

ANTHONY J. VARANO  
NJ PE No. 24GE05086900



PARTIAL SECOND FLOOR FRAMING PLAN

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

1. TOP OF FLOOR SLAB ELEVATION = MATCH EXISTING (VIF)
2. (E) WOOD JOIST DENOTES SPAN DIRECTION OF EXISTING WOOD JOIST (VIF).
3. (E) DECK DENOTES SPAN DIRECTION OF EXISTING WOOD DECKING SYSTEM (VIF).
4. (E) CONC DECK DENOTES SPAN DIRECTION OF EXISTING CORRIDOR CONCRETE SLAB (VIF)
5. SECTIONS SHOWN ON PLAN APPLY TO SIMILAR CONDITIONS THROUGHOUT THE BUILDING.
6. SEE DWG S0.10 & S0.20 FOR ADDITIONAL STRUCTURAL NOTES.
7. SEE DWG S2.10 FOR NEW LINTEL SECTIONS & DETAILS.
8. ALL EXISTING CONDITIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO THE START OF ANY NEW WORK.
9. SEE ARCHITECTURAL DRAWINGS FOR ALL DEMOLITION REQUIREMENTS.
10. (VIF) DENOTES TO VERIFY IN THE FIELD.
11. IF EXIST. MASONRY WALL IS NOT SOLID THEN GROUT EXIST WALL SOLID SUPPORTING NEW SQUEEZE LINTELS FULL HT W/ 3,000 PSI GROUT. ATTACH SQUEEZE LINTELS TO GROUTED SOLID CMU PER DETAIL G/S2.10
12. CONTRACTOR TO VERIFY EXISTING FLOOR JOIST ARE CONTINUOUS (NOT SPLICED) ABOVE EXISTING WALLS TO BE REMOVED PRIOR TO CONSTRUCTION. IF WALLS APPEAR TO BE LOAD-BEARING OR CONDITIONS ARE DIFFERENT THAN SHOWN ON THE STRUCTURAL AND ARCHITECTURAL DRAWINGS CONTACT ENGINEER OF RECORD IMMEDIATELY.

PARTIAL ROOF FRAMING PLAN

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

1. TOP OF FLOOR SLAB ELEVATION = MATCH EXISTING (VIF)
2. (E) ROOF DECK (VIF) DENOTES SPAN DIRECTION OF EXISTING METAL ROOF DECK (VIF).
3. (E) LINTEL DENOTES EXISTING LINTEL (VIF).
4. SECTIONS SHOWN ON PLAN APPLY TO SIMILAR CONDITIONS THROUGHOUT THE BUILDING.
5. SEE DWG S0.10 & S0.20 FOR ADDITIONAL STRUCTURAL NOTES.
6. SEE DWG S2.10 FOR NEW LINTEL SECTIONS & DETAILS.
7. ALL EXISTING CONDITIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO THE START OF ANY NEW WORK.
8. SEE ARCHITECTURAL DRAWINGS FOR ALL DEMOLITION REQUIREMENTS.
9. (VIF) DENOTES TO VERIFY IN THE FIELD.
10. IF EXIST. MASONRY WALL IS NOT SOLID THEN GROUT EXIST WALL SOLID SUPPORTING NEW SQUEEZE LINTELS FULL HT W/ 3,000 PSI GROUT. ATTACH SQUEEZE LINTELS TO GROUTED SOLID CMU PER DETAIL L/S2.10.
11. CONTRACTOR TO PROVIDE UNISTRUT FRAMING AS REQUIRED FOR THE SUPPORT OF THE KITCHEN HOOD. ALL UNISTRUT FRAMING TO BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY AND RETAINED BY THE CONTRACTOR.

PARTIAL FIRST FLOOR FRAMING PLAN

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

1. TOP OF FLOOR SLAB ELEVATION = MATCH EXISTING (VIF)
2. (E) LG JST (VIF) DENOTES SPAN DIRECTION OF EXISTING LIGHT GAUGE JOIST (VIF).
3. (E) DECK DENOTES SPAN DIRECTION OF EXISTING CONC / METAL LATH DECK SYSTEM (VIF).
4. (E) CONC DECK DENOTES SPAN DIRECTION OF EXISTING CORRIDOR CONCRETE SLAB (VIF)
5. SECTIONS SHOWN ON PLAN APPLY TO SIMILAR CONDITIONS THROUGHOUT THE BUILDING.
6. SEE DWG S0.10 & S0.20 FOR ADDITIONAL STRUCTURAL NOTES.
7. SEE DWG S2.10 FOR NEW LINTEL SECTIONS & DETAILS.
8. ALL EXISTING CONDITIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO THE START OF ANY NEW WORK.
9. SEE ARCHITECTURAL DRAWINGS FOR ALL DEMOLITION REQUIREMENTS.
10. (VIF) DENOTES TO VERIFY IN THE FIELD.
11. IF EXIST. MASONRY WALL IS NOT SOLID THEN GROUT EXIST WALL SOLID SUPPORTING NEW SQUEEZE LINTELS FULL HT W/ 3,000 PSI GROUT. ATTACH SQUEEZE LINTELS TO GROUTED SOLID CMU PER DETAIL G/S2.10.
12. CONTRACTOR TO VERIFY EXISTING FLOOR JOIST ARE CONTINUOUS (NOT SPLICED) ABOVE EXISTING WALLS TO BE REMOVED PRIOR TO CONSTRUCTION. IF WALLS APPEAR TO BE LOAD-BEARING OR CONDITIONS ARE DIFFERENT THAN SHOWN ON THE STRUCTURAL AND ARCHITECTURAL DRAWINGS CONTACT ENGINEER OF RECORD IMMEDIATELY.

KEY PLAN

NOT TO SCALE

|                                 |              |
|---------------------------------|--------------|
| NJ Certificate of Authorization |              |
| Eng'r. Nos.                     | 24GA28347700 |
| Arch. Nos.                      | 21AC00012400 |
| Date                            | 08/13/26     |
| Checked                         | AV           |
| Drawn                           | WP/AD        |

JEFFREY POTTER, R.A.

Title REGISTERED ARCHITECT License No. NJ21A02015400

| Date | Description |
|------|-------------|
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PARTIAL EXISTING FRAMING PLAN  
ALTERATIONS & ADDITIONS TO J. FITHIAN TATEM  
ELEMENTARY SCHOOL  
HADDONFIELD BOARD OF EDUCATION  
1 GLOVER AVE. HADDONFIELD, NJ 08033

Job No. 2.20277.25.10

File No. File No.

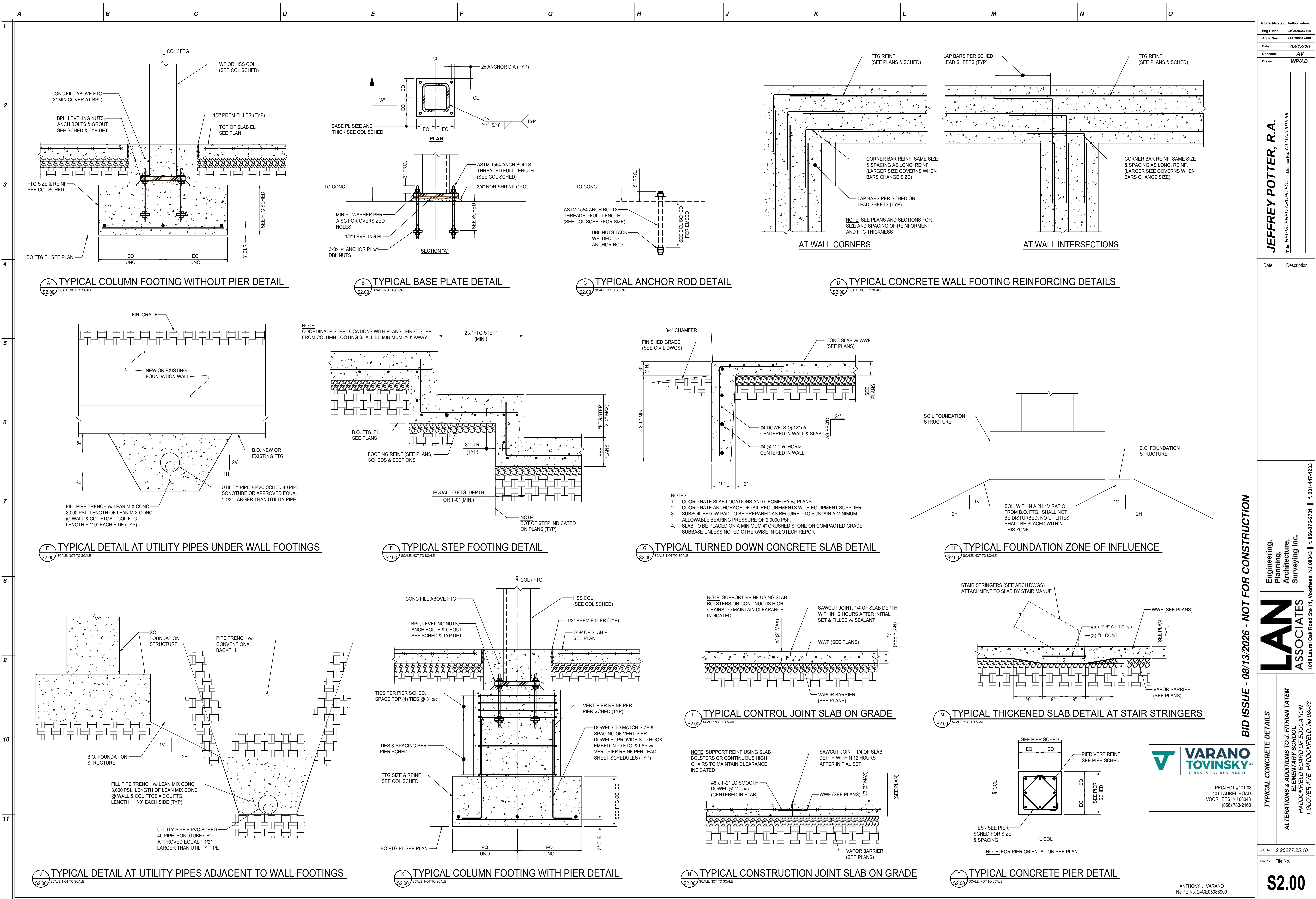
S1.30

VARANO  
TOVINSKY  
STRUCTURAL ENGINEERS

PROJECT #171.03  
101 LAUREL ROAD  
VOORHEES, NJ 08043  
(856) 785-2160

ANTHONY J. VARANO  
NJ PE No. 24GE0508900





|                                 |              |
|---------------------------------|--------------|
| NJ Certificate of Authorization |              |
| Engr. Nos.                      | 24GA28347700 |
| Arch. Nos.                      | 21AC00012400 |
| Date                            | 08/13/26     |
| Checked                         | AV           |
| Drawn                           | WP/AD        |

**JEFFREY POTTER, R.A.**  
Title REGISTERED ARCHITECT License No. NJ21A02015400

| Date | Description |
|------|-------------|
|------|-------------|

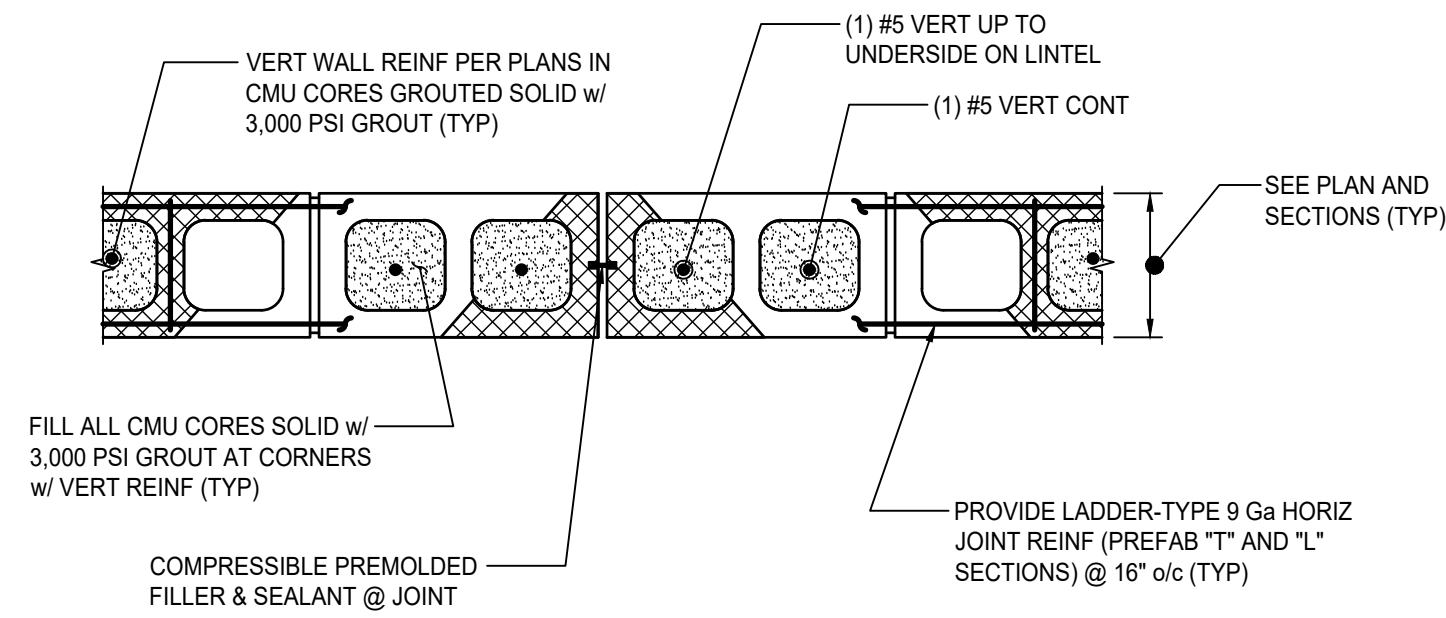
**LAN ASSOCIATES**  
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1018 Laurel Oak Road Ste 11, Voorhees, NJ 08043 | t. 856-375-2701 | f. 201-447-1233

**TYPICAL CONCRETE DETAILS**  
ALTERATIONS & ADDITIONS TO J. FIFTH TATEM ELEMENTARY SCHOOL  
HADDONFIELD BOARD OF EDUCATION  
1 GLOVER AVE. HADDONFIELD, NJ 08033

|          |               |
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| Job No.  | 2.20277.25.10 |
| File No. | File No.      |

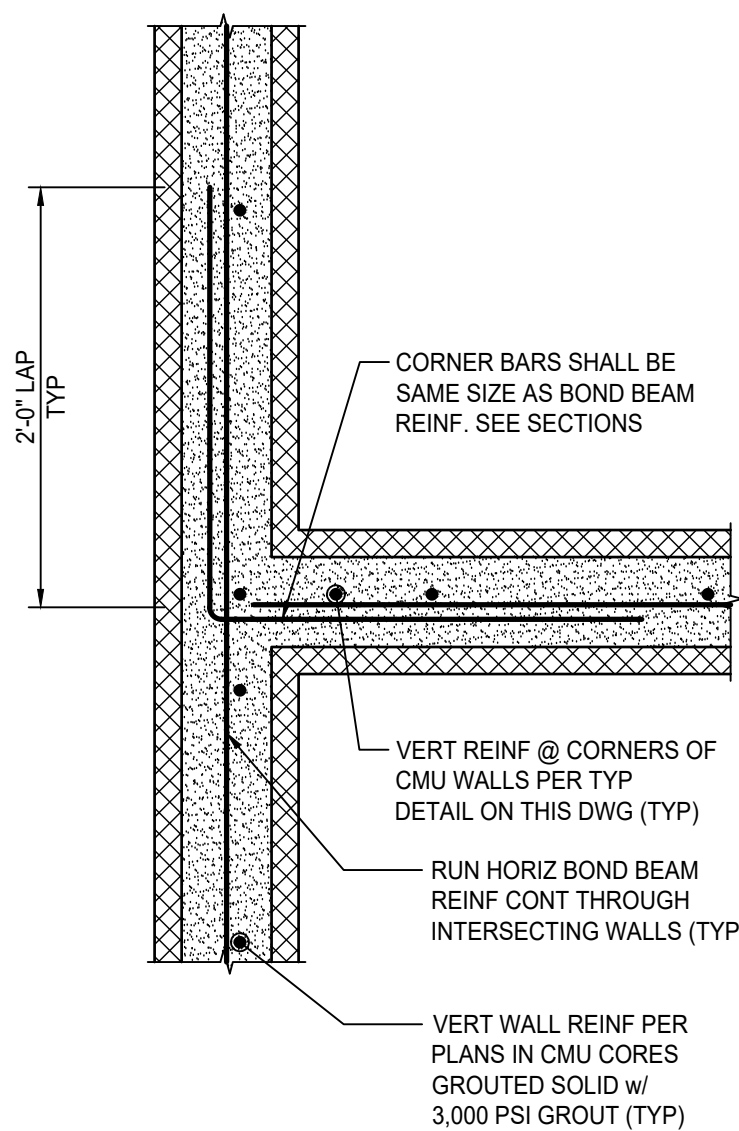
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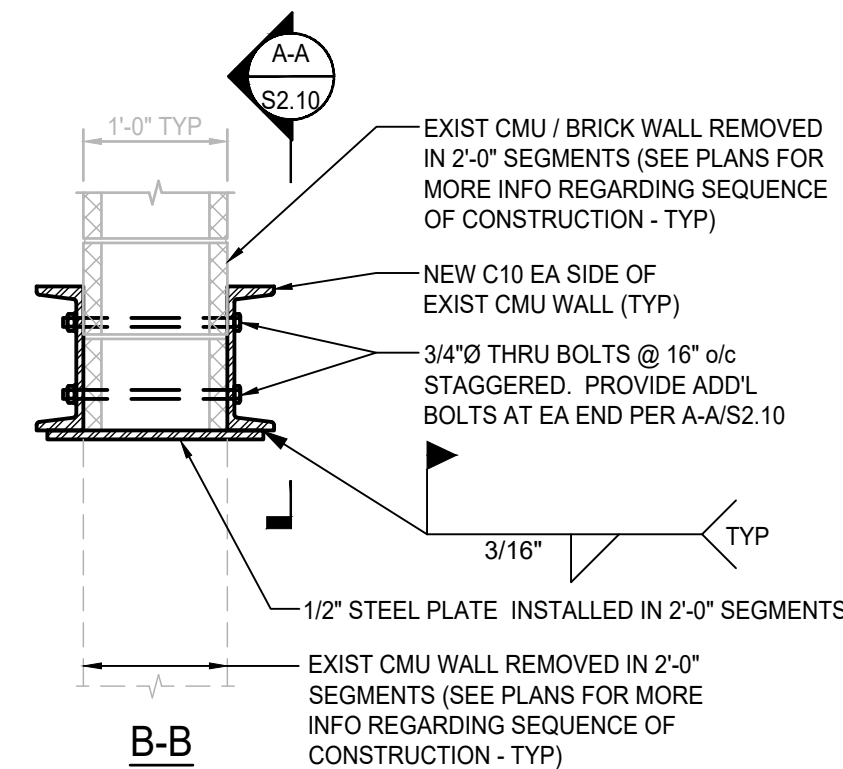
SEE PLAN AND -  
SECTIONS (TYP

**D TYPICAL CMU WALL CONTROL JOINT DETAIL**

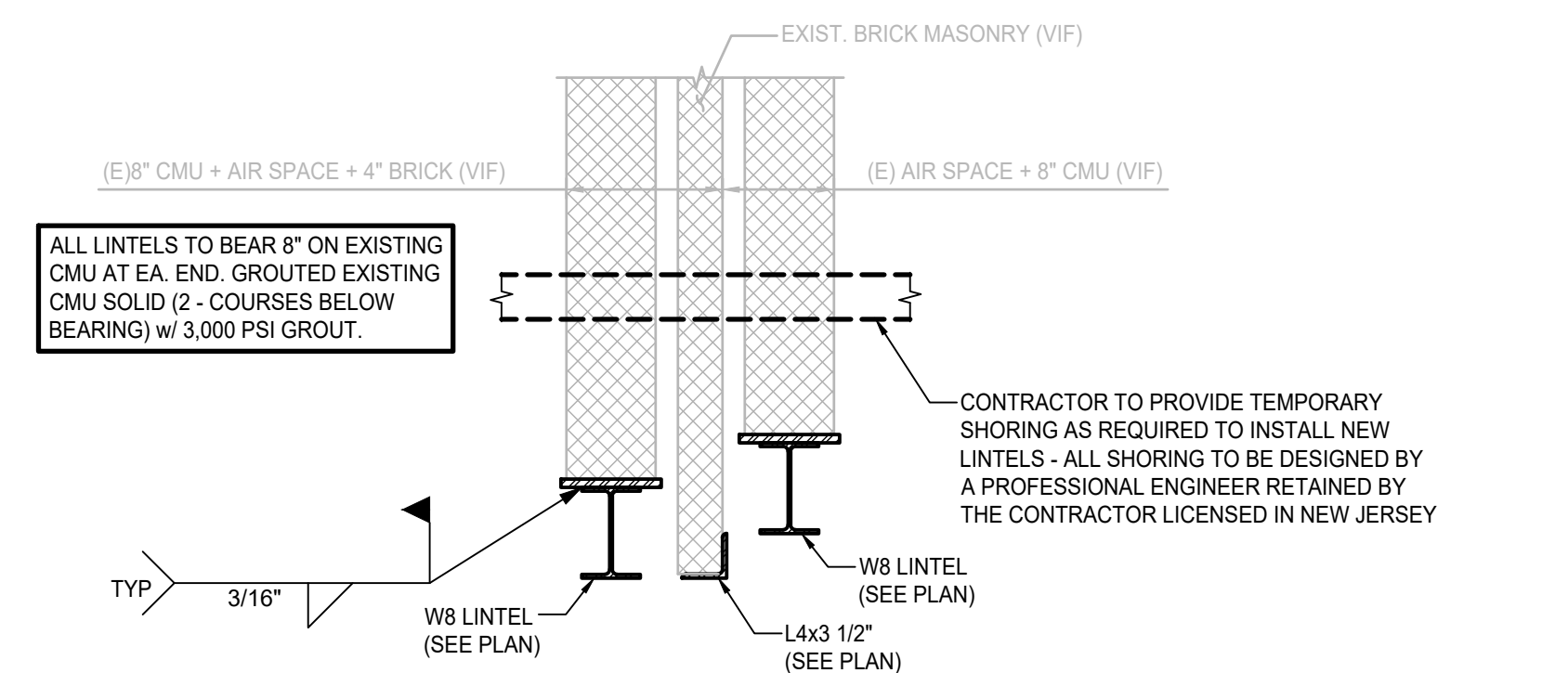


### DETAIL AT INTERSECTING WALLS

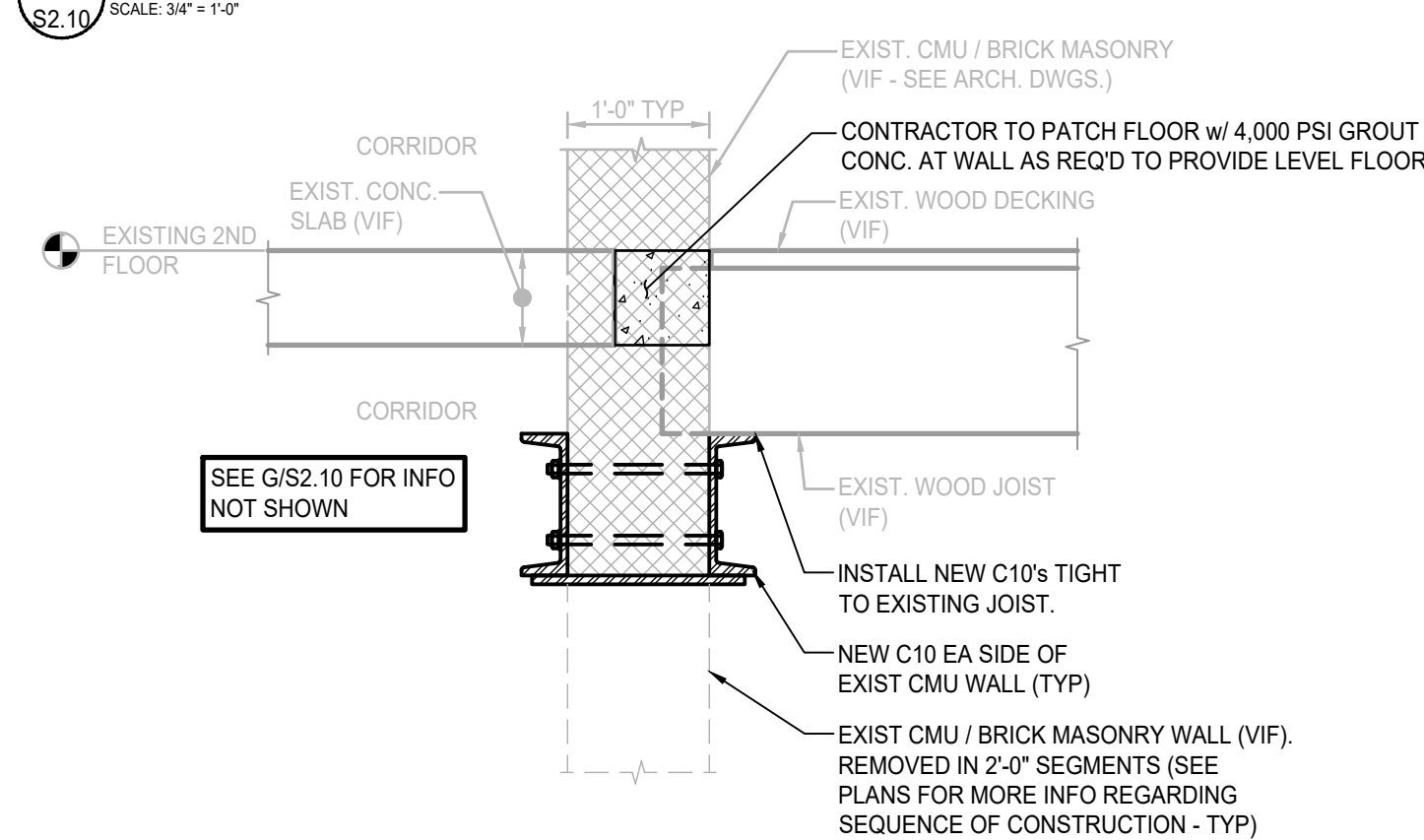
 TYPICAL CMU BOND BEAM REINFORCING LAYOUT



 1ST FLOOR FRAMING AT KITCHEN LINTEL SECTION



 1ST FLOOR FRAMING AT KITCHEN LINTEL SECTION



EXST. 2ND. FLOOR FRAMING AT CORRIDOR LINTEL SECTION

| Date | Description |
|------|-------------|
|------|-------------|

Job No. 2.20277.25.10

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| File No. | File No. |
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## S2.10

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101 LAUREL ROAD  
VOORHEES, NJ 08043  
(856) 783-2161

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**JEFFREY POTTER, R.A.**

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Title REGISTERED ARCHITECT License No. NJ21A02015400

**LAN**  
ASSOCIATES

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101 LAUREL ROAD  
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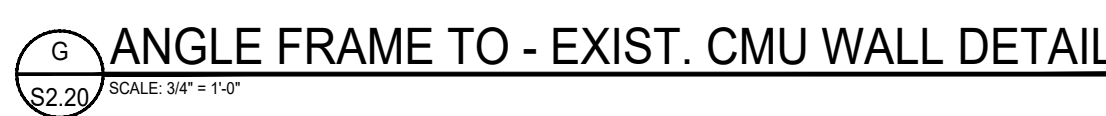
ANTHONY J. VARANO  
NJ PE No. 24GE05086000



Diagram illustrating a beam-to-column connection. The beam is labeled "WF BEAM (SEE PLAN)" and the column is labeled "COLUMN". The connection is labeled "EA SIDE" and "L3x3x5/16 (MIN)". The bolts are labeled "BOLTS PER SCHED".

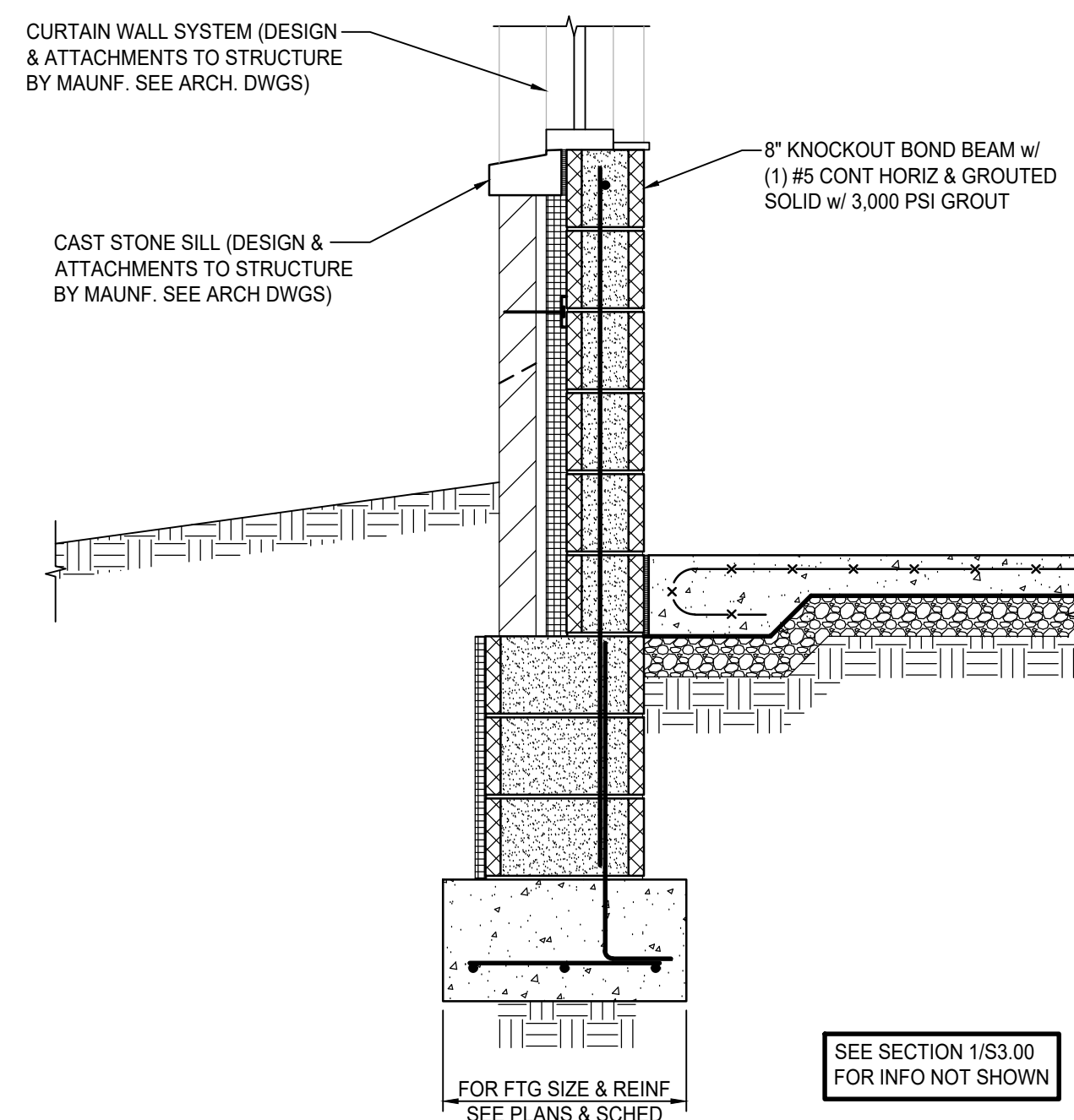
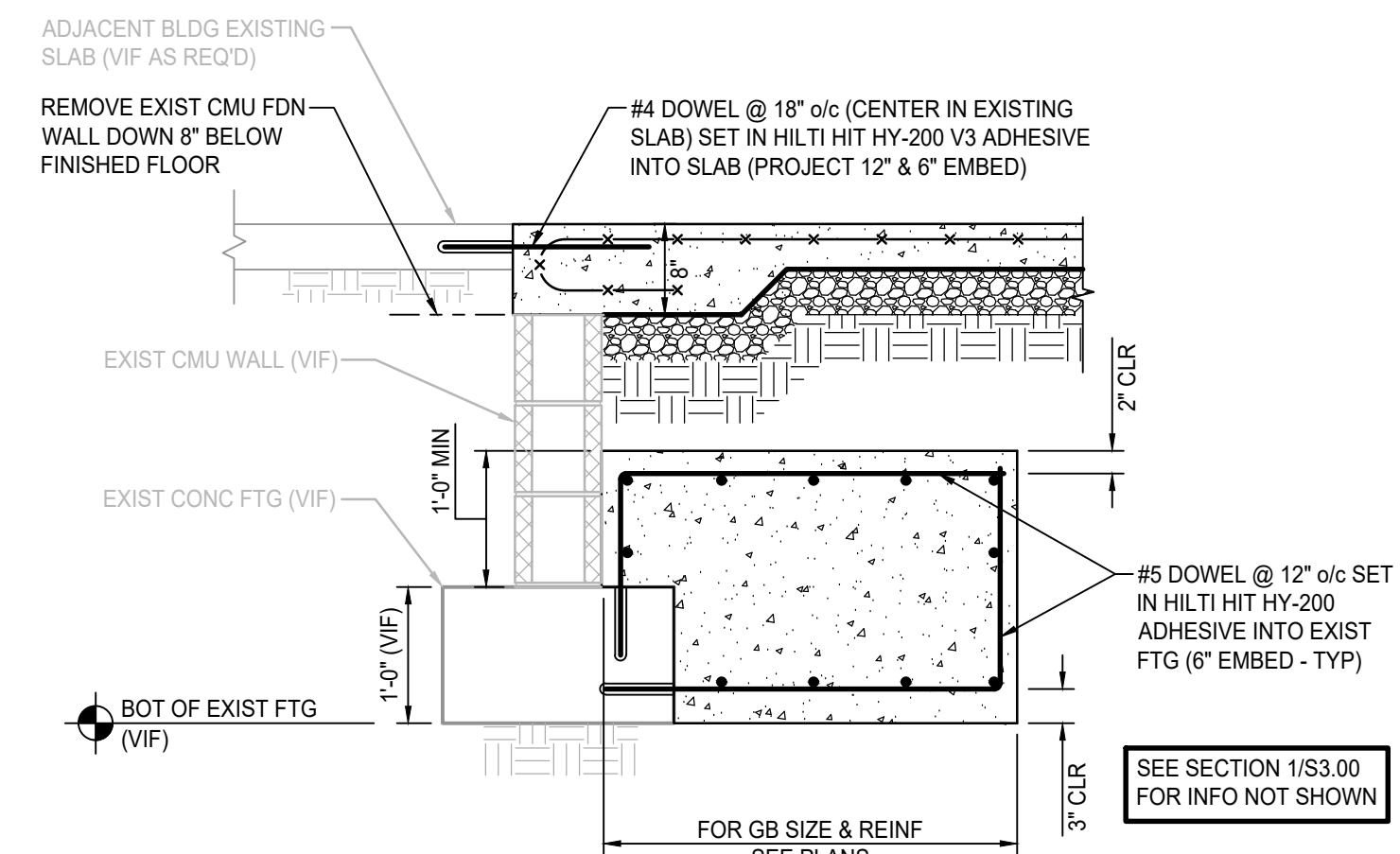
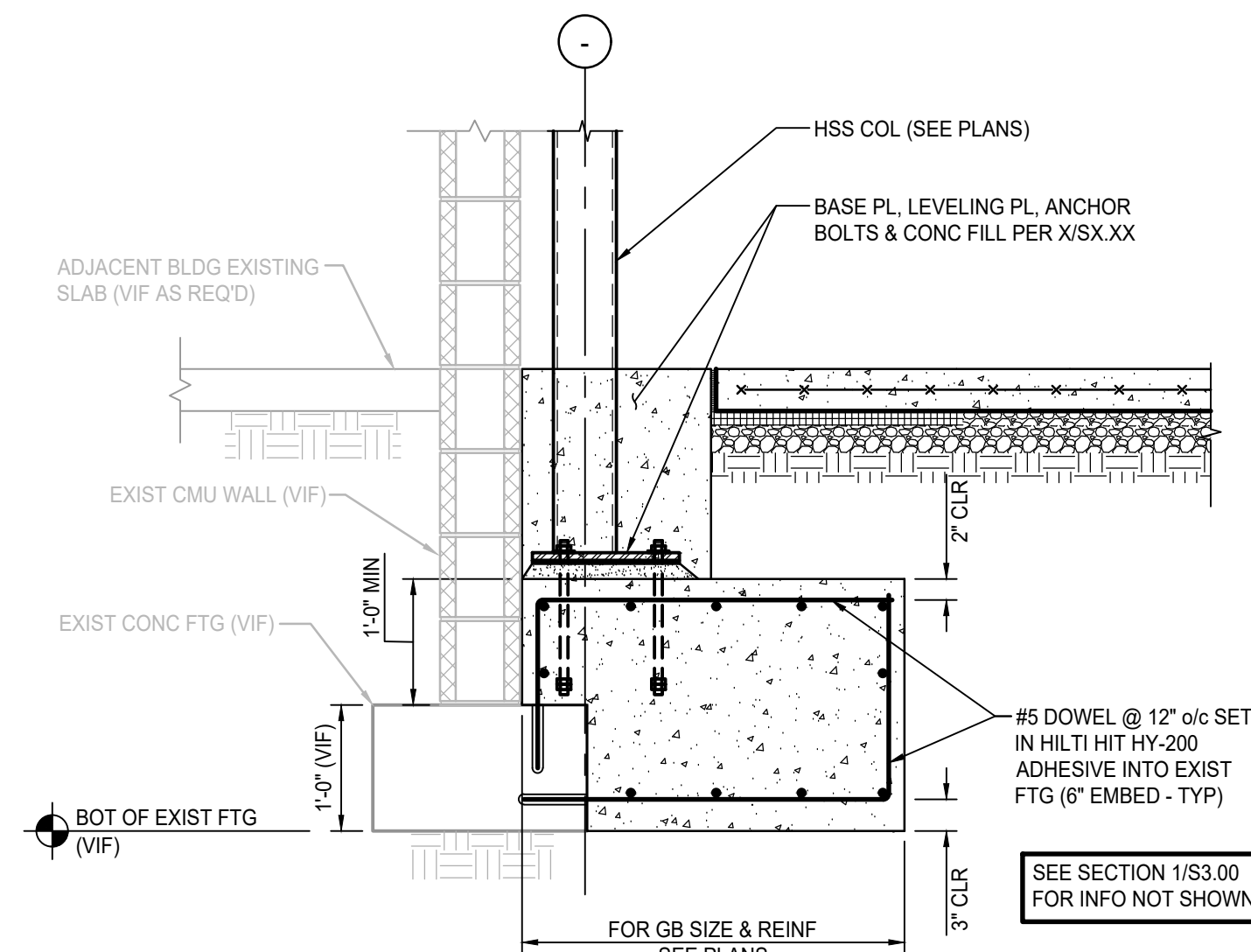
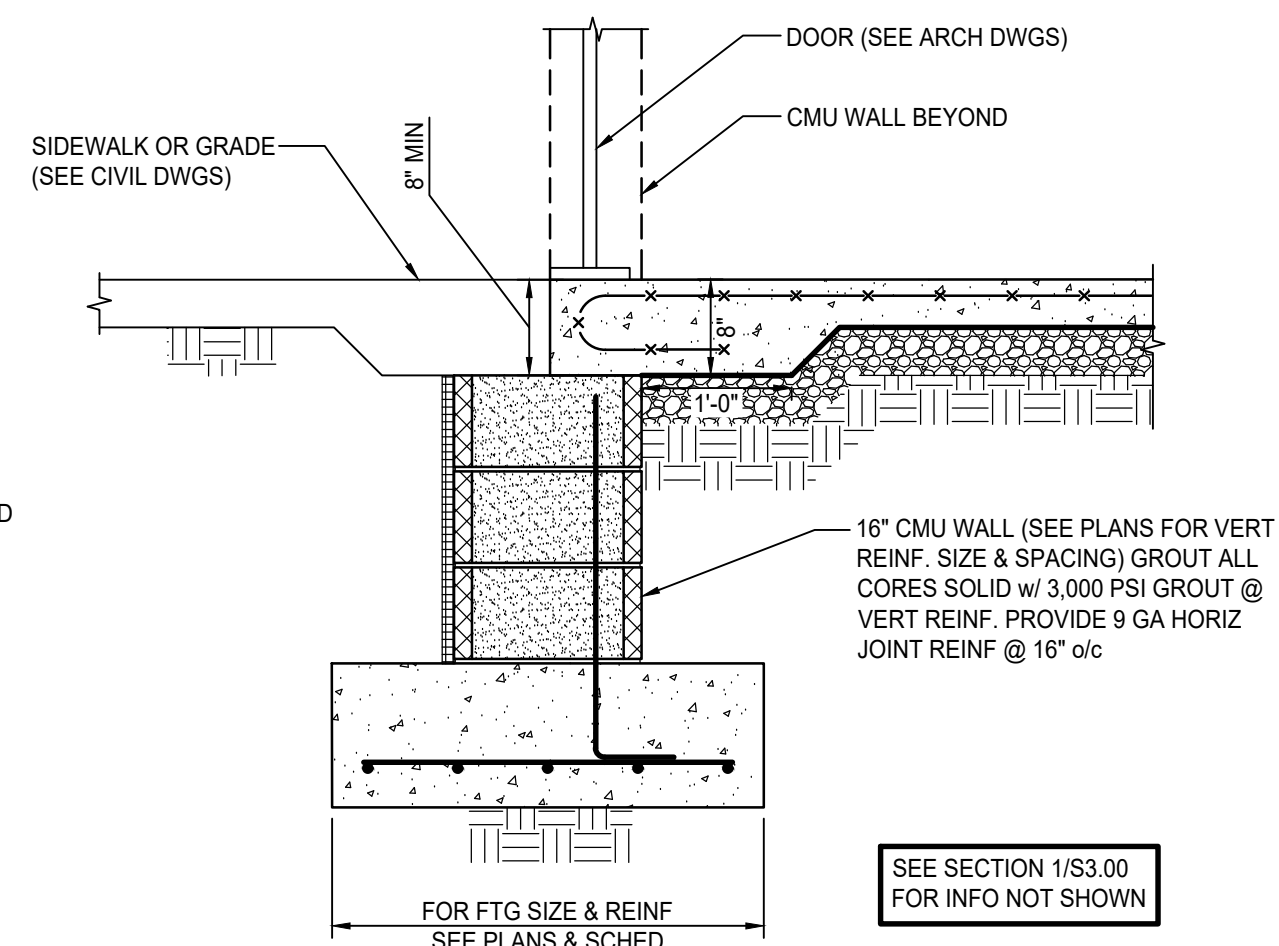
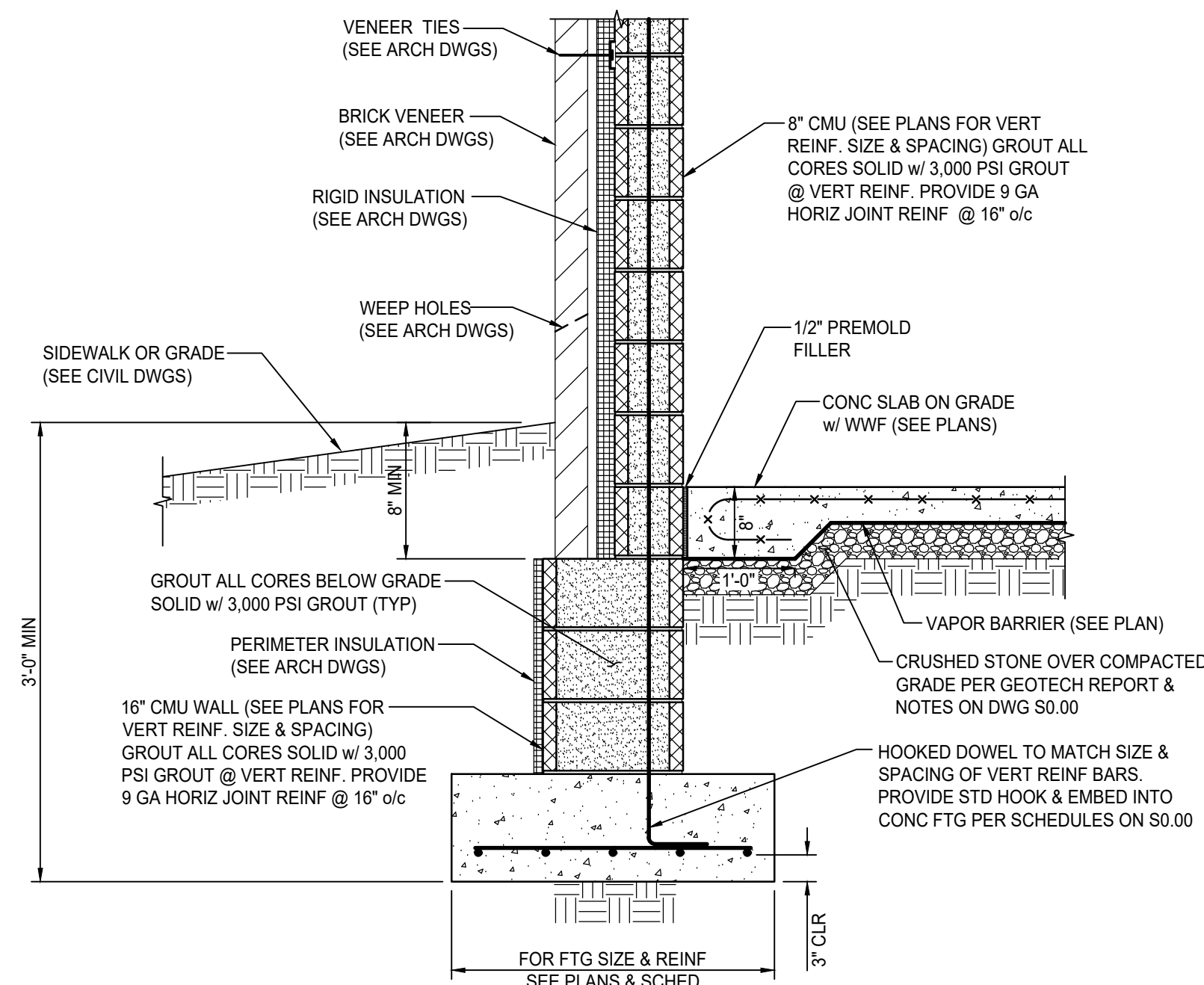
| BEAM SIZE | STANDARD BOLTS REQ'D |
|-----------|----------------------|
| W36       | (1) ROW - (10) BOLTS |
| W33       | (1) ROW - (9) BOLTS  |
| W30       | (1) ROW - (8) BOLTS  |
| W27       | (1) ROW - (7) BOLTS  |
| W24       | (1) ROW - (6) BOLTS  |
| W21       | (1) ROW - (5) BOLTS  |
| W18 & W16 | (1) ROW - (4) BOLTS  |
| W14 & W12 | (1) ROW - (3) BOLTS  |
| W10 & W8  | (1) ROW - (2) BOLTS  |
| W6        | (2) ROWS - (1) BOLT  |

**TYPICAL WF BEAM SHEAR CONNECTION DETAIL**



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|                                  |             |
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| NJ Certificate of Authorizations |             |
| Eng'r. Nos.                      | 24GA2834770 |
| Arch. Nos.                       | 21AC0001240 |
| Date                             | 08/13/2024  |
| Checked                          | AV          |
| Drawn                            | WP/AD       |

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**FOUNDATIONS & ADDITIONS TO J. FIFTHIAN TATEM  
ELEMENTARY SCHOOL**  
HADDONFIELD BOARD OF EDUCATION  
1 GLOVER AVE. HADDONFIELD, NJ 08033

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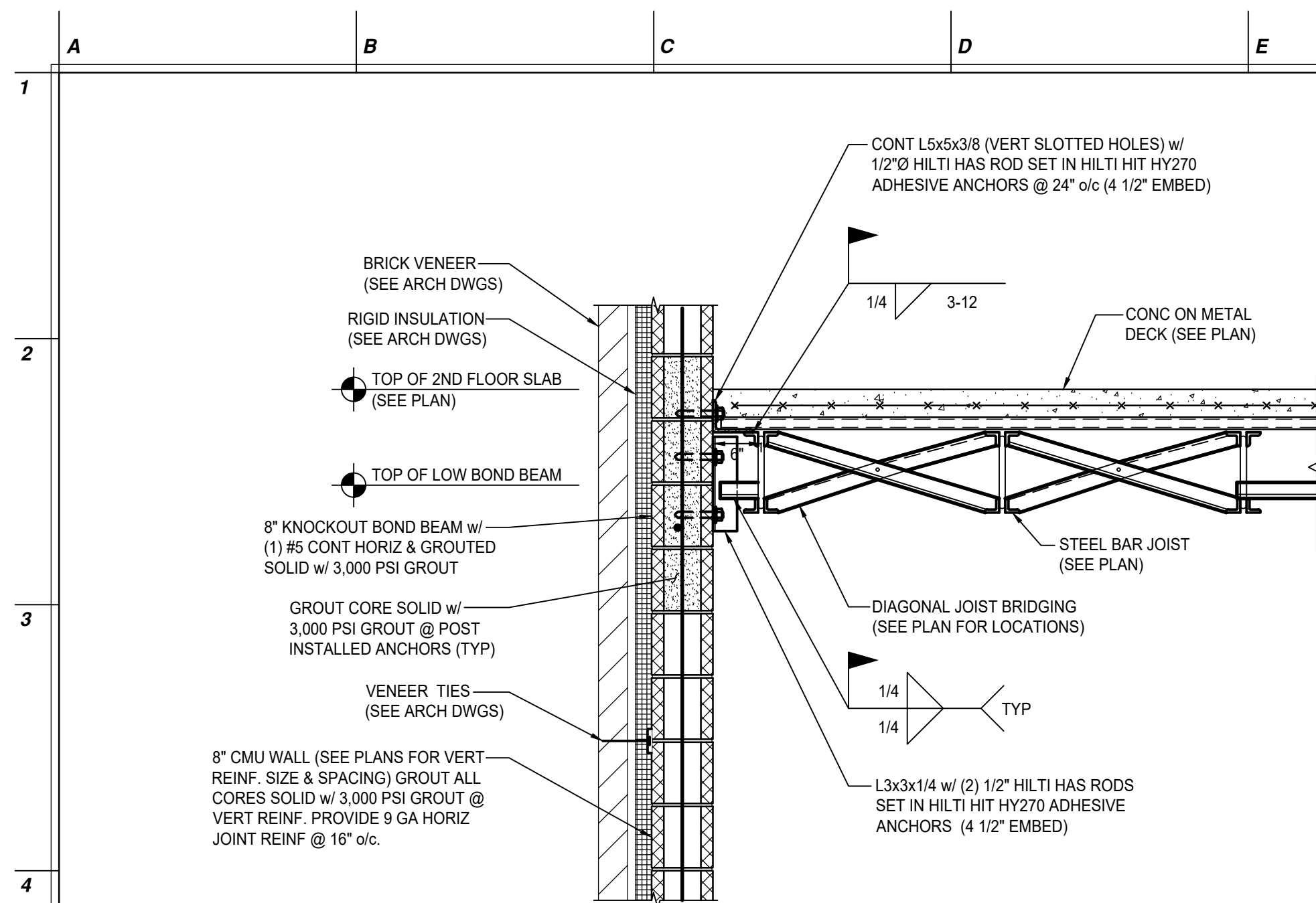
**S3.00**


**VARANO  
TOVINSKY**

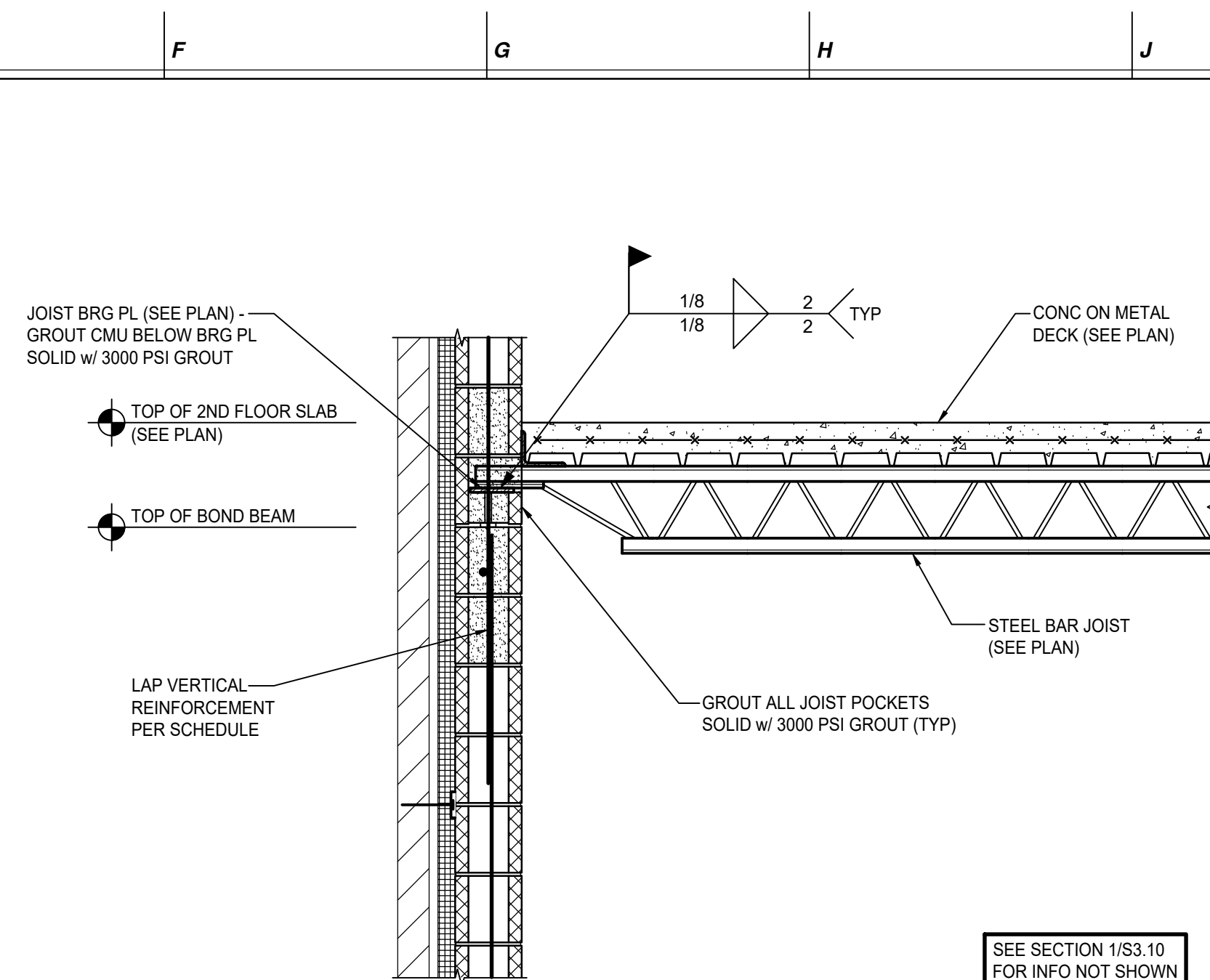
PROJECT #171.0  
101 LAUREL ROAD  
VOORHEES, NJ 08040  
(856) 783-2161

ANTHONY J. VARANO  
NJ PE No. 24GE05086900

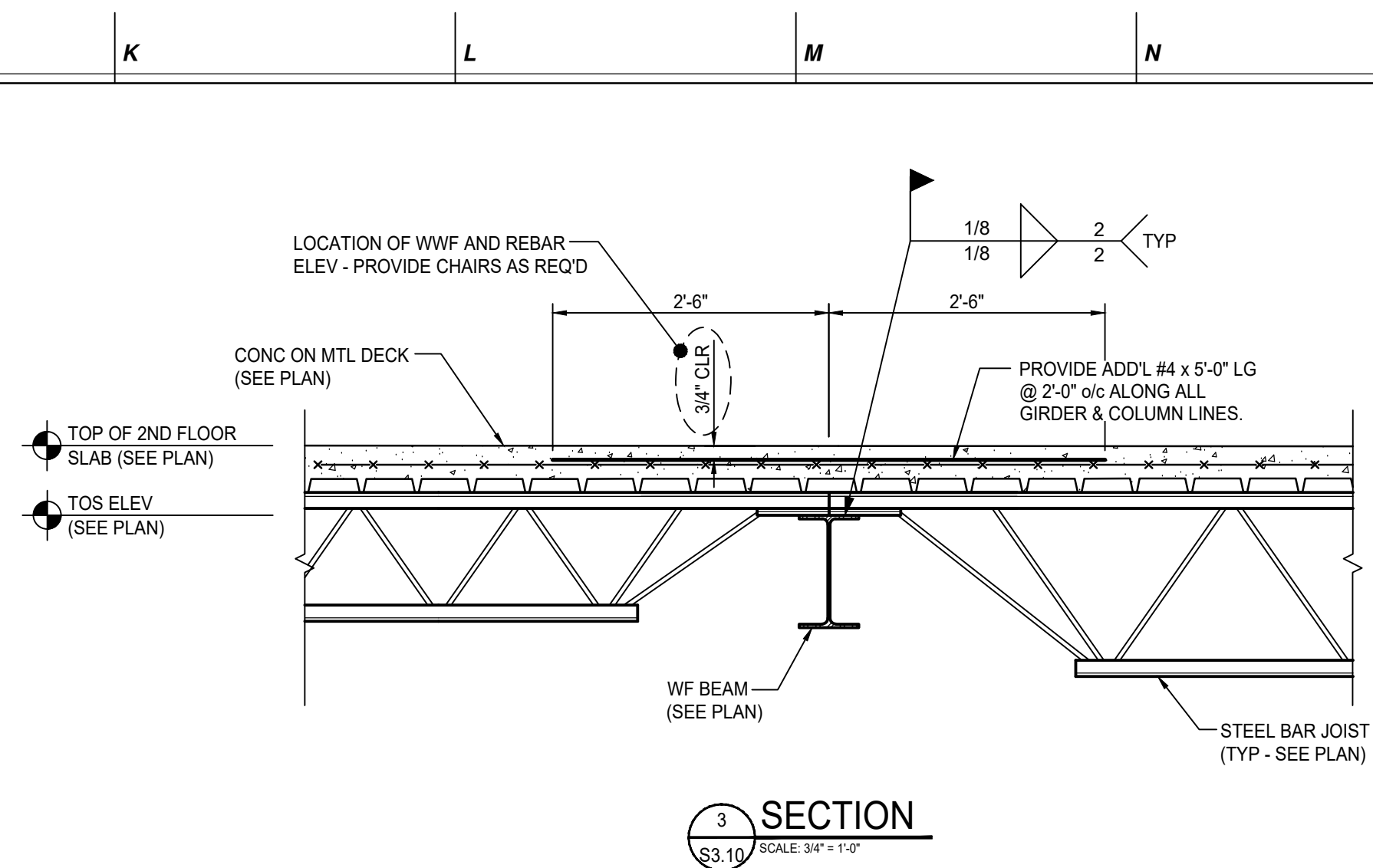




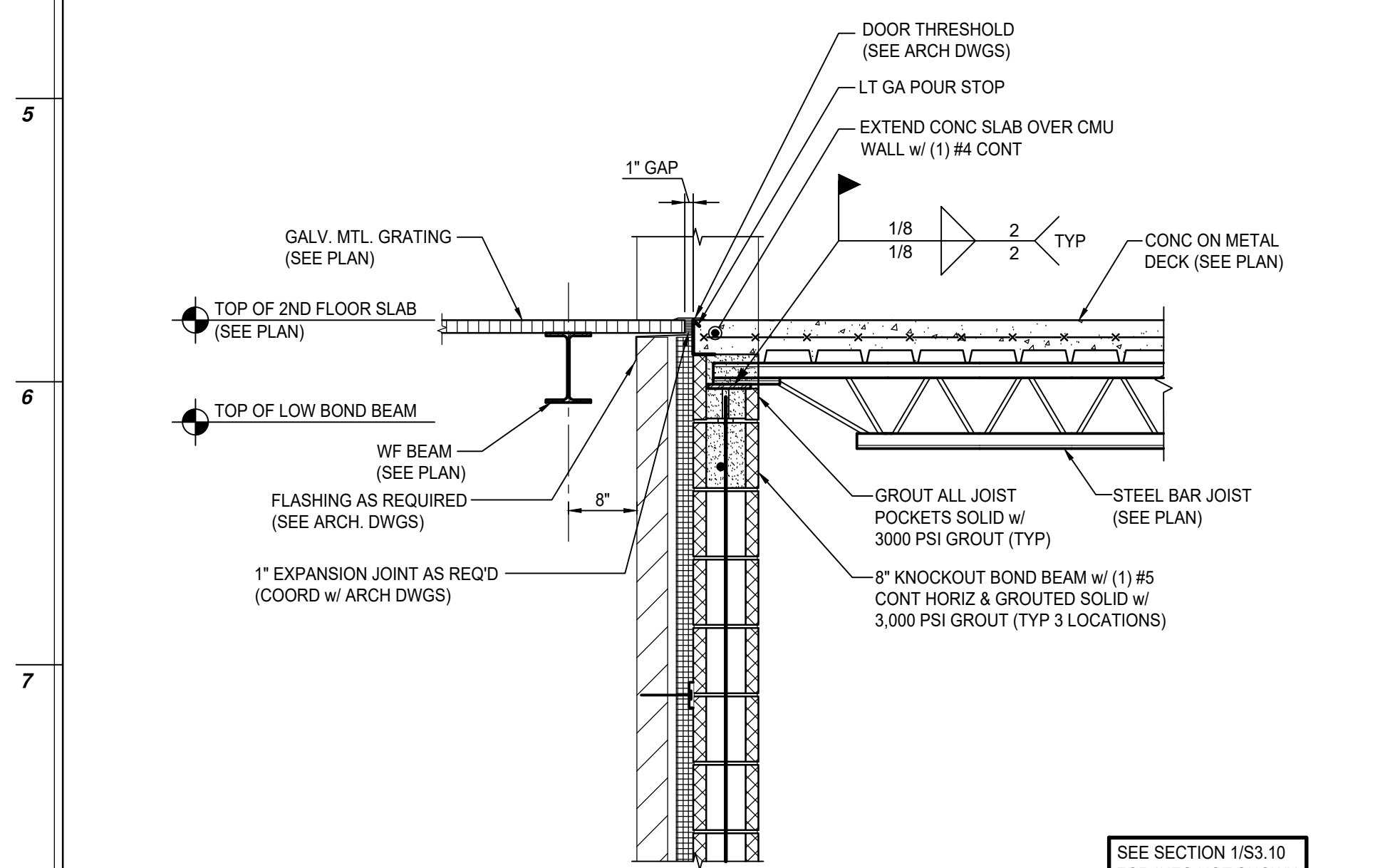
1 SECTION  
S3.10 SCALE: 3/4" = 1'-0"



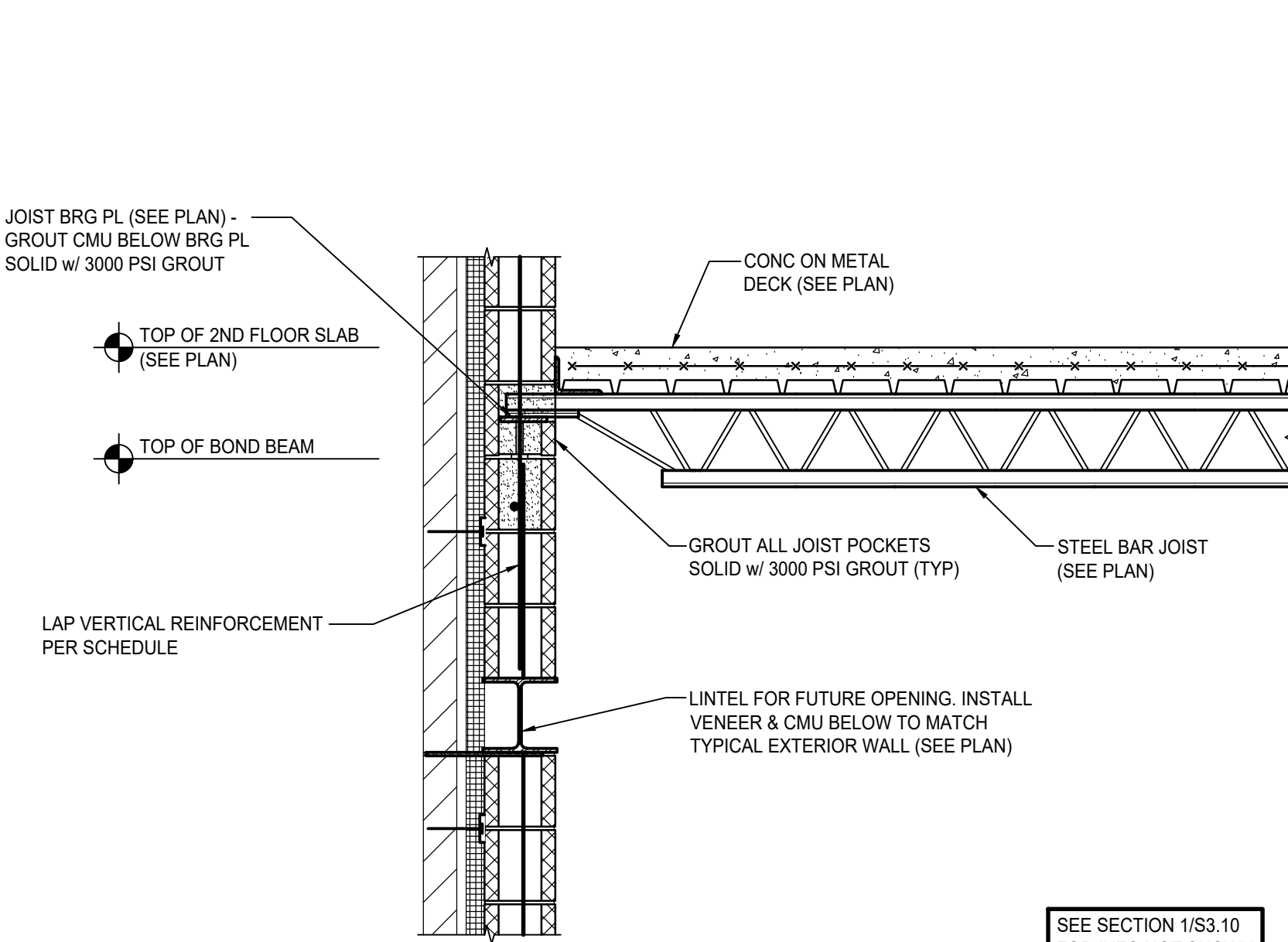
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S3.10 SCALE: 3/4" = 1'-0"



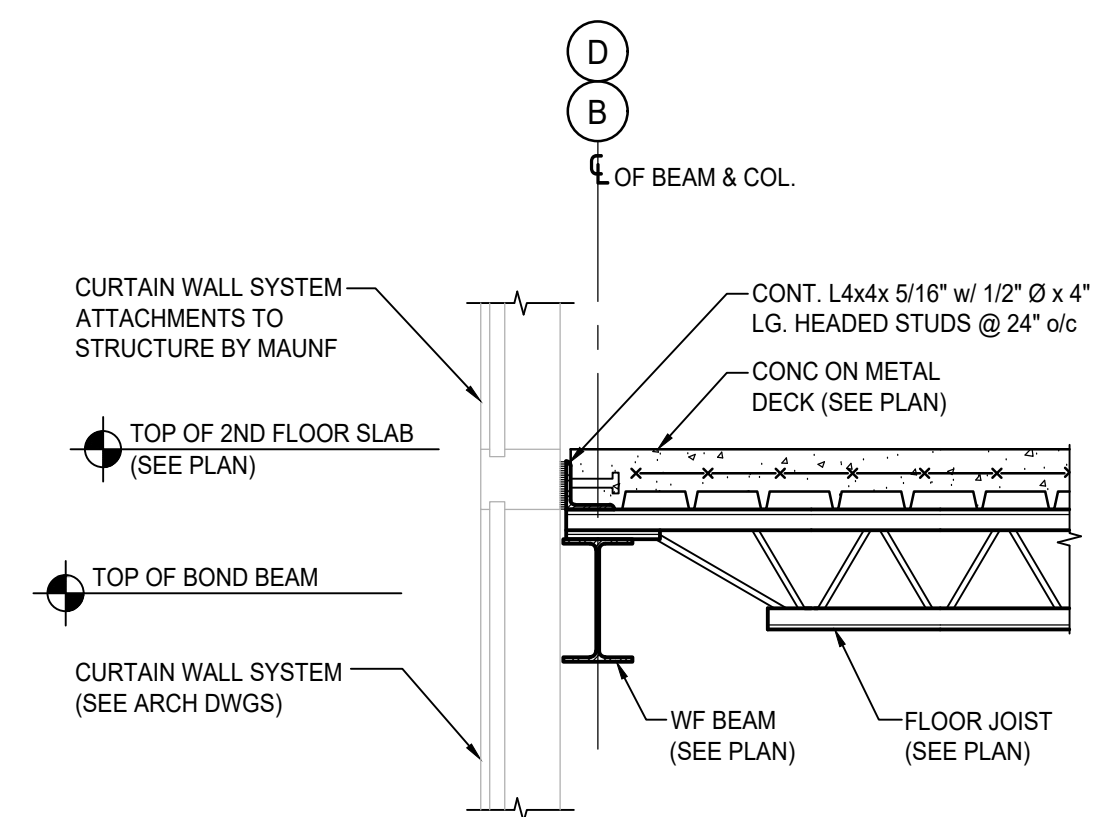
3 SECTION  
S3.10 SCALE: 3/4" = 1'-0"



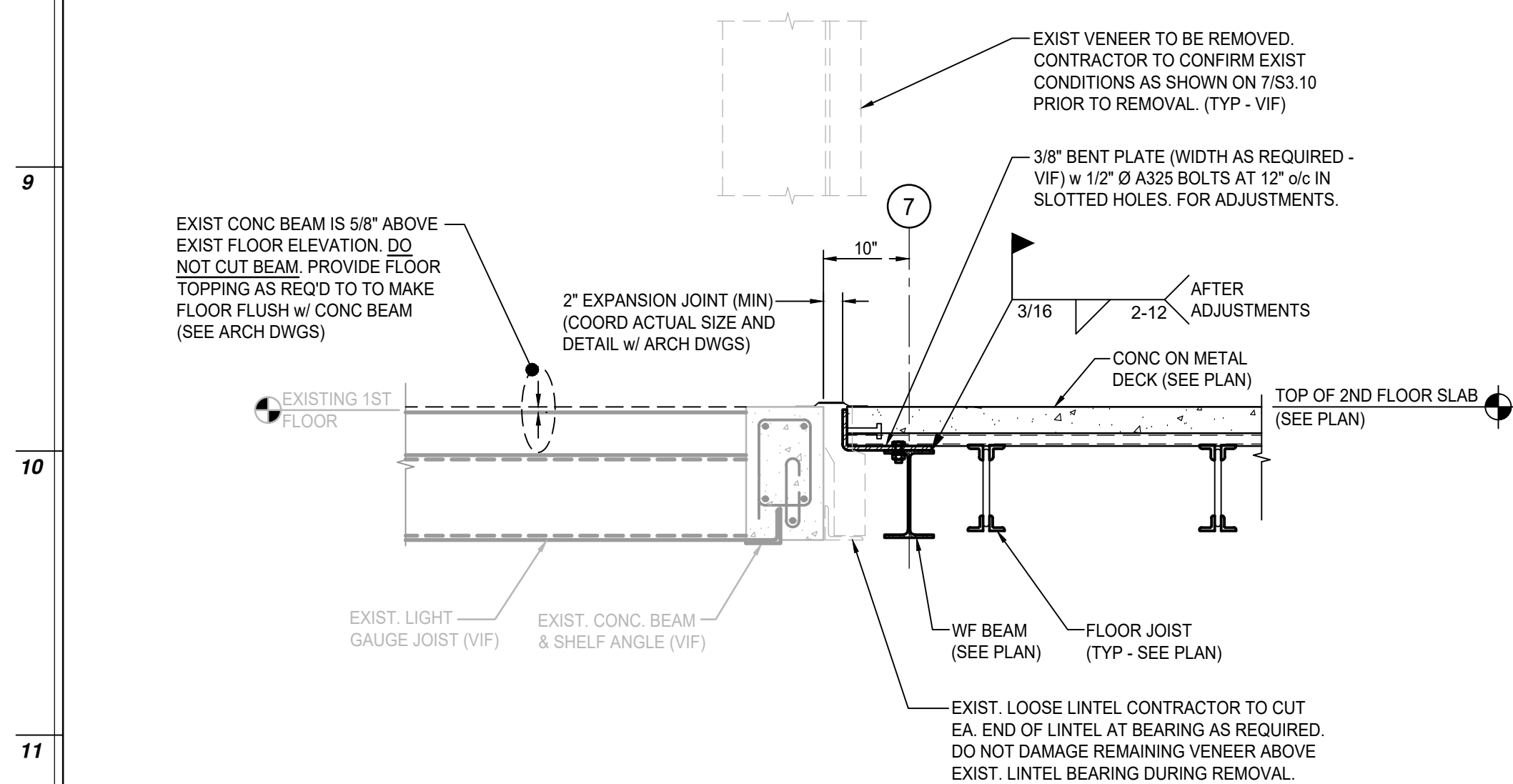
4 SECTION  
S3.10 SCALE: 3/4" = 1'-0"



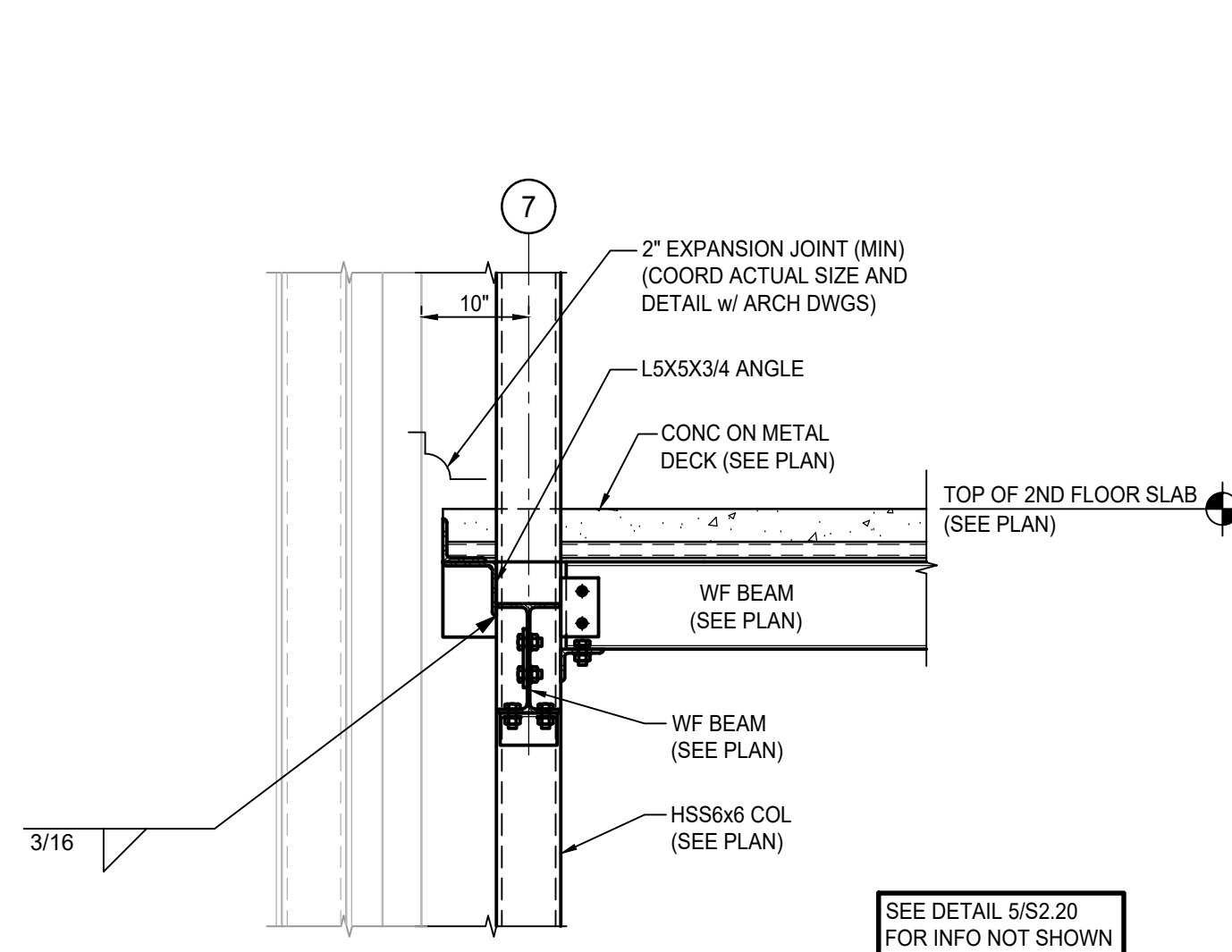
5 SECTION  
S3.10 SCALE: 3/4" = 1'-0"



6 SECTION AT CORRIDOR  
S3.10 SCALE: 3/4" = 1'-0"



7 1ST. FLOOR FRAMING AT EXST. / NEW CORRIDOR SECTION  
S3.10 SCALE: 3/4" = 1'-0"



8 SECTION AT COL. AT 1ST. FLOOR FRAMING  
S3.10 SCALE: 3/4" = 1'-0"

|                                                                                                                              |               |
|------------------------------------------------------------------------------------------------------------------------------|---------------|
| NJ Certificate of Authorization                                                                                              |               |
| Eng'r. Nos.                                                                                                                  | 24GAS28347790 |
| Arch. Nos.                                                                                                                   | 21AC00012460  |
| Date                                                                                                                         | 08/13/26      |
| Checked                                                                                                                      | AV            |
| Drawn                                                                                                                        | WP/AD         |
| <div> <div> <b>JEFFREY POTTER, R.A.</b><br/> REGISTERED ARCHITECT </div> <div> Title License No. NJE1A02015400 </div> </div> |               |

| <u>Date</u> | <u>Description</u> |
|-------------|--------------------|
|-------------|--------------------|

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**SECOND FLOOR SECTIONS**

**ALTERATIONS & ADDITIONS TO J. FITHIAN TATEM  
ELEMENTARY SCHOOL**  
HADDONFIELD BOARD OF EDUCATION  
1 GLOVER AVE. HADDONFIELD, NJ 08033

Job No. 2.20277.25.10

File No. File No.

