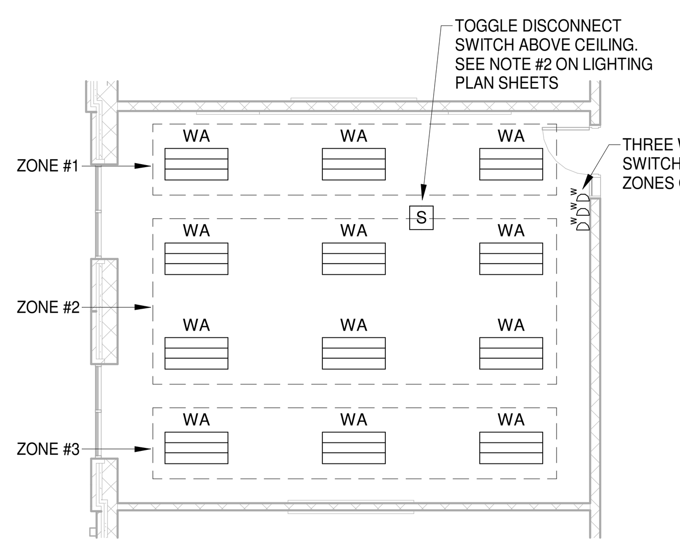
LIGHTING FIXTURE SCHEDULE

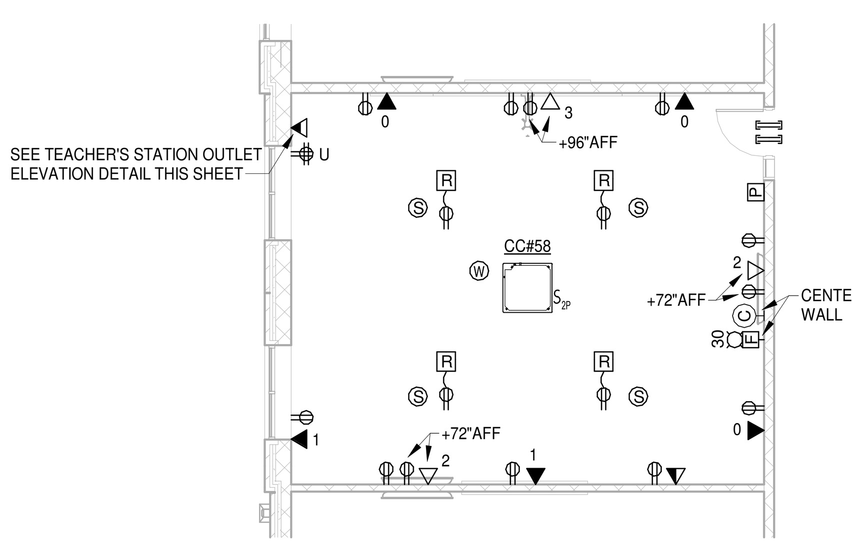
TYPE	DESCRIPTION	LED LAMPS VOLTS	LED LAMPS WATTS	LED LAMPS LUMENS	MOUNTING	OPTIONS	MANUFACTURER/ SERIES
A	2'x4' RECESSED VOLUMETRIC LED FIXTURE	120-277	34	4000	RECESSED	-	LUMINATION LVT-24-B-0-40-MM-835-V1-LT-WHITE
B	2'x4' RECESSED VOLUMETRIC LED FIXTURE	120-277	43	4800	RECESSED	-	LUMINATION LVT-24-B-0-48-MM-835-V1-LT-WHITE
BE	2'x4' RECESSED VOLUMETRIC LED FIXTURE	120-277	43	4800	RECESSED	ON GENERATOR CIRCUIT	LUMINATION LVT-24-B-0-48-MM-835-V1-LT-WHITE
B2	2'x4' RECESSED VOLUMETRIC LED FIXTURE WITH DRYWALL MOUNT KIT	120-277	43	4800	RECESSED	DRYWALL MOUNT KIT	LUMINATION LVT-24-B-0-48-MM-835-V1-LT-WHITE-GESK11
B2E	2'x4' RECESSED VOLUMETRIC LED FIXTURE WITH DRYWALL MOUNT KIT	120-277	43	4800	RECESSED	DRYWALL MOUNT KIT ON GENERATOR CIRCUIT	LUMINATION LVT-24-B-0-48-MM-835-V1-LT-WHITE-GESK11
C	2'x4' RECESSED VOLUMETRIC LED FIXTURE	120-277	47	6000	RECESSED	-	LUMINATION LVT-24-B-0-60-MM-835-V1-LT-WHITE
CE	2'x4' RECESSED VOLUMETRIC LED FIXTURE	120-277	47	6000	RECESSED	ON GENERATOR CIRCUIT	LUMINATION LVT-24-B-0-60-MM-835-V1-LT-WHITE
WA	2'x4' RECESSED VOLUMETRIC LED FIXTURE WITH INTEGRAL WIRELESS & OCCUPANCY SENSOR	120-277	34	4000	RECESSED	NOTE #2	LUMINATION LVT-24-B-0-40-MM-835-TT-LT-WHITE
WB	2'x4' RECESSED VOLUMETRIC LED FIXTURE WITH INTEGRAL WIRELESS & OCCUPANCY SENSOR	120-277	43	4800	RECESSED	NOTE #2	LUMINATION LVT-24-B-0-48-MM-835-TT-LT-WHITE
WC	2'x4' RECESSED VOLUMETRIC LED FIXTURE WITH INTEGRAL WIRELESS & OCCUPANCY SENSOR	120-277	47	6000	RECESSED	NOTE #2	LUMINATION LVT-24-B-0-60-MM-835-TT-LT-WHITE
D	4" RECESSED LED DOWNLIGHT	120-277	10	1000	RECESSED	-	LUMINATION LDXB-4R-0-10-T-35-V1-R-DI4R-W-SD-MR
EE	4" RECESSED LED DOWNLIGHT WITH WET LOCATION RATING	120-277	19	2000	RECESSED	ON GENERATOR CIRCUIT	LUMINATION LDXB-4R-0-20-T-35-V1-R-DI4R-W-SD-MR-WR
F	8' LINEAR SUSPENDED LED FIXTURE	120-277	57	800 LM/FT	SUSPENDED BOF @10'-4"	STARTER KIT CANOPY KIT	LUMINATION LALS-4-8-A-0-NA-00-MM-08-T35-VQ-CM-WHITE-IN
G	4' SURFACE MOUNT LED STRIP FIXTURE	120-277	27	4000	SURFACE	TONG HANGER	ALBEO ALV3-0-4T-04-T-C8-CW-SA-QQ-ST-K-Q-W
H	4' SURFACE MOUNT LED STRIP FIXTURE	120-277	45	6000	SURFACE	TONG HANGER	ALBEO ALV3-0-4T-06-T-C8-CW-SA-QQ-ST-K-Q-W
HE	4' SURFACE MOUNT LED STRIP FIXTURE	120-277	45	6000	SURFACE	TONG HANGER ON GENERATOR CIRCUIT	ALBEO ALV3-0-4T-06-T-C8-CW-SA-QQ-ST-K-Q-W
H2	4' SURFACE MOUNT LED STRIP FIXTURE	120-277	45	6000	SUSPEND AT 10' AFF	AIRCRAFT CABLE	ALBEO ALV3-0-4T-06-T-C8-CW-SA-QQ-ST-K-Q-W
H2E	4' SURFACE MOUNT LED STRIP FIXTURE	120-277	45	6000	SUSPEND AT 10' AFF	AIRCRAFT CABLE ON GENERATOR CIRCUIT	ALBEO ALV3-0-4T-06-T-C8-CW-SA-QQ-ST-K-Q-W
I	HIGH BAY LED FIXTURE	120-277	97	15000	SURFACE NOTE #1	SURFACE MOUNT KIT WD LENS, WIRE GUARD	ALBEO PHB-1-1X-08-WD-QV-ST-K-Q-W
IE	HIGH BAY LED FIXTURE	120-277	97	15000	SURFACE NOTE #1	SURFACE MOUNT KIT WD LENS, WIRE GUARD ON GENERATOR CIRCUIT	ALBEO PHB-1-1X-08-WD-QV-ST-K-Q-W
J	EXTERIOR WALL MOUNT LED FIXTURE	120-277	27	4000	WALL NOTE #3	-	EVOLVE EWLS-02-0-40-AF-7-40-N-1-FM-DKBZ
JE	EXTERIOR WALL MOUNT LED FIXTURE	120-277	17	2500	WALL +106" AFF	ON GENERATOR CIRCUIT	EVOLVE EWLS-02-0-25-AF-7-40-N-1-FM-DKBZ
K	EXTERIOR UNDER CANOPY LED FIXTURE	120-277	30	4500	SURFACE	-	BEACON VSH-30-4K7-UNV-DBT
KE	EXTERIOR UNDER CANOPY LED FIXTURE	120-277	30	4500	SURFACE	ON GENERATOR CIRCUIT	BEACON VSH-30-4K7-UNV-DBT
L	6' LINEAR WALL MOUNT UP/DOWN LED FIXTURE	120-277	84	800 LM/FT	BOF AT 8' ABOVE STAIR LANDING	STARTER KIT UPLIGHT LENS	LUMINATION LALS-4-6-A-0-AS-08-MM-08-T35-VQ-MM-WHITE-IN
LE	6' LINEAR WALL MOUNT UP/DOWN LED FIXTURE	120-277	84	800 LM/FT	BOF AT 8' ABOVE STAIR LANDING	STARTER KIT UPLIGHT LENS ON GENERATOR CIRCUIT	LUMINATION LALS-4-6-A-0-AS-08-MM-08-T35-VQ-MM-WHITE-IN
M	5' LINEAR LED SIGN LIGHT	120-277	35	3560	WALL	NOTE #4	SPI LIGHTING SEW12146-5FT-L35W-(120-277V)-4000K-DF80-DFMCS-PSE-WL-DFFT-AN08
X	THERMOPLASTIC LED EXIT SIGN	120-277	5	-	UNIVERSAL	ON GENERATOR CIRCUIT	LUMINATION LUXAR

GENERAL NOTES:
A. VERIFY FINISHES OF ALL LIGHT FIXTURES WITH ARCHITECT, PRIOR TO ORDER.
B. VERIFY CEILING TYPES PRIOR TO ORDERING LIGHT FIXTURES.
C. PROVIDE ALL NECESSARY MOUNTING HARDWARE AND ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION AND FUNCTIONING OF LIGHT FIXTURES.

NOTES:
1. MOUNT SO THAT THE BOTTOM OF THE FIXTURE ALIGNS WITH THE BOTTOM OF THE STRUCTURE. PROVIDE UNISTRUT AS NEEDED TO ALLOW FOR SURFACE MOUNTING OF THE FIXTURE. FIELD SELECT 15000 LUMENS AND 4000K.
2. CONTRACTOR SHALL FIELD PROGRAM THE LIGHT FIXTURES FOR MULTIPLE ZONE CONTROL AS SHOWN ON THE FLOOR PLANS.
3. MOUNT ALL TYPE 'J' FIXTURES AT SAME HEIGHT. MINIMUM 9' AFF.
4. LOCATE REMOTE POWER SUPPLY ON VERTICAL WALL ON ROOF. ALL BOXES, WIRING AND CONDUIT SHALL BE CONCEALED.
MOUNT THE FIXTURE MINIMUM 12" ABOVE SCHOOL LOGO. COORDINATE EXACT LOCATION ON SITE. FIELD ADJUST LAMP BODY TO UNIFORMLY LIGHT THE WHOLE LOGO.



TYPICAL CLASSROOM LIGHTING PLAN
1/8" = 1'-0"



TYPICAL CLASSROOM POWER, AUXILIARY AND FIRE ALARM PLAN
1/8" = 1'-0"

FIRE ALARM LEGEND

SYMBOL	DESCRIPTION
F	FIRE ALARM PULL STATION
M	MAGNETIC DOOR HOLD OPEN DEVICE
F	SMOKE DETECTOR
D	DUCT SMOKE DETECTOR
F 15	WALL MOUNTED STROBE LIGHT ALARM NUMBER INDICATES CANDELA LEVEL
F 15	WALL MOUNTED HORN/STROBE ALARM NUMBER INDICATES CANDELA LEVEL
F 15	CEILING MOUNTED STROBE LIGHT ALARM NUMBER INDICATES CANDELA LEVEL
F 15	CEILING MOUNTED HORN/STROBE ALARM NUMBER INDICATES CANDELA LEVEL
F WP	WALL MOUNTED EXTERIOR WEATHER PROOF HORN/STROBE ALARM
FS	FLOW SWITCH
TS	TAMPER SWITCH
PS	PRESSURE SWITCH

FIRE ALARM NOTES

ALL WORK MUST COMPLY WITH LOUISA COUNTY REQUIREMENTS.

NEW FIRE ALARM SYSTEM SHALL BE COMPATIBLE WITH EXISTING FACP 'HONEYWELL NOTIFIER NFS-320'. CONNECT NEW FACP TO EXISTING FACP. PROVIDE ACCESSORIES/MODULES AS NEEDED IN EXISTING FACP. BOTH FACP'S SHALL ACT AS A SINGLE SYSTEM - ALARM IN ONE FACP SHALL INITIATE ALARM IN THE OTHER FACP.

CONTRACTOR SHALL PROVIDE A SEPARATE SET OF FIRE ALARM DRAWINGS FOR FIRE ALARM PERMIT. INCLUDE VOLTAGE DROP AND BATTERY SIZE CALCULATIONS.

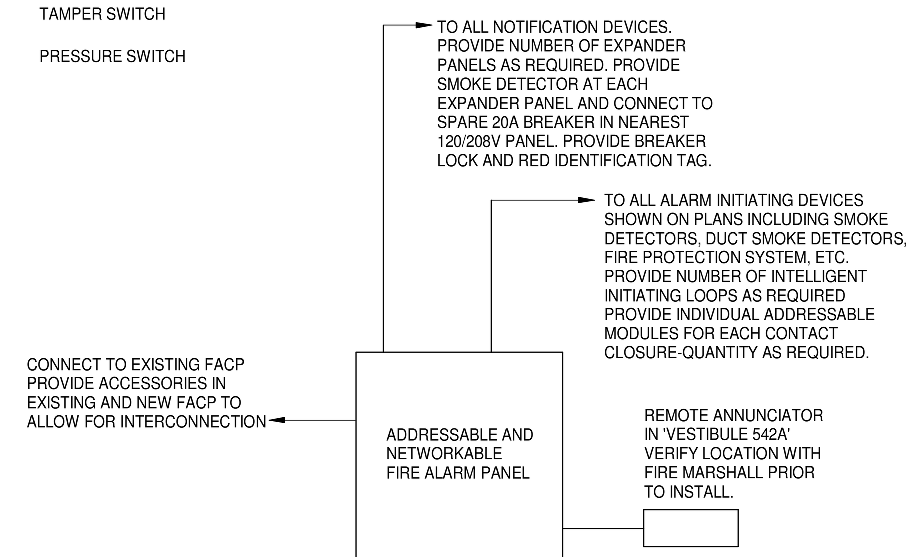
FIRE ALARM PULL STATIONS AT +44" AFF. HORNS AND STROBES AT +92" AFF.

PROVIDE #14 FOR NOTIFICATION & PROVIDE #18 FOR SIGNAL WIRING. RUN IN CONDUIT WHERE EXPOSED. PROVIDE MIN. 1" CONDUIT SLEEVES FOR WIRING PENETRATIONS OF WALLS AND FLOORS. FIRE ALARM CONDUIT SLEEVES SHALL BE SEPARATE FROM OTHER TRADES.

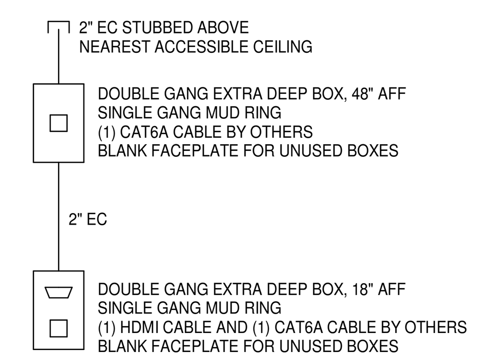
ON SENSING SMOKE, DUCT SMOKE DETECTORS LOCATED NEAR SMOKE PARTITIONS SHALL ALARM THE FACP, CLOSE ALL SMOKE DAMPERS ASSOCIATED WITH THAT SYSTEM AND SHUT DOWN THE HVAC UNIT. DUCT SMOKE DETECTORS ASSOCIATED WITH HVAC SYSTEMS THAT PROVIDE MORE THAN 2000 CFM SHALL ALARM THE FACP AND SHUT DOWN THAT HVAC UNIT.

REMOTE ANNUNCIATOR SHALL DUPLICATE FACP FUNCTIONS INCLUDING ALARM, SUPERVISORY AND TROUBLE INDICATIONS. ALSO DUPLICATE MANUAL SWITCHING FUNCTIONS SUCH AS ACKNOWLEDGING, SILENCING, RESETTING AND TESTING. PROVIDE FLUSH MOUNTING CABINET. DISPLAY SHALL BE 80 CHARACTER ALPHA NUMERIC LCD TO INDICATE ALARM, SUPERVISORY AND COMPONENT MESSAGES AND ALSO INDICATE CONTROL COMMANDS ENTERED ON THE ATTACHED KEYPAD FOR PROGRAMMING AND CONTROL.

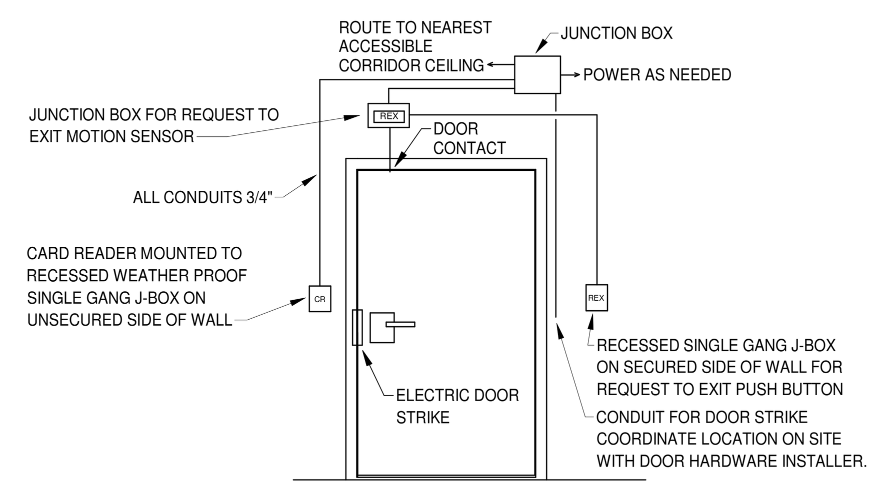
UNIT PRICE: PROVIDE TEN (10) ADDITIONAL FIRE ALARM HORN/STROBES CONNECTED TO THE FIRE ALARM SYSTEM AND INSTALLED AT THE DIRECTION OF THE BUILDING OFFICIAL OR FIRE MARSHALL. SEE BID FORM.



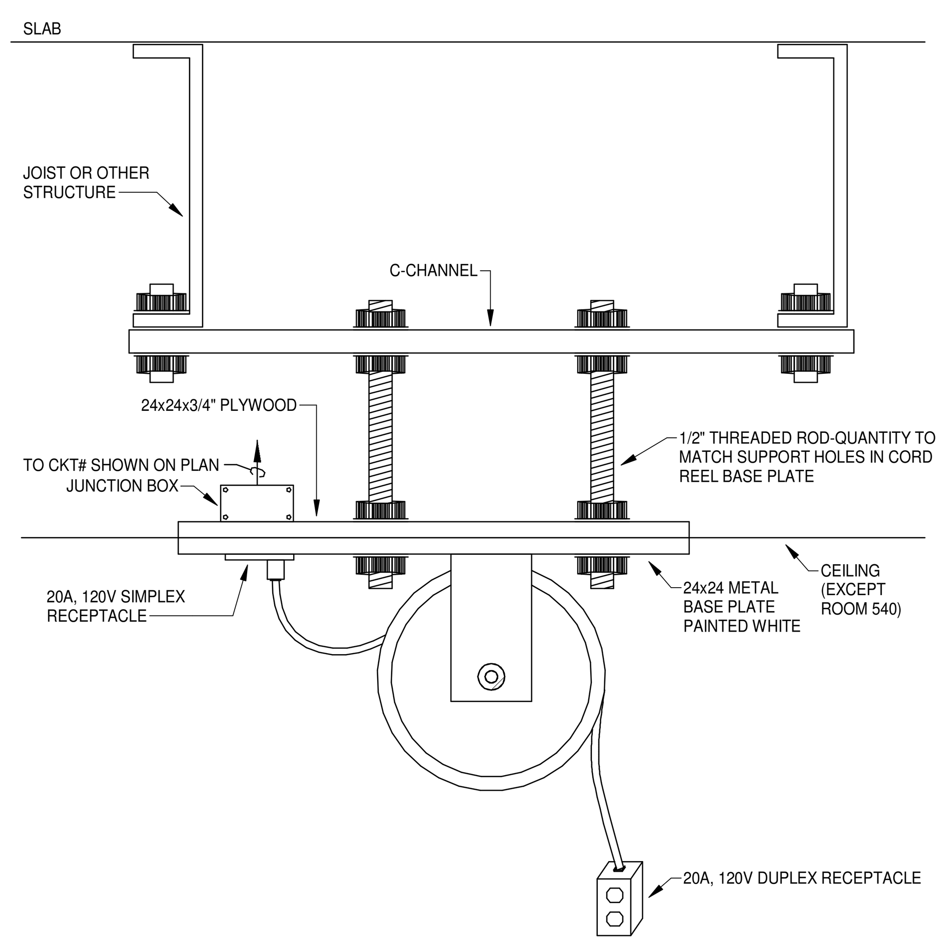
FIRE ALARM RISER
NOT TO SCALE



TEACHER'S STATION OUTLET ELEVATION
NOT TO SCALE



CR CARD READER DETAIL - SINGLE DOOR WITH ELECTRIC STRIKE
NOT TO SCALE
NOTE: USE SIMILAR ARRANGEMENT FOR DOUBLE DOORS.



CORD REEL INSTALLATION DETAIL
NOT TO SCALE

PANELBOARD LABELING:

FOR ALL NEW AND EXISTING MODIFIED PANELBOARDS, PROVIDE LABELS INDICATING THE FOLLOWING:
PANEL NAME
SOURCE (FED FROM)
AMPS
VOLTAGE
PHASE, NO. OF CONDUCTORS
WIRE TYPE (AL/CU)
WIRE AND CONDUIT SIZE
ARC FLASH LABELS PER NEC

PROVIDE NEW AND UPDATED DIRECTORIES IN ALL NEW AND EXISTING MODIFIED PANELBOARDS WITH ALL CIRCUITS TRACED.

GENERAL NEW WORK NOTES

1. ALL WIRE SIZES BASED ON 75° C THWN COPPER, EXCEPT, WIRE SIZES BASED ON 60° C THWN COPPER FOR 100A AND LESS.
2. WHERE RATED WALLS/ASSEMBLIES ARE PENETRATED, PROVIDE UL LISTED FIRE STOPPING TO MAINTAIN RATING OF THE ASSEMBLY.
3. SEAL ALL PENETRATIONS IN EXTERIOR AND INTERIOR WALLS. EXTERIOR PENETRATIONS SHALL BE SEALED WEATHER TIGHT.
4. ALL DISCONNECT SWITCHES SHALL BE HEAVY DUTY TYPE (U.O.N). ALL TOGGLE DISCONNECT SWITCHES SHALL BE COMMERCIAL SPECIFICATION GRADE (U.O.N).
5. PROVIDE CIRCUIT NUMBER LABELS FOR ALL DISCONNECT SWITCHES. PROVIDE CIRCUIT NUMBER LABELS FOR ALL HVAC AND PLUMBING EQUIPMENT.
6. WHERE MECHANICAL AND PLUMBING EQUIPMENT DISCONNECT SWITCHES ARE PROVIDED BY THE EQUIPMENT MANUFACTURER, ELECTRICAL CONTRACTOR SHALL INSTALL THOSE DISCONNECT SWITCHES AND CONNECT THEM TO THE CIRCUITS SHOWN ON FLOOR PLANS. ALSO WIRE FROM DISCONNECT SWITCHES TO ASSOCIATED EQUIPMENT.
7. FIELD COORDINATE ELECTRICAL EQUIPMENT LOCATIONS WITH OTHER TRADES AND MAINTAIN ALL NEC CLEARANCES.
8. NO EXPOSED CONDUIT/SURFACE RACEWAY IN FINISHED SPACES OF NEW BUILDING. SEE BELOW FOR WIRING METHODS IN EXISTING BUILDING.

WIRING METHODS FOR EXISTING BUILDING SHALL BE AS FOLLOWS, U.O.N.

1. EXISTING BLOCK WALLS IN FINISHED AREAS - METALLIC SURFACE RACEWAY, PAINT TO MATCH ADJACENT SURFACES.
2. EXISTING BLOCK WALLS IN UNFINISHED AREAS SUCH AS MECH. AND EQUIP. ROOMS - EXPOSED CONDUIT PAINTED TO MATCH ADJACENT SURFACES.
3. EXISTING STUD WALLS - FISH THROUGH OR CUT AND PATCH AS REQUIRED, PAINT TO MATCH ADJACENT SURFACES.
4. EXISTING EXTERIOR BLOCK WALLS - EXPOSED RIGID STEEL CONDUIT, PAINT TO MATCH ADJACENT SURFACES.

ABBREVIATIONS

U.O.N.	UNLESS OTHERWISE NOTED	WG	WIRE GUARD	FACP	FIRE ALARM CONTROL PANEL
AFF	ABOVE FINISHED FLOOR	KAIC	KILO AMPERE INTERRUPTING CAPACITY	ATS	AUTOMATIC TRANSFER SWITCH
ACT	ABOVE COUNTER TOP	KVA	KILO VOLT-AMPERES		
BOF	BOTTOM OF FIXTURE	MCB	MAIN CIRCUIT BREAKER		
TYP.	TYPICAL	MLO	MAIN LUGS ONLY		
EC	EMPTY CONDUIT WITH NYLON PULL STRING AND CONDUIT BUSHING.	SER	SERVICE ENTRANCE RATED		
ETR	EXISTING TO REMAIN	SPD	SURGE PROTECTION DEVICE		
ER	EXISTING RELOCATED	FTL	FEED THRU LUGS		

