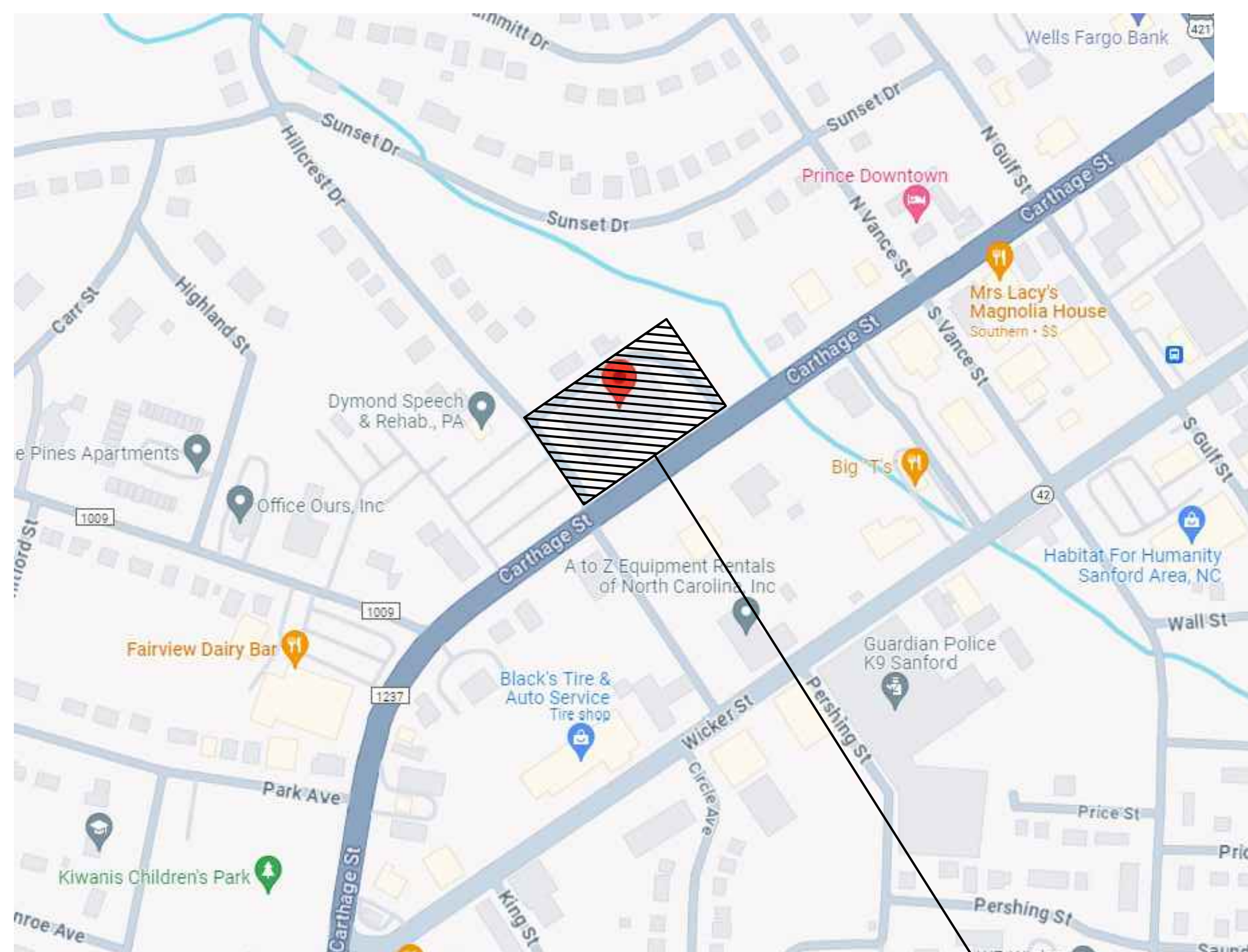


LEE COUNTY GOVERNMENT CENTER OPTIONAL STAND-BY GENERATOR REPLACEMENT

BID NUMBER 4262-02-26 100% CONSTRUCTION DOCUMENTS



PROJECT LOCATION:



1 VICINITY MAP
SCALE: NTS



PROJECT LOCATION
LEE COUNTY GOVERNMENT CENTER
106 HILLCREST DR.
SANFORD, NC 27330

OWNER:

LEE COUNTY GOVERNMENT
805 SOUTH FIFTH STREET
SANFORD, NORTH CAROLINA 27330

CONTACT:
RYAN FAULK
GENERAL SERVICES DIRECTOR
P: (919) 718-4622
RFAULK@LEECOUNTYNC.GOV

ENGINEERING:

DEWBERRY ENGINEERS, INC.
2610 WYCLIFF ROAD, SUITE 410
RALEIGH, NORTH CAROLINA 27607

CONTACT:
BILL HAMILTON, PE
P: (984) 833-4832
whamilton@dewberry.com

DRAWING INDEX:

- G-001 COVER SHEET
- E-001 ELECTRICAL LEGEND, NOTES AND DETAILS
- E-100 ELECTRICAL DEMOLITION AND NEW WORK FLOOR PLANS
- E-101 ELECTRICAL NEW WORK SITE PLAN
- E-300 ELECTRICAL DEMOLITION AND NEW WORK RISER DIAGRAMS
- E-400 ELECTRICAL DEMOLITION AND NEW WORK PANEL SCHEDULE
- P-001 PLUMBING SYMBOLS & ABBREVIATIONS
- P-101 PLUMBING NEW WORK SITE PLAN

PROJECT SCOPE NARRATIVE:

THE SCOPE OF THIS PROJECT IS TO REPLACE THE EXISTING BACKUP GENERATOR AT THE LEE COUNTY GOVERNMENT CENTER WITH A NEW 250KW OPTIONAL STAND-BY GENERATOR WITH NATURAL GAS CONNECTION, AND TO PROVIDE A NEW LIGHTING INVERTER.

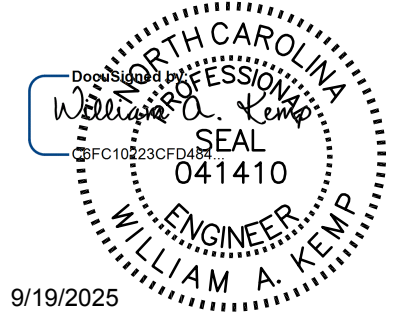


Dewberry Engineers Inc.
2610 Wycliff Road
Suite 410
Raleigh, NC 27607-3073
919.881.9939
NC License No. F-0829

LEE COUNTY
GOVERNMENT CENTER
OPTIONAL STAND-BY
GENERATOR REPLACEMENT

LEE COUNTY GOVERNMENT
106 HILLCREST DR.
SANFORD, NC 27330

SEAL



KEY PLAN

SCALE

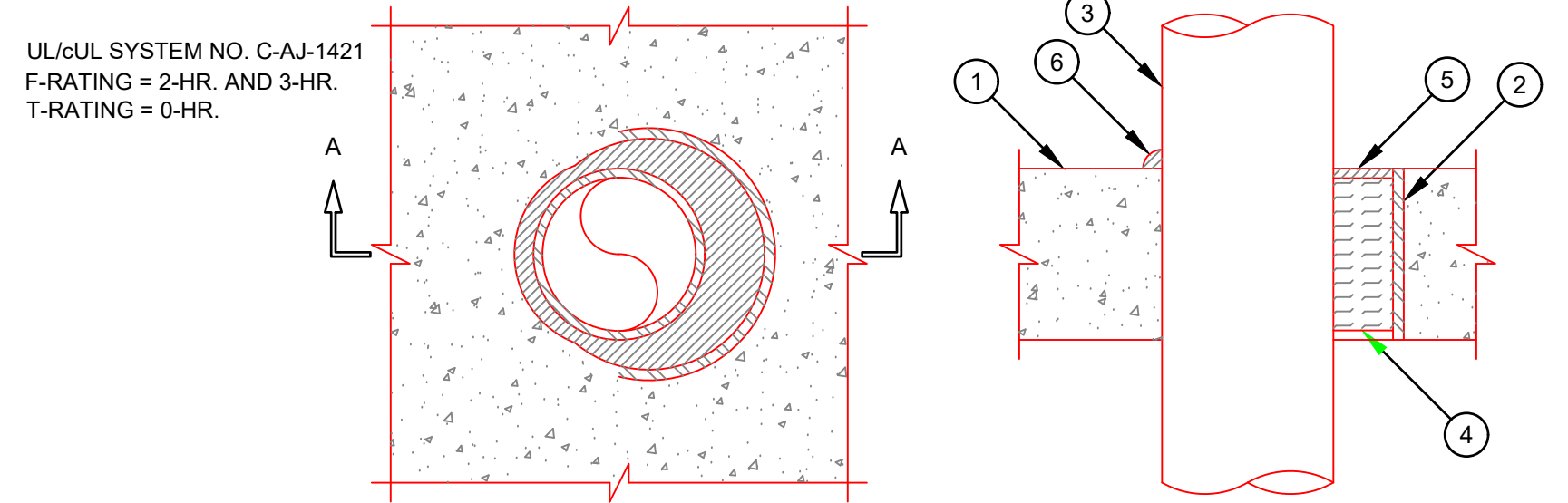
No.	DATE	BY	Description

REVISIONS			
No.	DATE	BY	Description

DRAWN BY: MEH
APPROVED BY: WAK
CHECKED BY: WAK
DATE: 09/19/2025
TITLE: COVER SHEET
PROJECT NO. 50189595

G-001

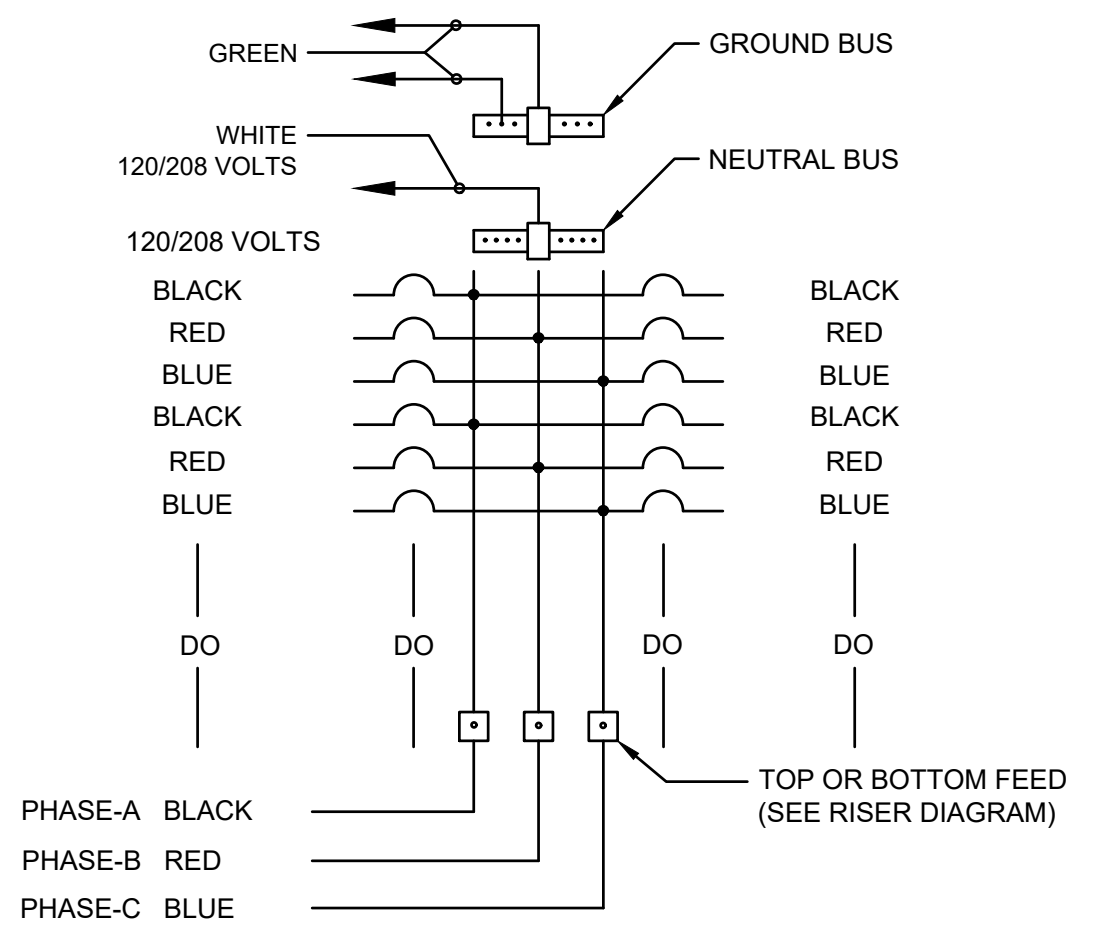
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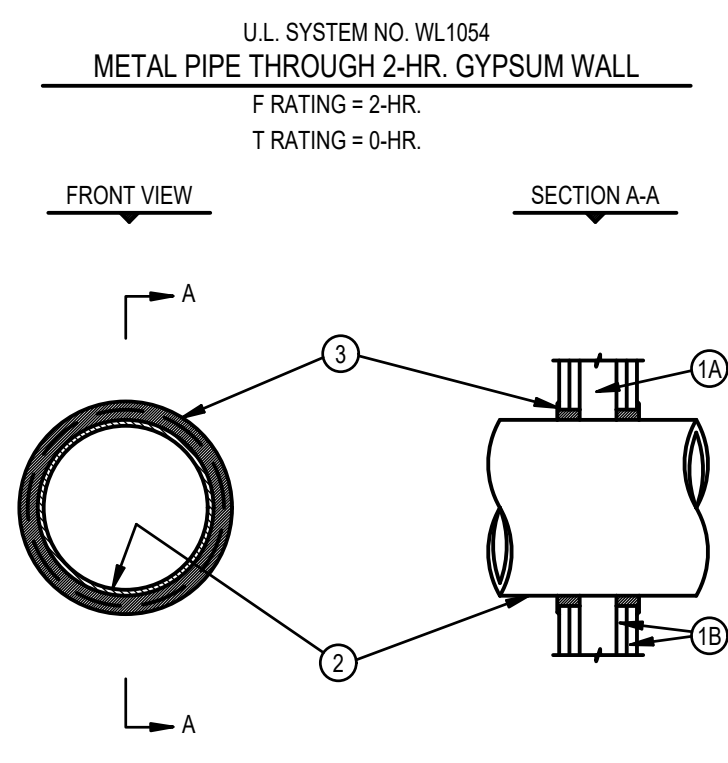
- UL/GUL SYSTEM NO. C-AJ-1421
F-RATING = 2-HR. AND 3-HR.
T-RATING = 0-HR.
- CONCRETE FLOOR OR WALL ASSEMBLY (2-HR. OR 3-HR. FIRE-RATING) :
A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR OR WALL (MINIMUM 4-1/2" THICK).
B. ANY UL/GUL CLASSIFIED CONCRETE BLOCK WALL.
 - MAXIMUM 6" DIAMETER STEEL PIPE SLEEVE (SCHEDULE 40 OR HEAVIER).
 - PENETRATING ITEM TO BE ONE OF THE FOLLOWING :
A. MAXIMUM 4" DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
B. MAXIMUM 4" DIAMETER CAST IRON PIPE.
C. MAXIMUM 4" NOMINAL DIAMETER COPPER PIPE.
D. MAXIMUM 4" NOMINAL DIAMETER STEEL CONDUIT.
E. MAXIMUM 4" NOMINAL DIAMETER EMT.
 - MINIMUM 4" THICKNESS MINERAL WOOL (MINIMUM 4 PCF DENSITY) TIGHTLY PACKED.
 - MINIMUM 1/4" DEPTH CP 604 SELF-LEVELING FIRESTOP SEALANT OR HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT.
 - MINIMUM 1/4" BEAD HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT AT POINT OF CONTACT. (NOT REQUIRED WHEN HILTI CP 604 SELF-LEVELING FIRESTOP SEALANT IS USED, ITEM NO. 5).