### S3.10

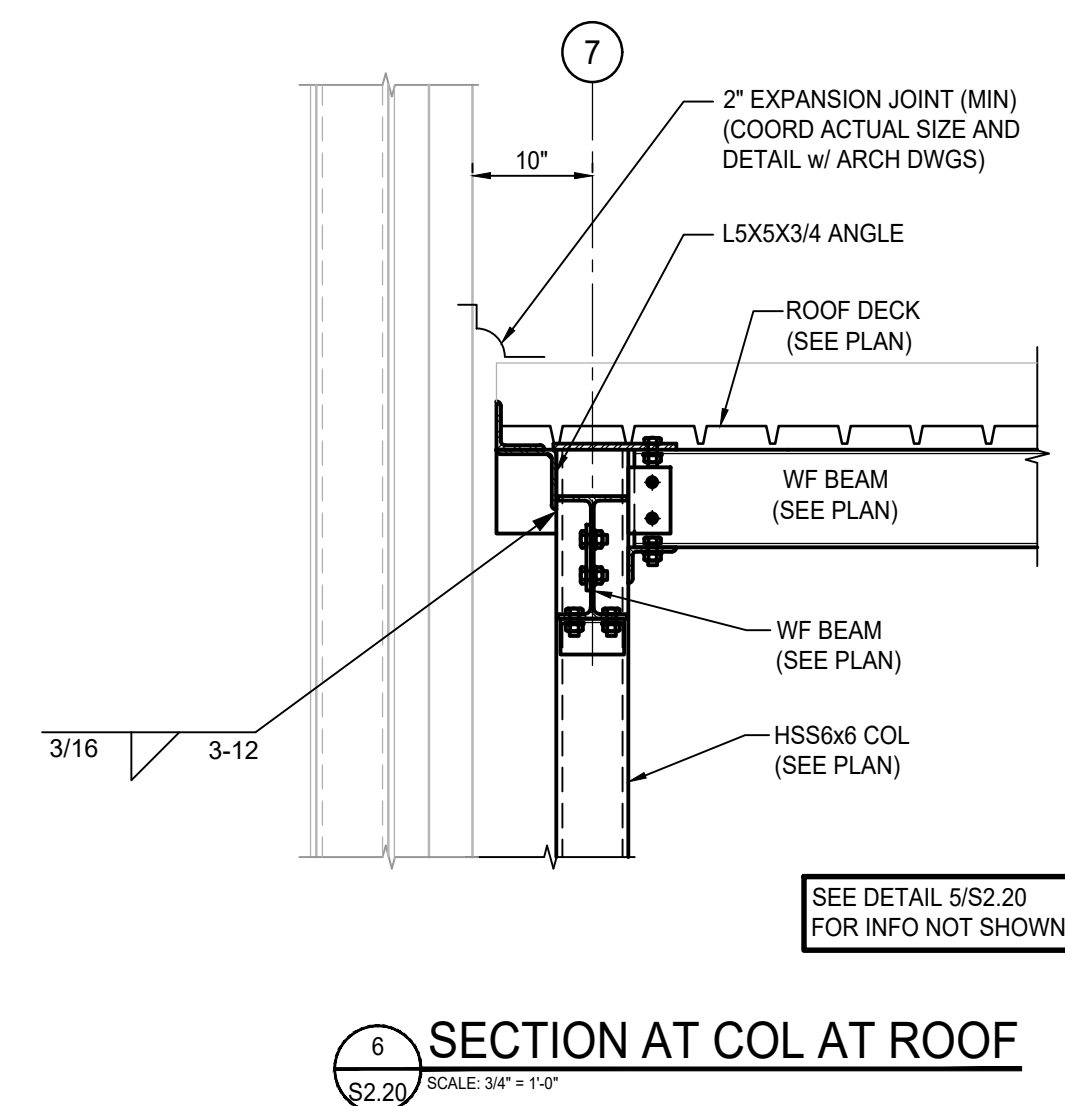
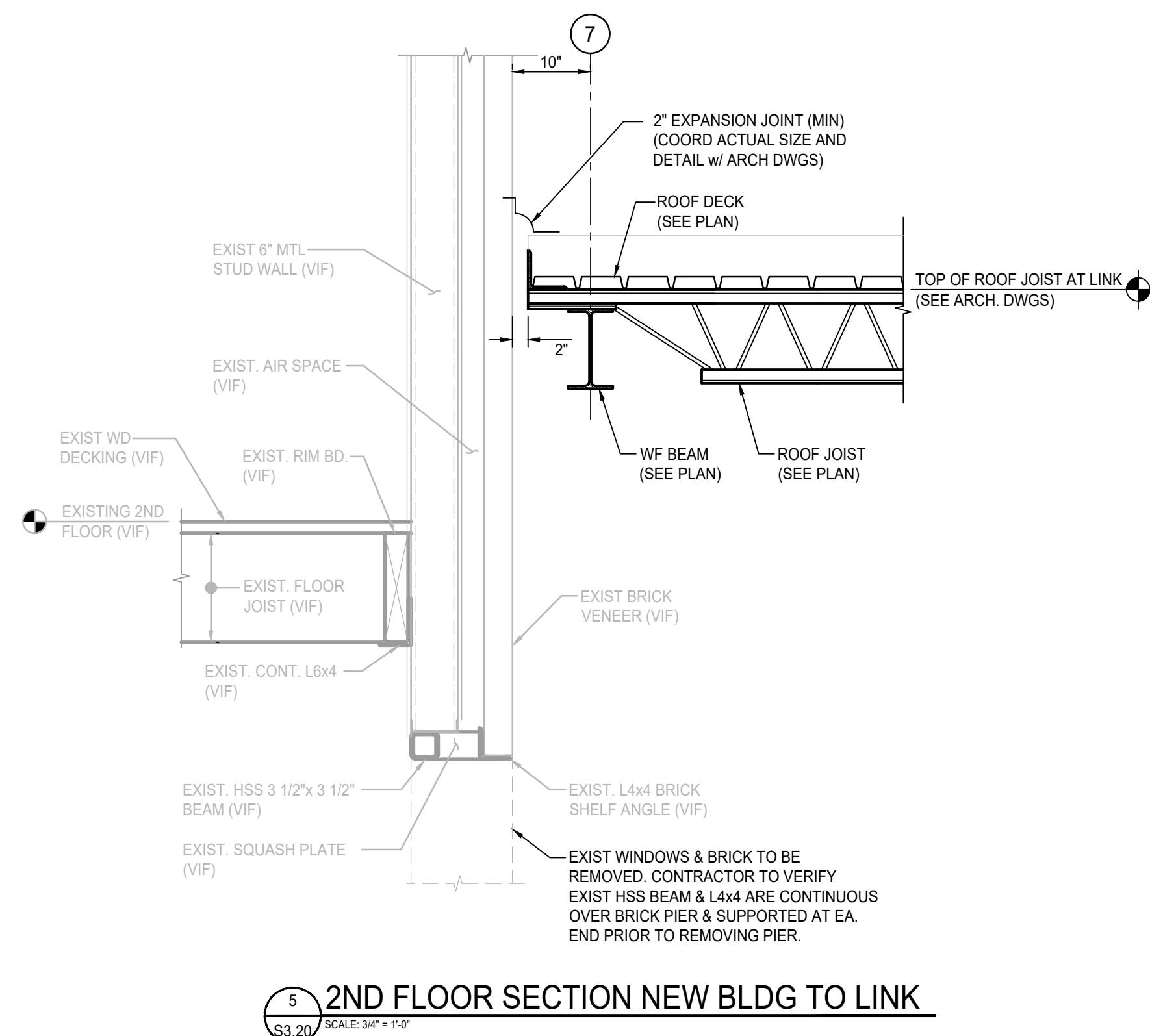
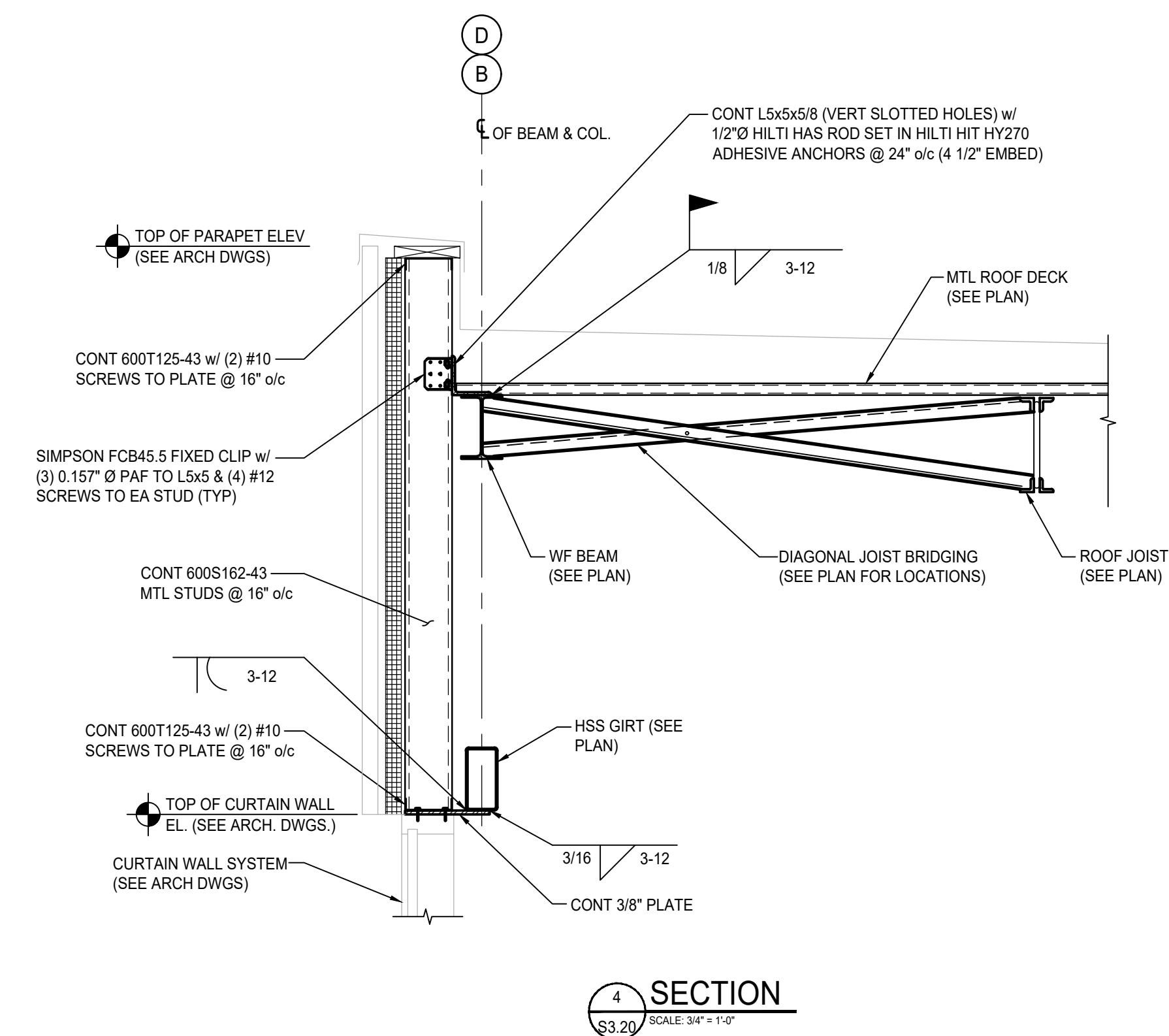
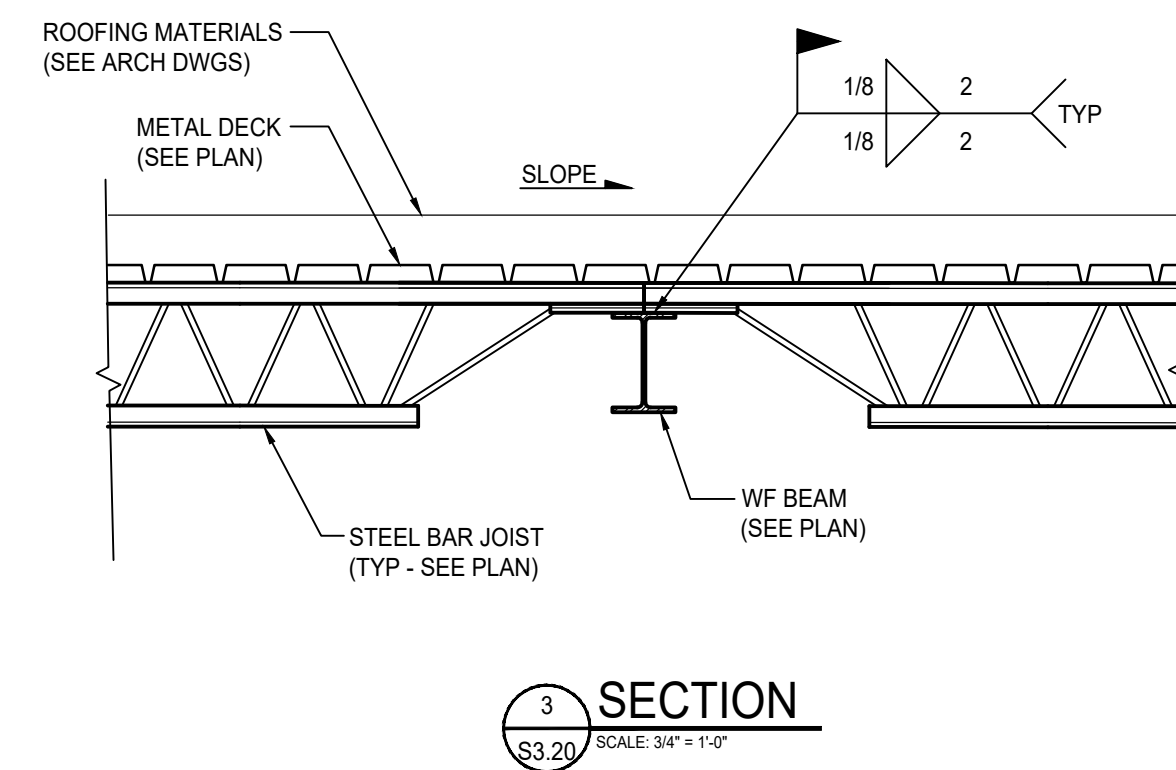
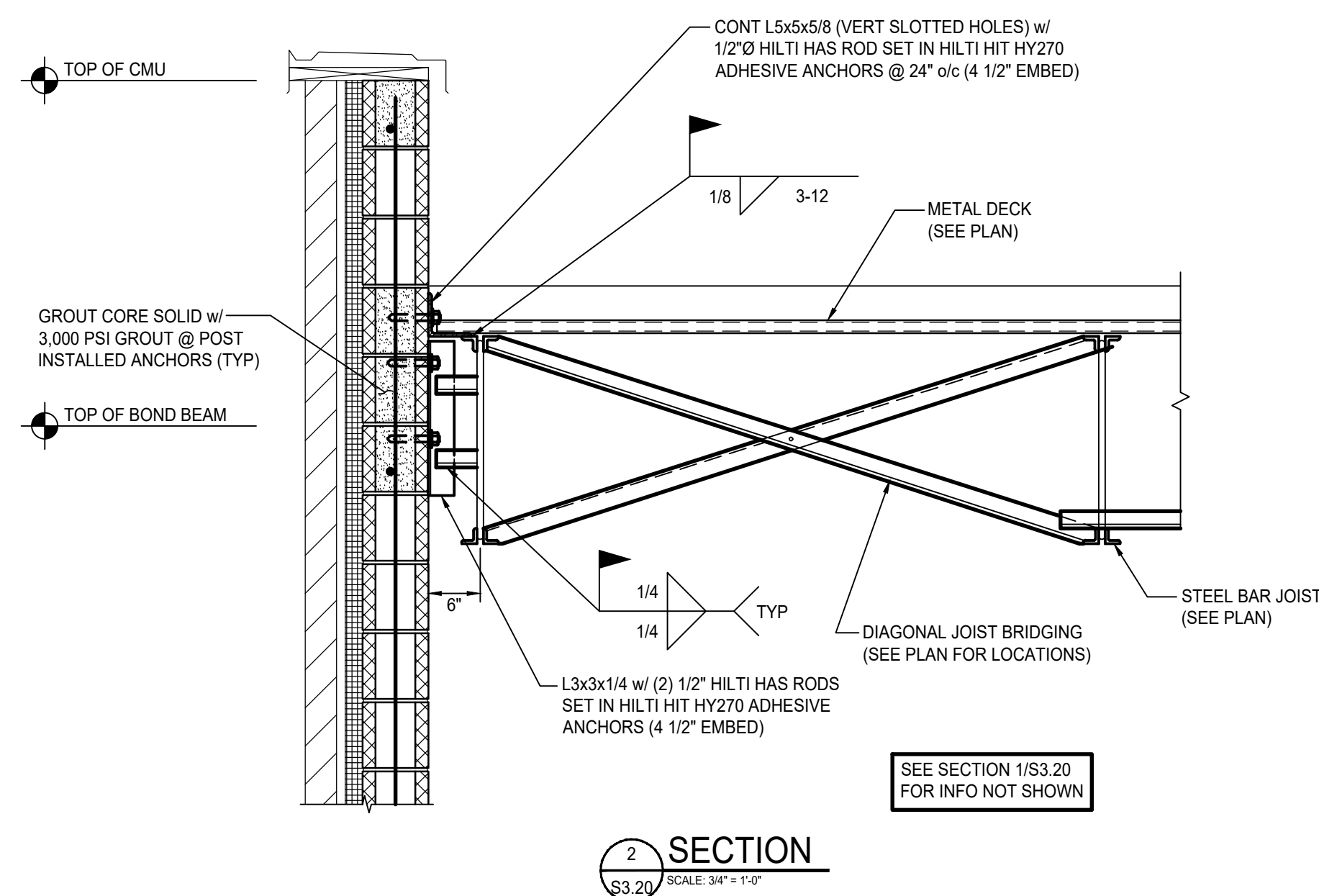
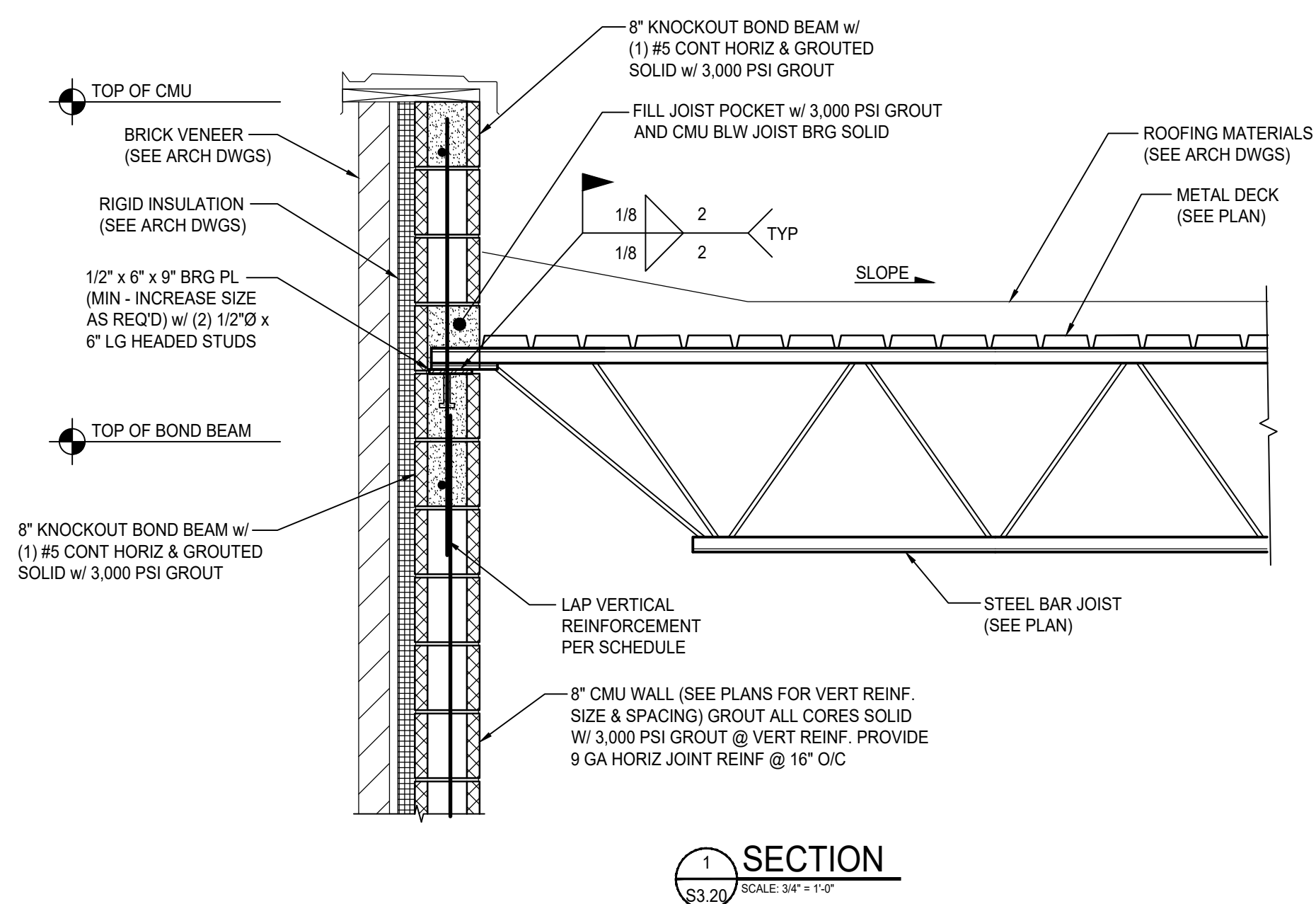


**VARANO  
TOVINSKY™**  
STRUCTURAL ENGINEERS

PROJECT #171.03  
101 LAUREL ROAD  
VOORHEES, NJ 08043  
(856) 783-2160

ANTHONY J. VARANO  
NJ PE No. 24GE05086900





|                                 |              |
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| NJ Certificate of Authorization |              |
| Eng'r. Nos.                     | 24GA28347700 |
| Arch. Nos.                      | 21AC00012400 |
| Date                            | 08/13/26     |
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**JEFFREY POTTER, R.A.**

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**ROOF SECTIONS**

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**ALTERATIONS & ADDITIONS TO J. FITHIAN TATEM  
ELEMENTARY SCHOOL**  
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1 GLOVER AVE. HADDONFIELD, NJ 08033

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| Job No.  | 2.20277.25.10 |
| File No. | File No.      |

### S3.20

**VARANO  
TOVINSKY<sup>LLC</sup>**  
STRUCTURAL ENGINEERS

PROJECT #171.03  
101 LAUREL ROAD  
VOORHEES, NJ 08043  
(856) 783-2160

ANTHONY J. VARANO  
NJ PE No. 24GE05086900







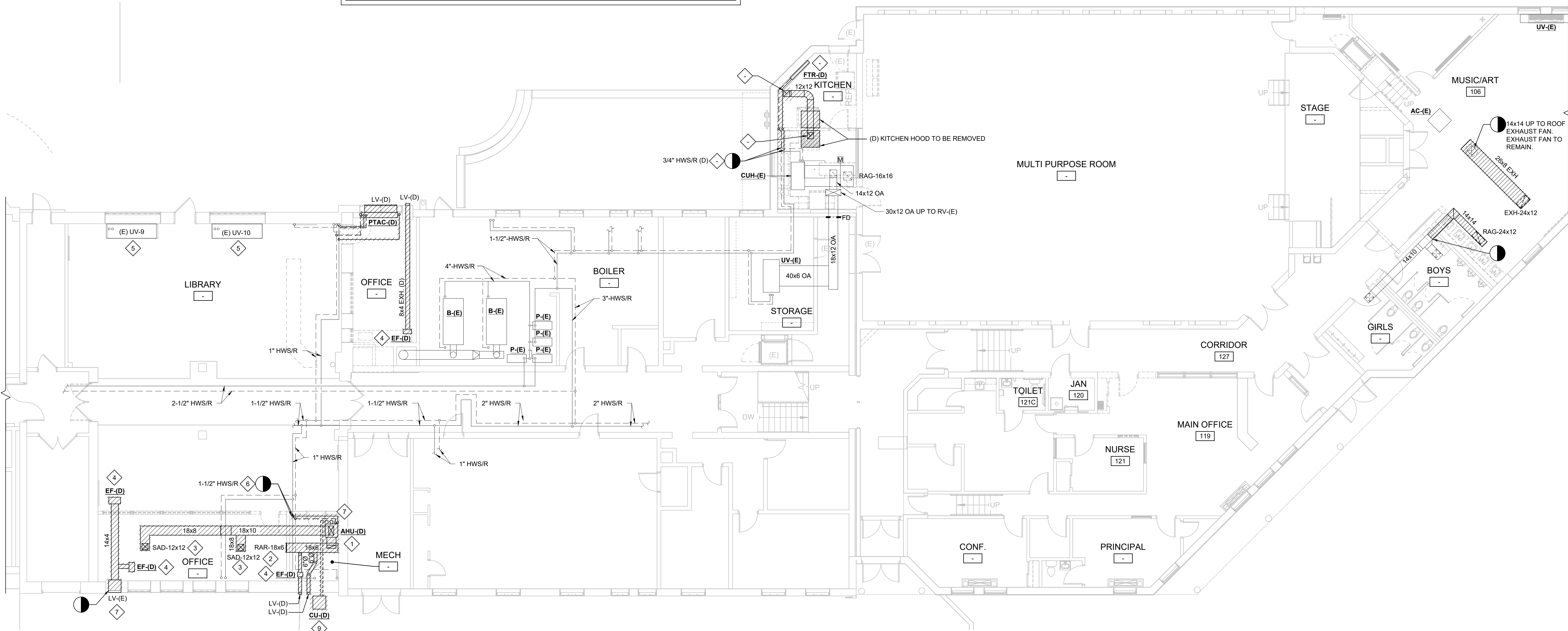
DEMOLITION KEY NOTES

- DEMOLISH AND REMOVE EXISTING FLOOR MOUNTED AIR HANDLING UNIT COMPLETE WITH ALL DUCTWORK, DIFFUSERS, REGISTERS, ASSOCIATED HOT WATER COIL, HOT WATER SUPPLY AND RETURN PIPING, REFRIGERANT PIPING AND INTERCONNECTED WIRING, SUPPORTS, INSULATION, CONTROLS, ELECTRICAL, ETC.
- REMOVE EXISTING RAR COMPLETE WITH ALL DUCTWORK, SUPPORTS, INSULATION, ETC. PATCH WALL TO MATCH EXISTING.
- REMOVE EXISTING SAD COMPLETE WITH ALL DUCTWORK, SUPPORTS, INSULATION, ETC.
- REMOVE EXISTING CEILING EXHAUST FAN COMPLETE WITH ALL EXHAUST DUCTWORK, SUPPORTS, ELECTRICAL, CONTROLS, INSULATION, ETC.
- EXISTING UV TO REMAIN COMPLETE WITH ALL STEAM SUPPLY AND CONDENSATE RETURN PIPING, INSULATION, ELECTRICAL, CONTROLS, ETC.
- DEMOLISH AND REMOVE HOT WATER SUPPLY AND RETURN PIPING UP TO POINT SHOWN. COMPLETE WITH REMOVAL OF ALL ASSOCIATED PIPE INSULATION, VALVES, FITTINGS, COMPONENTS, HANGERS, ETC.
- EXISTING LOUVER SHALL REMAIN TO BE REUSED DURING PROPOSED WORK PHASE OF THE PROJECT.
- EXISTING EXHAUST FAN TO REMAIN COMPLETE WITH ALL DUCTWORK, ELECTRICAL, SUPPORTS, CONTROLS, ETC.
- DEMOLISH AND REMOVE GRADE MOUNTED CONDENSING UNIT. COMPLETE WITH REMOVAL OF ALL REFRIGERANT PIPING AND INTERCONNECTED WIRING, SUPPORTS, ELECTRICAL, CONTROLS, ETC.

SYMBOL INDICATES  
DEMOLITION KEY NOTE

MECHANICAL DEMOLITION PLAN NOTES

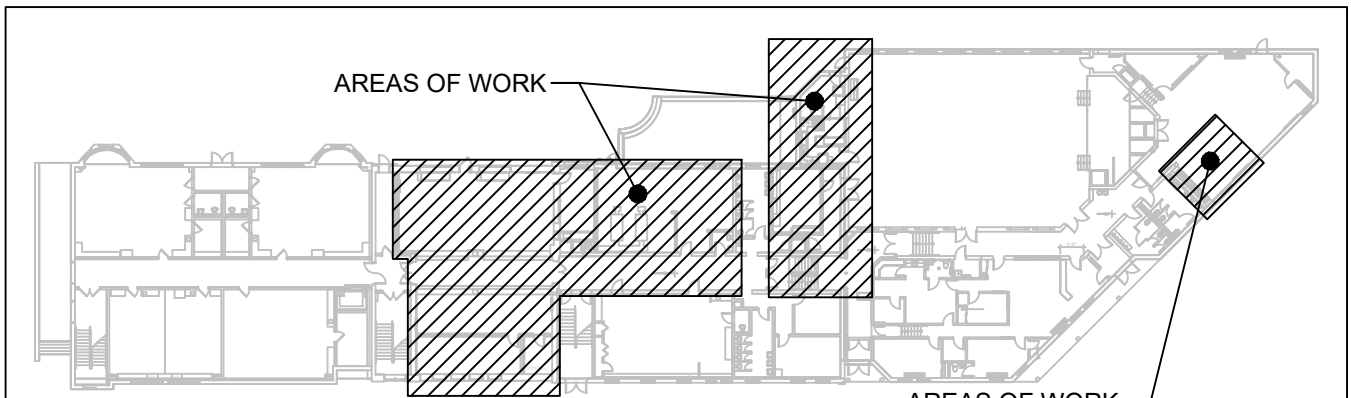
- SIZES & LOCATIONS OF EXIST. HVAC/MECH. EQUIPMENT, DUCTWORK, PIPING, AIR INLETS/OUTLETS, ETC. SHOWN ON DRAWINGS ARE BASED ON EXIST. DRAWINGS & SITE OBSERVATIONS, & THEY ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE TO VERIFY EXACT LOCATIONS IN FIELD.
- NOT ALL EXIST. HVAC/MECH. EQUIPMENT, DUCTWORK, PIPING, VALVES, ETC. ARE SHOWN ON DRAWINGS. VERIFY IN FIELD.
- PATCH ALL OPENINGS ON WALLS & CEILINGS & FLOORS AFTER EXIST. EQUIPMENT, DUCTWORK, PIPING, CONDUIT & WIREMOLD, ETC. ARE REMOVED. INFILL & PATCH W/ SUITABLE MATERIALS TO MAINTAIN FIRE RATING & PAINT TO MATCH EXISTING.
- ANY CUTTING, PATCHING, OR FINISH REPAIR WORK REQUIRED FOR MECHANICAL DEMOLITION IS THE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR IS RESPONSIBLE TO DRAIN-DOWN EXIST. HOT WATER PIPING SYSTEMS TO ACCOMMODATE MECHANICAL DEMOLITION & NEW INSTALLATION. RESTORE THE SYSTEM AFTER ALL WORK IS COMPLETE.**
- COORDINATE WORK ON HOT WATER PIPING SYSTEM TO ENSURE THAT SYSTEM TO REMAIN ACTIVE AND MAINTAINED DURING THE ENTIRE CONSTRUCTION PROCESS.**
- ALL EXIST. CONTROLS & RELATED WIRING & CONDUITS, ETC. WHICH BECOME OBSOLETE, WHETHER OR NOT SHOWN ON DRAWINGS SHALL BE REMOVED. PATCH WALLS & SOFFIT, ETC. & PAINT TO MATCH EXISTING.
- CONTRACTOR IS REQUIRED TO PROPERLY PROTECT EXIST. FLOORS, WALLS, FURNITURE, EQUIPMENT, ETC. DURING CONSTRUCTION. ALL DAMAGED ITEMS SHALL BE REPAIRED/REPLACED AT EXPENSE OF THE CONTRACTOR. REMOVE PROTECTIONS AFTER ALL WORK IS COMPLETE & VACUUM CLEAN ALL AREAS TO BE FREE OF DUST & DEBRIS.



PARTIAL FIRST FLOOR MECHANICAL DEMOLITION PLAN

1  
M1.01  
1/8" = 1'-0"

GROUND FLOOR KEYPLAN



NJ Certificate of Authorization  
Eng'r. No. 240427937500  
Arch. No. 21A020012400  
Date 8/13/26  
Checked TW  
Drawn MB

THOMAS WIGHARD, P.E.  
PROFESSIONAL ENGINEER  
License No. NJ24CE04901100

Revisions:  
8/13/26 BID SET

Engineering,  
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**LAN ASSOCIATES**  
1018 Laurel Oak Road, Suite 11, Voorhees, NJ 08043 | T. 856-375-2701

**FIRST FLOOR MECHANICAL DEMOLITION PLAN**  
ADDITION & ALTERATION TO TATEM J FTHIAN  
ELEMENTARY SCHOOL  
HADDONFIELD BOARD OF EDUCATION  
1 GLOVER AVE HADDONFIELD, NJ 08033

Job No. 2.20277.25.10  
File No. 202772510M10

M1.01



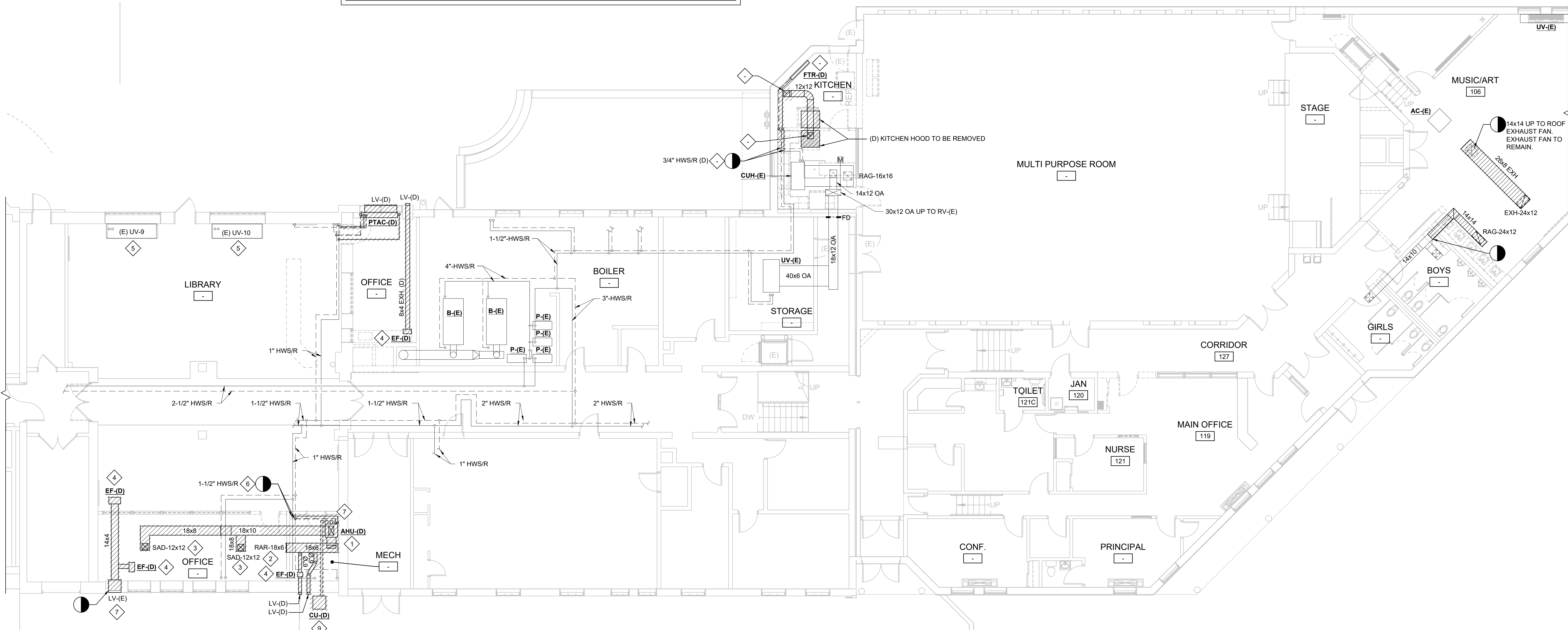
DEMOLITION KEY NOTES

- DEMOLISH AND REMOVE EXISTING FLOOR MOUNTED AIR HANDLING UNIT COMPLETE WITH ALL DUCTWORK, DIFFUSERS, REGISTERS, ASSOCIATED HOT WATER COIL, HOT WATER SUPPLY AND RETURN PIPING, REFRIGERANT PIPING AND INTERCONNECTED WIRING, SUPPORTS, INSULATION, CONTROLS, ELECTRICAL, ETC.
- REMOVE EXISTING RAR COMPLETE WITH ALL DUCTWORK, SUPPORTS, INSULATION, ETC. PATCH WALL TO MATCH EXISTING.
- REMOVE EXISTING SAD COMPLETE WITH ALL DUCTWORK, SUPPORTS, INSULATION, ETC.
- REMOVE EXISTING CEILING EXHAUST FAN COMPLETE WITH ALL EXHAUST DUCTWORK, SUPPORTS, ELECTRICAL, CONTROLS, INSULATION, ETC.
- EXISTING UV TO REMAIN COMPLETE WITH ALL STEAM SUPPLY AND CONDENSATE RETURN PIPING, INSULATION, ELECTRICAL, CONTROLS, ETC.
- DEMOLISH AND REMOVE HOT WATER SUPPLY AND RETURN PIPING UP TO POINT SHOWN. COMPLETE WITH REMOVAL OF ALL ASSOCIATED PIPE INSULATION, VALVES, FITTINGS, COMPONENTS, HANGERS, ETC.
- EXISTING LOUVER SHALL REMAIN TO BE REUSED DURING PROPOSED WORK PHASE OF THE PROJECT.
- EXISTING EXHAUST FAN TO REMAIN COMPLETE WITH ALL DUCTWORK, ELECTRICAL, SUPPORTS, CONTROLS, ETC.
- DEMOLISH AND REMOVE GRADE MOUNTED CONDENSING UNIT. COMPLETE WITH REMOVAL OF ALL REFRIGERANT PIPING AND INTERCONNECTED WIRING, SUPPORTS, ELECTRICAL, CONTROLS, ETC.

SYMBOL INDICATES  
DEMOLITION KEY NOTE

MECHANICAL DEMOLITION PLAN NOTES

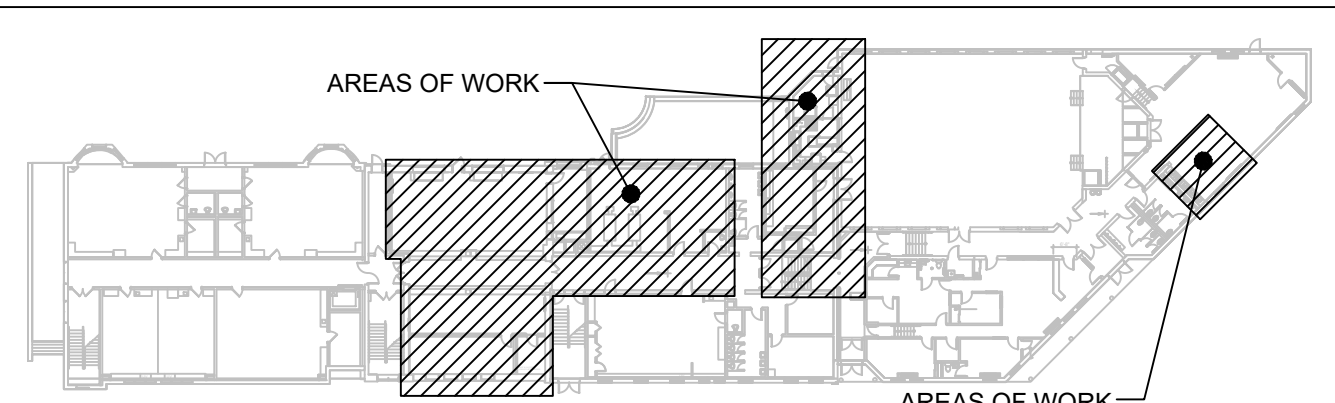
- SIZES & LOCATIONS OF EXIST. HVAC/MECH. EQUIPMENT, DUCTWORK, PIPING, AIR INLETS/OUTLETS, ETC. SHOWN ON DRAWINGS ARE BASED ON EXIST. DRAWINGS & SITE OBSERVATIONS, & THEY ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE TO VERIFY EXACT LOCATIONS IN FIELD.
- NOT ALL EXIST. HVAC/MECH. EQUIPMENT, DUCTWORK, PIPING, VALVES, ETC. ARE SHOWN ON DRAWINGS. VERIFY IN FIELD.
- PATCH ALL OPENINGS ON WALLS & CEILINGS & FLOORS AFTER EXIST. EQUIPMENT, DUCTWORK, PIPING, CONDUIT & WIREMOLD, ETC. ARE REMOVED. INFILL & PATCH W/ SUITABLE MATERIALS TO MAINTAIN FIRE RATING & PAINT TO MATCH EXISTING.
- ANY CUTTING, PATCHING, OR FINISH REPAIR WORK REQUIRED FOR MECHANICAL DEMOLITION IS THE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR IS RESPONSIBLE TO DRAIN-DOWN EXIST. HOT WATER PIPING SYSTEMS TO ACCOMMODATE MECHANICAL DEMOLITION & NEW INSTALLATION. RESTORE THE SYSTEM AFTER ALL WORK IS COMPLETE.**
- COORDINATE WORK ON HOT WATER PIPING SYSTEM TO ENSURE THAT SYSTEM TO REMAIN ACTIVE AND MAINTAINED DURING THE ENTIRE CONSTRUCTION PROCESS.**
- ALL EXIST. CONTROLS & RELATED WIRING & CONDUITS, ETC. WHICH BECOME OBSOLETE, WHETHER OR NOT SHOWN ON DRAWINGS SHALL BE REMOVED. PATCH WALLS & SOFFIT, ETC. & PAINT TO MATCH EXISTING.
- CONTRACTOR IS REQUIRED TO PROPERLY PROTECT EXIST. FLOORS, WALLS, FURNITURE, EQUIPMENT, ETC. DURING CONSTRUCTION. ALL DAMAGED ITEMS SHALL BE REPAIRED/REPLACED AT EXPENSE OF THE CONTRACTOR. REMOVE PROTECTIONS AFTER ALL WORK IS COMPLETE & VACUUM CLEAN ALL AREAS TO BE FREE OF DUST & DEBRIS.



PARTIAL FIRST FLOOR MECHANICAL DEMOLITION PLAN

1/8" = 1'-0"

GROUND FLOOR KEYPLAN



|                                 |              |
|---------------------------------|--------------|
| NJ Certificate of Authorization |              |
| Eng'r. No.                      | 24027937500  |
| Arch. No.                       | 21A000012400 |
| Date                            | 8/13/26      |
| Checked                         | TW           |
| Drawn                           | MB           |

THOMAS WIGHARD, P.E.

PROFESSIONAL ENGINEER License No. NJ24CE04901100

Revisions:  
8/13/26 BID SET

Engineering,  
Planning,  
Architecture,  
Surveying Inc.

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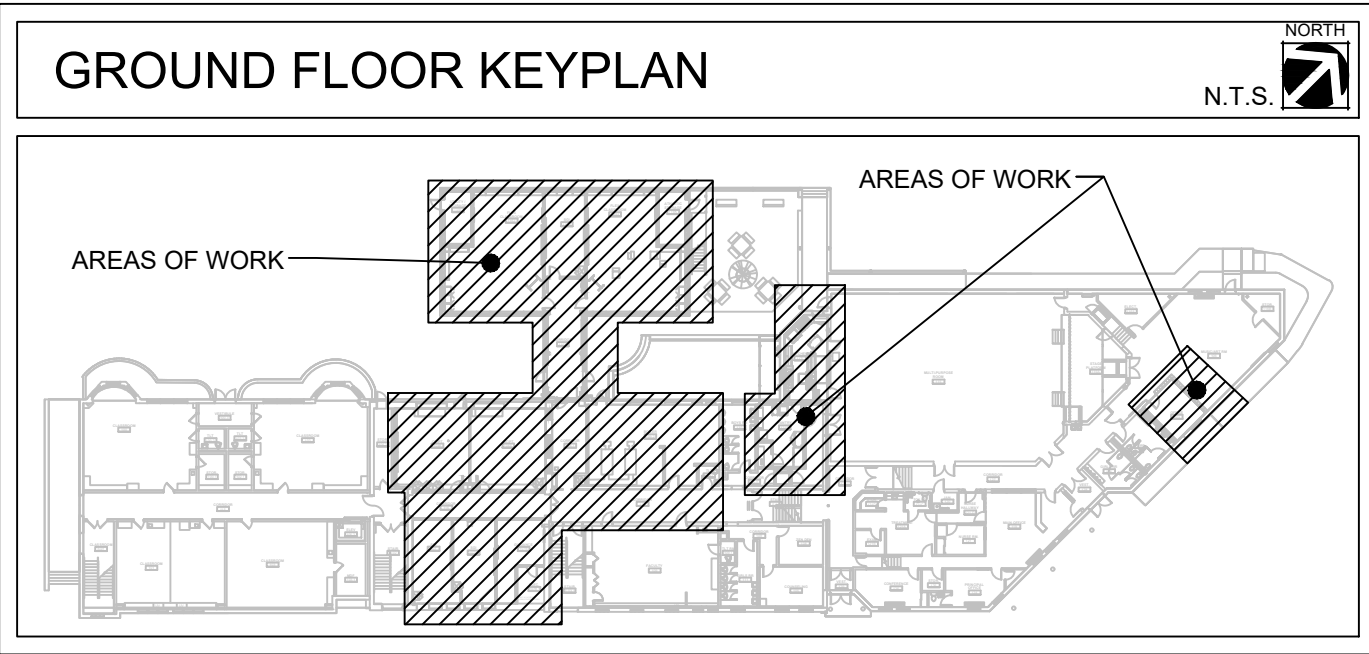
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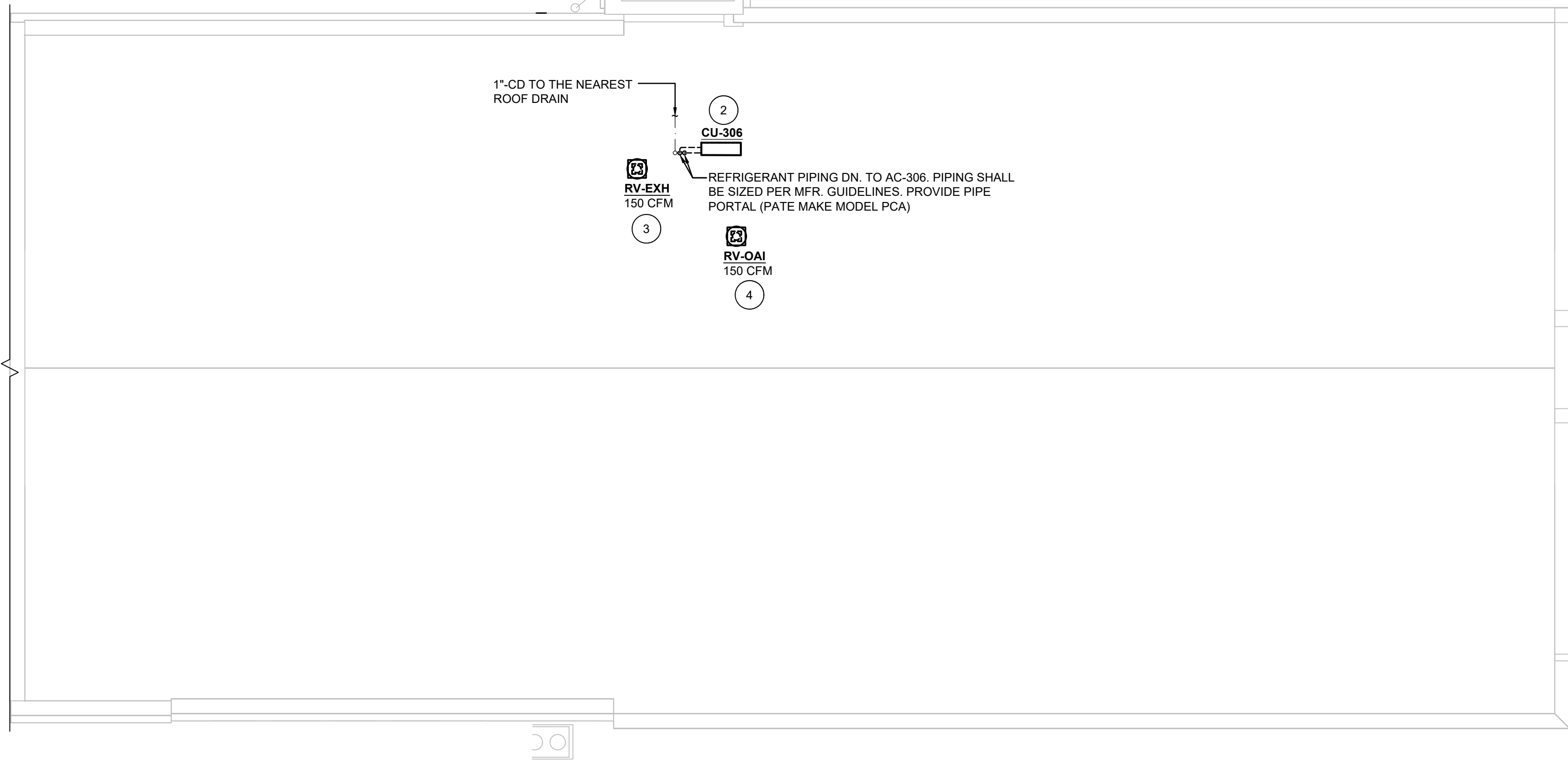












- #** SYMBOL INDICATES  
PROPOSED KEY NOTE

1. PROVIDE AND INSTALL NEW ROOF TOP UNIT OF CAPACITIES SCHEDULED. COMPLETE WITH ASSOCIATED DUCTWORK, PIPING, VALVES, FITTINGS, COMPONENTS, INSULATION, LINING, CONTROLS, ELECTRICAL, ETC. PROVIDE WITH MIN. 24" VIBRATION ISOLATION ROOF CURB. REFER TO DETAILS ON DWGS. M6.03/ME.04 FOR ADDITIONAL INFORMATION.
2. PROVIDE AND INSTALL NEW AIR COOLED CONDENSING UNIT OF CAPACITIES SCHEDULED. COMPLETE WITH ROOF RAILS, REFRIGERANT PIPING, CONTROLS, ELECTRICALS, ETC.
3. PROVIDE AND INSTALL NEW ROOF VENT GREENECKE MAKE, MODEL GRSR-6 COMPLETE WITH A NEW 18" HIGH CANTEED ROOF CURB, DUCTWORK, ETC.
4. PROVIDE AND INSTALL NEW ROOF VENT GREENECKE MAKE, MODEL GRSR-6 COMPLETE WITH A NEW 18" HIGH CANTEED ROOF CURB, DUCTWORK, ETC.
5. PROVIDE AND INSTALL NEW INDOOR CEILING CASSETTE UNIT COMPLETE WITH REFRIGERANT PIPING, CONDENSATE DRAIN PIPING, INSULATION, CONTROLS, POWER CONNECTIONS, AND ALL REQUIRED ACCESSORIES FOR COMPLETE AND OPERATIONAL SYSTEM.
6. PROVIDE AND INSTALL NEW SUSPENDED ENERGY RECOVERY UNIT SCHEDULED. COMPLETE WITH ASSOCIATED DUCTWORK, FLEX CONNECTIONS, VIBRATION ISOLATION HANGERS, ELECTRICALS, CONTROLS, ETC. ERV SHALL BE INTERLOCKED WITH AC-306 OPERATION.

NORTH



1. CONTRACTOR IS RESPONSIBLE FOR THE CUTTING OF ALL WALLS, FLOORS, CEILING ETC. FOR ALL PIPE & DUCT PENETRATIONS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING & RELOCATING EXISTING ELECTRICAL, FIRE ALARM & COMMUNICATION DEVICES TO ACCOMMODATE THE INSTALLATION OF NEW UNITS, PIPING & DUCTWORK. CHECK AND VERIFY EXACT LOCATIONS IN FIELD.
3. FOR EXISTING TO REMAIN CEILING AREAS AS INDICATED ON THE ARCHITECTURAL DRAWINGS, CONTRACTOR SHALL REMOVE EXISTING CEILING TILES AND CEILING GRID TO ACCOMMODATE THE INSTALLATION OF NEW UNITS, PIPING & DUCTWORK. RE-INSTALL ALL CEILING TILES BACK TO MATCH EXISTING. REMOVE & REPLACE ALL DAMAGED TILES & CEILING GRID IN FIELD. CHECK IN FIELD.
4. CONTRACTOR TO PATCH FLOORS & WALLS WHERE EXISTING THERMOSTAT & PNEUMATIC TUBING IS BEING REMOVED W/ NON-SHRINK GROUT. PAINT TO MATCH EXISTING.
5. CONTRACTOR IS RESPONSIBLE TO CORE DRILL ALL WALLS, FLOORS, CEILING ETC. FOR ALL PIPE CONDUIT, ETC. PENETRATIONS. SEAL OPENING WITH 3HRS FIRE BARRIER CAULK.
6. CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE EXTENT AND SCOPE OF THE WORK PRIOR TO SUBMITTING BIDS OR COMMENCING WORK.
7. CONTRACTOR SHALL REVIEW DRAWINGS AND FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO COMMENCING WORK. THE CONTRACTORS SHALL REPORT ANY DISCREPANCIES, AND ADDRESS ALL QUESTIONS TO THE ARCHITECT PRIOR TO COMMENCING WORK.
8. CONTRACTOR SHALL SECURE AND PAY FOR ALL REQUIRED PERMITS, FEES, AND INSPECTIONS PRIOR TO COMMENCING WORK. UPON COMPLETION OF WORK THE CONTRACTOR SHALL SECURE CERTIFICATE OF OCCUPANCY.
9. CONTRACTORS SHALL BE RESPONSIBLE TO DISPOSE OF ALL DEMOLISHED MATERIAL OF SITE IN AN APPROVED MANNER.
10. DOWN-TIME FOR THE TIE-IN OR SWITCHOVER SHALL BE KEPT TO A MINIMUM. COORDINATE SCHEDULE WITH THE OWNER.

1. EXIST. CEILING SYSTEM, GRIDS, CEILING TILES, GYP. BOARD, ETC. IN SOME AREAS WILL BE REMOVED & REPLACED. WHERE APPLICABLE, CONTRACTOR IS REQUIRED TO REMOVE EXIST. CEILING SYSTEM, GRIDS, TILES, GYP. BOARD, LIGHT FIXTURES, FIRE ALARM & COMMUNICATION DEVICES, ETC. TO ACCOMMODATE INSTALLATION OF NEW HVAC EQUIPMENT, DUCTWORK, PIPING, ETC. RESTORE CEILING SYSTEM TO MATCH EXISTING. REMOVE ALL DAMAGED ITEMS & REPLACE WITH NEW. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR AREAS WITH NEW CEILING.
2. SAWCUT & CORE DRILL EXIST. WALLS/FLOORS/CLG./ROOF FOR NEW DUCTWORK/PIPPING/CONDUIT PENETRATIONS. PATCH & CAULK W/ 2-HR RATED FIRESTOPPING MATERIALS. ANY CUTTING, PATCHING, OR FINISH REPAIR WORK REQUIRED FOR MECHANICAL INSTALLATION IS THE RESPONSIBILITY OF THE CONTRACTOR.
3. ALL NEW DUCTWORK & PIPING SHALL BE INSTALLED CONCEALED ABOVE CLG., UNLESS OTHERWISE NOTED. NEW DUCTWORK SHALL BE EXTERNALLY INSULATED AND/OR INTERNALLY LINED ACCORDING TO THE HVAC MATERIALS NOTES ON TO 01. PROVIDE FIBERGLASS INSULATION ON NEW PIPING, VALVES, ETC. REFER TO HVAC MATERIAL NOTES FOR INSULATION THICKNESS. PROVIDE PIPE IDENTIFICATIONS & FLOW ARROWS ON PIPE INSULATION.
4. ALL NEW DDC WIRING BY THE CONTROL'S SUBCONTRACTOR SHALL BE INSTALLED CONCEALED ABOVE EXIST. CLG. ALL NEW EXPOSED DDC WIRING FROM HVAC EQUIPMENT TO NEW THERMOSTATS SHALL BE INSULATED IN EMT TUBING AND PAINTED TO MATCH EXISTING WALL COLOR.
5. CONTRACTOR IS REQUIRED TO PROPERLY PROTECT EXIST. FLOORS, WALLS, FURNITURE, EQUIPMENT, ETC. DURING CONSTRUCTION. ALL DAMAGED ITEMS SHALL BE REPAIRED/REPLACED AT EXPENSE OF THE CONTRACTOR. REMOVE PROTECTIONS AFTER ALL WORK IS COMPLETE & VACUUM CLEAN ALL AREAS TO BE FREE OF DUST & DEBRIS.

**THOMAS WIGHARD, P.E.**  
 Title PROFESSIONAL ENGINEER License No. NJ246C4901100

## 8/13/26 BID SET

**LAN**  
ASSOCIATES

ADDITION & ALTERATION TO TATEM J FITHIAN  
ELEMENTARY SCHOOL  
HADDONFIELD BOARD OF EDUCATION  
1 GLOVER AVE HADDONFIELD, N.J. 08033

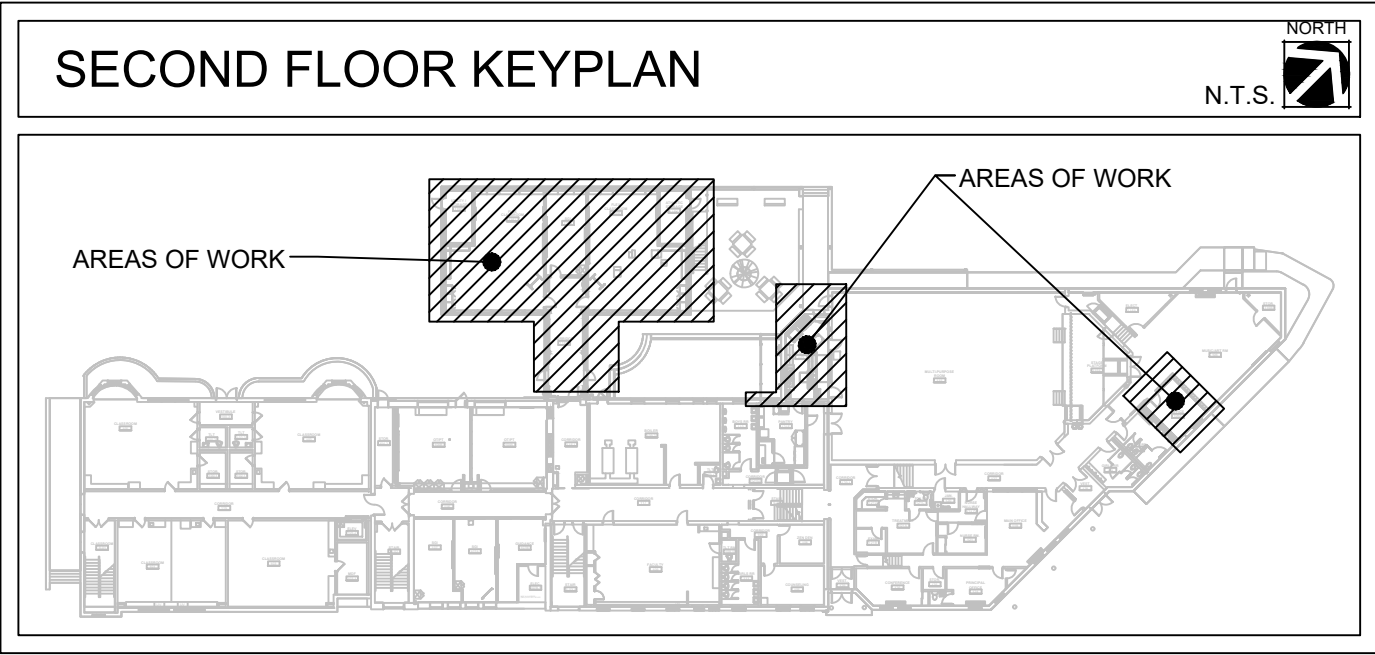
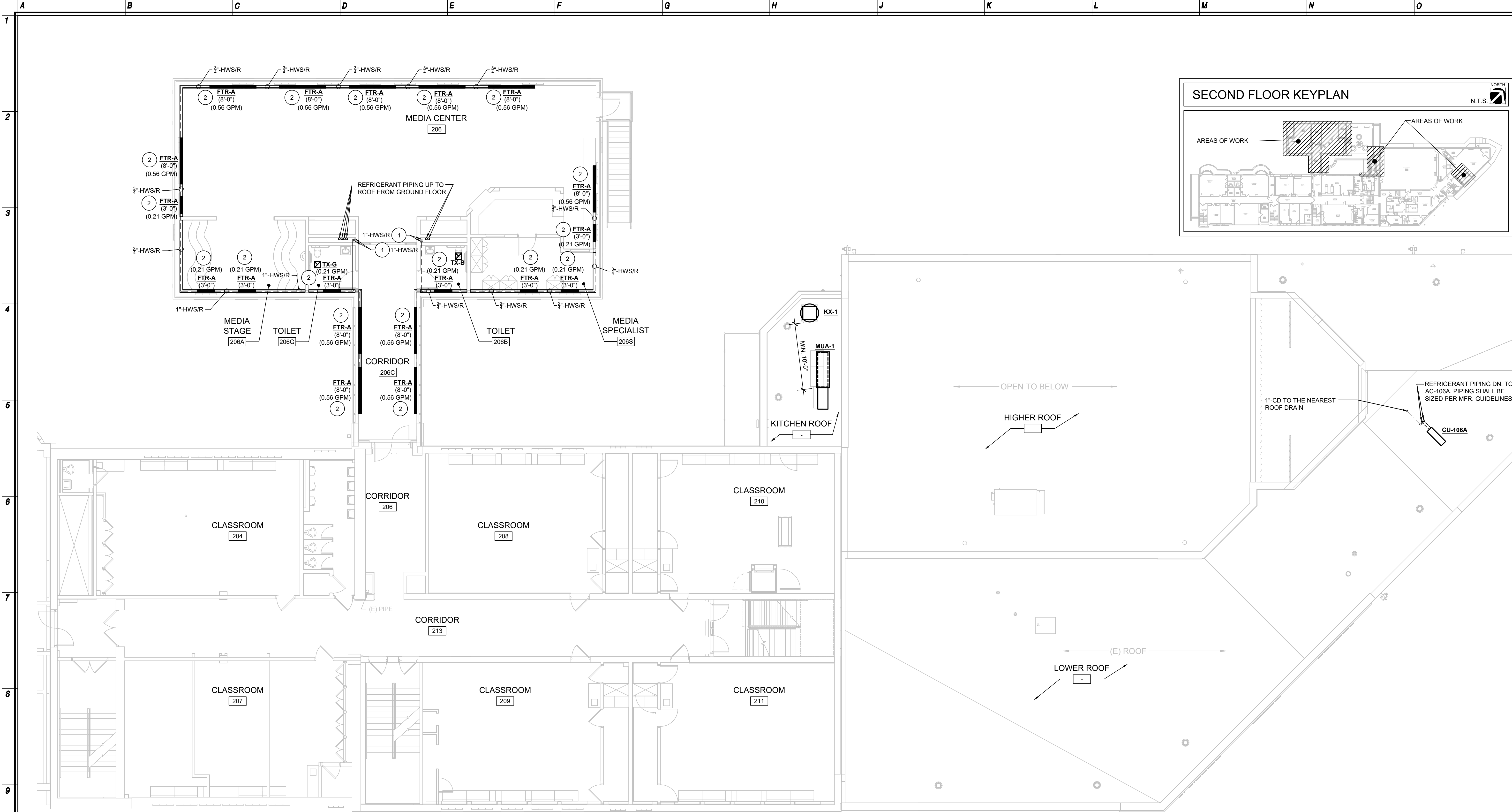
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## M2.03









1 PARTIAL SECOND FLOOR MECHANICAL PROPOSED PIPING PLAN  
M3.02 1/8" = 1'-0"

PROPOSED KEY NOTES

1. PROVIDE AND INSTALL NEW HWS/R PIPING OF SIZES INDICATED ON THE PLANS. COMPLETE WITH ALL ASSOCIATED INSULATION, HANGERS/SUPPORTS, VALVES, FITTINGS, COMPONENTS, ETC. RUN VERTICAL EXPOSED HOT WATER PIPING IN STERLING MADE, MODEL PCV PIPE COVER, OR APPROVED EQUAL.
2. PROVIDE AND INSTALL NEW FINNED TUBE RADIATION SCHEDULED. COMPLETE WITH ALL ASSOCIATED WALL BRACKETS, BACK PLATES, PIPE COVERS, VALVES, FITTINGS, COMPONENTS, INSULATION, ETC. REFER TO DETAILS FOR ADDITIONAL INFORMATION.

# SYMBOL INDICATES PROPOSED KEY NOTE

GENERAL CONSTRUCTION NOTES

1. CONTRACTOR IS RESPONSIBLE FOR THE CUTTING OF ALL WALLS, FLOORS, CEILING ETC. FOR ALL PIPE & DUCT PENETRATIONS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING & RELOCATING EXISTING ELECTRICAL, FIRE ALARM & COMMUNICATION DEVICES TO ACCOMMODATE THE INSTALLATION OF NEW UNITS, PIPING & DUCTWORK. CHECK AND VERIFY EXACT LOCATIONS IN FIELD.
3. FOR EXISTING TO REMAIN CEILING AREAS AS INDICATED ON THE ARCHITECTURAL DRAWINGS, CONTRACTOR SHALL REMOVE EXISTING CEILING TILES AND CEILING GRID TO ACCOMMODATE THE INSTALLATION OF NEW UNITS, PIPING & DUCTWORK. RE-INSTALL ALL CEILING TILES BACK TO MATCH EXISTING. REMOVE & REPLACE ALL DAMAGED TILES & CEILING GRID. CHECK IN FIELD.
4. CONTRACTOR TO PATCH FLOORS & WALLS WHERE EXISTING THERMOSTAT & PNEUMATIC TUBING IS BEING REMOVED W/ NON-SHRINK GROUT. PAINT TO MATCH EXISTING.
5. CONTRACTOR IS RESPONSIBLE TO CORE DRILL ALL WALLS, FLOORS, CEILING ETC. FOR ALL PIPE CONDUIT, ETC. PENETRATIONS. SEAL OPENING WITH 3HRS FIRE BARRIER CAULK.
6. CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE EXTENT AND SCOPE OF THE WORK PRIOR TO SUBMITTING BIDS OR COMMENCING WORK.
7. CONTRACTOR SHALL REVIEW DRAWINGS AND FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO COMMENCING WORK. THE CONTRACTORS SHALL REPORT ANY DISCREPANCIES, AND ADDRESS ALL QUESTIONS TO ARCHITECT/ENGINEER PRIOR TO COMMENCING WORK.
8. CONTRACTOR SHALL SECURE AND PAY FOR ALL REQUIRED PERMITS, FEES, AND INSPECTIONS PRIOR TO COMMENCING WORK. UPON COMPLETION OF WORK THE CONTRACTOR SHALL SECURE CERTIFICATE OF OCCUPANCY.
9. CONTRACTORS SHALL BE RESPONSIBLE TO DISPOSE OF ALL DEMOLISHED MATERIAL OF SITE IN AN APPROVED MANNER.
10. DOWN-TIME FOR THE TIE-IN OR SWITCHOVER SHALL BE KEPT TO A MINIMUM. COORDINATE SCHEDULE WITH THE OWNER.

