

Additions and Renovations Platt Technical High School

Milford, CT

ADDENDUM NO. 2

July 29, 2019

The original Specifications and Drawings dated May 24, 2019 and Addendum No.1 dated July 23, 2019 for the above-captioned project are amended as stated in this Addendum. This Addendum consists of 7 (seven) pages, plus the following attachments.

ATTACHMENTS

LANDSCAPE ARCHITECTURE DRAWING

SB1-L-102 (1 page)

ARCHITECTURAL SKETCHES

RA2-01 thru RA2-04 (4 pages)

PLUMBING DRAWINGS

P1-1-UA, P1-1-UB, P1-1-UC, P1-1-UD, P1-1-UE, P1-1-UF, P1-1-1A, P1-1-1B, P1-1-1C, P1-1-1D, P1-1-1E, P1-1-1F, P1-1-2B, P1-1-2C, P1-1-2D, P1-1-2E, P3-1-2, P4-1-2 (18 pages)

ELECTRICAL DRAWINGS

E1-1-1A, E1-1-1B, E1-1-1C, E1-1-2B, E1-1-2C, E1-1-2D, E2-1-1A, E2-1-1B, E2-1-1E, E3-1-1A, E3-1-1E, E3-1-1E, E3-1-1E, E4-1-1, E4-1-2, E5-1-1, E5-1-2, E8-1-1, E8-1-6 (18 pages)

BIDDER QUESTION LOG (SEE ATTACHMENT), dated 7-29-2019.

AMENDMENTS TO PROJECT MANUAL

DIVISION 00 – PROCUREMENT AND CONTRACTING REQUIREMENTS

ADD 2-001 SECTION 00 11 16 – INVITATION TO BID

Page 1, third paragraph: REVISE Bid Due Date to "2:00 pm on August 22, 2019."

ADD 2-002 SECTION 00 11 16 – INVITATION TO BID

Page 3: REVISE last day to submit Request for Information (RFI's) to August 7, 2019.



DIVISION 08 - OPENINGS

ADD 2-003 08 41 10 – ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS

Page 1, Article 1.2, Paragraph A: ADD sub-paragraph 7 as follows:

"7. Horizontal Aluminum Sunshades System integral with aluminum framing."

ADD 2-004 08 41 10 – ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS

Page 11, ADD Article 2.13 per the following:

"2.13 Horizontal Aluminum Sunshade System

A. Manufacture:

- 1. Sunshade shall be designed as an integral part of the Storefront System and manufactured by the same manufacture.
- 2. To establish standard of quality and basis of design, Storefront Sunshade shall be equivalent to "E-Shade System 5600" as manufactured by EFCO, as approved by Architect.

B. Material:

- 1. Aluminum: Extruded aluminum shall be 6063-T6 alloy and temper.
- 2. Dissimilar Metals: All dissimilar metals must be properly insulated to prevent galvanic action.
- 3. Fasteners: All exposed fasteners shall be aluminum, stainless steel, or zinc plated steel.
- 4. Anchors: Perimeter and floor line anchors shall be aluminum or steel. All steel anchors shall be properly insulated from the aluminum.

C. Fabrication:

- 1. 28" Sunshade "arms" and mullion clips shall be extrusions with a nominal wall thickness of .25" (6 mm).
- 4" deep by ¾" wide Sunshade "blade" horizontal components shall be aluminum extrusions having a minimum wall thickness of .063" (1.5 mm) to .125" (3 mm), mechanically fastened by means of extruded aluminum screw splines.

D. Finish:

1. Finish and color to match Storefront.

ADD 2-005 08 44 10 – GLAZED ALUMINUM CURTAIN WALLS

Page 15, ADD Article 2.11 per the following:

"2.11 Horizontal Aluminum Sunshade System

E. Manufacture:

- 3. Sunshade shall be designed as an integral part of the Curtainwall System and manufactured by the same manufacture.
- 4. To establish standard of quality and basis of design, Curtainwall Sunshade shall be equivalent to "E-Shade System 5600" as manufactured by EFCO, as approved by Architect.

F. Material:

- 5. Aluminum: Extruded aluminum shall be 6063-T6 alloy and temper.
- 6. Dissimilar Metals: All dissimilar metals must be properly insulated to prevent galvanic action.
- 7. Fasteners: All exposed fasteners shall be aluminum, stainless steel, or zinc plated steel.
- 8. Anchors: Perimeter and floor line anchors shall be aluminum or steel. All steel anchors shall be properly insulated from the aluminum.

G. Fabrication:

3. 28" Sunshade "arms" and mullion clips shall be extrusions with a nominal wall thickness of .25" (6 mm).

- 4. 4" deep by %" wide Sunshade "blade" horizontal components shall be aluminum extrusions having a minimum wall thickness of .063" (1.5 mm) to .125" (3 mm), mechanically fastened by means of extruded aluminum screw splines.
- H. Finish:
 - 2. Finish and color to match Curtainwall.

DIVISION 11 – EQUIPMENT

ADD 2-006 SECTION 11 60 000 – FIXED CASEWORK AND EQUIPMENT

Page 18, Item SC-TD, change "Sheldon #27000 Curved Infinity Teacher Demonstration Island; or equal." to "Custom Curved Teacher Demonstration Island; or equal."

ADD 2-007 SECTION 11 60 000 – FIXED CASEWORK AND EQUIPMENT

Page 18, Item SC-ST, change "Make & Model: Sheldon #26200 Student Worktable; or equal.." to "Student Worktable; or equal."

ADD 2-008 SECTION 11 60 000 – FIXED CASEWORK AND EQUIPMENT

Page 19, Item AC-01, change "1-Stainless steel sink assembly #SS-9." to "1-Stainless steel sink assembly #SS-4"

ADD 2-009 SECTION 11 60 000 – FIXED CASEWORK AND EQUIPMENT

Page 19, Item AC-02, change "1-Stainless steel sink assembly #SS-9." to "1-Stainless steel sink assembly #SS-4"

DIVISION 13 – SPECIAL CONSTRUCTION

ADD 2-010 SECTION 13 34 19 – METAL BUILDING SYSTEM – SUPPLEMENTAL BID #1 and ALTERNATE #2 Page 3, Article 1.4, Paragraph H, ADD Sub-Paragraph 1 through 3.

- 1. "Metal Building System Sub-contractor shall submit the Design Documents to the Connecticut Office of the State Building Inspector (OSBI) for review and approval.
- 2. The Metal Building System Documents provided by the Sub-contractor as part of Delegated Design shall be submitted to the DAS as required for the independent peer review by a structural engineer. DAS will procure independent structural engineer peer review services. This structural peer review does not relive the Metal Building System sub-contractor and the delegated design engineer from the responsibility to provide complete structural design for the Metal Buildings.
- 3. The metal building sub-contractor shall not proceed with manufacturing and installation of the building components until all comments provided by the independent structural peer reviewer and the OSBI are addressed the approval correspondence is issued by the OSBI. The sub-contractor shall allow appropriate adequate time for review and approval process as described herein."

DIVISION 21 - FIRE SUPPRESSION

ADD 2-011 Section 21 05 00 – COMMON WORK RESULTS FOR FIRE SUPPRESSION

Page 5, Article 2.6 – C: Add wording that hangers shall be clevis or adjustable swivel.

ADD 2-012 Section 21 05 48 – VIBRATION & SEISMIC CONTROLS FOR FIRE-SUPP. PIPING & EQUIPMENT

Page 2, Article 1.4 – D; Add subparagraph 4: "Systems listed below to be installed with seismic restraints shall be designed and installed with seismic restraints even if exempt from building codes and ASCE. Design criteria shall be in accordance with the International Building Code and ASCE 7, Chapter 13 and NFPA 13 (however exemptions listed shall not apply)...



ADD 2-013 Section 21 13 13 – WET PIPE SPRINKLER SYSTEMS

Page 4, Article 2.1 – I: Manufacturer/Model Number: Victaulic quick response concealed type sprinkler shall be model #V3802.

Page 7, Article 2.4: Delete paragraph H referencing Pedestal type Fire Department Connections.

DIVISION 32 – EXTERIOR IMPOVEMENTS

ADD 2-014 SECTION 32 14 00 - UNIT PAVING

Page 2, Article 2.1, Paragraph A.5. REPLACE paragraph with the following:

"A. 5. Color and Finish:

Nominal 6x6 paver:

Color: To be Hanover Standard Limestone Gray,

Finish: Tudor.
Nominal 12 x 12 paver:

Color: To be Hanover Standard Cream,

Finish: Tudor.

AMENDMENTS TO DRAWINGS

LANDSCAPE ARCHITECTURE

ADD 2-015 DRAWING SB1-L-102- SUPPLEMENTAL BID 1 SITE MATERIALS ENLARGEMENT PLAN

Modify legend to delete the word Sod and replace with Athletic Seed Mix. Refer to revision tag RL2-01.

ARCHITECTURAL

ADD 2-016 A1-1-2E - SECOND FLOOR PLAN - AREA E

At room E232, Electrical Engineering & Applied Sciences, provide "Base Type:LB-C1" under "Type 'A' Lockers."

ADD 2-017 A2-1-2 – BUILDING ELEVATIONS

<u>Elevation 3, South Elevation:</u> REVISE location of Pre-cast Elevation tag H11A-325. Refer to sketch RA2-01.

ADD 2-018 A2-2-5 – INTERIOR ELEVATIONS

<u>Elevation 2, Interior Elevation – Gymnasium West:</u> ADD Pre-cast Elevation Tag "H19A-71" to the left of column line 19, just below pre-cast panel H20-308. Refer to sketch RA2-03.

<u>Elevation 2, Interior Elevation – Gymnasium West:</u> ADD Pre-cast Elevation Tag "H21B-235" to the left of column line 17, just above pre-cast panel H20-235. Refer to sketch RA2-02.

<u>Elevation 2, Interior Elevation – Gymnasium West:</u> ADD Pre-cast Elevation Tag "H19A-20" to the right of column line 17, just below pre-cast panel H2O-308. Refer to sketch RA2-02.

ADD 2-019 A3-4-2 – OVERALL SECOND FLOOR PRECAST PANEL LAYOUT

ADD pre-cast identification tag at the Gymnasium along column line H between 16 and 17. Refer to sketch RA2-04.



PLUMBING ADD 2-020 DRAWING P1-1-UA - UNDERSLAB PLUMBING PLAN - AREA A Added floor clean outs (FCO-1) and piping per Revision RP2-1. ADD 2-021 DRAWING P1-1-UB - UNDERSLAB PLUMBING PLAN - AREA B Added floor clean outs (FCO-1) and piping per Revision RP2-2. Modified piping from FS-1 per Revision RP2-3. ADD 2-022 DRAWING P1-1-UC - UNDERSLAB PLUMBING PLAN - AREA C Added floor clean outs (FCO-1) and piping per Revision RP2-4 ADD 2-023 DRAWING P1-1-UD - UNDERSLAB PLUMBING PLAN - AREA D Added floor clean outs (FCO-1) and piping per Revision RP2-5 Added floor clean outs (FCO-2) and piping per Revision RP2-6. Modified floor clean out tag (FCO to FCO-2) per Revision RP2-7. ADD 2-024 DRAWING P1-1-UE - UNDERSLAB PLUMBING PLAN - AREA E Added floor clean outs (FCO-1) and piping per Revision RP2-8. ADD 2-025 DRAWING P1-1-UF - UNDERSLAB PLUMBING PLAN - AREA F Added floor clean outs (FCO-1) and piping per Revision RP2-9. Added floor clean out tag (FCO-1) per Revision RP2-10. ADD 2-026 DRAWING P1-1-1A - FIRST FLOOR PLUMBING PLAN - AREA A Added floor clean outs (FCO-1). (SAME AS P1-1-UA) per Revision RP2-11. Modified vent piping from 2-1/2" to 3" per Revision RP2-12. ADD 2-027 DRAWING P1-1-1B - FIRST FLOOR PLUMBING PLAN - AREA B Added floor clean outs (FCO-1). (SAME AS P1-1-UB) per Revision RP2-13. Modified vent piping from 2-1/2" to 3" per Revision RP2-14. **ADD 2-028** DRAWING P1-1-1C - FIRST FLOOR PLUMBING PLAN - AREA C Added floor clean outs (FCO-1). (SAME AS P1-1-UC) per Revision RP2-15. Modified vent piping from 2-1/2" to 3" per Revision RP2-16. ADD 2-029 DRAWING P1-1-1D - FIRST FLOOR PLUMBING PLAN - AREA D Added floor clean outs (FCO-1) and piping. (SAME AS P1-1-UD) per Revision RP2-17. Added floor clean outs (FCO-2) and piping. (SAME AS P1-1-UD) per Revision RP2-18. Modified floor clean out tag (FCO-1 to FCO-2) per Revision RP2-19. Modified vent piping from 2-1/2" to 3" per Revision RP2-20. Added tag to 4" Acid Vent per Revision RP2-21. ADD 2-030 DRAWING P1-1-1E - FIRST FLOOR PLUMBING PLAN - AREA E Added floor clean outs (FCO-1). (SAME AS P1-1-UE) per Revision RP2-22. Modified vent piping from 2-1/2" to 3" per Revision RP2-23. ADD 2-031 DRAWING P1-1-1F - FIRST FLOOR PLUMBING PLAN - AREA F Added floor clean outs (FCO-1). (SAME AS P1-1-UF) per Revision RP2-24. ADD 2-032 DRAWING P1-1-2B - SECOND FLOOR PLUMBING PLAN - AREA B

Modified vent piping from 2-1/2" to 3" per Revision RP2-25.

ADD 2-033 DRAWING P1-1-2C – SECOND FLOOR PLUMBING PLAN – AREA C

Modified vent piping from 2-1/2" to 3" per Revision RP2-26.

ADD 2-034 DRAWING P1-1-2D - SECOND FLOOR PLUMBING PLAN - AREA D

Modified vent piping from 2-1/2" to 3" per Revision RP2-27.

ADD 2-035 DRAWING P1-1-2E – SECOND FLOOR PLUMBING PLAN – AREA E

Modified vent piping from 2-1/2" to 3" per Revision RP2-28.

ADD 2-036 DRAWING P3-1-2 -PLUMBING ABBREVIATIONS, LEGENDS AND SCHEDULES

Modified remarks for FCO-1, FCO-2, WCO-1 per Revision RP2-29.

ADD 2-037 DRAWING P4-1-2 -PLUMBING DETAILS

Modified TYPICAL OIL INTERCEPTOR INSTALLATION DETAIL to include flood level and additional notes per Revision RP2-30.

ELECTRICAL

ADD 2-038 DRAWING E1-1-1A – FIRST FLOOR ELECTRICAL LIGHTING PLAN AREA A

Added callout for mounting height of pendant fixtures in Fitness Center A101 per Revision RE2-1. Added callout for mounting height of pendant fixtures in Gymnasium A133 per Revision RE2-2.

ADD 2-039 DRAWING E1-1-1B – FIRST FLOOR ELECTRICAL LIGHTING PLAN AREA B

Added callout for mounting height of pendant fixtures in Demo Classroom B105 per Revision RE2-3.

Added callout for mounting height of pendant fixtures in Theory B143 per Revision RE2-4. Added callout for mounting height of pendant fixtures in Restaurant A126 per Revision RE2-5.

ADD 2-040 DRAWING E1-1-1C – FIRST FLOOR ELECTRICAL LIGHTING PLAN AREA C

Added note for pendant fixture mounting heights for finished spaces. Typical of drawings E1-1-1C; E1-1-1D; E1-1-2B; E1-1-2C; E1-1-2D per Revision RE2-6.

ADD 2-041 DRAWING E1-1-2B - SECOND FLOOR ELECTRICAL LIGHTING PLAN AREA B

Added callout for mounting height of pendant fixtures in Corridor B160 and Cafeteria Seating B158 per Revision RE2-7.

Added callout for mounting height of pendant fixtures in Cafeteria Seating B159 per Revision RE2-8.

ADD 2-042 DRAWING E1-1-2C – SECOND FLOOR ELECTRICAL LIGHTING PLAN AREA C

Added callout for mounting height of pendant fixtures in Learning Commons C218 per Revision RE2-9.

ADD 2-043 DRAWING E1-1-2D – SECOND FLOOR ELECTRICAL LIGHTING PLAN AREA D

Added callout for mounting height of pendant fixtures in Multipurpose Room D111 per Revision RE2-10.

ADD 2-044 DRAWING E2-1-1A – FIRST FLOOR ELECTRICAL POWER PLAN AREA A

Added general note for additional information on shop equipment. Typical of all E2-X-XX series drawings per Revision RE2-11.

ADD 2-045 DRAWING E2-1-1B – FIRST FLOOR ELECTRICAL POWER PLAN AREA B

Relocated kitchen electrical panels per Revision RE2-12.

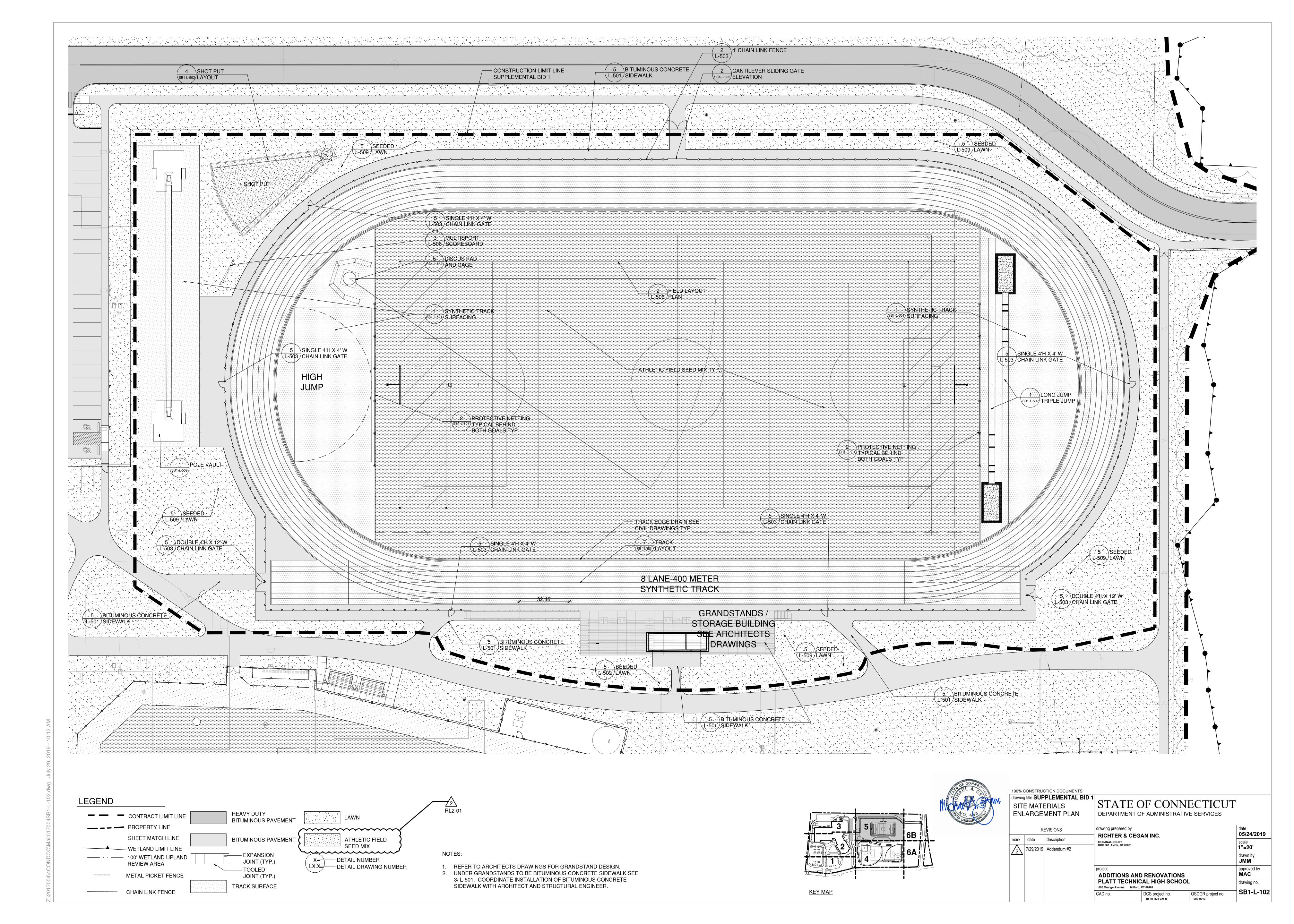


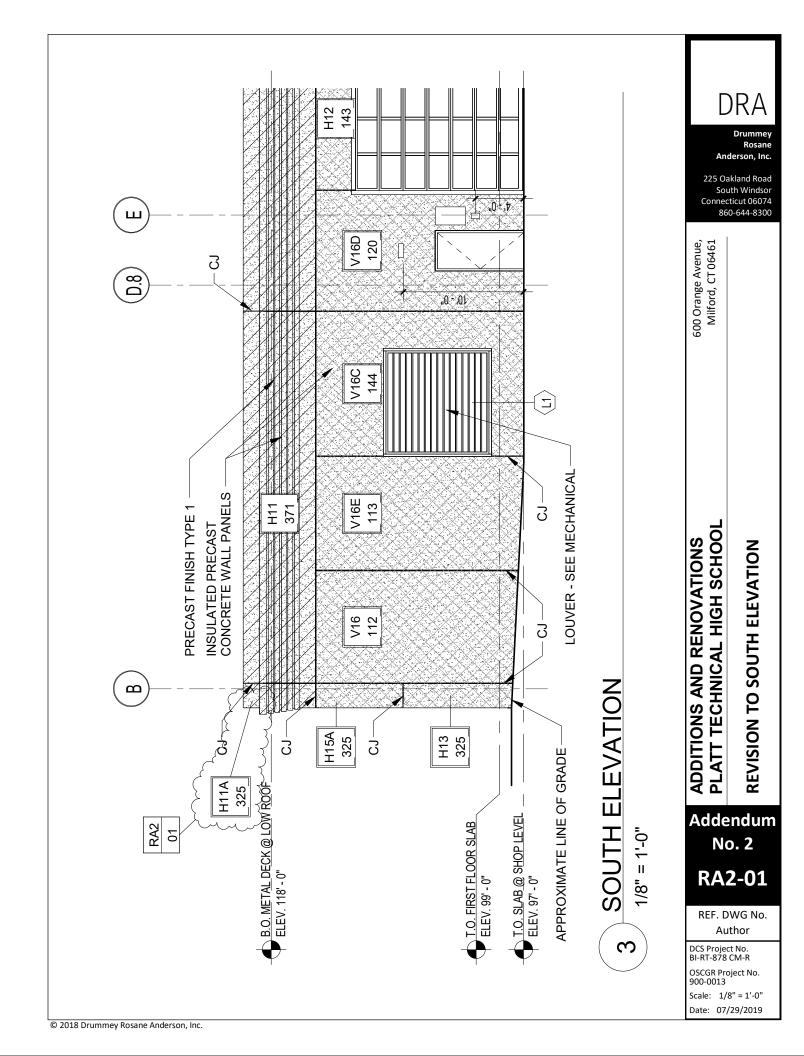
ADD 2-046	DRAWING E2-1-1E – FIRST FLOOR ELECTRICAL POWER PLAN AREA E Added branch circuit for spark detection panel DC-1 per Revision RE2-13. Added branch circuit for BMS panel per Revision RE2-14.
ADD 2-047	DRAWING E3-1-1A – FIRST FLOOR ELECTRICAL SYSTEMS PLAN AREA A Added general note for coordination of all AV receptacles and backboxes. Typical of all E3-X-XX series drawings per Revision RE2-15.
ADD 2-048	DRAWING E3-1-1E – FIRST FLOOR ELECTRICAL SYSTEMS PLAN AREA E Added CO detector to be within range for gas equipment in Plumbing E101 per Revision RE2-16. Relocated CO detector to be within range for gas equipment in HVAC E120 per Revision RE2-17.
ADD 2-049	DRAWING E3-1-2E – SECOND FLOOR ELECTRICAL SYSTEMS PLAN AREA E Added callout for cable tray size and mounting heights for Networking Lab E203 and Theory E204 per Revision RE2-18. Added callout for cable tray size and mounting heights for Theory E201 per Revision RE2-19. Added callout for cable tray size and mounting heights for Work Room E206 per Revision RE2-20.
ADD 2-050	DRAWING E4-1-1 – KITCHEN ELECTRICAL PARTIAL PLAN Removed kitchen electrical panels from Laundry/Storage B116 per Revision RE2-21.
ADD 2-051	DRAWING E4-1-2 – ENLARGED IDF ROOM ELECTRICAL POWER AND SYSTEMS PLANS Revised note for telecommunications grounding and riser detail per Revision RE2-22.
ADD 2-052	DRAWING E4-1-2 – ELECTRICAL ABBREVIATIONS, LEGENDS, AND NOTES Added fire alarm transponder panel to symbols list per Revision RE2-23. Added push button control station to symbols list per Revision RE2-24.
ADD 2-053	DRAWING E5-1-2 – ELECTRICAL SCHEDULES Updated motor circuit schedule for bus garage per Revision RE2-25.
ADD 2-054	DRAWING E8-1-1 – ELECTRICAL PANELBOARDS Added circuits for spark detection panel and BMS panel in panelboard EP1-1 per Revision RE2-26.

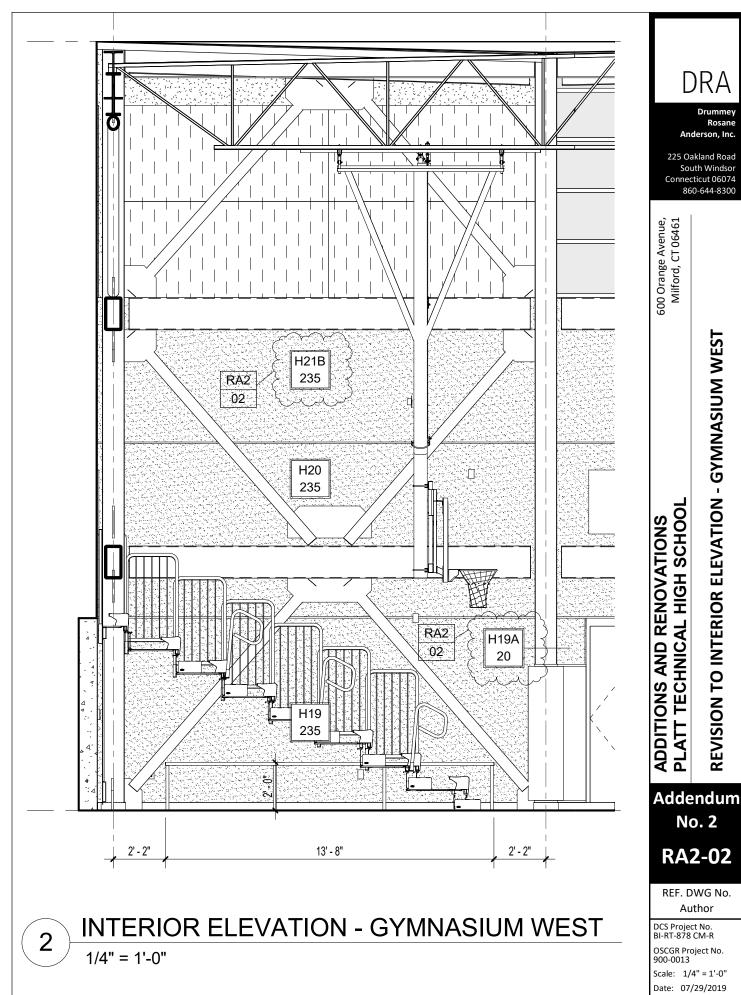
ADD 2-055 DRAWING E8-1-1 – ELECTRICAL PANELBOARDS

Revised loads for garage heaters in panelboard GPL per Revision RE2-27.

END OF ADDENDUM NO. 2

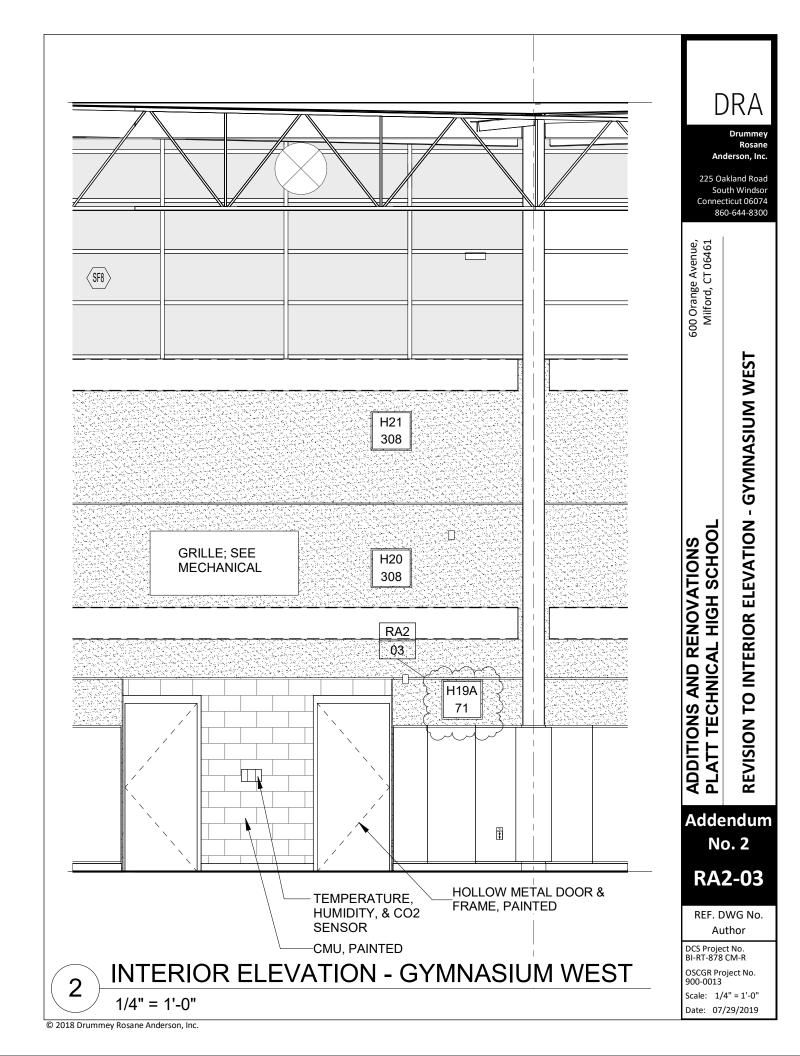


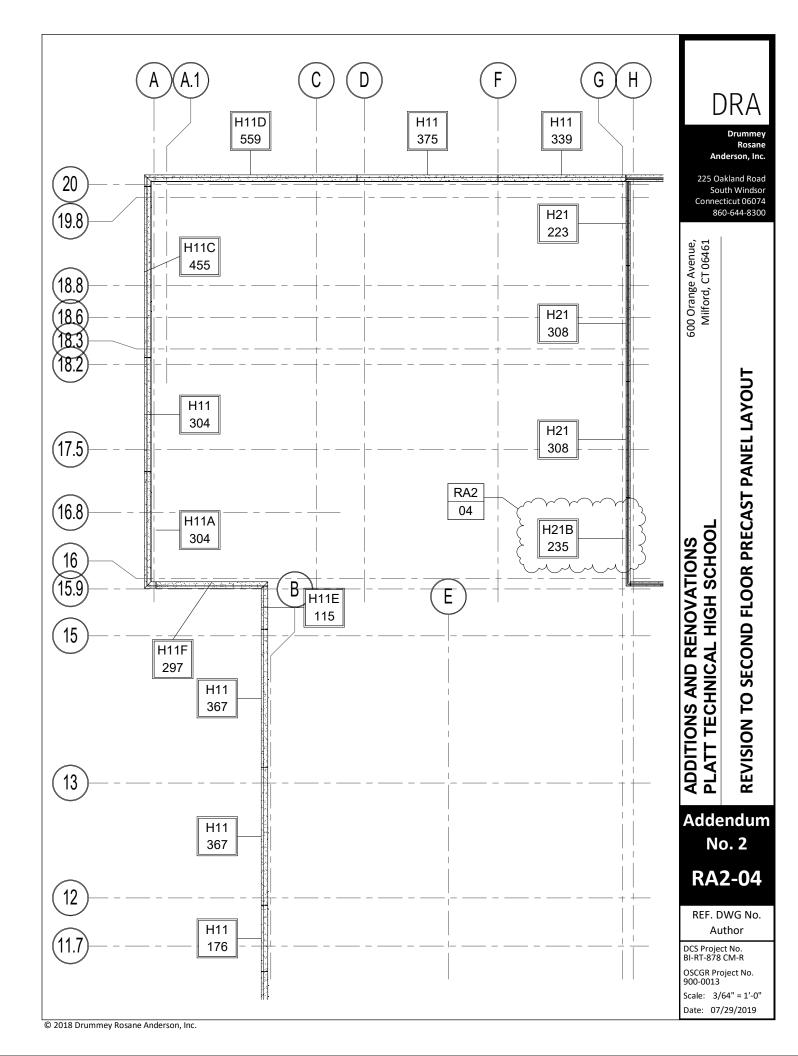


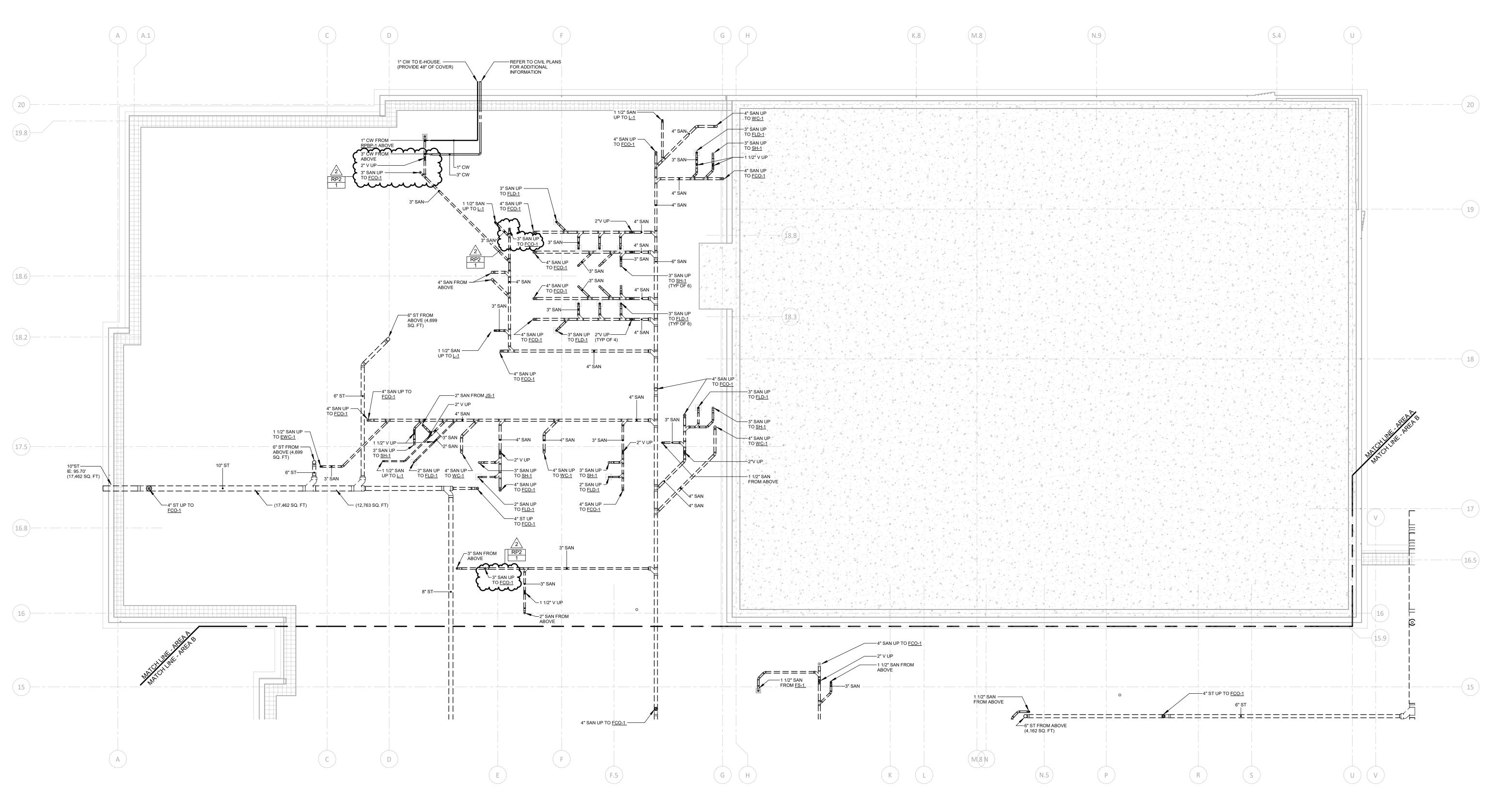


Rosane

REVISION TO INTERIOR ELEVATION - GYMNASIUM WEST



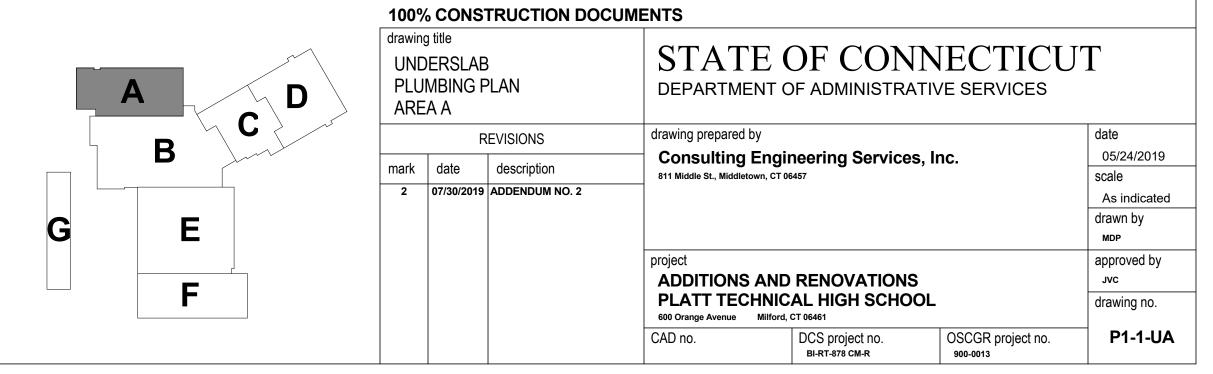


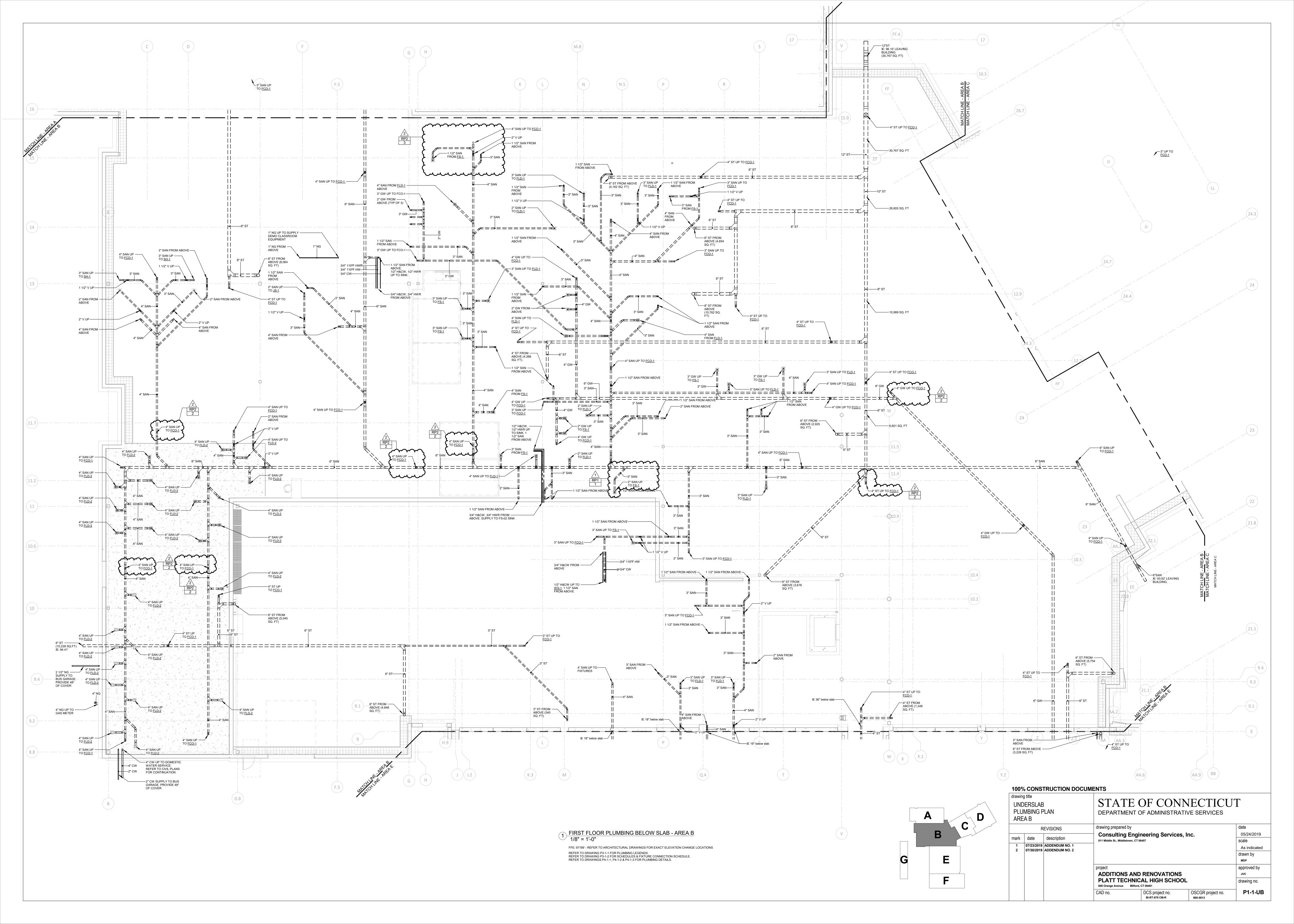


1 FIRST FLOOR PLUMBING BELOW SLAB - AREA A

REFER TO DRAWING P3-1-1 FOR PLUMBING LEGENDS. REFER TO DRAWING P3-1-2 FOR SCHEDULES & FIXTURE CONNECTION SCHEDULE. REFER TO DRAWINGS P4-1-1, P4-1-2 & P4-1-3 FOR PLUMBING DETAILS.

