


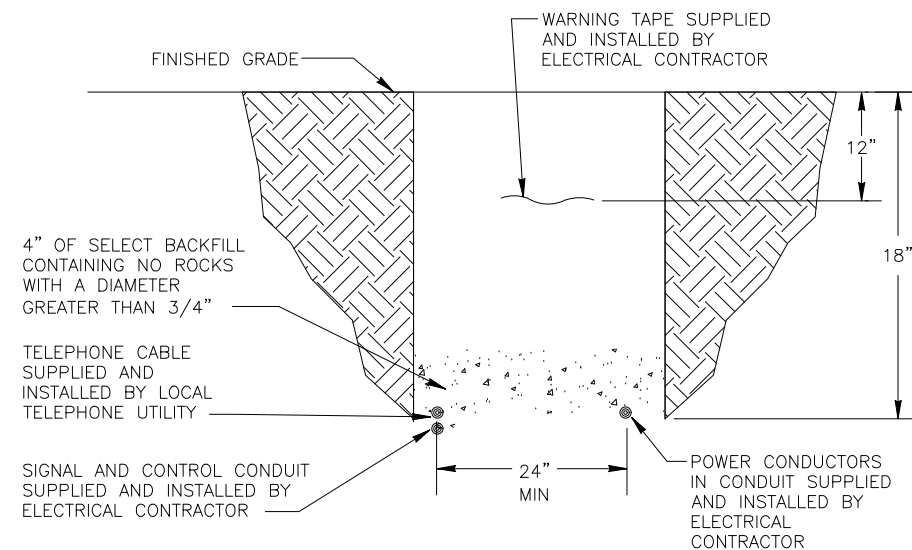


LIGHTING GENERAL NOTES:

1. THIS PROJECT CONSISTS OF WORK TO INSTALL ALL WIRING, CONDUIT, PULL BOXES, NEW LIGHTING, POLES, UTILITY BOXES AND CONCRETE PEDESTALS FOR ADDITION OF TYPE "SA" POLE TOP MOUNTED FIXTURES AS SHOWN IN DRAWINGS.
2. PROVIDE 2" PVC SCHEDULE 80 CONDUIT FROM PANEL "PP1" AS SHOWN IN DRAWINGS TO NEW LIGHT LOCATIONS.
3. LIGHT STANDARD & LUMINARIES (PEDESTRIAN AND STREET LIGHT), SHALL INCLUDE THE FOLLOWING ITEMS FROM ALL PHASE ELECTRIC LOCATED AT 2776 CROSSROADS BLVD, GRAND JUNCTION, CO 81506, 970.245.6031. THE ITEMS NUMBERS ARE AS FOLLOWS.
4. TYPE "SA" - RAB LIGHTING #ALED-5T-78-N-USA, PROVIDE COLLISION BREAK AWAY CONNECTORS. FIXTURE TO BE 10' ABOVE FINISHED GRADE TO BOTTOM OF LIGHT. ORDER WITH P54-11-10WT POLE.
5. TYPE "SB" - PHILLIPS GARDCO #GL18-1-4-310LA-961A-NW-UNV-BLP-LF-ISRPA2, PROVIDE COLLISION BREAK AWAY CONNECTORS. FIXTURE TO HAVE 25' POLE AND 2 FOOT CONCRETE PEDESTAL FOR A TOTAL OF 27' ABOVE FINISHED GRADE TO BOTTOM OF LIGHT, PROVIDE COLLISION BREAK AWAY CONNECTORS. ORDER WITH 5" ROUND POLE 401-5007-25-D1-GARDCO BLACK BAC-1.00-SET(GARDOC,LYTEP) POLE.
6. TYPE "SB2" - PHILLIPS GARDCO #GL18-2-4-310LA-961A-NW-UNV-BLP-LF-ISRPA2, PROVIDE COLLISION BREAK AWAY CONNECTORS. FIXTURE TO HAVE 25' POLE AND 2 FOOT CONCRETE PEDESTAL FOR A TOTAL OF 27' ABOVE FINISHED GRADE TO BOTTOM OF LIGHT, PROVIDE COLLISION BREAK AWAY CONNECTORS. ORDER WITH 5" ROUND POLE 401-5007-25-D1-GARDCO BLACK BAC-1.00-SET(GARDOC,LYTEP) POLE.
7. TYPE "SB4" - PHILLIPS GARDCO #GL18-4-4-310LA-961A-NW-UNV-BLP-LF-ISRPA2, PROVIDE COLLISION BREAK AWAY CONNECTORS. FIXTURE TO HAVE 25' POLE AND 2 FOOT CONCRETE PEDESTAL FOR A TOTAL OF 27' ABOVE FINISHED GRADE TO BOTTOM OF LIGHT, PROVIDE COLLISION BREAK AWAY CONNECTORS. ORDER WITH 5" ROUND POLE 401-5007-25-D1-GARDCO BLACK BAC-1.00-SET(GARDOC,LYTEP) POLE.
8. ALL PEDESTRIAN LIGHTING FIXTURES(TYPE "SA") INSTALLED ON THE PROJECT WILL BE CONTROLLED WITH NEW CONTROLLER WITH NEW PHOTO CELL LOCATED AS SHOWN IN DRAWINGS.
9. PULL BOXES FOR CDOT PULL BOXES 11"X18"X12".
10. PULL BOXES WILL BE INSTALLED IN GRADES WITHOUT CONCRETE WHERE POSSIBLE.
11. ALL ELECTRICAL CONDUIT SHALL BE SCHEDULE 80 PVC UNLESS NOTED OTHERWISE, TYPICAL.
12. UNLESS OTHERWISE NOTED, THE WORK DESCRIBED ON THE PLANS SHALL INCLUDE PROVIDING ALL LABOR AND MATERIALS NECESSARY FOR A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM. FURNISH ALL REQUIRED ITEMS WHETHER SUCH ARE SPECIFICALLY SHOWN OR NOT.
13. INFORMATION SHOWN ON DRAWINGS IS DIAGRAMMATIC ONLY AND SHALL NOT BE SCALED. OBTAIN VERIFY EXACT LOCATIONS, MEASUREMENTS, LEVELS, SPACE REQUIREMENTS, POTENTIAL CONFLICTS AMONG TRADES AND FOR ADJUSTING THE WORK REQUIRED BY THE ACTUAL CONDITIONS OF THE PROJECT. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDER GROUND OBSTRUCTIONS AND MAKING ALLOWANCES FOR FIELD ADJUSTMENT OF LOCATION OF LUMINARIES TO AVOID SHUT DOWN OF ANY SERVICES OR SYSTEMS THAT ARE TO REMAIN.
14. BEFORE SUBMITTING THE BID ELECTRICAL CONTRACTOR SHALL VISIT AND EXAMINE THE PREMISES AND/OR JOB SITE SO AS TO ASCERTAIN THE EXISTING CONDITIONS IN WHICH THE CONTRACTOR WILL BE OBLIGED TO OPERATE IN PERFORMING HIS PART OF THE CONTRACT TO ANTICIPATE ANY POSSIBLE SPACE RESTRICTIONS OR CONSTRAINTS THAT COULD AFFECT THE TIMELY COMPLETION OF THE ELECTRICAL WORK IN ACCORDANCE WITH THE INTENT OF THE SPECIFICATIONS AND DRAWINGS. THE ELECTRICAL CONTRACTOR SHALL REPORT TO THE THE PROJECT ENGINEER OR GENERAL CONTRACTOR ANY CONDITIONS THAT MIGHT PREVENT THE SPECIFIED ELECTRICAL WORK FROM BEING PERFORMED IN THE MANNER INTENDED. NO CONSIDERATION OR ALLOWANCE WILL BE GRANTED TO THE ELECTRICAL CONTRACTOR FOR FAILURE TO VISIT THE PROJECT SITE, OR FOR ANY ALLEGED MISUNDERSTANDING OF THE MATERIALS TO BE FURNISHED OR WORK TO BE DONE..
15. THE ELECTRICAL CONTRACTOR SHALL EXAMINE THE DRAWINGS OF ALL TRADES WHOSE WORK RELATES TO OR IS DEPENDENT ON ELECTRICAL WORK TO BECOME FULLY INFORMED OF THE EXTENT AND CHARACTER OF THEIR SPECIFIED WORK AND BE ABLE TO COORDINATE WITH OTHER TRADES WHILE AVOIDING POSSIBLE INTERFERENCE WITH THE ELECTRICAL WORK.
16. TRACE ALL CIRCUITS AND UPDATE PANEL SCHEDULES.
17. ONLY AREA LIGHTING WILL BE REPLACED ALL OTHER ITEMS POWERED BY EXISTING POWER PANEL WILL REMAIN POWERED.
18. FIELD LOCATE IRRIGATION CONTROL LINES AND AVOID AND PROTECT DURING CONSTRUCTION, TYPICAL.
19. RESTRICT OPEN TRENCHING OUTSIDE OF DRIP LINE OF EXISTING TREES TO AVOID DAMAGE TO DRIP LINE.
20. UTILIZE DIRECTIONAL BORING AT A MINIMUM DEPTH OF 36 INCHES UNDER THE CANOPY OF EXISTING TREE.
21. ADJUST LOCATION OF NEW LIGHTS WITH EXISTING TREES. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO TRENCHING.

- PP1-X ELECTRICAL CIRCUIT NUMBER (REFER TO PANEL SCHEDULES)
- UB  HEAVY DUTY, TRAFFIC RATED, FLUSH-TO-GRADE POLYMER CONCRETE SPLICE BOX WITH HEAVY DUTY, TRAFFIC RATED, BOLTED COVER. 11"X18"X12" TYPE 1.
-  UNDER GROUND BURIED RACEWAY (2#6 THWN CU AND 1#8 GND) IN 2" PVC CONDUIT (UNLESS NOTED OTHERWISE ON PLANS) IN 24" DEEP TRENCH, BURY AND COMPACTED BACKFILL TO PRE CONSTRUCTION CONDITION.
-  INSTALL POST TOP MOUNTED PEDESTRIAN STANDARD AS SPECIFIED.



TYPICAL SECONDARY ELECTRICAL TRENCH DETAIL

NOT TO SCALE



REVISION	DESCRIPTION	DATE	DRAWN BY	DATE	SCALES:
REVISION Δ			AJM	4/19/23	
REVISION Δ			AJM	4/19/23	
REVISION Δ			AJM	4/19/23	
REVISION Δ			EM	4/19/23	



PUBLIC WORKS
ENGINEERING DIVISION

COLUMBINE PARK LIGHTING
GENERAL NOTES

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Schedule of Lighting Devices

ITEM No.				613-30003	613-40012	613-30004	613-30005	613-30006	613-40011	
DESCRIPTION				LIGHT STANDARD AND LUMINAIRE LED (PEDESTRIAN) EACH	LIGHT STANDARD FOUNDATION SPECIAL EACH	LIGHT STANDARD AND LUMINAIRE LED (PARKING AREA, 1 HEAD) EACH	LIGHT STANDARD AND LUMINAIRE LED (PARKING AREA, 2 HEADS) EACH	LIGHT STANDARD AND LUMINAIRE LED (PARKING AREA, 4 HEADS) EACH	LIGHT STANDARD FOUNDATION SPECIAL EACH	NOTES
SHEET NO.	TYPE	EAST	NORTH	PLAN	PLAN	PLAN	PLAN	PLAN	PLAN	
E4	SA-49	101896.56	41333.02	1	1					1,2,3
E4	SA-50	101583.14	41338.95	1	1					1,2,3
E4	SA-51	101650.92	41338.95	1	1					1,2,3
E4	SA-52	101721.36	41338.95	1	1					1,2,3
E4	SA-53	101786.70	41341.89	1	1					1,2,3
E4	SA-54	101511.27	41338.06	1	1					1,2,3
E4	SA-55	101395.37	41349.34	1	1					1,2,3
E4	SA-56	101461.27	41434.41	1	1					1,2,3
E4	SA-57	101922.51	41456.41	1	1					1,2,3
E4	SA-58	101395.37	41479.34	1	1					1,2,3
E4	SA-59	101716.15	41483.84	1	1					1,2,3
E4	SA-60	101896.89	41519.12	1	1					1,2,3
E4	SA-61	101650.56	41520.40	1	1					1,2,3
E4	SA-62	101444.22	41547.17	1	1					1,2,3
E4	SA-63	101395.37	41552.27	1	1					1,2,3
E4	SA-64	101716.15	41560.02	1	1					1,2,3
E4	SA-65	101532.49	41561.82	1	1					1,2,3
E4	SA-74	101849.14	41484.50	1	1					1,2,3
E4	SB2-66	101614.60	41621.99				1		1	3,4
E4	SB2-70	101657.55	41656.26				1		1	3,4
E4	SB4-67	101799.32	41637.12					1	1	3,4
E4	SB4-69	101473.64	41640.59					1	1	3,4
E4	SB-72	101848.66	41521.47			1			1	3,4
E4	SB-73	101746.44	41521.13			1			1	
E4	SB-75	101930.97	41638.18			1			1	
TABLE TOTALS				18	18	3	2	2	7	

SCHEDULE OF LIGHTING DEVICES NOTES:

- FOUNDATION TOP HEIGHT EQUAL TO ADJACENT SIDEWALK
- LUMINAIRE LED(78 WATT) IS TO BE INCLUDED IN THE COST OF PAY ITEM 613-30005 LIGHT STANDARD AND LUMINAIRE (PEDESTRIAN)
- FOUNDATION TOP HEIGHT AS SHOWN IN DETAIL.
- REFERENCE LIGHTING SCHEDULE FOR QUANTITY OF LIGHTS ON POLE

GENERAL NOTES:

- EACH LIGHT TO HAVE A PULL BOX "UB", REFERENCE ELECTRICAL SHEETS.

Tabulation of Approximate Quantities

Item No.	Ref. No.	Construction Note Description	Quantity	Unit	NOTES
1		2 Inch Electrical Conduit (Plastic)	2597	LF	
2		Type two Pull Box(Electric)	27	EA	
3		Wiring	1	LS	
4	613-40012	Light Standard and Luminaire (Pedestrian)	18	EA	
5	613-30003	Light Standard Foundation (Special PEDESTRIAN)	18	EA	
6	613-30004	Light Standard and Luminaire (PARKING AREA)	3	EA	
7	613-30005	Light Standard and Luminaire (PARKING AREA)	2	EA	
8	613-30006	Light Standard and Luminaire (PARKING AREA)	2	EA	
9	613-40011	Light Standard Foundation (SpecialPARKING AREA)	7	EA	
SUMMARY NOTES:					



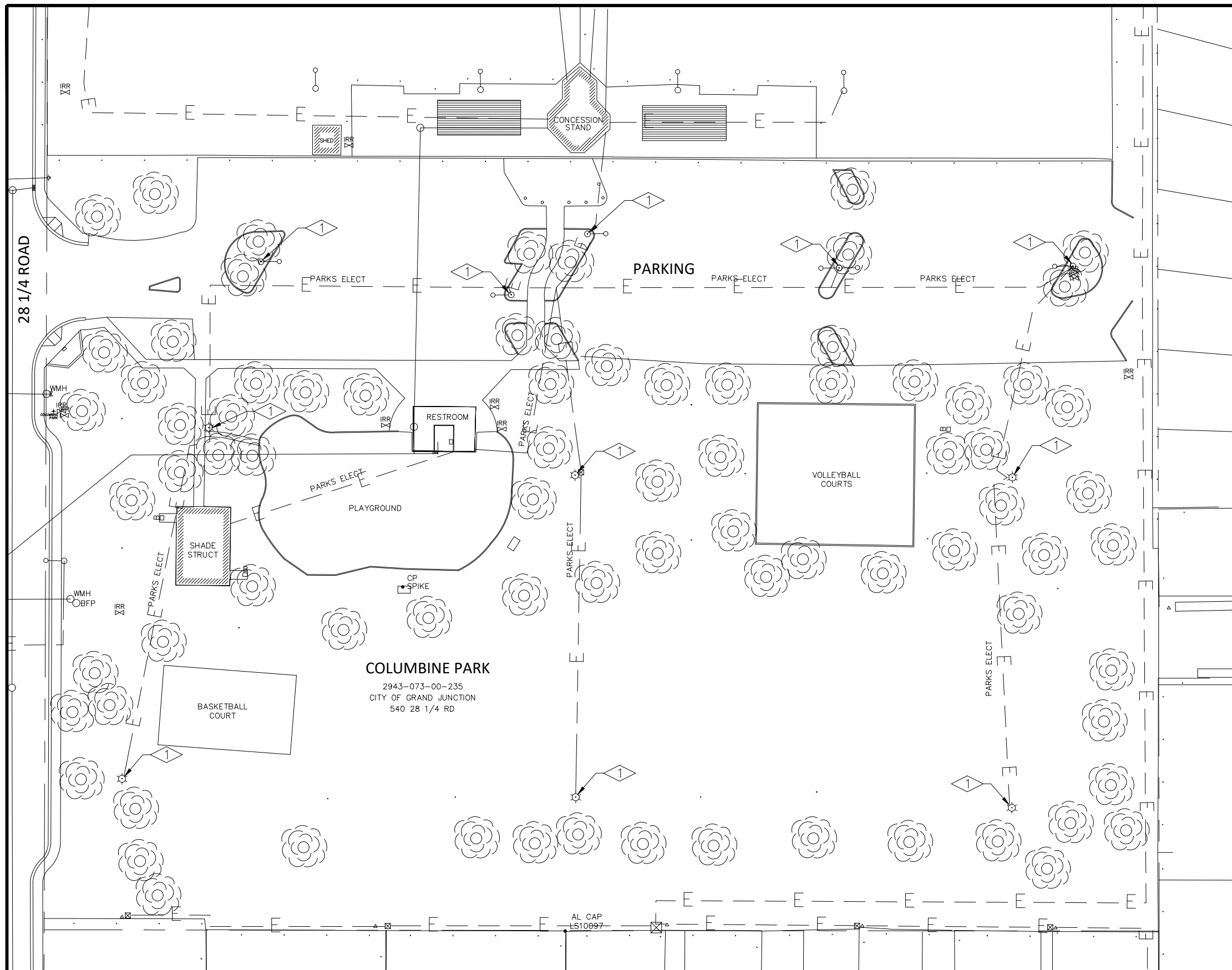
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PO 3211 GRAND JCT., CO 81502
EMAIL: joelm@ACMengrs.com

REVISION Δ _____	DESCRIPTION _____	DATE _____	DRAWN BY AJM	DATE 4/19/23
REVISION Δ _____	DESIGNED BY AJM	DATE 4/19/23	CHECKED BY AJM	DATE 4/19/23
REVISION Δ _____	APPROVED BY EM	DATE 4/19/23		



PUBLIC WORKS
ENGINEERING DIVISION

COLUMBINE PARK LIGHTING
QUANTITIES SCHEDULES



FLAG NOTES:

- ① REMOVE EXISTING LIGHT, POLE AND PEDESTAL. ABANDON EXISTING WIRING.

GENERAL NOTES:

1. POWER CIRCUIT AS SHOWN ON DRAWING, TYPICAL.
2. FIELD LOCATE IRRIGATION CONTROL LINES AND AVOID AND PROTECT DURING CONSTRUCTION, TYPICAL.
3. RESTRICT OPEN TRENCHING OUTSIDE OF DRIP LINE OF EXISTING TREES TO AVOID DAMAGE TO DRIP LINE.
4. UTILIZE DIRECTIONAL BORING AT A MINIMUM DEPTH OF 36 INCHES UNDER THE CANOPY OF EXISTING TREE.
5. ADJUST LOCATION OF NEW LIGHTS WITH EXISTING TREES. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO TRENCHING.

