

Electrical Equipment Replacement

FIELDS ROAD ELEMENTARY SCHOOL

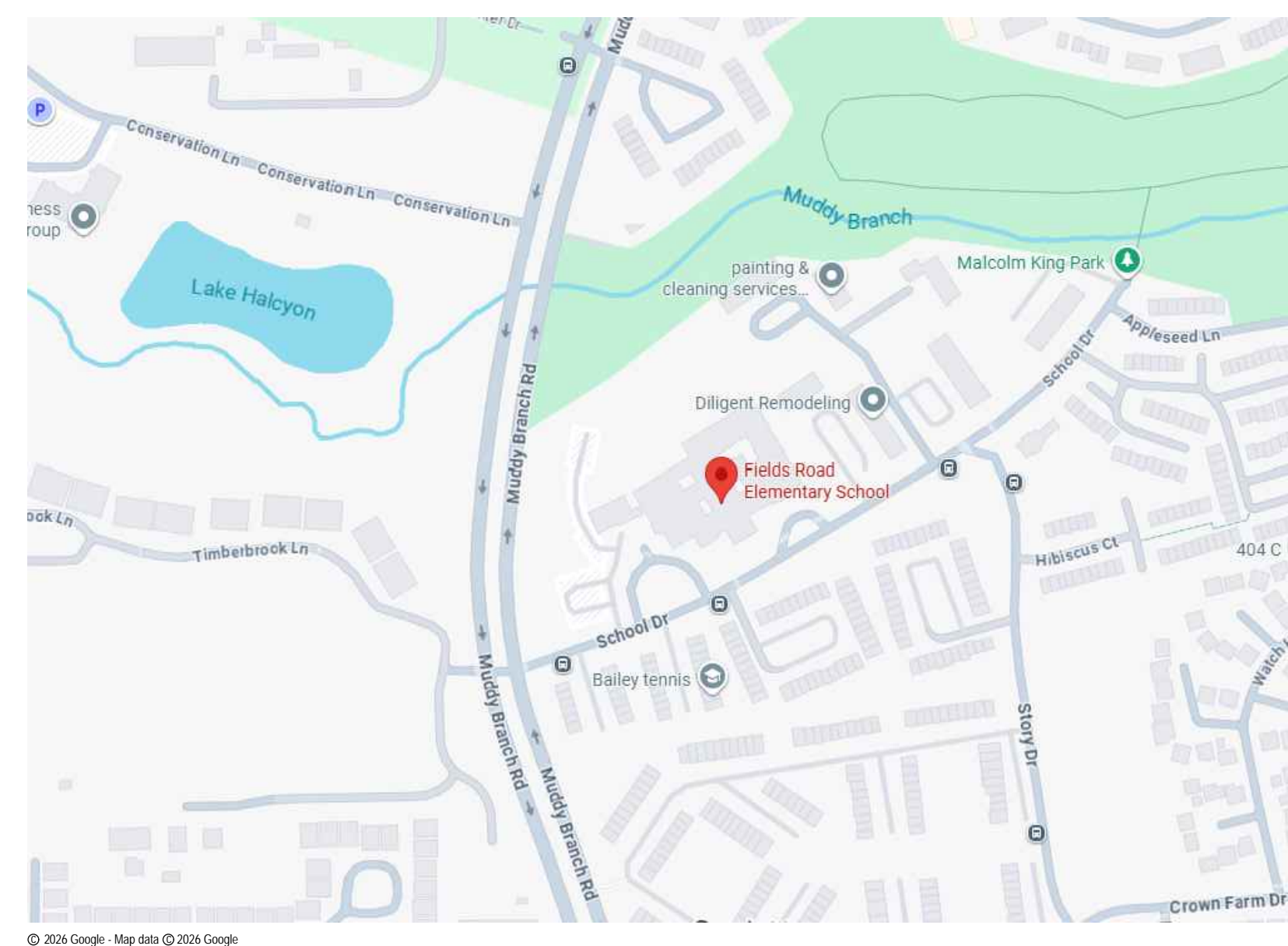
1 SCHOOL DRIVE, GAITHERSBURG, MD 20878

Montgomery County Public Schools

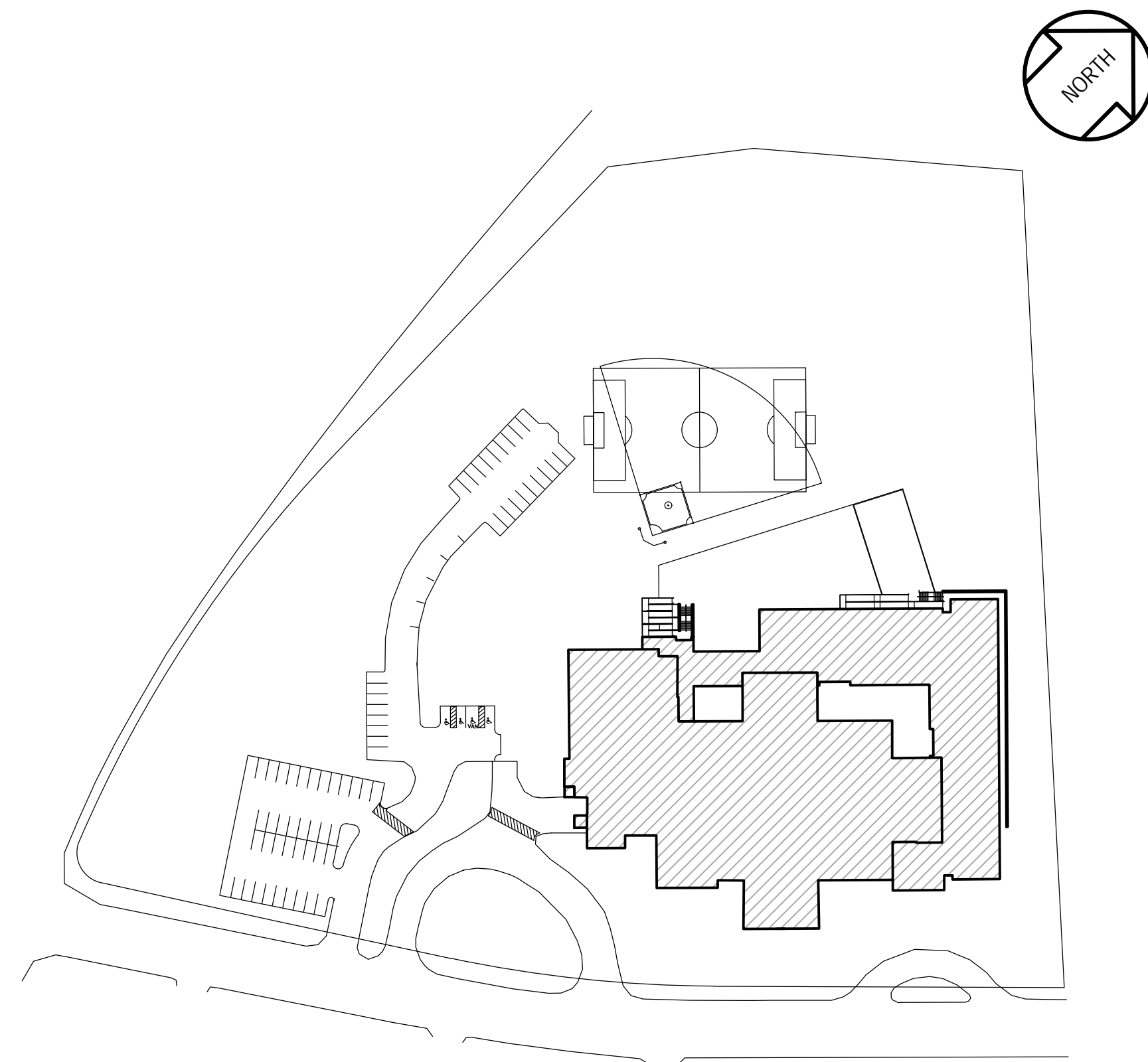
ELECTRICAL ENGINEERS
 JAMES POSEY ASSOCIATES, INC.
 11155 RED RUN BOULEVARD, SUITE 310
 BALTIMORE, MARYLAND 21117
 PHONE: 410.265.6100

ELECTRICAL EQUIPMENT REPLACEMENT
FIELDS ROAD ELEMENTARY SCHOOL
 1 SCHOOL DRIVE
 GAITHERSBURG, MD 20878
 MONTGOMERY COUNTY PUBLIC SCHOOLS

VICINITY PLAN



SITE PLANS



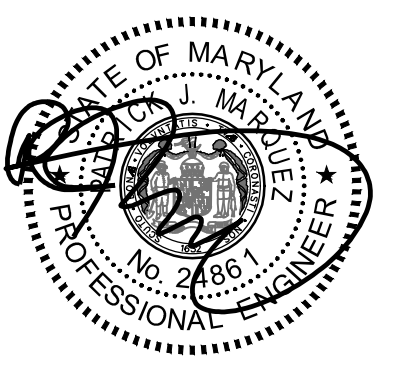
DRAWING INDEX

- T-1 TITLE SHEET
- ELECTRICAL**
- E-0 SYMBOLS LIST, ABBREVIATIONS, AND DETAILS
- E-1 PART FIRST FLOOR PLAN
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PROFESSIONAL CERTIFICATION

These contract documents for Fields Road Elementary School were prepared under my supervision and to the best of my knowledge, information, and belief, they comply with the relevant building codes of the State of Maryland.