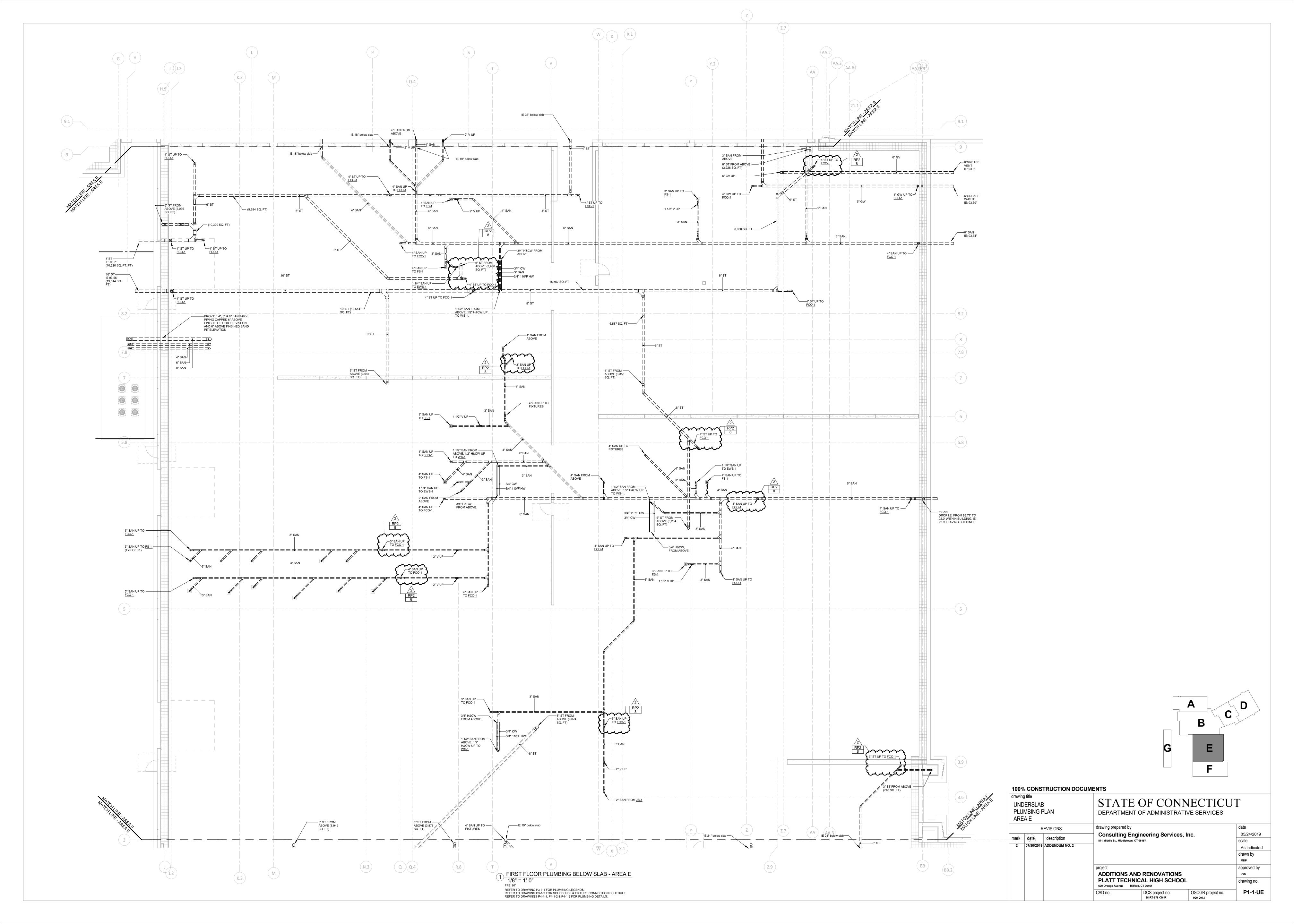
FFE: 99'

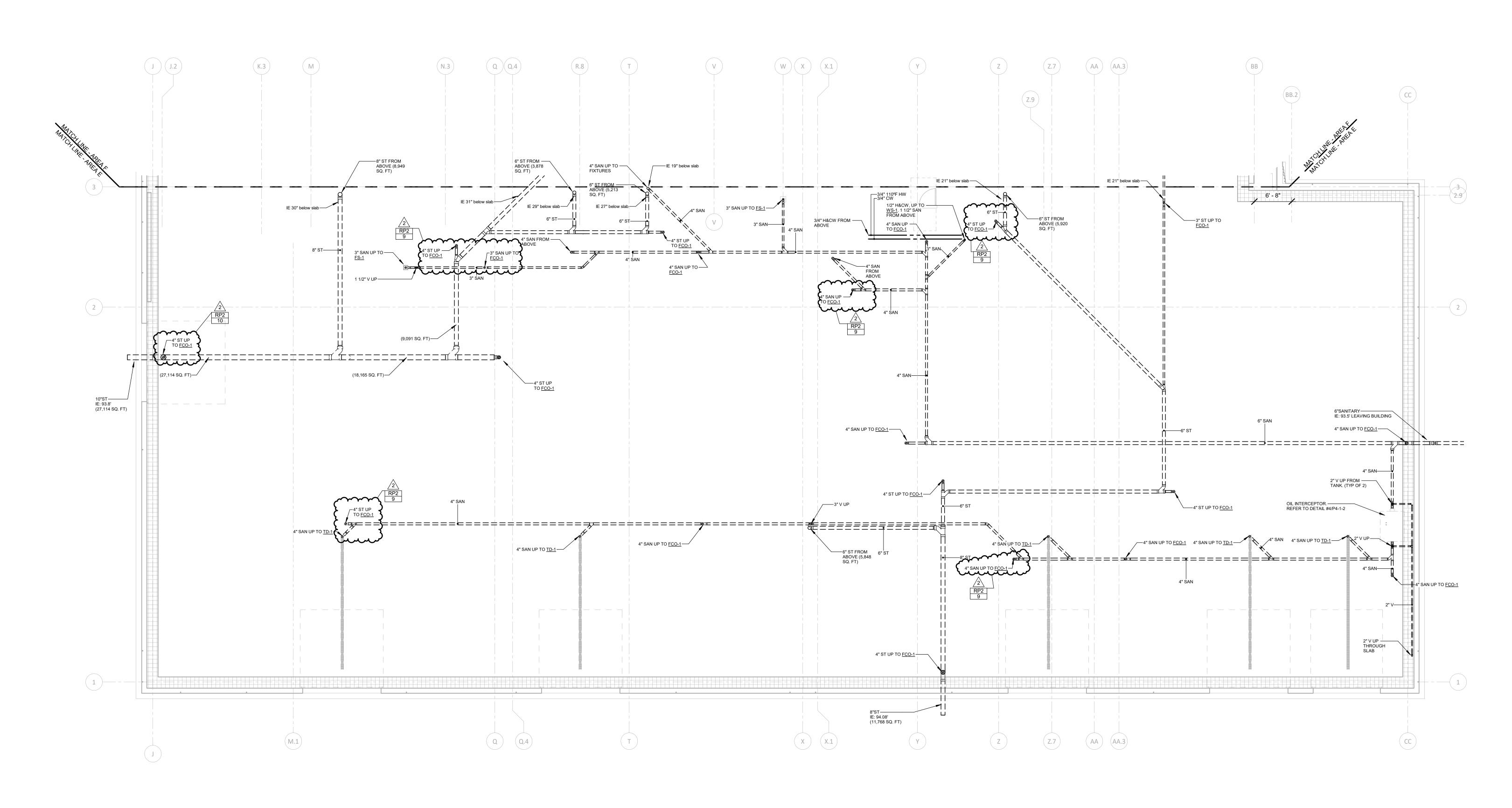










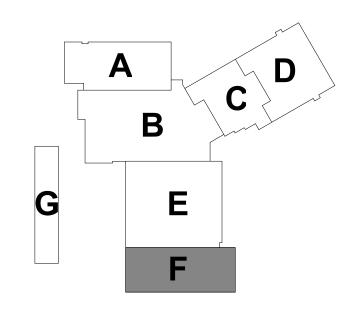


FIRST FLOOR PLUMBING BELOW SLAB - AREA F

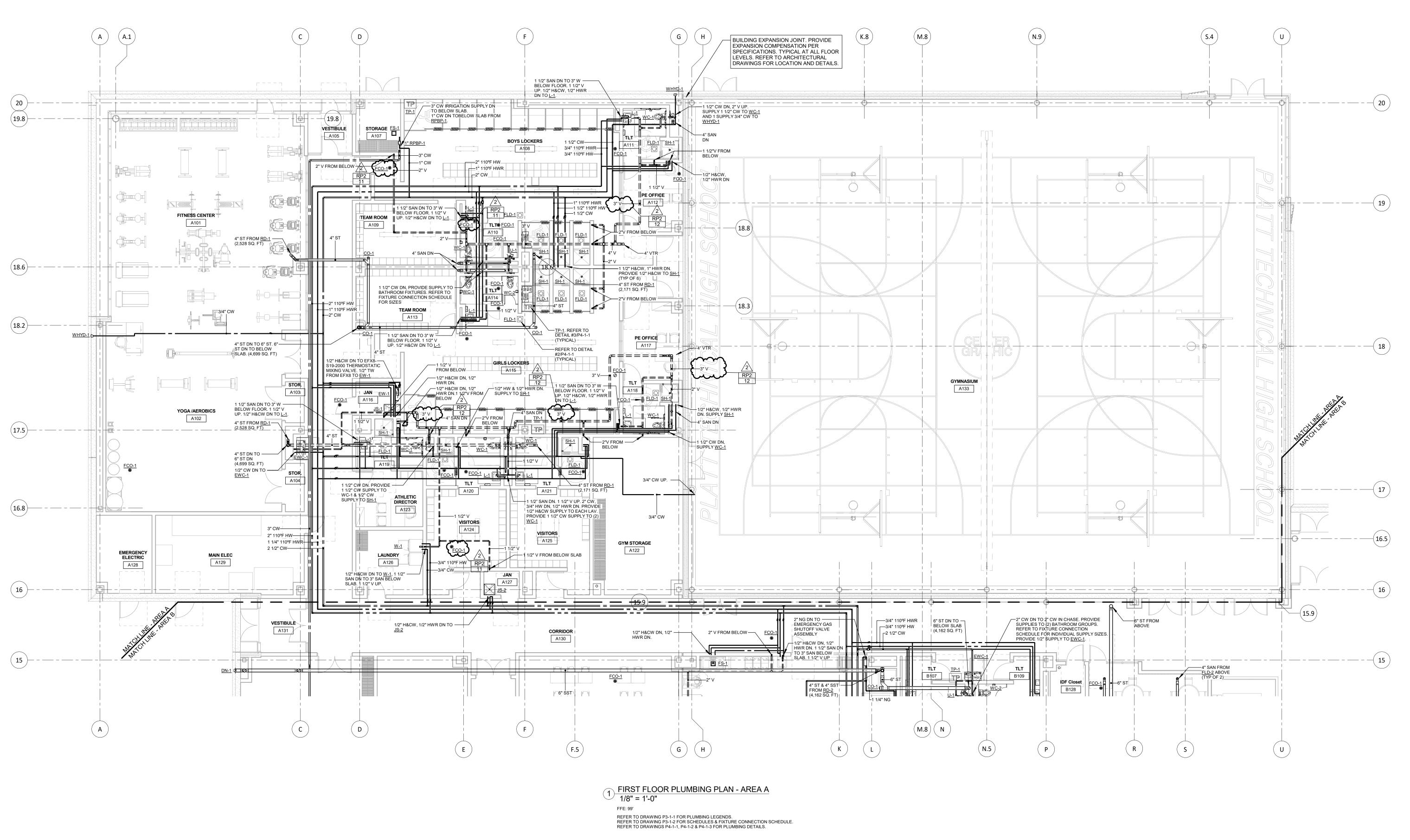
1/8" = 1'-0"

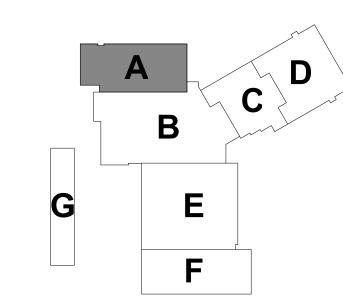
FFE: 97'

REFER TO DRAWING P3-1-1 FOR PLUMBING LEGENDS.
REFER TO DRAWING P3-1-2 FOR SCHEDULES & FIXTURE CONNECTION SCHEDULE.
REFER TO DRAWINGS P4-1-1, P4-1-2 & P4-1-3 FOR PLUMBING DETAILS.

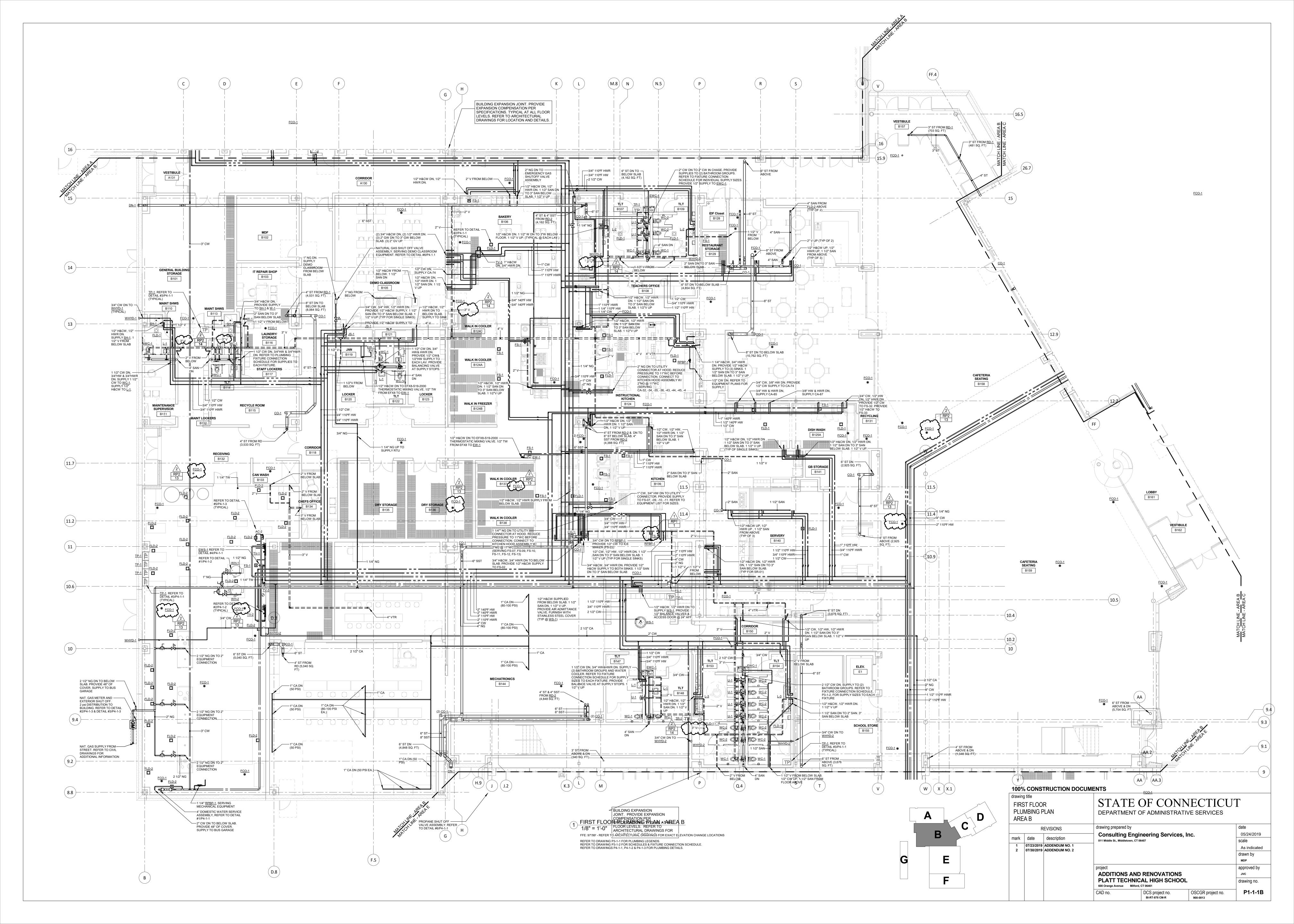


drawing title BELOWSLAB PLUMBING PLAN AREA F			STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES					
REVISIONS			drawing prepared by	drawing prepared by				
			Consulting Eng	Consulting Engineering Services, Inc.				
mark	date	description	811 Middle St., Middletown, CT	811 Middle St., Middletown, CT 06457				
2	07/30/2019	ADDENDUM NO. 2				As indica		
						drawn by		
						MDP		
			project			approved b		
			ADDITIONS AND RENOVATIONS					
			PLATT TECHNIC 600 Orange Avenue Milford	drawing no				
			CAD no.	DCS project no.	OSCGR project no.	[⊢] P1-1-		



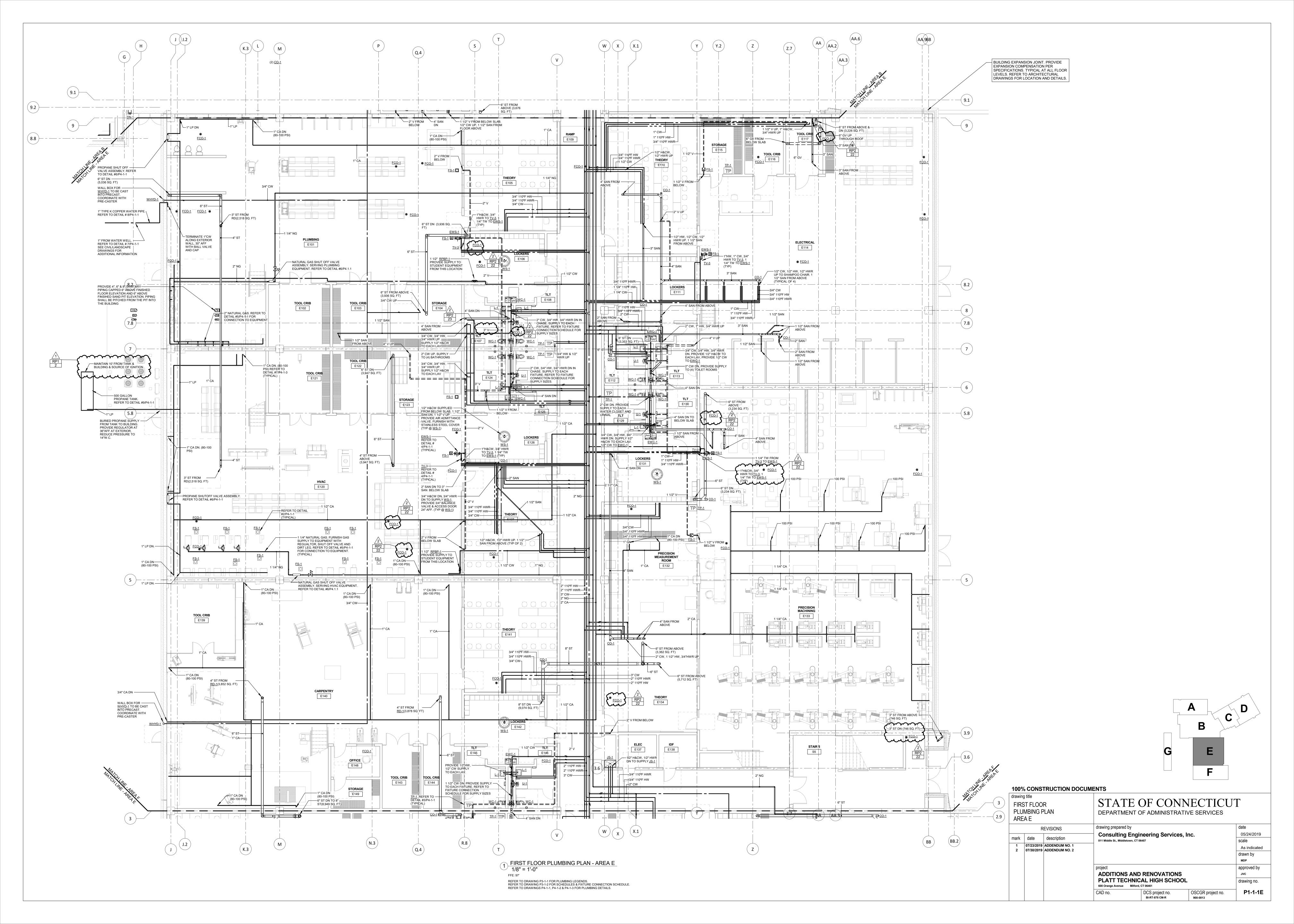


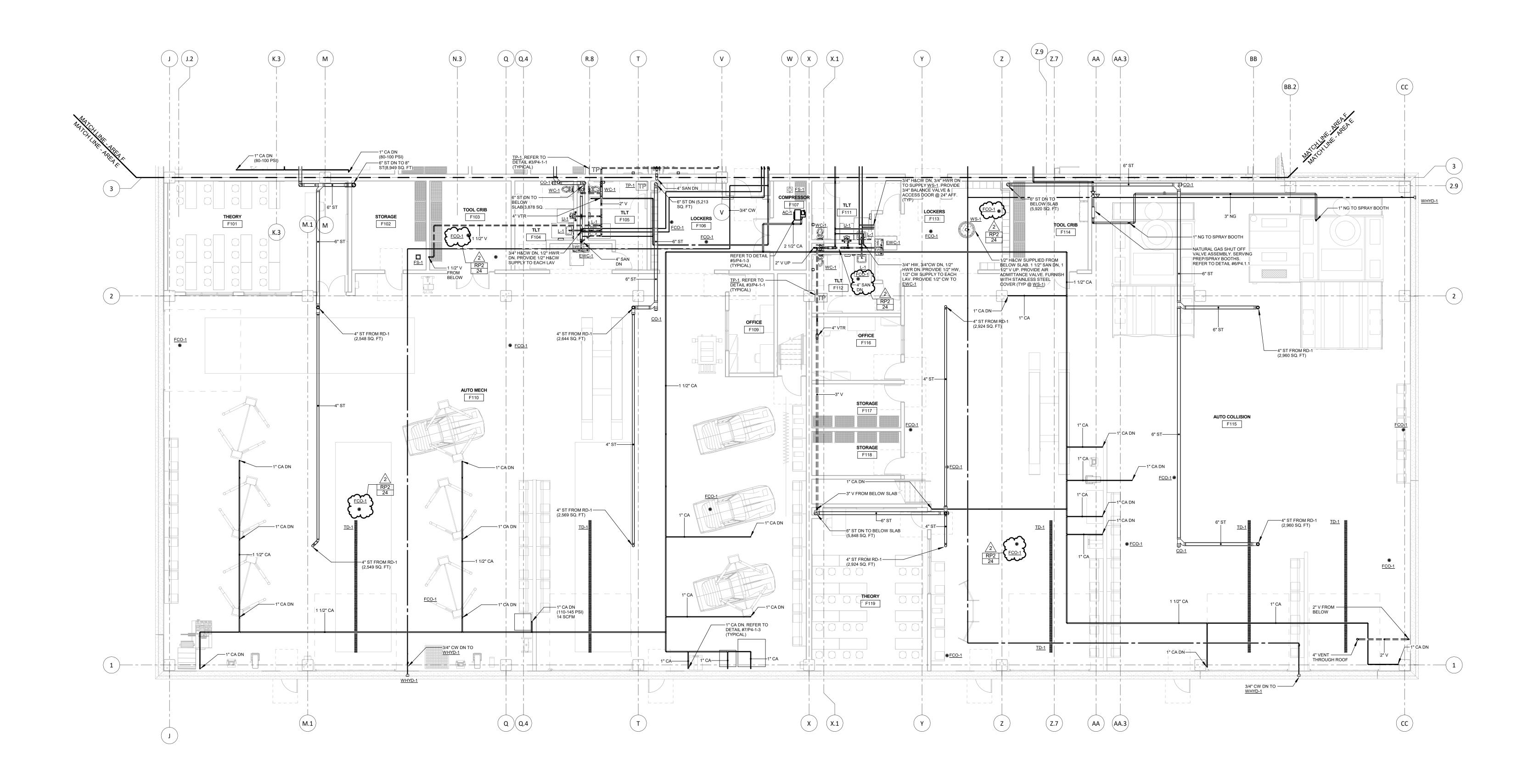
drawing title FIRST FLOOR PLUMBING PLAN AREA A				STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES					
REVISIONS		REVISIONS	drawing prepared by	drawing prepared by					
mark data description			Consulting Engi	Consulting Engineering Services, Inc.					
mark	date	description	811 Middle St., Middletown, CT 0	811 Middle St., Middletown, CT 06457		scale			
2	07/30/2019	ADDENDUM NO. 2				As indicated			
						drawn by			
			project			approved by			
			ADDITIONS AND	RENOVATIONS		Jvc			
				PLATT TECHNICAL HIGH SCHOOL					
	CAD no.	DCS project no.	OSCGR project no.	P1-1-1					









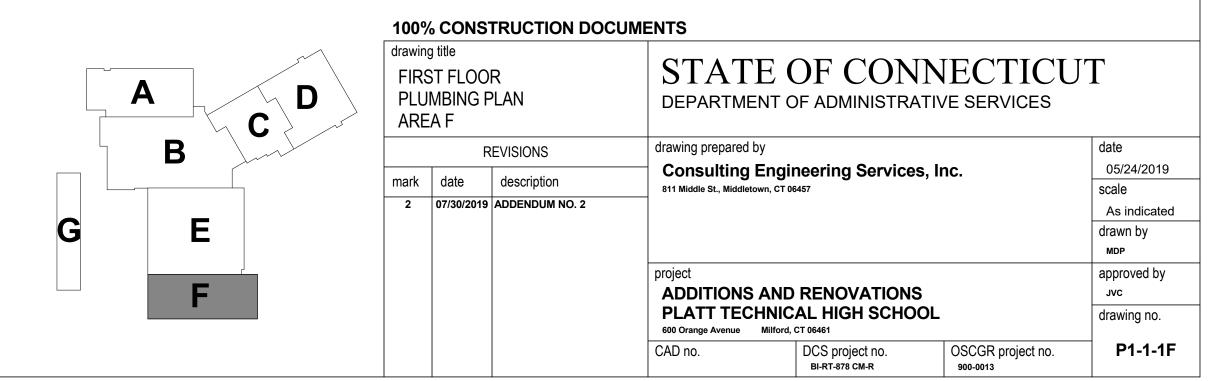


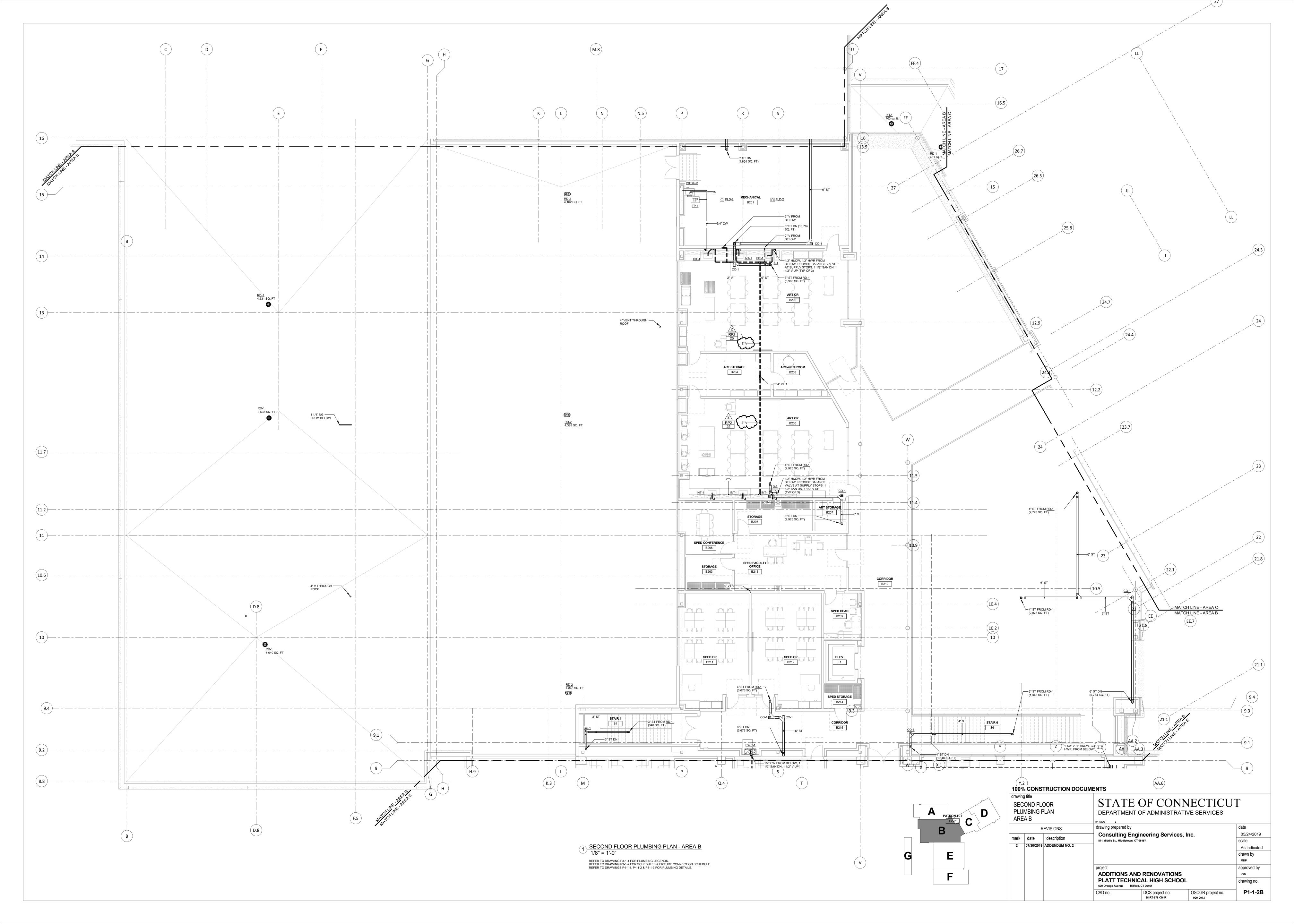
FIRST FLOOR PLUMBING PLAN - AREA F

1/8" = 1'-0"

FFE: 97'

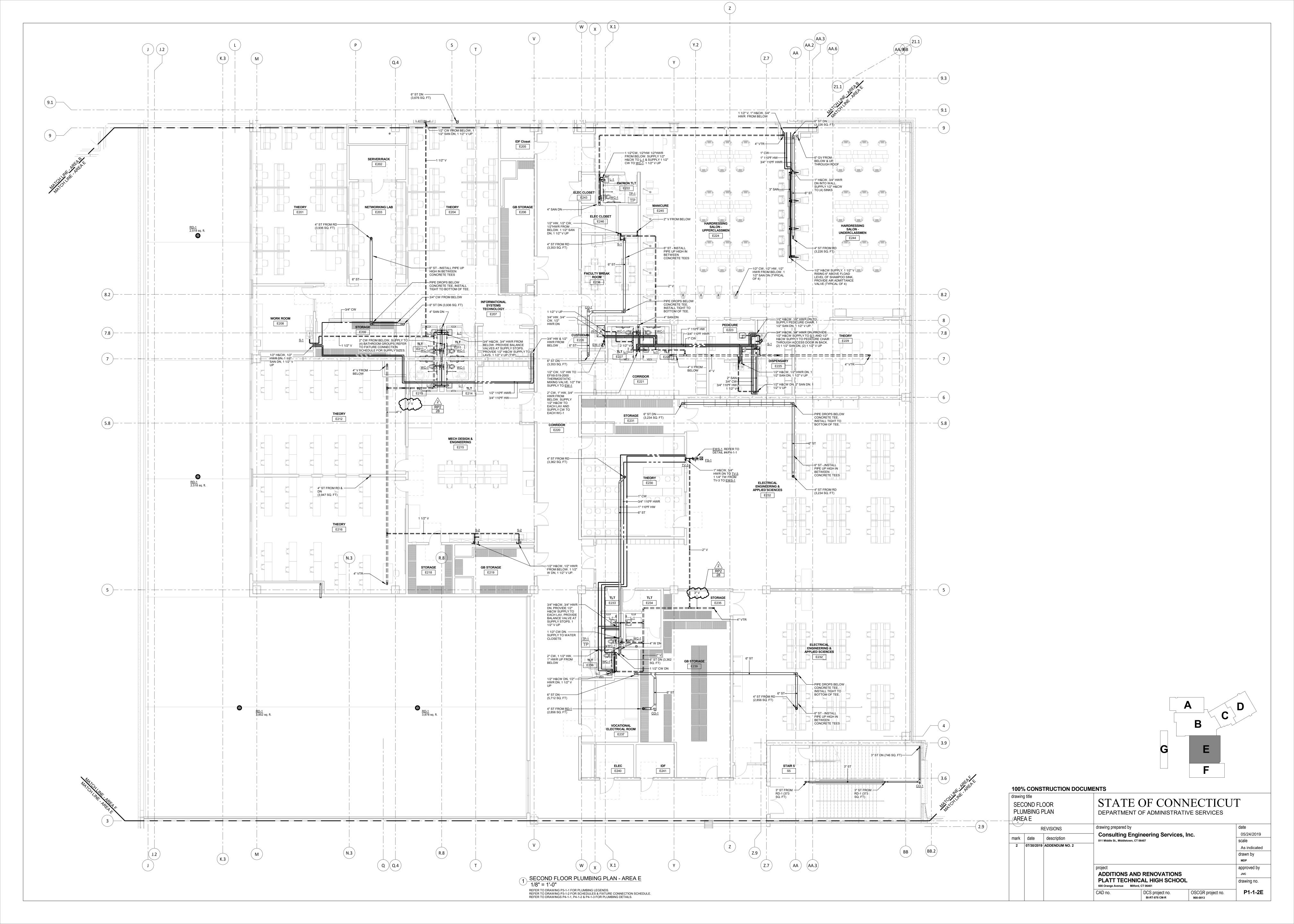
REFER TO DRAWING P3-1-1 FOR PLUMBING LEGENDS.
REFER TO DRAWING P3-1-2 FOR SCHEDULES & FIXTURE CONNECTION SCHEDULE.
REFER TO DRAWINGS P4-1-1, P4-1-2 & P4-1-3 FOR PLUMBING DETAILS.











				AIR COM	MPRESSOR SO	CHEDULE				
SYMBOL	MANUFACTURER/ MODEL NUMBER	TYPE	LOCATION	SERVING	CAPACITY CFM AT PSIG	MAX PRESSURE PSIG	WEIGHT	CAPACITY GALLONS	ELEC DATA HP-VOLTS- PH	REMARKS
<u>AC-1</u>	INGERSOLL RAND #RS30N	DUPLEX	COMPRESSOR ROOM (AREA F)	AUTO- MOTIVE SHOPS	82 CFM @ 125 PSI	-	1720 LBS	120 HORIZONTAL	40/480V/3PH	#1,2,3,4,6
AC-2	INGERSOLL RAND #R45N	DUPLEX		REMAINDER OF BUILDING	130 CFM @ 100 PSI	-	1720 LBS	120 HORIZONTAL	60/480V/3PH	#1,2,3,4,6

O OSHA AND UL STANDARDS

ELECTRIC DRIVE WITH POWER CORD

COMPLIANT TO OSHA AND UL STANDARDS

PROVIDE AIR DRYER PROVIDE CONDENSATE SEPARATOR <u>CS-1</u> <u>CS-2</u> AND <u>CS-3</u> INGERSOLL RAND MODEL PSG-30 PROVIDE PREMIUM EFFICIENCY MOTOR AND VFD

	AIR DRYER SCHEDULE										
SYMBOL	MANUFACTURER/ MODEL NUMBER	TYPE	LOCATION	SERVING	CAPACITY CFM AT PSIG	MAX PRESSURE PSIG	WEIGHT	FLA	ELEC DATA KW-VOLTS- PH	REMARKS	
ACD-1	INGERSOLL RAND #D170EC	-	MECH ROOM	AC-1	100 CFM @ 100 PSI	-	-	-	0.96/120V/1PH	#1,2	
ACD-2	INGERSOLL RAND #D255NC	-	MECH ROOM	AC-2	150 CFM @ 100 PSI	-	-	-	1.29/120V/1PH	#1,2	
REMARKS:											

	PLUMBING FI	XTURE CONNECT	ION SCHEDULE		
FIXTURE TYPE	WASTE CONNECTION	VENT CONNECTION	COLD WATER CONNECTION	HOT WATER CONNECTION	TEPID WATER
DRINKING FOUNTAIN	1 1/2"	1 1/2"	1/2"	-	-
DRINKING FOUNTAIN (2 BOWL)	1 1/2" (2)	1 1/2" (2)	1/2" (2)	-	-
EMERGENCY SHOWER	-	-	1"	1"	1 1/4"
JANITORS MOP BASIN	2"	1 1/2"	1/2"	1/2"	-
LAVATORY	1 1/2"	1 1/2"	1/2"	1/2"	-
SINK	1 1/2"	1 1/2"	1/2"	1/2"	-
URINAL	2"	1 1/2"	3/4"	-	-
WATER CLOSET (FLUSH VALVE)	4"	2"	1 1/2"	-	-
HOSE BIB (CW ONLY)	-	-	1/2"	-	-
HOSE BIB (CW & HW)	-	-	1/2"	1/2"	-

NOTES: 1. REFER TO ARCHITECTURAL DRAWINGS FOR ALL PLUMBING FIXTURE MOUNTING HEIGHTS. 2. ALL PIPE TRAPS AT SINKS AND LAVATORIES SHALL BE CHROME PLATED BRASS.

	WATER	R HAMME	ER ARREST	OR SCHEDU	LE	
SYMBOL	MANUFACTURER/ MODEL NUMBER	SIZE N.P.T.	OVERALL LENGTH	PRELOADE D PSI (AIR)	FIXTURE UNITS	REMARKS
WHA-1	PPP MODEL# SC-500	1/2"	5"	60	1-11	1,2,3,4
WHA-2	PPP MODEL# SC-750	3/4"	6"	60	12-32	1,2,3,4
WHA-3	PPP MODEL# SC-1000	1"	6 3/4"	60	33-60	1,2,3,4
WHA-4	PPP MODEL# SC-1250	1 1/4"	8 3/4"	60	61-113	1,2,3,4
WHA-5	PPP MODEL# SC-1500	1 1/2"	10 1/4"	60	114-154	1,2,3,4
WHA-6	PPP MODEL# SC-2000	2"	10 7/8"	60	155-330	1,2,3,4

INSTALL PER ALL MANUFACTURERS WRITTEN INSTALLATION INSTRUCTIONS.

LOCATE IN AN ACCESSIBLE LOCATION, PROVIDE ACCESS AS REQUIRED. FIXTURE UNITS SHALL BE BASED ON THE LATEST ADOPTED VERSION OF THE

INTERNATIONAL PLUMBING CODE.

SCREENS, 1/4" DRAIN REMARKS:

1. FIXTURES AND TRIM AS NOTED SHALL BE "ADA APPROVED" AND SHALL BE MOUNTED TO ADA AND

2. THE TRAP PRIMER SHALL BE INSTALLED A MINIMUM OF 1 FOOT ABOVE FINISHED FLOOR FOR EVERY 20 FEET OF PRIMER LINE. 3. PROVIDE EACH HYDRANT WITH A LOOSE KEY, CONTRACTOR SHALL VERIFY WALL THICKNESS. PROVIDE ISOLATION VALVES AT THE SUPPLY PIPE CONNECTIONS.

5. PROVIDE AN AIR GAP FITTING ON THE DRAIN LINE, MOUNT AT A SUFFICIENT HEIGHT TO ALLOW PROPER DRAINAGE 6. REFER TO FLOOR PLANS FOR SIZES.

MAINTAIN MINIMUM OF 9 1/2 INCHES CLEAR ABOVE INTERCEPTOR FOR STRAINER REMOVAL. INSTALL SIZED PER LOAD (WSFU) RECOMMENDED BY PDI & MANUFACTURER.

PLUMBING SPECIALTIES SCHEDULE

SYMBOL

<u>RD-1</u>

RPBP-1

REMARKS

MANUFACTURER/

MODEL NUMBER

JR. SMITH 8525

MODEL #RD-100-NH-B-

MODEL #RD-700-CT-B-

MODEL # 909-QT-S 3/4"

JR. SMITH # 9940

PRECISION PLUMBING

'PRIME-RITE"

POWERS

<u>TV-2</u>

<u>TV-3</u>

<u>W-1</u>

WCO-1

<u>WHA-1</u>

WHYD-1

INTELLISTATION

MODEL # LFIS200

INTELLISTATION

MODEL # LFIS150

MODEL # S19-2200

SYMMONS

JR SMITH

MODEL # 4402C-U

PRECISION PLUMBING

THROUGH # SC-1500

MODEL # SC-500

WOODFORD

WHYD-2 WOODFORD

MODEL # B67

MODEL # W-602

MODEL # SC-500 WALL.

THROUGH #SC-1500 WATER HAMMER

MODEL # PTS-4

COMPONENTS

AND

ACCESSORIES

ANCHOR FLANGE, NO-

HUB ADAPTER

UNDER DECK

SUMP RECEIVER

FOR ROOF

INSULATION.

