

DARCOR GENERAL NOTES

A. LOCATIONS INDICATED FOR EXISTING UNDERGROUND UTILITIES ARE BASED ON DRAWINGS PROVIDED TO US BY THE CIVIL ENGINEER AT TIME OF DESIGN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UNDERGROUND OBSTRUCTIONS AND UTILITIES ENCOUNTERED DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING BLUE-STAKE AND POT-HOLING TO VERIFY ALL EXISTING UNDERGROUND OBSTRUCTIONS.

B. DARCOR & ASSOCIATES INC., ITS OWNERS, OR EMPLOYEES WILL NOT BE HELD RESPONSIBLE FOR ANY DAMAGE TO PROPERTY CAUSED BY OTHERS DURING OR RESULTING FROM CONSTRUCTION OF THIS PROJECT.

C. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR COORDINATING THE RELOCATION OF UTILITIES, POWER POLES, ETC.

D. THE CONTRACTOR SHALL PROVIDE THE CITY WITH ACCURATE AS-BUILT INFORMATION INCLUDING FIELD MEASUREMENTS TO ELECTRICAL EQUIPMENT AND UNDERGROUND CONDUIT ROUTING.

E. ANY QUANTITIES SHOWN ARE THE BEST ESTIMATE OF THE ENGINEER. THE CONTRACTOR SHALL MAKE HIS OWN INDEPENDENT ESTIMATE OF QUANTITIES AND BASE HIS BID THEREON.

F. THE ENGINEER WILL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS OR PROGRAMS UTILIZED DURING CONSTRUCTION, AND WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

G. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING ALL PROPERTY, LANDSCAPING, PAVING AND DRIVEWAYS THAT ARE DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL CONDITION WITH CONFORMANCE TO MAG SPECIFICATION SECTION 107.9.

THE ELECTRICAL / MAINTENANCE COSTS OF ALL STREET LIGHTS ON LOCAL AND COLLECTOR STREETS (TYPICALLY THE 41 WATT / 4,800 LUMEN AND THE 88 WATT / 8,500 LUMEN FIXTURES) ARE TO BE PAID BY THE ADJACENT PROJECT OR THE ADJACENT DEVELOPMENT'S STREET LIGHT IMPROVEMENT DISTRICT (SLID).

LED TECHNOLOGY IS CHANGING RAPIDLY. THE FIXTURES SHOWN ON THESE PLANS MAY NOT BE APPLICABLE AT TIME OF CONSTRUCTION. CONTRACTOR TO COORDINATE WITH APS AND UTILIZE THEIR CURRENT SPECIFICATION AT THE TIME OF BIDDING AND CONSTRUCTION.

ENSURE THERE IS A 1' CLEARANCE FROM THE EDGE OF THE SIDEWALK TO FACE OF THE POLE.

CITY OF SURPRISE
GENERAL ENGINEERING NOTES

1. ALL CONSTRUCTION MUST CONFORM TO MARICOPA ASSOCIATION OF GOVERNMENT (MAG) SPECIFICATIONS AND DETAILS AND LATEST REVISIONS UNLESS OTHERWISE STATED ON PLANS.

2. THE ENGINEER WILL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES OR FOR SAFETY PRECAUTIONS OR PROGRAMS UTILIZED IN CONNECTION WITH THE WORK, AND THEY WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING ALL OVERHEAD AND UNDERGROUND UTILITY LOCATIONS WHERE CONSTRUCTION OCCURS. SPECIAL CARE SHALL BE TAKEN TO ENSURE THAT ALL UTILITIES ARE AVOIDED. UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND NOT FOR CONSTRUCTION PURPOSES. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AND/OR REPLACED AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL COMPLY WITH ALL CURRENT ARIZONA UNDERGROUND FACILITIES LAWS (ARIZONA REVISED STATUTES TITLE 40, CHAPTER 2, ARTICLE 6.3, SECTION 40-360.21-32). CALL ARIZONA 811 FOR FIELD LOCATION BY DIAL 811.

4. THE CITY OF SURPRISE ENGINEERING SERVICES OF PUBLIC WORKS SHALL BE NOTIFIED FORTY-EIGHT (48) HOURS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION WORK AT 623-222-6150.

5. THE ENGINEER AND APPLICABLE AGENCY MUST APPROVE, PRIOR TO CONSTRUCTION, ANY ALTERATION OR VARIANCE FROM THESE PLANS. ANY VARIATION FROM THESE PLANS SHALL BE PROPOSED AND RESUBMITTED FOR REVIEW AND APPROVAL.

6. THE CONTRACTOR SHALL PROTECT AND MAINTAIN ALL EXISTING UTILITIES ON THE SITE. ANY DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN OR NOT ON THE DRAWING, SHALL BE REPAIRED/REPLACED AT THE CONTRACTOR'S EXPENSE. EXISTING SURFACE FEATURES AND FENCING SHALL BE REPLACED IN KIND.

7. ANY INSPECTION BY THE CITY, COUNTY, OR THE ENGINEER, SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR FROM ANY OBLIGATION TO PERFORM THE WORK IN STRICT COMPLIANCE WITH THE APPLICABLE CODES AND AGENCY REQUIREMENTS.

8. THE CONTRACTOR IS TO LOCATE ALL EXISTING LANDSCAPING, LANDSCAPING IRRIGATION LINES, PROPERTY MONUMENTS, FENCING OR SURFACE FEATURES PRIOR TO CONSTRUCTION. ANYTHING DISTURBED DURING CONSTRUCTION SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.

9. NOTHING CONTAINED IN THE CONTRACT DOCUMENTS SHALL CREATE, NOR SHALL BE CONSTRUED TO CREATE, ANY CONTRACTUAL RELATIONSHIP BETWEEN THE ENGINEER AND THE CONTRACTOR OR ANY SUBCONTRACTOR.