- NOTES :
- MAXIMUM DIAMETER OF OPENING = 6".
 - ANNULAR SPACE = MINIMUM 0", MAXIMUM 5-3/8".
 - MINIMUM 1/4" DEPTH HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT IS REQUIRED ON EACH SIDE OF A WALL ASSEMBLY.
 - F-RATING IS 3-HR. WHEN HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT IS USED, AND 2-HR. WHEN HILTI CP 604 SELF-LEVELING FIRESTOP SEALANT IS USED.

1 PENETRATION DETAIL
SCALE: N.T.S.



3 WIRE COLOR CODING 120/208V
SCALE: N.T.S.



- U.L. SYSTEM NO. WL1054
METAL PIPE THROUGH 2-HR. GYPSUM WALL
F RATING = 2-HR.
T RATING = 0-HR.
- WALL ASSEMBLY--THE FIRE-RATED GYPSUM WALLBOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES WALL AND PARTITION DESIGNS IN THE U.L. FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:
A. STUDS--WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOM. 2 BY 4 IN. LUMBER SPACED 16 IN. O.C. STEEL STUDS TO BE MIN. 2 1/2 IN. WIDE AND SPACED MAX. 24 IN. O.C.
B. WALLBOARD, GYPSUM--TWO LAYERS OF 5/8 IN. THICK GYPSUM WALLBOARD, AS SPECIFIED IN INDIVIDUAL WALL AND PARTITION DESIGN. MAX. DIAM. OF OPENING TO BE 12 1/2 IN.
 - THROUGH PENETRANTS-- ONE METALLIC PIPE, CONDUIT OR TUBING TO BE INSTALLED WITHIN THE FIRESTOP SYSTEM. AN ANNULAR SPACE OF MIN. 1/4 IN. TO MAX. 1 1/4 IN. IS REQUIRED WITHIN FIRESTOP SYSTEM. PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, CONDUITS OR TUBING MAY BE USED:
A. STEEL PIPE--NOM 10 IN. DIAM. (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.
B. CONDUIT--NOM 4 IN. DIAM. (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR STEEL CONDUIT.
C. COPPER TUBING--NOM 4 IN. DIAM. (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING.
D. COPPER PIPE--NOM 4 IN. DIAM. (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.
 - FILL, VOID OR CAVITY MATERIAL--SEALANT--MIN 1 1/4 IN. THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH BOTH SURFACES OF WALL.
HILTI CONSTRUCTION CHEMICALS, INC.--FS601 SEALANT
*BEARING THE U.L. CLASSIFICATION MARKING

2 PENETRATION DETAIL
SCALE: N.T.S.

GENERAL PLAN NOTES

- THESE DRAWINGS ARE GENERALLY DIAGRAMMATIC AND DO NOT SHOW ALL DETAILS REQUIRED FOR THE COMPLETE SYSTEMS. THEY SHOULD HOWEVER BE FOLLOWED AS CLOSELY AS POSSIBLE IN THE GENERAL ARRANGEMENT AND LOCATION OF EQUIPMENT. ALL DIMENSIONS SHALL BE CHECKED AT THE BUILDING AND ALL STRUCTURAL AND FINISH CONDITIONS INVESTIGATED. THE CONTRACTOR SHALL ARRANGE HIS WORK TO MEET THESE CONDITIONS AND PROVIDE SUCH EQUIPMENT AND ACCESSORIES AS MAY BE REQUIRED.
- BEFORE INSTALLING EQUIPMENT, MAKE FIELD MEASUREMENTS TO INSURE THAT ALL ITEMS OF EQUIPMENT FURNISHED WILL FIT INTO THE SPACE AS SHOWN ON THE DRAWINGS. WHERE EQUIPMENT WILL NOT FIT AS SHOWN ON THE DRAWINGS, PROVIDE A DRAWING TO THE ENGINEER FOR APPROVAL WITH A PROPOSED REVISED ARRANGEMENT BEFORE INSTALLING THE EQUIPMENT.
- CONTRACTOR SHALL REFER TO THE SEQUENCE OF CONSTRUCTION TO DETERMINE THE EXTENT OF CONSTRUCTION REQUIRED FOR EACH PHASE OF THE PROJECT. CONTRACTOR SHALL RESTORE ALL SYSTEMS AS OPERATIONAL AND IN SERVICE AT THE END OF EACH CONSTRUCTION PHASE.
- PROPERLY SUPPORT ALL WORK AND EQUIPMENT INSTALLED UNDER THIS CONTRACT PLUMB AND PARALLEL WITH BUILDING LINES. STUDY ALL GENERAL, STRUCTURAL, PLUMBING, HVAC, AND ELECTRICAL DRAWINGS, SHOP DRAWINGS, AND CATALOG DATA TO DETERMINE HOW EQUIPMENT, ACCESSORIES, PIPING, FIXTURES, AND RELATED ITEMS ARE TO BE SUPPORTED, MOUNTED, OR SUSPENDED. PROVIDE ALL BOLTS, INSERTS, PIPE STANDS, BRACKETS, STRUCTURAL SUPPORTS, AND ACCESSORIES FOR PROPER SUPPORT OF EQUIPMENT FURNISHED UNDER THIS CONTRACT. COORDINATE THE ELECTRICAL WORK WITH ALL OTHER CONTRACTORS BEFORE BEGINNING WORK TO INSURE THAT THE ELECTRICAL WORK DOES NOT INTERFERE WITH OTHER WORK. LINES WHICH REQUIRE SLOPE SHALL TAKE PRECEDENCE OVER ELECTRICAL WORK. COORDINATE THIS WITH THE PLUMBING AND GENERAL CONTRACTORS.
- ALL ELECTRICAL WORK SHALL COMPLY WITH APPLICABLE CODES AND THE GOVERNMENTAL AUTHORITIES HAVING JURISDICTION.
- VERIFY LOCATION AND DIMENSIONS OF ALL EQUIPMENT AND COORDINATE ALL WORK PRIOR TO THE START OF CONSTRUCTION.
- CONTRACTOR SHALL VISIT THE SITE TO DETERMINE PRE-EXISTING CONDITIONS PRIOR TO SUBMISSION OF BID.
- CONTRACTOR SHALL PROVIDE CONDUCTORS AND RACEWAYS AS REQUIRED FOR CONNECTION TO NEW EQUIPMENT. REFER TO DRAWINGS FOR NEW EQUIPMENT LOCATIONS.
- CONTRACTOR SHALL PROVIDE BLANK STAINLESS STEEL COVER PLATES FOR ALL EXISTING OUTLET BOXES THAT ARE NOT REUSED.
- ALL CIRCUITS SHALL BE #2#12 THWN WITH #12G THWN-3/4"C UNLESS OTHERWISE NOTED ON PLANS, PANEL SCHEDULES, OR SPECIFICATIONS. ALL UNDERGROUND CONDUIT SHALL BE A MINIMUM OF 1".
- NOTIFY THE ENGINEER IN WRITING IMMEDIATELY UPON DISCOVERY OF ANY DISCREPANCY OR POINTS OF CONFLICT IN THE DRAWINGS OR THE SPECIFICATIONS. THE ENGINEER WILL CLARIFY SUCH DISCREPANCY OR POINT OF CONFLICT IN WRITING PRIOR TO THE PROGRESS OF WORK BEYOND THE POINT CONCERNED.
- CONTRACTOR SHALL INCREASE WIRE SIZE BY ONE SIZE FOR BRANCH CIRCUIT WIRING THAT EXCEEDS 100' IN LENGTH. CONTRACTOR SHALL INCREASE THE WIRE SIZE FOR BRANCH CIRCUIT WIRING ADDITIONALLY BY ONE SIZE FOR EVERY ADDITIONAL 100' IN LENGTH BEYOND 100'.

LEGEND

	EQUIPMENT CONNECTION		DENOTES NEW EQUIPMENT
	120/208V SURFACE MOUNTED PANELBOARD		DENOTES EXISTING EQUIPMENT TO REMAIN
	DISCONNECT SWITCH		DENOTES EXISTING EQUIPMENT TO BE DEMOLISHED
	ELECTRICAL EQUIPMENT, AS NOTED ON PLANS		TURNED UP CIRCUIT LOCATION
			PROPOSED ELECTRICAL CONDUIT ROUTE
			ARROWHEADS INDICATE HOMERUN CIRCUITS UNLESS OTHERWISE NOTED. MULTIPLE ARROW HEADS INDICATE MULTIPLE CIRCUITS DISTRIBUTED EVENLY ACROSS RECEPTACLES.

SEQUENCE OF CONSTRUCTION

- GENERAL NOTES:**
- ALL CUTOVERS, POTENTIAL POWER LOSS CASES, DRIVEWAY CLOSURES, OR SPACES THAT NEED TO BE USED DURING OPERATIONAL HOURS MUST BE COORDINATED WITH OWNER PRIOR TO THE EVENTS LISTED BELOW AND ALL OTHER EVENTS EFFECTING BUILDING OPERATION. UPON RECEIVING NTP CONTRACTOR SHALL COORDINATE ALL MAJOR SHUT DOWN DATES. CONTRACTOR SHALL PROVIDE A REMINDER 2 WEEKS AND AN ADDITIONAL REMINDER THE DAY BEFORE THE FOLLOWING EVENTS ARE TO OCCUR.
- 1.1. COORDINATING ANY ROAD CLOSURES NEEDED TO PERFORM WORK NEAR GENERATOR LOCATION.
 - 1.2. UPDATE GAS METER.
 - 1.3. INSTALL GENERATOR PAD.
 - 1.4. TRENCHING OF CONDUITS FOR THE GENERATOR
 - 1.5. INSTALLATION OF NEW GENERATOR FEEDS
 - 1.6. INSTALLATION AND RELOCATION OF EQUIPMENT AND BRANCH CIRCUITS RELATED TO THE INVERTER
- GENERATOR INSTALLATION:**
- IT IS IMPORTANT TO NOTE THAT CONTRACTOR SHALL HAVE STEPS 2 AND 3 COMPLETE BEFORE THE GENERATOR ARRIVES ON SITE. EC CAN COMPLETE ALL OTHER STEPS BEFORE OR AFTER THE GENERATOR ARRIVES DEPENDING ON ARRIVAL OF OTHER EQUIPMENT AND SCHEDULING CONFLICTS. CONTRACTOR SHALL INSTALL GENERATOR ON PAD UPON ARRIVAL. COORDINATE WITH OWNER ON ARRIVAL DATE.
 - EC SHALL TRENCH AND STUB UP ALL CONDUITS FROM GENERATOR TO ATS AND PANEL "EM" AS NOTED ON THE DRAWINGS.
 - CONTRACTOR SHALL POUR EQUIPMENT PAD FOR GENERATOR ACCORDING TO DETAILS.
 - EC SHALL COMPLETE GENERATOR INSTALLATION. MAKING ALL FINAL CONNECTIONS. EC SHALL COORDINATE SHUT DOWN OF DRIVEWAY TO INSTALL NEW GENERATOR.
 - EC SHALL COORDINATE SHUT DOWN TIME WITH OWNER TO SCHEDULE A DAY AND TIME WHEN THE BUILDING IS NOT OCCUPIED. EITHER BEFORE OR AFTER NORMAL BUSINESS HOURS, ON WEEKENDS OR HOLIDAYS.
 - REMOVE EXISTING ATS AND PROVIDE A NEW FEEDER FOR PANEL EM USING THE ATS AS A JUNCTION BOX IS THE CONTRACTOR CHOOSES TO DO SO.
 - SECOND SHUT DOWN SHALL NOT BE LONGER THAN 60 MINUTES. IF SHUT DOWN IS REQUIRED TO BE LONGER THAN PROVIDE OWNER ENOUGH NOTICE TO SWITCH CRITICAL LOADS TO NORMAL POWER AND OFF PREVIOUS GENERATOR POWER.

