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FWA Group



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CONSTRUCT



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Allendale / Fairfax
High School
Track & Field -
New Lighting

- Allendale County School District

MARK	DATE	DESCRIPTION
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PROJECT NO: FWA 2590.01

DRAWN BY: mjr

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COVER SHEET /
GENERAL INFO.

GI-001

ELECTRICAL NOTES AND SPECIFICATIONS:

1. ELECTRICAL INSTALLATION SHALL BE PERFORMED IN ACCORDANCE WITH THE PRESENTLY EFFECTIVE VERSION OF THE NATIONAL ELECTRIC CODE AND ALL OTHER APPLICABLE STATE OR LOCAL CODES, LAWS, AND ORDINANCES. WHERE ONE CODE DIFFERS FROM ANOTHER, THE MORE STRINGENT SHALL APPLY.
2. THE WORD "CONTRACTOR" AS USED IN THE "ELECTRICAL SCOPE OF WORK" SHALL MEAN THE ELECTRICAL SUBCONTRACTOR.
3. WHEREVER ON THE ELECTRICAL DRAWINGS THE WORD "PROVIDE" IS USED IT SHALL BE INFERRED TO MEAN "FURNISH AND INSTALL", UNLESS NOTED OTHERWISE.
4. THE CONTRACTOR SHALL OBTAIN ALL LICENSES, PERMITS, INSPECTIONS, AND CERTIFICATES OF APPROVAL FROM ALL AUTHORITIES HAVING JURISDICTION AND SHALL PAY ALL FEES REQUIRED FOR THE EXECUTION OF THIS WORK. SATISFACTORY EVIDENCE OF COMPLIANCE WITH THE REQUIREMENTS AND ALL CERTIFICATES OF INSPECTION SHALL BE DELIVERED TO THE OWNER PROMPTLY UPON REQUEST. THE CONTRACTOR SHALL ALSO PAY FOR ANY REQUIRED TEST(S) AND PROVIDE ALL NECESSARY LABOR, MATERIALS, AND EQUIPMENT REQUIRED TO PERFORM THE TEST(S).
5. ALL WORK SHALL BE PERFORMED IN A NEAT, CLEAN, AND ORDERLY MANNER. ALL WIRING AND RACEWAYS SHALL BE CONCEALED TO THE GREATEST EXTENT POSSIBLE.
6. THE CONTRACTOR SHALL SUPPLY ALL MATERIAL, EQUIPMENT, TOOLS, TRANSPORTATION, AND SUPERVISION TO PROVIDE A COMPLETE AND SATISFACTORILY OPERATING ELECTRICAL SYSTEM. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR STORING AND HANDLING ALL MATERIALS; THIS INCLUDES ANY OWNER SUPPLIED MATERIAL, FIXTURES OR EQUIPMENT.
7. ALL MATERIAL, EQUIPMENT, AND FIXTURES SHALL BE SPECIFICATION GRADE, NEW, AND U.L. LISTED FOR THE PURPOSE FOR WHICH IT IS USED.
8. THE ENTIRE ELECTRICAL SYSTEM SHALL BE FREE OF IMPROPER GROUNDS, SHORT OR OPEN CIRCUITS AND BE TESTED PRIOR TO ENERGIZING THE SYSTEM. ANY DEFECTS DISCOVERED DURING TESTING SHALL BE CORRECTED BY THE CONTRACTOR.
9. CONTRACTOR SHALL GUARANTEE ELECTRICAL WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER. CONTRACTOR SHALL FURNISH A WRITTEN COPY OF THE GUARANTEE TO THE OWNER. CONTRACTOR SHALL SUPPLY ALL LABOR AND MATERIALS REQUIRED TO PERFORM ANY WARRANTY WORK AT NO CHARGE TO THE OWNER.
10. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL TEMPORARY POWER AS REQUIRED FOR ALL TRADES DURING THE COURSE OF THE PROJECT. TEMPORARY LIGHTING SHALL BE ADEQUATE ENOUGH TO ENSURE WORKER SAFETY AND SHALL COMPLY WITH OSHA STANDARDS. UPON COMPLETION OF THE PROJECT THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL TEMPORARY LIGHTING AND POWER.
11. ALL CONDUCTORS SHALL BE 75 DEGREE C, 600 VOLT, TYPE THWN/THHN INSULATION COPPER CONDUCTOR UNLESS NOTED OTHERWISE. ALL CONDUCTORS INSTALLED BELOW GRADE SHALL HAVE TYPE THWN INSULATION.
12. ALL BRANCH CIRCUIT WIRING SHALL BE A MINIMUM OF #12 AWG UNLESS NOTED OTHERWISE. ANY CIRCUIT INDICATED TO BE LARGER THAN #12 AWG SHALL BE SIZED AS INDICATED FOR THE ENTIRE LENGTH OF THE CIRCUIT.
13. ALL BELOW GRADE CONDUCTORS SHALL BE INSTALLED IN SCHEDULE 40 PVC CONDUIT.
14. ALL CONDUCTORS INSTALLED ABOVE GRADE AND OUTDOORS SHALL BE IN SCHEDULE 80 PVC CONDUIT AS PERMITTED BY THE NATIONAL ELECTRIC CODE.
15. ALL CONNECTIONS TO EQUIPMENT SUBJECT TO VIBRATION SUCH AS MECHANICAL EQUIPMENT, MOTORS, TRANSFORMERS, AND THE LIKE, SHALL BE MADE USING METALLIC FLEX. ALL OUTDOOR FLEX SHALL BE PVC COATED. NO METALLIC FLEX SHALL EXCEED 6 FEET IN LENGTH.
16. ALL INDOOR DISCONNECTS AND PANELS SHALL BE IN NEMA TYPE 1 ENCLOSURES, UNLESS NOTED OTHERWISE. ALL EXTERIOR DISCONNECTS, PANELS AND SIMILAR EQUIPMENT SHALL BE IN NEMA TYPE 3R ENCLOSURES UNLESS NOTED OTHERWISE. ALL EQUIPMENT SHALL HAVE THE APPROPRIATE VOLTAGE AND CURRENT RATINGS SUITABLE FOR THE APPLICATION. ALL DISCONNECTS/SAFETY SWITCHES SHALL BE TOTALLY ENCLOSED, HEAVY DUTY TYPE, AND BE HORSEPOWER RATED (IF APPLICABLE).
17. ALL WORK SHALL BE GROUNDED IN ACCORDANCE WITH NATIONAL ELECTRIC CODE REQUIREMENTS. A COMPLETE EQUIPMENT GROUNDING SYSTEM, CONSISTING OF A GREEN INSULATED COPPER WIRE, SHALL BE INSTALLED IN EVERY CONDUIT REGARDLESS OF USE.
18. ALL PANELBOARDS SHALL HAVE THEIR SCHEDULES TYPED AND INSTALLED INSIDE THE FRONT COVER.
19. ALL ELECTRICAL EQUIPMENT (PANELBOARDS, EQUIPMENT DISCONNECTS, ETC.) SHALL BE CLEARLY IDENTIFIED WITH LAMINATED PLASTIC NAMEPLATES. ENGRAVE EQUIPMENT DESIGNATION (NAME) AND IDENTIFYING INFORMATION (VOLTAGE, PHASE, FED FROM) AS SHOWN ON THE PLANS IN 1/4" HIGH LETTERS. ALL EQUIPMENT NAMEPLATES SHALL BE WHITE WITH RAISED BLACK LETTERS. NAMEPLATES SHALL BE ATTACHED TO THE FRONT OF EQUIPMENT ENCLOSURES, WHERE CLEARLY VISIBLE, WITH ADHESIVE AS WELL AS TWO SCREWS IN OPPOSITE ENDS.
20. ALL PANELBOARDS, DISCONNECTS, TRANSFORMERS, CIRCUIT BREAKERS, AND OTHER ELECTRICAL EQUIPMENT SHALL BE MANUFACTURED BY SIEMENS, SQUARE-D, GENERAL ELECTRIC, OR EATON CORPORATION. ALL EQUIPMENT PROVIDED ON A PROJECT SHALL BE OF THE SAME MANUFACTURER.
21. ALL CONDUIT RUNS AS SHOWN ON THE PLANS ARE DIAGRAMMATIC ONLY; EXACT ROUTING AND METHOD OF SUPPORT SHALL BE DETERMINED IN THE FIELD.
