



**Additions and Renovations
Platt Technical High School
Milford, CT**

ADDENDUM NO. 1

July 23, 2019

The original Specifications and Drawings dated May 24, 2019 for the above-captioned project are amended as stated in this Addendum. This Addendum consists of seven (7) pages, plus the following attachments.

ATTACHMENTS

PROJECT MANUAL SECTION 22 11 23 – FACILITY NATURAL GAS PIPING	(13 pages)
ARCHITECTURAL SKETCHES RA1-01 thru RA1-02	(2 pages)
STRUCTURAL DRAWING S0-0-1	(1 page)
FIRE PROTECTION DRAWINGS FP1-1-1E, FP1-1-2B, FP1-1-3C, FP1-1-MB, FP1-1-ME, FP2-1-1	(6 pages)
PLUMBING DRAWINGS P1-1-UB, P1-1-1B, P1-1-1E, P1-1-2C, P2-1-1, P2-1-2, P3-1-2, P4-1-1, P4-1-3	(9 pages)
MECHANICAL DRAWINGS M1-1-1A, M1-1-1E, M1-1-ME, M1-2-1E, M2-1-1B, M2-1-1E, M2-1-2D, M2-3-1A, M2-3-1C, M3-1-2, M3-1-3, M5-1-4	(12 pages)
ELECTRICAL DRAWINGS E2-1-1E, E2-1-2E, E2-2-1C, E6-1-1, E7-1-2, E7-1-3, E8-1-1, E8-1-2, E8-1-3, E8-1-5	(10 pages)
EQUIPMENT SKETCHES REQ1-01	(1 page)
FOOD SERVICE SKETCHES RFS1-01 thru RFS1-05	(5 pages)

SIGN-IN SHEET FOR PRE-BID CONFERENCE THAT OCCURRED ON JULY 22, 2019 (SEE ATTACHMENT).

BIDDER QUESTION LOG (SEE ATTACHMENT), dated 7-23-2019.



AMENDMENTS TO PROJECT MANUAL

Note that all references to the Project Title as "Platt Technical High School" within the Construction Documents shall be replaced with the following Project Title "**Additions and Renovations Platt Technical High School**". The scope of the Project remains as indicated on the contract documents; this Project Title revision is necessary to align the Title on the Documents with the DAS's official Project Title that was established at the inception of the Project.

DIVISION 00 – PROCUREMENT AND CONTRACTING REQUIREMENTS

ADD 1-001 SECTION 00 01 10 - TABLE OF CONTENTS
Page 6, DELETE Section "12 71 10, Fixed Seating and Tables."

DIVISION 12 – FURNISHINGS

ADD 1-002 SECTION 12 61 13 – FIXED AUDIENCE SEATING
Page 1, Article 1.2, Paragraph A, Sub-Paragraph 1, ADD the following after the first sentence:

"Provide 9 (nine) seat and 2 (two) removable seats at Balcony, Room D224, as shown on drawing A1-1-2D."

ADD 1-003 SECTION 12 71 10 – FIXED SEATING AND TABLES
DELETE this Specification Section in its entirety.

DIVISION 13 – SPECIAL CONSTRUCTION

ADD 1-004 SECTION 13 34 16.53 – TRANSPORTABLE BLEACHERS
Page 2, Article 2.3, Paragraph A, REPLACE paragraph with the following:
"A. Quantity and Size: Provide the quantity of units indicated on the drawings. Size of units shall be 5 rows high x 15-feet long."

Page 2, Article 2.3, Paragraph I, ADD the following Subparagraph:
"2. Furnish one Transport Kit for each bleacher unit."

ADD 1-005 SECTION 13 34 16 – GRANDSTAND SEATING SYSTEM
Page 4, Article 2.2, ADD Paragraph H per the following:
"H. Vertical Closure System

1. Vertical closure shall be provided at the following locations and shall enclose the area from the walking surface to 4" above grade:
 - a. Front of grandstand
 - b. Field side of egress stair at front walkway
 - c. Field side of egress ramp
2. Vertical closure material shall be corrugated 6063-T6 extruded aluminum riser boards and shall be provided in a clear anodized finish."



DIVISION 21 – FIRE SUPPRESSION

- ADD 1-006** **Section 21 05 48 – VIBRATION & SEISMIC CONTROLS FOR FIRE-SUPP. PIPING & EQUIPMENT**
Page 1, 2, Articles 1.4 – D and 2: Expanded description of seismic certification analysis.
Page 3, Articles 2.1 – B: Add Novia as an acceptable manufacturer.

DIVISION 22 – PLUMBING

- ADD 1-007** **Section 22 05 48 – VIBRATION & SEISMIC CONTROLS FOR PLUMBING PIPING & EQUIPMENT**
Page 1,2,3 Articles 1.1, 1.4, 1.8-2 –2: Delete.
Page 7, Articles 2.1 – A: Add Novia as an acceptable manufacturer.

- ADD 1-008** **Section 22 11 23 – FACILITY NATURAL GAS PIPING**
REPLACE this Section in its entirety with the attached revised Section.

- ADD 1-009** **Section 22 15 00 – GENERAL SERVICE COMPRESSED AIR SYSTEMS**
1. Page 2, Articles 1.2 – B 1: delete: ASTM A53/A53M - Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless.

- ADD 1-010** **Section 22 15 00 – GENERAL SERVICE COMPRESSED AIR SYSTEMS**
1. Page 4, Articles 2.1 – A.2: delete: Tee Connections: Mechanically extracted collars with notched and dimpled branch tube or Mechanical T.
2. Page 4, Articles 2.1 – A.3: delete: or grooved.
3. Page 4, Articles 2.2 – A.4: delete: Stainless Steel Piping: 300 psig, threaded type with compression type ends.

DIVISION 23 – HEATING VENTILATION AND AIR CONDITIONING

- ADD 1-011** **Section 23 05 16 – EXPANSION FITTINGS AND LOOPS FOR HVAC PIPING**
Page 3, Articles 2.1 – A and 2.2 - A: Add Novia as an acceptable manufacturer.
Page 4, Article 2.3 – A: Add Novia as an acceptable manufacturer.

- ADD 1-012** **Section 23 09 23 –DIGITAL DIRECT CONTROL SYSTEM FOR HVAC**
Page 20, Article 2.9 – I: At CO/NO2 description add subparagraph 7. Provide to sign adjacent to panel and alarm output “CARBON MONOXIDE / NITROGEN DIOXIDE ALARM PANEL”.

- ADD 1-013** **Section 23 11 13 – FACILITY FUEL OIL PIPING**
Page 6, Article 2.12 – A: Revise UL listing from UL-58 to UL-142 and delete reference to 30-year warranty. Standard warranty for the project shall apply.

- ADD 1-014** **Section 23 34 00 – HVAC FANS AND DUST COLLECTORS**
Page 7, Article 2.8 – B: Revise RHD-CA1 to be 5’x3’6” neck size; 6 tier.
Page 9, Article 11: Dust Collection System DC-2 shall be served by spark detection and extinguishment system; same specification as DC-2.

- ADD 1-015** **Section 23 51 00 – BREECHINGS, CHIMNEYS AND STACKS**
Page 1, Articles 1.1 – A: Revise subparagraph 5 to read: Breeching and vents and induced draft fans for appliances and equipment at the Plumbing Shop and HVAC Shop.
Page 3, Article 2,2: Delete reference to IDF-1 and add reference to IDF-2.
Page 4, Article 2,3: Delete reference to IDF-2 and add reference to IDF-1.
Page 7, Article 2,7 - E: Add note to provide balancing dampers at each branch to individual appliances.



AMENDMENTS TO DRAWINGS

Note that all references to the Project Title as "Platt Technical High School" within the Construction Documents shall be replaced with the following Project Title "**Additions and Renovations Platt Technical High School**". The scope of the Project remains as indicated on the contract documents; this Project Title revision is necessary to align the Title on the Documents with the DAS's official Project Title that was established at the inception of the Project.

ARCHITECTURAL

- ADD 1-016 A6-3-20 – TRANSLUCENT WALL PANEL AND LOUVER DETAILS**
Detail 1: Revise Pre-cast sill profile at Translucent Wall Panel Sill Detail. Refer to sketch RA1-02.
- ADD 1-017 A7-1-7 – STAIR DETAILS**
Detail 7. Added code requirements for nosing projection at Typical Tread and Riser Detail. Refer to sketch RA1-01.

STRUCTURAL

- ADD 1-018 DRAWING S0-0-1 – GENERAL NOTES**
Revised Components and Cladding Design Wind Pressures (PSF) chart to show two charts. One for Unfactored ASCE 7 Loads and one for Magnified Loads for Use with FM 1-28 Designs. Refer to revision tag RS1/1.

FIRE PROTECTION

- ADD 1-019 DRAWING FP1-1-1E – FIRST FLOOR FIRE PROTECTION PLAN – AREA E**
Added second nozzle for suppression system, RFP1-1.
Revise note related to dust collection suppression system, RFP1-2.
- ADD 1-020 DRAWING FP1-1-2B – SECOND FLOOR FIRE PROTECTION PLAN – AREA B**
Added sprinklers below ductwork in Mechanical Room B201, RFP1-3.
- ADD 1-021 DRAWING FP1-1-3C – CLEARSTORY FLOOR FIRE PROTECTION PLAN – AREA C**
Expanded note for sprinklers below ductwork, RFP1-4.
- ADD 1-022 DRAWING FP1-1-MB – MEZZANINE FIRE PROTECTION PLAN – AREA B**
Added sprinklers below ductwork/louver in main mechanical Room, RFP1-5.
Added sprinklers below ductwork at two mezzanine locations, RFP1-6.
- ADD 1-023 DRAWING FP1-1-ME – MEZZANINE FIRE PROTECTION PLAN – AREA E**
Revised layout for sprinklers protecting dust collection ducts, RFP1-7.
Added sprinklers below ductwork at two mezzanine locations VOC Mezzanine M108, RFP1-8.
Added sprinklers below ductwork at two mezzanine locations VOC Mezzanine M107, RFP1-9.
Added sprinklers below ductwork at two mezzanine locations VOC Mezzanine M105, RFP1-10.
Added sprinklers below ductwork at two mezzanine locations VOC Mezzanine M104, RFP1-11.



ADD 1-024 DRAWING FP2-1-1 –FIRE PROTECTION ABBREVIATIONS AND LEGENDS
Revised notes 4,5,6,7,8 in Sprinkler system notes, RFP1-12.

PLUMBING

ADD 1-025 DRAWING P1-1-UB – UNDERSLAB PLUMBING PLAN – AREA B
Added FS-1 at equipment #22, RP1-1.

ADD 1-026 DRAWING P1-1-1B – FIRST FLOOR PLUMBING PLAN – AREA B
Added FS-1 at equipment #22, RP1-1.

ADD 1-027 DRAWING P1-1-1E – FIRST FLOOR PLUMBING PLAN – AREA E
Added note for clearance at propane tank, RP1-2.

ADD 1-028 DRAWING P1-1-2C – SECOND FLOOR PLUMBING PLAN – AREA C
Mechanical equipment hidden for clarity, RP1-3.

ADD 1-029 DRAWING P2-1-1 – KITCHEN PLUMBING PARTIAL PLAN
Added FS-1 at equipment #22, RP1-1.
Revised kitchen equipment schedule, RP1-4.

ADD 1-030 DRAWING P2-1-2 – CLASSROOM BAKERY PLUMBING PARTIAL PLAN
Revised kitchen equipment schedule, RP1-5.

ADD 1-031 DRAWING P3-1-2 –PLUMBING SCHEDULES
Revised model #s and notes in fixture schedule, RP1-6.

ADD 1-032 DRAWING P4-1-1 –PLUMBING DETAILS
Revised detail #9 to above ground tank, RP1-7.

ADD 1-033 DRAWING P4-1-3 –PLUMBING DETAILS
Added additional sizes to detail #5, RP1-8.
Revised valve location and notes to detail #6, RP1-9.
Revised notes to detail #7, RP1-10.

MECHANICAL

ADD 1-034 DRAWING M1-1-1A – FIRST FLOOR MECHANICAL PLAN – AREA A
Revise louver size and plenum per Revision RM1-1.
Revise louver size and plenum per Revision RM1-2.

ADD 1-035 DRAWING M1-1-1E – FIRST FLOOR MECHANICAL PLAN – AREA E
Change reference from IDF-2 to IDF-1 and associated changes per Revision RM1-3.
Add reference to Equipment Drawings per Revision RM1-4.
Update note at HVAC Shop per Revision RM1-5.

ADD 1-036 DRAWING M1-1-ME – MEZZANINE MECHANICAL PLAN – AREA E
Add spark detection system and revise ductwork layout per Revision RM1-6.

ADD 1-037 DRAWING M1-2-1E – ROOF MECHANICAL PLAN – AREA E
Revise ductwork layout per Revision RM1-7.



- ADD 1-038 DRAWING M2-1-1B – FIRST FLOOR MECHANICAL PIPING PLAN – AREA B**
Add butterfly valves to chilled water piping per Revision RM1-8.
Revise pipe layout and add valves per Revision RM1-9.
- ADD 1-039 DRAWING M2-1-1E – FIRST FLOOR MECHANICAL PIPING PLAN – AREA E**
Add DC-1 spark detection panel per Revision RM1-10.
- ADD 1-040 DRAWING M2-1-2D –SECOND FLOOR MECHANICAL PIPING PLAN – AREA D**
Revise type of radiation at two Science Labs from R1 to R2 per Revision RM1-11.
- ADD 1-041 DRAWING M2-3-1A –MECHANICAL PARTIAL PLAN**
Add butterfly valve to chilled water piping per Revision RM1-12.
Revise tags indicating what the temperature sensors serve per Revision RM1-13.
Revise tags indicating the designation of the type of chilled water piping per Revision RM1-14.
Add note at cooling tower per Revision RM1-15.
- ADD 1-042 DRAWING M2-3-1C –MECHANICAL PENTHOUSE PARTIAL PLAN**
Revise louver sizes and plenums per Revision RM1-16.
Add tag for AHU-4 per Revision RM1-16.
Add note for 24x12 RA per Revision RM1-16.
Revise location of EF-A and EF-V2 and layout of associated ductwork. Revise louver sizes and plenums per Revision RM1-16.
Add note regarding OA intakes per Revision RM1-16.
Revise layout of chilled water and hot water mains at AHU-4 and AHU-6 per Revision RM1-16.
- ADD 1-043 DRAWING M3-1-2 –MECHANICAL SCHEDULES**
Revise Remark #2 regarding drain pans per Revision RM1-17.
Revise reference to Note #2 to proper designation per Revision RM1-18.
Update data at Wrap Around Heat Pipe Schedule per Revision RM1-19.
- ADD 1-044 DRAWING M3-1-3 –MECHANICAL SCHEDULES**
Update data at Induced Draft Fan Schedule per Revision RM1-20.
- ADD 1-045 DRAWING M5-1-4 –MECHANICAL CONTROLS**
Revise Detail #17 per Revision RM1-21.

ELECTRICAL

- ADD 1-046 DRAWING 2-1-1E – FIRST FLOOR ELECTRICAL POWER PLAN AREA E**
Revised PP1-1 to a 3-section panel and shifted electrical room layout for clearances per Revision RE1-1.
- ADD 1-047 DRAWING 2-1-2E – SECOND FLOOR ELECTRICAL POWER PLAN AREA E**
Revised PP3-2 & MEP3-2 to a 3-section panel and shifted electrical room layout for clearances per Revision RE1-2.
Revised PP2-2 to a 3-section panel and shifted electrical room layout for clearances per Revision RE1-3.
- ADD 1-048 DRAWING 2-2-1C – ROOF ELEC. POWER AND PENTHOUSE ELEC. POWER AND LIGHTING PLANS AREA C**
Added equipment tags per Revision RE1-4.

- ADD 1-049 DRAWING 6-1-1– ELECTRICAL DETAILS**
Revised elevator machine space detail for new circuit homerun per Revision RE1-5.
- ADD 1-050 DRAWING 7-1-2 – ELECTRICAL RISER DIAGRAM**
Revised 1000A circuit breaker feeding T-LDSB-1 to have GFCI protection per Revision RE1-6.
Revised PP2-2 to be a 3-section panel with 250A main circuit breaker. T-PP2-2 was upsized to a T6 transformer and the feeder and disconnect have been upsized as well as the breaker feeding the disconnect from DSB-1 per Revision RE1-7.
Moved note for elevator conduit from MEP3-2 to EPDP-2 per Revision RE1-8.
- ADD 1-051 DRAWING 7-1-3 – ELECTRICAL RISER DIAGRAM SCHEDULES & DETAILS**
Updated transformer schedule per Revision RE1-9.
Changed feeder tags for 3000A feeder per Revision RE1-10.
- ADD 1-052 DRAWING 8-1-1 – ELECTRICAL PANELBOARDS**
Added 30A-3P circuit breaker in panelboard EPDP-2 for elevator controller and added note in panelboard EPDP-2 for shunt-trip circuit breaker with auxiliary contacts per Revision RE1-11.
- ADD 1-053 DRAWING 8-1-2 – ELECTRICAL PANELBOARDS**
Added 20A-1P circuit breaker in panelboard EP3-2 for elevator shunt-trip control per Revision RE1-12.
- ADD 1-054 DRAWING 8-1-3 – ELECTRICAL PANELBOARDS**
Revised panelboard PP2-2 to 250A bus rating and 250A main circuit breaker per Revision RE1-13.
Removed elevator shunt trip control circuit from panelboard PP3-2 and added a spare per Revision RE1-14.
- ADD 1-055 DRAWING 8-1-5 – ELECTRICAL PANELBOARDS**
Removed 30A-3P circuit breaker for elevator controller from panelboard MEP3-2 and removed note in panelboard MEP3-2 to provide shunt-trip with auxiliary contacts per Revision RE1-15.

EQUIPMENT

- ADD 1-056 EQ-2.4 - HVAC**
Propane tank shall be 10' away from pad.

FOOD SERVICE

- ADD 1-057 FS-2 – CULINARY ARTS EQUIPMENT SCHEDULE**
Add language of “Side Splashes” to CA-03, per request of Board of Health.
- ADD 1-058 FS-2 – CULINARY ARTS EQUIPMENT SCHEDULE**
Add item CA-67, Pot & Pan Rack, per request of Board of Health. Four (4) Required.
- ADD 1-059 FS-1 – CULINARY ARTS EQUIPMENT PLAN**
Add item CA-67, Pot & Pan Rack, per request of Board of Health.
- ADD 1-060 FS-1 – CULINARY ARTS EQUIPMENT PLAN**
Add item CA-90, Add label “Hand Sink”, per request of Board of Health.
- ADD 1-061 FS-4– MAIN KITCHEN & SERVERY EQUIPMENT PLAN**
Add item CA-67, Pot & Pan Rack, per request of Board of Health.

E N D O F A D D E N D U M N O . 1



PART 1 GENERAL

1.1 RELATED DOCUMENTS

- A. Each Contractor, Subcontractor and/or supplier providing goods or services referenced in or related to this Section shall also be bound by the Documents identified in Division 01 Section "Summary", Paragraph 1.1A, entitled "Related Documents."

1.2 HIGH PERFORMANCE BUILDINGS GENERAL REQUIREMENTS

- A. Implement practices and procedures to meet the project's environmental goals, which include compliance with Connecticut Standard Guidelines Compliance Manual for High Performance Buildings, September 2011 with additional mandatory building project requirements for schools. Specific project goals which may impact this and the other sections of this specification include: use of recycled-content materials; use of locally-manufactured materials; use of low-emitting materials; use of certified wood products; construction waste recycling; and the implementation of a construction indoor air quality management plan. Ensure that the requirements related to these goals, as defined in this Section and other Sections of the contract documents, are implemented to the fullest extent. Substitutions or other changes to the work shall not be allowed if such changes substantially compromise the stated High Performance Building criteria.
- B. Comply with Connecticut Standard Guidelines Compliance Manual for High Performance Buildings, September 2011 with additional mandatory building project requirements for schools and the Department of Administrative Services / Office of School Construction Grants High Performance School Construction Bulletin, September 2015.

1.3 ROOM NUMBERING REQUIREMENTS

- A. All system programming and labeling utilizing room numbers shall follow the room numbering plans provided by the Architect. Room numbers shown on contract documents for individual trades are not to be considered final numbers and shall not be utilized.

1.4 SUMMARY

- A. Section Includes:
1. Natural gas piping buried within 5 feet of building.
 2. Natural gas piping above grade.
 3. Unions and flanges.
 4. Valves.
 5. Energy Meter.
 6. Pipe hangers and supports.
 7. Strainers.
 8. Natural gas pressure regulators.
 9. Natural gas pressure relief valves.
 10. Underground pipe markers.
 11. Bedding and cover materials.
- B. Related Sections:
1. Section 07 90 00 - Joint Protection: Product requirements for calking between fixtures and building components for placement by this section.
 2. Section 22 04 00 – General Conditions for Plumbing Trades
 3. Section 22 05 00 – Common Work Results for Plumbing.
 4. Section 22 05 03 – Pipes and Tubes for Plumbing Piping and Equipment.
 5. Section 22 05 13 – Common Motor Requirements for Plumbing Equipment
 6. Section 22 05 16 – Expansion Fittings and Loops for Plumbing Piping.
 7. Section 22 05 23 – General-Duty Valves for Plumbing Piping.
 8. Section 22 05 29 – Hangers and Supports for Plumbing Piping and Equipment

9. Section 22 05 48 – Vibration and Seismic Controls for Plumbing Piping and Equipment
10. Section 22 05 53 – Identification for Plumbing Piping and Equipment.
11. Section 22 05 79 – Hangers and Supports for Plumbing Piping and Equipment.
12. Section 22 07 00 – Plumbing Insulation.
13. Section 22 11 23 – Facility Natural-Gas Piping.
14. Section 22 15 00 – General Service Compressed-Air Systems.
15. Section 22 21 23 – Plumbing Pumps.
16. Section 22 34 00 – Fuel-Fired Domestic Water Heaters.
17. Section 22 40 00 – Plumbing Fixtures
18. Section 26 05 03 - Equipment Wiring Connections: Execution requirements for electric connections to sensor valves and faucets specified by this section.

1.5 REFERENCES

- A. American National Standards Institute:
 1. ANSI Z21.15 - Manually Operated Gas Valves for Appliances, Appliance Connector Valves and Hose End Valves.
- B. American Society of Mechanical Engineers:
 1. ASME B16.3 - Malleable Iron Threaded Fittings.
 2. ASME B16.26 - Cast Copper Alloy Fittings for Flared Copper Tubes.
 3. ASME B16.33 - Manually Operated Metallic Gas Valves for Use in Gas Piping Systems Up to 125 psig (sizes 1/2 - 2).
 4. ASME B31.9 - Building Services Piping.
 5. ASME Section IX - Boiler and Pressure Vessel Code - Welding and Brazing Qualifications.
- C. ASTM International:
 1. ASTM A53/A53M - Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless.
 2. ASTM A234/A234M - Standard Specification for Piping Fittings of Wrought Carbon Steel and Alloy Steel for Moderate and High Temperature Service.
 3. ASTM B88 - Standard Specification for Seamless Copper Water Tube.
 4. ASTM B280 - Standard Specification for Seamless Copper Tube for Air Conditioning and Refrigeration Field Service.
 5. ASTM B749 - Standard Specification for Lead and Lead Alloy Strip, Sheet, and Plate Products.
 6. ASTM F708 - Standard Practice for Design and Installation of Rigid Pipe Hangers.
- D. American Welding Society:
 1. AWS D1.1 - Structural Welding Code - Steel.
- E. American Water Works Association:
 1. AWWA C105 - American National Standard for Polyethylene Encasement for Ductile-Iron Pipe Systems.
- F. Manufacturers Standardization Society of the Valve and Fittings Industry:
 1. MSS SP 58 - Pipe Hangers and Supports - Materials, Design and Manufacturer.
 2. MSS SP 67 - Butterfly Valves.
 3. MSS SP 69 - Pipe Hangers and Supports - Selection and Application.
 4. MSS SP 78 - Cast Iron Plug Valves, Flanged and Threaded Ends.
 5. MSS SP 89 - Pipe Hangers and Supports - Fabrication and Installation Practices.
 6. MSS SP 110 - Ball Valves Threaded, Socket-Welding, Solder Joint, Grooved and Flared Ends.
- G. National Fire Protection Association:
 1. NFPA 54 - National Fuel Gas Code.
- H. Underwriters Laboratories Inc.:
 1. UL 842 - Valves for Flammable Fluids.
- I. ICC Codes
 1. International Fuel Gas Code 2015.

1.6 SYSTEM DESCRIPTION

- A. Where more than one piping system material is specified, provide compatible system components and joints. Use non-conducting dielectric connections when joining dissimilar metals in systems.
- B. Provide flanges, unions, or couplings at locations requiring servicing. Use unions, flanges, or couplings downstream of valves and at equipment connections. Do not use direct welded or threaded connections to valves, equipment.
- C. Provide pipe hangers and supports in accordance with ASME B31.9, ASTM F708, MSS SP 58, MSS SP 69, and MSS SP 89.
- D. Use plug, valves for shut-off and to isolate equipment, part of systems, or vertical risers.

1.7 SUBMITTALS

- A. Section 01 33 00 - Submittal Procedures: Submittal procedures.
- B. Product Data:
 - 1. Piping: Submit data on pipe materials, fittings, and accessories. Submit manufacturers catalog information.
 - 2. Valves: Submit manufacturers catalog information with valve data and ratings for each service.
 - 3. Hangers and Supports: Submit manufacturers catalog information including load capacity.
 - 4. Piping Specialties: Submit manufacturers catalog information including capacity, rough-in requirements, and service sizes for the following:
 - a. Strainers.
 - b. Natural gas pressure regulators.
 - c. Natural gas pressure relief valves.
- C. Design Data: Indicate pipe size. Indicate load carrying capacity of trapeze, multiple pipe, and riser support hangers.
- D. Test Reports: Indicate results of piping system pressure test.
- E. Manufacturer's Certificate: Certify Products meet or exceed specified requirements
- F. Welders Certificates: Certify welders employed on the Work, verifying AWS qualification within previous 12 months.
- G. High Performance Building Submittal Requirements: The contractor or subcontractor shall submit the following High Performance Building certification items:
 - 1. A Connecticut High Performance Building Compliance letter shall be provided verifying agreement with relevant High Performance requirements. Information to be supplied includes, but is not limited to:
 - a. The percentage by weight of recycled content in the product(s). Identify post-consumer and/or pre-consumer recycled content.
 - b. The manufacturing location for the product(s); and the location (source) of the raw materials used to manufacture the product(s).
 - c. Provide material costs for the materials included in the contractor's or subcontractor's work. Material cost does not include costs associated with labor and equipment.
 - 2. Letters of Certification, provided from the product manufacturer on the manufacturer's letterhead, to verify the amount of recycled content.

3. Product Cut Sheets for all materials of this Section that meet High Performance Building Requirements.
4. Material Safety Data Sheets (MSDS), for all applicable products. Applicable products include, but are not limited to adhesives, sealants, carpets, paints and coatings applied on the interior of the building. MSDS shall indicate the Volatile Organic Compound (VOC) limits of products submitted (If an MSDS does not include a product's VOC content, then product data sheets, manufacturer literature, or a letter of certification from the manufacturer can be submitted in addition to the MSDS to indicate the VOC content).

1.8 CLOSEOUT SUBMITTALS

- A. Section 01 70 00 - Execution and Closeout Requirements: Closeout procedures.
- B. Project Record Documents: Record actual locations of valves piping system, and system components.
- C. Operation and Maintenance Data: Submit for valves and gas pressure regulators installation instructions, spare parts lists, and exploded assembly views.

1.9 QUALITY ASSURANCE

- A. Perform natural gas Work in accordance with NFPA 54.
- B. Perform work in accordance with NFPA 54, Fuel Gas Code and local gas company requirements.
- C. Perform Work in accordance with ASME B31.9 code for installation of piping systems and ASME Section IX for welding materials and procedures.
- D. Perform Work in accordance with applicable code authority having jurisdiction AWS D1.1 for welding hanger and support attachments to building structure.
- E. Furnish shutoff valves complying with ASME B16.33 or ANSI Z21.15.
- F. Maintain one copy of each document on site.
- G. High Performance Building Requirements:
 1. Adhesives, sealants, paints or coatings used for work in this section for interior applications shall meet the requirements of Division 1, Section 018113: "Volatile Organic Compound (VOC) Limits for Adhesives, Sealants, Paints and Coatings", where applicable.
 2. Materials manufactured within a radius of 500 miles from the project site where all or a portion of the raw resources also originate within a radius of 500 miles shall be documented in accordance with the High Performance Building Requirements of this Section.
 3. Materials that contain recycled content shall be documented in accordance with the High Performance Building Requirements of this Section.

1.10 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum three years documented experience.
- B. Installer: Company specializing in performing Work of this section with minimum three years documented experience.
- C. Design piping system hangers and supports under direct supervision of Professional Engineer experienced in design of this Work and licensed at Project location

1.11 PRE-INSTALLATION MEETINGS

- A. Section 01 30 00 - Administrative Requirements: Pre-installation meeting.
- B. Convene minimum one week prior to commencing work of this section.

1.12 DELIVERY, STORAGE, AND HANDLING

- A. Section 01 60 00 - Product Requirements: Product storage and handling requirements.
- B. Accept valves on site in shipping containers with labeling in place. Inspect for damage.
- C. Protect piping and fittings from soil and debris with temporary end caps and closures. Maintain in place until installation. Furnish temporary protective coating on cast iron and steel valves.

1.13 ENVIRONMENTAL REQUIREMENTS

- A. Section 01 60 00 - Product Requirements.
- B. Do not install underground piping when bedding is wet or frozen.

1.14 FIELD MEASUREMENTS

- A. Verify field measurements prior to fabrication.

1.15 COORDINATION

- A. Section 01 30 00 - Administrative Requirements: Requirements for coordination.

1.16 WARRANTY

- A. Section 01 70 00 - Execution and Closeout Requirements: Product warranties and product bonds.
- B. Furnish five year manufacturer warranty for valves excluding packing.

1.17 EXTRA MATERIALS

- A. Section 01 78 30 Warranties and Bonds: Spare parts and maintenance products.
- B. Furnish two packing kits for each type and size valve.

PART 2 PRODUCTS

2.1 NATURAL GAS and PROPANE PIPING, BURIED WITHIN 5 FEET OF BUILDING

- A. Steel Pipe: ASTM A53/A53M Schedule 40 black.
 - 1. Fittings: ASTM A234/A234M forged steel welding type.
 - 2. Joints: ASME B31.9, welded.
 - 3. Jacket: AWWA C105 polyethylene jacket or double layer, half-lapped 10 mil polyethylene tape.

2.2 NATURAL GAS and PROPANE PIPING, ABOVE GRADE

- A. Steel Pipe: ASTM A53/A53M Schedule 40 black.
 - 1. Fittings: ASME B16.3, malleable iron, or ASTM A234/A234M forged steel welding type.
 - 2. Joints: Threaded for pipe 2 inch and smaller; welded for pipe 2-1/2 inches and larger.

2.3 NATURAL GAS and PROPANE EQUIPMENT PIPING CONNECTION, ABOVE GRADE

- A. Corrugated Stainless Steel Tubing: ANSI LC 1.

2.4 REGULATOR VENT PIPING, ABOVE GRADE

- A. Indoors: Same as natural gas piping, above grade.

2.5 UNIONS AND FLANGES

- A. Unions for Pipe 2 inches and Smaller:
 - 1. Ferrous Piping: Class 150, malleable iron, threaded.
 - 2. Dielectric Connections: Union with galvanized or plated steel threaded end, copper solder end, water impervious isolation barrier.
- B. Flanges for Pipe 2-1/2 inches and Larger:
 - 1. Ferrous Piping: Class 150, forged steel, slip-on flanges.
 - 2. Gaskets: 1/16 inch thick preformed neoprene gaskets.

2.6 PLUG VALVES

- A. Manufacturers:
 - 1. DeZURIK, Unit of SPX Corp.
 - 2. Flow Control Equipment, Inc.
 - 3. Homestead Valve
 - 4. Substitutions: Section 01 60 00 - Product Requirements.
- B. 2 inches and Smaller: MSS SP 78, Class 300, semi-steel construction, round port, full pipe area, and pressure lubricated, teflon packing, threaded ends. Furnish one plug valve wrench for every ten plug-valves with minimum of one wrench.
- C. 2-1/2 inches and Larger: MSS SP 78, Class 300, semi-steel construction, round port, full pipe area, and pressure lubricated, teflon packing, flanged ends. Furnish wrench-operated.

2.7 EMERGENCY GAS SOLENOID VALVE

- A. Manufacturers:
 - 1. Asco.
 - 2. DeZURIK, Unit of SPX Corp.
 - 3. Tuflin.
- B. Die-cast aluminum body, Buna "N" seals and discs, 430F stainless steel core and plugnut, 305 stainless steel core tube, 320 stainless steel springs, copper shading coil, zinc plated steel plugs and threaded ends.
- C. Operator: Solenoid enclosure, red hat metal type 1 general purpose junction box.
- D. Zero differential, internal pilot-operated diaphragm valve incorporating a double disc arrangement.
- E. Electrical: Standard coil 120 volts, 60 Hz.

- F. Gas valve shall be provided as a normally closed, power open type valve.

2.8 STRAINERS

- A. Manufacturers:
1. Mueller Steam Specialty
 2. Armstrong
 3. Spirax Sarco, Inc.
 4. Yarway
 5. Substitutions: Section 01 60 00 - Product Requirements.
- B. 2 inch and Smaller: Screwed brass or iron body for 175 psig working pressure, Y pattern with 1/32 inch stainless steel perforated screen.
- C. 2-1/2 inch to 4 inch: Flanged iron body for 175 psig working pressure, Y pattern with 3/64 inch stainless steel perforated screen.

2.9 NATURAL GAS PRESSURE REGULATORS

- A. Manufacturers:
1. Invensys
 2. Maxitrol
 3. Dormont
 4. Substitutions: Section 01 60 00 - Product Requirements.
- B. Product Description: Spring loaded, general purpose, self-operating service regulator including internal relief type diaphragm assembly and vent valve. Diaphragm case can be rotated 360 degrees in relation to body.
1. Comply with ANSI Z21.80.
 2. Temperatures: minus 20 degrees F to 150 degrees F.
 3. Body: Steel.
 4. Spring case, lower diaphragm casing, union ring, seat ring and disk holder: Aluminum.
 5. Disk, diaphragm, and O-ring: Nitrile
 6. Maximum inlet pressure: 150 psig.
 7. Furnish sizes 2 inches and smaller with threaded ends. Furnish sizes 2-1/2 inches and larger with flanged ends.

2.10 NATURAL GAS PRESSURE RELIEF VALVES

- A. Manufacturers:
1. Dresser
 2. Fisher
 3. Maxitrol
 4. Substitutions: Section 01 60 00 - Product Requirements.
- B. Product Description: Spring loaded type relief valve.
1. Body: Aluminum.
 2. Diaphragm: Nitrile
 3. Orifice: Stainless steel.
 4. Maximum operating temperature: 150 degrees F.
 5. Inlet Connections: Threaded.
 6. Outlet or Vent Connection: Same size as inlet connection.

2.11 NATURAL GAS ENERGY METER

- A. Manufacturers: Onicon Model F-5500 or approved equal.
- B. Construction: Flanged iron body for 150 psig working pressure and 316 stainless steel construction in contact with fluid. Provide with integral display and flow conditioner at inlet.

- C. Output Signal: 4-20 milliamp for connection to Building Management Systems, in addition to RS485 interface.

2.12 PROPANE GAS PRESSURE REGULATORS

- A. Manufacturers:
1. Invensys
 2. Maxitrol
 3. Dormont
 4. Substitutions: Section 01 60 00 - Product Requirements.
- B. Product Description: Spring loaded, general purpose, self-operating service regulator including internal relief type diaphragm assembly and vent valve. Diaphragm case can be rotated 360 degrees in relation to body.
1. Comply with ANSI Z21.80.
 2. Temperatures: minus 20 degrees F to 150 degrees F.
 3. Body: Steel.
 4. Spring case, lower diaphragm casing, union ring, seat ring and disk holder: Aluminum.
 5. Disk, diaphragm, and O-ring: Nitrile
 6. Maximum inlet pressure: 150 psig.
 7. Furnish sizes 2 inches and smaller with threaded ends. Furnish sizes 2-1/2 inches and larger with flanged ends.

2.13 PROPANE GAS PRESSURE RELIEF VALVES

- A. Manufacturers:
1. Dresser
 2. Fisher
 3. Maxitrol
 4. Substitutions: Section 01 60 00 - Product Requirements.
- B. Product Description: Spring loaded type relief valve.
1. Body: Aluminum.
 2. Diaphragm: Nitrile
 3. Orifice: Stainless steel.
 4. Maximum operating temperature: 150 degrees F.
 5. Inlet Connections: Threaded.
 6. Outlet or Vent Connection: Same size as inlet connection.

2.14 PROPANE FUEL STORAGE TANKS

- A. Manufacturers:
1. Highland
 2. Xerxes
 3. Safe-T-Tank
 4. Substitutions: Section 01 60 00 - Product Requirements.
- B. Tank: UL listed and labeled, closed double wall type, welded steel, cleaned and coated with corrosion-resistant asphalt base paint, 500 gallon volume.
- C. Furnish tank with the following:
1. Anchor & Hold down straps and attachments.
 2. Lifting lugs.
 3. Fittings and taps for accessories.
 4. 24 inch diameter manhole with 4 inch fittings in cover.
 5. 4 inch shell wall service fitting.
 6. 4 inch monitor fitting.
 7. Steel Reservoir with ASME rated corrosion resistant coating.

- D. Filler Cap: 3 inch watertight brass with lock , recessed box and cover.
- E. Gage: Remote reading, electronic, for two wire, 24 volt power, with wall mounted direct reading gage.
- F. Cathodic Protection: API 1632, Galvanic type with sacrificial magnesium anodes welded to tank to NACE RP-02-85 & to STI ACT-100.

PART 3 EXECUTION

3.1 EXAMINATION

- A. 01300 - Administrative Requirements: Coordination and project conditions.
- B. Verify excavations are to required grade, dry, and not over-excavated.

3.2 PREPARATION

- A. Ream pipe and tube ends. Remove burrs. Bevel plain end ferrous pipe.
- B. Remove scale and dirt, on inside and outside, before assembly.
- C. Prepare piping connections to equipment with flanges or unions.

3.3 INSTALLATION - INSERTS

- A. Provide inserts for placement in concrete forms.
- B. Provide inserts for suspending hangers from reinforced concrete slabs and sides of reinforced concrete beams.
- C. Provide hooked rod to concrete reinforcement section for inserts carrying pipe 4 inches and larger.
- D. Where concrete slabs form finished ceiling, locate inserts flush with slab surface.
- E. Where inserts are omitted, drill through concrete slab from below and provide through-bolt with recessed square steel plate and nut flush with top of slab.

3.4 INSTALLATION - PIPE HANGERS AND SUPPORTS

- A. Install hangers and supports in accordance with ASME B31.9 ASTM F708 and MSS SP 89.
- B. Support horizontal piping hangers as scheduled.
- C. Install hangers to provide minimum 1/2 inch space between finished covering and adjacent work.
- D. Place hangers within 12 inches of each horizontal elbow.
- E. Install hangers to allow 1-1/2 inch minimum vertical adjustment. Design hangers for pipe movement without disengagement of supported pipe.
- F. Support vertical piping at every floor. Support riser piping independently of connected horizontal piping.
- G. Where installing several pipes in parallel and at same elevation, provide multiple pipe hangers or trapeze hangers.

- H. Provide sheet lead packing between hanger or support and piping.
- I. Prime coat exposed steel hangers and supports in accordance with Section 09 90 00. Finish paint exposed steel hangers and supports in accordance with Section 09 90 00. Hangers and supports located in crawl spaces, pipe shafts, and suspended ceiling spaces are not considered exposed.
- J. Provide clearance in hangers and from structure and other equipment for installation of insulation and access to valves and fittings.

3.5 INSTALLATION - BURIED PIPING SYSTEMS

- A. Install natural gas piping in accordance with IFGC 2012.
- B. Remove scale and dirt on inside of piping before assembly.
- C. Excavate pipe trench in accordance with requirements in Division 31 specifications.
- D. Place bedding material at trench bottom to provide uniform bedding for piping, level bedding materials in one continuous layer not exceeding 4 inches compacted depth; compact to 95 percent maximum density.
- E. Install pipe on prepared bedding.
- F. Route pipe in straight line.
- G. Install pipe to allow for expansion and contraction without stressing pipe or joints.
- H. Install plastic ribbon tape continuous. Buried 6 inches below finish grade, above pipe line; coordinate with Division 31.
- I. Pipe Cover and Backfilling:
 - 1. Backfill trench in accordance with Division 31
 - 2. Maintain optimum moisture content of fill material to attain required compaction density.
 - 3. After hydrostatic test, evenly backfill entire trench width by hand placing backfill material and hand tamping in 6 inches compacted layers to 12 inches minimum cover over top of jacket. Compact to 95 percent maximum density.
 - 4. Evenly and continuously backfill remaining trench depth in uniform layers with backfill material.
 - 5. Do not use wheeled or tracked vehicles for tamping.
- J. Piping buried below floor slabs shall be installed within a secondary conduit. Buried piping shall be continuous without any fittings or joints installed below the slab. Where the pipe originates and terminates within the same building, the conduit shall originate and terminate in an accessible portion of the building and shall not be sealed. The conduit shall extend not less than 2 inches (51mm) beyond the point where the pipe emerges from the floor.

3.6 INSTALLATION - ABOVE GROUND PIPING SYSTEMS

- A. Install natural gas piping in accordance with NFPA 54.
- B. Provide non-conducting dielectric connections wherever jointing dissimilar metals.
- C. Route piping in orderly manner and maintain gradient.
- D. Where required, bend pipe with pipe bending tools in accordance with procedures intended for that purpose.
- E. Install piping to conserve building space and not interfere with use of space.

- F. Size and install gas piping to provide sufficient gas to supply maximum appliance demand at pressure higher than appliance minimum inlet pressure.
- G. Group piping whenever practical at common elevations.
- H. Install piping to allow for expansion and contraction without stressing pipe, joints, or connected equipment.
- I. Sleeve pipe passing through partitions, walls and floors. Refer to Section 23 05 29.
- J. Install firestopping at fire rated construction perimeters and openings containing penetrating sleeves and piping. Refer to Section 07 84 00 23 05 29
- K. Provide clearance for installation of insulation and access to valves and fittings.
- L. Provide access where valves and fittings are not exposed. Coordinate size and location of access doors with Section 08 31 13.
- M. Where pipe support members are welded to structural building framing, scrape, brush clean, weld, and apply one coat of zinc rich primer. Refer to Section 05 12 00, 05 21 00.
- N. Provide support for utility meters in accordance with requirements of utility company.
- O. Install vent piping from gas pressure reducing valves to outdoors and terminate in weatherproof hood. Protect vent against entry of insects and foreign material.
 - 1. Minimum Vent Size: Connection size at regulator vent connection.
 - 2. Run individual vent line from each relief device, independent of breather vents.
 - 3. Maintain minimum of 25' (feet) from outdoor air intakes.
- P. Prepare pipe, fittings, supports, and accessories not pre-finished, ready for finish painting. Refer to Section 09 90 00.
- Q. Piping installed at the building exterior shall be primed and painted, or otherwise protected as required by NFPA 54 and IFGC.
- R. Install identification on piping systems including underground piping. Refer to Section 22 05 53.
- S. Install valves with stems upright or horizontal, not inverted.
- T. Protect piping systems from entry of foreign materials by temporary covers, completing sections of the Work, and isolating parts of completed system.
- U. Install medium pressure gas pressure regulator with tee fitting between regulator and upstream shutoff valve. Cap or plug one opening of tee fitting.
- V. Install medium pressure gas pressure regulator with tee fitting not less than 10 pipe diameters down stream of regulator. Cap or plug one opening of tee fitting.
- W. Install gas pressure regulator with independent vent full size opening on regulator and terminate above roof with weatherproof gooseneck.
- X. Provide new gas service complete with gas meter and regulators. Gas service distribution piping to have initial minimum pressure of 2 psi. Provide regulators on each line serving gravity type appliances, sized in accordance with equipment. Provide source valve to shut down entire service at meter assembly.
- Y. The plumbing contractor shall furnish and install an adequate natural gas supply to all gas fired appliances and devices throughout the project. In addition to the specifications and drawings included in

Division 22, the plumbing contractor shall also review the contract documents prepared by the site/civil, food service and architectural /structural disciplines for coordination and additional work by the plumbing contractor required to complete the project.

- Z. Terminate pressure regulator relief vent lines as required by the utility provider.
- AA. Gas solenoid valves shall be installed within 12"x12"x6" deep lockable steel enclosure.

3.7 INSTALLATION – PROPANE STORAGE TANKS

- A. Install tanks in accordance with API 1615, PEI 100, and NFPA 58.
- B. Check factory installed equipment and accessories for loosening during transit.
- C. Clean and flush tanks prior to delivery to site. Seal until pipe connections are made.
- D. Seal unused tank openings using threaded pipe plugs, flanges, or caps.
- E. Tank Accessories:
 - 1. Install tank accessories shipped loose with tank.
 - 2. Install the following tank accessories: anti-siphon devices, overfill shutoff and alarms, vents, gages, emergency vents.
- F. Do not bed on timbers, beams, or cradles.
- G. Adjust liquid level gages before initial start-up and after filling of tank.
- H. Fill tanks completely at Project turnover with appropriate fuel.

3.8 FIELD QUALITY CONTROL

- A. Section 01 40 00 - Quality Requirements 01 70 00 - Execution and Closeout Requirements: Field inspecting, testing, adjusting, and balancing.
- B. Where gas appliance will be damaged by test pressure, disconnect appliance and cap piping during pressure test. Reconnect appliance after pressure test and leak test connection.
- C. Where gas appliance is designed for operating pressures equal to or greater than piping test pressure, provide gas valve to isolate appliance or equipment from gas test pressure.
- D. Pressure test natural gas piping in accordance with NFPA 54.
- E. Inspect, test and purge gas piping in accordance with applicable code and local gas company requirements. Where new branch piping is extended from existing system, pressure test new branch piping only. Leak test joint between new and existing piping with noncorrosive leak detection fluid or other approved method.
- F. When pressure tests do not meet specified requirements, remove defective work, replace and retest.
- G. Immediately after gas is applied to a new system, or a system has been restored after gas service interruption, check pipe for leakage.
 - 1. Where leakage is detected, shut off gas supply until necessary repairs are complete.
- H. Do not place appliances in service until leak testing and repairs are complete.
- I. Pressure test tanks in accordance with NFPA 58.

END OF SECTION 22 11 23

DRA

Drumme
Rosane
Anderson, Inc.

225 Oakland Road
South Windsor
Connecticut 06074
860-644-8300

600 Orange Avenue
Milford, CT 06461

ADDITIONS AND RENOVATIONS
PLATT TECHNICAL HIGH SCHOOL

Revision to Typical Tread and Riser Detail on A7-1-7

Addendum
No. 1

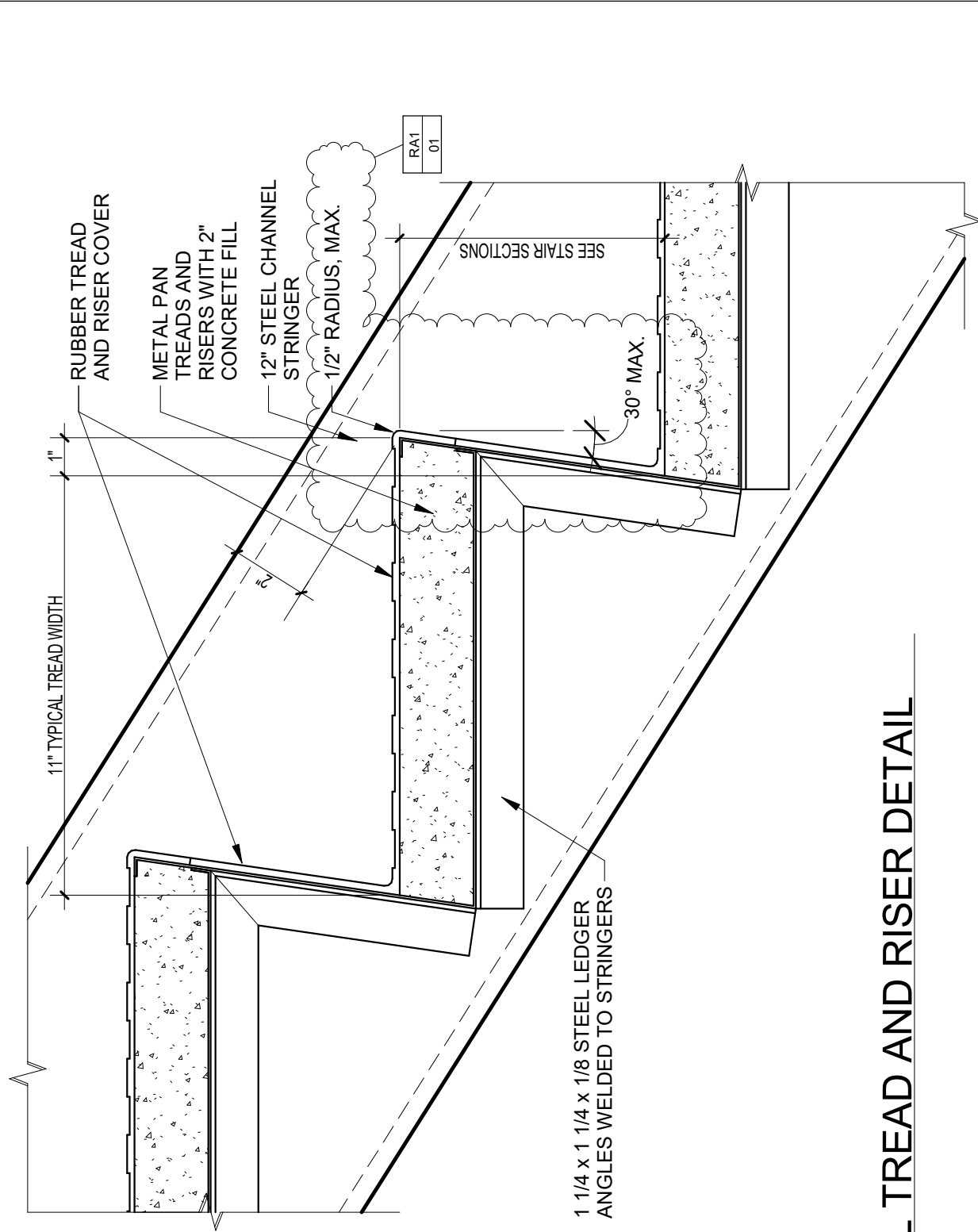
RA1-01

REF. DWG No.
A7-1-7

DCS Project No.
BI-RT-878 CM-R
OSCGR Project No.
900-0013

Scale: 3" = 1'-0"

Date: 07/23/2019



RA1
01

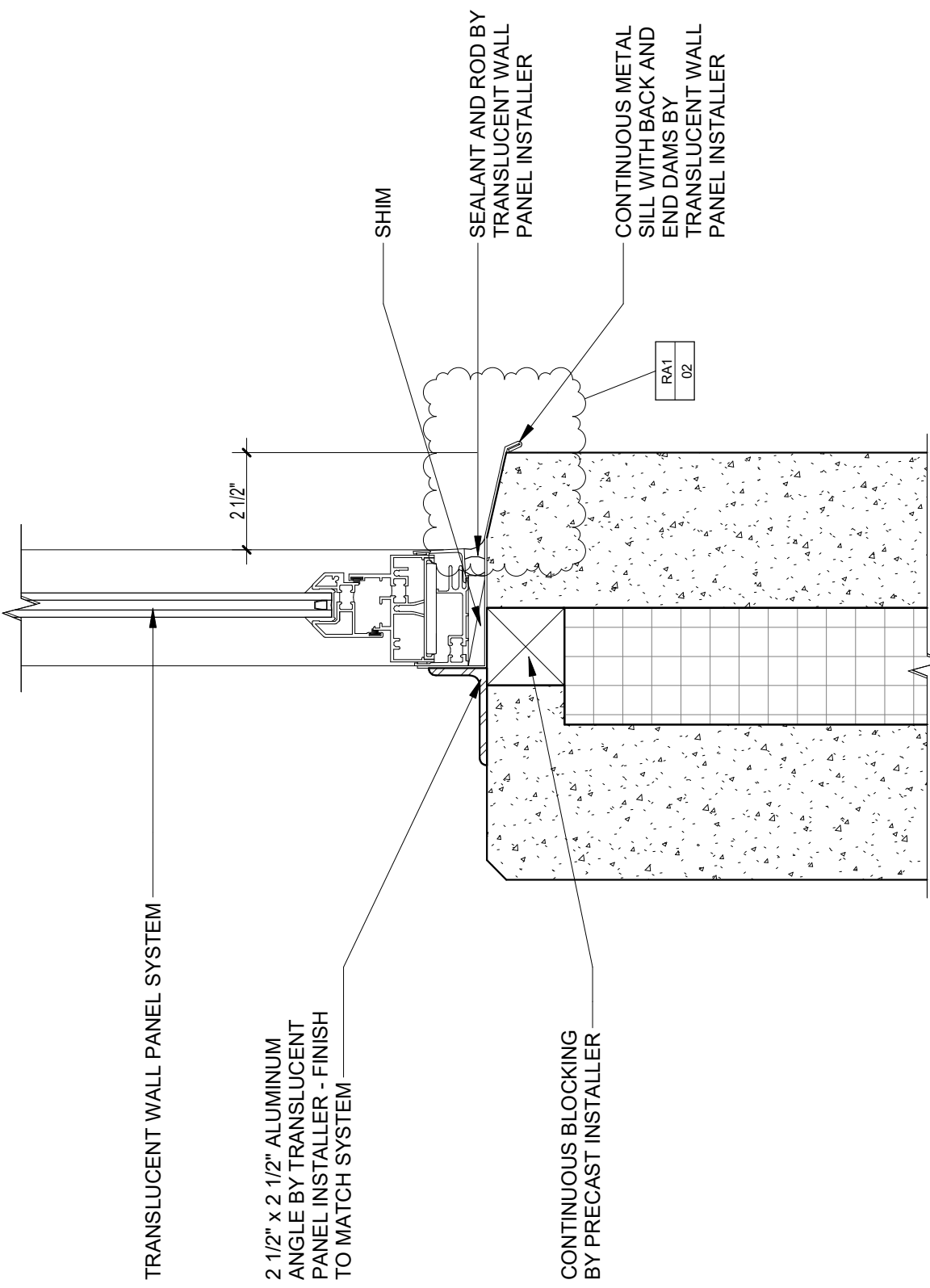
7 TYPICAL TREAD AND RISER DETAIL

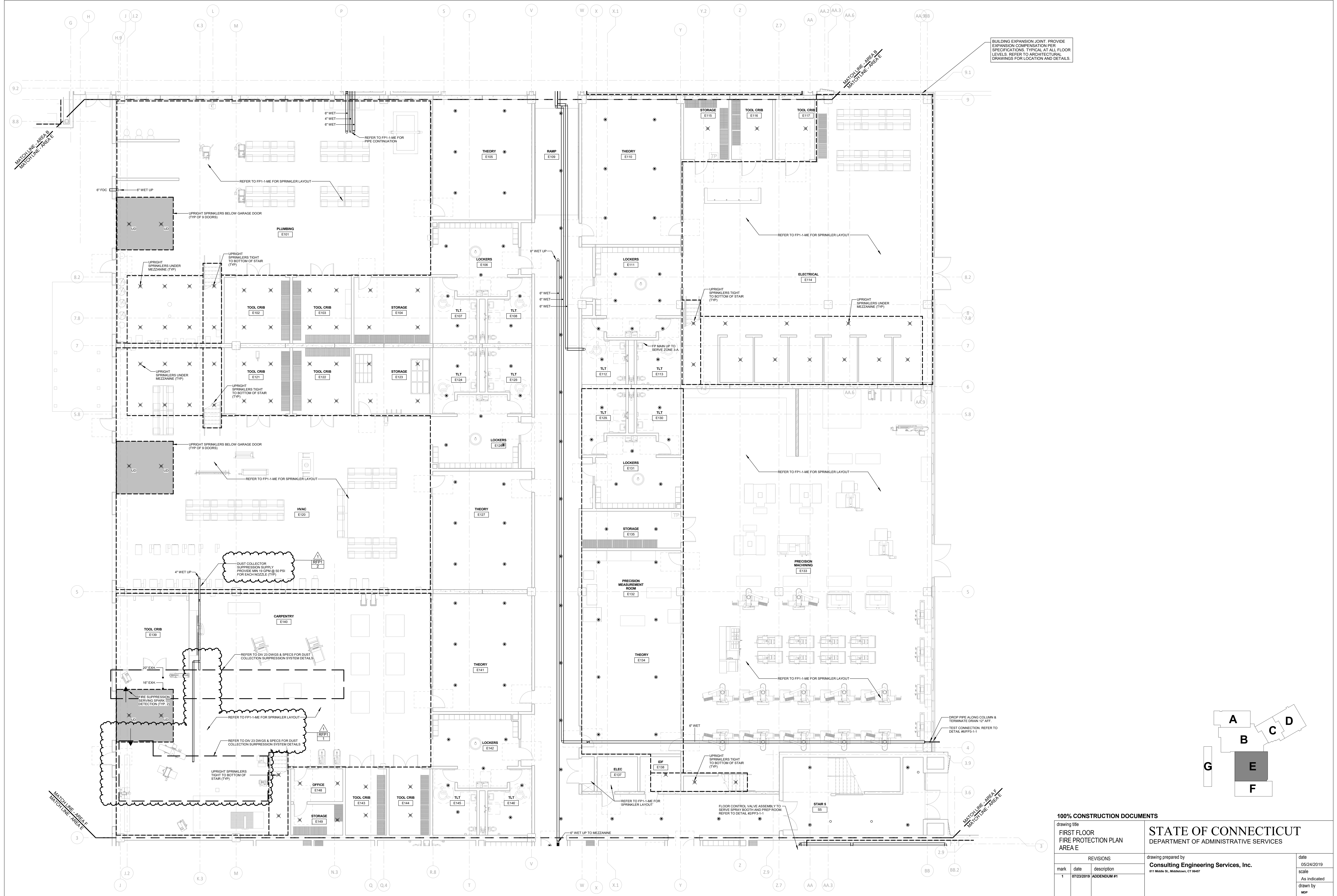
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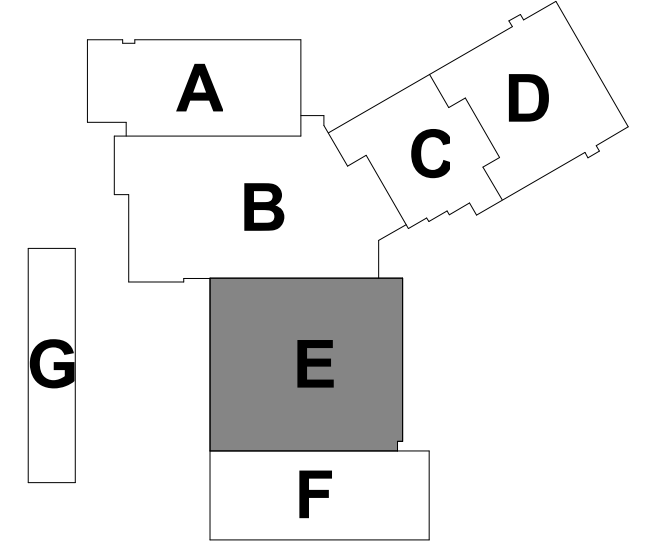
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TRANSLUCENT WALL PANEL SILL DETAIL

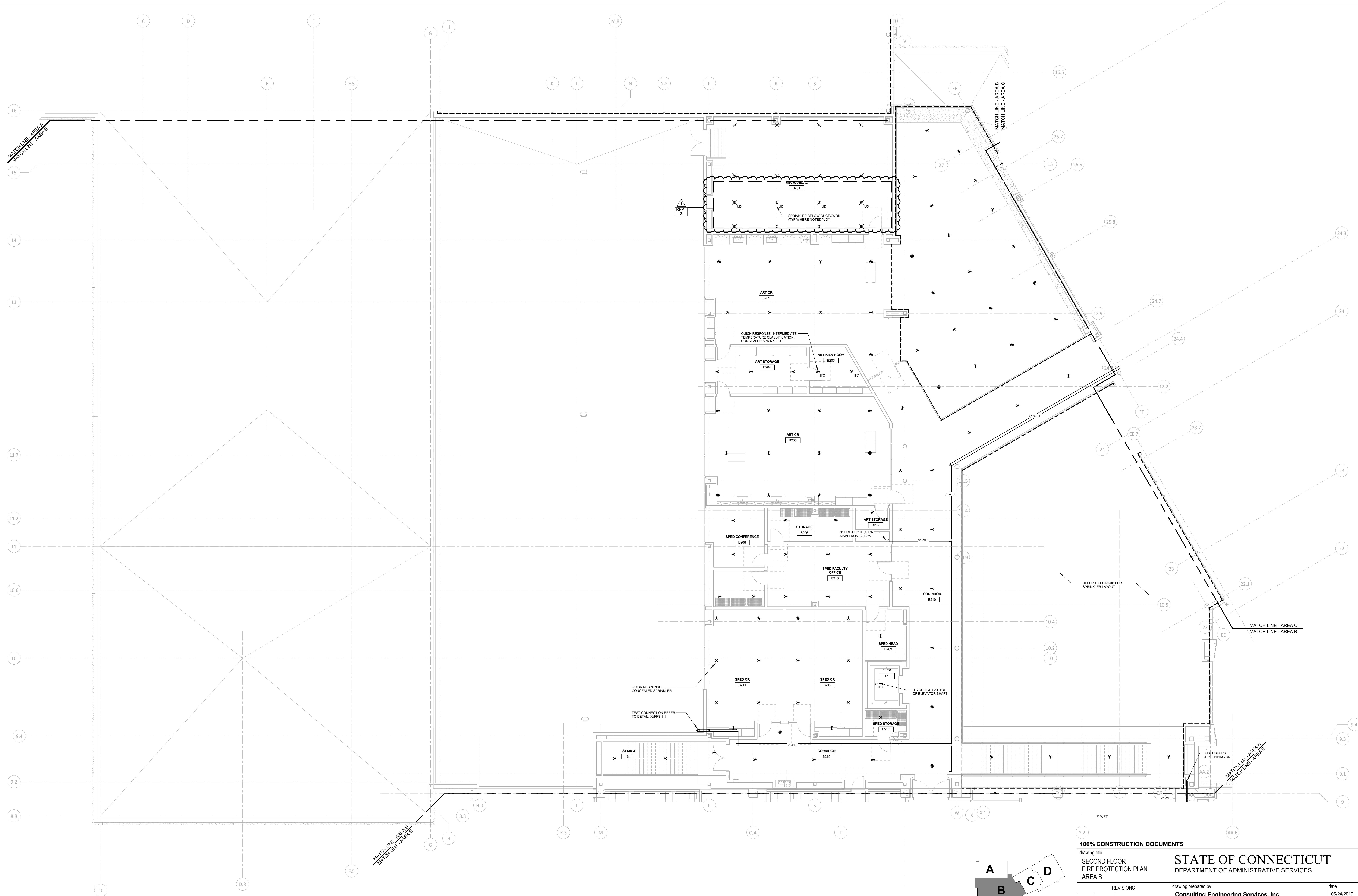




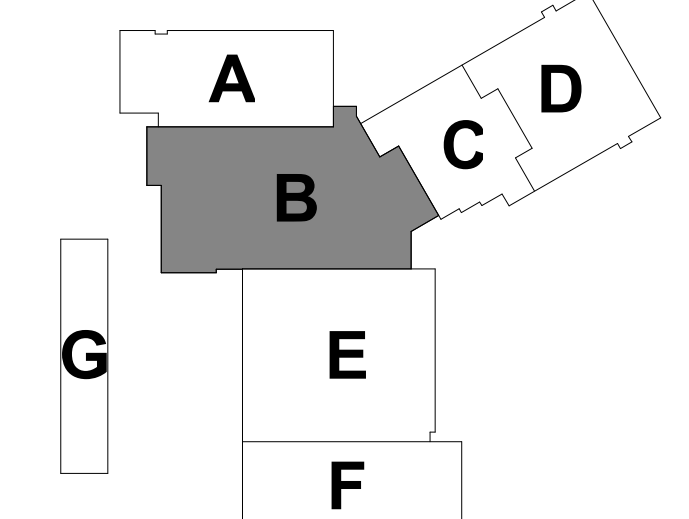
1 FIRST FLOOR FIRE PROTECTION PLAN - AREA E
 1/8" = 1'-0"
 REFER TO FP0-1 FOR FIRE PROTECTION SYMBOLS, LEGENDS & NOTES.
 REFER TO FP3-1 FOR FIRE PROTECTION DETAILS.
 REFER TO FP2-1 FOR ZONING



100% CONSTRUCTION DOCUMENTS			STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES	
drawing title FIRST FLOOR FIRE PROTECTION PLAN AREA E			drawing prepared by Consulting Engineering Services, Inc. 911 Middle St., Middletown, CT 06457	
date 07/23/2019			date 05/24/2019	
description ADDENDUM #1			scale As Indicated	
mark			drawn by MSF	
project ADDITIONS AND RENOVATIONS PLATT TECHNICAL HIGH SCHOOL 600 Orange Avenue Middletown, CT 06461			approved by JAC	
CAD no.			drawing no. FP1-1-E	
DCS project no. BR-RT-076 CM-R			OSGCR project no. 900-0013	



1 SECOND FLOOR FIRE PROTECTION PLAN - AREA B
 1/8" = 1'-0"
 REFER TO FP2-1-1 FOR FIRE PROTECTION SYMBOLS, LEGENDS & NOTES.
 REFER TO FP2-1-1 FOR FIRE PROTECTION DETAILS.
 REFER TO FP2-1-1 FOR ZONING

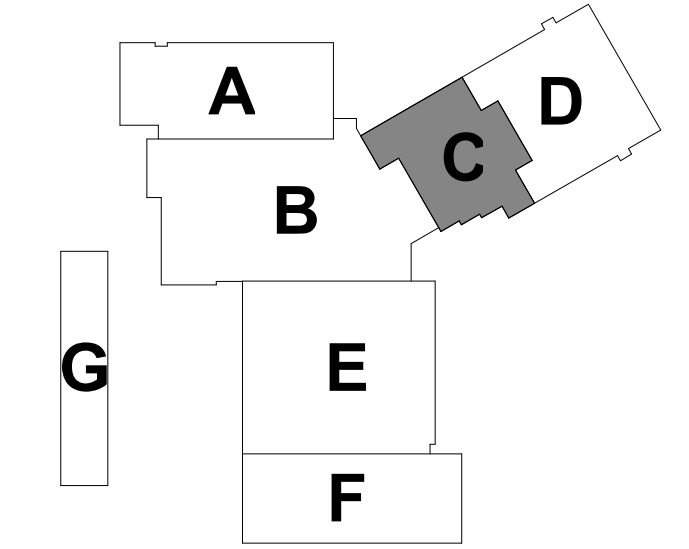


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date 05/24/2019			scale As Indicated	
drawn by MSP			approved by J.C.	
drawing no. FP1-1-2B			project ADDITIONS AND RENOVATIONS PLATT TECHNICAL HIGH SCHOOL 600 Orange Avenue Middletown, CT 06461	
CAD no.			DCS project no. BART-076 CM-R	
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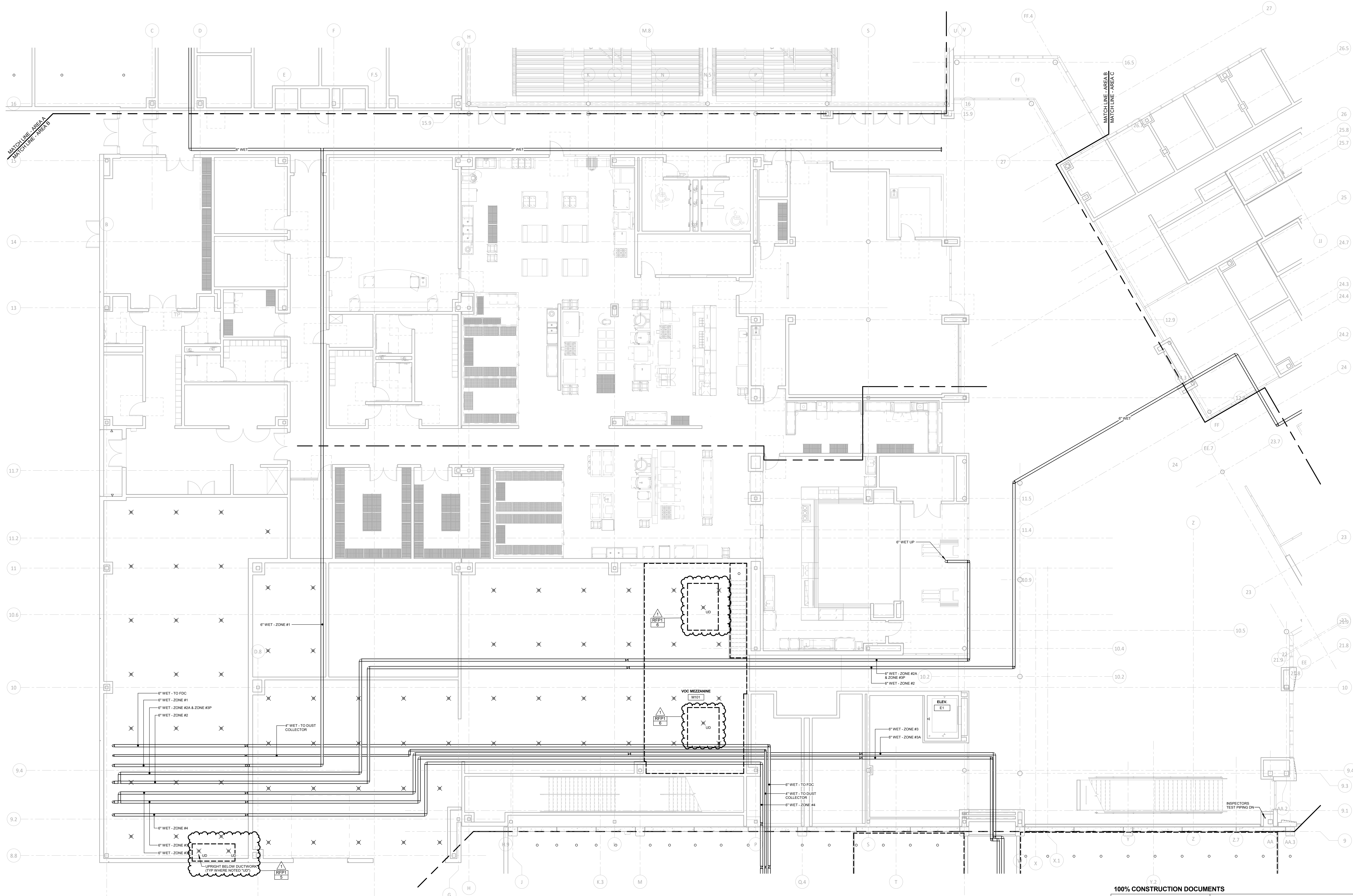


1 PENTHOUSE FIRE PROTECTION PLAN - AREA C
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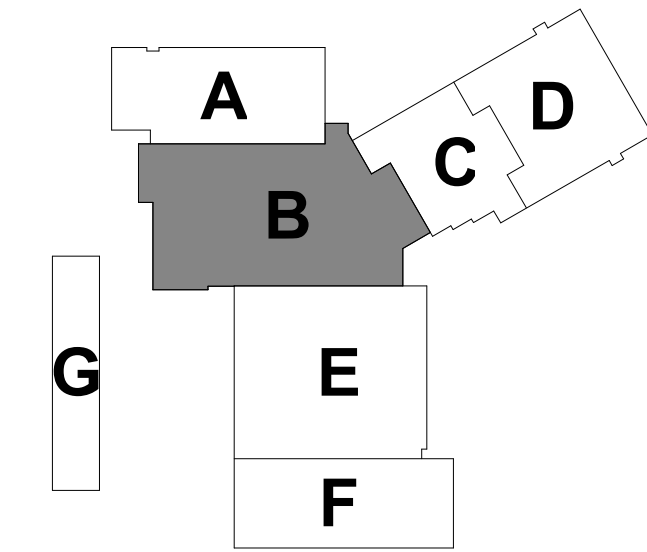
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 REFER TO FP2-1-1 FOR FIRE PROTECTION DETAILS.
 REFER TO FP2-1-1 FOR ZONING.