Dewberry Engineers Inc.
2610 Wyckoff Road
Suite 410
Raleigh, NC 27607-3073
919.881.9939
NC License No. F-0929

LEE COUNTY
GOVERNMENT CENTER
OPTIONAL STAND-BY
GENERATOR REPLACEMENT

LEE COUNTY GOVERNMENT
106 HILLCREST DR.
SANFORD, NC 27330

SEAL

9/19/2025

KEY PLAN

SCALE

No.	DATE	BY	Description

REVISIONS

DRAWN BY: MEH
APPROVED BY: WAK
CHECKED BY: WAK
DATE: 09/19/2025
TITLE:

**ELECTRICAL
LEGEND, NOTES
AND DETAILS**

PROJECT NO. 50189595

E-001

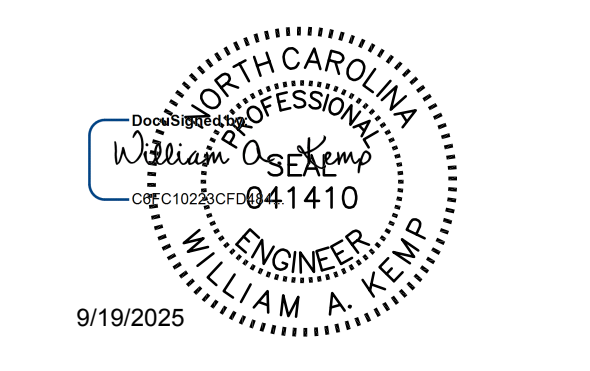
SHEET NO.

E
D
C
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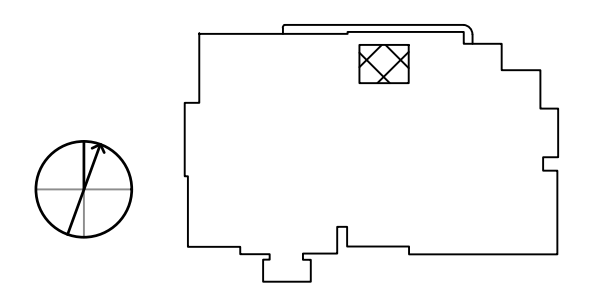
LEE COUNTY
GOVERNMENT CENTER
OPTIONAL STAND-BY
GENERATOR REPLACEMENT

LEE COUNTY GOVERNMENT
106 HILLCREST DR.
SANFORD, NC 27330

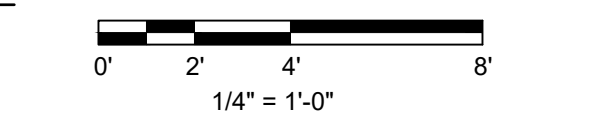
SEAL



KEY PLAN



SCALE



No.	DATE	BY	Description
REVISIONS			

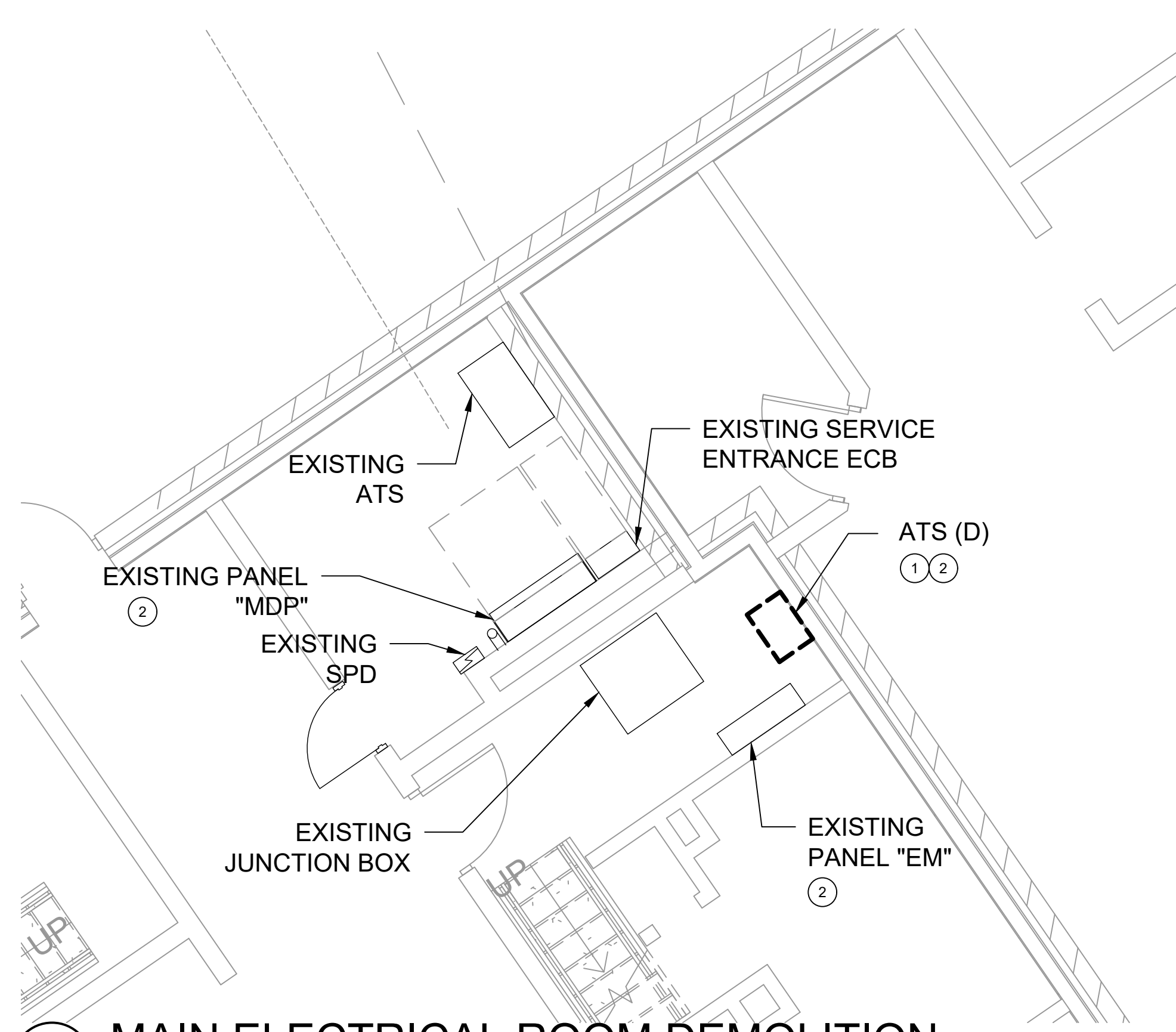
DRAWN BY: MEH
 APPROVED BY: WAK
 CHECKED BY: WAK
 DATE: 09/19/2025

TITLE
**ELECTRICAL
 DEMOLITION AND
 NEW WORK
 FLOOR PLANS**

PROJECT NO. 50189595

E-100

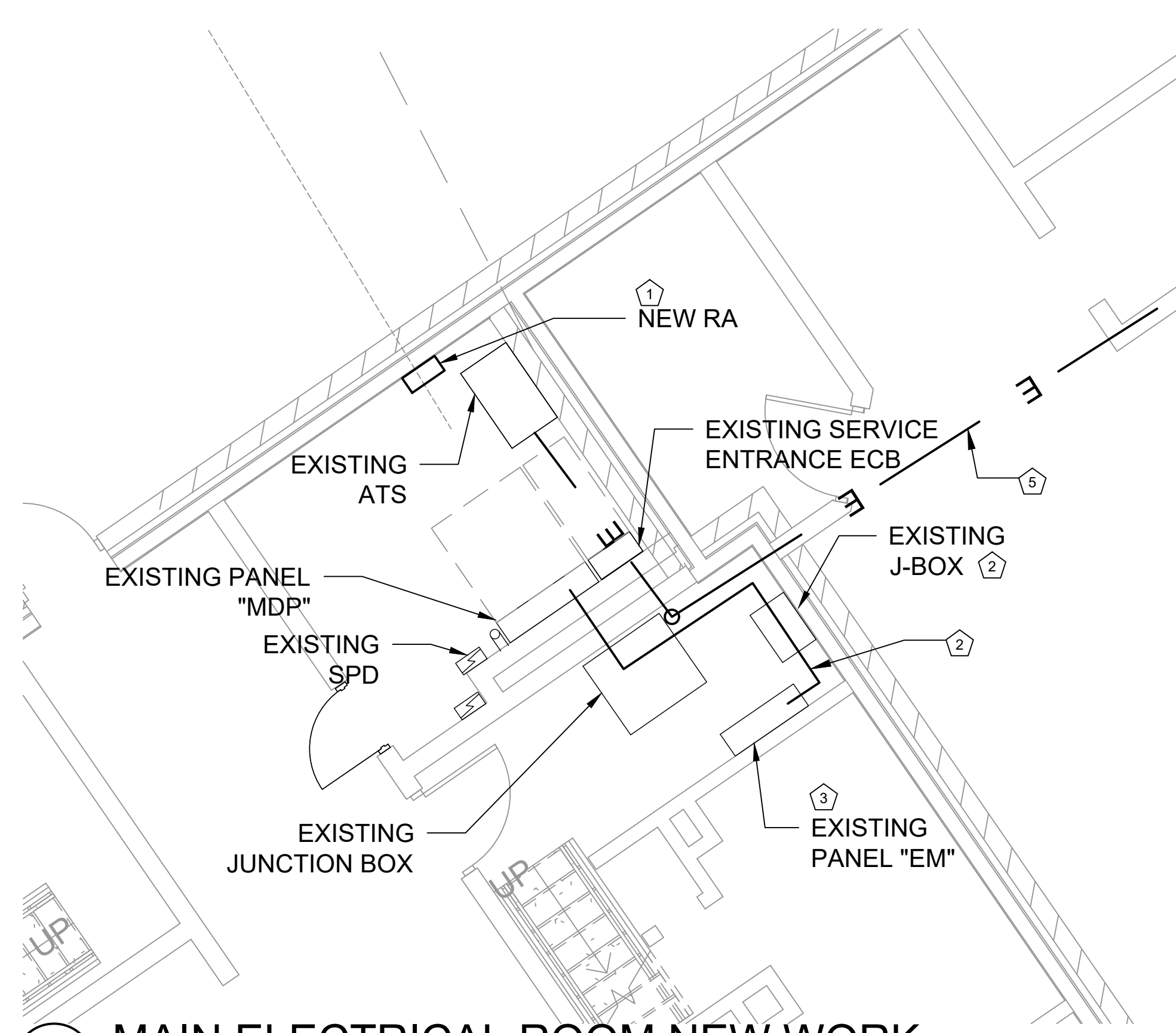
SHEET NO.



3 MAIN ELECTRICAL ROOM DEMOLITION
 E-100 SCALE: 1/4" = 1'-0"

KEYED NOTES DEMO:

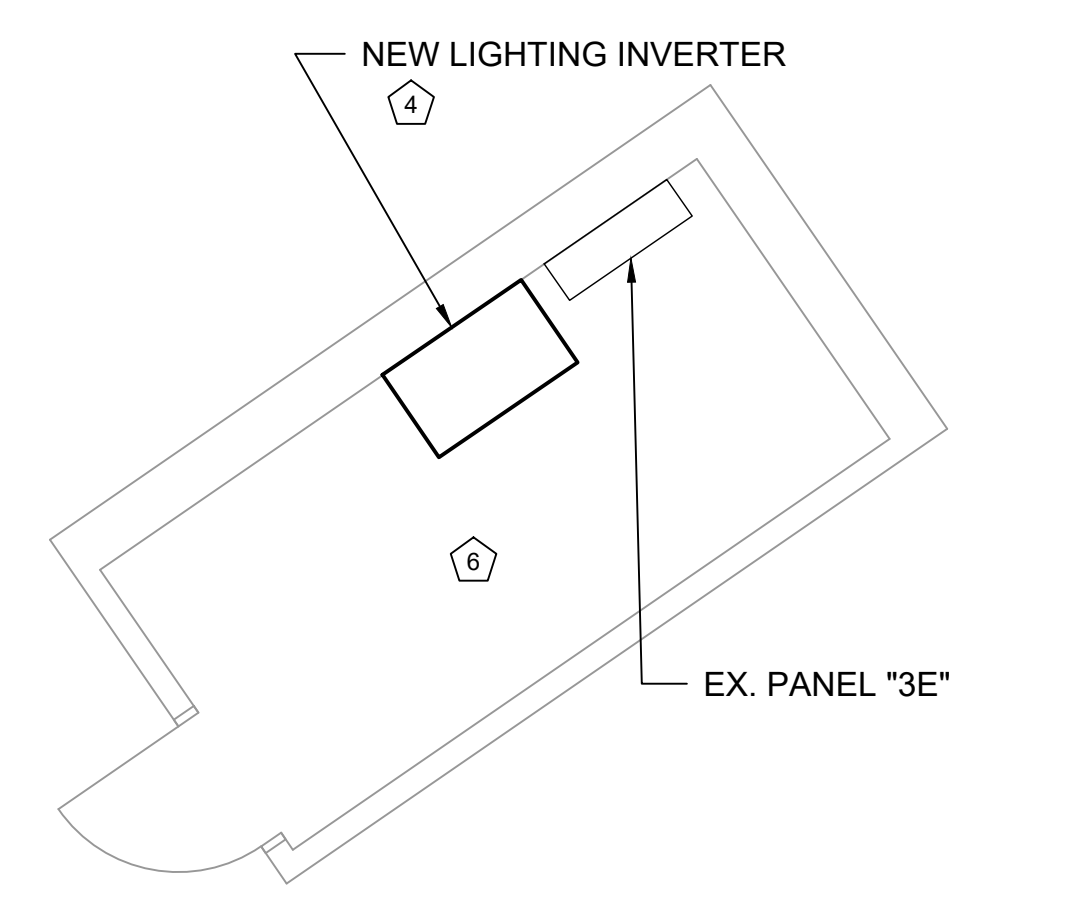
1. DEMOLISH EXISTING ATS RETAIN ENCLOSURE FOR NEW WORK. REFER TO RISER FOR ADDITIONAL INFORMATION.
2. DEMOLISH EXISTING FEEDERS BETWEEN EXISTING GENERATOR AND ATS, MDP AND ATS, ATS AND PANEL EM. REFER TO RISER DIAGRAM FOR ADDITIONAL INFORMATION.