LEGEND

SYMBOL	DESCRIPTION
	2'x4' RECESSED VOLUMETRIC LED FIXTURE - SEE LIGHTING FIXTURE SCHEDULE.
	LED DOWNLIGHT - SEE LIGHTING FIXTURE SCHEDULE.
	4' SURFACE MOUNT LED STRIP FIXTURE - SEE LIGHTING FIXTURE SCHEDULE.
	LED EXIT SIGN, UNSWITCHED, UNIVERSAL MOUNT, NUMBER OF FACES AND CHEVRONS AS INDICATED, ON GENERATOR CIRCUIT - SEE LIGHTING FIXTURE SCHEDULE.
	8' SUSPENDED LINEAR LED FIXTURE - SEE LIGHTING FIXTURE SCHEDULE.
	HIGH BAY LED FIXTURE - SEE LIGHTING FIXTURE SCHEDULE.
	EXTERIOR WALL MOUNT LED FIXTURE - SEE LIGHTING FIXTURE SCHEDULE.
	EXTERIOR UNDER CANOPY LED FIXTURE - SEE LIGHTING FIXTURE SCHEDULE.
	SOLID CENTER INDICATES EMERGENCY FIXTURE. CONNECT TO NORMAL CIRCUIT AND EMERGENCY GENERATOR CIRCUIT. SUBSCRIPT 'NL' INDICATES FIXTURE IS UNSWITCHED.
S	SWITCH, SINGLE POLE, SINGLE THROW, SIDE WIRED, TOGGLE, 120-277V, 20A, +48" AFF.
S_3	SWITCH, THREE WAY, SIDE WIRED, TOGGLE, 120-277V, 20A, +48" AFF.
S_4	SWITCH, FOUR WAY, SIDE WIRED, TOGGLE, 120-277V, 20A, +48" AFF.
S_{VS}	INFRARED AND ULTRASONIC, DUAL SENSING, WALL MOUNTED LINE VOLTAGE VACANCY SENSOR WITH ON/OFF SWITCH. MOUNT AT +48" AFF.
VS	INFRARED AND ULTRASONIC, DUAL SENSING, CEILING MOUNTED LINE VOLTAGE EXTENDED RANGE (2000 SQ. FT. MIN.) VACANCY SENSOR. LOCATE SENSOR TO PROVIDE FULL COVERAGE OVER SPACE AND ENTRANCE TO SPACE. WIRE PER MANUFACTURER'S INSTRUCTIONS. AVOID CONFLICTS WITH OTHER DEVICES. DO NOT INSTALL WITHIN 24" OF AIR DEVICE.
D	INFRARED AND ULTRASONIC, DUAL SENSING, WALL MOUNTED LOW VOLTAGE OCCUPANCY SENSOR WITH ON/OFF SWITCH. SUBSCRIPT 'D' INDICATES OCCUPANCY SENSOR WITH DIMMER SWITCH. OCCUPANCY SENSOR SHALL AUTOMATICALLY TURN ON THE LIGHTS TO 50%, U.O.N (EXCEPTION - SET TO 100% IN TOILETS). PROVIDE POWER PACK AS REQUIRED. WIRE PER MANUFACTURER'S INSTRUCTIONS. MOUNT AT +48" AFF.
HB	INFRARED AND ULTRASONIC, DUAL SENSING, CEILING MOUNTED LOW VOLTAGE EXTENDED RANGE (2000 SQ. FT. MIN) OCCUPANCY SENSOR. OCCUPANCY SENSOR SHALL AUTOMATICALLY TURN ON THE LIGHTS TO 50%, U.O.N (EXCEPTION - SET TO 100% IN TOILETS). PROVIDE POWER PACK AS REQUIRED. WIRE PER MANUFACTURER'S INSTRUCTIONS. LOCATE SENSOR TO PROVIDE FULL COVERAGE OVER SPACE AND ENTRANCE TO SPACE. AVOID CONFLICTS WITH OTHER DEVICES. DO NOT INSTALL WITHIN 24" OF AIR DEVICE. 'HB' INDICATES HIGH BAY SENSOR.
D	DIMMER SWITCH, LOW VOLTAGE, COMPATIBLE WITH DRIVER, IN RECESSED 1-GANG BACKBOX, 48" AFF. PROVIDE LOW VOLTAGE WIRING AS PER MANUFACTURER'S INSTRUCTIONS. PROVIDE POWER PACK AS REQUIRED. PROVIDE 2-GANG RECESSED BOXES WHERE TWO DIMMERS ARE SHOWN AT A SINGLE LOCATION.
$	SWITCH, LOW VOLTAGE, COMPATIBLE WITH DRIVER, IN RECESSED 1-GANG BACKBOX, MOUNTED AT 48" AFF. PROVIDE LOW VOLTAGE WIRING AS PER MANUFACTURERS INSTRUCTIONS. PROVIDE POWER PACK AS REQUIRED.
D^W	LINE POWERED OR KINETIC WIRELESS DIMMER CONTROL SWITCH, COMPATIBLE WITH DRIVER, IN RECESSED BOX, 48" AFF. PROVIDE 3-GANG AND 2-GANG RECESSED BOXES WHERE MULTIPLE DIMMERS ARE SHOWN AT A SINGLE LOCATION. CONTRACTOR SHALL FIELD PROGRAM THE DIMMERS TO CONTROL MULTIPLE ZONES AS SHOWN ON FLOOR PLANS.
U	TAMPER RESISTANT RECEPTACLE, DUPLEX, 125V AC, 20A, 18" AFF (U.O.N.). SUBSCRIPT 'U' INDICATES EACH DUPLEX RECEPTACLE TO HAVE (1) USB TYPE-A AND (1) USB TYPE-C OUTLET - TYPICAL FOR ALL RECEPTACLES. PROVIDE LABEL ON EACH OUTLET INDICATING CIRCUIT NUMBER - TYPICAL FOR ALL RECEPTACLES.
	TAMPER RESISTANT RECEPTACLE, QUADRUPLE OUTLET WITH TWO 125V AC, 20A DUPLEX, GROUNDED RECEPTACLES IN ONE FLUSH 4" SQUARE BOX. MOUNT AT 18" AFF (U.O.N.).
	GROUND FAULT INTERRUPTER, TAMPER RESISTANT DUPLEX RECEPTACLE, 125V AC, 20A, BOTTOM 2" ABOVE TOP OF BACKSPLASH OR AS NOTED.
WP	GROUND FAULT INTERRUPTER, TAMPER RESISTANT, WEATHER PROOF DUPLEX RECEPTACLE, 125V AC, 20A, WITH EXTRA HEAVY DUTY, CAST ALUMINUM (U.O.N) 'WHILE-IN-USE' WEATHERPROOF ENCLOSURE. MOUNT AT +24" AFF, (U.O.N.).
R G	CORD REEL, 20A, 120V, PLUG TO CEILING MOUNTED 20A RECEPTACLE, 25' CORD (3 #12), DUPLEX 20A, 120V RECEPTACLE AT THE END OF THE CORD, COMMERCIAL GRADE, STEEL CONSTRUCTION. SUBSCRIPT 'G' INDICATES GFCI DUPLEX RECEPTACLE AT THE END OF THE CORD. SEE CORD REEL INSTALLATION DETAIL THIS SHEET.
	SPECIAL OUTLET - RATING TO MATCH BREAKER FEEDING RECEPTACLE. NEMA CONFIGURATION TO MATCH EQUIPMENT PLUG. VERIFY PRIOR TO ORDER. MOUNT AT +18" AFF, (U.O.N.).
	FLOOR MOUNT RECEPTACLES. SEE NOTE #11 ON E-303.
	THREE GANG DIVIDED CAST IRON FLOOR BOX WITH ONE TAMPER RESISTANT DUPLEX RECEPTACLE (125V AC, 20A) AND TWO GANG CAPACITY FOR LOW VOLTAGE WIRING BY OTHERS. PROVIDE A 1-1/4" EC FROM LOW VOLTAGE SECTION OF THE FLOOR BOX TO A NEAREST ACCESSIBLE CEILING. PROVIDE MATCHING COVER PLATE WITH GASKET FOR THE FLOOR BOX. VERIFY FINISH WITH ARCHITECT. PROVIDE ALL NECESSARY MOUNTING HARDWARE AND ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION.
J	JUNCTION BOX. PROVIDE CIRCUIT NUMBER LABEL.
S	20A, 120-277V TOGGLE DISCONNECT SWITCH. PROVIDE CIRCUIT NUMBER LABEL.
	ELECTRIC MOTOR
HD	HEAVY DUTY (HD) DISCONNECT SWITCH, FUSED AT BREAKER SIZE, U.O.N OR UNLESS REQUIRED BY MANUFACTURER OR CODE. ALL DISCONNECT SWITCHES EXPOSED TO WATER OR LOCATED OUTSIDE SHALL BE NEMA TYPE 3R, U.O.N. ALSO CONNECT ALL STARTERS PROVIDED WITH EQUIPMENT. MAINTAIN ALL NEC CLEARANCES. PROVIDE CIRCUIT NUMBER LABEL.
S_{2P}	COMMERCIAL SPECIFICATION GRADE, 2-POLE TOGGLE DISCONNECT SWITCH. PROVIDE CIRCUIT NUMBER LABEL.
	HOME-RUN TO PANELBOARD, NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS. ALL 120V AND 277V CIRCUITS SHALL HAVE INDIVIDUAL NEUTRALS. ALL CIRCUITS SHALL HAVE INDIVIDUAL GROUND WIRE. MINIMUM WIRE SIZE #12. MINIMUM CONDUIT SIZE 3/4".
CR	CARD READER - SEE DETAIL THIS SHEET. PROVIDE BOX AND CONDUIT AS SHOWN. DEVICE AND WIRING BY OTHERS.
0 1 2	LOW VOLTAGE DEVICE OUTLET #1 - DOUBLE GANG EXTRA DEEP BOX WITH SINGLE GANG MUD RING WITH A 2" EC STUBBED ABOVE NEAREST ACCESSIBLE CEILING. MOUNT AT 18" AFF (U.O.N.). U.O.N., SUBSCRIPT INDICATES NUMBER OF CAT6A CABLES - PROVIDED BY OTHERS. PROVIDE BLANK FACEPLATES FOR UNUSED BOXES. SUBSCRIPT '0' INDICATES EMPTY BOX AND CONDUIT WITH BLANK FACEPLATE.
	LOW VOLTAGE DEVICE OUTLET #2 - DOUBLE GANG EXTRA DEEP BOX WITH SINGLE GANG MUD RING WITH A 2" EC STUBBED ABOVE NEAREST ACCESSIBLE CEILING. MOUNT AT 18" AFF (U.O.N.). U.O.N., (1) CAT6A CABLE AND (1) HDMI CABLE BY OTHERS. PROVIDE BLANK FACEPLATES FOR UNUSED BOXES.
	FLOOR MOUNT LOW VOLTAGE DEVICE OUTLET - WP DOUBLE GANG EXTRA DEEP BOX WITH SINGLE GANG MUD RING WITH A 2" EC STUBBED ABOVE THE ACCESSIBLE CEILING OF THE SPACE IN WHICH THE OUTLET IS LOCATED. WIRING BY OTHERS. MOUNT ON FLOOR SIMILAR TO FLOOR MOUNT RECEPTACLE. SEE DETAIL ON E-303.
2 3	TV OUTLET - THREE GANG EXTRA DEEP BOX WITH A 2" EC STUBBED ABOVE NEAREST ACCESSIBLE CEILING. MOUNT AT 72" AFF (U.O.N.). SUBSCRIPT INDICATES NUMBER OF CAT6A CABLES - PROVIDED BY OTHERS. (1) HDMI CABLE BY OTHERS. PROVIDE BLANK FACEPLATES FOR UNUSED BOXES.
	SEE TEACHER'S STATION OUTLET ELEVATION DETAIL THIS SHEET.
P	PANIC/INTERCOM BUTTON - PROVIDE A SINGLE GANG BOX AT 58" AFF WITH 1" EC STUBBED ABOVE NEAREST ACCESSIBLE CEILING. DEVICE AND WIRING BY OTHERS.
IS	INTERCOM SPEAKER - SHOWN FOR INFORMATION ONLY (NO BOX OR CONDUIT NEEDED). DEVICE AND WIRING BY OTHERS.
S	REINFORCEMENT SPEAKER - SHOWN FOR INFORMATION ONLY (NO BOX OR CONDUIT NEEDED). DEVICE AND WIRING BY OTHERS.
WS	WALL MOUNTED SPEAKER - WEATHER PROOF SINGLE GANG BOX AT 10' AFF WITH 3/4" EC TO NEAREST ACCESSIBLE CEILING. DEVICE AND WIRING BY OTHERS.
w	WIRELESS ACCESS POINT - SINGLE GANG BOX ABOVE CEILING. DEVICE AND WIRING BY OTHERS.
W	WALL MOUNTED WIRELESS ACCESS POINT - WEATHER PROOF SINGLE GANG BOX AT 96" AFF WITH 3/4" EC TO NEAREST ACCESSIBLE CEILING. DEVICE AND WIRING BY OTHERS.
C	WALL MOUNTED SINGLE FACE WIRELESS CLOCK - SINGLE GANG BOX AT 96" AFF. DEVICE BY OTHERS.
	WALL MOUNTED SINGLE FACE WIRED CLOCK - SINGLE GANG BOX AT 96" AFF WITH 3/4" EC TO NEAREST ACCESSIBLE CEILING. DEVICE AND WIRING BY OTHERS.
	WALL MOUNTED DOUBLE FACE WIRED CLOCK - SINGLE GANG BOX AT 96" AFF WITH 3/4" EC TO NEAREST ACCESSIBLE CEILING. DEVICE AND WIRING BY OTHERS.
	CAMERA - SINGLE GANG BOX ABOVE CEILING. PROVIDE 3/4" EC TO NEAREST ACCESSIBLE CEILING WHERE INSTALLED IN HARD CEILINGS. DEVICE AND WIRING BY OTHERS. SUBSCRIPT 'WP' INDICATES EXTERIOR CAMERA LOCATIONS - PROVIDE WALL MOUNT WEATHERPROOF SINGLE GANG JUNCTION BOX AT 9' AFF WITH 3/4" EC STUBBED ABOVE NEAREST ACCESSIBLE CEILING.
V	VAPE SENSOR - SINGLE GANG BOX ABOVE CEILING WITH 3/4" EC TO NEAREST ACCESSIBLE CEILING. DEVICE AND WIRING BY OTHERS.
	TWO 3" EMPTY STEEL CONDUIT SLEEVES (WITH BUSHING) ABOVE CEILING, STUBBED INTO CORRIDOR FOR COMMUNICATIONS WIRING. PROVIDE UL LISTED FIRESTOPPING TO MAINTAIN RATING OF THE ASSEMBLY. CONDUIT SLEEVES FOR FIRE ALARM SHALL BE SEPARATE FROM COMMUNICATIONS CONDUIT SLEEVES. USE 1" CONDUIT SLEEVES FOR FIRE ALARM - INSTALL AS NEEDED.

1 DEMOLITION NOTE — 1 NEW WORK NOTE — 1 POWER RISER NOTE

MARK | DATE | BY | DESCRIPTION
REVISIONS

SIMMONS, ROCKECHARLIE & PRINCE INC.
Mechanical and Electrical Engineers
JOB NO. 23050

RRMM ARCHITECTS, PC
115 South 15th Street, Suite 502
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T. A. ROCKECHARLIE
Lic. No. 25725
8 APRIL 2024
PROFESSIONAL ENGINEER

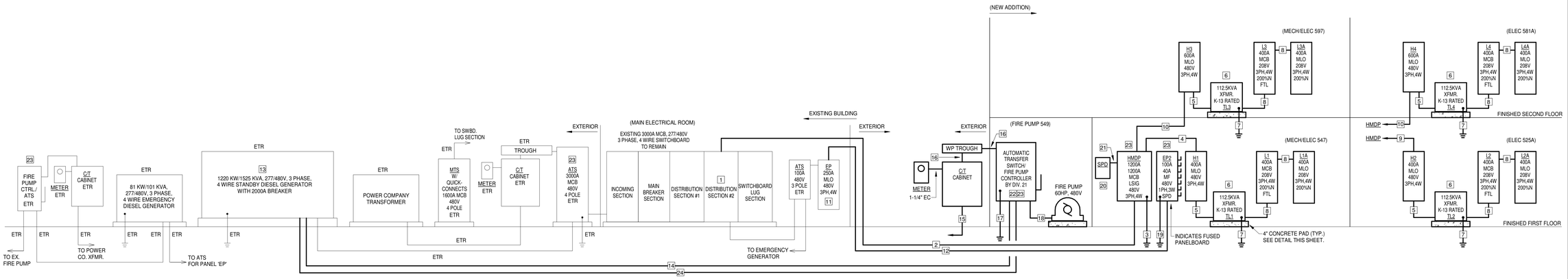
DATE 4/8/24
PROJECT 23143-00
DESIGNED RKCM
DRAWN RKCM
CHECKED RKCM

PROJECT
LOUISA COUNTY PUBLIC SCHOOLS
LOUISA COUNTY MIDDLE SCHOOL ADDITION
1009 DAVIS HIGHWAY
MINERAL, VIRGINIA

DRAWING
LEGEND, NOTES AND DETAILS

SHEET
E-101

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PARTIAL POWER RISER

NOT TO SCALE

PARTIAL POWER RISER NOTES

NOTE: U.O.N., ALL WIRE SIZES BASED ON 75º C THWN CU. WIRE.

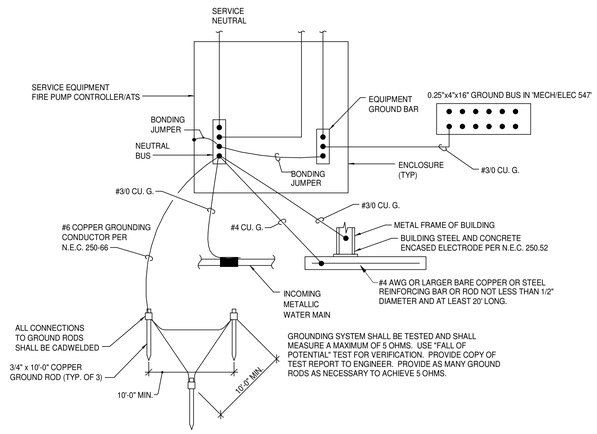
1. PROVIDE A NEW 1200A/3P LSIG BREAKER WITH SOLID STATE TRIP UNIT IN EXISTING SPACE OF DISTRIBUTION SECTION #2 OF EXISTING 3000A MAIN SWITCHBOARD, FOR CONNECTION TO NEW PANEL 'HMDP'. NEW 1200A/3P BREAKER SHALL HAVE ARC ENERGY REDUCTION MEANS AND SHALL BE RATED FOR 100KAIC. PROVIDE ALL NECESSARY MOUNTING HARDWARE AND ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION. PROVIDE LABEL ON THE NEW BREAKER - 'PANEL HMDP - 2024 CLASSROOM ADDITION'. EXISTING SWITCHBOARD IS 'SIEMENS SB3'.
   EXISTING ELECTRICAL SERVICE DOWNTIME SHALL BE LIMITED TO A MINIMUM. COORDINATE ALL POWER OUTAGES WITH OWNER. PROVIDE AT LEAST SEVEN DAYS' NOTICE.
2. 1200A/3P - THREE SETS OF (4) #600 MCM, (1) #3/0 G, 4" C. APPROXIMATE LENGTH OF RUN IS 650'. PROVIDE PULL BOXES AS NEEDED. LENGTH OF CONDUCTORS INSIDE THE NEW ADDITION BUILDING SHALL BE AS SHORT AS POSSIBLE.
3. (1) #3/0 CU. G. TO GROUND BUS IN 'MECH/ELEC. 547'. DO NOT BOND NEUTRAL AND GROUND.
4. 400A/3P - (4) #600 MCM, (1) #3 G, 4" C.
5. 175A/3P, NO NEUTRAL - (3) #2/0, (1) #6 G, 2" C.
6. 480V, 3 PHASE PRIMARY TO 120/208V, 3 PHASE SECONDARY, 112.5 KVA DRY TYPE, K-13 RATED TRANSFORMER.
7. (1) #1/0 CU. G. TO NEAREST GROUND BUS.
8. 400A/3P, 200% NEUTRAL - (5) #600 MCM, (1) #1/0 G, 4" C.
9. 250A/3P - (4) #250 MCM, (1) #4 G, 2-1/2" C.
10. 600A/3P - TWO SETS OF (4) #350 MCM, (1) #1 G, 3" C.
11. PROVIDE A NEW 40A/2P BREAKER IN EXISTING SPACE #26 OF PANEL 'EP'. FOR CONNECTION TO NEW PANEL 'EP2'. EXISTING PANEL 'EP' IS 'SIEMENS TYPE S2'. NEW BREAKER TYPE AND KAIC RATING SHALL MATCH EXISTING.
12. 40A/2P, W/ VOLTAGE DROP - (3) #4, (1) #6 G, 1" C. USE UL LISTED 2-HR FIRE RATED WIRE TO COMPLY WITH NEC 700.10 (D)(1). APPROXIMATE LENGTH OF RUN IS 630'. PROVIDE PULL BOXES AS NEEDED. LENGTH OF CONDUCTORS INSIDE THE NEW ADDITION BUILDING SHALL BE AS SHORT AS POSSIBLE.
13. PROVIDE A NEW 175A/3P LSI BREAKER IN EXISTING STANDBY GENERATOR FOR CONNECTION TO NEW FIRE PUMP CONTROLLER/ATS IN NEW BUILDING. PROVIDE ALL NECESSARY MOUNTING HARDWARE AND ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION. THIS WORK SHALL BE PERFORMED BY KOHLER FACTORY AUTHORIZED REPRESENTATIVE OF VIRGINIA. PROVIDE BREAKER LOCK. PROVIDE LABEL COMPLYING WITH NEC 695.4 (B)(3)(c). VERIFY BREAKER SIZE WITH FIRE PUMP HORSEPOWER. PRIOR TO ORDER.
14. 175A/3P - (4) #2/0, (1) #6 G, 2" C. APPROXIMATE LENGTH OF RUN IS 610'. PROVIDE PULL BOXES AS NEEDED. LENGTH OF CONDUCTORS INSIDE THE NEW ADDITION BUILDING SHALL BE AS SHORT AS POSSIBLE. VERIFY WIRE SIZE WITH FIRE PUMP HORSEPOWER, PRIOR TO ORDER.
15. (2) 2" EC'S TO A NEW POWER COMPANY TRANSFORMER. VERIFY EXACT LOCATION ON SITE. COORDINATE ALL REQUIREMENTS WITH POWER COMPANY AND PROVIDE ACCORDINGLY.
16. 200A/3P - (4) #3/0, 2" C. PROVIDE NEW WP TROUGH AS NEEDED. NO PENETRATIONS ON TOP OF TROUGH. LENGTH OF CONDUCTORS INSIDE THE BUILDING SHALL BE AS SHORT AS POSSIBLE.
17. SEE GROUNDING DETAIL THIS SHEET.
18. 175A/3P, 6 WIRE - TWO SETS OF (3) #2/0, (1) #6 G, 2" C.
19. (1) #6 CU. G. TO GROUND BUS IN 'MECH/ELEC 547'. DO NOT BOND NEUTRAL AND GROUND.
20. 200KA TYPE-1 SPD WITH INTEGRAL DISCONNECT AND SURGE COUNTER. SEE SPECIFICATIONS FOR MORE DETAILS.
21. 60A/3P - (4) #4, (1) #10 G, 1-1/4" C. LENGTH OF RUN SHALL BE AS SHORT AS POSSIBLE - MAXIMUM 48'.
22. PROVIDE PLACARD COMPLYING WITH NEC 695.4 (B)(3)(d).
23. PROVIDE A PERMANENT PLAQUE OR DIRECTORY COMPLYING WITH NEC 230.2 (E).
24. (1) 1" CONDUIT FOR GENERATOR CONTROL WIRING. WIRE PER MANUFACTURER'S INSTRUCTIONS. APPROXIMATE LENGTH OF RUN IS 610'. PROVIDE PULL BOXES AS NEEDED.

SERVICE LOAD CALCULATION

PEAK DEMAND THAT WAS RECORDED ON THE EXISTING 3000A, 277/480V, 3 PH, 4 WIRE SERVICE
DURING THE PERIOD 07/2021 - 01/2024 WAS 662 KW (798 AMPS @ 480V, 3PH).
NEW LOAD THAT IS BEING ADDED WITH THE NEW BUILDING ADDITION AND INTERIOR RENOVATIONS =
1044 KVA (1258 AMPS @ 480V, 3PH).
ESTIMATED LOAD ON THE EXISTING 3000A, 277/480V, 3 PH, 4 WIRE SERVICE AFTER THE NEW BUILDING ADDITION
AND INTERIOR RENOVATIONS = 1044 KVA + 1.25 x 662 KVA = 1872 KVA (2255 AMPS @480V, 3 PH)

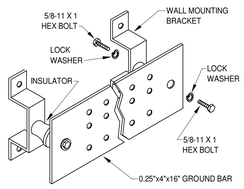
ALL SHOWN LIGHT IS EXISTING TO REMAIN
ALL SHOWN DARK IS NEW WORK

MOVE EXISTING EM PANEL AND FP TO STANDBY GENERATOR



GROUNDING DETAIL

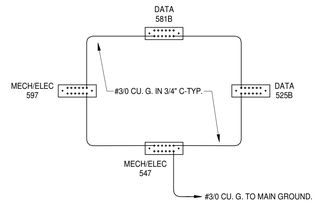
NOT TO SCALE



GROUND BUS INSTALLATION DETAIL

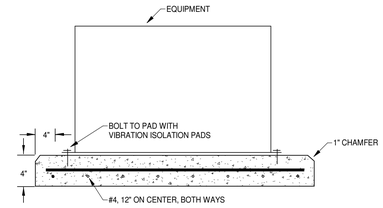
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NOTE: SECURE TO WALL WITH 1/2 X 1/2 LAG.
SEE GROUND LOOP INSTALLATION DETAIL
FOR ROOMS THAT REQUIRE GROUND BUS.



GROUND LOOP INSTALLATION

NOT TO SCALE



CONCRETE PAD DETAIL

NOT TO SCALE

NOTE: VERIFY ELECTRICAL EQUIPMENT DIMENSIONS, PRIOR TO CONCRETE POUR

MARK	DATE	DESCRIPTION
		REVISIONS

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phone: (804)262-7223
fax: (804)262-2023
website: www.srpeng.com

SIMMONS, ROCKECHARLIE & PRINCE INC.
Mechanical and Electrical Engineers
JOB NO. 23050

DATE	4/8/24
PROJECT	23143-00
DESIGNED	RKCM
DRAWN	RKCM
CHECKED	RKCM

RRMM®
ARCHITECTS, PC
115 South 15th Street, Suite 502
Richmond, Virginia 23219
(804)277-8987

COMMONWEALTH OF VIRGINIA
T. A. ROCKECHARLIE JR.
Lic. No. 29125
8 APRIL 2024
PROFESSIONAL ENGINEER

PROJECT
LOUISA COUNTY PUBLIC SCHOOLS
LOUISA COUNTY MIDDLE SCHOOL ADDITION
1009 DAVIS HIGHWAY
MINERAL, VIRGINIA

DRAWING
PARTIAL POWER RISER

SHEET
E-102

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Branch Panel: HMDP

Location: MECH / ELEC 547
Supply From: MAIN SWITCHBOARD
Mounting: Surface
Enclosure: Type 1

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

A.I.C. Rating: 42K AIC FULLY RATED
Mains Type: 1200 A MCB - NOTE #2
Panel Rating: 1200 A

Notes:

CKT	Circuit Description	Trip	Wire	Poles	A (KVA)	B (KVA)	C (KVA)	Poles	Wire	Trip	Circuit Description	CKT
1					65.00 35.94							2
3	PANEL 'H1' (MECH/ELEC 547) - NOTE #1	400 A		3		72.21 33.69		3		250 A	PANEL 'H2' (ELEC 525A) - NOTE #1	4
5							63.53 32.58					6
7					114.15 120.61							8
9	PANEL 'H3' (MECH/ELEC 597) - NOTE #1	600 A		3		113.07 120.07		3		600 A	PANEL 'H4' (ELEC 581A) - NOTE #1	10
11							112.90 109.34					12
13	SPACE	--		1	-- 0.00							14
15	SPACE	--		1		-- 0.00		3		60 A	SPD - NOTE #1	16
17	SPACE	--		1			-- 0.00					18
19	SPACE	--		1	-- --			1		--	SPACE	20
21	SPACE	--		1		-- --		1		--	SPACE	22
23	SPACE	--		1			-- --	1		--	SPACE	24
					Total Load:	335518 VA	338897 VA	318186 VA				
					Total Amps:	1221 A	1233 A	1149 A				

Panel Totals	
Total Conn. Load:	992601 VA
Total Conn.:	1201 A

Notes:
1. SEE POWER RISER FOR WIRE SIZE.
2. LSIG BREAKER WITH ARC ENERGY REDUCTION MEANS.

PANEL 'HMDP' LOAD CALCULATION:

RECEPTACLE LOAD CALCULATION PER NEC 220.44: FIRST 10 KVA AT 100% = 10 KVA
REMAINDER OVER 10 KVA AT 50% = 50% x 185.84 KVA = 92.92 KVA
TOTAL RECEPTACLE LOAD PER NEC 220.44 = 92.92 KVA + 10 KVA = 102.92 KVA
KITCHEN EQUIPMENT LOAD CALCULATION PER NEC 220.56:
NUMBER OF UNITS OF EQUIPMENT (6 AND OVER) = 65% x 210.36 KVA = 136.75 KVA
TOTAL CONNECTED CONTINUOUS LOAD ON PANEL 'HMDP' = 512.89 KVA
TOTAL CALCULATED NON-CONTINUOUS LOAD ON PANEL 'HMDP' = 102.92 KVA + 136.75 KVA + 95.94 KVA (OTHER NON-CONTINUOUS LOADS)
TOTAL LOAD ON PANEL 'HMDP' = 125% OF CONTINUOUS LOAD + 100% OF NON-CONTINUOUS LOAD = 125% x 512.89 KVA + 100% x 335.61 KVA = 976.72 KVA (1177 AMPS @ 480V, 3 PH).

Branch Panel: H1

Location: MECH / ELEC 547
Supply From: HMDP
Mounting: Surface
Enclosure: Type 1

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

A.I.C. Rating: 42K AIC FULLY RATED
Mains Type: 400 A MLO
Panel Rating: 400 A

Notes:

CKT	Circuit Description	Trip	Wire	Poles	A (KVA)	B (KVA)	C (KVA)	Poles	Wire	Trip	Circuit Description	CKT
1	ECH#1 (VESTIBULE 150)	15 A	12	1	2.00 2.00			1	12	15 A	EWH#1 (FIRE PUMP 101A)	2
3	ECH#2 (STAIR ST1 158)	15 A	12	1		2.00 8.31		1	8	40 A	WATER HEATER WH#9 (AG STOR. 540A)	4
5	ECH#3 (VESTIBULE 159)	15 A	12	1			2.00 0.00	1		20 A	SPARE	6
7					4.00 8.00							8
9	WATER HEATER WH#1 (CUST 113)	20 A	12	3		4.00 8.00		3	8	40 A	WATER HEATER WH#2 (CUST 133)	10
11							4.00 8.00					12
13	LTG. (AREA A 1ST FLOOR CORR., STAIRS)	20 A	12	1	0.80 37.11							14
15	LTG. (501, 501A-D, 503, 505, 507)	20 A	12	1		1.78 37.11		3		175 A	TRANSFORMER 'TL1' - NOTE #1	16
17	LTG. (529,31,33,35,37,39,41,43,45,47,49)	20 A	12	1			1.68 37.11					18
19	LTG. (502,504,506,508,510,512,514,516)	20 A	12	1	1.13 11.62							20
21	LTG. (538, 540)	20 A	12	1		1.10 11.62		3	4	70 A	BOOSTER PUMPS (2) 15 HP	22
23	EXTERIOR LIGHTING	20 A	10	1			0.78 11.62					24
25	SPARE	20 A		1	0.00 0.33							26
27	SPARE	20 A		1		0.00 0.33		3	12	15 A	JOCKEY PUMP (1/2 HP) (FIRE PUMP 549)	28
29	SPARE	20 A		1			0.00 0.33					30
31	SPARE	20 A		1	0.00 0.00			1		20 A	SPARE	32
33	SPARE	20 A		1		0.00 0.00		1		20 A	SPARE	34
35	SPARE	20 A		1			0.00 0.00	1		20 A	SPARE	36
37	SPACE	--		1	-- --			1		--	SPACE	38
39	SPACE	--		1		-- --		1		--	SPACE	40
41	SPACE	--		1			-- --	1		--	SPACE	42
					Total Load:	64998 VA	72209 VA	63535 VA				
					Total Amps:	235 A	261 A	229 A				

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	8000 VA	100.00%	8000 VA		
Lighting	6194 VA	100.00%	6194 VA	Total Conn. Load:	200742 VA
Motor	1000 VA	125.00%	1250 VA	Total Conn.:	242 A
Other	1074 VA	100.00%	1074 VA		
Power	34860 VA	100.00%	34860 VA		
WATER HEATER	42938 VA	100.00%	42938 VA		

Notes:
1. SEE POWER RISER FOR WIRE SIZE.

Branch Panel: H2

Location: ELEC 525A
Supply From: HMDP
Mounting: Surface
Enclosure: Type 1

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

A.I.C. Rating: 22K AIC FULLY RATED
Mains Type: 400 A MLO
Panel Rating: 400 A

Notes:

CKT	Circuit Description	Trip	Wire	Poles	A (KVA)	B (KVA)	C (KVA)	Poles	Wire	Trip	Circuit Description	CKT
1	ECH#4 (VESTIBULE 154)	15 A	12	1	2.00 2.01			1	12	20 A	LTG. (509, 511, 513, 515, 517)	2
3	ECH#5 (VESTIBULE 152)	15 A	12	1		2.00 1.69		1	12	20 A	LTG. (519, 521, 523, 525A 525B, 527)	4
5	LTG. (AREA B 1ST FLOOR CORR., STAIRS)	20 A	10	1			1.25 1.34	1	12	20 A	LTG. (518, 520, 522, 524)	6
7					30.00 1.93			1	10	20 A	LTG. (526, 528, 530, 532, 534, 536, 548C)	8
9	TRANSFORMER 'TL2' - NOTE #1	175 A		3		30.00 0.00		1		20 A	SPARE	10
11							30.00 0.00	1		20 A	SPARE	12
13	SPARE	20 A		1	0.00 0.00			1		20 A	SPARE	14
15	SPARE	20 A		1		0.00 0.00		1		20 A	SPARE	16
17	SPARE	20 A		1			0.00 0.00	1		20 A	SPARE	18
19	SPARE	20 A		1	0.00 0.00			1		20 A	SPARE	20
21	SPARE	20 A		1		0.00 0.00		1		20 A	SPARE	22
23	SPARE	20 A		1			0.00 0.00	1		20 A	SPARE	24
25	SPACE	--		1	-- --			1		--	SPACE	26
27	SPACE	--		1		-- --		1		--	SPACE	28
29	SPACE	--		1			-- --	1		--	SPACE	30
					Total Load:	35939 VA	33685 VA	32582 VA				
					Total Amps:	130 A	122 A	118 A				

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	4000 VA	100.00%	4000 VA		
Lighting	8206 VA	100.00%	8206 VA	Total Conn. Load:	102206 VA
Other	0 VA	0.00%	0 VA	Total Conn.:	123 A

Notes:
1. SEE POWER RISER FOR WIRE SIZE.