MECHANICAL CONSTRUCTION PLAN NOTES

1. EXIST. CEILING SYSTEM, GRIDS, CEILING TILES, GYP. BOARD, ETC. IN SOME AREAS WILL BE REMOVED & REPLACED. WHERE APPLICABLE, CONTRACTOR IS REQUIRED TO REMOVE EXIST. CEILING SYSTEM, GRIDS, TILES, GYP. BOARD, LIGHT FIXTURES, FIRE ALARM & COMMUNICATION DEVICES, ETC. TO ACCOMMODATE INSTALLATION OF NEW HVAC EQUIPMENT, DUCTWORK, PIPING, ETC. RESTORE CEILING SYSTEM TO MATCH EXISTING. REMOVE ALL DAMAGED ITEMS & REPLACE WITH NEW. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR AREAS WITH NEW CEILING.
2. SAWCUT & CORE DRILL EXIST. WALLS/FLOORS/CLG./ROOF FOR NEW DUCTWORK/PIPING/CONDUIT PENETRATIONS. PATCH & CAULK W/ 2-HR RATED FIRESTOPPING MATERIALS. ANY CUTTING, PATCHING, OR FINISH REPAIR WORK REQUIRED FOR MECHANICAL INSTALLATION IS THE RESPONSIBILITY OF THE CONTRACTOR.
3. ALL NEW DUCTWORK & PIPING SHALL BE INSTALLED CONCEALED ABOVE CLG., UNLESS OTHERWISE NOTED. NEW DUCTWORK SHALL BE EXTERNALLY INSULATED AND/OR INTERNALLY LINED ACCORDING TO THE HVAC MATERIALS NOTES ON T0.01. PROVIDE FIBERGLASS INSULATION ON NEW PIPING, VALVES, ETC. REFER TO HVAC MATERIAL NOTES FOR INSULATION THICKNESS. PROVIDE PIPE IDENTIFICATIONS & FLOW ARROWS ON PIPE INSULATION.
4. ALL NEW DDC WIRING BY THE CONTROL'S SUBCONTRACTOR SHALL BE INSTALLED CONCEALED ABOVE EXIST. CLG. ALL NEW EXPOSED DDC WIRING FROM HVAC EQUIPMENT TO NEW THERMOSTATS SHALL BE INSTALLED IN EMT TUBING AND PAINTED TO MATCH EXISTING WALL COLOR.
5. CONTRACTOR IS REQUIRED TO PROPERLY PROTECT EXIST. FLOORS, WALLS, FURNITURE, EQUIPMENT, ETC. DURING CONSTRUCTION. ALL DAMAGED ITEMS SHALL BE REPAIRED/REPLACED AT EXPENSE OF THE CONTRACTOR. REMOVE PROTECTIONS AFTER ALL WORK IS COMPLETE & VACUUM CLEAN ALL AREAS TO BE FREE OF DUST & DEBRIS.

|                                 |              |
|---------------------------------|--------------|
| NJ Certificate of Authorization |              |
| Eng'r. No.                      | 24027937500  |
| Arch. No.                       | 21AC00012400 |
| Date                            | 8/13/26      |
| Checked                         | TW           |
| Drawn                           | MB           |

THOMAS WIGHARD, P.E.  
PROFESSIONAL ENGINEER  
NJ24CE04901100

Revisions:  
8/13/26 BID SET

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Job No. 2.20277.25.10  
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M3.02







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EXHAUST FAN SCHEDULE

( GREENHECK AS STANDARD)

| TAG     | LOCATION  | UNIT SERVED | CFM | STATIC PRESSURE LOSS (IN) | ELECTRICAL DATA |      |     |              | DIMENSIONS (LxWxH) (In.) | APPROX WEIGHT (Lbs) | MODEL   | MANUFACTURER | NOTES           |
|---------|-----------|-------------|-----|---------------------------|-----------------|------|-----|--------------|--------------------------|---------------------|---------|--------------|-----------------|
|         |           |             |     |                           | FLA             | BHP  | RPM | V / Ph / Hz  |                          |                     |         |              |                 |
| TE-EF-1 | OT/PT 104 | UV-9        | 180 | 0.33                      | 0.46            | 0.03 | 900 | 115 / 1 / 60 | 14 x 12 x 11             | 24                  | SP-A200 | GREENHECK    | SEE NOTES BELOW |
| TE-EF-2 | OT/PT 104 | UV-10       | 180 | 0.33                      | 0.46            | 0.03 | 900 | 115 / 1 / 60 | 14 x 12 x 11             | 24                  | SP-A200 | GREENHECK    | SEE NOTES BELOW |

NOTES:  
USE AS RELIEF FOR UVs, PROVIDE HANGING VIBRATION ISOLATORS, FLEXIBLE CONNECTIONS, SIDE WALL VENT (X VENT BOX MAKE, MODEL: 8SEB-BR), BACKDRAFT DAMPER, AND DISCONNECT SWITCH. INTERLOCK WITH RESPECTIVE UVs AND TIE NEW FAN INTO EXISTING "CM3" BMS.

ENERGY RECOVERY VENTILATOR SCHEDULE

( MITSUBISHI AS STANDARD)

| TAG      | AREA SERVED                                                 | OUTSIDE AIR (CFM) | EXHAUST AIR (CFM) | HEAT EXCHANGER   |                  |          |          | E.S.P. (In H <sub>2</sub> O) | FILTER (TYPE) | ELECTRICAL DATA   |                   |     | DIMENSIONS (W x L x H) (In.) | APPROX. WEIGHT (Lbs) | MODEL                                                                                         | MANUFACTURER | NOTES          |            |                   |
|----------|-------------------------------------------------------------|-------------------|-------------------|------------------|------------------|----------|----------|------------------------------|---------------|-------------------|-------------------|-----|------------------------------|----------------------|-----------------------------------------------------------------------------------------------|--------------|----------------|------------|-------------------|
|          |                                                             |                   |                   | SUMMER EADB (°F) | WINTER RADB (°F) | EAT (°F) | RAT (°F) |                              |               | RECOVERED COOLING | RECOVERED HEATING | MCA |                              |                      |                                                                                               |              |                | MOP        | V - Ph - Hz       |
| TE-ERV-1 | SGI 107 & 107A, COUNSELING 107B, ELEC 107.1, & CORRIDOR 106 | 385               | 385               | 95               | 70               | 14       | 75       | 51%                          | 64%           | 1                 | MERV-8            | 5.1 | 15                           | 208/230 - 1 - 60     | 41 <sup>3</sup> <sub>8</sub> x 51 <sup>5</sup> <sub>16</sub> x 15 <sup>15</sup> <sub>16</sub> | 110          | LGH-F470RVX2-E | mitsubishi | SEE NOTE(S) BELOW |

NOTES:  
1. PROVIDE HINGED ACCESS DOORS, NON-FUSED DISCONNECT SWITCH, MOTORIZED DAMPERS.  
2. PROVIDE WITH DRAIN PAN BENEATH UNIT, CONDENSATE PUMP, TE-CDP-1, AND CONDENSATE DRAIN PIPING.  
3. NEW ERV UNITS TO BE PROVIDED WITH NEW DDC CONTROLS BY ATC CONTRACTOR AND TIE INTO THE EXISTING "CM3" BMS.  
4. ALL MOTORS SHALL BE PREMIUM EFFICIENCY TYPE.  
5. PROVIDE WITH OUTDOOR AIR DUCT HEATER, TE-EDH-1.

ENERGY RECOVERY VENTILATOR SCHEDULE

( FANTECH AS STANDARD)

| UNIT No. | AREAS SERVED | MANUFACTURER    | MODEL     | MAX SA (CFM) | MAX EXHAUST AIR (CFM) | ENERGY RECOVERY WHEEL  |                  |            | FAN DATA   |       | APPROX. UNIT WT. (LBS) | UNIT DIMENSIONS (LxWxH) (IN.) | ELECTRICAL V/PH/Hz | NOTES                                                            |          |           |
|----------|--------------|-----------------|-----------|--------------|-----------------------|------------------------|------------------|------------|------------|-------|------------------------|-------------------------------|--------------------|------------------------------------------------------------------|----------|-----------|
|          |              |                 |           |              |                       | COOLING EADB/EAWB (°F) | HEATING EAT (°F) | EFFICIENCY | EXT. S.P.* | WATTS |                        |                               |                    |                                                                  |          |           |
| ERV-156  | SGI 156      | INTELLI-BALANCE | FV-15ESC1 | 150          | 150                   | 95/78                  | -13              | 72         |            | 67    | 0.5                    | 115                           | 53                 | 28 <sup>3</sup> <sub>8</sub> x 22 <sup>3</sup> <sub>8</sub> x 10 | 120/1/60 | SEE NOTES |

NOTES:  
1. PROVIDE HINGED ACCESS DOORS, NON-FUSED DISCONNECT SWITCH, MOTORIZED DAMPERS.  
2. ALL MOTORS SHALL BE PREMIUM EFFICIENCY TYPE.

OUTDOOR AIR-COOLED VRF CONDENSING UNIT SCHEDULE

( MITSUBISHI AS STANDARD)

| TAG     | SCHOOL           | LOCATION | UNITS SERVED      | COOLING (TMBH) | HEATING (MBH) | ELECTRICAL DATA V - Ph - Hz | MCA     | MOCP      | EER  | SEER | IEER | APPROX. UNIT DIMENSIONS (L x D x H) (In.) | APPROX. WEIGHT (Lbs) | MODEL           | MANUFACTURER | NOTES           |
|---------|------------------|----------|-------------------|----------------|---------------|-----------------------------|---------|-----------|------|------|------|-------------------------------------------|----------------------|-----------------|--------------|-----------------|
| TE-CU-1 | TATEM ELEMENTARY | ON GRADE | TE-AC-1,2,3 UNITS | 96             | 108           | 208 - 3 - 60                | 60 / 60 | 100 / 100 | 12.5 | -    | 23.3 | 49-1/4 x 29-3/8 x 71-5/8                  | 653                  | TUHYH0963AMM0AN | mitsubishi   | SEE NOTES BELOW |

NOTES:  
1. INSTALL NEW CU<sub>2</sub> ON NEW 18" HIGH STANDS ON GRADE. PROVIDE CONCRETE PAD THAT EXTENDS 6" PAST THE STAND ON ALL SIDES. ANCHOR ACCUS TO WITHSTAND 125 MPH WINDS.  
2. INTERLOCK WITH RESPECTIVE MECHANICAL EQUIPMENT FOR OPERATION.  
3. ELECTRICAL SUBCONTRACTOR SHALL FURNISH AND INSTALL NEMA 3R DISCONNECT AND GFI CONVENIENCE OUTLET. REFER TO ELECTRICAL DRAWINGS.  
4. NEW CONDENSING UNITS TO BE PROVIDED WITH NEW DDC CONTROLS BY ATC CONTRACTOR AND TIE INTO THE EXISTING "CM3" BMS.  
5. ALL SYSTEMS UTILIZING REFRIGERANT OTHER THAN R410A SHALL BE PROVIDED WITH FACTORY INSTALLED AND WIRED REFRIGERANT LEAK DETECTORS.

INDOOR VRF DUCTLESS AIR-CONDITIONING / HEAT PUMP UNIT SCHEDULE

( MITSUBISHI AS STANDARD)

| TAG     | QTY. | TYPE           | UNIT SERVED | COOLING (BTUH) | HEATING (BTUH) | ELECTRICAL DATA  |      |     | CFM L / M / H         | APPROX. UNIT DIMENSIONS (L x D x H) (In.) | APPROX. WEIGHT (Lbs) | MODEL               | MANUFACTURER | REFRIGERANT TYPE | NOTES           |
|---------|------|----------------|-------------|----------------|----------------|------------------|------|-----|-----------------------|-------------------------------------------|----------------------|---------------------|--------------|------------------|-----------------|
|         |      |                |             |                |                | V / Ph / Hz      | MCA  | MOP |                       |                                           |                      |                     |              |                  |                 |
| TE-AC-1 | 4    | 4-WAY CASSETTE | TE-CU-1     | 12,000         | 13,500         | 208-230 / 1 / 60 | 0.39 | 15  | 494 / 530 / 565       | 33-3/32 x 33-3/32 x 10-3/16               | 46                   | PLFY-EP12NEMU1-E.TH | mitsubishi   | R-32             | SEE NOTES BELOW |
| TE-AC-2 | 2    | WALL MOUNTED   | TE-CU-1     | 12,000         | 13,500         | 208-230 / 1 / 60 | 0.24 | 15  | 152 / 191 / 244 / 297 | 30-7/16 x 9-11/32 x 11-25/32              | 24.5                 | PFKY-P12NLMU-ER1.TH | mitsubishi   | R-32             | SEE NOTES BELOW |
| TE-AC-3 | 1    | 4-WAY CASSETTE | TE-CU-1     | 24,000         | 27,000         | 208-230 / 1 / 60 | 0.54 | 15  | 636 / 671 / 742 / 812 | 33-3/32 x 33-3/32 x 11-3/4                | 55                   | PLFY-EP24NEMU1-E.TH | mitsubishi   | R-32             | SEE NOTES BELOW |

NOTES:  
1. REFER TO FLOOR PLANS FOR LOCATIONS OF EACH TYPE OF AC UNIT.  
2. INTERLOCK EACH INDOOR UNIT WITH RESPECTIVE ACCU.  
3. THE CONTROL OF ALL INDOOR DUCTLESS SPLIT AC HEAT PUMP UNITS SHALL BE FROM THE CENTRAL MITSUBISHI CONTROLLER.  
4. ALL CEILING-CASSETTE UNIT SHALL BE PROVIDED WITH CEILING MOUNTING BRACKETS, WASHABLE CEILING DECORATION PANELS, INTERNAL CONDENSATE LIFT MECHANISM & CONDENSATE PUMP WITH RESERVOIR SENSOR & ALARM CONTACT (BLUEDIAMOND MEGABLUE CONDENSATE PUMP WITH MAX HEAD OF 66.5 FT OR EQUAL, POWERED BY AC UNIT).  
5. ALL WALL-MOUNTED UNITS SHALL BE PROVIDED WITH WALL-MOUNTING PLATE & CONDENSATE PUMP WITH RESERVOIR SENSOR & ALARM CONTACT (BLUEDIAMOND MEGABLUE CONDENSATE PUMP WITH MAX HEAD OF 66.5 FT OR EQUAL, POWERED BY AC UNIT).  
6. PROVIDE PROPER REFRIGERANT FOR ALL UNITS. INTERLOCK WITH RESPECTIVE ACCU.  
7. PROVIDE TWO-YEARS PARTS & LABOR WARRANTY FROM THE MANUFACTURER.  
8. NEW AC UNITS TO BE PROVIDED WITH NEW DDC CONTROLS BY ATC CONTRACTOR AND TIE INTO THE EXISTING "CM3" BMS.  
9. ALL SYSTEMS UTILIZING REFRIGERANT OTHER THAN R410A SHALL BE PROVIDED WITH FACTORY INSTALLED AND WIRED REFRIGERANT LEAK DETECTORS.

PUMP SCHEDULE

( BELL & GOSSETT AS STANDARD)

| TAG | LOCATION    | PRIMARY / STAND BY | FLUID TYPE | RPM   | FLOW RATE (GPM) | PRESSURE HEAD (Ft.) | IMPELLER DIA (In.) | EFFICIENCY (%) | BHP AT DUTY POINT | ELECTRICAL DATA |              | DIMENSIONS (LxW) (In.) | APPROX WEIGHT (Lbs) | MODEL          | MANUFACTURER   | NOTES           |
|-----|-------------|--------------------|------------|-------|-----------------|---------------------|--------------------|----------------|-------------------|-----------------|--------------|------------------------|---------------------|----------------|----------------|-----------------|
|     |             |                    |            |       |                 |                     |                    |                |                   | HP              | V / Ph / Hz  |                        |                     |                |                |                 |
| P-5 | BOILER ROOM | PRIMARY            | HOT WATER  | 3,600 | 22              | 56                  | 4.125              | 49.9           | 0.62              | 2               | 208 / 3 / 60 | 11 x 9 x 17.5          | 66                  | E-90 / 1.25AAB | BELL & GOSSETT | SEE NOTES BELOW |
| P-6 | BOILER ROOM | STAND BY           | HOT WATER  | 3,600 | 22              | 56                  | 4.125              | 49.9           | 0.62              | 2               | 208 / 3 / 60 | 11 x 9 x 17.5          | 66                  | E-90 / 1.25AAB | BELL & GOSSETT | SEE NOTES BELOW |

NOTES:  
1. MECHANICAL CONTRACTOR SHALL FURNISH & INSTALL VIBRATION ISOLATION HANGERS AND PROPER SUPPORTS FOR THE NEW HOT WATER PUMPS.  
2. IN-LINE 1.5" ANSI FLANGE CONNECTIONS 125.  
3. PROVIDE PREMIUM EFFICIENCY MOTORS SUITABLE FOR VFD OPERATION.  
4. PROVIDE ONE (1) VFD FOR EACH PUMP WITH AUTOMATIC & MANUAL BYPASS IN NEMA ENCLOSURE.  
5. MINIMUM PUMP FLOW RATE SHALL BE 30% OF MAXIMUM FLOW.  
6. PROVIDE TRIPLE DUTY VALVE , ETC. REFER TO STANDARD DETAILS FOR ADDITIONAL REQUIREMENTS.  
7. PROVIDE AUTOMATIC PUMP BYPASS LINE WITH MODULATING CONTROL VALVE AND DIFFERENTIAL PRESSURE (DP) SENSOR ACROSS SYSTEM SUPPLY AND RETURN MAINS. BYPASS SHALL MAINTAIN MINIMUM PUMP FLOW REQUIREMENTS AND PROVIDE STABLE VFD OPERATION. DP SENSOR SHALL BE INTEGRATED WITH VFD CONTROL SEQUENCE.  
8. INTERNAL AUTOMATIC TEMPERATURE CONTROLS SHALL BE PROVIDED BY ATC CONTRACTOR. THE ATC CONTRACTOR SHALL FIELD MOUNT & WIRE ALL NEW CONTROLS. THE ATC CONTRACTOR SHALL PROVIDE, MOUNT, AND WIRE ALL EXTERNAL COMPONENTS. ALL UNITS SHALL BE TIED INTO THE EXISTING (CM3) BUILDING MANAGEMENT SYSTEM (BMS). REFER TO ATC DIAGRAMS AND SPECIFICATIONS.

ELECTRIC DUCT HEATER SCHEDULE

( RAYWALL AS STANDARD)

| TAG      | LOCATION | UNIT SERVED | SUPPLY CFM | OUTPUT (BTUH) | KW | EAT (°F) | LAT (°F) | DIMENSIONS (WxH) (In.) | MODEL     | ELECTRICAL   | MANUFACTURER | NOTES           |
|----------|----------|-------------|------------|---------------|----|----------|----------|------------------------|-----------|--------------|--------------|-----------------|
| TE-EDH-1 | 1        | TE-ERV-1    | 385        | 6.8           | 2  | 0        | 14       | 10x10                  | HF SERIES | 208 / 1 / 60 | RAYWALL      | SEE NOTES BELOW |

NOTES:  
PROVIDE TRANSITION DUCTWORK BEFORE AND AFTER THE COIL. PROVIDE DISCONNECT SWITCH, DUCTSTAT, AND AN AIRFLOW PROVING SWITCH. INTERLOCK WITH TE-ERV-1. ELECTRIC HEATER SHALL RUN WHEN TE-ERV-1 IS ENERGIZED AND THE OA TEMPERATURE IS BELOW 25°F.

CONDENSATE DRAIN PUMP SCHEDULE

( LITTLE GIANT AS STANDARD)

| TAG      | LOCATION   | UNIT SERVED | QUANTITY | PERFORMANCE (GPH @ HEAD) |       | SHUT OFF    | ELECTRICAL DATA |     |    |              | DIMENSIONS (LxWxH) (In.) | APPROX WEIGHT (Lbs) | MODEL       | MANUFACTURER | NOTES           |
|----------|------------|-------------|----------|--------------------------|-------|-------------|-----------------|-----|----|--------------|--------------------------|---------------------|-------------|--------------|-----------------|
| 10'      | 20'        | FEET        | HP       | AMPS                     | WATTS | V / Ph / Hz |                 |     |    |              |                          |                     |             |              |                 |
| TE-CDP-1 | ELEC 107.1 | TE-ERV-1    | 1        | 48                       | 0     | 17          | 1 / 30          | 0.5 | 75 | 230 / 1 / 60 | 10-1/2 x 5-1/8 x 7-1/8   | 6.5                 | VCMA-20ULST | LITTLE GIANT | SEE NOTES BELOW |

NOTES:  
CONTRACTOR SHALL PROVIDE AND INSTALL ALL NEW CONDENSATE DRAIN PUMPS. PROVIDE CHECK VALVE ON PUMP DISCHARGE PIPING

VENTILATION INDEX

| ROOM NAME               | UNIT SERVING | FLOOR AREA (Sq Ft) | MAX OCCUPANTS | REQUIRED OA CFM/SqFt | REQUIRED OA for SPACE | REQUIRED OA per PERSON | OA For OCCUPANTS | MIN OA REQUIRED | ZONE AIR DISTRIBUTION EFFECTIVENESS | MIN OA REQUIRED | DESIGN   |            |
|-------------------------|--------------|--------------------|---------------|----------------------|-----------------------|------------------------|------------------|-----------------|-------------------------------------|-----------------|----------|------------|
|                         |              |                    |               |                      |                       |                        |                  |                 |                                     |                 | OA (CFM) | EXH. (CFM) |
| OFFICE 106A             | AC-106A      | 167                | 1             | 0.06                 | 10                    | 5                      | 5                | 15              | 0.8                                 | 19              | 20       | -          |
| SGI 107                 | ERV-1        | 296                | 8             | 0.12                 | 36                    | 10                     | 80               | 116             | 0.8                                 | 145             | 150      | -          |
| SGI 107A                | ERV-1        | 300                | 8             | 0.12                 | 36                    | 10                     | 80               | 116             | 0.8                                 | 145             | 150      | -          |
| COUNSELING 107B         | ERV-1        | 205                | 5             | 0.06                 | 13                    | 5                      | 25               | 38              | 0.8                                 | 48              | 50       | -          |
| CORRIDOR 106            | ERV-1        | 170                | -             | 0.06                 | 18                    | -                      | -                | 18              | 0.8                                 | 23              | 25       | -          |
| ELECTRIC 107.1          | ERV-1        | 527                | -             | 0.06                 | 5                     | 5                      | -                | 5               | 0.8                                 | 7               | 10       | -          |
| OT-PT                   | UV-(E)       | 1045               | 16            | 0.12                 | 125                   | 10                     | 160              | 285             | 1.0                                 | 285             | 360      | -          |
| CORRIDOR 116S           | AHU-116      | 375                | -             | 0.06                 | 23                    | -                      | -                | 23              | 0.8                                 | 28              | 30       | -          |
| SGI 116Q                | AHU-116      | 299                | 8             | 0.12                 | 36                    | 10                     | 80               | 116             | 0.8                                 | 145             | 150      | -          |
| FLEXIBLE CLASSROOM 116J | UV-116J      | 879                | 25            | 0.12                 | 105                   | 10                     | 250              | 355             | 1                                   | 355             | 360      | -          |
| FLEXIBLE CLASSROOM 116M | UV-116M      | 900                | 25            | 0.12                 | 108                   | 10                     | 250              | 358             | 1                                   | 358             | 360      | -          |
| MEDIA CENTER 206        | RTU-M        | 2020               | 65            | 0.12                 | 242                   | 10                     | 270              | 892             | 0.8                                 | 1,115           | 1,115    | -          |
| MEDIA SPECIALIST 206S   | RTU-M        | 150                | 1             | 0.06                 | 9                     | 5                      | 5                | 14              | 0.8                                 | 18              | 20       | -          |
| CORRIDOR 206C           | RTU-M        | 375                | -             | 0.06                 | 23                    | -                      | -                | 23              | 0.8                                 | 28              | 30       | -          |
| SGI 306                 | ERV-306      | 230                | 8             | 0.12                 | 27                    | 10                     | 80               | 107             | 0.8                                 | 134             | 135      | -          |

MECHANICAL SCHEDULES

ADDITION & ALTERATION TO TATEM J FIFTH ELEMENTARY SCHOOL

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Job No. 2.20277.25.10

File No. 202772510M601

M6.02

NJ Certificate of Authorization

Eng'r. No. 24027937500

Arch. No. 21A000012400

Date 8/13/26

Checked TW

Drawn MNB

THOMAS WIGHARD, P.E.

The PROFESSIONAL ENGINEER

License No. NJ24GE04901100

Revisions:

8/13/26 BID SET

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MECHANICAL SCHEDULES

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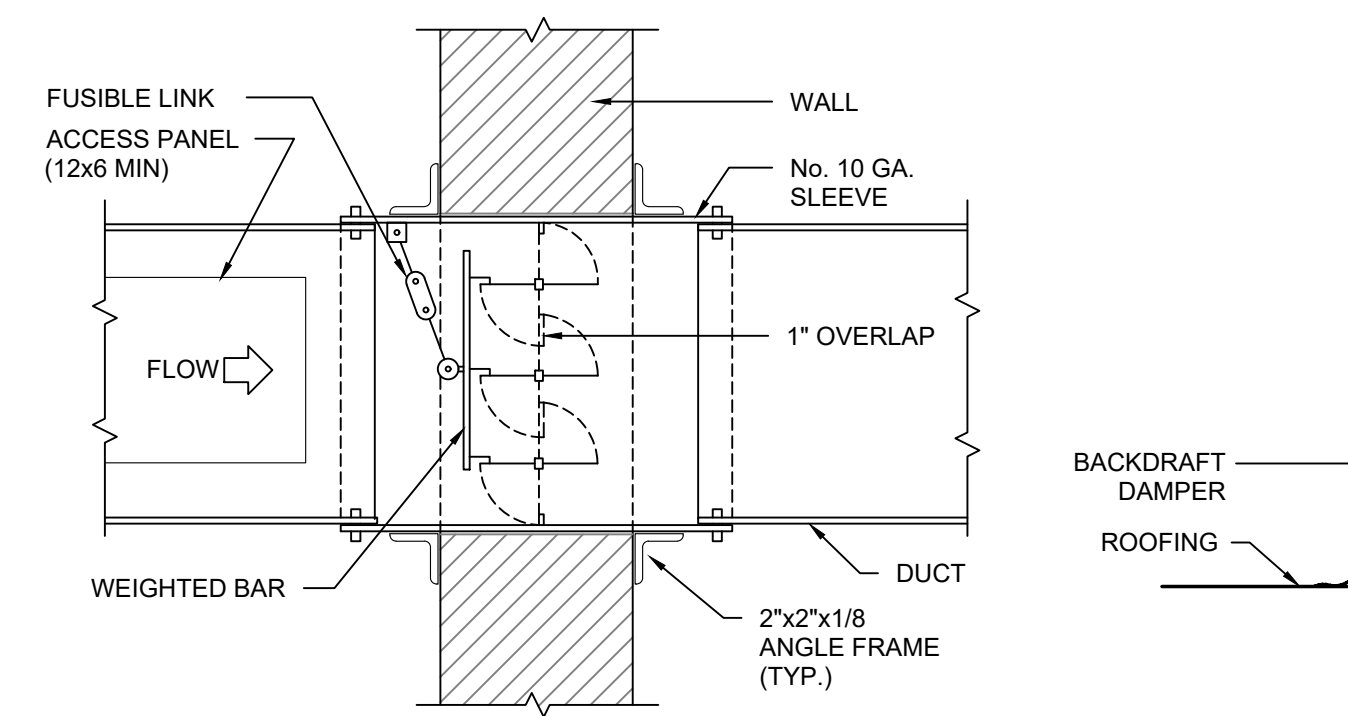
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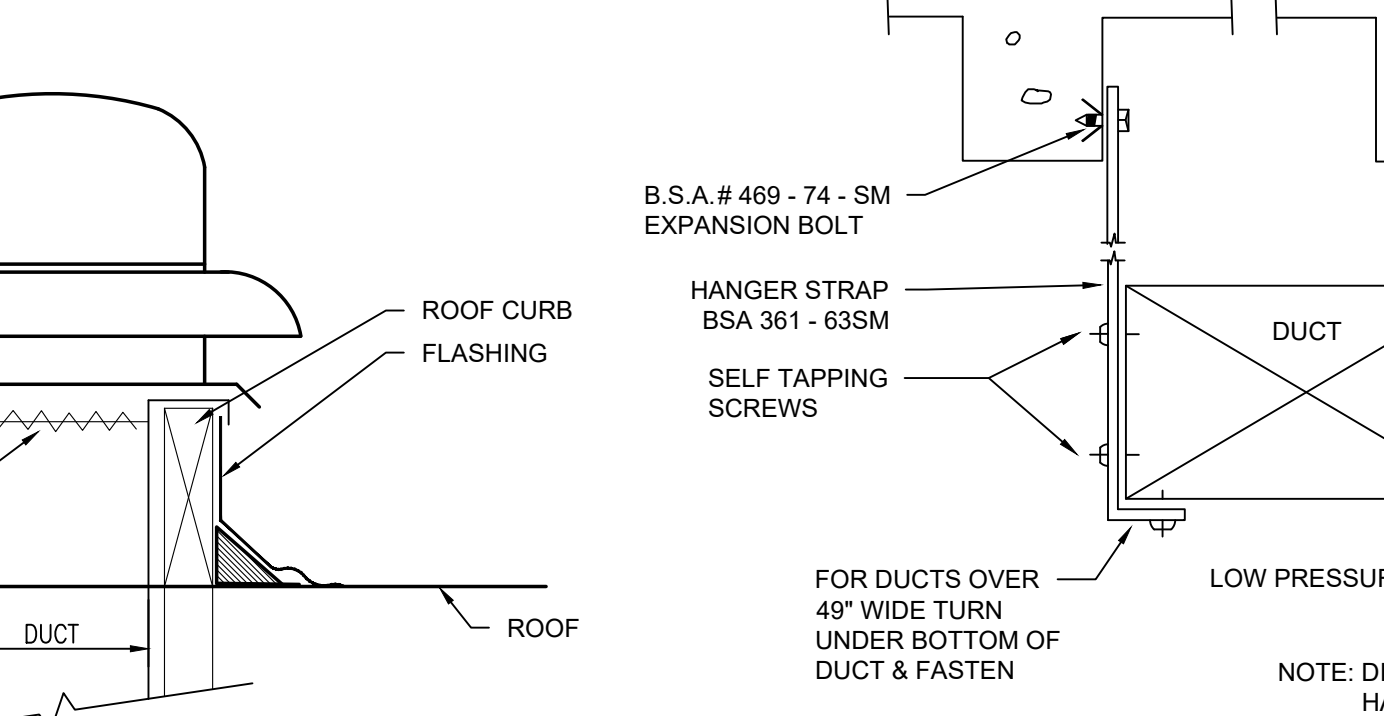
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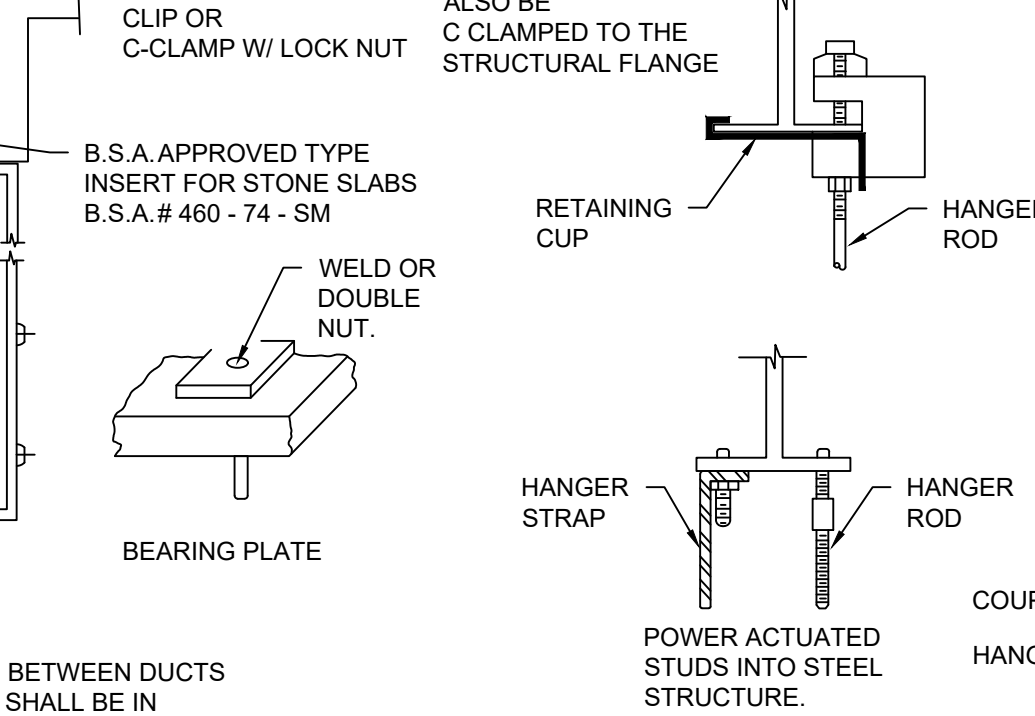
1 COMBINATION FIRE-SMOKE DAMPER FLOOR SLAB DETAIL  
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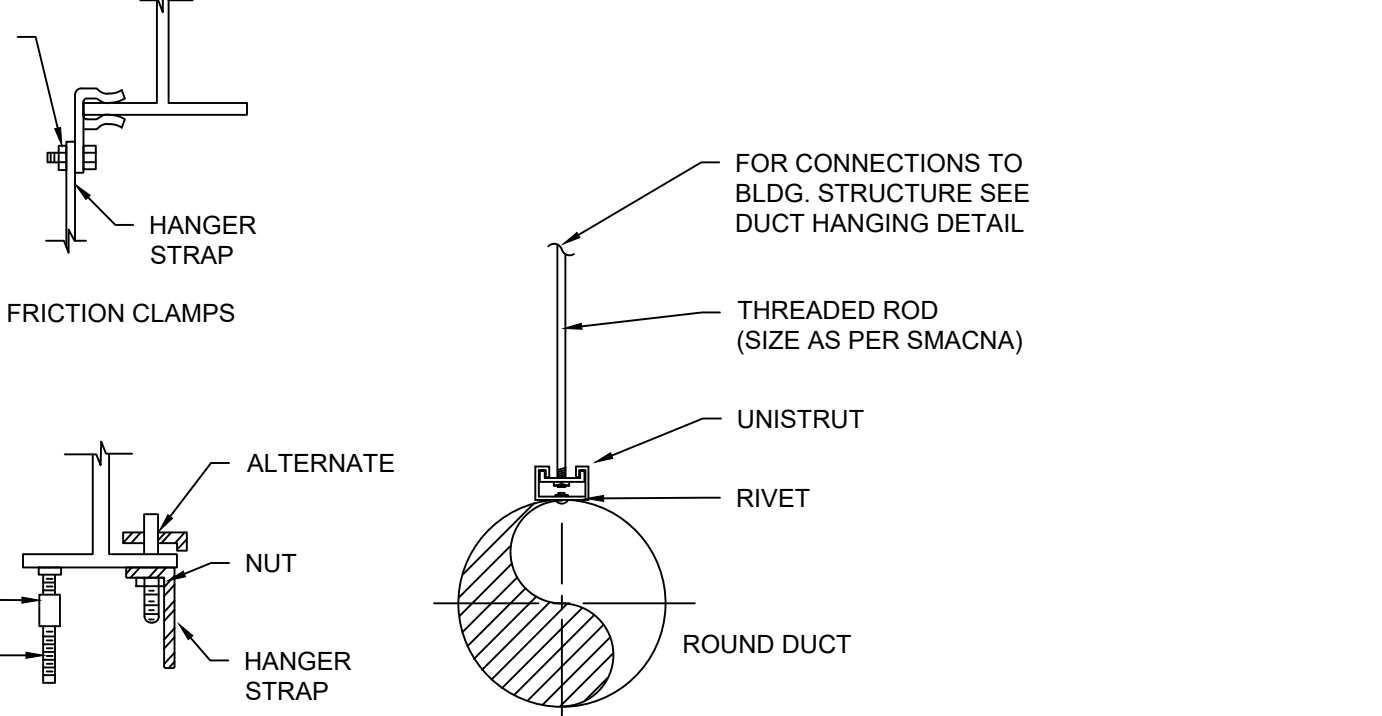
2 COMBINATION FIRE-SMOKE DAMPER IN-WALL DETAIL  
N.T.S.



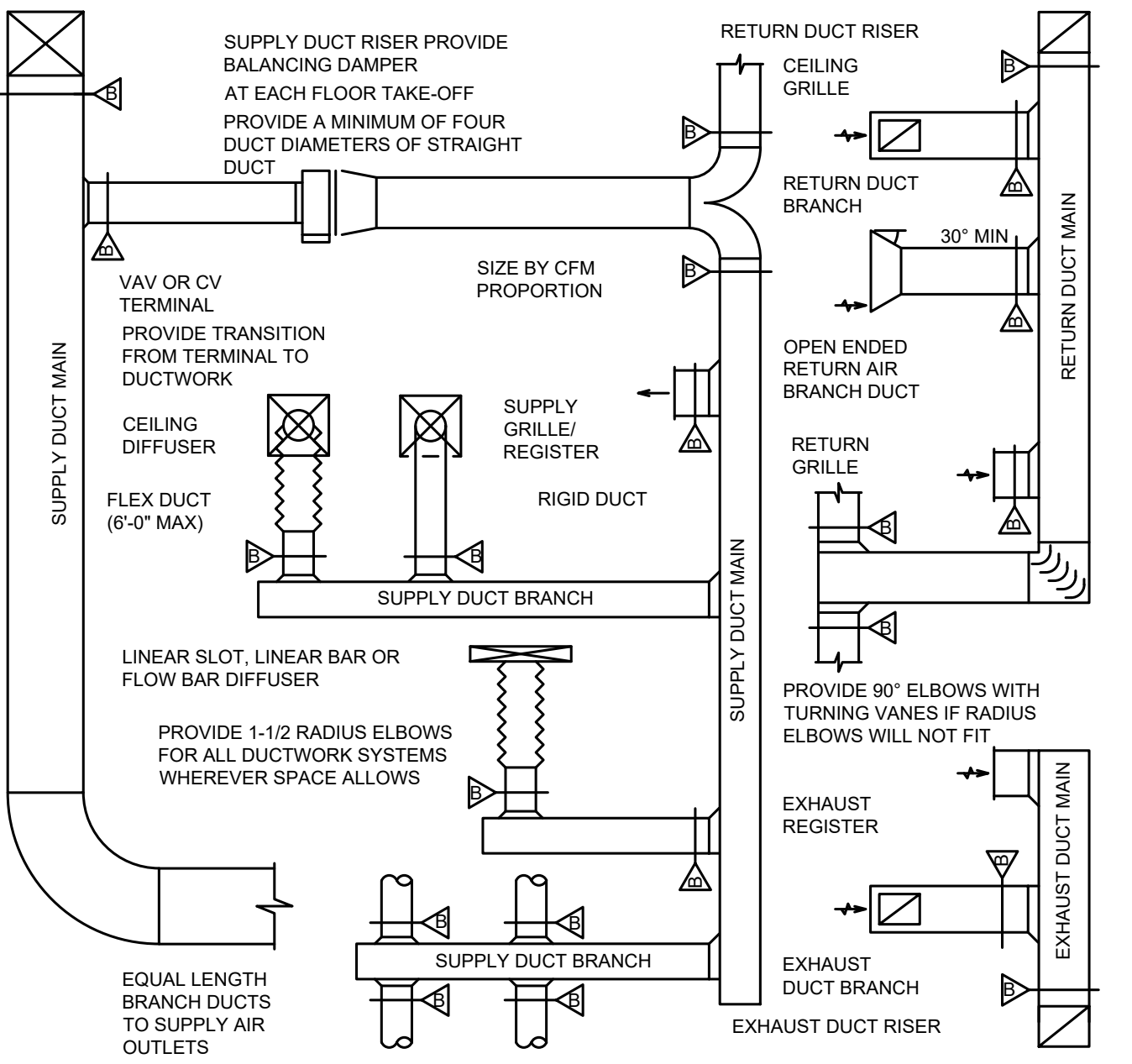
3 SUSPENDED AIR HANDLING UNIT DETAIL  
N.T.S.



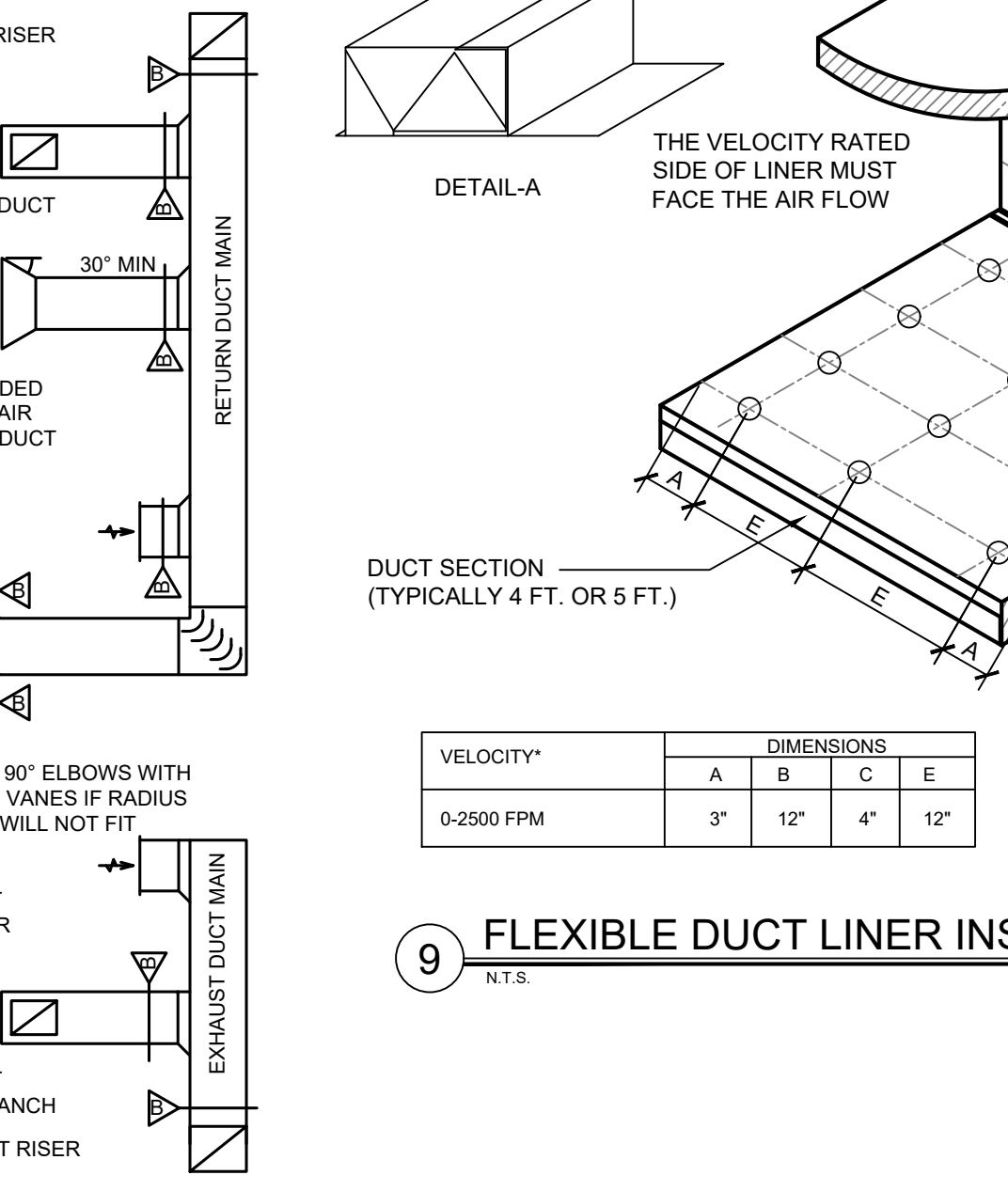
4 VAV BOX CONNECTION DETAIL  
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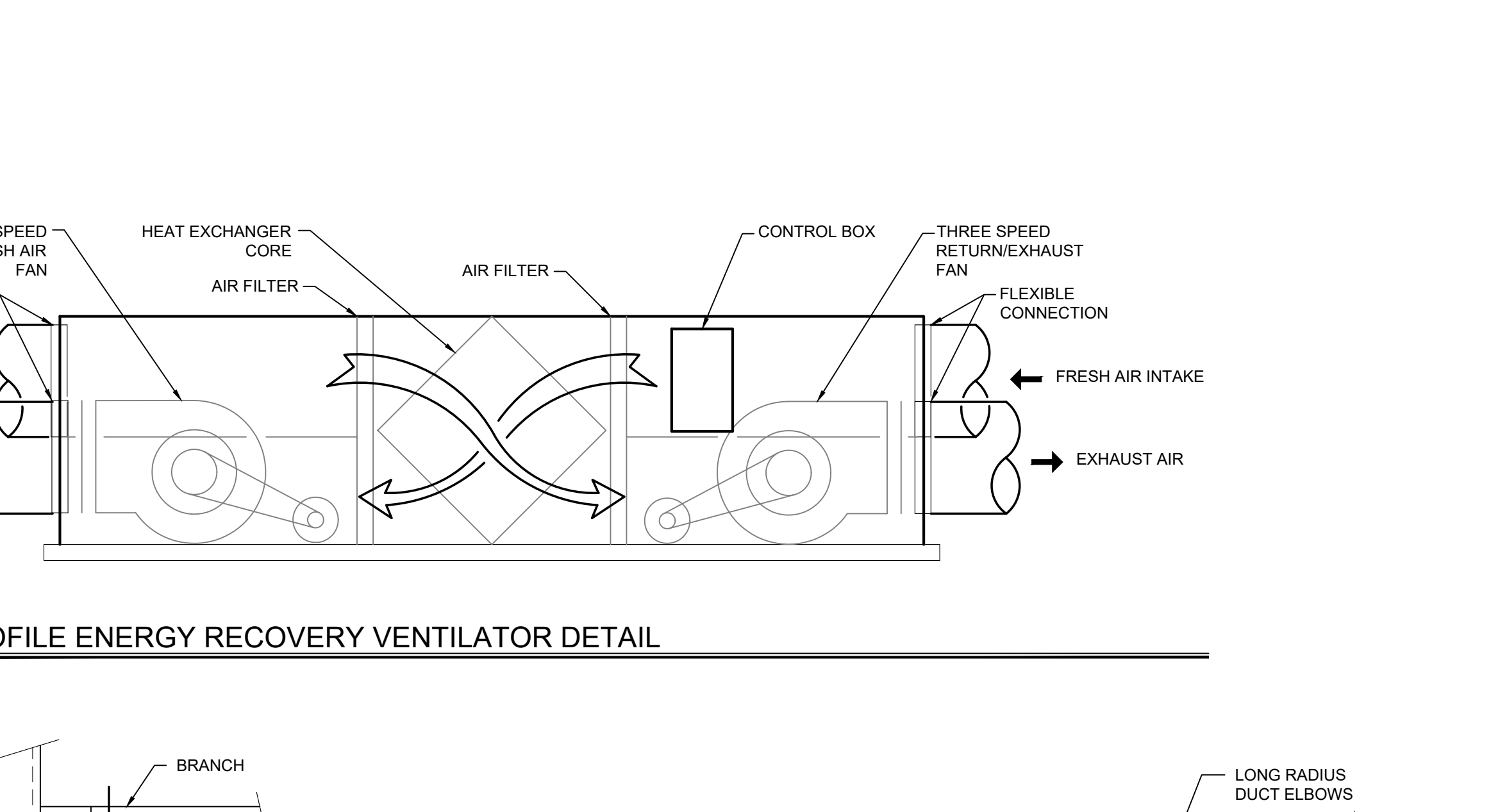
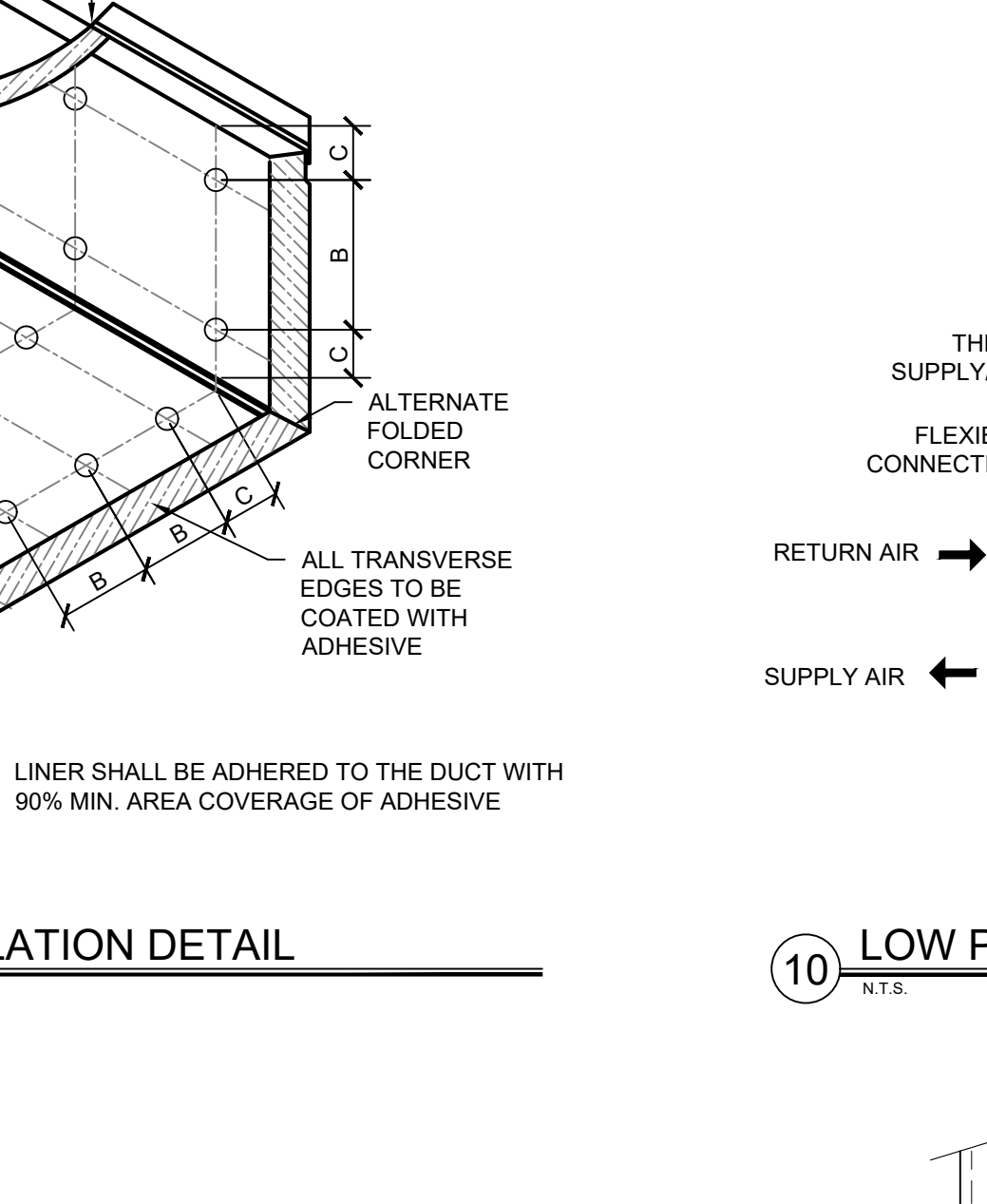
5 FIRE DAMPER IN WALL DETAIL  
N.T.S.



6 ROOF EXHAUST FAN DETAIL  
N.T.S.



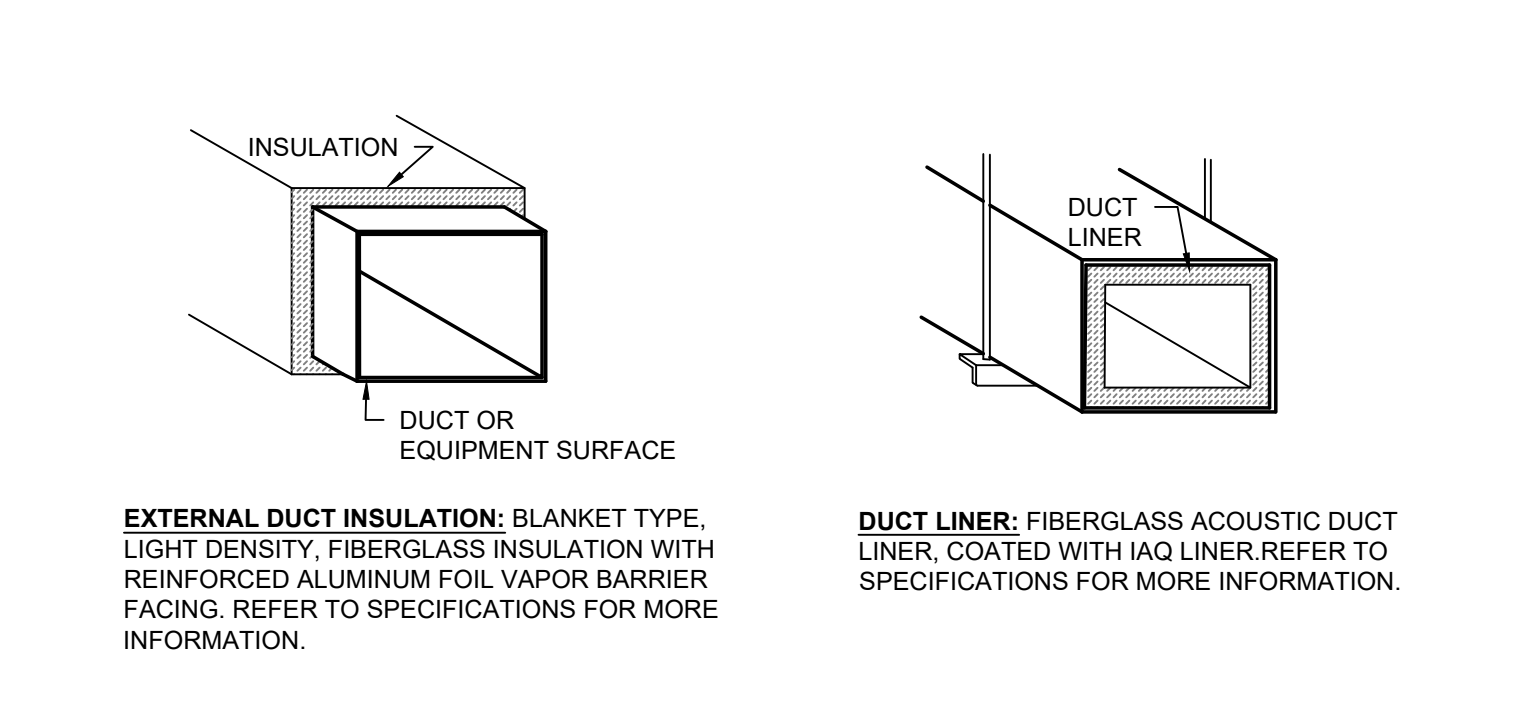
7 DUCT HANGING DETAILS  
N.T.S.



**General Notes**

- REFER TO HVAC FLOOR PLANS FOR DUCT SIZES
- REFER TO SCHEDULES FOR GRILLES, REGISTERS, DIFFUSERS AND TERMINAL SIZES AND TYPES
- PROVIDE A MANUAL TYPE CABLE OPERATED BALANCING DAMPER FOR EACH SUPPLY OUTLET AND RETURN INLET
- ALL DUCT RUNOUTS TO DIFFUSERS SHALL BE THE SAME SIZE AS DIFFUSER NECK SIZE, UNLESS OTHERWISE NOTED
- FLEX DUCT WILL NOT BE ALLOWED ON RETURN OR EXHAUST DUCTWORK SYSTEMS
- PROVIDE 12" AIR CUSHION AT THE END OF EACH SUPPLY MAIN AND BRANCH DUCT
- INDIVIDUAL BRANCH BALANCING DAMPERS NOT REQUIRED FOR SUPPLY OR EXHAUST REGISTERS
- VOLUME DAMPER

11 DUCT CONNECTION DETAILS  
N.T.S.

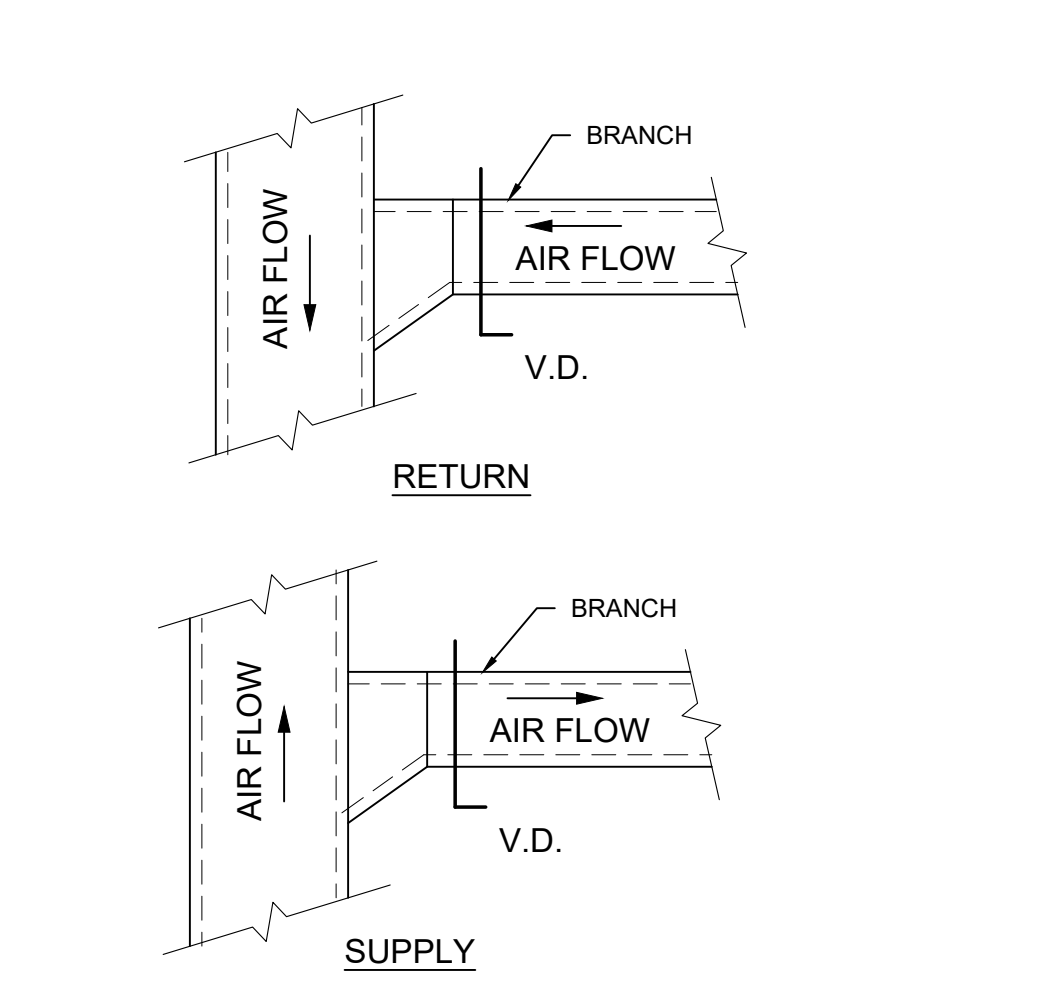


12 DUCT INSULATION DETAILS  
N.T.S.

**EXTERNAL DUCT INSULATION:** BLANKET TYPE, LIGHT DENSITY, FIBERGLASS INSULATION WITH REINFORCED ALUMINUM FOIL VAPOR BARRIER FACING. REFER TO SPECIFICATIONS FOR MORE INFORMATION.

**DUCT LINER:** FIBERGLASS ACOUSTIC DUCT LINER, COATED WITH IAQ LINER. REFER TO SPECIFICATIONS FOR MORE INFORMATION.

10 LOW PROFILE ENERGY RECOVERY VENTILATOR DETAIL  
N.T.S.



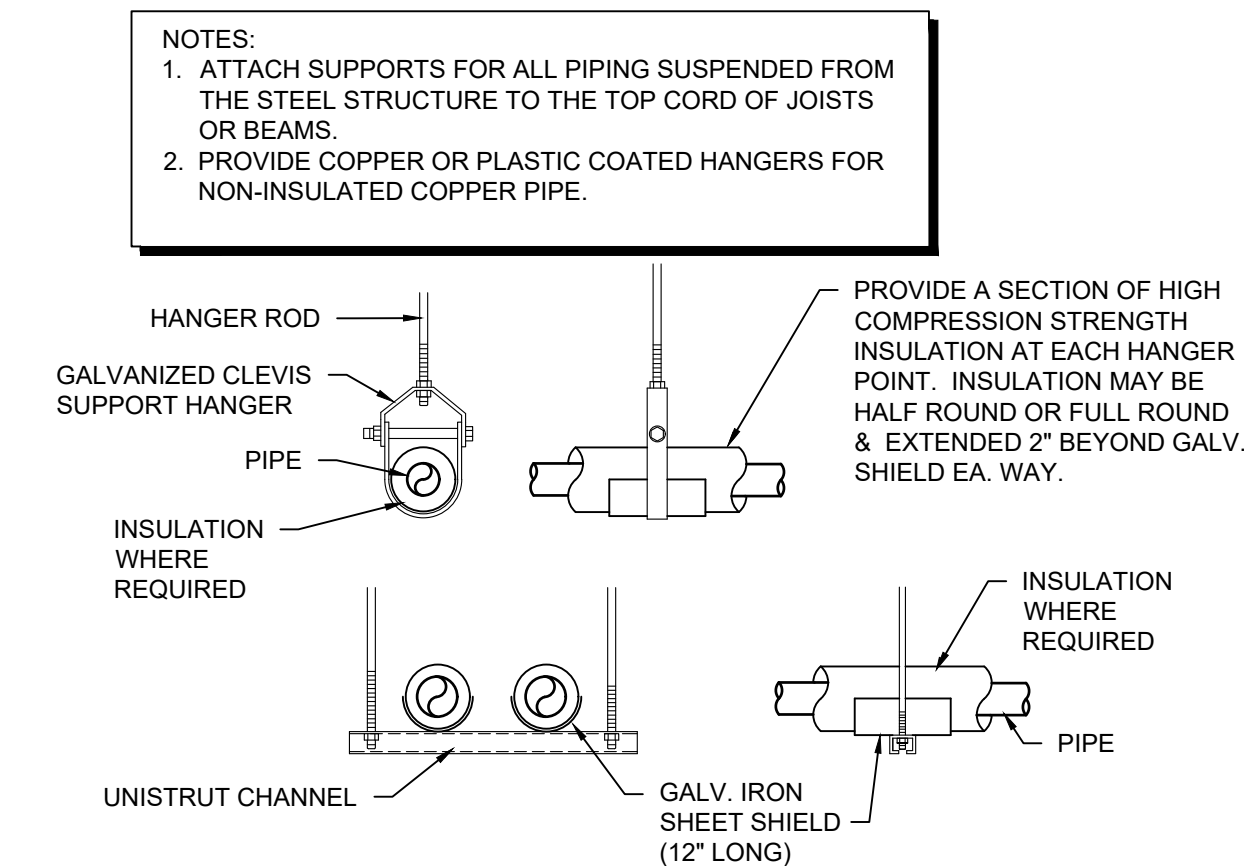
13 DUCT / DIFFUSER TAKE-OFF DETAIL  
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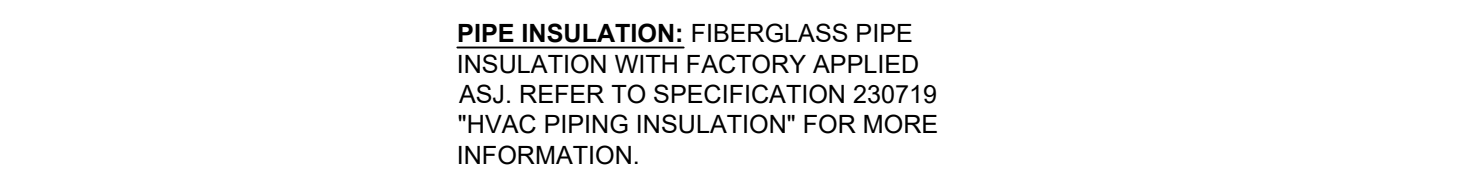
14 DUCT TURN DETAIL  
N.T.S.



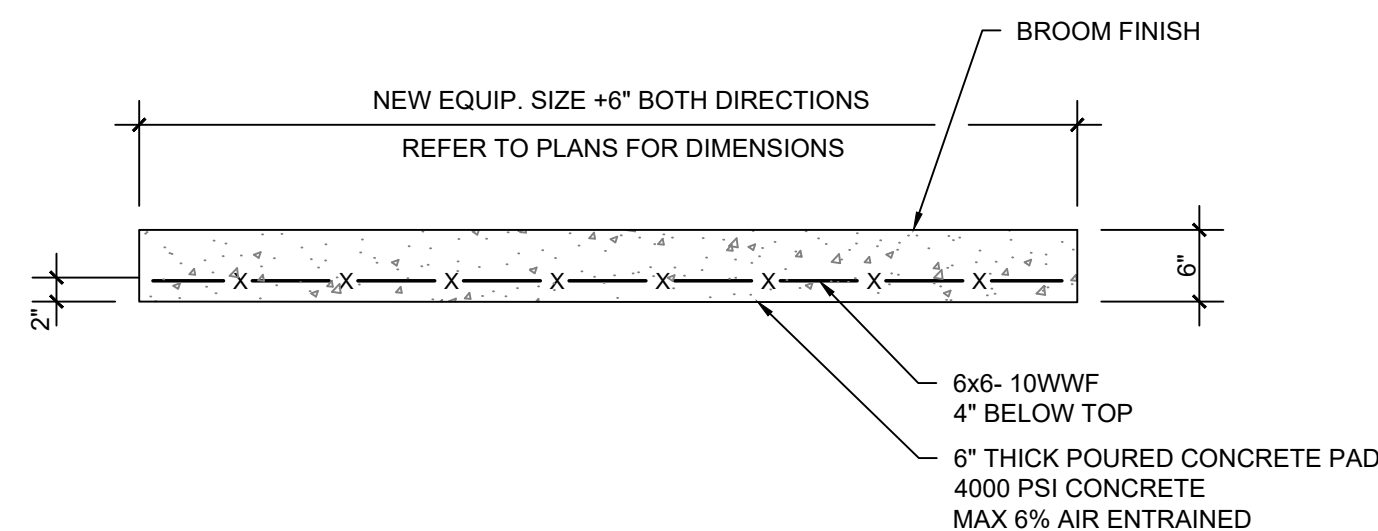




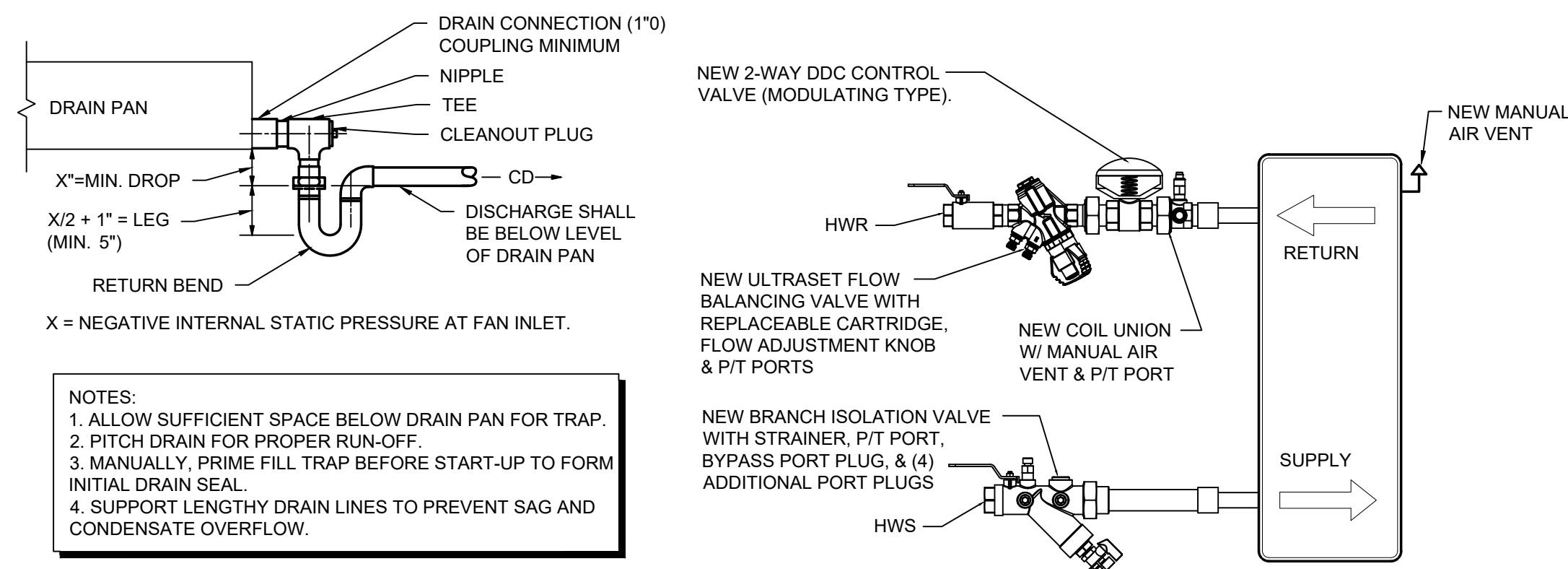
## 2 PIPE SUPPORT DETAIL



### 3 PIPE INSULATION DETAILS



4 CONCRETE PAD DETAIL  
N.T.S.

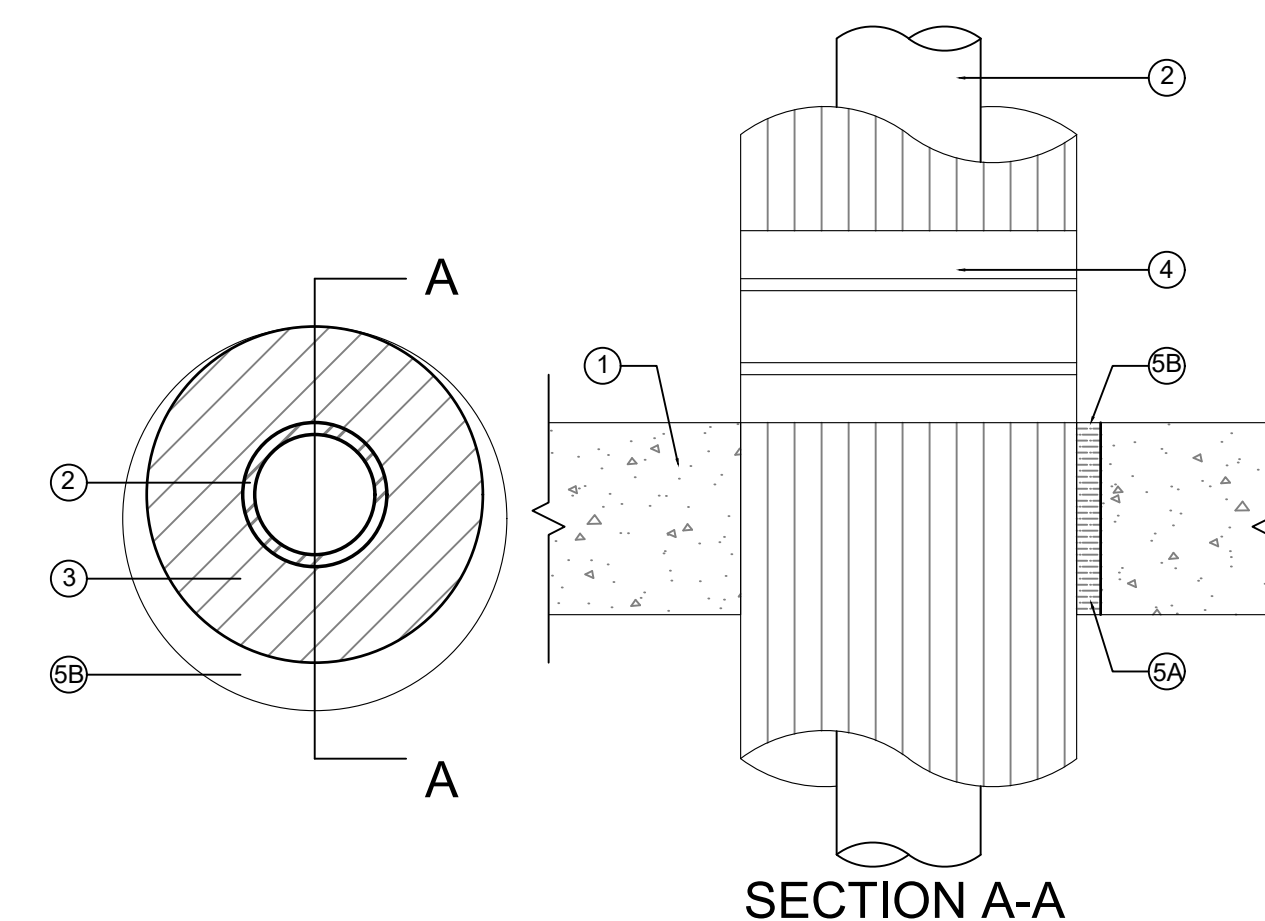


5 CONDENSATE TRAP DETAIL  
N.T.S.

6 TWO WAY HEATING COIL PIPING DETAIL

DUAL TEMP./HEATING COIL CONNECTION:

3. PROVIDE COIL CONNECTION USING VALVES AND CONNECTION DEVICES MANUFACTURED FOR COIL CONNECTION. PROVIDE: ISOLATION VALVE WITH INTEGRAL STRAINER, PRESSURE/TEMPERATURE MEASUREMENT PORT & DRAIN VALVE. UNION, CONNECTION WITH AIR VENT & PRESSURE/TEMPERATURE MEASUREMENT PORT. UNION CONNECTION WITH AIR VENT & PRESSURE/TEMPERATURE MEASUREMENT PORT. CIRCUIT SETTER MANUAL BALANCING VALVE FOR SYSTEM BALANCING. VALVES AS FURNISHED BY BELL & GOSSETT (OR APPROVED EQUAL). COIL SHALL BE CONNECTED TO VALVES USING UNION CONNECTIONS. VALVES SHALL BE FACTORY TAGGED USING FLEXIBLE LASER PRINTED PLASTIC WEATHERPROOF TAG TIE WRAPPED TO VALVE HANDLE OR VALVE BODY. "Y" BRANCH BALANCING VALVE PROVIDE CIRCUIT SETTER, TRIASER AND AS SHOWN, VALVE BODY SHALL BE BRONZE CONSTRUCTION. VALVE: RATED 400 PSI AT 250° F SERVICE FOR WATER. HAVING UNION PORT OR WATER. HAVE UNION NUT & SEPARATE TAIL PIECE EXIT FROM BODY WITH O-RING SEAL BETWEEN BODY AND FLANGE. SHALL HAVE TWO NPT FEMALE THREADED ACCESSORY PORT WITH INSTALLED PRESSURE/TEMPERATURE MEASUREMENT PORT. SHALL HAVE ONE PLUGGED 1/2" FEMALE THREADED NPT PORT. SHALL HAVE ROUND HANDLE WITH MEMORY STOP AND INTEGRAL CALIBRATED POSITION INDICATOR AND NAMEPLATE: 1.5" BRONZE CONSTRUCTION; INCORPORATE BALL SHUTOFF VALVE; RATED AT 400 PSI AT 250° F SERVICE FOR WATER. HAVE UNION NUT & SEPARATE TAIL PIECE EXIT FROM BODY WITH O-RING SEAL BETWEEN BODY AND FLANGE. INCORPORATE "Y" PATTERN STRAINER WITH 20 MESH STAINLESS STRAINER. SHALL HAVE FOUR PLUGGED 1/2" NPT FEMALE THREADED ACCESSORY PORTS; SHALL HAVE ONE 1/2" NPT FEMALE THREADED ACCESSORY PORT WITH INSTALLED PRESSURE/TEMPERATURE MEASUREMENT PORT. SHALL HAVE ONE 1/2" NPT FEMALE THREADED ACCESSORY PORT WITH GARDEN HOSE THREADING AND CAPPED FITTING. SHALL HAVE ONE PLUGGED 1/2" FEMALE THREADED NPT PORT.
4. ACCESSORY UNION: PROVIDE UNION AS SHOWN. UNION BODY SHALL BE BRONZE CONSTRUCTION; RATED AT 400 PSI AT 250° F SERVICE FOR WATER. HAVE UNION NUT & SEPARATE TAIL PIECE EXIT FROM BODY WITH O-RING SEAL BETWEEN BODY AND FLANGE. SHALL HAVE ONE 1/2" NPT FEMALE THREADED ACCESSORY PORT WITH INSTALLED PRESSURE/TEMPERATURE MEASUREMENT PORT. SHALL HAVE ONE SCREW DRIVER ACTUATED MANUAL AIR VENT WITH MEMORY STOP AND INTEGRAL CALIBRATED POSITION INDICATOR AND NAMEPLATE: 1.5" BRONZE CONSTRUCTION.
5. ASSOCIATED PIPING: ADAPTERS, STANDARD UNIONS, FITTINGS AND PIPE SHALL BE FURNISHED BY MECH. CONTRACTOR.

