

THE SCHOOL DISTRICT OF PHILADELPHIA
SCHOOL REFORM COMMISSION
Office of Capital Programs
440 North Broad Street, 3rd Floor – Suite 371
Philadelphia, PA 19130

TELEPHONE: (215) 400-4730

Addendum No. 001

Subject: HVAC Renovation
General, Mechanical, & Electrical
SDP Contract No. B-105/106/107 (c)2017/18

Location: Marin Elementary School
3rd & Ontario Streets
Philadelphia PA 19140

This Addendum, dated February 16, 2018, shall modify and become part of the Contract Documents for the work of this project. Any items not mentioned herein, or affected by, shall be performed strictly in accordance with the original documents.

Revise as indicated below or by attachment

1.0 Specifications

1.1 No modifications to Specifications are included in this Addendum.

2.0 Contractor questions:

- 2.1** Are the three forty foot rows of border lights and eight industrial light on the stage mounted under the ductwork to be removed and reinstalled?
Response: Yes. Refer to sketches E-202A.1 thru E-202A.8 for light locations and notes.
- 2.2** Are we responsible to replace the 120 par flood lamps in the border fixtures?
Response: Yes. Refer to sketches E-202A.1 thru E-202A.8 for light locations and notes.
- 2.3** Drawing E-302A shows keynote #3 pointing at some of the the unit ventilators Please confirm if this is incorrect and should be keynote #2.
Response: That is correct, and those keynote numbers will be changed to #2. Refer to sketch E-302.1 for revised information.
- 2.4** Drawing E-303 shows keynote #3 pointing at some of the the unit ventilators Please confirm if this is incorrect and should be keynote #2
Response: That is correct, and those keynote numbers will be changed to #2. Refer to sketch E-303.1 for revised information
- 2.5** The tree indicated for removal has been already been removed. Is there another tree that is to be removed?
Response: No trees are to be removed.

- 2.6** The control valves in the basement are not indicated for replacement. How are these valves addressed?
Response: Refer to sketches M-602.1, M-602.2, M-602.3 & M-602.4.
- 2.7** Please confirm GC is removing seats and making access for new duct install in auditorium
Response: GC is responsible for the temporary removal and reinstallation of seats in the auditorium. GC will need to coordinate with MC for scope of what needs to be removed and reinstalled.
- 2.8** How soon will we have access in the building for removals and new work installs? Normal working hours? Before the end of the school year?
Response: Contractors are permitted access to non-public spaces after NTP during normal operating hours prior to end of school year. Standard noise and odor restriction will be maintained until end of school year. Operation of the cooling plant and related systems must be maintained until end of school year. Work beyond normal hours is permitted however contractors are required to reimburse cost for SDP staff necessary for extended hours.
- 2.9** When can chiller be taken out of commission?
Response: Immediately after the last day of school.
- 2.10** Housekeeping pad shown on M200 mechanical drawings. Please confirm this is in the general contractor's scope of work.
Response: Housekeeping pads shall be a part of the General Contractor's scope of work. Coordinate with Mechanical and/or Electrical Contractor as required for size and location of housekeeping pads.
- 2.11** Please confirm estimated system volume for glycol removal
Response: System volume is estimated at 8500 gallon total including hot water system, chilled water system and dual temp system. At 30% concentration glycol the volume is 2550 Gallon of glycol.
- 2.12** Please clarify control scope on this project. I don't see a control spec or sequence of operation spec. Is everything standalone? What contractor is responsible for which portion of the controls? I see notes for both MC and EC.
Response: All units are standalone refer to drawing M-801 and sketches M-001.1, M-701.1 (PART B) and M501.1.

3.0 Drawings

- 3.1** Drawing A-001 – Notes for demo equipment pads and coordination with mechanical have been added. Refer to attached sketch A-001.1 referencing mechanical drawings.
- 3.2** Drawing M-204 – Pipe insulation has been clarified to show that it shall be included from mechanical room to point of chiller connection. Refer to attached sketch M-204.2, referencing Note 5 on M-602. All new piping to be primed, top coated, and insulated.
- 3.3** Refer to sketches M-601.1 and M-602.1 for information regarding specification of glycol and the % required for the system.
- 3.4** The sprinkler system throughout the existing elementary school is to remain in place. General contractor to coordinate any required head relocations or shutdowns as required by the Mechanical Contractor with School District of Philadelphia. Refer to sketch A-001.1 for added note.

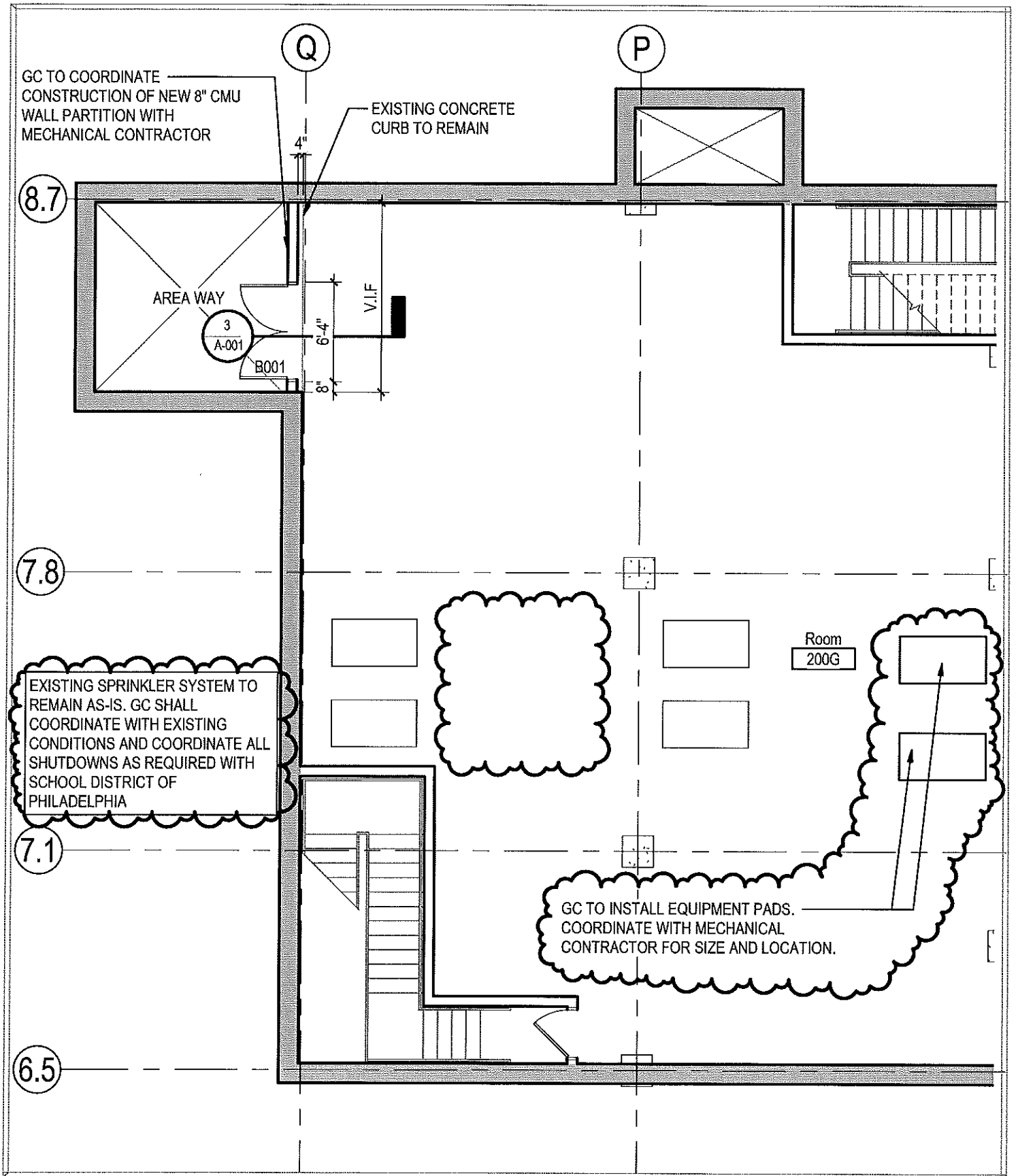
- 3.5 Temporary fire alarm requirements have been clarified. Refer to sketch E.002.1 for information.
- 3.6 Drawing AD-201A – Demo Note 01 has been clarified – Demo of lights is the responsibility of the electrical prime. Refer to sketch AD-201A.1 for revised note.
- 3.7 Fire alarm devices throughout have been added to drawings for clarity. Refer to E-200 series, Phase II. Refer to drawings as well as Fire Alarm scope of work documented under keynote #3 for information.
- 3.8 Drawing E-102 – Note 6 has been revised to coordinate with temporary work note 4 on the AD drawings. Refer to sketch E-102.1 for additional information.
- 3.9 M-100 – Note 3 has been removed in its entirety from this page.
- 3.10 Drawing M-602 has been modified – V1, V2, V3, and V4 – Remove and replace with new manual wheel valves and chain operators. Valve V9 – Remove and replace with 2 manual valves and chain operators. Refer to sketches M-602.1, M-602.2, M-602.3 & M-602.4 for additional information.
- 3.11 Drawing M-602 has been modified–Note has been added to remove control valves V1, V2, V3, and V4 as well as 3-way valve V9 located above pumps 13 and 14. Replace 3-way control valve with 2 manual wheel valves with chain operators. These have been identified with bold text on the drawing. Refer to sketches M-602.1, M-602.2, M-602.3 & M-602.4 for additional information.
- 3.12 Drawing M-701 – A note has been added to the Unit Ventilator schedule “all unit ventilators to be provided with adapter backs”. Refer to sketch M-701.3.
- 3.13 Drawing M-701 – A note about glycol has been added on all schedules. Refer to sketches M-701.1 (PART A), M-701.1 (PART B), M-701.2, M-701.3 for additional information.

4.0 Sketch List

- 4.1 A-001.1 - BASEMENT – DEMOLITION PLAN (PARTIAL)
- 4.2 A-001.2 - BASEMENT – DEMOLITION PLAN (PARTIAL)
- 4.3 AD-201A.1 – 1ST FLOOR – RCP (PARTIAL)
- 4.4 M-001.1 – MECHANICAL COVER SHEET
- 4.5 M-200.1 – MECHANICAL BASEMENT NEW WORK PLAN
- 4.6 M-204.1 – PARTIAL ROOF MECH. DEMO + NEW PLANS
- 4.7 M-204.2 – PARTIAL ROOF MECH. DEMO + NEW PLANS
- 4.8 M-401.1 – ENLARGED MECHANICAL NEW WORK PLANS
- 4.9 M401.2 – ENLARGED MECHANICAL NEW WORK PLANS
- 4.10 M-401.3 – ENLARGED MECHANICAL NEW WORK PLANS
- 4.11 M-401.4 – ENLARGED MECHANICAL NEW WORK PLANS
- 4.12 M-401.5 – ENLARGED MECHANICAL NEW WORK PLANS
- 4.13 M-401.6 – ENLARGED MECHANICAL NEW WORK PLANS
- 4.14 M-401.7 – ENLARGED MECHANICAL NEW WORK PLANS
- 4.15 M-501.1 – MECHANICAL DETAILS AND CONTROLS
- 4.16 M-601.1 – MECH. PIPING RISER DIAGRAM – DEMOLITION
- 4.17 M-602.1a – MECH PIPING RISER DIAGRAM - NEW WORK
- 4.18 M-602.1b – MECH. PIPING RISER DIAGRAM - NEW WORK
- 4.19 M-602.2 – MECH. PIPING RISER DIAGRAM - NEW WORK
- 4.20 M-602.3 – MECH. PIPING RISER DIAGRAM - NEW WORK

- 4.21 M-602.4 – MECH. PIPING RISER DIAGRAM - NEW WORK**
- 4.22 M-701.1a – MECHANICAL SCHEDULES**
- 4.23 M-701.1b – MECHANICAL SCHEDULES**
- 4.24 M-701.2 – MECHANICAL SCHEDULES**
- 4.25 M-701.3 – MECHANICAL SCHEDULES**
- 4.26 E-002.1 – Electrical Notes**
- 4.27 E-102.1 – 2ND FLOOR DEMOLITION POWER PLAN**
- 4.28 E-103.1 – 3RD FLOOR DEMOLITION POWER PLAN**
- 4.29 E-202A.1 – 2ND FLR ELEC NEW WORK LIGHTING PLAN**
- 4.30 E-202A.2 – 2ND FLR ELEC NEW WORK LIGHTING PLAN**
- 4.31 E-202A.3 – 2ND FLR ELEC NEW WORK LIGHTING PLAN**
- 4.32 E-202A.4 – 2ND FLR ELEC NEW WORK LIGHTING PLAN**
- 4.33 E-202A.5 – 2ND FLR ELEC NEW WORK LIGHTING PLAN**
- 4.34 E-202A.6 – 2ND FLR ELEC NEW WORK LIGHTING PLAN**
- 4.35 E-202A.7 – 2ND FLR ELEC NEW WORK LIGHTING PLAN**
- 4.36 E-202A.8 – 2ND FLR ELEC NEW WORK LIGHTING PLAN**
- 4.37 E-300.1 – BASEMENT ELEC NEW WORK POWER PLAN**
- 4.38 E-300.2 – BASEMENT ELEC NEW WORK POWER PLAN**
- 4.39 E-301B.1 – 1ST FLR ELEC NEW WORK POWER PLAN – AREA B**
- 4.40 E-302.1 – 2ND FLR ELEC NEW WORK POWER PLAN**
- 4.41 E-303.1 – 3RD FLR ELEC NEW WORK POWER PLAN**

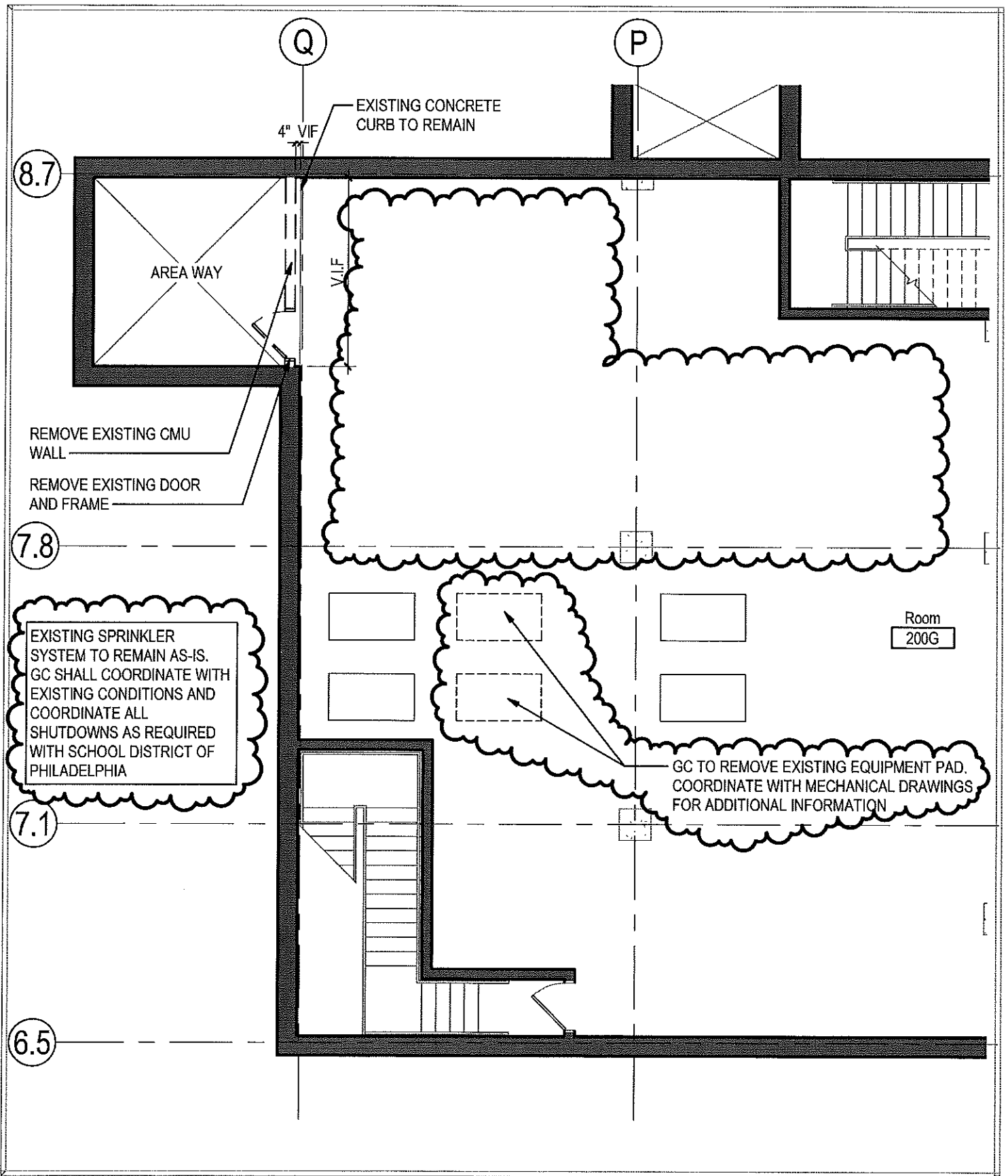
END OF ADDENDUM #001



A-001.1	DRAWING NO.
	SPEC NO.
	SCALE 1/8"=1'-0"
	DATE 02/15/18

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SCHOOL MARIN ELEMENTARY SCHOOL
PROJECT TITLE HVAC RENOVATIONS - PART A
DRAWING TITLE BASEMENT PLAN (PARTIAL)



DRAWING NO.
A-001.2

SPEC NO.
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SCHOOL
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PROJECT TITLE
HVAC RENOVATIONS - PART A
DRAWING TITLE
BASEMENT - DEMOLITION PLAN (PARTIAL)

EXISTING SPRINKLER SYSTEM TO REMAIN AS-IS. GC SHALL COORDINATE WITH EXISTING CONDITIONS AND COORDINATE ALL SHUTDOWNS AS REQUIRED WITH SCHOOL DISTRICT OF PHILADELPHIA.