2 MAIN ELECTRICAL ROOM NEW WORK
 E-100 SCALE: 1/4" = 1'-0"

KEYED NOTES NEW WORK:

1. PROVIDE REMOTE ANNUNCIATOR FOR GENERATOR. CONFIRM FINAL LOCATION OF RA WITH OWNER BEFORE FINAL INSTALLATION.
2. RE-USE DEMOLISHED ATS ENCLOSURE AS A JUNCTION BOX FOR NEW FEEDER FOR PANEL "EM". REUSE CONDUIT RETAINED FROM DEMOLITION FOR NEW FEEDER WIRE.
3. PROVIDE NEW BREAKERS IN PANEL "EM" AS SHOWN ON PANEL SCHEDULE ON SHEET E-400.

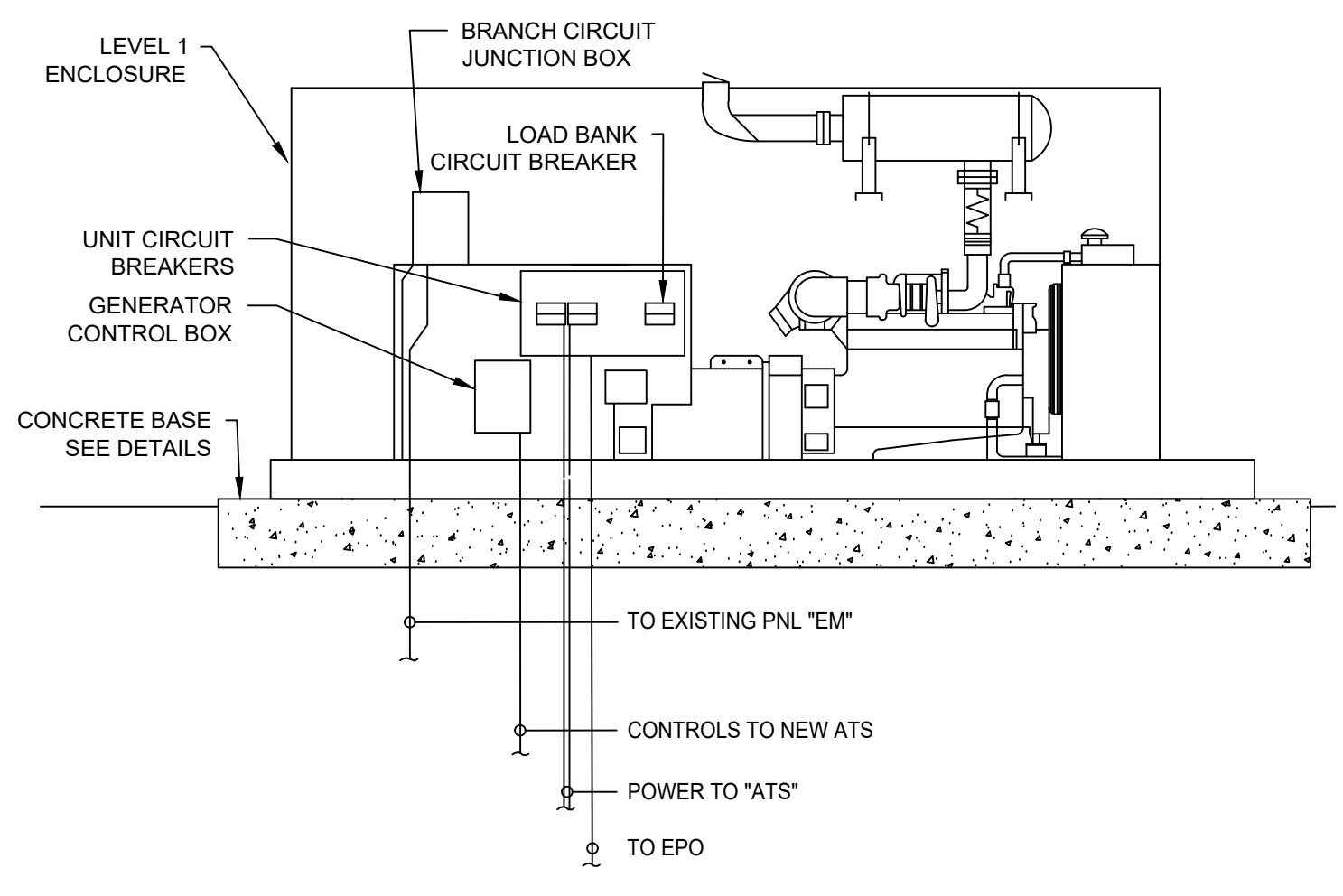
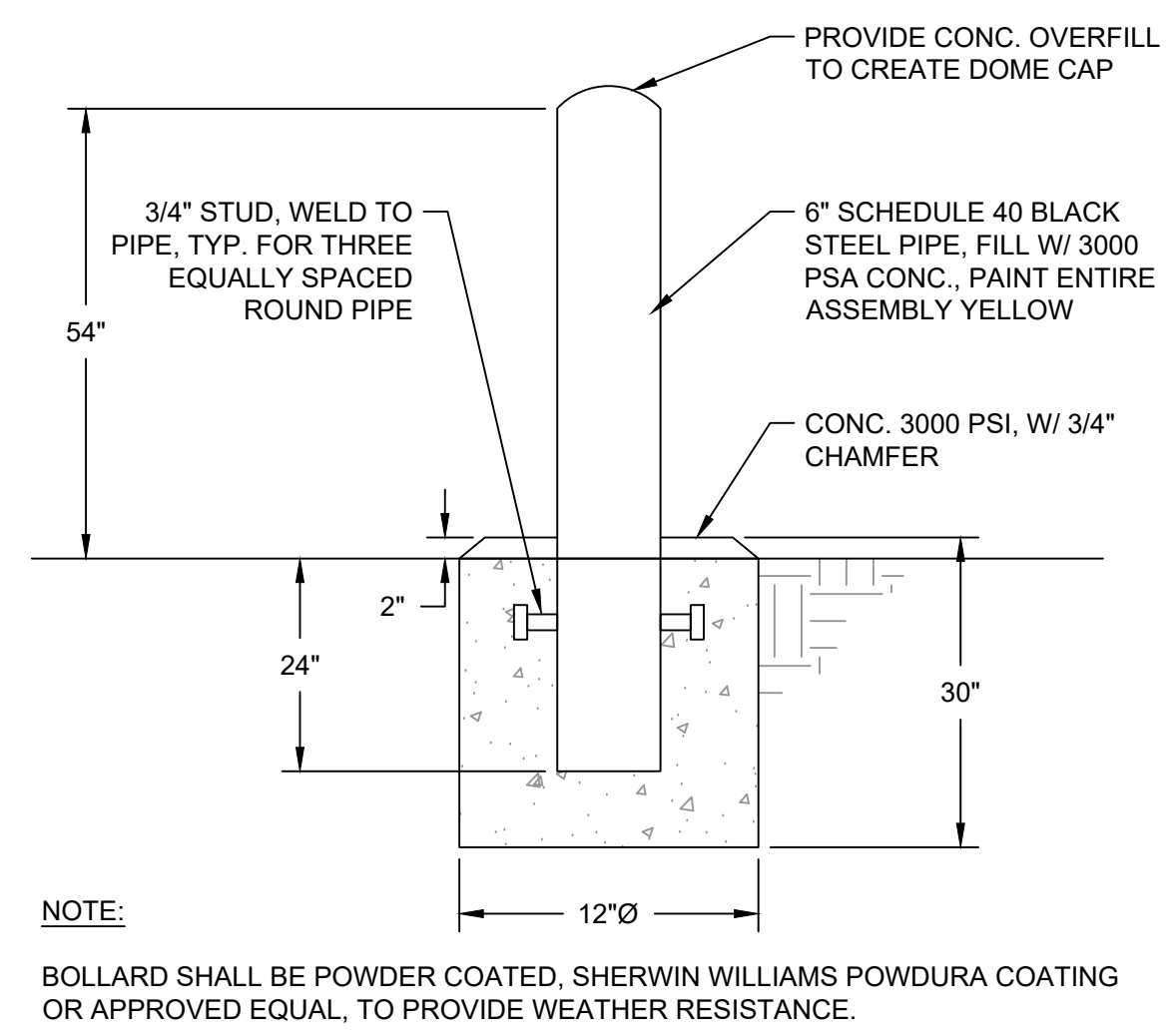
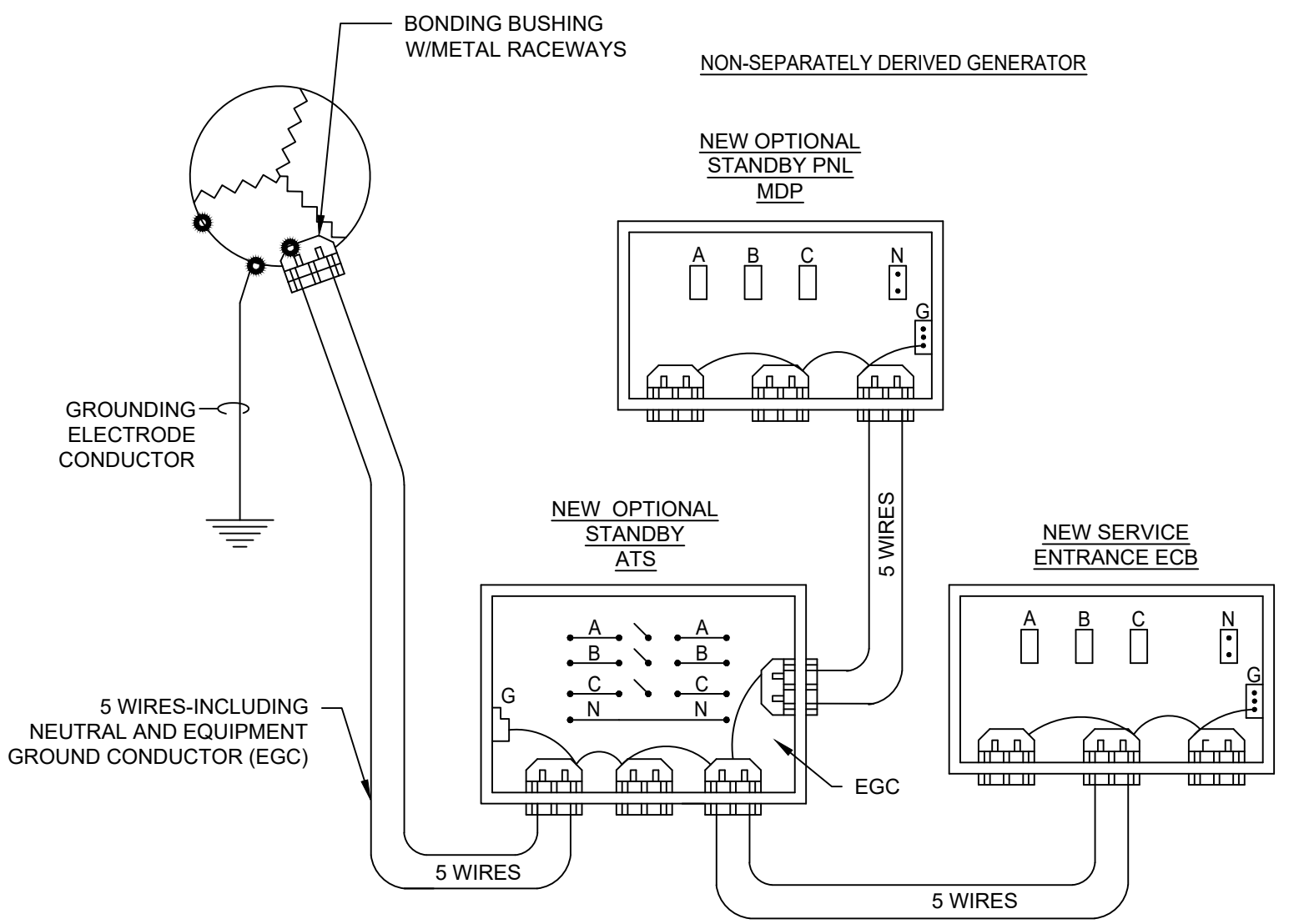
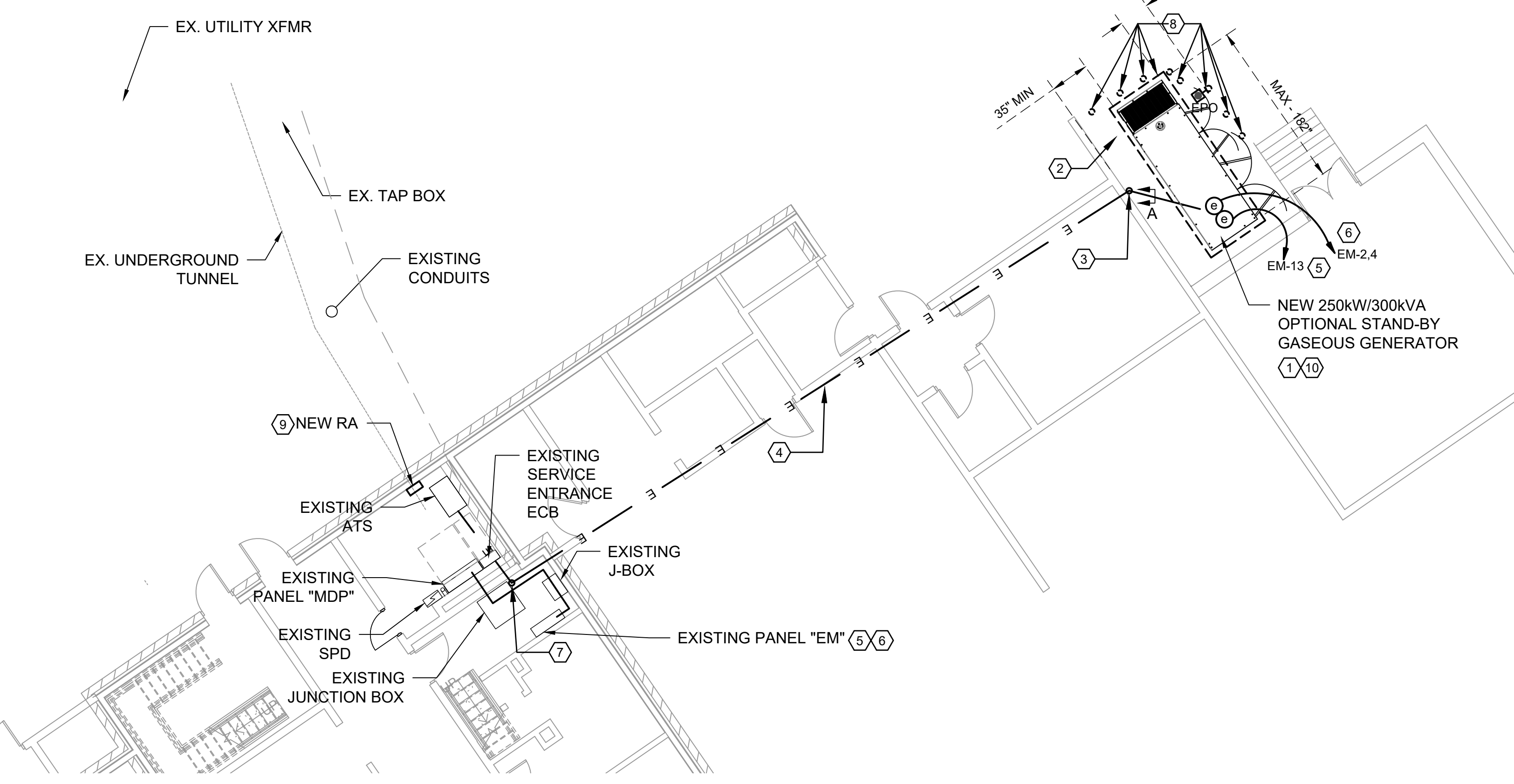
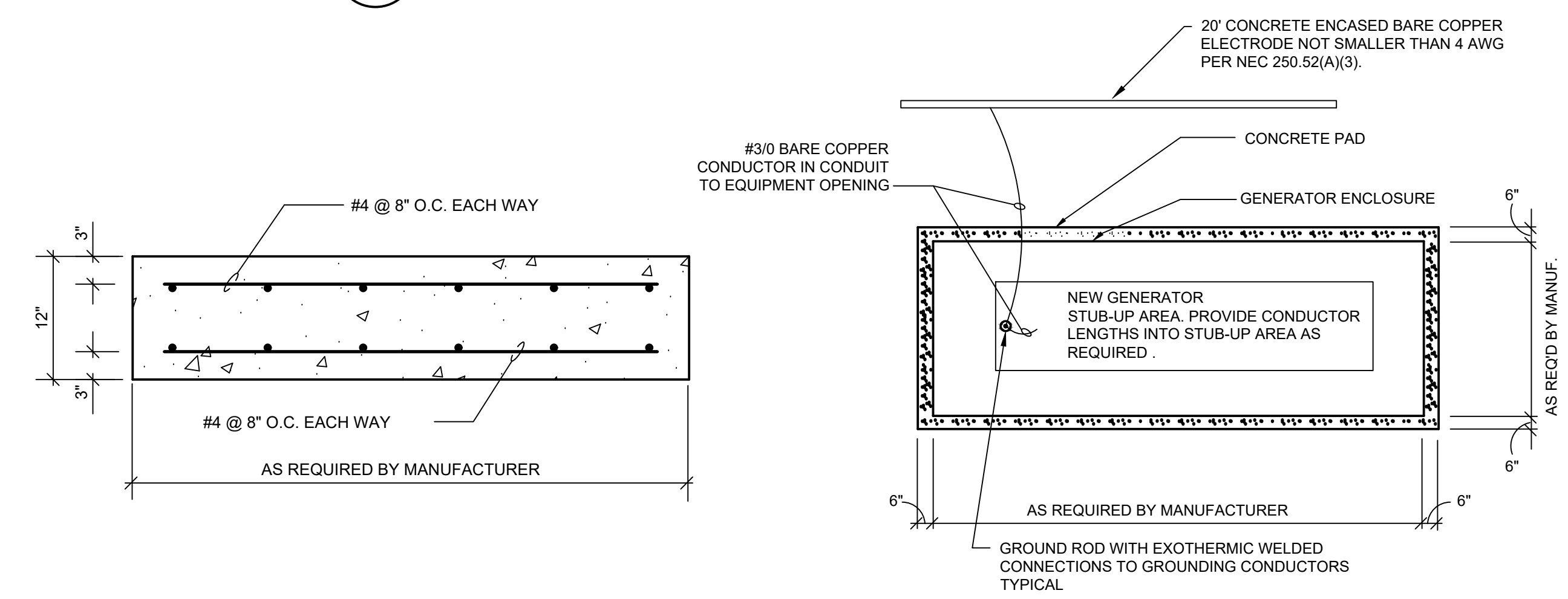
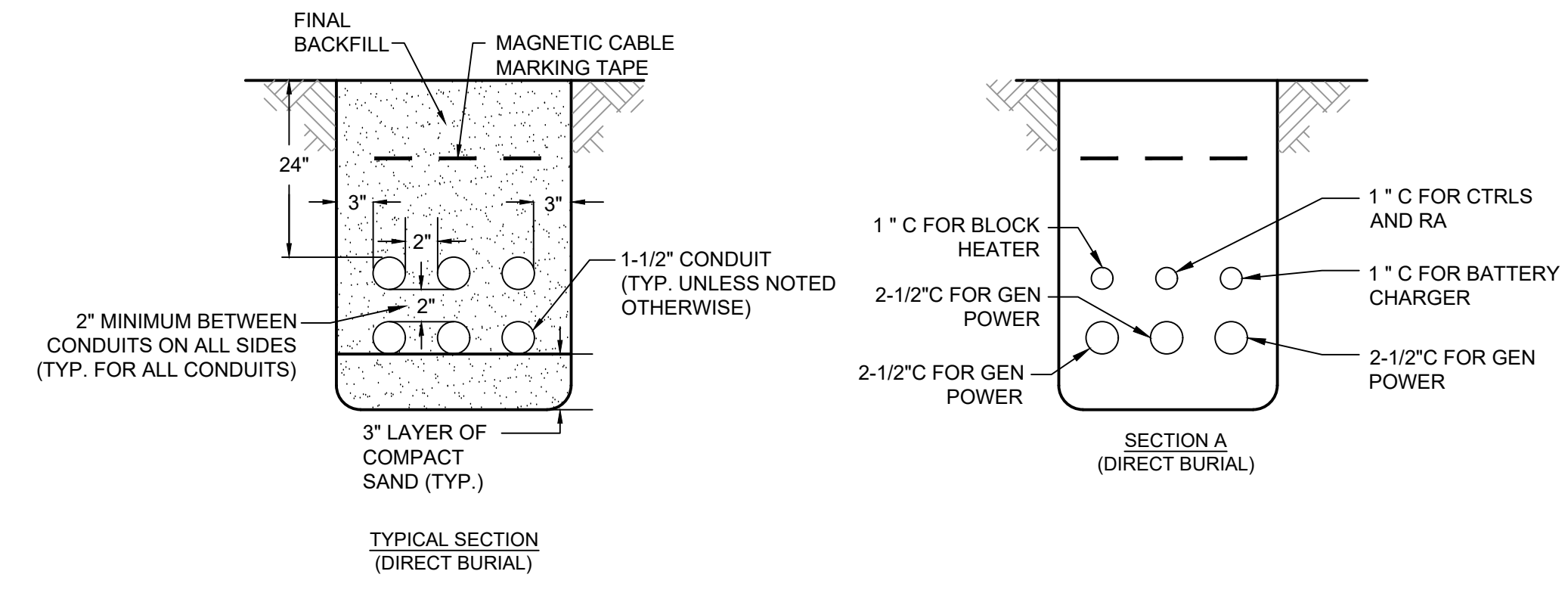
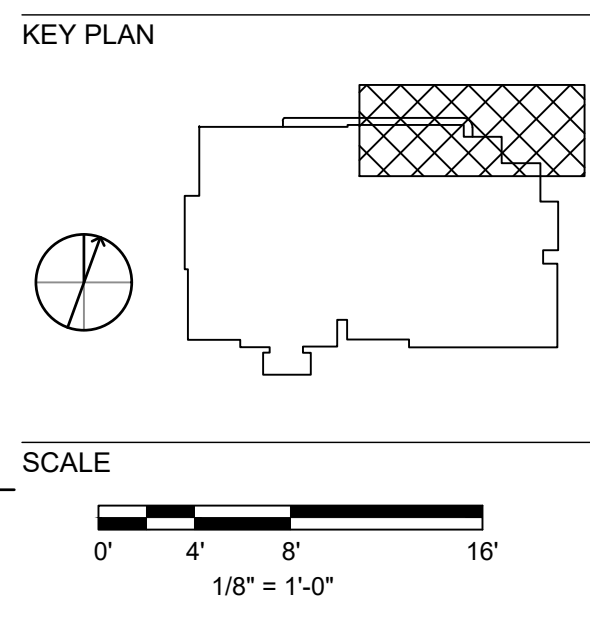
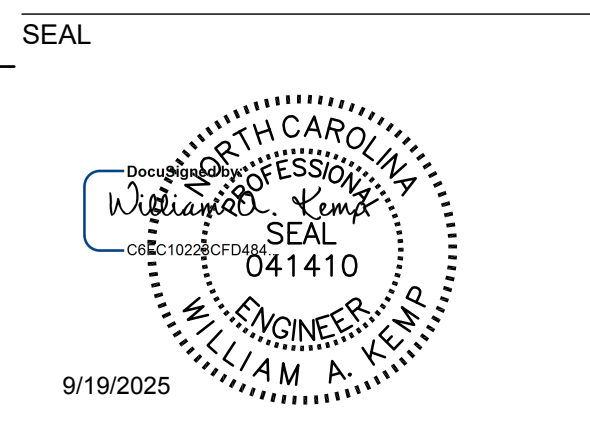