22. ALL WORK UNDER THIS SECTION SHALL BE COORDINATED IN THE FIELD WITH THE GENERAL CONTRACTOR AND ALL OTHER TRADES TO ELIMINATE ANY INTERFERENCES WITH EXISTING SITE CONDITIONS. CONFLICTS BETWEEN EQUIPMENT AND/OR MATERIAL LOCATIONS THAT ARISE SHALL BE CORRECTED BY THE CONTRACTOR AS DIRECTED BY THE ARCHITECT-ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
23. THE WORK OF THIS DIVISION SHALL ALSO INCLUDE THOSE ITEMS NOT SPECIFICALLY MENTIONED OR DESCRIBED BUT WHICH ARE NECESSARY TO PRODUCE A COMPLETE AND OPERABLE ELECTRICAL SYSTEM THAT CONFORMS TO THE DESIGN INTENT. SUCH ITEMS INCLUDE BUT ARE NOT LIMITED TO: FITTINGS, BOXES, CONNECTORS, WIRE NUTS, BLANK COVERS, STRAPPING, FASTENERS, ETC.
24. THE CONTRACTOR SHALL ADHERE TO EQUIPMENT MANUFACTURER'S INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS WHEN INSTALLING EQUIPMENT. IF A CONFLICT EXISTS BETWEEN THESE DRAWINGS AND THE EQUIPMENT MANUFACTURER'S INSTRUCTIONS THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND AWAIT CLARIFICATION IN WRITING.
25. ALL SPLICES SHALL BE MADE IN APPROPRIATE JUNCTION BOXES. SPLICES IN CONDUCTOR SIZE AWG #10 OR SMALLER MAY BE MADE USING SPRING-LOCK CONNECTORS (WIRE-NUTS). SPLICES IN CONDUCTORS LARGER THAN AWG #10 SHALL BE MADE USING COMPRESSION TYPE CONNECTORS OR INSULATED TERMINAL BLOCKS SUCH AS THOSE MANUFACTURED BY POLARIS.
26. CONTRACTOR SHALL SUBMIT MANUFACTURER'S DATA SHEETS FOR MATERIALS AND EQUIPMENT TO THE ENGINEER FOR REVIEW AND APPROVAL.
27. PRODUCTS USED ON THIS PROJECT SHALL BE MANUFACTURED BY COMPANIES REGULARLY ENGAGED IN THE PRODUCTION OF SIMILAR PRODUCTS WITH A MINIMUM HISTORY OF THREE YEARS SUCCESSFUL PRODUCTION.
28. CONTRACTOR SHALL FURNISH THE OWNER A COMPLETE BOUND SET OF EQUIPMENT CATALOG SHEETS, MANUFACTURER'S SPECIFICATIONS AND SERVICE, AND OPERATING INSTRUCTIONS ON EQUIPMENT FURNISHED UNDER THIS DIVISION UPON COMPLETION OF WORK UNDER THIS DIVISION.
29. CONTRACTOR SHALL PROVIDE ONE SET OF "AS-BUILT" DRAWINGS TO THE OWNER UPON COMPLETION OF CONSTRUCTION. THE AS-BUILT DRAWINGS SHALL BE CLEAN, LEGIBLE, NEAT, COMPILED IN AN ORDERLY MANNER, AND CONTAIN ALL WORK PERFORMED BY THE CONTRACTOR THAT DEVIATES FROM THE ORIGINAL CONTRACT DOCUMENTS.
30. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS TO DETERMINE EXACT EXTENT OF WORK TO BE PERFORMED PRIOR TO SUBMITTING BID.
31. BOXES SHALL BE PVC AND SHALL BE SIZED TO ACCOMMODATE WIRING, THE EQUIPMENT, OR APPARATUS TO BE INSTALLED AS REQUIRED BY NATIONAL ELECTRIC CODE.
32. WHERE MATERIAL IS CALLED OUT IN THE LEGEND BY MANUFACTURER, TYPE, OR CATALOG NUMBER, SUCH DESIGNATIONS ARE TO ESTABLISH STANDARDS OF DESIRED QUALITY. ACCEPTANCE OR REJECTION OF PROPOSED SUBSTITUTIONS SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT AND ENGINEER.
33. CONTRACTOR SHALL COORDINATE THE SERVICE INSTALLATION AND METERING ARRANGEMENT WITH THE LOCAL UTILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE METERING AND ANY ASSOCIATED FEES IMPOSED BY THE UTILITY.
34. THE GROUNDING ELECTRODE SYSTEM SHALL INCLUDE THE GROUND RODS AT A MINIMUM. THE GROUND RODS SHALL CONSIST OF 3/4" BY 10' COPPER CLAD STEEL GROUND RODS DRIVEN A MINIMUM OF 8' APART AND SHALL BE CONNECTED WITH A #6 AWG BARE COPPER CONDUCTOR. THE GROUND RODS SHALL BE LOCATED AS CLOSE TO PANEL AS PRACTICAL. THE TOP OF THE GROUND RODS SHALL BE LOCATED 18" BELOW FINISHED GRADE. REFER TO THE NATIONAL ELECTRIC CODE FOR ADDITIONAL REQUIREMENTS.
35. CONTRACTOR SHALL INCLUDE TIME AND EQUIPMENT COSTS AS REQUIRED TO ALLOW FOR ADJUSTMENT AND AIMING OF EACH INDIVIDUAL FIXTURE AFTER INITIAL INSTALLATION AND POWER HAS BEEN TURNED. CONTRACTOR SHALL INCLUDE ALL COSTS ASSOCIATED WITH HAVING THE MANUFACTURE ONSITE TO ENSURE PROPER ADJUSTMENT AND AIMING OF FIXTURES TO ACHIEVE PROPER LIGHT LEVELS ALONG THE TRACK.
36. NO EQUIPMENT SHALL BE OPERATED ON THE TRACK SURFACE AND THE TRACK SHALL NOT BE DISTURBED IN ANY WAY.
37. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED DURING THE COURSE OF THE INSTALLATION OF THE ELECTRICAL WORK. THIS INCLUDES, BUT IS NOT LIMITED TO, IRRIGATION LINES, DRAINAGE SYSTEMS, SOD, AND ANY UNDER-GROUND UTILITIES THAT MAY BECOME DAMAGED.
38. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING A UTILITY LOCATING SERVICE COMPANY COME TO THE SITE AND MARK ALL UNDERGROUND UTILITY LINES PRIOR TO BEGINNING ANY PORTION OF THE ELECTRICAL SCOPE OF WORK. CONDUIT MUST BE ROUTED TO MISS EXISTING UNDERGROUND UTILITIES, IRRIGATION, DRAINAGE, ETC. HAND EXCAVATE IF NECESSARY.
39. CONSTRUCTION AND ALL TRENCH ROUTES SHALL BE COORDINATED WITH THE ALLENDALE COUNTY SCHOOL DISTRICT REPRESENTATIVE PRIOR TO STARTING EXCAVATION.
40. ALL CONDUCTORS SHALL BE ROUTED AT A MINIMUM OF 36" BELOW FINISHED GRADE IN SCHEDULE 40 PVC CONDUIT.
41. GROUP CONDUITS IN COMMON TRENCHES WHEREVER POSSIBLE.
42. ALL CONDUCTORS SHALL BE CONTINUOUS LENGTH FROM CONTRACTOR TO LIGHT POLE UNLESS DESIGNATED JUNCTION BOXES ARE SHOWN. SPLICES MAY BE MADE IN THESE BOXES AS REQUIRED.
43. CONTRACTOR SHALL REVIEW THE CIVIL ENGINEERING TRACK CONSTRUCTION DOCUMENTS PREPARED BY CHA CONSULTING INC. AND TITLED "ALLENDALE FAIRFAX HIGH SCHOOL TRACK & FIELD FACILITY" AND DATED 09/25/2017. THESE DRAWINGS SHOW THE TRACK DRAINAGE, STORM SEWER AND IRRIGATION SYSTEMS AS WELL AS OTHER EXISTING UTILITIES THAT ARE TO BE AVOIDED DURING EXCAVATION. DRAWINGS CAN BE OBTAINED FROM THE SCHOOL DISTRICT'S REPRESENTATIVE.