EXTENSION SLEEVE

EXTENSION SLEEVE

TO 2" - BRONZE BODY

BALL VALVES, OVER

REQUIRED FOR THE

NUMBER OF FLOOR

DRAINS SHOWN ON

THE DRAWINGS.

BALANCE VALVES,

ON UNISTRUT.

INCLUDING

GAUGES BYPASS

BALANCE VALVES.

ON UNISTRUT.

POLISHED CHROME

RECESSED MOUNTING

3/4" THREADED ENDS.

VANDAL PROOF

BRASS PISTON AND

CONNECTION.

CONNECTION.

THREADED ADAPTER

3/4" THREADED HOSE 24" ABOVE

3/4" THREADED HOSE 24" ABOVE

SCREWS.

HERMOSTATIC MIXING PRE-PIPED ASSEMBLY

TEMPERATURE RANGE: | RECIRCULATION PUMP

PRESSURE DROP AT 96 | ASSEMBLY MOUNTED

HERMOSTATIC MIXING PRE-PIPED ASSEMBLY

TEMPERATURE RANGE: | RECIRCULATION PUMP

PRESSURE DROP AT 60 | ASSEMBLY MOUNTE

HERMOSTATIC MIXING | BRONZE BODY

PRESSURE DROP AT 22 | BOX WITH LOCK.

DRAIN FITTING W/ LEVER CONNECTIONS,

WATER CONTROLLER, VALVES,

HERMOSTATIC HI-LOW | WITH INLET CHECK

TEMPERATURE RANGE: | TEMPERATURE GAUGE

VASHER BOX: SUPPLY & 3/4" THREADED HOSE

HERMOSTATIC WATER PRESSURE/TEMP

THERMOSTATIC HI-LOW PRESSURE/TEMP

WATER CONTROLLER, | GAUGES, BYPASS

2" - OS&Y GATE VALVE. | FLOOR.

SHUTOFF VALVES: UP | MAXIMUM OF 5' | #5,6

FINISHED

#2,4

#6,10,12

ROOF DRAIN: UNDER DECK EPOXY COATED, CAST CLAMP, VANDAL

IRON BODY WITH CAST | PROOF DOME,

ROOF DRAIN: UNDER DECK COMBINATION PRIMARY CLAMP, VANDAL

EPOXY COATED, CAST | SUMP RECEIVER.

SECONDARY DRAINS, | PROOF DOME,

IRON DOME, NO HUB FOR ROOF

OUTLET OUTLET SIZE | INSULATION.

DESCRIPTION

OIL INTERCEPTOR: STEEL INTERCEPTOR

COATING INSIDE AND

IRON DOME, NO HUB

OUTLET. OUTLET SIZE

SHALL BE INDICATED

IRON BODY WITH CAST

SHALL BE INDICATED ON DRAWINGS

REDUCED PRESSURE

BRONZE OR CAST

PARTS AND SST

RESISTANT INTERNAL

PRE-SLOPED, 6" WIDE

SLOTTED GRATE. LOAD

7IP TRENCH, ADA

STAINLESS STEEL

CLASS "E" RATED

INTERNAL VACUUM

BREAKER, 1/2" INLET

AND OUTLET. SERVES

VALVE 120V, 6 WATTS,

90°F-160°F 5 PSIG

CONTROLLER.

0°F-140°F, 5 PSIG

65°F-95°F, 5 PSIG

TEMPERATURE AT 70°F.

LAUNDRY - MATE WITH OPERATION, 2" WASTE | FURNISH WITH WHA-1

PRECISION PLUMBING OUTLET, RECESSED IN BRASS PISTON AND

ARRESTOR: BARREL FABRICATED OF TYPE "K"

HARD DRAIN, COPPER,

SPIGOT FERRULE CAST

BRONZE THREAD PLUG,

W/ "O" RING SEALS WALL CLEANOUT: DUCO CAST IRON,

STAINLESS STEEL

WATER HAMMER

OF TYPE "K" HARD

"O" RINGS SEALS.

WALL HYDRANT: VACUUM BREAKER,

FREEZE PROOF, FLUSH

MOUNTING BOX WITH

FLUSH MOUNTING BOX

WITH HINGED COVER,

CHROME PLATED.

HINGED COVER. CHROME PLATED.

ARRESTOR:
BARREL FABRICATED

DRAIN, COPPER, WITH

ROUND COVER AND

4-12 DRAINS, SOLENOID

COMPLIANT

ASSEMBLY.

MANIFOLD,

REINFORCED

BODY WITH

CORROSION

ON DRAWINGS.

WITH GRAY DUCC

OUTSIDE. 25 GPM.

FLOW CONTROL FITTING

MOUNTING

HEIGHT

REMARKS

COMPONENTS

ACCESSORIES

PROVIDE EXTRA 1,700

WNER'S FUTURE USE

LBS OF LIME FOR

FLASHING CLAMP

FOR CARPETED

FURNISH WITH

VANDAL PROOF

CONNECTION

FURNISH WITH

VANDAL PROOF

CONNECTION

FURNISH WITH

CONNECTION

VANDAL PROOF

GRATE, TRAP PRIMER

8 1/2" SQUARE NICKEL

BRONZE TOP WITH 3/4"

FURNISH WITH SNAP- REFER TO

3/4" THREADED HOSE | 18" ABOVE

DRAWINGS FOR

LOCATIONS,

MOUNTING

HEIGHTS.

QUANTITIES AND

BELOW FIXTURE #7

VANDAL PROOF

TRAP SEAL.

GAS TURRET: FURNISH WITH SNAP- REFER TO ADA COMPLIANT, 3 5/8" IN INDEX, AIR, VAC, OR ARCHITECTURAL

CONNECTION.

GAS AS APPLICABLE.

AND FLASHING CLAMP. PROVIDE SURE SEAL

GRATE, TRAP PRIMER

GRATE, TRAP PRIMER

FLOORS

VANDAL PROOF

SCREWS

MOUNTING

HEIGHT

24" ABOVE

INDICATED

THERWISE

COORDINATE

WITH ARCHITECT

#6,10,11

#6,10,11

#6,9,13

#6,9,13

#6,9,13

UNI FSS

FINISHED GRADE

MANUFACTURER/

MODEL NUMBER

MODEL # 4532S-U

MODEL # COA/CPC

MODEL # RD-940

Z9A-NT-200Z9A-NT-200

MODEL # ST-120V-C

MODEL # 4023S-PB-U

MODEL # COA/CPC

AMTROL

JR. SMITH

FCO-2 ORION

FLD-2 JR. SMITH

FLD-3

<u>FS-1</u>

<u>HB-1</u>

MODEL # 2250-U

ZURN MODEL#

JR. SMITH

MODEL #3100C-13

MODEL # BL-4200-01

WOODFORD

MODEL # B26

MODEL # 8730-T

ANSI A117 REQUIREMENTS.

INT-1 JR. SMITH

Z9A-FD2-4Z9A-FD2-4

SYMBOL

<u>CO-1</u>

<u>CO-2</u>

<u>DN-1</u>

<u>ET-1</u>

DESCRIPTION

WITH TAPER

PLUG.

THREAD-BRONZE

PIPE/PVDG WITH

TAPER THREAD-PLUG.

DOWNSPOUT NOZZLE
TYPE 304 STAINLESS

STEEL DOWNSPOUT

SECURING FLANGE,

AND PERFORATED

HINGED STRAINER.

POLYETHELENE TANK

200 GALLONS, BOLTED

INLET/OUTLET, 3"

EXPANSION TANK

POLYPROPYLENE

CONSTRUCTED,

FLOOR CLEANOUT: CAST IRON BODY,

POLISHED BRONZE

VANDAL PROOF & BRONZE PLUG.

FLOOR CLEANOUT:

CLEANOUT: PPE/PVDF

WITH TAPER THREAD-

ROUND ADJUSTABLE

NICKEL BRONZE

FLASHING COLLAR,

CONNECTIONS, AND SEDIMENT BUCKET.

FLOOR DRAIN: CAST IRON BODY,

ROUND ADJUSTABLE

HEAVY DUTY CAST

IRON BAR GRATE.

FLASHING COLLAR.

CONNECTION, AND

SEDIMENT BUCKET.

<u>FLOOR DRAIN:</u> POLYPROPYLENE

POLYPROPYLENE

MEMBRANE CLAMP

W/ ADJUSTABLE STAINLESS STEEL

HEAD AND GRATE.

6" DEEP RECEPTOR,

NICKEL-BRONZE

RIM. CAST IRON

DOME STRAINER,

HEIGHT, 2 3/16"

DIAMETER BASE WITH

BALL VALVE HOSE

COCK AND SERATED

TIP, PLASTIC GASKET.

PROTECTED BRONZE

PLATED HANDWHEEL.

BODY, CHROME

CAST IRON BODY,

AND REMOVABLE

STAINI ESS STEFI

ALUMINUM STRAINER

OUTLET.

INVFRTIBI F

BODY WITH BOTTOM

TRAP PRIMER

STRAINER.

TRAP PRIMER

ROUND ADJUSTABLE

TOP, FLANGE GASKET

PRECHARGED

SCORIATED

OUTSIDE.

MODEL # 2010C-U-P050 CAST IRON BODY.

INSIDE, CAULK

LINER ASME

VENT, 36" DIAMETER,

COVER, 4"

48" HEIGHT.

COVER WITH

FURNISH WITH TRAP PRIMER CONNECTION AND TRAP PRIMER TP-1 10. PROVIDE CLEAN OUT AT ALL HORIZONTAL TURNS GREATER THAN 45 DEGREES FOR ALL STORM AND SANITARY 11. PROVIDE FLOOR CLEAN OUT FOR ALL BURIED STORM AND SANITARY PIPING, NOT MORE THAN 100' APART. PROVIDE

FCO AT ALL STORM & SANITARY LATERALS BEFORE EXITING FOUNDATION. 12. PROVIDE WCO AT BASE OF ALL SANITARY AND STORM STACKS. FURNISH WITH ACCESS DOOR OR COVER. 13. DRAIN GRATES SHALL BE 1/2" MAXIMUM SPACING.

PROVIDE WITH FIAT MODEL #830-AA SERVICE FAUCET WITH VACUUM BREAKER, MODEL #1453-BB 16 GAUGE STAINLESS STEEL STRAINER, MODEL #1239-BB ALUMINUM BUMPER GUARD PLATE, MODEL #MSG-3636 WALL GUARD, MODEL #889-CC MOP HANGER, FOR CAULKED LEAD CONNECTION NO LESS THAN 1" DEEP FROM DRAIN TO A 3" WASTE PIPE. SENSOR SHALL BE ADJUSTABLE. PROVIDE WITH SOLENOID VALVE, CHROME PLATED WALL PLATE AND MODEL EL-154 TRANSFORMER (120 VAC/24 VAC) SENSOR SHALL BE ADJUSTABLE. PROVIDE WITH FILTERED SOLENOID VALVE, CONTROL MODULE AND MODEL EL-208 TRANSFORMER (120 VAC/ 24 VAC). REFER TO DETAIL #6/E6-1-1 FOR ADDITIONAL INFO. 4. FIXTURE U-1 SHALL BE ACCESSIBLE, U-2 SHALL BE MOUNTED AT A STANDARD HEIGHT, REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS. 5. FURNISH TERRAZO BASE/RECEPTOR WITH 2" DRAIN AND STRAINER, ZURN MODEL Z415b OR APPROVED EQUAL. mannament in a serial contraction of the contractio

PROVIDE ISOLATION VALVES AT THE PIPE CONNECTIONS

COLOR AS SELECTED BY ARCHITECT, PROVIDE SAMPLES.

PROVIDE TEPID WATER SUPPLY TO EMERGENCY FIXTURE.

RECESS UNIT IN CONCRETE SLAB TO MAXIMUM OF 1/2" HIGH THRESHOLD.

FURNISH FAUCET WITH MIXING VALVE, INSTALL ALONG WALL BELOW FIXTURE.

PUMP SCHEDULE										
SYMBOL	MANUFACTURER/ MODEL NUMBER	TYPE	LOCATION	SYSTEM SERVED	CAPACITY	CAPACITY FT OF HEAD	FLUID TEMP (F°)	ELEC. DATA HP-V-PH	REMARKS	
HWRP-1	TACO 1616 CIRCULATOR	IL	BOILER ROOM	DOMESTIC 110°F HWR	-	-	110°F	3/4-200V-3ø	ALL	
HWRP-2	TACO 1615 CIRCULATOR	IL	BOILER ROOM	DOMESTIC 140°F HWR	-	-	140°F	3/4-200V-3ø	ALL	
NOTES:										

IL = IN-LINE PUMP SP = SUBMERSIBLE PUMP

REMARKS:

1. PUMP SHALL BE BRONZE FOR DOMESTIC WATER USE.

PROVIDE WITH THERMOSTATIC MIXING VAVLE (TV-1)

GAS FIRED WATER HEATER SCHEDULE STORAGE RECOVERY TYPE LOCATION TYPE MANUFACTURER/ BTUH ELEC. DATA CAP. IN GPH AT SYMBOL REMARKS MODEL NUMBER INPUT VOLT-PH-AMP 100°F RISE PVI MODEL # BOILER GAS 999,000 130 1157 NOTE #1,2,3 120V-1ø-11 100 L 130-GCML ROOM BOILER GAS 999,000 130 100 L 130-GCML S 120V-1ø-11 NOTE #1,2,3 1157 ROOM NOTES:

S= STORAGE WATER HEATER SHALL BE PROVIDED WITH A MINIMUM OF 4 1/2" - 14"W.C. GAS PRESSURE. COORDINATE WATER HEATER OPERATION WITH COMBUSTION AIR LOUVER, LOUVER SHALL OPEN WHEN WATER HEATER BURNER IS ON AND CLOSE WHEN BURNER IS OFF. WATER HEATER SHALL BE PROVIDED WITH ELECTRONIC IGNITION.

PROVIDE SINK WITH REAR OFFSET DRAIN TO LEFT OR RIGHT SIDE FOR ADA COMPLIANCY, ANSI A117 AND FEDERAL 504 REQUIREMENTS SEE ARCHITECTURAL DRAWINGS FOR DRAIN LOCATIONS.

PLUMBING FIXTURE SCHEDULE

SYMBOL

REMARKS

#2,3,4,10

DESCRIPTION

OF FIXTURE

STATIONS 30" ON

RESISTANT

CENTER, QUARTZ

SURFACE, VANDAL

UNDERMOUNT, 18

SST, 5" DEEP, REAR

ARCHITECTURAL

STANDARD, MUD SET

TILE FLOOR, REFER

TO ARCHITECTURAL

URINAL: ACCESSIBLE, WALL

HUNG, VITREOUS

BREAKER AND

ADJUSTABI F

TAILPIECE.

CHINA, 3/4" TOP SPUD,

1/8 GPF SENSOR FLUSH

VALVE WITH VACUUM

ACCESSIBLE. WAL

HUNG, ELONGATED

CHINA, 1 1/2" REAR

SPUD, 1.28 MAX GPF.

BOWL, VITREOUS

HUNG, ELONGATED

BOWL VITREOUS

CHINA. 1 1/2" REAR

CIRCULAR WASH

PROOF, FLOOR

PER STATION.

STANDARD, VANDAL

MOUNTED CIRCULAR

STATIONS, 0.5 GPM

BOWL, TYPE 304 SST, 5

SPUD, 1.28 MAX GPF.

GAUGE TYPE 304

OFFSET DRAIN

LOCATION.

REMARKS

#2,3,4,6,11

ACCESSORIES

FURNISH WITH IR-DCG

ELECTRONIC FAUCET W/ 4

ADDITIONAL 6V LITHIUM

BATTERIES, STAINLESS

STEEL ACCESS PANEL.

T&S MODEL # B-2741

GOOSENECK FAUCET WITH

PLUMBING CONTRACTOR

SHALL INSTALL FITTINGS

EQUIPMENT DRAWINGS.

HOSE WITH VACUUM BREAKER

SHOWER HEAD, JR SMITH

C-96-1-295-X WITH VANDAL

PROOF SHOWER HEAD MODEL

4-295, JR SMITH MODEL # 2005

186-ESS-0.123-DBP-SF-TMO-HW

TMO, SENSOR FLUSH VALVE W/

OVERRIDE & VACUUM BREAKER

TMO, SENSOR FLUSH VALVE W/

INTEGRAL STOP, MECHANICAL

OLSONITE # 95SS OPEN FRONT

COVERLESS, WHITE SEAT,

FURNISH WITH STAINLESS

STEEL COVER ATTACHED TO

DRAIN BODY. PROVIDE AIR

ADMITTANCE VALVE.

WALL SUPPORT JR SMITH

OVERRIDE & VACUUM BREAKER

OLSONITE # 95SS OPEN FRONT,

COVERLESS, WHITE SEAT.

WALL SUPPORT JR SMITH

SERIES 0200.

SERIES 0200.

INTEGRAL STOP, MECHANICAL

JR SMITH 0700 CARRIER

MODEL # 2005 2" DRAIN.

AND SLIDE BAR, VANDAL PROOF

SYMMONS "SAFETYMIX" MODEL | #3,4,7,8

SYMMONS "SAFETYMIX" MODEL | #4,7,8

SLOAN FLUSH VALVE MODEL # | #1,3,4,5,9,14

SLOAN MODEL # 111-1.28-ES-S- #1,4,5,13

SINGLE 6" LEVER

1.0 GPM AERATOR,

ASSEMBLY # LK-8.

AND DEVICES AS

SPECIFIED ON

CCESSIBLE, MUD SET # C-96-500-B30-V-X, WITH HAND

TILE FLOOR, REFER TO | SHOWER AND FLEX METAL

CHROME GRID DRAIN

MANUFACTURER/

MODEL NUMBER

BRADLEY MODEL

"LUSTERTONE"

ELUHAD191650

FURNISHED UNDER

BUILT UP SHOWER

ARCHITECTURAL

BUILT UP SHOWER

ARCHITECTURAL

AMERICAN STANDARD

"WASHBROOK"

MODEL # 6590.001

AMERICAN STANDARD

AMERICAN STANDARD

"AFWALL" MODEL #

BRADLEY "SENTRY"

MODEL # SN2005-AST4

"AFWALL" MODEL #

WC-2

WS-1

DRAWINGS.

DRAWINGS.

DIVISION 11.

PLUMBING

INSTALLED BY

CONTRACTOR.

MODEL#

#LVRD-3

DESCRIPTION

OF FIXTURE

WALL MOUNTED DUAL

PURPOSE STATIONARY

EYE/FACE WASH.12'

HOSE, DUAL SPRAY

GPM AT 30-90 PSI.

GAUGE SST, FRONT

GAUGE SST, FRONT

GUARD, 1.1 GPM BOTTLE

AT 30 PSI IMPACT-

BOWL, SHOWER HEAD

DELIVERING 20 GPM MIN

RESISTANT PLASTIC

BASIN, 24"X36"X10",

JANITORS SINK: MOLDED STONE

WALL HUNG, 4"

CHINA, FRONT

LAVATORY: ACCESIBLE TWO

STATIONS 30" ON

CENTER. QUARTZ

RESISTANT

SURFACE, VANDAL

SPACED FAUCET

HOLES, VITREOUS

BASIN 24"X24"X10"

SST INTEGRAL DRAIN

SST INTEGRAL DRAIN

PUSH BARS, 5 LB,

FORCE BUBBLER

GUARD, 1.1 GPM BOTTLE

PUSH BARS, 5 LB,

FORCE BUBBLER

OR REMOVABLE

AND

ACCESSORIES

PLUMBING CONTRACTOR

SHALL INSTALL FITTINGS

EQUIPMENT DRAWINGS.

PLUMBING CONTRACTOR

SHALL INSTALL FITTINGS

EQUIPMENT DRAWINGS.

STAY OPEN BALL VALVE,

STAINLESS STEEL FLAG

HANDLE, FURNISH WITH

BRADI FY FFX8-219-2000

THERMOSTATIC MIXING

FURNISH WITH HANGER

ALUMINUM FLAG HANDLE.

#1,4,12

#1,2,3,4,10

SEE REMARK #12

SEE REMARK #12

SLOAN MODEL #EAF-100-

IQ-FCT SENSOR FAUCET.

CHROME PLATED GRID

SMITH SERIES 700

LAVSHIELD

INSTALL TRUEBRO INC. MODEL #102, HANDI LAV-GUARD PROTECTOR ON THE HOT, COLD, AND DRAIN PIPING UNDER FIXTURE.

PROVIDE WATER HAMMER ARRESTORS AT THE PIPE CONNECTIONS, LOCATE IN AN ACCESSIBLE LOCATION.

FIXTURES AND TRIM AS NOTED SHALL BE "ACCESSIBLE" AND SHALL BE INSTALLED TO ADA / ANSI A117 AND FEDERAL 504 REQUIREMENTS.

). PLUMBING CONTRACTOR SHALL FURNISH & INSTALL H&CW SUPPLIES WITH SHUT OFF VALVES, DRAIN AND VENT PIPING AT FIXTURE.

STRAINER, PROVIDE JR

CONCEALED SUPPORT.

FURNISH WITH IR-DCG

ADDITIONAL 6V LITHIUM

BATTERIES, STAINLESS

STEEL ACCESS PANEL.

ELECTRONIC FAUCET W/ 4

TRUEBRO MODEL #2018ASL1

HLT-ISM-CP-0.5GPM-AER-IR-

HEADS, FLOWS 3.9-5.9 VALVE (1/2" H&CW SUPPLY)

COOLER: ACCESSIBLE, BRACKET AND CANE APRON,

DOUBLE BOWL, VANDAL- REPLACEMENT FILTERS

MOUNTED, 120V-1Ø, 14 12 PACK PER FIXTURE)

RESISTANT, SURFACE | MODEL 51300C_12PK (ONE

ELECTRIC WATER COOLER: ACCESSIBLE, BRACKET AND CANE APRON,

DOUBLE BOWL, VANDAL- REPLACEMENT FILTERS

MOUNTED, 120V-1ø, 14 | 12 PACK PER FIXTURE)

EYEWASH SHOWER: 1" IPS STAY OPEN BALL

W/ EYEWASH, IMPACT- | AND HANDLE, 1/2" CROME

RESISTANT ABS HEADS | PLATED BRASS STAY OPEN

DELIVERING 3 GPM MIN | BALL VALVE EPOXY COATE

BARRIER FREE SHOWER | VALVE WITH 4' - 0" PULL ROD

RESISTANT, SURFACE | MODEL 51300C_12PK (ONE

1/2" CHROME PLATED BRASS #3,4,11

AND DEVICES AS

SPECIFIED ON

AND DEVICES AS

SPECIFIED ON

MANUFACTURER/

MODEL NUMBER

FURNISHED UNDER

FURNISHED UNDER

DIVISION 11

INSTALLED BY

CONTRACTOR.

BRADLEY MODEL

S1944022ABC

FI KAY MODEL

LVRCTL8WS

FLKAY MODEL

LZWS-EDFPBM117K

BRADLEY MODEL

S19314BFPB

FIAT MODEL#

FIAT MODEL#

BRADLEY MODEL

#LVRD-2

REMARKS:

COLOR SHALL BE WHITE.

AMERICAN STANDARD LAVATORY: ACCESSIBLE

MSB-2424

<u>EWC-1</u>

<u>EWC-2</u>

<u>EWS-1</u>

DIVISION 11.

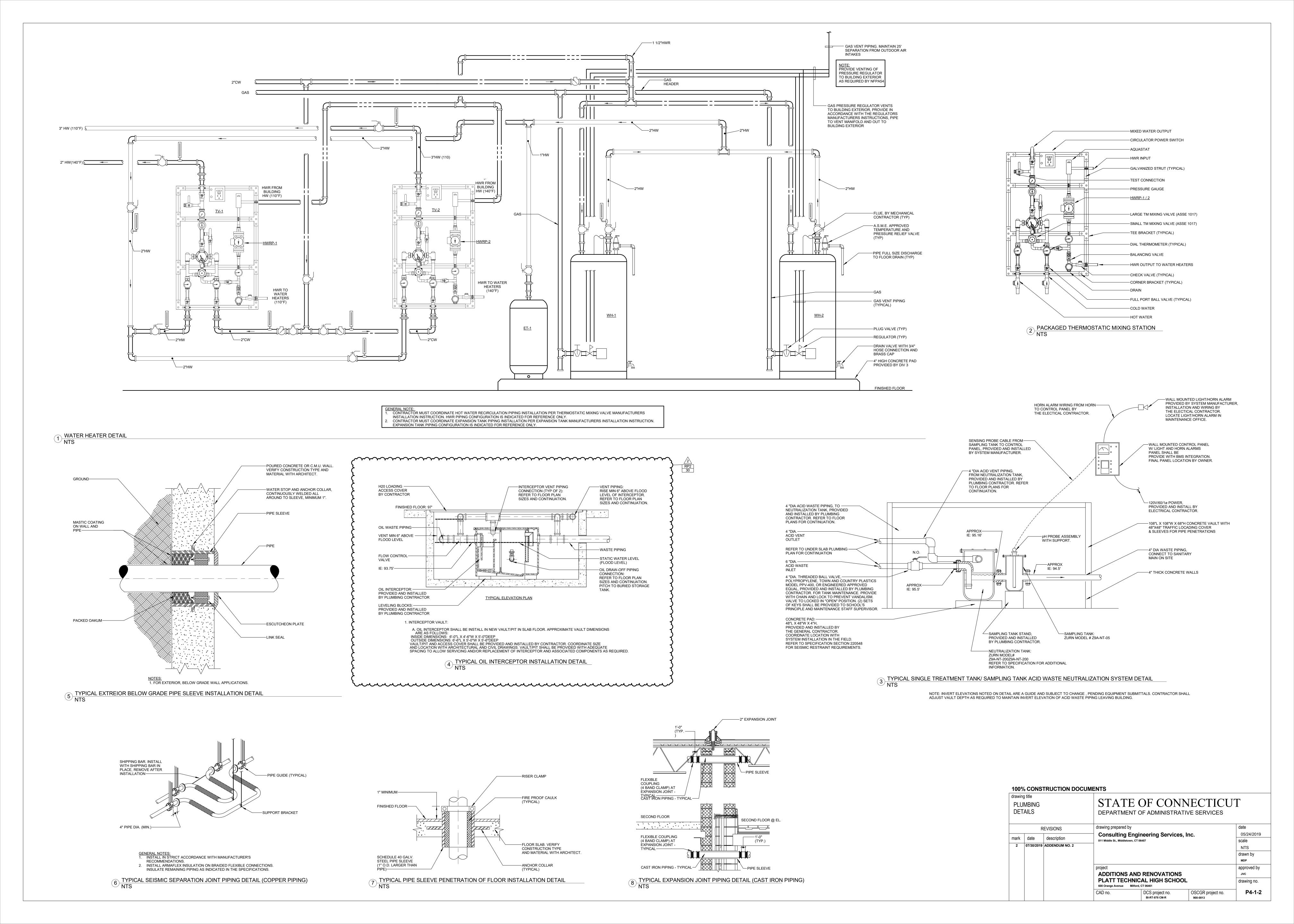
PI UMBING

INSTALLED BY

CONTRACTOR.

SYMBOL

100%	6 CONS	TRUCTION DOC	JMENTS							
_	g title IMBING IEDULES	3		STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES						
	R	EVISIONS	drawing prepared by	drawing prepared by						
	1-4-	do o orienti o re	Consulting Engi	Consulting Engineering Services, Inc. 811 Middle St., Middletown, CT 06457						
mark	date	description	811 Middle St., Middletown, CT							
1 2		ADDENDUM NO. 1 ADDENDUM NO. 2				1/8" = 1'-0"				
_	07/30/2013	ADDENDOM NO. 2				drawn by				
						MDP				
			project			approved by				
			ADDITIONS AND	RENOVATIONS		JVC				
				PLATT TECHNICAL HIGH SCHOOL 600 Orange Avenue Milford, CT 06461						
			CAD no.	DCS project no.	OSCGR project no.	P3-1-2				



ELECTRICAL LIGHTING KEY NOTES

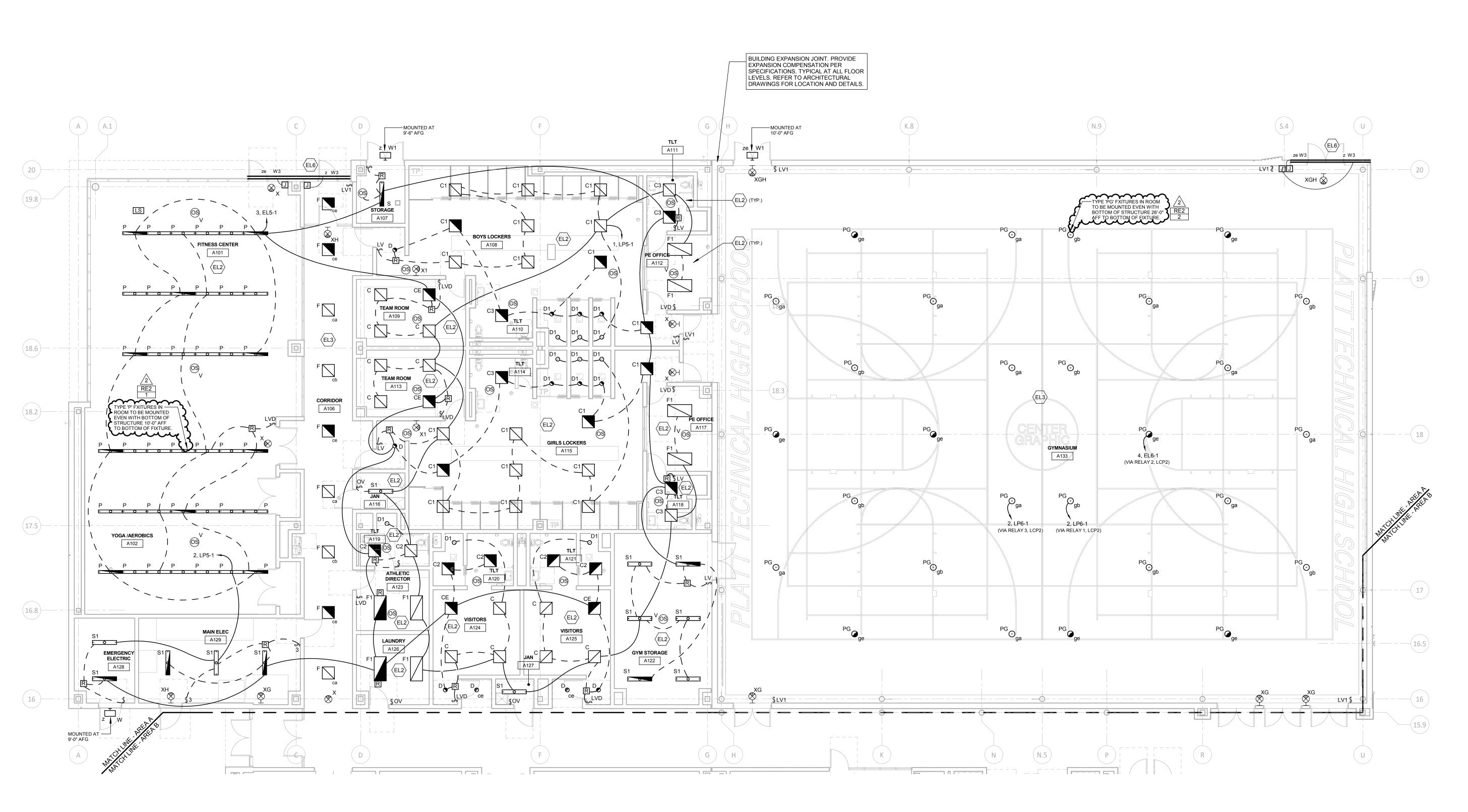
- CLASSROOM LIGHTING CONTROL PANEL REFER TO DETAILS ON DRAWING E6-1-4 FOR WIRING, UL 924 EMERGENCY BYPASS RELAYS, AND CONTROL DEVICES.
- REFER TO DETAILS ON DRAWING E6-1-3 FOR TYPICAL STANDALONE PRIVATE OFFICE, CONFERENCE ROOM, STORAGE ROOM, REST ROOMS, AND SMALL INTERIOR ROOM.
- REFER TO DETAILS AND SCHEDULES ON DRAWINGS E6-1-5 AND E6-1-9 FOR CORRIDOR, LOBBY, TRADE SHOP, OPEN SPACE AND EXTERIOR EGRESS LIGHTING CONTROL.
- (EL4) UP/DOWN TO NEXT NORMAL LIGHTING FIXTURE IN STAIRWELL.
- (EL5) UP/DOWN TO NEXT EMERGENCY LIGHTING FIXTURE IN STAIRWELL.
- SEE ARCHITECTURAL ENTRY SOFFIT DETAIL FOR MOUNTING. (2) TYPE 'W3' FIXTURES RUN IN PARALLEL.
- GENERAL NOTES ELECTRICAL LIGHTING
- ALL CIRCUITS SHALL BE 2#12,#12G.,3/4"C., TO NEW 20A-1P CIRCUIT BREAKER IN PANEL INDICATED UNLESS NOTED OTHERWISE.
 ALL BRANCH CIRCUITS EXCEEDING 150' IN LENGTH SHALL BE 2#10,#10G.,3/4"C. UNLESS NOTED
- 3. ALL DEVICES SHALL BE LABELED WITH SOURCE PANEL AND CIRCUIT NUMBER(S).
- REFER TO ARCHITECTS REFLECTED CEILING PLAN FOR MOUNTING HEIGHTS, FINAL LOCATIONS, CONTINUOUS LINEAR LENGTHS AND ADDITIONAL LIGHTING FIXTURE INFORMATION.
 REFER TO DRAWING E5-1-1 FOR ELECTRICAL SYMBOLS, LEGENDS, NOTES, AND ABBREVIATIONS.
- 6. REFER TO SPECIFICATION SECTION 26 5100, APPENDIX A FOR THE LIGHT FIXTURE SCHEDULE.

 7. REFER TO DRAWINGS E6-1-3, E6-1-4, AND E6-1-5 FOR LIGHTING CONTROL DETAILS.
- REFER TO DRAWINGS E6-1-3, E6-1-4, AND E6-1-5 FOR LIGHTING CONTROL DETAILS.
 EXIT SIGNS SHALL BE WIRED TO LINE SIDE OF LOCAL LIGHTING BRANCH CIRCUIT, AHEAD OF ALL SWITCHING DEVICES.
- 9. PROVIDE FIRE STOPPING AND SMOKE BARRIER SEALING OF ALL PENETRATIONS THROUGH FIRE WALLS AND FLOORS OR SMOKE BARRIERS AS REQUIRED. REFER TO ARCHITECTURAL
- FLOOR PLANS AND CODE SHEETS FOR WALLS.

 0. 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.

 11. REFER TO LIGHT FIXTURE LABELING SCHEMATIC ON DRAWING E5-1-1 FOR LIGHT FIXTURE TYPE, LIGHTING CONTROL ZONE DESIGNATION AND ADDITIONAL BRANCH CIRCUIT AND
- CONTROL INFORMATION.

 12. MINIMUM MOUNTING HEIGHT OF LIGHTING FIXTURES IN MECHANICAL/ELECTRICAL SPACES TO
- BE 8'-6" AFF. COORDINATE MOUNTING HEIGHTS WITH EQUIPMENT IN ROOM SUCH THAT LIGHTING IS NOT OBSTRUCTED BY DUCTWORK, PIPING AND CONDUIT.
- IN ALL LOCATIONS WHERE A LIGHT FIXTURE OR SUPPORTING DEVICE IS MOUNTED ON A PRECAST WALL, PROVIDE BACKBOXES, CONDUIT, CONCEALED WIRING AND TERMINATIONS WITHIN PRECAST CONCRETE PANELS. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
 IN ALL LOCATIONS WHERE A LIGHT FIXTURE OR SUPPORTING DEVICE IS MOUNTED ON AN
- 14. IN ALL LOCATIONS WHERE A LIGHT FIXTURE OR SUPPORTING DEVICE IS MOUNTED ON AN ALUMINUM STORE FRONT, PROVIDE BACKBOXES, CONDUIT, CONCEALED WIRING AND TERMINATIONS WITHIN STORE FRONT. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.



