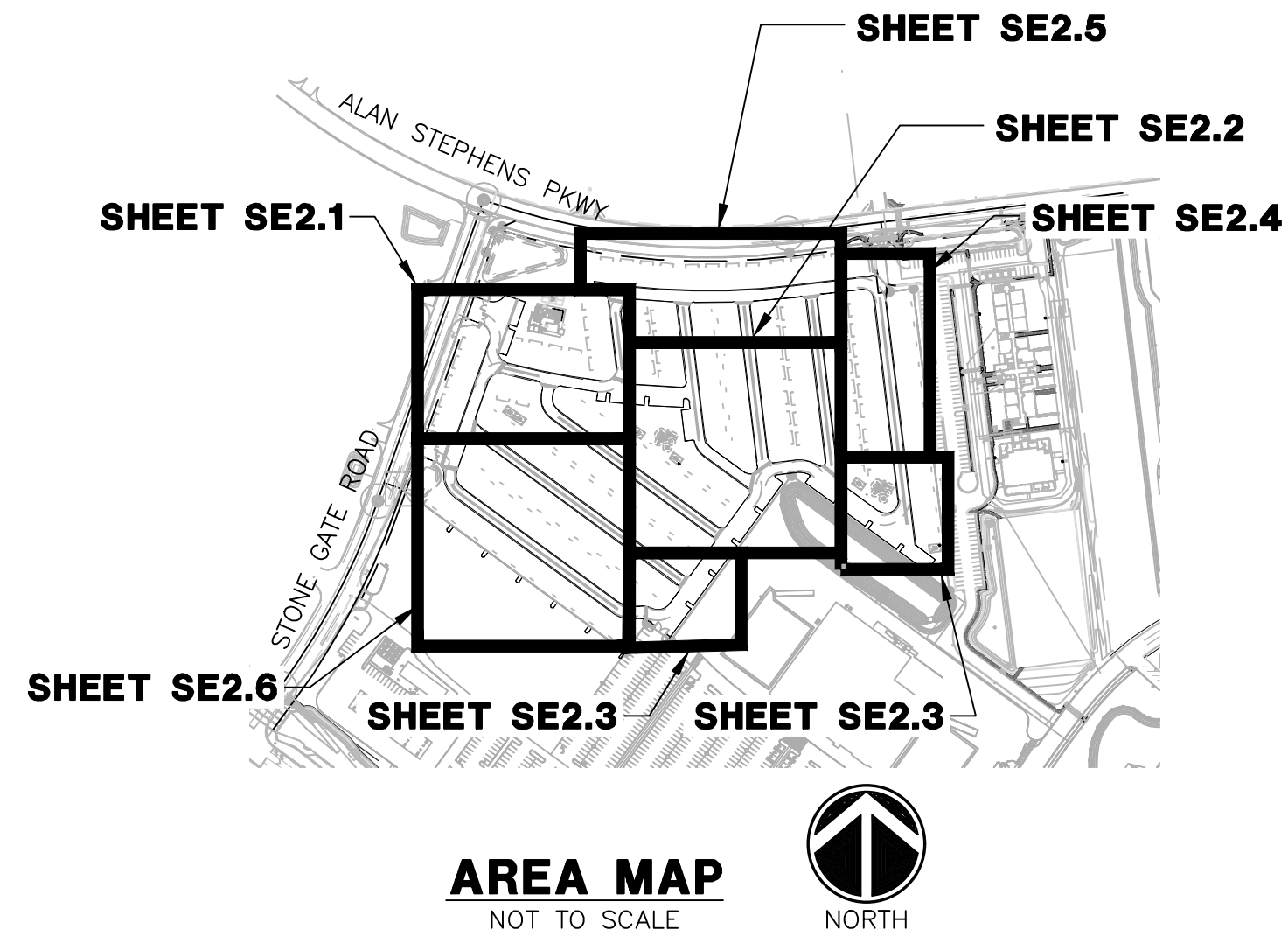
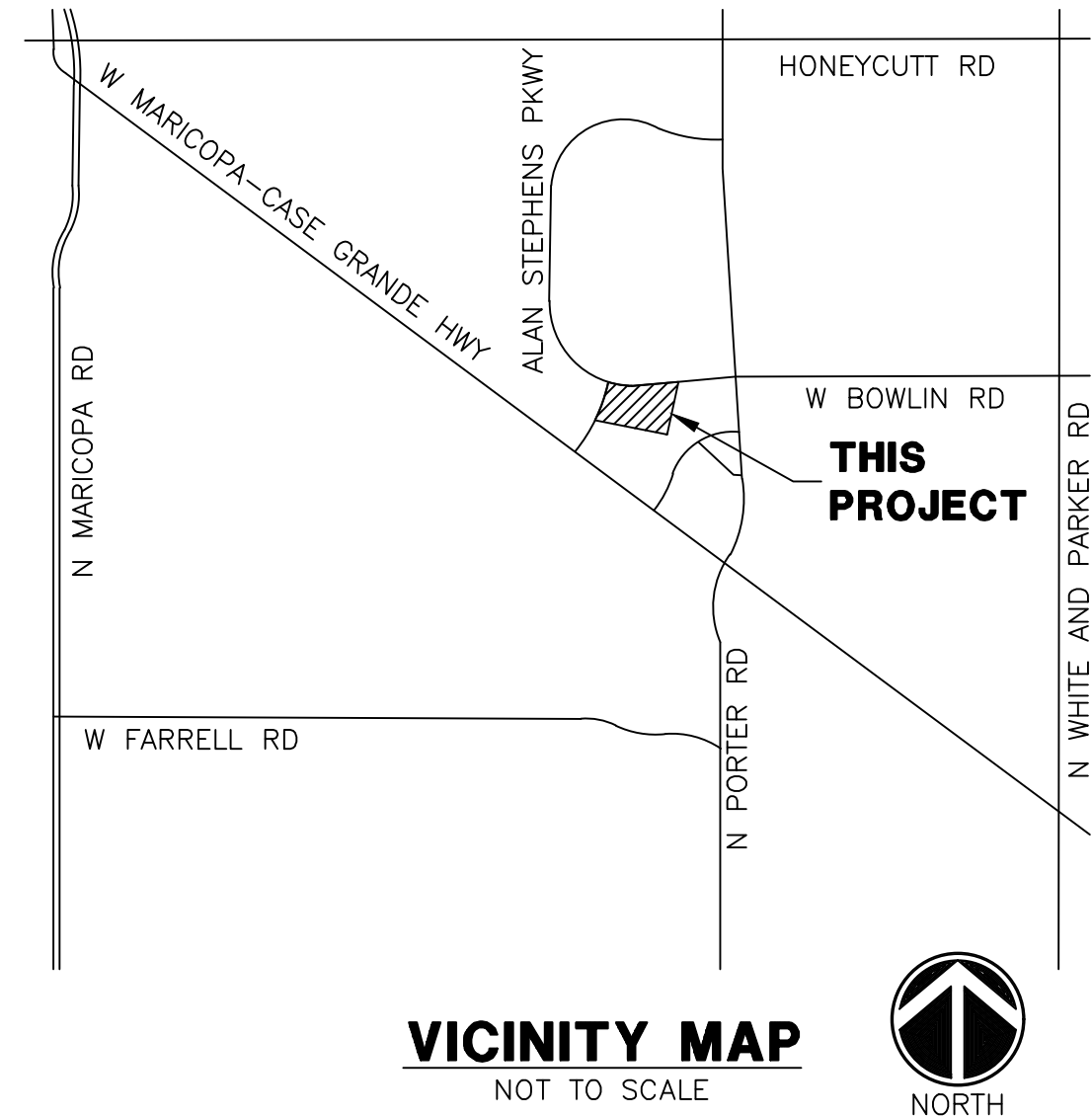


VILLAS AT STONEGATE
SITE ELECTRICAL PLAN
MARICOPA, ARIZONA

- ELECTRICAL WORK SHALL COMPLY WITH THE NATIONAL ELECTRIC CODE (LATEST EDITION), FEDERAL, STATE AND LOCAL JURISDICTION CODES.
- ALL WORK SHALL BE DONE IN A NEAT, WORKMANLIKE, FINISHED AND SAFE MANNER, ACCORDING TO THE LATEST PUBLISHED NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION STANDARDS OF INSTALLATION, UNDER COMPETENT SUPERVISION.
- VISIT THE SITE PRIOR TO BIDDING TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND ALL OTHER FACTORS WHICH MAY AFFECT THE EXECUTION OF THIS WORK. INCLUDE ALL RELATED COSTS IN THE INITIAL BID PROPOSAL.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATIONS OF ALL EXISTING UTILITIES AND AVOIDING DAMAGE TO SAME. CONTRACTOR TO CALL 811 FOR BLUE STAKE. FOR ALL MUNICIPAL OR PRIVATELY OWNED UTILITIES EXISTING WITHIN LIMITS OF WORK OF PROJECT, CONTRACTOR TO PRIVATELY LOCATE UTILITIES. IRRIGATION LINES LESS THAN 2" WILL NOT TYPICALLY BE MARKED AND CAUTION SHOULD BE USED TO AVOID DAMAGE. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ALL UTILITIES CAUSED AS A RESULT OF CONTRACT WORK, ALL DAMAGES TO BE REPAIRED IN KIND.
- CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO EXISTING WALKS, WALLS, DRIVES, CURBS, ETC. DAMAGES SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
- PROPER PROTECTION OF THE CONSTRUCTION AREA FOR SAFETY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. COVER ALL TRENCHES AT THE END OF EACH WORK DAY. BARRICADES SHALL BE INSTALLED AS DIRECTED BY THE OWNER OR THE PROJECT INSPECTOR. THE SITE AND ALL WORK SHALL CONFORM TO OSHA REQUIREMENTS.
- ALL EXISTING LANDSCAPE, HARDSCAPE AND SPRINKLER SYSTEMS DAMAGED OR DISTURBED DURING THE CONSTRUCTION OF THIS PROJECT BY THE CONTRACTOR SHALL BE REPLACED IN KIND.
- CONTRACTOR SHALL PAY FOR PERMITS AND INSPECTIONS AS MAY BE REQUIRED AND PROVIDE A CERTIFICATE OF INSPECTION TO THE OWNER.
- PROTECT ALL MATERIAL AND EQUIPMENT INSTALLED AGAINST DAMAGE BY OTHER TRADES. WEATHER CONDITIONS OR ANY OTHER CAUSES. EQUIPMENT FOUND DAMAGED OR IN OTHER THAN NEW CONDITION WILL BE REJECTED AS DEFECTIVE. ALL COMPONENTS SHALL BE FREE OF DUST, GRIT AND FOREIGN MATERIALS, AND LEFT AS NEW BEFORE FINAL ACCEPTANCE OF WORK.
- LEAVE THE SITE CLEAN, REMOVE ALL DEBRIS, EMPTY CARTONS, TOOLS, CONDUIT, WIRE SCRAPS AND ALL MISCELLANEOUS SPARE EQUIPMENT AND MATERIALS USED IN THE WORK DURING CONSTRUCTION.
- ALL UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC, BURIED 24" MINIMUM BELOW FINISHED GRADE, UNLESS SPECIFICALLY NOTED OTHERWISE ON PLANS OR IN DETAILS.
- PROVIDE EMT INDOOR AND GRS OUTDOOR FOR ABOVE GROUND CONDUIT. WHERE METALLIC CONDUITS COME IN CONTACT WITH DIRT, THEY SHALL BE HALF LAP WRAPPED WITH SCOTCH 50 TAPE TO 12" AFG. FITTINGS SHALL BE STEEL, THREADED TYPE WITH INSULATED THROATS. SECURELY ATTACH ALL SURFACE MOUNTED CONDUIT EVERY 10 FEET AND WITHIN 3 FEET OF EACH JUNCTION BOX, PER NEC ARTICLE 344.30.
- MINIMUM CONDUIT SIZE SHALL BE 3/4" UNLESS SPECIFICALLY NOTED OTHERWISE ON PLANS OR IN DETAILS.
- ALL FEEDERS AND BRANCH CIRCUIT WIRE SHALL BE COPPER TYPE XHHW (75 DEGREE C) FOR BELOW GRADE INSTALLATIONS (AND CONDUIT RISERS) AND THHN/THWN (75 DEGREE C) FOR ABOVE GRADE INSTALLATIONS. MINIMUM SIZE SHALL BE #12 AWG, UNLESS SPECIFICALLY NOTED OTHERWISE ON PLANS OR IN DETAILS. ALL WIRING SHALL BE IN CONDUIT. ALL CONDUCTORS SHALL BE NEW UNLESS NOTED OTHERWISE IN PLANS.
- A SEPARATE GREEN INSULATED EQUIPMENT GROUNDING CONDUCTOR (BOND) SHALL BE INSTALLED WITHIN EACH RACEWAY, INCLUDING WITHIN EMT CONDUIT. EQUIPMENT GROUNDING CONDUCTOR SHALL BE SIZED PER NEC TABLE 250.122.
- WHEN A PANEL IS SUPPLIED BY A FEEDER OR BRANCH CIRCUIT, ANY INSTALLED GROUNDED CONDUCTOR SHALL NOT BE CONNECTED TO THE EQUIPMENT GROUNDING CONDUCTOR (GEC) OR TO THE GROUNDING ELECTRODE(S) PER NEC ARTICLE 250.32(B).
- BOND ALL ENCLOSURES PER NEC ARTICLE 250.96.
- CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, ETC. NECESSARY FOR A COMPLETE AND WORKABLE ELECTRICAL SYSTEM WHETHER OR NOT THESE ITEMS ARE SPECIFICALLY NOTED ON THESE DRAWINGS. INCIDENTAL ITEMS NOT INDICATED ON THE DRAWINGS, NOR MENTIONED IN SPECIFICATIONS THAT CAN BE LEGITIMATELY AND REASONABLY INFERRED TO BELONG TO THE WORK DESCRIBED OR BE NECESSARY IN GOOD PRACTICE TO PROVIDE A COMPLETE SYSTEM, SHALL BE FURNISHED AND INSTALLED AS THOUGH ITEMIZED HERE IN EVERY DETAIL.
- CONTRACTOR IS RESPONSIBLE FOR AND SHALL PROVIDE ALL LABOR, MATERIAL, TRENCHING, CONDUIT, TRANSFORMER PAD AND OTHER REQUIRED EQUIPMENT PER UTILITY COMPANY PLANS AND SPECIFICATIONS NECESSARY FOR A COMPLETE UNDERGROUND CONDUIT SYSTEM FROM THE UTILITY POINT OF SERVICE TO THE UTILITY CO. TRANSFORMER AND FROM THE UTILITY CO. TRANSFORMER TO THE ELECTRICAL SERVICE ENTRANCE SECTION.
- ALL TRENCHING, CONDUITS, ETC. SHALL BE ROUTED AND INSTALLED IN SUCH A MANNER THAT WILL NOT DAMAGE EXISTING FACILITIES. SHOULD DAMAGE OCCUR, IT WILL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR DAMAGE TO THE SATISFACTION OF THE OWNER OR INSPECTOR.
- ALL CONDUIT RUNS SHOWN ON THIS PLAN ARE SCHEMATIC IN NATURE. THE CONTRACTOR SHALL MAKE SURE THAT ALL CONDUIT, ETC. FALLS WITHIN THE CONSTRUCTION AREA/RIGHT OF WAY. (THIS INCLUDES MAINTAINING ALL REQUIRED CLEARANCES.)
- WHEN CROSSING PATHWAYS OR SIDEWALKS, CONTRACTOR SHALL BORE UNDER EXISTING CONCRETE WALKS AND SAWCUT ASPHALT WALKS. ASPHALT WALKS SHALL BE REPLACED IN KIND.
- CONTRACTOR SHALL GUARANTEE WORK INSTALLED UNDER THE CONTRACT TO BE FREE FROM DEFECTIVE WORKMANSHIP AND MATERIALS, USUAL WEAR EXCEPTED, AND SHOULD ANY SUCH DEFECTS DEVELOP WITHIN A PERIOD OF ONE YEAR AFTER ACCEPTANCE OF THE PROJECT BY THE OWNER, THE CONTRACTOR SHALL REPAIR AND/OR REPLACE ANY DEFECTIVE ITEMS AND DAMAGE RESULTING FROM FAILURE OF THESE ITEMS, AT NO EXPENSE WHATSOEVER TO THE OWNER.
- CONTRACTOR SHALL IDENTIFY SERVICE ENTRANCE SECTION MAIN SERVICE DISCONNECT(S) WITH 3/32-INCH THICK LAMINATED PHENOLIC TYPE NAMEPLATES WITH 1/4-INCH MINIMUM HEIGHT LETTERS. NAMEPLATE TO BE BLACK MATTE FINISH SURFACE WITH WHITE LETTER ENGRAVING. ATTACH NAMEPLATE TO THE OUTSIDE PANEL FACE WITH TWO STAINLESS STEEL SELF-TAPPING SCREWS. NAMEPLATE SHALL READ "SERVICE DISCONNECT" PER NEC ARTICLE 230.70(B).
- ALL CIRCUITS SHALL BE LEGIBLY IDENTIFIED AT THE PANEL, JUNCTION BOXES AND AT ALL EQUIPMENT IN A PERMANENT MANNER (I.E. ETCHED PLATES, CONDUCTOR TAG, PERMANENT MARKER, ETC.). THE LABELING SHALL INCLUDE PANEL CIRCUIT NUMBER, "TO" AND "FROM" IDENTIFICATION, AND MARKED "SPARE" WHERE APPLICABLE.
- CONTRACTOR SHALL TEST ELECTRICAL SYSTEM FOR SHORT CIRCUITS AND MEGGER TEST FEEDER CIRCUIT WIRING. PROVIDE CERTIFIED TEST RESULTS FOR MEGGER TEST TO OWNER UPON COMPLETION OF PROJECT.
- ALL CONDUIT SHOWN SHALL BE CONCEALED WHEN POSSIBLE. WHEN NOT POSSIBLE, CONDUIT MAY BE SURFACE MOUNTED WITH PERMISSION OF THE OWNER OR OWNER'S REPRESENTATIVE.
- CONTRACTOR SHALL COORDINATE ALL EQUIPMENT CONNECTIONS WITH EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN. PROVIDE ADDITIONAL FUSED DISCONNECT SWITCHES AND CONTROLS IF OVERCURRENT PROTECTION OR CONTROLS IS NOT INTEGRAL WITH UNITS.
- ALL EQUIPMENT SHALL BE FUSE SIZED PER MANUFACTURES RECOMMENDATIONS AND BEAR U.L. APPROVAL. COORDINATE WITH ENGINEER/OWNER.

- ELECTRICAL DEVICES, DISCONNECT SWITCHES, ETC., SHALL BE SUPPORTED INDEPENDENT OF AND ISOLATED FROM EQUIPMENT VIBRATIONS.
- ALL OUTDOOR ELECTRICAL EQUIPMENT SHALL BE NEMA-3R OR NEMA-4 ENCLOSURES.
- CONDUITS OR RACEWAYS ROUTED FROM INDOORS TO OUTDOORS OR AS DESCRIBED IN NEC 300.7(A), SHALL BE SEALED WITH A PLIABLE SEALING COMPOUND AT A CONDUIT BODY OR AT A JUNCTION BOX BEFORE THE CONDUIT ENTERS THE COLDER ENVIRONMENT.
- CONDUITS OR RACEWAYS INSTALLED IN AREAS WHERE ELEVATION CHANGES MAY CAUSE WATER OR MOISTURE TO ENTER THE ELECTRICAL EQUIPMENT THROUGH THE CONDUIT SHALL BE SEALED WITH A HERMETIC CONDUIT SEAL AT BOTH ENDS OF THE CONDUIT OR RACEWAY.
- INSTALL FIRE SEALS IN ALL CONDUITS PENETRATING THE FIRE WALL TO MAINTAIN THE FIRE RESISTANCE RATING OF THE WALL, AS REQUIRED BY NEC 300.21.
- ALL POLE LIGHTS SHALL BE PROVIDED WITH A TWO POLE FUSE HOLDER BUSSMANN #HEX OR A SINGLE POLE FUSE HOLDER BUSSMANN #HEB OR EQUAL FOR INLINE FUSING, PROVIDE 5 AMP FUSING IN FUSEHOLDER.
- PRIOR TO POURING THE POLE BASES OR COVERING ANY ELECTRICAL CONDUITS, CONTACT THE INSPECTION DEPARTMENT 24 HOURS IN ADVANCE FOR APPROVAL.
- MATERIALS SHALL BE NEW AND OF THE BEST QUALITY WITH MANUFACTURER'S NAME PRINTED THEREON. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH NEMA, ANSI, UNDERWRITER'S LABORATORY OR OTHER APPLICABLE STANDARDS AND RATED FOR HEAVY DUTY SERVICE.
- ALL WIRING DEVICES SHALL BE SPECIFICATION GRADE. ALL 15 AND 20 AMP, 125 AND 250 VOLT, NONLOCKING RECEPTACLES INSTALLED OUTDOORS SHALL BE LISTED WEATHER-RESISTANT TYPE. RECEPTACLE COVERS IN WET LOCATIONS SHALL BE EXTRA DUTY PER NEC 406.9(B). ALL WEATHERPROOF WHILE IN-USE RECEPTACLE COVERS SHALL BE METAL.
- A MINIMUM OF (1) 20A 125V RECEPTACLE SHALL BE INSTALLED NOT LESS THAN 6 FEET AND NOT MORE THAN 20 FEET FROM THE INSIDE WALL OF EACH PERMANENTLY INSTALLED POOL, PER NEC 680.22(A)(1).
- SELECTION OF MATERIALS SHALL BE IN STRICT ACCORDANCE WITH THE DRAWINGS AND/OR SPECIFICATIONS. THE USE OF MANUFACTURER'S NAME, MODEL, AND NUMBER IS INTENDED TO ESTABLISH STYLE, QUALITY, APPEARANCE, USEFULNESS AND BID PRICE. CONTRACTOR SHALL SUBMIT TO THE OWNER OR OWNER'S REPRESENTATIVE FOR REVIEW AND APPROVAL (PRIOR TO ORDERING MATERIALS) COPIES OF EQUIPMENT SHOP DRAWINGS AS FOLLOWS: LIGHT FIXTURES, POLES, POLE BASES, SERVICE ENTRANCE SECTION, ELECTRICAL EQUIPMENT, DISCONNECT SWITCHES, TIME CLOCKS AND OTHER CONTROLS, LIGHTING CONTACTORS AND PULL BOXES. AT THE TIME OF EACH SUBMITTAL, THE CONTRACTOR SHALL DEFINE AND DELINEATE IN WRITING ANY DEVIATIONS FROM THE CONTRACT DOCUMENTS. THE REVIEW WILL BE ONLY FOR CONFORMANCE WITH THE DESIGN CONCEPT OF THE WORK AND FOR COMPLIANCE WITH THE INFORMATION CONTAINED IN THE CONTRACT DOCUMENTS. THE REVIEW OF A SPECIFIED ITEM, AS SUCH, WILL NOT INDICATE REVIEW OF THE ASSEMBLY IN WHICH THE ITEM FUNCTIONS. REVIEW BY THE OWNER OR OWNER'S REPRESENTATIVE WILL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR ANY ERRORS OR OMISSIONS IN THE SUBMITTALS NOR FROM HIS RESPONSIBILITY FOR COMPLYING WITH THE CONTRACT DOCUMENTS.
- THE SUBMITTALS SHALL BE NEATLY GROUPED AND ORGANIZED. PERTINENT INFORMATION SHALL BE HIGHLIGHTED, AND THE SPECIFIC PRODUCT SHALL BE IDENTIFIED. ALL SUBMITTALS SHALL BE COMPLETE, AND PRESENTED IN ONE PACKAGE. THE SUBMITTAL SHALL INCLUDE A COMPLETE LIST OF THE EQUIPMENT AND MATERIALS, INCLUDING THE MANUFACTURER'S NAME, PRODUCT SPECIFICATION, DESCRIPTIVE DATA, TECHNICAL LITERATURE, PERFORMANCE CHARTS, CATALOG CUTS, INSTALLATION INSTRUCTIONS, AND SPARE PART RECOMMENDATIONS FOR EACH DIFFERENT ITEM OF THE EQUIPMENT SPECIFIED.