Branch Panel: H3

Location: MECH / ELEC 597
Supply From: HMDP
Mounting: Surface
Enclosure: Type 1

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

A.I.C. Rating: 42K AIC FULLY RATED
Mains Type: 600 A MLO
Panel Rating: 600 A

Notes:

CKT	Circuit Description	Trip	Wire	Poles	A	B	C	Poles	Wire	Trip	Circuit Description	CKT
1					7.08 7.08							2
3	ODU#7 (MCA = 28.5) (ROOF)	35 A	8	3		7.08 7.08		3	8	35 A	ODU#3 (MCA = 28.5) (ROOF)	4
5							7.08 7.08					6
7					6.58 9.52							8
9	ODU#9 (MCA = 26.4) (ROOF)	35 A	8	3		6.58 9.52		3	6	50 A	ODU#5 (MCA = 38.3) (ROOF)	10
11							6.58 9.52					12
13					8.00 0.67			1	12	20 A	LTG. (AREA A 2ND FLOOR CORR., STAIRS)	14
15	WATER HEATER WH#10 (MECH/ELEC 203)	40 A	8	3		8.00 1.70		1	12	20 A	LTG. (551, 553, 555, 557, 599)	16
17							8.00 1.53	1	12	20 A	LTG. (585, 587, 589, 591, 593, 595, 597)	18
19					25.00 2.11			1	12	20 A	LTG. (574, 574A, 574B, 574C, 574D)	20
21	TRANSFORMER 'TL3' - NOTE #1	175 A		3		25.00 0.00		1		20 A	SPARE	22
23							25.00 0.00	1		20 A	SPARE	24
25					18.54 7.19							26
27	DOAS #3 (MCA = 84) (ROOF)	90 A	2	3		18.54 7.19		3	8	35 A	DISHWASHER (DISH WASH 574C)	28
29							18.54 7.19					30
31					18.54 4.00							32
33	DOAS #4 (MCA = 84) (ROOF)	90 A	2	3		18.54 4.00		3	12	20 A	DISHWASHER BOOSTER HEATER (574C)	34
35							18.54 4.00					36
37	SPARE	20 A		1	0.00 1.33							38
39	SPARE	20 A		1		0.00 1.33		3	12	15 A	DISPOSER (DISH WASH 574C)	40
41	SPARE	20 A		1			0.00 1.33					42
43	SPARE	20 A		1	0.00 0.00			1		20 A	SPARE	44
45	SPARE	20 A		1		0.00 0.00		1		20 A	SPARE	46
47	SPARE	20 A		1			0.00 0.00	1		20 A	SPARE	48
49	SPACE	--		1	-- --			1		--	SPACE	50
51	SPACE	--		1		-- --		1		--	SPACE	52
53	SPACE	--		1			-- --	1		--	SPACE	54
					Total Load:	114149 VA	113071 VA	112900 VA				
					Total Amps:	412 A	408 A	408 A				

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	202020 VA	100.00%	202020 VA		
Lighting	6015 VA	100.00%	6015 VA	Total Conn. Load:	340119 VA
Other	0 VA	0.00%	0 VA	Total Conn.:	409 A
Power	37580 VA	100.00%	37580 VA		
WATER HEATER	24000 VA	100.00%	24000 VA		

Notes:
1. SEE POWER RISER FOR WIRE SIZE.

Branch Panel: H4

Location: ELEC 581A
Supply From: HMDP
Mounting: Surface
Enclosure: Type 1

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

A.I.C. Rating: 22K AIC FULLY RATED
Mains Type: 600 A MLO
Panel Rating: 600 A

Notes:

CKT	Circuit Description	Trip	Wire	Poles	A	B	C	Poles	Wire	Trip	Circuit Description	CKT
1					8.85 10.30							2
3	ODU#2 (MCA = 35.7) (ROOF)	50 A	6	3		8.85 10.30		3	6	50 A	ODU#6 (MCA = 41.4) (ROOF)	4
5							8.85 10.30					6
7					7.08 7.08							8
9	ODU#1 (MCA = 28.5) (ROOF)	35 A	8	3		7.08 7.08		3	8	35 A	ODU#8 (MCA = 28.5) (ROOF)	10
11							7.08 7.08					12
13					8.85 2.01			1	12	20 A	LTG. (559, 561, 563, 565, 567)	14
15	ODU#4 (MCA = 35.7) (ROOF)	50 A	6	3		8.85 1.91		1	12	20 A	LTG. (569, 571, 573, 575, 577, 579, 581, 583)	16
17							8.85 1.23	1	12	20 A	LTG. (552, 554, 556, 558, 560)	18
19					8.00 2.19			1	12	20 A	LTG. (562, 564, 566, 568, 570, 572, 598A)	20
21	WATER HEATER WH#3 (CUST 233)	40 A	8	3		8.00 1.76		1	10	20 A	LTG. (AREA B 2ND FLOOR CORR., STAIRS)	22
23							8.00 0.00	1		20 A	SPARE	24
25	WATER HEATER WH#4 (SCIENCE CR. 220)	40 A	8	1	8.31 8.31			1	8	40 A	WATER HEATER WH#5 (SCIENCE CR. 224)	26
27	WATER HEATER WH#6 (SCIENCE CR. 231)	40 A	8	1		8.31 8.31		1	8	40 A	WATER HEATER WH#7 (SCIENCE CR. 221)	28
29	WATER HEATER WH#8 (SCIENCE CR. 215)	40 A	8	1			8.31 25.67					30
31					12.73 25.67			3		175 A	TRANSFORMER 'TL4' - NOTE #1	32
33	DOAS #1 (MCA = 53) (ROOF)	70 A	4	3		12.73 25.67						34
35							12.73 0.00	1		20 A	SPARE	36
37					12.73 0.00			1		20 A	SPARE	38
39	DOAS #2 (MCA = 53) (ROOF)	70 A	4	3		12.73 0.00		1		20 A	SPARE	40
41							12.73 0.00	1		20 A	SPARE	42
43	SPARE	20 A		1	0.00 0.00			1		20 A	SPARE	44
45	SPARE	20 A		1		0.00 0.00		1		20 A	SPARE	46
47	SPARE	20 A		1			0.00 0.00	1		20 A	SPARE	48
49	SPACE	--		1	-- --			1		--	SPACE	50
51	SPACE	--		1		-- --		1		--	SPACE	52
53	SPACE	--		1			-- --	1		--	SPACE	54
					Total Load:	120609 VA	120073 VA	109342 VA				
					Total Amps:	441 A	439 A	395 A				

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	202880 VA	100.00%	202880 VA		
Lighting	9097 VA	100.00%	9097 VA	Total Conn. Load:	350024 VA
Other	0 VA	0.00%	0 VA	Total Conn.:	425 A
Power	0 VA	0.00%	0 VA		
WATER HEATER	62433 VA	100.00%	62433 VA		

Notes:
1. SEE POWER RISER FOR WIRE SIZE.

Branch Panel:EP2

Location: MECH / ELEC 547
Supply From: PANEL EP1
Mounting: Surface
Enclosure: Type 1

Volts: 480/277
Phases: 1
Wires: 3

A.I.C. Rating: 10K AIC FULLY RATED
Mains Type: 40A MAIN FUSE
Panel Rating: 100 A

Notes: PANEL SHALL BE EQUAL TO EATON BUSSMANN FUSED PANELBOARD. PANEL SHALL HAVE INTEGRAL 100 KA SPD. PERFORM COORDINATION STUDY.

CKT	Circuit Description	Fuse Trip	Wire	Poles	A (KVA)	B (KVA)	Poles	Wire	Fuse Trip	Circuit Description	CKT
1	EMERGENCY LTG. (1ST FLR. CORR., STAIRS)	20 A	10	1	1.20 X		1	X	20 A	SPARE	2
3	EMERGENCY LTG. (2ND FLR. CORR., STAIRS)	20 A	10	1		1.00 X	1	X	20 A	SPARE	4
5	SPARE	20 A	X	1	X X		1	X	20 A	SPARE	6
7	SPARE	20 A	X	1		X X	1	X	20 A	SPARE	8
9	SPARE	20 A	X	1	X X		1	X	20 A	SPARE	10
11	SPARE	20 A	X	1		X X	1	X	20 A	SPARE	12
				Total Load:	1200 VA	1000 VA					
				Total Amps:	4 A	4 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
				Total Conn. Load:	2200 VA
				Total Conn.	5 A

Notes:

CHECK ROOM NAMES AND NUMBERS

VERIFY MAXIMUM AVAILABLE FAULT CURRENT PRIOR TO SUBMISSION OF SHOP DRAWINGS AND SELECT KAIC RATINGS ACCORDINGLY.

MARK	DATE	REVISIONS	BY	DESCRIPTION

SIMMONS, ROCKECHARLIE & PRINCE INC.
Mechanical and Electrical Engineers
10150 Staples Mill Rd., Suite A
Glen Allen, VA 23060
phone: (804)262-7223
fax: (804)262-7224
website: www.srpeng.com

JOB NO. 23050

DATE	PROJECT	DESIGNED	DRAWN	CHECKED
4/8/24	23143-00	RKCM	RKCM	RKCM

RRMM®
ARCHITECTS, PC
115 South 15th Street, Suite 502
Richmond, Virginia 23219
(804)277-8987

COMMONWEALTH OF VIRGINIA
T. A. ROCKECHARLIE III
Lic. No. 0402
8 APRIL 2024
PROFESSIONAL ENGINEER

PROJECT
LOUISA COUNTY PUBLIC SCHOOLS
LOUISA COUNTY MIDDLE SCHOOL ADDITION
1009 DAVIS HIGHWAY
MINERAL, VIRGINIA

DRAWING
HIGH VOLTAGE PANEL SCHEDULES

SHEET
E-103

C:\Users\rmadalis.SRP\Documents\23050 MEP CENTRAL V23_rmadalis@srpeng.com.rvt
4/4/2024 4:26:07 PM

1/32" = 1'-0" 0' 16' 32' 48'
1/16" = 1'-0" 0' 4' 8' 16' 24'
3/32" = 1'-0" 0' 4' 8' 16'
1/8" = 1'-0" 0' 4' 8' 12'
1/4" = 1'-0" 0' 2' 4' 6'
3/8" = 1'-0" 0' 1' 2' 3' 4'
1/2" = 1'-0" 0' 6" 1' 2' 3'
3/4" = 1'-0" 0' 6" 1' 2'
1" = 1'-0" 0' 3" 6" 9" 1' 1.5'
1 1/2" = 1'-0" 0' 3" 6" 9" 1'
3" = 1'-0" 0' 1" 2" 3" 4" 5" 6"
6" = 1'-0" 0' 1" 2" 3"
12" = 1'-0" 0' 1" 1.5"

Branch Panel: L1

Location: MECH / ELEC 547 | **Volts:** 120/208 Wye | **A.I.C. Rating:** 22K AIC FULLY RATED
Supply From: | **Phases:** 3 | **Mains Type:** 400 A MCB, FTL, 200%N
Mounting: Surface | **Wires:** 4 | **Panel Rating:** 400 A
Enclosure: Type 1

Notes:

CKT	Circuit Description	Trip	Wire	Poles	A (KVA)		B (KVA)		C (KVA)		Poles	Wire	Trip	Circuit Description	CKT
1	RECPT. (501, 501A)	20 A	10	1	1.62	1.80					1	10	20 A	RECPT. (501B, 501C)	2
3	RECPT. (ALT ED CONF. 501D)	20 A	12	1			1.44	1.20			1	10	20 A	RECPT. (ALT ED 505)	4
5	RECPT. (ALT ED 505)	20 A	10	1					1.08	1.08	1	10	20 A	RECPT. (ALT ED 505)	6
7	RECPT. (ALT ED 2 507)	20 A	8	1	1.08	1.08					1	8	20 A	RECPT. (ALT ED 2 507)	8
9	RECPT. (ALT ED 2 507)	20 A	10	1			1.20	1.44			1	10	20 A	RECPT. (ALT ED RESOURCE 3 503)	10
11	RECPT. (ALT ED RESOURCE 3 503)	20 A	12	1					1.20	1.62	1	12	20 A	RECPT. (EXT., CORR., 545A, 547, 549)	12
13	RECPT. (543A, 545, CORR.)	20 A	12	1	1.08	0.36					1	12	20 A	RECPT. EWC (CORRIDOR)	14
15	RECPT. (529,531,533,535A,537,539A,CORR.)	20 A	10	1			1.26	0.90			1	12	20 A	RECPT. (ALT ED RESOURCE 1 543)	16
17	RECPT. (ALT ED RESOURCE 1 543)	20 A	12	1					1.38	1.26	1	12	20 A	RECPT. (ALT ED RESOURCE 2 539)	18
19	RECPT. (ALT ED RESOURCE 2 539)	20 A	10	1	1.38	1.11					1	10	20 A	RECPT., REFRIG. (535) - NOTE #1	20
21	RECPT. (TEACHER WORKROOM 535)	20 A	10	1			1.18	1.18			1	10	20 A	RECPT. (TEACHER WORKROOM 535)	22
23	VRF INDOOR UNITS AND HRU'S	15 A	12	2					1.02	0.25	1	12	15 A	EAF#1 (1/10 HP) (FIRE PUMP 549)	24
25					1.02	1.00					1	12	20 A	FACP (MECH/ELEC 547) - NOTES #2, #3	26
27	CARD READERS - NOTE #2	15 A	12	1			0.18	0.53			1	12	15 A	HWRP#1 (1/6 HP) (CUST 531)	28
29	SPARE	20 A		1					0.00	0.00	1		20 A	SPARE	30
31	SPARE	20 A		1	0.00	0.00					1		20 A	SPARE	32
33	SPARE	20 A		1			0.00	0.00			1		20 A	SPARE	34
35	SPARE	20 A		1					0.00	0.00	1		20 A	SPARE	36
37	SPARE	20 A		1	0.00	0.00					1		20 A	SPARE	38
39	SPARE	20 A		1			0.00	0.00			1		20 A	SPARE	40
41	SPARE	20 A		1					0.00	0.00	1		20 A	SPARE	42
	(L1 + L1A) **Total Load:**				39908 VA		39410 VA		33648 VA						
	(L1 + L1A) **Total Amps:**				340 A		336 A		280 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	4107 VA	100.00%	4107 VA		
Motor	1060 VA	112.50%	1193 VA	**Total Conn. Load:**	112965 VA (L1 + L1A)
Other	1498 VA	100.00%	1498 VA	**Total Conn.:**	319 A (L1 + L1A)
Power	47240 VA	100.00%	47240 VA		
Receptacle	59060 VA	58.47%	34530 VA		

Notes:
1. PROVIDE GFCI BREAKER.
2. PROVIDE BREAKER LOCK.
3. PROVIDE RED IDENTIFICATION LABEL - 'FIRE ALARM PANEL'.

Branch Panel: L1A

Location: MECH / ELEC 547 | **Volts:** 120/208 Wye | **A.I.C. Rating:** 22K AIC FULLY RATED
Supply From: L1 | **Phases:** 3 | **Mains Type:** 400 A MLO, 200%N
Mounting: Surface | **Wires:** 4 | **Panel Rating:** 400 A
Enclosure: Type 1

Notes:

CKT	Circuit Description	Trip	Wire	Poles	A		B		C		Poles	Wire	Trip	Circuit Description	CKT
1	RECPT. (EXT., STAIRS, CORR., 502A)	20 A	12	1	1.08	1.44					1	10	20 A	RECPT. (CORR., TLT.S ,512, 514, 516)	2
3	RECPT. (SPEC ED 1 502) - NOTE #1	20 A	12	1			1.38	1.26			1	12	20 A	RECPT. (SPEC ED 1 502, 504) - NOTE #1	4
5	RECPT. REFRIG. (502) - NOTE #1	20 A	12	1					0.75	1.10	1	10	20 A	RECPT. (SPEC ED 1 502)	6
7	DISHWASHER (SPEC ED 1 502) - NOTE #2	20 A	10	1	1.20	1.00					1	10	20 A	RECPT. (SPEC ED 1 502)	8
9	RANGE (SPEC ED 1 502) - NOTES #2, #3	60 A	4	2			4.55	1.08			1	10	20 A	RECPT. (SPEC ED 2 506) - NOTE #1	10
11									4.55	1.38	1	10	20 A	RECPT. (SPEC ED 2 506) - NOTE #1	12
13	RANGE (SPEC ED 2 506) - NOTES #2, #3	60 A	4	2	4.55	1.20					1	10	20 A	DISHWASHER (SPEC ED 2 506) - NOTE #2	14
15							4.55	1.00			1	10	20 A	RECPT. (SPEC ED 2 506)	16
17	RECPT. REFRIG. (506) - NOTE #1	20 A	12	1					0.75	1.00	1	10	20 A	RECPT. (SPEC ED 2 506)	18
19	RECPT., REFRIG. (510) - NOTE #1	20 A	10	1	1.11	1.18					1	10	20 A	RECPT. (TEACHER WORKROOM 510)	20
21	RECPT. (TEACHER WORKROOM 510)	20 A	10	1			1.18	0.72			1	12	20 A	RECPT. (EXT., 540A)	22
23	RECPT. HYDROPONICS AREA (540) - NOTE #1	20 A	12	1					0.72	1.08	1	10	20 A	RECPT. (AG CLASSROOM 540) - NOTE #1	24
25	RECPT. CORD REEL (540)	20 A	10	1	0.60	0.60					1	10	20 A	RECPT. CORD REEL (540)	26
27	RECPT. CORD REEL (540)	20 A	10	1			0.60	0.96			1	10	20 A	RECPT. (AG CLASSROOM 540) - NOTE #1	28
29	RECPT. (AG CLASSROOM 540) - NOTE #1	20 A	10	1					0.78	1.20	1	10	20 A	RECPT. (AG CLASSROOM 540) - NOTE #1	30
31	RECPT. REFRIG. (AG CR 540) - NOTE #1	20 A	12	1	0.75	1.00					1	10	20 A	RECPT. (AG CLASSROOM 540)	32
33	RECPT. (AG CLASSROOM 540)	20 A	10	1			1.00	1.20			1	10	20 A	DISHWASHER (AG C R540) - NOTE #2	34
35	RANGE (AG CLASSROOM 540) - NOTES #2, #3	60 A	4	2					4.55	1.20	1	8	20 A	RECPT. (SPEC ED 3 538) - NOTE #1	36
37					4.55	4.55					2	4	60 A	RANGE (SPEC ED 3 538) - NOTES #2, #3	38
39	RECPT. (SPEC ED 3 538) - NOTE #1	20 A	8	1			0.90	4.55							40
41	RECPT. REFRIG. (538) - NOTE #1	20 A	10	1					0.75	1.20	1	8	20 A	DISHWASHER (SPEC ED 3 538) - NOTE #2	42
43	RECPT. (SPEC ED 3 538)	20 A	8	1	1.00	1.00					1	8	20 A	RECPT. (SPEC ED 3 538)	44
45	RECPT. WASHER (SPEC ED 3 538) - NOTE #1	20 A	8	1			1.32	2.15			2	6	30 A	RECPT. DRYER (538) - NOTES #1, #3	46
47	VRF INDOOR UNITS AND HRU'S	15 A	10	2					1.07	2.15					48
49					1.07	0.50					1	12	15 A	RECPT. DUST COLLECTOR (540) - NOTE #1	50
51	RECPT. DUST COLLECTOR (540) - NOTE #1	15 A	12	1			0.50	0.00			1		20 A	SPARE	52
53	HWRP#2 (1/6 HP) (CUST 514)	15 A	12	1					0.53	0.00	1		20 A	SPARE	54
55	SPARE	20 A		1	0.00	0.00					1		20 A	SPARE	56
57	SPARE	20 A		1			0.00	0.00			1		20 A	SPARE	58
59	SPARE	20 A		1					0.00	0.00	1		20 A	SPARE	60
	Total Load:				28379 VA		28900 VA		24759 VA						
	Total Amps:				241 A		245 A		206 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	2103 VA	100.00%	2103 VA		
Motor	530 VA	125.00%	663 VA	**Total Conn. Load:**	82037 VA
Other	34 VA	100.00%	34 VA	**Total Conn.:**	231 A
Power	44720 VA	100.00%	44720 VA		
Receptacle	34650 VA	64.43%	22325 VA		

Notes:
1. PROVIDE GFCI BREAKER.
2. PROVIDE BREAKER LOCK.
3. INCLUDE NEUTRL CONDUCTOR FOR THE CIRCUIT SHOWN.

Branch Panel: L2

Location: ELEC 525A | **Volts:** 120/208 Wye | **A.I.C. Rating:** 10K AIC FULLY RATED
Supply From: | **Phases:** 3 | **Mains Type:** 400 A MCB, FTL, 200%N
Mounting: Surface | **Wires:** 4 | **Panel Rating:** 400 A
Enclosure: Type 1

Notes:

CKT	Circuit Description	Trip	Wire	Poles	A		B		C		Poles	Wire	Trip	Circuit Description	CKT
1	RECPT. (ALT ED 7 517)	20 A	10	1	1.08	1.08					1	10	20 A	RECPT. (ALT ED 7 517)	2
3	RECPT. (ALT ED 7 517)	20 A	10	1			1.20	1.08			1	10	20 A	RECPT. (ALT ED 6 515)	4
5	RECPT. (ALT ED 6 515)	20 A	12	1					1.08	1.20	1	12	20 A	RECPT. (ALT ED 6 515)	6
7	RECPT. (ALT ED 5 513)	20 A	12	1	1.20	1.08					1	12	20 A	RECPT. (ALT ED 5 513)	8
9	RECPT. (ALT ED 5 513)	20 A	12	1			1.08	1.08			1	12	20 A	RECPT. (ALT ED 4 511)	10
11	RECPT. (ALT ED 4 511)	20 A	12	1					1.08	1.20	1	12	20 A	RECPT. (ALT ED 4 511)	12
13	RECPT. (ALT ED 3 509)	20 A	12	1	1.08	1.08					1	10	20 A	RECPT. (ALT ED 3 509)	14
15	RECPT. (ALT ED 3 509)	20 A	10	1			1.20	1.08			1	12	20 A	RECPT. (ALT ED 10 527)	16
17	RECPT. (ALT ED 10 527)	20 A	12	1					1.08	1.20	1	12	20 A	RECPT. (ALT ED 10 527)	18
19	RECPT. (ALT ED RESOURCE 4 523)	20 A	12	1	1.20	1.08					1	12	20 A	RECPT. (ALT ED RESOURCE 4 523)	20
21	RECPT. (ALT ED RESOURCE 4 523)	20 A	12	1			1.08	1.08			1	12	20 A	RECPT. (ALT ED 9 521)	22
23	RECPT. (ALT ED 9 521)	20 A	12	1					1.08	1.20	1	12	20 A	RECPT. (ALT ED 9 521)	24
25	RECPT. (ALT ED 8 519)	20 A	10	1	1.08	1.08					1	10	20 A	RECPT. (ALT ED 8 519)	26
27	RECPT. (ALT ED 8 519)	20 A	12	1			1.20	0.72			1	12	20 A	RECPT. (CORR., ELEC.)	28
29	RECPT. (EXT., CORR.)	20 A	12	1					0.90	0.97	2	12	15 A	VRF INDOOR UNITS AND HRU'S	30
31	VRF INDOOR UNITS	15 A	12	2	0.81	0.97									32
33							0.81	0.18			1	12	15 A	CARD READERS - NOTE #1	34
35	RECPT. (DATA 525B)	20 A	12	1					1.00	0.60	1	12	20 A	RECPT. (DATA 525B)	36
37	RECPT. (DATA 525B)	20 A	12	1	1.00	0.00					1		20 A	SPARE	38
39	RECPT. (DATA 525B)	20 A	12	1			1.00	0.00			1		20 A	SPARE	40
41	SPARE	20 A		1					0.00	0.00	1		20 A	SPARE	42
43	SPARE	20 A		1	0.00	0.00					1		20 A	SPARE	44
45	SPARE	20 A		1			0.00	0.00			1		20 A	SPARE	46
47	SPARE	20 A		1					0.00	0.00	1		20 A	SPARE	48
	(L2 + L2A) **Total Load:**				28928 VA		31651 VA		29987 VA						
	(L2 + L2A) **Total Amps:**				241 A		265 A		251 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	6148 VA	100.00%	6148 VA		
Other	68 VA	100.00%	68 VA	**Total Conn. Load:**	90566 VA (L2 + L2A)
Power	22360 VA	100.00%	22360 VA	**Total Conn.:**	252 A (L2 + L2A)
Receptacle	61990 VA	58.07%	35995 VA		

Notes:
1. PROVIDE BREAKER LOCK.

Branch Panel: L2A

Location: ELEC 525A | **Volts:** 120/208 Wye | **A.I.C. Rating:** 10K AIC FULLY RATED
Supply From: L2 | **Phases:** 3 | **Mains Type:** 400 A MLO, 200%N
Mounting: Surface | **Wires:** 4 | **Panel Rating:** 400 A
Enclosure: Type 1

Notes:

CKT	Circuit Description	Trip	Wire	Poles	A		B		C		Poles	Wire	Trip	Circuit Description	CKT
1	RECPT. (CLASSROOM 1 520)	20 A	12	1	1.20	1.08					1	12	20 A	RECPT. (CLASSROOM 1 520)	2
3	RECPT. (CLASSROOM 1 520)	20 A	12	1			1.08	1.08			1	10	20 A	RECPT. (CLASSROOM 2 522)	4
5	RECPT. (CLASSROOM 2 522)	20 A	10	1					1.08	1.20	1	12	20 A	RECPT. (CLASSROOM 2 522)	6
7	RECPT. (CLASSROOM 3 524)	20 A	10	1	1.20	1.08					1	10	20 A	RECPT. (CLASSROOM 3 524)	8
9	RECPT. (CLASSROOM 3 524)	20 A	10	1			1.08	1.20			1	10	20 A	RECPT. (SPEC ED 4 534) - NOTE #1	10
11	RECPT. (SPEC ED 4 534) - NOTE #1	20 A	8	1					1.08	0.90	1	12	20 A	RECPT. (CORR., STORAGE 518)	12
13	RECPT. (CLASSROOM 4 532)	20 A	10	1	1.20	1.08					1	10	20 A	RECPT. (CLASSROOM 4 532)	14
15	RECPT. (CLASSROOM 4 532)	20 A	10	1			1.08	1.20			1	10	20 A	RECPT. (CLASSROOM 5 530)	16
17	RECPT. (CLASSROOM 5 530)	20 A	10	1					1.08	1.08	1	10	20 A	RECPT. (CLASSROOM 5 530)	18
19	RECPT. (CLASSROOM 6 528)	20 A	8	1	1.08	1.08					1	8	20 A	RECPT. (CLASSROOM 6 528)	20
21	RECPT. (CLASSROOM 6 528)	20 A	10	1			1.20	1.08			1	8	20 A	RECPT. (CLASSROOM 7 526)	22
23	RECPT. (CLASSROOM 7 526)	20 A	8	1					1.08	1.20	1	8	20 A	RECPT. (CLASSROOM 7 526)	24
25	RECPT. EWC	20 A	10	1	1.00	1.26					1	10	20 A	RECPT. (CORR., 534A)	26
27	RECPT. (EXT., 548B, 548C)	20 A	8	1			1.08	0.75			1	10	20 A	RECPT. REFRIG. (534) - NOTE #1	28
29	RECPT. (SPEC ED 4 534)	20 A	8	1					1.00	1.00	1	8	20 A	RECPT. (SPEC ED 4 534)	30
31	DISHWASHER (SPEC ED 4 534) - NOTE #2	20 A	8	1	1.20	1.32					1	8	20 A	RECPT. WASHER (SPEC ED 4 534) - NOTE #1	32
33	RANGE (SPEC ED 4 534) - NOTES #2, #3	60 A	4	2			4.55	2.15			2	8	30 A	RECPT. DRYER (534) - NOTES #1, #3	34
35									4.55	2.15					36
37	VRF INDOOR UNITS AND HRU'S	15 A	12	2	0.79	0.54					2	12	15 A	VRF INDOOR UNITS	38
39							0.79	0.54							40
41	SPARE	20 A		1					0.00	0.00	1		20 A	SPARE	42
43	SPARE	20 A		1	0.00	0.00					1		20 A	SPARE	44
45	SPARE	20 A		1			0.00	0.00			1		20 A	SPARE	46
47	SPARE	20 A		1					0.00	0.00	1		20 A	SPARE	48
	Total Load:				15115 VA		18865 VA		17400 VA						
	Total Amps:				126 A		160 A		148 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	2670 VA	100.00%	2670 VA		
Power	15880 VA	100.00%	15880 VA	**Total Conn. Load:**	51380 VA
Receptacle	32830 VA	65.23%	21415 VA	**Total Conn.:**	145 A

Notes:
1. PROVIDE GFCI BREAKER.
2. PROVIDE BREAKER LOCK.
3. INCLUDE NEUTRL CONDUCTOR FOR THE CIRCUIT SHOWN.

Branch Panel: L3

Location: MECH / ELEC 597 | **Volts:** 120/208 Wye | **A.I.C. Rating:** 22K AIC FULLY RATED
Supply From: | **Phases:** 3 | **Mains Type:** 400 A MCB, FTL, 200%N
Mounting: Surface | **Wires:** 4 | **Panel Rating:** 400 A
Enclosure: Type 1

Notes:

CKT	Circuit Description	Trip	Wire	Poles	A (KVA)		B (KVA)		C (KVA)		Poles	Wire	Trip	Circuit Description	CKT
1	RECPT. (CLASSROOM 12 557)	20 A	8	1	1.20	1.08					1	8	20 A	RECPT. (CLASSROOM 12 557)	2
3	RECPT. (CLASSROOM 12 557)	20 A	10	1			1.08	1.08			1	10	20 A	RECPT. (CLASSROOM 11 555)	4
5	RECPT. (CLASSROOM 11 555)	20 A	10	1					1.08	1.20	1	10	20 A	RECPT. (CLASSROOM 11 555)	6
7	RECPT. (CLASSROOM 10 553)	20 A	10	1	1.20	1.08					1	12	20 A	RECPT. (CLASSROOM 10 553)	8
9	RECPT. (CLASSROOM 10 553)	20 A	12	1			1.08	1.20			1	12	20 A	RECPT. (CLASSROOM 9 551)	10
11	RECPT. (CLASSROOM 9 551)	20 A	12	1					1.08	1.08	1	12	20 A	RECPT. (CLASSROOM 9 551)	12
13	RECPT. (CLASSROOM 8 593)	20 A	12	1	1.08	1.08					1	12	20 A	RECPT. (CLASSROOM 8 593)	14
15	RECPT. (CLASSROOM 8 593)	20 A	12	1			1.20	0.90			1	12	20 A	RECPT. (ADMIN OFFICE 599)	16
17	RECPT., REFRIG. (591) - NOTE #1	20 A	12	1					1.11	1.18	1	10	20 A	RECPT. (TEACHER WORKROOM 591)	18
19	RECPT. (TEACHER WORKROOM 591)	20 A	12	1	1.18	1.20					1	10	20 A	RECPT. (MS RESOURCE 1 587)	20
21	RECPT. (MS RESOURCE 1 587)	20 A	10	1			1.08	1.20			1	10	20 A	RECPT. (MS RESOURCE 2 585)	22
23	RECPT. (MS RESOURCE 2 585)	20 A	10	1					1.08	1.26	1	10	20 A	RECPT. (CORR., 589, 591A)	24
25	RECPT. (595, 597)	20 A	12	1	1.08	1.24					2	10	15 A	VRF INDOOR UNITS AND HRU'S	26
27	ECH#6 (TOILET 591A)	15 A	12	1			0.75	1.24							28
29	ECH#7 (TOILET 589)	15 A	12	1					0.75	0.53	1	12	15 A	EAF #2 (1/6 HP) (ROOF)	30
31	SPARE	20 A		1	0.00	0.00					1		20 A	SPARE	32
33	SPARE	20 A		1			0.00	0.00			1		20 A	SPARE	34
35	SPARE	20 A		1					0.00	0.00	1		20 A	SPARE	36
37	SPARE	20 A		1	0.00	0.00					1		20 A	SPARE	38
39	SPARE	20 A		1			0.00	0.00			1		20 A	SPARE	40
41	SPARE	20 A		1					0.00	0.00	1		20 A	SPARE	42
	(L3 + L3A) **Total Load:**				26843 VA		25189 VA		22826 VA						
	(L3 + L3A) **Total Amps:**				227 A		213 A		190 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	5922 VA	100.00%	5922 VA		
Motor	250 VA	125.00%	313 VA	**Total Conn. Load:**	74857 VA (L3 + L3A)
Other	564 VA	100.00%	564 VA	**Total Conn.:**	210 A (L3 + L3A)
Power	11411 VA	100.00%	11411 VA		
Receptacle	56710 VA	58.82%	33355 VA		

Notes:
1. PROVIDE GFCI BREAKER.

