

# WARWICK VALLEY CENTRAL SCHOOL DISTRICT

## FEDERAL GRANT/ CAPITAL BOND HIGH SCHOOL UNIT VENTILATOR REPLACEMENT AND AIR CONDITIONING UPGRADE

225 WEST STREET EXT, WARWICK, NY 10990

ISSUED FOR BID - DATE: 11/09/2022




LOCATION PLAN

### LIST OF DRAWINGS:


CP	COVER PAGE
ARCHITECTURAL	
A-100	PARTIAL ROOF PLANS - NEW WORK
A-101	STRUCTURAL PLANS AND MISCELLANEOUS DETAILS
MECHANICAL	
M-001	ABBREVIATIONS AND SYMBOLS
MD-100	PARTIAL BASEMENT AND FIRST FLOOR PLANS - REMOVALS
MD-101	PARTIAL FIRST FLOOR PLAN - REMOVALS
MD-102	PARTIAL SECOND FLOOR PLAN - REMOVALS
M-100	PARTIAL BASEMENT AND FIRST FLOOR PLANS - NEW WORK
M-101	PARTIAL FIRST FLOOR PLAN - NEW WORK
M-102	PARTIAL SECOND FLOOR PLAN - NEW WORK
M-103	PARTIAL ROOF PLAN - NEW WORK
M-104	WRESTLING ROOM - DEMOLITION AND NEW WORK
M-111	VRF SYSTEM TREES
M-500	DETAILS
M-501	DETAILS
M-502	HVAC SCHEDULES AND CALCULATIONS
M-503	HIGH SCHOOL UV-C LIGHT FIXTURE SCHEDULES
M-504	UV-C LIGHT FIXTURE DETAILS
M-505	CONTROL SCHEMATICS
ELECTRICAL	
E-001	ABBREVIATIONS AND SYMBOLS
E-100	PARTIAL BASEMENT AND FIRST FLOOR PLANS - NEW WORK
E-101	PARTIAL FIRST FLOOR PLAN - DEMO & NEW WORK
E-102	PARTIAL SECOND FLOOR PLAN - DEMO & NEW WORK
E-103	PARTIAL SECOND FLOOR PLAN - DEMO & NEW WORK
E-400	RISER DIAGRAM - EXISTING & NEW WORK
E-401	ONE-LINE DIAGRAM
E-500	SCHEDULES
PLUMBING	
P-001	ABBREVIATIONS AND SYMBOLS
P-100	PARTIAL BASEMENT AND FIRST FLOOR PLANS - NEW WORK
P-101	PARTIAL FIRST FLOOR PLAN - NEW WORK
P-102	PARTIAL SECOND FLOOR PLAN - NEW WORK
P-500	SCHEDULE AND DETAILS

ENGINEER:




Eisenbach & Ruhke Engineering, P.C.  
281 Corporate Street - Union, NY 10987  
TEL: 914.892.4444  
FAX: 914.892.1717  
WWW.FULLERDANGELO.COM  
Copyright 2020 All Rights Reserved by FULLER & D'ANGELO P.C.

CONSULTANT(S):



FULLER & D'ANGELO P.C.  
ARCHITECTS  
PLANNERS  
48 KNOLLWOOD ROAD  
ELMHURST NEW YORK 10823  
TEL: 914.892.4444  
FAX: 914.892.1717  
WWW.FULLERDANGELO.COM  
Copyright 2020 All Rights Reserved by FULLER & D'ANGELO P.C.

STAMP:



WARWICK VALLEY CENTRAL SCHOOL DISTRICT  
HIGH SCHOOL UNIT VENTILATOR REPLACEMENT AND  
AIR CONDITIONING UPGRADE  
225 WEST STREET EXT, WARWICK, NY 10990  
WV HIGH SCHOOL - 89 SANFORDVILLE ROAD, WARWICK, NY 10990  
SED NO. 44-21-01-06-0-001-042

PROJECT NO.	05-21-04 05-20-06
BID ADDENDUM ISSUED FOR BID	11.23.2022 11.09.2022
SED SET	10.19.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED
SHEET TITLE	COVER PAGE
SHEET NO.	CP

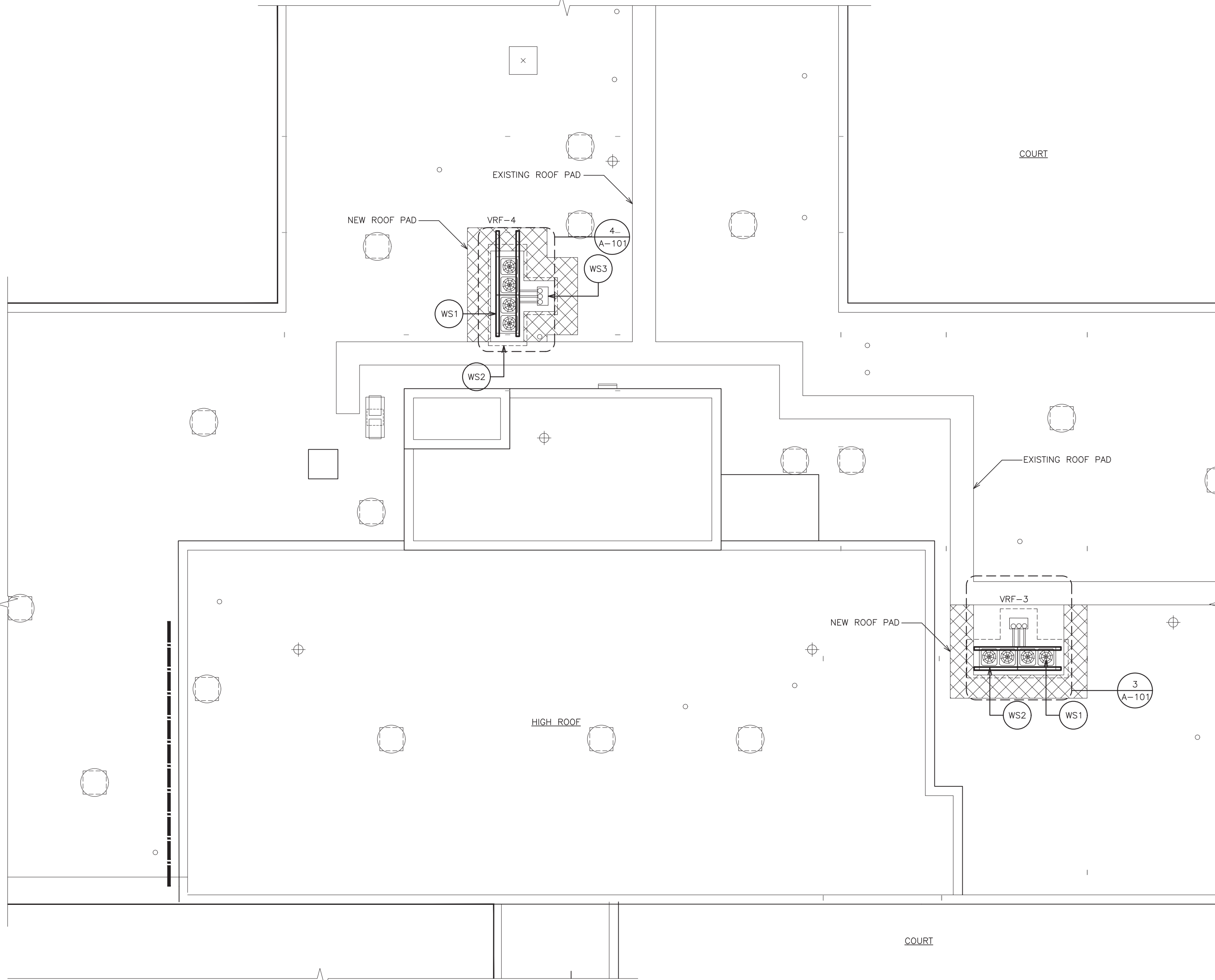




1 PARTIAL ROOF PLAN

SCALE: 1/8" = 1'-0"

ALL WORK THIS AREA PART OF ALTERNATE (ALT. R-1)



2 PARTIAL ROOF PLAN

SCALE: 1/8" = 1'-0"

WORKSCOPE NOTES

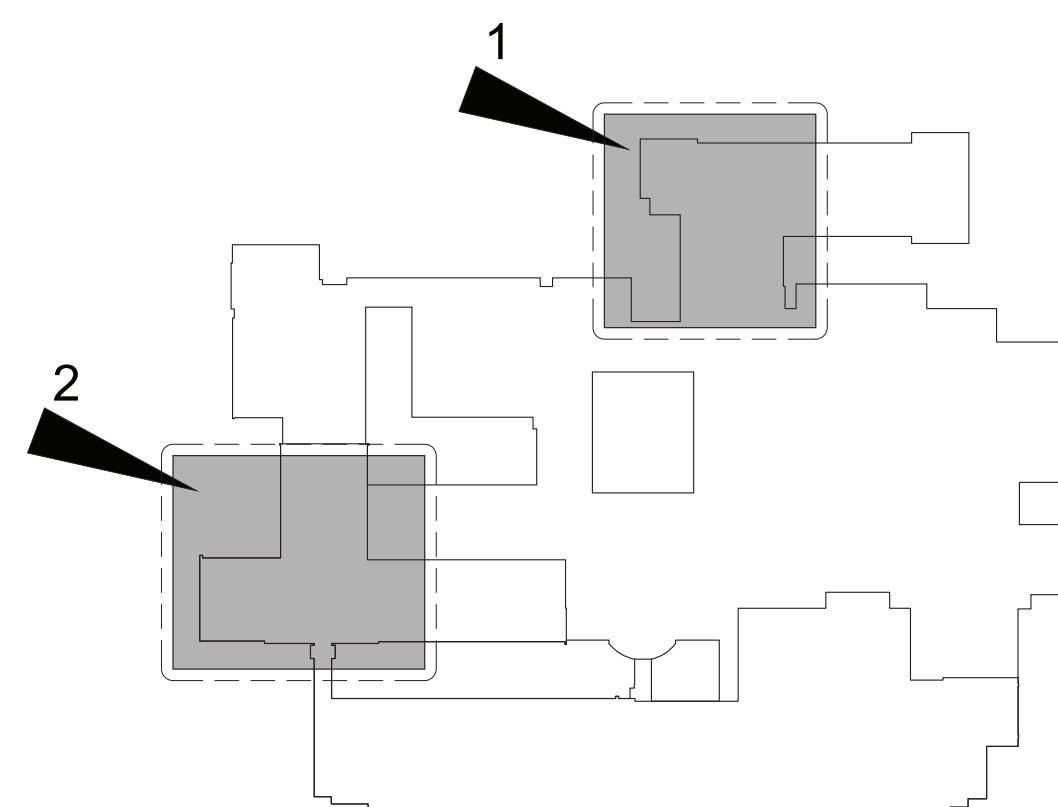
- WS1 NEW HEAT PUMP BY H-CONTRACTOR, COORDINATE WITH MECHANICAL CONTRACTOR FOR LOCATION.
- WS2 REMOVE EXISTING ROOFING, INSTALL NEW CURB PROVIDED BY H-CONTRACTOR. SEE DETAIL 5/A-101.
- WS3 NEW PIPE PORTAL. COORDINATE WITH MECHANICAL CONTRACTOR. SEE DETAIL 6/A-101.

LEGEND:

- EXISTING ROOF DRAIN
- EXISTING VENT PIPE
- EXISTING EXHAUST FAN.
- PITCH POCKE
- EXISTING ROOF LADDER
- EXISTING SKYLIGHT
- WALKWAY PADS. SEE SPECIFICATIONS
- EXISTING ROOF HATCH.

NOTE:  
BASF SPRAY POLYURETHANE  
FOAM ROOF WARRANTIED  
THROUGH AUGUST 2026.

LOCAL MAINTENANCE BY:  
A to Z COATINGS  
(570) 558-0932



HIGH SCHOOL  
KEY PLAN

SCALE N.T.S.

IT IS A VIOLATION OF THE LAW FOR ANY PERSON UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ARCHITECT/ENGINEER TO ALTER THE DRAWING IN ANY WAY. ALL ALTERATIONS MUST HAVE THE SEAL AFFIXED ALONG WITH A DESCRIPTION OF THE ALTERATION, THE SIGNATURE AND DATE. COPYRIGHT © 2019

ENGINEER:

**Eisenbach & Ruhke Engineering, P.C.**  
201 Gateway Street - Union, NY 10987  
TEL: 845-352-1188, FAX: 845-352-2402  
www.eareng.com

CONSULTANT(S):

**FULLER  
D'ANGELO  
P.C.**

**ARCHITECTS  
PLANNERS**

48 KNOLLWOOD ROAD  
ELMHURST NEW YORK 10823  
TEL: 914-892-6444  
FAX: 914-892-1717  
WWW.FULLERDANGELO.COM  
Copyright 2020 All Rights Reserved by FULLER  
& D'ANGELO P.C.

STAMP



**WARWICK VALLEY CENTRAL SCHOOL DISTRICT  
HIGH SCHOOL UNIT VENTILATOR REPLACEMENT AND  
AIR CONDITIONING UPGRADE**  
225 WEST STREET EXT. WARWICK, NY 10990  
WV HIGH SCHOOL - 89 SANFORDVILLE ROAD, WARWICK, NY 10990

