

# OZARK CORRECTIONAL CENTER - INSTALL SINGLE GENERATOR BACKUP Fordland, Missouri

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**TRUE**  
**ENGINEERING**  
MECHANICAL • ELECTRICAL • PLUMBING

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WWW.TRUE-MEP.COM

OWNER: STATE OF MISSOURI  
MIKE KEHOE,  
GOVERNOR

DEPARTMENT OF  
CORRECTIONS

PROJECT MANAGEMENT: OFFICE OF ADMINISTRATION  
DIVISION OF FACILITIES  
MANAGEMENT,  
DESIGN AND CONSTRUCTION

DESIGNER: TRUE ENGINEERING GROUP, LLC

PROJECT NUMBER: C2414-01

SITE NUMBER: 7003  
FACILITY NUMBER: 9327003081

#### SHEET INDEX

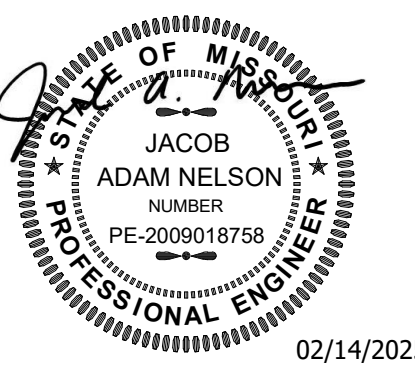
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SHEET NUMBER:

**G-001**

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02/14/2025

Engineer of Record  
Jacob Adam Nelson PE  
PE-2009018758



02/14/2025

PROFESSIONAL SEAL



**True Engineering Group LLC**  
Missouri State Certificate of  
Authority #E-2016000752

**OFFICE OF ADMINISTRATION  
DIVISION OF FACILITIES  
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OZARK CORRECTIONAL  
CENTER - INSTALL SINGLE  
GENERATOR BACKUP

929 HONOR CAMP LN,  
FORDLAND, MO 65652

**PROJECT # C2414-01  
SITE # 7003  
FACILITY # 9327003081**

REVISION:  
DATE:  
REVISION:  
DATE:  
REVISION:  
DATE:  
ISSUE DATE: 02/14/2025

CAD DWG FILE: C2414-01  
DRAWN BY: AM  
CHECKED BY: AH  
DESIGNED BY: AH

SHEET TITLE:

**SITE  
IMPROVEMENT  
PLAN**

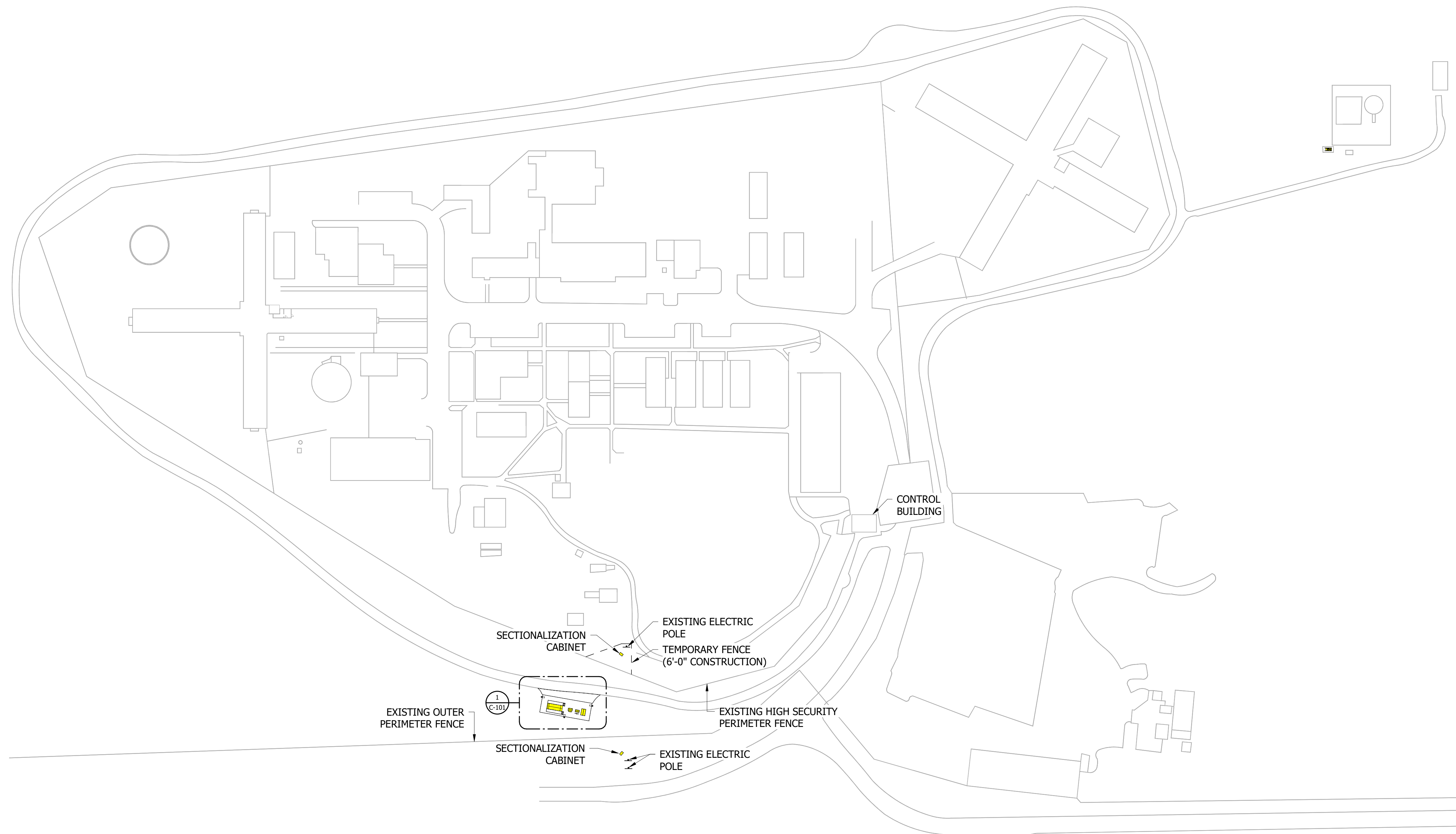
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**C-100**

02 OF 12 SHEETS  
02/14/2025

**SECURITY NOTE:**

CONTRACTOR AND ALL EMPLOYEES WILL BE REQUIRED TO CHECK-IN AND CHECK-OUT OF THE FACILITY DAILY WHEN WORKING INSIDE OF SECURITY FENCE.  
ALL EMPLOYEES WILL BE REQUIRED TO PERFORM BACKGROUND CHECKS FOR APPROVAL TO ENTER FACILITY.  
TRUCKS AND EQUIPMENT ENTERING AND EXITING THE FACILITY INSIDE SECURITY FENCE WILL REQUIRE INSPECTION.  
LARGE EQUIPMENT AND TOOLS CAN BE LEFT INSIDE SECURITY FENCE BUT MUST BE PROPERLY SECURED AND STORED PER OZARK CORRECTIONAL CENTER REQUIREMENTS.  
REFER TO SPECIFICATIONS FOR FURTHER REQUIREMENTS.

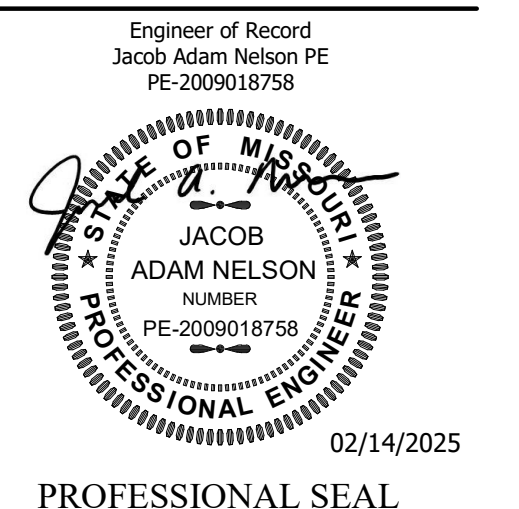


**1 SITE IMPROVEMENT PLAN**  
1" = 80'-0"



KEY VALUE	KEYNOTE TEXT
03.01	FURNISH AND INSTALL CONCRETE BOLLARD. REFER TO DETAIL 2/C101.

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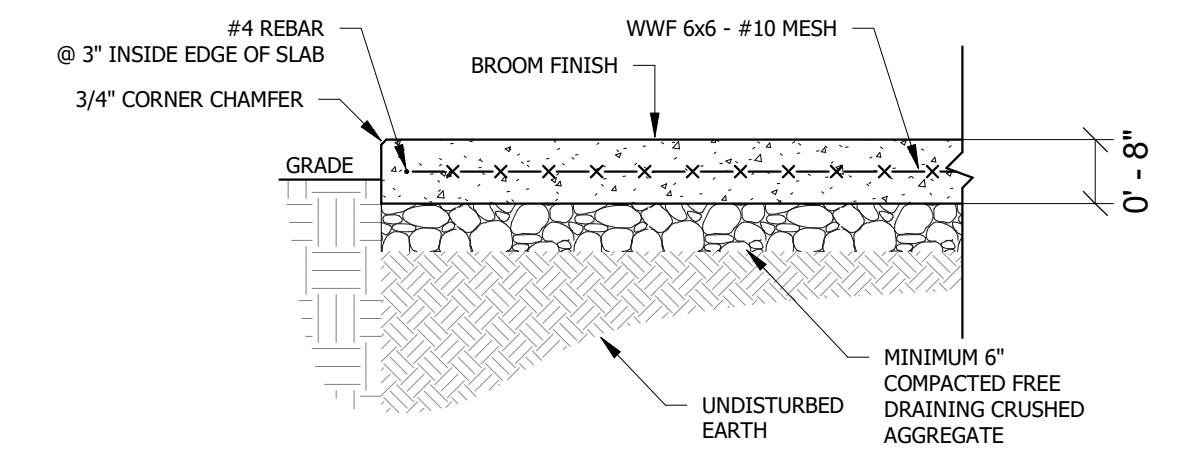
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IMPROVEMENT  
PLAN

SHEET NUMBER:

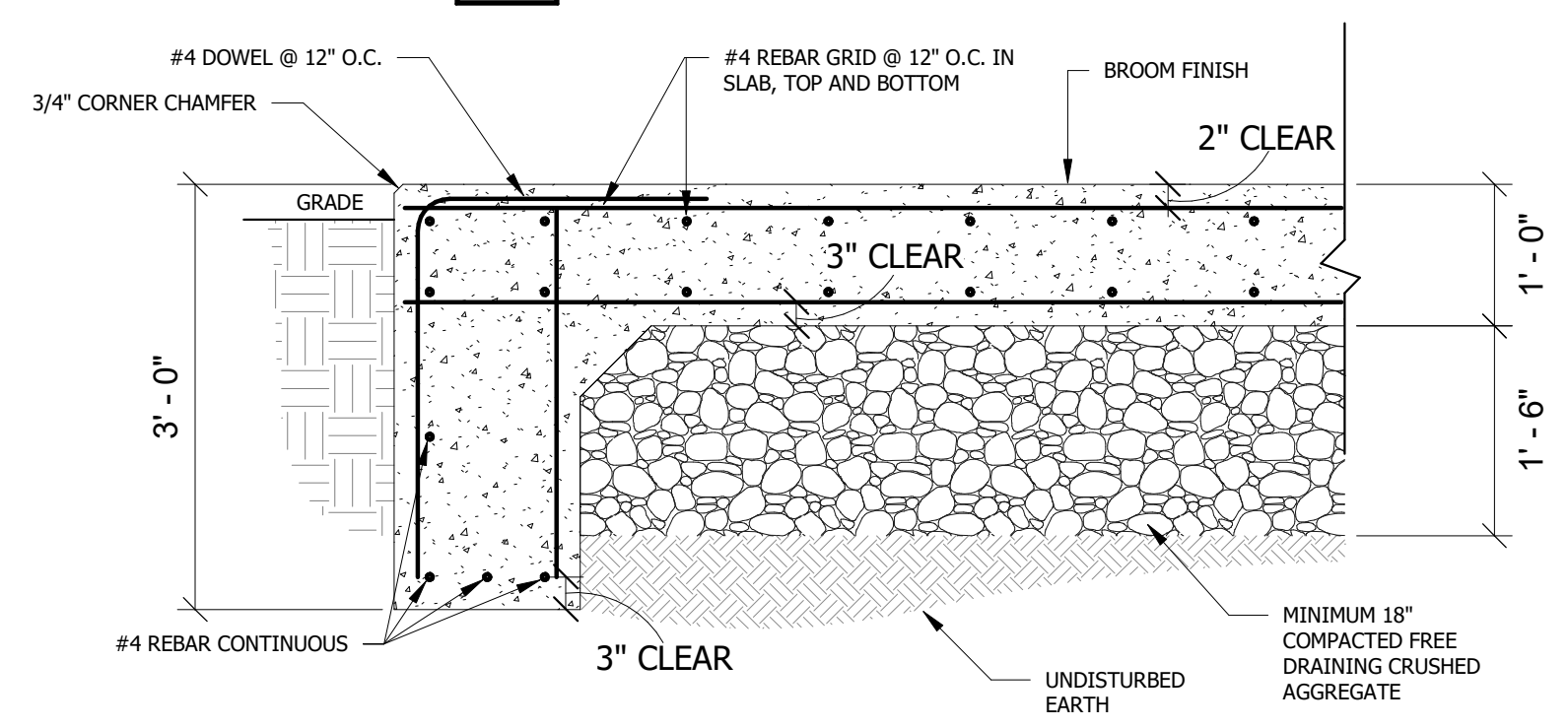
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02/14/2025



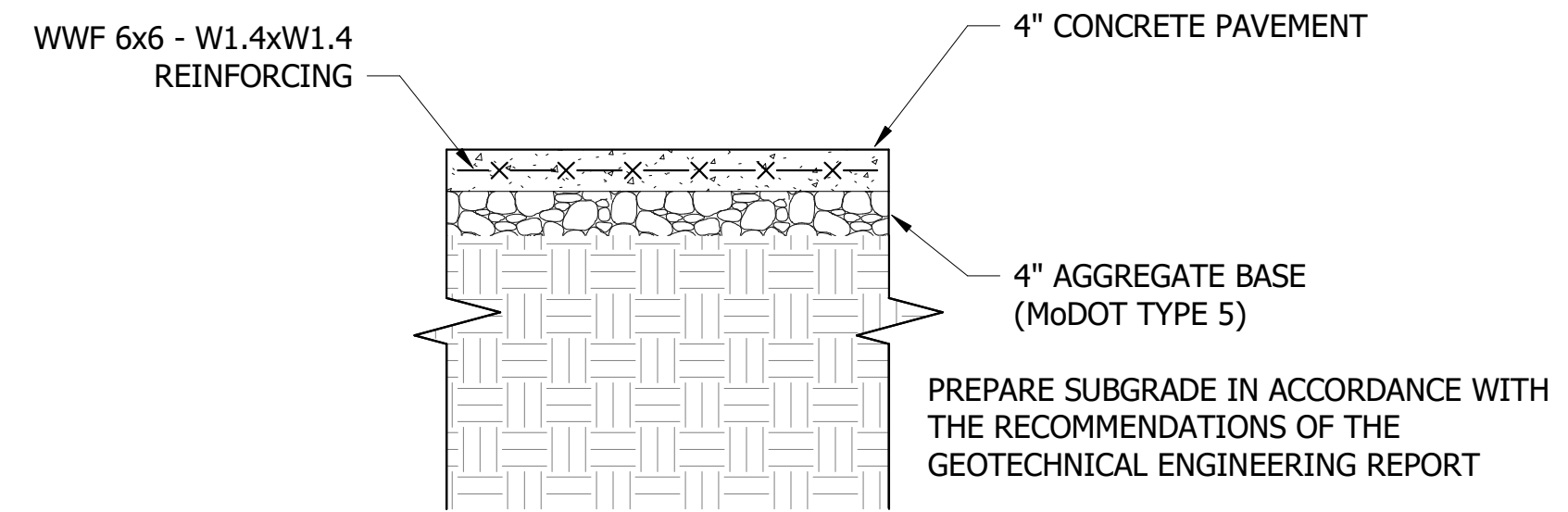
- NOTES:
- COORDINATE DIMENSIONS OF PAD WITH EQUIPMENT AND INCLUDE SUFFICIENT SPACE ON ALL SIDE FOR MAINTENANCE.
  - INSTALL EQUIPMENT ANCHOR BOLTS AS REQUIRED.

