

January 9, 2025

Pawtucket School Department
286 Main Street
Pawtucket, RI 02860

ADDENDUM 1

Subject: Addendum One RFP # C2024- 010 Goff Tolman Fire Code and Sprinkler Upgrades

Addendum #1 there were no RFI's submitted.

Addendum #1 includes the following documents:

1. Pre-Bid Walk-thru 12/23/24 Sign-In Sheet
2. Brewster Thornton Group Architects Bid Documents which includes project scope, and associated drawings.
3. The RFP submittal deadline has been extended to January 16, 2025 at 1:00 P.M.

*****Late submittals will not be considered.*****

END OF ADDENDUM ONE

ADDENDUM NUMBER 1

PARTICULARS

- 1.01 DATE: November 25th, 2024**
- 1.02 PROJECT: Fire code upgrades to the Goff Middle School/ Tolman High School**
- 1.03 ARCHITECTS'S PROJECT NUMBER: 2144**
- 1.04 OWNER: City of Pawtucket**
- 1.05 ARCHITECT: Brewster Thornton Group Architect**

TO: PROSPECTIVE BIDDERS:

- 2.01 THIS ADDENDUM FORMS A PART OF THE CONTRACT DOCUMENTS AND MODIFIES THE ORIGINAL PROCUREMENT DOCUMENTS DATED NOVEMBER 25, 2024, WITH AMENDMENTS AND ADDITIONS NOTED BELOW.**
- 2.02 ACKNOWLEDGE RECEIPT OF THIS ADDENDUM IN THE SPACE PROVIDED IN THE BID FORM. FAILURE TO DO SO MAY DISQUALIFY THE BIDDER.**

CHANGES TO THE PROJECT MANUAL - INTRODUCTORY REQUIREMENTS, PROCUREMENT REQUIREMENTS AND CONTRACTING REQUIREMENTS:

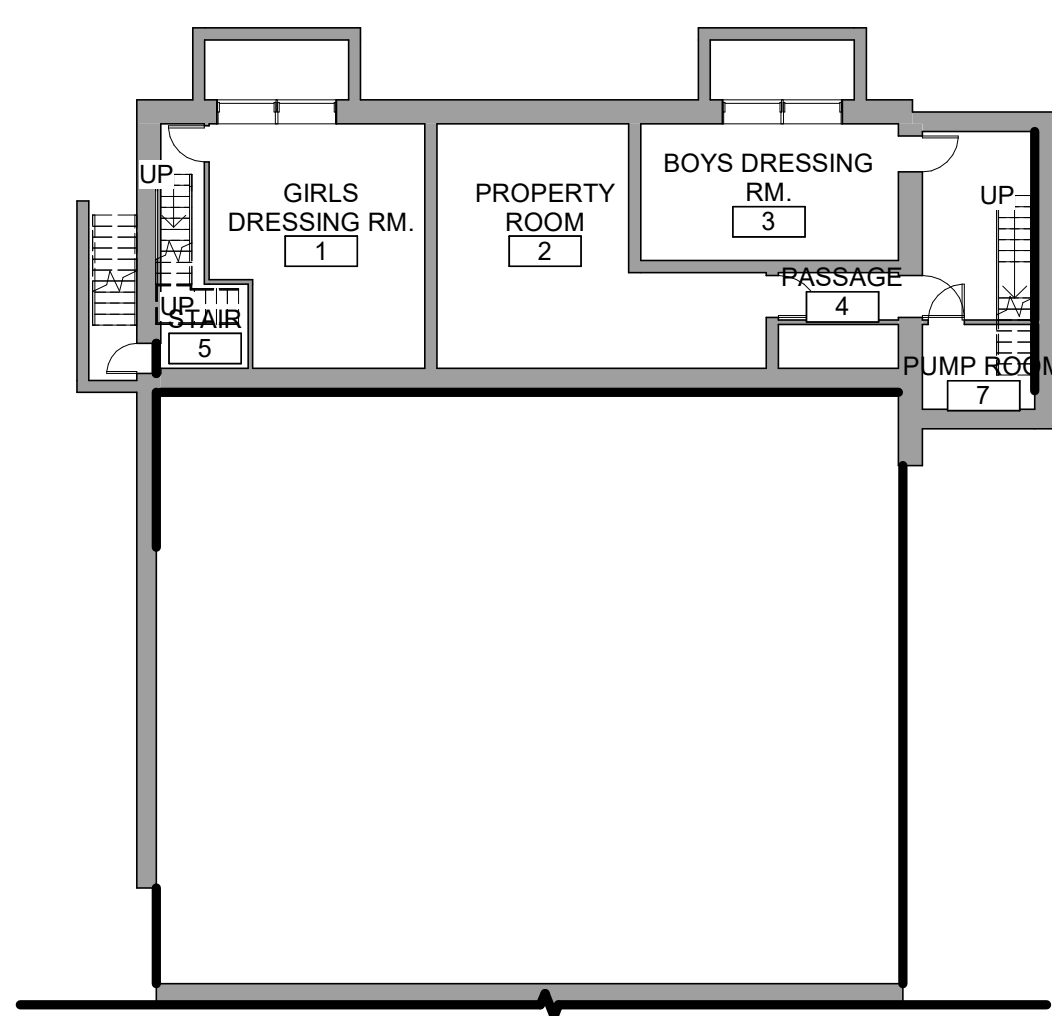
ATTACHMENTS:

- A. Drawing A1.1 First Floor Plan, revisions dated 01/08/25
- B. Drawing A5.1 Details, Door Types, Frames & Schedule, revisions dated 01/08/25
- C. Drawing 24144- E0.0 Electrical Symbol, Legend and Notes, revisions dated 01/08/2025
- D. Drawing 24144- E0.0 Electrical Symbol, Legend and Notes, revisions dated 01/08/2025
- E. Drawing 24144- E1.0 Electrical Level 1 Plans, revisions dated 01/08/2025
- F. Drawing 24144- E1.1 Electrical Level 2 Plans, revisions dated 01/08/2025
- G. Drawing 24144- E1.2 Electrical Level 3 Plans, revisions dated 01/08/2025
- H. Drawing 24144- E2.0 Electrical Specifications Sheet, revisions dated 01/08/2025
- I. Drawing 24144- E2.1 Electrical Specifications Sheet, revisions dated 01/08/2025
- J. Drawing 24144- E2.2 Electrical Specifications Sheet, revisions dated 01/08/2025
- K. Drawing 24145- E1.1 Electrical Level 1 Plans, revisions dated 01/08/2025
- L. Drawing 24145- E1.2 Electrical Level 2 Plans, revisions dated 01/08/2025
- M. Drawing 24145- E1.3 Electrical Level 3 Plans, revisions dated 01/08/2025
- N. Drawing 24145- E1.4 Electrical Level 4 Plans, revisions dated 01/08/2025
- O. Drawing 24145- E2.0 Electrical Specifications Sheet, revisions dated 01/08/2025
- P. Drawing 24145- E2.1 Electrical Specifications Sheet, revisions dated 01/08/2025
- Q. Drawing 24145- E2.2 Electrical Specifications Sheet, revisions dated 01/08/2025
- R. Drawing 24145- E1.0 Electrical Basement Plans, revisions dated 01/08/2025

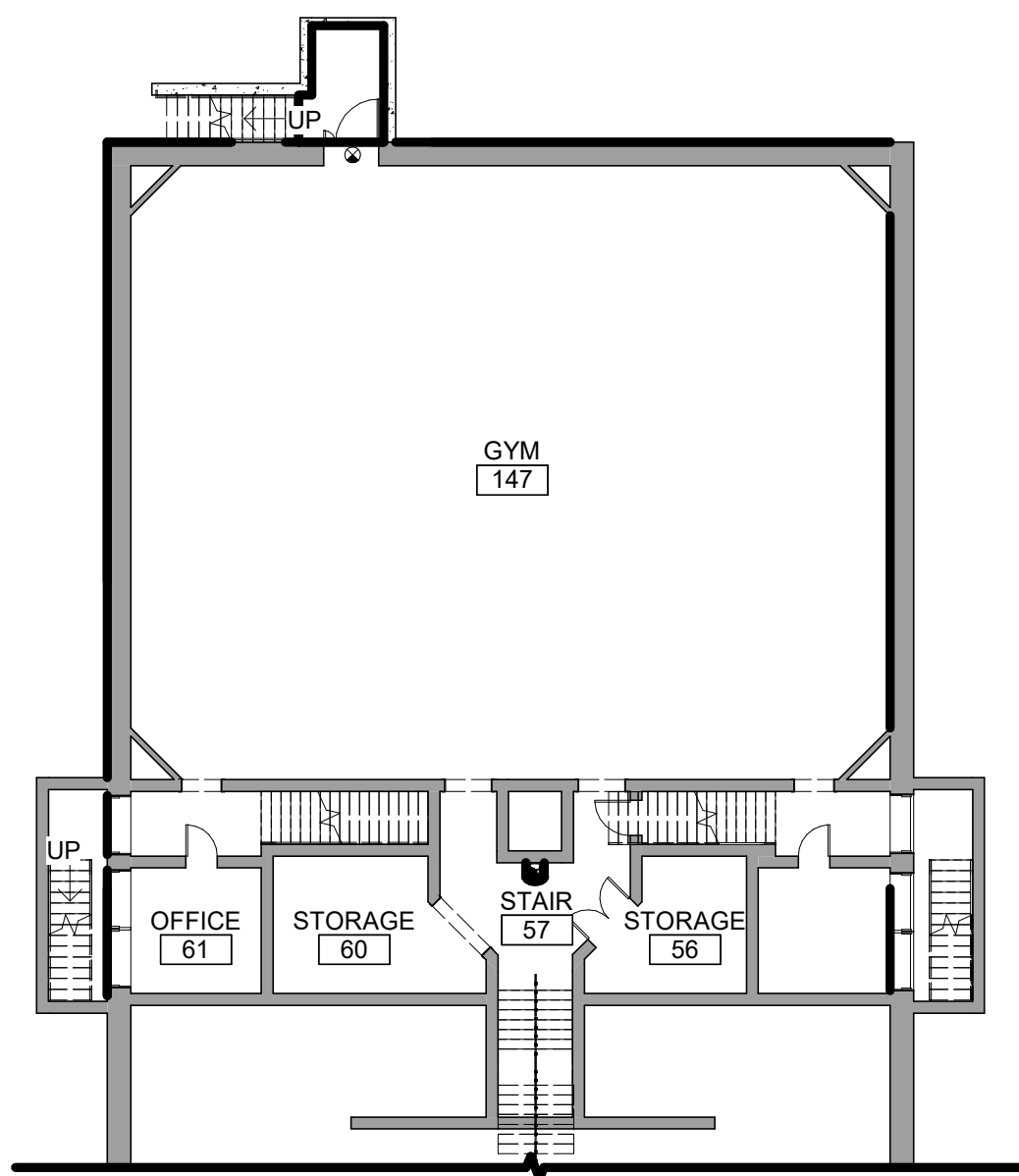
CHANGES TO DRAWINGS:

- A. A1.1 First Floor Plan, with revision 1 dated 01/08/25 alteration to note 1 and enlarged plans details 3-6. Showing transom above.
- B. A5.1 Revised Detail 10, with revision 1 dated 01/08/25 to clarify first floor jamb does not have sidelights..
- C. 24144- E1.0 Electrical Level 1 Plans, revisions dated 01/08/2025, Floor plan 6 & 7 have alterations to Note #12 and Note #20
- D. 24145- E1.1 Electrical Level 1 Plans, revisions dated 01/08/2025 alterations to Note # 12 then Note 18-21
- E. 24145- E1.2 Electrical Level 2 Plans, revisions dated 01/08/2025 alterations to Note # 12 then Note 18-21 as well as addition of new Detail #11
- F. 24145- E1.3 Electrical Level 3 Plans, revisions dated 01/08/2025 alterations to Note # 12 then Note 18-21 as well as addition of new Detail #13
- G. 24145- E1.4 Electrical Level 4 Plans, revisions dated 01/08/2025 alterations to Note # 12 then Note 18-21

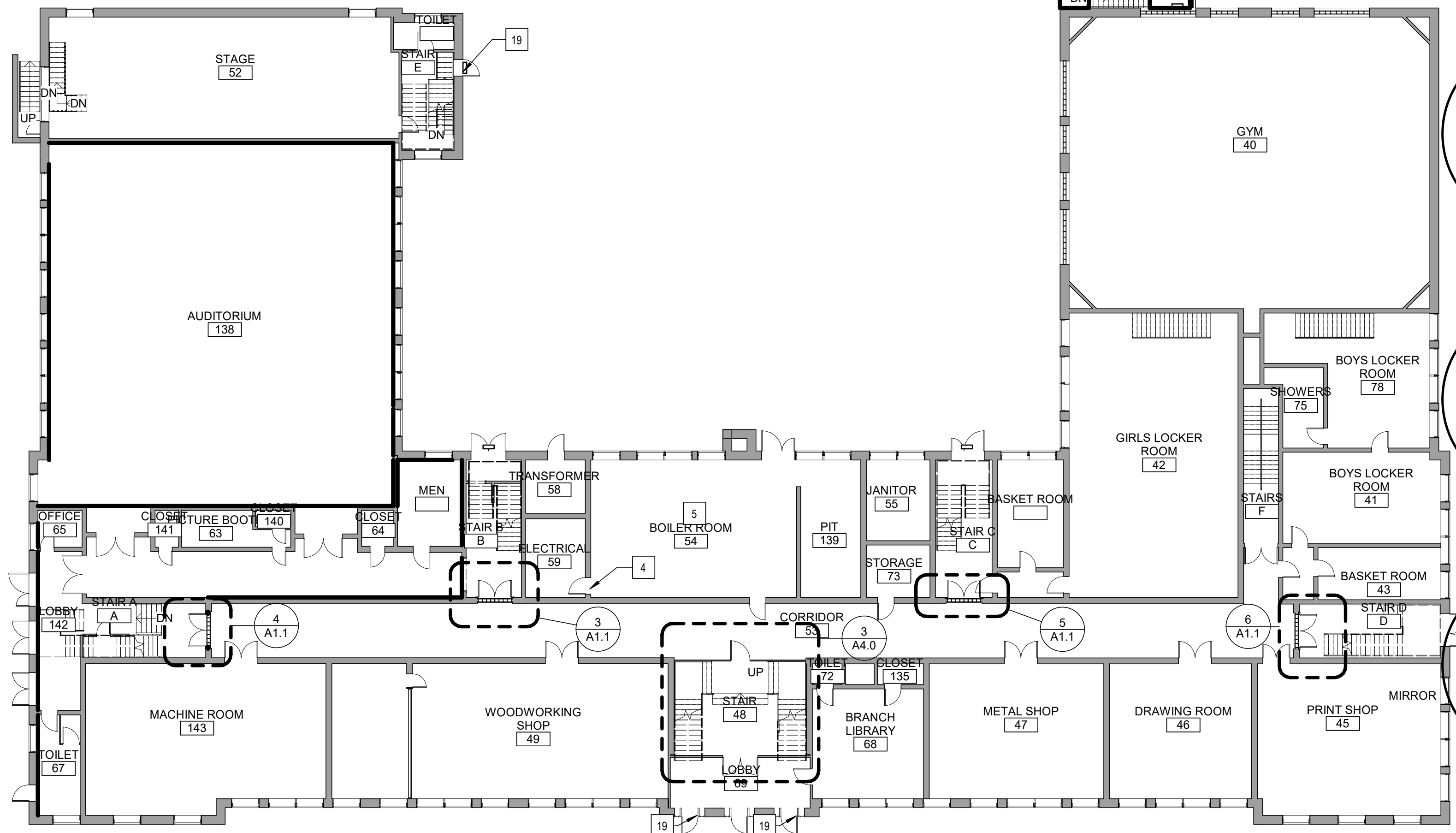
END OF SECTION



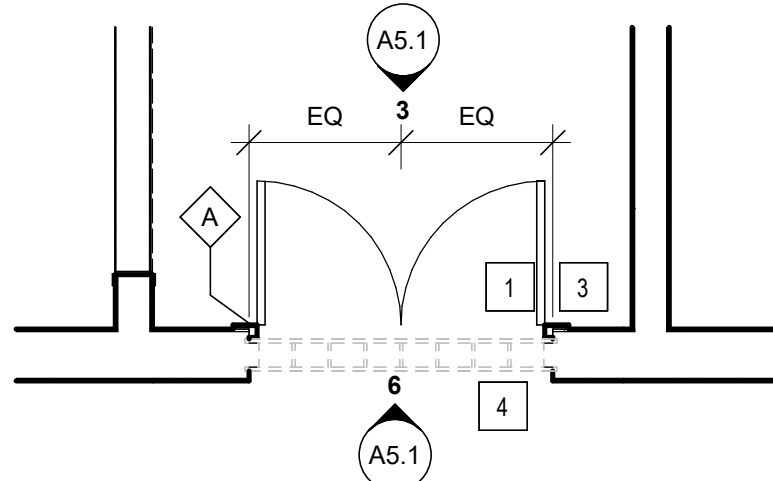
1 BASEMENT FLOOR PLAN
A1.1 Scale: 1/16" = 1'-0"



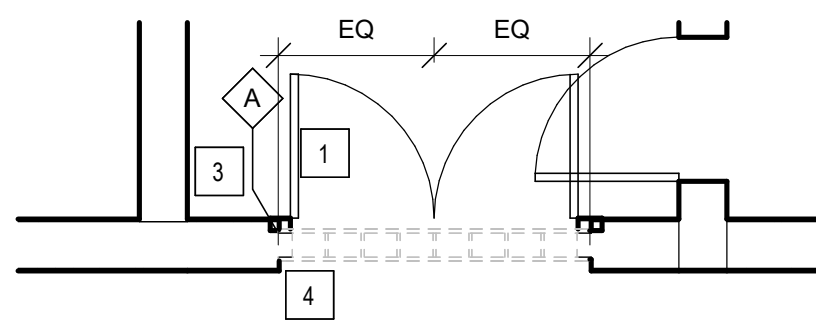
FLOOR PLAN KEY NOTES	
KEYNOTE NUMBER	DESCRIPTION
1	INSTALL DOUBLE DOORS WITH DOOR HARDWARE IN FIRE RATED WALL PER DOOR SCHEDULE. CAREFULLY ALIGN THE DOORS TO MATCH EX. TRANSOM ABOVE EX. STOREFRONT WALL.
2	INSTALL SINGLE DOOR IN FIRE RATED WALL. CAREFULLY ALIGN THE DOORS TO MATCH EX. OPENING IN EX. WOOD STOREFRONT WALL.
3	REINSTALL EXISTING AV/IT, FIRE ALARM EQUIPMEN. REFER TO MEP DWGS FOR LOCATION.
4	APPLY FILM ON GLASS PANELS OF EX. STOREFRONT ON THE CORRIDOR SIDE. INSTALL 1-HR RATED WALL AS SHOWN.



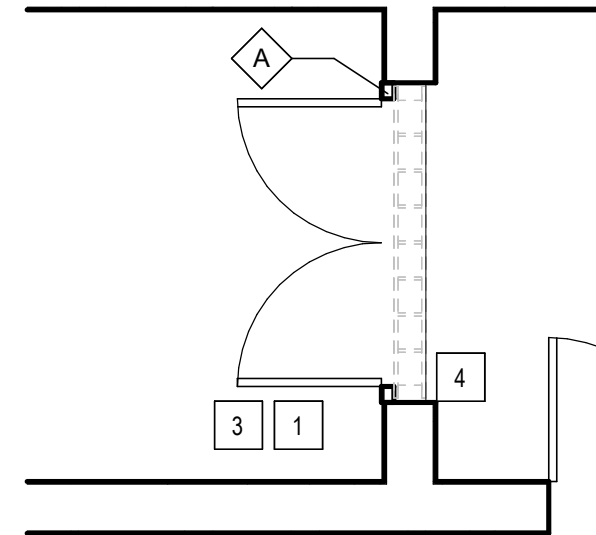
2 LEVEL 1 FLOOR PLAN
A1.1 Scale: 1/16" = 1'-0"



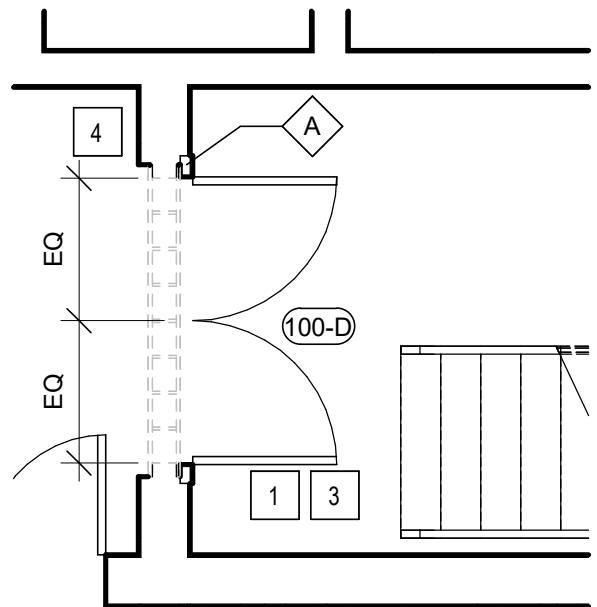
3 LEVEL 1 FLOOR PLAN - STAIR B
A1.1 Scale: 1/4" = 1'-0"



5 LEVEL 1 FLOOR PLAN - STAIR C
A1.1 Scale: 1/4" = 1'-0"



4 LEVEL 1 FLOOR PLAN - STAIR A
A1.1 Scale: 1/4" = 1'-0"



6 LEVEL 1 FLOOR PLAN - STAIR D
A1.1 Scale: 1/4" = 1'-0"

FIRE CODE UPGRADES TO THE
LYMAN B. GOFF MIDDLE SCHOOL

974 Newport Ave., Pawucket, RI 02861

**BREWSTER
THORNTON
GROUP
ARCHITECTS**
LLP

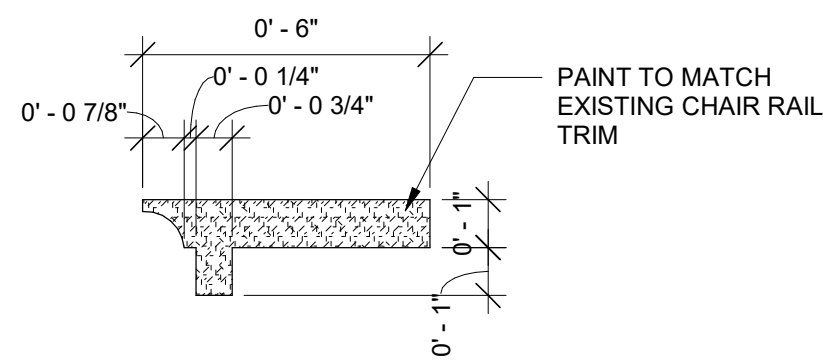
317 Iron Horse Way,
Suite 202
Providence, RI 02908

401.861.1600
brewsterthornton.com

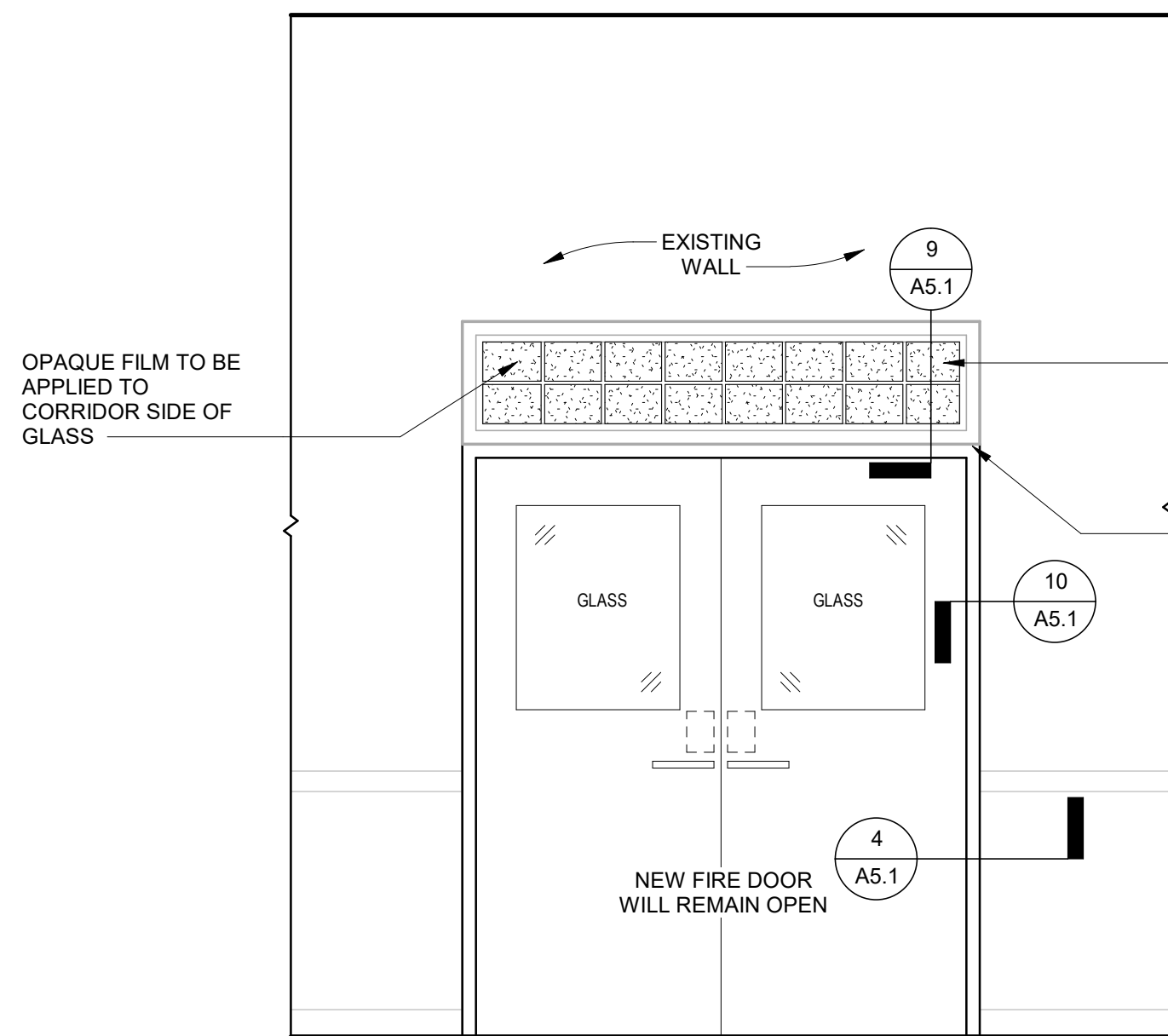
JOB NO.	DATE
2144	11/25/24
ISSUE : PRICING SET	
NO.	REVISION DESCRIPTION
1	ADDENDUM 1
	DATE
	01/08/2025

SHEET TITLE
**FIRST FLOOR
PLAN**

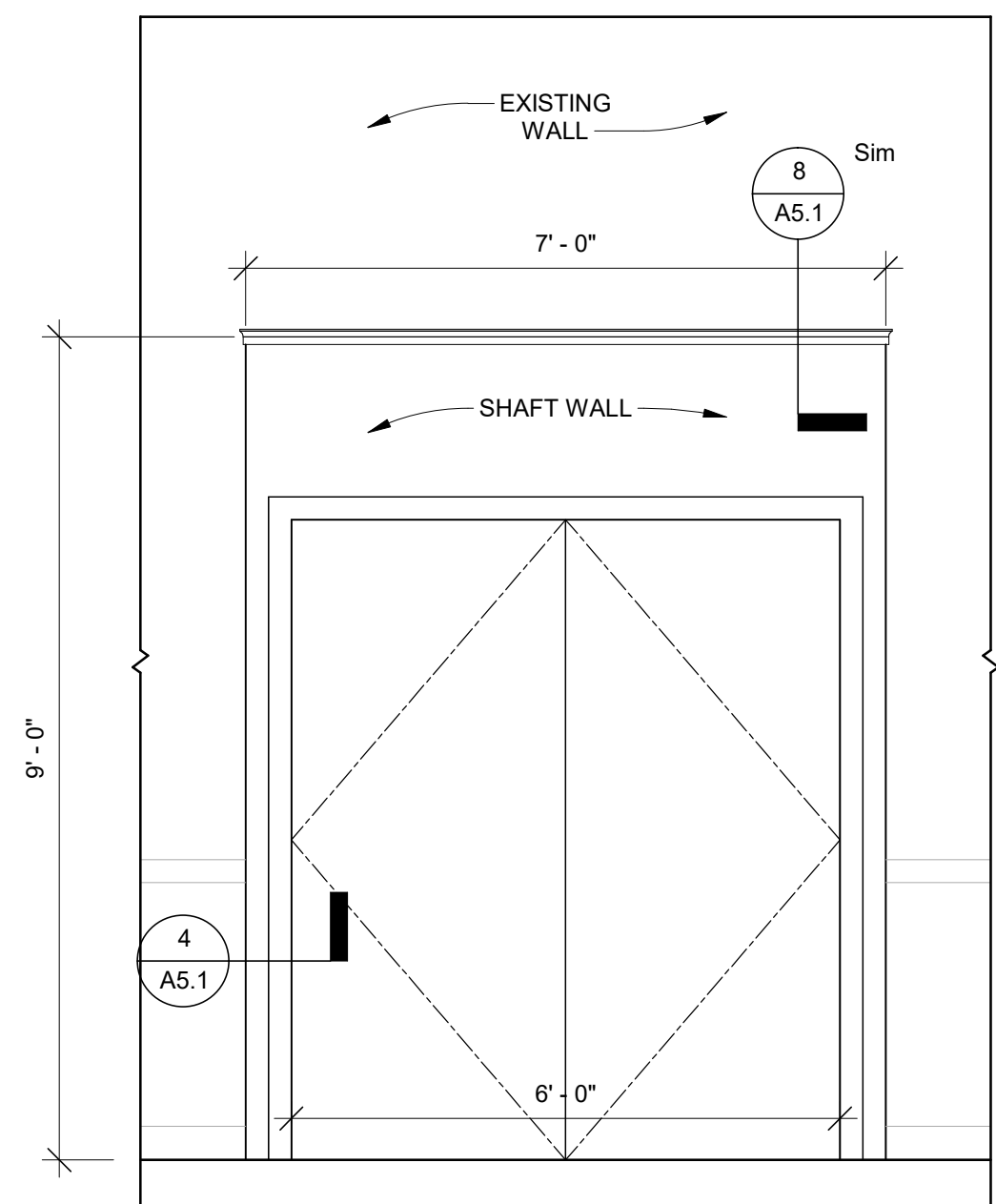
SHEET
A1.1



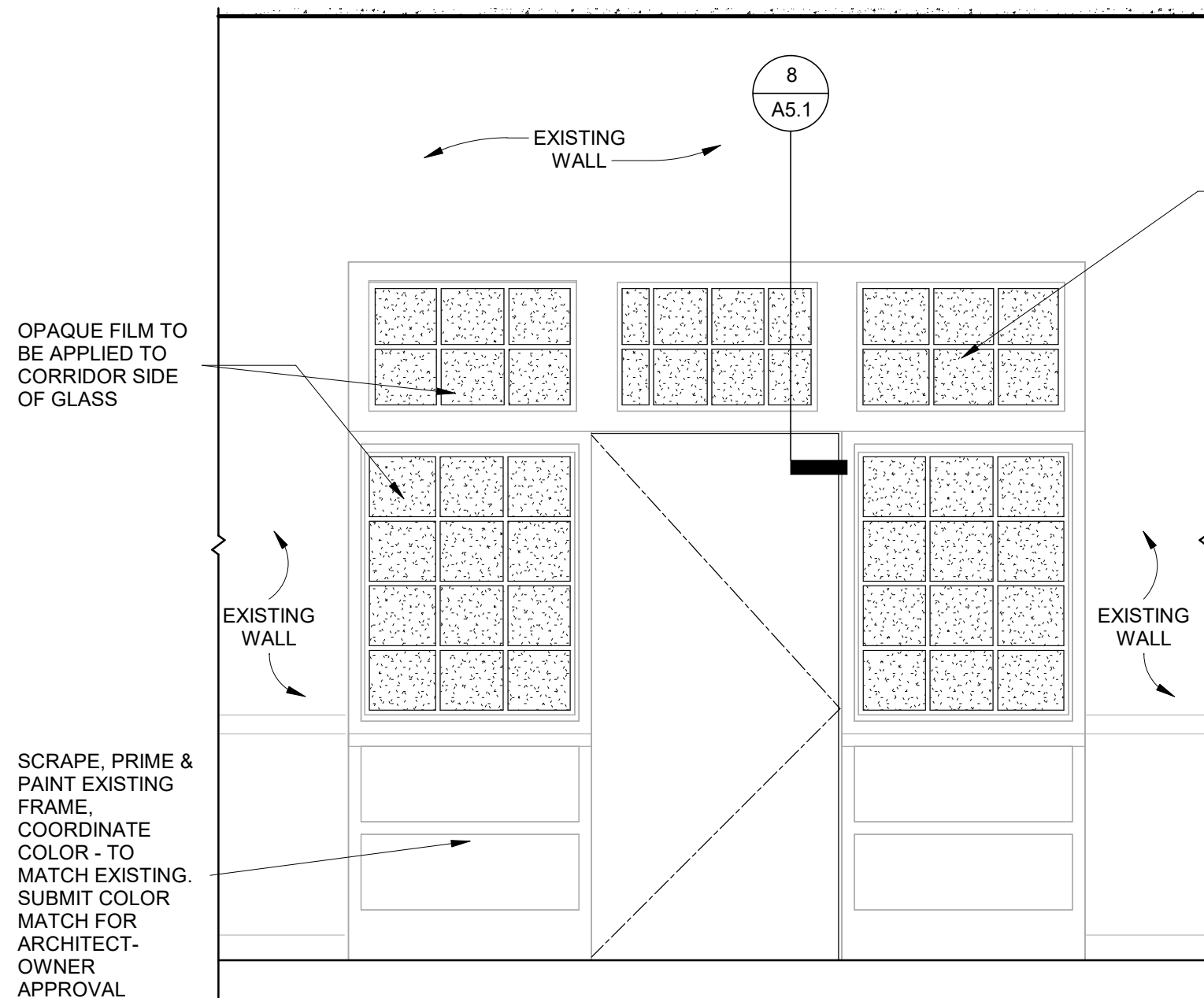
11 WOOD CAP DETAIL
3" = 1'-0"



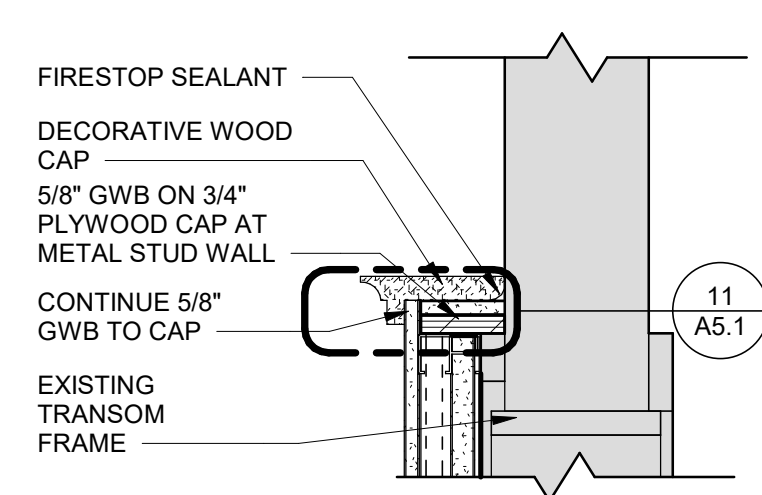
6 FIRE RATED EGRESS STAIR DOOR - FLOOR 1
Scale: 1/2" = 1'-0"



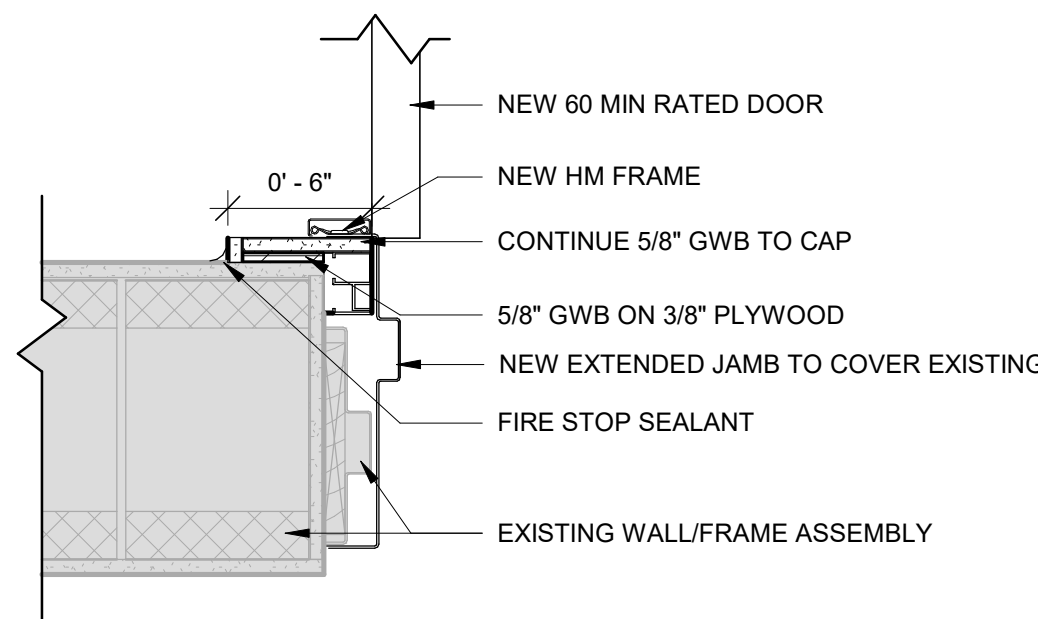
3 STAIRWELL SIDE- FIRE RATED EGRESS DOOR - FLOOR 1
Scale: 1/2" = 1'-0"



7 FIRE RATED EGRESS STAIR DOOR - FLOORS 2 & 3
Scale: 1/2" = 1'-0"

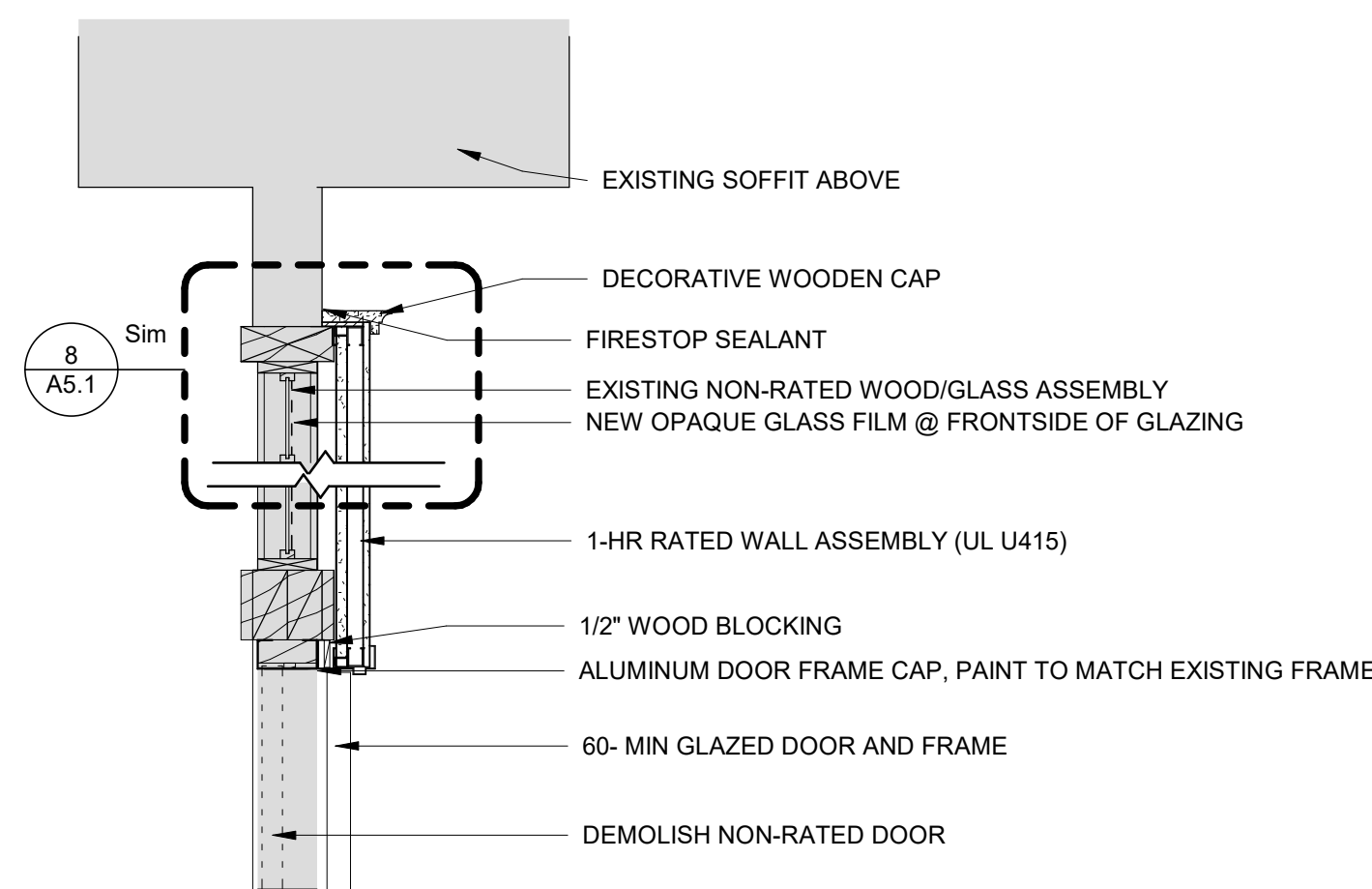
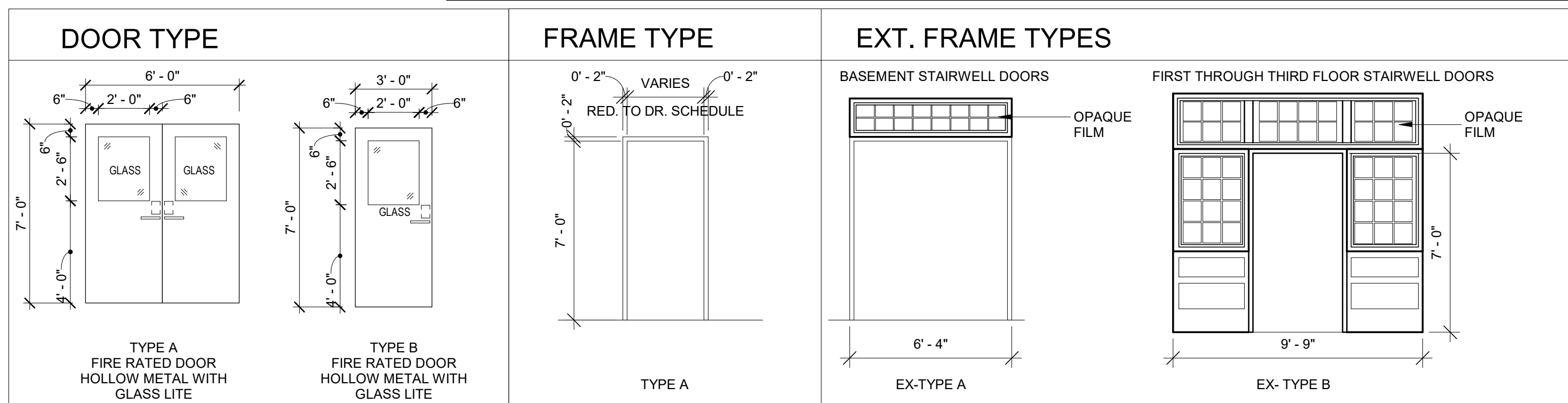