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

100% CONSTRUCTION DOCUMENTS drawing title STATE OF CONNECTICUT FIRST FLOOR **ELECTRICAL LIGHTING** DEPARTMENT OF ADMINISTRATIVE SERVICES PLAN AREA A **D** drawing prepared by REVISIONS Consulting Engineering Services, Inc.
811 Middle St., Middletown, CT 06457 В mark date description 2 07/30/2019 ADDENDUM NO. 2 **ADDITIONS AND RENOVATIONS** PLATT TECHNICAL HIGH SCHOOL 600 Orange Avenue Milford, CT 06461 DCS project no. OSCGR project no. BI-RT-878 CM-R 900-0013

05/24/2019

As indicated

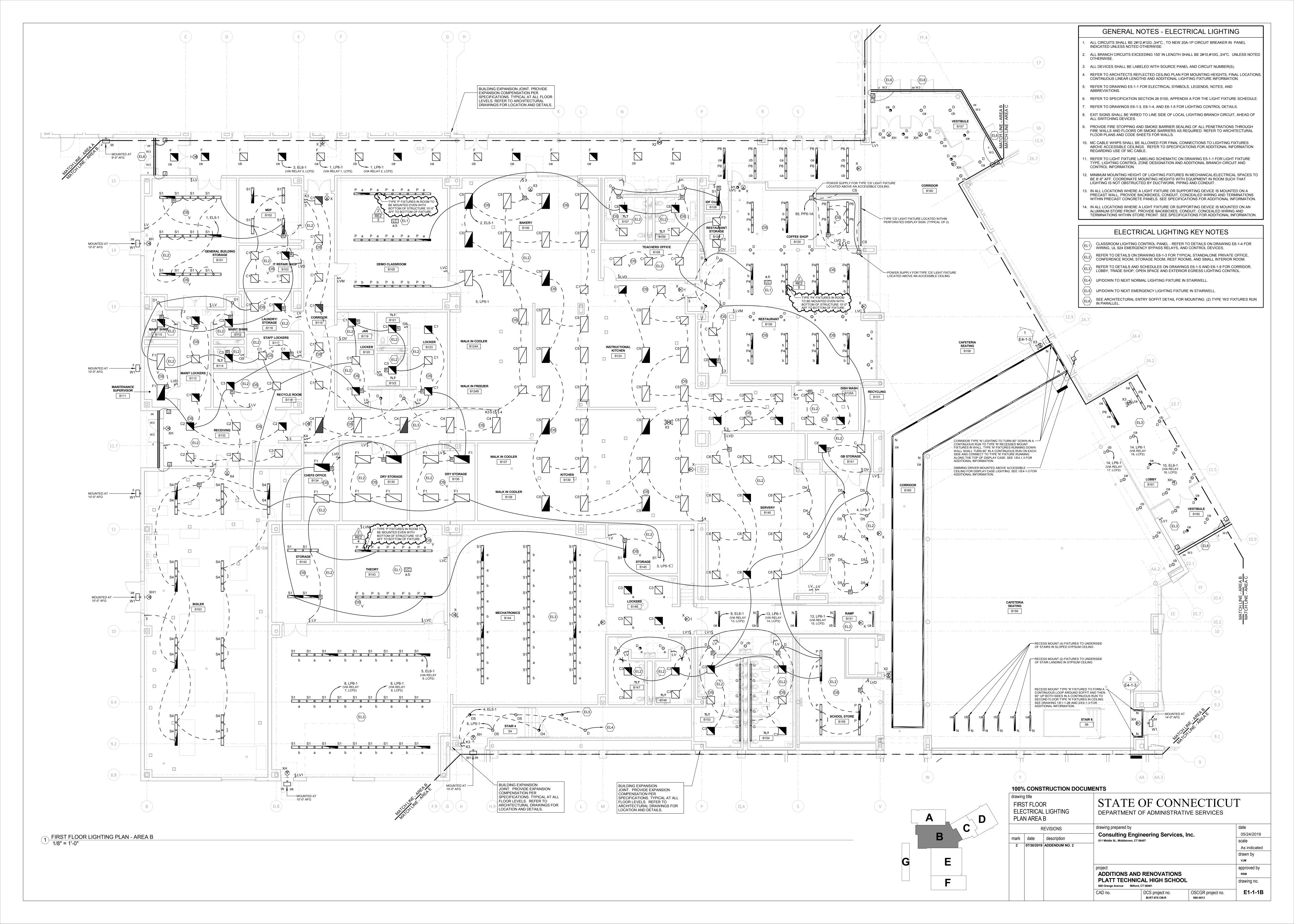
scale

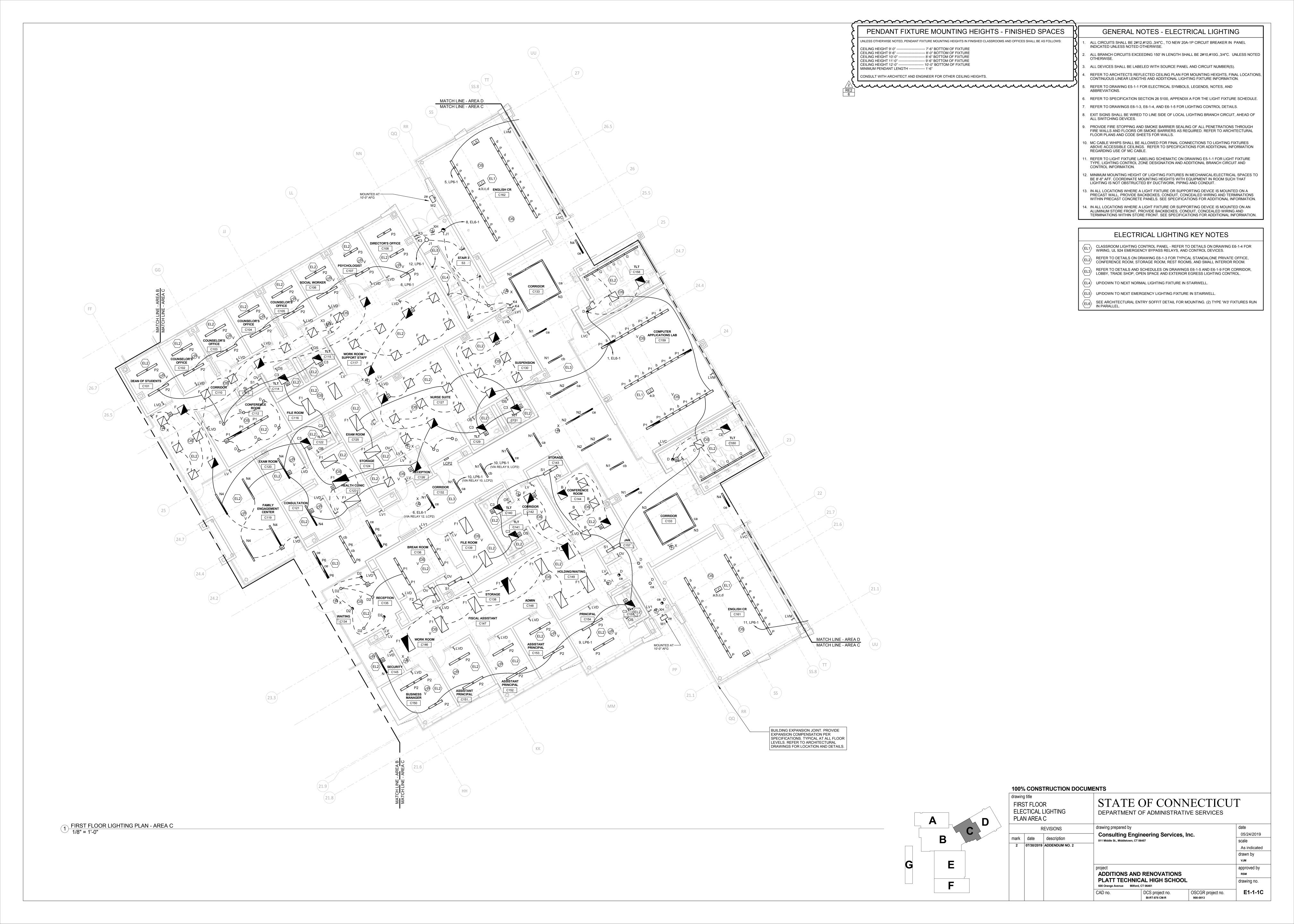
drawn by

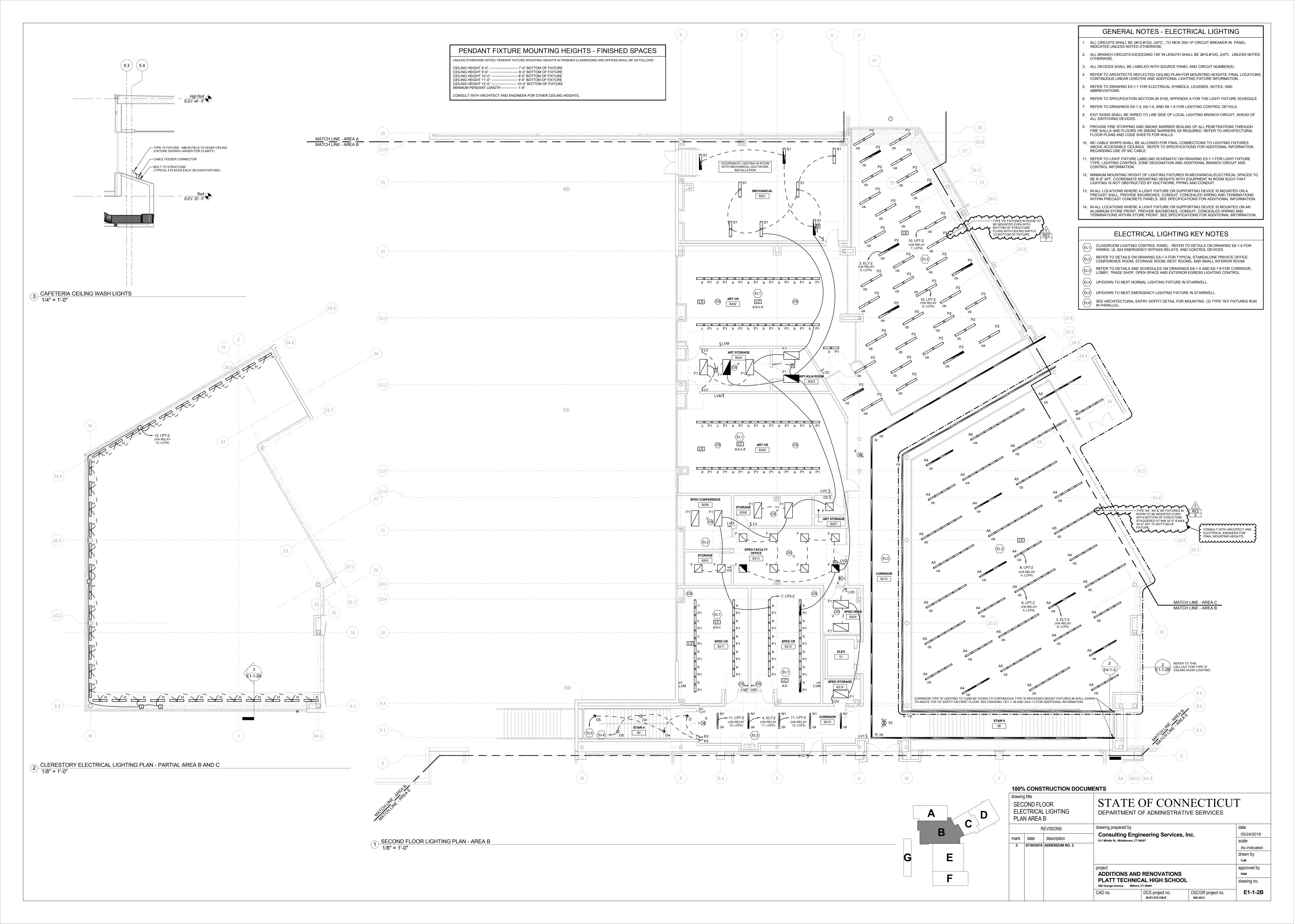
approved by

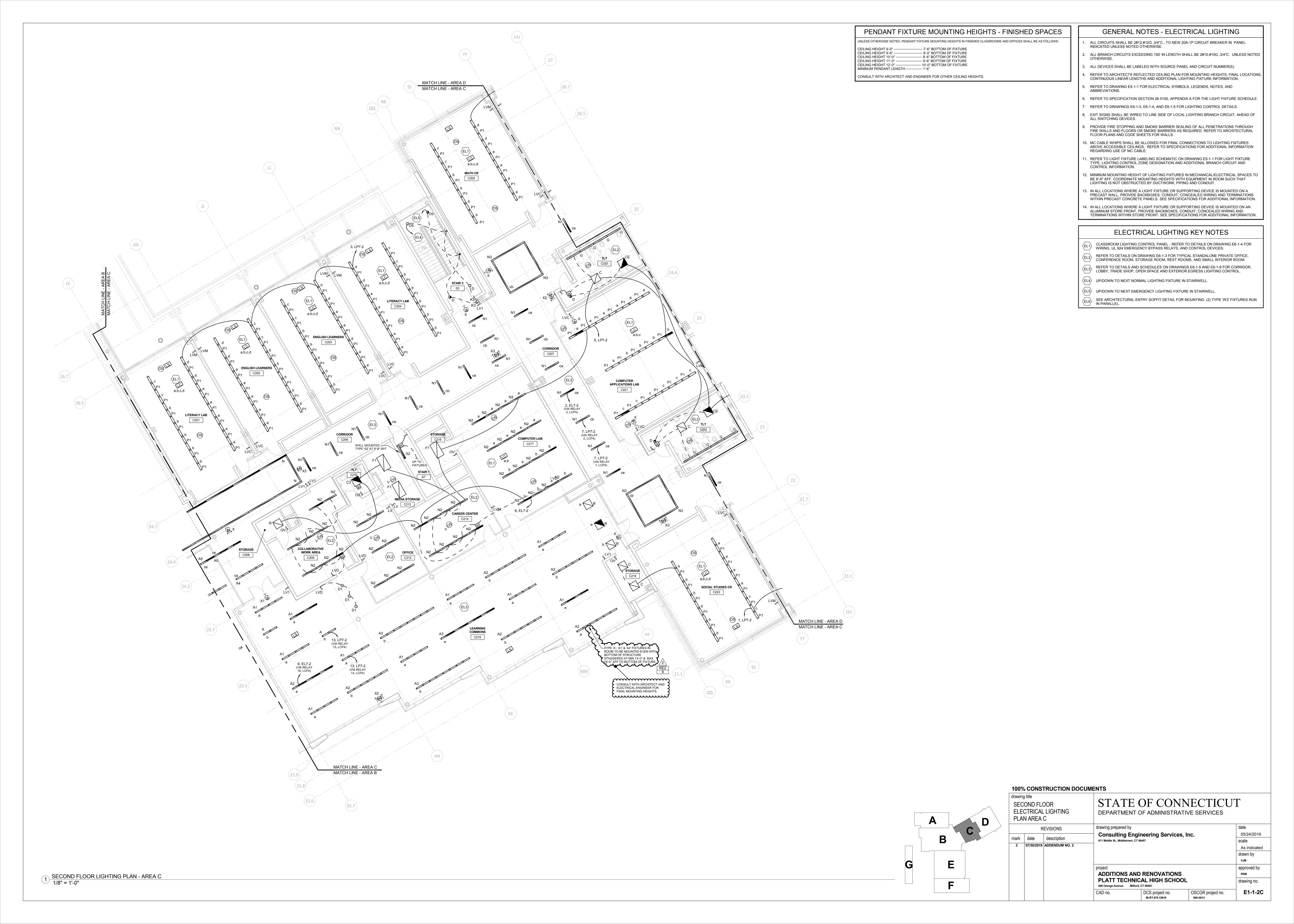
drawing no.

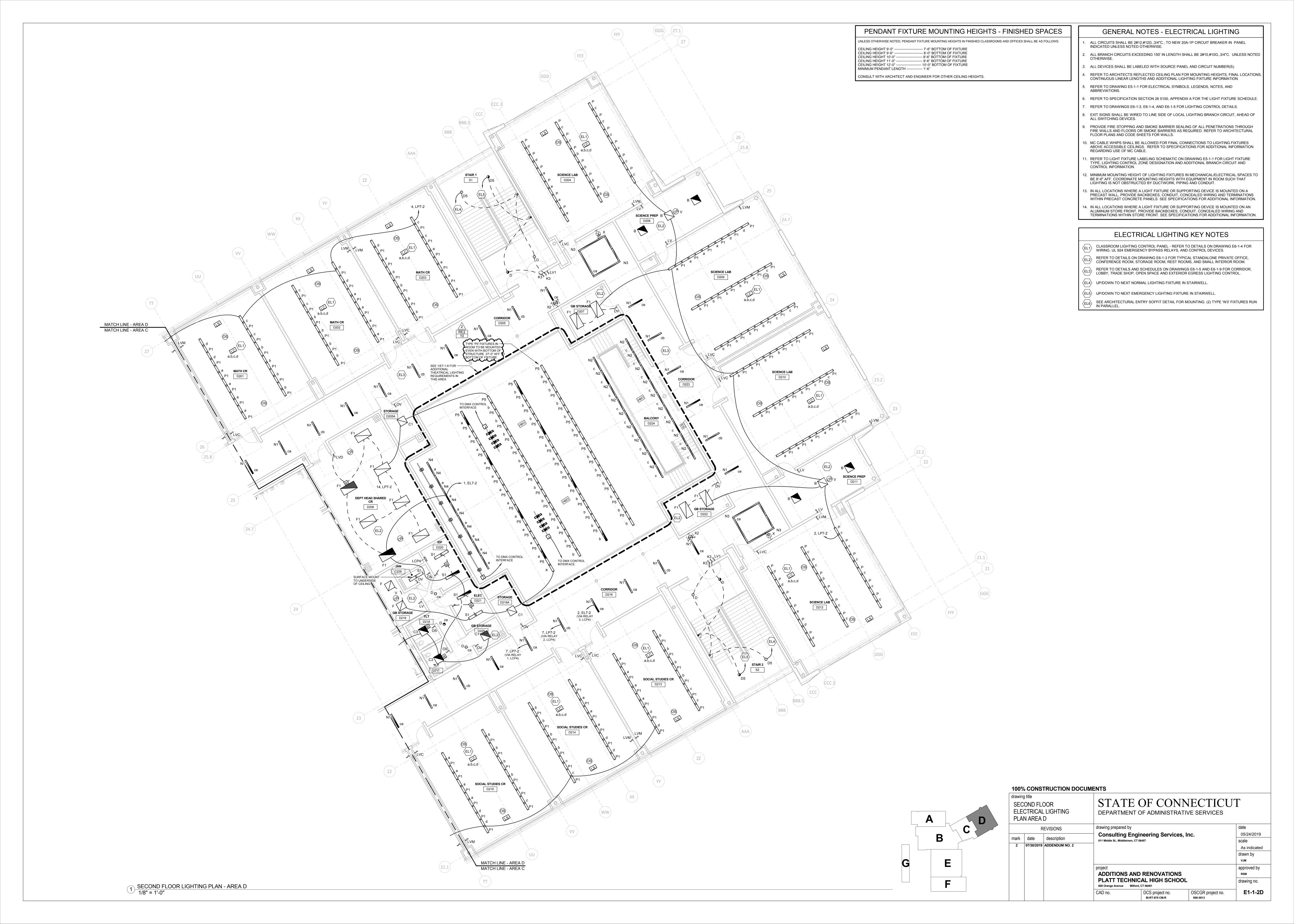
E1-1-1A











LIGHTNING PROTECTION KEY NOTES

- PROVIDE A GROUND RING CONDUCTOR (COUNTERPOISE) EXTENDING AROUND THE PERIMETER OF THE BUILDING. BURY COUNTERPOISE NOT LESS THAN 30-INCHES BELOW GRADE AND 5-FEET FROM BUILDING FOUNDATION. USE #4/0 AWG FOR COUNTERPOISE AND FOR TAP TO BUILDING STEEL. COUNTERPOISE CONDUCTOR TRENCH SHALL BE FILLED WITH 1" OF ERICO G.E.M. ABOVE AND BELOW CONDUCTOR (TYPICAL
- GROUND THE STEEL FRAMEWORK OF THE BUILDING WITH A GROUND ROD AT EVERY CORNER COLUMN AND AT EVERY OTHER EXTERIOR COLUMN. GROUND RODS SHALL BE LOCATED IN COUNTERPOISE TRENCH AND SHALL BE ATTACHED TO COUNTERPOISE WITH A TYPE GY (CONDUCTOR-TO-ROD) BY ERICO AND AN XB (CONDUCTOR-TO-CONDUCTOR) CONNECTION BY ERICO. TOP OF GROUND ROD SHALL NOT BE LESS THAN 24" BELOW GRADE. THE CONDUCTOR THAT ATTACHES THE ROD TO THE COUNTERPOISE SHALL BE RUN CONTINUOUS TO THE BASE OF THE STRUCTURAL STEEL COLUMN AND SHALL BE WELDED TO THE COLUMN (TYPICAL WHERE SHOWN).

KEY NOTES - GYMNASIUM

- THE ELECTRICAL CONTRACTOR SHALL PROVIDE A JUNCTION BOX WITH RECEPTACLE FOR A 3/4 HP, 120V/60/1 PHASE MOTOR WITH CORD AND PLUG AT EACH MOTORIZED BACKBOARD AND DIVIDER CURTAIN. JUNCTION BOXES SHALL BE LOCATED IN STRUCTURE ABOVE BACKBOARDS AND DIVIDER CURTAIN. MOTORS SHALL BE CONTROLLED BY KEY OPERATED SWITCHES FURNISHED BY THE EQUIPMENT SUPPLIER. INSTALLATION, WIRING, FINAL CONNECTIONS AND MATERIALS SHALL BE BY THE ELECTRICAL CONTRACTOR.
- G2 WIRING OF MOTORIZED BLEACHER COMPONENTS AND CONTROLS SHALL BE BY THE EQUIPMENT SUPPLIER. FINAL CONNECTIONS TO EQUIPMENT CONTROL BOX SHALL BE BY THE ELECTRICAL CONTRACTOR. REFER TO EQUIPMENT CONSULTANT'S DETAILED DRAWINGS FOR ADDITIONAL
- $\langle _{\mathsf{G3}}
 angle$ ELECTRICAL DEVICES ALONG THIS WALL SHALL BE MOUNTED IN PRECAST PANELS. REFER TO GENERAL NOTE #10 FOR ADDITIONAL INFORMATION.

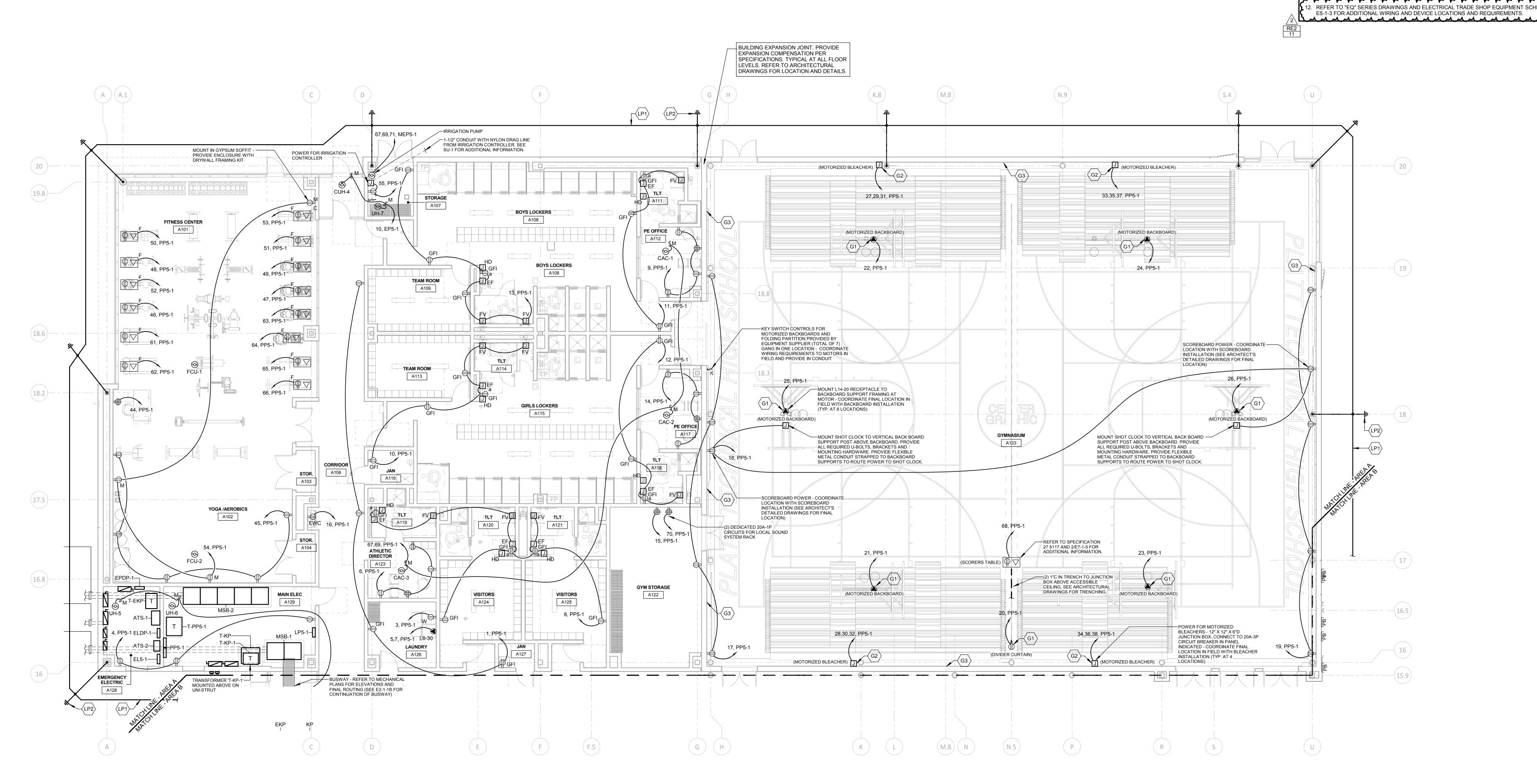
GENERAL NOTES - ELECTRICAL POWER

- ALL CIRCUITS SHALL BE 2#12,#12G.,3/4"C., TO NEW 20A-1P CIRCUIT BREAKER IN PANEL INDICATED UNLESS
- ALL 120VAC BRANCH CIRCUITS EXCEEDING 150' IN LENGTH SHALL BE 2#10,#10G., 3/4"C. UNLESS NOTED
- . REFER TO ARCHITECTS REFLECTED CEILING PLAN FOR EXACT LOCATION OF CEILING MOUNTED ELECTRICAL
- 5. REFER TO DRAWING E5-1-1 FOR ELECTRICAL SYMBOLS, LEGENDS, AND ABBREVIATIONS.
- 6. REFER TO DRAWING E5-1-2 FOR MOTOR CIRCUIT SCHEDULE.

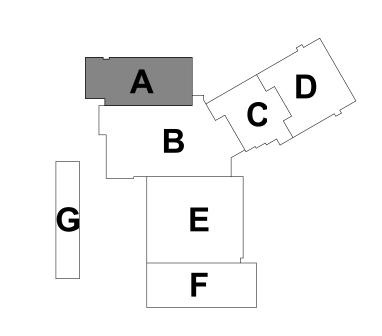
3. ALL DEVICES SHALL BE LABELED WITH SOURCE PANEL AND CIRCUIT NUMBER(S).

- 7. 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.
- 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.
- 1. 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.

 12. REFER TO "EQ" SERIES DRAWINGS AND ELECTRICAL TRADE SHOP EQUIPMENT SCHEDULES ON DRAWING



1) FIRST FLOOR ELECTRICAL POWER PLAN - AREA A 1/8" = 1'-0"



100% CONSTRUCTION DOCUME	ENTS
drawing title	Q r

STATE OF CONNECTICUT FIRST FLOOR **ELECTRICAL POWER** DEPARTMENT OF ADMINISTRATIVE SERVICES PLAN AREA A drawing prepared by REVISIONS Consulting Engineering Services, Inc.
811 Middle St., Middletown, CT 06457 mark date description 2 07/30/2019 ADDENDUM NO. 2 ADDITIONS AND RENOVATIONS PLATT TECHNICAL HIGH SCHOOL 600 Orange Avenue Milford, CT 06461

05/24/2019

As indicated

scale

drawn by VJM

approved by

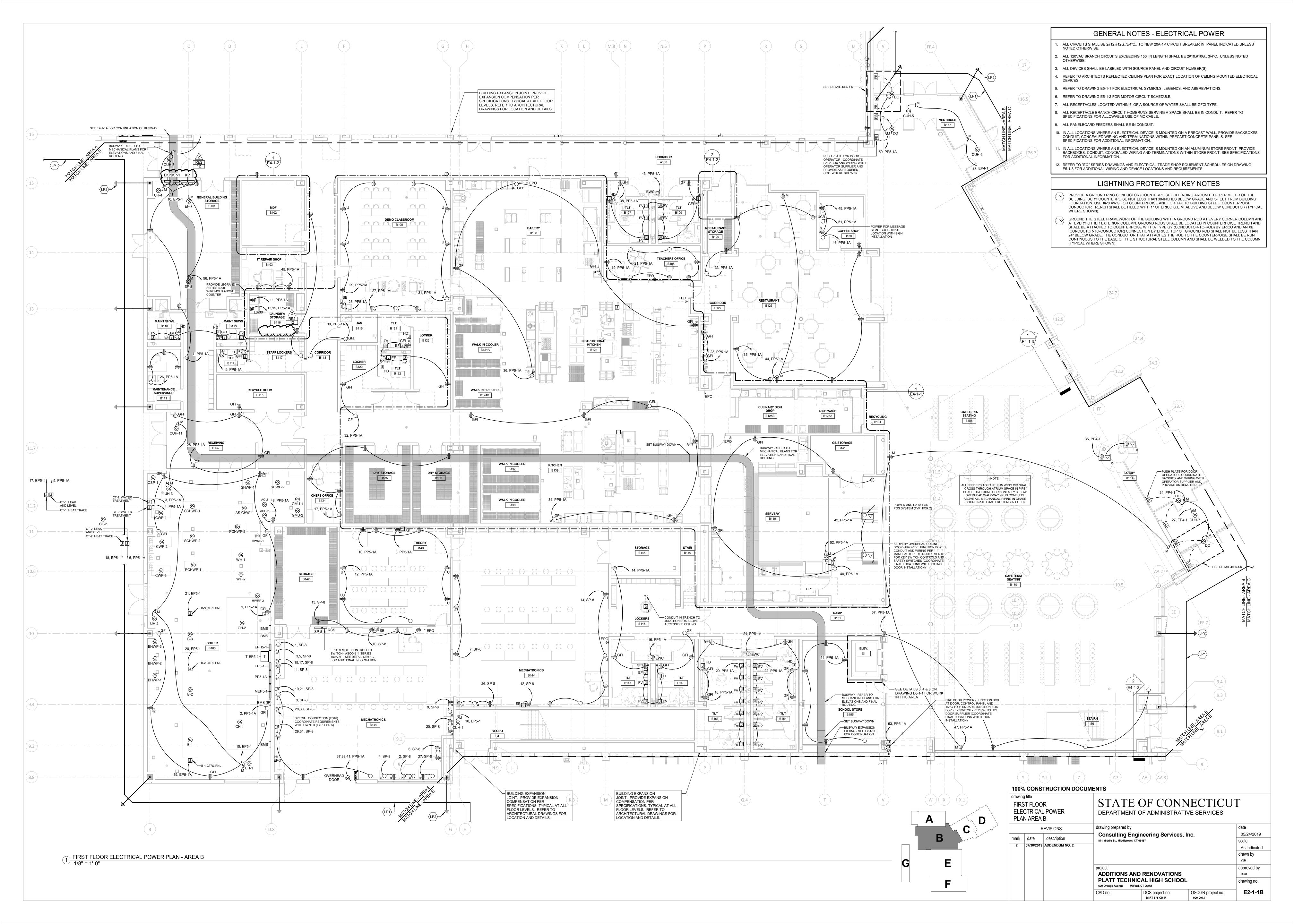
drawing no.

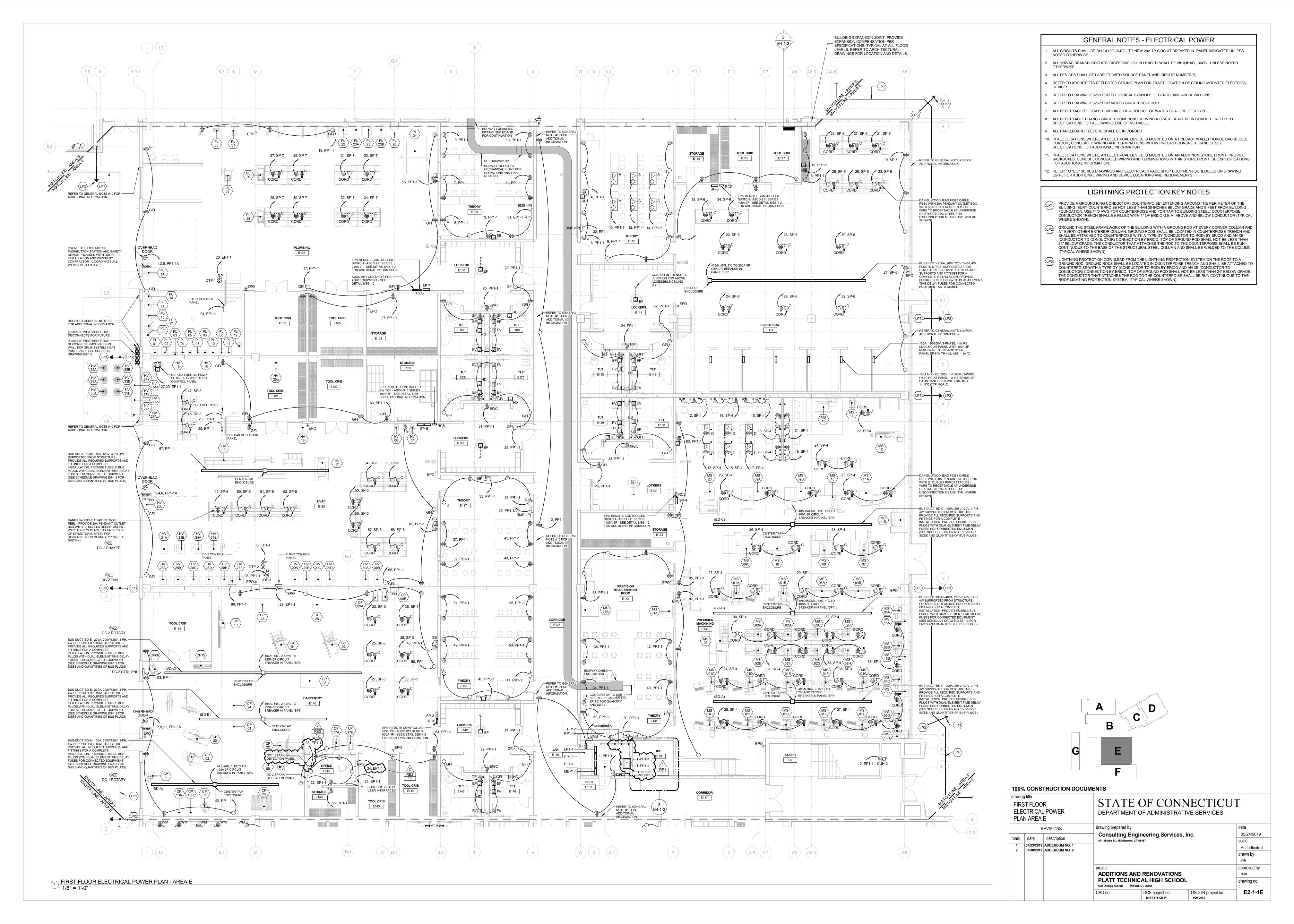
E2-1-1A

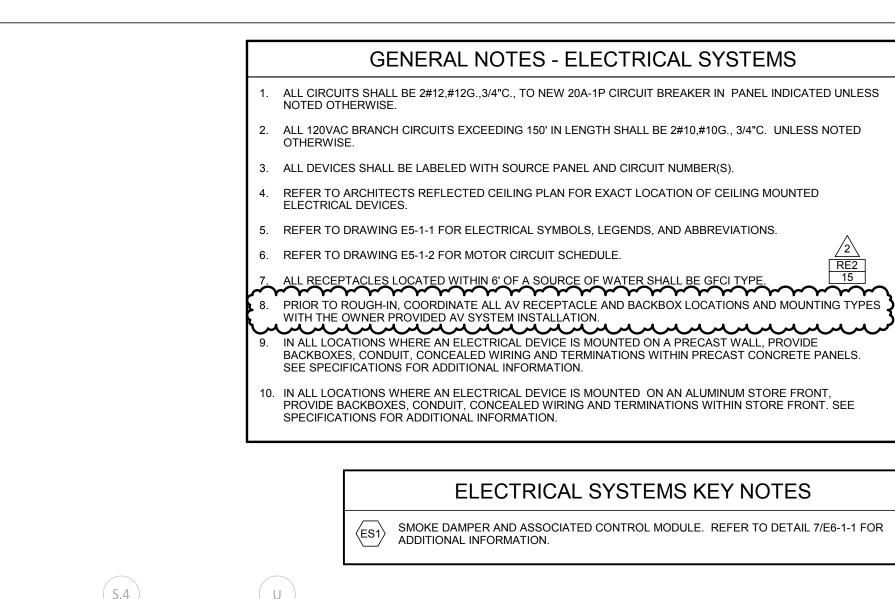
OSCGR project no.