COLUMBINE PARK
 2943-073-00-235
 CITY OF GRAND JUNCTION
 540 28 1/4 RD

EXISTING LIGHTING PLAN

SCALE: 1"=60'



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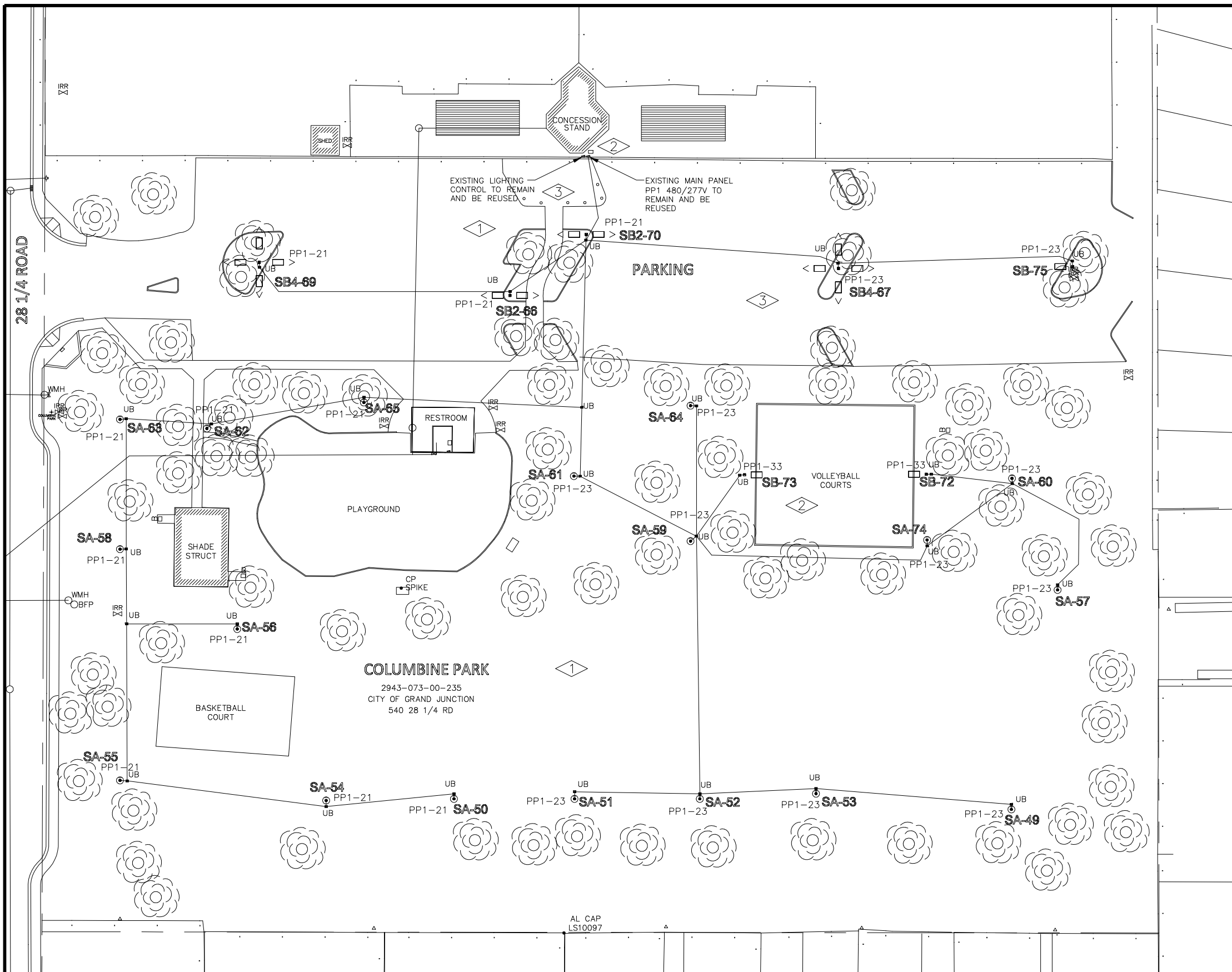
SCALES:

PLAN & PROFILE	0 15 30 60
HORIZONTAL	
VERTICAL	0 NA NA



**PUBLIC WORKS
 ENGINEERING DIVISION**

**COLUMBINE PARK LIGHTING
 EXISTING LIGHTING PLAN**



FLAG NOTES:

- 1 PROVIDE NEW LIGHT, POLE, J-BOX AND PEDESTAL, TYPICAL.
- 2 POLE LIGHTS FOR VOLLEYBALL COURTS TO BE ON OWN CIRCUIT. PROVIDE NEW 1φ 277 VOLT BREAKER IN PANEL PP1.
- 3 REUSE EXISTING CONDUIT IF FEASIBLE OTHER WISE DIRECTIONALLY BORE UNDER EXISTING PAVEMENT FOR NEW CONDUIT. FIELD VERIFY BORE WITH OWNER PRIOR TO START OF BORING, TYPICAL.

GENERAL NOTES:

1. POWER CIRCUIT AS SHOWN ON DRAWING, TYPICAL.
2. LIGHT TO BE ORIENTED TO BE PERPENDICULAR TO SIDEWALK AND SHINE ON SIDEWALK, TYPICAL.
3. NEW 2" CONDUIT AND PROVIDE 2-#6 THWN + #10 GND IN 2" PVC SCHEDULE 80 CONDUIT BETWEEN PULL BOXES UNLESS SHOWN OTHERWISE, TYPICAL.
4. FIELD LOCATE IRRIGATION CONTROL LINES AND AVOID AND PROTECT DURING CONSTRUCTION, TYPICAL.
5. RESTRICT OPEN TRENCHING OUTSIDE OF DRIP LINE OF EXISTING TREES TO AVOID DAMAGE TO DRIP LINE.
6. UTILIZE DIRECTIONAL BORING AT A MINIMUM DEPTH OF 36 INCHES UNDER THE CANOPY OF EXISTING TREE.
7. ADJUST LOCATION OF NEW LIGHTS WITH EXISTING TREES. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO TRENCHING.



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NEW LIGHTING PLAN
SCALE: 1"=60'

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REVISION			AJM	4/19/23
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REVISION			AJM	4/19/23
REVISION			EM	4/19/23

SCALES:

PLAN & PROFILE	0 15 30 60
HORIZONTAL	
VERTICAL	0 NA NA



PUBLIC WORKS
ENGINEERING DIVISION

COLUMBINE PARK LIGHTING
NEW LIGHTING PLAN

CONCESSION STAND

EXISTING
150KVA 3 ϕ 480/277V
XFMR TO REMAIN AND
BE REUSED

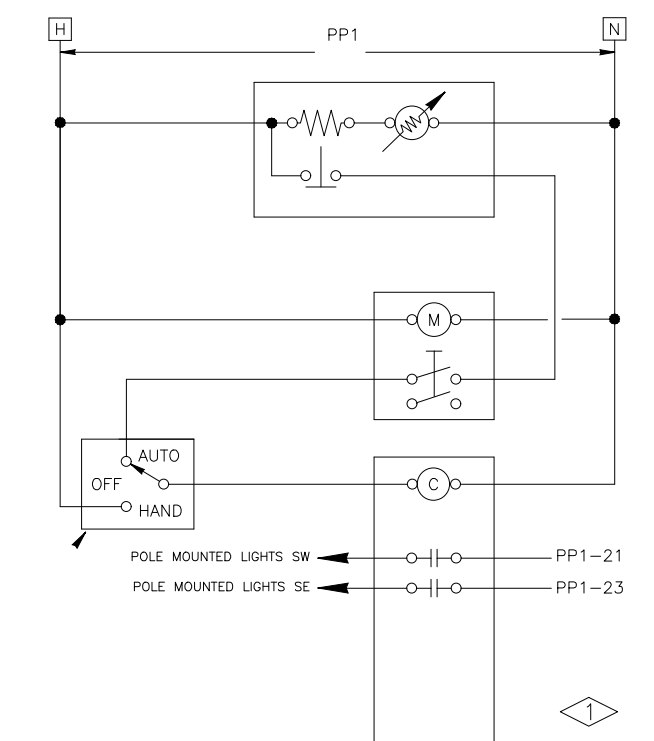
EXISTING LIGHT
CONTROL

EXISTING
200A 3 ϕ 480/277V
MCB PANEL PP1 TO
REMAIN AND BE REUSED

2" SCHEDULE 80 PVC

FLAG NOTES:

- ① REUSE EXISTING LIGHTING CONTROLLER, RELAYS AND PHOTOCELL.
- ② REUSE EXISTING CONDUIT IF POSSIBLE FOR NEW FEEDS TO NEW LIGHTS OTHERWISE DIRECTIONAL BORE TO LIGHT LOCATIONS. FIELD VERIFY BORING LOCATIONS AND DIRECTIONS WITH OWNER PRIOR TO START OF BORING, TYPICAL.



TYPICAL LIGHTING CONTROL SCHEMATIC
NOT TO SCALE

NEW ELECTRICAL PLAN
SCALE: N.T.S.



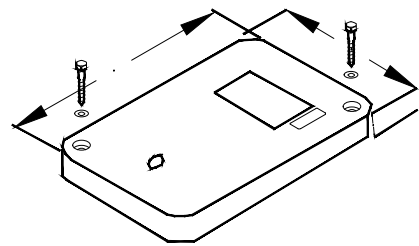
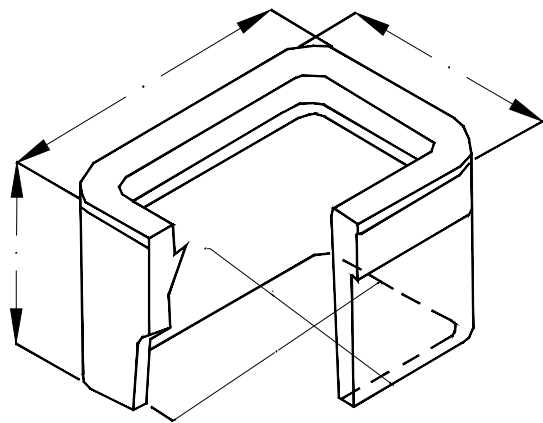
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PUBLIC WORKS
ENGINEERING DIVISION

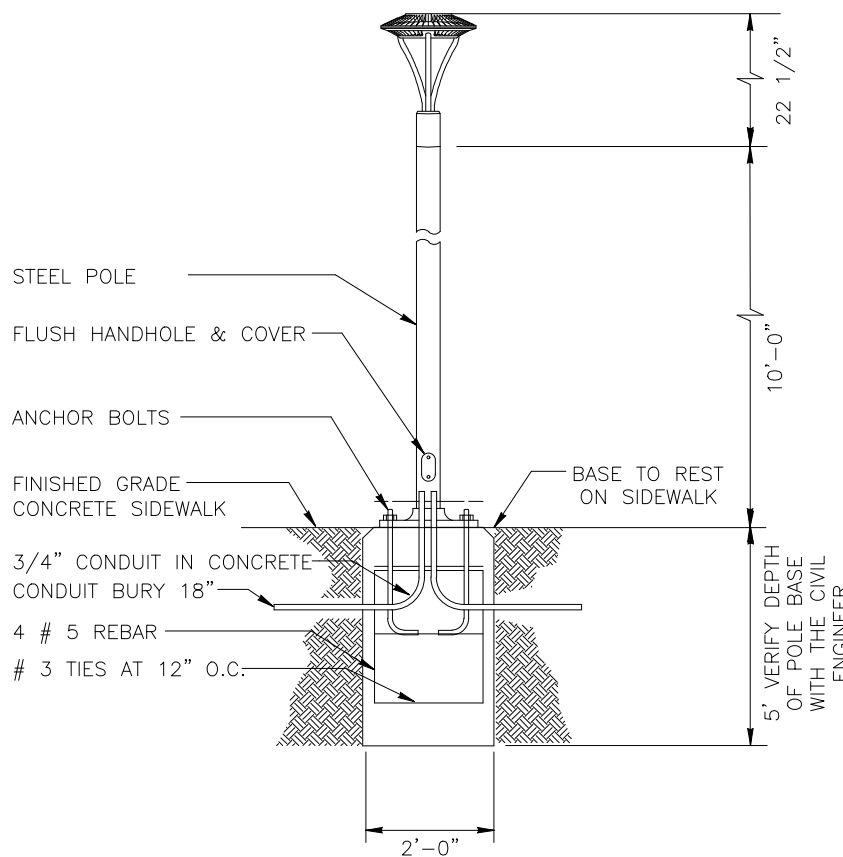
COLUMBINE PARK LIGHTING
NEW ELECTRICAL PLAN



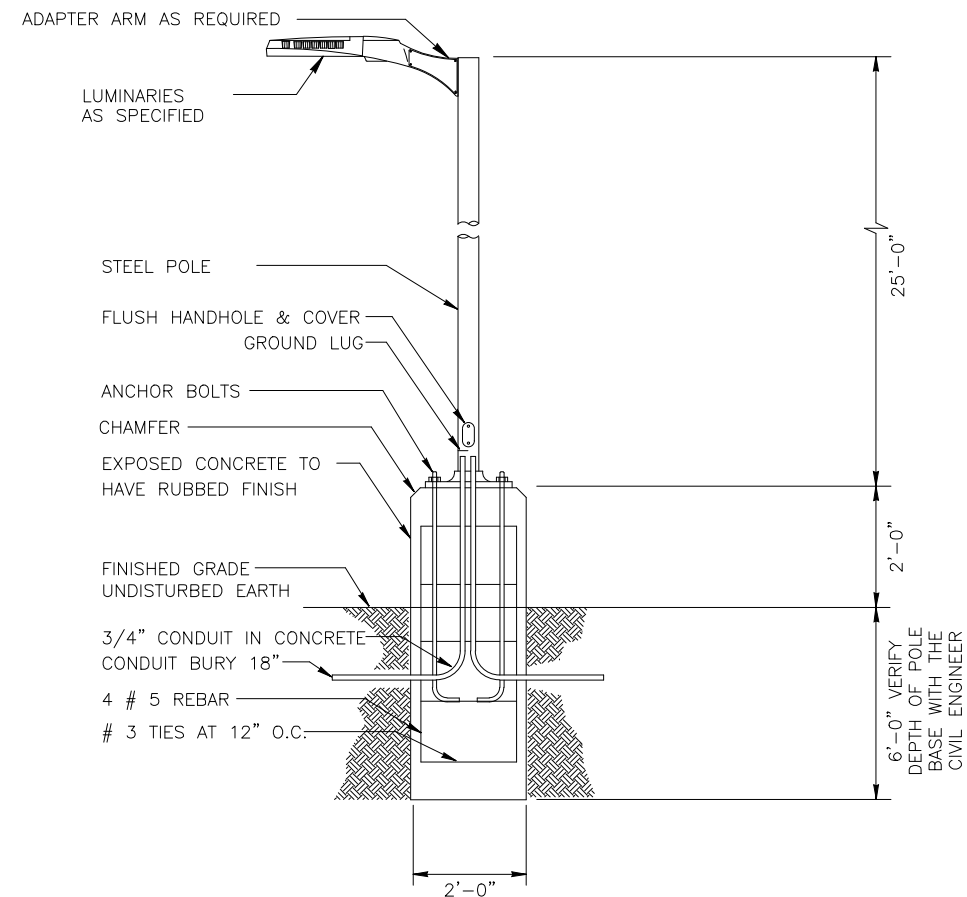
- A 18-1/8"
- B 11-1/4"
- C 1-1/4"
- D 20-1/2"
- E 13-3/8"
- F 12"
- G 15-3/4"
- H 8-7/8"

- PULL BOXES, PULL BOX COVERS AND EXTENSIONS SHALL BE MADE OF FIBERGLASS REINFORCED POLYMER CONCRETE. PULL BOXES SHALL BE VERIFIED BY A 3RD PARTY NATIONALLY RECOGNIZED INDEPENDENT TESTING LABORATORY AS MEETING ALL TEST PROVISIONS OF THE LATEST ANSI/SCTE 77 SPECIFICATION FOR UNDERGROUND ENCLOSURE INTEGRITY, TIER 22 RATING. CERTIFICATION DOCUMENTS SHALL BE SUBMITTED WITH MATERIALS SUBMITTALS. THE PULL BOX SHALL HAVE A DETACHABLE COVER WITH A SKID RESISTANT SURFACE AND HAVE THE WORDS ELECTRICAL CAST INTO THE SURFACE. PAINTING THE WORDS SHALL NOT BE ACCEPTED. MARKINGS SHOWING THE TIER 22 RATING MUST BE LABELED OR STENCILED ON THE INSIDE AND OUTSIDE OF THE BOX AND THE ON THE UNDER SIDE OF THE COVER. THE COVER SHALL BE ATTACHED TO THE PULL BOX BODY BY MEANS OF A MINIMUM 3/8 - 7 UNIFIED NATIONAL COURSE (UNC) STAINLESS STEEL PENTA HEAD BOLTS AND SHALL HAVE TWO LIFT SLOTS TO AID IN THE REMOVAL OF THE LID.
- PULL SLOTS SHALL BE RATED FOR A MINIMUM PULL OUT OF 3,000 POUNDS. MAGNESIUM CHLORIDE TESTS SHOULD BE PERFORMED IN ACCORDANCE WITH THE LATEST ANSI/SCTE 77 SPECIFICATION FOR UNDERGROUND ENCLOSURE INTEGRITY, TIER 22 RATING.
- PROVIDE AT LEAST 6 INCHES OF PEA GRAVEL MEASURED FROM BOTTOM OF PULL BOX FOR DRAINAGE. PEA GRAVEL IS INCLUDED IN PULL BOX PAY ITEM.

C UTILITY BOX DETAIL
1 NOT TO SCALE



TYPE SA LIGHT DETAIL
NOT TO SCALE



TYPE SB LIGHT DETAIL
NOT TO SCALE

GENERAL LIGHTING NOTES:

- ELECTRICAL CONTRACTOR TO ORDER ALL REQUIRED HARDWARE FOR MOUNTING OF EACH LUMINARIES.
- VERIFY THE BURY DEPTH AND DIAMETER OF THE SONOTUBE FOR POLE LUMINARIES WITH THE CIVIL ENGINEER PRIOR TO PURCHASING THE EQUIPMENT. DEPTH WILL DEPEND ON SOIL CONDITIONS. TYPICAL CONCRETE DEPTH IS 6 FT. VERIFY WITH CIVIL ENGINEER.
- ELECTRICAL CONTRACTOR TO VERIFY THAT ALL FIXTURES TO COMPLY WITH LIGHT TRESPASS AND AND DARK SKY CODES.
- NOTIFY ENGINEER OF ANY OBSTRUCTIONS TO POLE PLACEMENT IMMEDIATELY BEFORE PROCEEDING.
- VERIFY REQUIRED VOLTAGE OF FOR EACH LUMINARIES WITH AVAILABLE VOLTAGES PRIOR TO ORDERING.

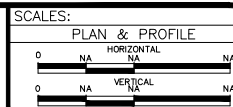
LUMINAIRE SCHEDULE

TYPE	MANUFACTURER MODEL NUMBER	APPROVAL	VOLTAGE MOUNTING # OF LAMPS	BALLAST LAMPE TYPE LAMP CAT. #	DESCRIPTION
SA	RAB LIGHTING ALED-5T-78-N-USA	OWNER REQUESTED	UNV POLE 1	ELECTRONIC LED 78 W	PEDESTRIAN LUMINAIRE, POST TOP MOUNTED, LED., COLOR OF POLE AND LUMINAIRE TO MATCH, TYPICAL.
SB	PHILIPS GARDCO GL18-1-4-310-961A-NW-UNV-BLP-LF-RPA2	OWNER REQUESTED	UNV POLE 1	ELECTRONIC LED 310W	POLE MOUNTED AREA LUMINAIRE ORDER WITH 25' POLE, #401-5007-25-D1 GARDCO BLACK BAC-1.00-SET(GARDCO,LYTEP). POLE FINISH TO MATCH LUMINAIRE FINISH
SB2	PHILIPS GARDCO GL18-2-4-310-961A-NW-UNV-BLP-LF-RPA2	OWNER REQUESTED	UNV POLE 2	ELECTRONIC LED 310W	POLE MOUNTED AREA LUMINAIRE ORDER WITH 25' POLE, #401-5007-25-D1 GARDCO BLACK BAC-1.00-SET(GARDCO,LYTEP). POLE FINISH TO MATCH LUMINAIRE FINISH
SB4	PHILIPS GARDCO GL18-4-4-230LA-9680-NW-UNV-BLP-LF-RPA2	OWNER REQUESTED	UNV POLE 4	ELECTRONIC LED 230W	POLE MOUNTED AREA LUMINAIRE ORDER WITH 25' POLE, #401-5007-25-D1 GARDCO BLACK BAC-1.00-SET(GARDCO,LYTEP). POLE FINISH TO MATCH LUMINAIRE FINISH



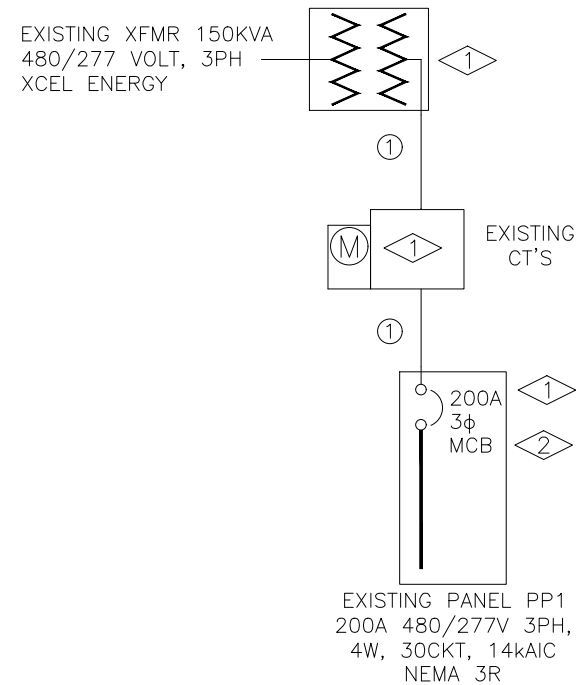
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**PUBLIC WORKS
ENGINEERING DIVISION**

**COLUMBINE PARK LIGHTING
COMPOSITE UTILITY PLAN**



① EXISTING

FLAG NOTES:

- ① EXISTING TO REMAIN AND BE REUSED.
- ② PROVIDE NEW GE TEY120, 20 AMP 277V 1φ 14kAIC BREAKER TO FEED VOLLEY BALL COURT LIGHTS.