EXTENT OF CEILING DEMOLITION/WORK

DEMOLITION NOTES

- 01 GC TO REMOVE EXISTING ACT CEILING TILES AND GRID TO EXTENT SHOWN. ELECTRICAL CONTRACTOR TO REMOVE, SALVAGE AND STORE LIGHT FIXTURES FOR RE-INSTALLATION. GC SHALL COORDINATE W/ E.C. FOR LIGHT FIXTURES TO BE REMOVED. LIMIT REMOVAL OF CEILING TO MITIGATE DAMAGE TO ADJACENT CEILING, COORDINATE REMOVAL WITH MECHANICAL CONTRACTOR.
- 02 GC TO REMOVE EXISTING ACT CEILING TILES AND GRID TO EXTENT SHOWN. SALVAGE AND CLEAN FOR REUSE. ELECTRICAL CONTRACTOR TO SALVAGE AND STORE LIGHT FIXTURES FOR REUSE. LIMIT REMOVAL OF CEILING TO MITIGATE DAMAGE TO ADJACENT CEILING, COORDINATE REMOVAL WITH MECHANICAL CONTRACTOR.
- 03 ELECTRICAL CONTRACTOR TO SALVAGE AND STORE EXISTING LIGHT FIXTURES FOR REUSE.

GENERAL NOTES

- 01 GC TO COORDINATE REPLACEMENT OF ACT CEILING TILES AND GRID WITH MECHANICAL WORK. CEILING TILES, GRID AND HEIGHT TO MATCH EXISTING. COORDINATE RE-INSTALLATION OF LIGHT FIXTURES WITH ELECTRICAL.
- 02 GC TO COORDINATE REPLACEMENT OF ACT CEILING TILES AND GRID WITH MECHANICAL WORK. REUSE SALVAGED TILES AND GRID. HEIGHT TO MATCH EXISTING. COORDINATE RE-INSTALLATION OF LIGHT FIXTURES WITH ELECTRICAL.
- 03 ELECTRICAL CONTRACTOR TO RE-INSTALL LIGHT FIXTURES IN EXISTING LOCATIONS.
- 04 GC TO FIELD PAINT NEW DIFFUSERS BLACK PRIOR TO INSTALLATION. COORDINATE WITH MECHANICAL CONTRACTOR.

AD-201A.1	DRAWING NO.
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SCHOOL MARIN ELEMENTARY SCHOOL
PROJECT TITLE HVAC RENOVATIONS - PART B
DRAWING TITLE 1ST FLOOR - RCP (PARTIAL)

PROJECT GENERAL NOTES

24. PROVIDE APPROVED FIRESAFING AT OPENINGS IN FLOORS, WALLS, ETC.
25. DIFFUSER, REGISTER AND GRILLE SIZES SHOWN ON FLOOR PLANS ARE NECK SIZES.
26. ALL NEW PIPING, SUPPORTS, ETC SHALL BE PRIMED AND TOP COATED PRIOR TO INSULATING.
27. ALL NEW PIPING, SUPPORTS, ETC. THAT WILL BE EXPOSED IN MECHANICAL ROOMS AND INTERIOR SPACES SHALL BE PRIMED AND TOP COATED.
28. WHERE SPACE IS AVAILABLE, CONTRACTOR, AT HIS OPTION, MAY SUBSTITUTE RADIUS ELBOWS FOR RETANGULAR ELBOWS WITH TURNING VANES.
29. PROVIDE INSULATION FOR ALL NEW DUCTWORK AND PIPING PER SPECIFICATIONS.
30. THERMOSTAT FOR UNIT VENTILATORS (UV) SHALL BE LOCATED INSIDE UNIT VENTILATOR HOUSING, THERMOSTATS FOR AIR HANDLERS (AH) SHALL BE LOCATED IN RETURN AIRSTREAM/DUCTWORK.

M-001.1

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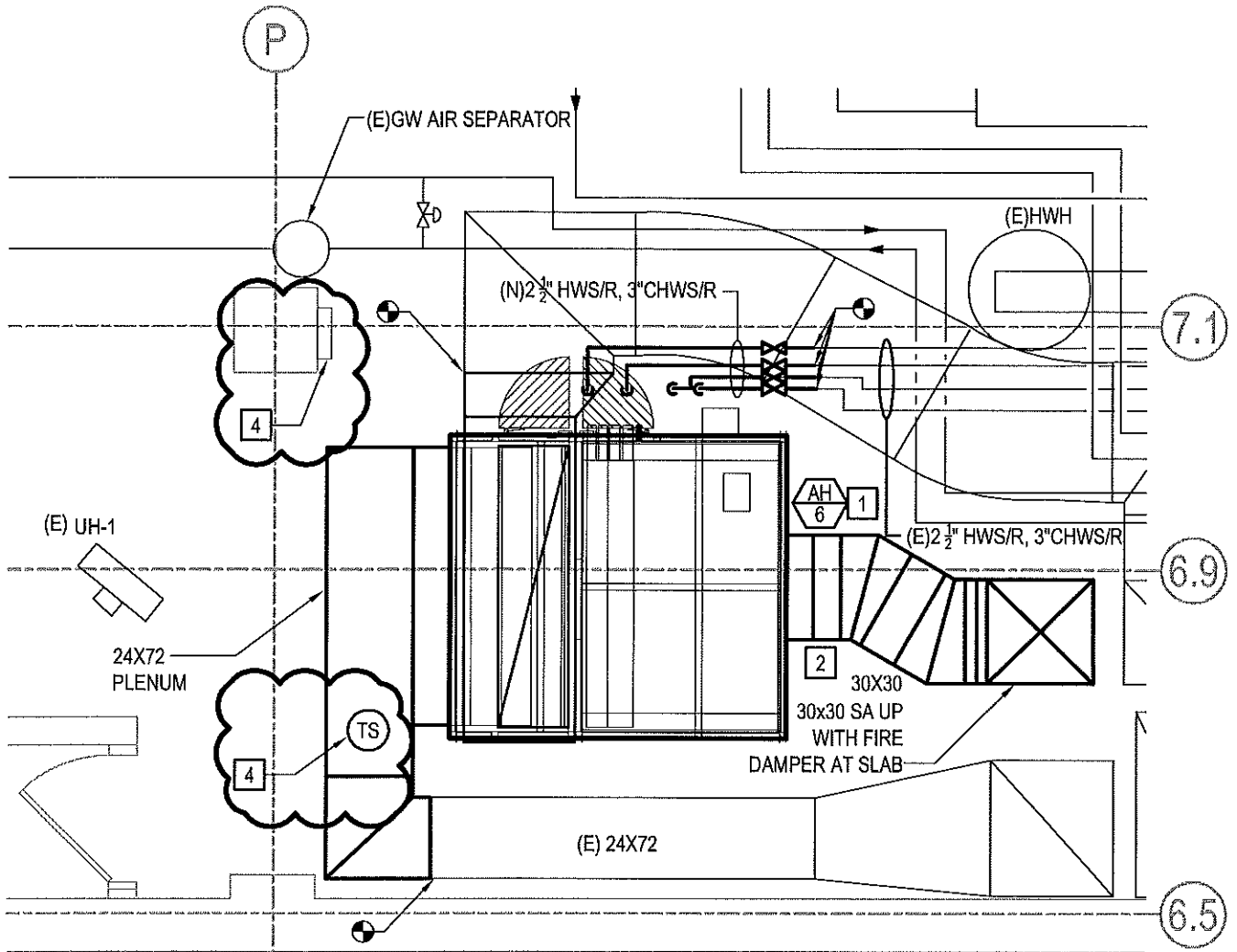
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SCHOOL
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PROJECT TITLE
HVAC RENOVATIONS - PART B
DRAWING TITLE
MECHANICAL COVER SHEET



KEY NOTES

- 1 INSTALL NEW AHU, PIPING, ACCESSORIES, AND CONTROLS TO ACCOMMODATE NEW WORK. MODIFY DUCTWORK AS REQUIRED TO CONNECT TO EXISTING. REUSE EXISTING HOUSEKEEPING PAD FOR NEW UNIT.
- 2 INSTALL NEW DUCTWORK. PROVIDE EXTERNAL INSULATION PER SPECIFICATIONS.
- 3 INSTALL NEW CONTROL VALVES V-1 THROUGH V-4. MATCH EXISTING SIZE.
- 4 PROVIDE NEW TEMPERATURE SENSOR & CONTROL PANEL FOR THE AHU PER MANUFACTURER.

M-2001

DRAWING NO.

SPEC NO.

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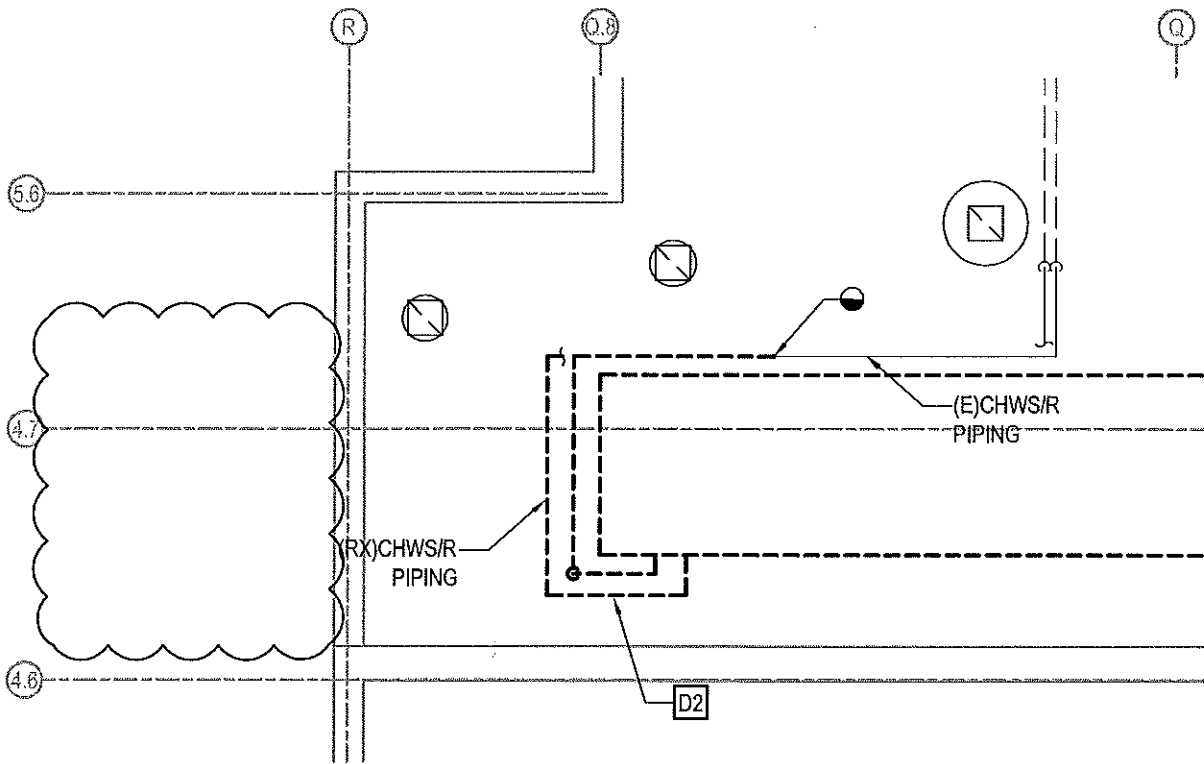
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SCHOOL
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PROJECT TITLE
HVAC RENOVATIONS - PART B

DRAWING TITLE
MECHANICAL BASEMENT NEW WORK PLAN

DEMOLITION KEY NOTES

- D1** REMOVE EXISTING CHILLER ON ROOF, PIPING, AND ACCESSORIES TO ACCOMMODATE NEW WORK. EXISTING PIPING ON THE ROOF TO REMAIN FOR NEW CONNECTION.
- D2** REMOVE ROOF MOUNTED PIPING AS SHOWN TO ACCOMMODATE NEW WORK.



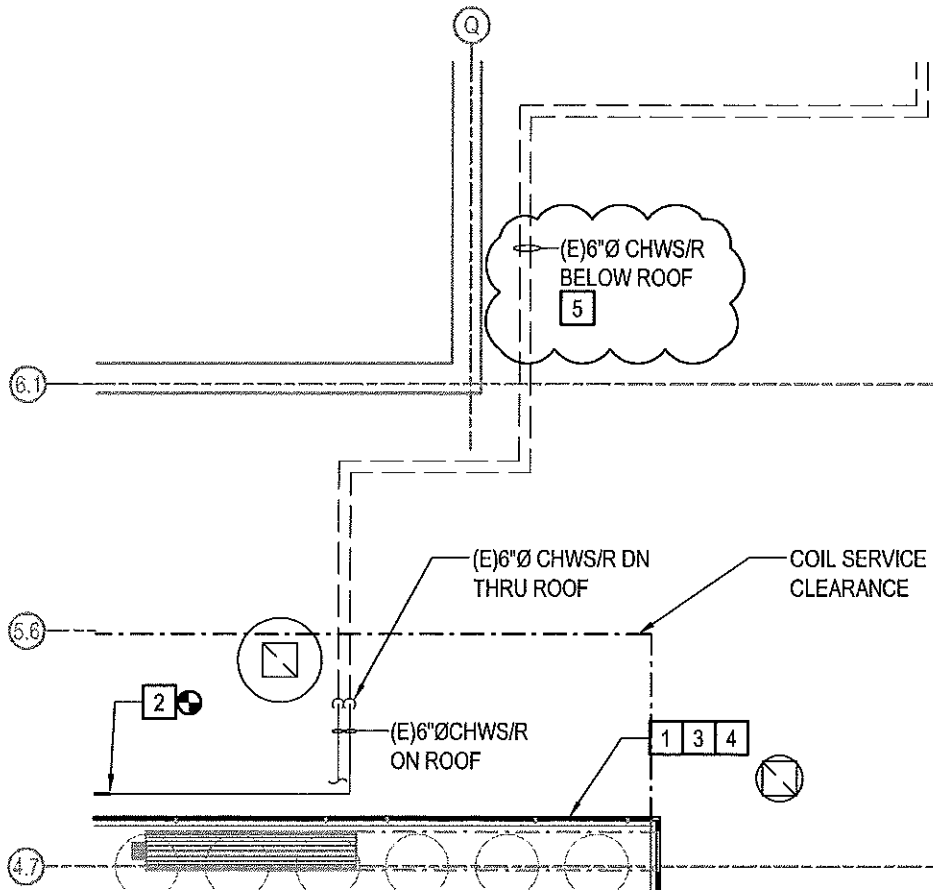
1 ROOF MECHANICAL DEMOLITION PLAN

1/8"=1'-0"

M-204.1	DRAWING NO.	SPEC NO.	SCHOOL DISTRICT OF PHILADELPHIA THE SCHOOL REFORM COMMISSION DEPARTMENT OF DESIGN AND CONSTRUCTION SERVICES 440 NORTH BROAD STREET PHILADELPHIA, PA 19130-4015 215.400.4730 FAX 215.400.4731 www.phila.k12.pa.us	SCHOOL MARIN ELEMENTARY SCHOOL PROJECT TITLE HVAC RENOVATIONS - PART A DRAWING TITLE PARTIAL ROOF MECH. DEMO + NEW PLANS
		SCALE 1/8"=1'-0"		
		DATE 02/15/18		

NEW WORK KEY NOTES

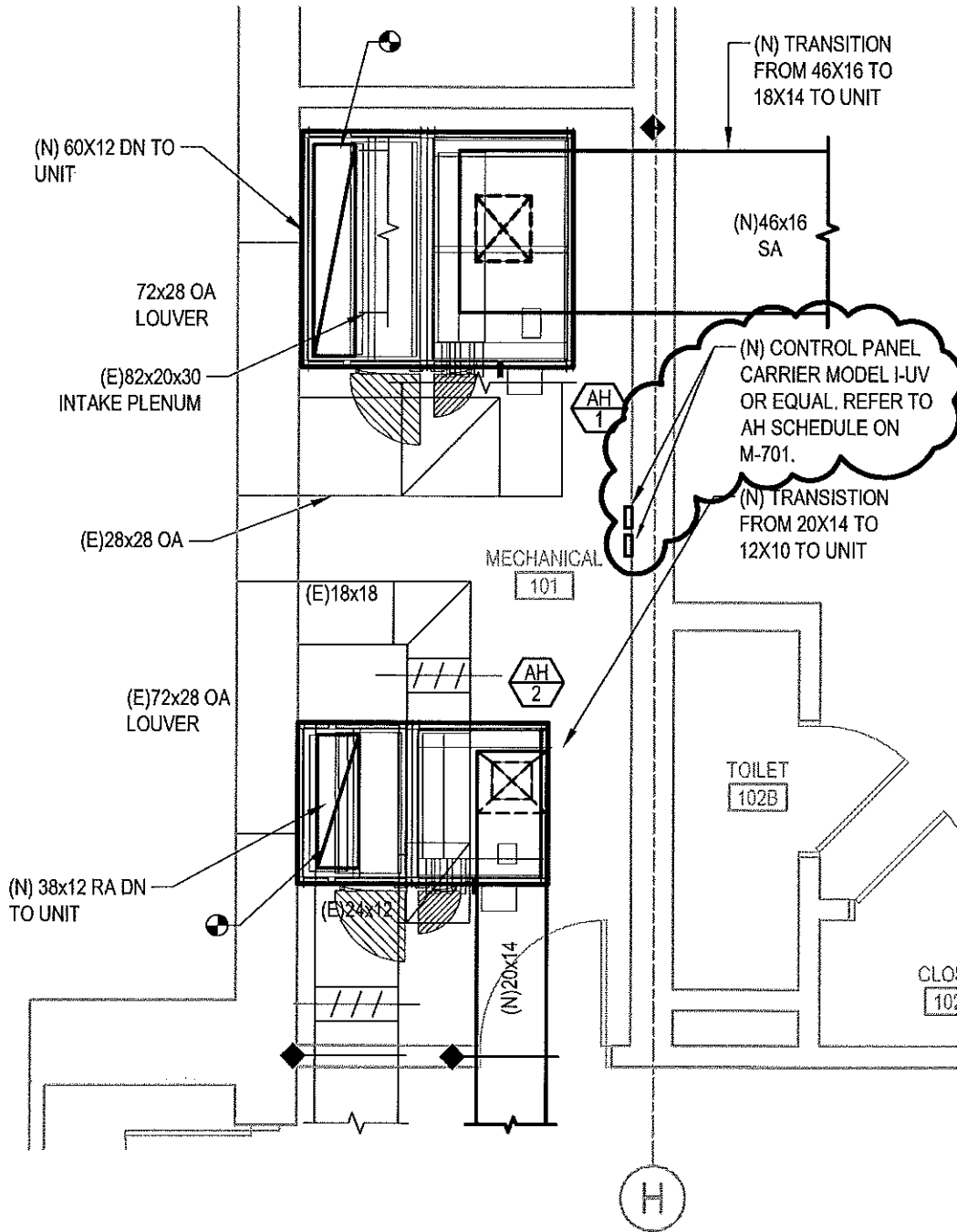
- 1 INSTALL NEW CHILLER, PIPING, AND ACCESSORIES ON EXISTING DUNNAGE. NEW PIPING TO BE SUPPORTED BY EXISTING PIPING SUPPORT SYSTEM ON ROOF.
- 2 CONNECT TO NEW 6"Ø CHWS/R PIPING TO EXISTING 6"Ø CHWS/R PIPING ABOVE ROOF AS SHOWN. SCRAPE, PRIME, AND PAINT ALL PIPING PRIOR TO INSULATION. PROVIDE NEW WEATHERPROOF JACKETING FOR ALL PIPING ABOVE ROOF.
- 3 EXISTING DUNNAGE SHALL BE CLEANED AND REFURBISHED USING LIMITED WIRE BRUSHING ON RUSTED AREA & RUST INHIBITING PRIMER. TOTAL OF 6 SF OF SURFACE AREA TO BE TREATED WHERE RUST IS PRESENT.
- 4 UNIT SHALL BE INSTALLED LEVEL WITHIN FACTORY TOLERANCES.
- 5 PROVIDE NEW PIPING INSULATION FOR EXISTING CHILLER PIPING FROM MECHANICAL ROOM TO CHILLER CONNECTION ON ROOF.