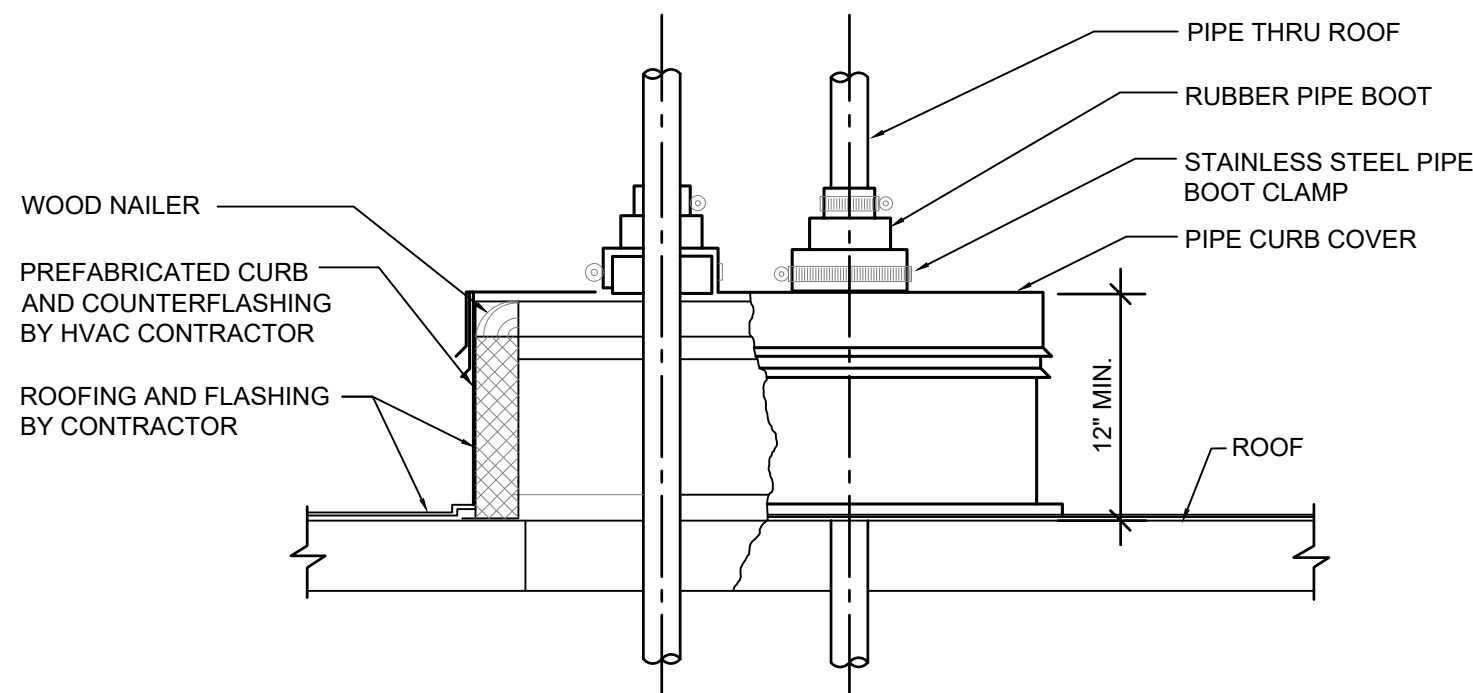


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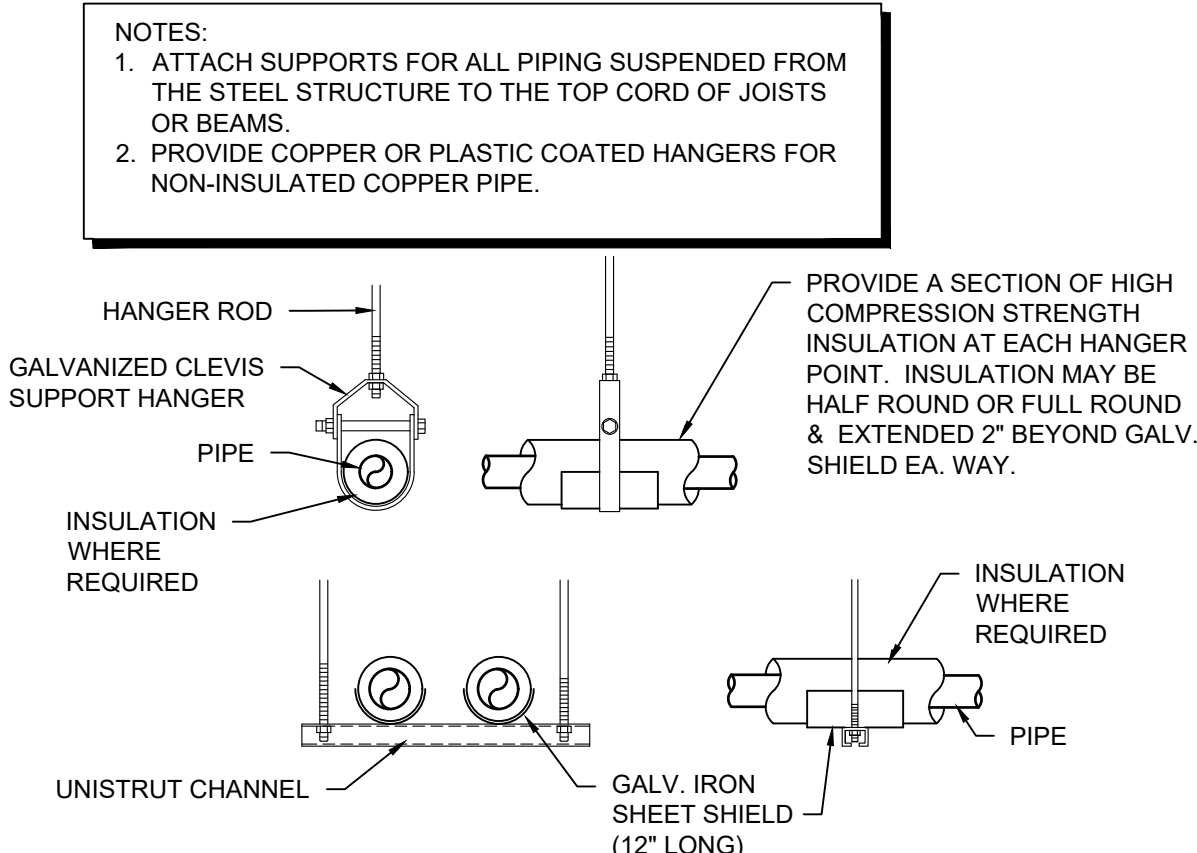
F RATING - 2 HR.

T RATING - 2 HR

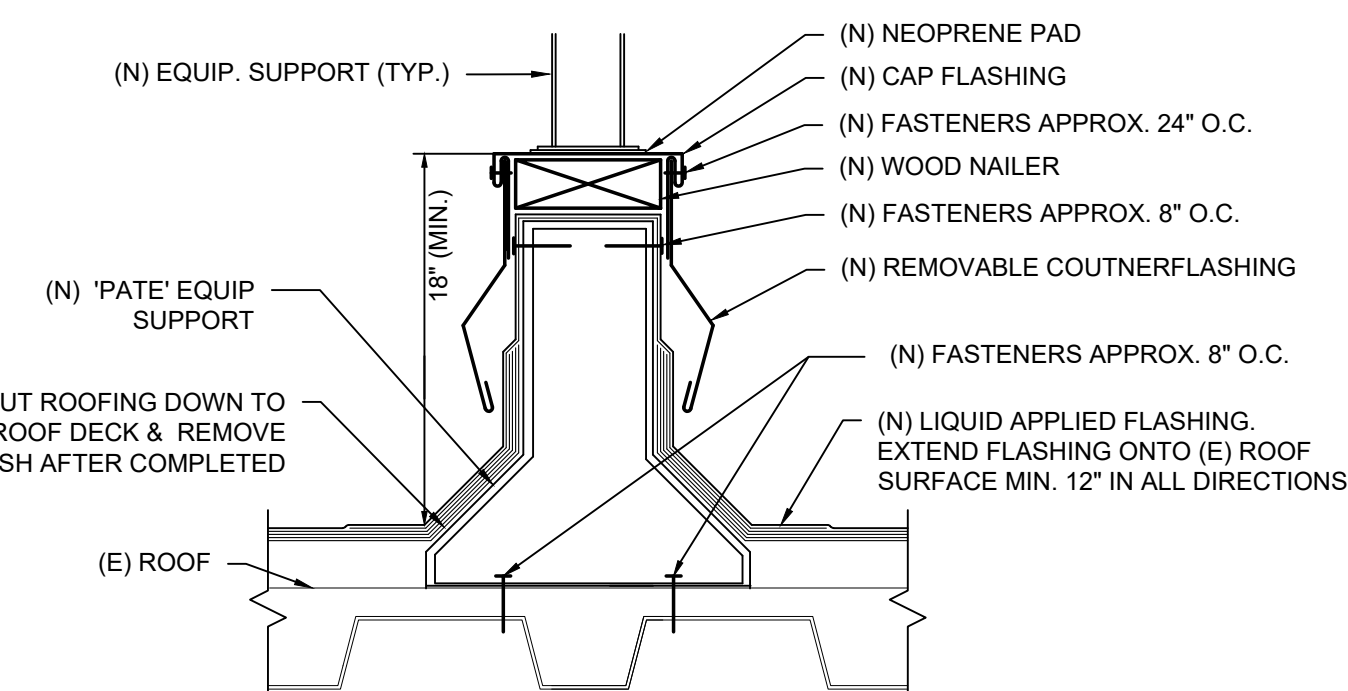
7 PIPING PENETRATION DETAIL



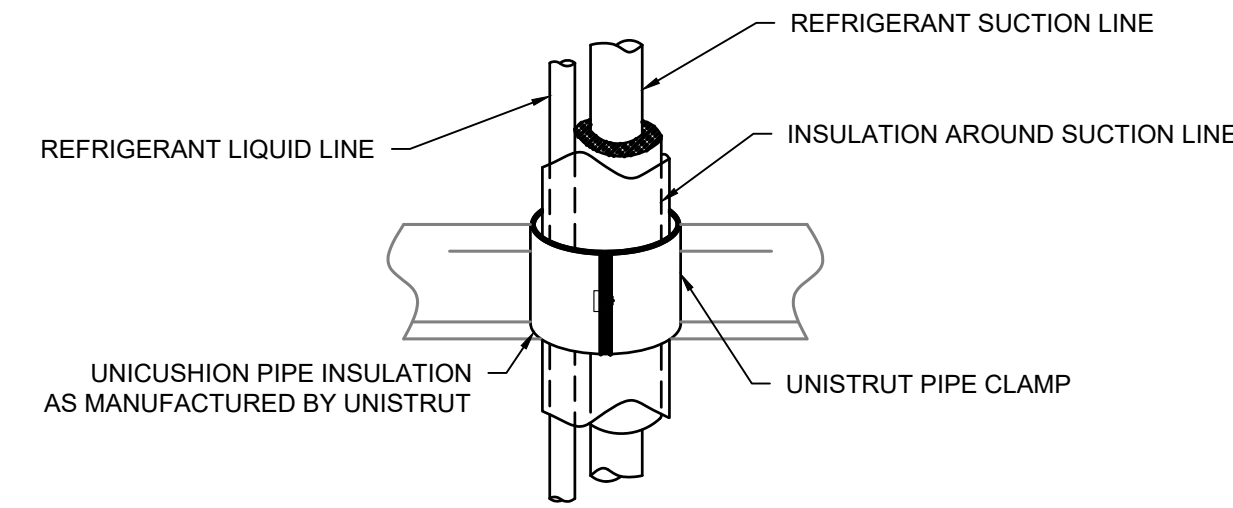
## 8 PIPE CURB DETAIL



## 9 PIPE HANGERS DETAIL



10 CONDENSING UNIT ROOF SUPPORTING RAILS DETAIL



NOTES:

1. LIQUID AND SUCTION LINES MAY BE ROUTED TOGETHER FOR CONVENIENCE, BUT MUST BE COMPLETELY INSULATED FROM EACH OTHER. DO NOT SOLDER LIQUID AND SUCTION LINES TOGETHER. DO NOT ALLOW METAL TO METAL CONTACT.
2. LINES SHOULD BE INSTALLED WITH AS FEW BENDS AS POSSIBLE, ALLOWING SERVICE ACCESS TO THE INDOOR COIL.
3. SLOPE HORIZONTAL SUCTION LINES 1 INCH EVERY 20 FEET TOWARD THE OUTDOOR UNIT.
4. USE LONG RADIUS ELBOWS WHEREVER POSSIBLE, EXCEPT IN OIL RETURN TRAPS, WHERE SHORT RADIUS ELBOWS SHALL BE USED.

11 REFRIGERANT PIPING SUPPORT DETAIL







1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11

HOOD INFORMATION - JOB#8267007

| HOOD NO | TAG | MODEL           | MANUFACTURER | LENGTH | MAX COOKING TEMP | TYPE | APPLIANCE DUTY | DESIGN CFM/FT | TOTAL EXH CFM | EXHAUST PLENUM RISER(S) |      |        |     |      |      |         | TOTAL SUPPLY CFM | HOOD CONSTRUCTION    | HOOD CONFIG |       |
|---------|-----|-----------------|--------------|--------|------------------|------|----------------|---------------|---------------|-------------------------|------|--------|-----|------|------|---------|------------------|----------------------|-------------|-------|
|         |     |                 |              |        |                  |      |                |               |               | WIDTH                   | LENG | HEIGHT | DIA | CFM  | VEL  | SP      |                  |                      | END TO END  | ROW   |
| 1       |     | 6024 ND-2-PSP-F | CAPTIVEAIRE  | 8' 0"  | 450 DEG          | I    | MEDIUM         | 200           | 1600          |                         |      | 4"     | 14" | 1600 | 1497 | -0.734" | 1280             | 430 SS WHERE EXPOSED | ALONE       | ALONE |

FOR QUESTIONS, CALL THE  
Philadelphia  
REGION 33  
PHONE: (215) 293-9665  
EMAIL: reg33@captiveaire.com

HOOD INFORMATION

| HOOD NO | TAG | FILTER(S)            |     |        |        | LIGHT(S)               |     |                |            | UTILITY CABINET(S) |      |      |      | FIRE SYSTEM PIPING | HOOD HANGING WEIGHT |
|---------|-----|----------------------|-----|--------|--------|------------------------|-----|----------------|------------|--------------------|------|------|------|--------------------|---------------------|
|         |     | TYPE                 | QTY | HEIGHT | LENGTH | EFFICIENCY @ 7 MICRONS | QTY | TYPE           | WIRE GUARD | LOCATION           | SIZE | TYPE | SIZE | ELECTRICAL MODEL # | SWITCHES QUANTITY   |
| 1       |     | CAPTRATE SOLO FILTER | 5   | 16"    | 16"    | 85% SEE FILTER SPEC    | 3   | RECESSED ROUND | NO         |                    |      |      |      |                    |                     |

HOOD OPTIONS

| HOOD NO | TAG | OPTION                                                                   |
|---------|-----|--------------------------------------------------------------------------|
| 1       |     | FIELD WRAPPER 18.00" HIGH FRONT, LEFT, RIGHT.                            |
|         |     | BACKSPLASH 84.00" HIGH X 96.00" LONG 430 SS VERTICAL.                    |
|         |     | RIGHT QUARTER END PANEL 23" TOP WIDTH, 0" BOTTOM WIDTH, 23" HIGH 430 SS. |
|         |     | LEFT QUARTER END PANEL 23" TOP WIDTH, 0" BOTTOM WIDTH, 23" HIGH 430 SS.  |
|         |     | RISER SENSOR INSTALL 6IN PLEN.                                           |

PERFORATED SUPPLY PLENUM(S)

| HOOD NO | TAG | POS   | LENGTH | WIDTH | HEIGHT | TYPE | RISER(S) |      |     |     |        |
|---------|-----|-------|--------|-------|--------|------|----------|------|-----|-----|--------|
|         |     |       |        |       |        |      | WIDTH    | LENG | DIA | CFM | SP     |
| 1       |     | Front | 96"    | 14"   | 6"     | MUA  | 12"      | 24"  |     | 640 | 0.183" |
|         |     |       |        |       |        | MUA  | 12"      | 24"  |     | 640 | 0.183" |
|         |     |       |        |       |        |      |          |      |     |     |        |

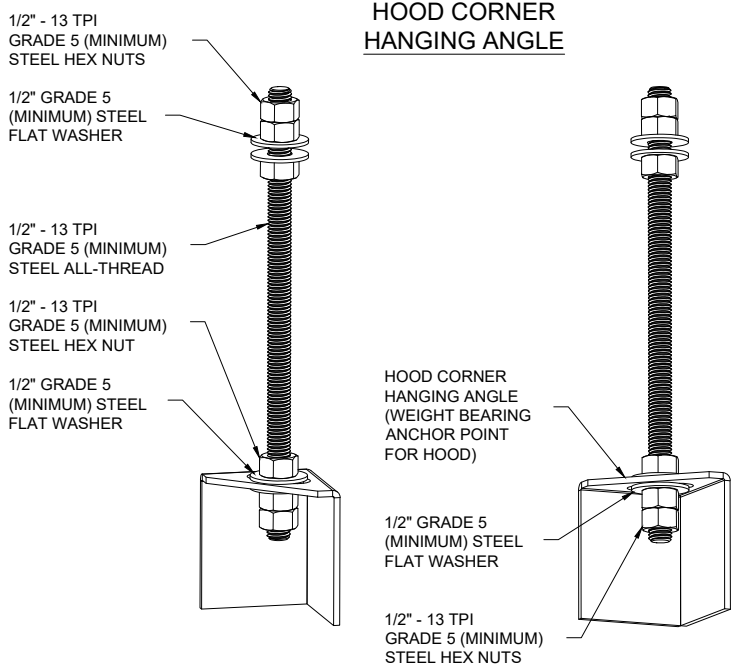
WALL-MOUNT UTILITY CABINET

| HOOD NO | LOCATION | SIZE        | UTILITY CABINET(S) |         |                    |                   | WEIGHT     |
|---------|----------|-------------|--------------------|---------|--------------------|-------------------|------------|
|         |          |             | FIRE SYSTEM TYPE   | SIZE    | ELECTRICAL MODEL # | SWITCHES QUANTITY |            |
| 1       | WALL MNT | 12"x54"x30" | TANK FS            | 4.0/4.0 | DCV-1111           | 1 LIGHT<br>1 FAN  | 340.00 LBS |

CLEARANCE TO COMBUSTIBLES

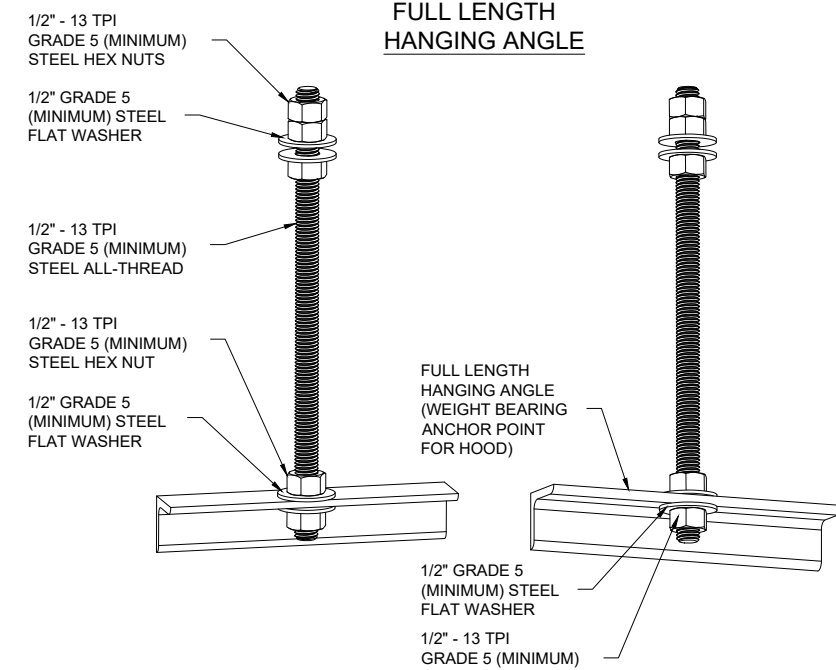
| HOODS # | SURFACE | *CLEARANCE |
|---------|---------|------------|
| 1       | TOP     | 18"        |
|         | FRONT   | 0"         |
|         | BACK    | 18"        |
|         | LEFT    | 18"        |
|         | RIGHT   | 18"        |

- 10" CLEARANCE TO COMBUSTIBLES CONFORMS TO UL710 STANDARD.



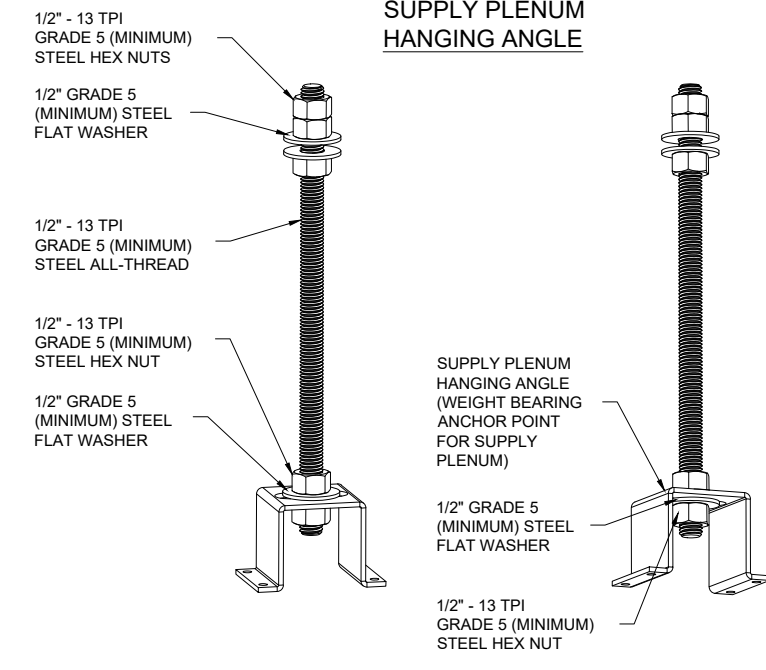
ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION BENEATH HOOD HANGING ANGLES AND ABOVE CEILING ANCHORS. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.



ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION ABOVE CEILING ANCHORS. SINGLE HEX NUT BENEATH HANGING ANGLE IS ACCEPTABLE FOR FULL LENGTH HANGING ANGLES. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.



ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION ABOVE CEILING ANCHORS. SINGLE HEX NUT BENEATH HANGING ANGLE IS ACCEPTABLE FOR PSP HANGING ANGLES. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.

SPECIFICATION: CAPTRATE GREASE-STOP SOLO FILTER

THE CAPTRATE GREASE-STOP SOLO FILTER IS A SINGLE-STAGE FILTER FEATURING A UNIQUE S-BAFFLE DESIGN IN CONJUNCTION WITH A SLOTTED REAR BAFFLE DESIGN, TO DELIVER EXCEPTIONAL FILTRATION EFFICIENCY.

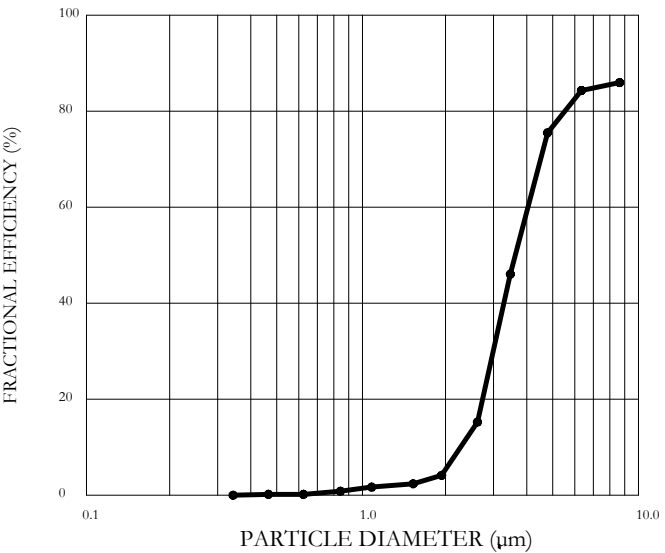
FILTER IS STAINLESS STEEL CONSTRUCTION, AND SIZED TO FIT INTO STANDARD 2-INCH DEEP HOOD CHANNEL(S).

UNITS SHALL INCLUDE STAINLESS STEEL HANDLES AND A FASTENING DEVICE TO SECURE THE TWO COMPONENTS WHEN ASSEMBLED.

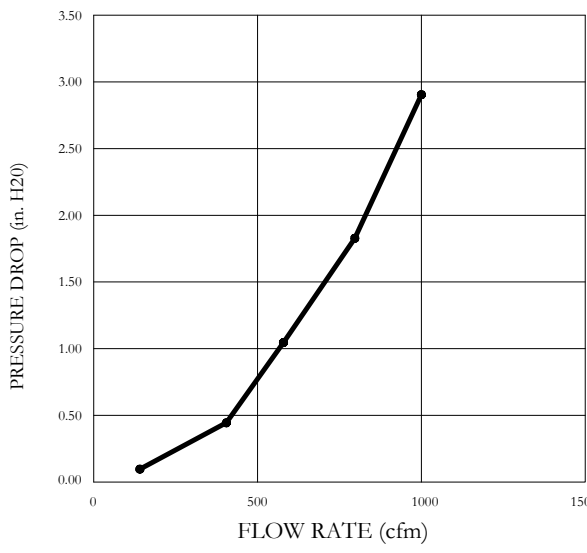
GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL REMOVE AT LEAST 75% OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND 85% GREASE PARTICLES NINE MICRONS IN SIZE AND LARGER, WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 1.0 INCHES OF WATER GAUGE.

THE CAPTRATE GREASE-STOP SOLO WAS TESTED TO ASTM STANDARD ASTM F2519-05.

EFFICIENCY VS. PARTICLE DIAMETER



PRESSURE DROP VS. FLOW RATE



CAPTRATE FILTERS ARE BUILT IN COMPLIANCE WITH:  
NFPA #96  
NSF STANDARD #2  
UL STANDARD #1046  
INT. MECH. CODE (IMC)  
ULC-S649



GREASE DUCT SPECIFICATIONS:

PROVIDE GREASE DUCT EQUAL TO CAPTIVEAIRE SYSTEMS MODEL "DW" ROUND 20 GAUGE 430 STAINLESS STEEL DUCTWORK. MODEL "DW" IS LISTED TO UL-1978 AND IS INSTALLED USING "V" CLAMP LOCKING CONNECTIONS SEALED WITH 3M FIRE BARRIER 2000 PLUS. MODEL "DW" DOES NOT REQUIRE WELDING PROVIDING IT HAS BEEN INSTALLED PER THE MANUFACTURES INSTALLATION GUIDE.

PROVIDE RATED ACCESS DOORS AT EVERY CHANGE IN DIRECTION AND EVERY 12' ON CENTER. PER MANUFACTURES LISTING MODEL "DW" HORIZONTAL RUNS LESS THAN 75 FT. CAN BE SLOPED 1/16" PER 12", HORIZONTAL RUNS MORE THAN 75 FT. CAN BE SLOPED 3/16" PER 12". DUCT SHOULD BE SLOPED AS MUCH AS POSSIBLE TO REDUCE THE CHANCE OF GREASE ACCUMULATION IN HORIZONTAL RUNS.

IF THE DUCT IS WITHIN 18 INCHES OF COMBUSTIBLE MATERIAL, PROVIDE UL-2221 LISTED DOUBLE WALL GREASE DUCT EQUAL TO CAPTIVEAIRE SYSTEMS MODEL "DW- 2R, 3R, OR 3Z" ROUND 20 GAUGE 430 STAINLESS INNER DUCT INSULATED WITH A 24 GAUGE 430 STAINLESS OUTER SHELL.

CAPTIVEAIRE SYSTEMS RECOMMENDS THE USE OF LISTED, PRE-FABRICATED ROUND GREASE EXHAUST DUCT TO REDUCE STATIC PRESSURE IN THE SYSTEM, MINIMIZE INSTALLATION AND INSPECTION TIMES, AND ENSURE DUCT IS LIQUID TIGHT

VERIFY CEILING HEIGHT

' - "

HEIGHT REQUIRED TO VERIFY THAT HOOD FITS SPACE AND TO SIZE THE ENCLOSURE PANELS

HVAC DISTRIBUTION NOTE

IT IS RECOMMENDED NOT TO INSTALL HIGH VELOCITY DIFFUSERS OR HVAC RETURNS WITHIN TEN (10) FEET OF THE EXHAUST HOOD. PERFORATED DIFFUSERS ARE RECOMMENDED.

CUSTOMER APPROVAL TO MANUFACTURE:

|                                  |                          |
|----------------------------------|--------------------------|
| Approved as Noted                | <input type="checkbox"/> |
| Approved with NO Exception Taken | <input type="checkbox"/> |
| Revise and Resubmit              | <input type="checkbox"/> |
| SIGNATURE _____                  |                          |
| Your Title _____                 | Date _____               |

|                                 |              |
|---------------------------------|--------------|
| NJ Certificate of Authorization |              |
| Eng'r. No.                      | 240247837500 |
| Arch. No.                       | 21A020012400 |
| Date                            | 8/13/26      |
| Checked                         | TW           |
| Drawn                           | MNB          |

THOMAS WIGHARD, P.E.  
The PROFESSIONAL ENGINEER License No. NJ24GE04901100

Revisions:  
8/13/26 BID SET

Engineering,  
Planning,  
Architecture,  
Surveying Inc.

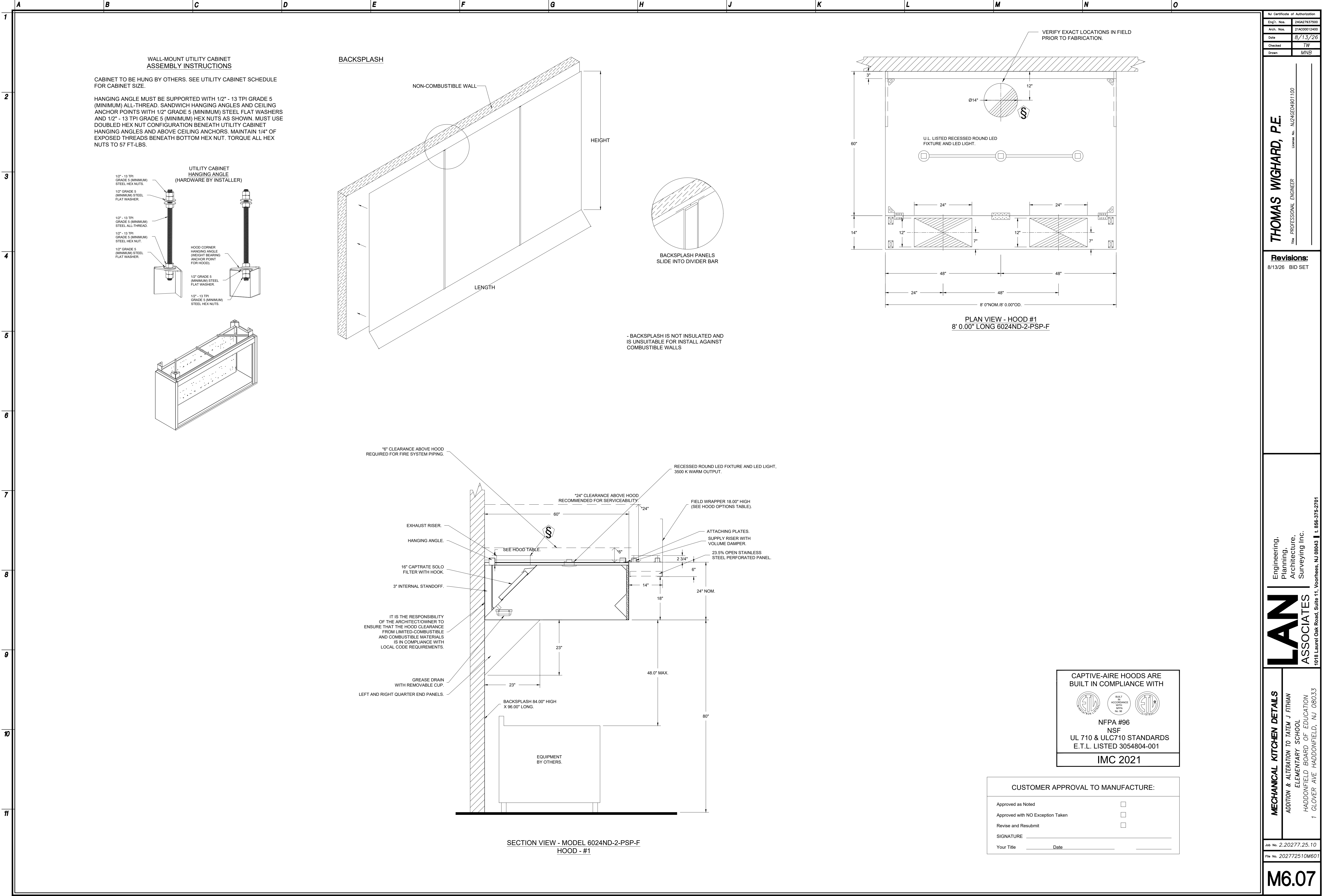
LAN ASSOCIATES  
1018 Laurel Oak Road, Suite 11, Voorhees, NJ 08043 | T. 856-375-2701

MECHANICAL KITCHEN DETAILS  
ADDITION & ALTERATION TO TATEM J FTHIAN  
ELEMENTARY SCHOOL  
HADDONFIELD BOARD OF EDUCATION  
1 GLOVER AVE HADDONFIELD, NJ 08033

Job No. 2.20277.25.10  
File No. 202772510M601

M6.06





|                                 |              |
|---------------------------------|--------------|
| NJ Certificate of Authorization |              |
| Eng'r. No.                      | 24027837500  |
| Arch. No.                       | 21AC00012400 |
| Date                            | 8/13/26      |
| Checked                         | TW           |
| Drawn                           | MNB          |

THOMAS WIGHARD, P.E.

PROFESSIONAL ENGINEER

NJ24027837500

Revisions:

8/13/26 BID SET

Engineering, Planning, Architecture, Surveying Inc.

**LAN ASSOCIATES**

1018 Laurel Oak Road, Suite 11, Voorhees, NJ 08043 | T. 856-375-2701

MECHANICAL KITCHEN DETAILS

ADDITION & ALTERATION TO TATEM J FTHIAN ELEMENTARY SCHOOL

HADDONFIELD BOARD OF EDUCATION

1 GLOVER AVE HADDONFIELD, NJ 08033

Job No. 2.20277.25.10

File No. 202772510M601

M6.07



|                                                                                                                                    |  |                                                                                                                                                      |  |
|------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>MECHANICAL KITCHEN DETAILS</b>                                                                                                  |  | <b>LAN ASSOCIATES</b><br>Engineering, Planning, Architecture, Surveying Inc.<br>1018 Laurel Oak Road, Suite 11, Voorhees, NJ 08045   t. 856-375-2701 |  |
| ADDITION & ALTERATION TO TATEM J FITHIAN ELEMENTARY SCHOOL<br>HADDONFIELD BOARD OF EDUCATION<br>1 GLOVER AVE HADDONFIELD, NJ 08033 |  | THOMAS WIGHARD, P.E.<br>This PROFESSIONAL ENGINEER<br>License No. NJ246C4901100                                                                      |  |
| Job No. 2.202277.25.10<br>File No. 2022772510M601                                                                                  |  | <b>Revisions:</b><br>8/13/26 BID SET                                                                                                                 |  |
| <b>M6.08</b>                                                                                                                       |  |                                                                                                                                                      |  |

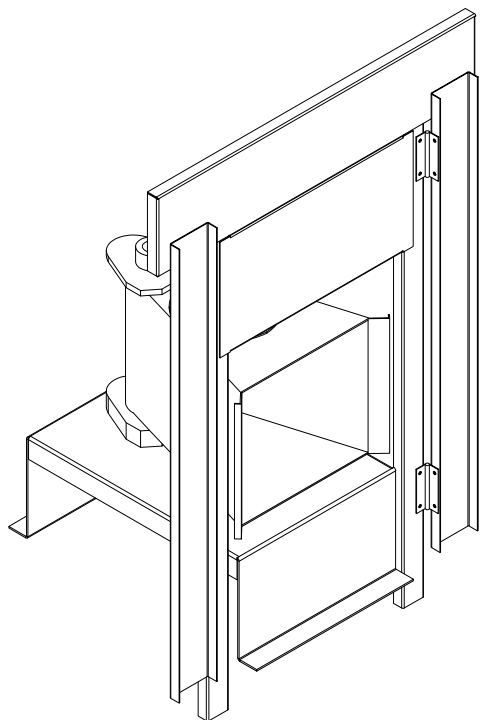






SUPPLY SIDE HEATER INFORMATION:

WINTER TEMPERATURE = 16°F. TEMP. RISE = 59°F  
BTUs CALCULATED OFF ACTUAL AIR DENSITY.  
OUTPUT BTUs AT ALTITUDE OF 0.0 FT. = 80681.  
INPUT BTUs AT ALTITUDE OF 0.0 FT. = 87697.  
OUTPUT BTUs AT ALTITUDE OF 73 FT. = 80468.  
INPUT BTUs AT ALTITUDE OF 73 FT. = 87466.



### DIRECT FIRED (DF) PROFILE PLATE ASSEMBLY

DIRECT FIRED PROFILE PLATE SPECIFICATIONS:

DESCRIPTION:

DIRECT FIRED BURNERS SHALL HAVE PATENTED (US PATENT NO.: US6629523B2), SELF-ADJUSTING PROFILE PLATES DESIGNED TO ENSURE PROPER AIR VELOCITY AND PRESSURE DROP ACROSS THE BURNER. PROFILE PLATES SHALL ALLOW BURNERS TO ACHIEVE CLEAN COMBUSTION BY LIMITING BY-PRODUCT LEVELS TO A MAXIMUM OF 5PPM OF CARBON MONOXIDE (CO) AND 0.5PPM OF NITROGEN DIOXIDE (NO2). DIRECT FIRED UNITS SHALL BE CONFIGURED WITH THE BLOWER MOUNTED DOWNSTREAM OF THE BURNER. THIS ARRANGEMENT WILL ENSURE A CONSISTENT AIRFLOW, REGARDLESS OF INLET AIR TEMPERATURE.

**APPLICATION:**

SPRING-LOADED BURNER PROFILE PLATES ARE ENGINEERED TO AUTOMATICALLY REACT TO THE MOMENTUM OF A FRESH AIR STREAM, WITHOUT THE NEED FOR ANY MOTORS OR ACTUATORS TO MECHANICALLY ADJUST THEM. WITH THIS FEATURE, ALL DF UNITS ARE DESIGNED FOR DEMAND CONTROL VENTILATION (DCV) REQUIREMENTS.

## CERTIFICATIONS

ALL PROFILE PLATE ASSEMBLIES SHALL BE INCLUDED IN THE DF UNIT'S ETL LISTING AND COMPLY WITH COMBINED SAFETY STANDARDS ANSI Z83.4 AND CSA 3.7 (NON-RECIRCULATING DF HEATERS) AND ANSI Z83.18 (RECIRCULATING DF HEATERS).

GENERAL CONSTRUCTION:

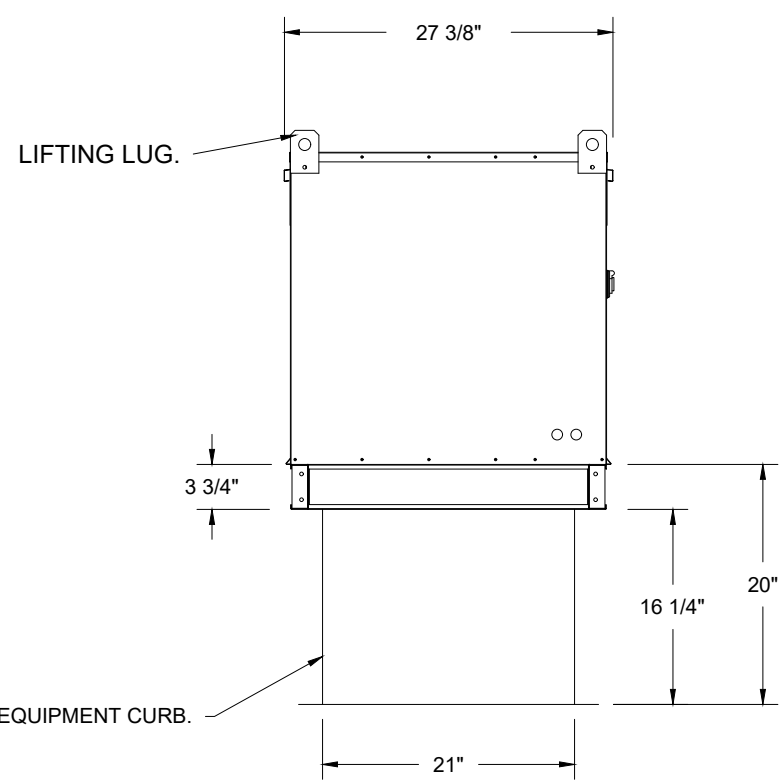
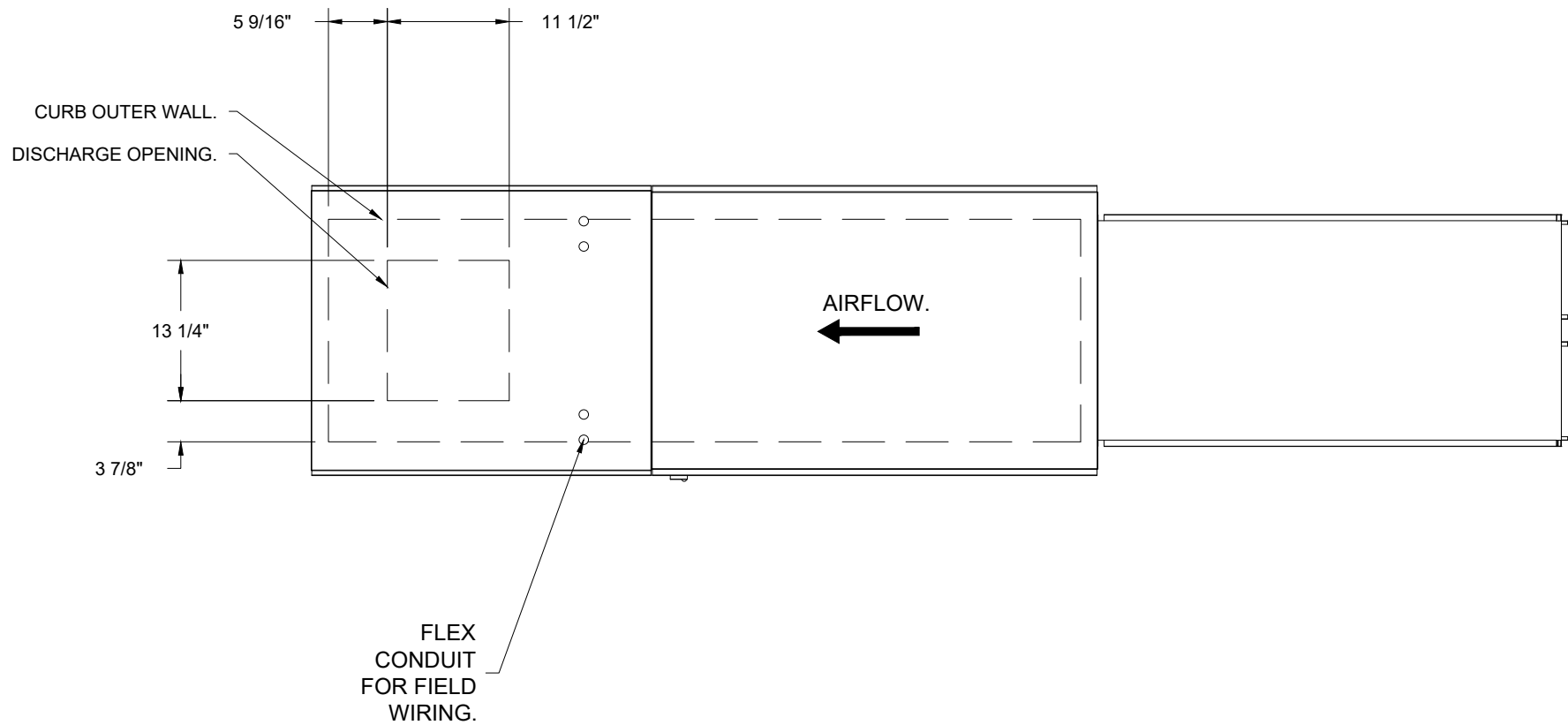
-PROFILE PLATES SHALL BE FORMED FROM G90 GALVANIZED STEEL

-PROFILE PLATES SHALL VARY IN SIZE PER UNIT

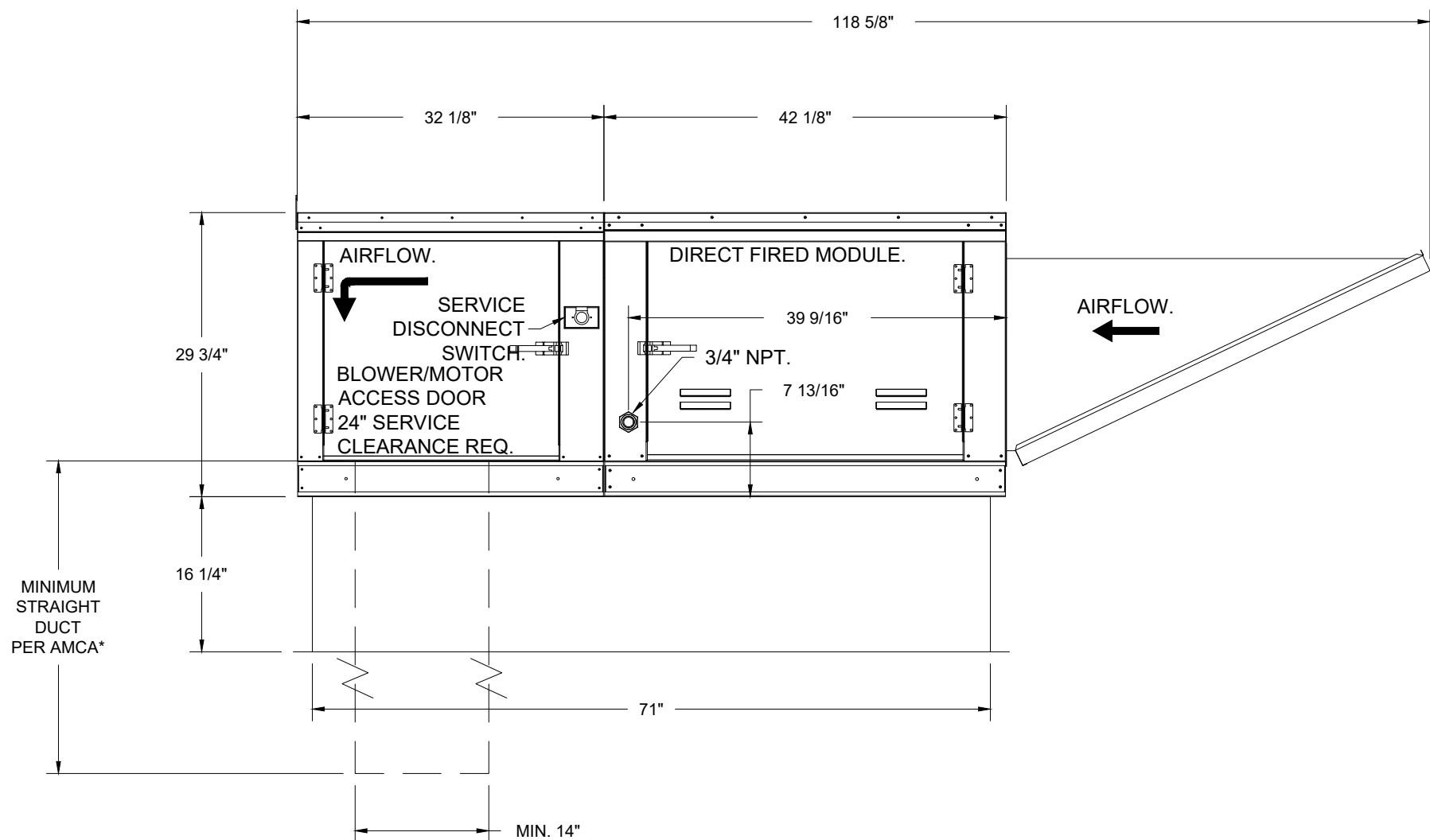
-PROFILE PLATES SHALL BE MOUNTED ALONG T

-DESIGN SHALL INCORPORATE PROPERLY TORQUED, PERMANENTLY MOUNTED SPRING HINGES.

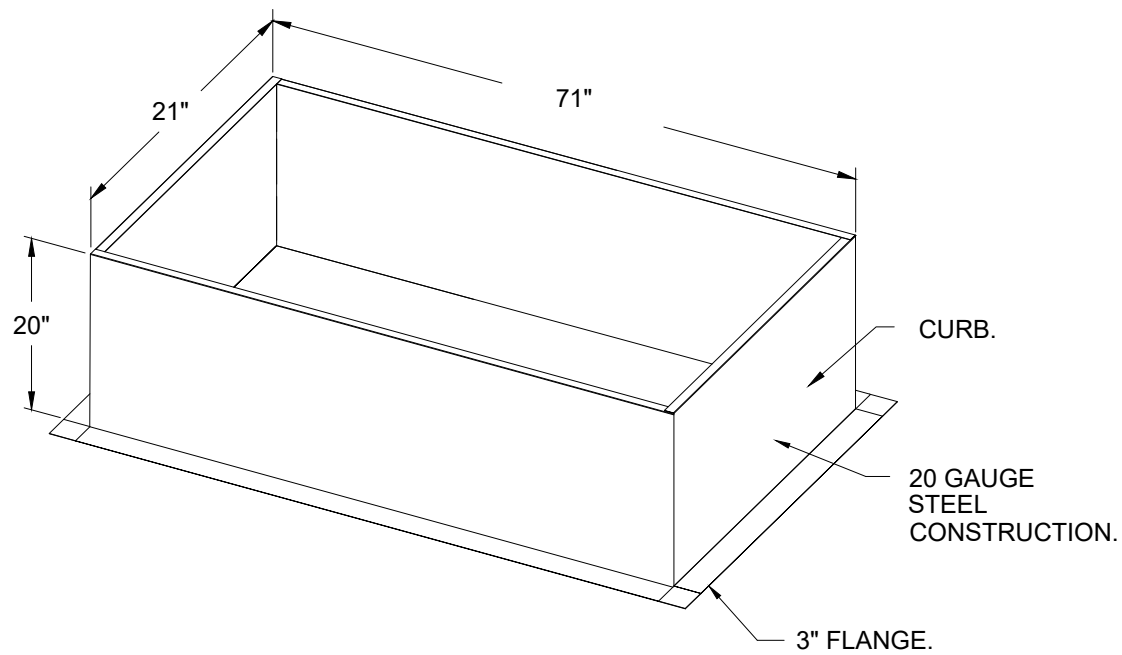
-SPRING HINGES SHALL BE MADE FROM PLATED STEEL.



ROOF OPENING 2" SMALLER THAN CURB DIMENSION.



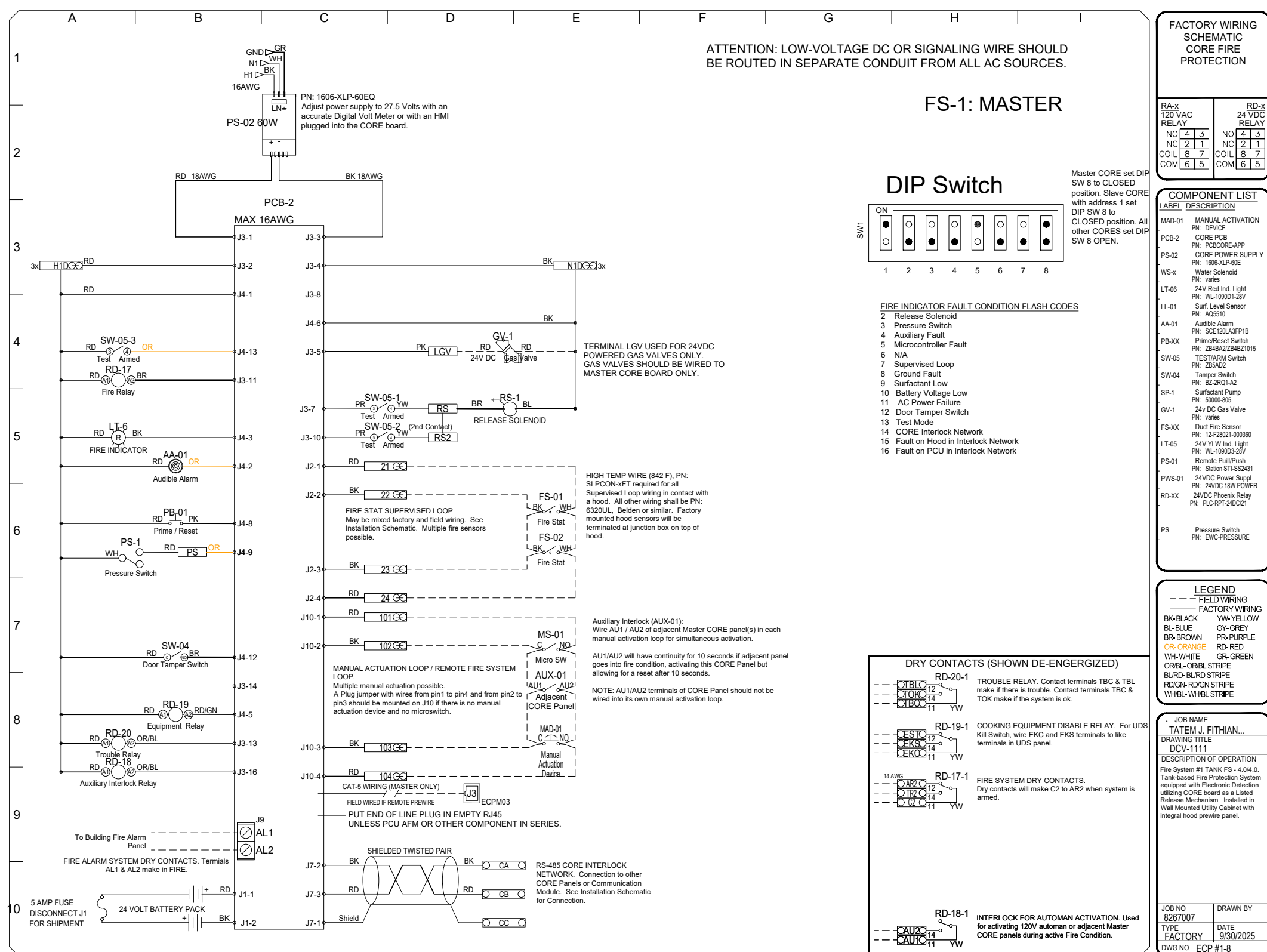
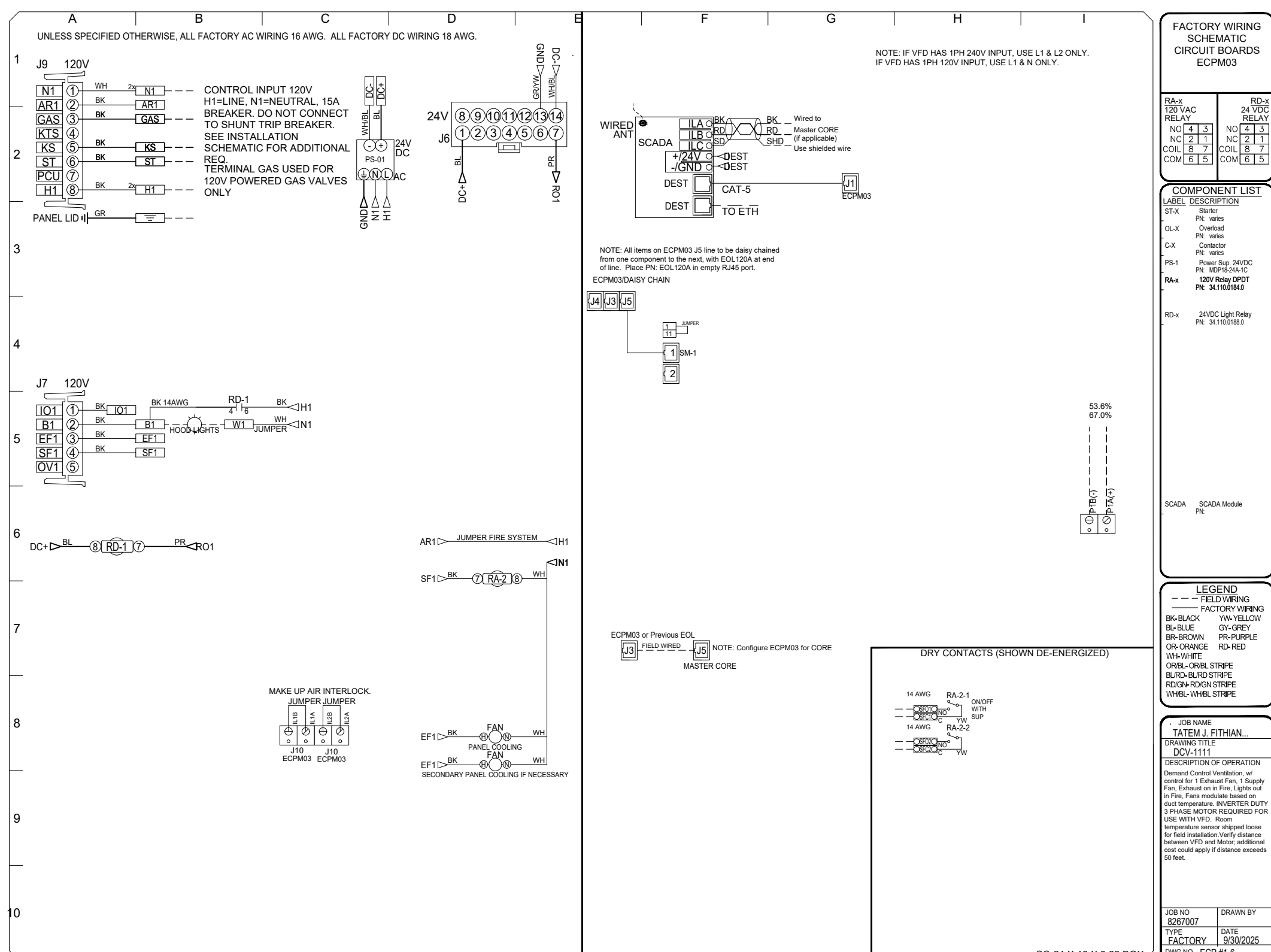
OPTIONS:  
- FULL BOTTOM CORNERS.









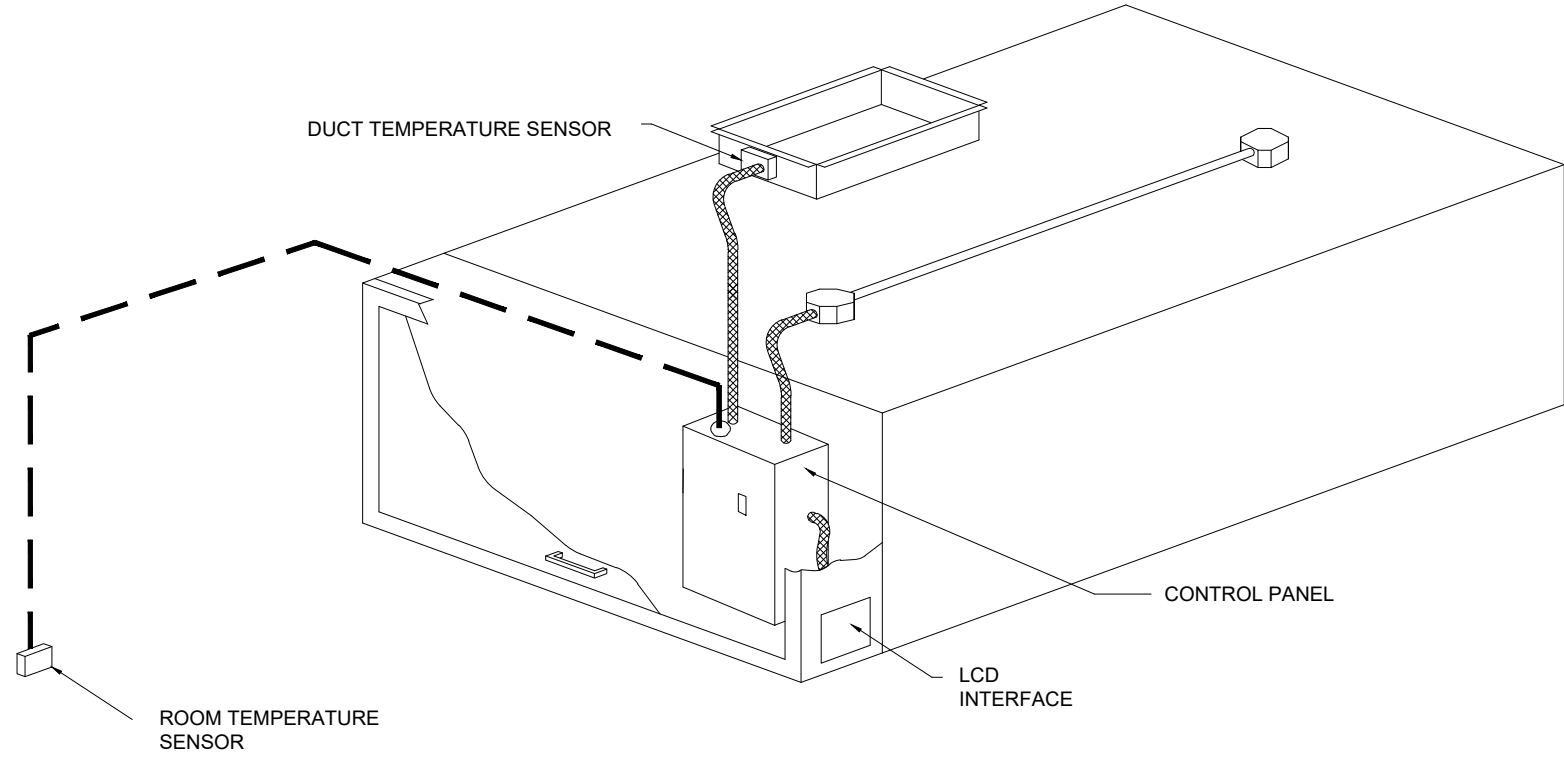
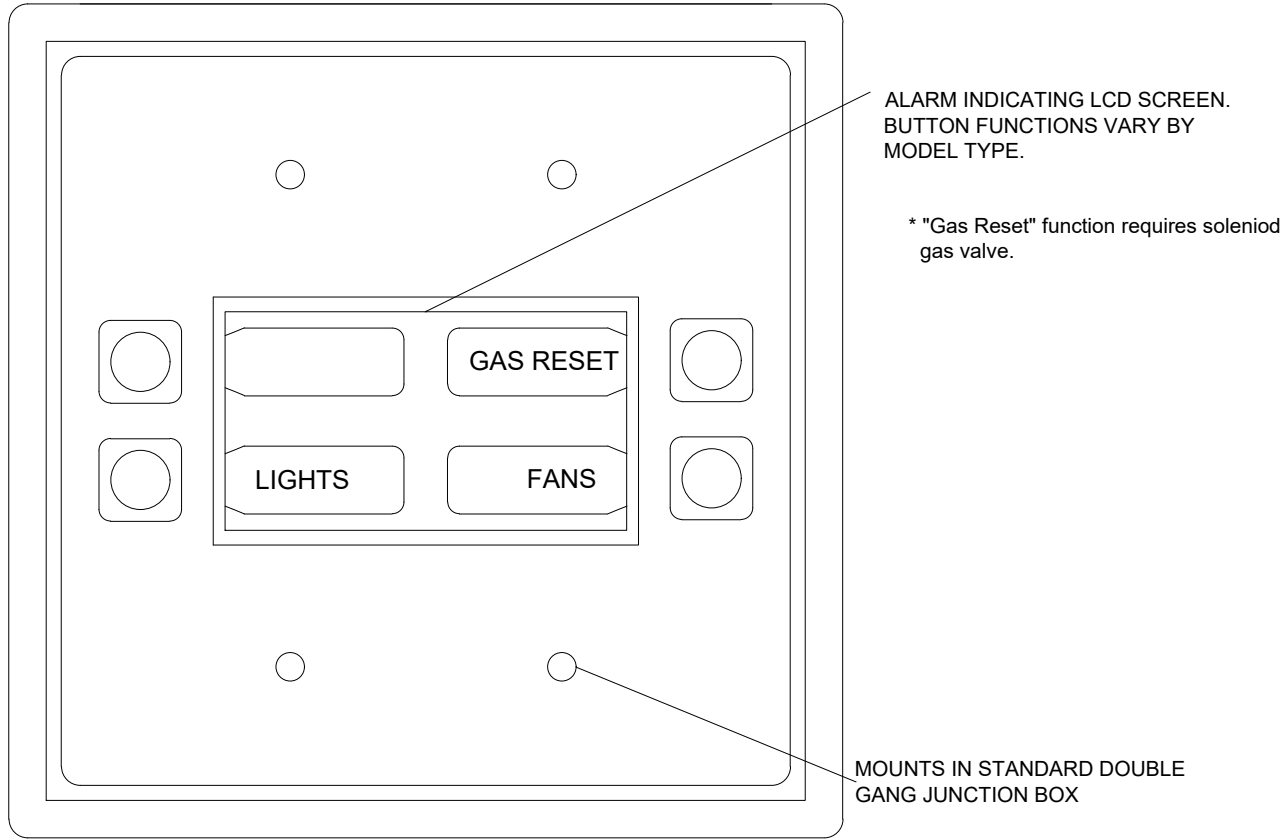




1  
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10  
11

Demand Control Ventilation Hood Control Panel Specifications:

- Controls shall be listed by ETL (UL 508A) and shall comply with demand ventilation system shutdown requirements outlined in IECC 403.2.8 (2015).
- The control enclosure shall be NEMA 1 rated and listed for installation inside of the exhaust hood utility cabinet. The control enclosure may be constructed of stainless steel or painted steel.
- Temperature probe(s) located in the exhaust duct riser(s) shall be constructed of stainless steel.
- A digital controller shall be provided to activate the hood exhaust fans dynamically based on a fixed differential between the ambient and duct temperatures sensors. This function shall meet the requirements of IMC 507.2.1.1
- A digital controller shall provide adjustable hysteresis settings to prevent cycling of the fans after the cooking appliances have been turned off and/or the heat in the exhaust system is reduced.
- A digital controller shall provide an adjustable minimum fan run-time setting to prevent fan cycling.
- Variable Frequency Drives (VFDs) shall be provided for fans as required. The digital controller shall modulate the VFDs between a minimum setpoint and a maximum setpoint on demand. The duct temperature sensor input(s) to the digital controller shall be used to calculate the speed reference signal.
- The VFD speed range of operation shall be from 0% to 100% for the system, with the actual minimum speed set as required to meet minimum ventilation requirements.
- An internal algorithm to the digital controller shall modulate supply fan VFD speed proportional to all exhaust fans that are located in the same fan group as the supply fan.
- The system shall operate in PREP MODE during light cooking load or COOL DOWN MODE when sufficient heat remains underneath the hood system after cooking operations have completed. Operation during either of these periods will disable the supply fans and provide an exhaust fan speed that is equal to the minimum ventilation requirement.
- A digital controller shall disable the supply fan(s), activate the exhaust fan(s), activate the appliance shunt trip, and disable an electric gas valve automatically when fire condition is detected on a covered hood.
- A digital controller shall allow for external BMS fan control via Dry Contact (external control shall not override fan operation logic as required by code).
- An LCD interface shall be provided with the following features:
  - a. On/Off push button fan & light switch activation
  - b. Integrated gas valve reset for electronic gas valves (no reset relay required)
  - c. VFD Fault display with audible & visual alarm notification
  - d. Duct temperature sensor failure detection with audible & visual alarm notification
  - e. Mis-wired duct temperature sensor detection with audible & visual alarm notification
  - f. A single low voltage Cat-5 RJ45 wiring connection
  - g. An energy savings indicator that utilizes measured kWh from the VFDs



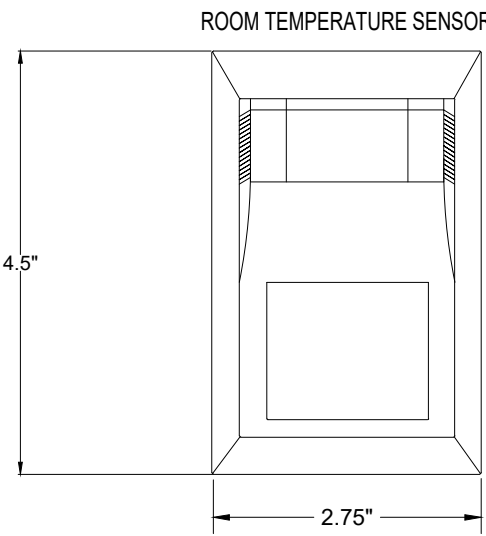
TYPICAL HOOD CONTROL PANEL INSTALLATION

Sequence of Operations:

- The hood control panel is capable of operating in one or more of the following states at any given time:
- **Automatic:** The system operates based on the differential between room temperature and the temperature at the hood cavity or exhaust duct collar. Fans activate at a configurable temperature differential threshold. Depending on the job configuration each fan zone can be configured as static or dynamic. These terms refer to whether a variable motor (such as EC Motors or VFD driven motors) modulate with temperature. If the panel is equipped with variable speed fans and the zone is defined as "dynamic", these will modulate within a user-defined range based on the temperature differential. Panels equipped with variable speed fans and a fan zone defined as "static", fans will run at a set speed calculated for the drive. Demand control ventilation systems are capable of modulating exhaust and make up air fan speeds per the requirements outlined in IECC 403.2.8.
  - **Manual:** The system operates based on human input from an HMI.
  - **Schedule:** A weekly schedule can be set to run fans for a specified period throughout the day. There are three occupied times per day to allow for the user to set up a time that is suitable to their needs. Any time that is within the defined occupied time, the system will run at modulation mode and follow the fan procedure algorithm based on temperature during this time. During unoccupied time, the system will have an extra offset to prevent unintended activation of the system during a time where the system is not being occupied.
  - **Other:** The system operates based on the input from an external source (DDC, BMS or hard-wired interlock)

ROOM TEMPERATURE SENSOR DETAIL

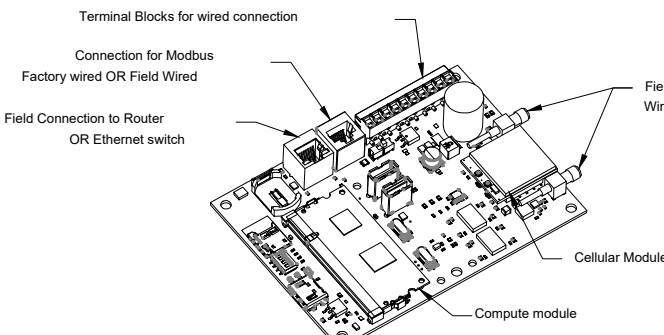
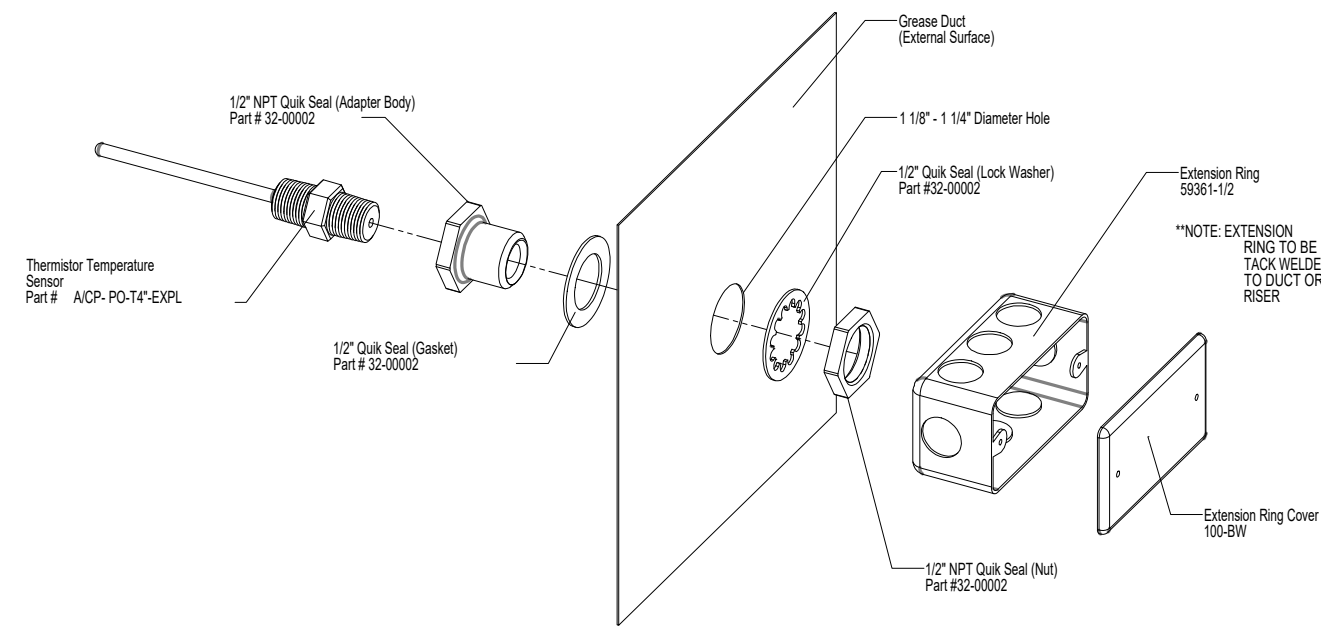
NOTE: This 2 wires that connect to control cabinet



Room temperature sensor used to automatically activate fans when temperature in the exhaust duct exceeds 15 deg F of room temperature. Mounting and wiring of room temperature sensor to control panel by others. Two strand 18 AWG thermostat wire provided by CaptiveAire. Room temperature sensor to be field installed in a safe location free of influence from external heat sources. Do not install room temperature sensor on an external wall.