10. ALL CONSTRUCTION WATER USED WITHIN THE CITY OF SURPRISE WATER SERVICE AREA REQUIRES APPROVAL BY THE CITY OF SURPRISE PUBLIC WORKS DEPARTMENT AND MAY BE SUBJECT TO VOLUME AND TIME RESTRICTIONS. PLEASE SEE THE CITY OF SURPRISE CONSTRUCTION WATER GUIDELINES FOR ADDITIONAL INFORMATION. THE GUIDELINES CAN BE OBTAINED FROM THE PUBLIC WORKS DEPARTMENT AT 623-222-6000.

11. TRAFFIC CONTROL SHALL BE MAINTAINED IN ACCORDANCE WITH MAG SPECIFICATION 401, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, AND THE "TEMPORARY WORK ZONE TRAFFIC MANAGEMENT POLICY" (LATEST EDITION).

12. PRIOR TO FINAL APPROVAL AND ACCEPTANCE OF THE WORK, THE DEVELOPER/CONTRACTOR WILL BE REQUIRED TO CLEAN AND REPAIR ADJACENT (OFF-PROJECT) ROADWAYS USED OR DAMAGED DURING THE COURSE OF CONSTRUCTION.

13. EMERGENCY VEHICLE ACCESS (E.V.A.) MUST BE PROVIDED BY THE DEVELOPER/CONTRACTOR THROUGHOUT THE PROJECT SITE. E.V.A. ROADS AND SIGNAGE SHALL BE MAINTAINED BY THE DEVELOPER/CONTRACTOR AT ALL TIMES. SIGNAGE SHALL BE POSTED AT THE POINT OF ENTRY TO THE SITE AND AT ALL LOCATIONS WHERE A CHANGE IN DIRECTION OCCURS.

14. THE PLANS SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT'S ACCESSIBILITY GUIDELINES, AS PUBLISHED IN THE FEDERAL REGISTER ON SEPTEMBER 15, 2010.

STREET LIGHTING PLANS
FOR
MESQUITE MOUNTAIN RANCH - PHASE 1

A PORTION OF THE THE SOUTHWEST QUARTER OF SECTION 23, TOWNSHIP 4 NORTH,
RANGE 3 WEST OF THE GILA AND SALT RIVER BASE AND MERIDIAN,
CITY OF SURPRISE, MARICOPA COUNTY, ARIZONA

PROJECT LOCATION

VICINITY MAP
NTS

SHEET INDEX

SHEET	DESCRIPTION
SL1	STREET LIGHTING COVER SHEET
SL2	STREET LIGHTING LAYOUT - I
SL3	STREET LIGHTING LAYOUT - II
SL4	STREET LIGHTING LAYOUT - III
SL5	STREET LIGHTING LAYOUT - IV
SL6	STREET LIGHTING LAYOUT - V
SL7	STREET LIGHTING LAYOUT - VI
SL8	STREET LIGHTING LAYOUT - VII
SL9	STREET LIGHTING LAYOUT - VIII
SL10	STREET LIGHTING DETAILS
P1	ROADWAY PHOTOMETRIC CALCULATIONS - I
P2	ROADWAY PHOTOMETRIC CALCULATIONS - II

LEGEND & QUANTITIES LIST

QUANTITY	SYMBOL	DESCRIPTION
105		41W LED (4,800 LUMENS) STREET LIGHT
17		88W LED (8,200 LUMENS) STREET LIGHT

KEY MAP
NTS

CITY OF SURPRISE SIGNATURE BLOCK

THIS SET OF PLANS HAS BEEN REVIEWED FOR COMPLIANCE WITH CITY REQUIREMENTS PRIOR TO ISSUANCE OF PERMITS. THE CITY NEITHER ACCEPTS NOR ASSUMES ANY LIABILITY FOR ERRORS OR OMISSIONS. THIS COMPLIANCE APPROVAL SHALL NOT PREVENT THE CITY ENGINEER FROM REQUIRING CORRECTIONS OF ERRORS OR OMISSIONS IN PLANS FOUND TO BE IN VIOLATION OF LAW OR ORDINANCES.

APPROVED _____
CITY OF SURPRISE ENGINEER

DATE _____

UTILITY CONFLICT COORDINATION

UTILITY COMPANY	DATE SUBMITTED	DATE OF RESPONSE	CONTACT	PHONE
APS	2020-6-2	2020-6-18	MERYBETH TAFT	623-975-5786
ZONA	2020-6-2	2020-6-18	BERNIE ARMSTRONG	623-455-4555
WAPA	2020-6-2	2020-6-18	CARLA CRISTELLI	602-605-2554
SRP POWER	2020-6-2	2020-6-18	BECKY THOMAS	602-236-0813
COX CABLEVISION	2020-6-2	2020-6-18	CONFLICT REVIEW DEPT.	623-594-1000
SOUTHWEST GAS	2020-6-2	2020-6-18	FRANCHISE DEPT.	602-484-5385