FIXTURE SCHEDULE						
TAG	MANUFACTURER	CATALOG NO.	VOLTS	BALLAST	LAMPS	COMMENTS
A	EPHESUS BY EATON	EPH-S8-VH-2N-BLK	480	ELECTRONIC	640W LED 90,000 LMNS 5600K 80CRI	MOUNT AT 50FT AFG; LUMASPORT 8 W/ TYPE 2 NARROW DISTRIBUTION
B	EPHESUS BY EATON	EPH-S8-VH-3N-BLK	480	ELECTRONIC	640W LED 90,000 LMNS 5600K 80CRI	MOUNT AT 50FT AFG; LUMASPORT 8 W/ TYPE 3 NARROW DISTRIBUTION
C	EPHESUS BY EATON	EPH-S8-VH-4N-BLK	480	ELECTRONIC	640W LED 90,000 LMNS 5600K 80CRI	MOUNT AT 50FT AFG; LUMASPORT 8 W/ TYPE 4 NARROW DISTRIBUTION
D	EPHESUS BY EATON	EPH-S8-VH-5N-BLK	480	ELECTRONIC	640W LED 90,000 LMNS 5600K 80CRI	MOUNT AT 50FT AFG; LUMASPORT 8 W/ TYPE 5 NARROW DISTRIBUTION

FIXTURE NOTES:

1. SPECIFIED FIXTURE IS A NEW EATON PRODUCT TO BE RELEASED MAY OF 2020.
2. CONTACT KURT KUSTER AT ARDD & WINTER FOR PRICING. (912)-629-0500 OR EMAIL: KURTK@AWLIGHTS.COM
3. ALTERNATE FIXTURES ARE ACCEPTABLE WITH PRIOR APPROVAL. PRIOR APPROVALS MUST INCLUDE A PHOTOMETRIC POINT BY POINT ANALYSIS OF THE TRACK INDICATING A 20 FOOT-CANDLE AVERAGE AT 3FT ABOVE THE TRACK WITH A MAX/MIN. RATIO OF 3:1 OR BETTER.

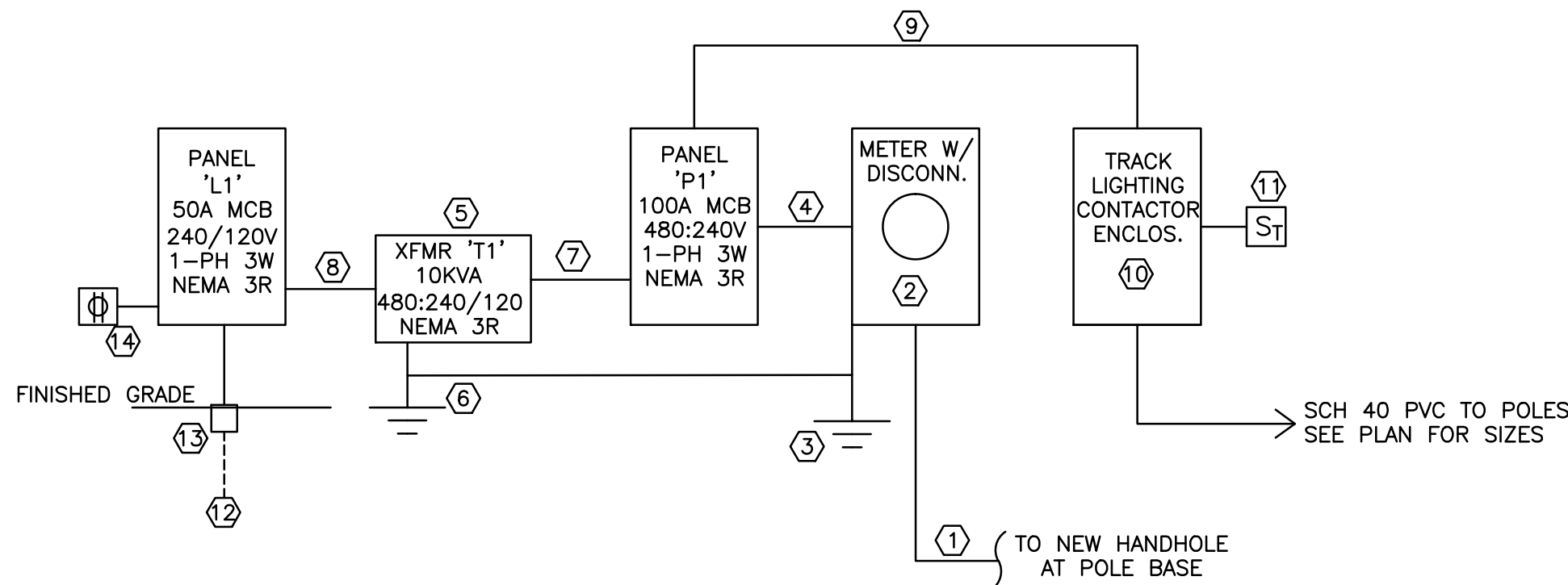
LIGHT POLE SCHEDULE			
TAG	MANUFACTURER	CATALOG NO.	COMMENTS
P1 P4	CMT	ML50-N-TC-BK/MOPXA-6I-BK	50' DIRECT BURIAL FIBERGLASS POLE W/ (3) LIGHTS
P2	CMT	ML50-N-TC-BK/MOPXA-(2)6I-BK	50' DIRECT BURIAL FIBERGLASS POLE W/ (5) LIGHTS
P3 P5 P6	CMT	ML50-N-TC-BK/MOPXA-8I-BK	50' DIRECT BURIAL FIBERGLASS POLE W/ (4) LIGHTS