Branch Panel: L3A

Location: MECH / ELEC 597 | **Volts:** 120/208 Wye | **A.I.C. Rating:** 22K AIC FULLY RATED
Supply From: L3 | **Phases:** 3 | **Mains Type:** 400 A MLO, 200%N
Mounting: Surface | **Wires:** 4 | **Panel Rating:** 400 A
Enclosure: Type 1

Notes:

CKT	Circuit Description	Trip	Wire	Poles	A		B		C		Poles	Wire	Trip	Circuit Description	CKT
1	VRF INDOOR UNITS AND HRU'S	15 A	10	2	0.99	0.72					1	12	15 A	RECPT. COLD FOOD (574B) - NOTE #1	2
3							0.99	0.72			1	12	15 A	RECPT. COLD FOOD (574B) - NOTE #1	4
5	RECPT. CASHIER'S COUNTERS - NOTE #1	20 A	12	1					0.50	1.20	1	12	15 A	RECPT. ALL PURPOSE COUNTER - NOTE #1	6
7	RECPT. HOLDING CABINET (574B) - NOTE #1	15 A	12	1	1.10	1.10					1	12	15 A	RECPT. HOLDING CABINET (574B) - NOTE #1	8
9	RECPT. HOLDING CABINET (574B) - NOTE #1	15 A	12	1			1.10	1.10			1	12	15 A	RECPT. HOLDING CABINET (574B) - NOTE #1	10
11	RECPT. HOLDING CABINET (574B) - NOTE #1	15 A	12	1					1.10	1.10	1	12	15 A	RECPT. HOLDING CABINET (574B) - NOTE #1	12
13	RECPT. HOLDING CABINET (574B) - NOTE #1	15 A	12	1	1.10	1.10					1	12	15 A	RECPT. HOLDING CABINET (574B) - NOTE #1	14
15	RECPT. HOLDING CABINET (574A) - NOTE #1	15 A	10	1			1.10	1.10			1	10	15 A	RECPT. HOLDING CABINET (574A) - NOTE #1	16
17	RECPT. (574A) - NOTE #1	20 A	10	1					0.36	0.36	1	10	20 A	RECPT. (574A) - NOTE #1	18
19	RECPT. (574B) - NOTE #1	20 A	10	1	0.36	0.50					1	12	15 A	WALK-IN-CLR. DOOR, LIGHTS - NOTES #2, #3	20
21	WALK-IN-FRZ. DOOR, LIGHTS - NOTES #2, #3	15 A	12	1			0.50	0.50			1	12	15 A	WALK-IN-CLR.EVAPORATOR - NOTE #2	22
23	WALK-IN-FRZ. EVAPORATOR - NOTE #2	15 A	12	2					0.60	0.63	2	12	15 A	WALK-IN-COOLER COND. UNIT (ROOF)	24
25					0.60	0.63									26
27	WALK-IN-FRZ. COND. UNIT (ROOF)	25 A	10	2			1.57	0.72			1	12	20 A	RECPT. (574C, 574D, CORR., STAIRS)	28
29									1.57	1.00	1	12	20 A	RECPT. EWC (DINING 574)	30
31	RECPT. (DINING 574)	20 A	10	1	1.08	0.90					1	10	20 A	RECPT. (DINING 574)	32
33	RECPT. (DINING 574)	20 A	10	1			0.90	1.04			1	10	20 A	RECPT. (DINING 574)	34
35	RECPT. (ROOF)	20 A	10	1					1.26	0.30	1	12	20 A	RECPT. PROJECTOR (DINING 574)	36
37	PROJECTOR SCREEN (DINING 574)	15 A	12	1	0.25	2.50					2	10	30 A	HOT FOOD CTR - NOTE #1, W/ NEUTRAL	38
39	RECPT. AV EQUIP. (574, 574D)	20 A	12	1			0.54	2.50							40
41	SPARE	20 A		1					0.00	2.50	2	10	30 A	HOT FOOD CTR - NOTE #1, W/ NEUTRAL	42
43	SPARE	20 A		1	0.00	2.50									44
45	SPARE	20 A		1			0.00	0.00			1		20 A	SPARE	46
47	SPARE	20 A		1					0.00	0.00	1		20 A	SPARE	48
49	SPARE	20 A		1	0.00	0.00					1		20 A	SPARE	50
51	SPARE	20 A		1			0.00	0.00			1		20 A	SPARE	52
53	SPARE	20 A		1					0.00	0.00	1		20 A	SPARE	54
	Total Load:				15423 VA		14378 VA		12476 VA						
	Total Amps:				131 A		122 A		104 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	1941 VA	100.00%	1941 VA		
Motor	250 VA	125.00%	313 VA	**Total Conn. Load:**	42276 VA
Other	34 VA	100.00%	34 VA	**Total Conn.:**	119 A
Power	7091 VA	100.00%	7091 VA		
Receptacle	32960 VA	65.17%	21480 VA		

Notes:
1. PROVIDE GFCI BREAKER.
2. PROVIDE BREAKER LOCK.
3. PROVIDE GFEP BREAKER.

Branch Panel: L4

Location: ELEC 581A | **Volts:** 120/208 Wye | **A.I.C. Rating:** 10K AIC FULLY RATED
Supply From: | **Phases:** 3 | **Mains Type:** 400 A MCB, FTL, 200%N
Mounting: Surface | **Wires:** 4 | **Panel Rating:** 400 A
Enclosure: Type 1

Notes:

CKT	Circuit Description	Trip	Wire	Poles	A		B		C		Poles	Wire	Trip	Circuit Description	CKT
1	RECPT. (CLASSROOM 17 567)	20 A	10	1	1.08	1.08					1	10	20 A	RECPT. (CLASSROOM 17 567)	2
3	RECPT. (CLASSROOM 17 567)	20 A	10	1			1.20	1.20			1	10	20 A	RECPT. (CLASSROOM 16 565)	4
5	RECPT. (CLASSROOM 16 565)	20 A	12	1					1.08	1.08	1	12	20 A	RECPT. (CLASSROOM 16 565)	6
7	RECPT. (CLASSROOM 15 563)	20 A	12	1	1.08	1.08					1	12	20 A	RECPT. (CLASSROOM 15 563)	8
9	RECPT. (CLASSROOM 15 563)	20 A	12	1			1.20	1.20			1	12	20 A	RECPT. (CLASSROOM 14 561)	10
11	RECPT. (CLASSROOM 14 561)	20 A	12	1					1.08	1.08	1	12	20 A	RECPT. (CLASSROOM 14 561)	12
13	RECPT. (CLASSROOM 13 559)	20 A	12	1	1.08	1.08					1	12	20 A	RECPT. (CLASSROOM 13 559)	14
15	RECPT. (CLASSROOM 13 559)	20 A	10	1			1.20	1.18			1	12	20 A	RECPT. (SCIENCE CLASSROOM 583)	16
17	RECPT. (SCIENCE CLASSROOM 583)	20 A	12	1					1.18	0.90	1	12	20 A	RECPT. (SCIENCE CLASSROOM 583)	18
19	RECPT. (SCIENCE CLASSROOM 583)	20 A	12	1	1.02	0.60					1	12	20 A	RECPT. (SCIENCE CLASSROOM 583)	20
21	RECPT. (PREP 577)	20 A	12	1			0.68	0.68			1	12	20 A	RECPT. (PREP 577)	22
23	RECPT., REFRIG. (PREP 577)	20 A	12	1					0.36	1.18	1	12	20 A	RECPT. (SCIENCE CLASSROOM 575)	24
25	RECPT. (SCIENCE CLASSROOM 575)	20 A	12	1	1.18	0.90					1	12	20 A	RECPT. (SCIENCE CLASSROOM 575)	26
27	RECPT. (SCIENCE CLASSROOM 575)	20 A	12	1			1.02	0.60			1	12	20 A	RECPT. (SCIENCE CLASSROOM 575)	28
29	RECPT. (SCIENCE CLASSROOM 575)	20 A	12	1					0.60	0.60	1	12	20 A	RECPT. (SCIENCE CLASSROOM 583)	30
31	RECPT. (ADMIN OFFICE 569)	20 A	12	1	0.90	1.08					1	12	20 A	RECPT. (ADMIN OFFICE 571)	32
33	RECPT. (CORR., 579)	20 A	12	1			0.90	1.00			1	12	20 A	RECPT. EWC (CORR.)	34
35	RECPT. (CORR., 581A)	20 A	12	1					0.72	0.90	1	12	20 A	RECPT. (ADMIN OFFICE 573)	36
37	VRF INDOOR UNITS AND HRU'S	15 A	12	2	1.24	1.00					1	12	20 A	RECPT. (DATA 581B)	38
39							1.24	1.00			1	12	20 A	RECPT. (DATA 581B)	40
41	DISHWASHER (PREP 577) - NOTE #1	20 A	12	1					1.20	1.00	1	12	20 A	RECPT. (DATA 581B)	42
43	BIPOLAR IONIZERS - DOAS UNITS	15 A	12	1	0.10	0.18					1	12	15 A	CARD READERS - NOTE #1	44
45	RECPT. (DATA 581B)	20 A	12	1			0.60	0.00			1		20 A	SPARE	46
47	SPARE	20 A		1					0.00	0.00	1		20 A	SPARE	48
49	SPARE	20 A		1	0.00	0.00					1		20 A	SPARE	50
51	SPARE	20 A		1			0.00	0.00			1		20 A	SPARE	52
53	SPARE	20 A		1					0.00	0.00	1		20 A	SPARE	54
	(L4 + L4A) **Total Load:**				27921 VA		27505 VA		25845 VA						
	(L4 + L4A) **Total Amps:**				235 A		231 A		215 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	4896 VA	100.00%	4896 VA		
Motor	530 VA	125.00%	663 VA	**Total Conn. Load:**	81270 VA (L4 + L4A)
Other	34 VA	100.00%	34 VA	**Total Conn.:**	227 A (L4 + L4A)
Power	14260 VA	100.00%	14260 VA		
Receptacle	61550 VA	58.12%	35775 VA		

Notes:
1. PROVIDE BREAKER LOCK.

Branch Panel: L4A

Location: ELEC 581A | **Volts:** 120/208 Wye | **A.I.C. Rating:** 10K AIC FULLY RATED
Supply From: L4 | **Phases:** 3 | **Mains Type:** 400 A MLO, 200%N
Mounting: Surface | **Wires:** 4 | **Panel Rating:** 400 A
Enclosure: Type 1

Notes:

CKT	Circuit Description	Trip	Wire	Poles	A		B		C		Poles	Wire	Trip	Circuit Description	CKT
1	RECPT. (CORR., 552, 554, 556, 568)	20 A	10	1	1.44	1.00					1	12	20 A	RECPT. EWC (CORRIDOR)	2
3	RECPT. (CORR., 598A)	20 A	8	1			1.44	1.18			1	12	20 A	RECPT. (SCIENCE CLASSROOM 558)	4
5	RECPT. (SCIENCE CLASSROOM 558)	20 A	12	1					1.18	0.90	1	12	20 A	RECPT. (SCIENCE CLASSROOM 558)	6
7	RECPT. (SCIENCE CLASSROOM 558)	20 A	12	1	1.02	0.60					1	12	20 A	RECPT. (SCIENCE CLASSROOM 558)	8
9	RECPT. (SCIENCE CLASSROOM 558)	20 A	12	1			0.60	1.20			1	12	20 A	RECPT. (CLASSROOM 19 560)	10
11	RECPT. (CLASSROOM 19 560)	20 A	12	1					1.08	1.08	1	10	20 A	RECPT. (CLASSROOM 19 560)	12
13	RECPT. (CLASSROOM 18 572)	20 A	8	1	1.08	1.08					1	10	20 A	RECPT. (CLASSROOM 18 572)	14
15	RECPT. (CLASSROOM 18 572)	20 A	8	1			1.20	1.18			1	10	20 A	RECPT. (SCIENCE CLASSROOM 570)	16
17	RECPT. (SCIENCE CLASSROOM 570)	20 A	10	1					1.18	0.60	1	12	20 A	RECPT. (SCIENCE CLASSROOM 570)	18
19	RECPT. (SCIENCE CLASSROOM 570)	20 A	12	1	0.60	1.02					1	10	20 A	RECPT. (SCIENCE CLASSROOM 570)	20
21	RECPT. (SCIENCE CLASSROOM 570)	20 A	10	1			0.90	0.50			1	12	20 A	RECPT. (PREP 566)	22
23	RECPT. (PREP 566)	20 A	10	1					1.25	1.50	1	8	20 A	RECPT., REFRIG. (566)	24
25	RECPT. (SCIENCE CLASSROOM 564)	20 A	10	1	0.90	1.02					1	10	20 A	RECPT. (SCIENCE CLASSROOM 564)	26
27	RECPT. (SCIENCE CLASSROOM 564)	20 A	12	1			0.60	0.60			1	12	20 A	RECPT. (SCIENCE CLASSROOM 564)	28
29	RECPT. (SCIENCE CLASSROOM 564)	20 A	8	1					1.18	1.18	1	8	20 A	RECPT. (SCIENCE CLASSROOM 564)	30
31	RECPT. (CLASSROOM 20 562)	20 A	8	1	1.20	1.08					1	8	20 A	RECPT. (CLASSROOM 20 562)	32
33	RECPT. (CLASSROOM 20 562)	20 A	8	1			1.08	1.22			2	10	15 A	VRF INDOOR UNITS AND HRU'S	34
35	HWRP#3 (1/6 HP) (CUST 554)	15 A	12	1					0.53	1.22					36
37	DISHWASHER (PREP 566) - NOTE #1	20 A	10	1	1.20	0.00					1		20 A	SPARE	38
39	RECPT. (ROOF)	20 A	12	1			0.90	0.00			1		20 A	SPARE	40
41	SPARE	20 A		1					0.00	0.00	1		20 A	SPARE	42
43	SPARE	20 A		1	0.00	0.00					1		20 A	SPARE	44
45	SPARE	20 A		1			0.00	0.00			1		20 A	SPARE	46
47	SPARE	20 A		1					0.00	0.00	1		20 A	SPARE	48
	Total Load:				13240 VA		12605 VA		12885 VA						
	Total Amps:				111 A		105 A		108 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	2415 VA	100.00%	2415 VA		
Motor	530 VA	125.00%	663 VA	**Total Conn. Load:**	38729 VA
Other	34 VA	100.00%	34 VA	**Total Conn.:**	108 A
Power	6960 VA	100.00%	6960 VA		
Receptacle	28790 VA	67.37%	19395 VA		

Notes:
1. PROVIDE BREAKER LOCK.

VERIFY MAXIMUM AVAILABLE FAULT CURRENT PRIOR TO SUBMISSION OF SHOP DRAWINGS AND SELECT KAIC RATINGS ACCORDINGLY.

1/32" = 1'-0" | 1/16" = 1'-0" | 3/32 = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0" | 12" = 1'-0"

MARK | DATE | BY | DESCRIPTION
REVISIONS

SIMMONS, ROCKECHARLIE & PRINCE INC.
JOB NO. 23050

DATE 4/8/24
PROJECT 23143-00
DESIGNED RKCM
DRAWN RKCM
CHECKED RKCM

RRMM ARCHITECTS, PC
115 South 15th Street, Suite 502
Richmond, Virginia 23219
(804)277-8987

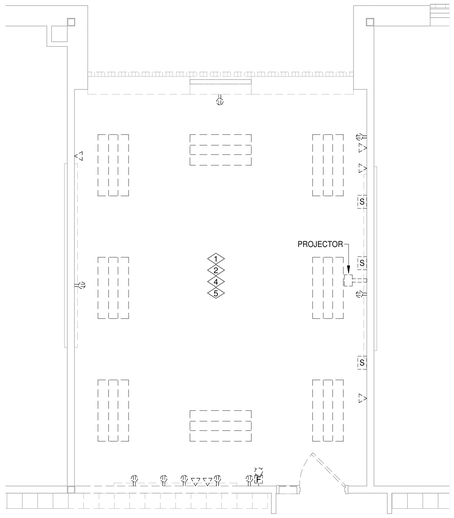
T. A. ROCKECHARLIE
Lic. No. 25725
8 APRIL 2024
PROFESSIONAL ENGINEER

PROJECT
LOUISA COUNTY PUBLIC SCHOOLS
LOUISA COUNTY MIDDLE SCHOOL ADDITION
1009 DAVIS HIGHWAY
MINERAL, VIRGINIA

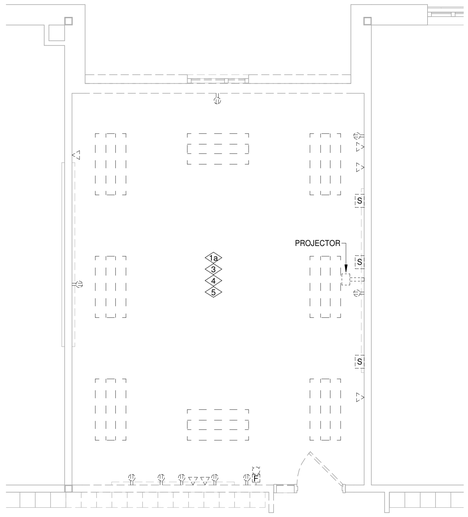
DRAWING
LOW VOLTAGE PANEL SCHEDULES

SHEET
E-104

C:\Users\rmadala.SRP\Documents\23050 MEP CENTRAL V23_rmadala@srpeng.com.rvt
4/4/2024 4:26:11 PM



EXISTING CLASSROOM 619 - ELECTRICAL DEMOLITION
1/4" = 1'-0"



EXISTING CLASSROOM 719 - ELECTRICAL DEMOLITION
1/4" = 1'-0"

ELECTRICAL DEMOLITION NOTES

NOTE: ALL SHOWN DASHED IS TO BE REMOVED.

1. REMOVE ALL EXISTING LIGHT FIXTURES IN THIS SPACE. REMOVE ALL ASSOCIATED SWITCHES. REMOVE ALL ASSOCIATED WIRE AND CONDUIT TO HOME-RUN JUNCTION BOX ABOVE CEILING. MAINTAIN CONTINUITY TO OTHER LIGHT FIXTURES THAT ARE TO REMAIN. EXISTING CIRCUIT SHALL BE REUSED TO CONNECT TO NEW LIGHT FIXTURES.

1a. REMOVE ALL EXISTING LIGHT FIXTURES IN THIS SPACE. REMOVE ALL ASSOCIATED SWITCHES. REMOVE ALL ASSOCIATED WIRE AND CONDUIT BACK TO SOURCE. MAINTAIN CONTINUITY TO OTHER LIGHT FIXTURES THAT ARE TO REMAIN. VERIFY AND MARK BREAKER AS SPARE.

2. REMOVE ALL EXISTING RECEPTACLES IN THIS SPACE. REMOVE ALL ASSOCIATED WIRE AND CONDUIT TO HOME-RUN JUNCTION BOXES ABOVE CEILING. EXISTING CIRCUITS SHALL BE REUSED TO CONNECT TO NEW RECEPTACLES.

3. REMOVE ALL EXISTING RECEPTACLES IN THIS SPACE. REMOVE ALL ASSOCIATED WIRE AND CONDUIT BACK TO SOURCE. TURN OFF AND MARK ASSOCIATED BREAKERS AS SPARE.

4. REMOVE ALL EXISTING LOW VOLTAGE OUTLETS IN THIS SPACE. REMOVE ALL EXISTING LOW VOLTAGE DEVICES SUCH AS SPEAKERS AND WIRELESS ACCESS POINTS IN THIS SPACE. REMOVE EXISTING PROJECTOR. REMOVE ALL ASSOCIATED WIRE AND CONDUIT BACK TO SOURCE. RETURN ALL LOW VOLTAGE DEVICES AND PROJECTOR TO OWNER.

5. REMOVE ALL EXISTING FIRE ALARM DEVICES IN THIS SPACE AND STORE SAFELY FOR REUSE. RETAIN ALL ASSOCIATED WIRE AND CONDUIT FOR EXTENSION TO NEW LOCATION. RETURN ALL UNUSED DEVICES TO OWNER.

GENERAL DEMOLITION NOTES

(APPLIES TO ALL DEMOLITION WORK IN THIS PROJECT)

A. THE CONTRACTOR SHALL VISIT THE SITE AND INSPECT THE ELECTRICAL SYSTEMS TO DETERMINE THE EXTENT OF THE DEMOLITION WORK REQUIRED AND INCLUDE PRICE FOR SAME IN BID.
ELECTRICAL DEMOLITION WORK SHALL COORDINATE WITH ARCHITECTURAL DEMOLITION WORK.
CONTRACTOR SHALL DE-ENERGIZE ALL CIRCUITS ASSOCIATED WITH EQUIPMENT BEING REMOVED BEFORE STARTING DEMOLITION. LOCK OUT AND TAG OUT ALL DE-ENERGIZED CIRCUITS TO PREVENT FROM ACCIDENTAL RE-ENERGIZATION.
ALL FIXTURES, DEVICES AND EQUIPMENT SHOWN DASHED AND ASSOCIATED WIRING SHALL BE REMOVED.

1. REMOVE ALL WIRE BACK TO SOURCE, UNLESS OTHERWISE NOTED. EXISTING CONDUIT MAY BE REUSED, IF CORRECT SIZE PER NEC. REMOVE ALL UNUSED CONDUIT BACK TO SOURCE.
2. CUT CONDUIT FLUSH WITH FLOOR AND SEAL FLUSH WITH FLOOR WHERE CONDUIT IS STUBBED UP ABOVE FLOOR. ABANDON THE REST OF THE CONDUIT RUN IN PLACE. REMOVE ALL WIRE BACK TO SOURCE.
3. REMOVE ALL SURFACE RACEWAY, PLUGMOLD AND WIRE BACK TO SOURCE.
4. PROVIDE BLANK COVER PLATES TO MATCH EXISTING FOR UNUSED BOXES.

B. MAINTAIN ALL CIRCUITS TO ROOMS ADJACENT TO THE REMODELED AREA. REWIRE ALL CIRCUITS THAT PASS THROUGH OR FEED THE REMODELED AREAS, AS WELL AS OTHER AREAS SUCH THAT THE CONTINUITY OF THE CIRCUITS ARE MAINTAINED.

C. ALL ELECTRICAL ITEMS DESIGNATED "ETR" (EXISTING TO REMAIN) SHALL REMAIN DURING DEMOLITION AND SHALL BE PROTECTED FROM DAMAGE.

D. ALL ELECTRICAL ITEMS DESIGNATED "ER"(EXISTING RELOCATED) SHALL BE RELOCATED TO NEW LOCATION SHOWN. MATCH AND EXTEND WIRE TO EXISTING SYSTEM/CIRCUITS. PROVIDE NEW DEVICE IF EXISTING NOT WORKING.

E. DISCONNECT AND REMOVE EXISTING FIXTURES AND DEVICES ON WALLS AND CEILINGS THAT ARE TO BE REMOVED.

F. MAINTAIN ALL PRESENT EMERGENCY LIGHT CIRCUITING. WHERE FIXTURE IS CONNECTED IN NEW LOCATION, EXTEND CONDUIT AND WIRING AS REQUIRED.

G. THE EXISTING CIRCUIT NUMBERS SHOWN ON THESE DRAWINGS WERE TAKEN FROM THE OLD DRAWINGS. THE CIRCUITS SHOWN MAY NOT BE CORRECT. EXCEPT FOR NEW CIRCUITS AS SHOWN, IT IS THE INTENT OF THIS JOB TO USE THE SAME CIRCUITS FOR NEW DEVICES, FIXTURES AND EQUIPMENT AS WERE USED FOR THE EXISTING DEVICES, FIXTURES AND EQUIPMENT REMOVED IN THE SAME GENERAL AREA. MAINTAIN PROPER CIRCUIT LOADING PER THE NEC. VERIFY VOLTAGE, RECIRCUIT AS REQUIRED WHERE CONFLICTS OCCUR.

H. PROVIDE NEW PANEL DIRECTORIES FOR ALL PANELS ASSOCIATED WITH THIS WORK. SHOW ROOM NUMBERS AS ASSIGNED BY OWNER TO ROOMS AND NOT ARCHITECTURAL DRAWING ROOM NUMBERS. TRACE OUT ALL CIRCUITS ASSOCIATED WITH THE PANELS AND MARK THE NEW DIRECTORIES CORRECTLY AND WITH THE NEW ROOM NUMBERS.

I. DISCONNECT ALL MECHANICAL, PLUMBING AND KITCHEN EQUIPMENT THAT IS BEING DEMOLISHED. REMOVE ALL ASSOCIATED WIRE BACK TO SOURCE, U.O.N. EXISTING CONDUIT MAY BE REUSED, IF CORRECT SIZE PER NEC. REMOVE ALL UNUSED CONDUIT BACK TO SOURCE.

J. PAINT EXISTING SURFACES THAT BECOME EXPOSED AS THE RESULT OF DEMOLITION WHERE NEW WORK NO LONGER CONCEALS.

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JOB NO. 23050

DATE	4/8/24
PROJECT	23143-00
DESIGNED	RKCM
DRAWN	RKCM
CHECKED	RKCM

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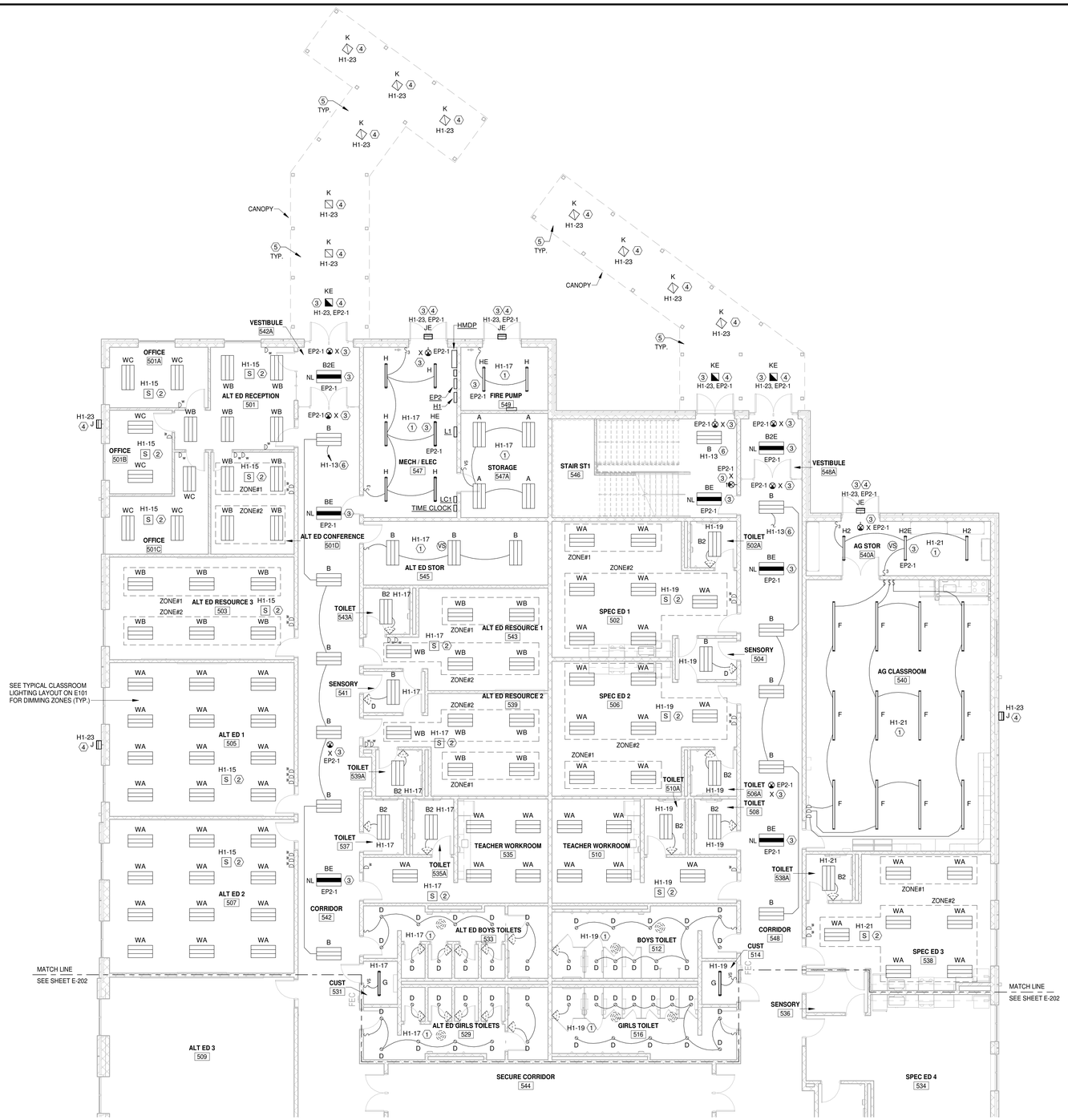
PROJECT
LOUISA COUNTY PUBLIC SCHOOLS
LOUISA COUNTY MIDDLE SCHOOL ADDITION
1009 DAVIS HIGHWAY
MINERAL, VIRGINIA

DRAWING
ELECTRICAL DEMOLITION PLAN

SHEET
ED-101

1/32" = 1'-0" | 1/16" = 1'-0" | 3/32" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0" | 12" = 1'-0"

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FIRST FLOOR LIGHTING PLAN - AREA A

1/8" = 1'-0"

FIRST FLOOR LIGHTING PLAN NOTES - AREA A

1. U.O.N., CONNECT ALL LIGHT FIXTURES IN THIS SPACE TO CIRCUIT SHOWN.
2. CONNECT ALL LIGHT FIXTURES IN THIS SPACE TO CIRCUIT SHOWN VIA A TOGGLE DISCONNECT SWITCH. LOCATE ABOVE CEILING. PROVIDE CIRCUIT NUMBER LABEL. PROVIDE A RED IDENTIFICATION LABEL ON THE CEILING GRID BELOW TO READ 'LIGHTING DISCONNECT SWITCH'.
3. CONNECT EMERGENCY LIGHT FIXTURE TO NORMAL CIRCUIT AND EMERGENCY CIRCUIT SHOWN VIA AN EMERGENCY RELAY PACK EQUAL TO 'LEGRAND ELCU200'. WIRE SO THAT THE FIXTURE COMES TO FULL BRIGHTNESS WHEN NORMAL POWER IS LOST. CONNECT EXIT SIGNS AND 'NL' EMERGENCY LIGHT FIXTURES DIRECTLY TO EMERGENCY CIRCUIT SHOWN.
4. CONNECT EXTERIOR LIGHT FIXTURES TO CIRCUIT SHOWN. FIXTURES SHALL BE CONTROLLED BY TIME CLOCK AND PHOTOCELL. PROVIDE CONTACTOR AS NEEDED. LOCATE TIME CLOCK IN 'MECH/ELEC 547'. FOR TYPE 'JE' FIXTURES, COORDINATE CONDUIT PATHWAY WITH LINTEL.
5. NO EXPOSED CONDUIT ON THE UNDERSIDE OF THE CANOPY. RUN CONDUIT ON TOP OF THE CANOPY AND PENETRATE THROUGH THE CANOPY AT FIXTURE LOCATIONS.
6. CONNECT ALL NON 'NL' CORRIDOR AND STAIR LIGHT FIXTURES TO CIRCUIT SHOWN VIA A 6-POLE LIGHTING CONTACTOR 'LC1'. LOCATE IN 'MECH/ELEC 547'. LIGHTING CONTACTOR SHALL BE CONTROLLED BY A NEW SWITCH INSTALLED IN EXISTING CAFETERIA AT EXISTING CORRIDOR LIGHT CONTROLS - SEE SITE PLAN ON E402 FOR APPROXIMATE LOCATION.