SLID #: SU-Mesquite Mtn Rnch 155

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MESQUITE MOUNTAIN RANCH
PHASE 1
SURPRISE, ARIZONA

SHEET TITLE

STREET LIGHTING
COVER SHEET

DATE
DEC 2020

DESIGNED: RWB

DWG No.
SL1

SCALE
NONE

DRAWN: JG

PROJ No.
20020

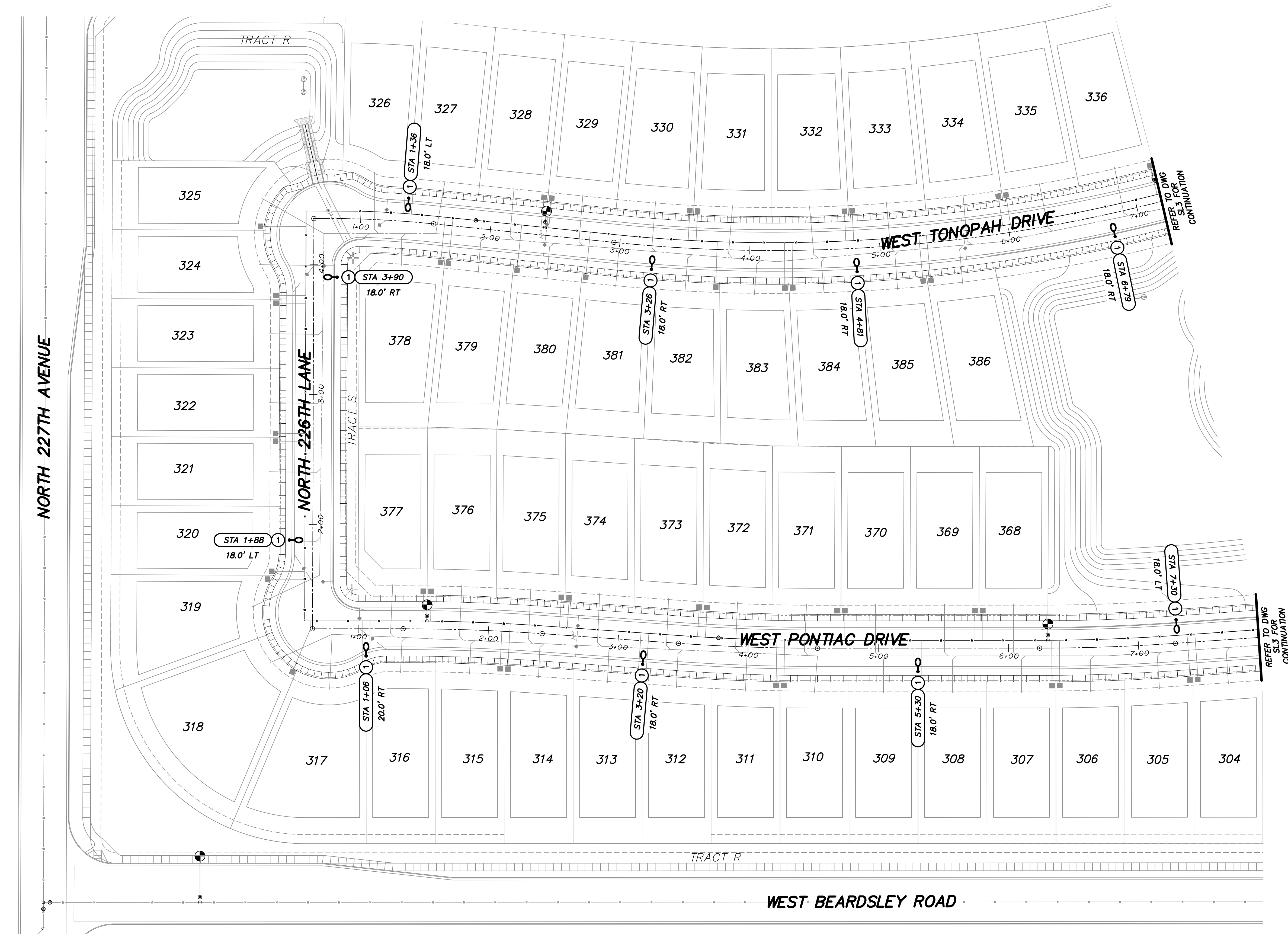
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SHEET
1
OF
12

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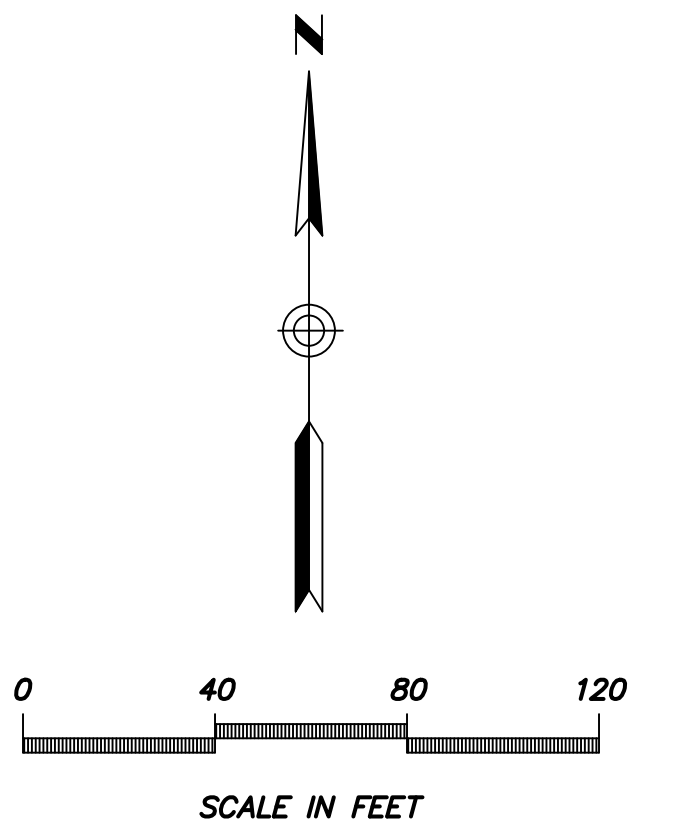
KEY NOTE

- ① INSTALL 41W, 3000K LED (4,800 LUMENS) BRONZE COBRAHEAD LUMINAIRE MOUNTED ON A 30'-6" DIRECT BURIED SQUARE STEEL POLE WITH A 2'-0" MAST ARM (25' MOUNTING HEIGHT). SEE APS STANDARD DETAIL 8030 AND APPLICABLE APS DETAILS ON SHEET SL10.