100% CONSTRUCTION DOCUMENTS			drawing title	
CLERESTORY FIRE PROTECTION PLAN AREA C			STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES	
drawing prepared by Consulting Engineering Services, Inc. 511 Middle St., Middletown, CT 06457			date 05/24/2019	
project ADDITIONS AND RENOVATIONS PLATT TECHNICAL HIGH SCHOOL 600 Orange Avenue - Middletown, CT 06461			scale As Indicated	
CAD no.			drawing no. FP1-1-3C	
DCS project no. BL-RT-076 CM-R			OS/GR project no. 990-0013	
REVISIONS			drawn by JHC	
mark	date	description	approved by JHC	
1	07/23/2019	ADDENDUM #1	drawing no.	

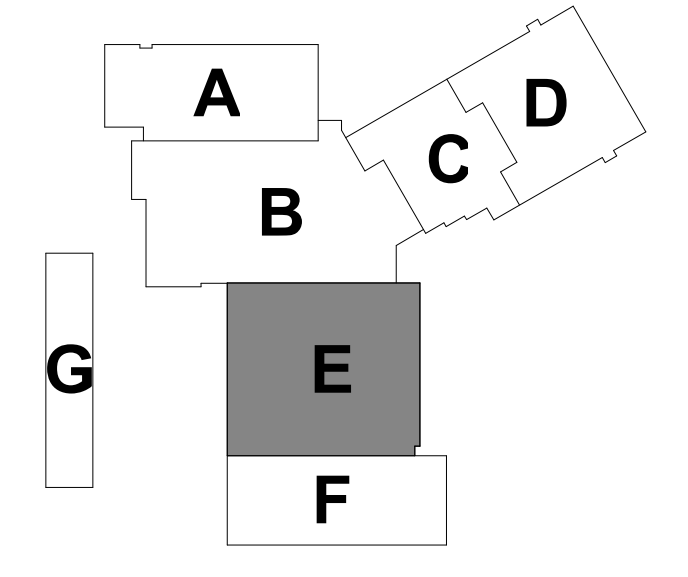
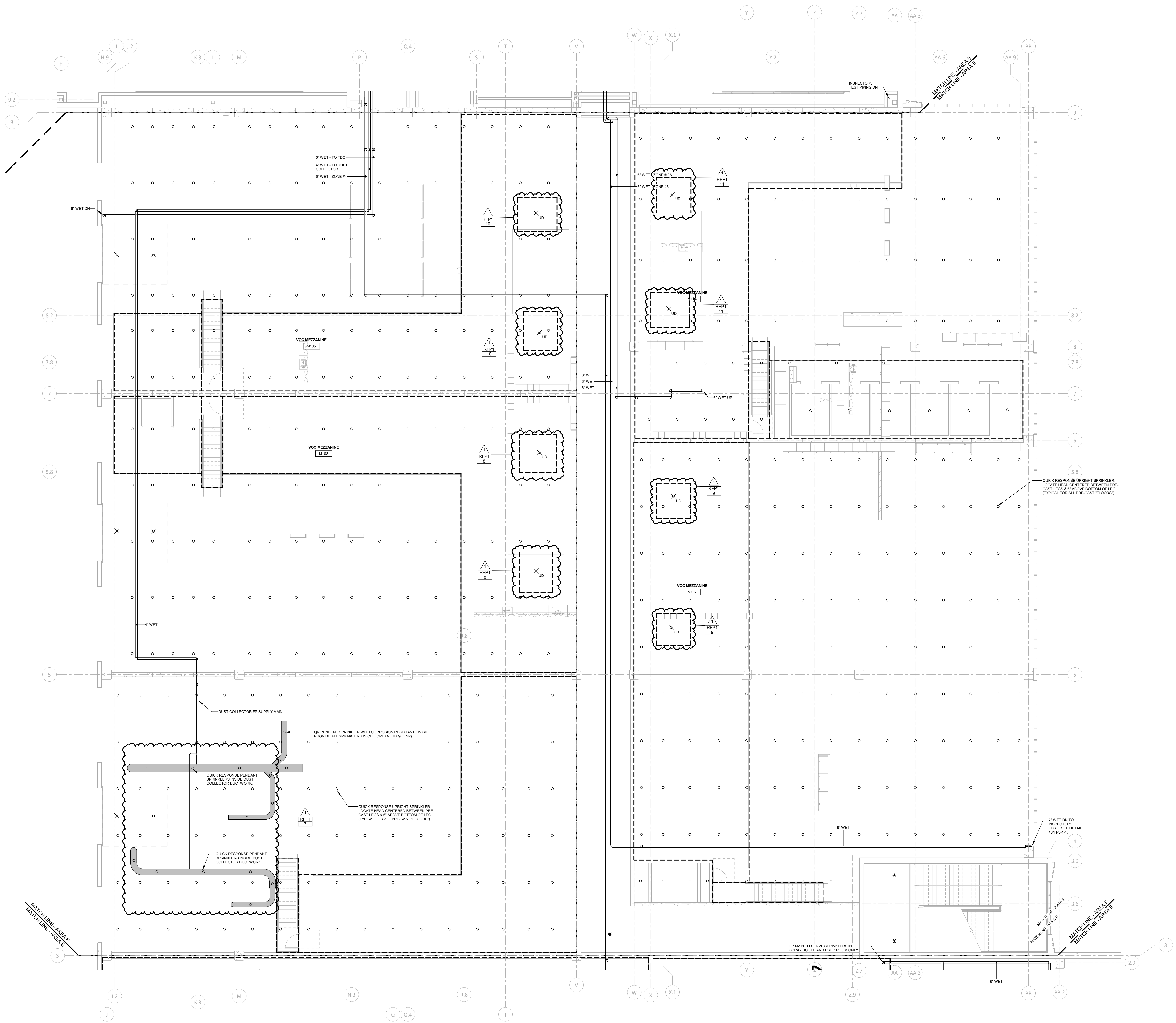


1 MEZZANINE FIRE PROTECTION PLAN - AREA B
 1/8" = 1'-0"
 REFER TO FP2-1.1 FOR FIRE PROTECTION SYMBOLS, LEGENDS & NOTES.
 REFER TO FP3-1.1 FOR FIRE PROTECTION DETAILS.
 REFER TO FP2-1.1 FOR ZONING.



100% CONSTRUCTION DOCUMENTS			STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES	
drawing title MEZZANINE FIRE PROTECTION PLAN AREA B			drawing prepared by Consulting Engineering Services, Inc. 811 Middle St., Middletown, CT 06457	
date 05/24/2019			scale As Indicated	
drawn by msp			approved by .j.c.	
drawing no. FP1-1-MB			project ADDITIONS AND RENOVATIONS PLATT TECHNICAL HIGH SCHOOL 600 Orange Avenue Middletown, CT 06461	
CAD no.			DCS project no. BR-RT-076 CM-R	
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REVISIONS		
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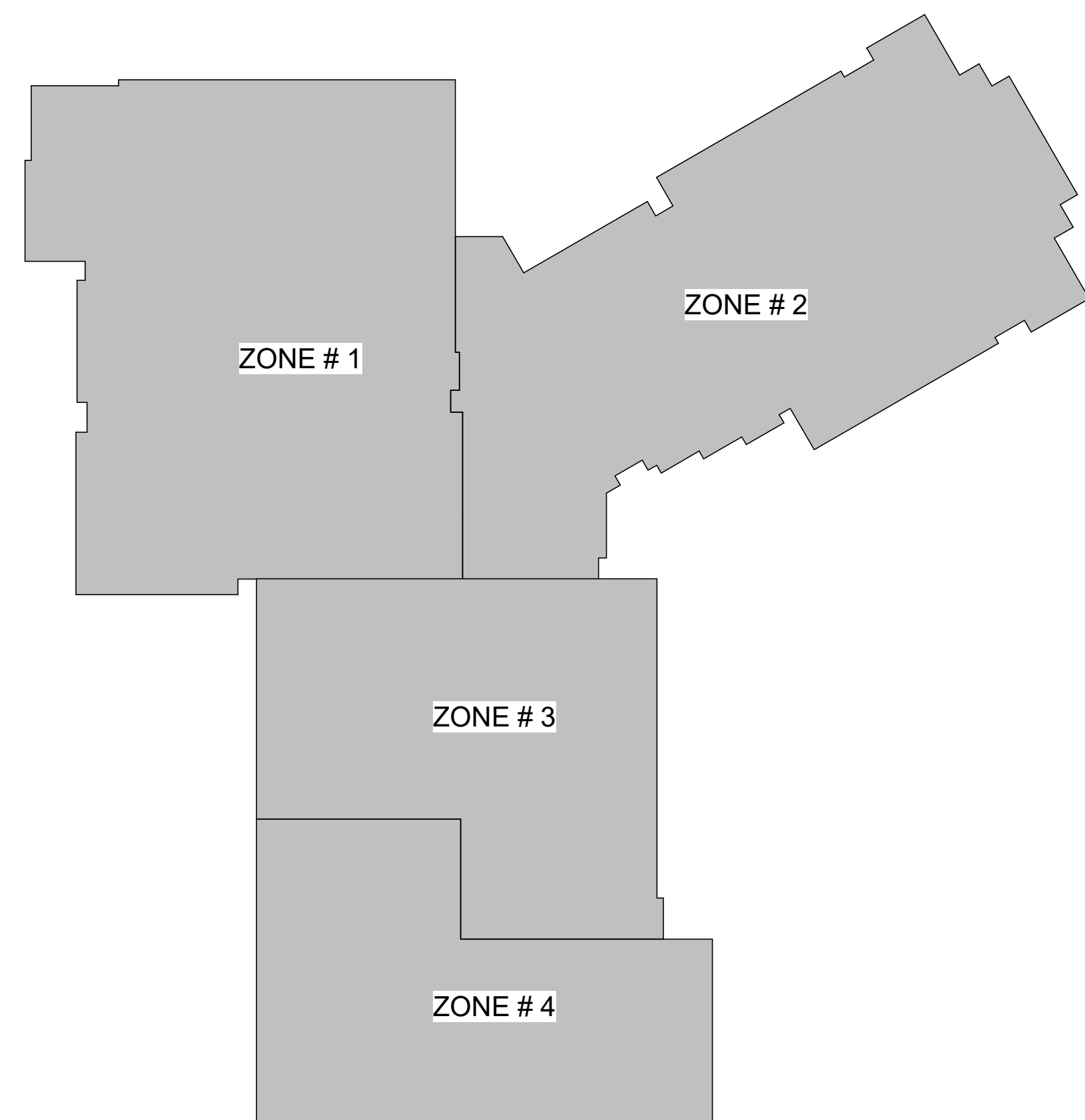


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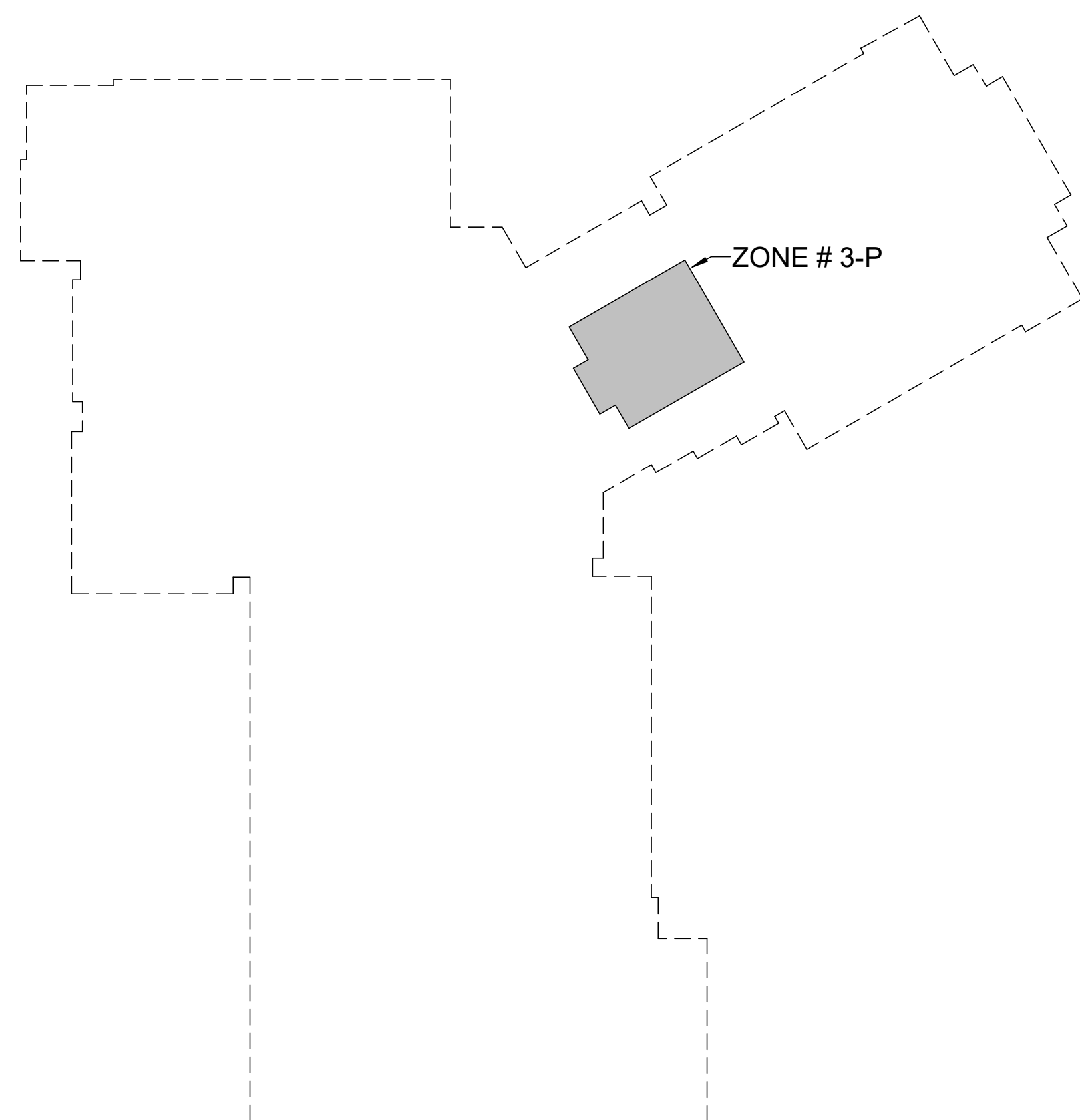
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 REFER TO FPG-1.1 FOR ZONING

100% CONSTRUCTION DOCUMENTS			STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES		
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drawing prepared by		Consulting Engineering Services, Inc. 811 Middle St., Middletown, CT 06457		scale	As Indicated
project		ADDITIONS AND RENOVATIONS PLATT TECHNICAL HIGH SCHOOL 600 Orange Avenue Middletown, CT 06461		drawn by	msw
CAD no.		DCS project no.	OSCRG project no.	approved by	.jnc
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REVISIONS					
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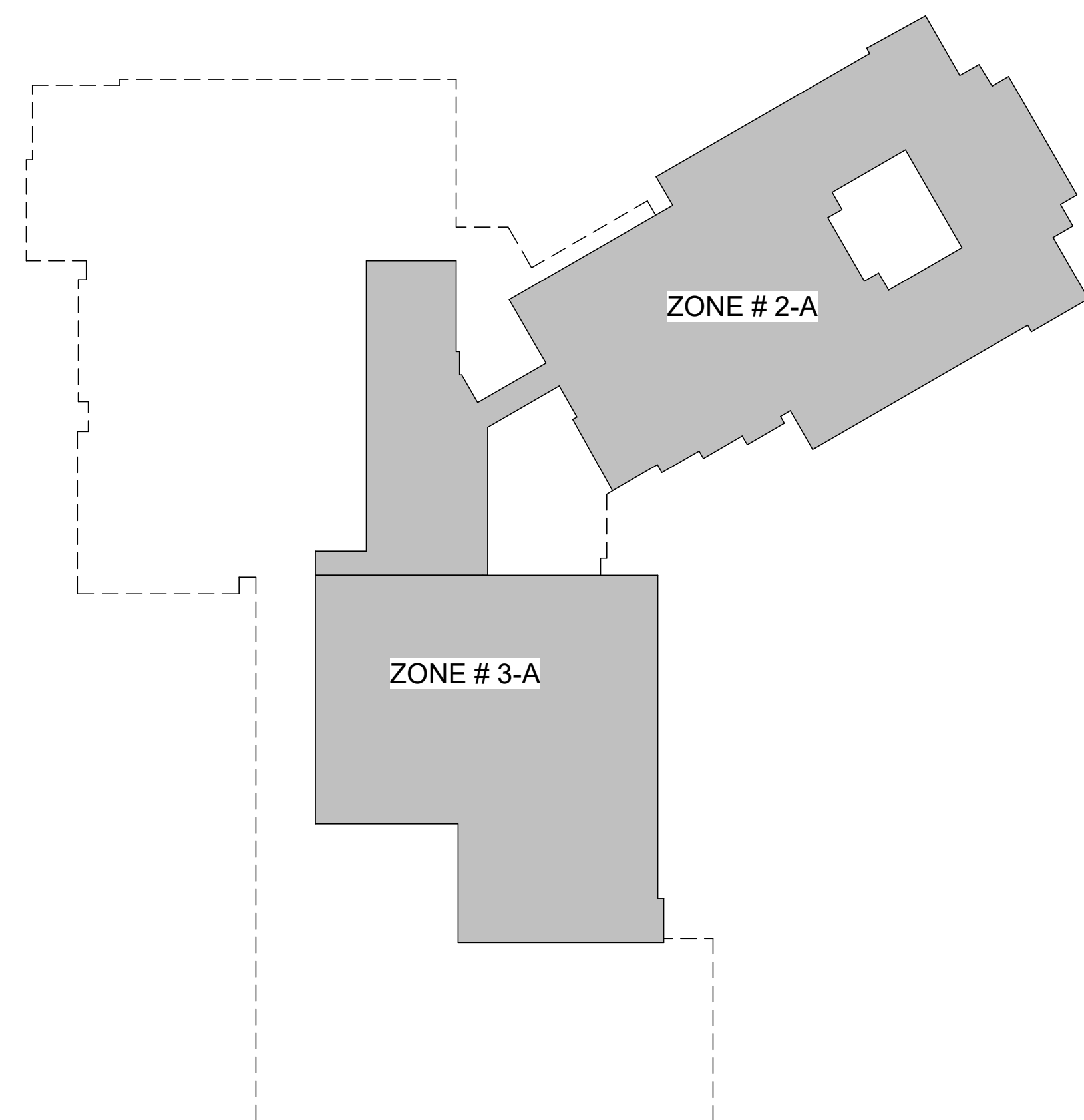
SPRINKLER SYMBOL LEGEND	
SYMBOL	DESCRIPTION
	SIDEWALL SPRINKLER (DRY)
	SIDEWALL SPRINKLER
	ITC SIDEWALL SPRINKLER
	PENDANT SPRINKLER
	PENDANT SPRINKLER (DRY)
	UPRIGHT SPRINKLER WITH GUARD
	UPRIGHT SPRINKLER UNDER DUCT OVER 48"
	CONCEALED PENDANT SPRINKLER
	CONCEALED PENDANT SPRINKLER (DRY)
	UPRIGHT SPRINKLER WITH GUARD UNDER DOOR



1 1ST FLOOR ZONE PLAN
1/64" = 1'-0"



3 PENTHOUSE FLOOR ZONE PLAN
1/64" = 1'-0"



2 2ND FLOOR ZONE PLAN
1/64" = 1'-0"

FIRE PROTECTION SYMBOL LEGEND	
SYMBOL	DESCRIPTION
	PREACTION SPRINKLER PIPING
	FIRE DEPARTMENT CONNECTION PIPING
	FIRE DEPARTMENT CONNECTION PIPING (BELOW GROUND)
	DRAIN PIPING
	SPRINKLER MAIN (DRY)
	SPRINKLER MAIN (WET)
	ALARM BELL
	*WET ALARM VALVE RISER
	*DRY ALARM VALVE RISER
	*DRY PREACTION, DELUGE VALVE RISER
	ANGLE VALVE
	SITE GLASS
	FIRE DEPARTMENT CONNECTION
	POST INDICATOR VALVE
	90° ELBOW DOWN
	90° ELBOW UP
	TEE UP
	TEE DOWN
	DROP AND RUN
	UNION
	OS&Y GATE VALVE
	GATE VALVE
	CHECK VALVE
	RELIEF VALVE
	DOUBLE CHECK VALVE ASSEMBLY
	STRAINER
	PRESSURE GAUGE
	POST MOUNTED FIRE DEPARTMENT CONNECTION
	STORZ FIRE DEPARTMENT CONNECTION
	FLOW SWITCH
	TAMPER SWITCH
	PRESSURE SWITCH
	HOSE VALVE CABINET

CONSTRUCTION GENERAL NOTES	
<p>GENERAL NOTES: ALL ELECTRICAL, AUDIO VISUAL, TECHNOLOGY AND SECURITY SYSTEMS AND COMPONENTS INCLUDING BUT NOT LIMITED TO CONDUITS, BACK-BOXES, DEVICES ETC., INSTALLED AT THE ARCHITECTURAL PRECAST CONCRETE PANELS SHALL BE CAST INTO THE PRE-CAST CONCRETE PANELS IN THE FACTORY TO AVOID EXPOSURE TO VIEW EXTERIOR OR INTERIOR CONDITIONS. CMR MUST COORDINATE ALL REQUIRED ELECTRICAL PASSWAYS AND COMPONENTS WITH THE PRECAST SUB-CONTRACTOR AS PART OF THE MEP&FP COORDINATION PROCESS, AND PRE-CAST SHOP DRAWINGS COORDINATION PROCESS.</p> <p>ALL MECHANICAL, ELECTRICAL AND FIRE PROTECTION (MEP&FP) SYSTEMS AND COMPONENTS THAT REQUIRE ATTACHMENT TO THE ARCHITECTURAL PRECAST CONCRETE PANELS SHALL BE COORDINATED WITH THE PRECAST CONCRETE SUB-CONTRACTOR DURING COORDINATION AND SHOP DRAWING PROCESS. NO ATTACHMENT OF THE MEP&FP COMPONENTS TO THE PRECAST CONCRETE PANELS SHALL BE ALLOWED IN THE FIELD WITHOUT PRIOR REVIEW AND APPROVAL BY THE PRECAST CONCRETE SUB-CONTRACTOR. NO CUTTING AND/OR PATCHING OF THE PRECAST CONCRETE PANELS IS ALLOWED IN THE FIELD. ALL PENETRATIONS THROUGH PRECAST COMPONENTS INCLUDING WALLS, DOUBLE TEES AND HOLLOW CORE PLANK FLOORS AND ROOFS SHALL BE COORDINATED BY THE SUB-CONTRACTORS AND THE CMR PRIOR TO MANUFACTURING OF THE PRECAST CONCRETE COMPONENTS.</p> <p>FIRST FLOOR - AREA B: ALL MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION (MEP&FP) SYSTEMS COMPONENTS THAT REQUIRE PENETRATIONS THROUGH PRE-CAST CONCRETE PLANK AT MEZZANINES FLOOR STRUCTURE SHALL BE COORDINATED WITH THE PRE-CAST PLANK CORE LOCATIONS. PENETRATIONS THROUGH THE PRE-CAST HOLLOW CORE PLANK, ARE ONLY ALLOWED THROUGH THE CORES. CMR MUST COORDINATE ALL OPENINGS IN THE PRE-CAST CONCRETE PLANK AS PART OF THE MEP&FP COORDINATION PROCESS.</p> <p>MECHANICAL, ELECTRICAL AND FIRE PROTECTION (MEP&FP) CONTRACTORS REFER TO THE ARCHITECTURAL REFLECTED CEILING PLANS, SECTIONS AND DETAILS DRAWINGS FOR LOCATIONS OF THE SOUND BARRIER CEILING SYSTEM. THIS IS A SPECIALTY SOUND ISOLATION SUSPENDED CEILING SYSTEM. MEP&FP SYSTEMS COMPONENTS ARE NOT ALLOWED TO BE ATTACHED/SUSPENDED, OR INSTALLED ABOVE THIS CEILING SYSTEM UNLESS SPECIFICALLY NOTED OTHERWISE. EACH SUB-CONTRACTOR SHALL PROVIDE UNISTRUT SUPPORTS ATTACHED TO BOTTOM CORD OF STRUCTURAL STEEL BEAMS OR INSERTS PROVIDED AS PART OF THE PRECAST DOUBLE TEES AS REQUIRED TO SUPPORT MEP&FP SYSTEMS COMPONENTS. SPECIALTY ACOUSTICALLY RATED ACCESS PANELS MAY BE ALLOWED TO ACCESS MEP&FP SYSTEMS COMPONENTS LOCATED ABOVE THE SOUND BARRIER SYSTEM ON THE LIMITED BASES AT LOCATIONS SPECIFICALLY INDICATED ON THE MEP&FP DRAWINGS.</p> <p>FIRST FLOOR - AREA E: ALL MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION (MEP&FP) SYSTEMS COMPONENTS THAT REQUIRE PENETRATIONS THROUGH PRE-CAST CONCRETE PLANK AT MEZZANINES FLOOR STRUCTURE SHALL BE COORDINATED WITH THE PRE-CAST PLANK CORE LOCATIONS. PENETRATIONS THROUGH THE PRE-CAST HOLLOW CORE PLANK, ARE ONLY ALLOWED THROUGH THE CORES. CMR MUST COORDINATE ALL OPENINGS IN THE PRE-CAST CONCRETE PLANK AS PART OF THE MEP&FP COORDINATION PROCESS.</p> <p>MECHANICAL, ELECTRICAL AND FIRE PROTECTION (MEP&FP) CONTRACTORS REFER TO THE ARCHITECTURAL REFLECTED CEILING PLANS, SECTIONS AND DETAILS DRAWINGS FOR LOCATIONS OF THE SOUND BARRIER CEILING SYSTEM. THIS IS A SPECIALTY SOUND ISOLATION SUSPENDED CEILING SYSTEM. MEP&FP SYSTEMS COMPONENTS ARE NOT ALLOWED TO BE ATTACHED/SUSPENDED, OR INSTALLED ABOVE THIS CEILING SYSTEM UNLESS SPECIFICALLY NOTED OTHERWISE. EACH SUB-CONTRACTOR SHALL PROVIDE UNISTRUT SUPPORTS ATTACHED TO BOTTOM CORD OF STRUCTURAL STEEL BEAMS OR INSERTS PROVIDED AS PART OF THE PRECAST DOUBLE TEES AS REQUIRED TO SUPPORT MEP&FP SYSTEMS COMPONENTS. SPECIALTY ACOUSTICALLY RATED ACCESS PANELS MAY BE ALLOWED TO ACCESS MEP&FP SYSTEMS COMPONENTS LOCATED ABOVE THE SOUND BARRIER SYSTEM ON THE LIMITED BASES AT LOCATIONS SPECIFICALLY INDICATED ON THE MEP&FP DRAWINGS.</p> <p>FIRST FLOOR - AREA F: ALL MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION (MEP&FP) SYSTEMS COMPONENTS THAT REQUIRE PENETRATIONS THROUGH PRE-CAST CONCRETE PLANK AT MEZZANINES FLOOR STRUCTURE SHALL BE COORDINATED WITH THE PRE-CAST PLANK CORE LOCATIONS. PENETRATIONS THROUGH THE PRE-CAST HOLLOW CORE PLANK, ARE ONLY ALLOWED THROUGH THE CORES. CMR MUST COORDINATE ALL OPENINGS IN THE PRE-CAST CONCRETE PLANK AS PART OF THE MEP&FP COORDINATION PROCESS.</p> <p>MECHANICAL, ELECTRICAL AND FIRE PROTECTION (MEP&FP) CONTRACTORS SHALL FOLLOW SPECIFIC DETAILS INDICATED ON THE DRAWINGS FOR ATTACHMENT TO THE DOUBLE TEES AND HOLLOW CORE PRECAST PLANK AT FLOORS AND ROOFS.</p> <p>SECOND FLOOR AREA E: MECHANICAL, ELECTRICAL AND FIRE PROTECTION (MEP&FP) CONTRACTORS SHALL FOLLOW SPECIFIC DETAILS INDICATED ON THE DRAWINGS FOR ATTACHMENT TO THE DOUBLE TEES AND HOLLOW CORE PRECAST PLANK AT FLOORS AND ROOFS.</p>	

SPRINKLER SYSTEM NOTES	
1. THESE GENERAL NOTES ARE APPLICABLE TO ALL FIRE PROTECTION DRAWINGS.	
2. DRAWINGS ARE DIAGRAMMATIC AND SHOW THE GENERAL INTENT OF WORK. SEE DETAILS, RISERS, AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.	
3. THE DRAWINGS INDICATE A SUGGESTED SPRINKLER HEAD LAYOUT AND THAT EACH AREA IS COVERED BY SPRINKLER PROTECTION AS REQUIRED BY ALL APPLICABLE STATE OF CT BUILDING, FIRE CODES, AND FM GLOBAL REQUIREMENTS. THE SPRINKLER QUANTITIES SHALL NOT BE COUNTED AS A TAKE OFF OR AS EXACT LOCATIONS. EXACT SPACING, DENSITY, AND LOCATION REQUIREMENTS SHALL BE AS DICTATED BY NFPA 13 & FM GLOBAL.	
4. FLOW DATA PERFORMED ON 3/13/17 AT A HYDRANT LOCATED AT 600 ORANGE AVE WAS RECORDED AS FOLLOWS:	
STATIC PRESSURE:	110 PSI
RESIDUAL PRESSURE:	75 PSI
FLOW RATE:	750 GPM
THIS FLOW DATA SHALL BE USED AS A GUIDE BY THE CONTRACTOR. THE CONTRACTOR SHALL PERFORM AN ADDITIONAL FLOW TEST TO VERIFY THIS INFORMATION. INFORMATION FROM THE CONTRACTOR'S FLOW TEST SHALL BE USED FOR HYDRAULIC CALCULATIONS. CALCULATIONS SHALL BE SUBMITTED TO OWNER FOR FM GLOBAL REVIEW.	
5. COMBINED INSIDE AND OUTSIDE HOSE STREAM ALLOWANCE FOR HYDRAULIC CALCULATIONS SHALL BE 250 GPM & 500 GPM FOR BUS GARAGE AND AUTOMOTIVE LAB.	
6. HYDRAULIC CALCULATIONS SHALL INCLUDE A SAFETY FACTOR OF 10%.	
7. PIPE VELOCITY AT ANY POINT OF THE SYSTEM SHALL NOT EXCEED 18FPS.	
8. INSTALLATION OF SPRINKLERS SHALL BE BASED ON THE FOLLOWING:	

AREA	OCCUPANCY CLASSIFICATION	DENSITY (GPM/SF)	AREA OF APPLICATION (SF)	K-FACTOR
BOILER ROOM	ORDINARY HAZARD GROUP 1	0.20	2500	8.0
STORAGE ROOMS	ORDINARY HAZARD GROUP 1	0.15	1500	8.0
KITCHEN/SERVERY	ORDINARY HAZARD GROUP 2	0.20	1500	5.6
MACHINING/CARPENTRY ROOMS	ORDINARY HAZARD GROUP 2	0.20	1500	5.6
SCIENCE ROOMS	ORDINARY HAZARD GROUP 2	0.20	1500	5.6
BUS GARAGE/AUTOMOTIVE SHOP	ORDINARY HAZARD GROUP 2	0.30	2500	11.2
SPRAY & PREP BOOTHS	EXTRA HAZARD GROUP 2	0.30	2500	11.2
REMAINDER OF THE BUILDING	LIGHT HAZARD	0.10	1500	5.6

FIRE PROTECTION ABBREVIATIONS	
ABBREVIATION	DESCRIPTION
AFF	ABOVE FINISHED FLOOR
CR	CORROSION RESISTANT
D	DRY
DCV	DOUBLE CHECK VALVE
EC	EXTENDED COVERAGE
ELEV	ELEVATION
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FD	FIRE DEPARTMENT
FDC	FIRE DEPARTMENT CONNECTION
FHV	FIRE HOSE VALVE
FP	FIRE PROTECTION
FFM	FEET PER MINUTE
FS	FLOW SWITCH
GFH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
HD	TOTAL DEVELOPED HEAD
HTC	HIGH TEMPERATURE CLASSIFICATION
HVC	HOSE VALVE CABINET
INTC	INTERMEDIATE TEMPERATURE CLASSIFICATION
N.C.	NORMALLY CLOSED
N.O.	NORMALLY OPEN
NTS	NOT TO SCALE
OS&Y	OUTSIDE SCREW AND YOLK
PD	PRESSURE DROP
PS	PRESSURE SWITCH
PSI	POUNDS PER SQUARE INCH
RPPB	REDUCED PRESSURE BACKFLOW PREVENTER
RPM	REVOLUTIONS PER MINUTE
SS	SUPERVISORY SWITCH
TS	TAMPER SWITCH
TYP	TYPICAL
V	VOLTS
VEL	VELOCITY
WG	WIRE GUARD

100% CONSTRUCTION DOCUMENTS

drawing title
FIRE PROTECTION ABBREVIATIONS AND LEGENDS

REVISIONS		
mark	date	description
1	07/23/2019	ADDENDUM #1

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES

drawing prepared by
Consulting Engineering Services, Inc.
911 Middle St., Middletown, CT 06457

date
05/24/2019

scale
As Indicated

drawn by
MSF

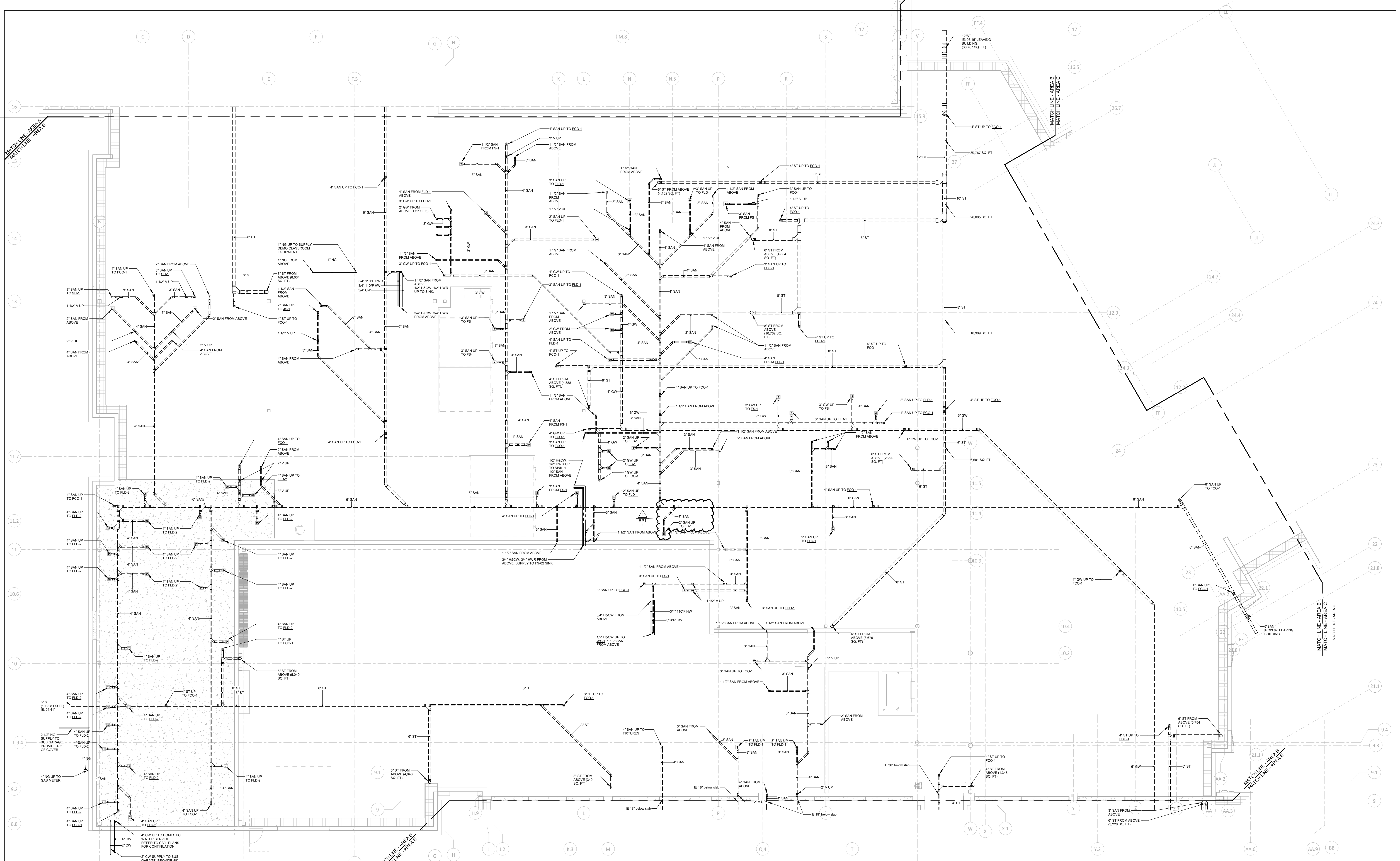
project
**ADDITIONS AND RENOVATIONS
PLATT TECHNICAL HIGH SCHOOL**
600 Orange Avenue Middletown, CT 06461

approved by
JAC

drawing no.
FP2-1-1

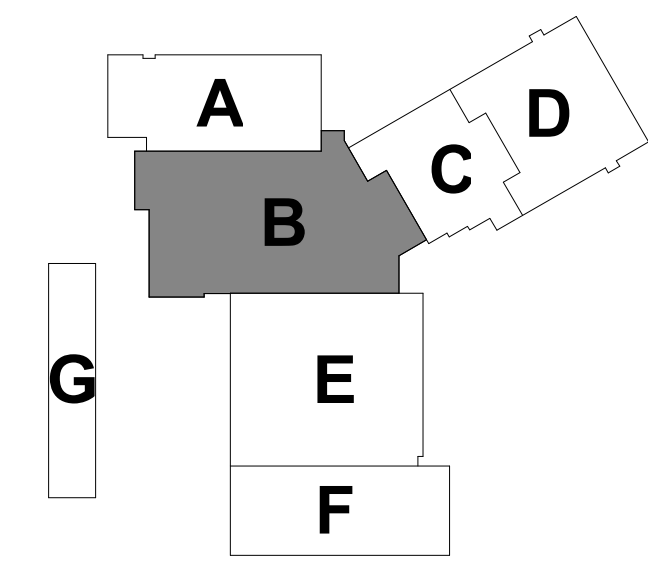
CAD no.
DCS project no.
BIRT-076 CM-R

OSCGR project no.
900-0013

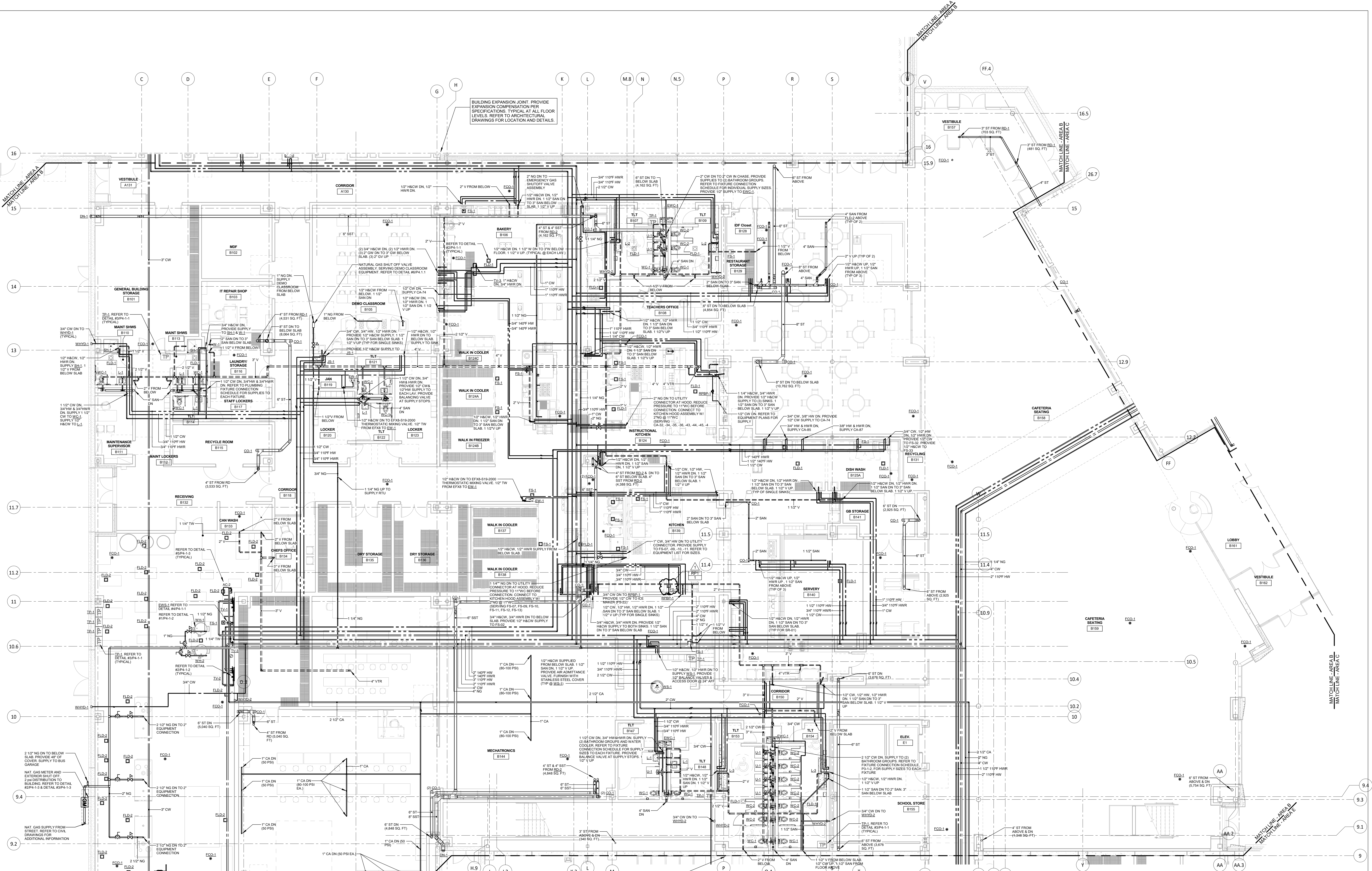


1 FIRST FLOOR PLUMBING BELOW SLAB - AREA B
 1/8" = 1'-0"

SEE 9799 - REFER TO ARCHITECTURAL DRAWINGS FOR EXACT ELEVATION CHANGE LOCATIONS
 REFER TO DRAWING PS-1-1 FOR PLUMBING LEGENDS
 REFER TO DRAWING PS-1-2 FOR SCHEDULES & FIXTURE CONNECTION SCHEDULE
 REFER TO DRAWINGS PS-1-1, PS-1-2 & PS-1-3 FOR PLUMBING DETAILS.



100% CONSTRUCTION DOCUMENTS			STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES	
drawing title UNDERSLAB PLUMBING PLAN AREA B			drawing prepared by Consulting Engineering Services, Inc. 911 Middle St., Middletown, CT 06457	
date 07/23/2019			date 05/24/2019	
description ADDENDUM #1			scale As Indicated	
project ADDITIONS AND RENOVATIONS PLATT TECHNICAL HIGH SCHOOL 600 Orange Avenue Middletown, CT 06461			drawn by msw	
CAD no.			approved by JAC	
DCS project no. BRF-076 CM-R			drawing no. P1-1-UB	
OSCR project no. 900-0113				



BUILDING EXPANSION JOINT. PROVIDE EXPANSION COMPENSATION PER SPECIFICATIONS. TYPICAL AT ALL FLOOR LEVELS. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION AND DETAILS.

MATCHLINE - AREA A
MATCHLINE - AREA B

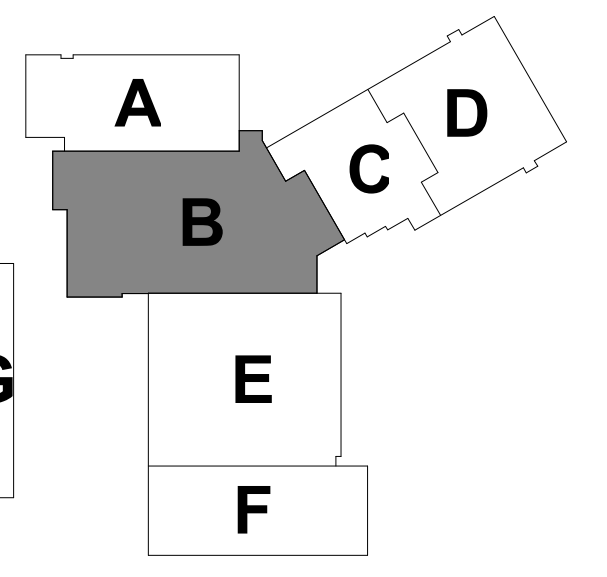
MATCHLINE - AREA A
MATCHLINE - AREA B

MATCHLINE - AREA A
MATCHLINE - AREA B

MATCHLINE - AREA A
MATCHLINE - AREA B

MATCHLINE - AREA A
MATCHLINE - AREA B

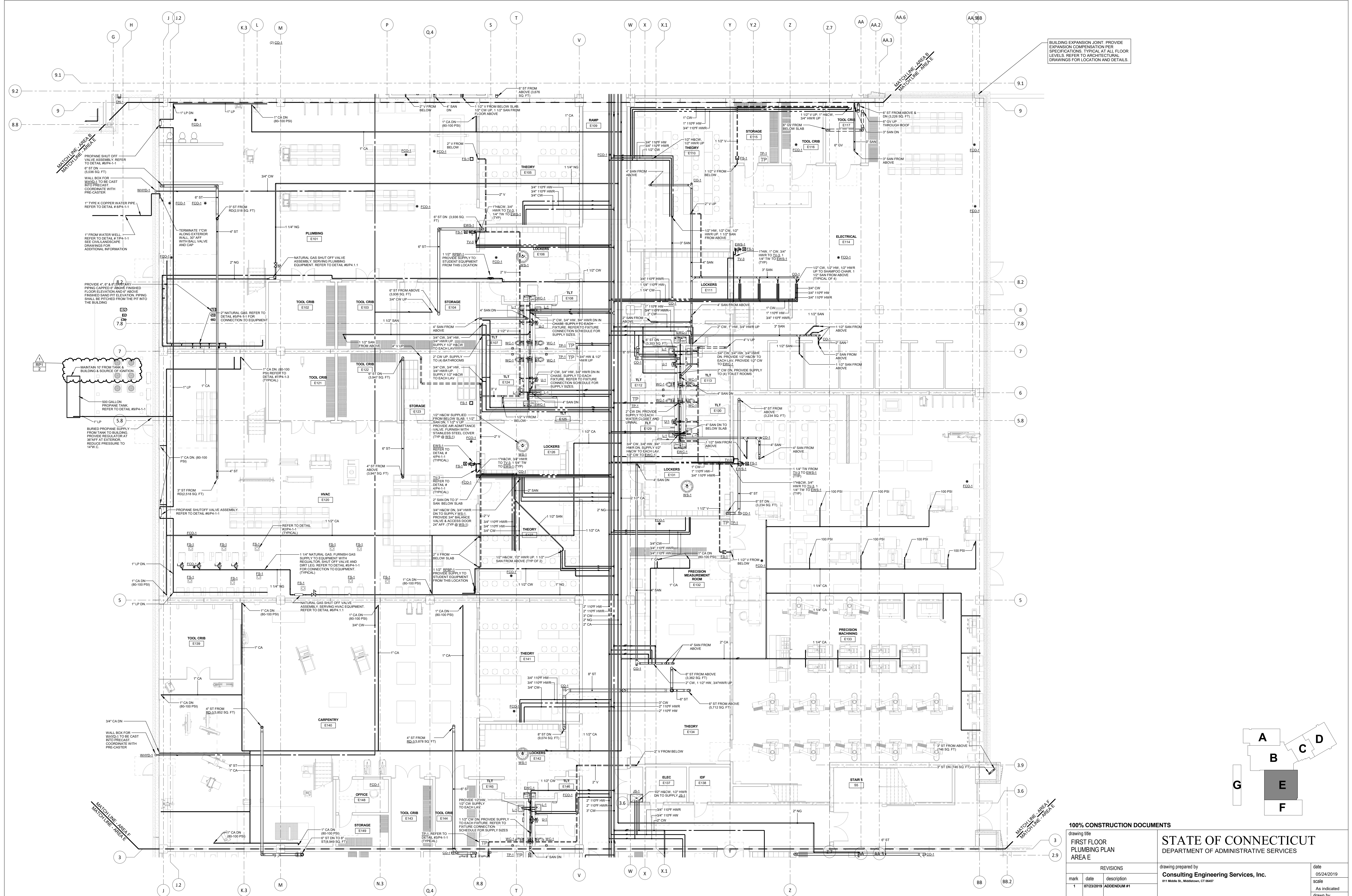
FIRST FLOOR PLUMBING PLAN AREA B
1/8" = 1'-0"
BUILDING EXPANSION JOINT. PROVIDE EXPANSION COMPENSATION PER SPECIFICATIONS. TYPICAL AT ALL FLOOR LEVELS. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION AND DETAILS.



100% CONSTRUCTION DOCUMENTS		
mark	date	description
1	07/23/2019	ADDENDUM #1

drawing title		date
FIRST FLOOR PLUMBING PLAN AREA B		05/24/2019
drawing by		As Indicated
drawn by		msp
approved by		.jtc
drawing no.		P1-1-1B

drawing title		date
STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES		05/24/2019
drawing prepared by		Consulting Engineering Services, Inc.
drawing no.		911 Model St., Wallingford, CT 06497
project		ADDITIONS AND RENOVATIONS PLATT TECHNICAL HIGH SCHOOL
CAD no.		605 Orange Avenue - Middletown, CT 06461
DCS project no.		OSCRG project no.
BLRT-076 C.M.R.		900-0113



1 FIRST FLOOR PLUMBING PLAN - AREA E
1/8" = 1'-0"

REF. TO DRAWING PS-1.1 FOR PLUMBING LEGENDS.
REF. TO DRAWING PS-1.2 FOR SCHEDULES & FIXTURE CONNECTION SCHEDULE.
REF. TO DRAWING PS-1.1, PA.1.2 & PA.3.3 FOR PLUMBING DETAILS.

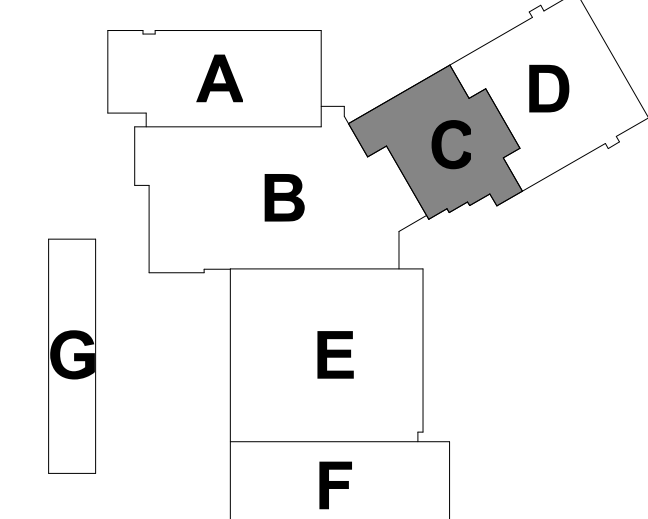
REVISIONS			date	
mark	date	description	scale	drawn by
1	07/23/2019	ADDENDUM #1	As Indicated	msf

drawing title		date	
FIRST FLOOR PLUMBING PLAN AREA E		05/24/2019	
drawing no.		scale	
P1-1-E		As Indicated	
drawing title		date	
STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES		05/24/2019	
drawing no.		scale	
P1-1-E		As Indicated	
drawing title		date	
CONSULTING ENGINEERING SERVICES, INC.		05/24/2019	
drawing no.		scale	
P1-1-E		As Indicated	
drawing title		date	
ADDITIONS AND RENOVATIONS PLATT TECHNICAL HIGH SCHOOL		05/24/2019	
drawing no.		scale	
P1-1-E		As Indicated	



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

REFER TO DRAWING PS-1-1 FOR PLUMBING LEGENDS.
REFER TO DRAWING PS-1-2 FOR SCHEDULES & FUTURE CONNECTION SCHEDULE.
REFER TO DRAWINGS PA-1-1, PA-1-2 & PA-1-3 FOR PLUMBING DETAILS.



100% CONSTRUCTION DOCUMENTS			STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES	
drawing title SECOND FLOOR PLUMBING PLAN AREA C		drawing prepared by Consulting Engineering Services, Inc. 811 Main St., Middletown, CT 06457		date 05/24/2019
REVISIONS		project ADDITIONS AND RENOVATIONS PLATT TECHNICAL HIGH SCHOOL 600 Orange Avenue Middletown, CT 06461		scale As Indicated
mark	date	description		drawn by MSF
1	07/23/2019	ADDENDUM #1		approved by JHC
CAD no.		DCS project no. BART-076 CM-R	OSGCR project no. 900-0113	drawing no. P1-1-2C

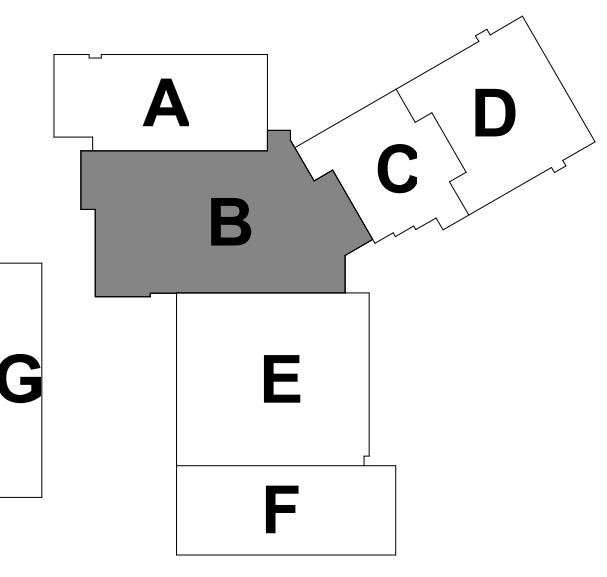
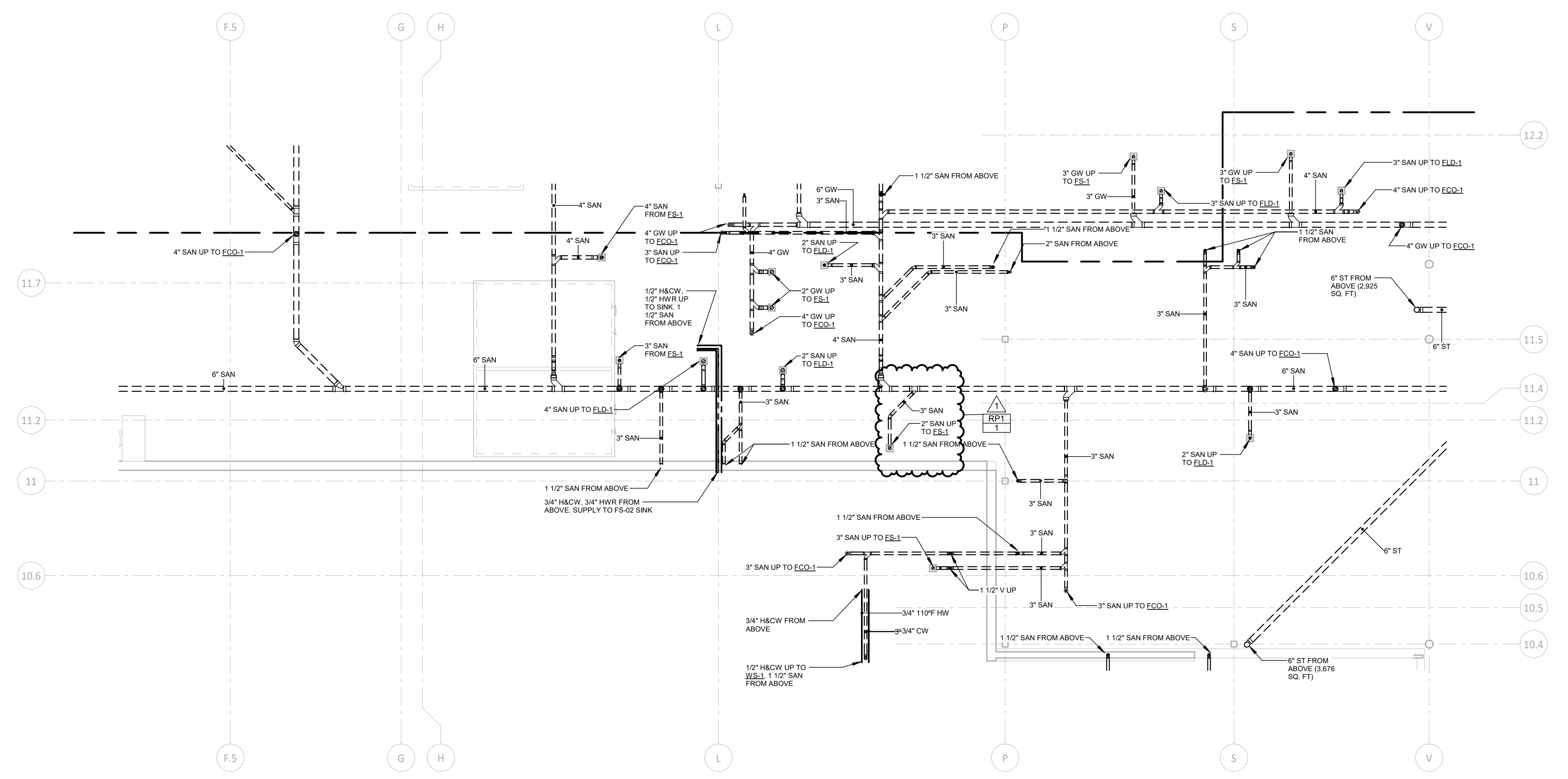
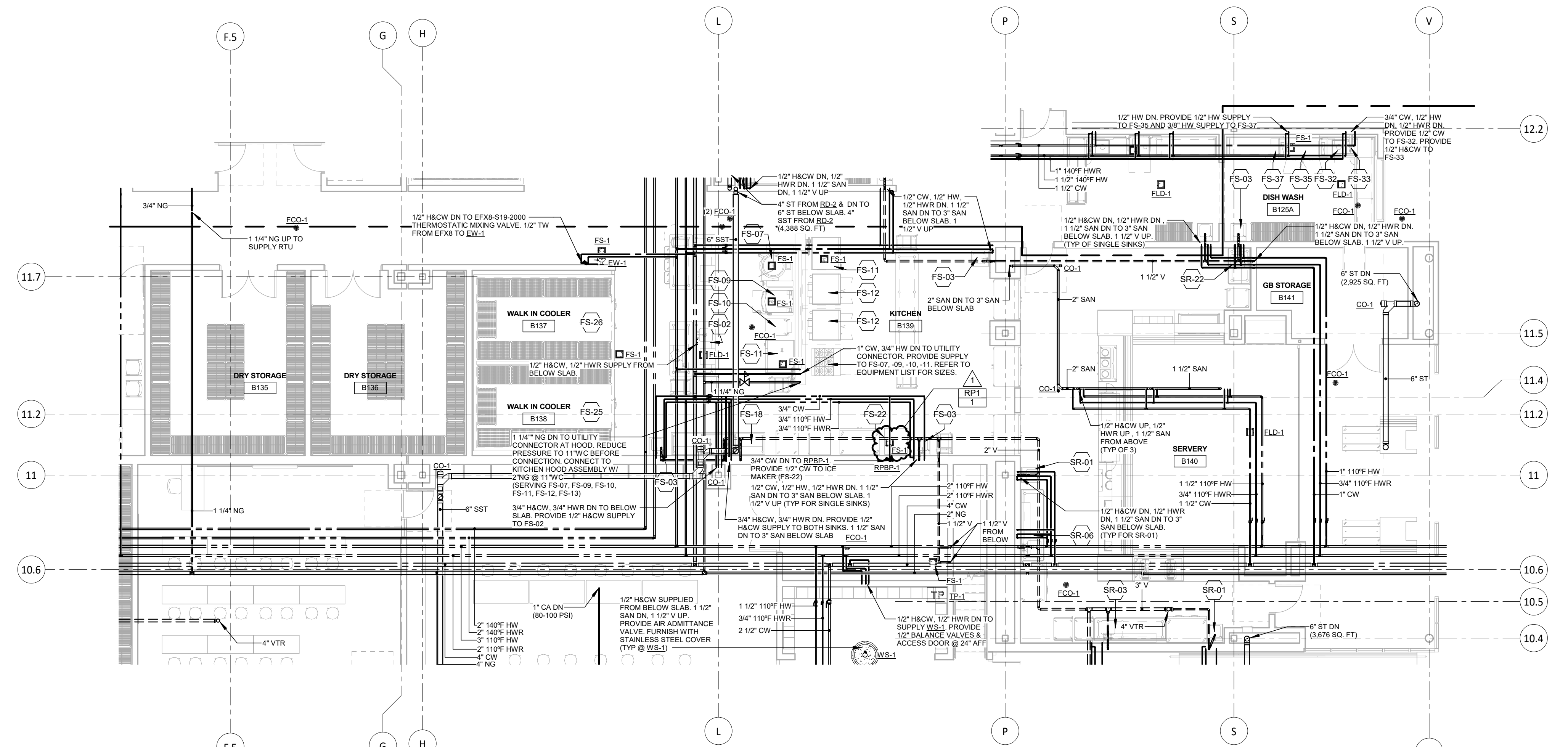
KITCHEN AND BAKERY EQUIPMENT SCHEDULE														
ITEM #	QTY	DESCRIPTION	FURNISHED BY		INSTALLED BY		HOT WATER SIZE (IN)	HOT WATER GPH	COLD WATER SIZE (IN)	DOMESTIC WATER DIRECT DRAIN SIZE (IN)	INDIRECT DRAIN SIZE (IN)	GAS SIZE (IN)	MBTU/H	EQUIPMENT REMARKS
			KEC	VENDOR/OWNER	GC	KEC								
FS-02	1	WORK SINK W/ HAND SINK & DRAWER					1/2	1/2	1 1/2	1 1/2			1.4	
FS-03	4	HAND SINK					1/2	1/2	1 1/2				4	
FS-07	1	KETTLE, STEAM JACKETED	X		X		1/2	1/2		2	3/4	100	1,2,4,5	
FS-08	1	FLOOR TROUGH												
FS-09	1	TILTING SKILLET	X		X		(2) 3/8	(2) 3/8		1 1/2	3/4	93	1,2,4,5	
FS-10	1	STEAMER, CONVECTION, GAS								3/4	2 1/2	1/2	62	1,2,4,5
FS-11	2	OVEN-STEAMER, COMBINATION					3/4	3/4		2	3/4	106	1,2,4,5	
FS-12	2	OVEN, CONVECTION, GAS	X		X						3/4	(2) 60		
FS-13	1	RANGE, HEAVY DUTY, GAS	X		X							1	255	
FS-14	1	EXHAUST HOOD ASSEMBLY	X		X									
FS-18	1	PREP TABLE W/ DOUBLE SINK & DRAWERS												
		FAUCET WALL MOUNT												
		TABLE MOUNT SHELF												
FS-19	1	REFRIGERATOR, REACH IN GLASS DOOR												
FS-21														
FS-22	1	ICE MACHINE	X		X									
FS-25	1	WALK-IN COOLER (+35 DEG. FAHRENHEIT)	X		X									
		CONDENSING UNIT	X		X									
		EVAPORATOR COIL	X		X								1.3	
FS-26	1	WALK-IN FREEZER (-10 DEG. FAHRENHEIT)	X		X									
		CONDENSING UNIT	X		X									
		EVAPORATOR COIL	X		X								1	
FS-30	1	SOILED DISHTABLE W/PRE SINK RINSE	X		X			1/2		2			1.4	
FS-32	1	DISPOSER	X		X			1/2		1/2			1.4	
FS-33	1	HOSE REEL ASSEMBLY	X		X		1/2	1/2					2.4	
FS-35	1	DISHWASHER	X		X		1/2	1/2					1.4	
FS-36	1	EXHAUST HOOD												
FS-37	1	HOT WATER BOOSTER	X		X		3/8			3/8			1.4	
SR-01	2	HAND SINK					1/2	1/2	1 1/2					
SR-03	1	WORK TABLE W/UNDERSHELF & SINK					1/2	1/2	1 1/2	1 1/2			1.4	
SR-06	1	WORK TABLE W/UNDERSHELF & SINK					1/2	1/2	1 1/2	1 1/2			1.4	
SR-13	1	COLD FOOD SERVING COUNTER	X		X								1	
		W/DROP-IN COLD PAN	X		X									
SR-14	1	HOT FOOD SERVING COUNTER	X		X								3/4	1
		W(2) DROP-IN HOT WELLS	X		X									
SR-20	1	HOT/COLD SERVING COUNTER	X		X								1	
		W/DROP-IN HOT/COLD PAN	X		X		1/4	1/4		1			1.4	
SR-21	1	HOT FOOD SERVING COUNTER	X		X									
		W/DROP-IN HEATED SHELF	X		X									
SR-22	1	S/S WORKTABLE W/UNDERSHELF & SINK	X		X		1/2	1/2	1 1/2	1 1/2			1.4	

REMARKS:

- PIPE I.W. TO FLOOR SINK.
- FURNISH AND INSTALL BACKFLOW PREVENTER ON WATER SUPPLY TO EQUIPMENT/FIXTURE.
- PROVIDED BY DIVISION 22.
- PROVIDE ISOLATION VALVE ON WATER SUPPLY.
- PROVIDE 1/2" FILTERED WATER SUPPLY.
- PROVIDE ISOLATION VALVE AND FLEX CONNECTION FROM GAS HEADER TO EQUIPMENT.