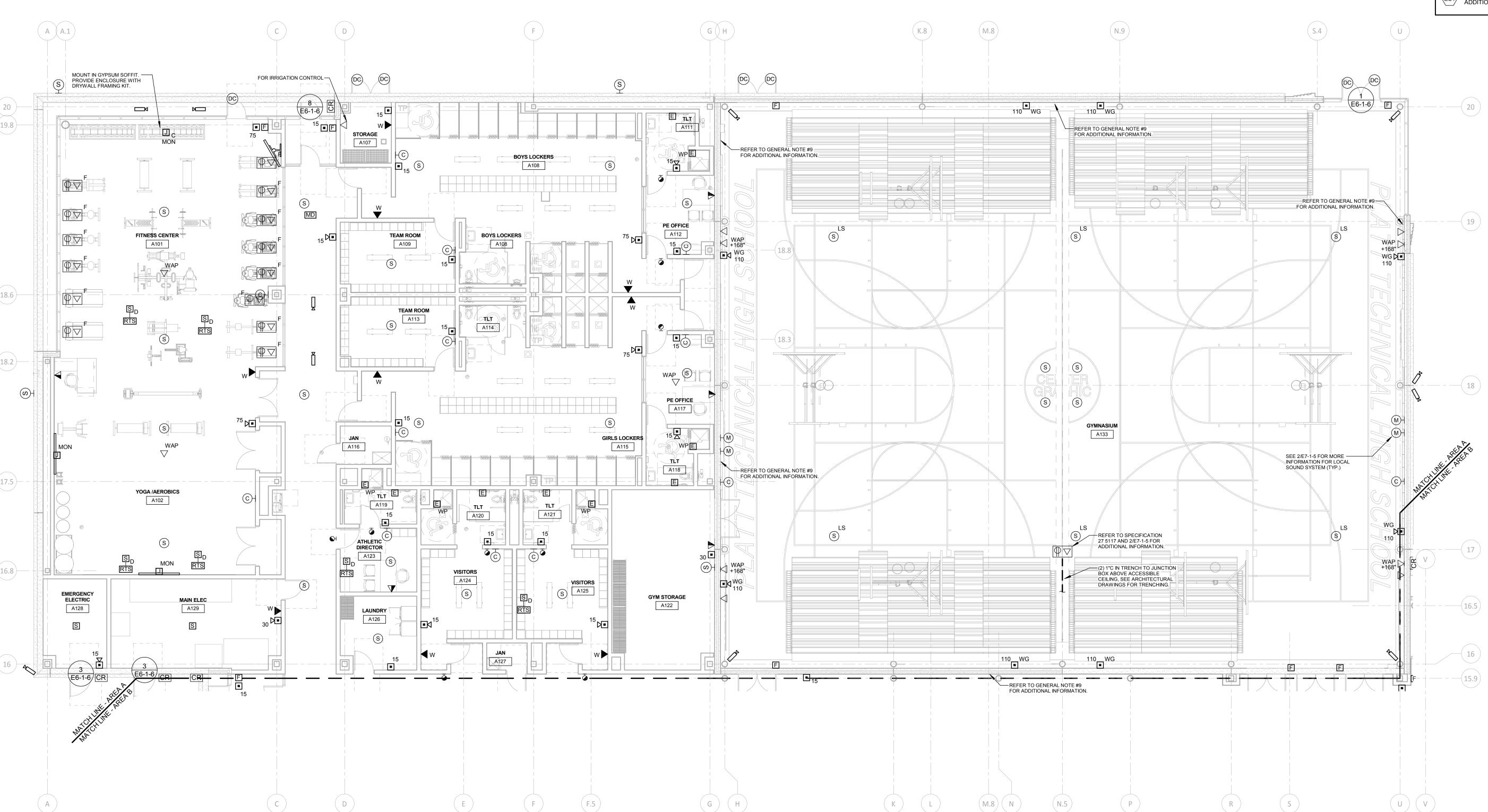
900-0013

DCS project no. BI-RT-878 CM-R

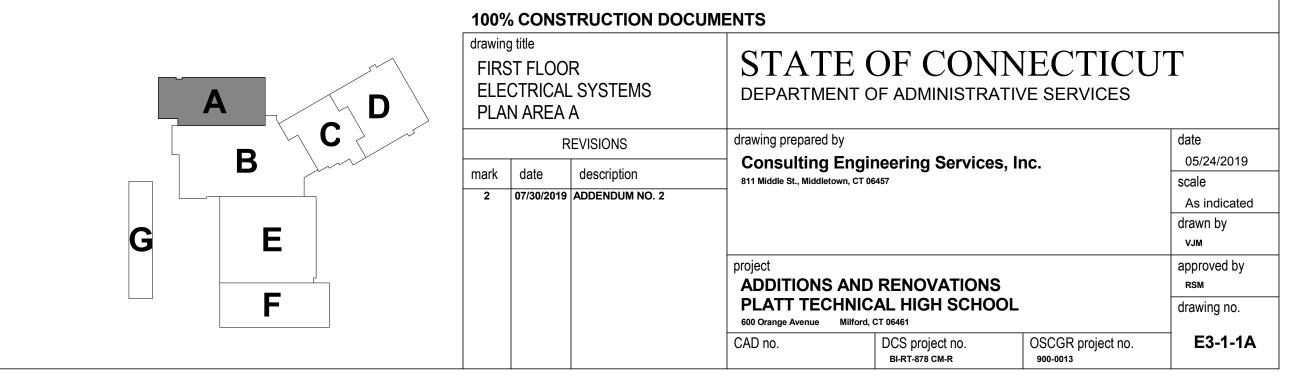


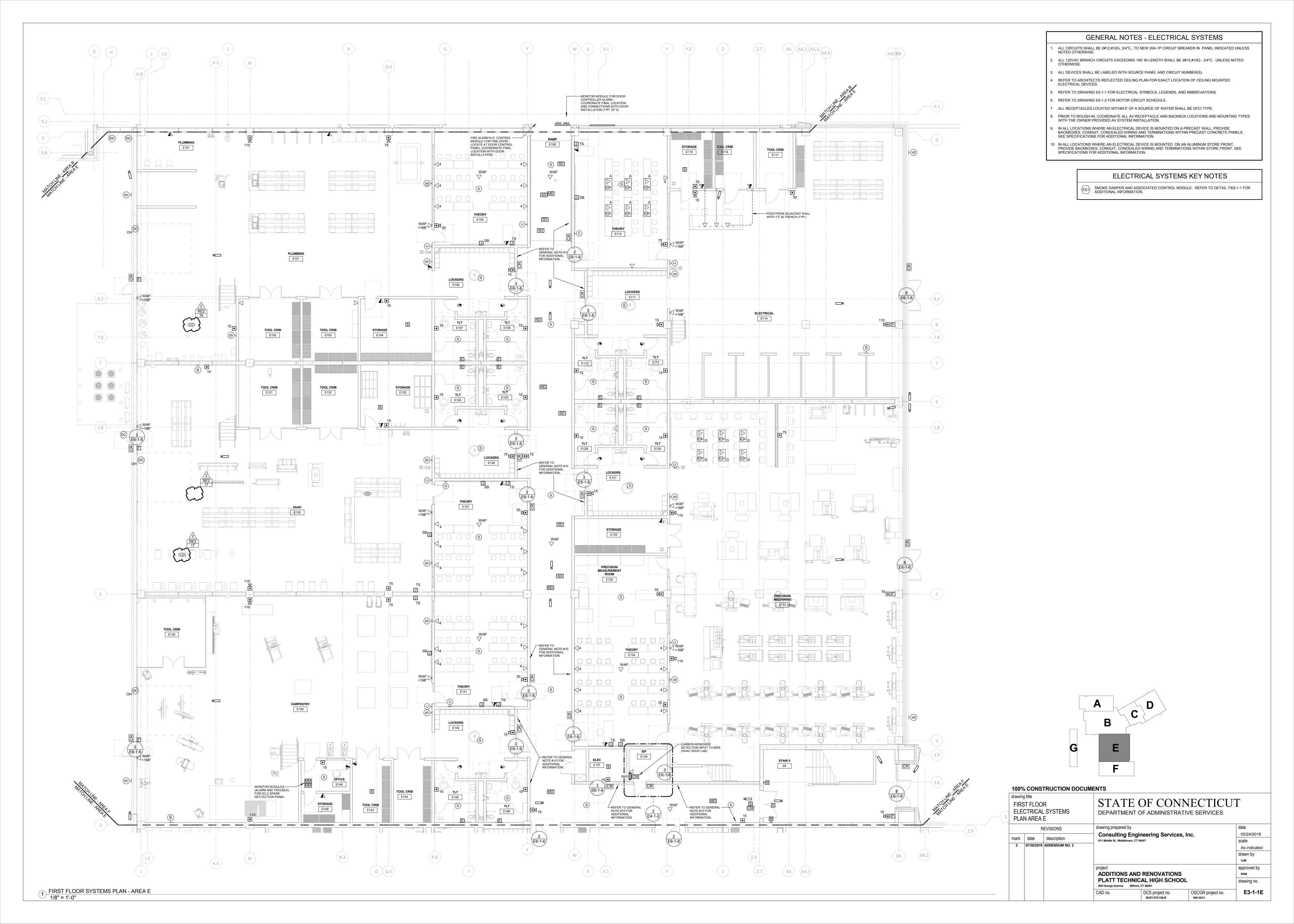


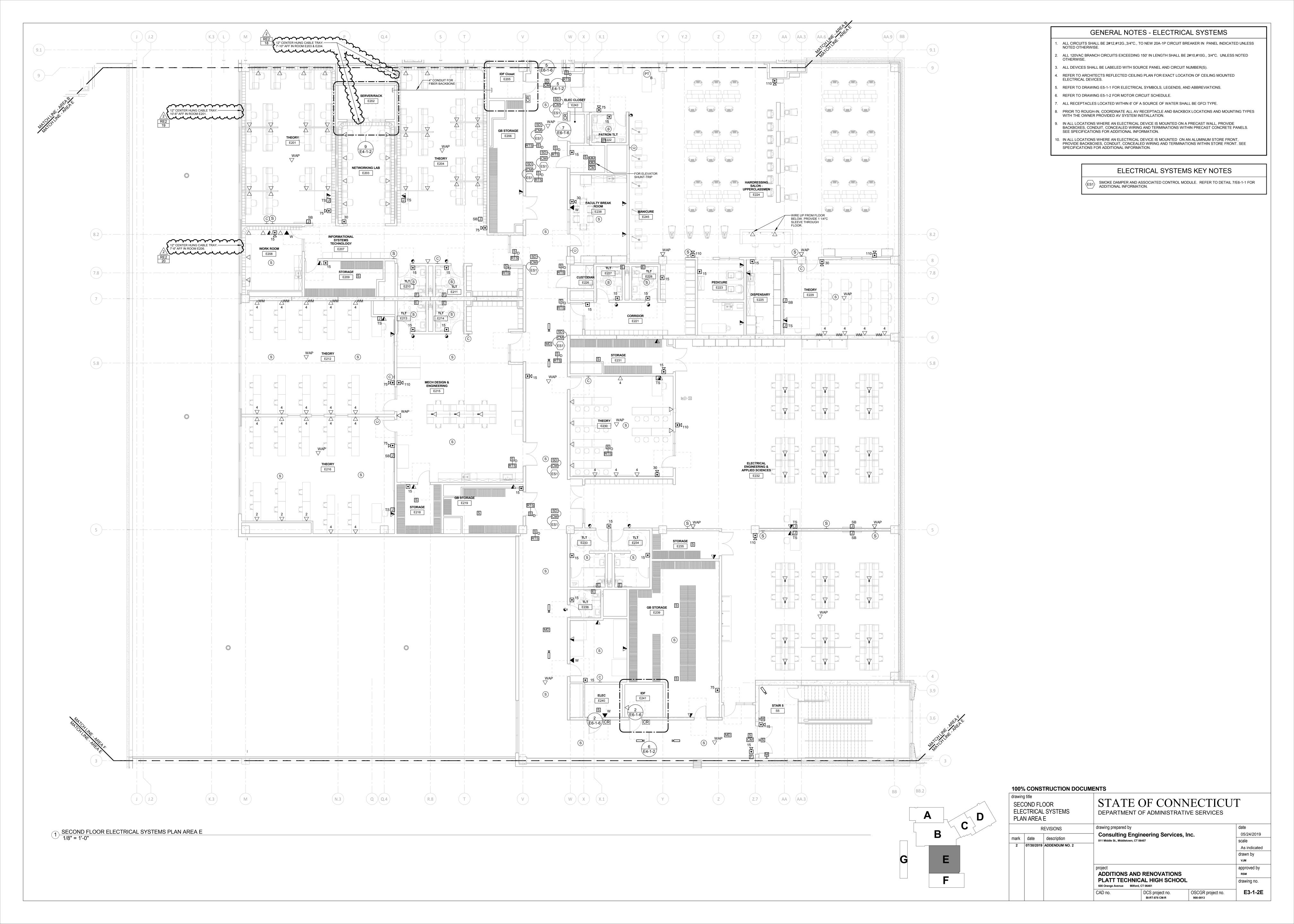




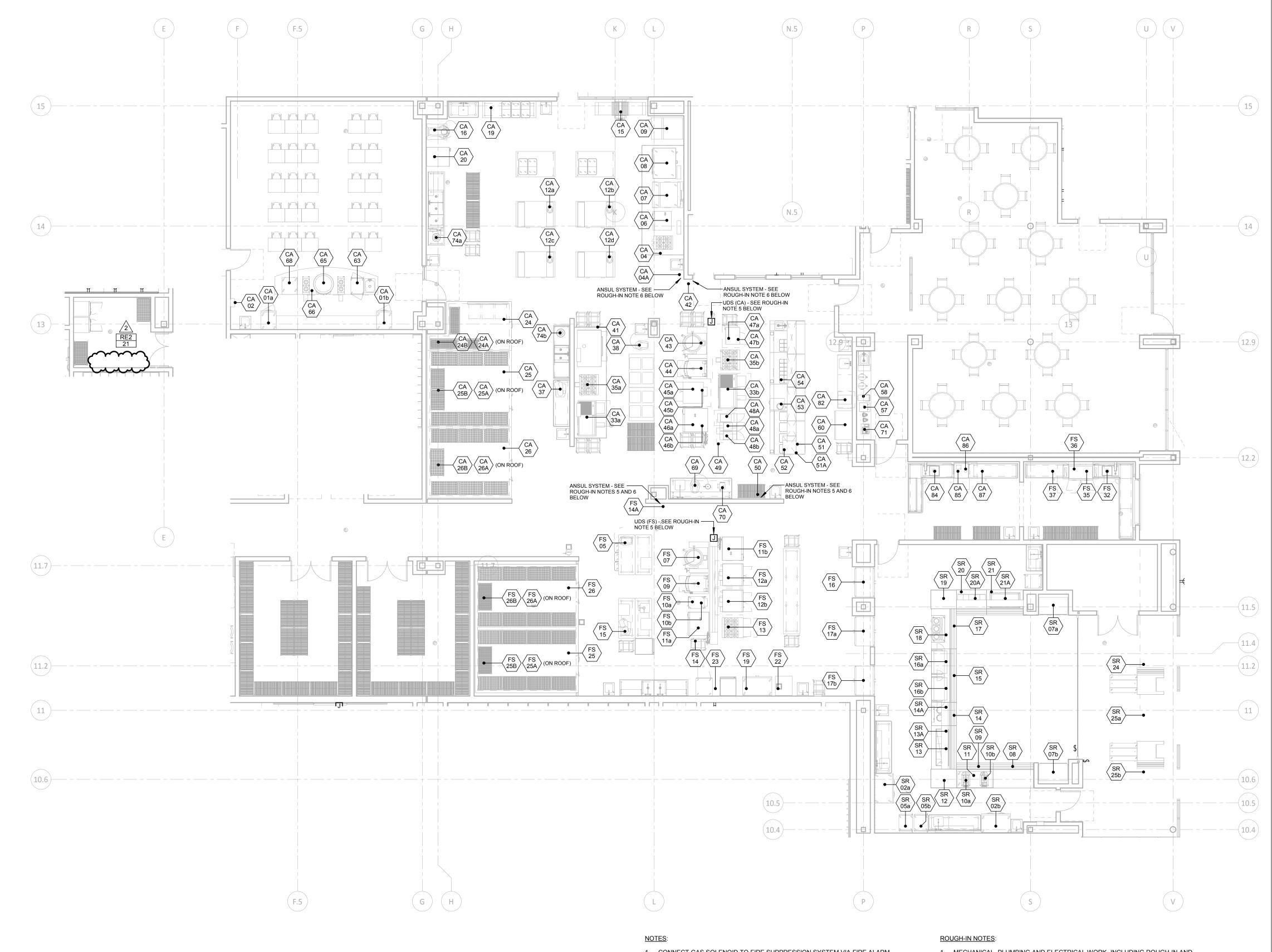
1) FIRST FLOOR ELECTRICAL SYSTEMS PLAN AREA A
1/8" = 1'-0"







ITEM NO.	DESCRIPTION	V	PH	TRICAL DA	KW	AMP	BRANCH PANEL	CIRCUIT BREAKER	DISC. SWITCH	WIRE AND CONDUIT	CONNECTION	REMARKS
CA-01a CA-01b	REFRIGERATOR/FREEZER, DUAL-TEMP REFRIGERATOR/FREEZER, DUAL-TEMP	120 120	1			12.0 12.0	EKP EKP	15A-1P 15A-1P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 2, 5 NOTES 2, 5	NOTE 4, NEMA 5-1
CA-02 CA-04	FIRE SUPPRESSION SYSTEM EXHAUST HOOD	120 208	1 3			4.0 15.0	KP KP	15A-1P 20A-3P		2#12, #12G., 3/4"C 3#12, #12G., 3/4"C	NOTES 1, 4, 5 NOTE 5	NOTES 5, 6 NOTES 7, 8
CA-04A CA-06	FIRE SUPPRESSION SYSTEM COMBI-OVEN	120 208	1		1.6	4.0 7.7	KP KP	15A-1P 15A-2P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 1, 4, 5 NOTES 1, 4, 5, 6	NOTES 5, 6 NOTE 6, NEMA 6-1
CA-07 CA-08	DECK OVEN	208	3		26.5 15.0 5.7	76.0 54.0	KP KP KP	100A-3P 70A-3P		3#1, #8G., 1 1/2"C 3#10, #10G., 3/4"C	NOTES 1, 5 NOTES 1, 5	
CA-09 CA-12a CA-12b	ROLL-IN PROOFER/RETARDER PLANETARY MIXER PLANETARY MIXER	208 120 120	1 1	1/6 1/6		27.0 2.9 2.9	KP KP	35A-2P 15A-1P 15A-1P		2#10, #10G., 3/4"C 2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 1, 5 NOTES 2, 5 NOTES 2, 5	NEMA 5-15R NEMA 5-15R
CA-12c	PLANETARY MIXER PLANETARY MIXER	120	1 1	1/6		2.9	KP KP	15A-1P 15A-1P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 2, 5 NOTES 2, 5	NEMA 5-15R NEMA 5-15R
CA-15 CA-16	DOUGH SHEETER W/ STAND PLANETARY MIXER 30QT	120 208	1	3/4 3/4		8.3 2.8	KP KP	15A-1P 15A-2P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 2, 5 NOTES 1, 5	NEMA 5-15R
CA-19 CA-20	DOUGH ROLLER BLAST CHILLER/SHOCK FREEZER, REACH-IN	120 208	3	3/4	6.6	8.8 26.5	KP KP	15A-1P 30A-3P		2#12, #12G., 3/4"C 3#10, #10G., 3/4"C	NOTES 2, 5 NOTES 2, 5, 7	 NEMA L15-30R
CA-24A CA-24B	WALK-IN COOLER (+35°F) CONDENSING UNIT (FOR CA-24) EVAPORATOR COIL (FOR CA-24)	120 208 120	3	 (2) 1/15	1.0	8.3 2.3	EKP EKP	15A-1P 15A-3P 15A-1P	30A-3P	2#12, #12G., 3/4"C 3#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 1, 5 NOTES 1, 3, 5 NOTES 1, 5	NOTE 9 NOTES 2, 9 NOTE 9
CA-25 CA-25A	WALK-IN COOLER (+35°F) CONDENSING UNIT (FOR CA-25)	120	1 3		1.0	 8.2	EKP EKP	15A-1P 15A-3P	30A-3P	2#12, #12G., 3/4"C 2#12, #12G., 3/4"C 3#12, #12G., 3/4"C	NOTES 1, 5 NOTES 1, 3, 5	NOTE 9 NOTES 2, 9
CA-25B CA-26	EVAPORATOR COIL (FOR CA-25) WALK-IN FREEZER (-10°F)	120 120	1	(2) 1/15	1.2	2.3	EKP EKP	15A-1P 15A-1P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 1, 5 NOTES 1, 5	NOTE 9 NOTE 9
CA-26A CA-26B	CONDENSING UNIT (FOR CA-26) EVAPORATOR COIL (FOR CA-26)	208 120	3	 (2) 1/15		13.7 10.3	EKP EKP	20A-3P 15A-1P	30A-3P	3#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 1, 3, 5 NOTES 1, 5	NOTES 2, 9 NOTE 9
CA-33a	EQUIPMENT STAND, REFRIGERATED BASE EQUIPMENT STAND, REFRIGERATED BASE	120 120	1 1	1/4		8.0	UDS (CA)	15A-1P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 2, 5 NOTES 2, 4, 5	NOTES 10, 11 NEMA 5-15R
CA-35a CA-35b CA-37	RANGE, RESTAURANT, GAS RANGE, RESTAURANT, GAS SLICER, FOOD	120 120 120	1 1	 1/2		5.9 5.9 5.6	UDS (CA) KP KP	15A-1P 15A-1P 15A-1P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 2, 4, 5 NOTES 2, 4, 5 NOTES 2, 5	NOTES 6, 10, 11 NOTE 6, NEMA 5-15 NEMA 5-15R
CA-38 CA-41	MIXER-20QT W/ STAND EXHAUST HOOD ASSEMBLY	120	1 1	1/2		8.0 4.0	KP KP	15A-1P 15A-1P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 2, 5 NOTE 5	NEMA 5-15R NOTES 7, 8
CA-42 CA-43	FIRE SUPPRESSION SYSTEM KETTLE, STEAM JACKETED	120 120	1			4.0	KP UDS (CA)	15A-1P 15A-1P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 1, 4, 5 NOTES 1, 4, 5	NOTES 5, 6 NOTES 6, 10, 11
CA-44 CA-45a	TILT SKILLET OVEN, CONVECTION, GAS	120 120	1	3/4		3.0 8.0	UDS (CA) UDS (CA)	15A-1P 15A-1P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 1, 4, 5 NOTES 1, 4, 5	NOTES 6, 10, 11 NOTES 6, 10, 11
CA-46b	OVEN, CONVECTION, GAS OVEN STEAMER, COMBINATION GAS OVEN STEAMER, COMBINATION GAS	120 208	1 1	3/4		8.0 3.7	UDS (CA) UDS (CA)	15A-1P 15A-2P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 1, 4, 5 NOTES 1, 4, 5 NOTES 1, 4, 5	NOTES 6, 10, 11 NOTES 6, 10, 11
CA-46b CA-47a CA-47b	OVEN STEAMER, COMBINATION GAS CONVECTION OVEN CONVECTION OVEN	208 120 120	1 1 1			3.7 5.0 5.0	UDS (CA) UDS (CA) UDS (CA)	15A-2P 15A-1P 15A-1P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 1, 4, 5 NOTES 1, 4, 5 NOTES 1, 4, 5	NOTES 6, 10, 11 NOTES 6, 10, 11 NOTES 6, 10, 11
CA-48a CA-48b	FRYER, DEEP FAT, GAS FRYER, DEEP FAT, GAS	120 120 120	1 1			1.0	UDS (CA) UDS (CA)	15A-1P 15A-1P 15A-1P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 1, 4, 5 NOTES 1, 4, 5 NOTES 1, 4, 5	NOTES 6, 10, 11 NOTES 6, 10, 11 NOTES 6, 10, 11
CA-48A CA-49	FRYER, DUMP STATION EXHAUST HOOD ASSEMBLY	120 120	1		0.8	6.3 4.0	UDS (CA)	15A-1P 15A-1P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 1, 5 NOTE 5	NOTES 10, 11 NOTES 10, 11
CA-50 CA-51	FIRE SUPPRESSION SYSTEM CHEF'S COUNTER, REFRIGERATOR, PREP	120 120	1	1/3		4.0 8.6	UDS (CA) KP	15A-1P 15A-1P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 1, 4, 5 NOTES 2, 5	NOTES 5, 6 NEMA 5-15R
CA-51A CA-52	CHEF'S COUNTER, DISPLAY LIGHTS MICROWAVE CONVECTION OVEN	120 208	1 1		8.3	40.0	KP KP KP	15A-1P 50A-2P		2#12, #12G., 3/4"C 2#6, #10G., 1"C	NOTES 1, 5 NOTES 2, 5, 6 NOTES 1, 5	 NEMA 6-50R
CA-53 CA-54 CA-57	WARMER, DRAWER TYPE TOASTER COFFEE BREWER	120 208 208	1 1		0.7 2.8 6.25	3.3 14.0 26.0	KP KP	15A-1P 20A-2P 35A-1P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C 2#10, #10G., 3/4"C	NOTES 1, 5 NOTES 2, 5, 6 NOTES 1, 5	 NEMA 6-20R
CA-58 CA-60	TEA BREWER REACH-IN REFRIGERATOR	120 120	1 1	1/3	1.7	14.0	KP EKP	20A-1P 15A-1P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 2, 5 NOTES 2, 5	NEMA 5-20R NEMA 5-15R
CA-63 CA-65	COOK HOLD OVEN ROUND GRIDDLE/PLANCHA	208 120	1		2.9	14.0 1.5	KP KP	20A-2P 15A-1P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 2, 5, 6 NOTES 2, 4, 5	NEMA 6-20R NOTE 6, NEMA 5-19
CA-66 CA-68	EXHAUST HOOD REACH-IN UNDERCOUNTER REFRIGERATOR	120 120	1	1/6		15.0 2.0	KP EKP	20A-1P 15A-1P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 1, 5 NOTES 2, 5	NOTES 7, 8 NEMA 5-15R
CA-69 CA-70 CA-71	MIXER/PLANETARY FOOD PROCESSOR POS STATION	120 208 120	3	3		8.0 5.0	KP KP KP	15A-1P 20A-3P 15A-1P		2#12, #12G., 3/4"C 3#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 2, 5 NOTES 2, 5, 7 NOTES 2, 5	NEMA 5-15R NEMA L15-20R NEMA 5-15R
CA-74a CA-74b	DISPOSER DISPOSER	208	3	2 2		12.0 12.0	KP KP	20A-3P		3#12, #12G., 3/4"C 3#12, #12G., 3/4"C	NOTES 1, 5 NOTES 1, 5	
CA-82 CA-84	ICE CUBER DISPOSER	120 208	1 3	2	4.9	7.0 12.0	EKP KP	15A-1P 20A-3P		2#12, #12G., 3/4"C 3#12, #12G., 3/4"C	NOTES 2, 5 NOTES 1, 5	NEMA 5-15R
CA-85 CA-86	DISHWASHER EXHAUST HOOD	480 120	3	2		13.4 4.0	MEP5-1 KP	15A-3P 15A-1P	30A-3P	3#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 1, 3, 5 NOTE 5	NOTE 2 NOTES 7, 8
CA-87 FS-05 FS-07	HOT WATER BOOSTER MIXER, COUNTER KETTLE, STEAM JACKETED	480 120 120	1 1	1/2	12.0	14.5 8.0 2.0	MEP5-1 KP UDS (FS)	20A-3P 15A-1P 15A-1P	30A-3P	3#12, #12G., 3/4"C 2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 1, 3, 5 NOTES 2, 5 NOTES 2, 5	NOTE 2 NEMA 5-15R NOTES 10, 11
FS-09 FS-10a	TILTING SKILLET STEAMER, CONVECTION, GAS	120	1 1			4.0	UDS (FS)	15A-1P 15A-1P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 2, 5 NOTES 2, 4, 5	NOTES 10, 11 NOTES 6, 10, 11
FS-10b FS-11a	STEAMER, CONVECTION, GAS OVEN-STEAMER, COMBINATION	120 208	1			3.7	UDS (FS)	15A-1P 20A-2P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 2, 4, 5 NOTES 2, 5	NOTES 6, 10, 11 NOTES 10, 11
FS-11b FS-12a	OVEN-STEAMER, COMBINATION OVEN, CONVECTION, GAS	208 120	1	 1/2		3.7 6.0	UDS (FS) UDS (FS)	20A-2P 15A-1P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 2, 5 NOTES 2, 4, 5	NOTES 10, 11 NOTES 6, 10, 11
FS-12b FS-13	OVEN, CONVECTION, GAS RANGE, HEAVY-DUTY, GAS	120	1 1	1/2		6.0	UDS (FS)	15A-1P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 2, 4, 5 NOTES 2, 4, 5	NOTES 6, 10, 11 NOTES 6, 10, 11
FS-14 FS-14A FS-15	FIRE SUPPRESSION SYSTEM SLICER, FOOD	120 120 120	1 1	 1/2		4.0 4.0 5.6	UDS (FS) UDS (FS) KP	15A-1P 15A-1P 15A-1P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTE 5 NOTES 1, 4, 5 NOTES 2, 5	NOTES 10, 11 NOTES 5, 6 NEMA 5-15R
FS-16 FS-17a	PASS-THRU DUAL TEMP CABINET PASS-THRU HEATED CABINET	120	1 1			15.7 13.0	KP KP	20A-1P 15A-2P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 2, 5 NOTES 2, 5, 6	NEMA 5-20R NEMA 6-15P
FS-17b FS-19	PASS-THRU HEATED CABINET REFRIGERATOR, REACH-IN GLASS DOOR	208 120	1 1			13.0 9.5	KP EKP	15A-2P 15A-1P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 2, 5, 6 NOTES 2, 5	NEMA 6-15P NEMA 5-15R
FS-22 FS-23	ICE MACHINE HEATED HOLDING CABINETS	120 120	1			15.0 7.5	EKP KP	20A-1P 15A-1P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 2, 5 NOTES 2, 5	NEMA 5-15R NEMA 5-15R
FS-25A FS-25B	WALK-IN COOLER (+35°F) CONDENSING UNIT (FOR FS-25) EVAPORATOR COIL (FOR FS-25)	120 208 120	3	 (2) 1/15	1.0	8.2 2.3	EKP EKP	15A-1P 15A-3P 15A-1P	30A-3P	2#12, #12G., 3/4"C 2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 1, 5 NOTES 1, 3, 5 NOTES 1, 5	NOTE 9 NOTES 2, 9 NOTE 9
FS-25B FS-26 FS-26A	WALK-IN FREEZER (-10°F) CONDENSING UNIT (FOR FS-26)	120 120 208	1 1 3		1.0	2.3 13.7	EKP EKP	15A-1P 15A-1P 20A-3P	30A-3P	2#12, #12G., 3/4 °C 2#12, #12G., 3/4 °C 2#12, #12G., 3/4 °C	NOTES 1, 5 NOTES 1, 5 NOTES 1, 3, 5	NOTE 9 NOTE 9 NOTES 2, 9
FS-26B FS-32	EVAPORATOR COIL (FOR FS-26) DISPOSER	120 208	1 3	(2) 1/15		10.3	EKP KP	15A-1P 20A-3P	30A-3P	2#12, #12G., 3/4"C 3#12, #12G., 3/4"C	NOTES 1, 5 NOTES 1, 3, 5	NOTE 9 NOTE 2
FS-35 FS-36	DISHWASHER EXHAUST HOOD	480 120	3	2		13.4 4.0	MEP5-1 KP	20A-3P	30A-3P	3#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 1, 3, 5 NOTE 5	NOTE 2 NOTES 7, 8
FS-37 SR-02a	HOT WATER BOOSTER REFRIGERATOR, REACH-IN	480 120	1 1	1/2	39.0	47.0 9.1	MEP5-1 EKP	60A-3P 15A-1P	60A-3P	3#4, #10G., 1"C 2#12, #12G., 3/4"C	NOTES 1, 3, 5 NOTES 2, 5	NOTE 2 NOTE 3, NEMA 5-1
SR-02b SR-05a SR-05b	REFRIGERATOR, REACH-IN HEATED HOLDING CABINETS HEATED HOLDING CABINETS	120 120 120	1 1	1/2 	1.9 1.9	9.1 16.0 16.0	EKP KP KP	15A-1P 20A-1P 20A-1P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 2, 5 NOTES 2, 5 NOTES 2, 5	NOTE 3, NEMA 5-1 NEMA 5-20R NEMA 5-20R
SR-07b SR-07b	COMMERCIAL REFRIGERATOR COMMERCIAL REFRIGERATOR	120 120 120	1 1	(2) 1/3 (2) 1/3		16.0 16.0	EKP EKP	20A-1P 20A-1P		2#10, #12G., 3/4"C 2#10, #12G., 3/4"C 2#10, #12G., 3/4"C	NOTES 2, 5 NOTES 2, 5 NOTES 2, 5	NOTE 3, NEMA 5-2 NOTE 3, NEMA 5-2
SR-08 SR-09	UTILITY SERVING COUNTER UTILITY SERVING COUNTER	120 120	1				KP KP	20A-1P 20A-1P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTE 6	
SR-10a SR-10b	PANINI GRILLE PANINI GRILLE	208	1		5.0 5.0	26.0 26.0	KP KP	30A-2P 30A-2P		2#10, #10G., 3/4"C 2#10, #10G., 3/4"C	NOTES 2, 5, 6 NOTES 2, 5, 6	NEMA 6-30R NEMA 6-30R
SR-11 SR-12 SR-13	UNDERCOUNTER REFRIGERATOR CORNER SERVING COUNTER COLD FOOD SERVING COUNTER	120 120 120	1 1	 1/4		3.0 7.0	EKP KP KP	15A-1P 20A-1P 15A-1P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 2, 5 NOTE 6 NOTES 2, 5	NEMA 5-15R NEMA 5-15R
SR-13 SR-13A SR-14	DROP-IN COLD PAN HOT FOOD SERVING COUNTER	120 120 120	1 1	1/4	 2.48	7.0 12.0 11.9	KP KP	15A-1P 15A-1P 15A-1P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 2, 5 NOTES 2, 5 NOTES 2, 5	NEMA 5-15R NEMA 5-15R NEMA 5-15R
SR-14 SR-14A SR-15	DROP-IN HOT WELLS UTILITY SERVING COUNTER	120 120 120	1 1		0.8	6.9	KP KP	15A-1P 20A-1P		2#12, #12G., 3/4"C 2#12, #12G., 3/4"C 2#12, #12G., 3/4"C	NOTES 2, 5 NOTE 6	NEMA 5-15R NEMA 5-15R
SR-16a SR-16b	HEATED ZONE MERCHANDISER HEATED ZONE MERCHANDISER	208	3		2.9	12.1 12.1	KP KP	20A-3P 20A-3P		3#12, #12G., 3/4"C 3#12, #12G., 3/4"C	NOTES 2, 5, 7 NOTES 2, 5, 7	NEMA L14-20R NEMA L14-20R
SR-17 SR-18	OPEN TOP SERVING COUNTER INDUCTION COOKING STATION	120 208	3		 8.5	 42.0	KP KP	20A-1P 50A-3P		2#12, #12G., 3/4"C 3#4, #10G., 1"C	NOTE 6 NOTES 2, 5, 7	 NEMA 14-50R
SR-19 SR-20	CORNER SERVING COUNTER HOT/COLD SERVING COUNTER DROP IN HOT/COLD PAN	120					 KB	20A-1P 		2#12, #12G., 3/4"C 	NOTE 6	SEE SR20A
SR-20A	DROP-IN HOT/COLD PAN HOT FOOD SERVING COUNTER	208	1			28.9	KP 	35A-2P 		2#8, #10G., 3/4"C 	NOTES 1, 5	SEE SR21A
SR-21 SR-21A	DOP-IN HEATED SHELF	120	1		0.7	5.8	KP	15A-1P	'	2#12, #12G., 3/4"C	NOTES 2, 5	NEMA 5-15R



- 1. CONNECT GAS SOLENOID TO FIRE SUPPRESSION SYSTEM VIA FIRE ALARM CONTROL MODULE. GAS VALVE SHALL SHUT DOWN UPON ACTIVATION OF FIRE
- 2. THE FIRE ALR\ARM MONITORING MODULE AND ASSOCIATED RELAY SHALL REPORT TO THE FIRE ALARM SYSTEM WHEN FIRE SUPPRESSION SYSTEM IS ACTIVATED AND WILL SHUT DOWN ASSOCIATED EXHAUST FAN AND MAK-UP AIR
- UNITS. REFER TO FOOD SERVICE DRAWINGS FOR ADDITIONAL INFORMATION.
- 3. REFER TO DRAWING E5-1-1 FOR ELECTRICAL SYMBOLS.4. ALL RECEPTACLES SHALL BE GFCI.

SUPPRESSION SYSTEM.

- 5. COORDINATE ALL MOUNTING HEIGHTS WITH KITCHEN EQUIPMENT CONTRACTOR.
- 6. REFER TO DRAWING E2-1-1B FOR ADDITIONAL POWER DEVICES.

8. REFER TO FOOD SERVICE DRAWINGS FOR ADDITIONAL INFORMATION.

- 7. REFER TO DRAWING E3-1-1B FOR ADDITIONAL FIRE ALARM DEVICES.
- MECHANICAL, PLUMBING AND ELECTRICAL WORK, INCLUDING ROUGH-IN AND FINAL CONNECTIONS TO FOOD SERVICE EQUIUPMENT SHALL BE PERFORMED BY
- THE RESPECTIVE CONTRACTOR.

 2. OPENINGS REQUIRED IN FOOD SERVICE EQUIPMENT FOR THE RUNNING OF
- SERVICES SHALL BE BY THE KITCHEN EQUIPMENT CONTRACTOR.
- THE ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL DISCONNECTS AND OTHER ELECTRICAL APPURTENANCES AS REQUIRED BY CURRENT CODES.
 ROUTE ELECTRICAL CONDUITS TO ALL EQUIPMENT IN SERVERY BELOW SLAB AS REQUIRED. ROUTE ELECTRICAL CONDUITS TO ALL OTHER EQUIPMENT BELOW

SLAB WHERE EQUIPMENT WIRING CONNECTIONS ARE NOT ADJACENT TO A FULL

HEIGHT PARTITION, OR ARE NOT DESIGNED TO BE TOP FED FROM CEILING.

- 5. CONNECTION FOR HOOD LIGHTS, ANSUL SYSTEM CONNECTIONS AND EQUIPMENT INTERLOCK WIRING. POWER FOR ANSUL SYSTEM SHUNT-TRIP AND POWER FOR ALL EQUIPMENT AT HOOD VIA UDS SYSTEM. REFER TO FOOD SERVICE DRAWINGS FOR ADDITIONAL INFORMATION.
- ANSUL SYSTEM LOCATION PROVIDE POWER, SHUNT-TRIP INTERLOCK WIRING AND FIRE ALARM SYSTEM CONNECTIONS. REFER TO FOOD SERVICE DRAWINGS AND ELECTRICAL DETAILS FOR ADDITIONAL INFORMATION.

1 KITCHEN FOOD SERVICE EQUIPMENT ELECTRICAL POWER PART PLAN 1/8" = 1'-0"

ELECTRICAL KITCHEN EQUIPMENT SCHEDULE NOTES: GENERAL NOTES:

- 1. ALL 15A & 20A RECEPTACLES SHALL BE GFCI TYPE.
- 2. ALL WIRING SHALL BE IN CONDUIT, MINIMUM SIZE= 3/4".
- PROVIDE NYLON PULL, STRINGS IN ALL EMPTY CONDUITS.
 COORDINATE FINAL LOCATIONS OF ALL EQUIPMENT IN THE FIELD.

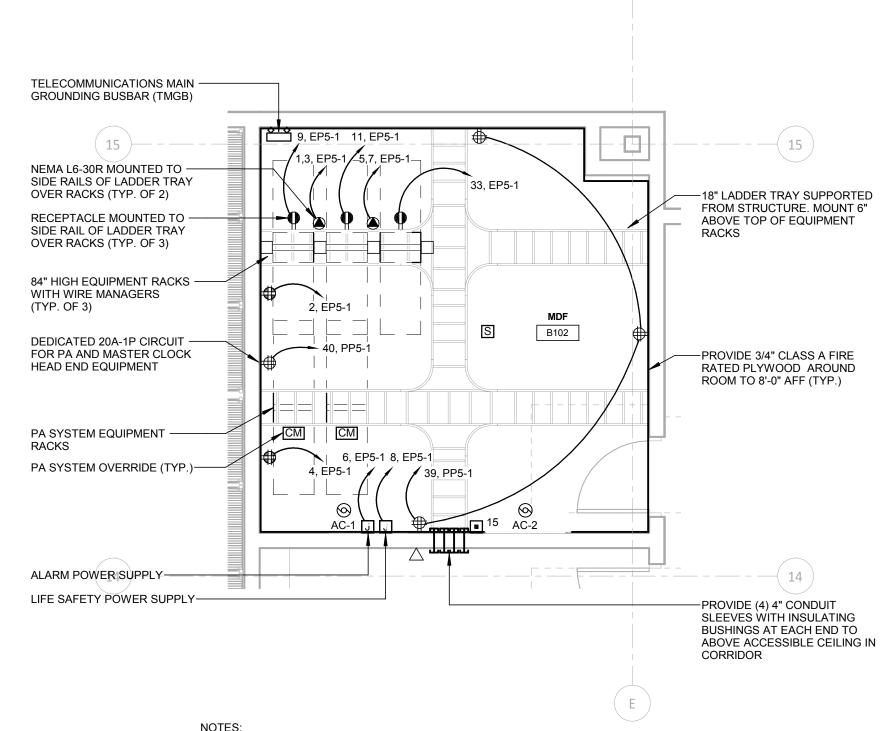
CONNECTION NOTES:

- JUNCTION BOX AND WIRING TO EQUIPMENT'S JUNCTION BOX BY DIV. 26, CIRCUIT AS SHOWN.
- 2. RECEPTACLE AND WIRING BY DIV. 26, CIRCUIT AS LISTED.
- 3. DISCONNECT SWITCH BY DIV. 26.
- ST CONNECT TO SHUNT TRIP CIRCUIT BREAKER IN PANEL INDICATED.
 COORDINATE ALL CONNECTIONS AND MOUNTING HEIGHTS WITH KITCHEN EQUIPMENT CONTRACTOR.
- 6. GFI COUNTER RECEPTACLE PROVIDED BY DIV. 26, MOUNTED BY KITCHEN EQUIPMENT CONTRACTOR.
- PROVIDE 2-POLE CIRCUIT BREAKER WITH GROUND FAULT CIRCUIT INTERRUPTER IN PANEL INDICATED.
 PROVIDE 3-POLE CIRCUIT BREAKER WITH GROUND FAULT CIRCUIT INTERRUPTER IN PANEL INDICATED.

- 1. DIV. 26 TO WIRE REMOTE ON/OFF SWITCH IN COUNTER. COORDINATE WIRING WITH EQUIPMENT INSTALLATION.
- 2. COORDINATE MOUNTING OF DISCONNECT WITH EQUIPMENT IN FIELD.
- 3. MOUNT RECEPTACLE @ 54" AFF.
- 4. MOUNT RECEPTACLE @ 90" AFF.
- 5. WIRE OUTPUTS FOR "ALARM AND TROUBLE" OF FIRE SUPPRESSION SYSTEM TO FIRE ALARM MONITOR MODULES.
- 6. WIRE SHUNT TRIP CIRCUIT BREAKERS VIA FIRE ALARM CONTROL MODULE AND EPO SWITCHES TO SHUT DOWN EQUIPMENT UPON ACTIVATION OF EPO SWITCH AND FIRE SUPPRESSION SYSTEM.
- 7. PROVIDE FIELD WIRING CONNECTIONS FOR HOOD LIGHTS AND TEMPERATURE SENSORS.
- 8. LIGHTING INTEGRAL TO EXHAUST VENTILATOR HOOD.
- EIGHTING INTEGRAL TO EXHAUST VENTILATOR HOOD.
 COORDINATE ALL CONNECTIONS FOR COOLER/FREEZER POWER WITH EQUIPMENT INSTALLATION. PROVIDE WIRING IN CONDUIT PER MANUFACTURERS INSTRUCTIONS. COORDINATE LOCATIONS AND PROVIDE POWER IN CONDUIT FOR COOLER/FREEZER LIGHTS, ALARM CONTROLS AND ANNUNCIATORS.
- 10. UDS PROVIDED BY FOOD SERVICE CONTRACTOR CONTAINS CIRCUIT BREAKERS FOR ALL EQUIPMENT PROTECTED BY KITCHEN HOODS AND INCLUDES HOOD LIGHTING AND CONTROL CIRCUITS TO BE WIRED BY DIV. 26. COORDINATE ALL WIRING AND CONNECTIONS WITH UDS SUPPLIER.
- 11. OVERCURRENT PROTECTION AND DISCONNECTING MEANS PROVIDED WITH UDS, WIRED BY DIV. 26.

4000/ CONCEDUCTION DOCUMENTS

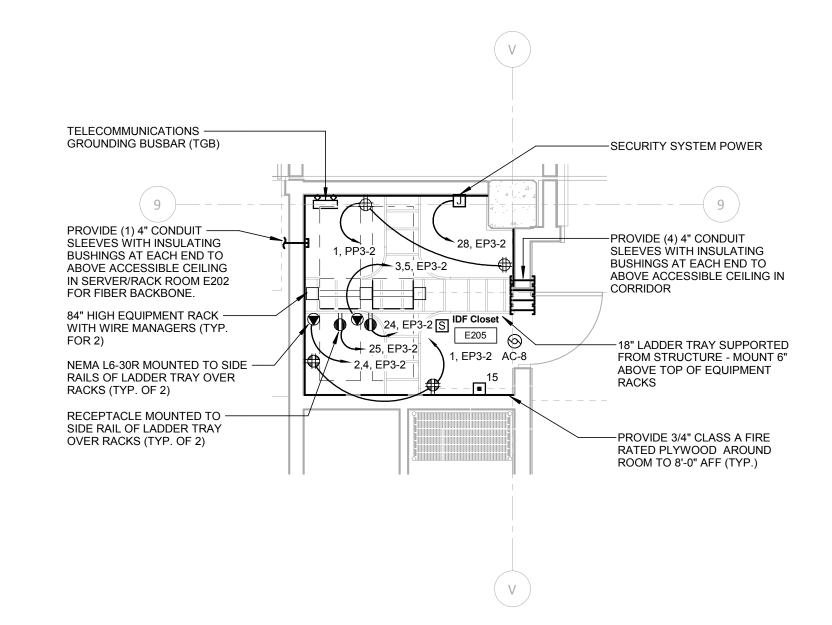
	CHEN CTRICAL	. PARTIAL		E OF CON ENT OF ADMINISTRA		JT
	R	EVISIONS	drawing prepared b	ру		date
	4-4-	de e estado e	Consulting	Engineering Services	s, Inc.	05/24/20
mark	date	description	811 Middle St., Middleto	own, CT 06457		scale
2	07/30/2019	ADDENDUM NO. 2				1/8" = 1
						drawn by
						VJM
			project			approved
			ADDITIONS	AND RENOVATIONS	}	RSM
			PLATT TEC 600 Orange Avenue	HNICAL HIGH SCHO Milford, CT 06461	OL	drawing no
			CAD no.	DCS project no.	OSCGR project no.	E4-1



NOTES:

- BOND ALL RACKS AND CABLE TRAYS TO GROUND BAR. PROVIDE BONDING AND GROUNDING IN ACCORDANCE TIA/EIA STANDARD J-STD-607 AND THE CONTRACT DOCUMENTS. SEE DETAILS THIS SHEET FOR REQUIREMENTS.
- 2. REFER TO TECHNOLOGY CONSULTANT'S DETAILED DRAWINGS FOR ADDITIONAL RACK REQUIREMENTS.
- 3. COORDINATE RACK AND EQUIPMENT LAYOUT WITH OWNER'S TELECOMMUNICATIONS PROJECT MANAGER PRIOR TO ROUGH-IN OF ANY DEVICES OR WIRING.

1 ENLARGED ELECTRICAL POWER AND SYSTEMS PLAN MDF ROOM B102 1/4" = 1'-0"



BOND ALL RACKS AND CABLE TRAYS TO GROUND BAR. PROVIDE BONDING AND GROUNDING IN ACCORDANCE TIA/EIA STANDARD J-STD-607 AND THE CONTRACT

DOCUMENTS. SEE DETAILS THIS SHEET FOR REQUIREMENTS.

- 2. REFER TO TECHNOLOGY CONSULTANT'S DETAILED DRAWINGS FOR ADDITIONAL RACK
- 3. COORDINATE RACK AND EQUIPMENT LAYOUT WITH OWNER'S TELECOMMUNICATIONS
- PROJECT MANAGER PRIOR TO ROUGH-IN OF ANY DEVICES OR WIRING.

- 5 ENLARGED ELECTRICAL POWER AND SYSTEMS PLAN IDF CLOSET E205

TO WATER PIPE.

PROVIDE (4) 4" CONDUIT —— SLEEVES WITH INSULATING

BUSHINGS AT EACH END TO

RECEPTACLE MOUNTED TO

SIDE RAIL OF LADDER TRAY

NEMA L6-30R MOUNTED TO -

OVER RACKS (TYP. OF 2)

84" HIGH EQUIPMENT RACK -

NOTES:

REQUIREMENTS.

1, EP2-2

BMS (IP)

1. BOND ALL RACKS AND CABLE TRAYS TO GROUND BAR. PROVIDE BONDING AND

PROJECT MANAGER PRIOR TO ROUGH-IN OF ANY DEVICES OR WIRING.

DOCUMENTS. SEE DETAILS THIS SHEET FOR REQUIREMENTS.

GROUNDING IN ACCORDANCE TIA/EIA STANDARD J-STD-607 AND THE CONTRACT

2. REFER TO TECHNOLOGY CONSULTANT'S DETAILED DRAWINGS FOR ADDITIONAL RACK

3. COORDINATE RACK AND EQUIPMENT LAYOUT WITH OWNER'S TELECOMMUNICATIONS

ENLARGED ELECTRICAL POWER AND SYSTEMS PLAN IDF CLOSET B128

WITH WIRE MANAGERS

(TYP. FOR 2)

84" HIGH EQUIPMENT RACK —

WITH WIRE MANAGERS

TELECOMMUNICATIONS -

GROUNDING BUSBAR (TGB)

PROVIDE 3/4" CLASS A FIRE -

RATED PLYWOOD AROUND

ROOM TO 8'-0" AFF (TYP.)

(TYP. FOR 2)

SIDE RAILS OF LADDER TRAY

OVER RACKS (TYP. OF 2)

CORRIDOR

ABOVE ACCESSIBLE CEILING IN

REFER TO TECHNOLOGY CONSULTANT'S DETAILED DRAWINGS FOR ADDITIONAL RACK

COORDINATE RACK AND EQUIPMENT LAYOUT WITH OWNER'S TELECOMMUNICATIONS

1. BOND ALL RACKS AND CABLE TRAYS TO GROUND BAR. PROVIDE BONDING AND GROUNDING IN ACCORDANCE TIA/EIA STANDARD J-STD-607 AND THE CONTRACT

PROJECT MANAGER PRIOR TO ROUGH-IN OF ANY DEVICES OR WIRING.

DOCUMENTS. SEE DETAILS THIS SHEET FOR REQUIREMENTS.

6 ENLARGED ELECTRICAL POWER AND SYSTEMS PLAN IDF CLOSET E241

TYPICAL BONDING CONDUCTOR -

COMPRESSION TWO-HOLE LUGS -

A MINIMUM OF TWO CRIMPS ON A LONG BARREL COMPRESSION LUG.