SED NO. 44-21-01-06-0-001-042

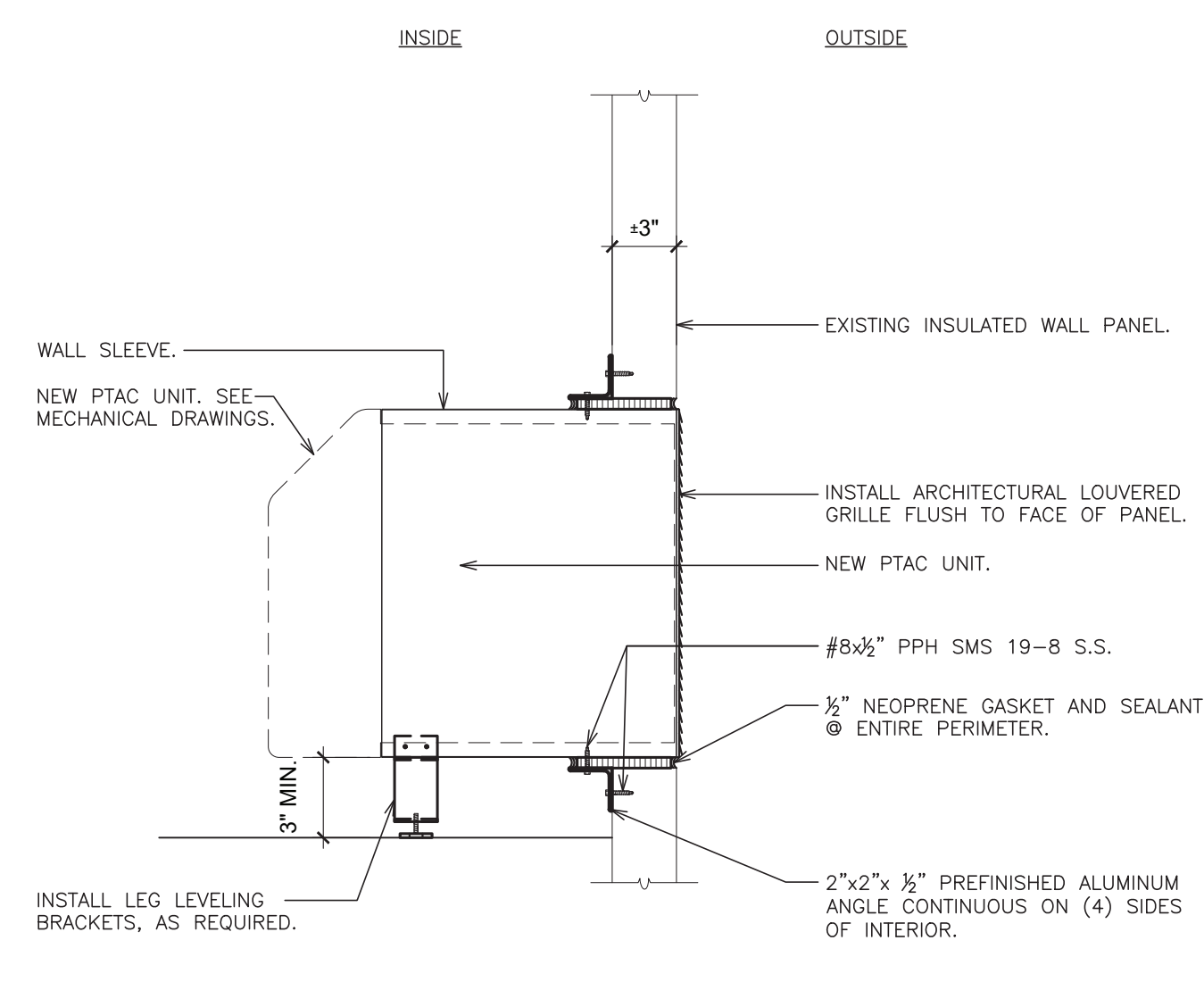
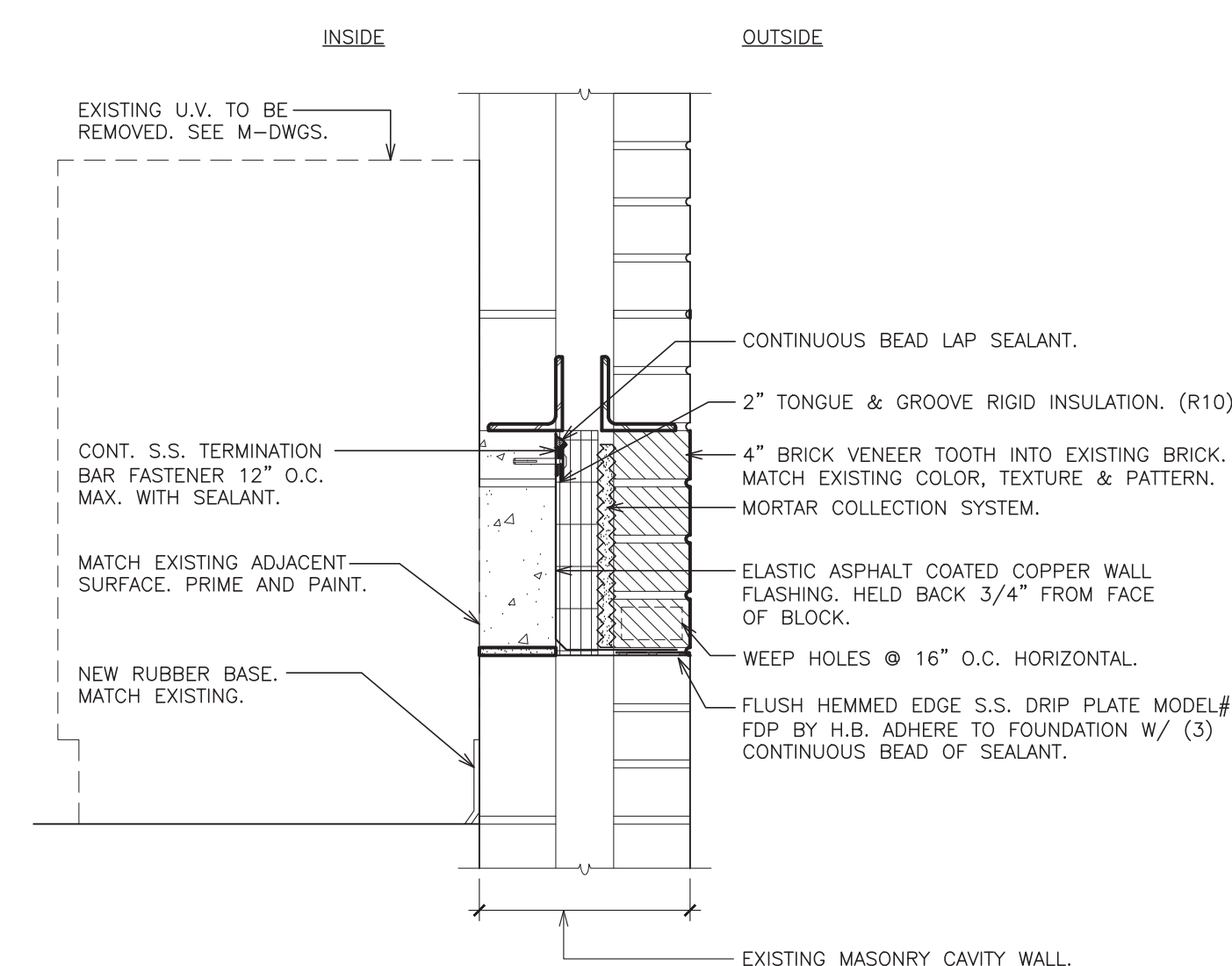
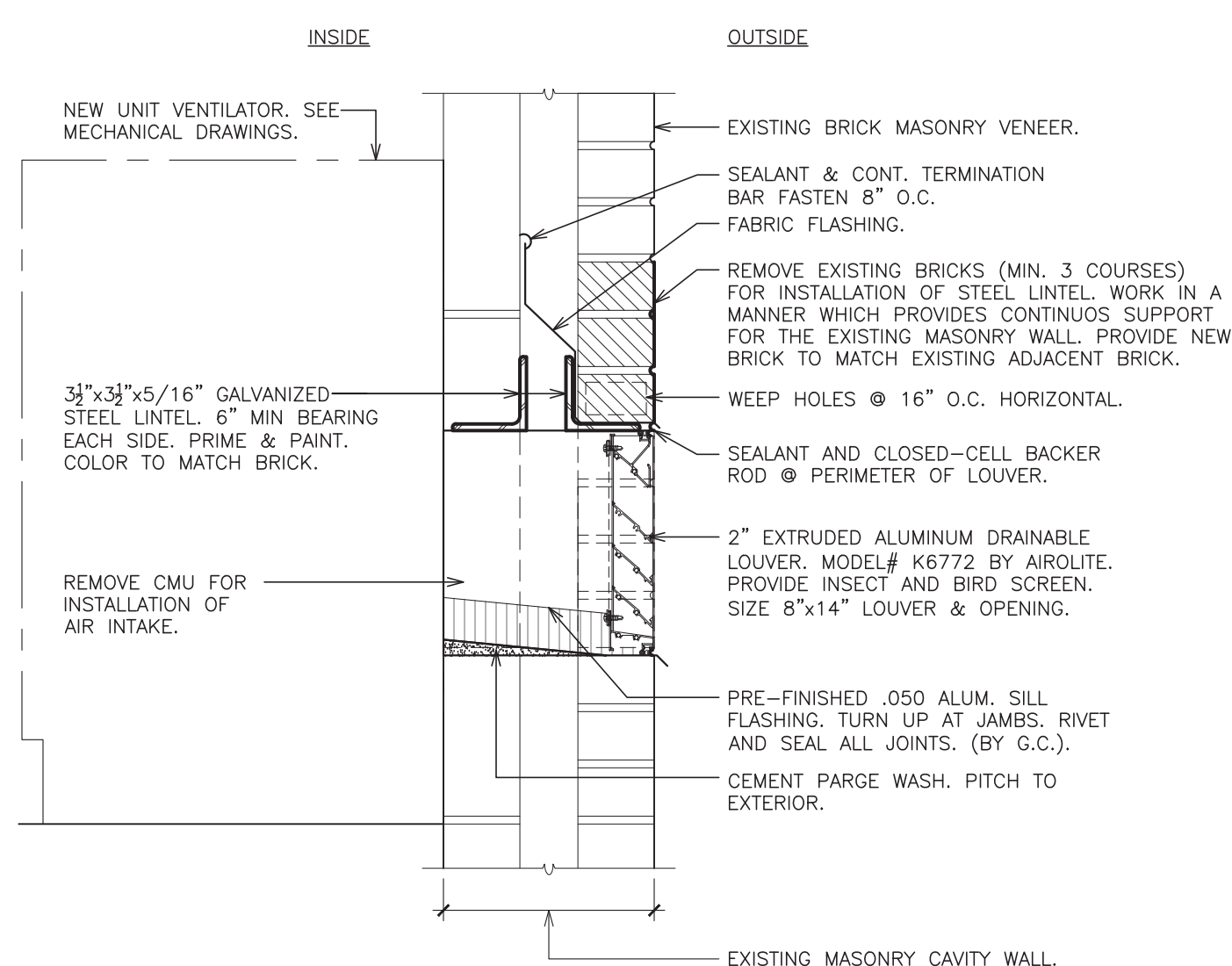
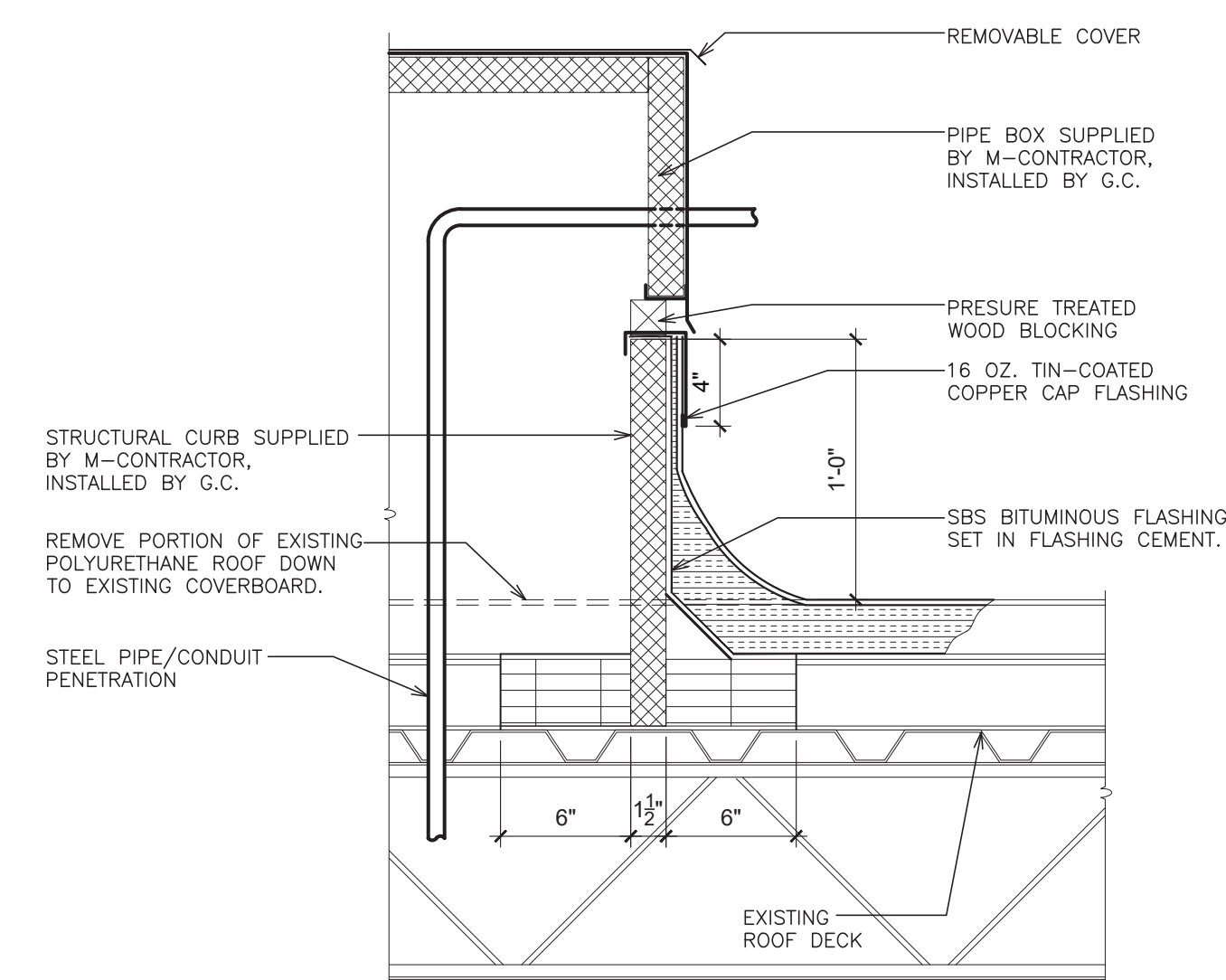
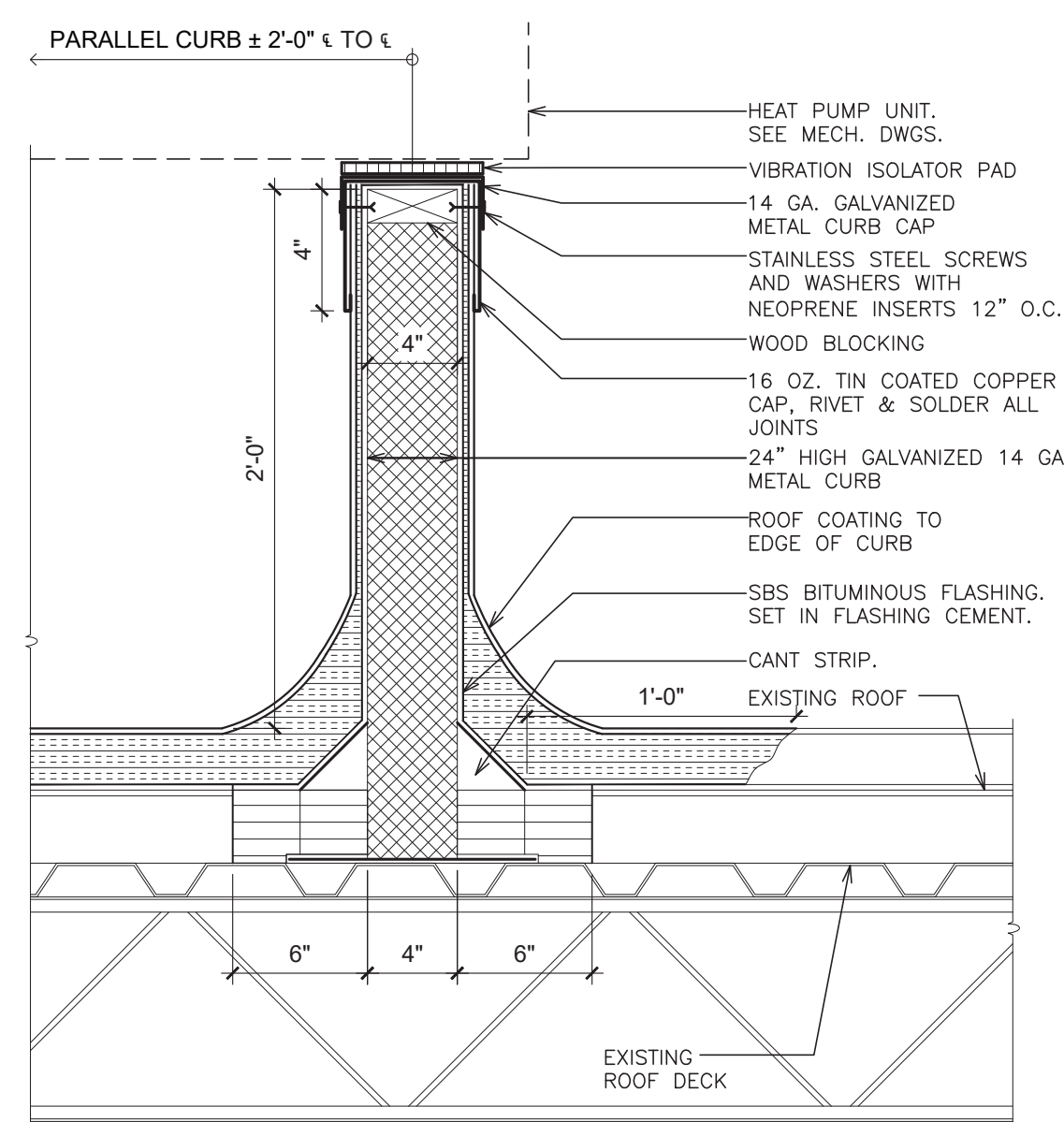
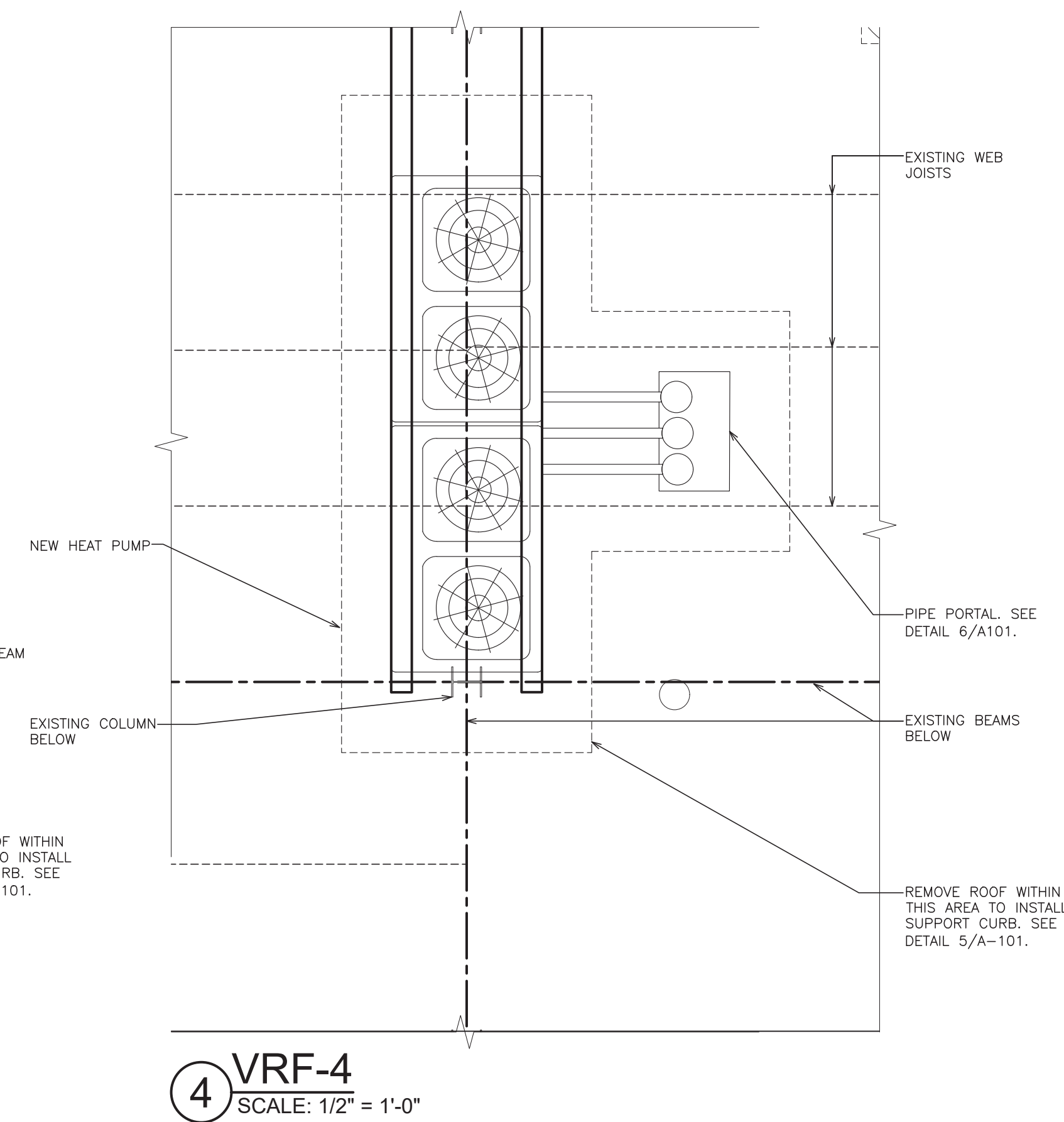
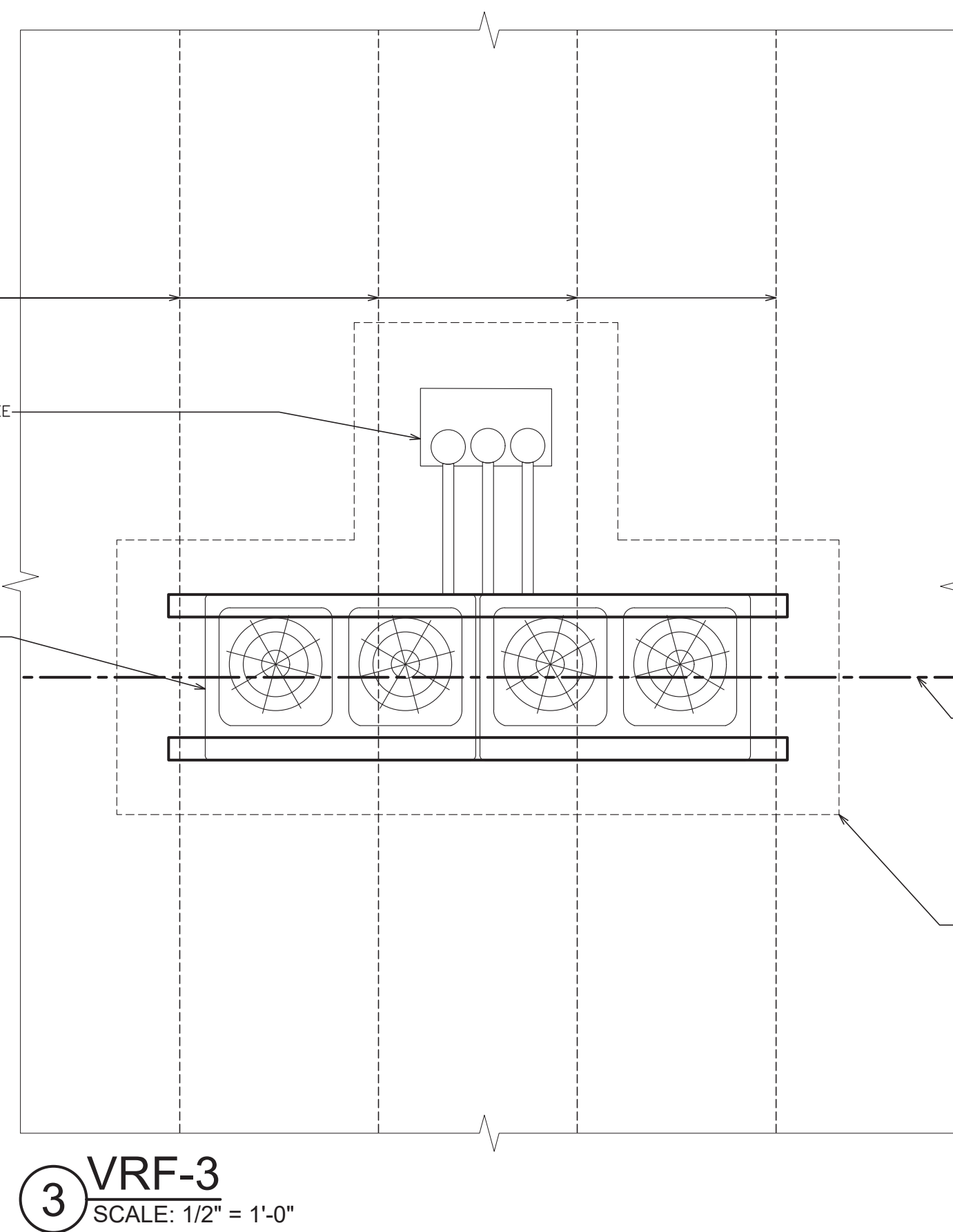
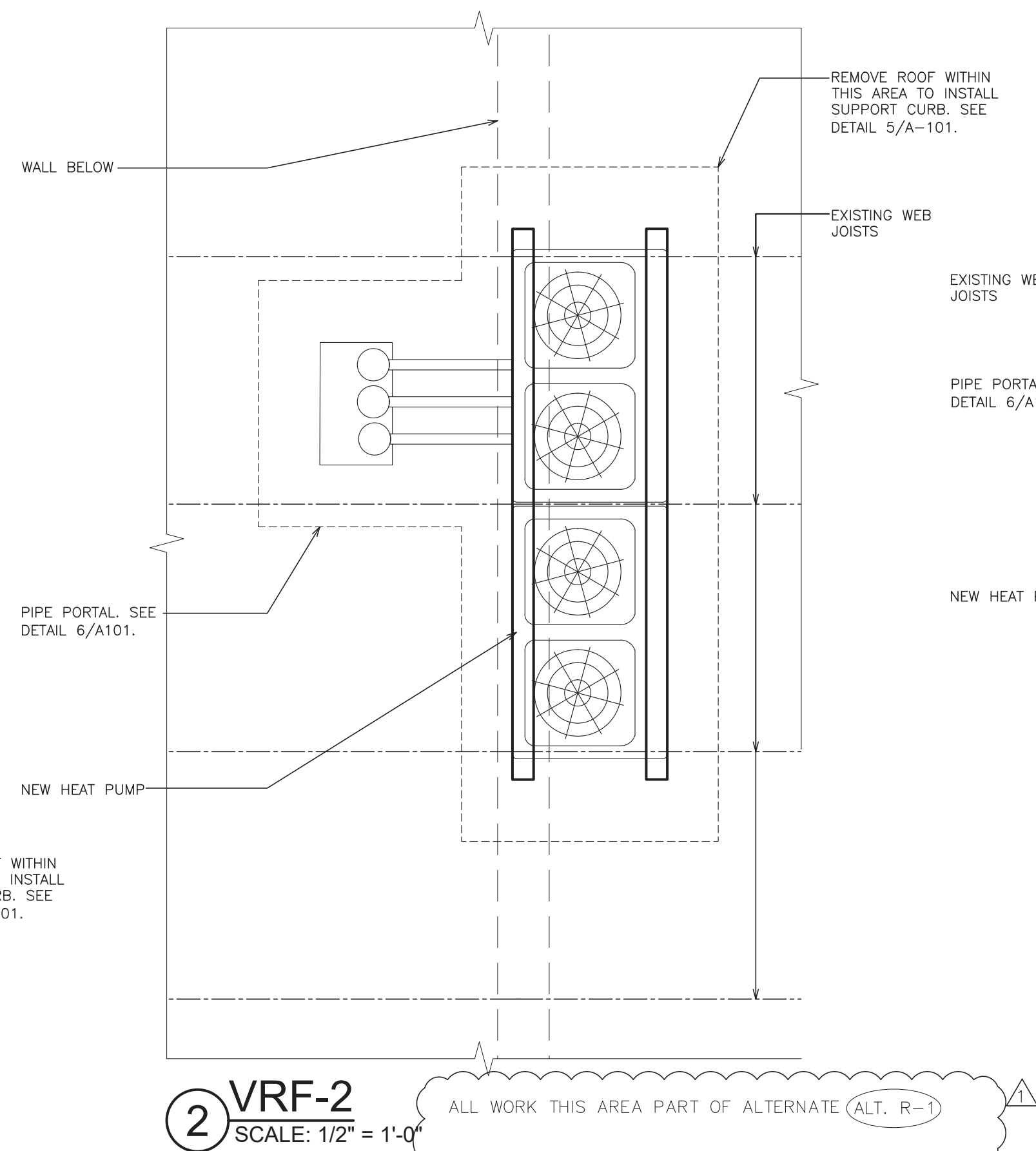
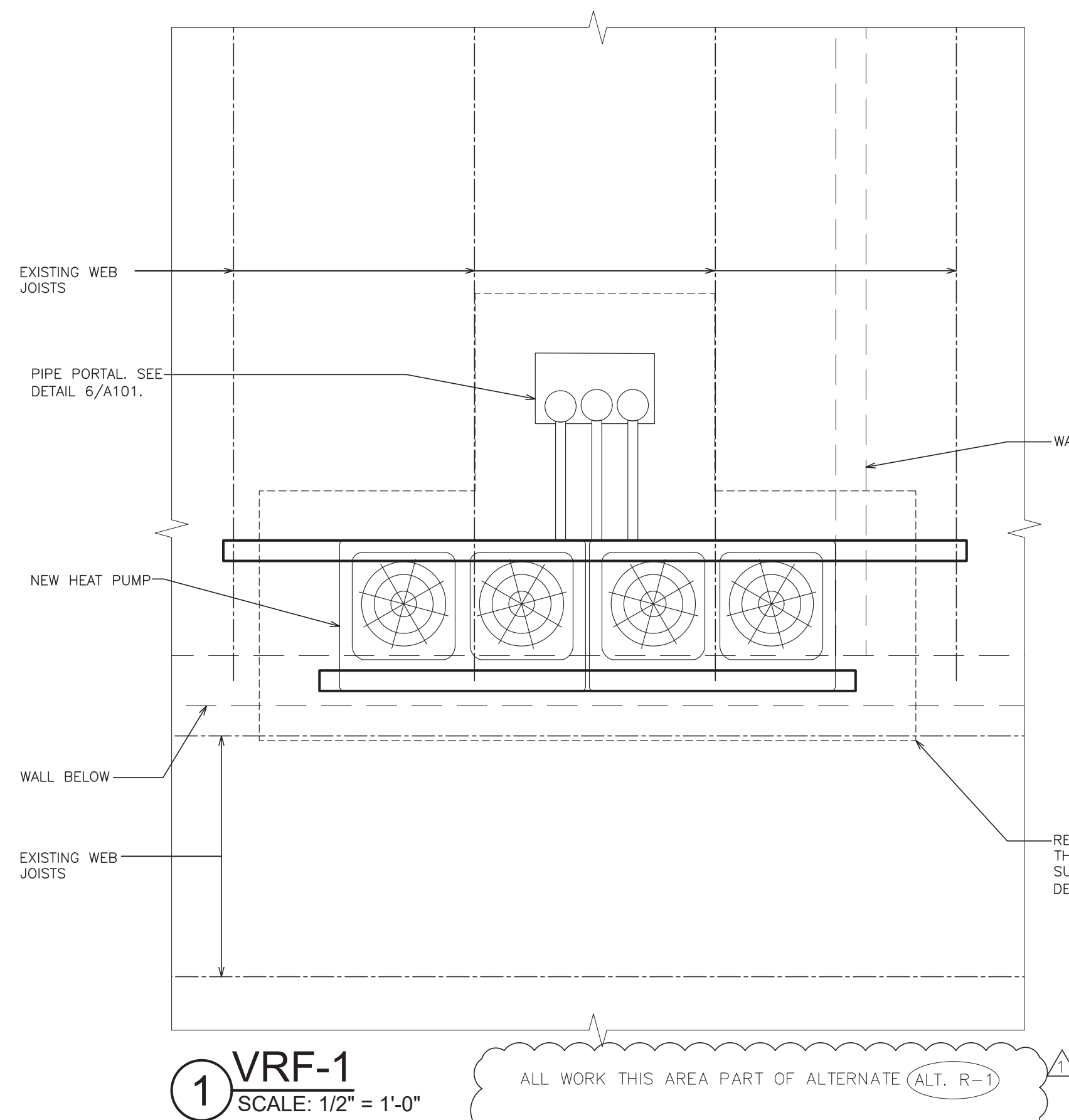
PROJECT NO.	05-21-04 05-20-06
BID ADDENDUM ISSUED FOR BID	11.23.2022 11.09.2022
SED SET	10.19.2022
REVISION	DATE
DRWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE  
**PARTIAL ROOF PLANS -  
NEW WORK**

SHEET NO.

**A-100**





- WORKSCOPE NOTES**
- WS1 NEW HEAT PUMP BY H-CONTRACTOR, COORDINATE WITH MECHANICAL CONTRACTOR FOR LOCATION.
  - WS2 REMOVE EXISTING ROOFING, INSTALL NEW CURB PROVIDED BY H-CONTRACTOR. SEE DETAIL 5/A-101.
  - WS3 NEW PIPE PORTAL. COORDINATE WITH MECHANICAL CONTRACTOR. SEE DETAIL 6/A-101.

- LEGEND:**
- EXISTING ROOF DRAIN
  - EXISTING VENT PIPE
  - EXISTING EXHAUST FAN.
  - PITCH POCKE
  - EXISTING ROOF LADDER
  - EXISTING SKYLIGHT
  - WALKWAY PADS. SEE SPECIFICATIONS
  - EXISTING ROOF HATCH.

THIS IS A VARIATION OF THE LAW FOR ANY PERSON UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ARCHITECT/ENGINEER TO ALTER THE DRAWING IN ANY WAY. ALL ALTERATIONS MUST HAVE THE SEAL AFFIXED ALONG WITH A DESCRIPTION OF THE ALTERATION, THE SIGNATURE AND DATE. COPYRIGHT © 2019

ENGINEER:

**Eisenbach & Ruhke Engineering, P.C.**  
281 Central Street - Union, NY 10987  
(845) 262-1234 FAX (845) 262-1234  
www.eandruke.com

CONSULTANT(S):

**FULLER D'ANGELO P.C.**  
ARCHITECTS PLANNERS  
48 KNOLLWOOD ROAD  
ELMHURST NEW YORK 10823  
TEL: (914) 892-6444  
FAX: (914) 892-1717  
WWW.FULLERDANGELO.COM  
Copyright 2020 All Rights Reserved by FULLER & D'ANGELO P.C.