LEGEND

- PROPOSED 41W STREET LIGHT
- EXISTING OR PROPOSED STREET LIGHT (NOT IN CONTRACT)
- ⊕ FIRE HYDRANT

NOTE: ALL STREET LIGHTS TO BE 1' CLEAR OF SIDEWALKS

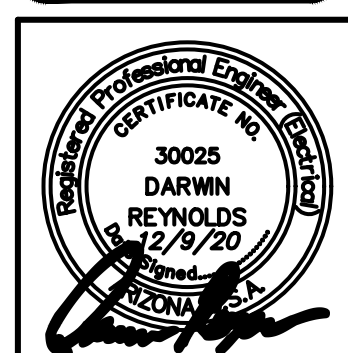


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MESQUITE MOUNTAIN RANCH
PHASE 1
SURPRISE, ARIZONA

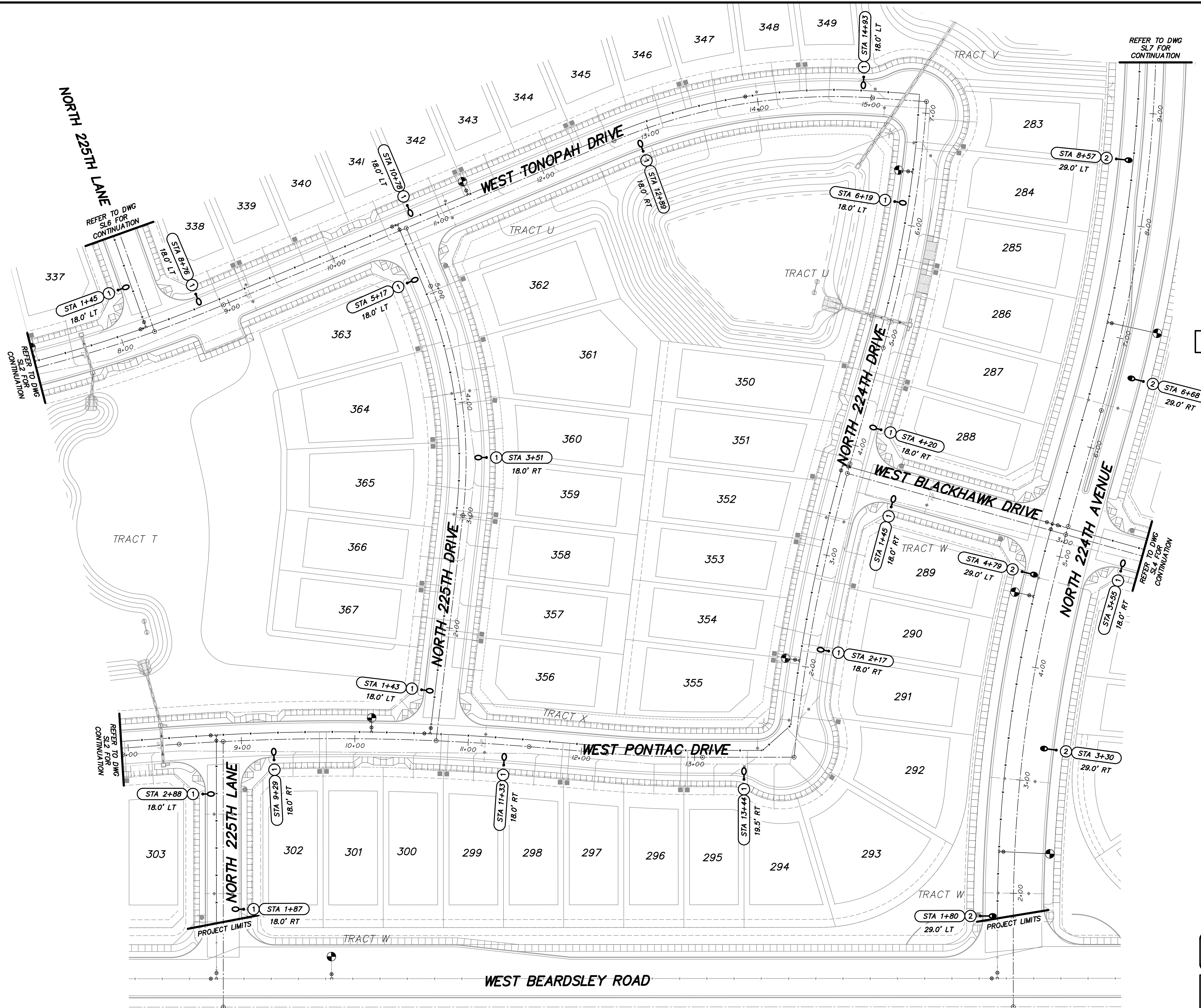
SHEET TITLE
STREET LIGHTING LAYOUT - I

DATE DEC 2020	DESIGNED: RWB DRAWN: JG CHECKED: DAR	DWG No. SL2 PROJ No. 20020	SHEET 2 OF 12
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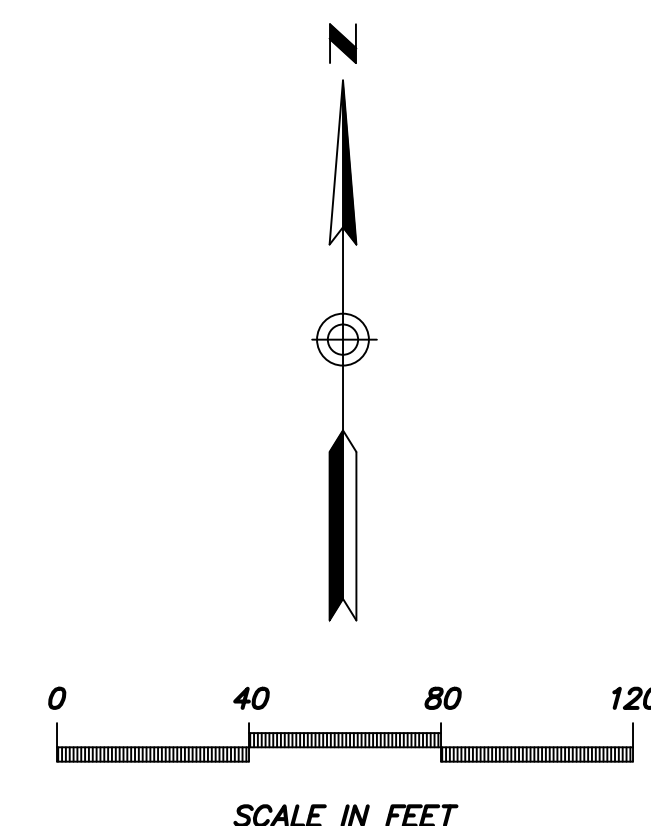
KEY NOTE