2 ROOF MECHANICAL NEW WORK PLAN

1/8"=1'-0"

M-204.2	DRAWING NO.	SPEC NO.	SCHOOL DISTRICT OF PHILADELPHIA THE SCHOOL REFORM COMMISSION DEPARTMENT OF DESIGN AND CONSTRUCTION SERVICES 440 NORTH BROAD STREET PHILADELPHIA, PA 19130-4015 215.400.4730 FAX 215.400.4731 www.phila.k12.pa.us	SCHOOL MARIN ELEMENTARY SCHOOL
	SCALE 1/8"=1'-0"	DATE 02/15/18		PROJECT TITLE HVAC RENOVATIONS - PART A
				DRAWING TITLE PARTIAL ROOF MECH. DEMO + NEW PLANS



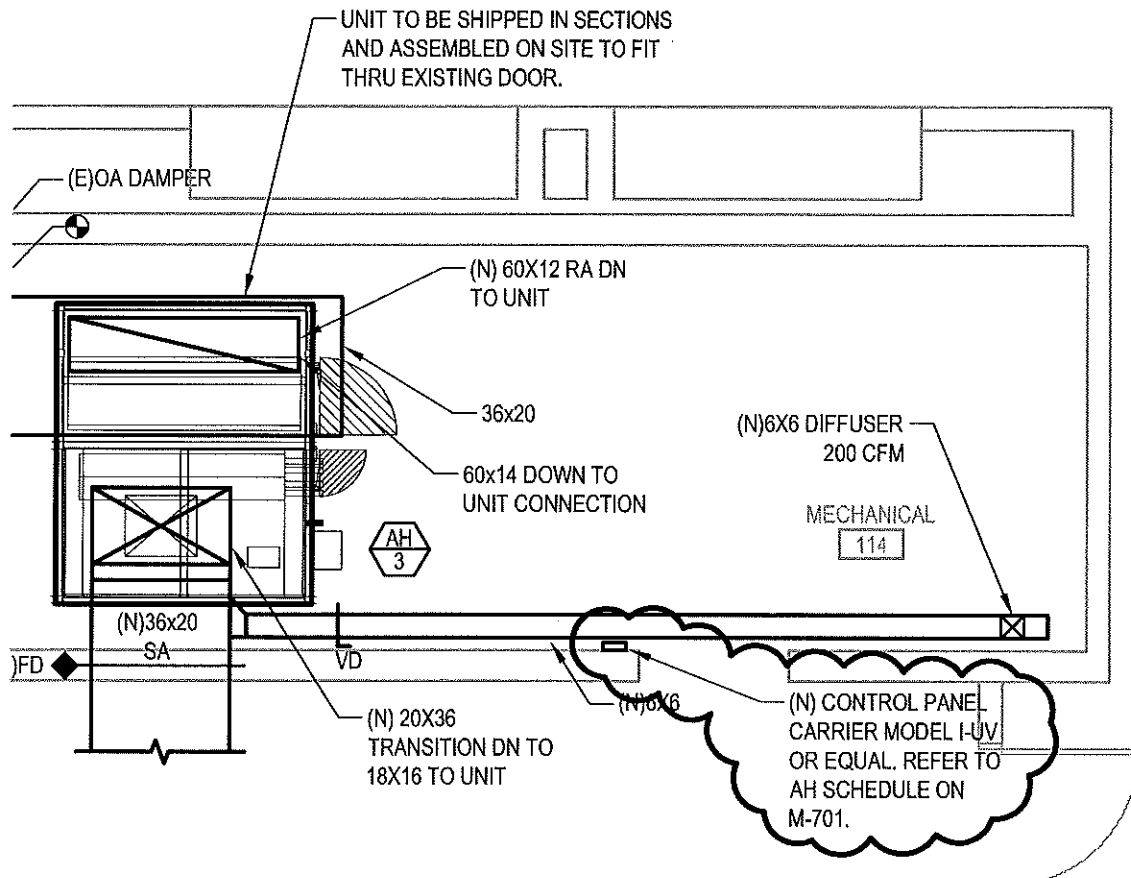
1 MECHANICAL ROOM 101

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DRAWING NO.	SPEC NO.
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	M-4011

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DRAWING TITLE ENLARGED MECHANICAL NEW WORK PLANS



2 MECHANICAL ROOM 114

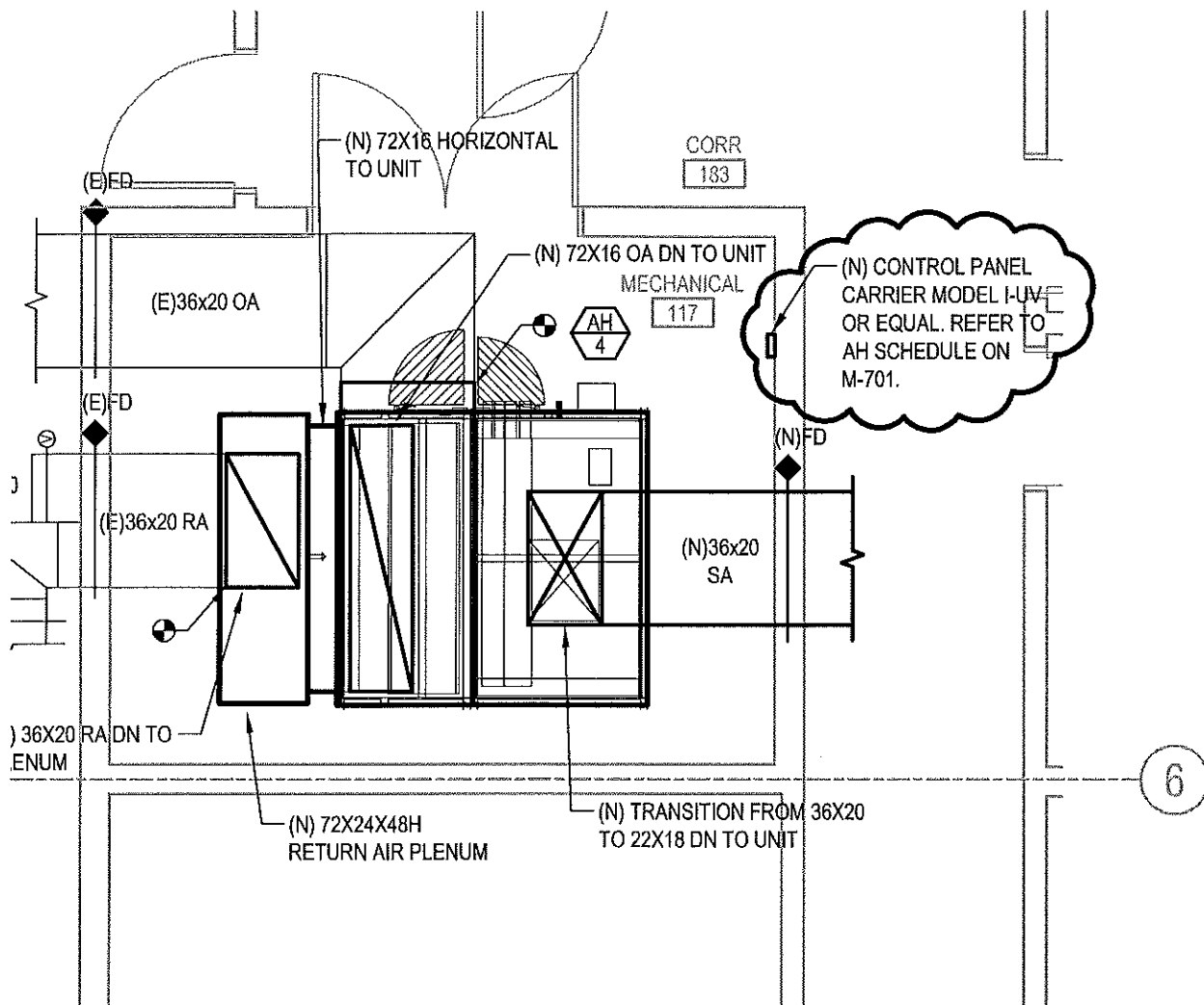
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M-4012
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HVAC RENOVATIONS - PART B
DRAWING TITLE
ENLARGED MECHANICAL NEW WORK PLANS



3

MECHANICAL ROOM 117

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

M-401.3

DRAWING NO.

SPEC NO.

SCALE
1/4"=1'-0"

DATE
02/15/18

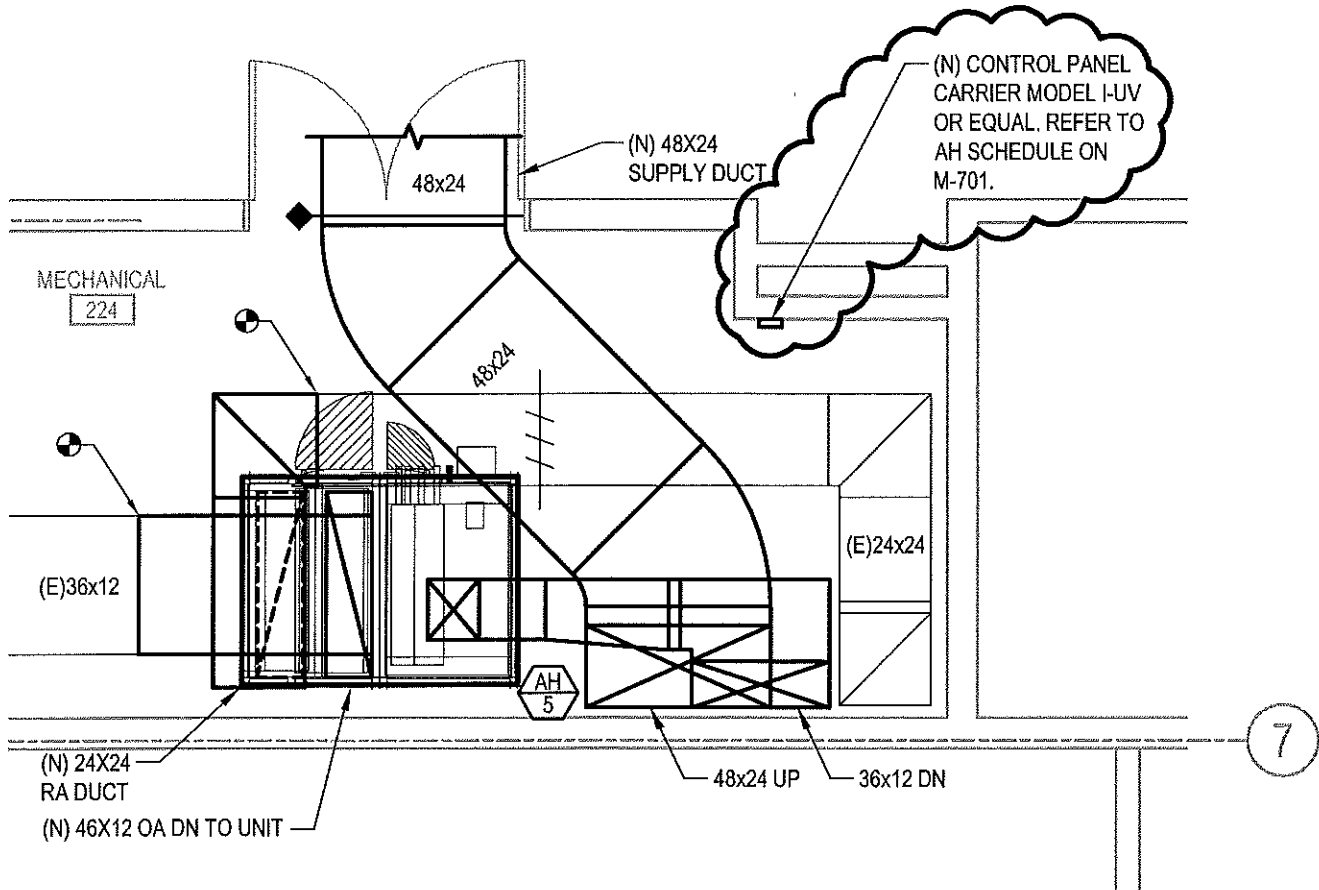
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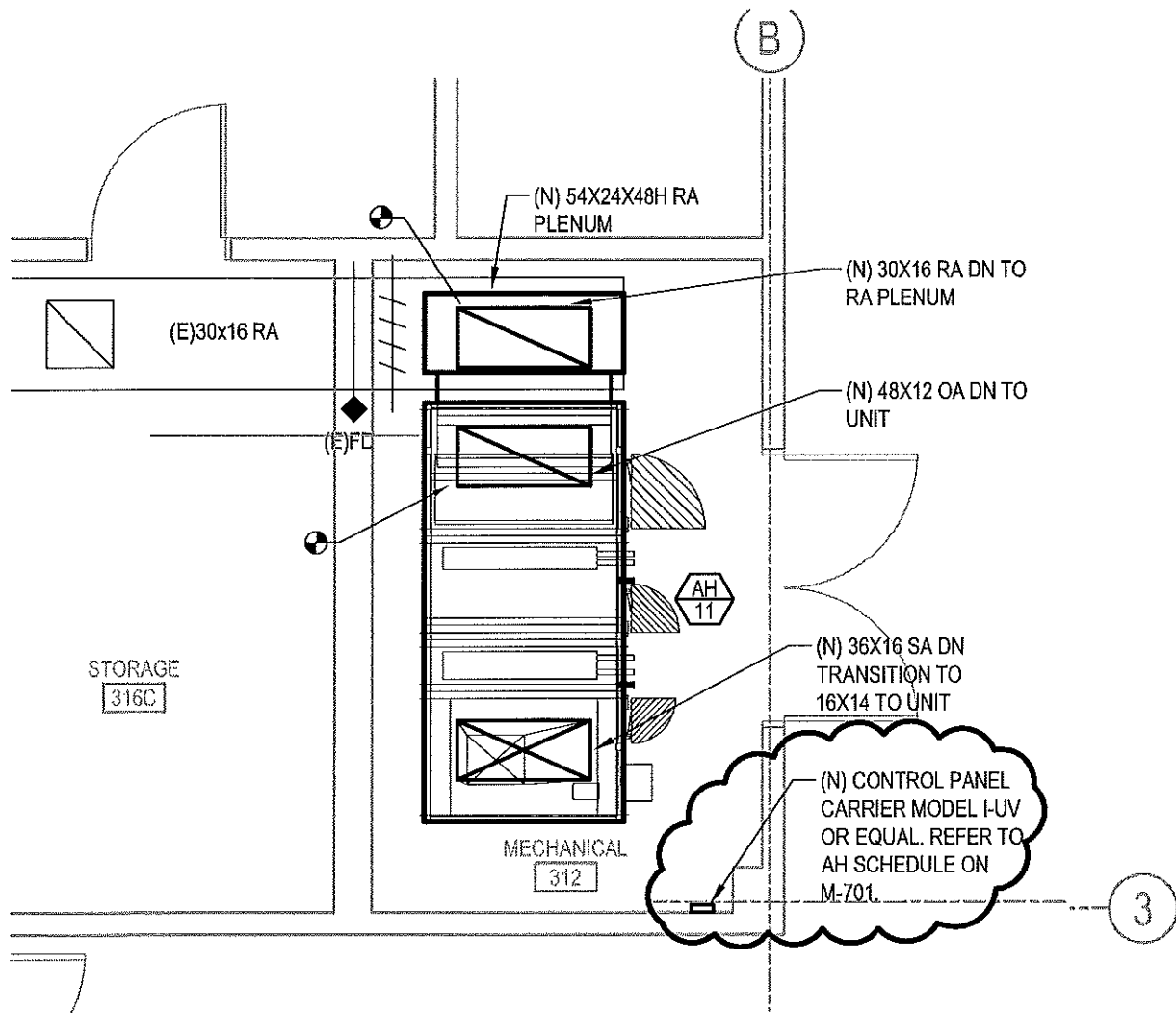
4 MECHANICAL ROOM 224
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M-401.4
DRAWING NO.

SPEC NO.
SCALE
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HVAC RENOVATIONS - PART B
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ENLARGED MECHANICAL NEW WORK PLANS



MECHANICAL ROOM 312

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

M-401.5

DRAWING NO.