04/17/2026 (Date)
 Maryland Professional Engineer Registration No. 24861



Professional Certification
 I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 24861. Expiration date: 02-24-2028.



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SCOPE OF WORK

SCOPE OF WORK GENERALLY CONSISTS OF THE FOLLOWING:
 - REPLACE I-T-E SWITCHBOARD AND TWELVE (12) PANELBOARDS.

THE SCOPE OF WORK INDICATED ON THIS SHEET IS INTENDED AS A BRIEF SUMMARY FOR GENERAL INFORMATIONAL PURPOSES ONLY, AND DOES NOT NECESSARILY INCLUDE ALL OF THE WORK REQUIRED. THE CONTRACTOR SHALL PROVIDE MATERIALS AND LABOR AS REQUIRED TO COMPLETE THE WORK AS INDICATED IN THE CONTRACT DOCUMENTS.

APPLICABLE CODES & STANDARDS

- 2021 IBC: INTERNATIONAL BUILDING CODE
- 2017 NEC: NATIONAL ELECTRICAL CODE

BOARD OF EDUCATION

- | | |
|-----------------------|--|
| DR. THOMAS W. TAYLOR | SUPERINTENDENT |
| MS. ANDREA SWIATOCHA | DEPUTY CHIEF, MCPS DIVISION OF FACILITIES MANAGEMENT |
| MS. GRACE RIVERA-OVEN | PRESIDENT / DISTRICT 1 |
| MS. BRENDA WOLFF | VICE PRESIDENT / DISTRICT 5 |
| MS. KARLA SILVESTRE | AT LARGE |
| MS. JULIE YANG | DISTRICT 3 |
| MS. RITA MONTOYA | AT LARGE |
| MS. LAURA STEWART | DISTRICT 4 |
| MS. NATALIE ZIMMERMAN | DISTRICT 2 |
| MS. ANUVA MALOO | STUDENT MEMBER |

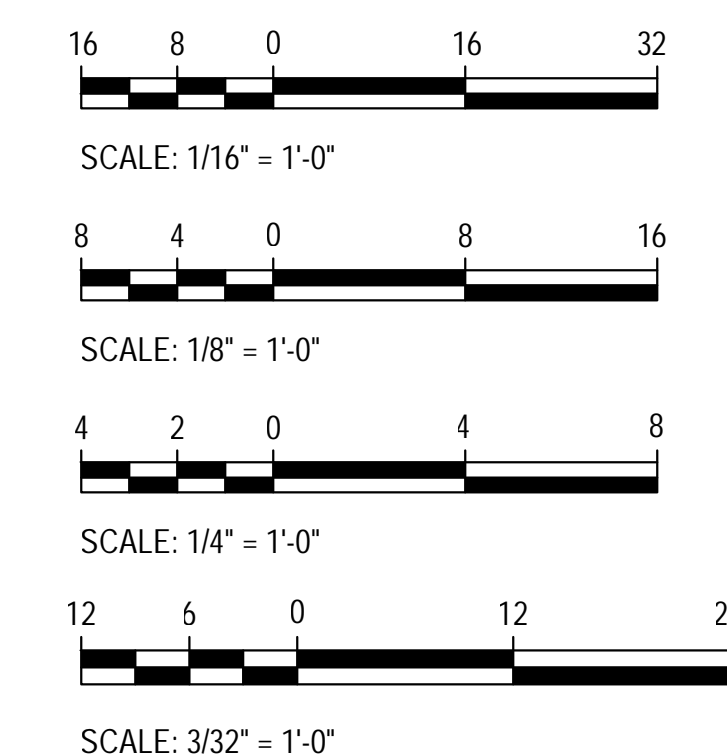
CODE ANALYSIS

CODE ANALYSIS (FROM INTERNATIONAL BUILDING CODE/2018)		
	EXISTING BLDG	PROPOSED ALTERATION
IBC OCCUPANCY CLASSIFICATION	E	THE SCOPE OF THIS WORK IS TO REPLACE I-T-E SWITCHBOARD AND TWELVE (12) PANELBOARDS.
TYPE OF CONSTRUCTION	IIB	
NUMBER OF STORIES ABOVE GRADE	1	
HIGH RISE (Y/N)	N	
FIRE ALARM (Y/N)	Y	
FULLY SPRINKLERED (Y/N)	Y	
TOTAL BUILDING FLOOR AREA	72,302 SF	

ALTERNATE BID SCOPE OF WORK

ALTERNATE 1: FEEDER ALTERNATE: REMOVE EXISTING UNDERGROUND CONDUCTORS AND ABANDON EXISTING CONDUIT BELOW GRADE, AND PROVIDE OVERHEAD FEEDERS WHERE INDICATED.