**6 EQUIPMENT PAD**  
NOT TO SCALE



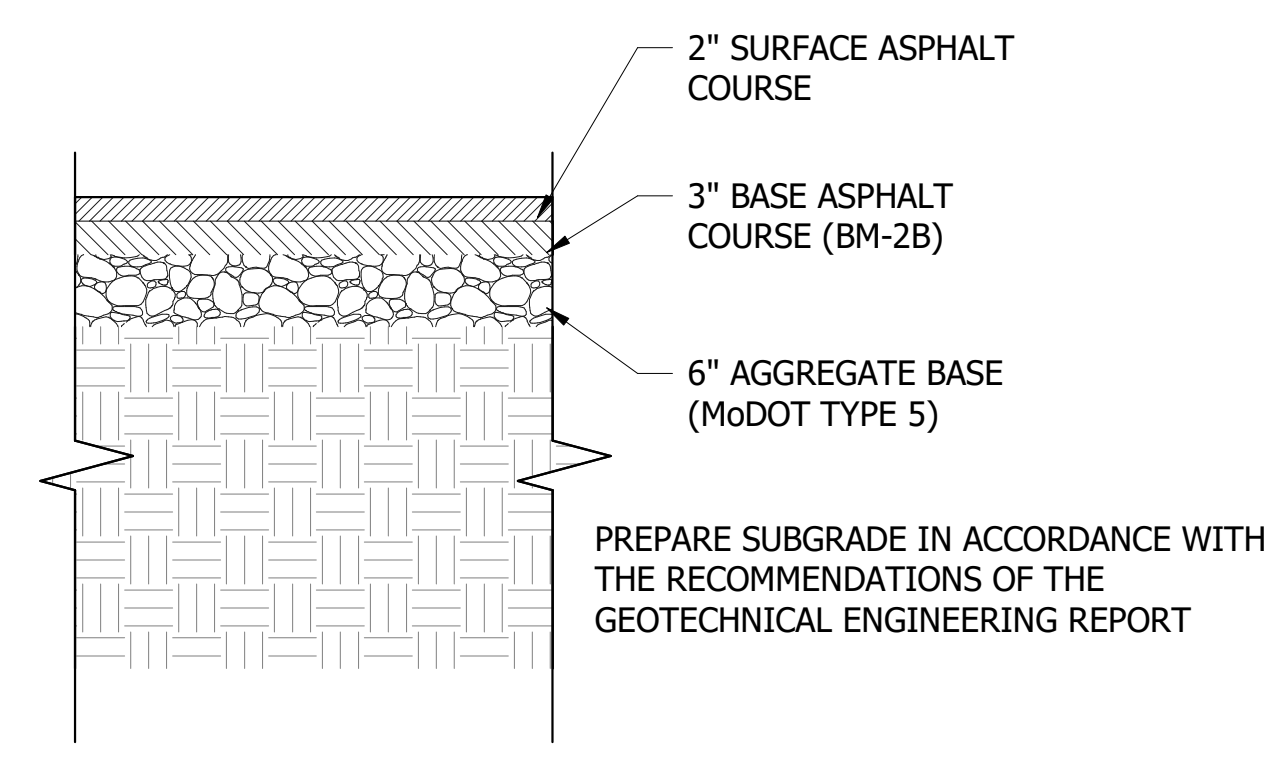
- NOTES:
- COORDINATE DIMENSIONS OF PAD WITH EQUIPMENT AND INCLUDE SUFFICIENT SPACE ON ALL SIDES FOR MAINTENANCE.
  - INSTALL EQUIPMENT ANCHOR BOLTS AND VIBRATION ISOLATION PER MANUFACTURERS REQUIREMENTS.
  - VERIFY SLAB FLATNESS AND LEVELNESS REQUIREMENTS WITH MANUFACTURER.

**5 GENERATOR PAD**  
NOT TO SCALE



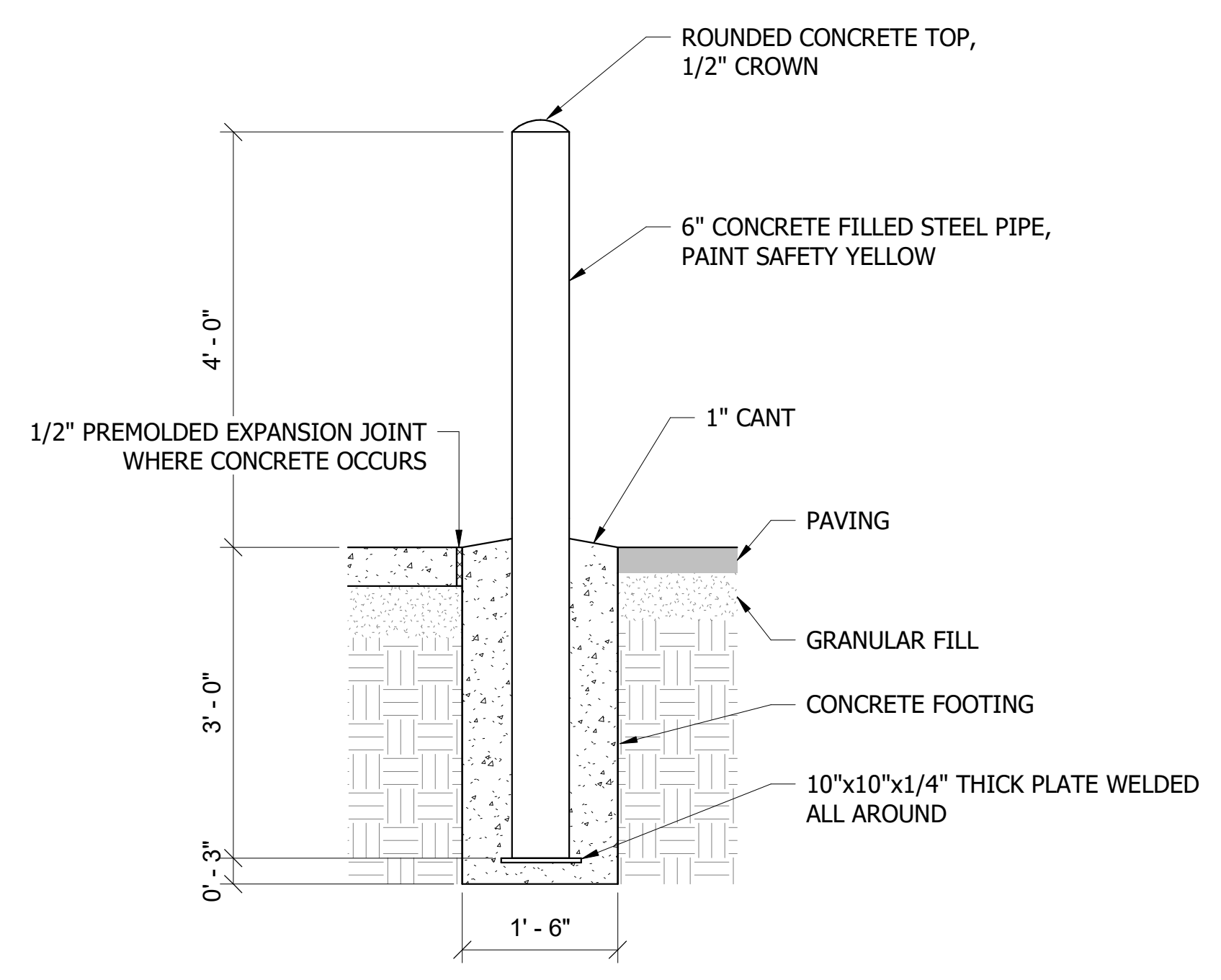
CONTRACTOR SHALL SUBMIT A PAVEMENT JOINTING PLAN AND JOINT DETAILS FOR ALL CONCRETE PAVEMENT FOR APPROVAL BY THE ENGINEER.

**4 CONCRETE PAVEMENT/EQUIPMENT APRON**  
NOT TO SCALE

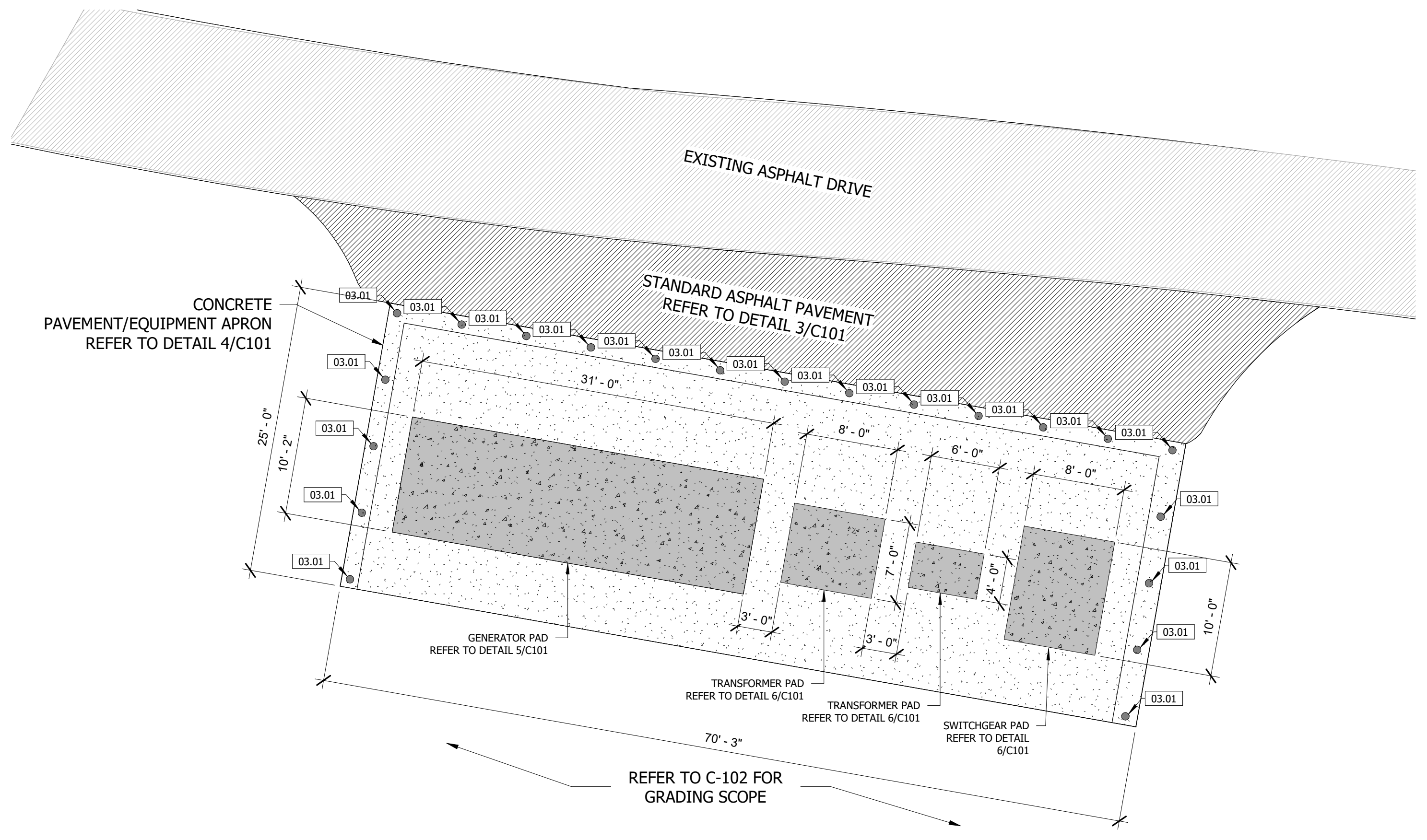


**3 STANDARD DUTY ASPHALT PAVEMENT**  
NOT TO SCALE

**EQUIPMENT PAD NOTES:**  
EQUIPMENT PAD DIMENSIONS SHALL BE SIZED TO EXTEND 6" MINIMUM ON ALL SIDES OF EQUIPMENT. COORDINATE DIMENSIONS OF EQUIPMENT WITH ELECTRICAL CONTRACTOR.



**2 BOLLARD**  
NOT TO SCALE



**1 ENLARGED SITE IMPROVEMENT PLAN**  
1/8" = 1'-0"





**KEY NOTES:**  
 ① CENTERLINE OF GRASS SWALE.

**ABBREVIATIONS**

BC	BACK OF CURB
CC	STANDARD CATCH CURB
CL	CENTER LINE
CMP	CORRUGATED METAL PIPE
EP	EDGE OF PAVEMENT
FES	FLARED END SECTION
FL	FLOW LINE
GT	GUTTER INVERT
GY	GUY WIRE
HDPE	HIGH DENSITY POLYETHYLENE
INV	INVERT
LF	LINEAR FEET
MC	MOUNTABLE CURB
PVC	POLYVINYL CHLORIDE PIPE
R/W	RIGHT-OF-WAY
RCP	REINFORCED CONCRETE PIPE
SC	SPILL CURB
TB	TOP OF BASE ROCK
TC	TOP OF CONCRETE
TG	TOP OF GROUND
TP	TOP OF PAVEMENT
TS	TOP OF SIDEWALK
TW	TOP OF WALL
EX TP	EXISTING TOP OF PAVEMENT
EX TS	EXISTING TOP OF SIDEWALK
	DIRECTION OF SHEET FLOW



NAME: SHAWN W. BARRY  
 LICENSE NO. MO #PE-2009001053



*Drawings and specifications are not intended for use on other projects at this site or other sites without written approval of the engineer*

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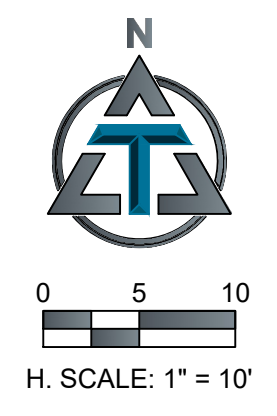
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 CHECKED BY: SWB  
 DESIGNED BY: ZRM

SHEET TITLE:  
**GRADING PLAN**

SHEET NUMBER:

**C-102**

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 02/14/2025

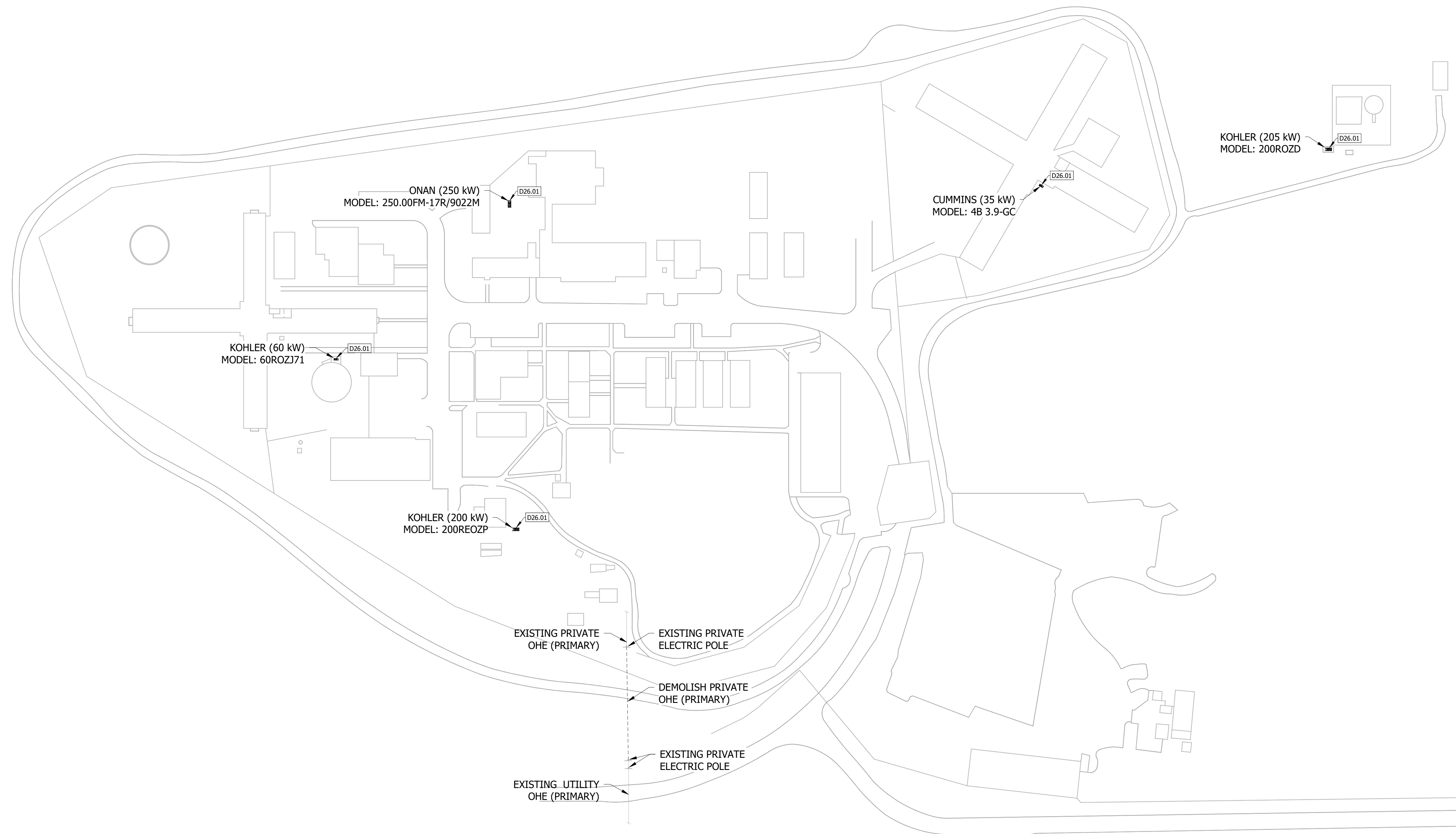




**ELECTRICAL INTERRUPTIONS SPECIAL NOTE:**

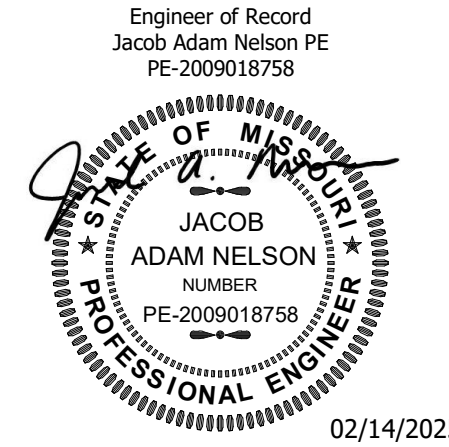
1. ELECTRICAL CONTRACTOR SHALL CAREFULLY PLAN AND EXECUTE ELECTRICAL MODIFICATIONS TO MINIMIZE ELECTRICAL POWER INTERRUPTIONS.
2. INTERRUPTIONS TO ELECTRICAL POWER SHALL BE COORDINATED WITH DEPARTMENT OF CORRECTIONS MINIMUM SEVEN (7) DAYS IN ADVANCE. INTERRUPTIONS MUST BE APPROVED BY THE ENGINEER AND STATE OF MISSOURI.
3. ELECTRICAL CONTRACTOR SHALL PROVIDE TEMPORARY POWER DURING INTERRUPTIONS TO ELECTRICAL POWER BY EXISTING GENERATORS CALLED FOR TO BE REMOVED. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR FUELING OF THE GENERATORS DURING INTERRUPTIONS TO ELECTRICAL POWER DUE TO CONSTRUCTION ACTIVITIES.
4. CONSTRUCTION ACTIVITIES INCLUDING BUT NOT LIMITED TO DEMOLITION, REMOVAL OF EXISTING COMPONENTS, AND/OR CONNECTIONS RESULTING IN INTERRUPTION TO ELECTRICAL POWER SHALL NOT BE PERFORMED UNTIL ALL NECESSARY COMPONENTS TO RESTORE ELECTRICAL POWER ARE AVAILABLE, INSTALLED, AND COMPLETED TO THE GREATEST EXTENT FEASIBLE.
5. EXISTING GENERATORS TO BE REMOVED SHALL REMAIN OPERATIONAL UNTIL NEW GENERATOR IS INSTALLED, CONNECTED, AND OPERATING.
6. INTERRUPTIONS OF ELECTRICAL POWER SHALL BE SCHEDULED IN ADVANCE OUTSIDE OF REGULAR BUSINESS HOURS INCLUDING BUT NOT LIMITED TO AFTER HOURS, WEEKENDS, AND HOLIDAYS. ELECTRICAL CONTRACTOR SHALL INCLUDE PREMIUM LABOR COSTS AS NECESSARY IN BASE BID.
7. INTERRUPTIONS OF ELECTRICAL POWER SHALL BE MINIMIZED IN BOTH FREQUENCY AND DURATION. THE ELECTRICAL CONTRACTOR SHALL MAKE AMPLE RESOURCES AVAILABLE DURING INTERRUPTIONS TO MITIGATE UNEXPECTED DELAYS.

KEYNOTE LEGEND	
KEY VALUE	KEYNOTE TEXT
D26.01	REMOVE EXISTING GENERATOR AND ASSOCIATED CONDUIT AND CONDUCTORS BACK TO ATS. DISABLE AUTOMATIC TRANSFER SWITCH. CONTRACTOR SHALL HAUL OFF GENERATOR WITH OPTION TO SALVAGE AT CONTRACTOR'S DISCRETION. FIELD VERIFY GENERATOR MAKE, MODEL, AND SIZE.



**1 DEMO SITE ELECTRICAL PLAN**  
1" = 80'-0"

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CAD DWG FILE: C2414-01  
DRAWN BY: AM  
CHECKED BY: AH  
DESIGNED BY: AH

SHEET TITLE:  
**DEMO SITE  
ELECTRICAL PLAN**

SHEET NUMBER:  
**E-001**

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02/14/2025

**DIVISION 26 SPECIFICATIONS:**

**26 05 00 - COMMON WORK FOR ELECTRICAL**

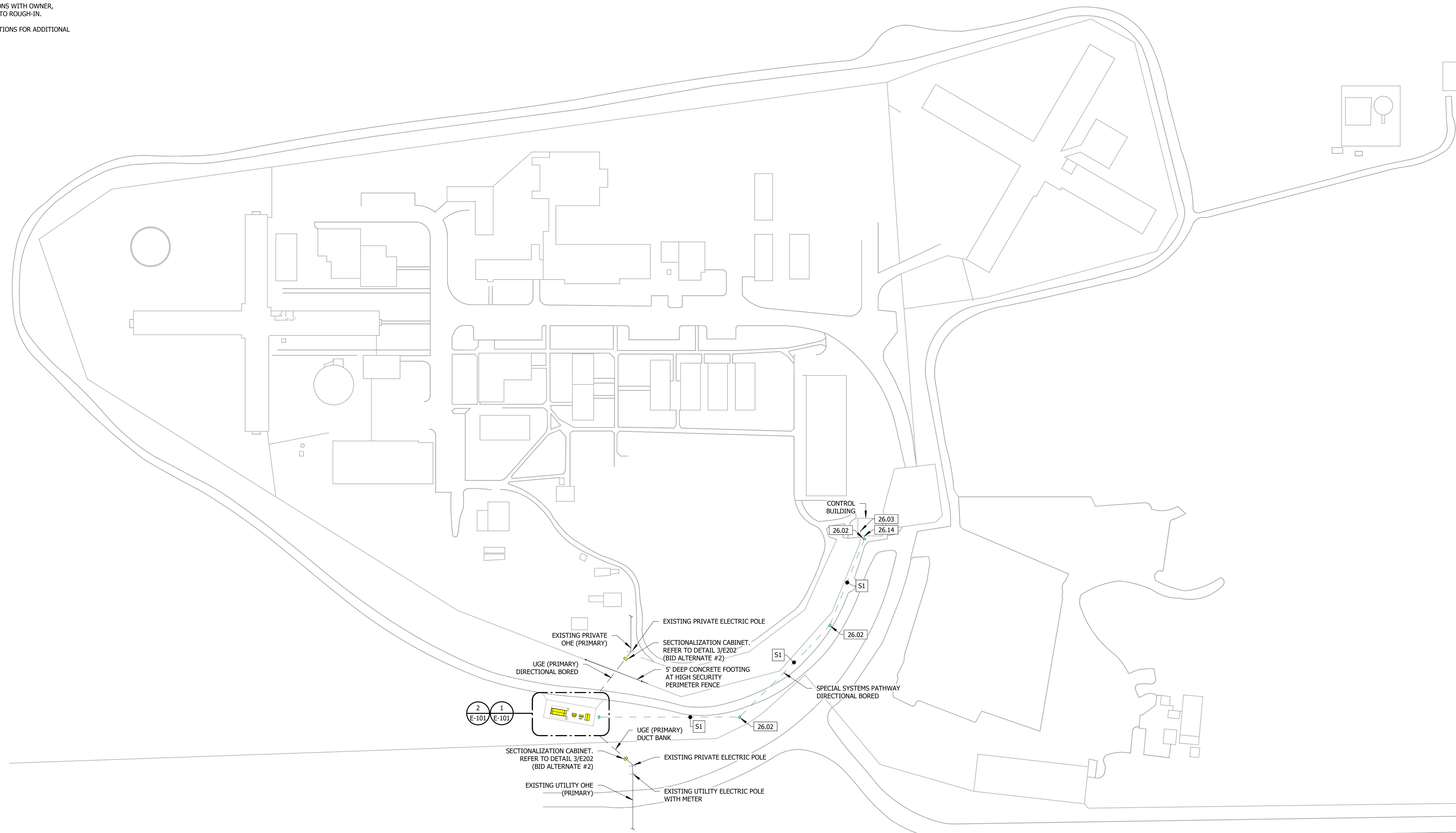
1. ALL ELECTRICAL WORK SHALL BE PERFORMED BY LICENSED ELECTRICAL CONTRACTOR AND SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF THE 2017 NATIONAL ELECTRICAL CODE AND ALL APPLICABLE LOCAL CODES AS ADOPTED BY THE AUTHORITY HAVING JURISDICTION.
2. ALL PERMIT AND INSPECTION FEES SHALL BE INCLUDED IN BID.
3. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO SUBMITTING THEIR BID. NO EXTRAS WILL BE PAID DUE TO UNANTICIPATED EXISTING CONDITIONS.
4. THE PLANS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED. REFER TO ARCHITECTURAL DRAWINGS AND EXISTING CONDITIONS FOR DIMENSIONS.
5. CONDUIT/CONDUCTOR LAYOUTS ARE DIAGRAMMATIC. FIELD COORDINATE EXACT LOCATIONS AND ROUTINGS WITH STRUCTURE, PIPING, LIGHT FIXTURES, CONDUITS, ETC.
6. COOPERATE CLOSELY WITH ALL OTHER TRADES TO EXPEDITE CONSTRUCTION AND AVOID INTERFERENCES AND CONFLICTS. BEFORE ANY PIPING, DUCTWORK, CONDUIT, ETC. IS INSTALLED, IT SHALL BE COORDINATED CAREFULLY BETWEEN ALL TRADES.
7. MAINTAIN ALL CLEARANCES REQUIRED BY ELECTRICAL EQUIPMENT. COORDINATE WITH MECHANICAL AND PLUMBING CONTRACTOR TO MAINTAIN ALL CLEARANCES REQUIRED FOR EQUIPMENT. DO NOT ROUTE PIPING, DUCTWORK, ETC. ABOVE ELECTRICAL PANELS.
8. THE CONTRACTOR SHALL GUARANTEE ALL EQUIPMENT, ACCESSORIES, AND MATERIAL FURNISHED BY THEM FOR A PERIOD OF ONE YEAR FROM FINAL ACCEPTANCE AGAINST ALL DEFECTS.
9. COORDINATE LIGHT FIXTURE LOCATIONS WITH OWNER, STRUCTURE, AND OTHER TRADES PRIOR TO ROUGH-IN.
10. REFER TO SPECIFICATION SHEET SECTIONS FOR ADDITIONAL REQUIREMENTS.

**SPECIAL SYSTEM PATHWAYS**

KEY VALUE	SIZE AND QUANTITY
S1	(1) 2" CONDUIT WITH PULL STRING.

**KEYNOTE LEGEND**

KEY VALUE	KEYNOTE TEXT
26.02	TERMINATE SPECIAL SYSTEMS PATHWAY IN POLYMER CONCRETE BOX WITH LID EQUAL TO HUBBELL QUAZITE. BOX SHALL BE 24"x18" WITH "COMMUNICATIONS" IMPRINTED ON LID.
26.03	BID ALTERNATE #1: GENERATOR REMOTE ANNUNCIATOR LOCATED IN CONTROL ROOM. FIELD VERIFY LOCATION AND CONDUIT/CABLE ROUTING.
26.14	EXTEND COMMUNICATIONS CONDUIT INTO EXISTING CONTROL BUILDING. FIELD VERIFY TERMINATION LOCATION.

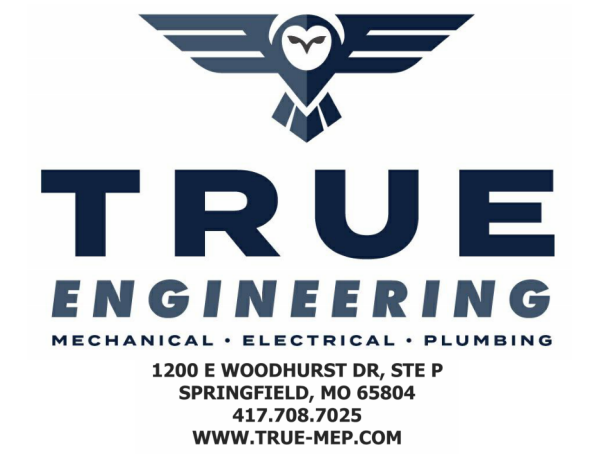


**1 SITE ELECTRICAL PLAN**  
1" = 80'-0"

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CAD DWG FILE: C2414-01  
DRAWN BY: AM  
CHECKED BY: AH  
DESIGNED BY: AH

SHEET TITLE:  
**SITE ELECTRICAL  
PLAN**

SHEET NUMBER:

**E-100**

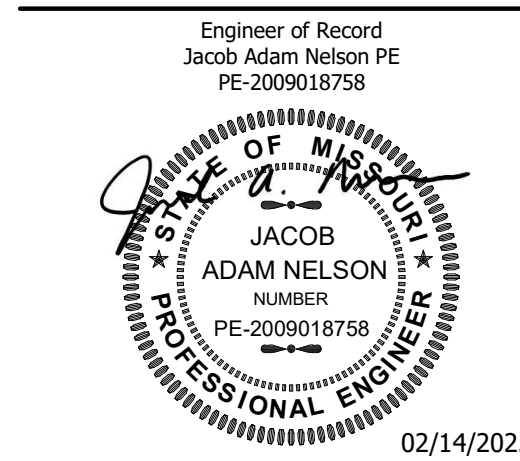
06 OF 12 SHEETS  
02/14/2025



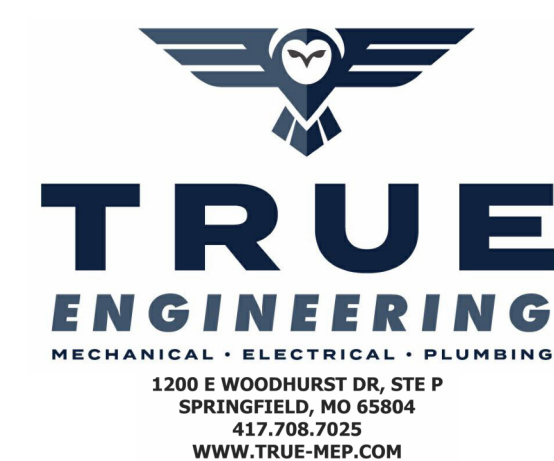
SPECIAL SYSTEM PATHWAYS		CONDUIT AND CONDUCTORS	
KEY VALUE	SIZE AND QUANTITY	KEY VALUE	SIZE AND QUANTITY
S1	(1) 2" CONDUIT WITH PULL STRING.	C1	(2) #10 AND (1) #10 GROUND IN 0.75" CONDUIT.