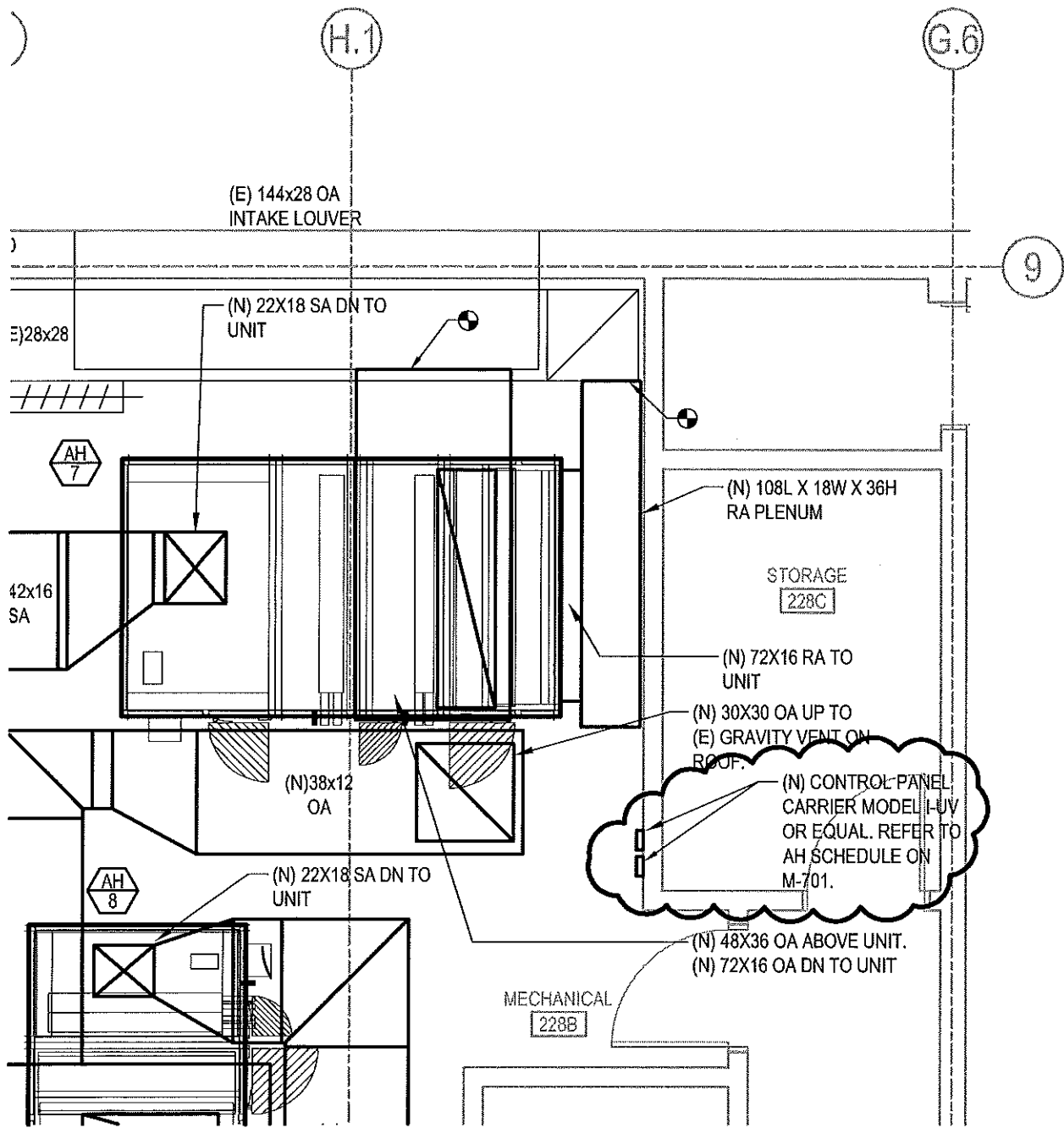
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HVAC RENOVATIONS - PART B
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ENLARGED MECHANICAL NEW WORK PLANS



MECHANICAL ROOM 228B

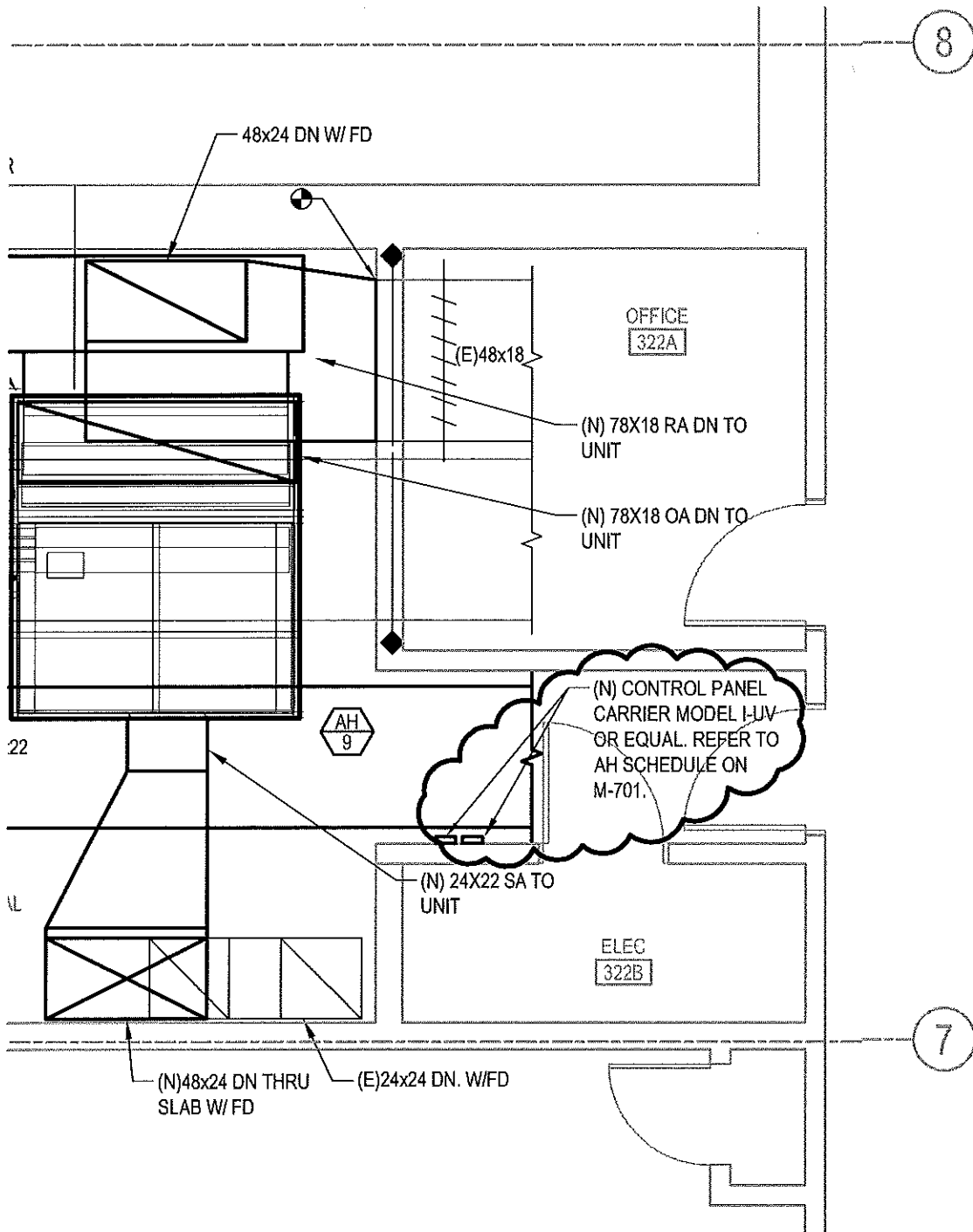
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DRAWING NO.
M-4016

SPEC NO.
SCALE
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 PROJECT TITLE
HVAC RENOVATIONS - PART B
 DRAWING TITLE
ENLARGED MECHANICAL NEW WORK PLANS



7

MECHANICAL ROOM 322

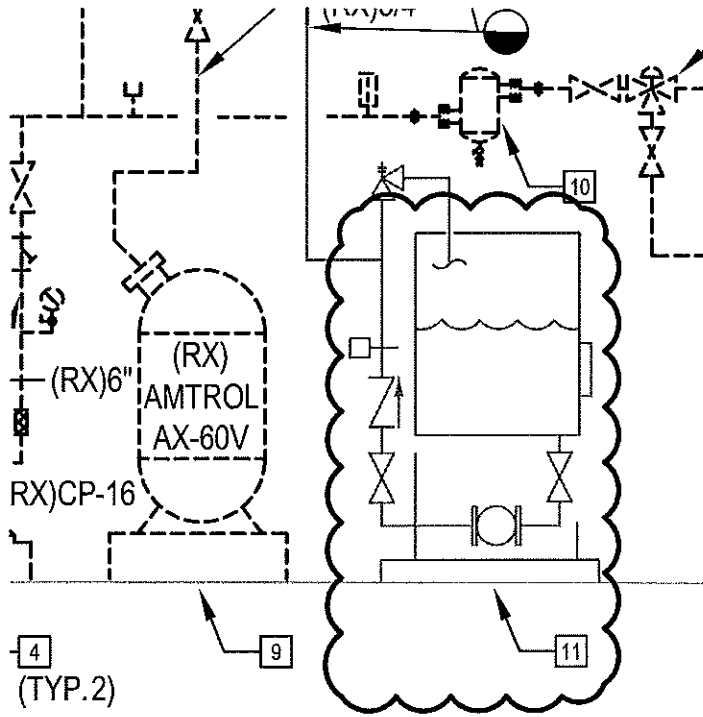
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M-4017
DRAWING NO.

SPEC NO.
SCALE
1/4"=1'-0"
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HVAC RENOVATIONS - PART B
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ENLARGED MECHANICAL NEW WORK PLANS



KEY NOTES

- 8 REMOVE EXISTING CHEMICAL FEED TANK, ASSOCIATED PIPING, AND ACCESSORIES TO ACCOMMODATE NEW WORK, REFER TO NEW WORK PLAN.
- 9 REMOVE EXISTING EXPANSION TANK, ASSOCIATED PIPING, AND ACCESSORIES TO ACCOMMODATE NEW WORK, REFER TO NEW WORK PLAN.
- 10 REMOVE EXISTING AIR SEPARATOR, ASSOCIATED PIPING, AND ACCESSORIES TO ACCOMMODATE NEW WORK, REFER TO NEW WORK PLAN.
- 11 DRAIN EXISTING ETHYLENE GLYCOL FROM THE CHILLED WATER SYSTEM AND DISPOSE OF ACCORDING TO CITY AND COUNTY REGULATIONS. DO NOT USE STORM OR SEWER SYSTEM TO DRAIN THE SYSTEM. DRAIN AND FLUSH THE ENTIRE SYSTEM PRIOR TO REFILLING. REFER TO M-602 FOR NEW WORK.

M-601.1

DRAWING NO.

SPEC NO.

SCALE
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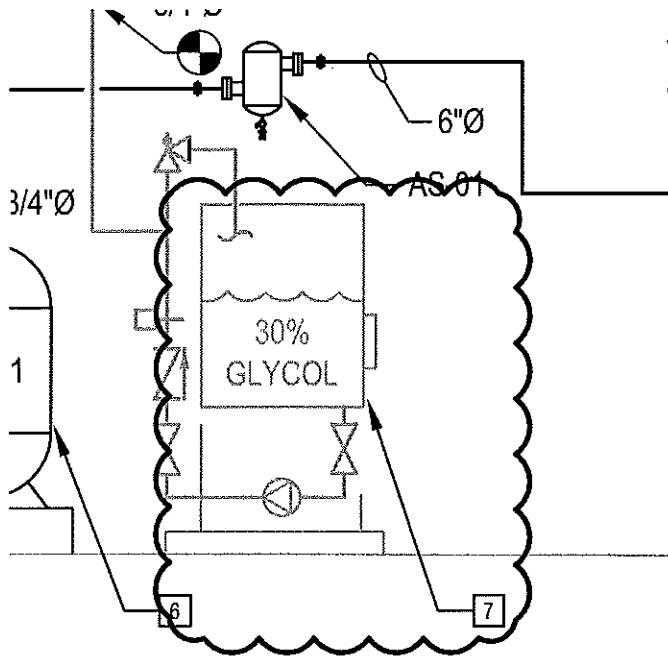
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SCHOOL
MARIN ELEMENTARY SCHOOL

PROJECT TITLE
HVAC RENOVATIONS - PART A

DRAWING TITLE
MECH. PIPING RISER DIAGRAM - DEMOLITION



KEY NOTES

- 1 INSTALL NEW CHILLER ON ROOF. UTILIZE EXISTING STEEL DUNNAGE TO INSTALL NEW CHILLER. REFER TO STRUCTURAL DRAWING FOR DETAILS. INSTALL ALL PIPING AND ACCESSORIES AND CONNECT TO EXISTING 6"Ø SUPPLY AND RETURN ABOVE ROOF.
- 2 INSTALL NEW PUMPS AS SHOWN, ALL PIPING AND ACCESSORIES. MODIFY EXISTING HOUSEKEEPING PADS TO SUPPORT NEW UNITS. CONNECT 2 WALL MOUNTED VFD'S TO CHILLER CONTROLLER FOR SEQUENCING & CONTROL.
- 3 PROVIDE NEW CHEMICAL FEED TANK.
- 4 PROVIDE 3" BY-PASS LINE & VALVE. CONNECT TO CHILLER CONTROLLER.
- 5 PROVIDE 10' OF PIPING TO CONNECT TO EXISTING SYSTEM.
- 6 INSTALL NEW ET-01 AS SHOWN ON EXISTING HOUSEKEEPING PAD.
- 7 REFILL THE ENTIRE SYSTEM WITH PROPYLENE GLYCOL AT 30% VOLUME.

M-602.1a

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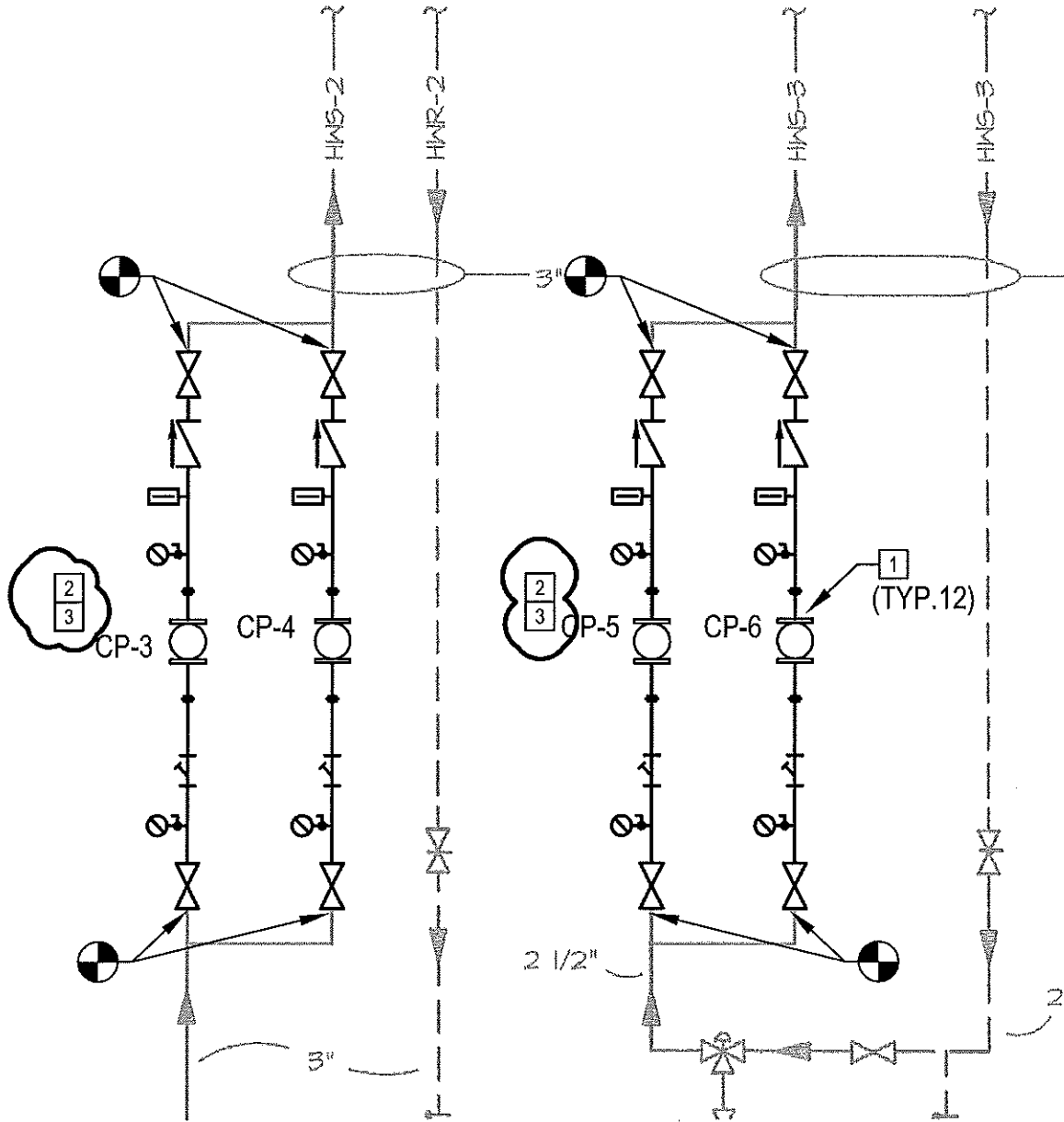
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PROJECT TITLE
HVAC RENOVATIONS - PART A

