicated, based on testing according to UL 1784.

1. Provide smoke labeled perimeter gasketing at all smoke labeled openings.

C. Fire Labeled Gasketing: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to UL-10C.

1. Provide intumescent seals as indicated to meet UL10C Standard for Positive Pressure Fire Tests of Door Assemblies, and NFPA 252, Standard Methods of Fire Tests of Door Assemblies.

D. Sound-Rated Gasketing: Assemblies that are listed and labeled by a testing and inspecting agency, for sound ratings indicated.

E. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strips are easily replaceable and readily available from stocks maintained by manufacturer.

F. Manufacturers:

1. National Guard Products (NG).
2. Pemko (PE).
3. Reese Enterprises, Inc. (RE).

2.15 ELECTRONIC ACCESSORIES

A. Door Position Switches: Door position magnetic reed contact switches specifically designed for use in commercial door applications. On recessed models the contact and magnetic housing snap-lock into a 1" diameter hole. Surface mounted models include wide gap distance design complete with armored flex cabling. Provide SPDT, N/O switches with optional Rare Earth Magnet installation on steel doors with flush top channels.

1. Manufacturers:

a. Sargent Manufacturing (SA) - 3280 Series.
b. Security Door Controls (SD) - DPS Series.
c. Securitron (SU) - DPS Series.

B. Intelligent Switching Power Supplies: Provide the least number of power supplies at the appropriate amperage level sufficient to exceed the required total draw for the specified electrified hardware and access control equipment.

1. Power supplies shall meet all functions and features as specified herein.

a. UL listed dual voltage 12 or 24 VDC field selectable continuous output.
b. Dedicated fast charger to prolong battery life with low battery cutoff to protect batteries from deep discharge.
c. Enhanced surge immunity for input/output protection
d. Separate, dedicated battery charging circuit to keep locks cooler.
e. Dual-color LED visual notification to prevent applying incorrect voltages to the power supply.
f. Instant auto-switch to battery on AC loss.
g. Expandable up to 16 outputs in the standard enclosure

h. Integrated fire alarm interface to allow main output shutdown or disconnect on a per output basis when using an R8 output module.
i. Network ready and remotely manage locks and connected devices when using an M8 managed output module on network models.
j. Lifetime replacement, no-fault, no questions asked warranty.

2. Manufacturers:

a. Altronix (AS) – Maximal 11F.
b. Securitron (SU) - AQL Series.

2.16 FABRICATION

A. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to manufacturers recognized installation standards for application intended.

2.17 FINISHES

A. Standard: Designations used in the Hardware Sets and elsewhere indicate hardware finishes complying with ANSI/BHMA A156.18, including coordination with traditional U.S. finishes indicated by certain manufacturers for their products.

B. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware

C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine scheduled openings, with Installer present, for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance.

B. Notify architect of any discrepancies or conflicts between the door schedule, door types, drawings and scheduled hardware. Proceed only after such discrepancies or conflicts have been resolved in writing.

3.2 PREPARATION

A. Hollow Metal Doors and Frames: Comply with ANSI/DHI A115 series.

B. Wood Doors: Comply with ANSI/DHI A115-W series.

3.3 INSTALLATION

A. Install each item of mechanical and electromechanical hardware and access control equipment to comply with manufacturer's written instructions and according to specifications.

1. Installers are to be trained and certified by the manufacturer on the proper installation and adjustment of fire, life safety, and security products including: hanging devices; locking devices; closing devices; and seals.

B. Mounting Heights: Mount door hardware units at heights indicated in following applicable publications, unless specifically indicated or required to comply with governing regulations:

1. Standard Steel Doors and Frames: DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."
2. DHI TDH-007-20: Installation Guide for Doors and Hardware.
3. Where indicated to comply with accessibility requirements, comply with ANSI A117.1 "Accessibility Guidelines for Buildings and Facilities."
4. Provide blocking in drywall partitions where wall stops or other wall mounted hardware is located.

C. Retrofitting: Install door hardware to comply with manufacturer's published templates and written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work specified in Division 9 Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.

D. Push Plates and Door Pulls: When through-bolt fasteners are in the same location as a push plate, countersink the fasteners flush with the door face allowing the push plate to sit flat against the door.

E. Thresholds: Set thresholds for exterior and acoustical doors in full bed of sealant complying with requirements specified in Division 7 Section "Joint Sealants."

F. Storage: Provide a secure lock up for hardware delivered to the project but not yet installed. Control the handling and installation of hardware items so that the completion of the work will not be delayed by hardware losses before and after installation.

3.4 FIELD QUALITY CONTROL

A. Field Inspection (Punch Report): Reference Division 01 Sections “Closeout Procedures”. Produce project punch report for each installed door opening indicating compliance with approved submittals and verification hardware is properly installed, operating and adjusted. Include list of items to be completed and corrected, indicating the reasons or deficiencies causing the Work to be incomplete or rejected.

1. Organization of List: Include separate Door Opening and Deficiencies and Corrective Action Lists organized by Mark, Opening Remarks and Comments, and related Opening Images and Video Recordings.

3.5 ADJUSTING

A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

3.6 CLEANING AND PROTECTION

A. Protect all hardware stored on construction site in a covered and dry place. Protect exposed hardware installed on doors during the construction phase. Install any and all hardware at the latest possible time frame.

B. Clean adjacent surfaces soiled by door hardware installation.

C. Clean operating items as necessary to restore proper finish. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of owner occupancy.

3.7 DEMONSTRATION

A. Instruct Owner's maintenance personnel to adjust, operate, and maintain mechanical and electromechanical door hardware.

3.8 DOOR HARDWARE SETS

A. The hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application and functionality.

1. Quantities listed are for each pair of doors, or for each single door.
2. The supplier is responsible for handing and sizing all products.
3. Where multiple options for a piece of hardware are given in a single line item, the supplier shall provide the appropriate application for the opening.
4. At existing openings with new hardware the supplier shall field inspect existing conditions prior to the submittal stage to verify the specified hardware will work as required. Provide alternate solutions and proposals as needed.

B. Manufacturer’s Abbreviations:

1. MK - McKinney
2. PE - Pemko
3. SA - SARGENT

4. SU - Securitron
5. KA - Kaba Ilco
6. RO - Rockwood
7. NO - Norton
8. RF - Rixson
9. OT - Other

Hardware Sets

Set: 1.0

Doors: A101B, A117

2 Continuous Hinge	CFM__SLF-HD1 PT - DOOR HEIGHT		PE
1 Removable Mullion	L980S - DOOR HEIGHT	US28	SA
2 Electric Power Transfer	EL-CEPT	630	SU
1 Rim Exit Device, Storeroom	16 21 55 56 8804	US32D	SA
1 Rim Exit Device, Dummy	16 21 55 8810	US32D	SA
1 Mullion Cylinder	21 980C1	US26D	SA
2 Pull	RM201 Mtg-Type 1XHD	US32D	RO
1 Surface Closer	351 CPS	EN	SA
1 Automatic Opener	6021 D	689	NO
1 Rain Guard	346C		PE
1 Gasketing (Mullion)	5110BL		PE
2 Sweep (w/ drip edge)	3452CNB		PE
1 Threshold	273x224 AFGT MSES25SS		PE
2 Frame Harness	QC-C1500P		MK
2 Door Harness	QC-CXXX- LENGTH TO SUIT		MK
1 Card Reader	Provided By Security Supplier		OT
2 Wall Switch	700		NO
2 Position Switch	1076D-G		GE
1 Power Supply	AQLxx-R8E1 (TO SUIT)		SU
1 Wiring Diagram	Elevation and Point to Point as Specified		OT

Notes:
• Perimeter/meeting stile seals by frame/door supplier.
• Electronic Operation: Outside, Card reader signals power supply to retract exit device latch allowing entry by door pull or automatic operator by wall switch. Key override. Inside, Free egress at all times by exit device with request to exit in panic bar or automatic operator by wall switch with request to exit

switch in operator switch. In case of power loss, door remains locked and latched.

Set: 1.1

Doors: A101A

2 Continuous Hinge	CFM__SLF-HD1 PT - DOOR HEIGHT		PE
1 Removable Mullion	L980S - DOOR HEIGHT	US28	SA
2 Electric Power Transfer	EL-CEPT	630	SU
1 Rim Exit Device, Storeroom	16 21 55 56 8804	US32D	SA
1 Rim Exit Device, Dummy	16 21 55 8810	US32D	SA
1 Mullion Cylinder	21 980C1	US26D	SA
2 Pull	RM201 Mtg-Type 1XHD	US32D	RO
1 Surface Closer	351 CPS	EN	SA
1 Automatic Opener	6021 D	689	NO
1 Rain Guard	346C		PE
1 Gasketing (Mullion)	5110BL		PE
2 Sweep (w/ drip edge)	3452CNB		PE
1 Threshold	766x5AFG MSES25SS		PE
1 Frame Harness	QC-C1500P		MK
1 Door Harness	QC-CXXX- LENGTH TO SUIT		MK
1 Card Reader	Provided By Security Supplier		OT
2 Wall Switch	700		NO
2 Position Switch	1076D-G		GE
1 Power Supply	AQLxx-R8E1 (TO SUIT)		SU
1 Wiring Diagram	Elevation and Point to Point as Specified		OT

Notes:
• Perimeter/meeting stile seals by frame/door supplier.
• Electronic Operation: Outside, Card reader signals power supply to retract exit device latch allowing entry by door pull or automatic operator by wall switch. Key override. Inside, Free egress at all times by exit device with request to exit in panic bar or automatic operator by wall switch with request to exit switch in operator switch. In case of power loss, door remains locked and latched.

Set: 2.0

Doors: A101C

2 Continuous Hinge	CFM_SLF-HD1 - DOOR HEIGHT		PE
1 Removable Mullion	L980S - DOOR HEIGHT	US28	SA

1 Rim Exit Device, Dummy	16 21 8810	US32D	SA
1 Rim Exit Device, Storeroom	16 21 8804	US32D	SA
1 Mullion Cylinder	21 980C1	US26D	SA
2 Pull	RM201 Mtg-Type 1XHD	US32D	RO
2 Surface Closer	351 CPS	EN	SA
1 Rain Guard	346C		PE
1 Gasketing (Mullion)	5110BL		PE
2 Sweep (w/ drip edge)	3452CNB		PE
1 Threshold	273x224 AFGT MSES25SS		PE
2 Position Switch	1076D-G		GE

Notes:
• Perimeter and meeting stile gasket by door / frame manufacturer.

Set: 3.0

Doors: B101

1 Continuous Hinge	CFM__SLF-HD1 PT - DOOR HEIGHT		PE
1 Electric Power Transfer	EL-CEPT	630	SU
1 Rim Exit Device, Storeroom	16 21 55 56 8804	US32D	SA
1 Pull	RM201 Mtg-Type 1XHD	US32D	RO
1 Surface Closer	351 CPS	EN	SA
1 Rain Guard	346C		PE
1 Sweep (w/ drip edge)	3452CNB		PE
1 Threshold	273x224 AFGT MSES25SS		PE
1 Frame Harness	QC-C1500P		MK
1 Door Harness	QC-CXXX- LENGTH TO SUIT		MK
1 Card Reader	Provided By Security Supplier		OT
1 Position Switch	1076D-G		GE
1 Power Supply	AQLxx-R8E1 (TO SUIT)		SU
1 Wiring Diagram	Elevation and Point to Point as Specified		OT

Notes:
• Perimeter and meeting stile gasket by door / frame manufacturer.
• Electronic Operation: Valid card or key retracts latchbolt. Request to exit shows authorized egress. Free egress at all times. In case of power loss, door remains locked and latched.

Set: 4.0

Doors: A104

1 Continuous Hinge	CFM__HD1 PT - DOOR HEIGHT		PE
1 Electric Power Transfer	EL-CEPT	630	SU
1 Rim Exit Device, Storeroom	16 21 55 56 8804	US32D	SA
1 Pull	RM201 Mtg-Type 1XHD	US32D	RO
1 Surface Closer	351 CPS	EN	SA
1 Kick Plate	K1050 10" CSK	US32D	RO
1 Rain Guard	346C		PE
1 Gasketing (Head/Jambs)	S773BL		PE
1 Sweep (w/ drip edge)	3452CNB		PE
1 Threshold	766x5AFG MSES25SS		PE
1 Frame Harness	QC-C1500P		MK
1 Door Harness	QC-CXXX- LENGTH TO SUIT		MK
1 Card Reader	Provided By Security Supplier		OT
1 Position Switch	1076D-G		GE
1 Power Supply	AQLxx-R8E1 (TO SUIT)		SU
1 Wiring Diagram	Elevation and Point to Point as Specified		OT

Notes:
• Electronic Operation: Valid card or key retracts latchbolt. Request to exit shows authorized egress. Free egress at all times. In case of power loss, door remains locked and latched.

Set: 5.0

Doors: A106, A107, A108, A109, A110, A111, A112, A113, A203, A204, A207, A208, A209, A210, A211, A212

3 Hinge, Full Mortise, Hvy Wt	T4A3786	US26D	MK
1 Dormitory/Exit Lock	21 V11 8225 LNP	US26D	SA
1 Surface Closer	351 O/P10 (TO SUIT)	EN	SA
1 Door Stop	403/441CU (TO SUIT)	US26D	RO

Notes:
• Perimeter/meeting stile seals by frame/door supplier.

Set: 6.0

Doors: B108B

6 Hinge, Wide Throw	TA2798	US26D	MK

2 Rim Exit Device, Classroom	21 8813 ETP	US32D	SA
1 Mullion Cylinder	21 980C1	US26D	SA
1 Mullion	L980S - DOOR HEIGHT	PC	SA
2 Surface Closer	351 O/P10 (TO SUIT)	EN	SA
2 Kick Plate	K1050 10" CSK	US32D	RO
2 Door Stop	403/441CU (TO SUIT)	US26D	RO
2 Silencer	608/609 (TO SUIT)		RO

Notes:
•Template closer to swing 180 degrees where needed.

Set: 7.0

Doors: B108A

3 Hinge, Full Mortise, Hvy Wt	T4A3786	US26D	MK
1 Rim Exit Device, Classroom	21 8813 ETP	US32D	SA
1 Surface Closer	351 O/P10 (TO SUIT)	EN	SA
1 Kick Plate	K1050 10" CSK	US32D	RO
1 Door Stop	403/441CU (TO SUIT)	US26D	RO
3 Silencer	608/609 (TO SUIT)		RO

Set: 8.0

Doors: A119

6 Hinge, Full Mortise, Hvy Wt	T4A3786	US26D	MK
2 Rim Exit Device	12 21 49 8816 ETP	US32D	SA
1 Mullion Cylinder	21 980C1	US26D	SA
1 Mullion	12-L980 - DOOR HEIGHT	PC	SA
2 Thumbturn	7011TK9	26D	KA
2 Surface Closer	351 O/P10 (TO SUIT)	EN	SA
2 Kick Plate	K1050 10" CSK	US32D	RO
2 Electromagnetic Holder	998M	689	RF
2 Door Stop	403/441CU (TO SUIT)	US26D	RO
1 Astragal	297AS		PE
1 Gasketing	S88BL		PE
1 Gasketing (Mullion)	5110BL		PE

Notes:
• Connect holder to fire alarm system to release upon fire alarm.

Set: 9.0

Doors: A103

2 Hinge, Full Mortise	TA2714	US26D	MK
1 Electric Hinge	TA2714-QC12	US26D	MK
1 Fail Secure Lock	FW RX 21 10XG71 LP	US26D	SA
1 Surface Closer	351 O/P10 (TO SUIT)	EN	SA
1 Kick Plate	K1050 10" CSK	US32D	RO
1 Door Stop	403/441CU (TO SUIT)	US26D	RO
3 Silencer	608/609 (TO SUIT)		RO
1 Frame Harness	QC-C1500P		MK
1 Door Harness	QC-CXXX- LENGTH TO SUIT		MK
1 Card Reader	Provided By Security Supplier		OT
1 Position Switch	1076D-G		GE
1 Power Supply	AQLxx-R8E1 (TO SUIT)		SU
1 Wiring Diagram	Elevation and Point to Point as Specified		OT

Notes:
• Electronic Operation: Valid card unlocks outside lever or key retracts latchbolt. Request to exit shows authorized egress. Free egress at all times. In case of power loss, door remains locked and latched.

Set: 10.0

Doors: A102, A115, A205B, A205C, A206, A214

3 Hinge, Full Mortise	TA2714	US26D	MK
1 Storeroom Lock	FW 21 10XG04 LP	US26D	SA
1 Surface Closer	351 O/P10 (TO SUIT)	EN	SA
1 Kick Plate	K1050 10" CSK	US32D	RO
1 Door Stop	403/441CU (TO SUIT)	US26D	RO
3 Silencer	608/609 (TO SUIT)		RO

Set: 11.0

Doors: A216

3 Hinge, Full Mortise	TA2714	US26D	MK
1 Storeroom Lock	FW 21 10XG04 LP	US26D	SA
1 Surface Closer	351 O/P10 (TO SUIT)	EN	SA
1 Kick Plate	K1050 10" CSK	US32D	RO

1 Door Stop	403/441CU (TO SUIT)	US26D	RO
1 Rain Guard	346C		PE
3 Silencer	608/609 (TO SUIT)		RO

Set: 12.0

Doors: B107

3 Hinge, Full Mortise	TA2714	US26D	MK
1 Office Lock	FW 21 10XG05 LP	US26D	SA
1 Door Stop	403/441CU (TO SUIT)	US26D	RO
3 Silencer	608/609 (TO SUIT)		RO

Set: 13.0

Doors: A105, A205A

3 Hinge, Full Mortise	TA2714	US26D	MK
1 Classroom Lock	FW 21 10XG37 LP	US26D	SA
1 Surface Closer	351 O/P10 (TO SUIT)	EN	SA
1 Kick Plate	K1050 10" CSK	US32D	RO
1 Door Stop	403/441CU (TO SUIT)	US26D	RO
3 Silencer	608/609 (TO SUIT)		RO

Set: 14.0

Doors: B103

3 Hinge, Full Mortise	TA2714	US26D	MK
1 Passage Latch	10XU15 LP	US26D	SA
1 Surface Closer	351 O/P10 (TO SUIT)	EN	SA
1 Kick Plate	K1050 10" CSK	US32D	RO
1 Door Stop	403/441CU (TO SUIT)	US26D	RO
3 Silencer	608/609 (TO SUIT)		RO

Set: 15.0

Doors: A205D, A105A

3 Hinge, Full Mortise	*TA2714*	*US26D*	*MK*
1 Privacy Lock	*V21 8265 LNP*	*US26D*	*SA*
1 Surface Closer	*351 O/P10 (TO SUIT)*	*EN*	*SA*

1 Kick Plate	*K1050 10" CSK*	*US32D*	*RO*
1 Mop Plate	*K1050 4" CSK*	*US32D*	*RO*
1 Door Stop	*403/441CU (TO SUIT)*	*US26D*	*RO*
3 Silencer	*608/609 (TO SUIT)*		*RO*
1 Coat Hook	*RM802*	*US32D*	*RO*

HARDWARE SCHEDULE ADDITIVE ALTERNATE NO. 1

Set: 20.0

Doors: B102B

1	Continuous Hinge	CFM_HD1 - DOOR HEIGHT		PE
1	Rim Exit Device, Storeroom	16 21 8804	US32D	SA
1	Pull	RM201 Mtg-Type 1XHD	US32D	RO
1	Surface Closer	351 CPS	EN	SA
1	Kick Plate	K1050 10" CSK	US32D	RO
1	Rain Guard	346C		PE
1	Gasketing (Head/Jambs)	S773BL		PE
1	Sweep (w/ drip edge)	3452CNB		PE
1	Threshold	766x5AFG MSES25SS		PE
1	Position Switch	1076D-G		GE

Notes:
• Provide doorbell at this location.

Set: 21.0

Doors: B110B

3	Hinge, Full Mortise, Hvy Wt	T4A3786	US26D	MK
1	Rim Exit Device, Classroom	21 8813 ETP	US32D	SA
1	Surface Closer	351 O/P10 (TO SUIT)	EN	SA
1	Kick Plate	K1050 10" CSK	US32D	RO
1	Door Stop	403/441CU (TO SUIT)	US26D	RO
3	Silencer	608/609 (TO SUIT)		RO

Set: 22.0

Doors: B107

3	Hinge, Full Mortise	TA2714	US26D	MK
1	Storeroom Lock	FW 21 10XG04 LP	US26D	SA
1	Surface Closer	351 O/P10 (TO SUIT)	EN	SA
1	Kick Plate	K1050 10" CSK	US32D	RO
1	Door Stop	403/441CU (TO SUIT)	US26D	RO
3	Silencer	608/609 (TO SUIT)		RO

Set: 23.0

Doors: B103

3	Hinge, Full Mortise	TA2714	US26D	MK
1	Office Lock	FW 21 10XG05 LP	US26D	SA
1	Door Stop	403/441CU (TO SUIT)	US26D	RO
3	Silencer	608/609 (TO SUIT)		RO

Set: 24.0

Doors: B108

3	Hinge, Full Mortise	TA2714	US26D	MK
1	Privacy Lock	V21 8265 LNP	US26D	SA
1	Surface Closer	351 O/P10 (TO SUIT)	EN	SA
1	Kick Plate	K1050 10" CSK	US32D	RO
1	Mop Plate	K1050 4" CSK	US32D	RO
1	Door Stop	403/441CU (TO SUIT)	US26D	RO
3	Silencer	608/609 (TO SUIT)		RO
1	Coat Hook	RM802	US32D	RO

Set: 25.0

Doors: B104, B109

3	Hinge, Full Mortise	TA2714	US26D	MK
1	Passage Latch	10XU15 LP	US26D	SA
1	Surface Closer	351 O/P10 (TO SUIT)	EN	SA
1	Kick Plate	K1050 10" CSK	US32D	RO
1	Door Stop	403/441CU (TO SUIT)	US26D	RO
3	Silencer	608/609 (TO SUIT)		RO

Set: 26.0

Doors: B102A, B110A, B110C, *B111A, B111B, B111C, B111D*

0 All Hardware	BY DOOR SUPPLIER	OT

END OF SECTION 087100

SECTION 092900 - GYPSUM BOARD ***(ADDENDUM NO. 1)***

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Interior gypsum board.
2. Exterior gypsum board for ceilings and soffits.
3. Tile backing panels.

B. Related Requirements:

1. Section 061600 "Sheathing" for gypsum sheathing for exterior walls.
2. Section 018113 "Sustainable Design Requirements" for Green Globes requirements.
3. Section 079219 "Acoustical Joint Sealants" for acoustical joint sealants installed in gypsum board assemblies.
4. Section 092116.23 "Gypsum Board Shaft Wall Assemblies" for metal shaft-wall framing, gypsum shaft liners, and other components of shaft-wall assemblies.
5. Section 092216 "Non-Structural Metal Framing" for non-structural steel framing and suspension systems that support gypsum board panels.

1.2 ACTION SUBMITTALS

A. Product Data: For the following:

1. Gypsum wallboard.
2. Gypsum board, Type X.
3. Gypsum ceiling board.
4. Abuse-resistant gypsum board.
5. Glass-mat gypsum sheathing board.
6. Cementitious backer units.
7. Interior trim.
8. Exterior trim.
9. Aluminum trim (perforated aluminum soffits).
10. Joint treatment materials.
11. Sound-attenuation blankets.

B. Sustainable Design Submittals:

1. Comply with Section 018113 "Sustainable Design Requirements".

1.3 DELIVERY, STORAGE AND HANDLING

A. Store materials inside under cover and keep them dry and protected against weather,

condensation, direct sunlight, construction traffic, and other potential causes of damage. Stack panels flat and supported on risers on a flat platform to prevent sagging.

1.4 FIELD CONDITIONS

A. Environmental Limitations: Comply with ASTM C840 requirements or gypsum board manufacturer's written instructions, whichever are more stringent.

B. Do not install paper-faced gypsum panels until installation areas are enclosed and conditioned.

C. Do not install panels that are wet, moisture damaged, and mold damaged.

1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

PART 2 - PRODUCTS

2.1 SOURCE LIMITATIONS

A. Obtain each type of gypsum panel and joint finishing material from single source with resources to provide products of consistent quality in appearance and physical properties.

2.2 PERFORMANCE REQUIREMENTS

A. Fire-Resistance-Rated Assemblies: For fire-resistance-rated assemblies, provide materials and construction identical to those tested in assembly indicated in accordance with ASTM E119 by an independent testing agency.

B. STC-Rated Assemblies: For STC-rated assemblies, provide materials and construction identical to those tested in assembly indicated in accordance with ASTM E90 and classified in accordance with ASTM E413 by an independent testing agency.

2.3 GYPSUM BOARD, GENERAL

A. Size: Provide maximum lengths and widths available that will minimize joints in each area and that correspond with support system indicated.

2.4 INTERIOR GYPSUM BOARD

A. Gypsum Wallboard: ASTM C1396/C1396M.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to,

the following:

a. CertainTeed; SAINT-GOBAIN
b. Georgia-Pacific Gypsum LLC
c. Gold Bond Building Products, LLC provided by National Gypsum Company
d. USG Corporation

2. Thickness: 1/2 inch or 5/8 inch as indicated on the Drawings.
3. Long Edges: Tapered.

B. Gypsum Board, Type X: ASTM C1396/C1396M.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

a. CertainTeed; SAINT-GOBAIN
b. Georgia-Pacific Gypsum LLC
c. Gold Bond Building Products, LLC provided by National Gypsum Company
d. USG Corporation

2. Thickness: 5/8 inch.
3. Long Edges: Tapered.

C. Gypsum Ceiling Board: ASTM C1396/C1396M.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

a. CertainTeed; SAINT-GOBAIN
b. Georgia-Pacific Gypsum LLC
c. Gold Bond Building Products, LLC provided by National Gypsum Company

2. Thickness: 1/2 inch or 5/8 inch as indicated on the Drawings.
3. Long Edges: Tapered.

D. Abuse-Resistant Gypsum Board: ASTM C1396/C1396M gypsum board, tested in accordance with ASTM C1629/C1629M.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

a. CertainTeed; SAINT-GOBAIN
b. Georgia-Pacific Gypsum LLC
c. Gold Bond Building Products, LLC provided by National Gypsum Company
d. USG Corporation

2. Core: 5/8 inch, Type X.

3. Surface Abrasion: ASTM C1629/C1629M, meets or exceeds Level 3 requirements.
4. Indentation: ASTM C1629/C1629M, meets or exceeds Level 1 requirements.
5. Soft-Body Impact: ASTM C1629/C1629M, meets or exceeds Level 2 requirements.
6. Long Edges: Tapered.
7. Mold Resistance: ASTM D3273, score of 10 as rated in accordance with ASTM D3274.

2.5 EXTERIOR GYPSUM BOARD FOR CEILINGS AND SOFFITS

A. Glass-Mat Gypsum Sheathing Board: ASTM C1177/C1177M, with fiberglass mat laminated to both sides and with manufacturer's standard edges.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

    a. CertainTeed; SAINT-GOBAIN
    b. Georgia-Pacific Gypsum LLC
    c. Gold Bond Building Products, LLC provided by National Gypsum Company
    d. USG Corporation

2. Core: 5/8 inch, Type X.

2.6 TILE BACKING PANELS

A. Cementitious Backer Units: ANSI A118.9 and ASTM C1288 or ASTM C1325, with manufacturer's standard edges.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

    a. James Hardie Building Products, Inc.
    b. PermaBASE Building Products, LLC provided by National Gypsum Company
    c. USG Corporation

2. Thickness: 5/8 inch.
3. Mold Resistance: ASTM D3273, score of 10 as rated in accordance with ASTM D3274.

2.7 TRIM ACCESSORIES

A. Interior Trim: ASTM C1047.

1. Material: Galvanized or aluminum-coated steel sheet or rolled zinc.
2. Shapes:

    a. Cornerbead.
    b. Bullnose bead.
    c. LC-Bead: J-shaped; exposed long flange receives joint compound.

d. Expansion (control) joint.
e. Curved-Edge Cornerbead: With notched or flexible flanges.

B. Exterior Trim: ASTM C1047.

1. Material: Hot-dip galvanized-steel sheet, plastic, or rolled zinc.
2. Shapes:

a. Cornerbead.
b. LC-Bead: J-shaped; exposed long flange receives joint compound.
c. Expansion (Control) Joint: One-piece, rolled zinc with V-shaped slot and removable strip covering slot opening.

C. Aluminum Trim: Extruded perforated aluminum soffit vents of profile and dimensions indicated on the Drawings.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

a. Clark Dietrich
b. Fry Reglet
c. Tamlyn

2. Finish: Apply manufacturer's standard baked enamel or powder coat finish immediately after cleaning and pretreating, with a minimum dry-film thickness of 1 mil for topcoat..

a. Color: As selected by Architect from manufacturer's full range of industry colors.

2.8 JOINT TREATMENT MATERIALS

A. General: Comply with ASTM C475/C475M.

B. Joint Tape:

1. Interior Gypsum Board: Paper.
2. Glass-Mat Gypsum Sheathing Board: 10-by-10 glass mesh.
3. Tile Backing Panels: As recommended by panel manufacturer.

C. Joint Compound for Interior Gypsum Board: For each coat, use formulation that is compatible with other compounds applied on previous or for successive coats.

1. Prefilling: At open joints, rounded or beveled panel edges, and damaged surface areas, use setting-type taping compound.
2. Embedding and First Coat: For embedding tape and first coat on joints, fasteners, and trim flanges, use setting-type taping compound.

a. Use setting-type compound for installing paper-faced metal trim accessories.

3. Fill Coat: For second coat, use drying-type, all-purpose compound.

4. Finish Coat: For third coat, use drying-type, all-purpose compound.
~~5. *Skim Coat: For final coat of Level 5 finish, use drying-type, all-purpose compound.*~~

D. Joint Compound for Exterior Applications:

1. Glass-Mat Gypsum Sheathing Board: As recommended by sheathing board manufacturer.

E. Joint Compound for Tile Backing Panels:

1. Cementitious Backer Units: As recommended by backer unit manufacturer.

2.9 AUXILIARY MATERIALS

A. Provide auxiliary materials that comply with referenced installation standards and manufacturer's written instructions.

B. Steel Drill Screws: ASTM C1002 unless otherwise indicated.

1. Use screws complying with ASTM C954 for fastening panels to steel members from 0.033 to 0.112 inch thick.
2. For fastening cementitious backer units, use screws of type and size recommended by panel manufacturer.

C. Sound-Attenuation Blankets: ASTM C665, Type I (blankets without membrane facing) produced by combining thermosetting resins with mineral fibers manufactured from glass, slag wool, or rock wool.

1. Fire-Resistance-Rated Assemblies: Comply with mineral-fiber requirements of assembly.

D. Acoustical Sealant: As specified in Section 079219 "Acoustical Joint Sealants."

E. Thermal Insulation: As specified in Section 072100 "Thermal Insulation."

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas and substrates including welded hollow-metal frames and support framing, with Installer present, for compliance with requirements and other conditions affecting performance of the Work.

B. Examine panels before installation. Reject panels that are wet, moisture damaged, and mold damaged.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION AND FINISHING OF PANELS, GENERAL

A. Comply with ASTM C840.

B. Install ceiling panels across framing to minimize the number of abutting end joints and to avoid abutting end joints in central area of each ceiling. Stagger abutting end joints of adjacent panels not less than one framing member.

C. Install panels with face side out. Butt panels together for a light contact at edges and ends with not more than 1/16 inch of open space between panels. Do not force into place.

D. Locate edge and end joints over supports, except in ceiling applications where intermediate supports or gypsum board back-blocking is provided behind end joints. Do not place tapered edges against cut edges or ends. Stagger vertical joints on opposite sides of partitions. Do not make joints other than control joints at corners of framed openings.

E. Form control and expansion joints with space between edges of adjoining gypsum panels.

F. Cover both faces of support framing with gypsum panels in concealed spaces (above ceilings, etc.), except in chases braced internally.

1. Unless concealed application is indicated or required for sound, fire, air, or smoke ratings, coverage may be accomplished with scraps of not less than 8 sq. ft. in area.
2. Fit gypsum panels around ducts, pipes, and conduits.
3. Where partitions intersect structural members projecting below underside of floor/roof slabs and decks, cut gypsum panels to fit profile formed by structural members; allow 1/4- to 3/8-inch- wide joints to install sealant.

G. Isolate perimeter of gypsum board applied to non-load-bearing partitions at structural abutments. Provide 1/4- to 1/2-inch- wide spaces at these locations and trim edges with edge trim where edges of panels are exposed. Seal joints between edges and abutting structural surfaces with acoustical sealant.

H. Attachment to Steel Framing: Attach panels so leading edge or end of each panel is attached to open (unsupported) edges of stud flanges first.

I. STC-Rated Assemblies: Seal construction at perimeters, behind control joints, and at openings and penetrations with a continuous bead of acoustical sealant. Install acoustical sealant at both faces of partitions at perimeters and through penetrations. Comply with ASTM C919 and with manufacturer's written instructions for locating edge trim and closing off sound-flanking paths around or through assemblies, including sealing partitions above acoustical ceilings.

J. Install sound attenuation blankets before installing gypsum panels unless blankets are readily installed after panels have been installed on one side.

3.3 INSTALLATION OF INTERIOR GYPSUM BOARD

A. Install interior gypsum board in the following locations:

1. Wallboard Type: As indicated on Drawings.
2. Type X: Where required for fire-resistance-rated assembly.
3. Flexible Type: Apply in double layer at curved assemblies.
4. Ceiling Type: Ceiling surfaces.
5. Abuse-Resistant Type: Generally all walls and vertical surfaces exposed to view below 8'-0" above finished floor. Refer to partition types on Drawings for additional information..

B. Single-Layer Application:

1. On ceilings, apply gypsum panels before wall/partition board application to greatest extent possible and at right angles to framing unless otherwise indicated.
2. On partitions/walls, apply gypsum panels vertically (parallel to framing) unless otherwise indicated or required by fire-resistance-rated assembly, and minimize end joints.

    a. Stagger abutting end joints not less than one framing member in alternate courses of panels.
    b. At stairwells and other high walls, install panels horizontally unless otherwise indicated or required by fire-resistance-rated assembly.

3. On Z-shaped furring members, apply gypsum panels vertically (parallel to framing) with no end joints. Locate edge joints over furring members.
4. Fastening Methods: Apply gypsum panels to supports with steel drill screws.

3.4 INSTALLATION OF EXTERIOR GYPSUM PANELS FOR CEILINGS AND SOFFITS

A. Apply panels perpendicular to supports, with end joints staggered and located over supports.

1. Install with 1/4-inch open space where panels abut other construction or structural penetrations.
2. Fasten with corrosion-resistant screws.

3.5 INSTALLATION OF TILE BACKING PANELS

A. Cementitious Backer Units: ANSI A108.11, at locations indicated to receive tile.

B. Where tile backing panels abut other types of panels in same plane, shim surfaces to produce a uniform plane across panel surfaces.

3.6 INSTALLATION OF TRIM ACCESSORIES

A. General: For trim with back flanges intended for fasteners, attach to framing with same fasteners used for panels. Otherwise, attach trim according to manufacturer's written instructions.

B. Control Joints: Install control joints at locations indicated on Drawings, in accordance with ASTM C840 and in specific locations approved by Architect for visual effect.

C. Interior Trim: Install in the following locations:

1. Cornerbead: Use at outside corners unless otherwise indicated.
2. LC-Bead: Use at exposed panel edges.

D. Exterior Trim: Install in the following locations:

1. Cornerbead: Use at outside corners.

E. Aluminum Trim: Install perforated aluminum soffits in locations indicated on Drawings.

3.7 FINISHING OF GYPSUM BOARD

A. General: Treat gypsum board joints, interior angles, edge trim, control joints, penetrations, fastener heads, surface defects, and elsewhere as required to prepare gypsum board surfaces for decoration. Promptly remove residual joint compound from adjacent surfaces.

B. Prefill open joints and damaged surface areas.

C. Apply joint tape over gypsum board joints, except for trim products specifically indicated as not intended to receive tape.

D. Gypsum Board Finish Levels: Finish panels to levels indicated below and in accordance with ASTM C840:

1. Level 1: Ceiling plenum areas, concealed areas, and where indicated.
2. Level 4: At all locations where gypsum board is exposed to view and at panel surfaces scheduled to receive wall coverings.

    a. Primer and its application to surfaces are specified in Section 099123 "Interior Painting."

E. Glass-Mat Gypsum Sheathing Board: Finish according to manufacturer's written instructions for use as exposed soffit board.

F. Cementitious Backer Units: Finish according to manufacturer's written instructions.

3.8 PROTECTION

A. Protect adjacent surfaces from drywall compound and promptly remove from floors and other non-drywall surfaces. Repair surfaces stained, marred, or otherwise damaged during drywall application.

B. Protect installed products from damage from weather, condensation, direct sunlight, construction, and other causes during remainder of the construction period.

C. Remove and replace panels that are wet, moisture damaged, and mold damaged.

1. Indications that panels are wet or moisture damaged include, but are not limited to,

discoloration, sagging, or irregular shape.

2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

END OF SECTION 092900

SECTION 099113 - EXTERIOR PAINTING ***(ADDENDUM NO. 1)***

1.1 SUMMARY

A. Section Includes:

1. Primers.
2. Finish coatings.

B. Related Requirements:

1. Section 018113 "Sustainable Design Requirements" for Green Globes requirements.
2. Section 051200 "Structural Steel Framing" for shop priming of metal substrates.
3. Section 099123 “Interior Painting” for surface preparation and the application of paint systems on interior substrates.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include preparation requirements and application instructions.
2. Indicate VOC content.

B. Sustainable Design Submittals:

1. Comply with Section 018113 "Sustainable Design Requirements".

C. Samples for Verification: For each type of paint system and each color and gloss of topcoat.

1. Submit Samples on rigid backing, 8 inches square.
2. Apply coats on Samples in steps to show each coat required for system.
3. Label each coat of each Sample.
4. Label each Sample for location and application area.

D. Product Schedule: Use same designations indicated on Drawings and in the Exterior Painting Schedule to cross-reference paint systems specified in this Section. Include color designations.

1.3 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
1. Paint Products: 5 percent, but not less than 1 gal. of each material and color applied.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F.

1. Maintain containers in clean condition, free of foreign materials and residue.
2. Remove rags and waste from storage areas daily.

1.5 FIELD CONDITIONS

A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F.

B. Do not apply paints in snow, rain, fog, or mist; when relative humidity exceeds 85 percent; at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

1. Behr Paint Company; Behr Process Corporation.
2. Benjamin Moore & Co.
3. PPG Paints.
4. Sherwin-Williams Company (The)
5. Valspar Corporation (The).

B. Source Limitations: Obtain each paint product from sole source from single manufacturer.

2.2 PAINT PRODUCTS, GENERAL

A. Material Compatibility:

1. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer based on testing and field experience.
2. For each coat in a paint system, provide products recommended in writing by topcoat manufacturer for use in paint system and on substrate indicated.

B. Colors: As indicated on Drawings.

1. 10 percent of surface area will be painted with deep tones.

2.3 SOURCE QUALITY CONTROL

A. Testing of Paint Materials: Owner reserves the right to invoke the following procedure at any time and as often as Owner deems necessary during the period when paints are being applied:

1. Owner may engage the services of a qualified testing agency to sample paint materials being used. Samples of material delivered to Project site will be taken, identified, sealed, and certified in presence of Contractor.
2. Testing agency will perform tests for compliance of paint materials with product requirements.
3. Owner may direct Contractor to stop applying paints if test results show materials being used do not comply with product requirements. Contractor shall remove noncomplying-paint materials from Project site, pay for testing, and repaint surfaces painted with rejected materials. Contractor will be required to remove rejected materials from previously painted surfaces if, on repainting with complying materials, the two paints are incompatible.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.

B. Verify suitability of substrates, including surface conditions and compatibility, with finishes and primers.

C. Proceed with coating application only after unsatisfactory conditions have been corrected.

1. Beginning coating application constitutes Contractor's acceptance of substrates and conditions.

3.2 PREPARATION

A. Comply with manufacturer's written instructions applicable to substrates and paint systems indicated.

B. Remove hardware, covers, plates, and comparable items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.

1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection.
2. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.

C. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.

1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems specified in this Section.

D. Steel Substrates: Remove rust, loose mill scale, and shop primer if any. Clean using methods recommended in writing by paint manufacturer but not less than the following:

1. SSPC-SP6/NACE3 Commercial Blast Cleaning. The surface must be clean and dry before painting.

E. Galvanized-Metal Substrates: Remove grease and oil residue from galvanized sheet metal by mechanical methods to produce clean, lightly etched surfaces that promote adhesion of subsequently applied paints.

1. SSPC-SP6/NACE3 Commercial Blast Cleaning. The surface must be clean and dry before painting.

F. Aluminum Substrates: Remove loose surface oxidation.

3.3 INSTALLATION

A. Apply paints in accordance with manufacturer's written instructions.

1. Use applicators and techniques suited for paint and substrate indicated.
2. Paint surfaces behind movable items same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed items with prime coat only.
3. Paint exterior side and edges of exterior doors and entire exposed surface of exterior door frames.

B. Tint undercoats same color as topcoat but tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of same material are to be applied. Provide sufficient difference in shade of undercoats to distinguish each separate coat.

C. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.

D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

3.4 FIELD QUALITY CONTROL

A. Dry Film Thickness Testing: Owner may engage the services of a qualified testing and inspecting agency to inspect and test paint for dry film thickness.

1. Contractor shall touch up and restore painted surfaces damaged by testing.

2. If test results show that dry film thickness of applied paint does not comply with paint manufacturer's written instructions, Contractor shall pay for testing and apply additional coats as needed to provide dry film thickness that complies with paint manufacturer's written instructions.

3.5 CLEANING AND PROTECTION

A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.

1. Do not clean equipment with free-draining water and prevent solvents, thinners, cleaners, and other contaminants from entering into waterways, sanitary and storm drain systems, and ground.
2. Dispose of contaminants in accordance with requirements of authorities having jurisdiction.
3. Allow empty paint cans to dry before disposal.
4. Collect waste paint by type and deliver to recycling or collection facility.

B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.

C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.

D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.6 EXTERIOR PAINTING SCHEDULE

A. Steel Substrates:

1. Semi-Gloss Finish

a. 1st Coat: Zinc Rich Aromatic Urethane applied at 2.5-3.5 dry mils. (performance equal to Tnemec Series 94H20 Tneme-Zinc)
b. 2nd Coat:Polyamide Epoxy applied at 4.0-6.0 dry mils. (performance equal to Tnemec Series 161~~*HS*~~ Tneme-Fascure)
c. 3rd Coat:Polyfunctional Hybrid Urethane applied at 2.0-3.0 dry mils. (performance equal to Tnemec Series ~~*750 UVX*~~ *1095 Endurashield*)

B. Galvanized-Metal Substrates:

1. Semi-Gloss Finish

a. 1st Coat:Polyamide Epoxy applied at 4.0-6.0 dry mils. (performance equal to Tnemec Series 161~~*HS*~~ Tneme-Fascure)
b. 2nd Coat:Polyfunctional Hybrid Urethane applied at 2.0-3.0 dry mils. (performance equal to Tnemec Series ~~*750 UVX*~~ *1095 Endurashield*)

C. CMU Substrates:

1. Latex System: MPI EXT 4.2A.

a. Prime Coat: Interior /Exterior latex block filler, Sherwin Williams Pro Industrial Heavy Duty Block Filler.
b. Intermediate Coat: Exterior latex matching topcoat.
c. Topcoat: Exterior latex semigloss, Sherwin Williams Exterior Acrylic Latex.

END OF SECTION 099113

SECTION 102800 - TOILET, BATH, AND LAUNDRY ACCESSORIES *(ADDENDUM NO. 1)*

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section Includes:

1. Public-use washroom accessories.
2. Custodial accessories.

B. Owner-Furnished / Contractor Installed Materials: Toilet paper holder, paper towel dispenser and soap dispenser.

C. Related Sections:

1. Division 22 Plumbing Sections for under lavatory guards.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product indicated. Include the following:

1. Construction details and dimensions.
2. Anchoring and mounting requirements, including requirements for cutouts in other work and substrate preparation.
3. *Include electrical characteristics.*
4. Material and finish descriptions.
5. Features that will be included for Project.
6. Manufacturer's warranty.

B. Product Schedule: Indicating types, quantities, sizes, and installation locations by room of each accessory required.

1. Identify locations using room designations indicated.

1.4 INFORMATIONAL SUBMITTALS

A. Warranty: Sample of special warranty.

1.5 CLOSEOUT SUBMITTALS

A. Maintenance Data: For toilet and bath accessories to include in maintenance manuals.

1.6 QUALITY ASSURANCE

A. Source Limitations: For products listed together in the same Part 2 articles, obtain products from single source from single manufacturer.

1.7 COORDINATION

A. Coordinate accessory locations with other work to prevent interference with clearances required for access by people with disabilities, and for proper installation, adjustment, operation, cleaning, and servicing of accessories.

B. Deliver inserts and anchoring devices set into concrete or masonry as required to prevent delaying the Work.

1.8 WARRANTY

A. Special Mirror Warranty: Manufacturer's standard form in which manufacturer agrees to replace mirrors that develop visible silver spoilage defects and that fail in materials or workmanship within specified warranty period.

1. Warranty Period: Fifteen (15) years from date of Substantial Completion.

B. Manufacturer's Special Warranty for Hand Dryers: Manufacturer agrees to repair or replace hand dryers that fail in materials or workmanship within specified warranty period.

1. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

2.2 MATERIALS

A. Stainless Steel: ASTM A 666, Type 304, 0.031-inch minimum nominal thickness unless otherwise indicated.

B. Steel Sheet: ASTM A 1008/A 1008M, Designation CS (cold rolled, commercial steel), 0.036-inch minimum nominal thickness.

C. Galvanized-Steel Sheet: ASTM A 653/A 653M, with G60 hot-dip zinc coating.

D. Fasteners: Screws, bolts, and other devices of same material as accessory unit and tamper-and-theft resistant where exposed, and of galvanized steel where concealed.

E. Chrome Plating: ASTM B 456, Service Condition Number SC 2 (moderate service).

F. Mirrors: ASTM C 1503, Mirror Glazing Quality, clear-glass mirrors, nominal 6.0 mm thick.

G. ABS Plastic: Acrylonitrile-butadiene-styrene resin formulation.

2.3 PUBLIC-USE WASHROOM ACCESSORIES

A. Manufacturers: Subject to compliance with requirements, provide products by the following available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

1. A & J Washroom Accessories, Inc.
2. American Specialties, Inc.
3. Bobrick Washroom Equipment, Inc.
4. Bradley Corporation.

B. Grab Bars:

1. Basis-of-Design Product: Bradley Corporation, 812 Grab Bar.
2. Mounting: Flanges with concealed fasteners.
3. Material: Stainless steel, 18 gauge

a. Finish: Smooth, No. 4 finish (satin) on ends and slip-resistant texture in grip area.

4. Outside Diameter: 1-1/2 inches.
5. Configuration and Length: As indicated on Drawings.

C. Toilet Tissue Dispenser: Owner-Furnished / Contractor Installed.

D. Sanitary-Napkin Disposal:

1. Basis-of-Design Product: Bradley Corporation, 4781-15 Napkin Disposal.
2. Mounting: Surface mounted.
3. Door or Cover: Self-closing, disposal-opening cover and hinged face panel with tumbler lockset.
4. Receptacle: Removable.
5. Material and Finish: Stainless steel, No. 4 finish (satin).

E. Soap Dispenser Unit: Owner-Furnished / Contractor Installed.

F. Mirror Unit:

1. Basis-of-Design Product: Bradley Corporation, 780 Mirror

2. Frame: Angle Frame with welded corners
3. Hangers: Produce rigid, tamper- and theft-resistant installation, using method indicated below.

    a. One-piece, galvanized-steel, wall-hanger device with spring-action locking mechanism to hold mirror unit in position with no exposed screws or bolts.
    b. Wall bracket of galvanized steel, equipped with concealed locking devices requiring a special tool to remove.

4. Size: As indicated on the Drawings.

G. Paper Towel Dispenser: Owner-Furnished / Contractor Installed.

H. Robe Hook:

1. Basis-of-Design Product: Bradley Corporation, 9118-81 Heavy Duty Robe Hook.
2. Mounting: Surface mounted, three screws minimum.
3. Material and Finish: Forged brass with satin chrome finish.
4. Mounting Height: 40” above finish floor to top of robe hook.
5. Locations: Provide robe hooks at the following locations:

    a. Interior side of all toilet partition stall doors.

I. Warm-Air Hand Dryer:

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

a. ASI-American Specialties, Inc.
b. Bobrick Washroom Equipment, Inc.
c. Bradley Corporation.
d. Saniflow Corporation; Mediclinics S.A. (Basis of Design M17ACS-UL)

2. Description: Standard-speed, warm-air hand dryer.
3. Mounting: Surface mounted.

a. Protrusion Limit: Installed unit protrudes maximum 4 inches from wall surface.

4. Operation: Infrared-sensor activated with timed power cutoff switch.

a. Automatic Shutoff: 30 seconds.

5. Maximum Sound Level: 67 dB.
6. Cover Material and Finish: Stainless steel, ASTM A480/A480M No. 4 finish (satin).
7. Electrical Requirements: 208 to 240 V, 9 to 10 A, 1900 to 2300 W.

2.4 CUSTODIAL ACCESSORIES

A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

1. A & J Washroom Accessories, Inc.
2. American Specialties, Inc.
3. Bobrick Washroom Equipment, Inc.
4. Bradley Corporation.
5. GAMCO Specialty Accessories; a division of Bobrick Washroom Equipment, Inc.
6. Tubular Specialties Manufacturing, Inc.

B. Mop and Broom Holder:

1. Basis-of-Design Product: Bradley Corporation, Mop and Broom Holder No. 9934.
2. Description: Unit with holders.
3. Length: 44 inches.
4. Mop/Broom Holders: Four (4), spring-loaded, rubber hat, cam type.
5. Material and Finish: Stainless steel, No. 4 finish (satin).

a. Shelf: Not less than nominal 0.05-inch-thick stainless steel.
b. Rod: Approximately 1/4-inch-diameter stainless steel.

PART 3 -

3.1 FABRICATION

A. General: Fabricate units with tight seams and joints, and exposed edges rolled. Hang doors and access panels with full-length, continuous hinges. Equip units for concealed anchorage and with corrosion-resistant backing plates.

B. Keys: Provide universal keys for internal access to accessories for servicing and resupplying. Provide minimum of six (6) keys to Owner's representative.

PART 4 - EXECUTION

4.1 INSTALLATION

A. Install accessories according to manufacturers' written instructions, using fasteners appropriate to substrate indicated and recommended by unit manufacturer. Install units level, plumb, and firmly anchored in locations and at heights indicated.

B. Grab Bars: Install to withstand a downward load of at least 250 lbf, when tested according to ASTM F 446.

4.2 ADJUSTING AND CLEANING

A. Adjust accessories for unencumbered, smooth operation. Replace damaged or defective items.

B. Remove temporary labels and protective coatings.

C. Clean and polish exposed surfaces according to manufacturer's written recommendations.

END OF SECTION 102800

SECTION 105300 - PREFABRICATED ALUMINUM CANOPIES ***(ADDENDUM NO. 1)***

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Prefabricated aluminum canopies with internal drainage capabilities.

B. Related Requirements:

1. Section 018113 "Sustainable Design Requirements" for Green Globes requirements.

1.2 ACTION SUBMITTALS

A. Product Data: Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each type of prefabricated aluminum canopies and associated accessories.

B. Sustainable Design Submittals:

1. Comply with Section 018113 "Sustainable Design Requirements".

C. Shop Drawings: Submit shop drawings for fabrication and erection of prefabricated aluminum canopies and accessories.

1. Include plans, elevations and details of sections and connections to adjoining work.
2. Indicate materials, finishes, fasteners, joinery and other information to determine compliance with specified requirements.
3. For installed products indicated to comply with design loads, include structural analysis data signed and sealed by the qualified professional engineer, registered in the State of Virginia, responsible for their preparation. Submit design calculations confirming the prefabricated aluminum canopies meet or exceed all structural requirements of the authorities having jurisdiction.

D. Samples: For each exposed product and for each color and texture specified.

1.3 INFORMATIONAL SUBMITTALS

A. Warranties: Special warranties specified in this Section.

B. Qualification Data: For Installer, manufacturer, professional engineer.

1.4 QUALITY ASSURANCE

A. Comply with the Specifications for Aluminum Structures, Latest Edition, ASCE 7-95, Minimum Design Loads for Buildings and Other Structures, Latest Edition, American Architectural Manufacturers Association (AAMA) and the American Society for Testing and Materials (ASTM) recommendations for fabrication, construction details and installation procedures, except as otherwise indicated.

B. Structural Performance: Provide prefabricated aluminum canopy systems capable of withstanding the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:

1. Design Loads: As indicated on Drawings.
2. Engineering Responsibility: Preparation of Shop Drawings and comprehensive engineering analysis by a qualified professional engineer registered in the State of Virginia.

C. Field Measurements: Verify size, location and placement of prefabricated aluminum canopies prior to fabrication.

D. Installer Qualifications: An experienced erector who has specialized in erecting and installing work similar in material, design, and extent to that indicated for this Project and who is acceptable to manufacturer.

E. Shop Assembly: Coordinate field measurements and shop drawings with fabrication and shop assembly to minimize field adjustments, mechanical attachment and field assembly of units. Pre-assemble units in ship to greatest extent possible and disassemble as necessary for shipping and handling limitations. Clearly mark units for re-assembly and coordinated installation.

F. Source Limitations: Obtain each type of prefabricated aluminum canopies through one source from a single manufacturer.

G. Product Options: Drawings indicate size, profiles, and dimensional requirements of prefabricated aluminum canopies are based on the specific system indicated.

1. Do not modify intended aesthetic effects, as judged solely by Architect, except with Architect's approval. If modifications are proposed, submit comprehensive explanatory data to Architect for review.

1.5 WARRANTY

A. Special Warranty: Manufacturer and Installer agree to repair or replace components of prefabricated aluminum canopies that fail in materials or workmanship within specified warranty period.

1. Warranty Period: One years from date of Substantial Completion.
2. Failures include, but are not limited to, the following:

a. Defects in materials, leaks, and workmanship.

B. Special Finish Warranty, Factory-Applied Finishes: Standard form in which manufacturer agrees to repair finishes or replace aluminum that shows evidence of deterioration of factory-applied finishes within specified warranty period.

1. Deterioration includes, but is not limited to, the following:

a. Color fading more than 5 Delta E units when tested in accordance with ASTM D2244.
b. Chalking in excess of a No. 8 rating when tested in accordance with ASTM D4214.
c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.

2. Warranty Period: 10 years from date of Substantial Completion.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver components, sheets, prefabricated aluminum canopies components, and other manufactured items so as not to be damaged or deformed. Package prefabricated aluminum canopy components for protection during transportation and handling.

B. Unload, store, and erect prefabricated aluminum canopy components in a manner to prevent bending, warping, twisting, and surface damage.

C. Stack prefabricated aluminum canopy components horizontally on platforms or pallets, covered with suitable weathertight and ventilated covering. Store components to ensure dryness, with positive slope for drainage of water. Do not store components in contact with other materials that might cause staining, denting, or other surface damage.

D. Protect strippable protective covering on metal prefabricated aluminum canopy components from exposure to sunlight and high humidity, except to extent necessary for period of prefabricated aluminum canopy installation.

1.7 PROJECT CONDITIONS

A. Field Measurements: Verify locations of structural members and wall opening dimensions by field measurements before prefabricated aluminum canopies fabrication and indicate measurements on Shop Drawings.

1.8 COORDINATION

A. A. Coordinate metal prefabricated aluminum canopies with structural supports and other adjoining work to provide a secure and noncorrosive installation.

PART 2 - PRODUCTS

2.1 PERFORMANCE

A. Delegated Design: Engage a qualified professional engineer, as defined in Section 014000 "Quality Requirements," to design prefabricated aluminum canopies.

B. General: Provide prefabricated aluminum canopies that comply with performance requirements specified as determined by testing manufacturers' standard assemblies similar to those indicated for this Project, by a qualified testing and inspecting agency.

C. Structural Performance: Provide prefabricated aluminum canopies capable of withstanding the effects of gravity loads and the loads and stresses within limits and under conditions indicated on the structural drawings.

D. Thermal Movements: Provide prefabricated aluminum canopies that allow for thermal movements resulting from the following maximum change (range) in ambient and surface temperatures by preventing buckling, opening of joints, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects. Base engineering calculation on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.

1. Temperature Change (Range): 120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.

2.2 PREFABRICATED ALUMINUM CANOPIES

A. Extruded aluminum overhead *cantilever supported* style canopy shall be of design, materials, sizes, depth, arrangement, and metal thickness as indicated and as required for optimum performance with respect to strength, durability, and uniform appearance. Include supports, anchorages, and accessories required for complete assembly. Canopy system shall come complete with internal drainage.

B. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

1. Avadek Walkway Cover Systems.
2. Dittmer Architectural Aluminum.
3. Mapes Industries, Inc. (Basis of Design)
4. Metals USA Building Products.
5. Peachtree Protective Covers.

2.3 MATERIALS

A. Aluminum: Alloy and temper recommended by awning manufacturer for type of use and finish indicated and with not less than the strength and durability properties of alloy and temper required by structural loads.

1. Aluminum Extrusions: ASTM B221, 6063 alloy, T6 temper.
2. Decking: Deck shall be 3" extruded aluminum flat soffit.

    a. Thickness: .078-inch.
    b. Surface: Smooth, flat finish.
    c. Finish: High-performance organic finish.

3. Intermediate Members: shall be extruded aluminum, in profile and thickness as required to meet design loads.
4. Fascia: Extruded aluminum 8-inch, J-style.

    a. Thickness: .125-inch
    b. Surface: Smooth, flat finish.
    c. Finish: High-performance organic finish.

5. Fasteners: 3/16 fasteners shall be aluminum, 18-8 stainless steel or 300 series stainless steel with a minimum shear stress of 350 pounds.
6. Gaskets: Dry seal santroprene pressure type.
7. Aluminum Flashing: ASTM B 209, Type 3003 H14, 0.040 inch minimum.

B. Cantilever supported brackets: Shall be finished to match canopy.

2.4 FABRICATION

A. General: Fabricate and finish prefabricated aluminum canopy accessories at the factory to greatest extent possible, by manufacturer's standard procedures and processes, as necessary to fulfill indicated performance requirements. Comply with indicated profiles and with dimensional and structural requirements.

    1. Form panel lines, breaks, and angles to be sharp and true, with surfaces free from warp and buckle.

B. Deck Construction: Deck shall be manufactured of extruded modules that interlock in a self-flashing manner. Interlocking joints shall be positively fastened at 8" O.C. creating a monolithic structural unit capable of developing the full strength of the sections. The fastenings must have minimum shear strength of 350 pounds each. Deck shall be assembled with sufficient camber to offset dead load deflection.

C. Provide steel hanger tubes, plates, and fasteners in manufacturer's standard shapes and sizes to transfer loads to building structure and meet loads requirements as indicated on the Drawings.

D. Concealed Drainage: Water shall run from covered surfaces into intermediate trough and be directed to downspout from rear gutter.

2.5 ALUMINUM FINISHES

A. High-Performance Organic Finish, Two-Coat PVDF: Fluoropolymer finish complying with

AAMA 2605 and containing not less than 70 percent PVDF resin by weight in color coat.

1. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
2. Color and Gloss: As selected by Architect from manufacturer's full range.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, supports, and other conditions affecting performance of work.

1. For the record, prepare written report, endorsed by Installer, listing conditions detrimental to performance of work. Proceed with installation only after unsatisfactory conditions have been corrected.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

C. Installer shall confirm dimensions and elevations as shown on drawings.

3.2 PREPARATION

A. Erection shall be performed after all concrete, masonry, and roofing work in the vicinity is completed and cleaned.

B. Clean substrates of substances harmful to installation, including removing projections capable of interfering with attachment.

C. Install flashings and other sheet metal to comply with requirements specified in Division 7 Section "Sheet Metal Flashing and Trim."

3.3 PREFABRICATED ALUMINUM CANOPY INSTALLATION, GENERAL

A. General: Install prefabricated aluminum canopies in orientation, sizes, and locations indicated on Drawings and in full compliance with manufacturer’s instructions. Install extrusions perpendicular to vertical supports, unless otherwise indicated. Anchor prefabricated aluminum canopies and other components of the work securely in place, with provisions for thermal and structural movement. Clean substrates of substances harmful to installation, including removing projections capable of interfering with attachment.

1. Field cutting of prefabricated aluminum canopy components by torch is not permitted.
2. Anchor prefabricated aluminum canopies to building substructure as indicated.
3. Cut and trim component parts during erection only with the approval of the manufacturer, and in accordance with their recommendations. Restore finish completely. Remove and

replace members where cutting and trimming has impaired the strength or appearance of the assemblies as directed.

4. Do not erect warped, bowed, deformed or otherwise damaged or defaced members. Remove and replace any members damaged in the erection process as directed.
5. Locate and space fastenings in uniform vertical and horizontal alignment.
6. Install flashing and trim as prefabricated aluminum canopy work proceeds.

B. Erection: Protective cover shall be erected true to line, level and plumb.

3.4 ERECTION TOLERANCES

A. Erection Tolerances: Variation from level: +/- 1/4” maximum in 20’-0” runs, non-cumulative.

3.5 FIELD QUALITY CONTROL

A. Remove and replace applications of prefabricated aluminum canopies where inspections indicate that they do not comply with specified requirements.

3.6 CLEANING AND PROTECTION

A. Remove temporary protective coverings and strippable films, if any, as prefabricated aluminum canopies are installed, unless otherwise indicated in manufacturer's written installation instructions. Upon completion of prefabricated aluminum canopy installation, clean finished surfaces as recommended by prefabricated aluminum canopy manufacturer. Maintain in a clean condition during construction.

B. Replace prefabricated aluminum canopy components that have been damaged or have deteriorated beyond successful repair.

END OF SECTION 105300

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EROSION CONTROL LEGEND

DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL
SILT FENCE	SF	INLET PROTECTION	IP
6' TEMPORARY CHAIN LINK SAFETY FENCE	SAF	CONSTRUCTION ENTRANCE	CE
LIMITS OF DISTURBANCE	LOD	TEMPORARY SEEDING	TS
TREE PROTECTION	TP	PERMANENT SEEDING	PS
DIVERSION	DV	MULCHING	MU

NOTE:
ALL SIDEWALK & CURB CUT IN R/W MUST BE SAWCUT TO THE NEAREST JOINT & REPLACED W/ LIKE KIND

DEMOLITION LEGEND

- DEMOLITION OF PAVEMENT/CONCRETE
- MILL & REMOVE 1.5" MINIMUM OF SURFACE PAVEMENT
- X REMOVE/DEMOLISH
- DRAINAGE FLOW ARROW
- LIMITS OF DISTURBANCE

*** CAUTION ***

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MATCHLINE – SEE SHEET CD103

MATCHLINE – SEE SHEET CD105

SEE NOTE #3, SHEET C-001

MATCHLINE – SEE SHEET CD104

MATCHLINE – SEE SHEET CD101

N/F
JOSEPH AND VICKI L. STREETER, III
(INST. 020029610)
MAP NO. 7J*2*9
(PC 2, SLIDE 91-B)

N/F
MURPHY LOGAN, SR.
(INST. 170014833)
MAP NO. 7J*2*10
(PC 2, SLIDE 91-B)
20' SIDE BUILDING SETBACK

20' PUBLIC UTILITY EASEMENT (PC 1, SLIDE 106E)

N/F
CRESENCIO A. AND FRENNIDA QUILPA
(INST. 010008469)
MAP NO. 7G*2*124
(PC 1, SLIDE 183-C)

30' REAR BUILDING SETBACK

N/F
SAMUEL D. REIN
(INST. 220002712)
MAP NO. 7G*2*125
(PC 1, SLIDE 183-C)

N/F
DEXTER AND KELLI BAILEY, JR
(INST. 200018646)
MAP NO. 7G*2*126
(PC 1, SLIDE 183-C)

N/F
CITY OF SUFFOLK
SCHOOL BOARD
(DB 441, PG 423)
MAP NO. 7*7A / 304464800
(PC 1, SLIDE 106-E)
AREA=655,760 SF
OR 15.054 AC

#6701
NORTHERN SHORES
ELEMENTARY SCHOOL
1 STORY BRICK
±72,777 SF
FF=17.32

N:3,490,862.76
E:12,092,993.65

N:3,490,757.54
E:12,092,868.99

665.44'
N43°50'00"E

105.55'
S 43°43'03"W

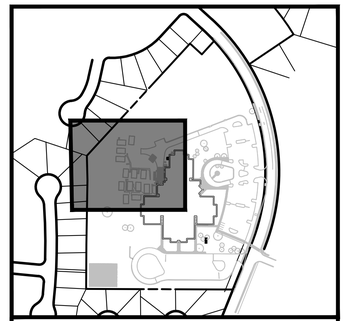
TEMPORARY SEDIMENT TRAP 1

RELOCATED PORTABLE

DEMOLITION KEYNOTES:

1 REMOVE TREE (TYP)
2 REMOVE CURB/CURB AND GUTTER TO NEAREST JOINT
3 REMOVE WATER LINE
4 REMOVE SANITARY SEWER PIPE
5 REMOVE STORMWATER PIPE
6 REMOVE STORMWATER STRUCTURE
7 REMOVE CONCRETE SIDEWALK
8 REMOVE ASPHALT WALKWAY
9 PORTABLES AND RAMPS REMOVED IN CONTRACT #1
10 REMOVE FIBER LINE TO LIMITS OF CONSTRUCTION.
11 RELOCATE POWER LINE – COORDINATE WITH ELECTRICAL PLAN
12 REMOVE LIGHT POLE
13 REMOVE COMMUNICATION STRUCTURE
14 REMOVE POWER STRUCTURE
15 REMOVE ASPHALT
16 REMOVE SIGN
17 CONVERT TO STORM MANHOLE
18 REMOVE PORTION OF STORM PIPE
19 CONTRACTOR SHALL NOT DRIVE HEAVY MACHINERY OVER PROPOSED BMP AREAS. SEE NOTES SHEET C-508.
20 REMOVE DOWNSPOUT – COORDINATE WITH ARCHITECTURAL PLANS
21 REMOVE AND STORE SWING SET FOR REUSE. REMOVE PLAYGROUND BORDER AND MULCH.
22 ERADICATE PAVEMENT MARKINGS. ALL MARKINGS TO BE REPLACED
23 ADD BLACK WIND SCREEN FABRIC TO EXISTING 8' CHAIN LINK FENCE ALONG PROPERTY LINE
24 TWO PORTABLE CLASSROOMS, LANDINGS, & RAMPS TO REMAIN FOR CONTRACT #1, TO BE DEMOED IN CONTRACT #2
25 SEVEN PORTABLE CLASSROOMS, LANDINGS, & RAMPS RELOCATED IN CONTRACT #1, TO BE DEMOED IN CONTRACT #2
26 TEMPORARY ASPHALT INSTALLED IN CONTRACT #1, TO BE DEMOED IN CONTRACT #2
27 CONTRACTOR TO ENSURE DRAINAGE MAINTAINED THROUGHOUT CONSTRUCTION. DEWATERING STRUCTURES TO BE USED TO PUMP STORMWATER DURING CONSTRUCTION OF BMPS.
28 REMOVE GREASE TRAP
29 REMOVE HVAC – COORDINATE WITH MECHANICAL PLANS.

PROPOSED STORM SEWER SCHEDULE	
ID	STRUCTURE & PIPE INFO
A17	VDOT DI-1 RIM=15.82 INV(A09)=9.70 (18" HP) INV(A18)=9.70 (18" RCP) INV(A16)=9.70 (12" HP) A17 TO A18, 62 LF – 18" RCP @ 0.32%
A18	18" VDOT ES-1 W/ VDOT EC-1 RIM=9.50 INV(A17)=9.50 (18" RCP)



A1	7/17/25	LEM	description
			ADDENDUM NO. 1
mark	date	by	revisions

DATE	07.18.2025
PROJECT	23238-00
DESIGNED	LEM
DRAWN	LEM
CHECKED	GBH

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06.24.2025
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IFB: 1886-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-33-00-101

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD
SUFFOLK, VIRGINIA

DRAWING
DEMOLITION & EROSION & SEDIMENT CONTROL PLAN

SHEET
CD102

MSA PROJ# 23189

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1 INCH = 20 FT

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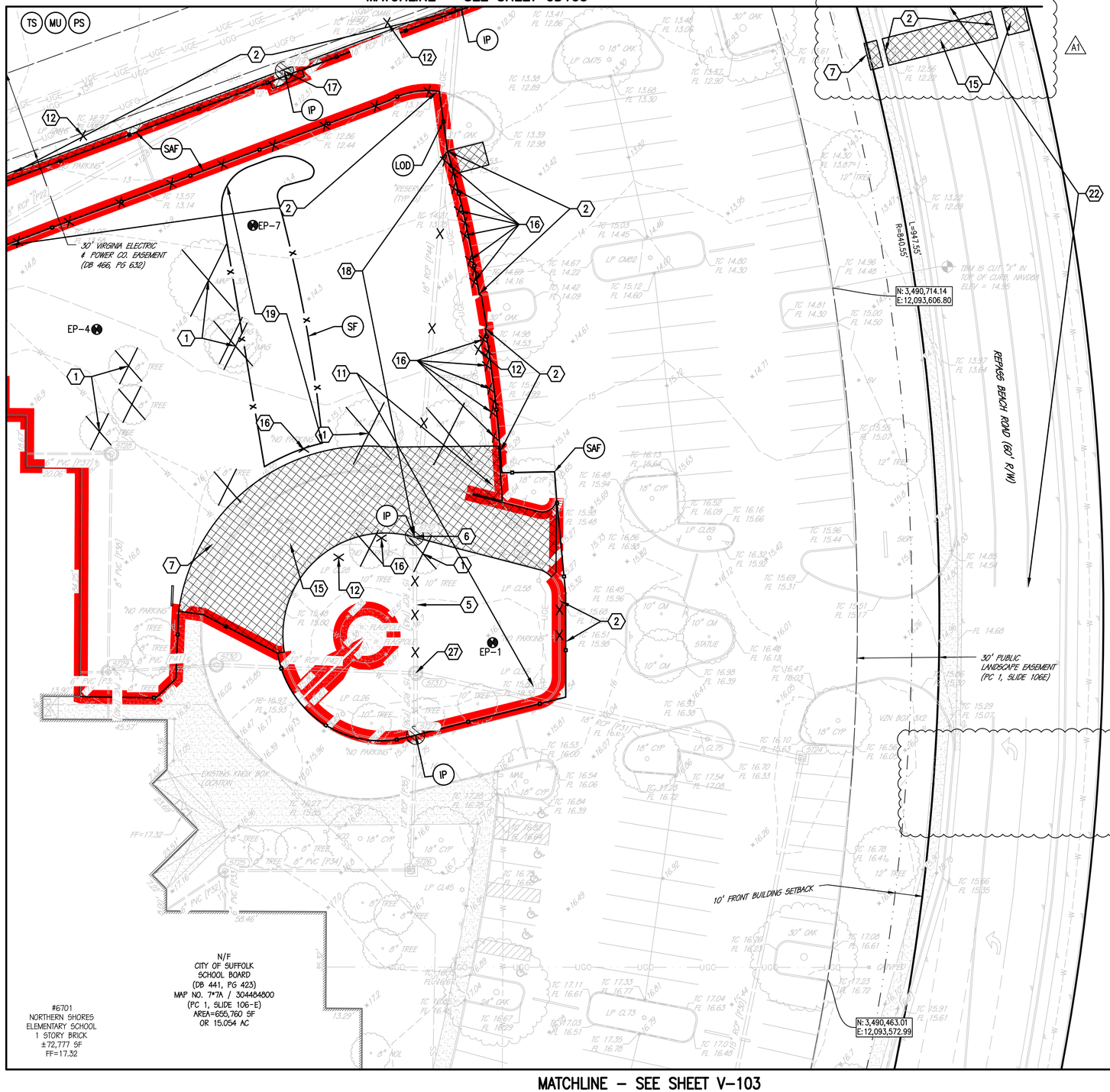
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NOTE:
ALL SIDEWALK & CURB CUT IN R/W MUST BE SAWCUT TO THE NEAREST JOINT & REPLACED W/ LIKE KIND

MATCHLINE – SEE SHEET CD105

MATCHLINE – SEE SHEET CD102

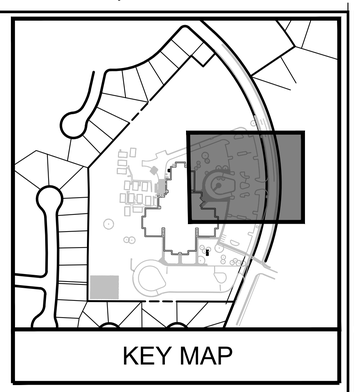
MATCHLINE – SEE SHEET V-103



DEMOLITION LEGEND

- DEMOLITION OF PAVEMENT/CONCRETE
- MILL & REMOVE 1.5" MINIMUM OF SURFACE PAVEMENT
- REMOVE/DEMOLISH
- DRAINAGE FLOW ARROW
- LIMITS OF DISTURBANCE

SEE NOTE #3, SHEET C-001



DEMOLITION KEYNOTES:

1 REMOVE TREE (TYP)
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17 CONVERT TO STORM MANHOLE
18 REMOVE PORTION OF STORM PIPE
19 CONTRACTOR SHALL NOT DRIVE HEAVY MACHINERY OVER PROPOSED BMP AREAS. SEE NOTES SHEET C-508.
20 REMOVE DOWNSPOUT – COORDINATE WITH ARCHITECTURAL PLANS
21 REMOVE AND STORE SWING SET FOR REUSE. REMOVE PLAYGROUND BORDER AND MULCH.
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28 REMOVE GREASE TRAP
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EROSION CONTROL LEGEND

DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL
SILT FENCE	SF	INLET PROTECTION	IP
6' TEMPORARY CHAIN LINK SAFETY FENCE	SAF	CONSTRUCTION ENTRANCE	CE
LIMITS OF DISTURBANCE	LOD	TEMPORARY SEEDING	TS
TREE PROTECTION	TP	PERMANENT SEEDING	PS
DIVERSION	DV	MULCHING	MU

20 0 20 40
1 INCH = 20 FT

mark	date	revisions
A1	7/17/25	ADDENDUM NO. 1
LEM		description
		by

DATE	07.16.2025			
PROJECT	23238-00			
DESIGNED	LEM			
DRAWN	LEM			
CHECKED	GBH			

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PROJECT: SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD
SUFFOLK, VIRGINIA

DRAWING: DEMOLITION & EROSION & SEDIMENT CONTROL PLAN

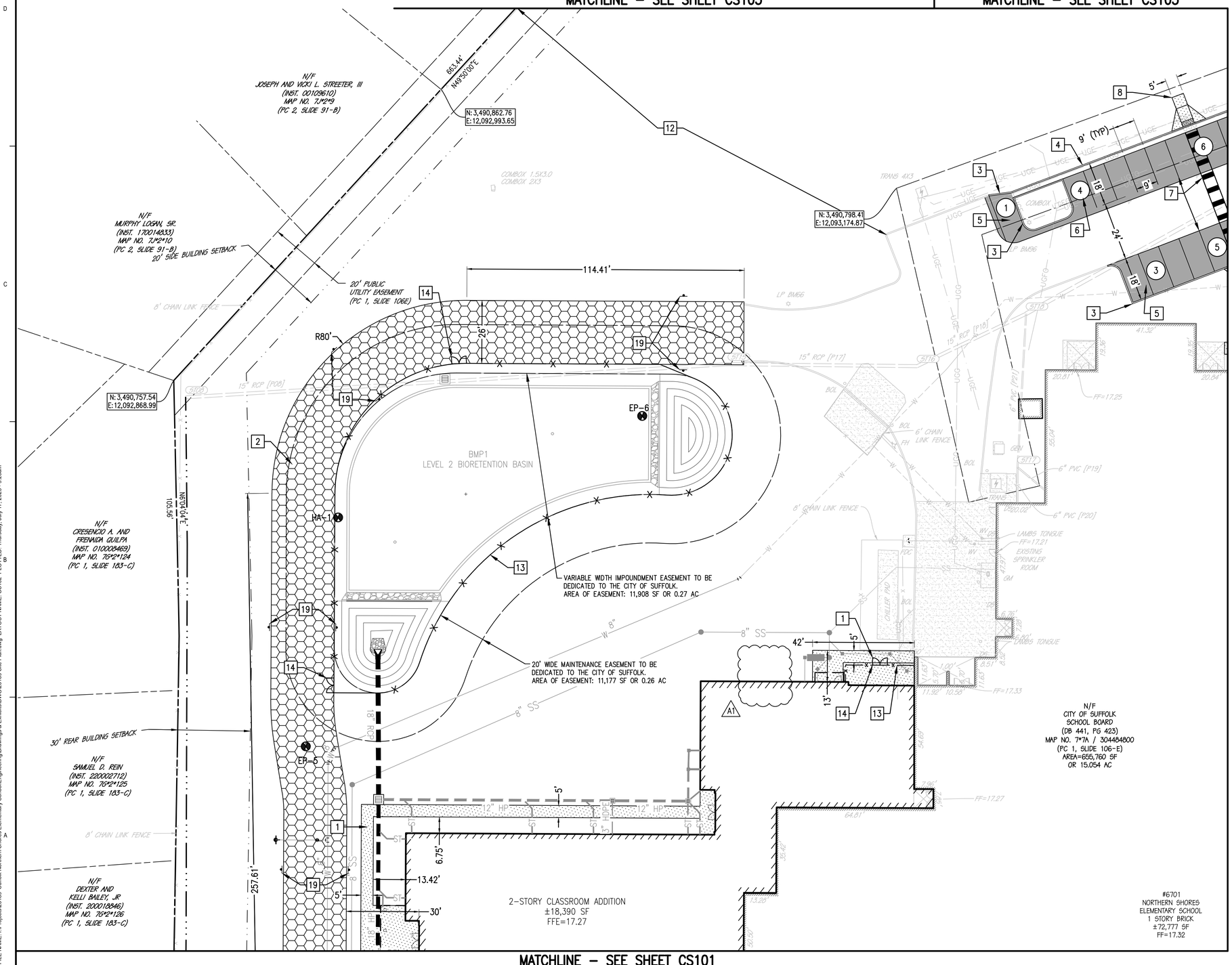
SHEET
CD104

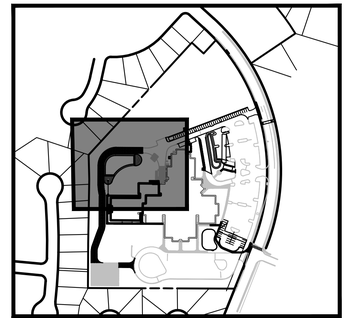
MSA PROJ# 23189

FILE NAME: I:\Projects\23189 Suffolk Northern Shores Elementary School\Engineering\Drawings & Exhibits\DWG\23189 Site Plan.dwg LAYOUT NAME: CD104 PLOTTED: Wednesday, July 16, 2025 - 2:35pm

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KEY MAP

NEW WORK KEYNOTES:

1 CONCRETE SIDEWALK
2 GRASS PAVE CELL
3 CURB
4 CURB AND GUTTER
5 ASPHALT
6 INDICATES NUMBER OF PARKING SPACES (TYP)
7 PAVEMENT MARKINGS (TYP)
8 HANDICAP RAMP
9 VALLEY GUTTER
10 HANDICAP SPACE
11 COMMERCIAL ENTRANCE
12 RESTORE GRASS FIELD-TOPSOIL AND GRASS SEED. MATCH EXISTING GRADE.
13 6' BLACK VINYL COATED CHAIN LINK FENCE
14 BLACK VINYL COATED CHAIN LINK FENCE DOUBLE GATE
15 EXISTING SWINGSET RELOCATED. MULCH WITH PLASTIC PLAYGROUND BORDER.
16 STOP SIGN
17 COMBINATION SIDEWALK/CURB
18 MOUNTABLE CURB (VDOT STD CG-7)
19 NO PARKING FIRE LANE SIGN
20 KNOX BOX
21 RESTORE SECTION OF COMMERCIAL ENTRANCE.
22 BIKE RACK – SEE DETAIL SHEET C-509

***FENCE NOTE:**

* BE ADVISED THAT A SEPARATE PERMIT WILL NEED TO BE OBTAINED FROM ZONING FOR THE PROPOSED FENCE AT THE TIME OF BUILDING PERMIT.

PAVEMENT LEGEND

ASPHALT PAVEMENT SECTION

GRASS PAVEMENT CELL

±2" VDOT STD SM-9.5A SURFACE PAVEMENT TO PROPOSED GRADE (SEE GRADING PLANS)

20 0 20 40

1 INCH = 20 FT

mark	date	revisions
A1	7/17/25	LEM ADDENDUM NO. 1

DATE	PROJECT	DESIGNED	DRAWN	CHECKED
07.16.2025	23238-00	LEM	LEM	GBH

RRMM ARCHITECTS, PC
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(757)622-2828

COMMONWEALTH OF VIRGINIA
LEE ELLEN MARKLEY
Lic. No.
0402068261
06.24.2025
PROFESSIONAL ENGINEER

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TELEPHONE | 757.490.9283
IFB: 1889-B
CONTRACT NO: 107-32-00-101

PROJECT: SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD
SUFFOLK, VIRGINIA
VIRGINIA DEPARTMENT OF EDUCATION

DRAWING: DIMENSIONAL SITE LAYOUT PLAN

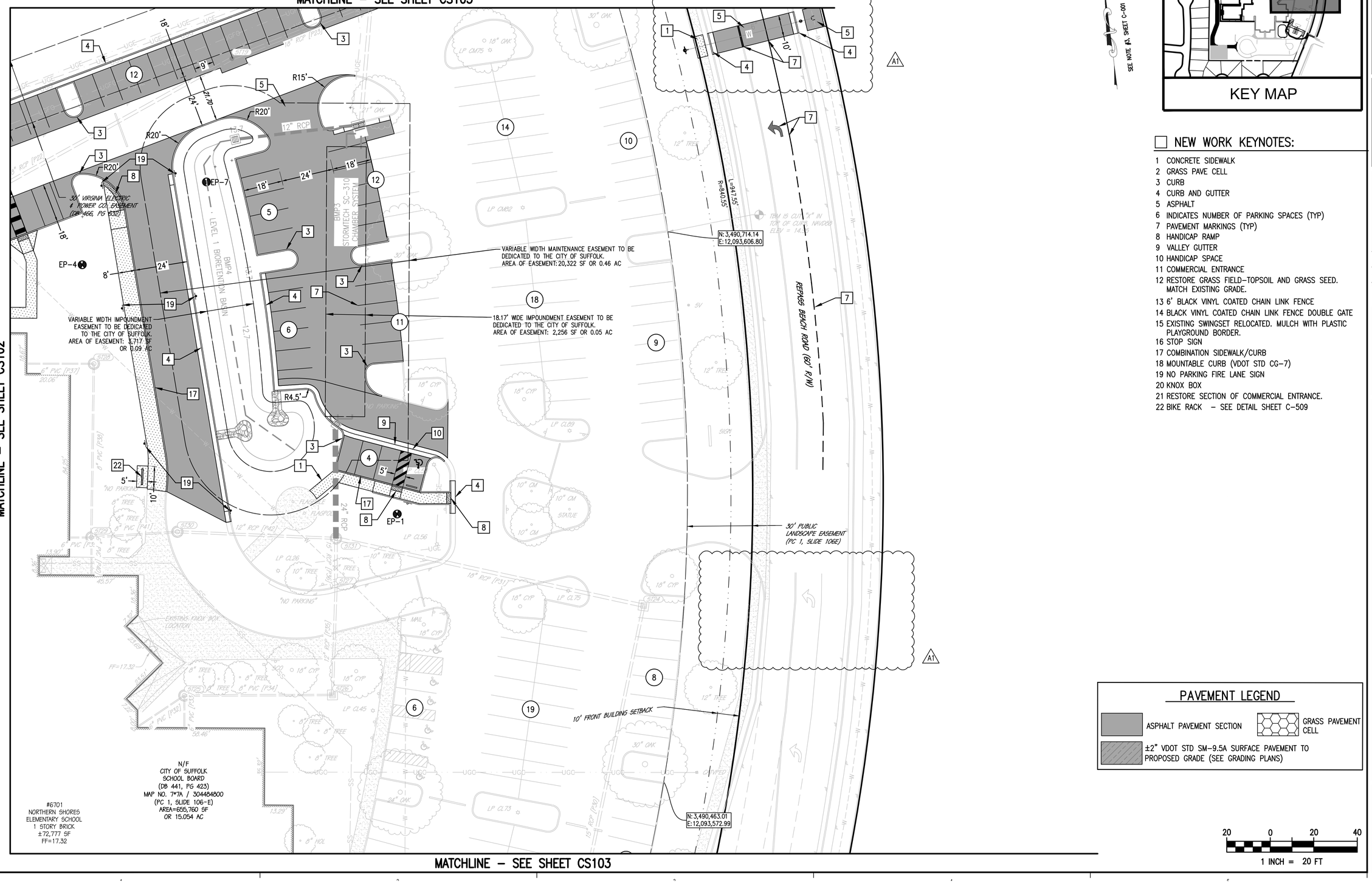
SHEET
CS102

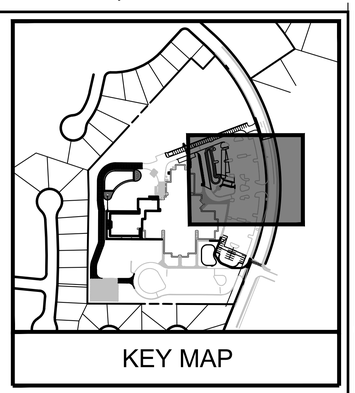
MSA PROJ# 23189

FILE NAME: I:\Projects\23189 Suffolk Northern Shores Elementary School\Engineering\Drawings & Exhibits\DWG\23189 Site Plan.dwg LAYOUT NAME: CS102 PLOTTED: Thursday, July 17, 2025 - 9:26am

*** CAUTION ***

THE UTILITIES SHOWN ARE FOR CONVENIENCE ONLY. THERE MAY BE OTHER UTILITIES NOT SHOWN ON THESE PLANS. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, SIZE, DIMENSION AND ELEVATION OF ALL UNDERGROUND UTILITIES. MSA, P.C. ASSUMES NO RESPONSIBILITY FOR THE LOCATION OF BURIED UTILITIES SHOWN ON THE PLANS OR LACK THEREOF. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF THE LOCATION OF ALL UNDERGROUND UTILITIES WITHIN THE LIMITS OF WORK. FOR MORE INFORMATION REGARDING THE LOCATION OF UNDERGROUND UTILITIES CALL MISS UTILITIES AT 1-800-552-7001 OR DIAL 811 IN VIRGINIA. ANY DISCREPANCIES IN REFERENCED HORIZONTAL LOCATIONS, ELEVATIONS, DIMENSIONS OR DETAILS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER OR OWNER'S REPRESENTATIVE BEFORE PROCEEDING WITH THE WORK. ANY DAMAGE MADE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.