KITCHEN PLUMBING GENERAL NOTES:

- THESE NOTES APPLY TO THE PLUMBING CONTRACTOR'S SCOPE OF WORK. CONTRACTOR SHALL FURNISH AND INSTALL MATERIALS, DEVICES AND EQUIPMENT AS REQUIRED AND NOTED BELOW.
- REFER TO FOOD SERVICE EQUIPMENT DRAWINGS FOR ADDITIONAL INFORMATION.
- FINAL CONNECTIONS TO ALL EQUIPMENT SHALL BE BY PLUMBING CONTRACTOR.
- PROVIDE WASTE P-TRAPS AT ALL DIRECT WASTE PIPING CONNECTIONS TO EQUIPMENT OR TROUGHS.
- FOOD SERVICE DRAWINGS FS SERIES ARE PART OF THIS CONTRACT. PLUMBING CONTRACTOR MUST REVIEW THEM FOR ALL PLUMBING CONNECTIONS, LOCATIONS, AND EQUIPMENT PIPING REQUIREMENTS.
- PLUMBING CONTRACTOR TO PROVIDE & INSTALL CONDENSATE DRAINS W/ P-TRAPS FROM EVAPORATORS IN REFRIGERATOR & FREEZER TO EMPTY TO FLOOR SINK.
- PROVIDE ISOLATION VALVES ON ALL HOT & COLD WATER SUPPLIES TO EQUIPMENT AND UNIONS FOR EQUIPMENT REMOVAL. PROVIDE WATER HAMMER ARRESTORS AT QUICK CLOSING VALVE SUPPLIES TO EQUIPMENT AS REQUIRED. INSTALL ALL PLUMBING PIPE ACCESSORIES SUPPLIED WITH KITCHEN EQUIPMENT INCLUDING VACUUM BREAKERS, SINK TAILPIECES, P-TRAPS, AND LEVER WASTES.
- PROVIDE FLOOR SINKS WITH HALF-GRATE COVERS WHEN INDIRECT WASTES DISCHARGE DIRECTLY INTO THEM. PROVIDE FUNNEL DRAINS FOR FLOOR SINKS WITH SMALL INDIRECT WASTES.
- PLUMBING CONTRACTOR TO SUPPLY AND INSTALL EMERGENCY GAS SOLENOID VALVE WITH MANUAL RESET WIRED BY OTHERS. SUPPRESSION CONTROL PANEL. COORDINATE PROPER VALVE ELECTRICAL REQUIREMENTS WITH HOOD SUPPRESSION SYSTEM SUPPLIER.



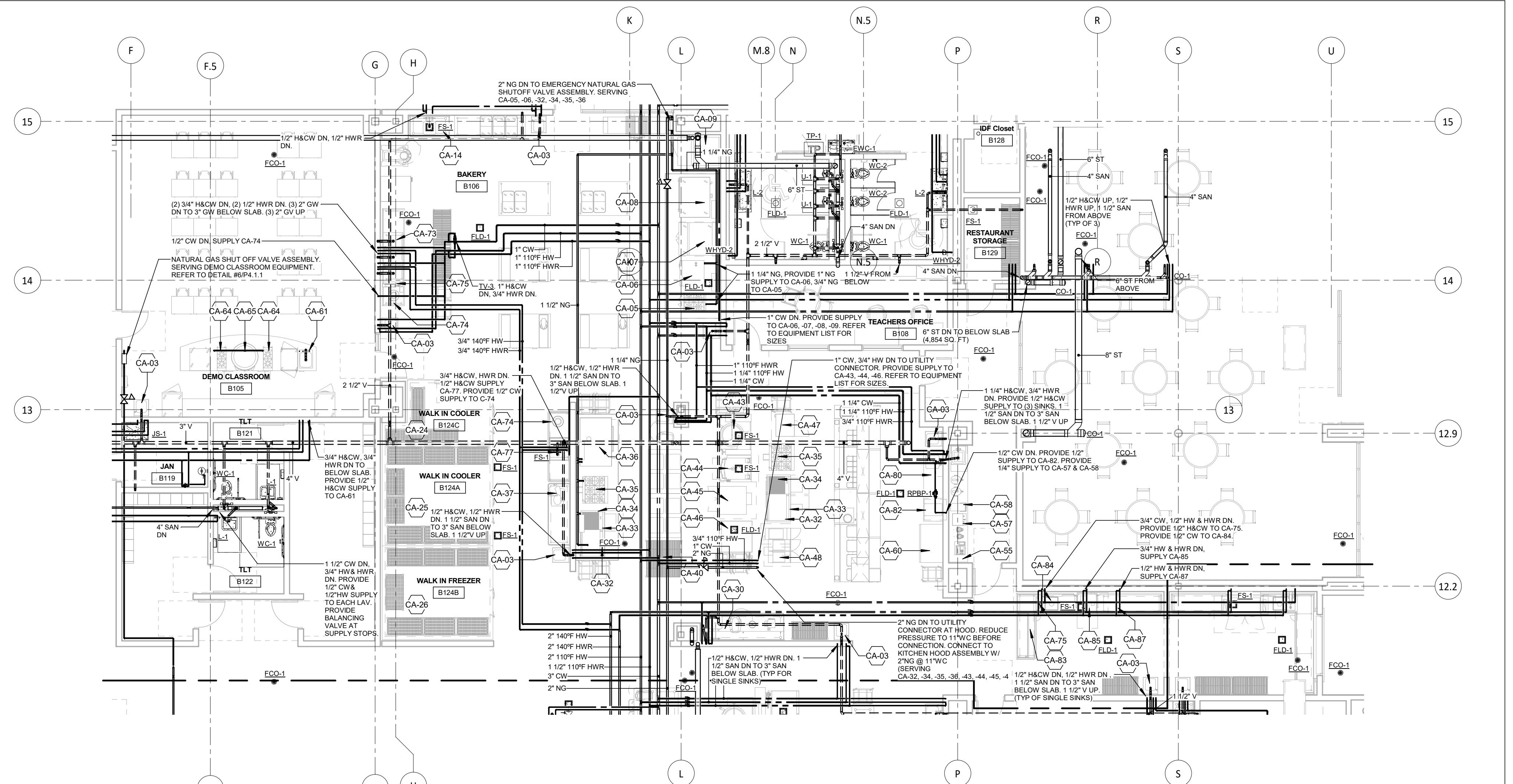
100% CONSTRUCTION DOCUMENTS			
drawing title	KITCHEN PARTIAL PLAN		PLUMBING
STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES			
drawing prepared by	Consulting Engineering Services, Inc.		date
811 Middle St., Middletown, CT 06457			05/24/2019
project			
ADDITIONS AND RENOVATIONS PLATT TECHNICAL HIGH SCHOOL			
800 Orange Avenue Middletown, CT 06461	DCS project no. BLRT-076 CM-R	OSCRG project no. 900-0013	approved by J.C.
CAD no.			drawing no. P2-1-1

CLASSROOM/BAKERY EQUIPMENT SCHEDULE

ITEM #	QTY.	DESCRIPTION	FURNISHED BY		INSTALLED BY		HOT WATER SIZE (IN.)	HOT WATER UPH	COLD WATER SIZE (IN.)	DOMESTIC WATER	DIRECT DRAIN SIZE (IN.)	INDIRECT DRAIN SIZE (IN.)	GAS SIZE (IN.)	EQUIPMENT REMARKS
			REC	VENDOR/OWNER	GC	REC								
CA-03	9	HAND SINK, WALL MOUNT	X		X		1/2		1/2		1 1/2		3	
CA-04	1	EXHAUST HOOD	X		X									
CA-05	1	RANGE, RESTAURANT, GAS	X		X							3/4	4	
CA-06	1	COMBI OVEN	X		X							2	1, 3, 4	
CA-07	1	CONVECTION OVEN	X		X								3	
CA-08	1	DECK OVEN	X		X								3	
CA-09	1	ROLL-IN PROOFER/RETARDER	X		X								3	
CA-14	1	WORK TABLE W/ SINK	X		X		1/2		1/2		1 1/2		1, 3	
CA-24	1	WALK-IN COOLER (+35 DEG. FAHRENHEIT)	X		X									
		CONDENSING UNIT	X		X									
		EVAPORATOR COIL	X		X							3/4	1	
CA-25	1	WALK-IN FREEZER (-10 DEG. FAHRENHEIT)	X		X									
		CONDENSING UNIT	X		X									
		EVAPORATOR COIL	X		X							3/4	1	
CA-26	1	WALK-IN COOLER (+35 DEG. FAHRENHEIT)	X		X									
		CONDENSING UNIT	X		X									
		EVAPORATOR COIL	X		X							3/4	1	
CA-30	1	WORKTABLE W/ SINK	X		X		1/2		1/2		1 1/2		1, 3	
CA-32	2	COUNTERTOP GRIDDLE	X		X							3/4	4	
CA-33	2	EQUIPMENT STAND, REFRIGERATED BASE	X		X						1/2		1	
CA-34	2	CHARBROILER	X		X								3/4	4
CA-35	2	RANGE, RESTAURANT, GAS	X		X								3/4	4
CA-36	1	DECK PIZZA OVEN	X		X								(2) 3/4	4
CA-41	1	EXHAUST HOOD ASSEMBLY	X		X									
CA-43	1	KETTLE, STEAM JACKETED	X		X		1/2		1/2		2	3/4	1, 2, 3, 4	
CA-44	1	TILTING SKILLET	X		X		3/8		3/8		1 1/2	3/4	1, 2, 3, 4	
CA-45	1	OVEN, CONVECTION, GAS	X		X								(2) 3/4	4
CA-46	1	OVEN-STEAMER, COMBINATION	X		X				(2) 1/2		(2) 2	(2) 3/4	1, 2, 3, 4	
	2	FILTER SYSTEM, STEAMER	X		X							3/8	1, 2, 3, 4	
CA-47	1	CONVECTION OVEN	X		X								(2) 3/4	4
CA-48	1	FRYER, DEEP FAT, GAS	X		X								(2) 3/4	4
		FRYER, DUMP STATION	X		X								(2) 3/4	4
CA-49	1	EXHAUST HOOD ASSEMBLY	X		X									
CA-55	1	COUNTER W/ SINK	X		X		1/2		1/2		1 1/2		3	
CA-57	1	COFFEE BREWER	X		X								1/4	
CA-58	1	TEA BREWER	X		X								1/4	
CA-64	2	COUNTERTOP HOT PLATE	X		X								3/4	4
CA-65	1	ROUND GRIDDLE/PLANCHA	X		X								1/2	4
CA-66	1	EXHAUST HOOD	X		X									REFER TO FS-10 FOR DETAILS
CA-73	1	POT & PAN WASHING SINK ASSEMBLY	X		X		1/2		1/2	(2) 2			3	
CA-74	2	DISPOSER	X		X						1 1/2		3	
CA-75	2	HOSE REEL ASSEMBLY	X		X		1/2		1/2				3	
CA-77	1	VEGETABLE PREP SINK ASSEMBLY	X		X		1/2		1/2		1 1/2		1, 3	
CA-80	1	SIS COUNTER W/ SINK	X		X		1/2		1/2		1 1/2		1, 3	
CA-82	1	ICE CUBER	X		X						1/2		1, 3, 4	
CA-83	1	SOILED DISHTABLE W/PIRE SINK RINSE	X		X						1/2		3	
CA-84	1	DISPOSER	X		X						1 1/2		3	
CA-85	1	DISHWASHER	X		X								1 1/2	1
CA-86	1	EXHAUST HOOD	X		X								3/4	
CA-87	1	HOT WATER BOOSTER	X		X		1/2						3/8	1

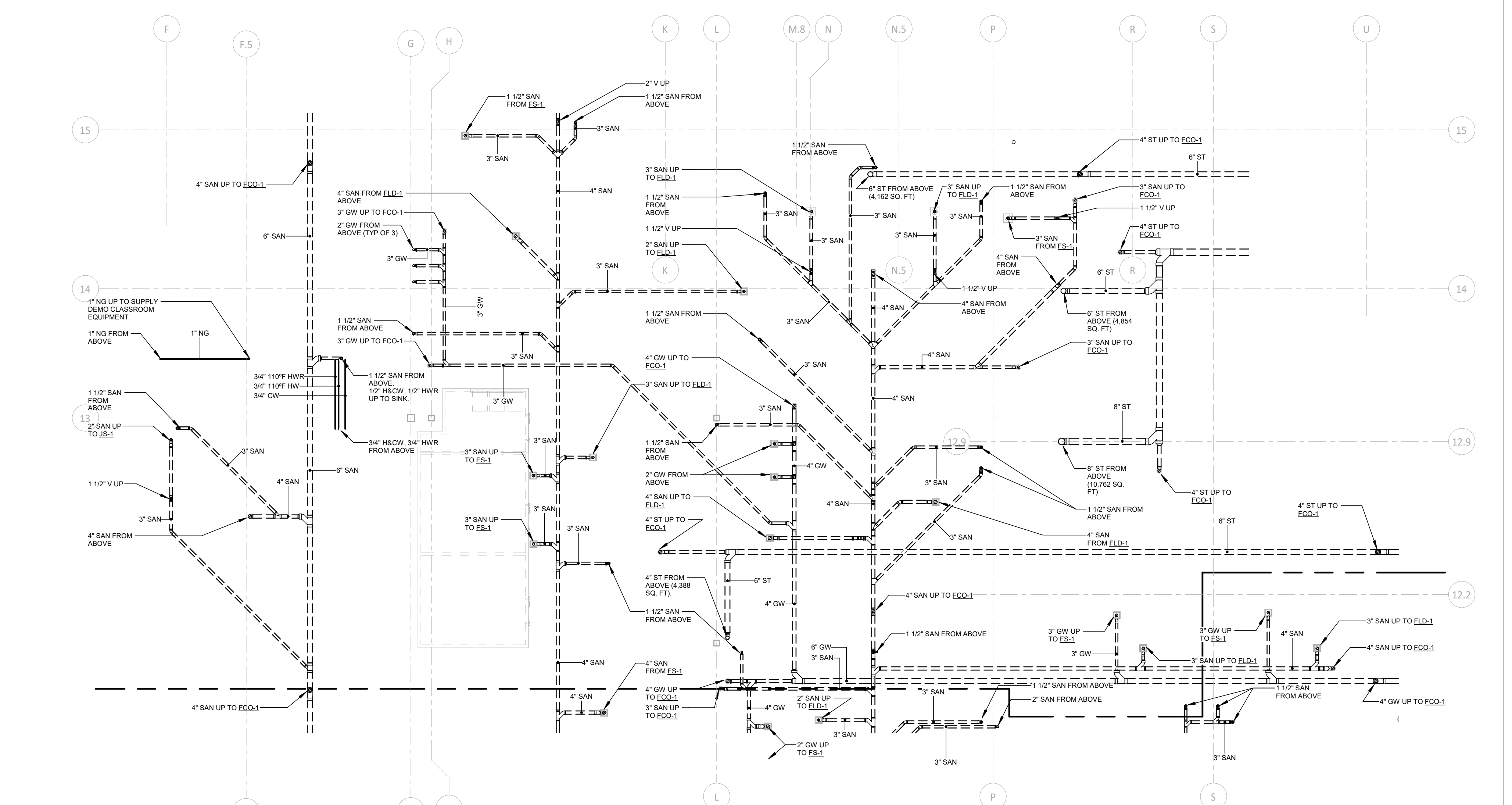
REMARKS:
 1. PIPE I.W. TO FLOOR SINK.
 2. FURNISH AND INSTALL BACKFLOW PREVENTER ON WATER SUPPLY TO EQUIPMENT/FIXTURE.
 3. PROVIDED BY DIVISION 22.
 4. PROVIDE ISOLATION VALVE ON WATER SUPPLY.
 5. PROVIDE 12" FILTERED WATER SUPPLY.
 6. PROVIDE ISOLATION VALVE AND FLEX CONNECTION FROM GAS HEADER TO EQUIPMENT.

KITCHEN PLUMBING GENERAL NOTES:
 1. THESE NOTES APPLY TO THE PLUMBING CONTRACTORS SCOPE OF WORK. CONTRACTOR SHALL FURNISH AND INSTALL MATERIALS, DEVICES AND EQUIPMENT AS REQUIRED AND NOTED BELOW.
 2. REFER TO FOOD SERVICE EQUIPMENT DRAWINGS FOR ADDITIONAL INFORMATION.
 3. FINAL CONNECTIONS TO ALL EQUIPMENT SHALL BE BY PLUMBING CONTRACTOR.
 4. PROVIDE WASTE P-TRAPS AT ALL DIRECT WASTE PIPING CONNECTIONS TO EQUIPMENT OR TROUGH.
 5. FOOD SERVICE DRAWINGS FS SERIES ARE PART OF THIS CONTRACT. PLUMBING CONTRACTOR MUST REVIEW THEM FOR ALL PLUMBING CONNECTIONS, LOCATIONS, AND EQUIPMENT PIPING REQUIREMENTS.
 6. PLUMBING CONTRACTOR TO PROVIDE & INSTALL CONDENSATE DRAINS W/ P-TRAPS FROM EVAPORATORS IN REFRIGERATOR & FREEZER TO EMPTY TO FLOOR SINK.
 7. PROVIDE ISOLATION VALVES ON ALL HOT & COLD WATER SUPPLIES TO EQUIPMENT AND UNIONS FOR EQUIPMENT REMOVAL. PROVIDE WATER HAMMER ARRESTORS AT QUICK CLOSING VALVE SUPPLIES TO EQUIPMENT AS REQUIRED. INSTALL ALL PLUMBING PIPE ACCESSORIES SUPPLIED WITH KITCHEN EQUIPMENT INCLUDING VACUUM BREAKERS, SINK TAILPIECES, P-TRAPS, AND LEVER WASTES.
 8. PROVIDE FLOOR SINKS WITH HALF-GRATE COVERS WHEN INDIRECT WASTES DISCHARGE DIRECTLY INTO THEM. PROVIDE FUNNEL DRAINS FOR FLOOR SINKS WITH SMALL INDIRECT WASTES.
 9. PLUMBING CONTRACTOR TO SUPPLY AND INSTALL EMERGENCY GAS SOLENOID VALVE WITH MANUAL RESET WIRED BY OTHERS. SUPPRESSION CONTROL PANEL. COORDINATE PROPER VALVE ELECTRICAL REQUIREMENTS WITH HOOD SUPPRESSION SYSTEM SUPPLIER.



1 FIRST FLOOR PLUMBING - CLASSROOM BAKERY PLAN

1/8" = 1'-0"
 REFER TO DRAWING PS-1 FOR PLUMBING LEGENDS.
 REFER TO DRAWING PS-2 FOR SCHEDULES & FIXTURE CONNECTION SCHEDULE.
 REFER TO DRAWINGS PA-1, PA-2 & PA-3 FOR PLUMBING DETAILS.
 REFER TO EQUIPMENT DRAWINGS & SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS & CONNECTIONS TO EQUIPMENT SPECIFIED BY OTHERS.



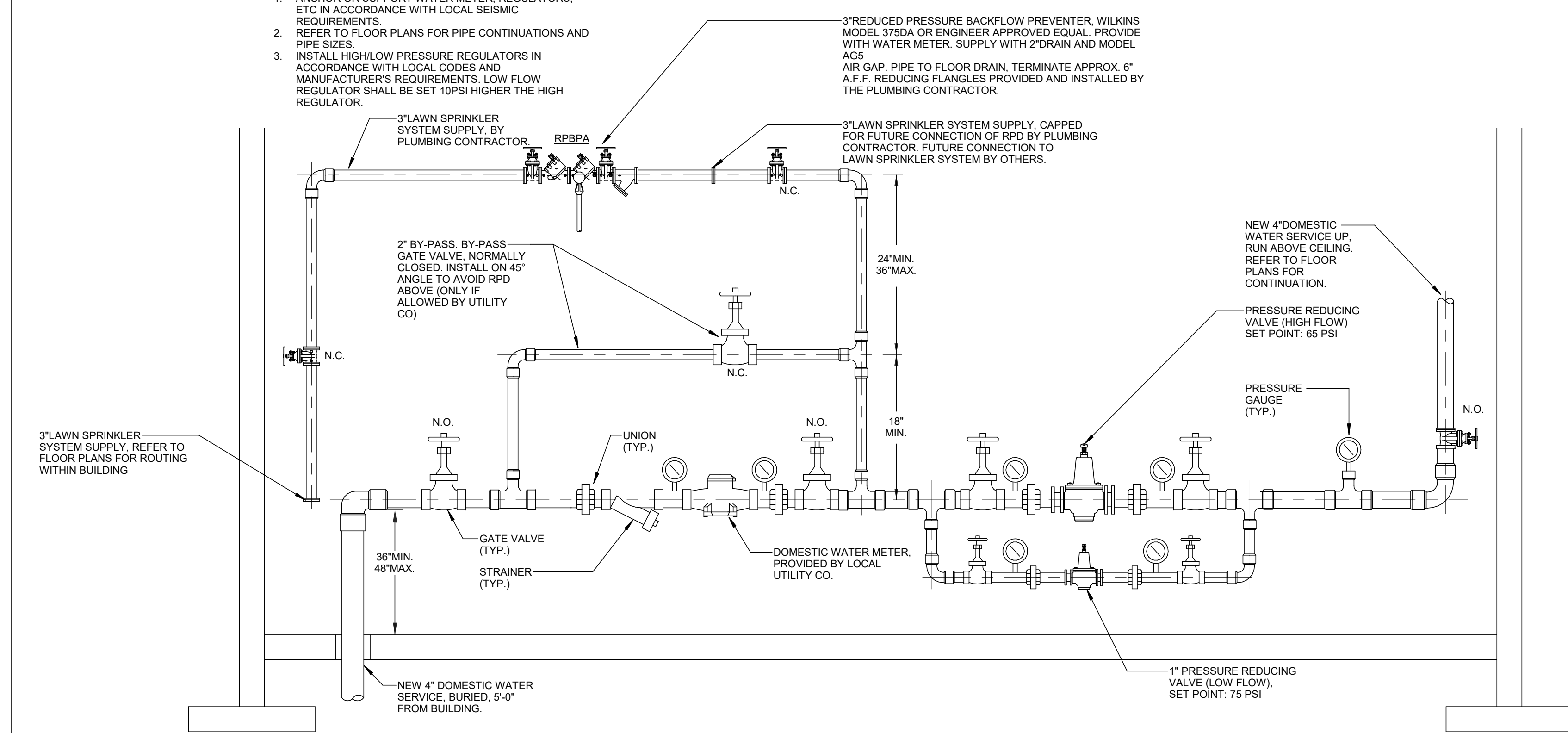
2 FIRST FLOOR PLUMBING BELOW SLAB - CLASSROOM BAKERY PLAN

1/8" = 1'-0"
 REFER TO DRAWING PS-1 FOR PLUMBING LEGENDS.
 REFER TO DRAWING PS-2 FOR SCHEDULES & FIXTURE CONNECTION SCHEDULE.
 REFER TO DRAWINGS PA-1, PA-2 & PA-3 FOR PLUMBING DETAILS.

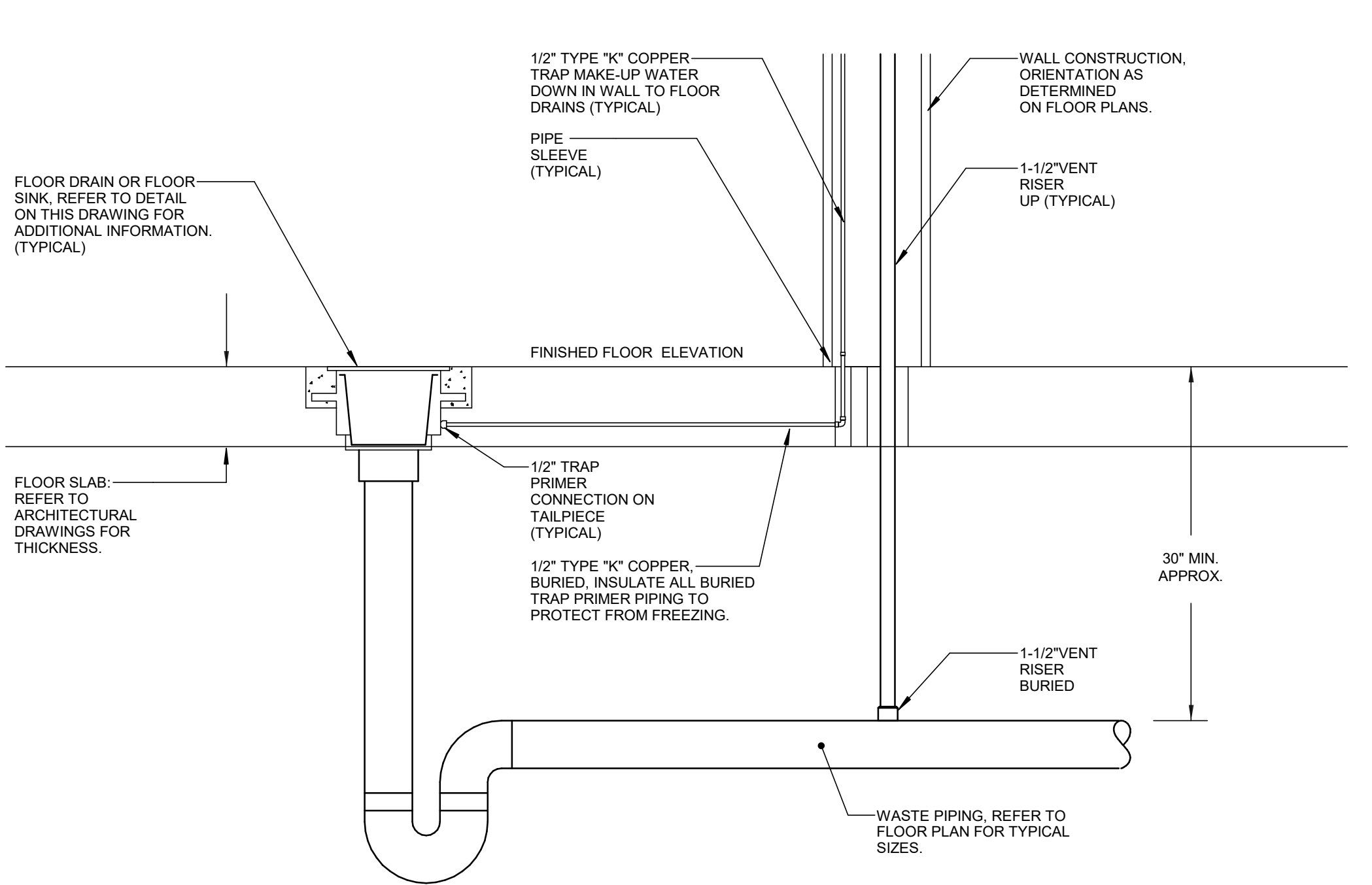
100% CONSTRUCTION DOCUMENTS		STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES	
drawing title CLASSROOM BAKERY PLUMBING PARTIAL PLAN		drawing prepared by Consulting Engineering Services, Inc. 811 Middle St., Middletown, CT 06457	
date 07/23/2019		date 05/24/2019	
description ADDENDUM #1		description As Indicated	
author		approved by	
approved by		approved by	
drawing no.		drawing no.	
CAD no.		OSCRG project no.	
DCS project no.		OSCRG project no.	
BLRT-076 CM-R		900-0113	
project ADDITIONS AND RENOVATIONS PLATT TECHNICAL HIGH SCHOOL 600 Orange Avenue Middletown, CT 06461		date 05/24/2019	
drawing title CLASSROOM BAKERY PLUMBING PARTIAL PLAN		drawing no. P2-1-2	

WATER SERVICE GENERAL NOTES:

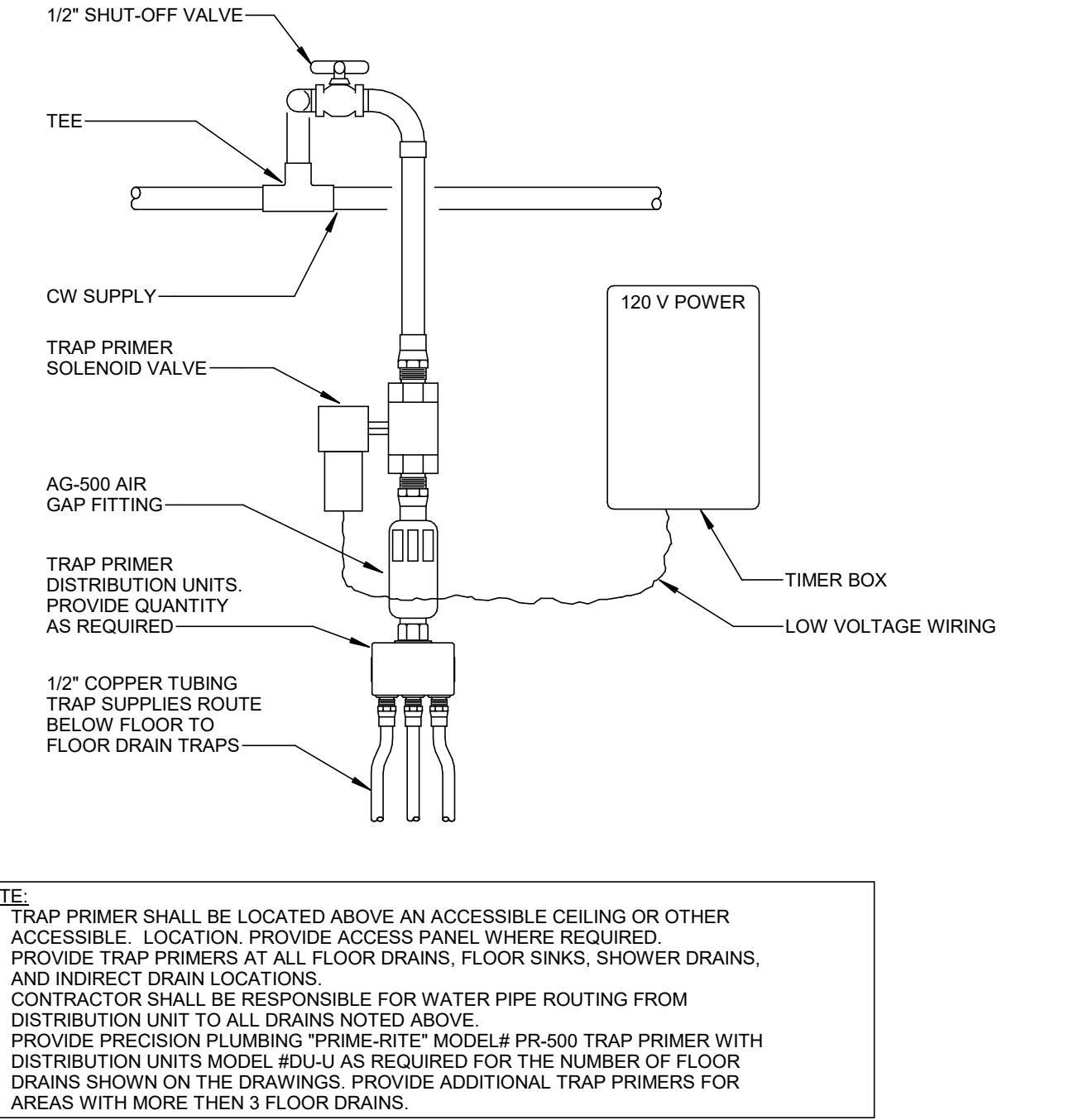
- ANCHOR OR SUPPORT WATER METER, REGULATORS, ETC. IN ACCORDANCE WITH LOCAL SEISMIC REQUIREMENTS.
- REFER TO FLOOR PLANS FOR PIPE CONTINUATIONS AND PIPE SIZES.
- INSTALL HIGH-FLOW PRESSURE REGULATORS IN ACCORDANCE WITH LOCAL CODES AND MANUFACTURER'S REQUIREMENTS. LOW FLOW REGULATOR SHALL BE SET 10PSI HIGHER THAN THE HIGH REGULATOR.



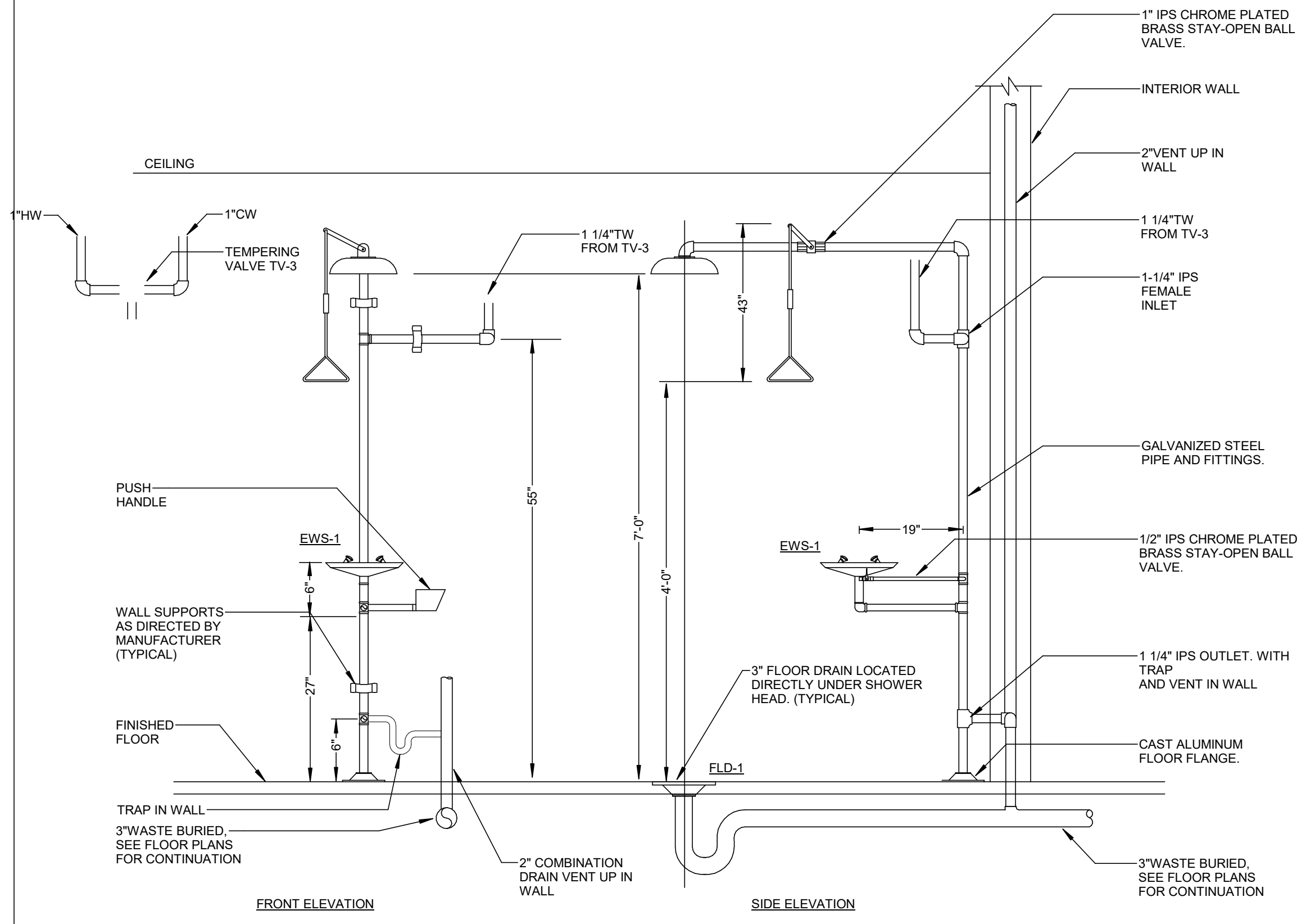
1 DOMESTIC WATER SERVICE INSTALLATION DETAIL WITH IRRIGATION
NTS



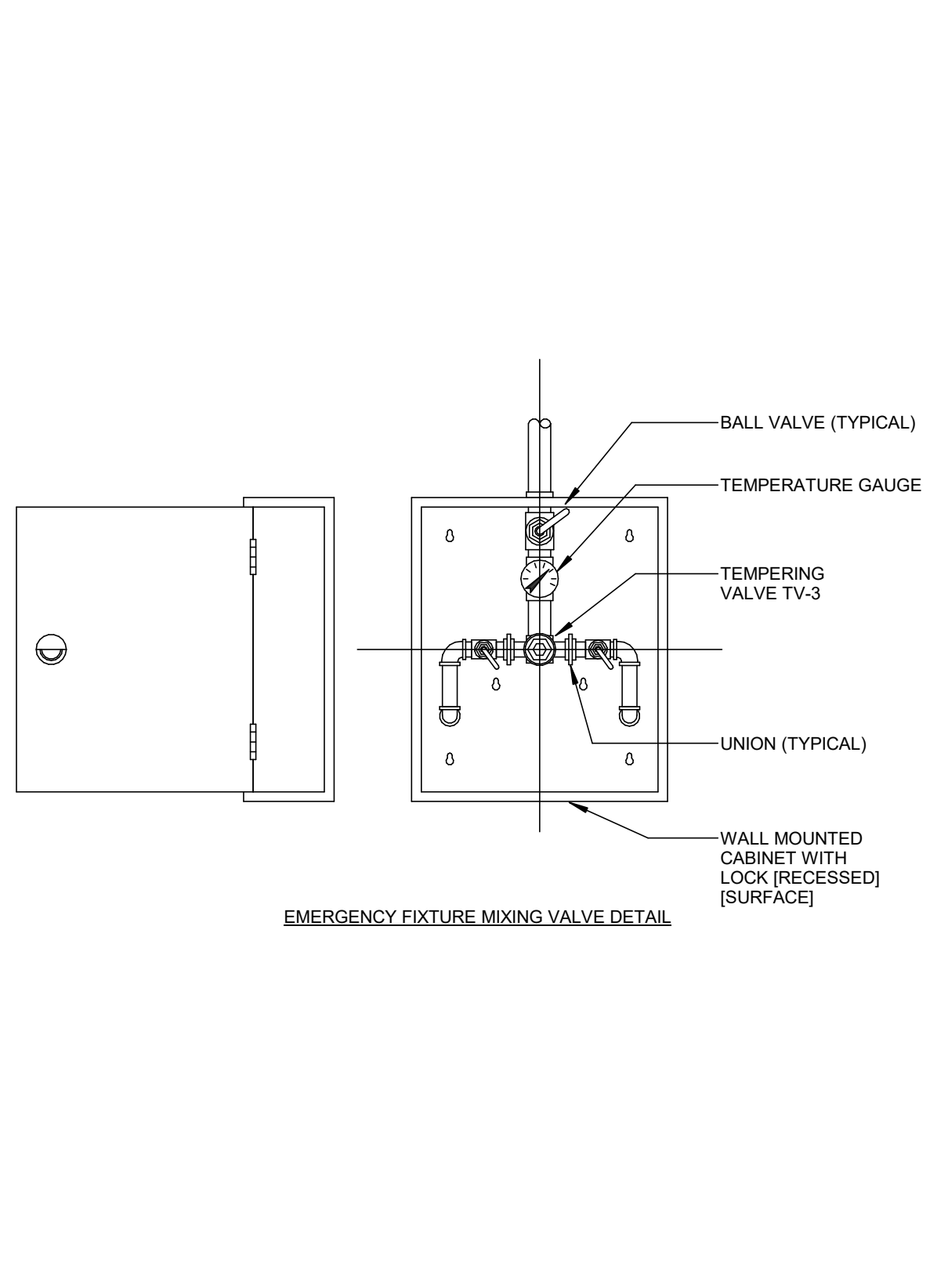
2 TYPICAL FLOOR DRAIN/FLOOR SINK SERVICE PIPING INSTALLATION DETAIL
NTS



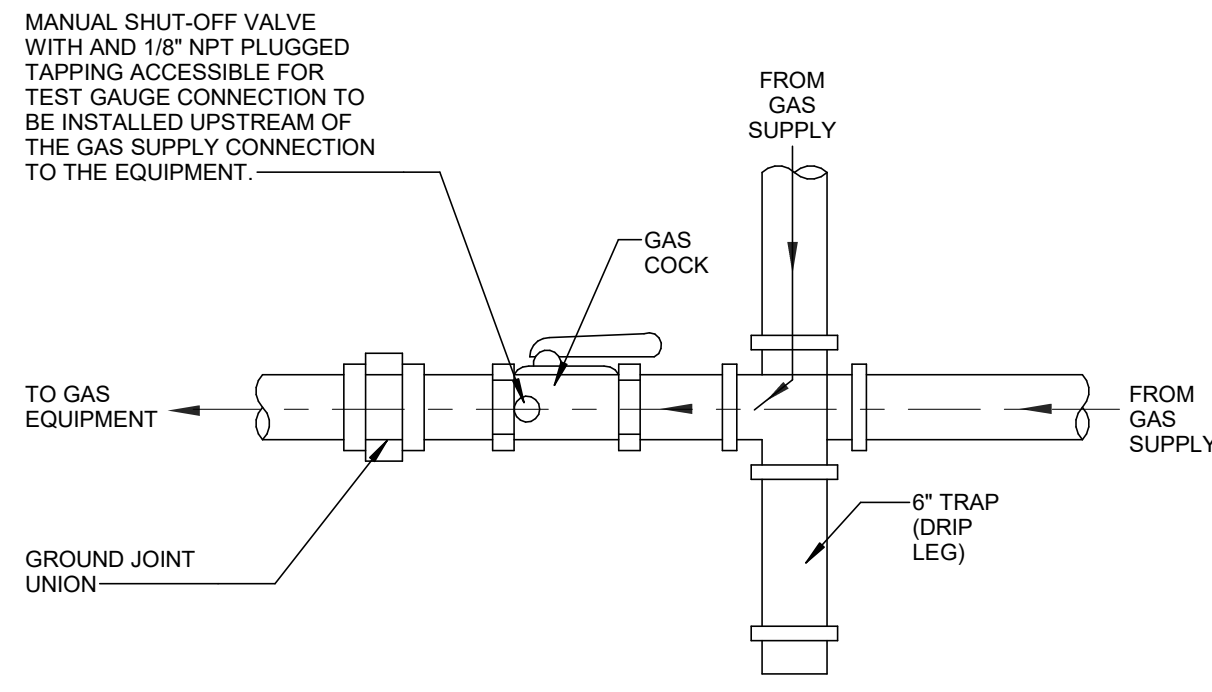
3 TRAP PRIMER DETAIL
NTS



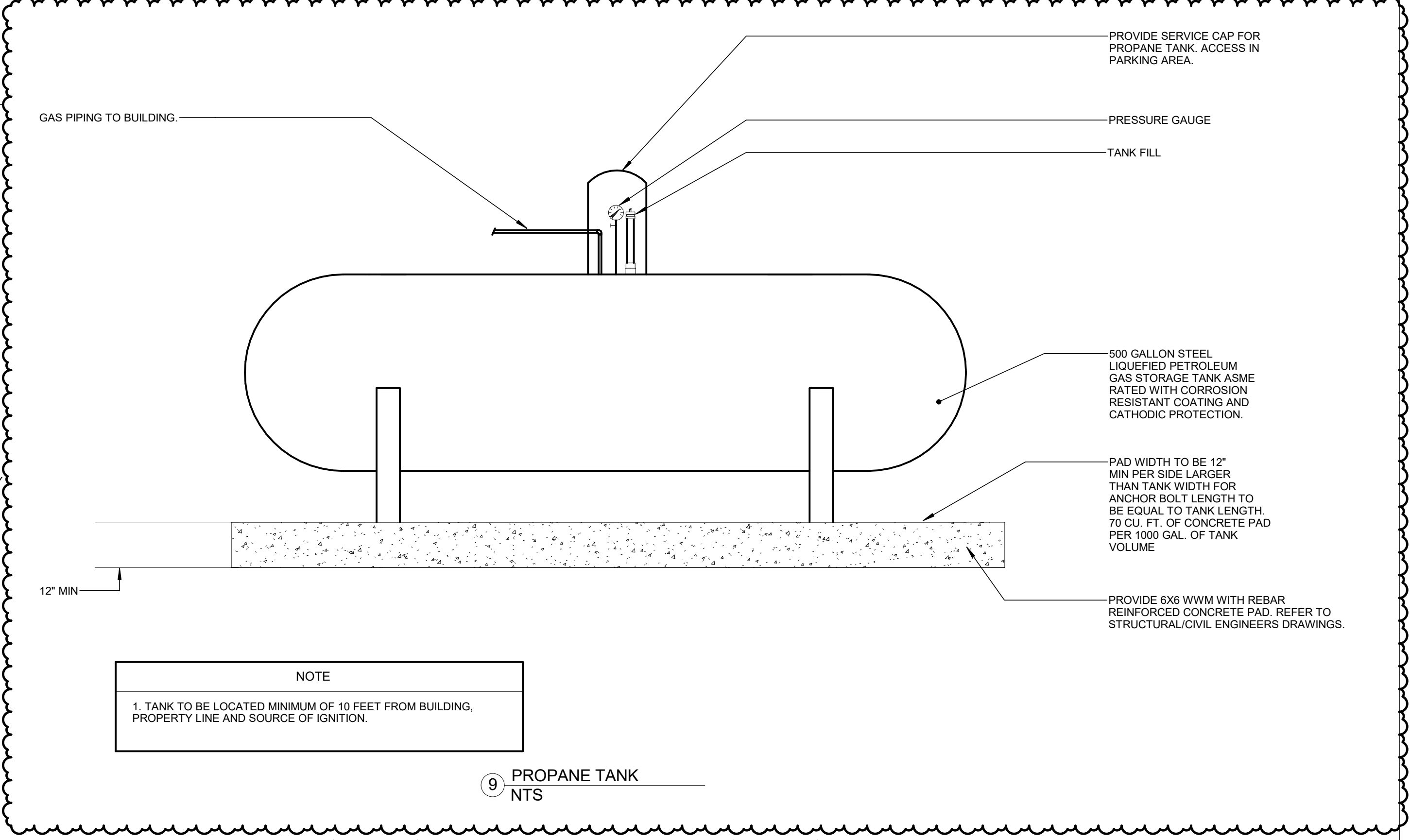
1 BARRIER FREE SAFETY STATION
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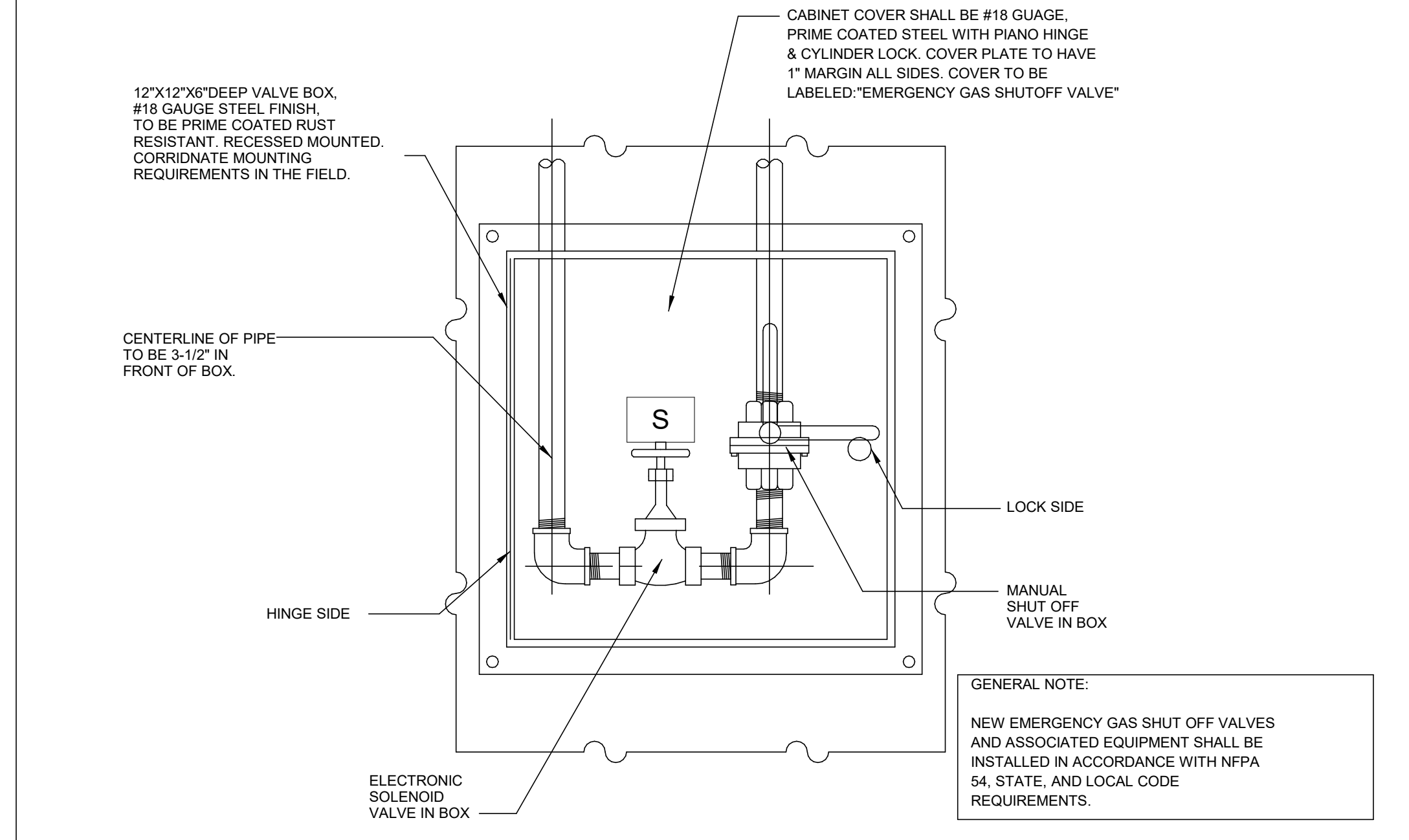
4 EYEWASH AND SHOWER DETAILS
NTS



5 TYPICAL GAS CONNECTION TO EQUIPMENT DETAIL
NTS



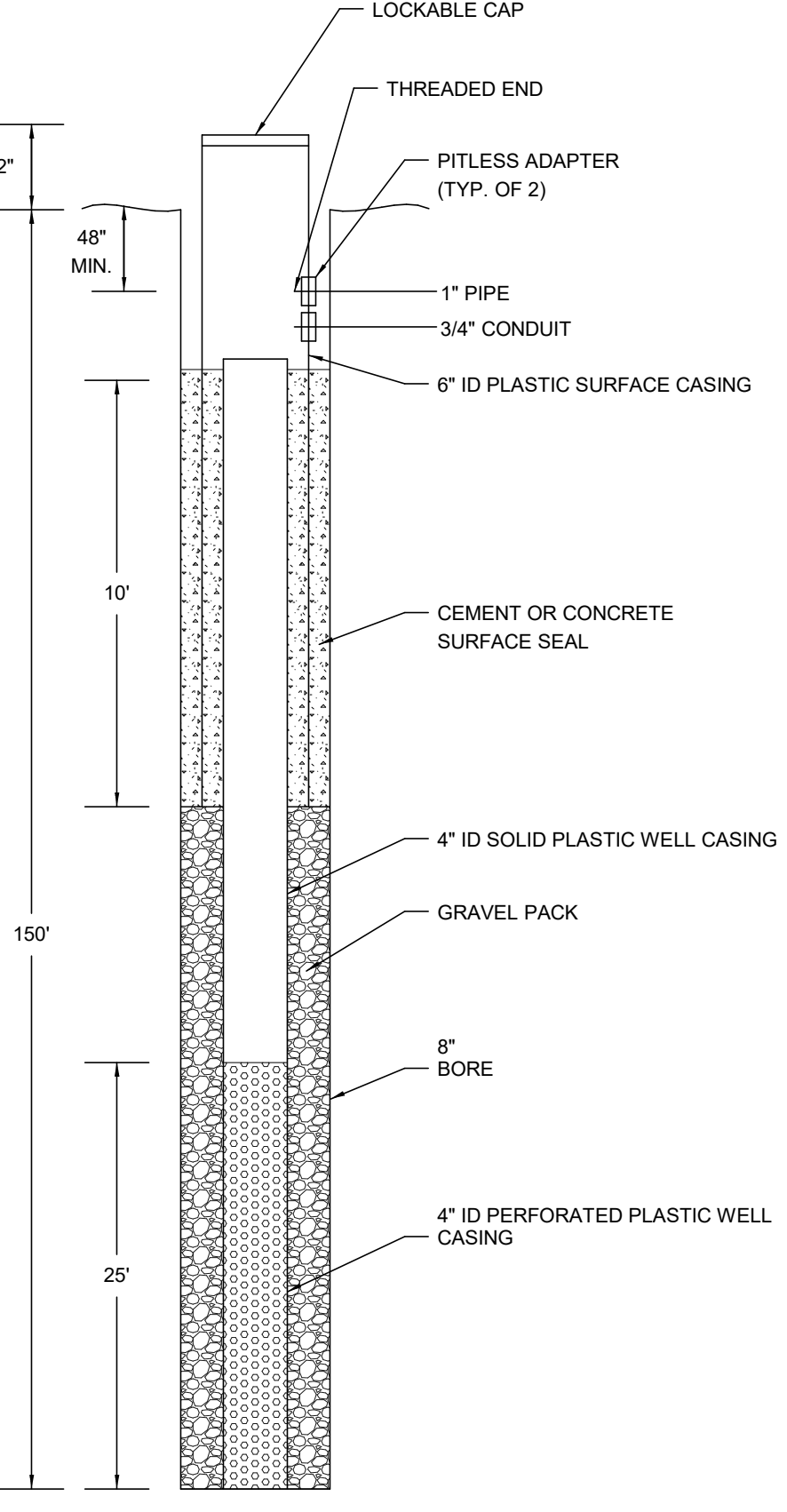
9 PROPANE TANK
NTS



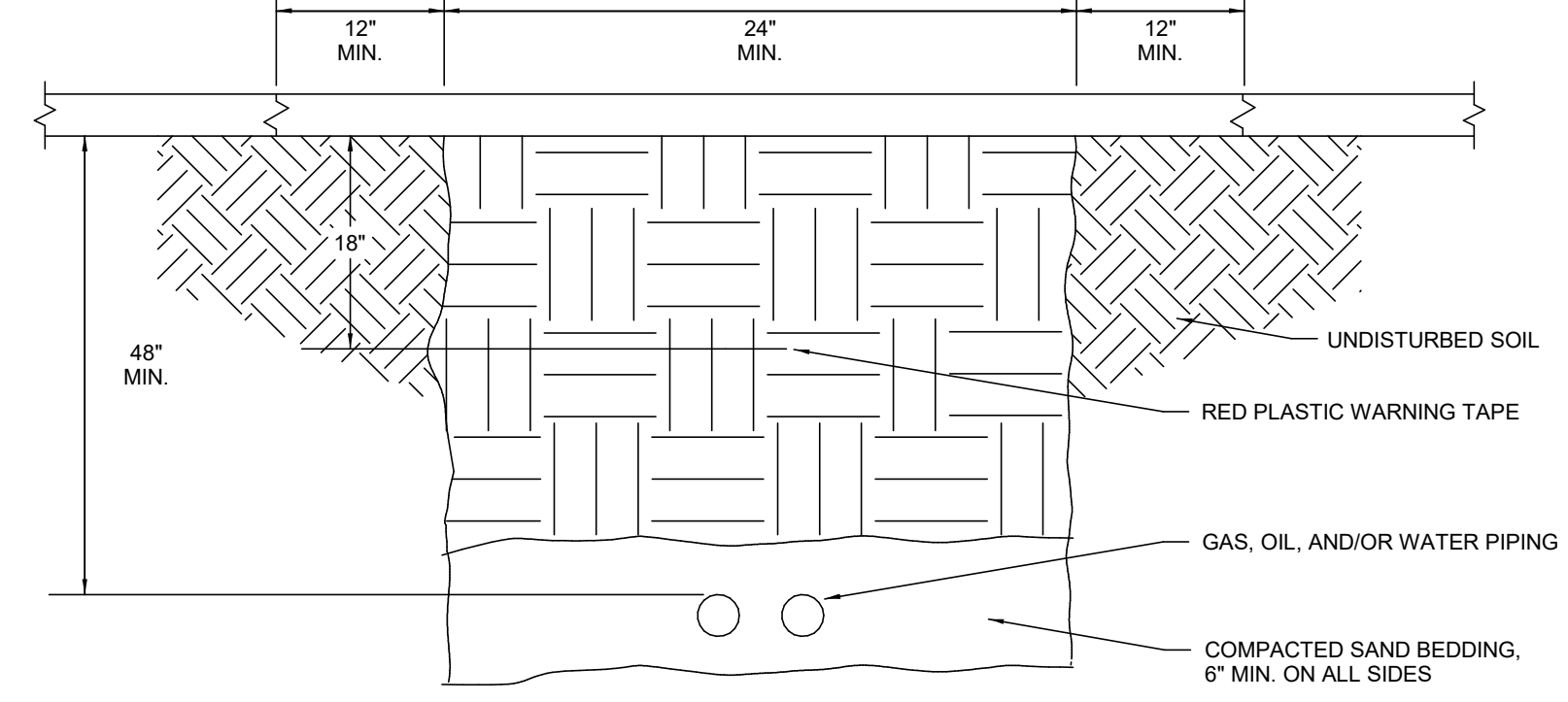
6 TYPICAL GAS SHUT OFF VALVE INSTALLATION DETAIL (RECESSED WALL MOUNTED)
NTS

GAS SOLENOID VALVE SCHEDULE						
PIPE SIZE	OFFICE SIZE	CV FLOW FACTOR	OPERATING PRESSURE DIFFERENTIAL	GAS CAPACITY 1\"/>		
				MIN. MAX.	BTU/HR.	WATT RATING/CLASS OF COIL INSULATION
NORMALLY CLOSED (CLOSED WHEN DE-ENERGIZED) ALUMINUM BODY WITH BUNA 'N' SEATING						
1/2"	3/4"	4.4	0 - 25 PSI		238,500	11.6F
3/4"	3/4"	5.1	0 - 25 PSI		247,500	11.6F
1"	1-5/8"	21	0 - 25 PSI		1,119,000	14.9F
1-1/4"	1-5/8"	32	0 - 25 PSI		1,730,000	14.9F
1-1/2"	1-5/8"	35	0 - 25 PSI		1,900,000	14.9F
2"	2-3/32"	60	0 - 25 PSI		3,251,000	14.9F

NOTE:
1. SEE KITCHEN EQUIPMENT SPECIFICATIONS & DRAWINGS FOR ADDITIONAL INFORMATION & REQUIREMENTS.
2. SOLENOID VALVES MAY BE MOUNTED IN ANY POSITION EXCEPT VALVES DENOTED BY *** WHICH MUST BE MOUNTED WITH THE SOLENOID VALVE VERTICAL AND UPRIGHT.
3. ALL SOLENOID VALVES SHALL BE U.L., F.M., AND CGA RATED AND APPROVED.



7 WATER WELL DETAIL
NTS



8 BELOW GRADE PIPING INSTALLATION DETAIL
NTS

TRENCHING NOTES
1. TRENCH EXCAVATION SHALL CONSIST OF THE REMOVAL OF ALL MATERIALS, EXCAVATION, TRENCH WALL SUPPORTS, DEWATERING, TEMPORARY STREAM OF GROUND WATER DIVERSION, SATISFACTORY DISPOSAL OF ALL SURPLUS OR UNSUITABLE MATERIAL, BACKFILL AND COMPACTION NECESSARY FOR THE CONSTRUCTION OF THE WORK AT THE LOCATIONS AND TO THE DIMENSIONS AS SHOWN ON THE CONTRACT DRAWINGS OR AS DIRECTED BY THE ENGINEER.
2. ALL DIMENSIONS ARE MINIMAL ACCESSIBLE QUANTITIES.
3. WHEN EXISTING PAVEMENT HAS BEEN REMOVED, REPLACE WITH THE SAME TYPE AND THICKNESS OF PAVEMENT AND SUB-BASE. IF EXCAVATION IS WITHIN GRASS AREA, DISTURBED AREAS SHALL BE REPAIRED WITH SEED. IF EXISTING CURB IS DAMAGED OR REMOVED, REPLACE WITH SAME TYPE OF CURB TO DIMENSIONS OF EXISTING CURB. IF CONCRETE WALKS ARE DISTURBED, REPLACE WITH CONCRETE TO MATCH EXISTING THICKNESS.