KEYNOTE LEGEND	
KEY VALUE	KEYNOTE TEXT
26.01	CIRCUIT THROUGH PHOTOCELL PC01 FOR CONTROL OF EXTERIOR POLE MOUNT LIGHTING.
26.02	TERMINATE SPECIAL SYSTEMS PATHWAY IN POLYMER CONCRETE BOX WITH LID EQUAL TO HUBBELL QUAZITE. BOX SHALL BE 24"X18" WITH "COMMUNICATIONS" IMPRINTED ON LID.
26.04	GROUND RING CONSISTING OF #4/0 CU BARE CABLE BURIED 30 INCHES BELOW GRADE MINIMUM IN CONTINUOUS LOOP.
26.05	GROUNDING ELECTRODE CONDUCTOR TO SWITCHBOARD. PROVIDE 0.75" CONDUIT SLEEVE THROUGH SLAB.
26.06	GROUNDING ELECTRODE CONDUCTOR TO TRANSFORMER. PROVIDE 0.75" CONDUIT SLEEVE THROUGH SLAB.
26.07	GROUNDING ELECTRODE CONDUCTOR TO GENERATOR. PROVIDE 0.75" CONDUIT SLEEVE THROUGH SLAB.
26.08	BOND GENERATOR FUEL TANK TO GROUND RING WITH #3/0 CU BARE CABLE. PROVIDE 0.75" CONDUIT SLEEVE THROUGH SLAB.
26.09	BOND REINFORCING STEEL TO GROUND RING WITH #3/0 CU BARE CABLE.
26.10	3/4" X 10' GROUND ROD BONDED TO GROUND RING AND GROUNDING ELECTRODE CONDUCTOR.
26.11	ELECTRICAL CONNECTION TO UTILITY MAIN CIRCUIT BREAKER FOR CONTROL POWER. FIELD VERIFY ELECTRICAL CONNECTION LOCATION AND REQUIREMENTS.
26.12	ELECTRICAL CONNECTION TO GENERATOR MAIN CIRCUIT BREAKER FOR CONTROL POWER. FIELD VERIFY ELECTRICAL CONNECTION LOCATION AND REQUIREMENTS.
26.13	ELECTRICAL CONNECTION TO SWITCHGEAR CABINET HEATER. FIELD VERIFY ELECTRICAL CONNECTION LOCATION AND REQUIREMENTS.
26.15	GALVANIZED UNISTRUT RACK FOR ELECTRICAL PANEL, PHOTOCELL, AND CONVENIENCE RECEPTACLE.
26.16	GROUNDING ELECTRODE CONDUCTOR TO ELECTRICAL PANEL. PROVIDE 0.75" CONDUIT SLEEVE THROUGH SLAB.
26.17	BONDED GROUNDING ELECTRODE TO GROUND RING.
26.18	GROUNDING ELECTRODE CONDUCTOR TO LIGHT POLE. PROVIDE 0.75" CONDUIT SLEEVE THROUGH SLAB.

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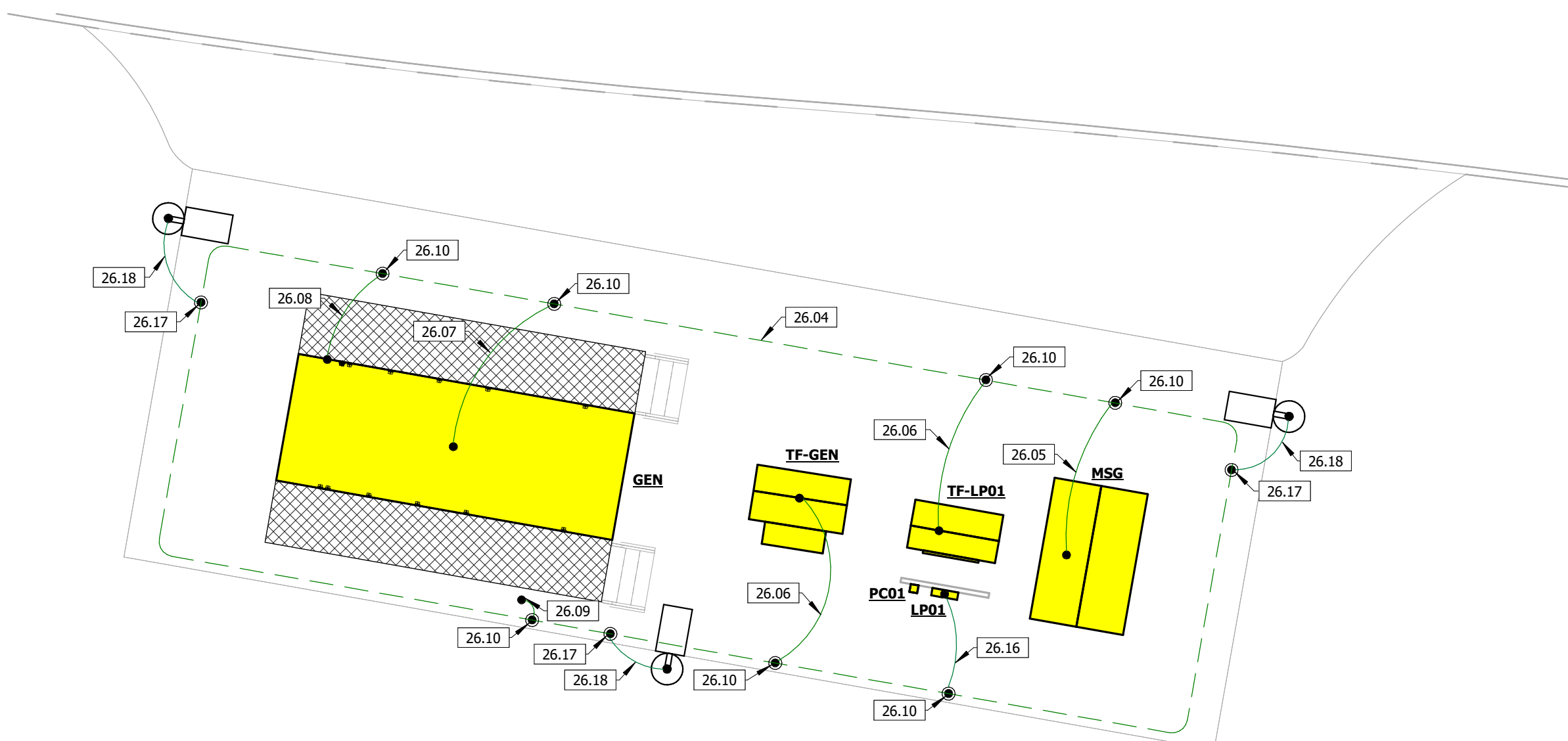
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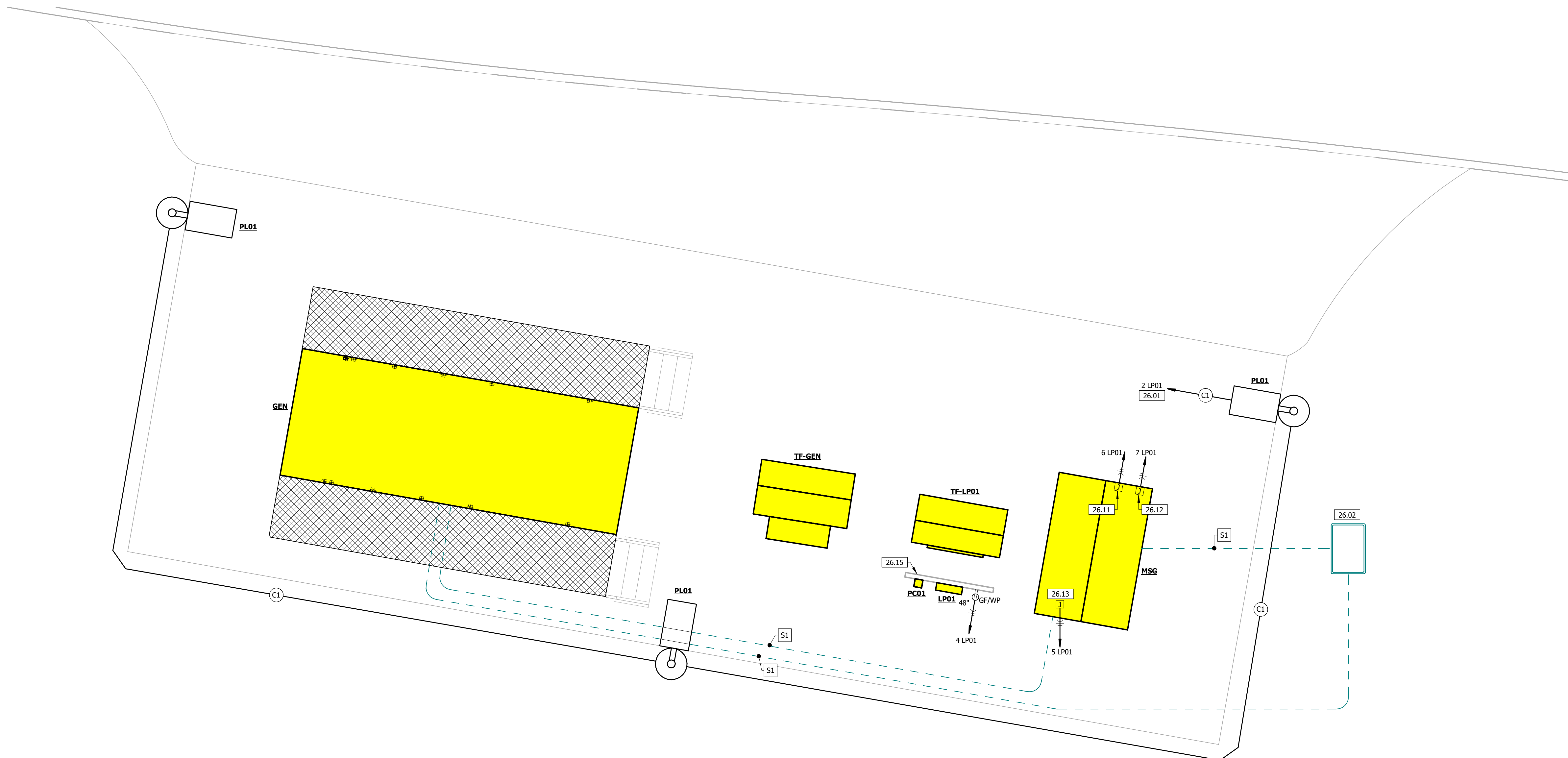
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**E-101**

07 OF 12 SHEETS  
02/14/2025



**2** ENLARGED ELECTRICAL GROUNDING PLAN  
1/8" = 1'-0"



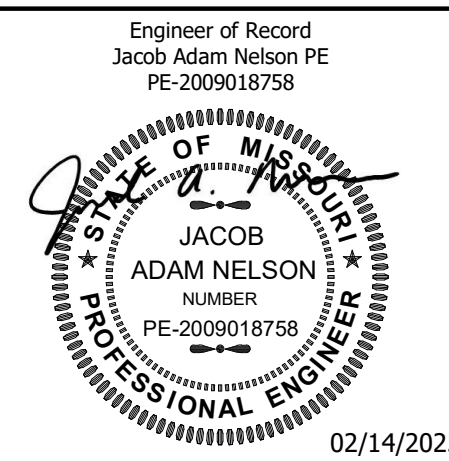
**1** ENLARGED ELECTRICAL PLAN  
1/4" = 1'-0"

**FEEDER SCHEDULE**

ALL CONDUCTORS SHALL BE COPPER PER SPECIFICATIONS

FEEDER MARK	PARALLEL SETS	CONDUCTORS		CONDUIT SIZE
		CURRENT CARRYING	GROUND	
60/3	1	(3) #6	(1) #8	1"
100/4	1	(4) #3	(3) #8	1.25"
1200/4	4	(4) #350	(1) #3/0	3"

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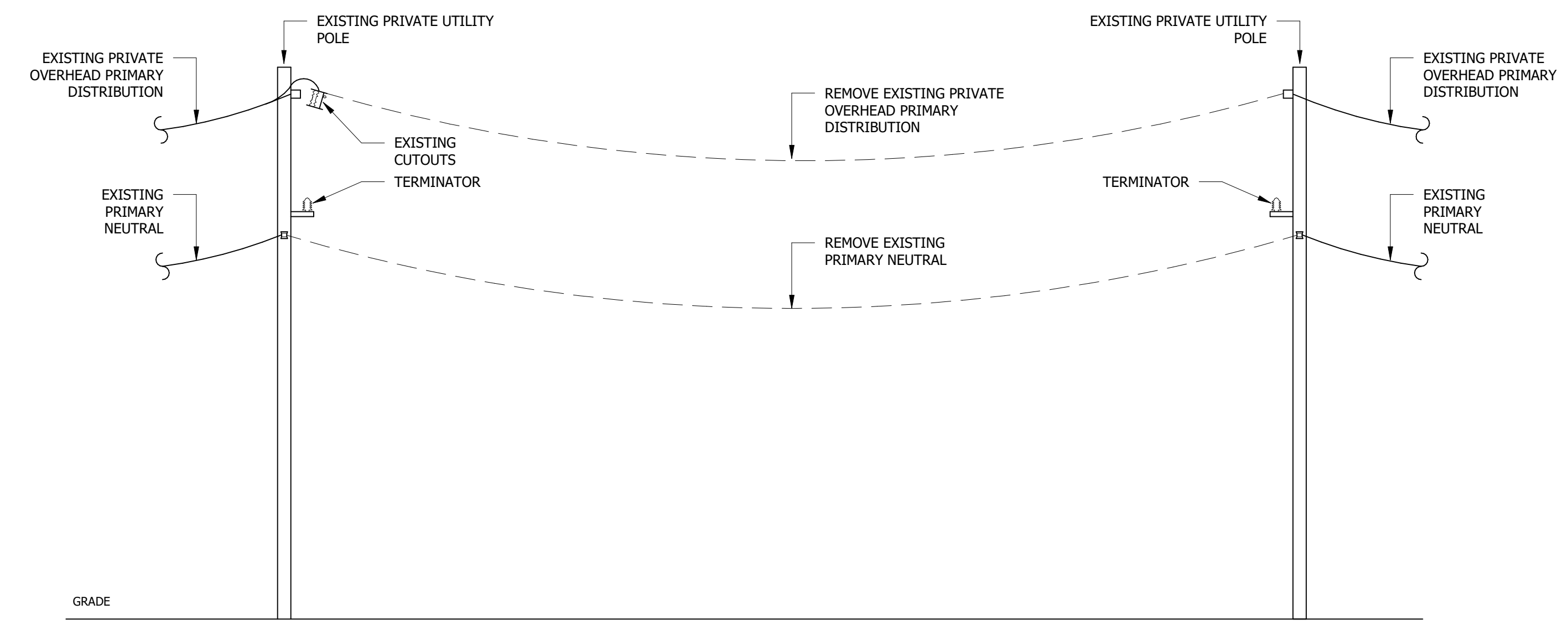
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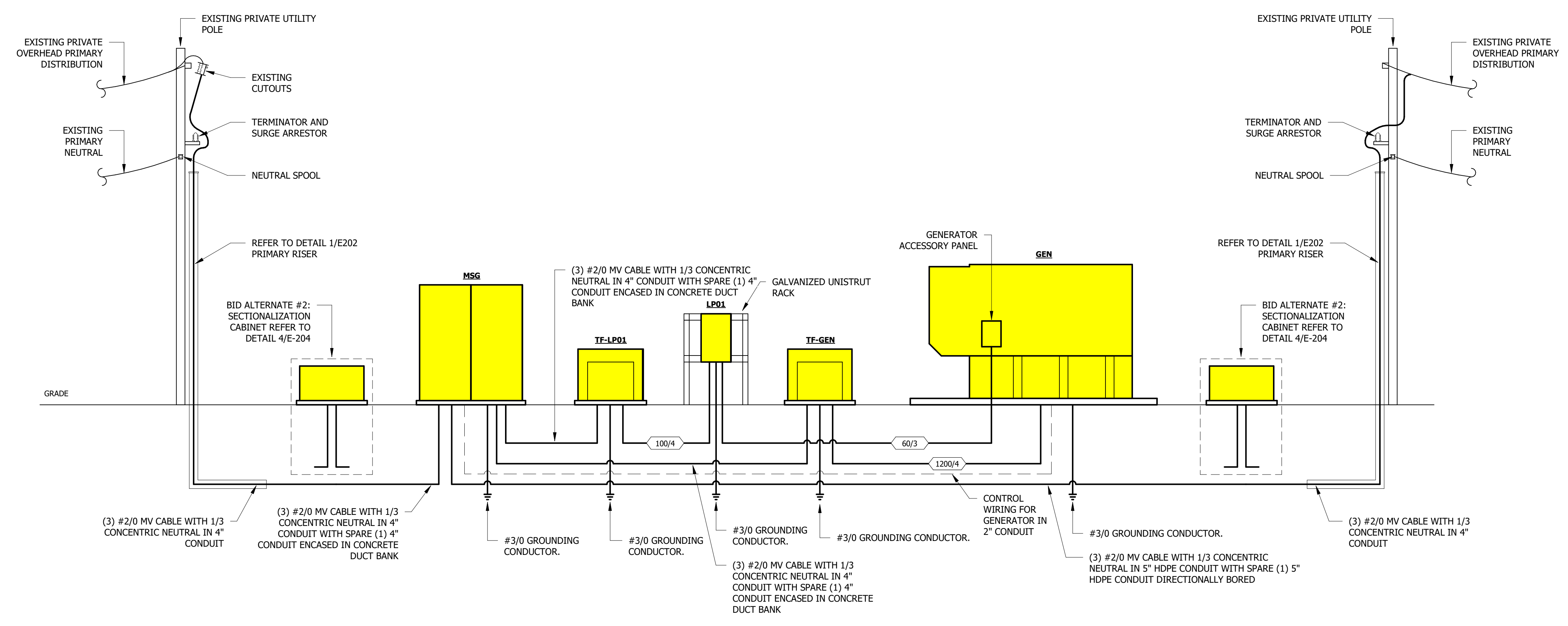
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**ELECTRICAL  
RISERS**