GRAPHIC SCALES

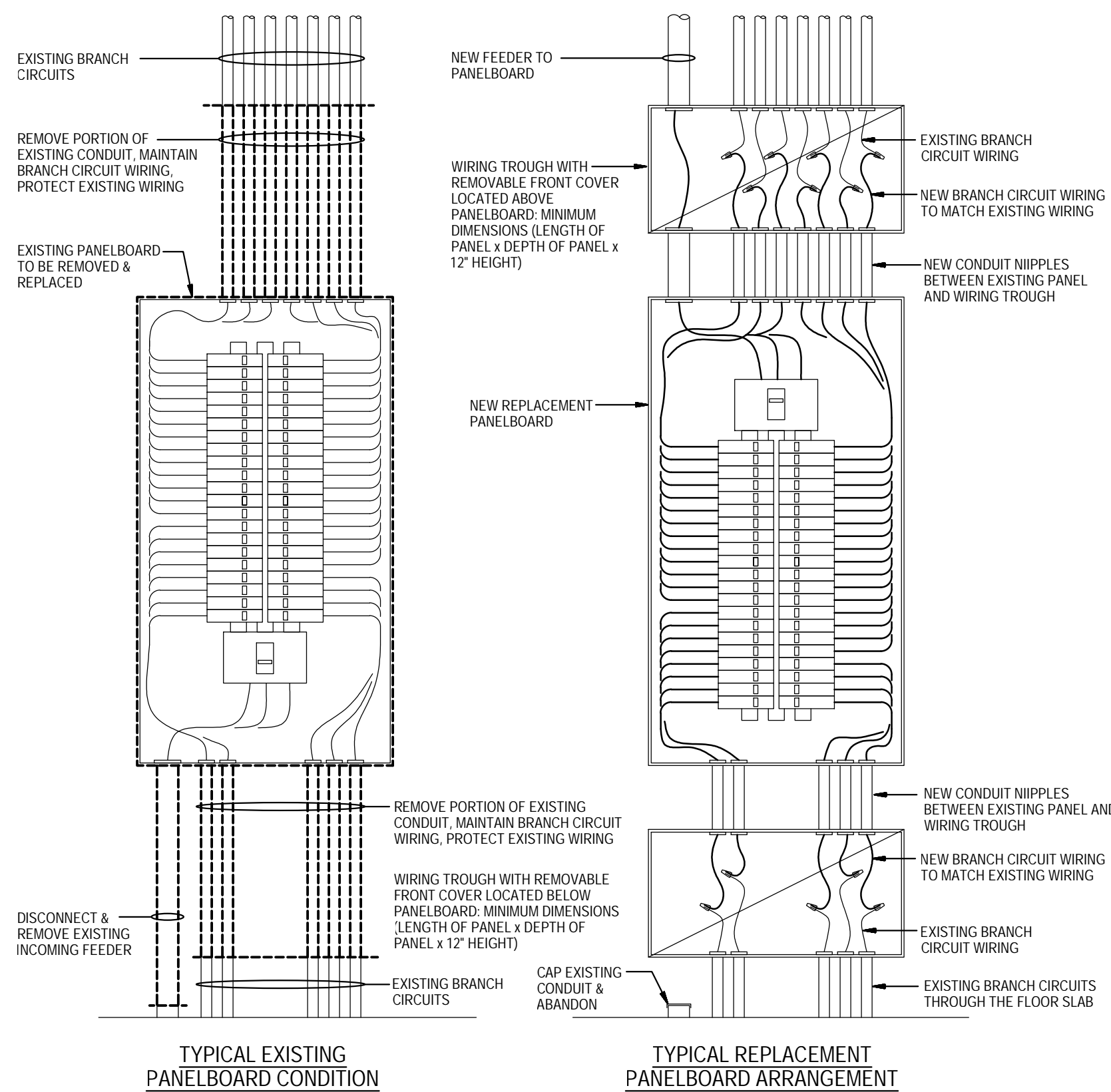


Tag	Description	Date
	BID SET	04/17/26

PSC Number	L15F020
Scale	AS NOTED
Project Number	B253-25
Date	APRIL 17, 2026

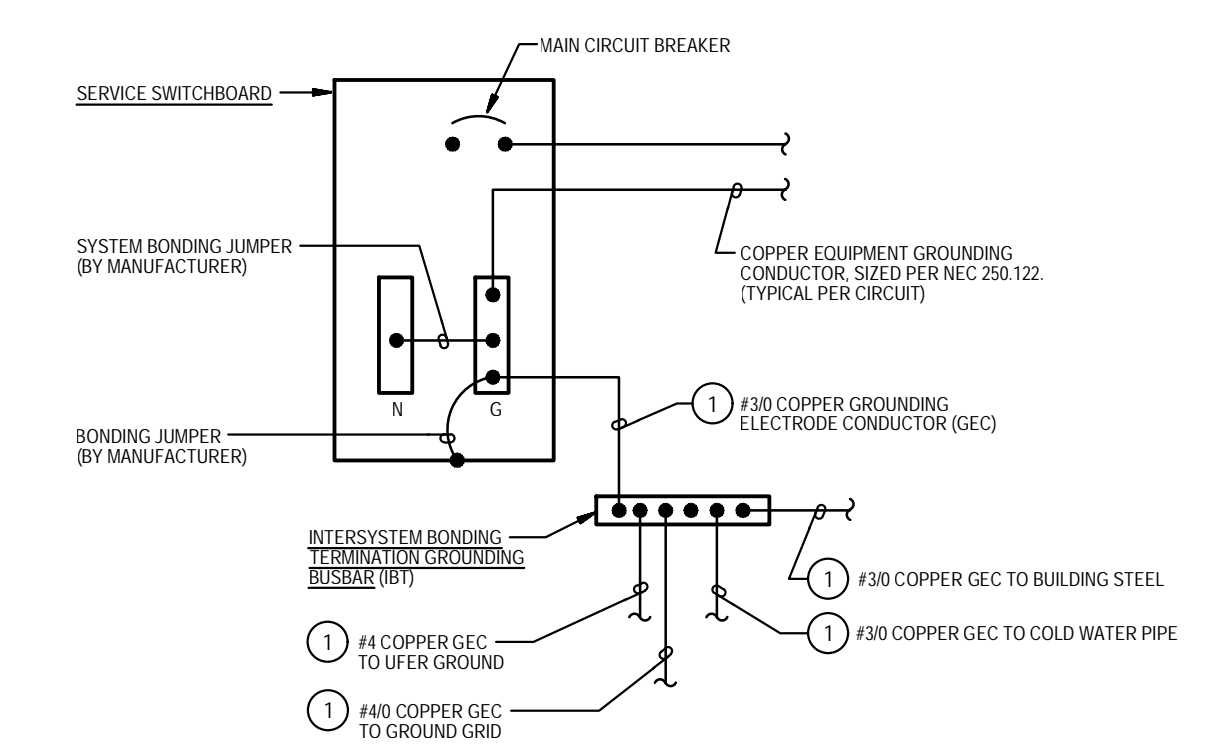
Drawing Title
TITLE SHEET

Sheet Number
T-1

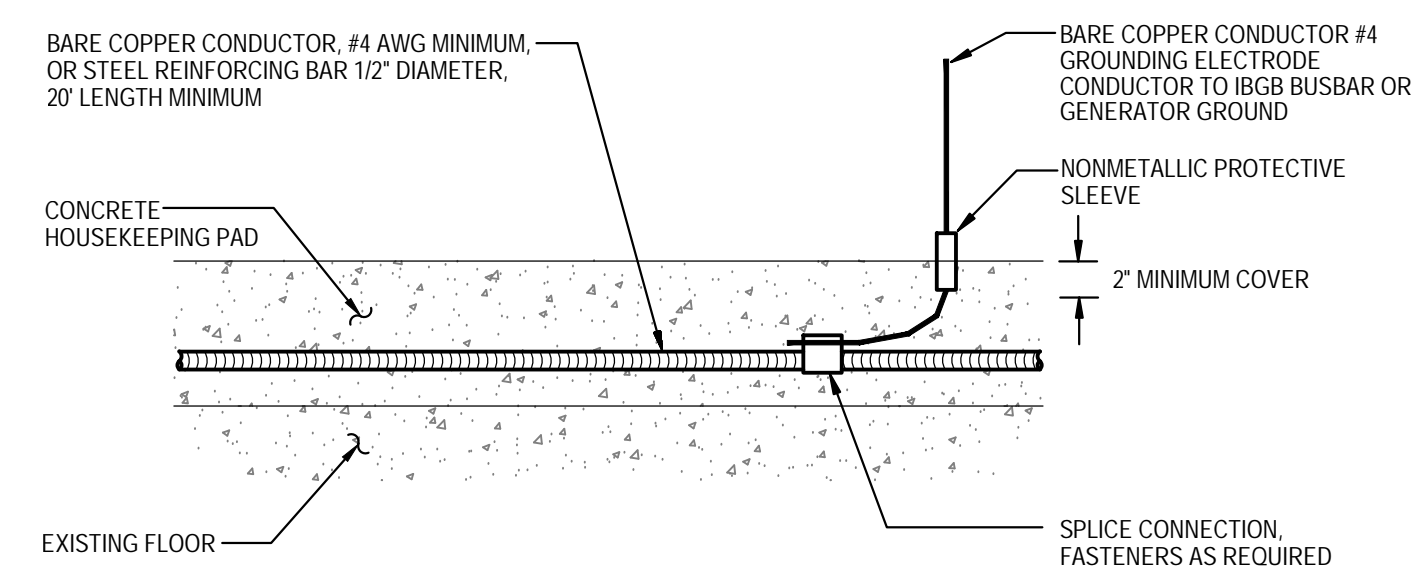


NOTES:
 A. DETAIL SHOWS PROPOSED METHOD OF INSTALLATION OF REPLACEMENT PANELBOARD. CONTRACTOR MAY USE ALTERNATE METHOD UPON APPROVAL.
 B. PANELBOARD SHALL BE MOUNTED IN SAME LOCATION AS EXISTING PANELBOARD.
 C. NEW BRANCH CIRCUIT WIRING SHALL MATCH SIZE AND TYPE OF EXISTING BRANCH CIRCUIT WIRING AND BE SPLICED IN WIRING TROUGH AS INDICATED.

1
 E-0
DETAIL
REPLACEMENT PANEL INSTALLATION (TYPICAL)
 NOT TO SCALE



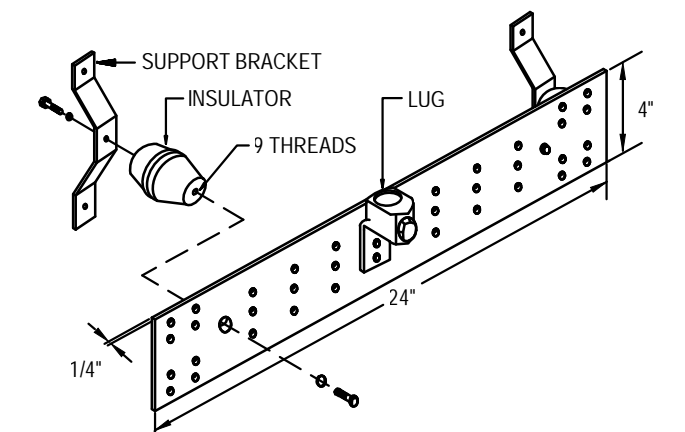
2
 E-0
DETAIL
SERVICE GROUND WIRING DIAGRAM
 NOT TO SCALE



3
 E-0
DETAIL
UFER GROUND IN HOUSEKEEPING PAD
 NOT TO SCALE

EMERGENCY AND STANDBY POWER
 60KW, 277/480 VOLTS, 3-PHASE, 4-WIRE
 NATURAL GAS GENERATOR
 LOCATED OUTDOORS
 OUTSIDE OF BOILER ROOM

5
 E-0
DETAIL
PLACARD AT MAIN SERVICE
 NOT TO SCALE



BUSBAR DETAIL NOTES:
 1. INTERSYSTEM BONDING TERMINATION GROUNDING BUSBAR (BT) SHALL BE HARGER BCSI PATTERN TGB KIT, PART NO. TGB14241MCSKT, OR APPROVED EQUAL. ALL CONNECTIONS TO THESE SHALL BE EXOTHERMIC WELD OR 2 LUG CONNECTION.
 2. REFER TO DETAIL 2E-0 FOR CONNECTIONS.

4
 E-0
DETAIL
GROUNDING BUSBAR ASSEMBLY
 NOT TO SCALE

ELECTRICAL SYMBOLS AND ABBREVIATIONS

DEMOLITION	
-----	DISCONNECT AND REMOVE EXISTING WIRING IN CONDUIT.
⊠	DISCONNECT, REMOVE, AND REPLACE EXISTING SURFACE-MOUNTED 120/208V PANELBOARD AS INDICATED.
⊠	DISCONNECT, REMOVE, AND REPLACE EXISTING RECESSED-MOUNTED 120/208V PANELBOARD AS INDICATED.
⊠	DISCONNECT, REMOVE, AND REPLACE EXISTING TRANSFORMER.
EXISTING	
⊠	EXISTING TO REMAIN PANELBOARD, 277/480V OR 120/208V, SURFACE OR RECESSED MOUNTED.
⊠	EXISTING TO REMAIN EQUIPMENT CABINET AS INDICATED.
⊠	EXISTING TO REMAIN PULLBOX
⊠	EXISTING TO REMAIN TRANSFORMER
—	EXISTING TO REMAIN WIRING IN CONDUIT.
—	EXISTING TO REMAIN WIRING IN CONDUIT CONTINUED.
⊠	EXISTING TO REMAIN ENCLOSED SWITCH (DISCONNECT/SAFETY SWITCH).
⊠	EXISTING TO REMAIN ENCLOSED CIRCUIT BREAKER.
⊠	EXISTING TO REMAIN AUTOMATIC TRANSFER SWITCH.
POWER	
—	WIRING IN CONDUIT RUN CONCEALED IN CEILING SPACE ABOVE CEILINGS AND EXPOSED IN OPEN CEILINGS, UNLESS OTHERWISE NOTED. PROVIDE GROUND WIRES IN CONDUITS.
—	WIRING IN CONDUIT CONTINUED.
⊠	PULLBOX, SIZED AS REQUIRED.
⊠	ELECTRIC PANELBOARD 120/208V OR 277/480V, SURFACE MOUNTED.
⊠	SURGE PROTECTIVE DEVICE.
⊠	GROUNDING BUSBAR.
⊠	PEPCO UTILITY METER.