8 WALL TRANSITION DETAIL @ EGRESS DOOR
Scale: 1 1/2" = 1'-0"

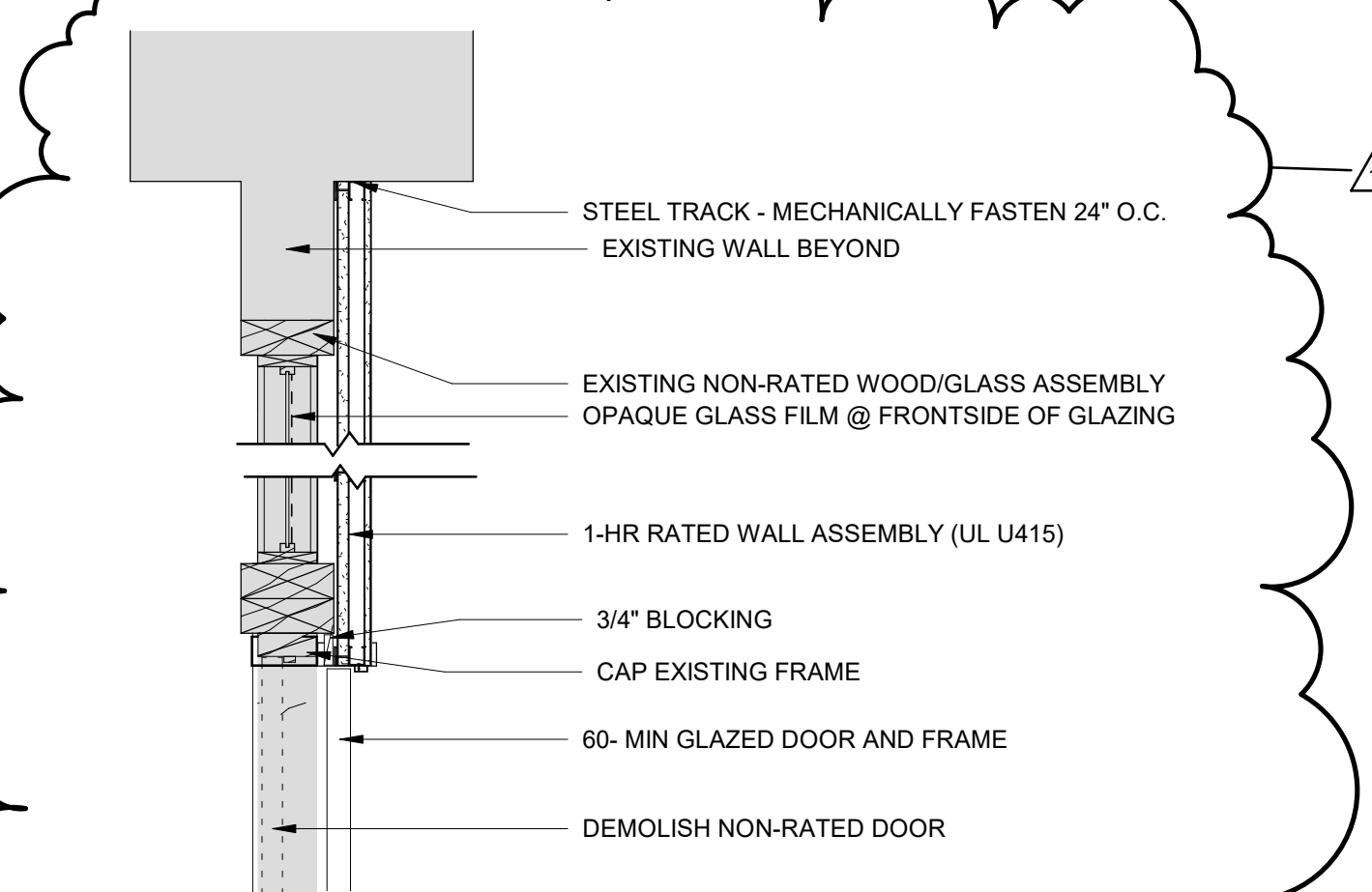


4 WALL TRANSITION DETAIL @ FIRST FLOOR DOOR JAMB
Scale: 1 1/2" = 1'-0"

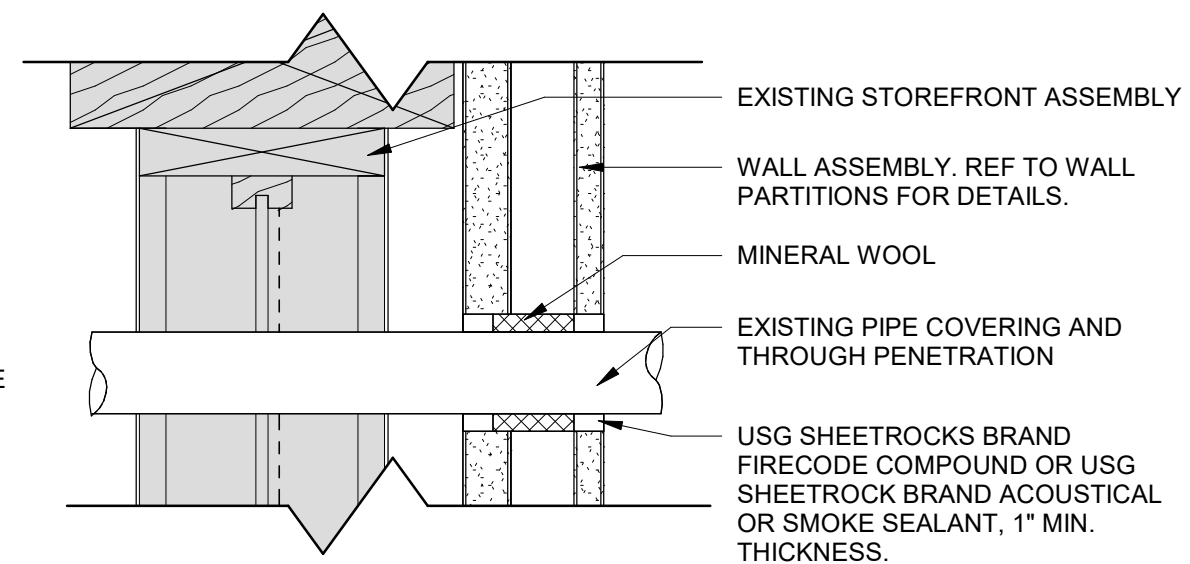
DOOR SCHEDULE										
Mark	Door Type	Material	Door Width	Height	Thickness	Fire Rating	NEW FRAME TYPE	Head	Jamb	Comments
100-A	A	PNT HM/GLASS	6'-0"	7'-0"	1 3/4"	60 MIN.	TYPE A	2/A5.1	3/A5.1	
100-B	A	PNT HM/GLASS	6'-0"	7'-0"	1 3/4"	60 MIN.	TYPE A	2/A5.1	3/A5.1	
100-C	A	PNT HM/GLASS	6'-0"	7'-0"	1 3/4"	60 MIN.	TYPE A	2/A5.1	3/A5.1	
100-D	A	PNT HM/GLASS	6'-0"	7'-0"	1 3/4"	60 MIN.	TYPE A	2/A5.1	3/A5.1	
200-A	B	PNT HM/GLASS	3'-4"	7'-0"	1 3/4"	60 MIN.	TYPE A	2/A5.1	3/A5.1	
200-B	B	PNT HM/GLASS	3'-4"	7'-0"	1 3/4"	60 MIN.	TYPE A	2/A5.1	3/A5.1	
200-C	B	PNT HM/GLASS	3'-4"	7'-0"	1 3/4"	60 MIN.	TYPE A	2/A5.1	3/A5.1	
200-D	B	PNT HM/GLASS	3'-4"	7'-0"	1 3/4"	60 MIN.	TYPE A	2/A5.1	3/A5.1	
300-A	B	PNT HM/GLASS	3'-4"	7'-0"	1 3/4"	60 MIN.	TYPE A	2/A5.1	3/A5.1	
300-B	B	PNT HM/GLASS	3'-4"	7'-0"	1 3/4"	60 MIN.	TYPE A	2/A5.1	3/A5.1	
300-C	B	PNT HM/GLASS	3'-4"	7'-0"	1 3/4"	60 MIN.	TYPE A	2/A5.1	3/A5.1	
300-D	B	PNT HM/GLASS	3'-4"	7'-0"	1 3/4"	60 MIN.	TYPE A	2/A5.1	3/A5.1	



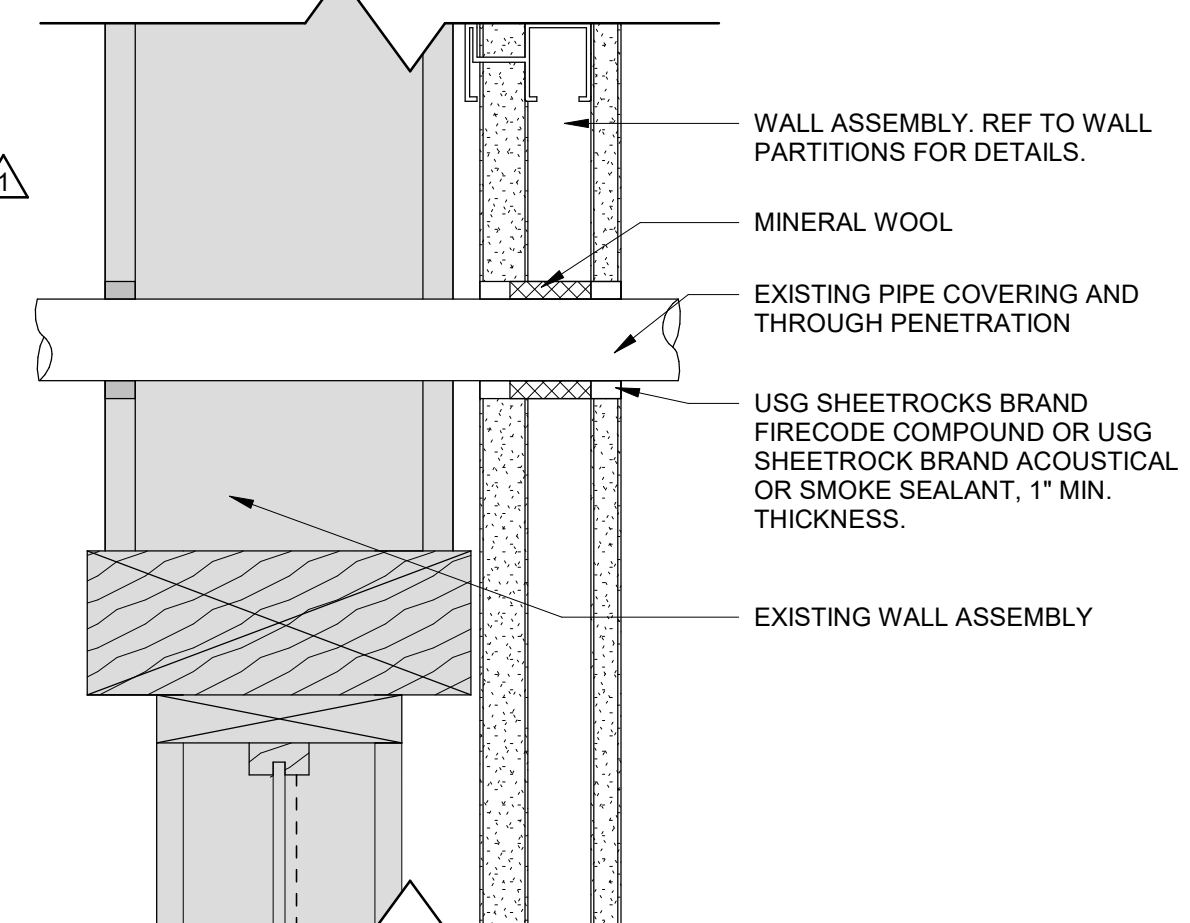
9 HEAD DETAIL @ GOFF STOREFRONT
Scale: 3/4" = 1'-0"



10 JAMB DETAIL @ GOFF STOREFRONT
Scale: 3/4" = 1'-0" NOTE: SIM. FIRST FLOOR, NO SIDELITES AT JAMB



1 TYP. RATED PIPE PENETRATION THROUGH EXT. STOREFRONT
Scale: 3" = 1'-0"



2 TYP. RATED PENETRATION THROUGH NEW SHAFT WALL
Scale: 3" = 1'-0"

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JOB NO.
2144

DATE
11/25/24

ISSUE : PRICING SET

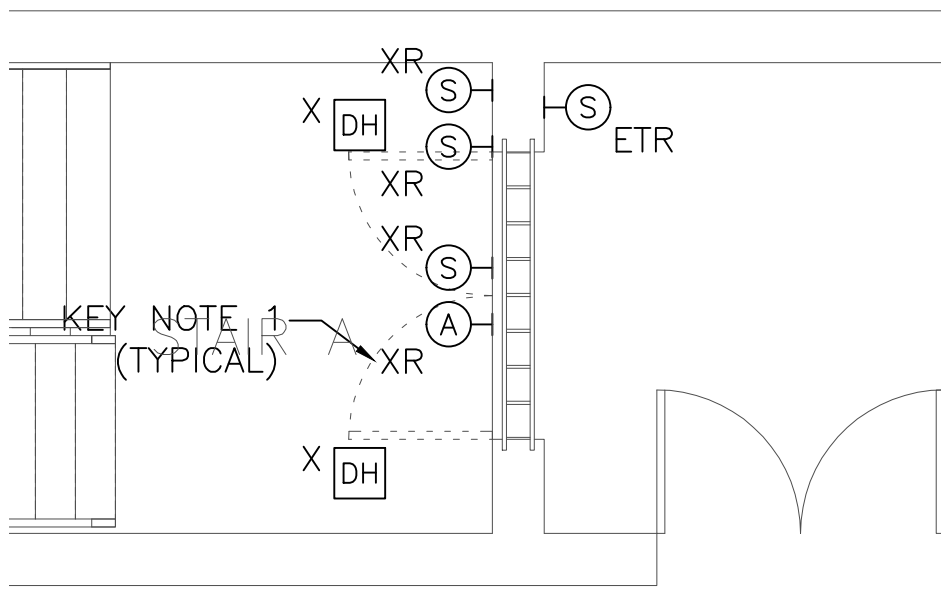
NO. REVISION DESCRIPTION DATE

1 ADDENDUM 1 01/08/2025

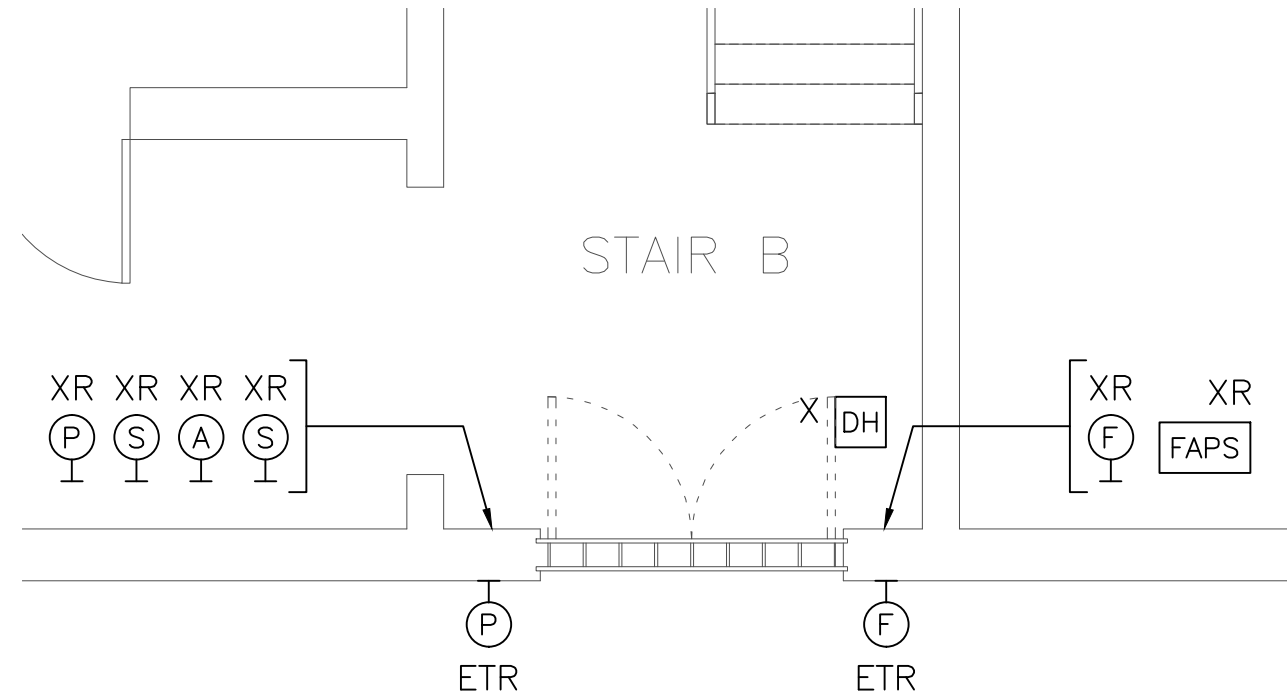
SHEET TITLE
DETAILS, DOOR
TYPES,
FRAMES, &
SCHEDULE

SHEET

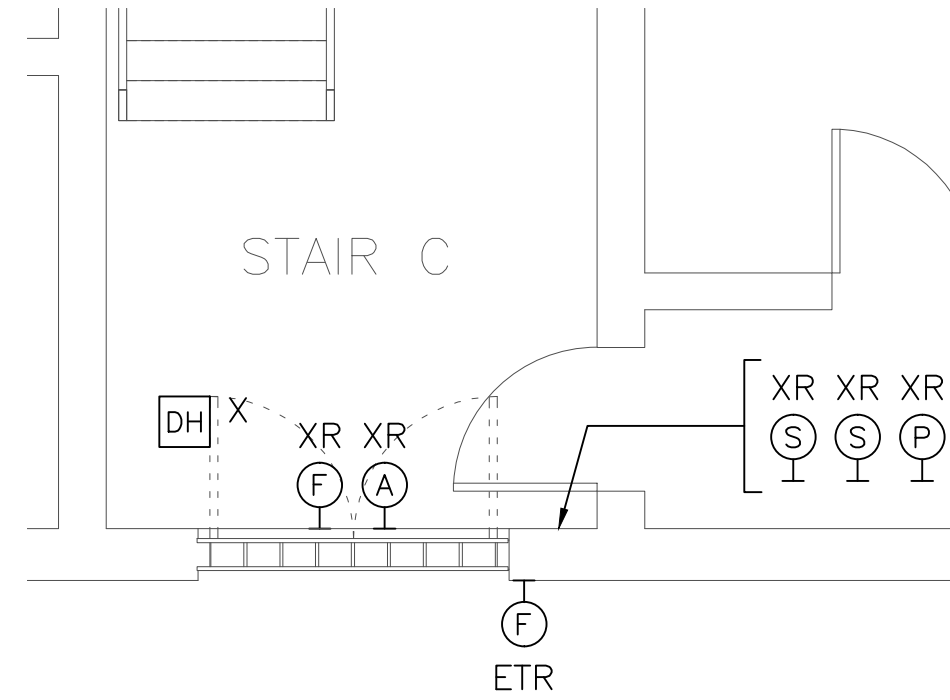
A5.1



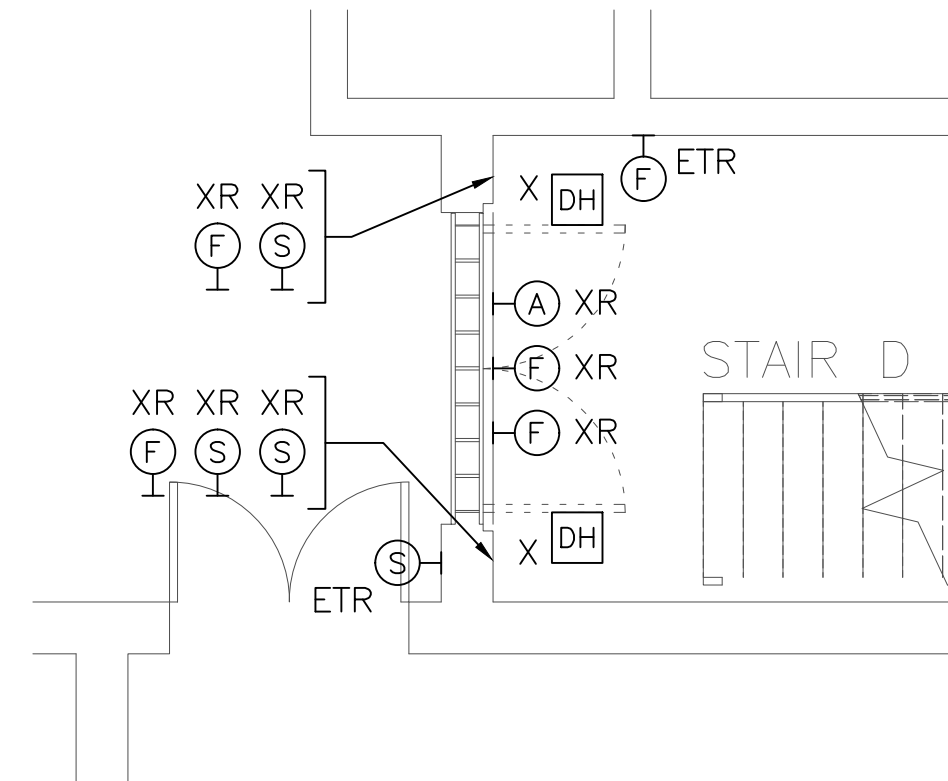
1 1st Fl Existing Stair A
Scale: 1/4"=1'-0"



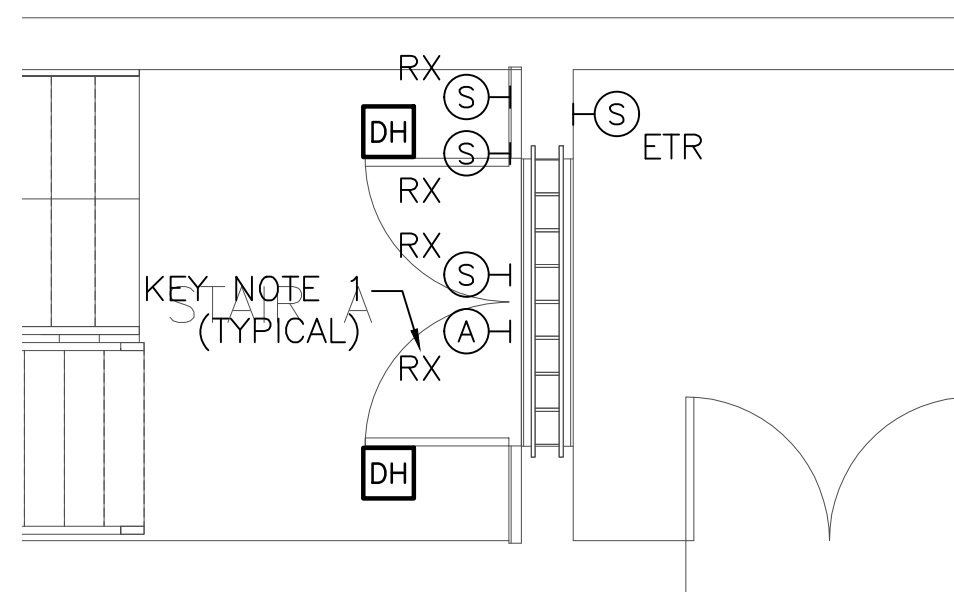
2 1st Fl Existing Stair B
Scale: 1/4"=1'-0"



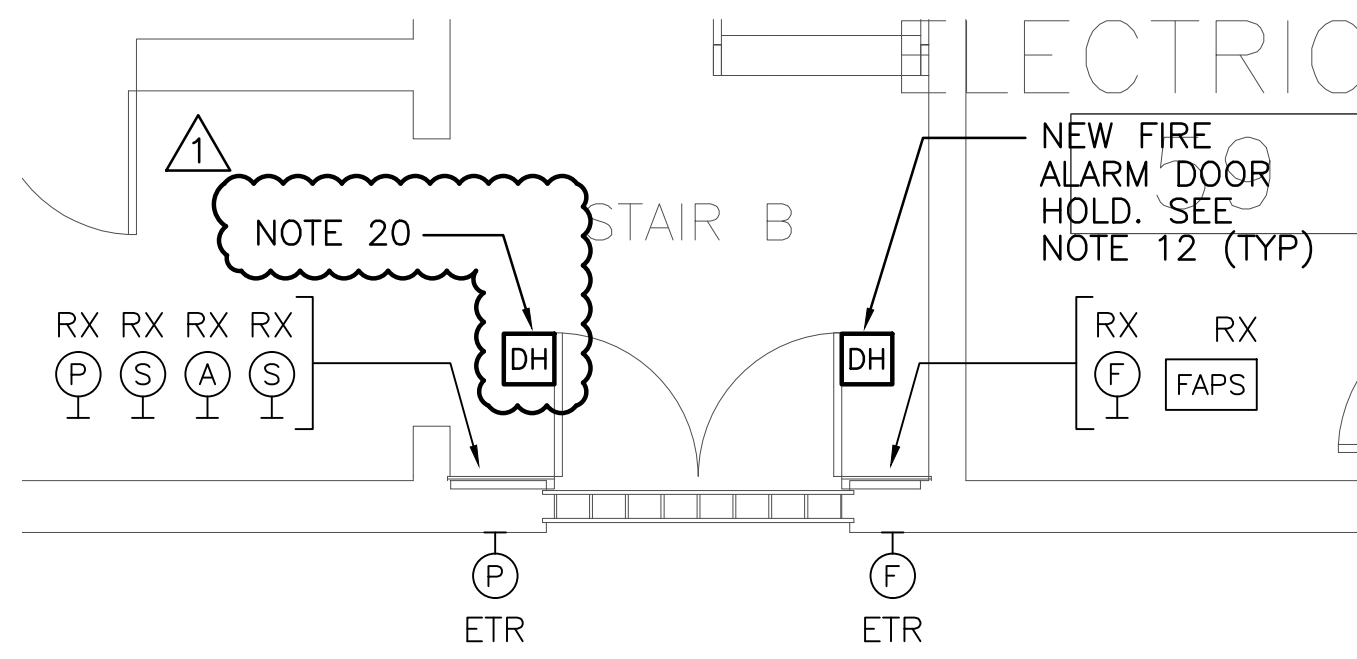
3 1st Fl Existing Stair C
Scale: 1/4"=1'-0"



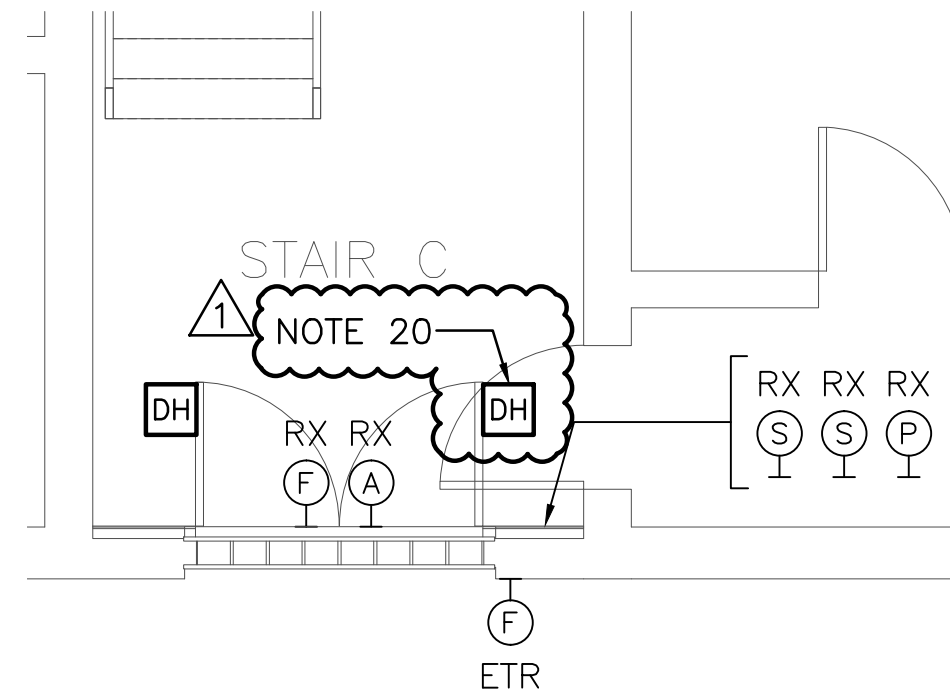
4 1st Fl Existing Stair D
Scale: 1/4"=1'-0"



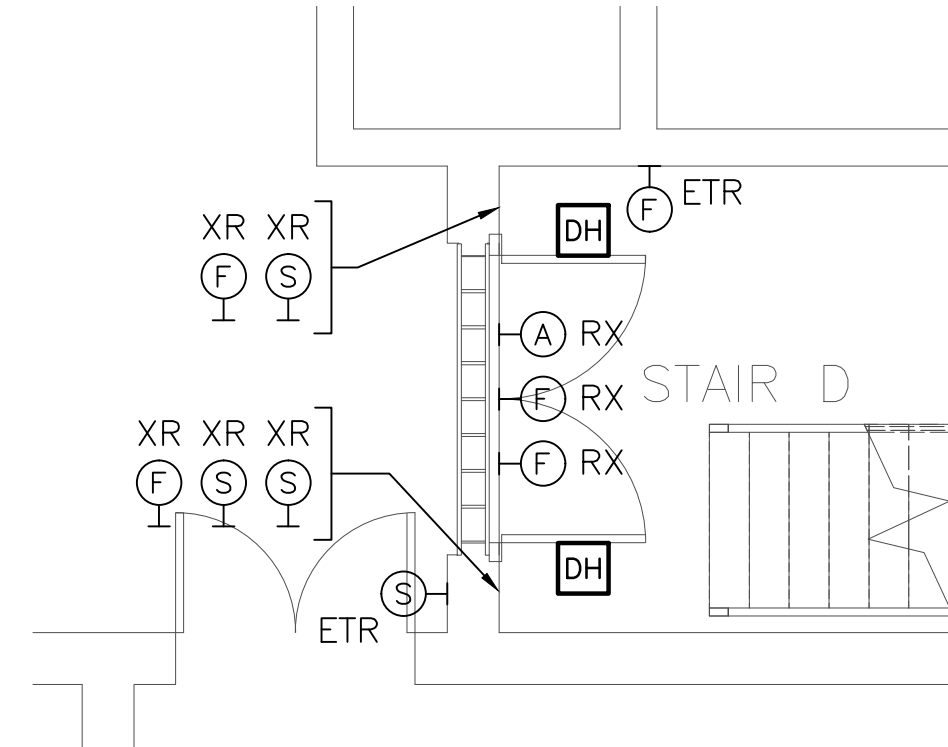
5 1st Fl Proposed Stair A
Scale: 1/4"=1'-0"



6 1st Fl Proposed Stair B
Scale: 1/4"=1'-0"



7 1st Fl Proposed Stair C
Scale: 1/4"=1'-0"



8 1st Fl Proposed Stair D
Scale: 1/4"=1'-0"

ELECTRICAL DEVICE KEY:

- Ⓐ AUDIO LOW VOLTAGE DEVICE, JUNCTION BOX RACEWAY. SEE KEY NOTE 1
- Ⓟ FIRE ALARM JUNCTION BOX, LB, RACEWAY
- Ⓟ 120V POWER JUNCTION BOX, LB, RACEWAY
- Ⓢ SECURITY LOW VOLTAGE DEVICE, JUNCTION BOX RACEWAY. SEE KEY NOTE 1
- Ⓜ FIRE ALARM DOOR HOLD DEVICE
- Ⓜ FIRE ALARM POWER SUPPLY
- Ⓜ BUILDING SYSTEM CONTROL PANEL, JUNCTION BOX, RACEWAY. SEE KEY NOTE 1
- Ⓜ DUAL HEAD EMERGENCY FIXTURE

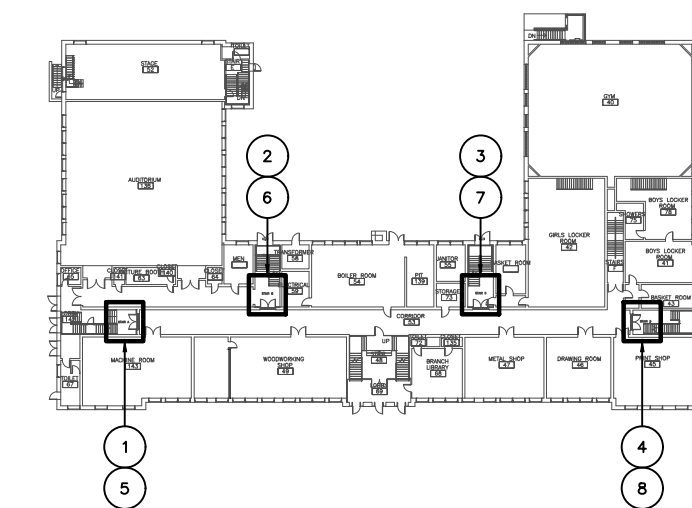
KEY NOTES:

1. CONTRACTOR SHALL CONFIRM AND COORDINATE FINAL LOCATION OF ALL RELOCATED BUILDING SYSTEM, LOW VOLTAGE DEVICES AND RACEWAY WITH ARCHITECT. CONFIRM ROUTING OF EXTENDED RACEWAY WITH ARCHITECT. LOW VOLTAGE SHOWN ON ELECTRICAL PLANS FOR REFERENCE ONLY.

ELECTRICAL NOTES:

1. LIMIT OF SCOPE LINE INDICATES THE APPROXIMATE AREA OF RENOVATION THAT ELECTRICAL SYSTEMS MAY BE RELOCATED OR REMOVED. SCOPE OF DEMOLITION SHOWN ON PLANS ARE PARTIAL ONLY FOR THE CONTRACTORS CONVENIENCE AND NOT INTENDED TO SHOW ALL EXISTING CONDITIONS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS TO INCLUDE ALL NECESSARY WORK TO MODIFY AND EXTEND EXISTING SYSTEMS, WIRING, ETC. AS REQUIRED TO ACCOMMODATE THE NEW ARCHITECTURAL FLOOR PLAN.
2. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY NECESSARY RE-FEEDING OF EQUIPMENT OR DEVICES TO MAINTAIN CIRCUIT CONTINUITY OF EXISTING EQUIPMENT REMAINING.
3. ELECTRICAL CONTRACTOR SHALL MAINTAIN INTEGRITY OF FIRE ALARM WIRING SO NOTIFICATION DEVICES OUTSIDE SCOPE OF WORK REMAIN ACTIVE DURING RENOVATION.
4. ALL EXISTING DEVICES AND EQUIPMENT TO BE REMOVED - DISCONNECT, REMOVE, AND DISPOSE ALL RACEWAY AND WIRING BACK TO ASSOCIATED PANEL.
5. COORDINATE SHUT DOWN OF BASE BUILDING ELECTRICAL AND FIRE ALARM SYSTEMS WITH SCHOOL FACILITIES.
6. DISCONNECT, MAKE SAFE, AND REMOVE ALL TEMPORARY AND ABANDONED WIRE WITHIN THE LIMIT OF WORK.
7. ELECTRICAL CONTRACTOR SHALL RELOCATE ANY AND ALL EXISTING ELECTRICAL DEVICES AND RACEWAY WITHIN AREA OF RENOVATION. CONFIRM AND COORDINATE RENOVATION SCOPE WITH ARCHITECT. EXTEND AND CONNECT EXISTING WIRING AND RACEWAY TO NEW LOCATION OF RELOCATED EQUIPMENT. CONTRACTOR SHALL EVALUATE CONDITION OF EXISTING WIRING AND RACEWAY AND REPLACE BACK TO SOURCE IF NECESSARY. CONTRACTOR SHALL REPLACE EXISTING WIRING, BACK TO SOURCE, IF EXISTING EXTENDED WIRING DOES NOT REACH LOCATION OF RELOCATED EQUIPMENT.
8. ELECTRICAL CONTRACTOR SHALL CONFIRM AND COORDINATE FINAL LOCATION OF ALL LOW VOLTAGE DEVICES AND ROUTING OF LOW VOLTAGE RACEWAY WITH ARCHITECT.
9. ALL NEW EQUIPMENT SHALL MATCH BASE BUILDING STANDARDS AND SPECIFICATIONS, UNLESS NOTED OTHERWISE. ALL NEW EQUIPMENT SHALL BE COMPATIBLE WITH THE EXISTING SYSTEM.
10. ALL POWER DEVICE FACEPLATES, COVERS, AND DISCONNECTS SHALL BE LABELED WITH CIRCUIT NUMBER AND PANEL DESIGNATION.
11. ALL SURFACE MOUNTED INTERIOR CONDUIT SHALL BE EMT (ELECTRIC METAL TUBING) CONFIRM ROUTING OF ALL SURFACE MOUNTED RACEWAY WITH ARCHITECT.
12. CONTRACTOR SHALL WIRE NEW DOOR HOLDS FROM EXISTING POWER SOURCE CURRENTLY SERVING EXISTING DOOR HOLDS. IF REQUIRED, CONTRACTOR SHALL FURNISH AND INSTALL MODULES AND RELAYS TO INTEGRATE NEW DOOR HOLDS WITH EXISTING FIRE ALARM SYSTEM.
13. ALL NEW EQUIPMENT SHALL MATCH BASE BUILDING STANDARDS AND SPECIFICATIONS, UNLESS NOTED OTHERWISE. ALL NEW EQUIPMENT SHALL BE COMPATIBLE WITH THE EXISTING SYSTEM.

14. FIRE ALARM DEVICES AND COMPONENTS SHALL BE NEW AND WIRED BACK TO THE EXISTING FIRE ALARM CONTROL PANEL. CONTRACTOR TO PROVIDE ALL REQUIRED DEVICES AND EQUIPMENT NECESSARY TO EXPAND EXISTING SYSTEM. CONTRACTOR TO ENSURE ALL NEW DEVICES AND RELATED EQUIPMENT ARE COMPATIBLE WITH THE EXISTING SYSTEM. CONTRACTOR TO MATCH EXISTING DEVICE MOUNTING HEIGHTS WITHIN ADA REQUIREMENTS. WHERE EXISTING HEIGHTS DO NOT MEET CURRENT ADA REQUIREMENTS MOUNT NEW, RELOCATED AND REINSTALLED DEVICES AT HEIGHTS LISTED IN MTG HEIGHT DETAIL ON DRAWING E0. ALL FIRE ALARM STROBES TO BE SYNCHRONIZED WITH EXISTING BLDG STROBES. CONTRACTOR SHALL REPLACE ALL EXISTING FIRE ALARM DEVICES IF THEY ARE NOT SYNCHRONIZABLE. PROVIDE A COMPLETE TEST OF THE ENTIRE FIRE ALARM SYSTEM UPON COMPLETION OF THE INSTALLATION. THE SYSTEM SHALL MEET ALL REQUIREMENTS OF THE NFPA AND LOCAL CODES. COORDINATE EXACT REQUIREMENTS WITH LOCAL FIRE DEPARTMENT PRIOR TO WORK BEING PERFORMED.
15. CONTRACTOR SHALL PROVIDE AN NFPA 241 IMPAIRMENT PLAN TO THE AHJ & OWNER FOR REVIEW AND APPROVAL BEFORE COMMENCEMENT OF WORK.
16. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ANY AND ALL NEW FIRE ALARM MODULES, RELAYS AND ASSOCIATED EQUIPMENT TO ADD NEW FIRE ALARM DEVICES TO THE EXISTING SYSTEM.
17. CONTRACTOR SHALL FURNISH AND INSTALL FIRE RATED SEALANT FOR ALL CONDUITS PENETRATING NEW FIRE RATED STAIRWELLS.
18. CONTRACTOR SHALL REMOVE PAINTERS PLASTIC AND TAPE COVERING EXISTING SMOKE DETECTOR.
19. ELECTRICAL CONTRACTOR SHALL RELOCATE EXISTING 120/208V POWER PANEL. EXTEND AND CONNECT EXISTING WIRING AND RACEWAY TO NEW LOCATION OF RELOCATED PANEL. CONTRACTOR SHALL EVALUATE CONDITION OF EXISTING WIRING AND RACEWAY AND REPLACE BACK TO SOURCE IF NECESSARY. CONTRACTOR SHALL REPLACE EXISTING WIRING, BACK TO SOURCE, IF EXISTING EXTENDED WIRING DOES NOT REACH LOCATION OF RELOCATED EQUIPMENT.
20. ELECTRICAL CONTRACTOR SHALL CONFIRM PATH OF EGRESS WITH ARCHITECT AND IF (1) NEW FIRE ALARM DOOR HOLDER IS REQUIRED AT THIS LOCATION. IF REQUIRED, CONTRACTOR SHALL WIRE NEW DOOR HOLD TO EXISTING POWER SOURCE CURRENTLY SERVING EXISTING DOOR HOLD IN STAIRWELL AT THIS LEVEL.