DRAWING TITLE
MECH. PIPING RISER DIAGRAM - NEW WORK

UNIT HEATERS

RADIATORS
CONVECTORS



M-602.1b

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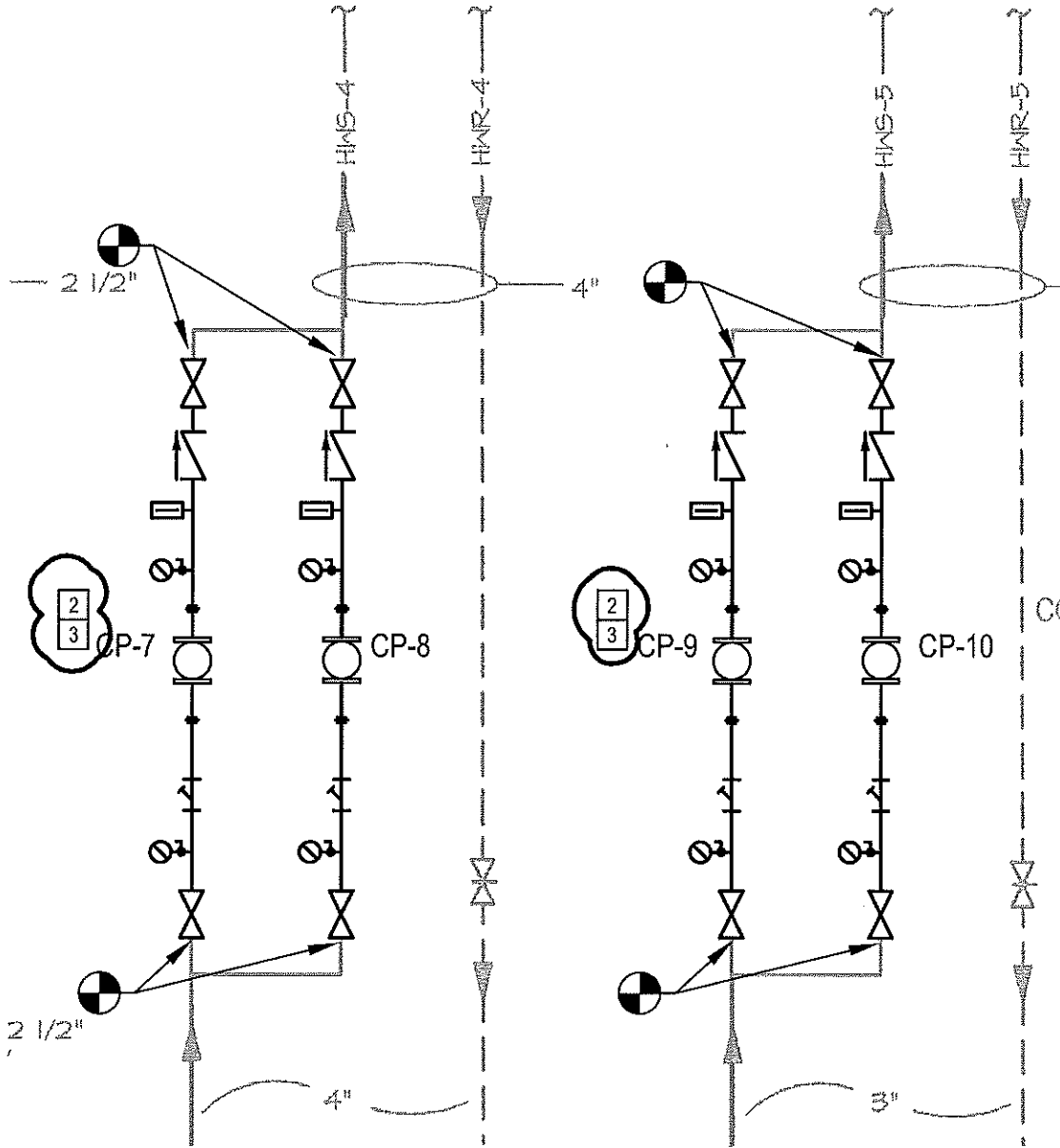
DRAWING TITLE
MECH. PIPING RISER DIAGRAM - NEW WORK

AIR HANDLERS - NORTH

AH-1 AH-2 AH-3
 AH-4 AH-5 AH-9
 AH-10 AH-11

AIR HANDLERS - SC

AH-6 AH-7
 AH-8
 HV-1 HV-2



M-602.2
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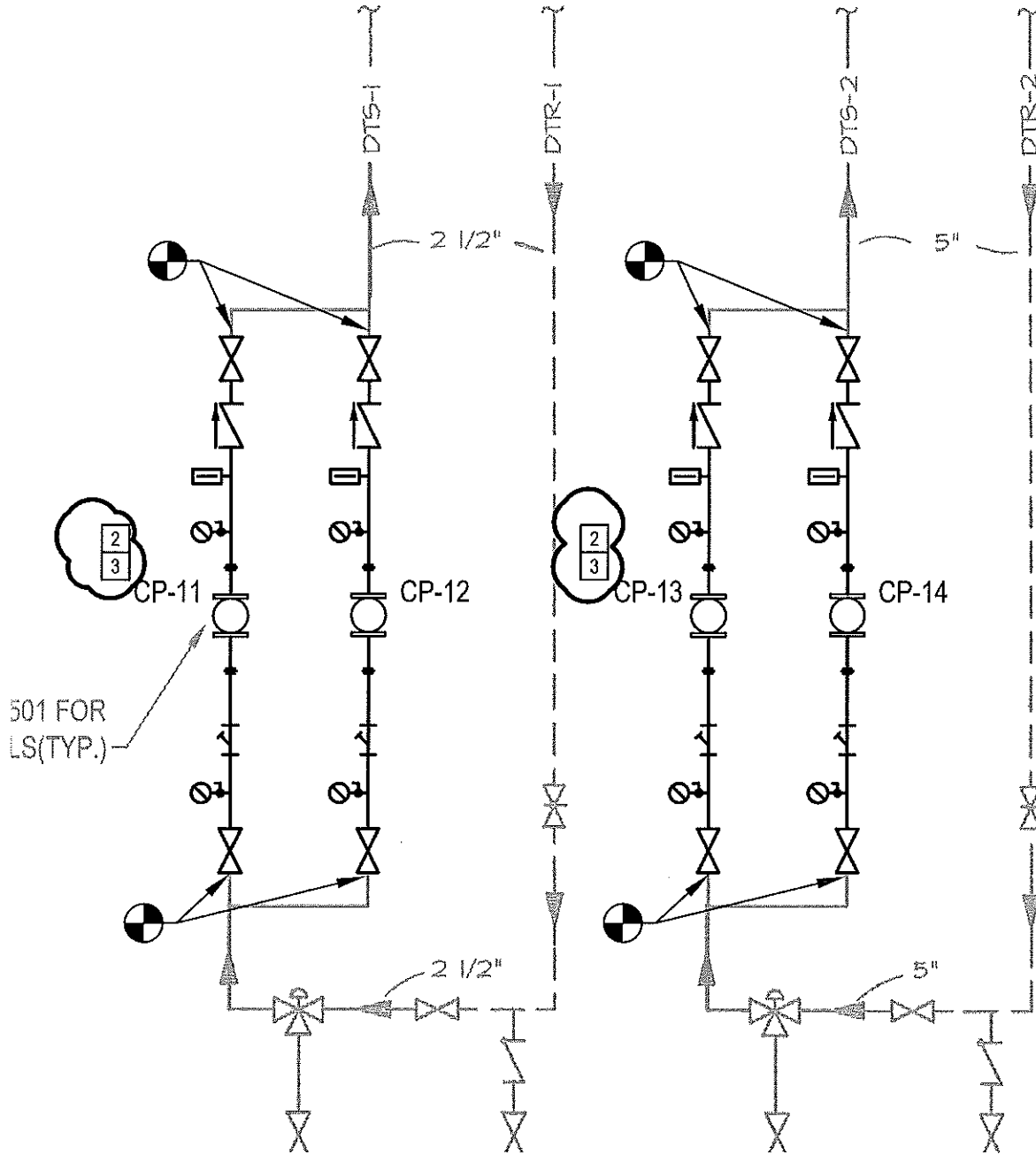
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SCHOOL
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 PROJECT TITLE
HVAC RENOVATIONS - PART B
 DRAWING TITLE
MECH. PIPING RISER DIAGRAM - NEW WORK

FAN COIL AND
UNIT VENTILATORS
FOR ADMINISTRATION
FACULTY AND STAFF

UNIT VENTILATORS
FOR CLASSROOMS
AND ACADEMIC AREAS



M-602.3

DRAWING NO.

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PROJECT TITLE
HVAC RENOVATIONS - PART B

DRAWING TITLE
MECH. PIPING RISER DIAGRAM - NEW WORK

KEY NOTES

- 1 INSTALL NEW PUMPS AS SHOWN, ALL PIPING AND ACCESSORIES. REUSE EXISTING HOUSEKEEPING PADS TO SUPPORT NEW UNITS.
- 2 REMOVE EXISTING CONTROL VALVES V1, V2, V3, V4 & REPLACE WITH NEW MANUAL WHEEL VALVES & CHAIN OPERATORS.
- 3 REMOVE EXISTING 3-WAY CONTROL VALVE V9 AND REPLACE WITH 2 NEW 2-WAY MANUAL WHEEL VALVES & CHAIN OPERATORS.

M-602.4

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SCHOOL
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PROJECT TITLE
HVAC RENOVATIONS - PART B

DRAWING TITLE
MECH. PIPING RISER DIAGRAM - NEW WORK

AIR COOLED CHILLER SCHEDULE

DENSER FANS	AMBIENT TEMP. (°F)	VOLTS	Ø	HZ	MCA	MOCP	SOUND POWER LEVEL S (dBS)										OVERALL A-WEIGHTED	PROPYLENE GLYCOL %	DIMENSIONS	MANUFACTURER AND MODEL	RI
							OCTAVE BAND CENTER FREQUENCY (HZ)														
2	95	460	3	60	453.1	600	63	125	300	500	1000	2000	4000	8000	1750	30%	346L x 86" x 99" H	CARRIER MODEL: 30XV250	1.		

CONTROL, MINIMUM LOAD CONTROL, STAND ALONE CONTROL PANEL, COIL TRIM PANELS, NAVIGATOR DISPLAY, AND HIGH SCOR 68 K CURRENT RATING (460V).

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PROJECT TITLE
HVAC RENOVATIONS - PART A
DRAWING TITLE
MECHANICAL SCHEDULES

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DRAWING NO.
M-7011a

AIR HANDLING UNIT SCHEDULE

UNIT NO.	AREA SERVED	FAN DATA										CHILLED WATER COOL DATA												
		TOTAL CFM	MAN O.A. CFM	EXT STANG PRESSURE IN WG	TOTAL STANG PRESSURE IN WG	OUTLET VELOCITY FPM	FAN RPM	FACE VELOCITY FPM	AIR FRICTION IN WG	EXT. AIR TEMP. °F	W.B.	LOG. AIR TEMP. °F	W.B.	TOTAL SENS. HEAT RATIO	TOTAL LOAD MBH	MIN. ROOMS	FINS PER FT.	GRAM DRIP	PRESS. DROP	INT. WATER TEMP. °F	LOG. WATER TEMP. °F	FACE VELOCITY FPM	AIR FRICTION IN WG	EXT. AIR TEMP. °F
AH-1	KINDERGARTEN - WEST	800	1200	1.0	2.2	800	1180	475	0.70	61	67	55	54	0.74	223	6	85	37	3.3	42	51	475	0.2	80
AH-2	FAMILY CENTER	2800	200	1.25	2.40	1704	1470	339	0.43	79	68	55	54	0.76	71	6	144	12	0.7	42	54	338	0.1	80
AH-3	KINDERGARTEN - EAST	9000	1200	1.0	2.48	1890	1125	475	0.48	81	67	57	55	0.75	208	4	132	35	13.5	42	51	475	0.2	80
AH-4	ADMINISTRATION	7890	1150	1.25	2.72	1821	878	452	0.8	80	65	55	54	0.85	238	6	86	40	14.4	42	54	452	0.18	80
AH-5	LIFE SKILLS	9600	720	0.75	2.37	1705	1280	472	0.69	81	67	54	53	0.72	143	6	86	23.8	11.3	42	51	472	0.2	80
AH-6	CAFETERIA	11800	2825	2.0	3.58	1797	1053	483	0.87	82	68	56	55	0.71	443	6	98	72.5	3.2	42	54	483	0.2	80
AH-7	AUDITORIUM	9000	2000	1.5	3.08	1905	1035	473	0.74	81	68	53	53	0.88	385	6	132	73	3.3	42	51	473	0.19	80
AH-8	AUDITORIUM LOBBY / BRIDGE	4800	480	1.25	2.5	1702	1039	464	0.5	80	68	56	55	0.79	154	4	132	28	4.0	42	51	888	0.17	80
AH-9	SECOND FL. CLASSROOMS	11300	2290	1.25	2.82	1797	980	463	0.88	81	67	55	55	0.74	414	9	89	88	2.9	42	51	463	0.19	80
AH-10	THIRD FL. CLASSROOMS	9600	1800	1.25	2.78	1510	887	443	0.81	81	67	56	55	0.76	341	6	88	57	1.8	42	54	443	0.17	80
AH-11	INC. LIBRARY	3800	700	1.25	2.24	1241	879	458	0.88	81	67	56	55	0.78	122	6	88	20	2.0	42	51	458	0.18	80

- NOTES:
1. PROVIDE VENT & STAND ALONE CONTROL PANEL AS PART OF THE AH UNIT. LUV CONTROL PANEL & LUPR OR EQUAL. INSTALL CONTROL PANEL ON THE WALL NEXT TO THE UNIT. PANEL TO BE POWERED BY THE AH UNIT.
 2. PROVIDE UNIT WITH ANTI-MICROBIAL COATING.
 3. UNIT TO BE SINGLE POINT ELECTRICAL CONNECTION.
 4. HEATING AND COOLING COILS TO BE SIZED BASED ON 30% PROPYLENE GLYCOL CONCENTRATION.

SCHOOL
MARIN ELEMENTARY SCHOOL
 PROJECT TITLE
HVAC RENOVATIONS - PART B
 DRAWING TITLE
MECHANICAL SCHEDULES

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M-701.1b

M-701.2

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FAN COIL UNIT SCHEDULE

UNIT NO.	CFM		COOLING COIL DATA				HEATING COIL DATA				UNIT DIMENSIONS IN.			MANUFACTURER AND MODEL	REMARKS				
	O.A.	TOTAL	SENSIBLE MBH	TOTAL MBH	ENT. WATER TEMP. °F	LVG. WATER TEMP. °F	FLOW GPM	PRESS. DROP H2O	TOTAL MBH	ENT. WATER TEMP. °F	LVG. WATER TEMP. °F	FLOW GPM	PRESS. DROP H2O			NO. OF COILS	HEIGHT	WIDTH	LENGTH
FC-1	80	800	10.3	14.9	45	55	3.0	5.5	36	150	128	3.0	9.5	1	10.5	22	42	CARRIER 42CE	1, 3
FC-2	-	400	8.7	11.4	45	55	2.3	7.5	23	150	130	2.3	7.5	1	25	51	9.25	CARRIER 42CE	2, 3
FC-3	-	800	18.8	21.4	45	55	3.7	7.4	37	150	130	3.7	7.4	1	28	61	12.25	CARRIER 42CE	2, 3
FC-4	-	400	8.3	10.5	45	55	1.8	4.9	18	150	130	1.8	4.9	1	25	51	9.25	CARRIER 42CE	2, 3
FC-5	30	300	6.5	8.5	45	55	1.5	3.8	18	150	126	1.5	3.8	1	10.5	22	33	CARRIER 42CE	1, 3
FC-6	40	400	8.3	10.8	45	55	2.0	6.7	24	150	126	2.0	6.7	1	10.5	22	33	CARRIER 42CE	1, 3

NOTES:

1. AUX DRAIN PAN
2. 1" FALL TO SINK
3. HEATING & COOLING COILS TO BE SIZED BASED ON 30% PROPYLENE GLYCOL SOLUTION

M-7013

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 MECHANICAL SCHEDULES

UNIT VENTILATOR SCHEDULE

UNIT NO	CFM		COOLING COIL DATA				HEATING COIL DATA				ELECTRICAL DATA			UNIT DIMENSIONS IN			REMARKS						
	MIN. O.A.	TOTAL	SENSIBLE MBH	TOTAL MBH	ENT. WATER TEMP. °F	LVG. WATER TEMP. °F	FLOW GPM	PRESS. DROP H2O	TOTAL MBH	ENT. WATER TEMP. °F	LVG. WATER TEMP. °F	FLOW GPM	PRESS. DROP H2O	NO OF COILS	WPH/Hz	MCA		MCCP	HP	HEIGHT	WIDTH	LENGTH	MANUFACTURER AND MODEL
UV-1	150	1062	26.7	41.0	46	65	8	23.1	776	180	148	5	7.3	1	157/60	4.5	8.3	1.5	30	21.3	74	CARRIER 40DV F3	1, 2, 3, 4, 5
UV-2	112	780	19.3	28.9	45	65	6	10.0	583	180	156	5	5.7	1	150/50	4.5	8.3	1.5	30	21.9	62	CARRIER 40DV F2	1, 2, 3, 4, 5
UV-3	.	1000	23.8	36.1	45	65	7	2	789	150	130	7	2	1	157/60	4.5	8.3	1.5	30	22	76	CARRIER 40DV F2	1, 2, 3, 4, 5

NOTES:
 1. 2 PIPE UNIT.
 2. PROVIDE UNIT WITH NON-USE DISCONNECT SWITCH.
 3. PROVIDE UNIT WITH STAGE 1 ENCL. COILS.
 4. HEATING & COOLING COILS TO BE SIZED BASED ON 30% PROPYLENE GLYCOL CONCENTRATION.
 5. PROVIDE WITH ADAPTER BACKS

DEMOLITION NOTES

1. THE SCOPE OF DEMOLITION WORK HAS BEEN GENERALLY INDICATED FOR CONTRACTOR'S DEMOLITION.
2. THE CONTRACTOR SHALL COORDINATE DEMOLITION WORK WITH THE OWNER PRIOR TO STARTING WORK.
3. THE CONTRACTOR SHALL COORDINATE ALL POWER SHUTDOWNS WITH THE OWNER. THE CONTRACTOR SHALL GIVE A MINIMUM OF TWO WEEKS NOTICE FOR ANY POWER SHUTDOWN.
4. THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND DISCONNECTING OF ANY SECURITY DEVICES WITH THE OWNER PRIOR TO PROCEEDING.
5. THE EXISTING INFORMATION PROVIDED ON THESE PLANS IS BASED ON FIELD OBSERVATIONS AND/OR RECORD DRAWINGS AVAILABLE AT THE TIME OF DESIGN. THE INFORMATION SHOWN IS NOT NECESSARILY COMPLETE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS IN THE FIELD PRIOR TO BIDDING, THE ACCURACY OF THE DESIGN DOCUMENTS, AND IDENTIFY RESOLUTIONS TO ANY CONFLICTS PRIOR TO COMMENCING WORK.
6. UNLESS NOTED OTHERWISE, IN THE CONTRACT AREA, THE ELECTRICAL CONTRACTOR SHALL DISCONNECT AND REMOVE ALL EXISTING ELECTRICAL EQUIPMENT, LIGHTING FIXTURES, SWITCHES, RECEPTACLES, PANELS, CONDUIT, AND WIRING NOT REQUIRED FOR THE RENOVATED SYSTEM EVEN THOUGH THESE MAY NOT BE SPECIFICALLY SHOWN HEREIN.
7. THE LOCATIONS OF ALL PIPING, CONDUIT, ELECTRICAL DEVICES, LIGHT FIXTURES, RECEPTACLES, PANELBOARD, CONTROL PANEL, ETC ARE APPROXIMATE AND ARE SHOWN FOR INFORMATION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING EXISTING ITEMS.
8. IF ELECTRICAL PANELS SCHEDULED FOR REMOVAL FEED EQUIPMENT OUTSIDE OF THE PROJECT AREA, MAINTAIN SERVICE TO THE DEVICES VIA TEMPORARY METHODS.
9. ALL EQUIPMENT REQUIRED TO ENSURE PROPER OPERATION OF THE EXISTING SYSTEMS SHALL REMAIN OR BE REVISED AND RECONNECTED TO MAINTAIN THE EXISTING SERVICE.
10. REMOVE ALL WIRING FROM THE LOAD SIDE OF DISCONNECTS, STARTERS ETC. TO THE MOTOR OR EQUIPMENT THAT THEY SERVE.