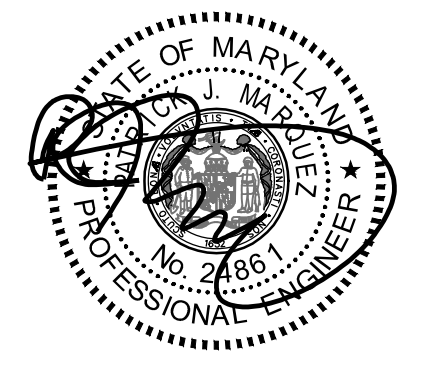
GENERAL	
①	DENOTES REFERENCE TO SPECIFIC NOTE ON DRAWING.
1 E-0	DETAIL, DIAGRAM, OR PLAN NUMBER.
1/E-0	DRAWING NUMBER WHERE DETAIL, DIAGRAM, OR PLAN IS LOCATED.
1/E-0	DETAIL REFERENCE: DETAIL, DIAGRAM, OR PLAN NUMBER/DRAWING NUMBER.
ABBREVIATIONS	

A, AMP	AMPERE(S)	LTG	LIGHTING
AHU	AIR-HANDLING UNIT	MCPS	MONTGOMERY COUNTY PUBLIC SCHOOLS
AIC	AMPERES INTERRUPTING CAPACITY	MIN	MINIMUM
AP	ASSISTANT PRINCIPAL	NEC	NATIONAL ELECTRICAL CODE
ATS	AUTOMATIC TRANSFER SWITCH	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
BLDG	BUILDING	NO.	NUMBER
BS	BUILDING SERVICES	OFF	OFFICE
C	CONDUIT	P	POLE(S)
CONF	CONFERENCE	PH	PHASE
CORR	CORRIDOR	REC	RECEPTACLE
CR	CLASSROOM	RM	ROOM
C/T	CURRENT TRANSFORMERS	RTU	ROOFTOP UNIT
DIST	DISTRIBUTION	RX	REMOVE EXISTING
ECB	ENCLOSED CIRCUIT BREAKER	SPD	SURGE PROTECTIVE DEVICE
ELEC	ELECTRICAL	STO	STORAGE
ETR	EXISTING TO REMAIN	U.V.	UNIT VENTILATOR
EX	EXISTING	V	VOLT(S)
EXT	EXTERIOR	W	WIRE(S)
FLR	FLOOR	XFMR	TRANSFORMER
G	GROUND	&	AND
GEC	GROUNDING ELECTRODE CONDUCTOR		
GFCI	GROUND FAULT CIRCUIT INTERRUPTER		
IBC	INTERNATIONAL BUILDING CODE		
KIT	KITCHEN		
KVA	KILOVOLT-AMPERES		

ELECTRICAL EQUIPMENT REPLACEMENT

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 1 SCHOOL DRIVE
 GAITHERSBURG, MD 20878

MONTGOMERY COUNTY PUBLIC SCHOOLS



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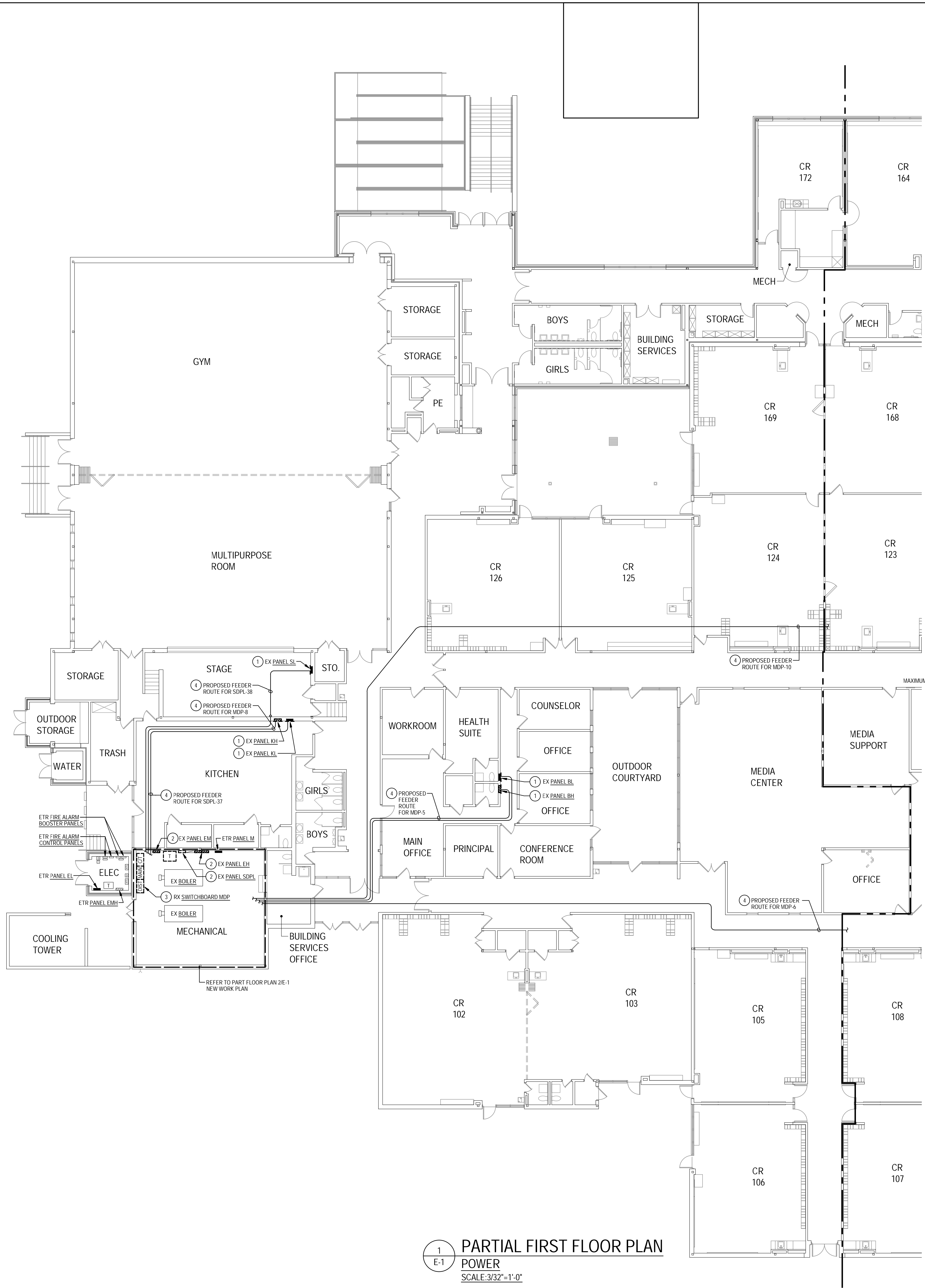
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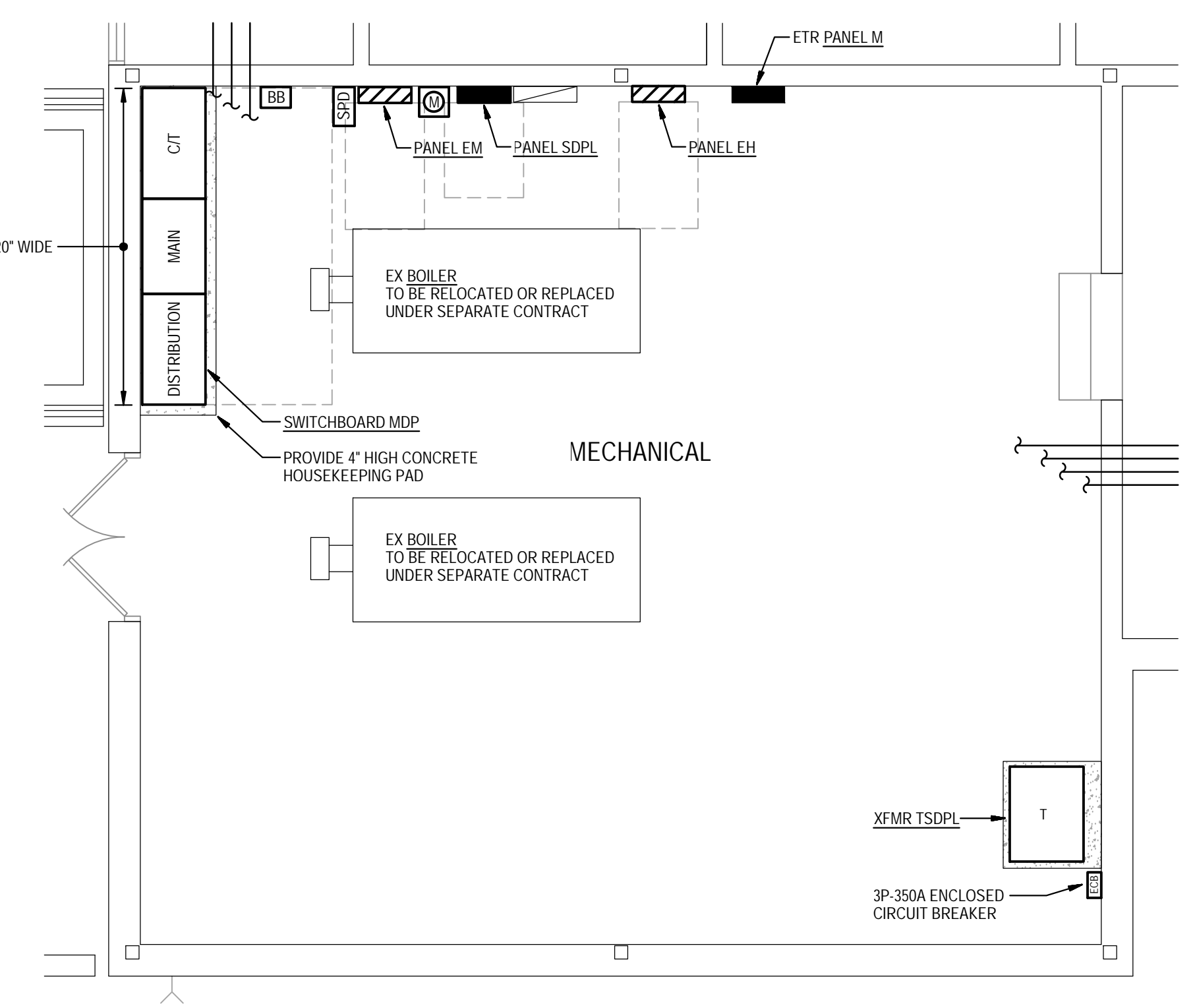
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Date	APRIL 17, 2026	
Drawing Title	SYMBOLS LIST, ABBREVIATIONS, AND DETAILS	
Sheet Number	E-0	