DUCT THERMISTOR SENSOR INSTALLATION

NOTE: Thermistor has 2 wires that connect to control cabinet



CASlink Monitor and Control

- Hood control panel to support communications to cloud-based Building Management System.
- Hood Control Panel to allow cloud-based Building Management System to monitor real time parameters outlined as MONITOR in the points list.
- Hood Control Panel to allow cloud-based Building Management System to control parameters outlined as CONTROL in the points list.
- Hood Control Panel to allow cloud-based Building Management System to implement SYSTEM ECONOMIZER control strategies for fully integrated Building Management.

MONITORING AND CONTROL POINTS LIST

| DOV Packages                      | Function          | SC Packages                       | Function          |
|-----------------------------------|-------------------|-----------------------------------|-------------------|
| Room Temperature                  | MONITOR           | Room Temperature(s)               | MONITOR           |
| Duct Temperature(s)               | MONITOR           | Duct Temperature(s)               | MONITOR           |
| MUA Discharge Temperature         | MONITOR           | MUA Discharge Temperature         | MONITOR           |
| Kitchen RTU Discharge Temperature | MONITOR           | Kitchen RTU Discharge Temperature | MONITOR           |
| Fan Speed                         | MONITOR           | Controller Faults                 | MONITOR           |
| Fan Amperage                      | MONITOR           | Fan Faults                        | MONITOR           |
| Fan Power                         | MONITOR           | Fan Status                        | MONITOR           |
| VFD Faults                        | MONITOR           | PCU Faults                        | MONITOR           |
| Controller Faults                 | MONITOR           | PCU Filter Clog Percentages       | MONITOR           |
| Fan Faults                        | MONITOR           | Fire Condition                    | MONITOR           |
| Fan Status                        | MONITOR           | CORE Fire System                  | MONITOR           |
| PCU Faults                        | MONITOR           | Building Pressures                | MONITOR           |
| PCU Filter Clog Percentages       | MONITOR           | Fans Buttons(s)                   | MONITOR & CONTROL |
| Fire Condition                    | MONITOR           | Lights Buttons(s)                 | MONITOR & CONTROL |
| CORE Fire System                  | MONITOR           | Wash Button                       | MONITOR & CONTROL |
| Building Pressures                | MONITOR           |                                   |                   |
| Prep Time Button                  | MONITOR & CONTROL |                                   |                   |
| Fans Button                       | MONITOR & CONTROL |                                   |                   |
| Lights Button                     | MONITOR & CONTROL |                                   |                   |
| Wash Button                       | MONITOR & CONTROL |                                   |                   |

NU Certificate of Authorization

Eng'r. No. 240247937500

Arch. No. 21AC00012400

Date 8/13/26

Checked TW

Drawn MNB

THOMAS WIGHARD, P.E.

PROFESSIONAL ENGINEER

License No. NJ24CE04901100

Revisions:

8/13/26 BID SET

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MECHANICAL KITCHEN DETAILS

ADDITION & ALTERATION TO TATEM J FTHAN ELEMENTARY SCHOOL

HADDONFIELD BOARD OF EDUCATION

1 GLOVER AVE HADDONFIELD, NJ 08033

Job No. 2.20277.25.10

File No. 202772510M601

M6.13

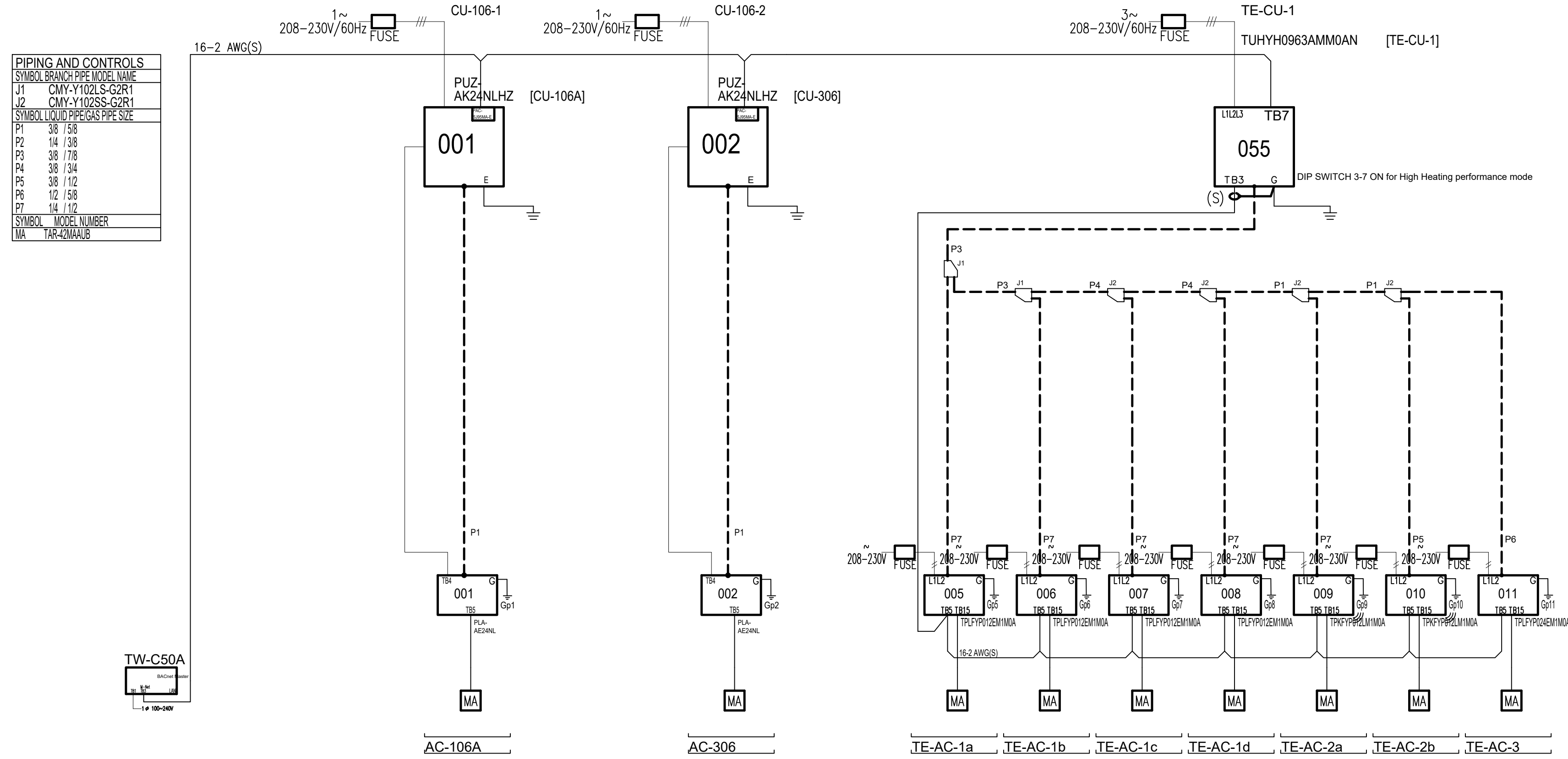


This drawing is schematic in nature. Final routing of piping & wiring shall be determined by the installing contractor.  
Additional refrigerant charge is needed depending on the size and length of extended piping. Please refer the amount of pre-charge and the formula of calculation which is mentioned on the data book.  
1.25mm(16 AWG) : 1.25mm(16 AWG) or more, 0.75mm(20 AWG) : between 0.5mm(24 AWG) and 0.75mm(20 AWG).

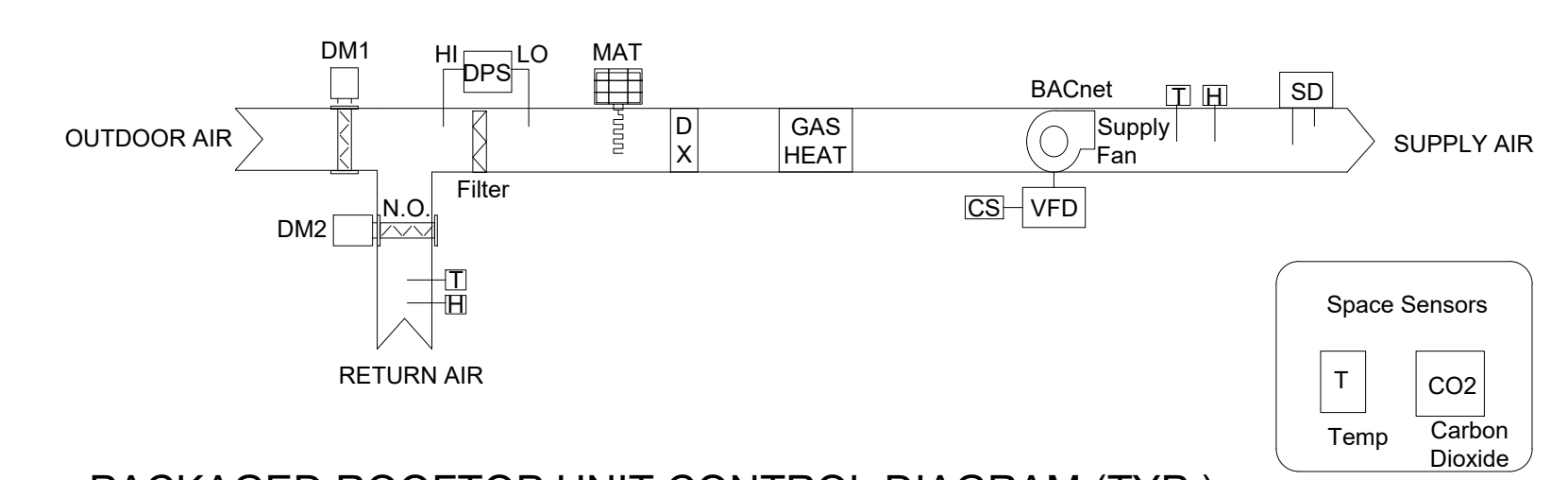
| DIAGRAM | SYMBOL       | LEGEND |
|---------|--------------|--------|
| DISPLAY | DESCRIPTION  |        |
| ---     | POWER WIRE   |        |
| ---     | CONTROL WIRE |        |
| ---     | REF. PIPE    |        |

|         |      |
|---------|------|
| CONT.No | PAGE |
|         |      |

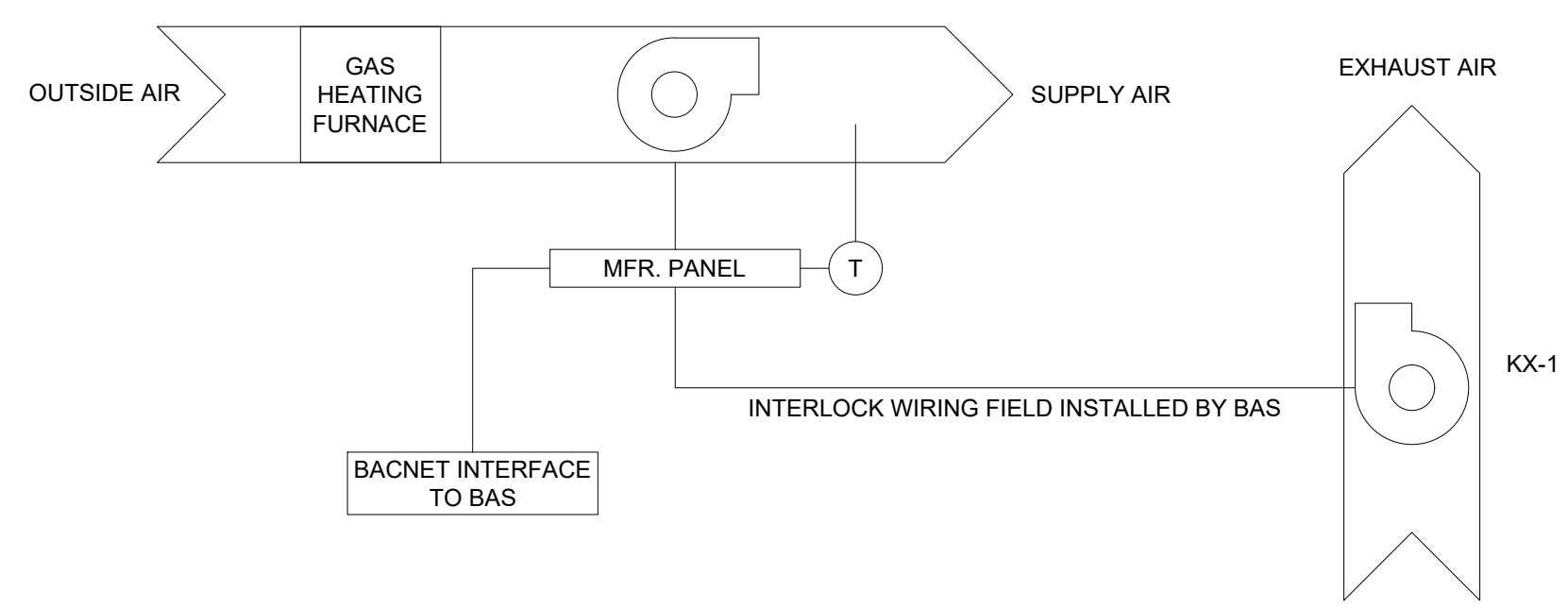
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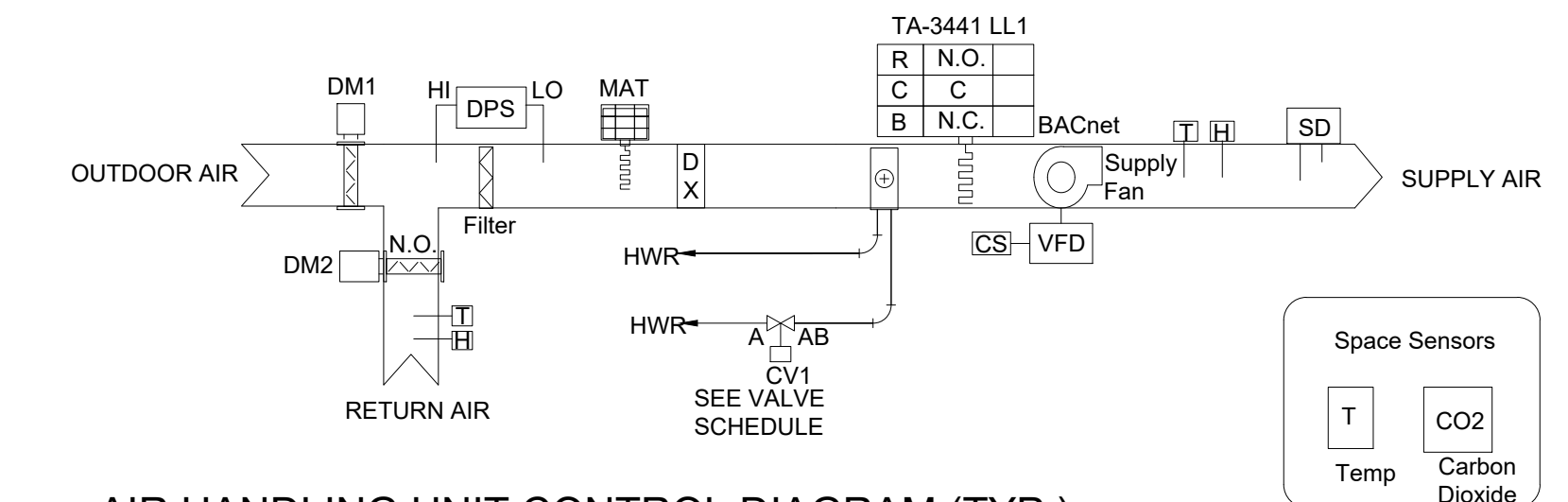
1 VRF AND MINISPLITS PIPING / WIRING DIAGRAMS  
N.T.S.



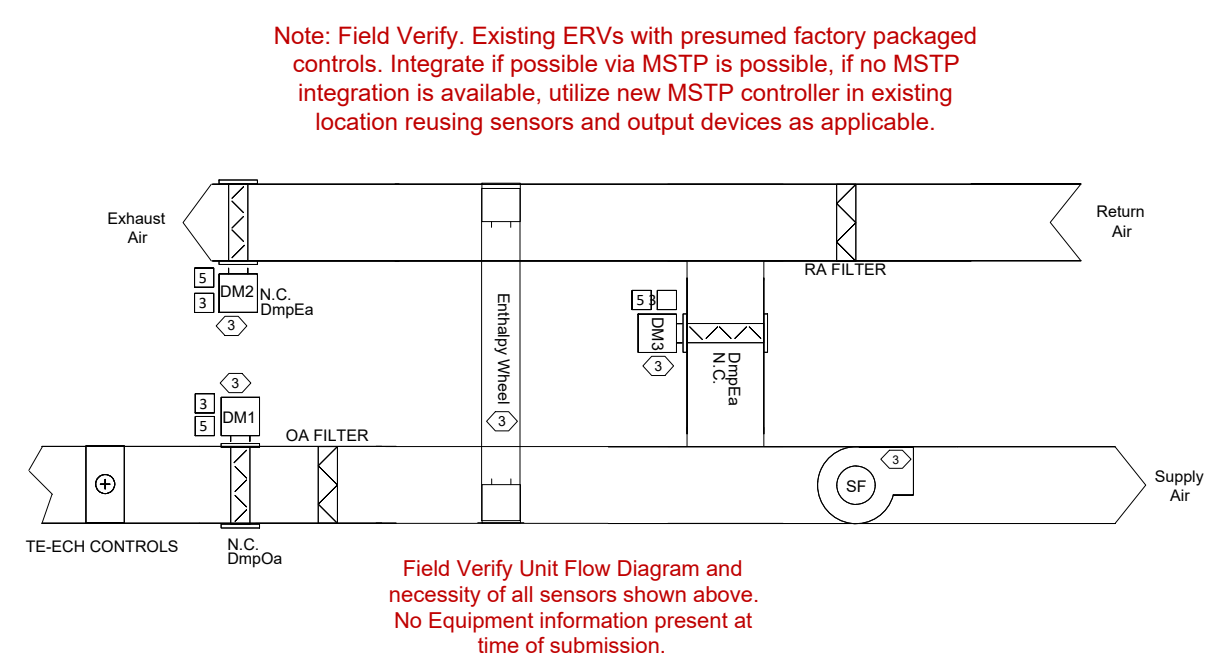
5 PACKAGED ROOFTOP UNIT CONTROL DIAGRAM (TYP.)  
N.T.S.



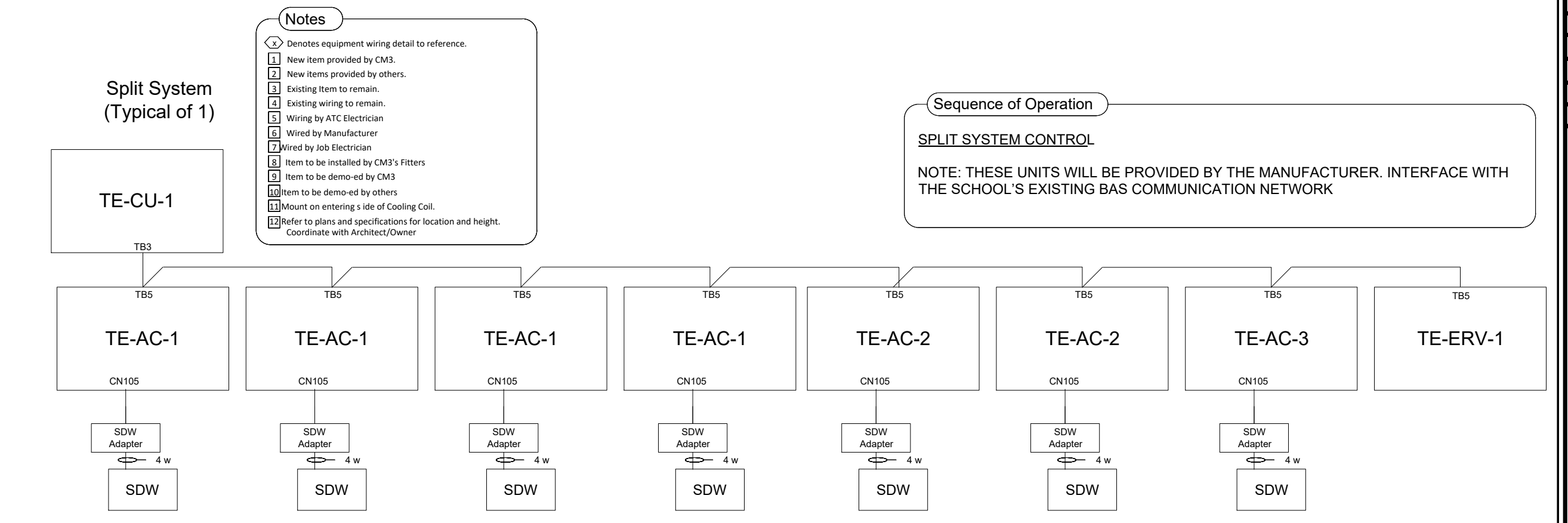
8 KITCHEN MAKE UP AIR UNIT / KITCHEN EXHAUST FAN CONTROL DIAGRAM  
N.T.S.



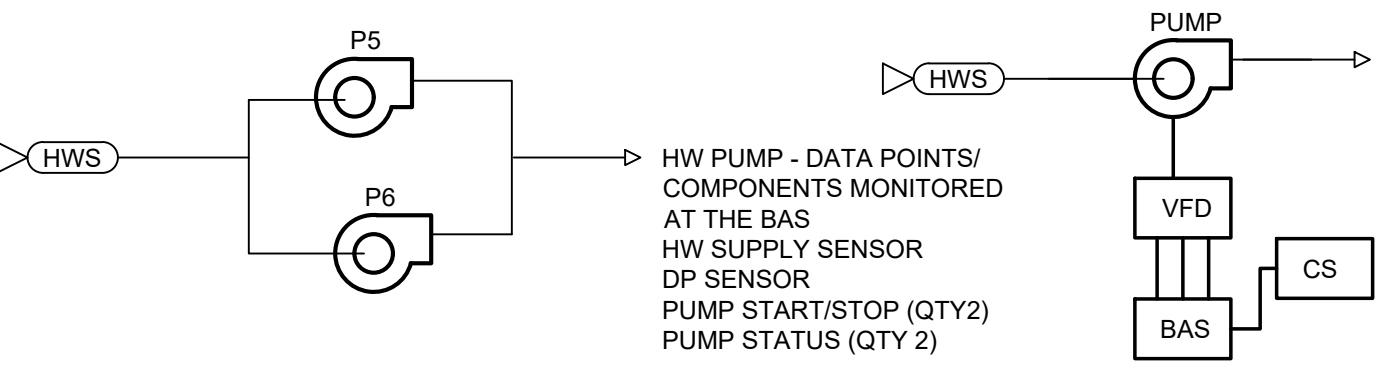
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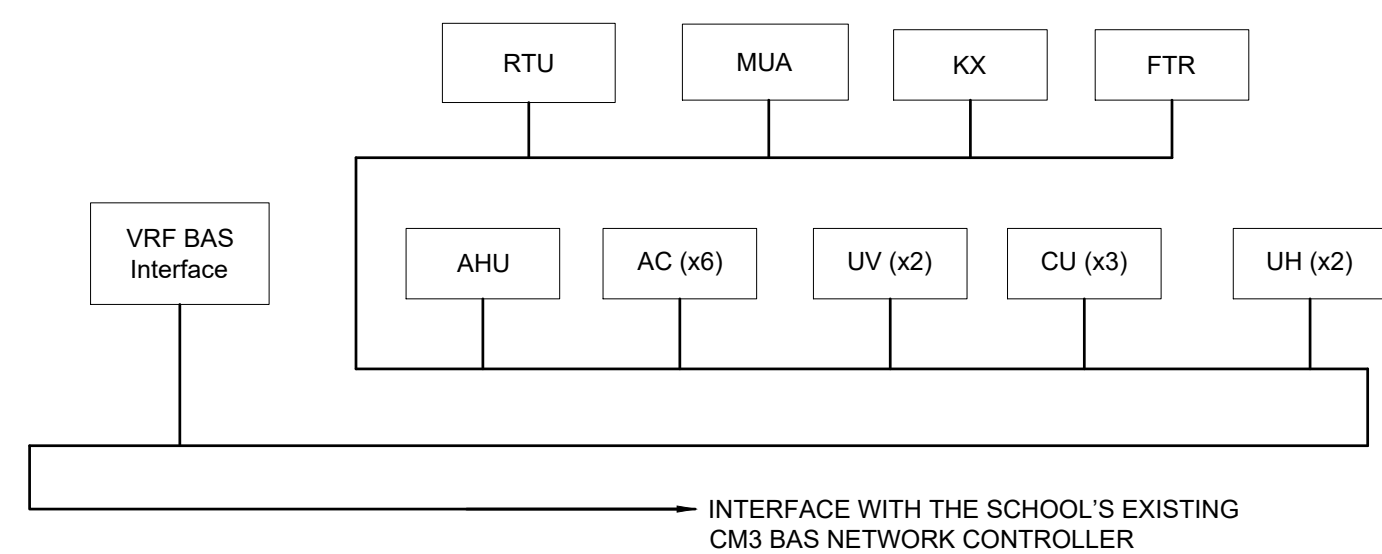
1 TE-ERV-1 CONTROLS DIAGRAM  
N.T.S.



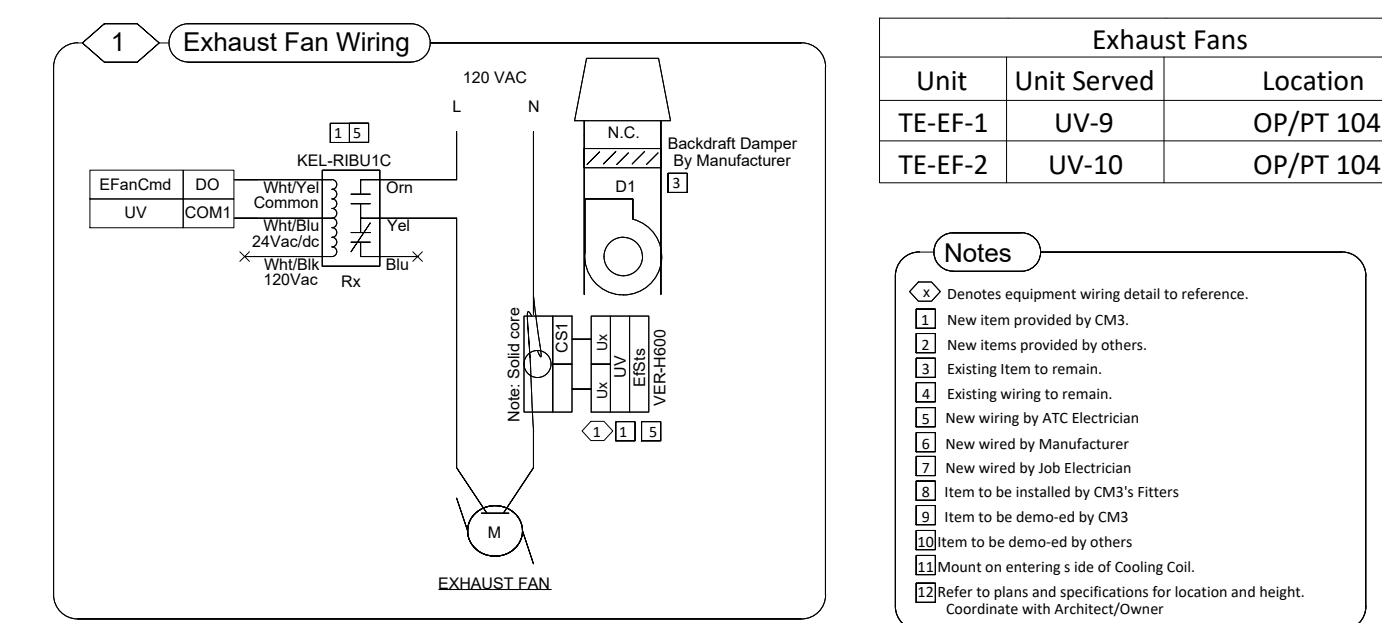
2 VRF SYSTEM NETWORK WIRING DIAGRAM  
N.T.S.



2 PUMP CONTROL DIAGRAM  
N.T.S.

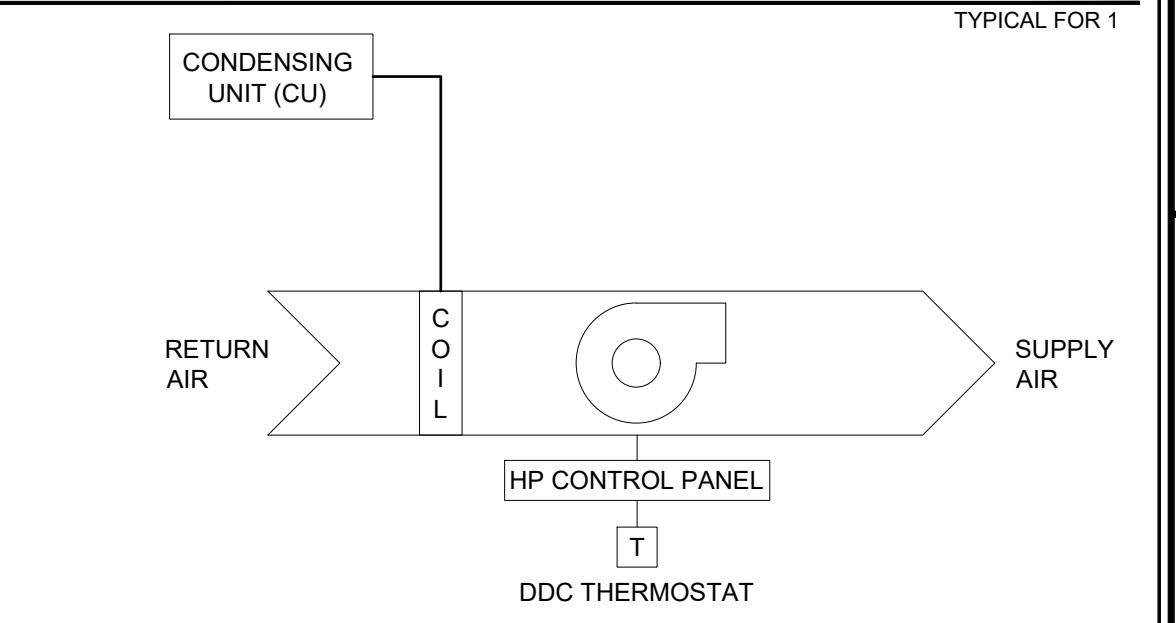


2 BAS NETWORK DIAGRAM  
N.T.S.

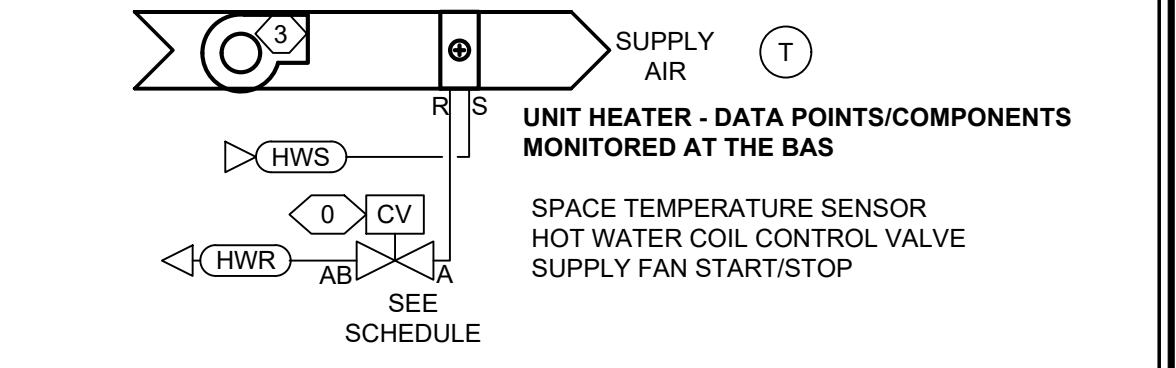


3 EXHAUST FAN CONTROLS DIAGRAM  
N.T.S.

Sequence of Operation  
SPLIT SYSTEM CONTROL  
NOTE: THESE UNITS WILL BE PROVIDED BY THE MANUFACTURER. INTERFACE WITH THE SCHOOL'S EXISTING BAS COMMUNICATION NETWORK



3 HEAT PUMP CONTROL DIAGRAM  
N.T.S.



8 UNIT HEATER CONTROL DIAGRAM  
N.T.S.

| Exhaust Fan Device | Qty | Part Number | Description                                           | Vendor             |
|--------------------|-----|-------------|-------------------------------------------------------|--------------------|
| Electrical CS1     | 2   | VER-H600    | CURRENT SW N.O. FUSED TRIP SPOT PILOT RELAY UNIVERSAL | Schneider Electric |

Sequence of Operation  
EXHAUST FAN SEQUENCE OF OPERATIONS  
1. Ventilation Fans - Exhaust to operate when called by interlock unit ventilator.

| Exhaust Fan Device | Qty | Part Number | Description                                           | Vendor             |
|--------------------|-----|-------------|-------------------------------------------------------|--------------------|
| Electrical CS1     | 2   | VER-H600    | CURRENT SW N.O. FUSED TRIP SPOT PILOT RELAY UNIVERSAL | Schneider Electric |

Sequence of Operation  
ERV CONTROL  
NOTE: These units will be provided by the Manufacturer and will stand alone controlled by remote control wall sensor.

NI Certificate of Authorization  
Eng'r. No. 24027937500  
Arch. No. 21AC00012400  
Date 8/13/26  
Checked TW  
Drawn MNB

THOMAS WIGHARD, P.E.  
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License No. NJ24CE04901100

Revisions:  
8/13/26 BID SET

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MECHANICAL CONTROL DIAGRAMS  
ADDITION & ALTERATION TO TATEM J FTHIAN  
ELEMENTARY SCHOOL  
HADDONFIELD BOARD OF EDUCATION  
1 GLOVER AVE HADDONFIELD, NJ 08033

Job No. 2.20277.25.10  
File No. 202772510M601  
M6.14





THE EXISTING SUBSURFACE PIPING SHOWN ON THE CONTRACT DRAWINGS IS BASED UPON THE ORIGINAL DESIGN DRAWINGS (CIRCA 1989). SHOULD NOT BE CONSIDERED AS-BUILT AND INTENDED TO CONVEY THE DESIGN INTENT. CHANGES MADE ON SITE SINCE THE DESIGN DRAWINGS WERE PRODUCED MAY NOT BE REFLECTED ON THESE DRAWINGS.

THE CONTRACT DRAWINGS ARE, IN PART, DIAGRAMMATIC AND ARE INTENDED TO CONVEY THE GENERAL SCOPE AND LOCATION OF THE WORK AS WELL AS INDICATE THE GENERAL ARRANGEMENT OF THE EQUIPMENT. THE CONTRACTOR IS TO COMPLY WITH THE DRAWINGS FOR GENERAL LAYOUT OF THE WORK AND IF THERE ARE DISCREPANCIES, THE CONTRACTOR IS TO NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY. PROVIDE ALL RELATED ACCESSORIES REQUIRED FOR A COMPLETE OPERATIONAL AND SATISFACTORY INSTALLATION REQUIRED FOR CONTINUOUS USE BY OWNER.

AS INDICATED ABOVE, DRAWINGS ARE DIAGRAMMATIC IN NATURE AND INDICATE THE SIZE AND GENERAL ARRANGEMENT OF PIPING, EQUIPMENT, AND SPECIALTIES. EXACT LOCATIONS AND ROUTINGS SHALL BE DETERMINED IN THE FIELD BEFORE AND AS THE WORK PROGRESSES.

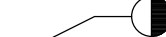
CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO COMMENCEMENT OF ANY WORK. ANY REQUIRED CHANGES TO WORK SHOWN ON DRAWINGS SHALL BE COORDINATED WITH ARCHITECT/ENGINEER AND OTHER TRADES PRIOR TO CONSTRUCTION.

1. CONTRACTOR TO NOTE THAT LOCATIONS & SIZES OF EXIST. PLUMBING PIPING SHOWN (WASTE, VENT, DOW, DHW, DHWR, ETC) ARE BASED ON FIELD OBSERVATIONS AND AVAILABLE BLUEPRINTS AND ARE APPROXIMATE. CONTRACTOR SHALL INVESTIGATE/TRACE (WITH CAMERA OR ELECTRONIC DEVICES) THE EXISTING SANITARY WASTE LINES TO BE REMOVED/REPLACED OR RESCHEDULED TO BE REUSED. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES. EXISTING VENTING AND WATER LINES ARE SHOWN GRAPHICALLY TO GIVE AN HONEST REPRESENTATION OF THE EXISTING CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL SIZES & LOCATIONS IN FIELD.
2. ALL SANITARY LINES BEING DEMOLISHED SHALL BE REMOVED BACK TO THE MAINS. DEAD END SHALL NOT EXCEED THE MAXIMUM LENGTH PER LATEST PLUMBING CODE.
3. REMOVE ALL EXIST. ABANDONED ROUGH-IN PIPING, WHETHER THEY ARE SHOWN OR NOT ON THE DRAWING. PATCH EXISTING FLOOR OPENINGS WHERE ARE NOT REUSED FOR NEW PIPE PENETRATIONS. PAINT TO MATCH EXISTING CEILING FINISH.
4. ANY CUTTING, PATCHING, OR FINISH REPAIR WORK REQUIRED FOR PLUMBING DEMOLITION IS THE RESPONSIBILITY OF THE PLUMBING SUBCONTRACTOR.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR SHUTDOWN AND/OR TO ISOLATE SECTIONS OF PLUMBING SYSTEM, AND DEAN WATER FROM THE SYSTEM TO ACCOMMODATE FOR DEMOLITION. RESTORE THE SYSTEM AS REQUIRED.
6. ANY SHUT-DOWNS MUST BE COORDINATED WITH THE OWNER MIN 72 HOURS IN ADVANCE. THE CONTRACTOR SHALL NOT SHUT DOWN ENTIRE SECTIONS OF THE BUILDING AT ONE TIME. PROVIDE BYPASS LINES AS NECESSARY TO WORK ON INDIVIDUAL BATHROOMS WHILE MAINTAINING THE INTEGRITY OF THE REST OF THE PLUMBING SYSTEM.
7. SAWCUT EXIST. WALLS/CHASES/FLOOR SLABS/CEILING AS REQUIRED FOR DEMOLITION OF ALL EXIST. PLUMBING FIXTURES & PIPING. PATCH TO MATCH EXISTING.

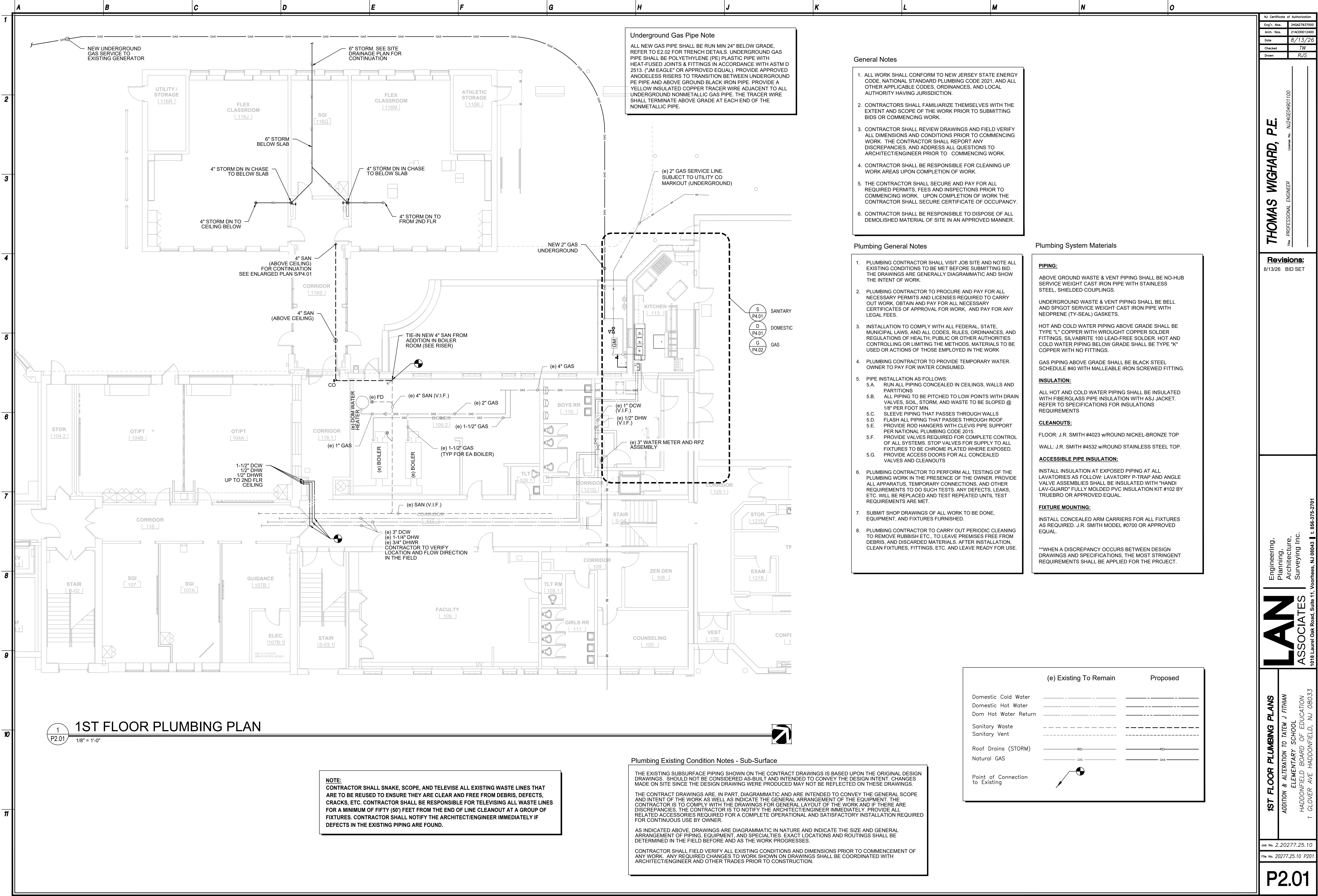
**UTILITIES NOTE:**  
ALL UTILITIES SHOWN ON THESE PLANS ARE SUBJECT TO A  
PROPER MARKOUT BY THE AUTHORITY HAVING JURISDICTION.  
  
UTILITIES ARE SHOWN GRAPHICALLY TO GIVE AN HONEST  
REPRESENTATION OF THE EXISTING CONDITIONS

1. PERFORM DEMOLITION IN AN ORGANIZED AND CAREFUL MANNER. LEAVE AREAS UNDER DEMOLITION CLEAN AND ORDERLY AT THE END OF EACH SHIFT.
2. CONTRACTOR IS RESPONSIBLE TO PROPERLY DRAIN OR DISCHARGE PLUMBING SYSTEMS PRIOR TO START OF DEMOLITION. COORDINATE WITH OWNER AND ALL APPLICABLE CODES FOR WASTE FLUID DISPOSAL.
3. PROTECT BUILDING OR SYSTEM COMPONENTS SCHEDULED TO REMAIN. PROVIDE FOR REPAIRS TO EXISTING BUILDING OR SYSTEM COMPONENTS IMPACTED BY DEMOLITION UNDER THIS CONTRACT.
4. MINIMIZE INTERFERENCE TO OWNER OCCUPIED AREAS OR AREAS NOT INCLUDED IN SCOPE OF WORK THROUGHOUT DEMOLITION PHASE.
5. COORDINATE DEMOLITION WORK OF THIS CONTRACT WITH WORK OF OTHER CONTRACTS AND THE OWNER. COORDINATE WITH ASBESTOS ABATEMENT CONTRACTOR PRIOR TO COMMENCEMENT OF ANY WORK.
6. IDENTIFY ANY REMAINING OR ABANDONED UTILITIES WITHIN DEMOLITION AREAS. IDENTIFICATION TAGS SHALL BE IN ACCORDANCE WITH PLUMBING IDENTIFICATION SPECIFICATION.
7. REMOVE ALL DEMOLISHED MATERIALS FROM THE WORK SITE AS WORK PROGRESSES UNLESS NOTED OTHERWISE. OWNER RETAINS THE RIGHT TO KEEP ANY MATERIALS OR EQUIPMENT REMOVED, TURN OVER SUCH ITEMS TO OWNER UPON REQUEST.
8. COMPLETELY REMOVE ABANDONED PIPING OR EQUIPMENT AS SHOWN ON PLUMBING. BRANCH WORK TO BE DEMOLISHED SHALL BE COMPLETELY REMOVED BACK TO POINT OF DISCONNECTION.
9. BLANK OFF, PLUG, OR CAP BRANCH PIPING TO BE DEMOLISHED AT THE POINT OF DISCONNECTION FROM MAIN.
10. COMPLETELY REMOVE PIPE HANGERS, STRAPS, CLAMPS, SUPPORTS AND PADS ASSOCIATED WITH PIPING OR EQUIPMENT BEING DEMOLISHED.

- 1 REMOVE EXISTING 3 POT SINK AND HAND SINK IN KITCHEN & ALL RELATED PIPING, VALVES, FITTINGS, ETC. REMOVE ALL RELATED PIPING WITHIN WALL/CHASE BEING DEMOLISHED. SAWCUT EXISTING MASONRY WALL OR CONCRETE FLOOR AS REQUIRED TO ALLOW REMOVAL OF EXISTING AND INSTALLATION OF NEW SCOPE OF WORK. CUT AND MODIFY EXISTING PLUMBING AND SANITARY LINES AS REQUIRED TO ACCOMMODATE NEW SCOPE OF WORK
- 2 REMOVE EXISTING COUNTER MOUNTED SINK, ASSOCIATED CASEWORK & ALL RELATED FAUCET, PIPING, VALVES, FITTINGS, SUPPORTS, ETC. SAWCUT EXISTING MASONRY WALL AND MODIFY/CAP EXISTING PLUMBING AND SANITARY LINES AS REQUIRED TO ACCOMMODATE NEW SCOPE OF WORK
- 3 REMOVE EXISTING DRINKING FOUNTAIN / BOTTLE FILLER & ALL RELATED, PIPING, VALVES, FITTINGS, SUPPORTS, SAWCUT EXISTING MASONRY WALL OR CONCRETE FLOOR AS REQUIRED TO ALLOW REMOVAL OF EXISTING AND INSTALLATION OF NEW SCOPE OF WORK. PATCH WALL/FLOOR SLAB TO MATCH EXISTING
- 4 REMOVE EXISTING ROOF DRAIN ASSEMBLY & ALL RELATED, PIPING, FITTINGS, ETC. REMOVE ALL RELATED PIPING WITHIN WALL/CHASE BEING DEMOLISHED. SAWCUT EXISTING AS REQUIRED TO ALLOW REMOVAL OF EXISTING AND INSTALLATION OF NEW SCOPE OF WORK. CUT AND MODIFY EXISTING ROOF LEADERS AS REQUIRED TO ACCOMMODATE NEW SCOPE OF WORK
- 5 REMOVE EXISTING PLUMBING ROOF VENT BOOT AND PREPARE FOR RECONNECTION OF EXISTING AND NEW SCOPE OF WORK

|                                         | Existing To Remain                                                                    | Demolition |
|-----------------------------------------|---------------------------------------------------------------------------------------|------------|
| Domestic Cold Water                     | -----                                                                                 | -----      |
| Domestic Hot Water                      | -----                                                                                 | -----      |
| Sanitary Waste                          | -----                                                                                 | -----      |
| Sanitary Vent                           | -----                                                                                 | -----      |
| Point of Disconnection<br>from Existing |  |            |





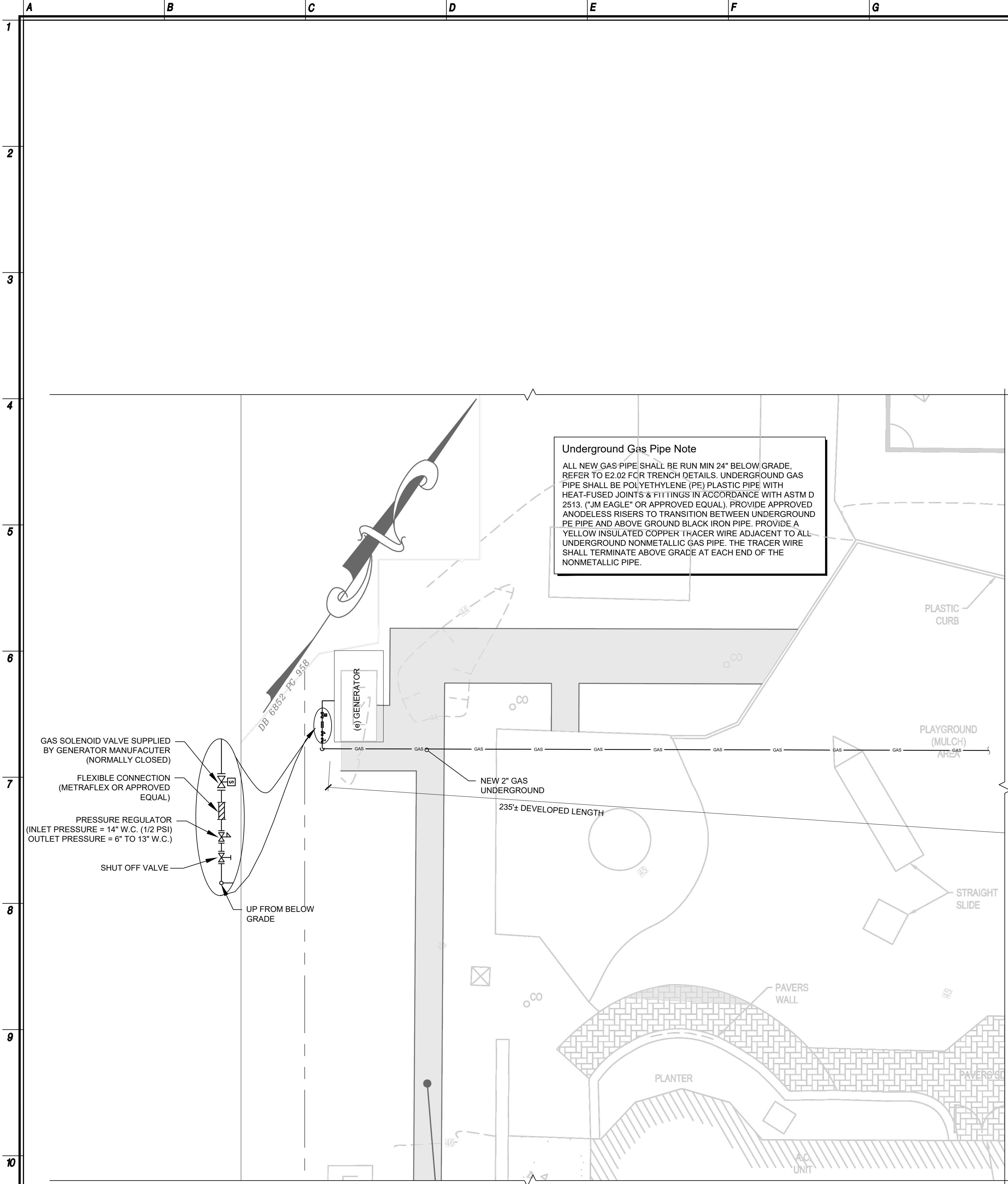




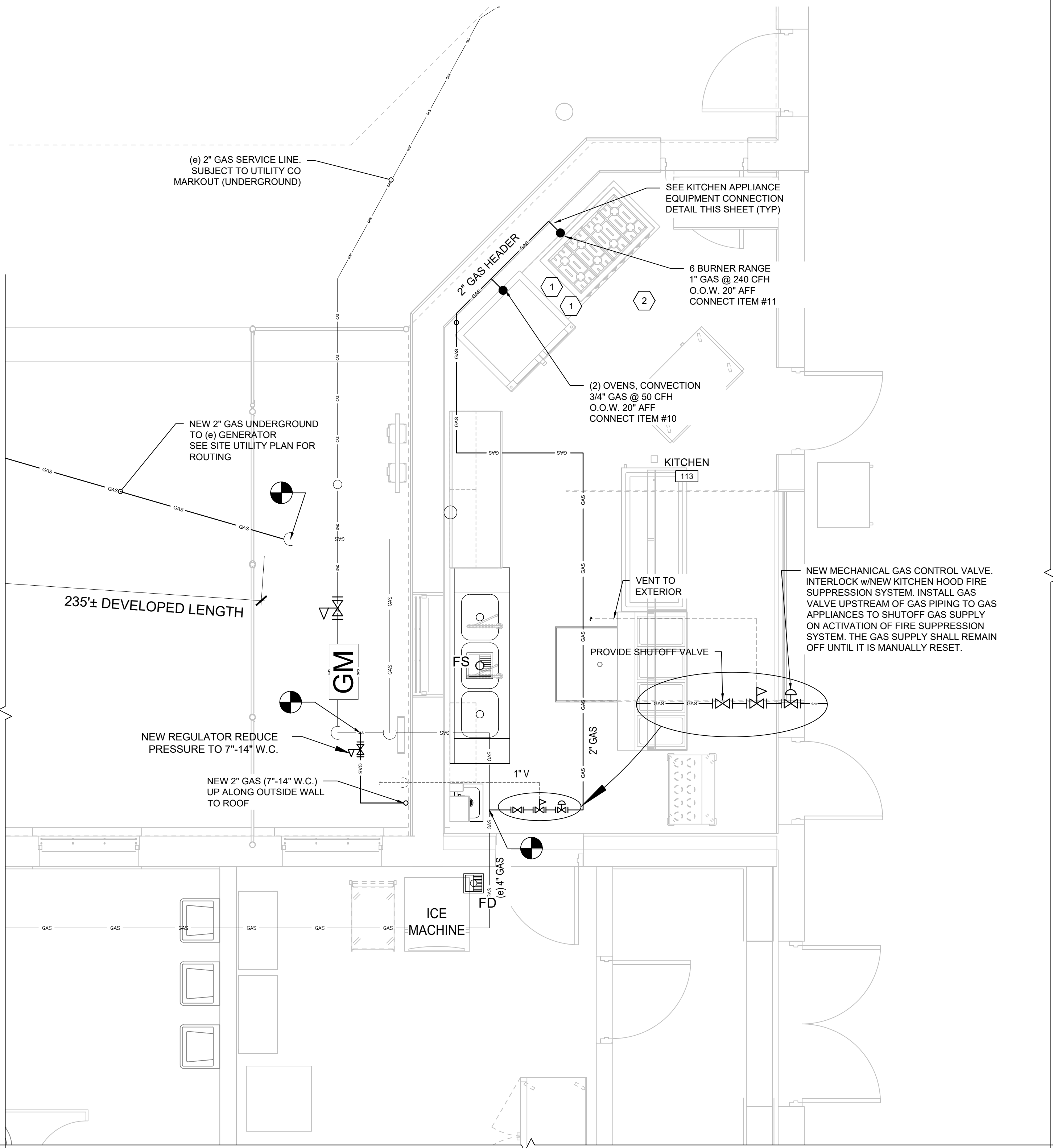








G1  
P4.02  
ENLARGED GENERTAOR GAS PLAN  
1/4" = 1'-0"



G2  
P4.02  
ENLARGED GAS PLAN - KITCHEN 113  
1/4" = 1'-0"

|                                 |              |
|---------------------------------|--------------|
| NJ Certificate of Authorization |              |
| Eng'r. No.                      | 24027937500  |
| Arch. No.                       | 21A000012400 |
| Date                            | 8/13/26      |
| Checked                         | TW           |
| Drawn                           | RJS          |

THOMAS WIGHARD, P.E.  
PROFESSIONAL ENGINEER  
NJ24027937500

Revisions:  
8/13/26 BID SET

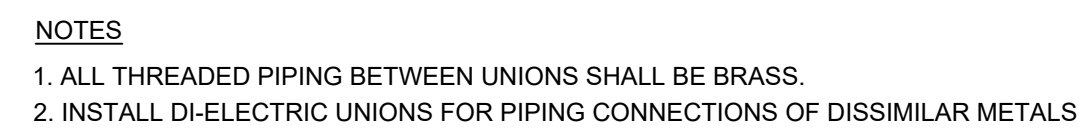
Engineering,  
Planning,  
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**LAN ASSOCIATES**  
1018 Laurel Oak Road, Suite 11, Voorhees, NJ 08043 | T. 856-375-2701

ENLARGED PLANS - KITCHEN GAS  
ADDITION & ALTERATION TO TATEM J FTHIAN  
ELEMENTARY SCHOOL  
HADDONFIELD BOARD OF EDUCATION  
1 GLOVER AVE HADDONFIELD, NJ 08033

Job No. 2.20277.25.10  
File No. 20277.25.10 P201

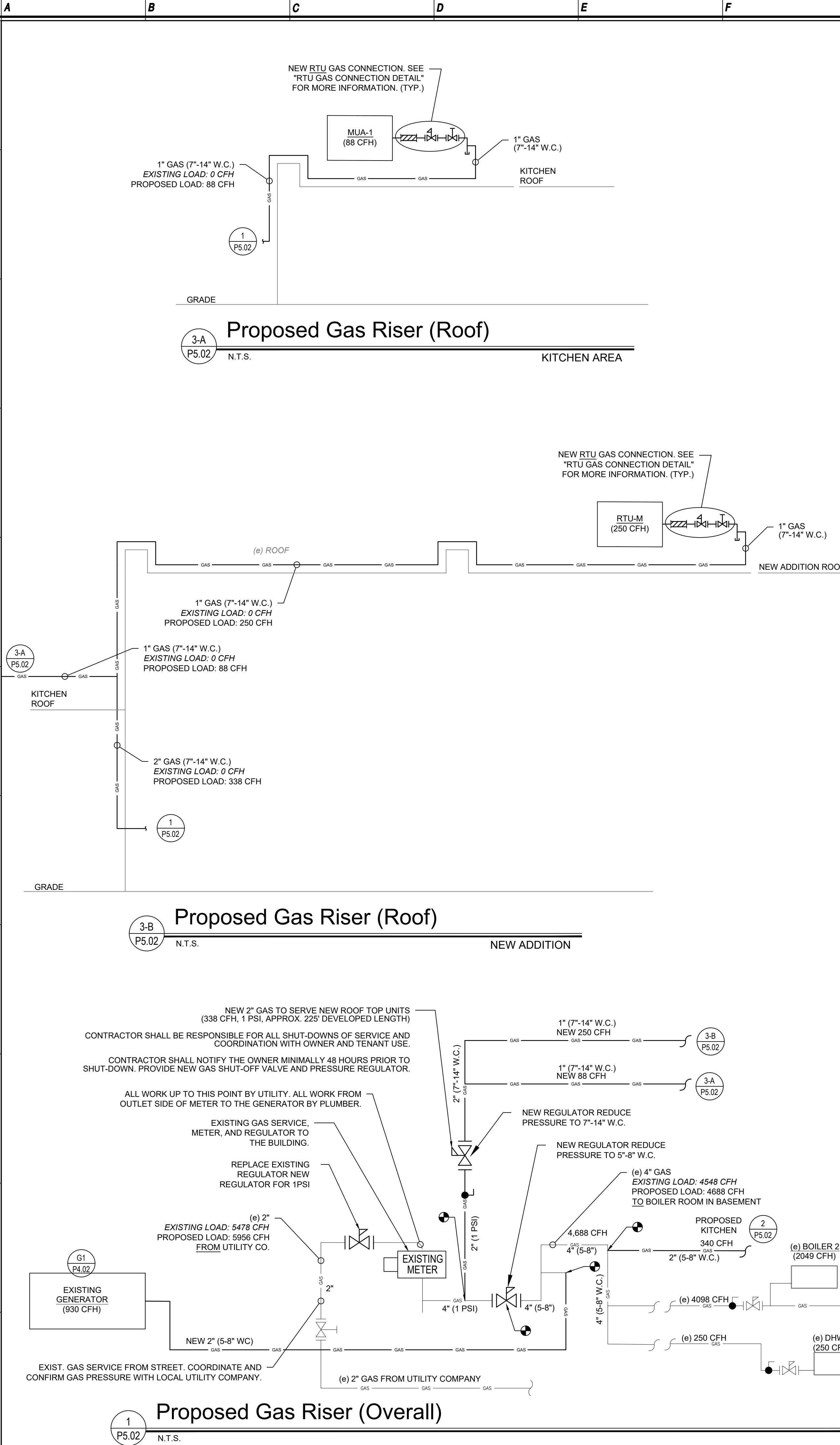
P4.02





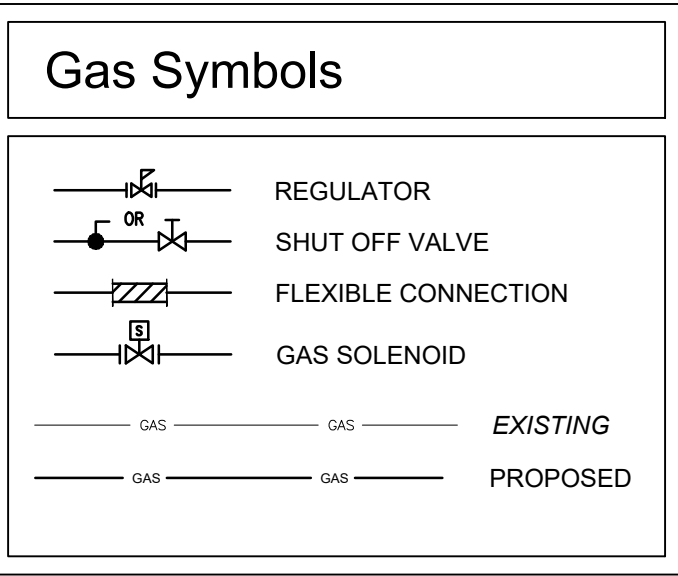
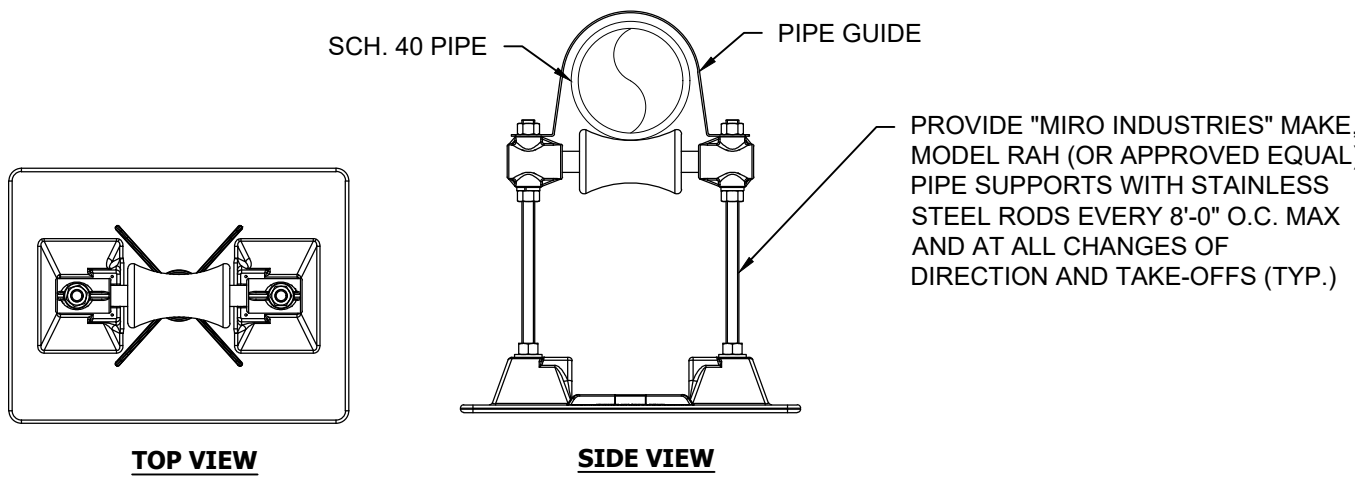
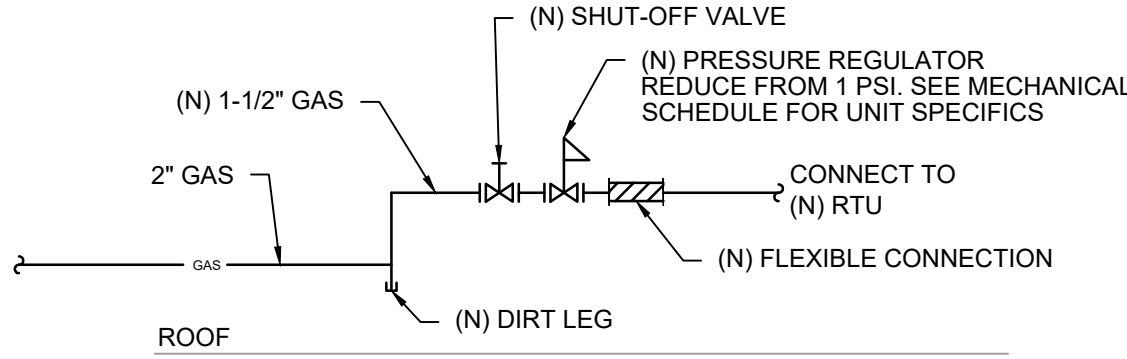


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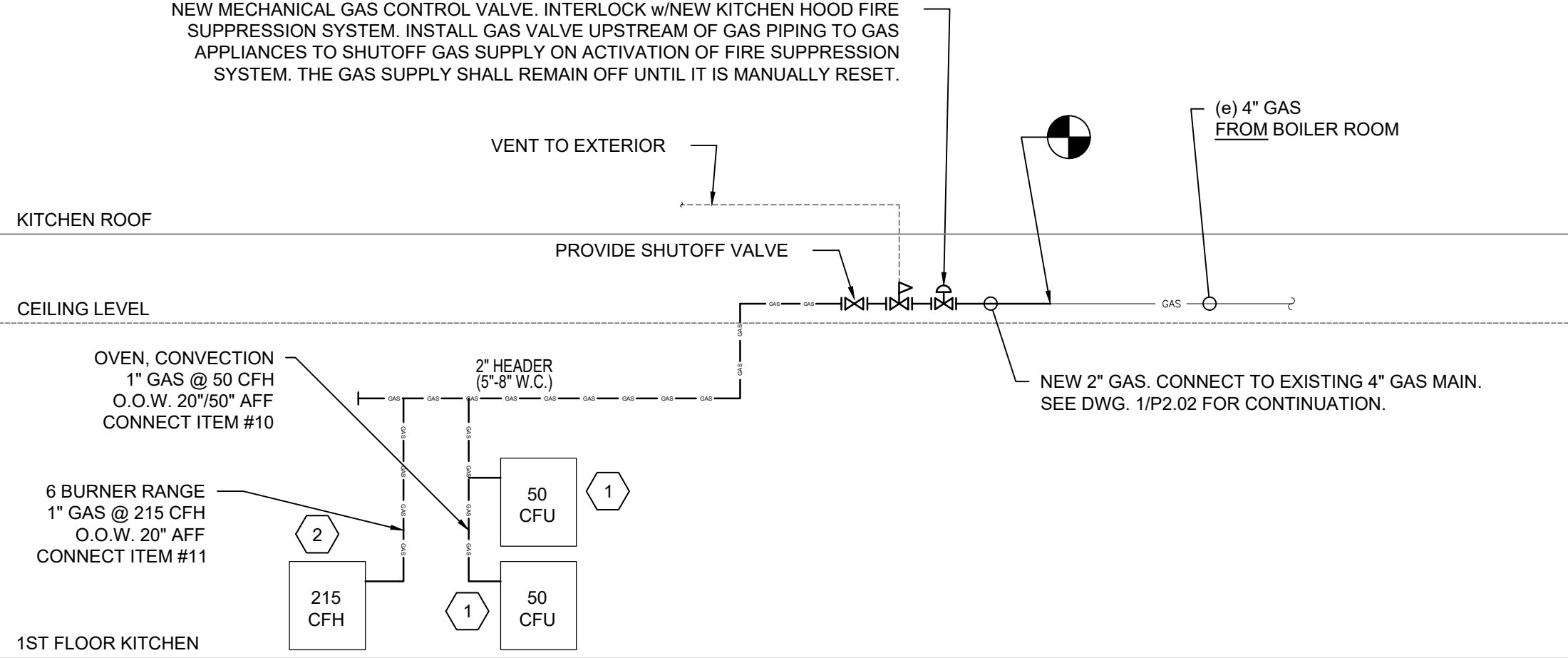
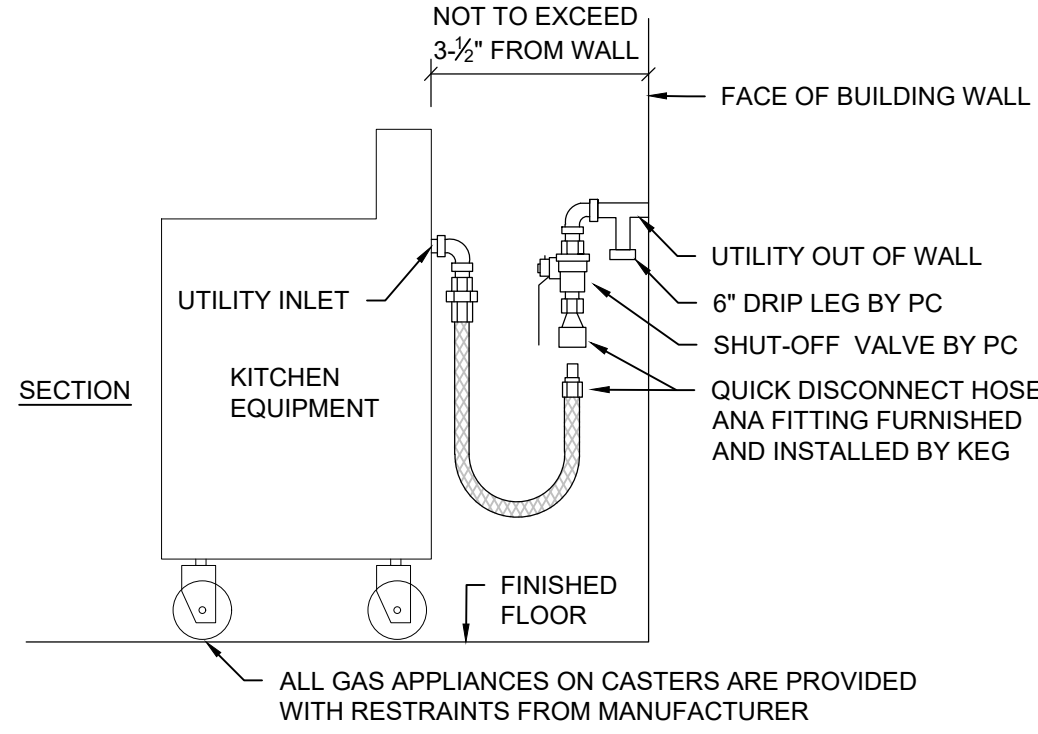
| KITCHEN EQUIPMENT SCHEDULE |                        |     |                                |               |             |
|----------------------------|------------------------|-----|--------------------------------|---------------|-------------|
| ITEM NO                    | EQUIPMENT CATEGORY     | QTY | MODEL                          | GAS SIZE (IN) | MBTUH (CFH) |
| 1                          | OVEN, CONVECTION, GAS  | 2   | VULCAN MODEL VC44GD -- STACKED | 1             | 2@50        |
| 2                          | 8 BURNER HOT PLAT, GAS | 1   | VULCAN MODEL VHP848            | 3/4           | 240         |

SEE SPEC DIVISION 11 FOR ALL FOOD SERVICE SPECIFICATIONS. THE ABOVE SCHEDULE ONLY SHOWS EQUIPMENT THAT REQUIRES GAS SERVICE.



- NOTES:**
- CONTRACTOR TO PROVIDE 1/2" VENT FOR ALL INDOOR GAS PRESSURE REGULATORS. PIPE VENT RELIEF TO ATMOSPHERE. COORDINATE W/ LOCAL UTILITY COMPANY FOR GAS PRESSURE REGULATOR VENTING REQUIREMENTS.
  - GAS PIPE SIZES BASED ON 2021 IFGC TABLE 402.4(1) "SCHEDULE 40 METALLIC PIPE" FOR INLET PRESSURE LESS THAN 2 PSI WITH A PRESSURE DROP OF 0.3" W.C.