A 1st Fl Key Plan
Scale: None

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401.861.1600
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JOB NO. 24114
DATE 11.25.24
ISSUE: RIDE REVIEW

NO.	REVISION DESCRIPTION	DATE
1	Addendum #1	01/08/25

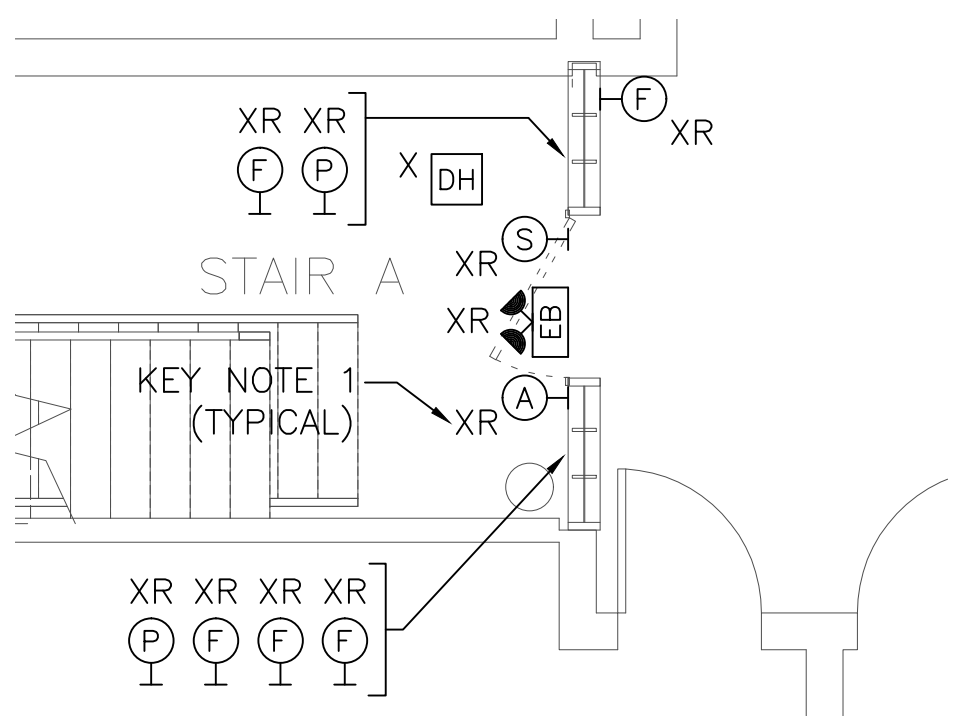
SHEET TITLE
**ELECTRICAL
LEVEL 1
PLANS**

SHEET
E1.0

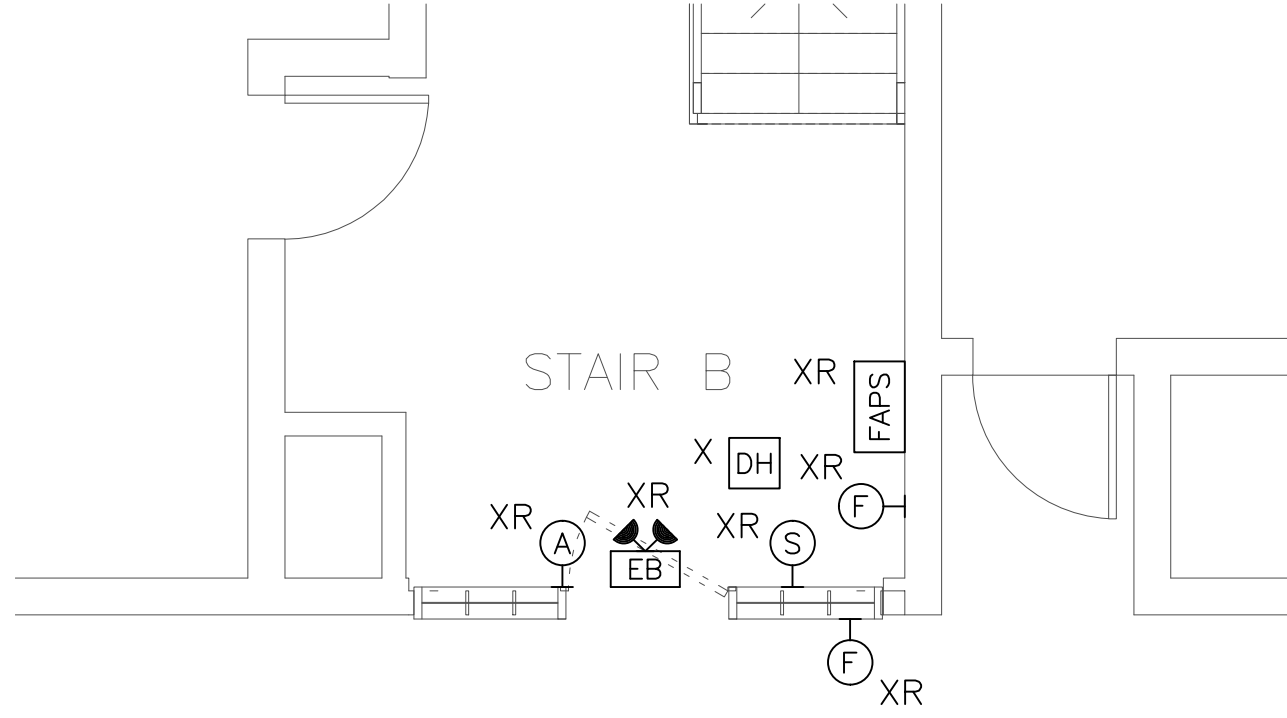
**FIRE CODE UPGRADE TO THE
LYMAN B. GOFF MIDDLE SCHOOL**
974 Newport Ave, Pawucket, RI 02861

**BREWSTER
THORNTON
GROUP
ARCHITECTS**
LLP

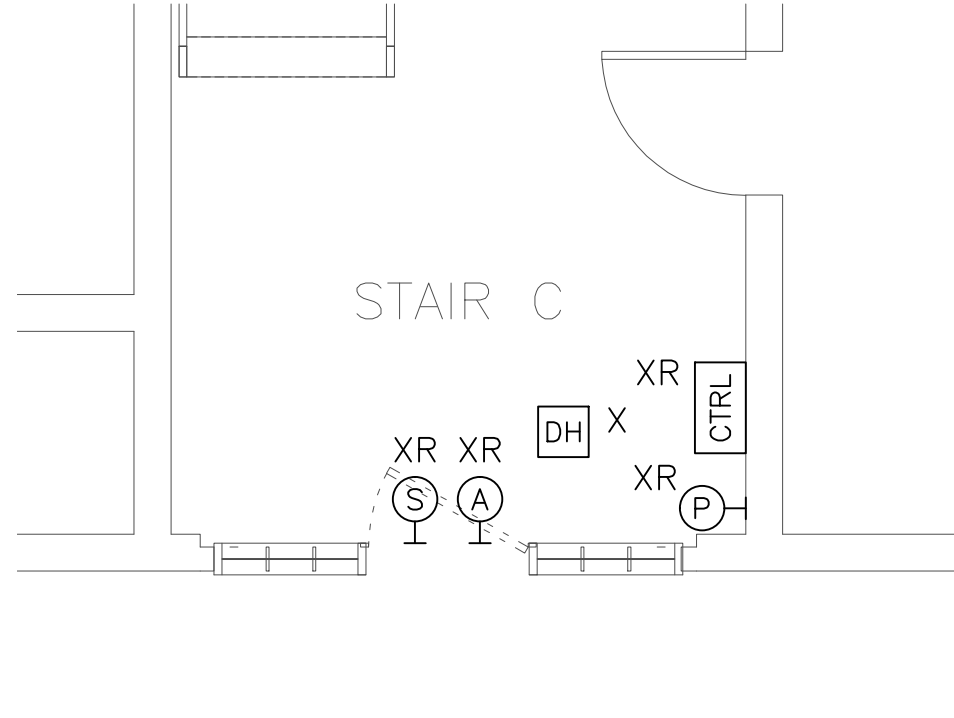
NO.	REVISION DESCRIPTION	DATE



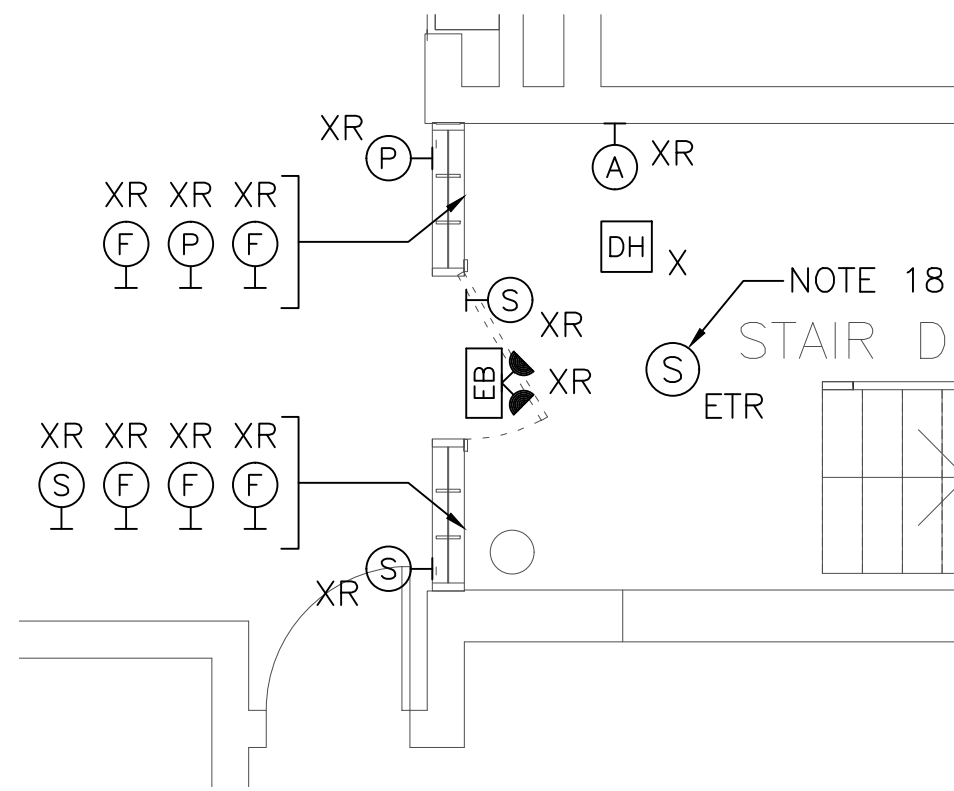
1 2nd Fl Existing Stair A
Scale: 1/4"=1'-0"



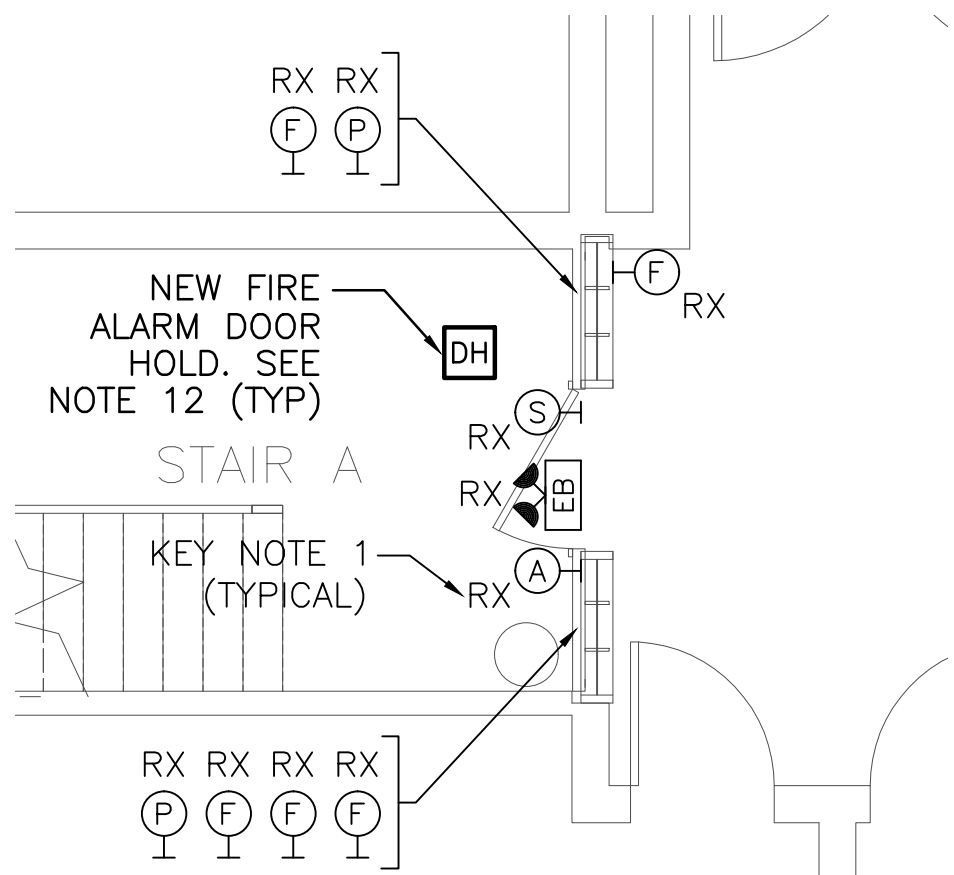
2 2nd Fl Existing Stair B
Scale: 1/4"=1'-0"



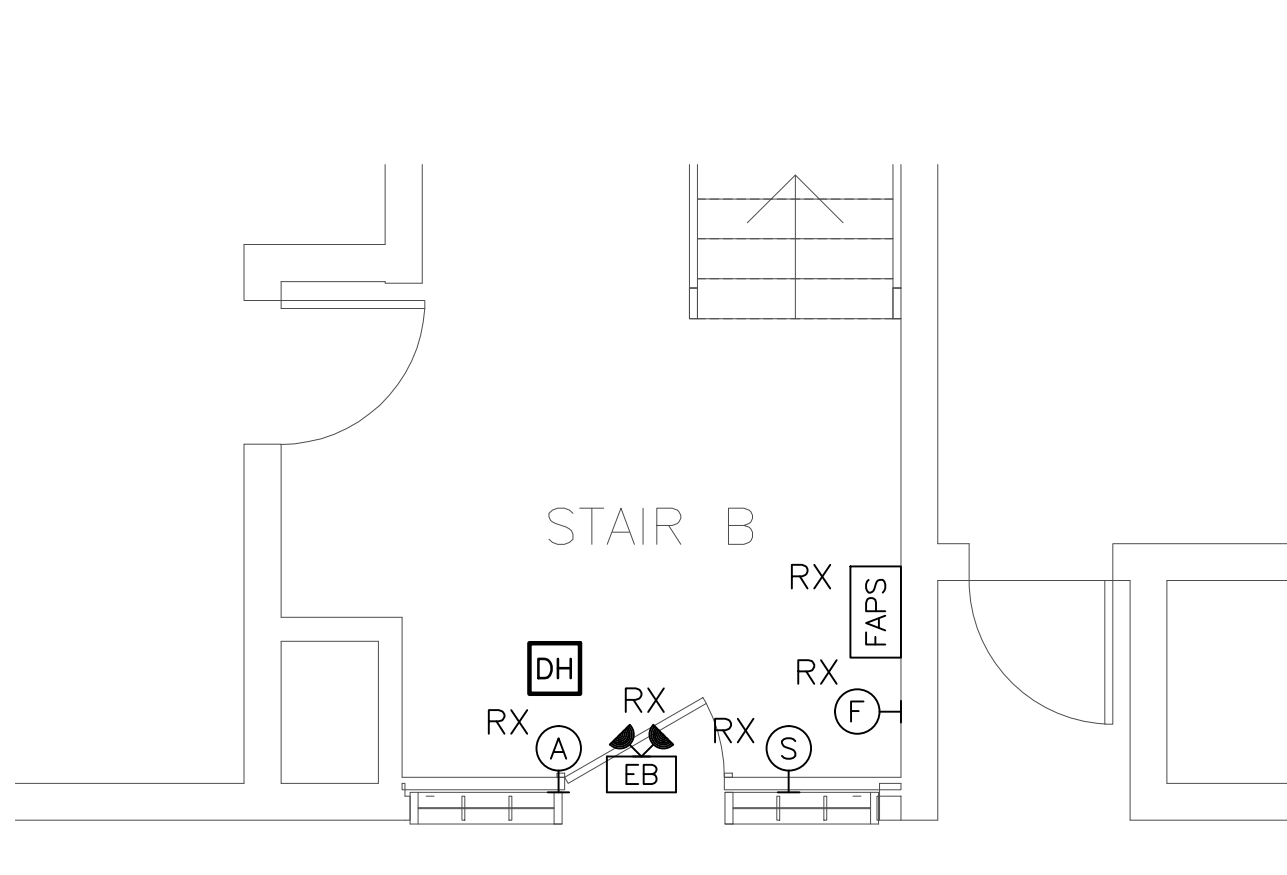
3 2nd Fl Existing Stair C
Scale: 1/4"=1'-0"



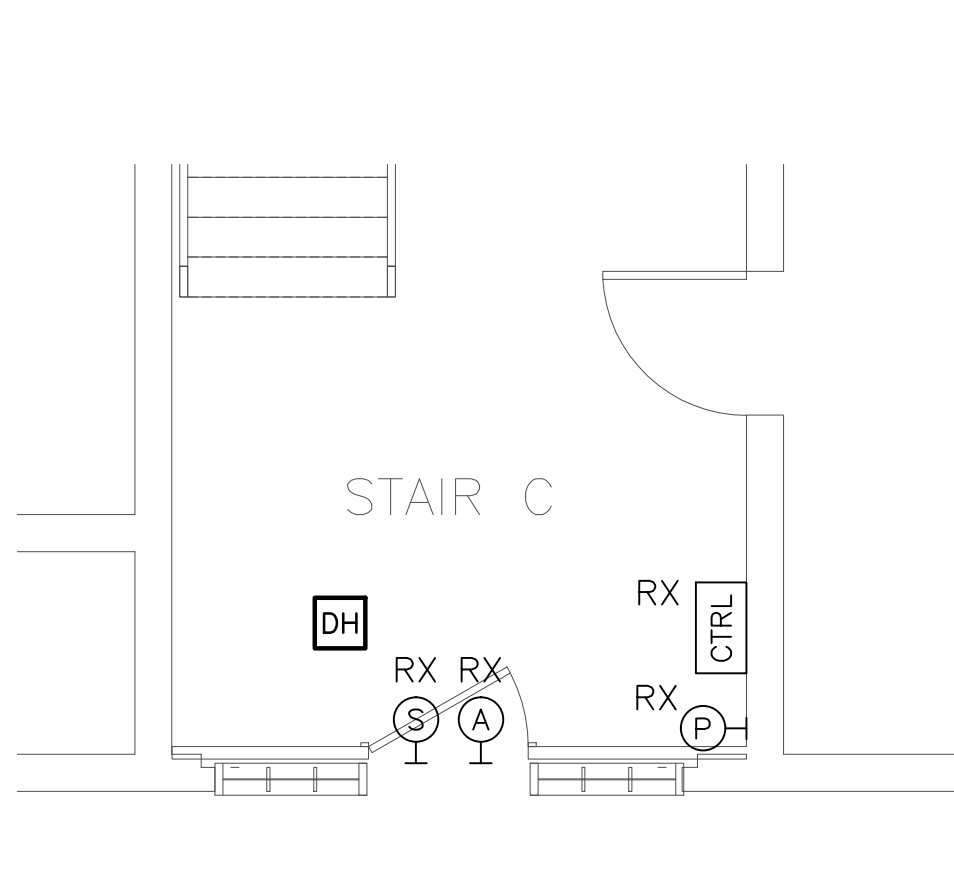
4 2nd Fl Existing Stair D
Scale: 1/4"=1'-0"



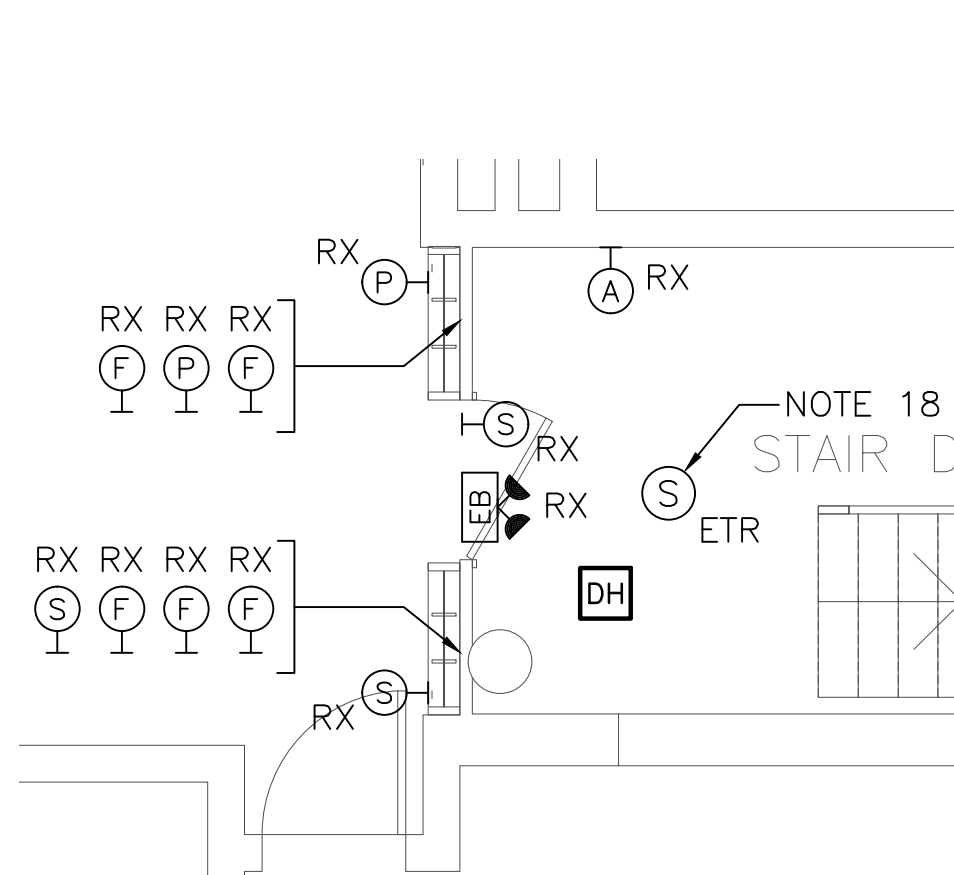
5 2nd Fl Proposed Stair A
Scale: 1/4"=1'-0"



6 2nd Fl Proposed Stair B
Scale: 1/4"=1'-0"



7 2nd Fl Proposed Stair C
Scale: 1/4"=1'-0"



8 2nd Fl Proposed Stair D
Scale: 1/4"=1'-0"

ELECTRICAL DEVICE KEY:

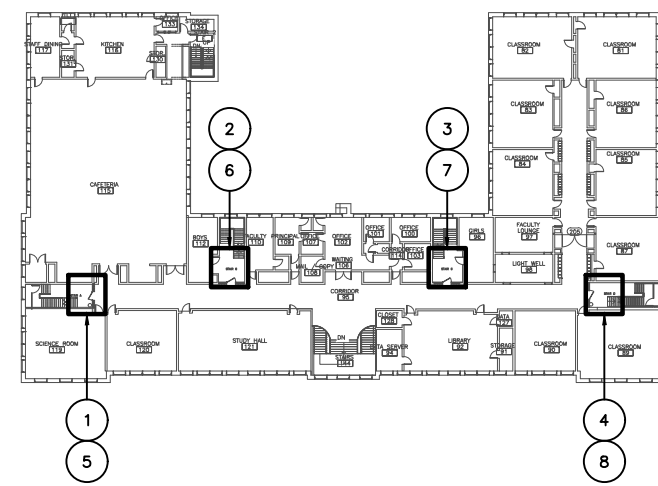
- A AUDIO LOW VOLTAGE DEVICE, JUNCTION BOX RACEWAY. SEE KEY NOTE 1
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- CTRL BUILDING SYSTEM CONTROL PANEL, JUNCTION BOX, RACEWAY. SEE KEY NOTE 1
- EB DUAL HEAD EMERGENCY FIXTURE

KEY NOTES:

- CONTRACTOR SHALL CONFIRM AND COORDINATE FINAL LOCATION OF ALL RELOCATED BUILDING SYSTEM, LOW VOLTAGE DEVICES AND RACEWAY WITH ARCHITECT. CONFIRM ROUTING OF EXTENDED RACEWAY WITH ARCHITECT. LOW VOLTAGE SHOWN ON ELECTRICAL PLANS FOR REFERENCE ONLY.

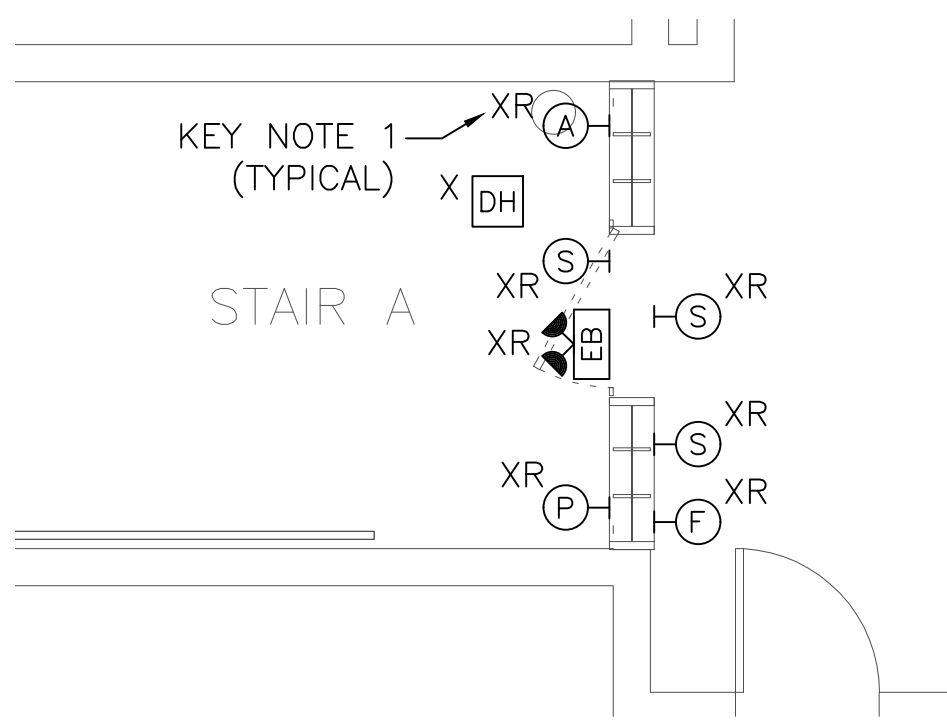
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- THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY NECESSARY RE-FEEDING OF EQUIPMENT OR DEVICES TO MAINTAIN CIRCUIT CONTINUITY OF EXISTING EQUIPMENT REMAINING.
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- ALL EXISTING DEVICES AND EQUIPMENT TO BE REMOVED - DISCONNECT, REMOVE, AND DISPOSE ALL RACEWAY AND WIRING BACK TO ASSOCIATED PANEL.
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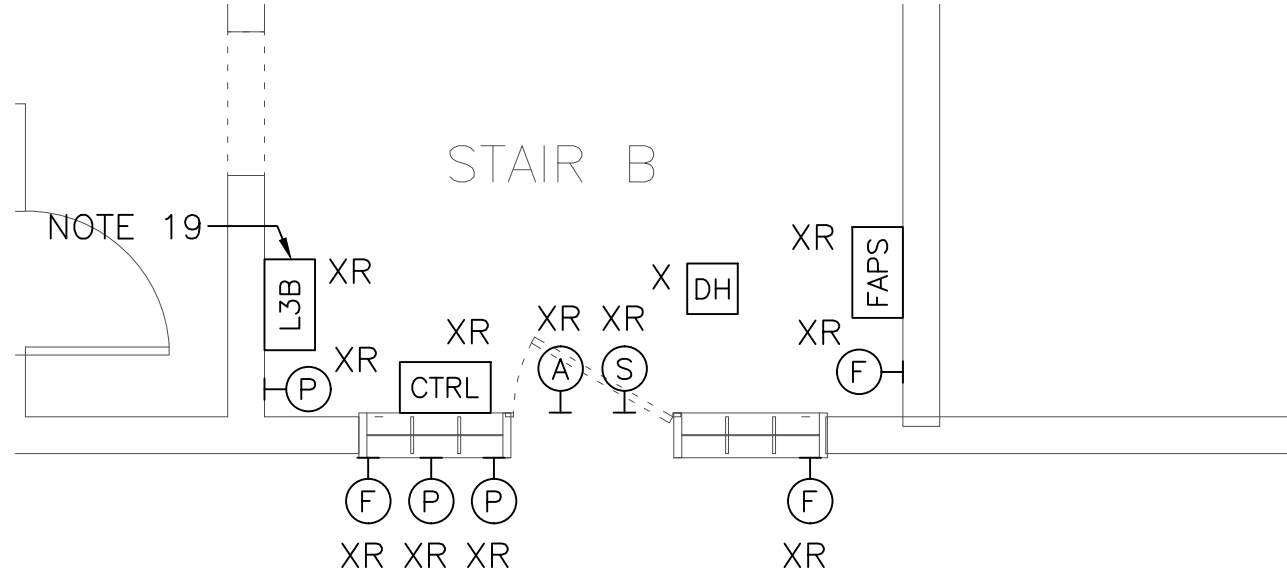


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Scale: None

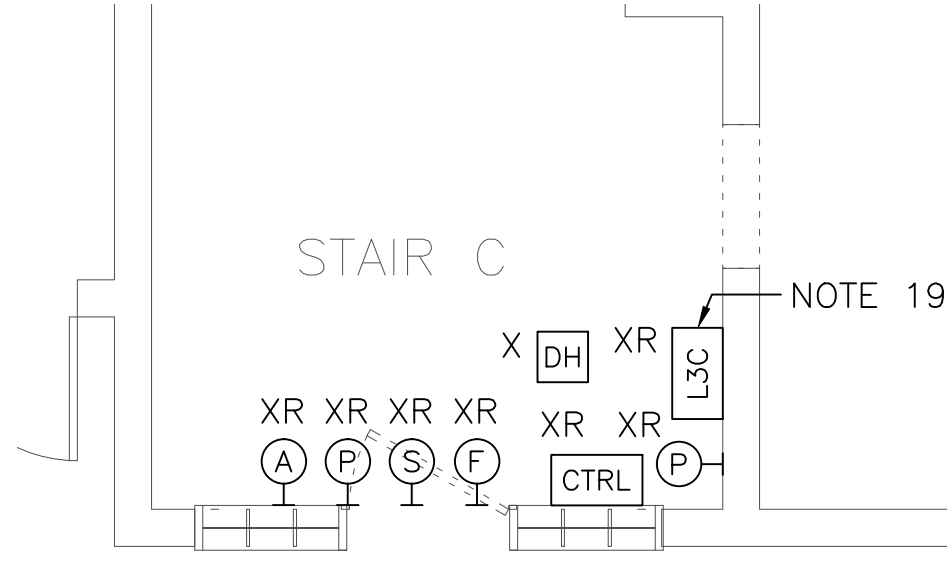
NO.	REVISION DESCRIPTION	DATE



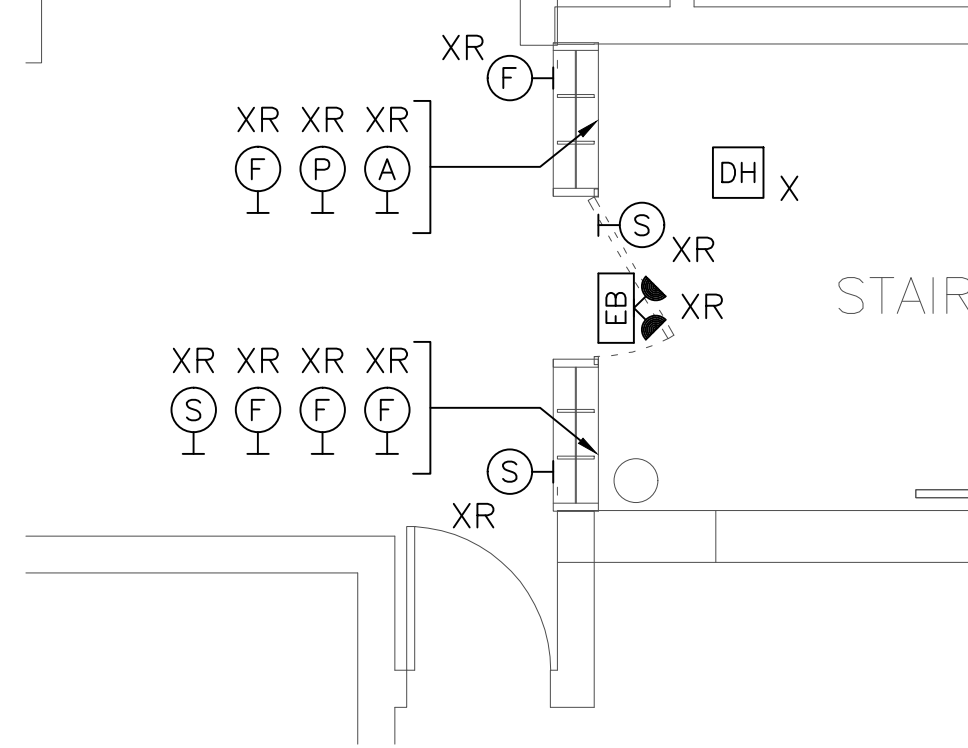
1 3rd Fl Existing Stair A
Scale: 1/4"=1'-0"



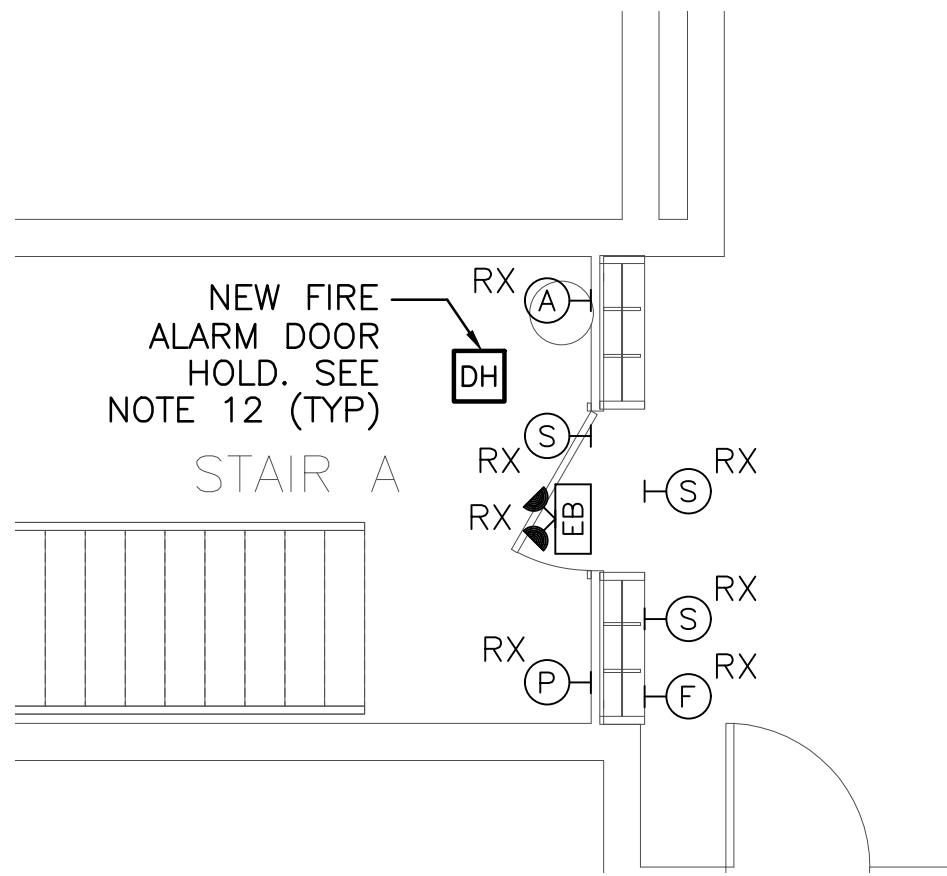
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Scale: 1/4"=1'-0"



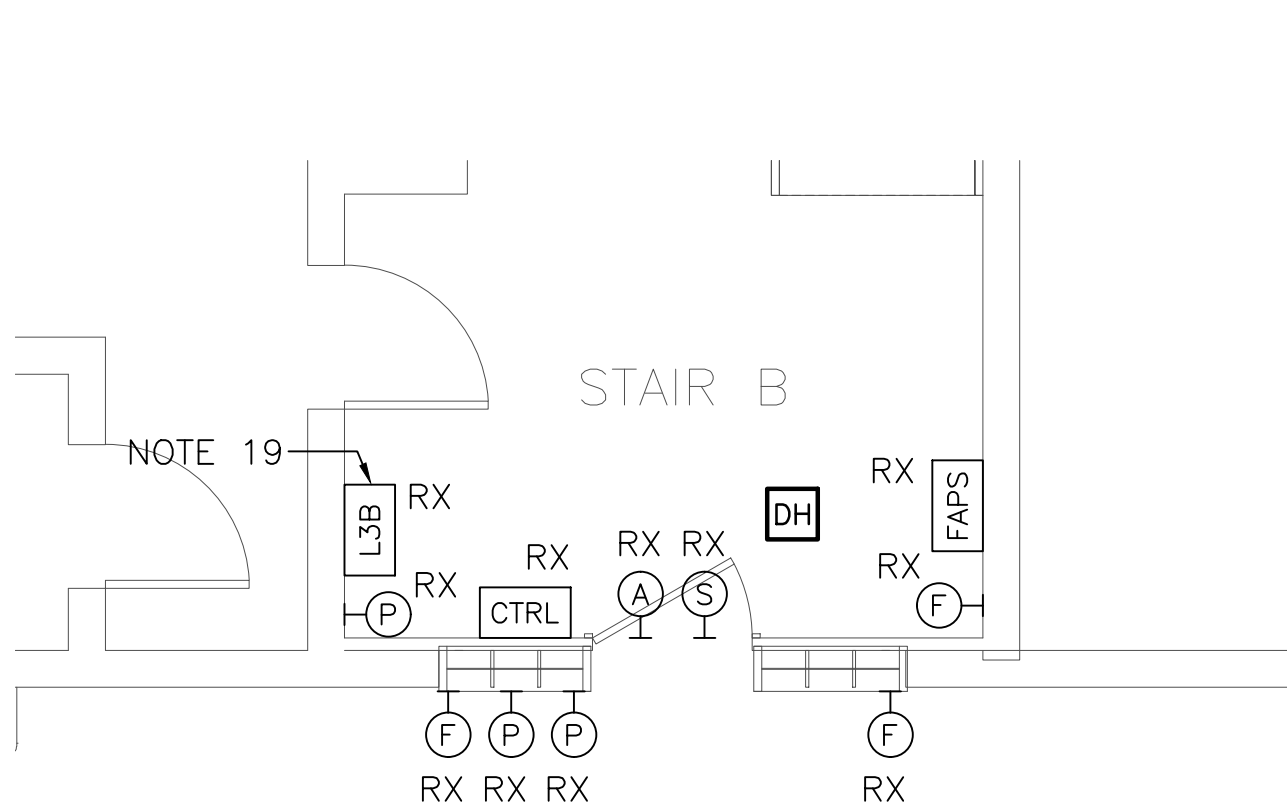
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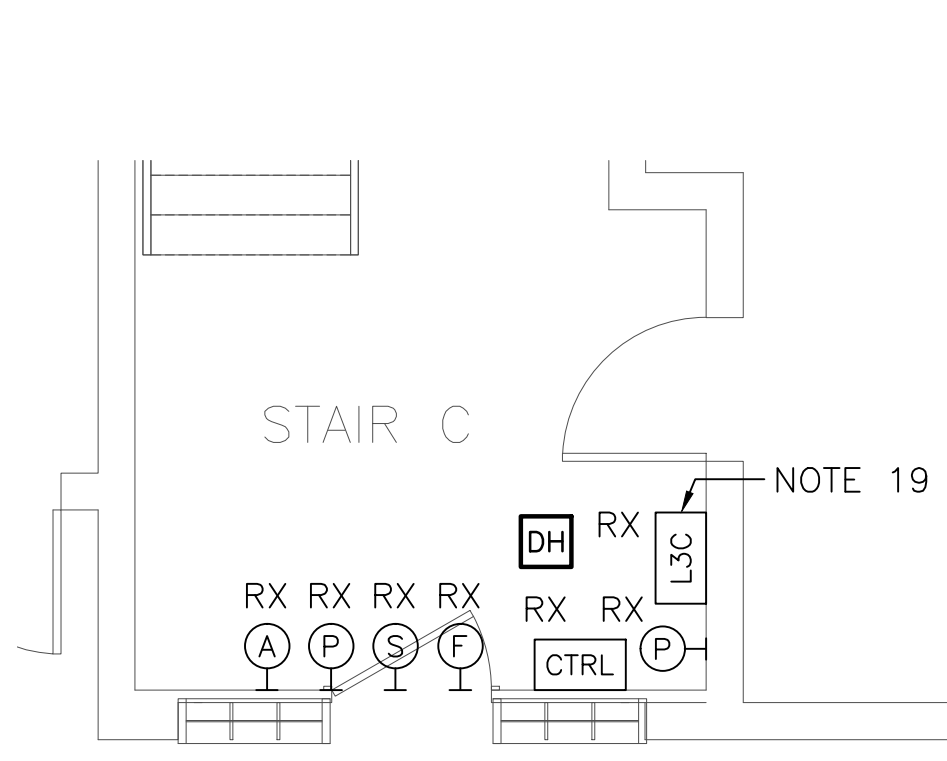
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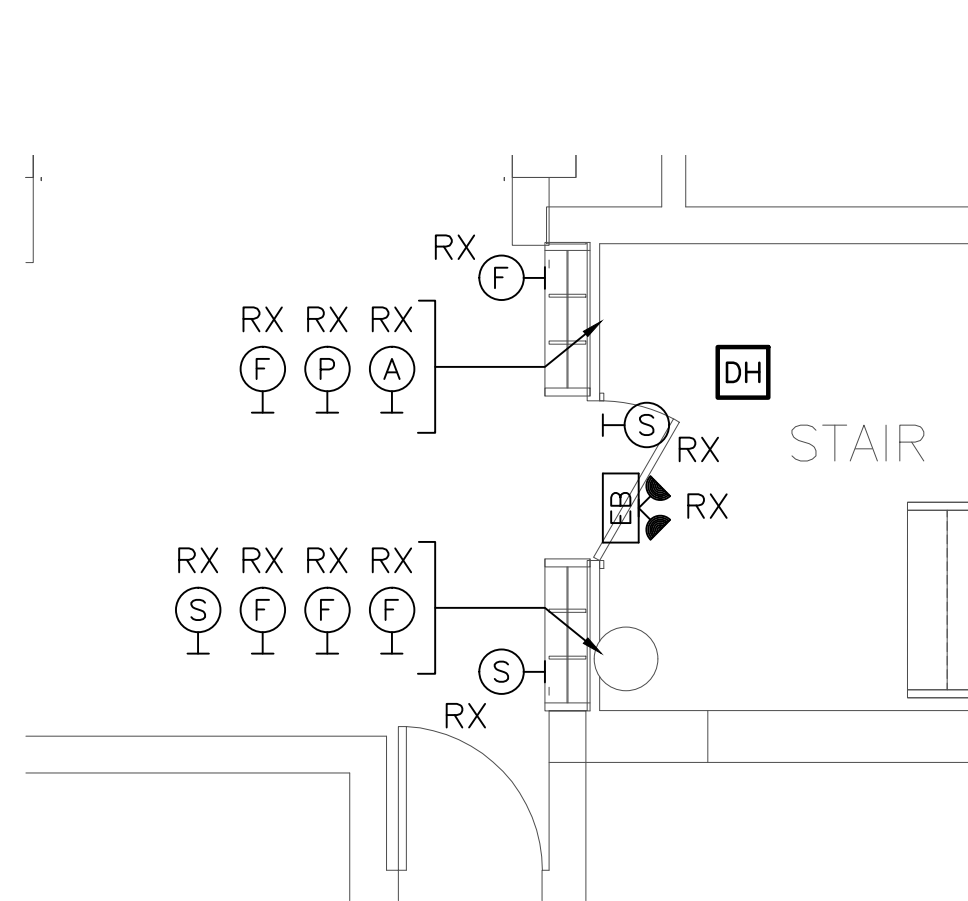
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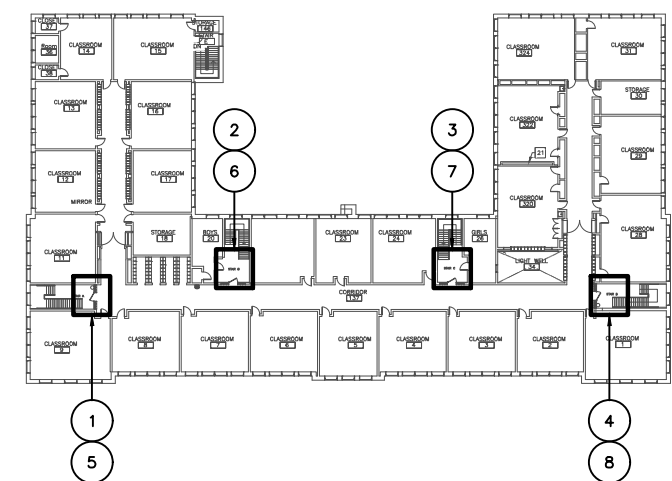
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A 3rd Fl Key Plan
Scale: None

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. ALL OF THE CONTRACT DOCUMENTS, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND DIVISIONS 1 GENERAL REQUIREMENTS, APPLY TO THE WORK OF THIS SECTION.
- B. EXAMINE ALL DRAWINGS AND ALL OTHER SECTIONS OF THE SPECIFICATIONS FOR REQUIREMENTS AFFECTING THE WORK OF THIS SECTION.