SHEET NUMBER:  
**E-200**

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02/14/2025

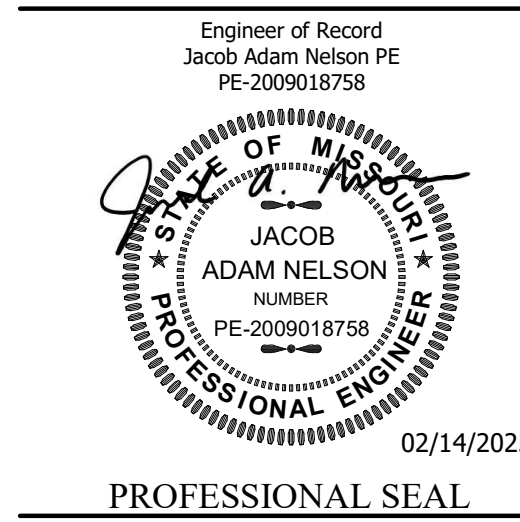


**2 DEMO ELECTRICAL RISER**  
NOT TO SCALE



**1 ELECTRICAL RISER**  
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PROJECT # C2414-01  
SITE # 7003  
FACILITY # 9327003081

REVISION:  
DATE:  
REVISION:  
DATE:  
REVISION:  
DATE:  
ISSUE DATE: 02/14/2025

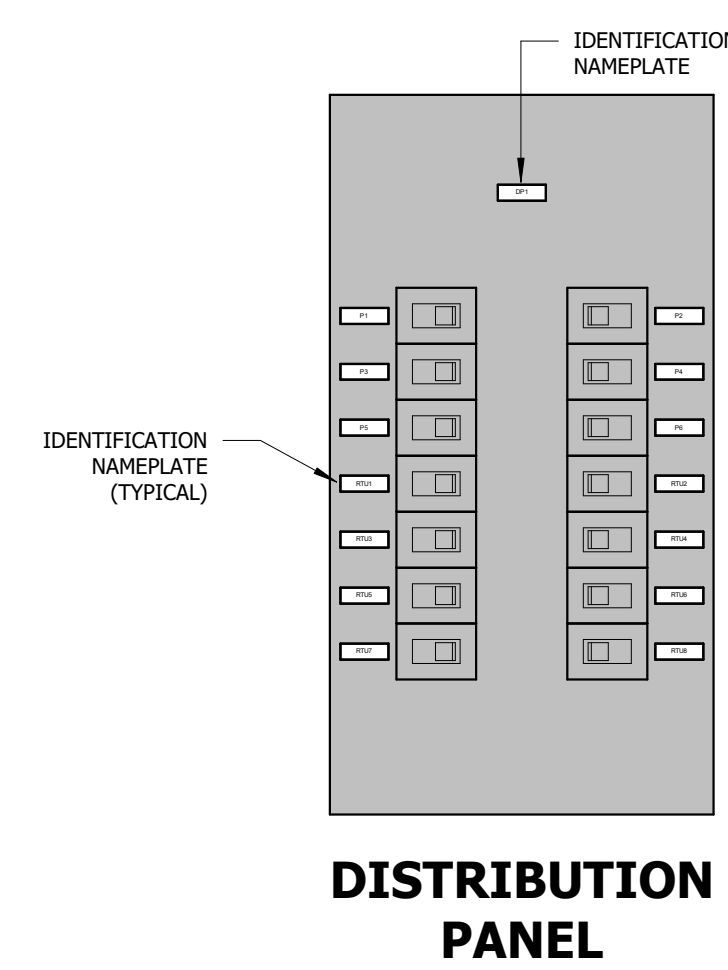
CAD DWG FILE: C2414-01  
DRAWN BY: AM  
CHECKED BY: AH  
DESIGNED BY: AH

SHEET TITLE:  
ELECTRICAL  
DETAILS

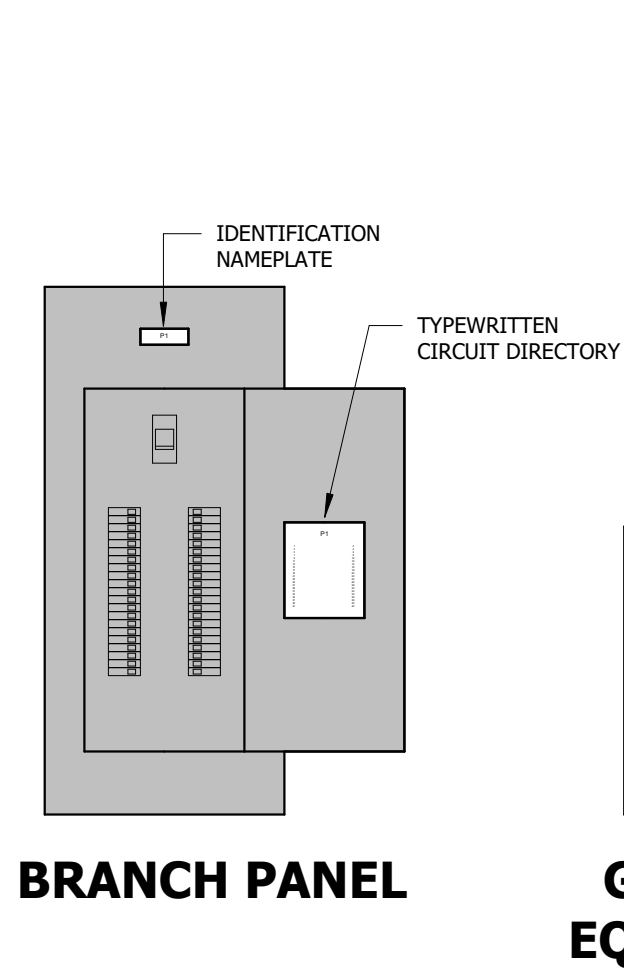
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**E-201**