NOTE:  
IF UTILITY INLET IS NOT INSTALLED AT HEIGHT SHOWN, PLUMBING CONTRACTOR SHALL PROVIDE PIPING WITH ELBOWS TO RAISE INLET.



**Gas Piping Notes**

- ALL ABOVE GROUND GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL WITH MALLEABLE IRON SCREWED FITTINGS.
- PIPING SHOULD BE RIGIDLY MOUNTED AND PROTECTED AGAINST VIBRATION.
- INSTALLED PIPING SHALL BE PROPERLY PURGED AND LEAK TESTED, IN ACCORDANCE WITH APPLICABLE STANDARDS.
- CONTRACTOR IS REQUIRED TO COORDINATE WITH LOCAL UTILITY COMPANY TO PROVIDE MINIMUM GAS PRESSURE OF 0.5 PSI. CONTRACTOR IS RESPONSIBLE FOR ALL COSTS.
- ALL GAS PRESSURE REGULATORS SHALL BE LOOKUP TYPE.
- PROVIDE GAS SHUT-OFF BALL VALVE FOR PIPE SIZES 2-1/2" AND SMALLER.
- ALL GAS PIPING SHALL BE PAINTED TO MATCH EXISTING (1 PRIMER AND 2 FINISH COATS).

|                                 |             |
|---------------------------------|-------------|
| NJ Certificate of Authorization |             |
| Eng'r. No.                      | 24027937500 |
| Arch. No.                       | 21A00012400 |
| Date                            | 8/13/26     |
| Checked                         | TW          |
| Drawn                           | RJS         |

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**Revisions:**  
8/13/26 BID SET

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1018 Laurel Oak Road, Suite 11, Voorhees, NJ 08043 | T. 856-375-2701

**PLUMBING GAS PLANS, RISER & DETAILS**  
ADDITION & ALTERATION TO TATEM J FTHIAN  
ELEMENTARY SCHOOL  
HADDONFIELD BOARD OF EDUCATION  
1 GLOVER AVE HADDONFIELD, NJ 08033

Job No. 2.20277.25.10  
File No. 20277.25.10 P201

**P5.02**



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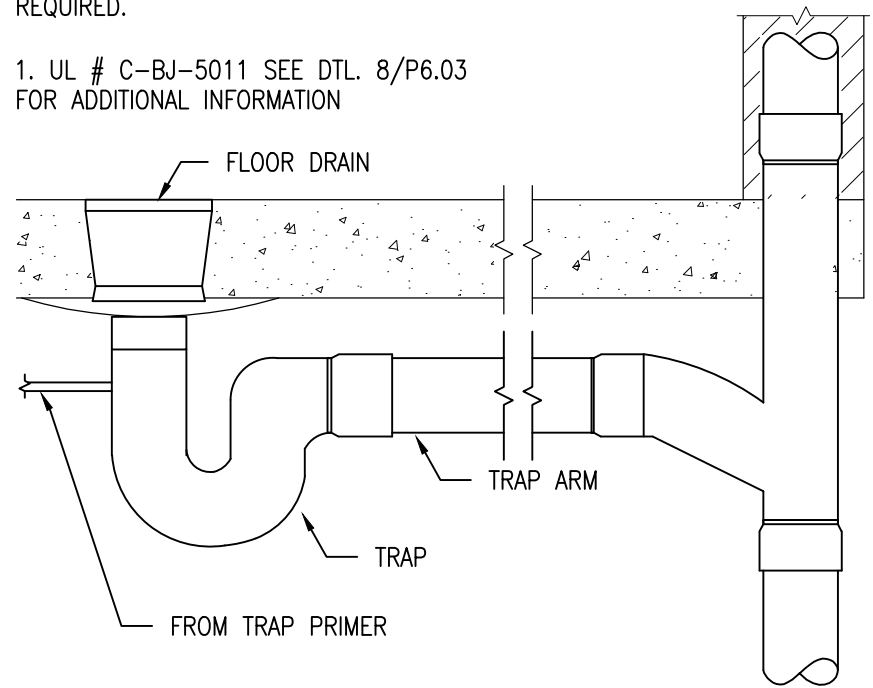
PLUMBING FIXTURE SCHEDULE

| NUMBER | FIXTURE            | MANUFACTURER  | TYPE & MODEL NO. | TRIM NO.                     | SUPPLY PIPE NO. | TRAP NO.      | SUPPORT NO. | PIPE SIZES     |        |        |        |      | DFU | WSFU | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------|--------------------|---------------|------------------|------------------------------|-----------------|---------------|-------------|----------------|--------|--------|--------|------|-----|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|        |                    |               |                  |                              |                 |               |             | TRAP           | WASTE  | VENT   | CW     | HW   |     |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| P-1    | WATER CLOSET       | KOHLER        | KINGSTON K-4325  | SLOAN ROYAL 11-SMO 1.1.28    |                 |               | WALL MTD    | INT            | 4"     | 2"     | 1-1/4" |      | 5   | 5    | WALL-MOUNTED ELONGATED FLUSH VALVE TOILET W/ EVERCLEAN. TOP SPUD & 1.28 GPF. COLOR SHALL BE WHITE. PROVIDE W/ KOHLER #4731 HEAVY-DUTY OPEN FRONT SEATLESS COVER, BATTERY POWERED SENSOR FLUSHOMETER. INSTALL TO MEET ADA REQUIREMENTS                                                                                                                                                                                                                                                                                                                                                                                  |
| P-2    | LAVATORY           | KOHLER        | KINGSTON K-2007  | CHICAGO FAUCETS 116.606.AB.1 | McGUIRE LF158   | McGUIRE 8902C | WALL MTD    | 1-1/4 x 1-1/2" | 1-1/2" | 1-1/2" | 1/2"   | 1/2" | 1   | 1    | WALL HUNG. PROVIDE WALL HANGER, P-TRAP & WATTS THERMOSTATIC MIXING VALVE MODEL #LFMMV-US-M1. INSTALL ADA LAVATORIES TO MEET ADA HEIGHT REQUIREMENTS. FIXTURE COLOR SHALL BE WHITE.                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| K-1    | 3 COMPARTMENT SINK | EAGLE         | S14-20-318-SL    | T&D BRASS B-0133-ADF12 (2)   | --              | --            | --          | 3"             | 2"     | 2"     | 1/2"   | 1/2" | 9   | 6    | S14 SERIES SINK, THREE COMPARTMENT, 103"W X 27"D, 14/304 STAINLESS STEEL CONSTRUCTION, 20" X 20" X 14" DEEP BOWLS, 18" DRAINBOARDS ON LEFT & RIGHT, 8"H BACKSPLASH WITH 3/4" UP TURN & TILE EDGE, STAINLESS STEEL FRONT APRON, 8" OC SPLASH MOUNT FAUCET HOLES, INCLUDES (3) 3 1/2" BASKET DRAINS, STAINLESS STEEL LEGS, PRE-RINSE UNIT, WITH MIXING FAUCET, WALL MOUNT BASE, 8" CENTERS, B-0044-H STAINLESS STEEL FLEXIBLE HOSE WITH POLYURETHANE INNER HOSE, OVERHEAD SPRING BODY & (B-0107) SPRAY VALVE, 18" RISER, ADD ON FAUCET WITH (062X) 12" SWING NOZZLE, ETERNA CARTRIDGES WITH SPRING CHECKS, LEVER HANDLES |
| K-2    | KITCHEN HAND SINK  | ADVANCE TABCO | DSE7-PS-60       | K-316-LU WRIST HANDLES       |                 |               |             | 1-1/2"         | 1-1/2" | 1-1/4" | 1/2"   |      | 1   | 1.5  | HAND SINK, WALL MOUNTED, 14" WIDE X 10" FRONT-TO-BACK X 5" DEEP BOWL, 20 GAUGE 304 STAINLESS STEEL, WITH SPLASH MOUNTED HEAVY DUTY GOOSENECK FAUCET, BASKET DRAIN, WALL BRACKET. 7-PS-12 SOAP DISPENSER, 7-PS-17 WELDED SIDE SPLASH                                                                                                                                                                                                                                                                                                                                                                                    |
| F.S.   | FLOOR SINK         | J.R. SMITH    | 325-Y03          | --                           | --              | --            | --          | 3"             | 3"     | 2"     | --     | --   | 5   | --   | 12"x12"x6" DEEP CAST IRON FLOOR SINK WITH WHITE ACID RESISTANT PORCELAIN ENAMEL COATED INTERIOR, LOOSE SET GRATE (COORDINATE GRATE TYPE WITH OWNER/KITCHEN EQUIPMENT SUPPLIER), SEDIMENT BUCKET.                                                                                                                                                                                                                                                                                                                                                                                                                       |
| F.D.   | 3" FLOOR DRAIN     | J.R. SMITH    | 2110Y            | --                           | --              | P-TRAP        | --          | 3"             | 3"     | 2"     | --     | --   | 5   | --   | FLOOR DRAIN W/ HINGED GRATE, SEDIMENT BUCKET, NICKEL BRONZE ROUND TOP & J.R. SMITH QUAD CLOSE TRAP SEAL.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

ABBREVIATIONS

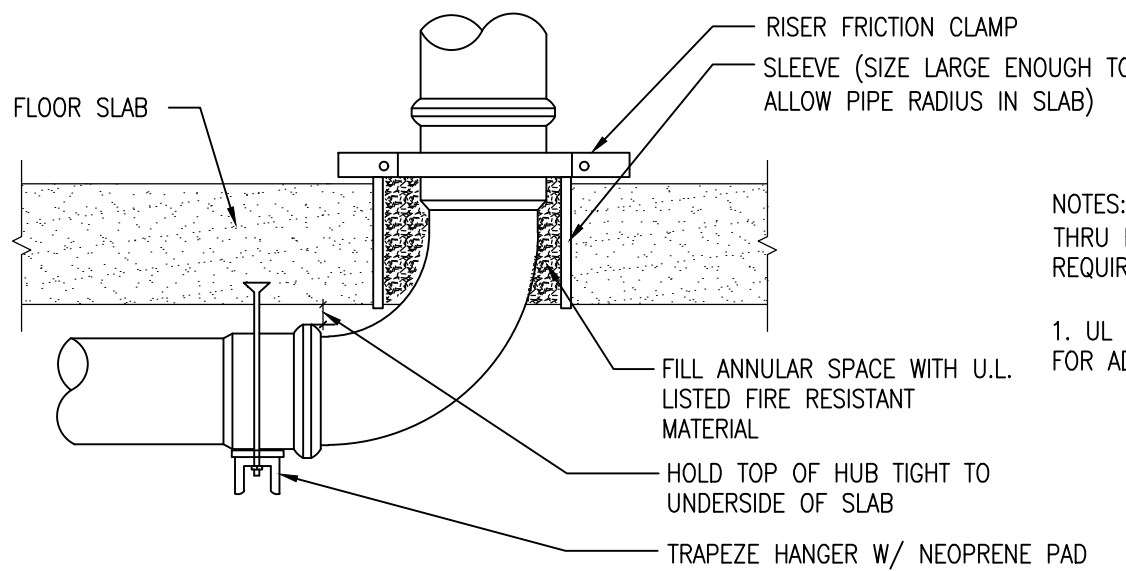
|       |   |                      |      |   |                                               |
|-------|---|----------------------|------|---|-----------------------------------------------|
| &     | = | DIAMETER OR ROUND    | ID   | = | INSIDE DIAMETER (DIM)                         |
| ADD'L | = | ADDITIONAL           | IN   | = | INCH                                          |
| APF   | = | ABOVE FINISHED FLOOR | INFO | = | INFORMATION                                   |
| ALT   | = | ALTERNATE            |      |   |                                               |
| ARCH. | = | ARCHITECTURAL        | MAX  | = | MAXIMUM                                       |
|       |   |                      | MIN  | = | MINIMUM                                       |
| CD    | = | CONDENSATE DRAIN     | NTS  | = | NOT TO SCALE                                  |
| CLG   | = | CEILING              | OD   | = | OVERFLOW ROOF DRAIN                           |
| CO    | = | CLEANOUT             | PD   | = | PRIMARY ROOF DRAIN                            |
| COOP  | = | CLEANOUT DECK PLATE  |      |   |                                               |
| COWP  | = | CLEANOUT WALL PLATE  | RD   | = | ROOF DRAIN                                    |
| CRD   | = | CANOPY ROOF DRAIN    | RPZ  | = | REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER |
| DCW   | = | DOMESTIC COLD WATER  |      |   |                                               |
| DHW   | = | DOMESTIC HOT WATER   | SPEC | = | SPECIFICATION                                 |
| DN    | = | DOWN                 | SS   | = | STAINLESS STEEL                               |
| DWG   | = | DRAWING              | STD  | = | STANDARD                                      |
| EA    | = | EACH                 |      |   |                                               |
| (e)   | = | EXISTING             | T&P  | = | TEMPERATURE & PRESSURE                        |
| FD    | = | FLOOR DRAIN          | TMV  | = | THERMOSTATIC MIXING VALVE                     |
| FS    | = | FLOOR SINK           | TYP  | = | TYPICAL                                       |
| GPH   | = | GALLON PER HOUR      | VTR  | = | VENT THROUGH ROOF                             |

NOTES: (FOR PLUMBING PIPE PENETRATIONS THRU FLOOR SLAB) 2-HOUR FIRE RATING REQUIRED.  
1. UL # C-BJ-5011 SEE DTL. 8/P6.03 FOR ADDITIONAL INFORMATION



FLOOR DRAIN DETAIL

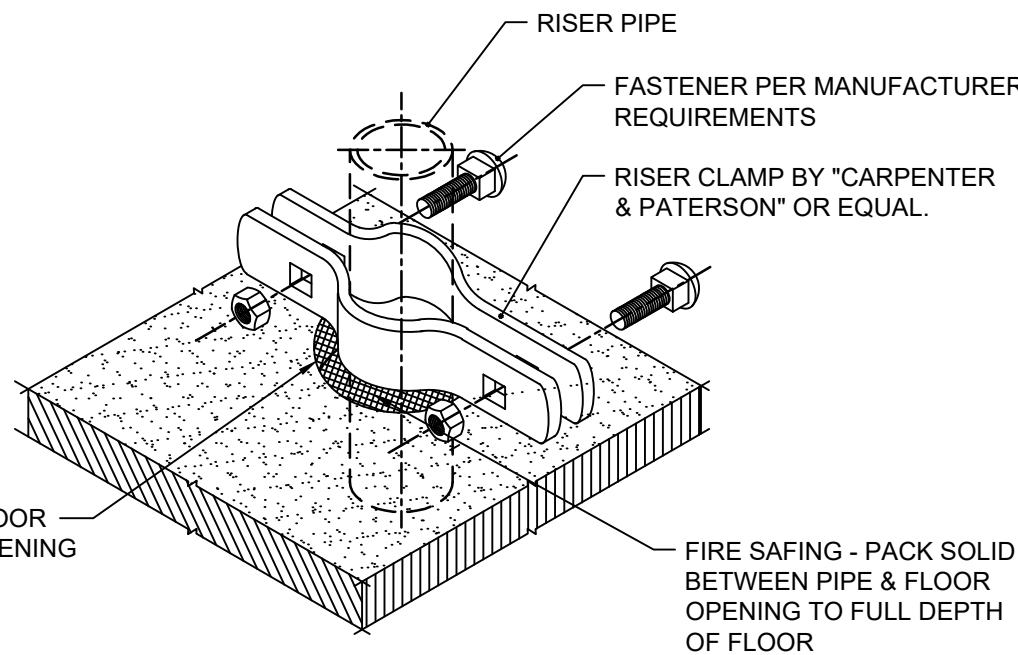
N.T.S.



NOTES: (FOR PLUMBING PIPE PENETRATIONS THRU FLOOR SLAB) 2-HOUR FIRE RATING REQUIRED.  
1. UL # C-BJ-5011 SEE DTL. 8/P6.03 FOR ADDITIONAL INFORMATION

BASE OF STACK DETAIL

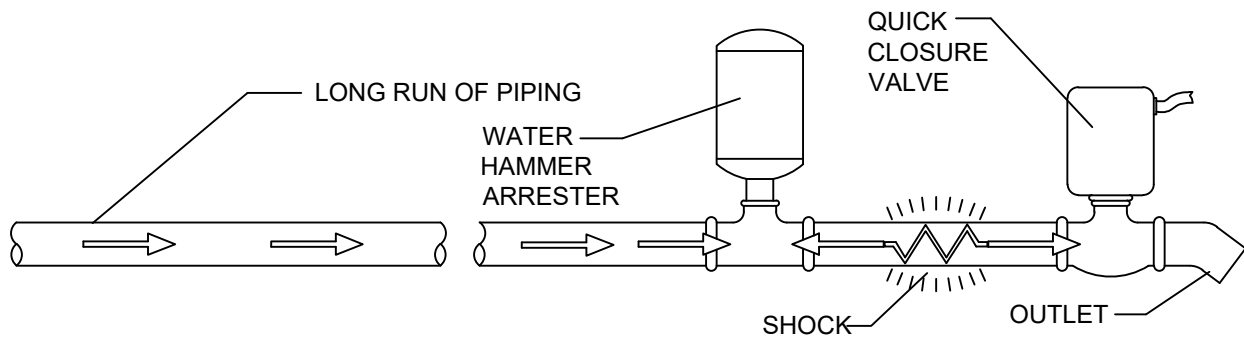
N.T.S.



PIPE RISER CLAMP

N.T.S.

THE FOLLOWING CHART INDICATES THE SIZE OF THE WATER ARRESTER REQUIRED FOR LONG RUNS OF PIPING WHICH FEED A SINGLE REMOTE FIXTURE OR APPLIANCE. THE WATER ARRESTER UNIT SHALL BE SIZED BY USING THE CHART AND LOCATED AS CLOSE TO THE POINT OF QUICK CLOSURE AS POSSIBLE.



WATER HAMMER ARRESTER SELECTION CHART

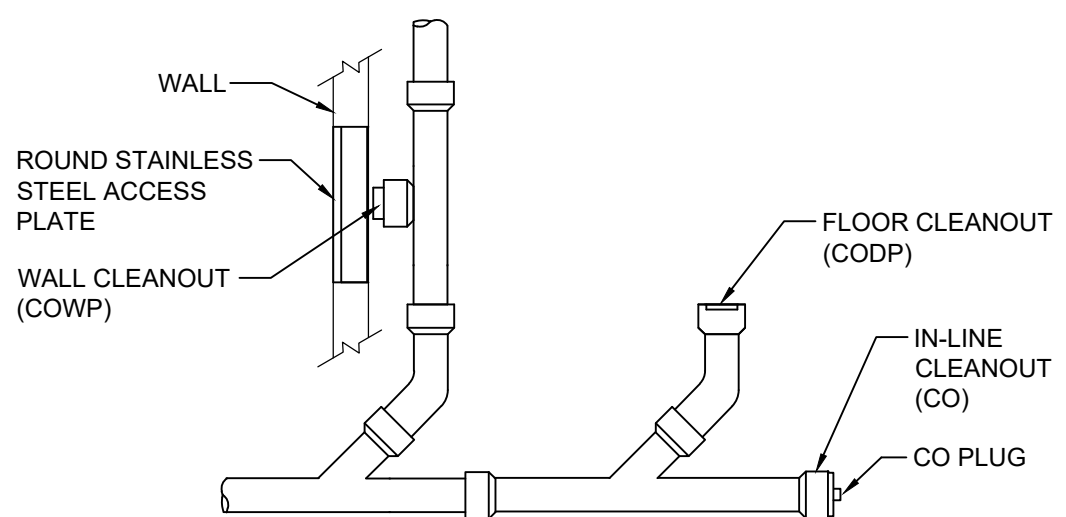
| LENGTH OF PIPE | NOMINAL PIPE SIZE |      |      |                  |                  |                  |
|----------------|-------------------|------|------|------------------|------------------|------------------|
|                | 1/2"              | 3/4" | 1"   | 1-1/4"           | 1-1/2"           | 2"               |
| 25'            | 5005              | 5005 | 5010 | 5020             | 5030             | 5040             |
| 50'            | 5005              | 5010 | 5020 | 5030             | 5040             | 5050             |
| 75'            | 5010              | 5020 | 5030 | 1-5005<br>1-5040 | 5050             | 1-5040<br>1-5050 |
| 100'           | 5020              | 5030 | 5040 | 5050             | 1-5020<br>1-5050 | 2-5050           |
| 125'           | 5020              | 5030 | 5050 | 1-5005<br>1-5050 | 1-5040<br>1-5050 | 1-5040<br>2-5050 |
| 150'           | 5030              | 5040 | 5050 | 1-5030<br>1-5050 | 2-5050           | 3-5050           |

NOTE: THE ABOVE CHART SHOWS LENGTHS OF RUN OF BRANCH PIPING. THE LENGTH OF RUN USED SHALL BE THE LENGTH OF PIPE FROM POINT OF VALVE CLOSURE TO A POINT OF RELIEF, SUCH AS LARGE PIPE RISER TWICE THE SIZE OF THE BRANCH LINE, MAIN LINE OR WATER TANK.

ALL SIZING RECOMMENDATIONS SHOWN ON THE ABOVE CHART ARE BASED ON AN OPERATING WATER PRESSURE OF 65 PSI OR UNDER AN AVERAGE VELOCITY BETWEEN 5 AND 10 FEET PER SECOND. IF OPERATING PRESSURE IS OVER 65 PSI USE THE NEXT LARGER WATER HAMMER ARRESTER UNIT. WHEN PRESSURE IS ANTICIPATED ABOVE 80 PSI A PRESSURE REDUCING VALVE IS REQUIRED.

SIZING & PLACEMENT OF WATER HAMMER ARRESTER (WHA)

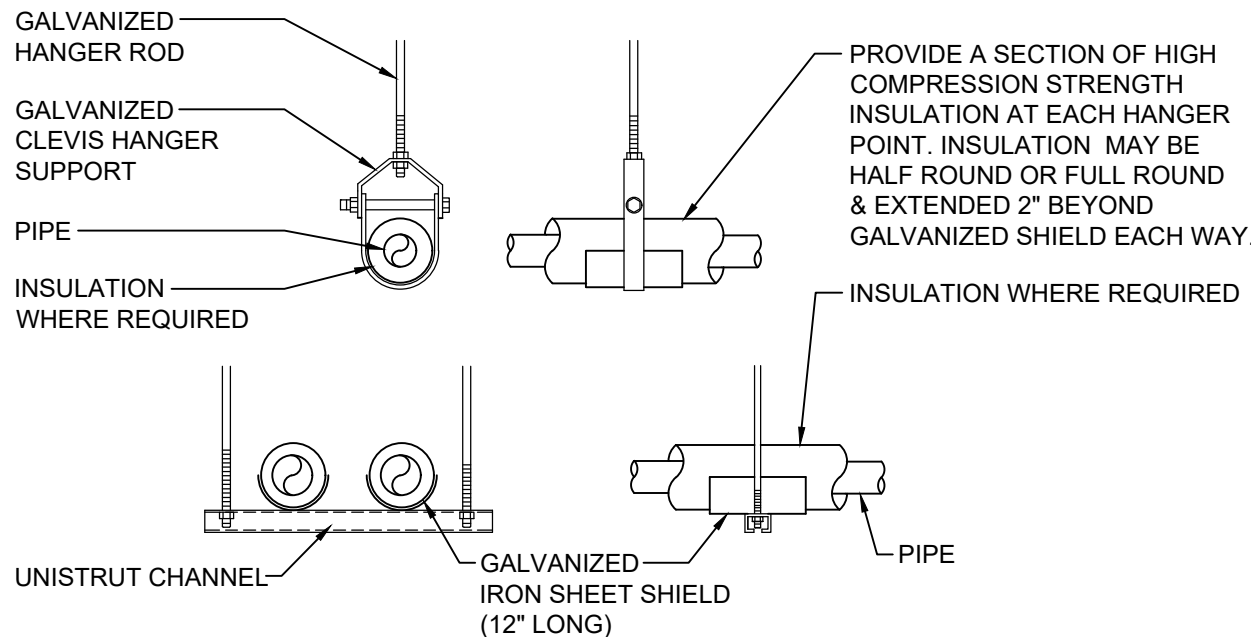
N.T.S.



CLEANOUT DETAIL

N.T.S.

NOTES:  
1. ATTACH SUPPORTS FOR ALL PIPING SUSPENDED FROM STRUCTURES OR TO THE TOP CORD OF BAR JOISTS OR BEAMS.  
2. PROVIDE COPPER CLAMP HANGER SUPPORTS FOR COPPER PIPING.  
3. PROVIDE PIPE SADDLE SUPPORTS FOR LARGE DIAMETER PIPES OR PIPE HEADERS.

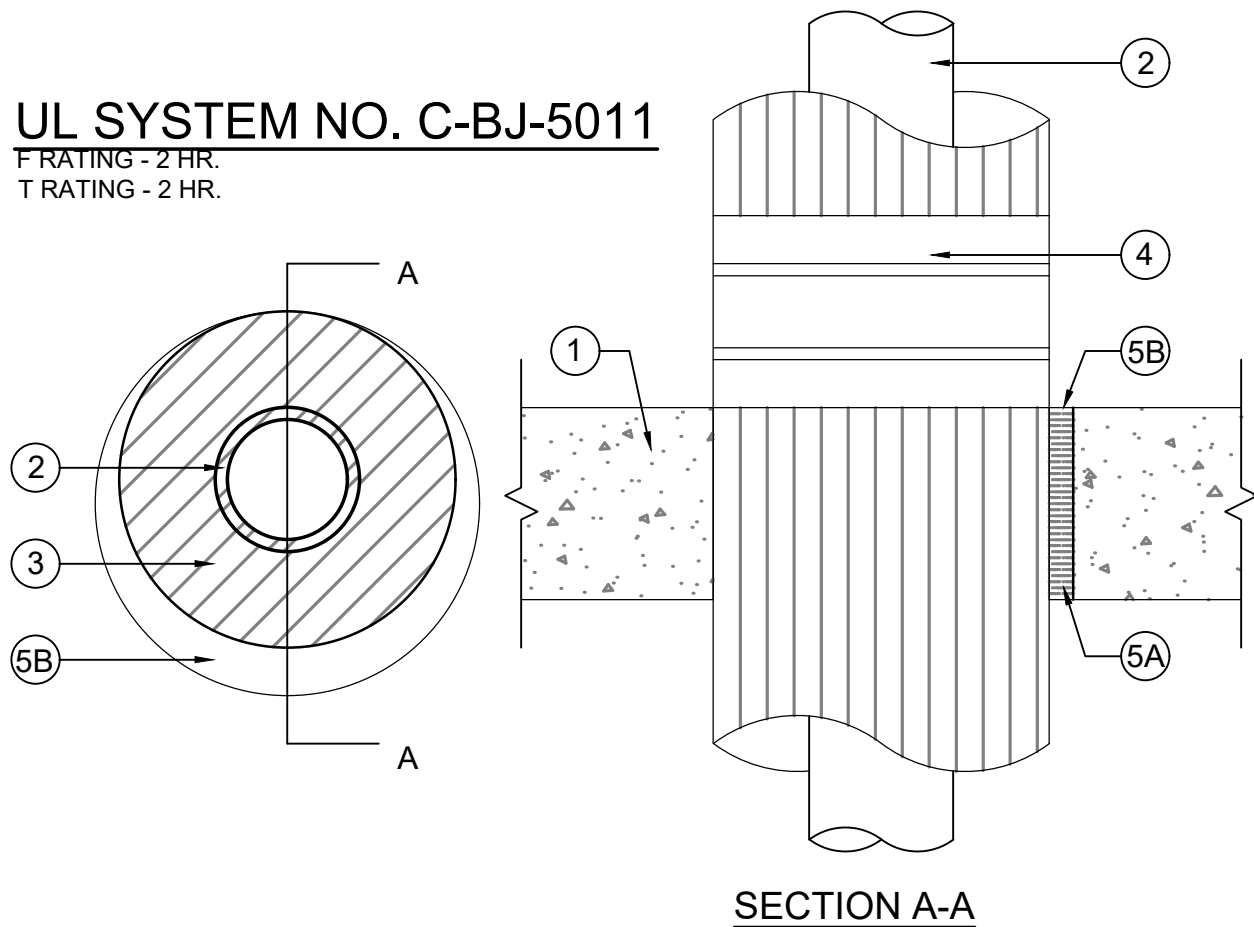


PIPE SUPPORT HANGERS

N.T.S.

UL SYSTEM NO. C-BJ-5011

FRATING - 2 HR.  
TRATING - 2 HR.



TYPICAL PIPE PENETRATION (ALL LOCATIONS)

N.T.S.

2-HOUR RATED

|                                 |              |
|---------------------------------|--------------|
| NJ Certificate of Authorization |              |
| Eng'r. No.                      | 240247937500 |
| Arch. No.                       | 21AC00012400 |
| Date                            | 8/13/26      |
| Checked                         | TW           |
| Drawn                           | RJS          |

THOMAS WIGHARD, P.E.  
License No. NJ24GE0901100  
The PROFESSIONAL ENGINEER

Revisions:  
8/13/26 BID SET

Engineering,  
Planning,  
Architecture,  
Surveying Inc.

LAN ASSOCIATES  
1018 Laurel Oak Road, Suite 11, Voorhees, NJ 08043 | T. 856-375-2701

PLUMBING SCHEDULE & DETAILS  
ADDITION & ALTERATION TO TATEM J FTHAN  
ELEMENTARY SCHOOL  
HADDONFIELD BOARD OF EDUCATION  
1 GLOVER AVE HADDONFIELD, NJ 08033

Job No. 2.20277.25.10  
File No. 20277.25.10 P201

P6.01







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| ELECTRICAL DEMOLITION NOTES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            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| <div><div><div>General Project Info:</div><div><div><div>1.</div><div>The demolition drawings are diagrammatic and indicate the general intent and scope. Plans do not attempt to show all electrical demolition items. Unless otherwise noted, the devices shown are for information purposes. The Contractor shall field verify all demolition items and the extent of demolition work, conditions under which demolition is to be accomplished, along with the kind and amount of materials being removed and provide for the removal of all devices accordingly prior to bid.</div></div></div><div><div><div>2.</div><div>The Contractor shall include all labor and materials in the base bid, including all temporary connections, conduit, and wire to accommodate construction and provide continuous service to devices. Systems that are to remain temporary or permanent and require the shutdown of the building power shall be performed during overtime and shall be included in the base bid.</div></div></div><div><div><div>3.</div><div>The Contractor is responsible for the sequence of all work and shall include in the base bid all labor and materials required for the extensions, re-routing and relocation of existing system components, equipment, wiring, conduits, and cabling to maintain the operation of all systems throughout the building during demolition and construction phases.</div></div></div><div><div><div>4.</div><div>The Contractor shall report to the client any and/or all conditions that may interfere with or otherwise affect or prevent the proper execution and completion of the work of this contract.</div></div></div><div><div><div>5.</div><div>The Contractor shall execute all work within the regulations of the building for demolition and removal of debris. Overtime work required will be at no extra cost to the client.</div></div></div><div><div><div>6.</div><div>All equipment shall be disconnected and removed back to its power source of origination unless otherwise noted ("U.O.N.") by Existing to Remain ("E"). All disconnected and removed items that are not being reused shall be returned to the Owner or disposed off site in an approved method.</div></div></div><div><div><div>7.</div><div>The Contractor shall always protect the property of the client and the building owner, including but not limited to windows, finishes, public toilets, elevators, doors, bucks, electrical and air conditioning equipment, convector enclosures, etc.</div></div></div><div><div><div>8.</div><div>Unless noted otherwise, all the existing electrical equipment currently located in the areas of demolition, whether specifically indicated on this drawing or not, shall be disconnected and removed from service. The Owner has the first right of refusal on all removed items. All items not wanted by the Owner shall be properly disposed of offsite by the Contractor in accordance with the law. Care shall be taken to maintain circuit continuity to all existing electrical devices to remain. Refer to architectural drawings for exact areas of demolition.</div></div></div><div><div><div>9.</div><div>Relocate or remove all electrical devices in accordance with the applicable codes.</div></div></div><div><div><div>10.</div><div>Do not disable or disrupt building fire or life safety systems without written permission from the Owner. In all cases, permission shall have been granted not less than ten (10) working days prior to the intended interruption.</div></div></div><div><div><div>11.</div><div>Before starting work, the electrical Contractor shall check all existing devices, light fixtures, equipment, etc. that are noted or required to be reused to satisfy himself that they are operating properly. Should any of the items not be operating properly, the Contractor shall report same to the engineer and await his directions. Contractors that do not comply with the above will be responsible for providing operational items at their expense.</div></div></div><div><div><div>12.</div><div>The Contractor shall field investigate the existing electrical &amp; low voltage systems installations. All existing installations in the renovation areas that are to remain but are not currently in compliance with current codes shall be corrected, including but not limited to the following: Un-supported wire, conduit and junction boxes laying on top of ceiling tiles, wire, conduit and/or junction boxes supported only by tie-wire. Raise and support conduit with strap per specs. Raise and support wire with bridle rings, J-hooks, or other appropriate means. Provide new conduit/wire as required. Fixtures improperly supported or inadequately supported by device boxes - provide proper support per N.E.C.</div></div></div></div><div><div>Work/Trade Coordination:</div><div><div><div>13.</div><div>The Electrical Contractor shall coordinate the mechanical equipment demolition with the Mechanical Contractor and mechanical demolition plans and general construction demolition with the General Contractor and architectural demolition plans for all equipment to be demolished and schedule time for electrical demolition.</div></div></div><div><div><div>14.</div><div>The Contractor shall remove all electrical equipment left after wall demolition, including conduit, switch boxes, plates, bridges, or any other telephone or electric wiring and equipment. Disconnect all wiring at panels and remove old wiring from the plenum.</div></div></div><div><div><div>15.</div><div>Temporarily relocate electrical equipment as required to accommodate the construction schedule. All areas not under construction must be kept operational during construction. To accomplish this, provide the necessary temporary electrical services. Remove temporary devices upon completion of the project.</div></div></div><div><div><div>16.</div><div>As part of the base bid, the Electrical Contractor shall provide temporary electric power required for construction activities of all project divisions. All temporary branch circuits shall be supplied by circuits protected by ground fault circuit breakers. All temporary branch circuits shall be in accordance with NEC Article 590.<div><div>a.</div><div>The AE will review complaints concerning power distribution or devices available in a specific area or areas of the project. If directed by the AE, the Contractor shall provide additional power distribution or connection devices required under this section at no additional cost.</div></div></div></div></div><div><div><div>17.</div><div>As part of the base bid, the Electrical Contractor shall provide temporary lighting with local switch for general illumination and task illumination for the General Contractor, other prime contractors, and for all sub-contractors for the duration of the construction. Lighting levels provided are to be in compliance with applicable workplace standards. All temporary lighting shall be supplied by circuits protected by ground fault circuit breakers. All temporary lighting shall be in accordance with NEC Article 590.<div><div>a.</div><div>The AE will review complaints concerning lighting levels and/or lighting quality in a specific area or areas of the project. If directed by the AE, the Contractor shall provide additional luminaries and/or additional distribution wiring required at no additional cost.</div></div></div></div></div><div><div><div>18.</div><div>At the conclusion of the construction activities remove all wiring, both exposed and concealed, used for temporary lighting and power distribution.</div></div></div></div><div><div>Demolition Requirements:</div><div><div><div>19.</div><div>Raceways associated with electrical being demolished, which are concealed in existing remaining walls may be abandoned in place. Remove wiring from the conduit.</div></div></div><div><div><div>20.</div><div>Raceways associated with electrical being demolished which are exposed shall be removed.</div></div></div><div><div><div>21.</div><div>Where removal of equipment or wiring is indicated, it shall include all associated wiring back to the last active remaining outlet, device, fixture, or panel.</div></div></div><div><div><div>22.</div><div>No removed equipment or material shall be reused as part of new work, U.O.N.</div></div></div><div><div><div>23.</div><div>Existing remaining concealed raceways may be reused for new work provided. They meet all requirements of the specification for new work.</div></div></div><div><div><div>24.</div><div>Coordinate with the Owner prior to the start of demolition to minimize power interruptions, work may have to occur during non-regular business hours. Coordinate in writing with the Owner one week before the planned power interruption</div></div></div><div><div><div>25.</div><div>The electrical Contractor shall ensure that all remaining active circuits, devices, outlets, light fixtures, etc. have not been disconnected or made inoperative during demolition. The electrical Contractor shall restore all interrupted or disconnected circuits to operation.</div></div></div><div><div><div>26.</div><div>Remove abandoned electrical equipment, devices and wiring (i.e., distribution equipment, receptacles, data ports, raceway systems) back to the source panelboard, switchboard, switchgear, communications closet, or cabinet. Abandoned wiring and raceways can result from actions that include the following:<div><div>a.</div><div>Equipment is removed or relocated.</div></div><div><div>b.</div><div>Fixtures are removed or relocated.</div></div><div><div>c.</div><div>System is no longer used.</div></div><div><div>d.</div><div>There is no demonstrable near term future use for the existing circuit or raceway system.</div></div></div></div></div><div><div><div>27.</div><div>Unused electrical equipment and material should only be left in place if one or more of the following conditions exist:<div><div>a.</div><div>The removal requires the demolition of other structures or equipment that is still in use. An example is conduit embedded in walls or ductbanks.</div></div><div><div>b.</div><div>The cost of removal is excessive due to hazards, construction methods, or restricted access. The engineer shall make a final determination for this condition.</div></div><div><div>c.</div><div>If either of the above two cases exist, remove the conduits, including those above accessible ceilings, to the point that building construction, earth, or paving covers them. Cut conduit beneath or flush with building construction or paving. Plug, cap, or seal the remaining unused conduits. Install blank covers for abandoned boxes and enclosures not removed.</div></div></div></div></div><div><div><div>28.</div><div>Inventory each panelboard where circuits are indicated to be reused. Sequentially consolidate existing circuits within each panelboard with regard to area served. Maximize capacity for service to the project area by including existing spares with the group of circuits breakers to be disconnected as a result of this selective demolition. Prepare a current directory, post demolition, for each panelboard as the base upon which the final directories will be compiled.</div></div></div></div><div><div>Extension/Continuity:</div><div><div><div>29.</div><div>Removal shall include wiring, raceway, boxes, switches, light fixtures, etc. as indicated on the plans and as required by these demolition notes</div></div></div><div><div><div>30.</div><div>All thermostats should remain connected until such time that they are relocated. If they are in a wall to be removed, leave them connected and either tuck them into the ceiling or attach them to the adjacent structure.</div></div></div><div><div><div>31.</div><div>Extend existing equipment connections using materials and methods compatible with the existing electrical installation and identified in the Electrical Specifications.</div></div></div><div><div><div>32.</div><div>When relocation or removal of an electrical device interrupts the continuity of a downstream circuit or device to remain, reroute/modify the circuit as required to maintain circuit continuity. Provide new junction boxes, pullboxes, raceways, wiring, etc., as required.</div></div></div><div><div><div>33.</div><div>When circuits are interrupted by the removal of a panelboard, the Electrical Contractor shall rewire devices to the nearest panelboard of same voltage requirements with available space. Furnish and install new circuit breakers or utilize spare circuit breakers as required.</div></div></div><div><div><div>34.</div><div>Where an existing device is removed but the raceway and box remains for circuit Continuity, provide an appropriate blank cover plate of material and finish to match the cover plates of the devices in that room.</div></div></div><div><div><div>35.</div><div>If the continuity of the neutral conductor of a multiwire circuit is interrupted (open), the resultant over or under voltage can cause a fire and/or destruction of electrical equipment. Contractor shall take necessary precautions to preclude the interruption of neutral conductor on a multiwire circuit.</div></div></div><div><div><div>36.</div><div>Non-demolition areas: Demolition works shall not affect areas not included in demolition. Contractor shall be responsible for the continuity of all services in non-demolition areas. All services shall be maintained at all times. Maintain service by extending, re-routing and/or reconnecting any circuits affected by demolition. Provide additional conduit/wire as required to maintain service. Circuits in non-demolition areas that are connected to demolished panels and/or circuits shall be re-circuited to the existing panels. Provide temporary power as required during change-over to maintain continuous service. Provide temporary power for all relocated circuits as required to maintain continuous service.</div></div></div><div><div><div>37.</div><div>Where existing outlets are shown to remain, but are indicated with new circuitry perform the following:<div><div>a.</div><div>Remove existing circuitry. Provide additional conduit, wiring, etc., necessary to maintain circuit continuity to existing devices on the same circuit that are not to be recircuited.</div></div><div><div>b.</div><div>Provide new wiring device and faceplate.</div></div><div><div>c.</div><div>Recircuit devices as indicated.</div></div></div></div></div></div><div><div>Patching/Repairing:</div><div><div><div>38.</div><div>Restore the original fire rating of floors, walls, and ceilings after electrical demolition using a UL classified fire sealant.</div></div></div><div><div><div>39.</div><div>Except for areas where partitions or ceilings are to be demolished or where new air conditioning or electric is to be installed, Contractor shall replace to the existing condition in area of disturbed ceiling. Any water damaged or broken ceiling tiles as the result of Contractor's demolition shall also be replaced.</div></div></div><div><div><div>40.</div><div>Upon completion of the demolition work, the Contractor shall provide that all areas be left broom clean.</div></div></div><div><div><div>41.</div><div>Furnish and install knockout plugs on all existing panels, equipment, and outlet box openings created by the removal or relocation of existing raceways.</div></div></div><div><div><div>42.</div><div>Where an existing electrical device, equipment, etc., is being removed from an existing wall and that wall is to remain Contractor shall patch existing wall to architects satisfaction.</div></div></div></div><div><div>Hazardous Material Disposal:</div><div><div><div>43.</div><div>Disconnect and remove all ballasts from fluorescent light fixtures that do not have a labels stating "BALLAST DOES NOT CONTAIN PCBs" or similar label (BALLAST MAY CONTAIN PCBs). Place PCB ballasts in D.O.T. approved containers. Properly dispose of containers with a federally approved disposal contractor. Disposal shall involve segregation of components for recycling and incineration of PCB contents. All disposal documentation shall be provided to the Owner upon completion of the project. Contractor shall maintain an owner approved log sheet for each run.</div></div></div><div><div><div>44.</div><div>Remove all mercury-containing lamps, do not break or crush. Retain services of a state approved lamp recycling facility able to accept waste D009. Coordinate packaging required and package, secure, and deliver lamps as required by the selected recycling facility to insure minimum lamp breakage. Minimum of 95% of lamp material must be shipped intact. Contractor must comply with all reporting and paperwork requirements of state laws regarding the handling, transportation, and disposal of hazardous waste including but not limited to filing the required paperwork and manifest with the state and owners as required by law. All disposal documentation shall be provided to the Owner upon completion of the project.</div></div></div><div><div><div>45.</div><div>Remove all sealed lead-acid batteries from the site. Return to the battery manufacturer or to a similarly qualified battery processing facility for proper disposal. Obtain a receipt for submission with the close out documents.</div></div></div><div><div><div>46.</div><div>Where Tritium Exit Signs are indicated for demolition, the Contractor shall use the following procedures:<div><div>a.</div><div>Take care to not drop or damage the exit signs in any way.</div></div><div><div>b.</div><div>Document location sign was removed from, serial number, manufacturer, model #, condition, and removal date.</div></div><div><div>c.</div><div>Store the sign in a central location until demolition completion.</div></div><div><div>d.</div><div>At the completion of the demolition, turn all removed signs over, in their entirety, to the Owner with a list and inventory of all of the signs boxed up in the left over packing material from new signs.</div></div></div></div></div></div></div> <tr><td 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NJ Certificate of Authorization

Eng'r. Nos. 24GA27937600

Arch. Nos. 21AC00012400

Date 07/17/26

Checked EM

Drawn PK

THOMAS WIGHARD, R.A.

This REGISTERED ARCHITECT License No. 21A02276900

Date

Description

Engineering,  
Planning,  
Architecture,  
Surveying Inc.

LAN ASSOCIATES

4445 Godwin Ave Ste 9, Midland Park, NJ 07432 | t. 201-447-5400 | f. 201-447-1233

ELECTRICAL DEMOLITION GENERAL NOTES  
ALTERATIONS & ADDITIONS TO J. FIFTHIN TATEM ELEMENTARY SCHOOL  
HADDONFIELD BOARD OF EDUCATION  
1 GLOVER AVE. HADDONFIELD, NJ 08033

Job No. 2.20277.25.10

File No.

E0.03

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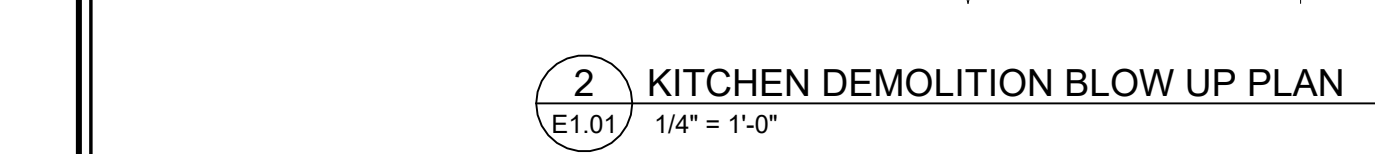
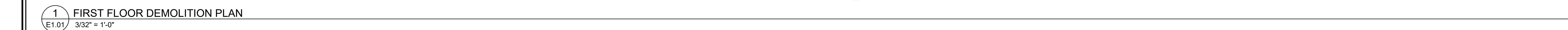
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| 1  | FIRE ALARM GENERAL NOTES & REQUIREMENTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|    | <b>TEMPORARY FACILITIES AND CONTROL:</b><br>1. WHERE EXISTING FIRE ALARM SYSTEMS ARE UPGRADED OR REPLACED, THE EXISTING SYSTEM SHALL REMAIN IN SERVICE UNTIL THE NEW SYSTEM IS OPERATIONAL AND SATISFACTORILY TESTED. INCLUDE PROCEDURES FOR IDENTIFYING ALL DEVICES, WIRES, AND CONNECTION OF OLD DEVICES TO NEW (AS APPROPRIATE) AND TRANSFER OF SERVICE BETWEEN OLD AND NEW. IF SERVICE IS ANTICIPATED TO BE OUT BEYOND A SINGLE 7AM - 5PM WORKDAY, AN APPROVED FIRE WATCH WILL BE NECESSARY AT THE CONTRACTOR'S EXPENSE. CONSULT WITH ENGINEER AND LOCAL AUTHORITIES FOR SPECIFICS REGARDING FIRE WATCH REQUIREMENTS.<br>a. MINIMUM FIRE WATCH REQUIREMENTS WILL INCLUDE THE FOLLOWING: <ul style="list-style-type: none"><li>THE INDIVIDUAL PERFORMING THE FIRE WATCH SHALL BE PROVIDED WITH AT LEAST ONE APPROVED MEANS FOR NOTIFICATION OF THE FIRE DEPARTMENT AND THEIR ONLY DUTY SHALL BE TO PERFORM CONSTANT PATROLS OF THE PROTECTED PREMISES AND KEEP WATCH FOR FIRES.</li><li>A FIRE WATCH SHOULD AT LEAST INVOLVE SOME SPECIAL ACTION BEYOND NORMAL STAFFING, SUCH AS ASSIGNING AN ADDITIONAL SECURITY GUARD(S) TO WALK THE AREAS AFFECTED. THESE INDIVIDUALS SHOULD BE SPECIALLY TRAINED IN FIRE PREVENTION AND IN OCCUPANT AND FIRE DEPARTMENT NOTIFICATION TECHNIQUES, AND THEY SHOULD UNDERSTAND THE PARTICULAR FIRE SAFETY SITUATION FOR PUBLIC EDUCATION PURPOSES.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 2  | <b>CIRCUIT AND RACEWAY:</b><br>1. RACEWAY LAYOUT SHALL CONSIST OF A VERTICAL RISER OF TERMINAL CABINETS LOCATED ON EACH FLOOR. LARGER BUILDINGS AND BUILDINGS WITH TWO OR MORE WINGS MAY REQUIRE MULTIPLE RISERS AND TERMINAL CABINETS PER FLOOR. THE CONTRACTOR IS REQUIRED TO INSTALL AT LEAST TWO LATERAL BRANCH LINES PER FLOOR ORIGINATING FROM EACH TERMINAL CABINET.<br>2. RACEWAY FILL SHALL BE LESS THAN 40% RACEWAY CAPACITY BETWEEN CONTROL PANELS AND TERMINAL CABINETS SHALL BE SUFFICIENTLY SIZED TO ACCEPT ADDITIONAL CIRCUITS IN THE FUTURE. THE CONTRACTOR IS REQUIRED TO INSTALL A MINIMUM SIZE THAT WOULD ACCOMMODATE FUTURE WORK.<br>3. CIRCUITS SHALL BE LAID OUT TO SERVE A SPECIFIC GEOGRAPHICAL AREA (ZONE) PER FLOOR. COORDINATE FIRE ALARM ZONES WITH SMOKE COMPARTMENTS AND/OR SPRINKLER ZONES.<br>4. FIELD LOCATED TERMINALS AND POWER SUPPLY PANELS MAY BE USED. ACCESS MUST BE PROVIDED FOR TESTING AND MAINTENANCE REQUIREMENTS.<br>5. ALL DEVICES SHALL BE PROPERLY FASTENED AND SECURED. CONTRACTOR SHALL VERIFY THAT EXISTING JUNCTION BOXES BEING REUSED ARE PROPERLY SECURED PRIOR TO INSTALLATION OF THE NEW DEVICES.<br>6. A COMPLETE WIRING DIAGRAM AND ROUTING SCHEME SHALL BE SUBMITTED TO THE ARCHITECT BY THE CONTRACTOR FOR APPROVAL PRIOR TO THE INSTALLATION.<br>7. ALL WIRING SHALL BE CONTINUOUS WITHOUT SPLICES BETWEEN DEVICES.<br>8. FOLLOW POLARITY OF ALL DEVICES.<br>9. REFER RISER DIAGRAM AND MANUF.'S PUBLISHED DOCUMENTATION FOR WIRING REQUIREMENTS.<br>10. ALL WIRING AND CONDUITS INSTALLED UNDER METAL-CORRUGATED SHEET ROOF DECKING SHALL BE INSTALLED AND SUPPORTED SO THERE IS NOT LESS THAN 1-1/2" MEASURED FROM THE LOWEST SURFACE OF THE ROOF DECKING TO THE TOP OF THE CABLE, RACEWAY, OR BOX.                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 3  | <b>LABELING AND IDENTIFICATION</b><br>1. ALL NEW JUNCTION BOXES, OUTLET BOXES, AND ASSOC. COVER PLATES INSTALLED AS PART OF THIS FIRE ALARM SYSTEM SHALL BE PAINTED RED.<br>2. WHEN NFPA 70, "FIRE ALARM CIRCUITS SHALL BE IDENTIFIED AT TERMINAL AND JUNCTION LOCATIONS IN A MANNER THAT WILL PREVENT UNINTENTIONAL INTERFERENCE WITH SIGNALING CIRCUIT DURING TESTING AND SERVICING".                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 4  | <b>DEVICE LAYOUT</b><br>1. THE DESIGN SHALL INCLUDE COMPLETE SMOKE DETECTION THROUGHOUT THE BUILDING. CORRIDOR DETECTION SHALL BE SPACED 35 - 40 FEET ON CENTER. COORDINATE DETECTOR LOCATIONS WITH CEILING DIFFUSERS; NONE MAY BE CLOSER THAN 3 FEET.<br>2. IN ALL AREAS, THE DETECTOR SHALL BE INSTALLED AT THE HIGHEST POINT AT THE LOCATION SHOWN ON THE PLANS.<br>3. THE LOCATIONS OF ALL DEVICES DEPICTED ON THE PLANS ARE APPROXIMATE AND SCHEMATIC. HOWEVER THE DEVICES SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO THE LOCATION DEPICTED.<br>4. ADJUSTMENT OF SMOKE DETECTOR LOCATION OF MORE THAN 5'-0" WILL REQUIRE APPROVAL OF ARCHITECT.<br>5. IN ROOMS WITH SMOKE DETECTORS, ALL AREAS OF THE CEILING MUST BE WITHIN 21' OF A DETECTOR. CONTRACTOR SHALL BE AWARE OF EXACT PLACEMENT WITHIN THE ROOM.<br>6. VISUAL NOTIFICATION MUST BE IN COMPLIANCE WITH NFPA 72, INCLUDING MINIMUM CANDELA INTENSITY THROUGHOUT ALL PUBLIC SPACES INCLUDING BUT NOT LIMITED TO CORRIDORS, AND RESTROOMS. SYNCHRONIZE VISUAL NOTIFICATION DEVICES WHEN MULTIPLE DEVICES ARE IN THE LINE OF SIGHT, THE PREFERRED METHOD IS TO SYNCHRONIZE THE CIRCUIT AT THE INDIVIDUAL FLOOR TERMINAL CABINET.<br>7. VISUAL NOTIFICATION PLACEMENT - WHILE THE PLAN LOCATIONS ARE SCHEMATIC, THE CONTRACTOR SHALL INSTALL THE DEVICES AS PER THE VISUAL NOTIFICATION DEVICE SPACING DETAIL.<br>8. THE EMERGENCY VOICE/ALARM COMMUNICATION SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 72. THE OPERATION OF ANY AUTOMATIC FIRE DETECTOR OR MANUAL FIRE ALARM BOX SHALL AUTOMATICALLY SOUND AN ALERT TONE FOLLOWED BY VOICE INSTRUCTIONS GIVING APPROVED INFORMATION AND DIRECTIONS FOR A GENERAL OR STAGED EVACUATION IN ACCORDANCE WITH THE BUILDING'S FIRE SAFETY AND EVACUATION PLANS. AT A MINIMUM, INDIVIDUAL PAGING ZONES SHALL BE PROVIDED AS FOLLOWS: <ul style="list-style-type: none"><li>SPECIAL CALLS:<ul style="list-style-type: none"><li>ELEVATOR GROUPS.</li><li>INTERIOR EXIT STAIRWAYS.</li><li>EACH FLOOR.</li><li>AREAS OF REFUGE.</li></ul></li></ul> |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 5  | <b>NOTIFICATION OUTPUT</b><br>1. UPON OPERATION OF A FIRE ALARM INITIATING DEVICE, THE FIRE ALARM SYSTEM WILL: <ul style="list-style-type: none"><li>NOTIFY OCCUPANTS BY ACTIVATING A TEMPORAL THREE ALARM SIGNAL FOLLOWED BY A VOICE INSTRUCTIONS AND</li><li>ACTIVATE THE VISIBLE APPLIANCES (STROBES).</li></ul> 2. SUBSEQUENT ACTIVATIONS OF INITIATING DEVICES WILL NOT INITIATE ANY NEW ALARM OUTPUTS, BUT WILL APPEAR AT THE FIRE ALARM CONTROL UNIT AND PRINTER. SUBSEQUENT TO THE ORIGINAL ALARM, ACTIVATION OF INITIATING DEVICES.<br>3. PROVIDE THE ABILITY TO SILENCE AUDIBLE SIGNALS WHILE VISUAL STROBE SIGNAL CONTINUE SYNCHRONIZED FLASHING.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 6  | <b>SPARE CAPACITY</b><br>1. THE QUANTITY OF SLC & NAC'S SHALL BE DETERMINED BY THE CONTRACTOR. ACTIVE CAPACITY SHALL NOT EXCEED 80% OF THE CIRCUIT CONSIDERING BOTH CIRCUIT AND PANEL LIMITATIONS. THIS INCLUDES DEVICE COUNT, CIRCUIT LENGTH, VOLTAGE DROP, AND PANEL CAPACITY. OTHER SPARE CAPACITY SHOULD BE AS PER SPECIFICATION.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 8  | <b>SPARES</b><br>1. UNLESS NOTED OTHERWISE IN THE SPECIFICATIONS, THE CONTRACTOR SHALL MAKE AN ALLOWANCE FOR A MINIMUM OF 5% FIRE ALARM DEVICES TO BE INSTALLED AS TO PROVIDE ADEQUATE COVERAGE DUE TO OBSTRUCTION, DUCTWORK, PIPING, ETC. INSTALLED DURING CONSTRUCTION, WHICH MAY ALTER THE ORIGINAL DESIGN. DEVICES CAN BE, BUT ARE NOT LIMITED TO, SMOKE DETECTORS, HEAT DETECTORS, DOOR HOLDERS, DUCT DETECTORS, FAN SHUTDOWNS, INPUT MODULES, OUTPUT MODULES, ETC. INCLUDE ALL LABOR AND MATERIALS, INCLUDING WIRE, BOXES, CONDUIT, TERMINATIONS, HARDWARE, SOFTWARE, PROGRAMMING, AND TESTING.<br>2. UNLESS NOTED OTHERWISE IN THE SPECIFICATIONS, THE CONTRACTOR SHALL MAKE AN ALLOWANCE FOR A MINIMUM OF 20 ADDITIONAL DUCT DETECTORS AND ASSOCIATED RELAYS FOR SHUTDOWN AND REMOTE TEST SWITCHES TO BE INSTALLED AS TO PROVIDE ADEQUATE COVERAGE OF THE HVAC SYSTEMS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 9  | <b>AUXILIARY CONTROLS</b><br>1. COORDINATE AUXILIARY CONTROLS FOR FANS, DAMPERS, AND DOOR CONTROL. INCLUDE ALL NECESSARY COMPONENTS AND RELAYS TO MAKE AN OPERATIONAL SYSTEM.<br>2. COORDINATE INTERFACE WITH ALL STAGE DIMMING PANELS TO BRING UP THE "HOUSE LIGHTS" UPON OPERATION OF A FIRE ALARM INITIATING DEVICE. INCLUDE ALL NECESSARY COMPONENTS AND RELAYS TO MAKE AN OPERATIONAL SYSTEM.<br>3. PROVIDE ADDRESSABLE MONITORING MODULES OR CONTROL MODULES FOR THE FUNCTIONS LISTED BELOW WHETHER OR NOT THE EXACT LOCATIONS ARE SHOWN ON THE FLOOR PLANS: <ul style="list-style-type: none"><li>ELEVATOR<ul style="list-style-type: none"><li>SIGNAL THE CONTROLLER TO INITIATE PRIMARY, SECONDARY, AND FIRE FUNCTIONS</li><li>SIGNAL HYVAC FAN SHUTDOWN</li><li>SIGNAL RELEASE OF MAGNETIC SMOKE DOOR HOLDER</li></ul></li><li>AUDITORIUM<ul style="list-style-type: none"><li>SIGNAL HOUSE AND/OR EGRESS LIGHTING TO ACTIVATE</li><li>SIGNAL THE SHUNT TRIP TO DE-ACTIVATE THE SOUND SYSTEM</li><li>SIGNAL RELEASE OF STAGE FIRE CURTAIN</li></ul></li><li>SECURITY<ul style="list-style-type: none"><li>SIGNAL THE EGRESS DOOR LOCKS TO UNLOCK</li><li>MONITOR KNOX BOX TO OPEN DOOR ACTIVITY</li></ul></li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 10 | <b>120VAC CIRCUITS</b><br>1. THE CONTRACTOR SHALL INCLUDE IN THE BASE BID ALL 120VAC CIRCUITS THAT ARE REQUIRED TO SUPPORT THE OPERATION OF THE FIRE ALARM SYSTEM. COORDINATE THE REQUIREMENTS WITH THE FIRE ALARM VENDOR, PROVIDE POWER FROM CLOSEST AVAILABLE PANEL.<br>2. CIRCUIT DISCONNECTING MEANS SHALL HAVE A RED MARKING, SHALL BE ACCESSIBLE ONLY TO AUTHORIZED PERSONNEL, AND SHALL BE IDENTIFIED AS "FIRE ALARM CIRCUIT."<br>3. THE LOCATION OF THE CIRCUIT DISCONNECTING MEANS SHALL BE PERMANENTLY IDENTIFIED AT THE FIRE ALARM CONTROL PANEL.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 11 | <b>TELEPHONE AND COMMUNICATION WIRING</b><br>1. ALL TELEPHONE AND COMMUNICATION WIRING SHALL BE INSTALLED IN 1/2" GALV., THREADED, RIGID CONDUIT FOR INTERCONNECTING THE NEW FACP AND TELEPHONE BLOCK. PROVIDE TWO (2) SEPARATE CONDUITS TO EACH LOCATION.<br>2. ALL TELEPHONE/OFFSITE PREMISES SIGNALING WIRE SHALL BE INSTALLED NEW FROM NEW FACP LOCATION TO TELEPHONE BLOCK.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

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| FIRE ALARM GENERAL NOTES & REQUIREMENTS (CONT.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>SITE CONDITION</b><br>1. THE CONTRACTOR IS ADVISED THAT THE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE NOT INTENDED TO SHOW ALL DETAILS.<br>2. THE CONTRACTOR IS EXPECTED TO PROVIDE ALL MISCELLANEOUS PARTS AND LABOR REQUIRED TO INSTALL A COMPLETE WORKABLE SYSTEM.<br>3. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER TO DEFINE AREAS WHERE THE INSTALLER CAN STORE TOOLS, EQUIPMENT AND OTHER MATERIALS FOR THIS PROJECT.<br>4. THE AREA IS TO BE KEPT CLEAN AND NEAT AT ALL TIMES. CONSTRUCTION DEBRIS SHALL BE REMOVED DAILY.<br>5. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE SECURITY OF ALL ITEMS STORED IN THIS AREA.                                                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>SUBMITTALS</b><br>1. SIGNED (NICET IV MINIMUM) FIRE ALARM SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO SYSTEM INSTALLATION. THE SHOP DRAWINGS SHALL CONFORM TO BOTH IBC-2021 SECTION 907.1.2 AND NFPA 72-2019, SECTIONS 7.4. <ul style="list-style-type: none"><li>SHOP DRAWINGS FOR THE FIRE ALARM SYSTEM SHALL BE SUBMITTED WITH THE CERTIFICATION OF A NICET LEVEL IV FIRE ALARM TECHNICIAN CERTIFYING THEY ARE IN COMPLIANCE WITH BOTH THE CONSTRUCTION DOCUMENTS AND THE CURRENT FIRE ALARM CODE.</li></ul> 2. BOTH FLOOR PLANS AND RISER DIAGRAM SHALL INCLUDE DEVICE ADDRESSES AND WIRE/CABLE ROUTING. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>CLOSEOUT DOCUMENTS</b><br>1. BEFORE REQUESTING FINAL APPROVAL OF THE INSTALLATION, THE INSTALLING CONTRACTOR SHALL FURNISH A WRITTEN STATEMENT TO THE ARCHITECT AND ENGINEER HAS BEEN INSTALLED IN ACCORDANCE WITH APPROVED PLANS AND SHOP DRAWINGS AND TESTED IN ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED INSTRUCTIONS AND THE APPROPRIATE NFPA REQUIREMENTS.<br>2. "AS-BUILT" DOCUMENTS COMPLYING WITH NFPA 72-2019 SECTIONS 7.5. THE AS-BUILT RISER AND FLOOR PLANS SHALL BE SUBMITTED PDF, CAD, AND HARD COPY FORMAT.<br>3. "AS-BUILT" FLOOR PLANS AND RISER DIAGRAM SHALL INCLUDING DEVICE ADDRESSES AND WIRE ROUTING.                                                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>DUCT DETECTORS</b><br>1. THE LOCATION OF ALL DETECTORS IN AIR DUCT SYSTEMS SHALL BE PERMANENTLY AND CLEARLY IDENTIFIED AND RECORDED AT THE MAIN FIRE ALARM CONTROL PANEL IN COMPLIANCE WITH NFPA 72 AND NFPA 90A.<br>2. ALL DUCT DETECTORS SHALL BE PROVIDED WITH A REMOTE TEST STATION IN AN AREA ADJACENT TO THE DEVICE AND APPROVED BY THE OWNER.                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>HVAC</b><br>1. MOTOR SHUTDOWN: OPERATING FANS IN AIR HANDLING SYSTEMS AND EXHAUST SYSTEMS, SERVING MULTIPLE SPACES, ASSEMBLY SPACES OR CORRIDORS, HAVING FAN CAPACITIES OF GREATER THAN 2000 CFM, SHALL BE INTERCONNECTED TO THE FIRE ALARM SYSTEM TO SHUT DOWN SUCH MOTORS WHEN THE FIRE ALARM IS ACTIVATED. TIE MOTORS INTO OUTPUT RELAY OF THE LOCAL DUCT DETECTOR.<br>2. PROVIDE & INSTALL RELAYS AT ALL GAS FIRED HVAC UNITS FOR SHUTDOWN ON AN ALARM CONDITION.                                                                                                                                                                                                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>DEVICE PROTECTION</b><br>1. ALL SMOKE AND HEAT DETECTORS, HORN STROBES, STROBES, AND MANUAL PULL STATIONS SUBJECT TO PHYSICAL DAMAGE (I.E. GYMNASIUMS, MULTI-PURPOSE ROOMS, ETC.) SHALL BE INSTALLED WITH VANDAL RESISTANT GUARDS.                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>DEMOLITION REQUIREMENTS</b><br>1. UPON COMPLETION OF THE NEW SYSTEM, ALL EXISTING FIRE ALARM EQUIPMENT NO LONGER IN USE, SHALL BE DISCONNECTED AND REMOVED BACK TO THE FACP.<br>2. REFER TO THE "FIRE ALARM DEMOLITION NOTES" FOR ADDITIONAL INFORMATION.                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>SPECIAL PROGRAMMING</b><br>1. THE "ALL" SWITCH SHALL BE PROGRAMMED TO ALLOW FOR THE OWNER TO PERFORM FIRE DRILLS WITH A SINGLE BUTTON PUSH THAT WILL ONLY SOUND THE NOTIFICATION APPLIANCES WITHOUT SHUTTING MAGNETIC DOOR HOLDERS, SHUTTING DOWN HVAC EQUIPMENT, RECALLING THE ELEVATOR, ETC.                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>REMOTE INDICATORS</b><br>1. PROVIDE REMOTE LED INDICATORS FOR ALL CONCEALED FIRE ALARM DEVICES SUCH AS DUCT SMOKE DETECTORS, SMOKE CEILING DETECTORS, MONITORING/CONTROL MODULES, ETC. LED INDICATORS FOR DEVICES MOUNTED ABOVE SUSPENDED CEILINGS SHALL BE MOUNTED BELOW THEIR ASSOCIATED DEVICE. LABEL INDICATOR (TYPED LABEL) TO INDICATE DEVICE SERVED.                                                                                                                                                                                                                                                                                                                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| FIRE ALARM DEMOLITION REQUIREMENTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>GENERAL PROJECT INFO:</b><br>1. THE DEMOLITION DRAWINGS ARE DIAGRAMMATIC AND INDICATED THE GENERAL INTENT AND SCOPE. PLANS DO NOT ATTEMPT TO SHOW ALL DEMOLITION ITEMS, UNLESS OTHERWISE NOTED. DEVICES SHOWN ARE FOR INFORMATION PURPOSES ONLY. FIELD VERIFY ALL DEMOLITION ITEMS AND THE EXTENT OF DEMOLITION WORK, CONDITIONS UNDER WHICH DEMOLITION IS TO BE ACCOMPLISHED ALONG WITH KIND AND AMOUNT OF MATERIALS BEING REMOVED AND PROVIDE FOR REMOVAL OF ALL DEVICES ACCORDINGLY PRIOR TO BID.<br>2. CONTRACTOR SHALL INCLUDE ALL LABOR AND MATERIALS IN THE BASE BID INCLUDING ALL TEMPORARY CONNECTIONS, CONDUIT AND WIRE IN ORDER TO ACCOMMODATE CONSTRUCTION AND PROVIDE CONTINUOUS SERVICE TO DEVICES. SYSTEMS THAT ARE TO REMAIN TEMPORARY OR PERMANENTLY AND REQUIRE THE SHUTDOWN OF THE BUILDING POWER SHALL BE PERFORMED DURING OVERTIME AND SHALL BE INCLUDED IN THE BASE BID.<br>3. THE CONTRACTOR IS RESPONSIBLE FOR THE SEQUENCE OF ALL WORK AND SHALL INCLUDE IN THE BASE BID ALL LABOR AND MATERIALS REQUIRED FOR THE EXTENSIONS, RE-ROUTING AND RELOCATION OF EXISTING SYSTEM COMPONENTS, EQUIPMENT, WIRING, CONDUITS AND CABLES TO MAINTAIN OPERATION OF ALL SYSTEMS THROUGHOUT THE BUILDING DURING DEMOLITION AND CONSTRUCTION PHASES.<br>4. THE CONTRACTOR SHALL REPORT TO THE CLIENT ANY AND/OR ALL CONDITIONS THAT MAY INTERFERE WITH OR OTHERWISE AFFECT OR PREVENT THE PROPER EXECUTION AND COMPLETION OF THE WORK OF THIS CONTRACT.<br>5. THE CONTRACTOR SHALL EXECUTE ALL WORK WITHIN THE REGULATIONS OF THE BUILDING FOR DEMOLITION AND REMOVAL OF DEBRIS. OVERTIME WORK REQUIRED WILL BE AT NO EXTRA COST TO THE CLIENT.<br>6. ALL EQUIPMENT SHALL BE DISCONNECTED AND REMOVED BACK TO ITS SOURCE OF ORIGINATION UNLESS OTHERWISE NOTED ("U.O.N.") BY EXISTING TO REMAIN ("E"). ALL DISCONNECTED AND REMOVED ITEMS THAT ARE NOT BEING REUSED SHALL BE RETURNED TO THE OWNER OR DISPOSED OFF SITE IN AN APPROVED METHOD.<br>7. THE CONTRACTOR SHALL AT ALL TIMES PROTECT THE PROPERTY OF THE CLIENT.<br>8. UNLESS OTHERWISE NOTED, ALL OF THE EXISTING EQUIPMENT, WHETHER SPECIFICALLY INDICATED ON THIS DRAWING OR NOT, SHALL BE DISCONNECTED AND REMOVED FROM SERVICE. THE OWNER HAS FIRST RIGHT OF REFUSAL ON ALL REMOVED ITEMS. ALL ITEMS NOT WANTED BY THE OWNER SHALL BE PROPERLY DISPOSED OF OFFSITE BY THE CONTRACTOR IN ACCORDANCE WITH THE LAW.<br>9. RELOCATE OR REMOVE ALL DEVICES IN ACCORDANCE WITH THE APPLICABLE CODES.<br>10. BEFORE THE START OF THE CONTRACTOR SHALL CHECK ALL EXISTING DEVICES, EQUIPMENT, ETC. THAT IS NOTED OR REQUIRED TO BE REUSED TO SATISFY HIMSELF THAT THEY ARE OPERATING PROPERLY. SHOULD ANY OF THE ITEMS NOT BE OPERATING PROPERLY, CONTRACTOR SHALL REPORT SAME TO THE ENGINEER AND AWAIT HIS DIRECTIONS. CONTRACTOR NOT COMPLY WITH THE ABOVE WILL BE RESPONSIBLE FOR PROVIDING OPERATIONAL ITEMS AT HIS EXPENSE.<br>11. FIELD INVESTIGATE THE EXISTING SYSTEM INSTALLATION. ALL EXISTING INSTALLATIONS THAT ARE TO REMAIN BUT ARE NOT CURRENTLY IN COMPLIANCE WITH CURRENT CODES SHALL BE CORRECTED, INCLUDING BUT NOT LIMITED TO THE FOLLOWING: UN-SUPPORTED WIRE, CONDUIT AND JUNCTION BOXES LAYING ON TOP OF CEILING TILES, WIRE, CONDUIT AND/OR JUNCTION BOXES SUPPORTED ONLY BY TIE-WIRE, RAISE AND SUPPORT CONDUIT WITH STRAPS PER SPECS. RAISE AND SUPPORT WIRE WITH BRIDLE RINGS, J-HOOKS, OR OTHER APPROPRIATE MEANS. PROVIDE NEW CONDUIT/WIRE AS REQUIRED. DEVICES IMPROPERLY SUPPORTED OR INADEQUATELY SUPPORTED BY DEVICE BOXES - PROVIDE PROPER SUPPORT PER N.E.C. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>DEMOLITION REQUIREMENTS:</b><br>1. REMOVE ABANDONED EQUIPMENT, DEVICES AND WIRING BACK TO THE SOURCE. ABANDONED WIRING AND RACEWAYS CAN RESULT FROM ACTIONS THAT INCLUDE THE FOLLOWING: <ul style="list-style-type: none"><li>DEVICES ARE REMOVED OR RELOCATED.</li><li>SYSTEM IS NO LONGER USED.</li><li>THERE IS NO DEMONSTRABLE NEAR TERM FUTURE USE FOR THE EXISTING RACEWAY SYSTEM.</li></ul> 2. UNUSED EQUIPMENT AND MATERIAL SHOULD ONLY BE LEFT IN PLACE IF ONE OR MORE OF THE FOLLOWING CONDITIONS EXIST: <ul style="list-style-type: none"><li>THE REMOVAL REQUIRES THE DEMOLITION OF OTHER STRUCTURES OR EQUIPMENT THAT IS STILL IN USE. AN EXAMPLE IS CONDUIT EMBEDDED IN WALLS.</li><li>THE COST OF REMOVAL IS EXCESSIVE DUE TO HAZARDS, CONSTRUCTION METHODS, OR RESTRICTED ACCESS. A FINAL DETERMINATION FOR THIS CONDITION SHALL BE MADE BY THE ENGINEER.</li><li>IF EITHER OF THE ABOVE TWO CASES EXIST, REMOVE THE CONDUITS, INCLUDING THOSE ABOVE ACCESSIBLE CEILINGS, TO THE POINT THAT BUILDING CONSTRUCTION COVERS THEM. CUT CONDUIT BENEATH OR FLUSH WITH BUILDING CONSTRUCTION, PLUG, CAP, OR SEAL THE REMAINING UNUSED CONDUITS. INSTALL BLANK COVERS FOR ABANDONED BOXES AND ENCLOSURES NOT REMOVED.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>PATCHING/REPAIRING:</b><br>1. RESTORE THE ORIGINAL FIRE RATING OF FLOORS, WALLS, AND CEILINGS AFTER ELECTRICAL DEMOLITION USING A UL CLASSIFIED FIRE SEALANT.<br>2. EXCEPT FOR AREAS WHERE PARTITIONS OR CEILINGS ARE TO BE DEMOLISHED, CONTRACTOR SHALL REPLACE TO THE EXISTING CONDITION IN AREA OF DISTURBED CEILING. ANY DAMAGED OR BROKEN CEILING TILES AS THE RESULT OF CONTRACTOR'S DEMOLITION SHALL ALSO BE REPLACED, INCLUSIVE OF WHERE EXISTING DETECTORS ARE BE REMOVED OR MADE A HOLE IS LEFT BEHIND.<br>3. UPON COMPLETION OF THE DEMOLITION WORK, THE CONTRACTOR SHALL PROVIDE THAT ALL AREAS BE LEFT BROOM CLEAN.<br>4. FURNISH AND INSTALL KNOCKOUT PLUGS ON ALL EXISTING PANELS, EQUIPMENT, AND OUTLET BOX OPENINGS CREATED BY THE REMOVAL OR RELOCATION OF EXISTING RACEWAYS.<br>5. WHERE AN EXISTING DEVICE, PIECE OF EQUIPMENT, ETC., IS BEING REMOVED FROM AN EXISTING WALL AND THAT WALL IS TO REMAIN CONTRACTOR SHALL PATCH AND PAINT EXISTING WALL TO ARCHITECT'S SATISFACTION.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