STAMP

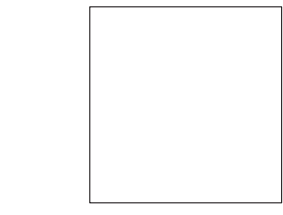
STATE OF NEW YORK  
JACK D'ANGELO  
No. 05944  
Professional Engineer

**WARWICK VALLEY CENTRAL SCHOOL DISTRICT  
HIGH SCHOOL UNIT VENTILATOR REPLACEMENT AND  
AIR CONDITIONING UPGRADE**  
225 WEST STREET EXT. WARWICK, NY 10990  
WV HIGH SCHOOL - 89 SANFORDVILLE ROAD, WARWICK, NY 10990  
SED NO. 44-21-01-06-0-001-042

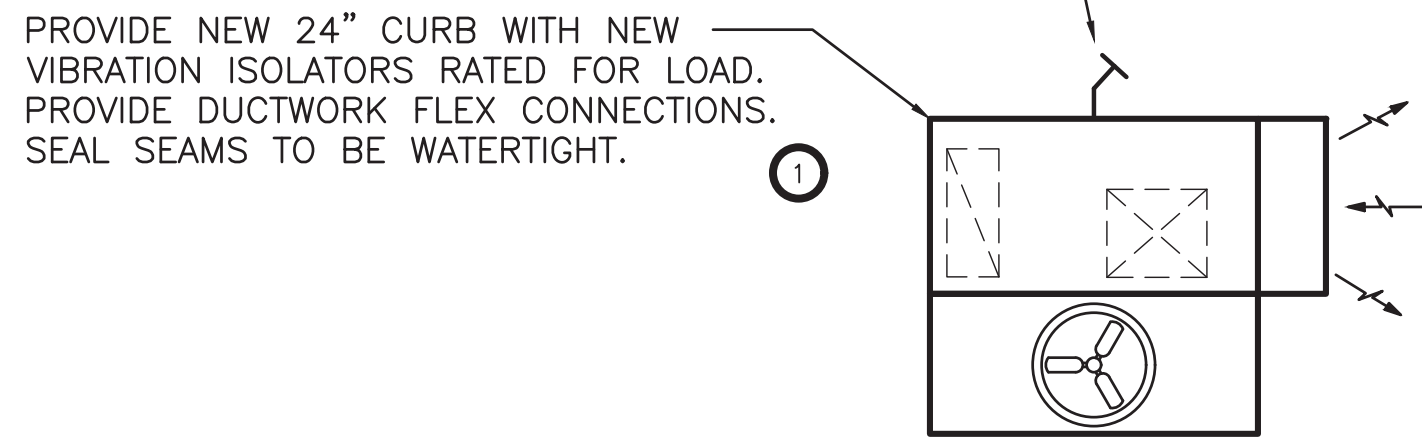
PROJECT NO.	05-21-04 05-20-06
BID ADDENDUM ISSUED FOR BID	11.23.2022 11.09.2022
SED SET	10.19.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" x 42"
SCALE	AS NOTED
SHEET TITLE	STRUCTURAL PLANS AND MISCELLANEOUS DETAILS
SHEET NO.	HS A-101

FILE PATH - N:\1 - PROJECT DIRECTORIES\1 - E & R Projects\US - Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package3\dwg\A-101-101.dwg

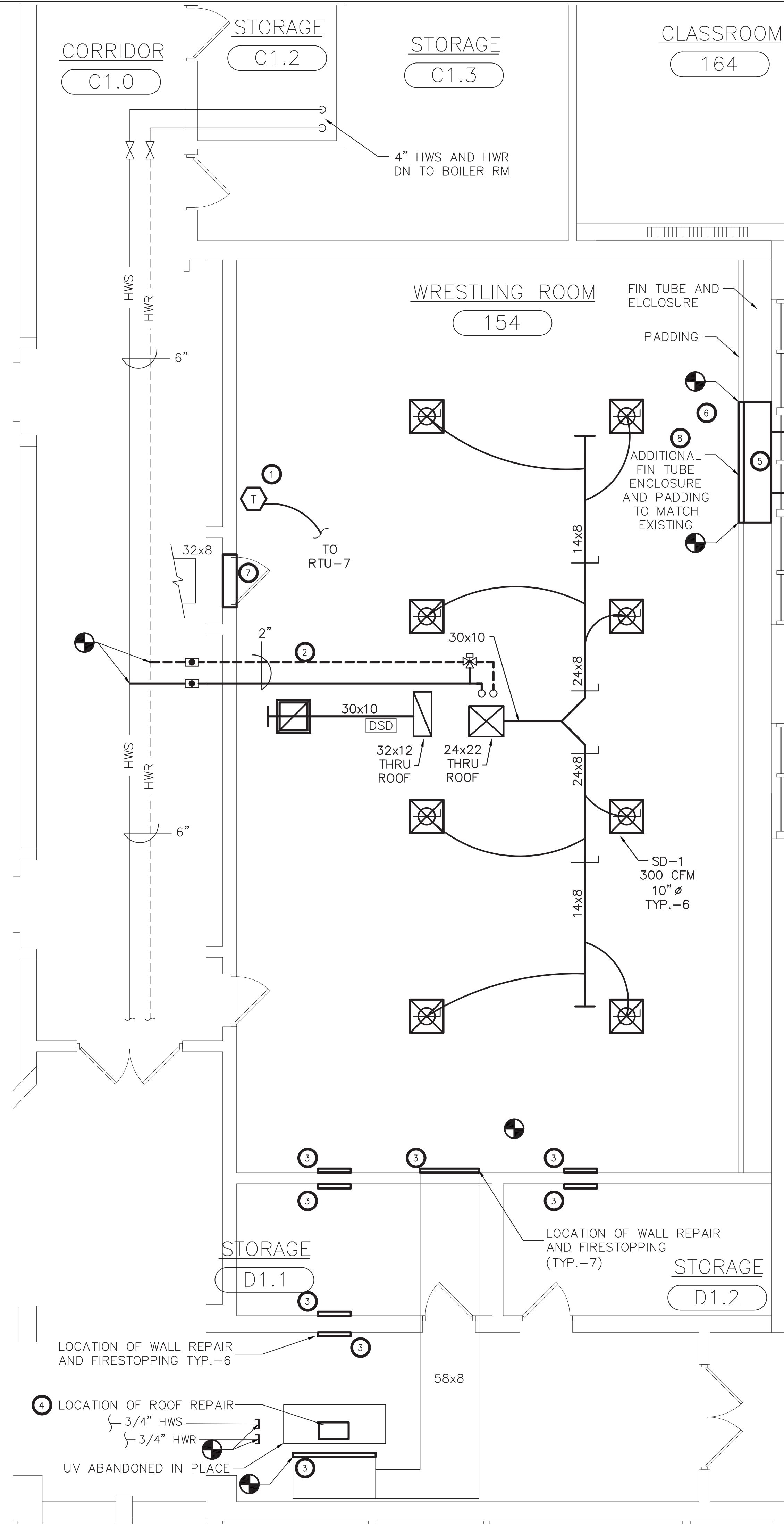




PROVIDE 1" PVC CONDENSATE PIPE, PITCHED TOWARD NEAREST ROOF DRAIN.



3 PARTIAL ROOF PLAN - WRESTLING ROOM - NEW WORK  
SCALE: 1/4"=1'-0"

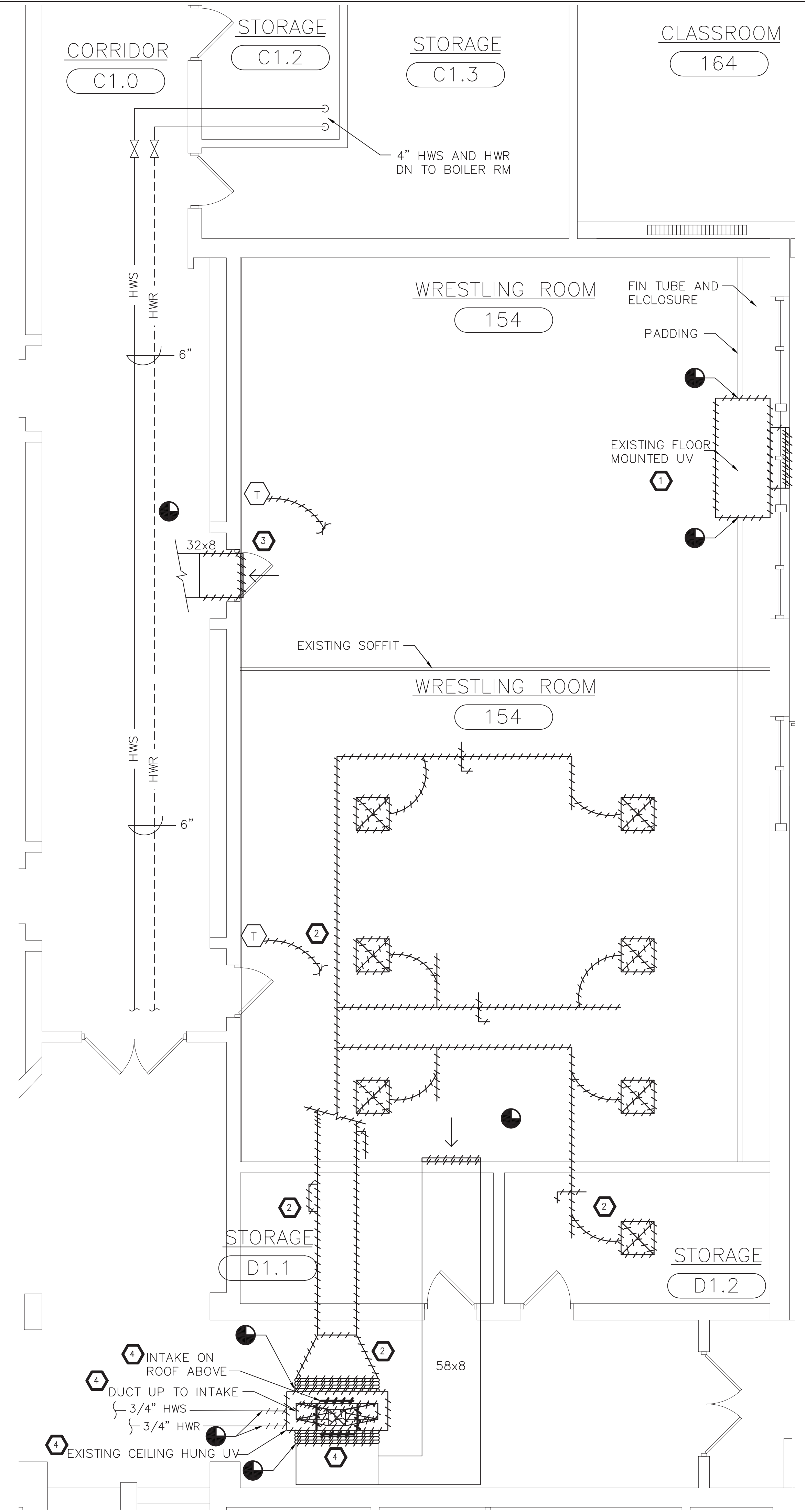


2 PARTIAL FIRST FLOOR PLAN - WRESTLING ROOM - NEW WORK  
SCALE: 1/4"=1'-0"

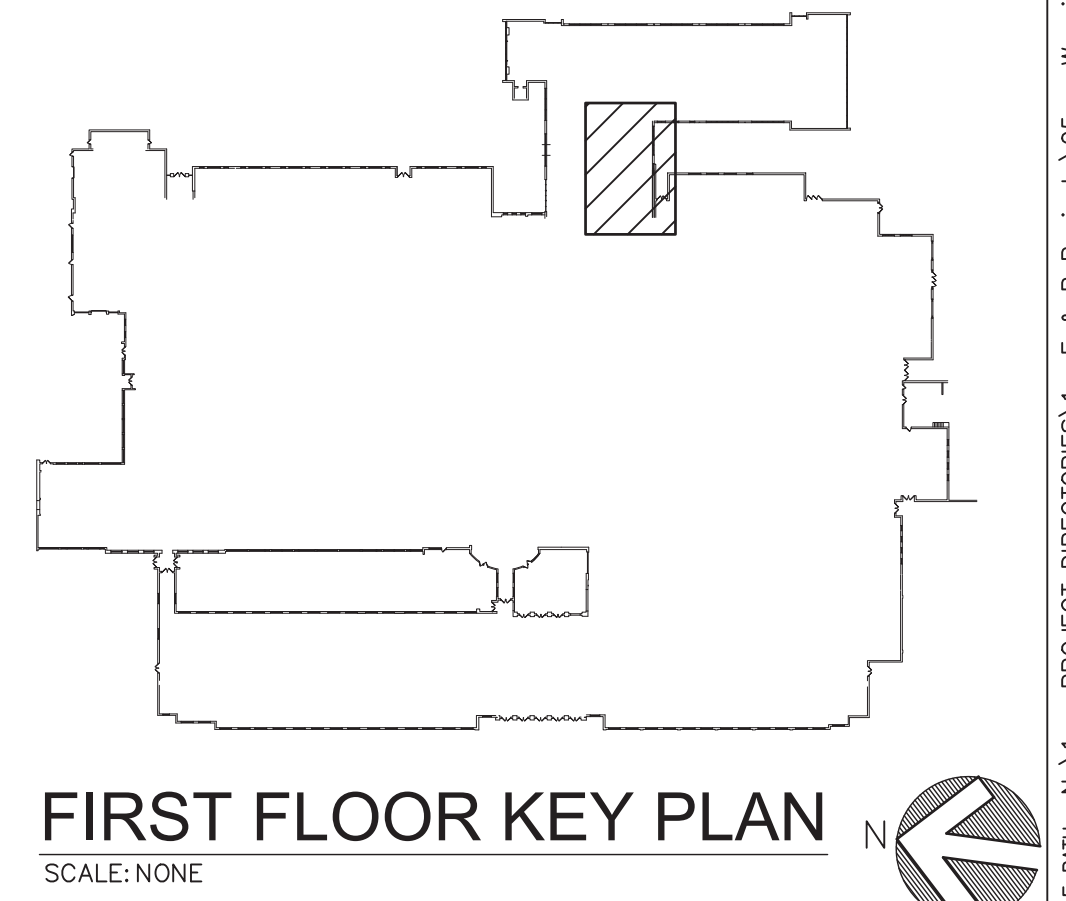
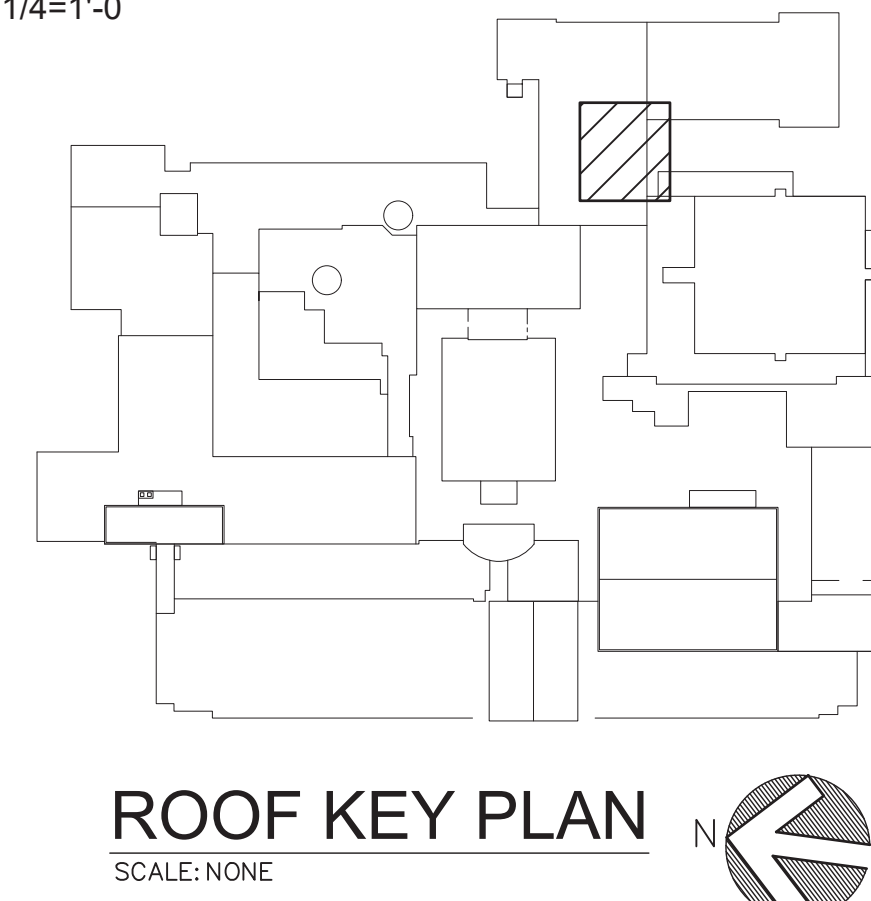
- KEYED NOTES — NEW WORK:
- 1 PROVIDE RTU AND NEW ROOF CURB. SEE M-502 FOR SCHEDULE. PROVIDE INSULATED DUCTWORK AND SUPPORT FROM STRUCTURE. PROVIDE DAMPERS, DETECTORS, AND ALL APPURTENANCES. SEE NEW WORK PLAN FOR SIZES AND ADDITIONAL NOTES. SEE M-500 AND M-501 FOR DETAILS. PROVIDE NECESSARY ROOF PENETRATIONS AND SEAL TO MAKE WEATERTIGHT. PROVIDE NEW WIRED TEMPERATURE SENSOR AND CONNECT TO BMS AND NEW RTU.
  - 2 TAP INTO EXISTING HWS & HWR PIPING IN CORRIDOR AND EXTEND 2" HWS & HWR PIPING TO NEW RTU. SEE DETAILS FOR ALL VALVES AND ARRANGEMENT. INSULATE NEW PIPING AND APPLICABLE VALVES.
  - 3 PROVIDE 18 GA STEEL BLANK OFF PANEL ABOVE CEILING LEVEL AND SEAL WITH A UNIFORM BEAD OF FIRE STOPPING. PANELS TO HAVE SMOOTH AND SQUARE CUTS. PAINT TO MATCH SURROUNDING CONDITIONS.
  - 4 REPAIR AND PATCH ROOF PENETRATION. SEAL TO MAKE WEATERTIGHT AND MAINTAIN WARRANTY.
  - 5 SEE ARCH DRAWINGS REGARDING BLOCKING UP EXISTING INTAKE OPENING.
  - 6 PROVIDE CUSTOM FIN TUBE ENCLOSURE TO CLOSELY MATCH ADJACENT ENCLOSURES. PROVIDE ATHLETIC SURFACE PADDING TO MATCH SURROUNDING PADDING. COORDINATE WITH DISTRICT.
  - 7 FILL AND REPAIR WALL PENETRATION ABOVE DOORWAY TO MATCH SURROUNDING MATERIALS AND PAINT TO MATCH ADJACENT WALL SPACE.

- KEYED NOTES — REMOVALS:
- 1 REMOVE EXISTING FLOOR MOUNTED UNIT VENTILATOR, SLEEVE, AND INTAKE LOUVER. CUT AND CAP SUPPLY AND RETURN PIPING. REMOVE EXISTING UNIT'S THERMOSTAT, INCLUDING WIREMOLD, CONTROL WIRING, AND CONDUIT. THERMOSTAT AND CONTROL WIRING FOR FIN TUBE TO REMAIN. DISCONNECT EXISTING UV CONTROLS AND REMOVE FROM BMS UI.
  - 2 REMOVE EXISTING DUCTWORK AND ASSOCIATED ABOVE CEILING. DISCONNECT AT POINT SHOWN.
  - 3 REMOVE TRANSFER GRILL AND PORTION OF TRANSFER DUCTWORK. DISCONNECT AT POINT SHOWN.
  - 4 DISCONNECT AND REMOVE PORTION OF DUCTWORK FROM CEILING HUNG UV AS SHOWN. OUTDOOR AIR DUCTWORK AND INTAKE ON ROOF TO BE REMOVED IN THEIR ENTIRETY. CUT AND CAP EXISTING SUPPLY AND RETURN HW PIPING. REMOVE EXISTING UNIT'S THERMOSTAT, INCLUDING WIREMOLD, CONTROL WIRING, AND CONDUIT. THERMOSTAT AND ASSOCIATED FOR FIN TUBE TO REMAIN. DISCONNECT EXISTING UV CONTROLS AND REMOVE FROM BMS UI. DISCONNECT FROM SERVICE AND ABANDON UV IN PLACE.

ALL WORK ON THIS SHEET IS TO BE PROVIDED BY MC AS PART OF ALTERNATE H-2.



1 PARTIAL FIRST FLOOR PLAN - WRESTLING ROOM - DEMOLITION  
SCALE: 1/4"=1'-0"



ENGINEER:  
**Eisenbach & Rohrer Engineering, P.C.**  
200 Green Street - 10th Fl. - New York, NY 10014  
Tel: 212-724-1818 Fax: 212-724-1825  
www.eisenbach.com

CONSULTANT(S):  
**FULLER D'ANGELO P.C.**  
ARCHITECTS PLANNERS  
48 KNOLLWOOD ROAD  
ELMSFORD NEW YORK 10523  
TEL: 914.892.4444  
FAX: 914.892.1717  
WWW.FULLERDANGELO.COM  
Copyright 2022 All Rights Reserved by FULLER & D'ANGELO P.C.

STAMP:  
STATE OF NEW YORK  
JACK EISENBACH  
Professional Engineer  
No. 05946

WARWICK VALLEY CENTRAL SCHOOL DISTRICT  
HIGH SCHOOL UNIT VENTILATOR REPLACEMENT AND  
AIR CONDITIONING UPGRADE  
225 WEST STREET EXT. WARWICK, NY 10990  
WV HIGH SCHOOL - 89 SANFORDVILLE ROAD, WARWICK, NY 10990  
SED NO. 44-21-01-06-0-001-042

PROJECT NO.	05-21-04
BID ADDENDUM ISSUED FOR BID	11.23.2022
SED SET	11.09.2022
REVISION	10.18.2022
DRAWN BY	DATE
CHECKED BY	DATE
SHEET SIZE	30" x 42"
SCALE	AS NOTED
SHEET TITLE	WRESTLING ROOM - DEMOLITION AND NEW WORK
SHEET NO.	HS M-104

FILE PATH: N:\1 - PROJECT DIRECTORIES\1 - E & R Projects\05 - Warwick Valley Central School District\05-21-04-M100-M104\_M100.dwg



ROOFTOP UNIT SCHEDULE																																						
MARK	SERVICE	MODEL NO.	CFM	O/A MIN	FAN MOTOR (HP) (SUPPLY)/(EXHAUST)	COOLING														HEATING																		
						TYPE	TEMPERATURE (°F)				CAPACITY				ENT. WATER (°F)	LVG. WATER (°F)	EER	TYPE	TEMPERATURE (°F)		CAPACITY (MBH)																	
							ENT. AIR DB	WB	LVG. AIR DB	WB	OD AMB DB/WB	TONS	MBH	TOTAL					SENS.	GPM		ENT. AIR DB	LVG. AIR DB															
(HS)	RTU-7	WRESTLING ROOM	AAON-RN-008	2400	517	(1.7)/(1.2)	PKG. DX – R410A REFRIG.	80	66	56	53	95/75	8	90	68	—	—	—	12.5	HOT WATER	56	94	102	20	180	170	208/3/60	50	MCA (A)	MOP (A)	FACTORY DISC.	VFD	GFCI OUTLET	ECONOMIZER	YES	YES	1279	SEE NOTES 1-7
NOTE 1: PROVIDE DAMPERS SHOWN ON THE DRAWINGS AND ADDITIONAL DAMPERS AS NECESSARY FOR AIR BALANCING OR AS NEEDED TO COMPLY WITH ECOCNYS C403.7.7 REQUIREMENTS FOR INTAKES AND EXHAUST OPENINGS. NOTE 2: OBSERVE REQUIRED AND RECOMMENDED CLEARANCES FOR UNIT DURING PLACEMENT. INSTALL UNIT ACCORDING TO MANUFACTURER RECOMMENDATIONS. NOTE 3: MAINTAIN MINIMUM OF 10' FROM ROOF EDGE WHEN PLACING UNIT.																																						