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WRIGHT ENGINEERING
PROJECT NO:
22109
DESIGN BY: XAG
DRAWN BY: XAG
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PROJECT: TITLE:

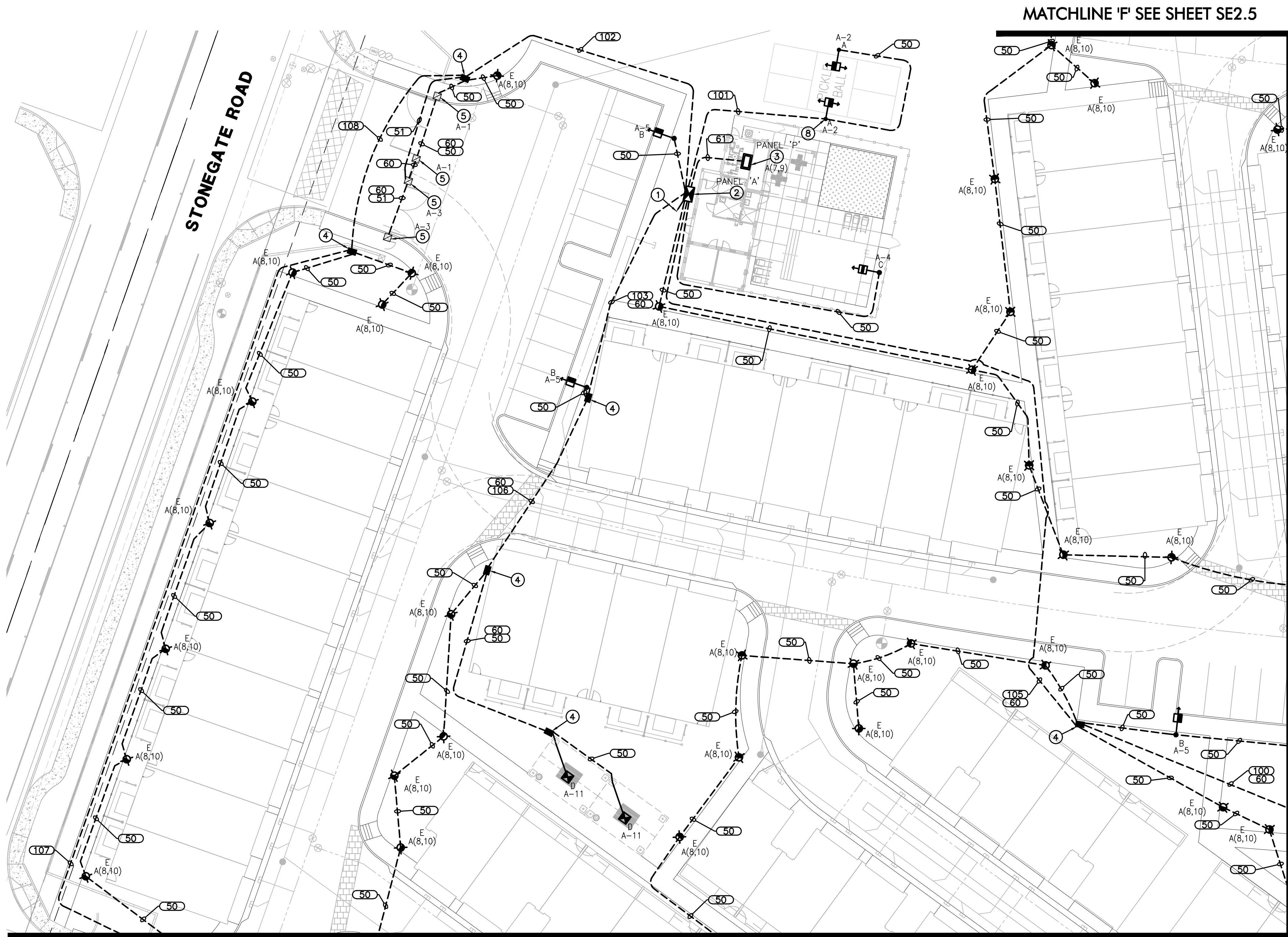
MARICOPA, ARIZONA
**VILLAS AT STONEGATE
SITE ELECTRICAL PLAN**
SITE ELECTRICAL COVER SHEET

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	AUG 2022	100% SUBMITTAL








DRAWING NO:
SE1.1
OF 18





MATCHLINE 'H' SEE SHEET SE2.6

LIGHT FIXTURE SCHEDULE

LIGHT FIXTURE SCHEDULE										
SYMBOL	LETTER ID	MANUFACTURER	CATALOG NUMBER	FINISH COLOR	VOLTS	LAMP	LUMENS (MIN)	CCT	MOUNTING HEIGHT	DETAIL
	A	COOPER LIGHTING	GAN-SA2C-730-U-T3-BZ-HSS	BRONZE	120	113W LED	13,182	3000K	14'-0"	TYPE 3 AREA LIGHT SEE DETAIL 4 SHEET SE3.3
	B	ARCHITECTURAL AREA LIGHTING	PRM22-72L-310-3K7-4W-DBS-UNV	BRONZE	120	69.46W LED	8,512	3000K	14'-0"	TYPE 4 PARKING LOT LIGHT SEE DETAIL 6 SHEET SE3.4
	C	COOPER LIGHTING	GAN-SA4C-730-U-T4W-BZ	BRONZE	120	213W LED	25,347	3000K	14'-0"	TYPE 4 AREA LIGHT SEE DETAIL 4 SHEET SE3.3
	D	LUMINAIRE LIGHTING	SWP1212-NODIM-40W-30K-MVOLT-OP-BRZ	BRONZE	120	43W LED	3,350	3000K	10'-0"	RAMADA LIGHT SEE DETAIL 5 SHEET SE3.3
	E	COOPER LIGHTING	BRT6-A3-730-U-T4-42-BZ	BRONZE	120	22W LED	1,786	3000K	3'-6"	BOLLARD SEE DETAIL 7 SHEET SE3.4

MATCHLINE 'F' SEE SHEET SE2.5









MATCHLINE 'G' SEE SHEET SE2.5

MATCHLINE 'A' SEE SHEET SE2.2

CONSTRUCTION NOTES

- ① 2.5" SCH. 40 PVC CONDUIT TO POINT OF SERVICE, CONTRACTOR SHALL VERIFY POINT OF ELECTRICAL SERVICE LOCATION AND SPECIFICATIONS WITH POWER CO. PLANS & INSTALL CONDUIT TO THIS LOCATION. POWER CO. PLANS WILL DETERMINE EXACT LOCATION OF CONDUIT AND TAKE PRECEDENCE OVER THESE DRAWINGS.
- ② 200 AMP, 120/240V, 1Ø, 3W, METERED ELECTRIC PEDESTAL, SEE DETAIL 1 ON SE3.1.
- ③ 125 AMP, 120/240V, 1Ø, 3W, WALL-MOUNTED SUB-PANEL PER BUILDING ELECTRICAL PLANS
- ④ #3-1/2 CONCRETE PULL BOX, SEE DETAIL 3 ON SE3.2.
- ⑤ GATE CONTROLLER. COORDINATE WITH GATE CONTRACTOR FOR EXACT LOCATION AND DETAILS. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR CONDUIT, STUB UPS, CONDUCTORS, SPLICES AND OTHER NECESSARY COMPONENTS FOR A COMPLETE SYSTEM.
- ⑥ GATE KEYPAD. COORDINATE WITH GATE CONTRACTOR FOR EXACT LOCATION AND DETAILS. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR WIRING.
- ⑦ 100 AMP, 120/240V, 1Ø, 3W, METERED ELECTRIC PEDESTAL, SEE DETAIL 2 ON SE3.1.
- ⑧ PUSH BUTTON ON LIGHT POLE TO FACE COURT, SEE DETAIL 4 ON SE3.3.
- ⑨ STUB OUT 5' OF 1" CONDUIT WITH PULL ROPE AS SHOWN ON SITE PLAN, FOR FUTURE USE. CAP CONDUIT AT GRADE AND MARK LOCATION ON AS-BUILT DRAWINGS.

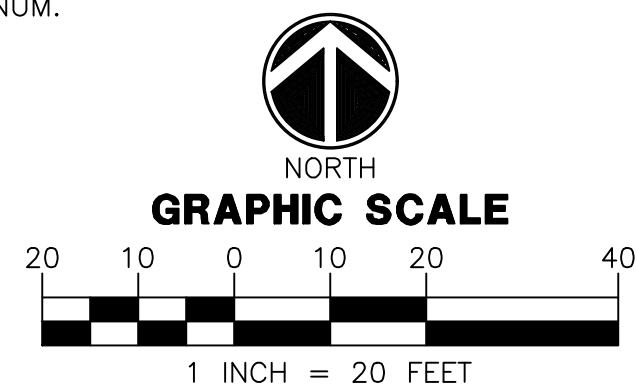
LEGEND

-  200A 120/240V 1Ø PEDESTAL
 125A 120/240V 1Ø SUB-PANEL PER BUILDING
 ELECTRICAL PLANS
 NEW PULL BOX
 GATE CONTROLLER
 GATE KEYPAD
 NEW UNDERGROUND CONDUIT
 A-1 CIRCUIT NUMBER
 WIRE & CONDUIT TAG, SEE WIRE & CONDUIT TABLE
 100A 120/240V 1Ø PEDESTAL

WIRE & CONDUIT TABLE

CONDUIT		WIRE			REMARKS
NO.	SIZE	POWER	GROUND	TYPE*	(CKT #)
50	1"	2-#12	1-#12	CU	TYPICAL
51	1"	2-#10	1-#10	CU	TYPICAL
52	1"	2-#8	1-#8	CU	TYPICAL
53	1"	2-#4	1-#4	CU	TYPICAL
60	1.5"	PULL	ROPE		SPARE
61	1.5"	3-#1	1-#6	CU	PANEL 'P'
100	1"	2-#12	1-#12	CU	A-5
		2-#12		CU	A-6
		2-#12		CU	A-11
101	1"	2-#12	1-#12	CU	A-2
		2-#12		CU	PICKLE BALL PB
102	1"	2-#8	1-#8	CU	A-1
		2-#8		CU	A-3
	1.5"	2-#4	1-#4	CU	A-13
		2-#4		CU	A-15
103	1"	2-#12	1-#12	CU	A(8,10)
		2-#12		CU	A-5
		2-#12		CU	A-11
		2-#12		CU	A(8,10)
104	1"	2-#12	1-#12	CU	A-6
		2-#12		CU	A-11
		2-#12		CU	A-5
		2-#12		CU	A-6
105	1"	2-#12	1-#12	CU	A-11
		2-#12		CU	A-5
		2-#12		CU	A-6
		2-#12		CU	A-11
106	1"	2-#12	1-#12	CU	A(8,10)
		2-#12		CU	A-6
		2-#12		CU	A(8,10)
107	1.5"	2-#4	1-#4	CU	A-13
		2-#4		CU	A-15
		2-#4		CU	A-13
108	1.5"	2-#4	1-#4	CU	A-15
		2-#4		CU	A-15
		2-#12		CU	A(8,10)
109	1"	2-#12	1-#12	CU	A-5
		2-#12		CU	A-6
200	1.5"	2-#4	1-#4	CU	B-3
201	1.5"	2-#12	1-#2	CU	B-4
		2-#2		CU	B-3
		2-#12		CU	B-4
202	1.5"	2-#2	1-#2	CU	B-3
		2-#12		CU	B-4
		2-#12		CU	B-6
203	1"	2-#12	1-#12	CU	B-4
		2-#12		CU	B-6

* THIS COLUMN IDENTIFIES THE CONDUCTOR MATERIAL TYPE.
CU = COPPER, AL = ALUMINUM.



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MATCHLINE 'K' SEE SHEET SE2.6



- ① 2.5" SCH. 40 PVC CONDUIT TO POINT OF SERVICE, CONTRACTOR SHALL VERIFY POINT OF ELECTRICAL SERVICE LOCATION AND SPECIFICATIONS WITH POWER CO. PLANS & INSTALL CONDUIT TO THIS LOCATION. POWER CO. PLANS WILL DETERMINE EXACT LOCATION OF CONDUIT AND TAKE PRECEDENCE OVER THESE DRAWINGS.
- ② 200 AMP, 120/240V, 1Ø, 3W, METERED ELECTRIC PEDESTAL, SEE DETAIL 1 ON SE3.1.
- ③ 125 AMP, 120/240V, 1Ø, 3W, WALL-MOUNTED SUB-PANEL PER BUILDING ELECTRICAL PLANS
- ④ #3-1/2 CONCRETE PULL BOX, SEE DETAIL 3 ON SE3.2.
- ⑤ GATE CONTROLLER. COORDINATE WITH GATE CONTRACTOR FOR EXACT LOCATION AND DETAILS. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR CONDUIT, STUB UPS, CONDUCTORS, SPLICES AND OTHER NECESSARY COMPONENTS FOR A COMPLETE SYSTEM.
- ⑥ GATE KEYPAD. COORDINATE WITH GATE CONTRACTOR FOR EXACT LOCATION AND DETAILS. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR WIRING.
- ⑦ 100 AMP, 120/240V, 1Ø, 3W, METERED ELECTRIC PEDESTAL, SEE DETAIL 2 ON SE3.1.
- ⑧ PUSH BUTTON ON LIGHT POLE TO FACE COURT, SEE DETAIL 4 ON SE3.3.
- ⑨ STUB OUT 5' OF 1" CONDUIT WITH PULL ROPE AS SHOWN ON SITE PLAN, FOR FUTURE USE. CAP CONDUIT AT GRADE AND MARK LOCATION ON AS-BUILT DRAWINGS.

 200A 120/240V 1ø PEDESTAL
 125A 120/240V 1ø SUB-PANEL PER BUILDING
 ELECTRICAL PLANS
 NEW PULL BOX
 GATE CONTROLLER
 GATE KEYPAD
 NEW UNDERGROUND CONDUIT
 A-1 WIRE CIRCUT NUMBER
(101) WIRE & CONDUIT TAG, SEE WIRE & CONDUIT TABLE
 100A 120/240V 1ø PEDESTAL

CONDUIT		WIRE		REMARKS	
NO.	SIZE	POWER	GROUND	TYPE*	(CKT #)
50	1"	2-#12	1-#12	CU	TYPICAL
51	1"	2-#10	1-#10	CU	TYPICAL
52	1"	2-#8	1-#8	CU	TYPICAL
53	1"	2-#4	1-#4	CU	TYPICAL
60	1.5"	PULL	ROPE		SPARE
61	1.5"	3-#1	1-#6	CU	PANEL 'P'
100	1"	2-#12	1-#12	CU	A-5
		2-#12		CU	A-6
		2-#12		CU	A-11
		2-#12		CU	A-2
101	1"	2-#12	1-#12	CU	PICKLE BALL PB
		2-#12		CU	PICKLE BALL PB
102	1"	2-#8	1-#8	CU	A-1
		2-#8		CU	A-3
		2-#8		CU	A-13
	1.5"	2-#4	1-#4	CU	A-15
		2-#12		CU	A(8,10)
103	1"	2-#12	1-#12	CU	A-5
		2-#12		CU	A-11
		2-#12		CU	A(8,10)
104	1"	2-#12	1-#12	CU	A-6
		2-#12		CU	A-11
105	1"	2-#12	1-#12	CU	A-5
		2-#12		CU	A-6
		2-#12		CU	A-11
		2-#12		CU	A(8,10)
		2-#12		CU	A(8,10)
106	1"	2-#12	1-#12	CU	A-6
		2-#12		CU	A(8,10)
107	1.5"	2-#4	1-#4	CU	A-13
		2-#4		CU	A-15
		2-#4		CU	A-15
108	1.5"	2-#4	1-#4	CU	A-13
		2-#4		CU	A-15
		2-#12		CU	A(8,10)
109	1"	2-#12	1-#12	CU	A-5
		2-#12		CU	A-6
200	1.5"	2-#4	1-#4	CU	B-3
		2-#12		CU	B-4
201	1.5"	2-#2	1-#2	CU	B-3
		2-#12		CU	B-4
202	1.5"	2-#2	1-#2	CU	B-3
		2-#12		CU	B-4
		2-#12		CU	B-6
203	1"	2-#12	1-#12	CU	B-4
		2-#12		CU	B-6

* THIS COLUMN IDENTIFIES THE CONDUCTOR MATERIAL TYPE
CU = COPPER, AL = ALUMINUM.

NORTH

GRAPHIC SCALE

20 10 0 10 20 40

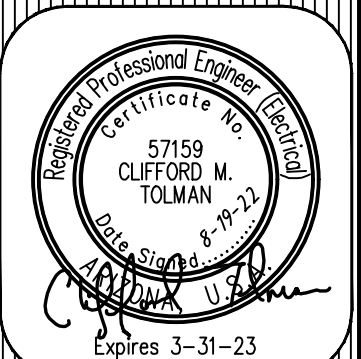
1 INCH = 20 FEET



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ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE • CHANDLER, ARIZONA 85225
PHONE 480.497.5829 • FAX 480.497.5807
www.wrightengineering.us

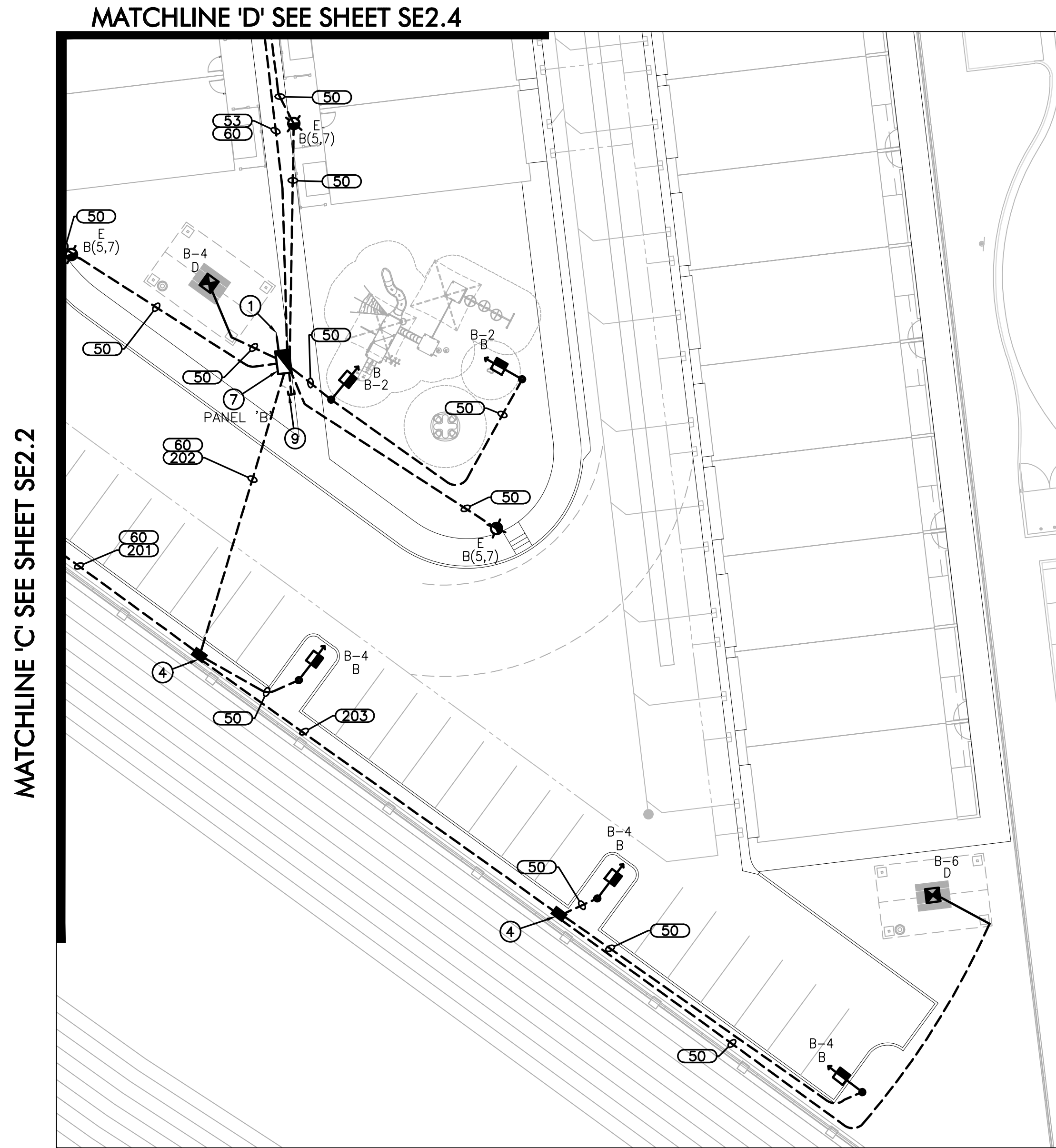
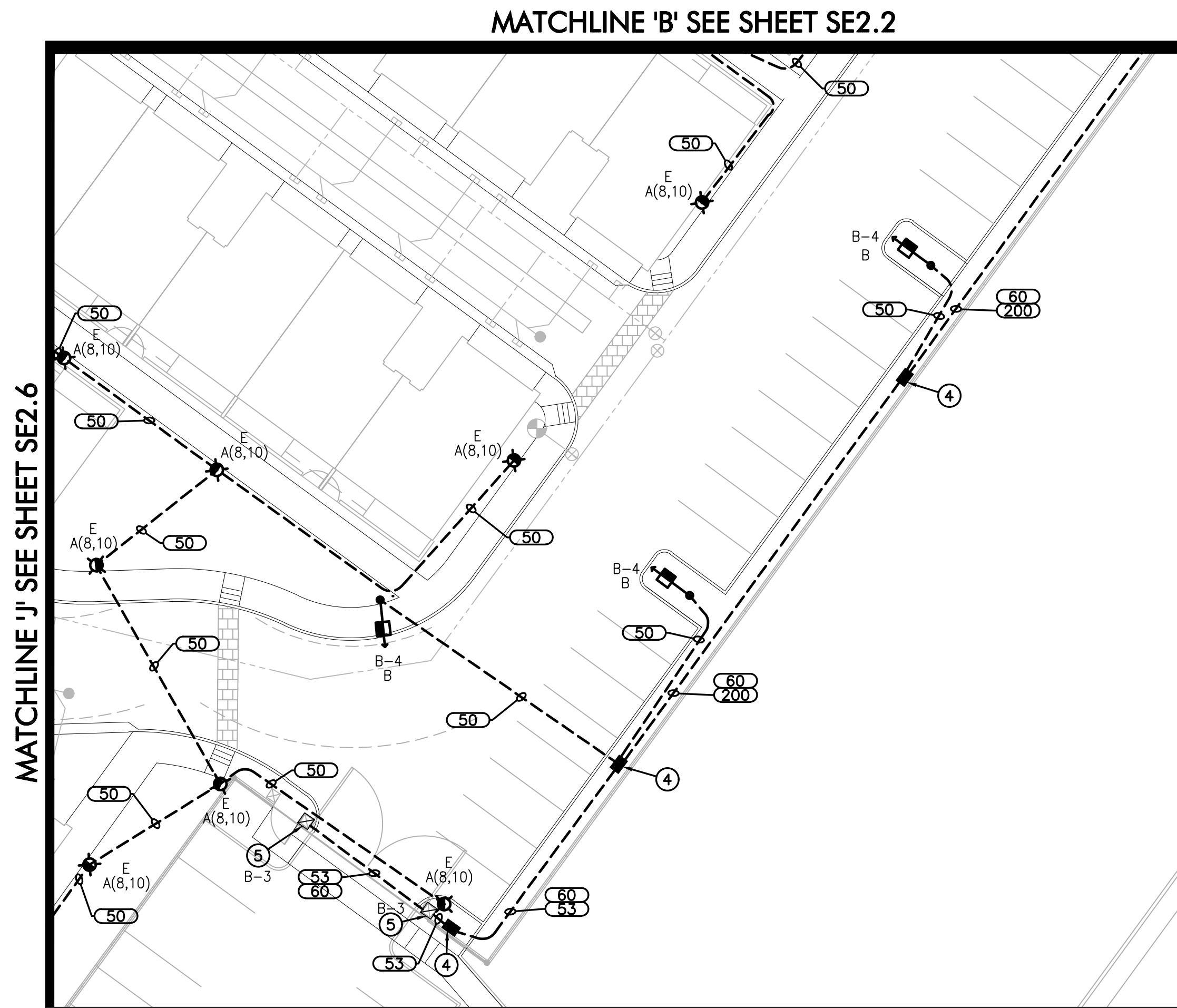
MARICOPA, ARIZONA
VILLAS AT STONEGATE
SITE ELECTRICAL PLAN

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	AUG 2022	100% SUBMITTAL



DRAWING NO:
SE2.2
OF 18

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CONSTRUCTION NOTES

- 2.5" SCH. 40 PVC CONDUIT TO POINT OF SERVICE, CONTRACTOR SHALL VERIFY POINT OF ELECTRIC SERVICE LOCATION AND SPECIFICATIONS WITH POWER CO. PLANS & INSTALL CONDUIT TO THIS LOCATION. POWER CO. PLANS WILL DETERMINE EXACT LOCATION OF CONDUIT AND TAKE PRECEDENCE OVER THESE DRAWINGS.
- 200 AMP, 120/240V, 1Ø, 3W, METERED ELECTRIC PEDESTAL, SEE DETAIL 1 ON SE3.1.
- 125 AMP, 120/240V, 1Ø, 3W, WALL-MOUNTED SUB-PANEL PER BUILDING ELECTRICAL PLANS
- #3-1/2 CONCRETE PULL BOX, SEE DETAIL 3 ON SE3.2.
- GATE CONTROLLER. COORDINATE WITH GATE CONTRACTOR FOR EXACT LOCATION AND DETAILS. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR CONDUIT, STUB UPS, CONDUCTORS, SPLICES AND OTHER NECESSARY COMPONENTS FOR A COMPLETE SYSTEM.
- GATE KEYPAD. COORDINATE WITH GATE CONTRACTOR FOR EXACT LOCATION AND DETAILS. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR WIRING.
- 100 AMP, 120/240V, 1Ø, 3W, METERED ELECTRIC PEDESTAL, SEE DETAIL 2 ON SE3.1.
- PUSH BUTTON ON LIGHT POLE TO FACE COURT, SEE DETAIL 4 ON SE3.3.
- STUB OUT 5' OF 1" CONDUIT WITH PULL ROPE AS SHOWN ON SITE PLAN, FOR FUTURE USE. CAP CONDUIT AT GRADE AND MARK LOCATION ON AS-BUILT DRAWINGS.

LEGEND

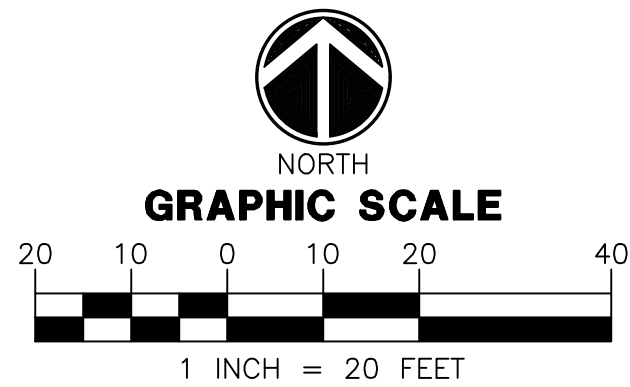
- 200A 120/240V 1Ø PEDESTAL
- 125A 120/240V 1Ø SUB-PANEL PER BUILDING ELECTRICAL PLANS
- NEW PULL BOX
- GATE CONTROLLER
- GATE KEYPAD
- NEW UNDERGROUND CONDUIT
- A-1 CIRCUIT NUMBER
- 101 WIRE & CONDUIT TAG, SEE WIRE & CONDUIT TABLE
- 100A 120/240V 1Ø PEDESTAL

WIRE & CONDUIT TABLE

CONDUIT		WIRE		REMARKS	
NO.	SIZE	POWER	GROUND	TYPE*	(CKT #)
50	1"	2-#12	1-#12	CU	TYPICAL
51	1"	2-#10	1-#10	CU	TYPICAL
52	1"	2-#8	1-#8	CU	TYPICAL
53	1"	2-#4	1-#4	CU	TYPICAL
60	1.5"	PULL	ROPE	SPARE	
61	1.5"	3-#1	1-#6	CU	PANEL 'P'
100	1"	2-#12	1-#12	CU	A-5
		2-#12		CU	A-6
		2-#12		CU	A-11
101	1"	2-#12	1-#12	CU	A-2
		2-#12		CU	PICKLE BALL PB
		2-#12		CU	A-1
102	1"	2-#8	1-#8	CU	A-3
		2-#8		CU	A-13
		2-#4		CU	A-15
		2-#4		CU	A(8,10)
		2-#12		CU	A-5
		2-#12		CU	A-11
103	1"	2-#12	1-#12	CU	A(8,10)
		2-#12		CU	A-5
		2-#12		CU	A-11
		2-#12		CU	A(8,10)
		2-#12		CU	A-6
		2-#12		CU	A-11
104	1"	2-#12	1-#12	CU	A-5
		2-#12		CU	A-6
		2-#12		CU	A-11
		2-#12		CU	A(8,10)
		2-#12		CU	A-6
		2-#12		CU	A(8,10)
105	1"	2-#12	1-#12	CU	A-6
		2-#12		CU	A(8,10)
		2-#12		CU	A-13
		2-#4		CU	A-15
		2-#4		CU	A-13
		2-#4		CU	A-15
106	1"	2-#12	1-#12	CU	A(8,10)
		2-#12		CU	A-5
		2-#12		CU	A-6
		2-#12		CU	A-11
		2-#12		CU	A(8,10)
		2-#12		CU	A-6
107	1.5"	2-#4	1-#4	CU	B-3
		2-#4		CU	B-4
		2-#4		CU	B-3
		2-#4		CU	B-4
		2-#4		CU	B-3
		2-#4		CU	B-4
108	1.5"	2-#4	1-#4	CU	B-6
		2-#4		CU	B-4
		2-#4		CU	B-6
		2-#4		CU	B-4
		2-#4		CU	B-6
		2-#4		CU	B-4
109	1"	2-#12	1-#12	CU	B-6
		2-#12		CU	B-4
		2-#12		CU	B-6
		2-#12		CU	B-4
		2-#12		CU	B-6
		2-#12		CU	B-4
200	1.5"	2-#4	1-#4	CU	B-6
		2-#4		CU	B-4
		2-#4		CU	B-6
		2-#4		CU	B-4
		2-#4		CU	B-6
		2-#4		CU	B-4
201	1.5"	2-#2	1-#2	CU	B-6
		2-#2		CU	B-4
		2-#2		CU	B-6
		2-#2		CU	B-4
		2-#2		CU	B-6
		2-#2		CU	B-4
202	1.5"	2-#2	1-#2	CU	B-6
		2-#2		CU	B-4
		2-#2		CU	B-6
		2-#2		CU	B-4
		2-#2		CU	B-6
		2-#2		CU	B-4
203	1"	2-#12	1-#12	CU	B-6
		2-#12		CU	B-4
		2-#12		CU	B-6
		2-#12		CU	B-4
		2-#12		CU	B-6
		2-#12		CU	B-4

* THIS COLUMN IDENTIFIES THE CONDUCTOR MATERIAL TYPE.
CU = COPPER, AL = ALUMINUM.