MARK	DATE	REVISIONS	BY
		DESCRIPTION	

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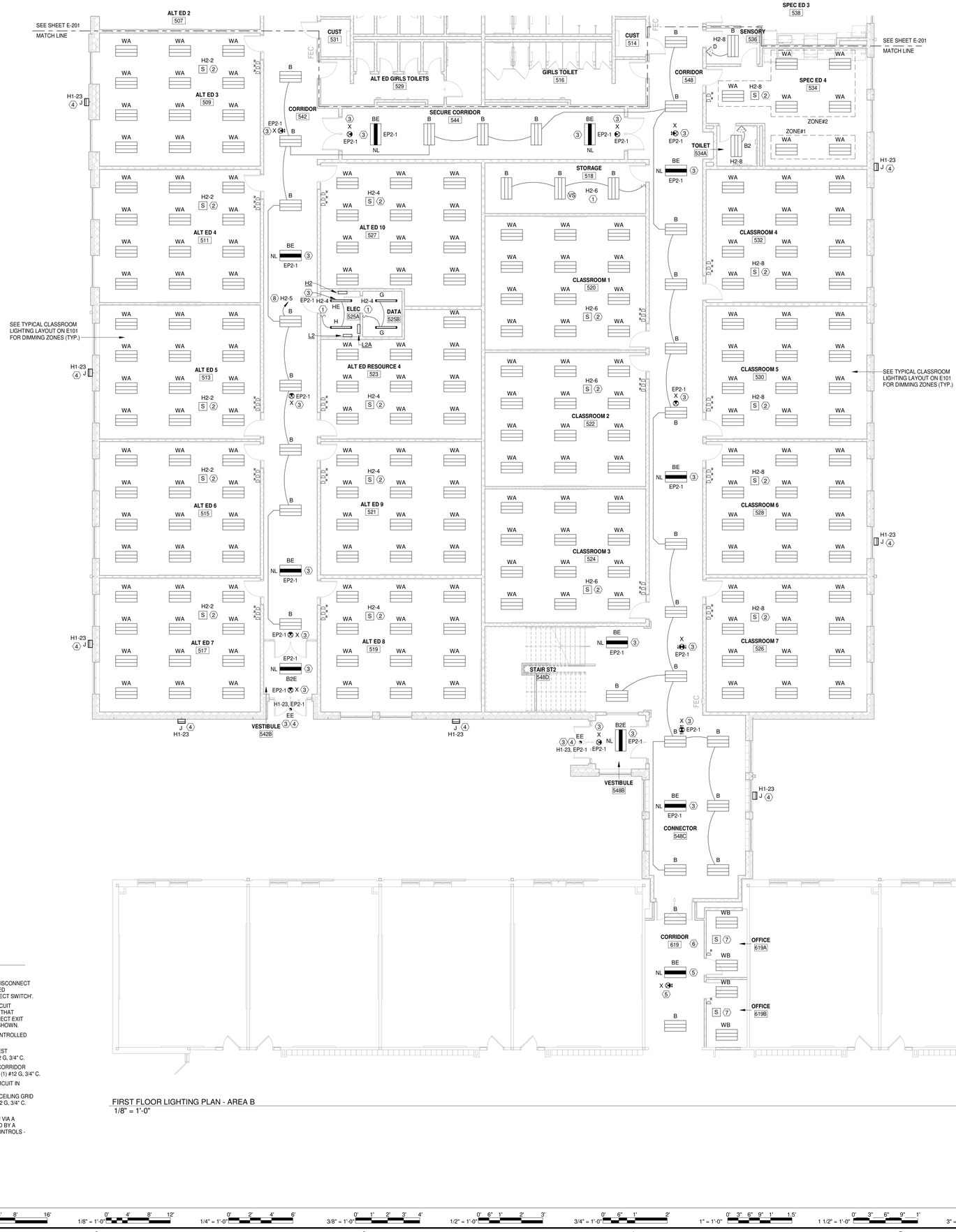
PROJECT
LOUISA COUNTY PUBLIC SCHOOLS
LOUISA COUNTY MIDDLE SCHOOL ADDITION
1009 DAVIS HIGHWAY
MINERAL, VIRGINIA

DRAWING
FIRST FLOOR LIGHTING PLAN - AREA A

KEY PLAN 1" = 200'

SHEET
E-201

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FIRST FLOOR LIGHTING PLAN NOTES - AREA B

1. U.O.N., CONNECT ALL LIGHT FIXTURES IN THIS SPACE TO CIRCUIT SHOWN.
2. CONNECT ALL LIGHT FIXTURES IN THIS SPACE TO CIRCUIT SHOWN VIA A TOGGLE DISCONNECT SWITCH. LOCATE ABOVE CEILING. PROVIDE CIRCUIT NUMBER LABEL. PROVIDE A RED IDENTIFICATION LABEL ON THE CEILING GRID BELOW TO READ 'LIGHTING DISCONNECT SWITCH'.
3. CONNECT EMERGENCY LIGHT FIXTURE TO NORMAL CIRCUIT AND EMERGENCY CIRCUIT SHOWN VIA AN EMERGENCY RELAY PACK EQUAL TO 'LEGRAND ELCU200'. WIRE SO THAT THE FIXTURE COMES TO FULL BRIGHTNESS WHEN NORMAL POWER IS LOST. CONNECT EXIT SIGNS AND 'NL' EMERGENCY LIGHT FIXTURES DIRECTLY TO EMERGENCY CIRCUIT SHOWN.
4. CONNECT EXTERIOR LIGHT FIXTURES TO CIRCUIT SHOWN. FIXTURES SHALL BE CONTROLLED BY TIME CLOCK AND PHOTOCELL. SEE NOTE #4 ON E-201.
5. CONNECT 'NL' EMERGENCY LIGHT FIXTURE AND EXIT SIGN UNSWITCHED TO NEAREST EXISTING EMERGENCY LIGHTING CIRCUIT IN EXISTING BUILDING. USE (2) #12, (1) #12 G, 3/4" C.
6. U.O.N., CONNECT NEW LIGHT FIXTURES IN 'CORRIDOR 619' TO NEAREST EXISTING CORRIDOR LIGHTING CIRCUIT AND CONTROL IN EXISTING BUILDING. VERIFY LOAD. USE (2) #12, (1) #12 G, 3/4" C.
7. CONNECT NEW LIGHT FIXTURES TO EXISTING RETAINED CLASSROOM LIGHTING CIRCUIT IN EXISTING BUILDING, VIA A TOGGLE DISCONNECT SWITCH. LOCATE ABOVE CEILING. PROVIDE CIRCUIT NUMBER LABEL. PROVIDE A RED IDENTIFICATION LABEL ON THE CEILING GRID BELOW TO READ 'LIGHTING DISCONNECT SWITCH'. VERIFY LOAD. USE (2) #12, (1) #12 G, 3/4" C. SEE NOTE #1 ON ED101.
8. CONNECT ALL NON 'NL' CORRIDOR AND STAIR LIGHT FIXTURES TO CIRCUIT SHOWN VIA A 6-POLE LIGHTING CONTACTOR 'LC1'. LIGHTING CONTACTOR SHALL BE CONTROLLED BY A NEW SWITCH INSTALLED IN EXISTING CAFETERIA AT EXISTING CORRIDOR LIGHT CONTROLS - SEE SITE PLAN ON E402 FOR APPROXIMATE LOCATION.

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

MARK	DATE	REVISIONS	BY
		DESCRIPTION	

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PROJECT	23143-00
DESIGNED	RKCM
DRAWN	RKCM
CHECKED	RKCM

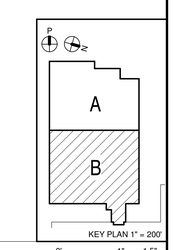
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PROJECT
LOUISA COUNTY PUBLIC SCHOOLS
LOUISA COUNTY MIDDLE SCHOOL ADDITION
1009 DAVIS HIGHWAY
MINERAL, VIRGINIA

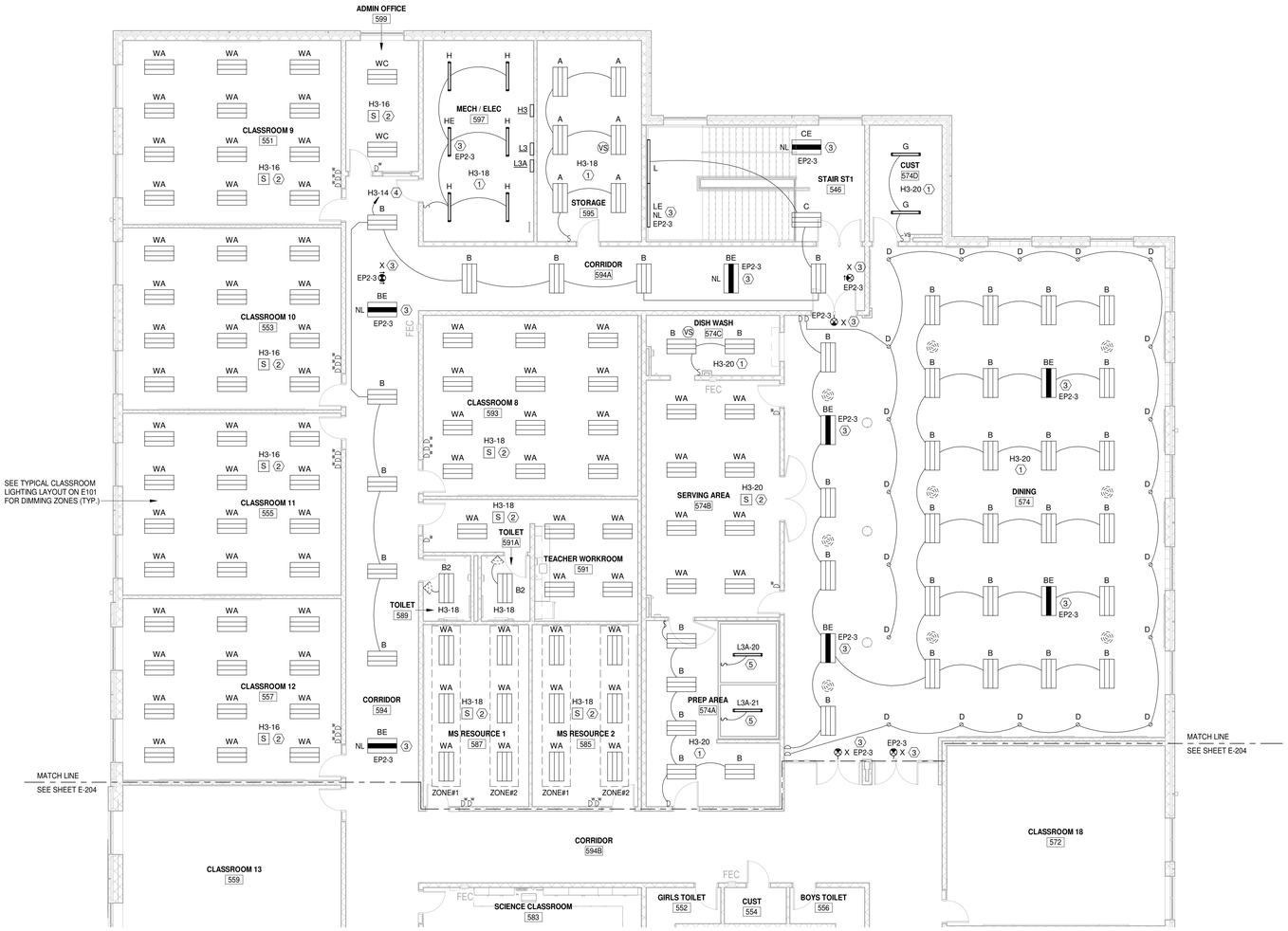
DRAWING
FIRST FLOOR LIGHTING PLAN - AREA B

SHEET
E-202



1/32" = 1'-0" | 1/16" = 1'-0" | 3/32" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0" | 12" = 1'-0"

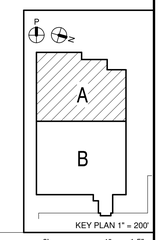
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SECOND FLOOR LIGHTING PLAN - AREA A
1/8" = 1'-0"

SECOND FLOOR LIGHTING PLAN NOTES - AREA A

1. U.O.N., CONNECT ALL LIGHT FIXTURES IN THIS SPACE TO CIRCUIT SHOWN.
2. CONNECT ALL LIGHT FIXTURES IN THIS SPACE TO CIRCUIT SHOWN VIA A TOGGLE DISCONNECT SWITCH. LOCATE ABOVE CEILING. PROVIDE CIRCUIT NUMBER LABEL. PROVIDE A RED IDENTIFICATION LABEL ON THE CEILING GRID BELOW TO READ 'LIGHTING DISCONNECT SWITCH'.
3. CONNECT EMERGENCY LIGHT FIXTURE TO NORMAL CIRCUIT AND EMERGENCY CIRCUIT SHOWN VIA AN EMERGENCY RELAY PACK EQUAL TO 'LEGRAND ELCU200'. WIRE SO THAT THE FIXTURE COMES TO FULL BRIGHTNESS WHEN NORMAL POWER IS LOST. CONNECT EXIT SIGNS AND 'NL' EMERGENCY LIGHT FIXTURES DIRECTLY TO EMERGENCY CIRCUIT SHOWN.
4. CONNECT ALL NON 'NL' CORRIDOR AND STAIR LIGHT FIXTURES TO CIRCUIT SHOWN VIA A 6 POLE LIGHTING CONTACTOR 'LC1'. LIGHTING CONTACTOR SHALL BE CONTROLLED BY A NEW LOW VOLTAGE SWITCH INSTALLED IN EXISTING CAFETERIA AT EXISTING CORRIDOR LIGHT CONTROLS - SEE SITE PLAN ON E402 FOR APPROXIMATE LOCATION.
5. INSTALL CEILING MOUNTED LIGHT FIXTURE FURNISHED BY WALK-IN PROVIDER AND CONNECT TO CIRCUIT SHOWN. WIRE TO WALL SWITCH PROVIDED BY WALK-IN PROVIDER.



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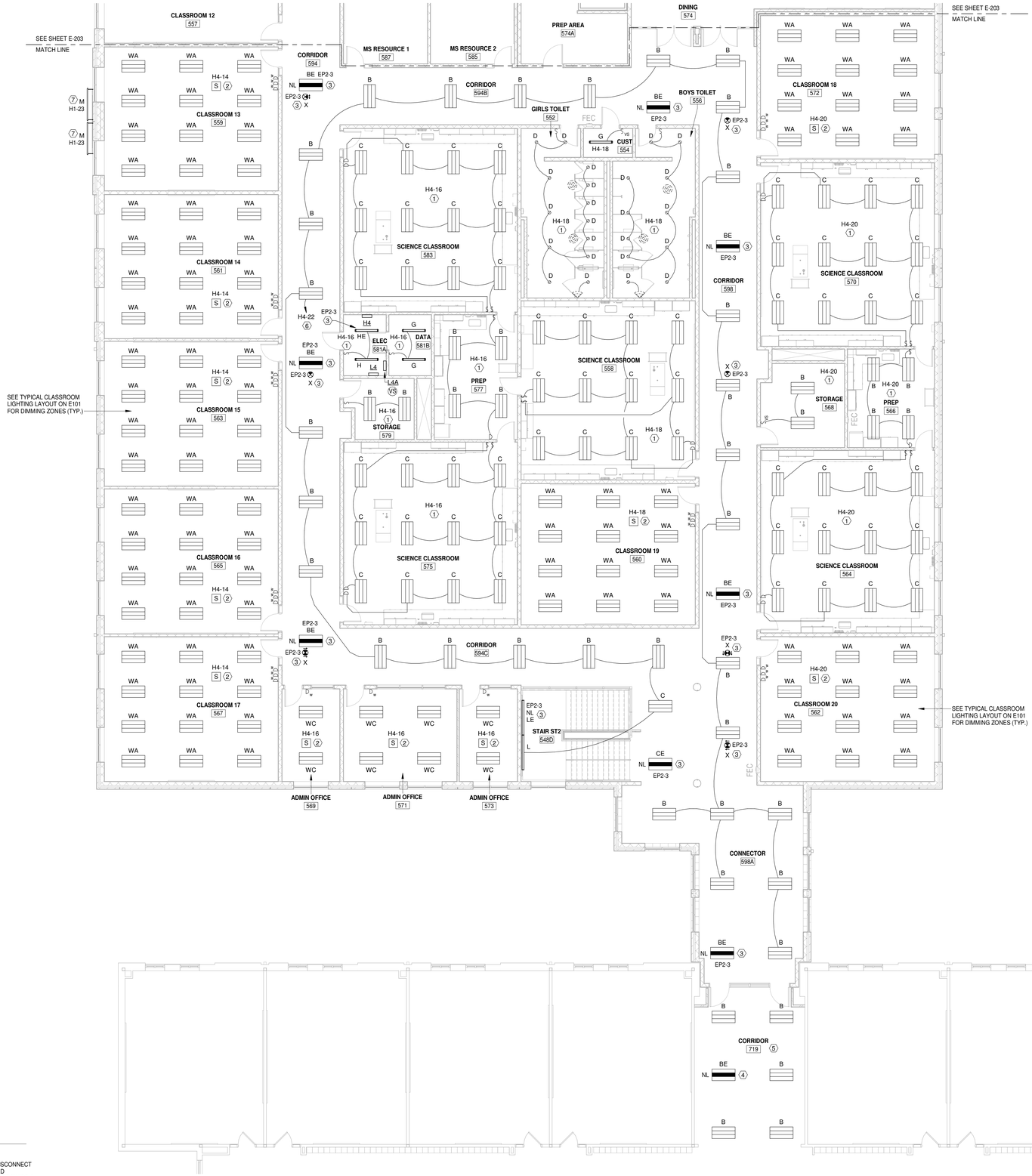
PROJECT
LOUISA COUNTY PUBLIC SCHOOLS
LOUISA COUNTY MIDDLE SCHOOL ADDITION
1009 DAVIS HIGHWAY
MINERAL, VIRGINIA

DRAWING
SECOND FLOOR LIGHTING PLAN - AREA A

SHEET
E-203

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1/32" = 1'-0" | 1/16" = 1'-0" | 3/32" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0" | 12" = 1'-0"



SECOND FLOOR LIGHTING PLAN - AREA B
1/8" = 1'-0"

SECOND FLOOR LIGHTING PLAN NOTES - AREA B

1. U.O.N., CONNECT ALL LIGHT FIXTURES IN THIS SPACE TO CIRCUIT SHOWN.
2. CONNECT ALL LIGHT FIXTURES IN THIS SPACE TO CIRCUIT SHOWN VIA A TOGGLE DISCONNECT SWITCH. LOCATE ABOVE CEILING. PROVIDE CIRCUIT NUMBER LABEL. PROVIDE A RED IDENTIFICATION LABEL ON THE CEILING GRID BELOW TO READ 'LIGHTING DISCONNECT SWITCH'.
3. CONNECT EMERGENCY LIGHT FIXTURE TO NORMAL CIRCUIT AND EMERGENCY CIRCUIT SHOWN VIA AN EMERGENCY RELAY PACK EQUAL TO 'LEGRAND ELCU200'. WIRE SO THAT THE FIXTURE COMES TO FULL BRIGHTNESS WHEN NORMAL POWER IS LOST. CONNECT EXIT SIGNS AND 'NL' EMERGENCY LIGHT FIXTURES DIRECTLY TO EMERGENCY CIRCUIT SHOWN.
4. CONNECT 'NL' EMERGENCY LIGHT FIXTURE UNSWITCHED TO NEAREST EXISTING EMERGENCY LIGHTING CIRCUIT IN EXISTING BUILDING. USE (2) #12, (1) #12 G, 3/4" C.
5. U.O.N., CONNECT NEW LIGHT FIXTURES IN 'CORRIDOR 719' TO NEAREST EXISTING CORRIDOR LIGHTING CIRCUIT AND CONTROL IN EXISTING BUILDING. VERIFY LOAD. USE (2) #12, (1) #12 G, 3/4" C.
6. CONNECT ALL NON 'NL' CORRIDOR AND STAIR LIGHT FIXTURES TO CIRCUIT SHOWN VIA A 6-POLE LIGHTING CONTACTOR 'LC1'. LIGHTING CONTACTOR SHALL BE CONTROLLED BY A NEW LOW VOLTAGE SWITCH INSTALLED IN EXISTING CAFETERIA AT EXISTING CORRIDOR LIGHT CONTROLS - SEE SITE PLAN ON E402 FOR APPROXIMATE LOCATION.
7. CONNECT EXTERIOR LIGHT FIXTURES TO CIRCUIT SHOWN. FIXTURES SHALL BE CONTROLLED BY TIME CLOCK AND PHOTOCELL. SEE NOTE #4 ON E-201.

MARK	DATE	REVISIONS
		DESCRIPTION
		BY

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DATE	4/8/24
PROJECT	23143-00
DESIGNED	RKCM
DRAWN	RKCM
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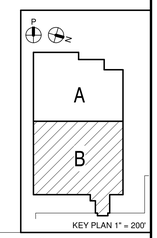
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COMMONWEALTH OF VIRGINIA
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8 APRIL 2024
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PROJECT
LOUISA COUNTY PUBLIC SCHOOLS
LOUISA COUNTY MIDDLE SCHOOL ADDITION
1009 DAVIS HIGHWAY
MINERAL, VIRGINIA

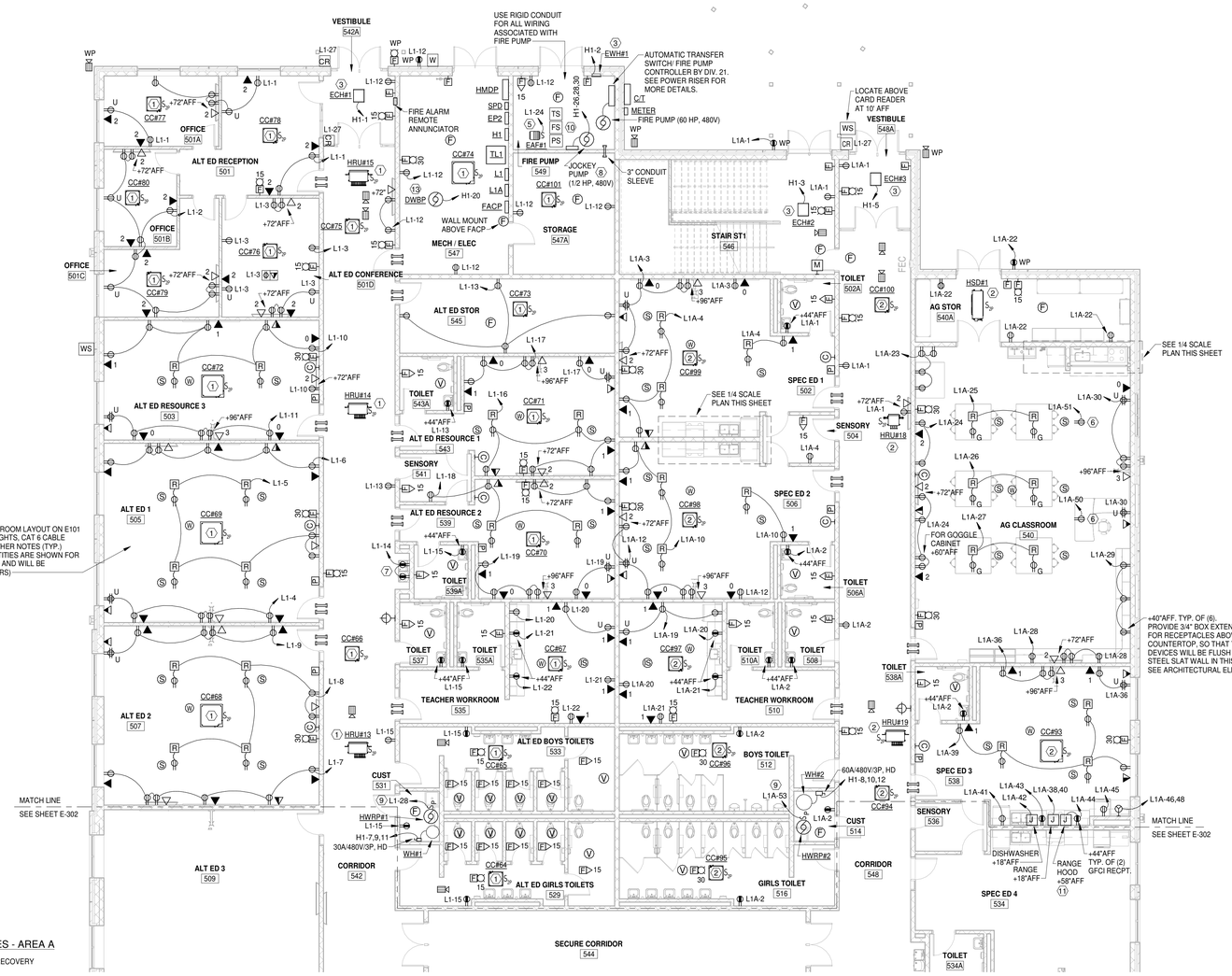
DRAWING
SECOND FLOOR LIGHTING PLAN - AREA B

SHEET
E-204

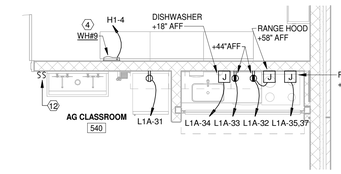


1/32" = 1'-0" | 1/16" = 1'-0" | 3/32" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0" | 12" = 1'-0"

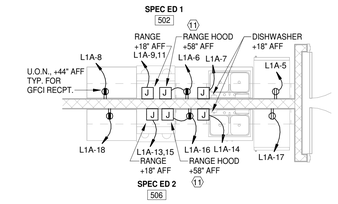
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FIRST FLOOR POWER, AUXILIARY AND FIRE ALARM PLAN - AREA A
1/8" = 1'-0"



FIRST FLOOR POWER, AUXILIARY AND FIRE ALARM PLAN - AREA A - AG CR 540
1/4" = 1'-0"



FIRST FLOOR POWER, AUXILIARY AND FIRE ALARM PLAN - AREA A - SPEC ED 502 & 506
1/4" = 1'-0"

FIRST FLOOR POWER, AUXILIARY AND FIRE ALARM PLAN NOTES - AREA A

1. PROVIDE 2-POLE TOGGLE DISCONNECT SWITCHES FOR VRF INDOOR UNITS AND HEAT RECOVERY UNITS AND CONNECT TO CIRCUIT 'L1-23'.
2. PROVIDE 2-POLE TOGGLE DISCONNECT SWITCHES FOR VRF INDOOR UNITS AND HEAT RECOVERY UNITS AND CONNECT TO CIRCUIT 'L1A-47'.
3. ELECTRIC HEATER COMES WITH DISCONNECT SWITCH. CONNECT TO CIRCUIT SHOWN.
4. WATER HEATER COMES WITH DISCONNECT SWITCH. CONNECT TO CIRCUIT SHOWN.
5. PROVIDE A TOGGLE DISCONNECT SWITCH FOR THE EXHAUST FAN AND CONNECT TO CIRCUIT SHOWN.
6. STRUCTURE MOUNT RECEPTACLE FOR DUST COLLECTOR. COORDINATE EXACT LOCATION ON SITE WITH EQUIPMENT INSTALLER.
7. RECEPTACLES FOR ELECTRIC WATER COOLER SHALL BE READILY ACCESSIBLE.
8. JOCKEY PUMP AND JOCKEY PUMP CONTROLLER BY DIV. 21. CONNECT TO CIRCUIT SHOWN.
9. PROVIDE A PILOT LAMP TOGGLE DISCONNECT SWITCH FOR THE RECIRCULATING PUMP AND CONNECT TO CIRCUIT SHOWN. PUMP SHALL BE CONTROLLED BY BAS. PROVIDE CONTACTOR AS NEEDED.
10. VERIFY QUANTITY OF FLOW SWITCHES, TAMPER SWITCHES AND PRESSURE SWITCHES REQUIRED AND PROVIDE ACCORDINGLY.
11. PROVIDE TWO TOGGLE SWITCHES ABOVE COUNTERTOP FOR CONTROL OF RANGE HOOD FAN AND LIGHT FOR ADA ACCESS. FOLLOW MANUFACTURER'S ADA WIRING INSTRUCTIONS. PROVIDE LABELS 'RANGE HOOD FAN', 'RANGE HOOD LIGHT'.
12. PROVIDE TWO TOGGLE SWITCHES FOR CONTROL OF RANGE HOOD FAN AND LIGHT FOR ADA ACCESS. MOUNT AT +36" AFF. FOLLOW MANUFACTURER'S ADA WIRING INSTRUCTIONS. PROVIDE LABELS 'RANGE HOOD FAN', 'RANGE HOOD LIGHT'.
13. BOOSTER PUMP COMES WITH DISCONNECT SWITCH. CONNECT TO CIRCUIT SHOWN.