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- 2 INSTALL 88W, 3000K LED (8,200 LUMENS) BRONZE COBRAHEAD LUMINAIRE MOUNTED ON A 38'-0" DIRECT BURIED SQUARE STEEL POLE WITH A 4'-0" MAST ARM (31.5' MOUNTING HEIGHT). SEE APS STANDARD DETAIL 8030 AND APPLICABLE APS DETAILS ON SHEET SL10.

LEGEND

- PROPOSED 41W STREET LIGHT
- PROPOSED 88W STREET LIGHT
- EXISTING OR PROPOSED STREET LIGHT (NOT IN CONTRACT)
- FIRE HYDRANT

NOTE: ALL STREET LIGHTS TO BE 1' CLEAR OF SIDEWALKS



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MESQUITE MOUNTAIN RANCH
PHASE 1
SURPRISE, ARIZONA

STREET LIGHTING LAYOUT - II

DATE DEC 2020	DESIGNED: RWB DRAWN: JG CHECKED: DAR	DWG No. SL3 PROJ No. 20020	SHEET 3 OF 12
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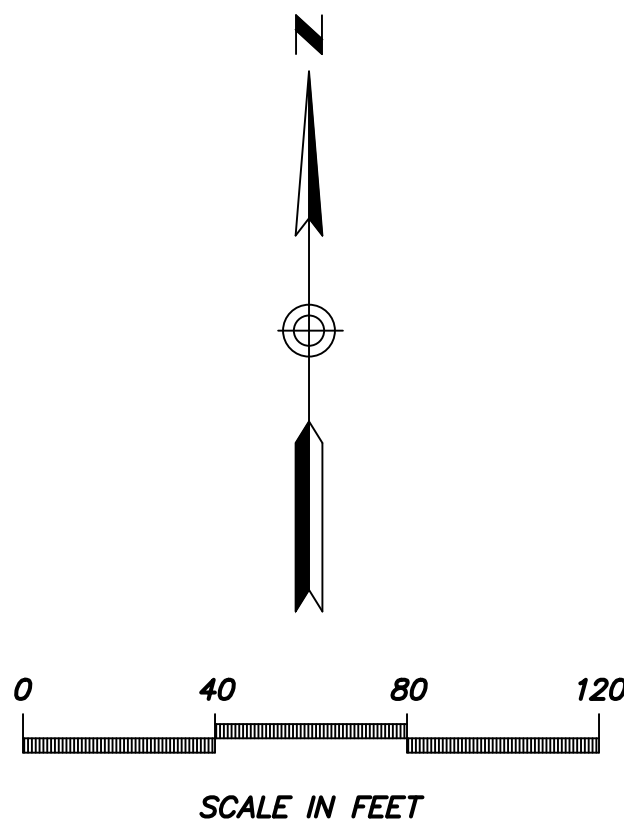
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LEGEND