CONNECTORS SHALL BE UL LISTED

- TYPICAL MOUNTING BRACKET SECURED TO PLYWOOD ON WALL

PER DIVISION 16 SPECIFICATIONS

2. REFER TO TECHNOLOGY CONSULTANT'S DETAILED DRAWINGS FOR ADDITIONAL RACK

3. COORDINATE RACK AND EQUIPMENT LAYOUT WITH OWNER'S TELECOMMUNICATIONS

PROJECT MANAGER PRIOR TO ROUGH-IN OF ANY DEVICES OR WIRING.

BOND ALL RACKS AND CABLE TRAYS TO GROUND BAR. PROVIDE BONDING AND GROUNDING IN ACCORDANCE TIA/EIA STANDARD J-STD-607 AND THE CONTRACT

DOCUMENTS. SEE DETAILS THIS SHEET FOR REQUIREMENTS.

TELECOMMUNICATIONS -

GROUNDING BUSBAR (TGB)

SECURITY SYSTEM POWER—

PROVIDE 3/4" CLASS A FIRE —

NOTES:

RECEPTACLE MOUNTED TO -

SIDE RAIL OF LADDER TRAY

OVER RACKS (TYP. OF 3)

TELECOMMUNICATIONS —

GROUNDING BUSBAR (TGB)

84" HIGH EQUIPMENT RACK —

PROVIDE 3/4" CLASS A FIRE 5

RATED PLYWOOD AROUND

ROOM TO 8'-0" AFF (TYP.)

PROVIDE (4) 4" CONDUIT -

SLEEVES WITH INSULATING

BUSHINGS AT EACH END TO

ABOVE ACCESSIBLE CEILING IN

18" LADDER TRAY SUPPORTED FROM STRUCTURE - MOUNT 6"

ABOVE TOP OF EQUIPMENT

SECURITY SYSTEM POWER-

NOTES:

WITH WIRE MANAGERS

(TYP. FOR 3)

CORRIDOR

REQUIREMENTS.

RATED PLYWOOD AROUND ROOM TO 8'-0" AFF (TYP.)

-SECURITY SYSTEM POWER

-18" LADDER TRAY SUPPORTED

FROM STRUCTURE - MOUNT 6"

ABOVE TOP OF EQUIPMENT

-PROVIDE 3/4" CLASS A FIRE

RATED PLYWOOD AROUND

ROOM TO 8'-0" AFF (TYP.)

TELECOMMUNICATIONS

-NEMA L6-30R MOUNTED TO

OVER RACKS (TYP. OF 2)

SIDE RAILS OF LADDER TRAY

-RECEPTACLE MOUNTED TO

18" LADDER TRAY SUPPORTED

FROM STRUCTURE - MOUNT 6"

ABOVE TOP OF EQUIPMENT

-SECURITY SYSTEM POWER

PROVIDE (4) 4" CONDUIT

CORRIDOR

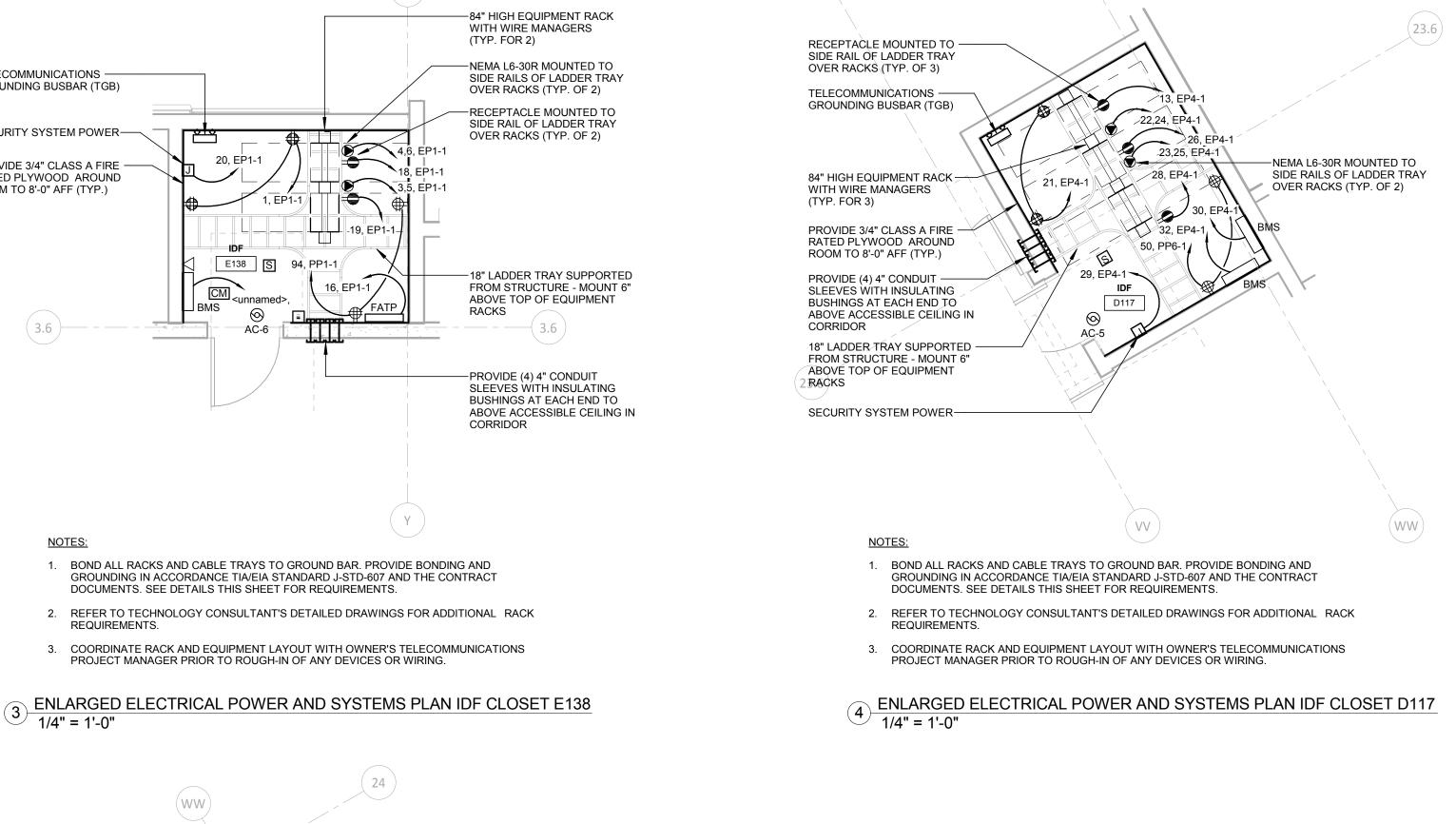
SLEEVES WITH INSULATING **BUSHINGS AT EACH END TO** ABOVE ACCESSIBLE CEILING IN

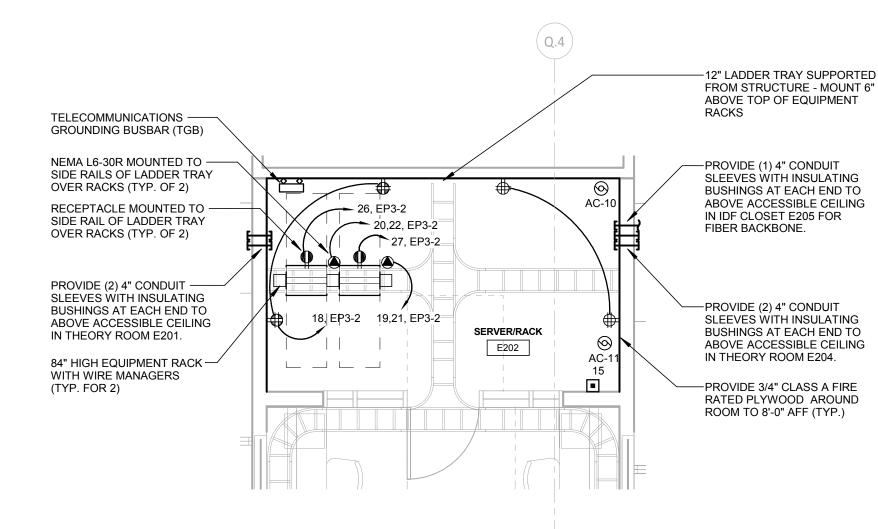
SIDE RAIL OF LADDER TRAY

OVER RACKS (TYP. OF 2)

GROUNDING BUSBAR (TGB)

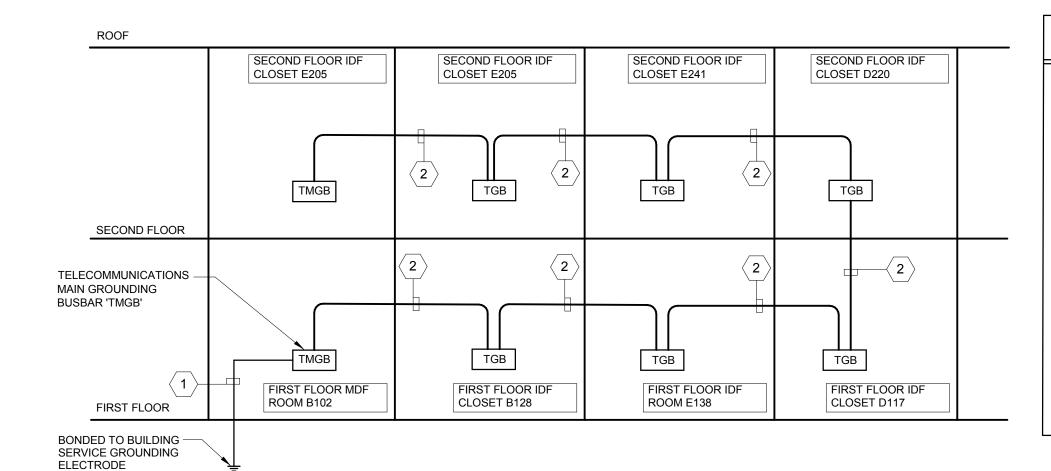
7 ENLARGED ELECTRICAL POWER AND SYSTEMS PLAN IDF CLOSET D220





- 1. BOND ALL RACKS AND CABLE TRAYS TO GROUND BAR. PROVIDE BONDING AND GROUNDING IN ACCORDANCE TIA/EIA STANDARD J-STD-607 AND THE CONTRACT
- DOCUMENTS. SEE DETAILS THIS SHEET FOR REQUIREMENTS. 2. REFER TO TECHNOLOGY CONSULTANT'S DETAILED DRAWINGS FOR ADDITIONAL RACK
- 3. COORDINATE RACK AND EQUIPMENT LAYOUT WITH OWNER'S TELECOMMUNICATIONS
- PROJECT MANAGER PRIOR TO ROUGH-IN OF ANY DEVICES OR WIRING.

ENLARGED ELECTRICAL POWER AND SYSTEMS PLAN SERVER/RACK ROOM E202 9 1/4" = 1'-0"



KEYED GROUNDING AND BONDING NOTES

- BONDING CONDUCTOR FOR TELECOMMUNICATIONS (BCT) TO BUILDING GROUNDING ELECTRODE. REFER TO CONDUCTOR SIZING CHART ON THIS DRAWING. TELECOMMUNICATIONS BONDING BACKBONE CONDUCTOR (TBB). REFER TO
- CONDUCTOR SIZING CHART ON THIS DRAWING. BCT TO NEAREST BUILDING METALLIC DOMESTIC COLD WATER PIPE. UTILIZE BRONZE WATER PIPE GROUNDING CLAMP CONNECTION
- BCT TO BUILDING STEEL. UTILIZE EXOTHERMIC WELDING CONNECTION TO BUILDING
- \langle 5 \rangle BCT TO NEAREST BUILDING ELECTRICAL PANELBOARD GROUND BAR. UTILIZE
- INSULATORS. ACCEPTABLE MANUFACTURERS ARE: PANDUIT, CHATSWORTH, ERITECH, HARGER AND HOMACO. UTILIZE BUSBAR MANUFACTURER FOR COMPRESSION TWO-HOLE LUGS.
- 0 0 0 0

GROUNDING & BONDING DETAIL NOTES PROVIDE 2"C SLEEVE PATHWAY AT EACH FLOOR AND WALL PENETRATIONS FOR THE TELECOMMUNICATION BONDING BACKBONE(TBB). COORDINATE PROPER PENETRATIONS WITH FIRESTOPPING IN FIELD. CONTINUITY TESTING MEASUREMENTS OF THE GROUNDING RESISTANCE TO NOT EXCEED 0.1 OHM BETWEEN A.THE TMGB AND THE NEAREST GROUNDING ELECTRODE. B.EACH TGB AND THE NEAREST GROUNDING ELECTRODE. C.EACH TGB AND PATHWAYS(S),RACK(S),CABINET(S) AND APPLICABLE

SIZE (AWG)

#6

#4

#2

#1

#1/0

#2/0

#3/0

-NEMA L6-30R MOUNTED TO

OVER RACKS (TYP. OF 2)

SIDE RAILS OF LADDER TRAY

PROVIDE BONDING CONDUCTORS (BCT) TO BUILDING STEEL, DOMESTIC COLD WATER PIPE AND GROUND BAR IN PANELBOARDS SERVING TELECOMMUNICATIONS EQUIPMENT ROOM IN ADDITION TO THE TELECOMMUNICATIONS BONDING BACKBONE CONDUCTOR. mmmm

CONDUCTOR SIZING CHART

LENGTH (FEET)

LESS THAN (<) 13'

14' - 20'

21' - 26' 27' - 33'

34' - 41'

42' - 52'

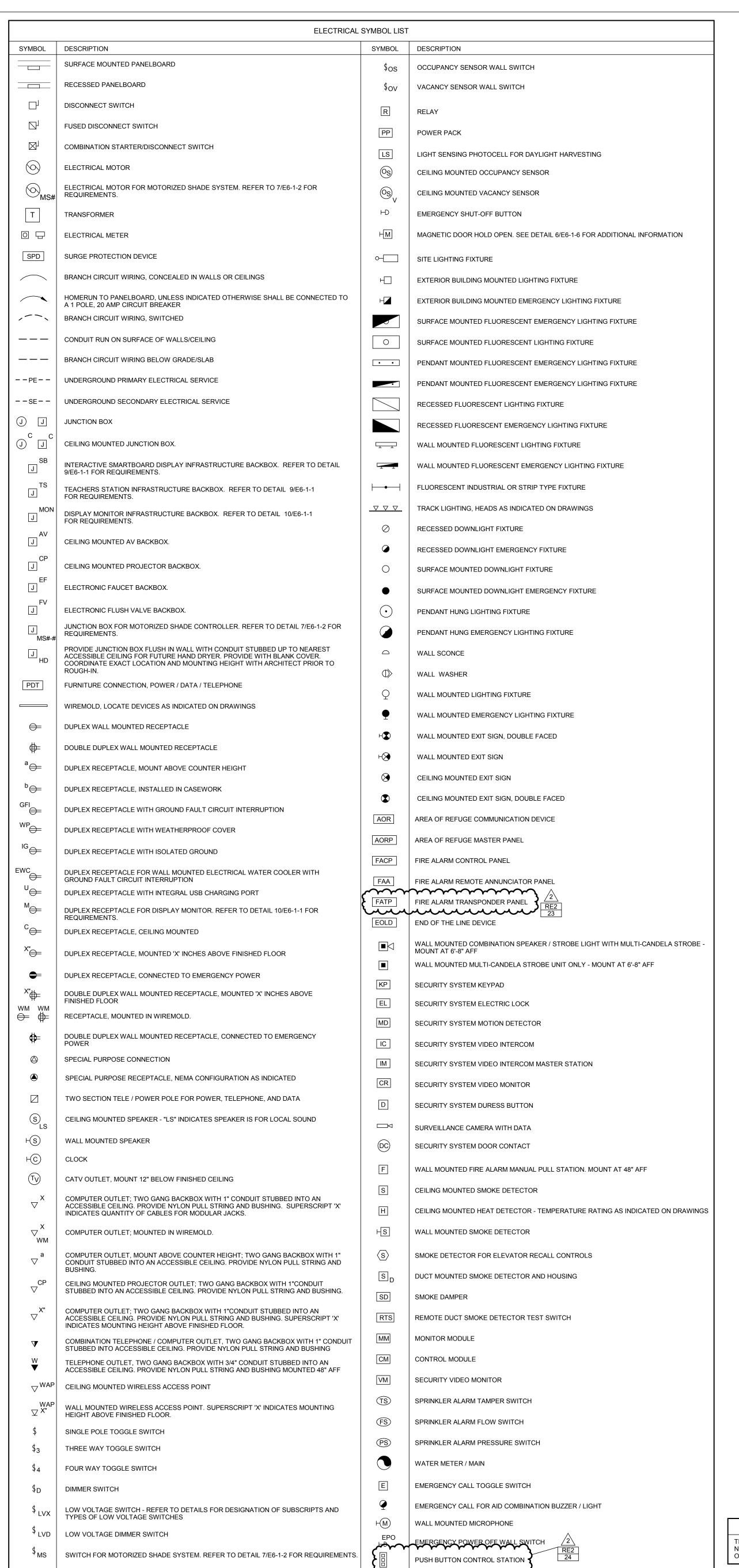
53' - 66' GREATER THAN (>) 66'

4000/ CONSTRUCTION DOCUMENTS

100%		TRUCTION DOCU	IMENTS			
ELE	ARGED I	DF ROOM . POWER AND .ANS		E OF CON IT OF ADMINISTRA	NECTICU TIVE SERVICES	Τ
	R	EVISIONS	drawing prepared by			date
mork	date	docorintion	Consulting E	ngineering Services	s, Inc.	05/24/2019
mark	0.0110	description	811 Middle St., Middletown	, CT 06457		scale
2	07/30/2019	ADDENDUM NO. 2				As indicated
						drawn by
						VJM
			project			approved by
			ADDITIONS A	IND RENOVATIONS		Approver
				NICAL HIGH SCHOO ilford, CT 06461	DL	drawing no.
			CAD no.	DCS project no. BI-RT-878 CM-R	OSCGR project no.	E4-1-2

\ <u>'</u>	LISTED CONNECTOR TO PANELBOARD GROUND BUS.
6	BCT TO TELECOMMUNICATIONS CABLE RUNWAYS(S), RACK(S), CABINET(S) AND APPLICABLE EQUIPMENT. DAISY CHAINING OF BCT AT RELAY RACKS IS NOT ACCEPTACLE. EACH RACK IS TO HAVE A BCT TO A COMPRESSION LUG TAP TO THE DEDICATED HOMERUN BCT BACK TO THE TGB.
(7)	MAIN GROUNDING BUSBAR SHALL MINIMUM SIZE OF 1/4"Hx4"Wx36"L (24"L IN IDF CLOSETS), AND BE UL LISTED. BUSBAR SHALL HAVE TWO MOUNTING BRACKETS AND

8 TELECOMMUNICATIONS GROUNDING AND RISER DETAIL N.T.S.



ELECTRICAL FLOOR BOX LEGEND

PROVIDE (1) WIREMOLD RFB4E-OG ON GRADE FLOOR BOX WITH: (2) DUPLEX RECEPTACLE BRACKETS AND DEVICES; (3) INTERNAL COMMUNICATIONS BRACKETS WITH (2) MODULAR COMMUNICATIONS JACKS IN ÉÁCH BRACKET: INTERNAL BARRIER KITS TO SEPARATÉ POWER AND DATA COMPARTMENTS: AND SURFACÉ STYLE COVER ASSEMBLY (FINISH SELECTION BY ARCHITECT). FEED POWER COMPARTMENT WITH 2#12,#12G -3/4"C IN TRENCH, FEED TELECOMMUNICATIONS COMPARTMENT WITH (1) 1-1/4"C WITH NYLON DRAG LINE IN TRENCH. STUB CONDUITS UP IN WALL TO ABOVE AN ACCESSIBLE CEILING OR AS SHOWN ON PLANS.

PROVIDE (1) WIREMOLD RFB4E-OG ON GRADE FLOOR BOX WITH: (1) DUPLEX RECEPTACLE BRACKETS AND DEVICES; (2) INTERNAL COMMUNICATIONS BRACKETS WITH (2) MODULAR COMMUNICATIONS JACKS IN ÉÁCH BRACKET: INTERNAL BARRIER KITS TO SEPARATÉ POWER AND DATA COMPARTMENTS: AND SURFACÉ STYLE COVER ASSEMBLY (FINISH SELECTION BY ÁRCHITECT). FEED POWER COMPARTMENT WITH 2#12,#12G -3/4"C IN TRENCH, FEED TELECOMMUNICATIONS COMPARTMENT WITH (1) 1-1/4"C WITH NYLON DRAG LINE IN TRENCH. STUB CONDUITS UP IN WALL TO ABOVE AN

PROVIDE (1) WIREMOLD EFB8S-OG ON GRADE FLOOR BOX WITH: (2) FOUR COMPARTMENT MODULES: (6) DUPLEX RECEPTACLE BRACKETS AND DEVICES: (1) INTERNAL COMMUNICATIONS BRACKETS WITH (2) MODULAR COMMUNICATIONS JACKS; INTERNAL BARRIER KITS TO SEPARATE POWER AND DATA COMPARTMENTS; LEVELING LEGS & CABLE MANAGEMENT GUIDES; AND SURFACE STYLE OVER ASSEMBLY (FINISH SELECTION BY ARCHITECT). FEED POWER COMPARTMENT WITH 2#12,#12G -3/4"C IN TRENCH, FEED TELECOMMUNICATIONS COMPARTMENT WITH (1) 1-1/4"C WITH NYLON DRAG LINE IN TRENCH. STUB CONDUITS UP IN WALL TO ABOVE AN ACCESSIBLE CEILING OR AS SHOWN ON PLANS.

PROVIDE (1) WIREMOLD REB4E-OG ON GRADE FLOOR BOX WITH: (1) DUPLEX RECEPTACLE BRACKETS AND DEVICES: (1) INTERNAL COMMUNICATIONS BRACKETS WITH: (2) MODULAR COMMUNICATIONS JACKS; INTÉRNAL BARRIER KITS TO SEPARATE POWER AND DATA COMPARTMENTS; AND SURFACE STYLE COVER ASSÉMBLY (FINISH SELECTION BY ARCHITECT). FEED POWER COMPARTMENT WITH 2#12,#12G -3/4"C IN TRENCH, FEED TELECOMMUNICATIONS COMPARTMENT WITH (1) 1-1/4"C WITH NYLON DRAG LINE IN TRENCH. STUB CONDUITS UP IN WALL TO ABOVE AN ACCESSIBLE CEILING OR

PROVIDE (1) WIREMOLD RFB4E-OG ON GRADE FLOOR BOX WITH: (1) DUPLEX RECEPTACLE BRACKETS AND DEVICES; (2) INTERNAL COMMUNICATIONS BRACKETS WITH (2) MODULAR COMMUNICATIONS JACKS IN EACH BRACKET; INTERNAL BARRIER KITS TO SEPARATE POWER AND DATA COMPARTMENTS; AND SURFACE STYLE COVER ASSEMBLY (FINISH SELECTION BY ARCHITECT). FEED POWER COMPARTMENT WITH 2#12,#12G -3/4"C IN TRENCH, FEED TELECOMMUNICATIONS COMPARTMENT WITH (1) 1-1/4"C WITH NYLON DRAG LINE IN TRENCH. STUB CONDUITS UP IN WALL TO ABOVE AN ACCESSIBLE CEILING OR AS SHOWN ON PLANS.

PROVIDE (1) WIREMOLD 6AT SERIES POKE-THRU DEVICE WITH: (1) DUPLEX RECEPTACLE BRACKET AND DEVICE; (1) CENTER COMPARTMENT COMMUNICATIONS BRACKET TO ACCEPT (6) MODULAR COMMUNICATIONS JACKS: (1) BOTTOM HOUSING ASSEMBLY WITH 3/4"C AND JUNCTION BOX FOR SIDE COMPARTMENT POWER: (1) BOTTOM HOUSING ASSEMBLY WITH 1-1/4"C ADAPTER FOR CENTER COMPARTMENT; BOTTOM HOUSING ASSEMBLY BLANK INSERTS, BARRIER BRACKETS AND PASS THROUGH BRACKETS AS REQUIRED; AND FLUSH STYLE COVER ASSEMBLY (FINISH SELECTION BY ARCHITECT). FEED POWER COMPARTMENT WITH 2#12,#12G – 3/4°C IN FROM FLOOR BELOW, FEED TELECOMMUNICATIONS COMPARTMENT WITH (1) 1-1/4°C FROM FLOOR BELOW. PROVIDE (1) WIREMOLD 6AT SERIES POKE-THRU DEVICE WITH: (2) DUPLEX RECEPTACLE BRACKETS AND DEVICES; (1) CENTER COMPARTMENT COMMUNICATIONS BRACKET TO ACCEPT (4) MODULAR

COMMUNICATIONS JACKS: (1) BOTTOM HOUSING ASSEMBLY WITH 3/4"C AND JUNCTION BOX FOR SIDE COMPARTMENT POWER: (1) BOTTOM HOUSING ASSEMBLY WITH 1-1/4"C ADAPTER FOR CENTER

COMPARTMENT: BOTTOM HOUSING ASSEMBLY BLANK INSERTS. BARRIER BRACKETS AND PASS THROUGH BRACKETS AS REQUIRED; AND FLUSH STYLE COVER ASSEMBLY (FINISH SELECTION BY ARCHITECT). FEED POWER COMPARTMENT WITH 2#12,#12G - 3/4"C IN FROM FLOOR BELOW, FEED TELECOMMUNICATIONS COMPARTMENT WITH (1) 1-1/4"C FROM FLOOR BELOW. PROVIDE (1) WIREMOLD 4FFATC15 FURNITURE FEED POKE-THRU DEVICE WITH: (1) 3/4"C AND JUNCTION BOX FOR POWER; (1) 1-1/2"C ADAPTER FOR TELECOMMUNICATIONS; FINISH COVER FLANGE WITH (1) 3/4" & (1) 1-1/2" CONDUIT SCREW PLUG OPENINGS (FINISH SELECTION BY ARCHITECT). FEED POWER COMPARTMENT WITH 2#12,#12G - 3/4"C IN FROM FLOOR BELOW, FEED TELECOMMUNICATIONS COMPARTMENT WITH CAT 6 CABLES - 1-1/2"C FROM FLOOR BELOW. ROUTE POWER AND COMMUNICATIONS WIRING IN FLEXIBLE METAL CONDUIT FROM DEVICE TO WIRING COMPARTMENT WITHIN FURNITURE.

PROVIDE (1) WIREMOLD 6AT SERIES POKE-THRU DEVICE WITH: (2) DUPLEX RECEPTACLE BRACKETS AND DEVICES: (1) CENTER COMPARTMENT COMMUNICATIONS BRACKET TO ACCEPT (2) MODULAR COMMUNICATIONS JACKS; (1) BOTTOM HOUSING ASSEMBLY WITH 3/4"C AND JUNCTION BOX FOR SIDE COMPARTMENT POWER; (1) BOTTOM HOUSING ASSEMBLY WITH 1-1/4"C ADAPTER FOR CENTER COMPARTMENT; BOTTOM HOUSING ASSEMBLY BLANK INSERTS, BARRIER BRACKETS AND PASS THROUGH BRACKETS AS REQUIRED; AND FLUSH STYLE COVER ASSEMBLY (FINISH SELECTION BY ARCHITECT). FEED POWER COMPARTMENT WITH 2#12,#12G – 3/4"C IN FROM FLOOR BELOW, FEED TELECOMMUNICATIONS COMPARTMENT WITH (1) 1-1/4"C FROM FLOOR BELOW

CONSTRUCTION GENERAL NOTES

SENERAL NOTES: ALL ELECTRICAL, AUDIO VISUAL, TECHNOLOGY AND SECURITY SYSTEMS ND 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. CM-R MUST COORDINATE ALL REQUIRED LECTRICAL PASS WAYS 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 REVIEW AND 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.

IRST 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. 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 INISTRUT 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.

TRST 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. 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 LINESS SPECIFICALLY NOTED OTHERWISE FACH 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&EP SYSTEMS COMPONENTS SPECIALTY ACQUISTICALLY 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

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. 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 2 LOWER CASE LETTER = CONTROL DESIGNATION

A — UPPER CASE LETTER = FIXTURE TYPE.

REFER TO LIGHT FIXTURE SCHEDULE

1. FIXTURE CONTROL DESIGNATION REFERS TO ZONE/SWITCH/RELAY CONTROL OF

FIXTURES CONTROLLED BY COMMON:

SWITCH FOR LIGHTING IN ROOM, CORRIDOR, OPEN AREA. ZONE RELAY IN LOCAL LIGHTING CONTROL PANEL OR LIGHTING CONTROL RELAY ALL CONTROL DEVICES (SWITCHES, CONTROL PANELS, OCCUPANCY/VACANCY SENSORS..ETC) WITH CONTROL DESIGNATIONS REFERS TO COMMON CONTROL OF THE SAME ZONE/SWITCH/RELAY CONTROL.

2. WHERE CONTROL DESIGNATION IS NOT SHOWN, FOLLOW WIRING SHOWN ON PLANS FOR FIXTURE CONTROL.

WHERE EMERGENCY AND NORMAL FIXTURES ARE CONTROLLED FROM THE SAME ZONE/SWITCH/CONTROL RELAY, UL 924 EMERGENCY BYPASS RELAYS SHOWN WITH SAME CONTROL DESIGNATION BYPASS THAT ZONE/SWITCH/CONTROL RELAY. REFER TO EMERGENCY LIGHTING CIRCUIT SCHEMATICS FOR ADDITIONAL WIRING

UNSWITCHED LIGHTING BRANCH CIRCUIT WIRING IS SHOWN TO A SINGLE FIXTURE IN EACH COMMON CONTROL ZONE. UNLESS OTHERWISE INDICATED, PROVIDE 2#12,#12G,3/4"C FOR SWITCHED WIRING TO ALL COMMON CONTROL FIXTURES.

5. PROVIDE LOW VOLTAGE DIMMING CONTROL WIRING AS INDICATED IN LIGHTING CONTROL DETAILS FOR DIMMABLE LIGHT FIXTURES IN COMMON CONTROL ZONES/SWITCHES/RELAY CONTROL.

6. REFER TO LIGHTING CONTROL DETAILS FOR ADDITIONAL WIRING AND CONTROL

7. REFER TO LIGHTING CONTROL RELAY PANEL SCHEDULES WHERE APPLICABLE FOR ADDITIONAL CONTROL INFORMATION.

LIGHT FIXTURE LABELING SCHEMATIC

ALTERNATING CURRENT THOUSAND CIRCULAR MILS ARC FAULT CIRCUIT INTERRUPTER KILOVOLT AMPERE KVA AIR CONDITIONING UNIT KII OWATT ABOVE FINISHED FLOOR MAXIMUM ABOVE FINISHED GRADE MAKE UP AIR UNIT AIR HANDI ING UNIT MCB MAIN CIRCUIT BREAKER AMPS INTERRUPTING CURRENT MCC MOTOR CONTROL CENTER AI UMINUM MCCB | MOLDED CASE CIRCUIT BREAKER AUTOMATIC TRANSFER SWITCH METAL HALIDE AMERICAN WIRE GAUGE MINIMUM BASEMENT MAIN LUGS ONLY CONDUIT NOT APPLICABLE CABLE TELEVISION NATIONAL ELECTRIC CODE CIRCUIT BREAKER NOT IN CONTRACT CIRCUIT NEW LOCATION OF EXISTING RELOCATED COMPRESSOR COMP NEW TO REPLACE EXISTING CONDENSATE PUMP NOT TO SCALE URRENT TRANSFORMER CONDENSING UNIT, COPPER PRIMARY ELECTRICAL SERVICE CABINET UNIT HEATER POWER FACTOR DIAMETER PANFI DOWN PVC POLYVINYL CHLORIDE CONDUIT DISHWASHER REMOVE EXISTING DRAWING REFRIGERATOR EXISTING TO REMAIN RIGID GALVANIZED STEEL CONDUIT EXHAUST FAN RELOCATE EXISTING ELECTRICAL ROOM **ELEVATOR** REMOVE AND REPLACE ON NEW SURFACE ELECTRIC METALLIC TUBING RTU ROOFTOP UNIT LECTRIC UNIT HEATER SECONDARY ELECTRICAL SERVICE ELECTRIC WATER COOLER SPEC | SPECIFICATION ELECTRIC WATER HEATER SWBD | SWITCHBOARD **FAHRENHEIT** SURGE PROTECTION DEVICE FIRE ALARM TELE TELECOMMUNICATIONS/TELEPHONE FIRE ALARM CONTROL PANEL TELEVISION FOOT CANDLE TRANSFORMER FAN COIL UNIT TYPICAL GROUND UNIT HEATER GROUND FAULT CIRCUIT INTERRUPTER VOLTS HORSE POWER VOLT AMPERE HIGH PRESSURE SODIUM VOLTS ALTERNATING CURRENT WATT. WIRE HFRT7 WG WIRE GUARD ISOLATED GROUND WEATHERPROOF **INCHES**

ELECTRICAL ABBREVIATIONS

JB JUNCTION BOX

DIVISION 26 SYSTEMS GENERAL NOTES

GENERAL FIRE ALARM NOTES

THE SCOPE OF WORK FOR THIS PROJECT IS TO PROVIDE A NEW NFPA 72 COMPLIANT FIRE ALARM SYSTEM THROUGHOUT THE PROJECT AREAS OF WORK.

COORDINATE DEVICE LOCATIONS WITH THE ARCHITECTURAL PLANS AND THE WORK OF ALL OTHER

COORDINATE FIRE ALARM INTERFACE REQUIREMENTS WITH:

A. DIV. 8 - DOOR HARDWARE, COILING DOORS, OVERHEAD DOORS. B. Div. 14 - ELEVATORS

C. DIV. 21 - FIRE SUPPRESSION SYSTEMS DIV. 23 - HVAC SYSTEMS E. DIV. 27 - PUBLIC ADDRESS AND SPECIALIZED SOUND SYSTEMS.

F. DIV. 28 - SECURITY SYSTEMS G FOOD SERVICE FOUIPMENT FAILURE TO COORDINATE INTERFACE REQUIREMENTS WILL NOT RELIEVE THE CONTRACTOR OF THEIR

RESPONSIBILITY TO COMPLETE THE WORK. **GENERAL TELECOMMUNICATIONS SYSTEM NOTES**

THE SCOPE OF WORK FOR THIS PROJECT IS TO PROVIDE THE INFRASTRUCTURE TO SUPPORT THE INSTALLATION OF TELECOMMUNICATIONS WIRING AND EQUIPMENT PROVIDED UNDER SEPARATE

INFRASTRUCTURE REQUIREMENTS INCLUDE

A. BACKBOXES AND PATHWAYS TO ABOVE AN ACCESSIBLE CEILING AT DEVICE LOCATIONS. B. PATHWAYS (SLEEVES) THROUGH PARTITIONS AND FLOORS FOR TELECOMMUNICATIONS WIRING.

C. PATHWAYS ACROSS INACCESSIBLE CEILINGS FOR TELECOMMUNICATIONS WIRING. D. POWER FOR EQUIPMENT. C. NYLON DRAG LINES IN ALL EMPTY RACEWAYS.

COORDINATE DEVICE LOCATIONS WITH THE ARCHITECTURAL PLANS AND THE WORK OF ALL OTHER MEET WITH THE OWNER'S TELECOMMUNICATIONS CONTRACTOR PRIOR TO PROVIDING ANY

INFRASTRUCTURE REQUIREMENTS TO COORDINATE WORK. SCHEDULE MEETINGS AS NECESSARY (MIN. BI-WEEKLY) TO COORDINATE WORK AND SCHEDULE SEQUENCE OF WORK.

FAILURE TO COORDINATE INFRASTRUCTURE REQUIREMENTS WILL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO COMPLETE THE WORK.

GENERAL PUBLIC ADDRESS, MASTER CLOCK AND SPECIALIZED SOUND SYSTEM NOTES

THE SCOPE OF WORK FOR THIS PROJECT IS TO PROVIDE NEW INSTALLATIONS OF THE PUBLIC ADDRESS, MASTER CLOCK & SPECIALIZED SOUND SYSTEMS AND WIRING FOR THE EQUIPMENT

SPECIFIED UNDER DIV. 27. INSTALLATION REQUIREMENTS INCLUDE:

> A. BACKBOXES AND PATHWAYS TO ABOVE AN ACCESSIBLE CEILING AT DEVICE LOCATIONS. B. PATHWAYS (SLEEVES) THROUGH PARTITIONS AND FLOORS FOR SYSTEMS WIRING. C. PATHWAYS ACROSS INACCESSIBLE CEILINGS FOR SYSTEMS WIRING. D. POWER FOR EQUIPMENT.

F. WIRING FOR ALL FOUIPMENT F. INSTALLTION AND TESTING OF ALL EQUIPMENT.

COORDINATE DEVICE LOCATIONS WITH THE ARCHITECTURAL PLANS AND THE WORK OF ALL OTHER MEET WITH THE PUBLIC ADDRESS, MASTER CLOCK & SPECIALIZED SOUND SYSTEM CONTRACTOR PRIOR TO PROVIDING ANY INSTALLATION REQUIREMENTS TO COORDINATE WORK. SCHEDULE MEETINGS AS

NECESSARY (MIN. BI-WEEKLY) TO COORDINATE WORK AND SCHEDULE SEQUENCE OF WORK. FAILURE TO COORDINATE INSTALLATION REQUIREMENTS WILL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO COMPLETE THE WORK.

GENERAL SECURITY SYSTEM NOTES

THE SCOPE OF WORK FOR THIS PROJECT IS TO PROVIDE THE INFRASTRUCTURE TO SUPPORT THE INSTALLATION OF SECURITY (ACCESS CONTROL, INTRUSION DETECTION & SURVEILLANCE CAMERA) SYSTEM WIRING AND EQUIPMENT PROVIDED UNDER SEPARATE CONTRACT.

INFRASTRUCTURE REQUIREMENTS INCLUDE:

A. BACKBOXES AND PATHWAYS TO ABOVE AN ACCESSIBLE CEILING AT DEVICE LOCATIONS. R PATHWAYS (SI FEVES) THROUGH PARTITIONS AND FLOORS FOR SYSTEMS WIRING.

C. PATHWAYS ACROSS INACCESSIBLE CEILINGS FOR SYSTEMS WIRING. D. PATHWAYS AND DRAG LINES THROUGH DOOR FRAMES TO DEVICES. E. POWER FOR EQUIPMENT.

F. NYLON DRAG LINES IN ALL EMPTY RACEWAYS.

COORDINATE DEVICE LOCATIONS WITH THE ARCHITECTURAL PLANS AND THE WORK OF ALL OTHER

COORDINATE PATHWAYS THROUGH DOOR FRAMES WITH THE DIVISION 8 CONTRACTOR.

MEET WITH THE OWNER'S SECURITY SYSTEM CONTRACTOR PRIOR TO PROVIDING ANY INFRASTRUCTURE REQUIREMENTS TO COORDINATE WORK. SCHEDULE MEETINGS AS NECESSARY (MIN. BI-WEEKLY) TO COORDINATE WORK AND SCHEDULE SEQUENCE OF WORK.

FAILURE TO COORDINATE INFRASTRUCTURE REQUIREMENTS WILL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO COMPLETE THE WORK.

100% CONSTRUCTION DOCUMENTS

ABB	CTRICAL	ONS, LEGENDS,		E OF CON		JT
	R	EVISIONS	drawing prepared by			date
mark	date	description	Consulting Er	ngineering Services	, Inc.	05/24/2019
		•	811 Middle St., Middletown,	CT 06457		scale
2	07/30/2019	ADDENDUM NO. 2				As indicated
						drawn by
						VJM
			project			approved by
			ADDITIONS A	ND RENOVATIONS		RSM
				NICAL HIGH SCHOO	DL	drawing no.
				lford, CT 06461	T	
			CAD no.	DCS project no.	OSCGR project no.	E5-1-1

SYMBOL LIST NOTE THE SYMBOL LIST AND ABBREVIATIONS DEFINE ITEMS INDICATED ON THE DRAWINGS NOT ALL SYMBOLS AND ABBREVIATIONS DEFINED HEREIN ARE NECESSARILY USED ON THIS PROJECT.