NEW WORK KEYNOTES:

1 CONCRETE SIDEWALK
2 GRASS PAVE CELL
3 CURB
4 CURB AND GUTTER
5 ASPHALT
6 INDICATES NUMBER OF PARKING SPACES (TYP)
7 PAVEMENT MARKINGS (TYP)
8 HANDICAP RAMP
9 VALLEY GUTTER
10 HANDICAP SPACE
11 COMMERCIAL ENTRANCE
12 RESTORE GRASS FIELD-TOPSOIL AND GRASS SEED. MATCH EXISTING GRADE.
13 6' BLACK VINYL COATED CHAIN LINK FENCE
14 BLACK VINYL COATED CHAIN LINK FENCE DOUBLE GATE
15 EXISTING SWINGSET RELOCATED. MULCH WITH PLASTIC PLAYGROUND BORDER.
16 STOP SIGN
17 COMBINATION SIDEWALK/CURB
18 MOUNTABLE CURB (VDOT STD CG-7)
19 NO PARKING FIRE LANE SIGN
20 KNOX BOX
21 RESTORE SECTION OF COMMERCIAL ENTRANCE.
22 BIKE RACK – SEE DETAIL SHEET C-509

PAVEMENT LEGEND

ASPHALT PAVEMENT SECTION

GRASS PAVEMENT CELL

±2" VDOT STD SM-9.5A SURFACE PAVEMENT TO PROPOSED GRADE (SEE GRADING PLANS)

A1	7/17/25	LEM	ADDENDUM NO. 1
	date	by	description
	mark		revisions

DATE	07.18.2025		
PROJECT	23238-00		
DESIGNED	LEM		
DRAWN	LEM		
CHECKED	GBH		

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COMMONWEALTH OF VIRGINIA LEE ELLEN MARKLEY Lic. No. 0402068261 06.24.2025 PROFESSIONAL ENGINEER

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD
SUFFOLK, VIRGINIA

DRAWING
DIMENSIONAL SITE LAYOUT PLAN

VIRGINIA DEPARTMENT OF EDUCATION: 127-32-06-101

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(O) 757.366.4480 | MSAPC.COM

IFB: 1889-B

SHEET
CS104

MSA PROJ# 23189

FILE NAME: I:\Projects\23189 Suffolk Northern Shores Elementary School\Engineering\Drawings & Exhibits\DWG\23189 Site Plan.dwg LAYOUT NAME: CS104 PLOTTED: Wednesday, July 16, 2025 - 2:40pm

*** CAUTION ***

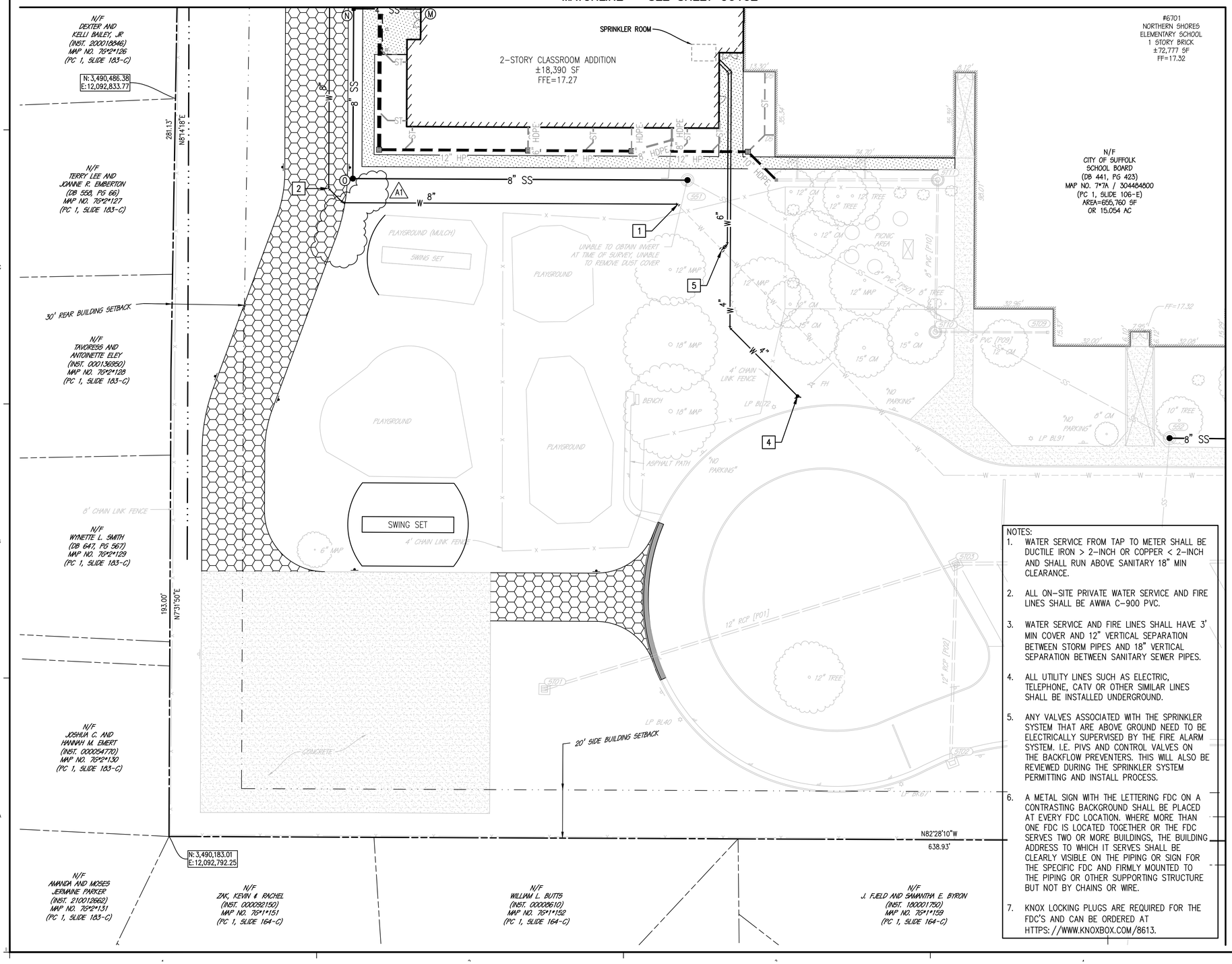
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UTILITY KEYNOTES:

1 CONNECT TO EXISTING WATERLINE
2 45° BEND (TYP)
3 FIRE HYDRANT ASSEMBLY
4 FIRE DEPARTMENT CONNECTION
5 8"X6" TAPPING SLEEVE AND VALVE
6 8"X6" TEE

CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF ALL EXISTING UNDERGROUND UTILITY LINES INCLUDING TELEPHONE, FIBER, POWER, GAS, WATER & SEWER PRIOR TO CONSTRUCTION AND SHALL COORDINATE RELOCATION AS NECESSARY FOR NEW CONSTRUCTION. SERVICES TO EXISTING FACILITIES SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION UNTIL THE NEW MIDDLE SCHOOL BUILDING, IT/TECH, & SECEP BUILDING RECEIVED CERTIFICATE OF OCCUPANCY AND THE SCHOOL OPERATIONS CAN BE MOVED TO THE NEW BUILDINGS.

MATCHLINE – SEE SHEET CU102



NOTES:

1. WATER SERVICE FROM TAP TO METER SHALL BE DUCTILE IRON > 2-INCH OR COPPER < 2-INCH AND SHALL RUN ABOVE SANITARY 18" MIN CLEARANCE.
2. ALL ON-SITE PRIVATE WATER SERVICE AND FIRE LINES SHALL BE AWWA C-900 PVC.
3. WATER SERVICE AND FIRE LINES SHALL HAVE 3' MIN COVER AND 12" VERTICAL SEPARATION BETWEEN STORM PIPES AND 18" VERTICAL SEPARATION BETWEEN SANITARY SEWER PIPES.
4. ALL UTILITY LINES SUCH AS ELECTRIC, TELEPHONE, CATV OR OTHER SIMILAR LINES SHALL BE INSTALLED UNDERGROUND.
5. ANY VALVES ASSOCIATED WITH THE SPRINKLER SYSTEM THAT ARE ABOVE GROUND NEED TO BE ELECTRICALLY SUPERVISED BY THE FIRE ALARM SYSTEM. I.E. PIVS AND CONTROL VALVES ON THE BACKFLOW PREVENTERS. THIS WILL ALSO BE REVIEWED DURING THE SPRINKLER SYSTEM PERMITTING AND INSTALL PROCESS.
6. A METAL SIGN WITH THE LETTERING FDC ON A CONTRASTING BACKGROUND SHALL BE PLACED AT EVERY FDC LOCATION. WHERE MORE THAN ONE FDC IS LOCATED TOGETHER OR THE FDC SERVES TWO OR MORE BUILDINGS, THE BUILDING ADDRESS TO WHICH IT SERVES SHALL BE CLEARLY VISIBLE ON THE PIPING OR SIGN FOR THE SPECIFIC FDC AND FIRMLY MOUNTED TO THE PIPING OR OTHER SUPPORTING STRUCTURE BUT NOT BY CHAINS OR WIRE.
7. KNOX LOCKING PLUGS ARE REQUIRED FOR THE FDC'S AND CAN BE ORDERED AT HTTPS://WWW.KNOXBOX.COM/8613.

MATCHLINE – SEE SHEET CU103

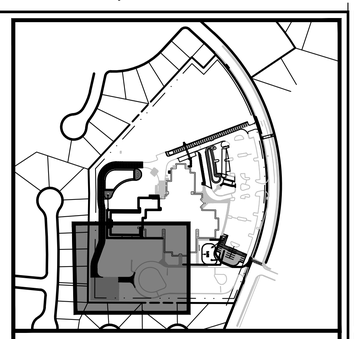
PROPOSED SANITARY SEWER SCHEDULE	
ID	STRUCTURE & PIPE INFO
M	BUILDING CONNECTION SEE PLUMBING PLAN RIM=17.25 INV(N)=12.24 (4" PVC) M TO N, 28 LF – 4" PVC @ 1.04%
N	SS CLEANOUT RIM=16.99 INV(L)=11.95 (8" PVC) INV(O)=11.95 (8" PVC) INV(M)=11.95 (4" PVC) N TO O, 70 LF – 8" PVC @ 0.40%
O	SS MANHOLE RIM=16.60 INV(N)=11.67 (8" PVC) INV(SS1)=11.57 (8" PVC) O TO SS1, 139 LF – 8" PVC @ 0.40%
SS1	EXISTING SS MANHOLE RIM=16.89 INV(O)=11.01 (8" PVC)
SS2	EXISTING MANHOLE INV(P50)=10.00 (8" PVC) INV(P51)=9.66 (8" PVC) RIM=??? INV(P)=9.76 (8" PVC)

BACKFLOW DEVICE REQUIREMENTS

FOR DOMESTIC & FIRE SYSTEMS: RPZ, RPDA, DCVA & DCDA

1. DEVICE MUST MEET A.S.S.E. REQUIREMENTS.
2. DCVAS AND DCDAS ARE NOT APPROVED FOR CHEMICALLY TREATED SYSTEMS—RPZS OR RPDAS ARE REQUIRED ON ALL CHEMICALLY TREATED SYSTEMS.
3. DEVICE MUST BE LOCATED ON THE CONSUMER'S PROPERTY.
4. DEVICE MUST BE INSTALLED BEFORE ANY TAKE-OFFS.
5. DEVICE MUST NOT BE LOCATED IN BASEMENTS OR AREAS SUBJECT TO FLOODING.
6. DEVICE MUST BE A MINIMUM OF 12-INCHES ABOVE GRADE, NOT TO EXCEED 30 INCHES.
7. DEVICE MUST BE EASILY ACCESSIBLE FOR TESTING AND MAINTENANCE.
8. DEVICE MUST BE INSTALLED INSIDE A BUILDING OR IN A HEATED AND INSULATED FIBERGLASS OR ALUMINUM ENCLOSURE.
9. RPZS AND RPDAS MUST HAVE A MEANS OF DRAINING THE WATER DISCHARGED THROUGH THE RELIEF VALVE AND SHALL BE OUTFITTED WITH AN AIR GAP FITTING PIPED TO A FLOOR DRAIN, THROUGH A WALL, OR TO AN ENCLOSURE WALL DRAIN PORT.
10. ALL TESTABLE BACKFLOW DEVICES IN THE CITY OF SUFFOLK MUST BE TESTED UPON INSTALLATION, AFTER ANY REQUIRED MAINTENANCE, AND ON AN ANNUAL BASIS.
11. A LICENSED BACKFLOW TESTER MUST PERFORM ALL TESTS.
12. THE ORIGINAL OF ALL TEST RESULTS MUST BE SUBMITTED TO:
    DEPARTMENT OF PUBLIC UTILITIES
    ATTN: CROSS CONNECTION CONTROL
    PO BOX 1858
    SUFFOLK, VA 23439

20 0 20 40
1 INCH = 20 FT



KEY MAP

mark	date	revisions
A1	7/17/25	LEM ADDENDUM NO. 1

DATE	PROJECT	DESIGNED	DRAWN	CHECKED
07.16.2025	23238-00	LEM	LEM	GBH

RRMM ARCHITECTS, PC
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COMMONWEALTH OF VIRGINIA LEE ELLEN MARKLEY Lic. No. 0402068261 PROFESSIONAL ENGINEER 06.24.2025

PROJECT: SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD
SUFFOLK, VIRGINIA

DRAWING: UTILITY PLAN

MSA
ENGINEERS | SCIENTISTS | SURVEYORS
5032 ROUSE DRIVE, SUITE 200 VIRGINIA BEACH, VA 23462
757.490.9454 | MSAGROUP.COM
IFB: 1899-B
VIRGINIA DEPARTMENT OF EDUCATION: 107-32-00-101

SHEET
CU101

MSA PROJ# 23189

FILE NAME: I:\Projects\23189 Suffolk Northern Shores Elementary School\Engineering\Drawings & Exhibits\DWG\23189 Site Plan.dwg LAYOUT NAME: CU101 PLOTTED: Wednesday, July 16, 2025 - 2:35pm

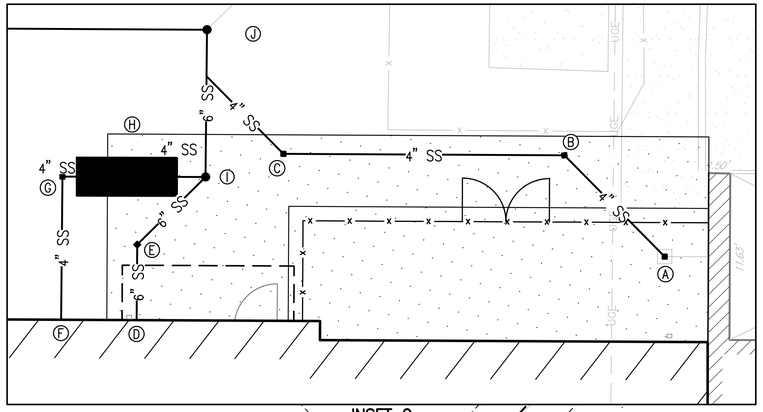
UTILITY KEYNOTES:

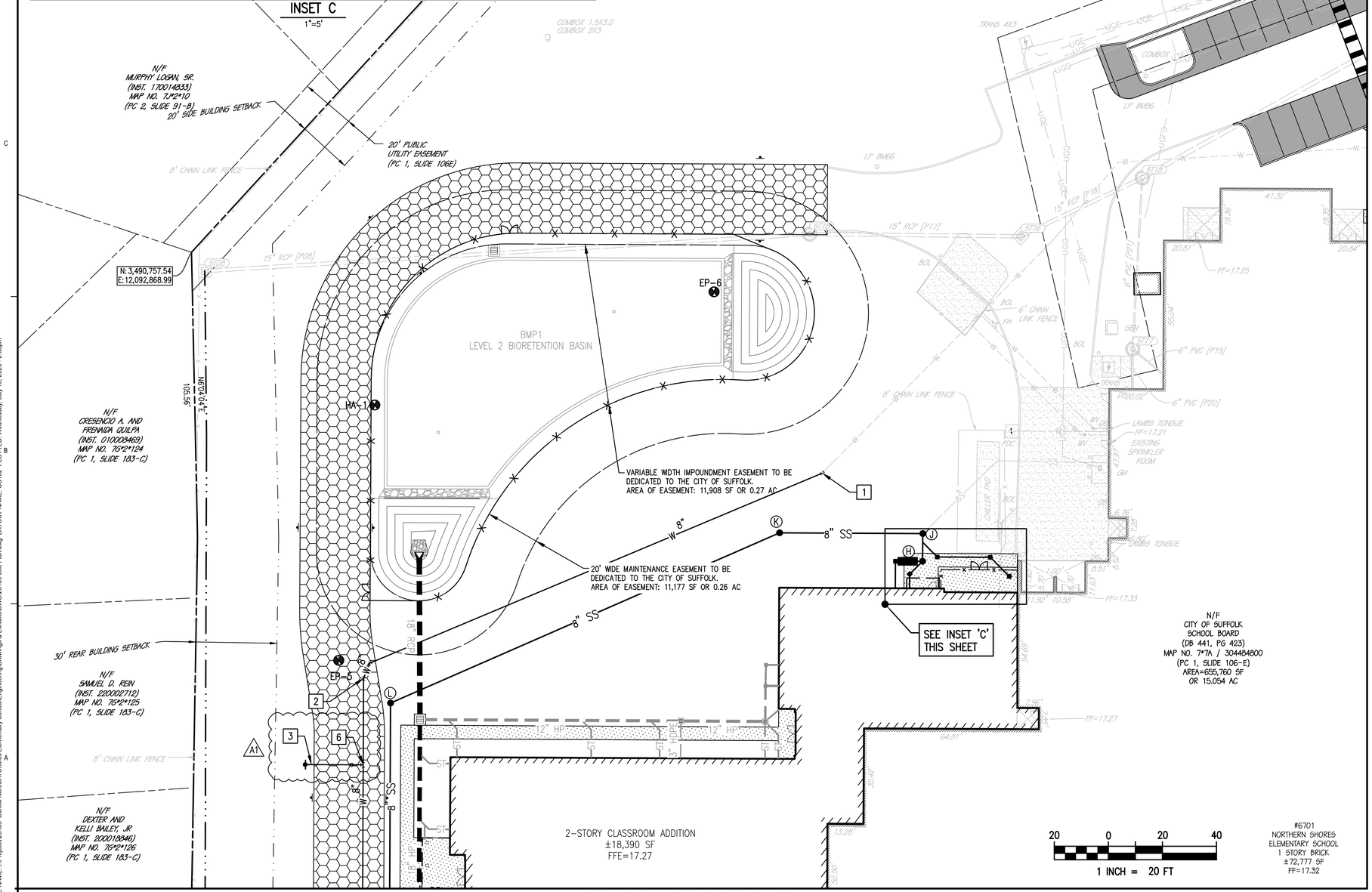
1 CONNECT TO EXISTING WATERLINE
2 45° BEND (TYP)
3 FIRE HYDRANT ASSEMBLY
4 FIRE DEPARTMENT CONNECTION
5 8"X6" TAPPING SLEEVE AND VALVE
6 8"X6" TEE

***** CAUTION *****

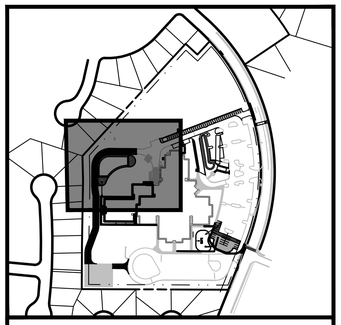
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PROPOSED SANITARY SEWER SCHEDULE	
ID	STRUCTURE & PIPE INFO
A	SS CLEANOUT CONNECT TO EXISTING SS LINE RIM=17.03 INV(B)=13.76 (4" PVC) A TO B, 10 LF – 4" PVC @ 1.00%
B	SS CLEANOUT RIM=16.94 INV(A)=13.66 (4" PVC) INV(C)=13.66 (4" PVC) B TO C, 20 LF – 4" PVC @ 0.97%
C	SS CLEANOUT RIM=17.12 INV(B)=13.47 (4" PVC) INV()=13.47 (4" PVC) C TO , 8 LF – 4" PVC @ 1.05%
D	BUILDING CONNECTION SEE PLUMBING PLAN RIM=17.22 INV(E)=13.61 (6" PVC) D TO E, 5 LF – 6" PVC @ 0.38%
E	SS CLEANOUT RIM=17.17 INV(D)=13.59 (6" PVC) INV(I)=13.59 (6" PVC) E TO I, 7 LF – 6" PVC @ 1.94%
F	BUILDING CONNECTION SEE PLUMBING PLAN RIM=17.17 INV(G)=13.65 (4" PVC) F TO G, 10 LF – 4" PVC @ 1.00%
G	SS CLEANOUT RIM=17.06 INV(F)=13.55 (4" PVC) INV(H)=13.55 (4" PVC) G TO H, 5 LF – 4" PVC @ 1.00%
H	GREASE TRAP REFER TO PLUMBING PLANS RIM=17.12 INV(G)=13.50 (4" PVC) INV(I)=13.50 (4" PVC) H TO I, 5 LF – 4" PVC @ 1.00%
I	SS MANHOLE RIM=17.16 INV(H)=13.45 (4" PVC) INV(J)=13.45 (6" PVC) INV(E)=13.46 (6" PVC) I TO J, 10 LF – 6" PVC @ 0.97%
J	SS MANHOLE RIM=16.98 INV(K)=13.25 (8" PVC) INV(I)=13.35 (6" PVC) J TO K, 53 LF – 8" PVC @ 0.40%
K	SS MANHOLE RIM=16.34 INV(J)=13.04 (8" PVC) INV(L)=12.94 (8" PVC) K TO L, 157 LF – 8" PVC @ 0.39%
L	SS MANHOLE RIM=15.52 INV(K)=12.32 (8" PVC) INV(N)=12.22 (8" PVC) L TO N, 69 LF – 8" PVC @ 0.39%



A1	7/17/25	LEM	ADDENDUM NO. 1
mark	date	by	description
revisions			

DATE	07.16.2025
PROJECT	23238-00
DESIGNED	LEM
DRAWN	LEM
CHECKED	GBH

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COMMONWEALTH OF VIRGINIA
LEE ELLEN MARKLEY
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04020682261
06.24.2025
PROFESSIONAL ENGINEER

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IFB: 1899-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD
SUFFOLK, VIRGINIA

DRAWING
UTILITY PLAN

SHEET
CU102

MSA PROJ# 23189

FILE NAME: I:\Projects\23189 Suffolk Northern Shores Elementary School\Engineering\Drawings & Exhibits\DWG\23189 Site Plan.dwg LAYOUT NAME: CU102 PLOTTED: Wednesday, July 16, 2025 - 2:36pm

*** CAUTION ***

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MATCHLINE – SEE SHEET CU104

MATCHLINE – SEE SHEET CU101

#6701
NORTHERN SHORES
ELEMENTARY SCHOOL
1 STORY BRICK
±72,777 SF
FF=17.32

N/F
CITY OF SUFFOLK
SCHOOL BOARD
(DB 441, PG 423)
MAP NO. 7**7A / 304484800
(PC 1, SLIDE 106-E)
AREA=655,760 SF
OR 15.054 AC

EP-3
EP-2
6" HDPE
12" RCP
BMP2
QUANTITY ONLY
DRY DETENTION BASIN
8" SS
20' WIDE MAINTENANCE EASEMENT TO BE DEDICATED TO THE CITY OF SUFFOLK. AREA OF EASEMENT: 6,650 SF OR 0.15 AC
VARIABLE WIDTH IMPOUNDMENT EASEMENT TO BE DEDICATED TO THE CITY OF SUFFOLK. AREA OF EASEMENT: 4,841 SF OR 0.11 AC
15" RCP [P03]
10' FRONT BUILDING SETBACK
18" RCP [P04]
20' SIDE BUILDING SETBACK
20' PUBLIC UTILITY EASEMENT (PC 1, SLIDE 106E)
30' PUBLIC LANDSCAPE EASEMENT (PC 1, SLIDE 106E)
N82°28'10"W
638.93'
N: 3,490,113.93
E: 12,093,314.78
N: 3,490,099.27
E: 12,093,425.67
214.16'
N29°12'00"E
REPASS BEACH ROAD (60' R/W)
"STOP" "BUSES ONLY"
COMBOX 2X3
COMBOX 3.5X3.5
CATVFED
UGE
UGFO
WV
WAULT
CROSSWALK SIGN
24" OAK
15" OAK
LP CK61
LP CK49
LP CK16
12" TREE
18" TREE
10" D
8" D
8" HDL
6" PVC [P24]
15" RCP [P29]
12" RCP [P28]
P
6
3
A1

N/F
SPENCER F. AND
ELEANOR R. FLINS
(INST. 220000282)
MAP NO. 76*1*160
(PC 1, SLIDE 164-C)

N/F
GREGORY M. ARNOLD, JR
(INST. 210014203)
MAP NO. 76*1*161
(PC 1, SLIDE 164-C)

N/F
ALONZO DAMAR &
TEISHA NICOL SPARROW
(INST. 210011346)
MAP NO. 7J*15
(PC 2, SLIDE 91-B)

N/F
HERBERT L. AND
MELANIE N. JOSEY, JR.
(INST. 170000016)
MAP NO. 7J*14
(PC 2, SLIDE 91-B)

N/F
MICHAEL H. O'NEILL
(INST. 000135690)
MAP NO. 7J*27
(PC 2, SLIDE 91-B)

8' CHAIN LINK FENCE
653.44'
N49°50'00"E

N/F
CITY OF SUFFOLK
SCHOOL BOARD
(DB 441, PG 423)
MAP NO. 7**7A
(PC 1, SLIDE 106-E)
AREA=655,760 SF
OR 15.054 AC

N/F
DEREK K. AND GEORGIA J. ROSS TRS
(INST. 000233970)
MAP NO. 7J*28
(PC 2, SLIDE 91-B)

20' PUBLIC UTILITY EASEMENT (PC 1, SLIDE 106E)

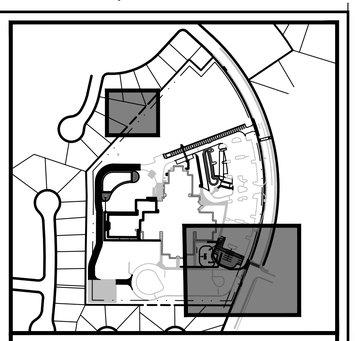
MATCHLINE – SEE SHEET CU105

MATCHLINE – SEE SHEET CU102

PROPOSED SANITARY SEWER SCHEDULE	
ID	STRUCTURE & PIPE INFO
P	SS MANHOLE RIM=15.88 INV(SS3)=10.51 (8" PVC) INV(SS2)=10.41 (8" PVC) P TO SS2, 162 LF – 8" PVC @ 0.40%
SS2	EXISTING MANHOLE INV(P50)=10.00 (8" PVC) INV(P51)=9.66 (8" PVC) RIM=??? INV(P)=9.76 (8" PVC)
SS3	EXISTING MANHOLE ADJUST RIM INV(P53)=10.81 (8" PVC) RIM=15.62 INV(P)=10.81 (8" PVC) SS3 TO P, 63 LF – 8" PVC @ 0.47%

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SEE NOTE #3, SHEET C-001



UTILITY KEYNOTES:

1 CONNECT TO EXISTING WATERLINE
2 45° BEND (TYP)
3 FIRE HYDRANT ASSEMBLY
4 FIRE DEPARTMENT CONNECTION
5 8"X6" TAPPING SLEEVE AND VALVE
6 8"X6" TEE

20 0 20 40
1 INCH = 20 FT

A1	7/17/25	LEM	ADDENDUM NO. 1
	date	by	description
	mark		revisions

DATE	07.16.2025
PROJECT	23238-00
DESIGNED	LEM
DRAWN	LEM
CHECKED	GBH

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VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD
SUFFOLK, VIRGINIA

DRAWING
UTILITY PLAN

SHEET
CU103

MSA PROJ# 23189

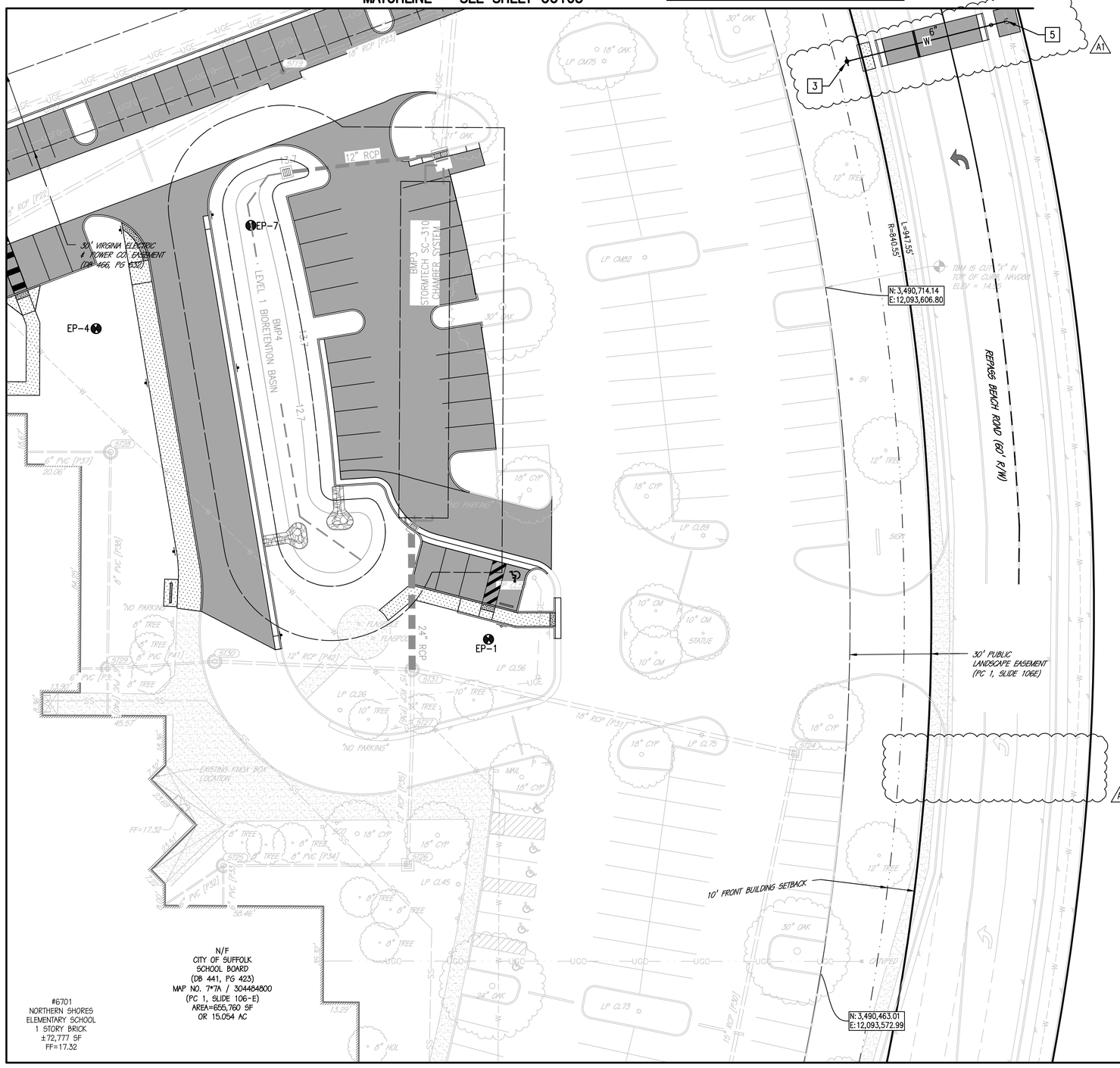
FILE NAME: I:\Projects\23189 Suffolk Northern Shores Elementary School\Engineering\Drawings & Exhibits\DWG\23189 Site Plan.dwg LAYOUT NAME: CU103 PLOTTED: Wednesday, July 16, 2025 - 2:36pm

*** CAUTION ***

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CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF ALL EXISTING UNDERGROUND UTILITY LINES INCLUDING TELEPHONE, FIBER, POWER, GAS, WATER & SEWER PRIOR TO CONSTRUCTION AND SHALL COORDINATE RELOCATION AS NECESSARY FOR NEW CONSTRUCTION. SERVICES TO EXISTING FACILITIES SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION UNTIL THE NEW MIDDLE SCHOOL BUILDING, IT/TECH, & SECEP BUILDING RECEIVED CERTIFICATE OF OCCUPANCY AND THE SCHOOL OPERATIONS CAN BE MOVED TO THE NEW BUILDINGS.

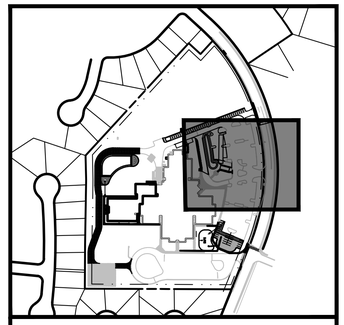
MATCHLINE – SEE SHEET CU105



MATCHLINE – SEE SHEET CU103

MATCHLINE – SEE SHEET CU102

SEE NOTE #3, SHEET C-001



UTILITY KEYNOTES:

1 CONNECT TO EXISTING WATERLINE
2 45° BEND (TYP)
3 FIRE HYDRANT ASSEMBLY
4 FIRE DEPARTMENT CONNECTION
5 8"X6" TAPPING SLEEVE AND VALVE
6 8"X6" TEE

SHEET NOTES:

1. THE DEVELOPER SHALL ENSURE THAT ALL EASEMENTS AND/OR FEE SIMPLE LANDS FOR PUBLIC UTILITIES ARE DEDICATED TO THE CITY OF SUFFOLK AND PROPERLY PLATTED AND RECORDED. THE RECORDATION OF EASEMENTS OR FEE SIMPLE LAND APPLIES TO ALL WATER AND SEWER MAINS, FIRE HYDRANTS, DETECTOR CHECKS, METERS, SERVICE CLEANOUTS, AND ANY OTHER PUBLIC WATER AND SEWER INFRASTRUCTURE WHICH IS IDENTIFIED ON THE APPROVED SITE/SUBDIVISION/ENGINEERING PLAN AS INTENDING TO BE DEDICATED TO THE CITY OF SUFFOLK. EASEMENT OR LAND RECORDING SHALL BE ACCOMPLISHED THROUGH THE FINAL SUBDIVISION PLATTING PROCESS AS PART OF THE CITY'S UNIFIED DEVELOPMENT ORDINANCE PROCESS. ALTERNATIVELY, AND WHEN THE WATER AND SEWER SYSTEM IS INTENDED TO BE ACCEPTED BY THE CITY AND BECOME OPERATIONAL PRIOR TO FINAL PLATTING, UTILITY EASEMENTS OR FEE SIMPLE LANDS ARE TO BE PROVIDED BY SEPARATE PLATS IN ACCORDANCE WITH THE DEPARTMENT OF PUBLIC UTILITIES REQUIREMENTS. IN THESE CASES, THE PLAT SHALL BE SUBMITTED DIRECTLY TO THE DEPARTMENT OF PUBLIC UTILITIES ENGINEERING DIVISION FOR REVIEW AND APPROVAL. THE DEPARTMENT OF PUBLIC UTILITIES WILL PROVIDE THE OWNER WITH SAMPLE LANGUAGE FOR THE LEGAL DESCRIPTION. CERTIFICATE OF OCCUPANCY, UTILITY CONNECTIONS AND/OR ACCEPTANCE OF THE UTILITY SYSTEM BY THE CITY MAY PROCEED UPON EVIDENCE OF APPROPRIATE RECORDATION.

FIRE DEPARTMENT NOTES:

1. THE SUFFOLK FIRE PREVENTION BUREAU REQUIRES SITE UTILITY CONTRACTORS TO OBTAIN A FIRE PERMIT FOR PRIVATE FIRE LINES, HYDRANTS, AND FIRE PROTECTION SYSTEMS.
   THE SITE UTILITY CONTRACTOR WILL ALSO BE RESPONSIBLE FOR OBTAINING AN ACCEPTANCE TEST AND INSPECTION BY A CERTIFIED THIRD PARTY INSPECTOR FOR THE INSTALLATION AND SUBMIT THE NFPA 24 CONTRACTOR'S MATERIAL AND TEST CERTIFICATE FOR UNDERGROUND PIPING TO THE SUFFOLK FIRE MARSHAL'S OFFICE UPON COMPLETION OF THE INSTALLATION AND PRIOR TO THE ISSUANCE OF THE C.O. THE PERMIT FEE IS 75.00 PAYABLE TO THE CITY OF SUFFOLK.
2. KNOX LOCKING PLUGS ARE REQUIRED FOR THE FDC AND KNOX BOXES ARE REQUIRED ON THE BUILDINGS FOR ACCESS. THEY CAN BE ORDERED ONLINE FROM HTTPS://WWW.KNOXBOX.COM/8613. KNOX BOXES SHALL BE AT THE HEIGHT OF 5' FOR INSTALLATION ON SIDE OF BUILDING.
3. A METAL SIGN WITH THE LETTERING FDC ON A CONTRASTING BACKGROUND SHALL BE PLACED AT EVERY
   FDC LOCATION. WHERE MORE THAN ONE FDC IS LOCATED TOGETHER OR THE FDC SERVES TWO OR MORE BUILDINGS, THE BUILDING ADDRESS TO WHICH IT SERVES SHALL BE CLEARLY VISIBLE ON THE PIPING OR SIGN FOR THE SPECIFIC FDC AND FIRMLY MOUNTED TO THE PIPING OR OTHER SUPPORTING STRUCTURE BUT NOT BY CHAINS OR WIRE.
4. ANY VALVES ASSOCIATED WITH THE SPRINKLER SYSTEM THAT ARE ABOVE GROUND NEED TO BE ELECTRICALLY SUPERVISED BY THE FIRE ALARM SYSTEM. I.E. PIVS AND CONTROL VALVES ON THE BACKFLOW PREVENTERS. THIS WILL ALSO BE REVIEWED DURING THE SPRINKLER SYSTEM PERMITTING AND INSTALL PROCESS.
5. ANY CHECK VALVES PLACED IN A VALVE BOX SHALL REMAIN ACCESSIBLE.
6. ANY VALVES ASSOCIATED WITH THE SPRINKLER SYSTEM OUTSIDE THE BUILDING SHALL BE AT LEAST THE HEIGHT OF THE BUILDING AWAY FROM THE BUILDING.

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1 INCH = 20 FT

mark	date	revisions
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VIRGINIA DEPARTMENT OF EDUCATION: 127-2020-101

PROJECT: SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD
SUFFOLK, VIRGINIA

DRAWING: UTILITY PLAN

SHEET
CU104

MSA PROJ# 23189

FILE NAME: I:\Projects\23189 Suffolk Northern Shores Elementary School\Engineering\Drawings & Exhibits\DWG\23189 Site Plan.dwg LAYOUT NAME: CU104 PLOTTED: Wednesday, July 16, 2025 - 2:36pm

EROSION CONTROL LEGEND

DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL
SILT FENCE	SF	INLET PROTECTION	IP
6' TEMPORARY CHAIN LINK SAFETY FENCE	SAF	CONSTRUCTION ENTRANCE	CE
LIMITS OF DISTURBANCE	LOD	TEMPORARY SEEDING	TS
TREE PROTECTION	TP	PERMANENT SEEDING	PS
DIVERSION	DV	MULCHING	MU

NOTE:
ALL SIDEWALK & CURB CUT IN R/W MUST BE SAWCUT TO THE NEAREST JOINT & REPLACED W/ LIKE KIND

DEMOLITION LEGEND

- DEMOLITION OF PAVEMENT/CONCRETE
- MILL & REMOVE 1.5" MINIMUM OF SURFACE PAVEMENT
- X REMOVE/DEMOLISH
- DRAINAGE FLOW ARROW
- LIMITS OF DISTURBANCE

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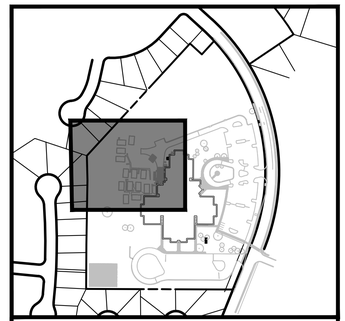
MATCHLINE – SEE SHEET CD103

MATCHLINE – SEE SHEET CD105

MATCHLINE – SEE SHEET CD104

MATCHLINE – SEE SHEET CD101

SEE NOTE #3, SHEET C-001



DEMOLITION KEYNOTES:

1 REMOVE TREE (TYP)
2 REMOVE CURB/CURB AND GUTTER TO NEAREST JOINT
3 REMOVE WATER LINE
4 REMOVE SANITARY SEWER PIPE
5 REMOVE STORMWATER PIPE
6 REMOVE STORMWATER STRUCTURE
7 REMOVE CONCRETE SIDEWALK
8 REMOVE ASPHALT WALKWAY
9 PORTABLES AND RAMPS REMOVED IN CONTRACT #1
10 REMOVE FIBER LINE TO LIMITS OF CONSTRUCTION.
11 RELOCATE POWER LINE – COORDINATE WITH ELECTRICAL PLAN
12 REMOVE LIGHT POLE
13 REMOVE COMMUNICATION STRUCTURE
14 REMOVE POWER STRUCTURE
15 REMOVE ASPHALT
16 REMOVE SIGN
17 CONVERT TO STORM MANHOLE
18 REMOVE PORTION OF STORM PIPE
19 CONTRACTOR SHALL NOT DRIVE HEAVY MACHINERY OVER PROPOSED BMP AREAS. SEE NOTES SHEET C-508.
20 REMOVE DOWNSPOUT – COORDINATE WITH ARCHITECTURAL PLANS
21 REMOVE AND STORE SWING SET FOR REUSE. REMOVE PLAYGROUND BORDER AND MULCH.
22 ERADICATE PAVEMENT MARKINGS. ALL MARKINGS TO BE REPLACED
23 ADD BLACK WIND SCREEN FABRIC TO EXISTING 8' CHAIN LINK FENCE ALONG PROPERTY LINE
24 TWO PORTABLE CLASSROOMS, LANDINGS, & RAMPS TO REMAIN FOR CONTRACT #1, TO BE DEMOED IN CONTRACT #2
A1 25 SEVEN PORTABLE CLASSROOMS, LANDINGS, & RAMPS RELOCATED IN CONTRACT #1, TO BE DEMOED IN CONTRACT #2
26 TEMPORARY ASPHALT INSTALLED IN CONTRACT #1, TO BE DEMOED IN CONTRACT #2
27 CONTRACTOR TO ENSURE DRAINAGE MAINTAINED THROUGHOUT CONSTRUCTION. DEWATERING STRUCTURES TO BE USED TO PUMP STORMWATER DURING CONSTRUCTION OF BMPS.
28 REMOVE GREASE TRAP
29 REMOVE HVAC – COORDINATE WITH MECHANICAL PLANS.

DEMOLITION KEYNOTES – ALTERNATE:

28 REMOVE CURB/CURB AND GUTTER TO NEAREST JOINT
29 REMOVE ASPHALT

NO.	mark	date	revisions	by
1	LEM	7/17/25	ADDENDUM NO. 1	description

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VA-200-101

PROJECT: SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD
SUFFOLK, VIRGINIA
VIRGINIA DEPARTMENT OF EDUCATION: 127-33-200-101

DRAWING: DEMOLITION & EROSION & SEDIMENT CONTROL PLAN - ADD ALT NO. 1

SHEET
CD902

MSA PROJ# 23189

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1 INCH = 20 FT

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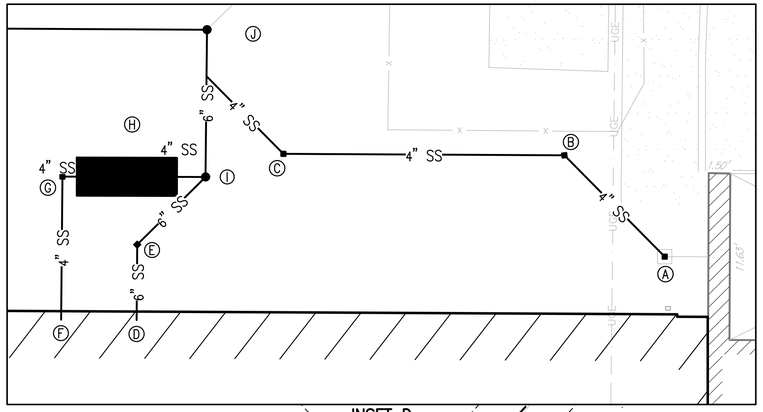
UTILITY KEYNOTES:

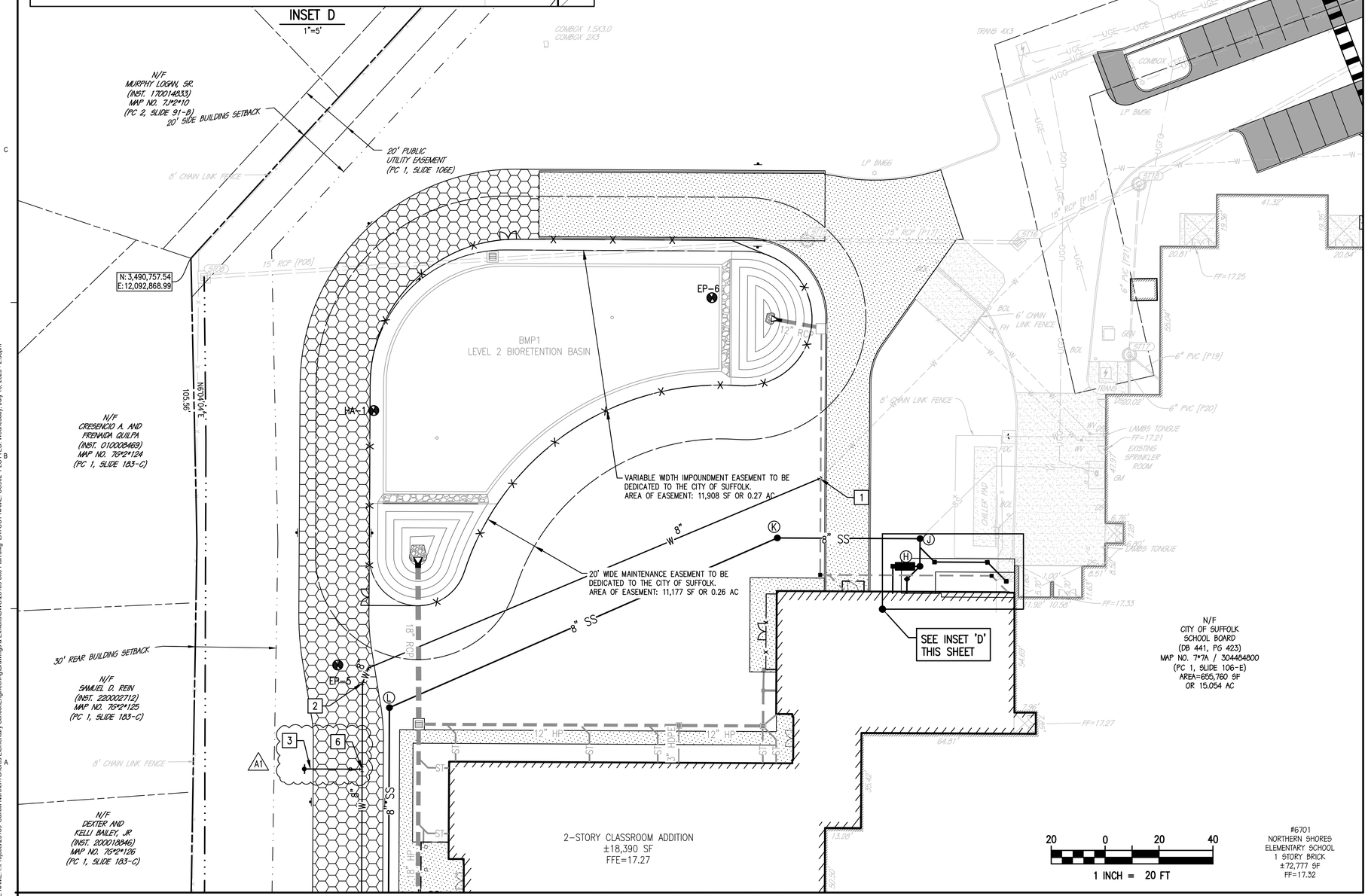
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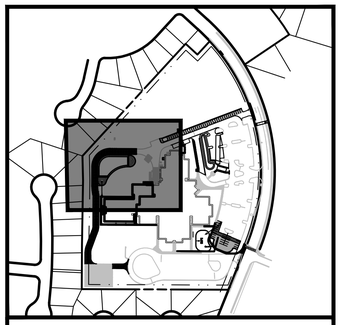
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PROPOSED SANITARY SEWER SCHEDULE

ID	STRUCTURE & PIPE INFO
A	SS CLEANOUT CONNECT TO EXISTING SS LINE RIM=17.03 INV(B)=13.76 (4" PVC) A TO B, 10 LF – 4" PVC @ 1.00%
B	SS CLEANOUT RIM=16.94 INV(A)=13.66 (4" PVC) INV(C)=13.66 (4" PVC) B TO C, 20 LF – 4" PVC @ 0.97%
C	SS CLEANOUT RIM=17.12 INV(B)=13.47 (4" PVC) INV()=13.47 (4" PVC) C TO , 8 LF – 4" PVC @ 1.05%
D	BUILDING CONNECTION SEE PLUMBING PLAN RIM=17.22 INV(E)=13.61 (6" PVC) D TO E, 5 LF – 6" PVC @ 0.38%
E	SS CLEANOUT RIM=17.17 INV(D)=13.59 (6" PVC) INV(I)=13.59 (6" PVC) E TO I, 7 LF – 6" PVC @ 1.94%
F	BUILDING CONNECTION SEE PLUMBING PLAN RIM=17.17 INV(G)=13.65 (4" PVC) F TO G, 10 LF – 4" PVC @ 1.00%
G	SS CLEANOUT RIM=17.06 INV(F)=13.55 (4" PVC) INV(H)=13.55 (4" PVC) G TO H, 5 LF – 4" PVC @ 1.00%
H	GREASE TRAP REFER TO PLUMBING PLANS RIM=17.12 INV(G)=13.50 (4" PVC) INV(I)=13.50 (4" PVC) H TO I, 5 LF – 4" PVC @ 1.00%
I	SS MANHOLE RIM=17.16 INV(H)=13.45 (4" PVC) INV(J)=13.45 (6" PVC) INV(E)=13.46 (6" PVC) I TO J, 10 LF – 6" PVC @ 0.97%
J	SS MANHOLE RIM=16.98 INV(K)=13.25 (8" PVC) INV(I)=13.35 (6" PVC) J TO K, 53 LF – 8" PVC @ 0.40%
K	SS MANHOLE RIM=16.34 INV(J)=13.04 (8" PVC) INV(L)=12.94 (8" PVC) K TO L, 157 LF – 8" PVC @ 0.39%
L	SS MANHOLE RIM=15.52 INV(K)=12.32 (8" PVC) INV(N)=12.22 (8" PVC) L TO N, 69 LF – 8" PVC @ 0.39%



KEY MAP

mark	date	revisions
A1	7/17/25	LEM ADDENDUM NO. 1

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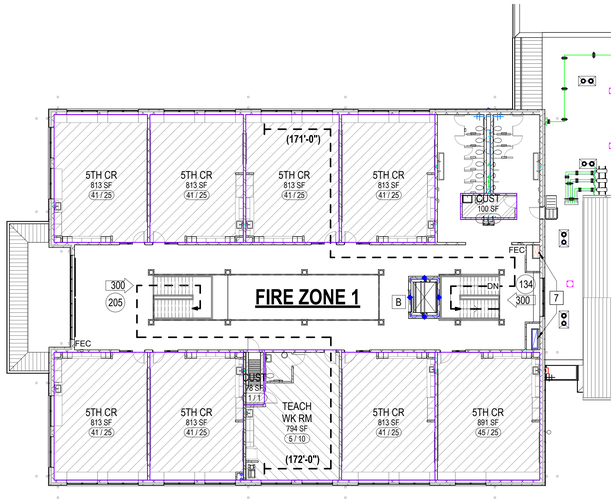
PROJECT
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6701 RESPASS BEACH RD
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DRAWING
UTILITY PLAN - ADD ALT NO. 1

SHEET
CU902

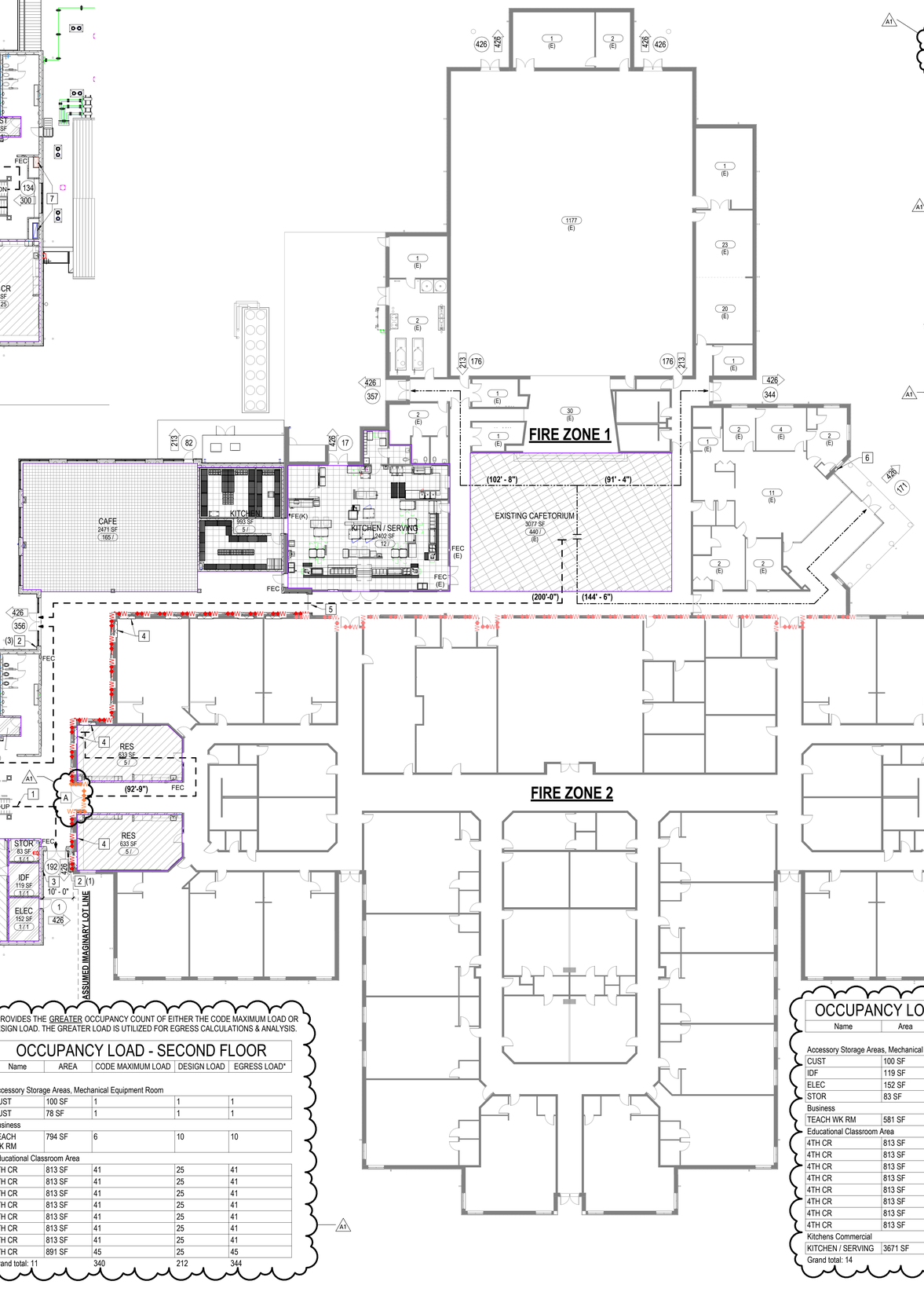
MSA PROJ# 23189

FILE NAME: I:\Projects\23189 Suffolk Northern Shores Elementary School\Engineering\Drawings & Exhibits\DWG\23189 Site Plan.dwg LAYOUT NAME: CU902 PLOTTED: Wednesday, July 16, 2025 - 2:36pm



LIFE SAFETY PLAN - SECOND FLOOR

SCALE: 1/16" = 1'-0"



LIFE SAFETY PLAN - FIRST FLOOR (BASE BID)

SCALE: 1/16" = 1'-0"

BUILDING CODE DESIGN SUPPORTING DATA

(REFER TO SHEET ***LS102***)

GENERAL NOTES - LIFE SAFETY

1. ALL WALLS DESIGNATED AS FIRE RATED OR RPS (RESIST THE PASSAGE OF SMOKE) PARTITIONS SHALL EXTEND TO THE UNDERSIDE OF ROOF OR FLOOR DECK ABOVE. ALL VOIDS SHALL BE SEALED CONTINUOUSLY WITH SPECIFIED FIRE SAFING MATERIAL IN ACCORDANCE WITH APPLICABLE CODES. EXISTING EXTERIOR WALLS WHERE ADJACENT TO NEW 2-HR FIRE WALL ASSUMED TO HAVE 2-HR RATING PER PRESCRIPTIVE FIRE RATINGS PER VCC 721.
2. ALL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES SHALL BE FIRESTOPPED AND SEALED AS REQUIRED TO MAINTAIN INTEGRITY OF THE FIRE RATED ASSEMBLY.
3. CLASSROOM DESIGN OCCUPANT LOAD IS 24 STUDENTS AND 1 TEACHER. SPECIALTY ROOMS HAVE DESIGN LOADS LISTED.

LIFE SAFETY PLAN KEY NOTES

(APPLIES TO SHEETS LS-101 & LS-102)

1. TOTAL PATH OF EGRESS TRAVEL DISTANCE IS NOTED ON THE SECOND FLOOR LIFE SAFETY PLAN ON THIS SHEET.
2. EXIT IDENTIFICATION SIGNAGE FOR EMERGENCY PERSONNEL. IDENTIFICATION NUMBER IS INDICATED BESIDE KEYNOTE THUS (X). REF SIGNAGE TYPE 10 ON SHEET A-607 FOR ADDITIONAL INFORMATION.
3. "KNOX-BOX 3200 SERIES" OR APPROVED EQUAL AS MFR'S BY KNOX COMPANY. UNIT TO BE RECESSED IN BRICK AT +4'-4" AFF.
4. INFILL ANY OPENINGS IN EXISTING EXTERIOR WALL AND SEAL ALL PENETRATIONS WITH FIRE RESISTIVE JOINT SYSTEMS TO PROVIDE A 2-HR FIRE WALL RATING. IT IS ANTICIPATED THAT THE EXISTING EXTERIOR WALLS ALREADY EXTEND TO THE DECK; HOWEVER, ALL TOP OF WALL VOIDS & PENETRATIONS ARE REQUIRED TO BE SEALED.
5. EXISTING EGRESS PATH WILL BE OUT OF COMMISSION DURING CONSTRUCTION. REFER TO TRAVEL PATH INFORMATION ON THIS SHEET FOR TEMPORARY EGRESS PATH. SEE PHASING PLAN GENERAL NOTES ON SHEET PH101 FOR MORE INFORMATION.
6. EXISTING "KNOX BOX" LOCATION.
7. PROVIDE FIRESTOP MATERIAL AROUND MECHANICAL DUCT PER DETAIL (C2 / ***LS102***)

PLAN LEGEND

- THREE HOUR FIRE WALL
- TWO HOUR FIRE WALL
- EXISTING TWO HOUR FIRE WALL
- ONE HOUR FIRE BARRIER
- NON-FIRE RATED PARTITION. REFER TO SHEET ***A-002*** FOR PARTITION TYPES LEGEND.
- A — 120 MIN RATED DOOR AND FRAME ASSEMBLY
- B — 60 MIN RATED DOOR AND FRAME ASSEMBLY
- EWC - ELECTRIC WATER COOLER
- 48/26 — DESIGN OCCUPANCY
- (E) 48/26 — CODE OCCUPANCY
- (E) — EXISTING/ UNCHANGED OCCUPANCY LOAD
- APPROXIMATE MAXIMUM TRAVEL DISTANCE
- APPROXIMATE TEMPORARY MAXIMUM TRAVEL DISTANCE (DURING CONSTRUCTION)
- 440 — EGRESS CAPACITY IN PERSONS FOR OPENING SHOWN
- 54 — CALCULATED OCCUPANCY LOAD AT EXIT LOCATION
- FEC — RECESSED FIRE EXTINGUISHER & CABINET- REFER TO DETAILS, SHEET ***LS102*** - AND SPECS
- FEC — SEMI-RECESSED FIRE EXTINGUISHER & CABINET- REFER TO DETAILS, SHEET ***LS102*** - AND SPECS
- WALL MOUNTED FIRE EXTINGUISHER- REF SPECS
- FE (K) — WET CHEMICAL FIRE EXTINGUISHER
- (E) — EXISTING FIRE EXTINGUISHER/ CABINET TO REMAIN

OCCUPANCY AREAS

- ACCESSORY STORAGE AREAS, MECHANICAL EQUIPMENT ROOM
- ASSEMBLY UNCONCENTRATED (TABLES AND CHAIRS)
- ASSEMBLY CONCENTRATED (CHAIRS ONLY - NOT FIXED)
- BUSINESS
- EDUCATIONAL CLASSROOM AREA
- KITCHENS COMMERCIAL

OCCUPANCY LOAD - FIRST FLOOR

Name	AREA	CODE MAXIMUM LOAD	DESIGN LOAD	EGRESS LOAD*
Accessory Storage Areas, Mechanical Equipment Room				
CUST	100 SF	1	1	1
ELEC	152 SF	1	1	1
IDF	119 SF	1	1	1
STOR	83 SF	1	1	1
Assembly Unconcentrated (tables and chairs)				
CAFE	2471 SF	165	165	165
Business				
TEACH WK RM	577 SF	4	6	6
Educational Classroom Area				
4TH CR	813 SF	41	25	41
4TH CR	813 SF	41	25	41
4TH CR	813 SF	41	25	41
4TH CR	813 SF	41	25	41
4TH CR	813 SF	41	25	41
4TH CR	813 SF	41	25	41
4TH CR	813 SF	41	25	41
4TH CR	813 SF	41	25	41
Kitchens Commercial				
KITCHEN	993 SF	5	5	5
Grand total: 15		506	380	508

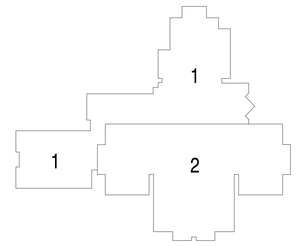
* PROVIDES THE GREATER OCCUPANCY COUNT OF EITHER THE CODE MAXIMUM LOAD OR DESIGN LOAD. THE GREATER LOAD IS UTILIZED FOR EGRESS CALCULATIONS & ANALYSIS.

OCCUPANCY LOAD - SECOND FLOOR

Name	AREA	CODE MAXIMUM LOAD	DESIGN LOAD	EGRESS LOAD*
Accessory Storage Areas, Mechanical Equipment Room				
CUST	100 SF	1	1	1
CUST	78 SF	1	1	1
Business				
TEACH WK RM	794 SF	6	10	10
Educational Classroom Area				
5TH CR	813 SF	41	25	41
5TH CR	813 SF	41	25	41
5TH CR	813 SF	41	25	41
5TH CR	813 SF	41	25	41
5TH CR	813 SF	41	25	41
5TH CR	813 SF	41	25	41
5TH CR	813 SF	41	25	41
5TH CR	891 SF	45	25	45
Grand total: 11		340	212	344

OCCUPANCY LOAD - FIRST FLOOR ADD ALT 1

Name	Area	CODE MAXIMUM LOAD	DESIGN LOAD	EGRESS LOAD*
Accessory Storage Areas, Mechanical Equipment Room				
CUST	100 SF	1	1	1
IDF	119 SF	1	1	1
ELEC	152 SF	1	1	1
STOR	83 SF	1	1	1
Business				
TEACH WK RM	581 SF	4	6	6
Educational Classroom Area				
4TH CR	813 SF	41	25	41
4TH CR	813 SF	41	25	41
4TH CR	813 SF	41	25	41
4TH CR	813 SF	41	25	41
4TH CR	813 SF	41	25	41
4TH CR	813 SF	41	25	41
4TH CR	813 SF	41	25	41
4TH CR	813 SF	41	25	41
Kitchens Commercial				
KITCHEN / SERVING	3671 SF	19	19	19
Grand total: 14		355	229	357



FIRE ZONE KEY PLAN

SCALE: 1/16" = 1'-0"

MARK	DATE	REVISIONS
A1	07.17.2025	ADDENDUM NO. 1
	RRMM	BY
		DESCRIPTION

DATE	06.24.2025
PROJECT	23238-00
DESIGNED	MW
DRAWN	MW
CHECKED	JAH

RRMM ARCHITECTS, PC
1317 Executive Blvd, Suite 200
Chesapeake, Virginia 23320
(757)622-2828

COMMONWEALTH OF VIRGINIA
JEFFREY A HARRIS
Lic. No. 10748
06.24.2025
ARCHITECT

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD,
SUFFOLK, VIRGINIA
IFB: 1888-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

DRAWING
LIFE SAFETY PLAN

SHEET
LS101

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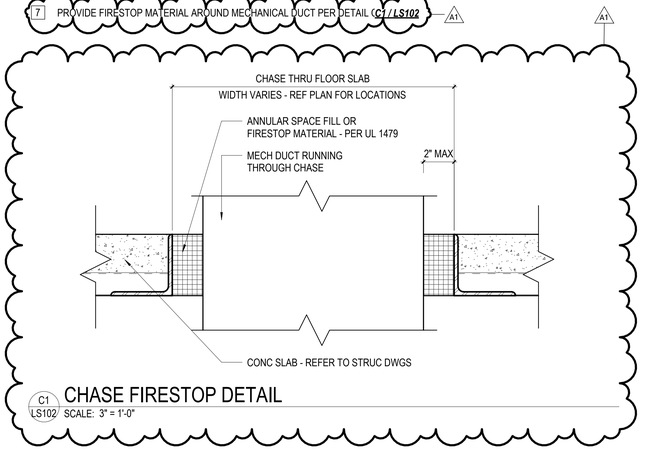
GENERAL NOTES - LIFE SAFETY

1. ALL WALLS DESIGNATED AS FIRE RATED OR RPS (RESIST THE PASSAGE OF SMOKE) PARTITIONS SHALL EXTEND TO THE UNDERSIDE OF ROOF OR FLOOR DECK ABOVE. ALL VOIDS SHALL BE SEALED CONTINUOUSLY WITH SPECIFIED FIRE SAFING MATERIAL IN ACCORDANCE WITH APPLICABLE CODES. EXISTING EXTERIOR WALLS WHERE ADJACENT TO NEW 2-HR FIRE WALL ASSUMED TO HAVE 2-HR RATING PER PRESCRIPTIVE FIRE RATINGS PER VCC 721.
2. ALL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES SHALL BE FIRESTOPPED AND SEALED AS REQUIRED TO MAINTAIN INTEGRITY OF THE FIRE RATED ASSEMBLY.
3. CLASSROOM DESIGN OCCUPANT LOAD IS 24 STUDENTS AND 1 TEACHER. SPECIALTY ROOMS HAVE DESIGN LOADS LISTED.

LIFE SAFETY PLAN KEY NOTES

(APPLIES TO SHEETS LS-101 & LS-102)

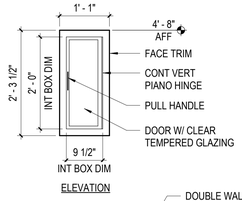
1. TOTAL PATH OF EGRESS TRAVEL DISTANCE IS NOTED ON THE SECOND FLOOR LIFE SAFETY PLAN ON THIS SHEET.
2. EXIT IDENTIFICATION SIGNAGE FOR EMERGENCY PERSONNEL. IDENTIFICATION NUMBER IS INDICATED BESIDE KEYNOTE THUS (X). REF SIGNAGE TYPE 10 ON SHEET A-607 FOR ADDITIONAL INFORMATION.
3. "KNOX-BOX 3200 SERIES" OR APPROVED EQUAL AS MFR'S BY KNOX COMPANY. UNIT TO BE RECESSED IN BRICK AT +4'-4" AFF.
4. INFILL ANY OPENINGS IN EXISTING EXTERIOR WALL AND SEAL ALL PENETRATIONS WITH FIRE RESISTIVE JOINT SYSTEMS TO PROVIDE A 2-HR FIRE WALL RATING. IT IS ANTICIPATED THAT THE EXISTING EXTERIOR WALLS ALREADY EXTEND TO THE DECK; HOWEVER, ALL TOP OF WALL VOIDS & PENETRATIONS ARE REQUIRED TO BE SEALED.
5. EXISTING EGRESS PATH WILL BE OUT OF COMMISSION DURING CONSTRUCTION. REFER TO TRAVEL PATH INFORMATION ON THIS SHEET FOR TEMPORARY EGRESS PATH. SEE PHASING PLAN GENERAL NOTES ON SHEET PH101 FOR MORE INFORMATION.
6. EXISTING "KNOX BOX" LOCATION.
7. PROVIDE FIRESTOP MATERIAL AROUND MECHANICAL DUCT PER DETAIL (C1 / LS102



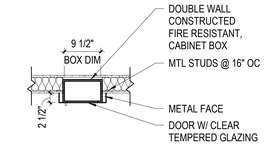
C1 / LS102 CHASE FIRESTOP DETAIL
SCALE: 3" = 1'-0"

PLAN LEGEND

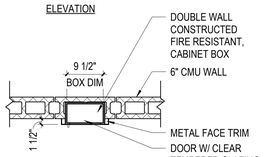
- THREE HOUR FIRE WALL
- TWO HOUR FIRE WALL
- EXISTING TWO HOUR FIRE WALL
- ONE HOUR FIRE BARRIER
- NON-FIRE RATED PARTITION, REFER TO SHEET A-002 FOR PARTITION TYPES LEGEND.
- A — 120 MIN RATED DOOR AND FRAME ASSEMBLY
- B — 60 MIN RATED DOOR AND FRAME ASSEMBLY
- EWC - ELECTRIC WATER COOLER
- 48/26 — DESIGN OCCUPANCY
- (E) — CODE OCCUPANCY
- EXISTING/ UNCHANGED OCCUPANCY LOAD
- APPROXIMATE MAXIMUM TRAVEL DISTANCE
- APPROXIMATE TEMPORARY MAXIMUM TRAVEL DISTANCE (DURING CONSTRUCTION)
- 440 — EGRESS CAPACITY IN PERSONS FOR OPENING SHOWN
- 54 — CALCULATED OCCUPANCY LOAD AT EXIT LOCATION
- FEC — RECESSED FIRE EXTINGUISHER & CABINET- REFER TO DETAILS, SHEET LS102 - AND SPECS
- FEC — SEMI-RECESSED FIRE EXTINGUISHER & CABINET- REFER TO DETAILS, SHEET LS102 - AND SPECS
- WALL MOUNTED FIRE EXTINGUISHER- REF SPECS
- FE (K) — WET CHEMICAL FIRE EXTINGUISHER
- (E) — EXISTING FIRE EXTINGUISHER/ CABINET TO REMAIN



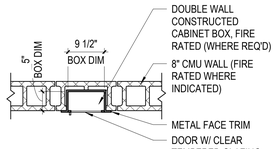
ELEVATION



SEMI RECESSED CABINET
PLAN DETAIL @ 3 5/8" MTL STUD WALL



SEMI - RECESSED CABINET
PLAN DETAIL @ 6" CMU WALL



RECESSED CABINET
PLAN DETAIL @ 8" CMU WALL

- IDENTIFY THE FIRE EXTINGUISHER AS REQUIRED PER THE SPECIFICATIONS, TYPICAL AT ALL LOCATIONS.
- PROVIDE FIRE RATED FEC WHERE LOCATED IN FIRE RATED WALLS SHOWN ON LS PLAN

FIRE EXTINGUISHER CABINET TYPICAL DETAILS

SCALE: 3/4" = 1'-0"

TYPICAL ACCESSIBILITY GUIDELINES

(REFER TO SHEET A-003)

BUILDING CODE DESIGN SUPPORTING DATA

PROJECT BASIC DESCRIPTION
THE PROJECT INCLUDES CONSTRUCTION OF A NEW 29,384 SF TWO-STORY 16 CLASSROOM AND CAFETERIA/ KITCHEN ADDITION, AS WELL AS RENOVATION OF TWO CLASSROOMS AND THE EXISTING KITCHEN. THE EXISTING STRUCTURE IS A SINGLE STORY ELEMENTARY SCHOOL AND IS SPRINKLED THROUGHOUT. THE EXISTING BUILDING HAS TWO FIRE ZONES (THE CAFETORIUM/ GYM AND THE CLASSROOM WING) SEPARATED BY A 2-HR FIRE WALL. THE NEW ADDITION WILL BE SPRINKLED THROUGHOUT AND THE SQUARE FOOTAGE HAS BEEN INCORPORATED INTO THE CAFETORIUM/ GYM FIRE ZONE, BUT IS SEPARATED FROM THE EXISTING CLASSROOM FIRE ZONE WITH A 2-HR FIRE WALL. THERE IS ALSO AN ADDITIVE ALTERNATE NO.1 DESIGN THAT RELOCATES THE EXISTING KITCHEN TO THE NEW ADDITION, CONVERTING THE EXISTING KITCHEN INTO ADDITIONAL CAFETERIA SEATING. THE RENOVATIONS ARE CLASSIFIED AS LEVEL 2 ALTERATIONS.

A. APPLICABLE CODES
1. BUILDING CODES: 2021 VIRGINIA UNIFORM STATEWIDE BUILDING CODE (VUSBC)
   INCLUDING BY REFERENCE:
   2021 VIRGINIA CONSTRUCTION CODE (VCC)
   2021 VIRGINIA EXISTING BUILDING CODE (VEBC)
   2021 VIRGINIA MECHANICAL CODE (VMC)
   2021 VIRGINIA PLUMBING CODE (VPC)
   2021 VIRGINIA ENERGY CONSERVATION CODE (VECC)
   2021 VIRGINIA FUEL GAS CODE
   2021 INTERNATIONAL FIRE CODE
   2021 NFPA 70
   2021 VIRGINIA FOOD REGULATIONS

2. ACCESSIBILITY CODE: 2021 VUSBC AND ICC/ANSI 117.1 - 2017
   2010 ADA STANDARDS FOR ACCESSIBLE DESIGN - SEPT 15, 2010

3. EXISTING BUILDING CONSTRUCTED UNDER 1993 (VUSBC) VIRGINIA UNIFORM STATEWIDE BUILDING CODE AND 1993 BOCA BUILDING CODE.

WHEN MULTIPLE CODE REFERENCES ADDRESS SIMILAR SPECIFIC CODE REQUIREMENTS, THE MOST STRINGENT CODE REQUIREMENT SHALL TAKE PRECEDENCE. COORDINATE WITH ALL DRAWINGS AND SPECIFICATIONS FOR OTHER CODES AND REGULATIONS THAT ARE APPLICABLE FOR THIS PROJECT.

B. GROSS BUILDING AREAS
1. FIRST FLOOR BUILDING AREA:
   A. FIRE ZONE 1 (EXISTING + ADDITION): 24,932 +17,458 SF = 42,390 SF
   B. FIRE ZONE 2 (EXISTING): 45,726 SF (UNCHANGED)
2. SECOND FLOOR BUILDING AREA:
   1. FIRE ZONE 1 (ADDITION): 11,926 SF
TOTAL BUILDING AREA: 100,042 SF

C. BUILDING OCCUPANCY AND CONSTRUCTION TYPE
1. BUILDING USE CLASSIFICATION: OCCUPANCY GROUP E "EDUCATIONAL", PER VCC 305.1
2. ASSEMBLY AREAS THAT ARE ASSOCIATED WITH GROUP E ARE NOT CONSIDERED SEPARATE OCCUPANCIES, PER VCC 303.1.3
3. CONSTRUCTION TYPE:
   A. EXISTING BUILDING - TYPE IIIB UNPROTECTED (SPRINKLERED), PER VCC 602.1
   B. NEW ADDITION - TYPE IIB UNPROTECTED (SPRINKLERED), PER VCC 602.1
   * ALL MATERIALS USED FOR CONSTRUCTION SHALL MEET THE REQUIREMENTS FOR TYPE II B CONSTRUCTION AS OUTLINED IN VCC CHAPTER 6.

D. FIRE PROTECTION SYSTEMS
1. ENTIRE BUILDING ADDITION IS SPRINKLERED THROUGHOUT PER VCC 903.1, THE INTERNATIONAL FIRE CODE AND NFPA 13 (PER VCC 903.3.1)
2. ENTIRE EXISTING BUILDING IS SPRINKLERED THROUGHOUT PER 1993 VUSBC AND 1993 BOCA CODES, (AS MODIFIED, MINOR RENOVATIONS TO EXISTING SPACES).
3. EXISTING DRY-PIPE SPRINKLER SYSTEM IN EXISTING BUILDING ATTIC SPACES (NON-MODIFIED).
4. EXERCISE SAFEGUARDS DURING CONSTRUCTION AND EXISTING SPRINKLER SYSTEM MODIFICATIONS AS ALLOWED PER VCC CHAPTER 33.
5. FIRE EXTINGUISHER PER VCC 906.1
6. FIRE ALARM AND DETECTION SYSTEMS PER VCC 907.1

E. FIRE RESISTANCE RATING REQUIREMENTS

1. PER VCC TABLE 601

EXTERIOR BEARING WALLS	0 HR
EXTERIOR NON-BEARING WALLS	0 HR
INTERIOR BEARING WALLS	0 HR
INTERIOR NON-BEARING WALLS	0 HR
STRUCTURAL FRAME	0 HR
FLOOR/CEILING CONSTRUCTION	0 HR
ROOF/CEILING CONSTRUCTION	0 HR

2. ADDITIONAL RATING REQUIREMENTS

FIRE WALLS (VCC 706.4a)	2 HR
FIRE BARRIER WALLS	2 HR
FIRE PARTITIONS	1 HR.
ELEVATOR SHAFT	1 HR.
ENCLOSED SPACE UNDER STAIRS	1 HR.
STORAGE ROOM WALLS	0 HR
EGRESS STAIRWAYS	0 HR (UNENCLOSED PER VCC 1019.3, EXCEPTION 1)
EXTERIOR WALLS W/ SEPARATION DISTANCE ≥ 10'	0HR (PER VCC TABLE 705.5)
EXTERIOR WALLS W/ SEPARATION DISTANCE < 10'	1HR (PER VCC TABLE 705.5)
CORRIDOR WALLS IN OCCUPANCY GROUP E	0 HR W/ SPRINKLER (PER VCC TABLE 1020.2)

3. MAX AREA OF EXTERIOR WALL OPENINGS BASED ON FIRE SEPARATION DISTANCE AND DEGREE OF OPENING PROTECTION (PER VCC TABLE 705.8) - UNPROTECTED, SPRINKLERED

LESS THAN 3'	NOT PERMITTED
3' TO < 5'	15%
5' TO < 10'	25%
>10'	NO LIMIT **

** PER VCC 705.8.1, EXCEPTION 2, FOR TYPE IIB CONSTRUCTION: UNLIMITED, UNPROTECTED OPENINGS ARE ALLOWED AT A FIRE SEPARATION DISTANCE ≥ 10' WHERE THE EXTERIOR WALL FIRE RESISTANCE RATING REQUIREMENT IS 0 HOURS (REFER TO VCC TABLE 705.5) .

4. VCC 706.5.1 HORIZONTAL CONTINUITY, EXTERIOR WALLS
EXCEPTION 1: THE EXTERIOR WALLS ON BOTH SIDES OF THE FIRE WALL SHALL HAVE A 1-HOUR FIRE-RESISTANCE RATING WITH 45 MIN PROTECTION WHERE OPENING PROTECTION IS REQUIRED BY SECTION 705.8. THE FIRE-RESISTANCE RATING OF THE EXTERIOR WALL SHALL EXTEND NOT LESS THAN 4 FEET ON EACH SIDE OF THE INTERSECTION OF THE FIRE WALL TO EXTERIOR WALL. EXTERIOR WALL INTERSECTIONS AT FIRE WALLS THAT FORM AN ANGLE EQUAL TO OR GREATER THAN 180 DEGREES DO NOT NEED EXTERIOR WALL PROTECTION.

5. VCC 706.6 VERTICAL CONTINUITY
EXCEPTION 3:
WALLS SHALL BE PERMITTED TO TERMINATE AT THE UNDERSIDE OF NONCOMBUSTIBLE ROOF SHEATHING, DECK OR SLABS WHERE BOTH BUILDINGS ARE PROVIDED WITH NOT LESS THAN A CLASS B ROOF COVERING. OPENINGS IN THE ROOF SHALL NOT BE LOCATED WITHIN 4 FEET OF THE FIRE WALL.

706.6.1 STEPPED BUILDINGS:
WHERE A FIRE WALL ALSO SERVES AS AN EXTERIOR WALL FOR A BUILDING AND SEPARATES BUILDINGS HAVING DIFFERENT ROOF LEVELS , SUCH WALL SHALL EXTEND 30" ABOVE LOWER ROOF. EXTERIOR WALLS ABOVE THE FIRE WALL TO BE ≥ 1-HR FIRE-RESISTANCE-RATED CONSTRUCTION FROM BOTH SIDES W/ 45 MIN FIRE PROTECTION RATED OPENINGS ≤ 15' ABOVE LOWER ROOF.

6. FIRE DOOR ASSEMBLIES SHALL BE CONSTRUCTED, RATED, TESTED AND LABELED PER VCC 716.2
FIRE DOOR ASSEMBLY RATINGS PER VCC TABLE 716.1 (2)
2 HR FIRE WALL OR BARRIER = 90 MIN FIRE DOOR ASSEMBLY
1 HR FIRE BARRIER = 60 MIN FIRE DOOR ASSEMBLY
1 HR FIRE PARTITION = 45 MIN FIRE DOOR ASSEMBLY

7. GLAZING IN FIRE DOOR ASSEMBLIES PER VCC 716.2.5
FIRE RESISTANCE RATED GLAZING IN EXCESS OF 100 SQUARE INCHES SHALL BE PERMITTED IN FIRE WALLS OR FIRE BARRIERS RATED > 1-HR WHEN TESTED AS COMPONENTS OF THE DOOR ASSEMBLY AND NOT AS GLASS LIGHTS.

A1
6. OTHER

DRAFTSTOPPING:	NOT REQUIRED WITH NON-COMBUSTIBLE CONSTRUCTION
ROOF COVERING CLASSIFICATION	MIN CLASS C, CLASS A PROVIDED
INTERIOR FINISHES:	CLASS B AND CLASS C DEPENDING ON FUNCTION

F. AREA ALLOWANCE PER OCCUPANT (PER VCC TABLE 1004.5)

1. ACCESSORY STORAGE AREAS, MECHANICAL EQUIPMENT ROOMS	300 SF GROSS
2. ASSEMBLY, UNCONCENTRATED TABLES AND CHAIRS (CAFETERIA)	15 SF NET
3. ASSEMBLY, CONCENTRATED CHAIRS ONLY (EXISTING CAFETERIA)	7 SF NET
4. BUSINESS AREAS	150 SF GROSS
5. EDUCATIONAL CLASSROOMS	20 SF NET
6. COMMERCIAL KITCHEN SPACE	200 SF GROSS

G. MEANS OF EGRESS
OCCUPANT LOAD PER VCC 1004.5 : EXCEPTION - WHERE APPROVED BY THE BUILDING OFFICIAL, THE ACTUAL NUMBER OF OCCUPANTS FOR WHOM EACH OCCUPIED SPACE, FLOOR OR BUILDING IS DESIGNED, ALTHOUGH LESS THAN THOSE DETERMINED BY CALCULATION, SHALL BE PERMITTED TO BE USED IN THE DETERMINATION OF THE DESIGN OCCUPANT LOAD.
- THE PLUMBING FIXTURE COUNTS ARE BASED OFF THIS EXCEPTION USING THE DESIGN OCCUPANT LOAD
- THE MEANS OF EGRESS CALCULATIONS ARE BASED OFF THE MAXIMUM CODE DERIVED OCCUPANT LOAD.

BASE BID CODE OCCUPANCY (ADDITION)	
FIRST FLOOR	'508' OCCUPANTS
SECOND FLOOR	'344' OCCUPANTS
TOTAL	852 OCCUPANTS
ADD. ALT. CODE OCCUPANCY (ADDITION)	
FIRST FLOOR	'357' OCCUPANTS
SECOND FLOOR	'344' OCCUPANTS
TOTAL	701 OCCUPANTS
DESIGN OCCUPANCY (ADDITION)	400 (STUDENTS + STAFF)

PER VCC SECTION 1005.3.1 & 1005.3.2 EGRESS WIDTH PER OCCUPANT (W/ SPRINKLER SYSTEM)

STAIRWAYS:	0.2 PER OCCUPANT
OTHER EGRESS COMPONENTS	0.15 PER OCCUPANT
TOTAL REQUIRED EGRESS WIDTH	130"
TOTAL PROVIDED EGRESS WIDTH	288"

VCC TABLE 1017.2 EXIT ACCESS TRAVEL DISTANCE: OCCUPANCY GROUP E, 250 ' W/ SPRINKLER

VCC 1020.5 DEAD ENDS : OCCUPANCY GROUP E ≤ 50 ' - 1020.5 EXCEPTION 2

VCC 1020.3 CORRIDOR WIDTH :	72" MIN W/ OCCUPANT LOAD ≥ 100
VCC 1006.2.1 COMMON PATH OF EGRESS TRAVEL :	75'
VCC TABLE 1006.3.3 EXITS PER FLOOR :	2 MIN W/ OCCUPANT LOAD ≤ 500 3 MIN W/ OCCUPANT LOAD > 500
VCC 504.3 AND 504.4 TOTAL ALLOWABLE STORY/HEIGHT DESIGN STORY / HEIGHT	3 STORIES / 75' 2 STORIES / 35'-9"

H. ALLOWABLE BUILDING AREA
TABULAR ALLOWABLE BUILDING AREA PER FLOOR:
GROUP E, TYPE IIB & TYPE IIIB CONSTRUCTION:
- ONE STORY = 58,000 SF W/ SPRINKLER
- MULTI-STORY = 43,500 SF W/ SPRINKLER

TOTAL BUILDING AREA **FIRE ZONE 1** =
FIRST FLOOR: 42,390 SF < 43,500 SF - **DESIGN COMPLIES**
SECOND FLOOR: 11,926 SF < 43,500 SF - **DESIGN COMPLIES**

TOTAL BUILDING AREA **FIRE ZONE 2** =
45,726 SF < 58,000 SF - **DESIGN COMPLIES**

J. PLUMBING FIXTURE REQUIREMENTS
FIXTURE COUNTS ARE BASED ON VCC 2901.1 & VPC TABLE 403.1
1. BUILDING USE OCCUPANCY CLASSIFICATION: (E) EDUCATIONAL
2. PER VEBC 603.10 PLUMBING FIXTURES FOR LEVEL 2 ALTERATIONS ARE ONLY REQUIRED TO BE INCREASED WHEN THE OCCUPANT LOAD OF THE EXISTING BUILDING HAS BEEN INCREASED BY MORE THAN 20%.
   - THE DESIGN OCCUPANCY OF THE ENTIRE EXISTING BUILDING IS 712 (STUDENTS + STAFF). SINCE TWO CLASSROOMS ARE GETTING RE-LOCATED TO THE NEW ADDITION TO CREATE A CONNECTING CORRIDOR, THE DESIGN OCCUPANCY OF THE EXISTING BUILDING DECREASES IN THE BASE BID DESIGN AND IS NOT INCREASED BY MORE THAN 20% IN THE ADDITIVE ALTERNATE. THUS, ONLY THE PLUMBING FIXTURE COUNTS FOR THE NEW ADDITION IS CALCULATED BELOW.
3. MAXIMUM DESIGN OCCUPANT LOAD OF ADDITION: **400 OCCUPANTS**

	REQUIRED	PROVIDED
WATER CLOSETS (INCLUDING URINALS)	8	24
LAVATORIES	8	12
DRINKING FOUNTAINS	4	4
SERVICE SINKS	1	2
CLASSROOM & WORKROOM SINKS	0	18

K. 2021 INTERNATIONAL ENERGY CONSERVATION CODE - NEW CONSTRUCTION (TABLE C301.1)
CITY OF SUFFOLK: CLIMATE ZONE 3A

BUILDING ENVELOPE REQUIREMENTS - OPAQUE ASSEMBLIES (TABLE 402.1.3)
NEW ROOF R-25ci WITH CONTINUOUS INSULATION ABOVE DECK
NEW WALLS MASS WALL R-7.6ci (CONTINUOUS INSULATION)
METAL FRAMED R-13 + R-7.5ci
SLAB ON GRADE
UNHEATED: NOT REQUIRED
HEATED (HYDRONIC): R-10 FOR 24" BELOW + R-5 FULL SLAB
OPAQUE DOOR (LESS THAN 50% GLASS)
SWINGING U-FACTOR 0.37
ROLL UP U-FACTOR 0.31

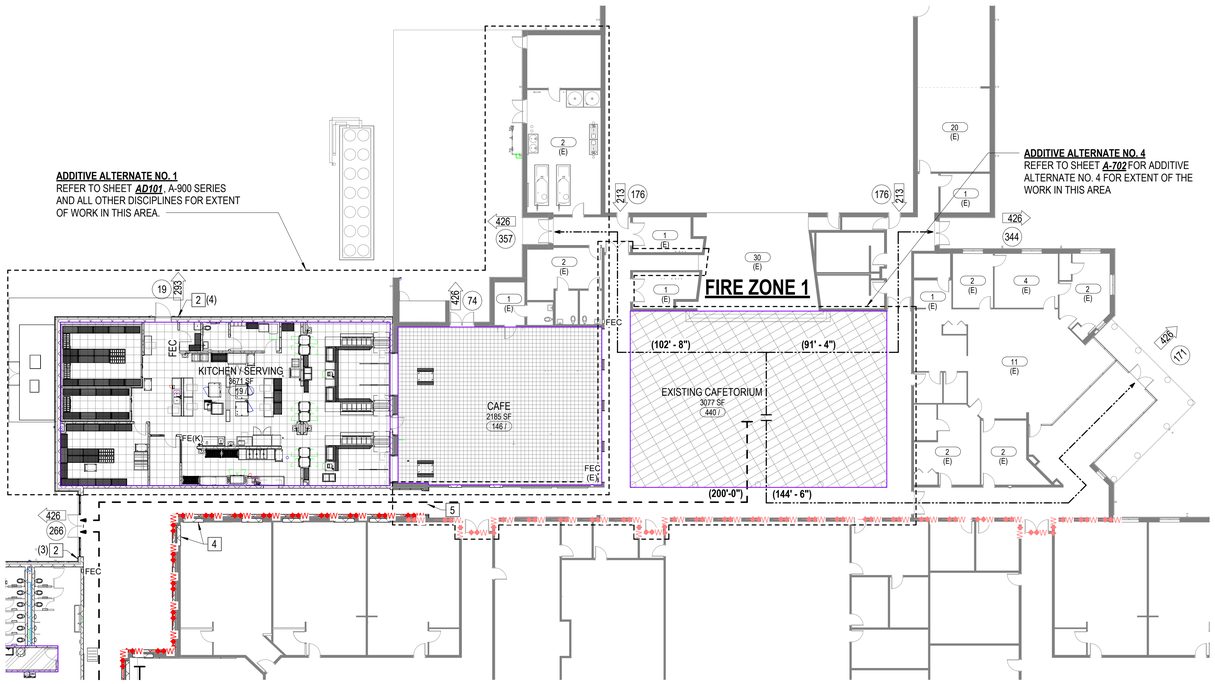
BUILDING ENVELOPE REQUIREMENTS - FENESTRATION (40% MAX. IF ABOVE GRADE WALL)
METAL FRAMING STOREFRONT
U-FACTOR 0.42
ENTRANCE DOOR
U-FACTOR 0.68
ALL OTHER (OPERABLE AND FIXED WINDOWS, NON-ENTRANCE DOORS
U-FACTOR 0.54

SHGC ALL FRAME TYPES	FIXED	OPERABLE
PROJECTION FACTOR: <0.2	0.25	0.23
PROJECTION FACTOR: 0.2 <= PF < 0.5	0.3	0.28
PROJECTION FACTOR: PF >= 0.5	0.4	0.37

SKYLIGHTS U-FACTOR 0.55, SHGC 0.30

OCCUPANCY AREAS

- ACCESSORY STORAGE AREAS, MECHANICAL EQUIPMENT ROOM
- ASSEMBLY UNCONCENTRATED (TABLES AND CHAIRS)
- ASSEMBLY CONCENTRATED (CHAIRS ONLY - NOT FIXED)
- BUSINESS
- EDUCATIONAL CLASSROOM AREA
- KITCHENS COMMERCIAL



LIFE SAFETY PLAN - FIRST FLOOR ADDITIVE ALTERNATE NO.1
SCALE: 1/16" = 1'-0"

MARK	DATE	REVISIONS
A1	07.17.2025	ADDENDUM NO. 1
	RRMM	BY
		DESCRIPTION

DATE	PROJECT	DESIGNED	DRAWN	CHECKED
06.24.2025	23238-00	MW	MW	JAH

RRMM ARCHITECTS, PC
1317 Executive Blvd, Suite 200
Chesapeake, Virginia 23320
(757)622-2828

COMMONWEALTH OF VIRGINIA
JEFFREY A HARRIS
Lic. No. 10748
06.24.2025
ARCHITECT

PROJECT: SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
VIRGINIA DEPARTMENT OF EDUCATION: 127-329-101
IFB: 1889-8

DRAWING: LIFE SAFETY PLAN - BUILDING CODE DATA & ADDITIVE ALTERNATE NO.1

SHEET
LS102

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PHASING KEY

PHASE I-A:
(NTP - AUGUST 1, 2026)
IN ORDER TO REDUCE NOISE, DUST AND DISRUPTIONS, CONTRACTOR WILL HAVE LIMITED ACCESS TO THIS AREA (OUTSIDE OF SCHOOL HOURS, WEEKENDS, AND HOLIDAYS ONLY DURING THE CALENDAR SCHOOL YEAR; FULL ACCESS AT OTHER TIMES).