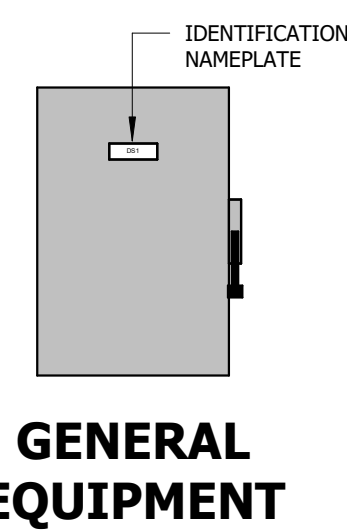
09 OF 12 SHEETS  
02/14/2025



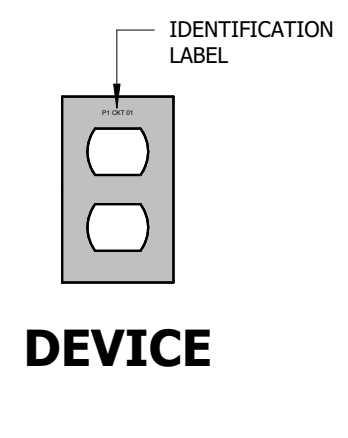
**DISTRIBUTION PANEL**



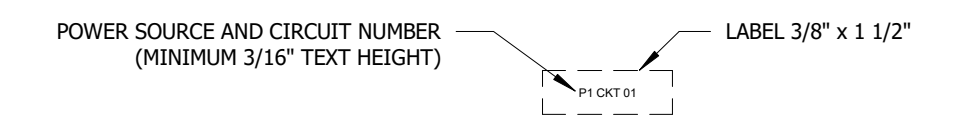
**BRANCH PANEL**



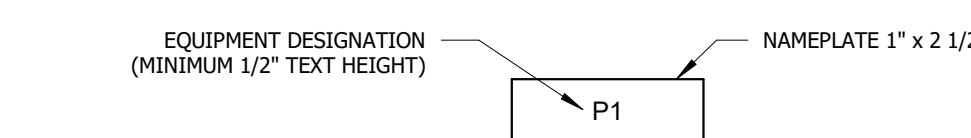
**GENERAL EQUIPMENT**



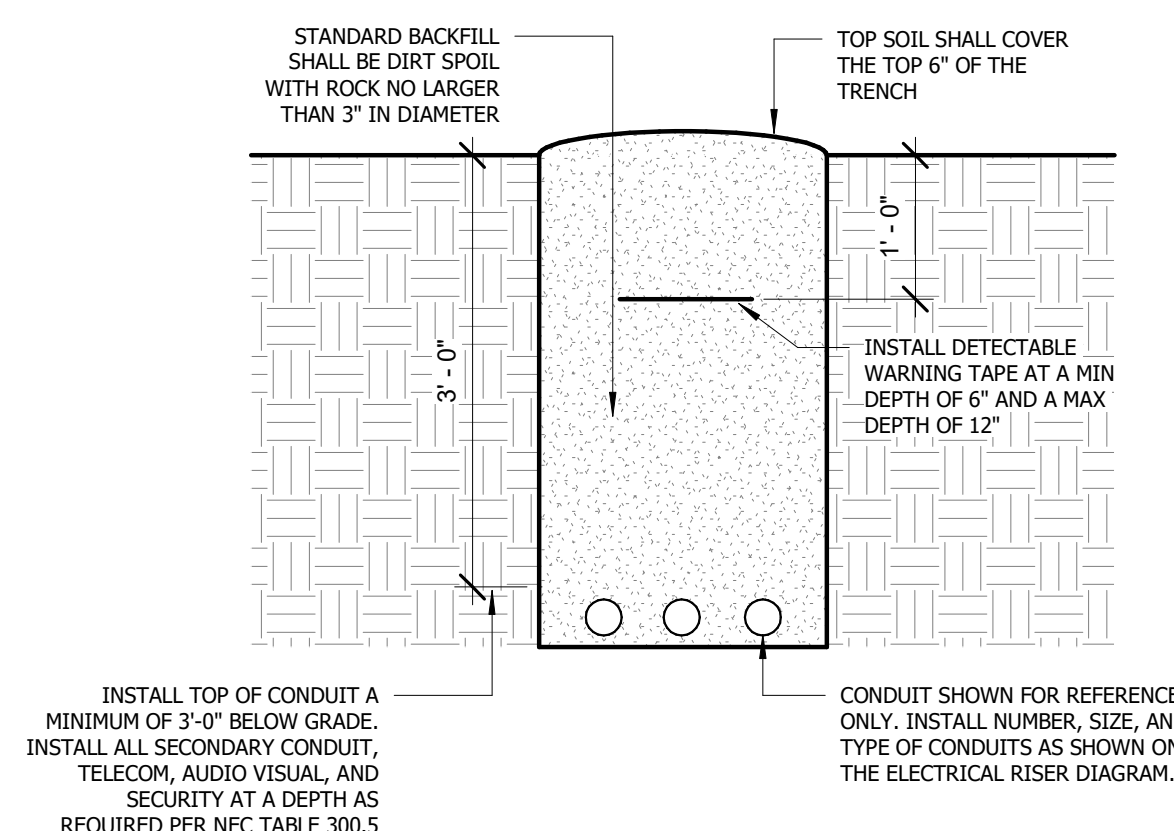
**DEVICE**



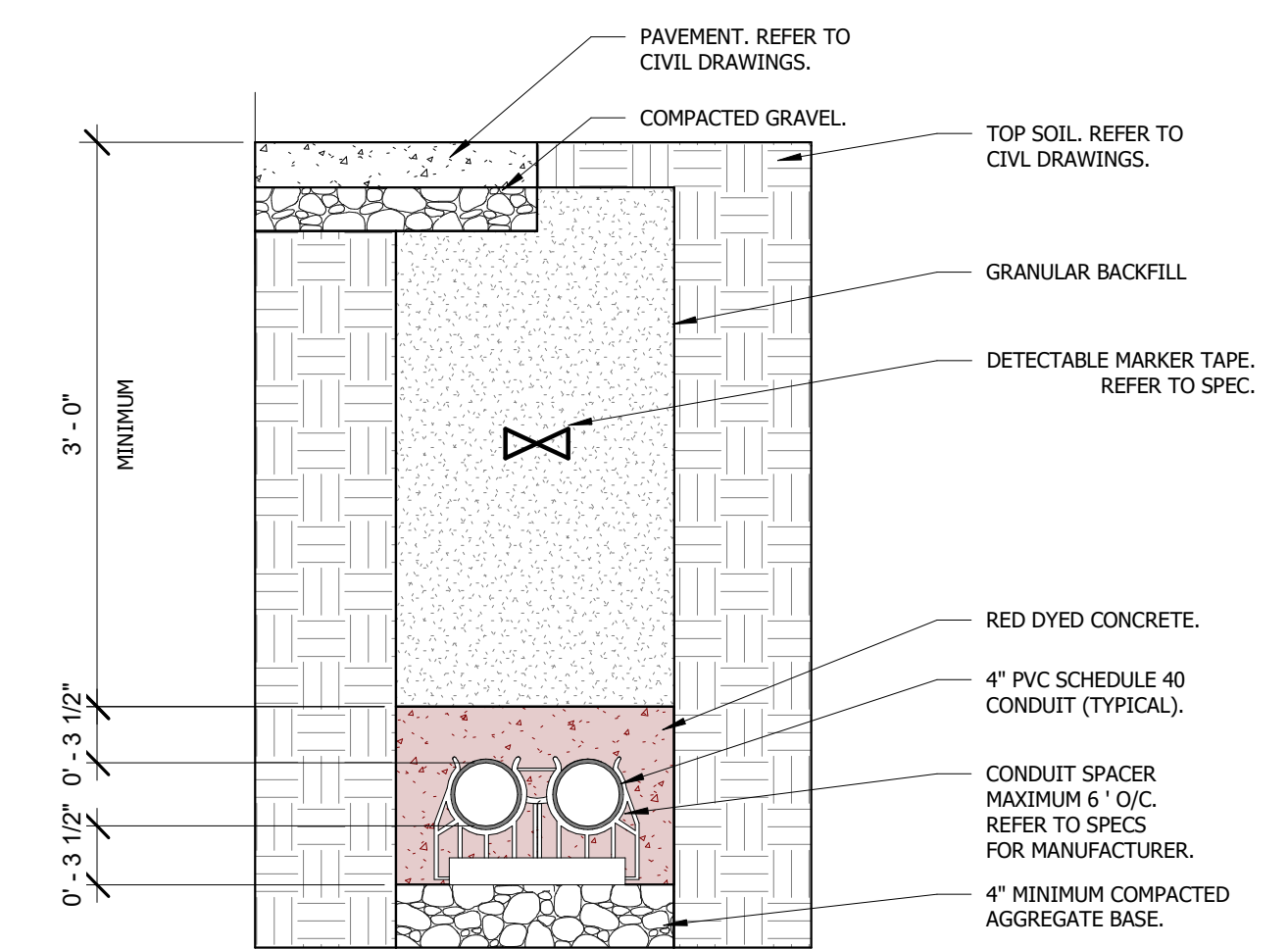
**IDENTIFICATION LABEL**



**IDENTIFICATION NAMEPLATE**



**3 CONDUIT TRENCH**  
NOT TO SCALE

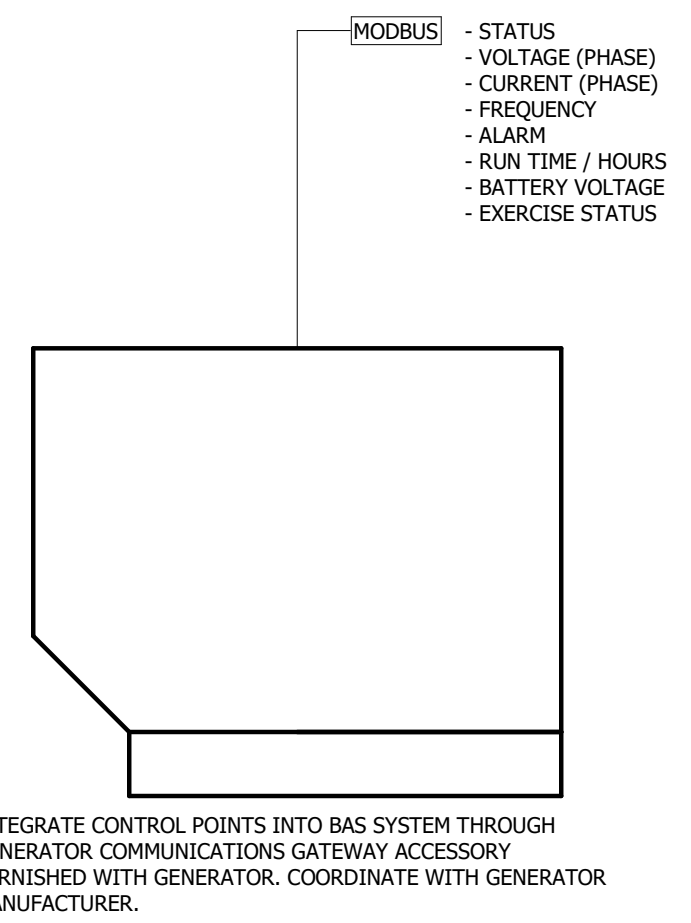


**2 CONDUIT DUCT BANK**  
NOT TO SCALE

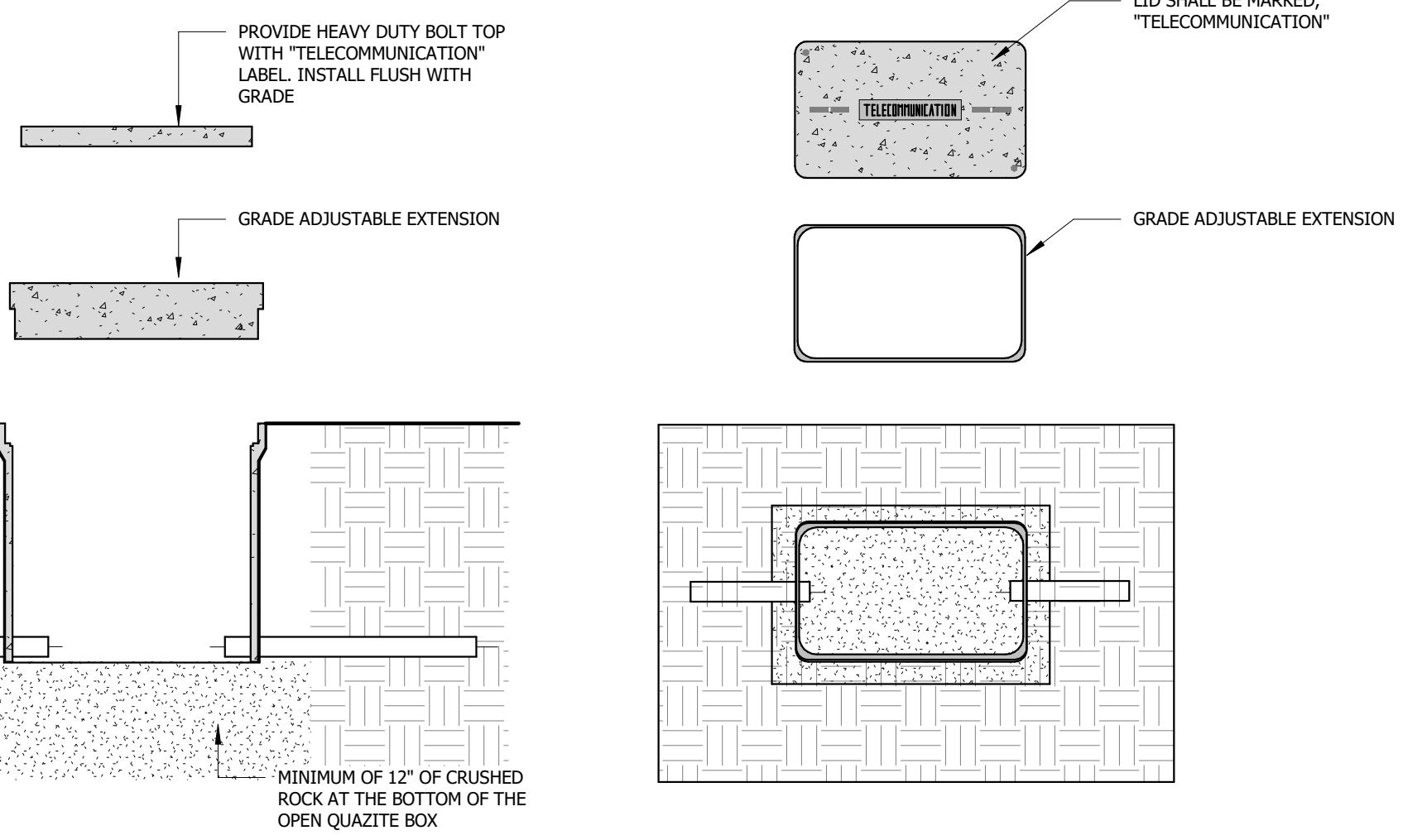
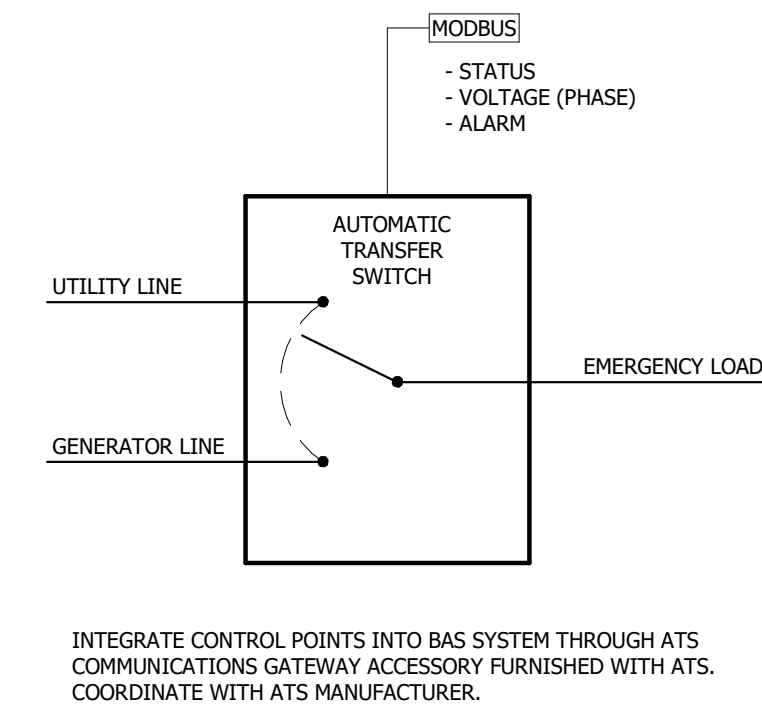
- NOTES:**
1. INTERIOR IDENTIFICATION NAMEPLATES SHALL BE MULTILAYER PLASTIC/ACRYLIC WITH MINIMUM THICKNESS OF 1/8" AND BEVELED EDGES. NAMEPLATES SHALL BE ATTACHED WITH ADHESIVE.
  2. EXTERIOR IDENTIFICATION NAMEPLATES SHALL BE ALUMINUM OR STAINLESS STEEL WITH MINIMUM THICKNESS OF 1/32". NAMEPLATES SHALL BE ATTACHED WITH RIVETS.
  3. IDENTIFICATION NAMEPLATE LETTERING SHALL BE MECHANICALLY ENGRAVED.
  4. COLOR FOR IDENTIFICATION NAMES PLATES:  
A. NORMAL POWER SYSTEMS: WHITE TEXT WITH BLACK BACKGROUND  
B. EMERGENCY POWER SYSTEMS: WHITE TEXT WITH RED BACKGROUND
  5. IDENTIFICATION LABELS SHALL BE SELF-ADHESIVE LAMINATED PLASTIC LABELS WITH BLACK TEXT ON CLEAR BACKGROUND.
  6. REFER TO SPECIFICATION SECTION 26 05 53 IDENTIFICATION FOR ELECTRICAL SYSTEMS FOR ADDITIONAL REQUIREMENTS.

**6 ELECTRICAL LABELING**  
NOT TO SCALE

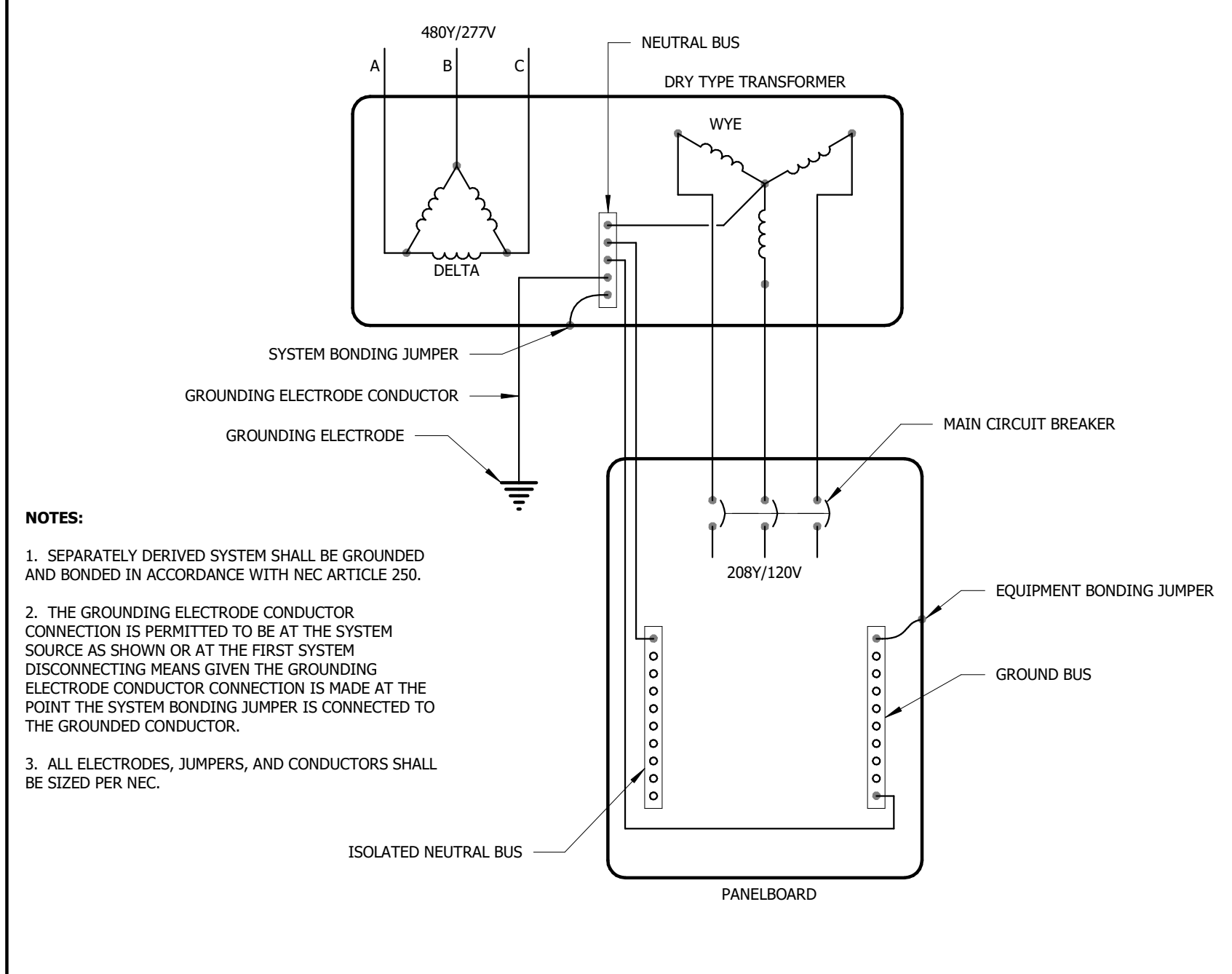
- SPECIAL NOTES:**
1. INTEGRATE GENERATOR AND AUTOMATIC TRANSFER SWITCH INTO BUILDING AUTOMATION SYSTEM.
  2. COMMUNICATIONS GATEWAY ACCESSORY FOR INTEGRATION WITH BAS SHALL BE MODBUS OR BACNET COMPATIBLE.
  3. SYSTEMS INTERFACE AND GRAPHICS SHALL COMPLY WITH STATE OF MISSOURI DEPARTMENT OF CORRECTIONS STANDARDS.
  4. CONTACT BRIAN SCHEPERS WITH C&C GROUP AT (573) 291-5425 FOR BAS INTEGRATION.