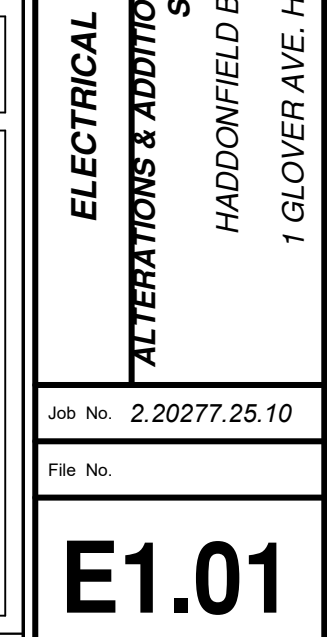
| GENERAL PROJECT REQUIREMENTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| PROJECT INFORMATION:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. UNLESS SPECIFICALLY NOTED OTHERWISE, IT SHALL BE UNDERSTOOD THAT WHEN THE WORDS "OWNER" OR "CLIENT" ARE USED IN THESE DRAWINGS THEY ARE SERVICE CONTRACTOR AND ALL REFER TO THE HADDONFIELD BOARD OF EDUCATION.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. UNLESS SPECIFICALLY NOTED OTHERWISE, IT SHALL BE UNDERSTOOD THAT WHEN THE WORDS "ARCHITECT", "ENGINEER", OR "A/E" ARE USED IN THESE DRAWINGS THEY ARE INTERCHANGEABLE AN ALL REFER TO LAN ASSOCIATES, ENGINEERING, PLANNING, ARCHITECTURE SURVEYING ("LAN").                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. UNLESS SPECIFICALLY NOTED OTHERWISE, IT SHALL BE UNDERSTOOD THAT THERE IS ONLY ONE CONTRACTOR FOR THIS PROJECT. WHEN THE WORD "CONTRACTOR" IS USED IT REFERS TO THE CONTRACTOR AWARDED THE BID.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. WHERE ATRIM REQUIREMENTS WITHIN A DOCUMENT IS REFERRED TO IN THESE DRAWINGS IN THE SINGULAR NUMBER (E.G., "THE SWITCH", "THE RECEPTACLE"), THIS REFERENCE SHALL BE DEEMED TO APPLY TO AS MANY SUCH DEVICES AS ARE REQUIRED TO COMPLETE THE INSTALLATION AS SHOWN ON THE DRAWINGS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5. HEALTH, SAFETY AND CRITICAL OPERATING EQUIPMENT SHALL NOT BE COMPROMISED WITHOUT OWNERS AUTHORIZATION. SCHEDULE SHUTDOWN DURING OFF HOURS AND IMPLEMENT AND MAINTAIN A TEMPORARY OPERATIONAL PLAN.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| CODE & STANDARDS COMPLIANCE:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. CODE COMPLIANCE IS MANDATORY. NOTHING IN THESE DRAWINGS AND SPECIFICATIONS PERMITS WORK NOT CONFORMING TO THESE CODES. WHERE WORK IS SHOWN TO EXCEED MINIMUM CODE REQUIREMENTS, COMPLY WITH DRAWINGS AND SPECIFICATIONS. WHEN DIFFERENCES IN UTILITY SPECIFICATIONS OR STANDARDS, GOVERNMENTAL ORDINANCES OR CODES OCCUR, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN THE INSTALLATION.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. THE INSTALLATION SHALL BE IN ACCORDANCE WITH THE CURRENTLY ENFORCED EDITION OF THE NATIONAL ELECTRICAL CODE (NEC), FIRE ALARM CODE (NFPA 72), NATIONAL ELECTRICAL SAFETY CODE (NESC), AMERICAN ELECTRICIANS' HANDBOOK, INTERNATIONAL BUILDING CODE (IBC), AMERICANS WITH DISABILITIES ACT (ADA), NFPA 55 & 99 AND NEC STANDARD OF INSTALLATION. WHEREVER IN THE DOCUMENTS THE WORD "CODE" IS STATED, THE MORE STRINGENT OF THE ABOVE REFERENCED CODES IS IMPLIED.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. ALL CONTRACTOR SUPPLIED MATERIALS/EQUIPMENT SHALL BE NEW AND UL LISTED OR APPROVED BY ANOTHER NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. THE CONTRACTOR SHALL PAY FOR AND OBTAIN ALL PERMITS AND INSPECTIONS REQUIRED BY THE BUILDING AND SAFETY CODES AND ORDINANCES, AND THE RULES AND REGULATIONS OF ANY LEGAL BODY HAVING JURISDICTION. PERMIT AND INSPECTIONS SHALL BE INCLUDED IN THE BASE BID AND SHALL NOT BE CAUSE FOR AN EXTRA.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5. CONTRACTOR SHALL CONFIRM TO ALL SAFETY RULES AND OTHER REGULATIONS, ETC. PERTAINING TO CONSTRUCTION WORK ON THE CLIENT'S PREMISES. CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ALL RULES AND REGULATIONS HAVE BEEN MET AND COORDINATE THIS WORK WITH RESPONSIBLE CLIENT'S PERSONNEL.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6. ALL EQUIPMENT AND RACEWAYS PERMANENTLY ATTACHED TO STRUCTURES, INCLUDING SUPPORTING STRUCTURES AND ATTACHMENTS TO NON-BUILDING STRUCTURES, SHALL BE ANCHORED FOR SEISMIC LOADING TO RESIST A HORIZONTAL FORCE ACTION IN ANY DIRECTION. CONTRACTOR SHALL PROVIDE SEISMIC RESTRAINTS FOR ALL CONDUITS LARGER THAN 2 1/2" TRADE DIAMETER. PROVIDE SWAY BRACES FOR CONDUIT AND EQUIPMENT SUSPENDED FROM THE OVERHEAD. PROVIDE ANCHOR BOLTS FOR FLOOR AND WALL MOUNTED EQUIPMENT. THE INSTALLATION SHALL MEET THE REQUIREMENTS OF INTERNATIONAL BUILDING CODE (IBC) SECTIONS 1614 AND 1621 AS THEY APPLY TO ELECTRICAL EQUIPMENT FOR EARTHQUAKE LOADS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7. CONTRACTOR SHALL REVIEW CODE COMPLIANCE DRAWINGS AND IDENTIFY ALL PENETRATIONS THROUGH FIRE/SMOKE PARTITIONS, FLOOR AND ROOFS. PATCH COMPROMISED PARTITIONS TO MATCH FIRE/SMOKE RESISTANCE RATING AS STATED ON CODE COMPLIANCE DRAWINGS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GENERAL PROCEDURES:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. ALL EQUIPMENT SHALL BE AS INDICATED OR AS APPROVED BY THE ENGINEER/ARCHITECT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. THE COST INCURRED BY THE ACCEPTANCE OF SUBSTITUTIONS SHALL BE BORNE BY THE CONTRACTOR. PROOF FOR THE EQUALITY OF THE SUBSTITUTIONS SHALL BE BY THE CONTRACTOR AND DIFFERENCES SHALL BE ENUMERATED WITH THE SUBMITTAL.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. OBTAIN SHOP DRAWINGS AND WIRING DIAGRAMS FOR THE PROPER INSTALLATION OF RELATED WORK.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. THE CONTRACTOR SHALL REMOVE AND REINSTALL CEILING SYSTEMS AS REQUIRED FOR THE INSTALLATION OF NEW WORK AND REPLACE IN KIND, ANY COMPONENTS DAMAGED BY PERSONNEL OR EQUIPMENT DURING PERFORMANCE OF THE WORK.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF DEBRIS GENERATED BY HIS WORK AND WORKERS AT THE END OF EACH WORKING DAY AND FOR GENERAL GOOD HOUSEKEEPING BY HIS WORKERS. CONTRACTOR SHALL PROVIDE REQUIRED REFUSE CONTAINERS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SITE CONDITIONS/DRAWING COORDINATION:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. THESE DRAWINGS AND SPECIFICATIONS ILLUSTRATE THE WORK TO BE PERFORMED. THE ENGINEER IS NOT RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES USED TO DO THE WORK, OR THE SAFETY ASPECTS OF CONSTRUCTIONS, AND NOTHING ON THESE DRAWINGS EXPRESSED OR IMPLIED CHANGES THIS CONDITION. PRIOR TO BIDDING AND/OR STARTING WORK THE CONTRACTOR SHALL VISIT THE PROJECT SITE TO DETERMINE THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED AND SHALL BE RESPONSIBLE FOR KNOWING HOW THEY AFFECT THE WORK. SCHEDULE SITE VISITS WITHIN 10 DAYS OF THE BIDDING PROCESS. THE CONTRACTOR SHALL FIELD VERIFY ALL SITE DIMENSIONS AND ROOM LAYOUTS. SUBMISSION OF A BID TO PERFORM THIS WORK IS AN ACKNOWLEDGEMENT OF THESE RESPONSIBILITIES, AND THAT THEY HAVE BEEN FULLY CONSIDERED IN PLANNING OF THE WORK, AND THE BID PRICE. NO CLAIMS OR EXTRA CHARGES DUE TO THESE CONDITIONS WILL BE FORTHCOMING.                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. THE CLIENT WILL OCCUPY THE SITE AND EXISTING BUILDING DURING THE ENTIRE CONSTRUCTION PERIOD. COOPERATE WITH THE CLIENT DURING CONSTRUCTION OPERATIONS TO AVOID ANY CONFLICTS. PERFORM THE WORK SO AS NOT TO INTERFERE WITH THE CLIENT'S OPERATIONS. SCHEDULE ALL POWER OUTAGES WITHIN 10 DAYS OF THE BIDDING PROCESS. THE CONTRACTOR SHALL FIELD VERIFY ALL SITE DIMENSIONS AND ROOM LAYOUTS. SUBMISSION OF A BID TO PERFORM THIS WORK IS AN ACKNOWLEDGEMENT OF THESE RESPONSIBILITIES, AND THAT THEY HAVE BEEN FULLY CONSIDERED IN PLANNING OF THE WORK, AND THE BID PRICE. NO CLAIMS OR EXTRA CHARGES DUE TO THESE CONDITIONS WILL BE FORTHCOMING.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. EXISTING PROJECT CONDITIONS INDICATED ARE BASED ON FIELD OBSERVATIONS. EXISTING DESIGN/CONSTRUCTION DOCUMENTS AND EXISTING RECORD DOCUMENTS AND ARE INTENDED TO INDICATE THE SCOPE OF THE WORK AFFECTED BY THIS PROJECT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. DRAWINGS SHALL NOT BE SCALED. DRAWINGS INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND REQUIREMENTS OF THE WORK. ALTHOUGH SIZE AND LOCATION OF EQUIPMENT IS DRAWN TO SCALE WHEREVER POSSIBLE, CONTRACTOR SHALL MAKE USE OF ALL DATA IN ALL OF THE CONTRACT DOCUMENTS AND VERIFY INFORMATION AT THE PROJECT SITE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5. THE CONTRACTOR SHALL MAKE HIS OWN TAKEOFF ON ALL QUANTITIES. IT SHALL BE HIS RESPONSIBILITY, AT HIS COST, TO INCLUDE ALL EQUIPMENT AND MATERIAL IN ORDER TO COMPLY WITH THE INTENT OF THE DRAWINGS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6. THE CONTRACT DRAWINGS DEPICT THE APPROXIMATE LOCATION OF ALL REQUIRED EQUIPMENT AND IF SHOWN, THE DIAGRAMMATIC ARRANGEMENT OF PIPING, RACEWAYS, CONDUITS, ETC. HEREIN AFTER REFERRED TO AS "CONDUIT". CONDUIT RUNS, IF SHOWN, HAVE BEEN DEPICTED WITH THE INTENTION OF MOST CLEARLY INDICATING THE PROPOSED ROUTING. ACTUAL RUNS MAY DIFFER IF KEPT WITHIN THE REQUIREMENTS AND PROVISIONS OF THESE SPECIFICATIONS, AND PROVIDING THAT THAT ALL MODIFICATIONS HAVE BEEN SHOWN IN THE SHOP DRAWINGS. CONTRACTOR RESPONSIBLE TO DETERMINE CONDUIT RUNS AND "CLEAR" PIPING, DUCTWORK, ACCESS DOORS, AND OTHER OBSTRUCTIONS AS APPLICABLE. CONTRACTOR SHALL COORDINATE CONDUIT WITH WORK OF OTHER TRADES AND ALTER WHERE NECESSARY TO AVOID INTERFERENCE. SUBMIT FOR APPROVAL, PRIOR TO SCALED INSTALLATION DRAWINGS SHOWING THE LOCATION OF ALL NEW EQUIPMENT/DEVICES TO BE INSTALLED AND INDICATING CIRCUITRY. SHOP DRAWINGS SHALL INCLUDE ALL WIRING, PULL BOXES, JUNCTION BOXES, FITTINGS, WIRING DEVICES AND DIMENSIONED CLEARANCES FROM THE STRUCTURE AND EQUIPMENT. COORDINATE SHOP DRAWINGS WITH OTHER TRADES PRIOR TO SUBMISSION.                                                                                                                                                                                                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7. ANY CUTTING, PATCHING, OR FINISH REPAIR WORK REQUIRED FOR THE INSTALLATION IS THE RESPONSIBILITY OF THE CONTRACTOR.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8. WHERE CONFLICTS EXIST, PROVIDE IN THE BID PROPOSAL THE COSTLIER ALTERNATIVE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| INSTALLATION:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. CONTRACTOR SHALL SUPPLY ALL LABOR, CABLES, CONDUIT BOXES, FITTINGS, WIRING MATERIALS, HARDWARE, SUPPORTS, AND MISCELLANEOUS ITEMS FOR A COMPLETE ELECTRICAL INSTALLATION AND CONNECTION OF THE ELECTRICAL WORK REQUIRED, EXCEPT THAT THE PROVISION FOR OWNER SUPPLIED EQUIPMENT SHALL BE ONLY BE COMPLETED TO THE POINT INDICATED ELSEWHERE ON THE DRAWINGS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. ALL CABLES, NOT WITHIN CONDUIT (EX. MC TYPE, FIRE ALARM, PA), ROUTED WITHIN THE CEILING CAVITY MUST BE SECURED USING BRIDLE RINGS, J-HOOKS, OR OTHER APPROPRIATE MEANS. THE CABLE MUST NOT LAY ON DROPPED CEILING PANELS, BE FASTENED TO EXISTING ELECTRICAL CONDUITS, STEAM PIPES, SPRINKLER PIPES, INSULATED PIPES, OR BE ROUTED IN SUCH A FASHION AS TO OBSTRUCT ACCESS HATCHES, DOORS, UTILITY ACCESS PANELS, MECHANICAL SERVICE WORK AREAS OR FITTINGS AND SHALL NOT BE ROUTED THROUGH FIRE DOORS, VENTILATING SHAFTS, OR GRATES. <ul style="list-style-type: none"><li>UNLESS OTHERWISE PROVIDED, MC CABLES SHALL BE SECURED AT INTERVALS NOT EXCEEDING 6'. CABLES CONTAINING FOUR OR FEWER CONDUCTORS SIZED NO LARGER THAN 10 AWG SHALL BE SECURED WITHIN 12" OF EVERY BOX, CABINET, FITTING, OR OTHER CABLE TERMINATION.</li><li>TYPE MC CABLE SHALL BE PERMITTED TO BE UNSUPPORTED WHERE THE CABLE: (A) IS FISHED BETWEEN ACCESS POINTS THROUGH CONCEALED SPACES IN FINISHED BUILDINGS OR STRUCTURES AND SUPPORTING IS IMPRACTICAL, OR (B) IS NOT MORE THAN 6' IN LENGTH FROM THE LAST POINT OF CABLE SUPPORT TO THE POINT OF CONNECTION TO LUMINAIRES OR OTHER ELECTRICAL EQUIPMENT AND THE CABLE AND POINT OF CONNECTION ARE WITHIN AN ACCESSIBLE CEILING. TYPE MC CABLE FITTINGS SHALL BE PERMITTED AS A MEANS OF CABLE SUPPORT.</li></ul> |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. ALL CABLE TRAYS AND ELECTRICAL CONDUITS SHALL BE INDEPENDENTLY SUPPORTED AND BRACED INDEPENDENTLY OF THE CEILING.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. ALL NEW WIRING IS TO BE RUN CONCEALED WHEREVER POSSIBLE. ALL CONDUCTORS SHALL BE IN A SURFACE MOUNTED METALLIC RACEWAY IN PUBLIC SPACES OR METALLIC CONDUIT IN UTILITY LOCATIONS WHEN NOT ROUTED CONCEALED IN THE CEILING/WALL CAVITIES. ANY LOCATIONS THAT DO NOT HAVE ACCESSIBLE OR DROPPED CEILINGS WILL REQUIRE THE USE OF SURFACE MOUNTED METALLIC RACEWAYS. PROVIDE PULL-BOXES (SIZE PER CODE) AND LOCATE IN CONDUIT RUNS AS REQUIRED. NO EXPOSED CABLE MAY BE INSTALLED.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5. SURFACE MOUNTED METALLIC RACEWAY SHALL MEET THE FOLLOWING CRITERIA: <ul style="list-style-type: none"><li>INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS FOR SYSTEM COMPONENTS AND APPROVED SHOP DRAWINGS. COORDINATE INSTALLATION WITH ADJACENT WORK TO ENSURE PROPER CLEARANCES AND TO PREVENT ELECTRICAL HAZARDS.</li><li>BEFORE THE START OF THE CONTRACTOR SHALL CHECK ALL EXISTING DEVICES, EQUIPMENT</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6. INSTALL IN ACCORDANCE WITH COMPLETE SYSTEM INSTRUCTION SHEETS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7. INSTALL ENCLOSURES TO BE MECHANICALLY CONTINUOUS AND CONNECTED TO ALL ELECTRICAL OUTLETS, BOXES, DEVICE MOUNTING BRACKETS, AND CABINETS. IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION SHEET.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8. INSTALL ENCLOSURES TO BE ELECTRICALLY CONTINUOUS AND BONDED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE FOR PROPER GROUNDING.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9. MECHANICAL SECURITY: RACEWAY SYSTEMS SHALL BE MECHANICALLY CONTINUOUS AND CONNECTED TO ALL ELECTRICAL OUTLETS, BOXES, DEVICE MOUNTING BRACKETS, AND CABINETS. IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION SHEETS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10. ELECTRICAL SECURITY: RACEWAY SHALL BE ELECTRICALLY CONTINUOUS AND BONDED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE FOR PROPER GROUNDING.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11. RACEWAY SUPPORT: RACEWAY SHALL BE SUPPORTED BY 2-HOLE STRAPS AT INTERVALS NOT EXCEEDING 5 FEET OR IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION SHEETS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12. ACCESSORIES: PROVIDE ACCESSORIES AS REQUIRED FOR A COMPLETE INSTALLATION, INCLUDING INSULATED BUSHINGS AND INSERTS WHERE REQUIRED BY THE MANUFACTURER.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13. UNUSED OPENINGS: CLOSE UNUSED RACEWAY OPENINGS USING MANUFACTURER'S RECOMMENDED ACCESSORIES.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14. ALL OPENINGS AND PENETRATIONS SHALL BE SEALED UPON COMPLETION OF THE ELECTRICAL INSTALLATION TO PREVENT THE SPREAD OF SMOKE AND FIRE THROUGH OPENINGS. SEAL AROUND CONDUIT AND RACEWAY PENETRATIONS THROUGH INTERIOR WALLS AND FLOOR SEPARATING AREAS TO RESTORE ORIGINAL FIRE RATING. USE A UL CLASSIFIED FIRE SEALANT. SEAL PENETRATIONS THROUGH ROOF AND EXTERIOR WALLS TO MAKE WATERPROOF. REQUEST SUBMITTAL WITH COPIES TO THE ENGINEER/ARCHITECT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15. ALL OPENINGS SHALL BE COORDINATED WITH THE OTHER TRADES TO LIMIT INTERFERENCE AND OBSTRUCTION.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16. LIMIT THE USE OF ELECTRICAL METALLIC TUBING (EMT) TO WHERE IT WILL NOT BE SUBJECT TO PHYSICAL DAMAGE OR CORROSION. USE INTERMEDIATE METAL CONDUIT (IMC) OR RIGID GALVANIZED STEEL CONDUIT (RGS) WHERE RACEWAYS ARE EMBEDDED IN CONCRETE OR EXPOSED TO PHYSICAL DAMAGE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17. INSTALL OUTDOOR EQUIPMENT TO BE WEATHERPROOF (NEMA 3R).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 18. SEAL ALL PENETRATIONS THROUGH ROOF AND EXTERIOR WALLS TO MAKE WATERPROOF. REQUEST SUBMITTAL WITH COPIES TO THE ENGINEER/ARCHITECT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19. ALL PENETRATIONS THROUGH ROOF AND EXTERIOR WALLS TO MAKE WATERPROOF. REQUEST SUBMITTAL WITH COPIES TO THE ENGINEER/ARCHITECT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20. THE CONTRACTOR SHALL GUARANTEE ALL WORK IN WRITING TO THE CLIENT AGAINST ANY AND ALL DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE YEAR, OR AS INDICATED IN THE SPECIFICATION, FROM DATE OF ACCEPTANCE AND PERFORM ALL CORRECTIVE WORK AT NO COST TO THE CLIENT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| INSPECTIONS/WARRANTY:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. NO WORK SHALL BE CONCEALED UNTIL AFTER INSPECTION AND APPROVAL BY PROPER AUTHORITIES. IF WORK IS CONCEALED WITHOUT INSPECTION AND APPROVAL, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK REQUIRED TO BOTH OPEN AND RESTORE THE CONCEALED AREAS IN ADDITION TO ANY REQUIRED MODIFICATIONS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. THE CONTRACTOR SHALL MAKE A FINAL INSPECTION OF ALL EQUIPMENT TO ENSURE THAT THERE ARE NO LOOSE CONNECTIONS OR CIRCUITS SUBJECT TO BREAK DOWN DUE TO THE PRESENCE OF FOREIGN MATERIAL. THIS SHALL INCLUDE INSPECTION OF ALL CONNECTIONS MADE UNDER THIS CONTRACT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. THE CONTRACTOR SHALL DELIVER CERTIFICATES OF ELECTRICAL AND OTHER INSPECTIONS OR COPIES THEREOF, TO THE CLIENT AT THE COMPLETION OF THE PROJECT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. THE CONTRACTOR SHALL GUARANTEE ALL WORK IN WRITING TO THE CLIENT AGAINST ANY AND ALL DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE YEAR, OR AS INDICATED IN THE SPECIFICATION, FROM DATE OF ACCEPTANCE AND PERFORM ALL CORRECTIVE WORK AT NO COST TO THE CLIENT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |





## DEMOLITION GENERAL NOTES

1. FOR ALL ITEMS DESIGNATED TO BE REMOVED, REMOVE THE BRANCH CIRCUIT, ASSOCIATED OBSOLETE WIRING, SUPPORTS, AND CONTROLS FOR THE OBSOLETE ITEMS UNLESS NOTED OTHERWISE.
2. PATCH EXISTING GENERAL CONSTRUCTION TO REMAIN TO MATCH THE EXISTING ADJACENT CONSTRUCTION FOR ALL ITEMS DESIGNATED TO BE REMOVED.
3. REMOVE ALL ITEMS FROM THE PREMISES DAILY AND KEEP CONSTRUCTION SITE BROOM SWEEP.
4. UTILIZE EXISTING ELECTRICAL POWER FOR CONSTRUCTION POWER. COORDINATE DEMOLITION TO PROVIDE GFCI RECEPTACLE EVERY 400 SQUARE FEET DURING CONSTRUCTION. IF CONSTRUCTION POWER CAN NOT BE COORDINATED WITH DEMOLITION, PROVIDE TEMPORARY POWER FOR CONSTRUCTION ACTIVITIES.
5. PROVIDE TEMPORARY LIGHTING THROUGHOUT CONSTRUCTION.
6. ENSURE DEMOLITION DOES NOT AFFECT ADJACENT SPACES. THE ADJACENT SPACES WILL REMAIN OCCUPIED THROUGHOUT CONSTRUCTION.



**THOMAS WIGHARD, R.A.**  
 Title REGISTERED ARCHITECT License No. 21A02276900

**LAN ASSOCIATES**

Engineering,  
Planning,  
Architecture,  
Surveying Inc.

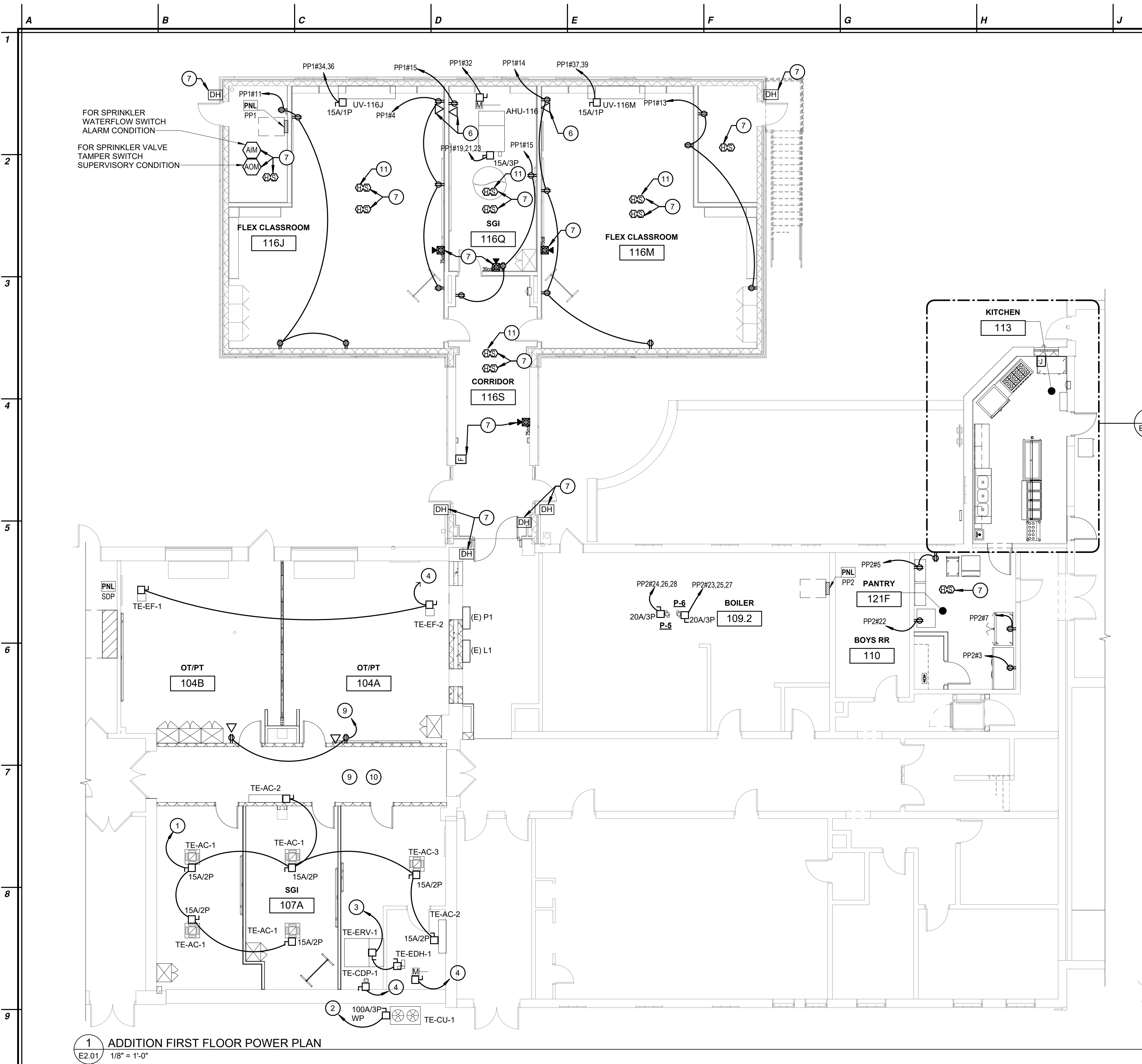
445 Godwin Ave Ste 9, Midland Park, NJ 07432 | t. 201-447-5400 | f. 201-447-1233

Job No. 2.20277.25.10

File No.

**E1.01**





1 ADDITION FIRST FLOOR POWER PLAN  
E2.01 1/8" = 1'-0"

### ELECTRICAL POWER PLAN GENERAL NOTES

- CONTRACTOR SHALL COORDINATE FINAL MOUNTING LOCATION OF ALL JUNCTION BOXES ASSOCIATED WITH SECURITY, INTERCOM, AUDIOVISUAL, AND CLOCK SYSTEMS. PROVIDE EMPTY CONDUIT WITH PULL STRING ABOVE FINISHED CEILING.
- ALL RECEPTACLES INSTALLED AS A PART OF THIS PROJECT SHALL BE TAMPERPROOF. SEE NEC SECTION 406.12.
- ROUTE CONDUIT AND BRANCH CIRCUITS ALONGSIDE REFRIGERANT PIPING WHERE POSSIBLE. WHERE POSSIBLE, RE-USE PENETRATIONS USED BY REFRIGERANT PIPING.
- UNLESS OTHERWISE NOTED ON PLAN, RECEPTACLE MOUNTING HEIGHT SHALL BE 18" AFF.
- THE ANGLE AT WHICH A CIRCUITRY SYMBOL MEETS ANOTHER SYMBOL HAS NOT PARTICULAR SIGNIFICANCE UNLESS OTHERWISE NOTED. CIRCUITS NORMALLY MEET ONE ANOTHER AT A JUNCTION BOX, PULL BOX, OR PIECE OF ELECTRICAL UTILIZATION OR COMMUNICATIONS EQUIPMENT.
- ALL RECEPTACLES WITHIN KITCHEN AREA SHALL BE GFCI RECEPTACLES OR GFCI PROTECTED AT THE BREAKER.

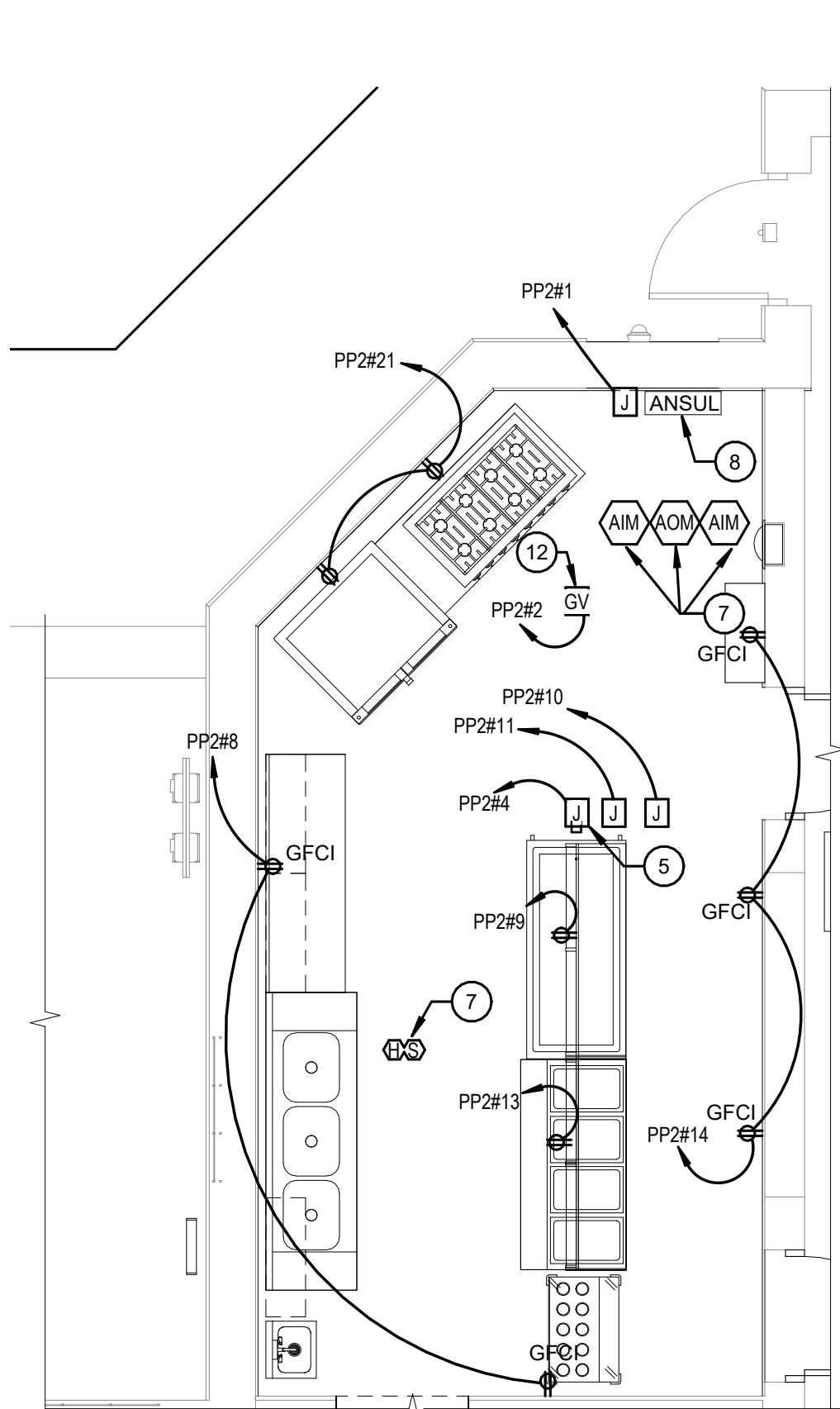
### PROPOSED FIRE ALARM SYMBOLS

#### Fire Alarm Notification Devices

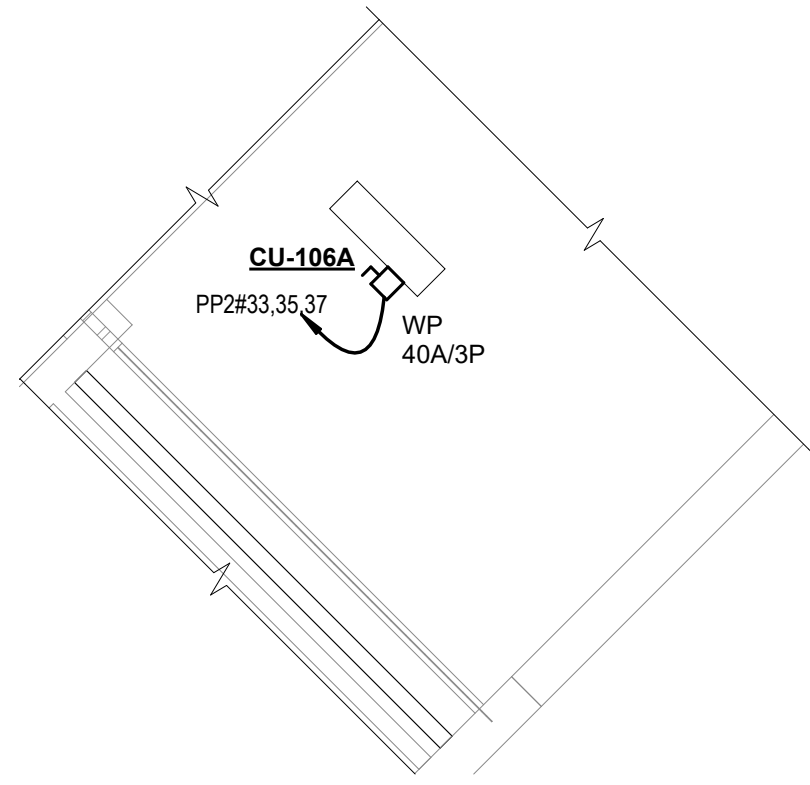
| SYMBOL | DESCRIPTION                                                                                                                                                                                                                                                                               |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|        | <b>120VAC MAGNETIC DOOR HOLDER</b> - PRIOR TO INSTALLATION, CONTRACTOR SHALL SURVEY CONDITIONS AND CONFIRM IF WALL OR FLOOR MOUNTED DEVICE IS MORE PRACTICAL. PROVIDE AND INSTALL UL LISTED BACKBOX AND JUNCTION BOX AS REQUIRED TO FACILITATE INSTALLATION IN EXTERNAL FIRE ALARM SCOPE. |
|        | <b>ANSUL SYSTEM</b> - NEW ANSUL SYSTEM TO BE INSTALLED IN CONJUNCTION WITH NEW KITCHEN. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT SCHEDULING/PHASING REQUIREMENTS WITH GENERAL & MECHANICAL CONTRACTOR.                                                                                |
|        | <b>COMBINATION HORN/STROBE</b> -<br>"CD" - MINIMUM CANDELA RATING<br>"C" - CEILING MOUNTED (WALL MOUNTED IF NOT INDICATED)                                                                                                                                                                |
|        | <b>HORN ONLY</b> -<br>"C" - CEILING MOUNTED (WALL MOUNTED IF NOT INDICATED)                                                                                                                                                                                                               |
|        | <b>WALL MOUNTED STROBE ONLY</b> -<br>"CD" - MINIMUM CANDELA RATING                                                                                                                                                                                                                        |
|        | <b>CEILING MOUNTED STROBE ONLY</b> -<br>"CD" - MINIMUM CANDELA RATING                                                                                                                                                                                                                     |

### CONSTRUCTION KEY NOTES LEGEND

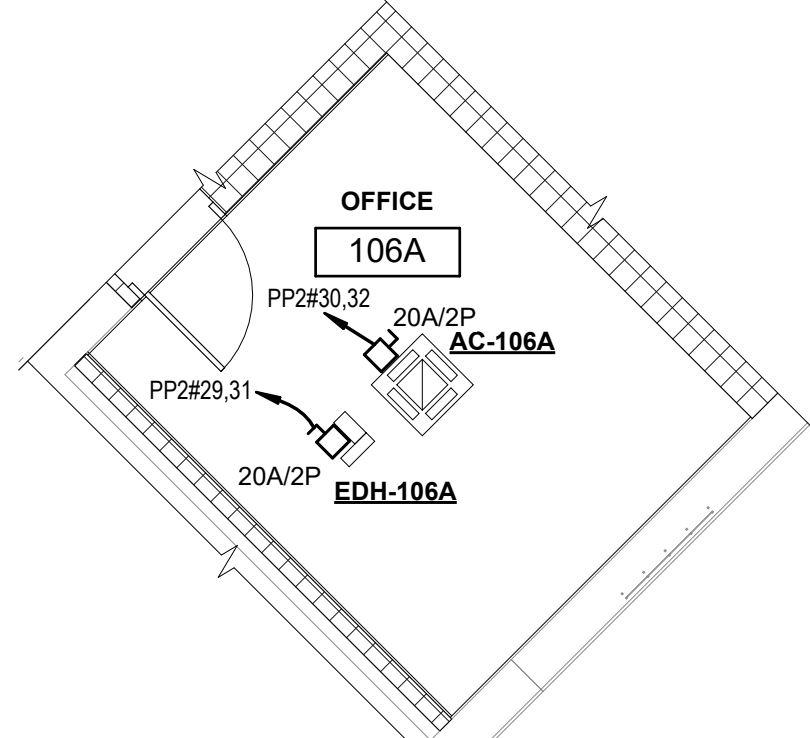
| KEY # | DESCRIPTION                                                                                                                                                                                                                                                            |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1     | NEW TE-AC UNITS TO BE FED BY BREAKER SPACE LEFT BEHIND AFTER DEMOLITION OF ACU-2 IN PANEL P1. PROVIDE (2) #12 AWG, #12G IN 3/4" CONDUIT TO NEW DEVICES, PROVIDING JUNCTION BOXES AS REQUIRED BY NEC. CONTRACTOR TO PROVIDE NEW 15A 2P BREAKER TO FEED NEW DEVICES.     |
| 2     | NEW TE-CU-1 UNIT TO BE FED BY SPARE 100A 3P BREAKER IN MAIN DISTRIBUTION PANEL MDP1 LOCATED IN MAIN ELECTRICAL ROOM. CONTRACTOR TO PROVIDE (3) #4AWG, #8G IN 1-1/4"C. CONTRACTOR TO PROVIDE ALL JUNCTION BOXES REQUIRED TO MEET NEC REQUIREMENTS.                      |
| 3     | NEW DEVICES TE-ERV-1 AND TE-EDH-1 TO BE CONNECTED TO NEW 20A 2P BREAKER IN EXISTING PANEL P1. CONTRACTOR TO PROVIDE (2) #12 AWG, #12G IN 3/4" CONDUIT BETWEEN DEVICES AND PANEL P1. CONTRACTOR TO PROVIDE JUNCTION BOXES AS REQUIRED BY NEC.                           |
| 4     | NEW CONDENSATE PUMP, MOTORIZED LOUVER AND EXHAUST FANS TO BE FED BY NEW 20A SINGLE POLE BREAKER IN PANEL P1. CONTRACTOR TO PROVIDE (2) #12AWG, #12G IN 3/4"C BETWEEN DEVICES AND PANEL P1. CONTRACTOR TO PROVIDE ALL JUNCTION BOXES REQUIRED TO MEET NEC REQUIREMENTS. |
| 5     | NEW JUNCTION BOX TO POWER NEW POWER POLE. PROVIDE JUNCTION BOX ABOVE FINISHED CEILING.                                                                                                                                                                                 |
| 6     | NEW DATA RECEPTACLE. CONTRACTOR TO INSTALL BACK BOX AND EXTEND CONDUIT TO STUB UP ABOVE FINISHED CEILING. FINAL WIRING TO BE COMPLETED BY CLIENT.                                                                                                                      |
| 7     | NEW FIRE ALARM DEVICE. CONTRACTOR TO PROVIDE BACK BOX AND REQUIRED CONDUIT ONLY. FIRE ALARM DEVICES WILL BE INSTALLED BY SEPERATE CONTRACTOR UNDER SEPEREATE SCOPE. CONTRACTOR TO PROVIDE EMPTY 3/4" CONDUIT AND TERMINATE ABOVE FINISHED CEILING WITH PLASTIC B.      |
| 8     | NEW ANSUL SYSTEM TO BE INSTALLED BY CONTRACTOR. SEE MECHANICAL PLANS FOR DETAILS. PREPARE TO BE CONNECTED TO NEW FIRE ALARM SYSTEM TO BE INSTALLED.                                                                                                                    |
| 9     | NEW RECEPTACLES TO BE FED BY NEW 20A SINGLE POLE BREAKER IN PANEL L1. CONTRACTOR TO PROVIDE (2) #12 AWG, #12 G IN 3/4" CONDUIT BETWEEN DEVICES AND PANEL L1. CONTRACTOR TO PROVIDE JUNCTION BOXES AS REQUIRED BY NEC.                                                  |
| 10    | NEW DEVICES TE-ERV-1 AND TE-EDH-1 TO BE CONNECTED TO NEW 20A 2P BREAKER IN EXISTING PANEL P1. CONTRACTOR TO PROVIDE (2) #12 AWG, #12G IN 3/4" CONDUIT BETWEEN DEVICES AND PANEL P1. CONTRACTOR TO PROVIDE JUNCTION BOXES AS REQUIRED BY NEC.                           |
| 11    | NEW FIRE ALARM DEVICE TO BE PLACED ABOVE FINISHED CEILING                                                                                                                                                                                                              |
| 12    | ELECTRICA GAS VALVE. REFER TO MECHANICAL DRAWING M6.07 FOR MORE DETAILS.                                                                                                                                                                                               |



3 KITCHEN BLOW UP PLAN  
E2.01 1/4" = 1'-0"

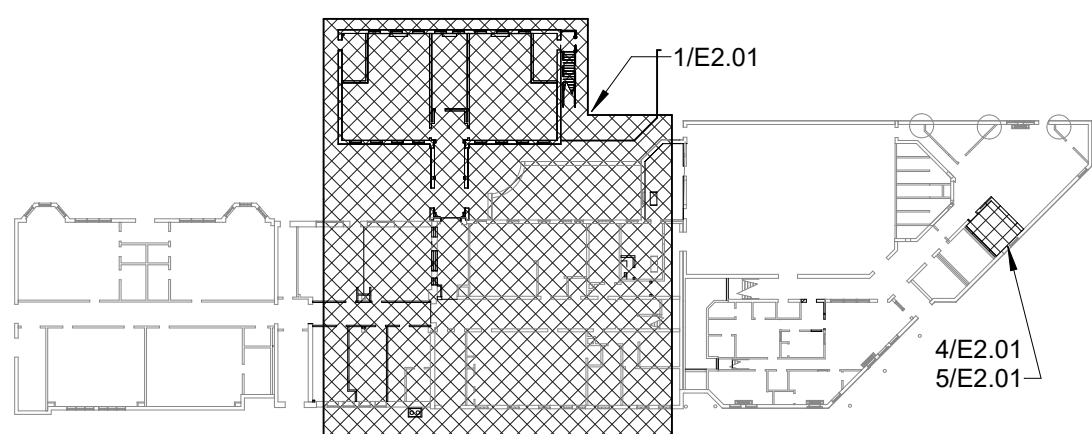


5 OFFICE 106A ROOF PLAN  
E2.01 3/16" = 1'-0"



4 OFFICE 106A POWER PLAN  
E2.01 3/16" = 1'-0"

### KEY PLAN



|                                 |              |
|---------------------------------|--------------|
| NJ Certificate of Authorization |              |
| Eng'r. Nos.                     | 24GA27937600 |
| Arch. Nos.                      | 21AC00012400 |
| Date                            | 07/17/26     |
| Checked                         | EM           |
| Drawn                           | PK           |

THOMAS WIGHARD, R.A.  
Title: REGISTERED ARCHITECT License No. 21A02276900

| Date | Description |
|------|-------------|
|------|-------------|

Engineering,  
Planning,  
Architecture,  
Surveying Inc.

**LAN**  
ASSOCIATES  
448 Godwin Ave Ste 9, Midland Park, NJ 07432 | t. 201-447-6400 | f. 201-447-1233

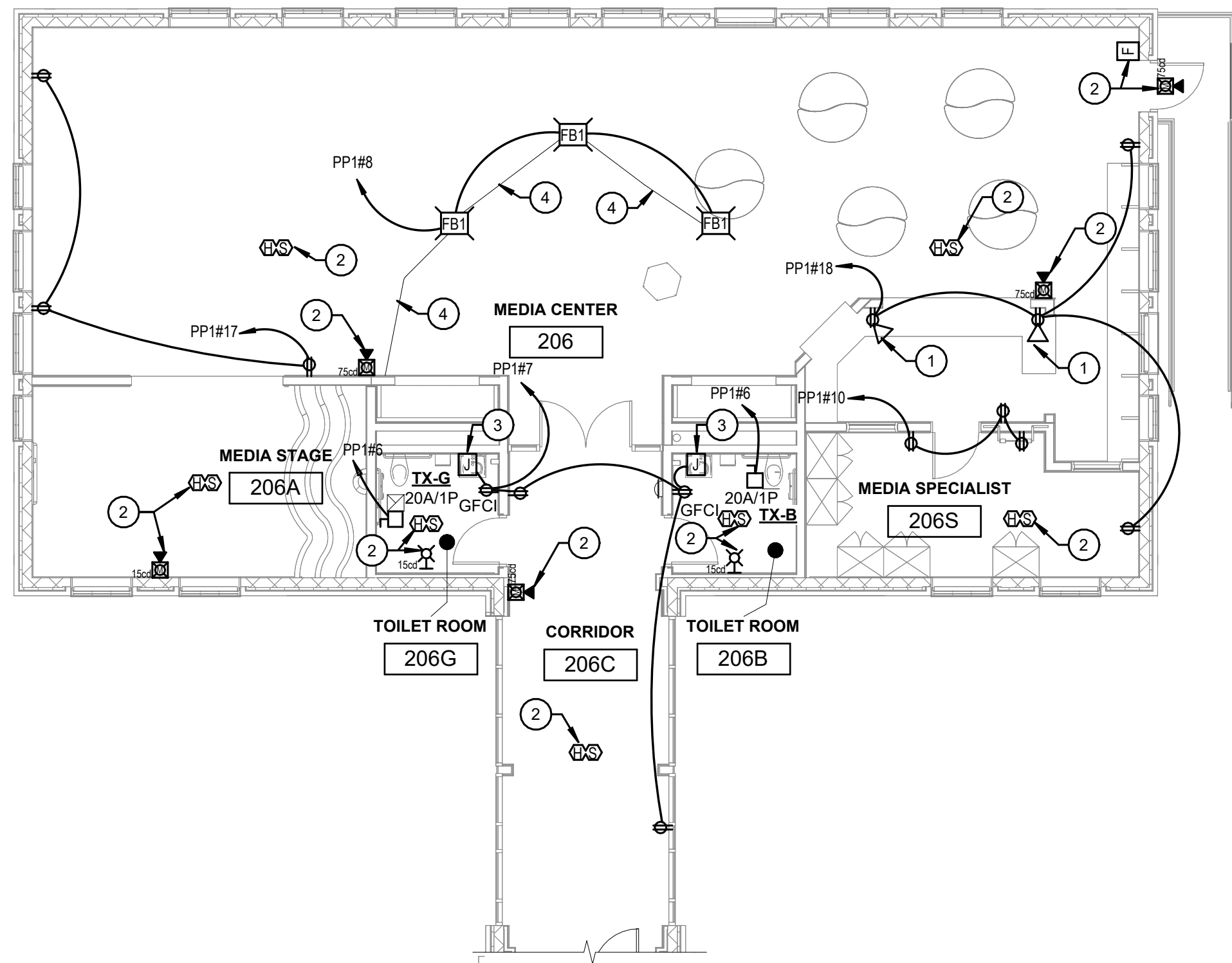
ELECTRICAL POWER PLAN  
ALTERATIONS & ADDITIONS TO J. FIFTHYAN TATEM ELEMENTARY SCHOOL  
HADDONFIELD BOARD OF EDUCATION  
1 GLOVER AVE. HADDONFIELD, NJ 08033

Job No. 2.20277.25.10

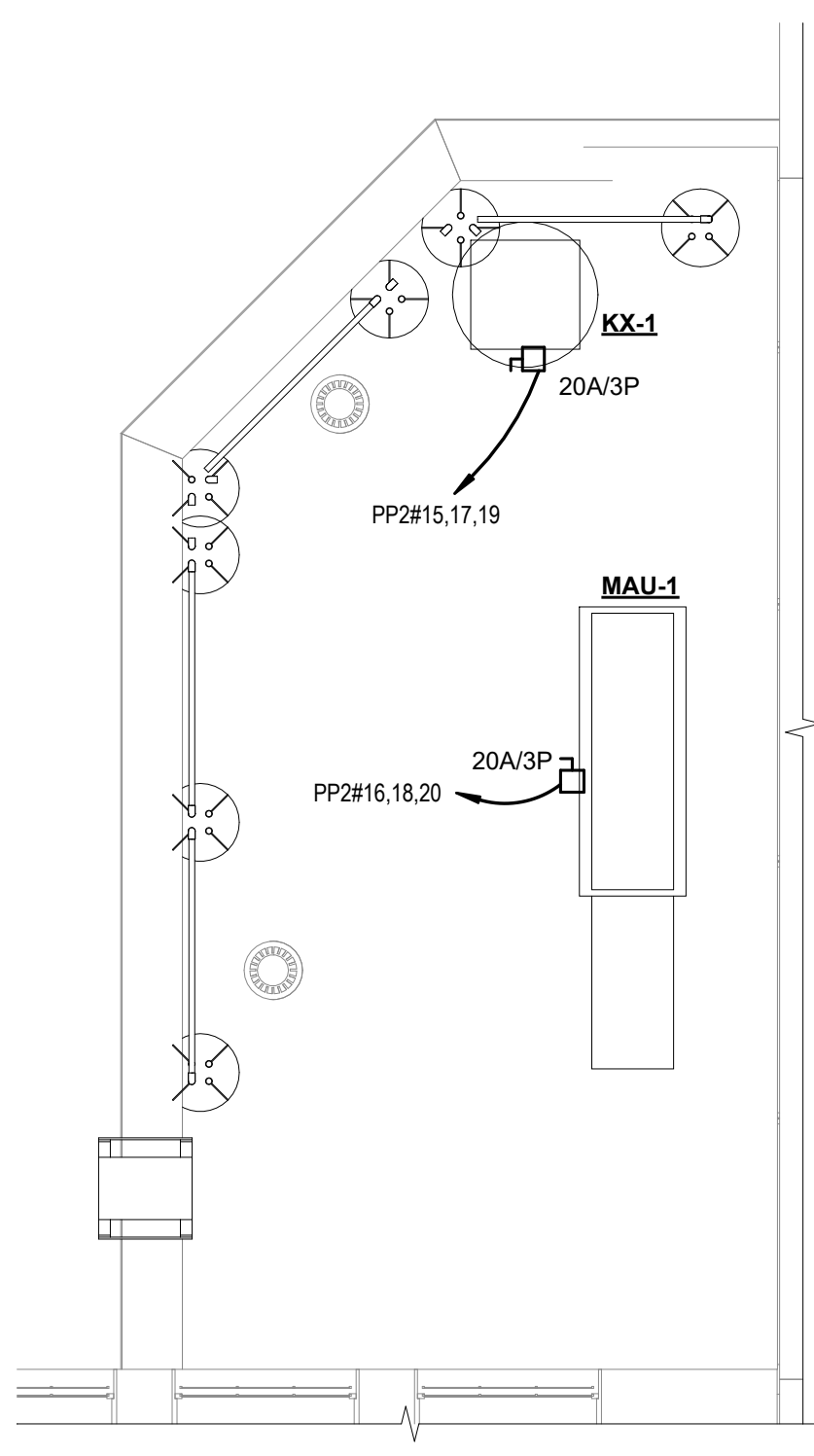
File No.

E2.01

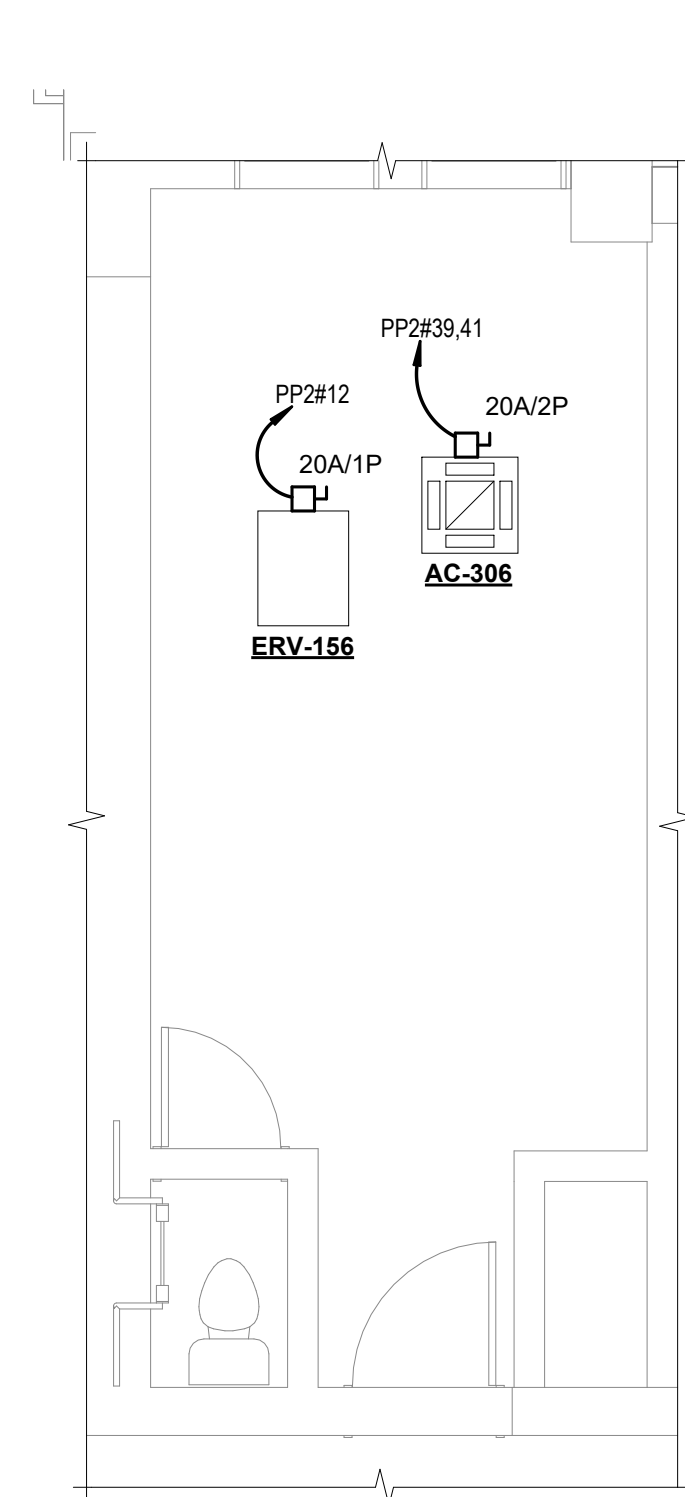




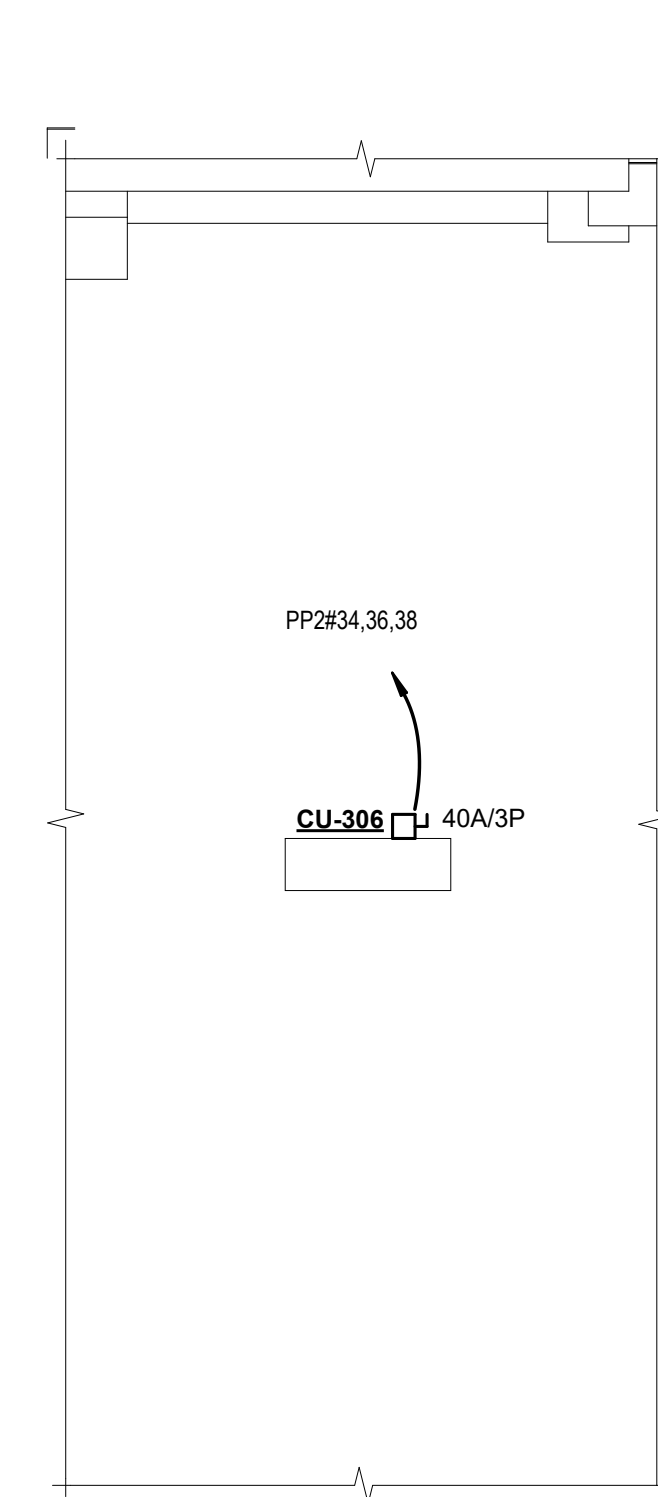
1 ADDITION SECOND FLOOR POWER PLAN  
E2.02 1/8" = 1'-0"



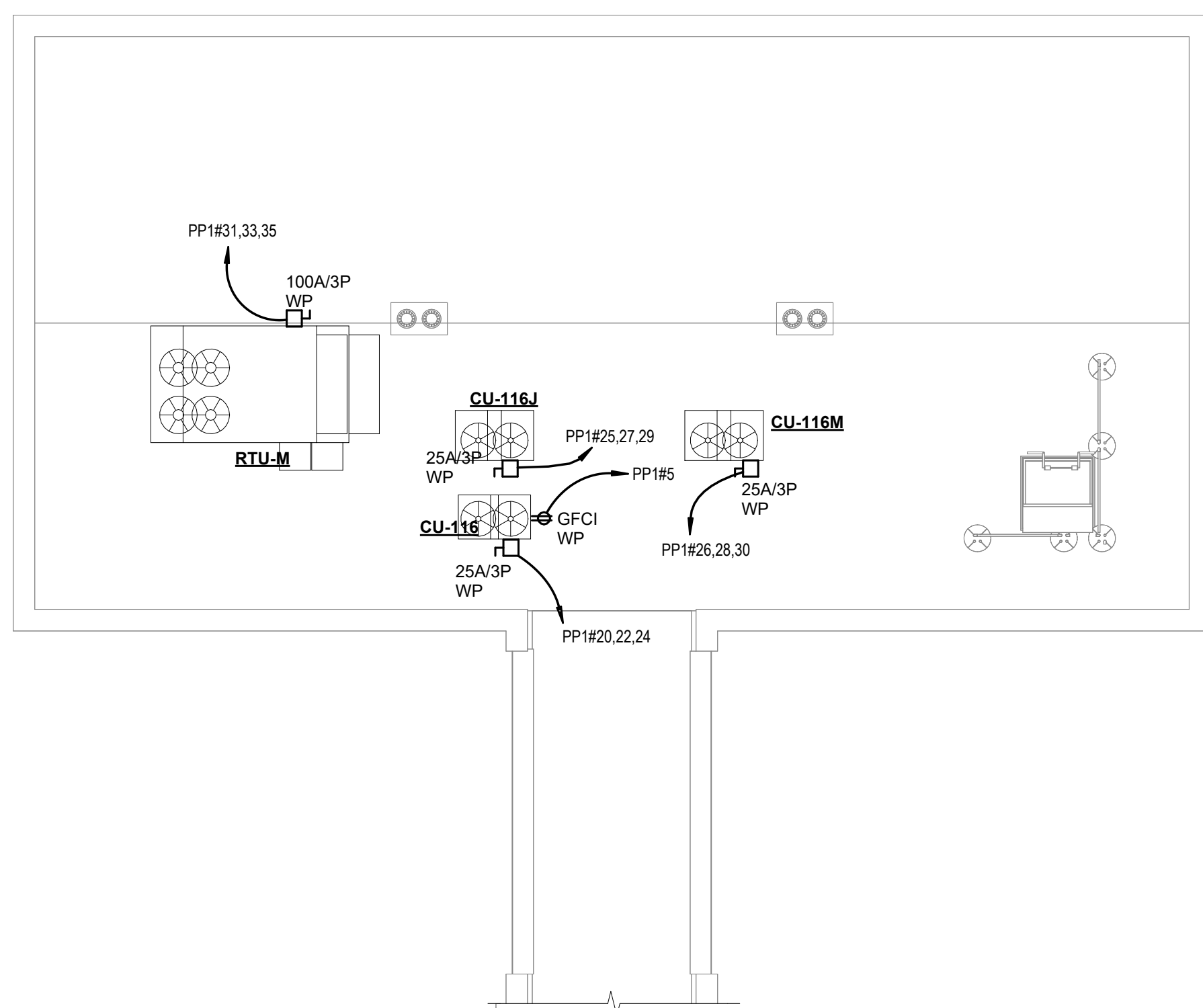
3 KITCHEN ROOF PLAN  
E2.02 1/4" = 1'-0"



5 OFFICE 306 POWER PLAN  
E2.02 1/4" = 1'-0"



4 OFFICE 306 ROOF PLAN  
E2.02 1/4" = 1'-0"

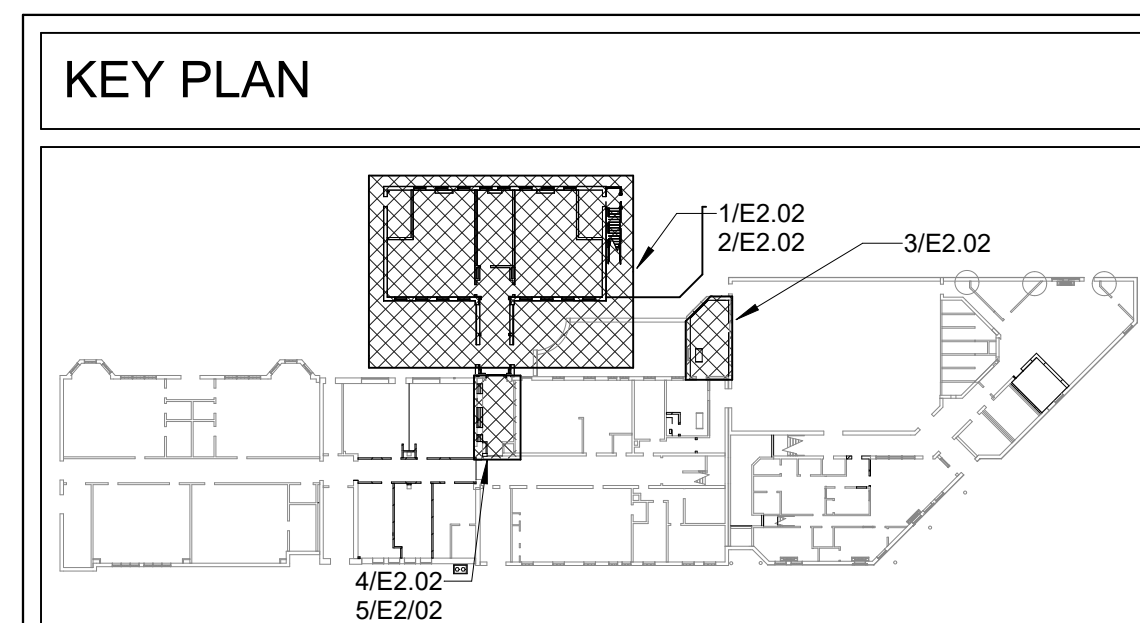


2 ADDITION ROOF PLAN  
E2.02 1/8" = 1'-0"

| CONSTRUCTION KEY NOTES LEGEND |                                                                                                                                                                                                                                                                  | # | SYMBOL INDICATES<br>CONST. KEY NOTE |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|-------------------------------------|
| KEY #                         | DESCRIPTION                                                                                                                                                                                                                                                      |   |                                     |
| 1                             | NEW DATA RECEPTACLE. CONTRACTOR TO INSTALL BACK BOX AND EXTEND CONDUIT TO STUB UP ABOVE FINISHED CEILING. FINAL WIRING TO BE COMPLETED BY CLIENT.                                                                                                                |   |                                     |
| 2                             | NEW FIRE ALARM DEVICE. CONTRACTOR TO PROVIDE BACK BOX AND REQUIRED CONDUIT ONLY. FIRE ALARM DEVICES WILL BE INSTALLED BY SEPARATE CONTRACTOR UNDER SEPARATE SCOPE. CONTRACTOR TO PROVIDE EMPTY 3/4" CONDUIT AND TERMINATE ABOVE FINISHED CEILING WITH PLASTIC B. |   |                                     |
| 3                             | POWER FOR HARDWIRED AUTOMATIC FAUCET. CONTRACTOR TO PROVIDE LOW VOLTAGE TRANSFORMER AS NEEDED AND FINALIZE ELECTRICAL CONNECTIONS AS REQUIRED BY MANUFACTURER.                                                                                                   |   |                                     |
| 4                             | PROPOSED CONDUIT ROUTING. CONTRACTOR TO EMBED CONDUIT BETWEEN NEW FLOORBOXES IN NEW CONCRETE SLAB.                                                                                                                                                               |   |                                     |

## ELECTRICAL POWER PLAN GENERAL NOTES

1. CONTRACTOR SHALL COORDINATE FINAL MOUNTING LOCATION OF ALL JUNCTION BOXES ASSOCIATED WITH SECURITY, INTERCOM, AUDIO/VISUAL, AND CLOCK SYSTEMS. PROVIDE EMPTY CONDUIT WITH PULL STRING ABOVE FINISHED CEILING.
2. ALL RECEPTACLES INSTALLED AS A PART OF THIS PROJECT SHALL BE TAMPERPROOF. SEE NEC SECTION 406.12.
3. ROUTE CONDUIT AND BRANCH CIRCUITS ALONGSIDE REFRIGERANT PIPING WHERE POSSIBLE. WHERE POSSIBLE, RE-USE PENETRATIONS USED BY REFRIGERANT PIPING.
4. UNLESS OTHERWISE NOTED ON PLAN, RECEPTACLE MOUNTING HEIGHT SHALL BE 18" AFF.
5. THE ANGLE AT WHICH A CIRCUITRY SYMBOL MEETS ANOTHER SYMBOL HAS NOT PARTICULAR SIGNIFICANCE UNLESS OTHERWISE NOTED. CIRCUITS NORMALLY MEET ONE ANOTHER AT A JUNCTION BOX, PULL BOX, OR PIECE OF ELECTRICAL BOX UTILIZATION OR COMMUNICATIONS EQUIPMENT.
6. ALL RECEPTACLES WITHIN KITCHEN AREA SHALL BE GFCI RECEPTACLES OR GFCI PROTECTED AT THE BREAKER.