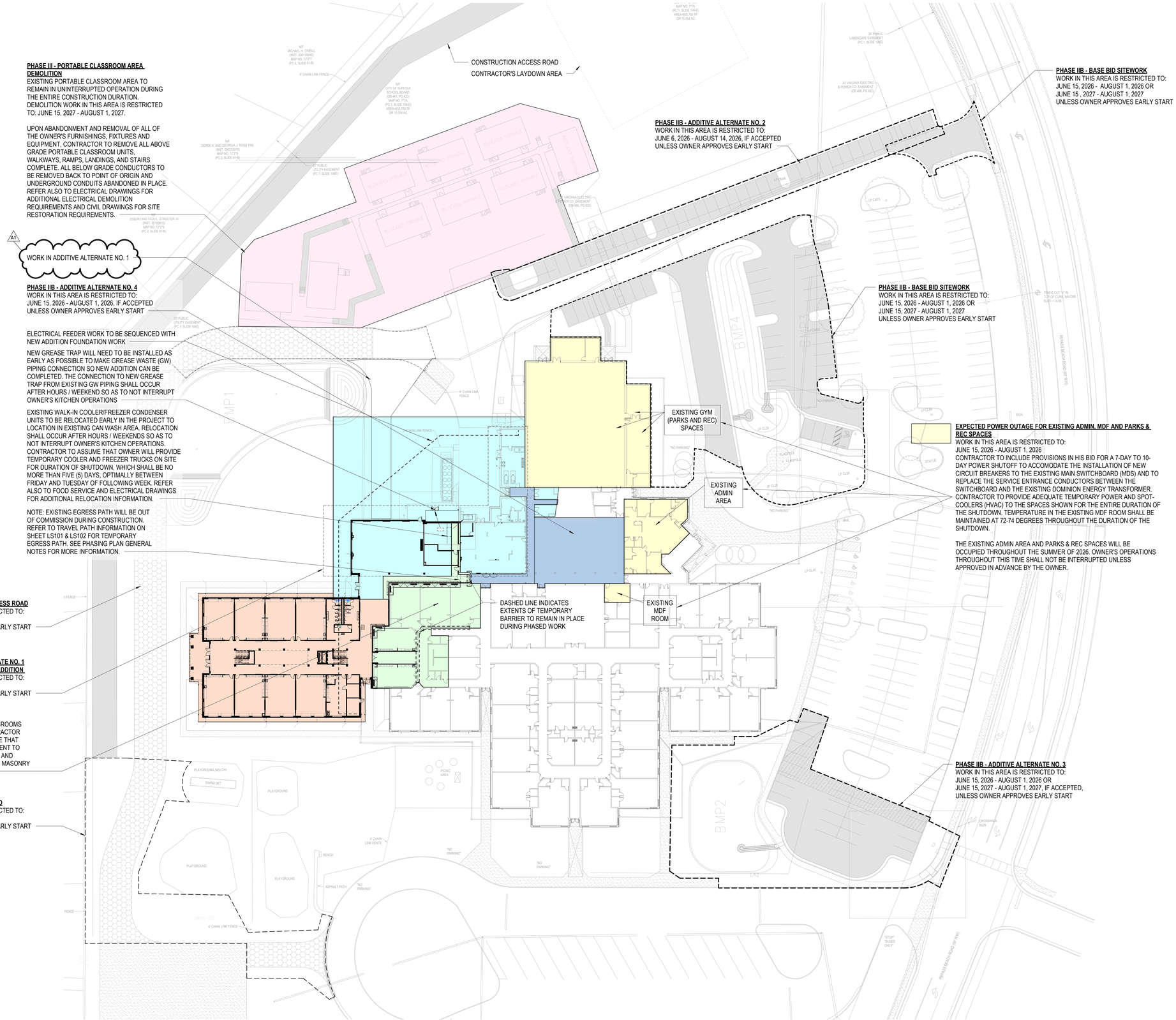
CONTRACTOR TO INSTALL NEW WORK MASONRY IN EXISTING BUILDING WINDOW OPENINGS AS EARLY AS POSSIBLE. COORDINATE THIS WORK WITH THE OWNER'S REPRESENTATIVE AND **MINIMIZE DOWN TIME TO THE GREATEST EXTENT POSSIBLE.**

PHASE I-B:
(NTP - BUILDING ADDITION SUBSTANTIAL COMPLETION)
NEW ADDITION WORK, BUILDING AND SITEWORK. CONTRACTOR TO PROVIDE NOISE AND DUST BARRICADES AT THIS LOCATION SEPARATING STUDENTS FROM CONSTRUCTION AREA. TO REMAIN IN PLACE UNTIL SUBSTANTIAL COMPLETION OR UPON OWNER'S APPROVAL TO REMOVE. MINIMUM EGRESS WIDTH TO BE MAINTAINED AT ALL LOCATIONS WITH TEMPORARY BARRICADES.

PHASE II-A:
(NTP - AUGUST 1, 2026)
THE OWNER HAS ADVISED THAT EARLY START OF WORK IN THE EXISTING KITCHEN (FOR BASE BID OR ADDITIVE ALTERNATE NO. 1) **MAY COMMENCE ON MAY 26, 2026 AND BE COMPLETED BY AUGUST 1, 2026 FOR FINAL COMPLETION.** CONTRACTOR TO INCLUDE PROVISIONS IN HIS BID FOR A 7-DAY TO 10-DAY POWER SHUTDOWN TO ACCOMODATE THE INSTALLATION OF NEW CIRCUIT BREAKERS TO THE EXISTING MAIN SWITCHBOARD (MDS) AND TO REPLACE THE SERVICE ENTRANCE CONDUCTORS BETWEEN THE SWITCHBOARD AND THE EXISTING DOMINION ENERGY TRANSFORMER. ALL SITE WORK AND BUILDING SYSTEMS ASSOCIATED WITH CONTINUED OPERATIONS OF KITCHEN AREA SHALL BE COMPLETED IN THIS PHASE AS WELL.

ADDITIVE ALTERNATE NO. 4 - REPLACE EXISTING CAFETERIA FLOORING, IF ACCEPTED.

PHASE III:
(JUNE 15, 2027 - AUGUST 1, 2027)
UPON NEW BUILDING ADDITION SUBSTANTIAL COMPLETION, OWNER WILL REMOVE FURNISHINGS AND EQUIPMENT. CONTRACTOR TO REMOVE EXISTING PORTABLE CLASSROOM UNITS, ASSOCIATED WALKWAY SYSTEM AND SITE ELECTRICAL IN THIS AREA COMPLETE. REMOVE TEMPORARY PAVEMENT / WALKWAYS, REGRADE AND RESEED THIS AREA PER CIVIL DRAWINGS.



PHASING PLAN GENERAL NOTES:

1. REFER TO THE BID FORM AND SAMPLE AGREEMENT FOR TIME OF COMPLETION FOR ACTUAL SUBSTANTIAL AND FINAL COMPLETION DATES AS OCCURRING.
2. REFER TO CIVIL, ARCHITECTURAL, FOOD SERVICE, PLUMBING, MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION FOR PHASED WORK REQUIREMENTS.
3. REFER TO PHASING NOTES ON SHEET PH101 FOR PHASING SUMMARY, GENERAL PHASING NOTES AND MORE DETAILED PHASING REQUIREMENTS.

OVERALL FIRST FLOOR PLAN

SCALE: 1/32" = 1'-0"

PLAN NORTH

1/32" = 1'-0" | 1/16" = 1'-0" | 3/32" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0" | 12" = 1'-0"

MARK	DATE	REVISIONS
A1	07.17.2025	ADDENDUM NO. 1
	RRMM	BY
		DESCRIPTION

DATE	06.24.2025
PROJECT	23238-00
DESIGNED	MW
DRAWN	STZ
CHECKED	JAH

RRMM ARCHITECTS, PC
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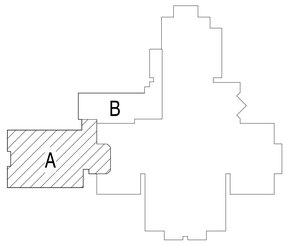
COMMONWEALTH OF VIRGINIA
JEFFREY A HARRIS
Lic. No. 10748
06.24.2025
ARCHITECT

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 1888-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

DRAWING
FIRST FLOOR PLAN - PHASING

SHEET
PH102

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KEY PLAN - AREA A

NOT TO SCALE

PLAN KEY NOTES

1. DASHED LINE INDICATES EDGE OF CANOPY/SOFFIT ABOVE.
2. DASHED LINE INDICATES 8'-0 1/2"W X 4'-0"D OVERHEAD SUPPORTED PRE-MANUFACTURED CANOPY W/ INTERNAL DRAINAGE AND AL DOWNSPOUT WITH CAST IRON DOWNSPOUT BOOT - REFER TO ***C5 / A-506*** FOR ADDITIONAL INFORMATION.
3. EXISTING DOWNSPOUT & CAST IRON BOOT WHERE APPLICABLE TO REMAIN.
4. NEW 5"X 5" PRE-FIN MTL DOWNSPOUT WITH CAST IRON BOOT - REF CIVIL DWGS FOR CONNECTION.
5. RE-LOCATED FIRE EXTINGUISHER (IN NEW CABINET WHERE APPLICABLE).
6. INFILL OPENING WITH 12" 2-HR FIRE RATED CMU, REFER TO DETAIL ***A4 / A-509*** .
7. 1" BUILDING EXPANSION JOINT WITH COMPRESSION SEAL.
8. SURFACE MOUNTED ADA PUSH PAD FOR AUTOMATIC DOOR OPERATOR - REF ELEC DWGS FOR ADDITIONAL INFO.
9. SURFACE MOUNTED CARD READER FOR ACTIVATING AUTOMATIC DOOR - REF ELEC DWGS FOR ADDITIONAL INFO.
10. REFER TO ***D1 / A-402*** FOR AREA 'A' TYPICAL CLASSROOM ENLARAGED PLAN.
11. REFERENCE SHEET (LS101) FOR INFO REGARDING EXISTING PARTITIONS TO BE EXTENDED & SEALED TO ROOF DECK. HOLES & PENETRATIONS SHALL BE SEALED TO CREATE 2-HR RATED PARTITION ALONG EXTERIOR WALL.
12. REFER TO ELEVATION ***C4 / A-402*** FOR TEACHING WALL LAYOUT.
13. METAL GUARDRAIL SYSTEM - REFER TO INTERIOR ELEVATIONS AND ENLARGED STAIR PLANS/SECTIONS.
14. INFILL OPENING WITH CMU (SIZE TO MATCH EXISTING), "TOOTH IN" CMU WHERE EXPOSED TO VIEW - REFER TO DETAIL ***A5 / A-509*** .
15. 6" SLAB DEPRESSION (BELOW KITCHEN FINISH FLOOR LEVEL) FOR INSTALLATION OF WALK-IN FREEZER AND COOLER - REF STRUCTURAL DWGS FOR ADDITIONAL INFO & COORD FINAL DEPTH AND SIZE OF DEPRESSIONS W/ FOODSERVICE EQUIPMENT MANUF.
16. INSTALL NEW 4"± THICK CONCRETE SLAB OVER -6" EXISTING SLAB TO MAKE FLUSH W/ ADJACENT EXISTING CONCRETE SLAB. PREPARE NEW SLAB FOR NEW QUARRY TILE FLOOR FINISH OR FINISH AS SCHEDULED. EXISTING RECESSED SLAB TO REMAIN.
17. PROVIDE NEW SLAB. REFER TO STRUCTURAL, PLUMBING, AND ELECTRICAL DWGS FOR COORDINATION. PROVIDE LEVEL WITH EXISTING ADJACENT SLAB & PREPARE TO RECEIVE NEW FLOOR FINISH.
18. RAIN LEADER(S) - REFER TO PLUMBING DWGS FOR ADDITIONAL INFORMATION.
19. PROVIDE 3/4" FIRE RETARDANT PLYWOOD AROUND ENTIRE PERIMETER OF IDF SPACE. PAINT PT1.
20. 6" CMU PLUMBING PIPE CHASE - EXTEND TO MINIMUM 4" ABOVE FINISHED CEILING IN EACH SPACE - PROVIDE MINIMUM 4" CLEAR SPACE INSIDE CHASE.
21. 3 5/8" METAL STUD FRAMING WITH 5/8" ABUSE RESISTANT GYP BOARD ENCLOSURE - CONSTRUCT WITH MIN DIMENSIONS NECESSARY TO CONCEAL RAIN LEADER, UON. EXTEND TO MINIMUM 4" ABOVE FINISHED CEILING IN EACH SPACE.
22. MECHANICAL CHASE - REFER TO STRUCTURAL DRAWINGS TO VERIFY SLAB OPENING. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION - REFER TO ***LS102*** .
23. MECHANICAL DUCT - REFER TO MECHANICAL DWGS.
24. MECHANICAL EQUIPMENT - REFER TO MECH DWGS.
25. ELECTRICAL EQUIPMENT - REFER TO ELEC DWGS.
26. BUILT IN BENCH. REF SHEET ***A-803*** FOR ADDITIONAL INFORMATION.
27. COPIER: OWNER FURNISHED, OWNER INSTALLED.
28. EXISTING LOW CMU PARTITION TO RECEIVE VERTICAL WALL EXTENSION UP TO 4" MIN ABOVE FINISH FACE OF CEILING. COORDINATE WITH ELECTRICAL DEMOLISION AT SAME LOCATION.
29. CONCRETE SIDEWALK, CHAIN-LINK FENCING AND DOUBLE GATES - REFER TO CIVIL DWGS.
30. MAINTAIN MINIMUM REQUIRED EGRESS WIDTH.
31. NEW 3"X 3" PRE-FIN MTL DOWNSPOUT WITH CAST IRON BOOT - REF CIVIL DWGS FOR CONNECTION.
32. DASHED LINE INDICATES 12'-0"W X 4'-0"D OVERHEAD SUPPORTED PRE-MANUFACTURED CANOPY W/ INTERNAL DRAINAGE AND AL DOWNSPOUT WITH CAST IRON DOWNSPOUT BOOT - REFER TO ***D3 / A-503*** FOR ADDITIONAL INFORMATION.
33. INFILL QUARRY TILE OVER EXISTING CONCRETE SLAB.
34. ANNULAR SPACE AROUND THE PENETRATING DUCT IS TO BE PROTECTED WITH AN APPROVED NONCOMBUSTIBLE MATERIAL THAT RESISTS THE FREE PASSAGE OF FLAME AND THE PRODUCTS OF COMBUSTION.
35. WALK-IN COOLER/FREEZER CONDENSER UNITS - REFER TO FOOD SERVICE AND MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
36. PRIME AND PAINT COLUMN (PT-1).
37. IF BID ALT 4 IS ACCEPTED. REINSTALL EXISTING ACOUSTICAL WALL PANELS IN SAME LOCATIONS PRIOR TO REMOVAL.

FLOOR PLAN GENERAL NOTES

A. UON, ALL FLOOR PLAN DIMENSIONS ARE TO FACE OF MASONRY, OR FACE OF STUD PARTITION. REFER TO PARTITION TYPES SHEET (***A-002***) FOR PARTITION DIMENSIONS, TYPICAL DETAILS AND ADDITIONAL PARTITION NOTES.

B. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES FOR DETERMINATION OF DIMENSIONAL ADJUSTMENTS.

C. WHERE A PARTICULAR DETAIL OR CONDITION OCCURS IN SEVERAL LOCATIONS, SPECIFIC DETAIL REFERENCE BUTTONS MAY NOT APPEAR ON THE DRAWINGS IN EACH AND EVERY CASE. THE DRAWINGS INFER THAT THE DETAIL REFERENCE WILL APPLY WITHOUT HAVING A SPECIFIC REFERENCE BUTTON AT EACH OCCURRENCE. IF A CONDITION IS IN DOUBT, REFER QUESTIONS TO THE ARCHITECT FOR CLARIFICATION.

D. PENETRATIONS THROUGH FIRE RATED ASSEMBLIES AS INDICATED OR NOTED IN THE DRAWINGS (FLOOR/CEILING, ROOF/CEILING, PARTITION, WALL, OR THE LIKE) BY PIPES, CONDUITS, DUCTS, STRUCTURAL MEMBERS, EXPANSION JOINTS OR OTHER CONSTRUCTION SHALL BE FIRESTOPPED. FIRESTOPPING SHALL BE PERFORMED USING MATERIALS COMPLYING WITH THE BUILDING CODES AND STANDARDS APPLICABLE TO THIS PROJECT AS INTERPRETED BY THE BUILDING OFFICIAL(S) HAVING JURISDICTION.

E. VERIFY DIMENSIONS REQUIRED FOR ALL SLOTS, CHASES, OPENINGS, AND RECESSES THROUGH FLOORS, WALLS, CEILINGS, AND ROOFS REQUIRED FOR PROPER INSTALLATION OF THE WORK PRIOR TO CONSTRUCTION. PROVIDE MISCELLANEOUS STEEL LINTELS, BOND BEAMS, OR CMU LINTELS AND/OR STEEL FRAMING AS SHOWN OR REASONABLY IMPLIED TO FRAME OPENINGS IN WALLS, FLOORS, CEILINGS, ROOFS, AND SIMILAR ASSEMBLIES FOR MECHANICAL, ELECTRICAL, OR OTHER EQUIPMENT AND ANY OTHER WORK WHICH PASSES THROUGH THE VARIOUS WALL, FLOOR, CEILING, ROOF, OR SIMILAR ASSEMBLIES.

F. PARTITION TERMINATION INFORMATION IS INDICATED ON THE REFLECTED CEILING PLANS, WALL SECTIONS, AND SHEET ***A-002***

G. REFER TO ENLARGED PLANS FOR ADDITIONAL DIMENSIONS, PARTITION TYPES, AND OTHER INFORMATION THAT MAY NOT APPEAR ON 1/8" SCALE PLANS.

H. PROVIDE METAL STRAP ANCHORS WITHIN STUD AND FURRING SPACES, BEHIND WALL MOUNTED ACCESSORIES, EQUIPMENT, ETC. AS REQUIRED FOR SECURE ANCHORAGE.

I. ALL BLOCKING IN CONTACT WITH MASONRY SHALL BE PRESERVATIVE PRESSURE TREATED UON.

J. COORDINATE THE WORK OF ALL TRADES, VERIFY LOCATION AND EXTENT OF SLEEVES, CHASES, HANGERS, INSERTS, ANCHORS, PENETRATIONS, ETC. AS REQUIRED BY STRUCTURAL, PLUMBING, MECHANICAL AND ELECTRICAL TRADES.

K. DOOR AND WINDOW OPENING DIMENSIONS ARE NOMINAL IN ALL MASONRY WALL LOCATIONS. FOR EXAMPLE, A 4'-0" WIDE MASONRY OPENING MAY ACTUALLY BE 4'-0 3/8" WIDE. EXCESSIVE JOINTS (OVER 1/2") AT WINDOW JAMBS AND HEADS WILL NOT BE ACCEPTABLE. ALL OPENINGS MUST BE FIELD VERIFIED TO COORDINATE FRAME DIMENSIONS WITH ACTUAL OPENING.

L. REFER TO DEMOLITION DRAWINGS FOR FLOOR & WALL CUTS, INFILLS, NOTES, AND DETAILS.

M. PATCH AND REPAIR ALL EXISTING CONCRETE FLOOR SLABS DAMAGED BY DEMOLITION OPERATIONS, (SUCH AS EXISTING PLUMBING, PIPING, AND ELECTRICAL CONDUIT ABANDONED BELOW FLOOR OR NEW UTILITIES INSTALLED UNDER EXISTING FLOOR) WITH CONCRETE TO MATCH EXISTING.

N. AFTER REMOVAL OF EXISTING FLOOR COVERINGS, USE LEVELING AND PATCHING COMPOUND(S) TO CORRECT SURFACE IRREGULARITIES PRIOR TO INSTALLATION OF NEW FLOOR FINISHES.

O. PATCH AND REPAIR ALL EXISTING CMU WALL SURFACES DAMAGED BY DEMOLITION OPERATIONS, (SUCH AS INTERSECTING WALLS, APPLIED FINISHES, OR WALL MOUNTED ACCESSORIES OR EQUIPMENT) AND WHICH WILL BE EXPOSED IN FINAL CONSTRUCTION WITH MORTAR TO PROVIDE UNIFORM WALL SURFACE FREE OF IRREGULARITIES, WHERE ACCEPTABLE PATCH CANNOT BE ATTAINED WITH MORTAR, CUT OUT EXISTING CMU ALONG JOINT LINES AND PROVIDE NEW CMU "SOAPS" AS NEEDED.

P. FOR LOCATIONS OF FIRE WALLS AND SMOKE PARTITIONS SEE LIFE SAFETY SHEETS. FIRE WALLS SHALL TERMINATE AT UNDERSIDE OF ROOF DECK. SEAL ALL TERMINATIONS WITH UL LISTED HEAD OF WALL JOINT SYSTEMS TO ACHIEVE FIRE RATING INDICATED.

Q. THE CONTRACTOR SHALL MAINTAIN AND KEEP ALL MASONRY WALL CAVITIES, MASONRY EXPANSION AND CONTROL JOINTS FREE OF MORTAR AND MORTAR DROPPINGS AT ALL TIMES. REFER TO CONTROL JOINT DETAILS SHEET A-003 FOR ADDITIONAL INFORMATION. REFER TO WALL SECTIONS AND DETAILS FOR ADDITIONAL EXPANSION JOINT REQUIREMENTS.

R. REFER TO LIFE SAFETY PLAN SHEETS LS101-LS102 FOR LOCATIONS OF FIRE EXTINGUISHER CABINETS AND BRACKET MOUNTED FIRE EXTINGUISHERS.

S. CLEAN EXISTING BRICK VENEER SURFACES AS INDICATED IN THE NEW WORK ELEVATIONS AFTER NEW WORK IS COMPLETED WITH MFR'S RECOMMENDED CHEMICAL CLEANER AND LOW PRESSURE POWER WASHING.

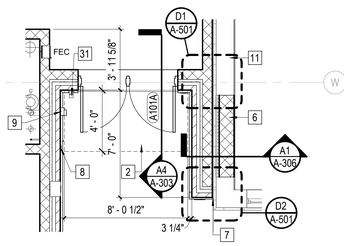
T. WHERE REMOVAL OF WALL MOUNTED ITEMS RESULTS IN EDGES OF PAINT "BUILD-UP" VISIBLE IN FINAL NEW WORK, CAREFULLY REMOVE "BUILD-UP" TO PROVIDE "LIKE NEW" CONDITION.

U. FURNITURE AND EQUIPMENT SHOWN DASHED IS NOT IN CONTRACT, U.O.N.

V. FOR CLARITY, NOT ALL FOOD SERVICE EQUIPMENT IS SHOWN ON THE ARCHITECTURAL DRAWINGS. REFER TO FOOD SERVICE DRAWINGS FOR ALL EXISTING FOOD SERVICE EQUIPMENT TO BE REMOVED OR REMAIN IN PLACE.

LEGEND

XX' MB	MARKER BOARD (NUMBER INDICATES LENGTH IN FEET)
XX' TB	TACK BOARD (NUMBER INDICATES LENGTH IN FEET)
DF	HI/LOW DRINKING FOUNTAIN WITH BOTTLE FILLER STATION
FE (E)	FIRE EXTINGUISHER - (E) INDICATES EXISTING TO REMAIN
FEC (K)	FIRE EXTINGUISHER & CABINET - (K) INDICATES WET CHEMICAL



A6 / A-101 ENLARGED PLAN - ENTRY

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

FIRST FLOOR PLAN - AREA A

SCALE: 1/8" = 1'-0"

PLAN NORTH

MARK	DATE	REVISIONS
A1	07.17.2025	ADDENDUM NO. 1
RRMM		BY
		DESCRIPTION

DATE	06.24.2025
PROJECT	23238-00
DESIGNED	MW
DRAWN	RIS
CHECKED	JAH

RRMM ARCHITECTS, PC
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Chesapeake, Virginia 23320
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COMMONWEALTH OF VIRGINIA
JEFFREY A HARRIS
Lic. No. 10748
06.24.2025
ARCHITECT

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
FPB: 1880-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

DRAWING
FIRST FLOOR PLAN - AREA A

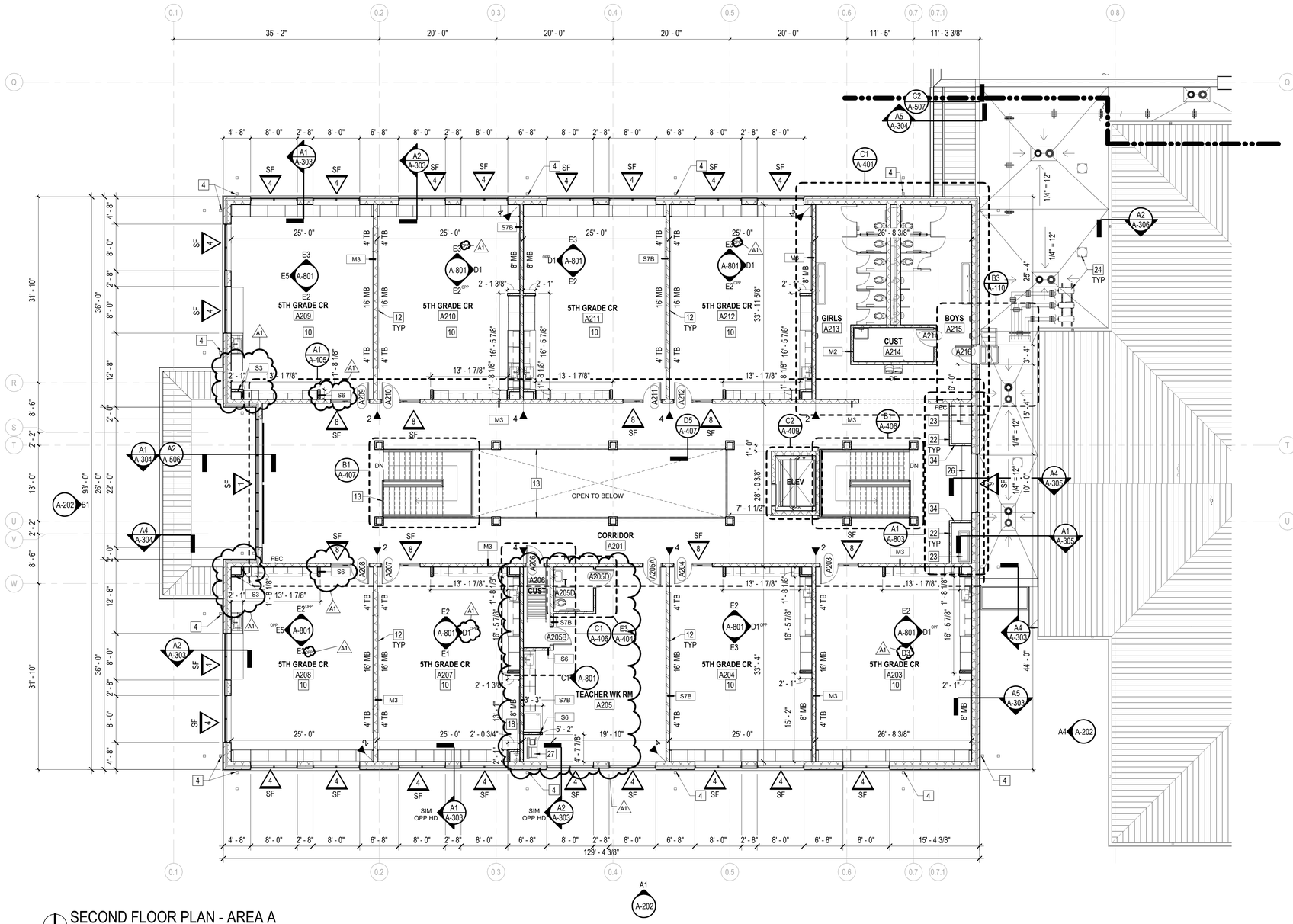
SHEET
A-101

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GENERAL WORK NOTES (REFER TO SHEET ***A-101***)

KEY NOTES (REFER TO SHEET ***A-101***)

LEGEND (REFER TO SHEET ***A-101***)



SECOND FLOOR PLAN - AREA A

SCALE: 1/8" = 1'-0"

PLAN NORTH

KEY PLAN - AREA A

NOT TO SCALE

MARK	DATE	REVISIONS
A1	07.17.2025	ADDENDUM NO. 1
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SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA

IFB: 1889-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

DRAWING
SECOND FLOOR PLAN - AREA A

SHEET
A-103

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REF CLG PLAN GENERAL NOTES

1. REFER TO FLOOR PLANS AND WALL SECTIONS FOR ADDITIONAL INFORMATION.
2. REFER TO ELECTRICAL LIGHTING PLANS FOR WALL MOUNTED AND UNDER-CABINET FIXTURES NOT INDICATED.
3. SPRINKLER HEADS (NOT INDICATED) TO BE CENTERED IN SACP OR WITHIN SPACE IN GYP. BD CLG.
4. REFER TO MECH AND ELEC DRAWINGS FOR CEILING-MOUNTED FIXTURE TYPES & DIFFUSER LOCATIONS. NOTIFY ARCHITECT (PRIOR TO INSTALLATION) OF CONFLICTS WITH LOCATIONS INDICATED ON DRAWINGS. ADDITIONAL FIXTURES OR OTHER CEILING MATERIALS SHOWN ON ELECTRICAL OR MECHANICAL DRAWINGS BUT NOT SHOWN ON RCP'S ARE INCLUDED IN THE BASE BID.
5. SUPPLY AND DIFFUSER GRILLES ARE INDICATED DIAGRAMATICALLY IN RCP FOR LOCATION ONLY. REFER TO MECHANICAL DWG'S FOR ACTUAL SIZE AND TYPE TO BE PROVIDED.
6. 24"x24" ACOUSTICAL CEILING PANELS (SACP) WILL BE THROUGHOUT.
7. REFER TO SHEET ***A-002*** FOR TYPICAL PARTITION TERMINATIONS AT STRUCTURAL ELEMENTS WITH ALL EXTENSIONS OF FINISHES & SOUND ATTEN.
8. PROVIDE ACCESS DOOR AND FRAME IN GYP. BD CEILINGS WHERE REQUIRED FOR CONCEALED EQUIPMENT, VALVES, AND OTHER ITEMS REQUIRING ACCESS FOR SERVICE AND MAINTENANCE. ACCESS DOOR SIZE AS REQUIRED PER EWUIPMENT MANUFACTURER'S REQUIREMENTS AND CLEARANCES. CONTRACTOR TO COORDINATE INSTALLATION LOCATION AND CLEARANCES WITH OTHER CEILING MOUNTED EQUIPMENT, FIXTURES, SPRINKLER HEADS, ETC.
9. PAINT ALL EXPOSED STRUCTURE INCLUDING DECK, MECHANICAL, PLUMBING, AND ELECTRICAL WORK - REFER TO FINISH SCHEDULE.

KEY NOTES - REF CLG PLAN

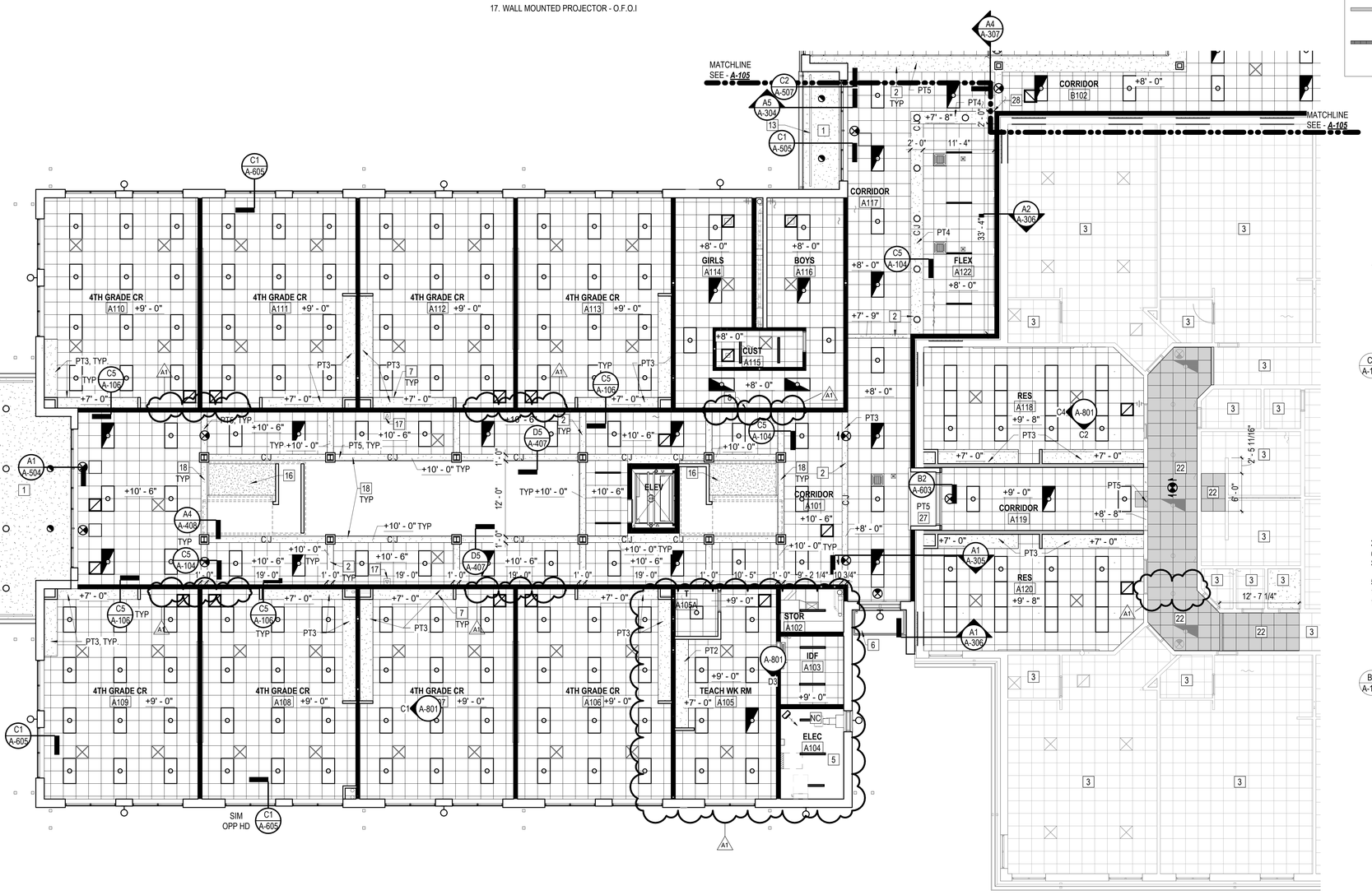
1. EFS ON 1/2" EXTERIOR GLASS MAT SHEATHING.
2. PTD GYP BD & MTL STUD BULKHEAD W/ SAPC EACH SIDE - REF DETAIL ***C5 / A-104***
3. EXIST. CEILING TO REMAIN IN THIS SPACE.
4. EXIST. EXTERIOR SOFFIT TO REMAIN.
5. EXPOSED STRUCTURE ABOVE - REF STRUCTURAL DWGS.
6. 8'-0 1/2"W X 4'-0"D OVERHEAD SUPPORTED PRE-MANUFACTURED CANOPY W/ INTERNAL DRAINAGE AND AL DOWNSPOUT WITH CAST IRON DOWNSPOUT BOOT - REFER TO ***C5 / A-506*** FOR ADDITIONAL INFORMATION
7. GYP BD SOFFIT - REF DETAIL ***C5 / A-106***
8. CMU HEADER – OPENING HEIGHT AS INDICATED.
9. KITCHEN EXHAUST HOOD - REF FOODSERVICE DWGS
10. REFER TO WALK-IN COOLER CEILING CLOSURE DETAIL ON FOOD SERVICE DWGS
11. EXIST. OVERHEAD COILING DOOR / COUNTER SHUTTER
12. OVERHEAD COILING DOOR / COUNTER SHUTTER
13. CONTINUOUS SOFFIT VENT
14. PERFORATED SOFFIT VENT - REFER TO DETAIL ***B4 / A-506***
15. PANEL JOINT IN METAL COMPOSITE MATERIAL WALL PANELS - ALTERNATE LOCATION FOR JOINTS MAY BE PROPOSED BY CONTRACTOR FOR REVIEW AND APPROVAL BY ARCHITECT. ALIGN WITH BUILDING ELEVATION ELEMENTS - REFER TO DETAIL ON SHEET ***A-003***
16. 1/2" GYP BOARD ON 2 1/2" METAL STUDS @ 24" OC ON BOTTOM OF STAIR AND LANDINGS WHERE EXPOSED.
17. WALL MOUNTED PROJECTOR - O.F.O.I
18. BULKHEAD AT PBL FLOOR/CEILING OPENING - REF DETAILS ***D5 / A-407*** AND ***A4 / A-408***
19. BULKHEAD AT WOOD CEILING - REF DETAIL ***B5 / A-104*** AND ***B5 / A-106***
20. HATCHED AREA INDICATES EXTENT OF SPRAY-APPLIED CELLULOSE ACCOUSTIC FINISH SYSTEM TO STEEL BEAMS AND METAL DECK BELOW MECHANICAL WELL
21. 8'-0 1/2"W X 4'-0"D OVERHEAD SUPPORTED PRE-MANUFACTURED CANOPY W/ INTERNAL DRAINAGE AND AL DOWNSPOUT WITH CAST IRON DOWNSPOUT BOOT - REFER TO ***D1 / A-908*** FOR ADDITIONAL INFORMATION
22. CEILING TILE AND GRID SYSTEM REPLACED TO EXTENTS SHOWN GRAYED TO ALLOW FOR OVERHEAD UTILITIES INSTALLATION
23. WALL MOUNTED PROJECTION SCREEN HOUSING IN SOFFIT ABOVE
24. PROJECTOR YOKE AND PROJECTOR MOUNT (OF/CI) THROUGH WOOD PLANK CEILING. REF. TO ENLARGED DTL ***B5 / A-105***
25. 12'-0"W X 4'-0"D OVERHEAD SUPPORTED PRE-MANUFACTURED CANOPY W/ INTERNAL DRAINAGE AND AL DOWNSPOUT WITH CAST IRON DOWNSPOUT BOOT - REFER TO ***D3 / A-503*** FOR ADDITIONAL INFORMATION.
26. PRE-FIN ALUM EXPANSION JOINT COVER.
27. PAINTED CONCRETE.
28. ALIGN SOFFIT AND WALL.
29. POWER POLE. REFER ELEC DWGS — A1

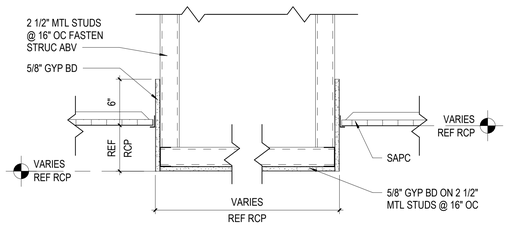
REFLECTED CEILING PLAN LEGEND

- GYPSUM BOARD CEILING OR BULKHEAD
- 2'-0" x 2'-0" LAY-IN ACOUSTICAL TILE CEILING IN SUSPENDED GRID
- SUSPENDED SOLID-WOOD, LINEAR-PLANK CEILINGS
- EXIT LIGHT
- EXTERIOR LIGHT
- DOWN LIGHT/ EMERGENCY DOWN LIGHT
- LIGHT FIXTURES/ EMERGENCY LIGHT FIXTURES
- WALL MOUNTED PROJECTOR - O.F.O.I
- SUPPLY DIFFUSER
- RETURN AIR GRILLE
- +X'-X" CEILING HEIGHT
- (W) WIRELESS ACCESS DEVICE - REF ELECTRICAL DWGS
- (OS) OCCUPANCY SENSOR - REF ELECTRICAL DWGS
- (S) CEILING SPEAKER - REF ELECTRICAL DWGS
- NC NO CEILING THIS SPACE

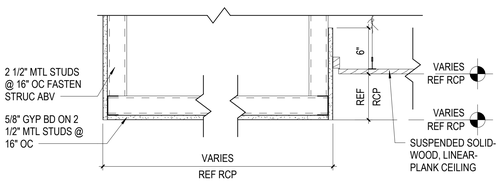
PARTITION TERMINATION LEGEND

- PARTITION WHICH PENETRATES THE CLG & TERMINATES 6" ABOV FINISHED CLG. UON- REF PARTITION TYPE LEGEND ON A-002 FOR ADDITIONAL INFORMATION.
- PARTITION WHICH CONTINUES THROUGH CLG TO BOTTOM OF ROOF DECK ABV (UNLESS NOTED OTHERWISE). AT GYP BD PARTITION PROVIDE BATT INSUL IN VOIDS IN DECK FOR ***A-002***) TRANSMISSION BLOCKING OR CONT SEALANT. REF PARTITION TYPE LEGEND ON A-01 FOR ADDITIONAL INFORMATION.
- NEW PARTITION WHICH EXTENDS TO BOTTOM OF EXISTING WOOD TRUSSES AND GYP BD CEILING ABOVE (UNLESS NOTED OTHERWISE). AT GYP BD PARTITION AND GYP BD CEILING INTERFACE, PROVIDE CONT. SEALANT. REF PARTITION TYPE LEGEND ON A-002 FOR ADDITIONAL INFORMATION.
- EXISTING PARTITION WHICH EXTENDS TO BOTTOM OF EXISTING WOOD TRUSSES ***A-002*** YP. BD CEILING ABOVE (UNLESS NOTED OTHERWISE). REF PARTITION TYPE LEGEND ON A-002 FOR ADDITIONAL INFORMATION.

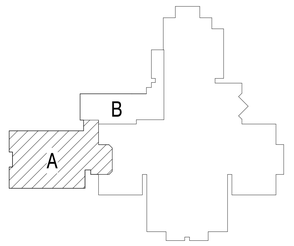




C5 A-104 RCP DETAIL
SCALE: 1 1/2" = 1'-0"



B5 A-104 RCP DETAIL
SCALE: 1 1/2" = 1'-0"



KEY PLAN - AREA A
NOT TO SCALE

FIRST FLOOR RCP - AREA A
SCALE: 1/8" = 1'-0"
PLAN NORTH

DATE	DESCRIPTION
A1	ADDENDUM NO. 1
07.17.2025	
RRMM	

MARK	DATE	REVISIONS	BY

DATE	06.24.2025
PROJECT	23238-00
DESIGNED	MW
DRAWN	RIS
CHECKED	JAH

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(757)622-2828

COMMONWEALTH OF VIRGINIA
JEFFREY A HARRIS
Lic. No. 10748
06.24.2025
ARCHITECT

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 1888-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

DRAWING
FIRST FLOOR REFLECTED CEILING PLAN - AREA A

SHEET
A-104

7/17/2025 4:25:17 PM Autodesk Docs://23238-00 SPS Northern Shores ES/23238-00 v24 SPS Northern Shores ES - ARCH.rvt

REFLECTED CEILING PLAN LEGEND

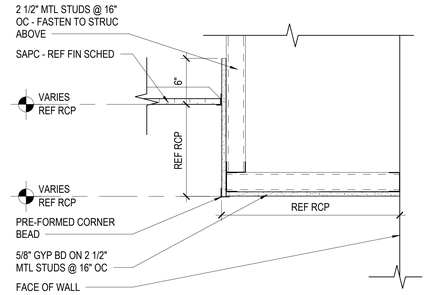
(REFER TO SHEET ***A-104***)

REFLECTED CEILING PLAN GENERAL NOTES

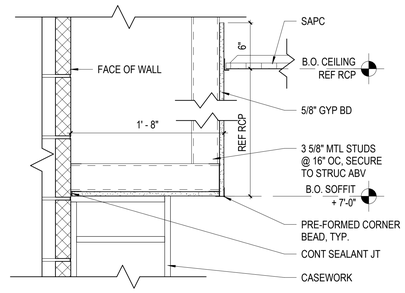
(REFER TO SHEET ***A-104***)

REFLECTED CEILING PLAN KEY NOTES

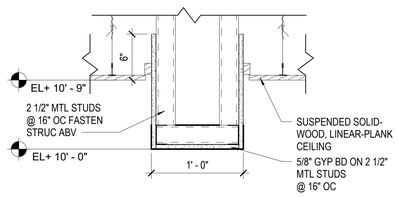
(REFER TO SHEET ***A-104***)



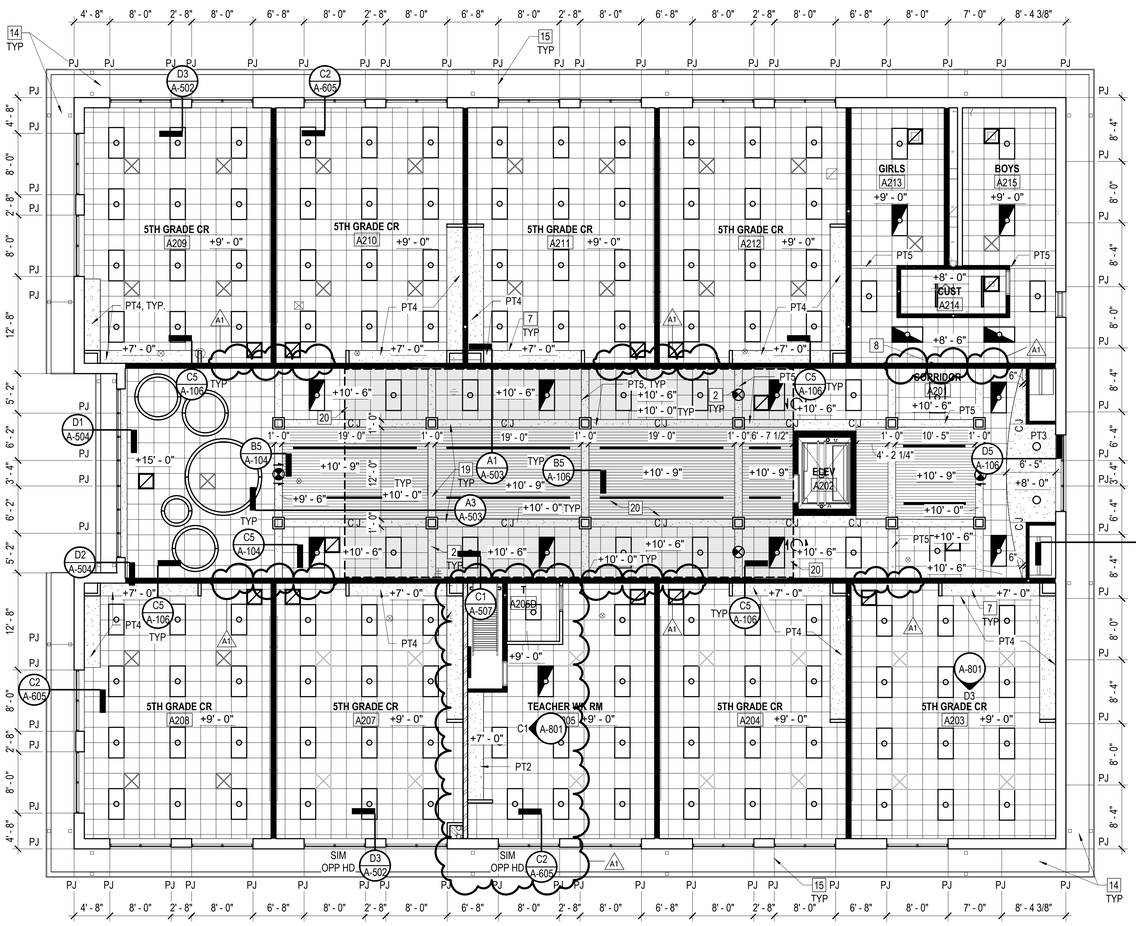
D5 A-106 **RCP DETAIL**
SCALE: 1 1/2" = 1'-0"



C5 A-106 **RCP DETAIL**
SCALE: 1 1/2" = 1'-0"



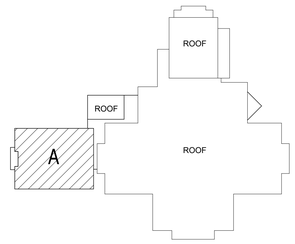
B5 A-106 **RCP DETAIL**
SCALE: 1 1/2" = 1'-0"



SECOND FLOOR RCP - AREA A

SCALE: 1/8" = 1'-0"

PLAN NORTH



KEY PLAN - AREA A

NOT TO SCALE

MARK	DATE	REVISIONS	BY
A1	07.17.2025	ADDENDUM NO. 1	RRMM

DATE	06.24.2025
PROJECT	23238-00
DESIGNED	MW
DRAWN	RIS
CHECKED	JAH

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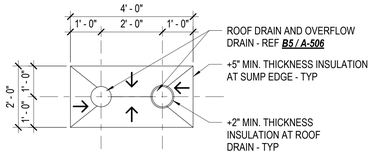
COMMONWEALTH OF VIRGINIA
JEFFREY A HARRIS
Lic. No. 10748
06.24.2025
ARCHITECT

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 1888-B
VIRGINIA DEPARTMENT OF EDUCATION: 123-22-00-101

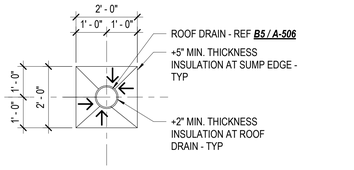
DRAWING
SECOND FLOOR REFLECTED CEILING PLAN - AREA A

SHEET
A-106

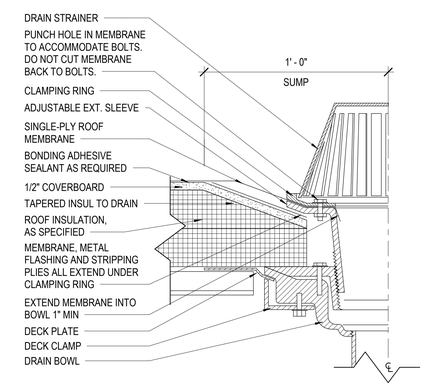
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E2 / A-108 ROOF DRAIN PLAN DETAIL
SCALE: 1/2" = 1'-0"



D2 / A-108 ROOF DRAIN PLAN DETAIL
SCALE: 1/2" = 1'-0"



D3 / A-108 ROOF DRAIN DETAIL
SCALE: 3" = 1'-0"

ROOF PLAN LEGEND

	ROOF DRAIN / OVERFLOW DRAIN - REF DTLS D2 / A-108 , E2 / A-108 & PLUMBING DWGS FOR ADDITIONAL INFO - COORD EXACT LOCATION W/ STRUCTURAL SUPPORT
DS (E)	DOWNSPOUT, (E) INDICATES EXISTING TO REMAIN
EF	EXHAUST FAN - REF CURB DTL :C2 / A-506
VTR	PLUMBING VENT THROUGH ROOF (VTR)- REF DTLS ON C1 / A-506
A1	
X : 12	SLOPED ROOF STRUCTURE AS INDICATED
A1	TAPERED ROOF INSULATION SLOPE AS NOTED
RTU-X	ROOF TOP UNIT- REF. MECHANICAL DRAWINGS
	PRE-FIN STANDING SEAM MTL ROOF SYSTEM - SLOPE AS INDICATED
	DASHED LINE INDICATES LOCATION OF WALL BELOW
RV	ROOF VENT- REF MECHANICAL DWGS AND CURB DTL
OU	OUTDOOR UNIT- REF MECHANICAL DWGS
CU	CONDENSING UNIT- REF FOOD SERVICE AND MECHANICAL DWGS
H	HIP
R	RIDGE
V	VALLEY

ROOF PLAN GENERAL NOTES

A. COORDINATE ALL ROOF WORK WITH ALL OTHER DRAWINGS AND SPECIFICATIONS FOR ALL OTHER ROOF EQUIPMENT AND PENETRATIONS THAT MAY NOT BE REFLECTED ON ROOF PLAN DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR FLASHING OF ALL PENETRATIONS IN ALL ROOF AREAS.

B. FIELD VERIFY EXACT AS-BUILT CONDITIONS AND COORDINATE ALIGNMENT OF ALL ROOF RIDGES, HIPS AND VALLEYS AS INDICATED ON DRAWINGS.

C. GENERAL CONTRACTOR TO VERIFY DIMENSIONS TO ROOF DRAINS AND COORDINATE FINAL LOCATION OF DRAINS WITH ROOF STRUCTURE AND MECHANICAL SYSTEMS.

D. THE DRAWINGS GRAPHICALLY SHOW THE REQUIRED WORK, MATERIALS AND COMPONENTS WITHOUT A SPECIFIC DESCRIPTION NOTE AT EVERY LOCATION. ALL NOTES AND DESCRIPTIONS ARE TYPICAL THROUGHOUT ALL ROOF AREAS IN ALL SIMILAR LOCATIONS WHETHER SHOWN OR NOT UNLESS OTHERWISE NOTES.

E. WHERE DISCREPANCIES OCCUR BETWEEN CONTRACT DRAWING ROOFING DETAILS AND ROOFING MANUFACTURER'S DETAILS, OR A DETAIL IS NOT SPECIFICALLY INDICATED, THE MANUFACTURER'S DETAIL AND WRITTEN INSTRUCTIONS SHALL GOVERN.

F. ROOF SYSTEMS MUST COMPLY WITH STANDARDS AND DETAILS AS INDICATED IN THESE DRAWINGS, SPECIFICATIONS AND AS PER NRCA ROOFING AND WATERPROOFING MANUAL - LATEST EDITION.

G. PROVIDE CRICKETS AT ALL VENTS, FANS, RTU'S, AND EQUIPMENT LOCATIONS SLOPED MIN 1/2"/FOOT (TYP - ALL LOCATIONS).

H. PROTECT AND MAINTAIN SCUPPERS, GUTTERS AND DOWNSPOUTS TO ENSURE THEY REMAIN FREE FROM DUST, DIRT, AND DEBRIS DURING THE ENTIRE CONSTRUCTION.

I. PROVIDE ONGOING AND FINAL CLEANING OF ALL ROOF EQUIPMENT AND ROOF SYSTEMS, INCLUDING FINAL CLEAN OUT OF SCUPPERS, GUTTERS AND DOWNSPOUTS AT THE END OF THE PROJECT.

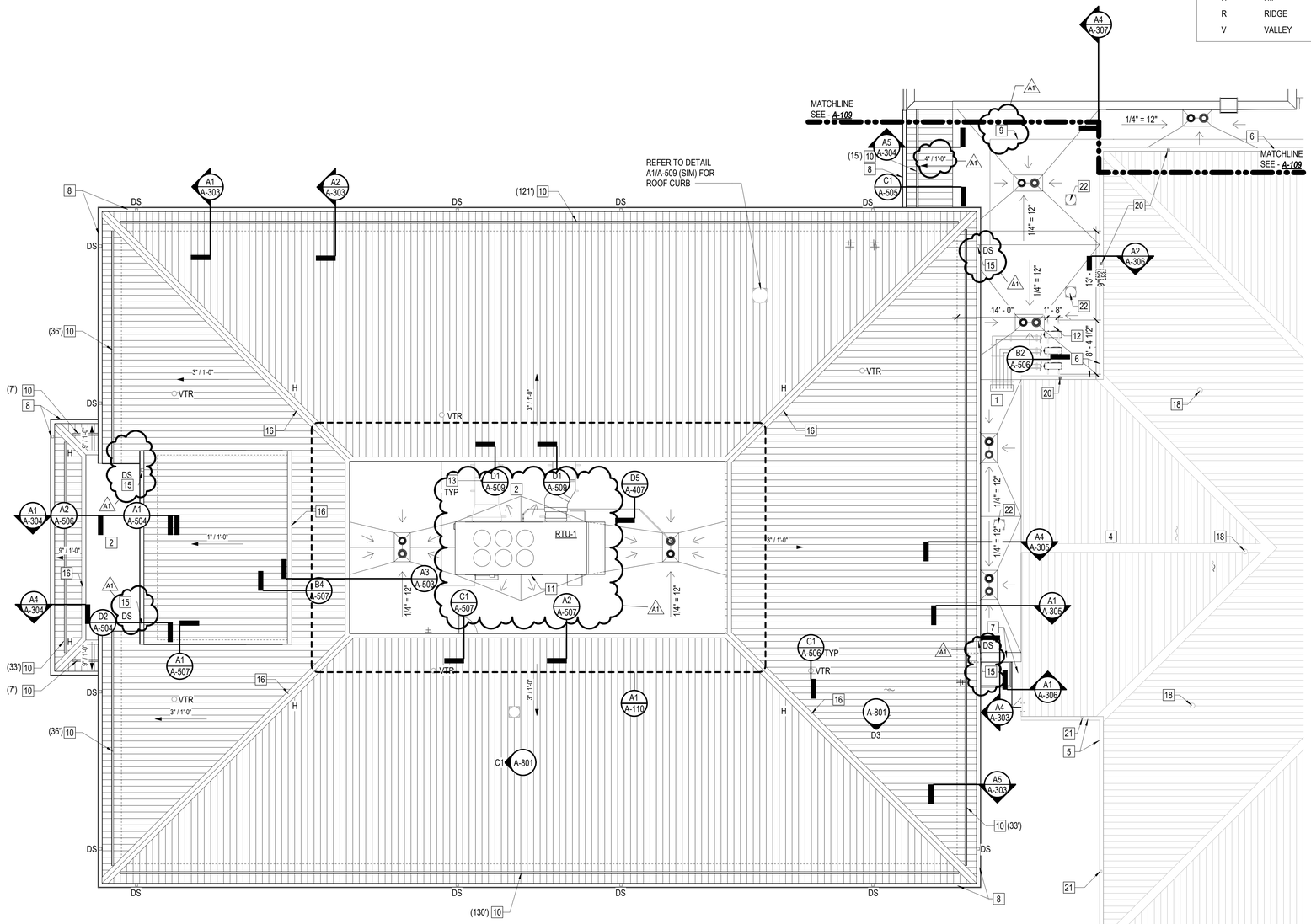
J. PROVIDE ONE-PIECE WELDED INSIDE AND OUTSIDE CORNERS OR ALL PRE-FINISHED METAL COPING SYSTEMS.

K. REF MECHANICAL DRAWINGS FOR TYPICAL ROOF MOUNTED DUCT SUPPORT DETAILS.

L. ALL WORK TO EXISTING ROOF TO COMPLY WITH THE EXISTING ROOF WARRANTY.

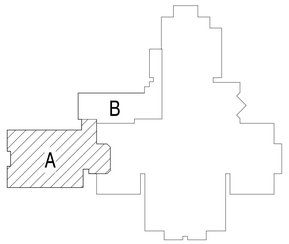
KEY NOTES - ROOF PLAN

1. SINGLE PLY ROOF MEMBRANE SYSTEM OVER BASE INSULATION AND DEAD LEVEL METAL DECK. TAPERED ROOF INSULATION SHALL PRODUCE A SLOPE OF NOT LESS THAN 1/4" PER 12". MIN R-25CI MIN. VALUE INSULATION REQUIRED.
2. SINGLE PLY ROOF MEMBRANE SYSTEM OVER METAL DECK. TAPERED ROOF INSULATION SHALL PRODUCE A SLOPE OF NOT LESS THAN 1/4" PER 12".
3. ROOF CRICKET -TAPERED INSULATION AT 1/2" PER FOOT MIN
4. EXISTING STANDING SEAM METAL ROOF TO REMAIN.
5. EXISTING GUTTER TO REMAIN.
6. EXISTING GUTTER TO REMAIN. EXTEND VERTICAL LEG OF 2 PIECE METAL EXPANSION JOINT FLASHING ABOVE EXISITNG GUTTER - MIN 5". REFER TO DETAIL :C4 / A-505
7. PRE-FINISHED COPING AT PARAPET - REFER TO DETAIL A4 / A-505(B4 / A-505 WHERE APPLICABLE)
8. PRE-FINISHED METAL GUTTER AND DOWNSPOUTS (PROFILE AND COLOR TO MATCH EXISTING) - REFER TO DETAIL B3 / A-505
9. NATURAL GAS PIPING. REF TO PLUMBING DWGS.
10. SNOW GUARDS
11. CURB MOUNTED MECHANICAL UNIT - REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFO. SEE DETAIL C2 / A-506 FOR EQUIPMENT CURB
12. MECHANICAL EQUIPMENT - REFER TO MECHANICAL DRAWINGS
13. ROOF MOUNTED DUCTWORK - REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
14. CONDENSATE PIPING TO DRAIN - REFER TO MECHANICAL DWGS
15. SPLASH PAN TYP.
16. STANDING SEAM METAL ROOF RIDGE/HIP CAP OR HIGH EAVE TRIM - REF DETAIL A3 / A-506
17. NOT USED.
18. EXISTING VENT THRU ROOF TO REMAIN.
19. REMOVE EQUIPMENT, ELECTRICAL CIRCUITRY (EXISTING ROOF CURB, FLASHING AND CRICKET TO REMAIN) AND PROVIDE METAL CAP ON ROOF SIDE. REFER TO CAPPED CURB DETAIL ON SHEET A-508 ALSO REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
20. EXISTING DOWNSPOUT TO BE REMOVED. SCUPPER EXTENSION - REFER DETAIL C4 / A-505
21. EXISTING DOWNSPOUTS TO REMAIN.
22. AIR INTAKE HOOD - REFER TO MECHANICAL DWGS.
23. NEW METAL CRICKET AT NEW CURB. COLOR FINISH TO MATCH EXISTING METAL ROOF. REFER TO DETAIL A2 / A-508 .



ROOF PLAN - AREA A
SCALE: 1/8" = 1'-0"

PLAN NORTH



KEY PLAN - AREA A
NOT TO SCALE

NO	DESCRIPTION	BY	DATE	REVISIONS
1	ADDENDUM NO. 1	RRMM	07.17.2025	A1

DATE	06.24.2025
PROJECT	23238-00
DESIGNED	MW
DRAWN	RIS
CHECKED	JAH

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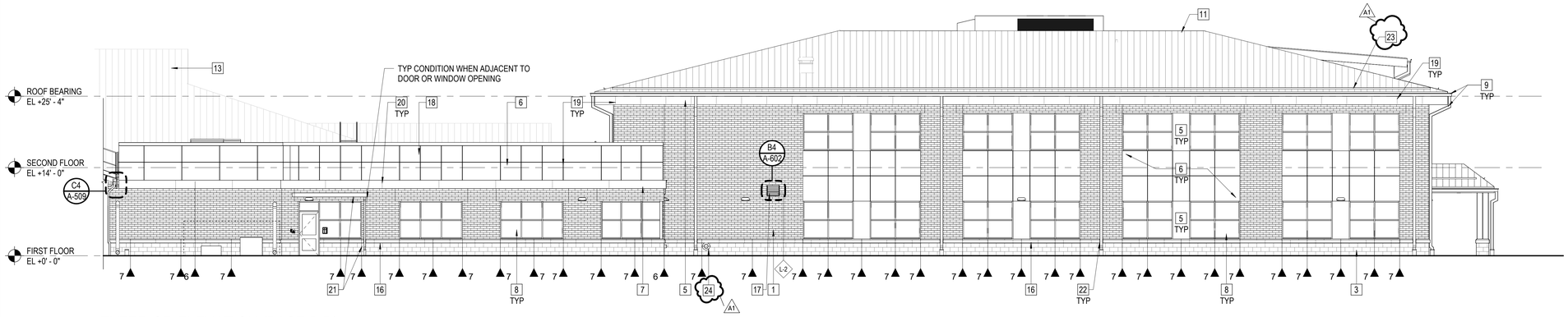
COMMONWEALTH OF VIRGINIA
JEFFREY A HARRIS
Lic. No. 10748
06.24.2025
ARCHITECT

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 1888-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

DRAWING
ROOF PLAN - AREA A

SHEET
A-108

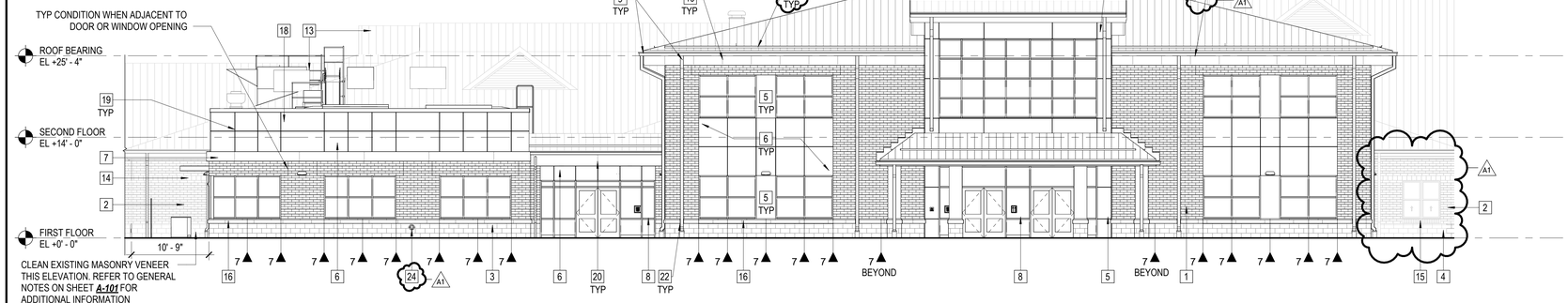
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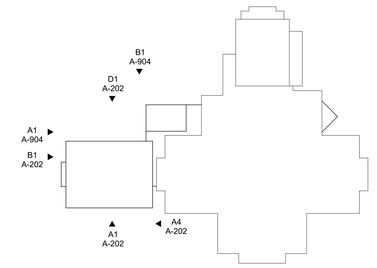
D1 A-202 EXTERIOR ELEVATION (BASE BID)
SCALE: 1/8" = 1'-0"

ELEVATION KEY NOTES

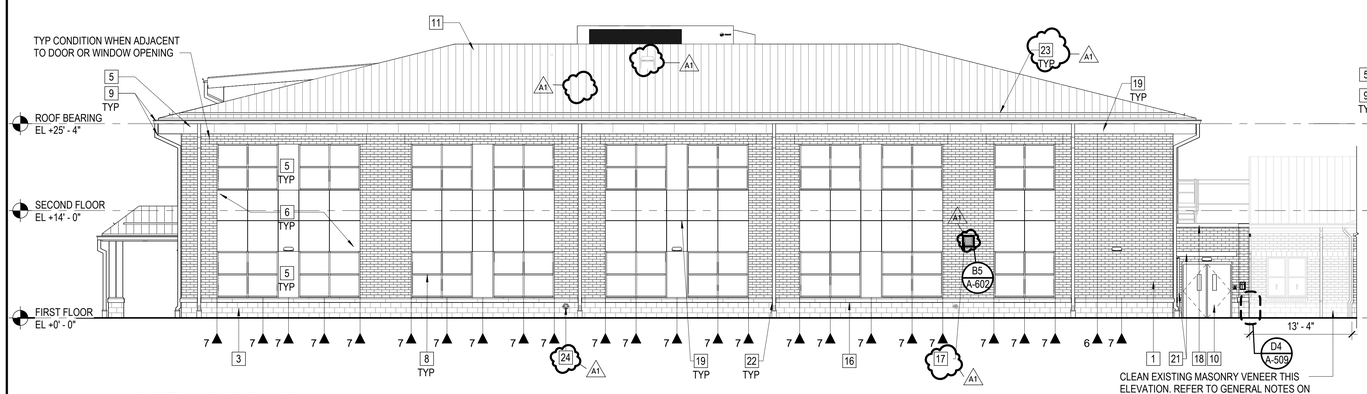
1. FACE BRICK
2. EXISTING FACE BRICK
3. SPLIT FACE CMU
4. EXISTING SPLIT FACE CMU
5. METAL COMPOSITE PANEL (MCM-1, WHITE) — A1
6. METAL COMPOSITE PANEL(MCM-2, TAN) — A1
7. BRAKE METAL FASCIA (BMF-1, WHITE) — A1
8. ALUMINUM STOREFRONT SYSTEM - TYPICAL
9. METAL DOWNSPOUT AND GUTTER - TYPICAL
10. HOLLOW METAL DOOR AND FRAME AS SCHEDULED
11. STANDING SEAM METAL ROOF
12. MECHANICAL UNIT - REFER TO MECH DWGS
13. EXISTING BUILDING - BEYOND
14. EXISTING SQUARE GLAZED CMU BANDING
15. EXISTING BRICK SOLDIER COURSE
16. ARCHITECTURAL CAST STONE TRIM. ROCKCAST SL-375-48 SILL. REFER TO DETAIL ***A1 / A-509*** FOR PROFILE AND CUSTOM SHAPES REQUIRED
17. DUCTED LOUVER - REFER TO DETAIL ***A-602*** AND MECH DWGS — A1
18. METAL COPING
19. 3/8" METAL COMPOSITE PANEL JOINT, TYPICAL - ALIGN JOINTS WITH WINDOW MULLIONS WHERE SHOWN. REF CONTROL JOINT DETAILS ON SHEET ***A-003***
20. 1/8" BRAKE METAL JOINT, TYPICAL - REF CONTROL JOINT DETAILS ON SHEET ***A-003***
21. PRE-FABRICATED CANOPY WITH DOWNSPOUT
22. ARCHITECTURAL CAST STONE TRIM INTERRUPTION AT DOWNSPOUT. REFER TO DETAIL ***A1 / A-509***
23. SNOW GUARD — A1
24. DOWNSPOUT NOZZLE - COORD W/ PLUMBING DWGS FOR EXACT LOCATIONS



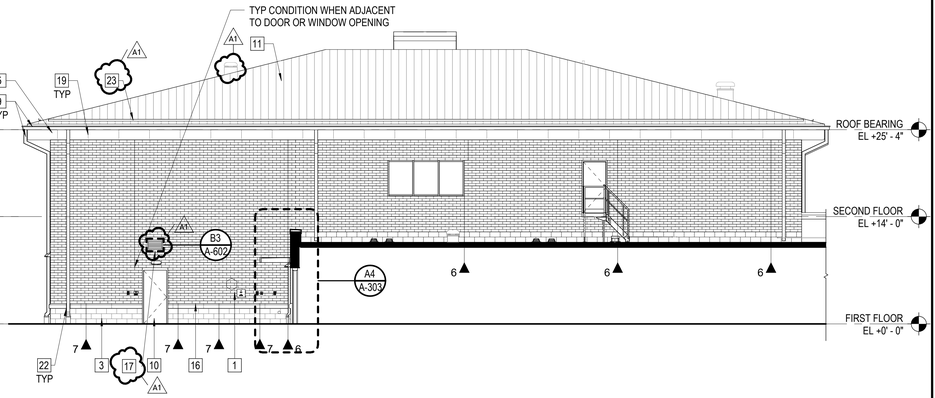
B1 A-202 EXTERIOR ELEVATION (BASE BID)
SCALE: 1/8" = 1'-0"



KEY PLAN ELEVATIONS
SCALE: 1/16" = 1'-0"



A1 A-202 EXTERIOR ELEVATION
SCALE: 1/8" = 1'-0"



A4 A-202 EXTERIOR ELEVATION
SCALE: 1/8" = 1'-0"

MARK	DATE	REVISIONS
A1	07.17.2025	ADDENDUM NO. 1
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	BY	

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PROJECT	23238-00	MW	RIS
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COMMONWEALTH OF VIRGINIA
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NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
FB: 1889-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

DRAWING
EXTERIOR BUILDING ELEVATIONS

SHEET
A-202

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TOILET ACCESSORY SCHEDULE

MARK	DESCRIPTION	MOUNTING HEIGHT	REMARKS
A	42" GRAB BAR	CL @ 2'-9" AFF FOR STAFF TOILET; CL @ 2'-2" AFF FOR GROUP TOILETS	2,4
B	36" GRAB BAR	CL @ 2'-9" AFF	3,4
C	18" VERTICAL GRAB BAR	VARIES - SEE NOTE	4,5,6
D	TOILET PAPER DISPENSER, DOUBLE ROLL	OUTLET @ 1'-6" AFF	1,7
E	SANITARY NAPKIN DISPOSAL	CL @ 1'-6" AFF	
F	SOAP DISPENSER	BOTTOM @ 3'-4" AFF FOR GROUP TOILETS; ALL OTHER LOCATIONS @ 4'-0"	1
G	MIRROR 18" X 30"	BOTTOM OF REFLECTIVE SURFACE @ 3' -4" AFF	
H	SENSOR OPERATED HAND DRYER	BOTTOM @ 4'-0" MAX	
J	44" SS MOP/HOOK SHELF	TOP @ 5'-4" AFF	
K	12" GRAB BAR - FIELD VERIFY	CL @ 2'-2" AFF	3
L	24" GRAB BAR	CL @ 2'-2" AFF	3
M	PAPER TOWEL DISPENSER	BOTTOM @ 4'-0" MAX	1

GENERAL NOTES

A. TOILET ACCESSORY ITEMS ARE IDENTIFIED BY SYMBOL (X) ON PLANS, LETTERS CORRESPOND TO SCHEDULE ABOVE.

B. REFER TO CASEWORK SHEET ***A-802*** FOR ADDITIONAL TOILET ACCESSORIES REQUIRED AS PART OF WORK.

C. GRAB BARS AND ACCESSORIES TO BE MOUNTED IN ACCORDANCE WITH ANSI, A117.1, 2017 (PER IBC 2021).

D. REFER TO SPEC SECTION 102800 FOR ALL ACCESSORY DESCRIPTIONS.

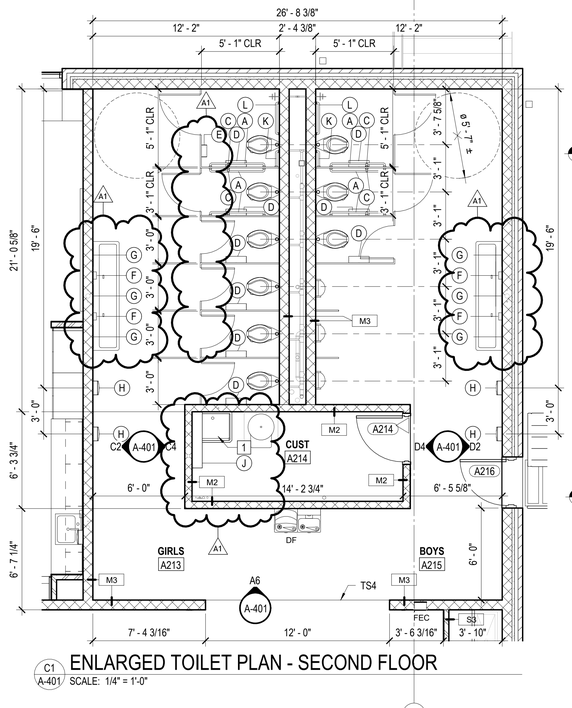
E. ACTUAL DIMENSIONS MAY VERY WITH APPROVED MANUFACTURER. COORDINATE ALL REVISIONS AS REQUIRED.