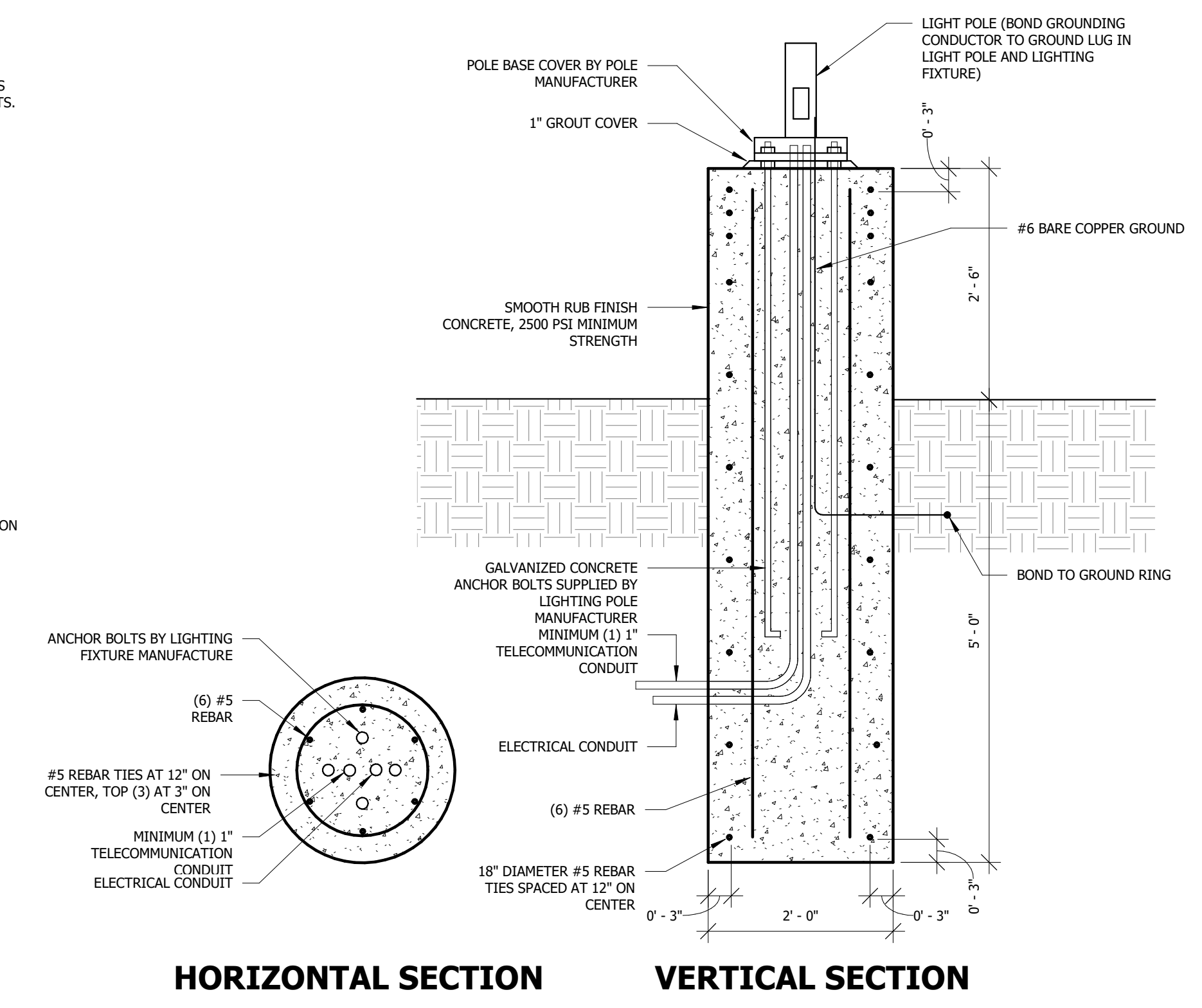
**5 BAS - GENERATOR/ATS**  
NOT TO SCALE



**4 INGRADE TELECOM BOX**  
NOT TO SCALE

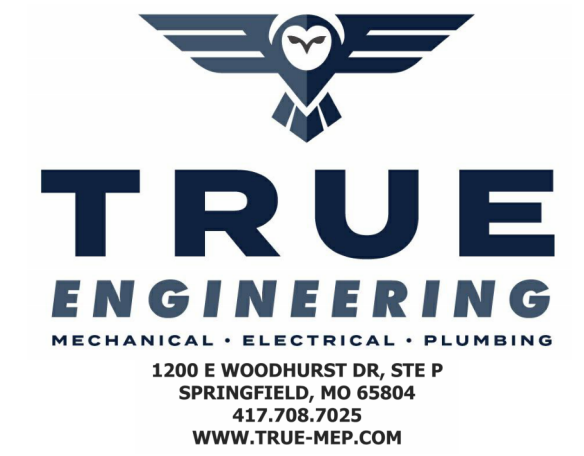
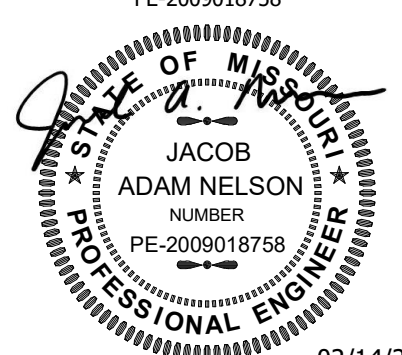


**7 SEPERATELY DERIVED SYSTEM**  
NOT TO SCALE



**HORIZONTAL SECTION VERTICAL SECTION**

**1 PARKING LOT LIGHT POLE BASE**  
NOT TO SCALE



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 CORRECTIONS

OZARK CORRECTIONAL  
 CENTER - INSTALL SINGLE  
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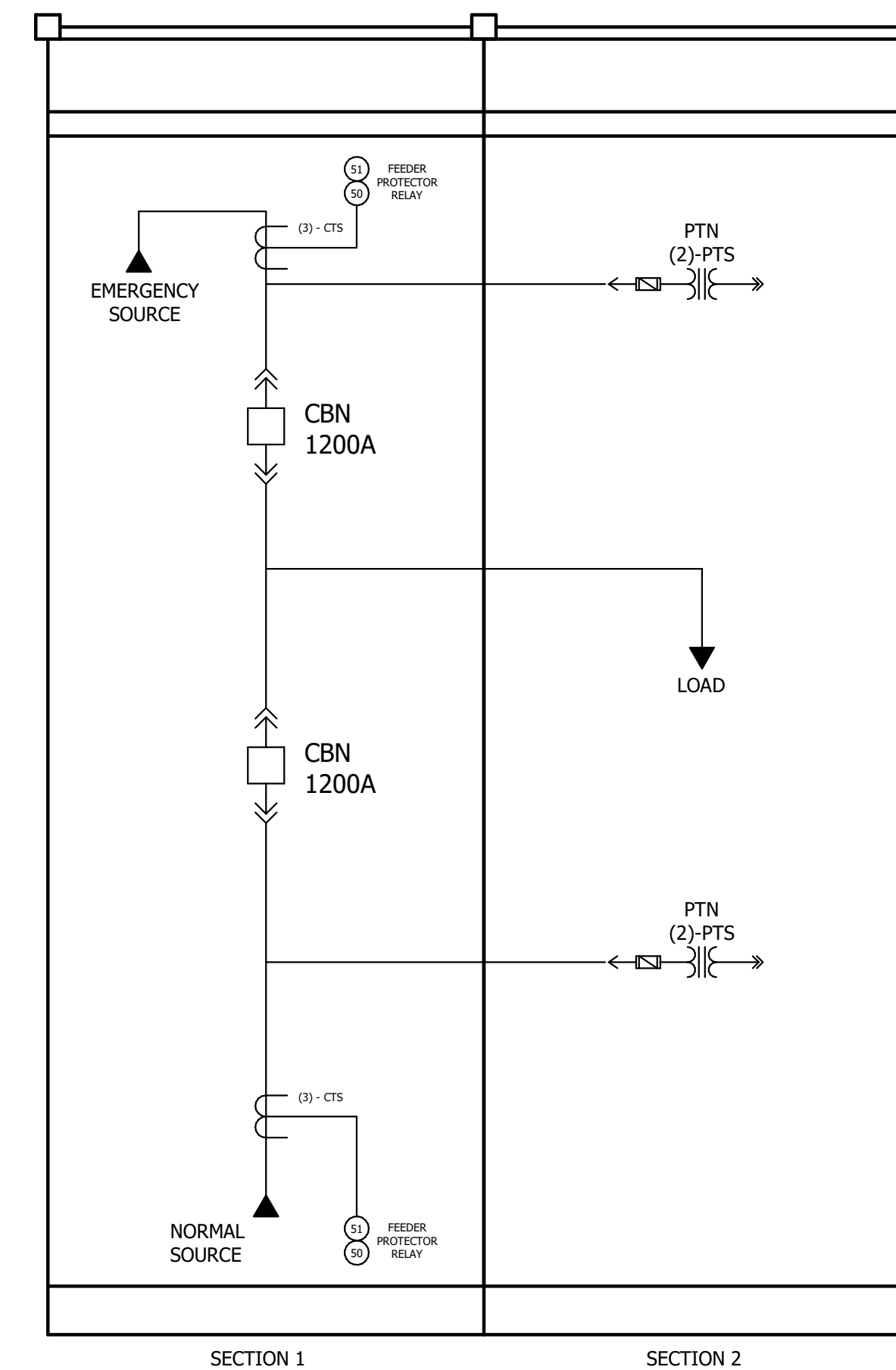
REVISION:  
 DATE:  
 REVISION:  
 DATE:  
 REVISION:  
 DATE:  
 ISSUE DATE: 02/14/2025

CAD DWG FILE: C2414-01  
 DRAWN BY: AM  
 CHECKED BY: AH  
 DESIGNED BY: AH

SHEET TITLE:  
 SWITCHGEAR  
 DETAILS

SHEET NUMBER:

**E-202**

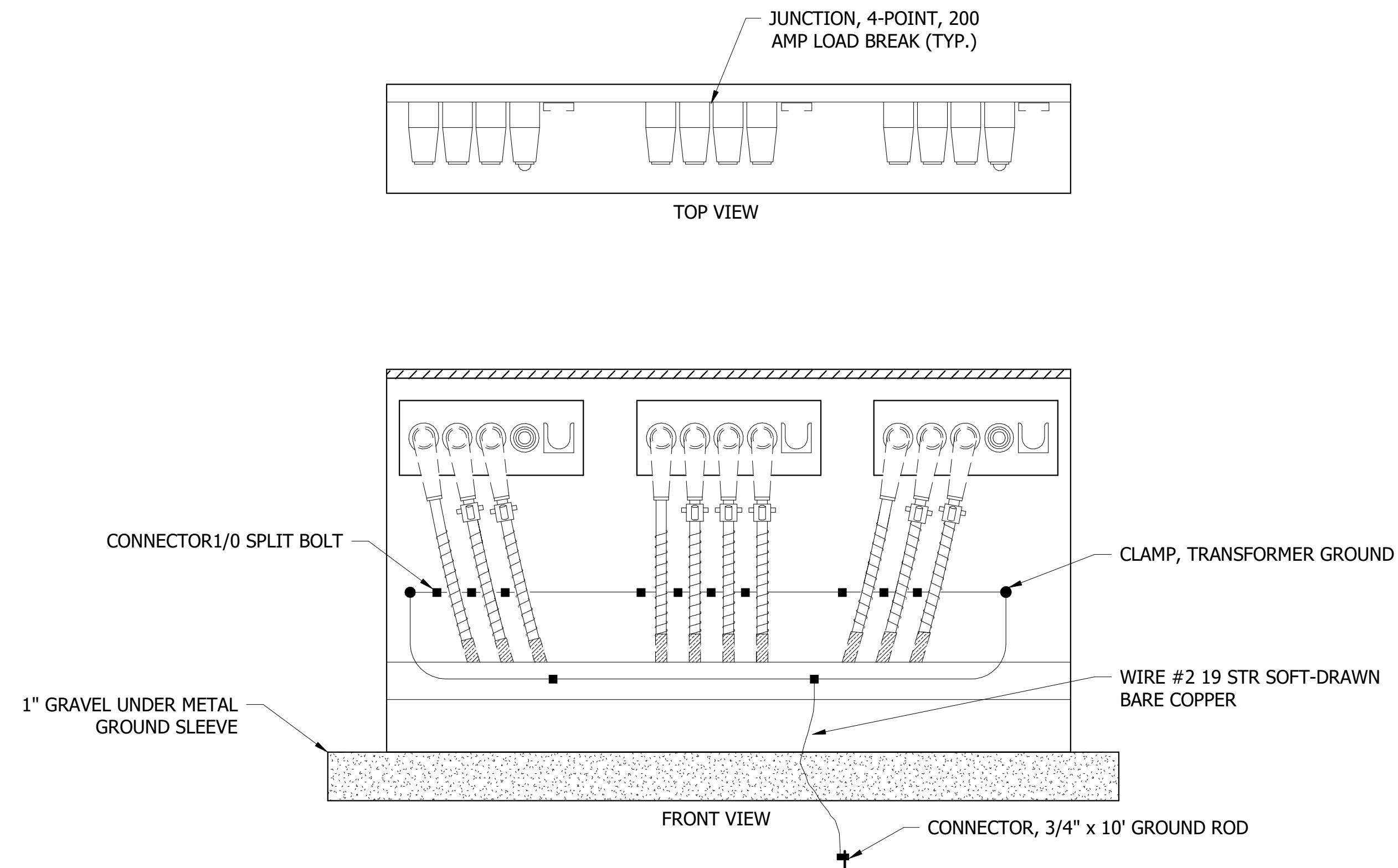


**NOTES:**

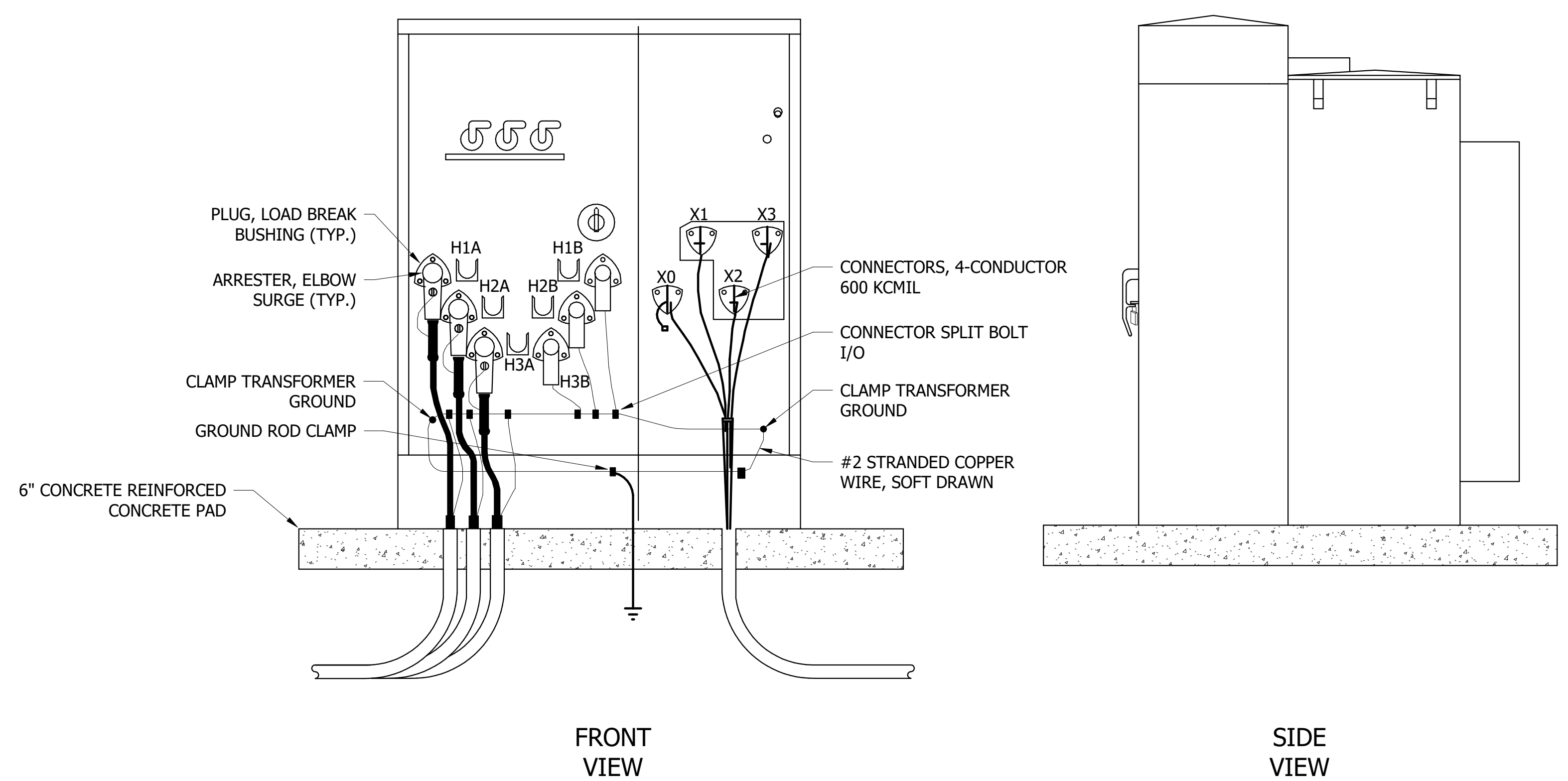
1. REFER TO SPECIFICATION SECTIN 26 12 36 - PARALLELING MEDIUM VOLTAGE SWITCHGEAR FOR ADDITIONAL REQUIREMENTS.
2. CIRCUIT BREAKERS SHALL BE VACUUM BREAKER TYPE WITH CAPACITOR TRIP (20 SECOND MINIMUM CHARGE).
3. LOAD TRANSFER SHALL BE AUTOMATIC MOMENTARY/FAST CLOSED TRANSITION. REFER TO SPECIFICATION SECTION 26 12 36 - PARALLELING MEDIUM VOLTAGE SWITCHGEAR FOR SEQUENCE OF OPERATION.