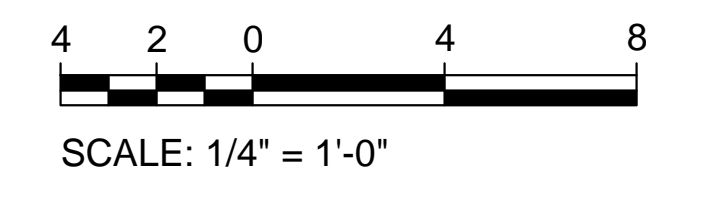
1 PARTIAL FIRST FLOOR PLAN
POWER
 SCALE: 3/32" = 1'-0"

- GENERAL NOTES:**
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 - THE EXISTING FACILITY SHALL REMAIN IN OPERATION DURING RENOVATION. INTERRUPTION TO THE EXISTING BUILDING ELECTRIC SERVICE SHALL BE COORDINATED WITH THE OWNER TO MINIMIZE DISRUPTION. INTERRUPTION OF UTILITIES SHALL NOT OCCUR DURING SCHOOL WORKING HOURS.
 - UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN HEAVY DASHED (-----) SHALL BE REMOVED AND ELECTRICAL ITEMS SHOWN LIGHT SOLID (---) SHALL REMAIN.
 - DEMOLITION SHALL INCLUDE REMOVAL AND OFF-SITE DISPOSAL OF MATERIALS. DO NOT ABANDON IN PLACE ANY ELECTRICAL COMPONENTS UNLESS OTHERWISE NOTED ON DRAWINGS.
 - REMOVE EXISTING EQUIPMENT AND DEVICES INDICATED.
 - EXISTING CIRCUITS INTERRUPTED BY DEMOLITION, BUT ARE TO REMAIN, SHALL BE MADE CONTINUOUS.

- SPECIFIC NOTES:**
- REMOVE EXISTING RECESSED MOUNTED PANEL AND REPLACE WITH NEW RECESSED MOUNTED PANEL. REMOVE PORTION OF WALL AS REQUIRED TO INSTALL NEW PANEL.
 - REMOVE EXISTING PANEL AND REPLACE WITH NEW PANEL.
 - REMOVE EXISTING SWITCHBOARD MDP AND ASSOCIATED CONCRETE HOUSEKEEPING PAD. EXISTING SWITCHBOARD IS MANUFACTURED BY I-T-E, TYPE FC-30 RATED AT 277/480V, 30-4W, WITH 1200A.
 - PROVIDE NEW OVERHEAD FEEDER UNDER FEEDER ALTERNATE 1.



2 PARTIAL BOILER ROOM - NEW WORK
 SCALE: 1/4" = 1'-0"



NOTE: IF THIS DRAWING IS A REDUCTION, GRAPHIC SCALE MUST BE USED.

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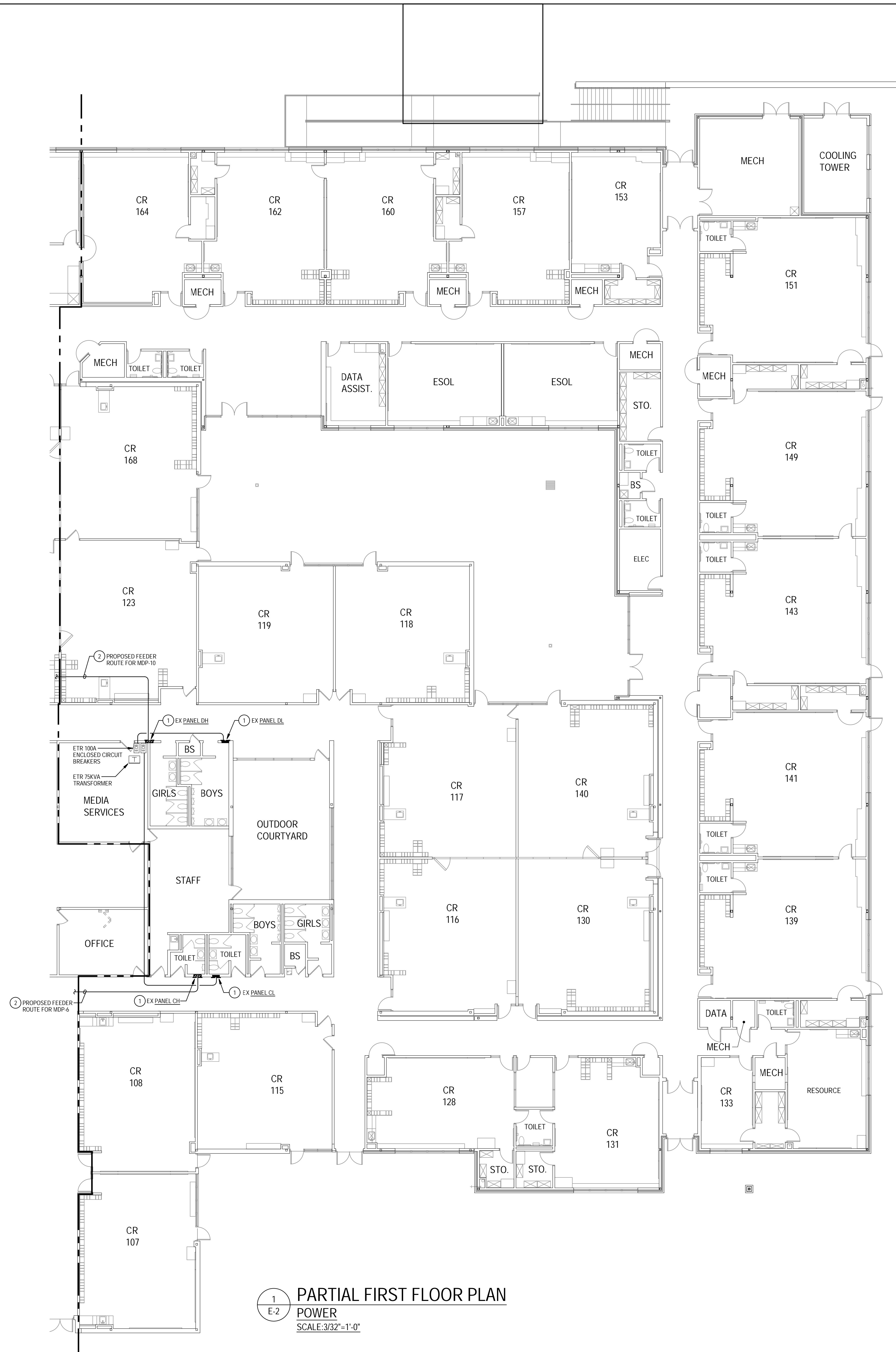
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Drawing Title
PART FIRST FLOOR PLAN

Sheet Number
E-1

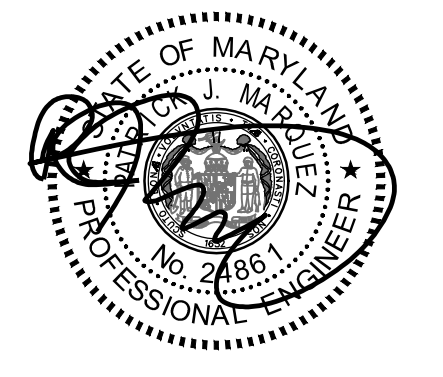


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 - C. UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN HEAVY DASHED (---) SHALL BE REMOVED AND ELECTRICAL ITEMS SHOWN LIGHT SOLID (---) SHALL REMAIN.
 - D. DEMOLITION SHALL INCLUDE REMOVAL AND OFF-SITE DISPOSAL OF MATERIALS. DO NOT ABANDON IN PLACE ANY ELECTRICAL COMPONENTS UNLESS OTHERWISE NOTED ON DRAWINGS.
 - E. REMOVE EXISTING EQUIPMENT AND DEVICES INDICATED.
 - F. EXISTING CIRCUITS INTERRUPTED BY DEMOLITION, BUT ARE TO REMAIN, SHALL BE MADE CONTINUOUS.
- SPECIFIC NOTES:**
- ① REMOVE EXISTING RECESSED-MOUNTED PANEL AND REPLACE WITH NEW RECESSED-MOUNTED PANEL. REMOVE PORTION OF WALL AS REQUIRED TO INSTALL NEW PANEL.
 - ② PROVIDE NEW OVERHEAD FEEDER UNDER FEEDER ALTERNATE 1.