UNIT VENTILATOR SCHEDULE (30)																										
MARK	SERVICE	MFR / MODEL	TYPE	TOTAL CFM	O/A MIN	DX COOLING COIL			HEATING COIL			MOTOR (ECM)		ELECTRICAL				LOUVER SIZE	REMARKS							
						TOT. MBH	SENS. MBH	ROWS	MBH	ROWS	FLUID	EWT	LWT	QTY	HP	VOLTAGE	FLA			MCA	MOP					
BASEMENT																										
UV-70-A	ART CLASS. 70	MAUVF3-P1FFB223	VERTICAL	1000	282	32.9	21.5	4	54.6	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9	ALT. H-2				
UV-70-B		MAUVF3-P1FFB223	VERTICAL	1000	282	32.9	21.5	4	54.6	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9	ALT. H-2				
FIRST FLOOR																										
UV-128	CLASSROOM 128	MAUVF2-P1FFB223	VERTICAL	750	283	23.4	15.6	4	47.2	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9					
UV-130	CLASSROOM 130	MAUVF3-P1FFB223	VERTICAL	1000	297	32.9	21.5	4	54.6	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9					
UV-132	CLASSROOM 132	MAUVF3-P1FFB223	VERTICAL	1000	310	32.9	21.5	4	54.6	2	WATER	180	150	1	1/3	115/60/1		6.30	20		SEE NOTES 1,2,3,6,8,9					
UV-147	CLASSROOM 147	MAUVF3-P1FFB223	VERTICAL	1000	417	32.9	21.5	4	54.6	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9	ALT. H-2				
UV-149	CLASSROOM 149	MAUVF3-P1FFB223	VERTICAL	1000	414	32.9	21.5	4	54.6	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9	ALT. H-2				
UV-151	CLASSROOM 151	MAUVF3-P1FFB223	VERTICAL	1000	415	32.9	21.5	4	54.6	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9	ALT. H-2				
UV-153	CLASSROOM 153	MAUVF3-P1FFB223	VERTICAL	1000	430	32.9	21.5	4	54.6	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9	ALT. H-2				
UV-155	CLASSROOM 155	MAUVF3-P1FFB223	VERTICAL	1000	429	32.9	21.5	4	54.6	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9	ALT. H-2				
UV-157	CLASSROOM 157	MAUVF3-P1FFB223	VERTICAL	1000	402	32.9	21.5	4	54.6	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9	ALT. H-2				
UV-159	CLASSROOM 159	MAUVF3-P1FFB223	VERTICAL	1000	401	32.9	21.5	4	54.6	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9	ALT. H-2				
UV-162	CLASSROOM 162	MAUVF5-P1FFB223	VERTICAL	1500	356	49.3	31.7	4	62.9	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9	ALT. H-2				
UV-164	CLASSROOM 164	MAUVF2-P1FFB223	VERTICAL	750	297	23.4	15.6	4	47.2	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9	ALT. H-2				
UV-166	CLASSROOM 166	MAUVF4-P1FFB223	VERTICAL	1250	417	37.3	24.3	4	58.9	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9	ALT. H-2				
UV-168	CLASSROOM 168	MAUVF4-P1FFB223	VERTICAL	1250	415	37.3	24.3	4	58.9	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9	ALT. H-2				
UV-170	CLASSROOM 170	MAUVF4-P1FFB223	VERTICAL	1250	415	37.3	24.3	4	54.6	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9	ALT. H-2				
UV-171	CLASSROOM 171	MAUVF5-P1FFB223	VERTICAL	1500	653	49.3	31.7	4	62.9	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9	ALT. H-2				
SECOND FLOOR																										
UV-231	SCI. LAB 231	MAUVF5-P1FFB223	VERTICAL	1500	434	49.3	31.7	4	62.9	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9					
UV-232	SCI. LAB 232	MAUVF5-P1FFB223	VERTICAL	1500	520	49.3	31.7	4	62.9	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9					
UV-233	SCI. LAB 233	MAUVF5-P1FFB223	VERTICAL	1500	609	49.3	31.7	4	62.9	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9					
UV-234	SCI. LAB 234	MAUVF5-P1FFB223	VERTICAL	1500	377	49.3	31.7	4	62.9	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9					
UV-235	SCI. LAB 235	MAUVF3-P1FFB223	VERTICAL	1000	499	32.9	21.5	4	54.6	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9					
UV-236	SCI. LAB 236	MAUHF3-PAADD223	HORIZONTAL	1000	342	32.9	21.5	4	46.7	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,4,6,8,9					
UV-238	SCI. LAB 238	MAUHF3-PAADD223	HORIZONTAL	1000	459	32.9	21.5	4	46.7	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,4,6,8,9					
UV-239	SCI. LAB 239	MAUHF4-PAAD223	HORIZONTAL	1250	397	37.3	24.3	4	58.9	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9,10					
UV-240	SCI. LAB 240	MAUHF5-PAADD223	HORIZONTAL	1500	438	49.3	31.7	4	64.3	2	WATER	180	150	1	3/4	115/60/1	12.00	20	NOTE 3	SEE NOTES 1,2,3,4,6,8,9						
UV-241	SCI. LAB 241	MAUVF3-P1FFB223	VERTICAL	1000	337	32.9	21.5	4	54.6	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9					
UV-243	SCI. LAB 243	MAUHF3-PAADD223	HORIZONTAL	1000	396	32.9	21.5	4	46.7	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,4,6,8,9					
UV-245	SCI. LAB 245	MAUHF3-PAADD223	HORIZONTAL	1000	375	32.9	21.5	4	46.7	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,4,6,8,9					
NOTE 1: PROVIDE ADDITIONAL DAMPERS AS NECESSARY TO AID IN AIR BALANCING. NOTE 2: DAMPERS CONTROLLING OUTDOOR AIR INTAKE VOLUME TO BE MOTORIZED. NOTE 3: CONNECT NEW UNIT VENTILATOR TO EXISTING LOUVER/INTAKE. PROVIDE NEW SLEEVE AND SEAL CONNECTIONS TO BE WEATHER TIGHT. PROVIDE NECESSARY MODIFICATIONS NEEDED FOR NEW CONNECTION. NOTE 4: SECURELY HANG FROM STRUCTURE USING STEEL THREADED RODS AND FRAMING. MUST INSTALL UNIT TO ALLOW FOR MAINTENANCE CLEARANCES AND FILTER CHANGES. REFER TO MANUFACTURER'S RECOMMENDATIONS. NOTE 5: NOT USED NOTE 6: PROVIDE CONDENSATE PAN. PITCH DRAIN LINE WITH MINIMUM 1/8" PER 12" SLOPE. PROVIDE CONDENSATE PUMP WHEN MINIMUM PITCH CANNOT BE MET. DISCHARGE TO A NEARBY VENT LINE OR TO EXTERIOR WHEN POSSIBLE. SEE DETAIL. NOTE 7: NOT USED NOTE 8: PROVIDE VRF COMPATIBLE UNITS, WHICH INCLUDE VRF ELECTRONIC EXPANSION VALVE KITS, VRF COMMUNICATION BOXES, ETC. PROVIDE 12" MINIMUM EXTENDED UTILITY CABINET FROM SAME MANUFACTURER TO MATCH NEW UV CABINET. HOUSE EEV AND CONTROLS IN UTILITY CABINET. NOTE 9: SEE PLANS FOR CONDENSATE PIPING AND ASSOCIATED. COORDINATE WITH PLUMBING CONTRACTOR. NOTE 10: BOTTOM RETURN, BOTTOM SUPPLY, REAR OA CONFIGURATION.																										

PTAC SCHEDULE																						
MARK	SERVICE	BRAND/MODEL NO.	TYPE	MAX CFM	MIN OA CFM	MAX OA CFM	COOLING COIL				HEATING COIL				ELECTRICAL				UNIT WEIGHT (LB)	LOUVER SIZE	REMARKS	
							EAT		OUTPUT (MBH)	EER	EAT DB (°F)	OUTPUT (MBH)	GPM	EWT	V/PH/HZ	MCA (A)	MOP (A)	FACTORY DISC.				
							DB	WB														
PTAC-1	CLASSROOM 237	AMANA/PTC092G00H	THRU WALL PACKAGE TERMINAL AC W/HYDRONIC HEAT	310	60	65	78.0	85.0	9.0	11.3	42.0	16.9	1	180	115/1/60	8.3	15	YES	102	16"x42"	SEE NOTES 1-7	
PTAC-2	DET. OFFICE 236.A	AMANA/PTC092G00H	THRU WALL PACKAGE TERMINAL AC W/HYDRONIC HEAT	310	55	65	78.0	85.0	9.0	11.3	42.0	16.9	1	180	115/1/60	8.3	15	YES	102	16"x42"	SEE NOTES 1-7	
PTAC-5	OFFICE 154.1	AMANA/PTC092G00H	THRU WALL PACKAGE TERMINAL AC W/HYDRONIC HEAT	310	35	65	78.0	85.0	9.0	11.3	42.0	16.9	1	180	115/1/60	8.3	15	YES	102	16"x42"	SEE NOTES 1-7 <b>ALT. H-1</b>	
PTAC-4	OFFICE 154.2	AMANA/PTC072G00H	THRU WALL PACKAGE TERMINAL AC W/HYDRONIC HEAT	310	25	65	78.0	85.0	7.0	11.9	42.0	14.9	1	180	115/1/60	6.9	15	YES	98	16"x42"	SEE NOTES 1-7 <b>ALT. H-1</b>	
PTAC-3	OFFICE 154.3	AMANA/PTC072G00H	THRU WALL PACKAGE TERMINAL AC W/HYDRONIC HEAT	310	25	65	78.0	85.0	7.0	11.9	42.0	14.9	1	180	115/1/60	6.9	15	YES	98	16"x42"	SEE NOTES 1-7 <b>ALT. H-1</b>	
NOTE 1: PROVIDE NEW WALL SLEEVE (WS900E). REPAIR OR ALTER EXISTING WALL PENETRATION AS NEEDED. MAINTAIN STRUCTURAL INTEGRITY. SEAL CONNECTIONS TO BE WEATHER TIGHT.																						
NOTE 2: PROVIDE REQUIRED AND RECOMMENDED CLEARANCES FOR UNIT BEFORE CUTTING OR INSTALLING. INSTALL UNIT ACCORDING TO MANUFACTURER RECOMMENDATIONS.																						
NOTE 3: PROVIDE DRAIN KIT (DK900D). DRAIN ALL CONDENSATE TO EXTERIOR.																						
NOTE 4: PROVIDE HYDRONIC WATER KIT (HWK03E) WITH 1/2" I.D. (5/8" O.D.) CONNECTIONS.																						
NOTE 5: PROVIDE HARD WIRE KIT AND TIE INTO EXISTING CIRCUIT.																						
NOTE 6: PROVIDE EXTRUDED ALUMINUM AMANA PTAC LOUVER (AGK01). COLOR TO MATCH NEAREST ADJACENT LOUVER COLORS OR AS SELECTED BY DISTRICT.																						
NOTE 7: DAMPER THAT MODULATES OA MUST BE MOTORIZED AND CONTROLLED TO AUTOMATICALLY CLOSE WHEN THE UNIT FAN IS DE-ENERGIZED.																						



HIGH SCHOOL UV-C LIGHTING SCHEDULE (ALTERNATE)								
NEW UVC CIRCUIT MARK	LOCATION/SERVICE	HVAC UNIT TYPE	HVAC UNIT NOMINAL AIR FLOW (CFM)	UV-C INSTALL LOCATION	UV-C FIXTURE MODEL NO.	UV-C FIXTURE VOLTAGE/PH	QTY.	HVAC UNIT VOLTAGE/PH
FIRST FLOOR								
UVC-HS-94	154 Wrestling Rm	RTU *	2400	208/3		UV-FCU-CL 90H-P-B-VENT	1	110-240/1
(*) INDICATES UNIT IS PROVIDED NEW AS PART OF CURRENT PROJECT. REFER TO M DRAWINGS FOR MORE INFORMATION. DO NOT PROVIDE UV-C FIXTURES TO EXISTING TO BE REMOVED EQUIPMENT.								

HIGH SCHOOL UV-C LIGHTING SCHEDULE								
NEW UVC CIRCUIT MARK	LOCATION/SERVICE	HVAC UNIT TYPE	HVAC UNIT NOMINAL AIR FLOW (CFM)	UV-C INSTALL LOCATION	UV-C FIXTURE MODEL NO.	UV-C FIXTURE VOLTAGE/PH	QTY.	HVAC UNIT VOLTAGE/PH
FIRST FLOOR								
UVC-HS-79	128	UV *	750	115/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	110-240/1
UVC-HS-80	130	UV *	1000	115/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	110-240/1
UVC-HS-81	132	UV *	1000	115/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	110-240/1
SECOND FLOOR								
UVC-HS-82	231	UV *	1500	115/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	110-240/1
UVC-HS-83	232	UV *	1500			UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-84	233	UV *	1500			UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-85	234	UV *	1500			UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-86	235	UV *	1000			UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-87	236	HORIZ. UV *	1000			UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-88	238	HORIZ. UV *	1000			UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-89	239	UV *	1250			UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-90	240	HORIZ. UV *	1500			UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-91	241	UV *	1000			UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-92	243	HORIZ. UV *	1000			UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-93	245	HORIZ. UV *	1000			UV-FCU-CL 90H-P-B-VENT	1	
(*) INDICATES UNIT IS PROVIDED NEW AS PART OF CURRENT PROJECT. REFER TO M DRAWINGS FOR MORE INFORMATION. DO NOT PROVIDE UV-C FIXTURES TO EXISTING TO BE REMOVED EQUIPMENT.								

HIGH SCHOOL UV-C LIGHTING SCHEDULE (ALTERNATE)								
NEW UVC CIRCUIT MARK	LOCATION/SERVICE	HVAC UNIT TYPE	HVAC UNIT NOMINAL AIR FLOW (CFM)	UV-C INSTALL LOCATION	UV-C FIXTURE MODEL NO.	UV-C FIXTURE VOLTAGE/PH	QTY.	HVAC UNIT VOLTAGE/PH
BASEMENT								
UVC-HS-95	70	UV *	1500	115/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	110-240/1
UVC-HS-96		UV *	1500	115/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	110-240/1
FIRST FLOOR								
UVC-HS-97	Main Office Conference Rm.	UV	1000	115/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	110-240/1
UVC-HS-98	Main Office	HORIZ. UV	1000		IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-99	147	UV *	1000		IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-100	149	UV *	1000		IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-101	151	UV *	1000		IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-102	153	UV *	1000		IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-103	155	UV *	1000		IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-104	157	UV *	1000		IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-105	159	UV *	1000		IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-106	162	UV *	1500		IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-107	164	UV *	750		IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-108	166	UV *	1250		IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-109	168	UV *	1250		IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-110	170	UV *	1250		IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-111	171	UV *	1500	▽	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	▽
(*) INDICATES UNIT IS PROVIDED NEW AS PART OF CURRENT PROJECT. REFER TO M DRAWINGS FOR MORE INFORMATION. DO NOT PROVIDE UV-C FIXTURES TO EXISTING TO BE REMOVED EQUIPMENT.								

BIDDING NOTE

ALL WORK ON THIS SHEET IS NOT IN CONTACT AND IS PROVIDED FOR REFERENCE ONLY.

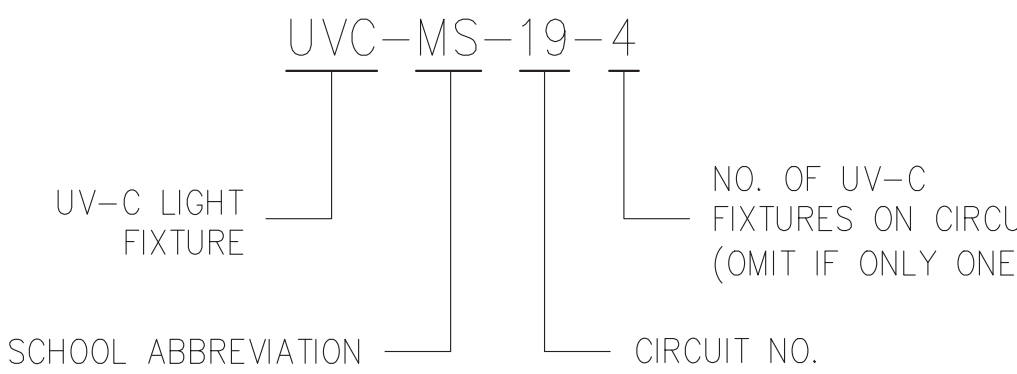
UV-C LIGHT FIXTURE SPECIFICATION AND INSTALLATION NOTES

- NOTE 1: PROVIDE UV-C LIGHT FIXTURES AND BULBS FROM COGNITUV BRAND, NO SUBSTITUTION, AND ANY HARDWARE, SHIELDING, WIRING, DRIVERS, RELAYS, TRANSFORMERS, AND ALL APPURTENANCES NECESSARY FOR INSTALLATION.
- NOTE 2: PROVIDE POWER TO LIGHT FIXTURES USING 2#12 -W1#12 GRD WIRING. PROVIDE 3/4" CONDUIT OR METAL CLADDING TO POWER AND CONTROL WIRING. POWER AND CONTROL WIRING TO BE IN SEPARATE CONDUIT/MC TO AVOID INTERFERENCE.
- NOTE 3: UV-C CONTRACTOR TO PROVIDE AND COORDINATE CUTTING, PATCHING, SEALING, AND REINSULATING OF DISTURBED DUCTWORK. REINFORCE DUCTWORK TO MAINTAIN RIGIDITY AND PROVIDE SUPPORT TO PREVENT DUCTWORK SAGGING, DEFORMATION, OR VIBRATION. TEST AND SEAL ALL PENETRATIONS TO BE AIRTIGHT.
- NOTE 4: EACH UV-C LIGHTING CIRCUIT MUST INCLUDE AN INDIVIDUAL SERVICE SWITCH. ONE SERVICE SWITCH MUST DISCONNECT POWER FROM ALL UV-C FIXTURES ON THE CIRCUIT. THIS SERVICE SWITCH SHALL NOT DISCONNECT POWER TO THE HVAC UNIT, CONTROLLER, OR FAN. THE SERVICE SWITCH FACE PLATES MUST INDICATE ON AND OFF DIRECTIONS.
- NOTE 5: THE SERVICE SWITCH SHALL HAVE A STATUS INDICATING LED, EITHER INCORPORATED INTO THE SWITCH OR OTHERWISE ADDED. THE SERVICE SWITCH LED SHALL ILLUMINATE ONLY IF THE UV-C FIXTURE(S) ARE ON AND ILLUMINATED. IF THERE ARE FACTORY-MOUNTED STATUS LEDS ON THE UV-C FIXTURES AND THEY ARE VISIBLE FROM THE OUTSIDE OF THE FIXTURE, THE SWITCH STATUS LED MAY BE OMITTED.
- NOTE 6: UV-C LIGHTING AND ALL APPURTENANCES MUST BE POSITIONED TO BE ACCESSIBLE WITHIN REASON TO ALLOW FOR CLEANING, MAINTENANCE, AND REPLACEMENT OF BULB(S). VERIFY PLACEMENT BASED ON FIELD CONDITIONS. PROVIDE PAINTED ACCESS PANELS AS NEEDED.
- NOTE 7: TIE INTO SPECIFIED HVAC EQUIPMENT CONTROLS. REFER TO THE UV-C ACTIVATION CONDITIONS DETAIL REGARDING WHEN THE UV-C FIXTURE(S) SHALL BE ACTIVATED.
- NOTE 8: CONNECT TO BMS CONTROLS AND INTEGRATE TO TRIP TROUBLE CODES FOR MALFUNCTIONS, SUCH AS A NON-FUNCTIONAL BALLAST OR BULB. PROVIDE UV-C FIXTURE WITH OPTIONS AND EQUIPMENT TO COMMUNICATE WITH EXISTING BMS. VERIFY IN FIELD.
- NOTE 9: AFFIX 1" PLASTIC OR VINYL LABELS TO EACH UV-C LIGHT FIXTURE AND SERVICE SWITCH WITH THE CORRESPONDING UV-C CIRCUIT MARK NOTED ABOVE. EACH UV-C FIXTURE TO BE MARKED WITH AN APPROPRIATE WARNING LABEL. PROVIDE PLASTIC OR VINYL PURPLE MARKERS TO APPROXIMATELY MARK LOCATIONS OF UV-C FIXTURES ABOVE CEILINGS. AFFIX TO T-BAR FOR DROP CEILINGS. AFFIX A LABEL READING "UV-C ON" NEAR ALL STATUS INDICATING LEDS, WHETHER FACTORY-MOUNTED OR OTHERWISE. FOR CIRCUITS THAT REQUIRE POWER TO COME FROM A NEARBY AVAILABLE POWER PANEL, AFFIX LABEL TO CIRCUIT SWITCH INDICATING PANEL'S ROOM NUMBER, PANEL NAME, AND BREAKER NUMBER.
- NOTE 10: CONTROLS TO BE COORDINATED WITH DISTRICT CONTROLS VENDER.
- NOTE 11: ALL LOCATIONS, ORIENTATIONS, AND TYPES OF UV-C LIGHT FIXTURES ARE APPROXIMATE. DETERMINE FINAL LOCATION/ORIENTATION BASED ON MANUFACTURER'S RECOMMENDATIONS AND FIELD CONDITIONS.
- NOTE 12: FOR UNITS WITH FIXTURES INDICATED TO BE MOUNTED "IN CABINET", PROVIDE AT LEAST ONE (1) SNAP-ACTION TYPE SWITCH TO EACH OF THE SCHEDULED HVAC UNITS\* (UV, AHU, RTU, ETC.) ACCESS DOORS/PANELS AND/OR ADJACENT DUCTWORK ACCESS DOORS/PANELS. HARDWIRE POWER TO SWITCHES TO AUTOMATICALLY TURN OFF ALL UV-C LIGHTS ON THE APPLICABLE UV-C CIRCUIT IF ANY PANELS ARE OPENED. PROVIDE ALL WIRING AND APPURTENANCES. SEE SCHEDULE FOR UNIT TYPES. VERIFY ACCESS DOORS/PANELS IN FIELD.
- NOTE 13: "IN CABINET" INSTALLATIONS SHALL MAKE USE OF LIGHT SHIELDING AND REQUIRE PROPER AIMING DURING INSTALLATION. REFER TO MANUFACTURER'S RECOMMENDATIONS.

HVAC UNIT LEGEND

- RTU - ROOF TOP UNIT  
AHU - AIR HANDLING UNIT  
UV - VERTICAL UNIT VENTILATOR - FLOOR MOUNTED  
HORIZ. UV - HORIZONTAL UNIT VENTILATOR - CEILING HUNG  
FCU - VERTICAL FAN COIL UNIT - FLOOR MOUNTED  
HORIZ. FCU - HORIZONTAL FAN COIL UNIT - CEILING HUNG  
VRF - VARIABLE REFRIGERANT FLOW SYSTEM  
HRU - HEAT RECOVERY UNIT  
MAU - MAKE-UP AIR UNIT

CIRCUIT NAMING CONVENTION



SEE NOTES AND SCHEDULES REGARDING LABELING EQUIPMENT WITH INDICATED CIRCUIT MARK

ENGINEER:

**Eisenbach & Rohrer Engineering P.C.**

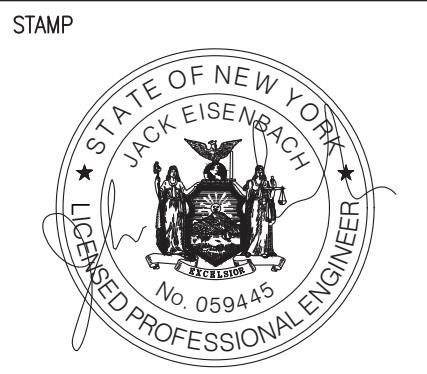
200 Corporate Center - 10th Fl. - 10001  
201-738-7318 Fax 201-738-7365  
www.ebr.com

CONSULTANT(S):

**FULLER D'ANGELO P.C.**

**ARCHITECTS PLANNERS**

48 KNOLLWOOD ROAD  
ELMHURST NEW YORK 10523  
TEL: 914.892.6666  
FAX: 914.892.1717  
WWW.FULLERDANGELO.COM  
Copyright 2019 All Rights Reserved by FULLER & D'ANGELO P.C.



