

ELECTRICAL NOTES

- IT IS THE INTENT OF THESE DRAWINGS AND OTHER RELATED DOCUMENTS TO PRODUCE A COMPLETE AND FUNCTIONING ELECTRICAL SYSTEM. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, TESTS, AND OTHER SERVICES AS MAY BE NECESSARY TO ACHIEVE THIS PRODUCT. THE CONTRACTOR SHALL ACKNOWLEDGE ACCEPTANCE OF THE PLANS AS AN ADEQUATE DEFINITION OF THE SCOPE OF WORK AND EXTRA COST CLAIMS BASED ON DISCREPANCIES ON THE PLANS WILL NOT BE CONSIDERED.
- ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NEC) AND ALL LOCAL CODES HAVING JURISDICTION. ALL EQUIPMENT, DEVICES, AND MATERIAL SHALL BE LISTED WITH UNDERWRITERS LABORATORIES FOR ITS APPLICATION AS INSTALLED AND SHALL BEAR THE UL LABEL.
- THE ELECTRICAL CONTRACTOR SHALL OBTAIN ALL PERMITS AND PAY SUCH FEES AS MAY BE NECESSARY FOR INSPECTIONS, TESTS, AND OTHER SERVICES WHICH ARE REQUIRED FOR THE COMPLETION OF HIS WORK.
- ELECTRICAL PLANS ARE DIAGRAMMATIC. DO NOT SCALE DRAWINGS.
- CONSULT PLANS OF ALL OTHER TRADES FOR COORDINATION AND FOR RELATED AND ADJOINING WORK.
- SHOP DRAWINGS FOR ALL ELECTRICAL EQUIPMENT, FIXTURES, DEVICES AND MATERIALS SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL BEFORE DELIVERY TO THE JOB SITE. EQUIPMENT, FIXTURES, DEVICES, AND MATERIAL DELIVERED TO THE JOB SITE OR INSTALLED PRIOR TO APPROVAL OF THE SHOP DRAWINGS, AND FOR WHICH THE SHOP DRAWINGS ARE SUBSEQUENTLY REJECTED, SHALL BE REPLACED WITH AN APPROVED ITEM AT NO ADDITIONAL COST TO THE OWNER.
- THE CORRECT NUMBER OF WIRES MAY NOT BE INDICATED FOR ALL CIRCUITS, ONLY THOSE WHERE CLARIFICATION IS NECESSARY. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL WIRES NECESSARY FOR THE PROPER FUNCTION OF THE SYSTEM WHETHER INDICATED ON THE DRAWINGS OR NOT.
- THE LIGHTING FIXTURES SHALL BE FURNISHED AND INSTALLED COMPLETE WITH ALL ACCESSORIES (INCLUDING LAMPS) BY THE ELECTRICAL CONTRACTOR.
- SYMBOLS SHOWN ON THIS SHEET ARE STANDARD SYMBOLS AND MAY NOT NECESSARILY ALL BE APPLICABLE TO THIS PROJECT.
- THE CONTRACTOR SHALL GUARANTEE ALL HIS WORK AND MATERIALS FOR A PERIOD OF ONE YEAR AFTER ACCEPTANCE BY OWNER.
- CONDUCTORS SHALL BE INSTALLED CONTINUOUS BETWEEN DEVICES, WITH SPLICES LOCATED ONLY IN JUNCTION BOXES OR IN CABINETS. CONDUCTORS SHALL BE OF SUFFICIENT LENGTH TO REACH THE FARTHEST TERMINAL IN PANELS. A MINIMUM OF 6" LOOPS SHALL REMAIN WHERE CONNECTIONS OR TAPS ARE TO BE MADE IN BRANCH CIRCUIT WIRING.
- ELECTRICAL CONTRACTOR SHALL PROVIDE AS BUILT DRAWINGS AND ALL MANUFACTURERS DATA AND WARRANTY LITERATURE AT THE COMPLETION OF THE CONTRACT.