100% CONSTRUCTION DOCUMENTS

drawing title
PLUMBING DETAILS

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES

drawing date
05/24/2019

drawing scale
NTS

drawing by
MSF

approved by
JAC

drawing no.
P4-1-1

drawing title
PLUMBING DETAILS

drawing date
07/23/2019

drawing description
ADDENDUM #1

drawing date
05/24/2019

drawing scale
NTS

drawing by
MSF

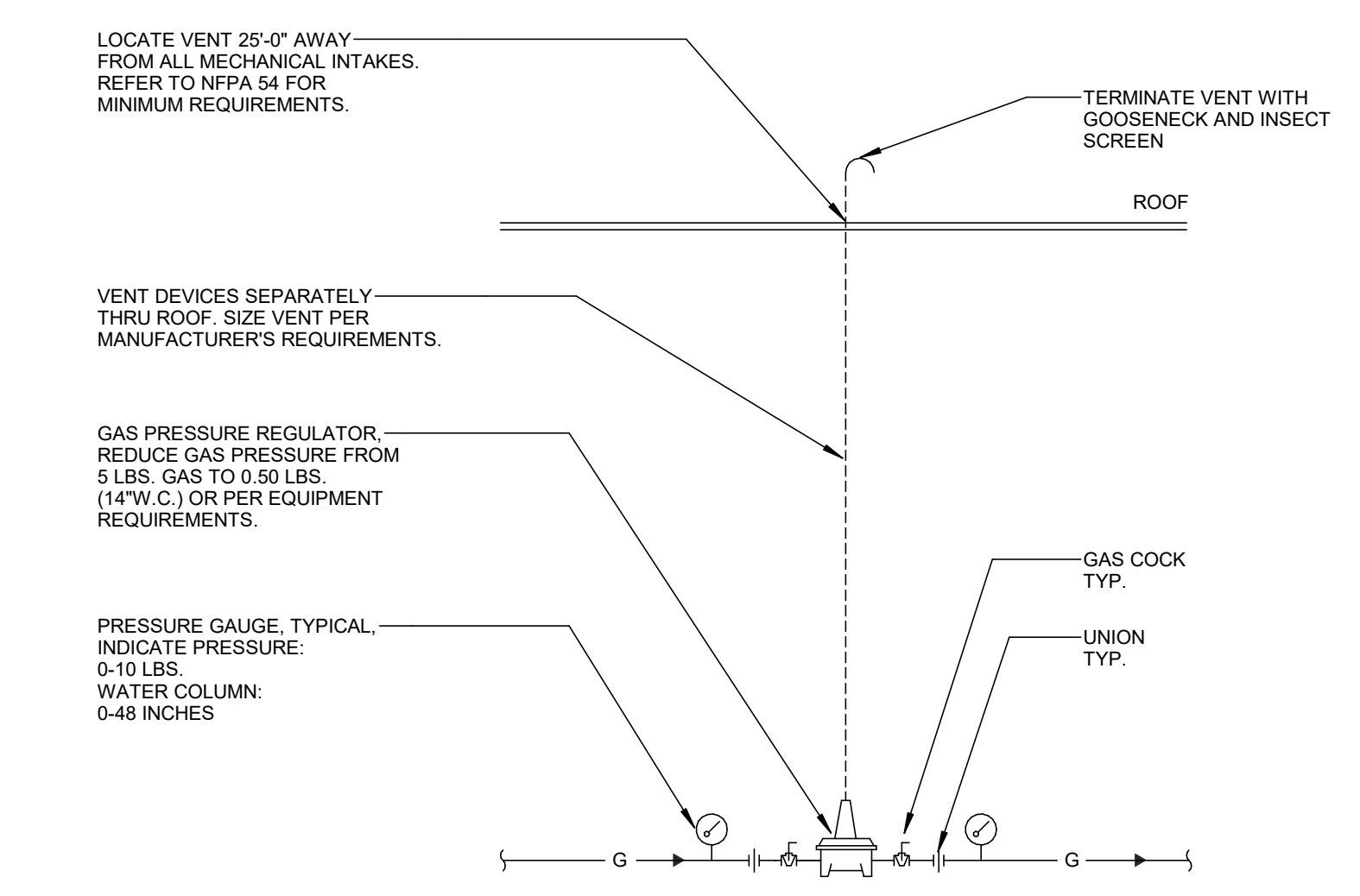
approved by
JAC

drawing no.
P4-1-1

project
**ADDITIONS AND RENOVATIONS
PLATT TECHNICAL HIGH SCHOOL**
600 Orange Avenue Middletown, CT 06461

CAD no.
DCS project no.
BLRT-076 CM-R

OSCR project no.
900-0013

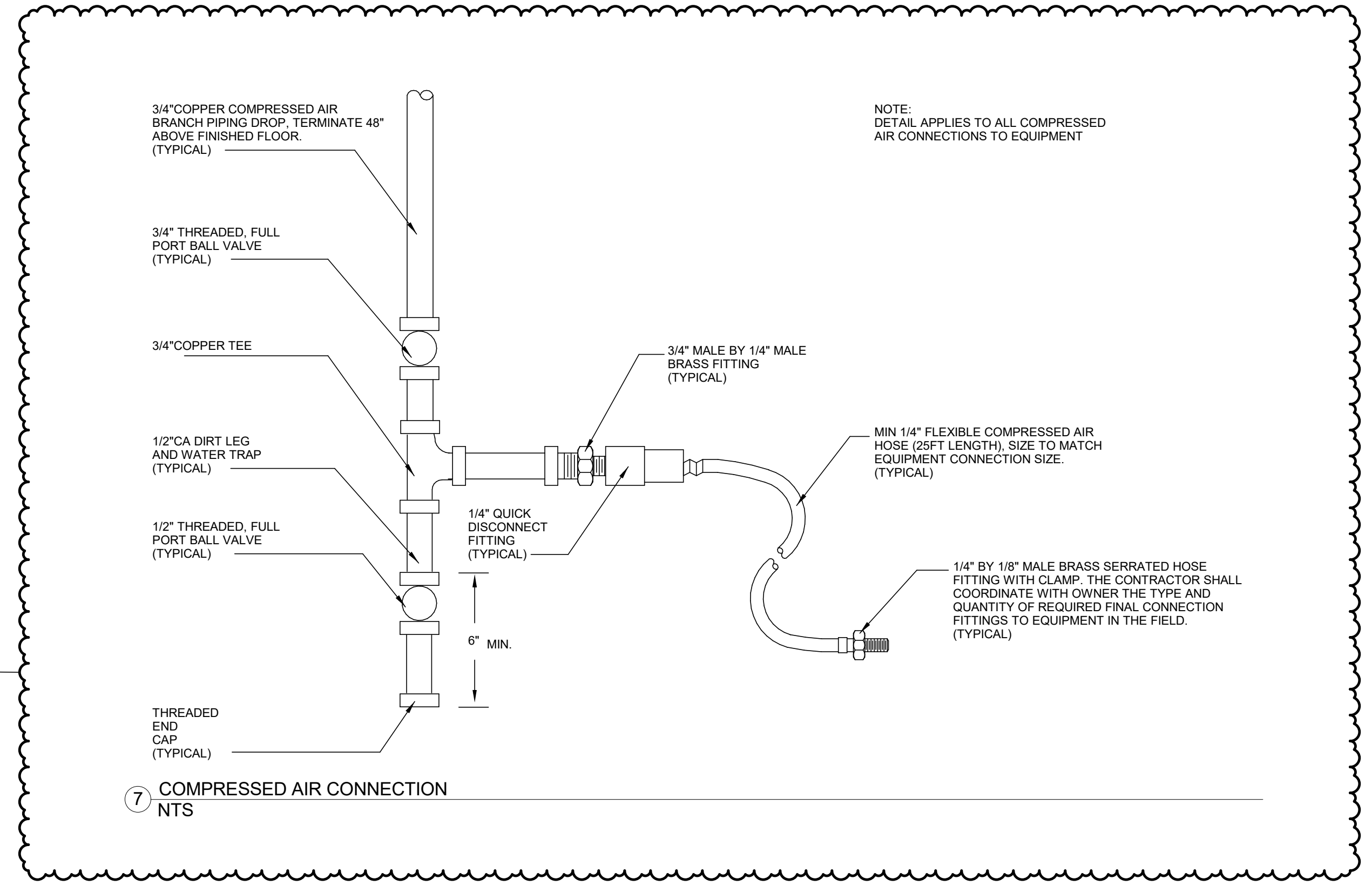
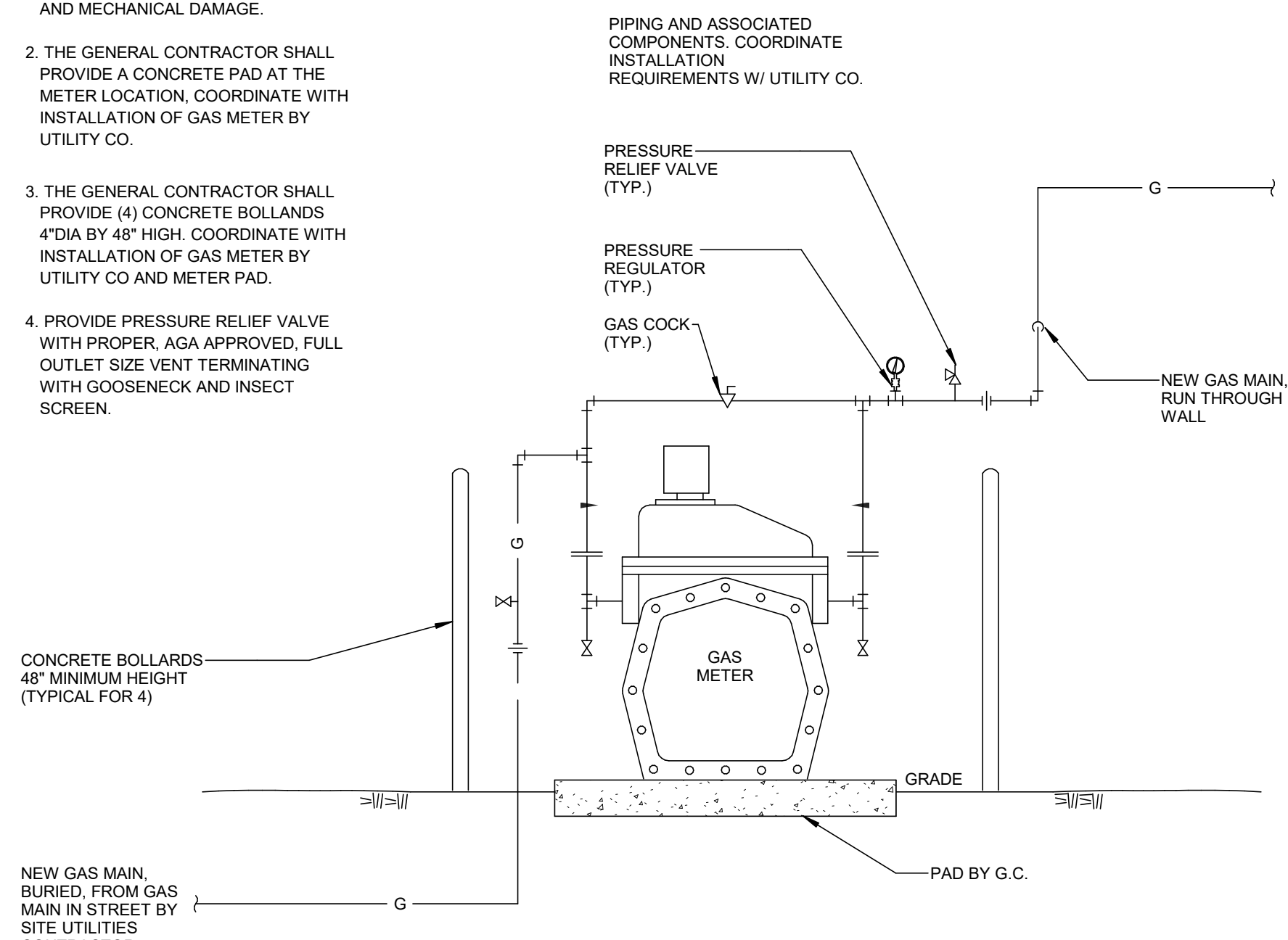


1 TYPICAL CEILING MOUNTED GAS PRESSURE REGULATOR VALVE DETAIL
NTS

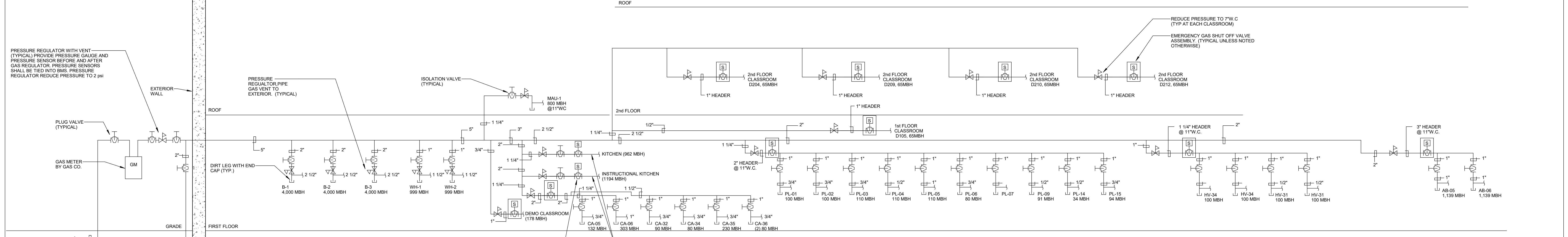
NOTES:

1. GAS METER SHALL BE PROPERLY PROTECTED AGAINST PHYSICAL AND MECHANICAL DAMAGE.
2. THE GENERAL CONTRACTOR SHALL PROVIDE A CONCRETE PAD AT THE METER LOCATION, COORDINATE WITH INSTALLATION OF GAS METER BY UTILITY CO.
3. THE GENERAL CONTRACTOR SHALL PROVIDE (4) CONCRETE BOLLARDS 4" DIA BY 48" HIGH. COORDINATE WITH INSTALLATION OF GAS METER BY UTILITY CO AND METER PAD.
4. PROVIDE PRESSURE RELIEF VALVE WITH PROPER, AGA APPROVED, FULL OUTLET SIZE VENT TERMINATING WITH GOOSENECK AND INSECT SCREEN.

3 TYPICAL GAS METER INSTALLATION DETAIL
NTS



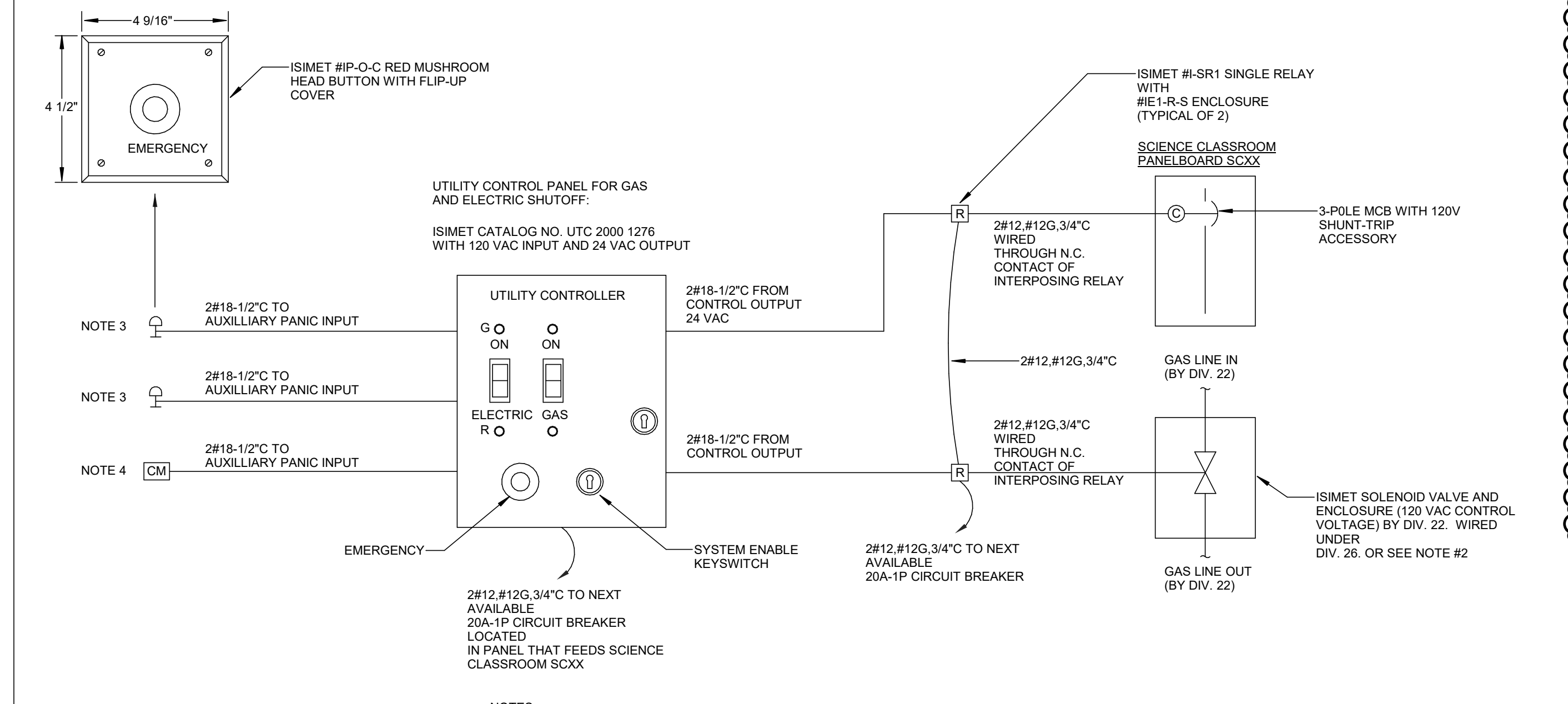
7 COMPRESSED AIR CONNECTION
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NOTE: CONFIRM WITH LOCAL UTILITY COMPANY ALL INSTALLATION REQUIREMENTS (I.E. VALVES, UNIONS, REGULATORS, ETC) PRIOR TO BID, INSTALLATION AND FABRICATION.

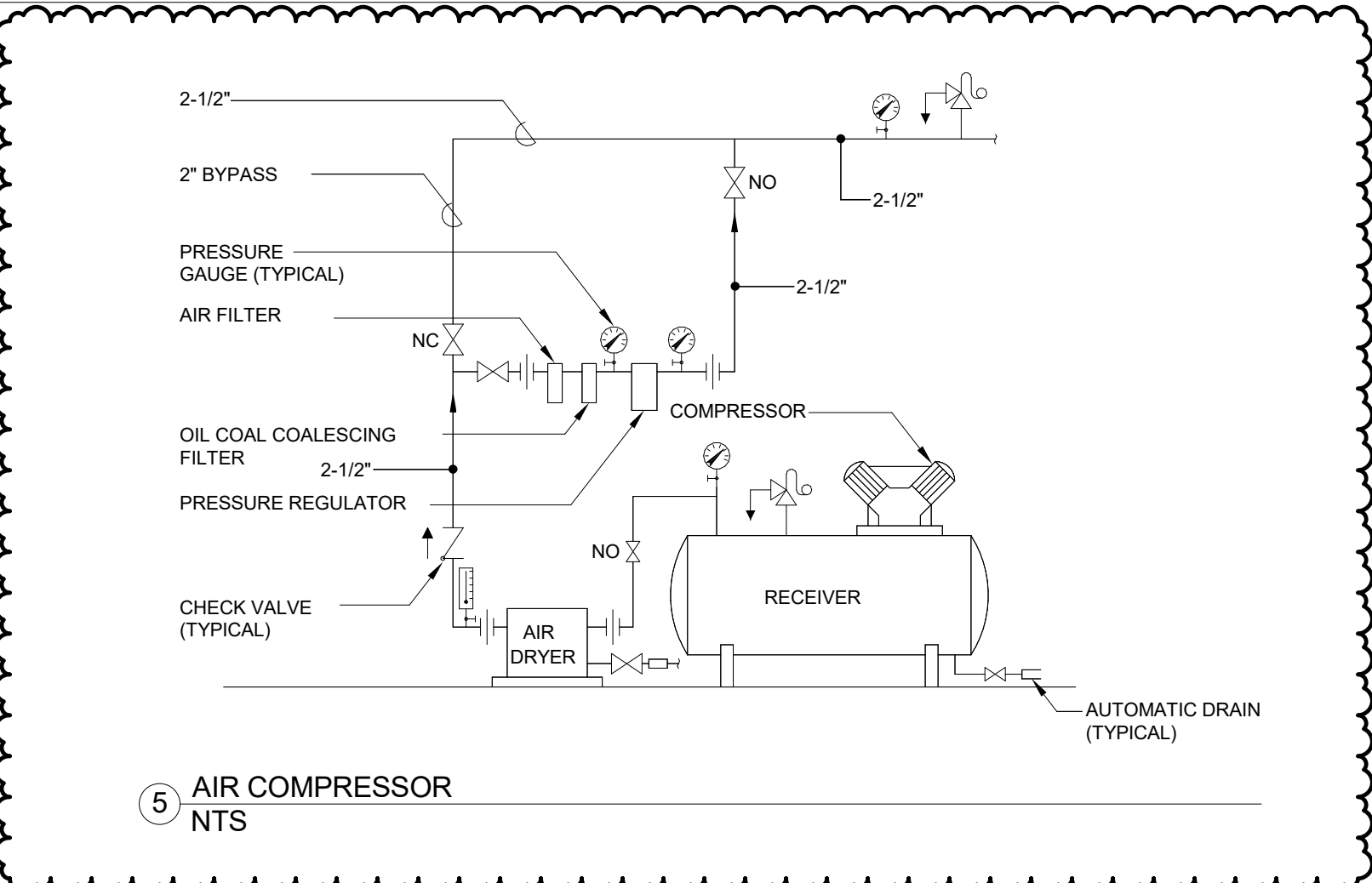
- NOTES:
1. PROVIDE PRESSURE RELIEF VALVE WITH PROPER, AGA APPROVED, FULL OUTLET.
 2. PROVIDE GAS CONNECTION TO ALL GAS FIRED EQUIPMENT PROVIDED BY KITCHEN EQUIPMENT PROVIDER. VERIFY QUANTITY AND CONNECTIONS PRIOR TO INSTALLING.
 3. KITCHEN VENTLESS PRESSURE REGULATOR SET TO 11\"/>

2 NATURAL GAS RISER
NTS

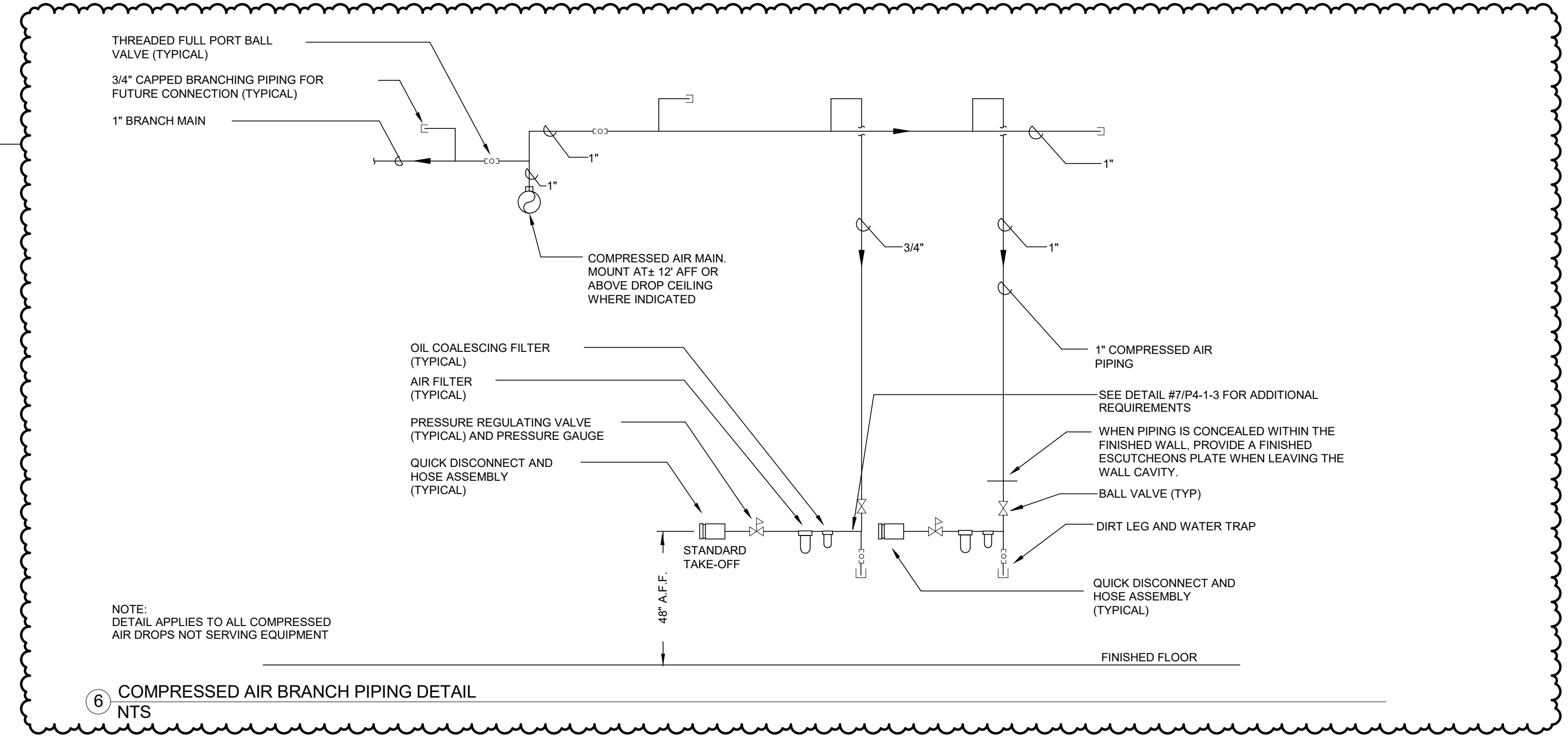


- NOTES:
1. COORDINATE LOCATIONS OF EPO MUSHROOM HEAD PUSHBUTTONS WITH OWNER IN FIELD.
 2. UNLESS NOTED OTHERWISE, ALL EQUIPMENT, WIRING, ELECTRICAL CONNECTIONS AND TESTING BY DIV. 26. COORDINATE GAS SOLENOID VALVE CABINET LOCATION AND FIELD WIRING WITH DIV. 22.
 3. REFER TO DRAWINGS FOR EMERGENCY SHUTOFF (EPO) BUTTON LOCATIONS AND QUANTITIES. MULTIPLE BUTTONS WIRED IN PARALLEL TO UTILITY CONTROLLER TERMINALS.
 4. FIRE ALARM CONTROL MODULE WIRED IN PARALLEL WITH EMERGENCY SHUTOFF (EPO) BUTTON INPUT(S).
 5. ALL KEY SWITCHES FOR ALL SCIENCE CLASSROOMS TO BE KEYPAD ALIKE.

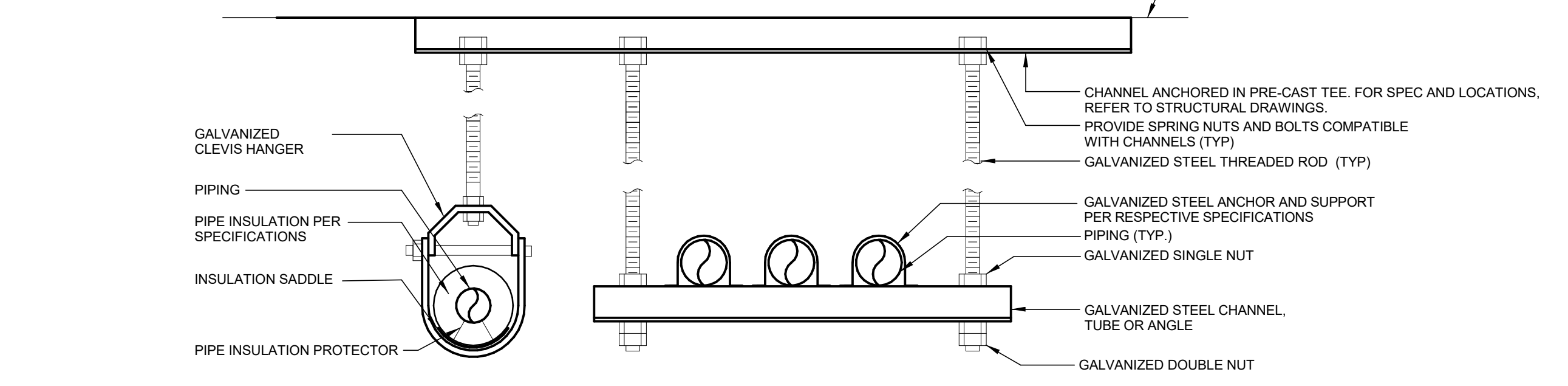
4 DETAIL - SCIENCE CLASSROOM GAS VALVE & ELECTRIC SHUNT TRIP DIAGRAM
NTS



5 AIR COMPRESSOR
NTS



6 COMPRESSED AIR BRANCH PIPING DETAIL
NTS



- NOTES:
1. REFER TO STRUCTURAL DRAWINGS FOR LOCATIONS OF CHANNELS INSTALLED IN PRE-CAST CONCRETE. AT OTHER LOCATIONS, HANGERS SHALL BE DIRECTLY ANCHORED TO PRE-CAST CONCRETE.
 2. PROVIDE ALL REQUIRED HARDWARE INCLUDING BUT NOT LIMITED TO WASHERS, BOLTS, BEAM CLAMPS, STRAPS, AND CHANNEL SPRING NUTS.
 3. SUPPORT DETAIL APPLIES TO PIPING.
 4. REFER TO DETAILS ON STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.

8 HANGER SUPPORT DETAIL AT PRE-CAST CONCRETE CONSTRUCTION
1/8" = 4'-0"

100% CONSTRUCTION DOCUMENTS			STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES	
drawing title PLUMBING DETAILS			drawing prepared by Consulting Engineering Services, Inc. 911 Middle St., Middletown, CT 06457	
date 07/23/2019			date 05/24/2019	
description ADDENDUM #1			scale 1/8" = 1'-0"	
author			approved by	
project ADDITIONS AND RENOVATIONS PLATT TECHNICAL HIGH SCHOOL 600 Orange Avenue Middletown, CT 06461			approved by	
CAD no.			drawing no. P4-1-3	
DCS project no. BR-RT-076 CM-R			OSCRG project no. 900-0013	

MECHANICAL NOTES

- SEE DRAWINGS M3-1-1, M3-1-2 & M3-1-3 FOR SYMBOL LIST AND SCHEDULES.
- SEE DRAWINGS M4-1-1, M4-1-2, M4-1-3 & M4-1-4 FOR DETAILS.
- SEE DRAWINGS M5-1-1, M5-1-2, M5-1-3 & M5-1-4 FOR CONTROLS DIAGRAMS.
- REFER TO SPECIFICATIONS FOR ADDITIONAL DETAILS ON GENERAL CONDITIONS, MATERIAL SPECIFICATIONS AND INSTALLATION.
- PROVIDE CLEARANCE ADJACENT TO EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS AND AS REQUIRED TO PROPERLY MAINTAIN EQUIPMENT. PROVIDE MINIMUM 42" CLEARANCE IN FRONT OF EQUIPMENT, PIPE DROPS, ETC. CLEARANCES SHALL BE IDENTIFIED ON COORDINATION SHOP DRAWINGS.
- PROVIDE REMOTELY CONTROLLED VOLUME DAMPERS AT ALL SHEETROCK AND METAL CEILINGS AND WHERE VOLUME DAMPERS ARE NOT ACCESSIBLE THRU ACCESSIBLE CEILINGS WITH STANDARD STEP LADDER.
- VOLUME DAMPERS SHALL BE INSTALLED MINIMUM 8'-0" FROM EACH DIFFUSER, GRILLE AND REGISTER WHERE EVER POSSIBLE. FLEXIBLE CONNECTIONS SHALL NOT EXCEED 8'-0" IN LENGTH.
- NOT ALL BRANCH PIPING TO DEVICES ARE SHOWN. PROVIDE BRANCH PIPING TO ALL DEVICES PER DETAILS AND SCHEDULES. PIPE BRANCHES SHALL BE MINIMUM 3/4" DIAMETER UNLESS NOTED OTHERWISE.
- ALL PENETRATIONS THROUGH FULL HEIGHT CORRIDOR WALLS SHALL BE SEALED. REFER TO ARCHITECTURAL DRAWINGS FOR TYPES OF WALLS AND REQUIREMENTS FOR SEALING.
- DUCTWORK AND PIPING LAYOUTS DO NOT SHOW ALL TRANSITIONS AND OFFSETS THAT WILL BE REQUIRED. PROVIDE COORDINATION DRAWINGS AND OFFSET DUCTWORK AND PIPING AS REQUIRED.

MECHANICAL DUCTWORK KEY NOTES

- (M1) OFFSET DUCT IN CEILING SPACE TO INSTALL DUCT IN CENTER OF THE HOLLOW CORE OF THE MEZZANINE FLOOR PLANK.
- (M2) TERMINATE DUCT WITH FLANGED CONNECTION AND 1/2"x1/2" GALVANIZED STEEL MESH.
- (M3) INSTALL THIS SECTION OF DUCT IN SPACE BETWEEN PRE-CAST TEES.
- (M4) PROVIDE 60"x42" PLENUM AT CONNECTION TO ROOF HOOD. PLENUM SHALL TERMINATE 12" BELOW ROOF DECK.

CONSTRUCTION GENERAL NOTES

GENERAL NOTES: ALL ELECTRICAL, AUDIO VISUAL, TECHNOLOGY AND SECURITY SYSTEMS AND COMPONENTS INCLUDING BUT NOT LIMITED TO CONDUITS, BACK BOXES, DEVICES, ETC., INSTALLED AT THE ARCHITECTURAL PRECAST CONCRETE PANELS SHALL BE CAST INTO THE PRE-CAST CONCRETE PANELS IN THE FACTORY TO AVOID EXPOSED TO VIEW EXTERIOR OR INTERIOR CONDITIONS. CONTRACTORS SHALL MAINTAIN ALL REQUIRED ELECTRICAL PASSWAYS AND COMPONENTS WITH THE PRECAST SUB-CONTRACTOR AS PART OF THE MEP&FP COORDINATION PROCESS, AND PRE-CAST SHOP DRAWINGS COORDINATION PROCESS.

ALL MECHANICAL, ELECTRICAL AND FIRE PROTECTION (MEP&FP) SYSTEMS AND COMPONENTS THAT REQUIRE ATTACHMENT TO THE ARCHITECTURAL PRE-CAST CONCRETE PANELS SHALL BE COORDINATED WITH THE PRE-CAST CONCRETE SUB-CONTRACTOR DURING COORDINATION AND SHOP DRAWING PROCESS. NO ATTACHMENT OF THE MEP&FP COMPONENTS TO THE PRE-CAST CONCRETE PANELS SHALL BE ALLOWED IN THE FIELD WITHOUT PRIOR APPROVAL BY THE PRE-CAST CONCRETE SUB-CONTRACTOR. NO CUTTING AND/OR PATCHING OF THE PRE-CAST CONCRETE PANELS IS ALLOWED IN THE FIELD. ALL PENETRATIONS THROUGH PRECAST COMPONENTS INCLUDING WALLS, DOUBLE TEES AND HOLLOW CORE PLANK FLOORS AND ROOFS SHALL BE COORDINATED BY THE SUB-CONTRACTORS AND THE CM-R PRIOR TO MANUFACTURING OF THE PRECAST CONCRETE COMPONENTS.

FIRST FLOOR - AREA A: ALL MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION (MEP&FP) SYSTEMS COMPONENTS THAT REQUIRE PENETRATIONS THROUGH PRE-CAST CONCRETE PLANK AT MEZZANINE FLOOR STRUCTURE SHALL BE COORDINATED WITH THE PRE-CAST PLANK CORE LOCATIONS. PENETRATIONS THROUGH THE PRE-CAST HOLLOW CORE PLANK ARE ONLY ALLOWED THROUGH THE CORES. CM-R MUST COORDINATE ALL OPENINGS IN THE PRE-CAST CONCRETE PLANK AS PART OF THE MEP&FP COORDINATION PROCESS.

MECHANICAL, ELECTRICAL AND FIRE PROTECTION (MEP&FP) CONTRACTORS REFER TO THE ARCHITECTURAL REFLECTED CEILING PLANS, SECTIONS AND DETAILS DRAWINGS FOR LOCATIONS OF THE SOUND BARRIER CEILING SYSTEM. THIS IS A SPECIALTY SOUND ISOLATION SUSPENDED CEILING SYSTEM. MEP&FP SYSTEMS COMPONENTS ARE NOT ALLOWED TO BE ATTACHED/SUSPENDED, OR INSTALLED ABOVE THIS CEILING SYSTEM UNLESS SPECIFICALLY NOTED OTHERWISE. EACH SUB-CONTRACTOR SHALL PROVIDE UNITS/ SUPPORTS ATTACHED TO BOTTOM CORER OF STRUCTURAL STEEL BEAMS OR INSERTS PROVIDED AS PART OF THE PRECAST DOUBLE TEES AS REQUIRED TO SUPPORT MEP&FP SYSTEMS COMPONENTS. SPECIALTY ACOUSTICALLY RATED ACCESS PANELS MAY BE ALLOWED TO ACCESS MEP&FP SYSTEMS COMPONENTS LOCATED ABOVE THE SOUND BARRIER SYSTEM ON THE LIMITED BASES AT LOCATIONS SPECIFICALLY INDICATED ON THE MEP&FP DRAWINGS.

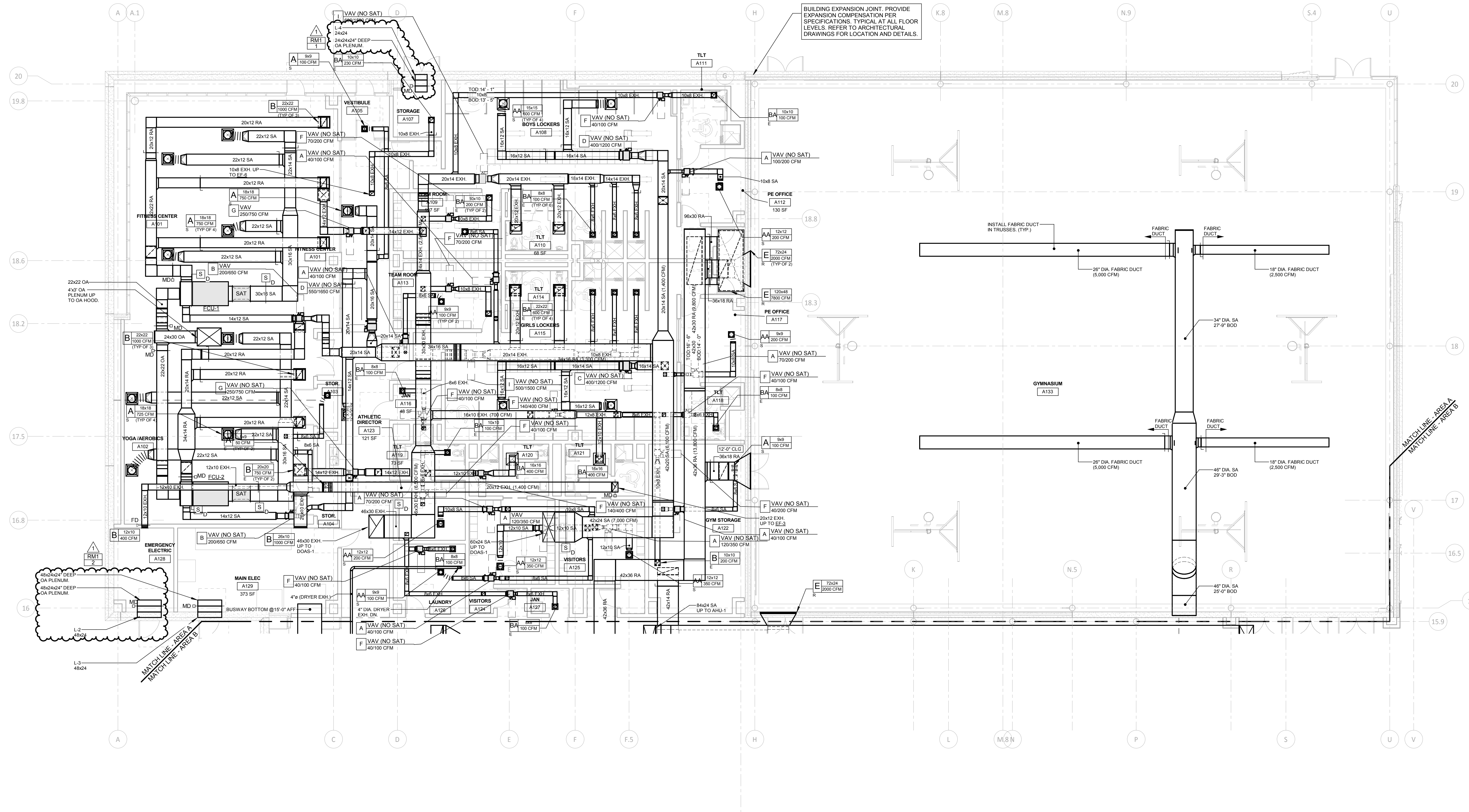
FIRST FLOOR - AREA A: ALL MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION (MEP&FP) SYSTEMS COMPONENTS THAT REQUIRE PENETRATIONS THROUGH PRE-CAST CONCRETE PLANK AT MEZZANINE FLOOR STRUCTURE SHALL BE COORDINATED WITH THE PRE-CAST PLANK CORE LOCATIONS. PENETRATIONS THROUGH THE PRE-CAST HOLLOW CORE PLANK ARE ONLY ALLOWED THROUGH THE CORES. CM-R MUST COORDINATE ALL OPENINGS IN THE PRE-CAST CONCRETE PLANK AS PART OF THE MEP&FP COORDINATION PROCESS.

MECHANICAL, ELECTRICAL AND FIRE PROTECTION (MEP&FP) CONTRACTORS REFER TO THE ARCHITECTURAL REFLECTED CEILING PLANS, SECTIONS AND DETAILS DRAWINGS FOR LOCATIONS OF THE SOUND BARRIER CEILING SYSTEM. THIS IS A SPECIALTY SOUND ISOLATION SUSPENDED CEILING SYSTEM. MEP&FP SYSTEMS COMPONENTS ARE NOT ALLOWED TO BE ATTACHED/SUSPENDED, OR INSTALLED ABOVE THIS CEILING SYSTEM UNLESS SPECIFICALLY NOTED OTHERWISE. EACH SUB-CONTRACTOR SHALL PROVIDE UNITS/ SUPPORTS ATTACHED TO BOTTOM CORER OF STRUCTURAL STEEL BEAMS OR INSERTS PROVIDED AS PART OF THE PRECAST DOUBLE TEES AS REQUIRED TO SUPPORT MEP&FP SYSTEMS COMPONENTS. SPECIALTY ACOUSTICALLY RATED ACCESS PANELS MAY BE ALLOWED TO ACCESS MEP&FP SYSTEMS COMPONENTS LOCATED ABOVE THE SOUND BARRIER SYSTEM ON THE LIMITED BASES AT LOCATIONS SPECIFICALLY INDICATED ON THE MEP&FP DRAWINGS.

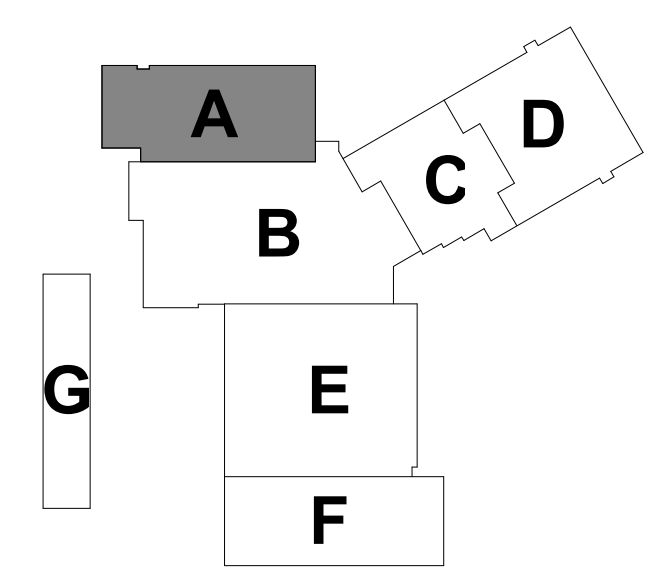
FIRST FLOOR - AREA F: ALL MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION (MEP&FP) SYSTEMS COMPONENTS THAT REQUIRE PENETRATIONS THROUGH PRE-CAST CONCRETE PLANK AT MEZZANINE FLOOR STRUCTURE SHALL BE COORDINATED WITH THE PRE-CAST PLANK CORE LOCATIONS. PENETRATIONS THROUGH THE PRE-CAST HOLLOW CORE PLANK ARE ONLY ALLOWED THROUGH THE CORES. CM-R MUST COORDINATE ALL OPENINGS IN THE PRE-CAST CONCRETE PLANK AS PART OF THE MEP&FP COORDINATION PROCESS.

MECHANICAL, ELECTRICAL AND FIRE PROTECTION (MEP&FP) CONTRACTORS SHALL FOLLOW SPECIFIC DETAILS INDICATED ON THE DRAWINGS FOR ATTACHMENT TO THE DOUBLE TEES AND HOLLOW CORE PRECAST PLANK AT FLOORS AND ROOFS.

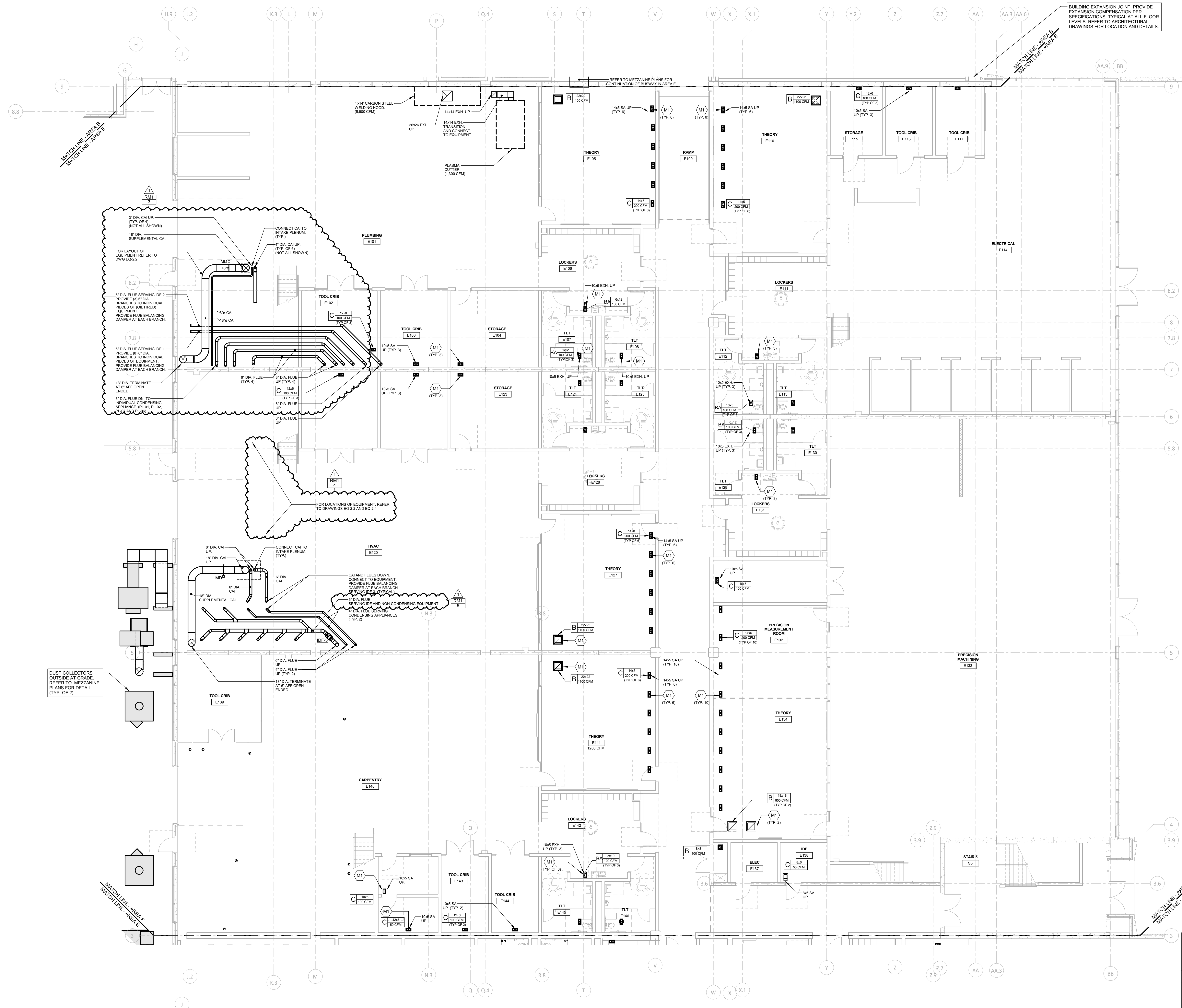
SECOND FLOOR AREA E: MECHANICAL, ELECTRICAL AND FIRE PROTECTION (MEP&FP) CONTRACTORS SHALL FOLLOW SPECIFIC DETAILS INDICATED ON THE DRAWINGS FOR ATTACHMENT TO THE DOUBLE TEES AND HOLLOW CORE PRECAST PLANK AT FLOORS AND ROOFS.



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



100% CONSTRUCTION DOCUMENTS			
drawing title		STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES	
FIRST FLOOR MECHANICAL PLAN AREA A		drawing prepared by Consulting Engineering Services, Inc. 811 Middle St., Middletown, CT 06457	
date		date	
07/23/2019		05/24/2019	
description		description	
ADDENDUM #1		As Indicated	
project		approved by	
ADDITIONS AND RENOVATIONS PLATT TECHNICAL HIGH SCHOOL 600 Orange Avenue Middletown, CT 06461		drawing no.	
CAD no.		drawing no.	
DCS project no. BL-RT-476 CM-R		OSCRG project no. 990-0013	
		M1-1-1A	



- ### MECHANICAL NOTES
- SEE DRAWINGS M3-1-1, M3-1-2 & M3-1-3 FOR SYMBOL LIST AND SCHEDULES.
 - SEE DRAWINGS M4-1-1, M4-1-2, M4-1-3 & M4-1-4 FOR DETAILS.
 - SEE DRAWINGS M5-1-1, M5-1-2, M5-1-3 & M5-1-4 FOR CONTROLS DIAGRAMS.
 - REFER TO SPECIFICATIONS FOR ADDITIONAL DETAILS ON GENERAL CONDITIONS, MATERIAL SPECIFICATIONS AND INSTALLATION.
 - PROVIDE CLEARANCE ADJACENT TO EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS AND AS REQUIRED TO PROPERLY MAINTAIN EQUIPMENT. PROVIDE MINIMUM 42" CLEARANCE IN FRONT OF EQUIPMENT, PIPE DROPS, ETC. CLEARANCES SHALL BE IDENTIFIED ON COORDINATION SHOP DRAWINGS.
 - PROVIDE REMOTELY CONTROLLED VOLUME DAMPERS AT ALL SHEETROCK AND METAL CEILINGS AND WHERE VOLUME DAMPERS ARE NOT ACCESSIBLE THRU ACCESSIBLE CEILINGS WITH STANDARD STEP LADDER.
 - VOLUME DAMPERS SHALL BE INSTALLED MINIMUM 8'-0" FROM EACH DIFFUSER, GRILLE AND REGISTER WHERE EVER POSSIBLE. FLEXIBLE CONNECTIONS SHALL NOT EXCEED 8'-0" IN LENGTH.
 - NOT ALL BRANCH PIPING TO DEVICES ARE SHOWN. PROVIDE BRANCH PIPING TO ALL DEVICES PER DETAILS AND SCHEDULES. PIPE BRANCHES SHALL BE MINIMUM 3/4" DIAMETER UNLESS NOTED OTHERWISE.
 - ALL PENETRATIONS THROUGH FULL HEIGHT CORRIDOR WALLS SHALL BE SEALED. REFER TO ARCHITECTURAL DRAWINGS FOR TYPES OF WALLS AND REQUIREMENTS FOR SEALING.
 - DUCTWORK AND PIPING LAYOUTS DO NOT SHOW ALL TRANSITIONS AND OFFSETS THAT WILL BE REQUIRED. PROVIDE COORDINATION DRAWINGS AND OFFSET DUCTWORK AND PIPING AS REQUIRED.

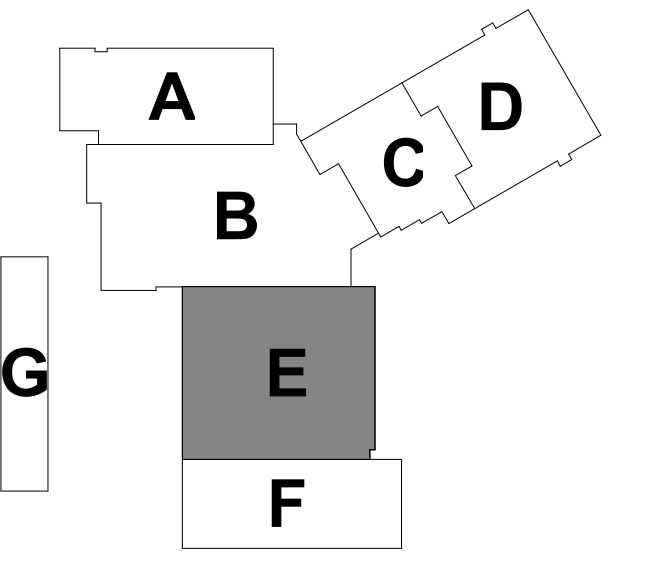
- ### MECHANICAL DUCTWORK KEY NOTES
- (M1) OFFSET DUCT IN CEILING SPACE TO INSTALL DUCT IN CENTER OF THE HOLLOW CORE OF THE MEZZANINE FLOOR PLANK.
 - (M2) TERMINATE DUCT WITH FLANGED CONNECTION AND 1/2"x1/2" GALVANIZED STEEL MESH.
 - (M3) INSTALL THIS SECTION OF DUCT IN SPACE BETWEEN PRE-CAST TEES.
 - (M4) PROVIDE 60"x42" PLENUM AT CONNECTION TO ROOF HOOD. PLENUM SHALL TERMINATE 12" BELOW ROOF DECK.

BUILDING EXPANSION JOINT. PROVIDE EXPANSION COMPENSATION PER SPECIFICATIONS. TYPICAL AT ALL FLOOR LEVELS. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION AND DETAILS.

MATCHLINE AREA A
MATCHLINE AREA E

MATCHLINE AREA B
MATCHLINE AREA E

MATCHLINE AREA E
MATCHLINE AREA F



1 FIRST FLOOR MECHANICAL PLAN - AREA E
1/8" = 1'-0"

drawing title			100% CONSTRUCTION DOCUMENTS	
FIRST FLOOR MECHANICAL PLAN AREA E			STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES	
drawing prepared by			date	
Consulting Engineering Services, Inc.			05/24/2019	
811 Middle St., Middletown, CT 06457			scale	
			As Indicated	
project			drawn by	
ADDITIONS AND RENOVATIONS PLATT TECHNICAL HIGH SCHOOL			msw	
600 Orange Avenue Middletown, CT 06451			approved by	
CAD no.			drawing no.	
DCS project no.			M1-1-1E	
BSRT-076 CM-R			OSCRG project no.	
			900-0013	

MECHANICAL NOTES

- SEE DRAWINGS M3-1.1, M3-1.2 & M3-1.3 FOR SYMBOL LIST AND SCHEDULES.
- SEE DRAWINGS M4-1.1, M4-1.2, M4-1.3 & M4-1.4 FOR DETAILS.
- SEE DRAWINGS M5-1.1, M5-1.2, M5-1.3 & M5-1.4 FOR CONTROLS DIAGRAMS.
- REFER TO SPECIFICATIONS FOR ADDITIONAL DETAILS ON GENERAL CONDITIONS, MATERIAL SPECIFICATIONS AND INSTALLATION.
- PROVIDE CLEARANCE ADJACENT TO EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS AND AS REQUIRED TO PROPERLY MAINTAIN EQUIPMENT. PROVIDE MINIMUM 42" CLEARANCE IN FRONT OF EQUIPMENT, PIPE DROPS, ETC. CLEARANCES SHALL BE IDENTIFIED ON COORDINATION SHOP DRAWINGS.
- PROVIDE REMOTELY CONTROLLED VOLUME DAMPERS AT ALL SHEETROCK AND METAL CEILINGS AND WHERE VOLUME DAMPERS ARE NOT ACCESSIBLE THRU ACCESSIBLE CEILINGS WITH STANDARD STEP LADDER.
- VOLUME DAMPERS SHALL BE INSTALLED MINIMUM 8" FROM EACH DIFFUSER, GRILLE AND REGISTER WHERE EVER POSSIBLE. FLEXIBLE CONNECTIONS SHALL NOT EXCEED 8'-0" IN LENGTH.
- NOT ALL BRANCH PIPING TO DEVICES ARE SHOWN. PROVIDE BRANCH PIPING TO ALL DEVICES PER DETAILS AND SCHEDULES. PIPE BRANCHES SHALL BE MINIMUM 3/4" DIAMETER UNLESS NOTED OTHERWISE.
- ALL PENETRATIONS THROUGH FULL HEIGHT CORRIDOR WALLS SHALL BE SEALED. REFER TO ARCHITECTURAL DRAWINGS FOR TYPES OF WALLS AND REQUIREMENTS FOR SEALING.
- DUCTWORK AND PIPING LAYOUTS DO NOT SHOW ALL TRANSITIONS AND OFFSETS THAT WILL BE REQUIRED. PROVIDE COORDINATION DRAWINGS AND OFFSET DUCTWORK AND PIPING AS REQUIRED.

MECHANICAL DUCTWORK KEY NOTES

- (M1) OFFSET DUCT IN CEILING SPACE TO INSTALL DUCT IN CENTER OF THE HOLLOW CORE OF THE MEZZANINE FLOOR PLANK.
- (M2) TERMINATE DUCT WITH FLANGED CONNECTION AND 1/2"x1/2" GALVANIZED STEEL MESH.
- (M3) INSTALL THIS SECTION OF DUCT IN SPACE BETWEEN PRE-CAST TEES.
- (M4) PROVIDE 60"x42" PLENUM AT CONNECTION TO ROOF HOOD. PLENUM SHALL TERMINATE WITH 1/2" DIA. GALVANIZED STEEL MESH.

DUST COLLECTOR DC-1 SCHEDULE

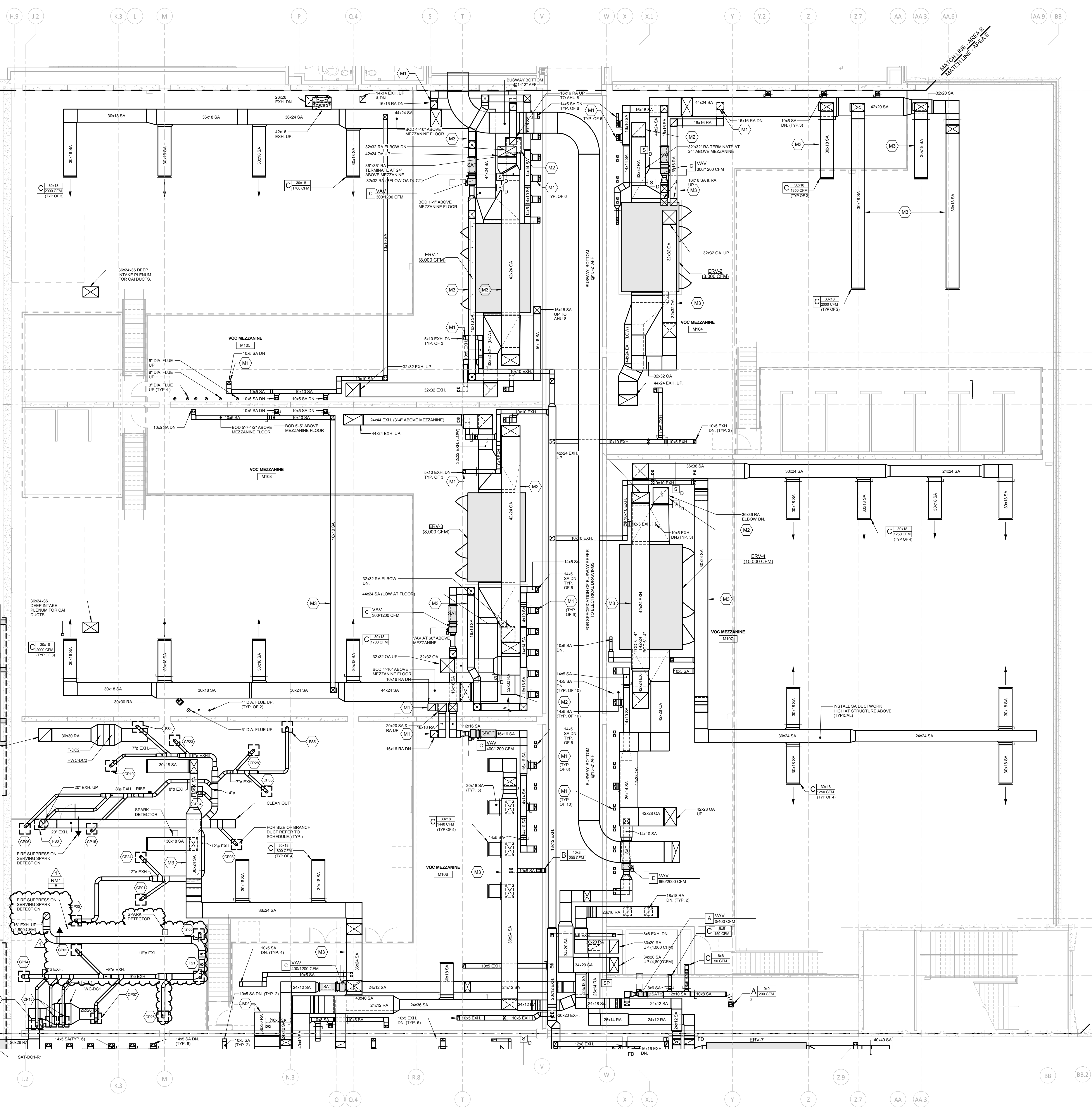
CP#	EQUIPMENT	CFM	BRANCH DUCT SIZE (DIA.)
CP2	JOINTER	800	6"
CP7	BAND SAW	350	4"
CP13	BAND SAW	350	4"
CP14	RADIAL SAW	350	4"
CP22	JOINTER	800	6"
CP28	CNC ROUTER	1,500	8"
FS1	FLOOR SWEEP	-	6"
FS2	FLOOR SWEEP	-	6"

- NOTES:
- PROVIDE BLAST GATE FOR BALANCING AT EACH BRANCH DUCT AT 10'-0" AFF.
 - TRANSITION AT CONNECTION TO EACH PIECE OF EQUIPMENT
 - FOR FLOOR SWEEPS, PROVIDE BLAST GATE AT 60" AFF. PROVIDE SIGN NEXT TO EACH ON WALL. *KEEP BLAST GATE CLOSES WHEN NOT IN USE.*

DUST COLLECTOR DC-2 SCHEDULE

CP#	EQUIPMENT	CFM	BRANCH DUCT SIZE (DIA.)
CP1	PLANNER	1,500	8"
CP3	RIP SAW	350	4"
CP4	TABLE SAW	650	6"
CP5	TABLE SAW	650	6"
CP6	BAND SAW	350	4"
CP15	COPY LATHE	750	6"
CP19	PANEL SAW	700	6"
CP20	JOINTER	800	6"
CP23	DOOR MACHINE	800	6"
CP24	BELT SANDER	800	6"
CP28	EDGE BANDER	300	4"
FS3	FLOOR SWEEP	-	6"
FS4	FLOOR SWEEP	-	6"
FS5	FLOOR SWEEP	-	6"

- NOTES:
- PROVIDE BLAST GATE FOR BALANCING AT EACH BRANCH DUCT AT 10'-0" AFF.
 - TRANSITION AT CONNECTION TO EACH PIECE OF EQUIPMENT
 - FOR FLOOR SWEEPS, PROVIDE BLAST GATE AT 60" AFF. PROVIDE SIGN NEXT TO EACH ON WALL. *KEEP BLAST GATE CLOSES WHEN NOT IN USE.*



GALVANIZED STEEL FRAME AT GRADE FOR SUPPORTING DUCTWORK (TYP.)

ABOVE GATE BOTTOM AT NORMAL 10'-0" ABOVE GRADE (TYP. OF 2)

AFTER FILTER (TYP. OF 2)

DC-2 DUST COLLECTION SYSTEM 4,800 CFM

FAN (TYP. OF 2)

30x30 EXH. BETWEEN FAN AND AFTER FILTER

RA DUCT UP ABOVE FOR CONTINUATION SEE ROOF PLAN (TYP. 2)

20" DIA. EXH.

CYCLONE SEPARATOR (TYP. OF 2)

EXH. DUCT UP ABOVE ROOF FOR CONTINUATION SEE ROOF PLAN (TYP. 2)

20" DIA. EXH.