TOILET ACCESSORY SCHEDULE REMARKS

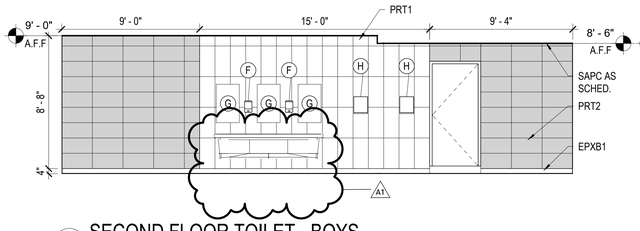
1. PAPER TOWEL, TOILET PAPER AND SOAP DISPENSERS SHALL BE PROVIDED BY OWNER'S PRODUCT SUPPLIER AND INSTALLED BY THE CONTRACTOR.
2. MOUNT GRAB BAR ON WALL OR TOILET PARTITION AS INDICATED, 12" CLEAR OF WALL WHICH RUNS BEHIND WATER CLOSET.
3. MOUNT GRAB BAR CLEAR OF FLUSH VALVE. HEIGHT MAY NEED TO BE DIFFERENT THAN INDICATED IN SCHEDULE. COORDINATE WITH PLUMBING FIXTURE PROVIDED. MOUNT 6" FROM FACE OF CONTIGUOUS WALL.
4. FIELD VERIFY FINISH WALL DEMINSION BEFORE INSTALLING GRAB BAR AND RELATED WALL SUPPORTS.
5. MOUNT BOTTOM OF VERTICAL GRAB BAR 3" ABOVE HORIZONTAL GRAB BAR.
6. MOUNT 40" FROM TOILET BACK WALL, MOUNT 35" FROM TOILET BACK WALL IN GROUP TOILETS.
7. MOUNT ON WALL OR TOILET PARTITION 8" BEYOND FRONT OF WATER CLOSET

KEY NOTES - TOILET ACCESSORIES

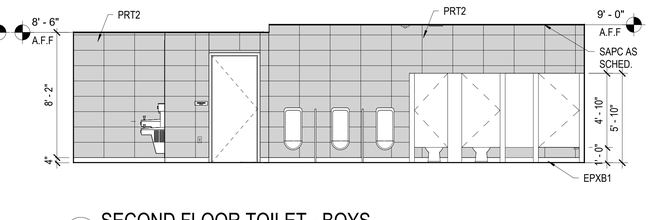
1. SERVICE SINK - REFER TO PLUMBING DRAWINGS



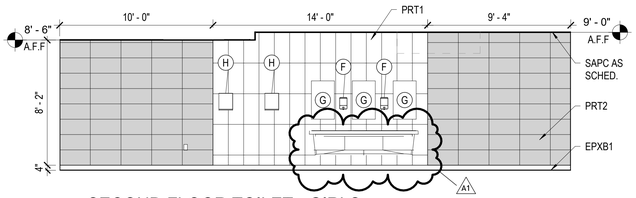
C1 A-401 ENLARGED TOILET PLAN - SECOND FLOOR
SCALE: 1/4" = 1'-0"



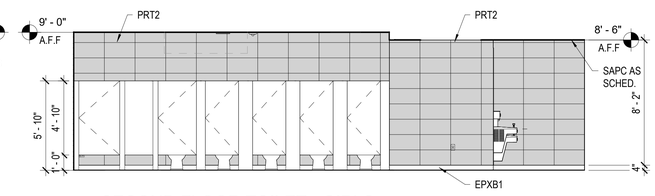
D2 A-401 SECOND FLOOR TOILET - BOYS
SCALE: 1/4" = 1'-0"



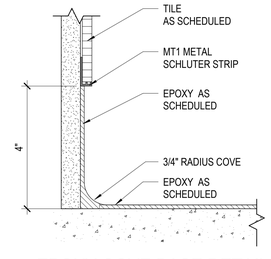
D4 A-401 SECOND FLOOR TOILET - BOYS
SCALE: 1/4" = 1'-0"



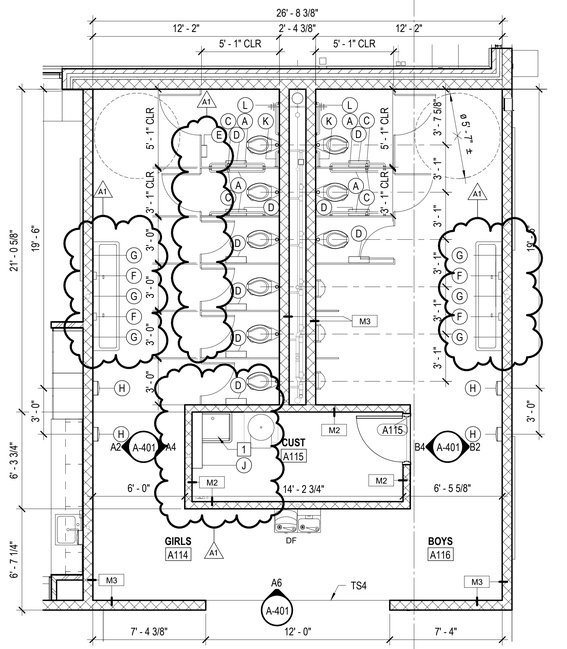
C2 A-401 SECOND FLOOR TOILET - GIRLS
SCALE: 1/4" = 1'-0"



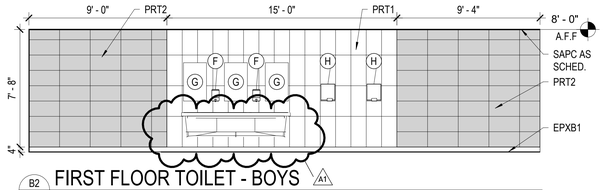
C4 A-401 SECOND FLOOR TOILET - GIRLS
SCALE: 1/4" = 1'-0"



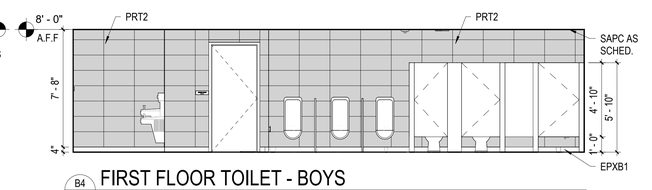
C6 A-401 EPOXY COVE BASE DETAIL
SCALE: 6" = 1'-0"



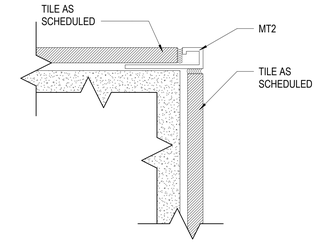
A1 A-401 ENLARGED TOILET PLAN - FIRST FLOOR
SCALE: 1/4" = 1'-0"



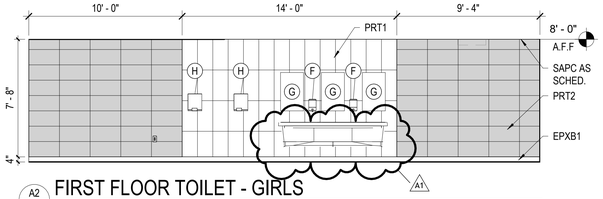
B2 A-401 FIRST FLOOR TOILET - BOYS
SCALE: 1/4" = 1'-0"



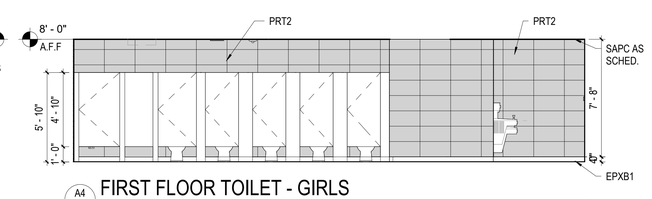
B4 A-401 FIRST FLOOR TOILET - BOYS
SCALE: 1/4" = 1'-0"



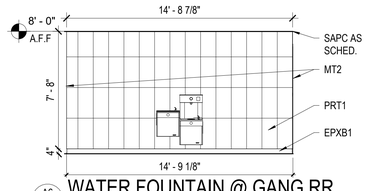
B6 A-401 TILE OUTSIDE CORNER DETAIL
SCALE: 12" = 1'-0"



A2 A-401 FIRST FLOOR TOILET - GIRLS
SCALE: 1/4" = 1'-0"



A4 A-401 FIRST FLOOR TOILET - GIRLS
SCALE: 1/4" = 1'-0"



A6 A-401 WATER FOUNTAIN @ GANG RR
SCALE: 1/4" = 1'-0"

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A1	07.17.2025	ADDENDUM NO. 1
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DATE	06.24.2025
PROJECT	23238-00
DESIGNED	MW
DRAWN	RIS
CHECKED	JAH

RRMM ARCHITECTS, PC
1317 Executive Blvd, Suite 200
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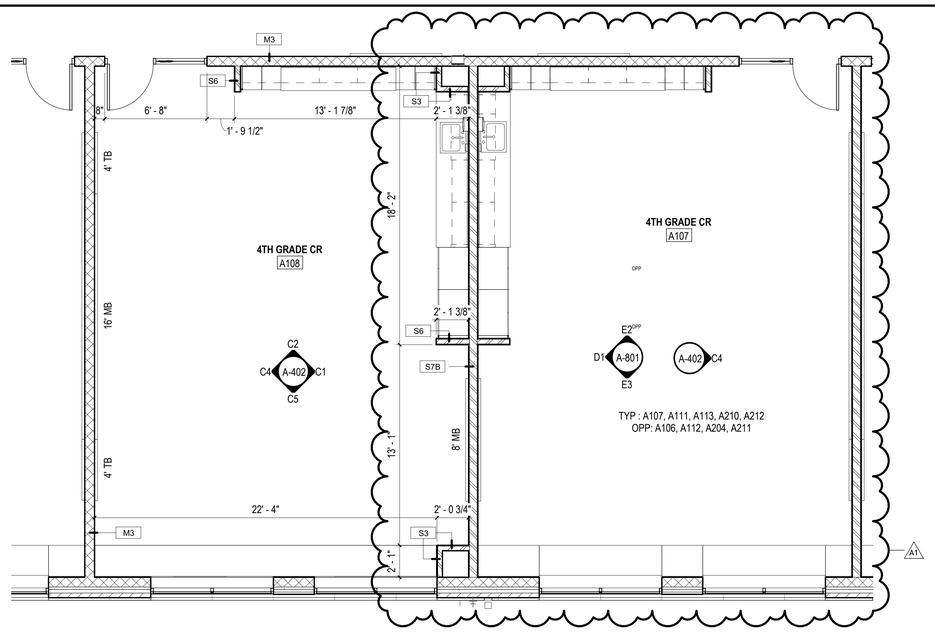
COMMONWEALTH OF VIRGINIA
JEFFREY A HARRIS
Lic. No. 10748
06.24.2025
ARCHITECT

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
VIRGINIA DEPARTMENT OF EDUCATION - 121-3240-101
IFB: 1889-B

DRAWING
ENLARGED TOILET PLANS AND INTERIOR ELEVATIONS

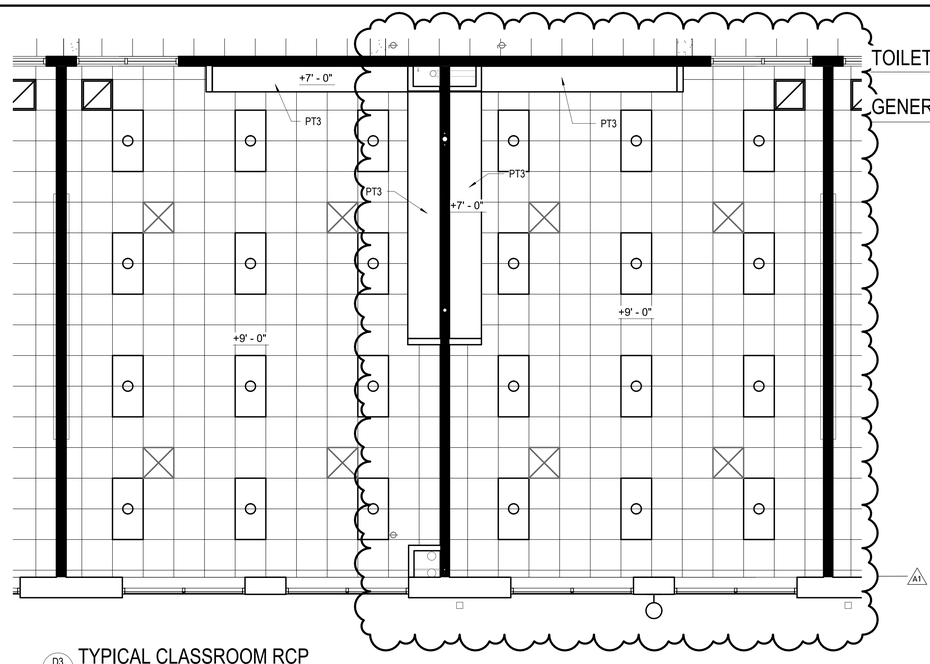
SHEET
A-401

7/17/2025 4:26:07 PM Autodesk Docs://23238-00 SPS Northern Shores ES/23238-00 v24 SPS Northern Shores ES - ARCH.rvt



D1 A-402 SCALE: 1/4" = 1'-0"

D1 ENLARGED PLAN - TYPICAL CLASSROOM

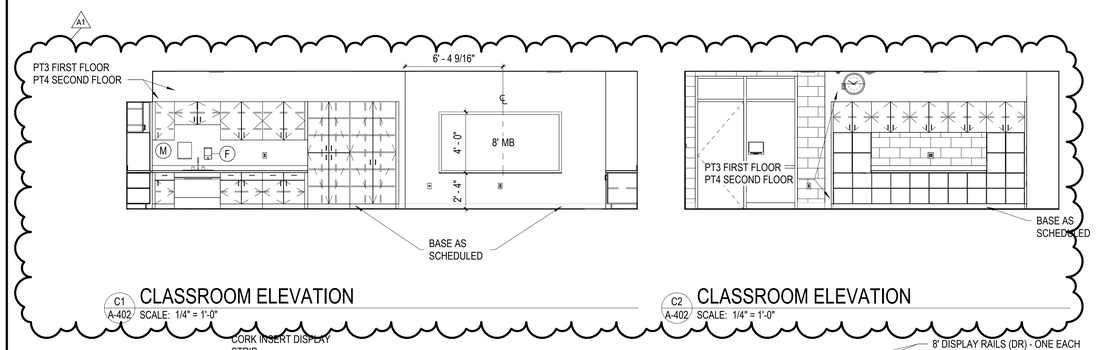


D3 A-402 SCALE: 1/4" = 1'-0"

D3 TYPICAL CLASSROOM RCP

TOILET ACCESSORY SCHEDULE (REFER TO SHEET A-401)

GENERAL CASEWORK NOTES (REFER TO SHEET A-801)

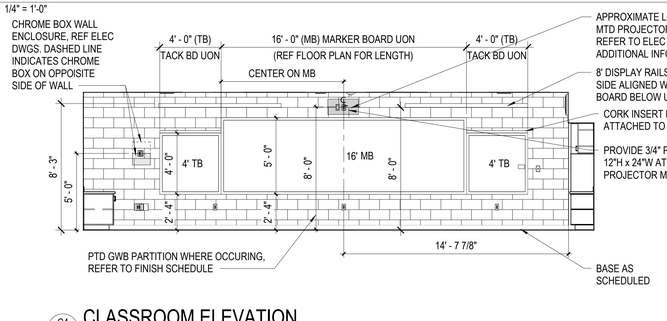


C1 A-402 SCALE: 1/4" = 1'-0"

C1 CLASSROOM ELEVATION

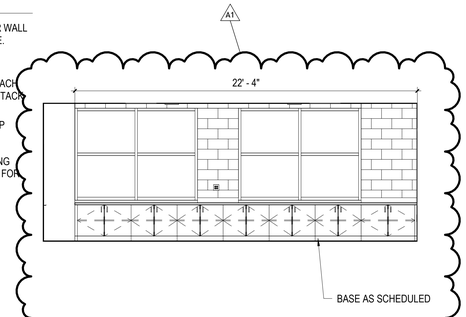
C2 A-402 SCALE: 1/4" = 1'-0"

C2 CLASSROOM ELEVATION



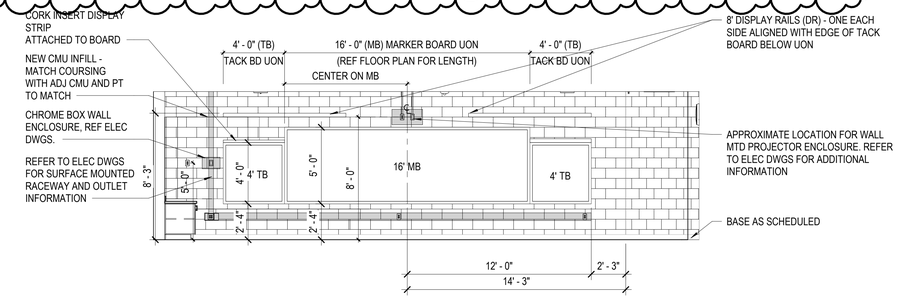
C4 A-402 SCALE: 1/4" = 1'-0"

C4 CLASSROOM ELEVATION



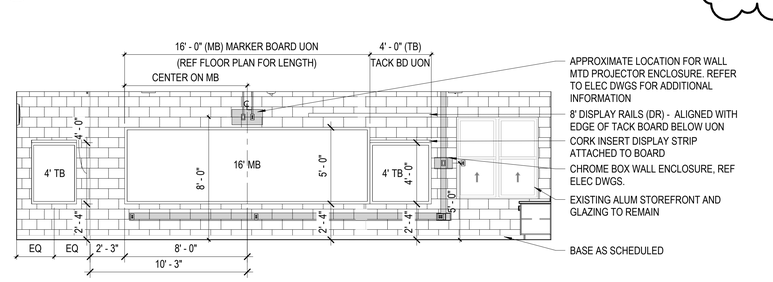
C5 A-402 SCALE: 1/4" = 1'-0"

C5 CLASSROOM ELEVATION (ROOM A108)



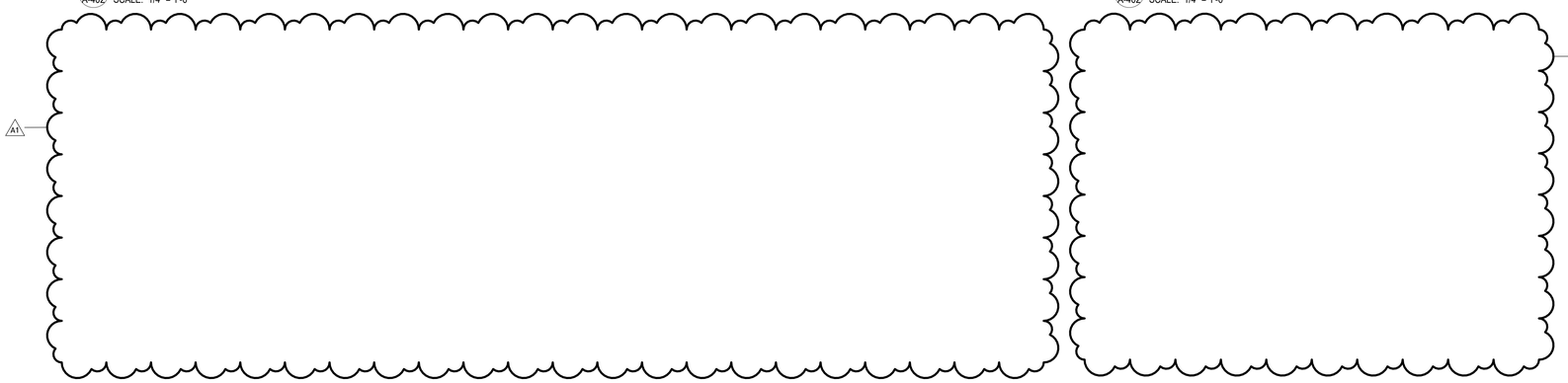
B1 A-402 SCALE: 1/4" = 1'-0"

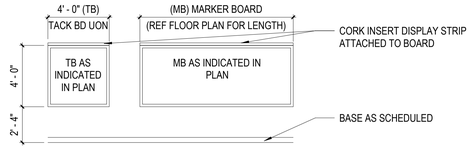
B1 CLASSROOM ELEVATION (ROOM A118)



B2 A-402 SCALE: 1/4" = 1'-0"

B2 CLASSROOM ELEVATION (ROOM A120)





A5 A-402 SCALE: 1/4" = 1'-0"

A5 VISUAL DISPLAY BOARDS

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A1	07.17.2025	ADDENDUM NO. 1	RRMM

DATE	06.24.2025
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CHECKED	JAH

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COMMONWEALTH OF VIRGINIA
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06.24.2025
ARCHITECT

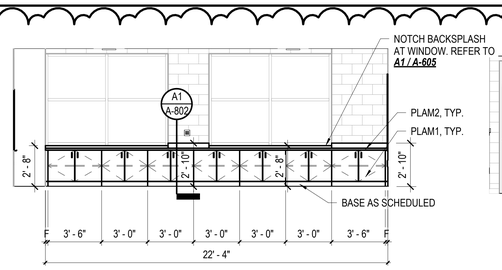
PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 1689-B
VIRGINIA DEPARTMENT OF EDUCATION : 127-32-00-101

DRAWING
ENLARGED TYPICAL CLASSROOM PLAN, INTERIOR ELEVATIONS AND RCP

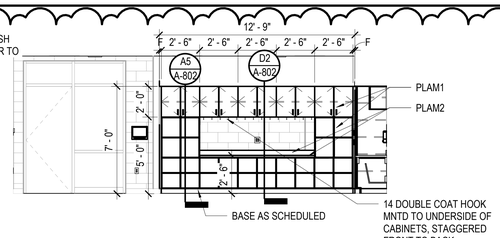
SHEET
A-402

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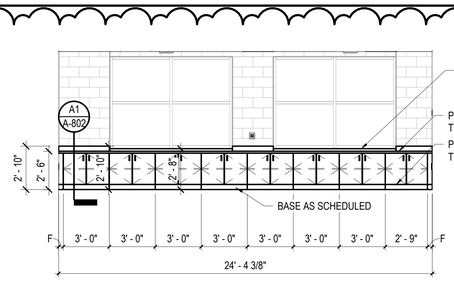
1/32" = 1'-0" 1/16" = 1'-0" 3/32" = 1'-0" 1/8" = 1'-0" 1/4" = 1'-0" 3/8" = 1'-0" 1/2" = 1'-0" 3/4" = 1'-0" 1" = 1'-0" 1 1/2" = 1'-0" 3" = 1'-0" 6" = 1'-0" 12" = 1'-0"



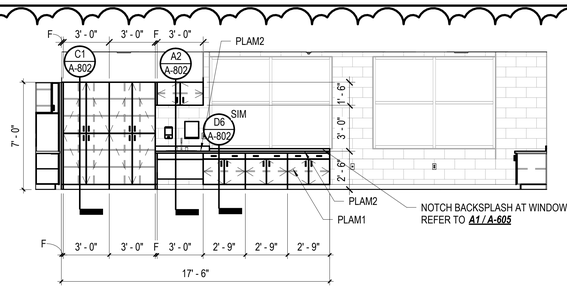
E1 CABINETS BELOW WINDOWS WITH RAIN LEADER
A-801 SCALE: 1/4" = 1'-0"



E2 CLASSROOM CUBBIES WALL
A-801 SCALE: 1/4" = 1'-0"



E3 CABINETS BELOW WINDOWS
A-801 SCALE: 1/4" = 1'-0"



E5 CLASSROOM SINK WALL W/ WINDOWS
A-801 SCALE: 1/4" = 1'-0"

D1 CLASSROOM CASEWORK SINK WALL
A-801 SCALE: 1/4" = 1'-0"

D2 TEACHERS WRKRM CASEWORK
A-801 SCALE: 1/4" = 1'-0"

D3 CABINETS CASEWORK
A-801 SCALE: 1/4" = 1'-0"

GENERAL CASEWORK NOTES

A. ALL CABINETS SHALL BE FLUSH OVERLAY DESIGN, AWI PREMIUM GRADE U.O.N. OR DETAILED.

B. PROVIDE 3MM EDGE BANDING TO MATCH LAMINATE ONALL EXPOSED EDGES. IF NO MATCH IS OFFERED PROVIDE SAMPLES TO ARCHITECT FOR SELECTION.

C. ALL DRAWER AND DOOR FRONTS SHOULD BE MDF. CABINET BOXES TO BE PLYWOOD. PARTICLEBOARD WILL NOT BE ACCEPTED.

D. PROVIDE 2" GROMMETS AT ALL WORKSTATIONS. PROVIDE ARCHITECT WITH COLOR OPTIONS FROM MANUFACTURER'S FULL RANGE.

E. PROVIDE 1" RADIUS ON ALL OUTSIDE CORNERS OF COUNTERTOPS.

F. PROVIDE FINISHED END PANEL AT ALL CABINETS NOT ENCLOSED WITH WALL.

G. CASEWORK SECTIONS SHOWN ARE TYPICALS AND NOT SHOWN ON EVERY ELEVATION.

H. AT SINK LOCATIONS 2'-10" HEIGHT SHALL BE MEASURED TO THE HIGHEST POINT OF THE SINK BASIN. COORDINATE WITH PLUMBING DRAWINGS.

I. FLOOR BASE SHALL WRAP AT ALL CASEWORK, INCLUDING END PANEL

J. "F" REFERS TO FILLER PANEL; WHEN FILLER IS PROVIDED ON EACH END FILLER PANELS SHOULD BE EQUAL

K. REFER TO ***A-402*** FOR TYPICAL CLASSROOM CASEWORK ELEVATIONS.

L. REFER TO ***A-802*** FOR TYPICAL CASEWORK SECTIONS.

C1 TEACHER WK RM CASEWORK
A-801 SCALE: 1/4" = 1'-0"

C2 RES CLASSROOM CASEWORK ELEVATION
A-801 SCALE: 1/4" = 1'-0"

C4 CLASSROOM CASEWORK ELEVATION
A-801 SCALE: 1/4" = 1'-0"

A1

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BY DESCRIPTION

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06.24.2025	23238-00	MW	RIS	JAH

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ARCHITECT

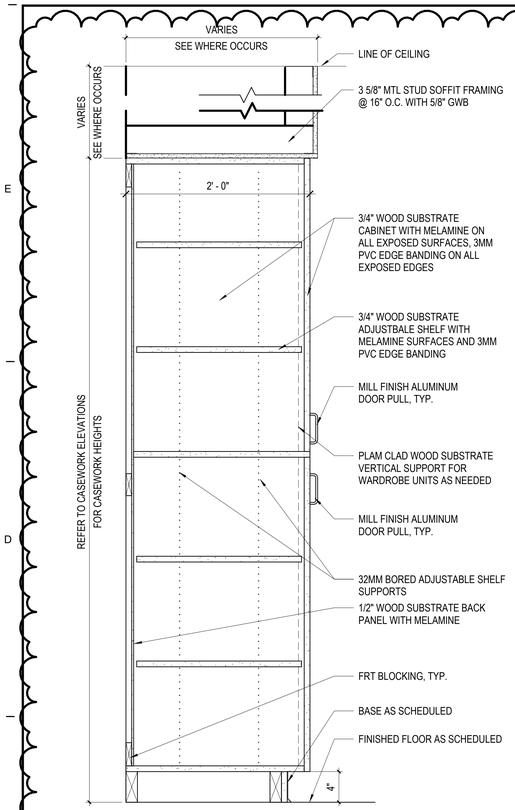
PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 1689-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

DRAWING
CASEWORK ELEVATIONS

SHEET
A-801

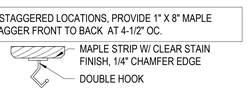
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1/32" = 1'-0" 1/16" = 1'-0" 3/32" = 1'-0" 1/8" = 1'-0" 1/4" = 1'-0" 3/8" = 1'-0" 1/2" = 1'-0" 3/4" = 1'-0" 1" = 1'-0" 1 1/2" = 1'-0" 3" = 1'-0" 6" = 1'-0" 12" = 1'-0"

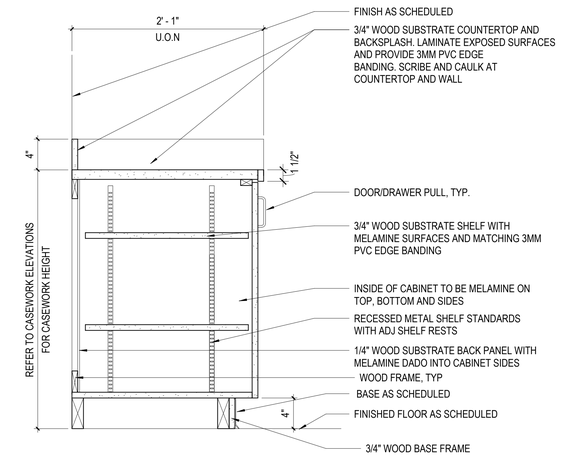


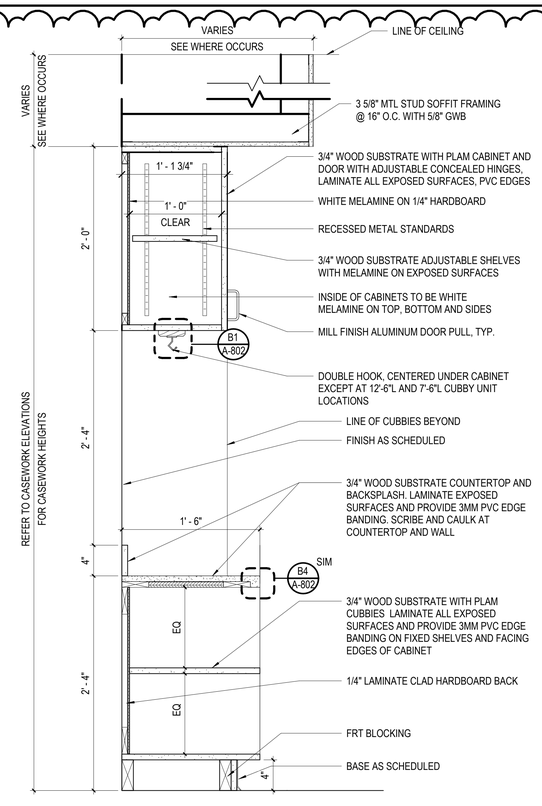
C1 STORAGE CABINET
A-802 SCALE: 1 1/2" = 1'-0"

NOTE: AT STAGGERED LOCATIONS, PROVIDE 1" X 8" MAPLE STRIP. STAGGER FRONT TO BACK AT 4-1/2" OC.

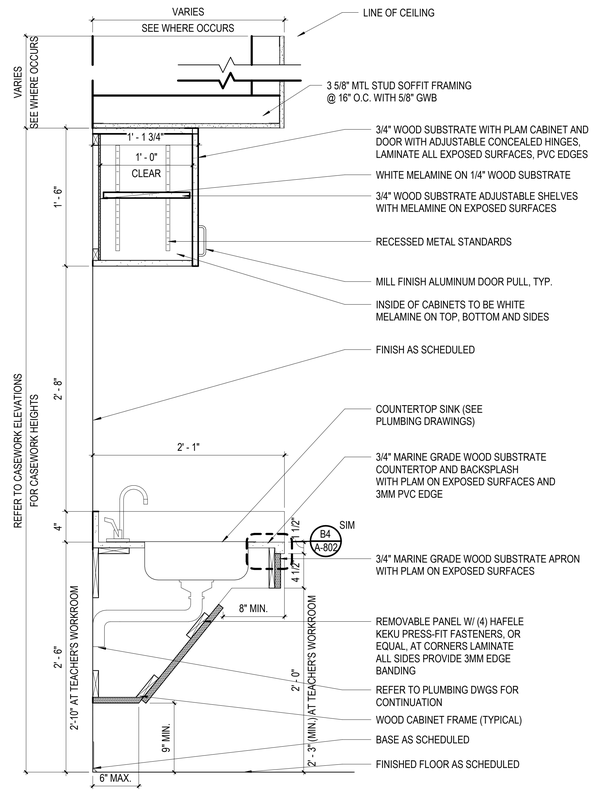


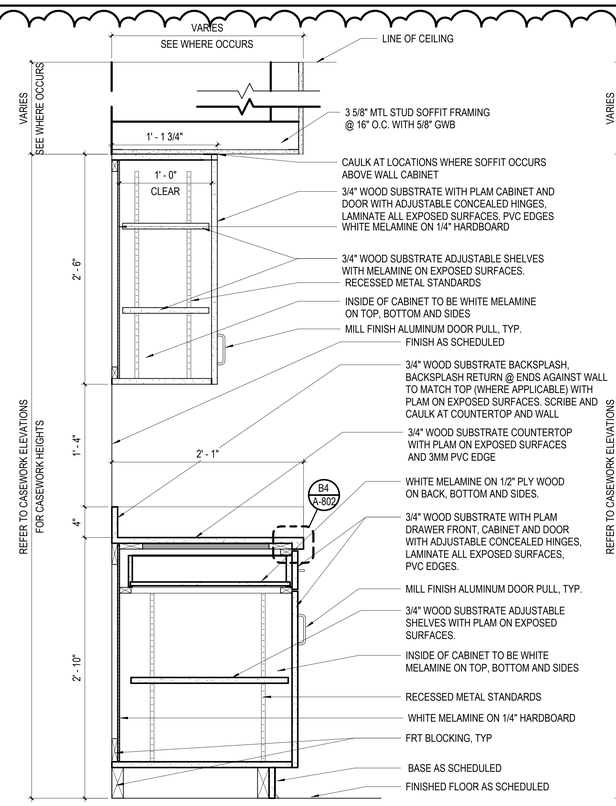
B1 HOOKS AT CUBBIES
A-802 SCALE: 3" = 1'-0"



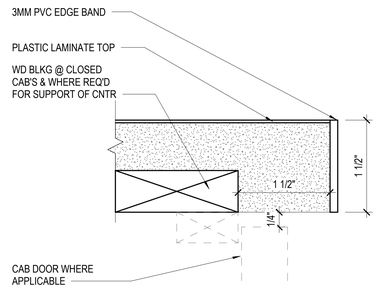


D2 WALL CABINET WITH LOW CUBBIES
A-802 SCALE: 1 1/2" = 1'-0"

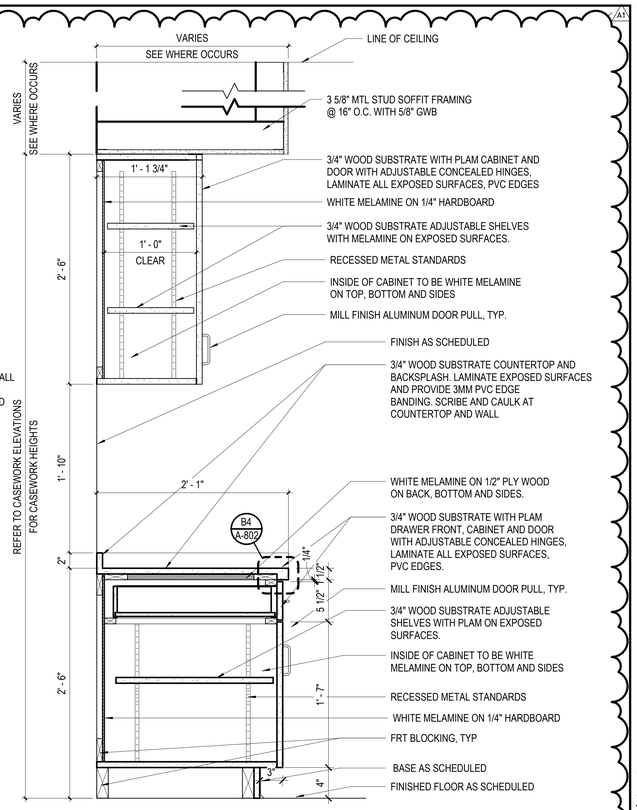




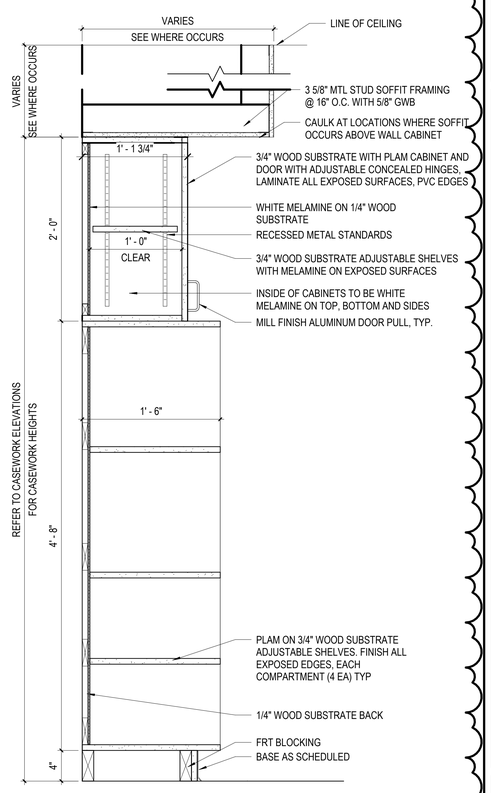
D4 WALL AND BASE CABINET WITH DRAWER
A-802 SCALE: 1 1/2" = 1'-0"



B4 TYPICAL PLAM COUNTER EDGE
A-802 SCALE: 12" = 1'-0"



D6 WALL AND BASE CABINET WITH DRAWER
A-802 SCALE: 1 1/2" = 1'-0"



A1 CASEWORK SECTION
A-802 SCALE: 1 1/2" = 1'-0"

A2 CASEWORK SECTION @ CLASSROOM
A-802 SCALE: 1 1/2" = 1'-0"

A5 WALL CABINET WITH LOW CUBBIES
A-802 SCALE: 1 1/2" = 1'-0"

1/32" = 1'-0" 0' 16" 32" 48" | 1/16" = 1'-0" 0' 4' 8' 16' 24" | 3/32" = 1'-0" 0' 4' 8' 16' | 1/8" = 1'-0" 0' 4' 8' 12' | 1/4" = 1'-0" 0' 2' 4' 6' | 3/8" = 1'-0" 0' 1' 2' 3' 4' | 1/2" = 1'-0" 0' 6" 1' 2' 3' | 3/4" = 1'-0" 0' 6" 1' 2' | 1" = 1'-0" 0' 3" 6" 9" 1' 1.5' | 1 1/2" = 1'-0" 0' 3" 6" 9" 1' | 3" = 1'-0" 0' 1" 2" 3" 4" 5" 6" | 6" = 1'-0" 0' 1" 2" 3" | 12" = 1'-0" 0' 1" 1.5"

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VIRGINIA DEPARTMENT OF EDUCATION: 727-32-00-101

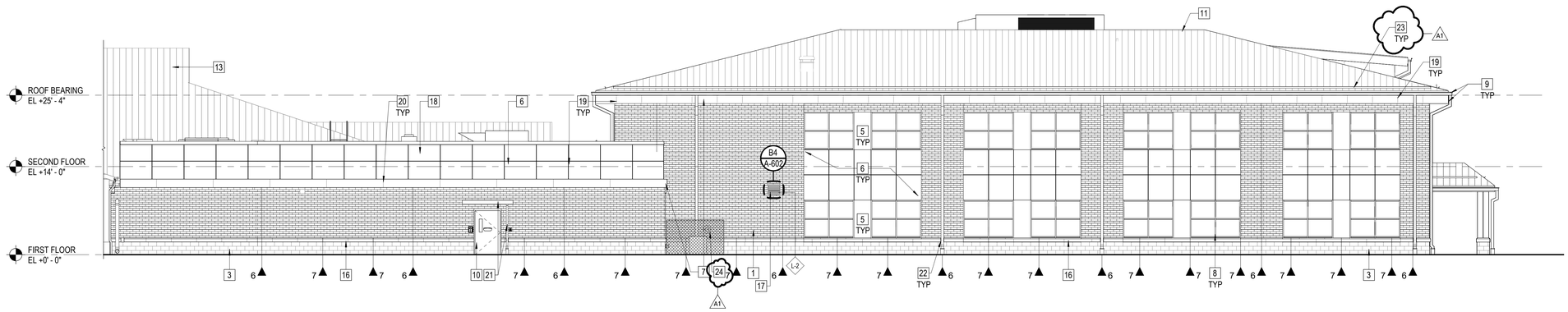
DRAWING
CASEWORK SECTIONS

SHEET
A-802

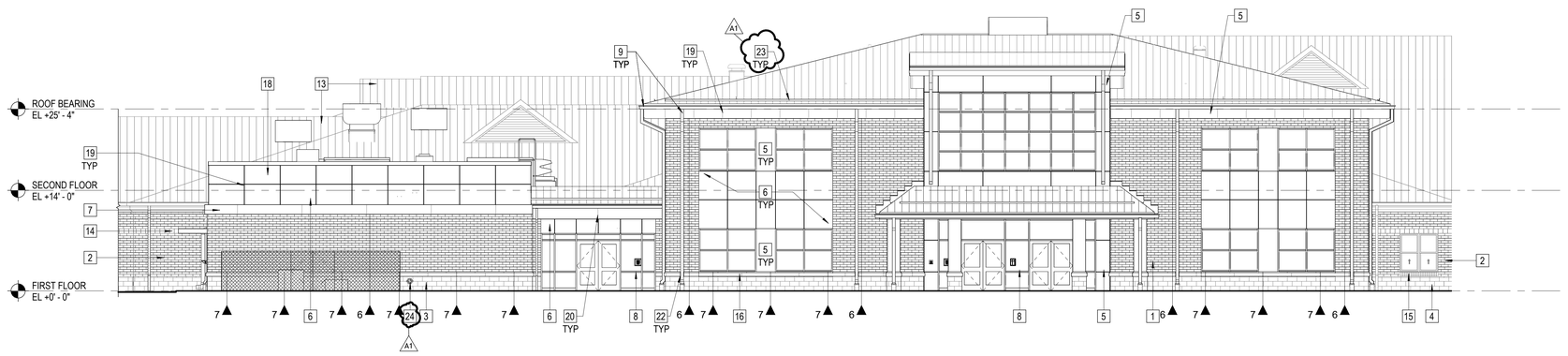
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ELEVATION KEY NOTES

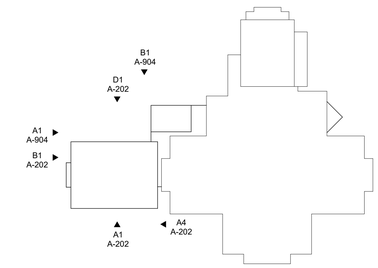
1. FACE BRICK
2. EXISTING FACE BRICK
3. SPLIT FACE CMU
4. EXISTING SPLIT FACE CMU
5. METAL COMPOSITE PANEL (MCM-1 (WHITE)) A1
6. METAL COMPOSITE PANEL(MCM-2 (TAN)) A1
7. BRAKE METAL FASCIA (BMF-1 (WHITE)) A1
8. ALUMINUM STOREFRONT SYSTEM - TYPICAL
9. METAL DOWNSPOUT AND GUTTER - TYPICAL
10. HOLLOW METAL DOOR AND FRAME AS SCHEDULED
11. STANDING SEAM METAL ROOF
12. MECHANICAL UNIT - REFER TO MECH DWGS
13. EXISTING BUILDING - BEYOND
14. EXISTING SQUARE GLAZED CMU BANDING
15. EXISTING BRICK SOLDIER COURSE
16. ARCHITECTURAL CAST STONE TRIM. ROCKCAST SL-375-48 SILL. REFER TO DETAIL ***A1 / A-509*** FOR PROFILE AND CUSTOM SHAPES REQUIRED
17. DUCTED LOUVER - REFER TO DETAIL ***A-602*** AND MECH DWGS A1
18. METAL COPING
19. 3/8" METAL COMPOSITE PANEL JOINT, TYPICAL - ALIGN JOINTS WITH WINDOW MULLIONS WHERE SHOWN. REF CONTROL JOINT DETAILS ON SHEET ***A-003***
20. 1/8" BRAKE METAL JOINT, TYPICAL - REF CONTROL JOINT DETAILS ON SHEET ***A-003***
21. PRE-FABRICATED CANOPY WITH DOWNSPOUT
22. ARCHITECTURAL CAST STONE TRIM INTERRUPTION AT DOWNSPOUT. REFER TO DETAIL ***A1 / A-509***
23. SNOW GUARD A1
24. DOWNSPOUT NOZZLE - COORD W/ PLUMBING DWGS FOR EXACT LOCATIONS



B1 A-905 EXTERIOR ELEVATION (ADDITIVE ALTERNATE NO. 1)
SCALE: 1/8" = 1'-0"



A1 A-905 EXTERIOR ELEVATION (ADDITIVE ALTERNATE NO. 1)
SCALE: 1/8" = 1'-0"



KEY PLAN ELEVATIONS
SCALE: 1/16" = 1'-0"

MARK	DATE	REVISIONS
A1	07.17.2025	ADDENDUM NO. 1
	RRMM	BY
		DESCRIPTION

DATE	06.24.2025
PROJECT	23238-00
DESIGNED	MW
DRAWN	RIS
CHECKED	JAH

RRMM ARCHITECTS, PC
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(757)622-2828

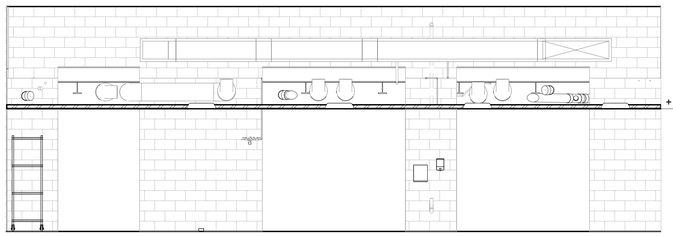
COMMONWEALTH OF VIRGINIA
Jeffrey A Harris
Lic. No. 10748
06.24.2025
ARCHITECT

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IPB: 1689-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-1011

DRAWING
EXTERIOR BUILDING ELEVATIONS - ADDITIVE ALTERNATE NO. 1

SHEET
A-905

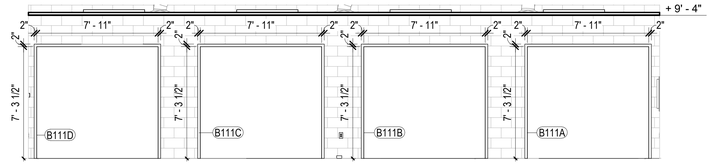
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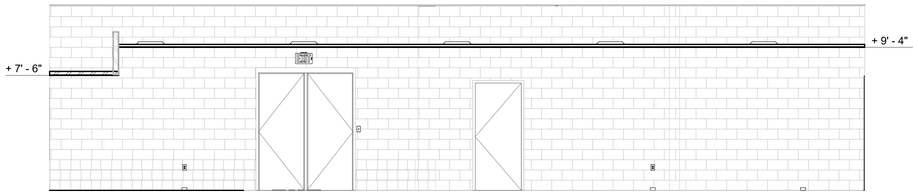
E1 A-909 ADD. ALT. KITCHEN
SCALE: 1/4" = 1'-0"



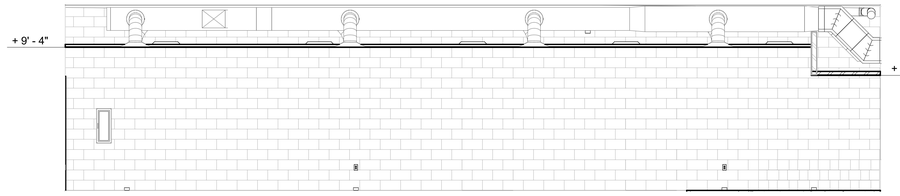
E3 A-909 EXTENDED CAFETERIA - WEST
SCALE: 1/4" = 1'-0"



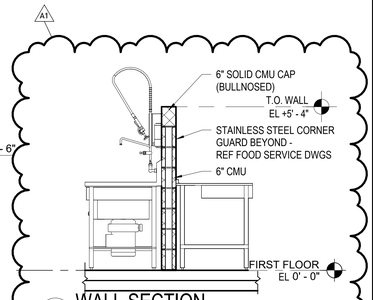
E5 A-909 EXTENDED CAFETERIA - EAST
SCALE: 1/4" = 1'-0"



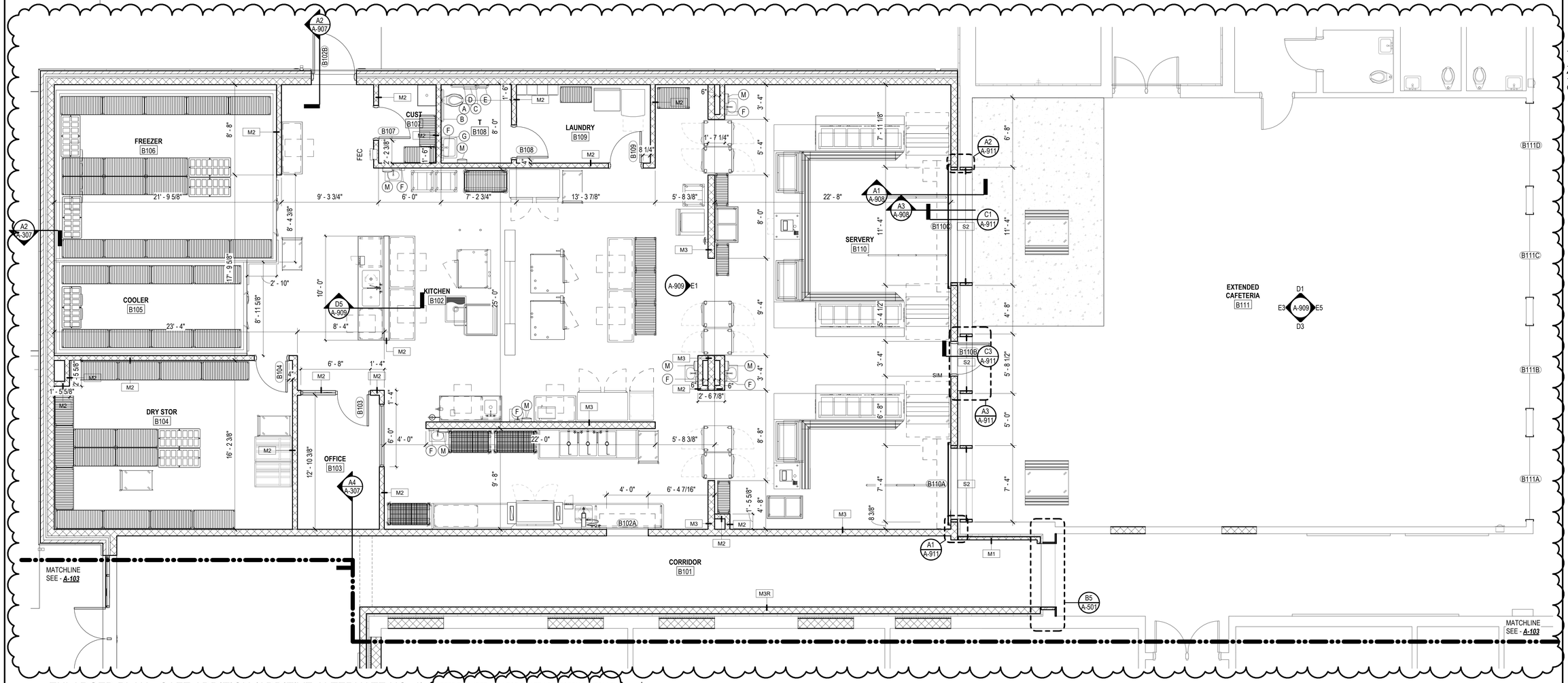
D1 A-909 EXTENDED CAFETERIA - NORTH
SCALE: 1/4" = 1'-0"



D3 A-909 EXTENDED CAFETERIA - SOUTH
SCALE: 1/4" = 1'-0"



D5 A-909 WALL SECTION
SCALE: 1/2" = 1'-0"



A1 A-909 ENLARGED PLAN - CAFE ADDITION (ADDITIVE ALTERNATE NO. 1)
SCALE: 1/4" = 1'-0" A-901

(REFER TO SHEET A-401 FOR TOILET ACCESSORY SCHEDULE)

MARK	DATE	REVISIONS	BY	DESCRIPTION
A1	07.17.2025	ADDENDUM NO. 1	RRMM	

DATE	06.24.2025
PROJECT	23238-00
DESIGNED	MW
DRAWN	RIS
CHECKED	JAH

RRMM ARCHITECTS, PC
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(757)622-2828

COMMONWEALTH OF VIRGINIA
Geoffrey A. Harris
Lic. No. 10748
06.24.2025
ARCHITECT

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
VIRGINIA DEPARTMENT OF EDUCATION: 123-20-101
IFB: 1689-B

DRAWING
ENLARGED CAFE PLANS AND INTERIOR ELEVATIONS - ADDITIVE ALTERNATE NO. 1

SHEET
A-909

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GENERAL FOUNDATION PLAN NOTES :

A. SEE THE CIVIL DRAWINGS FOR ACTUAL FINISHED FLOOR ELEVATION. TOP OF SLAB EQUALS FINISHED FLOOR ELEVATION AND MUST SERVE AS THE REFERENCE ELEVATION 0'-0".

B. FOR THE STRUCTURAL NOTES AND ABBREVIATIONS SEE SHEETS S-001 AND S-002.

C. SEE THE DIMENSION PLANS ON SHEETS S-101, S-102, S-601 AND THE ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN. SEE THE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF MASONRY CONTROL JOINTS.

D. TOP OF ALL FOOTINGS MUST BE 2'-0" BELOW REFERENCE ELEVATION 0'-0", UNLESS OTHERWISE NOTED.

E. COLUMNS AND COLUMN FOOTINGS MUST BE CENTERED ON GRIDS IN BOTH DIRECTIONS, UNLESS OTHERWISE NOTED.

F. WALL FOOTINGS MUST BE CENTERED ON TOTAL WIDTH OF THE FOUNDATION WALL, UNLESS OTHERWISE NOTED.

FOUNDATION DIMENSION PLAN NOTES :

D1. FOR DIMENSIONS NOT SHOWN AND LOCATIONS OF MASONRY CONTROL JOINTS SEE THE ARCHITECTURAL DRAWINGS.

D2. WALL FOOTINGS MUST BE CENTERED ON TOTAL WIDTH OF THE FOUNDATION WALL, UNLESS OTHERWISE NOTED.

D3. COLUMNS AND COLUMN FOOTINGS MUST BE CENTERED ON GRIDS IN BOTH DIRECTIONS, UNLESS OTHERWISE NOTED.

D4. COORDINATE PIT CLEARANCE REQUIREMENTS WITH THE SELECTED ELEVATOR MANUFACTURER.

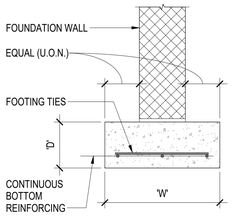
D5. CENTERLINE OF COLUMN FOOTING COINCIDES APPROXIMATELY WITH THE CENTERLINE OF BEAM BEARING POINT ABOVE.

COLUMN FOOTING SCHEDULE

MARK	DIMENSIONS			REINFORCING (BOTTOM)	REMARKS
	WIDTH	LENGTH	DEPTH		
CF3.0	3'-0"	3'-0"	1'-0"	4 - #4 EACH WAY	
CF4.0	4'-0"	4'-0"	1'-0"	4 - #5 EACH WAY TOP AND BOTTOM	
CF4.5	4'-6"	4'-6"	1'-0"	4 - #5 EACH WAY	
CF5.0	5'-0"	5'-0"	1'-2"	7 - #4 EACH WAY	

WALL FOOTING SCHEDULE

MARK	DIMENSIONS		REINFORCING (BOTTOM)		REMARKS
	WIDTH	DEPTH	CONTINUOUS	TIES	
WF2.0	2'-0"	1'-0"	3 - #4	#4 AT 4'-0"o/c	



WALL FOOTING DIAGRAM

EXISTING COLUMN FOOTING SCHEDULE

MARK	DIMENSIONS			REINFORCING (BOTTOM)	REMARKS
	WIDTH	LENGTH	DEPTH		
(E) CF3.0	3'-0"±	3'-0"±	1'-0"±	3 - #5 EACH WAY	
(E) CF4.0	4'-0"±	4'-0"±	1'-0"±	4 - #5 EACH WAY	
(E) CF5.0	5'-0"±	5'-0"±	1'-0"±	5 - #5 EACH WAY	
(E) CF6.0	6'-0"±	6'-0"±	1'-2"±	6 - #5 EACH WAY	

EXISTING WALL FOOTING SCHEDULE

MARK	DIMENSIONS		REINFORCING (BOTTOM)		REMARKS
	WIDTH	DEPTH	CONTINUOUS	TIES	
(E) WF2.0	2'-0"±	1'-0"±	2 - #5	#4 AT 4'-0"±o/c	
(E) WF3.0	3'-0"±	1'-0"±	3 - #5	#4 AT 4'-0"±o/c	

VERTICAL WALL REINFORCING PLAN NOTES :

V1. FOR CONCRETE MASONRY NOTES SEE SHEET S-001.

V2. FOR TYPICAL CONCRETE MASONRY VERTICAL WALL REINFORCING DETAILS SEE SHEET S-511.

V3. FOR WALLS NOT INDICATED PROVIDE #4 AT 48"o/c.

V4. REINFORCING MUST BE CENTERED IN MIDDLE OF WALL.

V5. REINFORCE JAMB WITH 2 #4 CENTERED AS SHOWN IN NOTE 4 OF 'TYPICAL CONCRETE MASONRY VERTICAL WALL REINFORCING DETAILS' ON SHEET S-511.

V6. REINFORCE JAMB WITH 2 #5 CENTERED AS SHOWN IN NOTE 4 OF 'TYPICAL CONCRETE MASONRY VERTICAL WALL REINFORCING DETAILS' ON SHEET S-511.

V7. REINFORCE OPENING PER 'TYPICAL REINFORCING AT MASONRY WALL OPENING DETAIL' ON SHEET S-511

V8. ADDITIONAL VERTICAL REINFORCING AT BEAM BEARING LOCATIONS PER 'TYPICAL CONCRETE MASONRY VERTICAL WALL REINFORCING DETAILS' ON SHEET S-511.

V9. BOND BEAM PER 'TYPICAL BOND BEAM LINTEL DETAILS' ON SHEET S-511.

VERTICAL WALL REINFORCING PLAN LEGEND :

[X] = VERTICAL WALL REINFORCING MARK - SEE SCHEDULE ON THIS SHEET

VERTICAL WALL REINFORCING SCHEDULE

MARK	[A]	[B]	[C]
VERTICAL REINFORCING	#4 AT 48"o/c	#5 AT 16"o/c	SEE ELEVATIONS
COMMENTS	-----	-----	-----

FOUNDATION PLAN NOTES :

F1. FIRST FLOOR MUST BE A 4" THICK FIBRILLATED SYNTHETIC FIBER REINFORCED CONCRETE SLAB-ON-GRADE, OVER 15 MIL. VAPOR RETARDER MINIMUM, OVER 4" DEPTH OF POROUS FILL. FIBERS MUST BE FIBERMESH 300 AS MANUFACTURED BY PROPEX AT A DOSAGE RATE OF 1 1/2 POUNDS PER CUBIC YARD.

F2. FIRST FLOOR MUST BE A 6" THICK FIBRILLATED SYNTHETIC FIBER REINFORCED CONCRETE SLAB-ON-GRADE, OVER 15 MIL. VAPOR RETARDER MINIMUM, OVER 4" DEPTH OF POROUS FILL. FIBERS MUST BE FIBERMESH 300 AS MANUFACTURED BY PROPEX AT A DOSAGE RATE OF 1 1/2 POUNDS PER CUBIC YARD.

F3. 2 - #4 x 3'-0" SPACED AT 2" ON-CENTER, SET 1 1/2" CLEAR FROM TOP OF SLAB, AT RE-ENTRANT CORNERS WHERE NO SLAB JOINT OCCURS.

F4. SUMP PIT - SEE 'TYPICAL SUMP PIT DETAIL' ON SHEET S-501 AND THE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.

F5. CENTERLINE OF COLUMN FOOTING COINCIDES WITH CENTERLINE OF BEAM BEARING POINT ABOVE.

F6. WIDEN WALL FOOTING TO ACCOMMODATE WALL ABOVE. REINFORCE WITH #4 AT 12" ON-CENTER PERPENDICULAR TO MAIN FOOTING REINFORCING AND 1 - #4 TIE AT EDGE. EDGE OF FOOTING MUST PROJECT 6" MINIMUM FROM FACE OF WALL ABOVE.

F7. STEP FOOTING AS REQUIRED TO MATCH EXISTING FOOTING ELEVATION. SEE 'TYPICAL DETAIL AT INTERSECTION OF NEW AND EXISTING FOOTINGS' ON SHEET S-501.

F8. GENERAL CUTTING AND PATCHING OF THE EXISTING SLAB IS PARTIALLY INDICATED. SEE THE ARCHITECTURAL, MECHANICAL AND PLUMBING DRAWINGS FOR ADDITIONAL REQUIREMENTS. PATCH EXISTING SLABS AS SHOWN IN 'TYPICAL DETAIL OF REMOVAL AND REPAIR OF EXISTING SLAB-ON-GRADE' ON SHEET S-502.

F9. NON-BEARING 6" CMU PARTITION WALL (PARTIALLY SHOWN) - SEE THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND EXTENTS. FOR VERTICAL WALL REINFORCING - SEE 'TYPICAL THICKENED SLAB/WALL FOOTING DETAIL' ON SHEET S-502.

F10. SEE THE ARCHITECTURAL DRAWINGS FOR MASONRY WALL DEMOLITION - EXTEND WALL DEMOLITION APPROXIMATELY 8" BELOW EXISTING FLOOR AT DOOR OPENINGS AND FILL SOLID WITH CONCRETE FROM TOP OF REMAINING WALL LEVEL WITH EXISTING SLAB.

FOUNDATION AND FOUNDATION DIMENSION PLAN LEGEND :

(X) = COLUMN GRID MARK

(+X'-X") = TOP OF FOUNDATION ELEVATION - MEASURED FROM REFERENCE ELEVATION 0'-0"

WFX.X = WALL FOOTING MARK - SEE SCHEDULE ON THIS SHEET

CFX.X = COLUMN FOOTING MARK - SEE SCHEDULE ON THIS SHEET

SF = STEPPED FOOTING - SEE TYPICAL DETAIL ON SHEET S-501

COLUMN SIDE CBP-X = COLUMN AND COLUMN BASE PLATE MARK - SEE COLUMN BASE PLATE DETAILS ON SHEET S-501

COLUMN SIDE CBP-X = COLUMN AND COLUMN BASE PLATE MARK - SEE COLUMN BASE PLATE DETAILS ON SHEET S-501

KCJ = SLAB-ON-GRADE KEYED CONSTRUCTION JOINT - SEE TYPICAL DETAIL ON SHEET S-502

CJ = SLAB-ON-GRADE CONTROL JOINT - SEE TYPICAL DETAIL ON SHEET S-502

= SLAB-ON-GRADE JOINT (CONTROL JOINT UNLESS OTHERWISE REQUIRED)

TS = THICKENED SLAB - SEE TYPICAL DETAIL ON SHEET S-502

TS/WF = THICKENED SLAB/WALL FOORTING - SEE TYPICAL DETAIL ON SHEET S-502

[XX'-XX"] = TOP OF SLAB ELEVATION - MEASURED FROM REFERENCE ELEVATION 0'-0"

= CHANGE IN SLAB ELEVATION - SEE THE ARCHITECTURAL DRAWINGS FOR EXACT SIZE AND LOCATION

= EXTENT OF SLAB SLOPE - SEE THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION

F/R = FIRST RISER - SEE THE ARCHITECTURAL DRAWINGS FOR DETAILS AND EXACT LOCATION

(X) = COLUMN PEDESTAL MARK - SEE TYPICAL DETAILS ON SHEET S-501

± = APPROXIMATE DIMENSION OR ELEVATION (FIELD VERIFY)

= SANITARY OR STORM SEWER PIPING BELOW SLAB (PIPING PARTIALLY SHOWN) - SEE THE PLUMB. DWGS.

= ELECTRICAL CONDUIT BELOW SLAB (CONDUIT PARTIALLY SHOWN) - SEE THE ELEC. DWGS.

FD FD = FLOOR DRAIN - SEE THE ARCH. AND PLUMB. DWGS.

= WORKING POINT

XXXX.XX = APPROXIMATE ACTUAL FINISHED GRADE ELEVATION - SEE THE CIVIL DWGS.

RL = RAIN LEADER - SEE THE ARCH. DWGS.

<X'-X"> = TOP OF CONCRETE PEDESTAL ELEVATION - MEASURED FROM REFERENCE ELEVATION 0'-0"

(E) = EXISTING

± = EXISTING DIMENSION OR ELEVATION (FIELD VERIFY)

(X) = EXISTING COLUMN GRID MARK

(+X'-X"±) = EXISTING TOP OF FOUNDATION ELEVATION - MEASURED FROM REFERENCE ELEVATION 0'-0"

(E) WFX.X = EXISTING WALL FOOTING MARK - SEE SCHEDULE ON THIS SHEET

(E) CFX.X = EXISTING COLUMN FOOTING MARK - SEE SCHEDULE ON THIS SHEET

GENERAL FRAMING PLAN NOTES :

A. SEE THE DIMENSION PLANS ON SHEETS S-101, S-102, S-601 AND THE ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN. SEE THE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF MASONRY CONTROL JOINTS.

B. FOR THE STRUCTURAL NOTES AND ABBREVIATIONS SEE SHEETS S-001 AND S-002.

D. FINISHED SECOND FLOOR ELEVATION MUST BE +14'-0" MEASURED FROM REFERENCE ELEVATION 0'-0". TOP OF SLAB EQUALS FINISHED FLOOR ELEVATION.

E. TOP OF STEEL ELEVATION MUST BE 4" BELOW FINISHED FLOOR SLAB ELEVATION, UNLESS OTHERWISE NOTED.

F. FOR JOIST BEARING ELEVATIONS NOT SHOWN ON PLAN INTERPOLATE LINEARLY BETWEEN GIVEN ELEVATIONS.

G. FOR BOTTOM OF DECK ELEVATIONS NOT SHOWN ON PLAN INTERPOLATE LINEARLY BETWEEN GIVEN LOCATIONS.

H. ROOF FRAMING HAS BEEN DESIGNED FOR AN ADDITIONAL 2 PSF TO ACCOMMODATE EXTRA LOADING DUE TO ROOF SUPPORTED MECHANICAL, ELECTRICAL, OR PLUMBING EQUIPMENT NOT SHOWN ON THE PLAN SHEETS.

J. ROOF FRAMING HAS BEEN DESIGNED TO INCLUDE EXTRA LOADING DUE TO SPRINKLER BRANCH LINES UP TO 4" IN DIAMETER. THE GENERAL CONTRACTOR MUST COORDINATE LOCATIONS AND LOADS OF LINES LARGER THAN 4" IN DIAMETER WITH THE STEEL JOIST MANUFACTURER AND THE COLD-FORMED METAL TRUSS MANUFACTURER.

FRAMING PLAN NOTES :

R1. FLOOR MUST BE A 4" TOTAL DEPTH CONCRETE SLAB ON 1 1/2" FORM DECK REINFORCED WITH POLYETHYLENE MACRO-FIBERS. FIBERS MUST BE FIBERMESH 650 AS MANUFACTURED BY PROPEX AT A DOSAGE RATE OF 3 POUNDS PER CUBIC YARD. DECK SUPPORTS MUST BE SPACED EQUALLY BETWEEN GIVEN LOCATIONS WITH A MAXIMUM SPACING OF 3'-5" ON-CENTER, UNLESS OTHERWISE NOTED.

R2. PREFABRICATED COLD-FORMED ROOF TRUSSES SPACED AT 4'-0" ON-CENTER MAXIMUM. PROVIDE COMPLETE STRUCTURAL SYSTEM UTILIZING BEARING WALLS AND BEAMS INDICATED ON PLAN. INCLUDE REQUIREMENTS FOR SIZE AND TYPE OF HANGERS, HURRICANE ANCHORS, AND ALL OTHER CONNECTIONS. CLEARLY INDICATE ON SHOP DRAWINGS AREAS THAT WILL REQUIRE SUPPLEMENTAL STICK FRAMING. COORDINATE REQUIREMENTS FOR ADDITIONAL BEAMS OR SUPPORTS WITH THE STRUCTURAL ENGINEER.

R3. EXISTING PREFABRICATED WOOD ROOF TRUSSES SPACED AT 2'-0"± ON-CENTER.

R4. EXISTING 2x10 RAFTERS SPACED AT 2'-0"± ON-CENTER.

R5. ROOF MUST BE 1 1/2" STEEL ROOF DECK SPANNING BETWEEN COLD-FORMED ROOF TRUSSES AND OTHER ROOF DECK SUPPORTS. DECK SUPPORTS MUST BE SPACED EQUALLY BETWEEN GIVEN LOCATIONS WITH A MAXIMUM SPACING OF 4'-0" ON-CENTER, UNLESS OTHERWISE NOTED. SEE SHEET S-001 FOR STEEL ROOF DECK REQUIREMENTS.

R6. ROOF MUST BE 1-1/2" STEEL ROOF DECK SPANNING BETWEEN STEEL ROOF JOISTS AND OTHER ROOF DECK SUPPORTS. DECK SUPPORTS MUST BE SPACED EQUALLY BETWEEN GIVEN LOCATIONS WITH A MAXIMUM SPACING OF 5'-0" ON-CENTER, UNLESS OTHERWISE NOTED. SEE SHEET S-001 FOR STEEL ROOF DECK REQUIREMENTS.

R7. ROOF MUST BE 1 1/2" STEEL ROOF DECK SPANNING BETWEEN SUPPORTS. DECK SUPPORTS MUST BE 6" COLD-FORMED RAFTERS WITH A MAXIMUM SPACING OF 2'-0" ON-CENTER. SEE 'COLD-FORMED METAL FRAMING NOTES' ON SHEET S-002.

R8. SHIPPS LADDER BELOW. LOCATE ROOF TRUSSES ON EITHER SIDE OF SHIPPS LADDER LANDING. SEE THE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.

R9. FLOOR JOISTS SPACING 4'-0" ON-CENTER MAXIMUM.

R10. ELEVATOR ROOF MUST BE A 5 1/2" TOTAL DEPTH LIGHTWEIGHT CONCRETE SLAB ON 2" x 20 GA. COMPOSITE DECK COMPOSITE DECK REINFORCED WITH POLYETHYLENE MACRO-FIBERS. FIBERS MUST BE FIBERMESH 650 AS MANUFACTURED BY PROPEX AT A DOSAGE RATE OF 3 POUNDS PER CUBIC YARD.

MISCELLANEOUS FRAMING PLAN NOTES :

M1. MASONRY WALL OPENING BELOW - SEE THE ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION. SEE 'TYPICAL BOND BEAM LINTEL DETAILS' ON SHEET S-511 FOR BOND BEAM REQUIREMENTS.

M2. FLOOR OPENING - SEE THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND EXTENTS.

M3. W8x31 ELEVATOR HOIST BEAM DESIGNED TO SUPPORT A 7,500# LIVE LOAD AT ANY POINT ALONG THE SPAN. FOR EXACT LOCATION COORDINATE WITH THE ELEVATOR MANUFACTURER.

M4. SERVICE STAIR - SEE THE ARCHITECTURAL DRAWINGS FOR SIZE, LOCATION AND ADDITIONAL INFORMATION.

M5. #4 x 6'-0" LONG BARS AT 12" ON-CENTER SET 1" CLEAR FROM TOP OF SLAB.

M6. FOLDING PARTITION BELOW - SEE THE ARCHITECTURAL DRAWINGS FOR LOCATION AND DETAILS.

M7. MECHANICAL UNIT - THE TRUSS MANUFACTURER MUST DESIGN FOR A MAXIMUM OPERATING WEIGHT PLUS CURB WEIGHT INDICATED THUS: X,XXX#. THE TRUSS MANUFACTURER MUST COORDINATE EXACT LOCATION AND WEIGHT WITH THE MECHANICAL DRAWINGS. CONTACT THE STRUCTURAL ENGINEER IF THE ASSUMED WEIGHTS AND LOCATIONS OF MECHANICAL UNITS DIFFER FROM THOSE SHOWN.

M8. MECHANICAL DUCT (PARTIALLY SHOWN) PASSING THROUGH ROOF TRUSS. THE TRUSS MANUFACTURER MUST PROVIDE AND DESIGN FOR A TRUSS WEB OPENING AND CONFIGURATION TO ALLOW DUCT SIZE INDICATED ON THE MECHANICAL DRAWINGS TO PASS THROUGH WITHOUT INTERFERENCE.

M9. NO CROSS BRIDGING PERMITTED THIS BAY TO ACCOMMODATE MECHANICAL DUCTS. SEE THE MECHANICAL DRAWINGS FOR EXACT LOCATIONS.

M10. MECHANICAL EQUIPMENT ACCESS WALKING PATH - SEE THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND EXTENTS. FRAME DOUBLE 2x4 BLOCKING BETWEEN TRUSSES AT EACH SUPPORT OF WALKWAY OR ADD 2x4 AT 4'-0" ON-CENTER BETWEEN TRUSSES UNDER WALKWAY. (A1)

M11. WEB PENETRATION OPENING TO BE CENTERED IN BEAM WE FOR SPRINKLER PIPE - SEE 'TYPICAL STEEL BEAM WEB PENETRATION DETAIL' ON SHEET S-512.

M12. EXISTING ROOFTOP MECHANICAL EQUIPMENT TO BE REMOVED AND EXISTING ROOF PENETRATIONS TO BE CAPPED. SEE THE MECHANICAL DRAWINGS FOR LOCATIONS.

M13. MECHANICAL EQUIPMENT. COORDINATE SIZE, OPENING LOCATIONS AND DETAILS WITH ARCHITECURAL AND MECHANICAL DRAWINGS. SEE 'TYPICAL ROOF TOP MECHANICAL EQUIPMENT SUPPORT DETAILS AT EXISTING WOOD TRUSS FRAMING' FOR REINFORCEMENT OF TRUSS, SUPPLEMENTAL SUPPORTS AND ADDED SUPPORTS BELOW MECHANICAL CURBS.

M14. KITCHEN HOOD BELOW FRAMING TO BE PLACED AT SAME LOCATION AS EXISTING. COORDINATE SIZE, LOCATION AND DETAILS WITH ARCHITECURAL AND FOOD SERVICE DRAWINGS. (A1)

M15. 2x6 BEAM FRAMING BETWEEN TRUSS TOP CHORDS FOR LOAD DISTRIBUTION. 2x6 MUST SPAN FOUR OR FIVE TRUSSES AS INDICATED AND LAP AT LOCATIONS INDICATED. SEE' TYPICAL ROOF TOP MECHANICAL EQUIPMENT SUPPORT DETAILS AT EXISTING WOOD TRUSS FRAMING.

M16. EXTEND 2x6 BEAMS TO ONE TRUSS BEYOND THE END OF THE MECHANICAL UNIT.

FRAMING PLAN LEGEND :

+XX'-XX" = JOIST BEARING ELEVATION (J.B.E.) - MEASURED FROM REFERENCE ELEVATION 0'-0"

(+XX'-XX") = TOP OF STEEL (T.O.S.) ELEVATION - MEASURED FROM REFERENCE ELEVATION 0'-0" (HI = HIGH; LO = LOW; SL = SLOPE)

= DIAGONAL BRACE TO BEAM BOTTOM FLANGE - SEE TYPICAL DETAIL ON SHEET S-521

= BEAM TO COLUMN KNEE BRACE CONNECTION - SEE TYPICAL DETAIL ON SHEET S-512

= WORKING POINT

X,XXX# = MECHANICAL UNIT (MAXIMUM OPERATING WEIGHT GIVEN IN POUNDS) - SEE THE MECHANICAL DRAWINGS

(X) = COLUMN GRID MARK

L-X = LINTEL MARK - SEE DETAILS ON SHEET S-512

L4 = L4x4x1/4

BP-X = BEAM BEARING PLATE MARK - SEE SCHEDULE AND TYPICAL DETAILS ON SHEET S-511 (BP-1 TYP. U.O.N.)

[+XX'-XX"] = FINISHED FLOOR ELEVATION - MEASURED FROM REFERENCE ELEVATION 0'-0"

(JS = X") = INDICATES JOIST SEAT DEPTH MEASURED AT CENTERLINE OF SUPPORT

= ROOF RIDGE, HIP OR VALLEY LINE - SEE THE ARCHITECTURAL DRAWINGS

= CHANGE IN ROOF ELEVATION - SEE THE ARCHITECTURAL DRAWINGS

X" DECK = STEEL DECK MARK - SEE STEEL DECK NOTES ON SHEET S-001

= L2 1/2x2 1/2x1/4 CROSS BRACING (TYP. U.O.N.)

X'-X" = TOP OF SLAB ELEVATION - MEASURED FROM SPECIFIED FINISHED FLOOR ELEVATION

SL = INDICATES DIRECTION OF SLAB SLOPE

(JS = X") = INDICATES JOIST SEAT DEPTH MEASURED AT CENTERLINE OF SUPPORT

± = APPROXIMATE DIMENSION OR ELEVATION (FIELD VERIFY)

(E) = EXISTING

± = EXISTING DIMENSION OR ELEVATION (FIELD VERIFY)

(X) = EXISTING COLUMN GRID MARK

(E) L-X = EXISTING LINTEL MARK - SEE DETAILS ON SHEET S-512

(E) MT = EXISTING MULTIPLE PLY TRUSS

MARK	DESCRIPTION
A1	ADDENDUM NO. 1
SMF	
07.17.2025	

MARK	DATE	REVISIONS BY

DATE	PROJECT	DESIGNED	DRAWN	CHECKED
06.24.2025	23238-00	JLJ	SEC	DWS

RRMM ARCHITECTS, PC
1317 Executive Blvd, Suite 200
Chesapeake, Virginia 23320
(757)622-2828

NOT FOR CONSTRUCTION
07.10.2025
PROGRESS SET

PROJECT: SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 1889-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

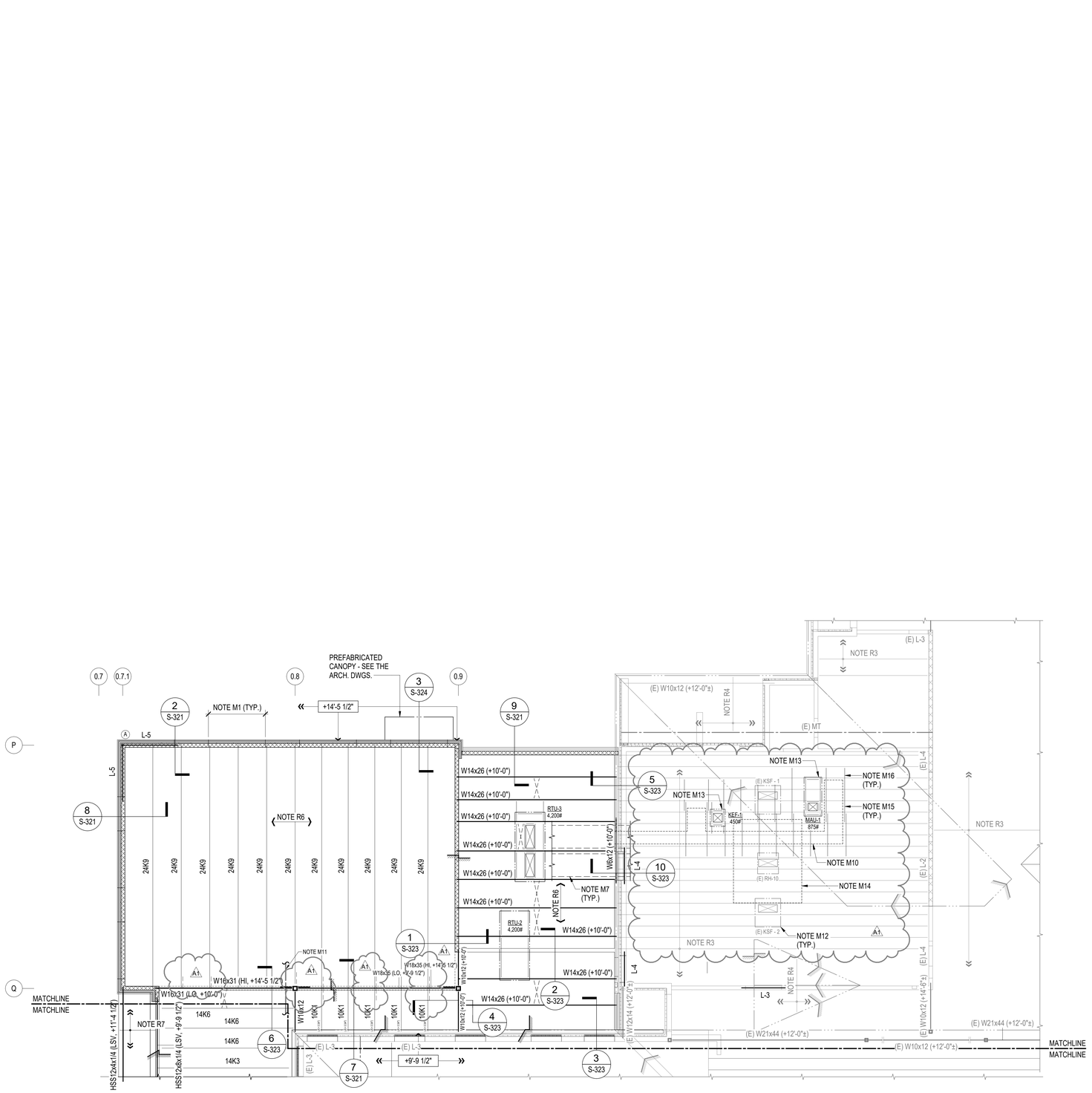
DRAWING: PLAN NOTES, LEGEND AND SCHEDULE

SHEET
S-003

SPEIGHT-MARSHALL-FRANCIS
STRUCTURAL ENGINEERS
1226 PERIMETER PARKWAY, SUITE 201
VIRGINIA BEACH, VIRGINIA 23454
P: 757.427.1703
7921 JAHNKE ROAD, SUITE 205
RICHMOND, VIRGINIA 23294
P: 804.464.4117
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1/32" = 1'-0" | 1/16" = 1'-0" | 3/32" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0" | 12" = 1'-0"

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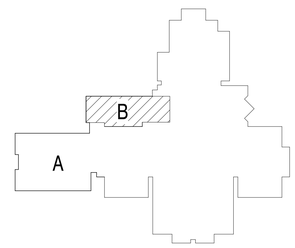


LOW ROOF FRAMING PLAN - AREA B (BASE BID)

1/8" = 1'-0"

(FOR PLAN NOTES AND LEGEND SEE SHEET S-003)

PLAN NORTH



KEY PLAN - AREA B

NOT TO SCALE

THE INFORMATION REGARDING THE EXISTING CONSTRUCTION WAS OBTAINED FROM THE RECORD DRAWINGS PREPARED BY THE MOSELEY McCLINTOCK GROUP DATED AUGUST 11, 1995 AND BY FIELD INVESTIGATION. ALL INFORMATION SPECIFYING EXISTING CONDITIONS MUST BE VERIFIED BY THE GENERAL CONTRACTOR. THE AFOREMENTIONED DRAWINGS WILL BE MADE AVAILABLE TO THE CONTRACTOR UPON REQUEST.

MARK	DATE	BY	DESCRIPTION
A1	07.17.2025	SMF	ADDENDUM NO. 1

DATE 06.24.2025
PROJECT 23238-00
DESIGNED JLJ
DRAWN SEC
CHECKED DWS

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1317 Executive Blvd, Suite 200
Chesapeake, Virginia 23320
(757)622-2828

NOT FOR CONSTRUCTION
07.10.2025
PROGRESS SET

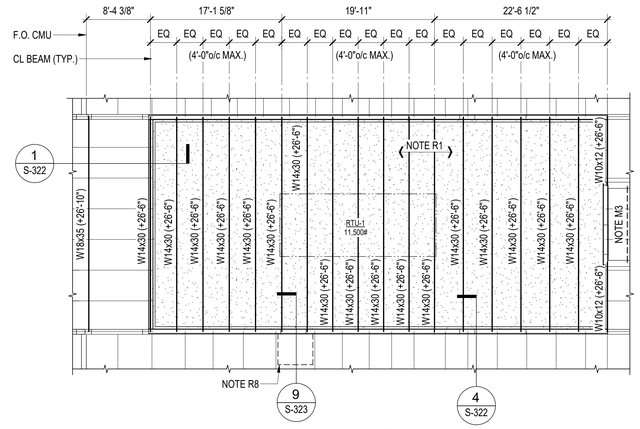
PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD,
SUFFOLK, VIRGINIA
IFB: 188B-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

DRAWING
LOW ROOF FRAMING PLAN - AREA B

SHEET
S-122

SPEIGHT·MARSHALL·FRANCIS
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RICHMOND, VIRGINIA 23294
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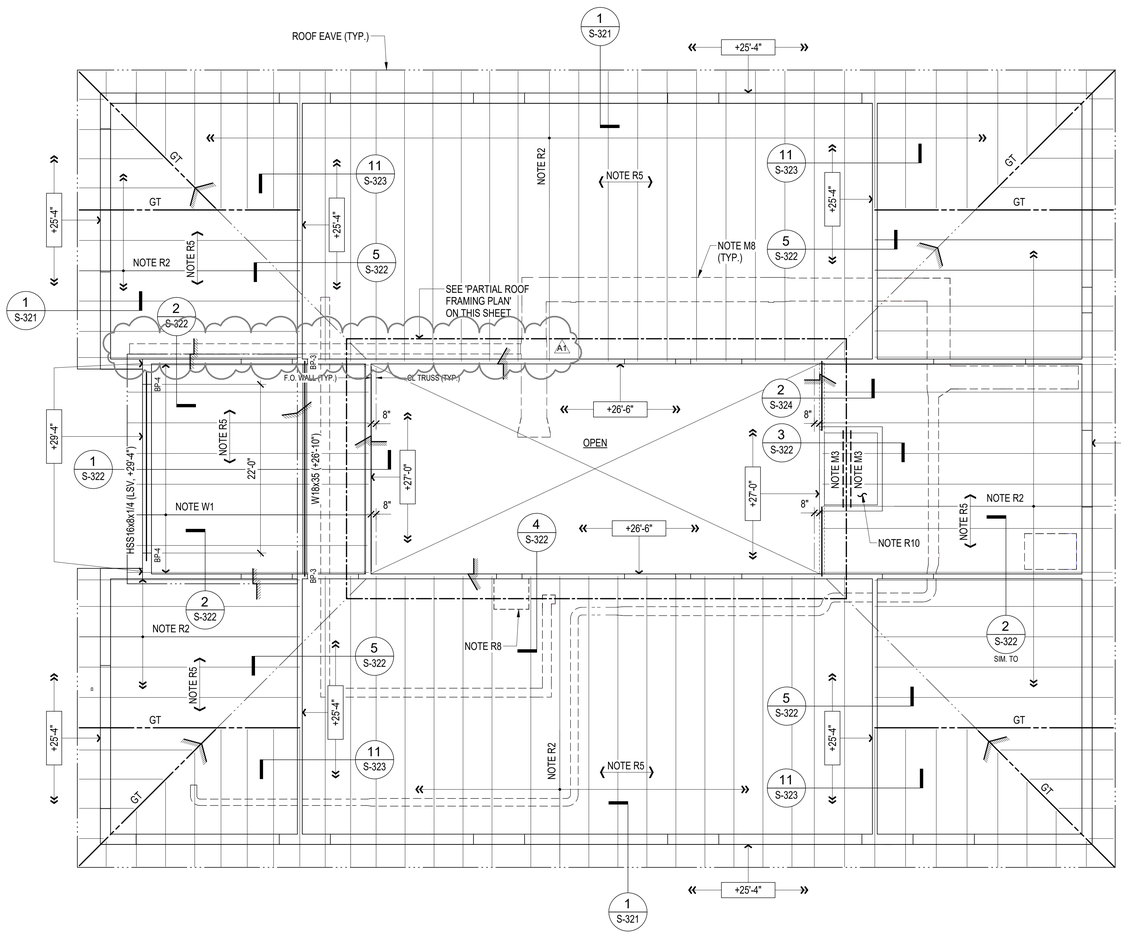


PARTIAL ROOF FRAMING PLAN - AREA A (BASE BID)

1/8" = 1'-0"

PLAN NORTH

(FOR PLAN NOTES AND LEGEND SEE SHEET S-003)

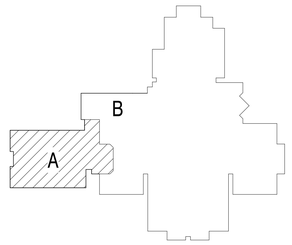


ROOF FRAMING PLAN - AREA A (BASE BID)

1/8" = 1'-0"

PLAN NORTH

(FOR PLAN NOTES AND LEGEND SEE SHEET S-003)



KEY PLAN - AREA A

NOT TO SCALE

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STRUCTURAL ENGINEERS
1228 PERIMETER PARKWAY, SUITE 202
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SKU EMPIRETECH PARKWAY SUITE 202
RICHMOND, VIRGINIA 23234
P: 804.464.6111
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MARK	DATE	REVISIONS BY	DESCRIPTION
A1	07.17.2025	SMF	ADDENDUM NO. 1

DATE	06.24.2025
PROJECT	23238-00
DESIGNED	JLJ
DRAWN	SEC
CHECKED	DWS

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(757)622-2828

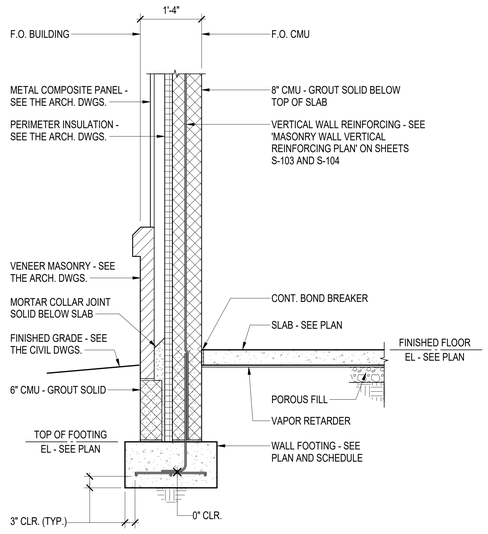
07.10.2025
*NOT*FOR*CONSTRUCTION*
PROGRESS SET

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 1888-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

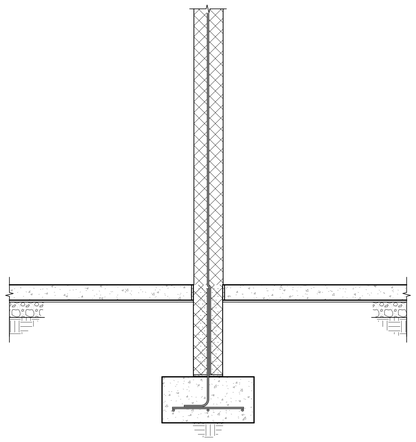
DRAWING
ROOF FRAMING PLAN - AREA A

SHEET
S-131

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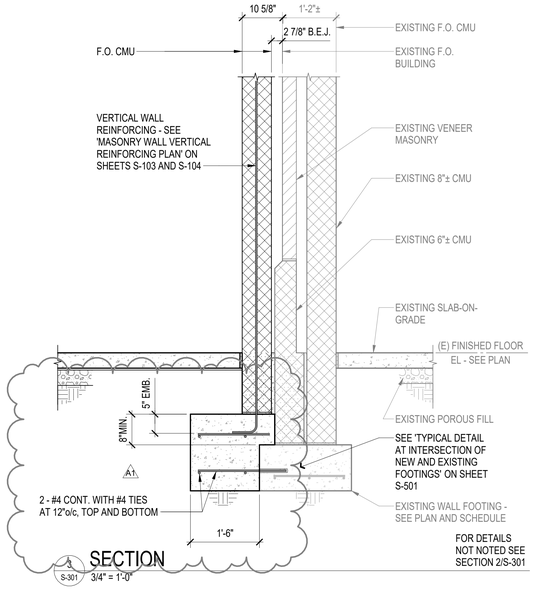


1 S-301 SECTION 3/4" = 1'-0"



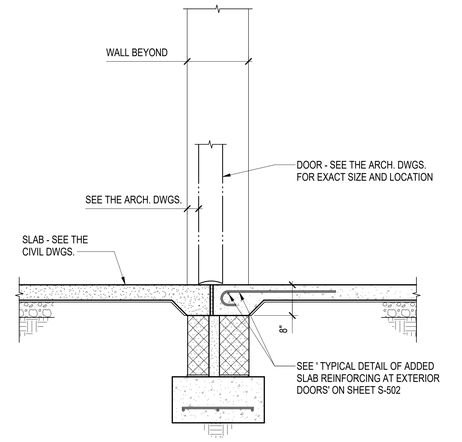
2 S-301 SECTION 3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 1/S-301



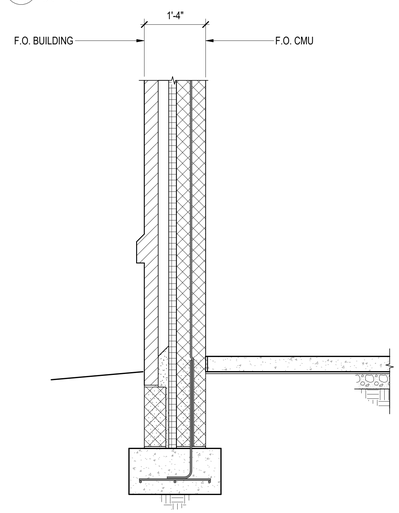
3 S-301 SECTION 3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 2/S-301



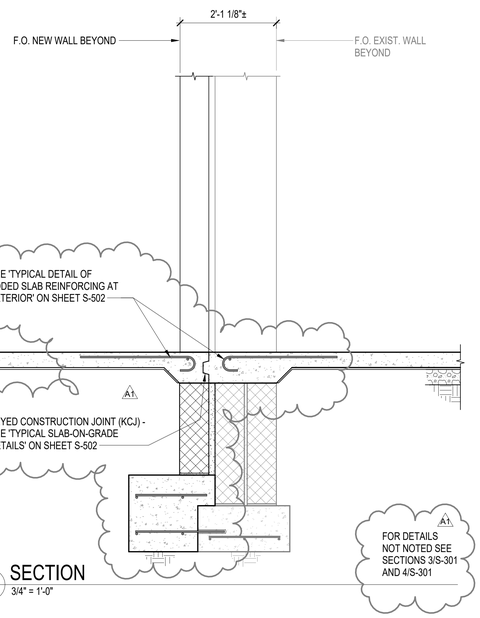
4 S-301 SECTION 3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 3/S-301



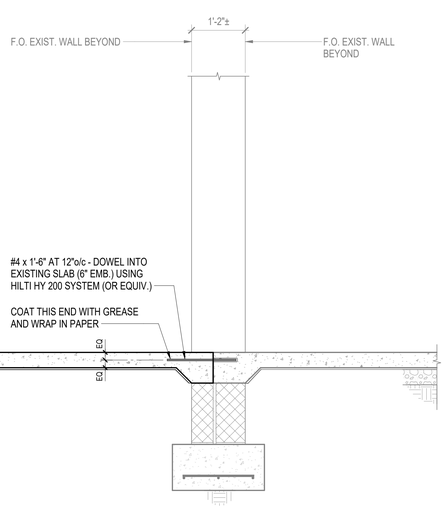
5 S-301 SECTION 3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 1/S-301



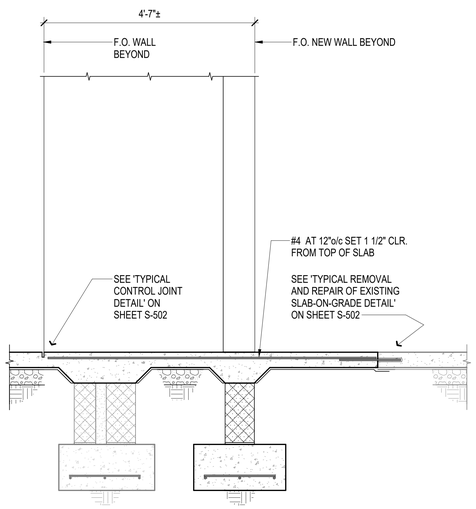
6 S-301 SECTION 3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTIONS 3/S-301 AND 4/S-301



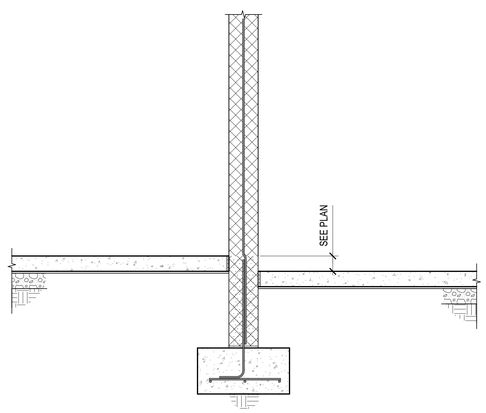
7 S-301 SECTION 3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 6/S-301



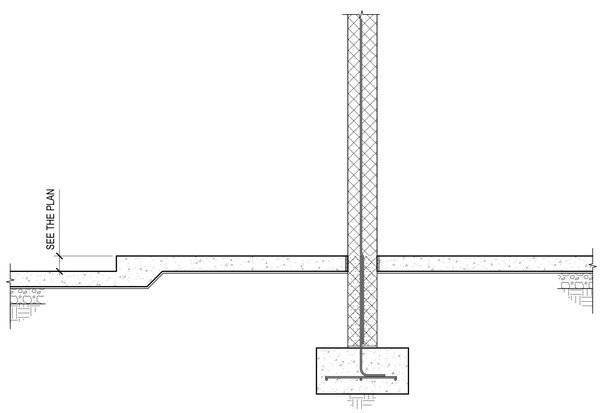
8 S-301 SECTION 3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 6/S-301



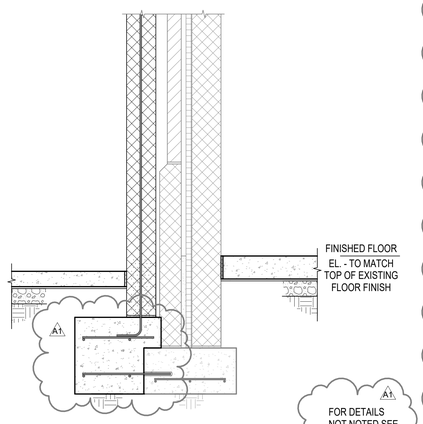
9 S-301 SECTION 3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 1/S-301