							MOTOR CIRC	CUIT SC	HEDULI	Ē				
EQUIPMENT	PANEL	ОСР	# OF POLES	BRANCH CIRCUIT	LOCAL DISC. SW	MOTOR S	TARTER LOCATION	HP	MCA	LO, FLA	AD MOP	PHASE	VOLT	REMARKS
AC-1	MEP1-1	90 A	3	3#2, #8G., 1 1/4"C.	100A/3P	- VFD	AT UNIT	40	-	-	-	3	480 V	SEE NOTE 10
AC-2 AHU-1 - RA-1	MEP5-1 MEP3-2	110 A 20 A	3	3#2, #6G., 1 1/4"C. 3#12, #12G., 3/4"C.	200A/3P DIV 23	- VFD - VFD	AT UNIT AT UNIT	7.5	-	-	-	3	480 V 480 V	SEE NOTE 10 SEE NOTES 1 & 3
AHU-1 - RA-2	MEP3-2	20 A	3	3#12, #12G., 3/4"C.	DIV 23	- VFD	AT UNIT	7.5	-	-	-	3	480 V	SEE NOTES 1 & 3
AHU-1 - SA-1	MEP3-2	40 A	3	3#8, #10G., 3/4"C.	DIV 23	- VFD	AT UNIT	15	-	-	-	3	480 V	SEE NOTES 1 & 3
AHU-1 - SA-2 AHU-2 - RA-1	MEP3-2 MEP3-2	40 A 15 A	3	3#8, #10G., 3/4"C. 3#12, #12G., 3/4"C.	DIV 23 DIV 23	- VFD - VFD	AT UNIT AT UNIT	15 5	-	-	-	3	480 V 480 V	SEE NOTES 1 & 3 SEE NOTES 1 & 3
AHU-2 - RA-2	MEP3-2	15 A	3	3#12, #12G., 3/4"C.	DIV 23	- VFD	AT UNIT	5	-	-	-	3	480 V	SEE NOTES 1 & 3
AHU-2 - SA-1	MEP3-2	40 A	3	3#8, #10G., 3/4"C.	DIV 23	- VFD	AT UNIT	15	-	-	-	3	480 V	SEE NOTES 1 & 3
AHU-2 - SA-2	MEP3-2	40 A	3	3#8, #10G., 3/4"C.	DIV 23	- VFD - VFD	AT UNIT	15	-	-	-	3	480 V	SEE NOTES 1 & 3
AHU-3 - RA-1 AHU-3 - RA-2	MEP3-2 MEP3-2	15 A 15 A	3	3#12, #12G., 3/4"C. 3#12, #12G., 3/4"C.	DIV 23 DIV 23	- VFD - VFD	AT UNIT AT UNIT	5	-	-	-	3	480 V 480 V	SEE NOTES 1 & 3 SEE NOTES 1 & 3
AHU-3 - SA-1	MEP3-2	40 A	3	3#8, #10G., 3/4"C.	DIV 23	- VFD	AT UNIT	15	-	-	-	3	480 V	SEE NOTES 1 & 3
AHU-3 - SA-2	MEP3-2	40 A	3	3#8, #10G., 3/4"C.	DIV 23	- VFD	AT UNIT	15	-	-	-	3	480 V	SEE NOTES 1 & 3
AHU-4 - RA-1 AHU-4 - RA-2	MEP8-3 MEP8-3	25 A 25 A	3	3#12, #12G., 3/4"C. 3#12, #12G., 3/4"C.	DIV 23 DIV 23	- VFD - VFD	AT UNIT AT UNIT	10	-	-	-	3	480 V 480 V	SEE NOTES 1 & 3 SEE NOTES 1 & 3
AHU-4 - SA-1	MEP8-3	15 A	3	3#12, #12G., 3/4"C.	DIV 23	- VFD	AT UNIT	5	-	-	-	3	480 V	SEE NOTES 1 & 3
AHU-4 - SA-2	MEP8-3	15 A	3	3#12, #12G., 3/4"C.	DIV 23	- VFD	AT UNIT	5	-	-	-	3	480 V	SEE NOTES 1 & 3
AHU-5 - RA-1	MEP7-2	20 A	3	3#12, #12G., 3/4"C.	DIV 23	- VFD - VFD	AT UNIT	7.5	-	-	-	3	480 V	SEE NOTES 1 & 3 SEE NOTES 1 & 3
AHU-5 - RA-2 AHU-5 - SA-1	MEP7-2 MEP7-2	20 A 40 A	3	3#12, #12G., 3/4"C. 3#10, #10G., 3/4"C.	DIV 23 DIV 23	- VFD - VFD	AT UNIT AT UNIT	7.5 15	-	-	-	3	480 V 480 V	SEE NOTES 1 & 3
AHU-5 - SA-2	MEP7-2	40 A	3	3#10, #10G., 3/4"C.	DIV 23	- VFD	AT UNIT	15	-	-	-	3	480 V	SEE NOTES 1 & 3
AHU-6 - RA-1	MEP8-3	20 A	3	3#12, #12G., 3/4"C.	DIV 23	- VFD	AT UNIT	7.5	-	-	-	3	480 V	SEE NOTES 1 & 3
AHU-6 - RA-2 AHU-6 - SA-1	MEP8-3	20 A 40 A	3	3#12, #12G., 3/4"C. 3#8, #10G., 3/4"C.	DIV 23 DIV 23	- VFD - VFD	AT UNIT AT UNIT	7.5 15	-	-	-	3	480 V 480 V	SEE NOTES 1 & 3 SEE NOTES 1 & 3
AHU-6 - SA-2	MEP8-3	40 A	3	3#8, #10G., 3/4"C.	DIV 23	- VFD	AT UNIT	15	-	-	-	3	480 V	SEE NOTES 1 & 3
AHU-7 - RA-1	MEP7-2	15 A	3	3#12, #12G., 3/4"C.	DIV 23	- VFD	AT UNIT	3	-	-	-	3	480 V	SEE NOTES 1 & 3
AHU-7 - RA-2	MEP7-2	15 A	3	3#12, #12G., 3/4"C.	DIV 23	- VFD	AT UNIT	3	-	-	-	3	480 V	SEE NOTES 1 & 3
AHU-7 - SA-1 AHU-7 - SA-2	MEP7-2 MEP7-2	20 A 20 A	3	3#12, #12G., 3/4"C. 3#12, #12G., 3/4"C.	DIV 23 DIV 23	- VFD - VFD	AT UNIT AT UNIT	7.5 7.5	-	-	-	3	480 V 480 V	SEE NOTES 1 & 3 SEE NOTES 1 & 3
AHU-8 - RA-1	MEP3-2	20 A	3	3#12, #12G., 3/4"C.	DIV 23	- VFD	AT UNIT	7.5	-	-	-	3	480 V	SEE NOTES 1 & 3
AHU-8 - RA-2	MEP3-2	20 A	3	3#12, #12G., 3/4"C.	DIV 23	- VFD	AT UNIT	7.5	-	-	-	3	480 V	SEE NOTES 1 & 3
AHU-8 - SA-1 AHU-8 - SA-2	MEP3-2 MEP3-2	60 A 60 A	3	3#4, #10G., 1"C. 3#4, #10G., 1"C.	DIV 23	- VFD - VFD	AT UNIT AT UNIT	20	-	-	-	3	480 V 480 V	SEE NOTES 1 & 3 SEE NOTES 1 & 3
AHU-9 - RA-1	MEP2-2	20 A	3	3#12, #12G., 3/4"C.	DIV 23	- VFD	AT UNIT	7.5	-	-	-	3	480 V	SEE NOTES 1 & 3
AHU-9 - RA-2	MEP2-2	20 A	3	3#12, #12G., 3/4"C.	DIV 23	- VFD	AT UNIT	7.5	-	-	-	3	480 V	SEE NOTES 1 & 3
AHU-9 - SA-1	MEP2-2	40 A	3	3#8, #10G., 3/4"C.	DIV 23	- VFD	AT UNIT	15	-	-	-	3	480 V	SEE NOTES 1 & 3
AHU-9 - SA-2 AHU-A - RA-1	MEP2-2 MEP8-3	40 A 15 A	3	3#8, #10G., 3/4"C. 3#12, #12G., 3/4"C.	DIV 23 DIV 23	- VFD - VFD	AT UNIT AT UNIT	15 3	-	-	-	3	480 V 480 V	SEE NOTES 1 & 3 SEE NOTES 1 & 3
AHU-A - RA-2	MEP8-3	15 A	3	3#12, #12G., 3/4"C.	DIV 23	- VFD	AT UNIT	3	-	-	-	3	480 V	SEE NOTES 1 & 3
AHU-A - SA-1	MEP8-3	15 A	3	3#12, #12G., 3/4"C.	DIV 23	- VFD	AT UNIT	5	-	-	-	3	480 V	SEE NOTES 1 & 3
AHU-A - SA-2 B-1	MEP8-3 EPH5-1	15 A 15 A	3	3#12, #12G., 3/4"C.	DIV 23 30A/3P	- VFD - DIV 23	AT UNIT DIV 23	5	-	-	-	3	480 V 480 V	SEE NOTES 1 & 3
B-2	EPH5-1	15 A	3	3#12, #12G., 3/4"C. 3#12, #12G., 3/4"C.	30A/3P	- DIV 23	DIV 23	5	-	-	-	3	480 V	
B-3	EPH5-1	15 A	3	3#12, #12G., 3/4"C.	30A/3P	- DIV 23	DIV 23	5	-	-	-	3	480 V	
BHWP-1	EPH5-1	15 A	3	3#12, #12G., 3/4"C.	DIV 23	- VFD	AT UNIT	5	-	-	-	3	480 V	SEE NOTES 1,3 & 7
BHWP-2 BHWP-3	EPH5-1 EPH5-1	15 A 15 A	3	3#12, #12G., 3/4"C. 3#12, #12G., 3/4"C.	DIV 23 DIV 23	- VFD - VFD	AT UNIT AT UNIT	5	-	-	-	3	480 V 480 V	SEE NOTES 1,3 & 7 SEE NOTES 1,3 & 7
CH-1	MSB-2	500 A	3	6#250, 2#2G., (2) 2-1/2"C.	DIV 23	- DIV 23	DIV 23	-	320 A	-	500 A	3	480 V	SEE NOTE 3
CH-2	MSB-2	500 A	3	6#250, 2#2G., (2) 2-1/2"C.	DIV 23	- DIV 23	DIV 23	-	320 A	-	500 A	3	480 V	SEE NOTE 3
CSP-1 CT-1	MEP5-1 MEP5-1	20 A 40 A	3	3#12, #12G., 3/4"C. 3#8, #10G., 3/4"C.	DIV 23 DIV 23	- DIV 23 - VFD	DIV 23 AT UNIT	5 15	-	-	-	3	480 V 480 V	SEE NOTE 3 SEE NOTES 1 & 3
CT-2	MEP5-1	40 A	3	3#8, #10G., 3/4"C.	DIV 23	- VFD	AT UNIT	15	-	-	-	3	480 V	SEE NOTES 1 & 3
CU-1 / AC-1	EP3-2	20 A	2	2#12, #12G., 3/4"C.	2PTS	- DIV 23	DIV 23	-	18.3 A	-	-	1	208 V	SEE NOTE 8
CU-2 / AC-2 CU-3 / AC-3	EP3-2 EP3-2	20 A 15 A	2 2	2#12, #12G., 3/4"C. 2#12, #12G., 3/4"C.	2PTS 2PTS	- DIV 23 - DIV 23	DIV 23 DIV 23	-	18.3 A 12.2 A	-	-	1 1	208 V 208 V	SEE NOTE 8 SEE NOTE 8
CU-4 / AC-4	EP3-2	15 A	2	2#12, #12G., 3/4"C.	2PTS	- DIV 23	DIV 23	-	12.2 A	-	-	1	208 V	SEE NOTE 8
CU-5 / AC-5	EP7-2	15 A	2	2#12, #12G., 3/4"C.	2PTS	- DIV 23	DIV 23	-	12.2 A	-	-	1	208 V	SEE NOTE 8
CU-6 / AC-6	EP2-2	15 A	2	2#12, #12G., 3/4"C.	2PTS	- DIV 23	DIV 23	-	12.2 A	-	-	1 1	208 V	SEE NOTE 8
CU-7 / AC-7 CU-8 / AC-8	EP7-2 EP3-2	15 A 15 A	2	2#12, #12G., 3/4"C. 2#12, #12G., 3/4"C.	2PTS 2PTS	- DIV 23 - DIV 23	DIV 23 DIV 23	-	12.2 A 12.2 A	-	-	1	208 V 208 V	SEE NOTE 8 SEE NOTE 8
CU-9 / AC-9	EP2-2	15 A	2	2#12, #12G., 3/4"C.	2PTS	- DIV 23	DIV 23	-	12.2 A	-	-	1	208 V	SEE NOTE 8
CU-10 / AC-10	EP2-2	15 A	2	2#12, #12G., 3/4"C.	2PTS	- DIV 23	DIV 23	-	12.2 A	-	-	1	208 V	SEE NOTE 8
CU-11 / AC-11 CU-A1	EP3-2 MEP8-3	15 A 50 A	3	2#12, #12G., 3/4"C. 3#6, #10G., 3/4"C.	2PTS 60A/3P	- DIV 23 - DIV 23	DIV 23 DIV 23	-	12.2 A 40 A	-	50 A	3	208 V 480 V	SEE NOTE 8 SEE NOTE 8
CWP-1	MEP5-1	60 A	3	3#4, #10G., 1"C.	DIV 23	- VFD	AT UNIT	20	-	-	-	3	480 V	SEE NOTES 1,3 & 7
CWP-2	MEP5-1	60 A	3	3#4, #10G., 1"C.	DIV 23	- VFD	AT UNIT	20	-	-	-	3	480 V	SEE NOTES 1,3 & 7
CWP-3 DC-1 FAN	MEP5-1 MEP1-1	60 A	3	3#4, #10G., 1"C.	DIV 23 100A/3P	- VFD - VFD	AT UNIT	20	-	-	-	3	480 V 480 V	SEE NOTES 1,3 & 7
DC-1 FAN DC-1 ROTARY	MEP1-1	70 A 15 A	3	3#4, #10G., 1"C. 3#12, #12G., 3/4"C.	30A/3P	00 FVNR	AT UNIT AT UNIT	25 2	-	-	-	3	480 V	SEE NOTE 1 SEE NOTES 2 & 4
DC-1 SHAKER	PP1-1	15 A	1	2#12, #12G., 3/4"C.	1PTS	00 FVNR	AT UNIT	1/4	-	-	-	1	120 V	SEE NOTES 2 & 4
DC-2 FAN	MEP1-1	90 A	3	3#2, #8G., 1-1/4"C.	100A/3P	- VFD	AT UNIT	40	-	-	-	3	480 V	SEE NOTES 1,3 & 7
DC-2 ROTARY DC-2 SHAKER	MEP1-1 MEP1-1	15 A 15 A	3	3#12, #12G., 3/4"C. 3#12, #12G., 3/4"C.	30A/3P 30A/3P	00 FVNR 00 FVNR	AT UNIT AT UNIT	3/4	-	-	-	3	480 V 480 V	SEE NOTES 2 & 4 SEE NOTES 2 & 4
DOAS-1 - EF	MEP3-2	25 A	3	3#10, #10G., 3/4"C.	DIV 23	- VFD	AT UNIT	10	-	-	-	3	480 V	SEE NOTES 1 & 3
DOAS-1 - ER-1	MEP3-2	15 A	3	3#12, #12G., 3/4"C.	DIV 23	- VFD	AT UNIT	1	-	-	-	3	480 V	SEE NOTES 1 & 3
DOAS-1 - SF	MEP3-2	40 A	3	3#8, #10G., 3/4"C.	DIV 23	- VFD	AT UNIT	15	-	-	-	3	480 V	SEE NOTES 1 & 3
EF-1 EF-2	EPDP-1 MEP5-1	15 A 15 A	3	3#12, #12G., 3/4"C. 3#12, #12G., 3/4"C.	DIV 23 DIV 23	- DIV 23 - DIV 23	DIV 23 DIV 23	1.5 3/4	-	-	-	3	480 V 480 V	SEE NOTE 3 SEE NOTE 3
EF-3	PP3-2	20 A	1	2#12, #12G., 3/4"C.	DIV 23	- DIV 23	DIV 23	1/2	-			1	120 V	SEE NOTE 3
EF-4	PP3-2	15 A	1	2#12, #12G., 3/4"C.	DIV 23	- DIV 23	DIV 23	1/3	-	-	-	1	120 V	SEE NOTE 3
EF-5 EF-6	MEP8-3	15 A	3	3#12, #12G., 3/4"C.	DIV 23	- DIV 23 - DIV 23	DIV 23 DIV 23	1.5 1/4	-	-	-	3	480 V 120 V	SEE NOTE 3
EF-6 EF-A	PP3-2 PP7-2	15 A 15 A	1	2#12, #12G., 3/4"C. 2#12, #12G., 3/4"C.	DIV 23	- DIV 23	DIV 23 DIV 23	1/4	-	-	-	1 1	120 V	SEE NOTE 3 SEE NOTE 3
EF-BG1	GPL	15 A	3	3#12, #12G., 3/4"C.	DIV 23	- VFD	AT UNIT	2	-			3	208 V	SEE NOTES 1 & 3
EF-BG2	GPL	15 A	3	3#12, #12G., 3/4"C.	DIV 23	- DIV 23	DIV 23	3/4	-	-	-	3	208 V	SEE NOTE 3
EF-BG3 EF-K1	GPL PP3-2	15 A 15 A	1 1	2#12, #12G., 3/4"C. 2#12, #12G., 3/4"C.	DIV 23	- DIV 23 - DIV 23	DIV 23 DIV 23	1/6	-	-	-	1 1	120 V 120 V	SEE NOTE 3 SEE NOTE 3
EF-V1	MEP5-1	15 A	3	3#12, #12G., 3/4 °C.	DIV 23	- DIV 23	AT UNIT	3	-	-	-	3	480 V	SEE NOTES SEE NOTES 1 & 3
EF-V2	MEP8-3	15 A	3	3#12, #12G., 3/4"C.	DIV 23	- VFD	AT UNIT	1.5	-	-	-	3	480 V	SEE NOTES 1 & 3
EF-V3	MEP3-2	15 A	3	3#12, #12G., 3/4"C.	DIV 23	- VFD	AT UNIT	1.5	-	-	-	3	480 V	SEE NOTES 1 & 3
EF-V4	MEP5-1	15 A	3	3#12, #12G., 3/4"C.	DIV 23	- VFD	AT UNIT	<u> 1</u>	-	_	-	3	480 V	SEE NOTES 1 & 3

			# OF		LOCAL DISC.		MOTOR S	TARTER			LOA	رD			
EQUIPMENT	PANEL	OCP	POLES	BRANCH CIRCUIT	SW	SIZE	TYPE	LOCATION	HP	MCA	FLA	MOP	PHASE	VOLT	REMARKS
-1	GPL	20 A	2	2#12, #12G., 3/4"C.	2PTS	-	-	-	-	-	12 A	-	1	208 V	
H-2	GPL GPL	20 A 20 A	2	2#12, #12G., 3/4"C. 2#12, #12G., 3/4"C.	2PTS 2PTS	-	-	-	-	-	12 A 12 A	-	1	208 V 208 V	<u> </u>
H-3 RV-1 - EXH	MEP3-2	20 A	3	3#12, #12G., 3/4°C.	DIV 23	-	- VFD	- AT UNIT	7.5	-	12 A	-	3	480 V	SEE NOTES 1 & 3
RV-1 - SA	MEP3-2	25 A	3	3#10, #10G., 3/4"C.	DIV 23	_	VFD	AT UNIT	10	_		_	3	480 V	SEE NOTES 1 & 3
RV-2 - EXH	MEP3-2	20 A	3	3#12, #12G., 3/4"C.	DIV 23	-	VFD	AT UNIT	7.5	-	-	-	3	480 V	SEE NOTES 1 & 3
RV-2 - SA	MEP3-2	25 A	3	3#10, #10G., 3/4"C.	DIV 23	-	VFD	AT UNIT	10	-	-	-	3	480 V	SEE NOTES 1 & 3
RV-3 - EXH	MEP2-2	20 A	3	3#12, #12G., 3/4"C.	DIV 23	-	VFD	AT UNIT	7.5	-	-	-	3	480 V	SEE NOTES 1 & 3
RV-3 - SA	MEP2-2	25 A	3	3#10, #10G., 3/4"C.	DIV 23	-	VFD	AT UNIT	10	-	-	-	3	480 V	SEE NOTES 1 & 3
RV-4 - EXH	MEP2-2 MEP2-2	20 A	3	3#12, #12G., 3/4"C.	DIV 23	-	VFD VFD	AT UNIT AT UNIT	7.5	-	-	-	3	480 V	SEE NOTES 1 & 3
RV-4 - SA-1 RV-4 - SA-2	MEP2-2	20 A 20 A	3	3#12, #12G., 3/4"C. 3#12, #12G., 3/4"C.	DIV 23	-	VFD	AT UNIT	7.5 7.5	-	-	-	3	480 V 480 V	SEE NOTES 1 & 3 SEE NOTES 1 & 3
RV-5 - EXH-1	MEP2-2	20 A	3	3#12, #12G., 3/4"C.	DIV 23	_	VFD	AT UNIT	7.5	_		_	3	480 V	SEE NOTES 1 & 3
RV-5 - EXH-2	MEP2-2	20 A	3	3#12, #12G., 3/4"C.	DIV 23	-	VFD	AT UNIT	7.5	-	-	-	3	480 V	SEE NOTES 1 & 3
RV-5 - SA-1	MEP2-2	25 A	3	3#10, #10G., 3/4"C.	DIV 23	-	VFD	AT UNIT	10	-	-	-	3	480 V	SEE NOTES 1 & 3
RV-5 - SA-2	MEP2-2	25 A	3	3#10, #10G., 3/4"C.	DIV 23	-	VFD	AT UNIT	10	-	-	-	3	480 V	SEE NOTES 1 & 3
RV-6 - EXH-1	MEP2-2	20 A	3	3#12, #12G., 3/4"C.	DIV 23	-	VFD	AT UNIT	7.5	-	-	-	3	480 V	SEE NOTES 1 & 3
RV-6 - EXH-2	MEP2-2	20 A	3	3#12, #12G., 3/4"C.	DIV 23	-	VFD	AT UNIT	7.5	-	-	-	3	480 V	SEE NOTES 1 & 3
RV-6 - SA-1 RV-6 - SA-2	MEP2-2 MEP2-2	25 A 25 A	3	3#10, #10G., 3/4"C. 3#10, #10G., 3/4"C.	DIV 23	-	VFD VFD	AT UNIT AT UNIT	10 10	-	-	-	3	480 V 480 V	SEE NOTES 1 & 3 SEE NOTES 1 & 3
RV-6 - SA-2 RV-7 - EXH-1	MEP2-2 MEP2-2	25 A 20 A	3	3#10, #10G., 3/4°C.	DIV 23	-	VFD	AT UNIT	7.5	-	-	-	3	480 V	SEE NOTES 1 & 3 SEE NOTES 1 & 3
RV-7 - EXH-2	MEP2-2	20 A	3	3#12, #12G., 3/4"C.	DIV 23	-	VFD	AT UNIT	7.5	-	_	-	3	480 V	SEE NOTES 1 & 3
RV-7 - SA-1	MEP2-2	25 A	3	3#10, #10G., 3/4"C.	DIV 23	-	VFD	AT UNIT	10	-	-	-	3	480 V	SEE NOTES 1 & 3
RV-7 - SA-2	MEP2-2	25 A	3	3#10, #10G., 3/4"C.	DIV 23	-	VFD	AT UNIT	10	-	-	-	3	480 V	SEE NOTES 1 & 3
RV-M1 - EXH	MEP3-2	20 A	3	3#12, #12G., 3/4"C.	DIV 23	-	VFD	AT UNIT	7.5	-	-	-	3	480 V	SEE NOTES 1 & 3
RV-M1 - SA	MEP3-2	25 A	3	3#10, #10G., 3/4"C.	DIV 23	-	VFD	AT UNIT	10	-	-	-	3	480 V	SEE NOTES 1 & 3
CU-1	MEP5-1	20 A	3	3#12, #12G., 3/4"C.	30A/3P	0	FVNR	AT UNIT	3	-	-	-	3	480 V	
CU-2 P AIR COMPRESSOR	MEP5-1	20 A 15 A	3	3#12, #12G., 3/4"C. 2#12, #12G., 3/4"C.	30A/3P 1PTS	0	FVNR -	AT UNIT AT UNIT	3 1/3	-	-	-	3	480 V 120 V	BUS GARAGE ALTERNATE #2 ONLY
MU-1	EP5-1	25 A	1	2#12, #12G., 3/4°C.	30A/2P		DIV 23	DIV 23	3/4	-			1	120 V	BOS GANAGE ALTERNATE #2 ONET
SMU-2	PP5-1	25 A	1	2#10, #10G., 3/4"C.	30A/2P	-	DIV 23	DIV 23	3/4	-	-	-	1	120 V	
IWRP-1	EP5-1	15 A	3	3#12, #12G., 3/4"C.	15A/3P	00	FVNR	AT UNIT	3/4	-	-	-	3	208 V	
IWRP-2	EP5-1	15 A	3	3#12, #12G., 3/4"C.	15A/3P	00	FVNR	AT UNIT	3/4	-	-	-	3	208 V	
DF-1	PP2-2	20 A	1	2#12, #12G., 3/4"C.	1PTS	-	DIV 23	DIV 23	1/2	-	-	-	1	120 V	
OF-2	PP2-2	20 A	1	2#12, #12G., 3/4"C.	1PTS	-	DIV 23	DIV 23	1/2	-	-	-	1	120 V	OFF NOTE O
(EF-1 (EF-2	MEP5-1 MEP5-1	15 A 15 A	3	3#12, #12G., 3/4"C.	DIV 23 DIV 23	-	VFD VFD	AT UNIT AT UNIT	3	-		-	3	480 V 480 V	SEE NOTE 9 SEE NOTE 9
EF-3	MEP5-1	20 A	3	3#12, #12G., 3/4"C. 3#12, #12G., 3/4"C.	DIV 23	-	VFD	AT UNIT	7.5	-		-	3	480 V	SEE NOTE 9 SEE NOTE 9
EF-4	MEP5-1	15 A	3	3#12, #12G., 3/4"C.	DIV 23	_	VFD	AT UNIT	5	-	_	-	3	480 V	SEE NOTE 9
EF-5	MEP5-1	15 A	3	3#12, #12G., 3/4"C.	DIV 23	-	VFD	AT UNIT	1.5	-	-	-	3	480 V	SEE NOTE 9
EF-1	EP7-2	15 A	3	3#12, #12G., 3/4"C.	DIV 23	00	FVNR	AT UNIT	1.5	-	-	-	3	208 V	SEE NOTES 2, 3 & 4
EF-2	EP7-2	15 A	3	3#12, #12G., 3/4"C.	DIV 23	00	FVNR	AT UNIT	1.5	-	-	-	3	208 V	SEE NOTES 2, 3 & 4
EF-3	EP7-2	15 A	3	3#12, #12G., 3/4"C.	DIV 23	00	FVNR	AT UNIT	1.5	-	-	-	3	208 V	SEE NOTES 2, 3 & 4
CHWP-1	MEP5-1	40 A	3	3#8, #10G., 3/4"C.	DIV 23	-	VFD VFD	AT UNIT	15	-	-	-	3	480 V	SEE NOTES 1,3 & 7
CHWP-2 CHWP-1	MEP5-1 MSB-2	40 A 125 A	3	3#8, #10G., 3/4"C. 3#1, #6G., 1-1/2"C.	DIV 23 DIV 23	-	VFD	AT UNIT AT UNIT	15 75	120 A	96 A	- 125 A	3	480 V 480 V	SEE NOTES 1,3 & 7 SEE NOTES 1,3 & 7
CHWP-2	MSB-2	125 A	3	3#1, #6G., 1-1/2"C.	DIV 23	-	VFD	AT UNIT	75	120 A	96 A	125 A	3	480 V	SEE NOTES 1,3 & 7
HEF-1	MEP1-1	15 A	3	3#12, #12G., 3/4"C.	DIV 23	-	DIV 23	DIV 23	1	-	-	-	3	480 V	SEE NOTE 3
HEF-2	PP1-1	15 A	1	2#12, #12G., 3/4"C.	DIV 23	-	DIV 23	DIV 23	1/4	-	-	-	1	120 V	SEE NOTE 3
HEF-3	MEP1-1	15 A	3	3#12, #12G., 3/4"C.	DIV 23	-	DIV 23	DIV 23	3	- 1	-	-	3	480 V	SEE NOTE 3
HEF-4	MEP2-2	15 A	3	3#12, #12G., 3/4"C.	DIV 23	-	DIV 23	DIV 23	3/4	-	-	-	3	480 V	SEE NOTE 3
HEF-5 HEF-6	MEP1-1 EP1-1	15 A	3	3#12, #12G., 3/4"C.	DIV 23 DIV 23	-	DIV 23 VFD	DIV 23 AT UNIT	2	-	-	-	3	480 V 208 V	SEE NOTE 3
HEF-6 HEF-7	EP1-1	35 A 35 A	3	3#8, #10G., 3/4"C. 3#8, #10G., 3/4"C.	DIV 23	-	VFD VFD	AT UNIT	5 5	 			3	208 V	SEE NOTES 1 & 3 SEE NOTES 1 & 3
HEF-8	EP1-1	15 A	3	3#8, #10G., 3/4"C.	DIV 23	-	VFD	AT UNIT	1	-	_	-	3	208 V	SEE NOTES 1 & 3
HEF-9	PP3-2	15 A	1	2#12, #12G., 3/4"C.	DIV 23	-	DIV 23	DIV 23	1/3	-	-	-	1	120 V	SEE NOTE 3
HEF-10	PP2-2	15 A	1	2#12, #12G., 3/4"C.	DIV 23	-	DIV 23	DIV 23	1/4	-	-	-	1	120 V	SEE NOTE 3
HEF-11	MEP1-1	15 A	3	3#12, #12G., 3/4"C.	DIV 23	0	FVNR	AT UNIT	3	-	-	-	3	480 V	SEE NOTES 3 & 4
HEF-12	MEP1-1	20 A	3	3#12, #12G., 3/4"C.	DIV 23	0	FVNR	AT UNIT	5	-	-	-	3	480 V	SEE NOTES 3 & 4
HEF-13	MEP3-2	15 A	3	3#12, #12G., 3/4"C.	DIV 23	00	FVNR	AT UNIT	3	-	-	-	3	480 V	SEE NOTES 3 & 4
HEF-14 HWP-1	MEP3-2	15 A	3	3#12, #12G., 3/4"C.	DIV 23	00	FVNR	AT UNIT	1/2	06.25.4	- 77 ^	110 ^	3	480 V	SEE NOTES 3 & 4
HWP-1 HWP-2	EPDP-1 EPDP-1	110 A 110 A	3	3#3, #6G., 1-1/4"C. 3#3, #6G., 1-1/4"C.	DIV 23 DIV 23	_	VFD VFD	AT UNIT AT UNIT	60 60	96.25 A 96.25 A	77 A 77 A	110 A 110 A	3	480 V 480 V	SEE NOTES 1,3 & 7 SEE NOTES 1,3 & 7
EF-1	MEP1-1	20 A	3	3#3, #6G., 1-1/4 C. 3#12, #12G., 3/4"C.	DIV 23	0	FVNR	AT UNIT	5	90.25 A		- TIU A	3	480 V	SEE NOTES 1,3 & 7 SEE NOTES 2, 3 & 4
EF-2	MEP1-1	15 A	3	3#12, #12G., 3/4"C.	DIV 23	0	FVNR	AT UNIT	3	-	_	_	3	480 V	SEE NOTES 2, 3 & 4
/H-1	EP5-1	20 A	1	2#12, #12G., 3/4"C.	1PTS	-	-	AT UNIT	-	13.75 A	11 A	-	1	120 V	
/H-2	EP5-1	20 A	1	2#12, #12G., 3/4"C.	1PTS		1	AT UNIT	_	13.75 A	11 A		4	120 V	

MOTOR CIRCUIT SCHEDULE GENERAL NOTES:

- DISCONNECT SWITCHES SHALL BE HEAVY DUTY TYPE. ABBREVIATIONS:
- DIV. 23 EQUIPMENT FURNISHED BY DIV. 23 CONTRACTOR FVNR - FULL VOLTAGE NON-REVERSING
- MAN MANUAL STARTER WITH THERMAL OVERLOADS S.P.C. - SINGLE POINT EQUIPMENT CONNECTION. COORDINATE WITH DIV. 23 CONTRACTOR
- VFD VARIABLE FREQUENCY DRIVE 1PTS - 1-POLE MOTOR RATED TOGGLE SWITCH
- 2PTS 2-POLE MOTOR RATED TOGGLE SWITCH O.C.P DEVICE (OVERCURRENT PROTECTIVE) SHALL BE MOLDED CASE CURCUIT BREAKER UNLESS NOTED WITH AN 'F' FOR FUSE. PROVIDE WEATHERPROOF DISCONNECT SWITCHES WHERE LOCATED OUTSIDE OR IN WET LOCATIONS.
- STARTERS SHALL BE SQUARE D CLASS 8536 OR APPROVED EQUAL.
- PROVIDE MANUAL STARTER WITH AUX. INPUTS FOR BMS CONTROL. PROVIDE CERUS INDUSTRIES MODEL 'BAS-1P' OR APPROVED EQUAL. REFER TO PANEL SCHEDULES FOR SOURCE PANEL/CIRCUIT INFORMATION.
- SEE MECHANICAL PLANS FOR EXACT LOCATIONS OF EQUIPMENT.
 REFER TO MECHANICAL SCHEDULES AND FLOOR PLANS FOR ALL MOTOR LOCATIONS AND ELECTRICAL REQUIREMENTS.
- EACH VRF UNIT INCLUDES A DEDICATED "BS" BRANCH SELECTOR BOX. PROVIDE POWER TO "BS" BOX AND A MANUAL DISCONNECT SWITCH AT EACH BOX. POWER FROM SAME CIRCUIT ASSOCIATED WITH VRF UNIT. COORDINATE LOCATION IN FIELD. WIRE VRF UNITS IN THE SAME AREA FROM A SINGLE CIRCUIT. PROVIDE FUSIBLE DISCONNECT SWITCH AT EACH VRF UNIT, DISCONNECT SWITCH TO DISCONNECT BOTH VRF'S AND BRANCH SELECTOR SWITCHES. PROVIDE (2) 10A DUAL ELEMENT TIME DELAY FUSES IN FUSIBLE DISCONNECT SWITCH.

MOTOR CIRCUIT SCHEDULE REFERENCED NOTES:

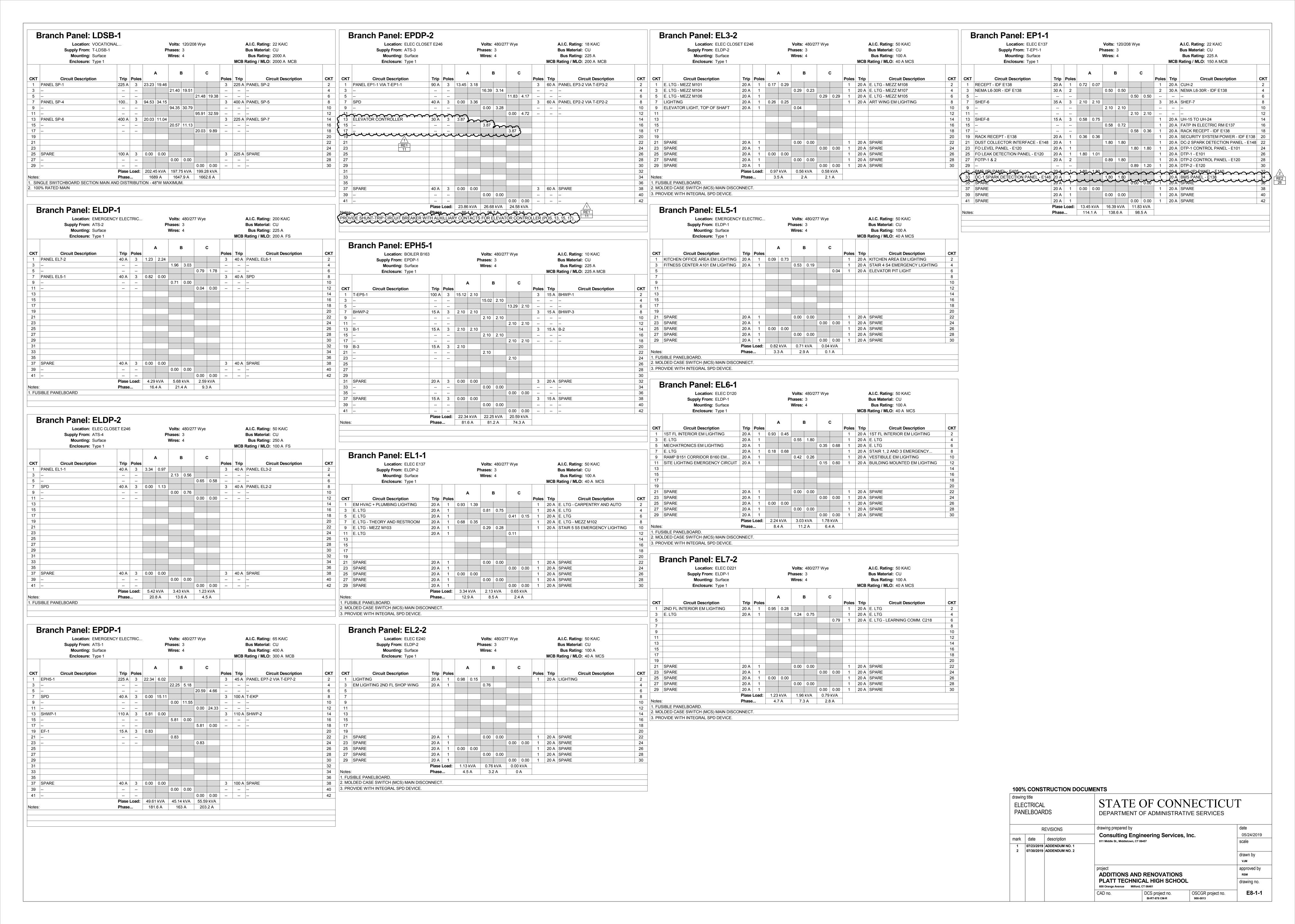
- VFD FURNISHED AND INSTALLED BY DIVISION 23. POWER WIRING FROM SOURCE TO VFD BY DIVISION 26. POWER WIRING BETWEEN VFD AND MOTORS BY DIVISION 26. CONTROL WIRING BY DIVISION 23. STARTER/CONTROLLER IS PREWIRED TO MOTORS AND FURNISHED BY DIVISION 23.
- LOCAL DISCONNECT SWITCH FURNISHED BY DIVISION 23 AS AN INTEGRAL PART OF EQUIPMENT. PROVIDE MANUAL STARTER WITH AUX. INPUTS FOR BMS CONTROL (CERUS INDUSTRIES MODEL 'BAS-1P' OR APPROVED EQUAL).
- PROVIDE 120V POWER TO AC UNIT CONDENSATE PUMP FROM NEAREST UNSWITCHED 120V RECEPTACLE CIRCUIT. POWER TO INDOOR UNIT (AC-X) DERIVED FROM CONDENSING UNIT (CU-X). COORDINATE POWER AND CONTROL WIRING BETWEEN UNITS WITH MANUFACTURER'S INSTRUCTIONS.
- PROVIDE SINGLE-PHASE, 208V POWER TO VRV UNITS FROM PANELBOARD INDICATED ON DRAWINGS. WIRE VAV UNITS IN SAME AREA FROM A SINGLE CIRCUIT. PROVIDE FUSIBLE DISCONNECT SWITCH AT EACH UNIT WITH (2) 10A DUAL ELEMENT TIME DELAY FUSES. PROVIDE GROUNDING RING AT PUMP SHAFT.
- PROVIDE 120V POWER TO AC UNIT CONDENSATE PUMP FROM NEAREST 120V RECEPTACLE CIRCUIT. POWER TO INDOOR UNIT (AC-X) DERIVED FROM OUTDOOR CONDENSING UNIT (CU-X). COORDINATE POWER AND CONTROL WIRING BETWEEN UNITS WITH MANUFACTURER'S INSTRUCTIONS. PROVIDE LOCAL DISCONNECT SWITCH (AS SCHEDULED) AT BOTH THE INDOOR AND OUTDOOR UNITS. VFD FURNISHED AND INSTALLED BY KITCHEN EQUIPMENT CONTRACTOR. POWER WIRING FROM SOURCE TO VFD BY DIVISION 26. POWER WIRING BETWEEN VFD AND MOTORS BY DIVISION 26. CONTROL WIRING BY
- KITCHEN EQUIPMENT CONTRACTOR. VFD FURNISHED AND INSTALLED BY DIVISION 22. POWER WIRING FROM SOURCE TO VFD BY DIV 26. POWER WIRING BETWEEN VFD AND MOTORS BY DIVISION 26. CONTROL WIRING BY DIVISION 22.

