



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.  
291 Cassese Street - Union, NY 13501  
(315) 735-1188, fax (315) 735-1806  
www.erenpc.com

CONSULTANT(S):




FULLER  
D'ANGELO  
P.C.



ARCHITECTS  
PLANNERS

48 KNOLLWOOD ROAD  
ELMHURST NEW YORK 11533  
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
ISSUED FOR BID	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

HIGH SCHOOL UV-C LIGHTING SCHEDULE (ALTERNATE)							
NEW UV-C 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	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
UVC-HS-82	154 Wrestling Rm	RTU *	2400	208/3		UV-FCU-CL 90H-P-B-VENT	1 110-240/1
SECOND FLOOR							
UVC-HS-83	231	UV *	1500	115/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1 110-240/1
UVC-HS-84	232	UV *	1500			UV-FCU-CL 90H-P-B-VENT	1
UVC-HS-85	233	UV *	1500			UV-FCU-CL 90H-P-B-VENT	1
UVC-HS-86	234	UV *	1500			UV-FCU-CL 90H-P-B-VENT	1
UVC-HS-87	235	UV *	1000			UV-FCU-CL 90H-P-B-VENT	1
UVC-HS-88	236	HORIZ. UV *	1000			UV-FCU-CL 90H-P-B-VENT	1
UVC-HS-89	238	HORIZ. UV *	1000			UV-FCU-CL 90H-P-B-VENT	1
UVC-HS-90	239	UV *	1250			UV-FCU-CL 90H-P-B-VENT	1
UVC-HS-91	240	HORIZ. UV *	1500			UV-FCU-CL 90H-P-B-VENT	1
UVC-HS-92	241	UV *	1000			UV-FCU-CL 90H-P-B-VENT	1
UVC-HS-93	243	HORIZ. UV *	1000			UV-FCU-CL 90H-P-B-VENT	1
UVC-HS-94	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							
ALL WORK THIS AREA PART OF ALTERNATE (ALT. H-1)							
NEW UV-C 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	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.							

ALTERNATE NOTE  
(ALT. H-1) EQUIPMENT AND ASSOCIATED WORK WITH THIS MARK TO BE PROVIDED AS PART OF ALTERNATE H-1 ONLY. ALL OTHER UNMARKED WORK TO BE PROVIDED AS PART OF BASE BID.

### 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

Diagram illustrating the Circuit Naming Convention:

UVC-MS-19-4

UVC- LIGHT FIXTURE

SCHOOL ABBREVIATION

NO. OF UV-C FIXTURES ON CIRCUIT (OMIT IF ONLY ONE)

CIRCUIT NO.

SEE NOTES AND SCHEDULES REGARDING LABELING EQUIPMENT WITH INDICATED CIRCUIT MARK