PRICING NOTE:

CONTRACTOR SHALL BREAK-OUT THE COSTS FOR THE FOLLOWING AS A PART OF THEIR BID. SINGLE LUMP SUM COST IS NOT ACCEPTABLE. EACH LINE ITEM BELOW SHALL INCLUDE ALL MATERIAL, LABOR, OVERHEAD, ETC. AS REQUIRED ASSUMING EACH ITEM COULD BE TREATED AS AN INDIVIDUAL PHASE OF WORK.

1. PROVIDE LUMP SUM COST FOR PANELS, BACKBOARD, METER, CONTACTORS AND SERVICE LATERAL CONDUIT & WIRE.
2. PROVIDE LUMP SUM COST TO PROVIDE AND INSTALL LIGHT POLES P1, P2, & P3 INCLUDING FIXTURES, POLES, CONDUIT, WIRING, ETC.
3. PROVIDE BROKEN OUT COST AS AN ADDITIVE ALTERNATE FOR EACH OF THE REMAINING POLES P4, P5, & P6 AS INDICATED ON THE PLANS.

PANEL - P1																								
100*	AMP		MCB	240		480		VOLT	1	PHASE			3	WIRE		SURFACE		NEMA	3R	18,000			AIC	
TYPE	#		VA	VA/PHASE		GND	WIRE AWG#	TRIP AMPS	POLE	CKT NO.	A	B	CKT NO.	POLE	TRIP AMPS	WIRE AWG#	GND	VA/PHASE		TYPE	#	VA		
				A	B													A	B					
POLE P1, CONTACTOR #1 C1-1.2	1	@	1407	1407		12	12	20	2	1	X		2	2	20	10	10	1407		POLE P4, CONTACTOR #2 C2-1.2	1	@	1407	
---	1	@	1407	1407		12	12	---	---	3	X		4	---	---	10		1407		---	1	@	1407	
POLE P2, CONTACTOR #1 C1-3.4	1	@	2344	2344		12	20	2	5	7	X		6	2	20	8	8	1875		POLE P5, CONTACTOR #2 C2-3.4	1	@	1875	
---	1	@	2344	2344		12	---	---	---	7	X		8	---	---	8		1875		---	1	@	1875	
POLE P3, CONTACTOR #1 C1-5.6	1	@	1875	1875		10	10	20	2	9	X		10	2	20	10	10	1875		POLE P6, CONTACTOR #2 C2-5.6	1	@	1875	
---	1	@	1875	1875			10	---	---	11	X		12	---	---	10		1875		---	1	@	1875	
XFMR T1* (PANEL 'L1')	1	@	1380	1380		SEE RISER		30	2	13	X		14					0						
---	1	@	180	180				---	---	15	X		16					0	0					
				0						17	X		18					0						
										19	X		20					0	0					
				0						21	X		22					0						
					0					23	X		24						0					
																			0					
TOTAL A				7006									TOTAL A		12163			5157						
TOTAL B					5806								TOTAL B		10863				5157					
													TOTAL VA		23126									
TOTAL PANEL					48		AMPS - Connected																	
*MAIN BREAKER SHALL BE U.L. LISTED FOR USE AS SERVICE ENTRANCE EQUIPMENT																								



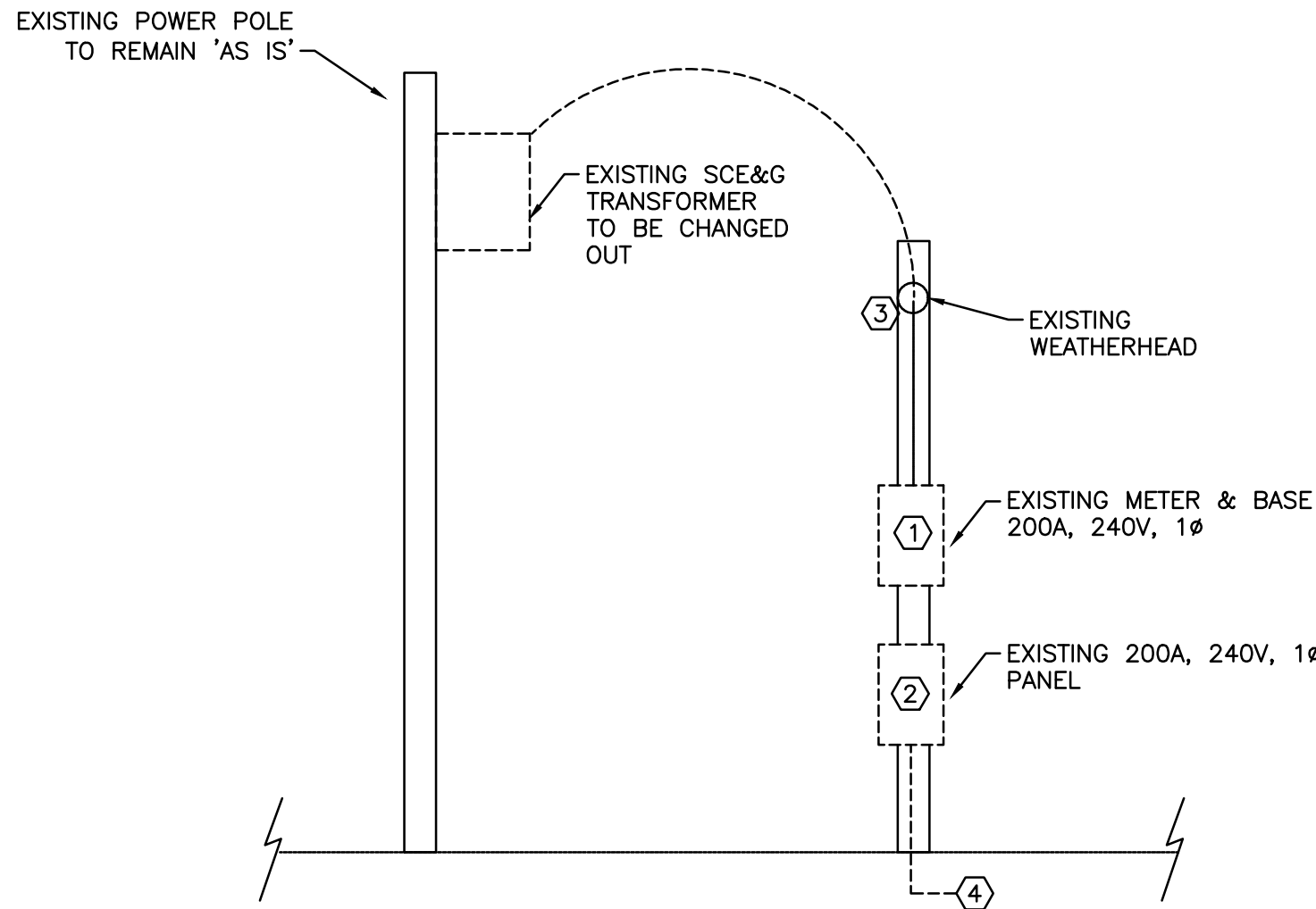
ELECTRICAL INSTALLATION RISER DIAGRAM GENERAL NOTES:

1. PROVIDE HOT DIP GALVANIZED STEEL FASTENERS AND HARDWARE AS REQUIRED FOR MOUNTING EQUIPMENT TO BACKBOARD. SEE BACKBOARD DETAIL.