**WARWICK VALLEY CENTRAL SCHOOL DISTRICT  
HIGH SCHOOL UNIT VENTILATOR REPLACEMENT AND  
AIR CONDITIONING UPGRADE**

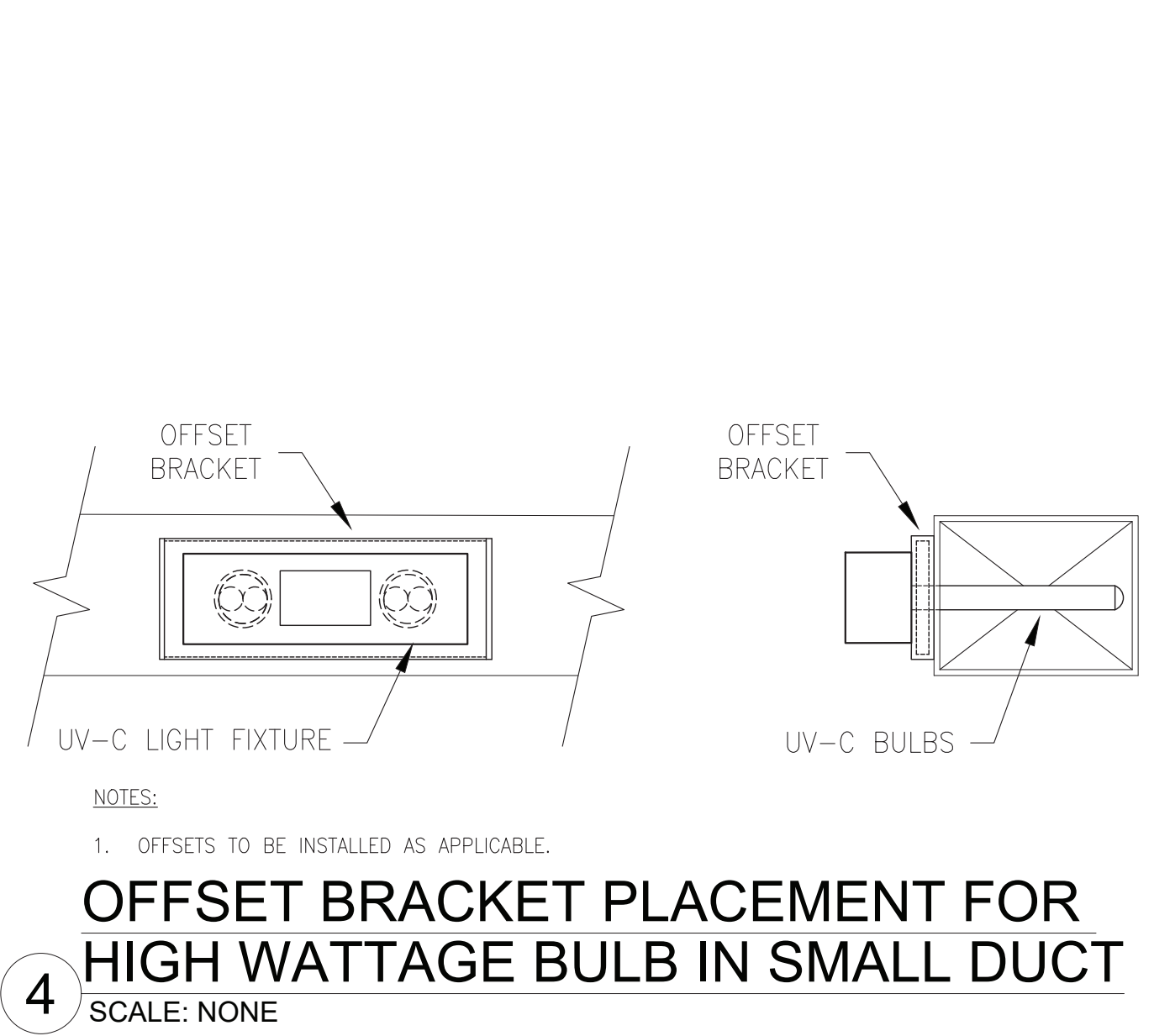
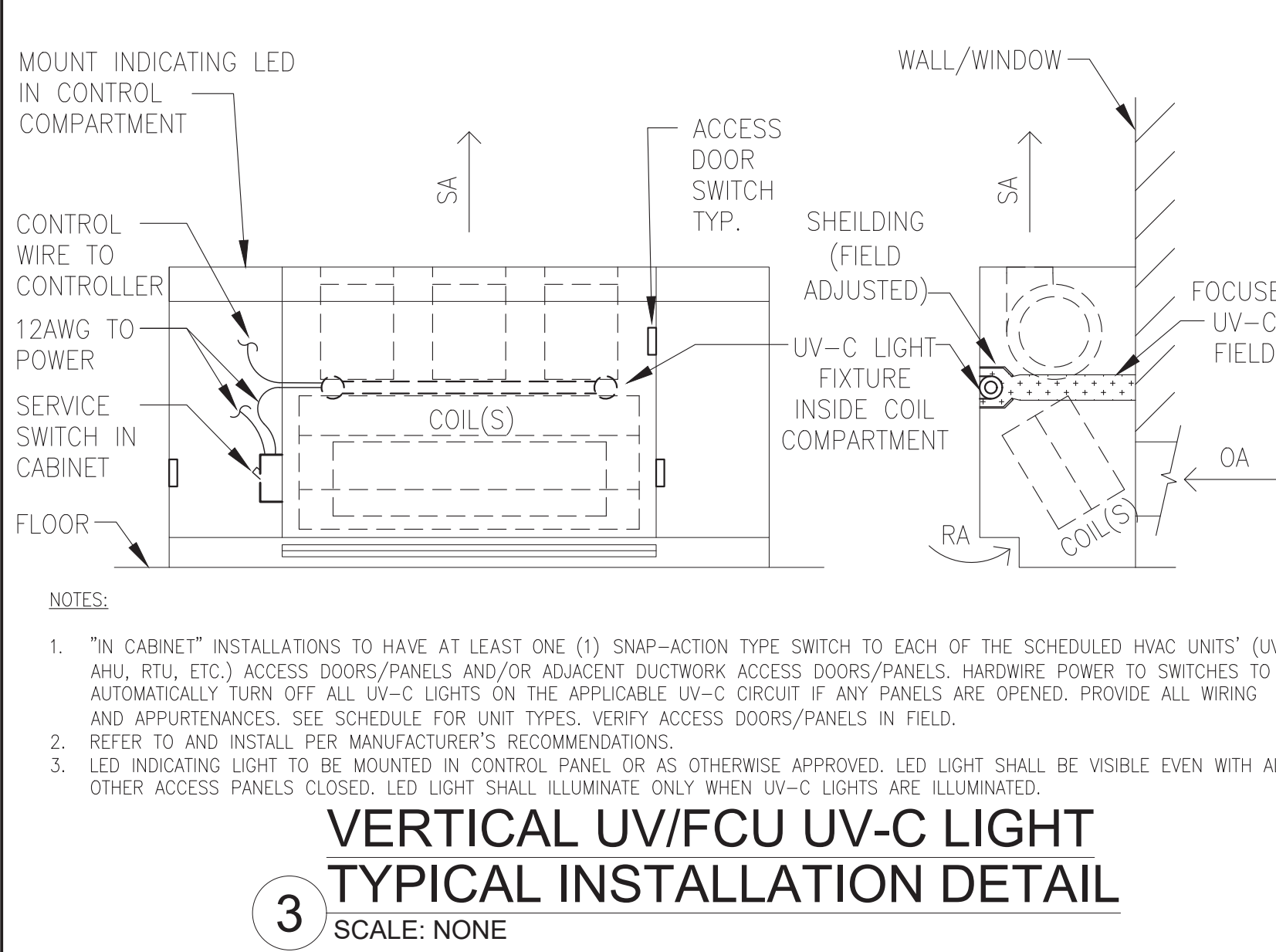
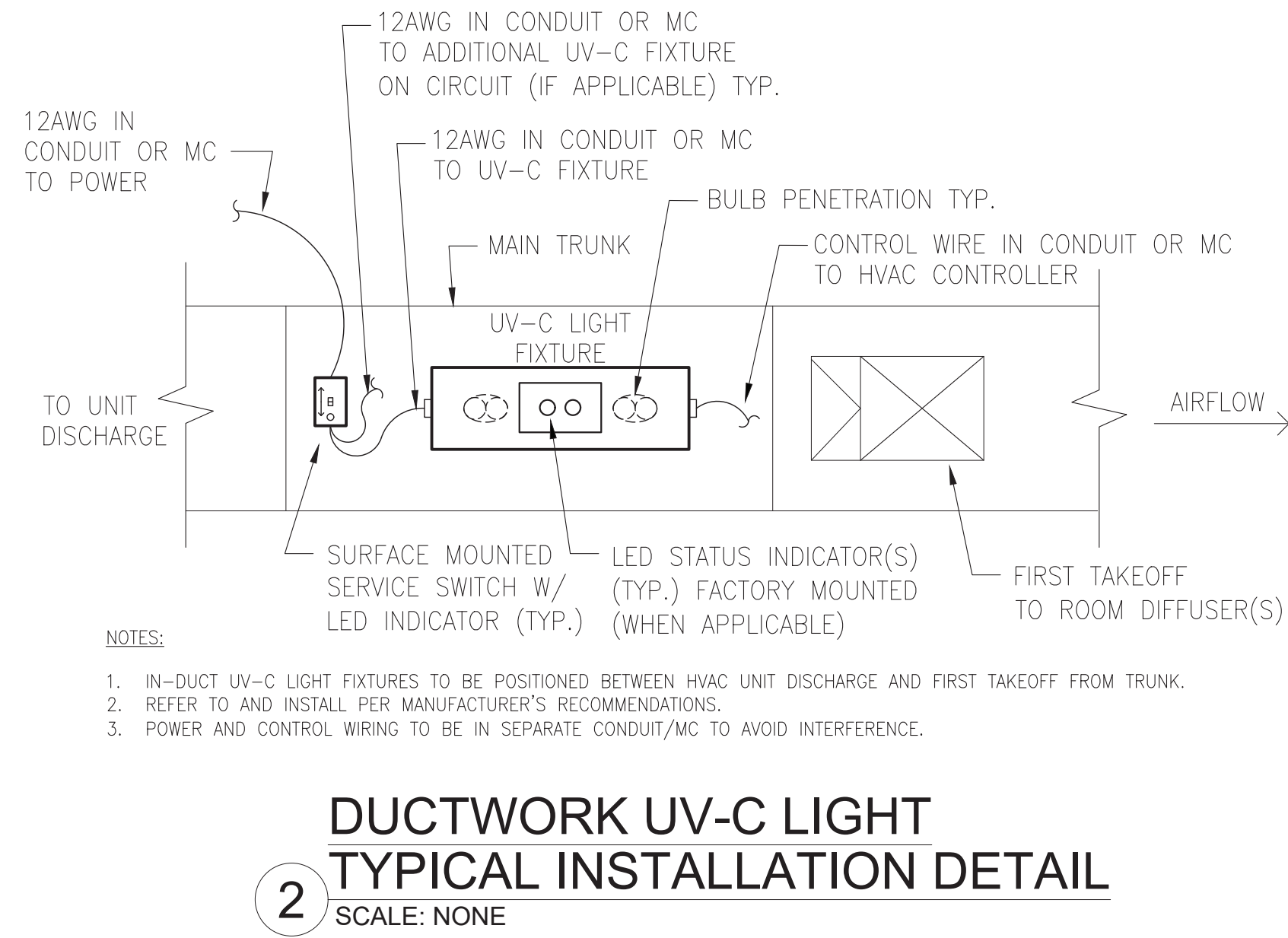
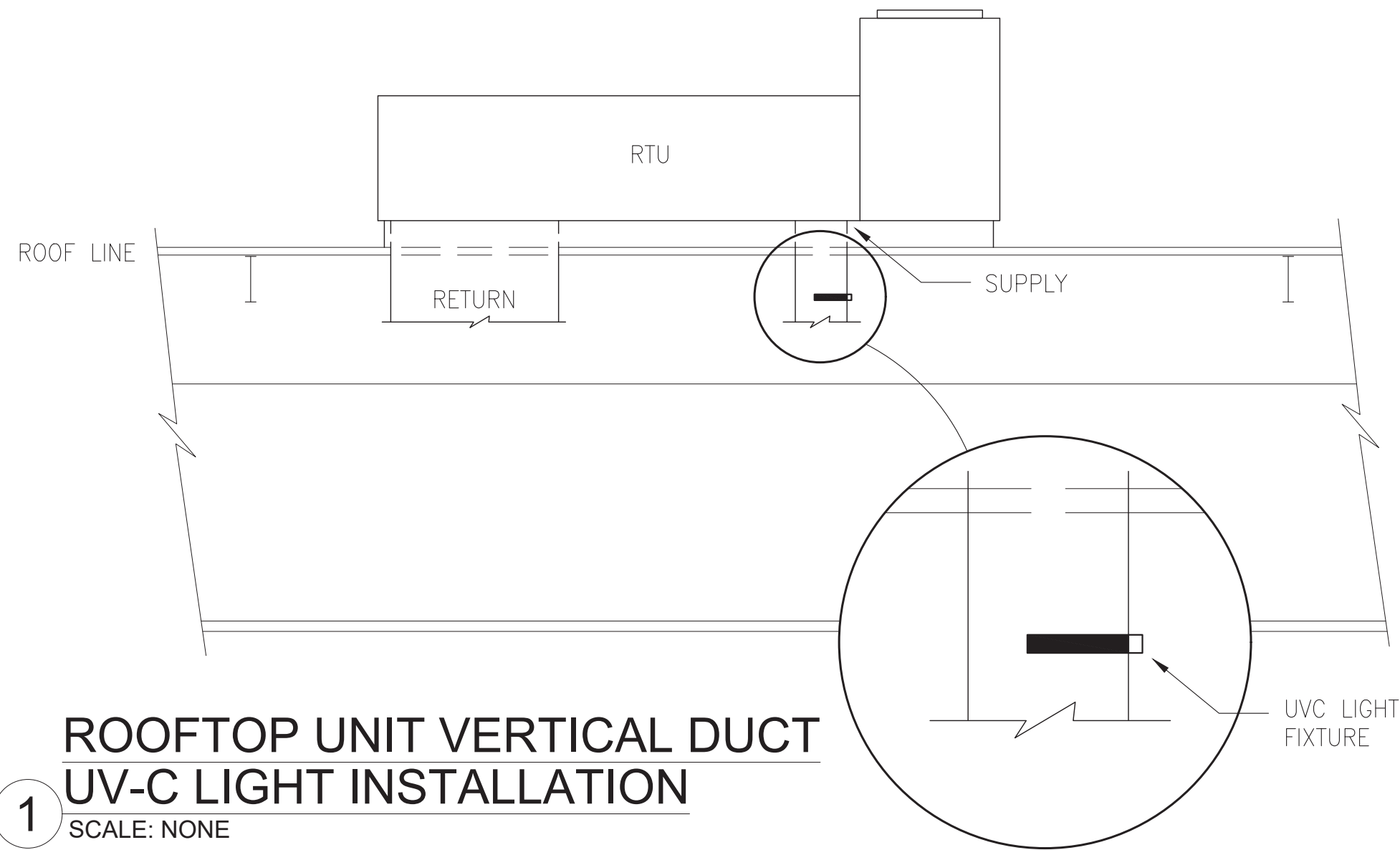
225 WEST STREET EXT, WARWICK, NY 10990  
WV HIGH SCHOOL - 89 SANFORDVILLE ROAD, WARWICK, NY 10990

SED NO. 44-21-01-06-0-001-042

PROJECT NO.	05-21-04 05-20-06
BID ADDENDUM ISSUED FOR BID	11.23.2022 11.09.2022
SED SET	10.19.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" x 42"
SCALE	AS NOTED
SHEET TITLE	
HIGH SCHOOL UV-C LIGHT FIXTURE SCHEDULE	
SHEET NO.	
M-503	

FILE PATH: N:\1 - PROJECT DIRECTORIES\1- E & R Projects\05 - Warwick Valley CSD\05-21-04 - Project\CAD\Package3-Helva\vr1\05-21-04-m503-m05.dwg





EQUIPMENT:	LABELS REQUIRED:
UV-C LIGHT FIXTURES	<ul style="list-style-type: none"> <li>UV-C CIRCUIT MARK</li> <li>"UV-C ON" AT INDICATING LEDS</li> <li>WARNING LABEL (BY MANUFACTURER)</li> <li>BLANK LABEL ON CEILINGS FOR QUICK LOCATION (WHEN APPLICABLE)</li> </ul>
SERVICE SWITCH	<ul style="list-style-type: none"> <li>UV-C CIRCUIT MARK</li> <li>"UV-C ON" AT INDICATING LEDS (WHEN APPLICABLE)</li> <li>PANEL LOCATION, NAME, BREAKER # (WHEN APPLICABLE)</li> </ul>

NOTE: LABEL COLOR TO BE PURPLE, OR AS SELECTED BY DISTRICT

## 5 LABELING REQUIREMENTS AND LOCATIONS

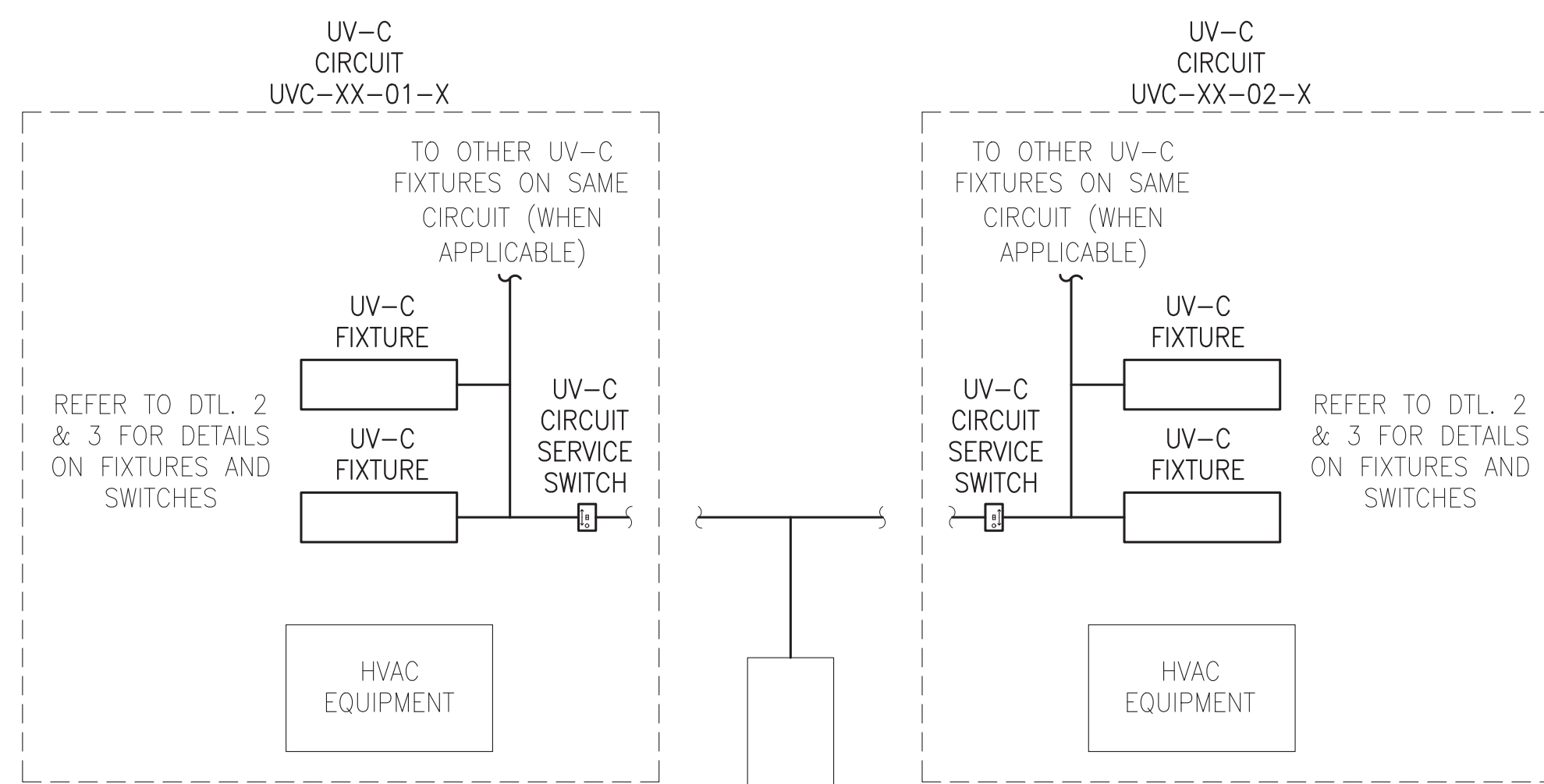
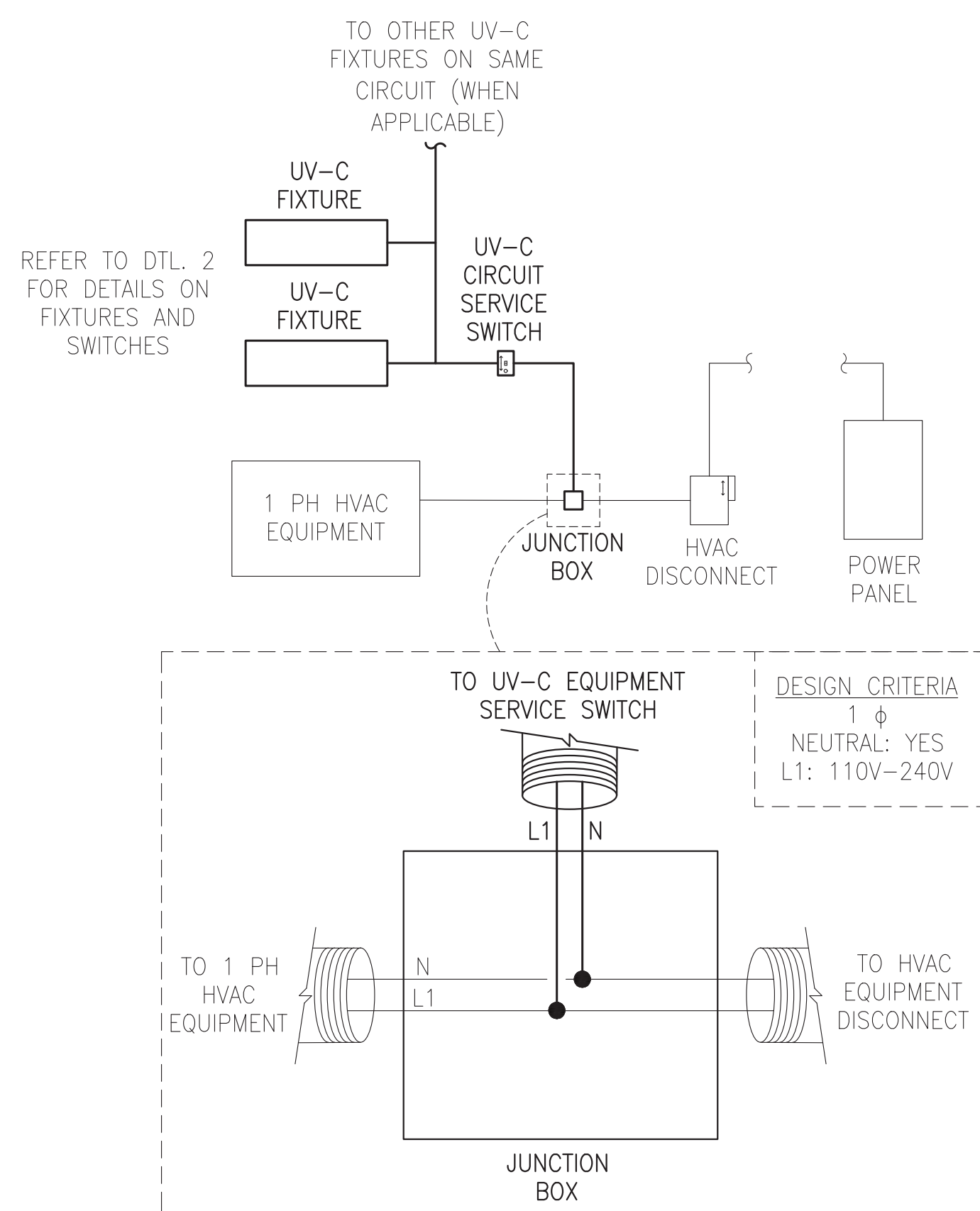
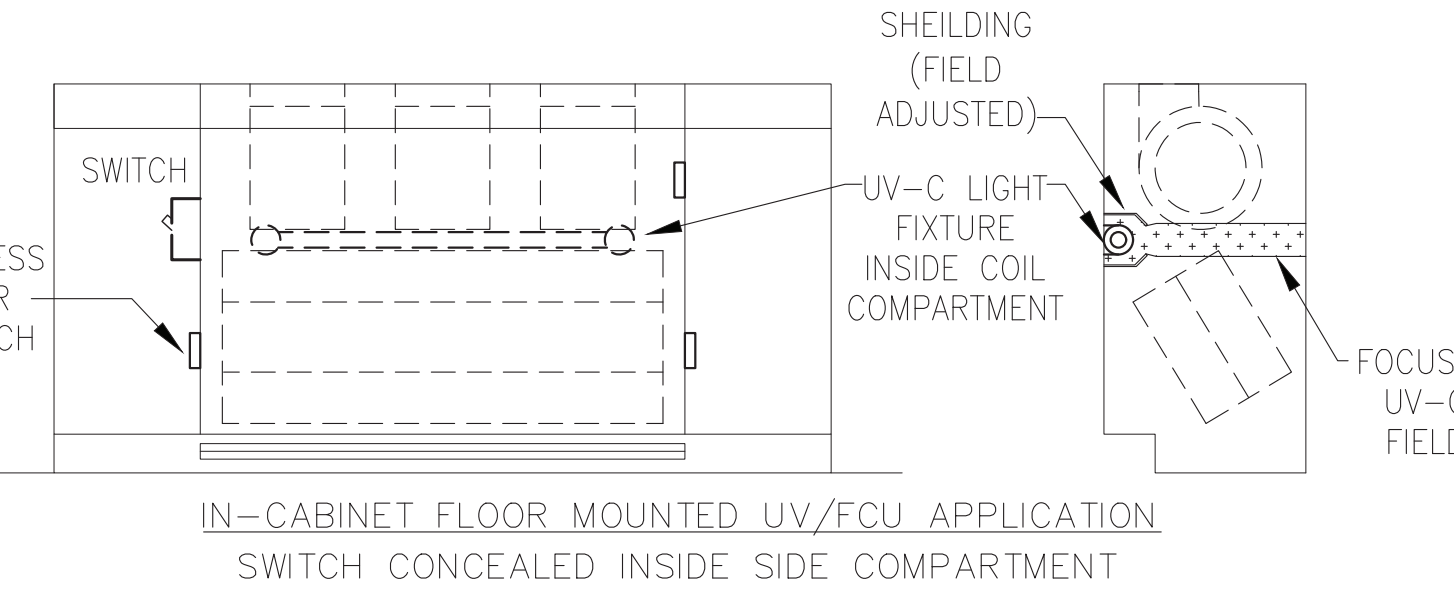
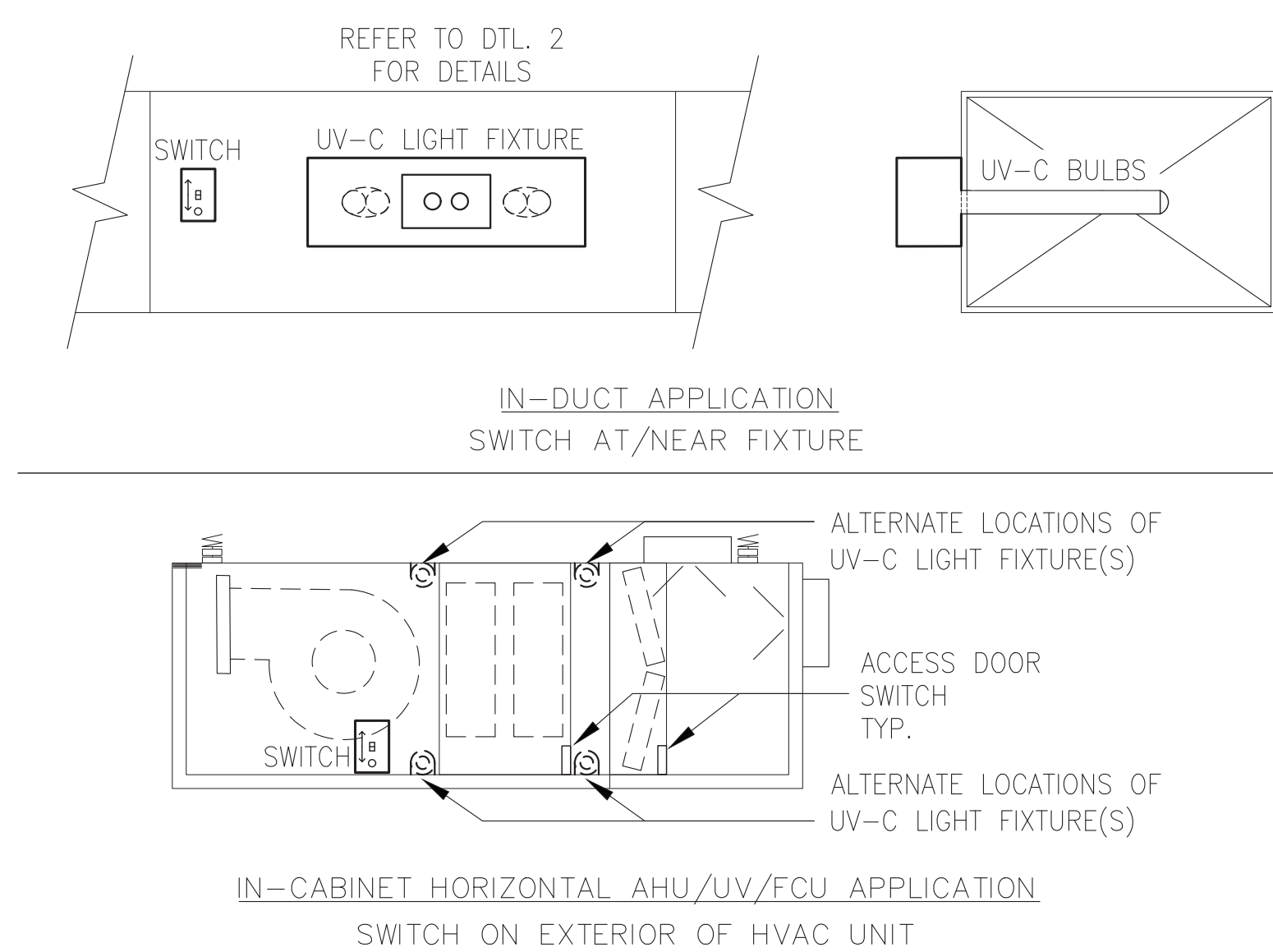
SCALE: NONE