1 DATA CLOSET RM 324
 E-100 SCALE: 1/4" = 1'-0"

4. PROVIDE NEW LIGHTING INVERTER FOR EGRESS LIGHTS. REFER TO PANEL SCHEDULE ON SHEET E-400 FOR BRANCH CIRCUITS THAT NEED TO BE MOVED TO INVERTER.
5. PROVIDE FEEDERS AND BRANCH CIRCUITS ASSOCIATED WITH GENERATOR. REFER TO SHEET E-101 FOR MORE INFORMATION. ROUTE NEW FEEDER AND BRANCH CIRCUITS ABOVE CEILING IN STORAGE SPACE ON LEVEL BELOW ELECTRICAL ROOM. STUB INTO ELECTRICAL ROOM AS INDICATED ON PLANS.
6. DATA CLOSET ROOM LOCATED ON THIRD FLOOR NEXT TO MAIN ELEVATOR. REMOVE EXISTING FOLDING TABLE FROM DATA CLOSET TO ALLOW FOR INSTALLATION SPACE OF NEW LIGHTING INVERTER.



LEE COUNTY
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 OPTIONAL STAND-BY
 GENERATOR REPLACEMENT
 LEE COUNTY GOVERNMENT
 106 HILLCREST DR.
 SANFORD, NC 27330



GENERAL NOTES:

- REFER TO SHEET E-001 FOR ADDITIONAL GENERAL NOTES.

KEYED NOTES NEW WORK:

- PROVIDE NEW OPTIONAL STAND-BY GENERATOR. NEW STAND-BY GENERATOR IS REQUIRED TO FIT IN EXISTING SPACE AS SHOWN. REFER TO PLAN DIMENSIONS FOR SIZE REFERENCES. REFER TO RISER DIAGRAM AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- PROVIDE EQUIPMENT PAD FOR GENERATOR PER DETAIL ON THIS SHEET.
- TURN UP ON EXTERIOR OF BUILDING WITH CONDUITS ASSOCIATED WITH NEW GENERATOR. TURN INTO BUILDING ABOVE CEILING OF GROUND FLOOR.
- PROVIDE FEEDER TO ATS AND BRANCH CIRCUITS FOR GENERATOR BLOCK HEATER AND BATTERY CHARGER.
- PROVIDE NEW BRANCH CIRCUIT TO SERVE BATTERY CHARGER AND CONNECT TO EXISTING SPARE BREAKER IN EXISTING PANEL "EM". REFER TO RISER DIAGRAM FOR CIRCUIT SIZE.
- PROVIDE NEW BRANCH CIRCUIT AND CONNECT TO NEW BREAKER IN EXISTING PANEL "EM". PROVIDE NEW TWO-POLE, 30A, BREAKER IN PANEL "EM" TO SERVE BLOCK HEATER. REFER TO PANEL SCHEDULE AND RISER DIAGRAM FOR ADDITIONAL INFORMATION.
- TURN UP CONDUITS UP FROM BELOW (BASEMENT) TO FIRST FLOOR IN SECONDARY ELECTRICAL ROOM. CONTINUE ROUTING CONDUITS TO FINAL DESTINATION ON FIRST FLOOR AS SHOWN ON RISER AND FLOOR PLANS.
- PROVIDE CONCRETE BOLLARDS AROUND GENERATOR TO PREVENT ACCIDENTAL DAMAGE TO EQUIPMENT. REFER TO BOLLARD DETAIL.
- PROVIDE SURFACE MOUNT REMOTE ANNUNCIATOR FOR GENERATOR. COORDINATE WITH OWNER ON FINAL LOCATION. PROVIDE ADDITIONAL 200' OF 3/4" AND CABLING TO REACH THE RECEPTIONIST DESK. ALL CONDUIT WILL BE EXPOSED OR ABOVE ACT TILE. ALL EXPOSED CONDUIT SHALL BE PAINTED WHITE TO MATCH EXISTING EXPOSED CONDUITS.
- GENERATOR SHALL BE INSTALLED SUCH THAT EXHAUST IS PLACED AWAY FROM BUILDING AND ACCESS TO TERMITE PLUGS IS MAINTAINED. COORDINATE FINAL PLACEMENT OF GENERATOR WITH ACCESS REQUIREMENTS.