ELECTRICAL INSTALLATION RISER DIAGRAM KEYED NOTES:

ALL KEYED NOTES ARE REPRESENTED BY A 'C' SYMBOL.

1. PROVIDE 1.5" CONDUIT WITH (3) #1/0 AWG AL'S TO DOMINION ENERGY PROVIDED HAND-HOLE AT POLE BASE. SEE SITE PLAN FOR LOCATION.
2. 480-VOLT 100A 1-PHASE METER BASE WITH INTEGRAL DISCONNECT PROVIDED BY DOMINION ENERGY.
3. SEE 'SERVICE GROUNDING AND BONDING DETAIL'.
4. PROVIDE 1.5" CONDUIT WITH (3) #1/0 AWG AL'S.
5. PROVIDE 10KVA, 480V:240/120V, 1Ø, 3W DRY-TYPE, 150" ALUMINUM WINDING, WALL-MOUNTED TRANSFORMER IN NEMA 3R ENCLOSURE. WALL MOUNT TRANSFORMER TO EQUIPMENT BACKBOARD; SEE BACKBOARD DETAIL.
6. PROVIDE #8 AWG CU AND BOND TO DRIVEN RODS.
7. PROVIDE 3/4" CONDUIT WITH (2) #10 AWG CU'S & (1) #10 AWG CU GROUND.
8. PROVIDE 3/4" CONDUIT WITH (3) #8 AWG CU'S & (1) #8 AWG CU GROUND.
9. PROVIDE (2) 1" CONDUITS TO CONTACTOR ENCLOSURE FOR BRANCH CIRCUITS. KEEP CONDUITS LESS THAN 24" TOTAL LENGTH TO AVOID DE-RATING OF CONDUCTORS. SEE PANEL SCHEDULE FOR WIRE SIZES.
10. PROVIDE LIGHTING CONTACTORS WITH ENCLOSURE FOR CONTROL OF TRACK LIGHTS AND LOCATE ON BACKBOARD ADJACENT TO PANEL. SEE CONTACTOR DETAIL.
11. PROVIDE TIME SWITCH FOR ON/OFF CONTROL OF LIGHTS.
12. RE-CONNECT EXISTING 2" SCH 40 PVC CONDUIT WITH 12/2 'UF' CABLE TO NEW PANEL. RE-CONNECT EXISTING CIRCUIT TO NEW 20A 1-POLE BREAKER IN PANEL.
13. PROVIDE A 12"x12"x6" PVC JUNCTION BOX, WITH TOP OF BOX INSTALLED FLUSH WITH FINISHED GRADE, AND EXTEND A NEW 2" SCH 40 PVC CONDUIT FROM BOX TO NEW PANEL LOCATION ON BACKBOARD. PROVIDE (3) #12 AWG CU'S THHN IN CONDUIT FOR EXTENSION OF EXISTING 12/2 'UF' CABLE TO NEW PANEL FOR RECONNECTION. IF CONDUIT HAS ADEQUATE LENGTH TO REACH NEW PANEL JUNCTION BOX SHALL BE OMITTED.
14. PROVIDE 20A 120-VOLT WEATHER RESISTANT GROUND FAULT CIRCUIT INTERRUPT DEVICE WITH WEATHERPROOF IN-USE COVER AND LOCATE IN PVC BACKBOX ON BACKBOARD ADJACENT TO PANEL 'L1'. CONNECT TO PANEL 'L1' WITH (3) #12 AWG CU'S IN 1/2" LIQUID-TIGHT.



ELECTRICAL DEMOLITION RISER DIAGRAM GENERAL NOTES:

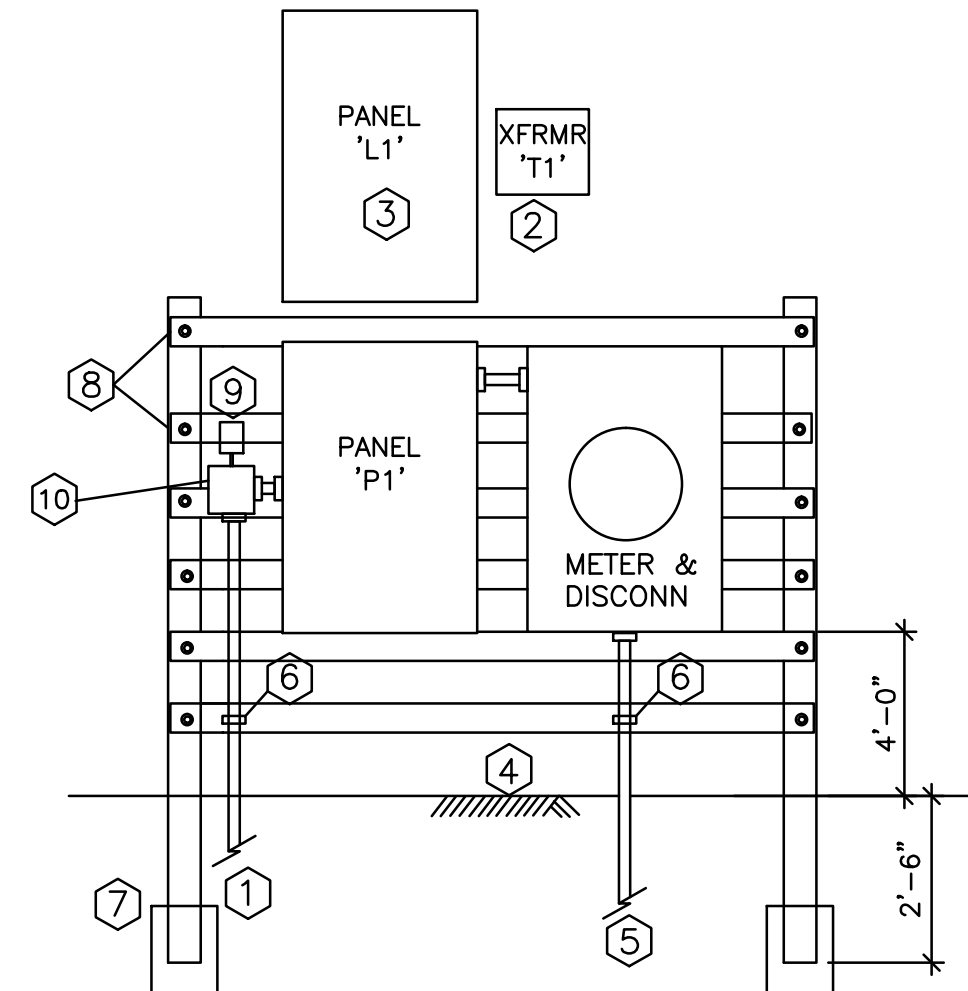
1. THE EXISTING 200A 240/120-VOLT SERVICE SHALL BE DEMOLISHED AND REMOVED COMPLETE. THE (2) 20A 1-POLE BRANCH CIRCUITS SHALL REMAIN AND BE RE-CONNECTED TO THE NEW SERVICE.