1 PARTIAL FIRST FLOOR PLAN
E-2 POWER
SCALE: 3/32"=1'-0"

12 6 0 12 24
SCALE: 3/32" = 1'-0"
NOTE: IF THIS DRAWING IS A REDUCTION, GRAPHIC SCALE MUST BE USED.

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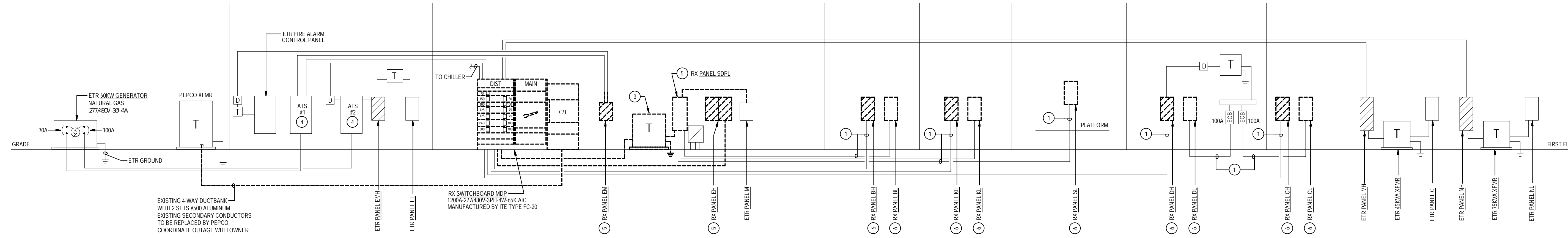
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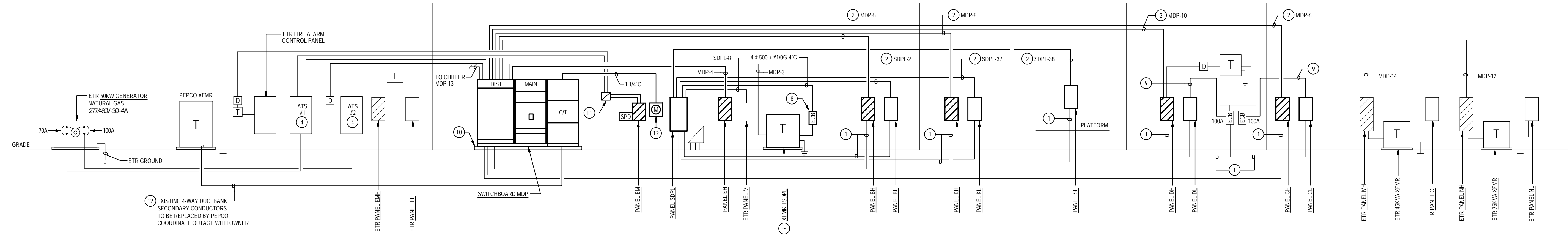
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E-2

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 - B. THE EXISTING FACILITY SHALL REMAIN IN OPERATION DURING REMOVAL. INTERRUPTION TO THE EXISTING BUILDING ELECTRIC SERVICE SHALL BE COORDINATED WITH THE OWNER TO MINIMIZE DISRUPTION. INTERRUPTION OF UTILITIES SHALL NOT OCCUR DURING SCHOOL WORKING HOURS.
- SPECIFIC NOTES:**
1. EXISTING BELOW GRADE FEEDER TO REMAIN UNDER BASE BID. FEEDER ALTERNATE 1: REMOVE EXISTING FEEDER CONDUCTORS AND REMOVE CONDUIT BELOW GRADE.
 2. FEEDER ALTERNATE 1: PROVIDE NEW OVERHEAD FEEDER.
 3. REMOVE EXISTING 113.5 KVA TRANSFORMER AND HOUSEKEEPING PAD AND REPLACE WITH NEW. SEE PLANS FOR NEW LOCATION.
 4. EXISTING TO REMAIN 100A AUTOMATIC TRANSFER SWITCH.
 5. REMOVE EXISTING SURFACE MOUNTED PANEL AND REPLACE WITH NEW SURFACE MOUNTED PANEL.
 6. REMOVE EXISTING RECESS MOUNTED PANEL AND REPLACE WITH NEW RECESS MOUNTED PANEL. REMOVE PORTION OF BLOCK WALL AS REQUIRED TO INSTALL NEW PANEL. PATCH WALL AS REQUIRED AND PAINT WALL TO MATCH EXISTING PAINT.
 7. REFER TO SCHEDULE OF TRANSFORMERS ON THIS DRAWING FOR ADDITIONAL INFORMATION ON TRANSFORMER AS NOTED, AND FOR NUMBER AND SIZE OF WIRE AND CONDUIT OF PRIMARY AND SECONDARY FEEDERS FOR TRANSFORMER AS NOTED.
 8. PROVIDE 3P-35A ENCLOSED CIRCUIT BREAKER.
 9. FEEDER ALTERNATE 1: PROVIDE 4 #2 - #8 GROUND IN 1 1/4" CONDUIT.
 10. PROVIDE 4" HIGH CONCRETE HOUSEKEEPING PAD.
 11. PROVIDE BOXES TO SPLICE EXISTING FEEDER FROM AT'S-1 AND EXISTING BRANCH CIRCUIT TO FIRE ALARM CONTROL PANEL. EXTEND FEEDER AND BRANCH CIRCUIT TO PANEL EM. WIRE AND CONDUITS SHALL MATCH EXISTING.
 12. COORDINATE WITH PEPCO WITH INSTALLATION OF SECONDARY SERVICE CONDUCTORS AND UTILITY METER.



1 POWER RISER DIAGRAM - DEMOLITION
 E-3 NOT TO SCALE



2 POWER RISER DIAGRAM - NEW WORK
 E-3 NOT TO SCALE

SCHEDULE OF TRANSFORMERS								
TRANSFORMER DESIG.	KVA	LOCATION	PRIMARY FEEDER	SECONDARY TAP WIRING & CONDUIT (NOTE A)	GROUNDING ELECTRODE CONDUCTOR	EQUIPMENT SERVED	XFMR TYPE (NOTE B)	NOTES
TSDPL	112.5	MECHANICAL	MDP-3	4 #500 + #10 SSBJ - 4" C	#10	PANEL SDPL	DOE	1

TRANSFORMER GENERAL NOTES:

- A. TRANSFORMER SECONDARY TAP - CONDUCTORS INDICATED REFLECT PHASE, NEUTRAL (IN WYE CONFIGURATION), AND SUPPLY-SIDE BONDING JUMPER (SSBJ) IN ACCORDANCE WITH NEC ARTICLES 450, 240.21, AND 250.30.
- B. TRANSFORMER TYPES: GENERAL PURPOSE DOE 2018 (DOE), RESIN ENCAPSULATED (RE).
- C. TRANSFORMER SHALL HAVE 480-VOLT, 3-PHASE, DELTA PRIMARY AND 120/208-VOLT, 3-PHASE, WYE-GROUNDED SECONDARY.

SPECIFIC NOTES:

1. PROVIDE 4" HIGH CONCRETE HOUSEKEEPING PAD AND MOUNT TRANSFORMER ON PAD.

WIRING SCHEDULE: SWITCHBOARD MDP (NOTES 1, 2, 3)							
277 / 480 VOLTS 3 PHASE 4 WIRE		1200A MAIN BUS 1200A MAIN CIRCUIT BREAKER (NOTE 4)		FREE STANDING 35,000 AIC RATING			
FEEDER NO.	EQUIPMENT SERVED	FEEDER SIZE	CIRCUIT BREAKER	CONNECTED LOAD (KVA)			NOTES
			FRAME POLE AMP	A Ø	B Ø	C Ø	
1	PANEL EM (VIA AT'S-1)	ETR (NOTE 5)	100 3 70	ETR	ETR	ETR	7, 8, 9
	SPARE		250 3 250				7, 8, 9
3	PANEL SDPL (VIA XFMR TSDPL)	3 #4/0 + #4G - 2 1/2" C	250 3 225	ETR	ETR	ETR	7, 8, 9
4	PANEL EH	4 #1/0 + #6G - 2" C (NOTES 5 & 6)	150 3 150	ETR	ETR	ETR	7, 8, 9
5	PANEL BH	4 #2 + #6G - 1 1/4" C (NOTES 5 & 6)	100 3 100	ETR	ETR	ETR	7, 8, 9
6	PANEL CH	4 #2 + #6G - 1 1/4" C (NOTES 5 & 6)	100 3 100	ETR	ETR	ETR	7, 8, 9
7	ETR PANEL EMH (VIA AT'S-2)	ETR (NOTE 5)	150 3 125	ETR	ETR	ETR	7, 8, 9
8	PANEL KH	4 #2/0 + #6G - 2" C (NOTES 5 & 6)	200 3 175	ETR	ETR	ETR	7, 8, 9
9	ETR PORTABLE	ETR (NOTE 5)	125 3 125	ETR	ETR	ETR	7, 8, 9
10	PANEL DH	4 #2/0 + #6G - 2" C (NOTES 5 & 6)	200 3 175	ETR	ETR	ETR	7, 8, 9
-	SPACE AND PROVISION	-	250 3 -	-	-	-	7, 9
12	ETR PANEL NH	ETR (NOTE 5)	400 3 400	ETR	ETR	ETR	7, 8, 10
13	ETR CHILLER	ETR (NOTE 5)	400 3 350	ETR	ETR	ETR	7, 8, 10, 11
14	ETR PANEL MH	ETR (NOTE 5)	400 3 400	ETR	ETR	ETR	7, 8, 10
	SPARE		400 3 300				7, 8, 10