- PROPOSED 41W STREET LIGHT
- EXISTING OR PROPOSED STREET LIGHT (NOT IN CONTRACT)
- ⊙ FIRE HYDRANT

NOTE: ALL STREET LIGHTS TO BE 1' CLEAR OF SIDEWALKS

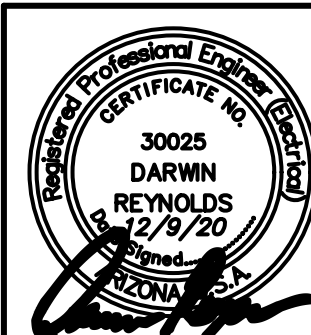


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MESQUITE MOUNTAIN RANCH
PHASE 1
SURPRISE, ARIZONA

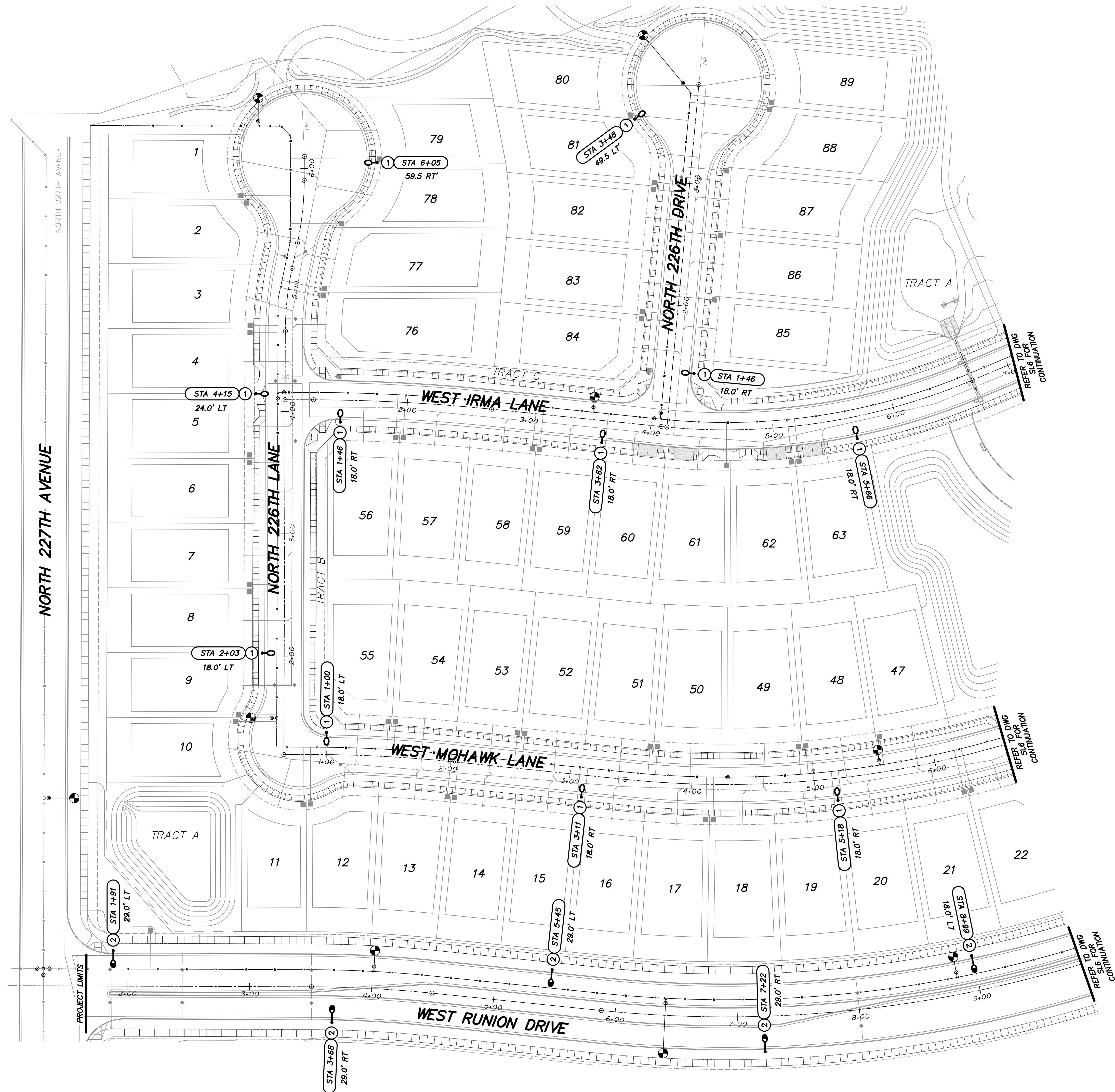
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STREET LIGHTING LAYOUT - III

DATE DEC 2020	DESIGNED: RWB DRAWN: JG CHECKED: DAR	DWG No. SL4 PROJ No. 20020	SHEET 4 OF 12
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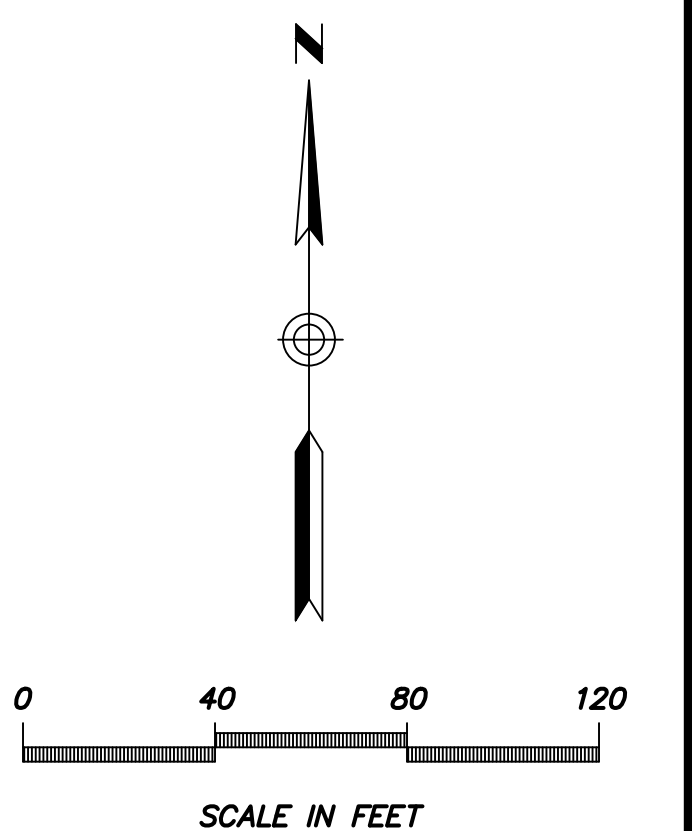
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LEGEND

- PROPOSED 41W STREET LIGHT
- PROPOSED 88W STREET LIGHT
- EXISTING OR PROPOSED STREET LIGHT (NOT IN CONTRACT)
- FIRE HYDRANT