ELECTRICAL DEMOLITION RISER DIAGRAM KEYED NOTES:

ALL KEYED NOTES ARE REPRESENTED BY A 'C' SYMBOL.

1. DEMOLISH AND REMOVE EXISTING 200A 240/120V, 1Ø, 3W METER. COORDINATE DEMOLITION WITH DOMINION ENERGY.
2. DEMOLISH AND REMOVE EXISTING 200A MCB, 240/120V, 1Ø, 3W SQUARE D LOAD CENTER.
3. DEMOLISH AND REMOVE EXISTING WEATHERHEAD, 2 1/2" PVC CONDUIT FROM WEATHERHEAD TO METER BASE, ASSOCIATED WIRING AND SERVICE POLE.
4. EXISTING 2" SCH 40 PVC CONDUIT WITH 12/2 'UF' CABLE TO REMAIN 'AS IS' AND BE RECONNECTED TO NEW PANEL. CONDUIT IS ROUTED TO HANDHOLE INSIDE OF TRACK ACROSS FROM PANEL AND SERVES A RECEPTACLE.

2 ELECTRICAL DEMOLITION RISER DIAGRAM
E002 SCALE: NOT TO SCALE



GENERAL NOTES:

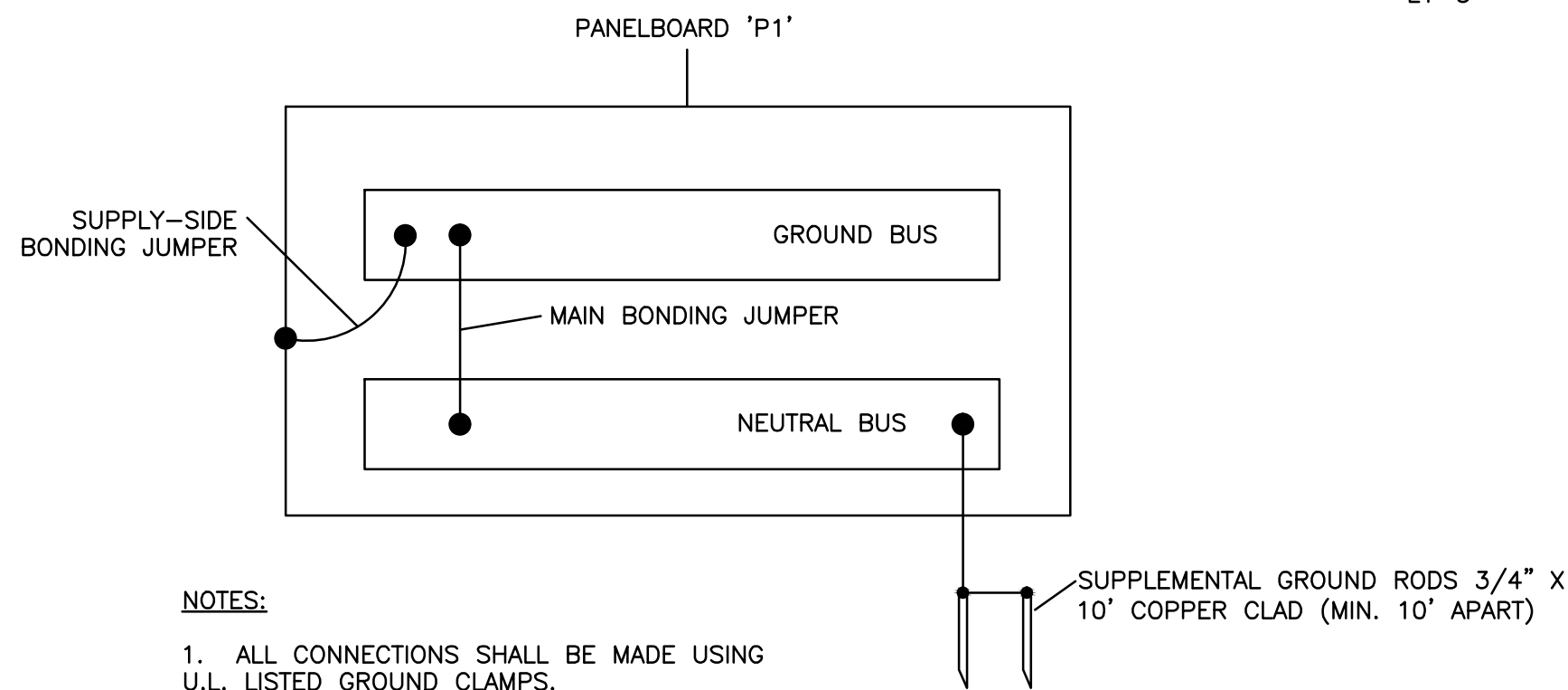
1. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING MATERIAL AND BUILDING NEW BACKBOARD. BACKBOARD SHALL BE KEPT AS SMALL AS POSSIBLE.
2. ENSURE METER BASE IS MOUNTED AT AN ELEVATION TO MEET DOMINION ENERGY'S REQUIREMENTS ABOVE FINISHED GRADE.

KEYED NOTES:

- 1 BRANCH CIRCUIT CONDUITS TO LIGHT POLES
- 2 MOUNT 10 KVA TRANSFORMER ON BACK OF BACKBOARD ADJACENT TO PANEL 'L1'
- 3 PANEL MOUNTED ON BACK OF BACKBOARD AND SHOWN ABOVE FOR CLARITY
- 4 FINISHED GRADE
- 5 SERVICE LATERAL TO HANDHOLE
- 6 TWO-HOLE CONDUIT STRAP AS REQUIRED
- 7 6X6 PRESSURE TREATED POST W/ 80# OF SAC-CRETE; TYP. OF 2
- 8 2X6 PRESSURE TREATED BOARD; TYP. ALL CROSS MEMBERS LEAVE APPROXIMATELY A 1/2" GAP BETWEEN BOARDS PROVIDE QUANTITY AS REQUIRED BASED ON EQUIPMENT HEIGHT
- 9 TIMER SWITCH FOR CONTROL OF CONTACTORS
- 10 PROVIDE 30A, 240V CONTACTOR WITH 120V COIL WITH ENOUGH CONTACTS FOR CONTROL OF CIRCUITS AS SHOWN ON 'LIGHTING CONTACTOR DETAIL'.