A
1 EXISTING ONE-LINE DIAGRAM
NOT TO SCALE

GENERAL NOTES:

1. IN AS MUCH AS DESIGN REQUIRES THAT CERTAIN ASSUMPTIONS BE MADE REGARDING EXISTING CONDITIONS, AND BECAUSE SOME OF THESE ASSUMPTIONS CANNOT BE VERIFIED. FIELD COORDINATION DURING CONSTRUCTION SERVICES IS IMPERATIVE. CONTRACTORS BIDDING THIS WORK MUST MAKE REASONABLE ALLOWANCES FOR UNFORESEEN CONTINGENCIES.
2. THE SERVING ELECTRICAL ASSOCIATION SHALL ADVISE THE OWNER/ENGINEER PRIOR TO SERVICE MODIFICATION REQUIRING COST TO THE OWNER.
3. COORDINATE INSTALLATION WITH XCEL ENERGY PRIOR TO ROUGH-IN.
4. REFERENCE CIVIL, LANDSCAPE AND IRRIGATION DRAWING PLANS FOR COORDINATION AND LOCATION OF ALL UNDER GROUND SYSTEMS.
5. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES AS REQUIRED: REFERENCE CIVIL LANDSCAPE AND IRRIGATION DRAWINGS.
6. ALL WIRING IS SHOWN DIAGRAMMATICALLY ON DRAWINGS, FIELD VERIFY ALL CONDITIONS PRIOR TO ROUGH-IN.
7. ALL ELECTRICAL WORK SHALL COMPLY WITH THE LATEST EDITION OF NATIONAL ELECTRICAL CODE AND ALL APPLICABLE LOCAL CODES.
8. CONDUCTOR COUNT IS SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL ENSURE THAT ANY AND ALL DEVICES AND EQUIPMENT ARE CIRCUITED PROPERLY. CONTRACTOR SHALL ENSURE THAT NO EQUIPMENT OR DEVICES ARE COMBINED OTHER THAN WHAT IS DEPICTED.
9. FIELD VERIFY ALL DIMENSIONS, DO NOT SCALE DRAWINGS.
10. COORDINATE INSTALLATION OF METER AND ELECTRICAL REQUIREMENTS WITH XCEL ENERGY.
11. PEDESTAL MUST MEET ALL XCEL ENERGY REQUIREMENTS I.E. COLD SEQUENCE PADLOCK SLIP LATCH ON METER COVER, HOLD OPEN BAR ON METER HOOD.



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REVISION Δ			AJM	4/19/23	
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PUBLIC WORKS
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COLUMBINE PARK LIGHTING
ONE-LINE PLAN

PANEL: PP1 DC DEVICE TYPE: Breaker ENCLOSURE: NEMA 3R MAINS(A): BKR CONTINUOUS(A): 200
 LOCATION: FIELD ENTRANCE MOUNTING: Free Standing WIRING: 3-Phase 4-Wire BUS SC RATING(A): 14000
 FED FROM: XF2-0011 DEVICE FAMILY: Plug In VOLTAGE: 480/277 FAULT CURRENT(A): 4725
 INCIDENT ENERGY: 0.00 Cal/cm2 @24.00(in) BOUNDARY: 0.00(in)

PANEL: PP1 DC DEVICE TYPE: Breaker ENCLOSURE: NEMA 3R MAINS(A): BKR CONTINUOUS(A): 200
 LOCATION: FIELD ENTRANCE MOUNTING: Free Standing WIRING: 3-Phase 4-Wire BUS SC RATING(A): 14000
 FED FROM: XF2-0011 DEVICE FAMILY: Plug In VOLTAGE: 480/277 FAULT CURRENT(A): 4725
 INCIDENT ENERGY: 14.98 Cal/cm2 @18.00(in) BOUNDARY: 87.36(in)

DC AMPS P	NOTES	DESCRIPTION	DEMAND CODE	VA	CKT	PHASE A	LOADS B	VA C	CKT	VA	DEMAND CODE	DESCRIPTION	NOTES	DC AMPS P
40 2		E1	LTS	7200	1	7200			2	7200	LTS	W1		40 2
40 2		E2	LTS	7200	5		7200		6	7200	LTS	W2		40 2
40 2		E3	LTS	7200	9		7200		10	7200	LTS	W3		40 2
40 2		E4	LTS	9600	13	8400			14	7200	LTS	W4		40 2
50 2		W&E 5	LTS	12000	17		9600		18	7200	LTS	W&E 6		40 2
30 2		LTS PARK	LTS	4320	21		7920		22	11520	LTS	XFMR 120/240		40 2
70 2		OLD PUMP	GENERAL	15360	25	11837			26	12471	GENERAL	RR BUILDINGS		60 3
60 2		HOT WATER	LTS	11520	29			9917	30					
0 1		SPACE	SPACE	0	33			0	34					
0 1		SPACE	SPACE	0	35			0	36					
0 1		SPACE	SPACE	0	37			0	38					
0 1		SPACE	SPACE	0	39			0	40					
0 1		SPACE	SPACE	0	41			0	42					

ALL CONNECTED	KVA	3P AVE AMPS	* PHASE TOTALS	VA	AMPS	BUS TOTALS	KVA	DATE: Apr 19, 2023
TOTAL CONNECTED	134.39	161.6	* A-N	49996.9	180.4	CONNECTED	135.59	TIME: 09:55:49
TOTAL DEMAND	161.03	193.7	* B-N	42556.9	153.6	DEMAND	162.23	
TOTAL DESIGN	194.33	233.7	* C-N	41836.9	151.0	DESIGN	195.53	

DC AMPS P	NOTES	DESCRIPTION	DEMAND CODE	VA	CKT	PHASE A	LOADS B	VA C	CKT	VA	DEMAND CODE	DESCRIPTION	NOTES	DC AMPS P
40 2		E1	LTS	7200	1	7200			2	7200	LTS	W1		40 2
40 2		E2	LTS	7200	5		7200		6	7200	LTS	W2		40 2
40 2		E3	LTS	7200	9		7200		10	7200	LTS	W3		40 2
40 2		E4	LTS	9600	13	8400			14	7200	LTS	W4		40 2
50 2		W&E 5	LTS	12000	17		9600		18	7200	LTS	W&E 6		40 2
30 1		LTS PARK SW	LTS	4960	21		10720		22	11520	LTS	XFMR 120/240		40 2
30 1		LTS PARK SE	LTS	4960	23		10720		24					
70 2		OLD PUMP	GENERAL	15360	25	11837			26	12471	GENERAL	RR BUILDINGS		60 3
60 2		HOT WATER	LTS	11520	29			9917	30					
20 1	②	LTS-VOLLEY BALL	SPACE	620	33			620	34					
0 1		SPACE	SPACE	0	35			0	36					
0 1		SPACE	SPACE	0	37			0	38					
0 1		SPACE	SPACE	0	39			0	40					
0 1		SPACE	SPACE	0	41			0	42					

ALL CONNECTED	KVA	3P AVE AMPS	* PHASE TOTALS	VA	AMPS	BUS TOTALS	KVA	
TOTAL CONNECTED	140.61	169.1	* A-N	49996.9	180.4	CONNECTED	141.81	
TOTAL DEMAND	168.65	202.9	* B-N	45976.9	165.9	DEMAND	169.85	
TOTAL DESIGN	203.70	245.0	* C-N	44636.9	161.1	DESIGN	204.90	

EXISTING PANEL SCHEDULE DETAIL

NOT TO SCALE

NEW PANEL SCHEDULE DETAIL

NOT TO SCALE

FLAG NOTES:

- ① TRACE CIRCUITS AND PROVIDE NEW UPDATED PANEL SCHEDULE, TYPICAL.
- ② PROVIDE NEW GE TEY120, 20 AMP 277V 1φ 14KAIC BREAKER TO FEED VOLLEY BALL COURT LIGHTS.



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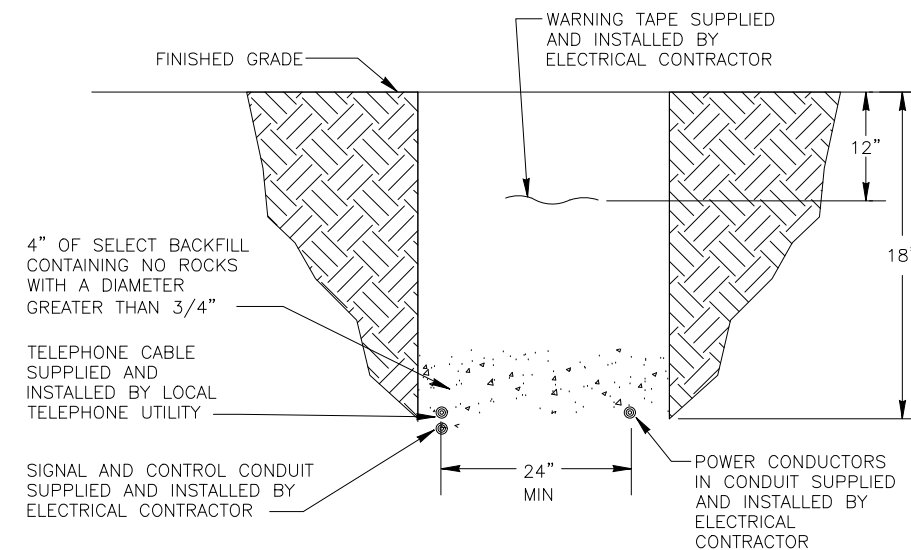
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COLUMBINE PARK LIGHTING
PANEL SCHEDULES PLAN

LIGHTING GENERAL NOTES:

1. THIS PROJECT CONSISTS OF WORK TO INSTALL ALL WIRING, CONDUIT, PULL BOXES, NEW LIGHTING, POLES, UTILITY BOXES AND CONCRETE PEDESTALS FOR ADDITION OF TYPE "SA" POLE TOP MOUNTED FIXTURES AS SHOWN IN DRAWINGS.
2. PROVIDE 2" PVC SCHEDULE 80 CONDUIT FROM PANEL "PP1" AS SHOWN IN DRAWINGS TO NEW LIGHT LOCATIONS.
3. LIGHT STANDARD & LUMINARIES (PEDESTRIAN AND STREET LIGHT), SHALL INCLUDE THE FOLLOWING ITEMS FROM ALL PHASE ELECTRIC LOCATED AT 2776 CROSSROADS BLVD, GRAND JUNCTION, CO 81506, 970.245.6031. THE ITEMS NUMBERS ARE AS FOLLOWS.
4. TYPE "SA" - RAB LIGHTING #ALED-5T-78-N-USA, PROVIDE COLLISION BREAK AWAY CONNECTORS. FIXTURE TO BE 10' ABOVE FINISHED GRADE TO BOTTOM OF LIGHT. ORDER WITH PS4-11-10WT POLE
5. ALL PEDESTRIAN LIGHTING FIXTURES (TYPE "SA") INSTALLED ON THE PROJECT WILL BE CONTROLLED WITH NEW LIGHTING CONTROLLER WITH NEW PHOTO CELL LOCATED AS SHOWN IN DRAWINGS.
6. PULL BOXES FOR CDOT PULL BOXES 11"X18"X12".
7. PULL BOXES WILL BE INSTALLED IN GRADES WITHOUT CONCRETE WHERE POSSIBLE.
8. ALL ELECTRICAL CONDUIT SHALL BE SCHEDULE 80 PVC UNLESS NOTED OTHERWISE, TYPICAL.
9. UNLESS OTHERWISE NOTED, THE WORK DESCRIBED ON THE PLANS SHALL INCLUDE PROVIDING ALL LABOR AND MATERIALS NECESSARY FOR A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM. FURNISH ALL REQUIRED ITEMS WHETHER SUCH ARE SPECIFICALLY SHOWN OR NOT.
10. INFORMATION SHOWN ON DRAWINGS IS DIAGRAMMATIC ONLY AND SHALL NOT BE SCALED. OBTAIN VERIFY EXACT LOCATIONS, MEASUREMENTS, LEVELS, SPACE REQUIREMENTS, POTENTIAL CONFLICTS AMONG TRADES AND FOR ADJUSTING THE WORK REQUIRED BY THE ACTUAL CONDITIONS OF THE PROJECT. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDER GROUND OBSTRUCTIONS AND MAKING ALLOWANCES FOR FIELD ADJUSTMENT OF LOCATION OF LUMINARIES TO AVOID SHUT DOWN OF ANY SERVICES OR SYSTEMS THAT ARE TO REMAIN.
11. BEFORE SUBMITTING THE BID ELECTRICAL CONTRACTOR SHALL VISIT AND EXAMINE THE PREMISES AND/OR JOB SITE SO AS TO ASCERTAIN THE EXISTING CONDITIONS IN WHICH THE CONTRACTOR WILL BE OBLIGED TO OPERATE IN PERFORMING HIS PART OF THE CONTRACT TO ANTICIPATE ANY POSSIBLE SPACE RESTRICTIONS OR CONSTRAINTS THAT COULD AFFECT THE TIMELY COMPLETION OF THE ELECTRICAL WORK IN ACCORDANCE WITH THE INTENT OF THE SPECIFICATIONS AND DRAWINGS. THE ELECTRICAL CONTRACTOR SHALL REPORT TO THE THE PROJECT ENGINEER OR GENERAL CONTRACTOR ANY CONDITIONS THAT MIGHT PREVENT THE SPECIFIED ELECTRICAL WORK FROM BEING PERFORMED IN THE MANNER INTENDED. NO CONSIDERATION OR ALLOWANCE WILL BE GRANTED TO THE ELECTRICAL CONTRACTOR FOR FAILURE TO VISIT THE PROJECT SITE, OR FOR ANY ALLEGED MISUNDERSTANDING OF THE MATERIALS TO BE FURNISHED OR WORK TO BE DONE..
12. THE ELECTRICAL CONTRACTOR SHALL EXAMINE THE DRAWINGS OF ALL TRADES WHOSE WORK RELATES TO OR IS DEPENDENT ON ELECTRICAL WORK TO BECOME FULLY INFORMED OF THE EXTENT AND CHARACTER OF THEIR SPECIFIED WORK AND BE ABLE TO COORDINATE WITH OTHER TRADES WHILE AVOIDING POSSIBLE INTERFERENCE WITH THE ELECTRICAL WORK.
13. ONLY AREA LIGHTING WILL BE REPLACED ALL OTHER ITEMS POWERED BY EXISTING POWER PANEL WILL REMAIN POWERED.
14. FIELD LOCATE IRRIGATION CONTROL LINES AND AVOID AND PROTECT DURING CONSTRUCTION, TYPICAL.
15. RESTRICT OPEN TRENCHING OUTSIDE OF DRIP LINE OF EXISTING TREES TO AVOID DAMAGE TO DRIP LINE.
16. UTILIZE DIRECTIONAL BORING AT A MINIMUM DEPTH OF 36 INCHES UNDER THE CANOPY OF EXISTING TREE.
17. ADJUST LOCATION OF NEW LIGHTS WITH EXISTING TREES. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO TRENCHING.

- PP1-X ELECTRICAL CIRCUIT NUMBER (REFER TO PANEL SCHEDULES)
- UB HEAVY DUTY, TRAFFIC RATED, FLUSH-TO-GRADE POLYMER CONCRETE SPLICE BOX WITH HEAVY DUTY, TRAFFIC RATED, BOLTED COVER. 11"X18"X12" TYPE 1.
-  UNDER GROUND BURIED RACEWAY (2#6 THWN CU AND 1#8 GND) IN 2" PVC CONDUIT (UNLESS NOTED OTHERWISE ON PLANS) IN 24" DEEP TRENCH, BURY AND COMPACTED BACKFILL TO PRE CONSTRUCTION CONDITION.
-  INSTALL POST TOP MOUNTED PEDESTRIAN STANDARD AS SPECIFIED.



TYPICAL SECONDARY ELECTRICAL TRENCH DETAIL

NOT TO SCALE



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PUBLIC WORKS
ENGINEERING DIVISION

HAWTHORNE PARK LIGHTING
GENERAL NOTES

E1
of 8



Schedule of Lighting Devices

ITEM No.	613-30003			613-40012		
DESCRIPTION	LIGHT STANDARD AND LUMINAIRE LED (PEDESTRIAN)			LIGHT STANDARD FOUNDATION SPECIAL		NOTES
	EACH			EACH		
SHEET NO.	TYPE	EAST	NORTH	PLAN	PLAN	
E4	SA-22	90846.45	38068.65	1	1	1,2,3
E4	SA-23	90955.01	38068.69	1	1	1,2,3
E4	SA-24	91143.85	38068.69	1	1	1,2,3
E4	SA-25	91228.92	38068.69	1	1	1,2,3
E4	SA-26	91054.10	38077.55	1	1	1,2,3
E4	SA-27	91017.66	38114.04	1	1	1,2,3
E4	SA-28	90844.04	38135.13	1	1	1,2,3
E4	SA-29	91123.20	38148.13	1	1	1,2,3
E4	SA-30	91231.90	38151.46	1	1	1,2,3
E4	SA-31	91047.06	38157.43	1	1	1,2,3
E4	SA-32	91006.51	38185.87	1	1	1,2,3
E4	SA-33	91168.25	38199.30	1	1	1,2,3
E4	SA-34	91076.50	38200.16	1	1	1,2,3
E4	SA-35	90936.51	38202.99	1	1	1,2,3
E4	SA-36	91125.16	38218.71	1	1	1,2,3
E4	SA-37	90862.05	38219.24	1	1	1,2,3
E4	SA-38	91219.32	38221.31	1	1	1,2,3
E4	SA-39	91002.85	38246.10	1	1	1,2,3
E4	SA-40	91051.80	38266.93	1	1	1,2,3
E4	SA-41	91231.90	38276.35	1	1	1,2,3
E4	SA-42	90846.45	38277.52	1	1	1,2,3
E4	SA-43	91123.20	38286.02	1	1	1,2,3
E4	SA-44	91028.73	38321.28	1	1	1,2,3
E4	SA-45	91231.90	38351.66	1	1	1,2,3
E4	SA-46	90846.45	38352.43	1	1	1,2,3
E4	SA-47	90958.76	38356.36	1	1	1,2,3
E4	SA-48	91101.80	38356.65	1	1	1,2,3
TABLE TOTALS				27	27	

SCHEDULE OF LIGHTING DEVICES NOTES:

1. FOUNDATION TOP HEIGHT EQUAL TO ADJACENT SIDEWALK
2. LUMINAIRE LED IS TO BE INCLUDED IN THE COST OF PAY ITEM, TYPICAL.
3. FOUNDATION TOP HEIGHT AS SHOWN IN DETAIL.