UV-C & LED "OFF" CONDITIONS (REASONS IN BOLD)			
"UNOCCUPIED MODE" UNIT/ FAN (ON)	"OCCUPIED MODE" UNIT/ FAN (ON)	"OCCUPIED MODE" UNIT/ FAN (ON)	"OCCUPIED MODE" UNIT/ FAN (ON)
<p>DISC. SWITCH (ON) SWITCH LED (OFF)</p> <p>ALL ACCESS DOOR SNAP SWITCHES (CLOSED)</p> <p>UV-C (OFF)</p> <p>UV-C (OFF)</p>	<p>DISC. SWITCH (OFF) SWITCH LED (OFF)</p> <p>ALL ACCESS DOOR SNAP SWITCHES (CLOSED)</p> <p>UV-C (OFF)</p> <p>UV-C (OFF)</p>	<p>DISC. SWITCH (ON) SWITCH LED (OFF)</p> <p>ANY ACCESS DOOR SNAP SWITCH (OPEN)</p> <p>UV-C (OFF)</p> <p>UV-C (OFF)</p>	<p>DISC. SWITCH (ON) SWITCH LED (ON)</p> <p>ALL ACCESS DOOR SNAP SWITCHES (CLOSED)</p> <p>UV-C (ON)</p> <p>UV-C (ON)</p>
NOTE 1	NOTE 2	NOTE 3	NOTE 4

- NOTES:
- UV-C FIXTURES SHALL NOT ENGAGE DURING "UNOCCUPIED" MODE. "OCCUPIED MODE" TO BE ACTIVE WITHIN THE TIME FRAME FROM ONE HOUR BEFORE SCHOOL UNTIL ONE HOUR AFTER SCHOOL "UNOCCUPIED MODE" TO BE ACTIVE OUTSIDE OF THAT TIME FRAME (COORDINATE TIME-FRAME SETTING WITH DISTRICT REPRESENTATIVE), OR AS DEFINED BY THE HVAC EQUIPMENT.
  - THE DISCONNECTING SWITCH IN THE "OFF" POSITION SHALL NOT ILLUMINATE THE LED AND SHALL DISCONNECT ALL UV-C LIGHTS ON THE CIRCUIT. UV-C FIXTURES SHALL NOT ENGAGE IF THE DISCONNECTING SWITCH IS "OFF".
  - HVAC UNITS WITH UV-C LIGHT FIXTURES INSTALLED INSIDE OF THE UNIT'S CABINET (WHEN APPLICABLE) SHALL HAVE SNAP SWITCH SENSORS INSTALLED TO ALL ACCESS DOORS. IF ANY ACCESS DOOR SNAP SWITCH SENSORS ARE OPEN THE UV-C FIXTURES SHALL NOT ENGAGE.
  - THE UV-C LIGHT FIXTURES AND DISCONNECTING SWITCH LED SHALL ENGAGE AND ILLUMINATE ONLY WHEN: DURING "OCCUPIED MODE", WHEN THE HVAC UNIT IS "ON", ALL SNAP SWITCH SENSORS ARE CLOSED, AND DISCONNECTING SWITCH IS "ON".

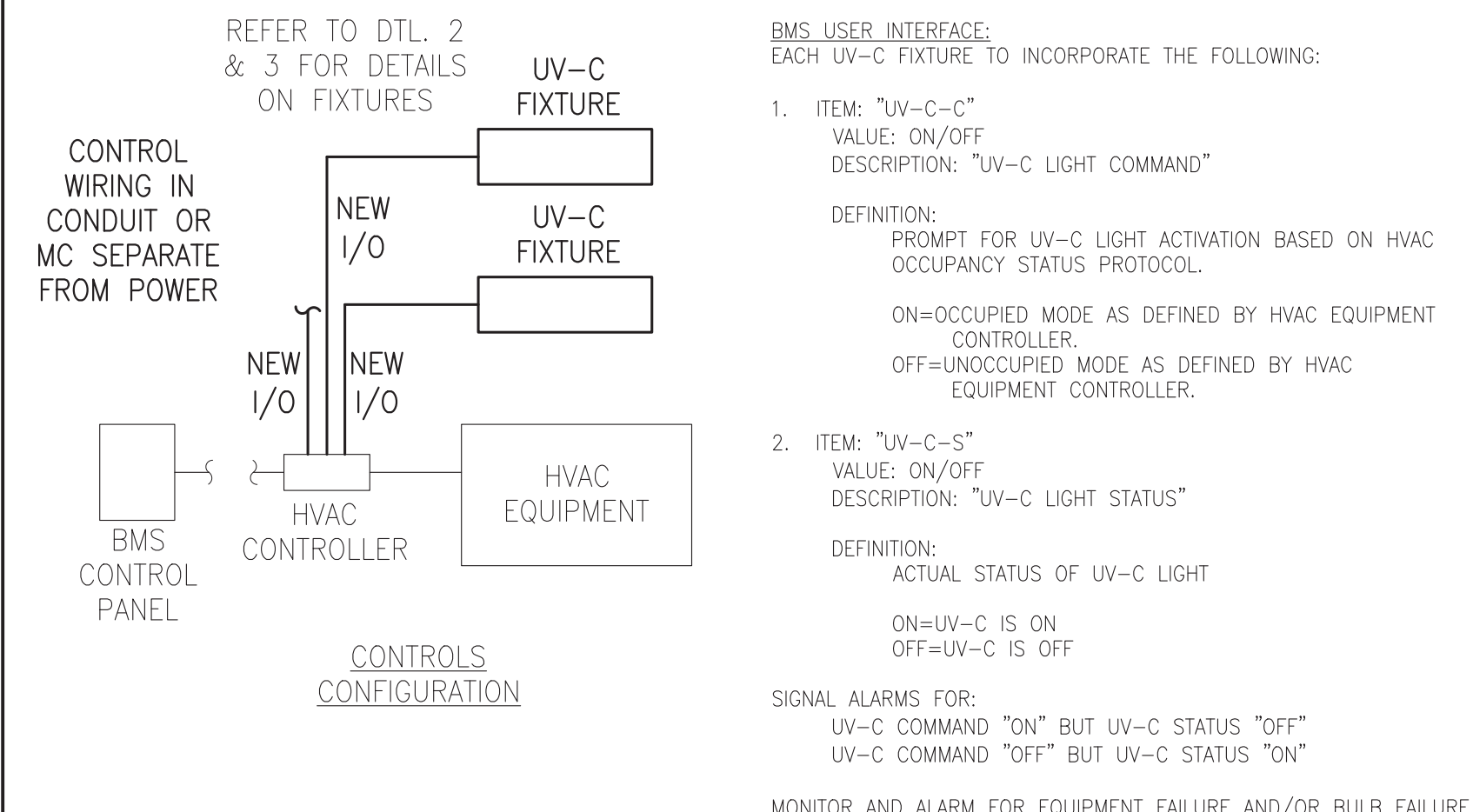
## 6 UV-C LIGHT FIXTURE ACTIVATION CONDITIONS

SCALE: NONE



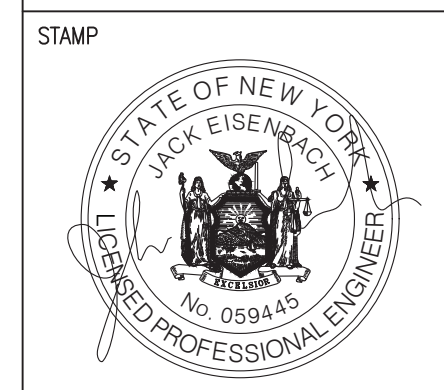
**BIDDING NOTE**

ALL WORK ON THIS SHEET IS NOT IN CONTACT AND IS PROVIDED FOR REFERENCE ONLY.



THIS DOCUMENT IS THE PROPERTY OF FULLER D'ANGELO P.C. IT IS TO BE USED ONLY FOR THE PROJECT AND NOT BE LOANED, REPRODUCED, COPIED, OR IN ANY MANNER ALTERED WITHOUT THE WRITTEN PERMISSION OF FULLER D'ANGELO P.C. ANY UNAUTHORIZED ALTERATION OF THIS DOCUMENT IS PROHIBITED. THE SIGNATURE AND DATE OF THE USER SHALL BE OBTAINED AND MAINTAINED WITH A DESCRIPTION OF THE ALTERATION, THE SIGNATURE AND DATE. COPYRIGHT © 2019

ENGINEER:  
**Fuller D'Angelo P.C.**  
48 KNOLLWOOD ROAD  
ELIZABETH, NEW YORK 10883  
TEL: 914.892.6666  
FAX: 914.892.1717  
WWW.FULLERDANGELO.COM  
Copyright 2019 All Rights Reserved by FULLER D'ANGELO P.C.



**WARWICK VALLEY CENTRAL SCHOOL DISTRICT  
HIGH SCHOOL UNIT VENTILATOR REPLACEMENT AND  
AIR CONDITIONING UPGRADE**  
225 WEST STREET EXT. WARWICK, NY 10990  
WV HIGH SCHOOL - 89 SANFORDVILLE ROAD, WARWICK, NY 10990  
SHEET NO. 44-21-01-06-0-001-042

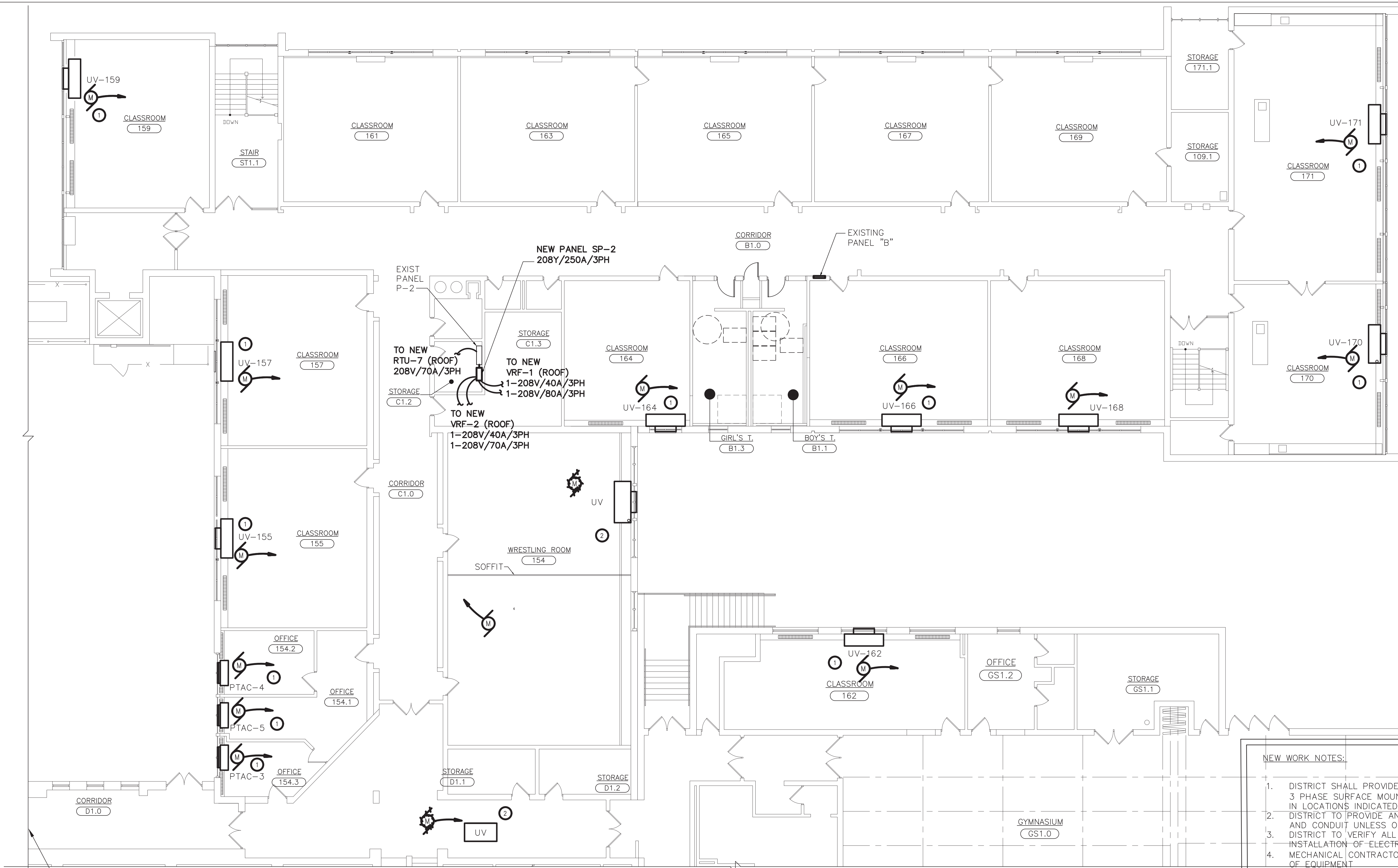
PROJECT NO.	05-21-04 05-20-06
BID ADDENDUM ISSUED FOR BID	11.23.2022
SED SET	10.19.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" x 42"
SCALE	AS NOTED
SHEET TITLE	UV-C LIGHT FIXTURE DETAILS
SHEET NO.	

**M-504**

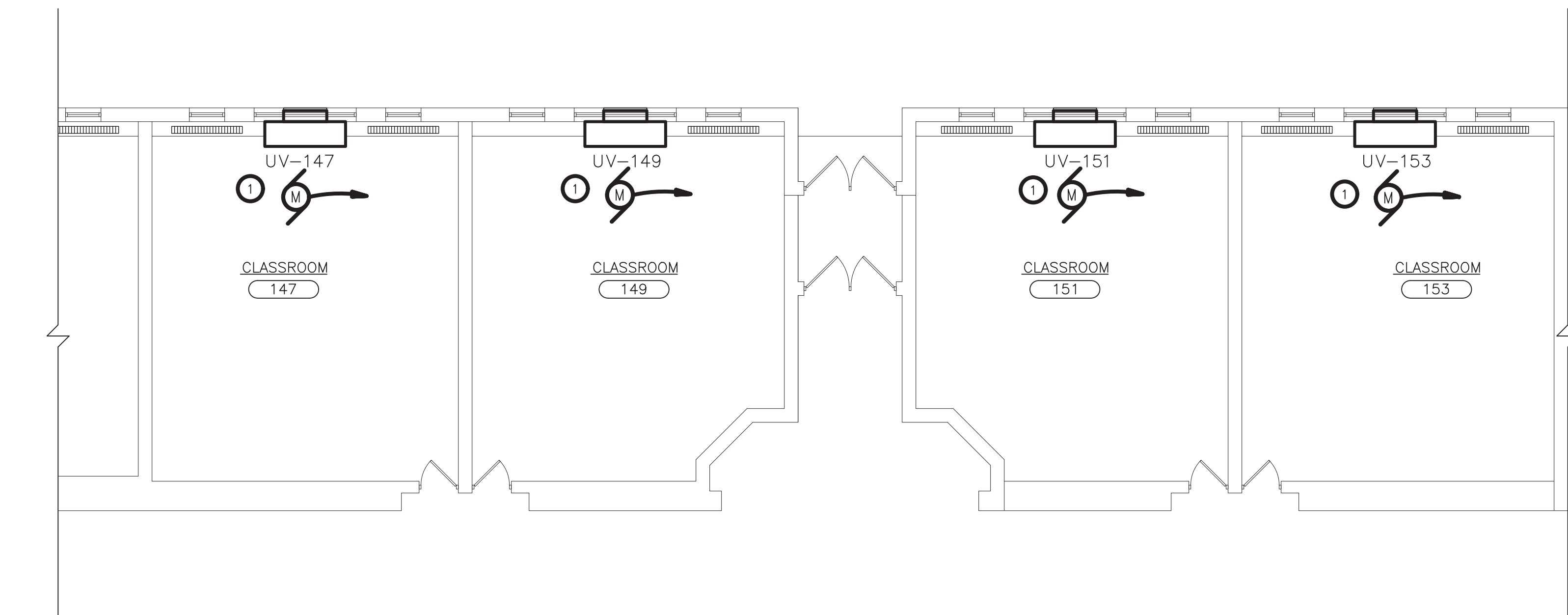




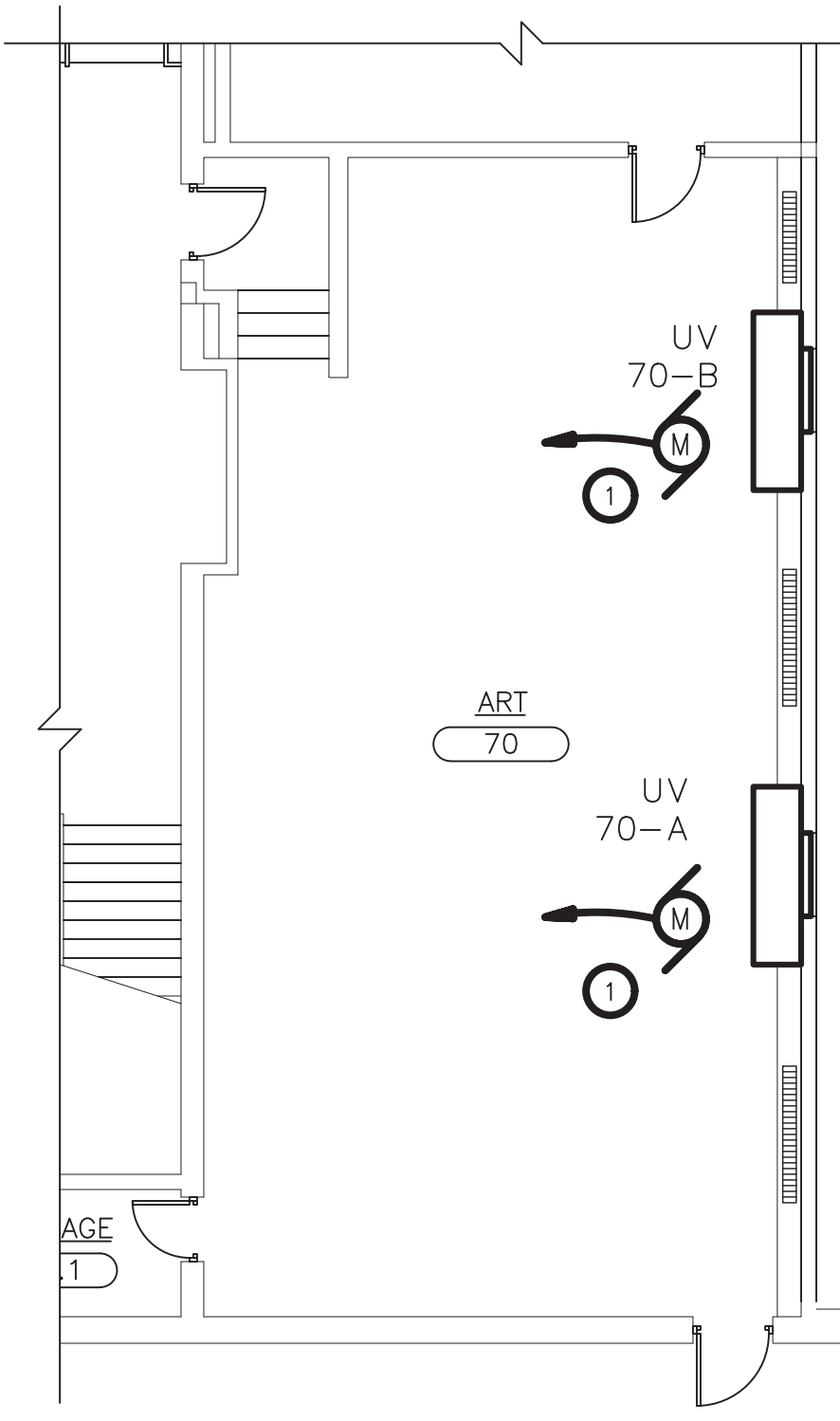




**2 PARTIAL FIRST FLOOR PLAN - DEMO & NEW WORK**  
SCALE: 1/8"=1'-0"



**3 PARTIAL FIRST FLOOR PLAN - DEMO & NEW WORK**  
SCALE: 1/8"=1'-0"



**1 PARTIAL BASEMENT FLOOR PLAN - DEMO & NEW WORK**  
SCALE: 1/8"=1'-0"

- NEW WORK NOTES:**
- DISTRICT SHALL PROVIDE NEW 250A - MINIMUM 24 SPACE 208Y/120V , 4-WIRE, 3 PHASE SURFACE MOUNTED PANEL BOARDS 'P-4' AND 'SP-2' TO BE INSTALLED IN LOCATIONS INDICATED ON DRAWINGS BY DISTRICT
  - DISTRICT TO PROVIDE AND INSTALL ALL ELECTRICAL DISTRIBUTION PANELS, WIRING, AND CONDUIT UNLESS OTHERWISE NOTED.
  - DISTRICT TO VERIFY ALL SERVICE VOLTAGES PRIOR TO MODIFICATION OR INSTALLATION OF ELECTRICAL EQUIPMENT.
  - MECHANICAL CONTRACTOR (MC) SHALL COORDINATE WITH DISTRICT FOR LOCATION OF EQUIPMENT
  - MC SHALL PROVIDE AND INSTALL ALL CONTROL, SENSOR, AND SIGNALING WIRE AND CONDUIT BETWEEN EQUIPMENT AND BMS.
  - MC SHALL COORDINATE WITH DISTRICT ALL WORK PRIOR TO COMMENCEMENT TO AVOID DUPLICATION OF SERVICE OR CONFLICTS WITH EXISTING SPACES.
  - DISTRICT SHALL LABEL ALL NEW WORK, PANELS, AND CIRCUITS TO CLEARLY IDENTIFY EQUIPMENT, LOADS, AND CIRCUIT NUMBERS.
  - CONTACT ENGINEERING FOR DISCREPANCIES OR CONFLICTS BETWEEN DRAWINGS, SPECIFICATION, OR SCHEDULES.