DC-1 DUST COLLECTION SYSTEM 4,800 CFM

30x30 EXH. BETWEEN FAN AND AFTER FILTER

1 MEZZANINE MECHANICAL PLAN - AREA E
1/8" = 1'-0"

100% CONSTRUCTION DOCUMENTS

drawing title
MEZZANINE MECHANICAL PLAN AREA E

drawing date
07/23/2019

drawing no.
ADDENDUM #1

drawing scale
As Indicated

drawing by
SKK

approved by
SKW

drawing no.
M1-1-ME

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES

drawing prepared by
Consulting Engineering Services, Inc.
911 Main St., Wallingford, CT 06497

date
05/24/2019

scale
As Indicated

drawing by
SKK

approved by
SKW

drawing no.
M1-1-ME

project
**ADDITIONS AND RENOVATIONS
PLATT TECHNICAL HIGH SCHOOL**
600 Orange Avenue Middletown, CT 06461

CAD no.
DCS project no.
B1-RT-076 CM-R

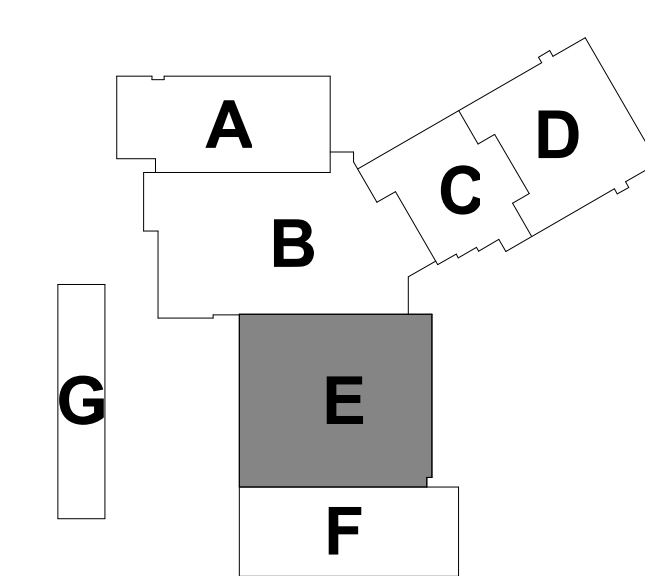
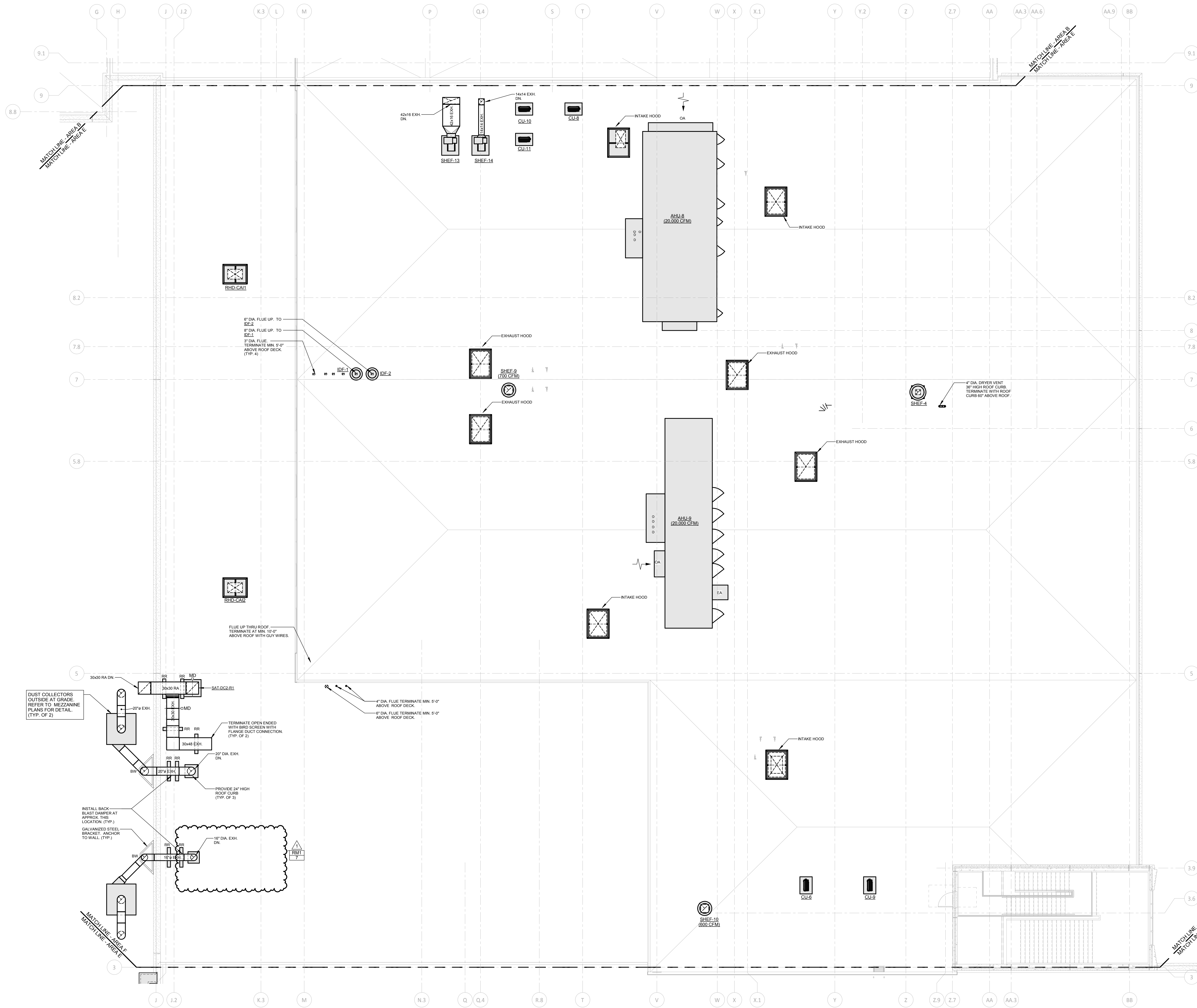
OSCRG project no.
900-0013

MECHANICAL NOTES

- SEE DRAWINGS M3-1-1, M3-1-2 & M3-1-3 FOR SYMBOL LIST AND SCHEDULES.
- SEE DRAWINGS M4-1-1, M4-1-2, M4-1-3 & M4-1-4 FOR DETAILS.
- SEE DRAWINGS M5-1-1, M5-1-2, M5-1-3 & M5-1-4 FOR CONTROLS DIAGRAMS.
- REFER TO SPECIFICATIONS FOR ADDITIONAL DETAILS ON GENERAL CONDITIONS, MATERIAL SPECIFICATIONS AND INSTALLATION.
- PROVIDE CLEARANCE ADJACENT TO EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS AND AS REQUIRED TO PROPERLY MAINTAIN EQUIPMENT. PROVIDE MINIMUM 42" CLEARANCE IN FRONT OF EQUIPMENT, PIPE DROPS, ETC. CLEARANCES SHALL BE IDENTIFIED ON COORDINATION SHOP DRAWINGS.
- PROVIDE REMOTELY CONTROLLED VOLUME DAMPERS AT ALL SHEETROCK AND METAL CEILINGS AND WHERE VOLUME DAMPERS ARE NOT ACCESSIBLE THRU ACCESSIBLE CEILINGS WITH STANDARD STEP LADDER.
- VOLUME DAMPERS SHALL BE INSTALLED MINIMUM 8'-0" FROM EACH DIFFUSER, GRILLE AND REGISTER WHERE EVER POSSIBLE. FLEXIBLE CONNECTIONS SHALL NOT EXCEED 8'-0" IN LENGTH.
- NOT ALL BRANCH PIPING TO DEVICES ARE SHOWN. PROVIDE BRANCH PIPING TO ALL DEVICES PER DETAILS AND SCHEDULES. PIPE BRANCHES SHALL BE MINIMUM 3/4" DIAMETER UNLESS NOTED OTHERWISE.
- ALL PENETRATIONS THROUGH FULL HEIGHT CORRIDOR WALLS SHALL BE SEALED. REFER TO ARCHITECTURAL DRAWINGS FOR TYPES OF WALLS AND REQUIREMENTS FOR SEALING.
- DUCTWORK AND PIPING LAYOUTS DO NOT SHOW ALL TRANSITIONS AND OFFSETS THAT WILL BE REQUIRED. PROVIDE COORDINATION DRAWINGS AND OFFSET DUCTWORK AND PIPING AS REQUIRED.

MECHANICAL DUCTWORK KEY NOTES

- M1 OFFSET DUCT IN CEILING SPACE TO INSTALL DUCT IN CENTER OF THE HOLLOW CORE OF THE MEZZANINE FLOOR PLANK.
- M2 TERMINATE DUCT WITH FLANGED CONNECTION AND 1/2"x1/2" GALVANIZED STEEL MESH.
- M3 INSTALL THIS SECTION OF DUCT IN SPACE BETWEEN PRE-CAST TEES.
- M4 PROVIDE 60"x42" PLENUM AT CONNECTION TO ROOF HOOD. PLENUM SHALL TERMINATE 12" BELOW ROOF DECK.



1 ROOF MECHANICAL PLAN - AREA E
1/8" = 1'-0"

REVISIONS			drawing title	
mark	date	description	ROOF MECHANICAL PLAN AREA E	
1	07/23/2019	ADDENDUM #1		

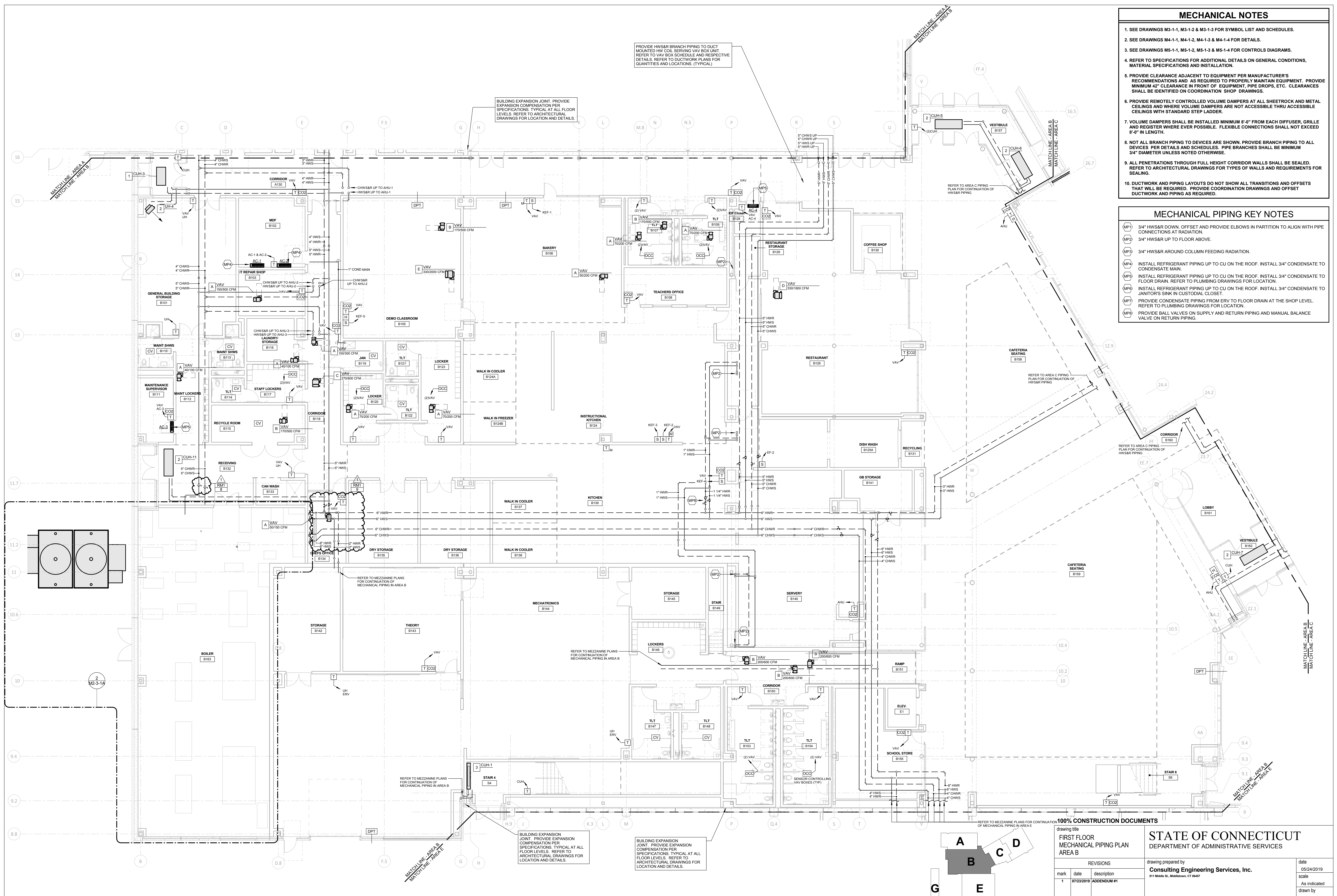
100% CONSTRUCTION DOCUMENTS			STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES	
drawing prepared by	Consulating Engineering Services, Inc.		date	05/24/2019
811 Middle St., Middletown, CT 06457			scale	As Indicated
project	ADDITIONS AND RENOVATIONS PLATT TECHNICAL HIGH SCHOOL		drawn by	ark
600 Orange Avenue, Middletown, CT 06461			approved by	scw
CAD no.	DCS project no.	OSGCR project no.	drawing no.	M1-2-1E
	BR-076 CM-R	990-0013		

MECHANICAL NOTES

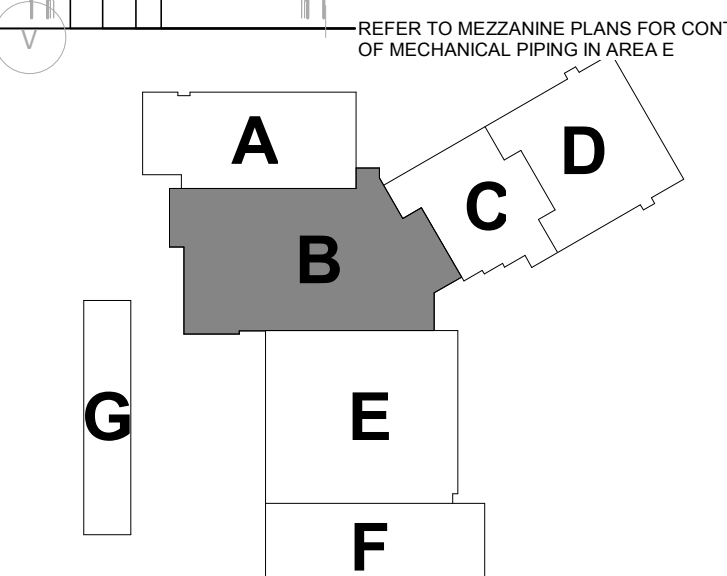
- SEE DRAWINGS M3-1-1, M3-1-2 & M3-1-3 FOR SYMBOL LIST AND SCHEDULES.
- SEE DRAWINGS M4-1-1, M4-1-2, M4-1-3 & M4-1-4 FOR DETAILS.
- SEE DRAWINGS M5-1-1, M5-1-2, M5-1-3 & M5-1-4 FOR CONTROLS DIAGRAMS.
- REFER TO SPECIFICATIONS FOR ADDITIONAL DETAILS ON GENERAL CONDITIONS, MATERIAL SPECIFICATIONS AND INSTALLATION.
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- VOLUME DAMPERS SHALL BE INSTALLED MINIMUM 8" FROM EACH DIFFUSER, GRILLE AND REGISTER WHERE EVER POSSIBLE. FLEXIBLE CONNECTIONS SHALL NOT EXCEED 8'-0" IN LENGTH.
- NOT ALL BRANCH PIPING TO DEVICES ARE SHOWN. PROVIDE BRANCH PIPING TO ALL DEVICES PER DETAILS AND SCHEDULES. PIPE BRANCHES SHALL BE MINIMUM 3/4" DIAMETER UNLESS NOTED OTHERWISE.
- ALL PENETRATIONS THROUGH FULL HEIGHT CORRIDOR WALLS SHALL BE SEALED. REFER TO ARCHITECTURAL DRAWINGS FOR TYPES OF WALLS AND REQUIREMENTS FOR SEALING.
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MECHANICAL PIPING KEY NOTES

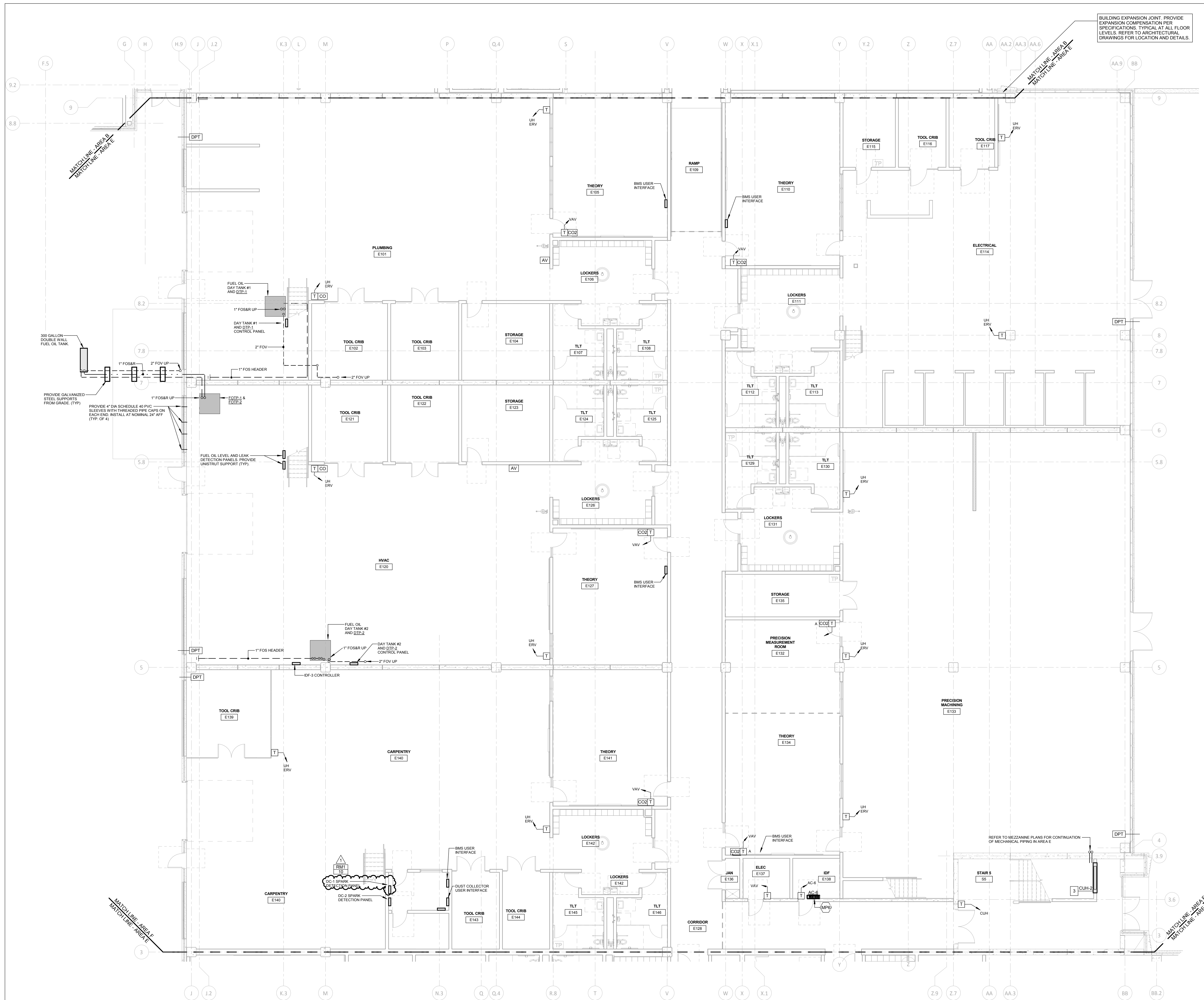
- (MP1) 3/4" HWS&R DOWN, OFFSET AND PROVIDE ELBOWS IN PARTITION TO ALIGN WITH PIPE CONNECTIONS AT RADIATION.
- (MP2) 3/4" HWS&R UP TO FLOOR ABOVE.
- (MP3) 3/4" HWS&R AROUND COLUMN FEEDING RADIATION.
- (MP4) INSTALL REFRIGERANT PIPING UP TO CU ON THE ROOF. INSTALL 3/4" CONDENSATE TO CONDENSATE MAIN.
- (MP5) INSTALL REFRIGERANT PIPING UP TO CU ON THE ROOF. INSTALL 3/4" CONDENSATE TO FLOOR DRAIN. REFER TO PLUMBING DRAWINGS FOR LOCATION.
- (MP6) INSTALL REFRIGERANT PIPING UP TO CU ON THE ROOF. INSTALL 3/4" CONDENSATE TO JANITOR'S SINK IN CUSTODIAL CLOSET.
- (MP7) PROVIDE CONDENSATE PIPING FROM ERV TO FLOOR DRAIN AT THE SHOP LEVEL. REFER TO PLUMBING DRAWINGS FOR LOCATION.
- (MP8) PROVIDE BALL VALVES ON SUPPLY AND RETURN PIPING AND MANUAL BALANCE VALVE ON RETURN PIPING.



1 FIRST FLOOR MECHANICAL PIPING PLAN - AREA B
1/8" = 1'-0"



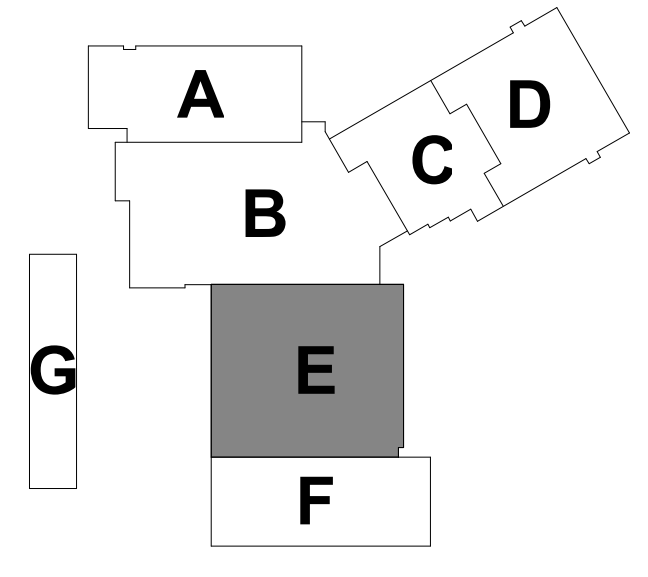
drawing title FIRST FLOOR MECHANICAL PIPING PLAN AREA B			100% CONSTRUCTION DOCUMENTS	
drawing title			date	
FIRST FLOOR MECHANICAL PIPING PLAN AREA B			05/24/2019	
REVISIONS			scale	
mark	date	description	As Indicated	
1	07/23/2019	ADDENDUM #1	drawn by	
			JAM	
			approved by	
			Approved	
			drawing no.	
			M2-1-1B	
project			drawing title	
ADDITIONS AND RENOVATIONS PLATT TECHNICAL HIGH SCHOOL			STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES	
CAD no.			drawing prepared by	
DCS project no. B147-076 C&R			Consulting Engineering Services, Inc. 911 Middle St., Wallingford, CT 06497	
OSCRG project no. 900-0013			date	



BUILDING EXPANSION JOINT. PROVIDE EXPANSION COMPENSATION PER SPECIFICATIONS. TYPICAL AT ALL FLOOR LEVELS. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION AND DETAILS.

- ### MECHANICAL NOTES
- SEE DRAWINGS M3-1-1, M3-1-2 & M3-1-3 FOR SYMBOL LIST AND SCHEDULES.
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 - SEE DRAWINGS M5-1-1, M5-1-2, M5-1-3 & M5-1-4 FOR CONTROLS DIAGRAMS.
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 - VOLUME DAMPERS SHALL BE INSTALLED MINIMUM 8'-0" FROM EACH DIFFUSER, GRILLE AND REGISTER WHERE EVER POSSIBLE. FLEXIBLE CONNECTIONS SHALL NOT EXCEED 8'-0" IN LENGTH.
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- ### MECHANICAL PIPING KEY NOTES
- (MP1) 3/4" HWS&R DOWN. OFFSET AND PROVIDE ELBOWS IN PARTITION TO ALIGN WITH PIPE CONNECTIONS AT RADIATION.
 - (MP2) 3/4" HWS&R UP TO FLOOR ABOVE.
 - (MP3) 3/4" HWS&R AROUND COLUMN FEEDING RADIATION.
 - (MP4) INSTALL REFRIGERANT PIPING UP TO CU ON THE ROOF. INSTALL 3/4" CONDENSATE TO CONDENSATE MAIN.
 - (MP5) INSTALL REFRIGERANT PIPING UP TO CU ON THE ROOF. INSTALL 3/4" CONDENSATE TO FLOOR DRAIN. REFER TO PLUMBING DRAWINGS FOR LOCATION.
 - (MP6) INSTALL REFRIGERANT PIPING UP TO CU ON THE ROOF. INSTALL 3/4" CONDENSATE TO JANITOR'S SINK IN CUSTODIAL CLOSET.
 - (MP7) PROVIDE CONDENSATE PIPING FROM ERV TO FLOOR DRAIN AT THE SHOP LEVEL. REFER TO PLUMBING DRAWINGS FOR LOCATION.
 - (MP8) PROVIDE BALL VALVES ON SUPPLY AND RETURN PIPING AND MANUAL BALANCE VALVE ON RETURN PIPING.



100% CONSTRUCTION DOCUMENTS			STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES	
drawing title FIRST FLOOR MECHANICAL PIPING PLAN AREA E			drawing prepared by Consulting Engineering Services, Inc. 811 Middle St., Middletown, CT 06457	
REVISIONS			date	05/24/2019
mark	date	description	scale	As Indicated
1	07/23/2019	ADDENDUM #1	drawn by	JMK
project ADDITIONS AND RENOVATIONS PLATT TECHNICAL HIGH SCHOOL 600 Orange Avenue Middletown, CT 06461			approved by	sew
CAD no.	DCS project no. BART-076 CM-R	OSCRG project no. 990-0013	drawing no.	M2-1-1E

1 FIRST FLOOR MECHANICAL PIPING PLAN - AREA E
1/8" = 1'-0"



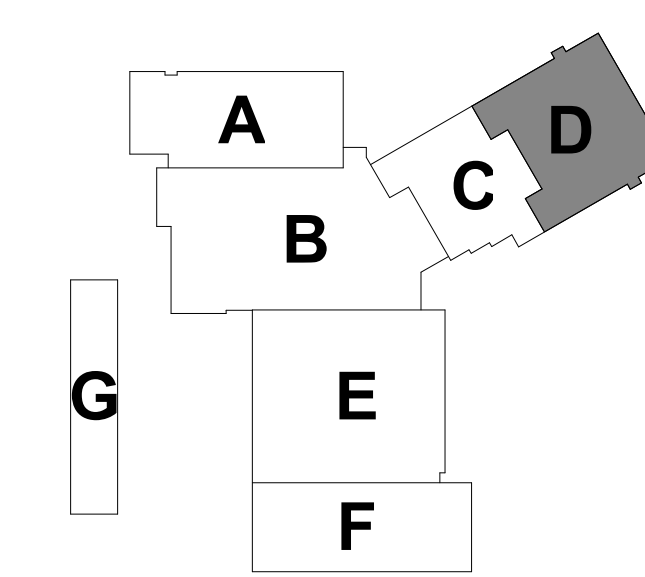
1 SECOND FLOOR MECHANICAL PIPING PLAN - AREA D
1/8" = 1'-0"

MECHANICAL NOTES

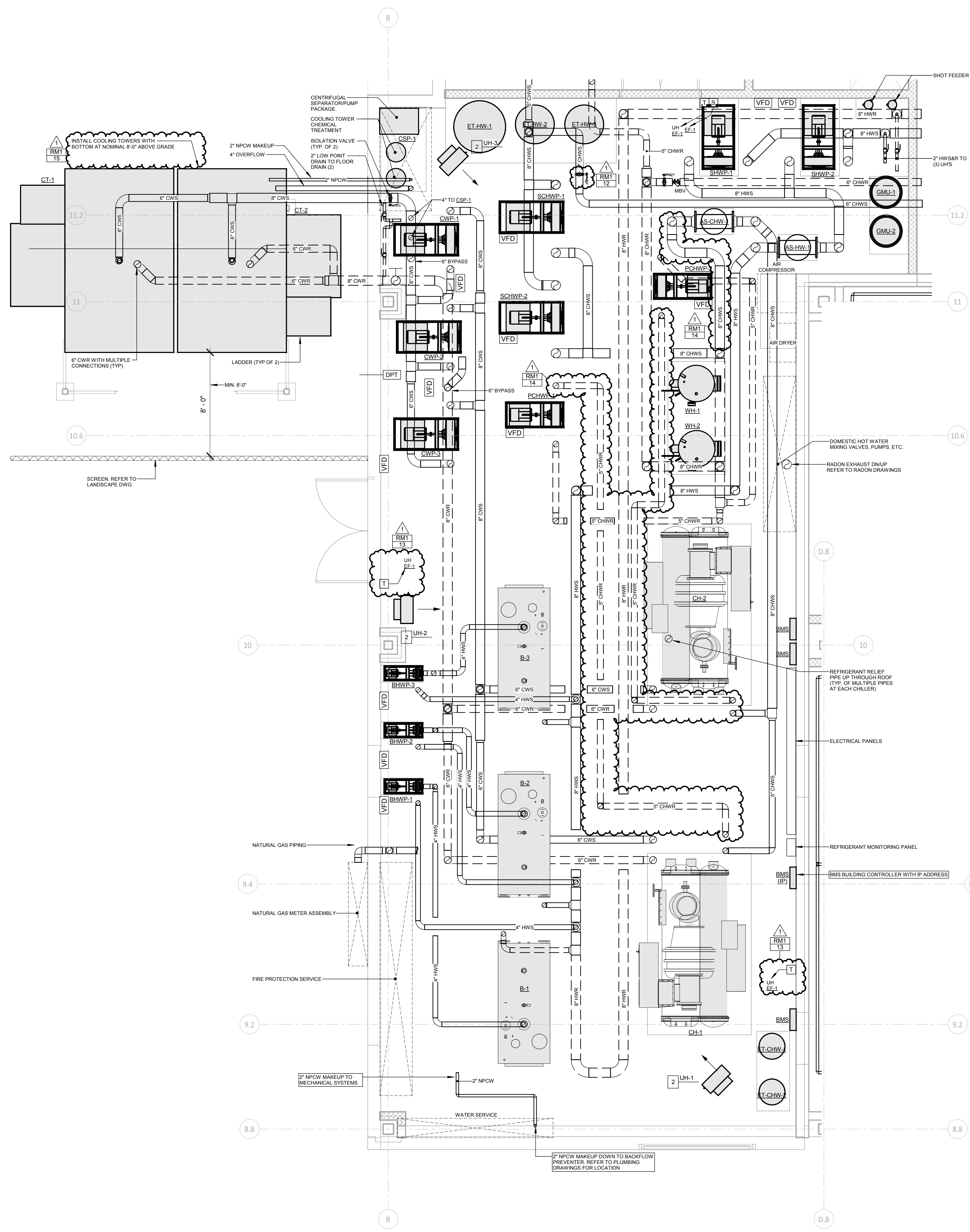
1. SEE DRAWINGS M3-1-1, M3-1-2 & M3-1-3 FOR SYMBOL LIST AND SCHEDULES.
2. SEE DRAWINGS M4-1-1, M4-1-2, M4-1-3 & M4-1-4 FOR DETAILS.
3. SEE DRAWINGS M5-1-1, M5-1-2, M5-1-3 & M5-1-4 FOR CONTROLS DIAGRAMS.
4. REFER TO SPECIFICATIONS FOR ADDITIONAL DETAILS ON GENERAL CONDITIONS, MATERIAL SPECIFICATIONS AND INSTALLATION.
5. PROVIDE CLEARANCE ADJACENT TO EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS AND AS REQUIRED TO PROPERLY MAINTAIN EQUIPMENT. PROVIDE MINIMUM 42" CLEARANCE IN FRONT OF EQUIPMENT, PIPE DROPS, ETC. CLEARANCES SHALL BE IDENTIFIED ON COORDINATION SHOP DRAWINGS.
6. PROVIDE REMOTELY CONTROLLED VOLUME DAMPERS AT ALL SHEETROCK AND METAL CEILINGS AND WHERE VOLUME DAMPERS ARE NOT ACCESSIBLE THRU ACCESSIBLE CEILINGS WITH STANDARD STEP LADDER.
7. VOLUME DAMPERS SHALL BE INSTALLED MINIMUM 8'-0" FROM EACH DIFFUSER, GRILLE AND REGISTER WHERE EVER POSSIBLE. FLEXIBLE CONNECTIONS SHALL NOT EXCEED 8'-0" IN LENGTH.
8. NOT ALL BRANCH PIPING TO DEVICES ARE SHOWN. PROVIDE BRANCH PIPING TO ALL DEVICES PER DETAILS AND SCHEDULES. PIPE BRANCHES SHALL BE MINIMUM 3/4" DIAMETER UNLESS NOTED OTHERWISE.
9. ALL PENETRATIONS THROUGH FULL HEIGHT CORRIDOR WALLS SHALL BE SEALED. REFER TO ARCHITECTURAL DRAWINGS FOR TYPES OF WALLS AND REQUIREMENTS FOR SEALING.
10. DUCTWORK AND PIPING LAYOUTS DO NOT SHOW ALL TRANSITIONS AND OFFSETS THAT WILL BE REQUIRED. PROVIDE COORDINATION DRAWINGS AND OFFSET DUCTWORK AND PIPING AS REQUIRED.

MECHANICAL PIPING KEY NOTES

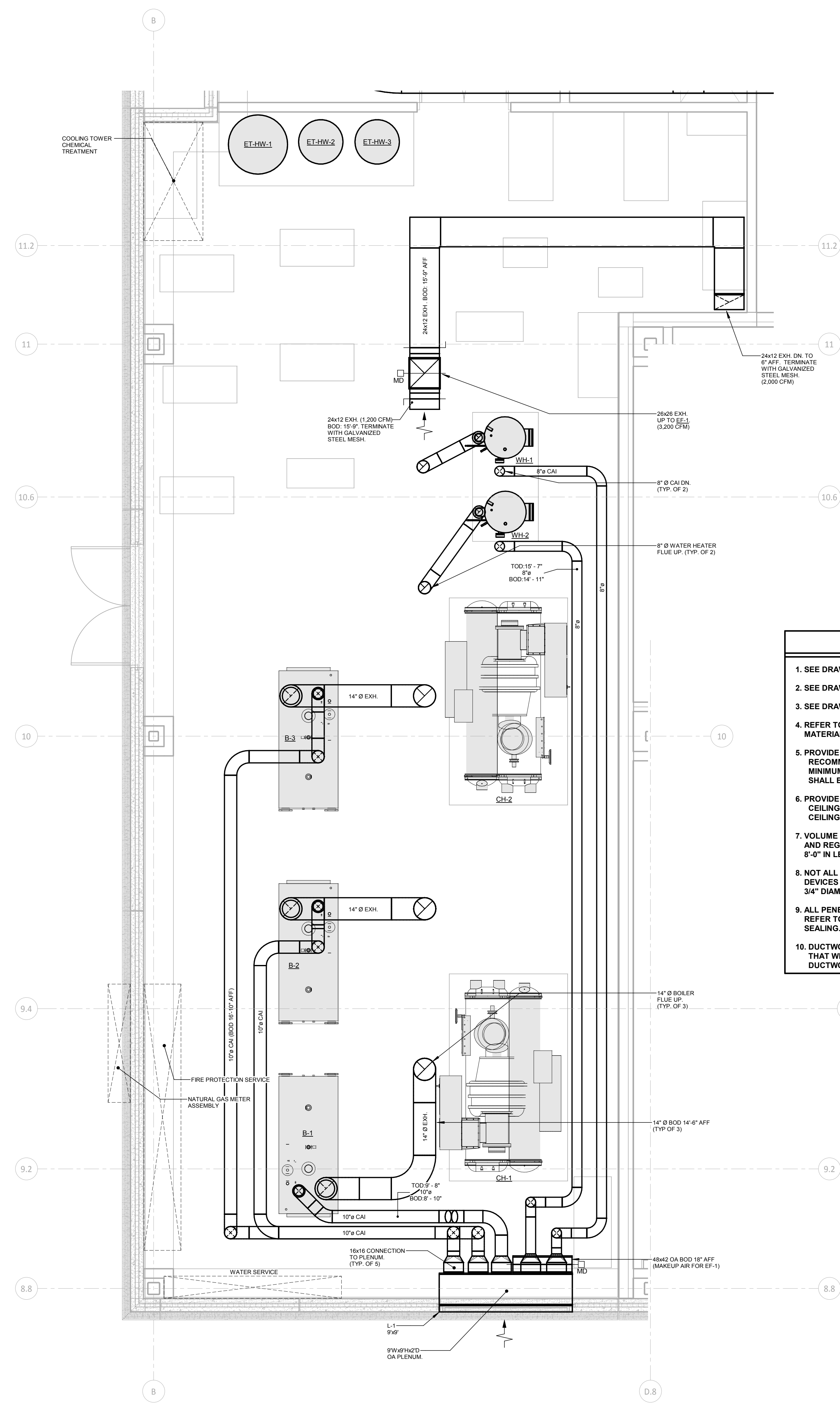
- (MP1) 3/4" HWS&R DOWN. OFFSET AND PROVIDE ELBOWS IN PARTITION TO ALIGN WITH PIPE CONNECTIONS AT RADIATION.
- (MP2) 3/4" HWS&R UP TO FLOOR ABOVE.
- (MP3) 3/4" HWS&R AROUND COLUMN FEEDING RADIATION.
- (MP4) INSTALL REFRIGERANT PIPING UP TO CU ON THE ROOF. INSTALL 3/4" CONDENSATE TO CONDENSATE MAIN.
- (MP5) INSTALL REFRIGERANT PIPING UP TO CU ON THE ROOF. INSTALL 3/4" CONDENSATE TO FLOOR DRAIN. REFER TO PLUMBING DRAWINGS FOR LOCATION.
- (MP6) INSTALL REFRIGERANT PIPING UP TO CU ON THE ROOF. INSTALL 3/4" CONDENSATE TO JANITOR'S SINK IN CUSTODIAL CLOSET.
- (MP7) PROVIDE CONDENSATE PIPING FROM ERYV TO FLOOR DRAIN AT THE SHOP LEVEL. REFER TO PLUMBING DRAWINGS FOR LOCATION.
- (MP8) PROVIDE BALL VALVES ON SUPPLY AND RETURN PIPING AND MANUAL BALANCE VALVE ON RETURN PIPING.



100% CONSTRUCTION DOCUMENTS			STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES	
drawing title SECOND FLOOR MECHANICAL PIPING PLAN AREA D			drawing prepared by Consulting Engineering Services, Inc. 811 Middle St., Middletown, CT 06457	
date 05/24/2019			date 05/24/2019	
scale As Indicated			scale As Indicated	
drawn by AMK			drawn by AMK	
approved by BOW			approved by BOW	
drawing no. M2-1-2D			drawing no. M2-1-2D	
project ADDITIONS AND RENOVATIONS PLATT TECHNICAL HIGH SCHOOL 600 Orange Avenue Middletown, CT 06461			project DCS project no. BIRT-076 CM-R	
CAD no.			OSGCR project no. 900-0113	



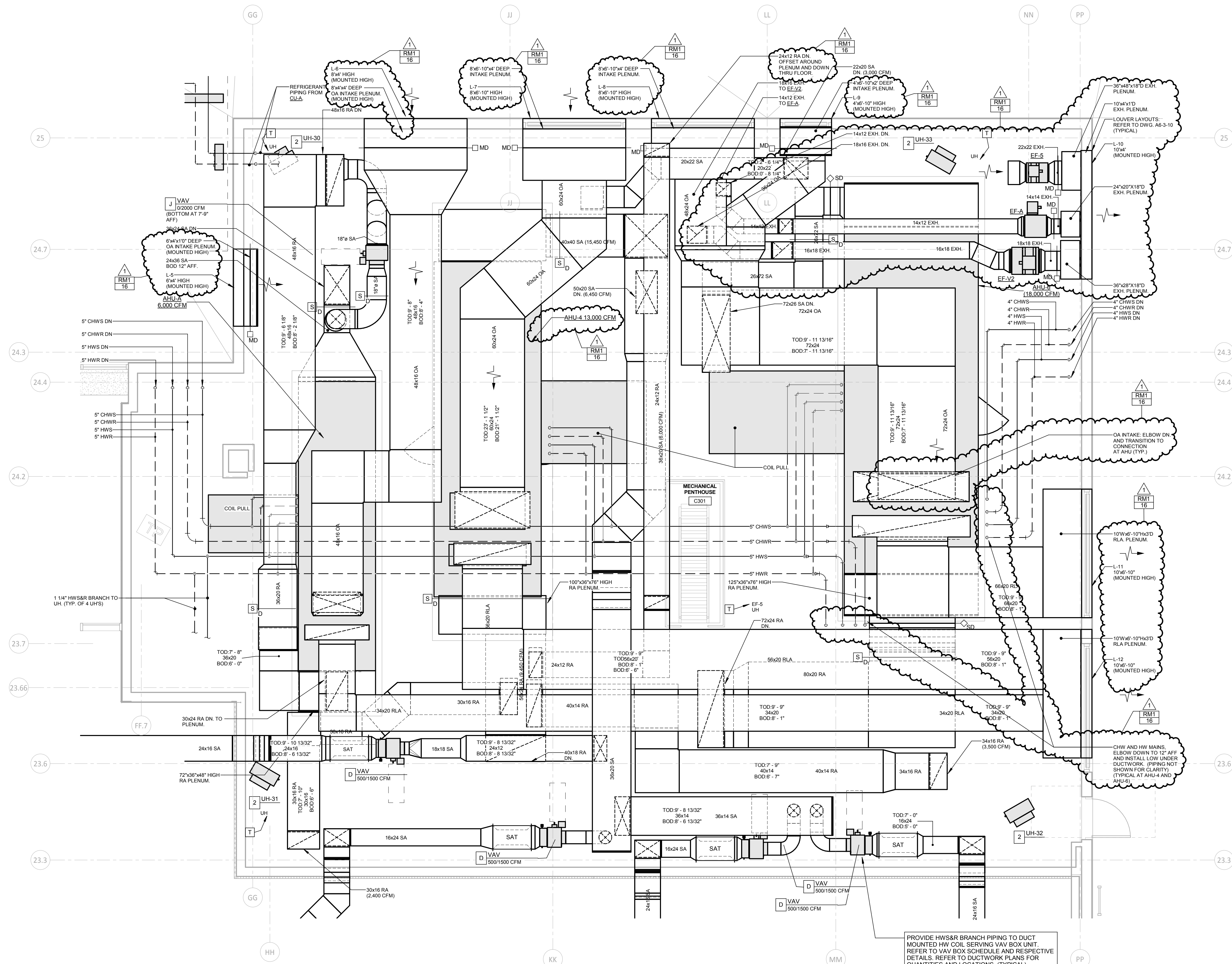
2 MECHANICAL BOILER ROOM PARTIAL PIPING PLAN
1/4" = 1'-0"



1 MECHANICAL BOILER ROOM PARTIAL PLAN
1/4" = 1'-0"

- ### MECHANICAL NOTES
- SEE DRAWINGS M3-1-1, M3-1-2 & M3-1-3 FOR SYMBOL LIST AND SCHEDULES.
 - SEE DRAWINGS M4-1-1, M4-1-2, M4-1-3 & M4-1-4 FOR DETAILS.
 - SEE DRAWINGS M5-1-1, M5-1-2, M5-1-3 & M5-1-4 FOR CONTROLS DIAGRAMS.
 - REFER TO SPECIFICATIONS FOR ADDITIONAL DETAILS ON GENERAL CONDITIONS, MATERIAL SPECIFICATIONS AND INSTALLATION.
 - PROVIDE CLEARANCE ADJACENT TO EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS AND AS REQUIRED TO PROPERLY MAINTAIN EQUIPMENT. PROVIDE MINIMUM 42" CLEARANCE IN FRONT OF EQUIPMENT, PIPE DROPS, ETC. CLEARANCES SHALL BE IDENTIFIED ON COORDINATION SHOP DRAWINGS.
 - PROVIDE REMOTELY CONTROLLED VOLUME DAMPERS AT ALL SHEETROCK AND METAL CEILINGS AND WHERE VOLUME DAMPERS ARE NOT ACCESSIBLE THRU ACCESSIBLE CEILINGS WITH STANDARD STEP LADDER.
 - VOLUME DAMPERS SHALL BE INSTALLED MINIMUM 8'-0" FROM EACH DIFFUSER, GRILLE AND REGISTER WHERE EVER POSSIBLE. FLEXIBLE CONNECTIONS SHALL NOT EXCEED 8'-0" IN LENGTH.
 - NOT ALL BRANCH PIPING TO DEVICES ARE SHOWN. PROVIDE BRANCH PIPING TO ALL DEVICES PER DETAILS AND SCHEDULES. PIPE BRANCHES SHALL BE MINIMUM 3/4" DIAMETER UNLESS NOTED OTHERWISE.
 - ALL PENETRATIONS THROUGH FULL HEIGHT CORRIDOR WALLS SHALL BE SEALED. REFER TO ARCHITECTURAL DRAWINGS FOR TYPES OF WALLS AND REQUIREMENTS FOR SEALING.
 - DUCTWORK AND PIPING LAYOUTS DO NOT SHOW ALL TRANSITIONS AND OFFSETS THAT WILL BE REQUIRED. PROVIDE COORDINATION DRAWINGS AND OFFSET DUCTWORK AND PIPING AS REQUIRED.

100% CONSTRUCTION DOCUMENTS			STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES	
drawing title MECHANICAL PARTIAL PLAN		drawing prepared by Consulting Engineering Services, Inc. 811 Middle St., Middletown, CT 06457		date 05/24/2019
REVISIONS		scale As Indicated		drawn by AMK
mark	date	description		approved by scw
1	07/23/2019	ADDENDUM #1		drawing no. M2-3-1A
project ADDITIONS AND RENOVATIONS PLATT TECHNICAL HIGH SCHOOL 600 Orange Avenue Middletown, CT 06461		CAD no.	DCS project no. BIRT-078 CM-R	OSGCR project no. 990-0113



1 MECHANICAL ROOM PARTIAL PLAN
1/4" = 1'-0"

FIRE DAMPER NOTE FOR FLOOR PENETRATIONS

PROVIDE FIRE DAMPERS AT ALL DUCTWORK PENETRATIONS THROUGH THE 2ND FLOOR AND FLOOR OF THE MECHANICAL PENTHOUSE. AT EACH FIRE DAMPER, PROVIDE A DUCT ACCESS DOOR TO PROVIDE ACCESS FROM THE FLOOR ABOVE. EACH ACCESS DOOR SHALL BE MINIMUM 24"X24" AND SHALL BE INSTALLED AT 6" AFF TO THE BOTTOM, WHERE DUCT WIDTH IS LESS THAN 24". ACCESS DOOR SHALL BE WIDTH OF DUCT, LESS 2". HEIGHT SHALL REMAIN 24". PROVIDE 24"X24" ACCESS PANEL IN THE PARTITION AT THE SAME HEIGHT TO ALLOW ACCESS TO THE DUCT ACCESS DOOR.

100% CONSTRUCTION DOCUMENTS			
drawing title		STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES	
MECHANICAL PENTHOUSE PARTIAL PLAN		drawing prepared by Consulting Engineering Services, Inc. 811 Middle St., Middletown, CT 06457	
date		date	
07/23/2019		05/24/2019	
description		scale	
ADDENDUM #1		As Indicated	
project		approved by	
ADDITIONS AND RENOVATIONS PLATT TECHNICAL HIGH SCHOOL		msw	
drawing no.		drawing no.	
M2-3-1C		M2-3-1C	
CAD no.	DCS project no.	OSGCR project no.	
	BLRT-076 CM-R	990-0113	

GAS FIRED INFRA-RED HEATER SCHEDULE

SYMBOL	MANUFACTURER/ MODEL NUMBER	STAGES	LENGTH (FEET)	FUEL	BTUH INPUT (LOW FIRE)	BTUH INPUT (HIGH FIRE)	GAS PRESSURE	ELECTRICAL		
								AMPS	VOLTS	PHASE
RH-1	SUPERIOR RADIANT MODEL WTS100	2	40	NATURAL GAS	75,000	100,000	5" TO 14"	12	120	1
RH-2	SUPERIOR RADIANT MODEL 100	2	40	NATURAL GAS	75,000	100,000	5" TO 14"	12	120	1
RH-3	SUPERIOR RADIANT MODEL 100	2	40	NATURAL GAS	75,000	100,000	5" TO 14"	12	120	1
RH-4	SUPERIOR RADIANT MODEL 100	2	40	NATURAL GAS	75,000	100,000	5" TO 14"	12	120	1

- REMARKS:**
 1. FURNISH RADIANT HEATERS WITH INTERFACE TO BMS.
 2. FURNISH RADIANT HEATERS WITH ALL REQUIRED MOUNTING HARDWARE.
 3. FURNISH RADIANT HEATERS WITH BLACK COATED ALUMINIZED STEEL BURNER WITH HOT SURFACE IGNITION.
 4. PROVIDE OUTDOOR COMBUSTION INTAKE ROOF CURBS.
 5. PROVIDE FACTORY PRE & POST PURGE CONTROLS AND MICRO-PROCESSOR CIRCUITRY.
 6. PROVIDE WITH ALUMINUM REFLECTOR.
 7. DISCONNECT SWITCHES SHALL BE BY DIVISION 26.

CASSETTE AIR CONDITIONING UNIT SCHEDULE

SYMBOL	MANUFACTURER/ MODEL NUMBER	TOTAL CAP (MBH)	SENS CAP (MBH)	AIR SIDE				WATER SIDE				MOTOR DATA			BRANCH PIPE SIZE
				FLOW (CFM)	EAT (°F) DBWB	FLOW (GPM)	EWT (°F)	LWT (°F)	PD (FT HD)	MCA	VOLTS	PH			
													SP (IN WG)	FAN SPEED (RPM)	
CAC-1	MCDINE SCW-20	12.3	11.7	630	75.0/62.5	3.0	45	55	3.5	1.0	208	1	3/4"		
CAC-2	MCDINE SCW-20	12.3	11.7	630	75.0/62.5	3.0	45	55	3.5	1.0	208	1	3/4"		
CAC-3	MCDINE SCW-20	12.3	11.7	630	75.0/62.5	3.0	45	55	3.5	1.0	208	1	3/4"		

- REMARKS:**
 1. DISCHARGE PATTERN SHALL BE 4-WAY.
 2. FILTERS SHALL BE MERV 8.
 3. PROVIDE EACH WITH INTEGRAL CONDENSATE PUMP.
 4. RATINGS ARE BASED ON UNIT RUNNING WITH 100% WATER.

FAN SCHEDULE

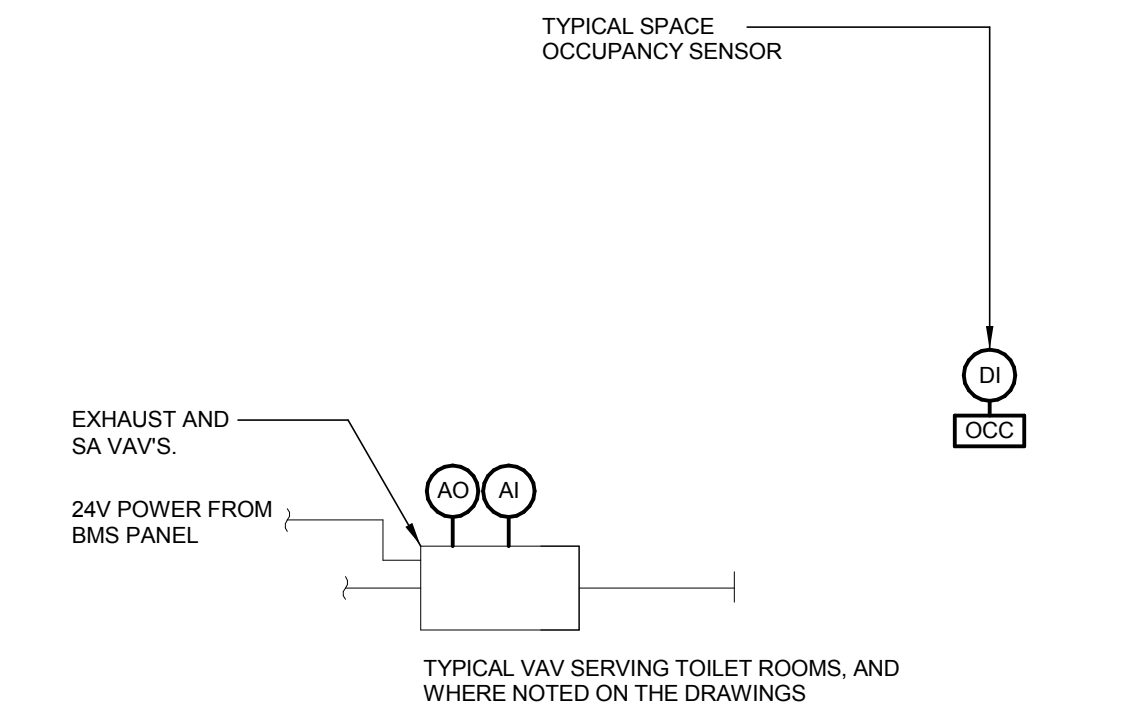
SYMBOL	MANUFACTURER/ MODEL NUMBER	TYPE	LOCATION	AREA SERVING	AIR FLOW (CFM)	SP (IN WG)	FAN SPEED (RPM)	DRIVE	BHP	MOTOR DATA			WEIGHT (LBS)	REMARKS
										HP	VOLTS	PH		
EF-A	LOREN COOK / SON-D 100 VF	IL	PENTHOUSE C301	C	900	1.0	1632	D	0.314	1/2	115	1	130	1,2,5
EF-1	LOREN COOK / ACRU-D 165R VF	RMUBF	ROOF	B	3,200	0.5	1364	D	0.869	1.5	480	3	200	1,5
EF-2	LOREN COOK / ACRU-D 150R VF	RMUBF	ROOF	B	1,600	1.0	1281	D	0.47	3/4	480	3	110	1,5
EF-3	LOREN COOK / ACE-D 120C VF	RMDBF	ROOF	A	1,400	0.5	1558	D	0.267	1/2	115	1	100	1,5
EF-4	LOREN COOK / SQN-D 135 VF	IL	MECH. B201	B (2nd FLOOR)	1,200	0.5	1150	D	0.201	1/3	115	1	200	1,2,5
EF-5	LOREN COOK / SON-D 165 VF	IL	PENTHOUSE C301	C	3,000	0.5	1340	D	0.736	1.5	480	3	300	1,2,5
EF-6	LOREN COOK / ACE-D 100C EC	RMDBF	ROOF	A	250	0.5	1308	D	53 (W)	1/4	115	1	60	1,5
EF-7	FANTECH / DBF 110	IL	STORAGE B101	B	75.2	1.23	2318	D	0.54 (A)	1/10	115	1	30	1,2
EF-8	FANTECH / DBF 110	IL	STORAGE B101	B	75.2	1.23	2318	D	0.54 (A)	1/10	115	1	30	1,2
EF-K1	LOREN COOK / SON-D 100 VF	IL	MECH. B201	B	600	0.8	1855	D	0.2	1/3	115	1	100	1,2,5
EF-V1	LOREN COOK / ACRU-D-HP 210	RMUBF	ROOF	B	4,200	1.5	1386	D	1.92	3	480	3	500	1,7
EF-V2	LOREN COOK / SQN-D 165	IL	PENTHOUSE C301	C & D	2,000	1.5	1595	D	0.94	1.5	480	3	400	1,2
EF-V3	LOREN COOK / SQN-D 165	IL	MECH. B201	B (2nd FLOOR)	2,000	1.2	1518	D	0.801	1.5	480	3	400	1,2
EF-V4	LOREN COOK / ACRU-D 165R VF	RMUBF	ROOF	B	2,100	0.8	1131	D	0.525	1.0	480	3	160	1,7
KEF-1	LOREN COOK / 210 VCR-HP	RMUBF	ROOF	B	3,131	2.0	1352	B	1.9	3	480	3	375	1,4
KEF-2	LOREN COOK / 225 VCR-HP	RMUBF	ROOF	B	3,915	2.0	1285	B	2.41	3	480	3	400	1,4
KEF-3	LOREN COOK / 365 VCR-XP	RMUBF	ROOF	B	8,443	2.0	993	B	5.29	7.5	480	3	700	1,4
KEF-4	LOREN COOK / 330 VCR-HP	RMUBF	ROOF	B	7,635	2.0	869	B	4.73	7.5	480	3	700	1,4
KEF-5	LOREN COOK / 225 VCR-XP	RMUBF	ROOF	B	2,208	2.0	1356	B	1.27	1.5	480	3	400	1,4
LEF-1	LOREN COOK / 120TCNHLE07	HPDF	ROOF	D	1,020	1.0	2360	B	0.829	1.5	208	3	1200	1,8
LEF-2	LOREN COOK / 120TCNHLE09	HPDF	ROOF	D	1,400	1.0	2376	B	0.899	1.5	208	3	1200	1,8
LEF-3	LOREN COOK / 135TCNHLE09	HPDF	ROOF	D	1,500	1.0	2002	B	0.992	1.5	208	3	1300	1,8
SHEF-1	LOREN COOK / ACRU-D 165R VF	RMUBF	ROOF	E & F	2,200	0.8	1131	D	0.525	1.0	480	3	120	1,5,7
SHEF-2	LOREN COOK / ACRU-D-HP 150RH VF	RMUBF	ROOF	F	500	0.8	1140	D	0.142	1/4	115	1	125	1,5
SHEF-3	LOREN COOK / ACRU-D 195R VF	RMUBF	ROOF	F	4,800	1.0	1212	D	1.65	3.0	480	3	400	1,5,7
SHEF-4	LOREN COOK / ACRU-D-HP 150RH VF	RMUBF	ROOF	E	1,000	1.0	1519	D	0.36	3/4	480	3	220	1,5,7
SHEF-5	LOREN COOK / ACRU-D 180R VF	RMUBF	ROOF	F	2,800	1.0	1141	D	0.938	2.0	480	3	280	1,5,7
SHEF-6	LOREN COOK / 245GMJU	RMUBF	ROOF	F	10,000	1.5	1144	B	4.23	5.0	208	3	2000	1,7,9
SHEF-7	LOREN COOK / 245GMJU	RMUBF	ROOF	F	10,000	1.5	1144	B	4.23	5.0	208	3	2000	1,7,9
SHEF-8	LOREN COOK / 903AMU	RMUBF	ROOF	F	1,150	1.5	2982	B	0.609	1.0	208	3	600	1,7,9
SHEF-9	LOREN COOK / ACRU-D-HP 150RH VF	RMUBF	ROOF	E	700	0.8	1244	D	0.197	1/3	115	1	150	1,5
SHEF-10	LOREN COOK / ACRU-D-EC 101R	RMUBF	ROOF	E	600	0.5	1522	D	92 (W)	1/4	115	1	150	1,5
SHEF-11	LOREN COOK / ACRU-HP 249RH10B	RMUBF	ROOF	F	5,600	1.0	1031	B	1.93	3.0	480	3	400	1,7
SHEF-12	LOREN COOK / ACRU-HP 365X11B	RMUBF	ROOF	F	7,000	2.0	891	B	3.97	5.0	480	3	500	1,7
SHEF-13	LOREN COOK / 195 CPS	CUF	ROOF	E	5,600	1.0	1349	B	2.11	3	480	3	600	1,6,7
SHEF-14	LOREN COOK / 120 CPS	CUF	ROOF	E	1,300	0.5	1618	B	0.279	1/2	480	3	300	1,6,7
VEF-1	LOREN COOK / 150 CPS	CUF	ROOF	F	3,000	5.5	2700	B	3.8	5.0	480	3	750	1,6,7
VEF-2	LOREN COOK / 150 CPS	CUF	ROOF	F	2,400	5.5	2900	B	3.2	5.0	480	3	700	1,6,7
EF-BG1	LOREN COOK / ACRU-S 330R	RMUBF	ROOF	BG	10,000	0.5	508	B	1.78	2.0	208	3	560	1
EF-BG2	LOREN COOK / ACRU-D 150R VF	RMUBF	ROOF	BG	2,000	0.5	1224	D	0.401	3/4	208	3	160	1,5
EF-BG3	LOREN COOK / 90SQND-EC	IL	MEP G102	BG	300	0.5	1569	D	75 (W)	1/8	115	1	150	1,2,5

- TYPE:**
 IL = IN-LINE
 HPDF = HIGH PLUME DISCHARGE FAN
 CUF = CENTRIFUGAL UTILITY FAN
 RMDBF = ROOF MOUNTED DOWNBLAST FAN
 RMUBF = ROOF MOUNTED UPBLAST FAN
 CF = CEILING FAN
- DRIVE:**
 B = BELT DRIVE
 D = DIRECT DRIVE
- REMARKS:**
 1. PROVIDE WITH DISCONNECT SWITCH.
 2. PROVIDE WITH VIBRATION ISOLATORS.
 3. NOT USED.
 4. FAN SHALL SERVE GREASE HOOD AND SHALL BE UL782 LISTED.
 5. PROVIDE WITH UNIT MOUNTED VARIABLE SPEED CONTROLLER AND ECM MOTOR.
 6. PROVIDE WITH STEEL ACCESS DOOR-BOLT AND CSA BGV6WEATHERCOVER-STEEL.
 7. INSTALL ON VIBRATION ISOLATION ROOF CURB AS SPECIFIED IN SPEC SECTION 230548.
 8. PROVIDE WITH MIXING BOX WITH BYPASS DAMPER AND DISCHARGE NOZZLE.
 9. PROVIDE WITH EXPLOSION PROOF MOTOR AND CONSTRUCTED TO MEET AMCA "A" SPARK RESISTANT RATING.
- NOTE:**
 1. FOR DAMPER SPEC. REFER TO SPEC SECTION 230923.
 2. FOR ROOF CURB SPECIFICATION, REFER TO SPECIFICATION SECTION 230548 UNLESS NOTED OTHERWISE.