GENERAL NOTES:

1. EACH LIGHT TO HAVE A PULL BOX "UB", REFERENCE ELECTRICAL SHEETS.

Tabulation of Approximate Quantities

Item No.	Ref. No.	Construction Note Description	Quantity	Unit	NOTES
1		2 Inch Electrical Conduit (Plastic)	2445	LF	
2		Type two Pull Box(Electric)	30	EA	
3		Wiring	1	LS	
4		Light Standard and Luminaire (Pedestrian)	27	EA	
5		Light Standard Foundation (Special)	27	EA	
6		Lighting Controller	1	EA	
7					
8					
SUMMARY NOTES:					



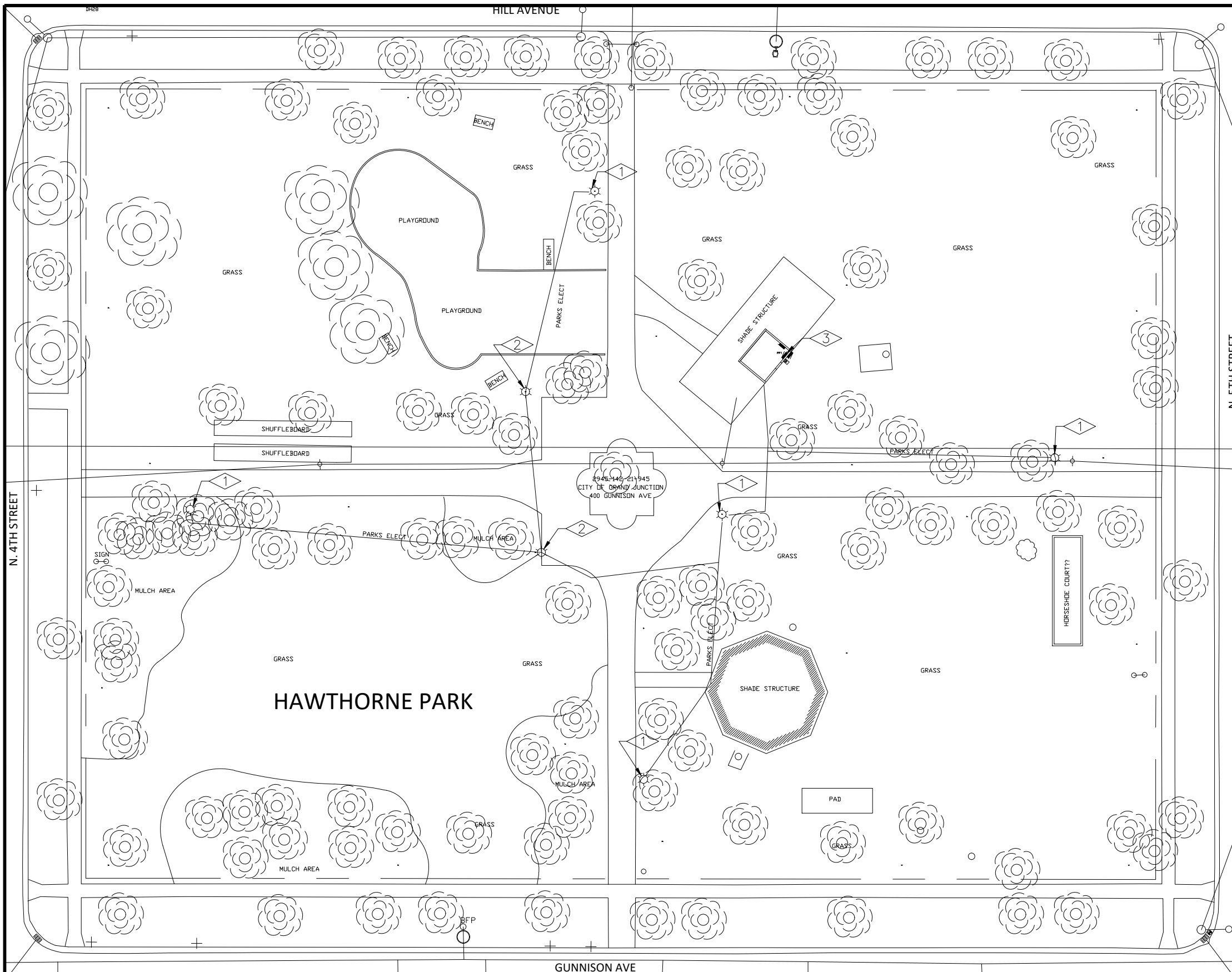
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ENGINEERING DIVISION

HAWTHORNE PARK LIGHTING
QUANTITIES SCHEDULES



FLAG NOTES:

- 1 REMOVE EXISTING LIGHT, POLE AND PEDESTAL. ABANDON EXISTING WIRING.
- 2 EXISTING LIGHT POLE HAS BEEN REMOVED. REMOVE PEDESTAL. ABANDON EXISTING WIRING.
- 3 EXISTING PANEL "PP1" TO REMAIN AND BE REUSED.

GENERAL NOTES:

1. POWER CIRCUIT AS SHOWN ON DRAWING, TYPICAL.
2. FIELD LOCATE IRRIGATION CONTROL LINES AND AVOID AND PROTECT DURING CONSTRUCTION, TYPICAL.
3. RESTRICT OPEN TRENCHING OUTSIDE OF DRIP LINE OF EXISTING TREES TO AVOID DAMAGE TO DRIP LINE.
4. UTILIZE DIRECTIONAL BORING AT A MINIMUM DEPTH OF 36 INCHES UNDER THE CANOPY OF EXISTING TREE.
5. ADJUST LOCATION OF NEW LIGHTS WITH EXISTING TREES. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO TRENCHING.

EXISTING LIGHTING PLAN
SCALE: 1"=40'



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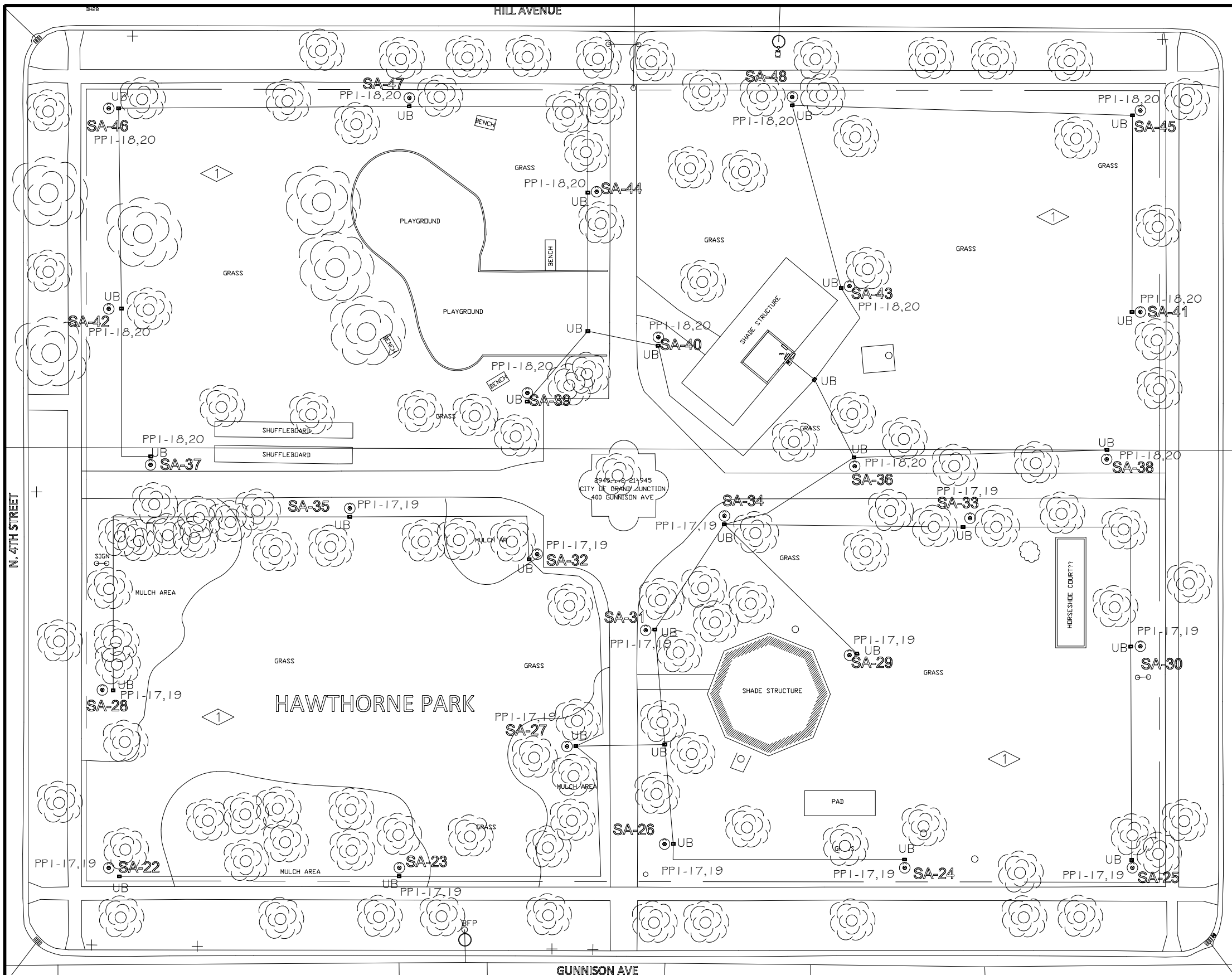
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PLAN & PROFILE
0 10 20 40 HORIZONTAL
0 NA VERTICAL NA



PUBLIC WORKS
ENGINEERING DIVISION

HAWTHORNE PARK LIGHTING
EXISTING LIGHTING PLAN



FLAG NOTES:

- ◇ PROVIDE NEW LIGHT, POLE, J-BOX AND PEDESTAL, TYPICAL.

N. 5TH STREET

N. 4TH STREET

GENERAL NOTES:

1. POWER CIRCUIT AS SHOWN ON DRAWING, TYPICAL.
2. LIGHT TO BE ORIENTED TO BE PERPENDICULAR TO SIDEWALK AND SHINE ON SIDEWALK, TYPICAL.
3. NEW 2" CONDUIT AND PROVIDE 2-#6 THWN + #10 GND IN 2" PVC SCHEDULE 80 CONDUIT BETWEEN PULL BOXES UNLESS SHOWN OTHERWISE, TYPICAL.
4. FIELD LOCATE IRRIGATION CONTROL LINES AND AVOID AND PROTECT DURING CONSTRUCTION, TYPICAL.
5. RESTRICT OPEN TRENCHING OUTSIDE OF DRIP LINE OF EXISTING TREES TO AVOID DAMAGE TO DRIP LINE.
6. UTILIZE DIRECTIONAL BORING AT A MINIMUM DEPTH OF 36 INCHES UNDER THE CANOPY OF EXISTING TREE.
7. ADJUST LOCATION OF NEW LIGHTS WITH EXISTING TREES. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO TRENCHING.

NEW LIGHTING PLAN
SCALE: 1"=40'



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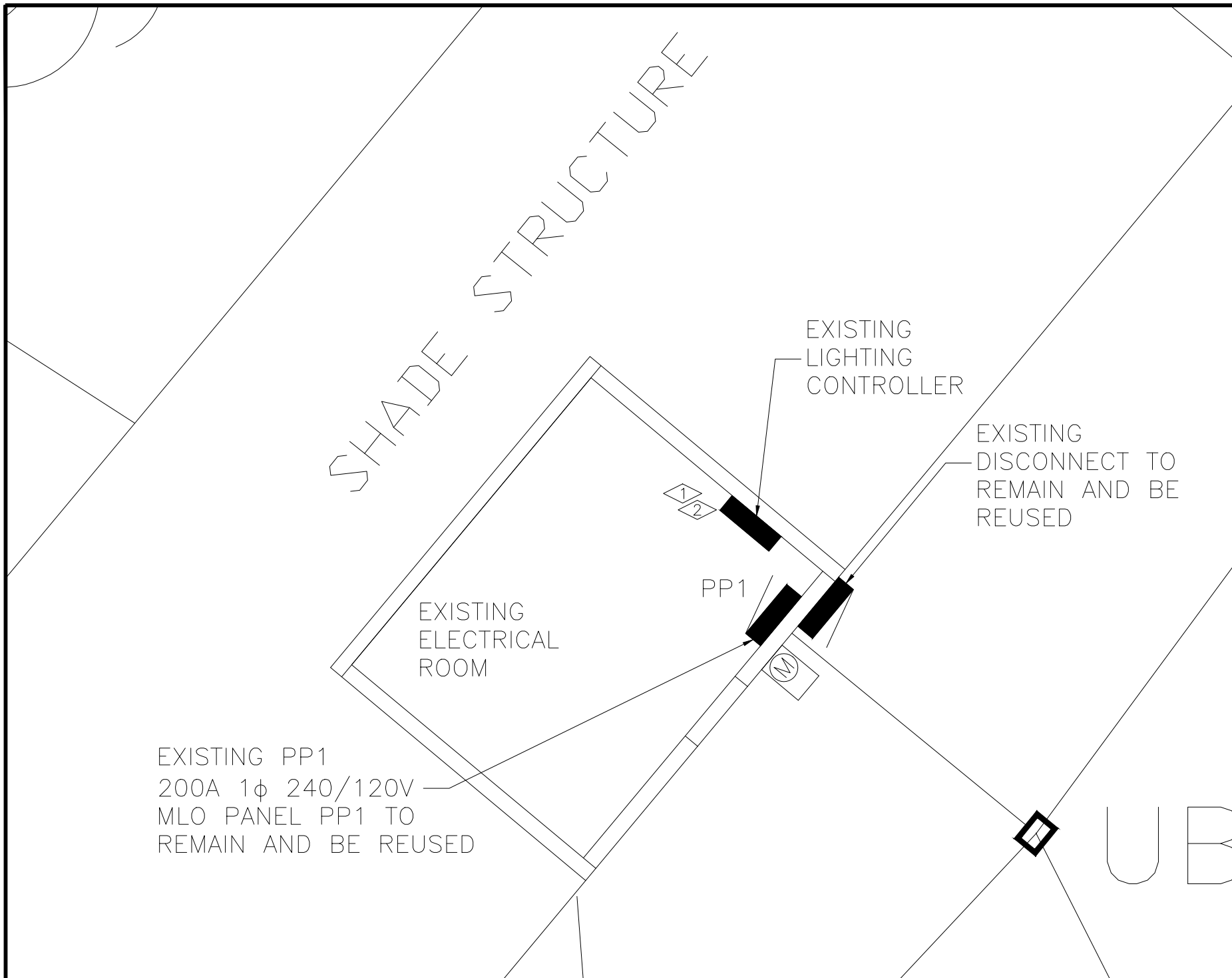
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HORIZONTAL	
VERTICAL	0 NA NA



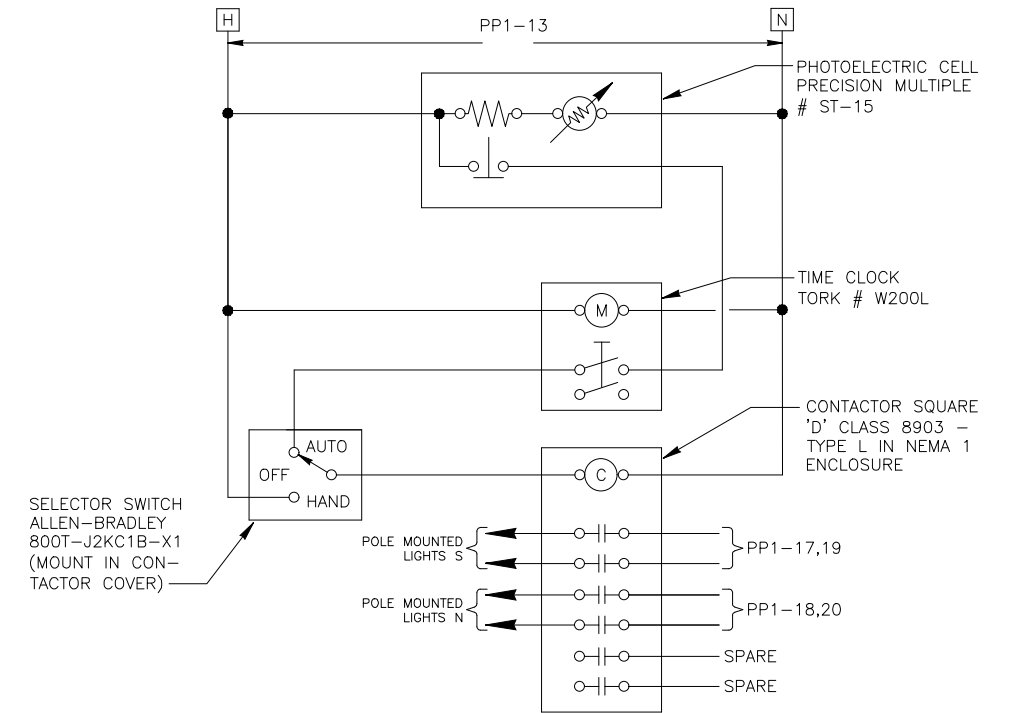
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HAWTHORNE PARK LIGHTING
NEW LIGHTING PLAN



FLAG NOTES:

- ① REMOVE AND REPLACE EXISTING LIGHTING CONTROLLER AND PHOTOCELL AND REPLACE WITH NEW LIGHTING CONTROLLER, REFERENCE LIGHTING CONTROL SCHEMATIC.
- ② PROVIDE NEW ENCLOSURE FOR CONTROLLER AND RELAYS.



TYPICAL LIGHTING CONTROL SCHEMATIC

NOT TO SCALE

NEW ELECTRICAL PLAN

SCALE: N.T.S.



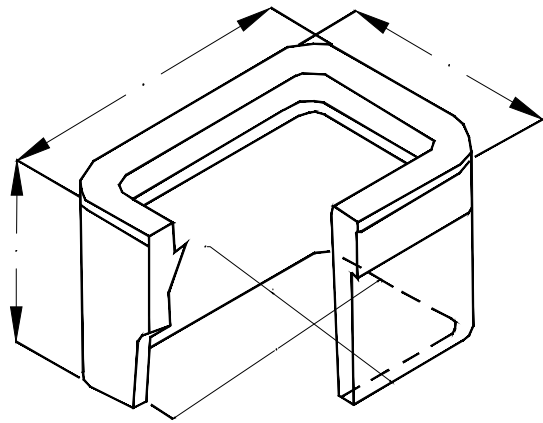
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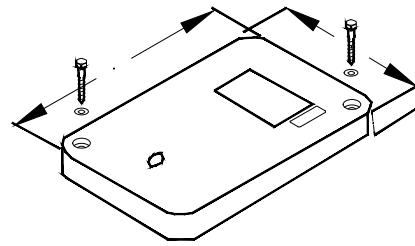


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HAWTHORNE PARK LIGHTING
NEW ELECTRICAL PLAN

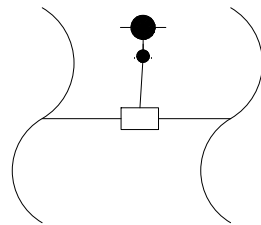


- A 18-1/8"
- B 11-1/4"
- C 1-1/4"
- D 20-1/2"
- E 13-3/8"
- F 12"
- G 15-3/4"
- H 8-7/8"