LIGHT FIXTURE SCHEDULE									
SYMBOL	LETTER ID	MANUFACTURER	CATALOG NUMBER	FINISH COLOR	VOLTS	LAMP	LUMENS (MIN)	CCT	MOUNTING HEIGHT
	A	COOPER LIGHTING	GAN-SA2C-730-U-T3-BZ-HSS	BRONZE	120	113W LED	13,182	3000K	14'-0"
	B	ARCHITECTURAL AREA LIGHTING	PRM22-72L-310-3K7-4W-DBS-UNV	BRONZE	120	69.46W LED	8,512	3000K	14'-0"
	C	COOPER LIGHTING	GAN-SA4C-730-U-T4W-BZ	BRONZE	120	213W LED	25,347	3000K	14'-0"
	D	LUMINAIRE LIGHTING	SWP1212-NODIM-40W-30K-MVOLT-OP-BRZ	BRONZE	120	43W LED	3,350	3000K	10'-0"
	E	COOPER LIGHTING	BRT6-A3-730-U-T4-42-BZ	BRONZE	120	22W LED	1,786	3000K	3'-6"



Call at least two full working days before you begin excavation.

ARIZONA 811

Arizona Blue Stake, Inc.

Dial 811 or 1-800-STAKE-IT (782-5348)

WRIGHT ENGINEERING
PROJECT NO:
22109
DESIGN BY: XAG
DRAWN BY: XAG
CHECKED BY: CMT

WRIGHT
engineering corporation
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VILLAS AT STONEGATE
SITE ELECTRICAL PLAN
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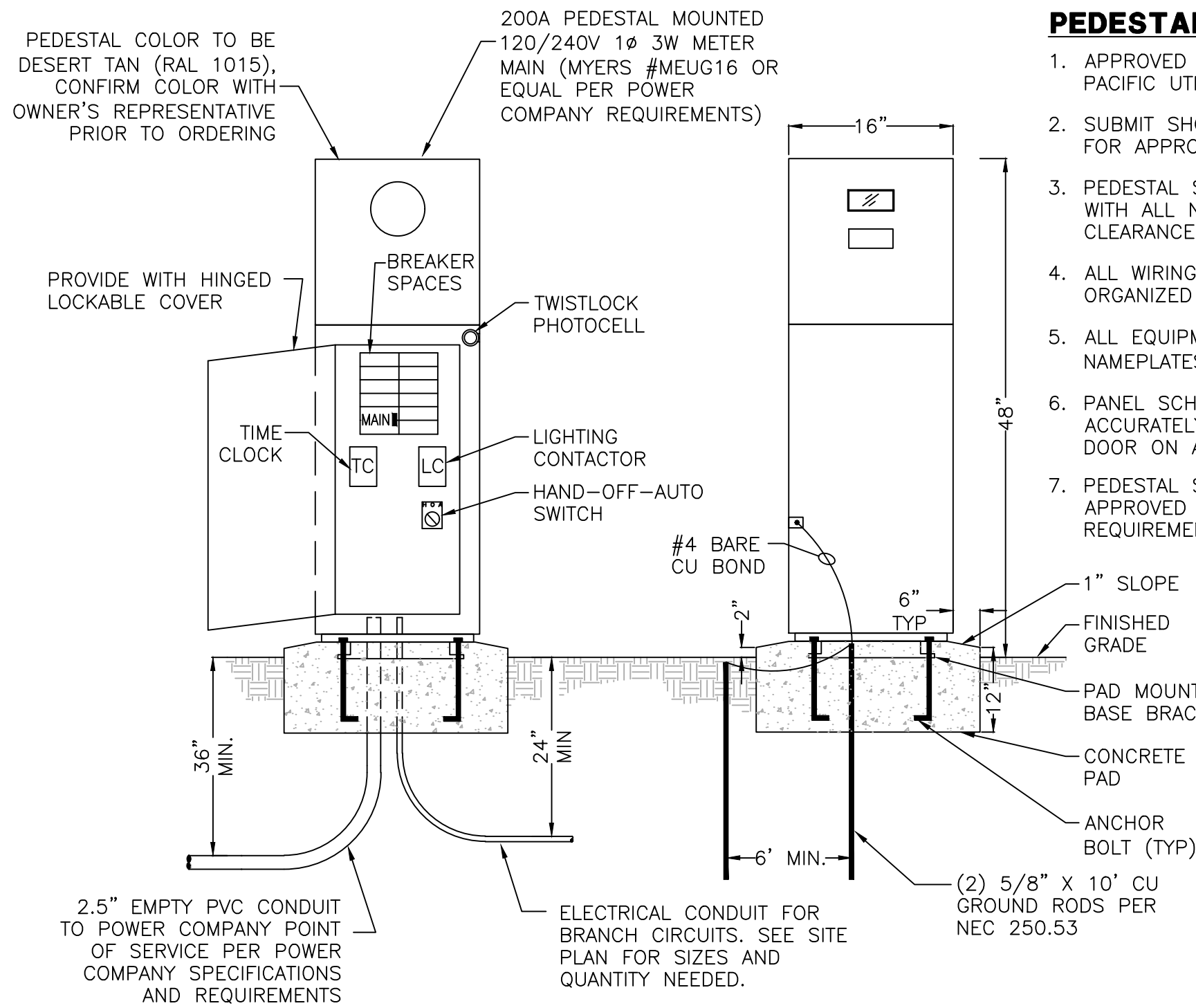
NO. DATE SUBMITTALS/REVISIONS (DESCRIPTIONS)

1 AUG 2022 100% SUBMITTAL

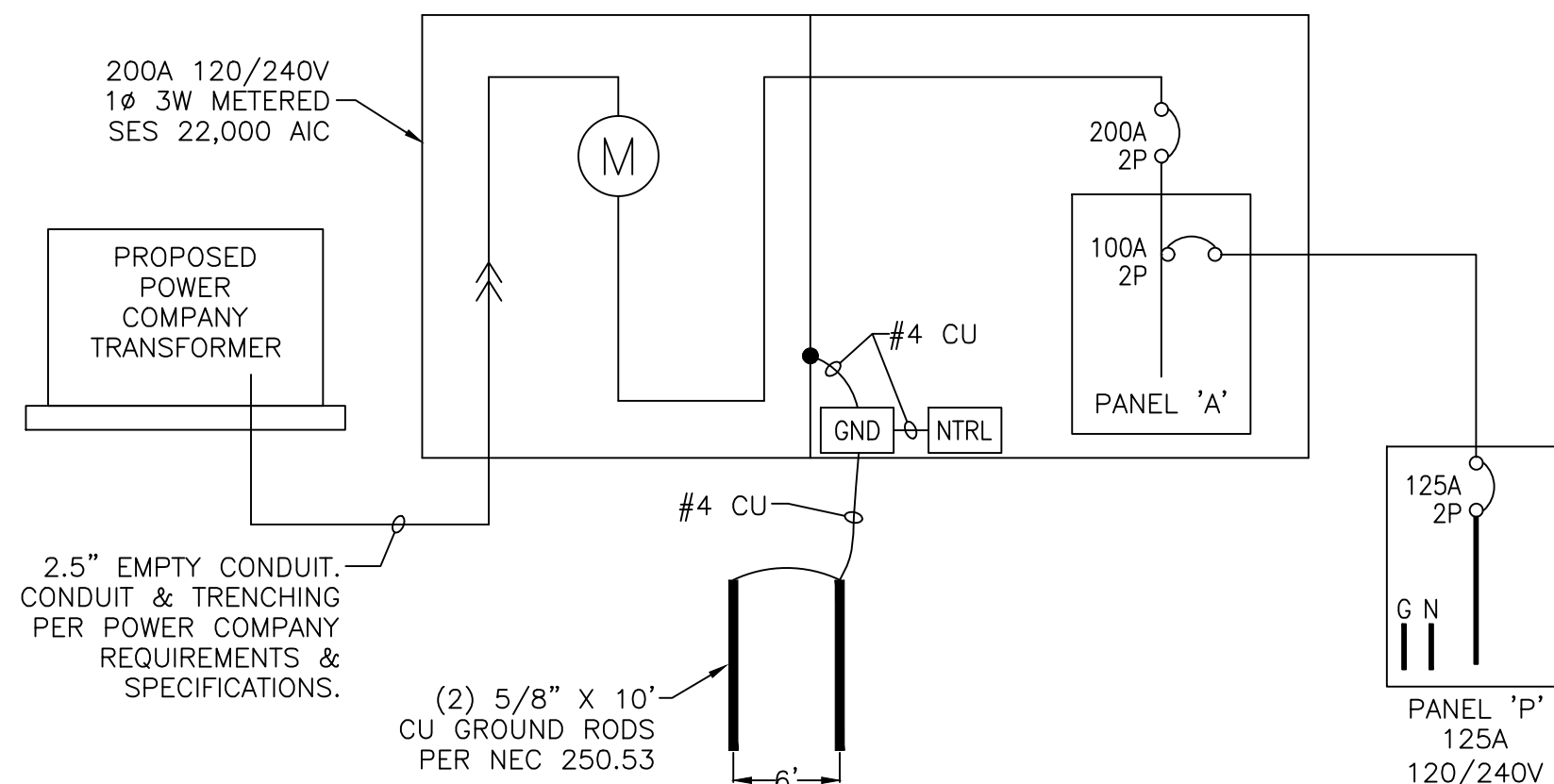
Professional Engineer
57159
CLIFFORD M. TOLMAN
Date Stamp: 8-17-22
Expires 3-31-23

DRAWING NO:
SE2.3
OF 18

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1A 200A PEDESTAL MOUNTED SERVICE (PANEL 'A')
NO SCALE 120/240V 1Ø 3W

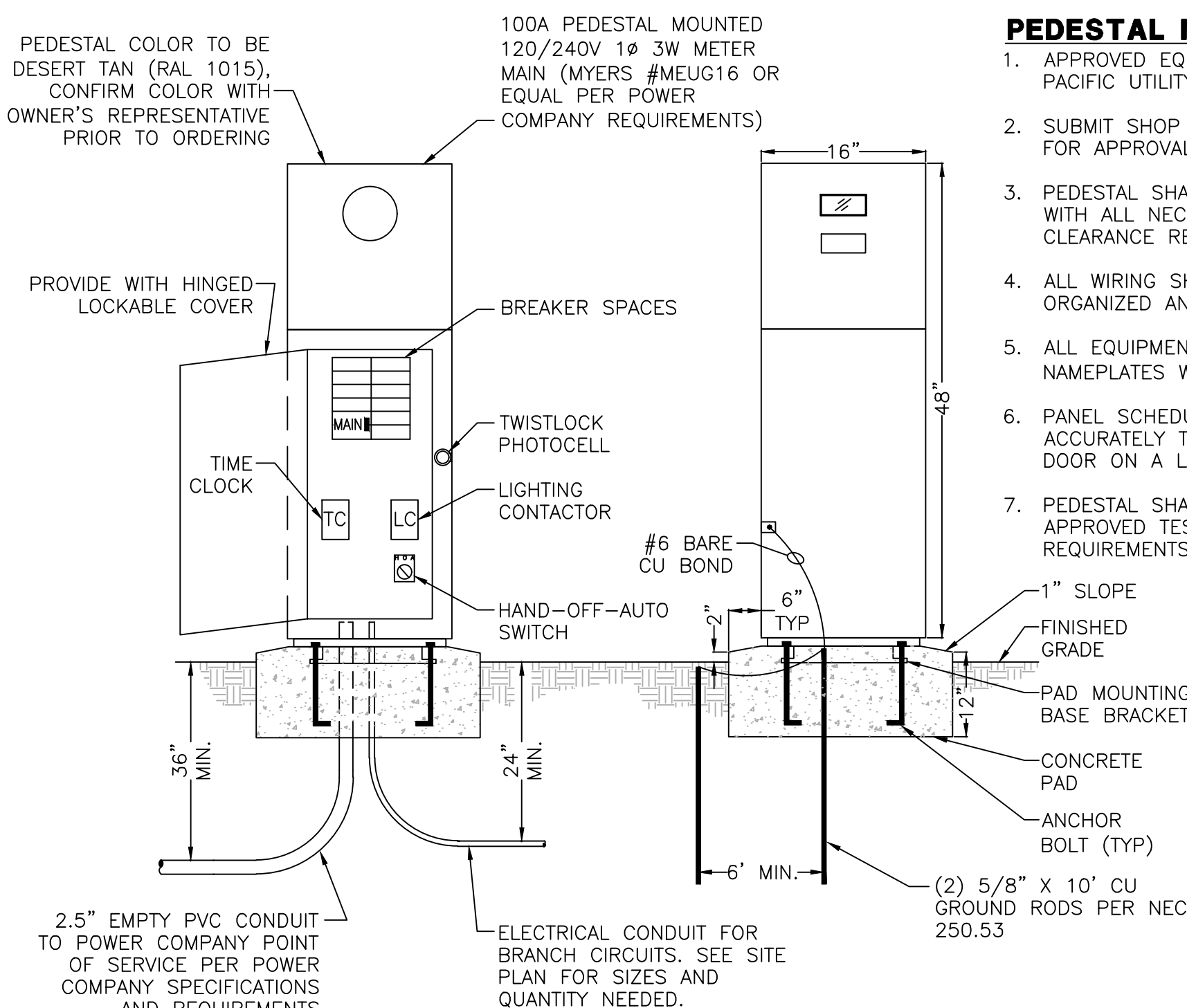


1B 200A SINGLE LINE DIAGRAM (PANEL 'A')
NO SCALE 120/240V 1Ø 3W

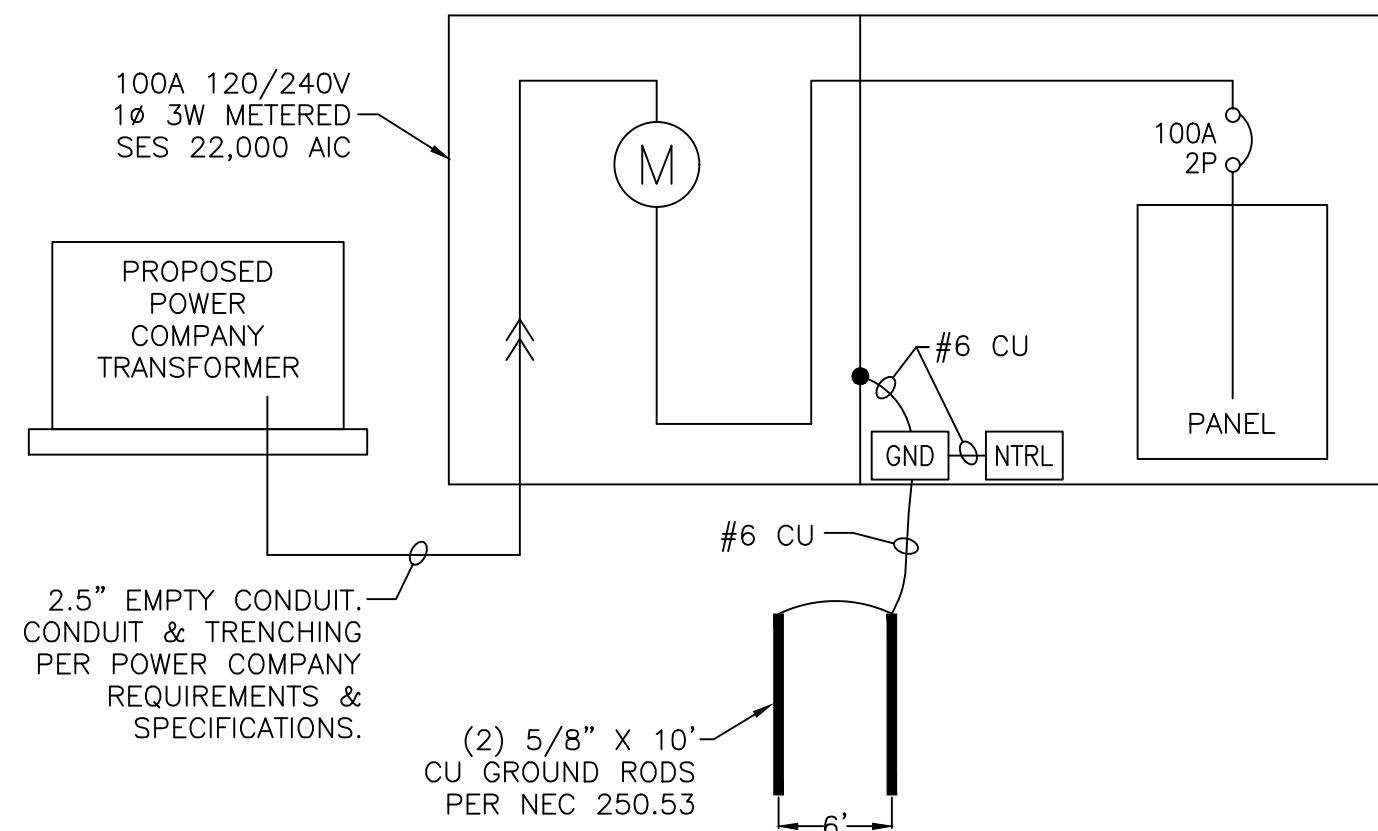
PANEL NAME: A			120/240V, 1Ø, 3W			200A MAIN BKR		
LOCATION: SEE SITE PLAN			TYPE: PLUG-IN			PEDESTAL MTD., NEMA 3R		
CKT NO.	BKR SIZE	DESCRIPTION	LOAD	AØ	BØ	LOAD	DESCRIPTION	CKT NO.
1	20/1	WEST EXIT GATE	1920	2203	283		PICKLEBALL LIGHTS*	20/1 2
3	20/1	WEST ENTRY GATE	1920		2187	267	POOL LIGHT*	20/1 4
5	20/1	PARKING LOT LIGHTS*	295	485		190	PLAYGROUND LIGHTS*	20/1 6
7	125/		12000		13417	1417		20/ 8
9	/2	PANEL 'P'	12000	13417		1417	BOLLARDS*	/2 10
11	20/1	RAMADA LIGHTS*	215		215	0	SPARE	20/1 12
13	20/1	SOUTH EXIT GATE	1920		1920	0	SPARE	20/1 14
15	20/1	SOUTH ENTRY GATE	1920		2120	200	LIGHTING CONTROL	20/1 16
CODE TOTAL VA/Ø			18025	17939			*INDICATES LOAD @ 125%	
CODE TOTAL AMPS/Ø			150.2	149.5			22,000 AIC BREAKERS	

PEDESTAL NOTES

1. APPROVED EQUAL MANUFACTURERS: MILBANK, PACIFIC UTILITY PRODUCTS
2. SUBMIT SHOP DRAWINGS TO POWER COMPANY FOR APPROVAL PRIOR TO ORDERING EQUIPMENT.
3. PEDESTAL SHALL BE INSTALLED IN ACCORDANCE WITH ALL NEC CODE AND POWER COMPANY CLEARANCE REQUIREMENTS.
4. ALL WIRING SHALL BE INSTALLED IN AN ORGANIZED AND NEAT MANNER.
5. ALL EQUIPMENT SHALL HAVE LAMICOID NAMEPLATES WITH 1/4" LETTERING.
6. PANEL SCHEDULE SHALL BE NEATLY & ACCURATELY TYPED AND PLACED ON THE INSIDE DOOR ON A LAMINATED SHEET.
7. PEDESTAL SHALL BE COMMERCIAL RATED WITH APPROVED TEST BLOCKS PER POWER COMPANY REQUIREMENTS.



2A 100A PEDESTAL MOUNTED SERVICE (PANEL 'B')
NO SCALE 120/240V 1Ø 3W



2B 100A SINGLE LINE DIAGRAM (PANEL 'B')
NO SCALE 120/240V 1Ø 3W

PANEL NAME: B			120/240V, 1Ø, 3W			100A MAIN BKR		
LOCATION: SEE SITE PLAN			TYPE: PLUG-IN			PEDESTAL MTD., NEMA 3R		
CKT NO.	BKR SIZE	DESCRIPTION	LOAD	AØ	BØ	LOAD	DESCRIPTION	CKT NO.
1	20/1	NORTH EXIT GATE	1920	2110		190	PLAYGROUND LIGHTS*	20/1 2
3	20/1	SOUTH EXIT GATE	1920		2436	516	PARKING LOT LIGHTS*	20/1 4
5	20/		578	686		108	RAMADA LIGHTS*	20/1 6
7	/2	BOLLARDS*	578		578	0	SPARE	20/1 8
9	20/1	SPARE	0	0		0	SPARE	20/1 10
11	20/1	SPARE	0		0	0	SPARE	20/1 12
13	20/1	SPARE	0	0		0	SPARE	20/1 14
15	20/1	SPARE	0		200	200	LIGHTING CONTROL	20/1 16
CODE TOTAL VA/Ø			2796	3214			*INDICATES LOAD @ 125%	
CODE TOTAL AMPS/Ø			23.3	26.8			22,000 AIC BREAKERS	

PEDESTAL NOTES

1. APPROVED EQUAL MANUFACTURERS: MILBANK, PACIFIC UTILITY PRODUCTS
2. SUBMIT SHOP DRAWINGS TO POWER COMPANY FOR APPROVAL PRIOR TO ORDERING EQUIPMENT.
3. PEDESTAL SHALL BE INSTALLED IN ACCORDANCE WITH ALL NEC CODE AND POWER COMPANY CLEARANCE REQUIREMENTS.
4. ALL WIRING SHALL BE INSTALLED IN AN ORGANIZED AND NEAT MANNER.
5. ALL EQUIPMENT SHALL HAVE LAMICOID NAMEPLATES WITH 1/4" LETTERING.
6. PANEL SCHEDULE SHALL BE NEATLY & ACCURATELY TYPED AND PLACED ON THE INSIDE DOOR ON A LAMINATED SHEET.
7. PEDESTAL SHALL BE COMMERCIAL RATED WITH APPROVED TEST BLOCKS PER POWER COMPANY REQUIREMENTS.

WRIGHT ENGINEERING
PROJECT NO:

22109

DESIGN BY: XAG

DRAWN BY: XAG

CHECKED BY: CMT

WRIGHT
engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE • CHANDLER, ARIZONA 85225
PHONE 480.497.5829 • FAX 480.497.5807
www.wrightengineering.us

PROJECT: TITLE:

MARICOPA, ARIZONA
VILLAS AT STONEGATE
SITE ELECTRICAL PLAN
SITE ELECTRICAL DETAILS

NO. DATE SUBMITTALS/REVISIONS (DESCRIPTIONS)

1 AUG 2022 100% SUBMITTAL

Professional Engineer
57159
CLIFFORD M. TOLMAN
Date Signed: 8-14-23
Expires: 3-31-23

DRAWING NO:

SE3.1

OF 18

Call at least two full working days
before you begin excavation.
ARIZONA811
Arizona Blue Stake, Inc.
Dial 811 or 1-800-STAKE-IT (782-5348)

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MATCHLINE 'E' SEE SHEET SE2.2

MATCHLINE 'I' SEE SHEET SE2.5



MATCHLINE 'D' SEE SHEET SE2.3

CONSTRUCTION NOTES

- 2.5" SCH. 40 PVC CONDUIT TO POINT OF SERVICE, CONTRACTOR SHALL VERIFY POINT OF ELECTRIC SERVICE LOCATION AND SPECIFICATIONS WITH POWER CO. PLANS & INSTALL CONDUIT TO THIS LOCATION. POWER CO. PLANS WILL DETERMINE EXACT LOCATION OF CONDUIT AND TAKE PRECEDENCE OVER THESE DRAWINGS.
- 200 AMP, 120/240V, 1Ø, 3W, METERED ELECTRIC PEDESTAL, SEE DETAIL 1 ON SE3.1.
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- 100 AMP, 120/240V, 1Ø, 3W, METERED ELECTRIC PEDESTAL, SEE DETAIL 2 ON SE3.1.
- PUSH BUTTON ON LIGHT POLE TO FACE COURT, SEE DETAIL 4 ON SE3.3.
- STUB OUT 5' OF 1" CONDUIT WITH PULL ROPE AS SHOWN ON SITE PLAN, FOR FUTURE USE. CAP CONDUIT AT GRADE AND MARK LOCATION ON AS-BUILT DRAWINGS.