EQUIPMENT SPECIFICATIONS

- RACEWAY:**
 - MINIMUM SIZE OF THE CONDUIT SHALL BE 3/4".
 - PROVIDE LIQUID TIGHT FLEXIBLE CONDUIT FOR CONNECTION OF MOTOR AND FOR OTHER ELECTRICAL EQUIPMENT WHERE SUBJECT TO MOVEMENT AND VIBRATION, AND ALSO WHERE SUBJECT TO ONE OR MORE OF THE FOLLOWING CONDITIONS, UNLESS NOTED OTHERWISE:
 - MOIST AND HUMID ATMOSPHERE WHERE CONDENSATE CAN BE EXPECTED TO ACCUMULATE.
 - CORROSIVE ATMOSPHERE.
 - SUBJECT TO DRIPPING OIL, GREASE OR WATER.
 - ALL CONDUITS SHALL BE GROUNDED PER NEC. CONDUITS ENTERING THE OUTLET BOXES, PANEL CABINETS ETC. MUST BE FITTED WITH A DOUBLE LOCKNUT AND BUSHING.
- WIRES AND CABLES:**
 - ALL WIRE AND CABLE SHALL BE COPPER WITH THHN/THWN INSULATION AND ALL WIRE SIZES ARE BASED ON COPPER CONDUCTORS WITH 75°C INSULATION UNLESS INDICATED OTHERWISE. ALL CONNECTORS, LUGS, ETC. SHALL BE LISTED FOR 75°C.
 - PROVIDE WIRING NOT SMALLER THAN #12 AWG FOR THE POWER DISTRIBUTION, AND NOT SMALLER THAN #14 AWG FOR THE FIRE ALARM SYSTEM. ARMORED METAL CABLE OR METAL CLAD CABLE, WHERE CONCEALED, MAY BE USED IF ACCEPTABLE TO THE LOCAL AUTHORITY HAVING JURISDICTION AND IN COMPLIANCE WITH APPLICABLE CODES.
 - CONDUCTORS INSTALLED UNDERGROUND OR IN THE WET LOCATIONS SHALL BE U.L. LISTED PER NEC, AND SHALL BE SUITABLE FOR WET LOCATIONS.
- ELECTRICAL BOXES AND FITTINGS:**
 - ALL BOXES AND FITTINGS SHALL BE OF CODE-GAUGE STEEL.
 - JUNCTION AND PULL BOXES: PROVIDE GALVANIZED CODE-GAUGE SHEET STEEL JUNCTION AND PULL BOXES WITH SCREW-ON COVER OF TYPES, SHAPES AND SIZES TO SUIT EACH RESPECTIVE LOCATION AND INSTALLATION, WITH WELDED SEAMS AND EQUIPPED WITH STAINLESS STEEL NUTS, SCREWS, AND WASHERS.
 - PROVIDE WEATHERPROOF OUTLETS FOR INTERIOR AND EXTERIOR LOCATIONS EXPOSED TO WEATHER OR MOISTURE.
 - ALL PULL BOXES SHALL BE FABRICATED FROM #12 OR HEAVIER GAUGE GALVANIZED STEEL AS REQUIRED BY THE NEC, AND SHALL BE EQUIPPED WITH SCREW FASTENED COVER.