1.2 SCOPE

- A. PROVIDE ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT FOR THE INSTALLATION OF THE COMPLETE AND FULLY OPERATIONAL EQUIPMENT AS SHOWN ON THE DRAWINGS AND AS SPECIFIED HEREIN.
- B. THE WORK INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING:
1. PRIMARY SERVICE INCLUDING CONDUIT BRESS, RACEWAYS, RIGID STEEL SHEEPS, AND CONCRETE FIBER PER LOCAL POWER COMPANY REQUIREMENTS.
 2. PRIMARY AND SECONDARY DUCT BANK INCLUDING CONDUIT SPACERS, CONCRETE, STEEL REINFORCING AS REQUIRED AND MARKET TAKE OFF BELOW GRADE.
 3. CONCRETE PAD, GROUNDING, REINFORCING, FOR LOCAL POWER COMPANY FURNISHED PAD MOUNTED TRANSFORMER.
 4. TRENCHING, BACKFILLING, SOD OR HYDRO SEEDING, (COORDINATE WITH GENERAL CONTRACTOR).
 5. SECONDARY ELECTRIC SERVICE INCLUDING SECONDARY SERVICE ENTRANCE RACEWAYS, CABLES, CONDUIT BUSHINGS AND GROUNDING.
 6. FREE STANDING SWITCHBOARDS INCLUDING VERTICAL FULL SECTION, MAIN CIRCUIT BREAKER, CURRENT TRANSFORMER COMPARTMENT WITH UTILITY METER, AMMETER, AMMETER SWITCH, VOLTMETER, VOLTMETER SWITCH, P/YS AND C/YS, FEEDER CURBULE WITH FEEDER BREAKERS.
 7. FEEDERS, BRANCH CIRCUIT WIRING AND RACEWAYS.
 8. CONDUIT, WIRE, BOXES, FITTINGS, HANGERS AND SUPPORTS.
 9. SWITCHES, RECEPTACLES, SPECIAL PURPOSE OUTLETS AND WALL PLATES.
 10. SAFETY DISCONNECTS SWITCHES, NON-FUSED AND FUSED WITH FUSES.
 11. LIGHTING SYSTEM INCLUDING LUMENS, LENSES, BALLASTS, DEVICES, CONTROLS AND CONTROLS.
 12. MOTOR CONNECTIONS AND CONTROLS.
 13. SURGE PROTECTIVE DEVICES SHALL BE PROVIDED PER NEC 700.28 TO ENSURE RELIABILITY OF CRITICAL EMERGENCY SYSTEMS SUCH AS EMERGENCY LIGHTING PANELS, EMERGENCY COMMUNICATION SYSTEMS, FIRE CONTROL SYSTEMS, ELEVATORS USED FOR EVACUATIONS.
 14. SYSTEM GROUNDING.
 15. POWER CONNECTIONS TO ALL PLUMBING, MECHANICAL, AND ALL OTHER EQUIPMENT INCLUDING ALL MAJOR ELECTRICAL EQUIPMENT AND COMPONENTS.
 16. NAMEPLATES ON ALL MAJOR ELECTRICAL EQUIPMENT AND COMPONENTS.
 17. UNDERGROUND FIRE ALARM SERVICE WITH MSA FIRE ALARM CABLE PER LOCAL FIRE ALARM CRITERIA.
 18. ADDRESSABLE FIRE ALARM SYSTEM, ANALOG SMOKE AND HEAT DEVICES, MONITORING MODULES, WIRE RACEWAYS, IAV C.I.C. STROBES, CONTROL PANEL WITH BUILT-IN AND REMOTE KID DISPLAYS).
 19. COORDINATION, SUPERVISION, ON, AND FINAL CONNECTION BY FIRE ALARM TESTING AGENCY OF RECORD.
 20. PROGRAMMING OF NEW FIRE ALARM SYSTEM.
 21. TEMPORARY LIGHT, POWER AND PANEL FOR USE DURING CONSTRUCTION.
 22. DATA, COMPUTER AND TELEPHONE DUPLEX BOXES WITH PULL STRING TO TELEPHONE BACKBOARDS.
 23. SEAL PENETRATIONS BETWEEN FOUNDATION FLOORS AND WALLS WITH FIRE RETARDANT MATERIAL.
 24. SEAL ALL CABLES AND CONDUITS FOR WATER/MOISTURE PENETRATION USING OZ GELITY PRODUCTS, REFER TO RACEWAYS SECTION FOR DETAIL.
 25. OBTAIN ALL PERMITS AND ASSOCIATED FEES.
 26. INTERIOR SECONDARY DISTRIBUTION SYSTEMS INCLUDING MAIN SWITCHBOARD, CURRENT LIMITER CABINET, BATTERY CHARGER, TRANSFORMER, DISTRIBUTION PANELBOARDS, MOTOR CONTROLS, MAGNETIC STARTERS, OVERCURRENT AND SWITCHING DEVICES, AND ALL OTHER COMPONENTS REQUIRED FOR COMPLETE ELECTRICAL DISTRIBUTION SYSTEM.
 27. AN ADDRESSABLE FIRE ALARM SYSTEM COMPLETE WITH ALL DEVICES AND WIRING INCLUDING MUNICIPAL CONNECTIONS.
 28. TESTING OF ALL ELECTRICAL SYSTEMS.
 29. ACCESS PANELS (FURNISH ONLY).
 30. COORDINATION BETWEEN EQUIPMENT AND OTHER TRADES.
 31. POWER WIRING FOR ELEVATORS AND ASSOCIATED EQUIPMENT.
 32. LIGHTING CONTROL AND DIMMING SYSTEM.
 33. INTERCOM SYSTEM COMPLETE WITH WIRING COMPONENTS AND PROGRAMMING.
 34. ALL OTHER SYSTEMS HEREAFTER SPECIFIED OR INDICATED ON THE CONTRACT DRAWINGS, COMPLETE LEAVING READY AN ELECTRICAL SYSTEM IN PERFECT OPERATING CONDITION.

1.3 DEFINITIONS

- A. AS USED IN THIS SECTION, PROVIDE MEANS FURNISH AND INSTALL AND POS MEANS PROVIDED UNDER OTHER SECTIONS.
- B. AS USED IN THE DRAWINGS AND SPECIFICATIONS FOR ELECTRICAL WORK, CERTAIN NON-TECHNICAL WORDS SHALL BE UNDERSTOOD TO HAVE SPECIFIC MEANINGS AS FOLLOWS REGARDLESS OF INDICATIONS TO THE CONTRARY IN THE GENERAL CONDITIONS OR OTHER DOCUMENTS GOVERNING THE ELECTRICAL WORK:
- FURNISH PURCHASE AND DELIVER TO THE PROJECT SITE COMPLETE WITH EVERY NECESSARY APPURTENANCE AND SUPPORT, ALL AS PART OF THIS WORK. PURCHASING SHALL INCLUDE PAYMENT OF ALL SALES TAXES AND OTHER SURCHARGES AS MAY BE REQUIRED TO ASSURE THAT PURCHASED ITEMS ARE FREE OF ALL LIENS, CLAIMS OR ENCUMBRANCES.

INSTALL UNLOAD AT THE DELIVERY POINT AT THE SITE AND PERFORM EVERY OPERATION NECESSARY TO ESTABLISH SECURE MOUNTING AND CORRECT OPERATION AT THE PROPER LOCATION IN THE PROJECT, ALL AS PART OF THIS WORK. PROVIDE FURNISH AND INSTALL.

NEW MANUFACTURED WITHIN THE PAST TWO YEARS AND NEVER BEFORE USED.

- C. EXCEPT WHERE MODIFIED BY A SPECIFIC NOTATION TO THE CONTRARY, IT SHALL BE UNDERSTOOD THAT THE INDICATION AND/OR DESCRIPTION OF ANY ITEM IN THE DRAWINGS OR SPECIFICATIONS FOR ELECTRICAL WORK CARRIES WITH IT THE INSTRUCTION TO FURNISH, INSTALL AND CONNECT THE ITEM AS PART OF THE ELECTRICAL WORK, REGARDLESS OF WHETHER OR NOT THIS INSTRUCTION IS EXPLICITLY STATED.
- D. IT SHALL BE UNDERSTOOD THAT THE SPECIFICATIONS AND DRAWINGS FOR ELECTRICAL WORK ARE COMPLEMENTARY AND ARE TO BE TAKEN TOGETHER FOR A COMPLETE INTERPRETATION OF THE ELECTRICAL WORK EXCEPT THAT INDICATIONS ON THE DRAWINGS, WHICH REFER TO AN INDIVIDUAL ELEMENT OF WORK, TAKE PRECEDENCE OVER THE SPECIFICATIONS WHERE THEY CONFLICT WITH SAME.

1.4 WORK BY OTHERS

- A. THE FOLLOWING IS RELATED WORK SPECIFIED ELSEWHERE:
1. HVAC EQUIPMENT INCLUDING PROVIDING INDIVIDUAL MOTOR STARTERS, ADJUSTABLE FREQUENCY DRIVES, CONTROL WIRING, VARIABLE SPEED SWITCHES AND SMOKE SHALL BE PROVIDED BY HVAC CONTRACTOR.
 2. TEMPERATURE CONTROL WIRING BY HVAC CONTRACTOR.
 3. CHARGES FOR POWER CONSUMED BY THE TEMPORARY LIGHT AND POWER SYSTEM FOR CONSTRUCTION WILL BE PAID BY THE GENERAL CONTRACTOR.
 4. ACCESS PANELS, WHERE REQUIRED, ARE FURNISHED BY THE GENERAL CONTRACTOR AND COORDINATED WITH THIS SECTION.
 5. ALL DUCT SMOKE DETECTORS SHALL BE SUPPLIED BY THE ELECTRICAL CONTRACTOR AND INSTALLED BY THE MECHANICAL CONTRACTOR, WIED TO THE FIRE ALARM SYSTEM BY THE ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL INCLUDE REMOTE TEST PANELS.

1.5 CODES, PERMITS & STANDARDS

- A. PROVIDE ALL PERMITS AND LICENSES, OBTAIN AND PAY ALL CERTIFICATES OF INSPECTION AS REQUIRED BY REGULATORY AGENCIES AND SUBMIT FOR APPROVAL.
- B. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND DESIGNED, CONSTRUCTED, INSTALLED AND TESTED IN ACCORDANCE WITH THE SPECIFICATION AND THE FOLLOWING STANDARDS:
1. MASSACHUSETTS ELECTRICAL CODE (MEC).
 2. NATIONAL ELECTRICAL CODE (NEC)
 3. OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA)
 4. NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
 5. UNDERWRITERS LABORATORY (UL)
 6. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
 7. NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)
 8. AMERICANS WITH DISABILITIES ACT (ADA)
 9. NATIONAL ELECTRIC SAFETY CODE (NESC)
 10. NEC ARTICLE 110 - FLASH PROTECTION
 11. MASSACHUSETTS BUILDING CODE
 12. INTERNATIONAL BUILDING CODE (IBC)

1.6 PROTECTION AND CLEANING

- A. ALL ELECTRICAL EQUIPMENT AND DEVICES IN THE EXISTING BUILDING IN WHICH THE ELECTRICAL WORK IS TO BE DONE UNDER CONTRACT SHALL BE PROTECTED FROM SCRATCHES, PAINT, GRIME, ETC. UNTIL THE WORK IS COMPLETE.
- B. WHERE ELECTRICAL EQUIPMENT AND/OR DEVICES ARE INDICATED TO BE ARMORDED AND THE OWNER ELECTS TO SAVE SPECIFIC ITEMS, SAID ITEMS SHOULD BE DELIVERED TO STORAGE ON SITE AT A LOCATION DESIGNATED BY THE OWNER.
- C. EXPOSED SURFACES OF ELECTRICAL EQUIPMENT & LIGHTING FIXTURES SHALL BE CLEANED UPON COMPLETION OF THE WORK.
- D. ALL DEBRIS AND MATERIAL, RESULTING FROM ELECTRICAL WORK SHALL BE REMOVED FROM THE PROPERTY EACH DAY AND EVERY DAY SHALL BE DISPOSED OF IN A LEGAL MANNER. WORKSPACE SHALL BE LEFT CLEAN AS ELECTRICAL WORK IS COMPLETED.
- E. DAMAGES TO COVERS AND TRIMS OF ELECTRICAL EQUIPMENT SHALL BE REPAIRED AND PAINTED WITH TOUCH-UP PAINT SUPPLIED BY THE EQUIPMENT MANUFACTURER TO THE SATISFACTION OF THE OWNER'S DESIGNATED REPRESENTATIVE OR THE ARCHITECT OR THE EQUIPMENT SHALL BE REPLACED WITH NEW.

1.7 INTERPRETATION OF PLANS

- A. ALL WORK SHOWN ON THE PLANS IS INTENDED TO BE APPROXIMATELY CORRECT TO SCALE BUT FURTHER DIMENSIONS AND DETAILS DRAWINGS ARE TO BE FOLLOWED IN EVERY CASE. THE DRAWINGS SHALL BE TAKEN AS DIAGRAMMATIC. RACEWAYS, WIRING AND PROTECTION EQUIPMENT IS PROVIDED AS A GUIDE TO THE WORK. THE WORK SHALL BE CARRIED OUT TO THE TRUE INTENT AND PURPOSE OF THE PLANS, SUPPLY AND INSTALL ALL COMPONENTS NECESSARY TO PROVIDE COMPLETE WORKING SYSTEMS, READY FOR USE WITH NO ADDITIONAL COST TO THE OWNER.

1.8 SHOP DRAWINGS

A. DEFINITIONS

1. SHOP DRAWINGS ARE INFORMATION PREPARED BY THE CONTRACTOR TO ELABORATE PORTIONS OF THE WORK IN MORE DETAIL THAN SHOWN IN THE CONTRACT DOCUMENTS.
2. COORDINATION DRAWINGS ARE DETAILED, LARGE-SCALE LAYOUT SHOP DRAWINGS SHOWING HVAC, ELECTRICAL, PLUMBING AND FIRE PROTECTION WORK SUPERIMPOSED IN ORDER TO IDENTIFY CONFLICTS AND ENSURE INTER-COORDINATION OF MECHANICAL, ELECTRICAL, ARCHITECTURAL, STRUCTURAL AND OTHER WORK.

B. SUBMITTAL COVER SHEET

1. SHOP DRAWINGS SHALL BE SUBMITTED ACCORDING TO SPECIFICATION SECTION WITH A SEPARATE COVER SHEET COMPLETED FOR EACH PRODUCT, RATHER THAN ONE COVER SHEET FOR MULTIPLE PRODUCTS, WHETHER OR NOT SUPPLIED BY ONE MANUFACTURER OR VENDOR.
2. SUBMITTAL PROCEDURES AND FORMAT

1. REVIEW SUBMITTAL PACKAGES FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS AND THEN SUBMIT TO ARCHITECT FOR REVIEW.
2. PROVIDE ADDITIONAL COPIES OF REVIEWED SHOP DRAWINGS AS REQUIRED FOR FULL DISTRIBUTION.
3. SHOP DRAWINGS SHOWING LAYOUTS OF SYSTEMS SHALL CONTAIN SUFFICIENT PLANS, ELEVATIONS, SECTIONS, DETAILS AND SCHEMATICS TO DESCRIBE WORK CLEARLY. THEY SHALL BE $\frac{1}{8}" = 1' - 0"$ SCALE UNLESS SPECIFIED OTHERWISE. SHEET METAL SHOP DRAWINGS SHALL BE $\frac{1}{4}" = 1' - 0"$ SCALE UNLESS SPECIFIED OTHERWISE. OTHER SECTIONS WHERE INTERFERENCES ARE POSSIBLE, PROVIDE LARGER DETAILS AS NECESSARY. SHEET METAL DRAWINGS SHALL SHOW ELEMENTS OF ARCHITECTS SELECTED CEILING PLAN, EXPOSED DUCTWORK, WALLS AND OTHER OFFSPRINGS, REGISTER, GRADES, FIRE DAMPERS, SLEEVES AND OTHER ASPECTS OF CONSTRUCTION AS NECESSARY FOR COORDINATION.
4. ALL FIREWALLS AND SMOKE PARTITIONS MUST BE HIGHLIGHTED ON THE SHEET METAL DRAWINGS FOR APPROPRIATE COORDINATION.
5. SHOP DRAWINGS SHOWING MANUFACTURER'S PRODUCT DATA SHALL CONTAIN MONITORED DIMENSIONAL DIMENSIONS, ACCURATE AND COMPLETE DESCRIPTION OF CONSTRUCTION MATERIALS, MANUFACTURER'S PUBLISHED PERFORMANCE CHARACTERISTICS AND CAPACITY RATINGS. DIMENSIONS, ALTERNATE IS NOT ACCEPTABLE. ELECTRICAL REQUIREMENTS AND WIRING DIAGRAMS, DRAWINGS SHALL CLEARLY INDICATE LOCATION (TERMINAL BLOCK OR WIRE NUMBER), VOLTAGE AND FUNCTION FOR ALL FIELD TERMINALS AND OTHER INFORMATION NECESSARY TO DEMONSTRATE COMPLIANCE WITH ALL REQUIREMENTS OF CONTRACT DOCUMENTS.

1. ACCEPTABLE MANUFACTURERS
1. ALTERNATE MANUFACTURERS ARE ACCEPTABLE ONLY IF, AS A MINIMUM, THEY:
- A. MEET ALL PERFORMANCE CRITERIA LISTED IN THE SCHEDULES AND OUTLINED IN THE SPECIFICATIONS.
 - B. HAVE IDENTICAL OPERATING CHARACTERISTICS TO THOSE CALLED FOR IN THE SPECIFICATION.
 - C. FIT WITHIN THE AVAILABLE SPACE IF WAS DESIGNED FOR, INCLUDING SPACE FOR MAINTENANCE AND COMPONENT REMOVAL, WITH NO MODIFICATION TO EITHER SPACE OR THE PRODUCT, CLEARANCES TO WALLS, CEILING AND OTHER EQUIPMENT SHALL BE AT LEAST EQUAL TO THOSE SHOWN ON THE DESIGN DRAWINGS.
 - D. FOR ROOFTOP MOUNTED EQUIPMENT AND FOR EQUIPMENT MOUNTED IN AREAS WHERE STRUCTURAL MATTERS ARE A CONSIDERATION, THE PRODUCTS MUST BE IDENTICAL TO THOSE CALLED FOR, INCLUDING THE PRODUCTS LISTED IN THE SCHEDULES OR SPECIFICATIONS.

- E. PRODUCTS MUST ADHERE TO ALL ARCHITECTURAL CONSIDERATIONS INCLUDING, BUT NOT LIMITED TO: BEING OF THE SAME COLOR AS THE PRODUCT SCHEDULED OR SPECIFIED, FITTING WITHIN ARCHITECTURAL ENCLOSURES AND DETAILS AND FOR OFFSPRINGS, REGISTER, GRADES, FIRE DAMPERS, SLEEVES AND OTHER ASPECTS OF CONSTRUCTION AS NECESSARY FOR COORDINATION.
- F. DEVIATIONS
1. CONCERNING DEVIATIONS OTHER THAN SUBSTITUTIONS, PROPOSED DEVIATIONS FROM CONTRACT DOCUMENTS SHALL BE REQUESTED INDIVIDUALLY IN WRITING. WHETHER DEVIATIONS RESULT FROM FIELD CONDITIONS, STANDARD SHOP PRACTICE, OR OTHER CAUSES, SUBMIT LETTER WITH TRANSMITTAL OF SHOP DRAWINGS, WHICH FLAG THE DEVIATION TO THE ATTENTION OF THE ARCHITECT.
2. WITHOUT LETTERS FLAGGING THE DEVIATION TO THE ARCHITECT, IT IS POSSIBLE THAT THE ARCHITECT MAY NOT NOTICE SUCH DEVIATION AND THEREFORE REJECT ITS RECOMMENDATIONS. THEREFORE, IF SUCH LETTERS ARE NOT SUBMITTED TO THE ARCHITECT, THE CONTRACTOR SHALL HOLD THE ARCHITECT AND HIS CONSULTANTS HARMLESS FOR ANY ADVERSE CONSEQUENCES RESULTING FROM THE DEVIATIONS BEING IMPLEMENTED. THIS SHALL APPLY REGARDLESS OF WHETHER THE ARCHITECT HAS REVIEWED OR APPROVED SHOP DRAWINGS CONTAINING THE DEVIATION, AND WILL BE STRICTLY ENFORCED.
3. APPROVAL OF PROPOSED DEVIATIONS, IF ANY, WILL BE MADE AT THE DISCRETION OF THE ARCHITECT.

- F. RESPONSIBILITY
1. INTENT OF SUBMITTAL REVIEW IS TO CHECK FOR CAPACITY, RATING, AND CERTAIN CONSTRUCTION FEATURES. CONTRACTOR SHALL ENSURE THAT WORK MEETS REQUIREMENTS OF CONTRACT DOCUMENTS REGARDING INFORMATION THAT PERTAINS TO FABRICATION PROCESSES OR MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES OF CONSTRUCTION; AND FOR COORDINATION OF WORK OF THIS AND OTHER SECTIONS. WORK WITH SUBMITTALS MARKED "REVIEWED" TO EXTENT THAT THEY AGREE WITH CONTRACT DOCUMENTS. SUBMITTAL REVIEW SHALL NOT OBTAIN RESPONSIBILITY UNDER THIS CONTRACT FOR DIMENSIONAL COORDINATION, QUANTITIES, INSTALLATION, WIRING, SUPPORTS AND ACCESS FOR SERVICE. NOR SHOP DRAWING ERRORS OR DEVIATIONS FROM REQUIREMENTS OF CONTRACT DOCUMENTS. THE ARCHITECT'S NOTING OF SOME ERRORS DOES NOT EXCUSE THE CONTRACTOR FROM PROCEEDING IN ERROR. CONTRACT DOCUMENTS REQUIREMENTS SHALL BE STRICTLY ENFORCED.
2. INFORM SUBMITTANTS, MANUFACTURERS, SUPPLIERS, ETC. OF SCOPE AND LIMITED NATURE OF REVIEW PROCESS AND ENFORCE COMPLIANCE WITH CONTRACT DOCUMENTS.
3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL DRAWINGS AND SPECIFICATIONS THOROUGHLY DURING BID PROCESS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER/ARCHITECT VIA RFI (REQUEST FOR INFORMATION) IF ANY CONFLICTS ARISE. FAILURE TO IDENTIFY THE DISCREPANCIES DURING THE BID PROCESS SHALL DISQUALIFY THE CONTRACTOR FOR CLAIMING ANY ADDITIONAL COMPENSATION.
4. SHOP DRAWINGS FOR ENTIRE DISTRIBUTION SYSTEM WILL NOT BE SUBMITTED UNTIL AFTER THE COMPLETION OF THE SHORT CIRCUIT STUDY. EQUIPMENT AND RATING SHALL MATCH WITH THE RESULTS OF THE STUDY. SERIES RATING OF DEVICES WILL NOT BE ACCEPTED.
5. SCHEDULE: INCORPORATE SHOP DRAWING REVIEW PERIOD INTO CONSTRUCTION SCHEDULE SO THAT WORK IS NOT DELAYED. CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR DELAYS CAUSED BY NOT INCORPORATING THE FOLLOWING SHOP DRAWING REVIEW TIME REQUIREMENTS INTO HIS PROJECT SCHEDULE. WORKING DAYS LISTED REFERENCE THE TIME IN THE ENGINEER'S OFFICE. IT DOES NOT INCLUDE TRANSMITTAL TIME FOR REVIEW EACH TIME SHOP DRAWING IS SUBMITTED OR RESUBMITTED.

- H. LIST OF PROPOSED EQUIPMENT AND MATERIALS
1. WITHIN FOUR WEEKS AFTER AWARD OF CONTRACT AND BEFORE ORDERING MATERIALS OR EQUIPMENT, SUBMIT COMPLETE LIST OF PROPOSED MATERIALS AND EQUIPMENT AND INDICATE MANUFACTURER'S NAMES AND ADDRESSES. NO CONSIDERATION WILL BE GIVEN TO PARTIAL LISTS SUBMITTED OUT OF SEQUENCE.

- I. SUBMIT SHOP DRAWINGS IN PDF FORMAT AND ELECTRONICALLY FOR THE FOLLOWING:
1. PANELBOARDS
 2. LOAD CENTERS
 3. CIRCUIT BREAKERS AND ENCLOSURES
 4. SWITCHBOARDS
 5. DISCONNECT SWITCHES
 6. CONDUIT, WIRE, FEEDERS, CABLES AND BRANCH CIRCUIT WIRING
 7. MANUAL MOTOR STARTERS
 8. WIRE WAYS, OUTLET BOXES, COVERS
 9. SWITCHES, RECEPTACLES, SPECIAL PURPOSE DEVICES AND PLATES
 10. LIGHTING FIXTURES AND LAMPS
 11. FIRE ALARM SYSTEM (ADDRESSABLE)
 12. APARTMENT ENTRY SYSTEM
 13. SHORT-CIRCUIT ANALYSIS
 14. PROTECTIVE DEVICE TIME CURRENT COORDINATION ANALYSIS
 15. AND FLASH HAZARD ANALYSIS.

- J. SUBSTITUTION OF MATERIALS OR EQUIPMENT
- A. IF THE ELECTRICAL CONTRACTOR WISHES TO USE MATERIALS OR EQUIPMENT OTHER THAN THOSE SPECIFICALLY DESIGNATED HEREIN, AS BEING EQUAL TO THOSE SO SPECIFICALLY DESIGNATED BEFORE PURCHASE, THE CONTRACTOR SHALL SUBMIT THE PROPOSED SUBSTITUTION IN ACCORDANCE WITH THE REQUIREMENTS OF THE FOLLOWING: THE QUALITY OF MATERIAL, BEING USED, AND THE QUALITY OF THE WORK, AND THE DECISION OF WHETHER OR NOT IT IS EQUAL TO THAT SPECIFIED SHALL BE DETERMINED BY THE OWNER.

- K. EXAMINATION OF SITE AND CONTRACT DOCUMENTS
- A. BEFORE SUBMITTING PRICES OR BEGINNING WORK, THOROUGHLY MAKE AN EXAMINATION OF THE SITE.
- B. NO CLAIM FOR EXTRA COMPENSATION WILL BE RECOGNIZED IF DIFFICULTIES ARE ENCOUNTERED WHICH AN EXAMINATION OF SITE CONDITIONS PRIOR TO EXECUTING CONTRACT WOULD HAVE REVEALED.
- C. THESE SPECIFICATIONS ALONG WITH CONTRACT DOCUMENTS DESCRIBE THE ELECTRICAL SYSTEMS. THE ELECTRICAL CONTRACTOR IS REQUIRED TO PROVIDE COMPLETE AND OPERATING SYSTEMS FOR ALL EQUIPMENT MENTIONED.

- L. ELECTRICAL EQUIPMENT REQUIRED FOR THE SUCCESSFUL OPERATION OF ANY OF THE PARTICULAR TYPES OF OWNER'S EQUIPMENT MENTIONED SHALL BE FURNISHED AND INSTALLED.
- A. BE RESPONSIBLE FOR ALL MATERIALS DELIVERED TO THE SITE IN CONNECTION WITH THE WORK AND PAY ALL CHARGES FOR CARTAGE, SCAFFOLDS, PLANNING, RIGGING AND HANDLING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE QUALITY OF MATERIAL, BEING USED, AND THE QUALITY OF THE WORK, AND THE DECISION OF WHETHER OR NOT IT IS EQUAL TO THAT SPECIFIED SHALL BE DETERMINED BY THE OWNER.

- M. RECORD DRAWINGS, PROJECT CLOSEOUT
- A. AS WORK PROGRESSES AND FOR THE DURATION OF CONTRACT, MAINTAIN A COMPLETE AND SEPARATE SET OF PRINTED OR ELECTRONIC RECORD DRAWINGS. THE RECORD DRAWINGS SHALL BE COMPLETED AND ALL CHANGES FROM ORIGINAL DRAWINGS CLEARLY AND ACCURATELY INCLUDING WORK INSTALLED AS A MODIFICATION OR ADDITION TO THE ORIGINAL DESIGN. WORK SHALL BE UPDATED ON A WEEKLY BASIS AND SHALL BE MADE AVAILABLE FOR REVIEW BY ARCHITECT. FAILURE TO PERFORM THIS WORK SHALL BE REASON FOR WITHHOLDING RECORD DRAWINGS. IN ADDITION, THE PHOTOGRAPHS OF ALL CONCEALED EQUIPMENT IN OPSIN BOARD CEILINGS, SHUTTS, AND OTHER CONCEALED, INACCESSIBLE WORK, AT COMPLETION OF WORK, HAVE CORRESPONDING PHOTOGRAPHS WITH WRITTEN EXPLANATION ON BACK. THESE SHALL BECOME PART OF RECORD DOCUMENTS.

- N. TOOLS AND EQUIPMENT
- A. PROVIDE ALL TOOLS AND EQUIPMENT REQUIRED FOR THE FABRICATION AND INSTALLATION OF THE MECHANICAL AND ELECTRICAL EQUIPMENT AT THE SITE.
- B. FURNISH ALL ACCESS PANELS APPROPRIATE TO PARTICULAR CONDITIONS, TO BE INSTALLED BY TRUCKS HAVING RESPONSIBILITY FOR THE CONSTRUCTION OF ACTUAL WALLS, FLOORS OR CEILINGS AT REQUIRED LOCATIONS.

- O. PORTABLE AND DETACHABLE PARTS
- A. CONTRACTORS SHALL RETAIN IN THEIR POSSESSION ALL PORTABLE AND/OR DETACHABLE PARTS AND PORTIONS OF MATERIALS, DEVICES, EQUIPMENT ETC. NECESSARY FOR THE PROPER OPERATION AND MAINTENANCE OF THE MECHANICAL AND ELECTRICAL SYSTEMS UNTIL FINAL COMPLETION OF THE WORK, AT WHICH TIME THEY SHALL BE HANDLED OVER TO THE OWNERS.

- P. RECORD DRAWINGS, PROJECT CLOSEOUT
- A. AS WORK PROGRESSES AND FOR THE DURATION OF CONTRACT, MAINTAIN A COMPLETE AND SEPARATE SET OF PRINTED OR ELECTRONIC RECORD DRAWINGS. THE RECORD DRAWINGS SHALL BE COMPLETED AND ALL CHANGES FROM ORIGINAL DRAWINGS CLEARLY AND ACCURATELY INCLUDING WORK INSTALLED AS A MODIFICATION OR ADDITION TO THE ORIGINAL DESIGN. WORK SHALL BE UPDATED ON A WEEKLY BASIS AND SHALL BE MADE AVAILABLE FOR REVIEW BY ARCHITECT. FAILURE TO PERFORM THIS WORK SHALL BE REASON FOR WITHHOLDING RECORD DRAWINGS. IN ADDITION, THE PHOTOGRAPHS OF ALL CONCEALED EQUIPMENT IN OPSIN BOARD CEILINGS, SHUTTS, AND OTHER CONCEALED, INACCESSIBLE WORK, AT COMPLETION OF WORK, HAVE CORRESPONDING PHOTOGRAPHS WITH WRITTEN EXPLANATION ON BACK. THESE SHALL BECOME PART OF RECORD DOCUMENTS.

- Q. ARCHITECT WILL NOT CERTIFY THE ACCURACY OF THE RECORD DRAWINGS. THIS IS SOLE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.

- D. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE HVAC, PLUMBING AND FIRE PROTECTION CONTRACTORS WITH REGARD TO FEEDERS, RACEWAY, AND CIRCUIT BREAKER AND DISCONNECT SWITCH SIZES. IF A SUBSTITUTION OF HVAC, PLUMBING AND FIRE PROTECTION EQUIPMENT IS PROPOSED BY A SUBCONTRACTOR, IT SHALL BECOME THE RESPONSIBILITY OF THAT SUBCONTRACTOR TO COORDINATE WITH THE ELECTRICAL CONTRACTOR AND ALL CHANGES WITH REGARD TO FEEDER, RACEWAY, AND CIRCUIT BREAKER AND DISCONNECT SWITCH SIZES. THE SHOP DRAWINGS SHALL CLEARLY INDICATE WHAT CHANGES ARE REQUIRED AND ANY ADDITIONAL COSTS ASSOCIATED WITH THE CHANGE. IF COORDINATION DOES NOT OCCUR, THE SUBCONTRACTOR PROPOSING THE CHANGE SHALL BE RESPONSIBLE FOR ALL COSTS THAT OCCUR DUE TO THE SUBSTITUTION.
- E. WHENEVER THE CONTRACTOR SECURES APPROVAL FOR CHANGING ANY ITEMS AND SUCH CHANGE INVOLVES A CORRESPONDING CHANGE OR ADJUSTMENT IN ANY ADJACENT OR RELATED ITEM, THE RESPONSIBILITY FOR MAKING THE REQUIRED CHANGE, OR SEEING THAT IT IS MADE, RESTS WITH THE CONTRACTOR. THE COST OF THESE CHANGES AND/OR ADJUSTMENTS SHALL BE PAID FOR BY THE CONTRACTOR UNLESS IT IS OTHERWISE AGREED. THE WRITING, AT THE TIME THE CHANGE IS APPROVED, THE ACCEPTANCE OF ANY CHANGE WILL NOT, IN ANY WAY, RELIEVE THE CONTRACTOR FROM FULL COMPLIANCE WITH THE CONTRACT DOCUMENTS.

- F. FIELD MEASUREMENTS
- A. THE ELECTRICAL CONTRACTOR (EC) SHALL VERIFY, IN THE FIELD, ALL MEASUREMENTS, SITE CONDITIONS NECESSARY FOR HIS WORK AND SHALL ASSUME RESPONSIBILITY FOR THEIR ACCURACY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED AFTER THE BIDS HAVE BEEN ACCEPTED.

- G. PERMITS, LAWS, ORDINANCES & CODES
- A. THE ELECTRICAL CONTRACTOR SHALL OBTAIN ALL NECESSARY NOTICES, OBTAIN ALL PERMITS, AND PAY ALL TAXES, FEES AND OTHER COSTS IN CONNECTION WITH HIS WORK. FILE ALL NECESSARY PLANS, PREPARE ALL NECESSARY DOCUMENTS AND OBTAIN ALL NECESSARY APPROVALS OF STATE AUTHORITIES, ALL LOCAL, TOWN, CITY OR COUNTY DEPARTMENTS HAVING JURISDICTION OBTAIN ALL REQUIRED CERTIFICATES OF INSPECTION FOR HIS WORK.
- B. THE ELECTRICAL CONTRACTOR SHALL INCLUDE IN THE WORK, WITHOUT EXTRA COST TO THE OWNER, ANY LABOR, MATERIALS, SERVICES, APPARATUS, DRAWINGS IN ADDITION TO THE DRAWINGS PREPARED BY THE ELECTRICAL CONTRACTOR AND SHALL BE RESPONSIBLE TO COMPLY WITH ALL APPLICABLE LAWS, ORDINANCES, RULES AND REGULATIONS WHETHER OR NOT SHOWN ON THE DRAWINGS AND/OR SPECIFIED.

- H. INTENT TO PREMISES
- A. THE ELECTRICAL CONTRACTOR SHALL VISIT THE PREMISES BEFORE SUBMITTING HIS PROPOSAL, AND MAKE HIS OWN APPRAISAL OF THE DIFFICULTIES AND CONDITIONS THAT WILL BE ENCOUNTERED DURING THE WORK. NO ADDITIONAL CHARGES WILL BE ALLOWED FOR WORK REQUIRED DUE TO EXISTING CONDITIONS TO MAKE THE INSTALLATION CONFORM TO THE SPECIFICATIONS.

- I. CLEANING UP
- A. THE ELECTRICAL CONTRACTOR SHALL, AT THE COMPLETION OF THE WORK, CLEAN, POLISH AND/OR WASH ALL EXPOSED ITEMS OF MATERIAL, EQUIPMENT AND FIXTURES IN HIS CONTRACT SO AS TO LEAVE SUCH ITEMS BRIGHT AND CLEAN. SPECIAL ATTENTION BEING GIVEN TO INTERIORS AND EXTERIORS OF ALL PANELS, ELECTRICAL EQUIPMENT, AND ENCLOSURES.
- B. ALL PAINTED METAL SURFACES WHICH HAVE BEEN SCRATCHED, DENTED OR MARKED SHALL BE REPAINTED BY THE ELECTRICAL CONTRACTOR.

- J. DAMAGE TO OTHER WORK
- A. EACH CONTRACTOR SHALL BE HELD RESPONSIBLE FOR AND SHALL PAY FOR ALL DAMAGE TO OTHER WORK CAUSED BY HIS WORK OR WORKMEN.
- B. REPAIRING OF SUCH DAMAGE SHALL BE DONE BY THE GENERAL CONTRACTOR OR CONTRACTORS WHO INSTALLED THE WORK AND SO DIRECTED BY THE OWNER'S ENGINEER.

- K. GUARANTEE
- A. ATTENTION IS DIRECTED TO PROVISIONS OF THE GENERAL CONDITIONS AND SPECIAL CONDITIONS REGARDING GUARANTEES AND WARRANTIES FOR WORK UNDER THIS CONTRACT.
- B. ELECTRICAL CONTRACTOR'S GUARANTEES SHALL BE THE SAME AS THE GENERAL CONTRACTORS.

- L. COORDINATION DRAWINGS
- A. BEFORE MATERIALS ARE PURCHASED OR WORK BEGUN, THE ELECTRICAL CONTRACTOR SHALL PREPARE COORDINATION DRAWINGS SHOWING THE SIZE AND LOCATION OF ELECTRICAL EQUIPMENT AND CONDUIT RUNS AND OTHER EQUIPMENT RELATED TO THE ELECTRICAL WORK.
- B. COORDINATION DRAWINGS ARE FOR THE GENERAL CONTRACTOR AND THE ENGINEER'S USE DURING CONSTRUCTION AND SHALL NOT BE CONSTRUED AS REPLACING ANY SHOP, AS BUILT OR RECORD DRAWINGS REQUIRED ELSEWHERE IN THIS CONTRACT DOCUMENT.

- M. OPERATING INSTRUCTIONS AND MAINTENANCE MANUALS
- A. INSTRUCT TO THE OWNER'S SATISFACTION SUCH PERSONS AS THE OWNER DESIGNATES, IN THE PROPER OPERATION AND MAINTENANCE OF THE SYSTEMS AND THEIR PARTS.
- B. FURNISH OPERATING AND MAINTENANCE MANUALS AND FORWARD SAME TO THE ENGINEER FOR TRANSMITTAL TO THE OWNER.
- C. OPERATING INSTRUCTIONS SHALL BE SPECIFIC FOR EACH SYSTEM AND SHALL INCLUDE COPIES OF POSTED SPECIFIC INSTRUCTIONS.
- D. FOR MAINTENANCE PURPOSES, PROVIDE SHOP DRAWINGS, PARTS LISTS, SPECIFICATIONS AND MANUFACTURER'S MAINTENANCE BULLETINS FOR EACH PIECE OF EQUIPMENT.

- N. ARRANGEMENT OF ALL ELECTRICAL WORK SHOWN ON THE DRAWINGS IS DIAGRAMMATIC ONLY AND INDICATES THE MINIMUM REQUIREMENTS OF THE WORK. CONDITIONS AT THE BUILDING INCLUDING ACTUAL MEASUREMENTS SHALL DETERMINE THE DETAILS OF THE INSTALLATION. ALL WORK SHALL BE LAID OUT AND INSTALLED SO AS TO REQUIRE THE LEAST AMOUNT OF CUTTING AND PATCHING.

- O. CHECK THE ARCHITECTURAL PLANS AND SPECIFICATIONS BEFORE ORDERING ANY MATERIAL AND EQUIPMENT. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR HIS DETERMINATION PRIOR TO PROCEEDING WITH THE WORK.

- P. TYPICAL DETAILS
- A. TYPICAL DETAILS WHERE SHOWN ON THE DRAWINGS SHALL APPLY TO EACH AND EVERY ITEM OF THE PROJECT WHERE SUCH ITEMS ARE APPLICABLE. THEY ARE NOT REPEATED FULL ON THE DRAWINGS. IN MANY CASES ARE DIAGRAMMATIC ONLY, BUT WITH THE INTENTION THAT SUCH DETAILS SHALL BE INCORPORATED IN FULL. ANY ALTERNATE METHOD PROPOSED FOR USE BY THE CONTRACTOR SHALL HAVE THE PRIOR APPROVAL OF THE ARCHITECT.

- Q. SLEEVES, INSERTS
- A. FURNISH AND INSTALL ALL SLEEVES, INSERTS, ANCHOR BOLTS AND SIMILAR ITEMS TO BE SET INTO MASONRY OR CONCRETE, AS REQUIRED FOR MECHANICAL AND ELECTRICAL WORK. INTERNAL, DAMAGED OR SLEEVE SHALL BE $\frac{1}{4}"$ LARGER THAN THE OUTSIDE DIAMETER OF THE PIPE OR INSULATION COVERED LINE PASSING THROUGH IT.

- R. CORE, CUT OR DRILL ALL SMALL HOLES $\frac{1}{4}"$ DIAMETER OR LESS IN WALLS AND FLOORS REQUIRED FOR THE INSTALLATION OF SLEEVES AND SUPPORTS FOR THE ELECTRICAL WORK.

- S. ACCESSIBILITY
- A. INSTALL ALL WORK SUCH THAT PARTS REQUIRING PERIODIC INSPECTION, OPERATION, MAINTENANCE AND REPAIR ARE READILY ACCESSIBLE.

- T. TOOLS AND EQUIPMENT
- A. PROVIDE ALL TOOLS AND EQUIPMENT REQUIRED FOR THE FABRICATION AND INSTALLATION OF THE MECHANICAL AND ELECTRICAL EQUIPMENT AT THE SITE.

- U. PORTABLE AND DETACHABLE PARTS
- A. CONTRACTORS SHALL RETAIN IN THEIR POSSESSION ALL PORTABLE AND/OR DETACHABLE PARTS AND PORTIONS OF MATERIALS, DEVICES, EQUIPMENT ETC. NECESSARY FOR THE PROPER OPERATION AND MAINTENANCE OF THE MECHANICAL AND ELECTRICAL SYSTEMS UNTIL FINAL COMPLETION OF THE WORK, AT WHICH TIME THEY SHALL BE HANDLED OVER TO THE OWNERS.

- V. RECORD DRAWINGS, PROJECT CLOSEOUT
- A. AS WORK PROGRESSES AND FOR THE DURATION OF CONTRACT, MAINTAIN A COMPLETE AND SEPARATE SET OF PRINTED OR ELECTRONIC RECORD DRAWINGS. THE RECORD DRAWINGS SHALL BE COMPLETED AND ALL CHANGES FROM ORIGINAL DRAWINGS CLEARLY AND ACCURATELY INCLUDING WORK INSTALLED AS A MODIFICATION OR ADDITION TO THE ORIGINAL DESIGN. WORK SHALL BE UPDATED ON A WEEKLY BASIS AND SHALL BE MADE AVAILABLE FOR REVIEW BY ARCHITECT. FAILURE TO PERFORM THIS WORK SHALL BE REASON FOR WITHHOLDING RECORD DRAWINGS. IN ADDITION, THE PHOTOGRAPHS OF ALL CONCEALED EQUIPMENT IN OPSIN BOARD CEILINGS, SHUTTS, AND OTHER CONCEALED, INACCESSIBLE WORK, AT COMPLETION OF WORK, HAVE CORRESPONDING PHOTOGRAPHS WITH WRITTEN EXPLANATION ON BACK. THESE SHALL BECOME PART OF RECORD DOCUMENTS.

- W. ARCHITECT WILL NOT CERTIFY THE ACCURACY OF THE RECORD DRAWINGS. THIS IS SOLE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.

- D. THIS TRADE SHALL SUBMIT THE RECORD SET FOR APPROVAL BY THE FIRE AND BUILDING DEPARTMENTS IN A FORM ACCEPTABLE TO THE DEPARTMENTS, WHEN REQUIRED BY THE JURISDICTION.
- E. DRAWINGS SHALL SHOW RECORD CONDITION OF DETAILS, SECTIONS, RISER DIAGRAMS, CONTROL, CHANGES AND CORRECTIONS TO SCHEDULES. SCHEDULES SHALL SHOW ACTUAL MANUFACTURER AND MAKE AND MODEL NUMBERS OF FINAL EQUIPMENT INSTALLATION.
- F. REFER TO SECTION 01770 - CLOSEOUT PROCEDURES AND 01782 - RECORD DOCUMENTS AND OWNER TRAINING.

- G. OPERATING, INSTRUCTIONS AND MAINTENANCE MANUALS
- A. REFER TO SECTION 01770 - CONTRACT CLOSEOUT FOR SUBMITTAL PROCEDURES PERTAINING TO OPERATING AND MAINTENANCE MANUALS.
- B. EACH COPY OF THE APPROVED OPERATING AND MAINTENANCE MANUAL SHALL CONTAIN COPIES OF APPROVED SHOP DRAWINGS, EQUIPMENT LITERATURE, CUTS, BULLETINS, DETAILS, EQUIPMENT AND ENGINEERING DATA SHEETS AND TYPEWRITTEN INSTRUCTIONS RELATIVE TO THE CARE AND MAINTENANCE FOR THE OPERATION OF THE EQUIPMENT. PROPERLY INDEXED. EACH MANUAL SHALL HAVE THE FOLLOWING MINIMUM CONTENTS:

- H. TABLE OF CONTENTS
1. TABLE OF CONTENTS
2. INTRODUCTION
- A. EXPLANATION OF MANUAL AND ITS PURPOSE AND USE.
- B. DESCRIPTION OF THE ELECTRICAL SYSTEMS.
- C. SAFETY PRECAUTIONS NECESSARY FOR EQUIPMENT.
- D. ILLUSTRATIONS, SCHEMATICS AND DIAGRAMS.
- E. INSTALLATION DRAWING.