LEGEND

- 200A 120/240V 1Ø PEDESTAL
- 125A 120/240V 1Ø SUB-PANEL PER BUILDING ELECTRICAL PLANS
- NEW PULL BOX
- GATE CONTROLLER
- GATE KEYPAD
- NEW UNDERGROUND CONDUIT
- A-1 CIRCUIT NUMBER
- WIRE & CONDUIT TAG, SEE WIRE & CONDUIT TABLE
- 100A 120/240V 1Ø PEDESTAL

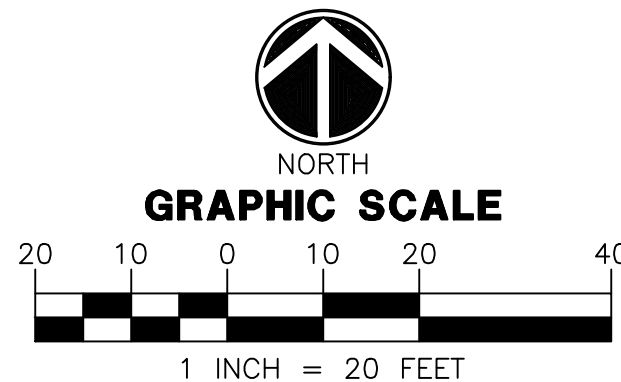
WIRE & CONDUIT TABLE

NO.	CONDUIT		WIRE		REMARKS	
	SIZE	POWER	GROUND	TYPE*	(CKT #)	
50	1"	2-#12	1-#12	CU	TYPICAL	
51	1"	2-#10	1-#10	CU	TYPICAL	
52	1"	2-#8	1-#8	CU	TYPICAL	
53	1"	2-#4	1-#4	CU	TYPICAL	
60	1.5"	PULL	ROPE		SPARE	
61	1.5"	3-#1	1-#6	CU	PANEL 'P'	
100	1"	2-#12	1-#12	CU	A-5	
		2-#12		CU	A-6	
		2-#12		CU	A-11	
		2-#12		CU	A-2	
101	1"	2-#12	1-#12	CU	PICKLE BALL PB	
		2-#8		CU	A-1	
		2-#8		CU	A-3	
		2-#4	1-#4	CU	A-13	
102	1.5"	2-#4		CU	A-15	
		2-#12		CU	A(8,10)	
		2-#12	1-#12	CU	A-5	
		2-#12		CU	A-11	
103	1"	2-#12		CU	A(8,10)	
		2-#12	1-#12	CU	A-6	
		2-#12		CU	A-11	
		2-#12		CU	A-5	
104	1"	2-#12	1-#12	CU	A-6	
		2-#12		CU	A-11	
		2-#12		CU	A-5	
		2-#12		CU	A-6	
105	1"	2-#12	1-#12	CU	A-11	
		2-#12		CU	A(8,10)	
		2-#12	1-#12	CU	A-6	
		2-#12		CU	A(8,10)	
106	1"	2-#12		CU	A-5	
		2-#12	1-#12	CU	A-6	
		2-#12		CU	A(8,10)	
		2-#4	1-#4	CU	A-13	
107	1.5"	2-#4		CU	A-15	
		2-#4		CU	A-13	
		2-#4	1-#4	CU	A-15	
		2-#12		CU	A(8,10)	
108	1"	2-#12	1-#12	CU	A-5	
		2-#12		CU	A-6	
		2-#12		CU	A-11	
		2-#12		CU	A-5	
109	1"	2-#12	1-#12	CU	A-6	
		2-#12		CU	B-3	
		2-#12	1-#4	CU	B-4	
		2-#12		CU	B-3	
200	1.5"	2-#4	1-#4	CU	B-4	
		2-#12		CU	B-3	
		2-#12	1-#2	CU	B-4	
		2-#12		CU	B-3	
201	1.5"	2-#2	1-#2	CU	B-4	
		2-#12		CU	B-3	
		2-#12	1-#2	CU	B-4	
		2-#12		CU	B-3	
202	1.5"	2-#2	1-#2	CU	B-4	
		2-#12		CU	B-3	
		2-#12	1-#2	CU	B-4	
		2-#12		CU	B-3	
203	1"	2-#12	1-#12	CU	B-4	
		2-#12		CU	B-3	
		2-#12	1-#12	CU	B-4	
		2-#12		CU	B-3	

* THIS COLUMN IDENTIFIES THE CONDUCTOR MATERIAL TYPE.
CU = COPPER, AL = ALUMINUM.

LIGHT FIXTURE SCHEDULE

SYMBOL	LETTER ID	MANUFACTURER	CATALOG NUMBER	FINISH COLOR	VOLTS	LAMP	LUMENS (MIN)	CCT	MOUNTING HEIGHT	DETAIL
	A	COOPER LIGHTING	GAN-SA2C-730-U-T3-BZ-HSS	BRONZE	120	113W LED	13,182	3000K	14'-0"	TYPE 3 AREA LIGHT SEE DETAIL 4 SHEET SE3.3
	B	ARCHITECTURAL AREA LIGHTING	PRM22-72L-310-3K7-4W-DBS-UNV	BRONZE	120	69.46W LED	8,512	3000K	14'-0"	TYPE 4 PARKING LOT LIGHT SEE DETAIL 6 SHEET SE3.4
	C	COOPER LIGHTING	GAN-SA4C-730-U-T4W-BZ	BRONZE	120	213W LED	25,347	3000K	14'-0"	TYPE 4 AREA LIGHT SEE DETAIL 4 SHEET SE3.3
	D	LUMINAIRE LIGHTING	SWP1212-NODIM-40W-30K-MVOLT-OP-BRZ	BRONZE	120	43W LED	3,350	3000K	10'-0"	RAMADA LIGHT SEE DETAIL 5 SHEET SE3.3
	E	COOPER LIGHTING	BR76-A3-730-U-T4-42-BZ	BRONZE	120	22W LED	1,786	3000K	3'-6"	BOLLARD SEE DETAIL 7 SHEET SE3.4



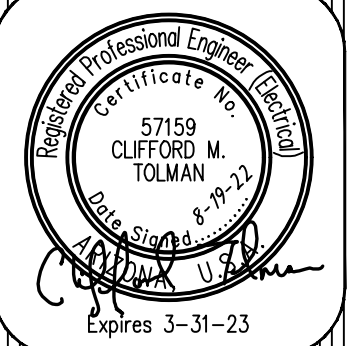
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DRAWN BY: XAG
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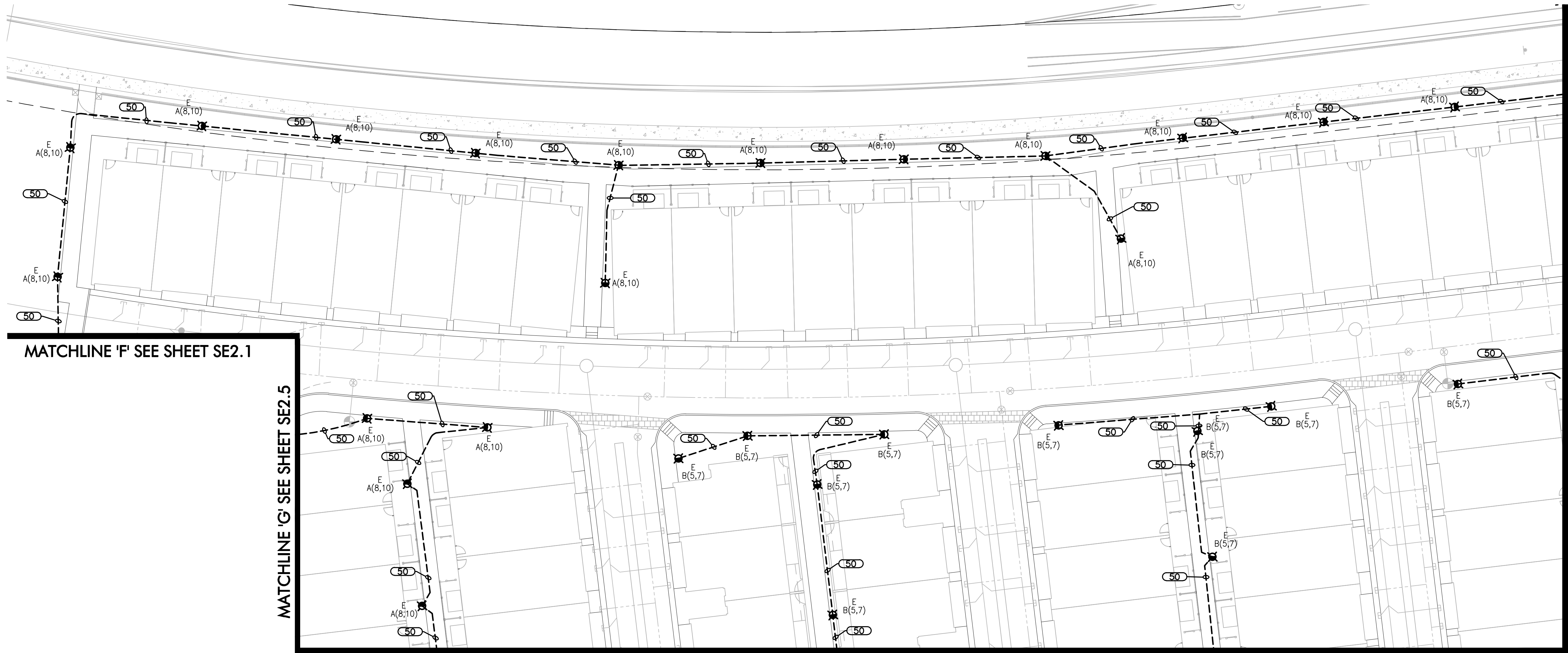
MARICOPA, ARIZONA
**VILLAS AT STONEGATE
SITE ELECTRICAL PLAN**
SITE ELECTRICAL PLAN

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DRAWING NO:
SE2.4
OF 18

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MATCHLINE 'F' SEE SHEET SE2.1

MATCHLINE 'G' SEE SHEET SE2.5

MATCHLINE 'I' SEE SHEET SE2.2

MATCHLINE 'L' SEE SHEET SE2.4

CONSTRUCTION NOTES

- 2.5" SCH. 40 PVC CONDUIT TO POINT OF SERVICE, CONTRACTOR SHALL VERIFY POINT OF ELECTRIC SERVICE LOCATION AND SPECIFICATIONS WITH POWER CO. PLANS & INSTALL CONDUIT TO THIS LOCATION. POWER CO. PLANS WILL DETERMINE EXACT LOCATION OF CONDUIT AND TAKE PRECEDENCE OVER THESE DRAWINGS.
- 200 AMP, 120/240V, 1Ø, 3W, METERED ELECTRIC PEDESTAL, SEE DETAIL 1 ON SE3.1.
- 125 AMP, 120/240V, 1Ø, 3W, WALL-MOUNTED SUB-PANEL PER BUILDING ELECTRICAL PLANS
- #3-1/2 CONCRETE PULL BOX, SEE DETAIL 3 ON SE3.2.
- GATE CONTROLLER, COORDINATE WITH GATE CONTRACTOR FOR EXACT LOCATION AND DETAILS. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR CONDUIT, STUB UPS, CONDUCTORS, SPLICES AND OTHER NECESSARY COMPONENTS FOR A COMPLETE SYSTEM.
- GATE KEYPAD, COORDINATE WITH GATE CONTRACTOR FOR EXACT LOCATION AND DETAILS. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR WIRING.
- 100 AMP, 120/240V, 1Ø, 3W, METERED ELECTRIC PEDESTAL, SEE DETAIL 2 ON SE3.1.
- PUSH BUTTON ON LIGHT POLE TO FACE COURT, SEE DETAIL 4 ON SE3.3.
- STUB OUT 5' OF 1" CONDUIT WITH PULL ROPE AS SHOWN ON SITE PLAN, FOR FUTURE USE. CAP CONDUIT AT GRADE AND MARK LOCATION ON AS-BUILT DRAWINGS.

LEGEND

- 200A 120/240V 1Ø PEDESTAL
- 125A 120/240V 1Ø SUB-PANEL PER BUILDING ELECTRICAL PLANS
- NEW PULL BOX
- GATE CONTROLLER
- GATE KEYPAD
- NEW UNDERGROUND CONDUIT
- A-1 CIRCUIT NUMBER
- WIRE & CONDUIT TAG, SEE WIRE & CONDUIT TABLE
- 100A 120/240V 1Ø PEDESTAL

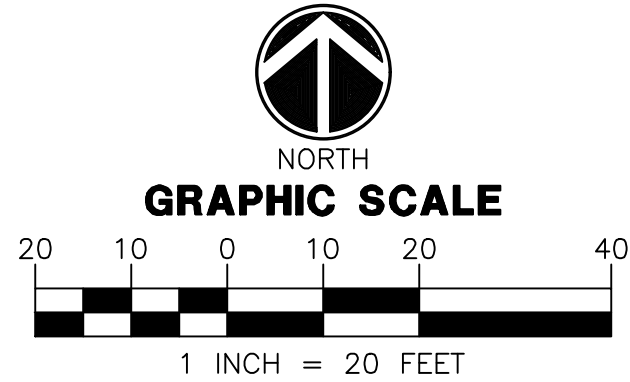
WIRE & CONDUIT TABLE

CONDUIT		WIRE		REMARKS	
NO.	SIZE	POWER	GROUND	TYPE*	(CKT #)
50	1"	2-#12	1-#12	CU	TYPICAL
51	1"	2-#10	1-#10	CU	TYPICAL
52	1"	2-#8	1-#8	CU	TYPICAL
53	1"	2-#4	1-#4	CU	TYPICAL
60	1.5"	PULL	ROPE		SPARE
61	1.5"	3-#1	1-#6	CU	PANEL 'P'
100	1"	2-#12	1-#12	CU	A-5
		2-#12		CU	A-6
		2-#12		CU	A-11
101	1"	2-#12	1-#12	CU	A-2
		2-#12		CU	PICKLE BALL PB
102	1"	2-#8	1-#8	CU	A-1
		2-#8		CU	A-3
	1.5"	2-#4	1-#4	CU	A-13
		2-#4		CU	A-15
		2-#12		CU	A(8,10)
103	1"	2-#12	1-#12	CU	A-5
		2-#12		CU	A-11
		2-#12		CU	A(8,10)
		2-#12		CU	A-6
104	1"	2-#12	1-#12	CU	A-11
		2-#12		CU	A-5
105	1"	2-#12	1-#12	CU	A-6
		2-#12		CU	A-11
		2-#12		CU	A(8,10)
		2-#12		CU	A-6
106	1"	2-#12	1-#12	CU	A-6
		2-#12		CU	A(8,10)
107	1.5"	2-#4	1-#4	CU	A-13
		2-#4		CU	A-15
108	1.5"	2-#4	1-#4	CU	A-13
		2-#4		CU	A-15
		2-#12		CU	A(8,10)
109	1"	2-#12	1-#12	CU	A-5
		2-#12		CU	A-6
200	1.5"	2-#4	1-#4	CU	B-3
		2-#12		CU	B-4
201	1.5"	2-#2	1-#2	CU	B-3
		2-#12		CU	B-4
202	1.5"	2-#2	1-#2	CU	B-3
		2-#12		CU	B-4
		2-#12		CU	B-6
203	1"	2-#12	1-#12	CU	B-4
		2-#12		CU	B-6

* THIS COLUMN IDENTIFIES THE CONDUCTOR MATERIAL TYPE.
CU = COPPER, AL = ALUMINUM.

LIGHT FIXTURE SCHEDULE

SYMBOL	LETTER ID	MANUFACTURER	CATALOG NUMBER	FINISH COLOR	VOLTS	LAMP	LUMENS (MIN)	CCT	MOUNTING HEIGHT	DETAIL
	A	COOPER LIGHTING	GAN-SA2C-730-U-T3-BZ-HSS	BRONZE	120	113W LED	13,182	3000K	14'-0"	TYPE 3 AREA LIGHT SEE DETAIL 4 SHEET SE3.3
	B	ARCHITECTURAL AREA LIGHTING	PRM22-72L-310-3K7-4W-DBS-UNV	BRONZE	120	69.46W LED	8,512	3000K	14'-0"	TYPE 4 PARKING LOT LIGHT SEE DETAIL 6 SHEET SE3.4
	C	COOPER LIGHTING	GAN-SA4C-730-U-T4W-BZ	BRONZE	120	213W LED	25,347	3000K	14'-0"	TYPE 4 AREA LIGHT SEE DETAIL 4 SHEET SE3.3
	D	LUMINAIRE LIGHTING	SWP1212-NODIM-40W-30K-MVOLT-OP-BRZ	BRONZE	120	43W LED	3,350	3000K	10'-0"	RAMADA LIGHT SEE DETAIL 5 SHEET SE3.3
	E	COOPER LIGHTING	BRT6-A3-730-U-T4-42-BZ	BRONZE	120	22W LED	1,786	3000K	3'-6"	BOLLARD SEE DETAIL 7 SHEET SE3.4



WRIGHT ENGINEERING
PROJECT NO:
22109
DESIGN BY: XAG
DRAWN BY: XAG
CHECKED BY: CMT

WRIGHT
engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE • CHANDLER, ARIZONA 85225
PHONE 480.497.5829 • FAX 480.497.5807
www.wrightengineering.us

PROJECT: TITLE:

MARICOPA, ARIZONA
VILLAS AT STONEGATE
SITE ELECTRICAL PLAN
SITE ELECTRICAL PLAN

NO. DATE SUBMITTALS/REVISIONS (DESCRIPTIONS)

1 AUG 2022 100% SUBMITTAL



DRAWING NO:

SE2.5
OF 18

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CONSTRUCTION NOTES

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- STUB OUT 5' OF 1" CONDUIT WITH PULL ROPE AS SHOWN ON SITE PLAN, FOR FUTURE USE. CAP CONDUIT AT GRADE AND MARK LOCATION ON AS-BUILT DRAWINGS.

LEGEND

- 200A 120/240V 1Ø PEDESTAL
- 125A 120/240V 1Ø SUB-PANEL PER BUILDING ELECTRICAL PLANS
- NEW PULL BOX
- GATE CONTROLLER
- GATE KEYPAD
- NEW UNDERGROUND CONDUIT
- A-1 CIRCUIT NUMBER
- WIRE & CONDUIT TAG, SEE WIRE & CONDUIT TABLE
- 100A 120/240V 1Ø PEDESTAL

WIRE & CONDUIT TABLE

CONDUIT NO.	SIZE	POWER	WIRE GROUND	TYPE*	REMARKS
50	1"	2-#12	1-#12	CU	TYPICAL
51	1"	2-#10	1-#10	CU	TYPICAL
52	1"	2-#8	1-#8	CU	TYPICAL
53	1"	2-#4	1-#4	CU	TYPICAL
60	1.5"	PULL ROPE			SPARE
61	1.5"	3-#1	1-#6	CU	PANEL 'P'
100	1"	2-#12	1-#12	CU	A-5
		2-#12		CU	A-6
		2-#12		CU	A-11
101	1"	2-#12	1-#12	CU	A-2
		2-#12		CU	PICKLE BALL PB
102	1"	2-#8	1-#8	CU	A-1
		2-#8		CU	A-3
	1.5"	2-#4	1-#4	CU	A-13
		2-#4		CU	A-15
		2-#12		CU	A(8,10)
103	1"	2-#12	1-#12	CU	A-5
		2-#12		CU	A-11
		2-#12		CU	A(8,10)
104	1"	2-#12	1-#12	CU	A-6
		2-#12		CU	A-11
105	1"	2-#12	1-#12	CU	A-5
		2-#12		CU	A-6
		2-#12		CU	A-11
		2-#12		CU	A(8,10)
106	1"	2-#12	1-#12	CU	A-6
		2-#12		CU	A(8,10)
107	1.5"	2-#4	1-#4	CU	A-13
		2-#4		CU	A-15
108	1.5"	2-#4	1-#4	CU	A-13
		2-#4		CU	A-15
		2-#12		CU	A(8,10)
109	1"	2-#12	1-#12	CU	A-5
		2-#12		CU	A-6
200	1.5"	2-#4	1-#4	CU	B-3
		2-#12		CU	B-4
201	1.5"	2-#2	1-#2	CU	B-3
		2-#12		CU	B-4
202	1.5"	2-#2	1-#2	CU	B-3
		2-#12		CU	B-4
		2-#12		CU	B-6
203	1"	2-#12	1-#12	CU	B-4
		2-#12		CU	B-6

* THIS COLUMN IDENTIFIES THE CONDUCTOR MATERIAL TYPE.
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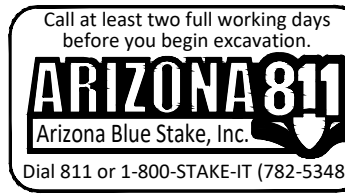
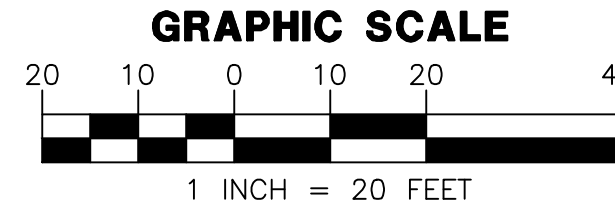
LIGHT FIXTURE SCHEDULE

SYMBOL	LETTER ID	MANUFACTURER	CATALOG NUMBER	FINISH COLOR	VOLTS	LAMP	LUMENS (MIN)	CCT	MOUNTING HEIGHT	DETAIL
	A	COOPER LIGHTING	GAN-SA2C-730-U-T3-BZ-HSS	BRONZE	120	113W LED	13,182	3000K	14'-0"	TYPE 3 AREA LIGHT SEE DETAIL 4 SHEET SE3.3
	B	ARCHITECTURAL AREA LIGHTING	PRM22-72L-310-3K7-4W-DBS-UNV	BRONZE	120	69.46W LED	8,512	3000K	14'-0"	TYPE 4 PARKING LOT LIGHT SEE DETAIL 6 SHEET SE3.4
	C	COOPER LIGHTING	GAN-SA4C-730-U-T4W-BZ	BRONZE	120	213W LED	25,347	3000K	14'-0"	TYPE 4 AREA LIGHT SEE DETAIL 4 SHEET SE3.3
	D	LUMINAIRE LIGHTING	SWP1212-NODIM-40W-30K-MVOLT-OP-BRZ	BRONZE	120	43W LED	3,350	3000K	10'-0"	RAMADA LIGHT SEE DETAIL 5 SHEET SE3.3
	E	COOPER LIGHTING	BRT6-A3-730-U-T4-42-BZ	BRONZE	120	22W LED	1,786	3000K	3'-6"	BOLLARD SEE DETAIL 7 SHEET SE3.4

MATCHLINE 'H' SEE SHEET SE2.1

MATCHLINE 'K' SEE SHEET SE2.2

MATCHLINE 'J' SEE SHEET SE2.3



WRIGHT ENGINEERING
PROJECT NO:
22109
DESIGN BY: XAG
DRAWN BY: XAG
CHECKED BY: CMT

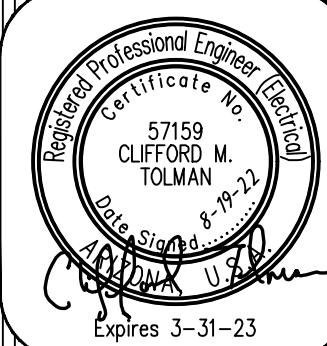
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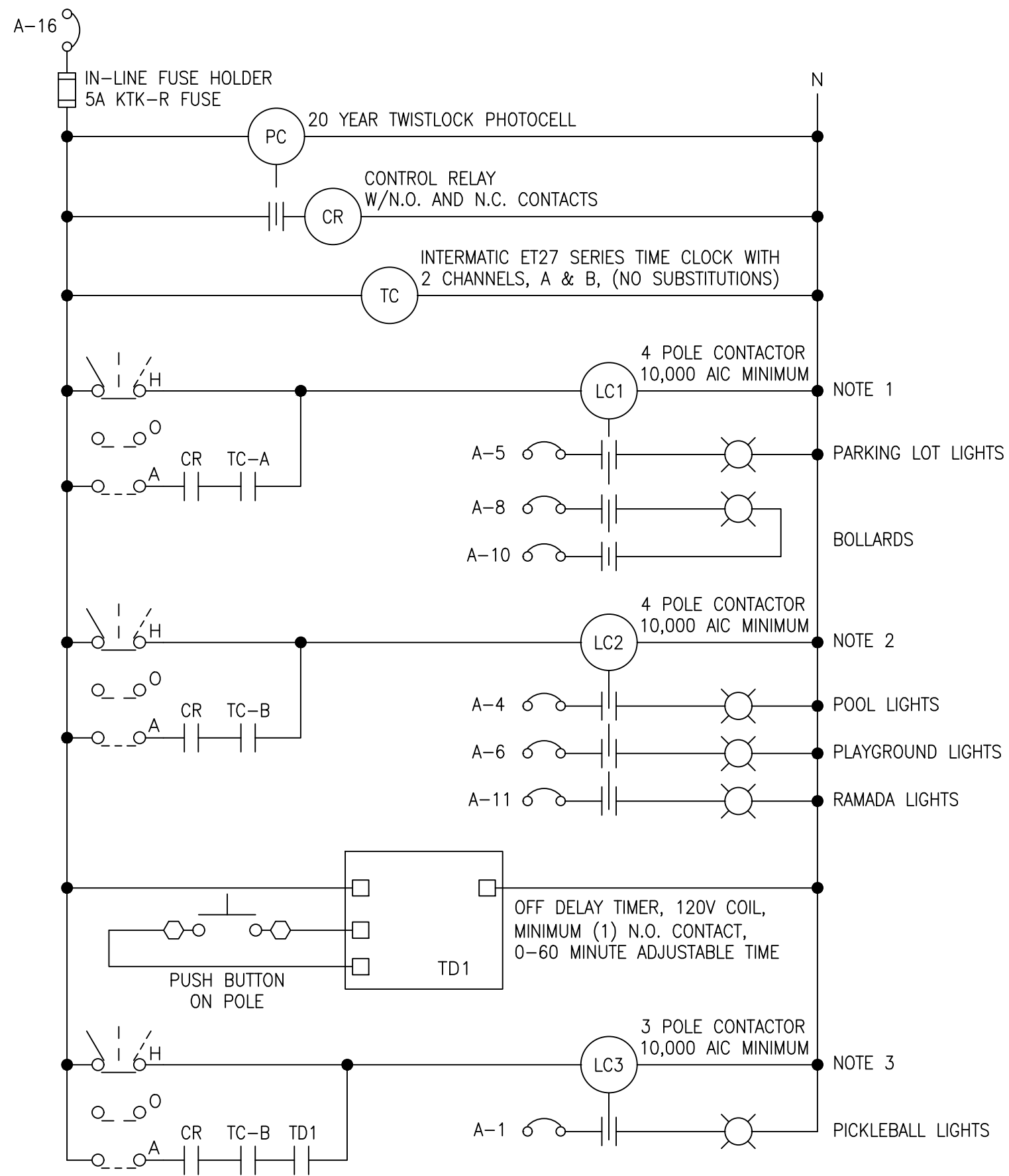
NO. DATE SUBMITTALS/REVISIONS (DESCRIPTIONS)