MARK	DATE	REVISIONS DESCRIPTION	BY

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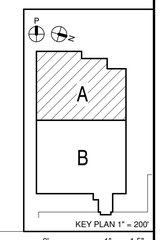
DATE	4/8/24
PROJECT	23143-00
DESIGNED	RKCM
DRAWN	RKCM
CHECKED	RKCM

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8 APRIL 2024
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PROJECT
LOUISA COUNTY PUBLIC SCHOOLS
LOUISA COUNTY MIDDLE SCHOOL ADDITION
1009 DAVIS HIGHWAY
MINERAL, VIRGINIA

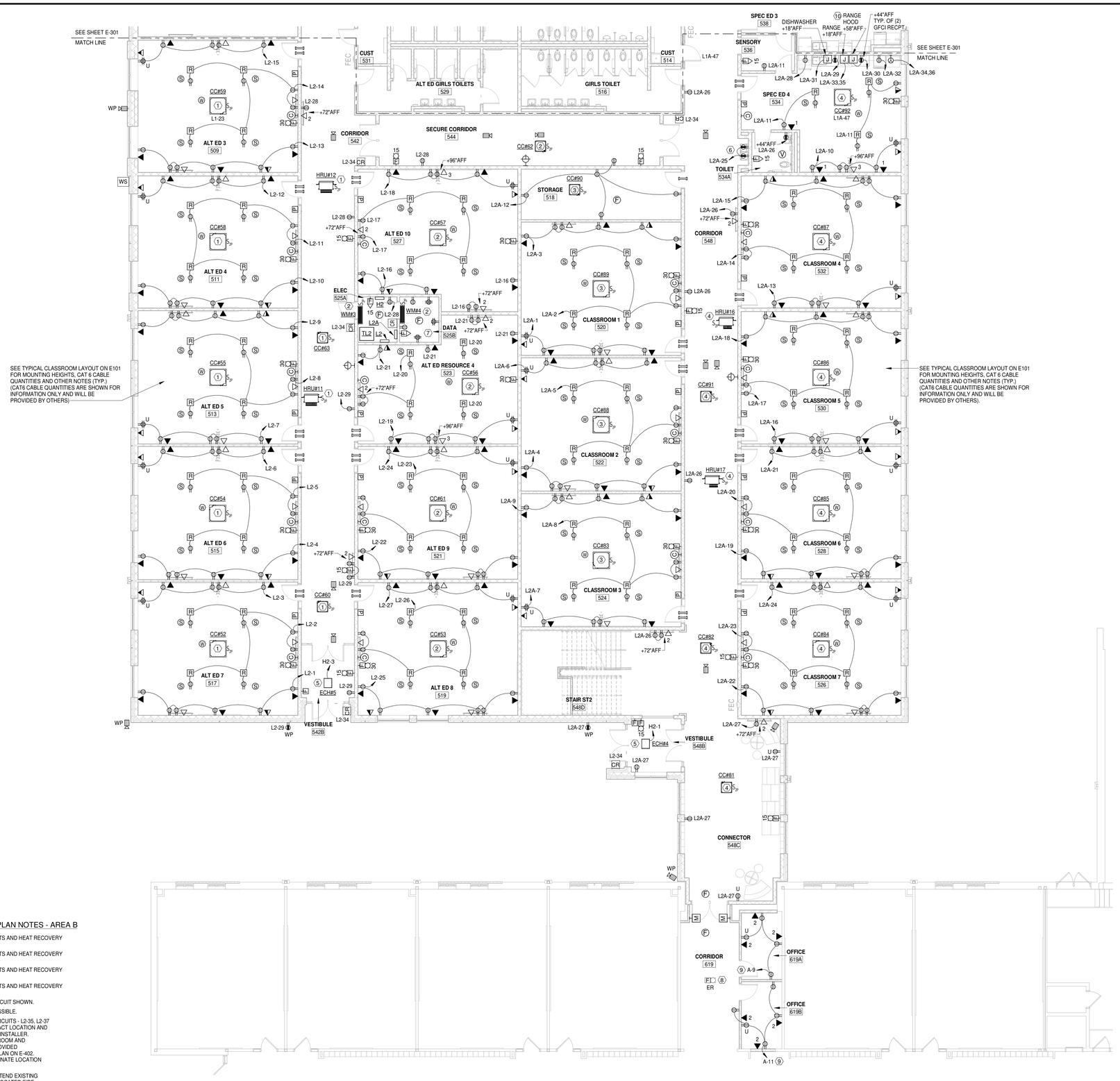
DRAWING
FIRST FLOOR POWER, AUXILIARY AND FIRE ALARM PLAN - AREA A



SHEET
E-301

1/32" = 1'-0" | 1/16" = 1'-0" | 3/32" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0" | 12" = 1'-0"

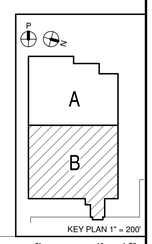
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FIRST FLOOR POWER, AUXILIARY AND FIRE ALARM PLAN NOTES - AREA B

1. PROVIDE 2-POLE TOGGLE DISCONNECT SWITCHES FOR VRF INDOOR UNITS AND HEAT RECOVERY UNITS AND CONNECT TO CIRCUIT 'L2-30' (U.O.N). (CC#59: L1-23).
2. PROVIDE 2-POLE TOGGLE DISCONNECT SWITCHES FOR VRF INDOOR UNITS AND HEAT RECOVERY UNITS AND CONNECT TO CIRCUIT 'L2-31'.
3. PROVIDE 2-POLE TOGGLE DISCONNECT SWITCHES FOR VRF INDOOR UNITS AND HEAT RECOVERY UNITS AND CONNECT TO CIRCUIT 'L2A-38'.
4. PROVIDE 2-POLE TOGGLE DISCONNECT SWITCHES FOR VRF INDOOR UNITS AND HEAT RECOVERY UNITS AND CONNECT TO CIRCUIT 'L2A-37' (U.O.N). (CC#92: L1A-47).
5. ELECTRIC HEATER COMES WITH DISCONNECT SWITCH. CONNECT TO CIRCUIT SHOWN.
6. RECEPTACLES FOR ELECTRIC WATER COOLER SHALL BE READILY ACCESSIBLE.
7. CONNECT THE THREE QUAD RECEPTACLES IN DATA ROOM TO THREE CIRCUITS - L2-35, L2-37 AND L2-39. CONNECT DUPLEX RECEPTACLES TO 'L2-36'. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF RECEPTACLES WITH DATA/SECURITY EQUIPMENT INSTALLER. PROVIDE (2) 4" EMPTY CONDUIT SLEEVES BETWEEN FIRST FLOOR DATA ROOM AND SECOND FLOOR DATA ROOM. ALSO PROVIDE (2) 4" EC'S TO A OWNER PROVIDED COMMUNICATIONS BOX LOCATED 30' OUTSIDE THE BUILDING. SEE SITE PLAN ON E-402. PROVIDE A 4'x8' PLYWOOD PANEL ON ONE WALL OF DATA ROOM. COORDINATE LOCATION WITH DATA/SECURITY EQUIPMENT INSTALLER.
8. RELOCATE EXISTING FIRE ALARM DEVICE TO NEW LOCATION SHOWN. EXTEND EXISTING WIRE AND CONDUIT AS NEEDED. NEW WIRE SHALL MATCH EXISTING. RELOCATED FIRE ALARM DEVICE SHALL FUNCTION AS INTENDED.
9. CONNECT NEW RECEPTACLES TO EXISTING CIRCUIT THAT BECAME AVAILABLE BY REMOVING EXISTING RECEPTACLES. EXTEND EXISTING WIRE AND CONDUIT AS NEEDED. USE (2) #12, (1) #12 G, 3/4" C. SEE NOTE #2 ON ED-101.
10. PROVIDE TWO TOGGLE SWITCHES FOR CONTROL OF RANGE HOOD FAN AND LIGHT FOR ADA ACCESS. FOLLOW MANUFACTURER'S ADA WIRING INSTRUCTIONS. PROVIDE LABELS 'RANGE HOOD FAN', 'RANGE HOOD LIGHT'.

FIRST FLOOR POWER, AUXILIARY AND FIRE ALARM PLAN - AREA B
1/8" = 1'-0"



1/32" = 1'-0" | 1/16" = 1'-0" | 3/32" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0" | 12" = 1'-0"

MARK	DATE	DESCRIPTION
		REVISIONS
	BY	

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DATE	4/8/24		
PROJECT	23143-00		
DESIGNED	RKCM		
DRAWN	RKCM		
CHECKED	RKCM		

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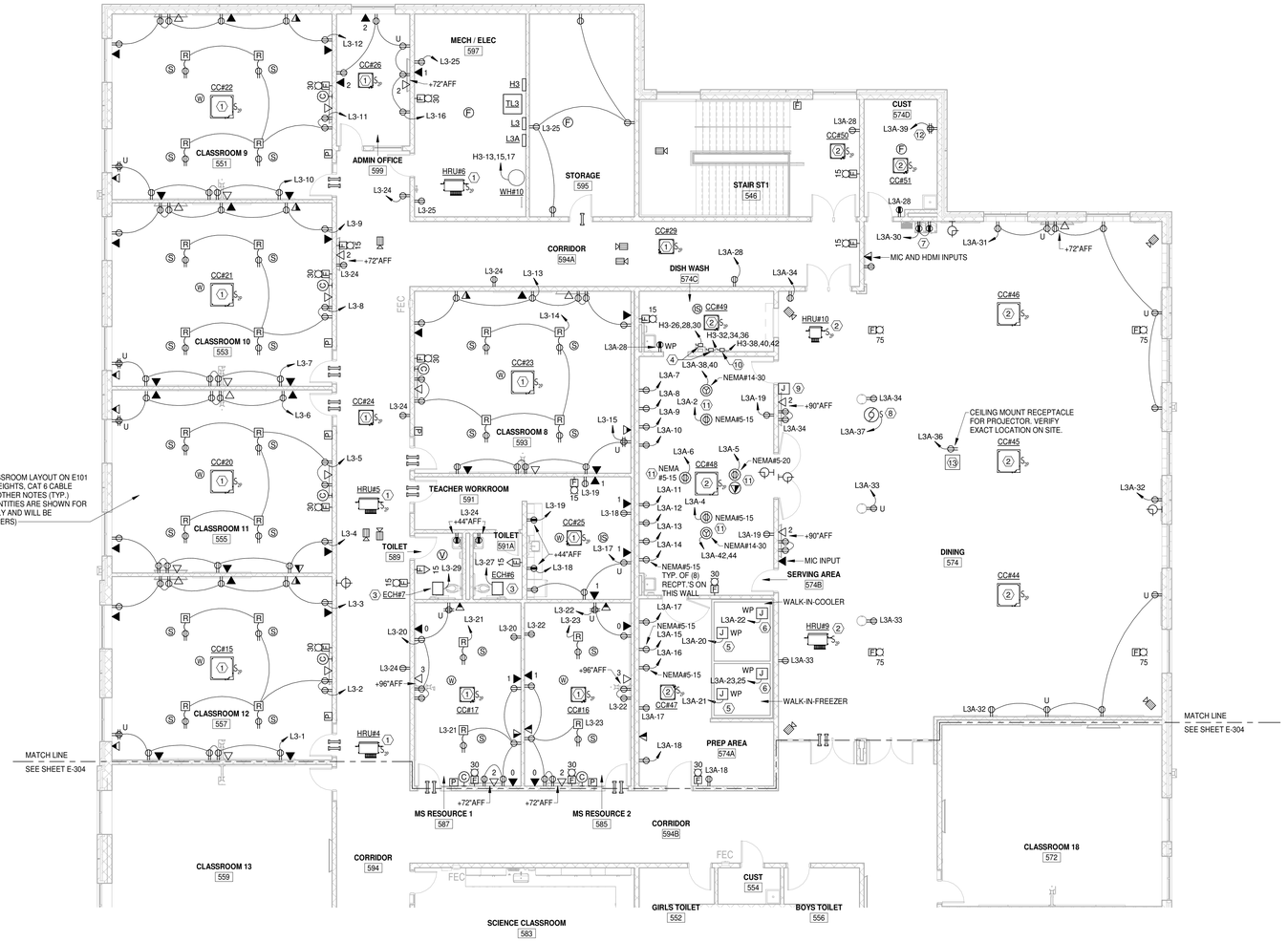
COMMONWEALTH OF VIRGINIA
T. A. ROCKECHARLIE III
Lic. No. 25725
8 APRIL 2024
PROFESSIONAL ENGINEER

PROJECT
LOUISA COUNTY PUBLIC SCHOOLS
LOUISA COUNTY MIDDLE SCHOOL ADDITION
1009 DAVIS HIGHWAY
MINERAL, VIRGINIA

DRAWING
FIRST FLOOR POWER, AUXILIARY AND FIRE ALARM PLAN - AREA B

SHEET
E-302

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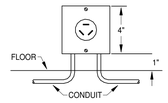


SEE TYPICAL CLASSROOM LAYOUT ON E101 FOR MOUNTING HEIGHTS, CAT 6 CABLE QUANTITIES AND OTHER NOTES (TYP.) (CAT6 CABLE QUANTITIES ARE SHOWN FOR INFORMATION ONLY AND WILL BE PROVIDED BY OTHERS)

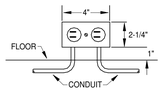
SECOND FLOOR POWER, AUXILIARY AND FIRE ALARM PLAN - AREA A
1/8" = 1'-0"

SECOND FLOOR POWER, AUXILIARY AND FIRE ALARM PLAN NOTES - AREA A

1. PROVIDE 2-POLE TOGGLE DISCONNECT SWITCHES FOR VRF INDOOR UNITS AND HEAT RECOVERY UNITS AND CONNECT TO CIRCUIT 'L3-25'.
2. PROVIDE 2-POLE TOGGLE DISCONNECT SWITCHES FOR VRF INDOOR UNITS AND HEAT RECOVERY UNITS AND CONNECT TO CIRCUIT 'L3A-1'.
3. ELECTRIC HEATER COMES WITH DISCONNECT SWITCH. CONNECT TO CIRCUIT SHOWN.
4. PROVIDE A 60A/480V/3P/4X, HD DISCONNECT SWITCH FOR THE DISHWASHER AND A 30A/480V/3P/4X, HD DISCONNECT SWITCH FOR THE BOOSTER HEATER. CONNECT TO CIRCUITS SHOWN. PROVIDE ALL FINAL CONNECTIONS TO EQUIPMENT PER MANUFACTURER'S INSTRUCTIONS. COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES ON SITE WITH EQUIPMENT INSTALLER. MAINTAIN ALL NEC CLEARANCES. PROVIDE IDENTIFICATION LABELS ON THE DISCONNECT SWITCHES.
5. WEATHER PROOF JUNCTION BOXES FOR CONNECTION TO LIGHTS, DOOR HEATERS AND AIR VENT HEATERS THAT COME WITH THE WALK-IN-FREEZER AND WALK-IN-COOLER. WIRE PER MANUFACTURER'S INSTRUCTIONS.
6. WEATHER PROOF JUNCTION BOXES FOR CONNECTION TO EVAPORATORS OF WALK-IN-FREEZER AND WALK-IN-COOLER. WIRE PER MANUFACTURER'S INSTRUCTIONS.
7. RECEPTACLES FOR BOTTLE FILLER AND ELECTRIC WATER COOLER SHALL BE READILY ACCESSIBLE.
8. PROVIDE A TOGGLE DISCONNECT SWITCH FOR THE PROJECTOR SCREEN MOTOR AND CONNECT TO CIRCUIT SHOWN. VERIFY EXACT LOCATION ON SITE.
9. PROVIDE A SINGLE GANG JUNCTION BOX AT 48" AFF FOR RAISE/LOWER CONTROL OF PROJECTOR SCREEN WITH 1" CONDUIT TO PROJECTOR SCREEN MOTOR. WIRE PER MANUFACTURER'S INSTRUCTIONS. VERIFY EXACT LOCATION ON SITE WITH OWNER.
10. PROVIDE A 30A/480V/3P/4X, HD DISCONNECT SWITCH FOR THE DISPOSER AND CONNECT TO CIRCUIT SHOWN. WIRE TO DISPOSER VIA MOTOR CONTROLLER PROVIDED BY THE DISPOSER MANUFACTURER. PROVIDE LABEL 'DISPOSER' ON THE DISCONNECT SWITCH.
11. INDICATES FLOOR MOUNT WEATHER RESISTANT OUTLETS. SEE DETAIL THIS SHEET. COORDINATE EXACT LOCATIONS ON SITE WITH EQUIPMENT INSTALLER. FOR SPECIAL OUTLETS, RATING SHALL MATCH BREAKER FEEDING RECEPTACLE. NEMA CONFIGURATION SHALL MATCH EQUIPMENT PLUG. VERIFY PRIOR TO ORDER.
12. COORDINATE RECEPTACLE LOCATION WITH AV EQUIPMENT INSTALLER. LOCATE MINIMUM 6' AWAY FROM THE SINK.
13. PROVIDE CEILING ENCLOSURE EQUAL TO 'FSR CB-22P' FOR MOUNTING PROJECTOR AND FOR LOW VOLTAGE CONNECTIONS TO PROJECTOR. VERIFY EXACT LOCATION ON SITE.



WP SINGLE RECEPTACLE OUTLET WITH WP COVER
(WP COVER SHALL BE EXTRA HEAVY DUTY CLEAR THERMOPLASTIC WHILE-IN-USE COVER)



WP DUPLEX RECEPTACLE OUTLET WITH WP COVER
(WP COVER SHALL BE EXTRA HEAVY DUTY CLEAR THERMOPLASTIC WHILE-IN-USE COVER)

TYPICAL FLOOR MOUNTED WP RECEPTACLE DETAILS

NOT TO SCALE

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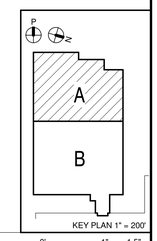
DATE	PROJECT	DESIGNED	DRAWN	CHECKED
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LOUISA COUNTY PUBLIC SCHOOLS
LOUISA COUNTY MIDDLE SCHOOL ADDITION
1009 DAVIS HIGHWAY
MINERAL, VIRGINIA

DRAWING
SECOND FLOOR POWER, AUXILIARY AND FIRE ALARM PLAN - AREA A



SHEET
E-303

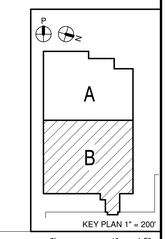
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1/32" = 1'-0" | 1/16" = 1'-0" | 3/32" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0" | 12" = 1'-0"

SECOND FLOOR POWER, AUXILIARY AND FIRE ALARM PLAN NOTES - AREA B

1. PROVIDE 2-POLE TOGGLE DISCONNECT SWITCHES FOR VRF INDOOR UNITS AND HEAT RECOVERY UNITS AND CONNECT TO CIRCUIT 'L4-37' (U.O.N). (CC#14 & CC-19; L3-26).
2. PROVIDE 2-POLE TOGGLE DISCONNECT SWITCHES FOR VRF INDOOR UNITS AND HEAT RECOVERY UNITS AND CONNECT TO CIRCUIT 'L4A-34' (U.O.N). (CC#43: L3A-1).
3. RECEPTACLES FOR ELECTRIC WATER COOLER SHALL BE READILY ACCESSIBLE.
4. WATER HEATER COMES WITH DISCONNECT SWITCH. CONNECT TO CIRCUIT SHOWN.
5. CONNECT THE THREE QUAD RECEPTACLES IN DATA ROOM TO THREE CIRCUITS - L4-38, L4-40 AND L4-42. CONNECT DUPLEX RECEPTACLES TO 'L4-45'. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF RECEPTACLES WITH DATA/SECURITY EQUIPMENT INSTALLER. PROVIDE (2) 4" EMPTY CONDUIT SLEEVES BETWEEN FIRST FLOOR DATA ROOM AND SECOND FLOOR DATA ROOM. PROVIDE A 4'x8' PLYWOOD PANEL ON ONE WALL OF DATA ROOM. COORDINATE LOCATION WITH DATA/SECURITY EQUIPMENT INSTALLER.
6. PROVIDE DUCT SMOKE DETECTOR IN THE EXHAUST DUCT OF DOAS UNIT. WIRE SO THAT A SIGNAL WILL BE SENT TO FACP AND THE UNIT WILL SHUT DOWN UPON DETECTION OF SMOKE.
7. PROVIDE A PILOT LAMP TOGGLE DISCONNECT SWITCH FOR THE RECIRCULATING PUMP AND CONNECT TO CIRCUIT SHOWN. PUMP SHALL BE CONTROLLED BY BAS. PROVIDE CONTACTOR AS NEEDED.
8. PROVIDE A TOGGLE DISCONNECT SWITCH FOR BIPOLAR IONIZERS AND CONNECT TO CIRCUIT 'L4-43' (TWO BIPOLAR IONIZERS AT EACH LOCATION).
9. RELOCATE EXISTING FIRE ALARM DEVICE TO NEW LOCATION SHOWN. EXTEND EXISTING WIRE AND CONDUIT AS NEEDED. NEW WIRE SHALL MATCH EXISTING. RELOCATED FIRE ALARM DEVICE SHALL FUNCTION AS INTENDED.

SECOND FLOOR POWER, AUXILIARY AND FIRE ALARM PLAN - AREA B
1/8" = 1'-0"



MARK	DATE	REVISIONS	BY	DESCRIPTION

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DATE	4/8/24
PROJECT	23143-00
DESIGNED	RKCM
DRAWN	RKCM
CHECKED	RKCM

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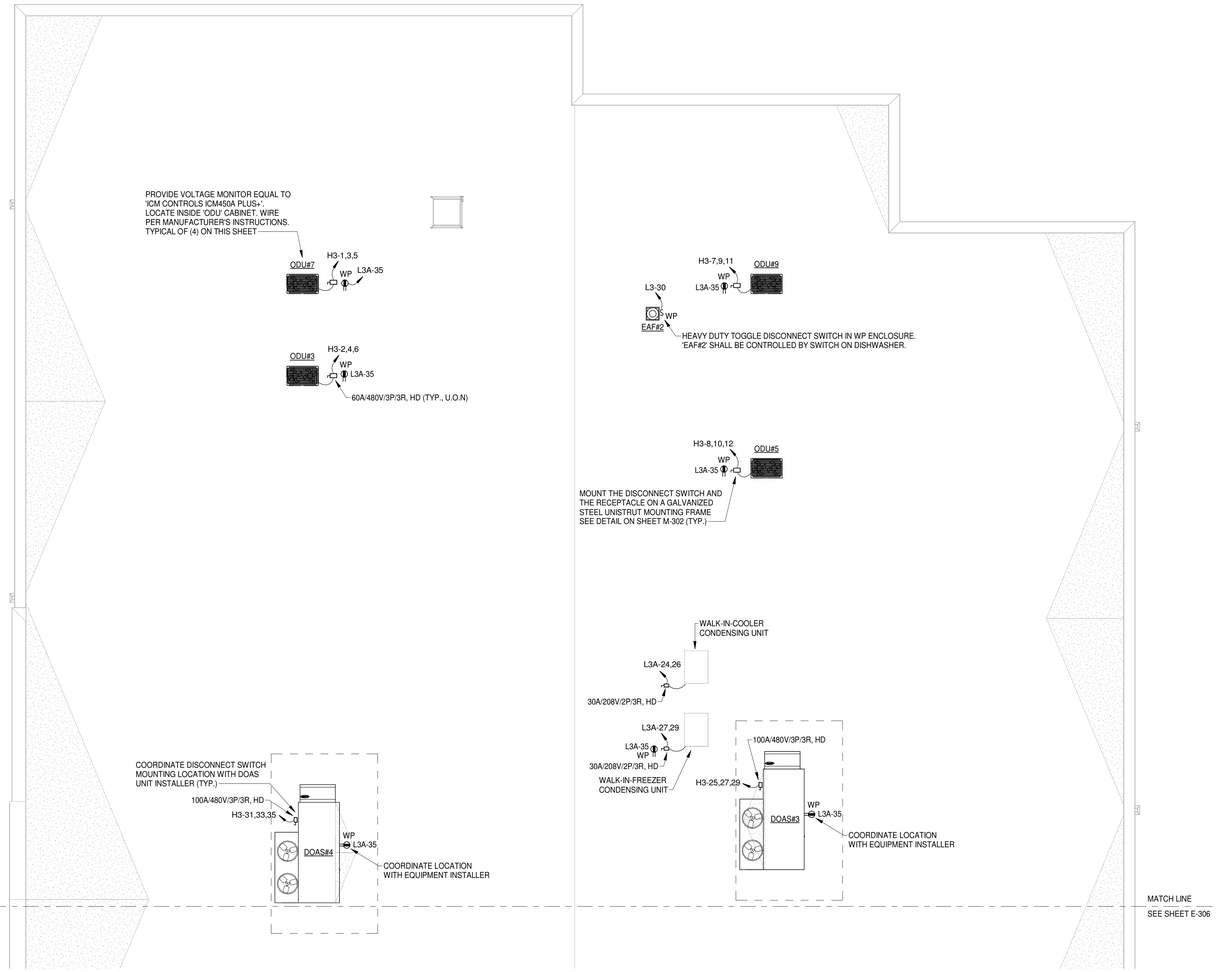
COMMONWEALTH OF VIRGINIA
T. A. ROCKECHARLIE JR.
Lic. No. 29175
8 APRIL 2024
PROFESSIONAL ENGINEER

PROJECT
LOUISA COUNTY PUBLIC SCHOOLS
LOUISA COUNTY MIDDLE SCHOOL ADDITION
1009 DAVIS HIGHWAY
MINERAL, VIRGINIA

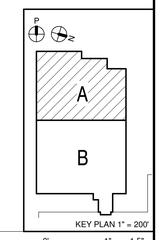
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SECOND FLOOR POWER, AUXILIARY AND FIRE ALARM PLAN - AREA B

SHEET
E-304

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ROOF POWER PLAN - AREA A
1/8" = 1'-0"



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PROJECT	23143-00
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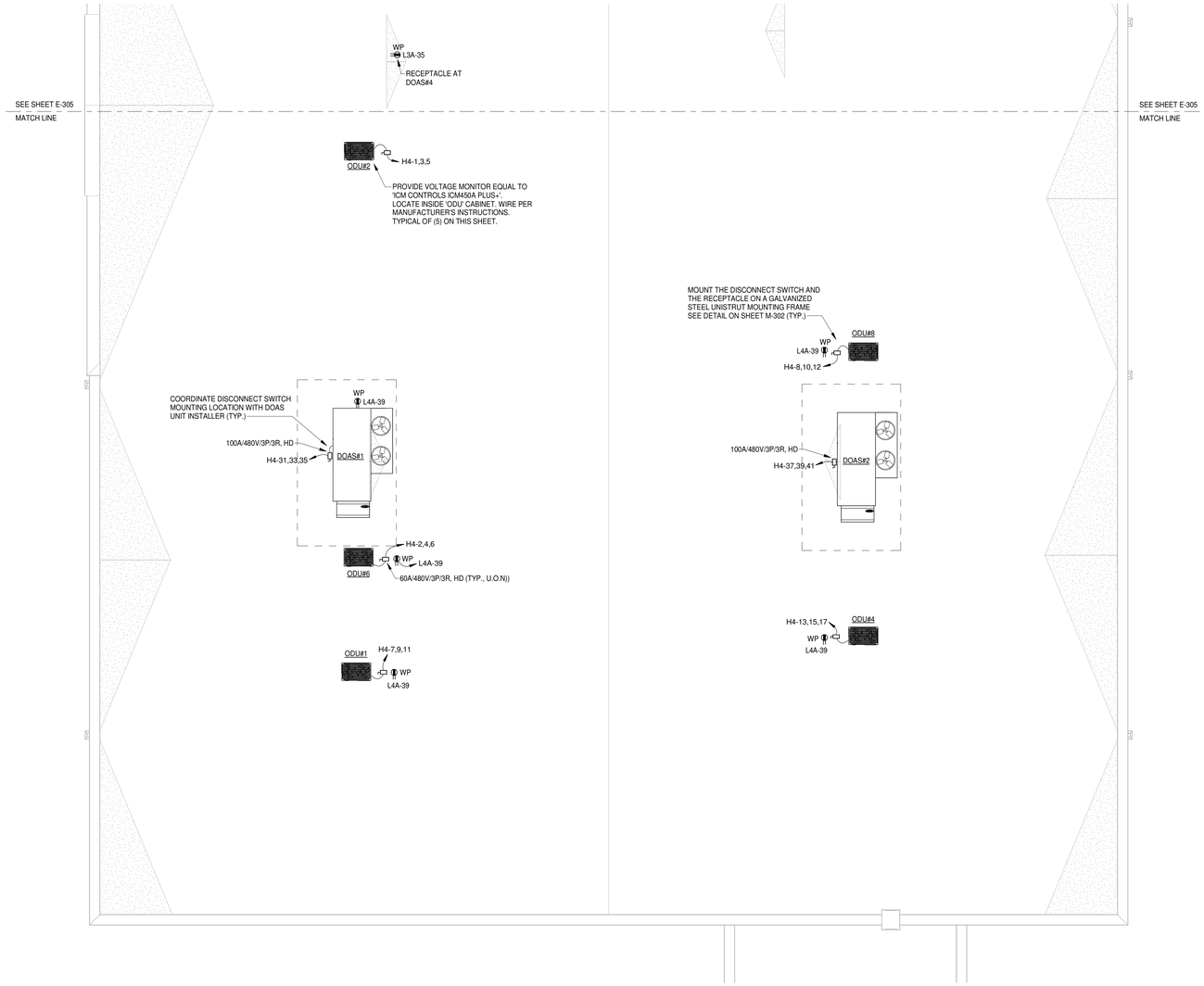
PROJECT
LOUISA COUNTY PUBLIC SCHOOLS
LOUISA COUNTY MIDDLE SCHOOL ADDITION
1009 DAVIS HIGHWAY
MINERAL, VIRGINIA

DRAWING
ROOF POWER PLAN - AREA A

SHEET
E-305

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1/32" = 1'-0" 0' 16" 32" 48"
1/16" = 1'-0" 0' 4' 8' 16' 24'
3/32" = 1'-0" 0' 4' 8' 16'
1/8" = 1'-0" 0' 4' 8' 12'
1/4" = 1'-0" 0' 2' 4' 6'
3/8" = 1'-0" 0' 1' 2' 3' 4'
1/2" = 1'-0" 0' 6" 1' 2' 3'
3/4" = 1'-0" 0' 6" 1' 2'
1" = 1'-0" 0' 3" 6" 9" 1' 1.5'
1 1/2" = 1'-0" 0' 3" 6" 9" 1'
3" = 1'-0" 0' 1" 2" 3" 4" 5" 6"
6" = 1'-0" 0' 1" 2" 3"
12" = 1'-0" 0' 1" 1.5"



ROOF POWER PLAN - AREA B
1/8" = 1'-0"

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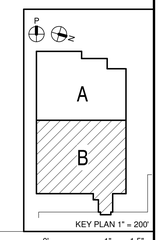
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LOUISA COUNTY MIDDLE SCHOOL ADDITION
1009 DAVIS HIGHWAY
MINERAL, VIRGINIA

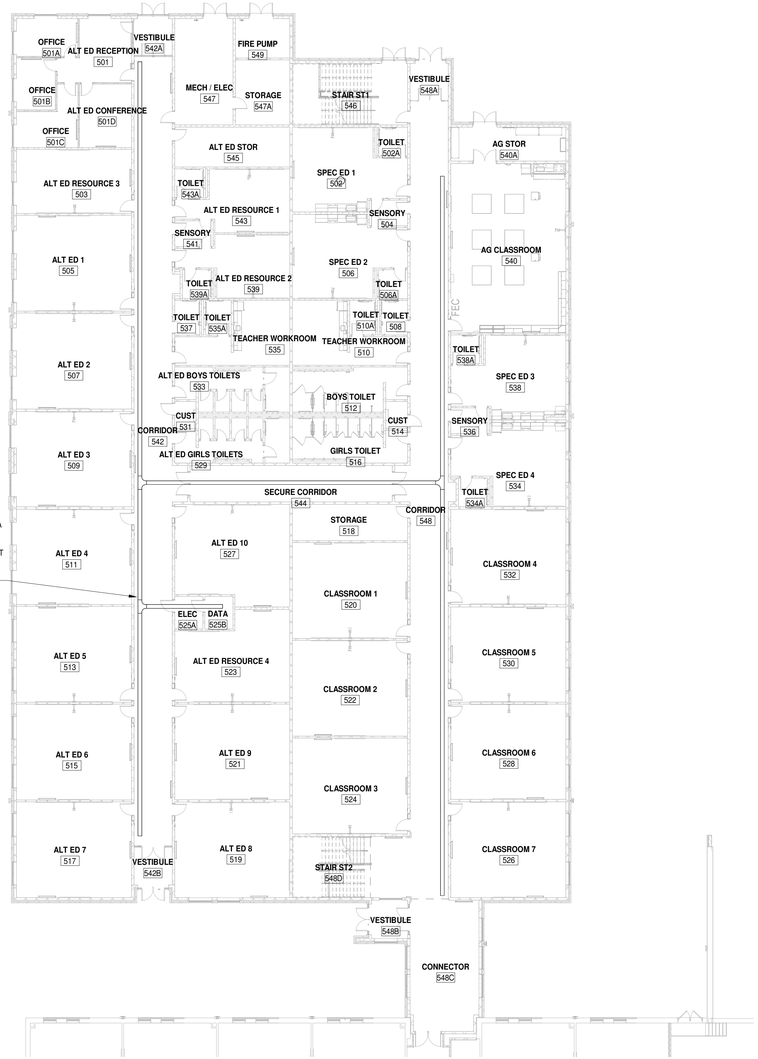
DRAWING
ROOF POWER PLAN - AREA B



SHEET
E-306

1/32" = 1'-0" | 1/16" = 1'-0" | 3/32" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0" | 12" = 1'-0"

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12" WIDE x 4" DEEP WIRE MESH CABLE TRAY ABOVE CEILING. PROVIDE ALL NECESSARY ACCESSORIES AND MOUNTING HARDWARE REQUIRED FOR A COMPLETE INSTALLATION. SUPPORT CABLE TRAY ON BOTH SIDES FROM THE STRUCTURE ABOVE. COORDINATE EXACT HEIGHT AND ROUTING ON SITE WITH OTHER TRADES. SEE SPECIFICATIONS FOR MORE DETAILS (TYP.)

FIRST FLOOR CABLE TRAY PLAN
1/16" = 1'-0"



12" WIDE x 4" DEEP WIRE MESH CABLE TRAY ABOVE CEILING. PROVIDE ALL NECESSARY ACCESSORIES AND MOUNTING HARDWARE REQUIRED FOR A COMPLETE INSTALLATION. SUPPORT CABLE TRAY ON BOTH SIDES FROM THE STRUCTURE ABOVE. COORDINATE EXACT HEIGHT AND ROUTING ON SITE WITH OTHER TRADES. SEE SPECIFICATIONS FOR MORE DETAILS (TYP.)