No.	DATE	BY	Description
REVISIONS			

DRAWN BY: MEH
 APPROVED BY: WAK
 CHECKED BY: WAK
 DATE: 09/19/2025

TITLE
**ELECTRICAL
 NEW WORK
 SITE PLAN**

PROJECT NO. 50189595

E-101

SHEET NO.

E

D

C

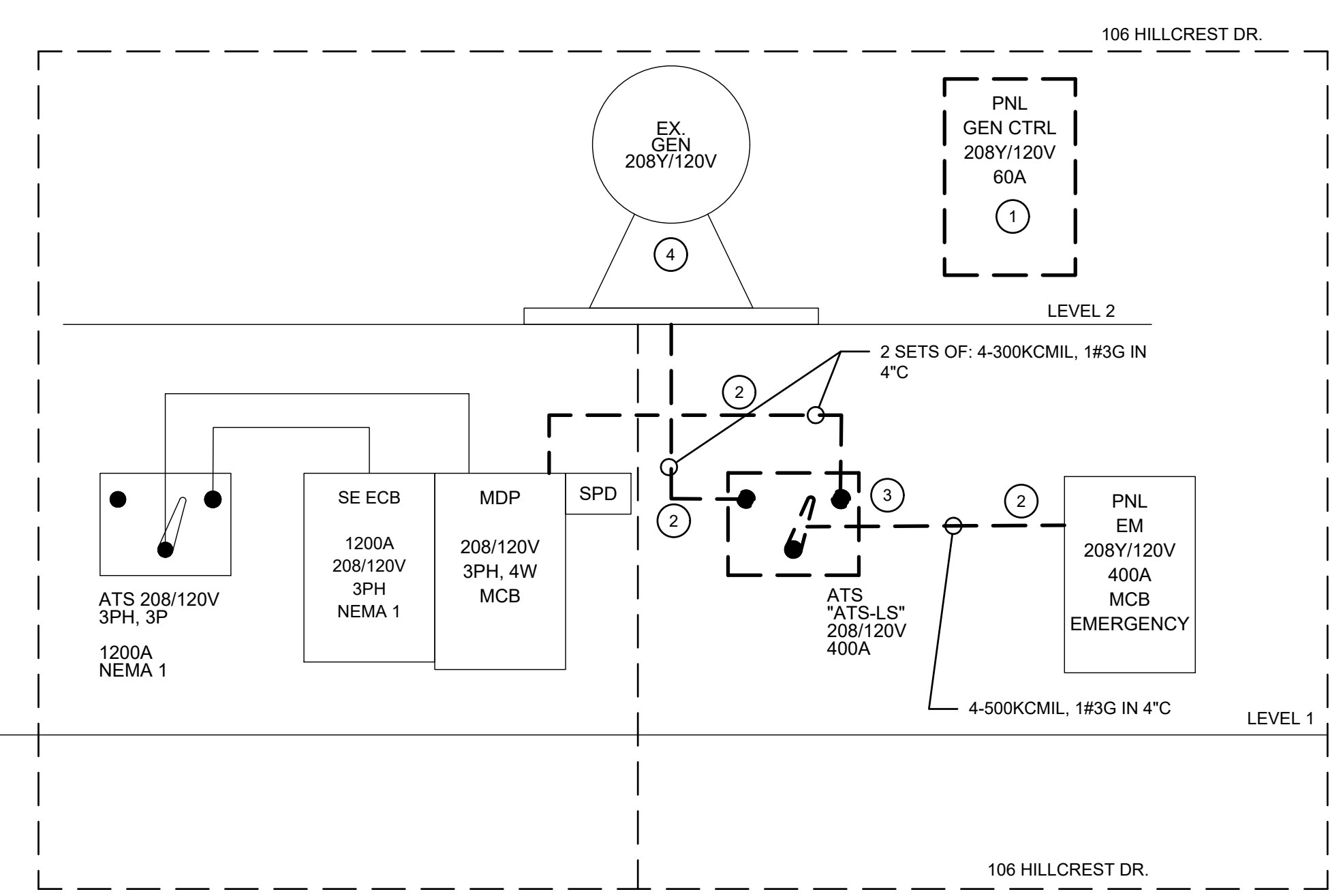
B

A

LEE COUNTY
 GOVERNMENT CENTER
 OPTIONAL STAND-BY
 GENERATOR REPLACEMENT
 LEE COUNTY GOVERNMENT
 106 HILLCREST DR.
 SANFORD, NC 27330

LOAD SUMMARY EXISTING SERVICE	
DESCRIPTION	DEMAND LOAD
METERING LOAD DATA PROVIDED BY OWNER FROM UTILITY COMPANY. METERED LOAD BY DUKE ENERGY OVER THE LAST 24 MONTHS.	223.68 KW
LOAD ADDED: GENERATOR LOAD CENTER	-2.5 KW
LOAD ADDED: NEW GENERATOR - HEATER, CHARGER	2.5 KW
TOTAL LOAD=	279.6 KVA 768 @ 208/120V, 3PH
EXISTING LOAD AT 125%=	960 AMPS
NEW SOURCE CAPACITY=	1000 AMPS

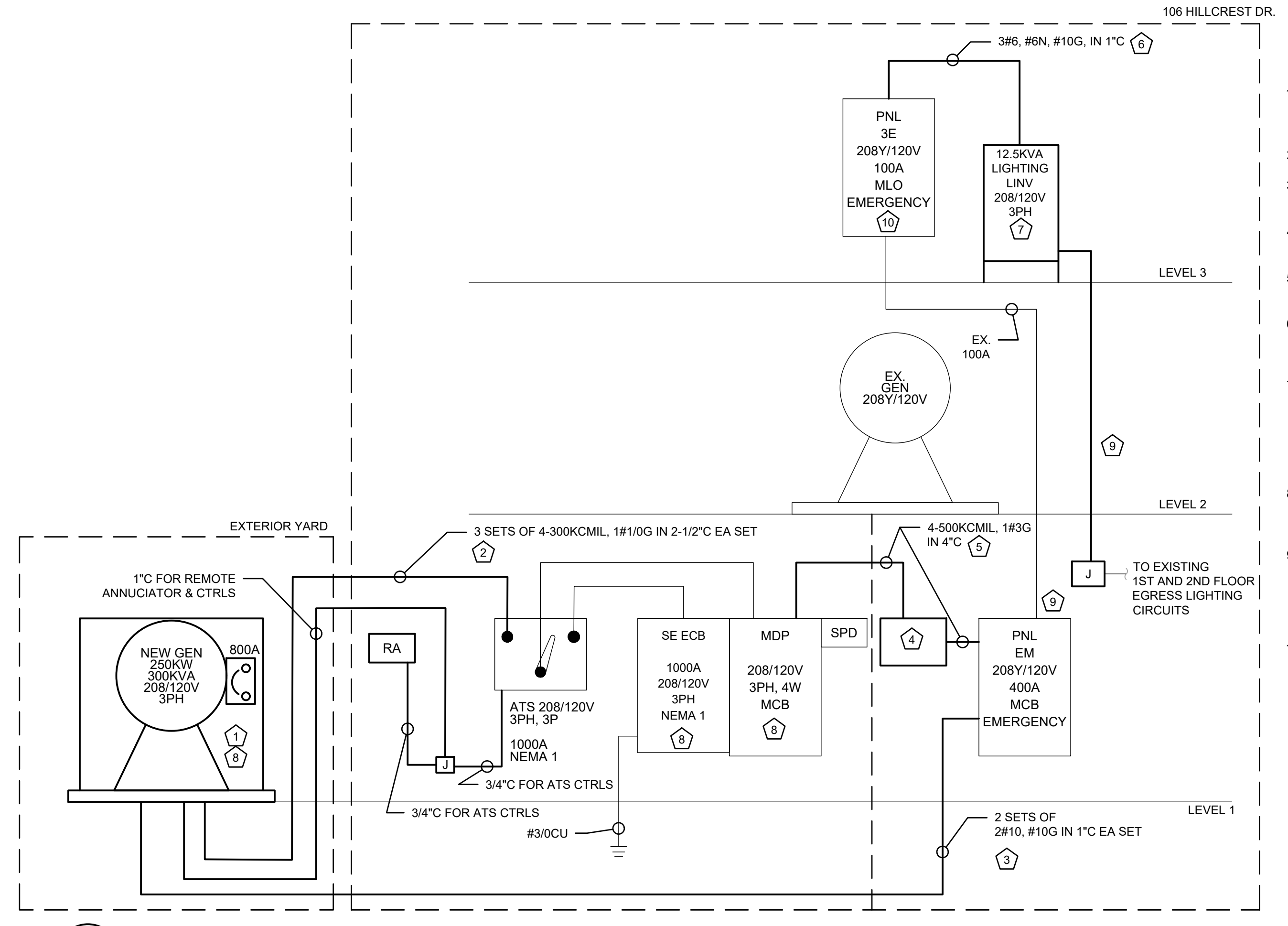
LINETYPE LEGEND:
 ——— NEW ELECTRICAL EQUIPMENT
 - - - - - EXISTING ELECTRICAL EQUIPMENT TO BE REMOVED
 ——— EXISTING ELECTRICAL PANEL, EQUIPMENT AND FEEDERS TO REMAIN



2 PARTIAL DEMOLITION WORK RISER DIAGRAM
 E-300 SCALE: N.T.S.

KEYED NOTES DEMO:

- CONTRACTOR SHALL DEMOLISH EXISTING GENERATOR LOAD CENTER. REMOVE ALL WIRING BETWEEN LOAD CENTER AND SOURCE. CONDUIT SHALL REMAIN, CAP OFF AND LABEL. TURN SOURCE BREAKER OFF AND LABEL AS SPARE. REPRINT EXISTING PANEL SCHEDULE WITH UPDATED CIRCUIT NAMES.
- CONTRACTOR SHALL DEMOLISH EXISTING FEEDERS. CONDUIT FROM GENERATOR TO ATS SHALL REMAIN, CAP OFF AND LABEL. CONDUIT BETWEEN ATS, PANELBOARD, AND SWITCHBOARD SHALL BE REUSED FOR NEW WORK.
- DEMOLISH EXISTING WALL MOUNTED ATS. RETAIN EXISTING ENCLOSURE FOR NEW WORK. REMOVE ALL LABELING ON EXTERIOR OF ATS THAT INDICATE TYPE OF EQUIPMENT.
- DEMOLISH ALL CONNECTIONS TO EXISTING GENERATOR AND ABANDON IN PLACE. REFER TO PLUMBING PLANS FOR DEMOLITION TO GAS LINES.

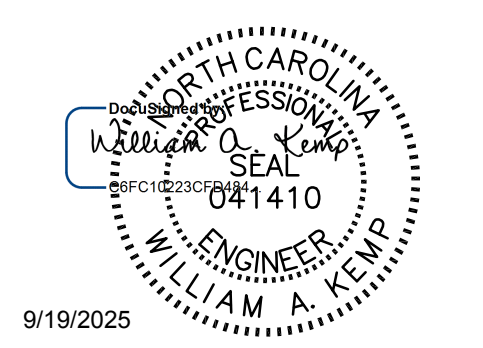


1 PARTIAL NEW WORK RISER DIAGRAM
 E-300 SCALE: N.T.S.

KEYED NOTES NEW WORK:

- PROVIDE NEW 250KW NATURAL GAS GENERATOR FOR OPTIONAL STAND-BY LOADS. REFER TO FLOOR PLAN FOR LOCATION OF GENERATOR. REFER TO SPECIFICATIONS FOR MORE INFORMATION ON GASEOUS GENERATOR.
- PROVIDE NEW FEEDER FOR GENERATOR POWER SOURCE IN ATS.
- PROVIDE NEW BRANCH CIRCUITS FOR GENERATOR HEATER AND BATTERY CHARGER. REFER TO FLOOR PLAN FOR ADDITIONAL INFORMATION.
- REUSE DEMOLISHED ATS ENCLOSURE RETAINED DURING DEMOLITION AS A JUNCTION BOX FOR NEW FEEDER.
- PROVIDE NEW FEEDER FOR PANEL EM. REUSE EXISTING CONDUIT RETAINED DURING DEMOLITION.
- PROVIDE NEW FEEDER FOR NEW LIGHTING INVERTER. REFER TO PANEL SCHEDULE FOR INFORMATION ON LOADS BEING RELOCATED TO LIGHTING INVERTER.
- PROVIDE NEW 12.5KVA, 208/120V, THREE PHASE INVERTER FOR LIFE SAFETY LOADS. REMOVE EXISTING BRANCH CIRCUITS SERVING EXIT SIGNS AND LIGHTING CIRCUITS FROM PANEL 3E AND EXTEND THE BRANCH CIRCUITS (3#12-3/4" C) TO LIGHTING INVERTER. CONNECT TO NEW CIRCUIT BREAKERS PROVIDED IN INVERTER. REFER TO E-400 FOR ADDITIONAL INFORMATION ON RELOCATED CIRCUITS.
- LABEL NEW MDP, ENCLOSED CIRCUIT BREAKER, AND GENERATOR DISCONNECT: "BUILDING SERVED BY 2 SOURCES OF POWER: "UTILITY SE-ECB (MAIN ELECTRICAL ROOM), OPTIONAL STAND-BY GENERATOR (YARD)."
- REMOVE EXISTING BRANCH CIRCUITS SERVING EXIT SIGNS AND LIGHTING CIRCUITS FROM PANEL EM AND EXTEND THE BRANCH CIRCUITS (3#12-3/4" C) TO NEW LIGHTING INVERTER ON THIRD FLOOR. CONNECT TO NEW CIRCUIT BREAKERS PROVIDED IN INVERTER. REFER TO E-400 FOR ADDITIONAL INFORMATION ON RELOCATED CIRCUITS.
- PROVIDE A NEW 60A, 3P BREAKER IN EXISTING PANEL 3E. REFER TO PANEL SCHEDULE FOR ADDITIONAL INFORMATION.