- I. MAINTENANCE
- A. MAINTENANCE AND LUBRICATING INSTRUCTIONS.
- B. SAFETY PRECAUTIONS FOR EQUIPMENT COMPONENTS.
- C. TROUBLE SHOOTING CHARTS FOR EQUIPMENT COMPONENTS.
- D. TESTING INSTRUCTIONS FOR EACH TYPICAL COMPONENT.
- E. TWO TYPED SETS OF INSTRUCTIONS FOR ORDERING SPARE PARTS, EACH SET SHALL INCLUDE NAME, PRICE, TELEPHONE NUMBER AND ADDRESS OF WHERE THEY WILL BE OBTAINED.

- J. MANUFACTURER'S LITERATURE
- A. THE EQUIPMENT FOR WHICH SHOP DRAWINGS HAVE BEEN SUBMITTED AND APPROVED.

- K. SERVICE CHARACTERISTICS
- A. SECONDARY BUILDING VOLTAGE - LOW LEVEL: 120/208 VOLT, 3 PHASE, 4 WIRE, 60 HZ
- B. ALL EQUIPMENT AND WIRING SHALL BE SUITABLE FOR THE APPLIED VOLTAGE.

- L. QUALITY ASSURANCE
- A. THE REQUIREMENTS OF THE STATE BUILDING CODE AND LOCAL REGULATIONS ESTABLISH THE MINIMUM ACCEPTABLE QUALITY OF WORKMANSHIP AND MATERIALS, AND ALL WORK SHALL CONFORM THERETO UNLESS MORE STRINGENT REQUIREMENTS ARE INDICATED OR SPECIFIED HEREIN.
- B. ALL WORK SHALL COMPLY WITH THE LATEST EDITIONS OF THE CODES AS REFERENCED HEREIN.

- M. FOLLOW MANUFACTURER'S DIRECTIONS FOR ARTICLES FURNISHED, IN ADDITION TO DIRECTIONS SHOWN ON DRAWINGS OR SPECIFIED HEREIN.

- N. PROTECT ALL WORK, MATERIALS, AND EQUIPMENT FROM DAMAGE DURING PROCESS OF WORK. REPLACE ALL DAMAGED OR DEFECTIVE WORK, MATERIALS AND EQUIPMENT WITHOUT ADDITIONAL COST TO OWNER.

- O. E. ALL EQUIPMENT AND MATERIALS FOR PERMANENT INSTALLATION SHALL BE THE PRODUCTS OF RECOGNIZED MANUFACTURERS AND SHALL BE NEW.

- P. EQUIPMENT AND MATERIALS SHALL:
1. WHERE NORMALLY SUBJECT TO UNDERWRITERS LABORATORY INC. LISTING OR LABELING SERVICES, BE SO LISTED OR LABELED.
 2. BE WITHOUT BLEMISH OR DEFECT.
 3. NOT BE USED FOR TEMPORARY LIGHT AND POWER PURPOSES.
 4. BE IN ACCORDANCE WITH THE LATEST APPLICABLE NAME STANDARDS.
 5. BE PRODUCTS WHICH WILL MEET WITH THE ACCEPTANCE OF ALL AUTHORITIES HAVING JURISDICTION OVER THE WORK, WHERE SUCH ACCEPTANCE IS CONTINGENT UPON HAVING THE PRODUCTS EXAMINED, TESTED AND CERTIFIED BY THE ELECTRICAL CONTRACTOR OR OTHER RECOGNIZED TESTING LABORATORY. THE PRODUCT SHALL BE SO EXAMINED, TESTED AND CERTIFIED.

- Q. EXCEPT FOR CONDUIT, CONDUIT FITTINGS, OUTLET BOXES, WIRE AND CABLE, ALL ITEMS OF EQUIPMENT OR MATERIAL OF ONE GENERIC TYPE SHALL BE THE PRODUCT OF ONE MANUFACTURER THROUGHOUT.

- R. FOR ITEMS WHICH ARE TO BE INSTALLED BUT NOT PURCHASED AS PART OF THE ELECTRICAL WORK, THE ELECTRICAL WORK SHALL INCLUDE:
1. THE COORDINATION OF THEIR DELIVERY.
 2. THEIR UNLOADING FROM DELIVERY TRUCKS DRIVEN INTO ANY POINT ON THE PROPERTY LINE AT GRADE LEVEL.

- S. THEIR SAFE HANDLING AND FIELD STORAGE UP TO THE TIME OF PERMANENT PLACEMENT IN THE PROJECT.

- T. THE CORRECTION OF ANY DAMAGE, DEFACEMENT OR CORROSION TO WHICH THEY MAY HAVE BEEN SUBJECTED. REPLACEMENT IF NECESSARY SHALL BE COORDINATED WITH CONTRACTOR WHO ORIGINALLY PURCHASED THE ITEM.

- U. THEIR FIELD MAKE-UP AND INTERNAL WIRING AS MAY BE NECESSARY FOR THEIR PROPER OPERATION.

- V. THEIR MOUNTING IN PLACE INCLUDING THE PURCHASE AND INSTALLATION OF ALL DUNNAGE, SUPPORTING MATERIALS, AND FASTENINGS NECESSARY TO ADAPT THEM TO ARCHITECTURAL AND STRUCTURAL CONDITIONS.

- W. THEIR CONNECTION TO BUILDING WIRING INCLUDING THE PURCHASE AND INSTALLATION OF ALL TERMINATION JUNCTION BOXES NECESSARY TO ADAPT AND CONNECT THEM TO THE WIRING. INCLUDED ALSO SHALL BE THE PURCHASE AND INSTALLATION OF ANY SUBSTITUTE LUMENS OR OTHER WIRING TERMINATIONS AS MAY BE NECESSARY TO ADAPT THEIR TERMINALS TO THE BUILDING WIRING AS CALLED FOR AND TO THE CONNECTION METHODS SET FORTH IN THESE SPECIFICATIONS.

- X. ITEMS WHICH ARE TO BE INSTALLED BUT NOT PURCHASED AS PART OF THE ELECTRIC WORK SHALL BE CAREFULLY EXAMINED UPON DELIVERY TO THE PROJECT, CLAIMS THAT ANY OF THESE ITEMS HAVE BEEN RECEIVED IN SUCH CONDITION THAT THEIR INSTALLATION WILL REQUIRE PROCEDURES BEYOND THE REASONABLE SCOPE OF THE ELECTRIC WORK WILL BE CONSIDERED ONLY IF PRESENTED IN WRITING WITHIN ONE WEEK OF THE DATE OF DELIVERY TO THE PROJECT. IF THE ITEM IS IN QUESTION, THE ELECTRIC WORK INCLUDES ALL PROCEDURES, REGARDLESS OF HOW EXTENSIVE, NECESSARY TO PUT INTO SATISFACTORY OPERATION, ALL ITEMS FOR WHICH NO CLAIMS HAVE BEEN SUBMITTED AS OUTLINED ABOVE.

- Y. DELIVERY, STORAGE AND HANDLING
- A. ALL MATERIALS FOR THE WORK OF THIS SECTION SHALL BE DELIVERED, STORED AND HANDLED SO AS TO PRECLUDE DAMAGE OF ANY NATURE. MANUFACTURED MATERIALS SHALL BE DELIVERED AND STORED IN THEIR ORIGINAL CONTAINERS, PLACED WITH THE PRODUCTS' AND MANUFACTURER'S NAME, MATERIALS IN BROKEN CONTAINERS OR IN PACKAGES SHOWING WATERMARKS OR OTHER EVIDENCE OF DAMAGE, SHALL NOT BE USED AND SHALL BE REMOVED FROM THE SITE.

- Z. TEMPORARY POWER AND LIGHTING
- A. THE ELECTRICAL SUBCONTRACTOR SHALL FURNISH AND INSTALL FEEDERS OF SUFFICIENT SIZE TO PROVIDE THE UTILITY COMPANY'S POWER TO THE BUILDING. THE FEEDERS SHALL MEET THE REQUIREMENTS FOR THE BUILDING WHILE UNDER CONSTRUCTION AND UNTIL THE PERMANENT FEEDERS AND RELATED EQUIPMENT HAVE BEEN INSTALLED AND ARE IN OPERATION. TEMPORARY LIGHTING SHALL BE BASED ON A MINIMUM OF PROVIDING AT LEAST ONE (1) WATT PER SQUARE FOOT FOR EACH 1,000 SQUARE FEET OF FLOOR AREA. SUFFICIENT WIRING, LAMPS, AND OUTLETS SHALL BE INSTALLED TO INSURE PROPER LIGHTING SHALL BE ROOM TO SPACE, STAINLESS, AND CORROSION RESISTANT. LAMP USED SHALL BE ROOM TO SPACE, STAINLESS, AND CORROSION RESISTANT. LIGHTING INTENSITIES ARE REQUIRED TO BE 100 FOOT CANDLE PER SQUARE FOOT OR OTHERWISE SPECIFIED. THE ABOVE SPECIFIED MINIMUM SHALL BE INCREASED TO PROVIDE THE NECESSARY LIGHTING. REFER TO SECTION 01510 - TEMPORARY UTILITIES FOR ADDITIONAL WORK.

**FIRE CODE UPGRADE TO THE
WILLIAM E TOLMAN HIGH SCHOOL**
150 EXCHANGE STREET, Pawucket, RI 02861

**BREWSTER
THORNTON
GROUP
ARCHITECTS**
111

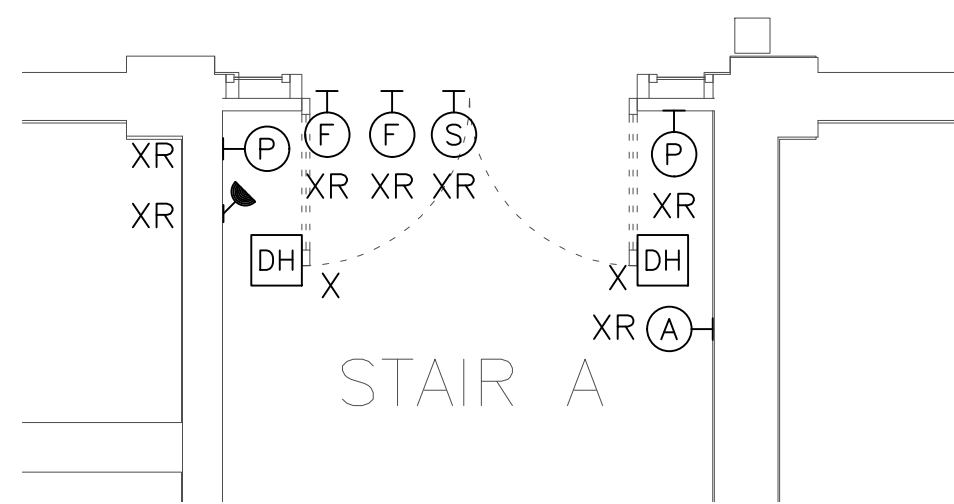
317 Iron Horse Way,
Suite 202
Providence, RI 02908

401.861.1600
brewsterthornton.com

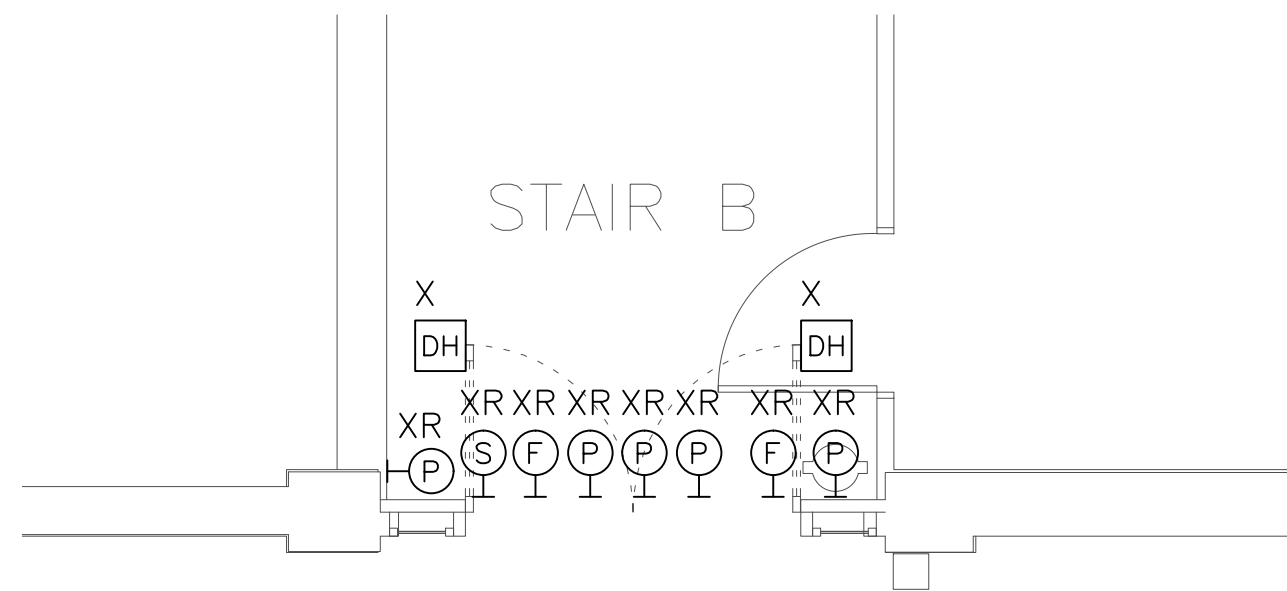
JOB NO. 4115		DATE 11.25.24
ISSUE: RIDE REVIEW		
NO.	REVISION DESCRIPTION	DATE

SHEET TITLE

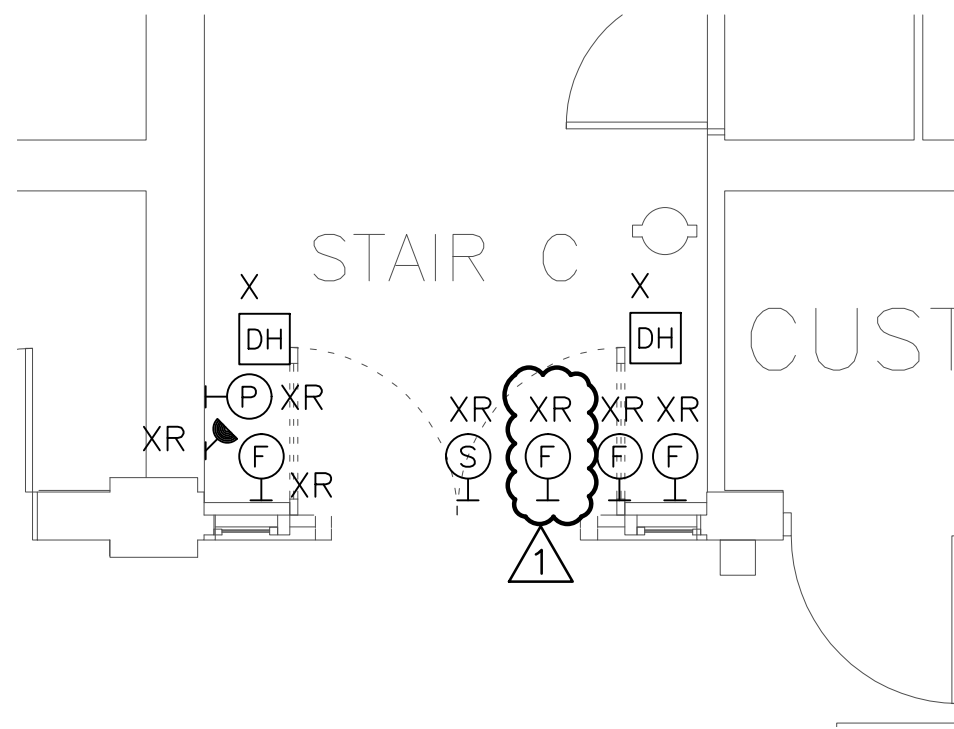
**ELECTRICAL
SYMBOL
LEGEND AND**



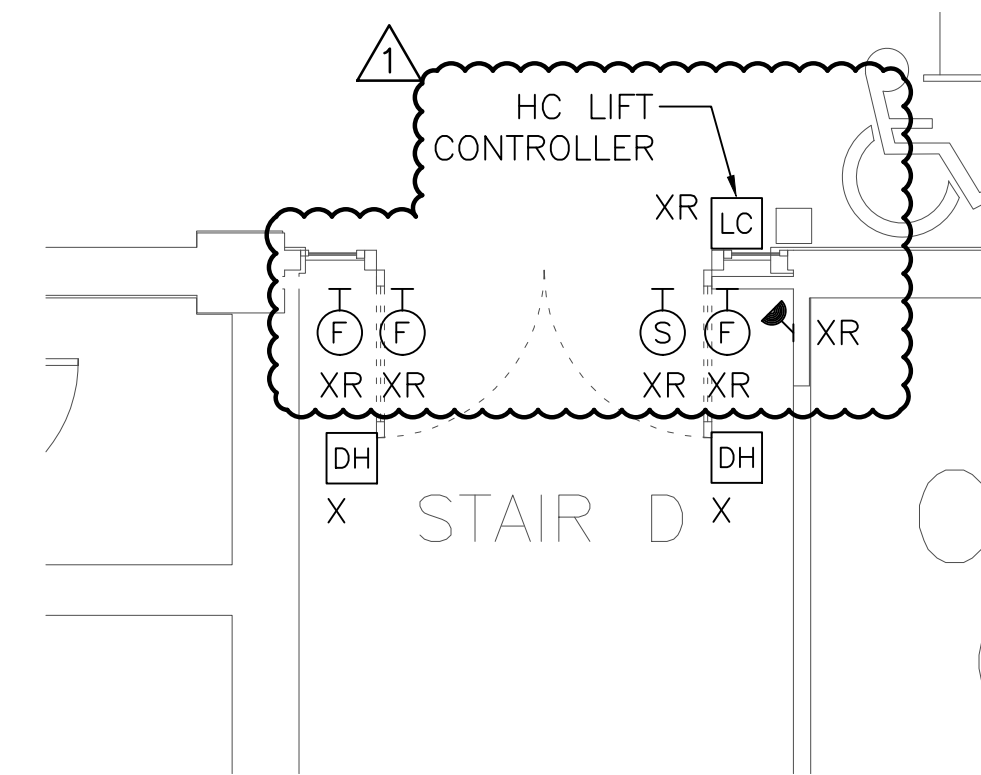
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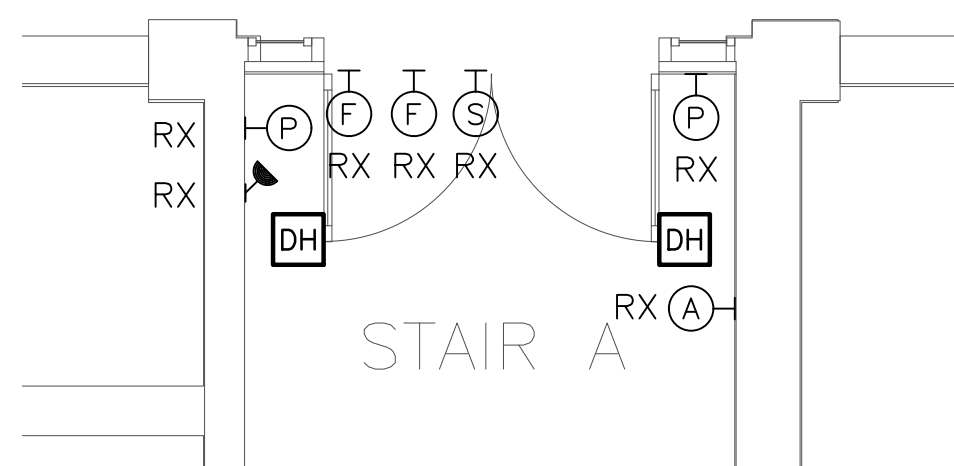
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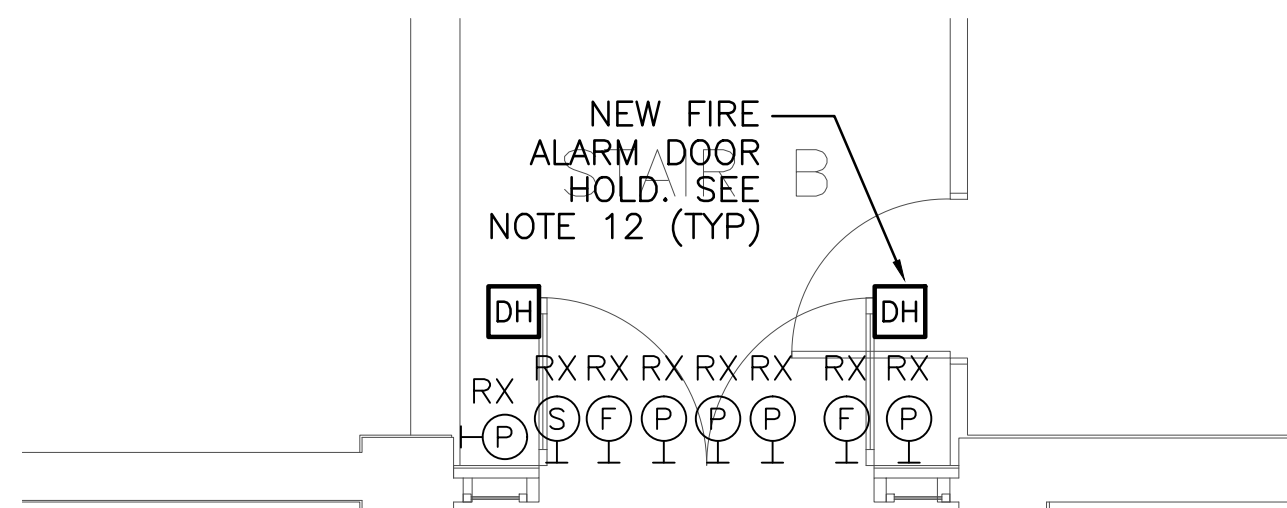
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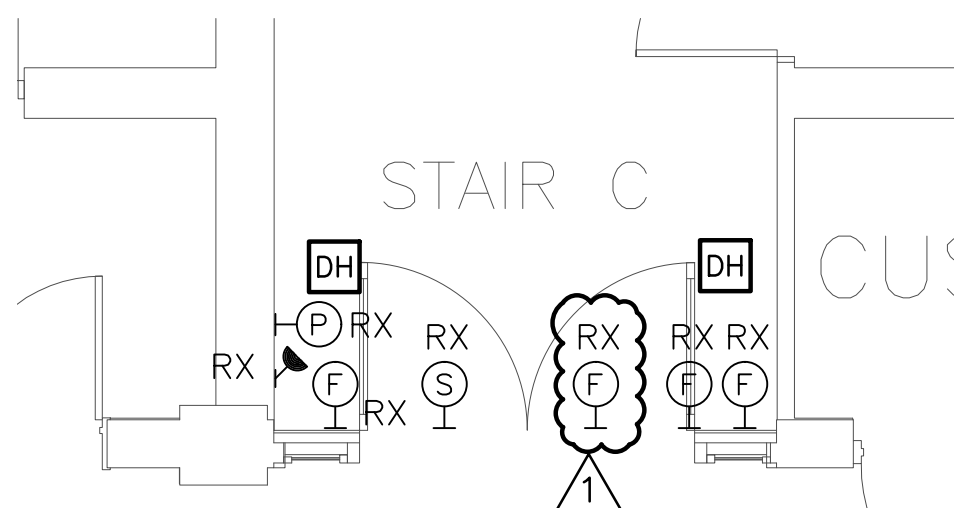
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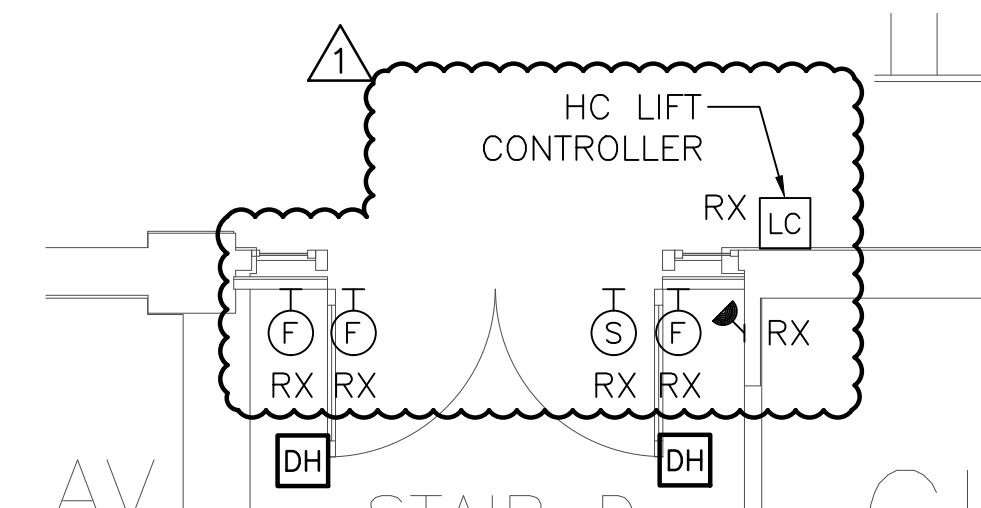
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Scale: 1/4"=1'-0"



7 Bsmt Fl Proposed Stair C
Scale: 1/4"=1'-0"



8 Bsmt Fl Proposed Stair D
Scale: 1/4"=1'-0"

ELECTRICAL DEVICE KEY:

- AUDIO LOW VOLTAGE DEVICE, JUNCTION BOX AND RACEWAY. SEE KEY NOTE 1
- FIRE ALARM JUNCTION BOX, LB, & RACEWAY
- 120V POWER JUNCTION BOX, LB, & RACEWAY
- SECURITY LOW VOLTAGE DEVICE, JUNCTION BOX AND RACEWAY. SEE KEY NOTE 1
- FIRE ALARM DOOR HOLD DEVICE
- FIRE ALARM POWER SUPPLY
- BUILDING SYSTEM CONTROL PANEL, JUNCTION BOX, RACEWAY. SEE KEY NOTE 1
- NEW FIRE ALARM CURTAIN GROUP CONTROL PANEL. SEE ELECTRICAL NOTE 18
- SURFACE MOUNTED EMERGENCY FIXTURE

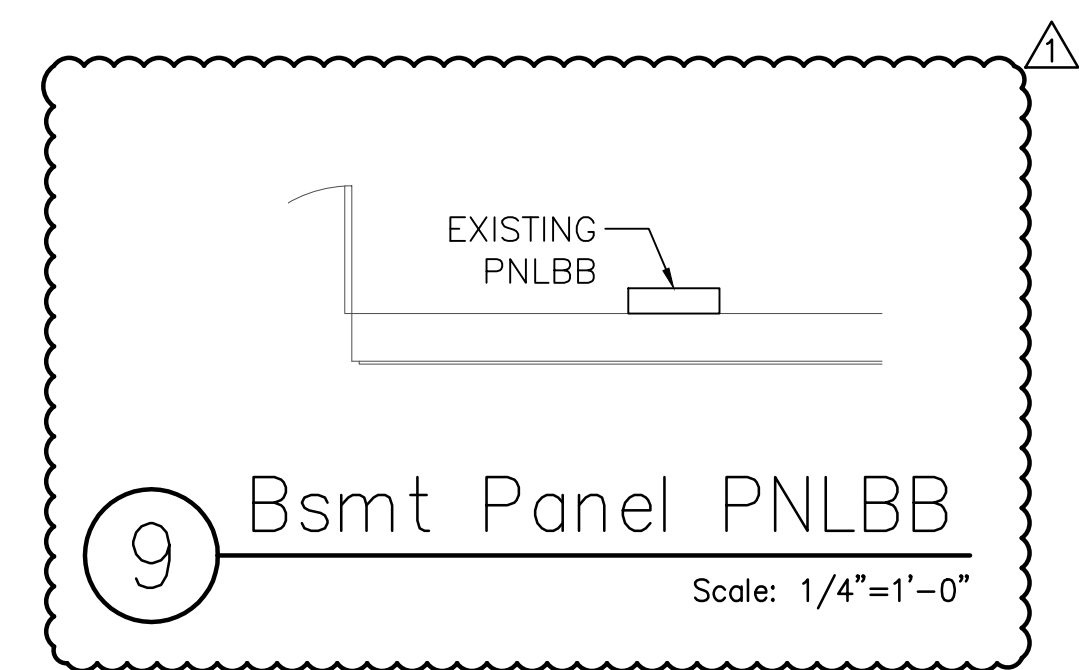
KEY NOTES:

1. CONTRACTOR SHALL CONFIRM AND COORDINATE FINAL LOCATION OF ALL RELOCATED BUILDING SYSTEMS, LOW VOLTAGE DEVICES AND RACEWAY WITH ARCHITECT. CONFIRM ROUTING OF EXTENDED RACEWAY WITH ARCHITECT. LOW VOLTAGE SHOWN ON ELECTRICAL PLANS FOR REFERENCE ONLY.

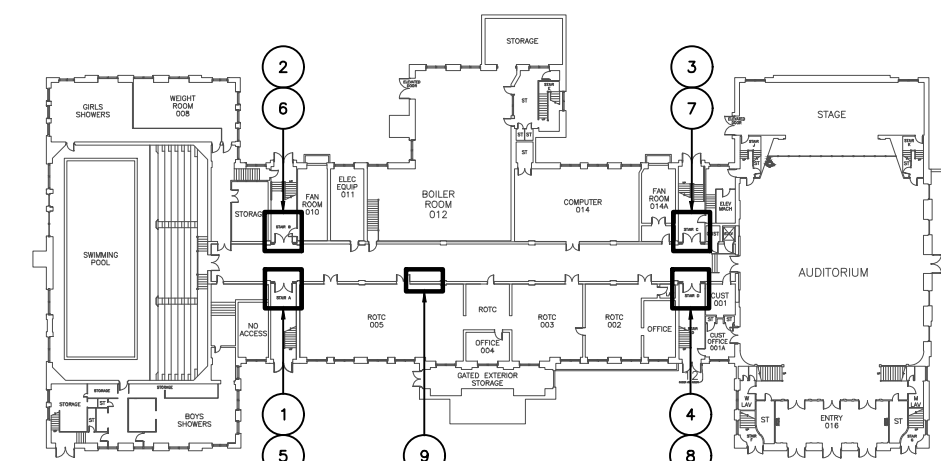
ELECTRICAL NOTES:

1. LIMIT OF SCOPE LINE INDICATES THE APPROXIMATE AREA OF RENOVATION THAT ELECTRICAL SYSTEMS MAY BE RELOCATED OR REMOVED. SCOPE OF DEMOLITION SHOWN ON PLANS ARE PARTIAL ONLY FOR THE CONTRACTORS CONVENIENCE AND NOT INTENDED TO SHOW ALL EXISTING CONDITIONS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS TO INCLUDE ALL NECESSARY WORK TO MODIFY AND EXTEND EXISTING SYSTEMS, WIRING, ETC. AS REQUIRED TO ACCOMMODATE THE NEW ARCHITECTURAL FLOOR PLAN.
2. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY NECESSARY RE-FEEDING OF EQUIPMENT OR DEVICES TO MAINTAIN CIRCUIT CONTINUITY OF EXISTING EQUIPMENT REMAINING.
3. ELECTRICAL CONTRACTOR SHALL MAINTAIN INTEGRITY OF FIRE ALARM WIRING SO NOTIFICATION DEVICES OUTSIDE SCOPE OF WORK REMAIN ACTIVE DURING RENOVATION.
4. ALL EXISTING DEVICES AND EQUIPMENT TO BE REMOVED - DISCONNECT, REMOVE, AND DISPOSE ALL RACEWAY AND WIRING BACK TO ASSOCIATED PANEL.
5. COORDINATE SHUT DOWN OF BASE BUILDING ELECTRICAL AND FIRE ALARM SYSTEMS WITH SCHOOL FACILITIES.
6. DISCONNECT, MAKE SAFE, AND REMOVE ALL TEMPORARY AND ABANDONED WIRE WITHIN THE LIMIT OF WORK.
7. ELECTRICAL CONTRACTOR SHALL RELOCATE ANY AND ALL EXISTING ELECTRICAL DEVICES AND RACEWAY WITHIN AREA OF RENOVATION. CONFIRM AND COORDINATE RENOVATION SCOPE WITH ARCHITECT. EXTEND AND CONNECT EXISTING WIRING AND RACEWAY TO NEW LOCATION OF RELOCATED EQUIPMENT. CONTRACTOR SHALL EVALUATE CONDITION OF EXISTING WIRING AND RACEWAY AND REPLACE BACK TO SOURCE IF NECESSARY. CONTRACTOR SHALL REPLACE EXISTING WIRING, BACK TO SOURCE, IF EXISTING EXTENDED WIRING DOES NOT REACH LOCATION OF RELOCATED EQUIPMENT.
8. ELECTRICAL CONTRACTOR SHALL CONFIRM AND COORDINATE FINAL LOCATION OF ALL LOW VOLTAGE DEVICES AND ROUTING OF LOW VOLTAGE RACEWAY WITH ARCHITECT.
9. ALL NEW EQUIPMENT SHALL MATCH BASE BUILDING STANDARDS AND SPECIFICATIONS, UNLESS NOTED OTHERWISE. ALL NEW EQUIPMENT SHALL BE COMPATIBLE WITH THE EXISTING SYSTEM.
10. ALL POWER DEVICE FACEPLATES, COVERS, AND DISCONNECTS SHALL BE LABELED WITH CIRCUIT NUMBER AND PANEL DESIGNATION.
11. ALL SURFACE MOUNTED INTERIOR CONDUIT SHALL BE EMT (ELECTRIC METAL TUBING) CONFIRM ROUTING OF ALL SURFACE MOUNTED RACEWAY WITH ARCHITECT.
12. CONTRACTOR SHALL WIRE NEW DOOR HOLDS FROM EXISTING POWER SOURCE CURRENTLY SERVING EXISTING DOOR HOLDS. IF REQUIRED, CONTRACTOR SHALL FURNISH AND INSTALL MODULES AND RELAYS TO INTEGRATE NEW DOOR HOLDS WITH EXISTING FIRE ALARM SYSTEM.
13. ALL NEW EQUIPMENT SHALL MATCH BASE BUILDING STANDARDS AND SPECIFICATIONS, UNLESS NOTED OTHERWISE. ALL NEW EQUIPMENT SHALL BE COMPATIBLE WITH THE EXISTING SYSTEM.

14. FIRE ALARM DEVICES AND COMPONENTS SHALL BE NEW AND WIRED BACK TO THE EXISTING FIRE ALARM CONTROL PANEL. CONTRACTOR TO PROVIDE ALL REQUIRED DEVICES AND EQUIPMENT NECESSARY TO EXPAND EXISTING SYSTEM. CONTRACTOR TO ENSURE ALL NEW DEVICES AND RELATED EQUIPMENT ARE COMPATIBLE WITH THE EXISTING SYSTEM. CONTRACTOR TO MATCH EXISTING DEVICE MOUNTING HEIGHTS WITHIN ADA REQUIREMENTS. WHERE EXISTING HEIGHTS DO NOT MEET CURRENT ADA REQUIREMENTS MOUNT NEW, RELOCATED AND REINSTALLED DEVICES AT HEIGHTS LISTED IN MTG HEIGHT DETAIL ON DRAWING E0. ALL FIRE ALARM STROBES TO BE SYNCHRONIZED WITH EXISTING BLDG STROBES. CONTRACTOR SHALL REPLACE ALL EXISTING FIRE ALARM DEVICES IF THEY ARE NOT SYNCHRONIZABLE. PROVIDE A COMPLETE TEST OF THE ENTIRE FIRE ALARM SYSTEM UPON COMPLETION OF THE INSTALLATION. THE SYSTEM SHALL MEET ALL REQUIREMENTS OF THE NFPA AND LOCAL CODES. COORDINATE EXACT REQUIREMENTS WITH LOCAL FIRE DEPARTMENT PRIOR TO WORK BEING PERFORMED.
15. CONTRACTOR SHALL PROVIDE AN NFPA 241 IMPAIRMENT PLAN TO THE AHJ & OWNER FOR REVIEW AND APPROVAL BEFORE COMMENCEMENT OF WORK.
16. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ANY AND ALL NEW FIRE ALARM MODULES, RELAYS AND ASSOCIATED EQUIPMENT TO ADD NEW FIRE ALARM DEVICES TO THE EXISTING SYSTEM.
17. CONTRACTOR SHALL FURNISH AND INSTALL FIRE RATED SEALANT FOR ALL CONDUITS PENETRATING NEW FIRE RATED STAIRWELLS.
18. ELECTRICAL CONTRACTOR SHALL WIRE NEW FIRE CURTAIN GROUP CONTROL PANEL TO EXISTING 120/208V CORRIDOR PANEL PNL4B. CONTRACTOR SHALL FURNISH AND INSTALL (1) NEW 20A/1P BREAKER WITHIN WITHIN PANEL TO POWER NEW CONTROL PANEL. BREAKER SHALL BE COMPATIBLE WITH EXISTING PANEL. CONTRACTOR SHALL FURNISH AND INSTALL (2) 4-CORE, 14 AWG STRANDED CONDUCTORS FROM GCP PANEL TO NEW CURTAIN. CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY FIRE ALARM MODULES, RELAYS, INITIATING DEVICES, SMOKE DETECTORS FOR NEW CURTAIN TO INTEGRATE WITH EXISTING TOLMAN SCHOOL FIRE ALARM CONTROL SYSTEM. CONFIRM GCP LOCATION AND OPTIONS WITH ARCHITECT.
19. ELECTRICAL CONTRACTOR SHALL WIRE NEW FIRE CURTAIN GROUP CONTROL PANEL TO EXISTING 120/208V CORRIDOR PANEL PNL3B. CONTRACTOR SHALL FURNISH AND INSTALL (1) NEW 20A/1P BREAKER WITHIN WITHIN PANEL TO POWER NEW CONTROL PANEL. BREAKER SHALL BE COMPATIBLE WITH EXISTING PANEL. CONTRACTOR SHALL FURNISH AND INSTALL (2) 4-CORE, 14 AWG STRANDED CONDUCTORS FROM GCP PANEL TO NEW CURTAIN. CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY FIRE ALARM MODULES, RELAYS, INITIATING DEVICES, SMOKE DETECTORS FOR NEW CURTAIN TO INTEGRATE WITH EXISTING TOLMAN SCHOOL FIRE ALARM CONTROL SYSTEM. CONFIRM GCP LOCATION AND OPTIONS WITH ARCHITECT.
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21. ELECTRICAL CONTRACTOR SHALL CONFIRM SPARE SPACE AND CAPACITY WITHIN EXISTING PANELS PNLBB, PNL2B, PNL3B, AND PNL4B. ELECTRICAL NOTES ARE BASED ON ENGINEERS VISUAL OBSERVATIONS ONLY. PANELS APPEAR TO HAVE SPARE SPACES. IF REQUIRED, CONTRACTOR SHALL UTILIZE SPARE SPACES WITHIN EXISTING PANEL PNLBB TO FEED NEW SMOKE CURTAIN CONTROL PANELS ON FLOORS 2, 3, AND FOUR.