- KEYED NOTES - NEW WORK:**
- PROVIDE DISCONNECTION OF POWER TO EXISTING EQUIPMENT AND REUSE EXISTING CIRCUITS/ RECONNECT TO NEW EQUIPMENT FOR NEW WORK. PROVIDE ALL APPURTENANCES. SEE ELECTRIC EQUIPMENT AND CONTROL SCHEDULE ON E500.
  - DISCONNECT POWER AND REMOVE BACK TO NEAREST JUNCTION BOX

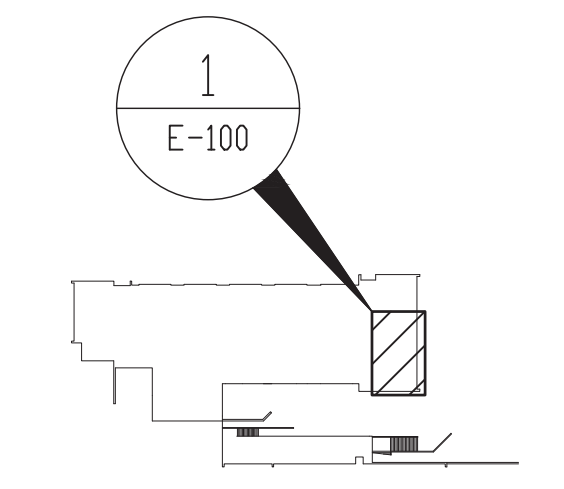
**BIDDING NOTE**

ALL WORK ON THIS SHEET TO BE PROVIDED IN ITS ENTIRETY BY THE DISTRICT AND IS PROVIDED FOR REFERENCE ONLY, UNLESS OTHERWISE NOTED.

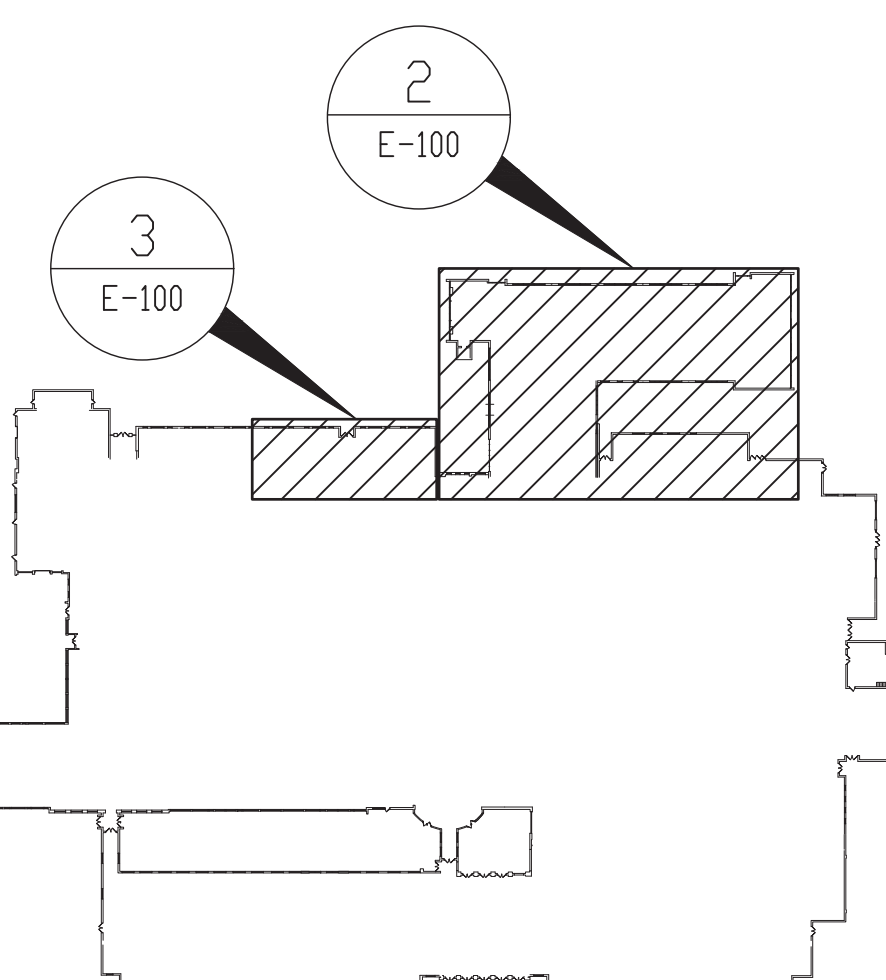
**ALTERNATE NOTE**

**ALT. E-1:**

EQUIPMENT AND ASSOCIATED WORK WITH THIS MARK TO BE PROVIDED AS PART OF ALTERNATE E-1 ONLY. ALL OTHER UNMARKED WORK TO BE PROVIDED AS PART OF BASE BID.



**BASEMENT KEY PLAN**  
SCALE: NONE



**FIRST FLOOR KEY PLAN**  
SCALE: NONE

ENGINEER:  
**Eisenbach & Rohrer Engineering, P.C.**  
200 Garden Street - 10th Fl. - New York, NY 10014  
Tel: 212-738-1818 Fax: 212-738-1825  
www.eisenbach.com

CONSULTANT(S):  
**FULLER D'ANGELO P.C.**  
ARCHITECTS PLANNERS  
48 KNOLLWOOD ROAD  
ELMSFORD NEW YORK 10523  
TEL: 914.892.4444  
FAX: 914.892.1717  
WWW.FULLERDANGELO.COM  
Copyright 2022 All Rights Reserved by FULLER & D'ANGELO P.C.

STATE OF NEW YORK  
Professional Engineer  
No. 05944  
Exp. 12/31/2024

**WARWICK VALLEY CENTRAL SCHOOL DISTRICT  
HIGH SCHOOL UNIT VENTILATOR REPLACEMENT AND  
AIR CONDITIONING UPGRADE**  
225 WEST STREET EXT. WARWICK, NY 10990  
WV HIGH SCHOOL - 89 SANFORDVILLE ROAD, WARWICK, NY 10990  
SED NO. 44-21-01-06-0-001-042

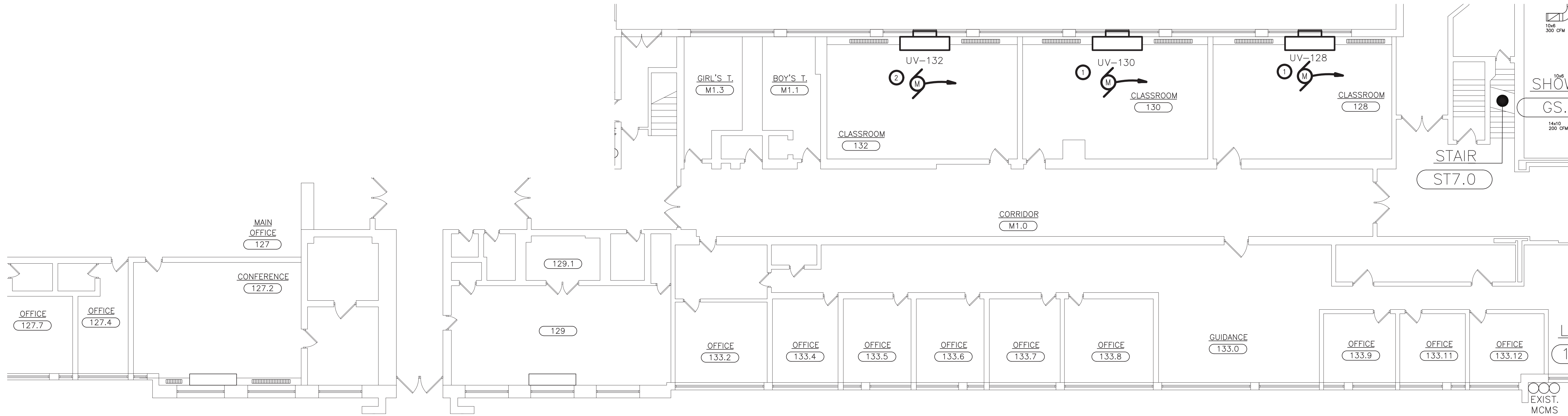
PROJECT NO.	05-21-04
ISSUED FOR BID	11.23.2022
SET	11.09.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" x 42"
SCALE	AS NOTED

**PARTIAL BASEMENT AND FIRST FLOOR PLANS - DEMO & NEW WORK**

SHEET NO.  
**E-100**

FILE PATH: N:\1 - PROJECT DIRECTORIES\1 - E & R Projects\05 - Warwick Valley CSP\05-21-04\05-21-04-01-06-0-001-042.dwg





1 PARTIAL FIRST FLOOR PLAN - DEMO & NEW WORK  
SCALE: 1/8"=1'-0"

- KEYED NOTES - NEW WORK:
- 1 PROVIDE DISCONNECTION OF POWER TO EXISTING EQUIPMENT AND REUSE EXISTING CIRCUITS/ RECONNECT TO NEW EQUIPMENT FOR NEW WORK. PROVIDE ALL APPURTENANCES. SEE ELECTRIC EQUIPMENT AND CONTROL SCHEDULE ON E500.
  - 2 PROVIDE POWER TO NEW UNIT VENTILATOR. PROVIDE ALL APPURTENANCES. SEE ELECTRIC EQUIPMENT AND CONTROL SCHEDULE ON E500.

- NEW WORK NOTES:
- DISTRICT TO VERIFY ALL SERVICE VOLTAGES PRIOR TO MODIFICATION OR INSTALLATION OF ELECTRICAL EQUIPMENT.
  - MECHANICAL CONTRACTOR (MC) SHALL COORDINATE WITH DISTRICT FOR LOCATION OF EQUIPMENT.
  - MC SHALL PROVIDE AND INSTALL ALL CONTROL, SENSOR, AND SIGNALING WIRE AND CONDUIT BETWEEN EQUIPMENT AND BMS.
  - MC SHALL COORDINATE WITH DISTRICT ALL WORK PRIOR TO COMMENCEMENT TO AVOID DUPLICATION OF SERVICE OR CONFLICTS WITH EXISTING SPACES.
  - CONTACT ENGINEERING FOR DISCREPANCIES OR CONFLICTS BETWEEN DRAWINGS, SPECIFICATION, OR SCHEDULES.

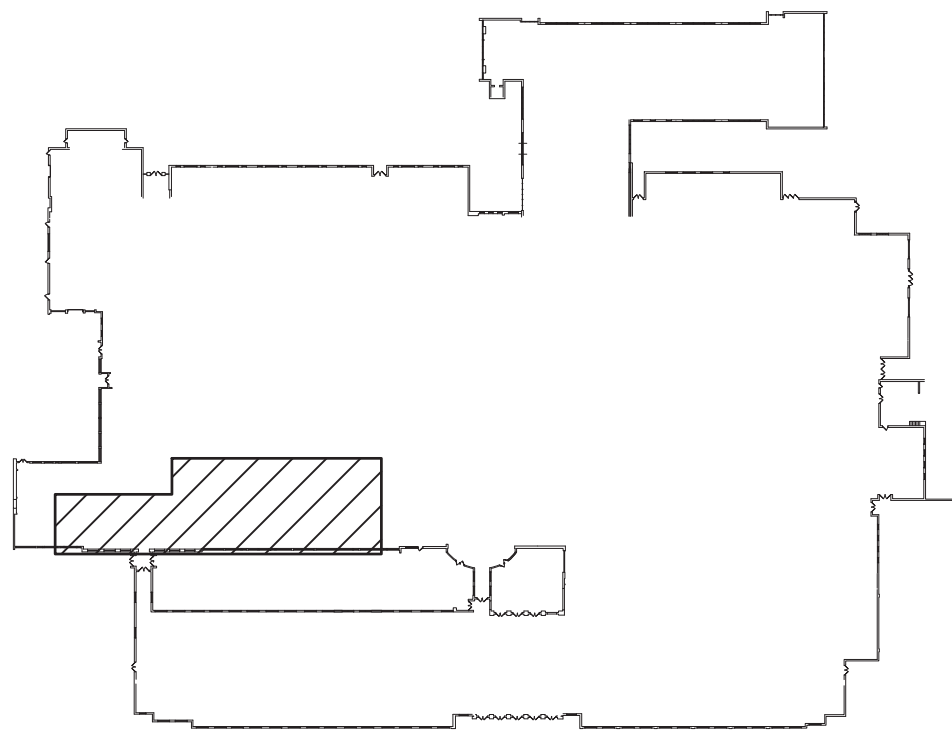
BIDDING NOTE

ALL WORK ON THIS SHEET TO BE PROVIDED IN ITS ENTIRETY BY THE DISTRICT AND IS PROVIDED FOR REFERENCE ONLY, UNLESS OTHERWISE NOTED.

ALTERNATE NOTE

ALT. E-1:

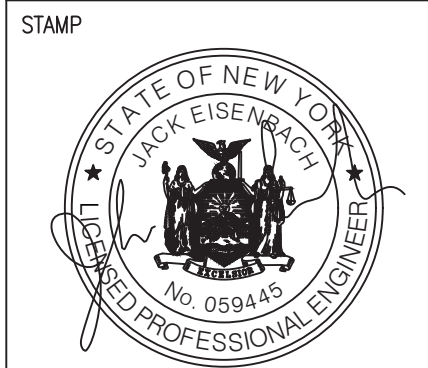
EQUIPMENT AND ASSOCIATED WORK WITH THIS MARK TO BE PROVIDED AS PART OF ALTERNATE E-1 ONLY. ALL OTHER UNMARKED WORK TO BE PROVIDED AS PART OF BASE BID.



FIRST FLOOR KEY PLAN  
SCALE: NONE

ENGINEER:  
**Eisenbach & Rohrer Engineering, P.C.**  
201 Stevens Street - Union, NY 10987  
Ph: 845-738-1818 Fax: 845-738-6365  
www.eisenbach.com

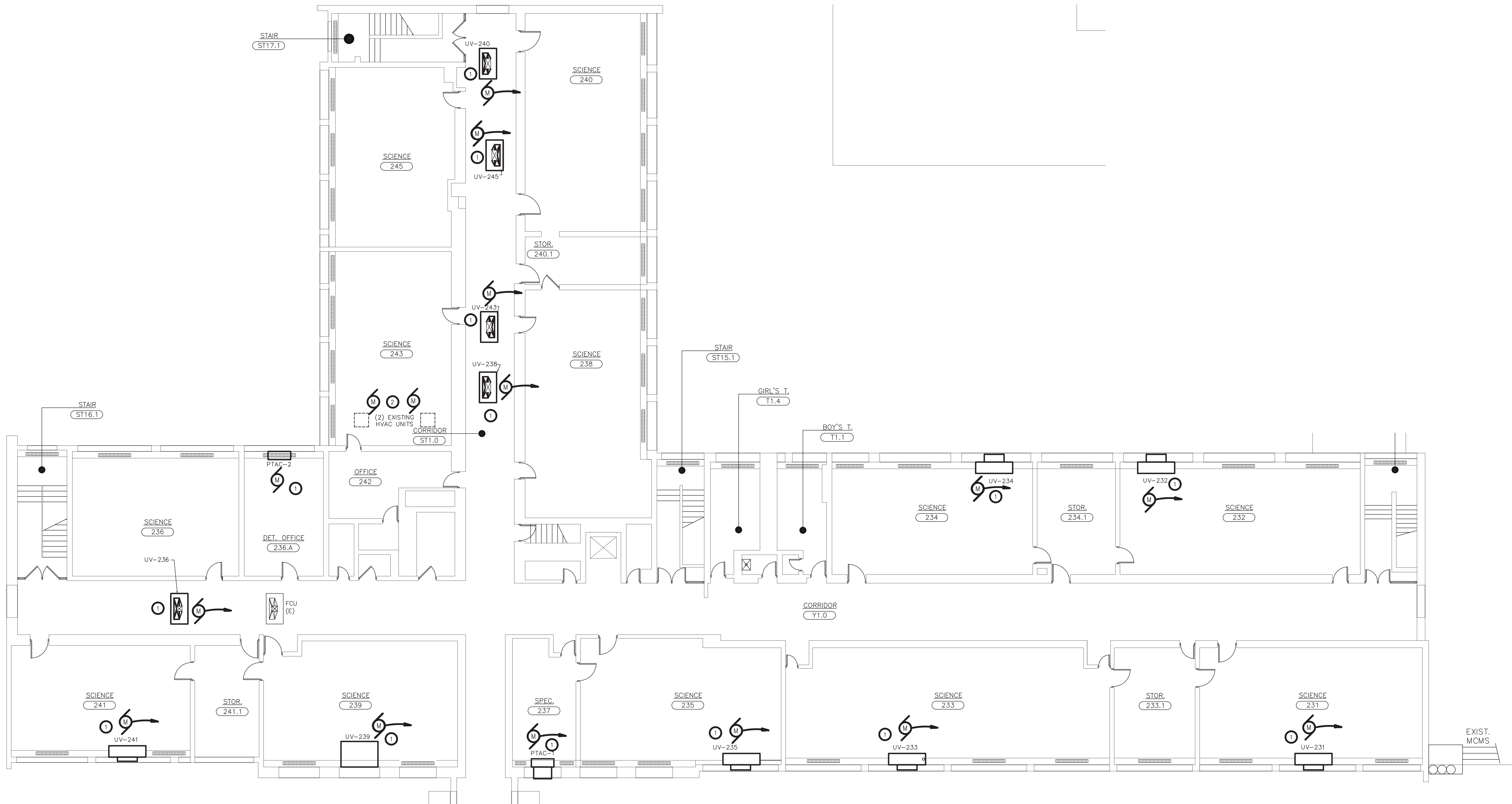
CONSULTANT(S):  
**FULLER D'ANGELO P.C.**  
ARCHITECTS PLANNERS  
48 KNOLLWOOD ROAD  
ELMSFORD NEW YORK 10523  
TEL: 914.892.4444  
FAX: 914.892.1717  
WWW.FULLERDANGELO.COM  
Copyright 2022 All Rights Reserved by FULLER & D'ANGELO P.C.



WARWICK VALLEY CENTRAL SCHOOL DISTRICT  
HIGH SCHOOL UNIT VENTILATOR REPLACEMENT AND  
AIR CONDITIONING UPGRADE  
225 WEST STREET EXT. WARWICK, NY 10990  
WV HIGH SCHOOL - 89 SANFORDVILLE ROAD, WARWICK, NY 10990  
SED NO. 44-21-01-06-0-001-042

PROJECT NO.	05-21-04 05-20-06
BID ADDENDUM ISSUED FOR BID	11.23.2022 11.09.2022
SED SET	10.18.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" x 42"
SCALE	AS NOTED
SHEET TITLE	PARTIAL FIRST FLOOR PLAN - DEMO & NEW WORK
SHEET NO.	E-101





1 PARTIAL SECOND FLOOR PLAN - DEMO & NEW WORK  
SCALE: 1/8"=1'-0"

KEYED NOTES - NEW WORK:

- 1 PROVIDE DISCONNECTION OF POWER TO EXISTING EQUIPMENT AND REUSE EXISTING CIRCUITS/ RECONNECT TO NEW EQUIPMENT FOR NEW WORK. PROVIDE ALL APPURTENANCES. SEE ELECTRIC EQUIPMENT AND CONTROL SCHEDULE ON E500.
- 2 DISCONNECT POWER TO (2) HVAC UNITS AND REMOVE BACK TO NEAREST JUNCTION BOX.

NEW WORK NOTES:

- DISTRICT TO VERIFY ALL SERVICE VOLTAGES PRIOR TO MODIFICATION OR INSTALLATION OF ELECTRICAL EQUIPMENT.
- MECHANICAL CONTRACTOR (MC) SHALL COORDINATE WITH DISTRICT FOR LOCATION OF EQUIPMENT.
- MC SHALL PROVIDE AND INSTALL ALL CONTROL, SENSOR, AND SIGNALING WIRE AND CONDUIT BETWEEN EQUIPMENT AND BMS.
- MC SHALL COORDINATE WITH DISTRICT ALL WORK PRIOR TO COMMENCEMENT TO AVOID DUPLICATION OF SERVICE OR CONFLICTS WITH EXISTING SPACES.
- CONTACT ENGINEERING FOR DISCREPANCIES OR CONFLICTS BETWEEN DRAWINGS, SPECIFICATION, OR SCHEDULES.

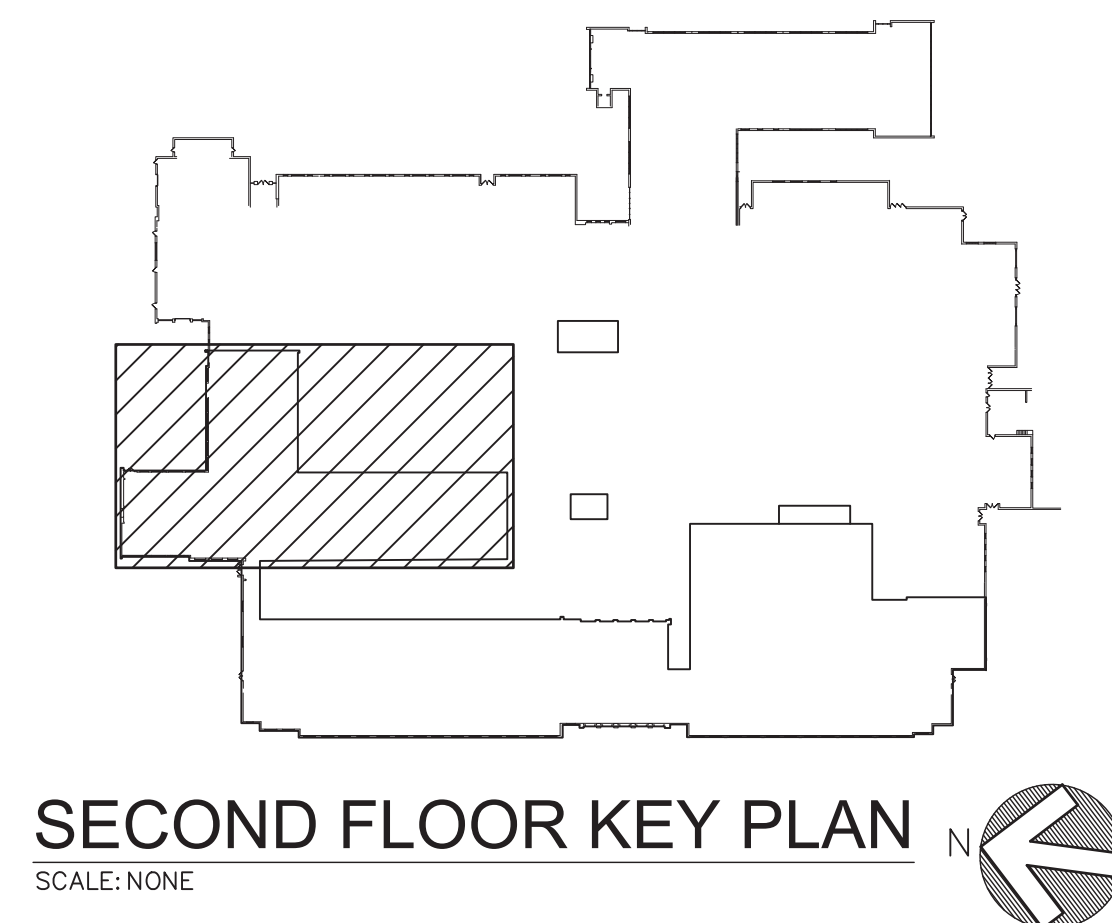
#### BIDDING NOTE

ALL WORK ON THIS SHEET TO BE PROVIDED IN ITS ENTIRETY BY THE DISTRICT AND IS PROVIDED FOR REFERENCE ONLY, UNLESS OTHERWISE NOTED.

#### ALTERNATE NOTE

ALT. E-1:

EQUIPMENT AND ASSOCIATED WORK WITH THIS MARK TO BE PROVIDED AS PART OF ALTERNATE E-1 ONLY. ALL OTHER UNMARKED WORK TO BE PROVIDED AS PART OF BASE BID.

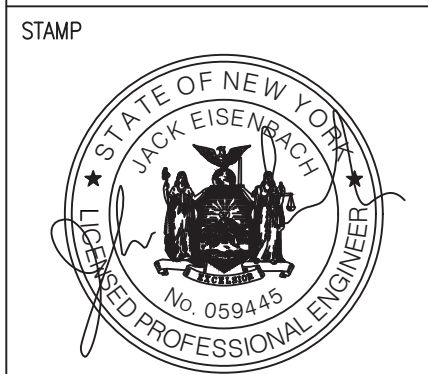


SECOND FLOOR KEY PLAN  
SCALE: NONE

THIS DRAWING IS THE PROPERTY OF FULLER D'ANGELO ARCHITECTS PLANNERS. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREON. NO PART OF THIS DRAWING IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN PERMISSION OF FULLER D'ANGELO ARCHITECTS PLANNERS. ANY ALTERATION MUST HAVE THE SEAL, ATTACHED ALONG WITH A DESCRIPTION OF THE ALTERATION, THE SIGNATURE AND DATE. COPYRIGHT © 2019

ENGINEER:  
**ER**  
Eisenbach & Rohrer Engineering, P.C.  
201 Stevens Street - Union, NY 10987  
Ph: 845-738-1818 Fax: 845-738-6365  
www.eisenbach.com

CONSULTANT(S):  
**FULLER D'ANGELO P.C.**  
ARCHITECTS PLANNERS  
48 KNOLLWOOD ROAD  
ELMSFORD NEW YORK 10523  
TEL: 914.892.4444  
FAX: 914.892.1717  
WWW.FULLERDANGELO.COM  
Copyright 2022 All Rights Reserved by FULLER & D'ANGELO P.C.