11. REFER TO DRAWINGS E-200 AND E201 FOR NEW CONDUIT PATHWAY. CONTRACTOR SHALL PROVIDE TEMPORARY FIRE ALARM SERVICE TO ANY EXISTING FIRE ALARM DEVICE LOCATED IN THE PROPOSED CONDUIT PATHWAY.

TEMPORARY FIRE ALARM SERVICE SHALL BE REQUIRED UNDER THE FOLLOWING CONDITIONS:

- * FOR ALL EXISTING FIRE ALARM DEVICES THAT ARE WITHIN THE AREA(S) OF WORK THAT INVOLVE CEILING REMOVAL (SEE ARCHITECTURAL DWGS), THE ELECTRICAL CONTRACTOR SHALL DECOMMISSION THOSE SMOKE DETECTORS ON THE SIMPLEX 4020 SYSTEM - MAIN FIRE ALARM PANEL LOCATED ON THE FIRST FLOOR, MECHANICAL ROOM 114. WHILE SMOKE DETECTORS HAVE BEEN DISCONNECTED, CONTRACTOR TO ENSURE THAT WIRING CONTINUITY WILL REMAIN. NO EXCEPTIONS.
- * SMOKE DETECTORS TO BE PARTIALLY DISABLED. ONCE CEILING WORK HAS BEEN COMPLETED, CONTRACTOR TO CONNECT AND COMMISSION SMOKE DETECTORS. CONTRACTOR TO PERFORM AN ACCEPTANCE TEST AS DICTATED ON NFPA 72-14.4.2.

12. CONTRACTOR SHALL PROVIDE TEMPORARY HEAT DETECTORS THROUGHOUT THE PROJECT AREA IN ACCORDANCE WITH THE LOCAL FIRE CODE AND THE OWNER'S INTERIM LIFE SAFETY PLAN WHILE

E-002.1

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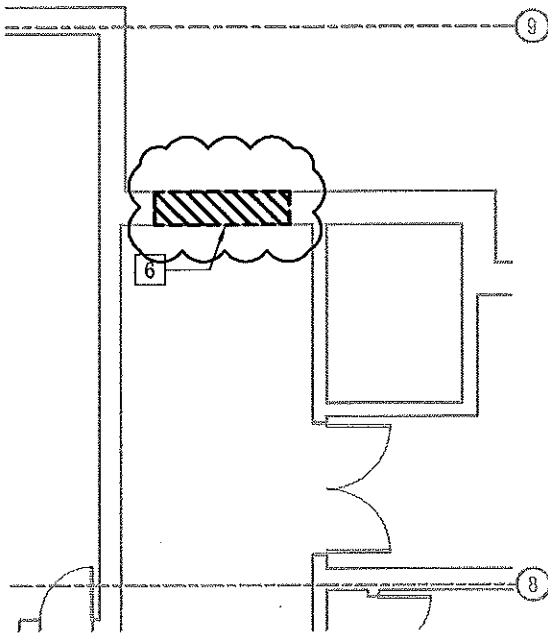
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SCHOOL
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PROJECT TITLE
HVAC RENOVATIONS - PART A

DRAWING TITLE
ELECTRICAL NOTES



1

SECOND FLOOR - ELECTRICAL PARTIAL DEMOLITION PLAN

1/8"=1'-0"

6 HATCH AREA IN CORRIDOR 2000 INDICATED TEMPORARILY REMOVE EXISTING WINDOW AND FRAME FOR MATERIAL/EQUIPMENT ACCESS. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT DIMENSIONS.

EXISTING LIGHTING, POWER AND FIRE ALARM CIRCUITS TO REMAIN.

THE ELECTRICAL WORK INCLUDED IN THE HATCH AREA CONSISTS OF THE FOLLOWING CONTRACTOR'S RESPONSIBILITIES AFTER REMOVAL OF THE EXISTING WALL AND WINDOW (REMOVAL OF WALL AND WINDOW BY OTHERS):

- * CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR FURNISHING ALL LABOR, SUPPLIES AND MATERIALS, CONDUIT AND WIRING, AND PERFORMING OF ALL WORK NECESSARY TO COMPLETE THE RE-INSTALLATION OF THE EXISTING FIRE ALARM, EMERGENCY, NORMAL AND LOW VOLTAGE POWER.
- * CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR LOCATING (AND SHALL LOCATE PRIOR TO PERFORMING ANY WORK) ALL FIRE ALARM LOW VOLTAGE AND POWER WIRING / CONDUIT LOCATED IN THE EXISTING WALL TO BE REMOVED.

E-102.1

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1/8"=1'-0"

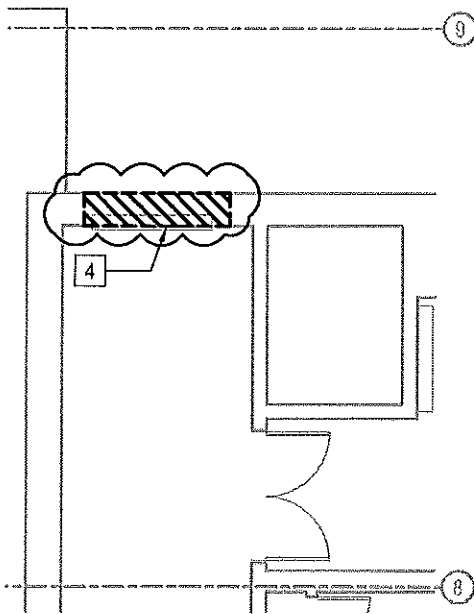
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PROJECT TITLE
HVAC RENOVATIONS - PART B

DRAWING TITLE
2ND FLR DEMOLITION POWER PLAN



4 HATCH AREA IN CORRIDOR 300D INDICATED, TEMPORARILY REMOVE EXISTING WINDOW AND FRAME FOR MATERIAL/EQUIPMENT ACCESS. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT DIMENSIONS.

EXISTING LIGHTING, POWER AND FIRE ALARM CIRCUITS TO REMAIN.

THE ELECTRICAL WORK INCLUDED IN THE HATCH AREA CONSISTS OF THE FOLLOWING CONTRACTOR'S RESPONSIBILITIES AFTER REMOVAL OF THE EXISTING WALL AND WINDOW (REMOVAL OF WALL AND WINDOW BY OTHERS):

- * CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR FURNISHING ALL LABOR, SUPPLIES AND MATERIALS, CONDUIT AND WIRING, AND PERFORMING OF ALL WORK NECESSARY TO COMPLETE THE RE-INSTALLATION OF THE EXISTING FIRE ALARM, EMERGENCY, NORMAL AND LOW VOLTAGE POWER.
- * CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR LOCATING (AND SHALL LOCATE PRIOR TO PERFORMING ANY WORK) ALL FIRE ALARM LOW VOLTAGE AND POWER WIRING / CONDUIT LOCATED IN THE EXISTING WALL TO BE REMOVED.

1 **THIRD FLOOR - ELECTRICAL PARTIAL DEMOLITION PLAN**
 1/8"=1'-0"

E-103.1
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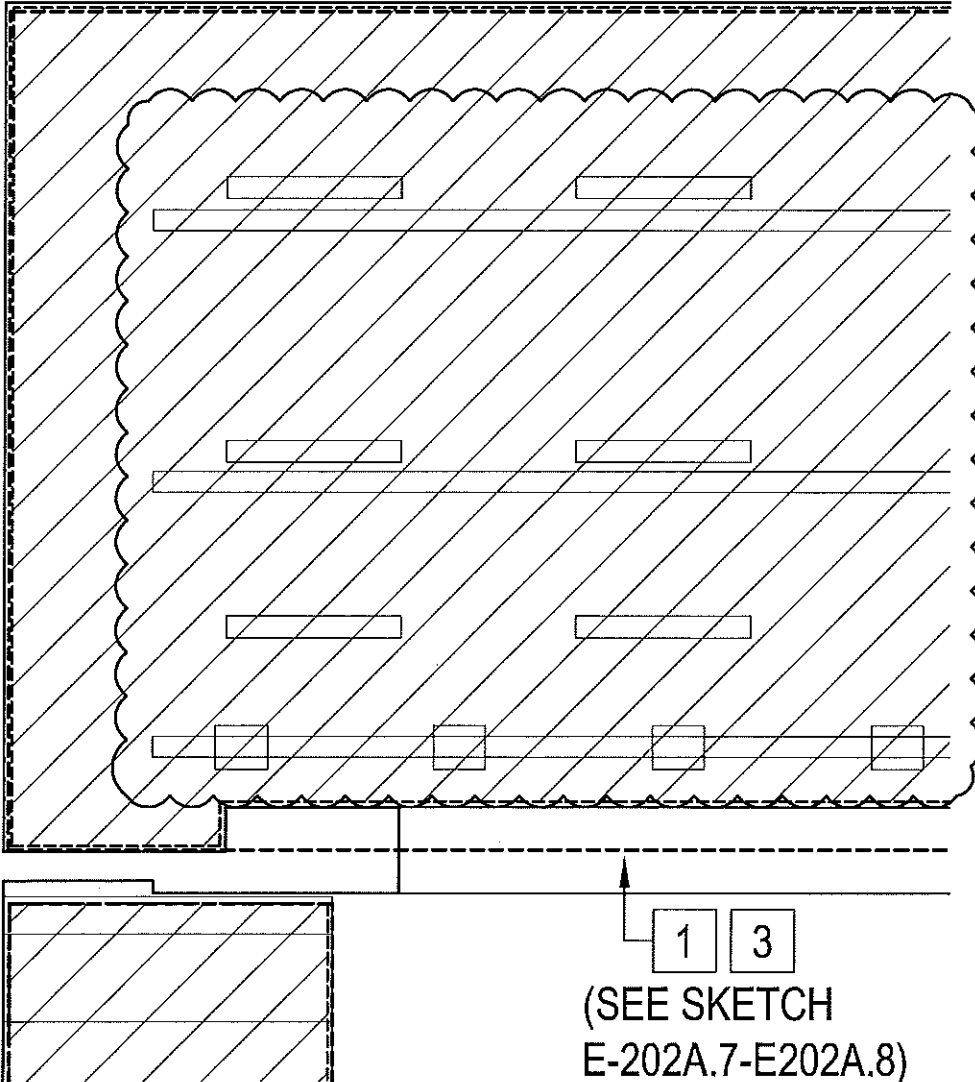
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 PROJECT TITLE
HVAC RENOVATIONS - PART B
 DRAWING TITLE
3RD FLR DEMOLITION POWER PLAN

K

9



1 3

(SEE SKETCH
E-202A.7-E202A.8)

SECOND FLOOR AREA A - ELECTRICAL NEW WORK PARTIAL LIGHTING PLAN

1

1/4"=1'-0"

E-202A.1
DRAWING NO.

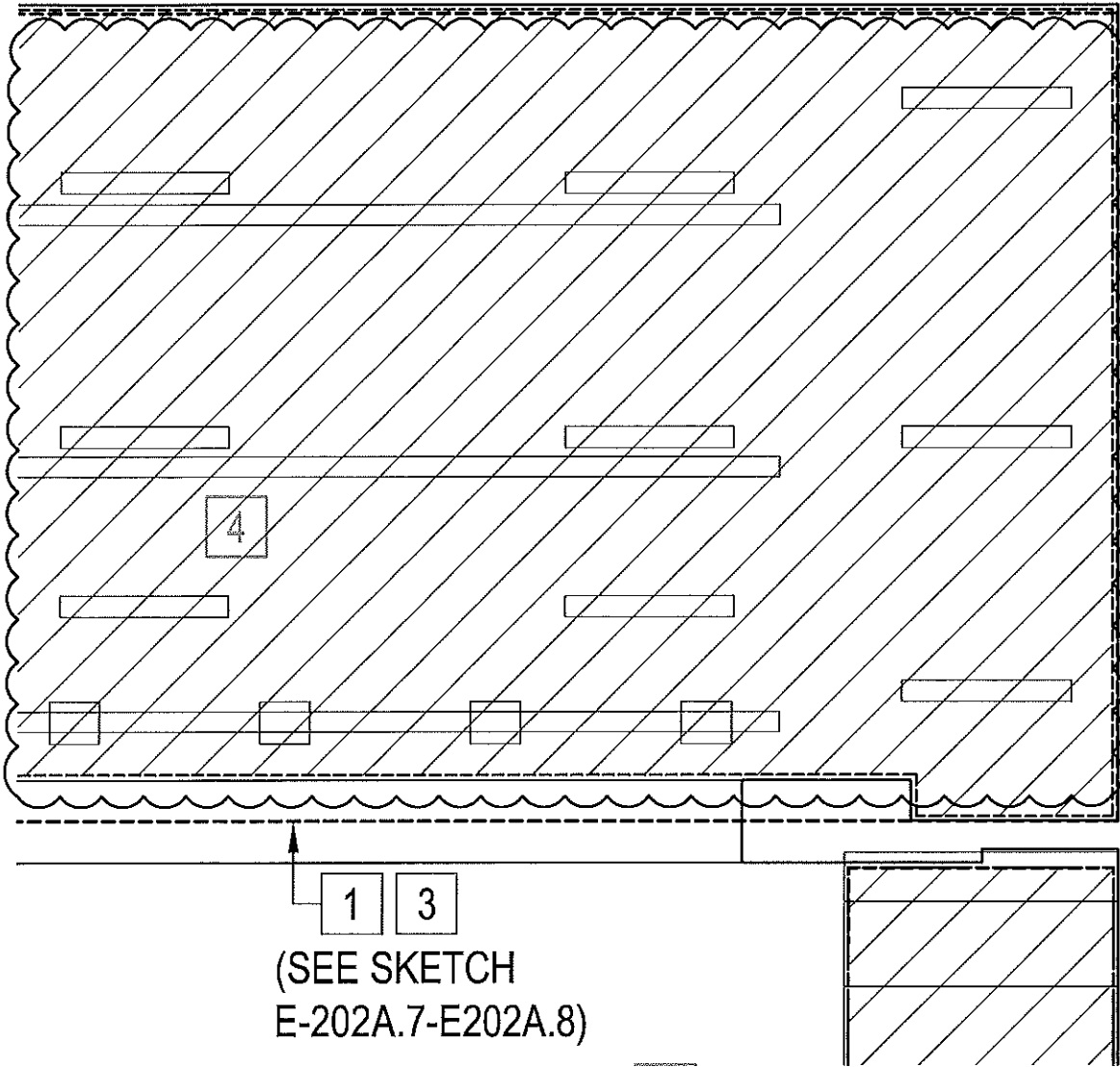
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HVAC RENOVATIONS - PART B
DRAWING TITLE
2ND FLR ELEC NEW WORK LIGHTING PLAN

J

9



(SEE SKETCH
E-202A.7-E202A.8)

SECOND FLOOR AREA A - ELECTRICAL NEW WORK PARTIAL LIGHTING PLAN

1

1/4"=1'-0"

E-202A.2

DRAWING NO.

SPEC NO.