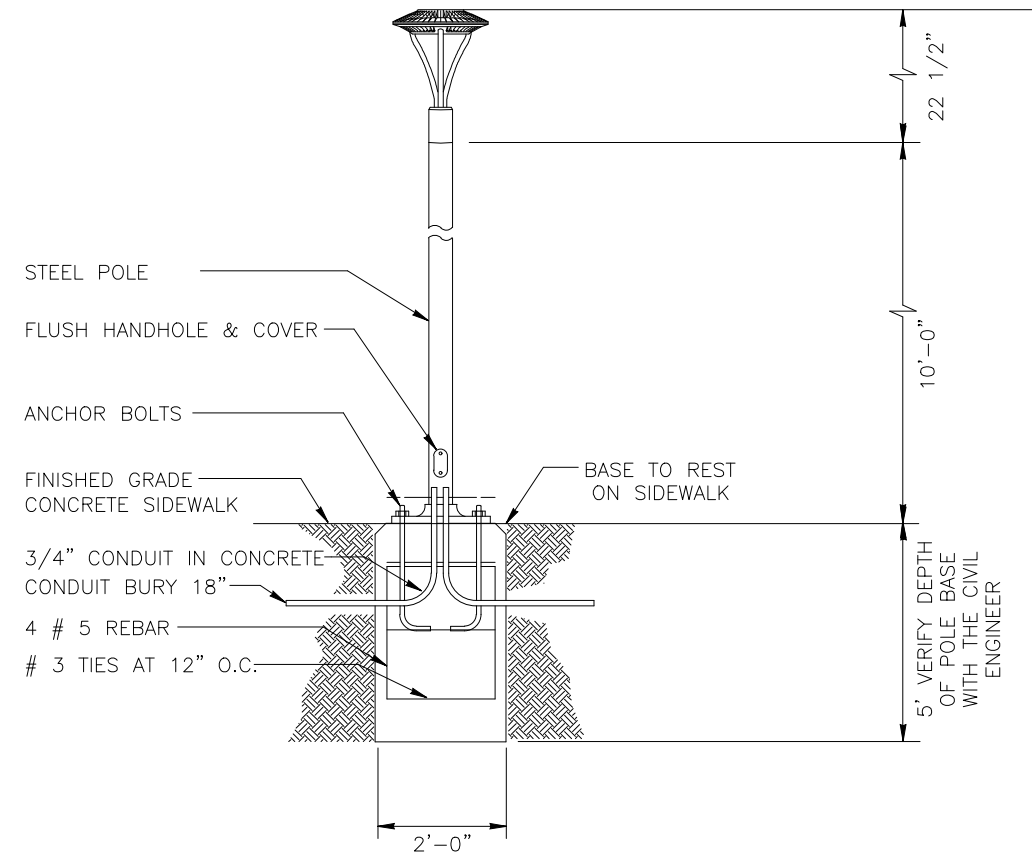


- PULL BOXES, PULL BOX COVERS AND EXTENSIONS SHALL BE MADE OF FIBERGLASS REINFORCED POLYMER CONCRETE. PULL BOXES SHALL BE VERIFIED BY A 3RD PARTY NATIONALLY RECOGNIZED INDEPENDENT TESTING LABORATORY AS MEETING ALL TEST PROVISIONS OF THE LATEST ANSI/SCTE 77 SPECIFICATION FOR UNDERGROUND ENCLOSURE INTEGRITY, TIER 22 RATING. CERTIFICATION DOCUMENTS SHALL BE SUBMITTED WITH MATERIALS SUBMITTALS. THE PULL BOX SHALL HAVE A DETACHABLE COVER WITH A SKID RESISTANT SURFACE AND HAVE THE WORDS ELECTRICAL CAST INTO THE SURFACE. PAINTING THE WORDS SHALL NOT BE ACCEPTED. MARKINGS SHOWING THE TIER 22 RATING MUST BE LABELED OR STENCILED ON THE INSIDE AND OUTSIDE OF THE BOX AND THE ON THE UNDER SIDE OF THE COVER. THE COVER SHALL BE ATTACHED TO THE PULL BOX BODY BY MEANS OF A MINIMUM 3/8 - 7 UNIFIED NATIONAL COURSE (UNC) STAINLESS STEEL PENTA HEAD BOLTS AND SHALL HAVE TWO LIFT SLOTS TO AID IN THE REMOVAL OF THE LID.
- PULL SLOTS SHALL BE RATED FOR A MINIMUM PULL OUT OF 3,000 POUNDS. MAGNESIUM CHLORIDE TESTS SHOULD BE PERFORMED IN ACCORDANCE WITH THE LATEST ANSI/SCTE 77 SPECIFICATION FOR UNDERGROUND ENCLOSURE INTEGRITY, TIER 22 RATING.
- PROVIDE AT LEAST 6 INCHES OF PEA GRAVEL MEASURED FROM BOTTOM OF PULL BOX FOR DRAINAGE. PEA GRAVEL IS INCLUDED IN PULL BOX PAY ITEM.

C UTILITY BOX DETAIL
1 NOT TO SCALE



C UTILITY BOX CONNECTION DETAIL
2 NOT TO SCALE



TYPE SA LIGHT DETAIL
NOT TO SCALE

GENERAL NOTES:

- ELECTRICAL CONTRACTOR TO ORDER ALL REQUIRED HARDWARE FOR MOUNTING OF EACH LUMINARIES.
- VERIFY THE BURY DEPTH AND DIAMETER OF THE SONOTUBE FOR POLE LUMINARIES WITH THE CIVIL ENGINEER PRIOR TO PURCHASING THE EQUIPMENT. DEPTH WILL DEPEND ON SOIL CONDITIONS. TYPICAL CONCRETE DEPTH IS 6 FT. VERIFY WITH CIVIL ENGINEER.
- ELECTRICAL CONTRACTOR TO VERIFY THAT ALL FIXTURES TO COMPLY WITH LIGHT TRESPASS AND DARK SKY CODES.
- NOTIFY ENGINEER OF ANY OBSTRUCTIONS TO POLE PLACEMENT IMMEDIATELY BEFORE PROCEEDING.
- VERIFY REQUIRED VOLTAGE OF FOR EACH LUMINARIES WITH AVAILABLE VOLTAGES PRIOR TO ORDERING.

LUMINAIRE SCHEDULE

TYPE	MANUFACTURER MODEL NUMBER	APPROVAL	VOLTAGE MOUNTING # OF LAMPS	BALLAST LAMPE TYPE LAMP CAT. #	DESCRIPTION
SA	RAB LIGHTING ALED-5T-78-N-USA	OWNER REQUESTED	UNV POLE 1	ELECTRONIC LED 78 W	PEDESTRIAN LUMINAIRE, POST TOP MOUNTED, LED,. COLOR OF POLE AND LUMINAIRE TO MATCH POLE. POLE PS4-11-10WT.



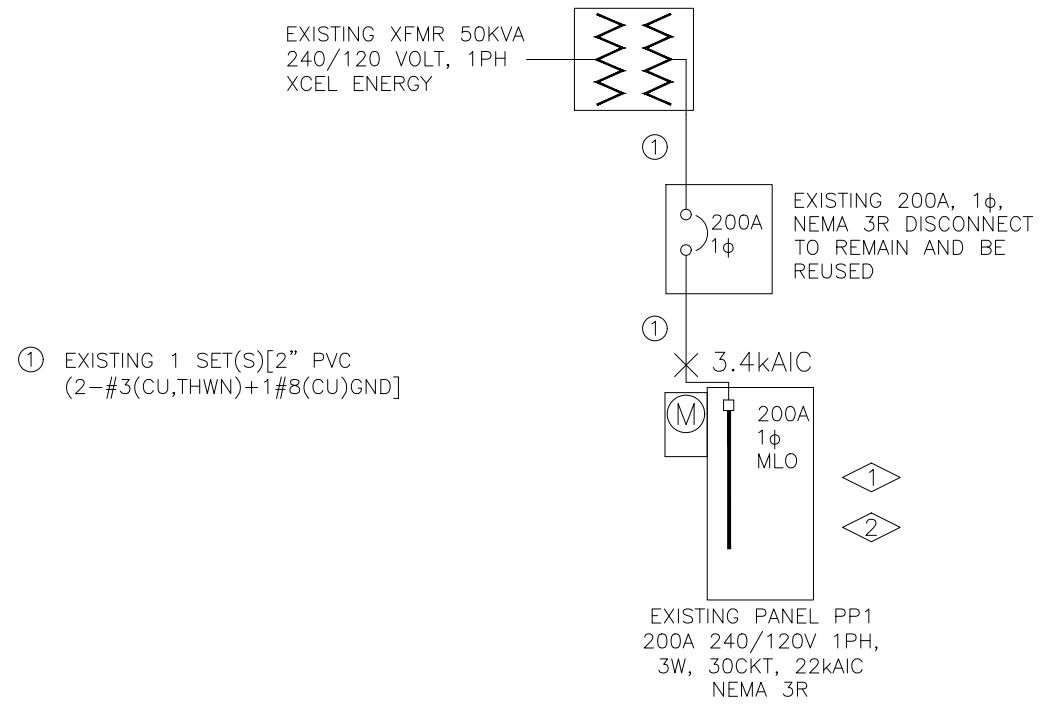
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REVISION Δ			AJM	4/19/23	AJM	4/19/23	AJM	4/19/23	EM	4/19/23



PUBLIC WORKS
ENGINEERING DIVISION

HAWTHORNE PARK LIGHTING
COMPOSITE UTILITY PLAN



FLAG NOTES:

- ① EXISTING PANEL PP1 TO REMAIN AND BE REUSED
- ② PROVIDE NEW BREAKERS AS SHOWN IN PANEL SCHEDULE DRAWING, TYPICAL. MATCH EXISTING BREAKER RATINGS.

A
1 EXISTING ONE-LINE DIAGRAM
NOT TO SCALE

GENERAL NOTES:

1. IN AS MUCH AS DESIGN REQUIRES THAT CERTAIN ASSUMPTIONS BE MADE REGARDING EXISTING CONDITIONS, AND BECAUSE SOME OF THESE ASSUMPTIONS CANNOT BE VERIFIED. FIELD COORDINATION DURING CONSTRUCTION SERVICES IS IMPERATIVE. CONTRACTORS BIDDING THIS WORK MUST MAKE REASONABLE ALLOWANCES FOR UNFORESEEN CONTINGENCIES.
2. THE SERVING ELECTRICAL ASSOCIATION SHALL ADVISE THE OWNER/ENGINEER PRIOR TO SERVICE MODIFICATION REQUIRING COST TO THE OWNER.
3. COORDINATE INSTALLATION WITH XCEL ENERGY PRIOR TO ROUGH-IN.
4. REFERENCE CIVIL, LANDSCAPE AND IRRIGATION DRAWING PLANS FOR COORDINATION AND LOCATION OF ALL UNDER GROUND SYSTEMS.
5. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES AS REQUIRED: REFERENCE CIVIL LANDSCAPE AND IRRIGATION DRAWINGS.
6. ALL WIRING IS SHOWN DIAGRAMMATICALLY ON DRAWINGS, FIELD VERIFY ALL CONDITIONS PRIOR TO ROUGH-IN.
7. ALL ELECTRICAL WORK SHALL COMPLY WITH THE LATEST EDITION OF NATIONAL ELECTRICAL CODE AND ALL APPLICABLE LOCAL CODES.
8. CONDUCTOR COUNT IS SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL ENSURE THAT ANY AND ALL DEVICES AND EQUIPMENT ARE CIRCUITED PROPERLY. CONTRACTOR SHALL ENSURE THAT NO EQUIPMENT OR DEVICES ARE COMBINED OTHER THAN WHAT IS DEPICTED.
9. FIELD VERIFY ALL DIMENSIONS, DO NOT SCALE DRAWINGS.
10. COORDINATE INSTALLATION OF METER AND ELECTRICAL REQUIREMENTS WITH XCEL ENERGY.
11. PEDESTAL MUST MEET ALL XCEL ENERGY REQUIREMENTS I.E. COLD SEQUENCE PADLOCK SLIP LATCH ON METER COVER, HOLD OPEN BAR ON METER HOOD.



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PUBLIC WORKS
ENGINEERING DIVISION

HAWTHORNE PARK LIGHTING
ONE-LINE PLAN

PANEL: PP1		DC DEVICE TYPE: Breaker		ENCLOSURE: NEMA 1		MAINS(A): MLD		CONTINUOUS(A): 225				
LOCATION: BUS-XFMRO		DEVICE FAMILY: Plug In		MOUNTING: Surface		WIRING: Single-Phase 3-Wire		BUS SC RATING(A): 22000				
INCIDENT ENERGY: 2.57 Cal/cm2 @18.00(in)				VOLTAGE: 240/120				FAULT CURRENT(A): 2077				
DC AMPS P	NOTES	DESCRIPTION	DEMAND CODE	VA	CKT	PHASE LOADS VA A B C	CKT	VA	DEMAND CODE	DESCRIPTION	NOTES	DC AMPS P
20 1		LTG-AREA	LTS	600	1	2807	2	2304	GENERAL	WTR HTR 1		30 1
20 1		LTG-AREA	LTS	600	3	2807	4	2304	GENERAL	WTR HTR 2		30 1
20 1		EXHAUST FANS	LTS	1200	5	2414	6	1344	GENERAL	HAND DRYER 1		25 1
40 2		AIR HANDLER HTR	GENERAL	3840	7	4981	8	1344	GENERAL	HAND DRYER 2		25 1
" "		" "	" "	3840	9	5040	10	1200	REC	RCPT- PINE		20 1
20 1		FLUSH VALVES	GENERAL	300	11	1500	12	1200	GENERAL	RCPT-SPRUCE		20 1
20 1		LTS-CONTROLLER	LTS	600	13	1200	14	600	GENERAL	IRR TIMER		20 1
20 1		LTS-POST SPRUCE	LTS	1200	15	1800	16	600	GENERAL	TIME CLOCK		20 1
					17		18					
					19		20					
					21		22					
					23		24					
ALL CONNECTED	KVA	3P AVE AMPS	* PHASE	TOTALS	VA	AMPS	BUS TOTALS	KVA				
TOTAL CONNECTED	23.08	55.5	* A-N	11688.0	97.4	25.54	CONNECTED	25.54				
TOTAL DEMAND	24.13	58.0	* B-N	11388.0	94.9	26.59	DEMAND	26.59				
TOTAL DESIGN	25.44	61.2	* C-N	0.0	0.0	27.90	DESIGN	27.90				

EXISTING PANEL SCHEDULE DETAIL

NOT TO SCALE

PANEL: PP1		DC DEVICE TYPE: Breaker		ENCLOSURE: NEMA 1		MAINS(A): MLD		CONTINUOUS(A): 200				
LOCATION: BUS-XFMRO		DEVICE FAMILY: Plug In		MOUNTING: Surface		WIRING: Single-Phase 3-Wire		BUS SC RATING(A): 22000				
INCIDENT ENERGY: 2.57 Cal/cm2 @18.00(in)				VOLTAGE: 240/120				FAULT CURRENT(A): 2077				
DC AMPS P	NOTES	DESCRIPTION	DEMAND CODE	VA	CKT	PHASE LOADS VA A B C	CKT	VA	DEMAND CODE	DESCRIPTION	NOTES	DC AMPS P
20 1		LTG- POLE NW	LTS	546	1	2760	2	2304	GENERAL	WTR HTR 1		30 1
20 1		LTG-POLE NE	LTS	468	3	2693	4	2304	GENERAL	WTR HTR 2		30 1
20 1		EXHAUST FANS	LTS	1200	5	2414	6	1344	GENERAL	HAND DRYER 1		25 1
40 2		AIR HANDLER HTR	GENERAL	3840	7	4981	8	1344	GENERAL	HAND DRYER 2		25 1
" "		" "	" "	3840	9	5040	10	1200	REC	RCPT- PINE		20 1
20 1		FLUSH VALVES	GENERAL	300	11	1500	12	1200	GENERAL	RCPT-SPRUCE		20 1
20 1		LTS-CONTROLLER	LTS	600	13	1200	14	600	GENERAL	IRR TIMER		20 1
20 1		LTS-POST SPRUCE	LTS	1200	15	1800	16	600	GENERAL	TIME CLOCK		20 1
20 2	1	LTS POLE S	LTS	507	17	1014	18	507	LTS	LTS POLE N	1	20 2
" "		" "	" "	507	19	1014	20	507	" "	" "		" "
					21		22					
					23		24					
ALL CONNECTED	KVA	3P AVE AMPS	* PHASE	TOTALS	VA	AMPS	BUS TOTALS	KVA				
TOTAL CONNECTED	24.92	59.9	* A-N	12648.0	105.4	27.38	CONNECTED	27.38				
TOTAL DEMAND	26.43	63.6	* B-N	12270.0	102.3	28.89	DEMAND	28.89				
TOTAL DESIGN	28.32	68.1	* C-N	0.0	0.0	30.78	DESIGN	30.78				

NEW PANEL SCHEDULE DETAIL

NOT TO SCALE

FLAG NOTES:

- 1 PROVIDE NEW 20 AMP 240V 1φ 10KAIC BREAKERS TO MATCH EXISTING RATINGS, TYPICAL.
- 2 PROVIDE NEW UPDATED PANEL SCHEDULE, TYPICAL



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PUBLIC WORKS
ENGINEERING DIVISION

HAWTHORNE PARK LIGHTING
PANEL SCHEDULES PLAN

LIGHTING GENERAL NOTES:

1. THIS PROJECT CONSISTS OF WORK TO REMOVE EXISTING FLUORESCENT LIGHTING AND EXISTING GFCI RECEPTACLES AND INSTALL NEW CEILING MOUNTED LIGHTING AND GFCI RECEPTACLES REUSING EXISTING WIRING, CONDUIT, PULL BOXES, AND EXTENDING TO LOCATION AS SHOWN IN DRAWINGS.
2. INSTALL NEW TYPE "SA" , HUBBELL #NRG-4-30L-U-4K-035-BZ FIXTURE MOUNTED TO CEILING OF EXISTING SHADE STRUCTURE AT LOCATIONS SHOWN IN DRAWINGS.
3. NEW TYPE "SA" INSTALLED ON THE PROJECT WILL BE CONTROLLED WITH EXISTING CONTROLLER, PROVIDE NEW PHOTO CELL TO MATCH EXISTING.
4. EXISTING SHELTER GFCI, JBOX AND COVER TO BE REMOVED AND REPLACED WITH LEVITON 1GM53-GY BOX WITH WM1D-SGY WEATHERPROOF COVER INSTALLED IN VANDAL STOP AA-EB-3R AS SHOWN IN DRAWINGS.
5. PULL BOXES FOR CDOT PULL BOXES 11"X18"X12".
6. PULL BOXES WILL BE INSTALLED IN GRADES WITHOUT CONCRETE WHERE POSSIBLE.
7. ALL ELECTRICAL CONDUIT TO MATCH EXISTING, TYPICAL.
8. UNLESS OTHERWISE NOTED, THE WORK DESCRIBED ON THE PLANS SHALL INCLUDE PROVIDING ALL LABOR AND MATERIALS NECESSARY FOR A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM. FURNISH ALL REQUIRED ITEMS WHETHER SUCH ARE SPECIFICALLY SHOWN OR NOT.
9. INFORMATION SHOWN ON DRAWINGS IS DIAGRAMMATIC ONLY AND SHALL NOT BE SCALED. OBTAIN VERIFY EXACT LOCATIONS, MEASUREMENTS, LEVELS, SPACE REQUIREMENTS, POTENTIAL CONFLICTS AMONG TRADES AND FOR ADJUSTING THE WORK REQUIRED BY THE ACTUAL CONDITIONS OF THE PROJECT. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDER GROUND OBSTRUCTIONS AND MAKING ALLOWANCES FOR FIELD ADJUSTMENT OF LOCATION OF LUMINARIES TO AVOID SHUT DOWN OF ANY SERVICES OR SYSTEMS THAT ARE TO REMAIN.
10. BEFORE SUBMITTING THE BID ELECTRICAL CONTRACTOR SHALL VISIT AND EXAMINE THE PREMISES AND/OR JOB SITE SO AS TO ASCERTAIN THE EXISTING CONDITIONS IN WHICH THE CONTRACTOR WILL BE OBLIGED TO OPERATE IN PERFORMING HIS PART OF THE CONTRACT TO ANTICIPATE ANY POSSIBLE SPACE RESTRICTIONS OR CONSTRAINTS THAT COULD AFFECT THE TIMELY COMPLETION OF THE ELECTRICAL WORK IN ACCORDANCE WITH THE INTENT OF THE SPECIFICATIONS AND DRAWINGS. THE ELECTRICAL CONTRACTOR SHALL REPORT TO THE THE PROJECT ENGINEER OR GENERAL CONTRACTOR ANY CONDITIONS THAT MIGHT PREVENT THE SPECIFIED ELECTRICAL WORK FROM BEING PERFORMED IN THE MANNER INTENDED. NO CONSIDERATION OR ALLOWANCE WILL BE GRANTED TO THE ELECTRICAL CONTRACTOR FOR FAILURE TO VISIT THE PROJECT SITE, OR FOR ANY ALLEGED MISUNDERSTANDING OF THE MATERIALS TO BE FURNISHED OR WORK TO BE DONE..
11. THE ELECTRICAL CONTRACTOR SHALL EXAMINE THE DRAWINGS OF ALL TRADES WHOSE WORK RELATES TO OR IS DEPENDENT ON ELECTRICAL WORK TO BECOME FULLY INFORMED OF THE EXTENT AND CHARACTER OF THEIR SPECIFIED WORK AND BE ABLE TO COORDINATE WITH OTHER TRADES WHILE AVOIDING POSSIBLE INTERFERENCE WITH THE ELECTRICAL WORK.