WARWICK VALLEY CENTRAL SCHOOL DISTRICT  
HIGH SCHOOL UNIT VENTILATOR REPLACEMENT AND  
AIR CONDITIONING UPGRADE  
225 WEST STREET EXT. WARWICK, NY 10990  
WV HIGH SCHOOL - 89 SANFORDVILLE ROAD, WARWICK, NY 10990  
SED NO. 44-21-01-06-0-001-042

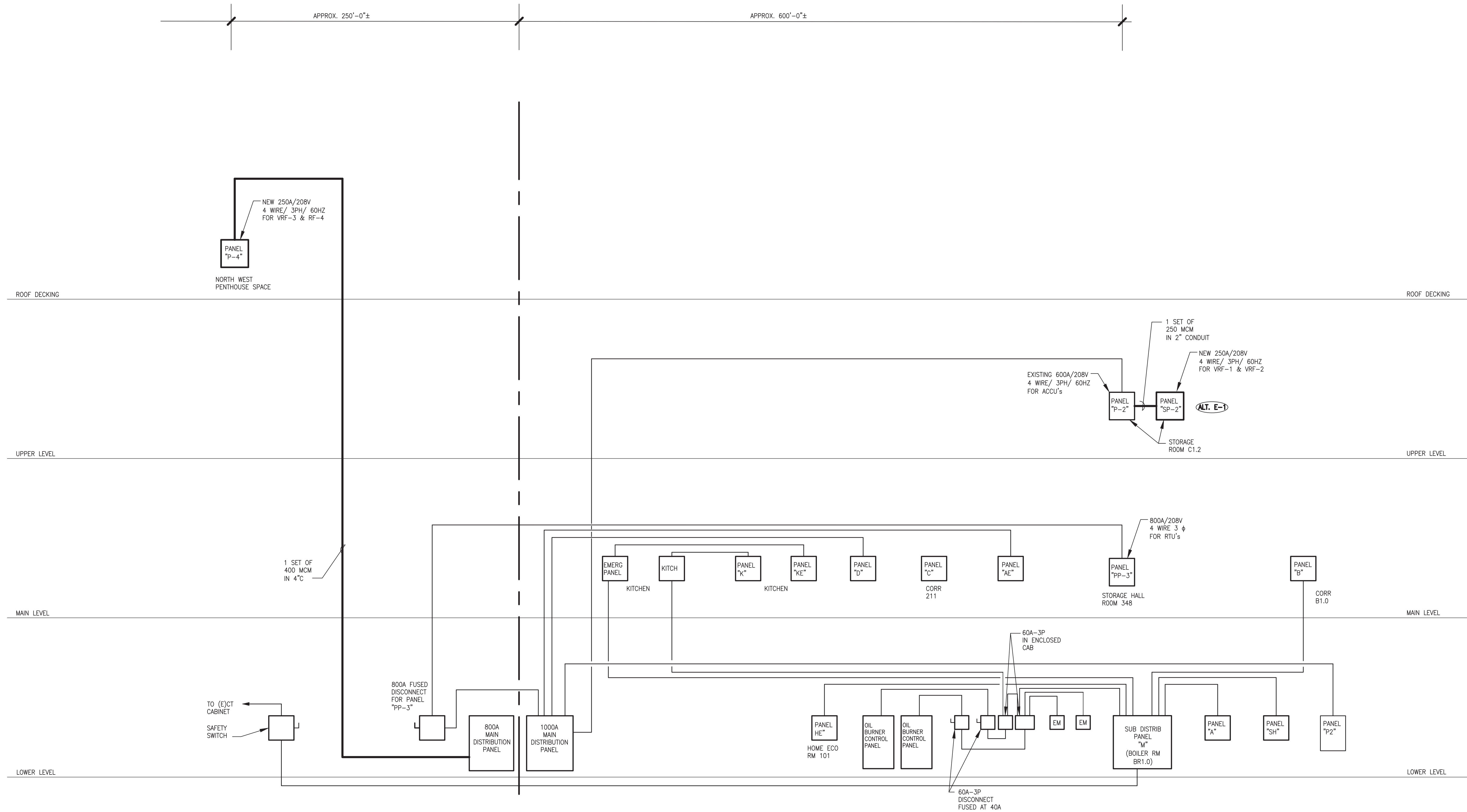
PROJECT NO.	05-21-04 05-20-06
BID ADDENDUM ISSUED FOR BID	11.23.2022 11.09.2022
SED SET	10.18.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" x 42"
SCALE	AS NOTED
SHEET TITLE	PARTIAL SECOND FLOOR PLAN - DEMO & NEW WORK
SHEET NO.	E-102

FILE PATH: -N:\1 - PROJECT DIRECTORIES\1- E & R Projects\05 - Warwick Valley CSD\05-21-04-01-06-0-001-042.dwg









1 RISER DIAGRAM - EXISTING & NEW WORK  
SCALE: NOT TO SCALE

#### BIDDING NOTE

ALL WORK ON THIS SHEET TO BE PROVIDED IN ITS ENTIRETY BY THE DISTRICT AND IS PROVIDED FOR REFERENCE ONLY, UNLESS OTHERWISE NOTED.

#### ALTERNATE NOTE

ALT. E-1:

EQUIPMENT AND ASSOCIATED WORK WITH THIS MARK TO BE PROVIDED AS PART OF ALTERNATE E-1 ONLY. ALL OTHER UNMARKED WORK TO BE PROVIDED AS PART OF BASE BID.

#### ELECTRICAL RISER NOTES:

- DISTRICT TO PROVIDE AND INSTALL NEW SURFACE MOUNTED POWER PANELS. LOCATION TO BE DETERMINED WITHIN SPACE NOTED.
- CONTROL WIRING AND CONDUIT TO BE PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR(MC) OR SUB-CONTRACTOR. WORK TO BE COORDINATED WITH DISTRICT.
- FIELD VERIFY LOCATION OF VRF 1 THROUGH 4, AND RTU-7. MC SHALL COORDINATE WITH DISTRICT FOR POWER SUPPLY TO UNITS.
- DISTRICT TO VERIFY DISTANCE FROM MDP TO PANEL 'P-4'.
- CONTACT ENGINEERING FOR ANY DISCREPANCIES OR CONFLICTS BETWEEN DRAWINGS OR SCHEDULES.

THIS DRAWING IS THE PROPERTY OF FULLER D'ANGELO P.C. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN PERMISSION OF FULLER D'ANGELO P.C. ANY UNAUTHORIZED REPRODUCTION OR TRANSMISSION OF THIS DRAWING IS PROHIBITED. THE USER MUST OBTAIN THE NECESSARY PERMISSIONS FROM THE DISTRICT TO ALTER THIS DRAWING IN ANY WAY. ALTERATIONS MUST HAVE THE SIGNATURE AND DATE OF THE USER. COPYRIGHT © 2019

ENGINEER:



Eisenbach & Rohrer Engineering P.C.  
200 Green Street - Union, NY 10987  
Ph: 845-738-1818 Fax: 845-738-1865  
www.eisenbach.com

CONSULTANT(S):



48 KNOLLWOOD ROAD  
ELMSFORD NEW YORK 10523  
TEL: 914.892.4444  
FAX: 914.892.1717  
WWW.FULLERDANGELO.COM  
Copyright 2019 All Rights Reserved by FULLER & D'ANGELO P.C.

STAMP



WARWICK VALLEY CENTRAL SCHOOL DISTRICT  
HIGH SCHOOL UNIT VENTILATOR REPLACEMENT AND  
AIR CONDITIONING UPGRADE  
225 WEST STREET EXT. WARWICK, NY 10990  
WV HIGH SCHOOL - 89 SANFORDVILLE ROAD, WARWICK, NY 10990  
SED NO. 44-21-01-06-0-001-042

PROJECT NO. 05-21-04  
05-20-06

BID ADDENDUM 11.23.2022

ISSUED FOR BID 11.09.2022

SED SET 10.18.2022

REVISION DATE

DRAWN BY

CHECKED BY

SHEET SIZE 30" x 42"

SCALE AS NOTED

SHEET TITLE

RISER DIAGRAM - EXISTING & NEW WORK

SHEET NO.

E-400



UTILITY  
SUPPLY  
ORANGE  
&  
ROCKLAND  
UTILITIES

O&R UTILITIES  
POLE #48424/45634

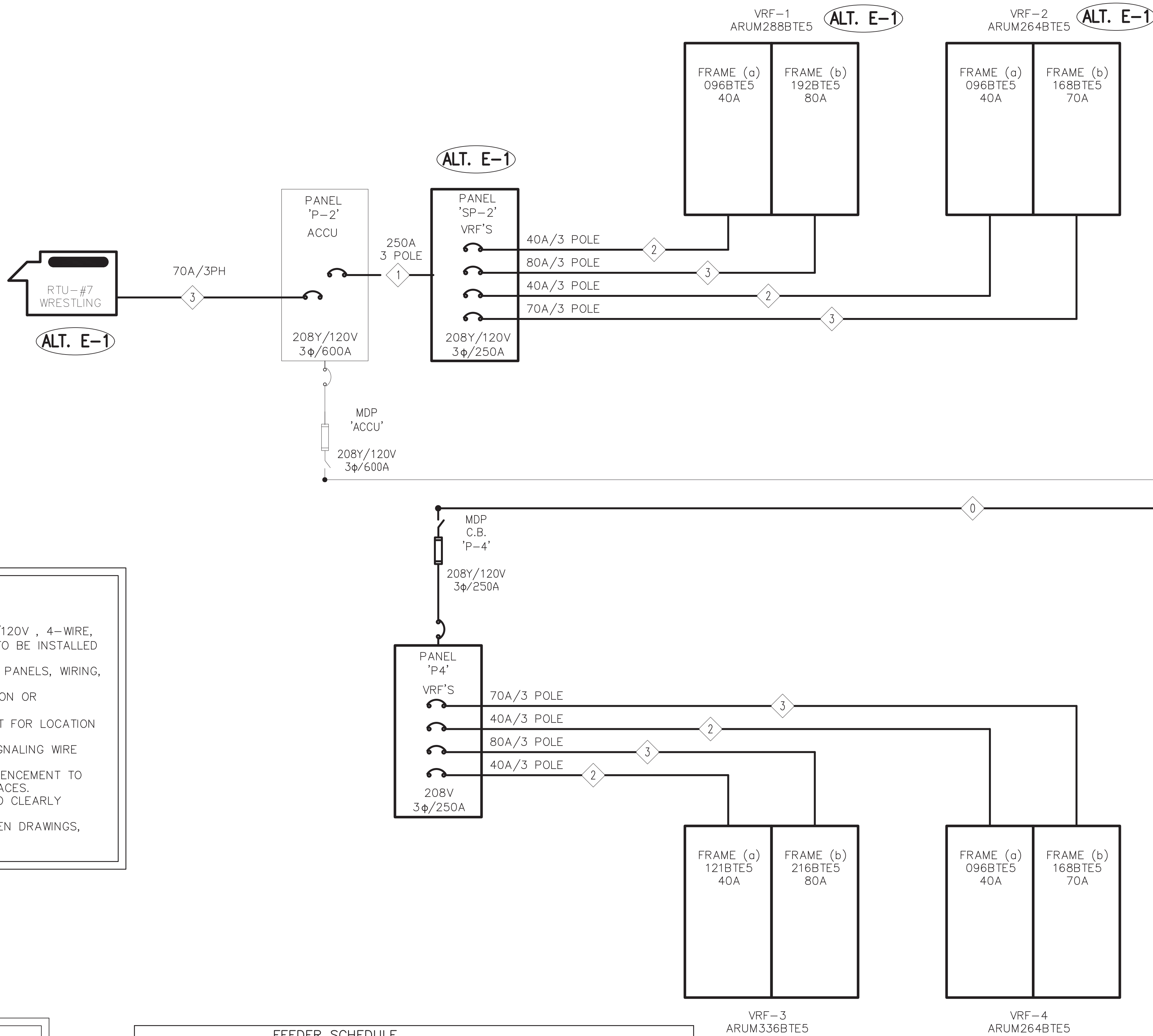
CT CABINET  
& METER

600A/3PH  
13.2kV PRIMARY  
SWITCH AMPS = 600A  
CUSTOMER OWNED  
PAD MOUNTED SWITCHGEAR

13.2kV PRIMARY  
1000 kVA SECONDARY  
208Y/120V 3 $\phi$  60Hz 4 WIRE  
CUSTOMER OWNED  
PAD MOUNTED TRANSFORMER

208Y/120V  
3 $\phi$ /2000A

MAIN  
SWITCH  
GEAR  
"MDP"



NEW WORK NOTES:

- DISTRICT SHALL PROVIDE NEW 250A - MINIMUM 24 SPACE 208Y/120V , 4-WIRE, 3 PHASE SURFACE MOUNTED PANEL BOARDS 'P-4' AND 'SP-2' TO BE INSTALLED IN LOCATIONS INDICATED ON DRAWINGS BY DISTRICT.
- DISTRICT TO PROVIDE AND INSTALL ALL ELECTRICAL DISTRIBUTION PANELS, WIRING, AND CONDUIT UNLESS OTHERWISE NOTED.
- DISTRICT TO VERIFY ALL SERVICE VOLTAGES PRIOR TO MODIFICATION OR INSTALLATION OF ELECTRICAL EQUIPMENT.
- MECHANICAL CONTRACTOR (MC) SHALL COORDINATE WITH DISTRICT FOR LOCATION OF EQUIPMENT.
- MC SHALL PROVIDE AND INSTALL ALL CONTROL, SENSOR, AND SIGNALING WIRE AND CONDUIT BETWEEN EQUIPMENT AND BMS.
- MC SHALL COORDINATE WITH DISTRICT ALL WORK PRIOR TO COMMENCEMENT TO AVOID DUPLICATION OF SERVICE OR CONFLICTS WITH EXISTING SPACES.
- DISTRICT SHALL LABEL ALL NEW WORK, PANELS, AND CIRCUITS TO CLEARLY IDENTIFY EQUIPMENT, LOADS, AND CIRCUIT NUMBERS.
- CONTACT ENGINEERING FOR DISCREPANCIES OR CONFLICTS BETWEEN DRAWINGS, SPECIFICATION, OR SCHEDULES.

BIDDING NOTE

ALL WORK ON THIS SHEET TO BE PROVIDED IN ITS ENTIRETY BY THE DISTRICT AND IS PROVIDED FOR REFERENCE ONLY, UNLESS OTHERWISE NOTED.

ALTERNATE NOTE

ALT. E-1:

EQUIPMENT AND ASSOCIATED WORK WITH THIS MARK TO BE PROVIDED AS PART OF ALTERNATE E-1 ONLY. ALL OTHER UNMARKED WORK TO BE PROVIDED AS PART OF BASE BID.

FEEDER SCHEDULE

SYMBOL	FEEDER SIZE	REMARKS
①	4 400MCM + 1 4AWG GRD. IN 4" CONDUIT	1,2,7
②	4 250MCM + 1 4AWG GRD. IN 3" CONDUIT	1,3,7
③	4 6AWG + 1 10AWG GRD. IN 1" CONDUIT	1,7
④	4 4AWG + 1 8AWG GRD. IN 1 1/2" CONDUIT	1,7
⑤	2 18AWG IN 1/2" CONDUIT	4,5,6,7

FEEDER SCHEDULE REMARKS:

- DISTRICT SHALL PROVIDE AND INSTALL ALL POWER WIRING UNLESS OTHERWISE NOTED. FIELD VERIFY EXACT WIRE SIZE AND QUANTITY WITH EQUIPMENT SUPPLIER.
- PANEL 'P-4' LOCATION TO BE DETERMINED.
- PANEL 'SP-2' TO BE LOCATED WITHIN SAME SPACE AND NOT TO EXCEED 10 FEET FROM PANEL 'P-2'.
- CONTROL/SIGNAL WIRING BY MECHANICAL CONTRACTOR (MC). CONFIRM EXACT WIRING REQUIREMENTS WITH EQUIPMENT MANUFACTURER PRIOR TO INSTALLATION.
- MC TO PROVIDE AND INSTALL CONTROL/SIGNAL WIRE AND CONDUIT. MC SHALL COORDINATE WITH DISTRICT FOR EQUIPMENT LOCATION.
- MC SHALL FIELD VERIFY DISTANCE FROM EQUIPMENT TO BMS AND MAKE FINAL CONNECTION TO BMS AND PROGRAM IT'S OPERATION.
- ALL CONDUCTORS AND GROUNDS SHALL BE COPPER UNLESS OTHERWISE SPECIFIED.

ONE-LINE DIAGRAM

SCALE: NOT TO SCALE

ENGINEER:

Eisenbach & Rohrer Engineering P.C.  
200 Corporate Center - Union, NY 10987  
Ph: 845-738-1818 Fax: 845-738-1865  
www.eisenbach.com

CONSULTANT(S):

FULLER  
D'ANGELO  
P.C.  
ARCHITECTS  
PLANNERS

48 KNOLLWOOD ROAD  
ELMSFORD NEW YORK 10523  
TEL: 914.892.4444  
FAX: 914.892.1717  
WWW.FULLERDANGELO.COM  
Copyright 2022 All Rights Reserved by FULLER & D'ANGELO P.C.

STAMP



WARWICK VALLEY CENTRAL SCHOOL DISTRICT  
HIGH SCHOOL UNIT VENTILATOR REPLACEMENT AND  
AIR CONDITIONING UPGRADE

225 WEST STREET EXT. WARWICK, NY 10990  
WV HIGH SCHOOL - 89 SANFORDVILLE ROAD, WARWICK, NY 10990

SED NO. 44-21-01-06-0-001-042

PROJECT NO.	05-21-04 05-20-06
BID ADDENDUM ISSUED FOR BID	11.23.2022 11.09.2022
SED SET	10.18.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" x 42"
SCALE	AS NOTED
SHEET TITLE	ONE-LINE DIAGRAM

SHEET NO.

E-401



UV-245, UV-UNIT VENTILATOR - LOCATION IN RM 245 - TYP.  
AU - AT UNIT  
OU - ON UNIT  
N/A - NOT APPLICABLE  
FRAC. - FRACTIONAL.

1. FOLLOW NEC 2008 (NFPA 70) REQUIREMENTS.

2. PROVIDE GFCI OUTLETS AT VRF-384 WIRED WITH 2-#12 AND 1-#12 GND IN 3" CONDUIT FROM EXISTING NEARBY PANEL. PROVIDE NEW 20A CIRCUIT BREAKER AND ALL APPURTENANCES.

3. PROVIDE GFCI OUTLET AT RTU-7 WIRED WITH 2-#12 AND 1-#12 GND IN 3" CONDUIT FROM EXISTING PANEL P-2. PROVIDE NEW 20A CIRCUIT BREAKER AND ALL APPURTENANCES.

4. AS PART OF ALTERNATE WORK, PROVIDE GFCI OUTLETS AT VRF-1&2 WIRED WITH 2-#12 AND 1-#12 GND IN 3" CONDUIT FROM EXISTING PANEL P-2 AND SHARE CIRCUIT WITH RTU-7S GFCI. PROVIDE NEW 20A CIRCUIT BREAKER AND ALL APPURTENANCES.

5. PROVIDE NEW TYPED PANEL BOARD LEGENDS IN NEW AND EXISTING PANELS. FOR EXISTING PANELS, REPLACE EXISTING PANEL BOARD LEGEND TO REFLECT ALL CHANGES MADE.

PANEL ID: PANEL "P-4" 120-200/3 PHASE/4 WIRE			NEW PANEL			LOCATION: PENTHOUSE		
NOTES	CIR. No.	CIRCUIT DESCRIPTION	BKR.	ø	BKR.	CIRCUIT DESCRIPTION	CIR. No.	NOTES
	<b>1</b>			A			<b>2</b>	
<b>2</b>	<b>3</b>	<b>(NEW) VWF-3</b>	<b>40A</b>	B	<b>80A</b>	<b>(NEW) VWF-3</b>	<b>4</b>	<b>2</b>
	<b>5</b>			C			<b>6</b>	
	<b>7</b>			A			<b>8</b>	
<b>2</b>	<b>9</b>	<b>(NEW) VWF-4</b>	<b>70A</b>	B	<b>40A</b>	<b>(NEW) VWF-4</b>	<b>10</b>	<b>2</b>
	<b>11</b>			C			<b>12</b>	
	13	OPEN SPACE		A		OPEN SPACE	14	
	15	OPEN SPACE		B		OPEN SPACE	16	
	17	OPEN SPACE		C		OPEN SPACE	18	
	19	OPEN SPACE		A		OPEN SPACE	20	
	21	OPEN SPACE		B		OPEN SPACE	22	
	23	OPEN SPACE		C		OPEN SPACE	24	

- | NOTES:  | GENERAL NOTES:   |
|---|--|
| 1. REMOVE EXISTING BREAKER AND TURN OVER TO DISTRICT<br>2. PROVIDE GROUND FAULT TYPE BREAKER, TYPE AND STYLE TO MATCH PANEL<br>3. USE PREVIOUSLY INSTALLED BREAKER, VERIFY GROUND FAULT TYPE. | - PROVIDE 208Y/120V PANELBOARD BUS RATING 250 AMPS<br>- THREE PHASE, 4-WIRE<br>- SURFACE MOUNTED<br>- MINIMUM 24 SPACE PANEL |

ALL WORK ON THIS SHEET TO BE PROVIDED IN ITS ENTIRETY BY THE DISTRICT AND IS PROVIDED FOR REFERENCE ONLY, UNLESS OTHERWISE NOTED.

ALT. E-1:

PANEL ID: PANEL "P-2" 120-208V/3 Phase/4 WIRE				EXISTING PANEL		LOCATION: UPPER LEVEL		
NOTES	CIR. No.	CIRCUIT DESCRIPTION	BKR.	ø	BKR.	CIRCUIT DESCRIPTION	CIR. No.	NOTES
	1			A			2	
	3	ACCU-2	35A	B	30A	ACCU-1	4	
	5			C			6	
	7			A			8	
	9	SPARE	30A	B	250A (NEW) SUB PANEL (SP-2)	ALT. E-1	10	1,2
	11			C			12	
	13			A			14	
	15	ACCU-9	30A	B	30A	ACCU-7	16	
	17			C			18	
	19			A			20	
	21	SPARE	30A	B	30A	ACCU-5	22	
	23			C			24	
	25			A	30A		26	
	27	ACCU-6	30A	B	30A	ACCU-3	28	
	29			C			30	
	31			A			32	
	33	ACCU-4	30A	B	30A	ACCU-8	34	
	35			C			36	
	37	EXISTING LOAD	20A	A			38	
2	39	ROOF EQUIP GFCI's	20A	B	70A	(NEW) RTU-7	40	2
	41	SPARE		C			42	

- | NOTES:  | GENERAL NOTES:                   |
|---|----------------------------------|
| 1. REMOVE EXISTING BREAKER AND TURN OVER TO DISTRICT                          | - PANELBOARD BUS RATING 600 AMPS |
| 2. PROVIDE GROUND FAULT TYPE BREAKER, TYPE AND STYLE TO MATCH EXISTING PANEL. | - 208Y/120V, 3PH, 4-WIRE         |
| 3. USE PREVIOUSLY INSTALLED BREAKER, VERIFY GROUND FAULT TYPE.                | - 42-SPACE SURFACE MOUNTED       |

PANEL ID: PANEL "SP-2" 120-2001/3 PHASE/4 WIRE			NEW SUB PANEL			LOCATION: UPPER LEVEL		
NOTES	CIR. No.	CIRCUIT DESCRIPTION	BKR.	ø	BKR.	CIRCUIT DESCRIPTION	CIR. No.	NOTES
	<b>1</b>			A			<b>2</b>	
<b>2</b>	<b>3</b>	<b>(NEW) WVF-1 (ALT. E-1)</b>	<b>40A</b>	B	<b>80A</b>	<b>(NEW) WVF-1 (ALT. E-1)</b>	<b>4</b>	<b>2</b>
	<b>5</b>			C			<b>6</b>	
	<b>7</b>			A			<b>8</b>	
<b>2</b>	<b>9</b>	<b>(NEW) WVF-2 (ALT. E-1)</b>	<b>70A</b>	B	<b>40A</b>	<b>(NEW) WVF-2 (ALT. E-1)</b>	<b>10</b>	<b>2</b>
	<b>11</b>			C			<b>12</b>	
13	OPEN SPACE			A		OPEN SPACE	14	
15	OPEN SPACE			B		OPEN SPACE	16	
17	OPEN SPACE			C		OPEN SPACE	18	
19	OPEN SPACE			A		OPEN SPACE	20	
21	OPEN SPACE			B		OPEN SPACE	22	
23	OPEN SPACE			C		OPEN SPACE	24	

- | NOTES:  | GENERAL NOTES:                                     |
|---|--|
| 1. REMOVE EXISTING BREAKER AND TURN OVER TO DISTRICT                | - PROVIDE 208Y/120V PANELBOARD BUS RATING 250 AMPS |
| 2. PROVIDE GROUND FAULT TYPE BREAKER, TYPE AND STYLE TO MATCH PANEL | - THREE PHASE, 4-WIRE                              |
| 3. USE PREVIOUSLY INSTALLED BREAKER, VERIFY GROUND FAULT TYPE.      | - SURFACE MOUNTED                                  |
|   | - MINIMUM 24 SPACE PANEL                           |

WARWICK VALLEY CENTRAL SCHOOL DISTRICT  
HIGH SCHOOL UNIT VENTILATOR REPLACEMENT AND  
AIR CONDITIONING UPGRADE  
225 WEST STREET, EXT. WARWICK, NY 10990  
WY HIGH SCHOOL - 89 SANFORDVILLE ROAD, WARWICK, NY 10990