SEAL



9/19/2025

KEY PLAN

SCALE

No.	DATE	BY	Description

REVISIONS

DRAWN BY MEH

APPROVED BY WAK

CHECKED BY WAK

DATE 09/19/2025

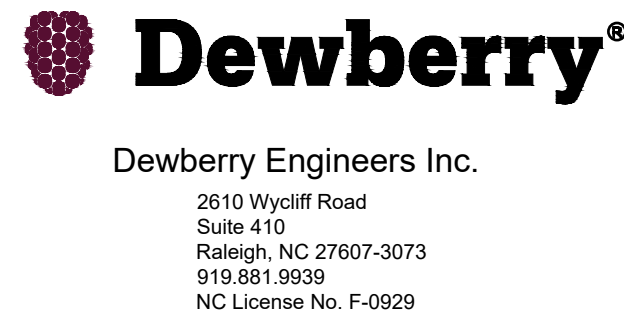
TITLE

**ELECTRICAL
 DEMOLITION AND
 NEW WORK
 RISER DIAGRAMS**

PROJECT NO. 50189595

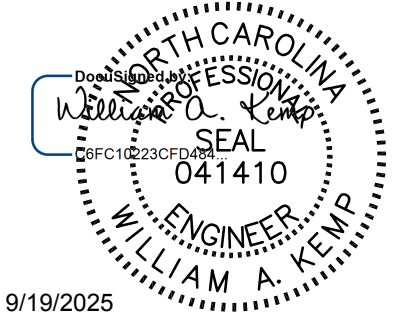
E-300

SHEET NO.



LEE COUNTY GOVERNMENT
 106 HILLCREST DR.
 SANFORD, NC 27330

SEAL



9/19/2025

KEY PLAN

SCALE

INVT LOAD SERVED	CKT	P	CB	VA/PHASE	DESCRIPTION
EMERGENCY LIGHTING - EXT SIGNS	1	1	20	1000	
EMERGENCY LIGHTING - EXT LIGHTS	2	1	20	1000	
EMERGENCY LIGHTING - LIGHTS	3	1	20	1000	
EMERGENCY LIGHTING - LIGHTS	4	1	20	1000	
EMERGENCY LIGHTING - OUTSIDE	5	1	20	1000	
EMERGENCY LIGHTING - EXT LIGHTS	6	1	20	1000	
EMERGENCY LIGHTING - EM LIGHT	7	1	20	1000	
EMERGENCY LIGHTING - EM LIGHTS	8	1	20	1000	
EMERGENCY LIGHTING - EM LIGHTS	9	1	20	1000	
EMERGENCY LIGHTING - EXT LIGHTS	10	1	20	1000	
SPARE	11	1	20	0	
SPARE	12	1	20	0	

VOLTAGE RATING	208	MAIN BREAKER?	YES	TOTAL LOAD (VA)	10000	PANEL DESIGNATION	LINV
# OF PHASES	3	BREAKER RATING	60	DEMAND FACTOR	1.25	NOTES:	
# OF WIRES	3	BUS RATING	60	DEMAND LOAD (VA)	12500	Provide with dead front	
MOUNTING?	FLOOR	NEUTRAL RATING	100%	DEMAND AMPS	34		
SIZE	12.5 kVA	MINIMUM KAIC	22				

1 LIGHTING INVERTER "LINV" SCHEDULE
E-400 SCALE: N.T.S.

EXISTING PANEL 3E												BRANCH: OPTIONAL STAND-BY												NEW WORK											
CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	CIRCUIT BREAKER			PHASE			CIRCUIT BREAKER			DESCRIPTION	LOAD KVA	LOAD TYPE	CKT																			
				NOTE	FUNCTION	TRIP	A	B	C	TRIP	FUNCTION	NOTE																							
1	L	0.00	SPARE	3	EX	20	0.00			20	EX	3	SPARE	0.00	L	2																			
3	L	1.00	2ND FLOOR LIGHTS		EX	20		1.00		20	EX	3	SPARE	0.00	L	4																			
5	L	0.00	SPARE	3	EX	20		1.00	1.00	30	EX		TELEPHONE OUTLETS	1.00	R	6																			
7	L	0.00	SPARE	3	EX	20	0.80			20	EX		TELEPHONE OUTLETS	0.80	R	8																			
9	O	0.80	COMP JOHN OFFICE		EX	20		0.80					SPACE	1.00	O	12																			
11	L	0.00	SPARE		EX	20			1.00	30	EX		2ND FLOOR COMP UPS	1.00	O	12																			
13	L	4.00	INVERTER	1,5	CB	60	5.00		1.00	30	EX		3RD FLOOR COMP UPS	1.00	O	14																			
15	E	4.00	REFER TO RISER DIAGRAM					4.00					SPACE		E	16																			
17	E	4.00						4.00					SPACE		E	18																			
19	E		SPACE			R	0.00						SPACE		E	20																			
21	E		SPACE				0.00						SPACE		E	22																			
23	E		SPACE					0.00					SPACE		E	24																			
25	E		SPACE				0.00						SPACE		E	26																			
27	E		SPACE					0.00					SPACE		E	28																			
29	E		SPACE					0.00					SPACE		E	30																			
	O						0.00							S																					
	O						0.00							S																					
	O						0.00							S																					

208Y/120 V	3 PHASE	4 WIRE	(R) RECEPTACLES	8.0	125%	10.0	FED FROM: NEW MDP
MAINS: MLO		100 A BUS	(M) MOTOR	1.8	100%	1.8	MOUNT: SURFACE
10 KAIC			(H) HVAC	0.0	100%	0.0	NEMA: 1
			(L) LIGHTING	5.0	125%	6.3	MAN / MODEL # EXISTING SQUARE D TYPE MCOO
			(S) SUBFED PANELS	0.0	100%	0.0	208/120V, 3PH, 4W PANELBOARD
			(O) OTHER	2.8	100%	2.8	
			TOTAL	17.6	118%	20.9	

LOAD TYPE	CONNECTED	DEMAND	LOAD TYPE	CONNECTED	DEMAND
(E) EXISTING	8.0	125%	(E) EXISTING	20.9	125%
(M) MOTOR	1.8	100%	(M) MOTOR	0.0	100%
(H) HVAC	0.0	100%	(H) HVAC	0.0	100%
(L) LIGHTING	5.0	125%	(L) LIGHTING	0.0	100%
(S) SUBFED PANELS	0.0	100%	(S) SUBFED PANELS	0.0	100%
(O) OTHER	2.8	100%	(O) OTHER	2.0	100%
TOTAL	17.6	118%	TOTAL	22.9	123%

1. PROVIDE NEW BREAKER IN EXISTING SPACE	SFCB: SUBFEED CB	C: CONDUIT	SR: SEE RISER
2. PROVIDE NEW CIRCUIT. CONNECT TO EXISTING BREAKER	SFL: SUBFEED LUGS	PH: PHASE	EX: EXISTING
3. RELOCATE BRANCH LIGHTING CIRCUITS TO INVERTER	N: NEUTRAL	GFCB: GND FAULT CB	ST: SHUNT TRIP
4. REMOVE WIRING TO SOURCE. MARK BREAKER AS SPARE	G: GROUND	ST: SHUNT TRIP	AFCB: ARC FAULT CB
5. VERIFY BREAKER SIZE WITH MANUFACTURER'S SUGGESTIONS.	CB: CKT BRKR	AFCB: ARC FAULT CB	

PH. A	6.9	KVA	57.3	AMP
PH. B	6.9	KVA	57.3	AMP
PH. C	7.1	KVA	59.2	AMP

2 EXISTING PANEL 3E SCHEDULE
E-400 SCALE: N.T.S.

EXISTING PANEL EM												BRANCH: OPTIONAL STAND-BY												NEW WORK											
CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	CIRCUIT BREAKER			PHASE			CIRCUIT BREAKER			DESCRIPTION	LOAD KVA	LOAD TYPE	CKT																			
				NOTE	FUNCTION	TRIP	A	B	C	TRIP	FUNCTION	NOTE																							
1	O	0.50	BLOCK HEATER	1	CB	20	0.50						SPACE		O	2																			
3	O	0.50						0.50					SPACE		E	4																			
5	E	0.00							0.00		30	EX	EXISTING		E	6																			
7	E	0.00	SPARE	4	EX	60	0.00				20	EX	NEW SYSTEM ON THIRD FLOOR		E	8																			
9	E	0.00						0.00			20	EX	NEW SYSTEM ON THIRD FLOOR		E	10																			
11	E		SPACE						0.00		20	EX	NEW SYSTEM ON THIRD FLOOR		E	12																			
13	E		EXISTING		EX	30	0.00				20	EX	FIRE ALARM		E	14																			
15	E		REFRIDGE ON SECOND FLOOR		EX	20		0.00			20	EX	EXISTING		E	16																			
17	E	0.00	SPARE	3	EX	20			0.00	20	EX	EXISTING		E	18																				
19	E		EXISTING		EX	20	0.00			20	EX	3	SPARE	0.00	E	20																			
21	E		LOOK? FRIDGE?		EX	20		0.00		20	EX		EXISTING		E	22																			
23	E		REFRIDGE ON SECOND FLOOR		EX	20		0.00		20	EX		EXISTING		E	24																			
25	E	6.90					7.90			20	EX	2,3	BATTERY CHARGER	1.00	O	26																			
27	E	6.90	PANEL 3E		EX	100		6.90		20	EX	3	SPARE	0.00	E	28																			
29	E	7.10						7.10		20	EX	3	SPARE	0.00	E	30																			
31	E		SPACE				0.00						SPACE		E	32																			
33	E		SPACE				0.00						SPACE		E	34																			
35	E		SPACE					0.00					SPACE		E	36																			
37	E		SPACE				0.00						SPACE		E	38																			
39	E		SPACE					0.00					SPACE		E	40																			
41	E		SPACE					0.00					SPACE		E	42																			
	O						0.00			200	EX		SUBFED 3RD AND 4TH COMPUTER PANEL (OLD COMPUTER ROOMS)		S																				
	O						0.00							S																					
	O						0.00							S																					

208Y/120 V	3 PHASE	4 WIRE	(R) RECEPTACLES	20.9	125%	26.1	FED FROM: NEW MDP
MAINS: MCB		400 A MCB	(M) MOTOR	0.0	100%	0.0	MOUNT: SURFACE
22 KAIC			(H) HVAC	0.0	100%	0.0	NEMA: 1
			(L) LIGHTING	0.0	125%	0.0	MAN / MODEL # EXISTING PRL3, 500A, 3PH, 4W
			(S) SUBFED PANELS	0.0	100%	0.0	208/120V PANEL WITH CH BREAKERS
			(O) OTHER	2.0	100%	2.0	
			TOTAL	22.9	123%	28.1	

LOAD TYPE	CONNECTED	DEMAND	LOAD TYPE	CONNECTED	DEMAND
(E) EXISTING	20.9	125%	(E) EXISTING	20.9	125%
(M) MOTOR	0.0	100%	(M) MOTOR	0.0	100%
(H) HVAC	0.0	100%	(H) HVAC	0.0	100%
(L) LIGHTING	0.0	125%	(L) LIGHTING	0.0	100%
(S) SUBFED PANELS	0.0	100%	(S) SUBFED PANELS	0.0	100%
(O) OTHER	2.0	100%	(O) OTHER	2.0	100%
TOTAL	22.9	123%	TOTAL	22.9	123%

1. PROVIDE NEW BREAKER IN EXISTING SPACE	SFCB: SUBFEED CB	C: CONDUIT	SR: SEE RISER
2. PROVIDE NEW CIRCUIT. CONNECT TO EXISTING BREAKER	SFL: SUBFEED LUGS	PH: PHASE	EX: EXISTING
3. RELOCATE BRANCH LIGHTING CIRCUITS TO INVERTER	N: NEUTRAL	GFCB: GND FAULT CB	ST: SHUNT TRIP
4. REMOVE WIRING TO SOURCE. MARK BREAKER AS SPARE	G: GROUND	ST: SHUNT TRIP	AFCB: ARC FAULT CB