SECOND FLOOR CABLE TRAY PLAN
1/16" = 1'-0"

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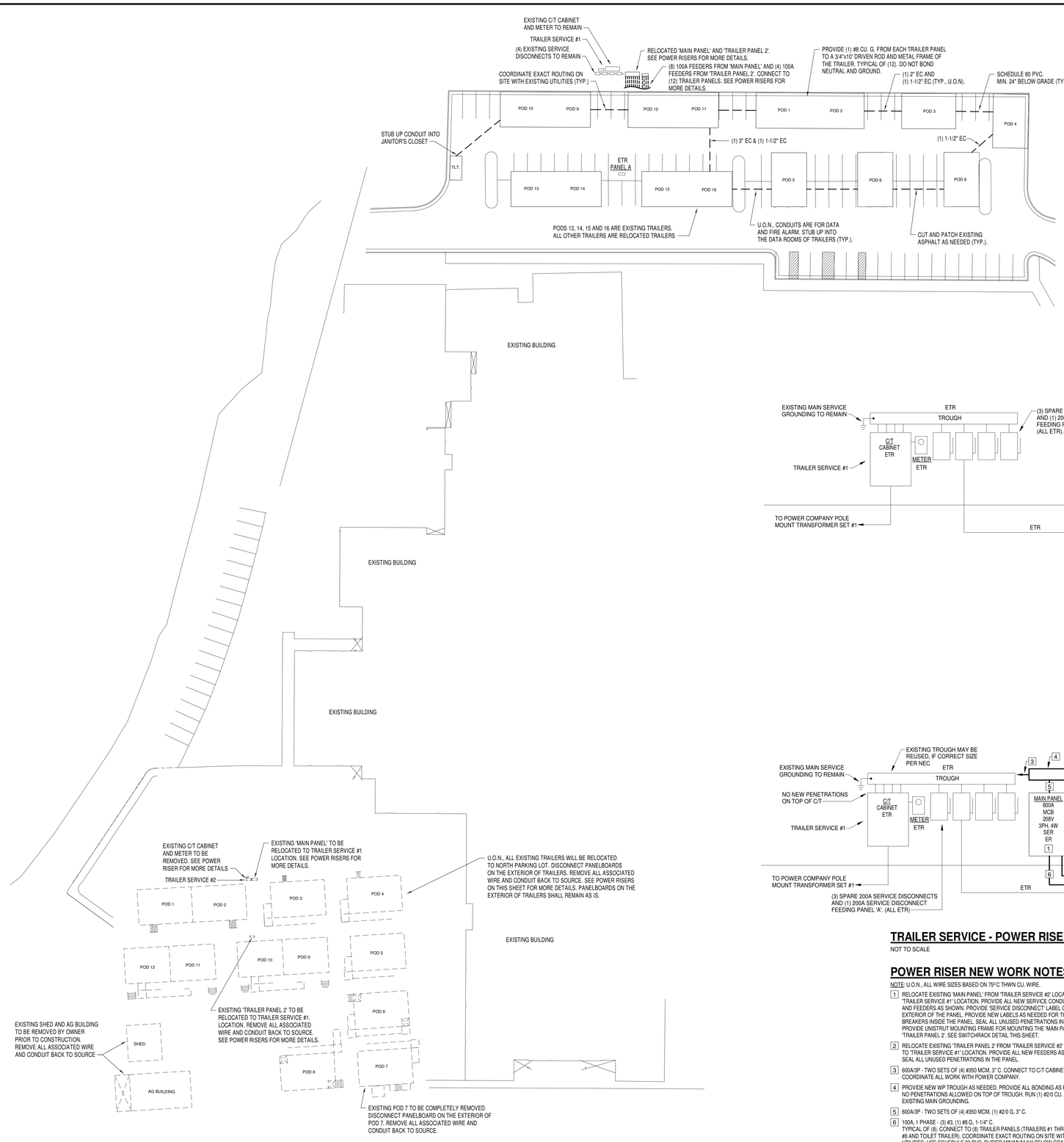
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8 APRIL 2024

PROJECT
LOUISA COUNTY PUBLIC SCHOOLS
LOUISA COUNTY MIDDLE SCHOOL ADDITION
1009 DAVIS HIGHWAY
MINERAL, VIRGINIA

DRAWING
FIRST AND SECOND FLOOR CABLE TRAY PLANS

SHEET
E-307

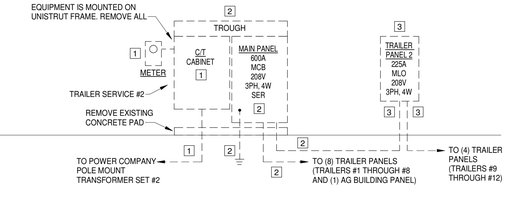
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MODULAR RELOCATION PLAN - ELECTRICAL DEMOLITION AND NEW WORK
1" = 30'-0"

NOTE: SEE CIVIL PLANS FOR COMPLETE INFORMATION ON EXISTING UTILITIES, GRADING, DRIVEWAY AND SIDE WALK LOCATIONS ETC.

NOTE: SEE SHEETS A-930 AND A-931 FOR ELECTRICAL WORK RELATED TO ADDITIVE ALTERNATE NO. 3



TRAILER SERVICES - POWER RISER - DEMOLITION

NOT TO SCALE

POWER RISER DEMOLITION NOTES

1. REMOVE EXISTING CT CABINET AND METER. REMOVE ALL ASSOCIATED WIRE AND CONDUIT BACK TO POWER COMPANY TRANSFORMERS. COORDINATE ALL WORK WITH POWER COMPANY.
2. EXISTING 'MAIN PANEL' SHALL BE RELOCATED TO 'TRAILER SERVICE #1' LOCATION. STORE SAFELY UNTIL REINSTALLATION. REMOVE ALL ASSOCIATED WIRE AND CONDUIT BACK TO CT CABINET. REMOVE ASSOCIATED TROUGH. REMOVE EXISTING MAIN GROUNDING. REMOVE ALL ASSOCIATED WIRE AND CONDUIT. REMOVE ALL EXISTING WIRE AND CONDUIT ASSOCIATED WITH 'TRAILER PANEL 2', (8) TRAILER PANELS AND (1) AG BUILDING PANEL.
3. EXISTING 'TRAILER PANEL 2' SHALL BE RELOCATED TO 'TRAILER SERVICE #1' LOCATION. STORE SAFELY UNTIL REINSTALLATION. REMOVE ALL ASSOCIATED WIRE AND CONDUIT BACK TO 'MAIN PANEL'. REMOVE ALL EXISTING WIRE AND CONDUIT ASSOCIATED WITH (4) TRAILER PANELS.

TRAILER SERVICE - POWER RISER - NEW WORK

NOT TO SCALE

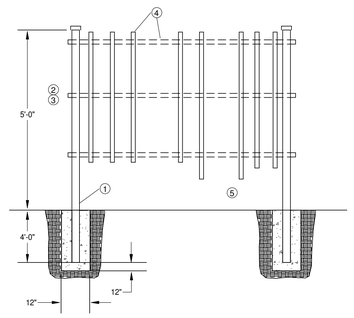
POWER RISER NEW WORK NOTES

NOTE: U.O.N., ALL WIRE SIZES BASED ON 75°C THWN CU. WIRE.

1. RELOCATE EXISTING 'MAIN PANEL' FROM 'TRAILER SERVICE #2' LOCATION TO 'TRAILER SERVICE #1' LOCATION. PROVIDE ALL NEW SERVICE CONDUCTORS AND FEEDERS AS SHOWN. PROVIDE 'SERVICE DISCONNECT' LABEL ON THE EXTERIOR OF THE PANEL. PROVIDE NEW LABELS AS NEEDED FOR THE FEEDER BREAKERS INSIDE THE PANEL. SEAL ALL UNUSED PENETRATIONS IN THE PANEL. PROVIDE UNISTRUT MOUNTING FRAME FOR MOUNTING THE 'MAIN PANEL' AND 'TRAILER PANEL 2'. SEE SWITCHRACK DETAIL THIS SHEET.
2. RELOCATE EXISTING 'TRAILER PANEL 2' FROM 'TRAILER SERVICE #2' LOCATION TO 'TRAILER SERVICE #1' LOCATION. PROVIDE ALL NEW FEEDERS AS SHOWN. SEAL ALL UNUSED PENETRATIONS IN THE PANEL.
3. 600A/3P - TWO SETS OF (4) #350 MCM, 3" C. CONNECT TO C/T CABINET. COORDINATE ALL WORK WITH POWER COMPANY.
4. PROVIDE NEW WP TROUGH AS NEEDED. PROVIDE ALL BONDING AS PER NEC. NO PENETRATIONS ALLOWED ON TOP OF TROUGH. RUN (1) #2/0 CU. G. TO EXISTING MAIN GROUNDING.
5. 600A/3P - TWO SETS OF (4) #350 MCM, (1) #2/0 G, 3" C.
6. 100A, 1 PHASE - (3) #3, (1) #8 G, 1-1/4" C. TYPICAL OF (8). CONNECT TO (8) TRAILER PANELS (TRAILERS #1 THROUGH #6, #8 AND TOILET TRAILER). COORDINATE EXACT ROUTING ON SITE WITH EXISTING UTILITIES. USE SCHEDULE 80 PVC, BURIED MINIMUM 24" BELOW GRADE. ALL EXPOSED CONDUIT SHALL BE RMC. CUT AND PATCH EXISTING ASPHALT AS NEEDED.
7. 200A/3P - (4) #3/0, (1) #6 G, 2" C.
8. 100A, 1 PHASE - (3) #3, (1) #8 G, 1-1/4" C. TYPICAL OF (4). CONNECT TO (4) TRAILER PANELS (TRAILERS #9 THROUGH #12).

SERVICE LOAD CALCULATION

PEAK DEMAND THAT WAS RECORDED ON THE EXISTING 800A, 120/208V, 3 PH, 4 WIRE 'TRAILER SERVICE #1' DURING THE PERIOD 11/2022 - 02/2024 WAS 32 KW (88 AMPS @ 208V, 3PH).
PEAK DEMAND THAT WAS RECORDED ON THE EXISTING 600A, 120/208V, 3 PH, 4 WIRE 'TRAILER SERVICE #2' DURING THE PERIOD 06/2022 - 02/2024 WAS 89 KW (247 AMPS @ 208V, 3PH).
NEW ESTIMATED LOAD ON THE ON THE EXISTING 800A, 120/208V, 3 PH, 4 WIRE 'TRAILER SERVICE #1' AFTER THE RELOCATION OF EXISTING 'MAIN PANEL' = 1.25 x 32 KVA + 1.25 x 89 KVA = 151 KVA (419 AMPS @208V, 3 PH)



SWITCHRACK ELEVATION

NOT TO SCALE

SWITCHRACK NOTES

1. ALL POSTS SHALL BE 4" ROUND GALVANIZED RIGID STEEL PIPE, CONCRETE FILLED WITH CAP, INSTALLED 4'-0" DEEP IN GROUND ENCASED IN 12" CONCRETE.
2. THE CONTRACTOR SHALL VERIFY THE DIMENSIONS OF ALL EQUIPMENT PRIOR TO FABRICATION OF SWITCHRACK.
3. MOUNTING HEIGHT FOR ALL EQUIPMENT SHALL BE IN ACCORDANCE WITH 2017 NEC AND REQUIRED MOUNTING HEIGHT FOR THE EQUIPMENT.
4. 1 5/8" X 1 5/8" GALVANIZED CHANNEL STRUT (QUANTITY AS REQUIRED), FASTENED WITH STAINLESS STEEL FASTENERS.
5. SEE POWER RISER FOR ELECTRICAL DETAILS.

ALL SHOWN LIGHT IS EXISTING TO REMAIN
ALL SHOWN DASHED IS TO BE REMOVED.
ALL SHOWN DARK IS NEW WORK.

MARK	DATE	REVISIONS
		DESCRIPTION
		BY

SIMMONS, ROCKECHARLIE & PRINCE INC.
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10150 Staples Mill Rd. | Suite A
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JOB NO. 23050

DATE	4/8/24
PROJECT	23143-00
DESIGNED	RKCM
DRAWN	RKCM
CHECKED	RKCM

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ARCHITECTS, PC
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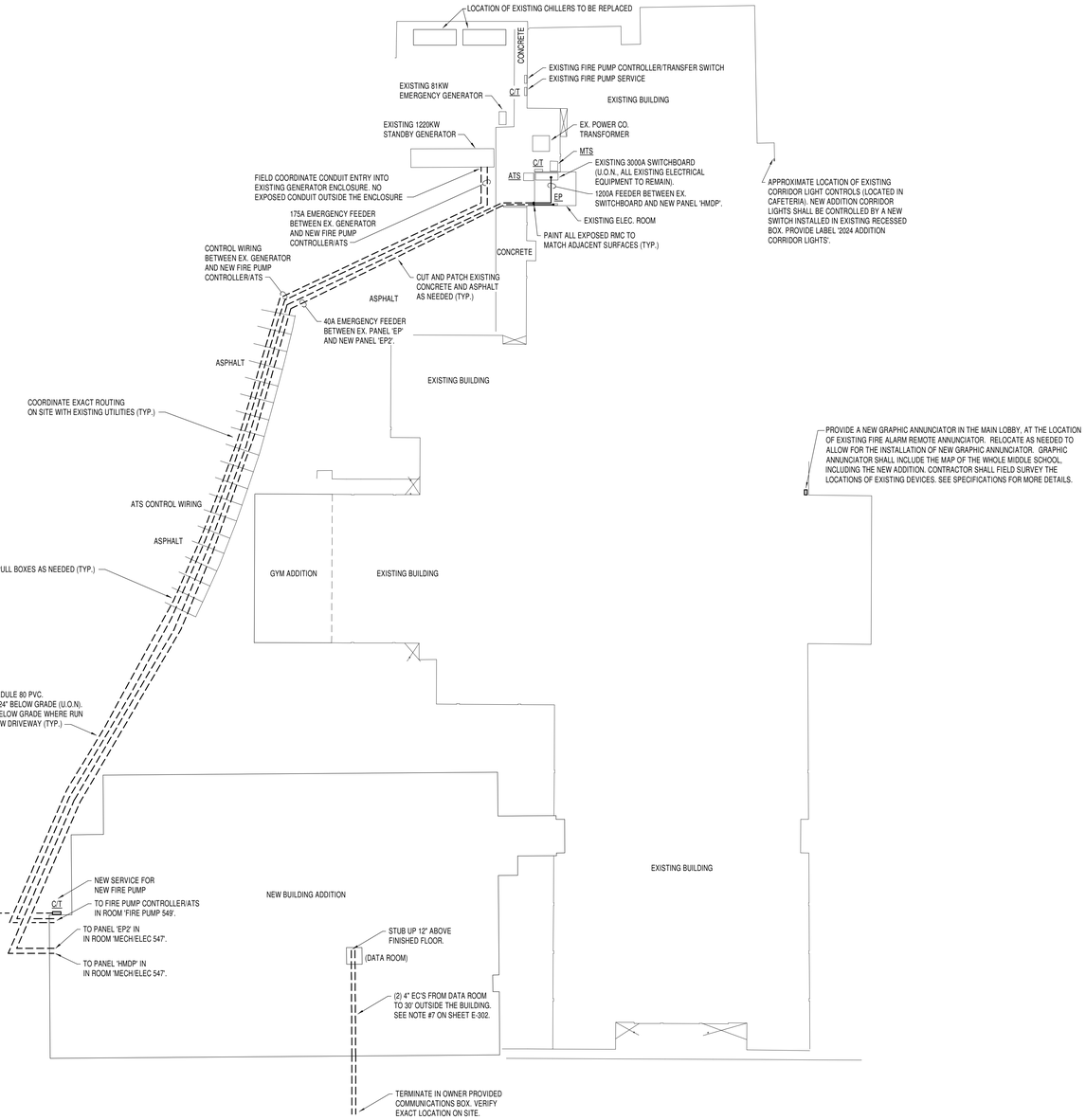
COMMONWEALTH OF VIRGINIA
T. A. ROCKECHARLIE
Lic. No. 29125
8 APRIL 2024
PROFESSIONAL ENGINEER

PROJECT
LOUISA COUNTY PUBLIC SCHOOLS
LOUISA COUNTY MIDDLE SCHOOL ADDITION
1009 DAVIS HIGHWAY
MINERAL, VIRGINIA

DRAWING
MODULAR RELOCATION PLAN - ELECTRICAL
DEMOLITION AND NEW WORK

SHEET
E-401

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SITE PLAN - ELECTRICAL NEW WORK
1" = 30'-0"

NOTE: SEE CIVIL PLANS FOR COMPLETE INFORMATION ON EXISTING UTILITIES, GRADING, DRIVEWAY AND SIDE WALK LOCATIONS ETC.

ALL SHOWN LIGHT IS EXISTING TO REMAIN
ALL SHOWN DARK IS NEW WORK.

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PROJECT	23143-00
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DRAWN	Author
CHECKED	Checker

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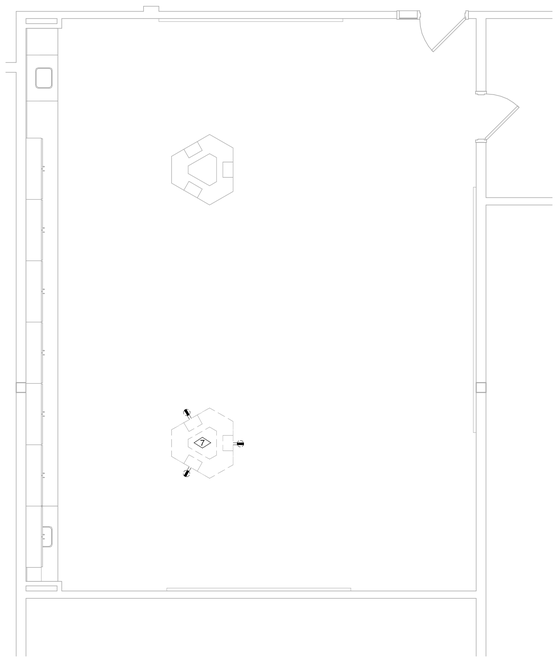
PROJECT
LOUISA COUNTY PUBLIC SCHOOLS
LOUISA COUNTY MIDDLE SCHOOL ADDITION
1009 DAVIS HIGHWAY
MINERAL, VIRGINIA

DRAWING
SITE PLAN - ELECTRICAL NEW WORK

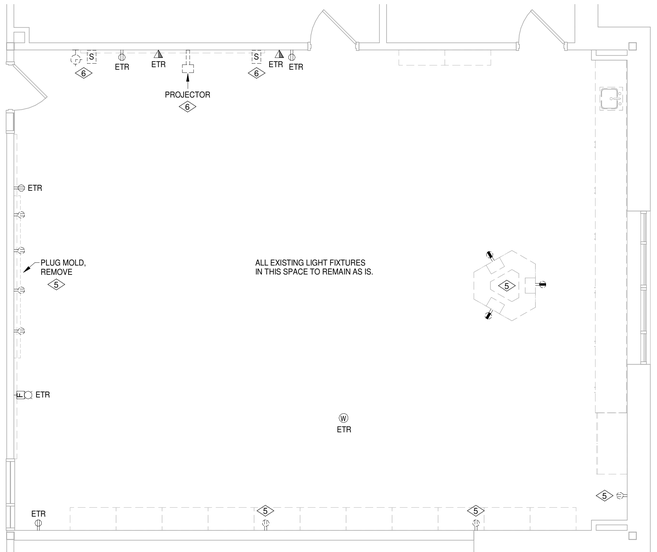
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1/32" = 1'-0" | 1/16" = 1'-0" | 3/32" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0" | 12" = 1'-0"

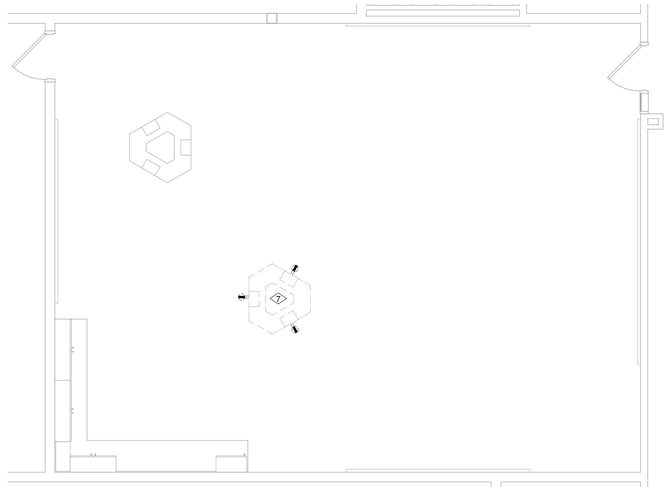
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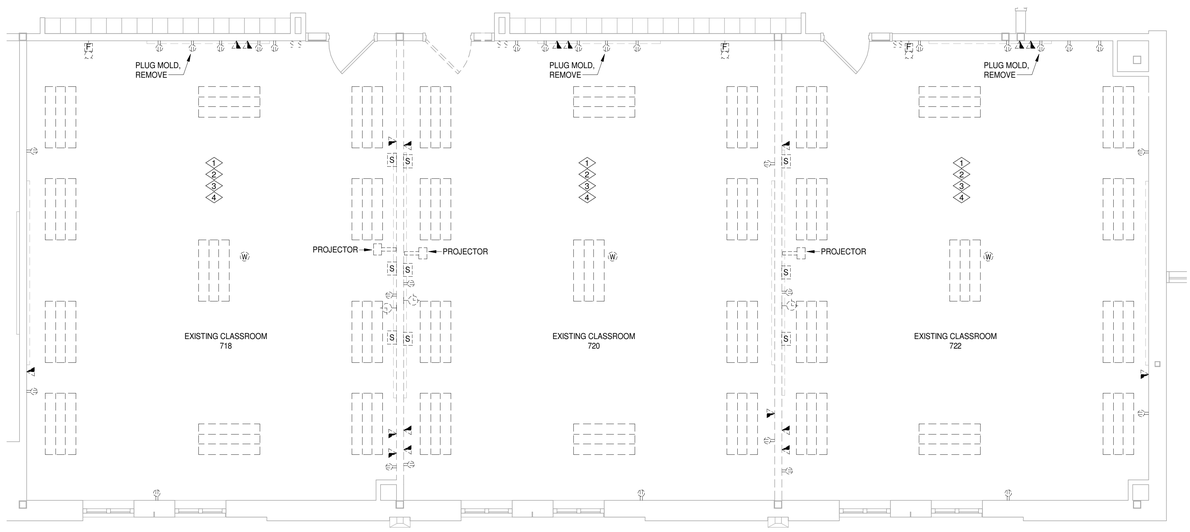
EXISTING SCIENCE 609 - ELECTRICAL DEMOLITION
1/4" = 1'-0"



EXISTING SCIENCE CLASSROOM 904 - ELECTRICAL DEMOLITION
1/4" = 1'-0"



EXISTING SCIENCE 804 - ELECTRICAL DEMOLITION
1/4" = 1'-0"



EXISTING CLASSROOMS 718, 720, 722 - ELECTRICAL DEMOLITION
1/4" = 1'-0"

ADD ALTERNATE NO. 1 - ELECTRICAL DEMOLITION NOTES

1. REMOVE ALL EXISTING LIGHT FIXTURES IN THIS SPACE. REMOVE ALL ASSOCIATED SWITCHES. REMOVE ALL ASSOCIATED WIRE AND CONDUIT TO HOME-RUN JUNCTION BOX ABOVE CEILING. MAINTAIN CONTINUITY TO OTHER LIGHT FIXTURES THAT ARE TO REMAIN. EXISTING CIRCUIT SHALL BE REUSED TO CONNECT TO NEW LIGHT FIXTURES.
2. REMOVE ALL EXISTING RECEPTACLES IN THIS SPACE. REMOVE ALL ASSOCIATED WIRE AND CONDUIT TO HOME-RUN JUNCTION BOXES ABOVE CEILING. EXISTING CIRCUITS SHALL BE REUSED TO CONNECT TO NEW RECEPTACLES.
3. REMOVE ALL EXISTING LOW VOLTAGE OUTLETS IN THIS SPACE. REMOVE ALL EXISTING LOW VOLTAGE DEVICES SUCH AS SPEAKERS AND WIRELESS ACCESS POINTS IN THIS SPACE. REMOVE EXISTING PROJECTOR. REMOVE ALL ASSOCIATED WIRE AND CONDUIT BACK TO SOURCE. U.O.N., RETURN ALL LOW VOLTAGE DEVICES AND PROJECTOR TO OWNER. RETAIN WAP FOR REUSE.
4. REMOVE ALL EXISTING FIRE ALARM DEVICES IN THIS SPACE AND STORE SAFELY FOR REUSE. RETAIN ALL ASSOCIATED WIRE AND CONDUIT FOR EXTENSION TO NEW LOCATION. RETURN ALL UNUSED DEVICES TO OWNER.
5. REMOVE EXISTING RECEPTACLES SHOWN DASHED. REMOVE ALL ASSOCIATED WIRE AND CONDUIT TO HOME-RUN JUNCTION BOXES ABOVE CEILING. EXISTING CIRCUITS SHALL BE REUSED TO CONNECT TO NEW RECEPTACLES. MAINTAIN CONTINUITY TO OTHER RECEPTACLES THAT ARE TO REMAIN.
6. REMOVE EXISTING SPEAKERS AND CLOCK AND RETURN TO OWNER. REMOVE EXISTING PROJECTOR AND RETURN TO OWNER. REMOVE ALL ASSOCIATED WIRE AND CONDUIT BACK TO SOURCE.
7. REMOVE ALL EXISTING RECEPTACLES LOCATED ON WORKSTATION. REMOVE ALL ASSOCIATED WIRE AND CONDUIT BACK TO SOURCE. MAINTAIN CONTINUITY TO OTHER RECEPTACLES THAT ARE TO REMAIN. ANY BREAKERS THAT BECOME SPARE SHALL BE TURNED OFF AND MARKED AS SPARE. NO OTHER WORK IN THIS ROOM. ALL EXISTING TO REMAIN AS IS.

ALL SHOWN LIGHT IS EXISTING TO REMAIN
ALL SHOWN DASHED IS TO BE REMOVED
SEE SHEET A-007 FOR LOCATIONS OF
INETRIOR RENOVATION AREAS

MARK	DATE	REVISIONS BY	DESCRIPTION

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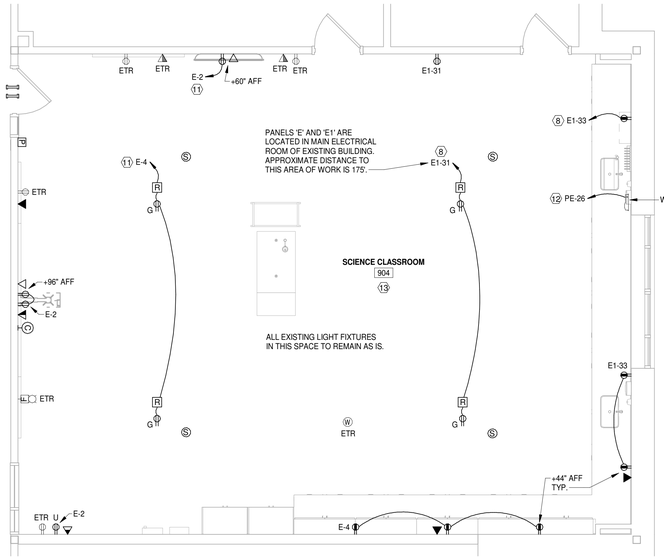
PROJECT
LOUISA COUNTY PUBLIC SCHOOLS
LOUISA COUNTY MIDDLE SCHOOL ADDITION
1099 DAVIS HIGHWAY
MINERAL, VIRGINIA

DRAWING
ADD ALTERNATE NO. 1 - ELECTRICAL DEMO PLANS

SHEET
E-501

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1/32" = 1'-0" 0' 16' 32' 48'
1/16" = 1'-0" 0' 4' 8' 16' 24'
3/32" = 1'-0" 0' 4' 8' 16'
1/8" = 1'-0" 0' 4' 8' 12'
1/4" = 1'-0" 0' 2' 4' 6'
3/8" = 1'-0" 0' 1' 2' 3' 4'
1/2" = 1'-0" 0' 6" 1' 2' 3'
3/4" = 1'-0" 0' 6" 1' 2'
1" = 1'-0" 0' 3" 6" 9" 1' 1.5'
1 1/2" = 1'-0" 0' 3" 6" 9" 1'
3" = 1'-0" 0' 1" 2" 3" 4" 5" 6"
6" = 1'-0" 0' 1" 2" 3"
12" = 1'-0" 0' 1" 1.5"



EXISTING SCIENCE CLASSROOM 904 - ELECTRICAL NEW WORK
1/4" = 1'-0"

Existing Panel: PB (Siemens Type S2)

Location: Electrical Closet
Supply From: Main Switchboard
Mounting: Surface
Enclosure: Type 1

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

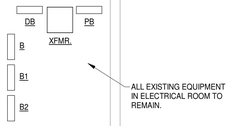
A.I.C. Rating: EX.
Mains Type: 250 A MLO
Panel Rating: 250 A

NOTES: EXISTING LOAD RECORDED ON THIS PANEL ON A NORMAL WORKING DAY WAS 19.5 AMPS.