CONNECTED LOAD = _____ ETR KVA
 DEMAND LOAD = _____ ETR KVA
 LOCATION _____ MECHANICAL _____

- SWITCHBOARD NOTES:**
1. SWITCHBOARD OVERALL WIDTH SHALL NOT EXCEED 120 INCHES. BASIS-OF-DESIGN: SCHNEIDER ELECTRIC, TYPE QED-2.
 2. PROVIDE SWITCHBOARD WITH INTEGRAL SURGE PROTECTIVE DEVICE IN SWITCHBOARD AND GROUND-FAULT PROTECTION AT SERVICE DISCONNECT.
 3. PROVIDE ENERGY-REDUCING MAINTENANCE SWITCH WITH LOCAL STATUS INDICATOR FOR CIRCUIT BREAKERS 1200A AND LARGER.
 4. MAIN CIRCUIT BREAKER: PROVIDE 100% RATED CIRCUIT BREAKER, ELECTRONIC TRIP WITH LSI ADJUSTABLE TRIP SETTINGS.
 5. BASE/B.D. EXTEND EXISTING FEEDER AS REQUIRED TO CONNECT TO CIRCUIT BREAKER. SPLICE WIRING WITHIN SWITCHBOARD. FEEDER SIZE SHALL MATCH EXISTING.
 6. FEEDER ALTERNATE 1: REMOVE EXISTING FEEDER AND PROVIDE NEW OVERHEAD FEEDER.
 7. BASIS-OF-DESIGN: SCHNEIDER ELECTRIC LINE DISTRIBUTION SECTION, 2000A VERTICAL BUS, 42" WIDE, DOUBLE ROW, MAX 600A CIRCUIT BREAKERS IN ONE ROW.
 8. DISTRIBUTION CIRCUIT BREAKER: PROVIDE 80% RATED, STANDARD MOLDED CASE-TYPE CIRCUIT BREAKER.
 9. BASIS-OF-DESIGN: SCHNEIDER ELECTRIC LINE DISTRIBUTION SECTION: LOCATE IN ROW WITH MAX 250A CIRCUIT BREAKERS.
 10. BASIS-OF-DESIGN: SCHNEIDER ELECTRIC LINE DISTRIBUTION SECTION: LOCATE IN ROW WITH MAX 600A CIRCUIT BREAKERS.
 11. PROVIDE LUGS TO ACCOMMODATE 2 SETS OF CONDUCTORS.



Professional Certification
 I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the state of Maryland. License No. 24861. Expiration date: 02-24-2028.

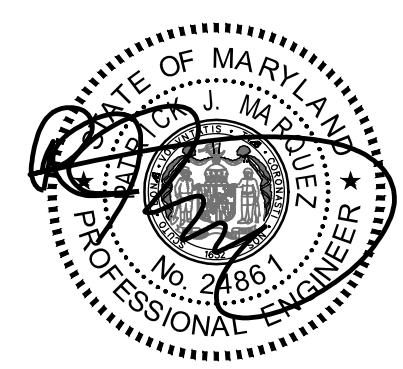


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Tag	Description	Date
	BID SET	04/17/26

PSC Number	L15F020
Scale	AS NOTED
Project Number	B253-25
Date	APRIL 17, 2026
Drawing Title	POWER RISER DIAGRAM AND SCHEDULES

ELECTRICAL EQUIPMENT REPLACEMENT
FIELDS ROAD ELEMENTARY SCHOOL
 1 SCHOOL DRIVE
 GAITHERSBURG, MD 20878
 MONTGOMERY COUNTY PUBLIC SCHOOLS



Professional Certification
 I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 24861.
 Expiration date: 02-24-2028.

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Tag	Description	Date
	BID SET	04/17/26

PSC Number L15F020

Scale AS NOTED

Project Number B253-25

Date APRIL 17, 2026

Drawing Title

SCHEDULES

Sheet Number

E-5

WIRING SCHEDULE: PANEL EH														
277 / 480 VOLTS			3 PHASE 4 WIRE			250 AMP BUS			SURFACE MOUNTED					
CR./CUT	POLE	DESCRIPTION	WIRE/CONDUIT	BREAKER/POLE AMP	AØ	BØ	CØ	CR./CUT	POLE	DESCRIPTION	WIRE/CONDUIT	BREAKER/POLE AMP		
1	1	MER EXHAUST	ETR	3	20	ETR	ETR	ETR	2	2	AIR COMPRESSOR	ETR	3	20
-	3								-	4				
-	5								-	6				
7	7	COND. PUMP	ETR	3	20	ETR	ETR	ETR	8	8	COOLING TOWER	ETR	3	30
-	9								-	10				
-	11								-	12				
13	13	BOILER B1	ETR	3	20	ETR			14	14	SPARE		3	20
-	15								-	16				
-	17								-	18				
19	19	BOILER B2	ETR	3	20	ETR	ETR	ETR	20	20	AHU-1	ETR	3	20
-	21								-	22				
-	23								-	24				
25	25	PUMP P1	ETR	3	20	ETR	ETR	ETR	26	26	PUMP P2	ETR	3	20
-	27								-	28				
-	29								-	30				
-	31	SPACE AND PROVISION	-	1	-	-	-	-	32	32	SPARE		3	20
-	33	SPACE AND PROVISION	-	1	-	-	-	-	34	34	SPARE			
-	35	SPACE AND PROVISION	-	1	-	-	-	-	36	36	SPACE AND PROVISION	-	1	-
-	37	SPACE AND PROVISION	-	1	-	-	-	-	38	38	SPACE AND PROVISION	-	1	-
-	39	SPACE AND PROVISION	-	1	-	-	-	-	40	40	SPACE AND PROVISION	-	1	-
-	41	SPACE AND PROVISION	-	1	-	-	-	-	42	42	SPACE AND PROVISION	-	1	-

CONNECTED LOAD = ETR KVA
 DEMAND LOAD = ETR KVA
 MN AIC RATING = 35,000 AMPS SYMMETRICAL
 MAIN BREAKER 225 AMPS
 LOCATION MECHANICAL

WIRING SCHEDULE: PANEL EM (SEE NOTES 1 & 2)														
277 / 480 VOLTS			3 PHASE 4 WIRE			100 AMP BUS			SURFACE MOUNTED					
CR./CUT	POLE	DESCRIPTION	WIRE/CONDUIT	BREAKER/POLE AMP	AØ	BØ	CØ	CR./CUT	POLE	DESCRIPTION	WIRE/CONDUIT	BREAKER/POLE AMP		
1	1	LTG EXIT, BOILER RM, KIT, STAGE	ETR	2	20	ETR	ETR	ETR	2	2	LTG EXIT, NORTH SIDE, PE	ETR	1	20
3	3	UNKNOWN (3)	ETR	2	20	ETR	ETR	ETR	4	4	EXT BLDG LIGHTS	ETR	1	20
-	5								-	6	LTG, EXIT SOUTH SIDE	ETR	1	20
7	7	SPARE		1	20	ETR			8	8	UNKNOWN (3)	ETR	1	20
9	9	SPARE		1	20	ETR			10	10	UNKNOWN (3)	ETR	1	20
11	11	SPARE		1	20	ETR			12	12	SPARE		1	20
13	13	SURGE PROTECTIVE DEVICE	4Ø+	3	30				14	14	SPARE		1	20
-	15		#Ø-						16	16	SPARE		1	20
-	17		1"Ø						18	18	SPARE		1	20

CONNECTED LOAD = ETR KVA
 DEMAND LOAD = ETR KVA
 MN AIC RATING = 35,000 AMPS SYMMETRICAL
 MAIN FUSE 70 AMPS
 LOCATION MECHANICAL

PANELBOARD NOTES:
 (1) PROVIDE FUSIBLE TYPE PANELBOARD.
 (2) WHERE CIRCUITS SHARE COMMON NEUTRAL, PROVIDE COMMON TRIP BREAKER LOCK.
 (3) TRACE AND IDENTIFY EXISTING CIRCUIT. UPDATE CIRCUIT DIRECTORY.