3 EQUIPMENT BACKBOARD MOUNTING DETAIL - PANELBOARD 'L1/L2'
E002 SCALE: NOT TO SCALE

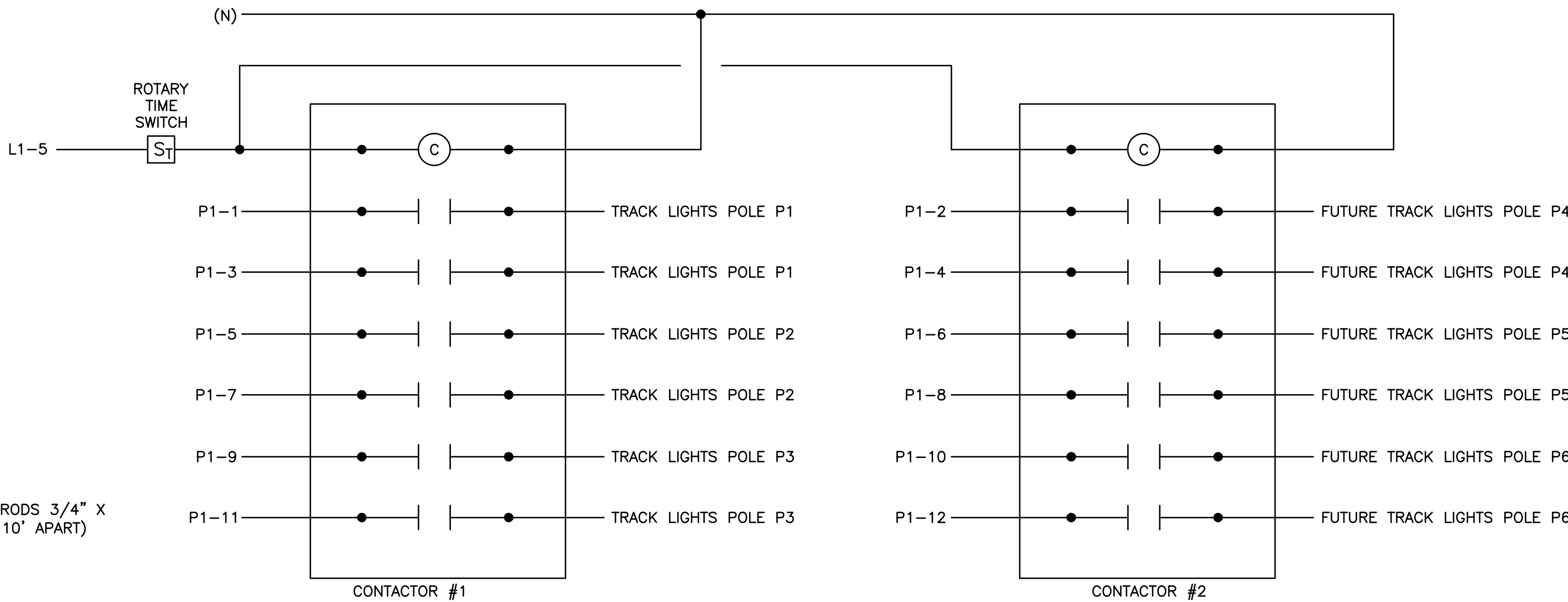
1 ELECTRICAL INSTALLATION RISER DIAGRAM
E002 SCALE: NOT TO SCALE



NOTES:

1. ALL CONNECTIONS SHALL BE MADE USING U.L. LISTED GROUND CLAMPS.
2. ALL GROUNDING ELECTRODE CONDUCTORS AND JUMPERS SHALL BE #6 AWG COPPER.

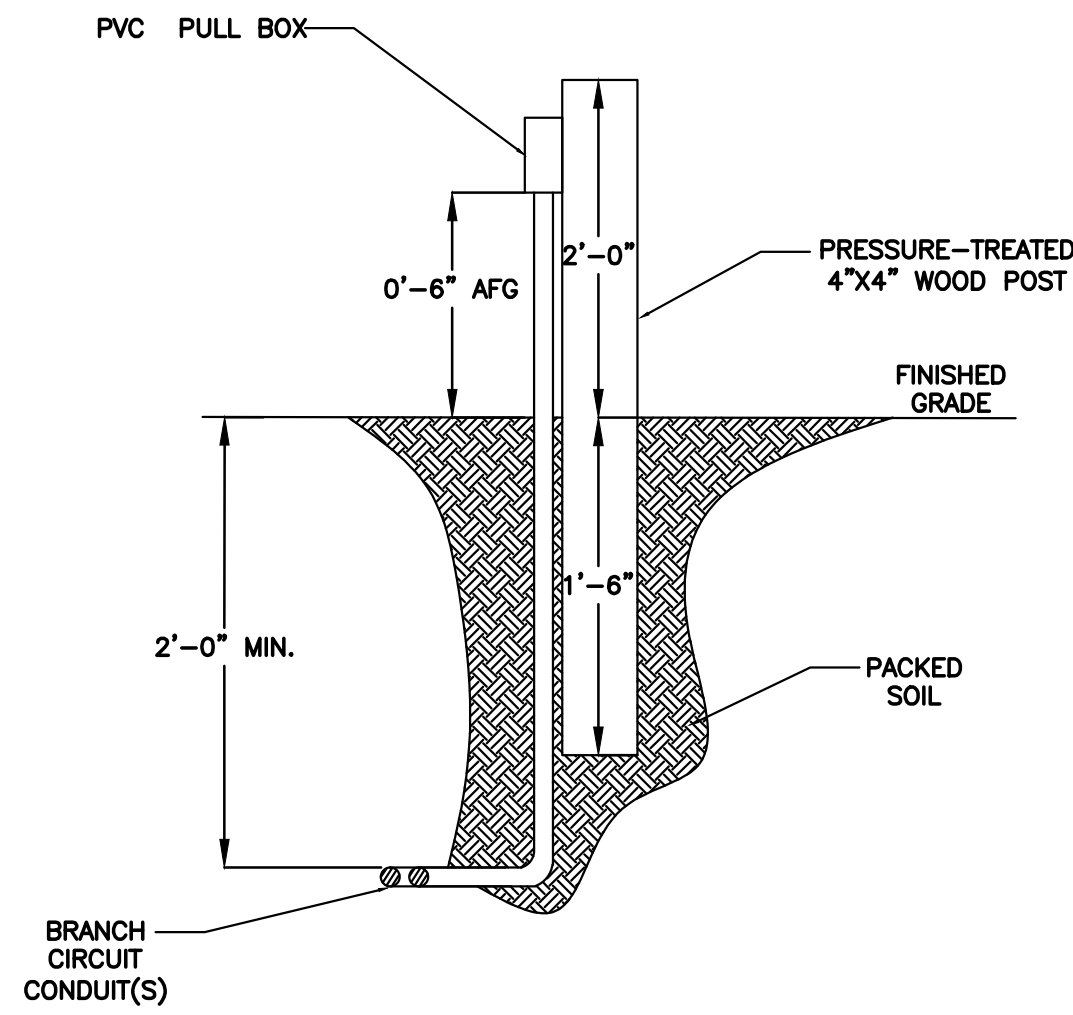
4 SERVICE GROUNDING AND BONDING DETAIL
E002 SCALE: NOT TO SCALE