1 AUG 2022 100% SUBMITTAL



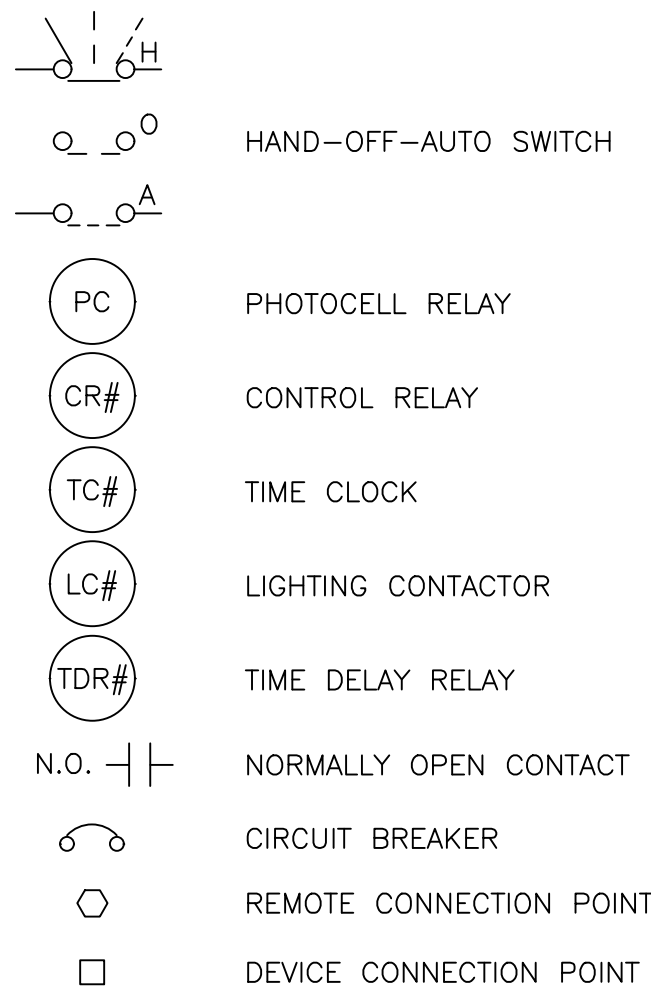
DRAWING NO:
SE2.6
OF 18

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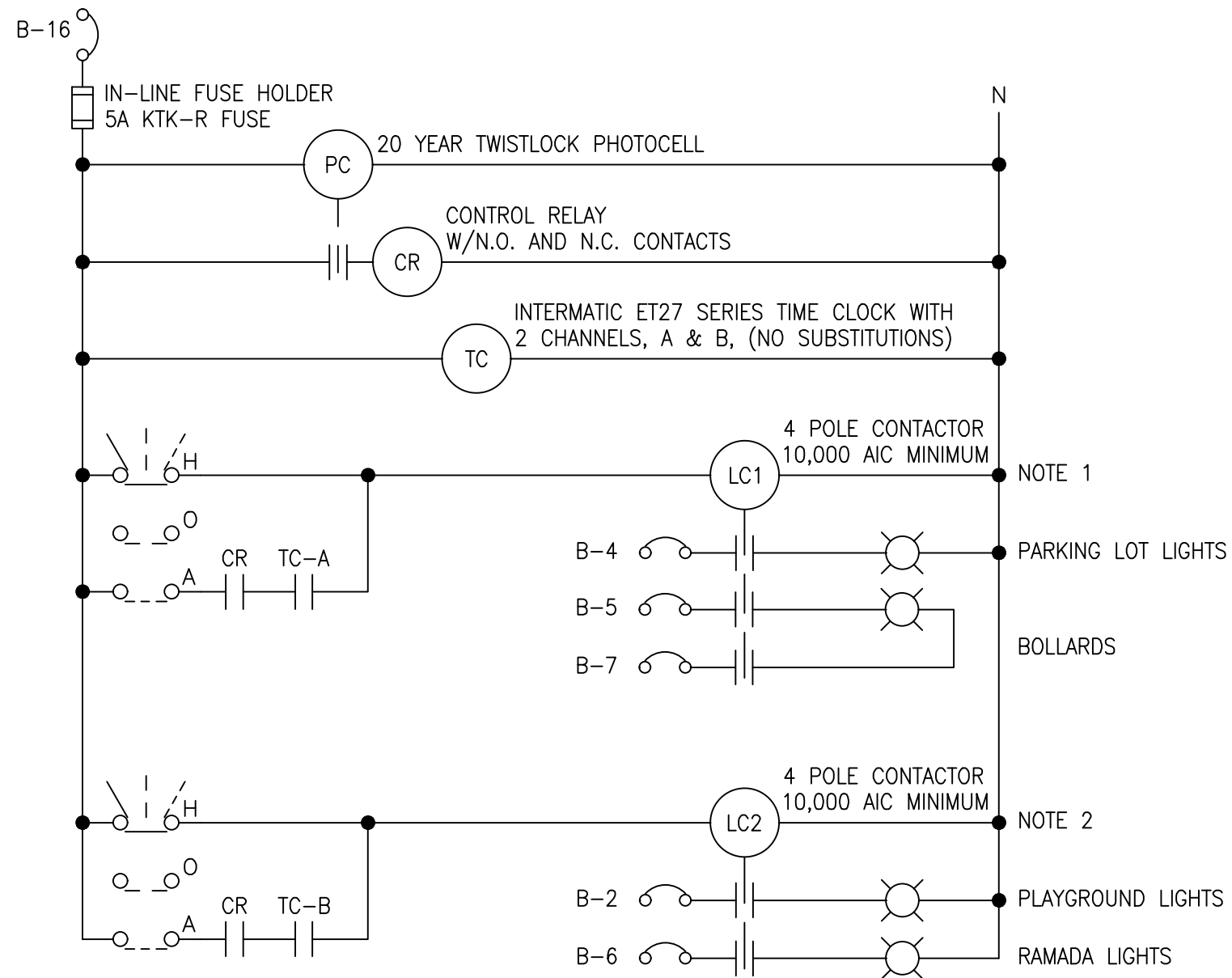
1C LIGHTING CONTROL SCHEMATIC (PANEL 'A')
NO SCALE 120V

CONTROL SCHEMATIC LEGEND

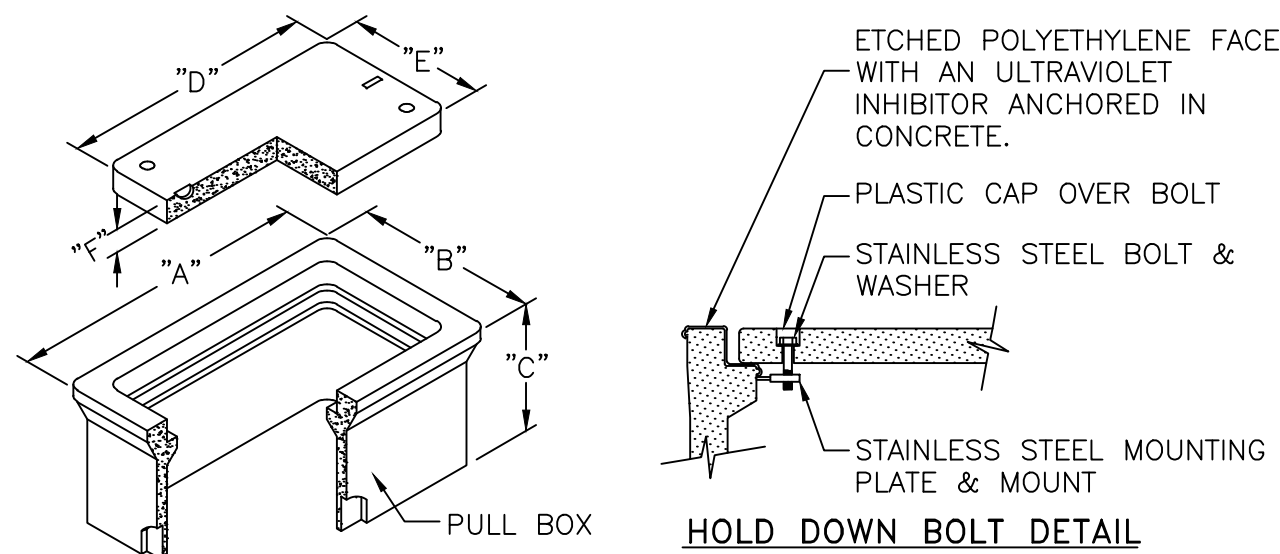


CONTROLLER NOTES

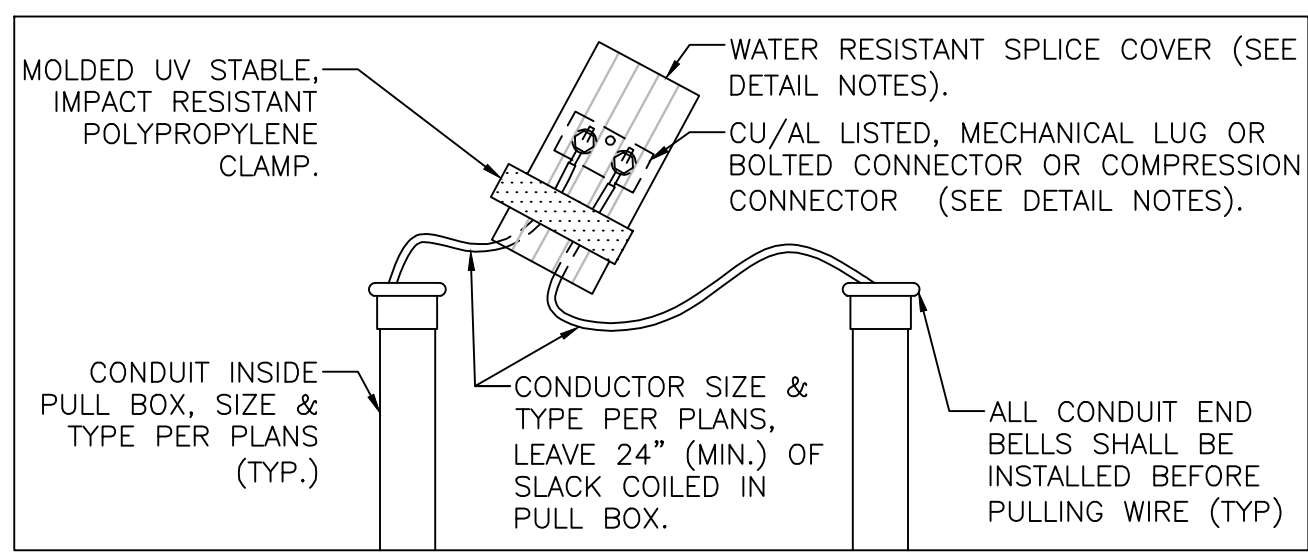
- THIS CIRCUIT TO BE ACTIVATED FROM DUSK TO DAWN.
- THIS CIRCUIT TO BE ACTIVATED AT DUSK AND SHUT OFF AT 10:30 PM.
- THIS CIRCUIT TO BE ACTIVATED VIA POLE MOUNTED PUSH BUTTON. ONCE ACTIVATED CIRCUIT WILL BE ON UNTIL TIMER EXPIRES. CIRCUIT CAN THEN BE REACTIVATED WITH PUSH BUTTON. CIRCUIT WILL BE AVAILABLE FOR USE FROM DUSK TO 10:30 PM.



2C LIGHTING CONTROL SCHEMATIC (PANEL 'B')
NO SCALE 120V



HOLD DOWN BOLT DETAIL



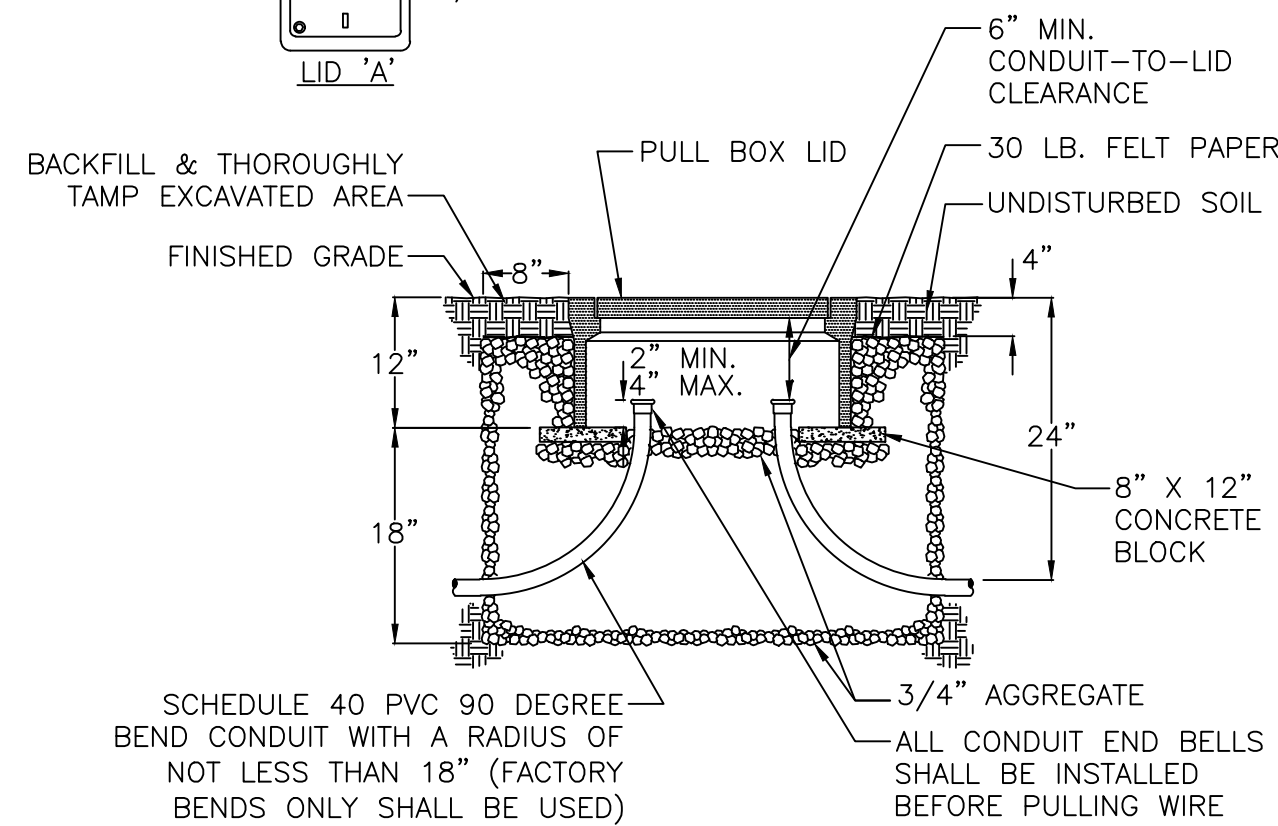
SPICES INSIDE PULL BOX

DETAIL NOTES:

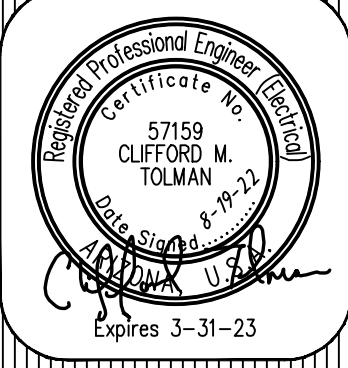
- THE PULL BOX SHALL BE MADE OF A HIGH DENSITY REINFORCED CONCRETE MATERIAL WITH END & SIDE KNOCKOUTS, & NON-SETTLING SHOULDERS TO MAINTAIN GRADE, MANUFACTURED WITH APPROXIMATE DIMENSIONS AS SHOWN.
- STEEL REINFORCEMENT SHALL BE AS REGULARLY USED IN STANDARD PRODUCTS OF THE RESPECTIVE MANUFACTURER.
- COVER LETTERING SHALL BE 1" LETTERS CAST IN STANDARD MARKINGS: "ELECTRIC" OR "HIGH VOLTAGE" OR "COMMUNICATIONS". AS REQUIRED.
- THE PULL BOX SHALL HAVE AN ETCHED POLYETHYLENE FACE WITH AN ULTRAVIOLET INHIBITOR ANCHORED IN CONCRETE.
- ALL CABLE & CONDUCTOR SPICES MADE USING CU/AL LISTED, MECHANICAL LUG OR BOLTED CONNECTOR OR COMPRESSION CONNECTOR, (TYCO ELECTRONICS, NSI INDUSTRIES, ILSCO OR APPROVED EQUAL). CONNECTION TO BE INSULATED & MADE WATER RESISTANT WITH TYCO ELECTRONICS GELCAP-SL, NSI INDUSTRIES ESSLK-2/0 OR 3M SCOTCHCAST SPICE KIT 85 SERIES.

DATA TABLE						
PULLBOX TYPE	PULLBOX LENGTH	PULLBOX WIDTH	PULLBOX HEIGHT	LID LENGTH	LID WIDTH	LID HEIGHT
	"A"	"B"	"C"	"D"	"E"	"F"
#3-1/2	19-3/4"	14-1/4"	12"	15-1/2"	10"	1-3/4"
#5	25-1/8"	15-5/8"	12"	20-3/4"	10-5/8"	2"
#7	35"	22"	12"	30-1/2"	17-1/2"	2"

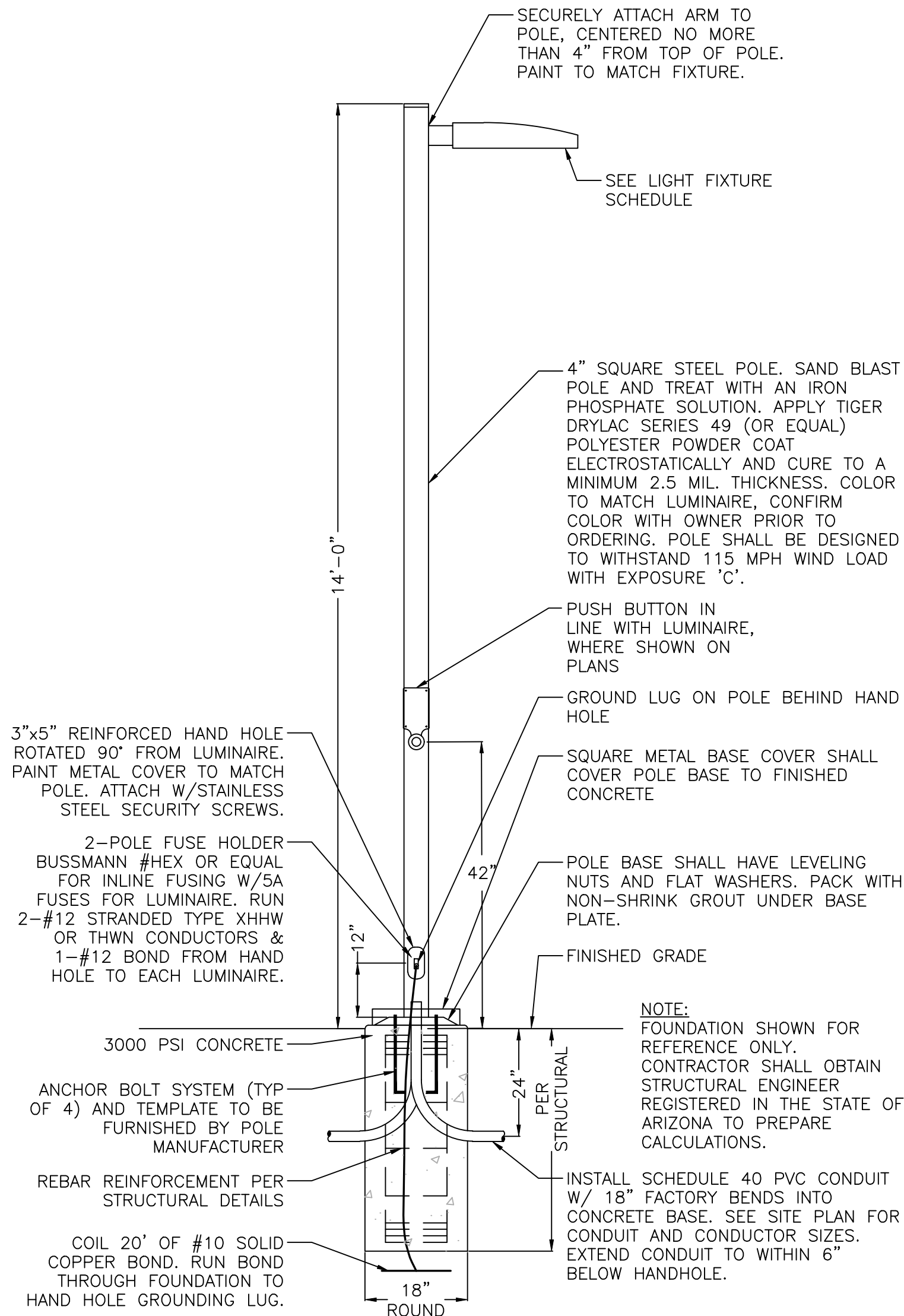
3 PULL BOX INSTALLATION
NO SCALE



NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	AUG 2022	100% SUBMITTAL



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4A FLUSH FOUNDATION STEELSPORTS LIGHT DETAIL
NO SCALE

Project

Catalog #

Type

Prepared by

Notes

Date

Streetworks

GAN Galleon

Area / Roadway Luminaire

Typical Applications
Outdoor • Parking Lots • Walkways • Roadways • Building Areas

Interactive Menu

- Ordering Information page 2
- Mounting Details page 3
- Optical Distributions page 4
- Product Specifications page 4
- Energy and Performance Data page 4
- Control Options page 5

Product Certifications

Product Features

Connected Systems

- WaveLink
- Enlighted

Quick Facts

- Lumen packages range from 4,200 - 80,800 (34W - 640W)
- Efficacy up to 156 lumens per watt

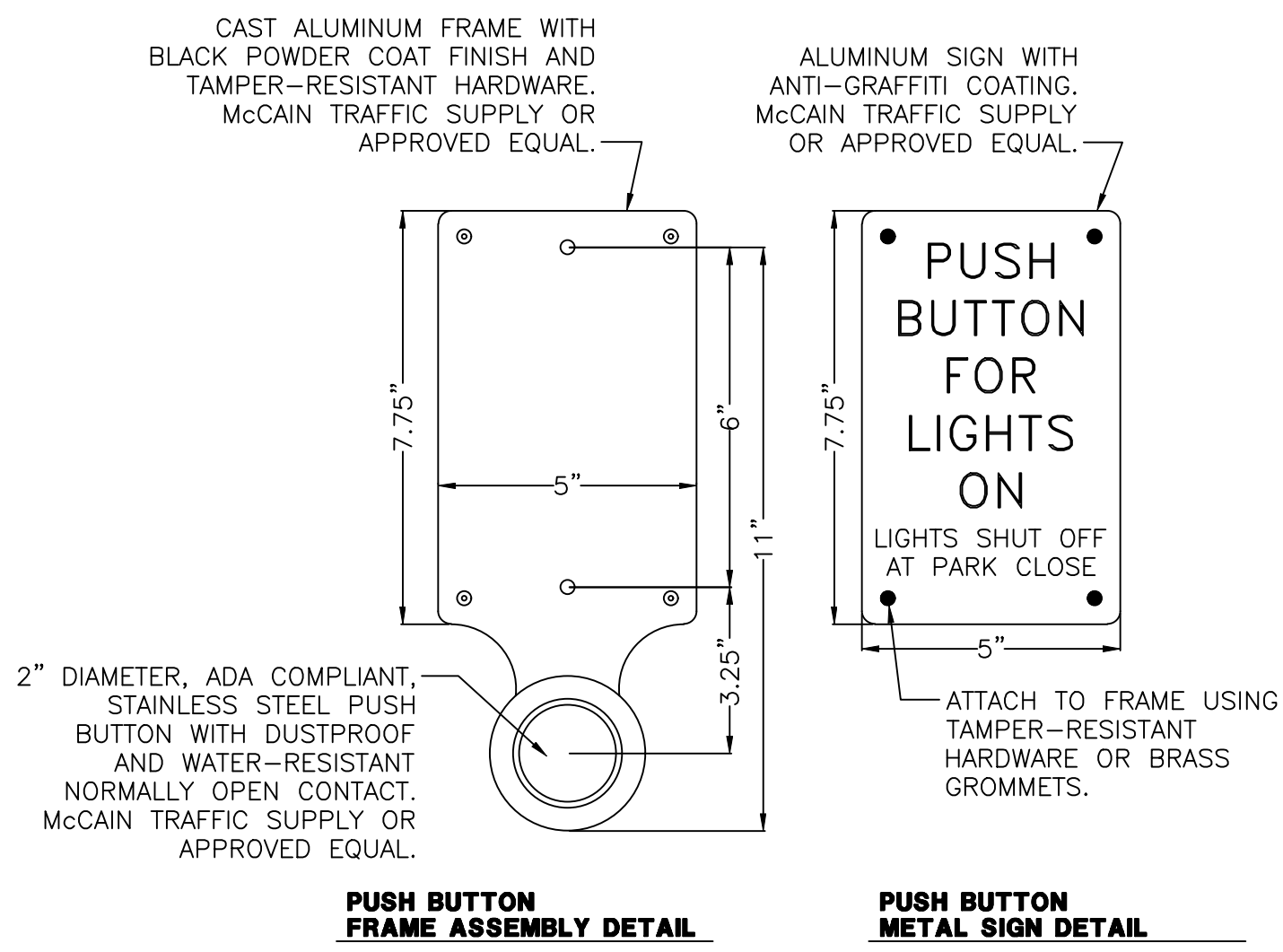
Dimensional Details

Number of Luminaire	W x H (mm)	W (mm)	H (mm)	W (mm)	H (mm)	W (mm)	H (mm)
1-4	15-1/2"	7"	10"	10-5/8"	--	16-9/16"	--
5-6	21-5/8"	7"	10"	10-5/8"	--	16-9/16"	--
7-8	27-5/8"	7"	13"	10-5/8"	10-5/16"	--	--
9-10	33-3/4"	7"	16"	--	10-5/16"	--	--

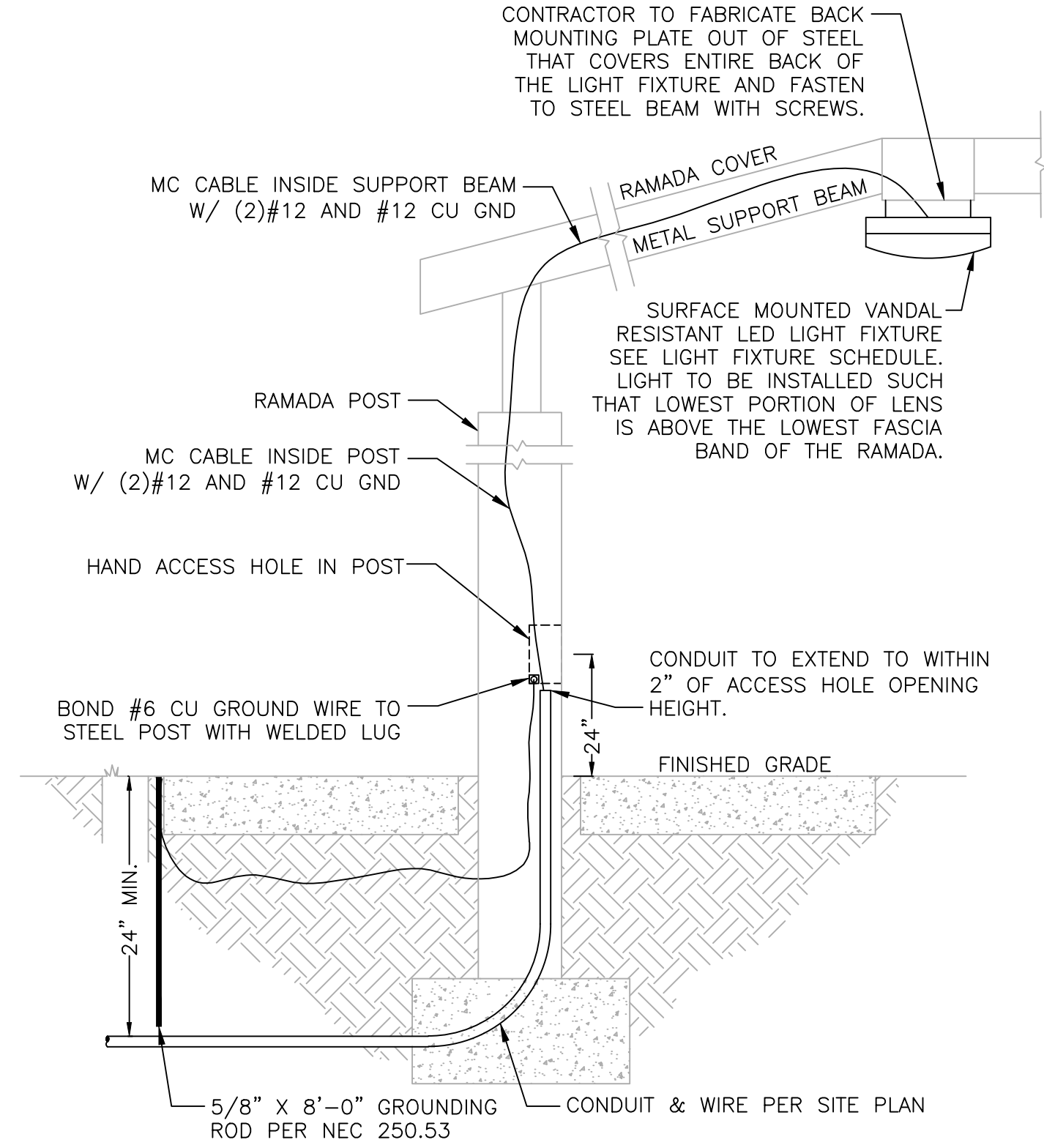
NOTES:
For all selection requirements and additional features, see Mounting Details section.