PH. A	10.3	KVA	86.0	AMP
PH. B	9.1	KVA	75.7	AMP
PH. C	8.7	KVA	72.7	AMP

3 EXISTING PANEL EM SCHEDULE
E-400 SCALE: N.T.S.

No.	DATE	BY	Description

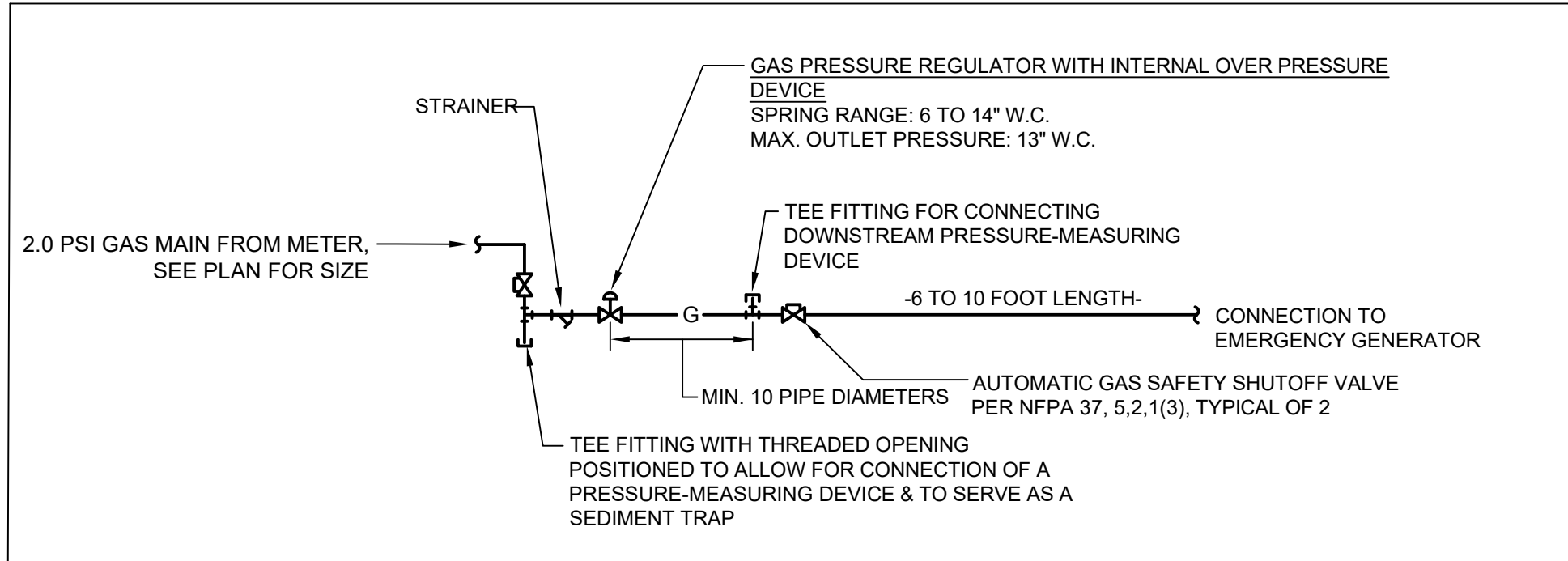
DRAWN BY: MEH
 APPROVED BY: WAK
 CHECKED BY: WAK
 DATE: 09/19/2025

TITLE: ELECTRICAL DEMOLITION AND NEW WORK PANEL SCHEDULE

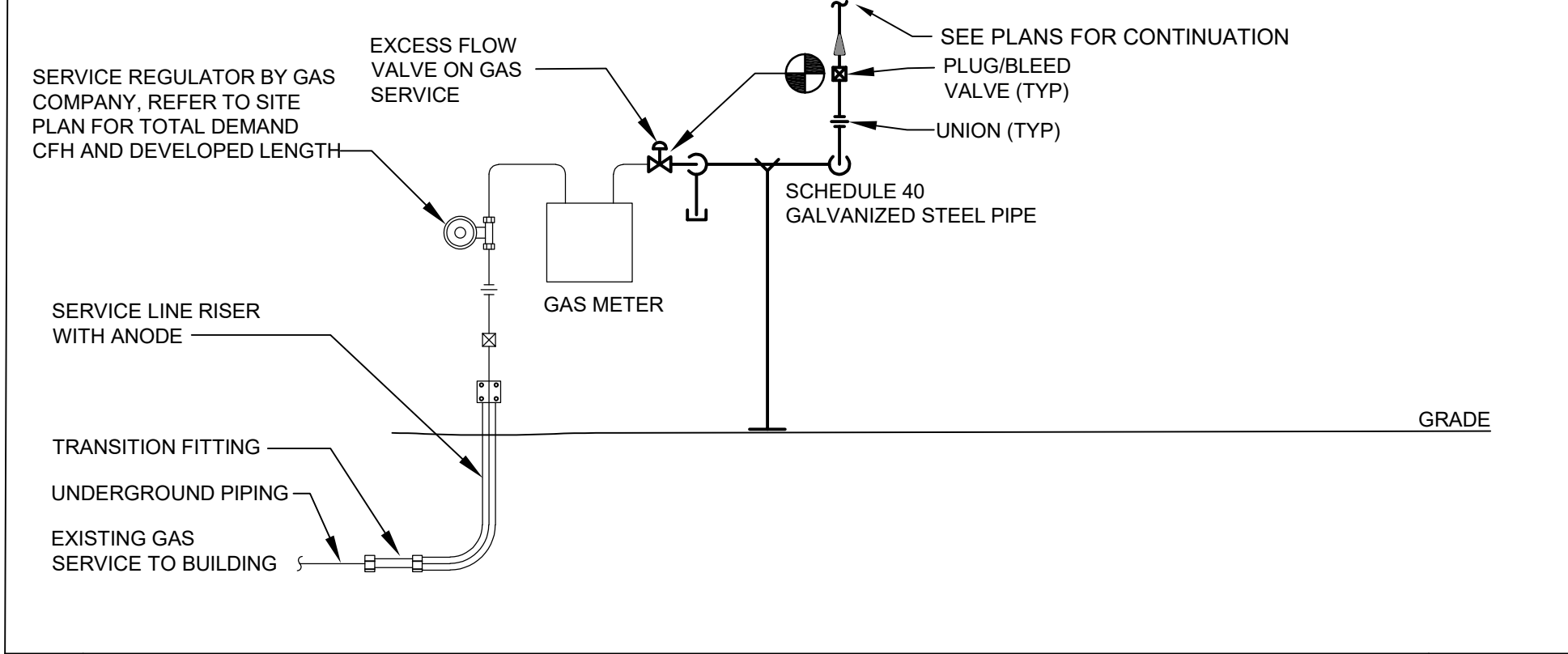
PROJECT NO. 50189595

E-400

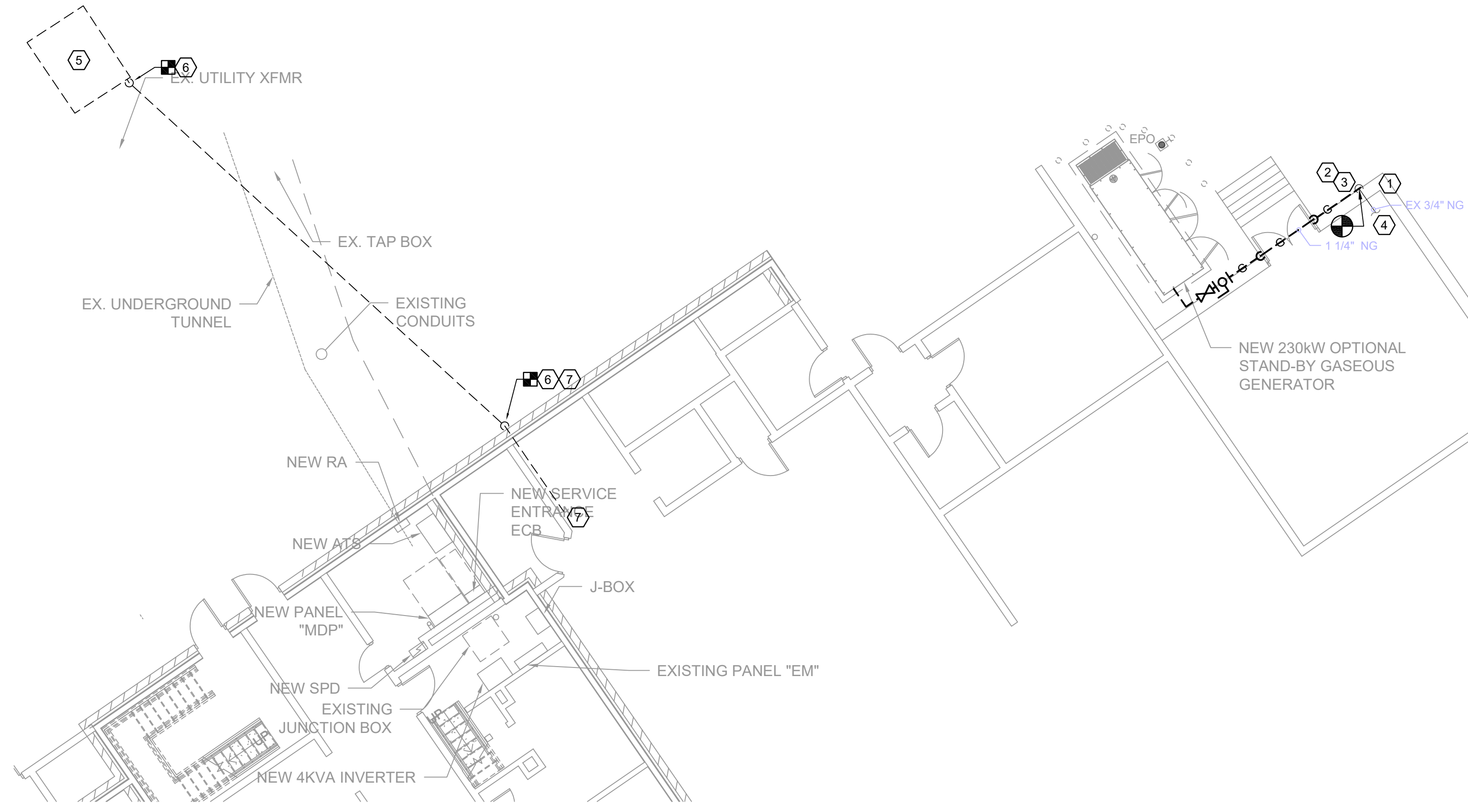
SHEET NO.



2 NATURAL GAS VALVE ASSEMBLY DETAIL SCALE: NTS



1 NATURAL GAS REGULATOR AND METER DETAIL SCALE: NTS



GENERAL NOTES:

- REFER TO P-001 FOR PLUMBING GENERAL NOTES.

KEYED NOTES NEW WORK: (6)

- COORDINATE WITH THE UTILITY PROVIDER TO REPLACE THE EXISTING METER TO SUPPORT THE NEW NATURAL GAS DEMAND AND SUPPLY PRESSURE. UTILITY PROVIDER TO REPLACE NATURAL GAS METER AND UTILITY SUPPLY AS NECESSARY TO ACCOMMODATE. SUPPLY PRESSURE TO BUILDING SHALL BE 2.0 PSI.
- UPSIZE EXISTING SUPPLY PIPING DOWNSTREAM TO MATCH SUPPLY SIZE INDICATED ON PLAN FOR GENERATOR.
- PROVIDE NEW CONNECTION AND ROUTE ON WALL SURFACE TO NEW GENERATOR LOCATION GOING ABOVE AND AROUND THE DOOR FRAME.
- CONTRACTOR TO REPLACE THE EXISTING PRESSURE REGULATING VALVE SERVING THE EXISTING BOILER (300 CFH) INSIDE THE BUILDING FOR ONE THAT ACCEPTS THE NEW 2.0 PSI INLET AND REDUCES THE PRESSURE DOWN TO THE NECESSARY RANGE OF EXISTING EQUIPMENT (ASSUMED TO BE 0.5 PSI).
- EXISTING DIESEL FUEL TANK TO REMAIN.
- CUT AND CAP BOTH ENDS OF UNDERGROUND DIESEL FUEL SUPPLY PIPING ABOVEGROUND. PRIOR TO CAPPING BOTH ENDS AND ABANDONING UNDERGROUND PIPING IN PLACE, FULLY EVACUATE ALL DIESEL FUEL FROM UNDERGROUND PIPING AND FILL PIPING WITH FLOWABLE FILL. CAP AND WATERPROOF FUEL LINE CONNECTION AT TOP OF TANK.
- DISCONNECT AND REMOVE ALL DIESEL FUEL SUPPLY PIPING, AND ASSOCIATED SUPPORTS, ROUTED UP BUILDING EXTERIOR, ALONG ROOF, UP TO AND INCLUDING FINAL CONNECTION TO EXISTING GENERATOR IN ROOM LOCATED ON ROOF. EVACUATE DIESEL FUEL FROM HOLDING TANK AT GENERATOR AND CAP AND SEAL FUEL LINE CONNECTION. REFER TO ELECTRICAL SHEETS FOR ADDITIONAL INFORMATION.

NATURAL GAS PIPE SIZING CRITERIA:

EXISTING NATURAL GAS DEMAND = 300.0 CFH.
 NEW NATURAL GAS DEMAND = 3000.0 CFH.
 TOTAL NATURAL GAS DEMAND = 3300.0.
 LONGEST PIPE LENGTH ~ 50 FT.
 PIPING SIZED IN ACCORDANCE WITH TABLE 402.4(5) OF THE
 NC FUEL GAS CODE. EACH PIECE OF EQUIPMENT SHALL BE
 PROVIDED WITH A PRESSURE REGULATOR.

Dewberry
 Dewberry Engineers Inc.
 2610 Wycliff Road
 Suite 410
 Raleigh, NC 27607-3073
 919.881.9939
 NC License No. F-0829



**LEE COUNTY
 GOVERNMENT CENTER
 OPTIONAL STAND-BY
 GENERATOR REPLACEMENT**
 LEE COUNTY GOVERNMENT
 106 HILLCREST DR.
 SANFORD, NC 27330

SEAL

 9/19/2025

KEY PLAN

 SCALE

No.	DATE	BY	Description
REVISIONS			

TITLE
**PLUMBING
 NEW WORK
 SITE PLAN**

PROJECT NO. 50189595

P-101
 SHEET NO.

E
D
C
B
A