**1** MAIN SWITCHGEAR "MSG" ELEVATION  
 NOT TO SCALE

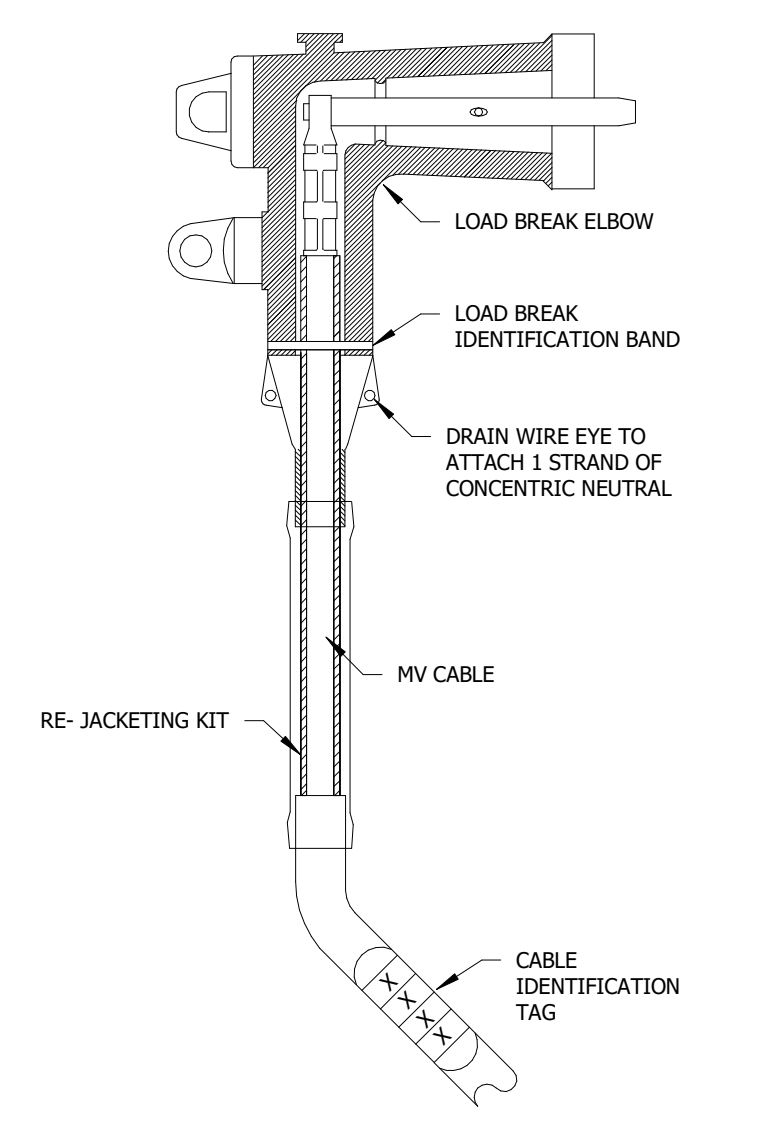




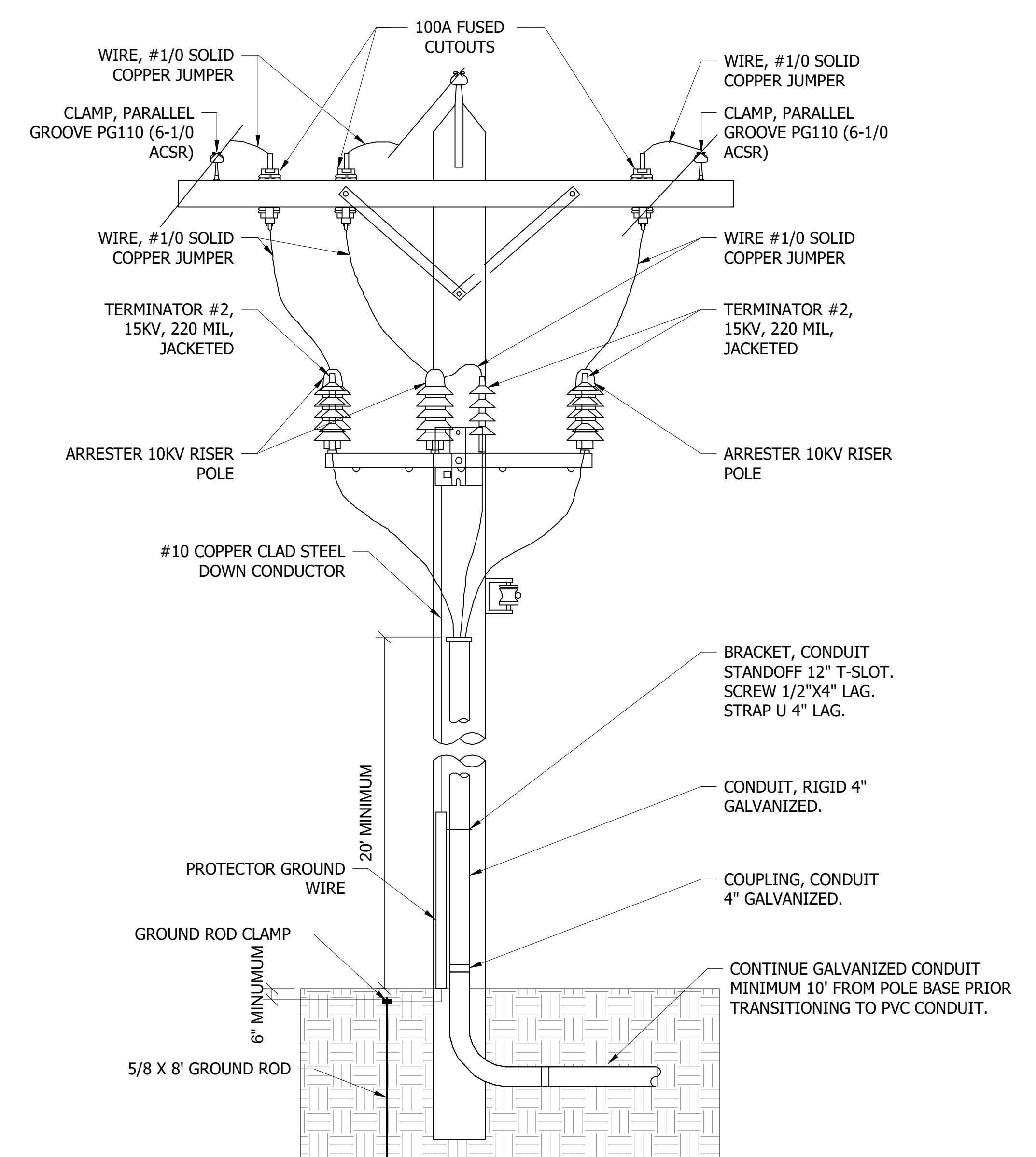
**4 SECTIONALIZATION CABINET**  
NOT TO SCALE



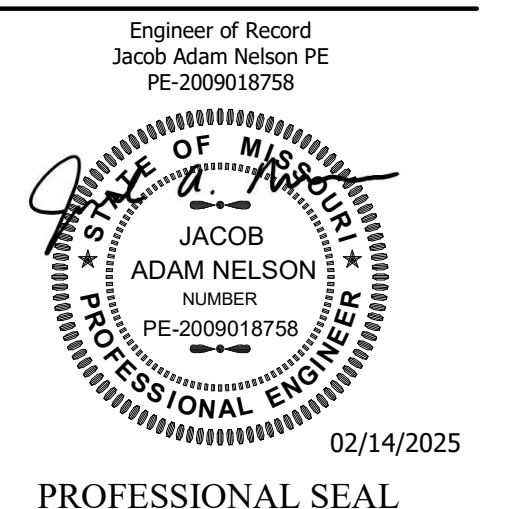
**3 PAD MOUNTED TRANSFORMER**  
NOT TO SCALE



**2 LOADBREAK ELBOW**  
NOT TO SCALE



**1 PRIMARY RISER**  
NOT TO SCALE



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Missouri State Certificate of Authority #E-2016000752

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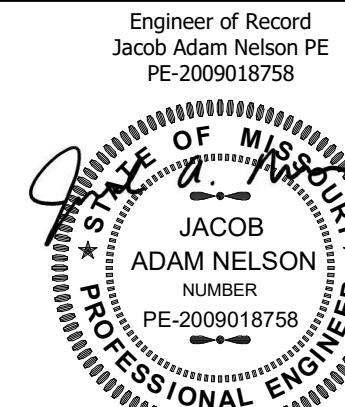
PROJECT # C2414-01  
SITE # 7003  
FACILITY # 9327003081

REVISION:  
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REVISION:  
DATE:  
ISSUE DATE: 02/14/2025

CAD DWG FILE: C2414-01  
DRAWN BY: AM  
CHECKED BY: AH  
DESIGNED BY: AH

SHEET TITLE:  
MV ELECTRICAL  
DETAILS

SHEET NUMBER:  
**E-203**



02/14/2025

PROFESSIONAL SEAL



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PROJECT # C2414-01  
SITE # 7003  
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REVISION:  
DATE:  
ISSUE DATE: 02/14/2025

CAD DWG FILE: C2414-01  
DRAWN BY: AM  
CHECKED BY: AH  
DESIGNED BY: AH

SHEET TITLE:  
ELECTRICAL  
SCHEDULES

SHEET NUMBER:

**E-300**

12 OF 12 SHEETS  
02/14/2025

Branch Panel: LP01												
Location: GENERATOR PAD				Volts: 120/208 Wye				A.I.C. Rating: 10 KAIC				
Supply From: MSG / TF-LP01				Phases: 3				Mains Type: 100A MCB				
Mounting: SURFACE				Wires: 4				Mains Rating: 100A				
Enclosure: NEMA 3R												
Panelboard Accessories: 1. GASKETED LOCKING DOOR, 2. EQUIPMENT GROUND BAR, 3. TIN PLATED COPPER BUS BARS, 4. SURGE PROTECTION DEVICE (SPD)												
CKT	CIRCUIT DESCRIPTION	TRIP	CB ACC	POLES	A	B	C	POLES	CB ACC	TRIP	CIRCUIT DESCRIPTION	CKT
1	Generator Load Center	60 A		2	5760 VA	279 VA		1			20 A Pole Lights	2
3	--	--	--	--	5760 VA	180 VA		1			20 A Receptacle	4
5	Switchgear Cabinet Heater	20 A		1			1000 VA	100 VA	1		20 A Utility Main Control Power	6
7	Power	20 A		1	100 VA	0 VA		1	--		20 A Spare	8
9	Spare	20 A	--	1		0 VA	--	1	--		Space	10
11	Spare	20 A	--	1			0 VA	--	1	--	Space	12
13	Space	--	--	1	--	0 VA		3	--		30 A SPD	14
15	Space	--	--	1		0 VA	--	0 VA	--		Space	16
17	Space	--	--	1			--	0 VA	--		Space	18
<b>Total Load:</b>					6139 VA	5940 VA	1100 VA					
<b>Total Amps:</b>					57 A	56 A	9 A					
Legend: 1. HACR = HACR RATED, 2. HLO = HAND LOCK-OFF, 3. GFCl = GROUND FAULT CIRCUIT INTERRUPTER, 4. AFCI = ARC FAULT CIRCUIT INTERRUPTER												
Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals								
Lighting	279 VA	100.00%	279 VA									
Power	12720 VA	100.00%	12720 VA	<b>Total Conn. Load:</b> 13179 VA								
Receptacle	180 VA	100.00%	180 VA	<b>Total Est. Demand:</b> 13179 VA								
				<b>Total Conn.:</b> 37 A								
				<b>Total Est. Demand:</b> 37 A								
Notes:												

PHOTOCELL SCHEDULE								
NOTES:								
1. INTEGRATE PHOTOCELL WITH BUILDING AUTOMATION SYSTEM. COORDINATE WITH BAS CONTRACTOR.								
2. INTEGRATE PHOTOCELL WITH TIME SWITCH. REFER TO TIME SWITCH SCHEDULE.								
TYPE MARK	MANUFACTURER	MODEL NUMBER	EQUIPMENT SERVED	WATTAGE	VOLTAGE	MOUNTING	NOTES	EQUIVALENTS
PC01	INTERMATIC	EK42365	EXTERIOR LIGHTING	-	120	SWIVEL	-	TORK

LIGHTING FIXTURE SCHEDULE										
NOTES:										
1. FIXTURE SHALL BE RATED FOR OUTDOOR USE.										
2. PROVIDE 20" SQUARE POLE.										
TYPE MARK	MANUFACTURER	MODEL NUMBER	DRIVER	FINISH	VOLTAGE	LAMP TYPE	COLOR TEMP	TOTAL WATTAGE	NOTES	EQUIVALENTS
PL01	COOPER MCGED	GALN-SA3A-740-U-T4W-AP-DIM	DIM	GREY	240	LED	4000	93	1,2	LITHONIA

TRANSFORMER SCHEDULE											
NOTES:											
1. BAYONET FUSING WITH 3 SPARE FUSES.											
2. 4-HOLE SPADE SECONDARY BUSHINGS.											
3. DRAIN VALVE WITH SAMPLER, PRESSURE RELIEF VALVE.											
4. COPPER PRIMARY & SECONDARY WINDINGS											
5. INSTALL ON REINFORCED CONCRETE PAD.											
6. WEATHER PROOF ENCLOSURE.											
7. MEDIUM VOLTAGE DEADFRONT ACCESS.											
TYPE MARK	MANUFACTURER	KVA RATING	PHASE	MOUNTING	TEMP RISE	PRIMARY VOLTAGE	PRIMARY CONNECTION	SECONDARY VOLTAGE	SECONDARY CONNECTION	NOTES	EQUIVALENTS
TF-GEN	EATON	1000	3	PAD	55 C	480 V	DELTA	12470 V	WYE	1,2,3,4,5,6,7	SQUARE D, ABB, ERMCO
TF-LP01	EATON	45	3	PAD	55 C	12470 V	DELTA	208 V	WYE	1,2,3,5,6,7	SQUARE D, ABB, ERMCO

GENERATOR SCHEDULE										
NOTES:										
1. SUB BASE FUEL TANK SIZED FOR MINIMUM 72 HOUR RUN TIME.										
2. ENGINE BLOCK HEATER.										
3. BATTERY CHARGER.										
4. REMOTE ANNUNCIATOR (BID ALTERNATE #1).										
5. INTEGRATE GENERATOR WITH BUILDING AUTOMATION SYSTEM AND PROVIDE COMMUNICATIONS ACCESSORY. COORDINATE WITH BAS CONTRACTOR.										
6. WORKING PLATFORM WITH STAIRS.										
7. INTEGRAL GENERATOR ACCESSORY LOAD CENTER.										
TYPE MARK	MANUFACTURER	MODEL NUMBER	POWER RATING (KW/KVA)	ALTERNATOR			FUEL TYPE	NOTES	EQUIVALENTS	
GEN	CUMMINS	750DQCB	750 KW / 938 KVA	MODEL NUMBER	VOLTAGE	AMPS	DIESEL	1,2,3,4,5,6,7	CAT, MTU	
				S6L1D-04	480	1200				