	MOTOR CIRCUIT SCHEDULE - BUS GARAGE ONLY (SUPPLEMENTAL BID #2)																
EQUIPMENT	CIRCUIT # OF LOCAL DISC. MOTOR STARTER LOAD EQUIPMENT NUMBER PANEL OCP POLES BRANCH CIRCUIT SW SIZE TYRE LOCATION HP MCA FLA MOP PHASE VOLT REMARKS																
RH-1	+	GPL	15 A	1	2#12, #12G., 3/4"C.	1PTS	-	-	AT UNIT	-	-	1.0 A	- Y- Y-	1	120 V		$\frac{1}{2}$
RH-2	9	GPL	15 A	1	2#12, #12G., 3/4"C.	1PTS	-	-	AT UNIT	-	-	1.0 A	-	a .1	120 V	\sim	√ RE
RH-3	10	GPL	15 A	1	2#12, #12G., 3/4"C.	1PTS	-		ATUNIT	-	-	1.0 A			120 V		3 25
RH-4	11	GPL	15 A	1	2#12, #12G., 3/4 °C.	1PTS	-	-	AT UNIT	-	-	1.0 A	-	1	120 V		1
	•		•	•			7				$\overline{\mathcal{C}}$		$\overline{\mathcal{L}}$		-		-



100% CONSTRUCTION DOCUMENTS

	g title CTRICAL IEDULES			E OF CON INT OF ADMINISTRA		JT
	F	REVISIONS	drawing prepared b	ру		date
	dete	do o onimtion	Consulting	Engineering Services	s, Inc.	05/24/2019
mark	date	description	811 Middle St., Middleto	own, CT 06457		scale
2	07/30/2019	ADDENDUM NO. 2				
						drawn by
						VJM
			project			approved by
			ADDITIONS	AND RENOVATIONS		RSM
			PLATT TEC 600 Orange Avenue	HNICAL HIGH SCHO Milford, CT 06461	OL	drawing no.
			CAD no.	DCS project no.	OSCGR project no.	E5-1-2



	Location: BOILER B1 Supply From: MSB-2 Mounting: Surface Enclosure: Type 1	63	Γ			Volts: hases: Wires:	-	7 Wye		A.I.C. Rating: 35 KAIC Bus Material: CU Bus Rating: 600 A B Rating / MLO: 500 A MCB			
СКТ	Circuit Description	Trip	Poles	,	4	į į	В	C		Poles	Trip	Circuit Description	СКТ
1	CT-1	40 A	3	5.81	5.81					3	•	CT-2	2
3						5.81	5.81						4
5								5.81	5.81				6
7	CWP-1	60 A	3	7.47	7.47					3	60 A	CWP-2	8
9						7.47	7.47						10
11								7.47	7.47		I		12
13	CWP-3	60 A	3	0.00	0.44					3	15 A	EF-2	14
15						0.00	0.44						16
17								0.00	0.44				18
19	EF-V1	15 A	3	1.33	0.50					3	15 A	EF-V4	20
21						1.33	0.50						22
23								1.33	0.50				24
25	KEF-1	15 A	3	1.33	1.33					3	15 A	KEF-2	26
27						1.33	1.33						28
29				0.04	0.40			1.33	1.33				30
31	KEF-3	20 A	3	3.04	2.10	0.04	0.40			3		KEF-4	32
33						3.04	2.10	2.04	0.40				34
35 37	 KEF-5	15 A	3	0.83	5.81			3.04	2.10		 40 A	PCHWP-1	38
				0.63	5.01	0.02	E 01			3			
39						0.83	5.81	0.02	E 01				40
41	PCHWP-2	40 A		E 01	21.30			0.83	5.81		 110 A	 AC 2	42
43	PCHVVP-2	40 A	3	5.81	21.30	5 01	21.30			3			44
45 47						3.01	21.30	5.91	21.30				48
49	DISHWASHER - B125B	20 A	3	3.71	4.00			3.01	21.30	3		HOT WATER BOOSTER - B125B	50
51				0.71	7.00	3.71	4.00						52
53						0.71	7.00	3.71	4.00				54
55	DISHWASHER - B125A	20 A	3	3.71	13.00			0.7 1	1.00	3		HOT WATER BOOSTER - B125A	56
57				0.7 1	10.00		13.00						58
59								3.71	13.00				60
61	FCU-1	20 A	3	2.10	2.10					3	20 A	FCU-2	62
63						2.10	2.10						64
65								2.10	2.10				66
67	IRRIGATION PUMP	20 A	3	3.05	2.10					3	20 A	CSP-1	68
69						3.05	2.10						70
71								3.05	2.10		1		72
73	SPARE	20 A	3	0.00	0.00					3	20 A	SPARE	74
75						0.00	0.00						76
77								0.00	0.00				78
79	SPARE	20 A	3	0.00	0.00					3	20 A	SPARE	80
81						0.00	0.00				-		82
83								0.00					84
		Plase	Load:	104 1	5 kVA	104.1	5 k\/A	104 1	5 k\/Δ				

	Location: ELEC D221 Supply From: MSB-2 Mounting: Surface Enclosure: Type 1			ı		Volts: hases: Wires:		A.I.C. Rating: 18 KAIC Bus Material: CU Bus Rating: 225 A MCB Rating / MLO: 225 A MCB					
СКТ	Circuit Description	Trip	Poles	,	A	ı	3	•	С	Poles	Trip	Circuit Description	CK ⁻
1	AHU-5 - RA-1	20 A	3	3.05	3.05					3	20 A	AHU-5 - RA-2	2
3						3.05	3.05						4
5								3.05	3.05				6
7	AHU-5 - SA-1	40 A	3	5.82	5.82					3	40 A	AHU-5 - SA-2	8
9						5.82	5.82						10
11								5.82	5.82				12
13	AHU-7 - RA-1	15 A	3	5.82	5.82					3	15 A	AHU-7 - RA-2	14
15						5.82	5.82						16
17								5.82	5.82				18
19	AHU-7 - SA-1	20 A	3	3.05	3.05					3	20 A	AHU-7 - SA-2	20
21						3.05	3.05						22
23								3.05	3.05				24
25													26
27													28
29													30
31													32
33													34
35													36
37	SPARE	40 A	3	0.00	0.00					3	20 A	SPARE	38
39						0.00	0.00						40
41								0.00	0.00				42
		Plase	Load:	35.46	kVA	35.46	kVA	35.46	6 kVA		1		

	Location: MECHANI Supply From: MSB-2 Mounting: Surface Enclosure: Type 1			PI	Volts: nases: Wires:	-	7 Wye		1		A.I.C. Rating: 18 KAIC Bus Material: CU Bus Rating: 225 A Rating / MLO: 225 A MCB		
СКТ	Circuit Description	Trip	Poles	,	4	E	3	(Poles	Trip	Circuit Description	СКТ
1	AHU-A - SA-1	15 A	3	2.10	2.10					3		AHU-A - SA-2	2
3						2.10	2.10						4
5						-	-	2.10	2.10				6
7	AHU-A - RA-1	15 A	3	1.33	1.33					3	15 A	AHU-A - RA-2	8
9						1.33	1.33						10
11								1.33	1.33				12
13	AHU-4 - SA-1	15 A	3	3.87	3.87					3	15 A	AHU-4 - SA-2	14
15						3.87	3.87						16
17								3.87	3.87				18
19	AHU-4 - RA-1	25 A	3	2.10	2.10					3	25 A	AHU-4 - RA-2	20
21						2.10	2.10						22
23								2.10	2.10				24
25	AHU-6 - RA-1	20 A	3	3.04	3.04					3	20 A	AHU-6 - RA-2	26
27						3.04	3.04						28
29								3.04	3.04				30
31	AHU-6 - SA-1	40 A	3	5.81	5.81					3	40 A	AHU-6 - SA-2	32
33						5.81	5.81						34
35								5.81	5.81				36
37	CU-A1	50 A	3	8.85	0.83					3	15 A	EF-V2	38
39						8.85	0.83						40
41								8.85	0.83				42
43	EF-5	15 A	3	0.83									44
45						0.83							46
47								0.83					48
49	SPARE	20 A	3	0.00	0.00					3	15 A	SPARE	50
51						0.00	0.00						52
53								0.00	0.00				54
		Plase	Load:	46.21	kVA	46.21	kVA	46.21	kVA				
Notes:		Phase		166	.8 A	166	.8 A	166	.8 A	1			

	Location: SCIENCE	PREP D1	07			Volts:	120/20	8 Wye				A.I.C. Rating: 10 KAIC	
	Supply From: PP6-1					hases:		, ,				Bus Material: CU	
	Mounting: Recessed					Wires:	4					Bus Rating: 100 A	
	Enclosure: Type 1										MCB	Rating / MLO: 60A ST MCB	
СКТ	Circuit Description	Trip	Poles	,	4	E	3	(Poles	Trip	Circuit Description	СКТ
1	RECEPT - D107	20 A	1	0.36	0.54					1		SMARTBOARD - D105	2
3	RECEPT - D107	20 A	1			0.72	0.72			1	20 A	RECEPT - D105	4
5	LAB TABLE - D105	20 A	1					1.26	0.90	1	20 A	RECEPT - D105	6
7	LAB TABLE - D105	20 A	1	1.26	1.26					1	20 A	LAB TABLE - D105	8
9	LAB TABLE - D105	20 A	1			1.26	1.26			1	20 A	LAB TABLE - D105	10
11	TEACHER'S LAB TABLE - D105	20 A	1					0.90	1.26	1	20 A	LAB TABLE - D105	12
13	SPARE	20 A	1	0.00	0.00					1	20 A	SPARE	14
15	SPARE	20 A	1			0.00	0.00			1	20 A	SPARE	16
17	SPARE	20 A	1					0.00	0.00	1	20 A	SPARE	18
19	SPARE	20 A	1	0.00	0.00					1	20 A	SPARE	20
21	SPARE	20 A	1			0.00	0.00			1	20 A	SPARE	22
23	SPACE							0.00	0.00			SPACE	24
25	SPACE			0.00	0.00							SPACE	26
27	SPACE					0.00	0.00					SPACE	28
29	9 SPACE							0.00	0.00			SPACE	30
	Plase Load:				kVA	3.96	kVA	4.32	kVA				
Notes	:	Phase)	28.	5 A	33.	7 A	36.	7 A				

E	Branch Panel: LAB	2											
	Location: SCIENCE	PREP D20	80			Volts:	120/20	08 Wye				A.I.C. Rating: 10 KAIC	
	Supply From: SCP				Р	hases:	3					Bus Material: CU	
	Mounting: Recessed					Wires:	4					Bus Rating: 100 A	
	Enclosure: Type 1										MCB	Rating / MLO: 60A ST MCB	
					A	ı	В		C				
CKT	Circuit Description	Trip	Poles							Poles	Trip	Circuit Description	(
1	RECEPT - D208	20 A	1	0.36	0.54					1	20 A	SMARTBOARD - D204	
3	RECEPT - D208	20 A	1			0.90	0.72			1	20 A	RECEPT - D204	
5	LAB TABLE - D204	20 A	1					1.26	0.90	1	20 A	RECEPT - D204	
7	LAB TABLE - D204	20 A	1	1.26	1.26					1	20 A	LAB TABLE - D204	
9	LAB TABLE - D204	20 A	1			1.26	1.26			1	20 A	LAB TABLE - D204	
11	TEACHER'S LAB TABLE - D208	20 A	1					0.90	1.26	1	20 A	LAB TABLE - D204	
13	SPARE	20 A	1	0.00	0.00					1	20 A	SPARE	
15	SPARE	20 A	1			0.00	0.00			1	20 A	SPARE	
17	SPARE	20 A	1					0.00	0.00	1	20 A	SPARE	
19	SPARE	20 A	1	0.00	0.00					1	20 A	SPARE	
21	SPARE	20 A	1			0.00	0.00			1	20 A	SPARE	
23	SPACE							0.00	0.00			SPACE	
25	SPACE			0.00	0.00							SPACE	
27	SPACE					0.00	0.00					SPACE	
29	SPACE							0.00	0.00			SPACE	
		Plase	Load:	3.42	kVA	4.14	kVA	4.32	kVA			,	
Notes	:	Phase)	28	.5 A	35.	4 A	36.	9 A	1			
1. PR	OVIDE WITH A 60 A SHUNT TRIP MAIN	N BREAKE	R							•			

	Location: SCIENCE P Supply From: SCP Mounting: Recessed Enclosure: Type 1	REP D20	08		-	Volts: hases: Wires:	3	08 Wye				A.I.C. Rating: 10 KAIC Bus Material: CU Bus Rating: 100 A Rating / MLO: 60A ST MCB	
СКТ	Circuit Description	Trip	Poles	,	A	ı	3	(С	Poles	Trip	Circuit Description	СК
1	SMARTBOARD - D209	20 A	1	0.54	0.18					1	20 A	FUME HOOD - D209	2
3	RECEPT - D209	20 A	1			0.72	0.90			1	20 A	RECEPT - D209	4
5	LAB TABLE - D209	20 A	1					1.26	1.26	1	20 A	LAB TABLE - D209	6
7	LAB TABLE - D209	20 A	1	1.26	1.26					1	20 A	LAB TABLE - D209	8
9	LAB TABLE - D209	20 A	1			1.26	1.26			1	20 A	LAB TABLE - D209	10
11	TEACHER'S LAB TABLE - D209	20 A	1					0.90	0.00	1	20 A	SPARE	12
13	SPARE	20 A	1	0.00	0.00					1	20 A	SPARE	14
15	SPARE	20 A	1			0.00	0.00			1	20 A	SPARE	16
17	SPARE	20 A	1					0.00	0.00	1	20 A	SPARE	18
19	SPARE	20 A	1	0.00	0.00					1	20 A	SPARE	20
21	SPARE	20 A	1			0.00	0.00			1	20 A	SPARE	22
23	SPACE							0.00	0.00			SPACE	24
25	SPACE			0.00	0.00							SPACE	26
27	SPACE					0.00	0.00			l		SPACE	28
29	SPACE							0.00	0.00			SPACE	30
Notes	Plase Load:)	3.24 kVA 27 A		4.14 34.	kVA 7 A		kVA 7 A				·

	Location: SCIENCE P Supply From: SCP Mounting: Recessed Enclosure: Type 1	REP D2 ⁻	11		P	Volts: hases: Wires:	3	8 Wye				A.I.C. Rating: 10 KAIC Bus Material: CU Bus Rating: 100 A Rating / MLO: 60A ST MCB	
СКТ	Circuit Description	Trip	Poles	,	4	E	3	(C	Poles	Trip	Circuit Description	СКТ
1	SMARTBOARD - D210	20 A	1	0.54	0.18					1	•	FUME HOOD - D210	2
3	RECEPT - D210	20 A	1	0.01	0.10	0.72	0.90			1		RECEPT - D210	4
5	LAB TABLE - D210	20 A	1			V	0.00	1.26	1.26	1		LAB TABLE - D210	6
7	LAB TABLE - D210	20 A	1	1.26	1.26					1		LAB TABLE - D210	8
9	LAB TABLE - D210	20 A	1			1.26	1.26			1	20 A	LAB TABLE - D210	10
11	TEACHER'S LAB TABLE - D210	20 A	1					0.90	0.00	1	20 A	SPARE	12
13	SPARE	20 A	1	0.00	0.00					1	20 A	SPARE	14
15	SPARE	20 A	1			0.00	0.00			1	20 A	SPARE	16
17	SPARE	20 A	1					0.00	0.00	1	20 A	SPARE	18
19	SPARE	20 A	1	0.00	0.00					1	20 A	SPARE	20
21	SPARE	20 A	1			0.00	0.00			1	20 A	SPARE	22
23	SPACE							0.00	0.00			SPACE	24
25	SPACE			0.00	0.00							SPACE	26
27	SPACE					0.00	0.00					SPACE	28
29	SPACE							0.00	0.00			SPACE	30
		Plase	Load:	3.24	kVA	4.14	kVA	3.42	kVA				
Votes	:	Phase		27	' A	34.	7 A	28.	7 A				

	Location: SCIENCE I	PREP D2	11			Volts:	120/20	8 Wye				A.I.C. Rating: 10 KAIC Bus Material: CU	
	Supply From: SCP					Mires:	_						
	Mounting: Recessed Enclosure: Type 1					vviies.	4				MCB	Bus Rating: 100 A Rating / MLO: 60A ST MCB	
	Enclosure: Type 1				4	E	3	(WOD	rating / MEO. GOA OT MOD	
CKT	Circuit Description	Trip	Poles							Poles	Trip	Circuit Description	CK
1	RECEPT - D211	20 A	1	0.36	0.54					1	20 A	SMARTBOARD - D212	2
3	RECEPT - D211	20 A	1			0.90	0.72			1	20 A	RECEPT - D212	4
5	LAB TABLE - D212	20 A	1					1.26	0.90	1	20 A	RECEPT - D212	6
7	LAB TABLE - D212	20 A	1	1.26	1.26					1	20 A	LAB TABLE - D212	8
9	LAB TABLE - D212	20 A	1			1.26	1.26			1	20 A	LAB TABLE - D212	10
11	TEACHER'S LAB TABLE - D212	20 A	1					0.90	1.26	1	20 A	LAB TABLE - D212	12
13	SPARE	20 A	1	0.00	0.00					1	20 A	SPARE	14
15	SPARE	20 A	1			0.00	0.00			1	20 A	SPARE	16
17	SPARE	20 A	1					0.00	0.00	1	20 A	SPARE	18
19	SPARE	20 A	1	0.00	0.00					1	20 A	SPARE	20
21	SPARE	20 A	1			0.00	0.00			1	20 A	SPARE	22
23	SPACE							0.00	0.00			SPACE	24
25	SPACE			0.00	0.00							SPACE	26
27	SPACE					0.00	0.00					SPACE	28
29	SPACE							0.00	0.00			SPACE	30
	Plase Load:			3.42	kVA	4.14	kVA	4.32	kVA		•		
Notes	:	Phase)	28.	5 A	35.	4 A	36.	9 A	1			

E	Branch Panel: GPH												
	Location: MECHAN	IICAL G102				Volts:	480/27	7 Wye				A.I.C. Rating: 65 KAIC	
	Supply From:				Р	hases:	3					Bus Material: CU	
	Mounting: Surface					Wires:	4					Bus Rating: 225 A	
	Enclosure: Type 1										MCB	Rating / MLO: 200 A MCB	
					4		В	(
CKT	Circuit Description	•	Poles		i					Poles	•	Circuit Description	CKT
1	T-GPL	100 A	3	14.98	3.54					1	20 A		2
3						12.21	2.73			1	20 A	BUS GARAGE 50% LIGHTING	4
5								12.30	0.78	1	20 A	BUS GARAGE SITE LIGHTING	6
7													8
9													10
11													12
13													14
15													16
17													18
19													20
21													22
23													24
25													26
27													28
29													30
31													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
		Plase	Load:	18.41	kVA	14.82	2 kVA	13.08	8 kVA				- "
Notes:		Phase		67.	4 A	54.	.5 A	47.	2 A				

No	ites:	
1.	BUS	GARAGE ALTERNATE #2.

	Location: MECHAN Supply From: T-GPL Mounting: Surface Enclosure: Type 1	IICAL G102			P	Volts: hases: Wires:	-	8 Wye	RE2	2		A.I.C. Rating: 22 KAIC Bus Material: CU Bus Rating: 225 A Rating / MLO: 225 A MCB	
CKT	Circuit Description	Trip	Poles	,	A	ı	В	C		Poles	Trip	Circuit Description	скт
1	EF-BG1	15 A	3	0.94	0.44					3	15 A	EF-BG2	2
3						0.94	0.44	,					4
5					-0-6		0-0-	0.94	0.44				6
7	EF-BG3	15 A	1	0.53	0.12	T	~ ~	,	\	1	15 A	RH-1	8
9	RH-2	15 A	1	}		0.12	0.12		?	1	15 A	RH-3	10
11	RH-4	15 A	1	1				0.12	1.25	2	20 A	EH-1	12
13	EH-2	20 A	2	1.25	1.25								14
15						1.25	1.25			2	20 A	EH-3	16
17	BMS PANEL	20 A	1					1.00	1.25				18
19	CO/NO2 PANEL	20 A	1	1.00	1.08					1	20 A	OFFICE RECEPTS.	20
21	RECEPTACLES	20 A	1			0.54	0.43			1	15 A	FP AIR COMPRESSOR	22
23	SECURITY SYSTEM POWER	20 A	1					0.36	0.72	1	20 A	FATP IN MECHANICAL G102	24
25	RECEPT - BUS GARAGE G101	20 A	1	1.44	0.72					1	20 A	RECEPT - BUS GARAGE G101	26
27	RECEPT - BUS GARAGE G101	20 A	1			0.90	1.33			3	20 A	OVERHEAD DOOR - G101	28
29	OVERHEAD DOOR - G101	20 A	3					1.33	1.33				30
31			-	1.33	1.33								32
33						1.33	1.33			3	20 A	OVERHEAD DOOR - G101	34
35	OVERHEAD DOOR - G101	20 A	3					1.33	1.33				36
37				1.33	1.33								38
39			-			1.33	0.89			3	20 A	OVERHEAD DOOR - G101	40
41	SPARE	20 A	1					0.00	0.89				42
43	SPARE	20 A	1	0.00	0.89			0.00					44
45	SPARE	20 A	1			0.00	0.00			1		SPARE	46
47	SPARE	20 A	1					0.00	0.00	1		SPARE	48
49	SPARE	20 A	3	0.00	0.00					3		SPARE	50
51						0.00	0.00					<u> </u>	52
53			-					0.00	0.00				54
	1	Plase	Load:	14.9	B kVA	12.2	1 kVA	12.30					1 2.
lotes		Phase			5 A		.7 A	102		-			

	Location: ELEC D221 Supply From: T-SCP Mounting: Surface Enclosure: Type 1					Volts: hases: Wires:	-	8 Wye				A.I.C. Rating: 10 KAIC Bus Material: CU Bus Rating: 225 A Rating / MLO: 225 A MCB	
OLET	Oireante Deservinetion	Tuin	Dalaa		Ą	ı	В	(3	Dalaa	T !	Olympid Describetion	014
CKT	Circuit Description PANEL LAB2	Trip	Poles	3.42	3.42					Poles 3	•	Circuit Description PANEL LAB5	CK
<u>1</u> 3		60 A	3	3.42	3.42	4.14	4.14				60 A		2
5						4.14	4.14	4.32	4.32			-	6
7	PANEL LAB3	60 A	3	3.24	3.24			4.02	4.02	3		PANEL LAB4	8
9				5.24	5.24	4.14	4.14						10
11						1	1.11	3.42	3.42				12
13	LAB2 GAS SHUTOFF PANEL AND	20 A	1	0.10	0.10			0.12	0.12	1	20 A	LAB4 GAS SHUTOFF PANEL AND	14
15	LAB3 GAS SHUTOFF PANEL AND	20 A	1			0.10	0.10			1		LAB5 GAS SHUTOFF PANEL AND	16
17	REF - D208 (GFCI)	20 A	1					1.50	1.08	1		DW - D208	18
19	REF - D211 (GFCI)	20 A	1	1.50	1.08					1	20 A	DW - D211	20
21													22
23													24
25													26
27													28
29													30
31													32
33													34
35													36
37	SPACE			0.00	0.00							SPACE	38
	SPACE					0.00	0.00					SPACE	40
41	SPACE							0.00	0.00			SPACE	42

100% CONSTRUCTION DOCUMENTS

100%		TRUCTION DOC	UMENTS								
	g title CTRICAL ELBOAR			OF CONT		T					
	R	EVISIONS	drawing prepared by			date					
	1-1-	de e estation	Consulting Er	ngineering Services,	Inc.	05/24/2019					
mark	date	description	811 Middle St., Middletown,	811 Middle St., Middletown, CT 06457							
2	07/30/2019	ADDENDUM NO. 2									
						drawn by					
			project			approved by					
			ADDITIONS A	ND RENOVATIONS		RSM					
	PLATT TECHNICAL HIGH SCHOOL 600 Orange Avenue Milford, CT 06461										
			CAD no.	DCS project no. BI-RT-878 CM-R	OSCGR project no.	E8-1-6					

Addendum	ltem	Question / Assumption	DWG REF in Question and/or Answer	SPEC REF in Question and/or Answer	RESPONSE
ADD-2	2-01	The sunshade element has no definitive design details other than location and extent, and a profile view on the wall sections. EFCO can assume standard EFCO parts and scale the depth on wall sections, if desired. Advise.		08 41 10 08 44 10	Refer to Addendum No.2
ADD-2	2-02	Please confirm that spec 133419 in its entirety is for alternate #2. Please confirm that the base bid requires no work.		13 34 19 Metal Building Systems	The free standing garage building and athletic equipment storage specified in Section 133419 are part of the Alternate #2 and Supplemental Bid No.1
ADD-2	2-03	There appears to be a sink assembly #SS-09, which is not shown on EQ-001 with #SS-4. Can you have the architect provide a Schedule for this Sink Assembly model?	EQ-001		Refer to Addendum No.2
ADD-2	2-04	Nevco Scoreboards Can you please clarify the correct model number for the Baseball and Softball. I did not find an OES model 7928. Also, can you let me know what isintended for the white game captions for the football scoreboard? Is it referring to Home, Guest, Down, and the rest as being white, or the LED digits?		11 68 43.03 Baseball/Softball Scoreboard 11 68 43.06 Multisport Scoreboards	Baseball and softball scoreboards: 7928 is the correct OES Inc. model number. Contact OES directly for product information; it might not be on their website. Multisport ("Football') scoreboard: LED electronic captions change according to the sport mode, eliminating the need for caption panels.
ADD-2	2-05	Drawing A1-1.2E, Room E232 please provide base type for lockers in that room.	A1-1.2E		Refer to Addendum No.2.
ADD-2	2-06	Equal or Substitution Request: Section 10 14 00, Paragrph 2.3A Request is to substitute two layer acrylic with second surface direct print and tactile copy and raster braille <u>for</u> the thermo-formed tactile plaques that we have specified.		10 14 00 Signage	Provide thermo-formed tactile plaques as specified.
ADD-2	2-07	Equal or Substitution Request: Section 10 14 00, Drawings 401-406 Request to substitute 1/4" thick white acrylic standard for 1/8" thick photopolymer backer.		10 14 00.03 Signage - Drawings	1/8" color black, acrylic is acceptable. Refer to forthcoming Addendum.

		Question / Assumption	DWG REF in	SPEC REF in	
			Question and/or	Question and/or	
Addendum	Item		Answer	Answer	RESPONSE
ADD-2	2-08	Under section 017700, Final Cleaning, Section B Item 3 and Sections C & D belong to other respective trades and not the final cleaners. Please clarify.		ALL Bid Packages	To clarify division 017700 3.2. Final cleaning, we offer the following. Paragraph 3.2.A of 01 770 General cleaning — cleaning during construction is owned by each individual bid package subcontractor for their work. Paragraph 3.2.B Cleaning is the scope of Final Cleaning BP#23. Paragraph 3.2.C Pest control is owned by General trades BP#06. Paragraph 3.2.D is owned by each bid package subcontractor unless the scope of work for the respective bid package subcontractor directs otherwise for certain items. Paragraph 3.2.E Compliance is owned by each bid package subcontractor for their work. With respect to paragraph 3.2.B sub-paragraphs 1, 2 and 3 of 01 7700 the final cleaning bid package subcontractor shall perform ALL work called for EXCEPT; Paragraph 3.2.B.2.b The portion for "replacement of chipped or broken glass", this shall be done by contractor that damaged it. Paragraph 3.2.B.2.d the portion for "replacement of filters and cleaning of strain-ers" shall be by the mechanical bid package subcontractor. Paragraph 3.2.B.2.h Final cleaning BP#23 shall perform vacuuming/dusting as noted, all other bid packages subcontractors shall remove the plastic, protection films, or other protection around light fixtures, glass or any other products as re-quired after installation if required or just prior to final cleaning for the Final Clean-ing BP#23. Paragraph 3.2.B.3.a "Clean the site including landscape development areas" shall be performed by Site BP#02. Paragraph 3.2.B.3.a "Clean exposed exterior hard surfaces" the cleaning of all precast shall be by the BP#05 Structural steel & Precast bid package sub-contractor as its required by the work of BP#05 and specification section 03 4500. BP#05 shall final clean all of the precast. Paragraph 3.2.B.3.d "Remove waste and surplus materials" shall be by each bid package subcontractor. Paragraph 3.2.B.3.e The portion for "replacement of chipped or broken glass", this shall be done by contractor that damaged it.
ADD-2	2-09	Please clarify for which sub-contractor is to furnish and/or install the precast concrete curb shown on 1/L-502?	1/L-502	Bid Packages: No.2- Sitework No.5 - Structural Steel & Precast Concrete	Precast curb is specified in section 32 16 13. Provided as part of Bid Package No.2 Site scope
ADD-2	2-10	Please clarify for which sub-contractor is to furnish and/or install the pre- cast parking bumper shown on 5/L-502?		Bid Packages: No.2- Sitework No.5 - Structural Steel & Precast Concrete	Precast parking bumpers are specified in section 32 17 13. Provided as part of Bid Package No.2 Site scope
ADD-2	2-11	Please clarify for which sub-contractor is to furnish and/or install the precast concrete seat wall shown on 1/L-504?	1/L-504	Bid Package No.5 Precast Concrete	Provided as part of Bid Package No.5 Structural Steel and Precast Concrete

		Question / Assumption	DWG REF in	SPEC REF in	
			Question and/or	Question and/or	
Addendum	Item		Answer	Answer	RESPONSE
ADD-2	2-12	Please clarify for which sub-contractor is to furnish and/or install the block unit and cap shown on 7/L-506?	7/L-506	Bid Packages: No.2- Sitework No.5 - Structural Steel & Precast Concrete	Detail 7/L-506 is an aluminum players bench. Please explain the question.
ADD-2	2-13	Please clarify for which sub-contractor is to furnish and/or install the pre- cast walls at the dug-out location shown on 6/L-506?	6/L-506	Bid Packages: No.2- Sitework No.5 - Structural Steel & Precast Concrete	Precast dougouts are to be provided by site BP#02 as they own the precast concrete dugout spec section. The specified dugout is a pre-engineered and pre-assembled structure produced by one of the specified manufacturers; including walls, roof and floor.
ADD-2	2-14	Please clarify if there will be any pre-cast walls at the dug-out location for the "Multi-Use Athletic Field" shown on drawing SB1-L-000?	SB1-L-000		Precast dougouts are to be provided by site BP#02 as they own the precast concrete dugout spec section. There are no dugouts in the Supplemental Bid #1. There are four dugouts in the Base Bid (2 at the softball field, and 2 at the baseball field.)
ADD-2	2-15	Drawing A2-1-1/3 West Elevation between grid line 12 and 11.5, panel type V17-176 shows a panel that is 8'-8" +/- in height x 6'-6" in length, followed by a door opening to the left of this panel, then a unidentified precast wall panel left of the door opening. Panel type V17-176 shown on drawing A3-4-14 shows the panel to be 12' 0" in height x 14'-8" in length with a door opening integrated to this panel, for which will effect panel type H15B-176.	A2-1-1 A3-4-14 A3-4-1 A3-2-24		V17-176 is a series of (3) panels that creates an alcove. Please see sheet A3-4-1 and 1/A3-2-24. Panels H15B-176 and V17-176 are not in the same plane thus not creating a conflict. Refer to Addendum No.2
		Please clarify which is correct?			
ADD-2	2-16	Drawing A2-2-5/2 Interior Elevation-Gymnasium West, left of grid line 19 or panel type H19-223 has an unidentified wall panel. Please clarify if this panel is to be panel type H19A-71 as shown on drawing A3-4-1?	A2-2-5 A3-4-1		Correct, that panel just to the left of grid 19 is H19A-71. Refer to drawing A3-4-1. Refer to Addendum No.2
ADD-2	2-17	Drawing A2-2-5/2 Interior Elevation-Gymnasium West, Left of grid line 17 or panel H21-308 has an unidentified wall panel. Please provide additional information for this wall panel.	A2-2-5 A3-4-8		This is panel H21B-235 as shown on drawing A3-4-8. Refer to Addendum No.2
ADD-2	2-18	Drawing A2-1-2/3 South Elevation, left of grid D.8 has a panel label as H11-371, drawing A3-4-2 also shows this panel this panel to be H11-371. At this same location it has a designation of H11A-325, please clarify for which designation is correct?	A2-1-2 A3-4-2		Panel tag H11A-325 is in the wrong location. Should be shown at the top horizontal panel at the left corner near grid line B. Panel H11-371 is correct. Refer to Addendum No.2.

		Question / Assumption	DWG REF in	SPEC REF in	
			Question and/or	Question and/or	
Addendum	Item		Answer	Answer	RESPONSE
ADD-2	2-19	Drawing A3-4-1 at Area A, along grid line G has a panel label as H19A-20, for which should be shown on Elevation 2/A2-2-5. This panel designation is not show at this elevation, please clarify?	A2-2-5 A3-4-1		Refer to Addendum No.2
ADD-2	2-20	Drawing S1-1-2F, along grid line X. There is a precast wall panel and a precast beam, refer to detail R4/S5-2-1. Please provide additional information for why this precast beam is required at this location? Can the precast beams be eliminated, this will allow for the precast wall panels to extend up to top of DT's elevation.	S1-1-2F S5-2-1	Bid Package No.5	The beam is shown to insure aid in the transfer of seismic diaphragm shear loads to the top of the precast shear walls "PW-126" and "PW-127". Drawing "S2-5-1" indicates a shear force of 300 kips to be transfered from the roof diaphragm to the shear wall.
ADD-2	2-21	Drawing S1-1-2E, note 13 requires a stem anchor system at the bottom of the DT stems, it also states to refer to architectural for location and requirements. Location and requirements are not found on architectural drawings. Please confirm that the location shown on the structural drawings are correct and please provide additional loading requirements at the bottom of the stems.	S1-1-2E	Bid Package No.5	The locations shown on the structural drawings indicate the extent of the slotted inserts. The functon of the inserts is to support all hung items above the shop where sound insulation panels are installed at the underside of the precast flanges. Drawing "S0.0.3" indicates a maximum concentrated hung load of 800 pounds. Tributary design dead load is 15 PSF and we do not believe that there are any unusual loads to be hung.
ADD-2	2-22	Please confirm that the DT's are to receive a structural concrete topping and the precast DT's is not to carry and diaphragm plates or steel.		Bid Package No.5	We believe that the structural drawings indicate a 4" minimum concrete topping thickness (tapered to a minimum of 2" for camber). Additional information will be provided to confirm the use of the topping for the diaphragm, in a forthcoming Addendum. Tops of precast elements should be roughened to accept a concrete topping.
ADD-2	2-23	Please confirm that a minimum of 10 trailers spaces will be provided for precast concrete products.			Yes, site bid package subcontractor will accommodate 10 trailers for concrete products and enough trailers spaces as needed for steel products as well.
ADD-2	2-24	Will a bid extension of 3 weeks be allowed to properly coordinate with the structural steel contractor on our complete scope of work bid package?			Refer to Addendum No.2.
ADD-2	2-25	Plumbing Drawing P1-1-UG Area G – ALT.#2 Nothing Shown.	P1-1-UG		The buried cold water and natural gas is shown.
ADD-2	2-26	HVAC Section 230400 – General Conditions for Mechanical Trades Page 1 1.1C Doesn't list Shop Areas as "Instructional Areas" Is the exposed Supply Duct in Room B144 - Mechatronics on M-1-1-MB, Carpentry, Plumbing, HVAC, Electrical and Precision Machining Shops on M1-1-ME and Auto Mech and Auto Collision Shops on M1-1-1MF Single Wall Rectangular or Double Wall Round/Oval as Listed in 233100- HVAC Ducts Page 11 for "Instructional Areas" without Ceilings/Exposed?	M-1-1-MB M1-1-ME M1-1-1MF	23 04 00 23 31 00	Shop Areas as listed are not Instructional Areas; and thus do not need to be double wall ductwork.

Addendum	ltem	Question / Assumption	DWG REF in Question and/or Answer	SPEC REF in Question and/or Answer	RESPONSE
ADD-2	2-27	Specification section 01 50 00 (Article 3.3) K.1 With respect to pest control required by General Trades package can you provide a specific scope that we can price as oppose to our assumptions.		01 50 00	An exterminator to employ measures & practices to prevent rodents from making home at the new facility. It would entail throwing rat traps, sticky pads and or granules around the perimeter when it seems appropriate and prevent infiltration into the building once it is enclosed, in addition to what is specified under 01 7700.
ADD-2	2-28	Regarding General Trades, Bid Package No.58, Is this note refering to the exterior 2" expansion joint systems and spray foam behind it (reference 2/A5-1-1)?		Bid Package No.6 General Trades	General trades owns the work of this item as required by all the contract documents.
ADD-2	2-29	Regarding General Trades, Bid Package No.63: a. Is 078410 1.2 A.2 refering to the firestopping shown on 3/A3-2-10 (as location example) between the slab edge and curtainwall?		Bid Package No.6 General Trades	Item #63 and the scope is clear.
ADD-2	2-30	Regarding General Trades, Bid Package No.67, is this refering to the idetification noted in General Note 12 on A1-0-3?		Bid Package No.6 General Trades	Yes
ADD-2	2-31	Due to the lack of capacity in the union fire sprinkler market we are requesting to have the specification waived for the projects CHRO goals, similar to other trade packages. i.e. elevator, roofing and curtainwall.		ALL Bid Packages	We cannot waive the CHRO goals.
ADD-2	2-32	FP3-1-1 detail #1 shows a dust collection system, please provide specifications on type of system required. i.e. wet, dry, pre-action etc.	FP3-1-1		This is a wet system.
ADD-2	2-33	FP1-1-1E has a note to provide dust collector nozzles. Please provide nozzle locations, specifications and quantities.	FP1-1-1E M1-1-ME M5-1-4	23 34 00	Refer to Drawing M1-1-ME, M5-1-4 and related mechanical drawings for locations and Specification Section 233400 for specification of spray nozzle.
ADD-2	2-34	Spec. section 210500 2.6C Pipe Hangers specifies clevis hangers for piping 2" and over. Please confirm that standard UL/FM approved swivel hangers are also approved.		21 05 00	UL/FM approved swivel hangers are an acceptable method along with clevis hangers. (refer to Addendum #2)
ADD-2	2-35	211313 Wet Sprinklers- are flexible sprinkler drops allowed? Please clarify.		21 13 13	Flex heads are allowed.

		Question / Assumption	DWG REF in	SPEC REF in	
			Question and/or	Question and/or	
Addendum	Item		Answer	Answer	RESPONSE
ADD-2	2-36	Is there a cost to the subcontractor for use of the CAD / Revit Files for MEP coordination purposes?		ALL Bid Packages	We are using BIM modeling on the project and the HVAC contractor is taking the lead on this process. Refer to Morganti Exhibit E, Article 8 for BIM procedure. Post-bid period, the Design Team will share Electronic Files at no cost. These files will be for informational purposes only and are not considered part of the Contract Documents. An Electronic Document License Agreement will need to be signed by the Constraction Manager and Sub-contractors prior to release of the electronic files.
ADD-2	2-37	Is a temporary standpipe required for construction, if yes please furnish the location or stair number.			No temporary stand pipe is required
ADD-2	2-38	What trade is responsible for fire-caulking and smoke sealing for the fire protection piping? Please advise.			The fire protection bid package subcontractor
ADD-2	2-39	Drawing S0-0-1 shows the seismic design classification as B. Please confirm if correct.			Correct. However refer to Addendum #2. Sprinkler systems shall be seismically braced even though the IBC and ASCE allow them to be exempt.
ADD-2	2-40	Please refer to spec section 321400 – Unit Paving, item 2.1.A.5 – Color and Finish. Please advise as to what color/finish/matrice is required for the project. There's a significant difference in price from standard to custom.		32 14 00 Unit Paving	Refer to Addendum No.2.
ADD-2	2-41	Can you provide details of the moment frame connection expected to be used for the precast column to beam connection?			Design of the moment connection is the responsibility of the precast supplier. It is expected that the connection will require field welding. A sketch with a conceptual connection design will be issued in a forthcoming Addendum.
ADD-2	2-42	S2-5-1 indicates that there is only one moment frame on the 1 line located between M.1 and Q. Can you confirm this is the only moment frame on this line or is the intent to have the entire 1 line a moment frame? Please provide details of frame connections			Precast supplier is to design rigid moment frames to resist the lateral seismic forces (100 kip minimum) shown on drawing "S2-5-1" for Area E as well as applicable gravity loads. It was assumed that most of the columns and beams would be moment connected to resist the required seismic force.
ADD-2	2-43	Details indicate a channel to be cast into the bottom of the double tee stems at certain locations. S0-0-1 does not provide loads for ceiling + hung items, can you provide the loads of what will be hung from these slotted/channel inserts.			See Item 2-21 Response, above.
ADD-2	2-44	Is the diaphragm steel located in the CIP topping over the double tees or in the precast double tees?			The diaphragm steel may be located in the structural topping. See Item 2-22 Response, above.

		Question / Assumption	DWG REF in	SPEC REF in	
			Question and/or	Question and/or	
Addendum	Item		Answer	Answer	RESPONSE
ADD-2	2-45	The diaphragm steel is not shown on the drawings can you provide whats required?			A sketch/drawing defining the diaphragm reinfocing steel will be provided in a forthcoming Addendum.
ADD-2	2-46	Detail R4/S5-2-1 show a beam sitting on top of a wall with weld connections to transfer seismic shear forces to the wall. What is the reason for not bringing the wall up to the floor level and transferring the loads directly into the wall?			See Item 2-20 Response, above.
ADD-2	2-47	The double tee detail shown on S2-4-1 shows a 2'-10" double tee. Is a 2'-6" double tee acceptable?	-		The underside of the precast double tees are exposed to view. Design intent is that all double tees within a room defined by precast bearing walls should be the same depth. It is also expected that the maximum camber of precast elements shall not exceed 2".
ADD-2	2-48	The panel/jointing layout on S2-3-1 will not work as shown. Can the jointing be revised to work within the precast fabricators constraints?			At corridors the design intent is that the wall panels be fabricated to eliminate visible vertical joints. The panel jointing as shown has the A/B horizontal joint located above the main floor corridor ceiling. Horizontal joint B/C is located at the top of precast at the second floor and the C/D joint is above the second floor corridor ceiling.
ADD-2	2-49	How are you eliminating the buckling that will happen at the horizontal joints between the unbraced stacked 8" shearwalls shown on the V and W lines?			At the grids "V" and "W" panel A is laterally stablized by the precast mezzanines ("S4/S4-2-2"). The top of panel "B" is stabilized by the second floor precast. Our calculations indicate that the use of grouted mechancial connectors between the stacked panels "C" and "D" will provide adequate continuity. A sketch will be provided for typical panel to panel connection in a forthcoming Addendum.
ADD-2	2-50	Scope # 26 states Bid Package #09 is responsible for fire safing penetrati ons in walls and ceilings. Is this the case or is each trade resonsible for there own penetration?		Bid Package No.9 Drywall	Item #26 is one of the items that is in all bid packages scope of work, Yes each trade is responsible for their own penetrations.
ADD-2	2-51	Which trade is responsible for slab edge firesafing?			General Trades package is responsible for this work.
ADD-2	2-52	Scope item #60 states Bid Package 09 is responsible for specification 072 100 1.2 A 2,3 & 5. Which trade is responsible for 4" Semi rigid insulation at curtain wall 1 A3-2-17 typ.			BP#08 Windows is responsible for this work.
ADD-2	2-53	FP1-1-B has a note fire protection provided by hood. Which trade is responsible for the kitchen hood system. Please clarify.	FP1-1-B	Bid Packages 13-Food Services 17-Fire Protection	Refer to FS (Food Services) drawings for kitchen hood fire suppression systems - Bid Package No.13, Food Service.
ADD-2	2-54	Are the City of Milford building department fees waived?		ALL Bid Packages	Yes, unless noted in your scope of work. Some packages will have to pay fees to Milford for this Project for their work.

Addendum	Item		Question and/or	SPEC REF in Question and/or Answer	RESPONSE
ADD-2	2-55	Are there any associated CAD fees with signing over the release forms from the Architect to start our 3D coordination?			Post-bid period, the Design Team will share Electronic Files at no cost. These files will be for informational purposes only and are not considered part of the Contract Documents. An Electronic Document License Agreement will need to be signed by the Constraction Manager and Sub-contractors prior to release of the electronic files.