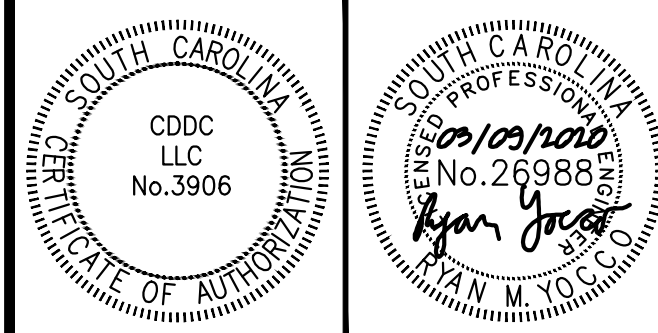
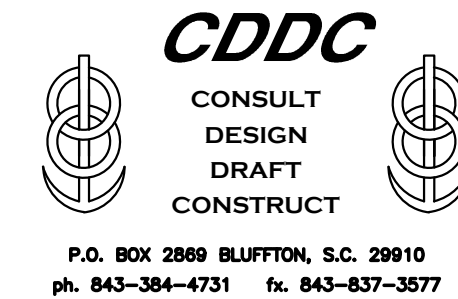
LIGHTING CONTACTOR NOTES:

1. PROVIDE QUANTITY OF 600V/30A RATED CONTACTS AS SHOWN AND 120V COIL.
2. PROVIDE NEMA 3R ENCLOSURE W/ COVER TO LOCATE CONTACTORS WITHIN.
3. PROVIDE ROTARY TIME SWITCH AS NOTED ON LEGEND IN NEMA 3R ENCLOSURE. TIME SWITCH SHALL CONTROL BOTH CONTACTORS.
4. SEE PANEL SCHEDULE FOR WIRE SIZES.
5. CONTRACTOR SHALL WIRE LINE SIDE OF CONTACTOR #2 IN PREPARATION FOR FUTURE POLES.

5 LIGHTING CONTACTOR DETAIL - TRACK LIGHT CONTROL
E002 SCALE: NOT TO SCALE



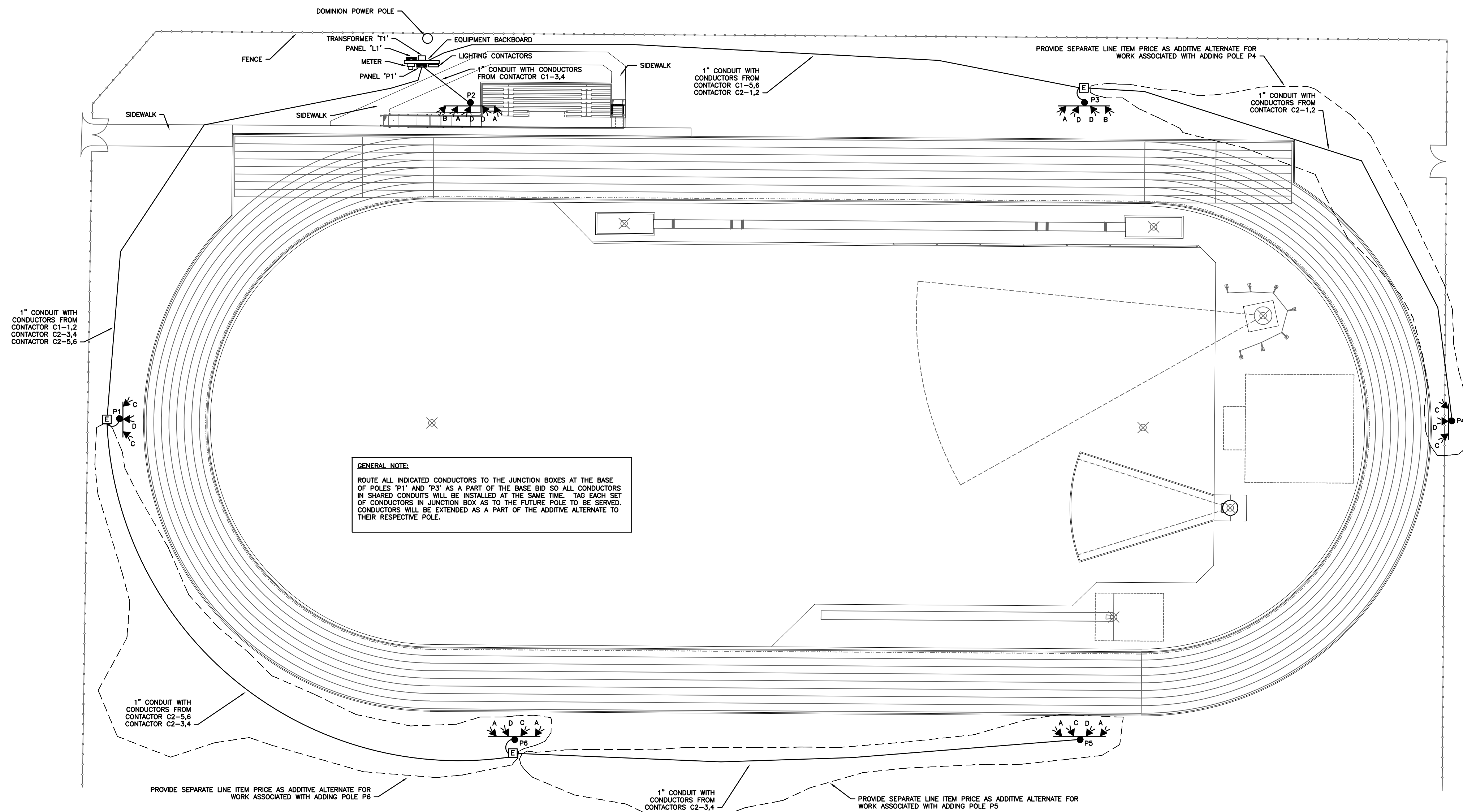
6 PULL BOX MOUNTING DETAIL & POLE BASE
E002 SCALE: NOT TO SCALE



NEW TRACK FACILITY
FOR ALLENDALE COUNTY
SCHOOL DISTRICT
SOUTH CAROLINA

Revisions	
XXX	
XXX	
XXX	
XXX	
XXX	
Submittal	PERMIT SET
Drawn By	Checked By
RMV	RMV
Date	03/09/2020
Scale	AS SHOWN
Project Number	2005-MS-E1
Sheet	

E002



1 SITE LIGHTING INSTALLATION PLAN
E100 SCALE: 1/32" = 1'-0"

NEW TRACK FACILITY
FOR ALLENDALE COUNTY
SCHOOL DISTRICT
SOUTH CAROLINA

Revisions	
XXX	
XXX	
XXX	
XXX	
XXX	
Submittal	
100% REVIEW SET	
Drawn By	Checked By
RMY	RMY
Date	02/20/2020
Scale	AS SHOWN
Project Number	2005-MS-E1
Sheet	E100