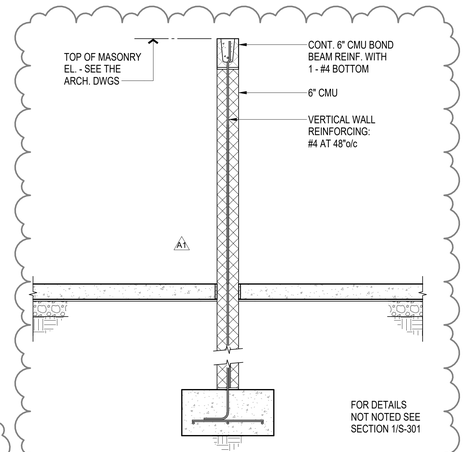


10 S-301 SECTION 3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 1/S-301



11 S-301 SECTION 3/4" = 1'-0"



12 S-301 SECTION 3/4" = 1'-0"

1/32" = 1'-0" 0' 16' 32' 48'
1/16" = 1'-0" 0' 4' 8' 16' 24'
3/32" = 1'-0" 0' 4' 8' 16'
1/8" = 1'-0" 0' 4' 8' 12'
1/4" = 1'-0" 0' 2' 4' 6'
3/8" = 1'-0" 0' 1' 2' 3' 4'
1/2" = 1'-0" 0' 6" 1' 2' 3'
3/4" = 1'-0" 0' 6" 1' 2'
1" = 1'-0" 0' 3" 6" 9" 1' 1.5'
1 1/2" = 1'-0" 0' 3" 6" 9" 1'
3" = 1'-0" 0' 1" 2" 3" 4" 5" 6'
6" = 1'-0" 0' 1" 2" 3"
12" = 1'-0" 0' 1" 1.5"

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A1	07.17.2025	ADDENDUM NO. 1	SMF	

DATE	06.24.2025
PROJECT	23238-00
DESIGNED	JLJ
DRAWN	SEC
CHECKED	DWS

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Chesapeake, Virginia 23320
(757)622-2828

NOT FOR CONSTRUCTION
07.10.2025
PROGRESS SET

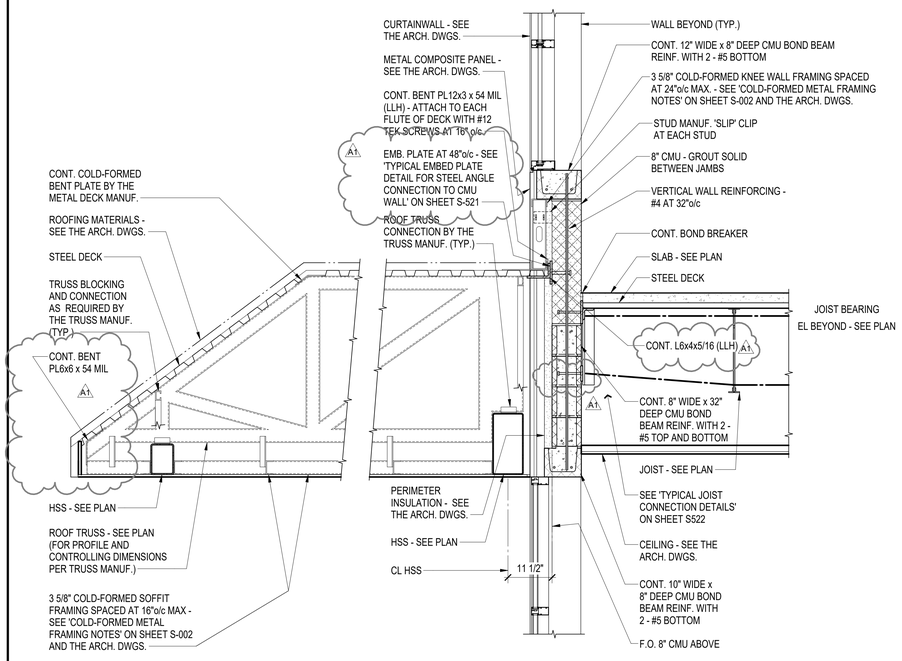
PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
FB: 1888-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

DRAWING
FOUNDATION SECTIONS

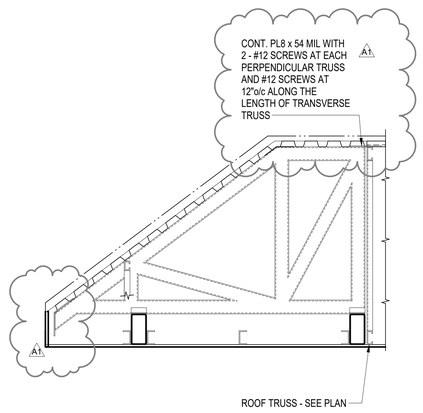
SHEET
S-301

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1317 EXECUTIVE BLVD, SUITE 200
CHESAPEAKE, VIRGINIA 23320
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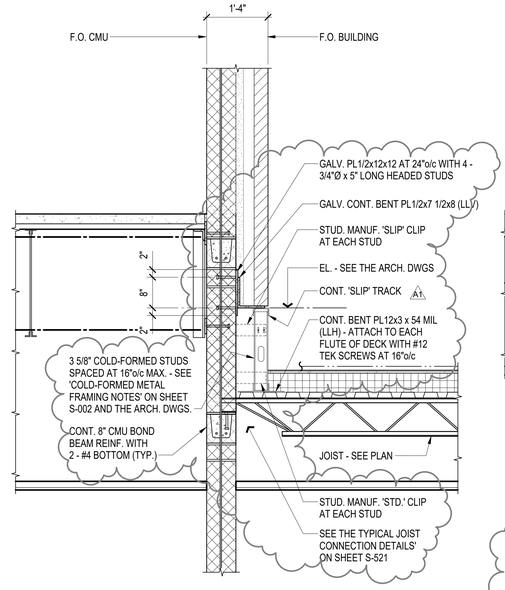


1 S-312 SECTION
3/4" = 1'-0"



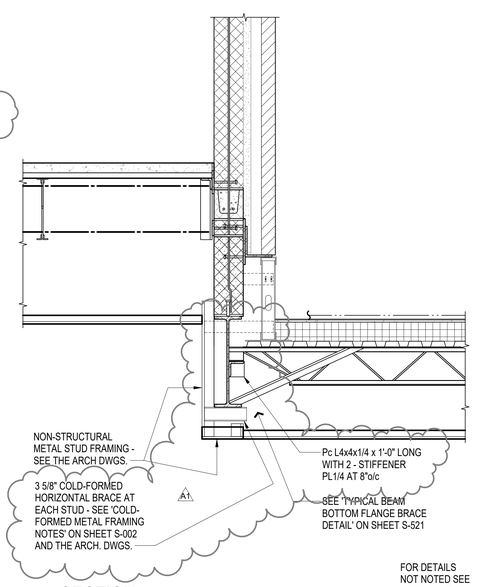
2 S-312 SECTION
3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 1/S-312



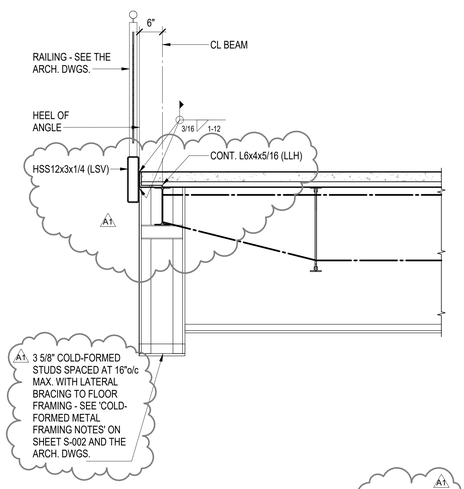
3 S-312 SECTION
3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 1/S-312



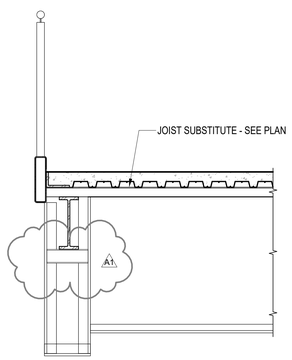
4 S-312 SECTION
3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 3/S-312



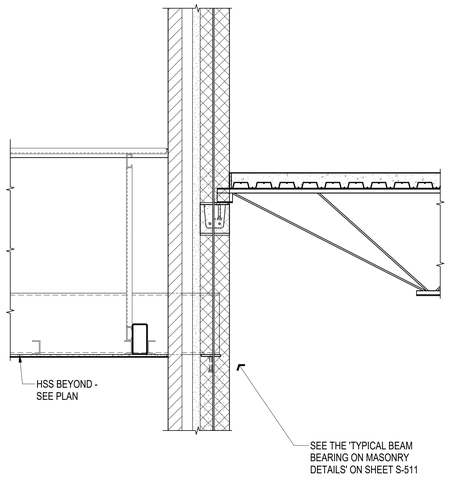
5 S-312 SECTION
3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTIONS 1/S-312 AND 4/S-312



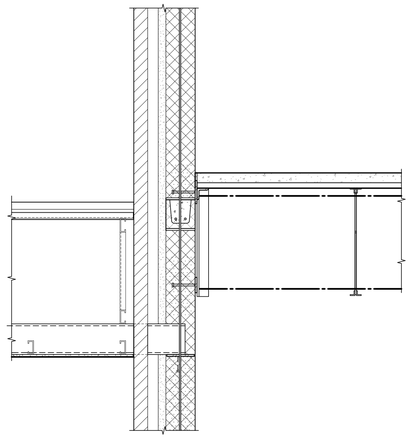
6 S-312 SECTION
3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 5/S-312



7 S-312 SECTION
3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 1/S-312



8 S-312 SECTION
3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 7/S-312

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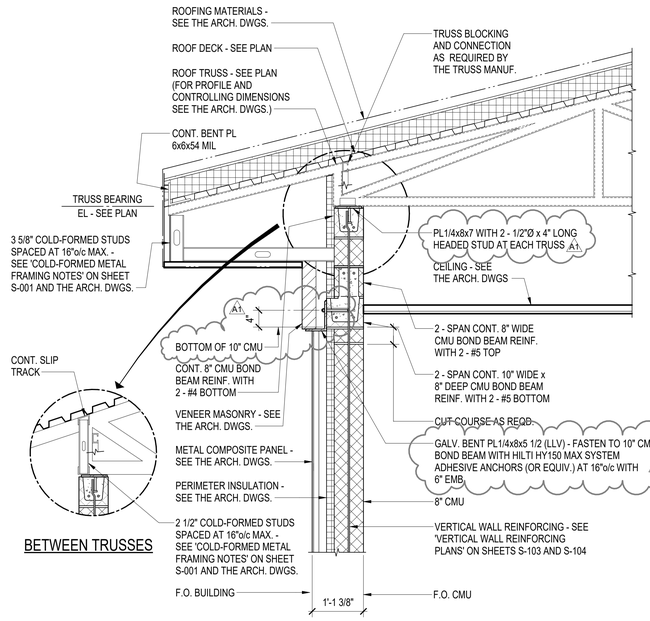
NOT FOR CONSTRUCTION
07.10.2025
PROGRESS SET

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD,
SUFFOLK, VIRGINIA
IFB: 1688-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

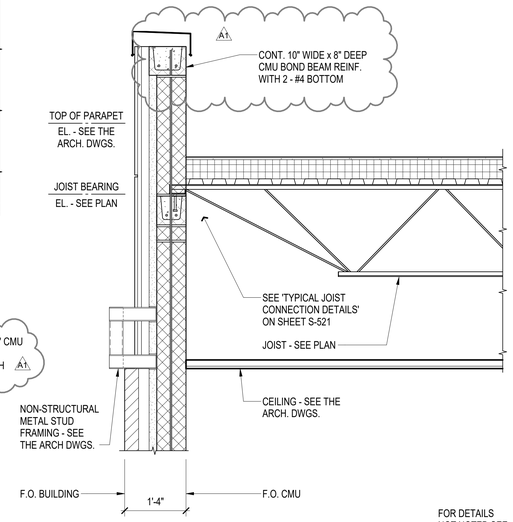
DRAWING
FRAMING SECTIONS

SHEET
S-312

7/16/2025 5:54:40 PM Autodesk Docs://23238-00 SPS Northern Shores ES/arch24_145_Northern Shores ES_STRUCT_v24.rvt

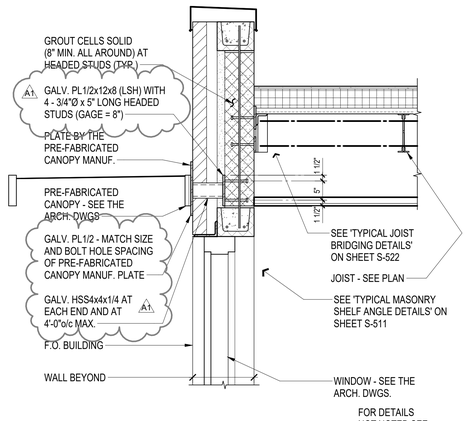


1 S-321 SECTION
3/4" = 1'-0"



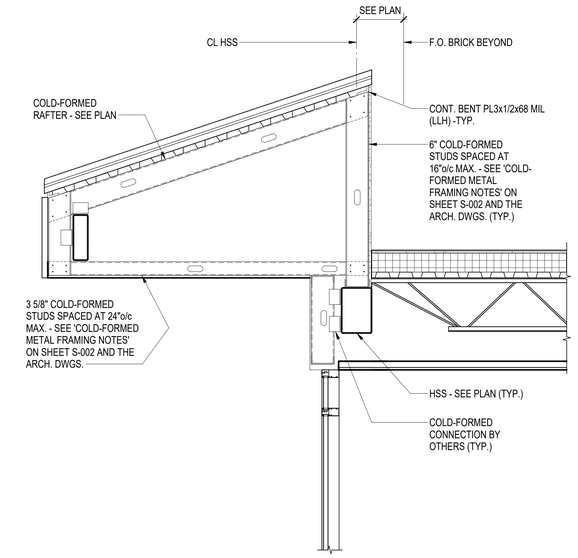
2 S-321 SECTION
3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 1/S-321



3 S-321 SECTION
3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 2/S-321



4 S-321 SECTION
3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 1/S-321

5 S-321 SECTION
3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 1/S-321

6 S-321 SECTION
3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 5/S-321

7 S-321 SECTION
3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 6/S-321

8 S-321 SECTION
3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 3/S-321

9 S-321 SECTION
3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 3/S-321

10 S-321 SECTION
3/4" = 1'-0"

THE INFORMATION REGARDING THE EXISTING CONSTRUCTION WAS OBTAINED FROM THE RECORD DRAWINGS PREPARED BY THE MOSELEY McCLINTOCK GROUP DATED AUGUST 11, 1995 AND BY FIELD INVESTIGATION. ALL INFORMATION SPECIFYING EXISTING CONDITIONS MUST BE VERIFIED BY THE GENERAL CONTRACTOR. THE AFOREMENTIONED DRAWINGS WILL BE MADE AVAILABLE TO THE CONTRACTOR UPON REQUEST.

MARK	DATE	REVISIONS
A1	07.17.2025	ADDENDUM NO. 1
	SMF	BY
		DESCRIPTION

DATE	06.24.2025
PROJECT	23238-00
DESIGNED	JLJ
DRAWN	SEC
CHECKED	DWS

RRMM ARCHITECTS, PC
1317 Executive Blvd, Suite 200
Chesapeake, Virginia 23320
(757)622-2828

NOT FOR CONSTRUCTION
07.10.2025
PROGRESS SET

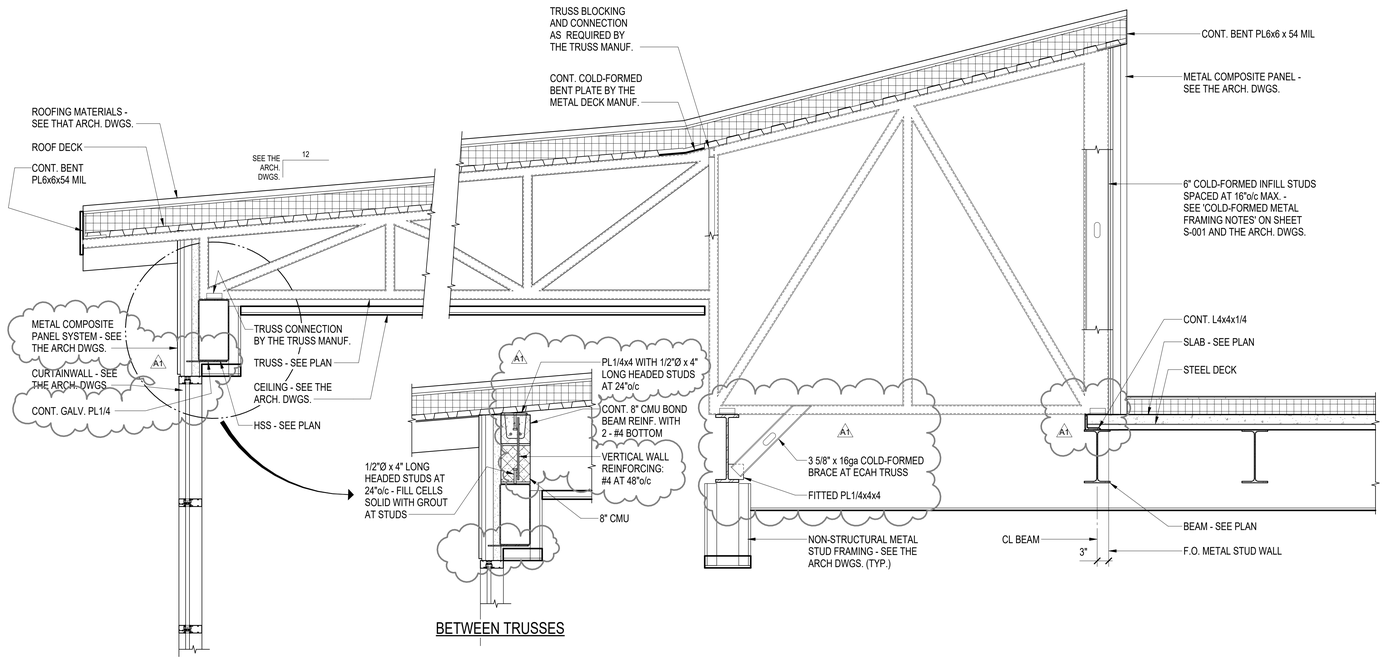
PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 1869-B
VIRGINIA DEPARTMENT OF EDUCATION : 127-32-00-101

DRAWING
FRAMING SECTIONS

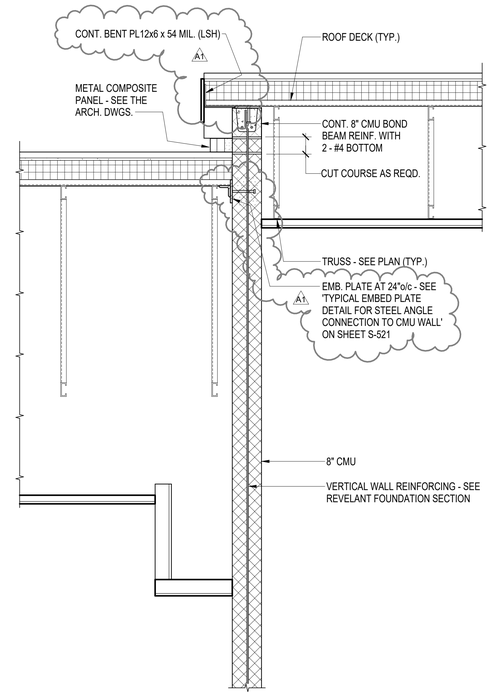
SHEET
S-321

SPEIGHT-MARSHALL-FRANCIS
STRUCTURAL ENGINEERS
5241 HOLLY POINT PARKWAY, SUITE 200
VIRGINIA BEACH, VIRGINIA 23454
P: 757.427.1020
2621 SKIPWORTH PARKWAY SUITE 300
RICHMOND, VIRGINIA 23294
P: 804.464.4117
WWW.SMANDF.COM

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7/16/2025 5:54:42 PM

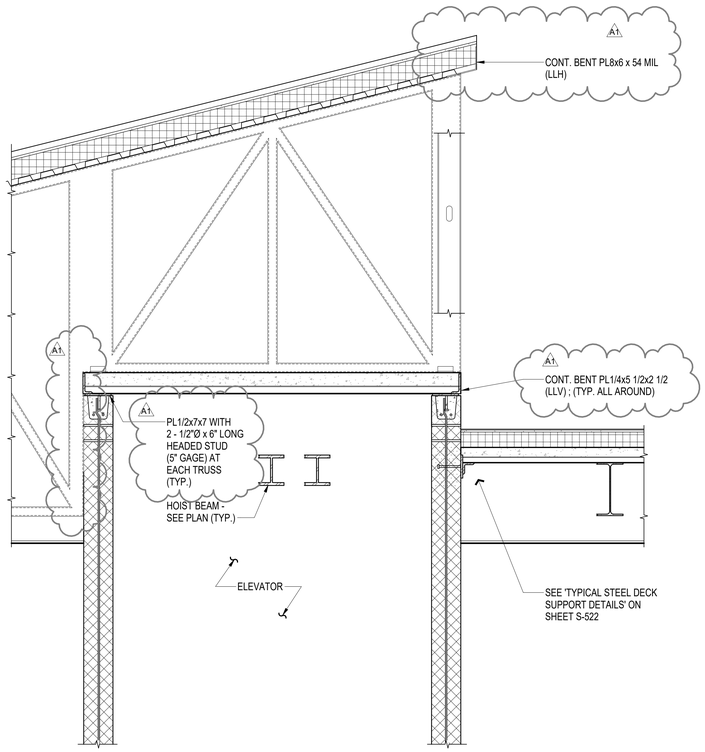


1 S-322 **SECTION**
3/4" = 1'-0"



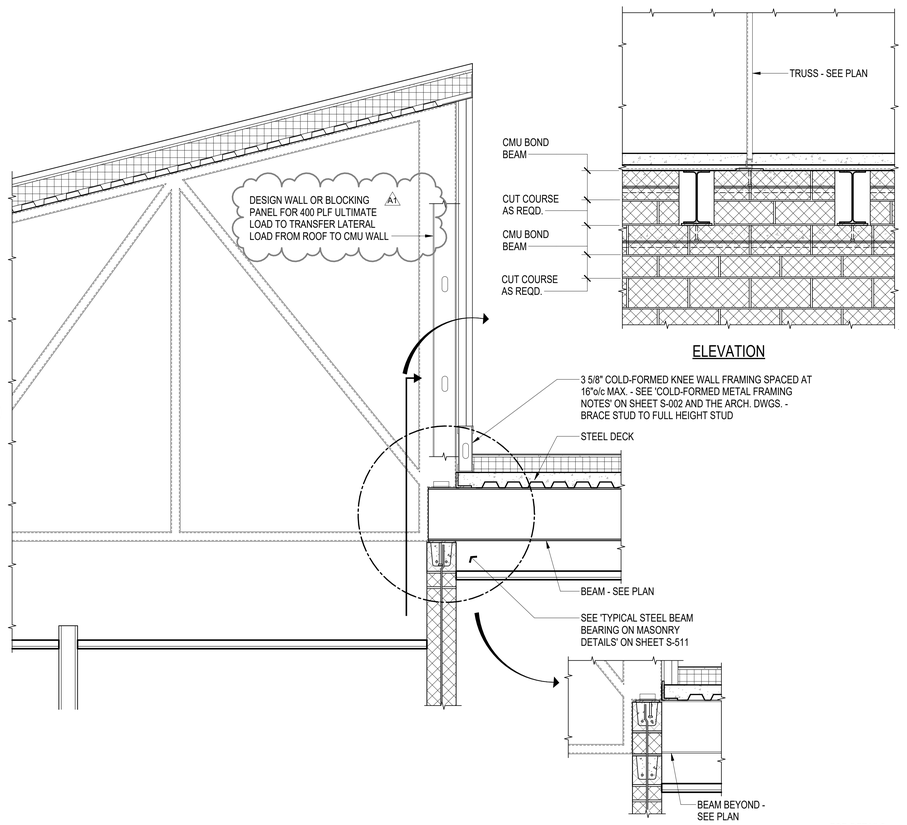
2 S-322 **SECTION**
3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 1/S-322



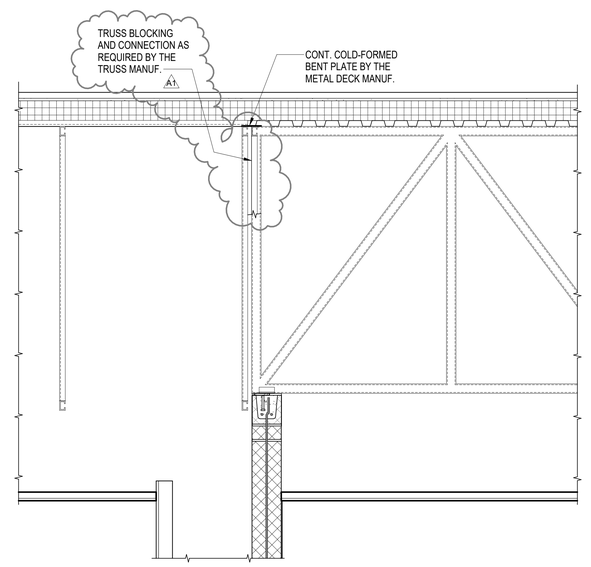
3 S-322 **SECTION**
3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 1/S-322



4 S-322 **SECTION**
3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 3/S-322



5 S-322 **SECTION**
3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTIONS 2/S-322 AND 3/S-322

THE INFORMATION REGARDING THE EXISTING CONSTRUCTION WAS OBTAINED FROM THE RECORD DRAWINGS PREPARED BY THE MOSELEY McCLINTOCK GROUP DATED AUGUST 11, 1995 AND BY FIELD INVESTIGATION. ALL INFORMATION SPECIFYING EXISTING CONDITIONS MUST BE VERIFIED BY THE GENERAL CONTRACTOR. THE AFOREMENTIONED DRAWINGS WILL BE MADE AVAILABLE TO THE CONTRACTOR UPON REQUEST.

SPEIGHT·MARSHALL·FRANCIS
STRUCTURAL ENGINEERS
1228 PERMETER PARKWAY, SUITE 201
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P: 757.422.0100
3821 SWORDCO PARKWAY SUITE 300
RICHMOND, VIRGINIA 23234
P: 804.454.4111
WWW.SMANDF.COM

MARK	DATE	REVISIONS
A1	07.17.2025	ADDENDUM NO. 1
	SMF	BY
		DESCRIPTION

DATE	06.24.2025
PROJECT	23238-00
DESIGNED	JLJ
DRAWN	SEC
CHECKED	DWS

RRMM®
ARCHITECTS, PC
1317 Executive Blvd, Suite 200
Chesapeake, Virginia 23320
(757)622-2828

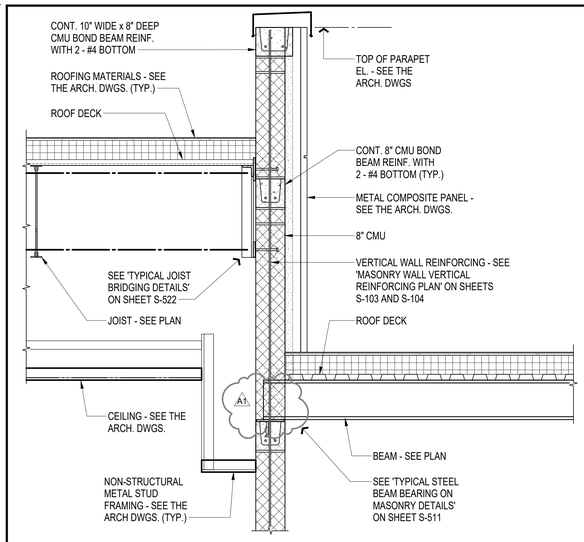
NOT FOR CONSTRUCTION
07.10.2025
PROGRESS SET

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 189-8
VIRGINIA DEPARTMENT OF EDUCATION : 127-32-00-101

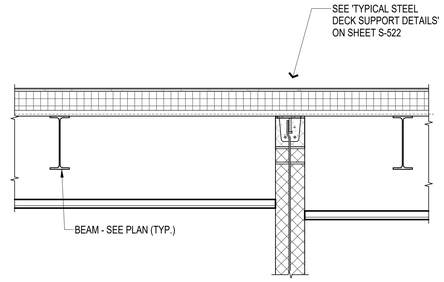
DRAWING
FRAMING SECTIONS

SHEET
S-322

Autodesk Docs://23238-00 SPS Northern Shores ES\smf24.145_Northern Shores ES_STRUCT_v24.rvt
7/16/2025 5:54:43 PM

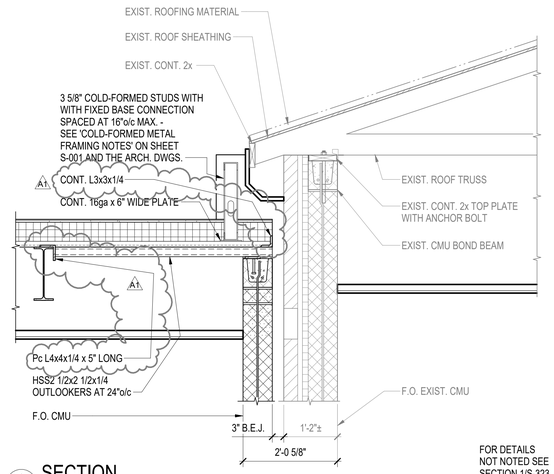


1 S-323 **SECTION** 3/4" = 1'-0"



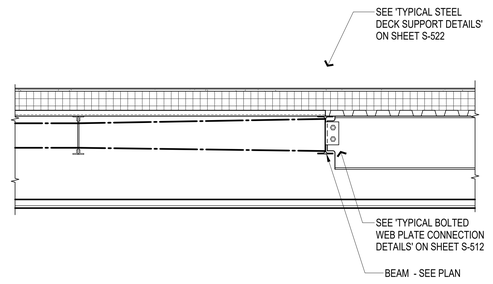
2 S-323 **SECTION** 3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 1/S-323



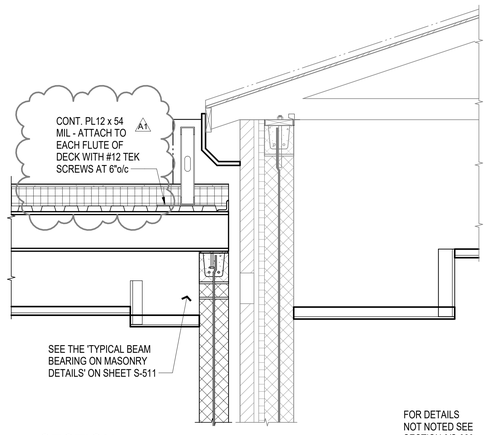
3 S-323 **SECTION** 3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 1/S-323



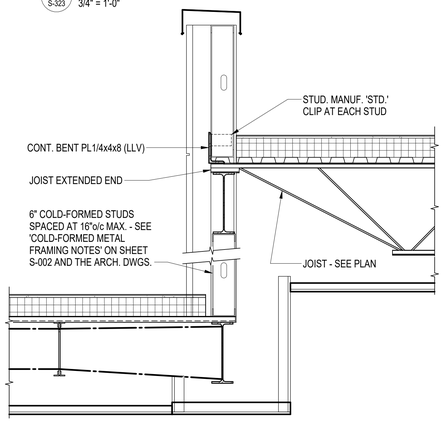
4 S-323 **SECTION** 3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 1/S-323



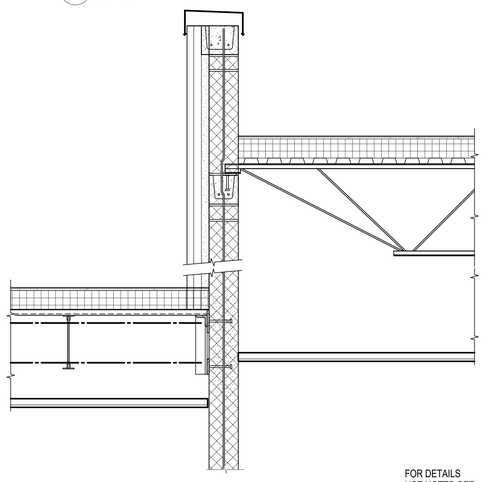
5 S-323 **SECTION** 3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 3/S-323



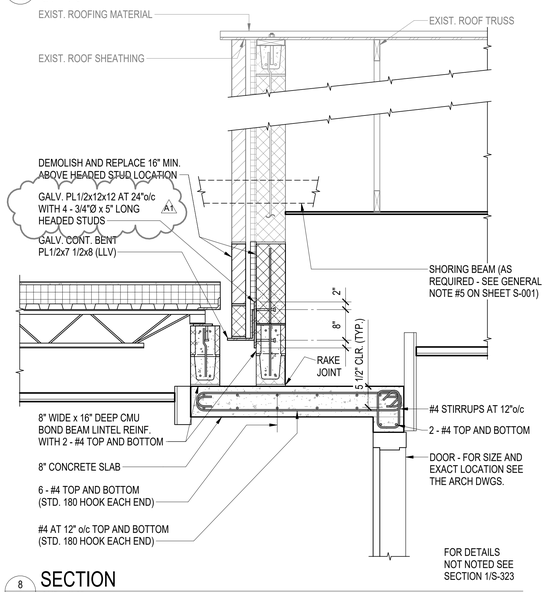
6 S-323 **SECTION** 3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 2/S-323



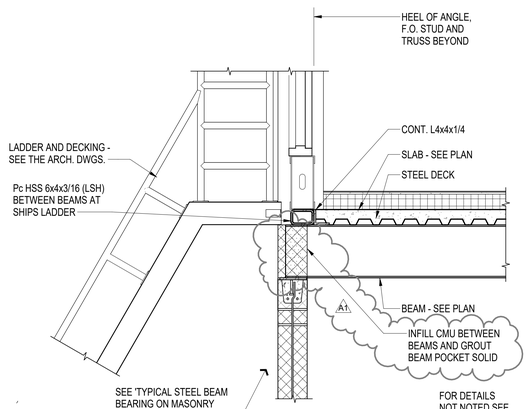
7 S-323 **SECTION** 3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 6/S-323



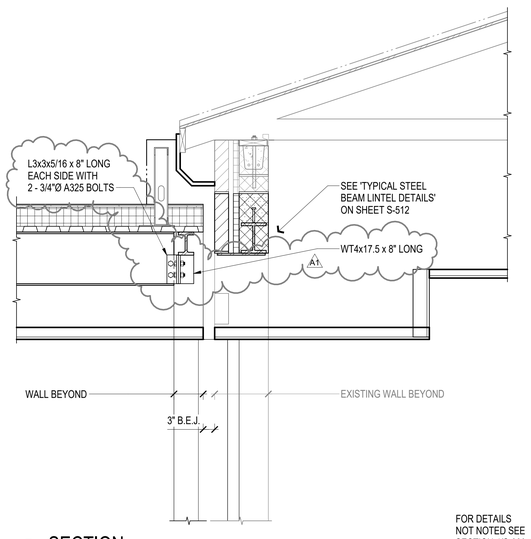
8 S-323 **SECTION** 3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 1/S-323



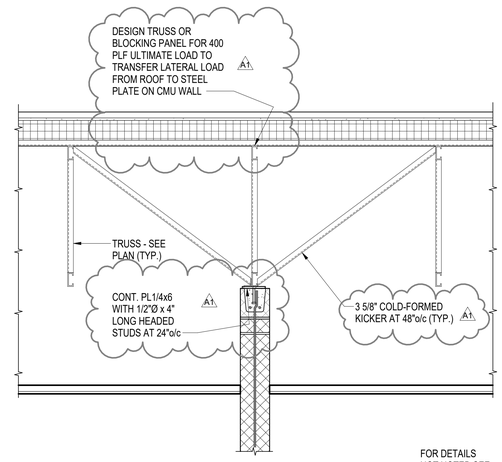
9 S-323 **SECTION** 3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 1/S-323



10 S-323 **SECTION** 3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 4/S-323



11 S-323 **SECTION** 3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 1/S-323

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SPEIGHT-MARSHALL-FRANCIS
STRUCTURAL ENGINEERS
7229 PERMETER PARKWAY, SUITE 201
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P. 757.427.0100
3521 ENTERPRISE PARKWAY, SUITE 200
RICHMOND, VIRGINIA 23294
P. 804.464.4111
WWW.SMANDF.COM

ADDENDUM NO.	DESCRIPTION
A1	ADDENDUM NO. 1
07.17.2025	
SMF	

MARK DATE BY REVISIONS

DATE	06.24.2025
PROJECT	23238-00
DESIGNED	JLJ
DRAWN	SEC
CHECKED	DWS

RRMM®
ARCHITECTS, PC
1317 Executive Blvd, Suite 200
Chesapeake, Virginia 23320
(757)622-2828

NOT FOR CONSTRUCTION
07.10.2025
PROGRESS SET

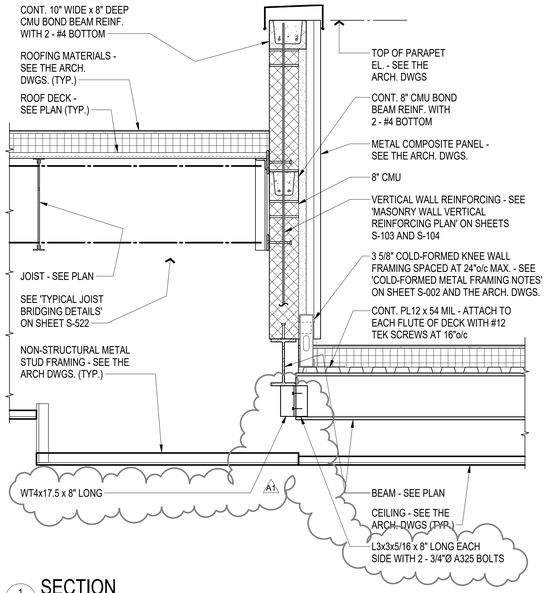
PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 1889-B
VIRGINIA DEPARTMENT OF EDUCATION - 127-32-00-101

DRAWING
FRAMING SECTIONS

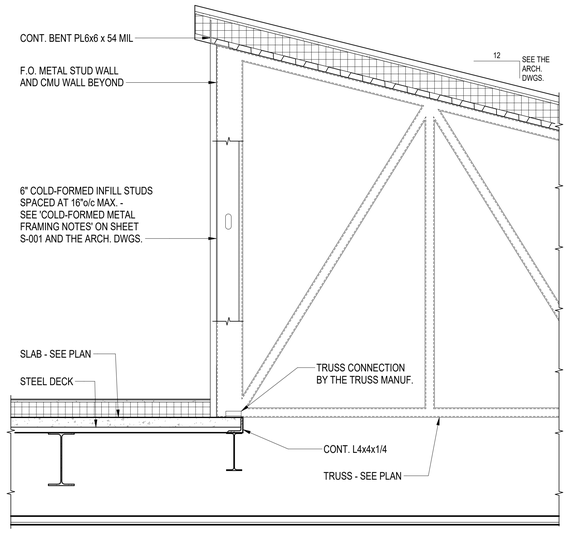
SHEET
S-323

1/32" = 1'-0" 0' 16' 32' 48'
1/16" = 1'-0" 0' 4' 8' 16' 24'
3/32" = 1'-0" 0' 4' 8' 16'
1/8" = 1'-0" 0' 4' 8' 12'
1/4" = 1'-0" 0' 2' 4' 6'
3/8" = 1'-0" 0' 1' 2' 3' 4'
1/2" = 1'-0" 0' 6" 1' 2' 3'
3/4" = 1'-0" 0' 6" 1' 2'
1" = 1'-0" 0' 3" 6" 9" 1' 1.5'
1 1/2" = 1'-0" 0' 3" 6" 9" 1'
3" = 1'-0" 0' 1" 2" 3" 4" 5" 6"
6" = 1'-0" 0' 1" 2" 3"
12" = 1'-0" 0' 1" 1.5"

7/16/2025 5:54:45 PM Autodesk Docs://23238-00 SPS Northern Shores ES\sm\24.145_Northern Shores ES_STRUCT_v24.rvt

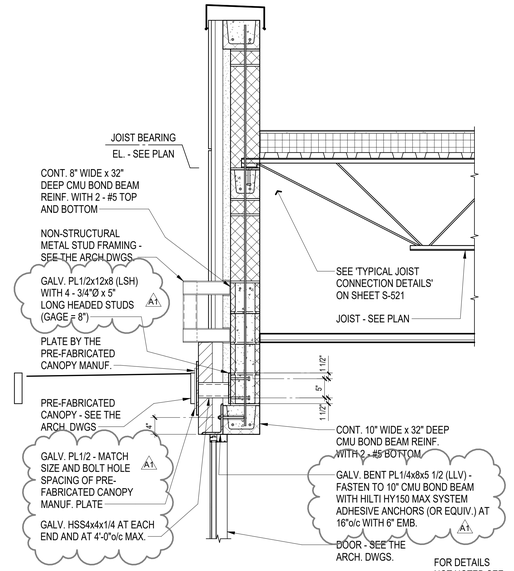


1 S-324 **SECTION**
3/4" = 1'-0"



2 S-324 **SECTION**
3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 1/S-324



3 S-324 **SECTION**
3/4" = 1'-0"

FOR DETAILS NOT NOTED SEE SECTION 1/S-324

MARK	DATE	REVISIONS	BY
A1	07.17.2025	ADDENDUM NO. 1	SMF

DATE	06.24.2025
PROJECT	23238-00
DESIGNED	JLJ
DRAWN	SEC
CHECKED	DWS

RRMM®
ARCHITECTS, PC
1317 Executive Blvd, Suite 200
Chesapeake, Virginia 23320
(757)622-2828

NOT FOR CONSTRUCTION
07.10.2025
PROGRESS SET

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD,
SUFFOLK, VIRGINIA
IFB: 1888-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-332-00-101

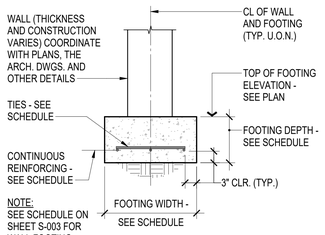
DRAWING
FRAMING SECTIONS

SHEET
S-324

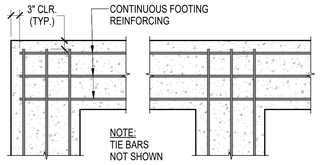
SPEIGHT·MARSHALL·FRANCIS
STRUCTURAL ENGINEERS
1226 PERIMETER PARKWAY, SUITE 201
VIRGINIA BEACH, VIRGINIA 23454
P: 757.490.1111
701 GAYWOOD PARKWAY, SUITE 200
RICHMOND, VIRGINIA 23294
P: 804.464.4111
WWW.SMANDF.COM

1/32" = 1'-0" 0' 16" 32" 48"
1/16" = 1'-0" 0' 4' 8' 16' 24'
3/32" = 1'-0" 0' 4' 8' 16'
1/8" = 1'-0" 0' 4' 8' 12'
1/4" = 1'-0" 0' 2' 4' 6'
3/8" = 1'-0" 0' 1' 2' 3' 4'
1/2" = 1'-0" 0' 6" 1' 2' 3'
3/4" = 1'-0" 0' 6" 1' 2'
1" = 1'-0" 0' 3" 6" 9" 1' 1.5'
1 1/2" = 1'-0" 0' 3" 6" 9" 1'
3" = 1'-0" 0' 1" 2" 3" 4" 5" 6"
6" = 1'-0" 0' 1" 2" 3"
12" = 1'-0" 0' 1" 1.5"

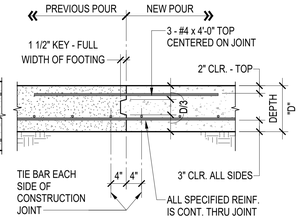
7/16/2025 5:54:46 PM Autodesk Docs://23238-00 SPS Northern Shores ES/arch24 145_Northern Shores ES_STRUCT_v24-rvt



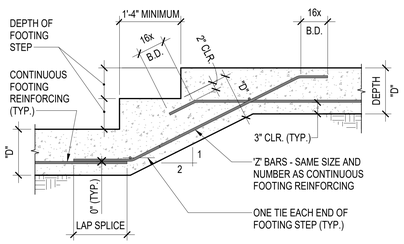
TYPICAL SECTION



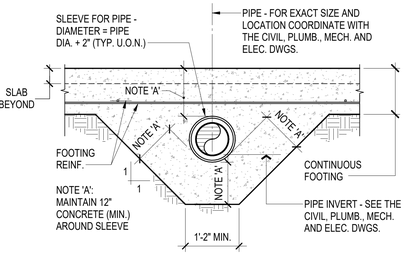
CORNERS AND INTERSECTIONS



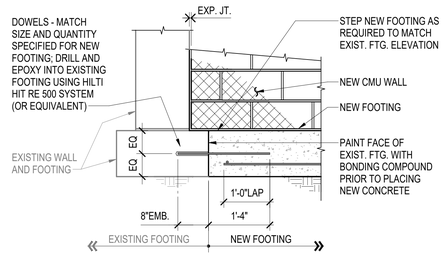
CONSTRUCTION JOINT



STEPPED FOOTING (BOTTOM STEEL ONLY)



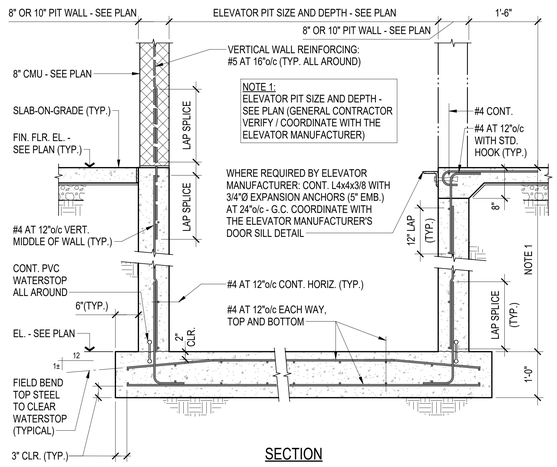
PIPE SLEEVE UNDER CONTINUOUS FOOTING



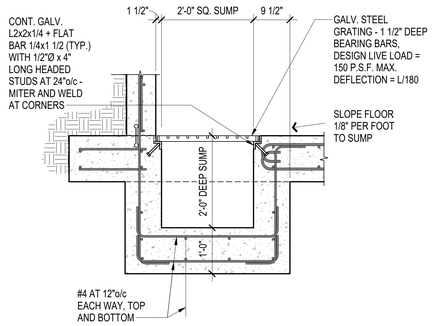
INTERSECTION OF NEW AND EXISTING FOOTINGS

TYPICAL WALL FOOTING DETAILS

NOT TO SCALE



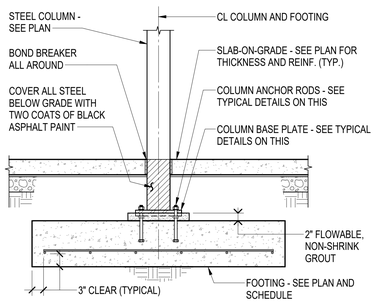
SECTION



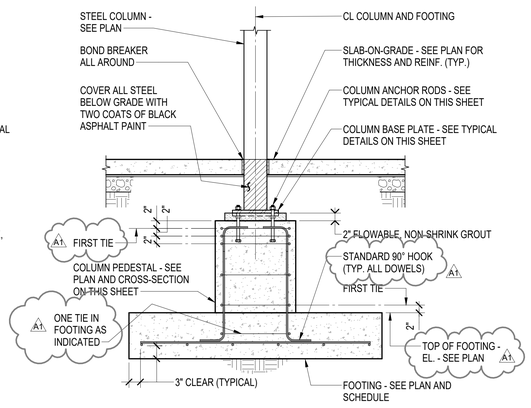
SUMP PIT

TYPICAL ELEVATOR PIT DETAILS

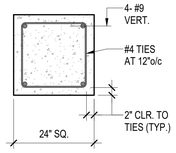
NOT TO SCALE



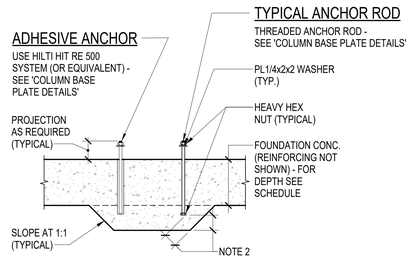
TYPICAL SECTION



AT PEDESTALS



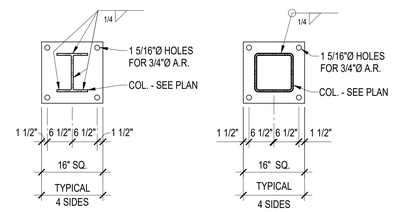
CROSS SECTION



COLUMN ANCHOR ROD DETAILS NOTES:

1. EMBEDMENT - SEE COLUMN BASE PLATE DETAILS
2. DEEPEN CONCRETE AS INDICATED AT ANCHOR RODS TO PROVIDE 3" MINIMUM COVERAGE

COLUMN ANCHOR ROD



COLUMN BASE PLATES

TYPICAL STEEL COLUMN AND FOOTING DETAILS

NOT TO SCALE

MARK	DATE	REVISIONS
A1	07.17.2025	ADDENDUM NO. 1
SMF		BY
		DESCRIPTION

DATE	06.24.2025
PROJECT	23238-00
DESIGNED	JLJ
DRAWN	SEC
CHECKED	DWS

RRMM ARCHITECTS, PC
1317 Executive Blvd, Suite 200
Chesapeake, Virginia 23320
(757)622-2828

NOT FOR CONSTRUCTION
07.10.2025
PROGRESS SET

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD,
SUFFOLK, VIRGINIA
IFB: 1888-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

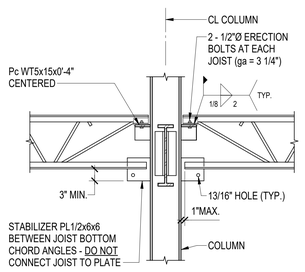
DRAWING
TYPICAL DETAILS

SHEET
S-501

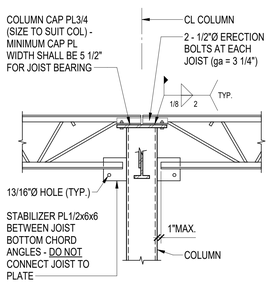
THE INFORMATION REGARDING THE EXISTING CONSTRUCTION WAS OBTAINED FROM THE RECORD DRAWINGS PREPARED BY THE MOSELEY McCLINTOCK GROUP DATED AUGUST 11, 1995 AND BY FIELD INVESTIGATION. ALL INFORMATION SPECIFYING EXISTING CONDITIONS MUST BE VERIFIED BY THE GENERAL CONTRACTOR. THE AFOREMENTIONED DRAWINGS WILL BE MADE AVAILABLE TO THE CONTRACTOR UPON REQUEST.

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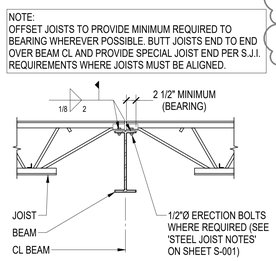
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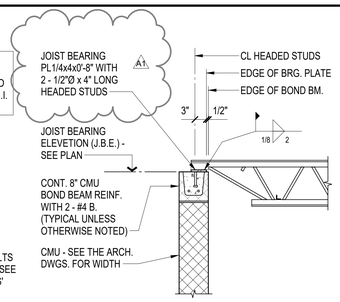
'K' SERIES FLOOR JOIST TO W-SHAPE COLUMN FLANGE (TWO SIDES)



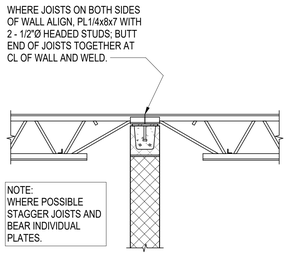
'K' SERIES ROOF JOIST TO HSS SHAPE COLUMN (TWO SIDES)



'K' SERIES JOIST TO BEAM



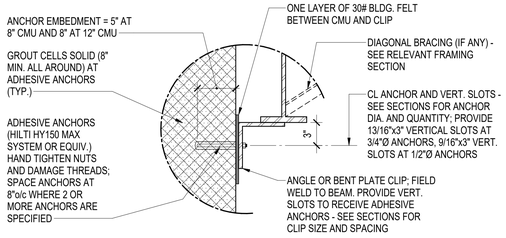
'K' SERIES JOIST BEARING ON CMU WALL (ONE SIDE)



'K' SERIES JOIST BEARING ON CMU WALL (TWO SIDES)

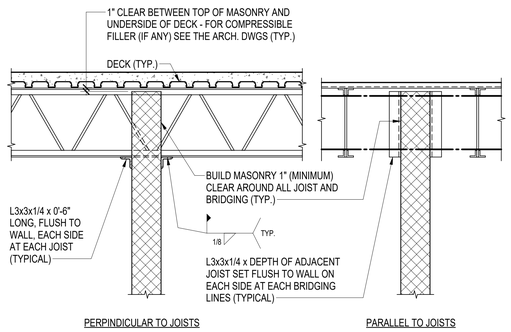
TYPICAL JOIST CONNECTION DETAILS

NOT TO SCALE

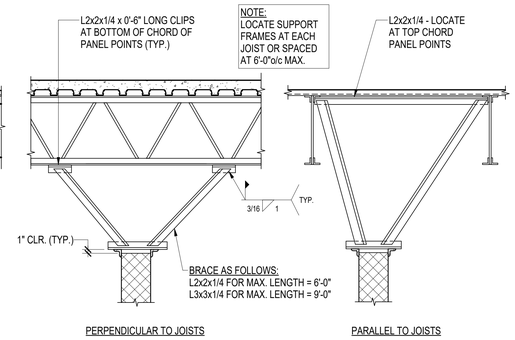


TYPICAL NON-BEARING MASONRY WALL BRACING SLIP CONNECTION DETAIL

NOT TO SCALE



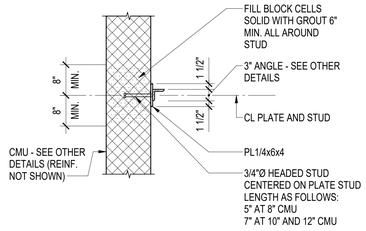
PARTITIONS TO UNDERSIDE OF DECK



PARTITIONS STOPPING BELOW JOISTS

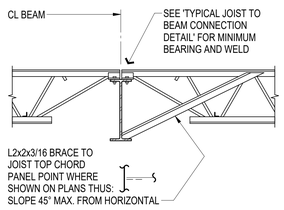
TYPICAL NON-BEARING MASONRY PARTITION DETAILS

NOT TO SCALE



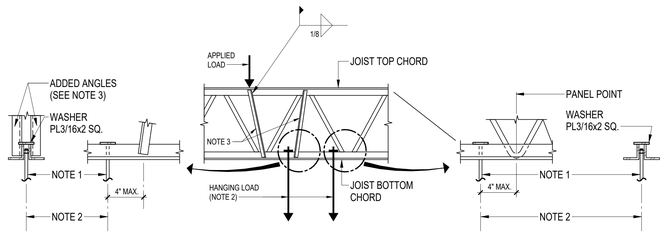
TYPICAL EMBED PLATE DETAIL FOR STEEL ANGLE CONNECTION TO CMU WALL

NOT TO SCALE



TYPICAL BEAM BOTTOM FLANGE BRACE DETAIL

NOT TO SCALE



BETWEEN PANEL POINTS

AT PANEL POINTS

TYPICAL DETAIL AT CONCENTRATED LOADS ON JOISTS NOTES:

1. HANGER RODS - SEE THE ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS.
2. POSITION HANGER RODS ON JOIST CENTERLINE BETWEEN BOTTOM CHORD ANGLES. "C" CLAMP CONNECTIONS ARE NOT ALLOWED.
3. WHERE CONCENTRATED LOADS ARE APPLIED TO TOP CHORDS OR HUNG FROM BOTTOM CHORDS BETWEEN PANEL POINTS REINFORCE EXISTING JOIST WITH DOUBLE ANGLES AS INDICATED. AT "K" SERIES PROVIDE DBL. L1x1x1/8.

TYPICAL DETAIL AT CONCENTRATED LOADS ON JOISTS

NOT TO SCALE

(NOTE: THIS DETAIL IS FOR ALL LOADS WHICH EXCEED 100 POUNDS)

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PROJECT	23238-00
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1317 Executive Blvd, Suite 200
Chesapeake, Virginia 23320
(757)622-2828

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07.10.2025
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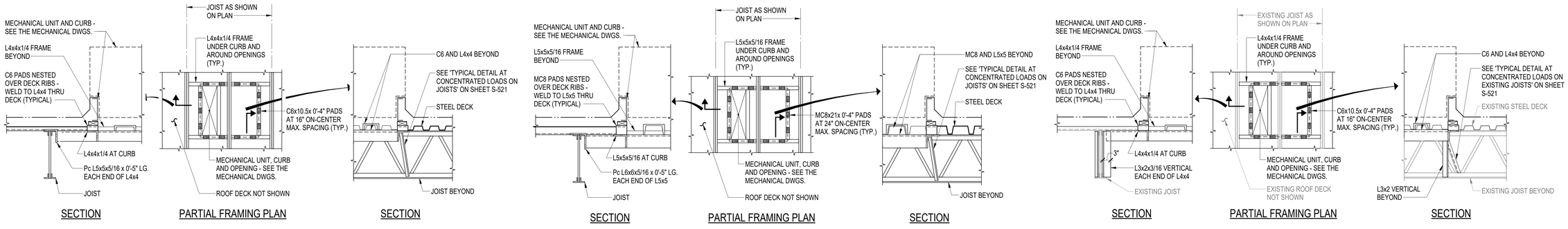
PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
FB: 1889-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

DRAWING
TYPICAL DETAILS

SHEET
S-521

SPEIGHT·MARSHALL·FRANCIS
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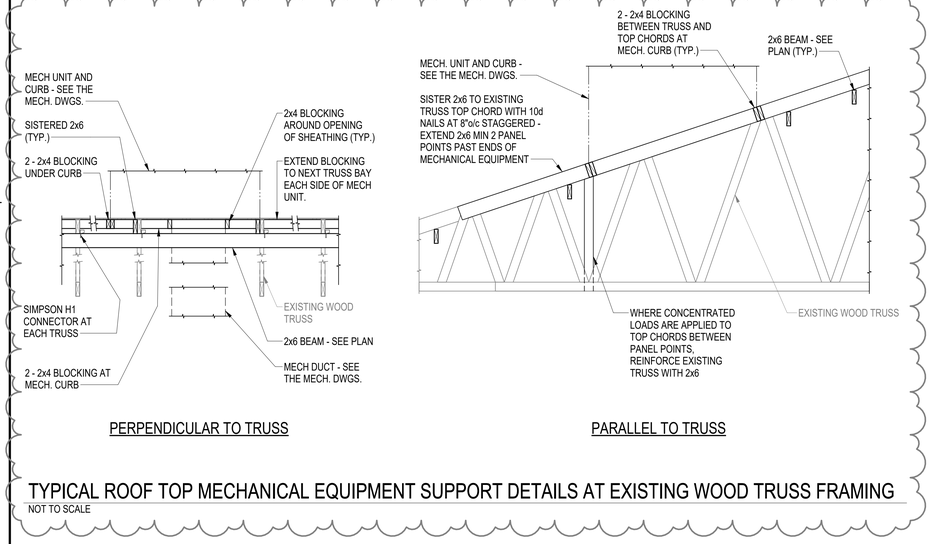


TYPICAL ROOF TOP MECHANICAL UNIT SUPPORT DETAILS AT STEEL JOIST FRAMING

NOT TO SCALE

TYPICAL ROOFTOP MECHANICAL UNIT SUPPORT DETAIL AT EXISTING STEEL JOIST FRAMING

NOT TO SCALE



TYPICAL ROOF TOP MECHANICAL EQUIPMENT SUPPORT DETAILS AT EXISTING WOOD TRUSS FRAMING

NOT TO SCALE

MARK	DATE	REVISIONS
A1	07.17.2025	ADDENDUM NO. 1
	SMF	BY
		DESCRIPTION

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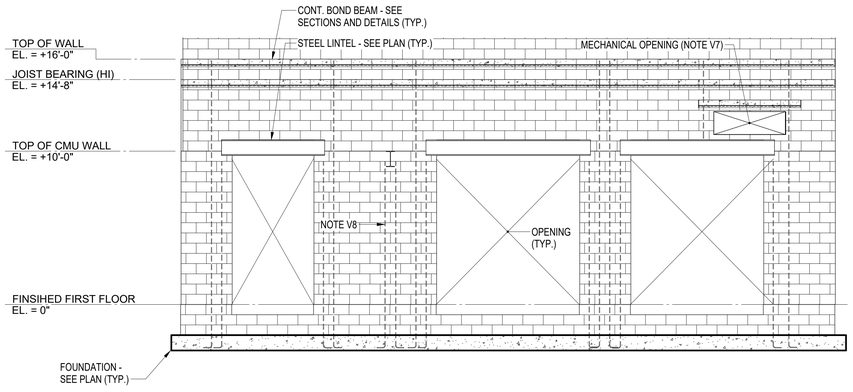
PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 1889-B
VIRGINIA DEPARTMENT OF EDUCATION - 127-32-00-101

DRAWING
TYPICAL DETAILS

SHEET
S-523

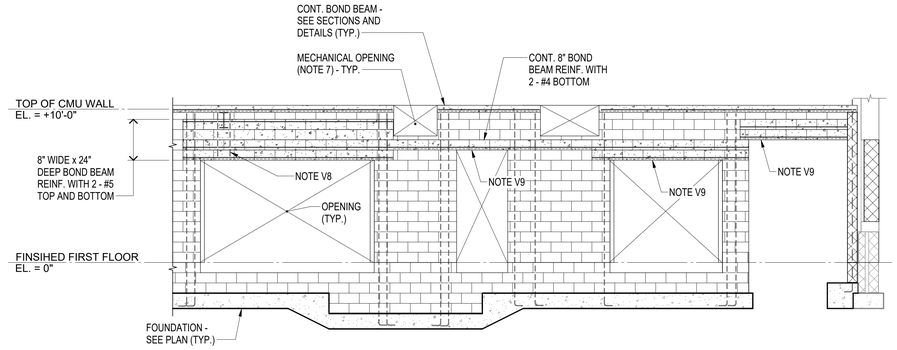
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7229 FORWATER PARKWAY, SUITE 201
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3521 EMERYWOOD PARKWAY SUITE 200
RICHMOND, VIRGINIA 23294
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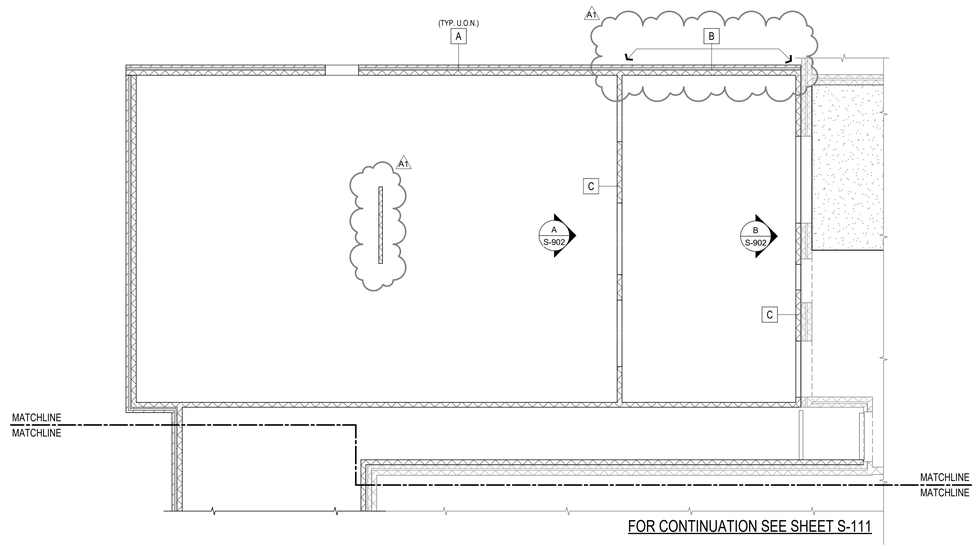
A S-902 VERTICAL WALL REINFORCING ELEVATION - AREA B (ADDITIVE ALTERNATIVE NO.1)

1/4" = 1'-0" (FOR PLAN NOTES AND LEGEND SEE SHEET S-003)



B S-902 VERTICAL WALL REINFORCING ELEVATION - AREA B (ADDITIVE ALTERNATIVE NO.1)

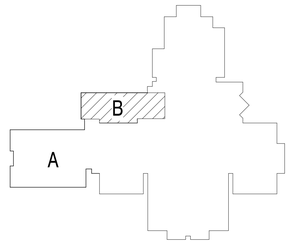
1/4" = 1'-0" (FOR PLAN NOTES AND LEGEND SEE SHEET S-003)



VERTICAL WALL REINFORCING PLAN - AREA B (ADDITIVE ALTERNATE NO.1)

1/8" = 1'-0" (FOR PLAN NOTES AND LEGEND SEE SHEET S-003)

PLAN NORTH



KEY PLAN - AREA B

NOT TO SCALE

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RICHMOND, VIRGINIA 23294
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MARK	DATE	DESCRIPTION
A1	07.17.2025	ADDENDUM NO. 1
	SMF	

DATE	06.24.2025
PROJECT	23238-00
DESIGNED	JLJ
DRAWN	SEC
CHECKED	DWS

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Chesapeake, Virginia 23320
(757)622-2828

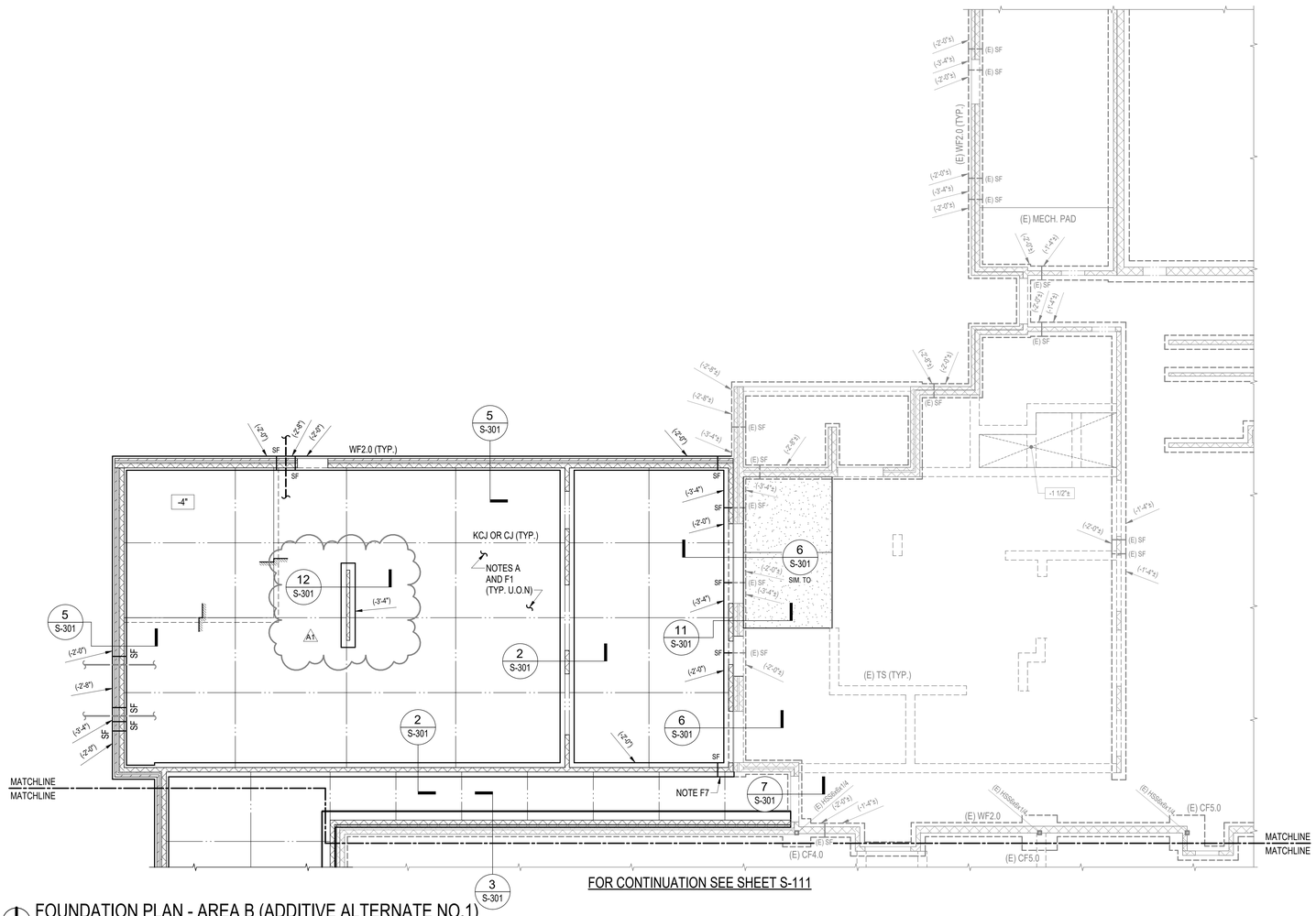
NOT FOR CONSTRUCTION
07.10.2025
PROGRESS SET

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD,
SUFFOLK, VIRGINIA
IFB: 1688-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-332-00-101

DRAWING
VERTICAL WALL REINFORCING PLAN - AREA B
ADDITIVE ALTERNATE NO. 1

SHEET
S-902

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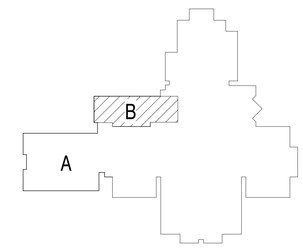
FOR CONTINUATION SEE SHEET S-111

FOUNDATION PLAN - AREA B (ADDITIVE ALTERNATE NO.1)

1/8" = 1'-0"

(FOR PLAN NOTES AND LEGEND SEE SHEET S-003)

PLAN NORTH



KEY PLAN - AREA B

NOT TO SCALE

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RICHMOND, VIRGINIA 23294
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MARK	DATE	BY	DESCRIPTION
A1	07.17.2025	SMF	ADDENDUM NO. 1

DATE	06.24.2025
PROJECT	23238-00
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NOT FOR CONSTRUCTION
07.10.2025
PROGRESS SET

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
FB: 1889-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-300-101

DRAWING
FOUNDATION PLAN - AREA B
ADDITIVE ALTERNATE NO. 1

SHEET
S-911

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1/32" = 1'-0" | 1/16" = 1'-0" | 3/32" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0" | 12" = 1'-0"

PLUMBING FIXTURE SCHEDULE (1)

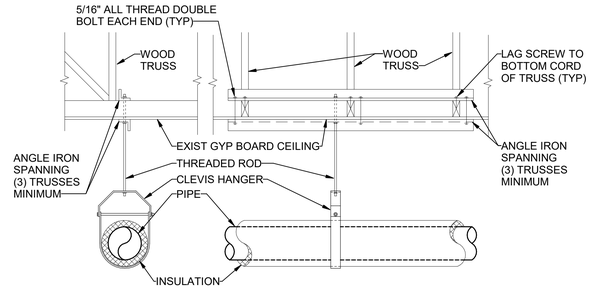
MARK	FIXTURE	MANUFACTURER	MODEL NUMBER	MATERIAL	SIZE	MOUNTING HEIGHT	SUPPLY & DRAIN FITTING	SUPPLY STOPS	TRAP	PIPE ROUGH-IN SIZES W	V	HW	CW	REMARKS
P-1	WATER CLOSET	KOHLER	K-96053	VITREOUS CHINA	15-3/16" TO RIM	FLOOR MOUNTED	SLOAN 111-1.28	-	-	4"	2"	-	1"	(2) (4)
P-1A	WATER CLOSET (ADA)	KOHLER	K-96057	VITREOUS CHINA	16-5/8" TO RIM	FLOOR MOUNTED	SLOAN 111-1.28	-	-	4"	2"	-	1"	(2) (4)
A1 P-2	LAVATORY SYSTEM (ADA)	BRADLEY	TLX-3-T	SOLID SURFACE	85-1/4" x 20-5/8"	31" TO RIM	FAUCET: 420-T45E39VPABCP DRAIN: 155WC	LOOSE KEY	17 GAUGE W/ CLEANOUT	1-1/2"	2"	1/2"	1/2"	(3) (6) (15) (18) (19)
P-2A	LAVATORY (ADA)	KOHLER	K-2005	VITREOUS CHINA	21-1/4" x 18-1/8"	34" TO RIM	FAUCET: 420-T45E39VPABCP DRAIN: 155WC	LOOSE KEY	17 GAUGE W/ CLEANOUT	1-1/2"	2"	1/2"	1/2"	(3) (6) (15) (18)
P-3	URINAL	KOHLER	K-4991-ET	VITREOUS CHINA	-	15" TO LIP	SLOAN 186-.125	-	-	2"	2"	-	3/4"	(7)
P-3A	URINAL (ADA)	KOHLER	K-4991-ET	VITREOUS CHINA	-	15" TO LIP	SLOAN 186-.125	-	-	2"	2"	-	3/4"	(7)
P-4	MOP SINK	STERN WILLIAMS	SB-900	TERRAZZO	24" x 24" 12" DEEP	FLOOR MOUNTED	FAUCET: 445-PVBCP	INTEGRAL	DEEP SEAL	3"	2"	3/4"	3/4"	(14)
A1 P-5	ELECTRIC WATER COOLER BI-LEVEL (ADA)	ELKAY	EZOTL8WSSK	STAINLESS STEEL	-	-	-	WITH HANDLE	17 GAUGE W/ CLEANOUT	1-1/2"	2"	-	1/2"	(12) (13)
P-6	SINGLE BOWL SINK (ADA)	ELKAY	LRAD252250	STAINLESS STEEL	22" x 25" 5-1/2" DEEP	COUNTERTOP	FAUCET: 201-AGN8AE35VPABCP DRAIN: LK-39	LOOSE KEY	17 GAUGE W/ CLEANOUT	1-1/2"	2"	1/2"	1/2"	(11) (16) (17)
P-6A	CLASSROOM SINK (ADA)	ELKAY	DRKAD222050L	STAINLESS STEEL	22" x 19-1/2" 5" DEEP	COUNTERTOP	FAUCET: 201-AGN8AE35VPABCP DRAIN: LKADA35	LOOSE KEY	17 GAUGE W/ CLEANOUT	1-1/2"	2"	1/2"	1/2"	(5) (8) (10) (11) (16)
P-6B	CLASSROOM SINK (ADA)	ELKAY	DRKAD222050R	STAINLESS STEEL	22" x 19-1/2" 5" DEEP	COUNTERTOP	FAUCET: 201-AGN8AE35VPABCP DRAIN: LKADA35	LOOSE KEY	17 GAUGE W/ CLEANOUT	1-1/2"	2"	1/2"	1/2"	(5) (9) (10) (11) (16)

NOTES:

1. ALL FIXTURES TO BE LOW CONSUMPTION AND VANDAL-RESISTANT.
2. 1.28 GPF.
3. FAUCET BY CHICAGO, DRAIN BY MCGUIRE.
4. PROVIDE SEAT: K-4670-SC.
5. PROVIDE MV-3 AS SCHEDULED.
6. WITH 0.35 GPM VANDAL-PROOF AERATOR.
7. 0.125 GPF.
8. BUBBLER ON LEFT, FAUCET REAR OF SINK.
9. BUBBLER ON RIGHT, FAUCET REAR OF SINK.
10. PROVIDE ELKAY BUBBLER MODEL #LK1141A.
11. FAUCET BY CHICAGO, DRAIN BY ELKAY.
12. LESS FILTER.
13. PROVIDE ELKAY LKAPREZL CANE APRON. INSTALL APRON ON HIGHER BOWL.
14. FAUCET BY CHICAGO, SHALL BE SUITABLE FOR CONTINUOUS OPERATION.
15. FAUCET EQUIPPED WITH THERMOSTATIC SCALD PROTECTION. ASSE 1070 CERTIFIED.
16. WITH 1.5 GPM VANDAL-PROOF AERATOR.
17. DRAIN CENTERED REAR OF BOWL.
18. A1 PROVIDE TRUBRO LAV GUARD 2 MODEL #103E-Z FOR ALL EXPOSED PIPING BELOW LAVATORY.
19. PROVIDE THREE FAUCETS AS SCHEDULED FOR EACH LAVATORY SYSTEM.

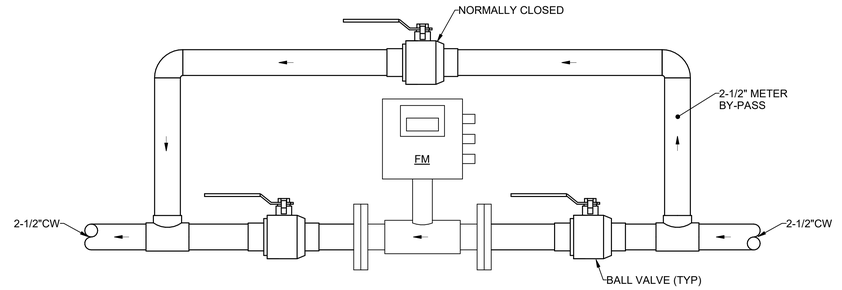
PLUMBING DRAIN AND EQUIPMENT SCHEDULE

ITEM	MANUFACTURER	MODEL NUMBER	REMARKS
FLOOR DRAIN #1 (FD-1)	J.R. SMITH	2005(Y)-A-U-NB	WITH DEEP SEAL TRAP AND WATERLESS TRAP SEAL.
FLOOR DRAIN #2 (FD-2)	J.R. SMITH	3510(Y)-A-U-NB	WITH DEEP SEAL TRAP, WATERLESS TRAP SEAL AND FUNNEL.
ROOF DRAIN (RD) / OVERFLOW ROOF DRAIN (ORD)	J.R. SMITH	1800Y-AD-U	ROOF DRAIN AND OVERFLOW ROOF DRAIN WITH INTERNAL OVERFLOW WATER DAM STANDPIPE MOUNTED ON COMMON DECK PLATE. WITH VANDAL-PROOF ALUMINUM DOME. PROVIDE DRAINS WITH SIDE OUTLET AND EXTENSION IF REQUIRED.
FLOOR SINK (FS)	J.R. SMITH	3100Y-U-12	WITH DEEP SEAL TRAP AND HALF GRATE.
WALL HYDRANT (WH)	WOODFORD	MODEL B65	WITH LOOSE KEY AND VACUUM BREAKER. MOUNT WITH CENTERLINE 18" AFF.
DOWNSPOUT NOZZLE (DSN)	J.R. SMITH	1770-NB-BS	NICKEL BRONZE WITH BIRD SCREEN. MOUNT WITH CENTERLINE 18" AFF.
WATERLESS TRAP SEAL	GREEN DRAIN	SERIES P24000	BARRIER-TYPE TRAP SEAL DEVICE. ASSE 1072 CERTIFIED.
ELEVATOR SUMP PUMP WITH OIL GUARD SYSTEM (SP-1)	ZOELLER	940-0007	SUMP PUMP: ZOELLER MODEL N153, 50 GPM @ 19 FT/HEAD, 0.5 HP, 1550 RPM, 115 V, 1 PH. ALARM PANEL: 115 VOLTS, 1 PH. COMPLETE WITH 50FT OIL RESISTANT JACKETED CORD AND NEMA 4X ALARM PANEL ENCLOSURE. WITH AUDIBLE, LIGHT AND DRY CONTACTS. LOCATE ALARM PANEL WHERE INDICATED IN STORAGE ROOM A102. ALARM PANEL SHALL BE MONITORED BY BUILDING AUTOMATION SYSTEM. SEE DETAIL, SHEET P-101.
MIXING VALVE #3 (MV-3)	LEONARD	170D	MOUNT MIXING VALVE BELOW EACH P-6A AND P-6B CLASSROOM SINK. ASSE 1070 CERTIFIED.
BACKFLOW PREVENTER #1 (BFP-1)	WILKINS	975XL	SERVES UTILITY DISTRIBUTION SYSTEM. DRAIN TO FLOOR SINK. ASSE 1013 CERTIFIED
ICE MAKER BOX (IMB)	IPS WATERTITE	87980	WITH WATER HAMMER ARRESTER
GREASE INTERCEPTOR (GI)	MIFAB	BIG-1150	100 GPM, 1,762 POUNDS (246 GALLONS) GREASE HOLDING CAPACITY, 300 GALLONS LIQUID HOLDING CAPACITY, 115 GALLON SOLIDS CAPACITY. HDPE MOLDED WITH INTERNAL FLOW CONTROL FITTING, 4" INLET AND OUTLET, CAST IRON H20 RATED LID FLUSH WITH GRADE. PROVIDE EXTENSIONS IF REQUIRED. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
FLOW METER (FM)	BADGER METER	BADGER METER M2000	FLOW RANGE: 0.10 - 39.4 FT/S, 120 V, BACNET COMPATIBLE, STANDARD NEMA4X ENCLOSURE. LOCATE FLOW METER ABOVE CEILING OF CORRIDOR B102 WHERE INDICATED.
A1 HOSE BIBB #1 (HB-1)	WOODFORD	MODEL 19	FREEZELESS HOSE BIBB WITH DIE CAST ALUMINUM HANDLE.
HOSE BIBB #2 (HB-2)	WOODFORD	24CP	WITH VACUUM BREAKER AND TEE KEY. MOUNT 12" AFF WHERE INDICATED IN GROUP TOILETS A114, A116, A213, AND A215.

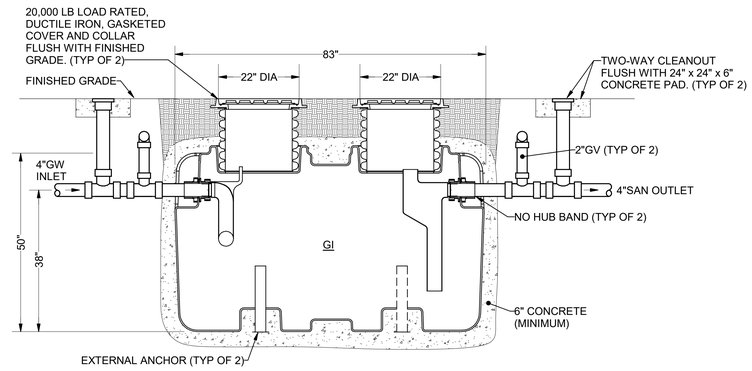


NOTE: EACH ATTACHMENT AND LOADS IMPOSED SHALL BE CHECKED WITH THE STRUCTURAL ENGINEER.

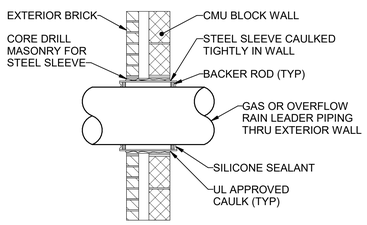
PIPE SUPPORTED FROM TRUSSES DETAIL
NOT TO SCALE



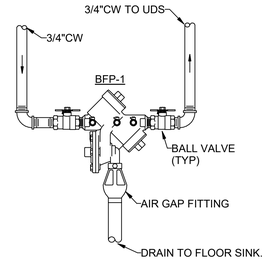
FLOW METER PIPING DETAIL
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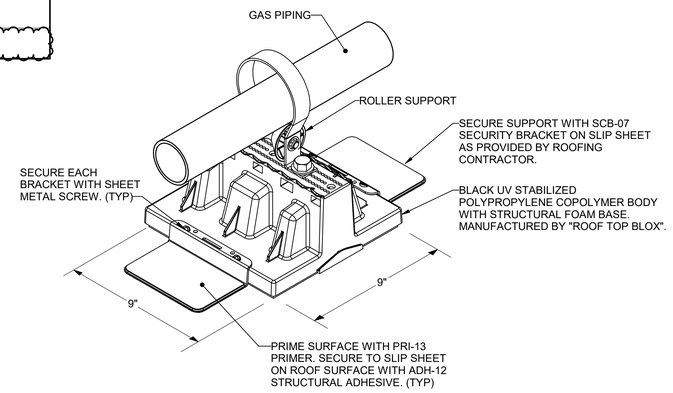
GREASE INTERCEPTOR DETAIL
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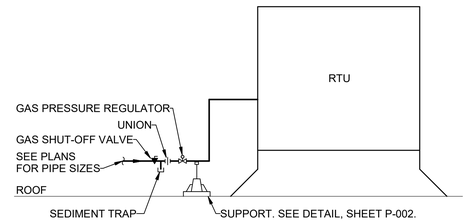
EXTERIOR WALL PIPE PENETRATION DETAIL
NOT TO SCALE



BACKFLOW PREVENTER DETAIL (BFP-1)
NOT TO SCALE



GAS PIPING SUPPORT DETAIL
NOT TO SCALE



NOTE: SIMILAR ARRANGEMENT FOR MAU-1

GAS CONNECTION DETAIL
NOT TO SCALE

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4411 CON ROAD, GLEN ALLEN, VA 23060
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TELEPHONE: (757) 399-4433, PROJECT #24-053

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DESCRIPTION	BY

DATE	PROJECT	DESIGNED	DRAWN	CHECKED
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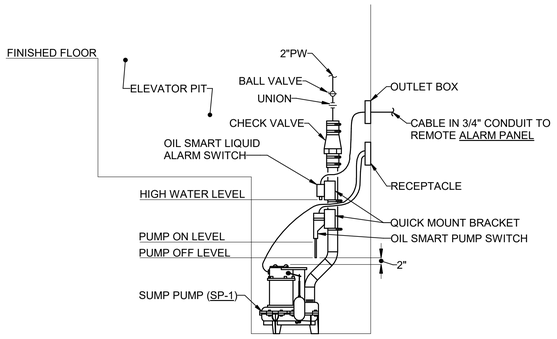
COMMONWEALTH OF VIRGINIA
KEVIN D. ALLEN
Lic. No. 023349
06.24.2025

PROJECT: SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 1888-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

DRAWING: PLUMBING SCHEDULES AND DETAILS

SHEET
P-002

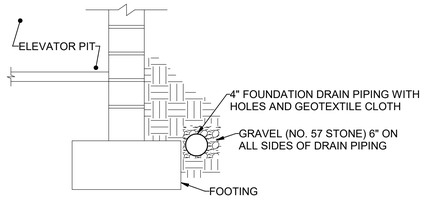
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NOTE: MOUNT ELEVATOR SUMP PUMP ALARM PANEL ON WALL IN STORAGE ROOM A102.