9 Bsmt Panel PNLBB
Scale: 1/4"=1'-0"



A Basement Key Plan
Scale: None

WB&A
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Hanover, MA 02339
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www.wbaengineers.com

FIRE CODE UPGRADE TO THE
WILLIAM E TOLMAN HIGH SCHOOL
150 EXCHANGE STREET, Pawtucket, RI 02861

BREWSTER THORNTON GROUP ARCHITECTS
LLP

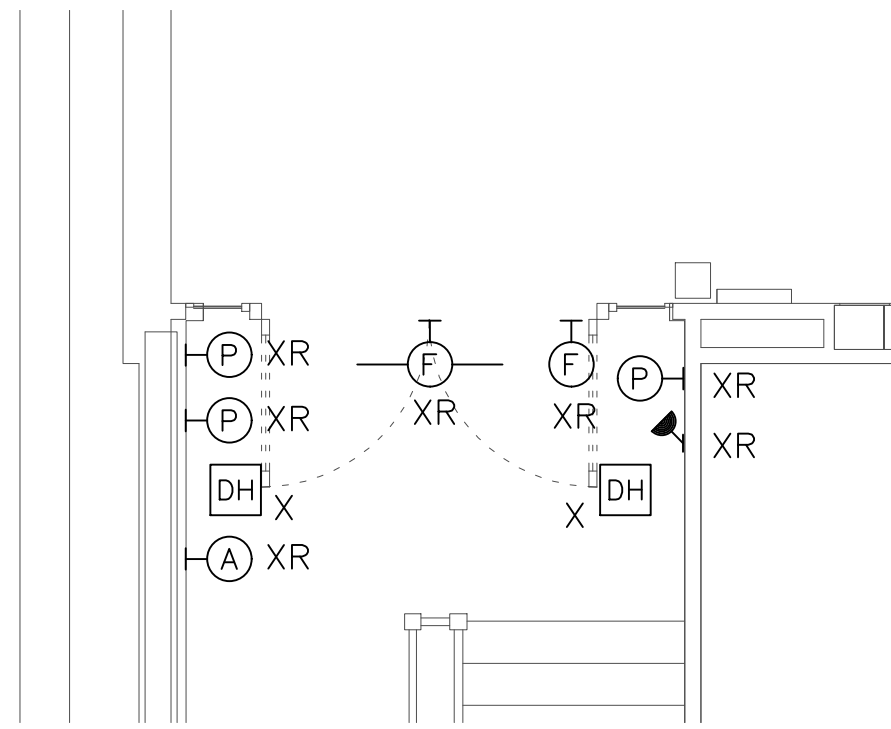
317 Iron Horse Way,
Suite 202
Providence, RI 02908

401.861.1600
brewsterthornton.com

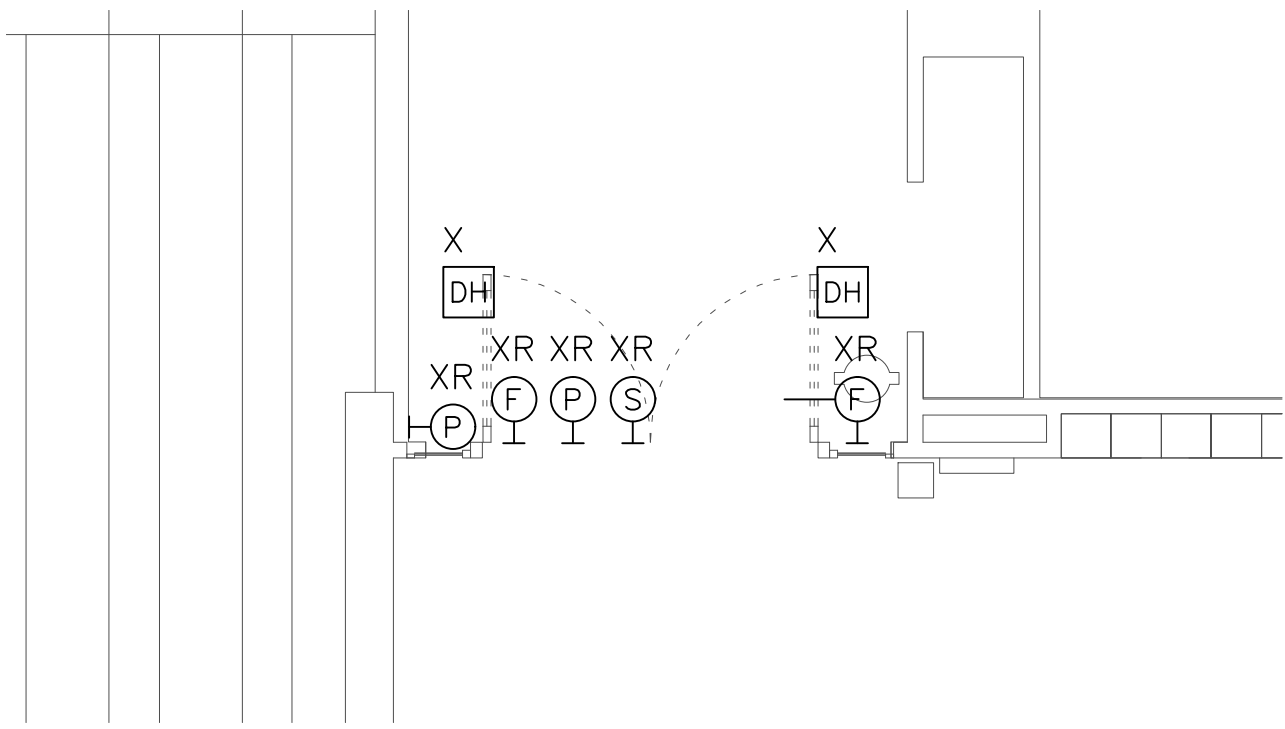
JOB NO. 24115	DATE 11.25.24
ISSUE : RIDE REVIEW	
NO.	REVISION DESCRIPTION
1	Addendum #1

SHEET TITLE
ELECTRICAL BASEMENT PLANS

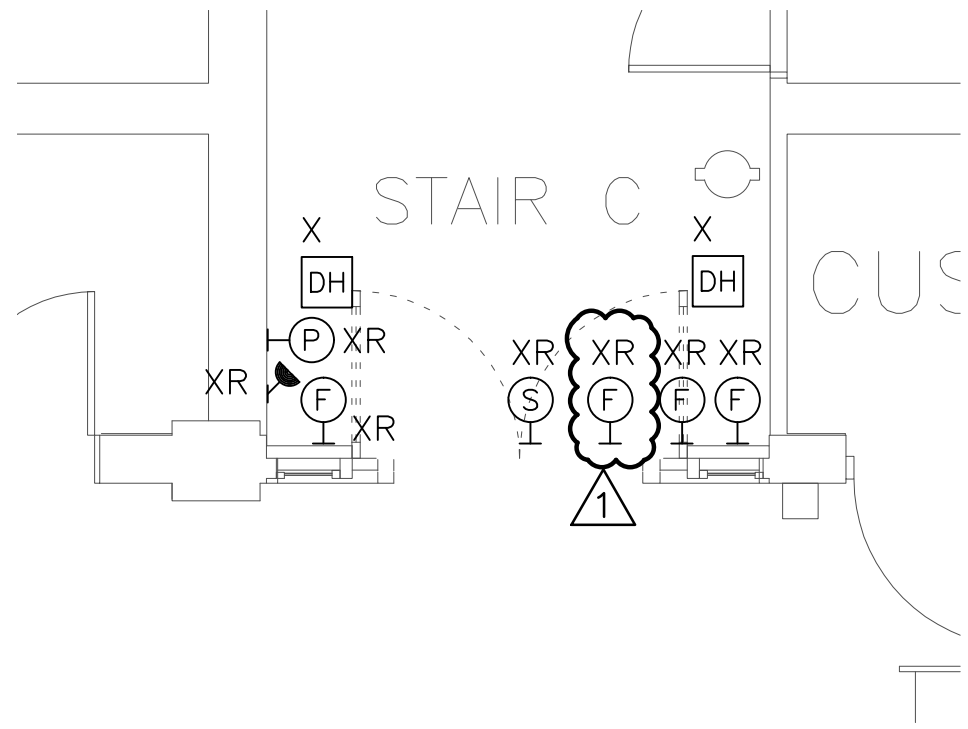
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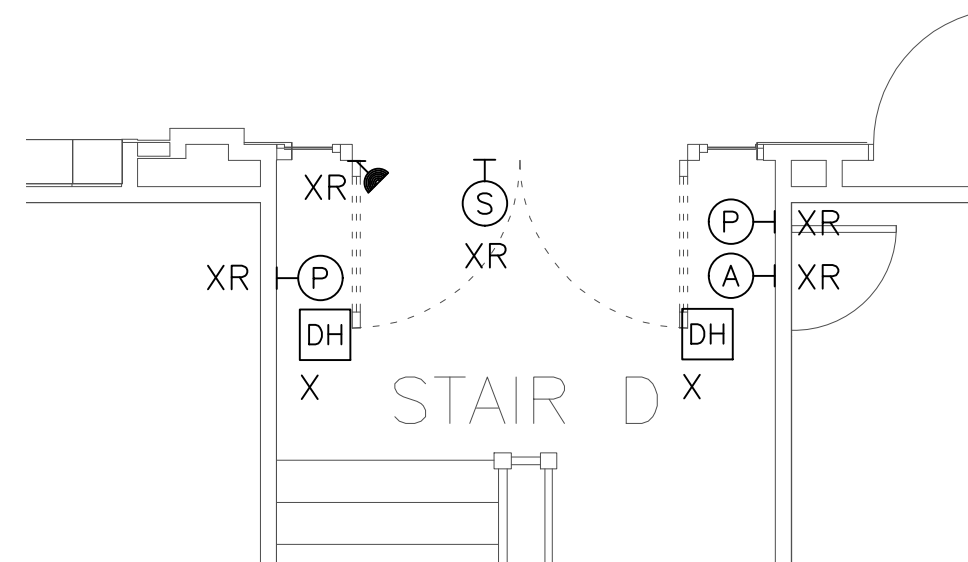
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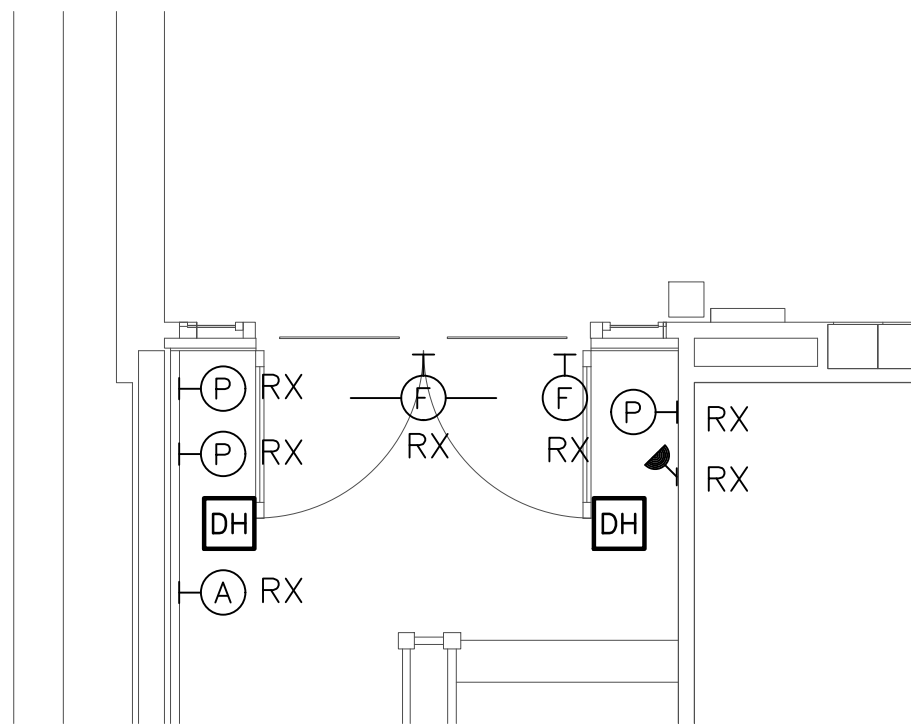
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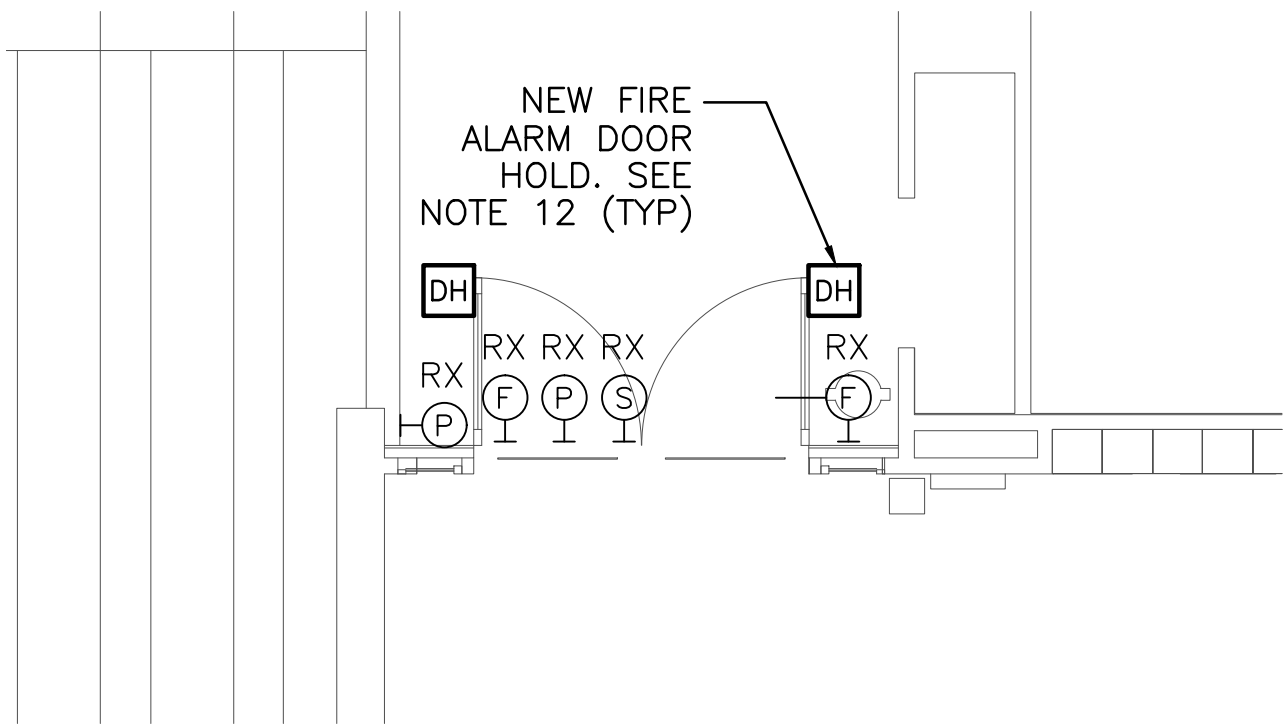
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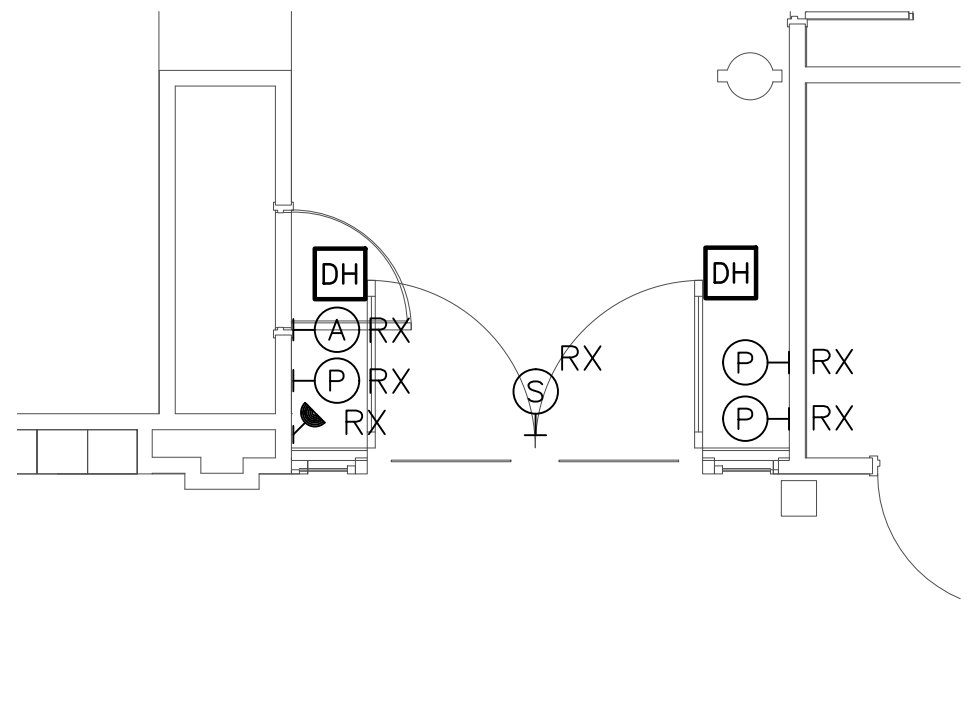
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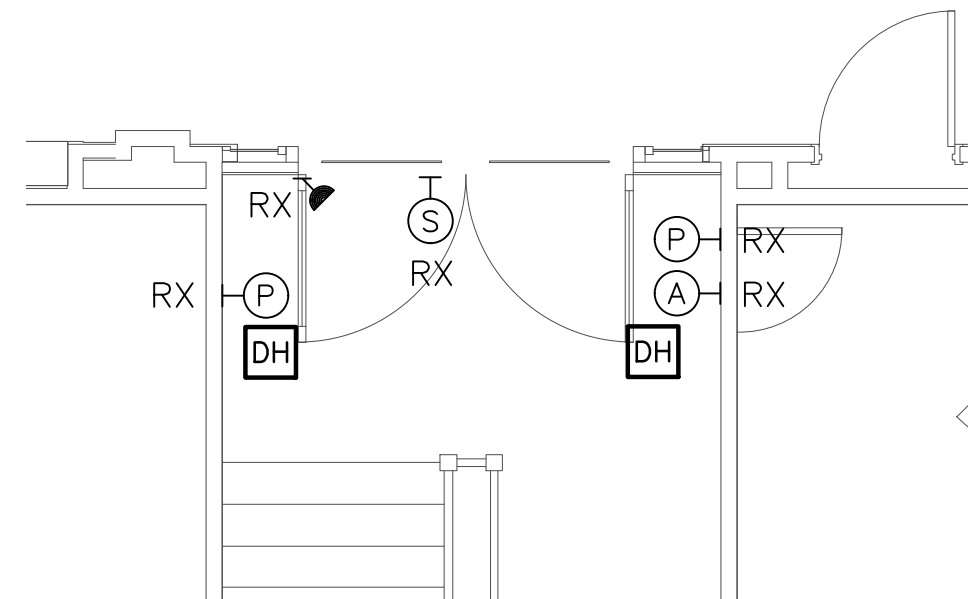
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6 1st Fl Proposed Stair B
Scale: 1/4"=1'-0"



7 1st Fl Proposed Stair C
Scale: 1/4"=1'-0"



8 1st Fl Proposed Stair D
Scale: 1/4"=1'-0"

ELECTRICAL DEVICE KEY:

- A** AUDIO LOW VOLTAGE DEVICE, JUNCTION BOX AND RACEWAY. SEE KEY NOTE 1
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- P** 120V POWER JUNCTION BOX, LB, & RACEWAY
- S** SECURITY LOW VOLTAGE DEVICE, JUNCTION BOX AND RACEWAY. SEE KEY NOTE 1
- DH** FIRE ALARM DOOR HOLD DEVICE
- FAPS** FIRE ALARM POWER SUPPLY
- CTRL** BUILDING SYSTEM CONTROL PANEL, JUNCTION BOX, RACEWAY. SEE KEY NOTE 1
- FGGCP** NEW FIRE ALARM CURTAIN GROUP CONTROL PANEL. SEE ELECTRICAL NOTE 18
- ▲▲** SURFACE MOUNTED EMERGENCY FIXTURE

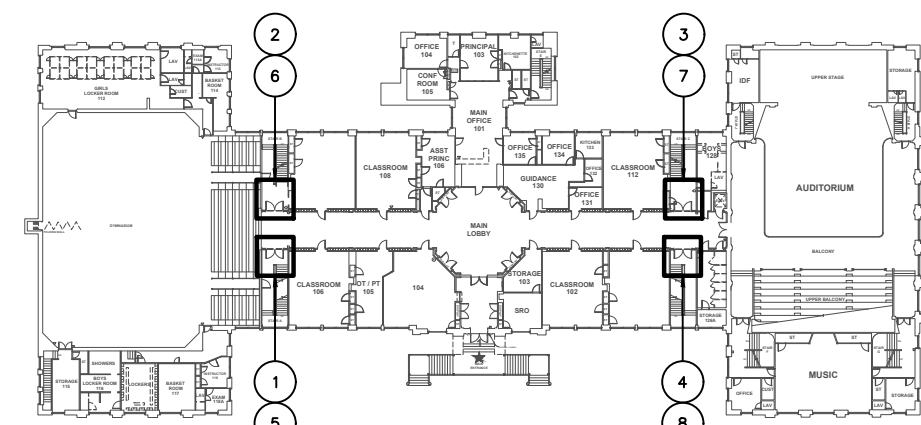
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21. ELECTRICAL CONTRACTOR SHALL CONFIRM SPARE SPACE AND CAPACITY WITHIN EXISTING PANELS PNLBB, PNL2B, PNL3B, AND PNL4B. ELECTRICAL NOTES ARE BASED ON ENGINEERS VISUAL OBSERVATIONS ONLY. PANELS APPEAR TO HAVE SPARE SPACES. IF REQUIRED, CONTRACTOR SHALL UTILIZE SPARE SPACES WITHIN EXISTING PANEL PNLBB TO FEED NEW SMOKE CURTAIN CONTROL PANELS ON FLOORS 2, 3, AND FOUR.



A 1st Floor Key Plan
Scale: None

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**FIRE CODE UPGRADE TO THE
WILLIAM E TOLMAN HIGH SCHOOL**
150 EXCHANGE STREET, Pawtucket, RI 02861

**BREWSTER
THORNTON
GROUP
ARCHITECTS** LLP

317 Iron Horse Way,
Suite 202
Providence, RI 02908

401.861.1600
brewsterthornton.com

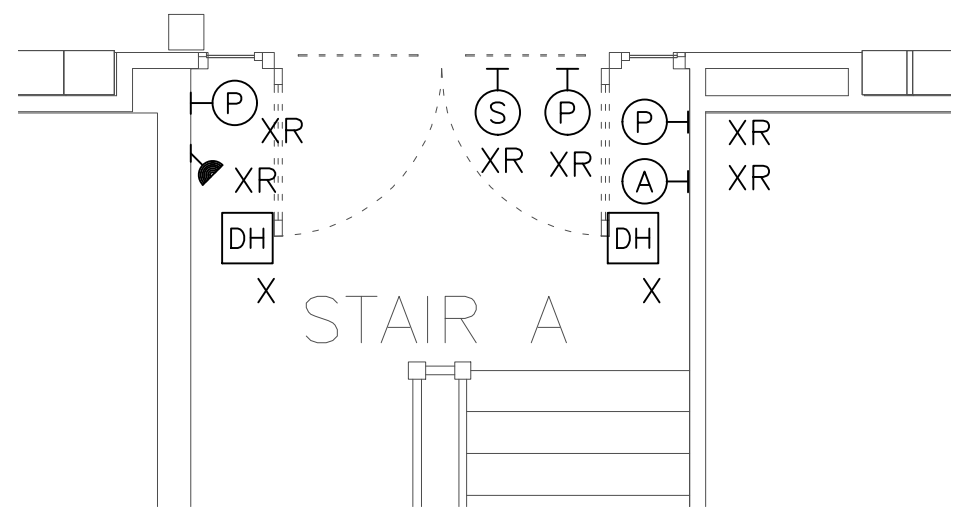
JOB NO. **24115** DATE **11.25.24**

ISSUE: **RIDE REVIEW**

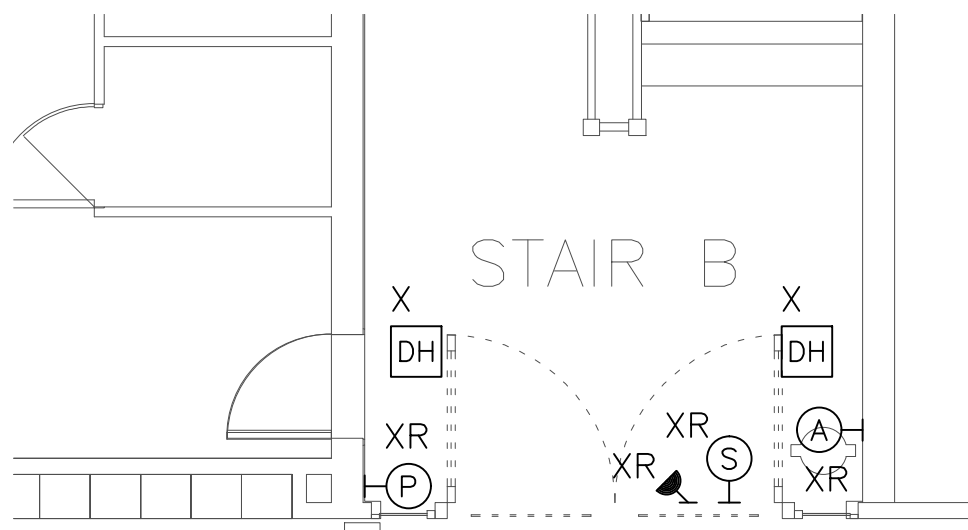
NO.	REVISION DESCRIPTION	DATE
1	Addendum #1	01/08/25

SHEET TITLE
**ELECTRICAL
1st FLOOR
PLANS**

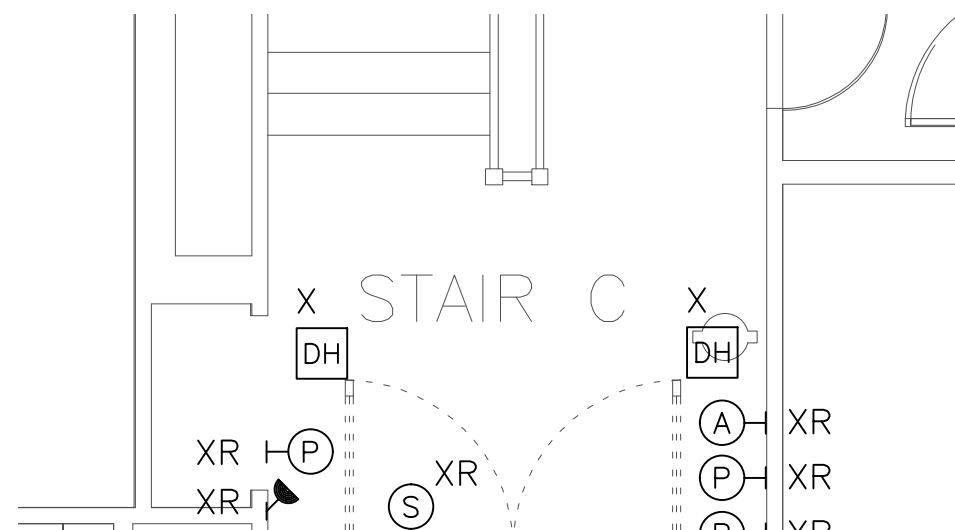
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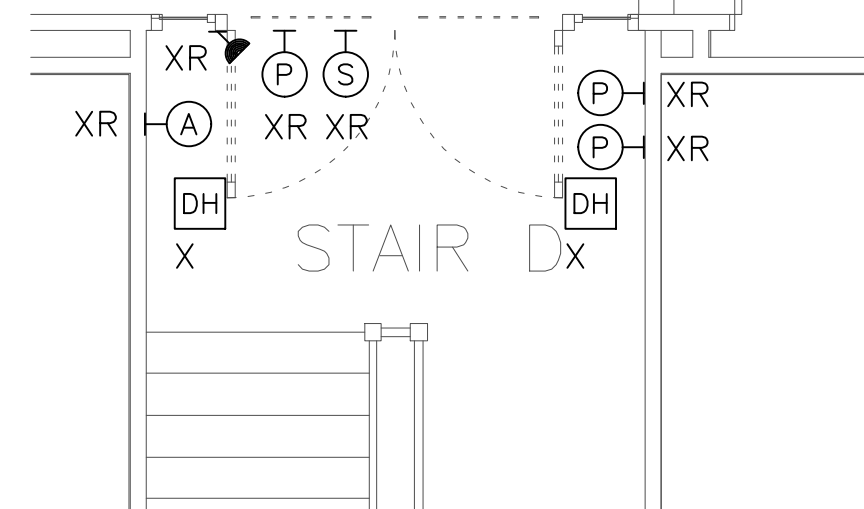
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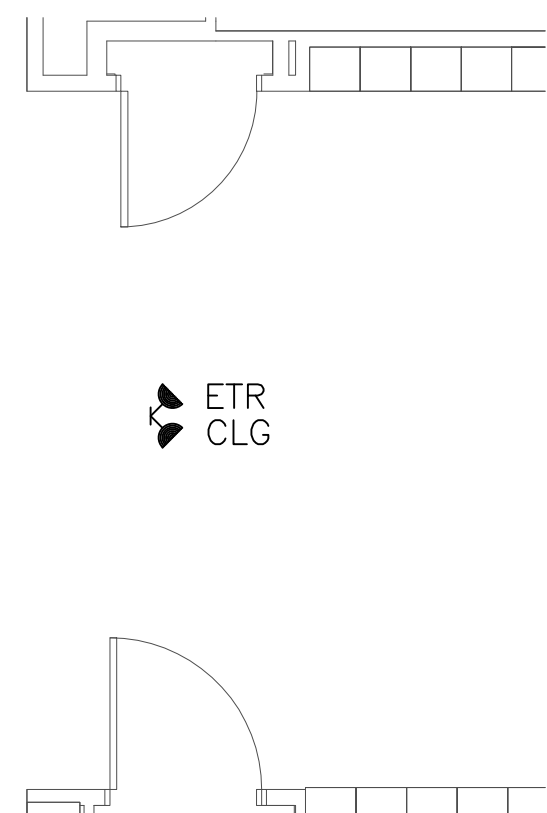
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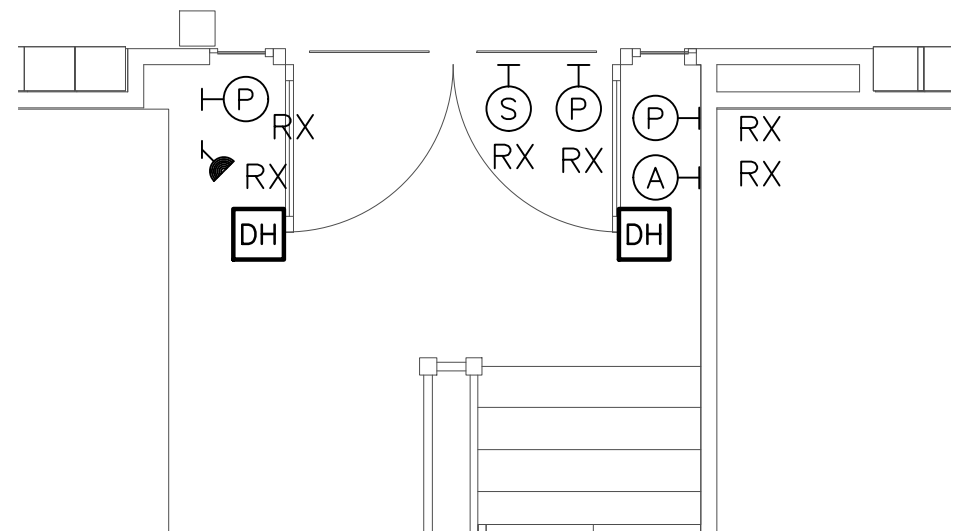
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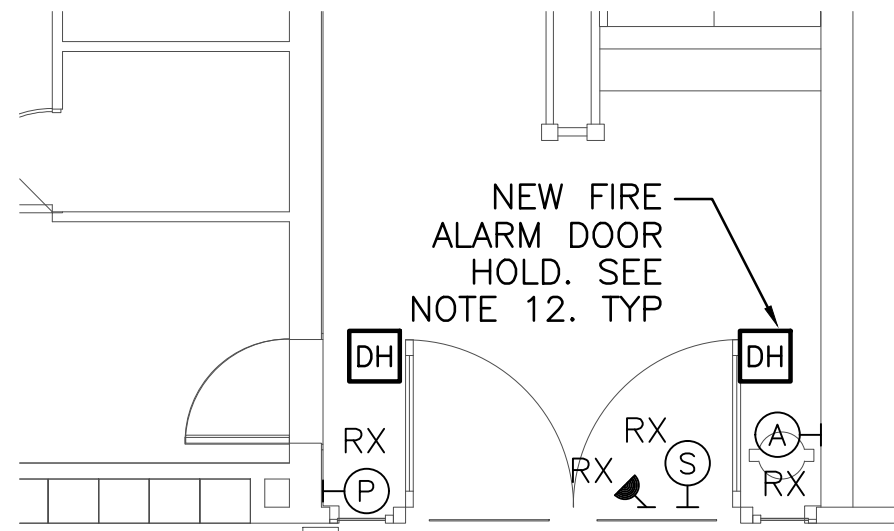
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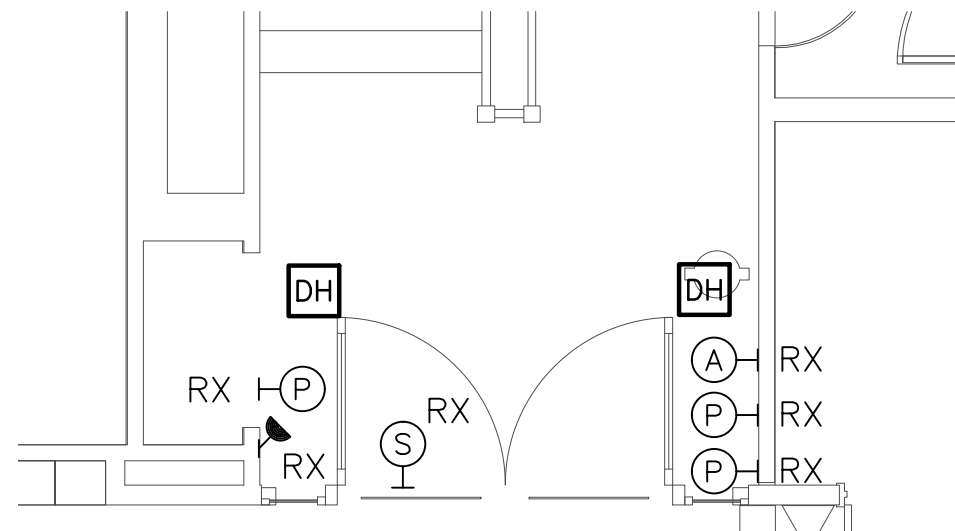
5 2nd Fl Existing Corr
Scale: 1/4"=1'-0"



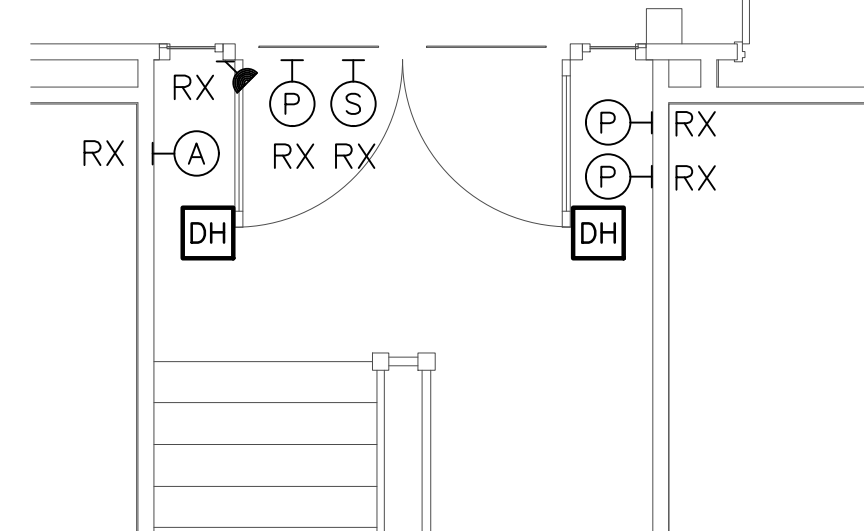
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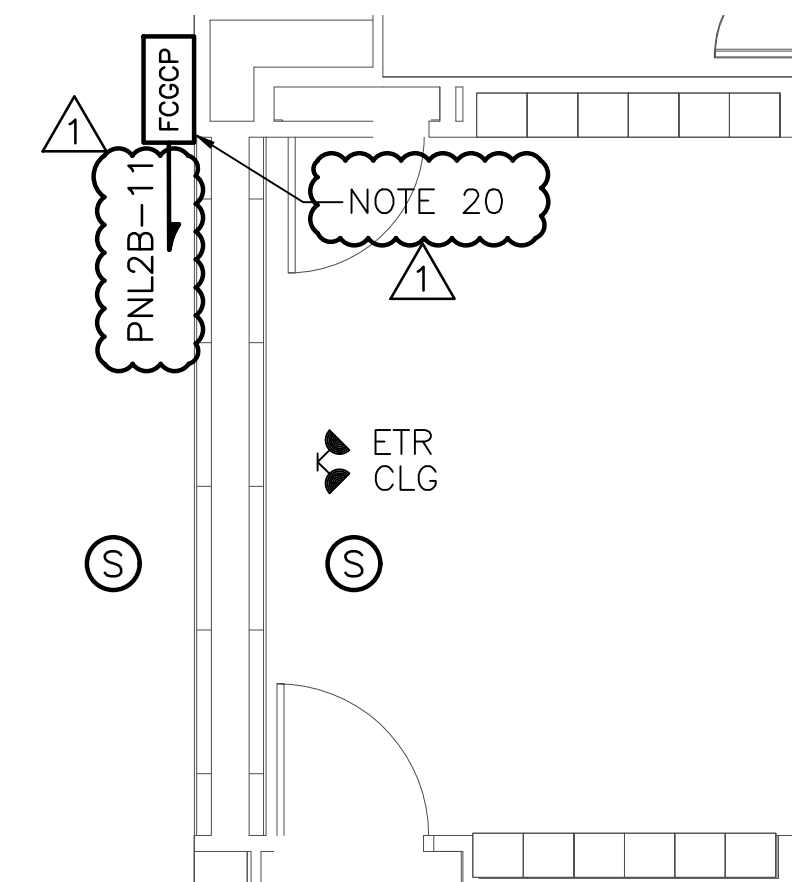
7 2nd Fl New Stair B
Scale: 1/4"=1'-0"



8 2nd Fl New Stair C
Scale: 1/4"=1'-0"



9 2nd Fl New Stair D
Scale: 1/4"=1'-0"



10 2nd Fl New Corr
Scale: 1/4"=1'-0"

ELECTRICAL DEVICE KEY:

- (A) AUDIO LOW VOLTAGE DEVICE, JUNCTION BOX AND RACEWAY. SEE KEY NOTE 1
- (F) FIRE ALARM JUNCTION BOX, LB, & RACEWAY
- (P) 120V POWER JUNCTION BOX, LB, & RACEWAY
- (S) SECURITY LOW VOLTAGE DEVICE, JUNCTION BOX AND RACEWAY. SEE KEY NOTE 1
- (DH) FIRE ALARM DOOR HOLD DEVICE
- (FAPS) FIRE ALARM POWER SUPPLY
- (CTRL) BUILDING SYSTEM CONTROL PANEL, JUNCTION BOX, RACEWAY. SEE KEY NOTE 1
- (FGGCP) NEW FIRE ALARM CURTAIN GROUP CONTROL PANEL. SEE ELECTRICAL NOTE 18
- ▲▲ SURFACE MOUNTED EMERGENCY FIXTURE

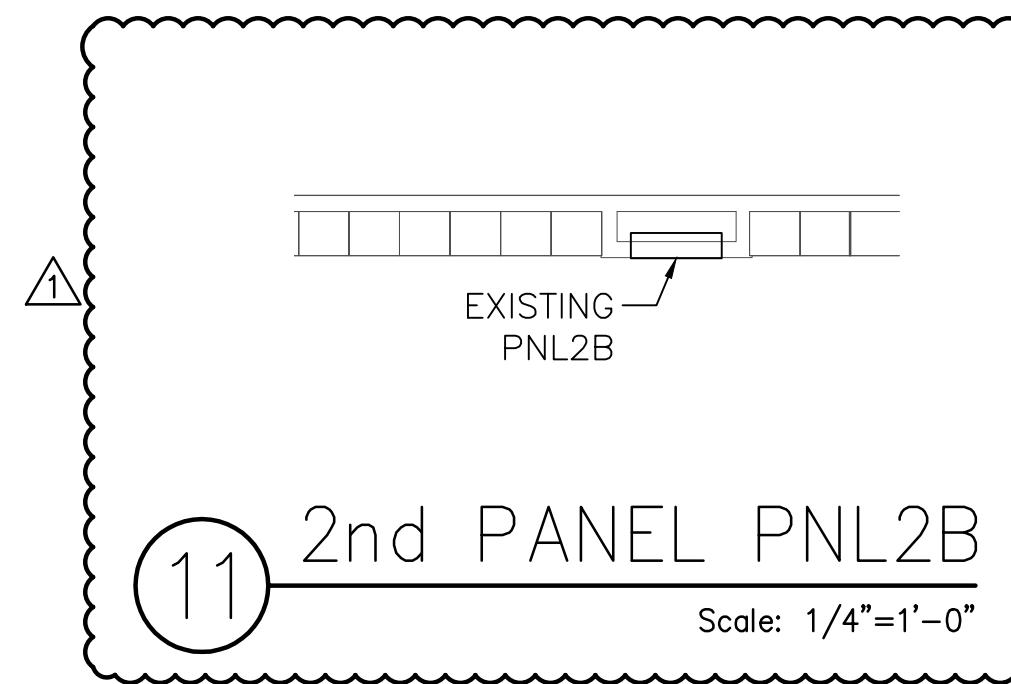
KEY NOTES:

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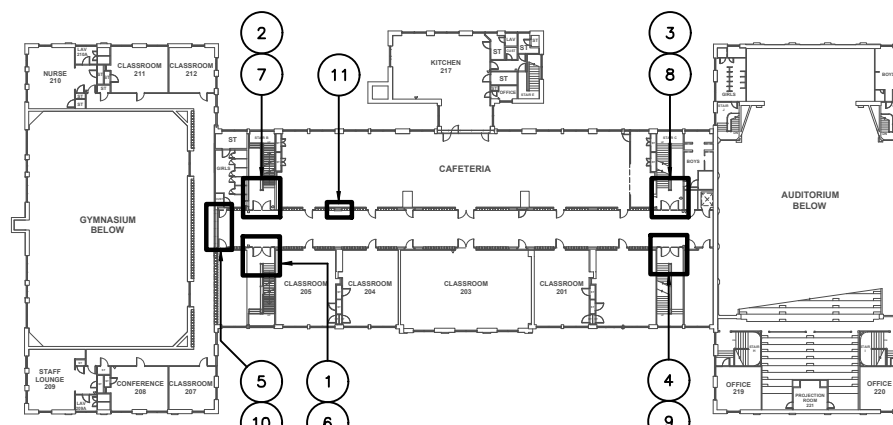
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6. DISCONNECT, MAKE SAFE, AND REMOVE ALL TEMPORARY AND ABANDONED WIRE WITHIN THE LIMIT OF WORK.
7. ELECTRICAL CONTRACTOR SHALL RELOCATE ANY AND ALL EXISTING ELECTRICAL DEVICES AND RACEWAY WITHIN AREA OF RENOVATION. CONFIRM AND COORDINATE RENOVATION SCOPE WITH ARCHITECT. EXTEND AND CONNECT EXISTING WIRING AND RACEWAY TO NEW LOCATION OF RELOCATED EQUIPMENT. CONTRACTOR SHALL EVALUATE CONDITION OF EXISTING WIRING AND RACEWAY AND REPLACE BACK TO SOURCE IF NECESSARY. CONTRACTOR SHALL REPLACE EXISTING WIRING, BACK TO SOURCE, IF EXISTING EXTENDED WIRING DOES NOT REACH LOCATION OF RELOCATED EQUIPMENT.
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13. ALL NEW EQUIPMENT SHALL MATCH BASE BUILDING STANDARDS AND SPECIFICATIONS, UNLESS NOTED OTHERWISE. ALL NEW EQUIPMENT SHALL BE COMPATIBLE WITH THE EXISTING SYSTEM.