SCALE
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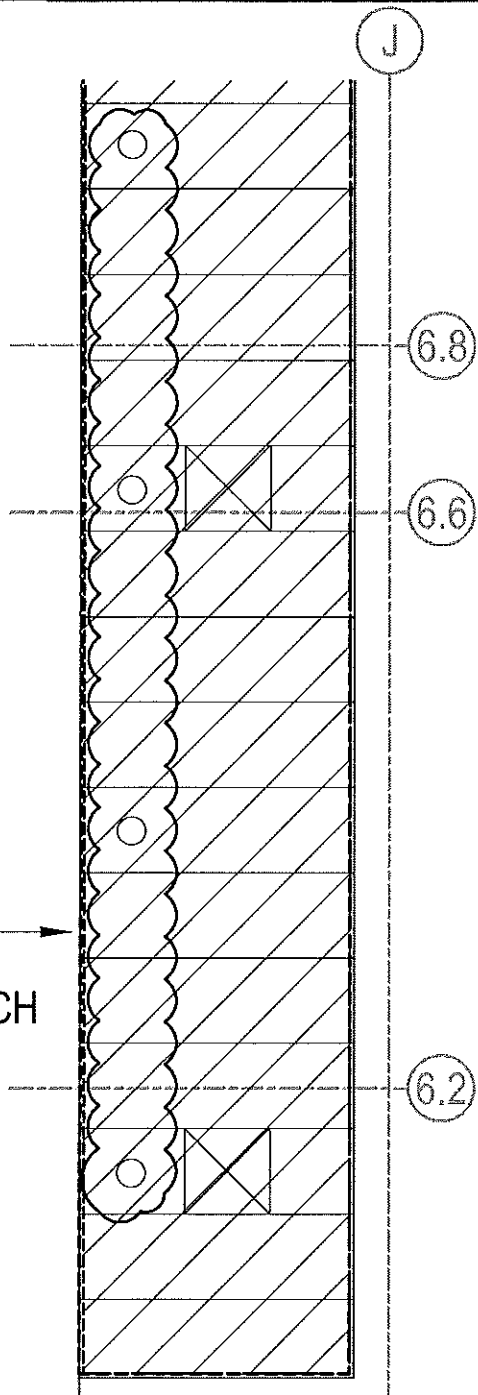
DATE
02/15/18

SCHOOL DISTRICT OF PHILADELPHIA
THE SCHOOL REFORM COMMISSION
 DEPARTMENT OF DESIGN AND CONSTRUCTION SERVICES
 440 NORTH BROAD STREET
 PHILADELPHIA, PA 19130-4015
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 www.phila.k12.pa.us

SCHOOL
MARIN ELEMENTARY SCHOOL

PROJECT TITLE
HVAC RENOVATIONS - PART B

DRAWING TITLE
2ND FLR ELEC NEW WORK LIGHTING PLAN

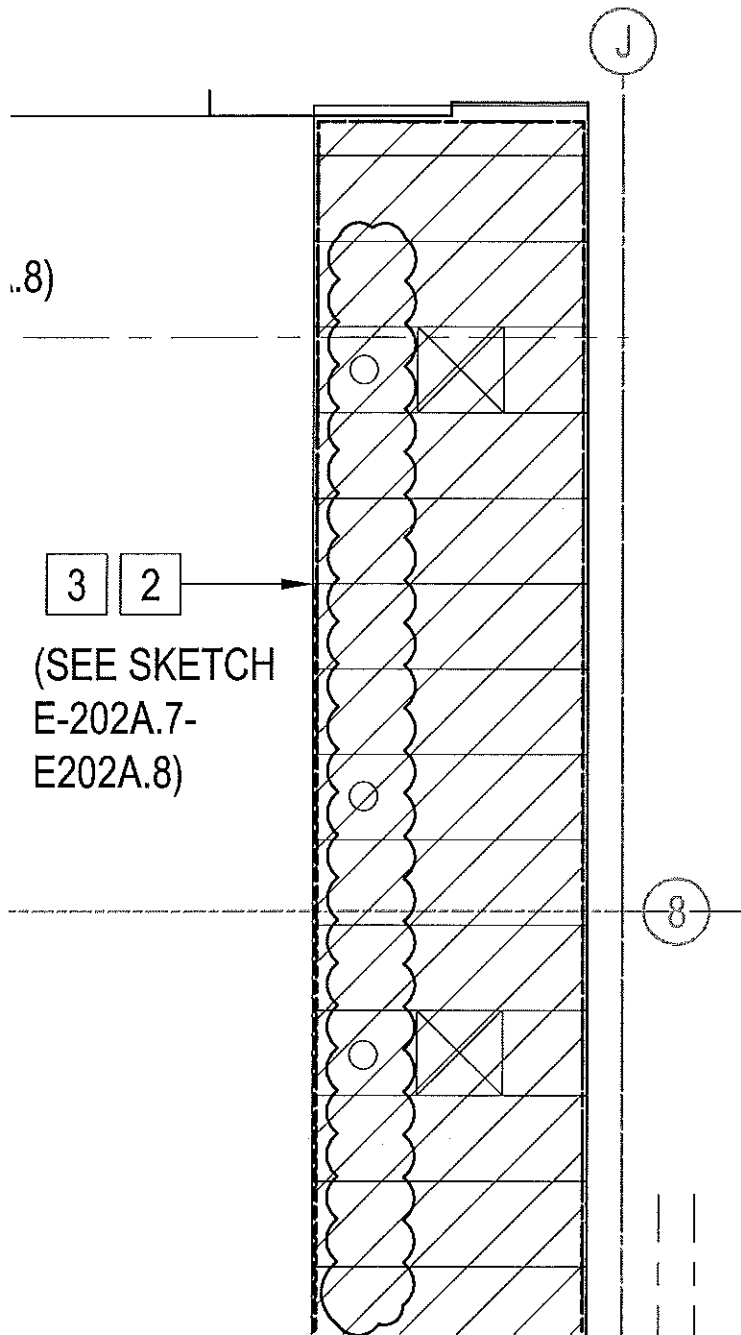


3 2
 (SEE SKETCH
 E-202A.7-
 E202A.8)

**SECOND FLOOR AREA A - ELECTRICAL
 NEW WORK PARTIAL LIGHTING PLAN**

1
 1/4"=1'-0"

E-202A.3 DRAWING NO.	SPEC NO.	SCHOOL DISTRICT OF PHILADELPHIA THE SCHOOL REFORM COMMISSION DEPARTMENT OF DESIGN AND CONSTRUCTION SERVICES 440 NORTH BROAD STREET PHILADELPHIA, PA 19130-4015 215.400.4730 FAX 215.400.4731 www.phlla.k12.pa.us	SCHOOL MARIN ELEMENTARY SCHOOL
	SCALE 1/4"=1'-0"		PROJECT TITLE HVAC RENOVATIONS - PART B
DATE 02/15/18			DRAWING TITLE 2ND FLR ELEC NEW WORK LIGHTING PLAN



**SECOND FLOOR AREA A - ELECTRICAL
NEW WORK PARTIAL LIGHTING PLAN**

1

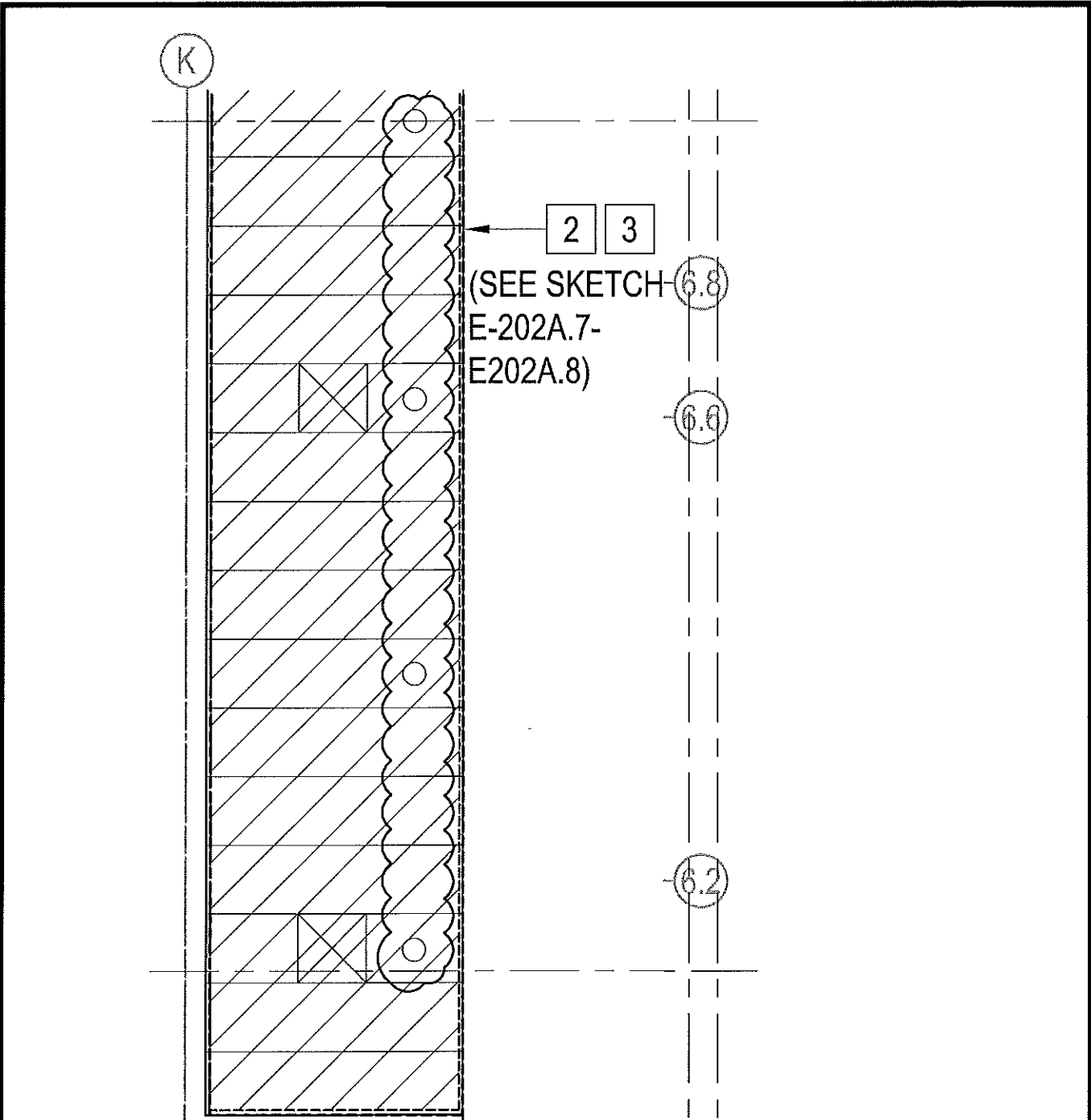
1/4"=1'-0"

E-202A.4
DRAWING NO.

SPEC NO.
SCALE
1/4"=1'-0"
DATE
02/15/18

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SCHOOL
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PROJECT TITLE
HVAC RENOVATIONS - PART B
DRAWING TITLE
2ND FLR ELEC NEW WORK LIGHTING PLAN



**SECOND FLOOR AREA A - ELECTRICAL
NEW WORK PARTIAL LIGHTING PLAN**

1

1/4"=1'-0"

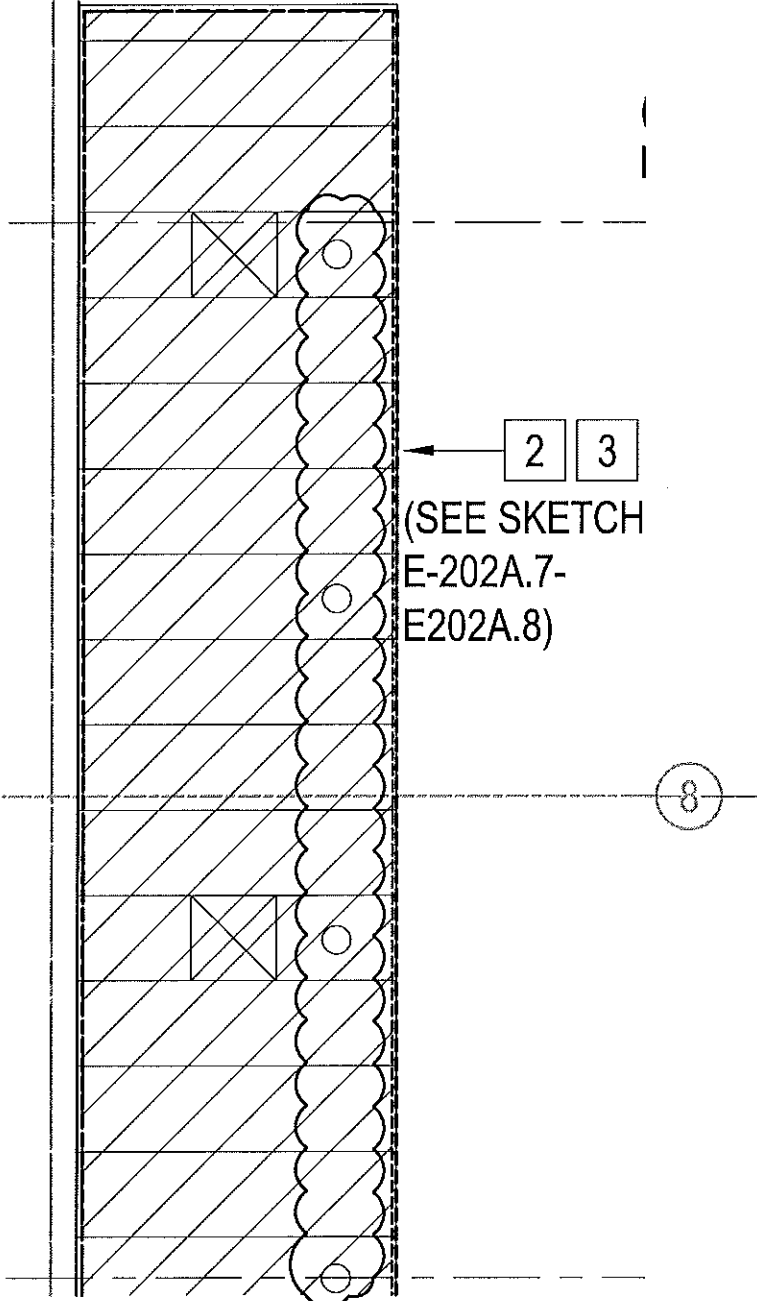
E-202A.5
DRAWING NO.

SPEC NO.
SCALE
1/4"=1'-0"
DATE
02/15/18

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PROJECT TITLE
HVAC RENOVATIONS - PART B
DRAWING TITLE
2ND FLR ELEC NEW WORK LIGHTING PLAN

K



2 3
 (SEE SKETCH
 E-202A.7-
 E202A.8)

8

SECOND FLOOR AREA A - ELECTRICAL NEW WORK PARTIAL LIGHTING PLAN

1

1/4"=1'-0"

E-202A.6
 DRAWING NO.

SPEC NO.
SCALE
 1/4"=1'-0"
DATE
 02/15/18

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PROJECT TITLE
HVAC RENOVATIONS - PART B
DRAWING TITLE
 2ND FLR ELEC NEW WORK LIGHTING PLAN

1 LIGHTING NEW WORK FOR EXISTING (15) INDUSTRIAL FLOURESCENT TROFFER WITH TURRET REFLECTORS AND WIRE GUARD FIXTURES IN AUDITORIUM STAGE AREA

LIGHTING NEW WORK FOR EXISTING (2) 60 FIXTURE HIGH-POWERED THEATRICAL LIGHTING IN AUDITORIUM STAGE AREA

LIGHTING NEW WORK FOR EXISTING TRACK MOUNTED THEATRICAL LIGHTING WITH (8) FIXTURES IN AUDITORIUM STAGE AREA

- * REMOVE, CLEAN, RELAMP EXISTING LIGHT FIXTURES; NEW LAMP MUST MATCH EXISTING TYPE, WATTAGE, AND COLOR TEMPERATURE.
- * CONTRACTOR TO REMOVE EXISTING BALLAST AND REPLACE WITH NEW BALLAST TO MATCH EXISTING IN NUMBER OF LAMPS, BALLAST FACTOR, VOLTAGE, START METHOD AND THERMAL HARMONIC DISTORTION (THD). ACCEPTABLE MANUFACTURERS ARE OSRAM, FULHAM AND HALCO.
- * REPLACE CRACKED, BROKEN AND DISCOLORED LENSES AND REUSE EXISTING LIGHT FIXTURES IN THE BOXED AREAS AS MARKED ON THE DRAWINGS.
- * REMOVE AND DISCONNECT LIGHT FIXTURES WHILE HVAC WORK IS TAKING PLACE AND RETAIN EXISTING CIRCUIT TO EXISTING PANEL.
- * AFTER REMOVING EXISTING LIGHT FIXTURE, CONTRACTOR SHALL SAFELY SECURE EXISTING CIRCUITS.
- * ONCE HVAC WORK HAS BEEN COMPLETED, CONTRACTOR TO INSTALL CLEANED AND RESTORED LIGHTING FIXTURES AND RECONNECTED TO EXISTING CIRCUIT IN EXISTING LOCATION. ELECTRICAL CONTRACTOR SHALL PROVIDE AN ALLOWANCE FOR ANY ADDITIONAL JUNCTION BOXES, CONDUIT, AND WIRING REQUIRED IN ORDER TO PROVIDE THE FINAL CONNECTIONS TO THE LIGHT FIXTURE.
- * LUMINAIRES SURFACE MOUNTED TO STRUCTURE CEILINGS SHALL BE SUPPORTED INDEPENDENT OF THE CEILING SYSTEM. LUMINAIRES SHALL BE SUPPORTED AS FOLLOWS:
 - A. PROVIDE MINIMUM OF TWO SUPPORT RODS OR WIRES, MINIMUM 12 GAUGE WIRE FOR EACH LUMINAIRE. WIRES SHALL BE LOCATED NO FURTHER THAN 6" FROM LUMINAIRE CORNERS. WIRES SHALL BE INSTALLED SUCH THAT THE LUMINAIRE IS SUPPORTED FROM THE BUILDING STRUCTURE.
 - B. PROVIDE 'T' BAR SUPPORT CLIPS AS REQUIRED TO FASTEN LUMINAIRES AND SUPPORTING THE LUMINAIRES FROM THE BUILDING STRUCTURE.

2 LIGHTING NEW WORK FOR EXISTING (14) 4" DOWNLIGHT LIGHT FIXTURES IN AUDITORIUM:

- * REMOVE, CLEAN, RELAMP EXISTING LIGHT FIXTURES; NEW LAMP MUST MATCH EXISTING TYPE, WATTAGE, AND COLOR TEMPERATURE.
- * CONTRACTOR TO REMOVE EXISTING BALLAST AND REPLACE WITH NEW BALLAST TO MATCH EXISTING IN NUMBER OF LAMPS, BALLAST FACTOR, VOLTAGE, START METHOD AND THERMAL HARMONIC DISTORTION (THD). ACCEPTABLE MANUFACTURERS ARE OSRAM, FULHAM AND HALCO.
- * REPLACE CRACKED, BROKEN AND DISCOLORED LENSES AND REUSE EXISTING LIGHT FIXTURES IN THE BOXED AREAS AS MARKED ON THE DRAWINGS.

E-2022A.7
DRAWING NO.

SPEC NO.
SCALE
1/4"=1'-0"
DATE
02/15/18

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SCHOOL
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PROJECT TITLE
HVAC RENOVATIONS - PART B
DRAWING TITLE
2ND FLR ELEC NEW WORK LIGHTING PLAN

2 CONTINUED

- * REMOVE AND DISCONNECT LIGHT FIXTURES WHILE CEILING WORK IS TAKING PLACE AND RETAIN EXISTING CIRCUIT TO EXISTING PANEL.
- * AFTER REMOVING EXISTING LIGHT FIXTURE, CONTRACTOR SHALL SAFELY SECURE EXISTING CIRCUITS.
- * ONCE CEILING WORK HAS BEEN COMPLETED, CONTRACTOR TO INSTALL CLEANED AND RESTORED LIGHTING FIXTURES AND RECONNECTED TO EXISTING CIRCUIT IN EXISTING LOCATION. ELECTRICAL CONTRACTOR SHALL PROVIDE AN ALLOWANCE FOR ANY ADDITIONAL JUNCTION BOXES, CONDUIT, AND WIRING REQUIRED IN ORDER TO PROVIDE THE FINAL CONNECTIONS TO THE LIGHT FIXTURE.
- * LUMINAIRES RECESSED OR SURFACE MOUNTED TO GRID CEILINGS SHALL BE SUPPORTED INDEPENDENT OF THE CEILING SYSTEM. LUMINAIRES SHALL BE SUPPORTED AS FOLLOWS:
 - A. PROVIDE MINIMUM OF TWO SUPPORT RODS OR WIRES, MINIMUM 12 GAUGE WIRE FOR EACH LUMINAIRE. WIRES SHALL BE LOCATED NO FURTHER THAN 6" FROM LUMINAIRE CORNERS. WIRES SHALL BE INSTALLED SUCH THAT THE LUMINAIRE IS SUPPORTED FROM THE BUILDING STRUCTURE AND NOT THE CEILING GRID.
 - B. PROVIDE 'T' BAR SUPPORT CLIPS AS REQUIRED TO FASTEN LUMINAIRES TO CEILING GRID IN ADDITION TO SUPPORTING THE LUMINAIRES FROM THE BUILDING STRUCTURE.