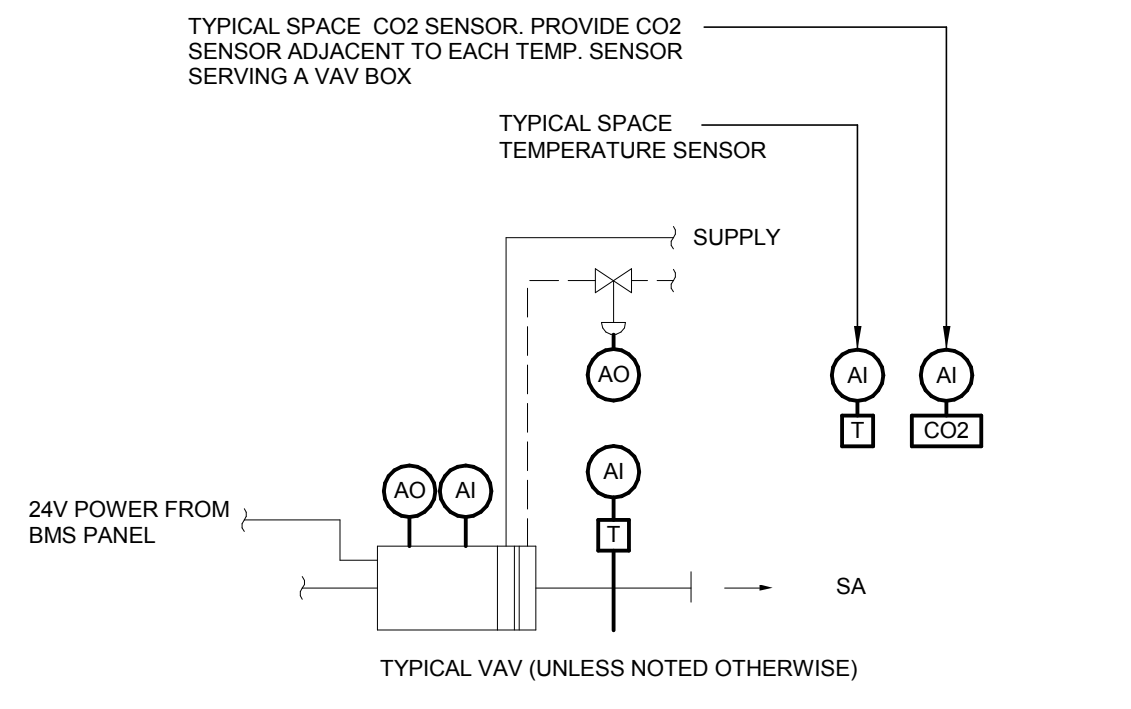
AIR HANDLING UNIT SCHEDULE

SYMBOL	MFR MODEL NO	SA DUCT CONNECTION SIZE	NO SA FANS	TOTAL SA CFM	SUPPLY FAN DATA (PER FAN)										ACCESS SECTION (LENGTH)	HEATING COIL SECTION	FILTER SECTION	ECONOMIZER AND MIXING BOX SECTIONS	ER	NO FANS	TOTAL EXH. CFM	EXHAUST / RETURN FAN DATA (PER FAN)										RA DUCT CONNECTION SIZE	OPERATING WEIGHT (LBS)	MAX HEIGHT INCLUDING BASE RAIL	NOTES
					MOTOR DATA					MOTOR DATA												MOTOR DATA													
					CFM	ESP (IN WG)	TSP (IN WG)	SPEED (RPM)	BHP	HP	RPM	VOLTS	PH	CFM								ESP (IN WG)	TSP (IN WG)	SPEED (RPM)	BHP	HP	RPM	VOLTS	PH	CFM	ESP (IN WG)				
ERV-M1	Xelex XHR-30-78-BP-HW	84"x18"	1	8,000	8,000	1.5	3.95	2,075	7.74	10	1,800	460	3	MIN 18"	HWC-EM1	REMARK #1	YES	PER-EM1	1	7,000	7,000	1.0	2.8	1,784	4.91	7.5	1,800	460	3	84"x16"	10,000	60			
ERV-1	Xelex XHR-30-78-BP-HW	84"x18"	1	8,000	8,000	1.5	3.95	2,075	7.74	10	1,800	460	3	MIN 18"	HWC-E1	REMARK #1	YES	PER-1	1	7,000	7,000	1.0	2.8	1,784	4.91	7.5	1,800	460	3	84"x16"	10,000	60			
ERV-2	Xelex XHR-30-78-BP-HW	84"x18"	1	8,000	8,000	1.5	3.95	2,075	7.74	10	1,800	460	3	MIN 18"	HWC-E2	REMARK #1	YES	PER-2	1	7,000	7,000	1.0	2.8	1,784	4.91	7.5	1,800	460	3	84"x16"	10,000	60			
ERV-3	Xelex XHR-30-78-BP-HW	84"x18"	1	8,000	8,000	1.5	3.95	2,075	7.74	10	1,800	460	3	MIN 18"	HWC-E3	REMARK #1	YES	PER-3	1	7,000	7,000	1.0	2.8	1,784	4.91	7.5	1,800	460	3	84"x16"	10,000	60			
ERV-4	Xelex XHR-40-80-RC-BP-HW	100"x28"	2	10,000	5,000	1.5	4.25	2,075	4.67	7.5	1,800	460	3	MIN 18"	HWC-E4	REMARK #1	YES	PER-4	1	9,000	9,000	1.0	2.95	1,784	4.91	7.5	1,800	460	3	100"x28"	16,000	72			
ERV-5	Xelex XHR-59-90-BP-HW	126"x32"	2	15,000	7,500	1.5	4.4	2,066	7.69	10	1,800	460	3	MIN 18"	HWC-E5	REMARK #1	YES	PER-5	2	14,000	7,000	1.0	3.35	1,862	5.62	7.5	1,800	460	3	126"x36"	17,000	96			
ERV-6	Xelex XHR-59-90-BP-HW	126"x32"	2	15,000	7,500	1.5	4.4	2,066	7.69	10	1,800	460	3	MIN 18"	HWC-E6	REMARK #1	YES	PER-6	2	14,000	7,000	1.0	3.35	1,862	5.62	7.5	1,800	460	3	126"x36"	17,000	96			
ERV-7	Xelex XHR-59-90-BP-HW	126"x32"	2	15,000	7,500	1.5	4.4	2,066	7.69	10	1,800	460	3	MIN 18"	HWC-E7	REMARK #1	YES	PER-7	2	14,000	7,000	1.0	3.35	1,862	5.62	7.5	1,800	460	3	126"x36"	17,000	96			

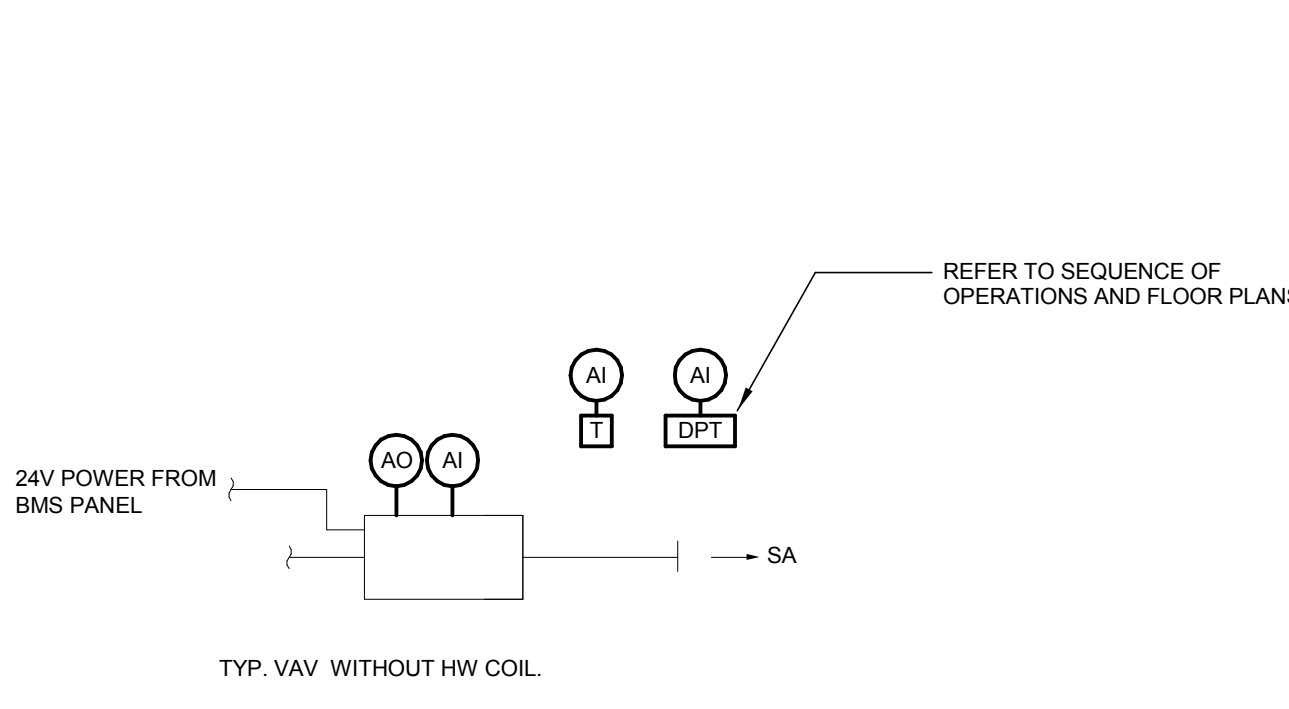
- REMARKS APPLY TO ALL UNITS:**
 1. FILTERS SHALL BE MERV 12 FILTERS (2" DEEP) AT OA AND RA AND SHALL BE ANGLE FILTER ARRANGEMENT.
 2. PROVIDE EACH FAN MOTOR WITH INDIVIDUAL VFD AND DISCONNECT SWITCH. EACH FAN SHALL BE PROVIDED WITH SHAFT GROUNDING RING.
 3. PROVIDE EACH FAN WITH BACKDRAFT DAMPER WHERE UNIT IS SERVED BY TWO FANS.
 4. PROVIDE WITH MODULATING FACE AND BYPASS DAMPERS AT ER SECTION.
 5. PROVIDE WITH MODULATING RA/EXHAUST AIR DAMPERS.
 6. PROVIDE DAMPERS AT OUTSIDE AIR AND EXHAUST AIR. DAMPERS SHALL BE REMOTE MOUNTED AT OUTSIDE AIR INTAKE HOOD AND EXHAUST AIR HOOD.<



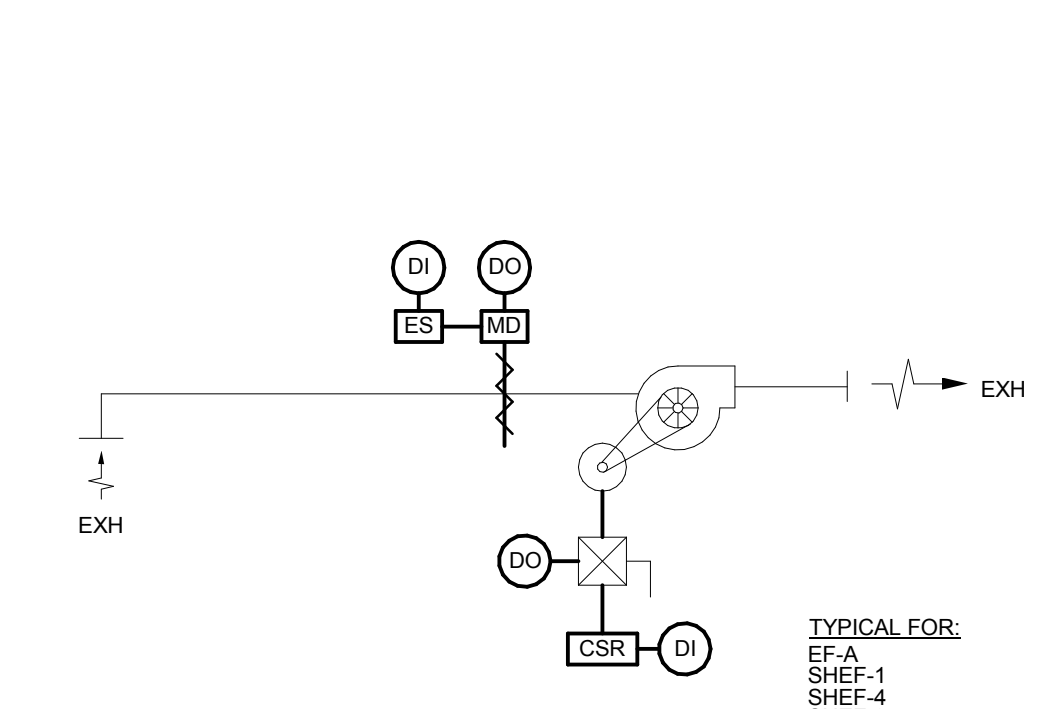
1 VAV CONTROL DIAGRAM-OCCUPANCY SENSOR
N.T.S.



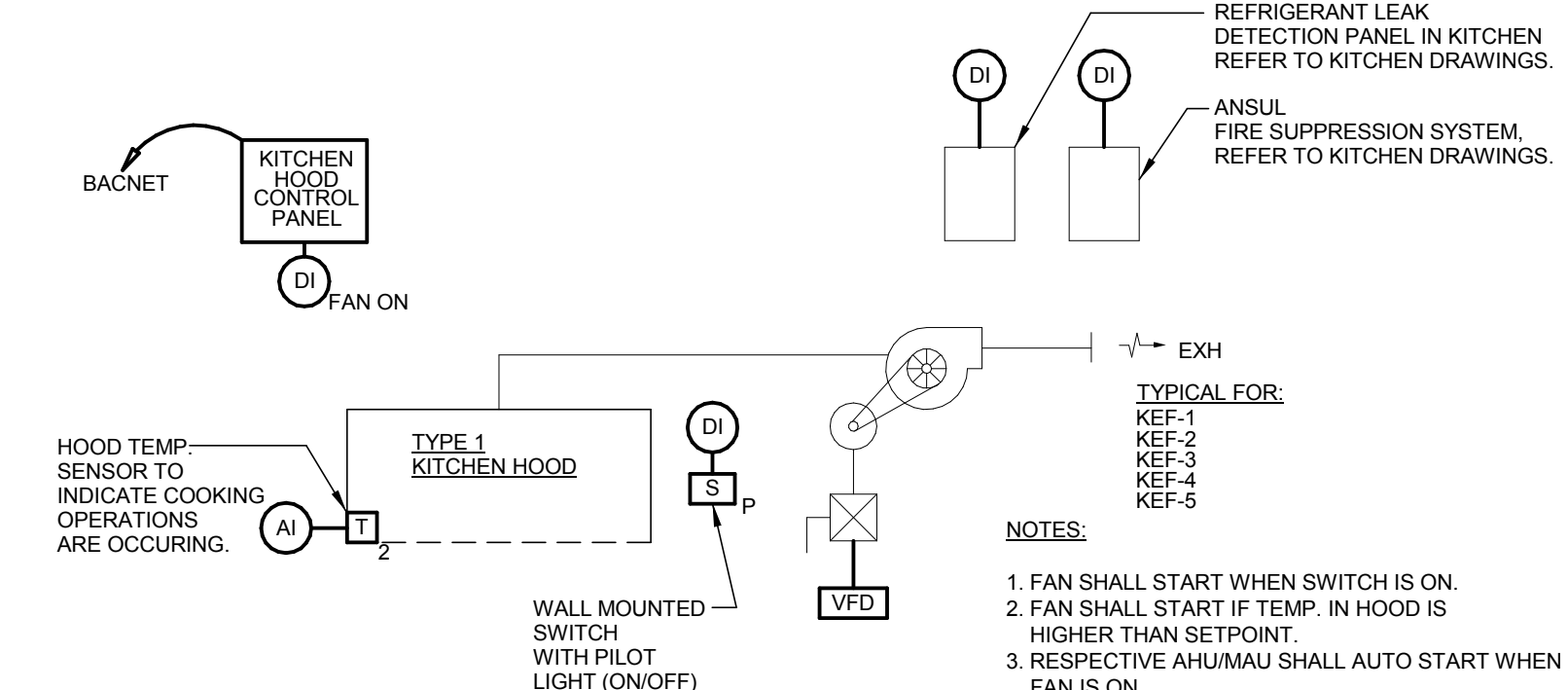
2 VAV CONTROL DIAGRAM
N.T.S.



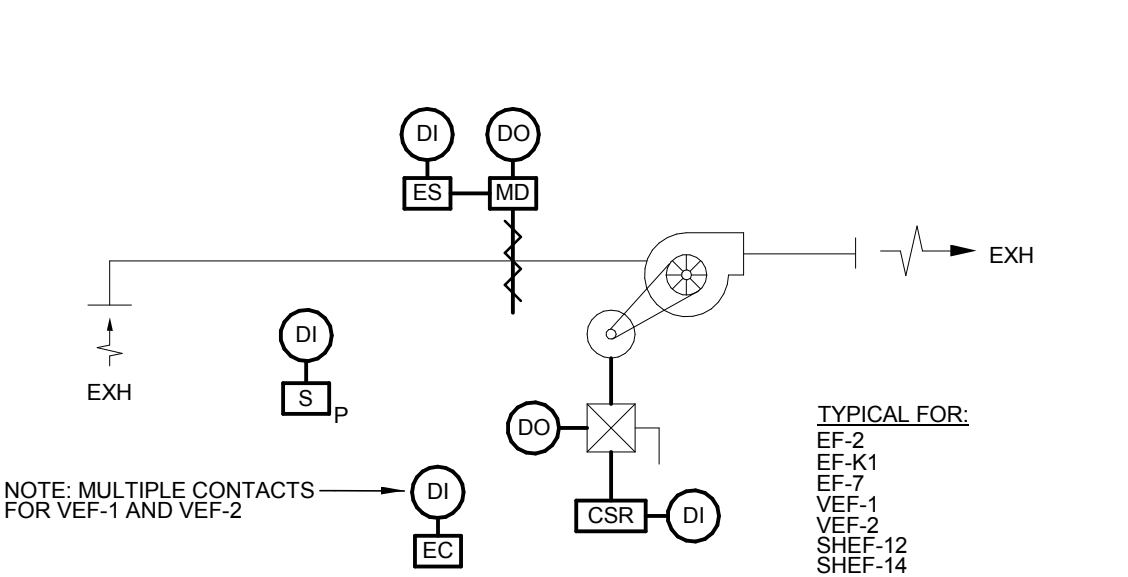
3 VAV CONTROL DIAGRAM
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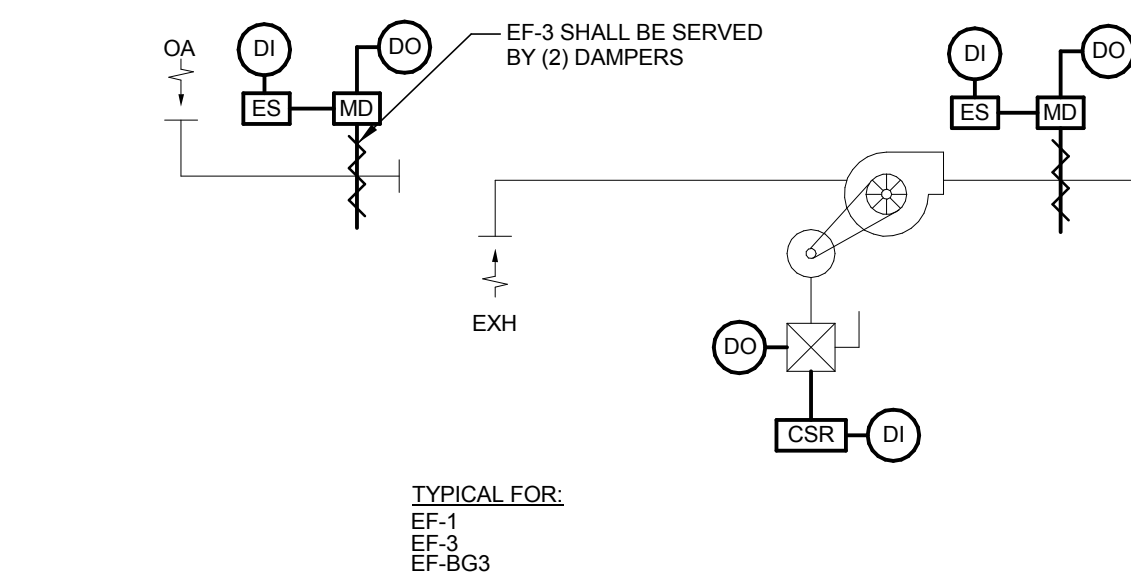
4 FAN CONTROL DIAGRAM - TIME OF DAY
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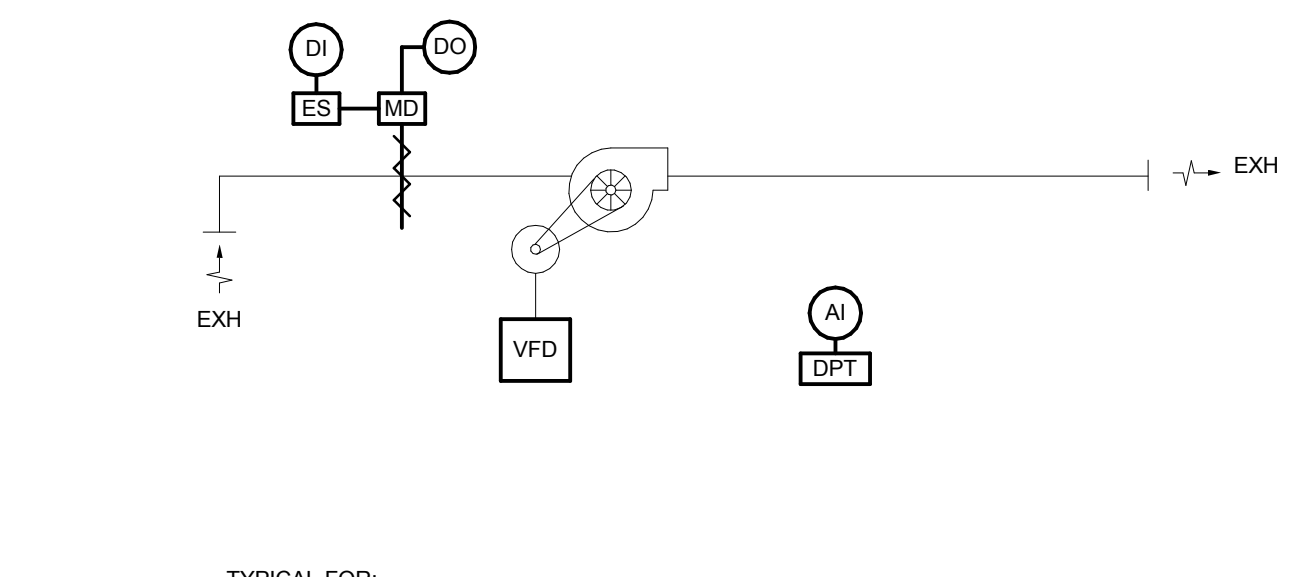
5 KITCHEN HOOD CONTROL DIAGRAM
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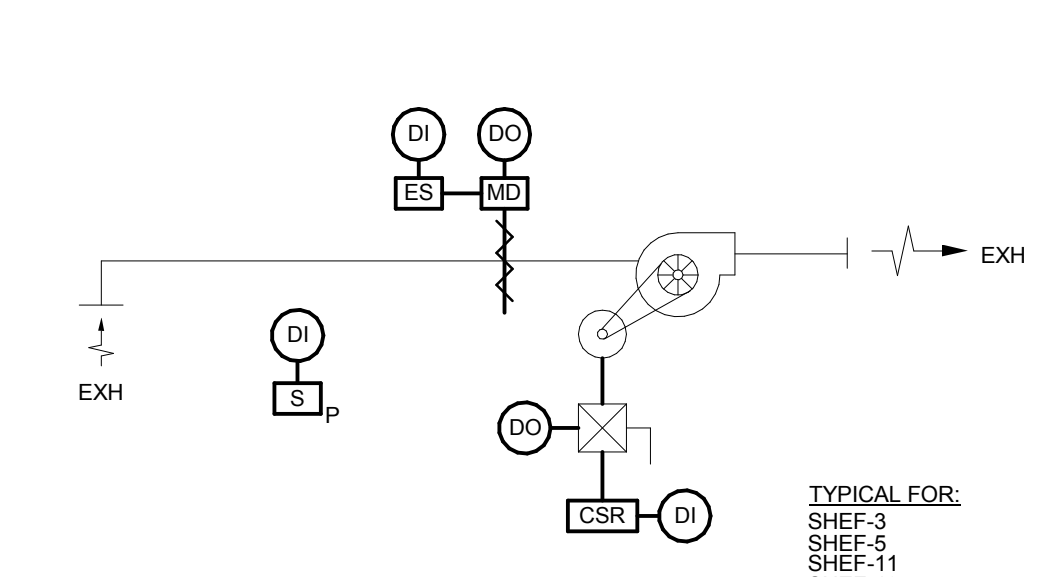
6 FAN CONTROL DIAGRAM - SWITCH/EQUIP. CONTACT
N.T.S.



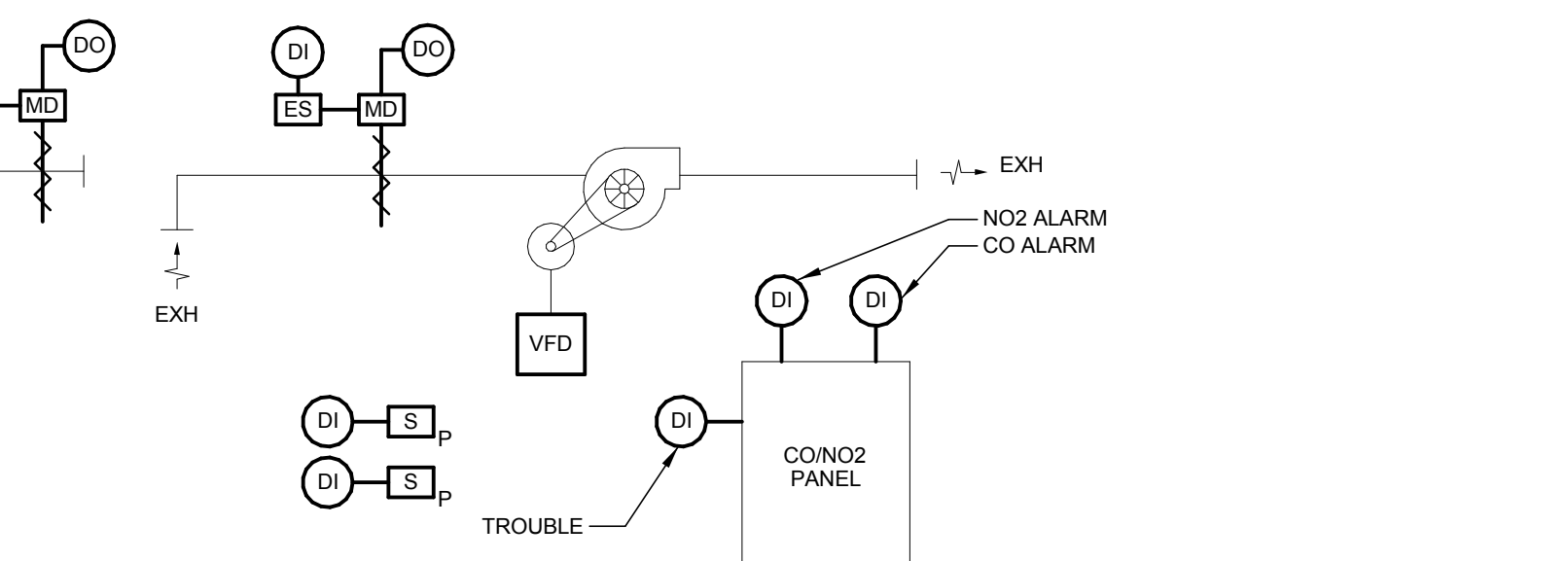
7 FAN CONTROL DIAGRAM - TEMP/SWITCH CONTROL
N.T.S.



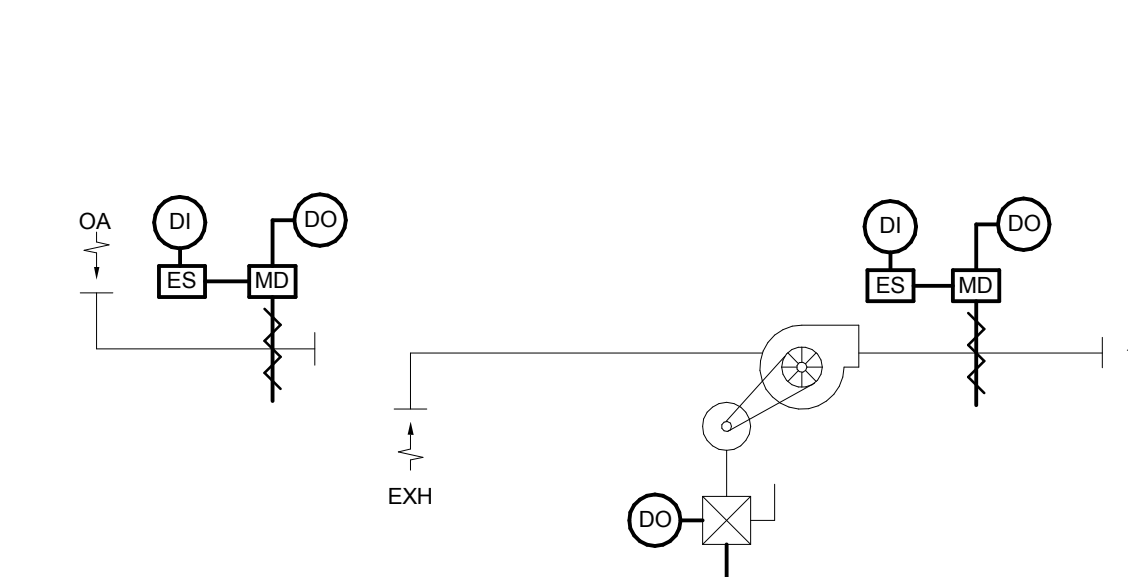
8 FAN CONTROL DIAGRAM - LEF-3
N.T.S.



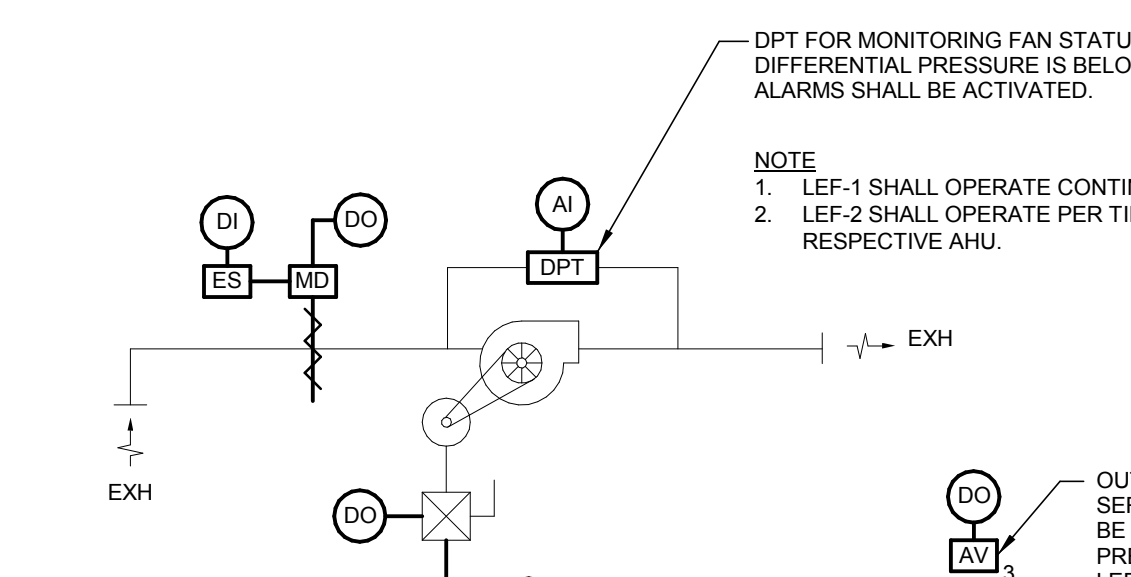
9 FAN CONTROL DIAGRAM - SWITCH OPERATED
N.T.S.



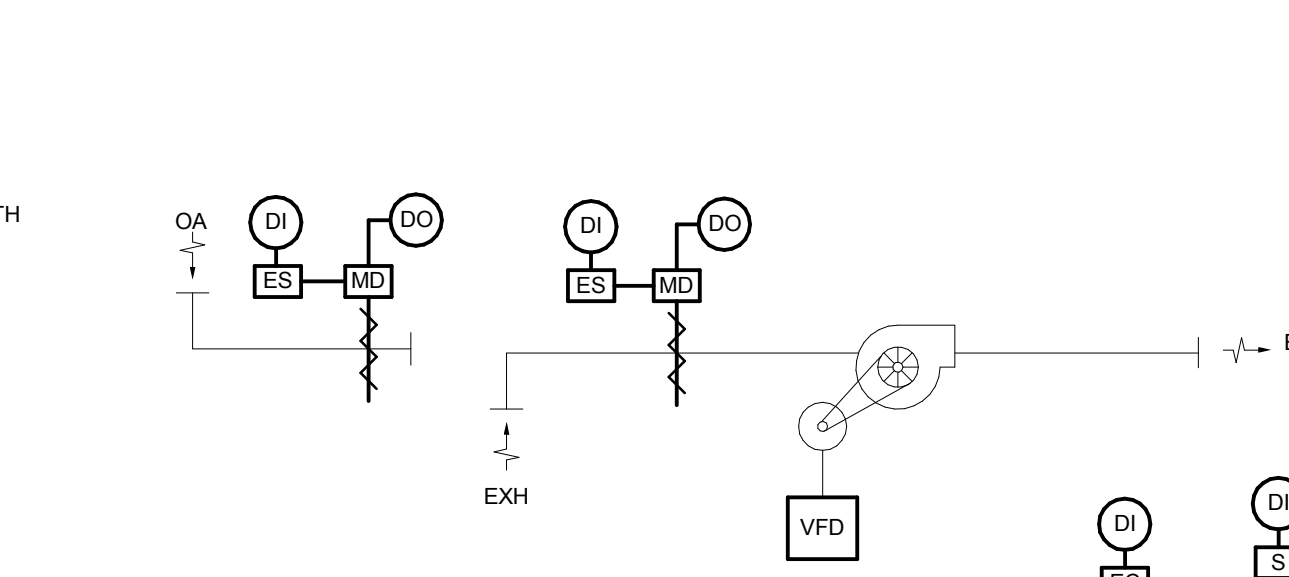
10 EF-BG1 AND EF-BG2 FAN CONTROL DIAGRAM
N.T.S.



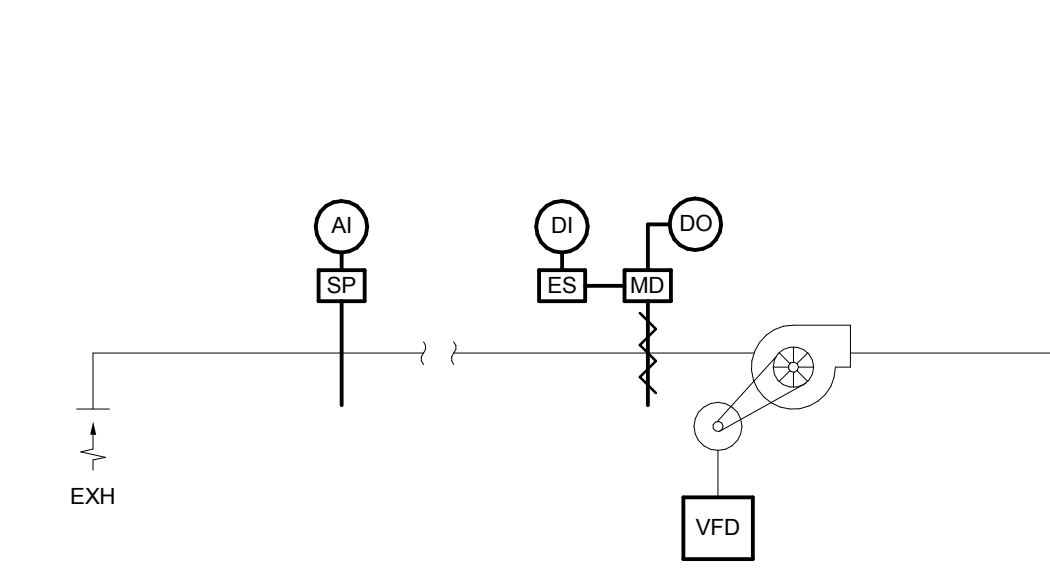
11 FAN CONTROL DIAGRAM - TEMPERATURE CONTROL
N.T.S.



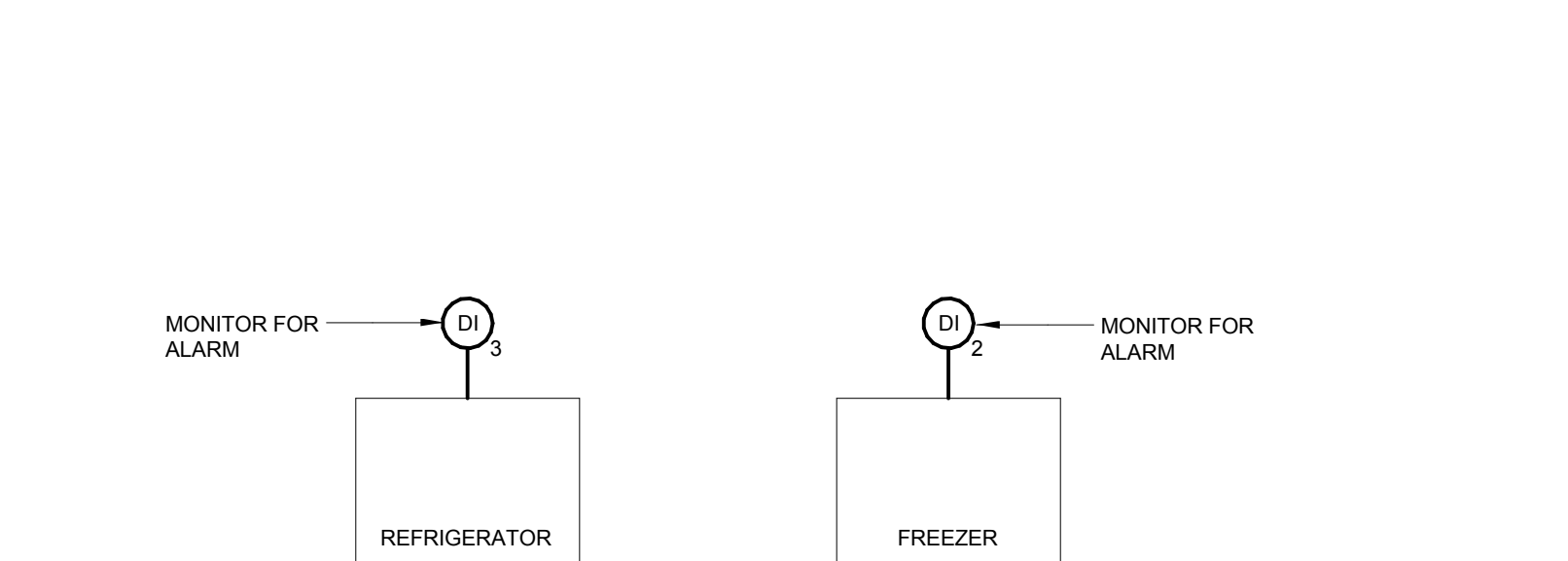
12 FAN CONTROL DIAGRAM - LAB EXHAUST FAN
N.T.S.



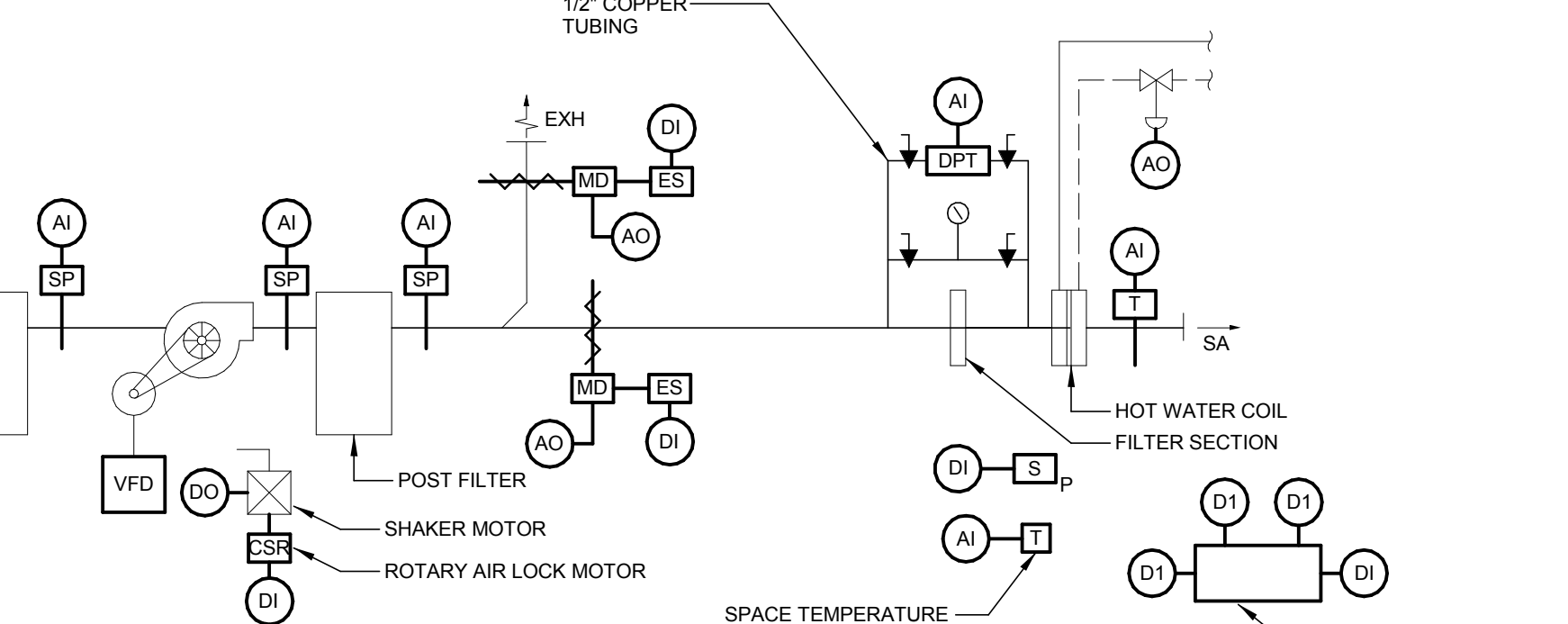
13 FAN CONTROL DIAGRAM - SPRAY BOOTHS
N.T.S.



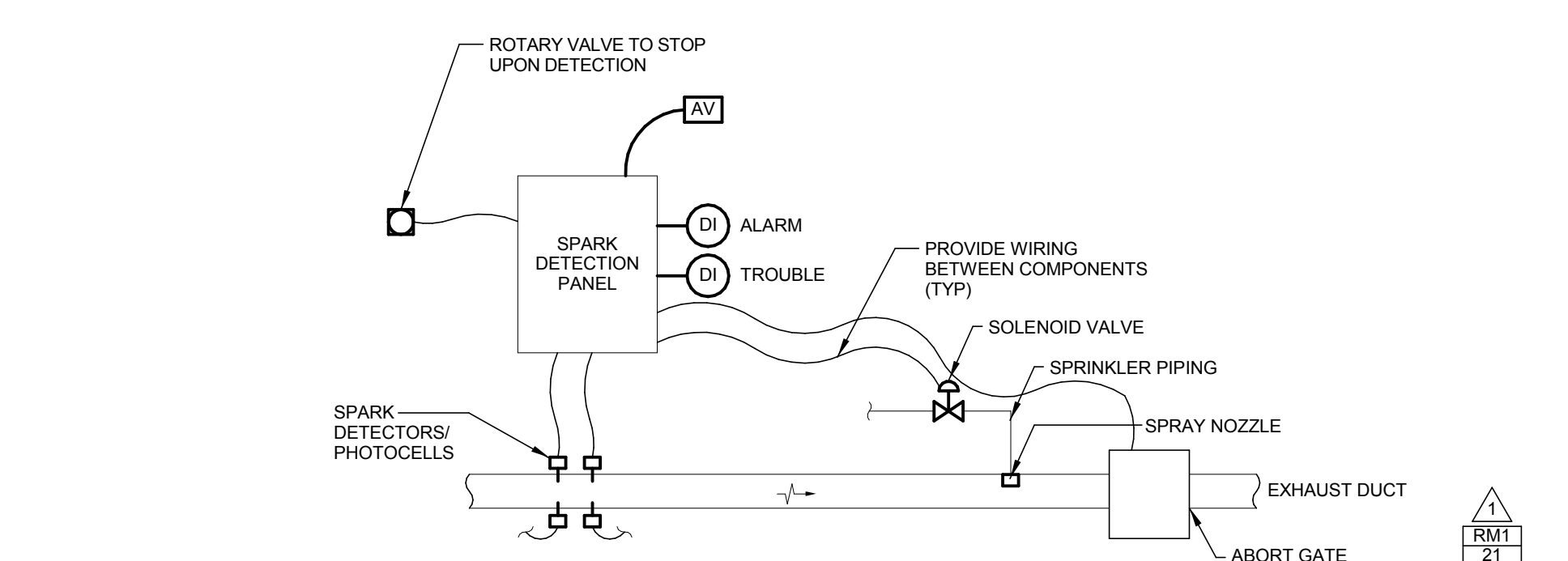
14 FAN CONTROL DIAGRAM - VARIABLE FLOW CONTROL
N.T.S.



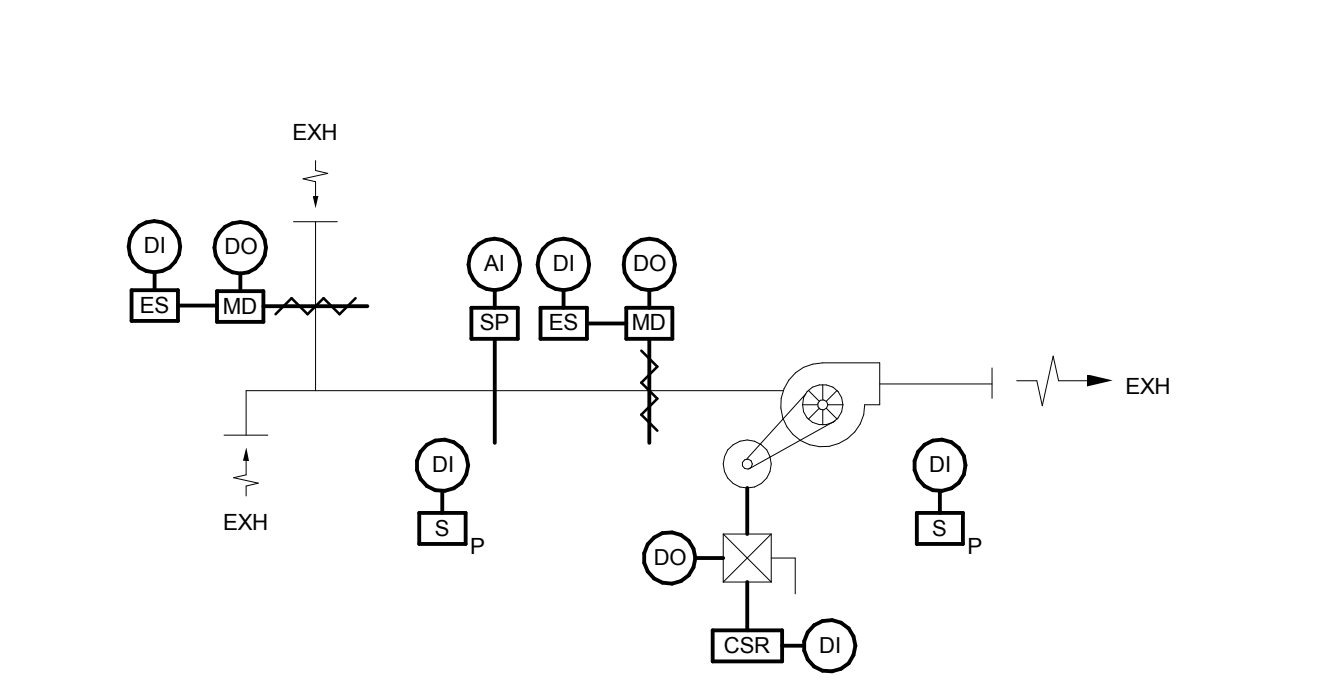
15 KITCHEN EQUIPMENT ALARMS
N.T.S.



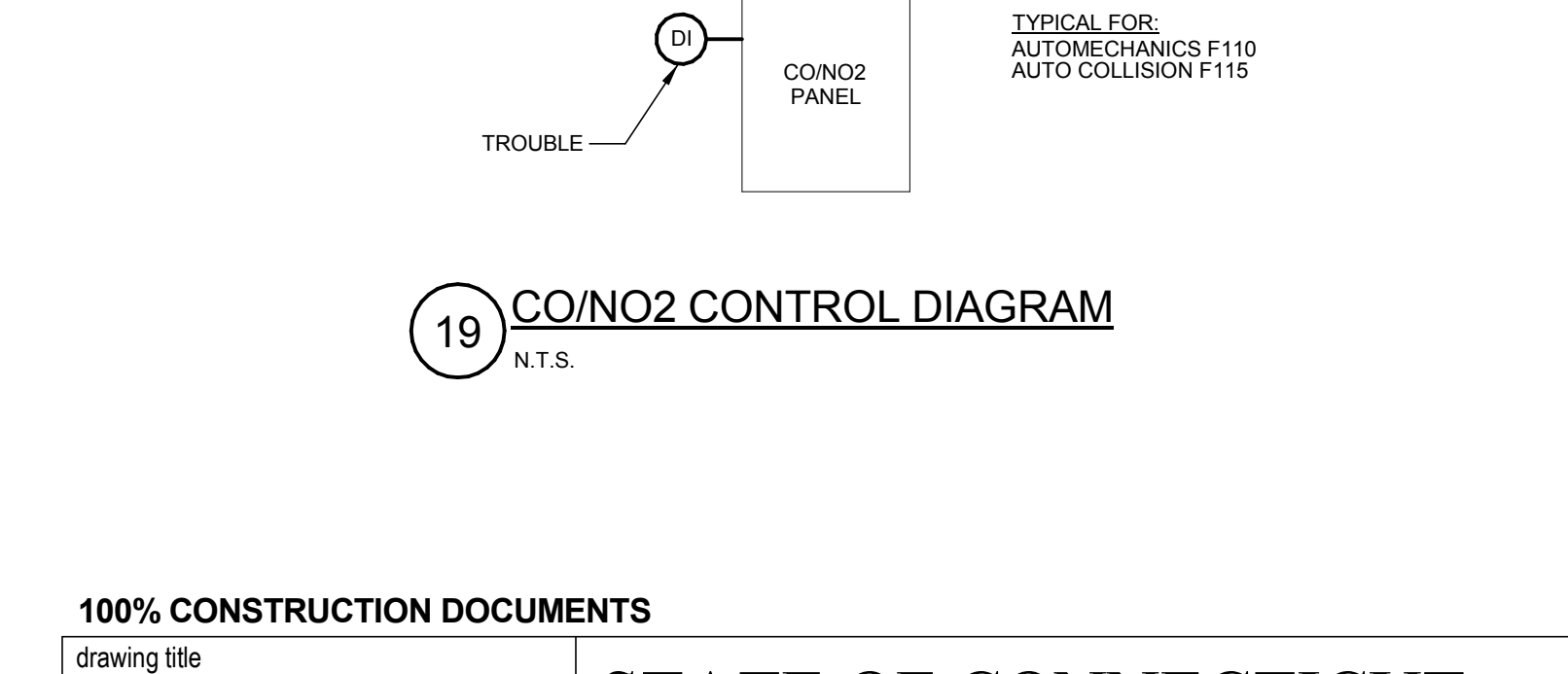
16 DUST COLLECTION DC-1 AND DC-2 CONTROL DIAGRAM
N.T.S.



17 DC-1 & DC-2 SPARK DETECTION/EXTINGUISHING CONTROL DIAGRAM
N.T.S.



18 SHEF-4 CONTROL DIAGRAM - SWITCH OPERATED
N.T.S.

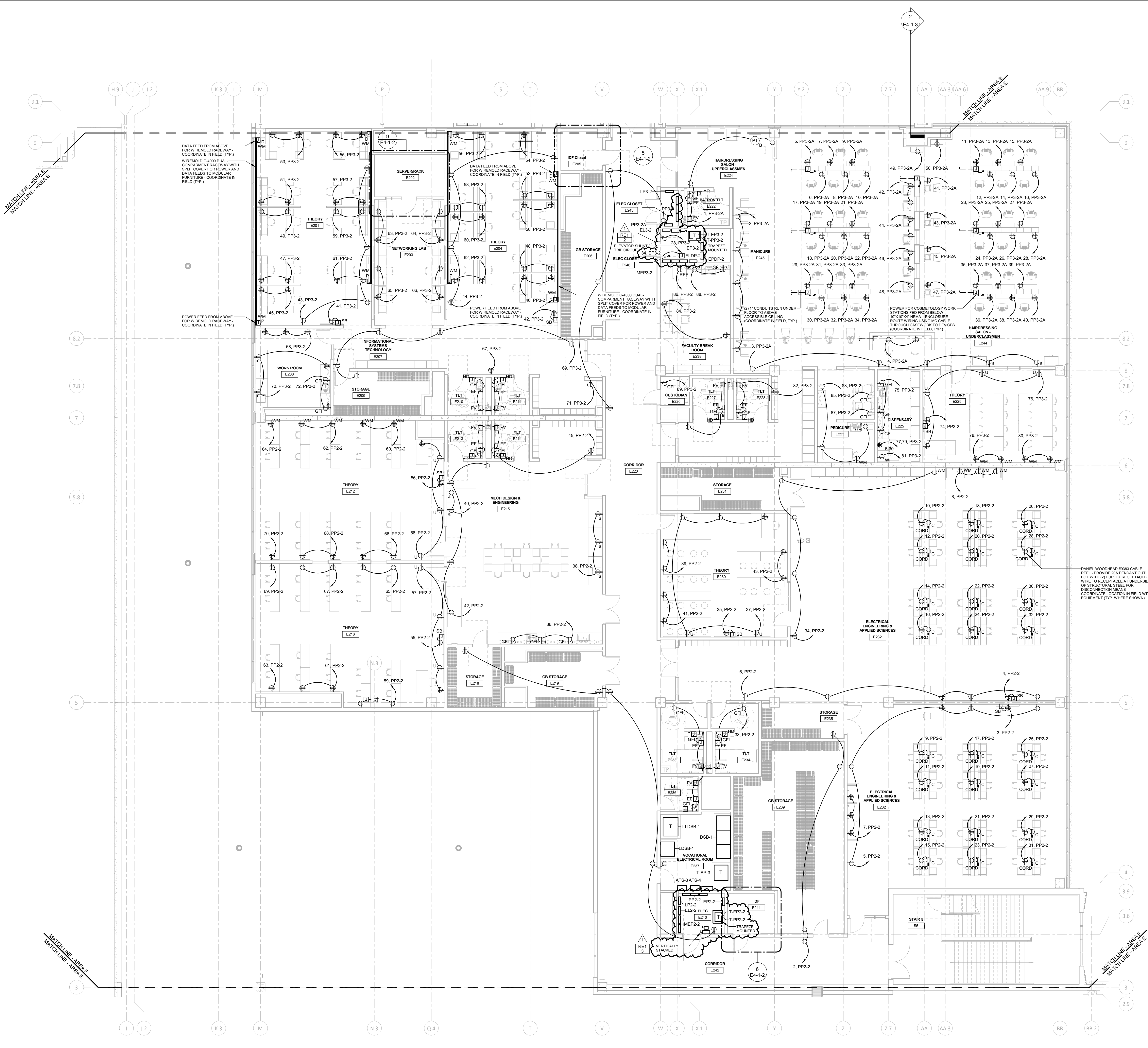


19 CO/NO2 CONTROL DIAGRAM
N.T.S.

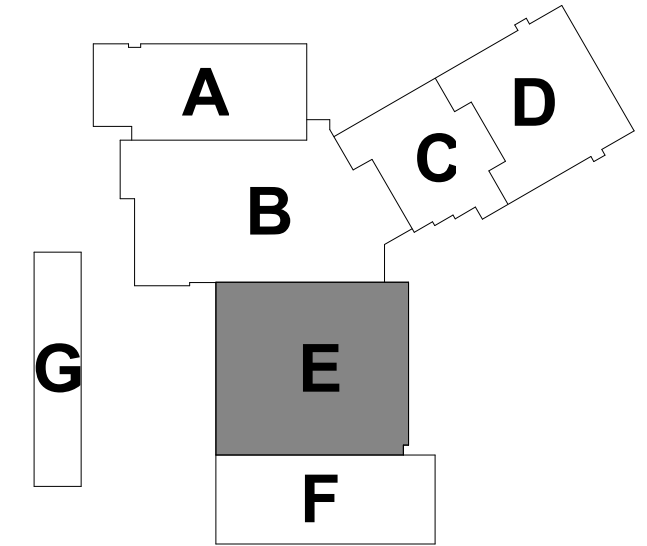
100% CONSTRUCTION DOCUMENTS			STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES	
drawing title MECHANICAL CONTROLS			drawing prepared by Consulting Engineering Services, Inc. 811 Middle St., Middletown, CT 06457	
date 07/23/2019			date 05/24/2019	
description ADDENDUM #1			scale 1/8" = 1'-0"	
project ADDITIONS AND RENOVATIONS PLATT TECHNICAL HIGH SCHOOL 600 Orange Avenue Middletown, CT 06461			author MS-1-4	
CAD no. DCS project no. BIRT-076 CM-R			approved by OSGCR project no. 900-0113	

GENERAL NOTES - ELECTRICAL POWER

1. ALL CIRCUITS SHALL BE #12, #10G, 3/4" C. TO NEW 20A-1P CIRCUIT BREAKER IN PANEL INDICATED UNLESS NOTED OTHERWISE.
2. ALL 120VAC BRANCH CIRCUITS EXCEEDING 150' IN LENGTH SHALL BE #10, #10G, 3/4" C. UNLESS NOTED OTHERWISE.
3. ALL DEVICES SHALL BE LABELED WITH SOURCE PANEL AND CIRCUIT NUMBER(S).
4. REFER TO ARCHITECTS REFLECTED CEILING PLAN FOR EXACT LOCATION OF CEILING MOUNTED ELECTRICAL DEVICES.
5. REFER TO DRAWING ES-1.1 FOR ELECTRICAL SYMBOLS, LEGENDS, AND ABBREVIATIONS.
6. REFER TO DRAWING ES-1.2 FOR MOTOR CIRCUIT SCHEDULE.
7. ALL RECEPTACLES LOCATED WITHIN 6' OF A SOURCE OF WATER SHALL BE GFCI TYPE.
8. ALL RECEPTACLE BRANCH CIRCUIT HOMERUNS SERVING A SPACE SHALL BE IN CONDUIT. REFER TO SPECIFICATIONS FOR ALLOWABLE USE OF MC CABLE.
9. ALL PANELBOARD FEEDERS SHALL BE IN CONDUIT.
10. IN ALL LOCATIONS WHERE AN ELECTRICAL DEVICE IS MOUNTED ON A PRECAST WALL, PROVIDE BACKBOXES, CONDUIT, CONCEALED WIRING AND TERMINATIONS WITHIN PRECAST CONCRETE PANELS. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
11. IN ALL LOCATIONS WHERE AN ELECTRICAL DEVICE IS MOUNTED ON AN ALUMINUM STORE FRONT, PROVIDE BACKBOXES, CONDUIT, CONCEALED WIRING AND TERMINATIONS WITHIN STORE FRONT. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.



DANIEL WOODHEAD #8083 CABLE REEL - PROVIDE 2X RENDANT OUTLET BOX WITH (2) DUPLEX RECEPTACLES WIRE TO RECEPTACLE AT UNDERSIDE OF STRUCTURAL STEEL FOR DISCONNECTION MEANS. COORDINATE LOCATION IN FIELD WITH EQUIPMENT (TYP. WHERE SHOWN)



1 SECOND FLOOR ELECTRICAL POWER PLAN - AREA E
1/8" = 1'-0"

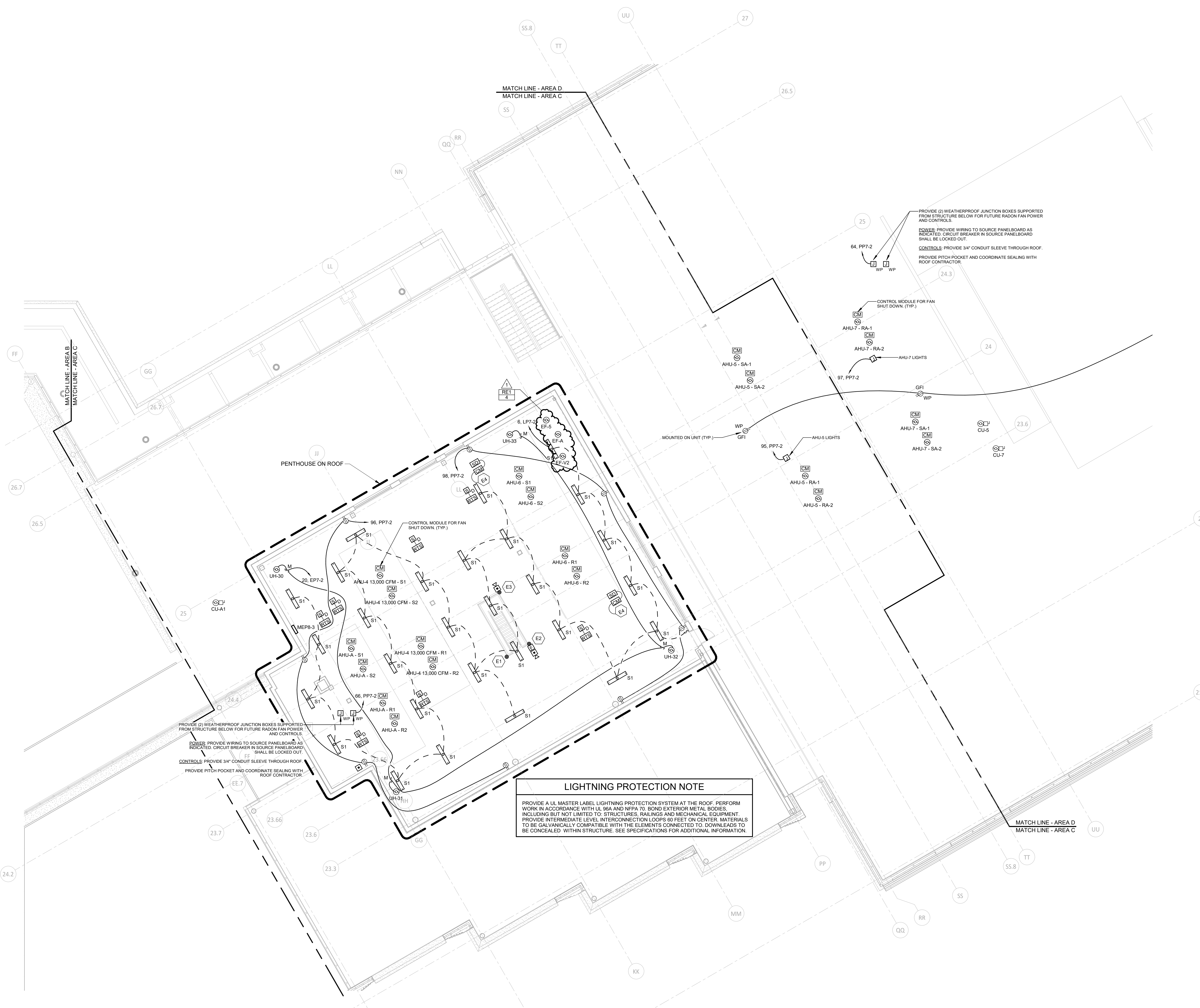
100% CONSTRUCTION DOCUMENTS			drawing title	
SECOND FLOOR ELECTRICAL POWER PLAN AREA E			STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES	
drawing title			date	
SECOND FLOOR ELECTRICAL POWER PLAN AREA E			05/24/2019	
drawing prepared by			scale	
Consulting Engineering Services, Inc. 811 Middle St., Middletown, CT 06457			As Indicated	
drawing date			drawn by	
07/23/2019			vsm	
drawing description			approved by	
ADDENDUM #1			esm	
project			drawing no.	
ADDITIONS AND RENOVATIONS PLATT TECHNICAL HIGH SCHOOL 600 Orange Avenue Middletown, CT 06461			E2-1-2E	
CAD no.		DCS project no.	OS/GR project no.	
		BLRT-076 CM-R	990-0013	

GENERAL NOTES - ELECTRICAL POWER

- ALL CIRCUITS SHALL BE 2#12,#12G, 3/4", TO NEW 20A-1P CIRCUIT BREAKER IN PANEL INDICATED UNLESS NOTED OTHERWISE.
- ALL 120 AND 277 VAC BRANCH CIRCUITS EXCEEDING 150' IN LENGTH SHALL BE 2#10,#10G, 3/4". UNLESS NOTED OTHERWISE.
- ALL DEVICES SHALL BE LABELED WITH SOURCE PANEL AND CIRCUIT NUMBER(S).
- REFER TO ARCHITECTS REFLECTED CEILING PLAN FOR EXACT LOCATION OF CEILING MOUNTED ELECTRICAL DEVICES.
- REFER TO DRAWING ES-1-1 FOR ELECTRICAL SYMBOLS, LEGENDS, AND ABBREVIATIONS.
- REFER TO DRAWING ES-1-2 FOR MOTOR CIRCUIT SCHEDULE.
- ALL RECEPTACLES LOCATED WITHIN 6' OF A SOURCE OF WATER SHALL BE GFCI TYPE.
- ALL RECEPTACLE BRANCH CIRCUIT HOMERUNS SERVING A SPACE SHALL BE IN CONDUIT. REFER TO SPECIFICATIONS FOR ALLOWABLE USE OF MC CABLE.
- ALL PANELBOARD FEEDERS SHALL BE IN CONDUIT.
- REFER TO SPECIFICATION SECTION 26 5100, APPENDIX A FOR THE LIGHT FIXTURE SCHEDULE.
- REFER TO DRAWINGS EB-1-3, EB-1-4, AND EB-1-5 FOR LIGHTING CONTROL DETAILS.
- EXIT SIGNS SHALL BE WIRED TO LINE SIDE OF LOCAL LIGHTING BRANCH CIRCUIT, AHEAD OF ALL SWITCHING DEVICES.
- PROVIDE FIRE STOPPING AND SMOKE BARRIER SEALING OF ALL PENETRATIONS THROUGH FIRE WALLS OR SMOKE BARRIERS AS REQUIRED. REFER TO ARCHITECTURAL FLOOR PLANS AND CODE SHEETS FOR WALLS.
- MC CABLE WHIPS SHALL BE ALLOWED FOR FINAL CONNECTIONS TO LIGHTING FIXTURES ABOVE ACCESSIBLE CEILINGS. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION REGARDING USE OF MC CABLE.
- MINIMUM MOUNTING HEIGHT OF LIGHTING FIXTURES IN PENTHOUSE SPACE TO BE 6'-6" AFF. COORDINATE MOUNTING HEIGHTS WITH EQUIPMENT IN ROOM SUCH THAT LIGHTING IS NOT OBSTRUCTED BY DUCTWORK, PIPING AND CONDUIT.

ELECTRICAL KEY NOTES

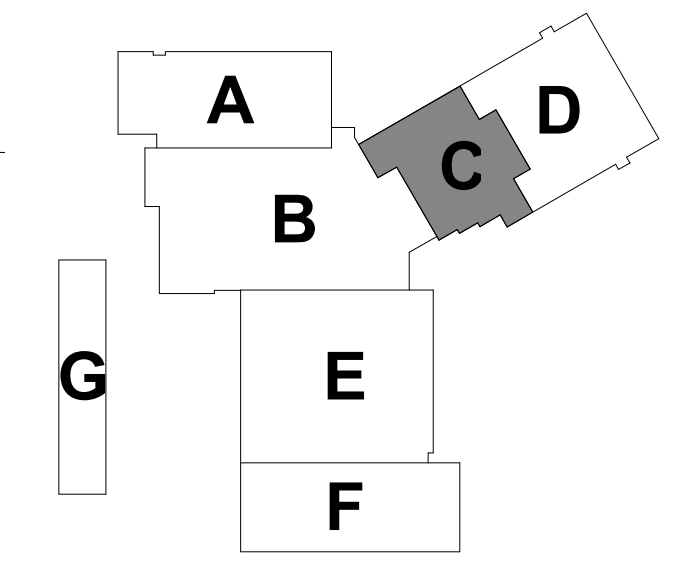
- E1 PROVIDE 3" RMC POST WITH CAP ON TOP, CLAMPED TO RAILING. STRAP BOX FOR LIGHT SWITCH TO POST WITH STAINLESS STEEL BAND @ 3'-6" AFF.
- E2 PROVIDE 3" RMC POST WITH CAP ON TOP, CLAMPED TO RAILING. STRAP BOX FOR FIRE ALARM PULL STATION TO POST WITH STAINLESS STEEL BAND @ 4'-0" AFF AND ANOTHER BOX STRAPPED AT 6'-6" AFF FOR HORN STROBE.
- E3 PROVIDE 3" RMC POST WITH CAP ON TOP, CLAMPED TO RAILING. STRAP BOX FOR HORN STROBE TO POST WITH STAINLESS STEEL BAND @ 6'-6" AFF.
- E4 SMOKE DAMPER AND ASSOCIATED CONTROL MODULE. REFER TO DETAIL 7/E6-1-1 FOR ADDITIONAL INFORMATION.