PANEL 'P'		208/120 VOLTS		3 PHASE		4 WIRE		225 AMPS	
(EXISTING)		SOLID NEUTRAL: YES		NEMA TYPE: 1		225 A. MCB(MLO)			
LOCATION: CORRIDOR		GROUND BUS: YES		A.I.C. SYM: 10K		STD. FRAME: YES		MOUNTING: SURFACE	
REMARKS: EXISTING PANEL. ALL CIRCUIT BREAKERS ARE EXISTING UNLESS OTHERWISE NOTED.									
DESCRIPTION	CONNECTED KVA	C.B. TRIP	C.B. NO.	A B C	C.B. TRIP	C.B. NO.	CONNECTED KVA	DESCRIPTION	
(E) RECEPTACLES	0.4	1	20	1	2	3			
(E) RECEPTACLES	0.4	1	20	3	4		6.0	(E) PUMP	
(E) LIGHTS	0.8	1	20	5	6	40			
(E) RECEPTACLES	0.7	1	20	7	8	2	2.3	(E) AHU	
(E) SPACE	0.0	1	20	9	10	20			
(E) LIGHTS	0.8	1	20	11	12	2	3.0	(E) EQUIPMENT	
(E) SUMP PUMP	5.0	2	13		14	40			
			60	15	16	2	4.2	(E) EQUIPMENT	
(E) PUMP	0.6	1	20	17	18	60			
(E) PUMP	0.6	1	20	19	20	1	0.8	(E) REFRIGERATOR	
(E) PUMP	0.6	1	20	21	22	1	0.8	(E) REFRIGERATOR	
(E) PUMP	0.6	1	20	23	24	2	5.2	(E) PUMP	
(E) PUMP	0.6	1	20	25	26	40			
(E) RECEPTACLES	0.4	1	20	27	28	2	2.3	(E) MICROWAVE	
(E) SPACE	0.0	1	20	29	30	20			
			3	31	32	3			
(E) FRYER	9.0	2	33		34		9.0	(E) FRYER	
			60	35	36	60			
(E) EXHAUST FAN	2.3	2	37		38	1	0.0	(E) SPACE	
			20	39	40	2	2.7	(N) SITE LIGHTING**	
SPACE	0.0	1	41		42	20*			

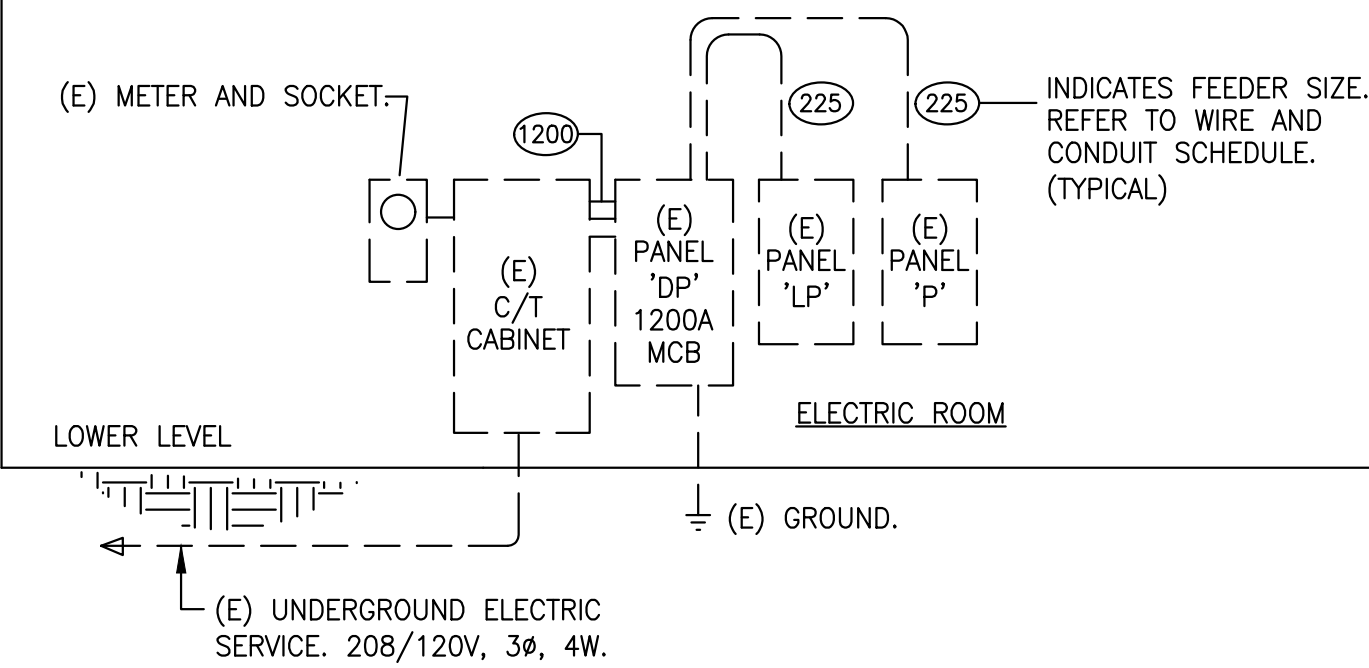
* PROVIDE NEW CIRCUIT BREAKER IN EXISTING SPACE. MATCH EXISTING TYPE.
 ** CONNECT THRU NEW TIME CLOCK.
 EXISTING CONNECTED LOAD: 56.4 KVA = 156.7 AMP.
 NEW CONNECTED LOAD: 2.7 KVA
 TOTAL CONNECTED LOAD: 59.1 KVA = 164.2 AMP.
 TOTAL DEMAND LOAD: 59.8 KVA = 166.1 AMP.