14. FIRE ALARM DEVICES AND COMPONENTS SHALL BE NEW AND WIRED BACK TO THE EXISTING FIRE ALARM CONTROL PANEL. CONTRACTOR TO PROVIDE ALL REQUIRED DEVICES AND EQUIPMENT NECESSARY TO EXPAND EXISTING SYSTEM. CONTRACTOR TO ENSURE ALL NEW DEVICES AND RELATED EQUIPMENT ARE COMPATIBLE WITH THE EXISTING SYSTEM. CONTRACTOR TO MATCH EXISTING DEVICE MOUNTING HEIGHTS WITHIN ADA REQUIREMENTS. WHERE EXISTING HEIGHTS DO NOT MEET CURRENT ADA REQUIREMENTS MOUNT NEW, RELOCATED AND REINSTALLED DEVICES AT HEIGHTS LISTED IN MTG HEIGHT DETAIL ON DRAWING E0. ALL FIRE ALARM STROBES TO BE SYNCHRONIZED WITH EXISTING BLDG STROBES. CONTRACTOR SHALL REPLACE ALL EXISTING FIRE ALARM DEVICES IF THEY ARE NOT SYNCHRONIZABLE. PROVIDE A COMPLETE TEST OF THE ENTIRE FIRE ALARM SYSTEM UPON COMPLETION OF THE INSTALLATION THE SYSTEM SHALL MEET ALL REQUIREMENTS OF THE NFPA AND LOCAL CODES. COORDINATE EXACT REQUIREMENTS WITH LOCAL FIRE DEPARTMENT PRIOR TO WORK BEING PERFORMED.
15. CONTRACTOR SHALL PROVIDE AN NFPA 241 IMPAIRMENT PLAN TO THE AHJ & OWNER FOR REVIEW AND APPROVAL BEFORE COMMENCEMENT OF WORK.
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20. ELECTRICAL CONTRACTOR SHALL WIRE NEW FIRE CURTAIN GROUP CONTROL PANEL TO EXISTING 120/208V CORRIDOR PANEL PNL2B. CONTRACTOR SHALL FURNISH AND INSTALL (1) NEW 20A/1P BREAKER WITHIN WITHIN PANEL TO POWER NEW CONTROL PANEL. BREAKER SHALL BE COMPATIBLE WITH EXISTING PANEL. CONTRACTOR SHALL FURNISH AND INSTALL (2) 4-CORE, 14 AWG STRANDED CONDUCTORS FROM GCP PANEL TO NEW CURTAIN. CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY FIRE ALARM MODULES, RELAYS, INITIATING DEVICES, SMOKE DETECTORS FOR NEW CURTAIN TO INTEGRATE WITH EXISTING TOLMAN SCHOOL FIRE ALARM CONTROL SYSTEM. CONFIRM GCP LOCATION AND OPTIONS WITH ARCHITECT.
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11 2nd PANEL PNL2B
Scale: 1/4"=1'-0"



A 2nd Floor Key Plan
Scale: None

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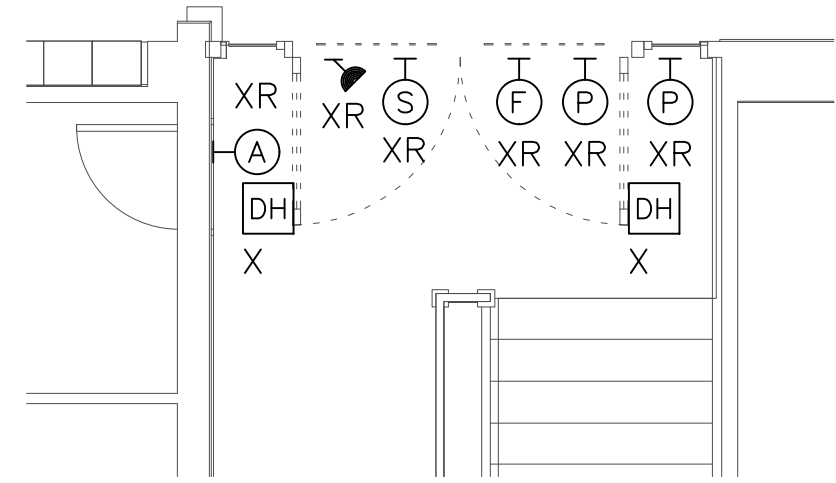
JOB NO.		DATE
24115		11.25.24
ISSUE : RIDE REVIEW		
NO.	REVISION DESCRIPTION	DATE
1	Addendum #1	01/08/25

SHEET TITLE
**ELECTRICAL
2nd FLOOR
PLANS**

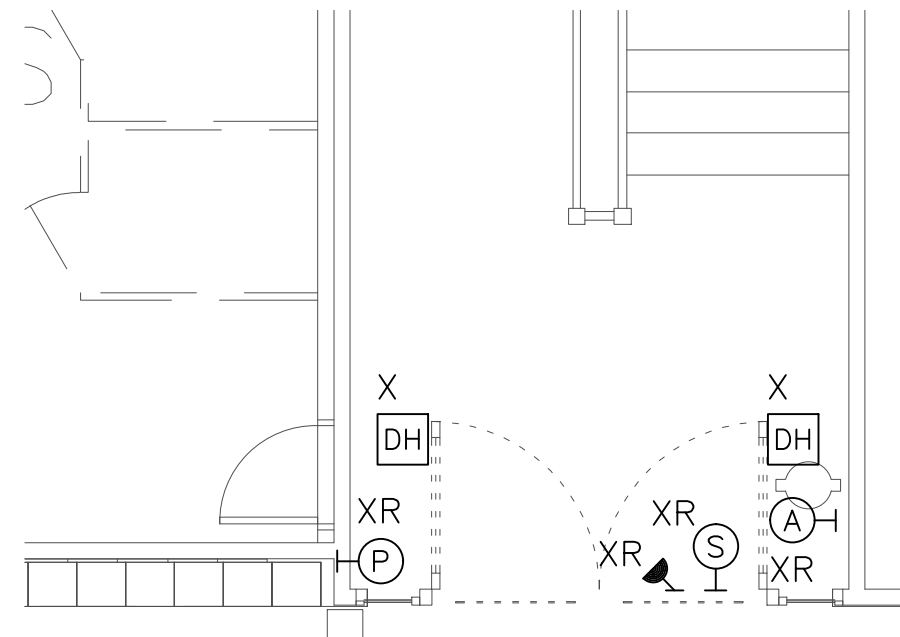
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**FIRE CODE UPGRADE TO THE
WILLIAM E TOLMAN HIGH SCHOOL**
150 EXCHANGE STREET, Pawucket, RI 02861

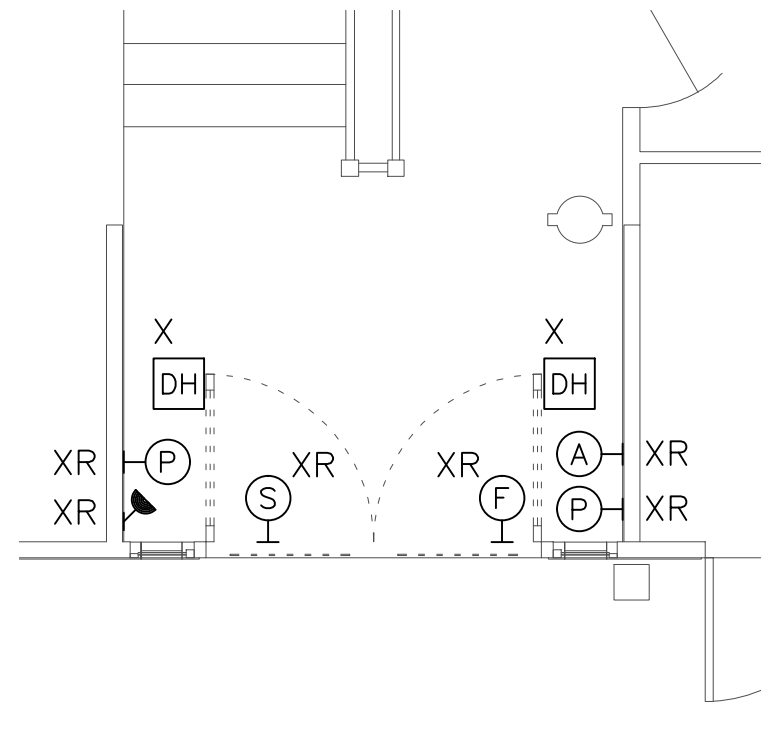
**BREWSTER
THORNTON
GROUP
ARCHITECTS**
LLP



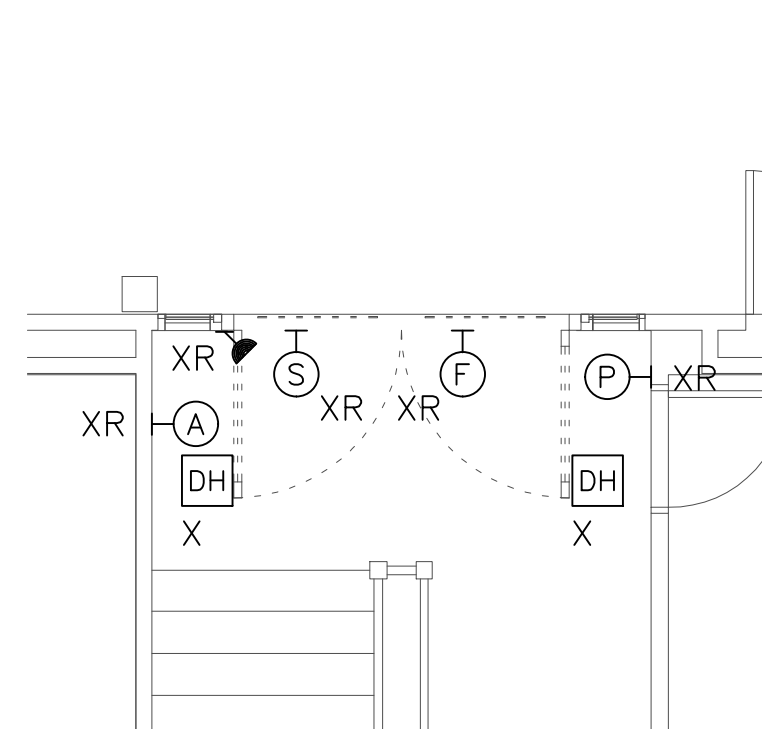
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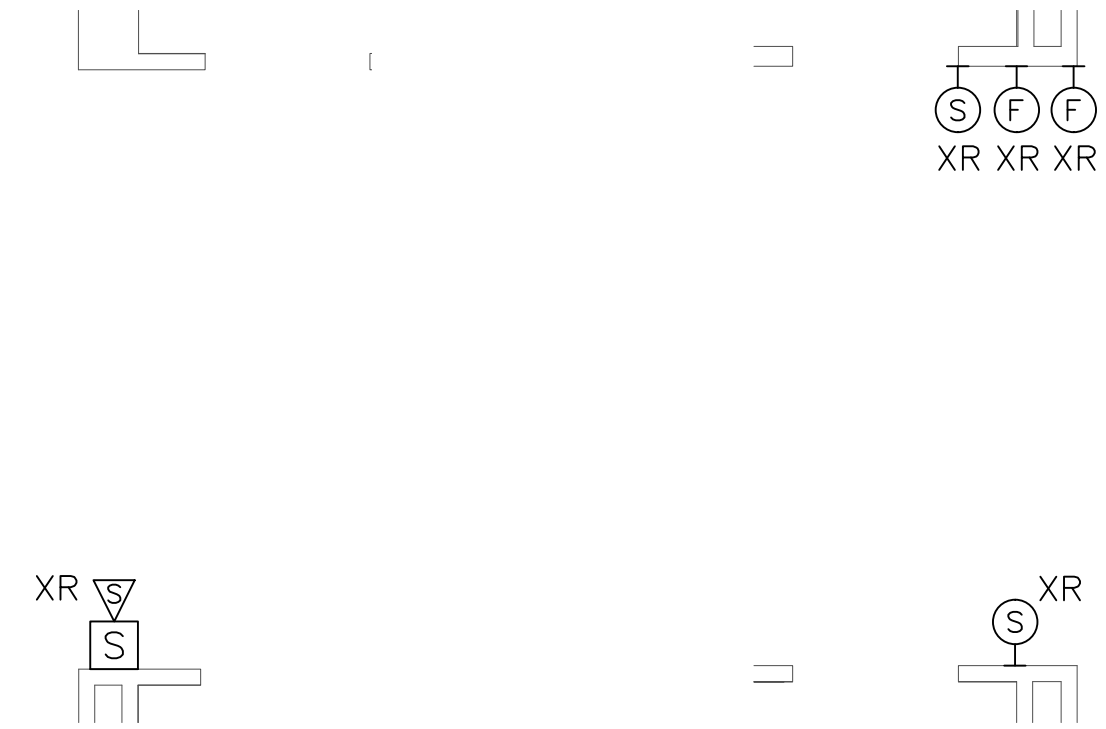
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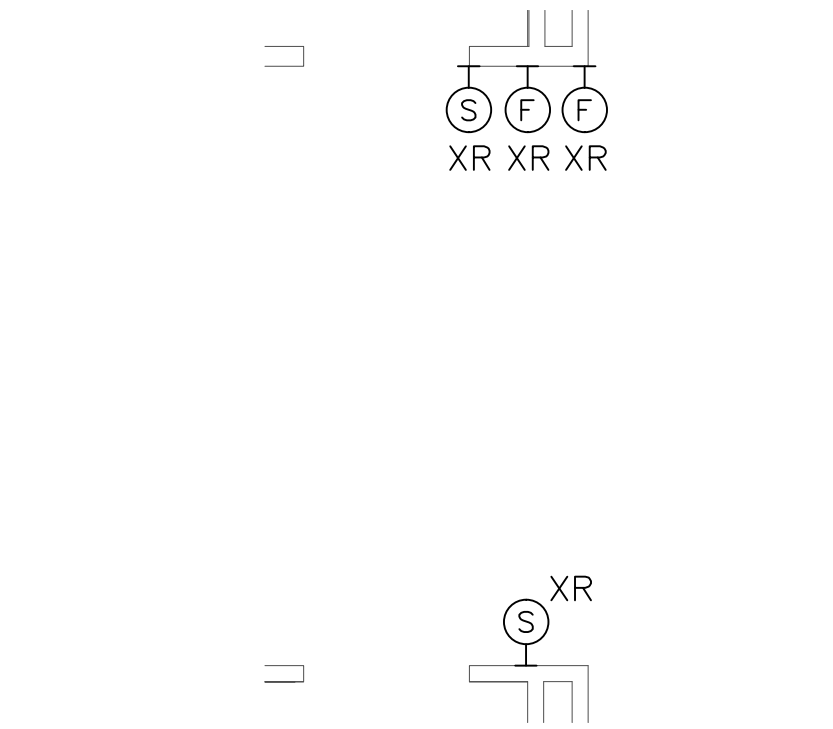
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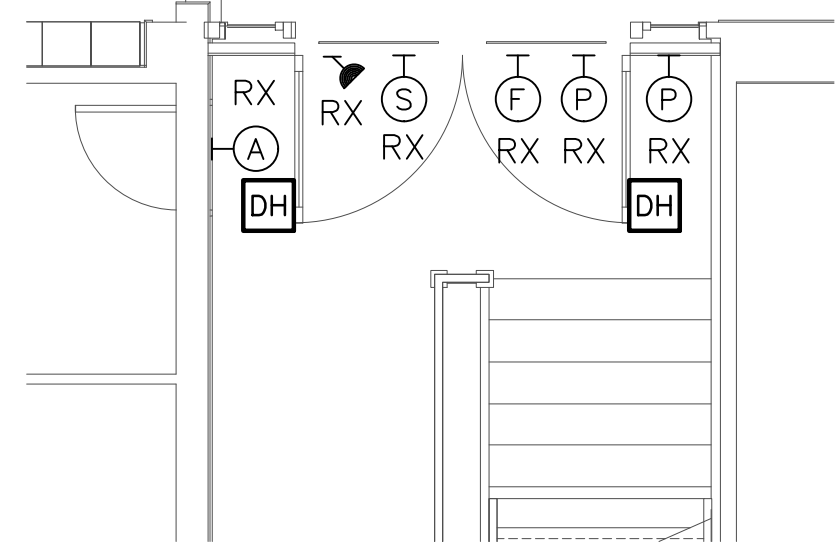
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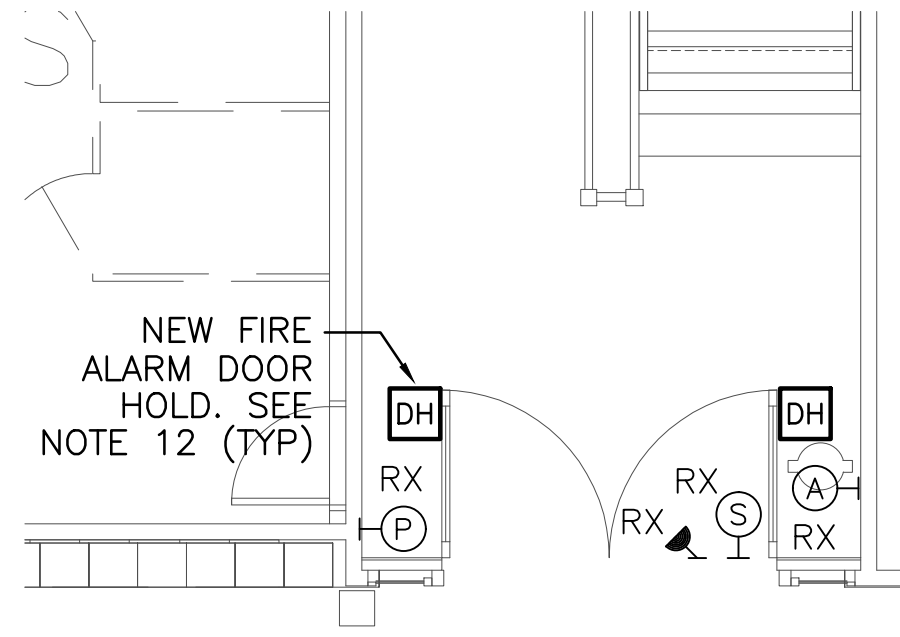
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Scale: 1/4"=1'-0"



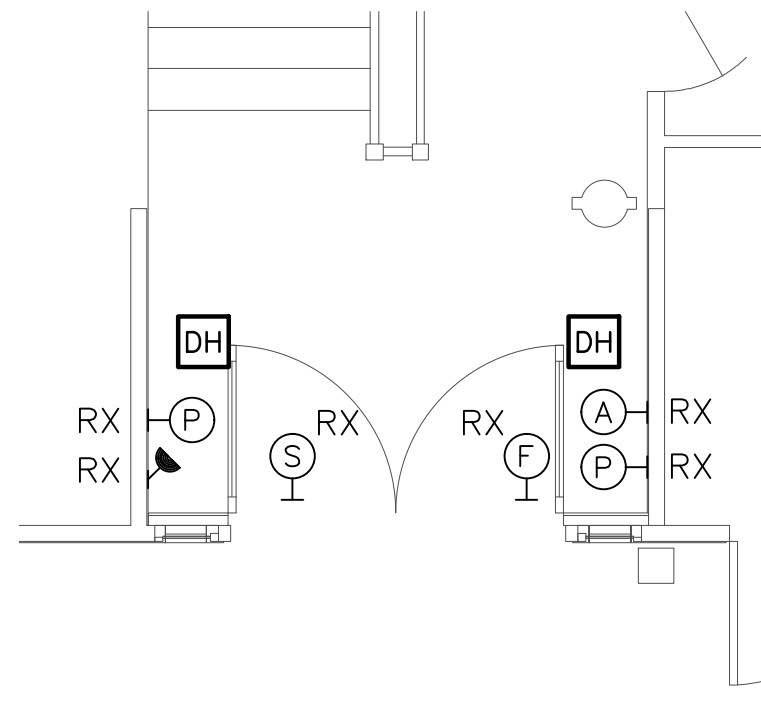
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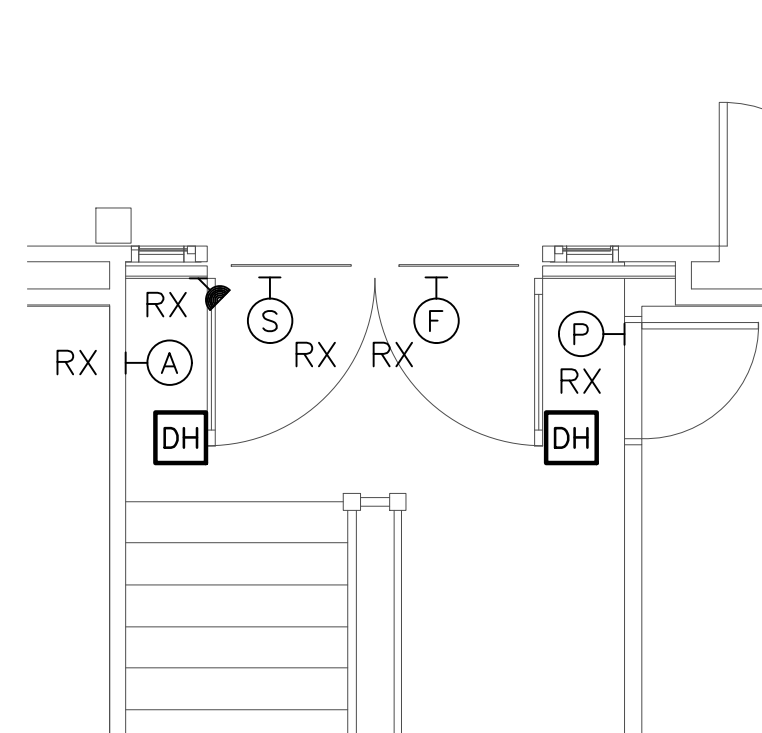
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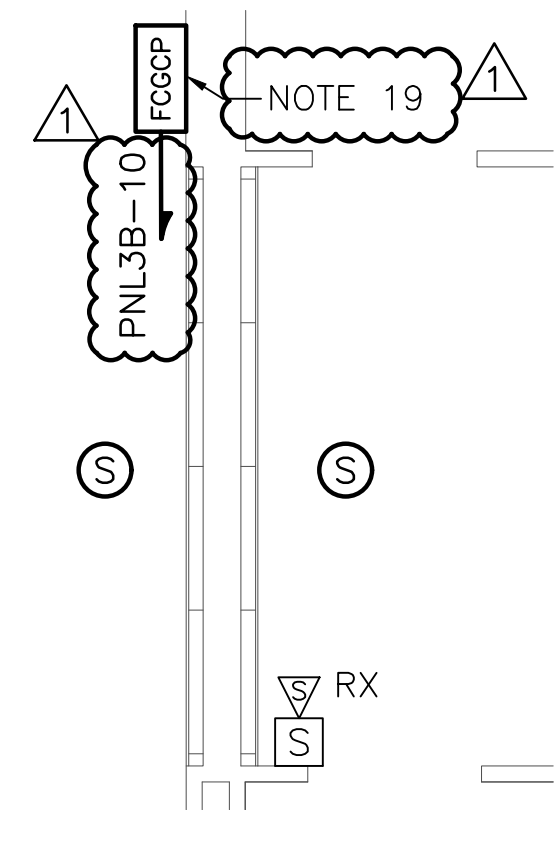
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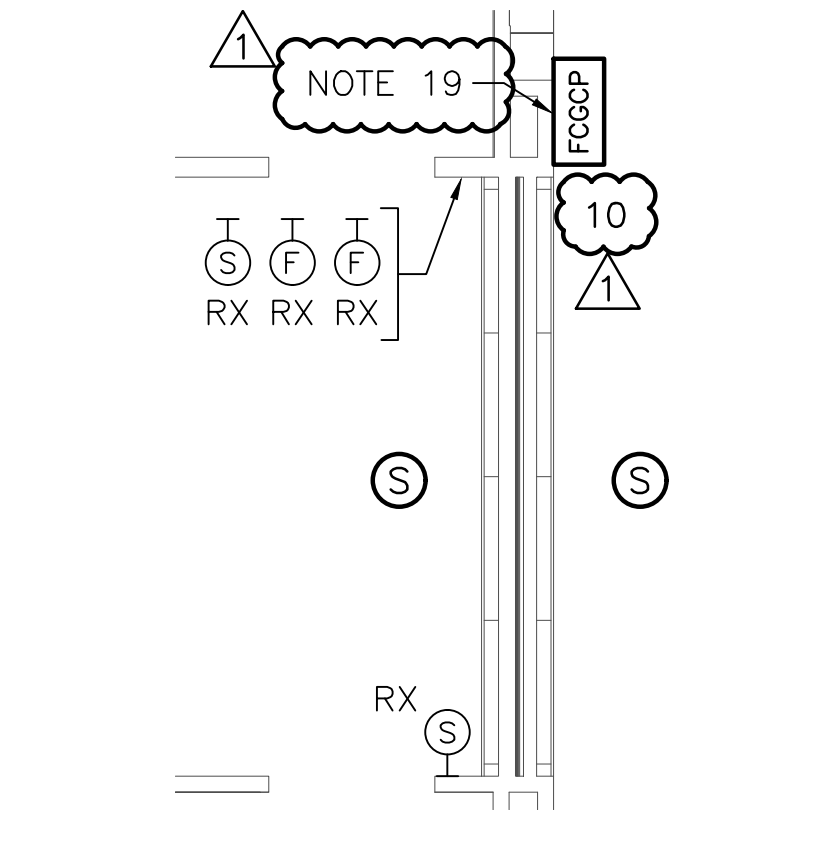
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Scale: 1/4"=1'-0"



10 3rd Fl New Stair D
Scale: 1/4"=1'-0"



11 3rd Fl New Corr
Scale: 1/4"=1'-0"



12 3rd Fl New Corr
Scale: 1/4"=1'-0"

ELECTRICAL DEVICE KEY:

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- 120V POWER JUNCTION BOX, LB, & RACEWAY
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- FIRE ALARM DOOR HOLD DEVICE
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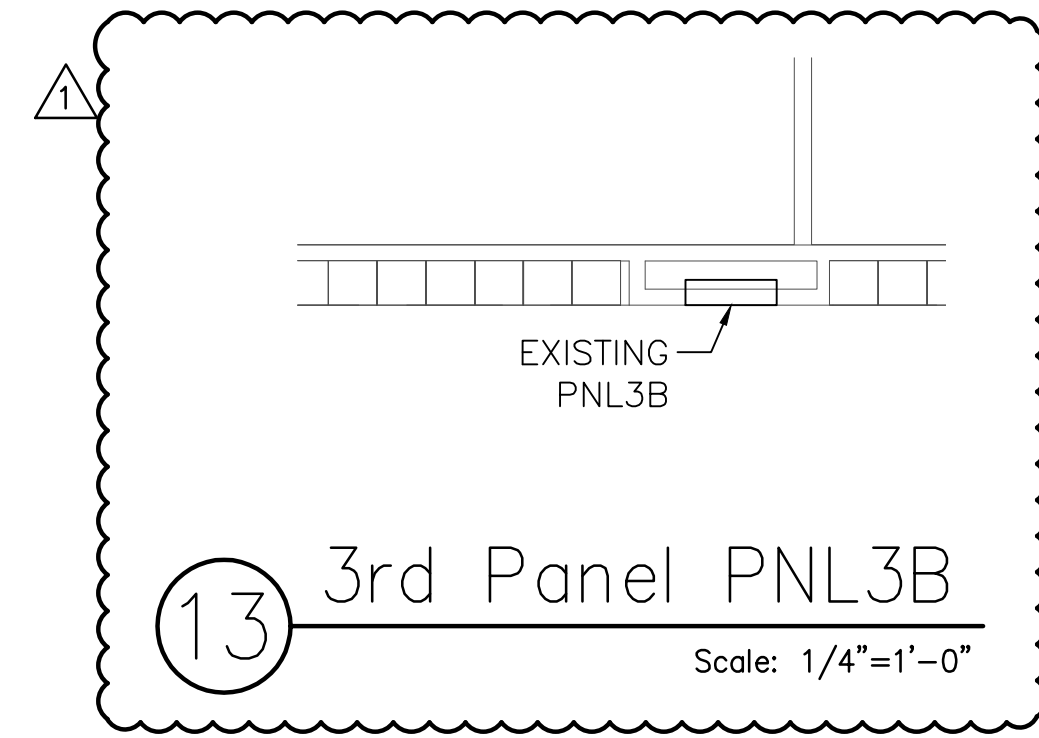
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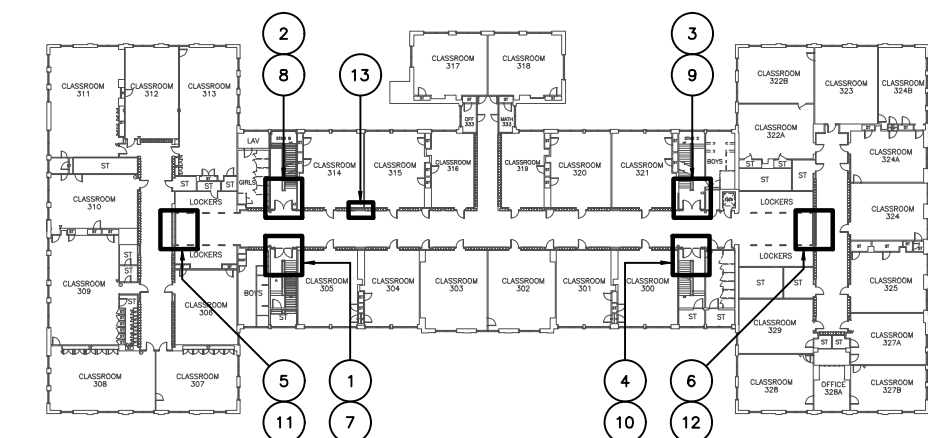
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17. CONTRACTOR SHALL FURNISH AND INSTALL FIRE RATED SEALANT FOR ALL CONDUITS PENETRATING NEW FIRE RATED STAIRWELLS.
18. ELECTRICAL CONTRACTOR SHALL WIRE NEW FIRE CURTAIN GROUP CONTROL PANEL TO EXISTING 120/208V CORRIDOR PANEL PNL4B. CONTRACTOR SHALL FURNISH AND INSTALL (1) NEW 20A/1P BREAKER WITHIN WITHIN PANEL TO POWER NEW CONTROL PANEL. BREAKER SHALL BE COMPATIBLE WITH EXISTING PANEL. CONTRACTOR SHALL FURNISH AND INSTALL (2) 4-CORE, 14 AWG STRANDED CONDUCTORS FROM GCP PANEL TO NEW CURTAIN. CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY FIRE ALARM MODULES, RELAYS, INITIATING DEVICES, SMOKE DETECTORS FOR NEW CURTAIN TO INTEGRATE WITH EXISTING TOLMAN SCHOOL FIRE ALARM CONTROL SYSTEM. CONFIRM GCP LOCATION AND OPTIONS WITH ARCHITECT.
19. ELECTRICAL CONTRACTOR SHALL WIRE NEW FIRE CURTAIN GROUP CONTROL PANEL TO EXISTING 120/208V CORRIDOR PANEL PNL3B. CONTRACTOR SHALL FURNISH AND INSTALL (1) NEW 20A/1P BREAKER WITHIN WITHIN PANEL TO POWER NEW CONTROL PANEL. BREAKER SHALL BE COMPATIBLE WITH EXISTING PANEL. CONTRACTOR SHALL FURNISH AND INSTALL (2) 4-CORE, 14 AWG STRANDED CONDUCTORS FROM GCP PANEL TO NEW CURTAIN. CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY FIRE ALARM MODULES, RELAYS, INITIATING DEVICES, SMOKE DETECTORS FOR NEW CURTAIN TO INTEGRATE WITH EXISTING TOLMAN SCHOOL FIRE ALARM CONTROL SYSTEM. CONFIRM GCP LOCATION AND OPTIONS WITH ARCHITECT.
20. ELECTRICAL CONTRACTOR SHALL WIRE NEW FIRE CURTAIN GROUP CONTROL PANEL TO EXISTING 120/208V CORRIDOR PANEL PNL2B. CONTRACTOR SHALL FURNISH AND INSTALL (1) NEW 20A/1P BREAKER WITHIN WITHIN PANEL TO POWER NEW CONTROL PANEL. BREAKER SHALL BE COMPATIBLE WITH EXISTING PANEL. CONTRACTOR SHALL FURNISH AND INSTALL (2) 4-CORE, 14 AWG STRANDED CONDUCTORS FROM GCP PANEL TO NEW CURTAIN. CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY FIRE ALARM MODULES, RELAYS, INITIATING DEVICES, SMOKE DETECTORS FOR NEW CURTAIN TO INTEGRATE WITH EXISTING TOLMAN SCHOOL FIRE ALARM CONTROL SYSTEM. CONFIRM GCP LOCATION AND OPTIONS WITH ARCHITECT.
21. ELECTRICAL CONTRACTOR SHALL CONFIRM SPARE SPACE AND CAPACITY WITHIN EXISTING PANELS PNLBB, PNL2B, PNL3B, AND PNL4B. ELECTRICAL NOTES ARE BASED ON ENGINEERS VISUAL OBSERVATIONS ONLY. PANELS APPEAR TO HAVE SPARE SPACES. IF REQUIRED, CONTRACTOR SHALL UTILIZE SPARE SPACES WITHIN EXISTING PANEL PNLBB TO FEED NEW SMOKE CURTAIN CONTROL PANELS ON FLOORS 2, 3, AND FOUR.



13 3rd Panel PNL3B
Scale: 1/4"=1'-0"



A 3rd Floor Key Plan
Scale: None

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JOB NO. 24115		DATE 11.25.24
ISSUE: RIDE REVIEW		
NO.	REVISION DESCRIPTION	DATE
1	Addendum #1	01/08/25

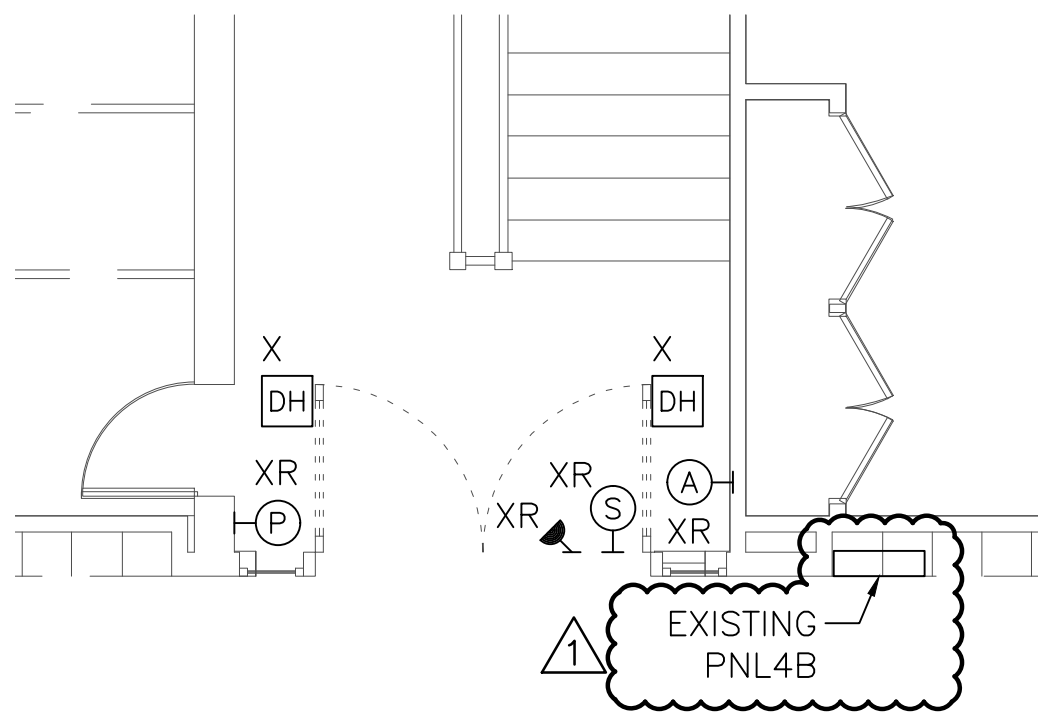
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ELECTRICAL
3rd FLOOR
PLANS

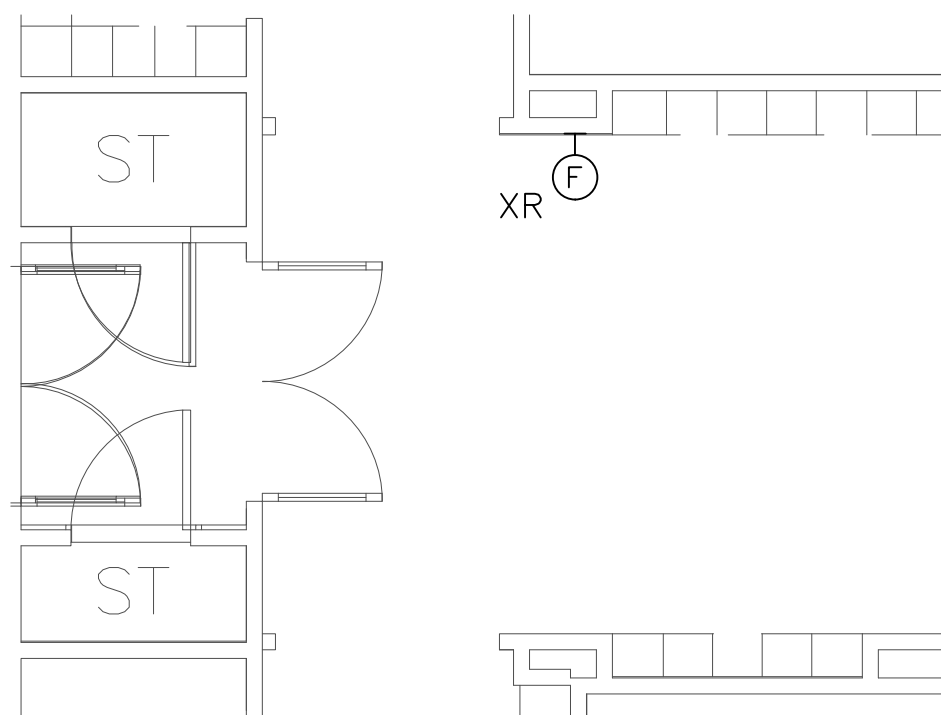
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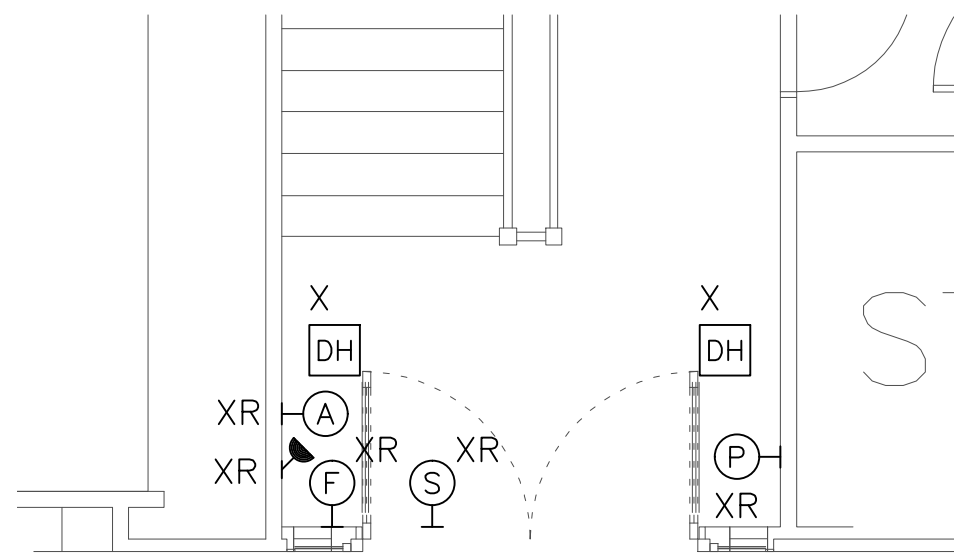
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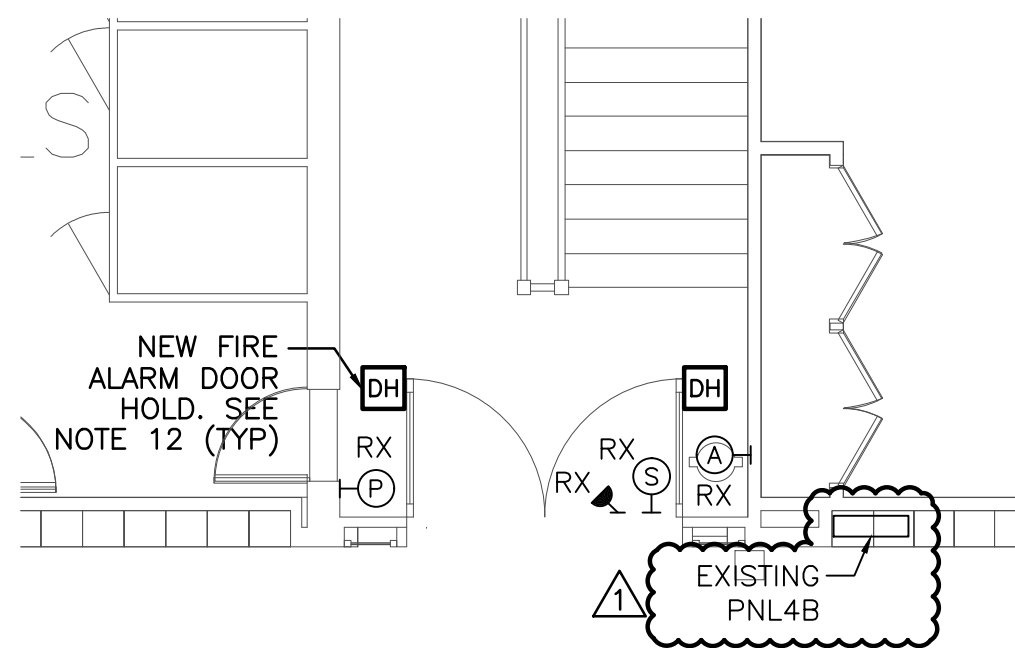
1 4th Fl Existing Stair B
Scale: 1/4"=1'-0"



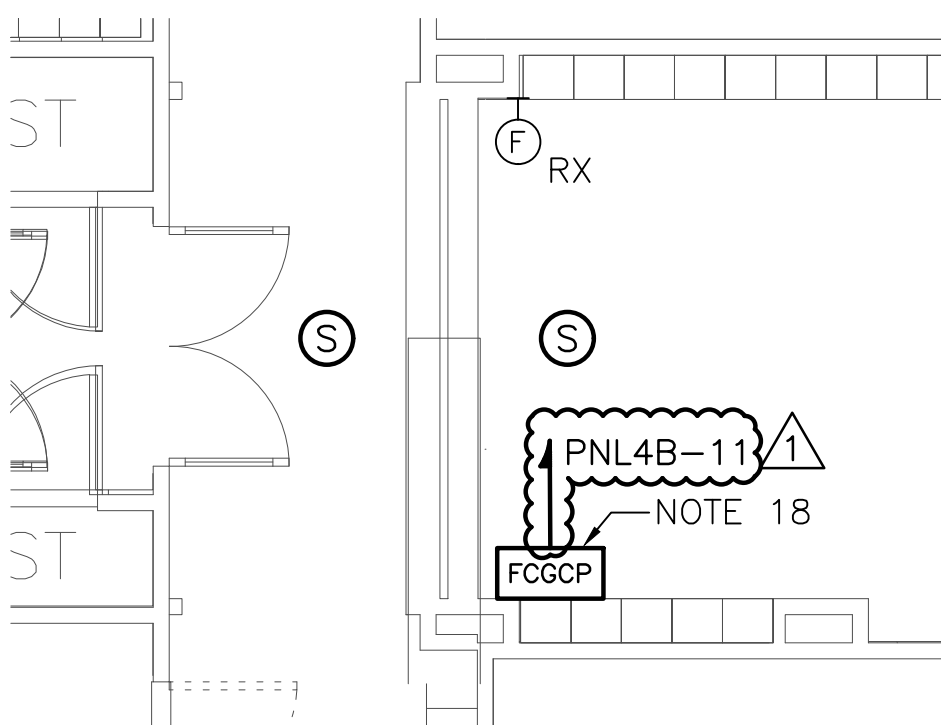
2 4th Fl Existing Corridor
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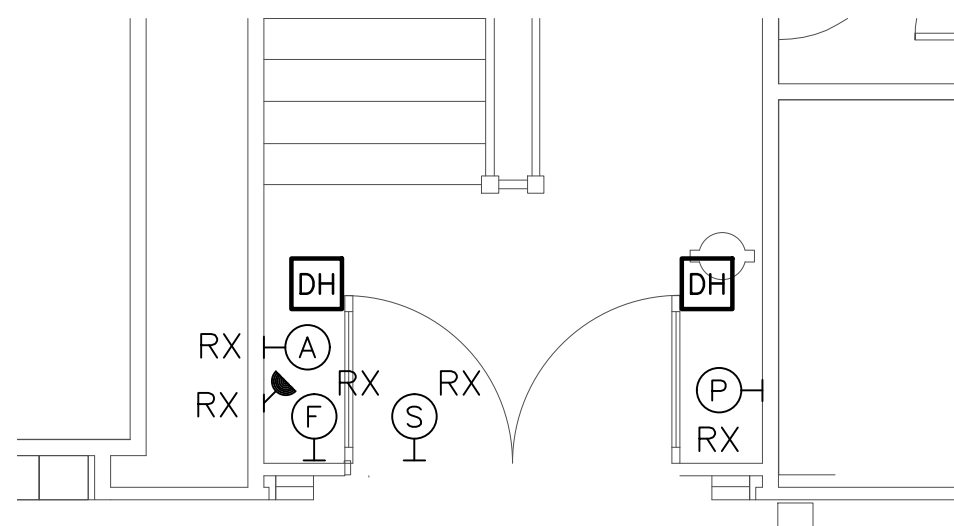
3 4th Fl Existing Stair C
Scale: 1/4"=1'-0"



4 4th Fl Proposed Stair B
Scale: 1/4"=1'-0"



5 4th Fl Proposed Corridor
Scale: 1/4"=1'-0"



6 4th Fl Proposed Stair C
Scale: 1/4"=1'-0"

ELECTRICAL DEVICE KEY:

- A AUDIO LOW VOLTAGE DEVICE, JUNCTION BOX AND RACEWAY. SEE KEY NOTE 1
- F FIRE ALARM JUNCTION BOX, LB, & RACEWAY
- P 120V POWER JUNCTION BOX, LB, & RACEWAY
- S SECURITY LOW VOLTAGE DEVICE, JUNCTION BOX AND RACEWAY. SEE KEY NOTE 1
- DH FIRE ALARM DOOR HOLD DEVICE
- FAPS FIRE ALARM POWER SUPPLY
- CTRL BUILDING SYSTEM CONTROL PANEL, JUNCTION BOX, RACEWAY. SEE KEY NOTE 1
- FCGCP NEW FIRE ALARM CURTAIN GROUP CONTROL PANEL. SEE ELECTRICAL NOTE 18
- ▲▲ SURFACE MOUNTED EMERGENCY FIXTURE

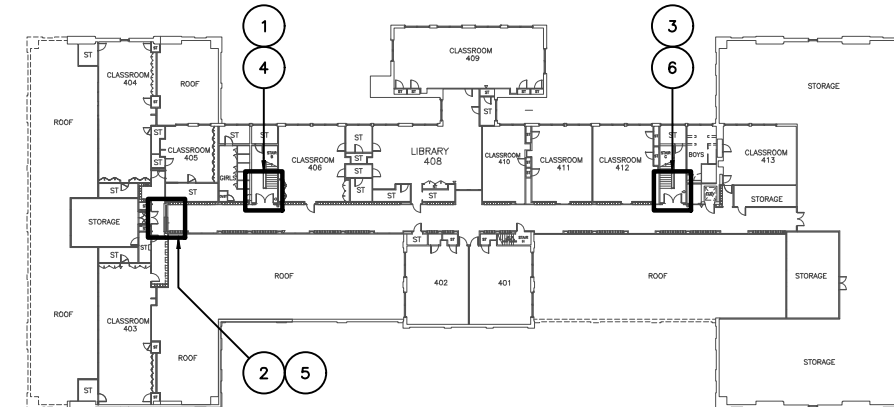
KEY NOTES:

- CONTRACTOR SHALL CONFIRM AND COORDINATE FINAL LOCATION OF ALL RELOCATED BUILDING SYSTEMS, LOW VOLTAGE DEVICES AND RACEWAY WITH ARCHITECT. CONFIRM ROUTING OF EXTENDED RACEWAY WITH ARCHITECT. LOW VOLTAGE SHOWN ON ELECTRICAL PLANS FOR REFERENCE ONLY.