- PP1-X ELECTRICAL CIRCUIT NUMBER (REFER TO PANEL SCHEDULES)
- UB HEAVY DUTY, TRAFFIC RATED, FLUSH-TO-GRADE POLYMER CONCRETE SPLICE BOX WITH HEAVY DUTY, TRAFFIC RATED, BOLTED COVER. 11"X18"X12" TYPE 1.
-  UNDER GROUND BURIED RACEWAY (2#6 THWN CU AND 1#8 GND) IN 2" PVC CONDUIT (UNLESS NOTED OTHERWISE ON PLANS) IN 24" DEEP TRENCH, BURY AND COMPACTED BACKFILL TO PRE CONSTRUCTION CONDITION.
- SA NEW LUMINIARE STANDARD AS SPECIFIED.



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PUBLIC WORKS
 ENGINEERING DIVISION

SHERWOOD PARK LIGHTING
 GENERAL NOTES

Tabulation of Approximate Quantities

Item No.	Ref. No.	Construction Note Description	Quantity	Unit	NOTES
1		Wiring	1	LS	
2		Hubbell Luminaire	6	EA	
3		LEVITON 1GM53-GY BOX WITH WM1D-SGY	4	EA	
4		VANDAL STOP AA-EB-3R	4	EA	
5					
6					
7					
8					
SUMMARY NOTES:					

GENERAL NOTES:

1. EXTEND EXISTING WIRING AND CONDUIT TO NEW LIGHT LOCATIONS SHOWN ON DRAWINGS.
2. PROVIDE MOUNTING HARDWARE FOR NEW LIGHTS, TYPICAL.

LUMINAIRE SCHEDULE

TYPE	MANUFACTURER MODEL NUMBER	APPROVAL	VOLTAGE MOUNTING # OF LAMPS	BALLAST LAMPE TYPE LAMP CAT. #	DESCRIPTION
SA	HUBBELL NRG-4-30L-U-4K-035-BZ	OWNER REQUESTED	UNV SURFACE CEILING 1	ELECTRONIC LED 35 W	SURFACE MOUNT LOW BAY MOUNTED TO SHELTER CEILING. PROVIDE MOUNTING HARDWARE AND LIQUID TIGHT FLEXIBLE METAL CONDUIT(LFMC) WITH FITTINGS TO EACH LIGHT.



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PUBLIC WORKS
ENGINEERING DIVISION

SHERWOOD PARK LIGHTING
QUANTITIES SCHEDULES



FLAG NOTES:

- 1 REMOVE EXISTING LIGHTING AND GFCI RECEPTACLES IN THIS SHELTER AND DISPOSE OF PROPERLY.
- 2 PRESERVE WIRING AND CONDUIT FOR REUSE FOR NEW LIGHTING AND RECEPTACLES.
- 3 EXISTING POWER PANEL TO REMAIN AND BE REUSED.

EXISTING SHELTER LOCATIONS PLAN

SCALE: 1"=60'



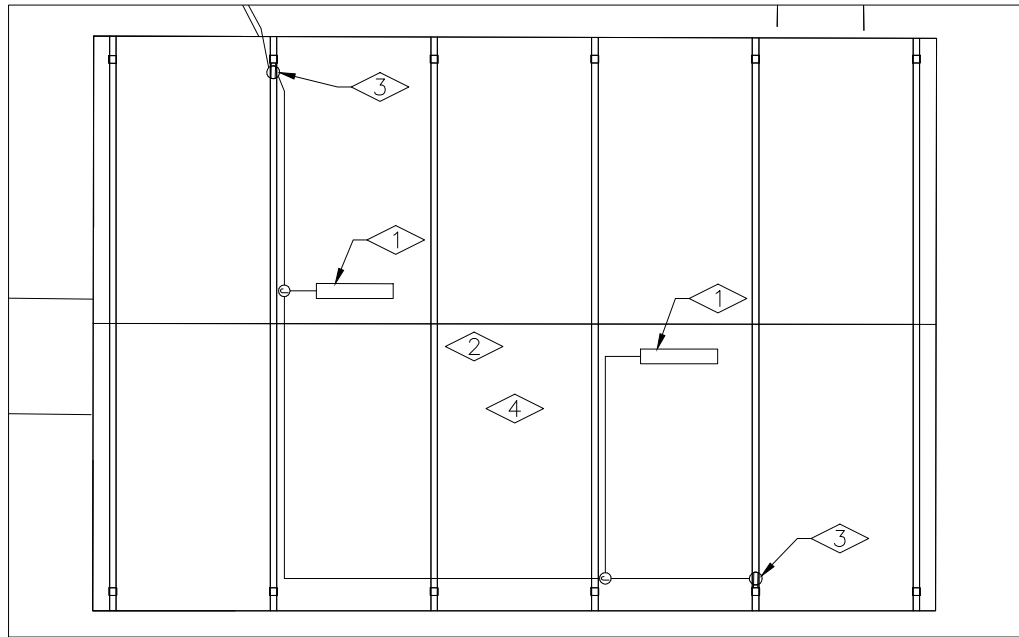
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REVISION			AJM	4/19/23	0 15 HORIZONTAL 60
REVISION			AJM	4/19/23	0 NA VERTICAL NA
REVISION			EM	4/19/23	



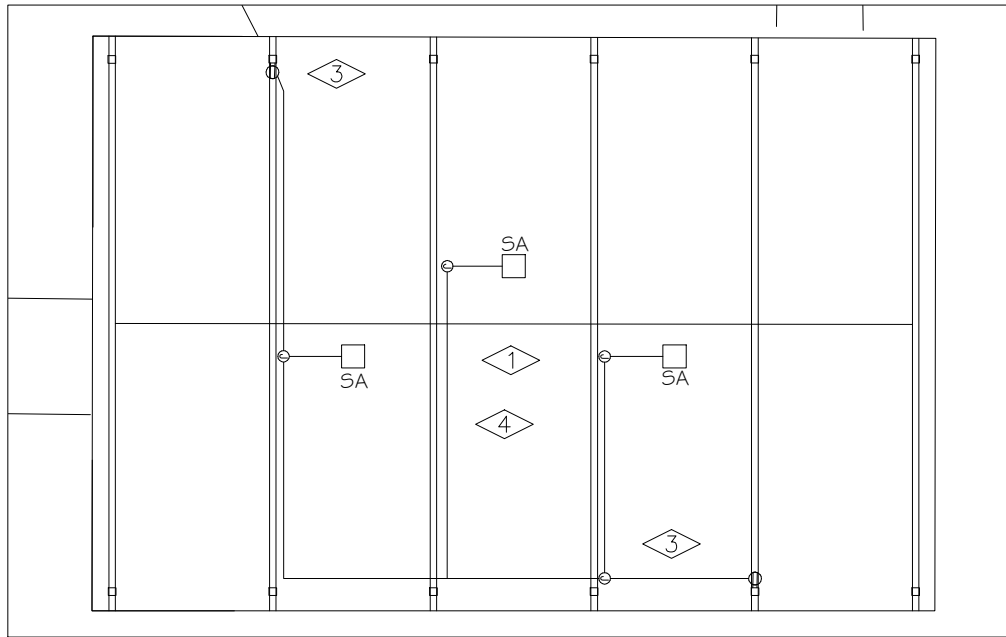
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SHERWOOD PARK LIGHTING
SHELTER LOCATIONS PLAN



EXISTING LIGHTING PLAN SHADE STRUCTURE #1

SCALE: 1"=10'



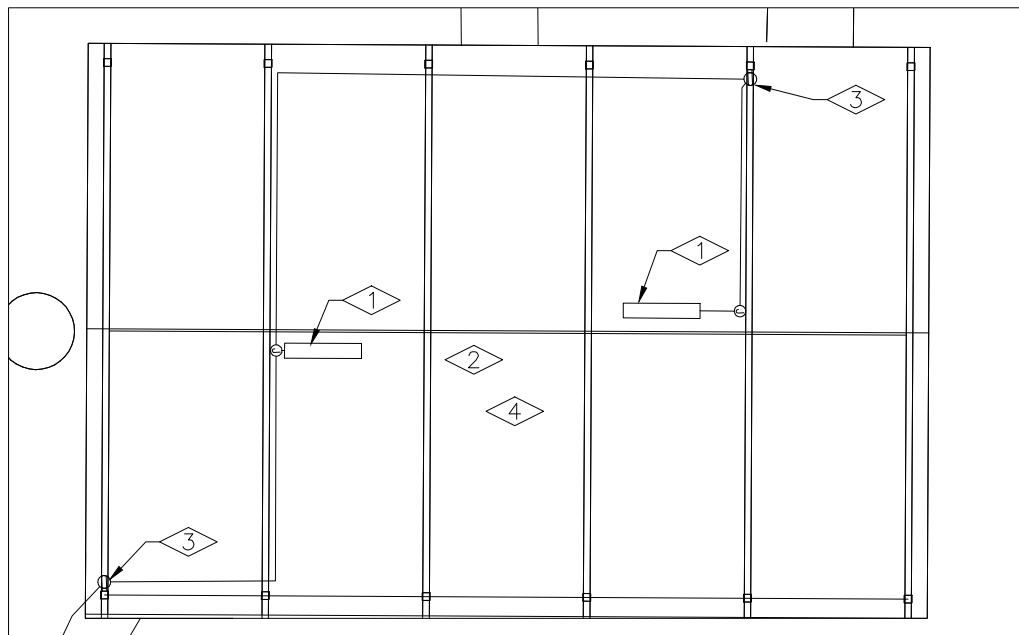
NEW LIGHTING PLAN SHADE STRUCTURE #1

SCALE: 1"=10'



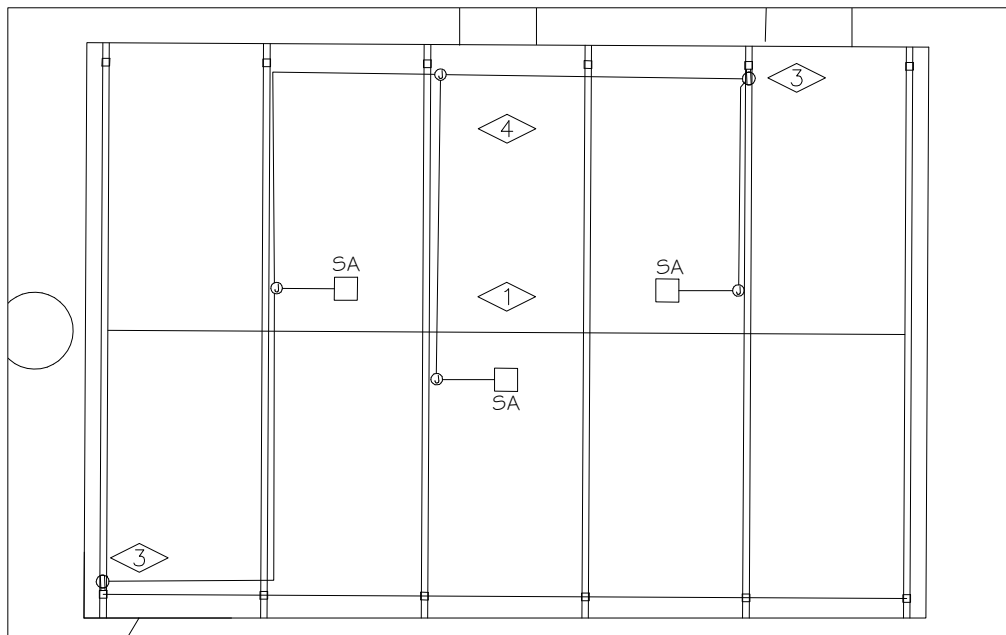
FLAG NOTES:

- ① EXISTING FLUORESCENT LIGHT TO BE REMOVED AND DISPOSED OF PROPERLY. REPLACE WITH TYPE "SA". EXISTING LIGHT CONTROL TO REMAIN AND BE REUSED.
- ② REMOVE AND REPLACE EXISTING PHOTOCELL WITH NEW, MATCH EXISTING.
- ③ REMOVE AND REPLACE EXISTING WP GFCI WITH NEW GFCI LEVITON 1GM53-GY BOX WITH WM1D-SGY WEATHERPROOF COVER INSTALLED IN VANDAL STOP AA-EB-3R OUTDOOR ELECTRICAL OUTLET SECURITY BOX.
- ④ PRESERVE REUSE AND EXTEND EXISTING WIRING AND CONDUIT AS REQUIRED, TYPICAL.



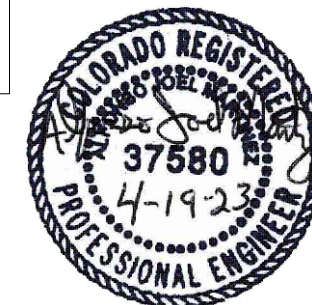
EXISTING LIGHTING PLAN SHADE STRUCTURE #2

SCALE: 1"=10'



NEW LIGHTING PLAN SHADE STRUCTURE #2

SCALE: 1"=10'



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REVISION Δ			AJM	4/19/23	0 NA VERTICAL NA
REVISION Δ			EM	4/19/23	



PUBLIC WORKS
ENGINEERING DIVISION

SHERWOOD PARK LIGHTING
NEW LIGHTING PLAN

PANEL: P1 DC DEVICE TYPE: Breaker ENCLOSURE: NEMA 1 MAINS(A): MLD CONTINUOUS(A): 225
 LOCATION: SHERWOOD DEVICE FAMILY: Plug In MOUNTING: SurFace WIRING: Single-Phase 3-Wire BUS SC RATING(A): 10000
 FED FROM: BUS-XFMRO VOLTAGE: 208/120 FAULT CURRENT(A): 0
 INCIDENT ENERGY: 0.00 Cal/cm2 @18.00(in) BOUNDARY: 0.00(in)



DC AMPS P	NOTES	DESCRIPTION	DEMAND CODE	VA	CKT	PHASE A	LOADS B	VA C	CKT	VA	DEMAND CODE	DESCRIPTION	NOTES	DC AMPS P
20 1		LTS-RR, STORAGE	GENERAL	0	1	0			2	0	GENERAL	S. HAND DRYER		20 2
20 1		LTS-EXTERIOR	GENERAL	0	3		0		4	-				
20 1		RCPT	GENERAL	0	5		0		6	0	GENERAL	N. HAND DRYER		20 2
20 1		IRR CONTROL	GENERAL	0	7		0		8	-				
30 1		WATER HTR S.	GENERAL	0	9		0		10	0	GENERAL	LTS-N. PARK		20 2
30 1		WATER HTR N.	GENERAL	0	11		0		12	-				
15 2		SPARE	SPARE	0	13		0		14	0	GENERAL	HEATING UNIT		40 2
				-	15		0		16	-				
20 1		SPARE	SPARE	0	17		0		18	0	RECEPTA	LTS-S. SHELTER		20 1
15 2		LTS-S. PARK	GENERAL	0	19		0		20	0	RECEPTA	RCPT-S. SHELTER		20 1
				-	21		0		22	0	RECEPTA	RCPT-N. SHELTER		20 1
15 1		SPRINKLERS SYS	GENERAL	0	23		0		24	0	LTS	LTS-N. SHELTER		20 1
0 1		SPACE	SPACE	0	25		0		26	0	SPACE	SPACE		0 1
0 1		SPACE	SPACE	0	27		0		28	0	SPACE	SPACE		0 1
0 1		SPACE	SPACE	0	29		0		30	0	SPACE	SPACE		0 1

ALL CONNECTED	KVA	3P AVE AMPS	* PHASE TOTALS	VA	AMPS	BUS TOTALS	KVA	DATE: Apr 12, 2023
TOTAL CONNECTED	0.00	0.0	* A-N	0.0	0.0	CONNECTED	1.20	TIME: 11:44:44
TOTAL DEMAND	0.00	0.0	* B-N	0.0	0.0	DEMAND	1.20	
TOTAL DESIGN	0.00	0.0	* C-N	0.0	0.0	DESIGN	1.20	

EXISTING PANEL SCHEDULE DETAIL

NOT TO SCALE

FLAG NOTES:

1 PROVIDE NEW UPDATED PANEL SCHEDULE, TYPICAL.



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




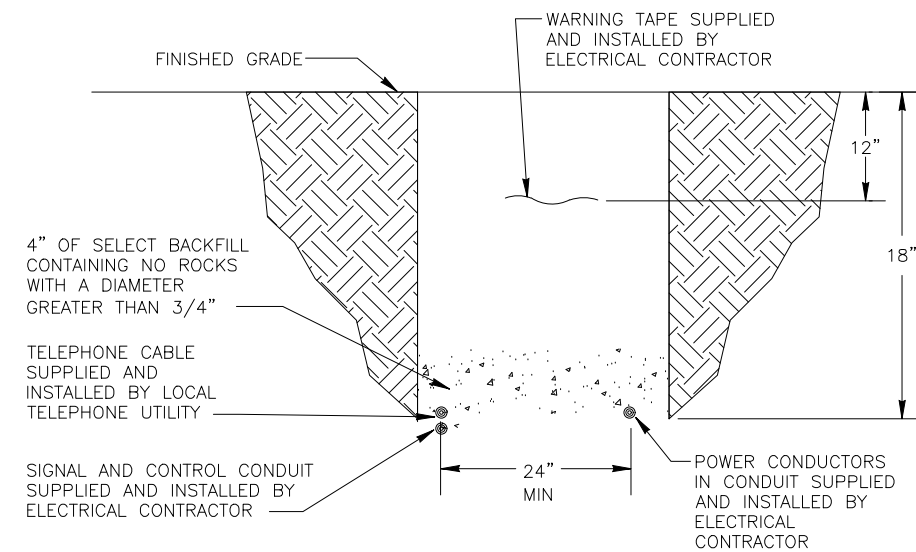
PUBLIC WORKS
ENGINEERING DIVISION

SHERWOOD PARK LIGHTING
PANEL SCHEDULES PLAN

LIGHTING GENERAL NOTES:

1. THIS PROJECT CONSISTS OF WORK TO INSTALL ALL WIRING, CONDUIT, PULL BOXES, NEW LIGHTING, POLES, UTILITY BOXES AND CONCRETE PEDESTALS FOR ADDITION OF TYPE "SA" POLE TOP MOUNTED FIXTURES AS SHOWN IN DRAWINGS.
2. PROVIDE 2" PVC SCHEDULE 80 CONDUIT FROM PANEL "PP1" AS SHOWN IN DRAWINGS TO NEW LIGHT LOCATIONS.
3. LIGHT STANDARD & LUMINARIES (PEDESTRIAN AND STREET LIGHT), SHALL INCLUDE THE FOLLOWING ITEMS FROM ALL PHASE ELECTRIC LOCATED AT 2776 CROSSROADS BLVD, GRAND JUNCTION, CO 81506, 970.245.6031. THE ITEMS NUMBERS ARE AS FOLLOWS.
4. TYPE "SA" - RAB LIGHTING #ALED-5T-78-N-USA, PROVIDE COLLISION BREAK AWAY CONNECTORS. FIXTURE TO BE 10' ABOVE FINISHED GRADE TO BOTTOM OF LIGHT. ORDER WITH PS4-11-10WT POLE
5. ALL PEDESTRIAN LIGHTING FIXTURES (TYPE "SA") INSTALLED ON THE PROJECT WILL BE CONTROLLED WITH NEW LIGHTING CONTROLLER WITH NEW PHOTO CELL LOCATED AS SHOWN IN DRAWINGS.
6. EXISTING PANEL "PP1" TO BE REMOVED AND REPLACED WITH NEW 100 AMP MCB PANEL 24 CIRCUIT 240/120V 1φ 10kAIC.
7. EXISTING EXTERIOR NORTH SIDE OF RESTROOMS GFCI, JBOX AND COVER TO BE REMOVED AND REPLACED WITH LEVITON 1GM53-GY BOX WITH WM1D-SGY WEATHERPROOF COVER INSTALLED IN VANDAL STOP AA-EB-3R AS SHOWN IN DRAWINGS.
8. PULL BOXES FOR CDOT PULL BOXES 11"X18"X12".
9. PULL BOXES WILL BE INSTALLED IN GRADES WITHOUT CONCRETE WHERE POSSIBLE.
10. ALL ELECTRICAL CONDUIT SHALL BE SCHEDULE 80 PVC UNLESS NOTED OTHERWISE, TYPICAL.
11. UNLESS OTHERWISE NOTED, THE WORK DESCRIBED ON THE PLANS SHALL INCLUDE PROVIDING ALL LABOR AND MATERIALS NECESSARY FOR A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM. FURNISH ALL REQUIRED ITEMS WHETHER SUCH ARE SPECIFICALLY SHOWN OR NOT.
12. INFORMATION SHOWN ON DRAWINGS IS DIAGRAMMATIC ONLY AND SHALL NOT BE SCALED. OBTAIN VERIFY EXACT LOCATIONS, MEASUREMENTS, LEVELS, SPACE REQUIREMENTS, POTENTIAL CONFLICTS AMONG TRADES AND FOR ADJUSTING THE WORK REQUIRED BY THE ACTUAL CONDITIONS OF THE PROJECT. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDER GROUND OBSTRUCTIONS AND MAKING ALLOWANCES FOR FIELD ADJUSTMENT OF LOCATION OF LUMINARIES TO AVOID SHUT DOWN OF ANY SERVICES OR SYSTEMS THAT ARE TO REMAIN.
13. BEFORE SUBMITTING THE BID ELECTRICAL CONTRACTOR SHALL VISIT AND EXAMINE THE PREMISES AND/OR JOB SITE SO AS TO ASCERTAIN THE EXISTING CONDITIONS IN WHICH THE CONTRACTOR WILL BE OBLIGED TO OPERATE IN PERFORMING HIS PART OF THE CONTRACT TO ANTICIPATE ANY POSSIBLE SPACE RESTRICTIONS OR CONSTRAINTS THAT COULD AFFECT THE TIMELY COMPLETION OF THE ELECTRICAL WORK IN ACCORDANCE WITH THE INTENT OF THE SPECIFICATIONS AND DRAWINGS. THE ELECTRICAL CONTRACTOR SHALL REPORT TO THE THE PROJECT ENGINEER OR GENERAL CONTRACTOR ANY CONDITIONS THAT MIGHT PREVENT THE SPECIFIED ELECTRICAL WORK FROM BEING PERFORMED IN THE MANNER INTENDED. NO CONSIDERATION OR ALLOWANCE WILL BE GRANTED TO THE ELECTRICAL CONTRACTOR FOR FAILURE TO VISIT THE PROJECT SITE, OR FOR ANY ALLEGED MISUNDERSTANDING OF THE MATERIALS TO BE FURNISHED OR WORK TO BE DONE..
14. THE ELECTRICAL CONTRACTOR SHALL EXAMINE THE DRAWINGS OF ALL TRADES WHOSE WORK RELATES TO OR IS DEPENDENT ON ELECTRICAL WORK TO BECOME FULLY INFORMED OF THE EXTENT AND CHARACTER OF THEIR SPECIFIED WORK AND BE ABLE TO COORDINATE WITH OTHER TRADES WHILE AVOIDING POSSIBLE INTERFERENCE WITH THE ELECTRICAL WORK.
15. ONLY AREA LIGHTING WILL BE REPLACED ALL OTHER ITEMS POWERED BY EXISTING POWER PANEL WILL REMAIN POWERED.
16. FIELD LOCATE IRRIGATION CONTROL LINES AND AVOID AND PROTECT DURING CONSTRUCTION, TYPICAL.
17. RESTRICT OPEN TRENCHING OUTSIDE OF DRIP LINE OF EXISTING TREES TO AVOID DAMAGE TO DRIP LINE.
18. UTILIZE DIRECTIONAL BORING AT A MINIMUM DEPTH OF 36 INCHES UNDER THE CANOPY OF EXISTING TREE.
19. ADJUST LOCATION OF NEW LIGHTS WITH EXISTING TREES. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO TRENCHING.

- PP1-X ELECTRICAL CIRCUIT NUMBER (REFER TO PANEL SCHEDULES)
- UB  HEAVY DUTY, TRAFFIC RATED, FLUSH-TO-GRADE POLYMER CONCRETE SPLICE BOX WITH HEAVY DUTY, TRAFFIC RATED, BOLTED COVER. 11"X18"X12" TYPE 1.
-  UNDER GROUND BURIED RACEWAY (2#6 THWN CU AND 1#8 GND) IN 2" PVC CONDUIT (UNLESS NOTED OTHERWISE ON PLANS) IN 24" DEEP TRENCH, BURY AND COMPACTED BACKFILL TO PRE CONSTRUCTION CONDITION.
-  INSTALL POST TOP MOUNTED PEDESTRIAN STANDARD AS SPECIFIED.



TYPICAL SECONDARY ELECTRICAL TRENCH DETAIL

NOT TO SCALE



REVISION	DESCRIPTION	DATE	DRAWN BY	DATE	SCALES:
REVISION Δ			AJM	4/19/23	
REVISION Δ			AJM	4/19/23	
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PUBLIC WORKS
ENGINEERING DIVISION

WHITMAN PARK LIGHTING
GENERAL NOTES

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Schedule of Lighting Devices

ITEM No.				613-30003	613-40012	
DESCRIPTION				LIGHT STANDARD AND LUMINAIRE LED (PEDESTRIAN)	LIGHT STANDARD FOUNDATION SPECIAL	NOTES
				EACH	EACH	
SHEET NO.	TYPE	EAST	NORTH	PLAN	PLAN	
E4	SA-1	90958.23	34780.95	1	1	1,2,3
E4	SA-10	90965.31	34904.47	1	1	1,2,3
E4	SA-11	91043.34	34904.99	1	1	1,2,3
E4	SA-12	91108.40	34904.99	1	1	1,2,3
E4	SA-13	90852.19	34961.30	1	1	1,2,3
E4	SA-15	91198.23	35024.77	1	1	1,2,3
E4	SA-16	90958.69	34977.31	1	1	1,2,3
E4	SA-17	90878.23	35024.77	1	1	1,2,3
E4	SA-18	90958.23	35034.77	1	1	1,2,3
E4	SA-19	91038.23	35034.77	1	1	1,2,3
E4	SA-2	91038.23	34780.95	1	1	1,2,3
E4	SA-20	91118.23	35034.77	1	1	1,2,3
E4	SA-3	91118.23	34780.95	1	1	1,2,3
E4	SA-3	91198.87	34960.71	1	1	1,2,3
E4	SA-4	91198.19	34787.46	1	1	1,2,3
E4	SA-5	90881.89	34788.81	1	1	1,2,3
E4	SA-5	91095.76	34971.27	1	1	1,2,3
E4	SA-6	91105.95	34840.41	1	1	1,2,3
E4	SA-7	90980.47	34843.19	1	1	1,2,3
E4	SA-8	90852.19	34846.10	1	1	1,2,3
E4	SA-9	91203.67	34850.35	1	1	1,2,3
TABLE TOTALS				21	21	

SCHEDULE OF LIGHTING DEVICES NOTES:

- FOUNDATION TOP HEIGHT EQUAL TO ADJACENT SIDEWALK
- LUMINAIRE LED(78 WATT) IS TO BE INCLUDED IN THE COST OF PAY ITEM 613-30005 LIGHT STANDARD AND LUMINAIRE (PEDESTRIAN)
- FOUNDATION TOP HEIGHT AS SHOWN IN DETAIL.

GENERAL NOTES:

- EACH LIGHT TO HAVE A PULL BOX "UB", REFERENCE ELECTRICAL SHEETS.

Tabulation of Approximate Quantities

Item No.	Ref. No.	Construction Note Description	Quantity	Unit	NOTES
1		2 Inch Electrical Conduit (Plastic)	2229	LF	
2		Type two Pull Box(Electric)	24	EA	
3		Wiring	1	LS	
4		Light Standard and Luminaire (Pedestrian)	21	EA	
5		Light Standard Foundation (Special)	21	EA	
6		PP1 POWER PANEL	1	EA	
7		LIGHTING CONTROLLER	1	EA	
8		LEVITON 1GM53-GY BOX WITH WM1D-SGY	2	EA	
9		VANDAL STOP AA-EB-3R	1	EA	
SUMMARY NOTES:					



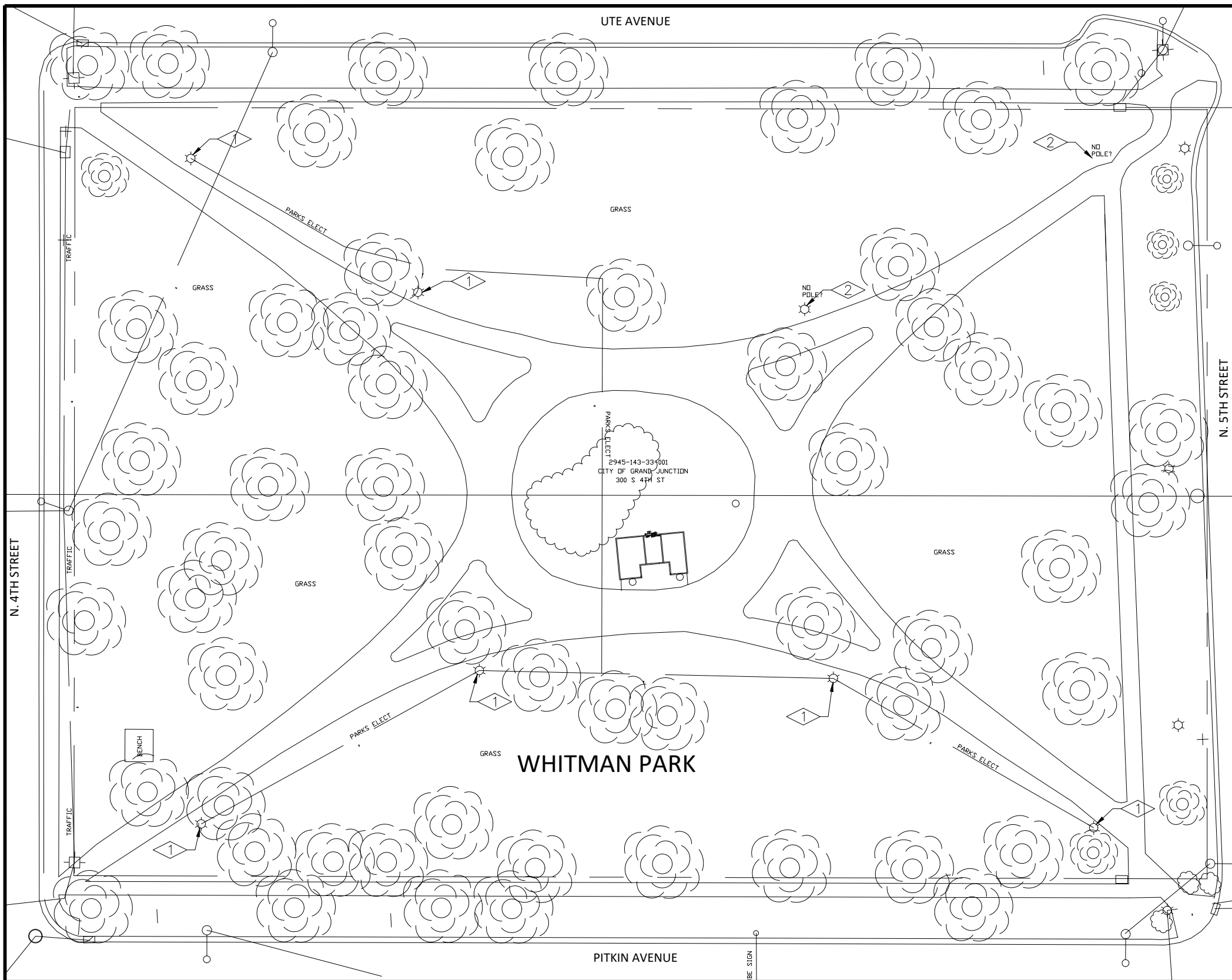
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REVISION Δ			APPROVED BY	EM	DATE	4/19/23



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WHITMAN PARK LIGHTING
QUANTITIES SCHEDULES



FLAG NOTES:

- ① REMOVE EXISTING LIGHT, POLE AND PEDESTAL. ABANDON EXISTING WIRING.
- ② EXISTING LIGHT/POLE AND PEDESTAL HAS PREVIOUSLY BEEN REMOVED. ABANDON EXISTING WIRING.

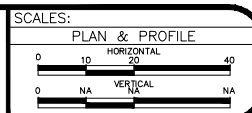
EXISTING LIGHTING PLAN

SCALE: 1"=40'



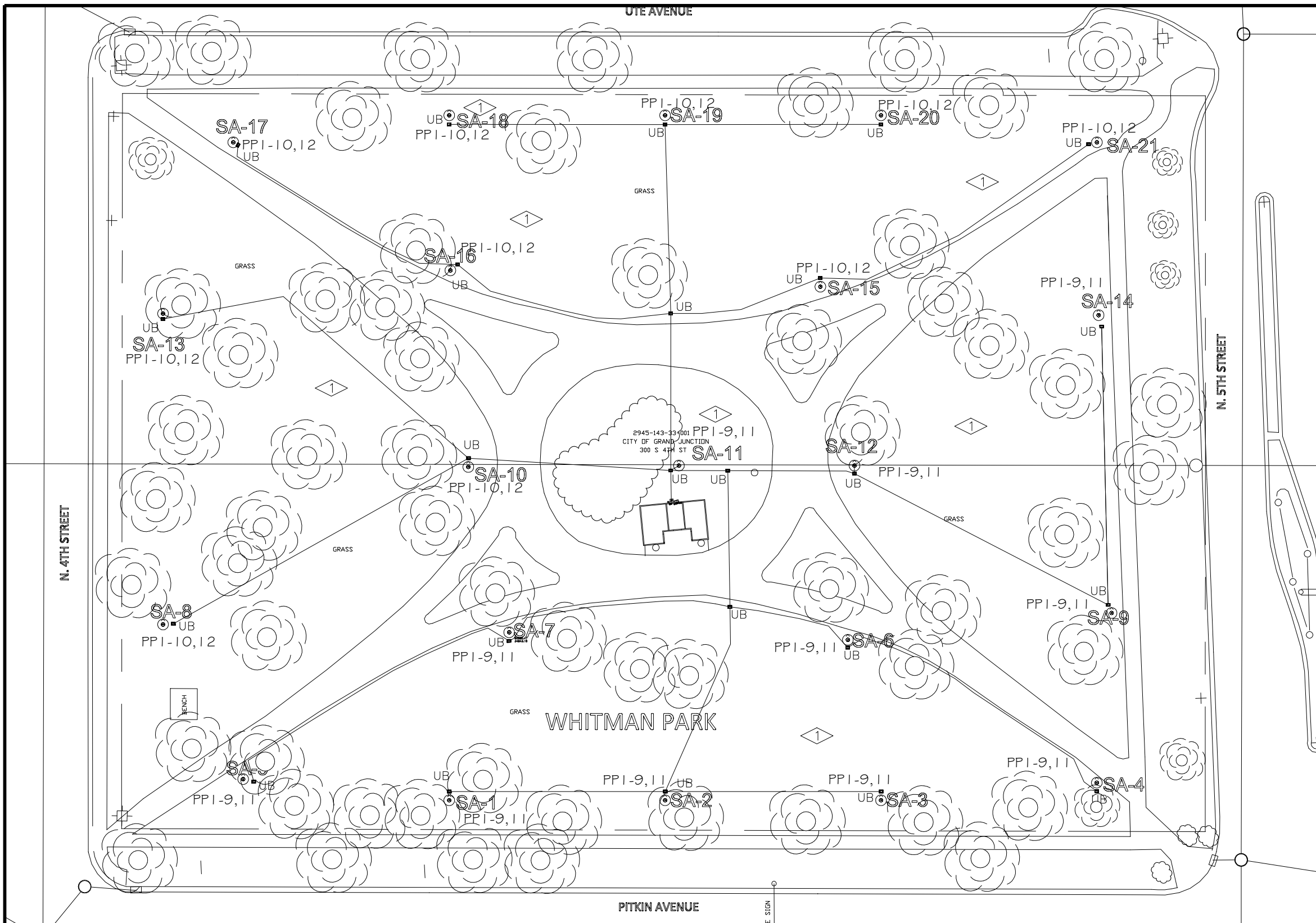
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REVISION 2										
REVISION 3										
REVISION 4										



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ENGINEERING DIVISION

WHITMAN PARK LIGHTING
EXISTING LIGHTING PLAN



FLAG NOTES:
 1 PROVIDE NEW LIGHT, POLE, J-BOX AND PEDESTAL, TYPICAL.

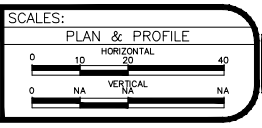


- GENERAL NOTES:
- POWER CIRCUIT AS SHOWN ON DRAWING, TYPICAL.
 - LIGHT TO BE ORIENTED TO BE PERPENDICULAR TO SIDEWALK AND SHINE ON SIDEWALK, TYPICAL.
 - NEW 2" CONDUIT AND PROVIDE 2-#6 THWN + #10 GND IN 2" PVC SCHEDULE 80 CONDUIT BETWEEN PULL BOXES UNLESS SHOWN OTHERWISE, TYPICAL.

- FIELD LOCATE IRRIGATION CONTROL LINES AND AVOID AND PROTECT DURING CONSTRUCTION, TYPICAL.
- RESTRICT OPEN TRENCHING OUTSIDE OF DRIP LINE OF EXISTING TREES TO AVOID DAMAGE TO DRIP LINE.
- UTILIZE DIRECTIONAL BORING AT A MINIMUM DEPTH OF 36 INCHES UNDER THE CANOPY OF EXISTING TREE.
- ADJUST LOCATION OF NEW LIGHTS WITH EXISTING TREES. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO TRENCHING.

NEW LIGHTING PLAN
 SCALE: 1"=40'

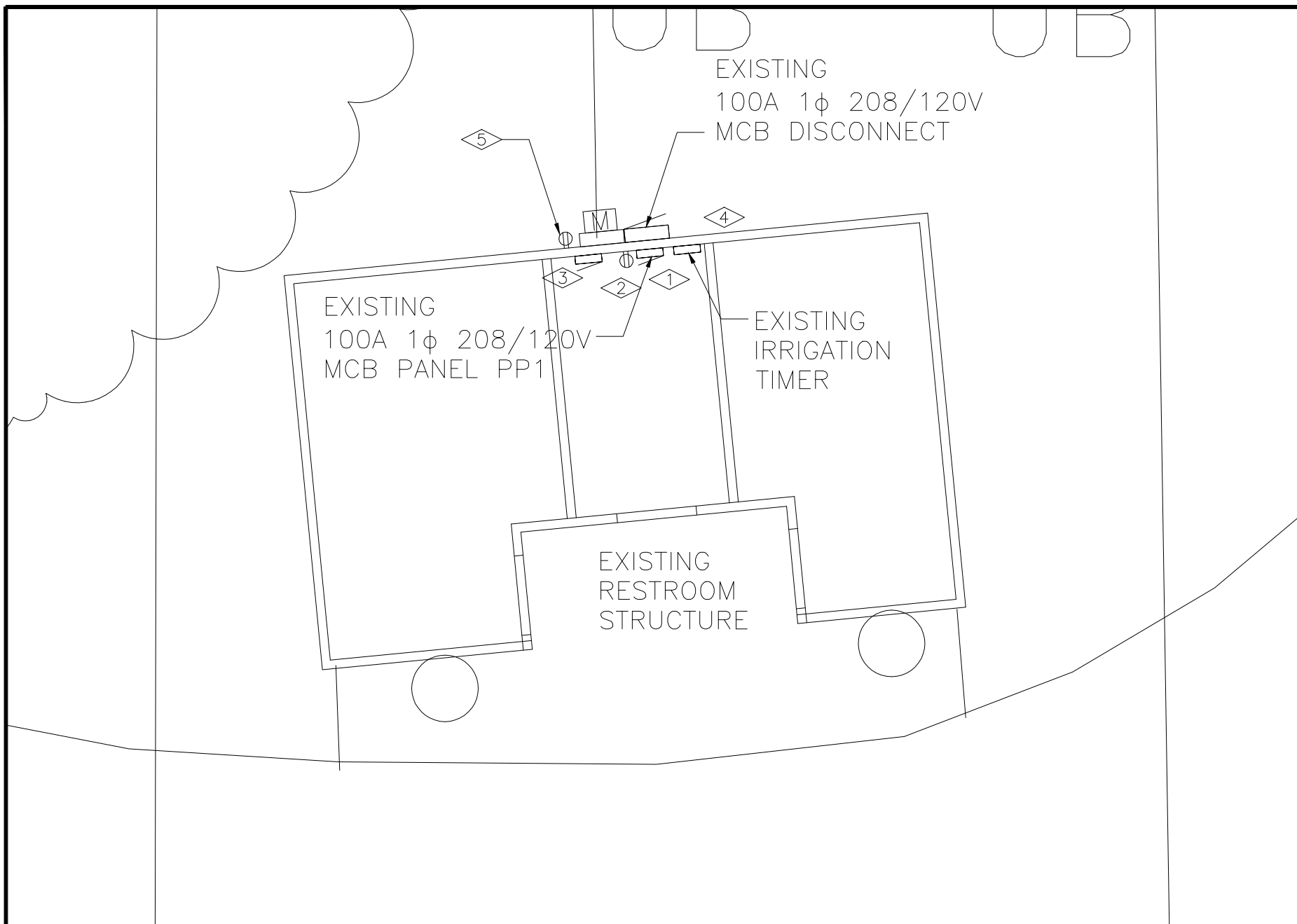
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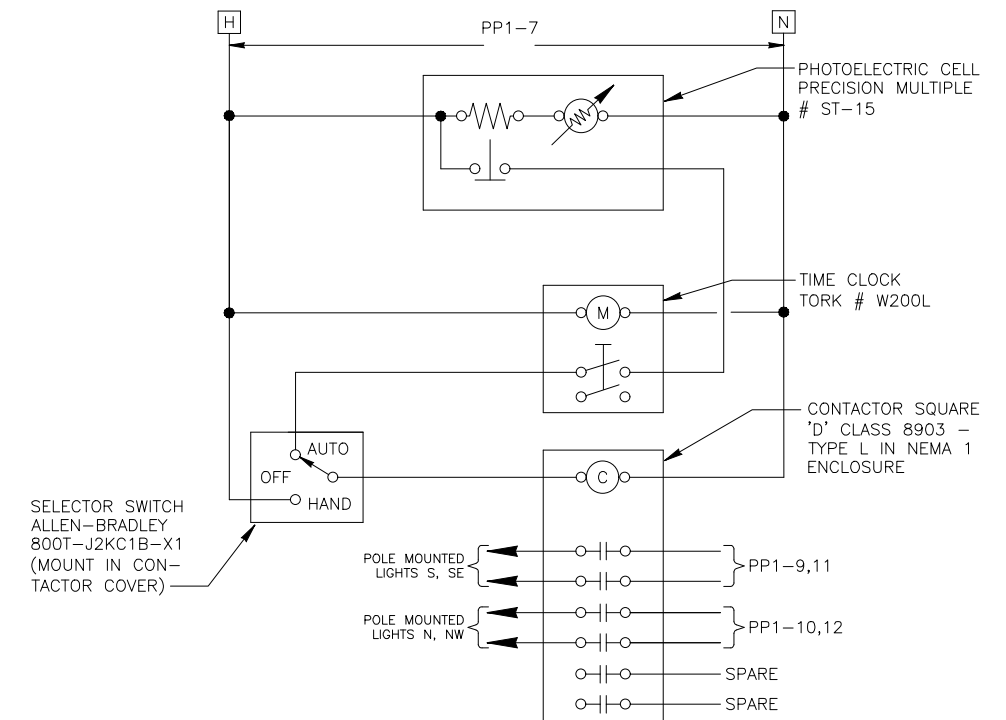
WHITMAN PARK LIGHTING
 NEW LIGHTING PLAN