PANEL NOTE:

CONTRACTOR SHALL IDENTIFY EXISTING BRANCH CIRCUITS AND PANELBOARDS PREVIOUSLY SERVING THIS AREA, AND TRACE EXISTING CIRCUITS TO VERIFY SOURCE. UPDATE PANEL DIRECTORY, AND PANEL SCHEDULES ON THE AS BUILT DRAWINGS. EXISTING LOADS ARE BASED ON EXISTING DRAWINGS AND FIELD OBSERVATIONS.

ROOF

NOTE: ALL ELECTRICAL EQUIPMENT SHOWN IS EXISTING TO REMAIN, UNLESS OTHERWISE NOTED.



EXISTING ELECTRICAL RISER DIAGRAM

NOT TO SCALE

LOAD SUMMARY:

THE EXISTING MAIN SERVICE IS RATED AT 1200 AMP. BASED ON THE EXISTING CONDITIONS DOCUMENTED IN THE FIELD AND EXISTING DRAWINGS. THE EXISTING CONNECTED LOAD IS 286.5 KVA AT 208/120V, 3Ø, 4W, WHICH EQUATES TO 795.8 AMPS + NEW CONNECTED LOAD AT 2.7 KVA TOTALS 289.2 KVA WHICH EQUATES TO 803.3 AMPS.