ELECTRICAL NOTES:

- LIMIT OF SCOPE LINE INDICATES THE APPROXIMATE AREA OF RENOVATION THAT ELECTRICAL SYSTEMS MAY BE RELOCATED OR REMOVED. SCOPE OF DEMOLITION SHOWN ON PLANS ARE PARTIAL ONLY FOR THE CONTRACTORS CONVENIENCE AND NOT INTENDED TO SHOW ALL EXISTING CONDITIONS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS TO INCLUDE ALL NECESSARY WORK TO MODIFY AND EXTEND EXISTING SYSTEMS, WIRING, ETC. AS REQUIRED TO ACCOMMODATE THE NEW ARCHITECTURAL FLOOR PLAN.
- THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY NECESSARY RE-FEEDING OF EQUIPMENT OR DEVICES TO MAINTAIN CIRCUIT CONTINUITY OF EXISTING EQUIPMENT REMAINING.
- ELECTRICAL CONTRACTOR SHALL MAINTAIN INTEGRITY OF FIRE ALARM WIRING SO NOTIFICATION DEVICES OUTSIDE SCOPE OF WORK REMAIN ACTIVE DURING RENOVATION.
- ALL EXISTING DEVICES AND EQUIPMENT TO BE REMOVED - DISCONNECT, REMOVE, AND DISPOSE ALL RACEWAY AND WIRING BACK TO ASSOCIATED PANEL.
- COORDINATE SHUT DOWN OF BASE BUILDING ELECTRICAL AND FIRE ALARM SYSTEMS WITH SCHOOL FACILITIES.
- DISCONNECT, MAKE SAFE, AND REMOVE ALL TEMPORARY AND ABANDONED WIRE WITHIN THE LIMIT OF WORK.
- ELECTRICAL CONTRACTOR SHALL RELOCATE ANY AND ALL EXISTING ELECTRICAL DEVICES AND RACEWAY WITHIN AREA OF RENOVATION. CONFIRM AND COORDINATE RENOVATION SCOPE WITH ARCHITECT. EXTEND AND CONNECT EXISTING WIRING AND RACEWAY TO NEW LOCATION OF RELOCATED EQUIPMENT. CONTRACTOR SHALL EVALUATE CONDITION OF EXISTING WIRING AND RACEWAY AND REPLACE BACK TO SOURCE IF NECESSARY. CONTRACTOR SHALL REPLACE EXISTING WIRING, BACK TO SOURCE, IF EXISTING EXTENDED WIRING DOES NOT REACH LOCATION OF RELOCATED EQUIPMENT.
- ELECTRICAL CONTRACTOR SHALL CONFIRM AND COORDINATE FINAL LOCATION OF ALL LOW VOLTAGE DEVICES AND ROUTING OF LOW VOLTAGE RACEWAY WITH ARCHITECT.
- ALL NEW EQUIPMENT SHALL MATCH BASE BUILDING STANDARDS AND SPECIFICATIONS, UNLESS NOTED OTHERWISE. ALL NEW EQUIPMENT SHALL BE COMPATIBLE WITH THE EXISTING SYSTEM.
- ALL POWER DEVICE FACEPLATES, COVERS, AND DISCONNECTS SHALL BE LABELED WITH CIRCUIT NUMBER AND PANEL DESIGNATION.
- ALL SURFACE MOUNTED INTERIOR CONDUIT SHALL BE EMT (ELECTRIC METAL TUBING) CONFIRM ROUTING OF ALL SURFACE MOUNTED RACEWAY WITH ARCHITECT.
- CONTRACTOR SHALL WIRE NEW DOOR HOLDS FROM EXISTING POWER SOURCE CURRENTLY SERVING EXISTING DOOR HOLDS. IF REQUIRED, CONTRACTOR SHALL FURNISH AND INSTALL MODULES AND RELAYS TO INTEGRATE NEW DOOR HOLDS WITH EXISTING FIRE ALARM SYSTEM.
- ALL NEW EQUIPMENT SHALL MATCH BASE BUILDING STANDARDS AND SPECIFICATIONS, UNLESS NOTED OTHERWISE. ALL NEW EQUIPMENT SHALL BE COMPATIBLE WITH THE EXISTING SYSTEM.

- FIRE ALARM DEVICES AND COMPONENTS SHALL BE NEW AND WIRED BACK TO THE EXISTING FIRE ALARM CONTROL PANEL. CONTRACTOR TO PROVIDE ALL REQUIRED DEVICES AND EQUIPMENT NECESSARY TO EXPAND EXISTING SYSTEM. CONTRACTOR TO ENSURE ALL NEW DEVICES AND RELATED EQUIPMENT ARE COMPATIBLE WITH THE EXISTING SYSTEM. CONTRACTOR TO MATCH EXISTING DEVICE MOUNTING HEIGHTS WITHIN ADA REQUIREMENTS. WHERE EXISTING HEIGHTS DO NOT MEET CURRENT ADA REQUIREMENTS MOUNT NEW, RELOCATED AND REINSTALLED DEVICES AT HEIGHTS LISTED IN MTG HEIGHT DETAIL ON DRAWING E0. ALL FIRE ALARM STROBES TO BE SYNCHRONIZED WITH EXISTING BLDG STROBES. CONTRACTOR SHALL REPLACE ALL EXISTING FIRE ALARM DEVICES IF THEY ARE NOT SYNCHRONIZABLE. PROVIDE A COMPLETE TEST OF THE ENTIRE FIRE ALARM SYSTEM UPON COMPLETION OF THE INSTALLATION. THE SYSTEM SHALL MEET ALL REQUIREMENTS OF THE NFPA AND LOCAL CODES. COORDINATE EXACT REQUIREMENTS WITH LOCAL FIRE DEPARTMENT PRIOR TO WORK BEING PERFORMED.
- CONTRACTOR SHALL PROVIDE AN NFPA 241 IMPAIRMENT PLAN TO THE AHJ & OWNER FOR REVIEW AND APPROVAL BEFORE COMMENCEMENT OF WORK.
- ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ANY AND ALL NEW FIRE ALARM MODULES, RELAYS AND ASSOCIATED EQUIPMENT TO ADD NEW FIRE ALARM DEVICES TO THE EXISTING SYSTEM.
- CONTRACTOR SHALL FURNISH AND INSTALL FIRE RATED SEALANT FOR ALL CONDUITS PENETRATING NEW FIRE RATED STAIRWELLS.
- ELECTRICAL CONTRACTOR SHALL WIRE NEW FIRE CURTAIN GROUP CONTROL PANEL TO EXISTING 120/208V CORRIDOR PANEL PNL4B. CONTRACTOR SHALL FURNISH AND INSTALL (1) NEW 20A/1P BREAKER WITHIN WITHIN PANEL TO POWER NEW CONTROL PANEL. BREAKER SHALL BE COMPATIBLE WITH EXISTING PANEL. CONTRACTOR SHALL FURNISH AND INSTALL (2) 4-CORE, 14 AWG STRANDED CONDUCTORS FROM GCP PANEL TO NEW CURTAIN. CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY FIRE ALARM MODULES, RELAYS, INITIATING DEVICES, SMOKE DETECTORS FOR NEW CURTAIN TO INTEGRATE WITH EXISTING TOLMAN SCHOOL FIRE ALARM CONTROL SYSTEM. CONFIRM GCP LOCATION AND OPTIONS WITH ARCHITECT.
- ELECTRICAL CONTRACTOR SHALL WIRE NEW FIRE CURTAIN GROUP CONTROL PANEL TO EXISTING 120/208V CORRIDOR PANEL PNL3B. CONTRACTOR SHALL FURNISH AND INSTALL (1) NEW 20A/1P BREAKER WITHIN WITHIN PANEL TO POWER NEW CONTROL PANEL. BREAKER SHALL BE COMPATIBLE WITH EXISTING PANEL. CONTRACTOR SHALL FURNISH AND INSTALL (2) 4-CORE, 14 AWG STRANDED CONDUCTORS FROM GCP PANEL TO NEW CURTAIN. CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY FIRE ALARM MODULES, RELAYS, INITIATING DEVICES, SMOKE DETECTORS FOR NEW CURTAIN TO INTEGRATE WITH EXISTING TOLMAN SCHOOL FIRE ALARM CONTROL SYSTEM. CONFIRM GCP LOCATION AND OPTIONS WITH ARCHITECT.
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A 4th Floor Key Plan
Scale: None

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. ALL OF THE CONTRACT DOCUMENTS, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND DIVISIONS 1 GENERAL REQUIREMENTS, APPLY TO THE WORK OF THIS SECTION.
- B. EXAMINE ALL DRAWINGS AND ALL OTHER SECTIONS OF THE SPECIFICATIONS FOR REQUIREMENTS AFFECTING THE WORK OF THIS SECTION.

1.2 SCOPE

- A. PROVIDE ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT FOR THE INSTALLATION OF THE COMPLETE AND FULLY OPERATIONAL ELECTRICAL SYSTEM AS SHOWN ON THE DRAWINGS AND AS SPECIFIED HEREIN.
- B. THE WORK INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING:
1. PRIMARY SERVICE INCLUDING CONDUIT BRESS, RACEWAYS, RIGID STEEL SHEEPS, AND CONCRETE PAD PER LOCAL POWER COMPANY REQUIREMENTS.
 2. PRIMARY AND SECONDARY DUCT BANK INCLUDING CONDUIT SPACERS, CONCRETE, STEEL REINFORCING AS REQUIRED AND MARKER TAPE 6" BELOW GRADE.
 3. CONCRETE PAD, GROUNDING, REINFORCING, FOR LOCAL POWER COMPANY FURNISHED PAD MOUNTED TRANSFORMER.
 4. TRENCHING, BACKFILLING, SOD OR HYDRO SEEDING, (COORDINATE WITH GENERAL CONTRACTOR).
 5. SECONDARY ELECTRIC SERVICE INCLUDING SECONDARY SERVICE ENTRANCE RACEWAYS, CABLES, CONDUIT BUSHINGS AND GROUNDING.
 6. FREE STANDING SWITCHBOARDS INCLUDING VERTICAL FULL SECTION, MAIN CIRCUIT BREAKER, CURRENT TRANSFORMER COMPARTMENT WITH UTILITY METER, AMMETER, AMMETER SWITCH, VOLTMETER, VOLTMETER SWITCH, P/Y'S AND C/T'S, FEEDER CURBULE WITH FEEDER BREAKERS.
 7. FEEDERS, BRANCH CIRCUIT WIRING AND RACEWAYS.
 8. CONDUIT, WIRE, BOXES, FITTINGS, HANGERS AND SUPPORTS.
 9. SWITCHES, RECEPTACLES, SPECIAL PURPOSE OUTLETS AND WALL PLATES.
 10. SAFETY DISCONNECTS SWITCHES, NON-FUSED AND FUSED WITH FUSES.
 11. LIGHTING SYSTEM INCLUDING LUMENS, LENSES, BALLASTS, DEVICES, CONTROLS AND CONTROLS.
 12. MOTOR CONNECTIONS AND CONTROLS.
 13. SURGE PROTECTIVE DEVICES SHALL BE PROVIDED PER NEC 700.28 TO ENSURE RELIABILITY OF CRITICAL EMERGENCY SYSTEMS SUCH AS EMERGENCY LIGHTING SYSTEMS, EMERGENCY COMMUNICATION SYSTEMS, FIRE CONTROL SYSTEMS, ELEVATORS USED FOR EVACUATIONS.
 14. SYSTEM GROUNDING.
 15. POWER CONNECTIONS TO ALL PLUMBING, MECHANICAL, AND ALL OTHER EQUIPMENT INCLUDING ALL MAJOR ELECTRICAL EQUIPMENT AND COMPONENTS.
 16. NAMEPLATES ON ALL MAJOR ELECTRICAL EQUIPMENT AND COMPONENTS.
 17. UNDERGROUND FIRE ALARM SERVICE WITH WSA FIRE ALARM CABLE PER LOCAL FIRE ALARM CRITERIA.
 18. ADDRESSABLE FIRE ALARM SYSTEM, ANALOG SMOKE AND HEAT DEVICES, MONITORING MODULES, WIRE RACEWAYS, I.M.C. STROBES, CONTROL PANEL WITH BUILT-IN AND REMOTE KID DISPLAYS).
 19. COORDINATION, SUPERVISION ON, AND FINAL CONNECTION BY FIRE ALARM TESTING AGENCY OF RECORD.
 20. PROGRAMMING OF NEW FIRE ALARM SYSTEM.
 21. TEMPORARY LIGHT, POWER AND PANEL FOR USE DURING CONSTRUCTION.
 22. DATA, COMPUTER AND TELEPHONE DUPLEX BOXES WITH PULL STRING TO TELEPHONE BACKROOMS.
 23. SEAL PENETRATIONS BETWEEN FOUNDATION FLOORS AND WALLS WITH FIRE RETARDANT MATERIAL.
 24. SEAL ALL CABLES AND CONDUITS FOR WATER/MOISTURE PENETRATION USING OZ GELNUT PRODUCTS, REFER TO RACEWAYS SECTION FOR DETAIL.
 25. OBTAIN ALL PERMITS AND ASSOCIATED FEES.
 26. INTERIOR SECONDARY DISTRIBUTION SYSTEMS INCLUDING MAIN SWITCHBOARD, CURRENT LIMITER CABINET, BATTERY CHARGER, TRANSFORMER, DISTRIBUTION PANELBOARDS, MOTOR CONTROLS, MAGNETIC STARTERS, OVERCURRENT AND SWITCHING DEVICES, WIRING, AND ALL OTHER COMPONENTS REQUIRED FOR COMPLETE ELECTRICAL DISTRIBUTION SYSTEM.
 27. AN ADDRESSABLE FIRE ALARM SYSTEM COMPLETE WITH ALL DEVICES AND WIRING INCLUDING MUNICIPAL CONNECTIONS.
 28. TESTING OF ALL ELECTRICAL SYSTEMS.
 29. ACCESS PANELS (FURNISH ONLY).
 30. COORDINATION BETWEEN ELECTRICAL AND OTHER TRADES.
 31. POWER WIRING FOR ELEVATORS AND ASSOCIATED EQUIPMENT.
 32. LIGHTING CONTROL AND DIMMING SYSTEM.
 33. INTERCOM SYSTEM COMPLETE WITH WIRING COMPONENTS AND PROGRAMMING.
 34. ALL OTHER SYSTEMS HEREAFTER SPECIFIED OR INDICATED ON THE CONTRACT DRAWINGS, COMPLETE LEAVING READY AN ELECTRICAL SYSTEM IN PERFECT OPERATING CONDITION.

- A. AS USED IN THIS SECTION, PROVIDE MEANS FURNISH AND INSTALL AND POS MEANS PROVIDED UNDER OTHER SECTIONS.
- B. AS USED IN THE DRAWINGS AND SPECIFICATIONS FOR ELECTRICAL WORK, CERTAIN NON-TECHNICAL WORDS SHALL BE UNDERSTOOD TO HAVE SPECIFIC MEANINGS AS FOLLOWS REGARDLESS OF INDICATIONS TO THE CONTRARY IN THE GENERAL CONDITIONS OR OTHER DOCUMENTS GOVERNING THE ELECTRICAL WORK:

- FURNISH PURCHASE AND DELIVER TO THE PROJECT SITE COMPLETE WITH EVERY NECESSARY APPURTENANCE AND SUPPORT, ALL AS PART OF THIS WORK. PURCHASING SHALL INCLUDE PAYMENT OF ALL SALES TAXES AND OTHER SURCHARGES AS MAY BE REQUIRED TO ASSURE THAT PURCHASED ITEMS ARE FREE OF ALL LIENS, CLAIMS OR ENCUMBRANCES.
- INSTALL UNLOAD AT THE DELIVERY POINT AT THE SITE AND PERFORM EVERY OPERATION NECESSARY TO ESTABLISH SECURE MOUNTING AND CORRECT OPERATION AT THE PROPER LOCATION IN THE PROJECT, ALL AS PART OF THIS WORK. PROVIDE FURNISH AND INSTALL.

- NEW MANUFACTURED WITHIN THE PAST TWO YEARS AND NEVER BEFORE USED.
- C. EXCEPT WHERE MODIFIED BY A SPECIFIC NOTATION TO THE CONTRARY, IT SHALL BE UNDERSTOOD THAT THE INDICATION AND/OR DESCRIPTION OF ANY ITEM IN THE DRAWINGS OR SPECIFICATIONS FOR ELECTRICAL WORK CARRIES WITH IT THE INSTRUCTION TO FURNISH, INSTALL AND CONNECT THE ITEM AS PART OF THE ELECTRICAL WORK, REGARDLESS OF WHETHER OR NOT THIS INSTRUCTION IS EXPLICITLY STATED.

- D. IT SHALL BE UNDERSTOOD THAT THE SPECIFICATIONS AND DRAWINGS FOR ELECTRICAL WORK ARE COMPLEMENTARY AND ARE TO BE TAKEN TOGETHER FOR A COMPLETE INTERPRETATION OF THE ELECTRICAL WORK EXCEPT THAT INDICATIONS ON THE DRAWINGS, WHICH REFER TO AN INDIVIDUAL ELEMENT OF WORK, TAKE PRECEDENCE OVER THE SPECIFICATIONS WHERE THEY CONFLICT WITH SAME.

1.4 WORK BY OTHERS

- A. THE FOLLOWING IS RELATED WORK SPECIFIED ELSEWHERE:
1. HVAC EQUIPMENT INCLUDING PROVIDING INDIVIDUAL MOTOR STARTERS, ADJUSTABLE FREQUENCY DRIVES, CONTROL WIRING, VARIABLE SPEED SWITCHES AND SMOKE SHALL BE PROVIDED BY HVAC CONTRACTOR.
 2. TEMPERATURE CONTROL WIRING BY HVAC CONTRACTOR.
 3. CHARGES FOR POWER CONSUMED BY THE TEMPORARY LIGHT AND POWER SYSTEM FOR CONSTRUCTION WILL BE PAID BY THE GENERAL CONTRACTOR.
 4. ACCESS PANELS, WHERE REQUIRED, ARE FURNISHED BY THE GENERAL CONTRACTOR AND COORDINATED WITH THIS SECTION.
 5. ALL DUCT SMOKE DETECTORS SHALL BE SUPPLIED BY THE ELECTRICAL CONTRACTOR AND INSTALLED BY THE MECHANICAL CONTRACTOR, WIRED TO THE FIRE ALARM SYSTEM BY THE ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL INCLUDE REMOTE TEST PANELS.

1.5 CODES, PERMITS & STANDARDS

- A. PROVIDE ALL PERMITS AND LICENSES, OBTAIN AND PAY ALL CERTIFICATES OF INSPECTION AS REQUIRED BY REGULATORY AGENCIES AND SUBMIT FOR APPROVAL.
- B. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND DESIGNED, CONSTRUCTED, INSTALLED AND TESTED IN ACCORDANCE WITH THE SPECIFICATION AND THE FOLLOWING STANDARDS:
1. MASSACHUSETTS ELECTRICAL CODE (MEC).
 2. NATIONAL ELECTRICAL CODE (NEC)
 3. OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA)
 4. NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
 5. UNDERWRITERS LABORATORY (UL)
 6. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
 7. NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)
 8. AMERICANS WITH DISABILITIES ACT (ADA)
 9. NATIONAL ELECTRIC SAFETY CODE (NESC)
 10. NEC ARTICLE 110 – FLASH PROTECTION
 11. MASSACHUSETTS BUILDING CODE
 12. INTERNATIONAL BUILDING CODE (IBC)

1.6 PROTECTION AND CLEANING

- A. ALL ELECTRICAL EQUIPMENT AND DEVICES IN THE EXISTING BUILDING IN WHICH THE ELECTRICAL WORK IS TO BE DONE UNDER CONTRACT SHALL BE PROTECTED FROM SCRATCHES, PUNCTURES, ETC. UNTIL THE WORK IS COMPLETE.
- B. WHERE ELECTRICAL EQUIPMENT AND/OR DEVICES ARE INDICATED TO BE ARMORDED AND THE OWNER ELECTS TO SAVE SPECIFIC ITEMS, SAID ITEMS SHOULD BE DELIVERED TO STORAGE ON SITE AT A LOCATION DESIGNATED BY THE OWNER.
- C. EXPOSED SURFACES OF ELECTRICAL EQUIPMENT & LIGHTING FIXTURES SHALL BE CLEANED UPON COMPLETION OF THE WORK.
- D. ALL DEBRIS AND MATERIAL, RESULTING FROM ELECTRICAL WORK SHALL BE REMOVED FROM THE PROPERTY EACH DAY AND EVERY DAY SHALL BE DISPOSED OF IN A LEGAL MANNER. WORKSPACE SHALL BE LEFT CLEAN AS ELECTRICAL WORK IS COMPLETED.
- E. DAMAGES TO COVERS AND TRIMS OF ELECTRICAL EQUIPMENT SHALL BE REPAIRED AND PAINTED WITH TOUCH-UP PAINT SUPPLIED BY THE EQUIPMENT MANUFACTURER TO THE SATISFACTION OF THE OWNER'S DESIGNATED REPRESENTATIVE OR THE ARCHITECT OR THE EQUIPMENT SHALL BE REPLACED WITH NEW.

1.7 INTERPRETATION OF PLANS

- A. ALL WORK SHOWN ON THE PLANS IS INTENDED TO BE APPROXIMATELY CORRECT TO SCALE BUT FURTHER DIMENSIONS AND DETAILS DRAWINGS ARE TO BE FOLLOWED IN EVERY CASE. THE DRAWINGS SHALL BE TAKEN AS DIAGRAMMATIC. RACEWAYS, WIRING AND PROTECTION EQUIPMENT IS PROVIDED BY A SUBCONTRACTOR TO SHOW EVERY OFFSET AND FITTING WORK EVERY STRUCTURAL DIFFICULTY THAT MAY BE ENCOUNTERED, TO CARRY OUT THE TRUE INTENT AND PURPOSE OF THE PLANS, SUPPLY AND INSTALL ALL COMPONENTS NECESSARY TO PROVIDE COMPLETE WORKING SYSTEMS, READY FOR USE WITH NO ADDITIONAL COST TO THE OWNER.

1.8 SHOP DRAWINGS

A. DEFINITIONS

1. SHOP DRAWINGS ARE INFORMATION PREPARED BY THE CONTRACTOR TO ILLUSTRATE PORTIONS OF THE WORK IN MORE DETAIL THAN SHOWN IN THE CONTRACT DOCUMENTS.

2. COORDINATION DRAWINGS ARE DETAILED, LARGE-SCALE LAYOUT SHOP DRAWINGS SHOWING HVAC, ELECTRICAL, PLUMBING AND FIRE PROTECTION WORK SUPERIMPOSED IN ORDER TO IDENTIFY CONFLICTS AND ENSURE INTER-COORDINATION OF MECHANICAL, ELECTRICAL, ARCHITECTURAL, STRUCTURAL AND OTHER WORK.

B. SUBMITTAL COVER SHEET

1. SHOP DRAWINGS SHALL BE SUBMITTED ACCORDING TO SPECIFICATION SECTION WITH A SEPARATE COVER SHEET COMPLETED FOR EACH PRODUCT, RATHER THAN ONE COVER SHEET FOR MULTIPLE PRODUCTS, WHETHER OR NOT SUPPLIED BY ONE MANUFACTURER OR VENDOR.

C. SUBMITTAL PROCEDURES AND FORMAT

1. REVIEW SUBMITTAL PACKAGES FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS AND THEN SUBMIT TO ARCHITECT FOR REVIEW.
2. PROVIDE ADDITIONAL COPIES OF REVIEWED SHOP DRAWINGS AS REQUIRED FOR FULL DISTRIBUTION.
3. SHOP DRAWINGS SHOWING LAYOUTS OF SYSTEMS SHALL CONTAIN SUFFICIENT PLANS, ELEVATIONS, SECTIONS, DETAILS AND ISOMETRICS TO DESCRIBE WORK CLEARLY. THEY SHALL BE $\frac{1}{8}" = 1' - 0"$ SCALE UNLESS SPECIFIED OTHERWISE. SHEET METAL SHOP DRAWINGS SHALL BE $\frac{1}{4}" = 1' - 0"$ SCALE UNLESS SPECIFIED OTHERWISE. DETAILS AS NECESSARY. SHEET METAL SHOP DRAWINGS SHALL SHOW ELEMENTS OF ARCHITECTS SELECTED CEILING PLAN, EXPOSED DUCTWORK, WALLS AND INTERFACES, REGISTER, OUTLETS, FIRE DAMPERS, SLEEVES AND OTHER ASPECTS OF CONSTRUCTION AS NECESSARY FOR COORDINATION.

4. ALL FIREWALLS AND SMOKE PARTITIONS MUST BE HIGHLIGHTED ON THE SHEET METAL DRAWINGS FOR APPROPRIATE COORDINATION.

5. SHOP DRAWINGS SHOWING MANUFACTURER'S PRODUCT DATA SHALL CONTAIN MONITORED DIMENSIONAL DIMENSIONS, ACCURATE AND COMPLETE DESCRIPTION OF CONSTRUCTION MATERIALS, MANUFACTURER'S PUBLISHED PERFORMANCE CHARACTERISTICS AND CAPACITY RATINGS. DIMENSIONS, ALTERNATE IS NOT ACCEPTABLE. ELECTRICAL REQUIREMENTS AND WIRING DIAGRAMS, DRAWINGS SHALL CLEARLY INDICATE LOCATION (TERMINAL BLOCK OR WIRE NUMBER), VOLTAGE AND FUNCTION FOR ALL FIELD TERMINALS AND OTHER INFORMATION NECESSARY TO DEMONSTRATE COMPLIANCE WITH ALL REQUIREMENTS OF CONTRACT DOCUMENTS.

D. ACCEPTABLE MANUFACTURERS

1. ALTERNATE MANUFACTURERS ARE ACCEPTABLE ONLY IF, AS A MINIMUM, THEY:
- A. MEET ALL PERFORMANCE CRITERIA LISTED IN THE SCHEDULES AND OUTLINED IN THE SPECIFICATIONS.
 - B. HAVE IDENTICAL OPERATING CHARACTERISTICS TO THOSE CALLED FOR IN THE SPECIFICATION.
 - C. FIT WITHIN THE AVAILABLE SPACE IF WAS DESIGNED FOR, INCLUDING SPACE FOR MAINTENANCE AND COMPONENT REMOVAL, WITH NO MODIFICATION TO EITHER SPACE OR THE PRODUCT. CLEARANCES TO WALLS, CEILING AND OTHER EQUIPMENT SHALL BE AT LEAST EQUAL TO THOSE SHOWN ON THE DESIGN DRAWINGS.
 - D. FOR ROOFMOUNTED EQUIPMENT AND FOR EQUIPMENT MOUNTED IN AREAS WHERE STRUCTURAL MATTERS ARE A CONSIDERATION, THE PRODUCTS MUST BE IDENTICAL TO THOSE SPECIFIED, INCLUDING THE PRODUCTS LISTED IN THE SCHEDULES OR SPECIFICATIONS.

- E. PRODUCTS MUST ADHERE TO ALL ARCHITECTURAL CONSIDERATIONS INCLUDING, BUT NOT LIMITED TO: BEING OF THE SAME COLOR AS THE PRODUCT SCHEDULED OR SPECIFIED, FITTING WITHIN ARCHITECTURAL ENCLOSURES AND DETAILS AND FOR OUTLETS, LIGHTING AND PLUMBING FIXTURES-BEING THE SAME SIZE AND OF THE SAME PHYSICAL APPEARANCE AS SCHEDULED OR SPECIFIED PRODUCTS.

E. DEVIATIONS

1. CONCERNING DEVIATIONS OTHER THAN SUBSTITUTIONS, PROPOSED DEVIATIONS FROM CONTRACT DOCUMENTS SHALL BE REQUESTED INDIVIDUALLY IN WRITING. WHETHER DEVIATIONS RESULT FROM FIELD CONDITIONS, STANDARD SHOP PRACTICE, OR OTHER CAUSES, SUBMIT LETTER WITH TRANSMITTAL OF SHOP DRAWINGS, WHICH FLAG THE DEVIATION TO THE ATTENTION OF THE ARCHITECT.

2. WITHOUT LETTERS FLAGGING THE DEVIATION TO THE ARCHITECT, IT IS POSSIBLE THAT THE ARCHITECT MAY NOT NOTICE SUCH DEVIATION. THEREFORE, IF SUCH LETTERS ARE NOT SUBMITTED TO THE ARCHITECT, THE CONTRACTOR SHALL HOLD THE ARCHITECT AND HIS CONSULTANTS HARMLESS FOR ANY ADVERSE CONSEQUENCES RESULTING FROM THE DEVIATIONS BEING IMPLEMENTED. THIS SHALL APPLY REGARDLESS OF WHETHER THE ARCHITECT HAS REVIEWED OR APPROVED SHOP DRAWINGS CONTAINING THE DEVIATION, AND WILL BE STRICTLY ENFORCED.

3. APPROVAL OF PROPOSED DEVIATIONS, IF ANY, WILL BE MADE AT THE DISCRETION OF THE ARCHITECT.

F. RESPONSIBILITY

1. INTENT OF SUBMITTAL REVIEW IS TO CHECK FOR CAPACITY, RATING, AND CERTAIN CONSTRUCTION FEATURES. CONTRACTOR SHALL ENSURE THAT WORK MEETS REQUIREMENTS OF CONTRACT DOCUMENTS REGARDING INFORMATION THAT PERTAINS TO FABRICATION PROCESSES OR MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES OF CONSTRUCTION; AND FOR COORDINATION OF WORK, REGARDLESS OF WHETHER OR NOT THIS INSTRUCTION IS EXPLICITLY STATED. MARKED PREVENTED) TO EXTENT THAT THEY AGREE WITH CONTRACT DOCUMENTS. SUBMITTAL REVIEW SHALL NOT OBTAIN RESPONSIBILITY UNDER THIS CONTRACT FOR DIMENSIONAL COORDINATION, QUANTITIES, INSTALLATION, WIRING, SUPPORTS AND ACCESS FOR SERVICE. NOR SHOP DRAWING ERRORS OR DEVIATIONS FROM REQUIREMENTS OF CONTRACT DOCUMENTS. THE ARCHITECT'S NOTICE OF SOME ERRORS DOES NOT EXCUSE THE CONTRACTOR FROM PROCEEDING IN ERROR. CONTRACT DOCUMENTS REQUIREMENTS SHALL BE STRICTLY ENFORCED.
2. INFORM SUBMITTORS, MANUFACTURERS, SUPPLIERS, ETC. OF SCOPE AND LIMITED NATURE OF REVIEW PROCESS AND ENFORCE COMPLIANCE WITH CONTRACT DOCUMENTS.

3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL DRAWINGS AND SPECIFICATIONS THOROUGHLY DURING BID PROCESS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER/ARCHITECT VIA RFI (REQUEST FOR INFORMATION) IF ANY CONFLICTS ARISE. FAILURE TO IDENTIFY THE DISCREPANCIES DURING THE BID PROCESS SHALL DISQUALIFY THE CONTRACTOR FOR CLAIMING ANY ADDITIONAL COMPENSATION.

4. SHOP DRAWINGS FOR ENTIRE DISTRIBUTION SYSTEM WILL NOT BE SUBMITTED UNTIL AFTER THE COMPLETION OF THE SHORT CIRCUIT STUDY. EQUIPMENT AND RATING SHALL MATCH WITH THE RESULTS OF THE STUDY. SERIES RATING OF DEVICES WILL NOT BE ACCEPTED.

- G. SCHEDULE: INCORPORATE SHOP DRAWING REVIEW PERIOD INTO CONSTRUCTION SCHEDULE SO THAT WORK IS NOT DELAYED. CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR DELAYS CAUSED BY NOT INCORPORATING THE FOLLOWING SHOP DRAWING REVIEW TIME REQUIREMENTS INTO HIS PROJECT SCHEDULE. WORKING DAYS LISTED REFERENCE THE TIME IN THE ENGINEER'S OFFICE. IT DOES NOT INCLUDE TRAVEL TIME FOR REVIEW EACH TIME SHOP DRAWING IS SUBMITTED OR RESUBMITTED.

- H. LIST OF PROPOSED EQUIPMENT AND MATERIALS

1. WITHIN FOUR WEEKS AFTER AWARD OF CONTRACT AND BEFORE ORDERING MATERIALS OR EQUIPMENT, SUBMIT COMPLETE LIST OF PROPOSED MATERIALS AND EQUIPMENT AND INDICATE MANUFACTURER'S NAMES AND ADDRESSES. NO CONSIDERATION WILL BE GIVEN TO PARTIAL LISTS SUBMITTED OUT OF SEQUENCE.

- I. SUBMIT SHOP DRAWINGS IN PDF FORMAT AND ELECTRONICALLY FOR THE FOLLOWING:

1. PANELBOARDS
2. LOAD CENTERS
3. CIRCUIT BREAKERS AND ENCLOSURES
4. SWITCHBOARDS
5. DISCONNECT SWITCHES
6. CONDUIT, WIRE, FEEDERS, CABLES AND BRANCH CIRCUIT WIRING
7. MANUAL MOTOR STARTERS
8. WIRE WAYS, OUTLET BOXES, COVERS
9. SWITCHES, RECEPTACLES, SPECIAL PURPOSE DEVICES AND PLATES
10. LIGHTING FIXTURES AND LAMPS
11. FIRE ALARM SYSTEM (ADDRESSABLE)
12. APARTMENT ENTRY SYSTEM
13. SHORT-CIRCUIT ANALYSIS
14. PROTECTIVE DEVICE TIME CURRENT COORDINATION ANALYSIS
15. AND FLASH HAZARD ANALYSIS.

J. SUBMITTAL DOCUMENTATION REQUIREMENTS

- A. FURNISH DOCUMENTATION ASSOCIATED WITH THIS BID PROPOSAL AND CONTRACT INCLUDING SUBMITTALS, SHOP DRAWINGS, DATA MANUALS, AND TEST REPORTS AS FOLLOWS. THESE REQUIREMENTS ARE IN ADDITION TO SUBMITTAL REQUIREMENTS STATED ELSEWHERE AND SHALL NOT BE THE OWNER OF RIGHTS UNDER OTHER PROVISIONS OF THE CONTRACT DOCUMENTS.
1. SUBMIT SIX (6) HARD COPIES OF DOCUMENTATION FOR REVIEW.
2. SUBMIT DOCUMENTS IN PORTABLE DOCUMENT FORMAT (PDF).
3. SUBMIT DOCUMENTS IN AUTOCAD – LATEST VERSION FOR DRAWINGS AND MICROSOFT WORD (LATEST VERSION) FOR TEXT FORMAT WHEN REQUESTED.

- B. PROVIDE A COMPLIANCE REVIEW OF EACH SECTION OF THE SPECIFICATIONS, DRAWINGS BUT FURTHER DIMENSIONS AND DETAILS DRAWINGS ARE TO BE FOLLOWED IN EVERY CASE. THE DRAWINGS SHALL BE TAKEN AS DIAGRAMMATIC. RACEWAYS, WIRING AND PROTECTION EQUIPMENT IS PROVIDED BY A SUBCONTRACTOR TO SHOW EVERY OFFSET AND FITTING WORK EVERY STRUCTURAL DIFFICULTY THAT MAY BE ENCOUNTERED, TO CARRY OUT THE TRUE INTENT AND PURPOSE OF THE PLANS, SUPPLY AND INSTALL ALL COMPONENTS NECESSARY TO PROVIDE COMPLETE WORKING SYSTEMS, READY FOR USE WITH NO ADDITIONAL COST TO THE OWNER.

3. 7E7, EXCEPTION, DO NOT COMPLY, FOR EACH AND EVERY DEVIATION, PROVIDE A NUMBERED FOOTNOTE WITH REASONS FOR THE PROPOSED DEVIATION AND HOW THE INTENT OF THE SPECIFICATION CAN BE SATISFIED.
3. 7E7, EXCEPTION, DO NOT COMPLY, FOR EACH AND EVERY DEVIATION, PROVIDE A NUMBERED FOOTNOTE WITH REASONS AND POSSIBLE ALTERNATIVES.

- C. UNLESS A DEVIATION OR EXCEPTION IS SPECIFICALLY NOTED IN THE COMPLIANCE REVIEW, IT IS ASSUMED THAT THE BIDDER IS IN COMPLETE COMPLIANCE WITH THE PLANS AND SPECIFICATIONS. DEVIATIONS OR EXCEPTIONS TAKEN IN COVER LETTERS, SUBSIDIARY DOCUMENTS, BY OMISSION OR BY CONTRADICTION DO NOT RELEASE THE BIDDER FROM BEING IN COMPLETE COMPLIANCE, UNLESS THE EXCEPTION OR DEVIATION HAS BEEN SPECIFICALLY NOTED IN THE COMPLIANCE REVIEW. BIDDER MAY SUBMIT THE LATEST STATE-OF-THE-ART COMPONENTS AND THEIR STANDARD CONTROL COMPONENTS IN LIEU OF THE SPECIFIED ITEMS. THE A/E AND OWNER WILL REVIEW DEVIATIONS FROM THE SPECIFICATIONS.

D. SUBMITTAL COVER SHEET

1. SHOP DRAWINGS SHALL BE SUBMITTED ACCORDING TO SPECIFICATION SECTION WITH A SEPARATE COVER SHEET COMPLETED FOR EACH PRODUCT, RATHER THAN ONE COVER SHEET FOR MULTIPLE PRODUCTS, WHETHER OR NOT SUPPLIED BY ONE MANUFACTURER OR VENDOR.

2. COORDINATION DRAWINGS ARE DETAILED, LARGE-SCALE LAYOUT SHOP DRAWINGS SHOWING HVAC, ELECTRICAL, PLUMBING AND FIRE PROTECTION WORK SUPERIMPOSED IN ORDER TO IDENTIFY CONFLICTS AND ENSURE INTER-COORDINATION OF MECHANICAL, ELECTRICAL, ARCHITECTURAL, STRUCTURAL AND OTHER WORK.

3. SHOP DRAWINGS SHALL BE SUBMITTED ACCORDING TO SPECIFICATION SECTION WITH A SEPARATE COVER SHEET COMPLETED FOR EACH PRODUCT, RATHER THAN ONE COVER SHEET FOR MULTIPLE PRODUCTS, WHETHER OR NOT SUPPLIED BY ONE MANUFACTURER OR VENDOR.

4. WORK UNDER THIS SECTION INCLUDES NEW WORK AND WORK ON EXISTING SYSTEMS WITHIN EXISTING BUILDING. PERFORM SUCH WORK SO AS NOT TO INTERFERE WITH THE OWNER'S OPERATION WHERE WORK NECESSITATES INTERRUPTION OF SERVICE(S).

5. SCHEDULE OUTAGES WITH THE OWNER AND ENGINEER AND PERFORM THE WORK AT SUCH TIME(S) AS THEY SHALL DIRECT.

6. ELECTRONIC FILES ARE AVAILABLE TO FACILITATE THE PREPARATION OF RECORD DRAWINGS. THESE FILES ARE AVAILABLE TO THE ARCHITECT AND MAY NOT BE A FULL REPRESENTATION OF THE SCOPE OF WORK. THESE FILES ARE AVAILABLE FROM WOZNY/BARBAR & ASSOCIATES, INC. AT A COST OF \$50.00 PER DRAWING FILE.

7. RECORD DRAWINGS SHALL BE TURNED OVER TO THE OWNER UPON COMPLETION OF THE WORK.

8. THE ELECTRICAL CONTRACTOR SHALL PROVIDE, AT HIS OWN EXPENSE, HIS OWN FIELD OFFICE, FURNISH ALL TOOLS, EQUIPMENT, SCAFFOLDING AND TEMPORARY CONSTRUCTION REQUIRED FOR THE EXECUTION OF THE ELECTRICAL WORK.

9. ALL PAINTED METAL SURFACES WHICH HAVE BEEN SCRATCHED, DENTED OR MARKED SHALL BE REPAINTED BY THE ELECTRICAL CONTRACTOR.

10. EACH CONTRACTOR SHALL BE HELD RESPONSIBLE FOR AND SHALL PAY FOR ALL DAMAGE TO OTHER WORK CAUSED BY HIS WORK OR WORKMEN.

11. REPAIRING OF SUCH DAMAGE SHALL BE DONE BY THE GENERAL CONTRACTOR OR CONTRACTORS WHO INSTALLED THE WORK AND SO DIRECTED BY THE OWNER'S ENGINEER.

12. ATTENTION IS DIRECTED TO PROVISIONS OF THE GENERAL CONDITIONS AND SPECIAL CONDITIONS REGARDING GUARANTEES AND WARRANTIES FOR WORK UNDER THIS CONTRACT.

13. ELECTRICAL CONTRACTOR'S GUARANTEES SHALL BE THE SAME AS THE GENERAL CONTRACTORS.

14. THE ARRANGEMENT OF ALL ELECTRICAL WORK SHOWN ON THE DRAWINGS IS DIAGRAMMATIC ONLY AND INDICATES THE MINIMUM REQUIREMENTS OF THE WORK. CONDITIONS AT THE BUILDING INCLUDING ACTUAL MEASUREMENTS SHALL DETERMINE THE DETAILS OF THE INSTALLATION. ALL WORK SHALL BE LAID OUT AND INSTALLED SO AS TO REQUIRE THE LEAST AMOUNT OF CUTTING AND PATCHING.

15. CHECK THE ARCHITECTURAL PLANS AND SPECIFICATIONS BEFORE ORDERING ANY MATERIAL AND EQUIPMENT. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR HIS DETERMINATION PRIOR TO PROCEEDING WITH THE WORK.

16. TYPICAL DETAILS WHERE SHOWN ON THE DRAWINGS SHALL APPLY TO EACH AND EVERY ITEM OF THE PROJECT WHERE SUCH ITEMS ARE APPLICABLE. THEY ARE NOT REPEATED FULL ON THE DRAWINGS. IN MANY CASES ARE DIAGRAMMATIC ONLY, BUT WITH THE INTENTION THAT SUCH DETAILS SHALL BE INCORPORATED IN FULL. ANY ALTERNATE METHOD PROPOSED FOR USE BY THE CONTRACTOR SHALL HAVE THE PRIOR APPROVAL OF THE ARCHITECT.

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**FIRE CODE UPGRADE TO THE
WILLIAM E TOLMAN HIGH SCHOOL**
150 EXCHANGE STREET, Pawucket, RI 02861

**BREWSTER
THORNTON
GROUP
ARCHITECTS**

317 Iron Horse Way,
Suite 202
Providence, RI 02908

401.861.1600
brewsterthornton.com

JOB NO. 24115	DATE 11.25.24
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ISSUE : RIDE REVIEW

NO.	REVISION DESCRIPTION	DAT
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SHEET TITLE

ELECTRICAL SPECIFICATIONS SHEET

SHEET

E2.2

SIGN-IN SHEET



Pawtucket School Department

RFP: C2024-010 Goff Tolman Fire Code Upgrades

Non-Mandatory Site Visit

Monday, December 23, 2024

[illegible]