COOPER
Lighting Solutions

PS00000000 page 1
August 3, 2021 11:55 AM



4B PUSH BUTTON DETAIL
NO SCALE



5 RAMADA ELECTRICAL DETAIL
NO SCALE

SWEEP SWP1212

Vandal Resistant

SWP1212 Series LED

Fixture Type

Date

Label Name

Approved By

Catalog Number

SPECIFICATIONS

Description The Swoop SWP1212 series features a durable, color-impregnated, polycarbonate housing supported by a marine grade, die cast aluminum base plate to provide a lighting fixture that will survive in many challenging environments.

Bezel One piece injection molded UV stabilized polycarbonate mechanically interlocked to lens. Minimum wall thickness shall be 0.140". Color is molded through entire part for scratch resistant finish.

Lens One piece injection molded UV stabilized prismatic polycarbonate with minimum 0.140" wall thickness. Available in Clear or Opal and secured to base plate with (4) conical captive stainless steel screws. XWP and YWP models come with a chemically etched, scratch resistant surface painted lens.

Reflector Die formed, shaped for maximum efficiency and finished with high gloss electrostatically applied white polyester powder coat.

Drivers 0-10V dimming to 1%, 10% or Non-Dimming Driver is also available.

LED Nichia NFSL757G series @ 2700K, 3000K, 3500K, 4000K, or 5000K and 82 CRI wired in parallel-series. L₇₀ projected life of over 130,000 hours at 50°C.

Buy American Luminaire LED, LLC products are assembled in the USA. Our products meet the Buy American(n) government procurement requirements under FAR, DFARS, and DOT. Please refer to www.acuitybrands.com/buy-american for additional information.

UL Listing U.L., C.U.L., Wet Location Listing standard.

Warranty Lifetime warranty, Luminaire LED incorporated will repair or replace any fixture damaged due to vandalism for the lifetime of the installation. 10-year warranty on LED boards against operational defects. Tested in accordance with LM-80.

Note Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

A

B

C

SWP1212	12.34	12.34	5.05
XWP1212 With Trim	12.34	12.34	5.05
YWP1212 With Trim	12.34	12.34	5.05

Diagram showing the dimensions of the SWEEP SWP1212 fixture. The diagram includes dimensions A, B, and C.

Luminaire LED

One Lithonia Way, Cary, NC 27513 | 1-800-705-5289 (7276) | www.luminaireled.net

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LUMINAIRE LED SWEEP SWP1212-LED
Rev. 08/2021
Page 1 of 1

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PROJECT NO:
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DRAWN BY: XAG
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engineering corporation
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SITE ELECTRICAL DETAILS

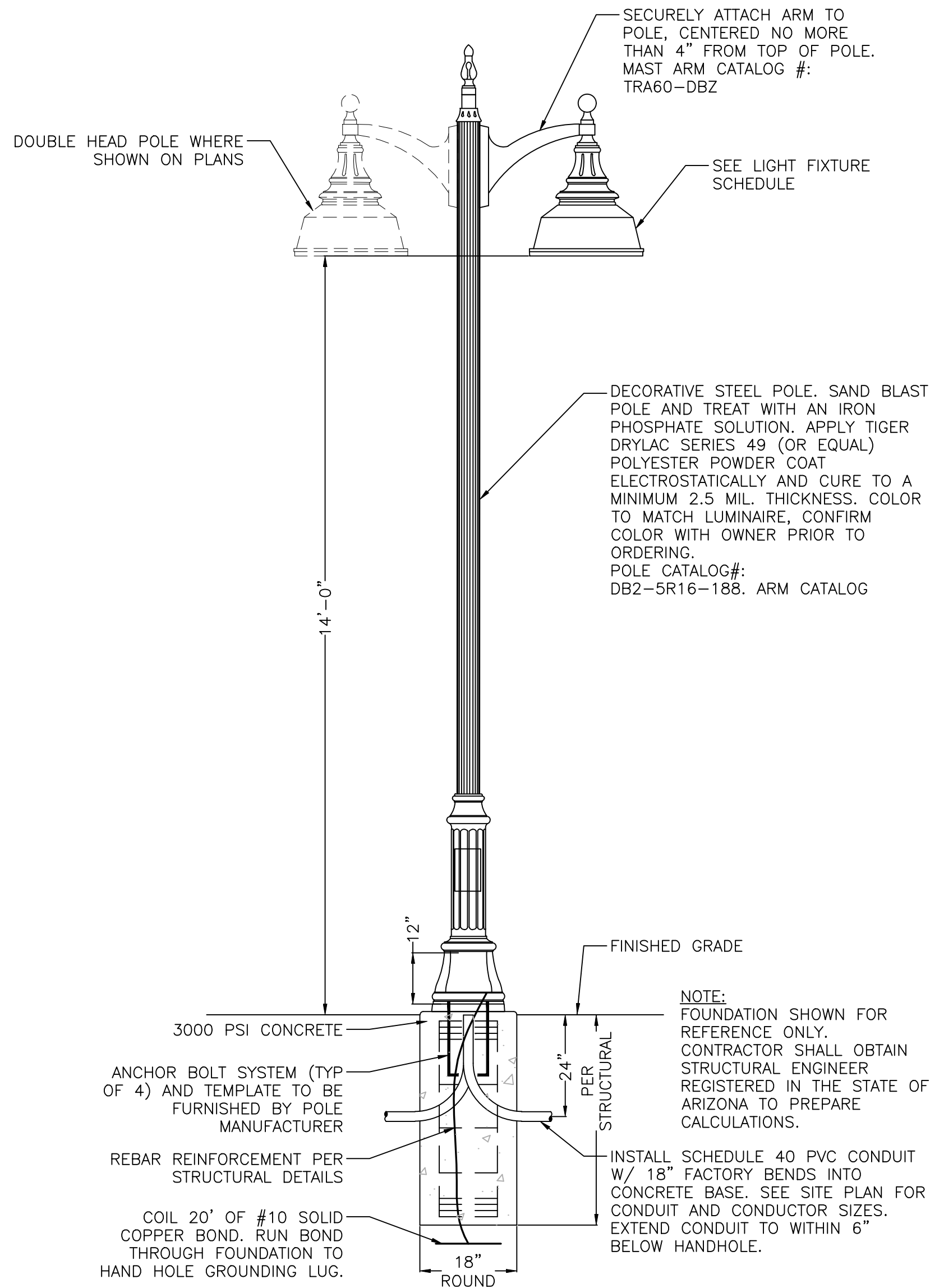
NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	AUG 2022	100% SUBMITTAL

Professional Engineer
57159
CLIFFORD M. TOLMAN
Exp. 3-31-23

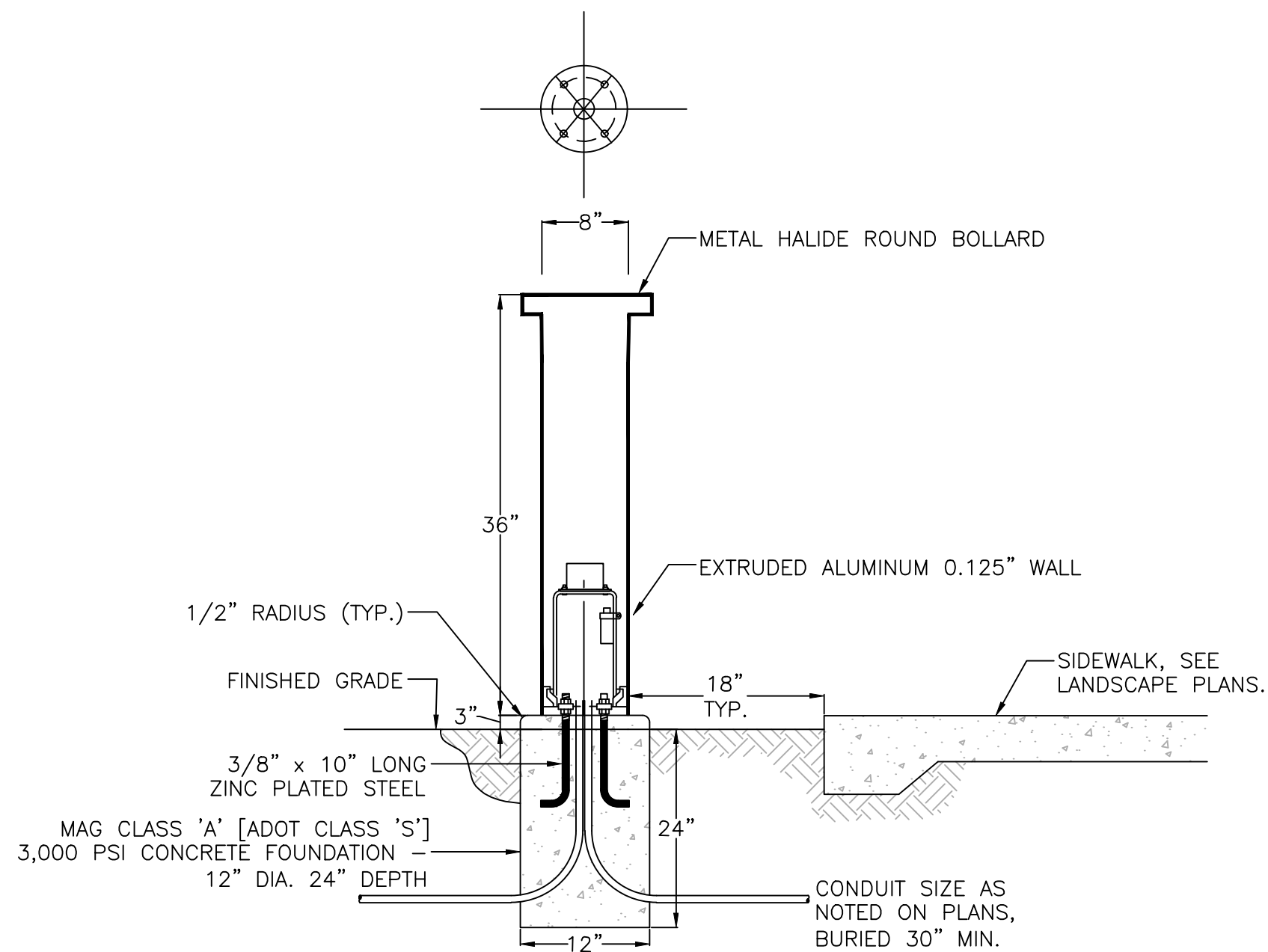
DRAWING NO:
SE3.3
OF 18

Call at least two full working days
before you begin excavation.
ARIZONA811
Arizona Blue Stake, Inc.
Dial 811 or 1-800-STAKE-IT (782-5348)

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6 FLUSH FOUNDATION STEEL AREA LIGHT DETAIL
NO SCALE



7 BOLLARD LIGHT DETAIL
NO SCALE

architectural
arealighting

PRM22
DECORATIVE

FEATURES

- Reliable, uniform, glare free illumination
- Types 1, 2, 3, 4W, 50, and 5W distributors
- 3000K, 4000K, 5000K CCT
- 0-10V dimming ready
- Integral surge suppression
- Upgrade Kits

CERTIFICATIONS

- ETL listed under UL 1598 and CSA C22.2 No. 250.0-08 for wet locations
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 6/06/2020. See Buy American Solutions

WARRANTY

- See HLL Standard Warranty for additional information

INSTALLATION

- Features must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.
- Luminaires have integral surge protection, UL recognized and have a surge current rating of 10,000 Amps using the industry standard 8/20uSec wave and surge rating of 372 J.
- Drivers are UL recognized with an inrush current maximum of <200 Amps maximum at 250VAC.
- 100%-RL dimming range. Fixture will be wired for low voltage 0-10V dimming control.

ELECTRICAL

- Optical carriage system consisting of a die cast heat sink, LED engine, TR optics, gasket and bezel plate.
- Carriage is easily disassembled to replace components. Optics are held in place without the use of adhesives.
- Molded silicone gasket ensures a weather-proof seal around each individual LED.
- Features revolutionary individual LED optical control based on high performance TR optical designs.
- House Side Shield is available on Standard and Clear Lens options except any Type 5 distribution. House Side Shield is not available for any distribution using a Diffused Lens.

LEDOPTICS

- Optical carriage system consisting of a die cast heat sink, LED engine, TR optics, gasket and bezel plate.
- Carriage is easily disassembled to replace components. Optics are held in place without the use of adhesives.
- Molded silicone gasket ensures a weather-proof seal around each individual LED.
- Features revolutionary individual LED optical control based on high performance TR optical designs.
- House Side Shield is available on Standard and Clear Lens options except any Type 5 distribution. House Side Shield is not available for any distribution using a Diffused Lens.

KEY DATA

LUMEN RANGE	8,200-15,000
WATTAGE RANGE	70-160
EFFICACY RANGE (lm/W)	100-140
INPUT CURRENT RANGE (mA)	330-700
WEIGHT	45 lbs/20.4 kg
EPA	19

Page 18 Rev 10/10/20
PRM22

© 2020 Architectural Area Lighting, a division of Hubbell Lighting, Inc. Specifications subject to change without notice.
17760 Rowland St, Rowland Heights, CA 91748 / Tel: 626-965-5666 / Website: www.aal.net

HUBBELL
Lighting

DATE: LOCATION:
TYPE: PROJECT:
CATALOG #:

PROMENADE

Decorative Poles DATE: TYPE: PAGE 10 OF 22

DB2
5" ROUND (RD) & FLUTED (FL) DECORATIVE BASE

CATALOG NO. MAXIMUM ALLOWABLE EPA (NPS)

BASE	POLE	DRS	DRFT	WT	85	90	100	110	120	130	140	150
Q02	5/14-188	14 (4.3M)	5" RD X 188"	118	32.3	28.5	22.7	18.6	15.5	13.1	11.2	9.6
Q02	5/16-188	16 (4.9M)	5" RD X 188"	123	27.3	23.9	19.0	15.5	12.8	10.8	9.2	7.9
Q02	5/18-188	18 (5.5M)	5" RD X 188"	129	22.8	19.8	15.6	12.7	10.5	8.8	7.4	6.4
Q02	5/20-188	20 (6.2M)	5" RD X 188"	136	18.9	16.4	12.8	10.3	8.5	7.0	5.9	5.0
Q02	5/22-188	22 (6.8M)	5" RD X 188"	142	15.8	13.5	10.4	8.3	6.8	5.6	4.7	3.9
Q02	5/24-188	24 (7.4M)	5" RD X 188"	148	13.1	11.1	8.4	6.8	5.3	4.5	3.6	3.0
Q02	5/26-188	26 (7.9M)	5" RD X 188"	151	11.9	10.0	7.5	5.9	4.7	3.8	3.1	2.5
Q02	5/14-250	14 (4.3M)	5" RD X 250"	130	35.7	31.5	25.2	20.0	17.2	14.5	12.4	10.7
Q02	5/16-250	16 (4.9M)	5" RD X 250"	140	30.3	26.8	21.3	17.4	14.5	12.2	10.4	9.0
Q02	5/18-250	18 (5.5M)	5" RD X 250"	150	25.8	22.5	17.8	14.5	12.0	10.1	8.6	7.3
Q02	5/20-250	20 (6.2M)	5" RD X 250"	158	21.8	18.9	14.8	12.0	9.9	8.3	7.0	6.0
Q02	5/22-250	22 (6.8M)	5" RD X 250"	167	18.5	15.9	12.4	9.9	8.1	6.7	5.7	4.8
Q02	5/24-250	24 (7.4M)	5" RD X 250"	176	15.7	13.4	10.3	8.2	6.6	5.5	4.5	3.8
Q02	5/26-250	26 (7.9M)	5" RD X 250"	180	14.5	12.3	9.3	7.4	6.0	4.9	4.0	3.4
Q02	5/14-188	14 (4.3M)	5" FL X 188"	118	21.4	18.7	14.8	12.1	10.0	8.2	6.9	5.8
Q02	5/16-188	16 (4.9M)	5" FL X 188"	123	17.8	15.5	12.1	9.8	8.0	6.6	5.4	4.5
Q02	5/18-188	18 (5.5M)	5" FL X 188"	129	14.5	12.5	9.7	7.8	6.3	5.1	4.1	3.3
Q02	5/20-188	20 (6.2M)	5" FL X 188"	136	11.8	10.0	7.6	6.1	4.8	3.7	3.0	2.3
Q02	5/22-188	22 (6.8M)	5" FL X 188"	142	9.4	7.9	5.8	4.6	3.9	2.9	2.0	1.4
Q02	5/24-188	24 (7.4M)	5" FL X 188"	148	7.4	6.1	4.3	3.3	2.4	1.7	1.1	0.8
Q02	5/26-188	26 (7.9M)	5" FL X 188"	151	6.6	5.2	3.6	2.7	1.9	1.2	0.7	0.3

NOTE: OVERALL HEIGHT IS MEASURED TO TOP OF POLE.

SPECIFICATIONS

Base shall be cast aluminum #356 alloy, free of any porosity, foreign materials, or cosmetic filers. Base casting shall be heat treated to a T-6 condition, and of uniform wall thickness, with no warping or mold shifting.

WARNINGS

Caution must be exercised in the selection of a design wind speed when the pole is to be installed in a special wind region (as indicated by the wind map) or in an area where wind speed is unpredictable.

AAL recommends consulting a local structural engineer when the pole is to be installed in an area that may be subject to extreme weather and exposure.

Poles installed on structures such as buildings and bridges may be subjected to vibration, oscillations, and other fatigue effects which are not covered by the AAL warranty.

The use of banners or other appendages can severely affect the loading of a pole. No banner or other appendage should be attached to an AAL pole unless approved by AAL.

If the products are to be used on an existing foundation or on other structures, the customer assumes all responsibility for the structural integrity of the existing foundation, anchorage or structures and all the consequences arising therefrom.

CAUTION

Poles should never be erected without the luminaire installed. Warranty is voided if the pole is erected without the luminaire. The warranty is voided if the pole is not grouted under the entire base after installation.

Anchor bolts shall be hot dip galvanized steel. Six galvanized hex nuts and flat washers, and a bolt circle template shall be provided. Anchor bolts for poles 14 feet high or less are 3/4" x 24" x 3". Anchor bolt for poles more than 14 feet high are 1" x 36" x 4".

SOLD TO: PO # JOB NAME APPROVALS

Architectural Area Lighting
10555 East Gale Ave. 1 City of Industry 1 CA 91745
P 626-965-5666 | F 626-965-5656 | www.aal.net
Design patents, Copyright © 2010 Rev 01/2012

Project: Catalog #: Type:

Prepared by: Notes: Date:

McGraw-Edison
BRT6 Bollard
Round LED Pedestrian Luminaire

Interactive Menu

- Ordering Information [page 2](#)
- Product Specifications [page 2](#)
- Optical Distributions [page 2](#)
- Energy and Performance Data [page 3](#)

Quick Facts

- 4 Optical Distributions
- Available in 30", 36", and 42"
- Lumen packages range from 560 - 4400 (SW - 49W)
- Efficacy up to 122 lumens per watt
- Zero uplight on all configurations

Dimensional Details

Side View

Top View

CBP Option

GFI and USB Options

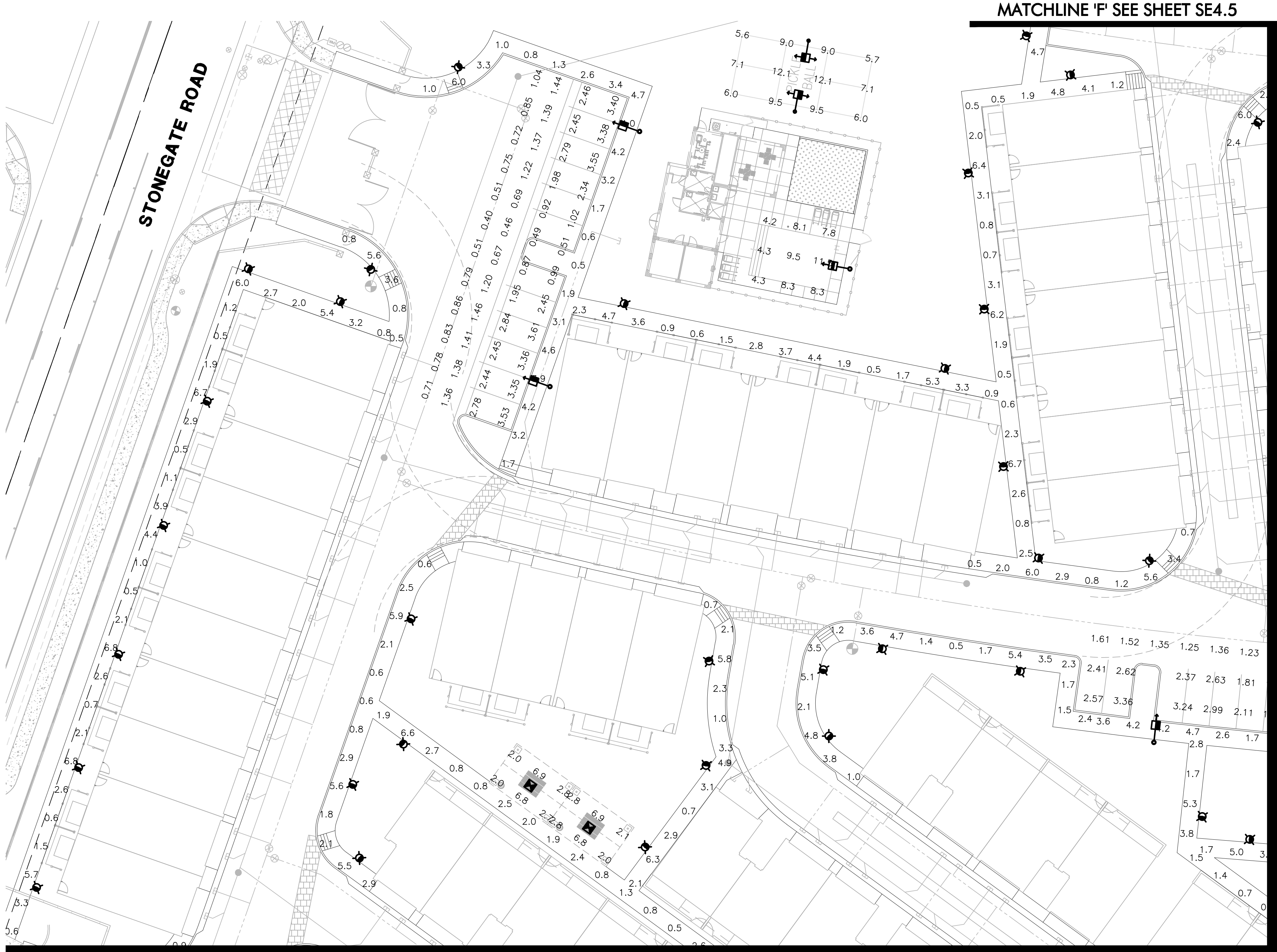
SM2 Option

Height	Height
30"	7.25 (3.75m)
36"	8.75 (4.75m)
42"	10.25 (5.75m)

* Base model without options or controls

PS000045EN page 1
April 14, 2022 (2/27 PM)

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PHOTOMETRIC RESULTS

Parking Lot
391 points
HORIZONTAL FOOTCANDLES
Average 2.04
Maximum 4.34
Minimum 0.36
Avg:Min 5.66
Max:Min 12.06
Coef Var 0.48

Playground
35 points
HORIZONTAL FOOTCANDLES
Average 4.1
Maximum 6.5
Minimum 2.0
Avg:Min 2.04
Max:Min 3.25
Coef Var 0.25

Pickle Ball Court
12 points at z=0, sp 1ft by 10ft
HORIZONTAL FOOTCANDLES
Average 8.2
Maximum 12.1
Minimum 5.6
Avg:Min 1.47
Max:Min 2.16
Coef Var 0.27
UnifGrad 1.34

Pool
9 points at z=0, sp 10ft by 10ft
HORIZONTAL FOOTCANDLES
Average 7.4
Maximum 11.5
Minimum 4.2
Avg:Min 1.75
Max:Min 2.74
Coef Var 0.33
UnifGrad 2.21