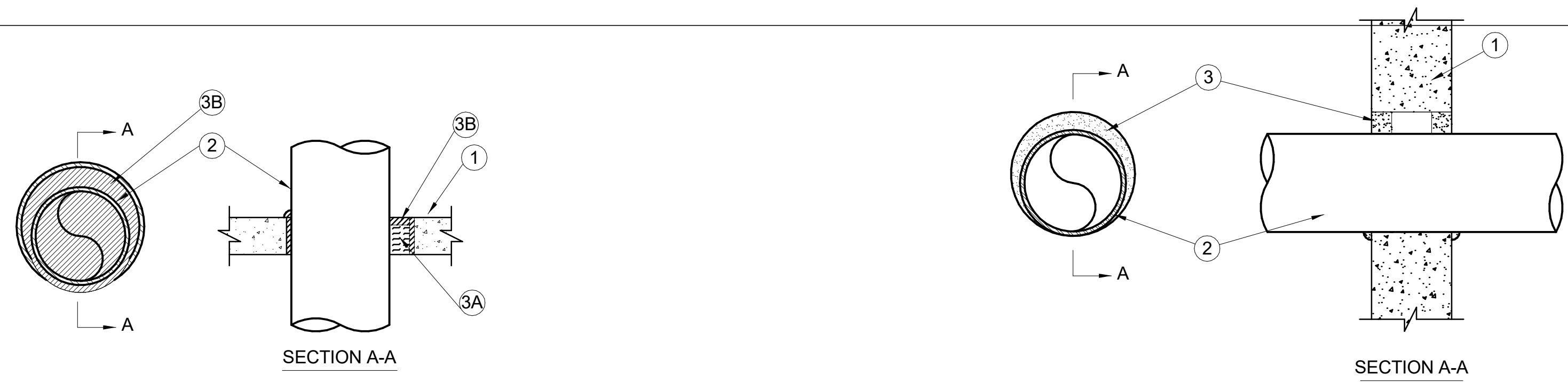
LIGHTNING PROTECTION NOTE

PROVIDE A UL MASTER LABEL LIGHTNING PROTECTION SYSTEM AT THE ROOF. PERFORM WORK IN ACCORDANCE WITH UL 96A AND NFPA 70. BOND EXTERIOR METAL BODIES INCLUDING BUT NOT LIMITED TO STRUCTURES, RAILINGS AND MECHANICAL EQUIPMENT. PROVIDE INTERMEDIATE LEVEL INTERCONNECTION LOOPS 80 FEET ON CENTER. MATERIALS TO BE GALVANICALLY COMPATIBLE WITH THE ELEMENTS CONNECTED TO. DOWNLEADS TO BE CONCEALED WITHIN STRUCTURE. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

1 ROOF ELECTRICAL POWER AND PENTHOUSE ELECTRICAL POWER, LIGHTING AND SYSTEMS PLAN - AREA C
1/8" = 1'-0"



100% CONSTRUCTION DOCUMENTS			
drawing title		STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES	
ROOF ELEC. POWER AND PENTHOUSE ELEC. POWER AND LIGHTING PLANS AREA C		Consulting Engineering Services, Inc. 811 Middle St., Middletown, CT 06457	
drawing prepared by		date	
Consulting Engineering Services, Inc.		05/24/2019	
811 Middle St., Middletown, CT 06457		scale	
		As Indicated	
drawn by		date	
vsm		07/23/2019	
project		ADDENDUM #1	
ADDITIONS AND RENOVATIONS PLATT TECHNICAL HIGH SCHOOL 600 Orange Avenue Middletown, CT 06461		approved by	
CAD no.		msm	
DCS project no. B1-R7-076 CM-R		drawing no.	
OS/GR project no. 990-0013		E2-2-1C	

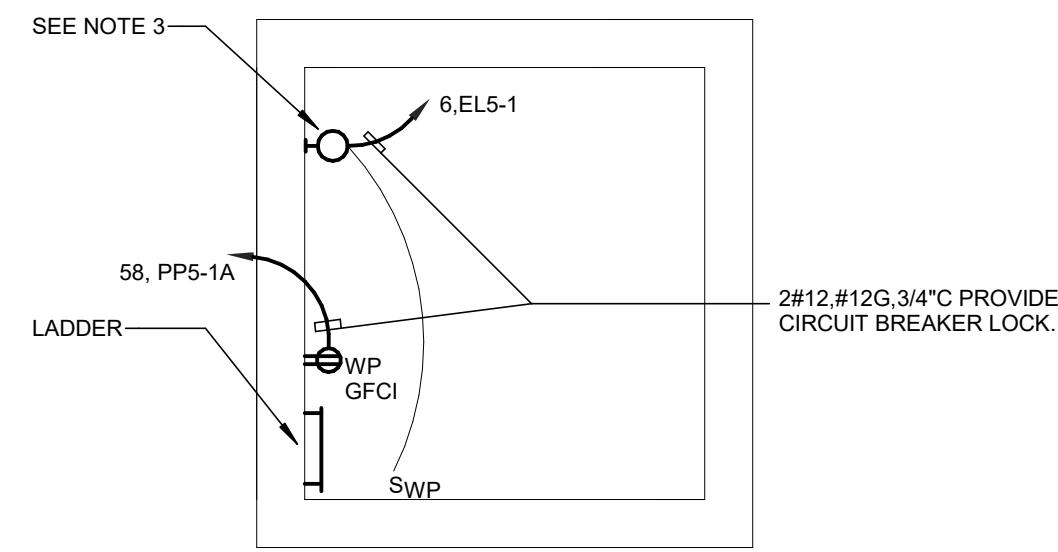


- FLOOR ASSEMBLY — MIN 2-1/2 IN. THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. MAX DIAMETER OF OPENING IS 31-7/8 IN.
- THROUGH PENETRANTS — ONE METALLIC PIPE, CONDUIT OR TUBING TO BE INSTALLED CONCENTRICALLY WITHIN THE FIRESTOP DEVICE. PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR ASSEMBLY.
- FIRESTOP SYSTEM — THE FIRESTOP SYSTEM SHALL CONSIST OF THE FOLLOWING:
 - PACKING MATERIAL — MIN 2 IN THICKNESS OF MIN 4 PCF MINERAL WOOL BATT INSULATION TIGHTLY PACKED INTO THE OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL.
 - FILL, VOID OR CAVITY MATERIALS* — SEALANT — MIN 1/2 IN. THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS. FLUSH WITH TOP SURFACE OF FLOOR. AT POINT CONTACT, A MIN 1/2 IN. DIAM BEAD OF FILL MATERIAL SHALL BE APPLIED AT THE CONCRETE/SLEEVE/PIPE INTERFACE ON TOP SURFACE OF FLOOR.

SEALANT: FS-ONE SEALANT
*BEARING THE UL CLASSIFICATION MARK

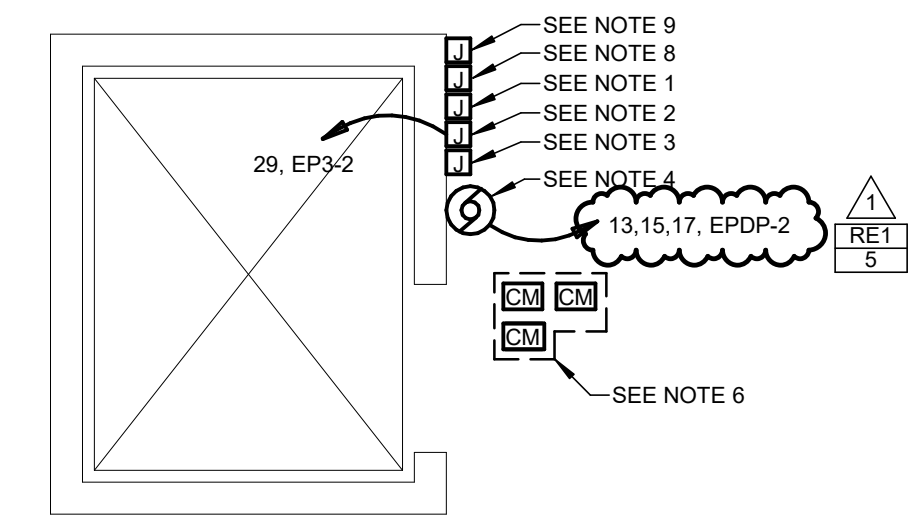
- WALL ASSEMBLY - MIN 3-3/4 IN. AND 5 IN THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS.
- THROUGH PENETRANTS - ONE METALLIC PIPE, CONDUIT OR TUBING TO BE CENTERED WITHIN THE FIRESTOP SYSTEM. PIPE MAY BE INSTALLED WITH CONTINUOUS POINT CONTACT. PIPE, CONDUIT OR TUBE MAY BE INSTALLED AT AN ANGLE NOT GREATER THAN 45 DEGREES FROM PERPENDICULAR. PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY.
- FILL, VOID OR CAVITY MATERIAL* - MIN 5/8 IN. THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS. FLUSH WITH BOTH SURFACES OF WALL. AT THE POINT OR CONTINUOUS CONTACT LOCATIONS BETWEEN PIPE AND WALL, A MIN 1/2 IN. DIAM BEAD OF FILL MATERIAL SHALL BE APPLIED AT THE PIPE-WALL INTERFACE ON BOTH SURFACES OF WALL.

SEALANT: FS-ONE SEALANT
*BEARING THE UL CLASSIFICATION MARK
- PROVIDE A BEAD OF NON-SHRINK, WP SILICON SEALANT AROUND EXTERIOR WALL PENETRATIONS.



DESIGN NOTES:

- REFER TO FIRE ALARM RISER AND SPECS FOR HEAT AND SMOKE DETECTOR REQUIREMENTS.
- COORDINATE LOCATION OF ALL DEVICES WITH ELEVATOR VENDOR.
- SPECTRUM LIGHTING "WJ1LW20L40KEXJG1C/CP104KOMW" WALL MOUNTED FIXTURE OR APPROVED EQUAL.
- MOUNT HEAT DETECTORS WITHIN 24" OF SPRINKLER HEADS IN PIT AND TOP OF SHAFT.



NOTES:

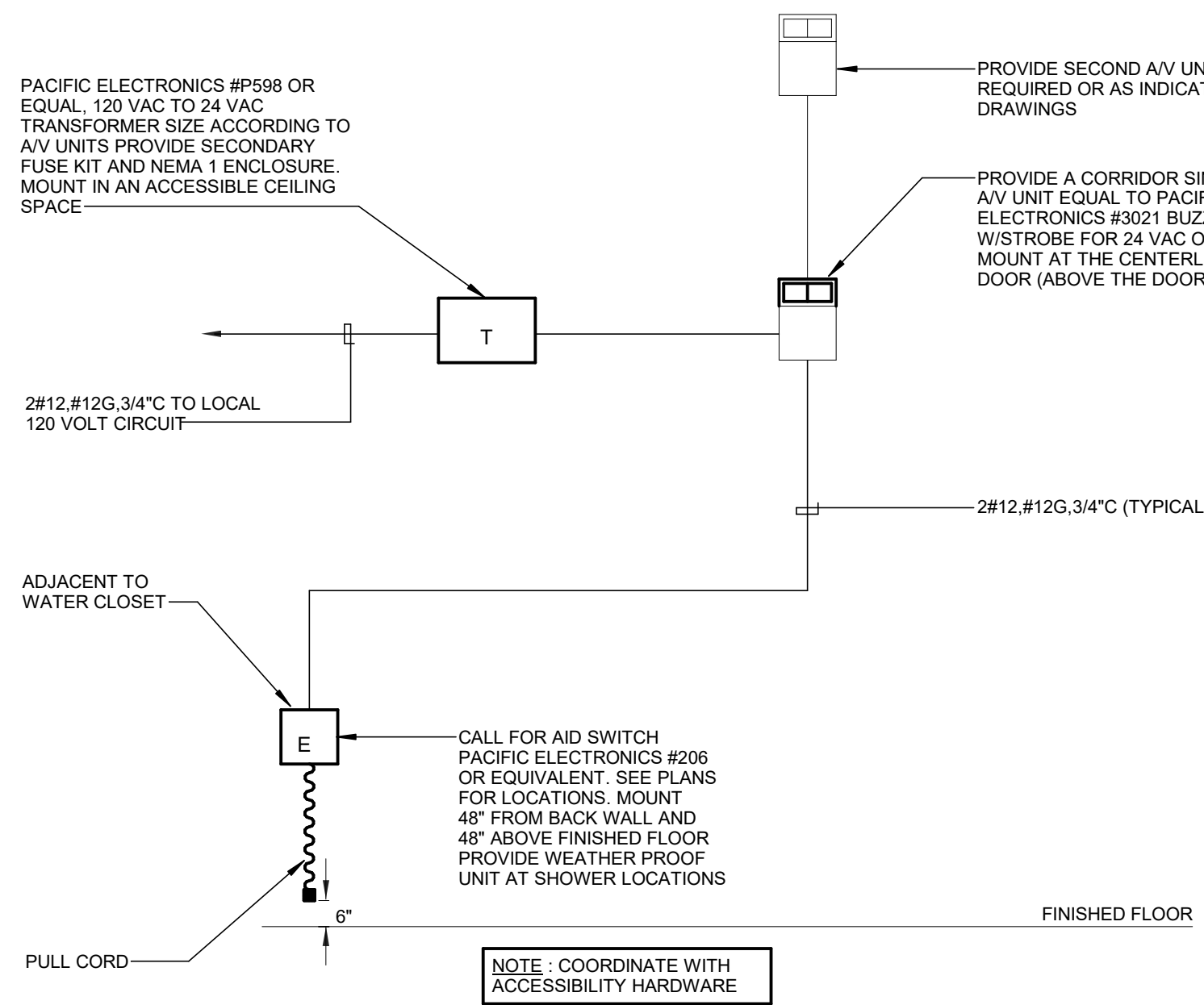
- 3/4" WITH (2) CAT 3 CABLES FOR ELEVATOR COMMUNICATION TO DF. PROVIDE 3/4" WITH WIRING TO ELEVATOR CONTROLLER. COORDINATE WIRING AND CONDUIT ENTRY TO ELEVATOR CONTROLLER CABINET WITH ELEVATOR CONTRACTOR.
- ELEVATOR CONTROLLER POWER, FROM JUNCTION BOX TO ELEVATOR CONTROLLER DISCONNECT CIRCUIT BREAKER PROVIDED WITH CONTROLLER. COORDINATE WIRING AND CONDUIT ENTRY TO ELEVATOR CONTROLLER CABINET WITH ELEVATOR CONTRACTOR.
- ELEVATOR CAB LIGHTING AND ALARM CIRCUIT. PROVIDE 2#12, #12G, 3/4" FROM JUNCTION BOX TO CAB LIGHTING AND ALARM DISCONNECT CIRCUIT BREAKER PROVIDED WITH CONTROLLER. COORDINATE WIRING & CONDUIT ENTRY TO ELEVATOR CONTROLLER CABINET WITH ELEVATOR CONTRACTOR.
- ELEVATOR CONTROLLER MOUNTED IN ELEVATOR JAMB. CONTROLLER PROVIDED WITH DISCONNECT SWITCHES. CONDUIT ENTRY PROVISIONS, COMMUNICATIONS CONTROLLER, AND CODE REQUIRED ELEVATOR CONTROLS. COORDINATE CONDUIT ENTRY, WIRING REQUIREMENTS AND ALL REQUIRED TERMINATIONS WITH THE ELEVATOR INSTALLER.
- COORDINATE LOCATION OF ALL EQUIPMENT WITH ELEVATOR CONTRACTOR.
- PROVIDE FIRE ALARM CONTROL MODULES (3) FOR ELEVATOR RECALL OPERATION.
- SEE TYPICAL FIRE ALARM SYSTEM ELEVATOR RECALL RISER DETAIL FOR ADDITIONAL INFORMATION.
- CARD READER LOCATED IN ELEVATOR CAB. TRAVELING CABLE FROM CARD READER TO CONTROLLER BY ELEVATOR CONTRACTOR. PROVIDE 3/4" CONDUIT AND JUNCTION BOX FOR CARD READER INTERCONNECTION. COORDINATE WIRING AND CONDUIT ENTRY TO ELEVATOR CONTROLLER WITH ELEVATOR CONTRACTOR.
- JUNCTION BOX FOR ATS AND ELEVATOR CIRCUIT BREAKER STATUS SIGNALS. PROVIDE 3/4" CONDUIT AND JUNCTION BOX FOR CONNECTION TO ELEVATOR CONTROLLER. COORDINATE WIRING, TERMINATIONS AND CONDUIT ENTRY WITH THE ELEVATOR CONTRACTOR.

1 TYPICAL CONDUIT FLOOR PENETRATION DETAIL N.T.S.

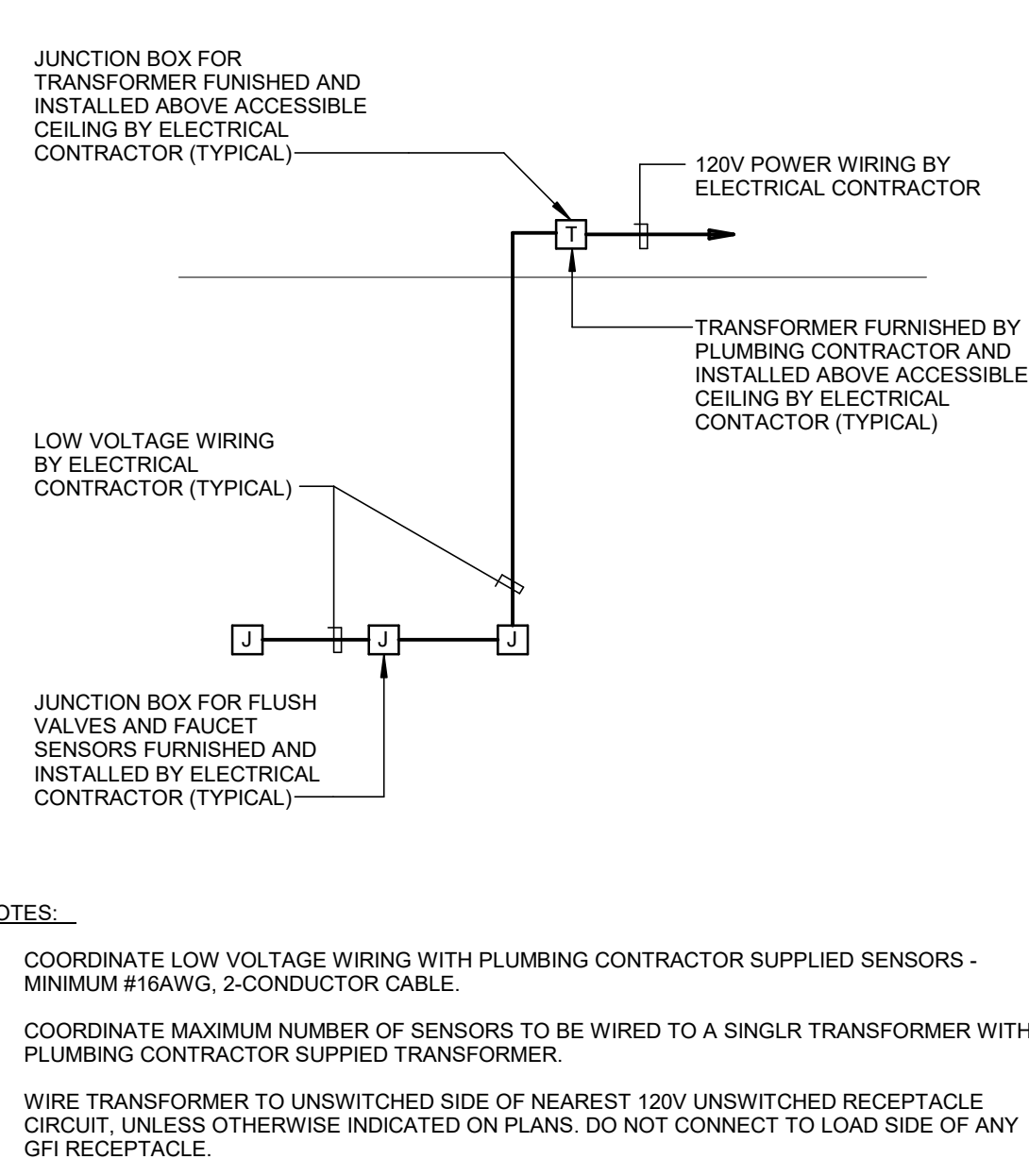
2 TYPICAL CONDUIT WALL PENETRATION DETAIL N.T.S.

3 ELEVATOR PIT DESIGN GUIDE N.T.S.

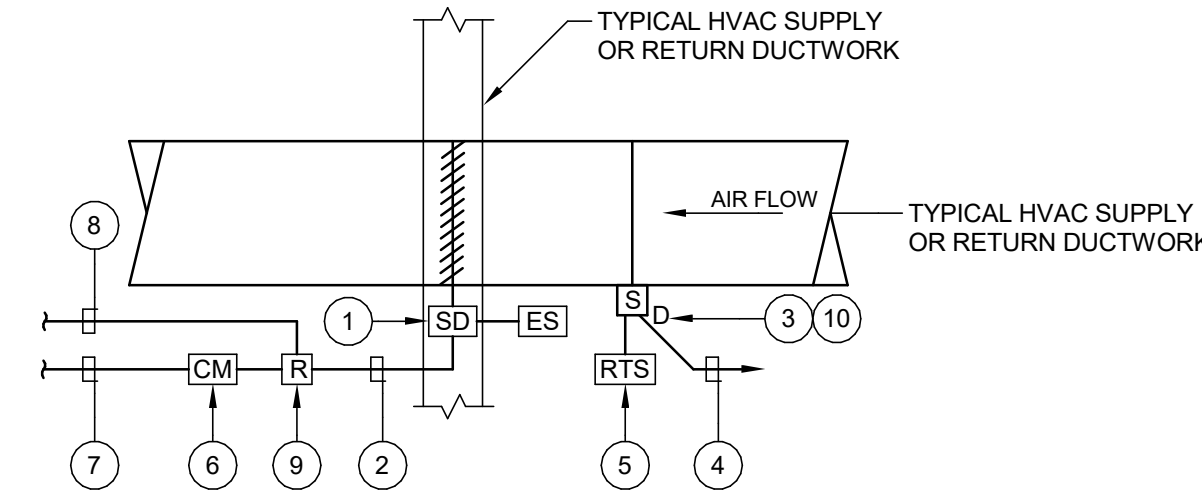
4 ELEVATOR MACHINE SPACE DETAIL N.T.S.



5 EMERGENCY CALL-FOR-AID SYSTEM SCHEMATIC N.T.S.



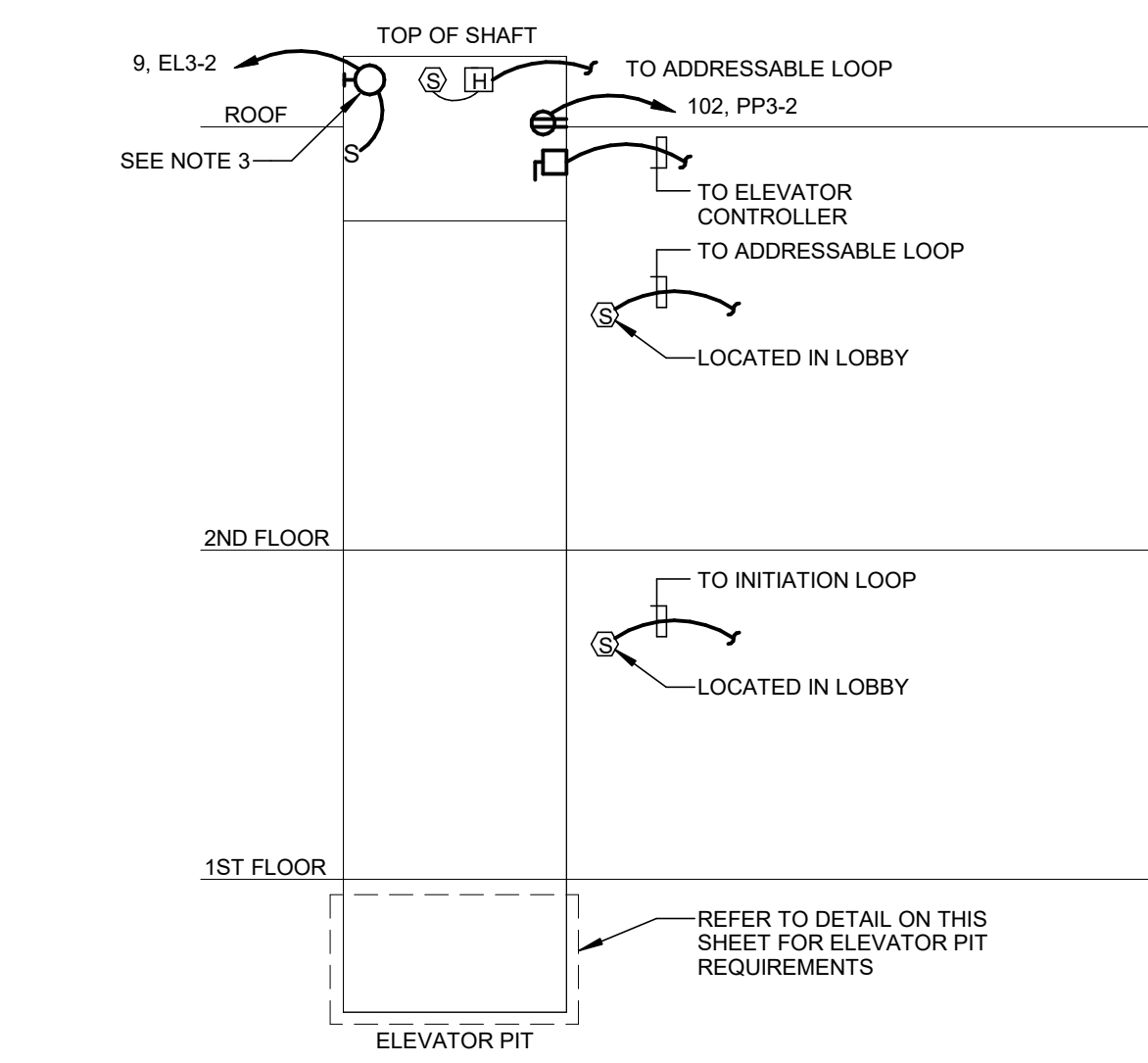
6 TYPICAL ELECTRONIC CONTROL FOR FLUSH VALVES AND SENSORS DETAIL N.T.S.



NOTES:

- DUCT SMOKE DAMPER(S) AND END SWITCH(ES) SHALL BE FURNISHED BY DIV. 23. SMOKE DAMPER WIRED BY DIV. 26. END SWITCH WIRED BY DIV. 23.
- ALL WIRING SHALL BE FURNISHED AND INSTALLED BY DIVISION 26 UNLESS OTHERWISE NOTED. ALL WIRING SHALL BE #12 THHN.
- DUCT SMOKE DETECTOR SHALL BE FURNISHED BY DIVISION 26 AND INSTALLED BY DIVISION 23. PROVIDE SAMPLING TUBE CROSSING THE ENTIRE WIDTH OF THE DUCT.
- FIRE ALARM ZONE WIRING PER MANUFACTURERS REQUIREMENTS.
- REMOTE TEST/RESET KEY SWITCH AND ASSOCIATED WIRING PROVIDED BY DIV. 26.
- FIRE ALARM CONTROL MODULE/RELAY MODULE PROVIDED BY DIV. 26. WIRED IN SERIES WITH BMS INPUT RELAY TO CLOSE DAMPER UPON ACTION.
- 2#12, #12G, 3/4" FOR DAMPER POWER FROM UNSWITCHED 120V SOURCE. SEE PLANS FOR ADDITIONAL INFORMATION.
- LOW VOLTAGE COIL CONTROL WIRING FROM BUILDING MANAGEMENT SYSTEM. WIRING BY DIV. 23.
- UL LISTED DPDT RELAY WITH LOW VOLTAGE COIL BY DIV. 26. COORDINATE COIL OPERATING VOLTAGE WITH DIV. 23.
- LOCATE DUCT SMOKE DETECTORS WITHIN 5 FT. OF THE SMOKE DAMPER.

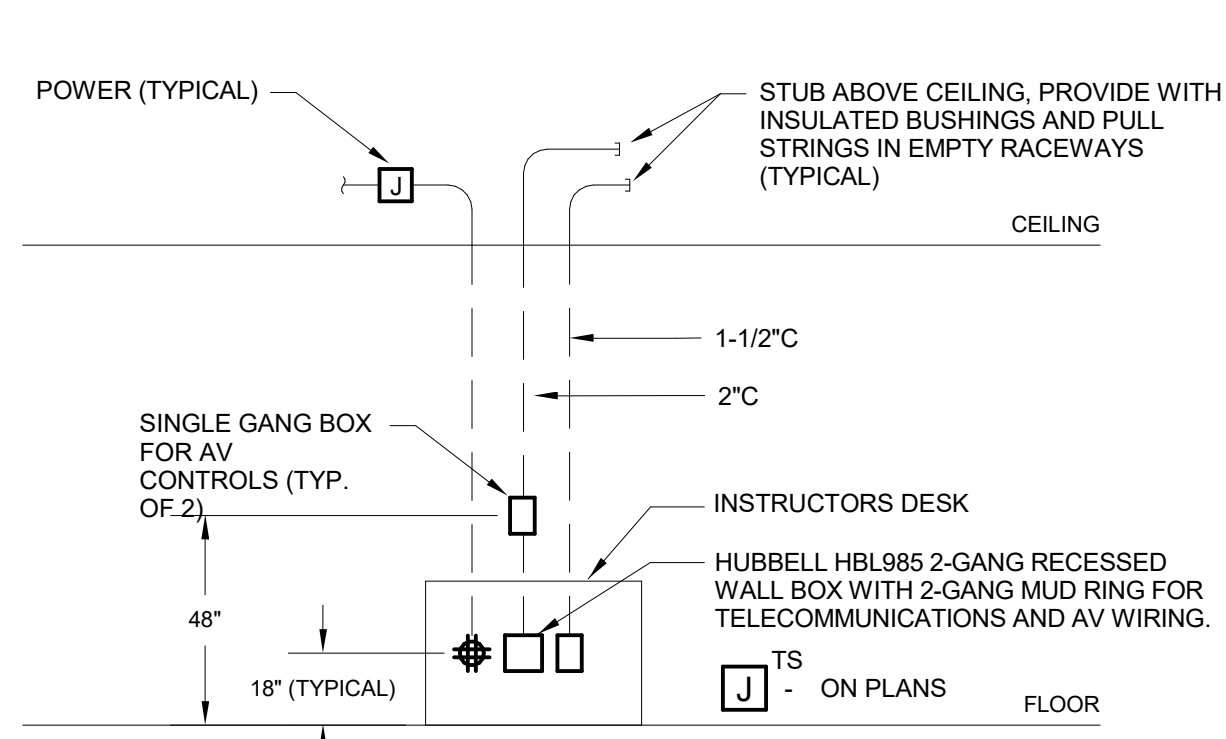
7 TYPICAL DUCT SMOKE DETECTOR & SMOKE DAMPER CONTROL DIAGRAM N.T.S.



NOTES:

- SEE DRAWINGS AND PARTIAL PLANS FOR ADDITIONAL INFORMATION.
- COORDINATE LOCATION OF ALL DEVICES WITH ELEVATOR VENDOR.
- SPECTRUM LIGHTING "WJ1LW20L40KEXJG1C/CP104KOMW" WALL MOUNTED FIXTURE OR APPROVED EQUAL.

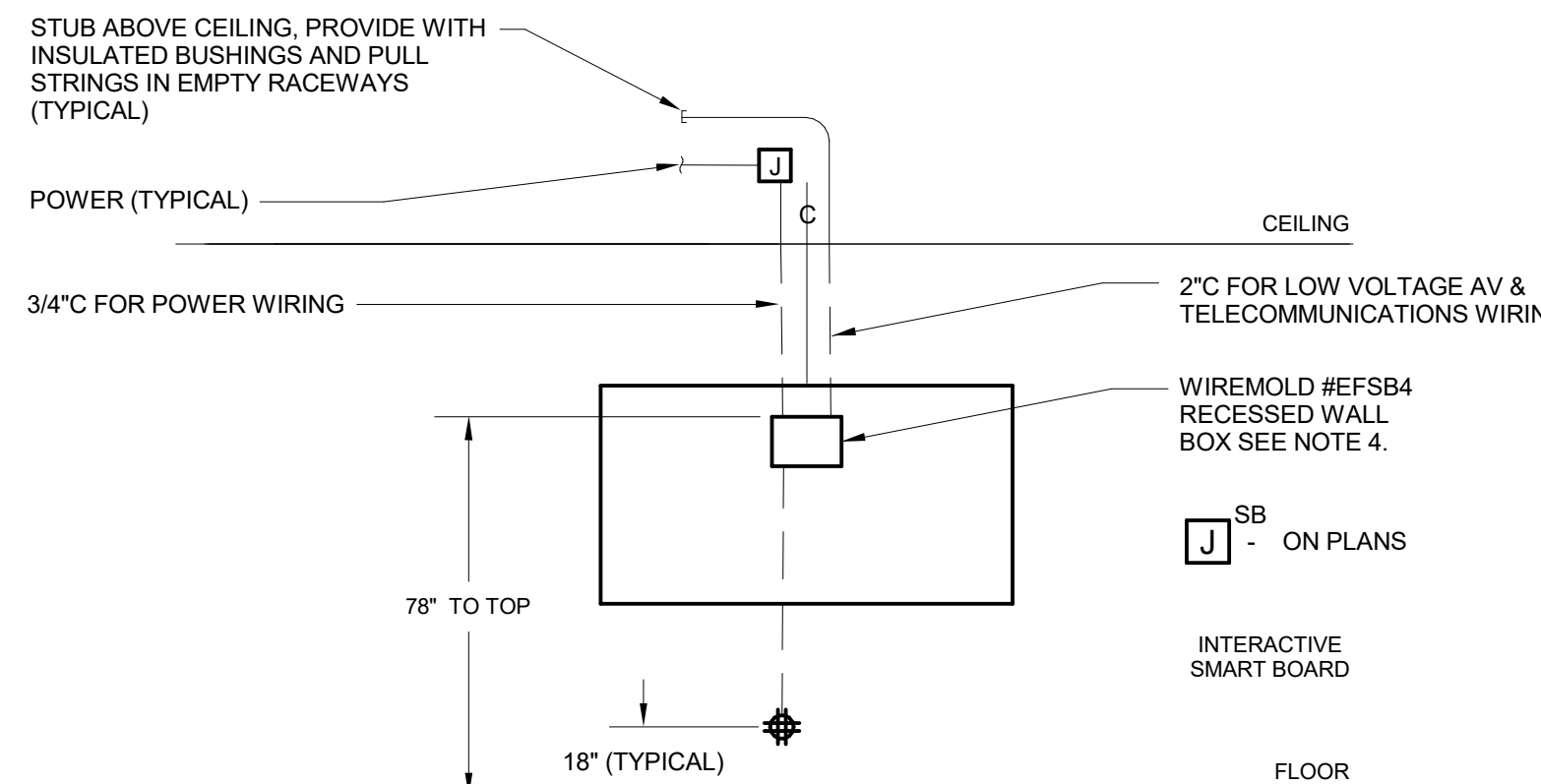
8 TYPICAL FIRE ALARM SYSTEM ELEVATOR RECALL RISER N.T.S.



NOTES:

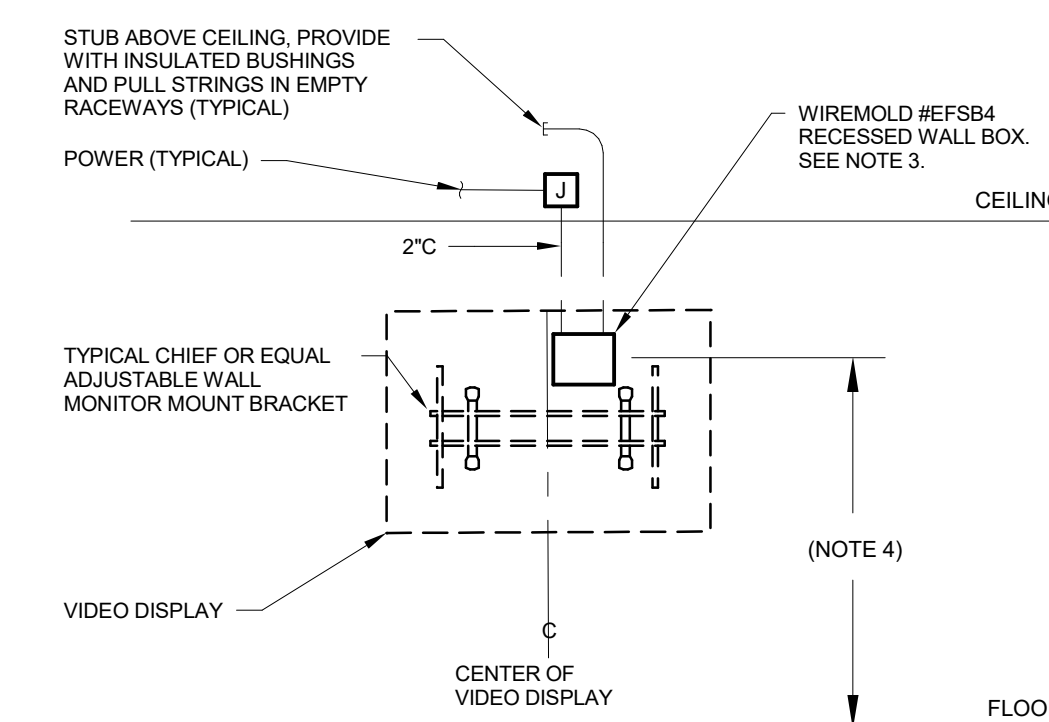
- SEE DRAWINGS FOR CIRCUITING.
- COORDINATE LOCATIONS OF ALL DEVICES WITH ARCHITECTURAL PLANS, FURNITURE PLANS AND WITH TECHNOLOGY EQUIPMENT INSTALLATION.
- COORDINATE INSTALLATION OF TELECOMMUNICATIONS AND AV WIRING WITH THE OWNER'S TECHNOLOGY CONTRACTOR. TELECOMMUNICATIONS DEVICES, AV DEVICES AND COVER PLATES BY TECHNOLOGY CONTRACTOR.

9 TYPICAL INTERACTIVE SB AND INSTRUCTORS STATION DETAIL N.T.S.



NOTES:

- SEE DRAWINGS FOR CIRCUITING.
 - COORDINATE LOCATIONS OF ALL DEVICES WITH ARCHITECTURAL PLANS, FURNITURE PLANS AND WITH TECHNOLOGY EQUIPMENT INSTALLATION.
 - LOCATE RECESSED WALL BOX CENTERED BEHIND INTERACTIVE SMARTBOARD AT THE HEIGHT SHOWN TO THE TOP OF THE BOX AND FREE AND CLEAR OF FIXED MONITOR MOUNT MOUNTING ARMS. COORDINATE FINAL LOCATION WITH THE APPROVED INTERACTIVE DISPLAY AND MONITOR MOUNT.
 - PROVIDE WIREMOLD #EFSB4 WALL BOX WITH THE FOLLOWING:
 - EFS DIVIDER PLATE TO SEPARATE LOW VOLTAGE COMPARTMENT.
 - DUPLEX RECEPTACLES WITH COVER PLATES.
 - STORAGE MODULE - MOUNT TO BOTTOM OF BOX.
 - FINISHED COVER PLATE.
- COORDINATE INSTALLATION OF TELECOMMUNICATIONS AND AV WIRING WITH THE OWNER'S TECHNOLOGY CONTRACTOR. TELECOMMUNICATIONS DEVICES, AV DEVICES AND COVER PLATES BY TECHNOLOGY CONTRACTOR.

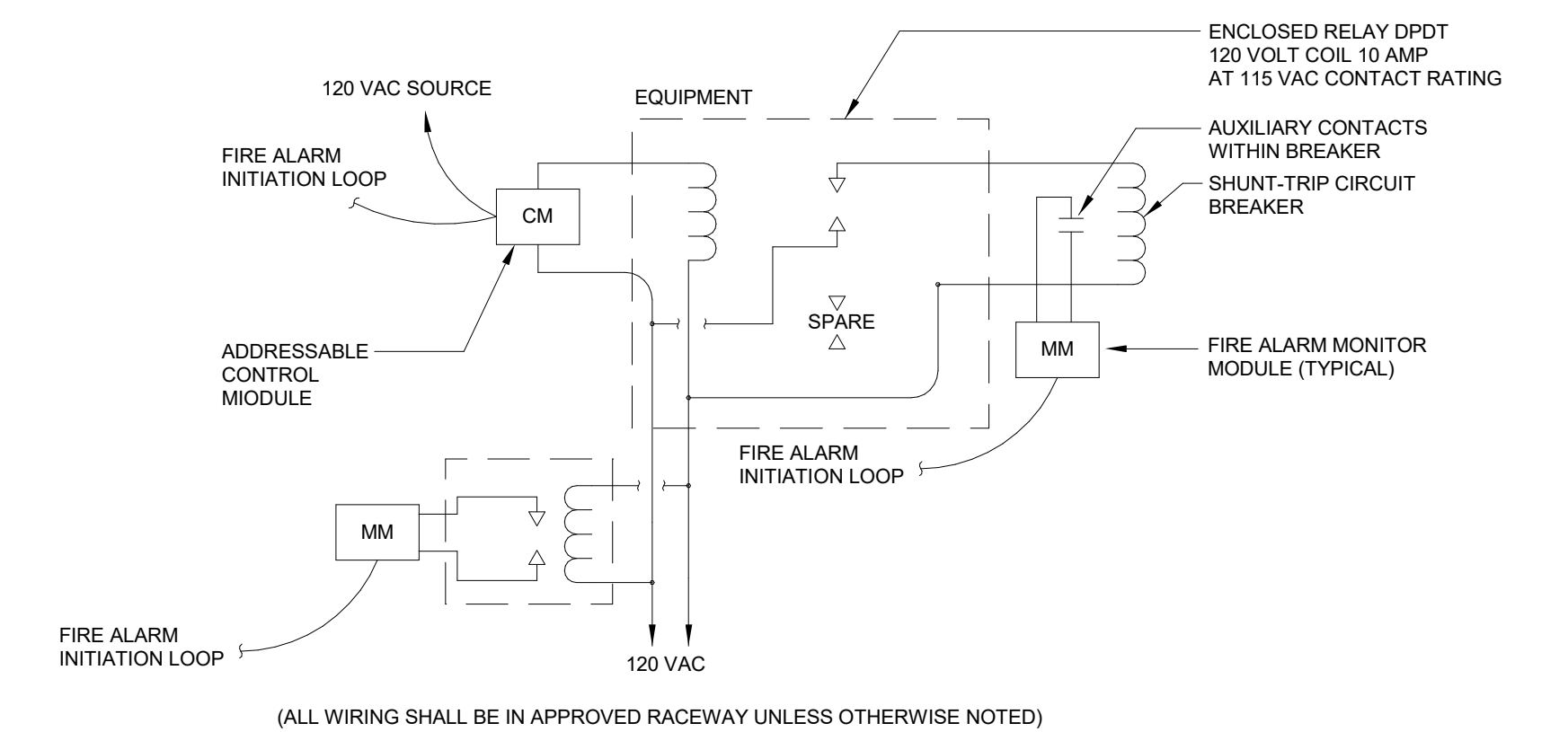


NOTES:

- SEE ARCHITECTURAL DRAWINGS FOR MONITOR LOCATIONS AND ELEVATIONS. SEE ELECTRICAL DRAWINGS FOR CIRCUITING.
- SEE ELECTRICAL DRAWINGS, SCHEDULES AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- LOCATE WALL BOX SUCH THAT IT IS LOCATED ON THE SAME SIDE OF THE MONITOR AS THE INPUT/OUTPUT CONNECTIONS TO THE MONITOR AND IS FREE AND CLEAR OF FIXED MOUNTING ARMS ON THE MONITOR MOUNT. COORDINATE FINAL LOCATION WITH APPROVED MONITOR AND MOUNTING BRACKET. PROVIDE WITH:
 - EFS DIVIDER PLATE TO SEPARATE LOW VOLTAGE COMPARTMENT.
 - DUPLEX RECEPTACLES WITH COVER PLATES.
 - FINISHED COVER PLATE.
- COORDINATE FINAL MOUNTING HEIGHT WITH DISPLAY MONITOR INSTALLATION.
- COORDINATE INSTALLATION OF ALL TELECOMMUNICATIONS AND AV WIRING WITH THE OWNER'S TECHNOLOGY CONTRACTOR. TELECOMMUNICATIONS DEVICES, AV DEVICES AND COVER PLATES BY TECHNOLOGY CONTRACTOR.

10 TYPICAL VIDEO DISPLAY MONITOR WIRING DETAIL N.T.S.

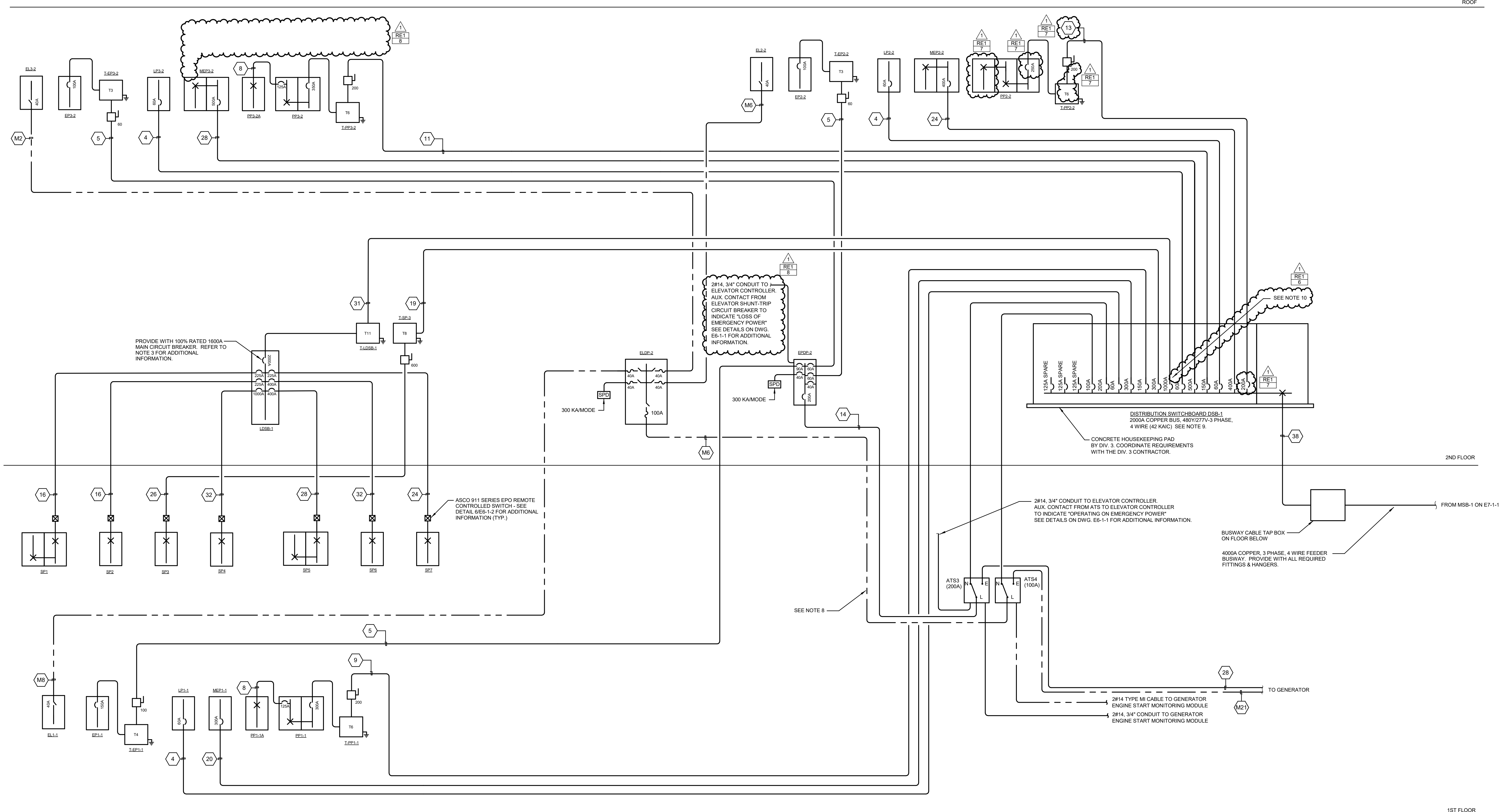
11 CEILING MOUNTED SINGLE-CIRCUIT OCCUPANCY SENSOR SCHEMATIC N.T.S.



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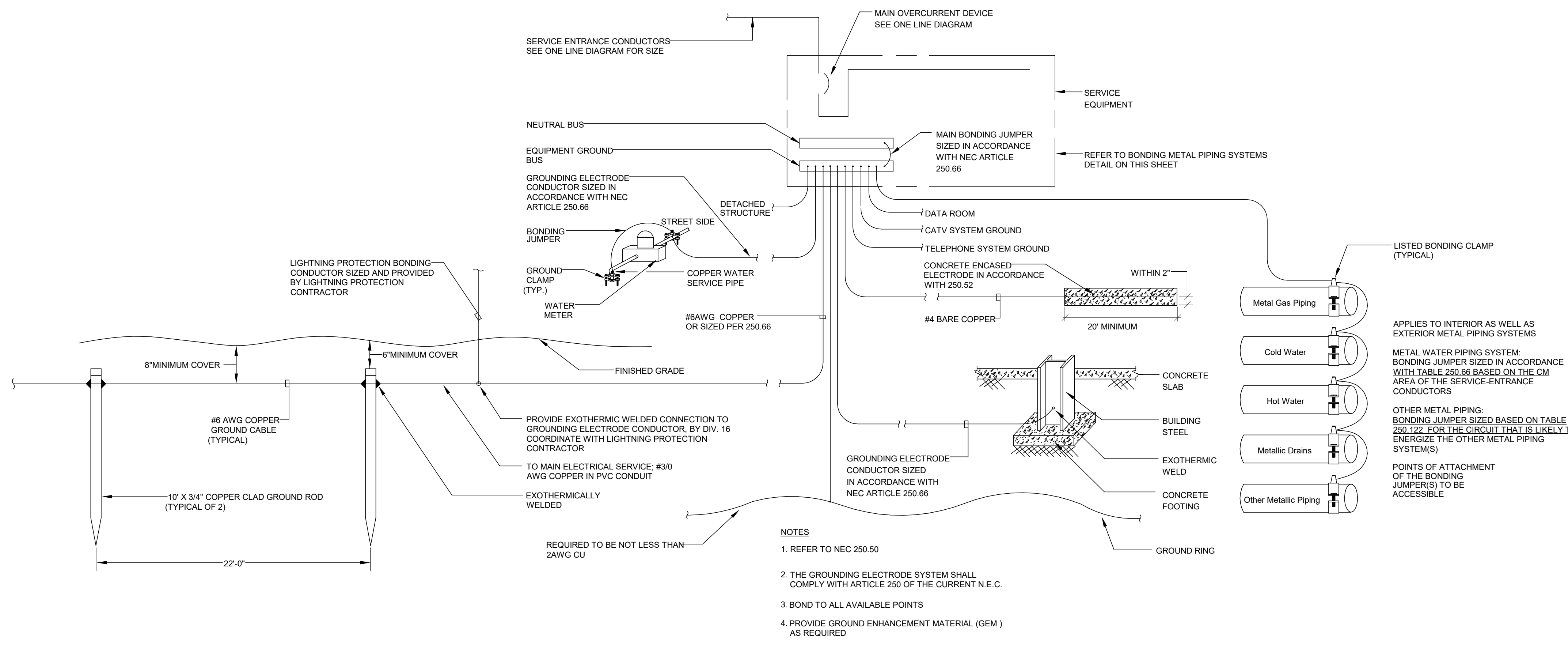
drawing title		date	
ELECTRICAL DETAILS		05/24/2019	
mark		date	
1		07/23/2019	
description		ADDENDUM #1	
drawing no.		date	
E6-1-1		05/24/2019	
drawing title		date	
ELECTRICAL DETAILS		05/24/2019	
mark		date	
1		07/23/2019	
description		ADDENDUM #1	
drawing no.		date	
E6-1-1		05/24/2019	
drawing prepared by		date	
Consulting Engineering Services, Inc.		05/24/2019	
811 Middle St., Middletown, CT 06457		N.T.S.	
project		drawing no.	
ADDITIONS AND RENOVATIONS		E6-1-1	
PLATT TECHNICAL HIGH SCHOOL		drawing no.	
800 Orange Avenue Middletown, CT 06461		E6-1-1	
CAD no.		OSCRG project no.	
DCS project no. BR7-076 CM-R		900-0013	

- RISER DIAGRAM NOTES**
- REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
 - COORDINATE METER AND CT CABINET REQUIREMENTS AND INSTALLATION WITH UTILITY COMPANY.
 - MAIN CIRCUIT BREAKER SHALL HAVE LSIQ FUNCTIONS WITH ENERGY REDUCTION MAINTENANCE SETTING (ERMS) SYSTEM WITH MAINTENANCE SWITCH. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
 - REFER TO SERVICE GROUNDING DETAIL, DRAWING E7-1-3 FOR SERVICE ENTRANCE GROUNDING REQUIREMENTS (APPLIES TO ALL SERVICES FED FROM UTILITY TRANSFORMER).
 - REFER TO THREE PHASE FEEDER SCHEDULE, DRAWING E7-1-3 FOR FEEDER REQUIREMENTS.
 - REFER TO DRY TYPE TRANSFORMER SCHEDULE, DRAWING E7-1-3 FOR TRANSFORMER REQUIREMENTS.
 - ESL POWER SYSTEMS #T4DX-300H-300H-300H-480-311-S-C MANUAL TRANSFER SWITCH FOR TEMPORARY GENERATOR MAINTENANCE CONNECTION.
 - FEEDERS TO ALL LIFE SAFETY EMERGENCY PANELBOARDS SHALL BE TYPE MI (MINERAL INSULATED) CABLE. TYPICAL FOR ALL FEEDERS OF THIS LINETYPE.
 - PROVIDE SIGNAGE AT THE SWITCHBOARD PER THE SPECIFICATIONS AND NEC FOR ARC FLASH AND FAULT CURRENT INDICATION. IN ADDITION PROVIDE PERMANENT SIGNAGE INDICATING THE LOCATION OF OTHER SOURCES OF POWER. REFER TO SPECIFICATION SECTION 26 05 53 FOR ADDITIONAL INFORMATION.
 - PROVIDE CIRCUIT BREAKER WITH GFCI PROTECTION.



1 PARTIAL ELECTRICAL RISER DIAGRAM VOCATIONAL SWITCHBOARD
N.T.S.

100% CONSTRUCTION DOCUMENTS			
drawing title ELECTRICAL RISER DIAGRAM		STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES	
REVISIONS		drawing prepared by Consulting Engineering Services, Inc. 911 Middle St., Middletown, CT 06457	date 05/24/2019
mark	date	description	scale N.T.S.
1	07/23/2019	ADDENDUM #1	drawn by vsm
project ADDITIONS AND RENOVATIONS PLATT TECHNICAL HIGH SCHOOL 600 Orange Avenue - Middletown, CT 06461		approved by esm	drawing no. E7-1-2
CAD no.	DCS project no. BIRT-076 CM-R	OSCRG project no. 990-0013	



3 SERVICE GROUNDING DETAIL
N.T.S.

- NOTES
1. REFER TO NEC 250.50
 2. THE GROUNDING ELECTRODE SYSTEM SHALL COMPLY WITH ARTICLE 250 OF THE CURRENT N.E.C.
 3. BOND TO ALL AVAILABLE POINTS
 4. PROVIDE GROUND ENHANCEMENT MATERIAL (GEM) AS REQUIRED

DRY TYPE TRANSFORMER SCHEDULE

SIZE	KVA	PRIMARY AMPS	SECONDARY AMPS	480 VOLT OVERCURRENT	208 VOLT OVERCURRENT	208 VOLT (NOTE 4) OVERCURRENT	480 VOLT FEEDER	208/120 VOLT FEEDER	GEC (NOTE 5)	SSBJ (NOTE 6)
T1	9	11	25	30A, 3P	30A, 3P	3P12 & 1P12G - 3/4"	4P10 - 3/4"	4P10 - 3/4"	1P8 - 3/4"	1P8 - 3/4"
T2	15	18	42	30A, 3P	50A, 3P	3P10 & 1P10G - 3/4"	4P8 - 1"	4P8 - 1"	1P8 - 3/4"	1P8 - 3/4"
T3	30	36	83	60A, 3P	100A, 3P	3P4 & 1P10G - 1"	4P1 - 1 1/2"	4P1 - 1 1/2"	1P8 - 3/4"	1P8 - 3/4"
T4	45	54	125	90A, 3P	150A, 3P	3P3 & 1P8G - 1 1/4"	4P10 - 1 1/2"	4P10 - 1 1/2"	1P8 - 3/4"	1P8 - 3/4"
T5	75	90	208	150A, 3P	250A, 3P	3P10 & 1P6G - 1 1/2"	4P250 KCML - 2 1/2"	4P250 KCML - 2 1/2"	1P8 - 3/4"	1P8 - 3/4"
T6	112.5	135	313	200A, 3P	400A, 3P	3P30 & 1P6G - 2"	4P500 KCML - (2) 2 1/2"	4P500 KCML - (2) 2 1/2"	1P10 - 3/4"	1P10 - 3/4"
T7	150	181	417	300A, 3P	500A, 3P	3P350 KCML & 1P4G - 3"	8P250 KCML - (2) 2 1/2"	8P250 KCML - (2) 2 1/2"	1P10 - 3/4"	1P10 - 3/4"
T8	225	270	625	400A, 3P	800A, 3P	3P400 KCML & 1P3G - 3 1/2"	8P400 KCML - (2) 3"	8P400 KCML - (2) 3"	1P10 - 3/4"	1P10 - 3/4"
T9	300	361	834	600A, 3P	1000A, 3P	3P630 KCML & 2P1G - (2) 3"	12P400 KCML - (3) 3"	12P400 KCML - (3) 3"	1P30 - 3/4"	1P30 - 3/4"
T10	500	600	1400	1000A, 3P	1800A, 3P	3P840 KCML & 3P20G - (3) 3 1/2"	16P600 KCML - (4) 4"	16P600 KCML - (4) 4"	1P300 KCML - 1"	1P300 KCML - 1"
T11	750	902	2082	1000A, 3P	2000A, 3P	3P850 KCML & 3P30G - (3) 3 1/2"	24P600 KCML - (6) 4"	24P600 KCML - (6) 4"	1P300 KCML - 1"	1P300 KCML - 1"

TRANSFORMER NOTES:

1. BOND NEUTRAL TRANSFORMER SECONDARY TO THE TRANSFORMER GROUND BAR AND CASE WITH SYSTEM BONDING JUMPER
2. USE NEAREST AVAILABLE EFFECTIVELY GROUNDED WATER PIPE, STRUCTURAL STEEL, AND/OR DRIVEN GROUND ROD IN ACCORDANCE WITH N.E.C. 250-61 AND 250-83 FOR THE SEPARATELY DERIVED SYSTEM GROUNDING ELECTRODE.
3. ALL CONDUCTOR SIZES ARE FOR COPPER CONDUCTORS. N.E.C. TABLE 310-16
4. SECONDARY OVERCURRENT PROTECTION SHALL BE LOCATED WITHIN (10) FEET OF THE TRANSFORMER SECONDARY TERMINALS EITHER IN A PANELBOARD (MAIN BREAKER, AN INDIVIDUALLY MOUNTED CIRCUIT BREAKER, OR A FUSIBLE DISCONNECT SWITCH)
5. GROUNDING ELECTRODE CONDUCTOR TO BE RUN FROM GROUND BAR IN TRANSFORMER TO THE GROUNDING ELECTRODE FOR THE SEPARATELY DERIVED SYSTEM
6. SYSTEM BONDING JUMPER/SUPPLY SIDE BONDING JUMPER TO BE INSTALLED BETWEEN THE TRANSFORMER GROUND BAR AND CASE AND BETWEEN THE GROUND BAR IN THE FIRST SUPPLY SIDE DISCONNECTING MEANS (PANELBOARD, ENCLOSED CIRCUIT BREAKER OR FUSIBLE DISCONNECT SWITCH) AND TRANSFORMER GROUND BAR
7. 600 KCML CONDUCTORS SHALL BE PROVIDED WITH MAC ADAPTERS AS REQUIRED TO COORDINATE WITH BREAKER LUG SIZES.

LEGEND OF FEEDER SIZES

SINGLE CONDUCTOR OR CABLE

FEEDER SYMBOL	CONDUCTORS (3 PHASE, 3 WIRE)	CONDUCTORS (3 PHASE, 4 WIRE)	NOMINAL AMPERE RATING
(M1)	3P8	3P8, 1P8N	60
(M2)	3P8	3P8, 1P8N	70
(M3)	3P8	3P8, 1P8N	100
(M4)	3P8	3P8, 1P8N	125
(M5)	3P8	3P8, 1P8N	150
(M6)	3P8	3P8, 1P8N	175
(M7)	3P8	3P8, 1P8N	200
(M8)	3P8	3P8, 1P8N	225
(M9)	3P8	3P8, 1P8N	250
(M10)	3P8	3P8, 1P8N	300
(M11)	3P8	3P8, 1P8N	350
(M12)	3P8	3P8, 1P8N	400
(M13)	3P8	3P8, 1P8N	450
(M14)	3P8	3P8, 1P8N	500
(M15)	3P8	3P8, 1P8N	600
(M16)	3P8	3P8, 1P8N	700
(M17)	3P8	3P8, 1P8N	800
(M18)	3P8	3P8, 1P8N	1000
(M19)	3P8	3P8, 1P8N	1200
(M20)	3P8	3P8, 1P8N	1500
(M21)	3P8	3P8, 1P8N	2000
(M22)	3P8	3P8, 1P8N	2500
(M23)	3P8	3P8, 1P8N	3000
(M24)	3P8	3P8, 1P8N	4000

NOTES:

1. UNLESS OTHERWISE INDICATED, CONDUCTOR SIZING SHALL MATCH THE SIZE INDICATED ABOVE FOR THE APPLICABLE OVERCURRENT DEVICE. PROVIDE LARGER CONDUCTORS WHERE INDICATED, OR AS REQUIRED BY CODE.
2. SINGLE CONDUCTOR CABLES SHOULD BE RUN IN GROUPS HAVING ONE CABLE FROM EACH PHASE, WITH CABLES FASTENED TIGHTLY TOGETHER AND WITH CABLE EFFECTIVELY GROUNDED BY CONNECTING THE GLAND CONNECTOR AT EACH END OF THE CABLE RUN TO THE METAL ENCLOSURE
3. CONDUCTOR SIZES ARE BASED ON 75°C. ALL EQUIPMENT AND CONDUCTOR TERMINATIONS CONNECTED TO WIRES SHALL MATCH THESE RATINGS
4. REFER TO SPECIFICATIONS FOR ADDITIONAL ELECTRICAL CONDUCTOR REQUIREMENTS.

LEGEND OF FEEDER SIZES

COPPER CONDUCTORS

FEEDER SYMBOL	CONDUCTORS (3 PHASE, 3 WIRE) WITH GROUND	RACEWAY SIZE CONDUIT	CONDUCTORS (3 PHASE, 4 WIRE) WITH GROUND	RACEWAY SIZE CONDUIT	NOMINAL AMPERE RATING
(1)	3P4 & 1P10G	1"	4P4 & 1P10G	1 1/4"	60
(2)	3P4 & 1P8G	1"	4P4 & 1P8G	1 1/4"	70
(3)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	100
(4)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	125
(5)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	150
(6)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	175
(7)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	200
(8)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	225
(9)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	250
(10)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	300
(11)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	350
(12)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	400
(13)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	500
(14)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	600
(15)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	800
(16)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	1000
(17)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	1200
(18)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	1500
(19)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	2000
(20)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	2500
(21)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	3000
(22)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	4000
(23)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	5000
(24)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	6000
(25)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	8000
(26)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	10000
(27)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	12000
(28)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	15000
(29)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	20000
(30)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	25000
(31)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	30000
(32)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	40000
(33)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	50000
(34)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	60000
(35)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	80000
(36)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	100000
(37)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	120000
(38)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	150000
(39)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	200000
(40)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	250000
(41)	3P4 & 1P8G	1 1/2"	4P4 & 1P8G	1 1/2"	300000

NOTE 7:

- NOTES:
1. UNLESS OTHERWISE INDICATED, CONDUCTOR SIZING SHALL MATCH THE SIZE INDICATED ABOVE FOR THE APPLICABLE OVERCURRENT DEVICE. PROVIDE LARGER CONDUCTORS AND CONDUIT WHERE INDICATED, OR AS REQUIRED BY CODE.
 2. CONDUIT SIZES IN THIS TABLE REFLECT THE REQUIREMENTS OF NEC INFORMATIVE ANNEX "C", TABLE C.1.
 3. PROVIDE A 4-WIRE CIRCUIT UNLESS DEVICE SERVED DOES NOT HAVE PROVISIONS FOR A NEUTRAL.
 4. REFER TO PANELBOARD SCHEDULES AND MOTOR CIRCUIT SCHEDULE (WHERE APPLICABLE) FOR CONDUCTOR AND CONDUIT SIZE REQUIREMENTS FOR OTHER MOTOR LOADS NOT SHOWN ON ONE LINE DIAGRAM
 5. CONDUCTOR SIZES ARE BASED ON 60°C WHERE AMPACITY IS LESS THAN OR EQUAL TO 100A AND 75°C WHERE AMPACITY IS GREATER THAN 100A. ALL EQUIPMENT AND CONDUCTOR TERMINATIONS CONNECTED TO WIRES SHALL MATCH THESE RATINGS.
 6. REFER TO SPECIFICATIONS FOR ADDITIONAL ELECTRICAL CONDUCTOR REQUIREMENTS.
 7. REFER TO DRY TYPE TRANSFORMER SCHEDULE PRIMARY (480 VOLT) AND SECONDARY (208/120 VOLT) FEEDER REQUIREMENTS BASED ON TRANSFORMER SIZE.

100% CONSTRUCTION DOCUMENTS

drawing title
ELECTRICAL RISER DIAGRAM SCHEDULES & DETAILS

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES

drawing prepared by
Consulting Engineering Services, Inc.
811 Middle St., Middletown, CT 06457

date
05/24/2019

scale
N.T.S.

drawn by
vsm

approved by
msm

drawing no.
E7-1-3

REVISIONS

mark	date	description
1	07/23/2019	ADDENDUM #1

project
ADDITIONS AND RENOVATIONS PLATT TECHNICAL HIGH SCHOOL
600 Orange Avenue Middletown, CT 06461

CAD no.
DCS project no.
BLRT-076 CM-R

OSCGR project no.
900-0013

Branch Panel: LDSB-1

Location: VOCATIONAL...
Supply From: T-LDSB-1
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 22 KAIC
Bus Material: CU
Bus Rating: 2000 A
MCB Rating / MLO: 2000 A MCB

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT	
1	PANEL SP-1	225 A	3	23.23	19.46				PANEL SP-2	2	
3					21.40	19.51				4	
5						21.48	19.38			6	
7	PANEL SP-4	100 A	3	94.53	34.15				400 A PANEL SP-5	8	
9					94.35	30.79				10	
11						95.91	32.59			12	
13	PANEL SP-6	400 A	3	20.03	11.04				225 A PANEL SP-7	14	
15					20.57	11.13				16	
17						20.03	9.89			18	
19										20	
21										22	
23										24	
25	SPARE	100 A	3	0.00	0.00				225 A SPARE	26	
27					0.00	0.00				28	
29						0.00	0.00			30	
				Phase Load:	202.45 kVA	197.75 kVA	199.28 kVA				
				Phase...	1689 A	1647.9 A	1662.6 A				

Notes:
1. SINGLE SWITCHBOARD SECTION MAIN AND DISTRIBUTION - 48"W MAXIMUM.
2. 100% RATED MAIN

Branch Panel: EPDP-2

Location: ELEC CLOSET E246
Supply From: ATS-3
Mounting: Surface
Enclosure: Type 1

Volts: 480/277 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 18 KAIC
Bus Material: CU
Bus Rating: 225 A
MCB Rating / MLO: 200 A MCB

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT	
1	PANEL EP1-1 VIA T-EP1-1	90 A	3	13.45	3.18				PANEL EP3-2 VIA T-EP3-2	2	
3					12.79	3.14				4	
5						11.83	4.17			6	
7	SPD	40 A	3	0.00	3.36				60 A PANEL EP2-2 VIA T-EP2-2	8	
9					0.00	3.28				10	
11						0.00	4.72			12	
13	ELEVATOR CONTROLLER	30 A	3	3.87		3.87				14	
15										16	
17										18	
19										20	
21										22	
23										24	
25										26	
27										28	
29										30	
31										32	
33										34	
35										36	
37	SPARE	40 A	3	0.00	0.00				60 A SPARE	38	
39					0.00	0.00				40	
41						0.00	0.00			42	
				Phase Load:	23.86 kVA	23.08 kVA	24.58 kVA				
				Phase...	98.4 A	99.3 A	101.1 A				

Notes:
1. FUSIBLE PANELBOARD.
2. MOLDED CASE SWITCH (MCS) MAIN DISCONNECT.
3. PROVIDE WITH INTEGRAL SPD DEVICE.