WIRING SCHEDULE: PANEL KH (SEE NOTE 1)														
277 / 480 VOLTS			3 PHASE 4 WIRE			250 AMP BUS			RECESSED MOUNTED					
CR./CUT	POLE	DESCRIPTION	WIRE/CONDUIT	BREAKER/POLE AMP	AØ	BØ	CØ	CR./CUT	POLE	DESCRIPTION	WIRE/CONDUIT	BREAKER/POLE AMP		
1	1	DOUBLE OVEN	ETR	3	50	ETR	ETR	ETR	2	2	GRIDDLE	ETR	3	70
-	3								-	4				
-	5								-	6				
7	7	SPARE		3	30	ETR			8	8	UNKNOWN (2)	ETR	3	20
-	9								-	10				
-	11								-	12				
13	13	SPARE		3	30	ETR			14	14	SPARE		3	20
-	15								-	16				
-	17								-	18				
19	19	HOOD	ETR	3	20	ETR			20	20	SPARE		3	20
-	21								-	22				
-	23								-	24				
25	25	SPARE		3	20	ETR			26	26	SPARE		3	20
-	27								-	28				
-	29								-	30				
31	31	A.P. RM MERCURY VAPOR LT	ETR	1	20	ETR	ETR	ETR	32	32	KITCHEN LIGHTS	ETR	1	20
33	33	GYM MERCURY VAPOR LIGHT	ETR	1	20	ETR	ETR	ETR	34	34	LTG BOILER RM, BOYS, GIRL, KIT.	ETR	1	20
35	35	SPARE		1	20	ETR			36	36	LTG OUT, STOR, CHAIR, COMPACTOR	ETR	1	20
37	37	SPARE		1	20	ETR			38	38	SPARE		1	20
-	39	SPACE AND PROVISION	-	1	-	-	-	-	40	40	SPACE AND PROVISION	-	1	-
-	41	SPACE AND PROVISION	-	1	-	-	-	-	42	42	SPACE AND PROVISION	-	1	-

CONNECTED LOAD = ETR KVA
 DEMAND LOAD = ETR KVA
 MN AIC RATING = 35,000 AMPS SYMMETRICAL
 MAIN LUGS ONLY
 LOCATION KITCHEN

PANELBOARD NOTES:
 (1) WHERE CIRCUITS SHARE COMMON NEUTRAL, PROVIDE COMMON TRIP BREAKER LOCK.
 (2) TRACE AND IDENTIFY EXISTING CIRCUIT. UPDATE CIRCUIT DIRECTORY.

WIRING SCHEDULE: PANEL KL (SEE NOTE 2)														
120 / 208 VOLTS			3 PHASE 4 WIRE			225 AMP BUS			RECESSED MOUNTED					
CR./CUT	POLE	DESCRIPTION	WIRE/CONDUIT	BREAKER/POLE AMP	AØ	BØ	CØ	CR./CUT	POLE	DESCRIPTION	WIRE/CONDUIT	BREAKER/POLE AMP		
1	1	UNKNOWN (3)	ETR	3	20	ETR			2	2	SPARE		3	20
-	3								-	4				
-	5								-	6				
7	7	SPARE		1	20	ETR			8	8	SPARE		3	20
9	9	ANSUL CONTROL CIRCUIT	ETR	1	20	ETR			10	10	UNKNOWN (3)		1	20
11	11	SPARE		1	20	ETR			12	12	UNKNOWN (3)		1	20
13	13	TRASH RM COMPACTOR	ETR	3	20	ETR	ETR	ETR	14	14	VICTORY FREEZER	ETR	2	40
-	15								-	16				
-	17								-	18	UNKNOWN (3)	ETR	2	30
19	19	SPARE		2	40	ETR			20	20	UNKNOWN (3)		1	20
-	21								-	22	HAND DRYER GIRLS (1)	ETR	1	30
23	23	TRASH ROOM HEAT	ETR	2	20	ETR	ETR	ETR	24	24	HAND DRY BOYS (1)	ETR	1	30
-	25								-	26	RADON	ETR	1	20
27	27	SPARE		2	20	ETR	ETR	ETR	28	28	UNKNOWN (3)	ETR	1	20
-	29								-	30	UNKNOWN (3)	ETR	1	20
31	31	WARMER NEXT TO GRIDDLE	ETR	1	20	ETR	ETR	ETR	32	32	UNKNOWN (3)	ETR	1	20
33	33	UNKNOWN (3)	ETR	1	20	ETR	ETR	ETR	34	34	FLOOR RECEPTACLE (1)	ETR	1	20
35	35	UNKNOWN (3)	ETR	1	20	ETR	ETR	ETR	36	36	OFFICE	ETR	1	20
37	37	UNKNOWN (3)	ETR	1	20	ETR	ETR	ETR	38	38	FREEZER (1)	ETR	1	20
39	39	UNKNOWN (3)	ETR	1	20	ETR	ETR	ETR	40	40	UNKNOWN (3)	ETR	1	20
41	41	SPARE (1)		1	20	ETR	ETR	ETR	42	42	SPARE (1)		1	20

CONNECTED LOAD = ETR KVA
 DEMAND LOAD = ETR KVA
 MN AIC RATING = 10,000 AMPS SYMMETRICAL
 MAIN LUGS ONLY
 LOCATION KITCHEN

PANELBOARD NOTES:
 (1) PROVIDE GFCI CIRCUIT BREAKER.
 (2) WHERE CIRCUITS SHARE COMMON NEUTRAL, PROVIDE COMMON TRIP BREAKER LOCK.
 (3) TRACE AND IDENTIFY EXISTING CIRCUIT. UPDATE CIRCUIT DIRECTORY.

WIRING SCHEDULE: PANEL SDPL (SEE NOTE 1)														
120 / 208 VOLTS			3 PHASE 4 WIRE			400 AMP BUS			SURFACE MOUNTED					
CR./CUT	POLE	DESCRIPTION	WIRE/CONDUIT	BREAKER/POLE AMP	AØ	BØ	CØ	CR./CUT	POLE	DESCRIPTION	WIRE/CONDUIT	BREAKER/POLE AMP		
1	1	TRAILER 50A RECEPTACLE	ETR	3	50	ETR	ETR	ETR	2	2	PANEL BL	4Ø+	3	100
-	3								-	4		#Ø-		
-	5								-	6		1 1/4"Ø		
7	7	SPARE		3	70	ETR			8	8	PANEL M	4Ø+	3	50
-	9								-	10		#Ø-		
-	11								-	12		1"Ø		
13	13	SPARE		3	20	ETR			14	14	SPARE		3	20
-	15								-	16				
-	17								-	18				
19	19	REC OUTSIDE BOILER ROOM	ETR	1	20	ETR	ETR	ETR	20	20	HOT WATER CIRC	ETR	1	20
21	21	SPARE		1	20	ETR			22	22	REC SERVICE MGR. BOILER RM	ETR	1	20
23	23	#2 DRAFT FAN ON BOILER	ETR	1	20	ETR	ETR	ETR	24	24	REC OUTSIDE INGR	ETR	1	20
25	25	#1 DRAFT FAN ON BOILER	ETR	1	20	ETR	ETR	ETR	26	26	COOLER DRYER	ETR	1	20
27	27	CONTROL CKT C.T. HEATER	ETR	1	20	ETR	ETR	ETR	28	28	REC TELE EQUIP	ETR	1	20
29	29	SPARE		1	20	ETR			30	30	SPARE		1	20
31	31	SPARE		1	20	ETR			32	32	SPARE		1	20
33	33	SPARE		1	20	ETR			34	34	SPARE		1	20
35	35	SPARE		1	20	ETR			36	36	SPARE		1	20
37	37	PANEL KL (2)	4Ø+	3	125	ETR	ETR	ETR	38	38	PANEL SL (2)	4Ø+	3	125
-	39		#Ø-						-	40		#Ø-		
-	41		1 1/2"Ø						-	42		1 1/2"Ø		

CONNECTED LOAD = ETR KVA
 DEMAND LOAD = ETR KVA
 MN AIC RATING = 22,000 AMPS SYMMETRICAL
 MAIN LUGS ONLY
 LOCATION MECHANICAL

PANELBOARD NOTES:
 (1) WHERE CIRCUITS SHARE COMMON NEUTRAL, PROVIDE COMMON TRIP BREAKER LOCK.
 (2) PROVIDE SUB-FEED CIRCUIT BREAKER.

WIRING SCHEDULE: PANEL SL (SEE NOTE 2)														
120 / 208 VOLTS			3 PHASE 4 WIRE			225 AMP BUS			RECESSED MOUNTED					
CR./CUT	POLE	DESCRIPTION	WIRE/CONDUIT	BREAKER/POLE AMP	AØ	BØ	CØ	CR./CUT	POLE	DESCRIPTION	WIRE/CONDUIT	BREAKER/POLE AMP		
1	1	FOLDING PARTITION	ETR	3	20	ETR	ETR	ETR	2	2	KITCHENETTE UNIT	ETR	2	30
-	3								-	4				
-	5								-	6	LV/CG ENTRY 2, LTG, REC.	ETR	1	20
7	7	SPOT LTG, ALL PURPOSE	ETR	1	20	ETR	ETR	ETR	8	8	LTG ON STAGE	ETR	1	20
9	9	SPOT LTG ON STAGE	ETR	1	20	ETR	ETR	ETR	10	10	LTG ON STAGE	ETR	1	20
11	11	EXH FAN #6 REC P.E. OFFICE	ETR	1	20	ETR	ETR	ETR	12	12	BATTERY LTG, ALL PURP, FLR REC	ETR	1	20
13	13	SODA MACHINE	ETR	1	20	ETR	ETR	ETR	14	14	REC, ALL PURPOSE, CHAIR STOR	ETR</		