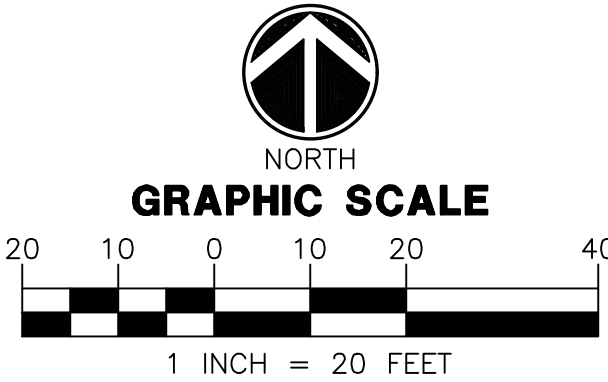
Ramada
36 points
HORIZONTAL FOOTCANDLES
Average 4.0
Maximum 7.6
Minimum 1.9
Avg:Min 2.10
Max:Min 4.00
Coef Var 0.55

Property Line
392 points
HORIZONTAL FOOTCANDLES
Average 0.0
Maximum 0.9
Minimum 0.0
Avg:Min N/A
Max:Min N/A
Coef Var 2.94

Pathway
757 points
HORIZONTAL FOOTCANDLES
Average 2.6
Maximum 6.8
Minimum 0.5
Avg:Min 5.23
Max:Min 13.60
Coef Var 0.72

PHOTOMETRIC LEGEND

- T3 Area Light
candela file 'GAN-SA2C-730-U-T3-HSS.ies'
32 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 113
mounting height= 14 ft
number locations= 2, number luminaires= 2
kw all locations= 0.2
- Ramada Light
candela file 'SWP1212_40W_40K_OP.ies'
120 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 43
mounting height= 10 ft
number locations= 6, number luminaires= 6
kw all locations= 0.3
- T4 Parking Lot Light
candela file 'PRM22-72L-310-3K7-4W.ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 70
mounting height= 14 ft
number locations= 21, number luminaires= 21
kw all locations= 1.5
- T4 Area Light
candela file 'GALN-SA4C-730-U-T4W_25347 lumens (1).ies'
64 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 213
mounting height= 14 ft
number locations= 1, number luminaires= 1
kw all locations= 0.2
- BOLLARD
candela file 'BRT6-A4-730-U-T3-XX-BK.ies'
8 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 22
mounting height= 3.5 ft
number locations= 147, number luminaires= 147
kw all locations= 3.2

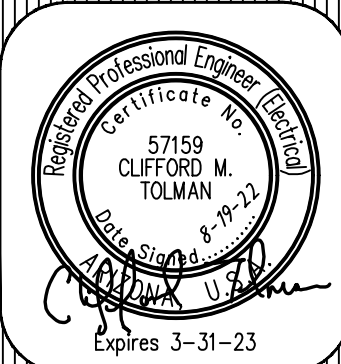


WRIGHT ENGINEERING
PROJECT NO:
22109
DESIGN BY: XAG
DRAWN BY: XAG
CHECKED BY: CMT

WRIGHT
engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE • CHANDLER, ARIZONA 85225
PHONE 480.497.5829 • FAX 480.497.5807
www.wrightengineering.us

PROJECT: TITLE:
MARICOPA, ARIZONA
VILLAS AT STONEGATE
SITE ELECTRICAL PLAN
PHOTOMETRIC ANALYSIS

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	AUG 2022	100% SUBMITTAL



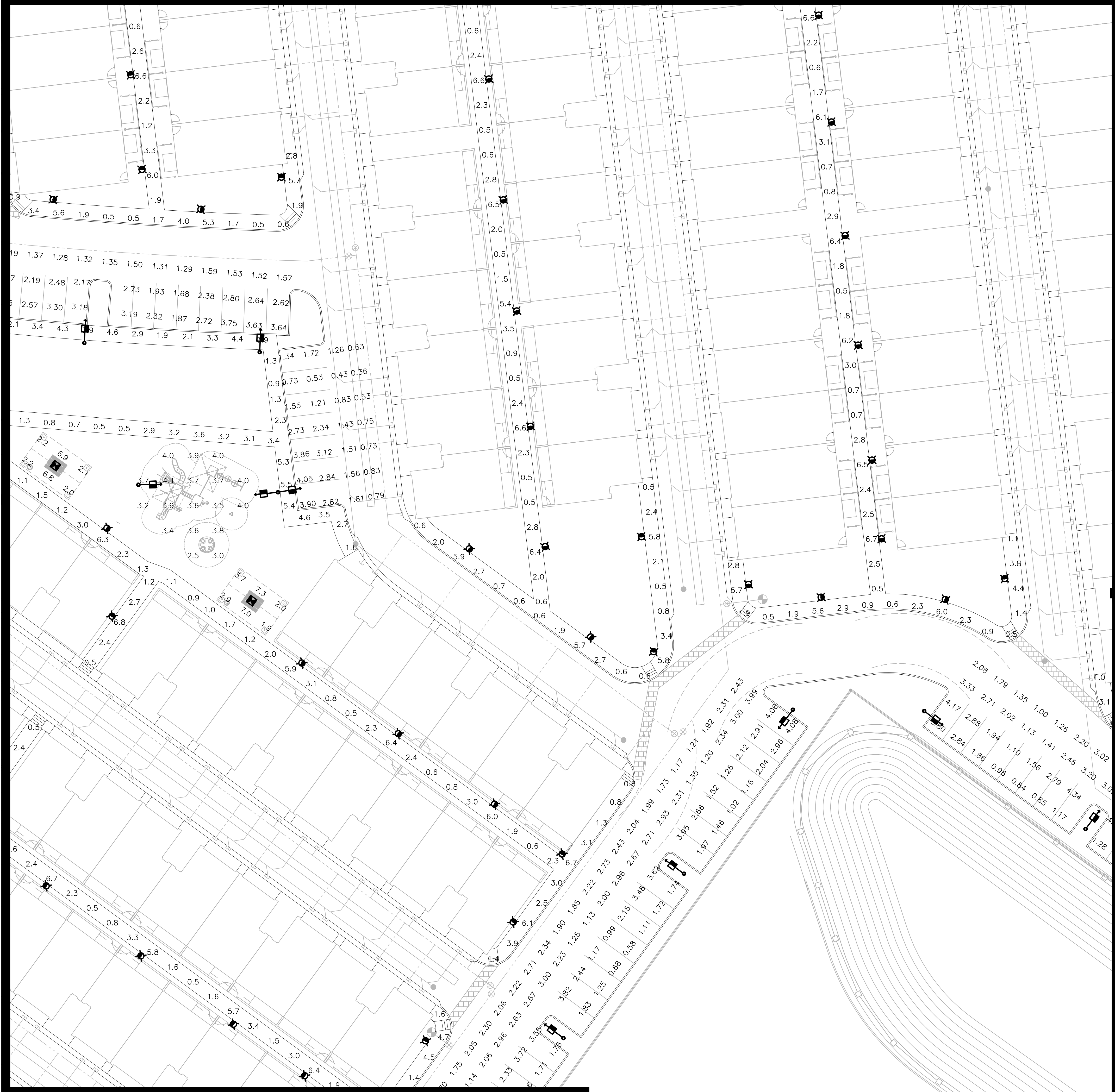
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SE4.1
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MATCHLINE 'K' SEE SHEET SE4.6

MATCHLINE 'A' SEE SHEET SE4.1

MATCHLINE 'I' SEE SHEET SE4.5



MATCHLINE 'B' SEE SHEET SE4.3

MATCHLINE 'C' SEE SHEET SE4.3

MATCHLINE 'E' SEE SHEET SE4.4

PHOTOMETRIC RESULTS

Parking Lot
391 points
HORIZONTAL FOOTCANDLES
Average 2.04
Maximum 4.34
Minimum 0.36
Avg:Min 5.66
Max:Min 12.06
Coef Var 0.48

Playground
35 points
HORIZONTAL FOOTCANDLES
Average 4.1
Maximum 6.5
Minimum 2.0
Avg:Min 2.04
Max:Min 3.25
Coef Var 0.25

Pickle Ball Court
12 points at z=0, sp 1ft by 10ft
HORIZONTAL FOOTCANDLES
Average 8.2
Maximum 12.1
Minimum 5.6
Avg:Min 1.47
Max:Min 2.16
Coef Var 0.27
UnifGrad 1.34

Pool
9 points at z=0, sp 10ft by 10ft
HORIZONTAL FOOTCANDLES
Average 7.4
Maximum 11.5
Minimum 4.2
Avg:Min 1.75
Max:Min 2.74
Coef Var 0.33
UnifGrad 2.21

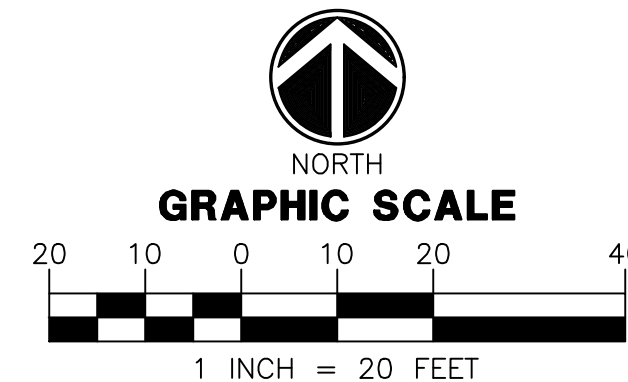
Ramada
36 points
HORIZONTAL FOOTCANDLES
Average 4.0
Maximum 7.6
Minimum 1.9
Avg:Min 2.10
Max:Min 4.00
Coef Var 0.55

Property Line
392 points
HORIZONTAL FOOTCANDLES
Average 0.0
Maximum 0.9
Minimum 0.0
Avg:Min N/A
Max:Min N/A
Coef Var 2.94

Pathway
757 points
HORIZONTAL FOOTCANDLES
Average 2.6
Maximum 6.8
Minimum 0.5
Avg:Min 5.23
Max:Min 13.60
Coef Var 0.72

PHOTOMETRIC LEGEND

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candela file 'GAN-SA2C-730-U-T3-HSS.ies'
32 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 113
mounting height= 14 ft
number locations= 2, number luminaires= 2
kw all locations= 0.2
- Ramada Light
candela file 'SWP1212_40W_40K_OP.ies'
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Light Loss Factor = 0.910, watts per luminaire = 43
mounting height= 10 ft
number locations= 6, number luminaires= 6
kw all locations= 0.3
- T4 Parking Lot Light
candela file 'PRM22-72L-310-3K7-4W.ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 70
mounting height= 14 ft
number locations= 21, number luminaires= 21
kw all locations= 1.5
- T4 Area Light
candela file 'GALN-SA4C-730-U-T4W_25347 lumens (1).ies'
64 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 213
mounting height= 14 ft
number locations= 1, number luminaires= 1
kw all locations= 0.2
- BOLLARD
candela file 'BRT6-A4-730-U-T3-XX-BK.ies'
8 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 22
mounting height= 3.5 ft
number locations= 147, number luminaires= 147
kw all locations= 3.2



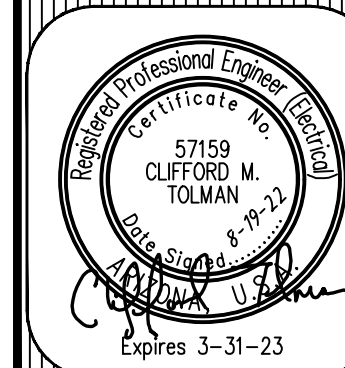
WRIGHT ENGINEERING
PROJECT NO:
22109
DESIGN BY: XAG
DRAWN BY: XAG
CHECKED BY: CMT

WRIGHT
engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE • CHANDLER, ARIZONA 85225
PHONE 480.497.5829 • FAX 480.497.5807
www.wrightengineering.us

PROJECT: TITLE:

MARICOPA, ARIZONA
VILLAS AT STONEGATE
SITE ELECTRICAL PLAN
PHOTOMETRIC ANALYSIS

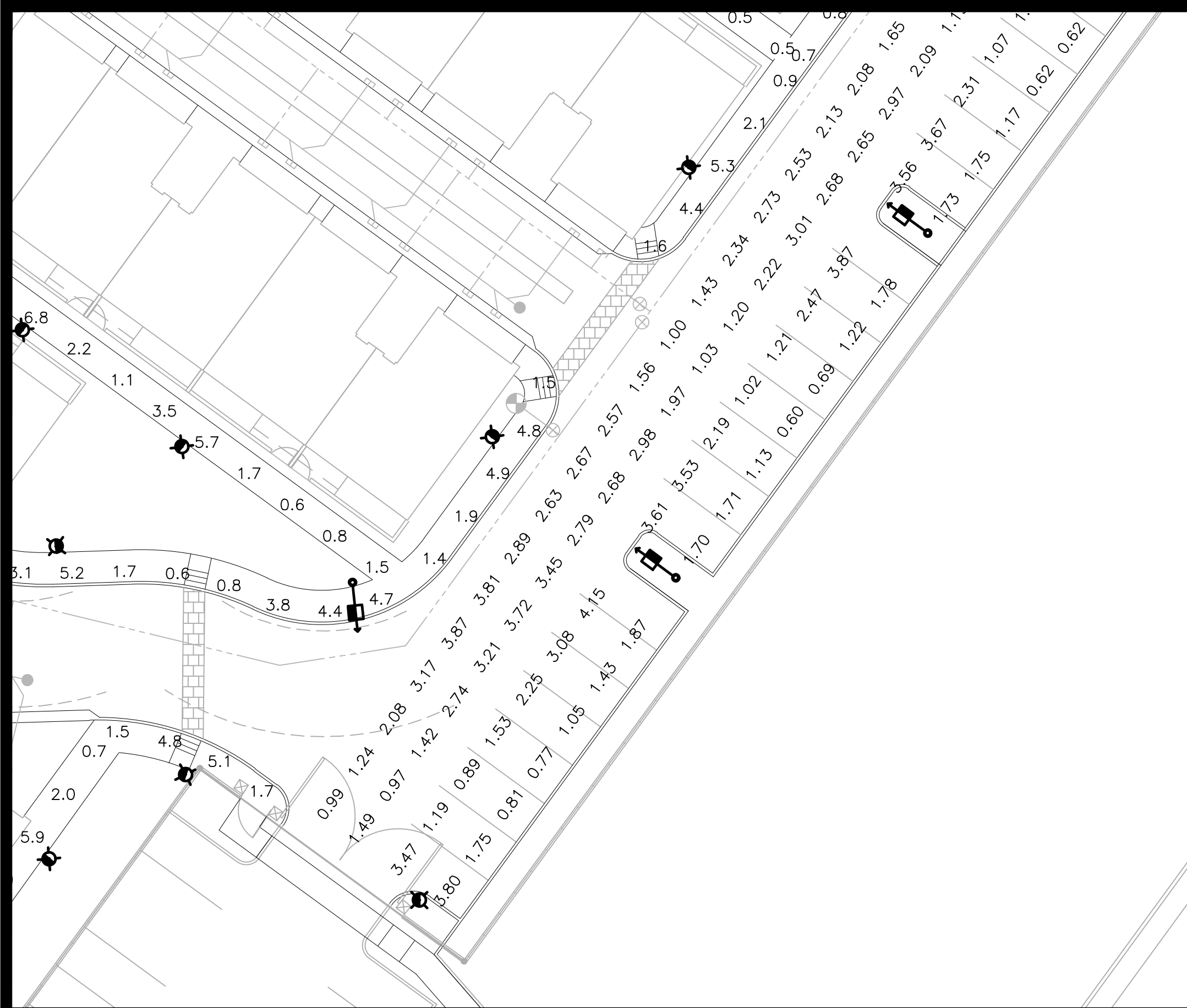
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MATCHLINE 'J' SEE SHEET SE4.6



MATCHLINE 'B' SEE SHEET SE4.2

PHOTOMETRIC LEGEND

- T3 Area Light
candela file 'GAN-SA2C-730-U-T3-HSS.ies'
32 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 113
mounting height= 14 ft
number locations= 2, number luminaires= 2
kw all locations= 0.2
- Ramada Light
candela file 'SWP1212_40W_40K_OP.ies'
120 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 43
mounting height= 10 ft
number locations= 6, number luminaires= 6
kw all locations= 0.3
- T4 Parking Lot Light
candela file 'PRM22-72L-310-3K7-4W.ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 70
mounting height= 14 ft
number locations= 21, number luminaires= 21
kw all locations= 1.5
- T4 Area Light
candela file 'GALN-SA4C-730-U-T4W_25347 lumens (1).ies'
64 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 213
mounting height= 14 ft
number locations= 1, number luminaires= 1
kw all locations= 0.2
- BOLLARD
candela file 'BRT6-A4-730-U-T3-XX-BK.ies'
8 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 22
mounting height= 3.5 ft
number locations= 147, number luminaires= 147
kw all locations= 3.2

PHOTOMETRIC RESULTS

Parking Lot
391 points
HORIZONTAL FOOTCANDLES
Average 2.04
Maximum 4.34
Minimum 0.36
Avg:Min 5.66
Max:Min 12.06
Coef Var 0.48

Playground
35 points
HORIZONTAL FOOTCANDLES
Average 4.1
Maximum 6.5
Minimum 2.0
Avg:Min 2.04
Max:Min 3.25
Coef Var 0.25

Pickle Ball Court
12 points at z=0, sp 1ft by 10ft
HORIZONTAL FOOTCANDLES
Average 8.2
Maximum 12.1
Minimum 5.6
Avg:Min 1.47
Max:Min 2.16
Coef Var 0.27
UnifGrad 1.34

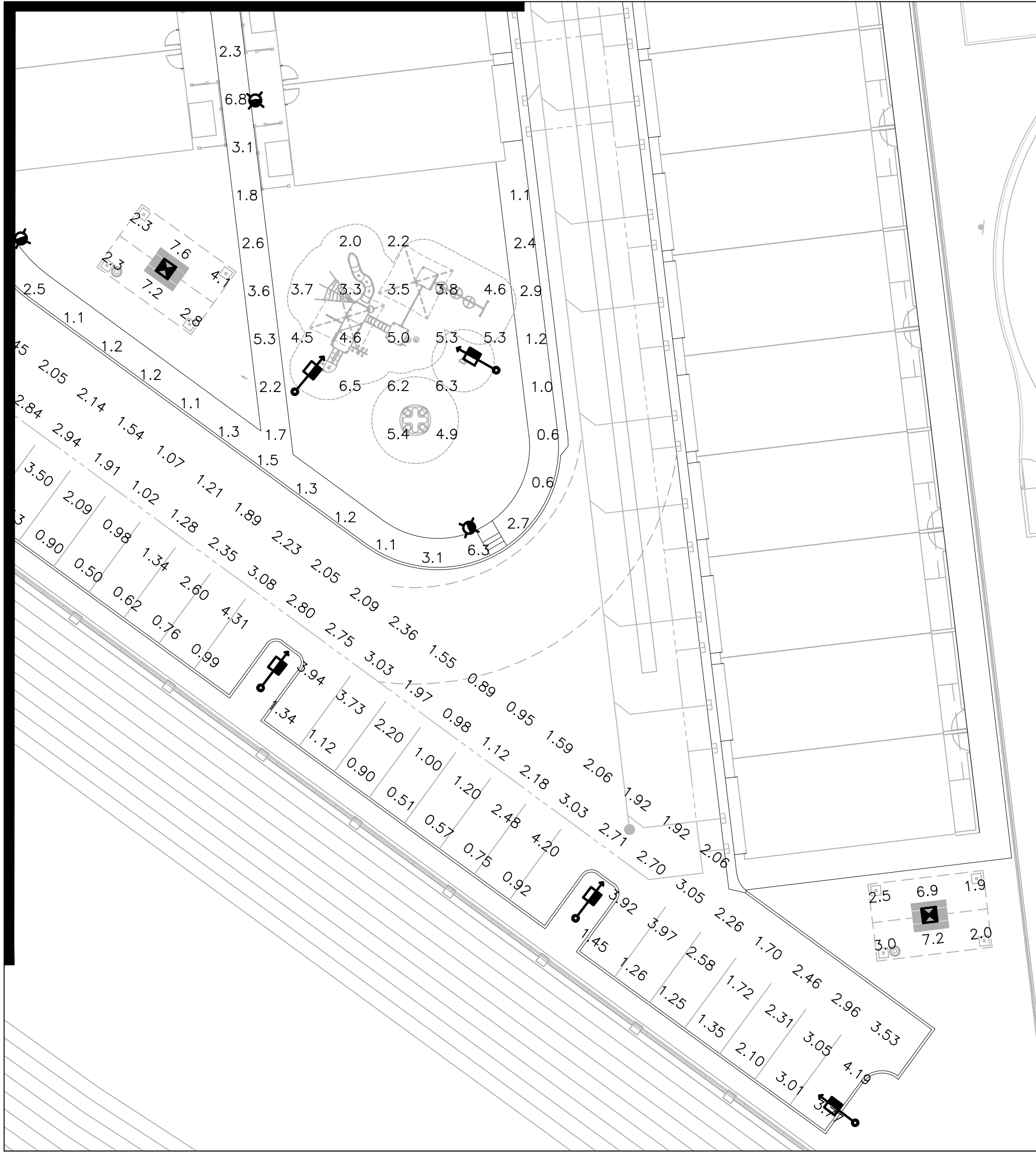
Pool
9 points at z=0, sp 10ft by 10ft
HORIZONTAL FOOTCANDLES
Average 7.4
Maximum 11.5
Minimum 4.2
Avg:Min 1.75
Max:Min 2.74
Coef Var 0.33
UnifGrad 2.21

Ramada
36 points
HORIZONTAL FOOTCANDLES
Average 4.0
Maximum 7.6
Minimum 1.9
Avg:Min 2.10
Max:Min 4.00
Coef Var 0.55

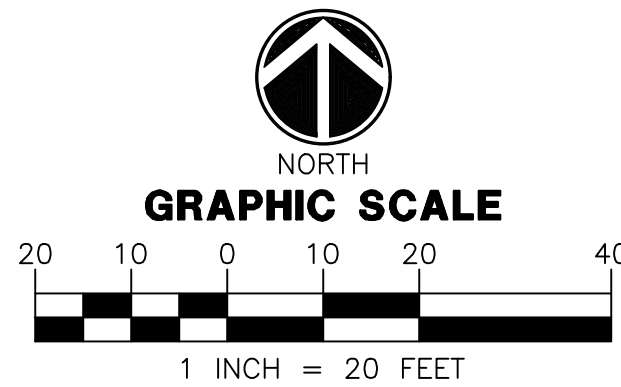
Property Line
392 points
HORIZONTAL FOOTCANDLES
Average 0.0
Maximum 0.9
Minimum 0.0
Avg:Min N/A
Max:Min N/A
Coef Var 2.94

Pathway
757 points
HORIZONTAL FOOTCANDLES
Average 2.6
Maximum 6.8
Minimum 0.5
Avg:Min 5.23
Max:Min 13.60
Coef Var 0.72

MATCHLINE 'D' SEE SHEET SE4.4



MATCHLINE 'C' SEE SHEET SE4.2



Call at least two full working days
before you begin excavation.
ARIZONA811
Arizona Blue Stake, Inc.
Dial 811 or 1-800-STAKE-IT (782-5348)

WRIGHT ENGINEERING
PROJECT NO:
22109
DESIGN BY: XAG
DRAWN BY: XAG
CHECKED BY: CMT

WRIGHT
engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE • CHANDLER, ARIZONA 85225
PHONE 480.497.5829 • FAX 480.497.5807
www.wrightengineering.us

PROJECT: TITLE:

MARICOPA, ARIZONA
VILLAS AT STONEGATE
SITE ELECTRICAL PLAN
PHOTOMETRIC ANALYSIS

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	AUG 2022	100% SUBMITTAL

Professional Engineer
57159
CLIFFORD M. TOLMAN
Date Signed: 8-14-23
Expires: 3-31-23

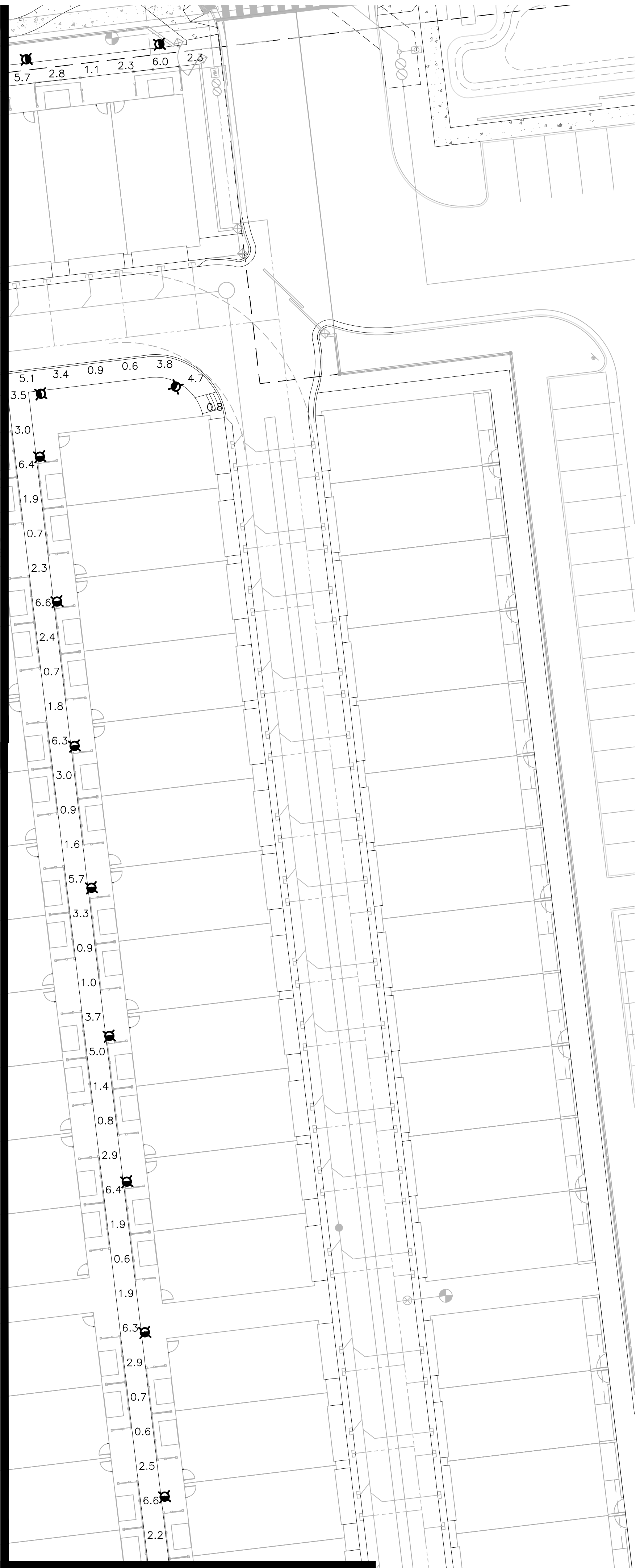
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OF 18