Branch Panel: EL3-2

Location: ELEC CLOSET E246
Supply From: ELPD-2
Mounting: Surface
Enclosure: Type 1

Volts: 480/277 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 50 KAIC
Bus Material: CU
Bus Rating: 100 A
MCB Rating / MLO: 40 A MCS

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT	
1	E. LTG - MEZZ M101	20 A	1	0.17	0.29				20 A E. LTG - MEZZ M106	2	
3	E. LTG - MEZZ M104	20 A	1		0.29	0.23			20 A E. LTG - MEZZ M107	4	
5	E. LTG - MEZZ M106	20 A	1			0.29	0.29		20 A E. LTG - MEZZ M105	6	
7	LIGHTING	20 A	1	0.26	0.25				20 A ART WING EM LIGHTING	8	
9	ELEVATOR LIGHT, TOP OF SHAFT	20 A	1		0.04					10	
11										12	
13										14	
15										16	
17										18	
19										20	
21	SPARE	20 A	1		0.00	0.00			20 A SPARE	22	
23	SPARE	20 A	1			0.00	0.00		20 A SPARE	24	
25	SPARE	20 A	1	0.00	0.00				20 A SPARE	26	
27	SPARE	20 A	1		0.00	0.00			20 A SPARE	28	
29	SPARE	20 A	1			0.00	0.00		20 A SPARE	30	
				Phase Load:	0.97 kVA	0.56 kVA	0.58 kVA				
				Phase...	3.5 A	2 A	2.1 A				

Notes:
1. FUSIBLE PANELBOARD.
2. MOLDED CASE SWITCH (MCS) MAIN DISCONNECT.
3. PROVIDE WITH INTEGRAL SPD DEVICE.

Branch Panel: EP1-1

Location: ELEC E137
Supply From: T-EP1-1
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 22 KAIC
Bus Material: CU
Bus Rating: 225 A
MCB Rating / MLO: 150 A MCB

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT	
1	RECEPT - IDF E136	20 A	1	0.72	0.07				20 A CUH-2	2	
3	NEMA L6-30R - IDF E138	30 A	2		0.50	0.50			20 A NEMA L6-30R - IDF E138	4	
5					0.50	0.50				6	
7	SHEF-6	35 A	3	2.10	2.10				3 35 A SHEF-7	8	
9					2.10	2.10				10	
11						2.10	2.10			12	
13	SHEF-8	15 A	3	0.58	0.75				1 20 A UH-16 TO UH-24	14	
15					0.58	0.72			1 20 A FATP IN ELECTRIC RM E137	16	
17						0.58	0.36		1 20 A RACK RECEIPT - IDF E138	18	
19	RACK RECEIPT - E138	20 A	1	0.36	0.36				20 A SECURITY SYSTEM POWER - IDF E138	20	
21	DUST COLLECTOR INTERFACE - E148	20 A	1		1.80	1.80			1 20 A DC-2 SPARK DETECTION PANEL - E148	22	
23	FO LEVEL PANEL - E120	20 A	1			1.80	1.80		1 20 A DTP-1 CONTROL PANEL - E101	24	
25	FO LEAK DETECTION PANEL - E120	20 A	1	1.80	1.01				1 20 A DTP-1 - E101	26	
27	FOTP-1 & 2	20 A	2		0.89	1.80			1 20 A DTP-2 CONTROL PANEL - E120	28	
29					0.89	1.20			1 20 A DTP-2 - E120	30	
31	BMS (IP) PANEL - E105	20 A	1	1.80	1.80				1 20 A BMS (IP) PANEL - E110	32	
33	SPARE	20 A	1		0.00	0.00			1 20 A SPARE	34	
35	SPARE	20 A	1			0.00	0.00		1 20 A SPARE	36	
37	SPARE	20 A	1	0.00	0.00				1 20 A SPARE	38	
39	SPARE	20 A	1		0.00	0.00			1 20 A SPARE	40	
41	SPARE	20 A	1			0.00	0.00		1 20 A SPARE	42	
				Phase Load:	13.45 kVA	12.79 kVA	11.83 kVA				
				Phase...	113.3 A	107.8 A	98.6 A				

Notes:
1. FUSIBLE PANELBOARD.
2. MOLDED CASE SWITCH (MCS) MAIN DISCONNECT.
3. PROVIDE WITH INTEGRAL SPD DEVICE.

Branch Panel: ELDP-1

Location: EMERGENCY ELECTRIC...
Supply From: ATS-2
Mounting: Surface
Enclosure: Type 1

Volts: 480/277 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 200 KAIC
Bus Material: CU
Bus Rating: 225 A
MCB Rating / MLO: 200 A FS

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT	
1	PANEL EL7-2	40 A	3	1.23	2.24				PANEL EL6-1	2	
3					1.96	3.03				4	
5						0.79	1.78			6	
7	PANEL EL5-1	40 A	3	0.82	0.00				3 40 A SPD	8	
9					0.71	0.00				10	
11						0.04	0.00			12	
13										14	
15										16	
17										18	
19										20	
21										22	
23										24	
25										26	
27										28	
29										30	
31										32	
33										34	
35										36	
37	SPARE	40 A	3	0.00	0.00				3 40 A SPARE	38	
39					0.00	0.00				40	
41						0.00	0.00			42	
				Phase Load:	4.29 kVA	5.68 kVA	2.59 kVA				
				Phase...	16.4 A	21.4 A	9.3 A				

Notes:
1. FUSIBLE PANELBOARD

Branch Panel: EPH5-1

Location: BOILER B163
Supply From: EPDP-1
Mounting: Surface
Enclosure: Type 1

Volts: 480/277 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10 KAIC
Bus Material: CU
Bus Rating: 225 A
MCB Rating / MLO: 225 A MCB

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT	
1	T-EP5-1	100 A	3	15.12	2.10				3 15 A BHWP-1	2	
3					15.02	2.10				4	
5						13.29	2.10			6	
7	BHWP-2	15 A	3	2.10	2.10				3 15 A BHWP-3	8	
9					2.10	2.10				10	
11						2.10	2.10			12	
13	B-1	15 A	3	2.10	2.10				3 15 A B-2	14	
15					2.10	2.10				16	
17						2.10	2.10			18	
19	B-3	15 A	3	2.10						20	
21					2.10					22	
23						2.10				24	
25										26	
27										28	
29										30	
				Phase Load:	22.34 kVA	22.25 kVA	20.59 kVA				
				Phase...	81.6 A	81.2 A	74.3 A				

Notes:
1. FUSIBLE PANELBOARD
2. MOLDED CASE SWITCH (MCS) MAIN DISCONNECT.
3. PROVIDE WITH INTEGRAL SPD DEVICE.

Branch Panel: EL5-1

Location: EMERGENCY ELECTRIC...
Supply From: ELPD-1
Mounting: Surface
Enclosure: Type 1

Volts: 480/277 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 50 KAIC
Bus Material: CU
Bus Rating: 100 A
MCB Rating / MLO: 40 A MCS

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT	
1	KITCHEN OFFICE AREA EM LIGHTING	20 A	1	0.09	0.73				20 A KITCHEN AREA EM LIGHTING	2	
3	FITNESS CENTER A101 EM LIGHTING	20 A	1		0.53	0.19			20 A STAR 4 S4 EMERGENCY LIGHTING	4	
5						0.04			20 A ELEVATOR PIT LIGHT	6	
7										8	
9										10	
11										12	
13										14	
15										16	
17										18	
19										20	
21	SPARE	20 A	1			0.00	0.00		20 A SPARE	22	
23	SPARE	20 A	1				0.00	0.00	20 A SPARE	24	
25	SPARE	20 A	1	0.00	0.00				20 A SPARE	26	
27	SPARE	20 A	1			0.00	0.00		20 A SPARE	28	
29	SPARE	20 A	1				0.00	0.00	20 A SPARE	30	
				Phase Load:	0.82 kVA	0.71 kVA	0.04 kVA				

Branch Panel: EP2-2

Table with 24 columns: CKT, Circuit Description, Trip, Poles, A, B, C, Poles, Trip, Circuit Description, CKT. Includes location, supply, phases, and phase load data.

Branch Panel: EP7-2

Table with 24 columns: CKT, Circuit Description, Trip, Poles, A, B, C, Poles, Trip, Circuit Description, CKT. Includes location, supply, phases, and phase load data.

Branch Panel: LP3-2

Table with 24 columns: CKT, Circuit Description, Trip, Poles, A, B, C, Poles, Trip, Circuit Description, CKT. Includes location, supply, phases, and phase load data.

Branch Panel: EP3-2

Table with 24 columns: CKT, Circuit Description, Trip, Poles, A, B, C, Poles, Trip, Circuit Description, CKT. Includes location, supply, phases, and phase load data.

Branch Panel: EKP

Table with 24 columns: CKT, Circuit Description, Trip, Poles, A, B, C, Poles, Trip, Circuit Description, CKT. Includes location, supply, phases, and phase load data.

Branch Panel: LP5-1

Table with 24 columns: CKT, Circuit Description, Trip, Poles, A, B, C, Poles, Trip, Circuit Description, CKT. Includes location, supply, phases, and phase load data.

Branch Panel: LP6-1

Table with 24 columns: CKT, Circuit Description, Trip, Poles, A, B, C, Poles, Trip, Circuit Description, CKT. Includes location, supply, phases, and phase load data.

Branch Panel: EP4-1

Table with 24 columns: CKT, Circuit Description, Trip, Poles, A, B, C, Poles, Trip, Circuit Description, CKT. Includes location, supply, phases, and phase load data.

Branch Panel: LP1-1

Table with 24 columns: CKT, Circuit Description, Trip, Poles, A, B, C, Poles, Trip, Circuit Description, CKT. Includes location, supply, phases, and phase load data.

Branch Panel: EP5-1

Table with 24 columns: CKT, Circuit Description, Trip, Poles, A, B, C, Poles, Trip, Circuit Description, CKT. Includes location, supply, phases, and phase load data.

Branch Panel: LP2-2

Table with 24 columns: CKT, Circuit Description, Trip, Poles, A, B, C, Poles, Trip, Circuit Description, CKT. Includes location, supply, phases, and phase load data.

Branch Panel: LP7-2

Table with 24 columns: CKT, Circuit Description, Trip, Poles, A, B, C, Poles, Trip, Circuit Description, CKT. Includes location, supply, phases, and phase load data.

100% CONSTRUCTION DOCUMENTS

REVISIONS table with columns: mark, date, description. Includes project name: ADDITIONS AND RENOVATIONS PLATT TECHNICAL HIGH SCHOOL.

STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES

CONSULTING ENGINEERING SERVICES, INC.

ADDITIONS AND RENOVATIONS PLATT TECHNICAL HIGH SCHOOL

OSCRG project no. E8-1-2

Branch Panel: PP1-1

Table with columns: CKT, Circuit Description, Trip, Poles, A, B, C, Poles, Trip, Circuit Description, CKT. Includes location, supply, and phase information.

Branch Panel: PP1-1A

Table with columns: CKT, Circuit Description, Trip, Poles, A, B, C, Poles, Trip, Circuit Description, CKT. Includes location, supply, and phase information.

Branch Panel: PP2-2

Table with columns: CKT, Circuit Description, Trip, Poles, A, B, C, Poles, Trip, Circuit Description, CKT. Includes location, supply, and phase information.

Branch Panel: PP3-2

Table with columns: CKT, Circuit Description, Trip, Poles, A, B, C, Poles, Trip, Circuit Description, CKT. Includes location, supply, and phase information.

Branch Panel: PP3-2A

Table with columns: CKT, Circuit Description, Trip, Poles, A, B, C, Poles, Trip, Circuit Description, CKT. Includes location, supply, and phase information.

Branch Panel: PP4-1

Table with columns: CKT, Circuit Description, Trip, Poles, A, B, C, Poles, Trip, Circuit Description, CKT. Includes location, supply, and phase information.

Branch Panel: PP5-1

Table with columns: CKT, Circuit Description, Trip, Poles, A, B, C, Poles, Trip, Circuit Description, CKT. Includes location, supply, and phase information.

100% CONSTRUCTION DOCUMENTS

Table with columns: drawing title, REVISIONS, drawing prepared by, date, mark, date, description, project, approved by, drawing no., CAD no., DCS project no., OSOGR project no.

Branch Panel: SP-3 Location: CARPENTRY E140 Supply From: T-SF-3 DISC Mounting: Surface Enclosure: Type 1

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT
1	100A BUS DUCT 'BD-A'	100A	3	6.00	16.57	6.00	16.57	3	200A BUS DUCT 'BD-B'	2
3	--	--	--	--	--	6.00	16.57	--	--	6
5	--	--	--	--	--	6.00	16.57	--	--	8
7	200A BUS DUCT 'BD-C'	200A	3	13.68	8.40	13.68	8.40	3	110A CP26 - CNC ROUTER	8
9	--	--	--	--	--	13.68	8.40	--	--	10
11	--	--	--	--	--	13.68	8.40	--	--	12
13	CP17A - SCROLL SAW	20A	1	0.96	5.52	0.96	5.52	3	80A CNC ROUTER VACUUM PUMP	14
15	CP17B - SCROLL SAW	20A	1	--	--	--	--	--	--	16
17	DOOR MACHINE	20A	3	--	--	4.33	5.52	--	--	18
19	--	--	4.33	0.55	--	--	--	3	20A CP28 - EDGE BANDING PACKAGE	20
21	--	--	4.33	0.55	--	--	--	--	--	22
23	CORD REEL	20A	1	--	--	0.54	0.55	--	--	24
25	CORD REEL	20A	1	0.54	0.54	--	--	1	20A CORD REEL	26
27	CORD REEL	20A	1	0.54	0.54	--	--	1	20A CORD REEL	28
29	SPARE	20A	1	--	--	0.00	0.54	1	20A CORD REEL	30
31	SPARE	20A	1	0.00	0.00	--	--	1	20A SPARE	32
33	SPARE	20A	1	0.00	0.00	--	--	1	20A SPARE	34
35	SPARE	20A	1	--	--	0.00	0.00	1	20A SPARE	36
37	SPARE	--	--	0.00	0.00	--	--	--	--	38
39	SPARE	--	--	0.00	0.00	--	--	--	--	40
41	SPARE	--	--	0.00	0.00	--	--	--	--	42
Phase Load:				57.09 kVA	57.09 kVA	56.13 kVA				
Phase...				477 A	477 A	467.8 A				

Branch Panel: SP-6 Location: ELECTRICAL E114 Supply From: LDSB-1 Mounting: Surface Enclosure: Type 1

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT
1	54 POLE, 120/208V, 3-PH, 4W PANEL	225 A	3	0.00	0.00	0.00	0.00	3	100 A 30 POLE, 120/208V, 3-PH, 4W PANEL	2
3	--	--	--	--	--	--	--	--	--	4
5	--	--	--	--	--	--	--	--	--	6
7	18 POLE, 120/208V, 1-PH, 3W PANEL	60 A	2	0.00	0.00	--	--	2	60 A 18 POLE, 120/208V, 1-PH, 3W PANEL	8
9	--	--	--	--	0.00	0.00	--	--	--	10
11	18 POLE, 120/208V, 1-PH, 3W PANEL	60 A	2	--	--	0.00	0.00	2	60 A 18 POLE, 120/208V, 1-PH, 3W PANEL	12
13	--	--	--	--	--	0.00	0.00	--	--	14
15	18 POLE, 120/208V, 1-PH, 3W PANEL	20 A	2	0.00	0.00	0.00	17.33	3	200 A 200A BUS DUCT	16
17	--	--	--	--	--	0.00	17.33	--	--	18
19	RECEPT	20 A	1	0.54	17.33	--	--	--	--	20
21	RECEPT	20 A	1	--	0.54	0.54	--	1	20 A CORD REEL	22
23	WORKBENCH CORD REEL	20 A	1	--	0.54	0.54	--	1	20 A CORD REEL	24
25	WORKBENCH CORD REEL	20 A	1	0.54	0.54	--	--	1	20 A CORD REEL	26
27	WORKBENCH CORD REEL	20 A	1	0.54	0.54	--	--	1	20 A CORD REEL	28
29	WORKBENCH CORD REEL	20 A	1	0.54	0.54	--	--	1	20 A CORD REEL	30
31	WORKBENCH CORD REEL	20 A	1	0.54	0.54	--	--	1	20 A CORD REEL	32
33	WORKBENCH CORD REEL	20 A	1	0.54	0.54	--	--	1	20 A CORD REEL	34
35	CORD REEL	20 A	1	--	--	0.54	0.00	1	20 A SPARE	36
37	SPARE	20 A	1	0.00	0.00	--	--	1	20 A SPARE	38
39	SPARE	20 A	1	0.00	0.00	--	--	1	20 A SPARE	40
41	SPARE	20 A	1	--	--	0.00	0.00	1	20 A SPARE	42
Phase Load:				20.03 kVA	20.57 kVA	20.03 kVA				
Phase...				166.9 A	171.4 A	166.9 A				

Branch Panel: MEP1-1 Location: ELEC E137 Supply From: USB-1 Mounting: Surface Enclosure: Type 1

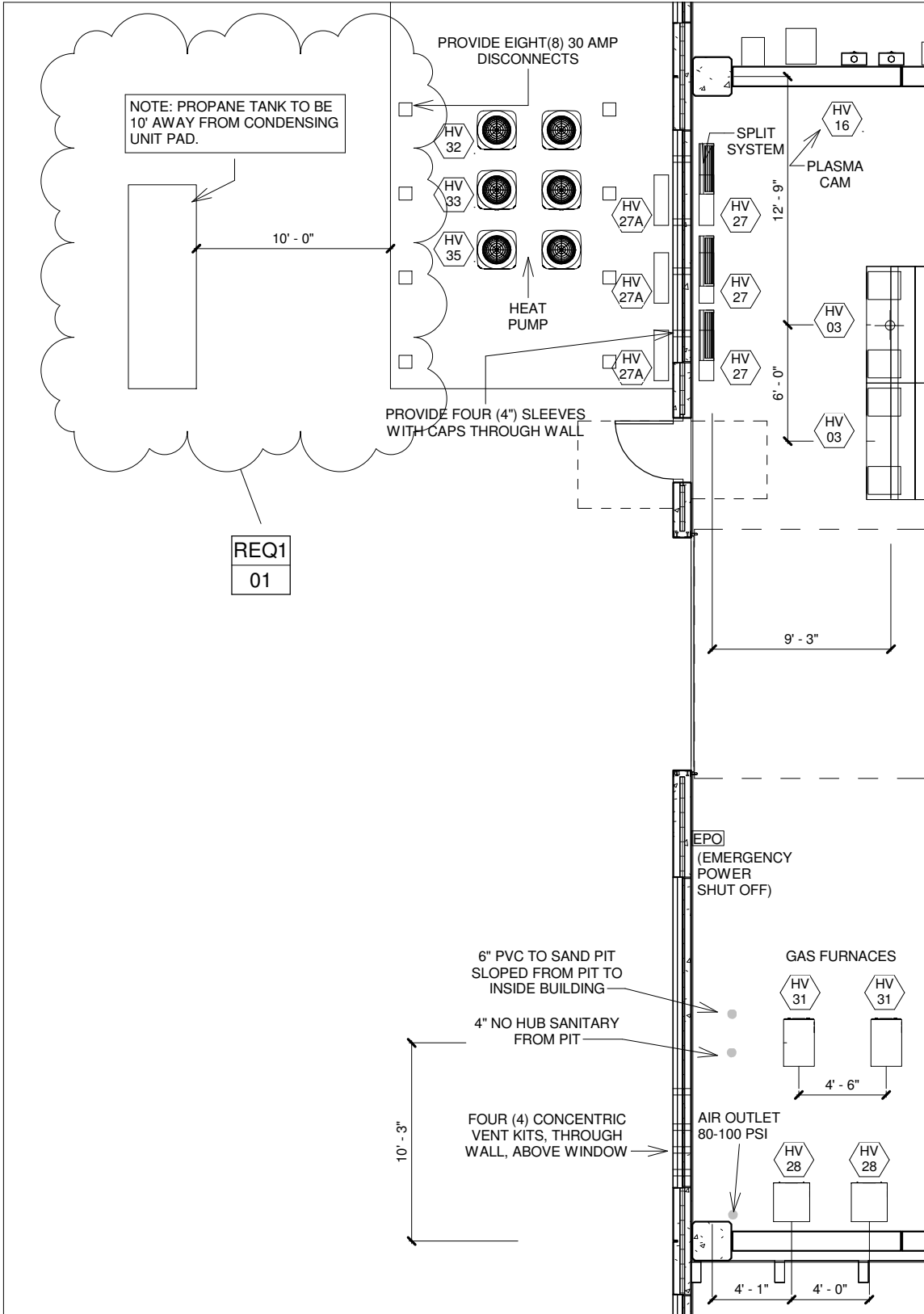
CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT
1	SHEF-1	15 A	3	0.58	1.33	0.58	1.33	3	15 A SHEF-3	2
3	--	--	--	--	--	0.58	1.33	--	--	4
5	--	--	--	--	--	0.58	1.33	--	--	6
7	SHEF-5	15 A	3	0.94	2.10	0.94	2.10	3	20 A VEF-1	8
9	--	--	--	--	--	0.94	2.10	--	--	10
11	--	--	--	--	--	0.94	2.10	--	--	12
13	VEF-2	15 A	3	1.33	0.94	1.33	0.94	3	15 A DC-1 ROTARY	14
15	--	--	--	--	--	1.33	0.94	--	--	16
17	--	--	--	--	--	1.33	0.94	--	--	18
19	DC-1 FAN	70 A	3	9.41	14.39	9.41	14.39	3	90 A DC-2 FAN	20
21	--	--	--	--	--	9.41	14.39	--	--	22
23	--	--	--	--	--	9.41	14.39	--	--	24
25	DC-2 ROTARY	15 A	3	0.94	10.23	0.94	10.23	3	60 A PLASMA CUTTER - PLUMBING E101	26
27	--	--	--	--	--	0.94	10.23	--	--	28
29	--	--	--	--	--	0.94	10.23	--	--	30
31	DC-2 SHAKER	15 A	3	0.44	7.36	0.44	7.36	3	60 A WELDER - PLUMBING E101	32
33	--	--	--	--	--	0.44	7.36	--	--	34
35	--	--	--	--	--	0.44	7.36	--	--	36
37	AC-1	90 A	3	14.40	1.33	14.40	1.33	3	15 A SHEF-11	38
39	--	--	--	--	--	14.40	1.33	--	--	40
41	--	--	--	--	--	14.40	1.33	--	--	42
43	--	--	--	2.10	--	--	--	3	20 A SHEF-12	44
45	--	--	--	2.10	--	2.10	--	--	--	46
47	--	--	--	--	--	2.10	--	--	--	48
49	SPARE	60 A	3	0.00	0.00	--	--	3	15 A SPARE	50
51	--	--	--	0.00	0.00	0.00	0.00	--	--	52
53	--	--	--	0.00	0.00	0.00	0.00	--	--	54
Phase Load:				67.82 kVA	67.82 kVA	67.82 kVA				
Phase...				244.8 A	244.8 A	244.8 A				

Branch Panel: MEP3-2 Location: ELEC CLOSET E246 Supply From: DSB-1 Mounting: Surface Enclosure: Type 1

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT
1	DOAS-1 - SF	40 A	3	5.81	3.87	5.81	3.87	3	25 A DOAS-1 - EF	2
3	--	--	--	5.81	3.87	5.81	3.87	--	--	4
5	--	--	--	5.81	3.87	5.81	3.87	--	--	6
7	DOAS-1 - ER-1	15 A	3	0.58	5.81	0.58	5.81	3	40 A AHU-1 - SA-1	8
9	--	--	--	0.58	5.81	0.58	5.81	--	--	10
11	--	--	--	0.58	5.81	0.58	5.81	--	--	12
13	AHU-1 - SA-2	40 A	3	5.81	3.04	5.81	3.04	3	20 A AHU-1 - RA-1	14
15	--	--	--	5.81	3.04	5.81	3.04	--	--	16
17	--	--	--	5.81	3.04	5.81	3.04	--	--	18
19	AHU-1 - RA-2	20 A	3	3.04	5.81	3.04	5.81	3	40 A AHU-2 - SA-1	20
21	--	--	--	3.04	5.81	3.04	5.81	--	--	22
23	--	--	--	3.04	5.81	3.04	5.81	--	--	24
25	AHU-2 - SA-2	40 A	3	5.81	2.10	5.81	2.10	3	15 A AHU-2 - RA-1	26
27	--	--	--	5.81	2.10	5.81	2.10	--	--	28
29	--	--	--	5.81	2.10	5.81	2.10	--	--	30
31	AHU-2 - RA-2	15 A	3	2.10	5.81	2.10	5.81	3	40 A AHU-3 - SA-1	32
33	--	--	--	2.10	5.81	2.10	5.81	--	--	34
35	--	--	--	2.10	5.81	2.10	5.81	--	--	36
37	AHU-3 - SA-2	40 A	3	5.81	2.10	5.81	2.10	3	15 A AHU-3 - RA-1	38
39	--	--	--	5.81	2.10	5.81	2.10	--	--	40
41	--	--	--	5.81	2.10	5.81	2.10	--	--	42
43	AHU-3 - RA-2	15 A	3	2.10	7.47	2.10	7.47	3	60 A AHU-8 - SA-1	44
45	--	--	--	2.10	7.47	2.10	7.47	--	--	46
47	--	--	--	2.10	7.47	2.10	7.47	--	--	48
49	AHU-8 - SA-2	60 A	3	7.47	3.04	7.47	3.04	3	20 A AHU-8 - RA-1	50
51	--	--	--	7.47	3.04	7.47	3.04	--	--	52
53	--	--	--	7.47	3.04	7.47	3.04	--	--	54
55	AHU-8 - RA-2	20 A	3	3.04	3.87	3.04	3.87	3	25 A ERV-M1 - SA	56
57	--	--	--	3.04	3.87	3.04	3.87	--	--	58
59	--	--	--	3.04	3.87	3.04	3.87	--	--	60
61	ERV-M1 - EXH	20 A	3	3.04	3.87	3.04	3.87	3	25 A ERV-1 - SA	62
63	--	--	--	3.04	3.87	3.04	3.87	--	--	64
65	--	--	--	3.04	3.87	3.04	3.87	--	--	66
67	ERV-1 - EXH	20 A	3	3.04	3.87	3.04	3.87	3	25 A ERV-2 - SA	68
69	--	--	--	3.04	3.87	3.04	3.87	--	--	70
71	--	--	--	3.04	3.87	3.04	3.87	--	--	72
73	ERV-2 - EXH	20 A	3	3.04	0.83	3.04	0.83	3	15 A EF-V3	74
75	--	--	--	3.04	0.83	3.04	0.83	--	--	76
77	--	--	--	3.04	0.83	3.04	0.83	--	--	78
79	SHEF-13	15 A	3	0.94	0.30	0.94	0.30	3	15 A SHEF-14	80
81	--	--	--	0.94	0.30	0.94	0.30	--	--	82
83	--	--	--	0.94	0.30	0.94	0.30	--	--	84
Phase Load:				103.27 kVA	103.27 kVA	103.27 kVA				
Phase...				78.8 A	78.8 A	78.8 A				

Branch Panel: SP-4 Location: PRECISION MACHINING... Supply From: LDSB-1 Surface Mounting: Surface Enclosure: Type 1

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT
1	400A BUS DUCT 'BD-C'	400 A	3	35.91	36.84	35.91	36.84	3	400A BUS DUCT 'BD-B'	2
3	--	--	--	--	--	35.91	36.84	--	--	4
5	--	--	--	--	--	35.91	36.84	--	--	6
7	225A BUS DUCT 'BD-A'	225 A	3	13.08	0.60	13.08	0.60	1	20 A MS21A - CMM	8
9	--	--	--	--	--	13.08	0.60	--	--	10
11	--	--	--	--	--	13.08	0.54	--	--	12
13	FLOOR BOXES	20 A	1	0.36	0.54	0.36	0.54	1	20 A RECEIPT	14
15	FLOOR BOXES	20 A	1	0.36	0.54	--	--	1	20 A RECEIPT	16
17	FLOOR BOXES	20 A	1	0.36	0.54	0.36	0.54	1	20 A RECEIPT	18
19	RECEPT	20 A	1	0.36	0.36	--	--	1	20 A RECEIPT	20
21	RECEPT	20 A	1	--	0.54	0.54	--	1	20 A CORD REEL	22
23	CORD REEL	20 A	1	--	--	1.62	1.08	1	20 A CORD REEL	24
25	CORD REEL	20 A	1	1.08	1.08	--	--	1	20 A CORD REEL	26
27	CORD REEL	20 A	1	1.08	1.08	--	--	1	20 A CORD REEL	28
29	CORD REEL	20 A	1	1.08	1.08	1.62	1.62	1	20 A CORD REEL	30
31	CORD REEL	20 A	1	1.08	1.08	--	--	1	20 A CORD REEL	32
33	CORD REEL	20 A	1	1.08	1.62	1.62	1.08	1	20 A CORD REEL	34
35	CORD REEL	20 A	1	1.08	1.08	1.62	1.08	1	20 A CORD REEL	36
37	CORD REEL	20 A	1	1.08	1.08	--	--	1	20 A CORD REEL	38
39	SPARE	20 A	1	0.00	1.08	--	--	1	20 A CORD REEL	40
41	SPARE	20 A	1	0.00	0.00	--	--	1	20 A SPARE	42
43	SP									



DRA

Drumme
Rosane
Anderson, Inc.

225 Oakland Road
South Windsor
Connecticut 06074
860-644-8300

Milford, CT 06461

600 Orange Avenue

**ADDITIONS AND RENOVATIONS
PLATT TECHNICAL HIGH SCHOOL**

CA EQUIPMENT SCHEDULE

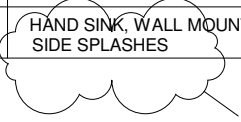
**ADDENDUM
NO.1**

RFS1-01

REF. DWG No.
FS-02

DCS Project No.
BI-RT-878-CMR
OSCGR Project No.
900-0013
Scale:
Date: 07/23/2019

ITEM#	QTY.	EQUIPMENT CATEGORY	FURNISHED BY			INSTALLED BY			MANUFACTURER	MODEL NO.
			KEC	VENDOR/OWNER	GC	KEC	VENDOR/OWNER	GC		
CA-01	2	REFRIGERATOR/FREEZER	X	-	-	X	-	-	TRUE FOOD SERVICE	
CA-02	1	FIRE SUPPRESSION SYSTEM	-	-	-	-	-	-	ANSUL/RANGEGUARD	
CA-03	9	HAND SINK, WALL MOUNT/ SIDE SPLASHES	X	-	-	X	-	-	ADVANCE TABCO	



RFS1
01

DRA

Drummey
Rosane
Anderson, Inc.

225 Oakland Road
South Windsor
Connecticut 06074
860-644-8300

Milford, CT 06461

600 Orange Avenue

ADDITIONS AND RENOVATIONS
PLATT TECHNICAL HIGH SCHOOL

CA EQUIPMENT SCHEDULE

ADDENDUM
NO.1

RFS1-02

REF. DWG No.
FS-02

DCS Project No.
BI-RT-878-CMR
OSCGR Project No.
900-0013
Scale:
Date: 07/23/2019

ITEM #	QTY.	EQUIPMENT CATEGORY	MANUFACTURER	MODEL NO.
CA-67	4	POT & PAN RACK	METRO WIRE	SUPER ERECTA

RFS1
02

DRA

Drumme
Rosane
Anderson, Inc.

225 Oakland Road
South Windsor
Connecticut 06074
860-644-8300

Milford, CT 06461

600 Orange Avenue

ADDITIONS AND RENOVATIONS
PLATT TECHNICAL HIGH SCHOOL

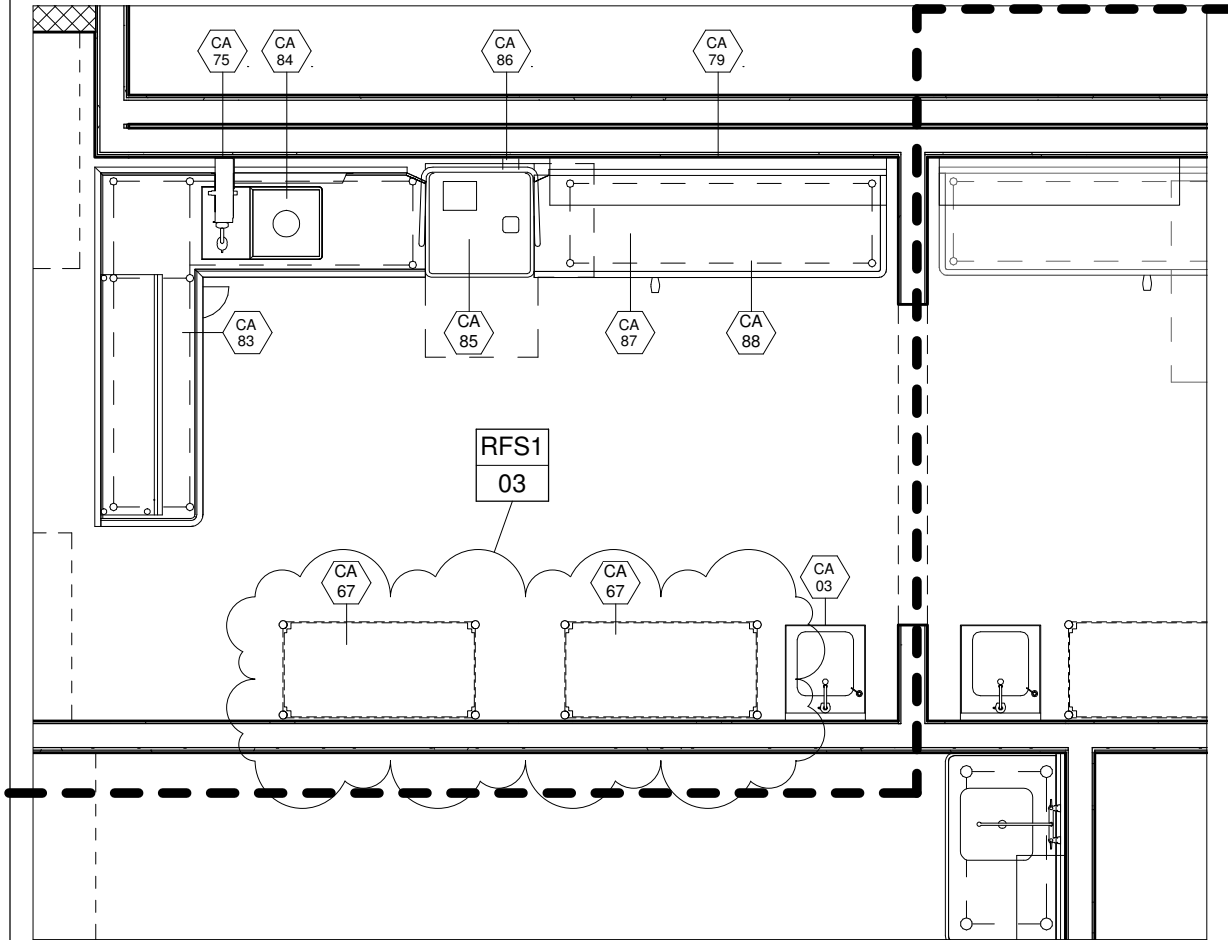
CULINARY DISH DROP - B125B

ADDENDUM
NO.1

RFS1-03

REF. DWG No.
FS-01

DCS Project No.
BI-RT-878-CMR
OSCGR Project No.
900-0013
Scale: 1/4" = 1'-0"
Date: 07/23/2019



DRA

Drumme
Rosane
Anderson, Inc.

225 Oakland Road
South Windsor
Connecticut 06074
860-644-8300

Milford, CT 06461

600 Orange Avenue

**ADDITIONS AND RENOVATIONS
PLATT TECHNICAL HIGH SCHOOL**

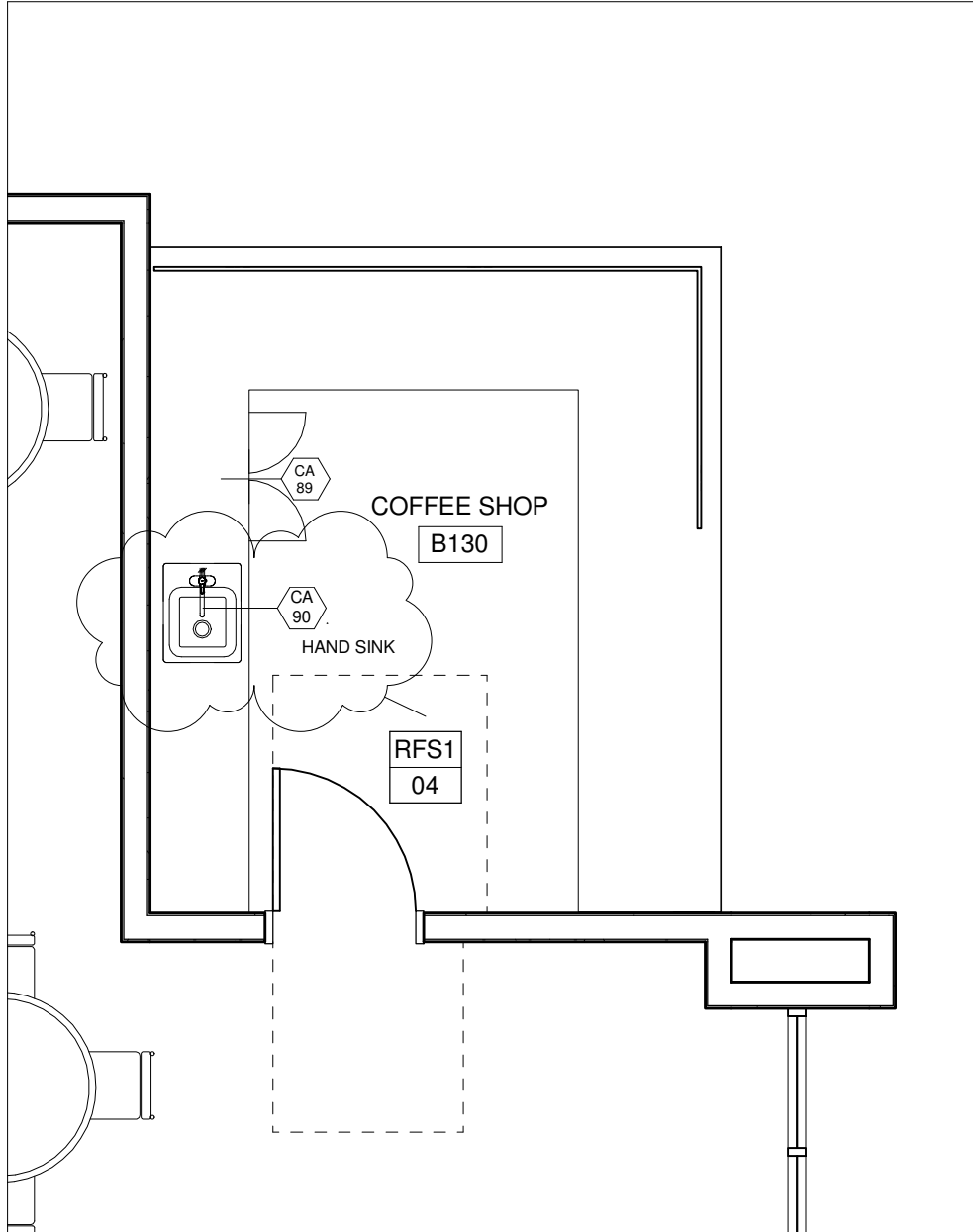
COFFEE SHOP - B130

**ADDENDUM
NO.1**

RFS1-04

REF. DWG No.
FS-01

DCS Project No.
BI-RT-878-CMR
OSCGR Project No.
900-0013
Scale: 1/4" = 1'-0"
Date: 07/23/2019



DRA

Drumme
Rosane
Anderson, Inc.

225 Oakland Road
South Windsor
Connecticut 06074
860-644-8300

Milford, CT 06461

600 Orange Avenue

ADDITIONS AND RENOVATIONS
PLATT TECHNICAL HIGH SCHOOL

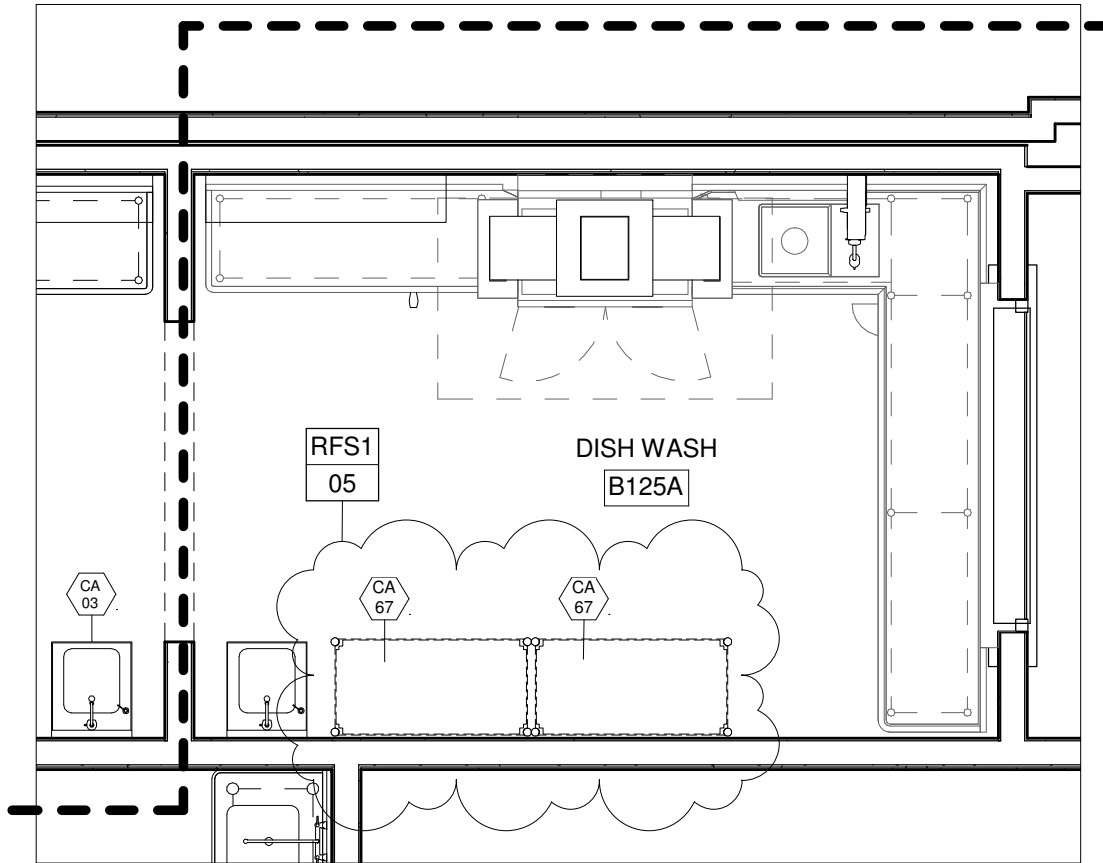
DISH WASH - B125A

ADDENDUM
NO.1

RFS1-05

REF. DWG No.
FS-04

DCS Project No.
BI-RT-878-CMR
OSCGR Project No.
900-0013
Scale: 1/4" = 1'-0"
Date: 07/23/2019



DCS Project No.:	BI RT 878 CMR	Meeting Purpose:
Date:	7.22.19	<input checked="" type="checkbox"/> Pre-Bid Meeting
Meeting Start Time:	10:00a.m.	<input type="checkbox"/> Post Bid Review Meeting
Meeting Location:	Platt Technical High School 600 Orange Ave Milford Ct	<input type="checkbox"/> Other:

Name:	LAWRENCE ROSATI	Title:	PX
Company/Department:	MORGANTI	E-mail:	LROSATI@MORGANTI.COM
Street:	100 Mill Plain Rd	Phone:	203-994-2693
City/State/Zip:	Danbury CT	FAX:	

Name:	Alvin Bingham	Title:	
Company/Department:	CHICO	E-mail:	alvin.bingham@ct.gov
Street:		Phone:	
City/State/Zip:		FAX:	

Name:	ED HERNDON	Title:	
Company/Department:	MORGANTI	E-mail:	EHERNDON@MORGANTI.COM
Street:	100 Mill Plain Rd	Phone:	
City/State/Zip:	Danbury Ct.	FAX:	

Name:	Steven Longo	Title:	Proj. Manager
Company/Department:	DAS-CS	E-mail:	steven.longo@ct.gov
Street:	450 Columbus Blvd.	Phone:	860-713-5751
City/State/Zip:	Hartford, CT 06103	FAX:	

Name:	John Ambra	Title:	Supt
Company/Department:	MORGANTI	E-mail:	JAMBRA@MORGANTI.COM
Street:	100 Mill Plain Rd	Phone:	203-994-2432
City/State/Zip:	Danbury CT	FAX:	

Name:	Gary Cleveland	Title:	Project Manager
Company/Department:	MORGANTI GROUP INC	E-mail:	gcleveland@morganti.com
Street:		Phone:	
City/State/Zip:		FAX:	

DCS Project No.:		Meeting Purpose:
Date:		<input type="checkbox"/> Pre-Bid Meeting
Meeting Start Time:		<input type="checkbox"/> Post Bid Review Meeting
Meeting Location:		<input type="checkbox"/> Other:

Name: TONY LOGODICJO	Title: ASSIST P.M.
Company/Department: MORGANTI	E-mail:
Street:	Phone:
City/State/Zip	FAX:

Name: Luke Sinopoli	Title: P.E.
Company/Department: Manafat Brothers Inc	E-mail: LSinopoli@manafat.com
Street:	Phone: 860-250-2753
City/State/Zip	FAX:

Name: FAKID KTHOURI	Title:
Company/Department: MORGANTI	E-mail:
Street:	Phone:
City/State/Zip	FAX:

Name: JSSAM AbuHanna	Title:
Company/Department: CS contractors	E-mail: SamabuHanna@yahoo
Street:	Phone: 203 671 4296
City/State/Zip	FAX:

Name: Jude Jean-Pierre	Title: President
Company/Department: ARKONE/TAUARES	E-mail: jude@arkonecontracting.com
Street: 46 Richards Ave, STE 300	Phone: (203) 450-3008
City/State/Zip: Norwalk, CT 06854	FAX:

Name: Michael Denicola	Title: President
Company/Department: Modern Painting & Remodeling LLC	E-mail: modernpainting@outlook.com
Street: 75 concord St.	Phone: 203-907-6394
City/State/Zip: Hamden, CT 06514	FAX:



Division of
Construction Services

6020
Bid Phase Meeting
Attendance Log

Page 3 of 7

DCS Project No.:	Meeting Purpose:
Date:	<input type="checkbox"/> Pre-Bid Meeting
Meeting Start Time:	<input type="checkbox"/> Post Bid Review Meeting
Meeting Location:	<input type="checkbox"/> Other:

Name: Cesar Velez	Title:
Company/Department: Coreslab Structure	E-mail:
Street: 1023 Waterbury Road	Phone:
City/State/Zip: Thomaston, CT 06787	FAX:

Name: Rob Delmundo	Title:
Company/Department: Coreslab Structure	E-mail:
Street: 1023 Waterbury Rd	Phone:
City/State/Zip: Thomaston, CT 06787	FAX:

Name: Ed Hellauer	Title:
Company/Department: Guerrera Const.	E-mail: EdH@guerreraconstruction.com
Street: 154 Christian St.	Phone: 203 308 0926
City/State/Zip: OXFORD, CT 06478	FAX:

Name: Matt Hoff	Title:
Company/Department: Banton Construction	E-mail: mhoff@bantonstruc.com
Street: 339 Washington Ave	Phone: 203 234 2353
City/State/Zip: North Haven CT	FAX:

Name: ROBERT PIACENTINI, JR	Title: SUPER
Company/Department: KBE BUILDING	E-mail: BPIACENTINI@KBEBUILDING.COM
Street:	Phone: 860 384 4120
City/State/Zip:	FAX:

Name: ROBERT CAMILLO	Title: MEMBER / OWNER
Company/Department: OWI CONTRACTORS	E-mail: BOB@OWICONTRACTORS.COM
Street: 1685 BARROW AVE	Phone: 203-908-3545 ext 102
City/State/Zip: STRATFORD, CT 06614	FAX: 203-870-4030



DCS Project No.:		Meeting Purpose:	
Date:		<input type="checkbox"/> Pre-Bid Meeting	
Meeting Start Time:		<input type="checkbox"/> Post Bid Review Meeting	
Meeting Location:		<input type="checkbox"/> Other:	

Name: MATT PEACOCK	Title: CA
Company/Department: KRBE BUNDING	E-mail: MPEACOCK@KRBEBUNDING.COM
Street:	Phone: 860-878-5015
City/State/Zip: FARMINGTON	FAX:

Name: Nick Furey	Title: Intern
Company/Department: Waters Construction	E-mail: n.furey@watersconst.com
Street: 300 Bestwick Drive	Phone: 203-334-6888
City/State/Zip: Bridgeport CT	FAX:

Name: Antony Smith	Title:
Company/Department:	E-mail:
Street:	Phone:
City/State/Zip:	FAX:

Name: Will Beazit	Title:
Company/Department: DiRienzo Mechanical	E-mail: will@dirienzomechanical.com
Street: 203-996-6809	Phone:
City/State/Zip:	FAX:

Name: Jon Poirier	Title: GM-CT
Company/Department: B-G Mechanical	E-mail: jpoirier@bgmechanical.com
Street:	Phone: 860-645-1105
City/State/Zip:	FAX:

Name: WILLIAM TELLIER	Title: PROJ MGR / ESTIMATOR
Company/Department: CT FUCCI CONSTRUCTION	E-mail: WTELLIER@CTFUCCI.COM
Street: 63 RUSSELL STREET	Phone: 203/469-7487
City/State/Zip: NEW HAVEN CT 06513	FAX: 203/468-6256



DCS Project No.:	Meeting Purpose:
Date:	<input type="checkbox"/> Pre-Bid Meeting
Meeting Start Time:	<input type="checkbox"/> Post Bid Review Meeting
Meeting Location:	<input type="checkbox"/> Other:

Name: CT Temp Control	Title: VP Operations
Company/Department: Mike Sulo	E-mail: msulo@CTTempControls.com
Street: 500 Corporate Row	Phone: 800 890 2022
City/State/Zip: Cromwell CT 06410	FAX:

Name: John Poverenza	Title: Account Executive
Company/Department: AAA Maintenance	E-mail: JPoverenza@AAAMaintenance.com
Street: 965 Midland Ave	Phone: 914 280 3794
City/State/Zip: Yonkers NY 10704	FAX:

Name: Jim Bona	Title:
Company/Department: E.C.I.	E-mail: JIM@E.C.I.COM
Street: Main St	Phone: 860-549-2822
City/State/Zip: Hartford CT	FAX:

Name: Tom Baerlein	Title: Sr Acct Executive
Company/Department: Horizon Services	E-mail: tbaerlein@horizoncs.com
Street: 250 Gardner Street	Phone: 860-798-0966
City/State/Zip: East Hartford CT 06108	FAX: 860-791-6966 9710

Name: David Telesca	Title:
Company/Department: Platt Tech	E-mail:
Street:	Phone:
City/State/Zip:	FAX:

Name: Andrew Ferdinand	Title: OWNER
Company/Department: F&F Floors	E-mail: fandfwoodfloors@hotmail.com
Street: 27 Mill Plain Rd	Phone: 203 648 5663
City/State/Zip: Danbury CT 06811	FAX: 203 917 4726

DCS Project No.:	Meeting Purpose:
Date:	<input type="checkbox"/> Pre-Bid Meeting
Meeting Start Time:	<input type="checkbox"/> Post Bid Review Meeting
Meeting Location:	<input type="checkbox"/> Other:

Name: Hector Hernandez	Title: Estimator
Company/Department: Chandler Architectural	E-mail: hector@cap-llc.com
Street:	Phone: 413-557-4432
City/State/Zip: West Springfield	FAX:

Name: Timothy Andre	Title: New England Sales Manager
Company/Department: Unistrass Corp.	E-mail: Timothy.Andre@UnistrassCorp.com
Street: 550 Chesire R.d.	Phone: 413 629-2066
City/State/Zip: Pittsfield, MA 01020	FAX:

Name: Bill MITCHELL	Title: ASST EXEC
Company/Department: CHAMPAIGN MANUFACTURE	E-mail: bmitchell@champservicesllc.com
Street: 301 COMMERCIAL DRIVE	Phone: 203 345-5992
City/State/Zip: FAIRFIELD, CT 06425	FAX: 203 908 7316

Name: MARC BARBIAN	Title: PROJECT MANAGER
Company/Department: ENCOR	E-mail: M.BARBAN@GONCON.COM
Street: 1265 WOODROW RD	Phone: 203-375-5228 x 7431
City/State/Zip: STRATFORD, CT 06615	FAX:

Name: Antony. Smith.	Title: Landscaping
Company/Department: ZON AIRICKS-LANDSCAPING	E-mail: TonySmith@airicklandscaping
Street: P.O. Box Windsor Ct.	Phone: 860-385-2550
City/State/Zip: 06095	FAX: N

Name: Ronnie Demme Ronnie Demme	Title: PM
Company/Department: Ronnie Demme Ronnie Demme	E-mail: M.BARBAN@GONCON.COM
Street: 150 dividend Rd	Phone: 860 461 6444
City/State/Zip: Roxbury Hill CT	FAX:

DCS Project No.:		Meeting Purpose:
Date:		<input type="checkbox"/> Pre-Bid Meeting
Meeting Start Time:		<input type="checkbox"/> Post Bid Review Meeting
Meeting Location:		<input type="checkbox"/> Other: _____

Name:	Alix Simonetti	Title:	Human Rights Atty
Company/Department:	CT Comm. on Human Rights and Opport.	E-mail:	alix.Simonetti@ct.gov
Street:	450 Columbus Blvd, Suite 2	Phone:	(860) 541-3430
City/State/Zip	Hartford, CT 06103	FAX:	

Name:		Title:	
Company/Department:		E-mail:	
Street:		Phone:	
City/State/Zip		FAX:	

Name:		Title:	
Company/Department:		E-mail:	
Street:		Phone:	
City/State/Zip		FAX:	

Name:		Title:	
Company/Department:		E-mail:	
Street:		Phone:	
City/State/Zip		FAX:	

Name:		Title:	
Company/Department:		E-mail:	
Street:		Phone:	
City/State/Zip		FAX:	

Name:		Title:	
Company/Department:		E-mail:	
Street:		Phone:	
City/State/Zip		FAX:	

Addendum	Item	Question / Assumption	DWG REF	SPEC REF	RESPONSE
ADD-1	1-01	Started taking off the plumbing and I need some information for the 500 gallon propane tank, we will be Subbing the tank and piping to a gas Co. that will give us a turnkey system in-cluding tank, piping, regulator to the entry point at the building and we will take it from there into the building, there's no Specs for the underground propane piping from the tank to the building, only Facility Natural Gas piping 22 11 23, the gas co. always use polypropylene pipe to a steel riser up to the regulator with a plug valve could you run this by the engineers for approval?		22 11 23	The tank and piping shall be provided by contractor. Scope and specifications will be updated in Addendum No. 1
ADD-1	1-02	Reference 2.1 and 2.2 Condensing Water-Tube Boilers Boiler Control and Lead Lag Specification lists manufacturers as Cleaver Brooks, Veissmann and Buderus. Please confirm that Fulton Endura Plus EDR + 4000 which meets the spec would be acceptable for this project?		23 52 32 Condensing Boilers	Specifications to remain with the three boilers as specified.
ADD-1	1-03	RFI on the Oil Tank. Spec calls for a UL-58 that is for Underground Tanks Should Be UL-142. Also the Spec Calls for a 30 Year That would Make it a Firegusrd UL-285 Tank. This is an Above Ground Tank. I think all they need is a UL-142 Double Wall Tank.		23 11 13 Facility Fuel Oil Piping Article 2.12	Tank is above ground and shall be UL-142. Specification shall be updated in Addendum No. 1
ADD-1	1-04	Substitution request for metal lockers and bench to allow Scranton Tufftec lockers, Scranton Duralife lockers and Scranton tufftec bench.		10 51 00 Metal Lockers	Specifications to remain with the three metal locker manufactures as specified.
ADD-1	1-05	I am planning to bid on the lecture hall and auditorium seating for this project, however I am unable to see on the plans how many positions are required of each product. I was wondering if you would be able to provide me with some additional information in order to propose a bid?		12 61 13 Fixed Audience Seating	Refer to Addendum No. 1. Refer to Equipment drawing EQ-1.1D where at Multipurpose Room, D111, Folding Seating is called out as N.I.C (Not in Contract).
ADD-1	1-06	Substitution request - Request to have Horner Flooring added to the list of manufactures for Athletic Wood Flooring		09 64 60 Wood Athletic Flooring	Specifications to remain with the three Wood Athletic Flooring manufactures as specified.

Addendum	Item	Question / Assumption	DWG REF	SPEC REF	RESPONSE
ADD-1	1-07	Substitution request - Midwest Regional Sales Manager for California Sports Surfaces. I'm writing to seek approval for our Plexitrac Accelerator running track surfacing system as an alternate to the proposed Beynon BSS 100 Track Surface showing in the specification for the Platt Tech High School Track project. We are submitting our Plexitrac Accelerator, a premium environmentally friendly water-based system which meets or exceeds the IAAF performance standards listed in the specification. Also, this water-borne system does not require the use of acetones, isocyanates, or solvents during construction or clean-up. I have attached our product information, specifications, and testing data for your review.		32 18 23.39 Synthetic Track Surfacing	Specifications to remain with the three Track Surface manufactures as specified.
ADD-1	1-08	<ol style="list-style-type: none"> 1) For the main grandstand, could not find a completion date. 2) For the main grandstand, could not find a soil report. 3) For the main grandstand, the drawings show a front riser closure. It is not in the specs. 4) For the main grandstand, the riser finish is not noted in the specs. 5) For the main grandstand, the seat plan finish is not noted in the specs. 		13 34 16 Grandsand Seating System	<ol style="list-style-type: none"> 1) It is near the end of phase 2, please review exhibit C project schedule. 2) Refer to 50 40 00, Subsurface Geotechnical Report 3) Refer to Addendum No.1 4) Refer to 13 34 16, Article 2.4, Paragraph B.3. 5) Refer to 13 34 16, Article 2.4, Paragraph B.2.
ADD-1	1-09	<ol style="list-style-type: none"> 6) For the portable bleachers, the rise/run is not noted. 7) For the portable bleachers, if the rise/run is 8/24, double foot plank, risers, and aisles will be required. 8) For the portable bleachers, if the rise/run is 6/24, the seats and foot planks will need to be 2 x 12's. 9) For the portable bleachers, the quantity of tow kits is not noted. 		13 34 16.53 Transportable Bleachers	Refer to Addendum No.1
ADD-1	1-10	<p>1. There is a spec section for "fixed seating". It shows seating in the mezzanine of the multi purpose room. Drawing EQ -1.2D shows the seating with 'tablet arms', the spec sections does not call tablet arms. What is required? Spec also calls out CAL 133 for the fabric. CAL 117 will be much less expensive and will fill any requirements. Is CAL 117 acceptable?</p>	EQ-1.2D	12 71 10 Fixed Seating and Tables	Section 12 71 10, Fixed Seating and Tables has been deleted. Refer to Addendum No. 1.

Addendum	Item	Question / Assumption	DWG REF	SPEC REF	RESPONSE
ADD-1	1-11	2. Drawing EQ-4.1 shows telescoping platforms in the multi purpose room But there is a note on the drawing that indicates That GB-05 will be by owner. There is no spec section for this seating. Please advise.	EQ-4.1		GB-05, Folding Seating, is Not-in-Contract. Folding Seating to be procured at a future date.
ADD-1	1-12	3. Spec section 12710 – Fixed Tables. Can not seem to find a lecture room that shows these lecture tables.		12 71 10 Fixed Seating and Tables	Section 12 71 10, Fixed Seating and Tables has been deleted. Refer to Addendum No. 1.
ADD-1	1-13	For Bonding purposes, who is to be the Obligee.			The Morganti Group is the obligee.
ADD-1	1-14	The symbol legend of drawing SB1-L-102 seems to indicate the Supplemental Bid #1 field getting sod which would be in conflict with the note in the center of the SB-1 field that calls for Athletic Field Seed Mix Typ. Please clarify.	Landscape SB1-L-102	32 92 00 Turf and Grasses	All athletic fields are to be seeded as specified see Section 32 92 00 Turf and Grasses. No sod is specified for the project. The legend on sheet SB1-L-102 will be updated to reflect this in forthcoming Addendum No.2.
ADD-1	1-15	Please confirm Bid Package #24 is only responsible for 078410 Penetration Fire Stopping and not 078440 Fire resistive Joint Systems.		Bid Package No.24 07 84 40	Correct BP#24 is responsible for 078410 and the scope of work of that bid package.
ADD-1	1-16	Per General Trades special instruction number 52, please confirm that the intent is to have the general trades package complete all painting. This is not usually the case, it is usually its own bid package. It appears that Bid package #25 only has to paint the stair towers.		Bid Package No.6	Yes, the General trades bid package provides all painting EXCEPT for what is required by Bid Package #25 Painting.
ADD-1	1-17	Please define Special instruction #64 in the general trades package, what is the snow retention system?		Bid Package No.6	This lines refers to the snow guards/snow retention system at the garage.
ADD-1	1-18	Who is responsible for the wood trusses shown on S1-1-3A?	S1-1-3A		Trusses shown on S1-1-3a are metal, not wood, and are provided by BP#05.
ADD-1	1-19	Please confirm the only Glazing Package 19 Millwork, is responsible for is the Glazing integral to the Millwork. Not the Hollow Metal frames specified in 08 80 00 Glazing or the unframed mirrors.			Confirmed

Addendum	Item	Question / Assumption	DWG REF	SPEC REF	RESPONSE
ADD-1	1-20	Please advise if the Millwork subcontractor is providing fittings and fixtures or if the MEP trades will provide there own fixtures.			Please refer to the contract documents.
ADD-1	1-21	We will need the grading plans and existing conditions plan in a .dwg format. This should be able to be done by sending us 1 file with the existing conditions and proposed data on separate layers. We are willing to sign a waiver. Please make sure that the landscape architect combines all the files. We cannot search and find external references.			Files will only be available after bids, not prior to bids.
ADD-1	1-22	Per trade specific instruction number 43 in bid package #6 General Trades: Please advise if these temporary enclosures are to be insulated and if the ½" plywood is required on one side or two sides? Does the plywood and 2" by's have to be fire treated? Can a budget for man hours be provided? This will be tricky for us to predict not know-ing how many enclosure we can do at a time, or when the enclosures will be going up. We strongly suggest an allowance also be issued for this item in its entirety, material and labor. Please advise.		Bid Package No.6	Insulation is required and ½" plywood is only required on 1 side. All wood has to be fire treated. No budget will be provided you are required to provide the square footage required.
ADD-1	1-23	Per trade specific instruction number 45 in bid package #6 General Trades: Who is responsible for installing, maintaining and removing the perimeter safety guard rails during construction? We suggest an allowance or quantity be issued for this item as it is nearly in possible to predict. What is the tolerance the concrete contractor is being held to while pouring the slabs? Is that what we are to ensure? Or is the intent just repair work? Please advise.		Bid Package No.6	The removal of the safety rails is by the bid package contractor that has the per-manent work to eliminate the hazard. You will be required to perform work per note #45, no allowance will be allowed.
ADD-1	1-24	Per trade specific instruction number 47 in bid package #6 General Trades: Who is responsible for installing the guard rails at the elevator? Are the temp enclosures for the elevator to be included in the budget of 50,000 SF given to us in trade specific instruction # 43?		Bid Package No.6	General trades is responsible to furnish, install and maintain the elevator guard rails. No they are not included in in the 50,000 SF allowance.

Addendum	Item	Question / Assumption	DWG REF	SPEC REF	RESPONSE
ADD-1	1-25	Per trade specific instruction number 52 in bid package #6 General Trades: Please confirm if the intent of this specific instruction is to paint just the hollow metal door frames of stair towers 1-5, or if the general trades package owns the painting scope of the entire building? Please clarify.		Bid Package No.6	Provide the painting that is called for, General trades shall paint both sides of doors and frames within the stairwells only
ADD-1	1-26	Specification calls for HLM 5000. We would like to request that our HYDRALASTIC 836 please be reviewed as an cold fluid applied waterproofing material here. Please see the attached data sheets to assist with review, if you can please let me know if it's acceptable it would be greatly appreciated.		07 14 00 Cold Fluid-Applied Waterproofing	Specifications to remain with the six Waterproofing manufactures as specified.
ADD-1	1-27	I am planning to bid on the lecture hall and auditorium seating for this project, however I am unable to see on the plans how many positions are required of each product. I was wondering if you would be able to provide me with some additional information in order to propose a bid?		12 61 13 Fixed Audience Seating 12 71 10 Fixed Seating and Tables	Refer to Addendum No.1
ADD-1	1-28	I am reaching out to you to see if you may be able to assist us with some CAD Drawings for the Platt Technical High School. We are working on Sedia specifications for the fixed audience seating as well as the fixed seating and tables. It would be quite helpful to have the CAD's for these areas to produce specifications.		12 61 13 Fixed Audience Seating 12 71 10 Fixed Seating and Tables	Files will only be available after bids, not prior to bids.