NOTE: ALL STREET LIGHTS TO BE 1' CLEAR OF SIDEWALKS



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MESQUITE MOUNTAIN RANCH
PHASE 1
SURPRISE, ARIZONA

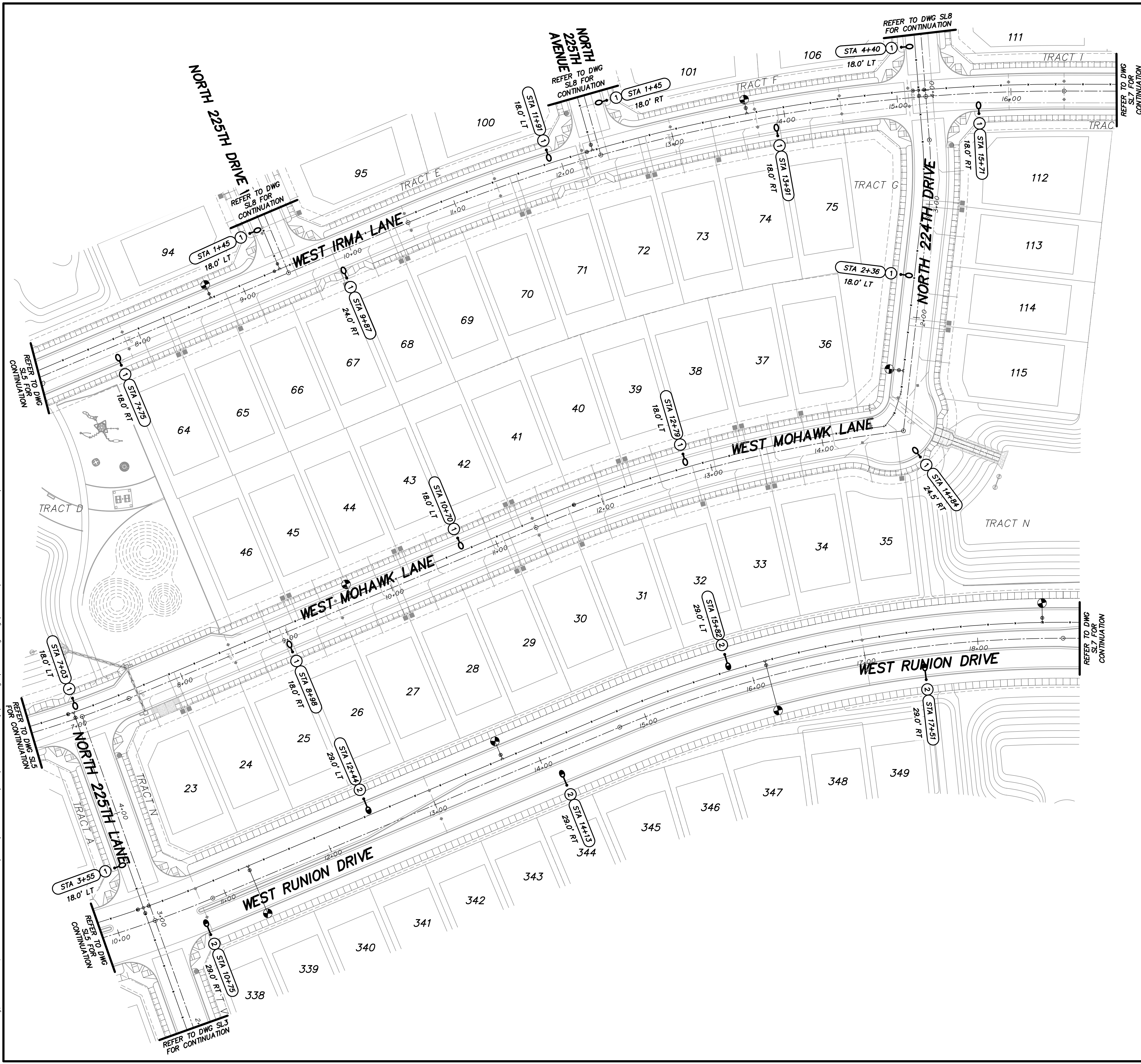
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STREET LIGHTING LAYOUT - IV

DATE DEC 2020	DESIGNED: RWB DRAWN: JG CHECKED: DAR	DWG No. SL5 PROJ No. 20020	SHEET 5 OF 12
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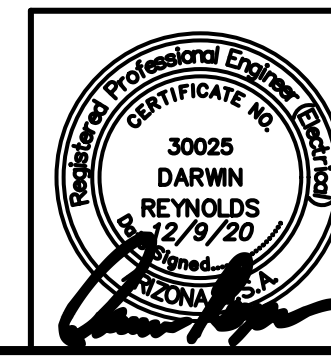
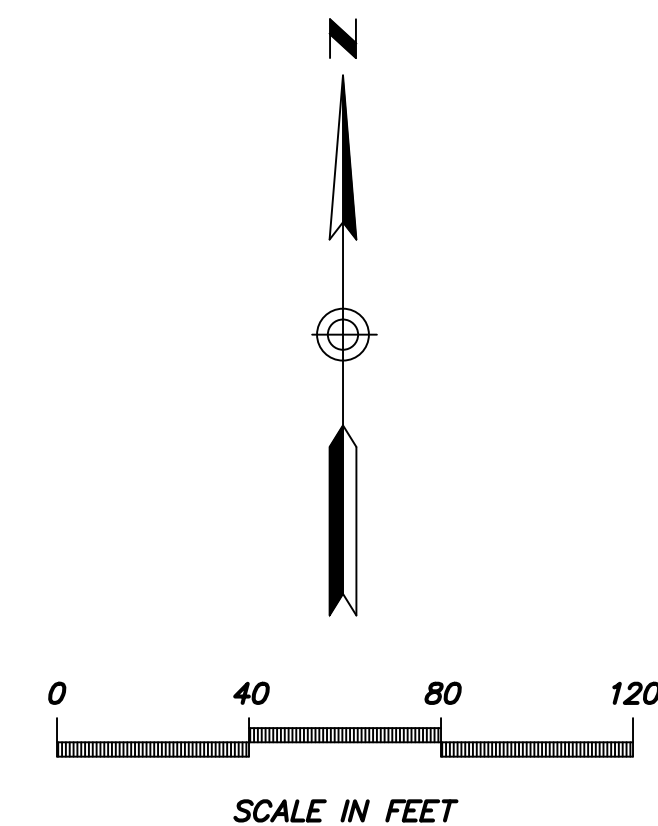
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LEGEND

- PROPOSED 41W STREET LIGHT
- PROPOSED 88W STREET LIGHT
- EXISTING OR PROPOSED STREET LIGHT (NOT IN CONTRACT)
- FIRE HYDRANT