ELEVATOR SUMP PUMP DETAIL (SP-1)

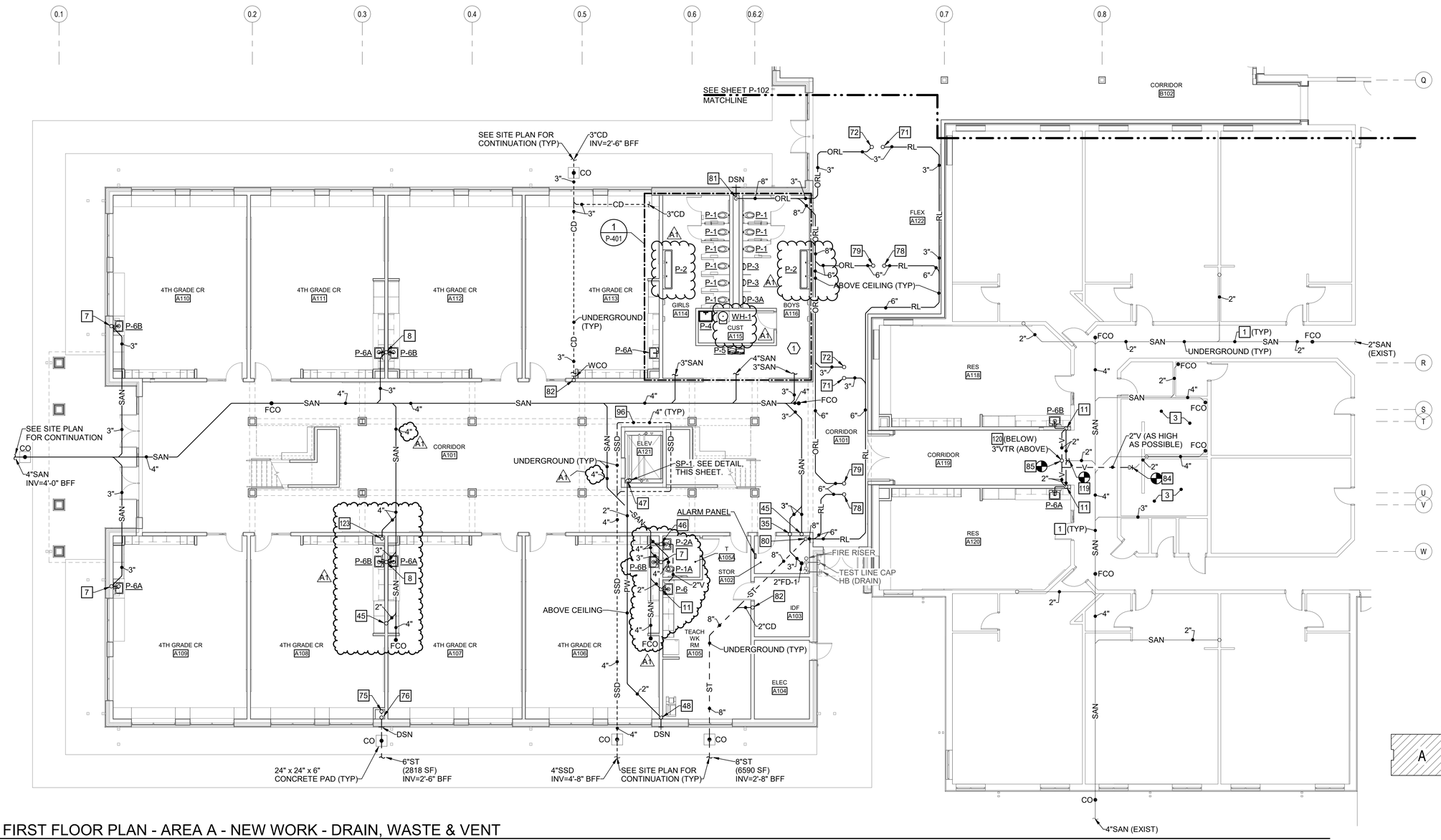
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FOUNDATION DRAIN PIPING DETAIL

NOT TO SCALE

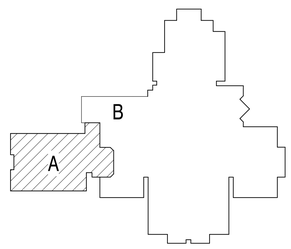
NEW WORK NOTES ☐	
NO.	DESCRIPTION
1	EXISTING UNDERGROUND WASTE PIPING.
3	NO PLUMBING WORK IN EXISTING GROUP TOILETS.
7	2" WASTE STACK VENT UP AND DOWN.
8	3" WASTE STACK VENT UP AND DOWN.
11	2" WASTE DOWN, 2" VENT UP.
35	2" VENT UP TO SECOND FLOOR.
45	2" WASTE FROM SECOND FLOOR.
46	2" WASTE DOWN, 2" VENT UP TO SECOND FLOOR.
47	2" PUMPED WASTE FROM BELOW.
48	2" PUMPED WASTE DOWN.
71	3" RAIN LEADER FROM 3" ROOF DRAIN.
72	3" OVERFLOW RAIN LEADER FROM 3" OVERFLOW ROOF DRAIN.
75	6" RAIN LEADER FROM SECOND FLOOR.
76	6" OVERFLOW RAIN LEADER FROM SECOND FLOOR.
78	4" RAIN LEADER FROM 4" ROOF DRAIN.
79	4" OVERFLOW RAIN LEADER FROM 4" OVERFLOW ROOF DRAIN.
80	8" RAIN LEADER DOWN.
81	8" OVERFLOW RAIN LEADER DOWN.
82	STUB 2" CONDENSATE UP FROM UNDERGROUND. TERMINATE PIPING 2'-0" ABOVE FINISHED FLOOR FOR FINAL CONNECTION BY MECHANICAL CONTRACTOR.
84	CONNECT TO EXISTING 2" VENT PIPING. TURN VENT AS HIGH AS POSSIBLE TO AVOID NEW CONSTRUCTION.
85	CONNECT RE-ROUTED VENT PIPING TO EXISTING 3" VENT THRU ROOF AS HIGH AS POSSIBLE.
96	SEE FOUNDATION DRAIN PIPING DETAIL, THIS SHEET.
119	CONNECT TO EXISTING UNDERGROUND WASTE PIPING.
120	PROVIDE NEW FLOOR CLEANOUT NOT SHOWN FOR CLARITY. CONNECT TO EXISTING WASTE PIPING.
A1 123	4" WASTE FROM SECOND FLOOR.



FIRST FLOOR PLAN - AREA A - NEW WORK - DRAIN, WASTE & VENT

SCALE: 1/8" = 1'-0"

PLAN NORTH



KEY PLAN - AREA A

NOT TO SCALE

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DATE	06.24.2025
PROJECT	23238-00
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KEVIN D. ALLEN
Lic. No. 023349
06.24.2025
PROFESSIONAL ENGINEER

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 1888-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

DRAWING
FIRST FLOOR PLAN - AREA A - NEW WORK - DRAIN, WASTE & VENT

SHEET
P-101

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NEW WORK NOTES	
NO.	DESCRIPTION
9	2" WASTE STACK VENT DOWN, 2" VENT UP.
10	3" WASTE STACK VENT DOWN, 3" VENT UP.
11	2" WASTE DOWN, 2" VENT UP.
18	3" VENT THRU ROOF.
19	2" VENT UP TO 2" VENT THRU ROOF.
36	2" VENT FROM FIRST FLOOR.
53	2" WASTE DOWN.
71	3" RAIN LEADER FROM 3" ROOF DRAIN.
72	3" OVERFLOW RAIN LEADER FROM 3" OVERFLOW ROOF DRAIN.
73	6" RAIN LEADER DOWN.
74	6" OVERFLOW RAIN LEADER DOWN.
124	4" WASTE DOWN.

ADDENDUM NO. 1

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A1	07.17.2025		TCE	

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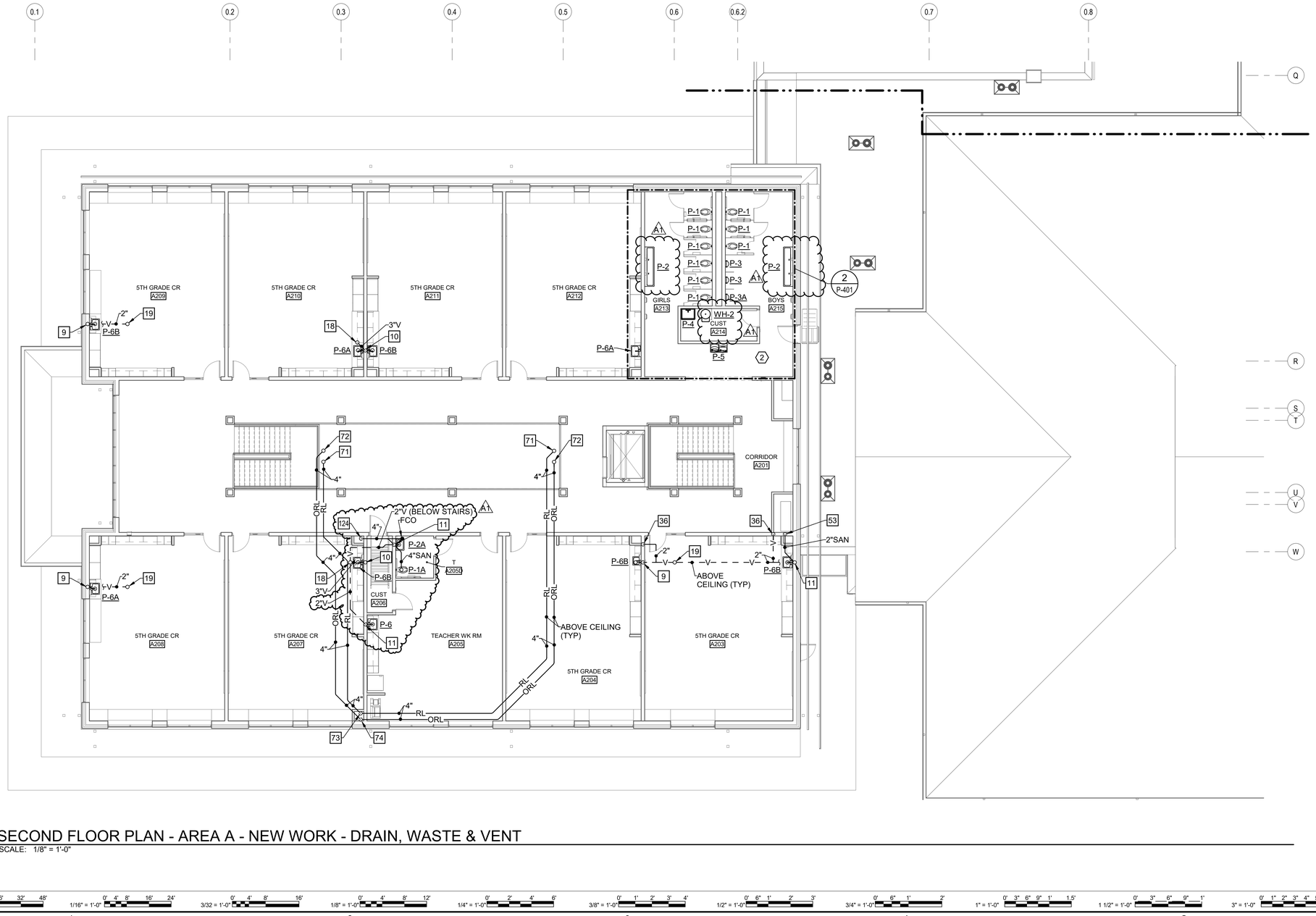
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NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
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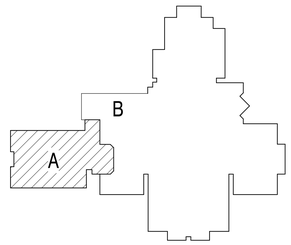
DRAWING
SECOND FLOOR PLAN - AREA A - NEW WORK - DRAIN, WASTE & VENT

SHEET
P-103



SECOND FLOOR PLAN - AREA A - NEW WORK - DRAIN, WASTE & VENT
SCALE: 1/8" = 1'-0"

PLAN NORTH

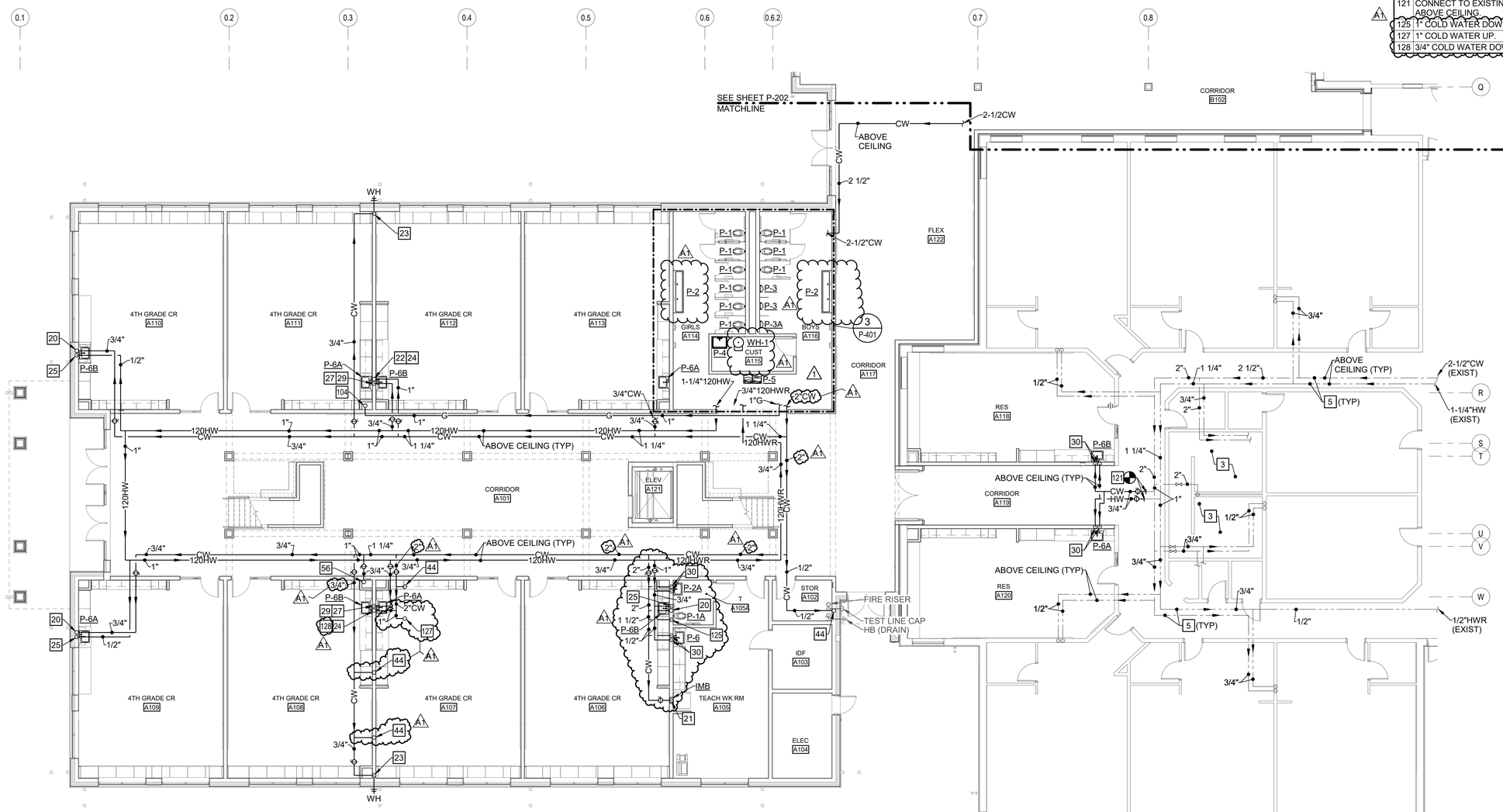


KEY PLAN - AREA A
NOT TO SCALE

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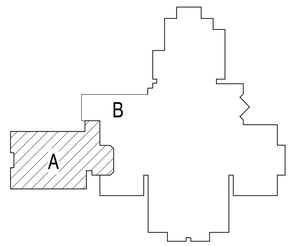
NEW WORK NOTES ☐	
NO.	DESCRIPTION
3	NO PLUMBING WORK IN EXISTING GROUP TOILETS.
5	EXISTING HOT AND/OR COLD AND/OR HOT WATER RECIRCULATING PIPING.
20	1/2" COLD WATER UP AND DOWN.
21	1/2" COLD WATER DOWN.
22	3/4" COLD WATER UP AND DOWN.
23	3/4" COLD WATER DOWN.
24	BRANCH 1/2" COLD WATER TO EACH SINK.
25	1/2" HOT WATER DOWN.
27	3/4" HOT WATER DOWN.
29	3/4" HOT WATER DOWN. BRANCH 1/2" HOT WATER TO EACH SINK.
30	1/2" HOT AND COLD WATER DOWN.
44	1/2" COLD WATER UP.
56	3/4" COLD WATER UP.
104	1" GAS UP.
121	CONNECT TO EXISTING 3/4" HOT AND COLD WATER PIPING ABOVE CEILING.
125	1" COLD WATER DOWN.
127	1" COLD WATER UP.
128	3/4" COLD WATER DOWN, 1/2"COLD WATER UP.



FIRST FLOOR PLAN - AREA A - NEW WORK - DOMESTIC WATER AND GAS

SCALE: 1/8" = 1'-0"

PLAN NORTH



KEY PLAN - AREA A

NOT TO SCALE

MARK	DATE	REVISIONS
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	BY	

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06.24.2025
PROFESSIONAL ENGINEER

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 1888-B
VIRGINIA DEPARTMENT OF EDUCATION: 727-24-00-101

DRAWING
FIRST FLOOR PLAN - AREA A - NEW WORK - DOMESTIC WATER & GAS

SHEET
P-201

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NEW WORK NOTES	
NO.	DESCRIPTION
24	BRANCH 1/2" COLD WATER TO EACH SINK.
25	1/2" HOT WATER DOWN.
26	1/2" COLD WATER FROM FIRST FLOOR.
27	3/4" HOT WATER DOWN.
28	3/4" COLD WATER FROM FIRST FLOOR.
29	3/4" HOT WATER DOWN. BRANCH 1/2" HOT WATER TO EACH SINK.
43	1" GAS UP AND DOWN.
56	3/4" COLD WATER UP.
126	1" COLD WATER FROM FIRST FLOOR.

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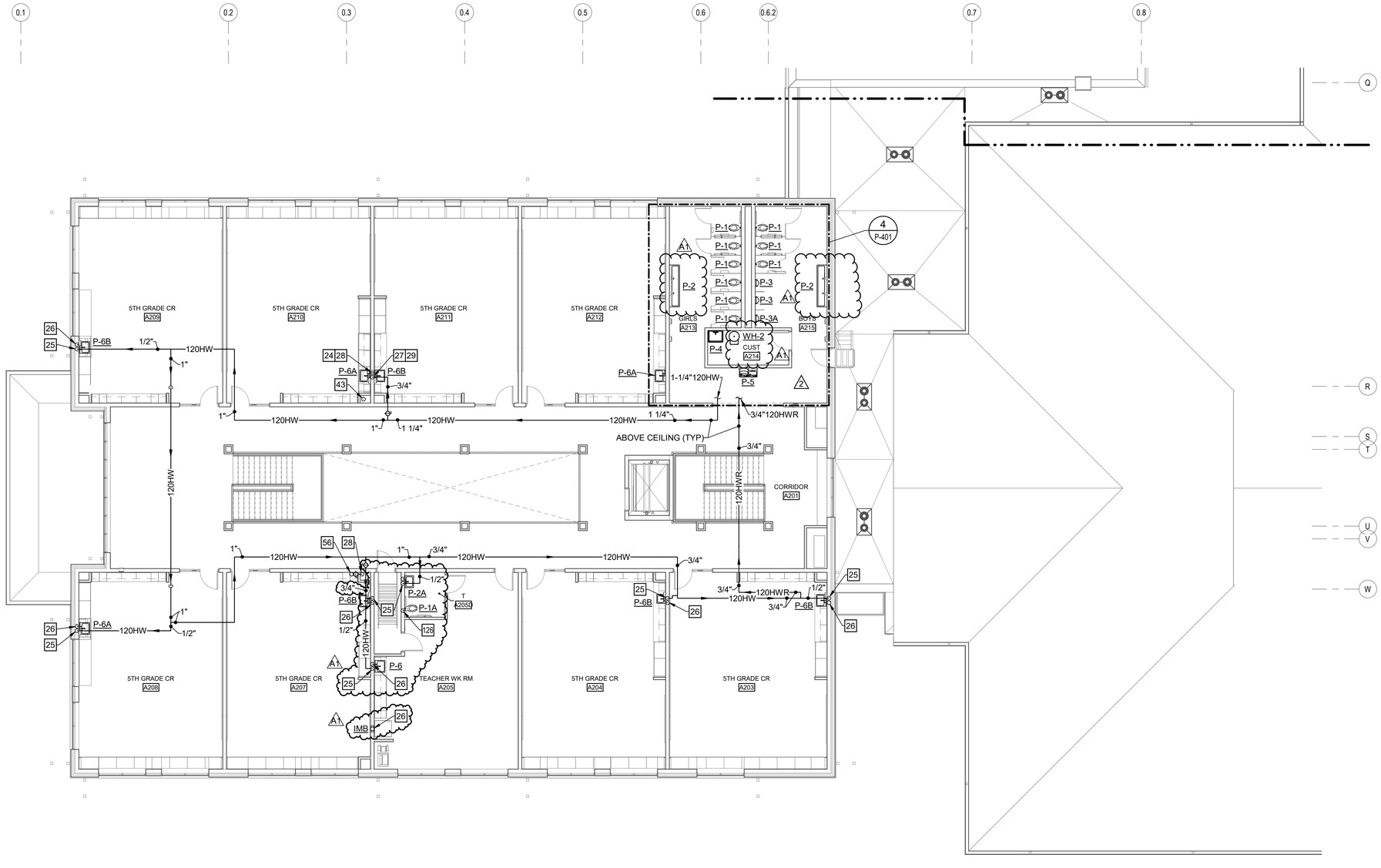
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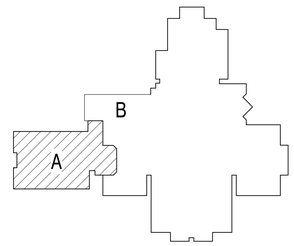
DRAWING
SECOND FLOOR PLAN - AREA A - NEW WORK -
DOMESTIC WATER & GAS

SHEET
P-203



SECOND FLOOR PLAN - AREA A - NEW WORK - DOMESTIC WATER AND GAS
SCALE: 1/8" = 1'-0"

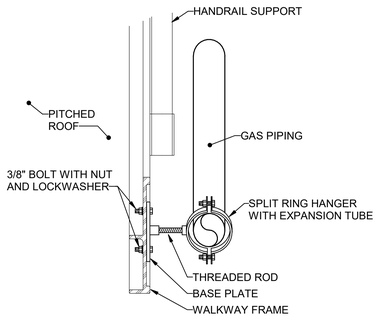
PLAN NORTH



KEY PLAN - AREA A
NOT TO SCALE

1/32" = 1'-0" | 1/16" = 1'-0" | 3/32" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0" | 12" = 1'-0"

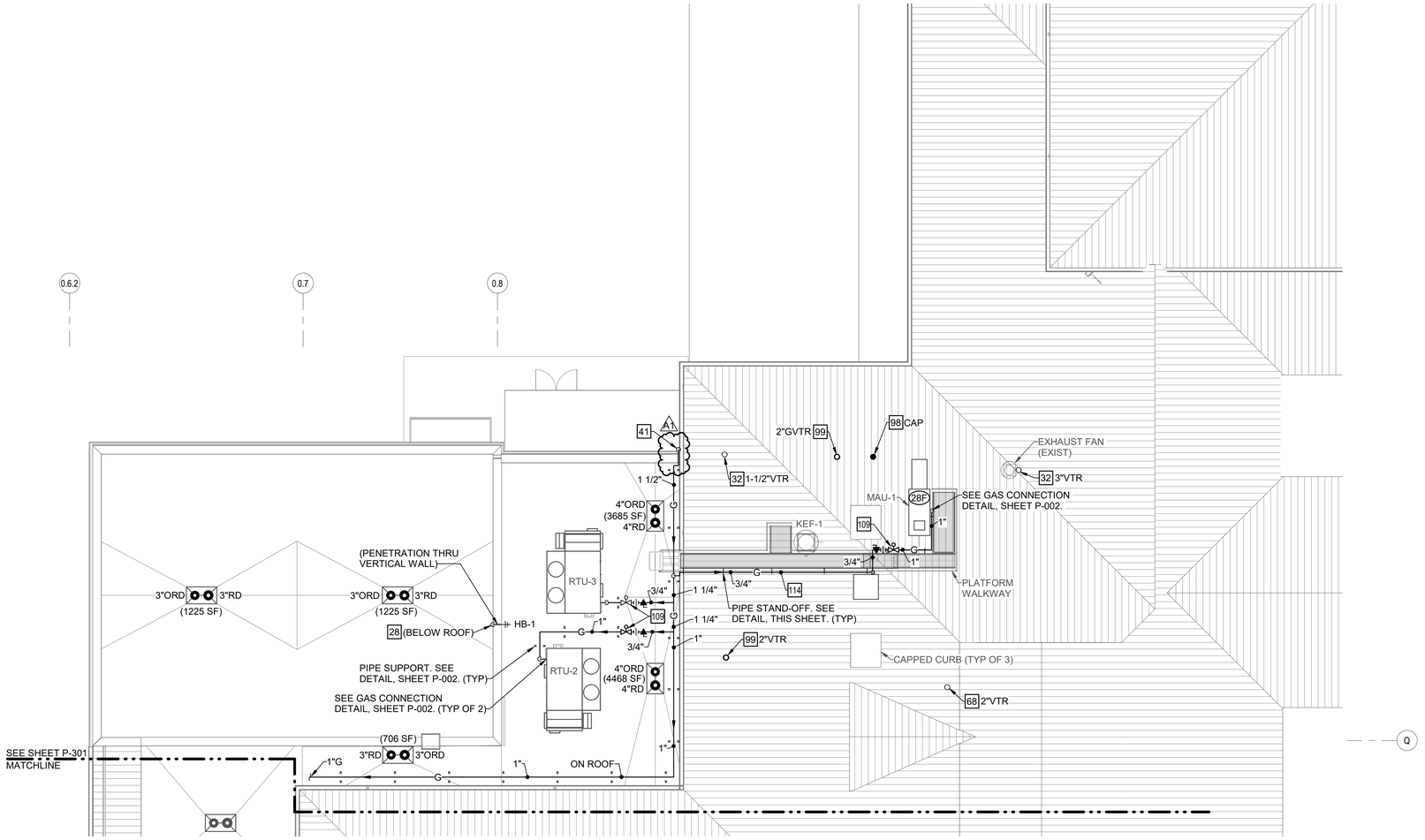
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PIPE STAND-OFF DETAIL

NOT TO SCALE

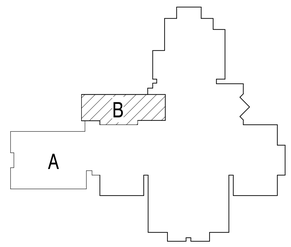
NEW WORK NOTES	
NO.	DESCRIPTION
28	3/4" COLD WATER FROM FIRST FLOOR.
32	EXISTING VENT THRU ROOF.
41	1-1/2" GAS FROM BELOW.
68	EXISTING GREASE VENT THRU ROOF.
98	EXISTING GREASE VENT THRU ROOF CAPPED ABOVE AND BELOW ROOF.
99	NEW VENT OR GREASE VENT THRU ROOF. COORDINATE ROOF PENETRATION POINT TO BE CENTERED BETWEEN ROOF PANEL SEAMS.
109	GAS PRESSURE REGULATOR 2 PSI TO 12" WATER COLUMN.
114	ATTACH GAS PIPING TO WALKWAY WHERE REQUIRED WITH PIPE STAND-OFFS INCLUDING THREADED ROD, NUTS, BOLTS, LOCKWASHERS AND BASEPLATE. ALL COMPONENTS USED TO HANG GAS PIPING SHALL BE HOT DIPPED GALVANIZED.



ROOF PLAN - AREA B - NEW WORK - PLUMBING

SCALE: 1/8" = 1'-0"

PLAN NORTH



KEY PLAN - AREA B

NOT TO SCALE

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A1	07.17.2025	ADDENDUM NO. 1
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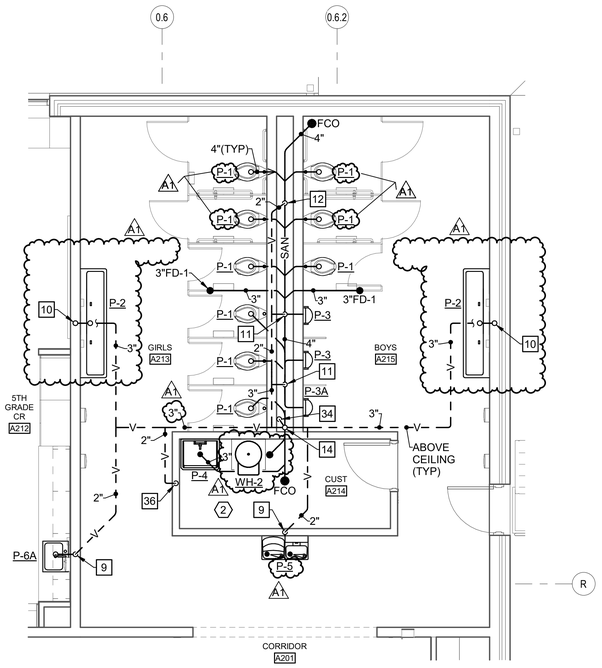
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KEVIN D. ALLEN
Lic. No. 023349
PROFESSIONAL ENGINEER
06.24.2025

PROJECT: SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 1688-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

DRAWING: ROOF PLAN - AREA B - NEW WORK - PLUMBING

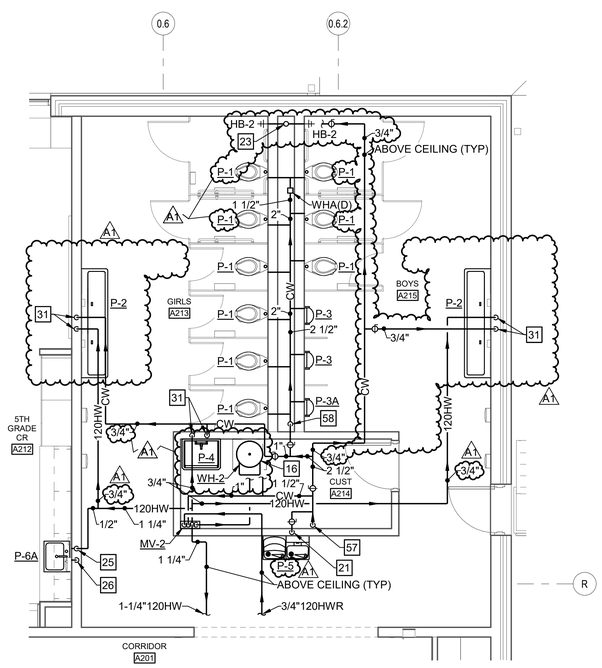
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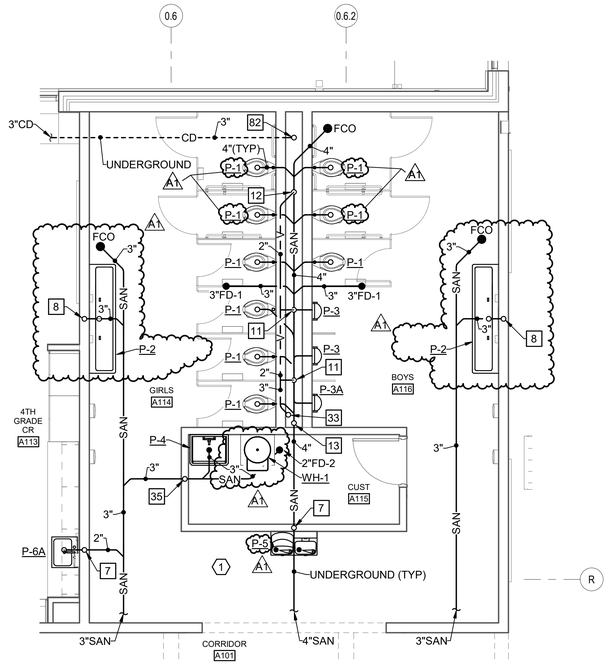
2 ENLARGED PLAN - NEW WORK - DRAIN, WASTE & VENT

2 / P-102 SCALE: 1/4" = 1'-0"



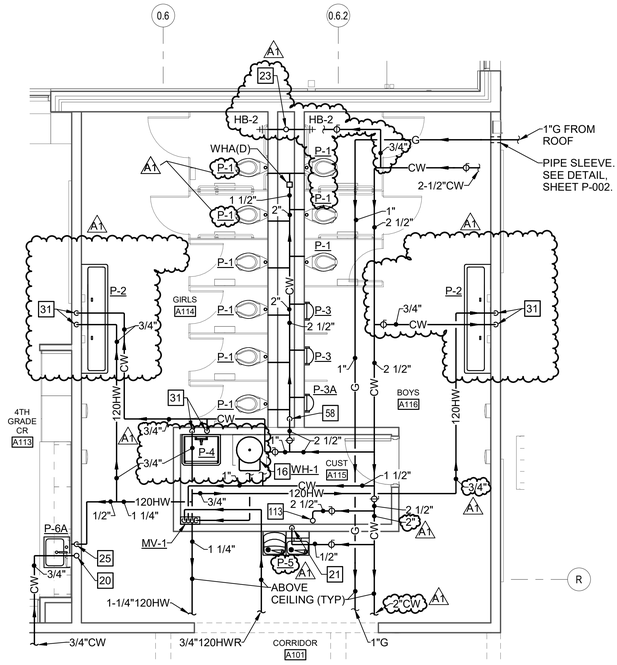
4 ENLARGED PLAN - NEW WORK - DOMESTIC WATER

4 / P-202 SCALE: 1/4" = 1'-0"



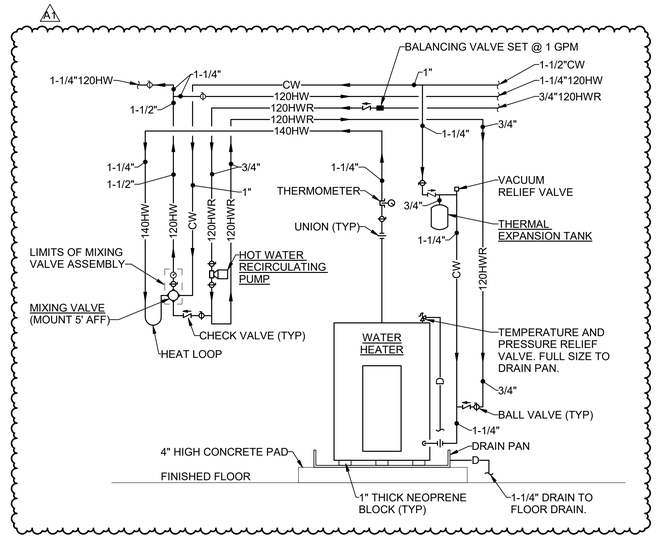
1 ENLARGED PLAN - NEW WORK - DRAIN, WASTE & VENT

1 / P-101 SCALE: 1/4" = 1'-0"



3 ENLARGED PLAN - NEW WORK - DOMESTIC WATER AND GAS

3 / P-201 SCALE: 1/4" = 1'-0"



WATER HEATER PIPING DIAGRAM (WH-1 AND WH-2)

NOT TO SCALE

NEW WORK NOTES	
NO.	DESCRIPTION
7	2" WASTE STACK VENT UP AND DOWN.
8	3" WASTE STACK VENT UP AND DOWN.
9	2" WASTE STACK VENT DOWN, 2" VENT UP.
10	3" WASTE STACK VENT DOWN, 3" VENT UP.
11	2" WASTE DOWN, 2" VENT UP.
12	2" VENT UP.
13	4" WASTE FROM ABOVE.
14	4" WASTE DOWN, 3" VENT UP TO 3" VENT THRU ROOF.
16	SEE PIPING DIAGRAM, THIS SHEET.
20	1/2" COLD WATER UP AND DOWN.
21	1/2" COLD WATER DOWN.
23	3/4" COLD WATER DOWN.
25	1/2" HOT WATER DOWN.
26	1/2" COLD WATER FROM FIRST FLOOR.
31	3/4" HOT AND COLD WATER DOWN.
33	3" VENT UP TO SECOND FLOOR.
34	3" VENT FROM FIRST FLOOR.
35	2" VENT UP TO SECOND FLOOR.
36	2" VENT FROM FIRST FLOOR.
57	2-1/2" COLD WATER FROM FIRST FLOOR.
58	2-1/2" COLD WATER DOWN. BRANCH 1" TO EACH WATER CLOSET AND 3/4" TO EACH URINAL.
82	STUB 2" CONDENSATE UP FROM UNDERGROUND. TERMINATE PIPING 2'-0" ABOVE FINISHED FLOOR FOR FINAL CONNECTION BY MECHANICAL CONTRACTOR.
113	2-1/2" COLD WATER TO SECOND FLOOR.

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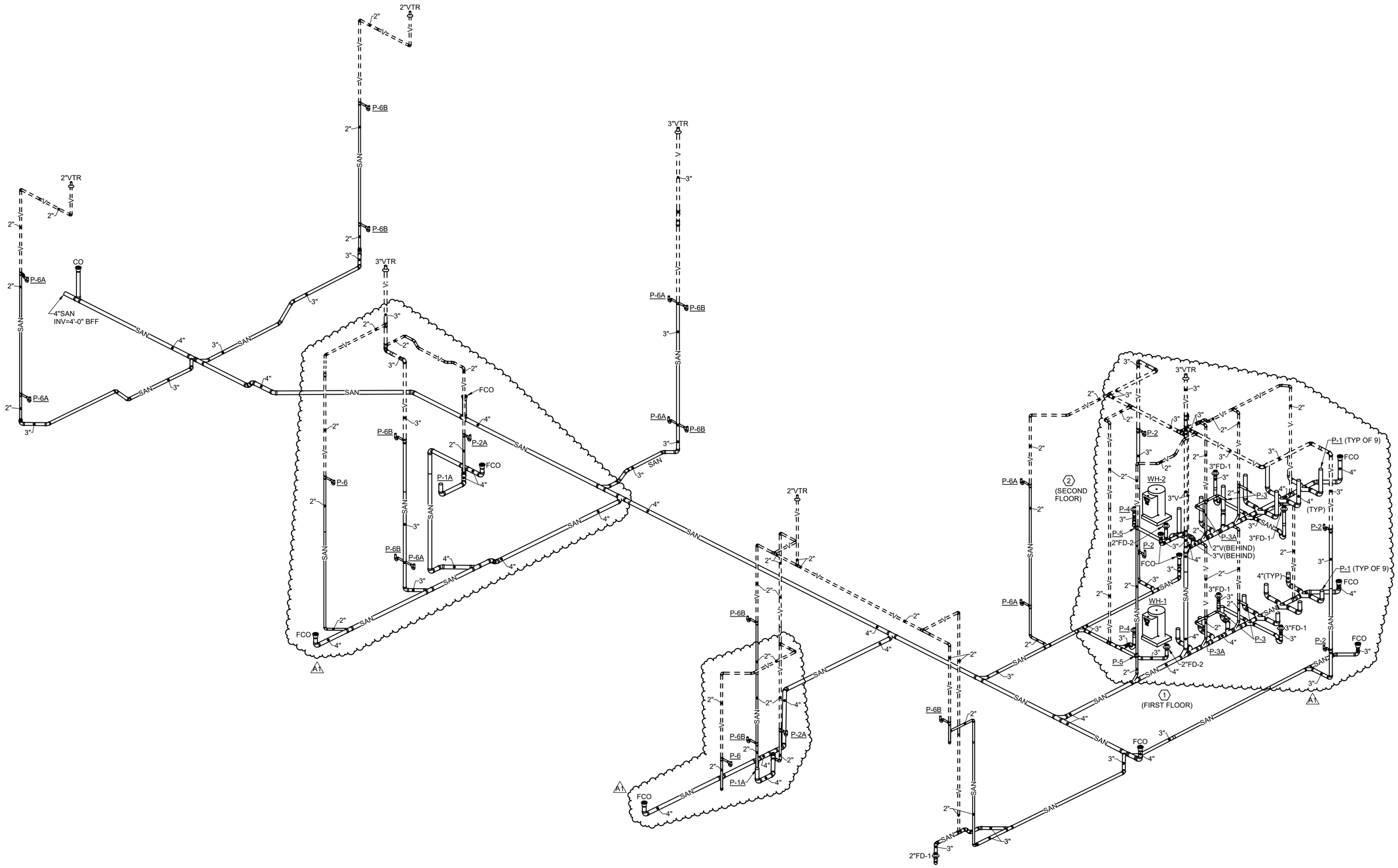
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KEVIN D. ALLEN
Lic. No. 023349
06.24.2025
PROFESSIONAL ENGINEER

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 188-B
VIRGINIA DEPARTMENT OF EDUCATION: 121-32-00-101

DRAWING
ENLARGED PLANS - NEW WORK - PLUMBING

SHEET
P-401

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SANITARY WASTE PIPING ISOMETRICS

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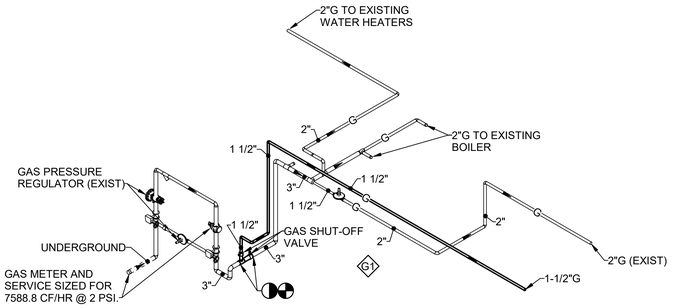
PROJECT
SUFFOLK PUBLIC SCHOOLS
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6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 1888-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

DRAWING
SANITARY WASTE PIPING ISOMETRICS

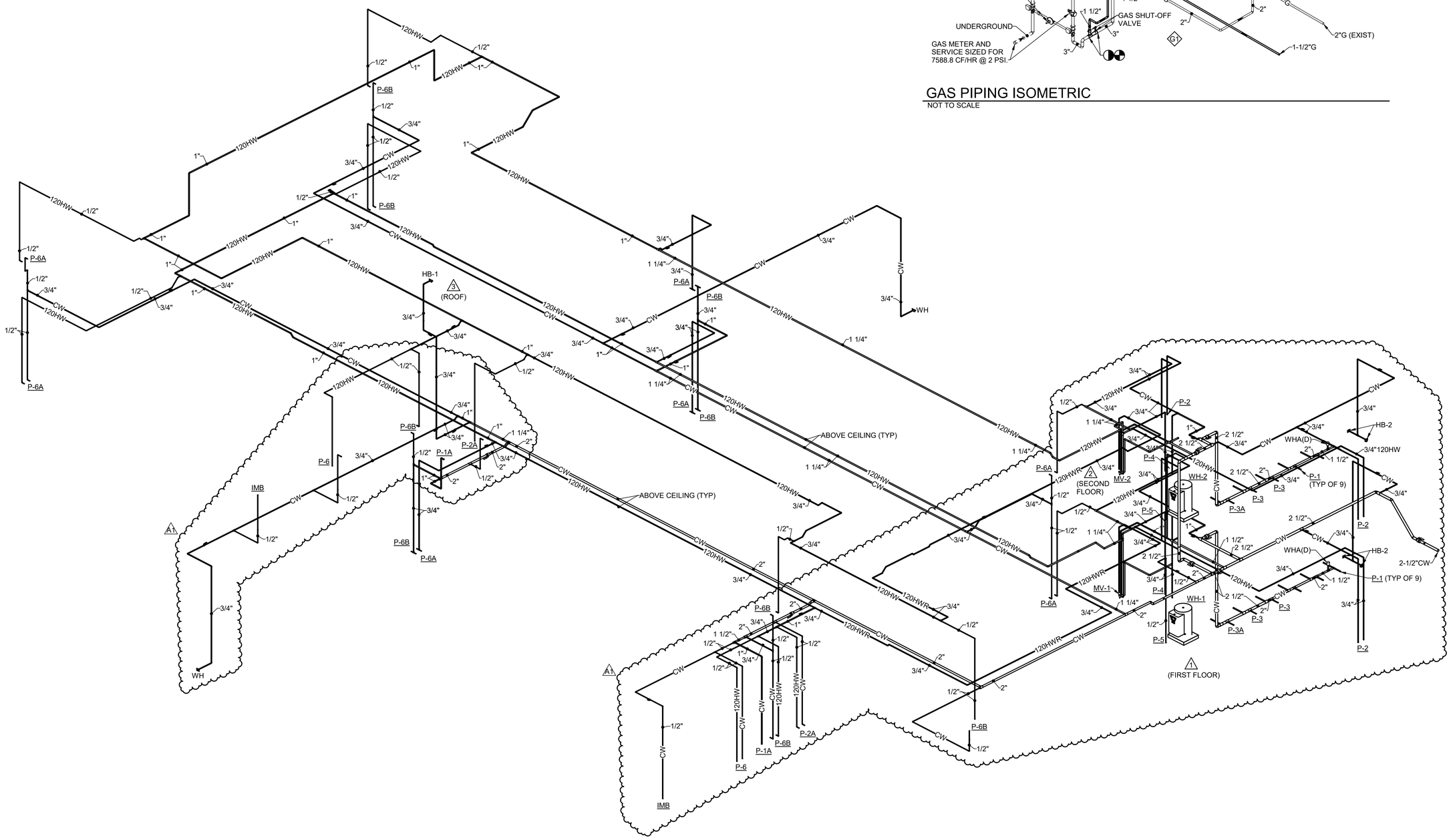
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GAS PIPING ISOMETRIC
NOT TO SCALE



DOMESTIC WATER PIPING ISOMETRICS
NOT TO SCALE

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06.24.2025
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NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD,
SUFFOLK, VIRGINIA
IFB: 1688-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

DRAWING
DOMESTIC WATER AND GAS PIPING ISOMETRICS

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PLUMBING FIXTURE SCHEDULE - ADDITIVE ALTERNATE NO.1 (1)

MARK	FIXTURE	MANUFACTURER	MODEL NUMBER	MATERIAL	SIZE (A1)	MOUNTING HEIGHT	SUPPLY & DRAIN FITTING	SUPPLY STOPS	TRAP	PIPE ROUGH-IN SIZES				REMARKS
										W	V	HW	CW	
P-1B	WATER CLOSET (ADA)	KOHLER	K-96057	VITREOUS CHINA	16-5/8" TO RIM	FLOOR MOUNTED	SLOAN 111-1.28	-	-	4"	2"	-	1"	(2) (3)
P-2A	LAVATORY (ADA)	KOHLER	K-2005	VITREOUS CHINA	21-1/4" x 18-1/8"	34" TO RIM	FAUCET: 420-T45E39VPABCP DRAIN: 155WC	LOOSE KEY	17 GAUGE W/ CLEANOUT	1-1/2"	2"	1/2"	1/2"	(4) (5) (6) (7) (A1)

NOTES:

(1) ALL FIXTURES TO BE LOW CONSUMPTION AND VANDAL-RESISTANT.

(2) 1.28 GPF.

(3) PROVIDE SEAT: K-4670-SC.

(4) FAUCET BY CHICAGO, DRAIN BY MCGUIRE.

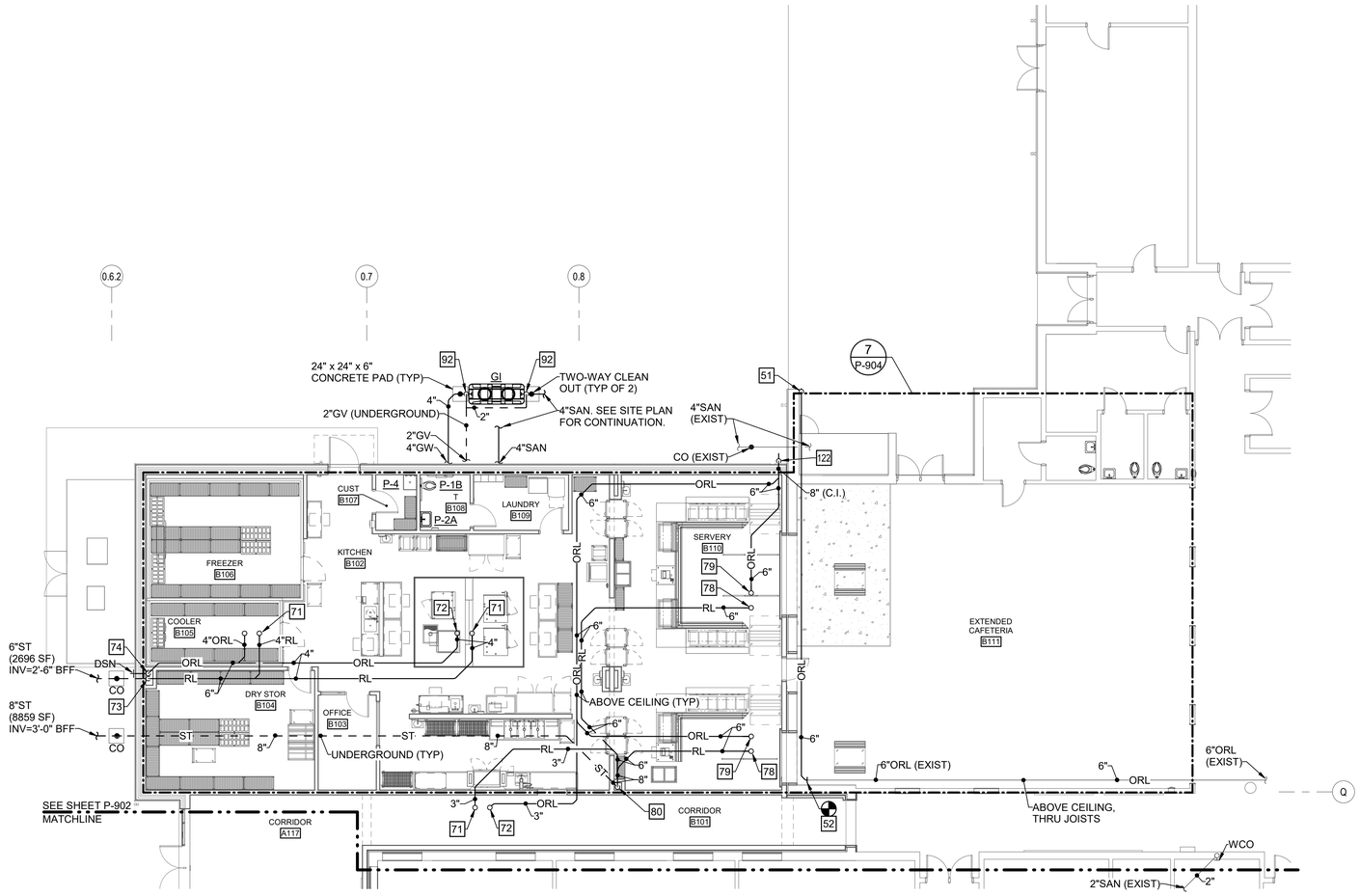
(5) WITH 0.35 GPM VANDAL-PROOF AERATOR.

(A1) (6) FAUCET EQUIPPED WITH THERMOSTATIC SCALD PROTECTION. ASSE 1070 CERTIFIED.

(7) PROVIDE TRUBRO LAV GUARD 2 MODEL #103E-Z FOR ALL EXPOSED PIPING BELOW LAVATORY.

PLUMBING DRAIN AND EQUIPMENT SCHEDULE - ADDITIVE ALTERNATE NO.1

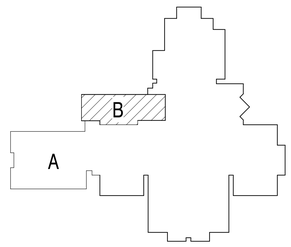
ITEM	MANUFACTURER	MODEL NUMBER	REMARKS
BACKFLOW PREVENTER #2 (BFP-2)	WILKINS	975XL	SERVES ICE MAKER WATER FILTER. DRAIN TO FLOOR DRAIN. ASSE 1013 CERTIFIED.
WASHING MACHINE BOX (WMB)	IPS WATERTITE	85708	WITH WATER HAMMER ARRESTERS
AIR ADMITTANCE VALVE (AAV)	STUDOR	MINI-VENT	-
SOLIDS INTERCEPTOR #1 (SI-1)	MIFAB	LIL-10-S	9.2 GAL LIQUID CAPACITY, 4.5 GAL SOLIDS CAPACITY, 10 GPM FLOW RATE. HDPE MOLDED. FLOOR MOUNTED. 2" INLET AND OUTLET. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
SOLIDS INTERCEPTOR #2 (SI-2)	MIFAB	LIL-20-S	16 GAL LIQUID CAPACITY, 8 GAL SOLIDS CAPACITY, 20 GPM FLOW RATE. HDPE MOLDED. FLOOR MOUNTED. 3" INLET AND OUTLET. INSTALL PER MANUFACTURER'S INSTRUCTIONS.



FIRST FLOOR PLAN - AREA B - NEW WORK - DRAIN, WASTE & VENT (ADDITIVE ALTERNATE NO.1)

SCALE: 1/8" = 1'-0"

PLAN NORTH



KEY PLAN - AREA B

NOT TO SCALE

NEW WORK NOTES

NO.	DESCRIPTION
51	6" OVERFLOW RAIN LEADER DOWN.
52	CONNECT TO EXISTING OVERFLOW RAIN LEADER PIPING AT POINT INDICATED.
71	3" RAIN LEADER FROM 3" ROOF DRAIN.
72	3" OVERFLOW RAIN LEADER FROM 3" OVERFLOW ROOF DRAIN.
73	6" RAIN LEADER DOWN.
74	6" OVERFLOW RAIN LEADER DOWN.
78	4" RAIN LEADER FROM 4" ROOF DRAIN.
79	4" OVERFLOW RAIN LEADER FROM 4" OVERFLOW ROOF DRAIN.
80	8" RAIN LEADER DOWN.
92	2" GREASE VENT UP.
122	8" OVERFLOW RAIN LEADER DOWN. TRANSITION TO CAST IRON PIPING BEFORE EXITING BUILDING. RUN PIPING EXPOSED DOWN WALL TO ABOVE FINISHED GRADE.

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MARK	DESCRIPTION	BY	DATE
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06.24.2025
PROFESSIONAL ENGINEER

PROJECT: SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 188-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

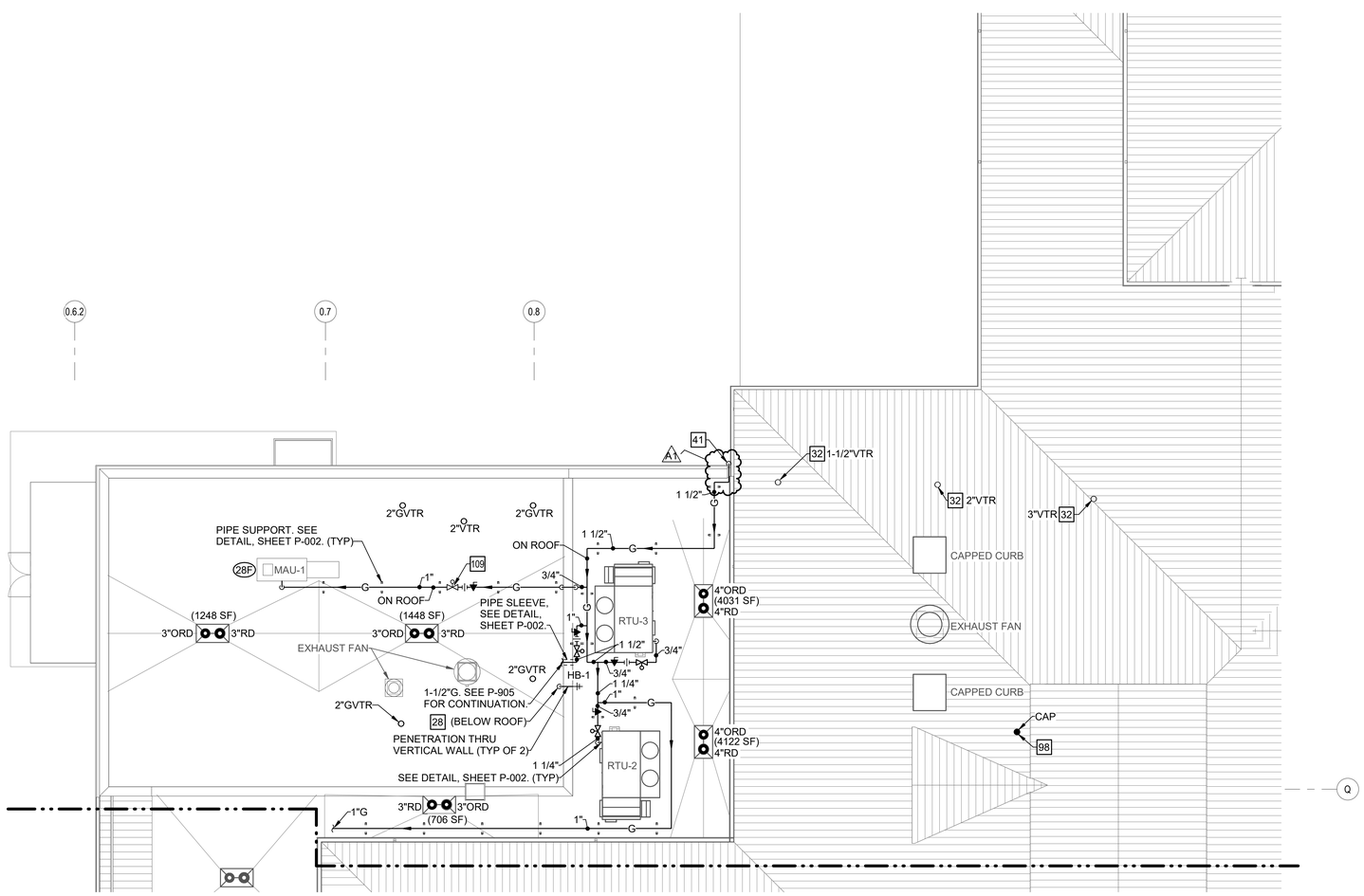
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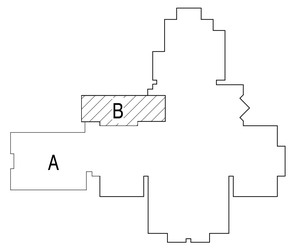
NEW WORK NOTES ☐	
NO.	DESCRIPTION
28	3/4" COLD WATER FROM FIRST FLOOR.
32	EXISTING VENT THRU ROOF.
41	1-1/2" GAS FROM BELOW.
98	EXISTING GREASE VENT THRU ROOF CAPPED ABOVE AND BELOW ROOF.
109	GAS PRESSURE REGULATOR 2 PSI TO 12" WATER COLUMN.



ROOF PLAN - AREA B - NEW WORK - PLUMBING (ADDITIVE ALTERNATE NO.1)

SCALE: 1/8" = 1'-0"

PLAN NORTH



KEY PLAN - AREA B

NOT TO SCALE

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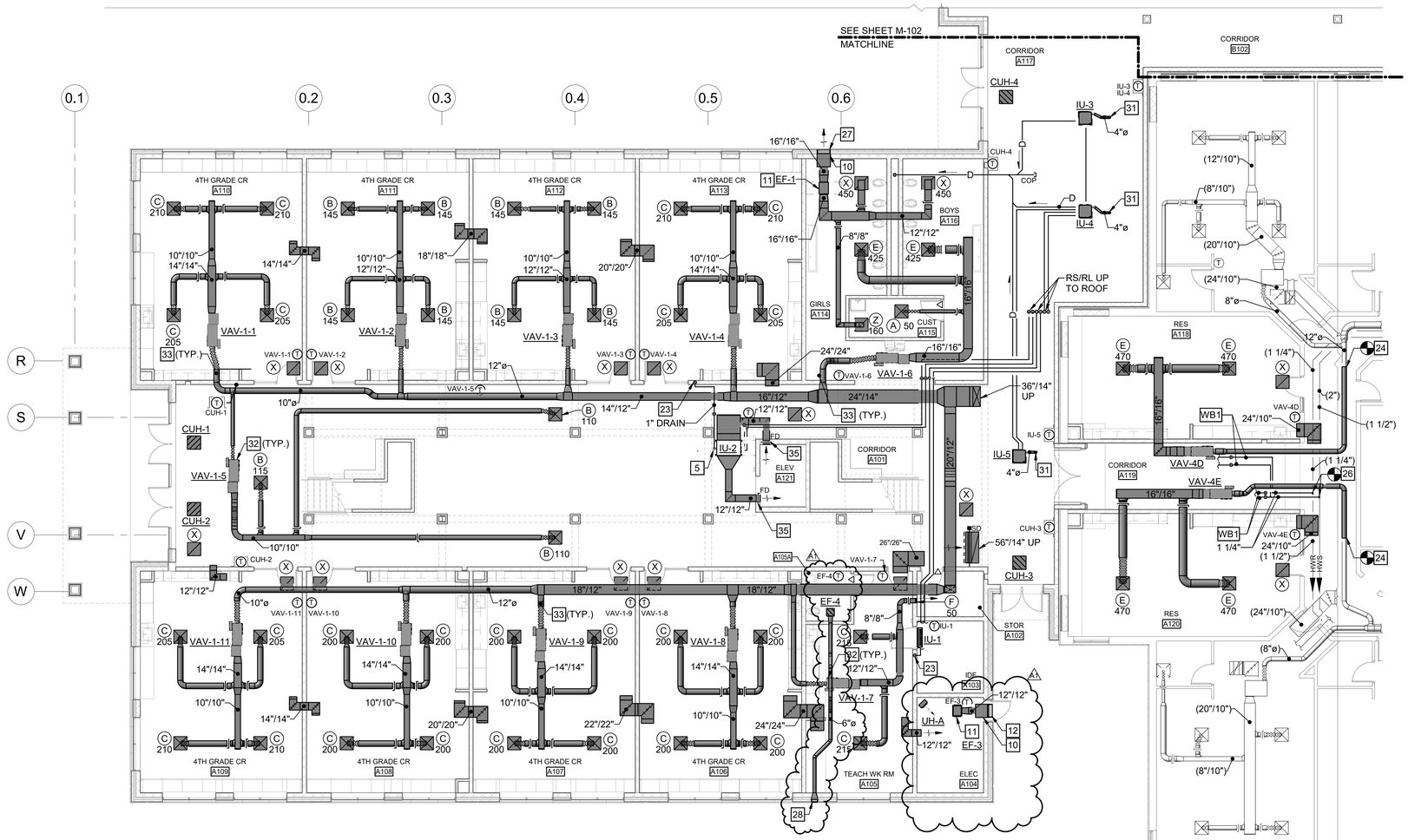
DRAWING
ROOF PLAN - AREA B - NEW WORK - PLUMBING - ADDITIVE ALTERNATE NO.1

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P-903

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NEW WORK NOTES ☐	
NO.	DESCRIPTION
5	REFER TO "CONDENSATE DRAIN TRAP DETAIL" ON DRAWING M-201.
10	PROVIDE A 2'-0" PLENUM BOX SERVING LOUVER.
11	REFER TO "IN-LINE EXHAUST FAN DETAIL" ON DRAWING M-202.
12	EXHAUST AIR LOUVER. 2'-0" TALL x 1'-4" WIDE WITH AT LEAST 0.6 SF FREE AREA. "GREENHECK" MODEL EHH-601 OR APPROVED EQUAL WITH STATIONARY LOUVER BLADES. BLADES SHALL BE OF SINGLE PIECE CONSTRUCTION (515 CFM MAXIMUM). COLOR SELECTION BY ARCHITECT.
23	REFER TO PLUMBING DRAWINGS FOR 2" VERTICAL CONDENSATE RISER.
24	PROVIDE DUCTWORK INCLUDING SUPPORTS AND HANGERS TO POINT INDICATED.
26	PROVIDE NEW HOT WATER PIPING TO POINT INDICATED INCLUDING INSULATION, HANGERS AND SUPPORTS COMPLETE.
27	EXHAUST AIR LOUVER. 2'-0" TALL x 1'-8" WIDE WITH AT LEAST 1.2 SF FREE AREA. "GREENHECK" MODEL EHH-601 OR APPROVED EQUAL WITH STATIONARY LOUVER BLADES. BLADES SHALL BE OF SINGLE PIECE CONSTRUCTION (1060 CFM MAXIMUM). COLOR SELECTION BY ARCHITECT.
28	EXHAUST AIR LOUVER. 1'-0" TALL x 1'-0" WIDE WITH AT LEAST 0.2 SF FREE AREA. "GREENHECK" MODEL EHH-501 OR APPROVED EQUAL WITH STATIONARY LOUVER BLADES. BLADES SHALL BE OF SINGLE PIECE CONSTRUCTION. (75 CFM MAX). COLOR SELECTION BY ARCHITECT.
31	PROVIDE 4" OUTSIDE AIR INTAKE DUCTWORK UP TO INTAKE HOOD ON ROOF. PROVIDE GREENHECK MODEL "SRSI-8" OR EQUAL WITH ROOF CURB.
32	REFER TO "TYPICAL SERIES FAN-POWERED VAV BOX INSTALLATION DETAIL" ON DRAWING M-202 FOR ADDITIONAL INFORMATION.
33	REFER TO VAV TERMINAL UNIT SCHEDULE FOR INLET DUCT SIZES.
35	REFER TO "VERTICAL DYNAMIC FIRE DAMPER DETAIL" ON DRAWING M-202.

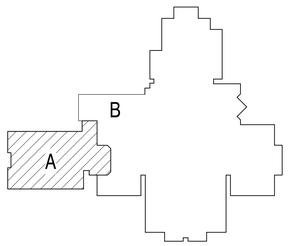
WATER BALANCE NOTES	
NO.	DESCRIPTION
WB1	1" HWS/HWR (3.5 GPM)



FIRST FLOOR PLAN - AREA A - NEW WORK - DUCTWORK AND PIPING

SCALE: 1/8" = 1'-0"

PLAN NORTH



KEY PLAN - AREA A

NOT TO SCALE

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6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
VIRGINIA DEPARTMENT OF EDUCATION - 127-2400-101
IFB: 1889-B

DRAWING
FIRST FLOOR - AREA A - NEW WORK - DUCTWORK AND PIPING

SHEET
M-101

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NEW WORK NOTES ☐	
NO.	DESCRIPTION
1	PROVIDE 1" x 1" WIRE MESH AND FRAME OVER OPEN END OF DUCTWORK.
6	PROVIDE DUCT MOUNTED SMOKE DETECTOR FURNISHED BY DIVISION 28, INSTALLED BY DIVISION 23. INTERLOCK SMOKE DETECTOR(S) WITH THE FIRE ALARM SYSTEM IN ACCORDANCE WITH SECTION 606.4.1 OF THE VIRGINIA MECHANICAL CODE. REFER TO ELECTRICAL DRAWINGS FOR FURTHER INFORMATION.
11	REFER TO "IN-LINE EXHAUST FAN DETAIL" ON DRAWING M-202.
33	REFER TO VAV TERMINAL UNIT SCHEDULE FOR INLET DUCT SIZES.
34	PROVIDE 16"/16" UP TO RELIEF HOOD ON ROOF. PROVIDE GREENHECK MODEL "GRSR-16" OR EQUAL WITH ROOF CURB.
37	PROVIDE 6"ø UP TO RELIEF HOOD ON ROOF. PROVIDE GREENHECK MODEL "GRSR-8" OR EQUAL WITH ROOF CURB.

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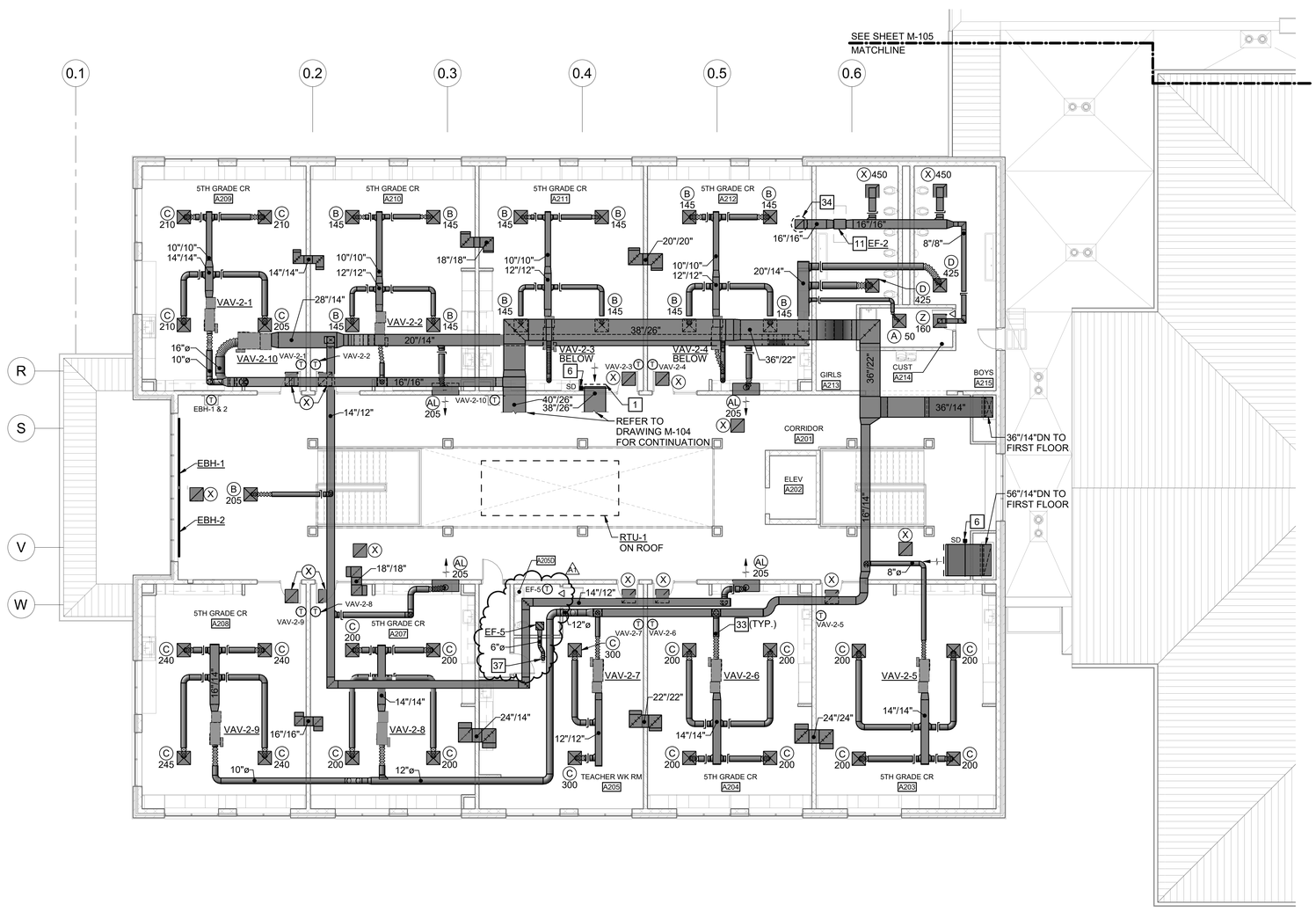
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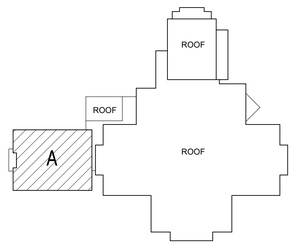
COMMONWEALTH OF VIRGINIA
KEVIN D. ALLEN
Lic. No. 023349
06.24.2025

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 1888-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

DRAWING
SECOND FLOOR - AREA A

SHEET
M-103





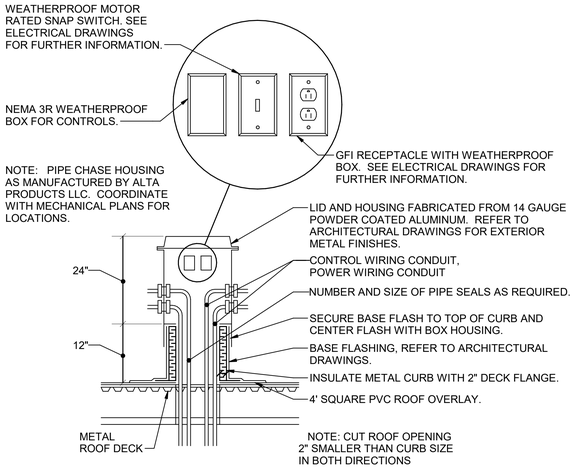
KEY PLAN - AREA A
NOT TO SCALE

SECOND FLOOR PLAN - AREA A
SCALE: 1/8" = 1'-0"

PLAN NORTH

1/32" = 1'-0" | 1/16" = 1'-0" | 3/32" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0" | 12" = 1'-0"

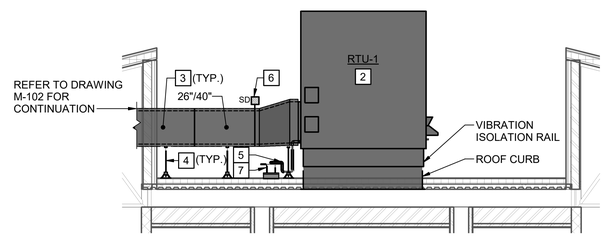
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REFRIGERANT PIPING AND POWER THROUGH ROOF DETAIL

NOT TO SCALE

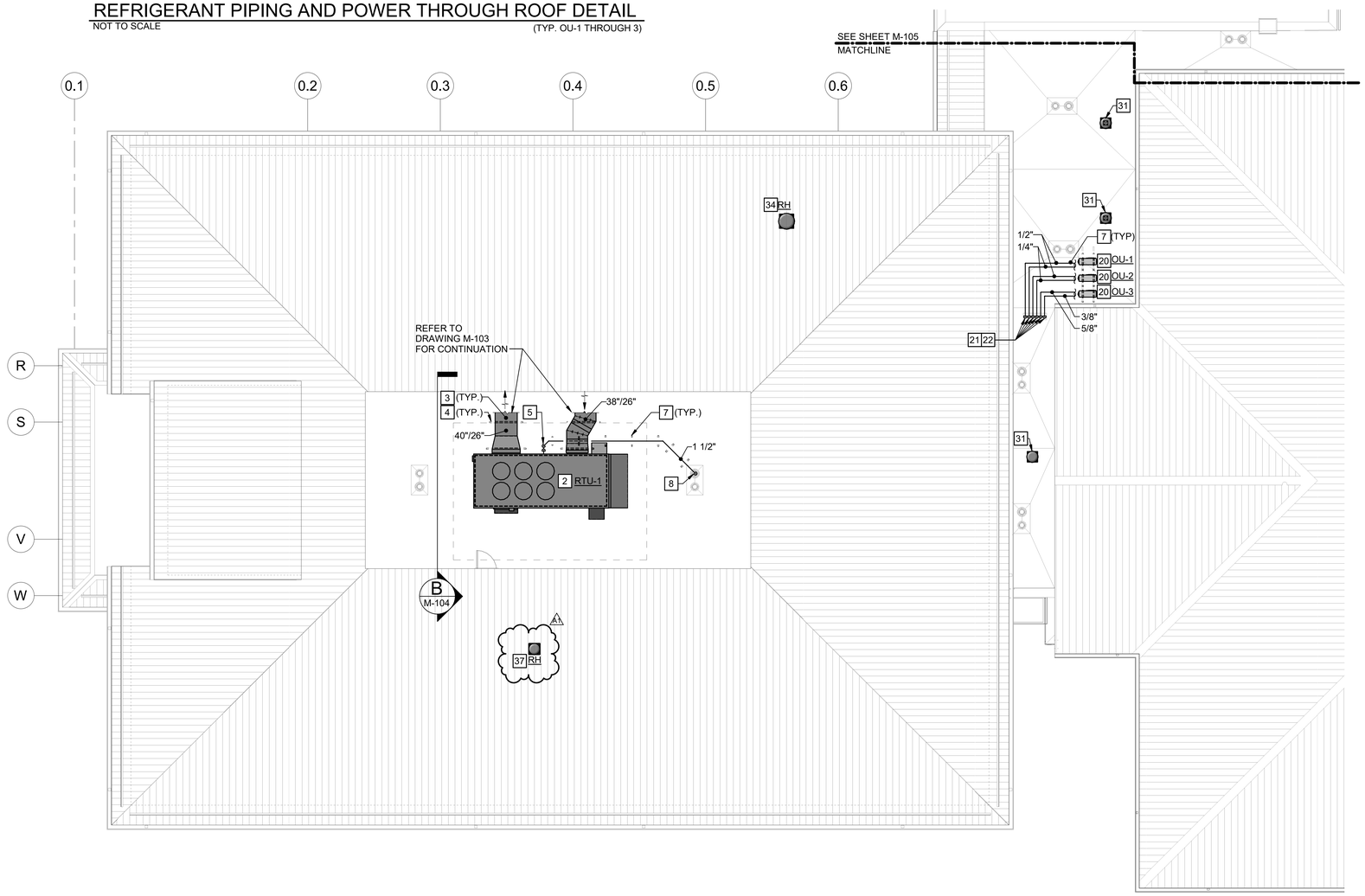
(TYP. OU-1 THROUGH 3)



B M-104/M-104 **SECTION B**

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

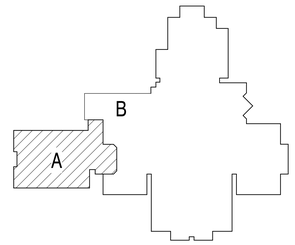
NEW WORK NOTES ☐	
NO.	DESCRIPTION
2	REFER TO "ROOFTOP UNIT MOUNTING DETAIL" ON DRAWING M-202.
3	PROVIDE DOUBLE WALL DUCTWORK WITH 3" FIBERGLASS INSULATION ENCAPSULATED BETWEEN SOLID INNER WALL FOR ALL DUCTWORK INSTALLED OUTDOORS. REFER TO SPECIFICATION 230500 FOR DUCTWORK REQUIREMENTS. REFER TO SPECIFICATION 230700 FOR WEATHERPROOF COATING DETAILS.
4	REFER TO "ROOF MOUNTED DUCT SUPPORT DETAIL" ON DRAWING M-201.
5	REFER TO "CONDENSATE DRAIN TRAP DETAIL" ON DRAWING M-201.
6	PROVIDE DUCT MOUNTED SMOKE DETECTOR FURNISHED BY DIVISION 28, INSTALLED BY DIVISION 23. INTERLOCK SMOKE DETECTOR(S) WITH THE FIRE ALARM SYSTEM IN ACCORDANCE WITH SECTION 606.4.1 OF THE VIRGINIA MECHANICAL CODE. REFER TO ELECTRICAL DRAWINGS FOR FURTHER INFORMATION.
7	REFER TO "ROOF MOUNTED PIPE SUPPORT DETAIL" ON DRAWING M-202.
8	DISCHARGE CONDENSATE DRAIN INTO ROOF DRAIN. DO NOT DISCHARGE INTO OVERFLOW ROOF DRAIN.
20	REFER TO "ROOF MOUNTED CONDENSING UNIT SUPPORT DETAIL" ON ROOF PLAN.
21	PROVIDE RS/RL PIPING. SIZE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
22	PROVIDE REFRIGERANT PIPING DOWN THROUGH ROOF. REFER TO "REFRIGERANT PIPING AND POWER THRU ROOF DETAIL" ON DRAWING M-202.
31	PROVIDE 4" OUTSIDE AIR INTAKE DUCTWORK UP TO INTAKE HOOD ON ROOF. PROVIDE GREENHECK MODEL "GRSI-8" OR EQUAL WITH ROOF CURB.
34	PROVIDE 16"/16" UP TO RELIEF HOOD ON ROOF. PROVIDE GREENHECK MODEL "GRSR-16" OR EQUAL WITH ROOF CURB.
37	PROVIDE 6"ø UP TO RELIEF HOOD ON ROOF. PROVIDE GREENHECK MODEL "GRSR-8" OR EQUAL WITH ROOF CURB.



ROOF PLAN - AREA A

SCALE: 1/8" = 1'-0"

PLAN NORTH



KEY PLAN - AREA A

NOT TO SCALE

THOMPSON *Consulting Engineers*
22 ENTERPRISE PARKWAY, HAMPTON, VA 23666
4411 CON ROAD, GLEN ALLEN, VA 23060
2809-S LYNNHAVEN ROAD, VA BEACH, VA 23452
TELEPHONE: (757) 399-4433 PROJECT #24-053

MARK	DATE	REVISIONS	BY	TCE
A1	07.17.2025	ADDENDUM NO. 1		

DATE	06.24.2025
PROJECT	23238-00
DESIGNED	SDH
DRAWN	SLS
CHECKED	KDA

RRMM® ARCHITECTS, PC
1317 Executive Blvd, Suite 200
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(757)622-2828

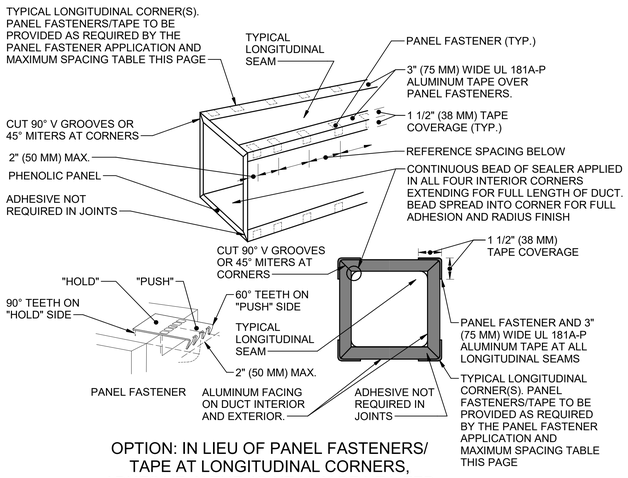
COMMONWEALTH OF VIRGINIA
KEVIN D. ALLEN
Lic. No. 023349
06.24.2025
PROFESSIONAL ENGINEER

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 188948
VIRGINIA DEPARTMENT OF EDUCATION : 127-32-005-101

DRAWING
ROOF PLAN - AREA A

SHEET
M-104

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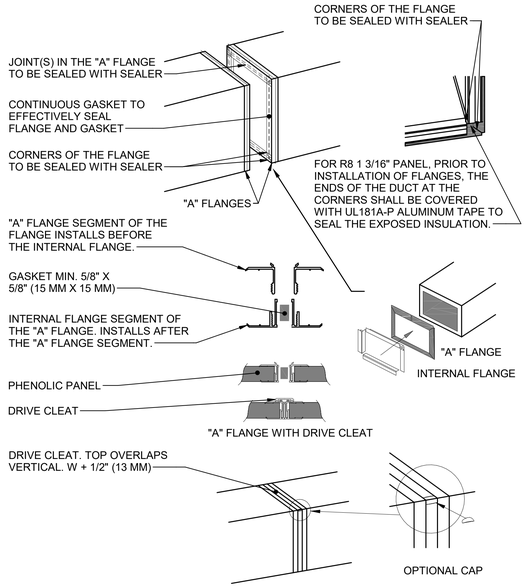
OPTION: IN LIEU OF PANEL FASTENERS/ TAPE AT LONGITUDINAL CORNERS, ADHESIVE IN THE JOINT MAY BE UTILIZED

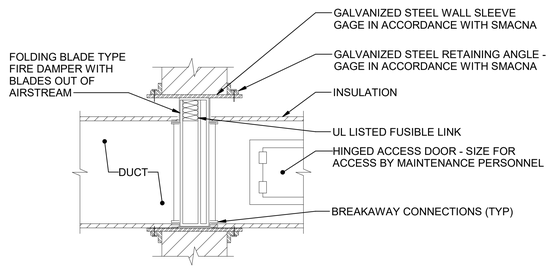
PANEL FASTENER APPLICATION AND MAXIMUM SPACING				
PRESSURE IN. w.g.	PRESSURE Pa	DUCT DIMENSION	PANEL FASTENER MAXIMUM SPACING	APPLICATION
0.5 - 2	125-500	80" (2000 mm) AND UNDER	20" (508 mm)	LONGITUDINAL SEAMS AND LONGITUDINAL CORNERS
3, [1]4	750, [1]1000	80" (2000 mm) AND UNDER	10" (254 mm)	LONGITUDINAL SEAMS AND LONGITUDINAL CORNERS

[1] POSITIVE PRESSURE ONLY

NOTE:
FOR DUCT OVER 80" (2000 mm), CONSULT WITH THE PHENOLIC PANEL MANUFACTURER.

OPTIONAL PANEL FASTENER IN LIEU OF ADHESIVE IN LONGITUDINAL JOINTS

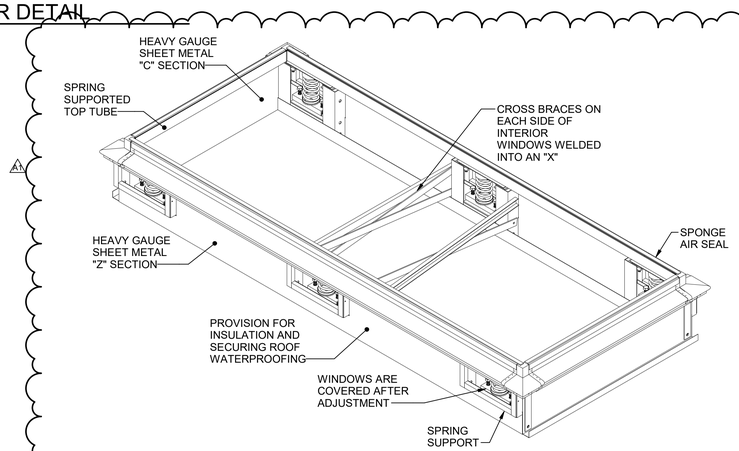




NOTE: HORIZONTAL FIRE DAMPER INSTALLATION SIMILAR BUT WITH SPRING CLOSURE.

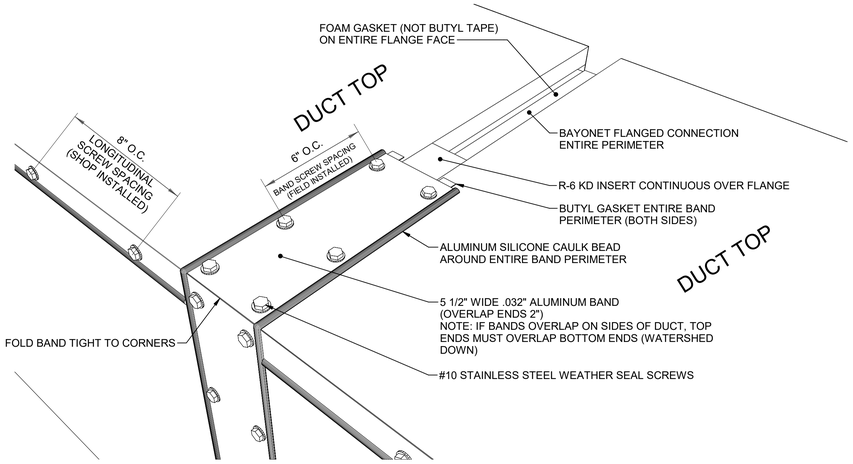
VERTICAL DYNAMIC FIRE DAMPER DETAIL

NOT TO SCALE



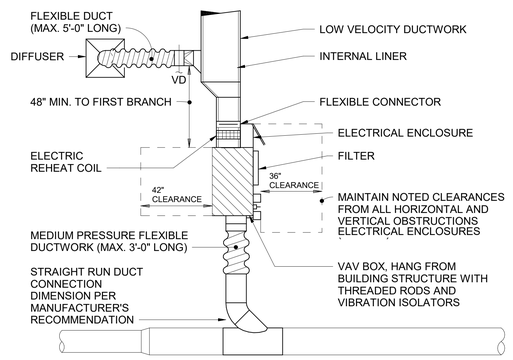
ROOFTOP UNIT MOUNTING DETAIL

NOT TO SCALE (RTU-1 THROUGH RTU-3)



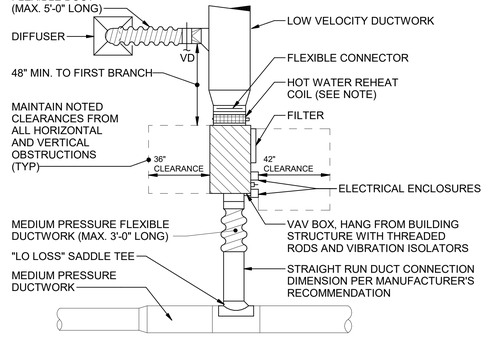
ROOFTOP DUCT DETAILS

NOT TO SCALE



TYPICAL SERIES FAN POWERED VAV BOX (WITH ELECTRIC REHEAT COIL) INSTALLATION DETAIL

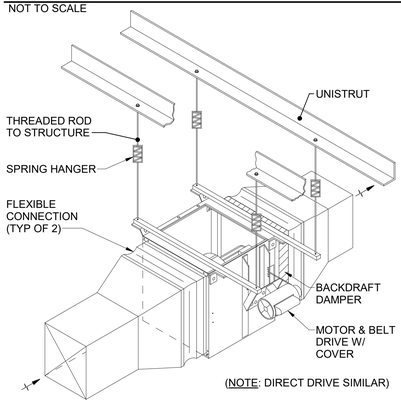
NOT TO SCALE



NOTE: EXTERNALLY INSULATE HOT WATER RE-HEAT COIL AND COIL PIPING CONNECTIONS TO PREVENT CONDENSATION ON PIPING AND U-BENDS WHEN CONTROL VALVE IS CLOSED.