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FLAG NOTES:

- ① REMOVE AND REPLACE EXISTING POWER PANEL WITH NEW 100 AMP MCB PANEL 24 CIRCUIT 240/120V 1φ 10kAIC.
- ② REMOVE AND REPLACE EXISTING GFCI RECEPTACLE WITH NEW GFCI RECEPTACLE.
- ③ PROVIDE NEW NEMA 3R LOCKABLE ENCLOSURE FOR TIME CLOCK AND CONTACTORS.
- ④ MOUNT NEW PHOTOCELL ON ROOF WITH OF NORTHERN SIDE OF BUILDING, FIELD VERIFY THAT PHOTO CELL IS NOT OBSTRUCTED. MOUNT AT MINIMUM OF 10' AFG.
- ⑤ REMOVE AND REPLACE WP GFCI WITH NEW WP GFCI IN LEVITON 1GM53-GY BOX WITH WM1D-SGY WEATHERPROOF COVER INSTALLED IN VANDAL STOP AA-EB-3R OUTDOOR ELECTRICAL OUTLET SECURITY BOX.



TYPICAL LIGHTING CONTROL SCHEMATIC

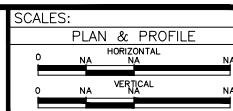
NOT TO SCALE

NEW ELECTRICAL PLAN
SCALE: N.T.S.



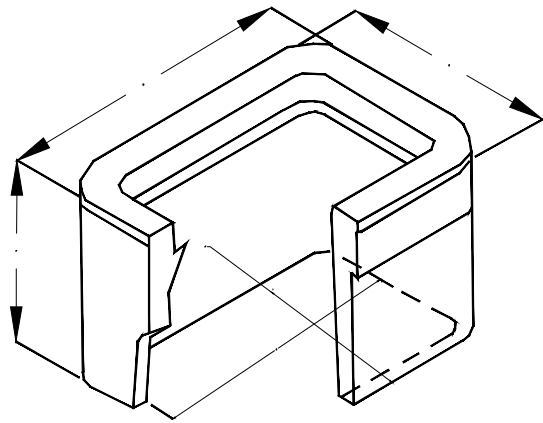
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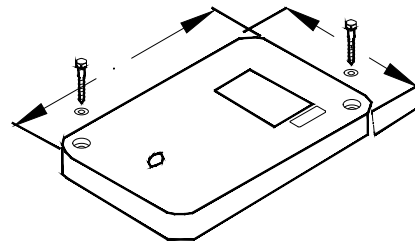


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WHITMAN PARK LIGHTING
NEW ELECTRICAL PLAN

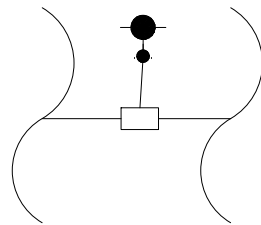


- A 18-1/8"
- B 11-1/4"
- C 1-1/4"
- D 20-1/2"
- E 13-3/8"
- F 12"
- G 15-3/4"
- H 8-7/8"

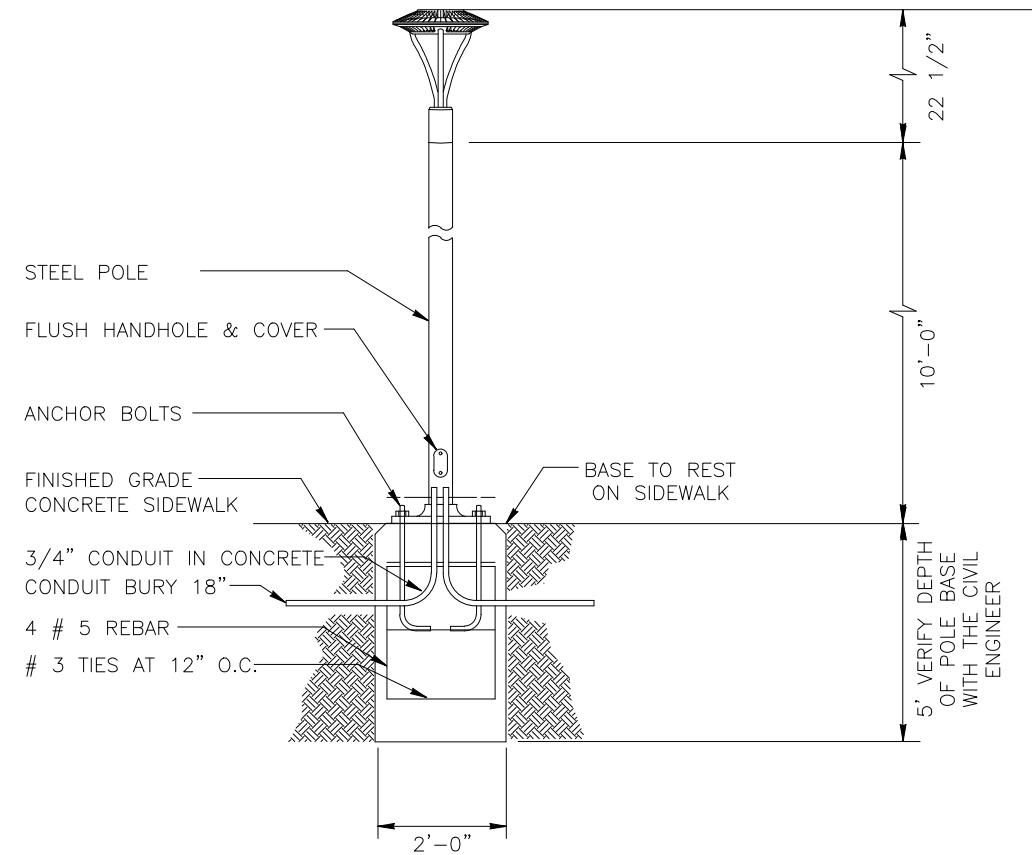


- PULL BOXES, PULL BOX COVERS AND EXTENSIONS SHALL BE MADE OF FIBERGLASS REINFORCED POLYMER CONCRETE. PULL BOXES SHALL BE VERIFIED BY A 3RD PARTY NATIONALLY RECOGNIZED INDEPENDENT TESTING LABORATORY AS MEETING ALL TEST PROVISIONS OF THE LATEST ANSI/SCTE 77 SPECIFICATION FOR UNDERGROUND ENCLOSURE INTEGRITY, TIER 22 RATING. CERTIFICATION DOCUMENTS SHALL BE SUBMITTED WITH MATERIALS SUBMITTALS. THE PULL BOX SHALL HAVE A DETACHABLE COVER WITH A SKID RESISTANT SURFACE AND HAVE THE WORDS ELECTRICAL CAST INTO THE SURFACE. PAINTING THE WORDS SHALL NOT BE ACCEPTED. MARKINGS SHOWING THE TIER 22 RATING MUST BE LABELED OR STENCILED ON THE INSIDE AND OUTSIDE OF THE BOX AND THE ON THE UNDER SIDE OF THE COVER. THE COVER SHALL BE ATTACHED TO THE PULL BOX BODY BY MEANS OF A MINIMUM 3/8" - 7 UNIFIED NATIONAL COURSE (UNC) STAINLESS STEEL PENTA HEAD BOLTS AND SHALL HAVE TWO LIFT SLOTS TO AID IN THE REMOVAL OF THE LID.
- PULL SLOTS SHALL BE RATED FOR A MINIMUM PULL OUT OF 3,000 POUNDS. MAGNESIUM CHLORIDE TESTS SHOULD BE PERFORMED IN ACCORDANCE WITH THE LATEST ANSI/SCTE 77 SPECIFICATION FOR UNDERGROUND ENCLOSURE INTEGRITY, TIER 22 RATING.
- PROVIDE AT LEAST 6 INCHES OF PEA GRAVEL MEASURED FROM BOTTOM OF PULL BOX FOR DRAINAGE. PEA GRAVEL IS INCLUDED IN PULL BOX PAY ITEM.

C UTILITY BOX DETAIL
1 NOT TO SCALE



C UTILITY BOX CONNECTION DETAIL
2 NOT TO SCALE



TYPE SA LIGHT DETAIL
NOT TO SCALE

GENERAL NOTES:

- ELECTRICAL CONTRACTOR TO ORDER ALL REQUIRED HARDWARE FOR MOUNTING OF EACH LUMINARIES.
- VERIFY THE BURY DEPTH AND DIAMETER OF THE SONOTUBE FOR POLE LUMINARIES WITH THE CIVIL ENGINEER PRIOR TO PURCHASING THE EQUIPMENT. DEPTH WILL DEPEND ON SOIL CONDITIONS. TYPICAL CONCRETE DEPTH IS 6 FT. VERIFY WITH CIVIL ENGINEER.
- ELECTRICAL CONTRACTOR TO VERIFY THAT ALL FIXTURES TO COMPLY WITH LIGHT TRESPASS AND DARK SKY CODES.
- NOTIFY ENGINEER OF ANY OBSTRUCTIONS TO POLE PLACEMENT IMMEDIATELY BEFORE PROCEEDING.
- VERIFY REQUIRED VOLTAGE OF FOR EACH LUMINARIES WITH AVAILABLE VOLTAGES PRIOR TO ORDERING.

LUMINAIRE SCHEDULE

TYPE	MANUFACTURER MODEL NUMBER	APPROVAL	VOLTAGE MOUNTING # OF LAMPS	BALLAST LAMPE TYPE LAMP CAT. #	DESCRIPTION
SA	RAB LIGHTING ALED-5T-78-N-USA	OWNER REQUESTED	UNV POLE 1	ELECTRONIC LED 78 W	PEDESTRIAN LUMINAIRE, POST TOP MOUNTED, LED,. COLOR OF POLE AND LUMINAIRE TO MATCH, POLE #PS4-11-10WT.



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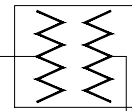
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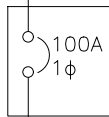
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WHITMAN PARK LIGHTING
COMPOSITE UTILITY PLAN

EXISTING XFMR 50KVA
240/120 VOLT, 1PH
XCEL ENERGY

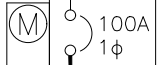
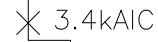


①



EXISTING 100A, 1φ,
240/120V NEMA 3R
DISCONNECT TO REMAIN
AND BE REUSED

①



①

②

NEW 100A 240/120V
1PH, 3W, 24CKT, 10kAIC
NEMA 3R

① EXISTING 1 SET(S)[2" PVC
(2-#3(CU,THWN)+1#8(CU)GND)]

FLAG NOTES:

- ① REMOVE AND REPLACE EXISTING PANEL PP1 WITH NEW 100A 240/120V 1PH, 3W, 24CKT, 10kAIC NEMA 3R
- ② PROVIDE NEW PANEL AND BREAKERS AS SHOWN IN PANEL SCHEDULE DRAWING, TYPICAL.

ONE-LINE DIAGRAM
A
1 NOT TO SCALE

GENERAL NOTES:

1. IN AS MUCH AS DESIGN REQUIRES THAT CERTAIN ASSUMPTIONS BE MADE REGARDING EXISTING CONDITIONS, AND BECAUSE SOME OF THESE ASSUMPTIONS CANNOT BE VERIFIED. FIELD COORDINATION DURING CONSTRUCTION SERVICES IS IMPERATIVE. CONTRACTORS BIDDING THIS WORK MUST MAKE REASONABLE ALLOWANCES FOR UNFORESEEN CONTINGENCIES.
2. THE SERVING ELECTRICAL ASSOCIATION SHALL ADVISE THE OWNER/ENGINEER PRIOR TO SERVICE MODIFICATION REQUIRING COST TO THE OWNER.
3. COORDINATE INSTALLATION WITH XCEL ENERGY PRIOR TO ROUGH-IN.
4. REFERENCE CIVIL, LANDSCAPE AND IRRIGATION DRAWING PLANS FOR COORDINATION AND LOCATION OF ALL UNDER GROUND SYSTEMS.
5. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES AS REQUIRED: REFERENCE CIVIL LANDSCAPE AND IRRIGATION DRAWINGS.
6. ALL WIRING IS SHOWN DIAGRAMMATICALLY ON DRAWINGS, FIELD VERIFY ALL CONDITIONS PRIOR TO ROUGH-IN.
7. ALL ELECTRICAL WORK SHALL COMPLY WITH THE LATEST EDITION OF NATIONAL ELECTRICAL CODE AND ALL APPLICABLE LOCAL CODES.
8. CONDUCTOR COUNT IS SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL ENSURE THAT ANY AND ALL DEVICES AND EQUIPMENT ARE CIRCUITED PROPERLY. CONTRACTOR SHALL ENSURE THAT NO EQUIPMENT OR DEVICES ARE COMBINED OTHER THAN WHAT IS DEPICTED.
9. FIELD VERIFY ALL DIMENSIONS, DO NOT SCALE DRAWINGS.
10. COORDINATE INSTALLATION OF METER AND ELECTRICAL REQUIREMENTS WITH XCEL ENERGY.
11. PEDESTAL MUST MEET ALL XCEL ENERGY REQUIREMENTS I.E. COLD SEQUENCE PADLOCK SLIP LATCH ON METER COVER, HOLD OPEN BAR ON METER HOOD.



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PUBLIC WORKS
ENGINEERING DIVISION

WHITMAN PARK LIGHTING
ONE-LINE PLAN

PANEL: PP1		DC DEVICE TYPE: Breaker		ENCLOSURE: NEMA 1		MAINS(A): BKR		CONTINUOUS(A): 100	
LOCATION: BUS-XFMR		DEVICE FAMILY: Bolt On		MOUNTING: Free Standing		WIRING: Single-Phase 3-Wire		BUS SC RATING(A): 10000	
				VOLTAGE: 240/120					

DC AMPS P	NOTES	DESCRIPTION	DEMAND CODE	VA	CKT	PHASE A	LOADS B	VA C	CKT	VA	DEMAND CODE	DESCRIPTION	NOTES	DC AMPS P
20 1		LTS-MECH	LTS	600	1	1200			2	600	GENERAL	CONTACTOR		20 1
20 1		LTS-POLE	LTS	1200	3		1800		4	600	GENERAL	SPRINKLER CNTRL		20 1
20 1		LTS-POLE	LTS	1200	5		1800		6	600	RECEPTA	RCPT-GFCI		20 1
20 1		LTS-POLE	LTS	1200	7				8	600	RECEPTA	1 POLE	2	20 1
					9				10					
					11				12					
					13				14					
					15				16					
					17				18					
					19				20					
					21				22					
					23				24					

ALL CONNECTED	KVA	3P AVE AMPS	* PHASE TOTALS	VA	AMPS	BUS TOTALS	KVA
TOTAL CONNECTED	6.60	15.9	* A-N	3000.0	25.0	CONNECTED	9.10
TOTAL DEMAND	7.65	18.4	* B-N	3600.0	30.0	DEMAND	10.14
TOTAL DESIGN	8.96	21.6	* C-N	0.0	0.0	DESIGN	11.45

EXISTING PANEL SCHEDULE DETAIL

NOT TO SCALE

PANEL: PP1		DC DEVICE TYPE: Breaker		ENCLOSURE: NEMA 1		MAINS(A): BKR		CONTINUOUS(A): 100	
LOCATION: BUS-XFMRO		DEVICE FAMILY: Bolt On		MOUNTING: Free Standing		WIRING: Single-Phase 3-Wire		BUS SC RATING(A): 10000	
				VOLTAGE: 240/120				FAULT CURRENT(A): 3597	
				INCIDENT ENERGY: 2.57 Cal/cm2 @18.00(in)					

DC AMPS P	NOTES	DESCRIPTION	DEMAND CODE	VA	CKT	PHASE A	LOADS B	VA C	CKT	VA	DEMAND CODE	DESCRIPTION	NOTES	DC AMPS P
20 1		LTS-MECH	LTS	600	1	1200			2	600	GENERAL	CONTACTOR		20 1
20 1		SPARE	SPARE	0	3		600		4	600	GENERAL	SPRINKLER CNTRL		20 1
20 1		SPARE	SPARE	0	5		600		6	600	RECEPTA	RCPT-GFCI		20 1
20 1		LTG CONTROLLER	SPARE	600	7		2400		8	600	RECEPTA	1 POLE		20 1
20 2		LTS-S, SE	LTS	390	9		819		10	429	LTS	LTS N, NW		20 2
					11				12	429				20 2
					13				14					
					15				16					
					17				18					
					19				20					
					21				22					
					23				24					

ALL CONNECTED	KVA	3P AVE AMPS	* PHASE TOTALS	VA	AMPS	BUS TOTALS	KVA
TOTAL CONNECTED	6.44	15.5	* A-N	2619.0	21.8	CONNECTED	8.94
TOTAL DEMAND	7.00	16.8	* B-N	3819.0	31.8	DEMAND	9.49
TOTAL DESIGN	7.70	18.5	* C-N	0.0	0.0	DESIGN	10.19

NEW PANEL SCHEDULE DETAIL

NOT TO SCALE

FLAG NOTES:

- ① PROVIDE NEW PANEL AND BREAKERS, TYPICAL.
- ② TRACE ALL CIRCUITS AND PROVIDE NEW LIGHTING SCHEDULE, TYPICAL.
- ③ MAINTAIN AND EXTEND ALL EXISTING FEEDS TO NEW PANEL, TYPICAL.



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REVISION △	DESCRIPTION	DATE	DRAWN BY	AJM	DATE	4/19/23	SCALES:
REVISION △			DESIGNED BY	AJM	DATE	4/19/23	
REVISION △			CHECKED BY	AJM	DATE	4/19/23	
REVISION △			APPROVED BY	EM	DATE	4/19/23	



PUBLIC WORKS
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PANEL SCHEDULES PLAN