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MATCHLINE 'E' SEE SHEET SE4.2

MATCHLINE 'U' SEE SHEET SE4.5

MATCHLINE 'D' SEE SHEET SE4.3



PHOTOMETRIC LEGEND

- T3 Area Light
candela file 'GAN-SA2C-730-U-T3-HSS.ies'
32 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 113
mounting height= 14 ft
number locations= 2, number luminaires= 2
kw all locations= 0.2
- Ramada Light
candela file 'SWP1212_40W_40K_OP.ies'
120 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 43
mounting height= 10 ft
number locations= 6, number luminaires= 6
kw all locations= 0.3
- T4 Parking Lot Light
candela file 'PRW22-72L-310-3K7-4W.ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 70
mounting height= 14 ft
number locations= 21, number luminaires= 21
kw all locations= 1.5
- T4 Area Light
candela file 'GALN-SA4C-730-U-T4W_25347 lumens (1).ies'
64 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 213
mounting height= 14 ft
number locations= 1, number luminaires= 1
kw all locations= 0.2
- BOLLARD
candela file 'BRT6-A4-730-U-T3-XX-BK.ies'
8 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 22
mounting height= 3.5 ft
number locations= 147, number luminaires= 147
kw all locations= 3.2

PHOTOMETRIC RESULTS

Parking Lot
391 points
HORIZONTAL FOOTCANDLES
Average 2.04
Maximum 4.34
Minimum 0.36
Avg:Min 5.66
Max:Min 12.06
Coef Var 0.48

Playground
35 points
HORIZONTAL FOOTCANDLES
Average 4.1
Maximum 6.5
Minimum 2.0
Avg:Min 2.04
Max:Min 3.25
Coef Var 0.25

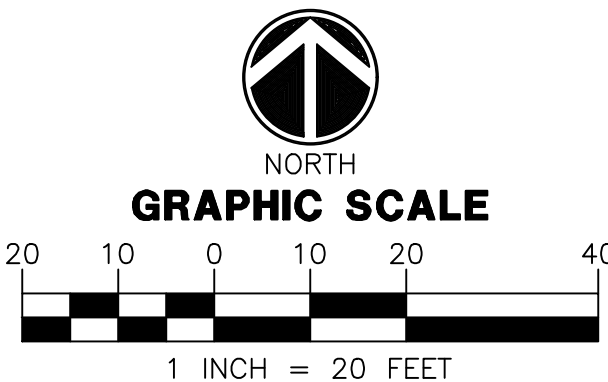
Pickle Ball Court
12 points at z=0, sp 1ft by 10ft
HORIZONTAL FOOTCANDLES
Average 8.2
Maximum 12.1
Minimum 5.6
Avg:Min 1.47
Max:Min 2.16
Coef Var 0.27
UnifGrad 1.34

Pool
9 points at z=0, sp 10ft by 10ft
HORIZONTAL FOOTCANDLES
Average 7.4
Maximum 11.5
Minimum 4.2
Avg:Min 1.75
Max:Min 2.74
Coef Var 0.33
UnifGrad 2.21

Ramada
36 points
HORIZONTAL FOOTCANDLES
Average 4.0
Maximum 7.6
Minimum 1.9
Avg:Min 2.10
Max:Min 4.00
Coef Var 0.55

Property Line
392 points
HORIZONTAL FOOTCANDLES
Average 0.0
Maximum 0.9
Minimum 0.0
Avg:Min N/A
Max:Min N/A
Coef Var 2.94

Pathway
757 points
HORIZONTAL FOOTCANDLES
Average 2.6
Maximum 6.8
Minimum 0.5
Avg:Min 5.23
Max:Min 13.60
Coef Var 0.72

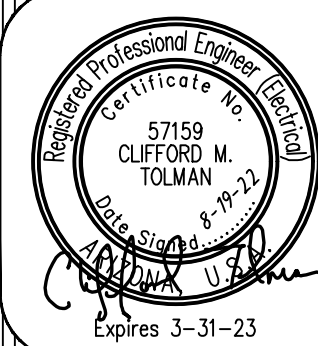


PROJECT: TITLE:

MARICOPA, ARIZONA
VILLAS AT STONEGATE
SITE ELECTRICAL PLAN
PHOTOMETRIC ANALYSIS

NO. DATE SUBMITTALS/REVISIONS (DESCRIPTIONS)

1 AUG 2022 100% SUBMITTAL



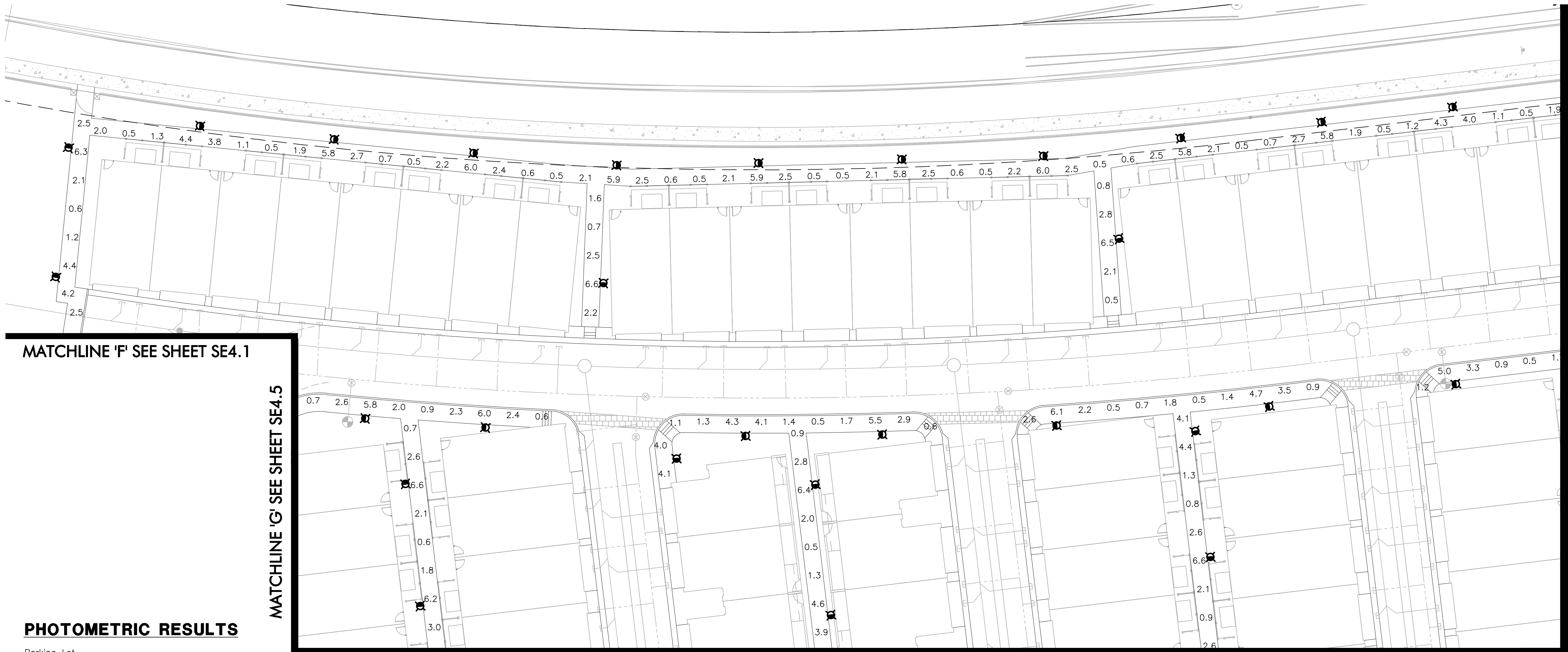
DRAWING NO:

SE4.4
OF 18

WRIGHT ENGINEERING
PROJECT NO:
22109
DESIGN BY: XAG
DRAWN BY: XAG
CHECKED BY: CMT

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engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE • CHANDLER, ARIZONA 85225
PHONE 480.497.5829 • FAX 480.497.5807
www.wrightengineering.us

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MATCHLINE 'F' SEE SHEET SE4.1

MATCHLINE 'G' SEE SHEET SE4.5

MATCHLINE 'I' SEE SHEET SE4.2

MATCHLINE 'L' SEE SHEET SE4.4

PHOTOMETRIC RESULTS

Parking Lot
391 points
HORIZONTAL FOOTCANDLES
Average 2.04
Maximum 4.34
Minimum 0.36
Avg:Min 5.66
Max:Min 12.06
Coef Var 0.48

Playground
35 points
HORIZONTAL FOOTCANDLES
Average 4.1
Maximum 6.5
Minimum 2.0
Avg:Min 2.04
Max:Min 3.25
Coef Var 0.25

Pickle Ball Court
12 points at z=0, sp 1ft by 10ft
HORIZONTAL FOOTCANDLES
Average 8.2
Maximum 12.1
Minimum 5.6
Avg:Min 1.47
Max:Min 2.16
Coef Var 0.27
UniGrad 1.34

Pool
9 points at z=0, sp 10ft by 10ft
HORIZONTAL FOOTCANDLES
Average 7.4
Maximum 11.5
Minimum 4.2
Avg:Min 1.75
Max:Min 2.74
Coef Var 0.33
UniGrad 2.21

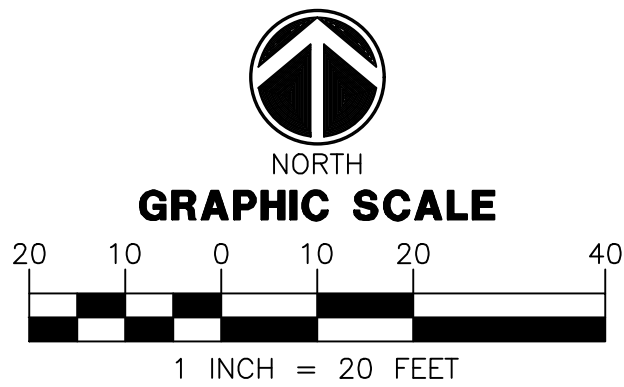
Ramada
36 points
HORIZONTAL FOOTCANDLES
Average 4.0
Maximum 7.6
Minimum 1.9
Avg:Min 2.10
Max:Min 4.00
Coef Var 0.55

Property Line
392 points
HORIZONTAL FOOTCANDLES
Average 0.0
Maximum 0.9
Minimum 0.0
Avg:Min N/A
Max:Min N/A
Coef Var 2.94

Pathway
757 points
HORIZONTAL FOOTCANDLES
Average 2.6
Maximum 6.8
Minimum 0.5
Avg:Min 5.23
Max:Min 13.60
Coef Var 0.72

PHOTOMETRIC LEGEND

- T3 Area Light
candela file 'GAN-SA2C-730-U-T3-HSS.ies'
32 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 113
mounting height= 14 ft
number locations= 2, number luminaires= 2
kw all locations= 0.2
- Ramada Light
candela file 'SWP1212_40W_40K_OP.ies'
120 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 43
mounting height= 10 ft
number locations= 6, number luminaires= 6
kw all locations= 0.3
- T4 Parking Lot Light
candela file 'PRM22-72L-310-3K7-4W.ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 70
mounting height= 14 ft
number locations= 21, number luminaires= 21
kw all locations= 1.5
- T4 Area Light
candela file 'GALN-SA4C-730-U-T4W_25347 lumens (1).ies'
64 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 213
mounting height= 14 ft
number locations= 1, number luminaires= 1
kw all locations= 0.2
- BOLLARD
candela file 'BRT6-A4-730-U-T3-XX-BK.ies'
8 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 22
mounting height= 3.5 ft
number locations= 147, number luminaires= 147
kw all locations= 3.2



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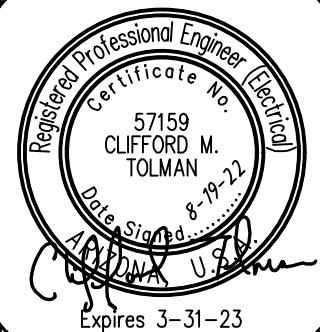
WRIGHT ENGINEERING
PROJECT NO:
22109
DESIGN BY: XAG
DRAWN BY: XAG
CHECKED BY: CMT

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engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE • CHANDLER, ARIZONA 85225
PHONE 480.497.5829 • FAX 480.497.5807
www.wrightengineering.us

PROJECT: TITLE:

MARICOPA, ARIZONA
VILLAS AT STONEGATE
SITE ELECTRICAL PLAN
PHOTOMETRIC ANALYSIS

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	AUG 2022	100% SUBMITTAL



DRAWING NO:
SE4.5
OF 18

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PHOTOMETRIC RESULTS

Parking Lot
391 points
HORIZONTAL FOOTCANDLES
Average 2.04
Maximum 4.34
Minimum 0.36
Avg:Min 5.66
Max:Min 12.06
Coef Var 0.48

Playground
35 points
HORIZONTAL FOOTCANDLES
Average 4.1
Maximum 6.5
Minimum 2.0
Avg:Min 2.04
Max:Min 3.25
Coef Var 0.25

Pickle Ball Court
12 points at z=0, sp 1ft by 10ft
HORIZONTAL FOOTCANDLES
Average 8.2
Maximum 12.1
Minimum 5.6
Avg:Min 1.47
Max:Min 2.16
Coef Var 0.27
UniGrad 1.34

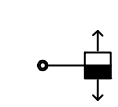
Pool
9 points at z=0, sp 10ft by 10ft
HORIZONTAL FOOTCANDLES
Average 7.4
Maximum 11.5
Minimum 4.2
Avg:Min 1.75
Max:Min 2.74
Coef Var 0.33
UniGrad 2.21


Ramada
36 points
HORIZONTAL FOOTCANDLES
Average 4.0
Maximum 7.6
Minimum 1.9
Avg:Min 2.10
Max:Min 4.00
Coef Var 0.55

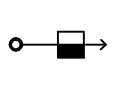
Property Line
392 points
HORIZONTAL FOOTCANDLES
Average 0.0
Maximum 0.9
Minimum 0.0
Avg:Min N/A
Max:Min N/A
Coef Var 2.94

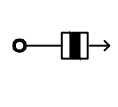
Pathway
757 points
HORIZONTAL FOOTCANDLES
Average 2.6
Maximum 6.8
Minimum 0.5
Avg:Min 5.23
Max:Min 13.60
Coef Var 0.72


PHOTOMETRIC LEGEND

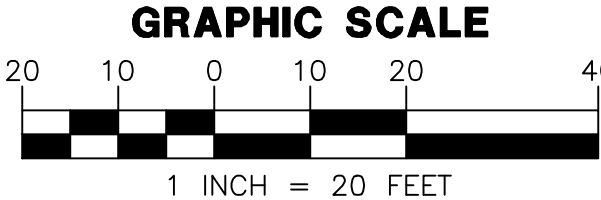
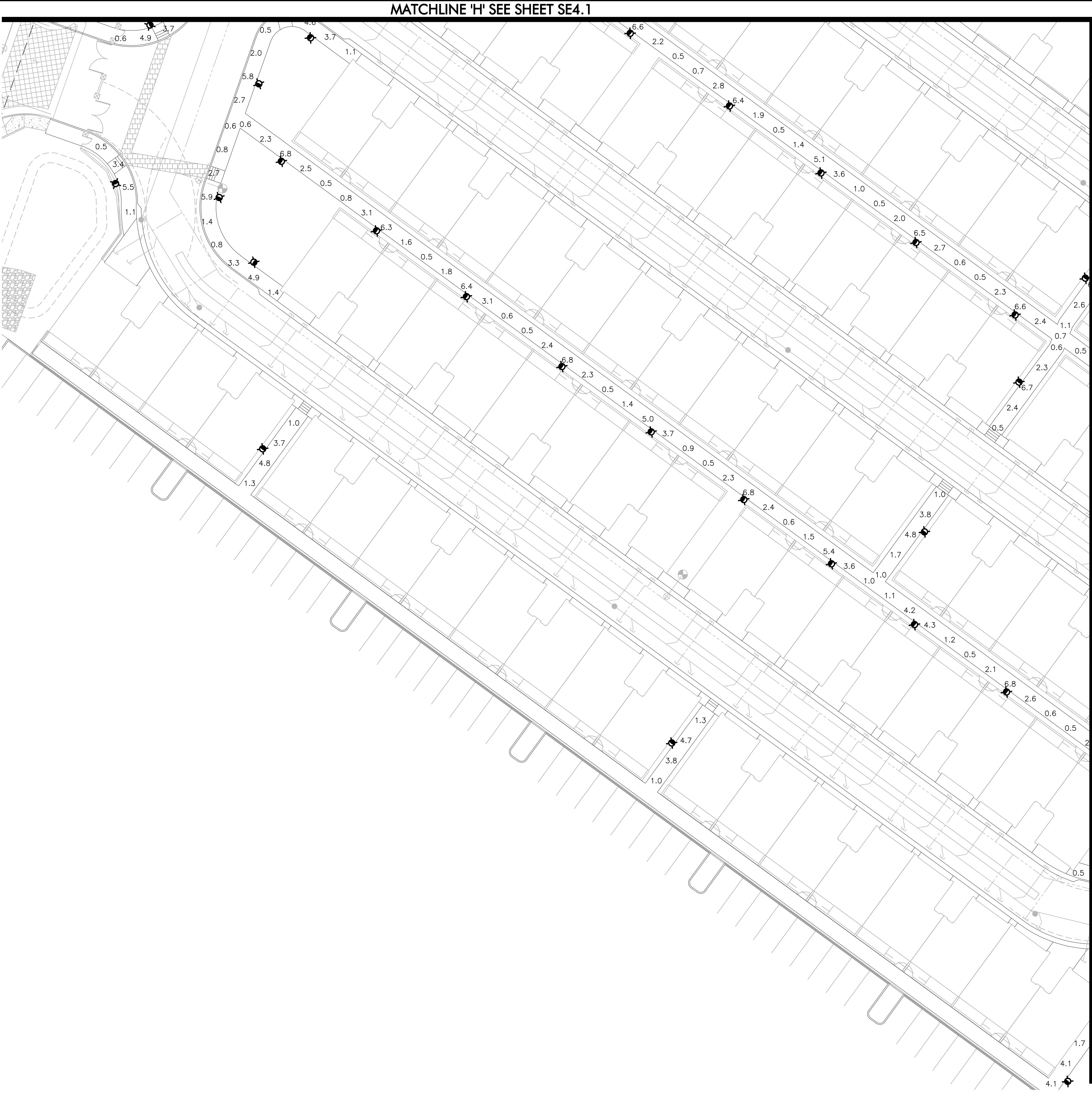
 T3 Area Light
candela file 'GAN-SA2C-730-U-T3-HSS.ies'
32 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 113
mounting height= 14 ft
number locations= 2, number luminaires= 2
kw all locations= 0.2

 Ramada Light
candela file 'SWP1212_40W_40K_OP.ies'
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number locations= 21, number luminaires= 21
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 T4 Area Light
candela file 'GALN-SA4C-730-U-T4W_25347 lumens (1).ies'
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Light Loss Factor = 0.910, watts per luminaire = 213
mounting height= 14 ft
number locations= 1, number luminaires= 1
kw all locations= 0.2

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candela file 'BRT6-A4-730-U-T3-XX-BK.ies'
8 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 22
mounting height= 3.5 ft
number locations= 147, number luminaires= 147
kw all locations= 3.2

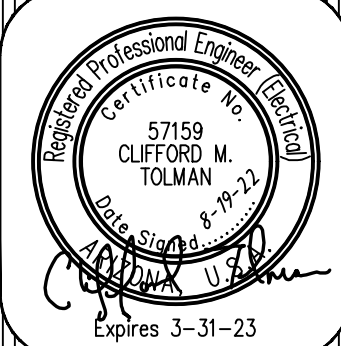


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DESIGN BY: XAG
DRAWN BY: XAG
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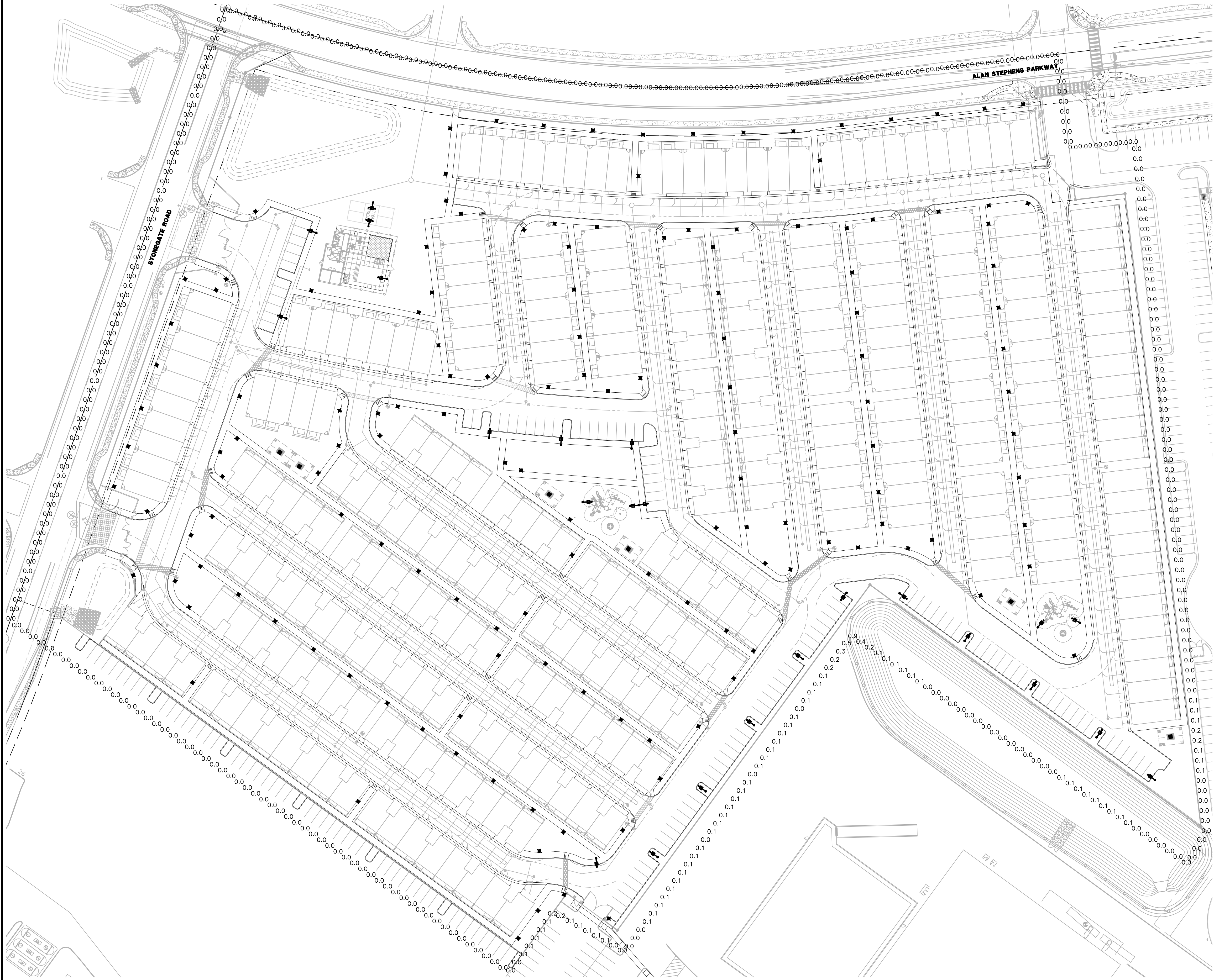
PROJECT: TITLE:
MARICOPA, ARIZONA
VILLAS AT STONEGATE
SITE ELECTRICAL PLAN
PHOTOMETRIC ANALYSIS

NO.	DATE	SUBMITTALS/REVISIONS	DESCRIPTIONS
1	AUG 2022	100% SUBMITTAL	



DRAWING NO:
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OF 18

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PHOTOMETRIC LEGEND

- T3 Area Light
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Light Loss Factor = 0.910, watts per luminaire = 22
mounting height= 3.5 ft
number locations= 147, number luminaires= 147
kw all locations= 3.2

PHOTOMETRIC RESULTS

Parking Lot
391 points
HORIZONTAL FOOTCANDLES
Average 2.04
Maximum 4.34
Minimum 0.56
Avg:Min 5.86
Max:Min 12.06
Coef Var 0.48

Playground
35 points
HORIZONTAL FOOTCANDLES
Average 4.1
Maximum 6.5
Minimum 2.0
Avg:Min 2.04
Max:Min 3.25
Coef Var 0.25

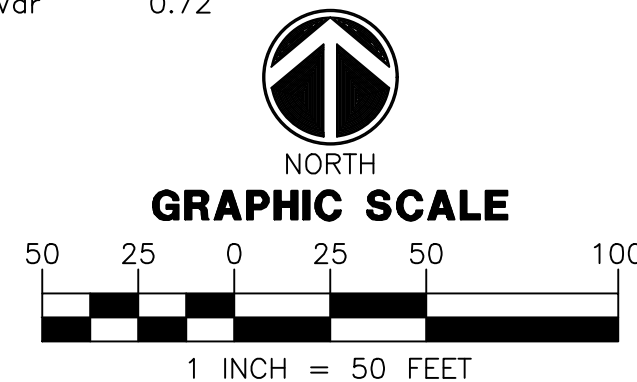
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HORIZONTAL FOOTCANDLES
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Minimum 5.6
Avg:Min 1.47
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Coef Var 0.27
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HORIZONTAL FOOTCANDLES
Average 7.4
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Minimum 4.2
Avg:Min 1.75
Max:Min 2.74
Coef Var 0.33
UniGrad 2.21

Ramada
36 points
HORIZONTAL FOOTCANDLES
Average 4.0
Maximum 7.6
Minimum 1.9
Avg:Min 2.10
Max:Min 4.00
Coef Var 0.55

Property Line
392 points
HORIZONTAL FOOTCANDLES
Average 0.0
Maximum 0.9
Minimum 0.0
Avg:Min N/A
Max:Min N/A
Coef Var 2.94

Pathway
757 points
HORIZONTAL FOOTCANDLES
Average 2.6
Maximum 6.8
Minimum 0.5
Avg:Min 5.23
Max:Min 13.60
Coef Var 0.72



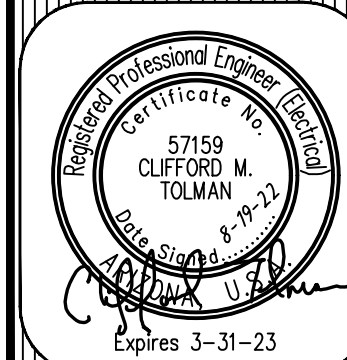
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DRAWING NO:
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