SERIES FAN POWERED VAV BOX (WITH HOT WATER REHEAT COIL) INSTALLATION DETAIL

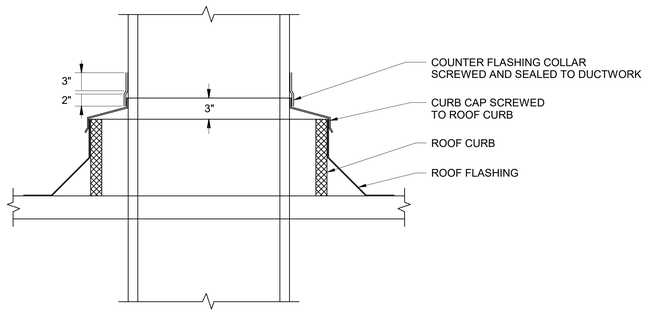
NOT TO SCALE



(NOTE: DIRECT DRIVE SIMILAR)

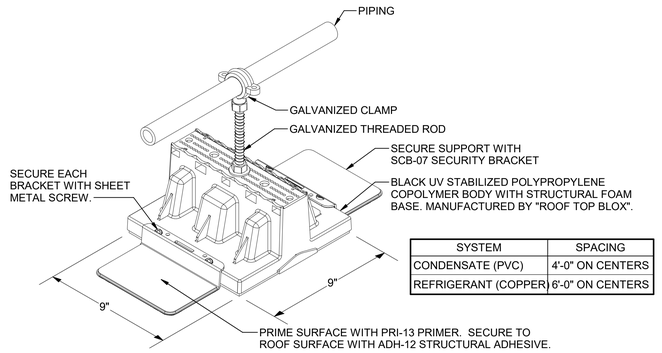
IN-LINE EXHAUST FAN DETAIL

NOT TO SCALE (EF-1 & 2)(SIMILAR FOR EF-3 & IU-2)



TYPICIAL DUCT THRU ROOF CURB DETAIL

NOT TO SCALE



SYSTEM	SPACING
CONDENSATE (PVC)	4'-0" ON CENTERS
REFRIGERANT (COPPER)	6'-0" ON CENTERS

PIPING SUPPORT DETAIL

NOT TO SCALE

THOMPSON
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TELEPHONE: (757) 399-4433, PROJECT #24-053

MARK	DATE	REVISIONS
A1	07.17.2025	ADDENDUM NO. 1
	TCE	BY
		DESCRIPTION

DATE	06.24.2025		
PROJECT	23238-00		
DESIGNED	SDH		
DRAWN	SLS		
CHECKED	KDA		

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1317 Executive Blvd, Suite 200
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(757)622-2828

COMMONWEALTH OF VIRGINIA
KEVIN D. ALLEN
Lic. No. 023349
06.24.2025
PROFESSIONAL ENGINEER

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 1868-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-3240-101

DRAWING
MECHANICAL DETAILS

SHEET
M-202

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1/32" = 1'-0" | 1/16" = 1'-0" | 3/32" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0" | 12" = 1'-0"

ELECTRICAL LEGEND:

LIGHTING:

- EXISTING 2' X 2' LIGHT FIXTURE.
- EXISTING 2' X 4' LIGHT FIXTURE.
- EXISTING 2' X 4' LED LIGHT FIXTURE CONNECTED TO EMERGENCY GENERATOR.
- EXISTING CEILING MOUNTED EXIT LIGHT. SHADED AREA INDICATES FACE-LIT.
- EXISTING WALL MOUNTED LIGHT FIXTURE
- $ — EXISTING LIGHT SWITCH
- $_3$ — EXISTING THREE-WAY SWITCH
- $_{3K}$ — EXISTING THREE-WAY KEY OPERATED SWITCH
- $_4$ — EXISTING FOUR-WAY SWITCH
- $_{OS}$ — WALL SWITCH WITH OCCUPANCY SENSOR; COOPER LIGHTING CATALOG NUMBER OS310U-W, OR APPROVED EQUAL. INSTALL + 48" A.F.F. TO THE TOP OF THE OUTLET BOX. A1
- $_{14}$ — DOWNLIGHT LED LIGHT FIXTURE, RECESSED. NUMBER SUBSCRIPT INDICATES LIGHT FIXTURE TYPE.
- $_{15}$ — DOWNLIGHT LED LIGHT FIXTURE WITH SELF-CONTAINED BATTERY BACKUP, RECESSED. NUMBER SUBSCRIPT INDICATES LIGHT FIXTURE TYPE.
- CEILING MOUNTED EXIT LIGHT WITH SELF-CONTAINED BATTERY BACKUP, WITH DIRECTIONAL ARROWS AS INDICATED CONNECTED TO EMERGENCY CIRCUIT. SHADED AREA INDICATES FACE-LIT. NUMBER SUBSCRIPT INDICATES LIGHT FIXTURE TYPE.
- $_{21}$ — 2' X 2' LED LIGHT FIXTURE . NUMBER SUBSCRIPT INDICATES LIGHT FIXTURE TYPE.
- A 3 — 2' X 4' LED LIGHT FIXTURE . NUMBER SUBSCRIPT INDICATES LIGHT FIXTURE TYPE. LETTER SUBSCRIPT INDICATES LIGHT FIXTURE CONTROLLED BY CORRESPONDING LIGHT SWITCH.
- A 4 — 2' X 4' LED LIGHT FIXTURE WITH SELF-CONTAINED BATTERY BACKUP. NUMBER SUBSCRIPT INDICATES LIGHT FIXTURE TYPE. LETTER SUBSCRIPT INDICATES LIGHT FIXTURE CONTROLLED BY CORRESPONDING CHANNEL IN DIMMING CONTROL STATION.
- $_{17}$ — WALL MOUNTED LIGHT FIXTURE. NUMBER SUBSCRIPT INDICATES LIGHT FIXTURE TYPE.
- 18 — 4" WIDE RECESSED OR PENDANT MOUNTED LED LIGHT FIXTURE. SEE LIGHT FIXTURE SCHEDULE AND LIGHT FIXTURE SCHEDULE NOTES FOR INDIVIDUAL FIXTURE LENGTHS AND MOUNTING HEIGHTS. NUMBER SUBSCRIPT INDICATES LIGHT FIXTURE TYPE.
- 19 E — 4" WIDE RECESSED OR PENDANT MOUNTED LED LIGHT FIXTURE WITH SELF-CONTAINED BATTERY BACKUP. SEE LIGHT FIXTURE SCHEDULE AND LIGHT FIXTURE SCHEDULE NOTES FOR INDIVIDUAL FIXTURE LENGTHS AND MOUNTING HEIGHTS. NUMBER SUBSCRIPT INDICATES LIGHT FIXTURE TYPE.
- 24 — PENDANT MOUNTED LIGHT FIXTURE RING. SEE LIGHT FIXTURE SCHEDULE AND LIGHT FIXTURE SCHEDULE NOTES ON DRAWING E-002 FOR RING DIAMETERS AND MOUNTING HEIGHTS.
- 31 — ELEVATOR 2-WAY COMMUNICATION LIGHT. SEE LIGHT FIXTURE SCHEDULE AND LIGHT FIXTURE SCHEDULE NOTES ON DRAWING E-002 FOR ADDITIONAL REQUIREMENTS.
- $_{33}$ — REMOTE HEAD FOR EMERGENCY BATTERY LIGHT
- MC — MAIN LIGHTING CONTROLLER - PROVIDE COOPER CATALOG NUMBER TRX-TCPRO2 OR APPROVED EQUAL.
- WC — WIRELESS AREA CONTROLLER - PROVIDE COOPER CATALOG NUMBER WAC2-POE OR APPROVED EQUAL.
- D1 — WIRELESS SINGLE CHANNEL DIMMING CONTROL STATION. PROVIDE COOPER CATALOG NUMBER WW3-W CONTROL STATION OR APPROVED EQUAL.
- D2 — WIRELESS THREE CHANNEL DIMMING CONTROL STATION. PROVIDE COOPER CATALOG NUMBER WW3-RL-W CONTROL STATION OR APPROVED EQUAL. PROGRAM CONTROL STATION SUCH THAT THE TOP BUTTON CONTROLS ALL LIGHT FIXTURE IN THE SPACE. PROGRAM CONTROL STATION SUCH THAT THE MIDDLE BUTTON CONTROLS ALL LIGHT FIXTURE IN THE SPACE WITH SUBSCRIPT "A". PROGRAM CONTROL STATION SUCH THAT THE BOTTOM BUTTON CONTROLS ALL REMAINING LIGHT FIXTURE IN THE SPACE.
- A — WIRELESS LIGHTING AREA CONTROLLER. PROVIDE COOPER LIGHTING CATALOG NUMBER WAC2-POE OR APPROVED EQUAL. INSTALL ROOM CONTROLLER ABOVE THE CEILING WHERE INDICATED ON THE DRAWINGS. A1
- I — INVERTER / BATTERY PACK. PROVIDE SURE-LITES CATALOG NUMBER INVM-175-W-1 OR APPROVED EQUAL. WALL MOUNT INVERTER ABOVE THE CEILING
- L/C — LIGHTING CONTACTOR - SEE LIGHTING CONTACTOR SCHEDULE ON DRAWING E-002.
- LIGHTING BRANCH CIRCUIT WIRING IN CONDUIT. RUN CONCEALED ABOVE CEILING, IN WALL, BELOW FLOOR SLAB, OR UNDERGROUND. AS A MINIMUM, EACH SINGLE-PHASE LIGHTING CIRCUIT SHALL HAVE ONE PHASE CONDUCTOR, ONE NEUTRAL CONDUCTOR, AND ONE GROUND CONDUCTOR IN 1/2" CONDUIT. PROVIDE ADDITIONAL CONDUCTORS AS REQUIRED FOR LIGHTING CONTROLS, SWITCH LEG, THREE-WAY, AND FOUR-WAY LIGHT SWITCHES. PROVIDE ADDITIONAL PHASE CONDUCTORS FOR EXIT LIGHTS, EMERGENCY LIGHTING EQUIPMENT AND DEVICES.
- 57fc — FOOTCANDLE INDICATOR.

POWER:

- 4 GFI / WP GFI — DUPLEX RECEPTACLE, 20A, 120V. INSTALL +18" A.F.F. TO CENTER OF RECEPTACLE, U.O.N. IF CENTER SHADED, INSTALL +6" ABOVE COUNTER TOP OR BACKSPLASH. "GFI" WHEN USED INDICATES GROUND FAULT CIRCUIT INTERRUPTER. "WP" WHEN USED INDICATES WEATHERPROOF WHILE IN USE. "4" WHEN USED INDICATES DOUBLE DUPLEX RECEPTACLE.
- SIMPLEX RECEPTACLE - 20A., 120 VOLT. INSTALL +18" A.F.F. U.O.N.
- COMBINATION 20A., 120 VOLT DUPLEX RECEPTACLE AND DUPLEX USB CHARGING JACK. INSTALL DEVICE +18" A.F.F.
- COMBINATION 20A., 120 VOLT DOUBLE DUPLEX RECEPTACLE AND DUPLEX USB CHARGING JACK. INSTALL DEVICE +18" A.F.F., UNLESS OTHERWISE NOTED.
- SPECIAL PURPOSE RECEPTACLE. PROVIDE DEVICE WITH NEMA CONFIGURATION AS INDICATED ON FLOOR PLAN. PROVIDE DEVICE WITH MATCHING PLUG.
- SU — SPECIAL PURPOSE RECEPTACLE ON CONDUIT STUB-UP. SEE DETAIL ON FOOD SERVICE DRAWINGS.
- SU — DUPLEX RECEPTACLE ON CONDUIT STUP-UP. SEE DETAIL ON FOOD SERVICE DRAWINGS.
- 2 COMPARTMENT SURFACE RACEWAY - PROVIDE WIREMOLD 5400 SERIES WHITE RACEWAY OR APPROVED EQUAL. PROVIDE ALL ACCESSORIES FOR A COMPLETE AND PROPER INSTALLATION.
- SHADED AREA INDICATES RACEWAY TURNED UP AND RUN VERTICALLY UP WALL TO ABOVE THE CEILING, CUT CEILING EDGE TEE AS REQUIRED.
- MAGNETIC MOTOR STARTER A1

POWER (CONT.):

- C — 20A, 120V. DUPLEX RECEPTACLE INSTALLED FLUSH IN CEILING. PROVIDE CEILING GRID SUPPORT BRACKET FOR OUTLET BOX.
- 20A, 120V. DUPLEX RECEPTACLE FOR TELEVISION/MONITOR. INSTALL RECEPTACLE FOR TELEVISION/MONITOR +84" A.F.F. SUCH THAT IT DOES NOT INTERFERE WITH THE MOUNTING BRACKET. COORDINATE MONITOR LOCATION WITH ARCHITECTURAL DRAWINGS.
- G — 20A, 120V. DUPLEX RECEPTACLE FOR GOOGLE CHROME BOX. INSTALL RECEPTACLE AND SURFACE OUTLET BOX +60" A.F.F. INSIDE CHROME BOX. COORDINATE EXACT LOCATION WITH ARCHITECTURAL DRAWINGS.
- P — DUPLEX RECEPTACLE FOR PROJECTOR. INSTALL RECEPTACLE BEHIND PROJECTOR MOUNTING PLATE ENCLOSURE. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF THE PROJECTOR WITH THE ARCHITECTURAL DRAWINGS.
- EWC — PROVIDE DUPLEX RECEPTACLE 20A, 120V FOR ELECTRIC WATER COOLER. INSTALL IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS BEHIND THE ENCLOSURE.
- PANELBOARD, 208Y/120 VOLT.
- PANELBOARD, 480Y/277 VOLT.
- E — ELECTRICAL CONNECTION TO EQUIPMENT.
- EF — ELECTRICAL CONNECTION TO EXHAUST FAN.
- WH — ELECTRICAL CONNECTION TO WATER HEATER.
- CR — CORD REEL - PROVIDE COX REELS, CATALOG NUMBER PC13-3512-F OR EQUAL. PROVIDE 20A, 120V, SINGLE RECEPTACLE. INSTALL BESIDE CORD REEL. INSTALL CORD REEL AND RECEPTACLE AS INDICATED ON DRAWINGS.
- J — JUNCTION BOX - SIZE AS REQUIRED.
- T — DRY TYPE TRANSFORMER.
- S_M — MOTOR RATED SNAP SWITCH.
- S_{M330} — MOTOR RATED SNAP SWITCH. 3=NUMBER OF POLES, 30=SWITCH AMPS RATING.
- 3P 60 40 3R — DISCONNECT SWITCH, 600V. U.O.N.: 3P=NUMBER OF POLES, 60=SWITCH RATING, 40=FUSE RATING (NF INDICATES NONFUSED). PROVIDE IN NEMA 1 ENCLOSURE IF INSTALLED INDOORS AND PROVIDE NEMA 3R ENCLOSURE IF INSTALLED OUT OF DOORS.
- M — ENERGY METER. SEE "POWER RISER DIAGRAM" ON DRAWING E-701 AND E-908 FOR QUANTITIES AND MODEL NUMBERS A1
- HH — HANDHOLE - PROVIDE QUAZITE HAND HOLE (SIZE AND DEPTH AS REQUIRED)OR APPROVED EQUAL. PROVIDE NON-TRAFFIC RATED COVER WITH "ELECTRIC" ENGRAVED IN THE LID. INSTALL TOP OF HAND HOLE FLUSH WITH FINISHED GRADE.
- BRANCH CIRCUIT RUN CONCEALED ABOVE CEILING, IN WALLS, BELOW FLOOR SLAB OR BELOW GRADE.
- POWER BRANCH CIRCUIT OR FEEDER WIRING IN CONDUIT. RUN CONCEALED ABOVE CEILING, IN WALL, BELOW FLOOR SLAB OR UNDERGROUND. NO TICK MARKS INDICATES 2 #12 CONDUCTORS & 1 #12 GROUND., IN 1/2" CONDUIT, U.O.N. TICK MARKS, WHEN SHOWN, INDICATE NUMBER OF CONDUCTORS IF OTHER THAN THREE: (7) INDICATES GROUNDING CONDUCTOR. REFER TO PANELBOARD SCHEDULES FOR CONDUCTOR SIZES LARGER THAN #12.
- L1-1 — HOMERUNS TO PANEL. PANEL & CIRCUIT DESIGNATION AS INDICATED.
- CONDUIT TURNED UP
- CONDUIT TURNED DOWN.

FIRE ALARM SYSTEM:

- E — EXTERIOR FIRE ALARM AUDIO DEVICE. INSTALL DEVICE +9'-0" A.F.F.. SEE "EXTERIOR SPEAKER DETAIL" ON DRAWING E-003 FOR ADDITIONAL INFORMATION. A1
- $_{15}$ — AUDIO/VISUAL DEVICE. INSTALL ON WALL AT +80" A.F.F. TO THE BOTTOM OF THE LENS OR +96" TO THE TOP OF THE LENS. SUBSCRIPT INDICATES CANDELA RATING.
- $_{15}$ — VISUAL ONLY DEVICE. INSTALL ON WALL AT +80" A.F.F. TO THE BOTTOM OF THE LENS OR +96" TO THE TOP OF THE LENS. SUBSCRIPT INDICATES CANDELA RATING.
- F — PULL STATION, INSTALL +42" A.F.F. TO CENTER.
- HS $_{15}$ — CEILING MOUNTED AUDIO/VISUAL DEVICE. SEE FLOOR PLANS FOR ADDITIONAL REQUIREMENTS. SUBSCRIPT INDICATES CANDELA LEVEL.
- V $_{15}$ — CEILING MOUNTED VISUAL DEVICE. SEE FLOOR PLANS FOR ADDITIONAL REQUIREMENTS. SUBSCRIPT INDICATES CANDELA LEVEL.
- S — FIRE ALARM SYSTEM SMOKE DETECTOR.
- H — FIRE ALARM SYSTEM HEAT DETECTOR.
- M — FIRE ALARM CARBON MONOXIDE DETECTOR.
- T — FIRE ALARM SYSTEM CONNECTION TO SPRINKLER SYSTEM TAMPER SWITCH.
- F — FIRE ALARM SYSTEM CONNECTION TO SPRINKLER SYSTEM FLOW SWITCH.
- K — FIRE ALARM CONNECTION TO KITCHEN HOOD.
- B — FIRE ALARM SYSTEM AND ELECTRICAL CONNECTION TO SPRINKLER FIRE ALARM BELL.
- D — FIRE ALARM SYSTEM DUCT SMOKE DETECTOR. SEE MECHANICAL DRAWINGS FOR EXACT LOCATIONS AND QUANTITIES.
- L — FIRE ALARM SYSTEM DUCT SMOKE DETECTOR REMOTE INDICATING LIGHT / TEST SWITCH. INSTALL SWITCH FLUSH IN CEILING BELOW DUCT SMOKE DETECTOR. PROVIDE BRACKET TO SUPPORT OUTLET BOX FROM CEILING GRID
- F/C — PROVIDE 120V POWER TO DOOR HOLD-OPEN DEVICES THROUGH A SINGLE POLE, NORMALLY CLOSED CONTRACTOR (COIL VOLTAGE - 120V). PROVIDE POWER TO THE COIL BY TAPPING THE 120V CIRCUIT AHEAD OF THE CONTACTOR AND RUNNING IT THROUGH A RELAY TO BE CONTROLLED BY THE BUILDING FIRE ALARM SYSTEM SO ANY FIRE ALARM INITIATION WILL CAUSE THE RELAY TO OPEN, THE CONTACTOR TO OPEN AND THE DOOR HOLD-OPEN DEVICES TO DE-ENERGIZE. THE REVERSE SHALL HAPPEN UPON CLEARING OF THE ALARM. PROVIDE ALL MATERIAL, EQUIPMENT AND HARDWARE NECESSARY FOR COMPLETE INSTALLATION. INSTALL CONTACTOR AND RELAY IN A SINGLE ENCLOSURE ABOVE THE CEILING ABOVE EACH DOOR OR GROUP OF DOORS CONTROLLED. SERVE CONTACTOR FROM CIRCUIT INDICATED.
- ONE HOUR FIRE BARRIER.
- TWO HOUR FIRE WALL.

INTERCOM / CLOCK SYSTEM:

- S_1 — CEILING MOUNTED INTERCOM SYSTEM SPEAKER. PROVIDE VALCOM CATALOG NUMBER VE9022A-2 SPEAKERS. NO SUBSTITUTE WILL BE CONSIDERED. PROVIDE VALCOM CATALOG NUMBER VP-4124D AMPLIFIERS AS REQUIRED FOR CORRIDOR SPEAKERS. NO SUBSTITUTE WILL BE CONSIDERED. SEE DRAWING E-401 FOR ADDITIONAL REQUIREMENTS.
- S_2 — CEILING MOUNTED PROJECTOR SPEAKER. PROVIDE Q5C CATALOG NUMBER AC-C6T OR APPROVED EQUAL. CONNECT PROJECTOR SPEAKERS TO PROJECTOR VIA AMPLIFIER INSTALLED ON TOP OF PROJECTOR.
- A — AMPLIFIER FOR CEILING MOUNTED PROJECTOR SPEAKERS. PROVIDE CRESTRON CATALOG NUMBER AMP-50MP OR APPROVED EQUAL. INSTALL ON TOP OF PROJECTOR IN CLASSROOM.
- S_P — PENDANT MOUNTED INTERCOM SYSTEM SPEAKER. PROVIDE VALCOM CATALOG NUMBER V1015B-WW SPEAKERS. NO SUBSTITUTE WILL BE CONSIDERED. PROVIDE VALCOM CATALOG NUMBER VP-4124D AMPLIFIERS AS REQUIRED FOR CORRIDOR SPEAKERS. NO SUBSTITUTE WILL BE CONSIDERED. SEE DRAWING E-401 FOR ADDITIONAL REQUIREMENTS.
- S_V — VOLUME CONTROL SWITCH FOR INTERCOM SPEAKER. INSTALL OUTLET BOX +48" A.F.F. TO TOP OF OUTLET BOX. PROVIDE VALCOM CATALOG NUMBER V-1092. NO SUBSTITUTE WILL BE CONSIDERED.
- S_E — EXTERIOR INTERCOM SYSTEM SPEAKER - INSTALL SPEAKER +9'-0" A.F.F. PROVIDE VALCOM CATALOG NUMBER VIP-9831AL-IC. SEE "EXTERIOR SPEAKER DETAIL" ON DRAWING E-003 FOR ADDITIONAL INFORMATION.
- WALL MOUNTED SCHOOL CLOCK. PROVIDE VALCOM CATALOG NUMBER VL520BK-F-FC-IC. NO SUBSTITUTES WILL BE CONSIDERED. PROVIDE 2-GANG OUTLET BOX WITH 3/4" CONDUIT WITH BUSHINGS ON BOTH ENDS FROM CLOCK AND TERMINATE ABOVE THE CEILING. PROVIDE CAT6 CABLE FROM CLOCK TO IDF RACK. TERMINATE CABLE IN PATCH PANEL AS DIRECTED BY THE OWNER. INSTALL BOTTOM OF CLOCK +7'-6" A.F.F. U.O.N.
- DOUBLE FACED WALL MOUNTED SCHOOL CLOCK. PROVIDE VALCOM CATALOG NUMBER VL522BK-F-FC-IC. NO SUBSTITUTES WILL BE CONSIDERED. PROVIDE 1-GNG OUTLET BOX FLUSH IN WALL BEHIND CLOCK MOUNTING BRACKET. PROVIDE 2-GANG OUTLET BOX WITH 3/4" CONDUIT WITH BUSHINGS ON BOTH ENDS FROM OUTLET BOX AND TERMINATE ABOVE THE CEILING. PROVIDE CAT6 CABLE FROM CLOCK TO IDF RACK. TERMINATE CABLE IN PATCH PANEL AS DIRECTED BY THE OWNER. INSTALL BOTTOM OF CLOCK +7'-6" A.F.F. U.O.N.
- TP — TEACHERS PANEL. PROVIDE 2-GANG OUTLET BOX WITH COVERPLATE FLUSH IN WALL U.O.N. PROVIDE 1-1/4" CONDUIT AND BUSHINGS. TERMINATE CONDUIT +6" ABOVE LAY-IN TILE CEILING, U.O.N. PROVIDE WITH ONE (1) USB INSERT AND ONE (1) HDMI INSERT. PROVIDE WITH CABLES, STAINLESS STEEL COVERPLATE AND INSERT COVERS IN ACCORDANCE WITH TEACHERS PANEL DETAIL" ON DRAWING E-003. INSTALL +36" A.F.F. A1

INTRUSION DETECTION SYSTEM:

- KP — INTRUSION DETECTION SYSTEM KEYPAD. INSTALL ON WALL + 54" A.F.F. PROVIDE OUTLET BOX AND 3/4" CONDUIT WITH BUSHINGS ON BOTH ENDS TO ABOVE THE CEILING AS DIRECTED BY THE SCHOOLS INTRUSION DETECTION SYSTEM PROVIDER. SEE "DOOR CONTROL / SECURITY DETAILS" ON DRAWING E-404 FOR ADDITIONAL INFORMATION.
- DC — DOUBLE POLE DOOR CONTACTS PROVIDED BY DOOR HARDWARE SUPPLIER. DOOR CONTACTS SHALL BE SUITABLE FOR USE WITH THE BUILDING INTRUSION DETECTION SYSTEM AND THE BUILDING ACCESS CONTROL SYSTEM. PROVIDE 3/4" CONDUIT WITH BUSHINGS ON BOTH ENDS TO ABOVE THE CEILING AS DIRECTED BY THE SCHOOLS INTRUSION DETECTION SYSTEM PROVIDER. SEE "DOOR CONTROL / SECURITY DETAILS" ON DRAWING E-404 FOR ADDITIONAL INFORMATION.

ELEVATOR COMMUNICATION SYSTEM:

- ECRS — ELEVATOR COMMUNICATION REMOTE CENTER.
- ECMS — ELEVATOR COMMUNICATION MASTER STATION.

ACCESS CONTROL SYSTEM:

- CR — ACCESS CONTROL SYSTEM CARD READER. INSTALL ON WALL + 48" A.F.F. MAXIMUM TO TOP OF OUTLET BOX. PROVIDE OUTLET BOX AND 3/4" CONDUIT WITH BUSHINGS ON BOTH ENDS TO ABOVE THE CEILING AS DIRECTED BY THE SCHOOLS INTRUSION DETECTION SYSTEM PROVIDER. SEE "DOOR CONTROL / SECURITY DETAILS" ON DRAWING E-404 FOR ADDITIONAL INFORMATION. A1
- P — PUSH PLATE FOR AUTOMATIC DOOR OPERATOR. A1

CCTV SYSTEM:

- INTERIOR CEILING MOUNTED CCTV CAMERA FURNISHED BY THE OWNER'S VENDOR AND INSTALLED BY THE ELECTRICAL CONTRACTOR. PROVIDE ONE (1) CAT6 CABLE FROM CAMERA TO PATCH PANEL IN IDF ROOM. A1
- EXTERIOR CEILING MOUNTED CCTV CAMERA FURNISHED BY THE OWNER'S VENDORAND INSTALLED BY THE ELECTRICAL CONTRACTOR. PROVIDE 3/4" CONDUIT FROM CAMERA LOCATION TO NEAREST LAY-IN TILE CEILING WITH ACCESS TO CABLE TRAY. PROVIDE ONE (1) CAT6 CABLE FROM CAMERA TO PATCH PANEL IN IDF ROOM.
- EXTERIOR WALL / CORNER MOUNTED CCTV CAMERA AND WALL BRACKET AT +9'-0" A.F.F. FURNISHED BY THE OWNER'S VENDORAND INSTALLED BY THE ELECTRICAL CONTRACTOR. PROVIDE WEATHERPROOF JUNCTION BOX FLUSH IN WALL LOCATED ADJACENT TO THE WALL BRACKET. PROVIDE WEATHERPROOF COVERPLATE WITH 1/2" GROMMETED OPENING IN CENTER. PROVIDE 3/4" LIQUID-TIGHT FLEXIBLE FROM COVERPLATE TO CAMERA FOR DATA CABLE. PROVIDE ONE (1) CAT6 CABLE FROM CAMERA TO PATCH PANEL IN IDF ROOM. COORDINATE LOCATION OF JUNCTION BOX WITH THE OWNER'S CCTV VENDOR.

GENERAL:

- 1 — DEMOLITION NOTE INDICATOR.
- 1 — NEW WORK NOTE INDICATOR.
- A151 — ROOM NUMBER INDICATOR.

THOMPSON
Consulting Engineers
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MARK	DATE	REVISIONS
A1	07.17.2025	ADDENDUM NO. 1
	TCE	BY
		DESCRIPTION

DATE	06.24.2025
PROJECT	23238-00
DESIGNED	DWC
DRAWN	MAC
CHECKED	KC

RRMM®
ARCHITECTS, PC
1317 Executive Blvd, Suite 200
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COMMONWEALTH OF VIRGINIA
KENZIE CAMBAR
Lic. No.049752
06.24.2025
PROFESSIONAL ENGINEER

PROJECT: SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 1889-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

DRAWING: ELECTRICAL LEGEND

SHEET
E-001

1/32" = 1'-0" | 1/16" = 1'-0" | 3/32" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0" | 12" = 1'-0"

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ELECTRICAL LEGEND (CONT.):

TELECOMMUNICATION SYSTEM:

P — PROVIDE 2-GANG OUTLOX WITH PASS THRU COVERPLATE FOR PROJECTOR CABLES. PROVIDE 1-1/4" CONDUIT AND BUSHINGS. TERMINATE CONDUIT +6" ABOVE LAY-IN TILE CEILING, U.O.N. PROVIDE TWO CAT6A DATA CABLE HOMERUNS WITH INSERTS. SEE "TYPICAL ACADEMIC CLASSROOM AV LINE DETAIL" ON THIS DRAWING FOR ADDITIONAL INFORMATION. INSTALL DEVICE SUCH THAT IT IS LOCATED BEHIND THE PROJECTOR MOUNTING BRACKET ENCLOSURE.

DATA OUTLET. PROVIDE 1-GANG OUTLET BOX WITH 1-GANG COVER PLATE AND ONE CAT6A INSERT. PROVIDE 3/4" CONDUIT AND BUSHINGS. TERMINATE CONDUIT +6" ABOVE LAY-IN TILE CEILING, U.O.N. PROVIDE ONE CAT6A DATA CABLE HOMERUN WITH INSERTS. TERMINATE CAT6A HOMERUN AS INDICATED ON DRAWINGS. INSTALL OUTLET +18" A.F.F. , U.O.N.

2 — DATA OUTLET. PROVIDE 2-GANG OUTLET BOX WITH 1-GANG COVER PLATE WITH TWO CAT6A INSERTS. PROVIDE 3/4" CONDUIT AND BUSHINGS. TERMINATE CONDUIT +6" ABOVE LAY-IN TILE CEILING, U.O.N. PROVIDE TWO CAT6A DATA CABLE HOMERUNS WITH INSERTS. TERMINATE CAT6A HOMERUNS AS INDICATED ON DRAWINGS. INSTALL OUTLET +18" A.F.F. , U.O.N.

C — DATA OUTLET FOR CLOCK. PROVIDE 1-GANG OUTLET BOX WITH ONE CAT6A INSERT. PROVIDE 3/4" CONDUIT AND BUSHINGS. TERMINATE CONDUIT +6" ABOVE LAY-IN TILE CEILING, U.O.N. PROVIDE ONE CAT6A DATA CABLE HOMERUN WITH INSERTS. TERMINATE CAT6A HOMERUN AS INDICATED ON DRAWINGS. INSTALL OUTLET DIRECTLY BEHIND CLASSROOM CLOCK / SPEAKER AS DIRECTED BY MANUFACTURER.

CB — GOOGLE CHROME BOX ENCLOSURE. PROVIDE LEGRAND ON-Q CATALOG NUMBER ENP0905NAV1. NO SUBSTITUTES WILL BE CONSIDERED. PROVIDE 1-1/4" CONDUIT AND BUSHINGS. TERMINATE CONDUIT +6" ABOVE LAY-IN TILE CEILING, U.O.N. PROVIDE ONE CAT6A DATA CABLE HOMERUN WITH INSERTS. TERMINATE CAT6A HOMERUN AS INDICATED ON DRAWINGS. PROVIDE ADEQUATE BLOCKING IN WALL FOR INSTALLATION OF BOX AS DIRECTED BY CHROME BOX MANUFACTURER. PROVIDE 1" CONDUIT BETWEEN CHROME BOX AND TEACHERS PANEL "TP". INSTALL CHROME BOX +60" A.F.F. ON LEFT OR RIGHT SIDE OF TACKBOARDS. SEE ARCHITECTURAL ELEVATIONS.

W.6 — SURFACE MOUNTED DATA OUTLET. PROVIDE 1-GANG WIREMOLD NON-METALLIC OUTLET BOX WITH 1-GANG COVER PLATE AND SIX (6) CAT6A INSERTS. PROVIDE WIREMOLD SURFACE NON-METALLIC RACEWAY FROM OUTLET BOX AND TERMINATE RACEWAY +6" ABOVE LAY-IN TILE CEILING. CUT CEILING GRID FOR RACEWAY INSTALLATION. PROVIDE THREE (3) CAT6A DATA CABLE HOMERUNS WITH INSERTS. TERMINATE CAT6A HOMERUNS AS INDICATED ON DRAWINGS. PROVIDE THREE (3) CAT6A PATCH CABLES BETWEEN INSERTS FOR CASH REGISTERS AND HEAD DIETICIANS COMPUTER. INSTALL OUTLET +18" A.F.F. A1

SU — DATA OUTLET STUB-UP FOR CASH REGISTER. SEE DETAIL ON FOOD SERVICE DRAWINGS.

WA — CEILING MOUNTED WIRELESS ACCESS DATA OUTLET. PROVIDE 1-GANG OUTLET BOX. INSTALL FLUSH IN CEILING. SUPPORT BOX FROM STRUCTURE ABOVE. PROVIDE ONE CAT6A DATA CABLE HOMERUN AND DATA INSERT. COORDINATE COVER PLATE TYPE WITH OWNER PROVIDED WIRELESS ACCESS DEVICE.

STAFF PHONE PROVIDED BY OWNER. PROVIDE 1-GANG OUTLET BOX WITH COVERPLATE. INSTALL OUTLET BOX +54" A.F.F., U.O.N. PROVIDE 3/4" CONDUIT WITH BUSHINGS. TERMINATE CONDUIT +6" ABOVE LAY-IN TILE CEILING. PROVIDE ONE CAT6A DATA CABLE HOMERUN WITH INSERTS. TERMINATE HOMERUN AS INDICATED ON DRAWINGS. COORDINATE COVERPLATE TYPE WITH OWNER.

A1 TG — TELECOMMUNICATIONS GROUNDING BUS BAR. SEE "TELECOMMUNICATIONS SECONDARY GROUNDING BUS BAR "GB" DETAIL" ON DRAWING E-003 FOR ADDITIONAL INFORMATION.

BASKET TYPE CABLE TRAY. SEE "GENERAL AUXILIARY SYSTEMS NOTES" ON DRAWING E-003 FOR ADDITIONAL REQUIREMENTS. A1

PROVIDE 2" EMT CONDUIT (WITH BUSHINGS) ABOVE CEILING (QUANTITY AS SHOWN) 24" LONG MINIMUM, BUT WITH NOT LESS THAN 2" OF CONDUIT ON EACH SIDE OF WALL. PROVIDE UL APPROVED FIRE SEALS AFTER INSTALLATION OF ALL CABLING.

DB — DOOR BELL BUZZER - EDWARDS MODEL NUMBER 340A-N5 OR APPROVED EQUAL. INSTALL BUZZER 82" A.F.F.

PB — DOORBELL TYPE PUSHBUTTON FOR BUZZER - VERIFY REQUIREMENTS WITH DOORBELL BUZZER PROVIDER. INSTALL 42"A.F.F.

TB — REMOTE TELEPHONE BELL PROVIDED BY OWNER. PROVIDE 1-GANG OUTLET BOX WITH 3/4" CONDUIT AND BUSHINGS. TERMINATE CONDUIT +6" ABOVE LAY-IN TILE CEILING, U.O.N. PROVIDE ONE CAT6A DATA CABLE HOMERUN IN "IDF" ROOM, ON A WALL MOUNTED TYPE 66 PUNCH-DOWN BLOCK.

E — ELEVATOR TELEPHONE/VIDEO MESSAGING OUTLET. PROVIDE 2-GANG OUTLET BOX WITH 1-GANG COVER PLATE WITH TWO CAT6A INSERTS. PROVIDE 3/4" CONDUIT AND BUSHINGS. TERMINATE CONDUIT +6" ABOVE LAY-IN TILE CEILING, U.O.N. PROVIDE TWO CAT6A DATA CABLE HOMERUNS WITH INSERTS. TERMINATE CAT6A HOMERUNS AS INDICATED ON DRAWINGS. COORDINATE OUTLET LOCATION WITH ELEVATOR MANUFACTURER. A1

LIGHT FIXTURE SCHEDULE

Type	MANAUFACTURER / CATALOG No.	LED / LUMEN	INITIAL COLOR TEMPERATURE	WATTS	VOLT	MOUNTING	REMARKS
1	ATLITE XLN2-8DR1-ES	0	3500	1.0	277	CEILING	
2	ATLITE XLN2-8DR1-ES	0	3500	1.0	277	WALL	
3	METALUX 24CZ2-30VHE-S-UNV-L835-HCD-1-WPS	3000	3500	21.0	277	RECESSED	
4	METALUX 24CZ2-30VHE-S-UNV-EL14WSD-835-HCD-1-WPS	3000	3200	21.0	277	RECESSED	
6	METALUX 24CZ2-40VHE-S-UNV-L835-HCD-1-WPS	4000	3500	27.0	277	RECESSED	
7	METALUX 24CZ2-40VHE-S-UNV-L835-HCD-EL14WSD-1-WPS	4000	3500	27.0	277	RECESSED	
8	METALUX 22CZ2-20VHE-S-UNV-L835-HCD-WLS	2000	3500	15.8	277		
9	METALUX 24CZ2-50VHE-S-UNV-L835-HCD-1-WPS	5000	3500	33.0	277	RECESSED	
10	METALUX 24CZ2-50VHE-S-UNV-L835-HCD-EL14WSD-1-WPS	5000	3500	33.0	277	RECESSED	
11	METALUX 4SNX-31SL-LW-UNV-L835-CD1-WPS-SCA	3100	3500	17.2	277	WALL	
12	METALUX 4SNX-31SL-LW-UNV-L835-CD1-WPS-SCA	3100	3500	17.2	277	PENDANT	
13	METALUX 4SNX-31SL-LW-UNV-L835-CD1-EL14WSD-WPS-SCA	3100	3500	17.2	277	PENDANT	
14	PORTFOLIO LD6D-25-90-35-S-0-H-WPN	2500	3500	28.0	277	RECESSED	
15	PORTFOLIO LD6D-25-90-35-S-0-H-EM14-WPN	2500	3500	28.0	277	RECESSED	
16	METALUX 4SNX-31SL-LW-UNV-L835-CD1	3100	3800	17.0	277	WALL	SEE NOTE 1
17	LUMARK XTOR2B-1-BZ	2100	A1 3500	18.0	277	WALL +9'-0" A.F.F.	
18	NEORAY S124DR-H1020D835-FES16FO-1-UDD-F-W-WPS	9200	3500	71.0	277	RECESSED	
19	NEORAY S124DR-H1020D835-FES16FO-1-B2-UDD-F-W-WPS	9200	3500	71.0	277	RECESSED	
20	PORTFOLIO LD6D-15-90-35-S-0-H	1500	3500	18.0	277	RECESSED	
21	METALUX 22CZ2-20VHE-S-UNV-L835-HCD-1-WPS	2000	3500	15.8	277	RECESSED	
22	NEORAY S124DR-H575D835-FES4FO-1-UDD-F-W-WPS	2300	3500	18.0	277	RECESSED	
23	NEORAY S124DP-H1020D835-FES8FO-1-UDD-F-W-WPS	4600	3500	36.0	277	RECESSED	
24	CAMMAN P1063-LD-35K-CLV-MV-WM-ACC-LDX-2000DL	2000	3500	25.0	277	PENDANT	SEE NOTE 8
25	CAMMAN P1066-LD-35K-CLV-MV-WM-ACC-LDX-3000DL	3000	3500	35.0	277	PENDANT	SEE NOTE 8
26	CAMMAN P1069-LD-35K-CLV-MV-WM-ACC-LDX-4000DL	4000	3500	45.0	277	PENDANT	SEE NOTE 8
27	NEORAY S124DR-H795D835-FES4FO-1-UDD-F-W	3150	3500	27.0	277	RECESSED	
28	NEORAY S124DR-H795D835-FES8FO-1-UDD-F-W	6200	3500	34.4	277	RECESSED	
29	METALUX 24CZ2-55VHE-S-UNV-L835-HCD-1-W-WPS	5500	3500	39.0	277	RECESSED	
30	METALUX 24CZ2-50VHE-S-UNV-L835-HCD-WLS-EL14WSD-1-WPS-WLN	5500	3500	39.0	277	RECESSED	
31	CHLORIDE ER45VLE2RMLRSW	0	3500	1.0	277	CEILING	SEE NOTE 3

LIGHT FIXTURE SCHEDULE NOTES

GENERAL:

1. MATCH LIGHT FIXTURE MOUNTING HARDWARE AND FRAME WITH THE CEILING TYPE OR CONSTRUCTION IN WHICH THE LIGHT FIXTURE IS TO BE INSTALLED. COORDINATE WORK WITH ARCHITECTURAL REFLECTED CEILING PLANS AND FINISH SCHEDULE.
2. THE CONTRACTOR SHALL PROVIDE LIGHT FIXTURE COLORS FOR ALL FIXTURE TYPES WHERE OPTIONAL COLORS ARE AVAILABLE AS DIRECTED BY THE ARCHITECT.

SPECIFIC:

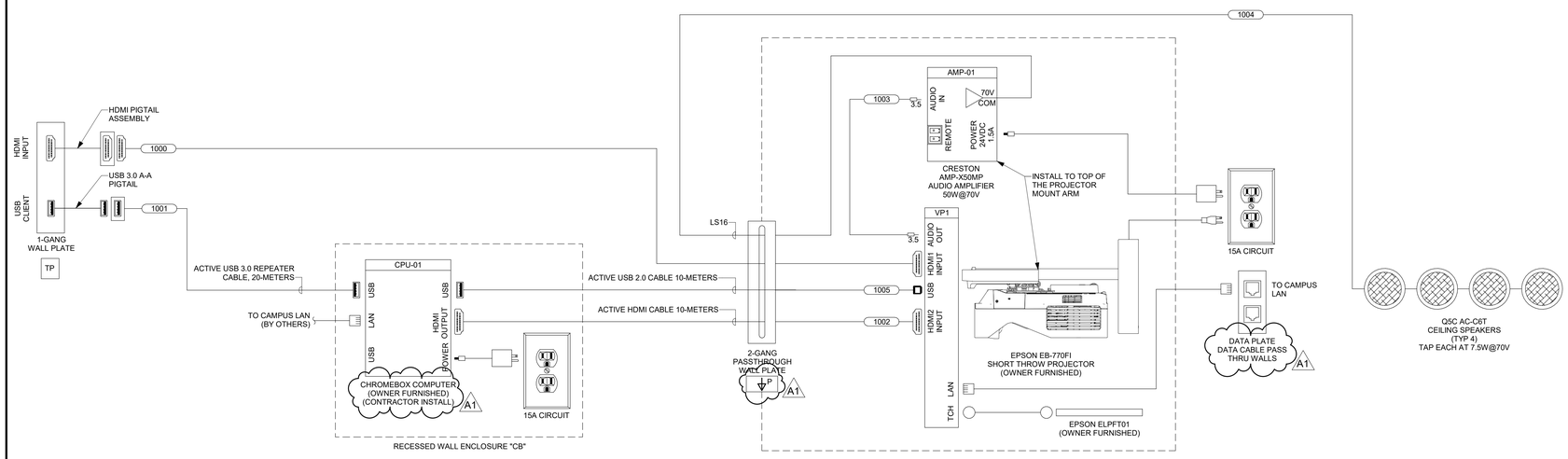
1. PROVIDE PENDANT (LENGTH AS REQUIRED) TO SUSPEND LIGHT FIXTURE SUCH THAT THE BOTTOM OF THE FIXTURE IS XX'-X" A.F.F.
2. SURFACE MOUNT LIGHT FIXTURES IN ROOMS WHICH HAVE A CEILING. PROVIDE UNISTRUT CHANNEL (LENGTH AS REQUIRED) TO SPAN THE BOTTOM OF TOP CHORD OF THE BAR JOISTS. PROVIDE PENDANTS (LENGTH AS REQUIRED) TO SUSPEND LIGHT FIXTURES FROM UNISTRUT SUCH THAT THE BOTTOM OF THE LIGHT FIXTURE IS 9'-0" A.F.F.
3. SIGN SHALL READ "EMERGENCY CALL STATION" WITH DIRECTIONAL ARROWS POINT TOWARD ELEVATOR. VERIFY WITH FIXTURE SUPPLIER THAT WORDING AND DIRECTIONAL ARROWS WILL FIT. PROVIDE SHOP DRAWING DEPICTING SIZE AND LETTERING PLACEMENT.

LIGHTING CONTACTOR SCHEDULE

DESIGNATION	LOCATED IN ROOM	SQUARE D CAT.# PROVIDE W/FORM R6 RELAY (OR APPROVED EQUAL)	SYMBOL SHOWING LOCATION ON DRAWINGS	NOTES:
L/C-1	ELECTRICAL ROOM 120	8903-LXG40-V01	L/C L/C-1	SEE NOTES 1, & 2
L/C-X1	ELECTRICAL ROOM 120	8903-LXG20-V01	L/C L/C-X1	SEE NOTES 1, & 2

LIGHTING CONTRACTOR SCHEDULE NOTES:

1. THE LIGHTING CONTACTOR SHALL BE CONTROLLED BY BOTH THE BUILDING AUTOMATION SYSTEM (OR DDC) AND THE PHOTOCELL PROVIDED BY DIVISION 23 SUB-CONTRACTOR WITH PHOTOCELL OVERRIDING THE SIGNAL FROM THE DDC SYSTEM. THE DDC SYSTEM SHALL SEND A SIGNAL TO ENERGIZE/DE-ENERGIZE THE LIGHTING CONTACTOR EVERY DAY AT A PROGRAMMED TIME. COORDINATE COIL VOLTAGE AND AUXILIARY RELAY REQUIREMENTS WITH DIVISION 23 SUB-CONTRACTOR.
2. PROVIDE LIGHTING CONTACTOR WITH HAND-OFF AUTOMATIC SELECTOR SWITCH ON FRONT OF CONTACTOR ENCLOSURE.



ALL EQUIPMENT SHOWN ON THIS IS PROVIDED BY THE CONTRACTOR U.O.N. A1

TYPICAL ACADEMIC CLASSROOM AV LINE DIAGRAM

NOT TO SCALE

GENERAL DEMOLITION NOTES

1. PERFORM ALL THE REQUIRED DEMOLITION TO COMPLY WITH THE SCOPE AND INTENT OF THE PROJECT. REMOVE ALL WIRING ASSOCIATED WITH THE REQUIRED DEMOLITION BACK TO POINT OF ORIGIN OR LAST DEVICE TO REMAIN
2. VERIFY ALL CIRCUITS SAVED DURING DEMOLITION FOR REUSE AS TO WIRE SIZE AND POINT OF ORIGIN.
3. EXERCISE CARE IN REMOVING MATERIAL AND EQUIPMENT DURING DEMOLITION. REPAIR ALL DAMAGE TO EXISTING SURFACES OR EXISTING EQUIPMENT TO REMAIN TO THE SATISFACTION OF THE ARCHITECT AND OWNER AT NO ADDITIONAL COST TO THE OWNER.
4. PROVIDE THE OWNER WITH FIRST RIGHT OF REFUSAL FOR ALL ELECTRICAL EQUIPMENT BEING REMOVED AS A PART OF THIS CONTRACT AND NOT SCHEDULED FOR REINSTALLATION. ALL ELECTRICAL EQUIPMENT NOT TURNED OVER TO THE OWNER SHALL BECOME THE PROPERTY OF THE ELECTRICAL CONTRACTOR AND SHALL BE REMOVED FROM THE SITE.
5. BEFORE BEGINNING ANY WORK, FIELD VERIFY THE WORKING CONDITION OF ALL AUXILIARY SYSTEM DEVICES SCHEDULED FOR REMOVAL AND REINSTALLATION. NOTIFY THE OWNER OF ALL DEFECTIVE EQUIPMENT. AFTER THE REINSTALLATION OF ALL EQUIPMENT, RE-VERIFY THE WORKING CONDITION. REPLACE ALL EQUIPMENT FOUND DEFECTIVE AFTER REINSTALLATION, WHICH WERE WORKING PRIOR TO REMOVAL WITH EQUIPMENT TO MATCH EXISTING AT NO ADDITIONAL COST TO THE OWNER.
6. IN AREAS WHERE NO OTHER TRADES ARE INVOLVED, THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF EXISTING CEILING TILES AS REQUIRED TO INSTALL THE NEW BRANCH CIRCUITRY. REINSTALL EXISTING CEILING TILES AFTER COMPLETION OF WORK. REPLACE ALL CEILING TILES DAMAGED DURING THIS PROJECT WITH NEW TILES TO MATCH EXISTING TO THE SATISFACTION OF THE ARCHITECT AND OWNER.
7. PROVIDE ALL ELECTRICAL DEMOLITION WORK NECESSARY TO INSTALL NEW WORK. REROUTE AND RECONNECT ALL CIRCUIT THAT IS REQUIRED TO REMAIN IN USE BUT INTERFERES WITH NEW CONSTRUCTION.
8. CONDUITS MAY BE ABANDONED IN WALLS AND BELOW FIRST FLOOR SLABS ONLY. REMOVE ALL WIRING FROM ABANDONED CONDUITS. DISCONNECT CONDUCTORS FROM ALL POWER SOURCES AND PROVIDE BLANK COVERPLATES ON ALL ABANDONED OUTLET BOXES.
9. WHERE THE TERM "BRANCH CIRCUITRY" IS USED ON THESE DRAWINGS, IT IS TO BE CONSTRUED TO MEAN CONDUIT AND CONDUCTORS.
10. PROVIDE NEW TYPED PANEL INDEX CARDS IN EXISTING PANELBOARDS WHERE CIRCUITS HAVE BEEN MODIFIED BY THIS PROJECT. PROVIDE COPIES OF MODIFIED PANEL INDEX CARDS ON AS BUILT DRAWINGS AND INCLUDED IN OPERATION AND MAINTENANCE MANUALS. PROVIDE CIRCUIT BREAKER FILLER PLATES FOR ALL CIRCUIT BREAKERS REMOVED FROM EXISTING PANELBOARDS DURING DEMOLITION WORK.
11. THE EXISTING CONDITIONS ILLUSTRATED HAVE BEEN DETERMINED FROM ORIGINAL CONSTRUCTION DOCUMENTS AND A LIMITED NON-INVASIVE FIELD INVESTIGATION. THE CONTRACTOR SHALL INVESTIGATE FIELD CONDITIONS PRIOR TO COMMENCEMENT OF WORK, COORDINATE AND MAKE ADJUSTMENTS AS NECESSARY.

GENERAL FIRE ALARM NOTES:

1. THE EXISTING SCHOOL FIRE ALARM PANEL IS A NOTIFIER NFS-320 ADDRESSABLE PANEL. PROVIDE ONLY COMPATIBLE NOTIFIER FIRE ALARM SYSTEM DEVICES AND WIRING FOR THIS PROJECT. ALL FIRE ALARM WORK ON THIS PROJECT SHALL BE PERFORMED BY A CERTIFIED NOTIFIER TECHNICIAN.
2. THE FIRE ALARM SYSTEM CONTRACTOR SHALL PROVIDE A COMPLETE SYSTEM WIRING DIAGRAM AND SHALL INSTALL THE SYSTEM IN ACCORDANCE WITH THE WIRING DIAGRAM, THE NATIONAL ELECTRICAL CODE, AND ANY AND ALL LOCAL CODES AND ORDINANCES WHICH PERTAIN TO THE WORK.
3. PROVIDE PHOTOELECTRIC DUCT SMOKE DETECTORS WITH AIR SAMPLING TUBES. DUCT TYPE SMOKE DETECTORS SHALL ACCOMMODATE AN INTELLIGENT PHOTOELECTRIC SENSOR THAT PROVIDES CONTINUOUS ANALOG MONITORING AND ALARM VERIFICATION FROM THE FIRE ALARM CONTROL PANEL. PROVIDE AUXILIARY RELAYS/CONTACTS FOR EACH DETECTOR AS REQUIRED TO SUPPORT THE REQUIRED TEMPERATURE CONTROL FUNCTIONS. THE DUCT DETECTOR SHALL BE RATED FOR AIR DUCT VELOCITIES OF 0 TO 3000 CUBIC FEET PER MINUTE. PROVIDE SAMPLING TUBES, LENGTH AS DIRECTED BY THE MECHANICAL CONTRACTOR.
4. DUCT SMOKE DETECTORS ARE FURNISHED BY THE DIVISION 28 FIRE ALARM SYSTEM CONTRACTOR, INSTALLED IN THE DUCTWORK BY THE MECHANICAL CONTRACTOR AND CONNECTED TO THE FIRE ALARM SYSTEM BY THE DIVISION 28 FIRE ALARM SYSTEM CONTRACTOR IN ACCORDANCE WITH SECTION 606 IN THE INTERNATIONAL MECHANICAL CODE. SEE ELECTRICAL AUXILIARY SYSTEMS DRAWINGS, MECHANICAL DRAWINGS AND/OR SPECIFICATIONS FOR THE QUANTITY AND LOCATION OF DUCT SMOKE DETECTORS REQUIRED.
5. PROVIDE EACH DUCT SMOKE DETECTOR WITH A REMOTE INDICATOR LIGHT IN ACCORDANCE WITH NFPA 72. INSTALL REMOTE INDICATING LIGHT FLUSH IN THE CEILING BELOW THE DUCT DETECTOR.
6. LABEL ALL REMOTE INDICATING LIGHTS WITH MECHANICAL EQUIPMENT DESIGNATIONS THAT ARE ASSOCIATED WITH THE DUCT SMOKE DETECTOR.
7. CORRIDOR DOORS INSTALLED IN FIREWALLS WILL BE HELD OPEN WITH MAGNETIC HOLD OPEN DEVICES THAT WILL BE ACTIVATED BY SMOKE DETECTORS INSTALLED ON EACH SIDE OF THE DOORS. SEE ARCHITECTURAL PLANS FOR LOCATIONS OF FIRE DOORS.
8. WHERE FIRE ALARM DEVICES ARE REMOVED AND NOT REPLACED, PROVIDE A BLANK COVERPLATE ON THE EXISTING OUTLET BOX OF SUFFICIENT SIZE TO CONCEAL ALL GAPS AROUND THE OUTLET BOX. PAINT COVERPLATE TO MATCH SURFACE ON WHICH ATTACHED.
9. PROVIDE ONLY PLENUM RATED FIRE ALARM CABLE ON THIS PROJECT. INSTALL ALL FIRE ALARM SYSTEM ABOVE LAY-IN TILE CEILINGS WITHOUT CONDUIT, U.O.N. TIE CABLES TOGETHER WITH PLENUM RATED NYLON TIE WRAPS AND SUPPORT FROM J-HOOKS OR CABLE TRAY ATTACHED TO THE WALL ABOVE THE CEILING AND BELOW EXISTING PIPING AND DUCTWORK. RUN ALL FIRE ALARM CABLES ABOVE A HARD CEILING OR IN AN EXPOSED AREA WITH NO CEILING IN 3/4" CONDUIT. IF SPLICING BECOMES A NECESSITY, IT SHALL BE DONE IN AN APPROPRIATELY SIZED JUNCTION BOX (JUNCTION BOX SHALL THEN BE PAINTED RED). ALL DOWN STREAM MODULES (I.E. ZONE ADDRESSABLE AND/OR ZONE ADAPTER MODULES) SHALL BE INSTALLED IN JUNCTION BOXES CONCEALED ABOVE LAY-IN TILE CEILINGS.
10. INSTALL ALL NEW FIRE ALARM MANUAL PULL STATIONS WITHIN 5'-0" OF EGRESS DOORS IN ACCORDANCE WITH THE NATIONAL FIRE ALARM CODE, NFPA 72.
11. PATCH OPENINGS AROUND CONDUIT THROUGH WALL PENETRATIONS ON EACH SIDE OF THE WALL WITH FIRE RATED SEALANT EQUAL OR GREATER THAN THE RATING OF THE WALL.
12. INSTALL CEILING MOUNTED SMOKE DETECTORS ON A 4" SQUARE JUNCTION BOX. CUT ACOUSTICAL TILE CEILING TO ACCOMMODATE THE JUNCTION BOX. PROVIDE ACOUSTICAL TEE 24" SPAN ELECTRICAL BOX HANGAR BY ERICO CADDY FASTENER, CATALOG NUMBER 512 OR APPROVED EQUAL FOR SUPPORT OF JUNCTION BOX.
13. PROVIDE ALL EQUIPMENT NECESSARY IN THE FIRE ALARM CONTROL PANEL TO COMPLY WITH THE FOLLOWING:
    A. THE ACTIVATION OF ANY AUTOMATIC FIRE DETECTION DEVICE SHALL ACTIVATE A GENERAL ALARM AND TRANSMISSION OF THE SIGNAL TO AN OFF-SITE MONITORING AGENCY.
    B. THE ACTIVATION OF THE GENERAL ALARM SHALL DE-ENERGIZE ALL DOOR HOLD OPEN DEVICES.
    C. THE ACTIVATION OF ANY DUCT SMOKE DETECTOR SHALL ACTIVATE A GENERAL ALARM AND SHUT DOWN THE MECHANICAL EQUIPMENT ASSOCIATED WITH THE DUCT DETECTOR.
14. ALL VISUAL FIRE ALARM NOTIFICATION DEVICES SHALL FLASH IN SYNCHRONIZATION.

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MARK	DATE	REVISIONS
A1	07.17.2025	TCE ADDENDUM NO. 1
		BY DESCRIPTION

DATE	06.24.2025			
PROJECT	23238-00			
DESIGNED	DWC			
DRAWN	MAC			
CHECKED	KC			

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COMMONWEALTH OF VIRGINIA — KENZIE CAMBAR, Lic. No.049752, 06.24.2025, PROFESSIONAL ENGINEER

PROJECT: SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 1888-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

DRAWING: LIGHT FIXTURE SCHEDULE, NOTES AND DETAILS

SHEET
E-002

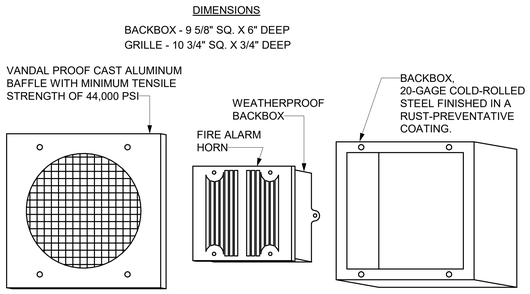
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GENERAL NEW WORK NOTES

1. WHERE INDIVIDUAL 120V HOMERUN CIRCUITS ARE SHOWN ON THE DRAWINGS THEY MAY BE COMBINED AS FOLLOWS:
   - NO MORE THAN THREE (3) PHASE CONDUCTOR PLUS THREE NEUTRALS AND ONE (1) GROUND PER CONDUIT, EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE.
   - NO TWO OF THE SAME PHASE CONDUCTOR PER CONDUIT.
   - PROVIDE 120V CIRCUIT WITH INDIVIDUAL NEUTRALS PER CIRCUIT. NEUTRALS MAY NOT BE SHARED BETWEEN PHASES.
2. PAINT ALL SURFACE METAL RACEWAY TO MATCH THE SURFACE TO WHICH ATTACHED IF THE SURFACE IS PAINTED.
3. COORDINATE WITH MECHANICAL CONTRACTOR AND DRAWINGS FOR EXACT LOCATION OF EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS INCLUDING BUT NOT LIMITED TO NUMBER OF ELECTRICAL CONNECTIONS, NUMBER AND SIZE OF FEEDERS' TERMINAL LUGS, MAXIMUM OVERCURRENT PROTECTION, AND SIZE AND TYPE OF FUSES. MAKE ADJUSTMENTS TO CONDUIT ROUTING, PLACEMENT OF DISCONNECTS AND STARTERS AS REQUIRED.
4. WHERE THE TERM "BRANCH CIRCUITRY" IS USED ON THESE DRAWINGS, IT IS TO BE CONSTRUED TO MEAN CONDUIT AND CONDUCTORS.
5. PROVIDE EACH EXTERIOR RECEPTACLE WITH A "WEATHERPROOF WHILE IN USE" RATED LOCKABLE COVERPLATE.
6. VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES (POWER, TELEPHONE, TELEVISION ETC.) BEFORE DIGGING OR INSTALLING ANY UNDERGROUND CONDUITS. ANY EXISTING UNDERGROUND UTILITY THAT IS DAMAGED DURING CONSTRUCTION OF THIS PROJECT SHALL BE REPAIRED BACK TO ITS ORIGINAL CONDITION UTILIZING THE APPROPRIATE TRADES AT NO ADDITIONAL COST TO THE BEFORE DIGGING, CALL "MISS UTILITY" TOLL FREE (1-800-552-7001) AND/OR PRIVATE UTILITY LOCATING CONTRACTOR.
7. PROVIDE HACR RATED CIRCUIT BREAKERS FOR ALL HEATING AND AIR CONDITIONING EQUIPMENT.
8. PROVIDE GFCI CIRCUIT BREAKERS WHERE INDICATED. GFCI CIRCUIT BREAKERS SHALL BE CLASS A GROUND-FAULT PROTECTION (5-MA TRIP).
9. CIRCUIT BREAKERS SERVING HEAT TRACE AND ICE MELTING EQUIPMENT SHALL BE PROVIDED WITH A PERMANENT LOCK-OUT DEVICE.
10. SECURE DISCONNECTS SWITCHES SERVING HVAC EQUIPMENT TO BUILDING ELEMENTS OR EQUIPMENT HOUSINGS AS INDICATED ON THE DRAWINGS. WHERE BUILDING WALLS OR EQUIPMENT HOUSINGS DO NOT PROVIDE SUITABLE MOUNTING SURFACES, PROVIDE A GALVANIZED UNISTRUT FRAME OR RACK SATISFACTORY IN SIZE TO SECURELY SUPPORT THE DISCONNECT SWITCH, MAGNETIC CONTACTOR AND/OR VFD.
11. THE CONTRACTOR SHALL ONLY USE DESIGNATED AREAS WITHIN THE HVAC EQUIPMENT FOR PENETRATIONS OF ELECTRICAL CONDUITS AND CONTROL CONDUITS. THESE PENETRATIONS MUST BE WEATHERTIGHT. IF A CONTRACTOR PENETRATES ANY AREAS IN THE EQUIPMENT THAT IS NOT DESIGNATED BY THE MANUFACTURER FOR PENETRATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REPAIRS TO THE EQUIPMENT, TO INSURE IT IS WEATHERTIGHT. IF EQUIPMENT CANNOT BE MADE WEATHERTIGHT, THE CONTRACTOR SHALL BE REQUIRED TO REPLACE THE EQUIPMENT AT HIS/HER OWN EXPENSE.
12. RECESSED LIGHT FIXTURES SHALL BE SUPPORTED WITH INDIVIDUAL ANNEALED, LIGHT ZINC-COATED FINISH, 12-GAUGE WIRE FROM ALL FOUR CORNERS TIED TO BUILDING STRUCTURAL MEMBERS. SECURE SAFETY WIRES TO BRIDGING IS NOT ACCEPTABLE. THE SUPPORTING WIRES SHALL BE DISTINGUISHABLE BY COLOR OR TAGGING. PROVIDE ROD HANGERS CAPABLE OF SUPPORTING TWICE THE WEIGHT OF THE LIGHT FIXTURE SUPPORTED BY ROD HANGER FOR ALL SURFACE MOUNTED LIGHT FIXTURES. ROD HANGERS SHALL BE A MINIMUM 1/4" DIAMETER.
13. PROVIDE A TYPED CIRCUIT INDEX CARD FOR EACH PANELBOARD UPON COMPLETION OF INSTALLATION WORK. INDICATE LOAD SERVED AND ROOM NUMBER(S). USE EXISTING ROOM NUMBERS.
14. PROVIDE ALL ELECTRICAL EQUIPMENT INSTALLED OUTDOOR WITH NEMA 3R ENCLOSURES, WHETHER INDICATED OR NOT.
15. THE HVAC CONTROLS BRANCH CIRCUITRY BETWEEN EACH HVAC CONTROL PANEL AND ELECTRICAL PANELS WITH CIRCUIT BREAKERS LABELED AS "HVAC CONTROLS" SHALL BE PROVIDED BY THE MECHANICAL CONTROLS CONTRACTOR. THE FINAL TERMINATION OF EACH CONTROLS BRANCH CIRCUITRY TO THE ELECTRICAL PANELS SHALL BE DONE BY THE ELECTRICAL CONTRACTOR.
16. DISCONNECT SWITCHES SHALL CONFORM TO GOVERNING INDUSTRY NEMA STANDARDS. THEY SHALL BE LISTED BY UL. DISCONNECT SWITCHES SHALL BE NEMA STANDARD HEAVY DUTY, QUICK-MAKE, QUICK-BREAK TYPE, AND CAPABLE OF BEING LOCKED IN THE OFF POSITION. WHERE DISCONNECT SWITCHES ARE INDICATED OR REQUIRED BY THE NEC TO BE WEATHERPROOF, FURNISH NEMA 3R ENCLOSURES, UNLESS INDICATED OTHERWISE.
17. WHERE CONFLICTS ARE FOUND BETWEEN DRAWINGS, DETAILS, OR SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT SHALL APPLY. NOTIFY ARCHITECT OF DISCREPANCY IN WRITING.
18. SEAL AROUND ALL EXISTING AND NEW CONDUIT PENETRATIONS THROUGH WALLS WITH FIRE RETARDANT SEALANT THAT MEETS OR EXCEEDS THE FIRE RATING OF THE WALL. ALL OTHER THRU WALL PENETRATIONS SHALL BE GROUTED OR SEALED WITH CAULK. ALL PENETRATIONS SHALL BE CORE DRILLED OR DRILLED WITH PROPER TOOLS. HAMMERS SHALL NOT BE USED TO CREATE PENETRATIONS IN WALLS. REPAIRS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
19. PROVIDE A COMPLETE RADIATING CABLE SYSTEM CONSISTING OF COAXIAL CABLE OR EQUIVALENT ABOVE ACCESSIBLE CEILINGS (PREFERABLY CORRIDORS) IN THE EXISTING BUILDING AND THE NEW ADDTION TO PROVIDE A SUPPORTING CABLE INFRASTRUCTURE FOR THE POSSIBLE FUTURE ADDITION OF A BUILDING DISTRIBUTION AMPLIFIER TO PERPETUATE CONTINUOUS EMERGENCY COMMUNICATION WITHIN THE BUILDING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE CABLE EVERYWHERE NECESSARY TO ENSURE ADEQUATE COMMUNICATION IS ATTAINED IN ALL AREAS OF THE OF THE EXISTING BUILDING AND NEW ADDITION. THE FUTURE AMPLIFIER WILL BE LOACTED IN THE EXISTING MAIN DISTRIBUTION FRAME (MDF) ROOM. SEE DRAWING E-504 FOR LOCATION OF MDF ROOM. ALL CABLE WILL BE RUN BACK TO MDF ROOM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A PATHWAY (1" CONCUIT MINIMUM) FROM THE FUTURE AMPLIFIER LOCATION TO THE ROOF (THROUGH A PITCH POCKET) FOR THE FUTURE ADDITION OF A RADIO SYSTEM ANTENNA. INSTALLATION, AND TESTING OF THE CABLING SYSTEM SHALL CONFORM WITH REQUIREMENTS OF 2021 VIRGINIA CONSTRUCTION CODE, SECTION 918 "IN-BUILDING EMERGENCY COMMUNICATIONS".

GENERAL AUXILIARY SYSTEMS NOTES:

1. SEE DRAWING SHEET E-001 FOR SYMBOLS SHOWN ON DRAWINGS E-401 THROUGH E-404 AND E-501 THROUGH E-504.EXPLANATORY NOTES REGARDING SAME. A1
2. INSTALL DEVICES SHOWN ON DRAWINGS E-401 THROUGH E-407 IN ACCORDANCE WITH MOUNTING HEIGHTS SHOWN IN LEGEND ON DRAWING SHEET E-001 AND/OR THE PROJECT SPECIFICATIONS. INSTALL FIRE ALARM DEVICES IN ACCORDANCE WITH A.D.A. REQUIREMENTS.
3. WHERE CABLE TRAYS PENETRATE FIRE RATED WALLS AND/OR SMOKE PARTITIONS PROVIDE FIRE STOPPING FITTINGS TO EQUAL OR EXCEED RATING OF WALL; WIREMOLD "FS4R" SERIES, OR APPROVED EQUAL. PROVIDE QUANTITY OF FITTINGS TO EQUAL THE CAPACITY OF THE CABLE TRAY. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF FIRE RATED WALLS.
4. ADJUST ROUTING OF CABLE TRAYS TO AVOID STRUCTURAL MEMBERS, HVAC DUCTWORK, EQUIPMENT, PIPING AND OTHER ABOVE CEILING OBSTRUCTIONS. PROVIDE ALL FITTINGS AND ACCESSORIES REQUIRED TO CHANGE LEVEL AND DIRECTIONS OF CABLE TRAY SUCH THAT THE CABLE TRAY RUNS ARE CONTINUOUS. COORDINATE CABLE TRAY WITH ALL OTHER WORK IN CORRIDOR WHERE "HARD CEILING" IS INSTALLED ABOVE LAY-IN TILE CEILING.
5. SEE ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF CEILING SPEAKERS AND OTHER DEVICES SURFACE MOUNTED ON OR RECESSED IN CEILINGS.
6. INSTALL AUXILIARY SYSTEM DEVICE CABLING IN CABLE TRAYS (U.O.N.) WHERE CABLE TRAYS ARE PROVIDED. SUPPORT CABLING BETWEEN CABLE TRAYS AND DEVICES (NOT RUN IN CONDUIT) TO BUILDING STRUCTURAL MEMBERS USING J-HOOKS ON MAXIMUM 60" CENTERS. TRAIN CABLING PARALLEL WITH STRUCTURAL STEEL. DIAGONAL CROSSINGS ARE UNACCEPTABLE. PROVIDE STEEL ANGLES SECURED TO UNDERSIDE OF UPPER CHORD OF JOISTS TO SPAN FROM JOIST-TO-JOIST IF GREATER THAN 60" APART.
7. PROVIDE PLENUM RATED CABLING WHERE CABLES ARE RUN ABOVE CEILINGS AND NOT RUN IN CONDUIT.
8. CABLE JACKETS FOR DATA, VOICE, AND CCTV SYSTEMS SHALL BE BLUE. CABLE JACKETS FOR FIBER OPTIC CABLES SHALL BE ORANGE IN COLOR. CABLE JACKETS FOR FIRE ALARM CABLES SHALL BE RED IN COLOR.
9. WHERE AUXILIARY SYSTEM CABLES ARE RUN ABOVE PLASTER CEILINGS OR IN AREAS WITH EXPOSED CONSTRUCTION, RUN CABLING IN CONDUIT, SIZE AS REQUIRED. TERMINATE CONDUIT ABOVE NEAREST CORRIDOR WITH LAY-IN TILE CEILING. RUN CONDUIT ABOVE BOTTOM CHORD OF THE STRUCTURE IN AREAS WITH EXPOSED CONSTRUCTION.
10. COORDINATE WITH DOOR HARDWARE SUPPLIER FOR EXACT TYPES OF HOLD OPEN DEVICES TO BE PROVIDED. PROVIDE MATERIAL AND EQUIPMENT AS REQUIRED FOR SATISFACTORY OPERATION OF ALL DOOR HOLD OPEN DEVICES. DOOR HOLD OPEN DEVICES SHALL BE PROVIDED BY THE SUPPLIER OF DOOR HARDWARE AND ARE SPECIFIED IN SPECIFICATION SECTION 087100.
11. COORDINATE DATA, TELEPHONE, PROJECTOR, SPEAKER, CLOCK AND FIRE ALARM DEVICE LOCATIONS WITH ARCHITECTURAL FLOOR PLANS, ELECTRICAL POWER PLANS, ENLARGED FLOOR PLANS, EQUIPMENT AND FURNITURE LAYOUTS, SECTIONS, ELEVATIONS, DETAILS, AND JOB SITE DIFFERENCES PRIOR TO ROUGHING-IN CONDUITS. MAKE REQUIRED ADJUSTMENTS (WITH ARCHITECTS APPROVAL) AT NO ADDITIONAL COST TO OWNER.
12. DUCT SMOKE DETECTORS SHALL BE PROVIDED BY DIVISION 28 CONTRACTOR, INSTALLED IN THE DUCT WORK BY THE DIVISION 23 CONTRACTOR AND CONNECTED TO THE FIRE ALARM SYSTEM BY DIVISION 28 CONTRACTOR. SEE MECHANICAL DRAWINGS AND/OR SPECIFICATIONS FOR QUANTITY, TYPE AND LOCATION OF DUCT SMOKE DETECTORS REQUIRED. COORDINATE WITH MECHANICAL CONTRACTOR AND PROVIDE THE NUMBER OF AUXILIARY RELAYS REQUIRED FOR EACH DETECTOR.

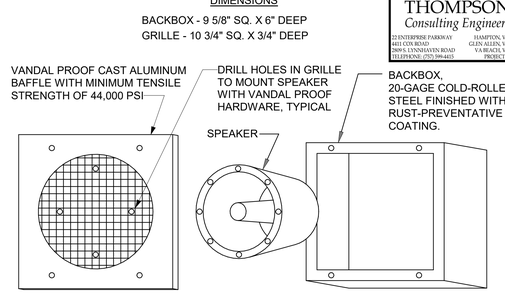


EXTERIOR FIRE ALARM HORN DETAIL

NOT TO SCALE

NOTES:

1. INSTALL FIRE ALARM HORN INSIDE OF BACK BOX.
2. SPEAKER AND HORN COVERS GRILLE TO HAVE CUSTOM COLOR POWER COAT FINISH TO MATCH BUILDING SURFACE. ARCHITECT WILL SELECT COLOR DURING SUBMITTAL PHASE.

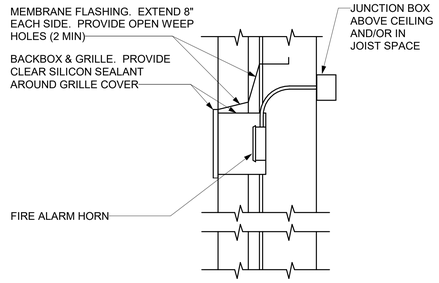


EXTERIOR SPEAKER DETAIL

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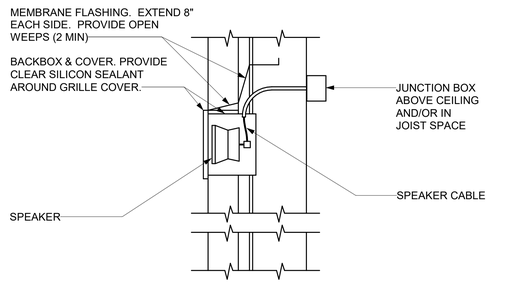
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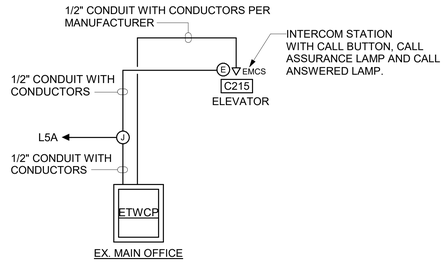
EXTERIOR FIRE ALARM HORN MOUNTING DETAIL

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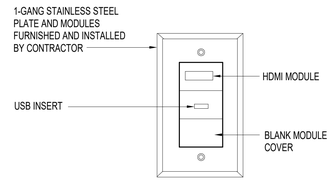
EXTERIOR SPEAKER MOUNTING DETAIL

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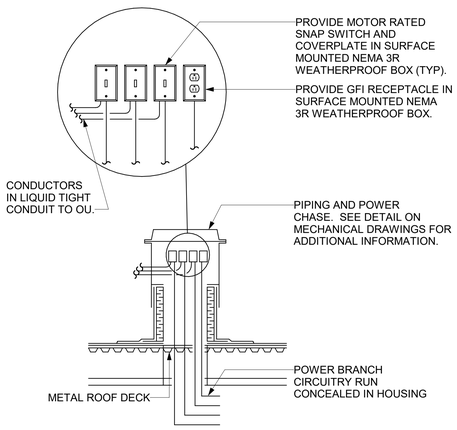
EMERGENCY ELEVATOR COMMUNICATION SYSTEM RISER DIAGRAM

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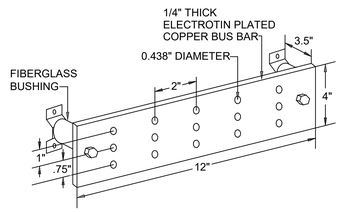
TP TEACHERS PLATE DETAIL

NOT TO SCALE



PIPING AND POWER ROOF CHASE HOUSING PENETRATION DETAIL

NOT TO SCALE



TELECOMMUNICATIONS GROUNDING BUS BAR "TG" DETAIL TG

NOT TO SCALE

TG NOTES:

1. PROVIDE BUS BAR IN EACH IDF ROOM WITHIN THE BUILDING; COORDINATE EXACT MOUNTING LOCATION WITH DATA/TECHNOLOGY EQUIPMENT INSTALLER.
2. PROVIDE #2 INSULATED GROUND CONDUCTOR IN 3/4" CONDUIT BETWEEN "TG" GROUNDING BUS BARS AND "TMG" BUS BAR.
3. PROVIDE #2 INSULATED GROUND CONDUCTOR IN 3/4" CONDUIT BETWEEN BUS BAR AND CABLE TRAY.
4. INSTALL BUS BAR 6" ABOVE THE CEILING. PROVIDE GREEN PLAQUE WITH WHITE LETTERS (1" TALL) MOUNTED ON WALL 6" BELOW CEILING IDENTIFYING EACH BUS BAR LOCATION. SECURE PLAQUE TO WALL WITH MECHANICAL FASTENERS.
5. PROVIDE #6 INSULATED GROUND CONDUCTOR BETWEEN BUS BAR AND EACH DATA RACK IN BUILDING. COORDINATE EACH RACK LOCATION WITH OWNER.

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DRAWING
GENERAL NOTES AND DETAILS

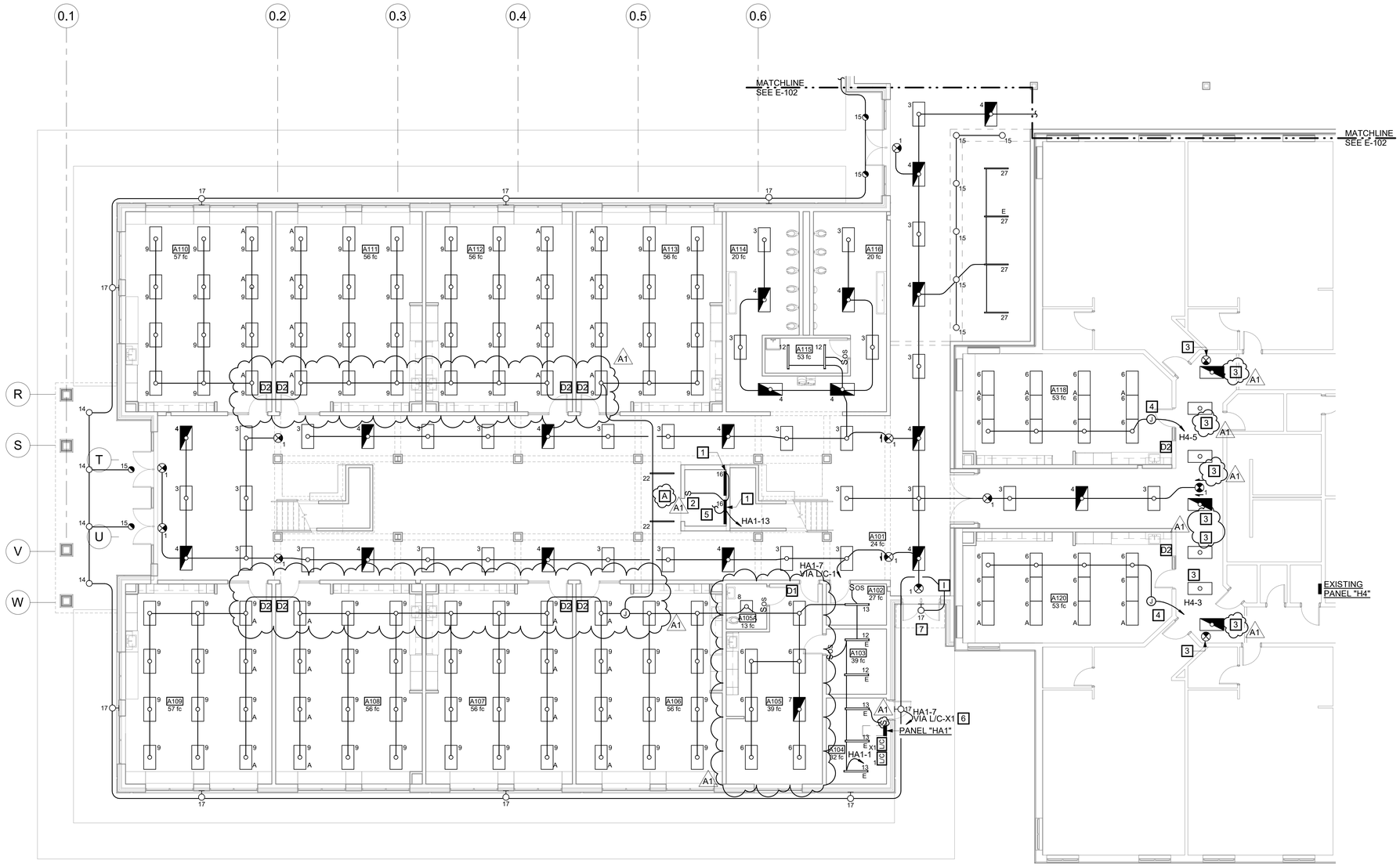
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NEW WORK NOTES: (THIS DRAWING ONLY)

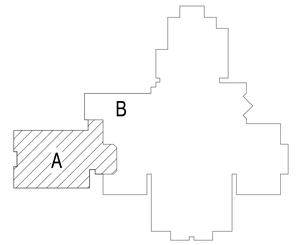
1. UP TO LIGHT FIXTURES IN BOTTOM OF ELEVATOR SHAFT.
2. INSTALL LIGHT SWITCH IN ELEVATOR SHAFT AS DIRECTED BY ELEVATOR MANUFACTURER.
3. REINSTALL EXISTING LIGHT FIXTURE / EXIT LIGHT SAVED DURING DEMOLITION IN NEW CEILING. CONNECT TO EXISTING BRANCH CIRCUITRY SAVED DURING DEMOLITION.
4. PROVIDE JUNCTION BOX ON END OF EXISTING HOMERUN BRANCH CIRCUITRY SAVED DURING DEMOLITION AND CONNECT TO NEW LIGHT FIXTURES AS INDICATED.
5. SEE DRAWING E-103 FOR CONTINUATION.
6. CONNECTION BATTERY BACKUP IN ALL LIGHT FIXTURES TYPE "15" AND "17" TO UNSWITCHED PHASE CONDUCTOR, AHEAD OF LIGHTING CONTACTOR L/C-X1.
7. INSTALL OUTLET BOX FOR LIGHT FIXTURE DIRECTLY ABOVE STEEL ANGLE SUCH THAT THE BOTTOM OF THE LIGHT FIXTURE IS IN FRONT OF THE DOOR HEADER BUT AVOIDS THE DOOR SWING.



FIRST FLOOR PLAN - AREA A - LIGHTING

SCALE: 1/8" = 1'-0"

PLAN NORTH



KEY PLAN - AREA A

NOT TO SCALE

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VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

DRAWING: FIRST FLOOR PLAN - AREA A - LIGHTING

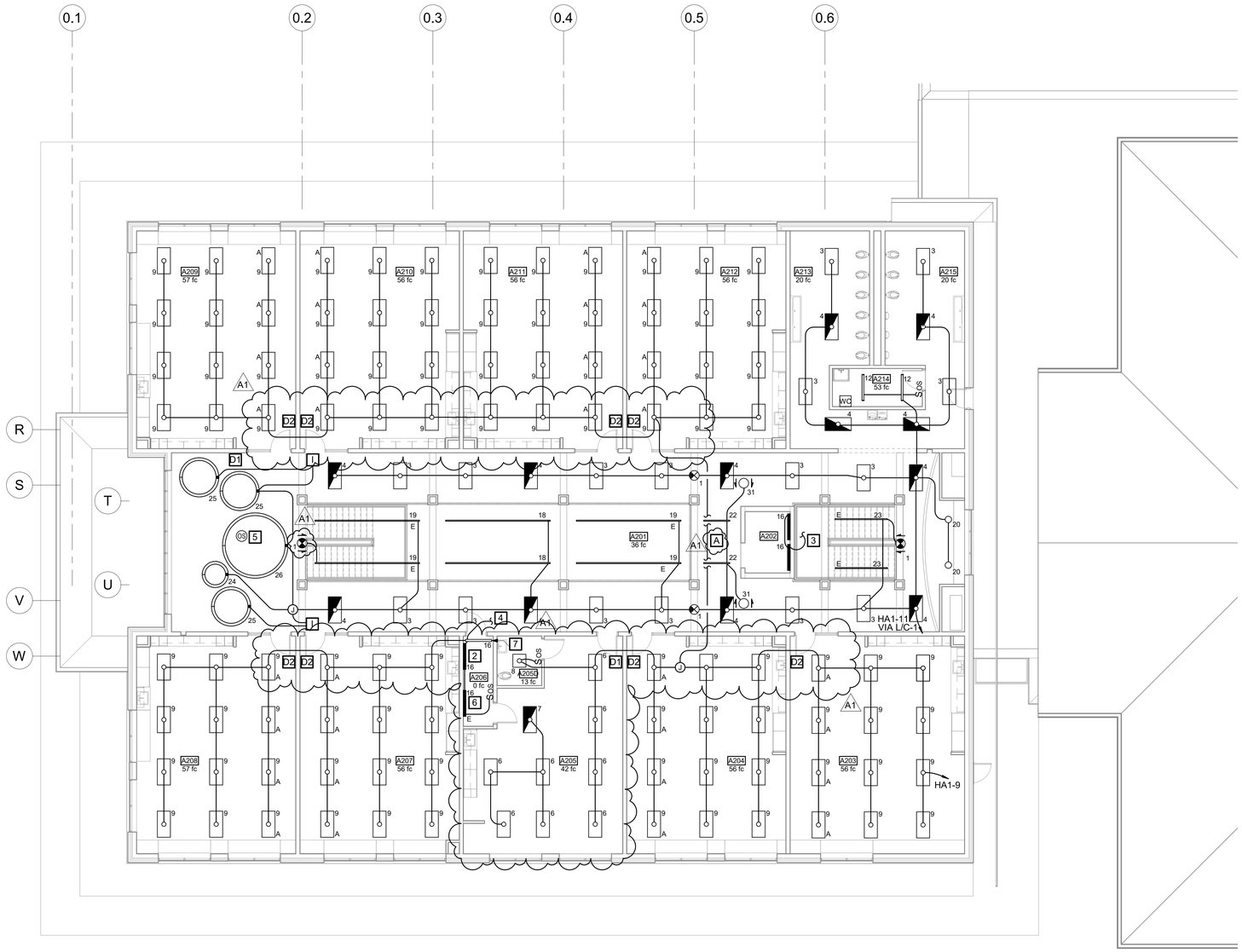
SHEET
E-101

7/16/2025 2:58:46 PM Autodesk Docs://23238-00 SPS Northern Shores ES/Northern Shores ES - Electrical - R24.rvt

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TELEPHONE: (757) 399-4433, PROJECT #24-057

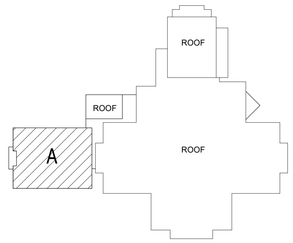
NEW WORK NOTES: (THIS DRAWING ONLY)

1. SEE DRAWING E-101 FOR LOCATION OF PANEL "HA1 AND L/C1.
2. INSTALL LIGHT FIXTURE ON WALL +5'-6" ABOVE STAIR LANDING.
3. DOWN TO TYPE 16 LIGHT FIXTURES IN ELEVATOR PIT. SEE DRAWING E-101 FOR CONTINUATION.
4. UP TO TYPE 17 LIGHT FIXTURE ON ROOF. SEE DRAWING E-304 FOR CONTINUATION.
5. INSTALL OCCUPANCY SENSOR TO OUTLET BOX ATTACHED TO THE BOTTOM OF THE ROOF TRUSS.
6. INSTALL LIGHT FIXTURE ON WALL +9'-0" A.F.F.
7. ATTACH LIGHT FIXTURE TO BOTTOM OF STAIR LANDING.