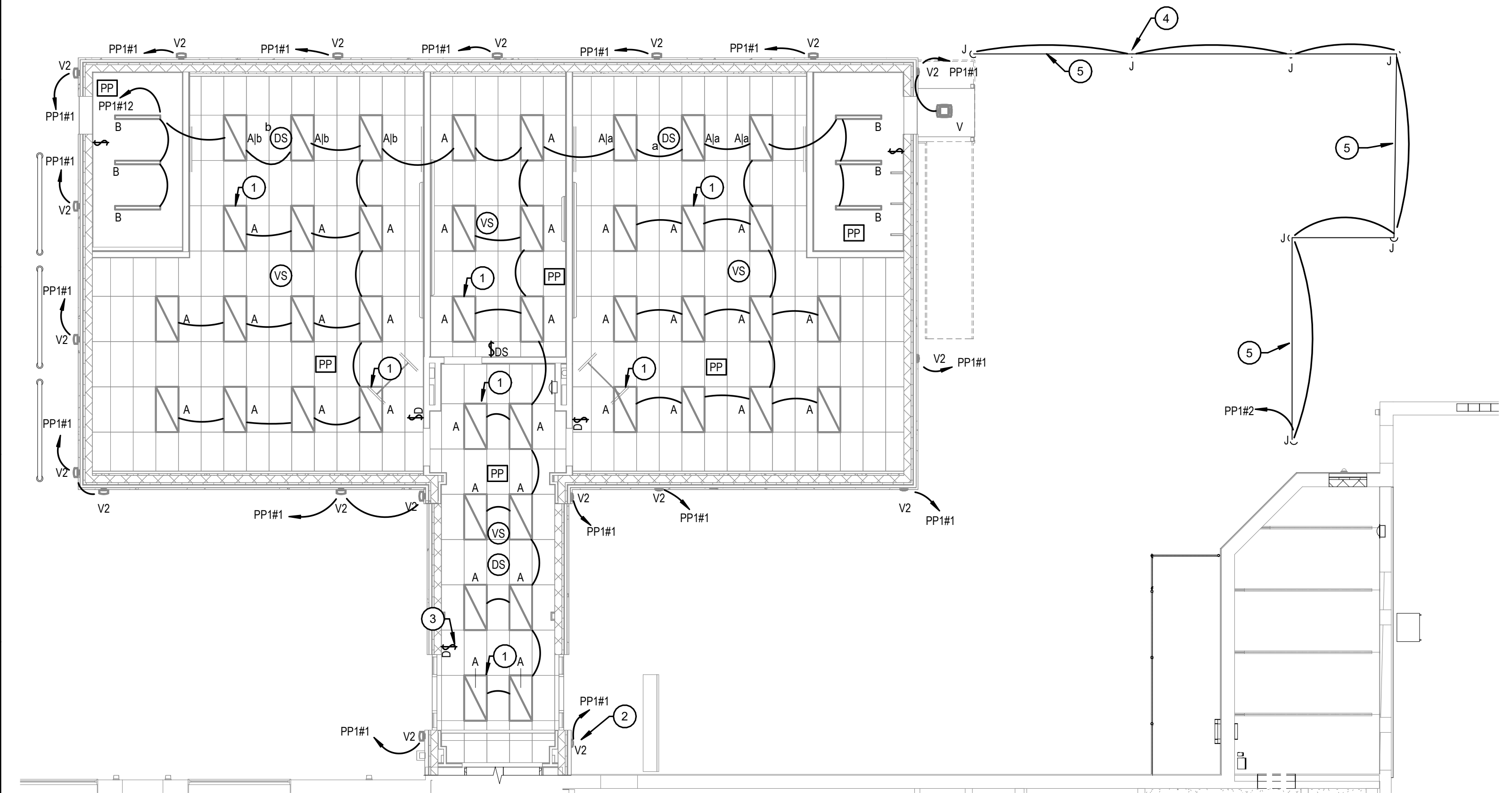


| <u>Date</u> | <u>Description</u> |
|-------------|--------------------|
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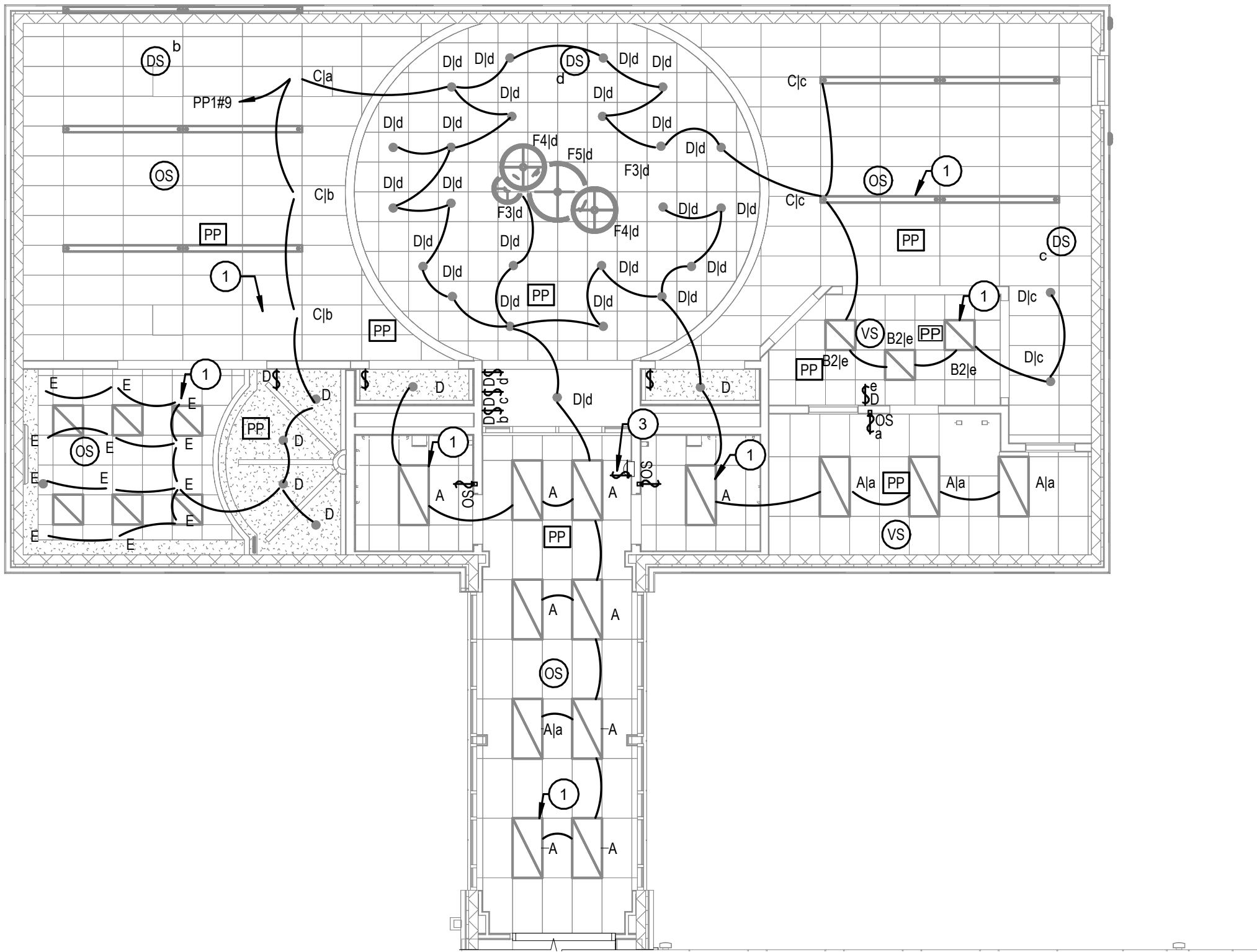


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A B C D E F G H J K L M N O



1 ADDITION FIRST FLOOR LIGHTING PLAN  
E5.01 1/8" = 1'-0"



2 ADDITION SECOND FLOOR LIGHTING PLAN  
E5.01 1/8" = 1'-0"

### LIGHT FIXTURE SCHEDULE

| FIXTURE TAG | MAKE       | MODEL                                                        | DESCRIPTION                                       | VOLTAGE | WATTAGE | LUMENS    | COLOR TEMP. | CRI |
|-------------|------------|--------------------------------------------------------------|---------------------------------------------------|---------|---------|-----------|-------------|-----|
| A           | WILLIAMS   | BP-24-LS-8CS-DIM-UNV-30W-3500K                               | 2'x4' TROFFER                                     | 120 V   | 29      | 3,452 lm  | 3500 K      | +80 |
| B           | WILLIAMS   | 75R-4-L50-835-DIM-UNV                                        | 4' LINEAR STRIP                                   | 120 V   | 33      | 4,867 lm  | 3500 K      | +80 |
| B2          | WILLIAMS   | LT-22-L39-835-AF-(L35)-DIM-UNV                               | 2'x2' TROFFER                                     | 120 V   | 29      | 3,543 lm  | 3500 K      | +80 |
| C           | WILLIAMS   | LRX4-X-20-L8-835-DMA-DIM-UNV                                 | LINEAR FIXTURE                                    | 120 V   | 50      | 2,050 lm  | 3500 K      | +80 |
| D           | WILLIAMS   | 4DR-TL-L10-827-DIM-UNV-OW-OF-CS                              | 4.5' SUARE DOWNLIGHT                              | 120 V   | 25      | 2,050 lm  | 3500 K      | +80 |
| E           | WILLIAMS   | 4DR-TL-L10-827-DIM-UNV-OW-OF-CS                              | 4.5' SUARE DOWNLIGHT                              | 120 V   | 25      | 2,050 lm  | 3500 K      | +80 |
| F3          | BETA-CALCO | MRT2P203-EEF1-LPF017-LPG017-CR80-CTA35-CTB35-X-X-X-X-X-X-X-X | HANGING FIXTURE                                   | 120 V   | 240     | 550 lm    | 3500 K      | +80 |
| F4          | BETA-CALCO | MRT2P204-EEF1-LPF017-LPG017-CR80-CTA35-CTB35-X-X-X-X-X-X-X-X | HANGING FIXTURE                                   | 120 V   | 240     | 1,240 lm  | 3500 K      | +80 |
| F5          | BETA-CALCO | MRT2P206-EEF1-LPF017-LPG017-CR80-CTA35-CTB35-X-X-X-X-X-X-X-X | HANGING FIXTURE                                   | 120 V   | 240     | 2,200 lm  | 3500 K      | +80 |
| J           | WILLIAMS   | OSA8R-L16/840-AC-FT-DBR-AB-OPTION S-DIM-UNV                  | BOLLARD FIXTURE                                   | 120 V   | 18      | 1,600 lm  | 3500 K      | +80 |
| V           | WILLIAMS   | VG1-L30-730-T5-X-X-X-X-X-X                                   | SURFACE MOUNTED EXTERIOR FIXTURE                  | 120 V   | 36      | 550 lm    | 3500 K      | +80 |
| V2          | COMPASS    | CUSO DB                                                      | EXTERIOR WALL MOUNTED FIXTURE WITH BATTERY BACKUP | 120 V   | 4       | 19,000 lm | 3500 K      | +80 |

### LIGHTING GENERAL NOTES

- PLANS DO NOT SHOW EXACT QUANTITY OF POWER PACKS REQUIRED. POWER PACKS, RELAY PACKS OR ROOM CONTROLLERS SHALL BE PROVIDED AS NEEDED TO PROVIDE A COMPLETE LIGHTING CONTROL SYSTEM THAT COMPLIES WITH THE CONTROL REQUIREMENTS SET BY ASHREA 90.1
- REFER TO ARCHITECTURAL PLANS FOR MOUNTING HEIGHTS OF LIGHTING FIXTURES. FOR SUSPENDED LIGHTING FIXTURES, PROVIDE ENOUGH LENGTH OF AIRCRAFT CABLE TO ACHIEVE SPECIFIED MOUNTING HEIGHT.
- ALL LIGHTING FIXTURES THAT HAVE THE TAG "EM" SHALL BE PROVIDED WITH INTEGRAL BATTERY BACK-UP POWER. BATTERIES SHALL PROVIDE 90 MINUTES OF ILLUMINATION UPON LOSS OF POWER.
- ALL EXIT SIGNS SHALL BE CIRCUITED FROM THE ADJACENT CIRCUIT SERVING THE GENERAL LIGHTING AREA.
- THE ANGLE AT WHICH A CIRCUITRY SYMBOL MEETS ANOTHER SYMBOL HAS NO PARTICULAR SIGNIFICANCE UNLESS OTHERWISE NOTED. CIRCUITS NORMALLY MEET ONE ANOTHER AT A JUNCTION BOX, PULL BOX, OR PIECE OF ELECTRICAL UTILIZATION OR COMMUNICATIONS EQUIPMENT.
- ALL CLASSROOMS AND LIBRARY SPACES TO BE CONTROLLED WITH MANUAL-ON TYPE OCCUPANCY SENSORS.

### CONSTRUCTION KEY NOTES LEGEND

| KEY # | DESCRIPTION                                                                                                                                             |
|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1     | NEW LIGHTING DEVICES TO BE INCLUDED WITH EMERGENCY BATTERY BACKUP.                                                                                      |
| 2     | NEW OUTDOOR LIGHT FIXTURE 'E' FIXTURE INCLUDES INTEGRATED PHOTOCELL. TYP. FOR ALL "E" FIXTURES.                                                         |
| 3     | SNAP SWITCH TO BE KEYED TYPE TO PREVENT TAMPERING.                                                                                                      |
| 4     | NEW EXTERIOR LIGHTING BOLLARD (TYP.) BOLLARD TO BE FED BY UNDERGROUND CONDUIT FROM PANEL PP1. COORDINATE INSTALLATION WITH ARCITECHTURE AND CIVIL PLANS |
| 5     | PROPOSED CONDUIT ROUTING (TYP.). PATCH PER DETAIL 3/E6.01.                                                                                              |

# SYMBOL INDICATES CONST. KEY NOTE

### LIGHTING CONTROL SCHEDULE

| SYMBOL | BASIS OF DESIGN |                | DESCRIPTION                          | SENSOR | VOLT.         | NOTE |
|--------|-----------------|----------------|--------------------------------------|--------|---------------|------|
|        | MAKE            | MODEL          |                                      |        |               |      |
| \$     | GENERIC         | GENERIC        | LINE VOLTAGE SNAP SWITCH             | NONE.  | 120V/<br>277V | -    |
| \$OS   | NX CONTROLS     | LDHMMTS SERIES | LINE VOLTAGE OCCUPANCY SENSOR SWITCH | PIR/US | 120V/<br>277V | 1    |
| \$D    | NX CONTROLS     | NX-ORLO SERIES | LOW VOLTAGE DIMMING SWITCH           | PIR/US | LOW VOLT.     | 2    |
| OS     | NX CONTROLS     | NXOS-OM SERIES | LOW VOLTAGE OCCUPANCY SENSOR         | PIR/US | LOW VOLT.     | 1,3  |
| VS     | NX CONTROLS     | NXOS-OM SERIES | LOW VOLTAGE VACANCY SENSOR           | PIR/US | LOW VOLT.     | 2,3  |
| PP     | NX CONTROLS     | NXRC2          | LINE VOLTAGE POWER PACK              | NONE.  | LOW VOLT.     | 3    |

- LIGHTING CONTROL SCHEDULE NOTES:**
- SENSOR SHALL BE SET TO AUTOMATIC-ON MODE.
  - SENSOR SHALL BE SET TO MANUAL-ON MODE.
  - PROVIDE WIRING BETWEEN POWER PACK, SWITCHES, OCCUPANCY/VACANCY SENSORS, AND OTHER LIGHTING CONTROL COMPONENTS AS NEEDED.

|                                 |              |
|---------------------------------|--------------|
| NJ Certificate of Authorization |              |
| Eng'y. Nos.                     | 24GA27937600 |
| Arch. Nos.                      | 21AC00012400 |
| Date                            | 05/27/26     |
| Checked                         | EM           |
| Drawn                           | PK           |

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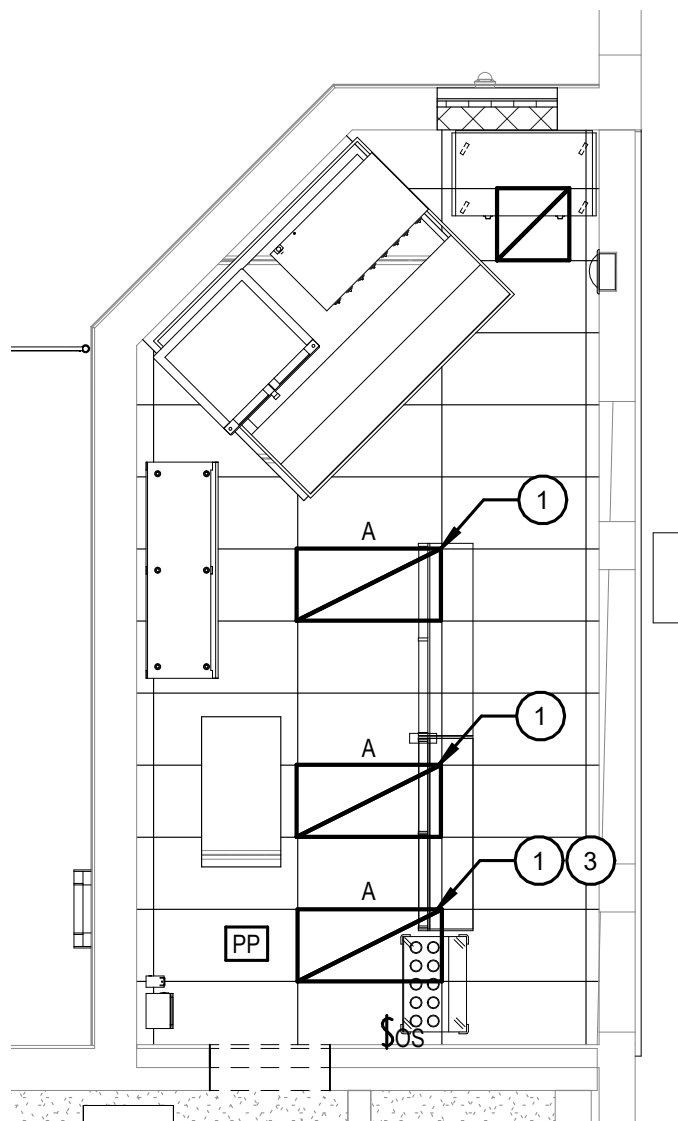
ELECTRICAL LIGHTING PLAN  
ALTERATIONS & ADDITIONS TO J. FIFTHY TATEM ELEM.  
SCHOOL  
HADDONFIELD BOARD OF EDUCATION  
1 GLOVER AVE. HADDONFIELD, NJ 08033

Job No. 2.20277.25.10

File No.

E5.01





2 KITCHEN PROPOSED LIGHTING PLAN  
E5.02 3/16" = 1'-0"

| LIGHTING CONTROL SCHEDULE                                                             |                 |                   |                                         |                   |               |      |
|---------------------------------------------------------------------------------------|-----------------|-------------------|-----------------------------------------|-------------------|---------------|------|
| SYMBOL                                                                                | BASIS OF DESIGN |                   | DESCRIPTION                             | SENSOR            | VOLT.         | NOTE |
|                                                                                       | MAKE            | MODEL             |                                         |                   |               |      |
|  | GENERIC         | GENERIC           | LINE VOLTAGE SNAP SWITCH                | NONE.             | 120V/<br>277V | -    |
|  | NX<br>CONTROLS  | LDHMMTS<br>SERIES | LINE VOLTAGE OCCUPANCY<br>SENSOR SWITCH | PIR/US            | 120V/<br>277V | 1    |
|  | NX<br>CONTROLS  | NX-ORLO<br>SERIES | LOW VOLTAGE DIMMING<br>SWITCH           | <del>PIR/US</del> | LOW VOLT.     | 2    |
|  | NX<br>CONTROLS  | NXOS-OM<br>SERIES | LOW VOLTAGE OCCUPANCY<br>SENSOR         | PIR/US            | LOW VOLT.     | 1,3  |
|  | NX<br>CONTROLS  | NXOS-OM<br>SERIES | LOW VOLTAGE VACANCY<br>SENSOR           | PIR/US            | LOW VOLT.     | 2,3  |
|  | NX<br>CONTROLS  | NXRC2             | LINE VOLTAGE POWER PACK                 | NONE.             | LOW VOLT.     | 3    |

**LIGHTING CONTROL SCHEDULE NOTES:**

1. SENSOR SHALL BE SET TO AUTOMATIC-ON MODE.
2. SENSOR SHALL BE SET TO MANUAL-ON MODE.
3. PROVIDE WIRING BETWEEN POWER PACK, SWITCHES, OCCUPANCY/VACANCY SENSORS, AND OTHER LIGHTING CONTROL COMPONENTS AS NEEDED.

## CONSTRUCTION KEY NOTES LEGEND

- | KEY # | DESCRIPTION                                                                                                                                                                                                     |
|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1     | NEW LIGHTING DEVICES TO BE CONNECTED TO CIRCUIT LEFT BEHIND BY PREVIOUS LIGHTING DEVICES. CONTRACTOR TO EXTEND CIRCUITS AS REQUIRED, PROVIDING JUNCTION BOXES, CONDUIT, AND WIRE AS REQUIRED TO COMPLETE SCOPE. |
| 2     | SNAP SWITCH TO BE KEYED TYPE TO PREVENT TAMPERING                                                                                                                                                               |
| 3     | NEW LIGHTING DEVICE TO INCLUDE BATTERY BACKUP                                                                                                                                                                   |

# SYMBOL INDICATES CONST. KEY NOTE

|                                 |              |
|---------------------------------|--------------|
| NJ Certificate of Authorization |              |
| Eng'r. Nos.                     | 24GA27937500 |
| Arch. Nos.                      | 21AC00012400 |
| Date                            | 05/27/26     |
| Checked                         | EM           |
| Drawn                           | PK           |

**THOMAS WIGHARD, R.A.**

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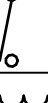
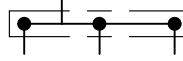
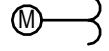
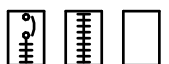
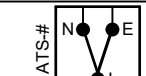
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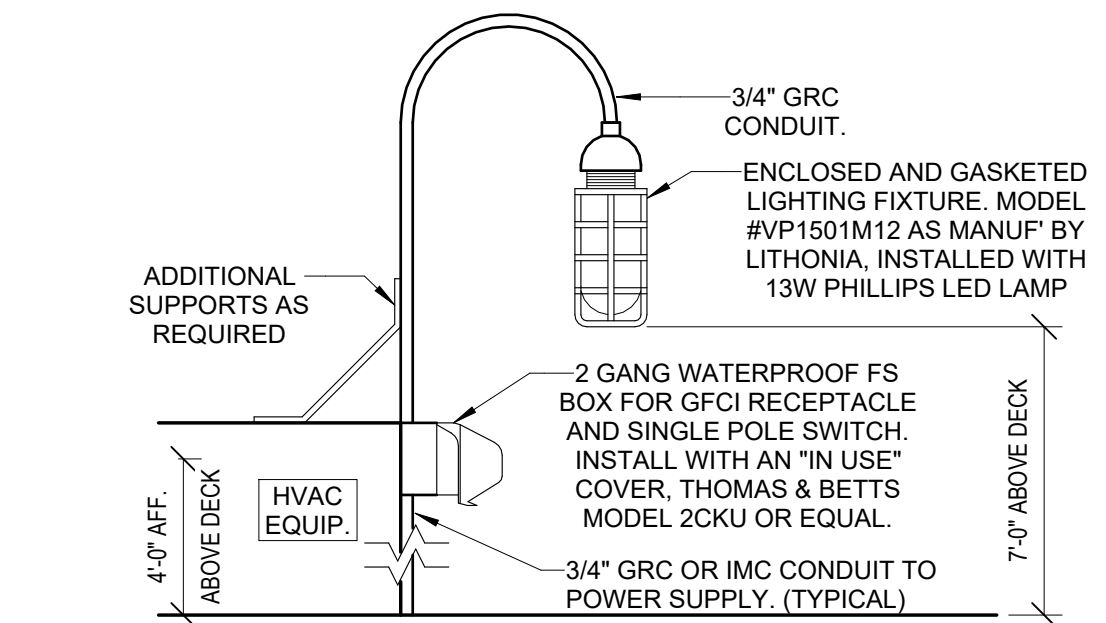
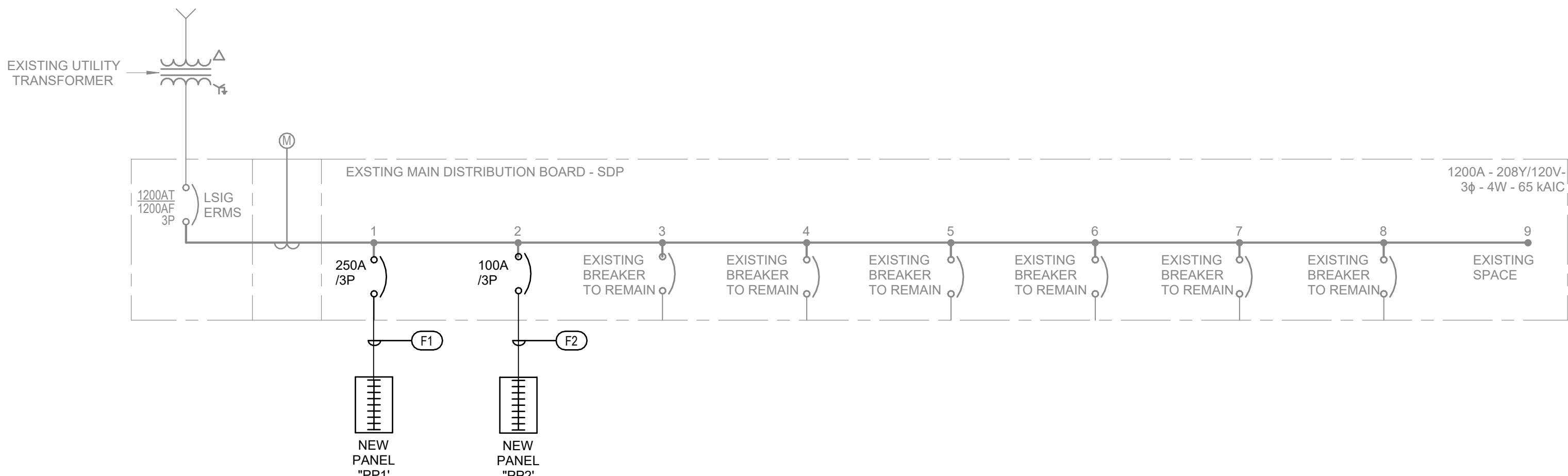
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File No.

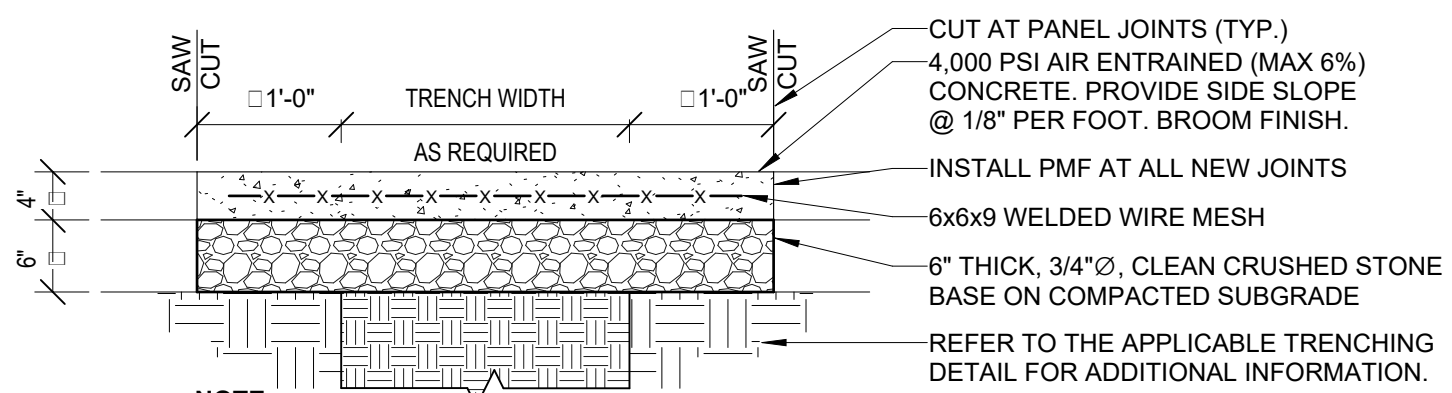
## E5.02



| Single Line                                                                                                     |                                                                                                                                                                                |
|-----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SYMBOL                                                                                                          | DESCRIPTION                                                                                                                                                                    |
|  <p>300AT<br/>400AF<br/>1P</p> | <p><b><u>CIRCUIT BREAKER</u></b> - LOW VOLTAGE, THERMAL MAGNETIC</p> <p>"AT" - TRIP SETTING ; "AF" - FRAME SIZE</p> <p>"#P" - No. OF POLES (3-POLE UNLESS NOTED OTHERWISE)</p> |
|  <p>300AT<br/>400AF<br/>1P</p> | <p><b><u>FUSED DISCONNECT SWITCH</u></b> -</p> <p>"AF" - SWITCH AMPERAGE RATING; "AS" - FUSE AMP SIZE</p> <p>"#P" - No. OF POLES (3-POLE UNLESS NOTED OTHERWISE)</p>           |
|  <p>400A</p>                   | <p><b><u>DISCONNECT SWITCH</u></b> -</p> <p>"A" - SWITCH AMPERAGE RATING</p>                                                                                                   |
|                                | <p><b><u>TRANSFORMER</u></b> - LOW VOLTAGE, DRY-TYPE WITH COPPER WINDINGS. REFER TO XFMR SCHEDULE FOR ADDITIONAL REQUIREMENTS.</p>                                             |
| <p>XFMR T-1<br/>480V PRI<br/>208V SEC</p>                                                                       | <p><b><u>TRANSFORMER TAG</u></b>- REFER TO TRANSFORMER SCHEDULE FOR MORE INFORMATION.</p>                                                                                      |
|                                | <p><b><u>ENCLOSURE</u></b></p>                                                                                                                                                 |
|                                | <p><b><u>TROUGH</u></b> - CODE SIZED WIRING TROUGH</p>                                                                                                                         |
| <p>A - Y/ V<br/>3ø - 4W - kAIC</p>                                                                              | <p><b><u>EQUIPMENT BUS &amp; RATING DATA</u></b></p>                                                                                                                           |
|                                | <p><b><u>UTILITY METER</u></b></p>                                                                                                                                             |
|                                | <p><b><u>PANEL BREAKER</u></b> - MAIN BREAKER OR MAIN LUG AS INDICATED.</p>                                                                                                    |
|                                | <p><b><u>GENERATOR</u></b></p>                                                                                                                                                 |
|  <p>ATS</p>                    | <p><b><u>AUTOMATIC TRANSFER SWITCH</u></b> - "#I" INDICATES ATS NUMBER</p>                                                                                                     |



2 HVAC ROOF RECEPTACLE/LIGHT DETAIL  
E6.01 12" = 1'-0"



### 3 TRENCHING SURFACE TREATMENT

1 SINGLE LINE  
E6.01 NOT TO SCALE

| FEEDER KEY NOTES LEGEND |           |                              |                       | #            | SYMBOL INDICATES FEEDER KEY NOTE |
|-------------------------|-----------|------------------------------|-----------------------|--------------|----------------------------------|
| TAG                     | # OF SETS | CURRENT + NEUTRAL CONDUCTORS | GROUND CONDUCTOR SIZE | RACEWAY SIZE |                                  |
| F1                      | 1         | (4) 300 KCMIL                | #4 AWG                | 2-1/2" C.    |                                  |
| F2                      | 1         | (4) 3/0 AWG                  | #6 AWG                | 2" C.        |                                  |

## SCHEDULE OF PANELBOARDS

| TAG | LOCATION                     | VOLTAGE<br>(L-L) | PHASE + WIRE | MAINS TYPE | MCB/MLO<br>RATING | ENCLOSURE | MOUNTING | FED FROM | TOTAL<br>CIRCUITS | NOTES |
|-----|------------------------------|------------------|--------------|------------|-------------------|-----------|----------|----------|-------------------|-------|
| PP1 | UTILITY /<br>STORAGE<br>116R | 208 V            | 3Ø-4W        | MLO        | 250 A             | NEMA 1    | SURFACE  | SDP      | 54                | 1,2   |
| PP2 | BOILER 109.2                 | 208 V            | 3Ø-4W        | MLO        | 150 A             | NEMA 1    | SURFACE  | SDP      | 54                | 1,2   |
| SDP | STOR. 104.2                  |                  | 3Ø-4W        | MCB        | 800 A             | NEMA 1    | FLOOR    |          |                   |       |

**PANELBOARD GENERAL NOTES**

1. ALL BUSSING SHALL BE COPPER.
2. PROVIDE GFCI BREAKERS AS INDICATED ON PLAN

| EXISTING PANELBOARD NAME:  |                     |             |         |           |      | PP2                                                                                     |       |               |       |                  |       |                                |         |             |                      |                    |                 |    |
|----------------------------|---------------------|-------------|---------|-----------|------|-----------------------------------------------------------------------------------------|-------|---------------|-------|------------------|-------|--------------------------------|---------|-------------|----------------------|--------------------|-----------------|----|
| LOCATION: BOILER 109.2     |                     |             |         |           |      | VOLTAGE: 208Y/120V                                                                      |       |               |       |                  |       | A.I.C RATING: 22               |         |             |                      |                    |                 |    |
| FED FROM: SDP              |                     |             |         |           |      | PHASES: 3                                                                               |       |               |       |                  |       | MAIN TYPE: MLO                 |         |             |                      |                    |                 |    |
| MOUNTING: SURFACE          |                     |             |         |           |      | WIRES: 4                                                                                |       |               |       |                  |       | MIN. MCB/BLO RATING: 150 A     |         |             |                      |                    |                 |    |
| ENCLOSURE RATING: NEMA 1   |                     |             |         |           |      | C/G/R REFERS TO SIZE OF CURRENT-CARRYING CONDUCTORS, GROUND, AND RACEWAY, RESPECTIVELY. |       |               |       |                  |       |                                |         |             |                      |                    |                 |    |
| CKT                        | LOAD NAME           |             | C/G/R   | TRIP/POLE |      | A                                                                                       | B     | C             |       | POLE/TRIP        | C/G/R | LOAD NAME                      | CKT     |             |                      |                    |                 |    |
| 1                          | ANSUL CABINET       | (2) #12 AWG | #12 AWG | 3/4"      | 20 A | 1                                                                                       | 180   | 180           |       | 1                | 20 A  | 3/4"                           | #12 AWG | (2) #12 AWG | ELECTRICAL GAS VALVE | 2                  |                 |    |
| 3                          | FRIDGE              | (2) #12 AWG | #12 AWG | 3/4"      | 20 A | 1                                                                                       |       | 900           | 1,000 |                  | 1     | 20 A                           | 3/4"    | #12 AWG     | (2) #12 AWG          | KITCHEN POWER POLE | 4               |    |
| 5                          | PANTRY RECEPT       | (2) #12 AWG | #12 AWG | 3/4"      | 20 A | 1                                                                                       |       |               |       | 1,800            | 180   | 1                              | 20 A    | 3/4"        | #12 AWG              | (2) #12 AWG        | MECHANICAL RECP | 6  |
| 7                          | FREEZER             | (2) #12 AWG | #12 AWG | 3/4"      | 20 A | 1                                                                                       | 180   | 360           |       | 1                | 20 A  | 3/4"                           | #12 AWG | (2) #12 AWG | KITCHEN RECEPTACLES  | 8                  |                 |    |
| 9                          | KITCHEN RECEPTACLES | (2) #12 AWG | #12 AWG | 3/4"      | 20 A | 1                                                                                       |       | 180           | 180   |                  | 1     | 20 A                           | 3/4"    | #12 AWG     | (2) #12 AWG          | KITCHEN POWER POLE | 10              |    |
| 11                         | KITCHEN POWER POLE  | (2) #12 AWG | #12 AWG | 3/4"      | 20 A | 1                                                                                       |       |               |       | 180              | 115   | 1                              | 20 A    | 3/4"        | #12 AWG              | (2) #12 AWG        | ERV-156         | 12 |
| 13                         | KITCHEN RECEPTACLES | (2) #12 AWG | #12 AWG | 3/4"      | 20 A | 1                                                                                       | 180   | 540           |       | 1                | 20 A  | 3/4"                           | #12 AWG | (2) #12 AWG | KITCHEN RECEPTACLES  | 14                 |                 |    |
| 15                         |                     |             |         |           |      |                                                                                         |       | 1,033         | 1,296 |                  |       |                                |         |             |                      |                    | 16              |    |
| 17                         | KX-1                | (3)#12 AWG  | #12 AWG | 3/4"      | 20 A | 3                                                                                       |       |               |       | 1,033            | 1,296 | 3                              | 15 A    | 3/4"        | #12 AWG              | (3)#12 AWG         | MUA-1           | 18 |
| 19                         |                     |             |         |           |      |                                                                                         | 1,033 | 1,296         |       |                  |       |                                |         |             |                      |                    | 20              |    |
| 21                         | KITCHEN RECEPTACLES | (2) #12 AWG | #12 AWG | 3/4"      | 20 A | 1                                                                                       |       | 360           | 180   |                  |       | 1                              | 20 A    | 3/4"        | #12 AWG              | (2) #12 AWG        | FRIDGE          | 22 |
| 23                         |                     |             |         |           |      |                                                                                         |       |               |       | 833              | 833   |                                |         |             |                      |                    | 24              |    |
| 25                         | PUMP P-6            | (3) #12 AWG | #12 AWG | 3/4"      | 20 A | 3                                                                                       | 833   | 833           |       |                  |       | 3                              | 20 A    | 3/4"        | #12 AWG              | (3) #12 AWG        | PUMP P-5        | 26 |
| 27                         |                     |             |         |           |      |                                                                                         |       | 833           | 833   |                  |       |                                |         |             |                      |                    | 28              |    |
| 29                         | EDH-106A            | (2) #12 AWG | #12 AWG | 3/4"      | 20 A | 2                                                                                       |       |               |       | 1,000            | 150   | 2                              | 20 A    | 3/4"        | #12 AWG              | (2) #12 AWG        | AC-106A         | 30 |
| 31                         |                     |             |         |           |      |                                                                                         | 1,000 | 150           |       |                  |       |                                |         |             |                      |                    | 32              |    |
| 33                         |                     |             |         |           |      |                                                                                         |       | 2,880         | 2,880 |                  |       |                                |         |             |                      |                    | 34              |    |
| 35                         | CU-106A             | (3) #8 AWG  | #10 AWG | 3/4"      | 40 A | 3                                                                                       | 2,880 | 2,880         |       | 2,880            | 2,880 | 3                              | 40 A    | 3/4"        | #10 AWG              | (3) #8 AWG         | CU-306          | 36 |
| 37                         |                     |             |         |           |      |                                                                                         | 2,880 | 2,880         |       |                  |       |                                |         |             |                      |                    | 38              |    |
| 39                         | AC-306              | (2) #12 AWG | #12 AWG | 3/4"      | 20 A | 2                                                                                       |       | 150           | 0     |                  |       | 1                              | 20 A    |             |                      |                    | SPARE           | 40 |
| 41                         |                     |             |         |           |      |                                                                                         |       |               |       | 150              | 0     | 1                              | 20 A    |             |                      |                    | SPARE           | 42 |
| 43                         | SPARE               |             |         |           | 20 A | 1                                                                                       | 0     | 0             |       |                  |       | 1                              | 20 A    |             |                      |                    | SPARE           | 44 |
| 45                         | SPARE               |             |         |           | 20 A | 1                                                                                       |       | 0             | 0     |                  |       | 1                              | 20 A    |             |                      |                    | SPARE           | 46 |
| 47                         | SPARE               |             |         |           | 20 A | 1                                                                                       |       |               |       | 0                | 0     | 1                              | 20 A    |             |                      |                    | SPARE           | 48 |
| 49                         | PREPARED SPACE      |             |         |           | --   | 1                                                                                       | --    | --            |       |                  |       | 1                              | --      |             |                      |                    | PREPARED SPACE  | 50 |
| 51                         | PREPARED SPACE      |             |         |           | --   | 1                                                                                       |       | --            | --    |                  |       | 1                              | --      |             |                      |                    | PREPARED SPACE  | 52 |
| 53                         | PREPARED SPACE      |             |         |           | --   | 1                                                                                       |       |               |       | --               | --    | 1                              | --      |             |                      |                    | PREPARED SPACE  | 54 |
| TOTAL LOAD (VA PER PHASE): |                     |             |         |           |      | 12,526 VA                                                                               |       | 12,706 VA     |       | 13,331 VA        |       |                                |         |             |                      |                    |                 |    |
| TOTAL LOAD (VA):           |                     |             |         |           |      | 38,563 VA                                                                               |       |               |       |                  |       |                                |         |             |                      |                    |                 |    |
| TOTAL AMPS (A PER PHASE):  |                     |             |         |           |      | 104 A                                                                                   |       | 106 A         |       | 111 A            |       |                                |         |             |                      |                    |                 |    |
| TOTAL AMPS (A):            |                     |             |         |           |      | 107 A                                                                                   |       |               |       |                  |       |                                |         |             |                      |                    |                 |    |
| LOAD CLASSIFICATION        |                     |             |         |           |      | CONNECTED LOAD (VA)                                                                     |       | DEMAND FACTOR |       | EST. DEMAND (VA) |       | TOTALS                         |         |             |                      |                    |                 |    |
| Other                      |                     |             |         |           |      | 31,983                                                                                  |       | 100.00%       |       | 31,983           |       |                                |         |             |                      |                    |                 |    |
| LAN EQUIPMENT              |                     |             |         |           |      | 1,000                                                                                   |       | 100.00%       |       | 1,000            |       | TOTAL CONN. LOAD (VA): 38,563  |         |             |                      |                    |                 |    |
| LAN RECEPTACLES            |                     |             |         |           |      | 5,400                                                                                   |       | 100.00%       |       | 5,400            |       | TOTAL EST. DEMAND (VA): 38,563 |         |             |                      |                    |                 |    |
| EQUIPMENT                  |                     |             |         |           |      | 180                                                                                     |       | 100.00%       |       | 180              |       | TOTAL CONN. CURRENT (A): 107 A |         |             |                      |                    |                 |    |
|                            |                     |             |         |           |      |                                                                                         |       |               |       |                  |       | TOTAL EST. CURRENT (A): 107 A  |         |             |                      |                    |                 |    |

| EXISTING PANELBOARD NAME:        |                         |         |          |           |                     |       |               |             |                  | PP1                                                                                     |                                |    |  |  |  |  |  |  |  |
|----------------------------------|-------------------------|---------|----------|-----------|---------------------|-------|---------------|-------------|------------------|-----------------------------------------------------------------------------------------|--------------------------------|----|--|--|--|--|--|--|--|
| LOCATION: UTILITY / STORAGE 116R |                         |         |          |           | VOLTAGE: 208Y/120V  |       |               |             |                  | A.I.C RATING: 22                                                                        |                                |    |  |  |  |  |  |  |  |
| FED FROM: SDP                    |                         |         |          |           | PHASES: 3           |       |               |             |                  | MAIN TYPE: MLO                                                                          |                                |    |  |  |  |  |  |  |  |
| MOUNTING: SURFACE                |                         |         |          |           | WIRES: 4            |       |               |             |                  | MIN. MCB/MLO RATING: 250 A                                                              |                                |    |  |  |  |  |  |  |  |
| ENCLOSURE RATING: NEMA 1         |                         |         |          |           |                     |       |               |             |                  | C/G/R REFERS TO SIZE OF CURRENT-CARRYING CONDUCTORS, GROUND, AND RACEWAY, RESPECTIVELY. |                                |    |  |  |  |  |  |  |  |
| CKT                              | LOAD NAME               | #12     | C/G/R    | TRIP/POLE | A                   | B     | C             | POLE/TRIP   | C/G/R            | LOAD NAME                                                                               | CKT                            |    |  |  |  |  |  |  |  |
| 1                                | OUTDOOR LIGHTS          | #12     | 3/4"     | 20 A 1    | 112                 | 126   |               | 1           | 20 A 3/4"        | (2)#12                                                                                  | 2                              |    |  |  |  |  |  |  |  |
| 3                                | PREPARED SPACE          |         |          | -- 1      |                     | --    | 540           |             | 1                | 20 A 3/4"                                                                               | 116J RECPTS                    | 4  |  |  |  |  |  |  |  |
| 5                                | MECH RECPT              | (2)#12  | #12 3/4" | 20 A 1    |                     |       |               |             | 1                | 20 A 3/4"                                                                               | EXHAUST FAN                    | 6  |  |  |  |  |  |  |  |
| 7                                | MEDIA CENTER 206 RECPTS | (2)#12  | #12 3/4" | 20 A 1    | 1,080               | 1,080 |               | 180 240     | 1                | 20 A 3/4"                                                                               | MEDIA CENTER FLOOR.            | 8  |  |  |  |  |  |  |  |
| 9                                | 2ND FLOOR ADD LIGHTS    | (2)#12  | #12 3/4" | 20 A 1    |                     |       | 1,728 540     |             | 1                | 20 A 3/4"                                                                               | MEDIA CENTER 206 RECPTS        | 10 |  |  |  |  |  |  |  |
| 11                               | 116J RECPTS             | (2)#12  | #12 3/4" | 20 A 1    |                     |       |               | 720 1,416   | 1                | 20 A 3/4"                                                                               | FIRST FLOOR ADD LIGHTING       | 12 |  |  |  |  |  |  |  |
| 13                               | 116M RECPT              | (2)#12  | #12 3/4" | 20 A 1    | 540                 | 720   |               |             | 1                | 20 A 3/4"                                                                               | 116M RECPT                     | 14 |  |  |  |  |  |  |  |
| 15                               | 116Q RECPTS             | (2)#12  | #12 3/4" | 20 A 1    |                     |       | 720 0         |             | 1                | 20 A                                                                                    | SPARE                          | 16 |  |  |  |  |  |  |  |
| 17                               | MEDIA CENTER 206 RECPTS | (2)#12  | #12 3/4" | 20 A 1    |                     |       |               | 540 720     | 1                | 20 A 3/4"                                                                               | MEDIA CENTER 206 RECPTS        | 18 |  |  |  |  |  |  |  |
| 19                               |                         |         |          |           | 300                 | 1,956 |               |             |                  |                                                                                         |                                | 20 |  |  |  |  |  |  |  |
| 21                               | AHU-116                 | (3) #12 | #12 3/4" | 15 A 3    |                     |       | 300 1,956     |             | 3                | 25 A 3/4"                                                                               | CU-116                         | 22 |  |  |  |  |  |  |  |
| 23                               |                         |         |          |           | 1,956               | 1,956 |               |             |                  |                                                                                         |                                | 24 |  |  |  |  |  |  |  |
| 25                               |                         |         |          |           |                     |       | 1,956 1,956   |             | 3                | 25 A 3/4"                                                                               | CU-116M                        | 26 |  |  |  |  |  |  |  |
| 27                               | CU-116J                 | (3)#10  | #10 3/4" | 25 A 3    |                     |       |               | 1,956 1,956 |                  |                                                                                         |                                | 28 |  |  |  |  |  |  |  |
| 29                               |                         |         |          |           | 9,607               | 150   |               |             | 1                | 20 A 3/4"                                                                               | LOUVER                         | 30 |  |  |  |  |  |  |  |
| 31                               |                         |         |          |           |                     |       | 9,607 520     |             |                  |                                                                                         |                                | 32 |  |  |  |  |  |  |  |
| 33                               | RTU-M                   | (3)#1   | #8 1/16" | 100 A 3   |                     |       |               | 9,607 520   | 2                | 15 A 3/4"                                                                               | UV-116J                        | 34 |  |  |  |  |  |  |  |
| 35                               |                         |         |          |           |                     |       |               |             |                  |                                                                                         |                                | 36 |  |  |  |  |  |  |  |
| 37                               | UV-116M                 | (2)#12  | #12 3/4" | 15 A 2    | 520                 | 0     |               |             | 1                | 20 A                                                                                    | SPARE                          | 38 |  |  |  |  |  |  |  |
| 39                               |                         |         |          |           |                     |       | 520 0         |             | 1                | 20 A                                                                                    | SPARE                          | 40 |  |  |  |  |  |  |  |
| 41                               | SPARE                   |         |          | 20 A 1    |                     |       |               | 0 0         | 1                | 20 A                                                                                    | SPARE                          | 42 |  |  |  |  |  |  |  |
| 43                               | SPARE                   |         |          | 20 A 1    | 0                   | 0     |               |             | 1                | 20 A                                                                                    | SPARE                          | 44 |  |  |  |  |  |  |  |
| 45                               | SPARE                   |         |          | 20 A 1    |                     | 0     | 0             |             | 1                | 20 A                                                                                    | SPARE                          | 46 |  |  |  |  |  |  |  |
| 47                               | SPARE                   |         |          | 20 A 1    |                     |       |               | 0 --        | 1                | --                                                                                      | PREPARED SPACE                 | 48 |  |  |  |  |  |  |  |
| 49                               | PREPARED SPACE          |         |          | -- 1      | --                  | --    |               |             | 1                | --                                                                                      | PREPARED SPACE                 | 50 |  |  |  |  |  |  |  |
| 51                               | PREPARED SPACE          |         |          | -- 1      |                     | --    | --            | -- --       | 1                | --                                                                                      | PREPARED SPACE                 | 52 |  |  |  |  |  |  |  |
| 53                               | PREPARED SPACE          |         |          | -- 1      |                     |       |               |             | 1                | --                                                                                      | PREPARED SPACE                 | 54 |  |  |  |  |  |  |  |
| TOTAL LOAD (VA PER PHASE):       |                         |         |          |           | 20,103 VA           |       | 20,343 VA     |             | 20,111 VA        |                                                                                         |                                |    |  |  |  |  |  |  |  |
| TOTAL LOAD (VA):                 |                         |         |          |           |                     |       | 60,557 VA     |             |                  |                                                                                         |                                |    |  |  |  |  |  |  |  |
| TOTAL AMPS (A PER PHASE):        |                         |         |          |           | 168 A               |       | 170 A         |             | 168 A            |                                                                                         |                                |    |  |  |  |  |  |  |  |
| TOTAL AMPS (A):                  |                         |         |          |           |                     |       | 168 A         |             |                  |                                                                                         |                                |    |  |  |  |  |  |  |  |
| LOAD CLASSIFICATION              |                         |         |          |           | CONNECTED LOAD (VA) |       | DEMAND FACTOR |             | EST. DEMAND (VA) |                                                                                         | TOTALS                         |    |  |  |  |  |  |  |  |
| LAN_LIGHTING                     |                         |         |          |           | 3,382               |       | 100.00%       |             | 3,382            |                                                                                         |                                |    |  |  |  |  |  |  |  |
| Other                            |                         |         |          |           | 49,795              |       | 100.00%       |             | 49,795           |                                                                                         | TOTAL CONN. LOAD (VA): 60,557  |    |  |  |  |  |  |  |  |
| LAN_EQUIPMENT                    |                         |         |          |           | 360                 |       | 100.00%       |             | 360              |                                                                                         | TOTAL EST. DEMAND (VA): 60,557 |    |  |  |  |  |  |  |  |
| LAN_RECETAPCLES                  |                         |         |          |           | 7,020               |       | 100.00%       |             | 7,020            |                                                                                         | TOTAL CONN. CURRENT (A): 168 A |    |  |  |  |  |  |  |  |
|                                  |                         |         |          |           |                     |       |               |             |                  |                                                                                         | TOTAL EST. CURRENT (A): 168 A  |    |  |  |  |  |  |  |  |

|             |              |
|-------------|--------------|
| Eng'r. Nos. | 24GA27937500 |
| Arch. Nos.  | 21AC00012400 |
| Date        | 07/03/24     |
| Checked     | EM           |
| Drawn       | PK           |

**THOMAS WIGHARD, R.A.**

| <u>Date</u> | <u>Description</u> |
|-------------|--------------------|
|-------------|--------------------|

**LAN**  
ASSOCIATES

Engineering,  
Planning,  
Architecture,  
Surveying Inc.

**ELECTRICAL SINGLE LINE**  
**ADDITIONS TO J. FITHIAN TATEM ELEMENTARY SCHOOL**  
HADDONFIELD BOARD OF EDUCATION  
1 GLOVER AVE. HADDONFIELD, NJ 08033

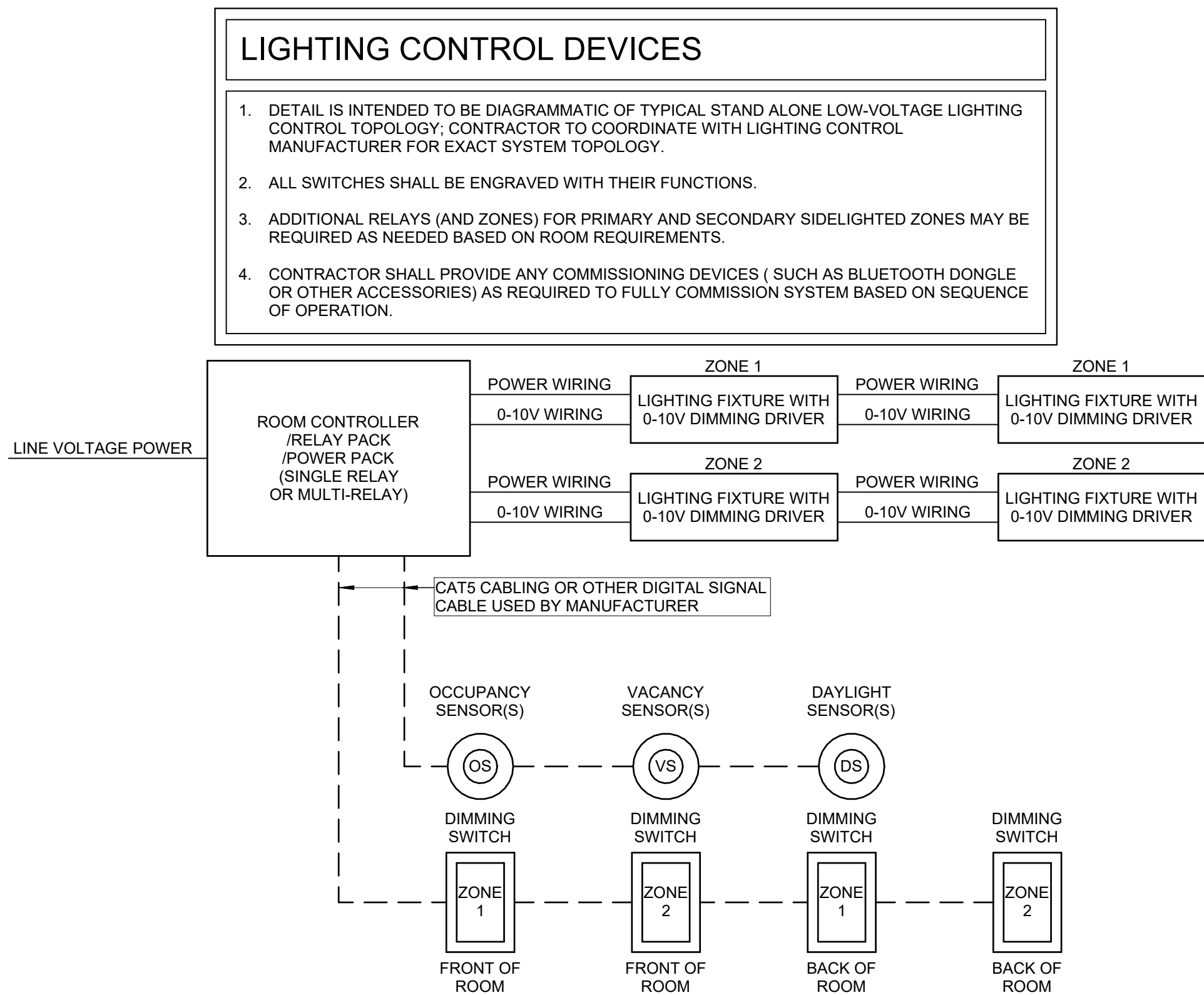
Job No. 2.20277.25.10

File No.

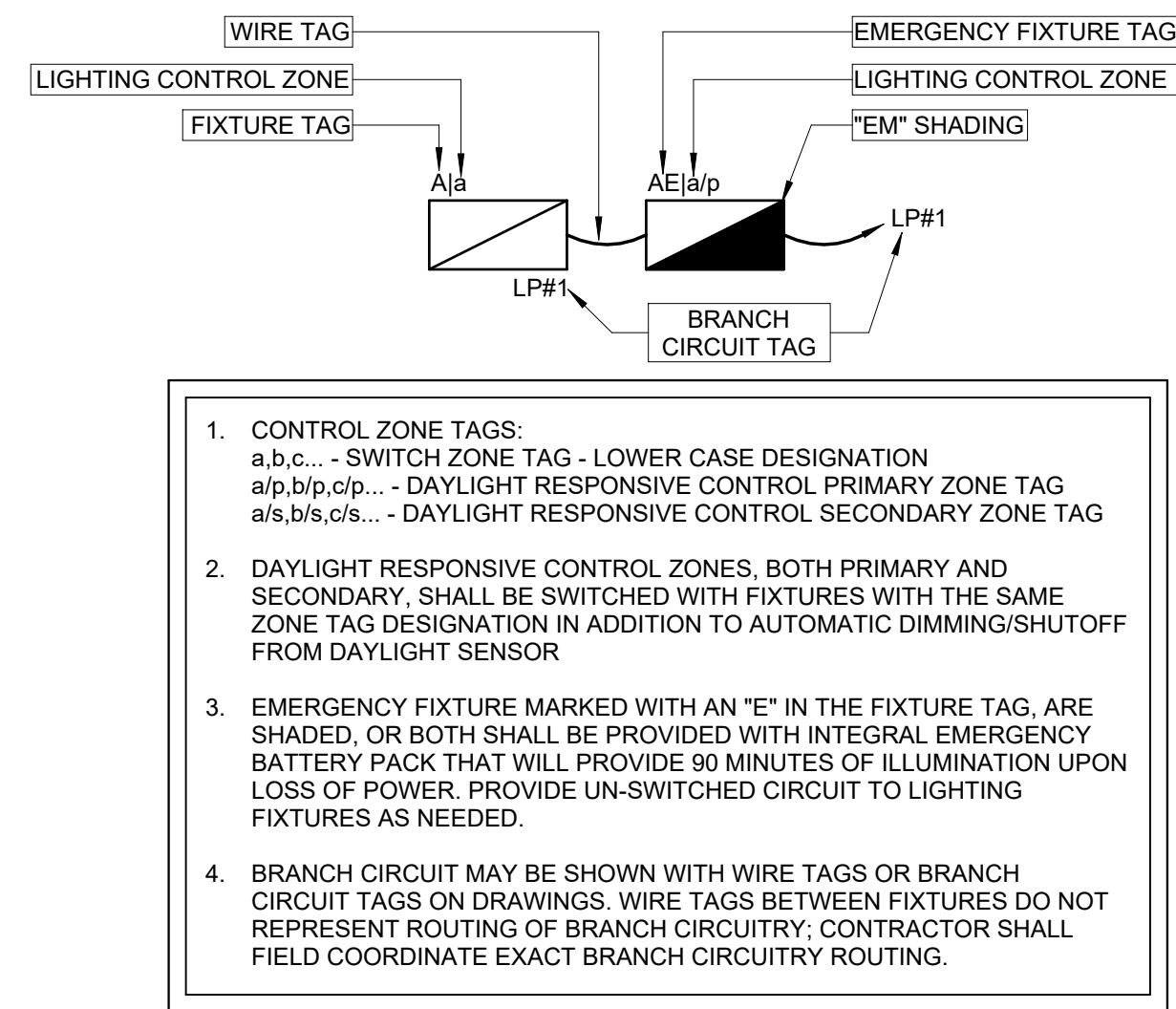
## E6.01



## 2 DEVICE MOUNTING HEIGHTS



4 TYPICAL LIGHTING CONTROL DETAIL  
E6.02 NOT TO SCALE

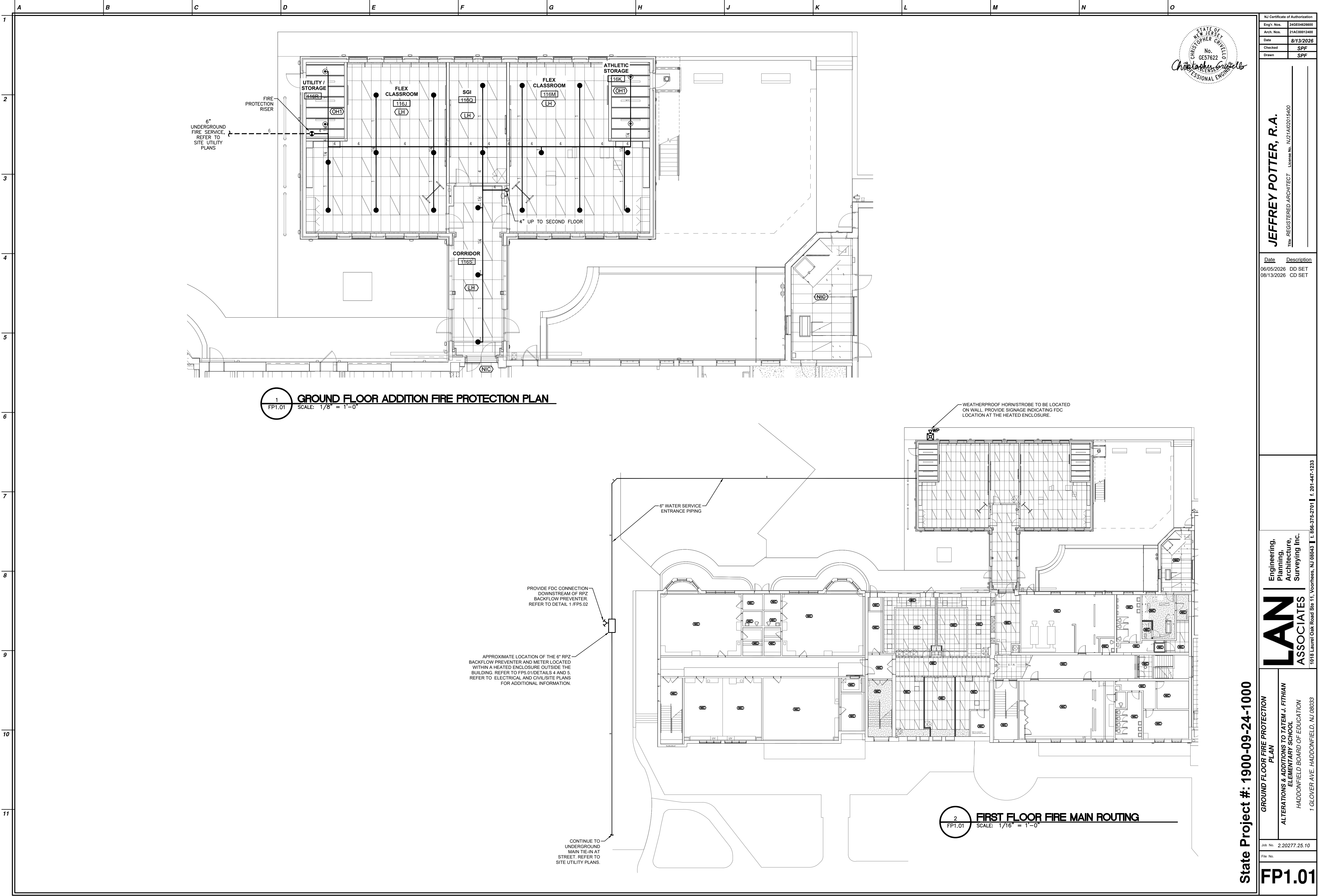


5 TYPICAL LIGHTING DESIGNATIONS  
E6.02 NOT TO SCALE



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State Project #: 1900-09-24-1000

GROUND FLOOR FIRE PROTECTION  
PLAN  
ALTERATIONS & ADDITIONS TO TATEM J. FITHIAN  
ELEMENTARY SCHOOL  
HADDONFIELD BOARD OF EDUCATION  
1 GLOVER AVE. HADDONFIELD, NJ 08033

Engineering,  
Planning,  
Architecture,  
Surveying Inc.

**LAN**  
ASSOCIATES  
1018 Laurel Oak Road Ste 11, Voorhees, NJ 08043 | t. 856-375-2701 | f. 201-447-1233

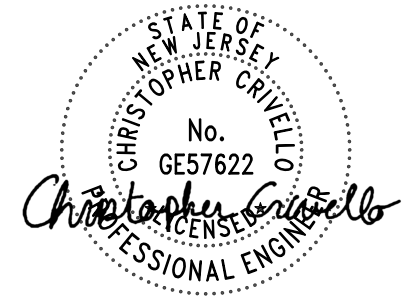
Job No. 2.20277.25.10  
File No.

**FP1.01**

| Date       | Description |
|------------|-------------|
| 06/05/2026 | DD SET      |
| 08/13/2026 | CD SET      |

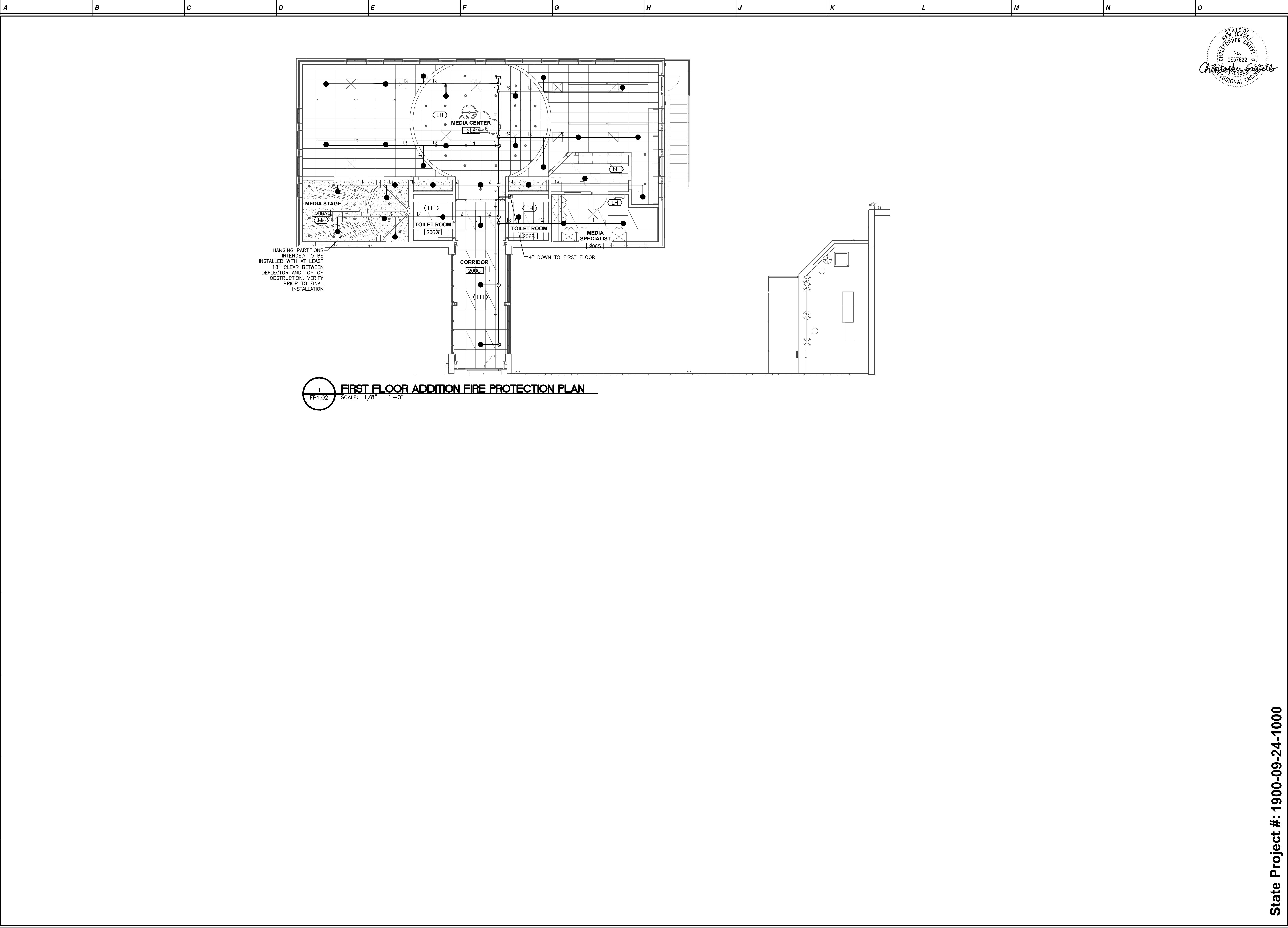
**JEFFREY POTTER, R.A.**  
This REGISTERED ARCHITECT License No. NJ21A02015400

|                                 |              |
|---------------------------------|--------------|
| NJ Certificate of Authorization |              |
| Eng'r. Nos.                     | 24GE04626600 |
| Arch. Nos.                      | 21AC00012400 |
| Date                            | 8/13/2026    |
| Checked                         | SPF          |
| Drawn                           | SPF          |

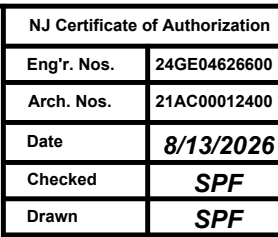




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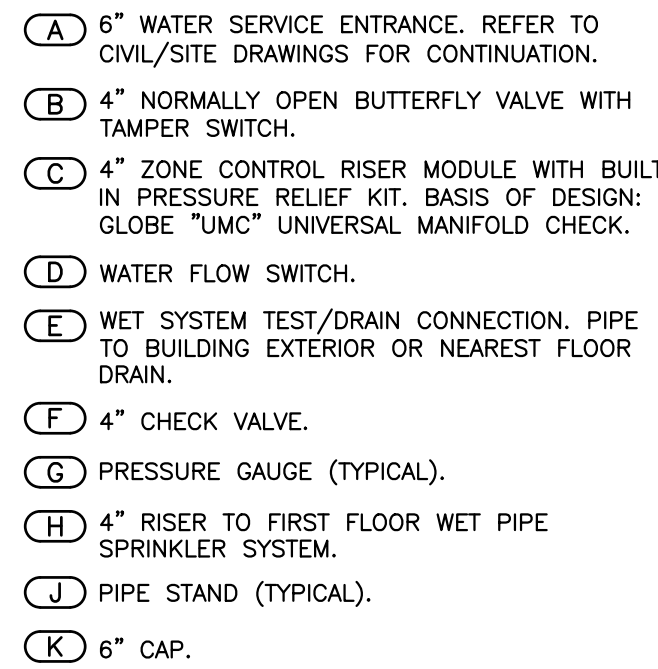
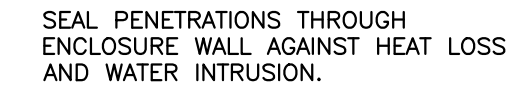
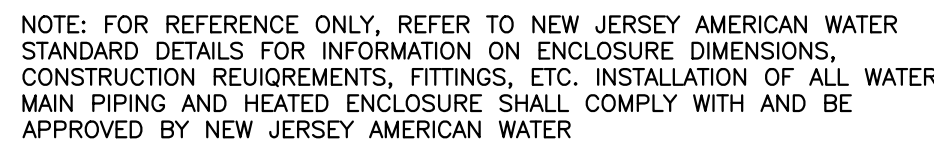
Title REGISTERED ARCHITECT License No. NJ21A102015400

-1233

**LAN ASSOCIATES**

Job No. 2.20277.25.10

## FP5.01



6 **SCHEMATIC WATER SERVICE ENTRANCE**  
FP5.01 SCALE: NOT TO SCALE

LOCAL AHJ AND/OR WATER DEPARTMENT REQUIRE A LEVEL OF CONNECTION CONTROL ABOVE THE DOUBLE CHECK BACKFLOW PREVENTION DEVICE SPECIFIED ON THESE DRAWINGS, THE ARCHITECT AND ENGINEER SHALL BE NOTIFIED PRIOR TO SUBMISSION OF PROPOSAL. NO ADDITIONAL COSTS TO THE CONTRACT PRICE WILL BE ACCEPTED FOR AN INCREASE IN THE LEVEL CROSS CONNECTION CONTROL (I.E. LOCAL REQUIREMENT FOR INSTALLATION OF RPZ BACKFLOW PREVENTION DEVICE, INCREASE IN PIPE SIZES OR RESET OF RESET PRESSURE SET POINTS FROM THE INSTALLED RPZ BACKFLOW PREVENTION DEVICE, ETC.) THAT WOULD HAVE BEEN DETERMINED BY CONTACTING THE LOCAL AHJ AND/OR WATER DEPARTMENT PRIOR TO PREPARING THE PROPOSAL.

G- BACKFLOW PREVENTER ASSEMBLY (FURNISHED & INSTALLED BY CUSTOMER)





**PRODUCT LEGEND:**

- 1 INLET NIPPLE (1" FNPT)
- 2 NUT
- 3 ISOLATION RING
- 4 COLLAR / WELD FITTING
- 5 STAINLESS STEEL FLEXIBLE BRAIDED HOSE (1" NOMINAL DIAMETER)  
(LENGTHS AVAILABLE 31", 36", 48", 60", & 72")
- 6 COLLAR / WELD FITTING
- 7 NUT
- 8 REDUCING OUTLET (AVAILABLE 1/2" OR 3/4" FNPT)
- 9 CENTER BRACKET ASSEMBLY
- 10 SQUARE BAR (AVAILABLE IN 24" AND 48" LENGTHS)
- 11 END BRACKET ASSEMBLY
- 12 SHEET METAL SCREW
- 13 MECHANICAL-T OUTLET STYLE 922 FLORECK (1" FNPT)

SEE SUBMITTAL 10.85 FOR MAXIMUM TOTAL BENDS

MIN. RADIUS PER THE 1" MIN. RADIUS PER THE 1/2"

UL LISTED US FM

NOTES:  
1. PRELIMINARY HYDRAULIC CALCULATIONS BASED ON 60" FLEX HOSE LENGTHS WITH STRAIGHT REDUCERS.

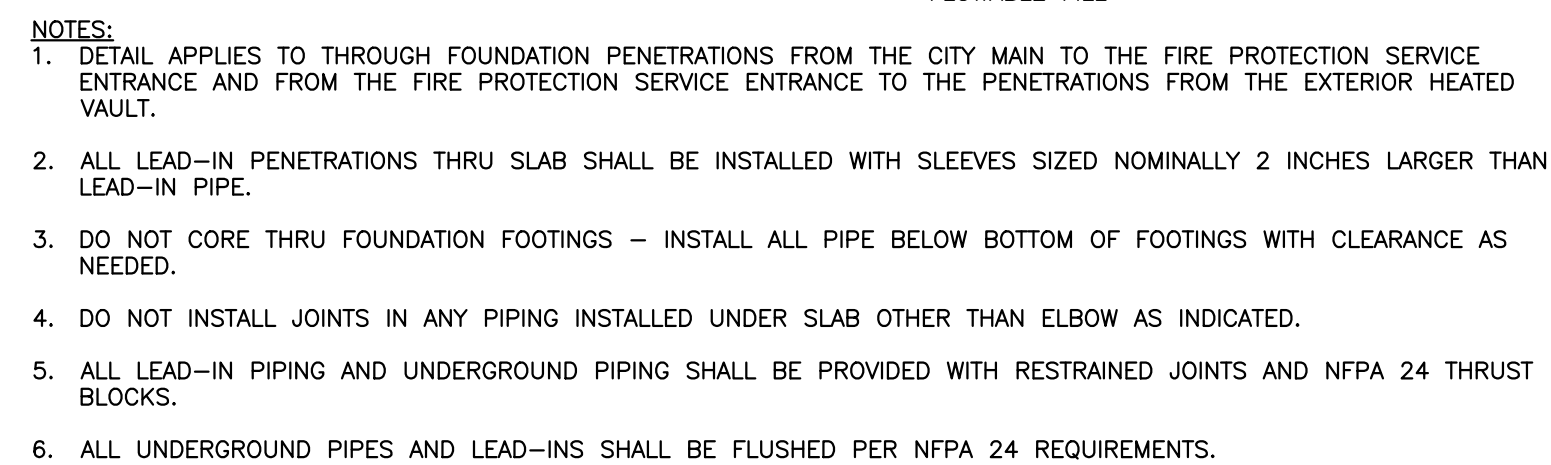
AB9  
AB7  
AB1  
AB1  
AB7  
AB9

DROP CEILING TILE  
CEILING COVER PLATE

**2**  
FP5.02

**BRAIDED FLEXIBLE HOSE SPRINKLER ASSEMBLIES**

SCALE: NOT TO SCALE



3 UNDERGROUND PIPE THROUGH FOUNDATION  
FP5.02 SCALE: NOT TO SCALE



**JEFFREY POTTER, R.A.**

| <u>Date</u> | <u>Description</u> |
|-------------|--------------------|
| 06/05/2026  | DD SET             |
| 08/13/2026  | CD SET             |

**Engineering,  
Planning,  
Architecture,  
Surveying Inc.**

**LAN**  
ASSOCIATES

**FIRE PROTECTION DETAILS**

---

**ALTERATIONS & ADDITIONS TO TATEM J. FITHIAN  
ELEMENTARY SCHOOL**

HADDONFIELD BOARD OF EDUCATION

1 GLOVER AVE. HADDONFIELD, NJ 08033

Job No. 2.20277.25.10

File No.

## FP5.02

**State Project #: 1900-09-24-1000**