CKT	Circuit Description	Trip	Wire	Poles	A (KVA)		B (KVA)		C (KVA)		Poles	Wire	Trip	Circuit Description	CKT
1	EXISTING LIGHTING	20 A	EX	1	EX	EX					1	EX	20 A	EXISTING LIGHTING	2
3	EXISTING LIGHTING	20 A	EX	1			EX	EX			1	EX	20 A	EXISTING LIGHTING	4
5	EXISTING LIGHTING	20 A	EX	1					EX	EX	1	EX	20 A	EXISTING LIGHTING	6
7	EXISTING LIGHTING	20 A	EX	1	EX	EX					1	EX	20 A	EXISTING LIGHTING	8
9	EXISTING LIGHTING	20 A	EX	1			EX	EX			1	EX	20 A	EXISTING LIGHTING	10
11	EXISTING LIGHTING	20 A	EX	1					EX	EX	1	EX	20 A	EXISTING LIGHTING	12
13	EXISTING LIGHTING	20 A	EX	1	EX	EX					1	EX	20 A	EXISTING LIGHTING	14
15	WATER HTR. WH#11 (SCI. CR 718) - NOTE #1	40 A	8	1			8.31	0.00			1		20 A	SPARE	16
17	WATER HTR. WH#12 (SCI. CR 722) - NOTE #1	40 A	8	1					8.31	0.00	1		20 A	SPARE	18
19	WATER HTR. WH#14 (SCI. CR 718)	20 A	12	1	4.15	9.13					1		20 A	SPARE	20
21	WATER HTR. WH#15 (SCI. CR 722)	20 A	12	1			4.15	9.13			3	6	45 A	DOAS#5 (MCA = 41) (ROOF) - NOTE #1	22
23	WATER HTR. WH#16 (PREP 720)	20 A	12	1					4.15	9.13					24
25	SPARE	20 A		1	0.00	0.00					1		20 A	SPARE	26
27	SPARE	20 A		1			0.00	0.00			1		20 A	SPARE	28
29	SPARE	20 A		1					0.00	0.00	1		20 A	SPARE	30
31	SPACE	--		1	--	--					1		--	SPACE	32
33	SPACE	--		1			--	--			1		--	SPACE	34
35	SPACE	--		1					--	--	1		--	SPACE	36
37	SPACE	--		1	--	--					1		--	SPACE	38
39	SPACE	--		1			--	--			1		--	SPACE	40
41	SPACE	--		1					--	--	1		--	SPACE	42
	Total New Load Added:				13280 VA		21590 VA		21590 VA						
	Total New Amps Added:				48 A		83 A		83 A						

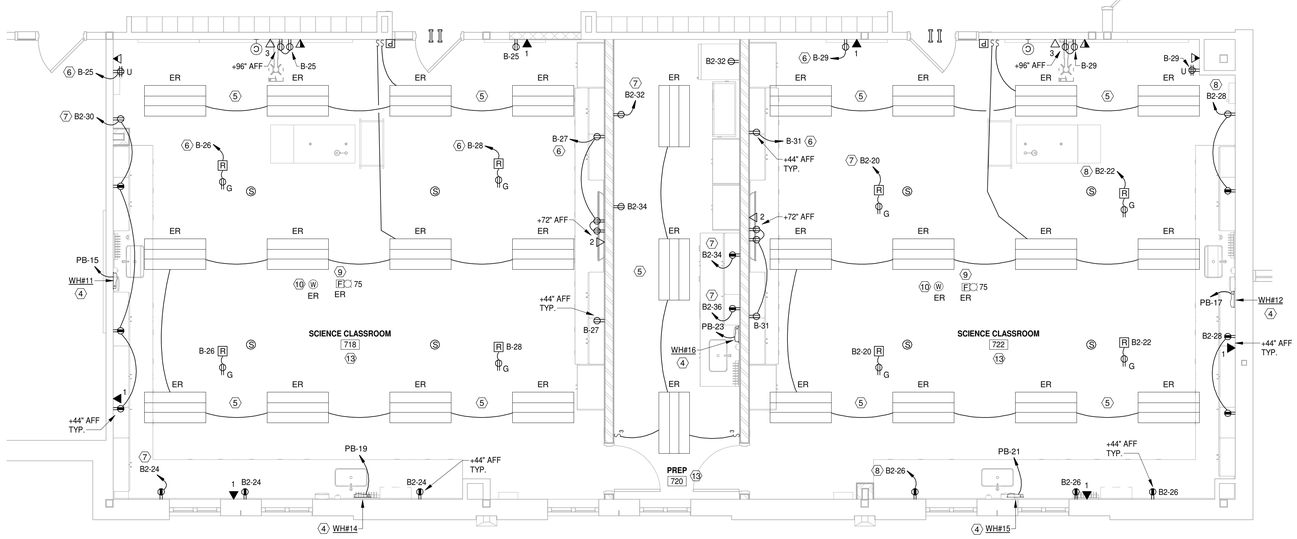
Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
HVAC	27390 VA	100.00%	27390 VA	
WATER HEATER	29070 VA	100.00%	29070 VA	**Total New Load Added:** 56460 VA
				Total New Amps Added: 71 A

Notes:
1. REPLACE EXISTING BREAKER WITH NEW BREAKER SHOWN. NEW BREAKER TYPE AND KAIC RATING SHALL MATCH EXISTING.



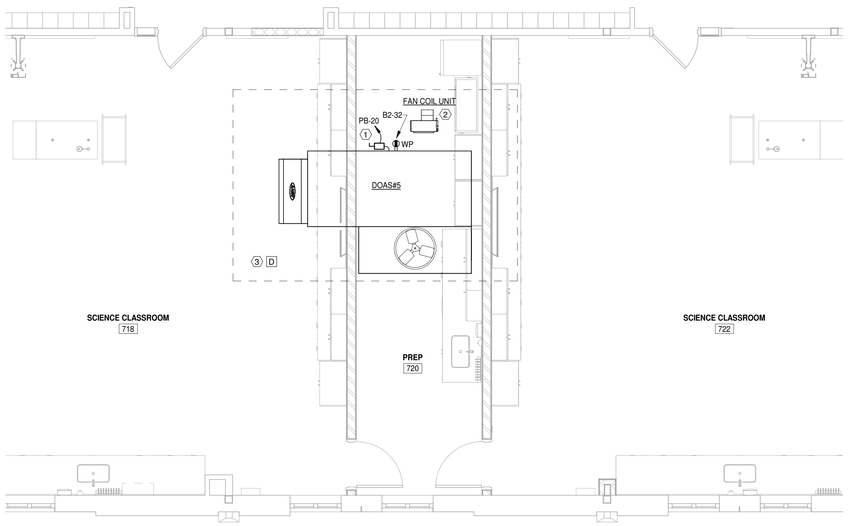
ADD ALTERNATE NO. 1 - ELECTRICAL NEW WORK NOTES

1. PROVIDE A 60A/480V/3P/3R HEAVY DUTY DISCONNECT SWITCH FOR THE DOAS UNIT AND CONNECT TO CIRCUIT SHOWN. COORDINATE DISCONNECT SWITCH MOUNTING LOCATION WITH DOAS UNIT INSTALLER.
2. EXISTING FAN COIL UNIT TO BE LOWERED BY MECHANICAL CONTRACTOR. EXTEND ALL EXISTING WIRE AND CONDUIT TO NEW LOCATION. NEW WIRE SHALL MATCH EXISTING. EXISTING FAN COIL UNIT SHALL FUNCTION AS INTENDED.
3. PROVIDE DUCT SMOKE DETECTOR IN THE EXHAUST DUCT OF DOAS UNIT. WIRE SO THAT A SIGNAL WILL BE SENT TO FACP AND THE UNIT WILL SHUT DOWN UPON DETECTION OF SMOKE.
4. WATER HEATER COMES WITH DISCONNECT SWITCH. CONNECT TO CIRCUIT SHOWN.
5. REINSTALL EXISTING RETAINED LIGHT FIXTURES AT NEW LOCATIONS SHOWN. RECONNECT TO EXISTING RETAINED WIRE AND CONDUIT. EXTEND AS NEEDED. USE (2) #12, (1) #12 G, 3/4" C. RELOCATED LIGHT FIXTURES SHALL FUNCTION AS INTENDED.
6. CONNECT NEW RECEPTACLES TO EXISTING CIRCUIT THAT BECAME AVAILABLE BY REMOVING EXISTING RECEPTACLES. EXTEND EXISTING WIRE AND CONDUIT AS NEEDED. USE (2) #12, (1) #12 G, 3/4" C.
7. CONNECT NEW RECEPTACLES TO EXISTING 20A/1P SPARE CIRCUIT SHOWN. USE (2) #12, (1) #12 G, 3/4" C.
8. CONNECT NEW RECEPTACLES TO EXISTING 20A/1P SPARE CIRCUIT SHOWN. USE (2) #10, (1) #10 G, 3/4" C.
9. REINSTALL EXISTING RETAINED FIRE ALARM DEVICE AT NEW LOCATION SHOWN. RECONNECT TO EXISTING RETAINED WIRE AND CONDUIT. EXTEND AS NEEDED. NEW WIRE SHALL MATCH EXISTING. RELOCATED FIRE ALARM DEVICE SHALL FUNCTION AS INTENDED.
10. REINSTALL EXISTING RETAINED WAP DEVICE AT NEW LOCATION SHOWN. RECONNECT TO EXISTING RETAINED WIRE AND CONDUIT. EXTEND AS NEEDED. NEW WIRE SHALL MATCH EXISTING. RELOCATED WAP DEVICE SHALL FUNCTION AS INTENDED.
11. CONNECT NEW RECEPTACLES TO EXISTING CIRCUIT THAT BECAME AVAILABLE BY REMOVING EXISTING RECEPTACLES. EXTEND EXISTING WIRE AND CONDUIT AS NEEDED. USE (2) #10, (1) #10 G, 3/4" C.
12. REPLACE EXISTING 20A/1P SPARE BREAKER IN CIRCUIT #26 OF PANEL 'PE' WITH A 40A/1P BREAKER FOR CONNECTION TO NEW WATER HEATER #13. PANEL 'PE' IS SIEMENS TYPE S3, 400A MLO, 277/480Y, 3 PH, 4W'. NEW BREAKER TYPE AND KAIC RATING SHALL MATCH EXISTING. USE (2) #6, (1) #8 G, 3/4" C. PANEL 'PE' IS LOCATED IN THE MAIN ELECTRICAL ROOM OF EXISTING BUILDING. APPROXIMATE LENGTH OF RUN IS 175'.
13. CONCEAL ALL WIRING IN CHASES AND CABINETS AS MUCH AS POSSIBLE. PROVIDE SURFACE METALLIC RACEWAY WHERE EXPOSED. PAINT TO MATCH ADJACENT SURFACES.



EXISTING CLASSROOMS 718, 720, 722 - ELECTRICAL NEW WORK
1/4" = 1'-0"

ALL SHOWN LIGHT IS EXISTING TO REMAIN/EXISTING RELOCATED
ALL SHOWN DARK IS NEW WORK
SEE SHEET A-007 FOR LOCATIONS OF INETRIOR RENOVATION AREAS



EXISTING CLASSROOMS 718, 720, 722 - HVAC CONNECTION PLAN
1/4" = 1'-0"

MARK	DATE	REVISIONS DESCRIPTION	BY

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Mechanical • Electrical • Plumbing
JOB NO. 23050

DATE	PROJECT	DESIGNED	DRAWN	CHECKED
4/8/24	23143-00	RKCM	RKCM	RKCM

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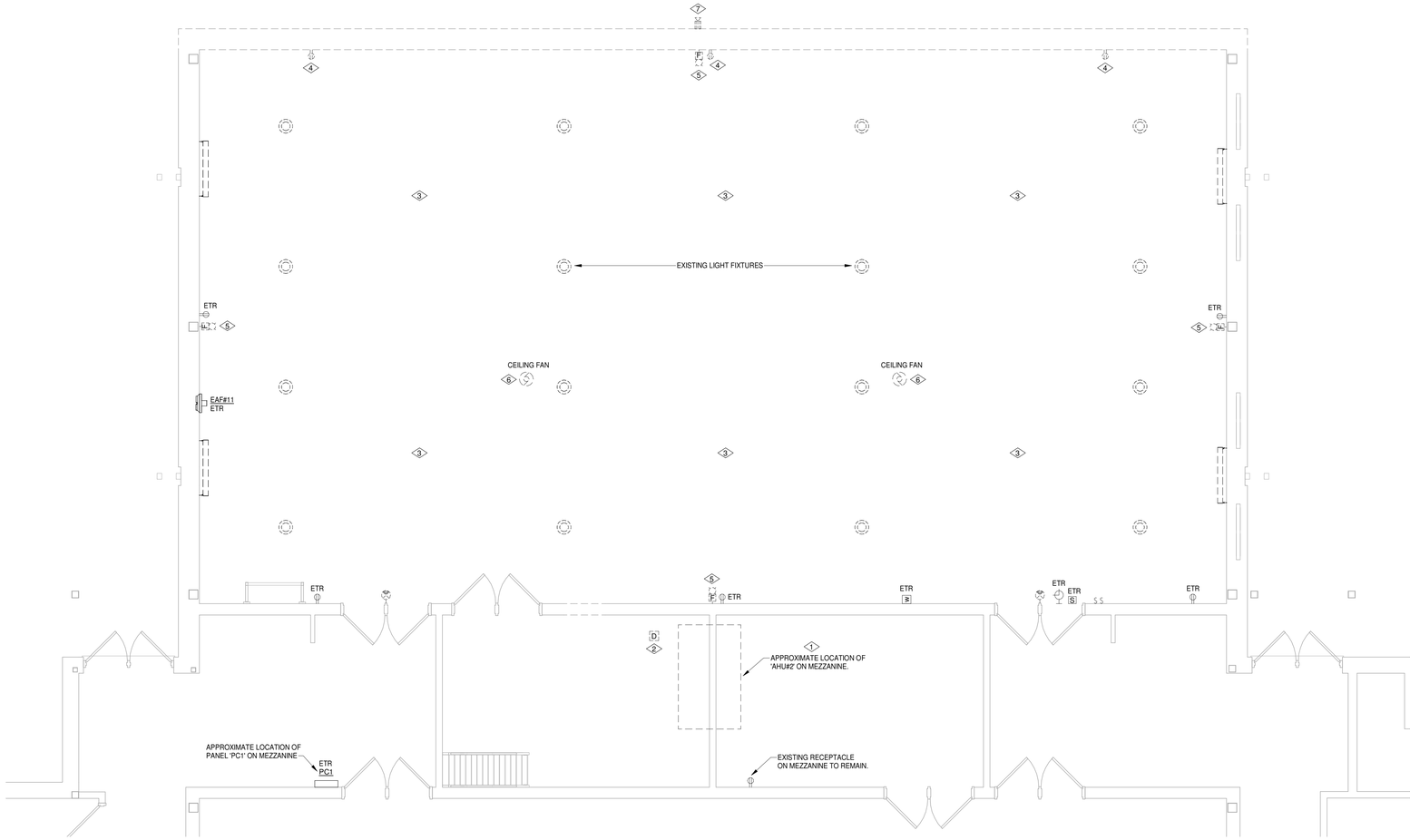
COMMONWEALTH OF VIRGINIA
T. A. ROCKECHARLIE JR.
Lic. No. 29125
8 APRIL 2024
PROFESSIONAL ENGINEER

PROJECT
LOUISA COUNTY PUBLIC SCHOOLS
LOUISA COUNTY MIDDLE SCHOOL ADDITION
1009 DAVIS HIGHWAY
MINERAL, VIRGINIA

DRAWING
ADD ALTERNATE NO. 1 - ELECTRICAL NEW WORK PLAN

SHEET
E-502

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EXISTING AUX GYM 103 - ELECTRICAL DEMOLITION

1/4" = 1'-0"

NOTE: SEE SHEET A-007 FOR AUX GYM LOCATION

EXISTING AUX GYM 103 - ELECTRICAL DEMOLITION NOTES

1. REMOVE ALL ELECTRICAL ASSOCIATED WITH EXISTING 'AHU#2' BEING REMOVED. REMOVE ALL ASSOCIATED WIRE AND CONDUIT BACK TO SOURCE. 'AHU#2' IS FED FROM A 15A/3P CIRCUIT BREAKER IN PANEL 'PC1'. EXISTING BREAKER WILL BE REUSED TO CONNECT TO NEW 'AHU#2'.
2. REMOVE EXISTING DUCT SMOKE DETECTOR. RETAIN ALL ASSOCIATED WIRE AND CONDUIT FOR RECONNECTION TO NEW DUCT SMOKE DETECTOR.
3. REMOVE ALL EXISTING LIGHT FIXTURES IN THIS SPACE. REMOVE ALL ASSOCIATED SWITCHES. REMOVE ALL ASSOCIATED WIRE AND CONDUIT BACK TO SOURCE. EXISTING CIRCUIT WILL BE REUSED TO CONNECT TO NEW LIGHT FIXTURES.
4. REMOVE EXISTING RECEPTACLES SHOWN DASHED. REMOVE ALL ASSOCIATED WIRE AND CONDUIT TO JUNCTION BOX IN STRUCTURE. EXISTING CIRCUIT WILL BE REUSED TO CONNECT TO NEW RECEPTACLES.
5. REMOVE EXISTING FIRE ALARM DEVICE AND RETUNR TO OWNER. RETAIN ALL ASSOCIATED WIRE AND CONDUIT FOR EXTENSION TO NEW DEVICES.
6. DISCONNECT EXISTING CEILING FANS BEING REMOVED. REMOVE ASSOCIATED CONTROL SWITCH. REMOVE ALL ASSOCIATED WIRE AND CONDUIT TO NEAREST JUNCTION BOX. ALSO REMOVE WIRE AT SOURCE PANEL TO NEAREST JUNCTION BOX. CAP WIRING AND CONCEAL IN JUNCTION BOX. PROVIDE BLANK COVER PLATE. TURN OFF AND MARK ASSOCIATED BREAKER AS SPARE.
7. REMOVE EXISTING CAMERA AND STORE SAFELY FOR REUSE. RETAIN ALL ASSOCIATED WIRE AND CONDUIT FOR EXTENSION TO NEW LOCATION.

ALL SHOWN LIGHT IS EXISTING TO REMAIN
ALL SHOWN DASHED IS TO BE REMOVED

1/32" = 1'-0" | 1/16" = 1'-0" | 3/32" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0" | 12" = 1'-0"

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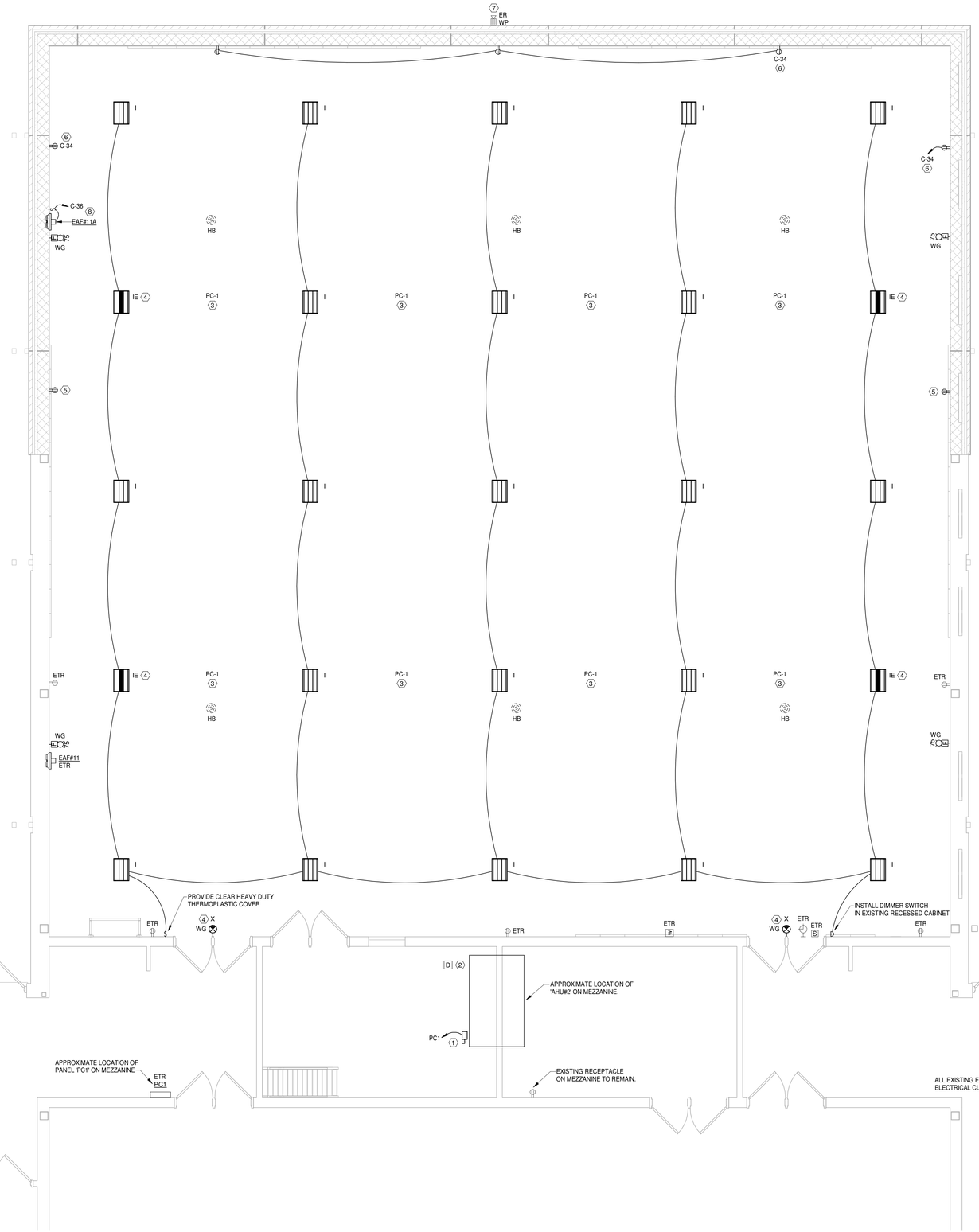
COMMONWEALTH OF VIRGINIA
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8 APRIL 2024
PROFESSIONAL ENGINEER

PROJECT
LOUISA COUNTY PUBLIC SCHOOLS
LOUISA COUNTY MIDDLE SCHOOL ADDITION
1009 DAVIS HIGHWAY
MINERAL, VIRGINIA

DRAWING
ADD ALTERNATE NO. 2 - ELECTRICAL DEMO PLAN

SHEET
E-511

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EXISTING AUX GYM 103 - ELECTRICAL NEW WORK NOTES

1. PROVIDE A 30A/480V/3P, HD DISCONNECT SWITCH FOR 'AHU#2' AND CONNECT TO EXISTING 15A/3P CIRCUIT BREAKER IN PANEL 'PC1' THAT BECAME AVAILABLE BY REMOVING EXISTING 'AHU#2'. USE (3) #12, (1) #12 G, 3/4" C. COORDINATE DISCONNECT SWITCH MOUNTING LOCATION WITH 'AHU#2' INSTALLER.
2. PROVIDE DUCT SMOKE DETECTOR IN THE RETURN DUCT OF 'AHU#2'. RECONNECT TO EXISTING RETAINED WIRE AND CONDUIT. DUCT SMOKE DETECTOR SHALL SEND A SIGNAL TO FACP AND SHUT DOWN THE UNIT UPON DETECTION OF SMOKE.
3. U.O.N., CONNECT ALL LIGHT FIXTURES IN THIS SPACE TO EXISTING CIRCUIT THAT BECAME AVAILABLE BY REMOVING THE EXISTING LIGHT FIXTURES. USE (2) #12, (1) #12 G, 3/4" C.
4. CONNECT EMERGENCY LIGHT FIXTURE TO NORMAL CIRCUIT AND NEAREST EMERGENCY CIRCUIT VIA AN EMERGENCY RELAY PACK EQUAL TO 'LEGRAND ELCU200'. WIRE SO THAT THE FIXTURE COMES TO FULL BRIGHTNESS WHEN NORMAL POWER IS LOST. CONNECT EXIT SIGNS UNSWITCHED TO NEAREST EMERGENCY CIRCUIT.
5. CONNECT NEW RECEPTACLES TO EXISTING CIRCUIT THAT BECAME AVAILABLE BY REMOVING EXISTING RECEPTACLES. EXTEND EXISTING WIRE AND CONDUIT AS NEEDED. NEW WIRE SHALL MATCH EXISTING.
6. CONNECT NEW RECEPTACLES TO EXISTING 20A/1P SPARE CIRCUIT SHOWN. USE (2) #8, (1) #8 G, 3/4" C.
7. REINSTALL EXISTING RETAINED CAMERA AT NEW LOCATION SHOWN. MOUNT AT SAME HEIGHT AS EXISTING. RECONNECT TO EXISTING RETAINED WIRE AND CONDUIT. EXTEND AS NEEDED. NEW WIRE SHALL MATCH EXISTING. RELOCATED CAMERA SHALL FUNCTION AS INTENDED.
8. PROVIDE A TOGGLE DISCONNECT SWITCH (WITH WIRE GUARD) FOR THE EXHAUST FAN AND CONNECT TO CIRCUIT SHOWN. USE (2) #6, (1) #6 G, 3/4" C.

ALL SHOWN LIGHT IS EXISTING TO REMAIN/EXISTING RELOCATED
ALL SHOWN DARK IS NEW WORK

EXISTING AUX GYM 103 - ELECTRICAL NEW WORK

1/4" = 1'-0"

NOTE: SEE SHEET A-007 FOR AUX GYM LOCATION

REVISIONS			
MARK	DATE	BY	DESCRIPTION

10150 Staples Mill Rd, Suite A
Glen Allen, VA 23060
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SIMMONS, ROCKECHARLIE & PRINCE INC.
Mechanical and Electrical Engineers
JOB NO. 23050

DATE	4/8/24
PROJECT	23143-00
DESIGNED	RKCM
DRAWN	RKCM
CHECKED	RKCM

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COMMONWEALTH OF VIRGINIA
R. A. ROCKECHARLIE III
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8 APRIL 2024
PROFESSIONAL ENGINEER

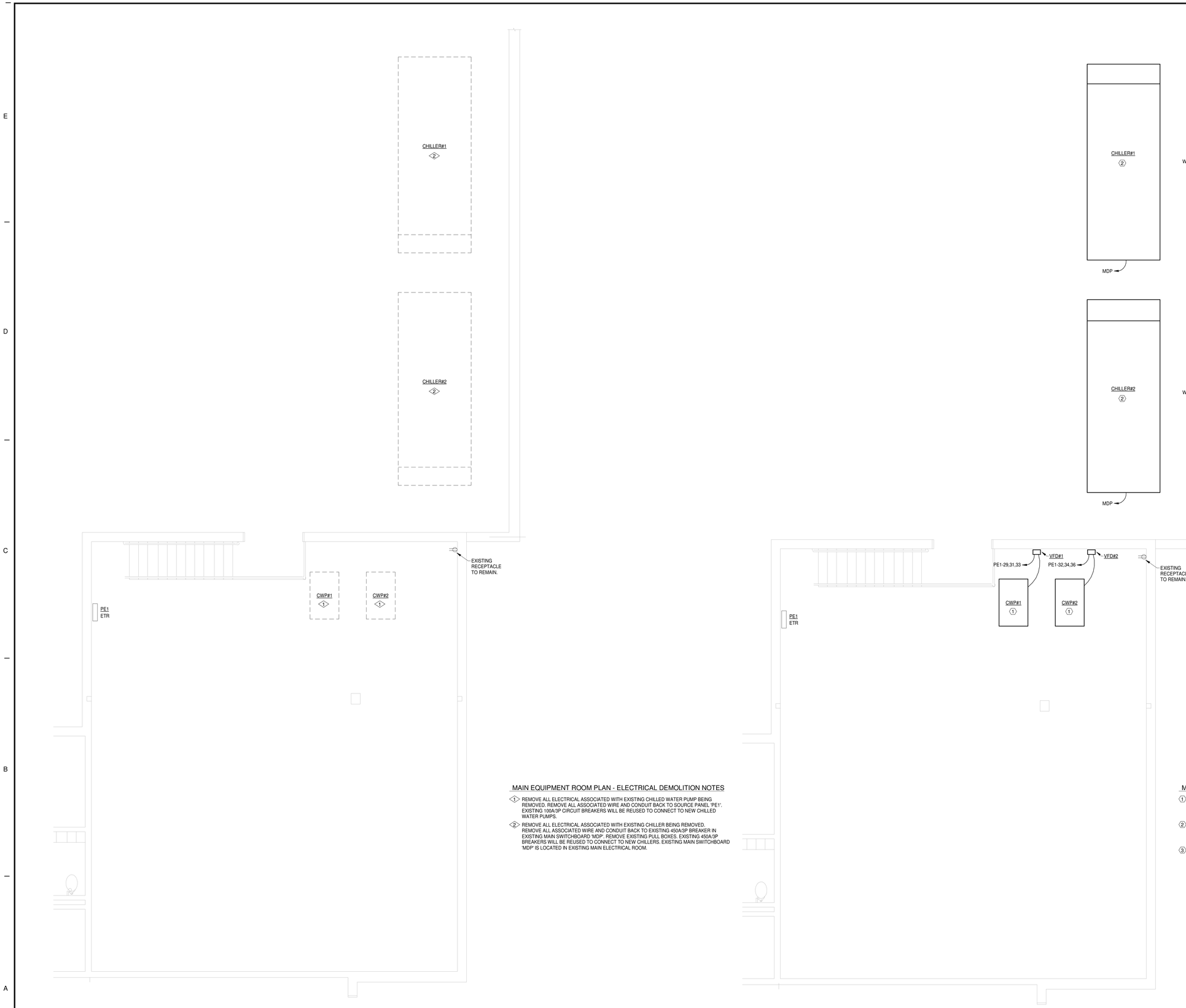
PROJECT
LOUISA COUNTY PUBLIC SCHOOLS
LOUISA COUNTY MIDDLE SCHOOL ADDITION
1009 DAVIS HIGHWAY
MINERAL, VIRGINIA

DRAWING
ADD ALTERNATE NO. 2 - ELECTRICAL NEW WORK PLAN

SHEET
E-512

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1/32" = 1'-0" | 1/16" = 1'-0" | 3/32" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0" | 12" = 1'-0"



MAIN EQUIPMENT ROOM PLAN - ELECTRICAL DEMOLITION NOTES

1. REMOVE ALL ELECTRICAL ASSOCIATED WITH EXISTING CHILLED WATER PUMP BEING REMOVED. REMOVE ALL ASSOCIATED WIRE AND CONDUIT BACK TO SOURCE PANEL 'PE1'. EXISTING 100A/3P CIRCUIT BREAKERS WILL BE REUSED TO CONNECT TO NEW CHILLED WATER PUMPS.
2. REMOVE ALL ELECTRICAL ASSOCIATED WITH EXISTING CHILLER BEING REMOVED. REMOVE ALL ASSOCIATED WIRE AND CONDUIT BACK TO EXISTING 450A/3P BREAKER IN EXISTING MAIN SWITCHBOARD 'MDP'. REMOVE EXISTING PULL BOXES. EXISTING 450A/3P BREAKERS WILL BE REUSED TO CONNECT TO NEW CHILLERS. EXISTING MAIN SWITCHBOARD 'MDP' IS LOCATED IN EXISTING MAIN ELECTRICAL ROOM.

MAIN EQUIPMENT ROOM PLAN - ELECTRICAL NEW WORK NOTES

1. CHILLED WATER PUMP COMES WITH VFD. CONTRACTOR SHALL INSTALL AND CONNECT TO EXISTING 100A/3P BREAKER IN PANEL 'PE1' THAT BECAME AVAILABLE BY REMOVING THE EXISTING CHILLED WATER PUMP. USE (3) #1, (1) #6 G, 1-1/2" C. COORDINATE EXACT LOCATION OF VFD ON SITE. MAINTAIN ALL NEC CLEARANCES.
2. CHILLER COMES WITH CIRCUIT BREAKER DISCONNECT. CONNECT TO EXISTING 450A/3P BREAKER IN EXISTING SWITCHBOARD 'MDP' THAT BECAME AVAILABLE BY REMOVING EXISTING CHILLER. USE TWO SETS OF (3) #4/0, (1) #2 G, 2" C. APPROXIMATE LENGTH OF RUN IS 100'. EXISTING SWITCHBOARD 'MDP' IS LOCATED IN EXISTING MAIN ELECTRICAL ROOM.
3. PROVIDE NEW RECEPTACLE AS SHOWN AND CONNECT TO NEAREST EXISTING RECEPTACLE CIRCUIT. VERIFY LOAD AND NUMBER OF RECEPTACLES ON THE CIRCUIT PER NEC. USE (2) #12, (1) #12 G, 3/4" C.

ALL SHOWN LIGHT IS EXISTING TO REMAIN
ALL SHOWN DASHED IS TO BE REMOVED
ALL SHOWN DARK IS NEW WORK
SEE SHEET E-402 FOR LOCATION OF CHILLERS

MAIN EQUIPMENT ROOM PLAN - ELECTRICAL - DEMOLITION
1/4" = 1'-0"

MAIN EQUIPMENT ROOM PLAN - ELECTRICAL - NEW WORK
1/4" = 1'-0"

MARK	DATE	REVISIONS	BY
		DESCRIPTION	

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115 South 15th Street, Suite 502
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COMMONWEALTH OF VIRGINIA
R. A. ROCKECHARLIE III
Lic. No. 29725
8 APRIL 2024
PROFESSIONAL ENGINEER

PROJECT
LOUISA COUNTY PUBLIC SCHOOLS
LOUISA COUNTY MIDDLE SCHOOL ADDITION
1009 DAVIS HIGHWAY
MINERAL, VIRGINIA

DRAWING
ADD ALTERNATE NO. 2 - CHILLER REPLACEMENT - ELECTRICAL PLAN

SHEET
E-513

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