LIGHTING FIXTURE SCHEDULE

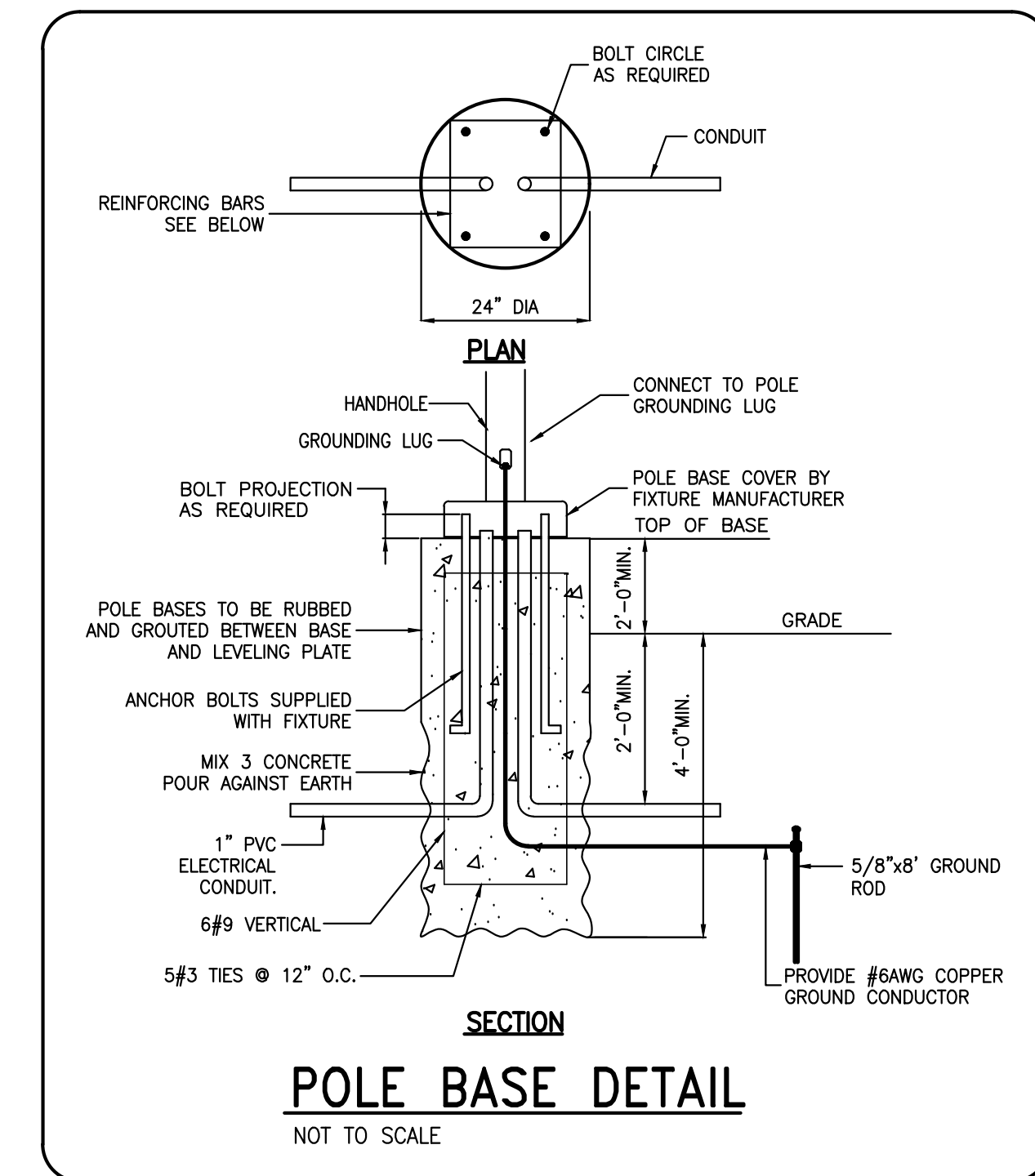
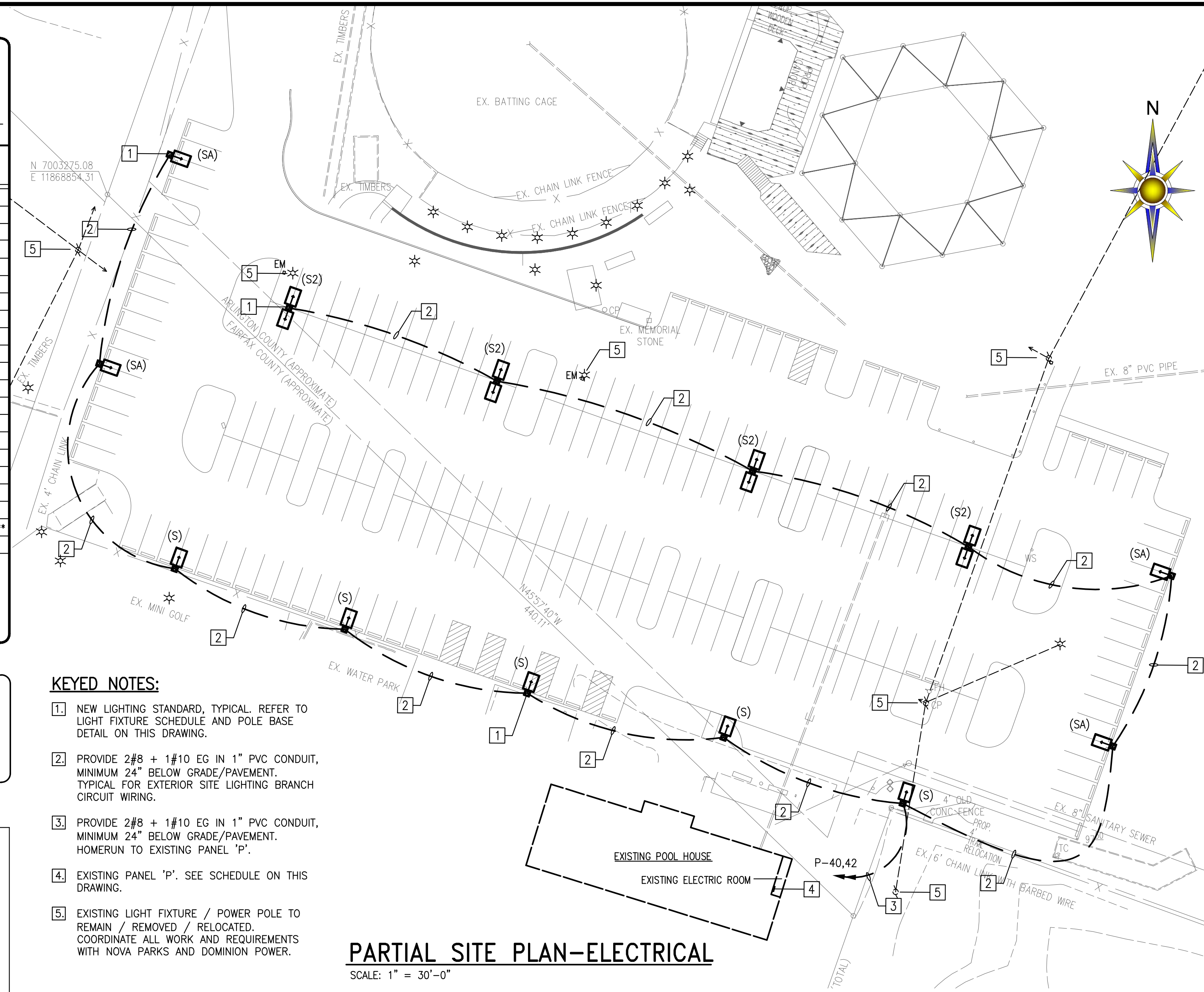
FIXTURE DESIGNATION	FIXTURE TYPE	MANUFACTURER	CATALOG NO.	LAMP		WATTS	VOLTS	MOUNTING	REMARKS
				NO.	TYPE				
(S)	LED ARCHITECTURAL CUT-OFF	LSI LIGHTING	1/XGBM-FT-LED-SS-NW-HSS-UE-BRZ PCI208 W/RTPB5-S11G-20-S-BRZ-BC.	1	12,597 LUMENS	190	208	20' POLE	SEE BASE DETAIL ON THIS DRAWING.
(SA)	LED ARCHITECTURAL CUT-OFF	LSI LIGHTING	1/XGBM-3-LED-SS-NW-HSS-UE-BRZ PCI208 W/RTPB5-S11G-20-S-BRZ-BC.	1	10,384 LUMENS	190	208	20' POLE	SEE BASE DETAIL ON THIS DRAWING.
(S2)	LED ARCHITECTURAL CUT-OFF	LSI LIGHTING	2/XGBM-5-LED-SS-NW-UE-BRZ-PCI208 W/RTPB5-S11G-20-D180-BRZ-BC.	2	15,173 LUMENS	380	208	20' POLE	SEE BASE DETAIL ON THIS DRAWING.

KEYED NOTES:

- NEW LIGHTING STANDARD, TYPICAL. REFER TO LIGHT FIXTURE SCHEDULE AND POLE BASE DETAIL ON THIS DRAWING.
- PROVIDE 2#8 + 1#10 EG IN 1" PVC CONDUIT, MINIMUM 24" BELOW GRADE/PAVEMENT. TYPICAL FOR EXTERIOR SITE LIGHTING BRANCH CIRCUIT WIRING.
- PROVIDE 2#8 + 1#10 EG IN 1" PVC CONDUIT, MINIMUM 24" BELOW GRADE/PAVEMENT. HOMERUN TO EXISTING PANEL 'P'.
- EXISTING PANEL 'P'. SEE SCHEDULE ON THIS DRAWING.
- EXISTING LIGHT FIXTURE / POWER POLE TO REMAIN / REMOVED / RELOCATED. COORDINATE ALL WORK AND REQUIREMENTS WITH NOVA PARKS AND DOMINION POWER.

PARTIAL SITE PLAN-ELECTRICAL

SCALE: 1" = 30'-0"



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ELECTRICAL PLAN AND DETAILS
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