3 FIRE ALARM NEW WORK IN AUDITORIUM STAGE AND AUDITORIUM HATCHED AREAS:

- * CONTRACTOR TO REMOVE AND REINSTALL ALL THE SMOKE DETECTORS. DECOMMISSION ON SIMPLEX 4020 SYSTEM.
- * WHILE SMOKE DETECTORS HAVE BEEN DISCONNECTED, CONTRACTOR TO ENSURE THAT WIRING CONTINUITY WILL REMAIN. NO EXCEPTIONS.
- * SMOKE DETECTORS TO BE PARTIALLY DISABLE. ONCE CEILING WORK HAS BEEN COMPLETED, CONTRACTOR TO CONNECT AND COMMISSIONING SMOKE DETECTORS. CONTRACTOR TO PERFORM AND ACCEPTANCE TEST AS DICTATED ON NFPA 72-2013 14.4.2

PAGING, WIRELESS, AND SECURITY SYSTEMS NEW WORK IN EXISTING AUDITORIUM STAGE AND AUDITORIUM HATCHED AREAS:

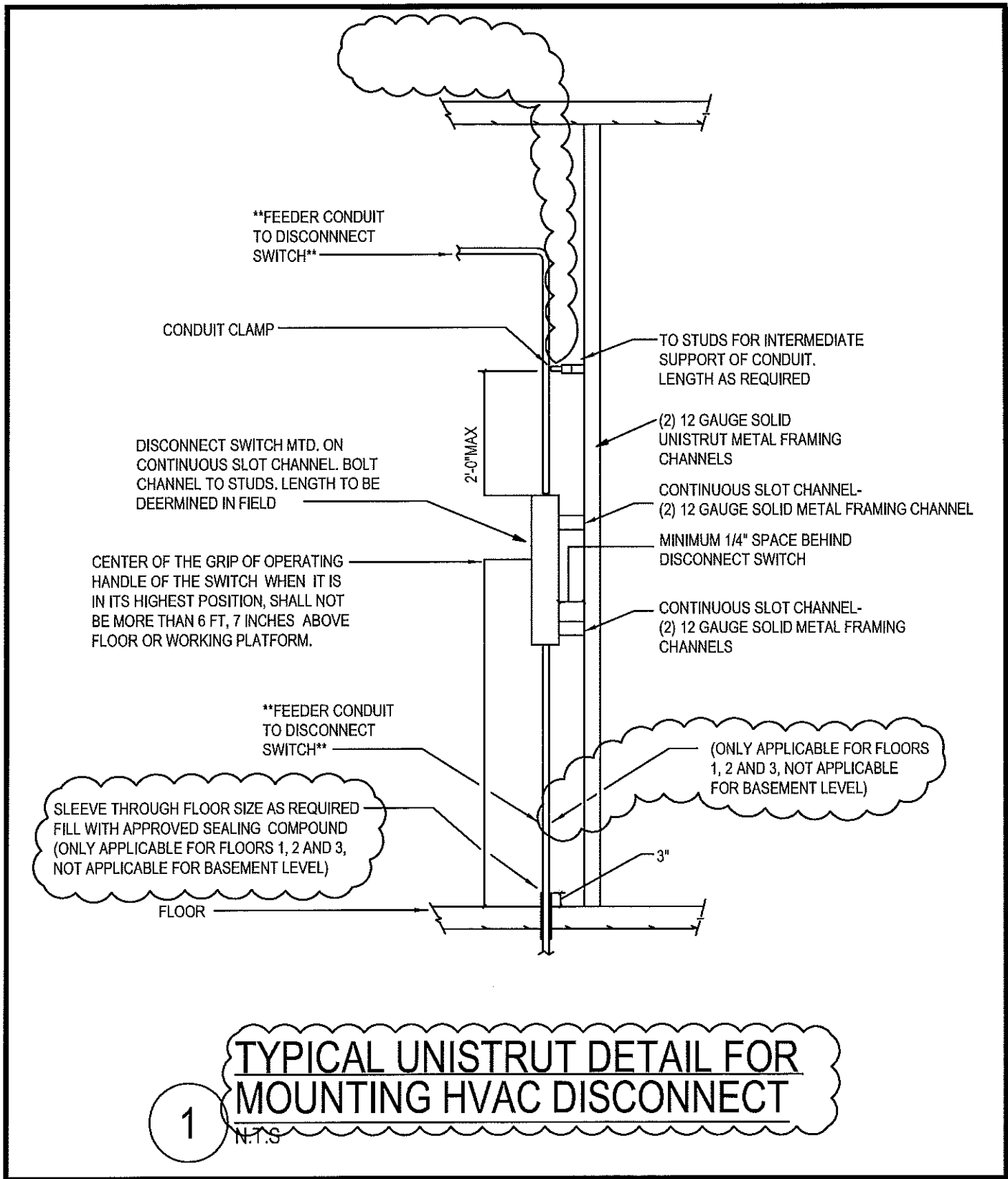
- * CONTRACTOR TO REMOVE EXISTING PA SPEAKERS, WIRELESS DEVICES AND SECURITY CAMERAS.
- * ONCE CEILING WORK HAS BEEN COMPLETED, CONTRACTOR TO RE-INSTALL PAGING SPEAKERS, WIRELESS DEVICES AND SECURITY CAMERAS TO EXISTING PAGING LOOP AND SECURITY WIRING.

E-2022A.8
DRAWING NO.

SPEC NO.
SCALE
1/4"=1'-0"
DATE
02/15/18

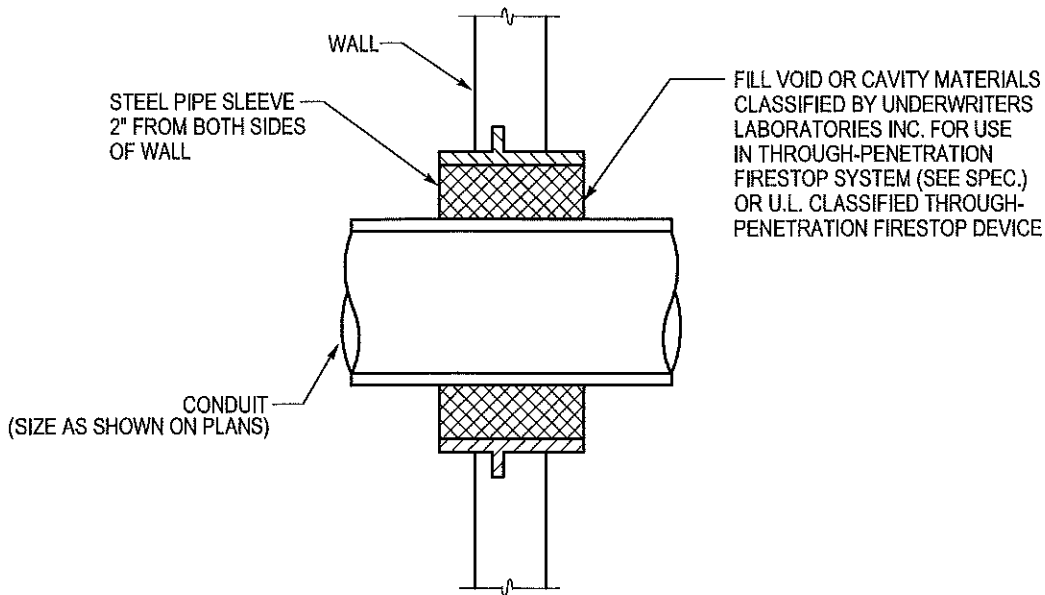
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SCHOOL
MARIN ELEMENTARY SCHOOL
PROJECT TITLE
HVAC RENOVATIONS - PART B
DRAWING TITLE
2ND FLR ELEC NEW WORK LIGHTING PLAN

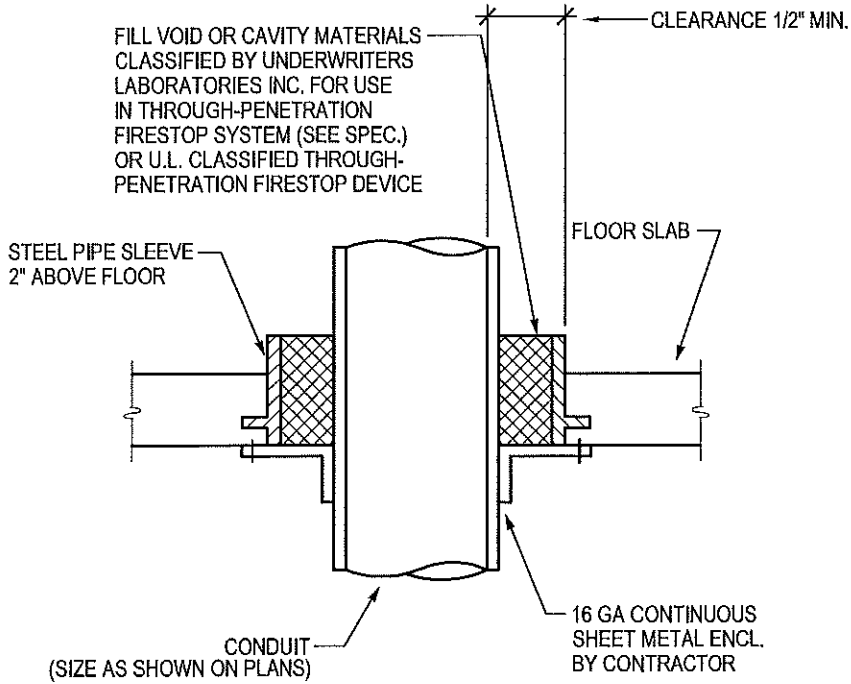


TYPICAL UNISTRUT DETAIL FOR MOUNTING HVAC DISCONNECT
 1 N.T.S

E-300.1 DRAWING NO.	SPEC NO. SCALE N.T.S. DATE 02/15/18	SCHOOL DISTRICT OF PHILADELPHIA THE SCHOOL REFORM COMMISSION DEPARTMENT OF DESIGN AND CONSTRUCTION SERVICES 440 NORTH BROAD STREET PHILADELPHIA, PA 19130-4015 215.400.4730 FAX 215.400.4731 www.phila.k12.pa.us	SCHOOL MARIN ELEMENTARY SCHOOL PROJECT TITLE HVAC RENOVATIONS - PART B DRAWING TITLE BASEMENT ELEC NEW WORK POWER PLAN
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2 CONDUIT WALL PENETRATION DETAIL
N.T.S.



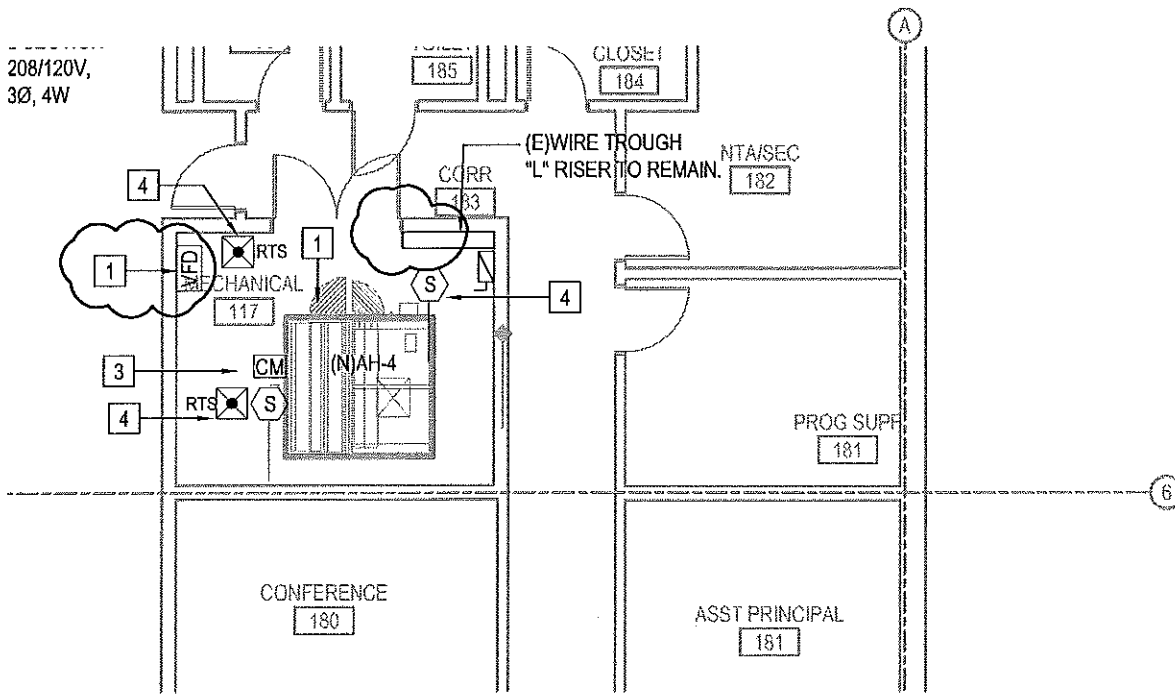
3 CONDUIT FLOOR PENETRATION DETAIL
N.T.S.

E-300.2
DRAWING NO.

SPEC NO.
SCALE
N.T.S.
DATE
02/15/17

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SCHOOL
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PROJECT TITLE
HVAC RENOVATIONS - PART B
DRAWING TITLE
BASEMENT ELEC NEW WORK POWER PLAN



FIRST FLOOR AREA B - ELECTRICAL PARTIAL NEW WORK PLAN

1

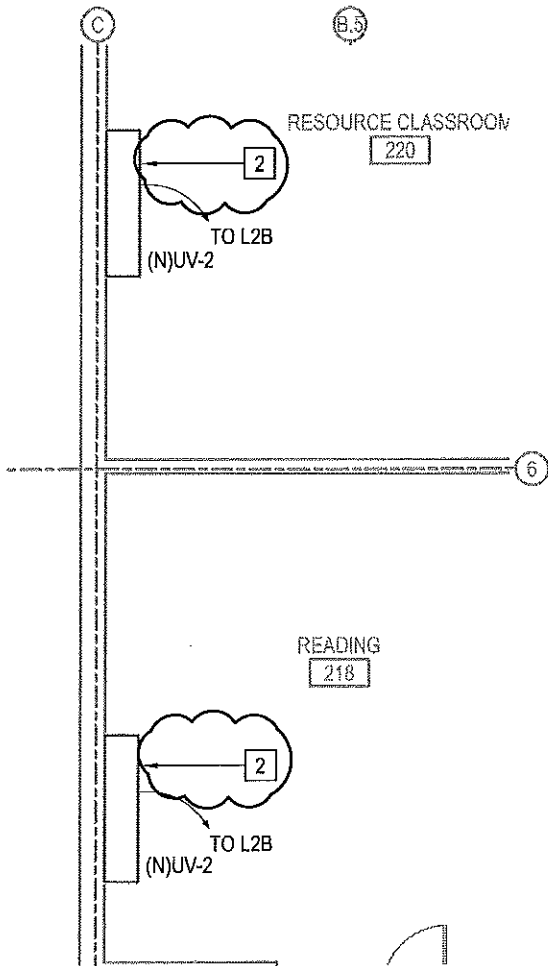
1/8"=1'-0"

E-301B.1
DRAWING NO.

SPEC NO.
SCALE
1/8"=1'-0"
DATE
02/15/18

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SCHOOL
MARIN ELEMENTARY SCHOOL
PROJECT TITLE
HVAC RENOVATIONS - PART B
DRAWING TITLE
1ST FLR NEW WORK POWER PLAN - AREA B



SECOND FLOOR - ELECTRICAL PARTIAL NEW WORK PLAN

1

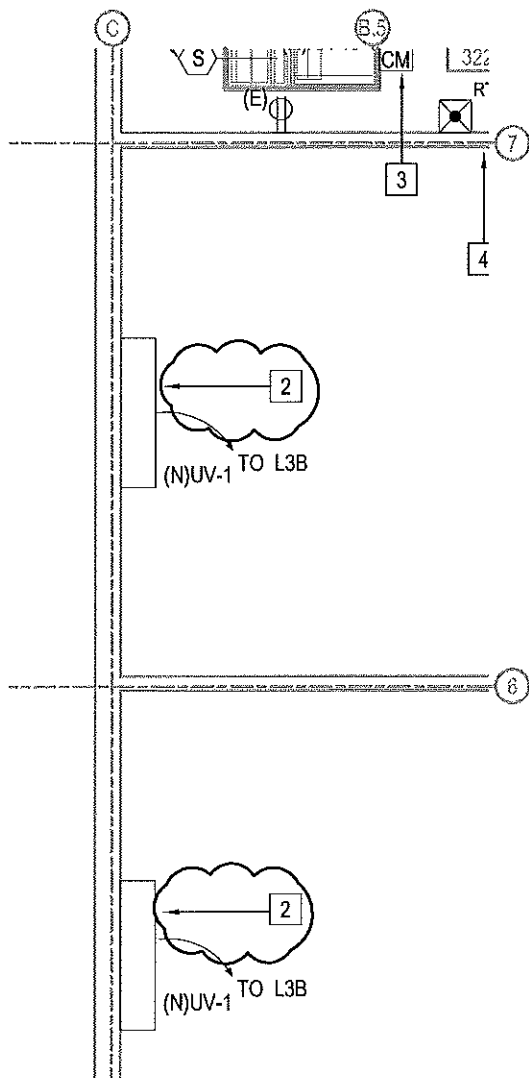
1/8" = 1'-0"

E-302.1
DRAWING NO.

SPEC NO.
SCALE
1/8" = 1'-0"
DATE
02/15/17

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SCHOOL
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PROJECT TITLE
HVAC RENOVATIONS - PART B
DRAWING TITLE
2ND FLR ELEC NEW WORK POWER PLAN



THIRD FLOOR - ELECTRICAL PARTIAL NEW WORK PLAN

1

1/8"=1'-0"

E-303.1
DRAWING NO.

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1/8"=1'-0"
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PROJECT TITLE
HVAC RENOVATIONS - PART B
DRAWING TITLE
3RD FLR ELEC NEW WORK POWER PLAN