SECOND FLOOR PLAN - AREA A - LIGHTING 1
SCALE: 1/8" = 1'-0"

PLAN NORTH



KEY PLAN - AREA A
NOT TO SCALE

MARK	DATE	REVISIONS
A1	07.17.2025	ADDENDUM NO. 1
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		DESCRIPTION

DATE	06.24.2025		
PROJECT	23238-00	DWC	
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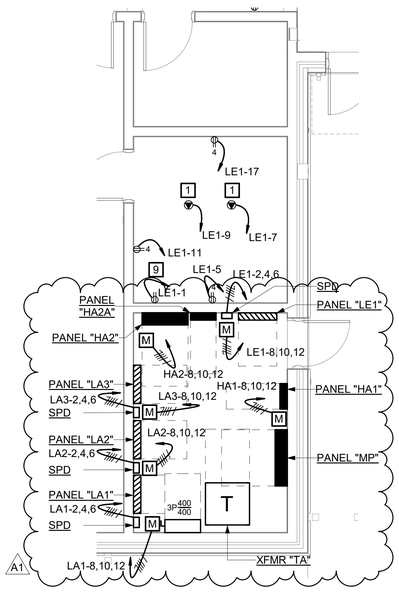
COMMONWEALTH OF VIRGINIA
KENZIE CAMBAR
Lic. No.049752
06.24.2025
PROFESSIONAL ENGINEER

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 1889-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

DRAWING
SECOND FLOOR PLAN - AREA A - LIGHTING

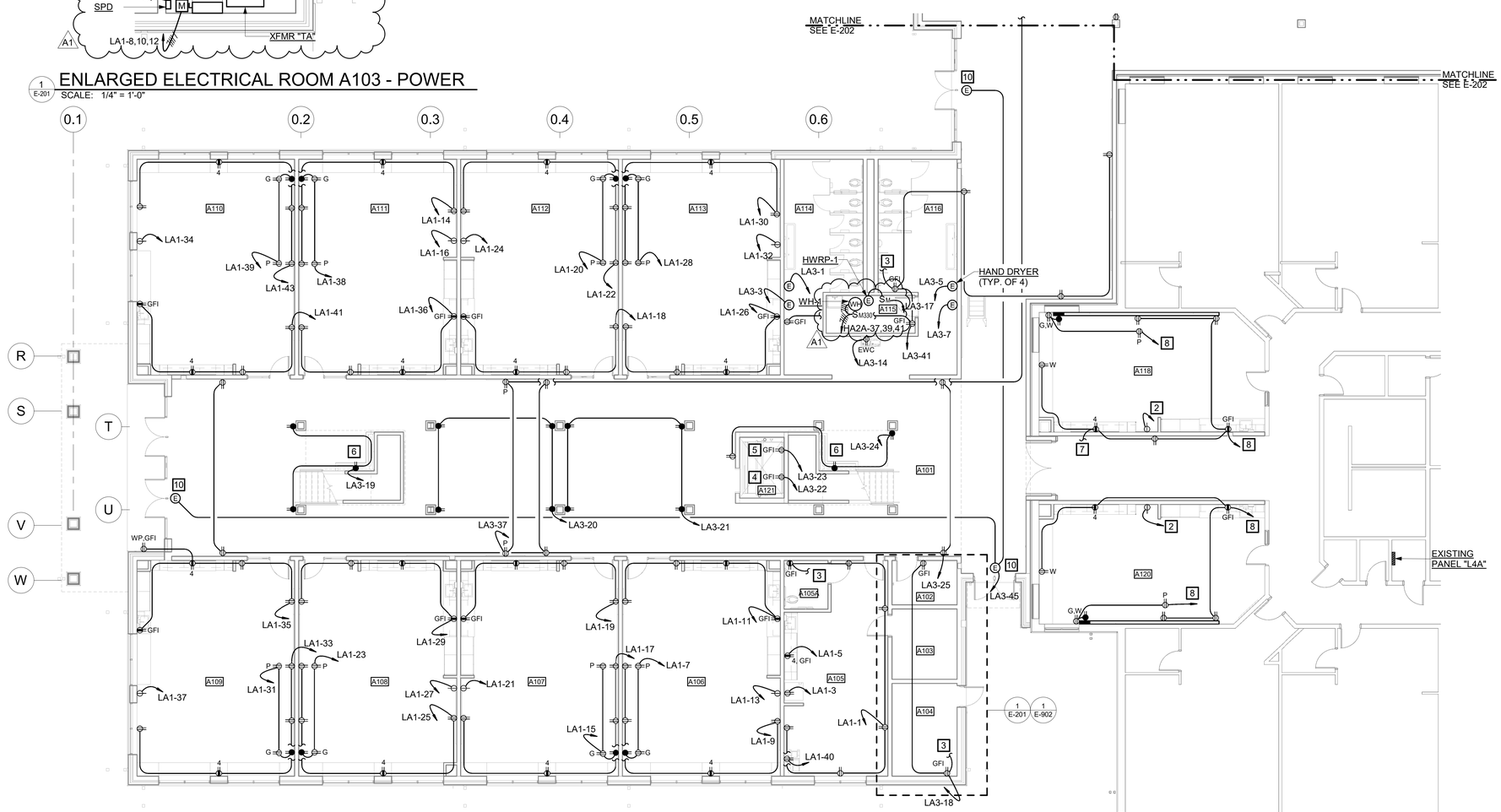
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ENLARGED ELECTRICAL ROOM A103 - POWER

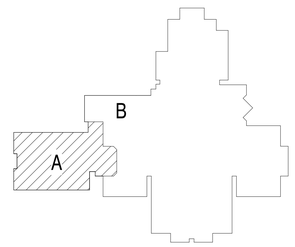
1 / E-201 SCALE: 1/4" = 1'-0"



FIRST FLOOR PLAN - AREA A - POWER

SCALE: 1/8" = 1'-0"

PLAN NORTH



KEY PLAN - AREA A

NOT TO SCALE

NEW WORK NOTES: (THIS DRAWING ONLY)

1. PROVIDE NEMA L5-30 RECEPTACLE IN SURFACE MOUNTED OUTLET BOX. ATTACH OUTLET BOX TO CABLE TRAY AS DIRECTED BY THE OWNERS TECHNOLOGY DEPARTMENT. PROVIDE ONE (1) EATON CATALOG NUMBER 9PX3000RT-L UPS FOR EACH RACK. INSTALL UPS IN RACK AS DIRECTED BY THE OWNER. CONNECT UPS TO NEMA L5-30 RECEPTACLE IN THE TOP OF THE RACK.
2. CONNECT HOMERUN TO 20A-1P CIRCUIT BREAKER IN PANEL "L4A" MADE SPARE DURING DEMOLITION. CHANGE PANEL INDEX TO REFLECT LOAD SERVED.
3. UP TO EXHAUST FAN. SEE DRAWING E-301 FOR CONTINUATION.
4. INSTALL RECEPTACLE +18" ABOVE ELEVATOR PIT FLOOR. COORDINATE EXACT LOCATION WITH ELEVATOR PROVIDER.
5. INSTALL RECEPTACLE +18" ABOVE ELEVATOR PIT FLOOR. COORDINATE EXACT LOCATION WITH PLUMBING SUB-CONTRACTOR.
6. INSTALL RECEPTACLE +24" A.F.F.
7. UP TO FIRE ALARM CONTACTOR. SEE DRAWING E-401 FOR CONTINUATION.
8. CONNECT HOMERUN TO EXISTING SPARE 20A-1P CIRCUIT BREAKER IN PANEL "L4A". CHANGE PANEL INDEX TO REFLECT LOAD SERVED.
9. INSTALL RECEPTACLE +60" A.F.F. TO POWER INTERCOM SYSTEM SPEAKER AMPLIFIERS. PROVIDE PLUG-N STRIPS (QUANTITY AS REQUIRED) FOR AMPLIFIERS. MOUNT PLUG-IN STRIP ON WALL ADJACENT TO RECEPTACLE.
10. PROVIDE ELECTRICAL CONNECTION TO AUTOMATIC DOORS AND LOCK RETRACTION DEVICES VIA DOOR CONTROL JUNCTION BOX. RUN BRANCH CIRCUIT IN STOREFRONT AS REQUIRED. COORDINATE REQUIREMENTS WITH DOOR HARDWARE PROVIDER.

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A1	07.17.2025	ADDENDUM NO. 1
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KENZIE CAMBAR
Lic. No.049752
06.24.2025
PROFESSIONAL ENGINEER

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD,
SUFFOLK, VIRGINIA
IFB: 188-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

DRAWING
FIRST FLOOR PLAN - AREA A - POWER

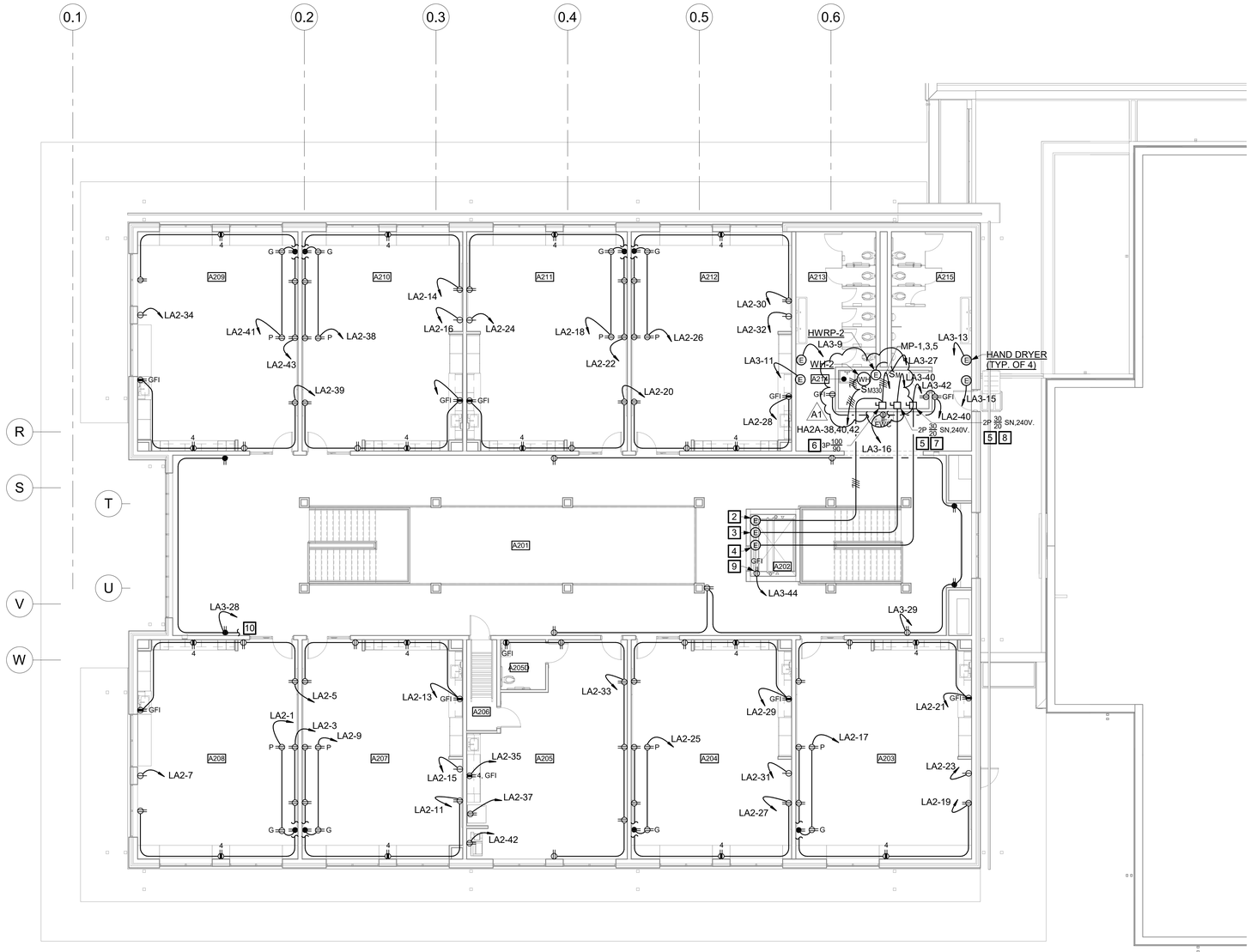
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E-201

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NEW WORK NOTES: (THIS DRAWING ONLY)

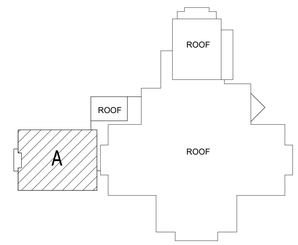
1. SEE DRAWING E-201 FOR LOCATION OF PANELS "MP", "LA2", AND "LA3".
2. PROVIDE ELECTRICAL CONNECTION TO ELEVATOR CONTROL PANEL FOR POWER TO ELEVATOR. COORDINATE ROUGH-IN REQUIREMENTS WITH ELEVATOR SUPPLIER.
3. PROVIDE ELECTRICAL CONNECTION TO ELEVATOR CONTROL PANEL FOR POWER TO ELEVATOR CAB LIGHTS. COORDINATE ROUGH-IN REQUIREMENTS WITH ELEVATOR SUPPLIER.
4. PROVIDE ELECTRICAL CONNECTION TO ELEVATOR CONTROL PANEL FOR POWER TO ELEVATOR CONTROLS. COORDINATE ROUGH-IN REQUIREMENTS WITH ELEVATOR SUPPLIER.
5. CONNECT DISCONNECT SWITCH FOR 120 VOLT OPERATION.
6. PROVIDE BAKELITE LABEL FOR DISCONNECT SWITCH ENGRAVED "ELEVATOR POWER". ATTACH LABEL TO DISCONNECT SWITCH WITH RIVETS. PROVIDE ELEVATOR DISCONNECT SWITCH WITH AUXILIARY CONTACT FOR USE BY ELEVATOR INSTALLER. COORDINATE WITH ELEVATOR INSTALLER. (A1)
7. PROVIDE BAKELITE LABEL FOR DISCONNECT SWITCH ENGRAVED "ELEVATOR CAB LIGHTS". ATTACH LABEL TO DISCONNECT SWITCH WITH RIVETS.
8. PROVIDE BAKELITE LABEL FOR DISCONNECT SWITCH ENGRAVED "ELEVATOR CONTROLS". ATTACH LABEL TO DISCONNECT SWITCH WITH RIVETS.
9. INSTALL RECEPTACLE NEAR ELEVATOR CONTROLLER.
10. UP TO RECEPTACLE ON ROOF. SEE DRAWING E-304 FOR CONTINUATION.



SECOND FLOOR PLAN - AREA A - POWER 1

SCALE: 1/8" = 1'-0"

PLAN NORTH



KEY PLAN - AREA A

NOT TO SCALE

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06.24.2025

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 1869-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-332-101

DRAWING
SECOND FLOOR PLAN - AREA A - POWER

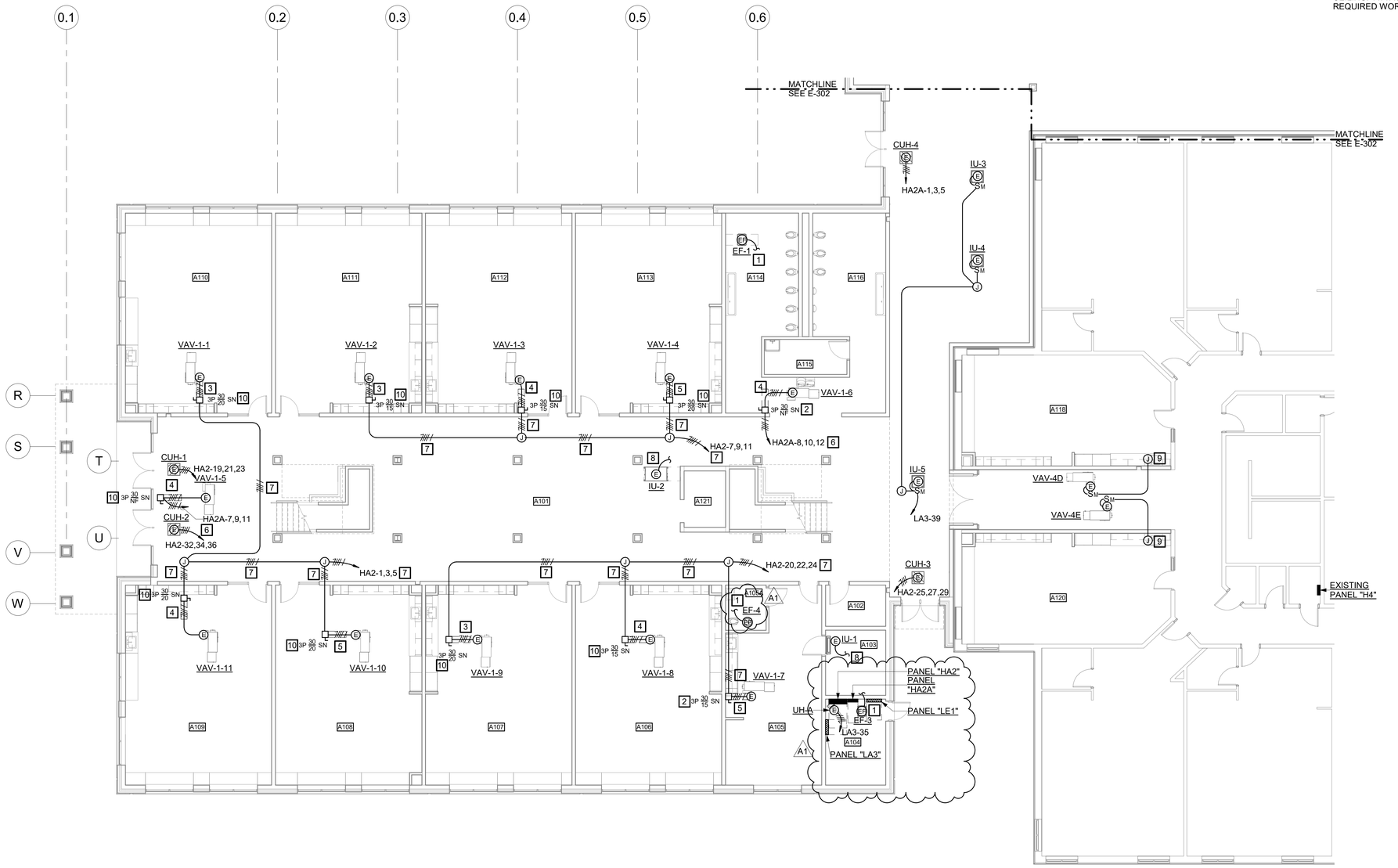
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E-203

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TELEPHONE: (757) 399-4433, PROJECT #24-053

NEW WORK NOTES: (THIS DRAWING ONLY)

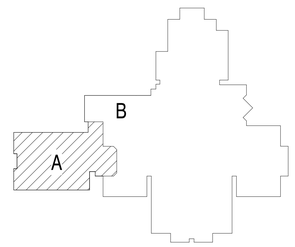
1. DOWN TO RECEPTACLE. SEE DRAWING E-201 FOR CONTINUATION.
2. INSTALL DISCONNECT SWITCH ON WALL ABOVE CEILING. MAINTAIN N.E.C. REQUIRED WORKING CLEARANCE AROUND DISCONNECT SWITCH.
3. PROVIDE 4 #12 AND 1 #12 GROUND IN 1/2" CONDUIT. CONNECT VAV BOX FAN TO CONDUCTOR ON PHASE "A".
4. PROVIDE 4 #12 AND 1 #12 GROUND IN 1/2" CONDUIT. CONNECT VAV BOX FAN TO CONDUCTOR ON PHASE "B".
5. PROVIDE 4 #12 AND 1 #12 GROUND IN 1/2" CONDUIT. CONNECT VAV BOX FAN TO CONDUCTOR ON PHASE "C".
6. PROVIDE 4 #12 AND 1 #12 GROUND IN 1/2" CONDUIT.
7. PROVIDE 4 #8 AND 1 #10 GROUND IN 1" CONDUIT.
8. PROVIDE 3/4" CONDUIT UP TO CORRESPONDING OU ON ROOF. INSTALL INTERCONNECTING WIRING FURNISHED BY EQUIPMENT PROVIDER IN CONDUIT. MAKE ALL ELECTRICAL CONNECTIONS TO IU (VIA DISCONNECT SWITCH FURNISHED WITH UNIT) AND OU AS DIRECTED BY THE EQUIPMENT PROVIDER.
9. PROVIDE JUNCTION BOX ON THE END OF EXISTING VAV BOX BRANCH CIRCUITRY SAVED DURING DEMOLITION. EXTEND NEW BRANCH CIRCUITRY FROM JUNCTION AND CONNECT TO RELOCATED VAV BOX.
10. PROVIDE 1-1/4" X 1-1/4" UNISTRUT CHANNELS SPANNING WEB OF BAR JOISTS ABOVE THE CEILING. ATTACH DISCONNECT SWITCH VERTICALLY TO UNISTRUT. MAINTAIN N.E.C. REQUIRED WORKING CLEARANCE AROUND DISCONNECT SWITCH.



FIRST FLOOR PLAN - AREA A - HVAC POWER

SCALE: 1/8" = 1'-0"

PLAN NORTH



KEY PLAN - AREA A

NOT TO SCALE

MARK	DATE	REVISIONS
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PROJECT: SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 1888-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

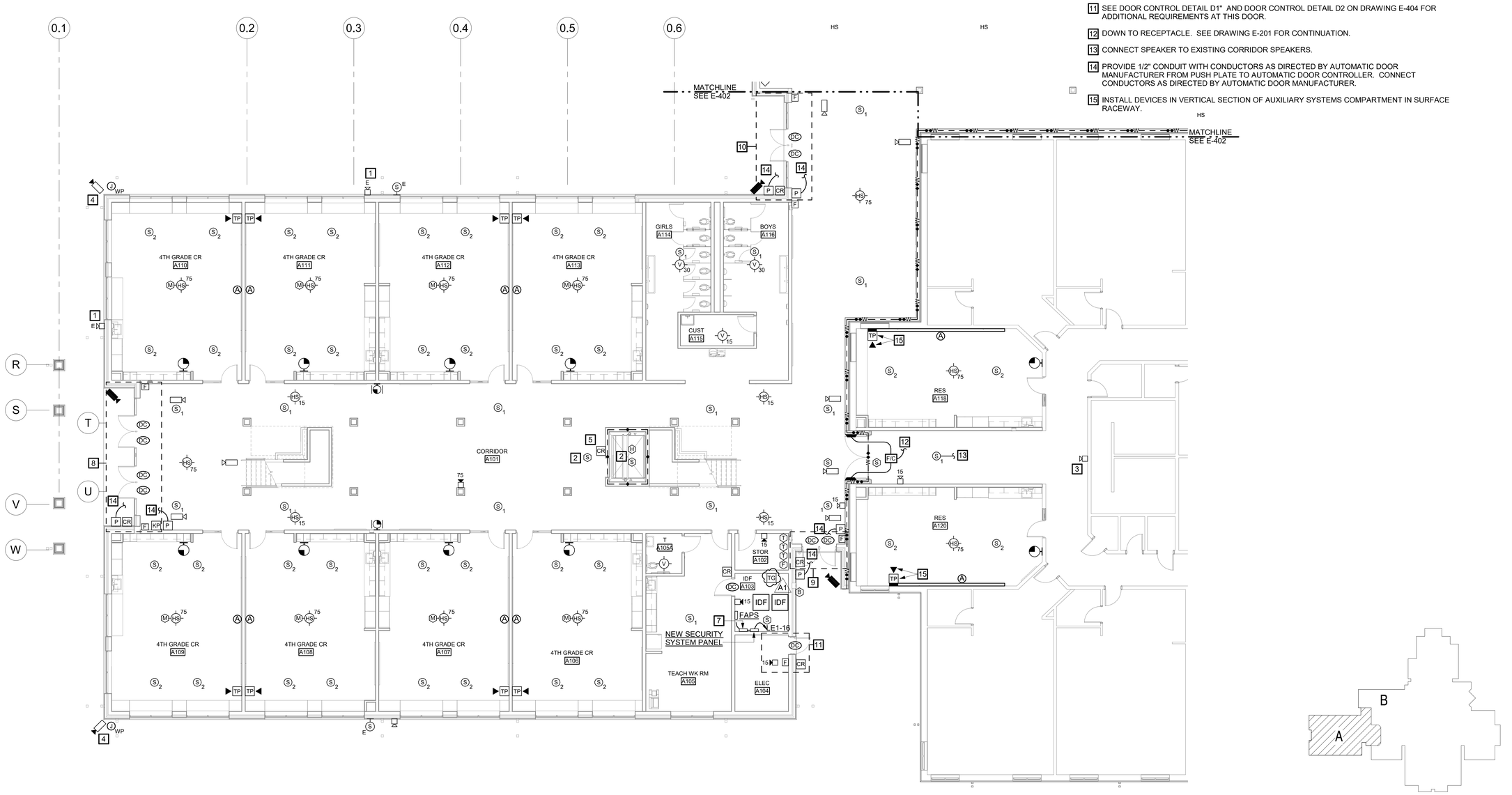
DRAWING: FIRST FLOOR PLAN - AREA A - HVAC POWER

SHEET
E-301

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NEW WORK NOTES: (THIS DRAWING ONLY)

1. INSTALL EXISTING FIRE ALARM DEVICE SAVED DURING DEMOLITION. REUSE AND EXTEND EXISTING FIRE ALARM CABLES SAVED DURING DEMOLITION AND CONNECT TO THIS DEVICE.
2. CONNECT ALL FIRE ALARM SMOKE AND HEAT DETECTORS ASSOCIATED WITH THE ELEVATOR TO THE ELEVATOR CONTROL PANEL ON THE SECOND FLOOR. SEE DRAWING E-203 FOR LOCATION. COORDINATE ALL WORK ASSOCIATED WITH THE ELEVATOR WITH THE ELEVATOR SUPPLIER.
3. INSTALL EXISTING FIRE ALARM HORN SAVED DURING DEMOLITION IN RED WIREMOLD SURFACE METAL OUTLET BOX. PROVIDE WIREMOLD SURFACE METAL RACEWAY FROM OUTLET BOX AND TERMINATE ABOVE THE CEILING. CUT EXISTING CEILING GRID AS REQUIRED. CONNECT FIRE ALARM HORN TO EXISTING FIRE ALARM WIRING SAVED DURING DEMOLITION.
4. INSTALL EXISTING CORNER MOUNTED CCTV CAMERA SAVED DURING DEMOLITION +9'-0" A.F.F. PROVIDE 2-GANG OUTLET BOX WITH WEATHERPROOF COVERPLATE WITH 3/4" OPENING. PROVIDE 3/4" LIQUID-TIGHT FLEXIBLE METAL CONDUIT FROM COVERPLATE TO CAMERA FOR CCTV CABLE. PROVIDE 3/4" CONDUIT FROM OUTLET BOX AND TERMINATE ABOVE CEILING INSIDE BUILDING. TERMINATE DATA CABLE FROM CAMERA IN IDF RACK IN ROOM A103.
5. INTERLOCK ACCESS CONTROL CARD READER WITH ELEVATOR CONTROLLER.
6. RUN INTERCOM SYSTEM WIRING FOR CORRIDOR SPEAKERS THROUGH POWER SUPPLY(S) LOCATED IN IDF ROOM.
7. PROVIDE POWER SUPPLIES (QUANTITY AND WATTAGE AS REQUIRED) AND CONNECT TO ALL CORRIDOR SPEAKERS IN THE ADDITION. CONNECT POWER SUPPLIES TO DOUBLE DUPLEX RECEPTACLE. SEE DRAWING E-201 FOR LOCATION.
8. SEE DOOR CONTROL DETAIL A1" AND DOOR CONTROL DETAIL A2 ON DRAWING E-404 FOR ADDITIONAL REQUIREMENTS AT THESE DOORS.
9. SEE DOOR CONTROL DETAIL B1" AND DOOR CONTROL DETAIL B2 ON DRAWING E-404 FOR ADDITIONAL REQUIREMENTS AT THESE DOORS.
10. SEE DOOR CONTROL DETAIL C1" AND DOOR CONTROL DETAIL C2 ON DRAWING E-404 FOR ADDITIONAL REQUIREMENTS AT THESE DOORS.
11. SEE DOOR CONTROL DETAIL D1" AND DOOR CONTROL DETAIL D2 ON DRAWING E-404 FOR ADDITIONAL REQUIREMENTS AT THIS DOOR.
12. DOWN TO RECEPTACLE. SEE DRAWING E-201 FOR CONTINUATION.
13. CONNECT SPEAKER TO EXISTING CORRIDOR SPEAKERS.
14. PROVIDE 1/2" CONDUIT WITH CONDUCTORS AS DIRECTED BY AUTOMATIC DOOR MANUFACTURER FROM PUSH PLATE TO AUTOMATIC DOOR CONTROLLER. CONNECT CONDUCTORS AS DIRECTED BY AUTOMATIC DOOR MANUFACTURER.
15. INSTALL DEVICES IN VERTICAL SECTION OF AUXILIARY SYSTEMS COMPARTMENT IN SURFACE RACEWAY.



FIRST FLOOR PLAN - AREA A - AUXILIARY SYSTEMS
SCALE: 1/8" = 1'-0"

PLAN NORTH

KEY PLAN - AREA A
NOT TO SCALE

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KENZIE CAMBAR
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06.24.2025
PROFESSIONAL ENGINEER

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 1889-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

DRAWING
FIRST FLOOR PLAN - AREA A - AUXILIARY SYSTEMS

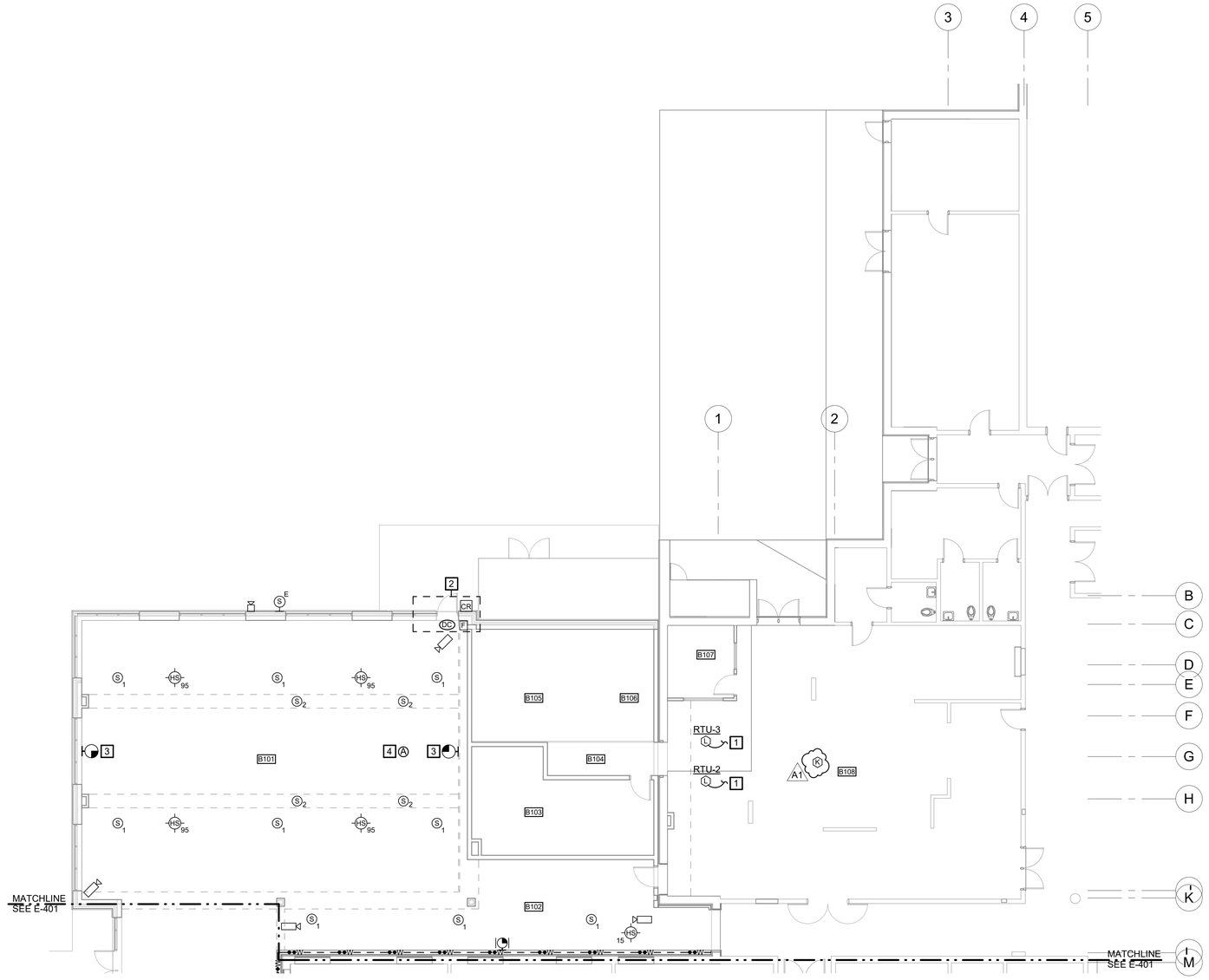
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E-401

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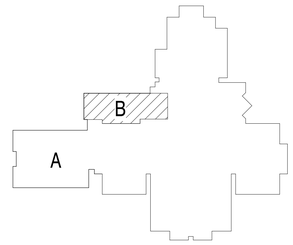
NEW WORK NOTES: (THIS DRAWING ONLY)

1. PROVIDE FIRE ALARM WIRING BETWEEN REMOTE INDICATING LIGHT/TEST SWITCH AND DUCT SMOKE DETECTOR ON ROOF. ALL FIRE ALARM WIRING RUN ON ROOF MUST BE RUN IN 3/4" IMC CONDUIT. COORDINATE REQUIRED ROOF PENETRATION WITH THE GENERAL CONTRACTOR.
2. SEE "DOOR CONTROL / SECURITY DETAIL E" ON DRAWING E-404 FOR ADDITIONAL WORK WITH THIS DOOR.
3. INSTALL BOTTOM OF CLOCK +9'-0" A.F.F.
4. ATTACH AMPLIFIER FOR PROJECTOR SPEAKERS TO PIPE SUPPORT FOR PROJECTOR.



FIRST FLOOR PLAN - AREA B - AUXILIARY SYSTEMS
SCALE: 1/8" = 1'-0"

PLAN NORTH



KEY PLAN - AREA B
NOT TO SCALE

MARK	DATE	REVISIONS
A1	07.17.2025	ADDENDUM NO. 1
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KENZIE CAMBAR
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06.24.2025
PROFESSIONAL ENGINEER

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 1888-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

DRAWING
FIRST FLOOR PLAN - AREA B - AUXILIARY SYSTEMS

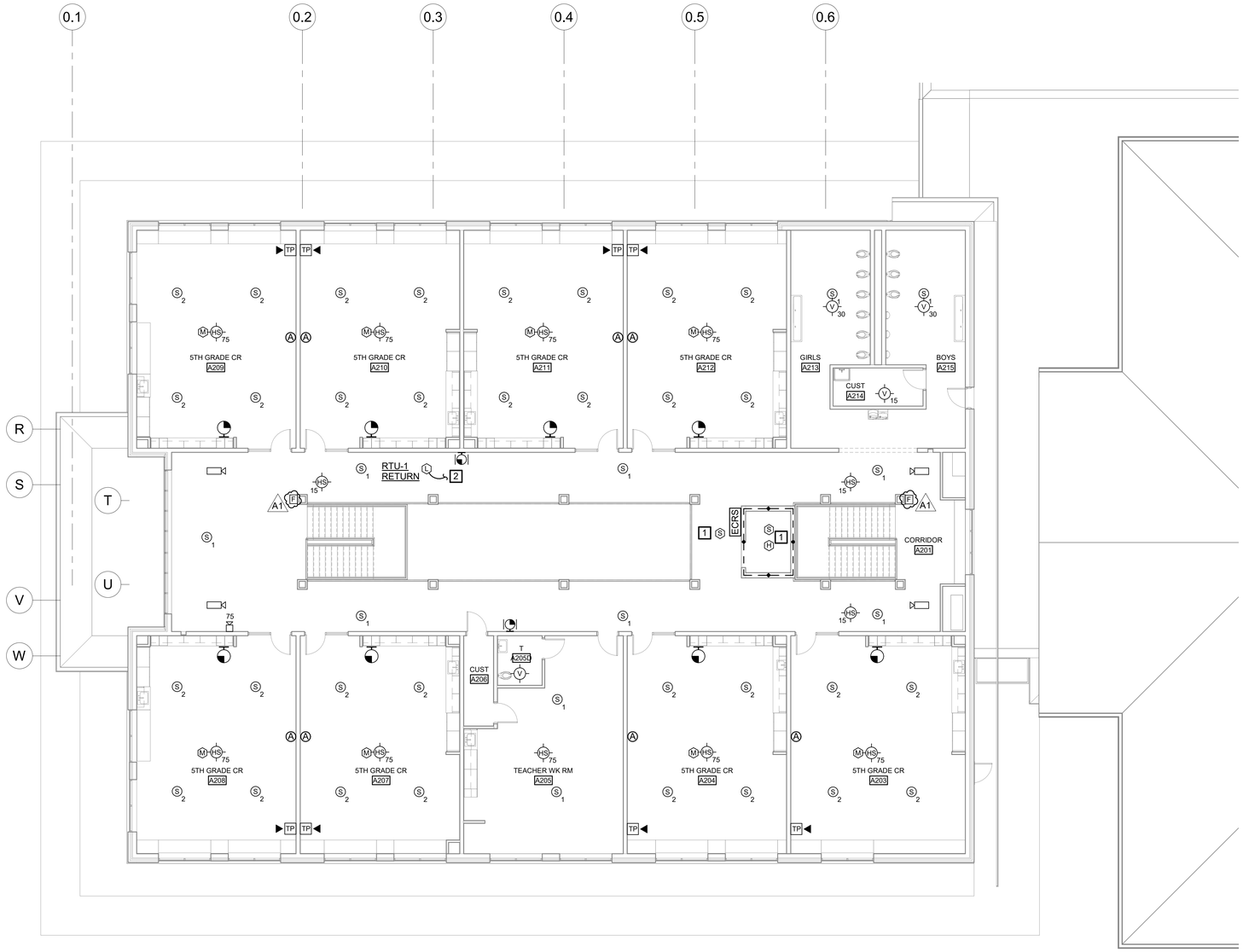
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TELEPHONE: (757) 399-4433, PROJECT #24-057

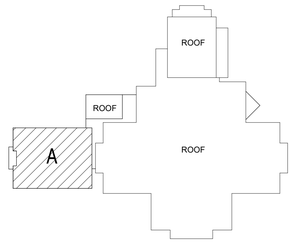
NEW WORK NOTES: (THIS DRAWING ONLY)

1. CONNECT ALL FIRE ALARM SMOKE AND HEAT DETECTORS ASSOCIATED WITH THE ELEVATOR TO THE ELEVATOR CONTROL PANEL ON THE SECOND FLOOR. SEE DRAWING E-207 FOR LOCATION. COORDINATE ALL WORK ASSOCIATED WITH THE ELEVATOR WITH THE ELEVATOR SUPPLIER.
2. PROVIDE FIRE ALARM WIRING BETWEEN REMOTE INDICATING LIGHT/TEST SWITCH AND DUCT SMOKE DETECTOR ON ROOF. ALL FIRE ALARM WIRING RUN ON ROOF MUST BE RUN IN 3/4" LIQUID-TIGHT CONDUIT. COORDINATE REQUIRED ROOF PENETRATION WITH THE GENERAL CONTRACTOR.



SECOND FLOOR PLAN - AREA A - AUXILIARY SYSTEMS
SCALE: 1/8" = 1'-0"

PLAN NORTH



KEY PLAN - AREA A
NOT TO SCALE

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KENZIE CAMBAR
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PROFESSIONAL ENGINEER

PROJECT: SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
VIRGINIA DEPARTMENT OF EDUCATION #372-400-101
IFB: 188-8

DRAWING: SECOND FLOOR PLAN - AREA A - AUXILIARY SYSTEMS

SHEET
E-403

7/16/2025 2:59:42 PM Autodesk Docs://23238-00 SPS Northern Shores ES/Northern Shores ES - Electrical - R24.rvt

PANEL: MP

LOCATION: ELEC A104 | VOLTS: 480/277 Wye | KAIC RATING: 35
MOUNTING: Surface | PHASES: 3 | MAINS TYPE: MAIN LUGS ONLY
NEMA: Type 1 | WIRES: 4 | MAINS RATING: 1200 A

CKT NO	LOAD SERVED	P	C/B TRIP	WIRE SIZE	A	B	C	WIRE SIZE	C/B TRIP	P	LOAD SERVED	CKT NO
1	ELEVATOR (SEE NOTE 1,3) A1	3	90	1	54.0	152.6		2/0	175	3	XFMR "TA"	2
3						54.0	131.6					4
5							54.0	127.0				6
7	PANEL "HA1"	3	50	8	16.0	610.5		(2 SETS) 500 KCMIL	600 A1	3	PANEL "HA2"	8
9						18.8	599.7					10
11							7.9	599.1				12
13	SPACE	1	--	--	--	165.0						14
15	SPACE	1	--	--			--	141.0	3/0	200	3	PANEL "HK1" (SEE NOTE 1) 16
17	SPACE	1	--	--				--	158.4			18
19	SPACE	1	--	--	--	--				--	--	1 SPACE 20
21	SPACE	1	--	--			--	--		--	--	1 SPACE 22
23	SPACE	1	--	--				--	--	--	--	1 SPACE 24
25	SPACE	1	--	--	--	--				--	--	1 SPACE 26
27	SPACE	1	--	--			--	--		--	--	1 SPACE 28
29	SPACE	1	--	--				--	--	--	--	1 SPACE 30
31	SPACE	1	--	--	--	--				--	--	1 SPACE 32
33	SPACE	1	--	--			--	--		--	--	1 SPACE 34
35	SPACE	1	--	--				--	--	--	--	1 SPACE 36
37	SPACE	1	--	--	--	--				--	--	1 SPACE 38
39	SPACE	1	--	--			--	--		--	--	1 SPACE 40
41	SPACE	1	--	--				--	--	--	--	1 SPACE 42
	CONNECTED LOAD (AMPS):				994 A	943 A	945 A					
	CONNECTED LOAD (KVA):				275 kVA	261 kVA	262 kVA					

TOTAL CONNECTED LOAD (KVA): 797 kVA | TOTAL ESTIMATED DEMAND LOAD (KVA): 773 kVA

NOTES:
1. DELETE THIS CIRCUIT BREAKER IF THE ADD ALT. IS NOT ACCEPTED.
2. PROVIDE SHUNT-TRIP TYPE CIRCUIT BREAKER WITH 120 VOLT OPERATING COIL.
3. PROVIDE SHUNT-TRIP TYPE CIRCUIT BREAKER. COORDINATE COIL VOLTAGE WITH SUPPLIER OF ELEVATOR. A1

PANEL: HA1

LOCATION: ELEC A104 | VOLTS: 480/277 Wye | KAIC RATING: 14
MOUNTING: Surface | PHASES: 3 | MAINS TYPE: MAIN LUGS ONLY
NEMA: Type 1 | WIRES: 4 | MAINS RATING: 125 A

CKT NO	LOAD SERVED	P	C/B TRIP	WIRE SIZE	A	B	C	WIRE SIZE	C/B TRIP	P	LOAD SERVED	CKT NO
1	LIGHTING	1	20	12	12.4	0.0		--	20	1	SPARE	2
3	LIGHTING	1	20	12			4.7	0.0	--	20	1	SPARE 4
5	LIGHTING	1	20	12					1.5	0.0	--	20	1	SPARE 6
7	LIGHTING	1	20	12	1.7	0.6								8
9	LIGHTING	1	20	12			12.4	0.6			12	20	3	POWER METER 10
11	LIGHTING	1	20	12					5.8	0.6				12
13	ELEVATOR SHAFT LIGHTS	1	20	12	0.2	--					--	--	1	SPACE 14
15	SPARE	1	20	--		0.0	--				--	--	1	SPACE 16
17	SPARE	1	20	--			0.0	--			--	--	1	SPACE 18
	CONNECTED LOAD (AMPS):				16 A	19 A	8 A							
	CONNECTED LOAD (KVA):				4 kVA	5 kVA	2 kVA							

TOTAL CONNECTED LOAD (KVA): 11 kVA | TOTAL ESTIMATED DEMAND LOAD (KVA): 11 kVA

NOTES:

PANEL: HA2

LOCATION: ELEC A104 | VOLTS: 480/277 Wye | KAIC RATING: 35
MOUNTING: Surface | PHASES: 3 | MAINS TYPE: MAIN LUGS ONLY
NEMA: Type 1 | WIRES: 4 | MAINS RATING: 800 A

CKT NO	LOAD SERVED	P	C/B TRIP	WIRE SIZE	A	B	C	WIRE SIZE	C/B TRIP	P	LOAD SERVED	CKT NO
1	VAV-1-1, VAV-1-10 & VAV-1-11	3	60	6	45.3	--						2
3						45.3	--	--	--	3	SPACE	4
5							45.3	--				6
7	VAV-1-2, VAV-1-3 & VAV-1-4	3	60	6	40.5	0.6						8
9						40.5	0.6	12	20	3	POWER METER	10
11							40.5	0.6				12
13	VAV-2-2, VAV-2-3 & VAV-2-4	3	50	8	37.5	34.9						14
15						37.5	34.9	8	50	3	VAV-2-1 & VAV-2-9	16
17							37.5	34.9				18
19	CUH-1	3	15	12	7.8	38.7						20
21						7.8	38.7	8	50	3	VAV-1-7, VAV-1-8 & VAV-1-9	22
23							7.8	38.7				24
25	CUH-3	3	15	12	7.8	19.3						26
27						7.8	19.3	8	50	3	VAV-2-5 & VAV-2-6	28
29							7.8	19.3				30
31	CUH-5	3	15	12	7.8	7.8						32
33						7.8	7.8	12	15	3	CUH-2	34
35							7.8	7.8				36
37	RTU-1	3	225	4/0	179.3	183.1						38
39						179.3	172.3	4/0	225	3	PANEL "HA2A"	40
41							179.3	172.3				42
	CONNECTED LOAD (AMPS):				610 A	600 A	600 A					
	CONNECTED LOAD (KVA):				169 kVA	166 kVA	166 kVA					

TOTAL CONNECTED LOAD (KVA): 501 kVA | TOTAL ESTIMATED DEMAND LOAD (KVA): 501 kVA

NOTES:

PANEL: HA2A

LOCATION: ELEC A104 | VOLTS: 480/277 Wye | KAIC RATING: 35
MOUNTING: Surface | PHASES: 3 | MAINS TYPE: LUGS
NEMA: Type 1 | WIRES: 4 | MAINS RATING: 225 A

CKT NO	LOAD SERVED	P	C/B TRIP	WIRE SIZE	A	B	C	WIRE SIZE	C/B TRIP	P	LOAD SERVED	CKT NO
1					7.8	--			--	1	SPACE	2
3	CUH-4	3	15	12		7.8	--		--	1	SPACE	4
5							7.8	--	--	1	SPACE	6
7					6.0	15.5						8
9	VAV-1-5	3	15	12		6.0	15.5	12	20	3	VAV-1-6	10
11							6.0	15.5				12
13					26.7	33.2						14
15	VAV-2-7 & VAV-2-8	3	50	8		26.7	33.2	8	45	3	VAV-2-10	16
17							26.7	33.2				18
19	EBH-1	1	15	12	5.4	5.4		12	15	1	EBH-2	20
21	SPARE	1	20	--		0.0	--	--	--	1	SPACE	22
23	SPARE	1	20	--			0.0	--	--	1	SPACE	24
25	SPARE	1	20	--	0.0	--		--	--	1	SPACE	26
27	SPACE	1	--	--		--	--	--	--	1	SPACE	28
29	SPACE	1	--	--			--	--	--	1	SPACE	30
31	SPACE	1	--	--	--	39.7						32
33	SPACE	1	--	--		--	39.7	8	50	3	RTU-3	34
35	SPACE	1	--	--			--	39.7				36
37					21.7	21.7						38
39	WH-1	3	30	10		21.7	21.7	10	30	3	WH-2	40
41							21.7	21.7				42
	CONNECTED LOAD (AMPS):				183 A	172 A	172 A					
	CONNECTED LOAD (KVA):				51 kVA	48 kVA	48 kVA					

TOTAL CONNECTED LOAD (KVA): 146 kVA | TOTAL ESTIMATED DEMAND LOAD (KVA): 146 kVA

NOTES:

PANEL: LA1

LOCATION: ELEC A104 | VOLTS: 120/208 Wye | KAIC RATING: 22 A1
MOUNTING: Surface | PHASES: 3 | MAINS TYPE: MAIN CIRCUIT BREAKER
NEMA: Type 1 | WIRES: 4 | MAINS RATING: 150 A

CKT NO	LOAD SERVED	P	C/B TRIP	WIRE SIZE	A	B	C	WIRE SIZE	C/B TRIP	P	LOAD SERVED	CKT NO
1	RECEPTACLES	1	20	12	7.5	1.0						2
3	REFRIGERATOR	1	20	12			10.0	1.0	10	30	3	SPD 4
5	RECEPTACLE	1	20	12					3.0	1.0				6
7	RECEPTACLES	1	20	12	9.5	1.4								8
9	RECEPTACLES	1	20	12			7.5	1.4			12	20	3	Power Meter 10
11	RECEPTACLES	1	20	12					7.5	1.4				12
13	LAPTOP CHARGING CART	1	20	12	10.0	7.5					12	20	1	RECEPTACLES 14
15	RECEPTACLES	1	20	12			9.5	10.0			12	20	1	LAPTOP CHARGING CART 16
17	RECEPTACLES	1	20	12					7.5	7.5	12	20	1	RECEPTACLES 18
19	RECEPTACLES	1	20	12	7.5	9.5					12	20	1	RECEPTCLES 20
21	LAPTOP CHARGING CART	1	20	12			10.0	7.5			12	20	1	RECEPTACLES 22
23	RECEPTACLES	1	20	12					9.5	10.0	12	20	1	LAPTOP CHARGING CART 24
25	RECEPTACLES	1	20	12	7.5	7.5					12	20	1	RECEPTACLES 26
27	LAPTOP CHARGING CART	1	20	12			10.0	9.5			12	20	1	RECEPTACLES 28
29	RECEPTACLES	1	20	12					7.5	7.5	12	20	1	RECEPTACLES 30
31	RECEPTACLES	1	20	12	9.5	10.0					12	20	1	LAPTOP CHARGING CART 32
33	RECEPTACLES	1	20	12			7.5	10.0			12	20	1	LAPTOP CHARGING CART 34
35	RECEPTACLES	1	20	12					9.0	7.5	12	20	1	RECEPTACLES 36
37	LAPTOP CHARGING CART	1	20	12	10.0	9.5					12	20	1	RECEPTACLES 38
39	RECEPTACLES	1	20	12			9.5	10.0			12	20	1	COPIER 40
41	RECEPTACLES	1	20	12					7.5	--	--	--	1	SPACE 42
43	RECEPTACLES	1	20	12	7.5	--					--	--	1	SPACE 44
45	SPARE	1	20	--			0.0	--			--	--	1	SPACE 46
47	SPARE	1	20	--					0.0	--	--	--	1	SPACE 48
49	SPARE	1	20	--	0.0	--					--	--	1	SPACE 50
51	SPARE	1	20	--			0.0	--			--	--	1	SPACE 52
53	SPARE	1	20	--					0.0	--	--	--	1	SPACE 54
	CONNECTED LOAD (AMPS):				120 A	118 A	86 A							
	CONNECTED LOAD (KVA):				14 kVA	14 kVA	10 kVA							

TOTAL CONNECTED LOAD (KVA): 37 kVA | TOTAL ESTIMATED DEMAND LOAD (KVA): 33 kVA

NOTES:

THOMPSON Consulting Engineers
22 ENTERPRISE PARKWAY, SUITE 200, HAMPTON, VA 23666
4411 CON ROAD, GLEN ALLEN, VA 23060
2809-S LYNNHAVEN ROAD, VA BEACH, VA 23452
TELEPHONE: (757) 399-4433 PROJECT #24-053

MARK	DATE	REVISIONS
A1	07.17.2025	ADDENDUM NO. 1
TCE		DESCRIPTION
		BY

DATE	06.24.2025
PROJECT	23238-00
DESIGNED	DWC
DRAWN	MAC
CHECKED	KC

RRMM ARCHITECTS, PC
1317 Executive Blvd, Suite 200
Chesapeake, Virginia 23320
(757)622-2828

COMMONWEALTH OF VIRGINIA
KENZIE CAMBAR
Lic. No.049752
06.24.2025
PROFESSIONAL ENGINEER

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
IFB: 1688-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
DRAWING
PANELBOARD SCHEDULES

SHEET
E-601

7/16/2025 2:59:45 PM Autodesk Docs://23238-00 SPS Northern Shores ES/Northern Shores ES - Electrical - R24.rvt

1/32" = 1'-0" | 1/16" = 1'-0" | 3/32" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0" | 12" = 1'-0"

PANEL: LA2

LOCATION: ELEC A104
MOUNTING: Surface
NEMA: Type 1

VOLTS: 120/208 Wye
PHASES: 3
WIRES: 4

KAIC RATING: 22 (A1)
MAINS TYPE: MAIN CIRCUIT BREAKER
MAINS RATING: 150 A

CKT NO	LOAD SERVED	P	C/B TRIP	WIRE SIZE	A		B		C		WIRE SIZE	C/B TRIP	P	LOAD SERVED	CKT NO
1	RECEPTACLES	1	20	12	9.5	1.0									2
3	RECEPTACLES	1	20	12			7.5	1.0			10	30	3	SPD	4
5	RECEPTACLES	1	20	12					7.5	1.0					6
7	LAPTOP CHARGING CART	1	20	12	10.0	1.4									8
9	RECEPTACLES	1	20	12			9.5	1.4			12	20	3	Power Meter	10
11	RECEPTACLES	1	20	12					7.5	1.4					12
13	RECEPTACLES	1	20	12	7.5	7.5					12	20	1	RECEPTACLES	14
15	LAPTOP CHARGING CART	1	20	12			10.0	10.0			12	20	1	LAPTOP CHARGING CART	16
17	RECEPTACLES	1	20	12					9.5	9.5	12	20	1	RECEPTACLES	18
19	RECEPTACLES	1	20	12	7.5	7.5					12	20	1	RECEPTACLES	20
21	RECEPTACLES	1	20	12			7.5	7.5			12	20	1	RECEPTACLES	22
23	RECEPTACLE	1	20	12					10.0	10.0	12	20	1	LAPTOP CHARGING CART	24
25	RECEPTACLES	1	20	12	9.5	9.5					12	20	1	RECEPTACLES	26
27	RECEPTACLES	1	20	12			7.5	7.5			12	20	1	RECEPTACLES	28
29	RECEPTACLES	1	20	12					7.5	7.5	12	20	1	RECEPTACLES	30
31	LAPTOP CHARGING CART	1	20	12	10.0	10.0					12	20	1	LAPTOP CHARGING CART	32
33	RECEPTACLES	1	20	12			7.5	10.0			12	20	1	LAPTOP CHARGING CART	34
35	RECEPTACLES	1	20	12					3.0	6.0	12	20	1	RECEPTACLES	36
37	REFRIGERATOR (SEE NOTE 1)	1	20	12	10.0	9.5					12	20	1	RECEPTACLES	38
39	RECEPTACLES	1	20	12			7.5	4.5			12	20	1	RECEPTACLES	40
41	RECEPTACLES	1	20	12					9.5	10.0	12	20	1	COPIER	42
43	RECEPTACLES	1	20	12	7.5	--					--	--	1	SPACE	44
45	SPARE	1	20	--			0.0	--			--	--	1	SPACE	46
47	SPARE	1	20	--					0.0	--	--	--	1	SPACE	48
49	SPARE	1	20	--	0.0	--					--	--	1	SPACE	50
51	SPARE	1	20	--			0.0	--			--	--	1	SPACE	52
53	SPARE	1	20	--					0.0	--	--	--	1	SPACE	54
	CONNECTED LOAD (AMPS):				118 A		99 A		100 A						
	CONNECTED LOAD (KVA):				14 kVA		12 kVA		12 kVA						

TOTAL CONNECTED LOAD (KVA): 38 kVA
TOTAL ESTIMATED DEMAND LOAD (KVA): 33 kVA

NOTES:
1. PROVIDE GFI TYPE CIRCUIT BREAKER.

PANEL: LA3

LOCATION: ELEC A104
MOUNTING: Surface
NEMA: Type 1

VOLTS: 120/208 Wye
PHASES: 3
WIRES: 4

KAIC RATING: 22 (A1)
MAINS TYPE: MAIN CIRCUIT BREAKER
MAINS RATING: 150 A (A1)

CKT NO	LOAD SERVED	P	C/B TRIP	WIRE SIZE	A		B		C		WIRE SIZE	C/B TRIP	P	LOAD SERVED	CKT NO
1	HAND DRYER (SEE NOTE 2)	1	20	12	10.0	1.0									2
3	HAND DRYER (SEE NOTE 2)	1	20	12			10.0	1.0			10	30	3	SPD	4
5	HAND DRYER (SEE NOTE 2)	1	20	12					10.0	1.0					6
7	HAND DRYER (SEE NOTE 2)	1	20	12	10.0	1.4									8
9	HAND DRYER (SEE NOTE 2)	1	20	12			10.0	1.4			12	20	3	Power Meter	10
11	HAND DRYER (SEE NOTE 2)	1	20	12					10.0	1.4					12
13	HAND DRYER (SEE NOTE 2)	1	20	12	10.0	5.0					12	20	1	EWC (SEE NOTE 1)	14
15	HAND DRYER (SEE NOTE 2)	1	20	12			10.0	5.0			12	20	1	EWC (SEE NOTE 1)	16
17	HWRP-1	1	15	12					1.7	7.0	12	20	1	RECEPTACLES & EF-3	18
19	RECEPTACLES	1	20	12	9.0	12.0					12	20	1	RECEPTACLES	20
21	RECEPTACLES	1	20	12			12.0	1.5			12	20	1	SUMP PUMP RECEPTACLE	22
23	ELEVATOR PIT RECEPTACLE	1	20	12					1.5	7.5	12	20	1	RECEPTACLES	24
25	RECEPTACLES	1	20	12	9.0	9.0					12	20	1	RECEPTACLES	26
27	HWRP-2	1	15	12			1.7	7.5			12	20	1	RECEPTACLES	28
29	RECEPTACLES	1	20	12					13.5	11.6	10	30	2	IU-1 & OU-1	30
31	IU-2 & OU-2	2	30	10	11.6	11.6									32
33							11.6	1.5			12	20	1	RECEPTACLE	34
35	UH-A	1	30	10					20.8	1.5	12	20	1	RECEPTACLE	36
37	RECEPTACLES	1	20	12	14.5	3.0					12	20	1	RECEPTACLE	38
39	IU-3, IU-4 & IU-5	1	20	12			0.5	1.7			12	20	1	ELEVATOR CAB LIGHTS	40
41	RECEPTACLES & EF-1	1	20	12					11.0	10.0	12	20	1	ELEVATOR CONTROLS	42
43	WATER METER	1	20	12	2.0	1.5					12	20	1	RECEPTACLE	44
45	DOOR OPERATORS	1	20	12			10.0	6.3			12	20	1	PROJECTION SCREEN	46
47	SPARE	1	20	--					0.0	--	--	--	1	SPACE	48
49	SPARE	1	20	--	0.0	--					--	--	1	SPACE	50
51	SPARE	1	20	--			0.0	--			--	--	1	SPACE	52
53	SPARE	1	20	--					0.0	--	--	--	1	SPACE	54
	CONNECTED LOAD (AMPS):				120 A		90 A		110 A						
	CONNECTED LOAD (KVA):				14 kVA		11 kVA		13 kVA						

TOTAL CONNECTED LOAD (KVA): 37 kVA
TOTAL ESTIMATED DEMAND LOAD (KVA): 37 kVA

NOTES:
1. PROVIDE GFI TYPE CIRCUIT BREAKER.
2. PROVIDE WITH A PERMANENT LOCKOUT DEVICE.

PANEL: LK

LOCATION: Space B108
MOUNTING: Flush
NEMA: Type 1

VOLTS: 120/208 Wye
PHASES: 3
WIRES: 4

KAIC RATING: 10
MAINS TYPE: MAIN LUGS ONLY
MAINS RATING: 400 A

CKT NO	LOAD SERVED	P	C/B TRIP	WIRE SIZE	A		B		C		WIRE SIZE	C/B TRIP	P	LOAD SERVED	CKT NO
1	MILK COOLER (SEE NOTE 1)	1	20	12	3.0	8.2					12	20	1	REFRIGERATOR (SEE NOTE 1)	2
3	HEATED DISPLAY (SEE NOTE 1)	1	20	12			10.0	7.8			12	20	2	HOT FOOD PASS THRU (SEE NOTE 1)	4
5	CASHIER (SEE NOTE 1)	1	20	12					10.0	7.8					6
7	ICE CREAM BOX (SEE NOTE 1)	1	20	12	4.2	40.0									8
9	REFRIGERATOR (SEE NOTE 1)	1	20	12			8.2	40.0			8	50	3	Unitary Distribution System	10
11	RECEPTACLE (SEE NOTE 1)	1	20	12					1.5	40.0					12
13	CORD REEL (SEE NOTE 1)	1	20	12	4.2	8.2					12	20	1	REFRIGERATOR (SEE NOTE 1)	14
15	HOT FOOD PASS THRU (SEE NOTE 1)	2	20	12			7.8	8.2			12	20	1	REFRIGERATOR (SEE NOTE 1)	16
17									7.8	7.8	12	20	2	HOT FOOD PASS THRU (SEE NOTE 1)	18
19	HOT FOOD WELL (SEE NOTE 1)	2	20	12	14.4	7.8									20
21							14.4	1.4							22
23	RECEPTACLE	1	15	12					1.5	1.4	EX	100	3	Existing Panel "LKA"	24
25	RECEPTACLES	1	20	12	7.5	1.4									26
27	SPARE	1	20	--			0.0	--			--	--	1	SPACE	28
29	SPARE	1	20	--					0.0	--	--	--	1	SPACE	30
31	SPARE	1	20	--	0.0	--					-	--	1	SPACE	32
33	SPARE	1	20	--			0.0	--			-	--	1	SPACE	34
35	SPARE	1	20	--					0.0	--	--	--	1	SPACE	36
37	SPARE	1	20	--	0.0	--					--	--	1	SPACE	38
39	SPARE	1	20	--			0.0	--			--	--	1	SPACE	40
41	SPARE	1	20	--					0.0	--	--	--	1	SPACE	42
	CONNECTED LOAD (AMPS):				99 A		97 A		75 A						
	CONNECTED LOAD (KVA):				11 kVA		11 kVA		9 kVA						

TOTAL CONNECTED LOAD (KVA): 32 kVA
TOTAL ESTIMATED DEMAND LOAD (KVA): 32 kVA

NOTES:
1. PROVIDE GFI TYPE CIRCUIT BREAKER.

PANEL: LE1

LOCATION: ELEC A104
MOUNTING: Surface
NEMA: Type 1

VOLTS: 120/208 Wye
PHASES: 3
WIRES: 4

KAIC RATING: 10
MAINS TYPE: MAIN LUGS ONLY
MAINS RATING: 100 A

CKT NO	LOAD SERVED	P	C/B TRIP	WIRE SIZE	A		B		C		WIRE SIZE	C/B TRIP	P	LOAD SERVED	CKT NO
1	SPEAKER AMPLIFIER RECEPTACLE	1	20	12	5.0	1.0									2
3	SPACE	1	--				--	1.0			10	30	3	SPD	4
5	RECEPTACLE	1	20	12					3.0	1.0					6
7	RECEPTACLE	1	30	10	20.0	1.4									8
9	RECEPTACLE	1	30	10			20.0	1.4			12	20	3	POWER METER	10
11	RECEPTACLE	1	20	12					3.0	1.4					12
13	Power	2	20		2.4	--					--	--	1	SPACE	14
15							2.4	10.0			12	20	1	ALARM PANELS	16
17	RECEPTACLE	1	20	12					3.0	--	--	--	1	SPACE	18
19	SPACE	1	--	--	--	--					--	--	1	SPACE	20
21	SPACE	1	--	--			--	--			--	--	1	SPACE	22
23	SPACE	1	--	--					--	--	--	--	1	SPACE	24
25	SPACE	1	--	--	--	--					--	--	1	SPACE	26
27	SPACE	1	--	--			--	--			--	--	1	SPACE	28
29	SPACE	1	--	--					--	--	--	--	1	SPACE	30
	CONNECTED LOAD (AMPS):				32 A		37 A		11 A						
	CONNECTED LOAD (KVA):				4 kVA		4 kVA		1 kVA						

TOTAL CONNECTED LOAD (KVA): 9 kVA
TOTAL ESTIMATED DEMAND LOAD (KVA): 9 kVA

NOTES:

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MARK	DATE	REVISIONS
A1	07.17.2025	ADDENDUM NO. 1
TCE		DESCRIPTION
		BY

DATE	06.24.2025
PROJECT	23238-00
DESIGNED	DWC
DRAWN	MAC
CHECKED	KC

RRMM ARCHITECTS, PC
1317 Executive Blvd, Suite 200
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COMMONWEALTH OF VIRGINIA
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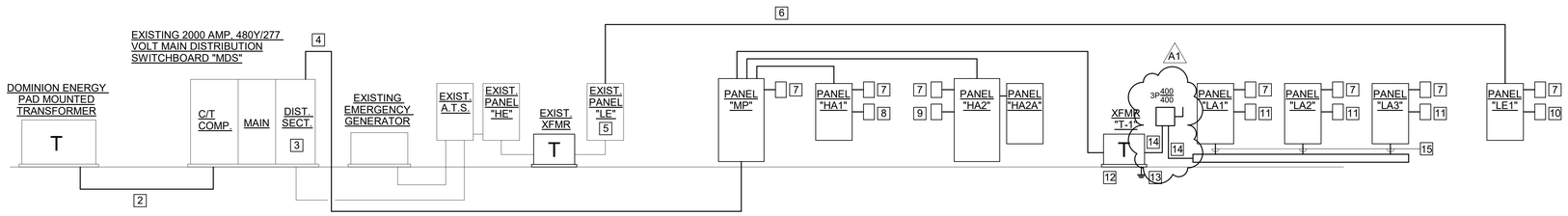
PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 1889-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

DRAWING
PANELBOARD SCHEDULES

SHEET
E-602

1/32" = 1'-0" 0' 16" 32" 48"
1/16" = 1'-0" 0' 4' 8' 16' 24'
3/32" = 1'-0" 0' 4' 8' 16'
1/8" = 1'-0" 0' 4' 8' 12'
1/4" = 1'-0" 0' 2' 4' 6'
3/8" = 1'-0" 0' 1' 2' 3' 4'
1/2" = 1'-0" 0' 6" 1' 2' 3'
3/4" = 1'-0" 0' 6" 1' 2'
1" = 1'-0" 0' 3" 6" 9" 1' 1.5'
1 1/2" = 1'-0" 0' 3" 6" 9" 1'
3" = 1'-0" 0' 1" 2" 3" 4" 5" 6"
6" = 1'-0" 0' 1" 2" 3"
12" = 1'-0" 0' 1" 1.5"

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POWER RISER DIAGRAM 1

NOT TO SCALE

POWER RISER DIAGRAM NOTES

1 COORDINATE POWER OUTAGE REQUIRED FOR ALL WORK ASSOCIATED WITH THE EXISTING MDS INCLUDED IN THE BASE BID AND THE ADD. ALT. WITH THE OWNER AND DOMINION ENERGY PRIOR TO CONSTRUCTION.

2 DISCONNECT AND REMOVE EXISTING SERVICE ENTRANCE CONDUCTORS FROM TRANSFORMER SECONDARY AND TERMINALS INSIDE C/T CABINET. PROVIDE 4-750KCMIL (COPPER) IN EACH OF FIVE (5) EXISTING CONDUITS. PROVIDE WIRE TERMINALS ON BOTH ENDS OF CONDUCTORS WITH DOMINION ENERGY.

3 PROVIDE NEW 800 AMP, 3 POLE, 100% DUTY RATED, 65 KAIC CIRCUIT BREAKER, MOUNTING HARDWARE, AND NEW SPACE COVERS. INSTALL CIRCUIT BREAKER IN SWITCHBOARD AS DIRECTED BY SWITCHBOARD MANUFACTURER. THE SWITCHBOARD IS A CUTLER HAMMER 2000 AMP, MAIN BREAKER 480Y/277 VOLT, 3 PHASE, 4 WIRE, CUTLET HAMMER "POW-R-LINE C" TYPE SWITCHBOARD. ADJUST LOCATION OF TWIN MOUNTED 225 AMP CIRCUIT BREAKER AND SPACE IF REQUIRED. PROVIDE ENGRAVED BAKELITE NAMEPLATE LABELED "PANEL MP" TO MATCH EXISTING.

4 PROVIDE TWO (2) 4" CONDUITS EACH WITH 4-500KCMIL AND 1 #1 GROUND. CONNECT TO NEW 800A-3P CIRCUIT BREAKER IN MDS PROVIDED BY POWER RISER DIAGRAM NOTE 3.

5 PROVIDE NEW 45 AMP, 3 POLE, 10 KAIC CIRCUIT BREAKER AND INSTALL IN AVAILABLE SPACES IN PANEL. PANEL "LE" IS A 100 AMP, MAIN BREAKER 480Y/277 VOLT, 3 PHASE, 4 WIRE, CUTLET HAMMER TYPE "PRL1" PANELBOARD. CHANGE PANEL INDEX TO REFLECT LOAD SERVED.

6 PROVIDE 3 #6 AND 1 #10 GROUND IN 3/4" CONDUIT. CONNECT TO NEW 45A-3P CIRCUIT BREAKER IN PANEL "LE" PROVIDED BY POWER RISER DIAGRAM NOTE 23.

7 PROVIDE SURGE PROTECTIVE DEVICE "SPD" IN NEMA 1 SURFACE ENCLOSURE IN ACCORDANCE WITH SPECIFICATION SECTION 264313. PROVIDE 4 #10 AND 1 #10 GROUND IN 1/2" CONDUIT AND CONNECT TO CIRCUIT BREAKER IN ACCORDANCE WITH PANEL SCHEDULE.

8 PROVIDE POWER METER E-MON D-MON CATALOG NUMBER E20-480200-JDKIT OR APPROVED EQUAL. INSTALL C/T'S AROUND PANEL FEEDER CONDUCTORS IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS. PROVIDE 4 #12 AND 1 #12 GROUND IN 1/2" CONDUIT AND CONNECT TO CIRCUIT BREAKER IN ACCORDANCE WITH PANEL SCHEDULE.

9 PROVIDE POWER METER E-MON D-MON CATALOG NUMBER E20-480800-JDKIT OR APPROVED EQUAL. INSTALL C/T'S AROUND PANEL FEEDER CONDUCTORS IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS. PROVIDE 4 #12 AND 1 #12 GROUND IN 1/2" CONDUIT AND CONNECT TO CIRCUIT BREAKER IN ACCORDANCE WITH PANEL SCHEDULE.

10 PROVIDE POWER METER E-MON D-MON CATALOG NUMBER E20-208200-JDKIT OR APPROVED EQUAL. INSTALL C/T'S AROUND PANEL FEEDER CONDUCTORS IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS. PROVIDE 4 #12 AND 1 #12 GROUND IN 1/2" CONDUIT AND CONNECT TO CIRCUIT BREAKER IN ACCORDANCE WITH PANEL SCHEDULE.

11 PROVIDE POWER METER E-MON D-MON CATALOG NUMBER E20-208200-JDKIT OR APPROVED EQUAL. INSTALL C/T'S AROUND PANEL FEEDER CONDUCTORS IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS. PROVIDE 4 #12 AND 1 #12 GROUND IN 1/2" CONDUIT AND CONNECT TO CIRCUIT BREAKER IN ACCORDANCE WITH PANEL SCHEDULE.

12 PROVIDE CONCRETE HOUSEKEEPING PAD UNDER ELECTRICAL EQUIPMENT IN ACCORDANCE WITH SPECIFICATION SECTION 262200.

13 PROVIDE 1 #1/0 GROUNDING ELECTRODE CONDUCTOR. INSTALL IN ACCORDANCE WITH ARTICLE 250 OF THE N.E.C.

14 PROVIDE WIRING TROUGH SIZE AS REQUIRED BY THE NEC. PROVIDE 3-600 KCMIL PHASE CONDUCTORS, 2-600 KCMIL NEUTRALS AND 1 #1/0 GROUND IN WIRING TROUGH.

15 PROVIDE 3 #1/0 PHASE CONDUCTORS, 2 #1/0 NEUTRALS AND 1 #6 GROUND IN 2" CONDUIT. TAP CONDUCTORS IN WIRING TROUGH AND CONNECT TO PANEL. A1

TRANSFORMER SCHEDULE

TRANSF. No.	KVA	PRIMARY	SECONDARY	ROOM NO.	APPROX. WT.	MOUNTING	REMARKS
T-1	112.5	480	208Y/120	A104	925 LBS	FLOOR	K-4 RATED

CONNECTED LOAD SCHEDULE

TYPE OF LOAD	TOTAL IN KVA
INTERIOR LIGHTING	12 KVA
EXTERIOR LIGHTING	1 KVA
RECEPTACLES	87 KVA
HVAC EQUIPMENT	442 KVA
WATER HEATERS	36 KVA
ELEVATOR	20 KVA
KITCHEN EQUIPMENT (ADD ALT.)	108 KVA
TOTAL KVA	706 KVA

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A1	07.17.2025	ADDENDUM NO. 1
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DATE	06.24.2025			
PROJECT	23238-00			
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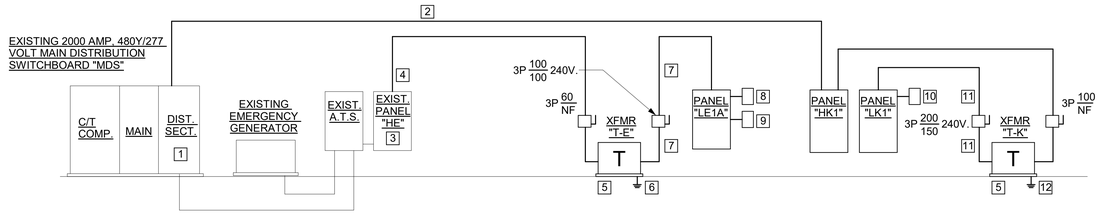
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Lic. No.049752
06.24.2025
PROFESSIONAL ENGINEER

PROJECT
SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
67701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 1888-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

DRAWING
POWER RISER DIAGRAM AND NOTES

SHEET
E-701

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POWER RISER DIAGRAM ADDITIVE ALTERNATE NO. 1

NOT TO SCALE

POWER RISER DIAGRAM ADDITIVE ALTERNATE NO. 1 NOTES

1. PROVIDE NEW 175 AMP, 3 POLE, 65 KAIC CIRCUIT BREAKER, AND MOUNTING HARDWARE. INSTALL CIRCUIT BREAKER IN SPACE ON RIGHT HAND SIDE OF EXISTING TWIN BREAKER MOUNTING ASSEMBLY AS DIRECTED BY SWITCHBOARD MANUFACTURER. THE SWITCHBOARD IS A CUTLER HAMMER 2000 AMP, MAIN BREAKER 480Y/277 VOLT, 3 PHASE, 4 WIRE, CUTLET HAMMER "POW-R-LINE C" TYPE SWITCHBOARD. PROVIDE ENGRAVED BAKELITE NAMEPLATE LABELED "PANEL HK1" TO MATCH EXISTING.
2. PROVIDE 4 #2/0 AND 1 #6 GROUND IN 2" CONDUIT. CONNECT TO NEW 175A-3P CIRCUIT BREAKER IN MDS PROVIDED BY POWER RISER DIAGRAM NOTE 1.
3. PROVIDE NEW 45 AMP, 3 POLE, 65 KAIC CIRCUIT BREAKER AND INSTALL IN AVAILABLE SPACES IN PANEL. PANEL "HE" IS A 100 AMP, MAIN BREAKER 480Y/277 VOLT, 3 PHASE, 4 WIRE, CUTLET HAMMER TYPE "PRL2" PANELBOARD. CHANGE PANEL INDEX TO REFLECT LOAD SERVED.
4. PROVIDE 3 #8 AND 1 #10 GROUND IN 3/4" CONDUIT. CONNECT TO NEW 45A-3P CIRCUIT BREAKER IN PANEL "HE" PROVIDED BY POWER RISER DIAGRAM NOTE 3. A1
5. PROVIDE CONCRETE HOUSEKEEPING PAD UNDER ELECTRICAL EQUIPMENT IN ACCORDANCE WITH SPECIFICATION SECTION 262200.
6. PROVIDE 1 #8 GROUNDING ELECTRODE CONDUCTOR. INSTALL IN ACCORDANCE WITH ARTICLE 250 OF THE N.E.C.
7. PROVIDE 3 #3 PHASE CONDUCTORS, 2 #3 NEUTRALS AND 1 #8 GROUND IN 1-1/2" CONDUIT. A1
8. PROVIDE SURGE PROTECTIVE DEVICE "SPD" IN NEMA 1 SURFACE ENCLOSURE IN ACCORDANCE WITH SPECIFICATION SECTION 264313. PROVIDE 4 #10 AND 1 #10 GROUND IN 1/2" CONDUIT AND CONNECT TO CIRCUIT BREAKER IN ACCORDANCE WITH PANEL SCHEDULE.
9. PROVIDE POWER METER E-MON D-MON CATALOG NUMBER E20-208200-JDKIT OR APPROVED EQUAL. INSTALL C/T'S AROUND PANEL FEEDER CONDUCTORS IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS. PROVIDE 4 #12 AND 1 #12 GROUND IN 1/2" CONDUIT AND CONNECT TO CIRCUIT BREAKER IN ACCORDANCE WITH PANEL SCHEDULE.
10. PROVIDE SURGE PROTECTIVE DEVICE "SPD" IN NEMA 1 FLUSH ENCLOSURE IN ACCORDANCE WITH SPECIFICATION SECTION 264313. PROVIDE 4 #10 AND 1 #10 GROUND IN 1/2" CONDUIT AND CONNECT TO CIRCUIT BREAKER IN ACCORDANCE WITH PANEL SCHEDULE.
11. PROVIDE 3 #1/0 PHASE CONDUCTORS, 2 #1/0 NEUTRALS AND 1 #6 GROUND IN 2" CONDUIT A1
12. PROVIDE 1 #6 GROUNDING ELECTRODE CONDUCTOR. INSTALL IN ACCORDANCE WITH ARTICLE 250 OF THE N.E.C.

ADDITIVE ALTERNATE NO. 1 TRANSFORMER SCHEDULE

TRANSF. No.	KVA	PRIMARY	SECONDARY	ROOM NO.	APPROX. WT.	MOUNTING	REMARKS
T-E	30	480	208Y/120	B102	380 LBS	FLOOR	K-4 RATED
T-K	45	480	208Y/120	B104	475 LBS	FLOOR	K-4 RATED

PANEL: HK1

LOCATION: Space B101 | VOLTS: 480/277 Wye | KAIC RATING: 25
MOUNTING: Surface | PHASES: 3 | MAINS TYPE: LUGS
NEMA: Type 1 | WIRES: 4 | MAINS RATING: 225 A

CKT NO	LOAD SERVED	P	C/B TRIP	WIRE SIZE	A	B	C	WIRE SIZE	C/B TRIP	P	LOAD SERVED	CKT NO
1					2.2	2.2						2
3	DISPOSER	3	20	12		2.2	2.2	12	20	3	DISPOSER	4
5							2.2	2.2				6
7					26.5	24.1						8
9	BOOSTER HEATER	3	35	8		26.5	24.1	10	30	3	DISHWASHER	10
11							26.5	24.1				12
13					3.4	4.8						14
15	KMAU-1	3	15	12		3.4	4.8	12	15	3	KEF-1	16
17							3.4	4.8				18
19					94.3	6.7		12	20	1	Lighting	20
21	PANEL "LK1" VIA XFMR "T-K"	3	70	4		77.8	--	--	--	1	SPACE	22
23							92.9	--	--	--	1	SPACE	24
25	SPARE	1	20	--	0.0	--		--	--	1	SPACE	26
27	SPARE	1	20	--		0.0	--	--	--	1	SPACE	28
29	SPARE	1	20	--			0.0	--	--	1	SPACE	30
	CONNECTED LOAD (AMPS):				164 A	141 A	156 A					
	CONNECTED LOAD (KVA):				45 kVA	39 kVA	43 kVA					

TOTAL CONNECTED LOAD (KVA): 126 kVA | TOTAL ESTIMATED DEMAND LOAD (KVA): 107 kVA

NOTES:

PANEL: LE1A

LOCATION: ELEC A104 | VOLTS: 120/208 Wye | KAIC RATING: 10
MOUNTING: Surface | PHASES: 3 | MAINS TYPE: MAIN LUGS ONLY
NEMA: Type 1 | WIRES: 4 | MAINS RATING: 100 A

CKT NO	LOAD SERVED	P	C/B TRIP	WIRE SIZE	A	B	C	WIRE SIZE	C/B TRIP	P	LOAD SERVED	CKT NO
1	WALK-IN COOLER LIGHTS	1	20	12	0.4	1.0						2
3	WALK-IN FREEZER LIGHTS	1	20	12		1.3	1.0	10	30	3	SPD	4
5	RECEPTACLE	1	20	12			3.0	1.0				6
7	RECEPTACLE	1	30	10	20.0	1.4						8
9	RECEPTACLE	1	30	10		20.0	1.4	12	20	3	POWER METER	10
11	RECEPTACLE	1	20	12			3.0	1.4				12
13						5.0		12	20	1	SPEAKER AMPLIFIER RECEPTACLE	14
15							10.0	12	20	1	ALARM PANELS	16
17	RECEPTACLE	1	20	12			3.0	12.5	12	20	1	WALK-IN COOLER EVAPORATOR	18
19					15.0	41.1						20
21	WALK-IN COOLER CONDENSOR	3	20	12		15.0	41.1	6	60	3	WALK-IN FREEZER EVAPORATOR AND CONDENSOR	22
23							15.0	41.1				24
25	SPARE	1	20	--	0.0	--		--	--	1	SPACE	26
27	SPARE	1	20	--		0.0	--	--	--	1	SPACE	28
29	SPARE	1	20	--			0.0	--	--	1	SPACE	30
	CONNECTED LOAD (AMPS):				85 A	90 A	80 A					
	CONNECTED LOAD (KVA):				10 kVA	11 kVA	10 kVA					

TOTAL CONNECTED LOAD (KVA): 30 kVA | TOTAL ESTIMATED DEMAND LOAD (KVA): 30 kVA

NOTES:

PANEL: LK1

LOCATION: Space B101 | VOLTS: 120/208 Wye | KAIC RATING: 10
MOUNTING: Flush | PHASES: 3 | MAINS TYPE: MAIN LUGS ONLY
NEMA: Type 1 | WIRES: 4 | MAINS RATING: 225 A

CKT NO	LOAD SERVED	P	C/B TRIP	WIRE SIZE	A	B	C	WIRE SIZE	C/B TRIP	P	LOAD SERVED	CKT NO
1					1.0	16.0		12	20	1	WORK TABLE RECEPTACLE	2
3	SPD	3	30	10		1.0	16.0	12	20	1	WORK TABLE RECEPTACLE	4
5							1.0	16.0	12	20	1	WORK TABLE RECEPTACLE	6
7	AIR CURTAIN	1	20	12	13.0	16.0		12	20	1	WORK TABLE RECEPTACLE	8
9	CAN OPENER	1	20	12		2.1	8.3	12	20	1	MICROWAVE	10
11	REFRIGERATOR (SEE NOTE 1)	1	20	12			8.2	16.0	12	20	1	MOBILE HEATED CABINET (SEE NOTE 1)	12
13	REFRIGERATOR (SEE NOTE 1)	1	20	12	8.2	10.0		12	20	1	ICE MAKER (SEE NOTE 1)	14
15	HOT FOOD PASS THRU (SEE NOTE 1)	2	20	12			7.8	7.2	12	20	1	PASS THRU REFRIGERATOR (SEE NOTE 1)	16
17								7.8	7.2	12	20	1	PASS THRU REFRIGERATOR (SEE NOTE 1)	18
19	HOT FOOD PASS THRU (SEE NOTE 1)	2	20	12	7.8	7.2		12	20	1	PASS THRU REFRIGERATOR (SEE NOTE 1)	20
21						7.8	3.0	12	20	1	MILK COOLER (SEE NOTE 1)	22
23	HOT FOOD PASS THRU (SEE NOTE 1)	2	20	12			7.8	3.0	12	20	1	MILK COOLER (SEE NOTE 1)	24
25					7.8	3.0		12	20	1	MILK COOLER (SEE NOTE 1)	26
27	HOT FOOD WELL (SEE NOTE 1)	2	30	10			14.4	10.0	12	20	1	HEAT LAMP AND LIGHT (SEE NOTE 1)	28
29								14.4	10.0	12	20	1	HEAT LAMP AND LIGHT (SEE NOTE 1)	30
31	HOT FOOD WELL (SEE NOTE 1)	2	30	10	14.4	10.0		12	20	1	HEAT LAMP AND LIGHT (SEE NOTE 1)	32
33						14.4	3.3	12	20	1	FROST TOP (SEE NOTE 1)	34
35	HOT FOOD WELL (SEE NOTE 1)	2	30	10				14.4	3.3	12	20	1	FROST TOP (SEE NOTE 1)	36
37					14.4	3.3		12	20	1	FROST TOP (SEE NOTE 1)	38
39	TWO TIER DISPLAY (SEE NOTE 1)	1	20	12		3.3	10.0	12	20	1	CASHIER (SEE NOTE 1)	40
41	TWO TIER DISPLAY (SEE NOTE 1)	1	20	12			3.3	10.0	12	20	1	CASHIER (SEE NOTE 1)	42
43	TWO TIER DISPLAY (SEE NOTE 1)	1	20	12	3.3	10.0		12	20	1	CASHIER (SEE NOTE 1)	44
45	ICE CREAM BOX (SEE NOTE 1)	1	20	12		4.2	0.0	12	20	1	DEF-1	46
47	ICE CREAM BOX (SEE NOTE 1)	1	20	12			4.2	6.7	12	20	1	HOOD LIGHTS/CONTROL	48
49	HOOD FIRE SUPPRESSION	1	20	12	6.7	40.0							50
51	RECEPTACLES	1	20	12			7.5	40.0	8	50	3	UNITARY DISTRIBUTION SYSTEM (UDS)	52
53	RECEPTACLES	1	20	12				9.0	40.0				54
55	ROLL UP DOOR	1	20	12	4.2	10.0							56
57	ROLL UP DOOR	1	20	12			4.2	24.0					58
59	EWH-A	1	20	12				12.5	24.0	10	30	2	DRYER	60
61	EWH-A	1	20	12	12.5	0.0							62
63	SPARE	1	20	--			0.0	--	--	--	1	SPACE	64
65	SPARE	1	20	--				0.0	--	--	--	1	SPACE	66
67	SPARE	1	20	--	0.0	--				--	--	1	SPACE	68
69	SPARE	1	20	--			0.0	--		--	--	1	SPACE	70
71	SPARE	1	20	--				0.0	--	--	--	1	SPACE	72
73	SPARE	1	20	--	0.0	--				--	--	1	SPACE	74
75	SPARE	1	20	--			0.0	--		--	--	1	SPACE	76
77	SPARE	1	20	--				0.0	--	--	--	1	SPACE	78
79	SPARE	1	20	--	0.0	--				--	--	1	SPACE	80
81	SPARE	1	20	--			0.0	--		--	--	1	SPACE	82
83	SPARE	1	20	--				0.0	--	--	--	1	SPACE	84
	CONNECTED LOAD (AMPS):				18 A	18 A	21 A					
	CONNECTED LOAD (KVA):				2 kVA	2 kVA	2 kVA					

A1

TOTAL CONNECTED LOAD (KVA): 72 kVA | TOTAL ESTIMATED DEMAND LOAD (KVA): 53 kVA

NOTES:
1. PROVIDE GFI TYPE CIRCUIT BREAKER.

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MARK	DATE	REVISIONS
A1	07.17.2025	ADDENDUM NO. 1
	TCE	BY
		DESCRIPTION

DATE	PROJECT	DESIGNED	DRAWN	CHECKED
06.24.2025	23238-00	DWC	MAC	KC

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KENZIE CAMBAR
Lic. No.049752
06.24.2025
PROFESSIONAL ENGINEER

PROJECT: SUFFOLK PUBLIC SCHOOLS
NORTHERN SHORES ELEMENTARY SCHOOL ADDITION
6701 RESPASS BEACH RD.
SUFFOLK, VIRGINIA
IFB: 188-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-101

DRAWING: POWER RISER DIAGRAM, NOTES AND SCHEDULES - ADDITIVE ALTERNATE NO. 1

SHEET
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