NOTE: ALL STREET LIGHTS TO BE 1' CLEAR OF SIDEWALKS



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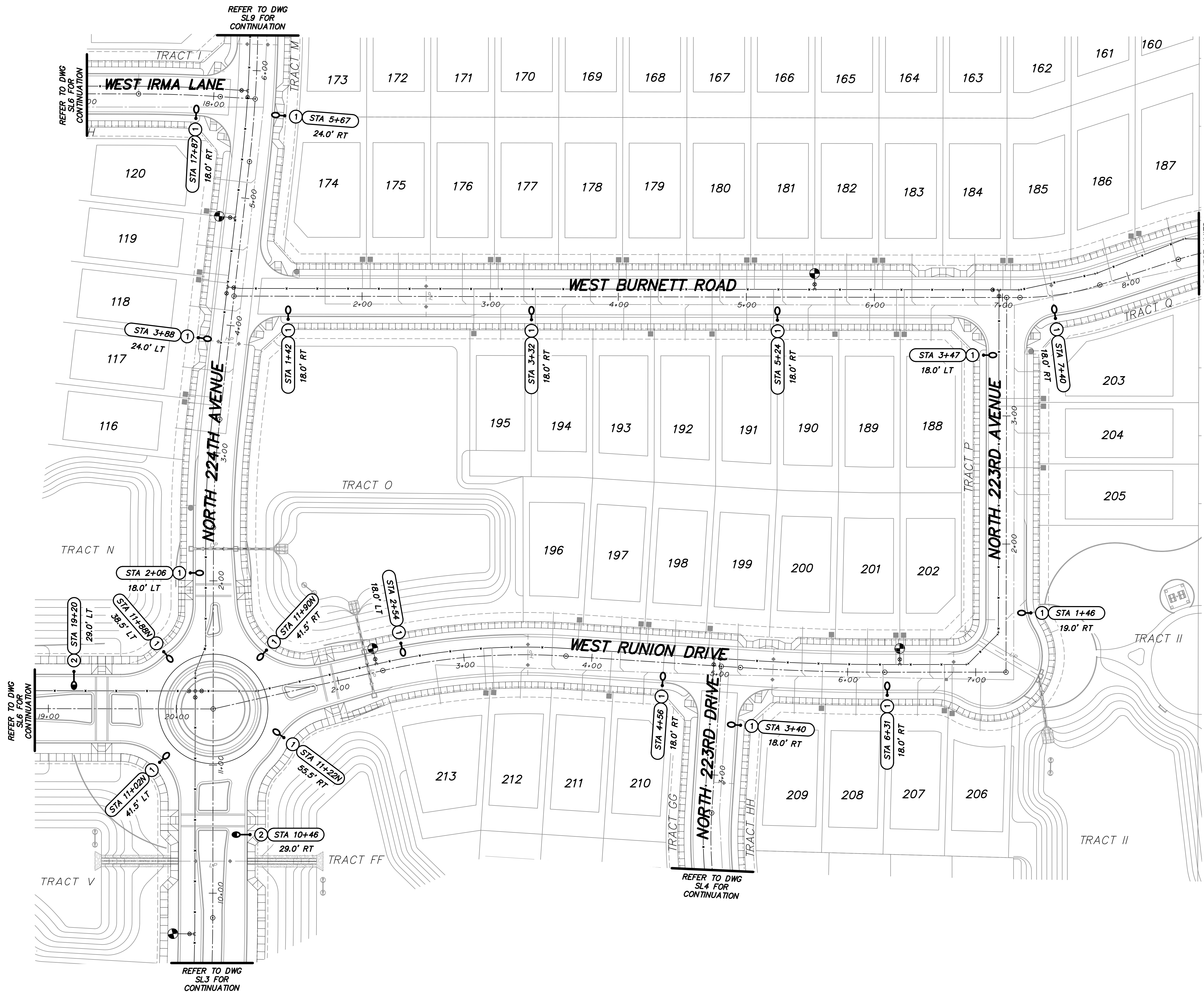
MESQUITE MOUNTAIN RANCH
PHASE 1
SURPRISE, ARIZONA

SHEET TITLE
STREET LIGHTING LAYOUT - V

DATE DEC 2020	DESIGNED: RWB DRAWN: JG CHECKED: DAR	DWG No. SL6 PROJ No. 20020	SHEET 6 OF 12
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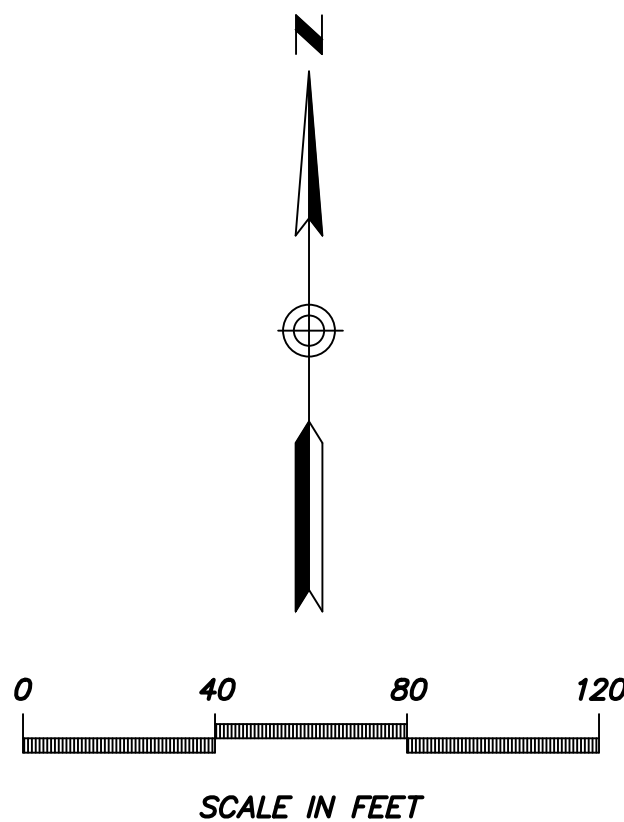
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LEGEND

- PROPOSED 41W STREET LIGHT
- PROPOSED 88W STREET LIGHT
- EXISTING OR PROPOSED STREET LIGHT (NOT IN CONTRACT)
- FIRE HYDRANT

NOTE: ALL STREET LIGHTS TO BE 1' CLEAR OF SIDEWALKS



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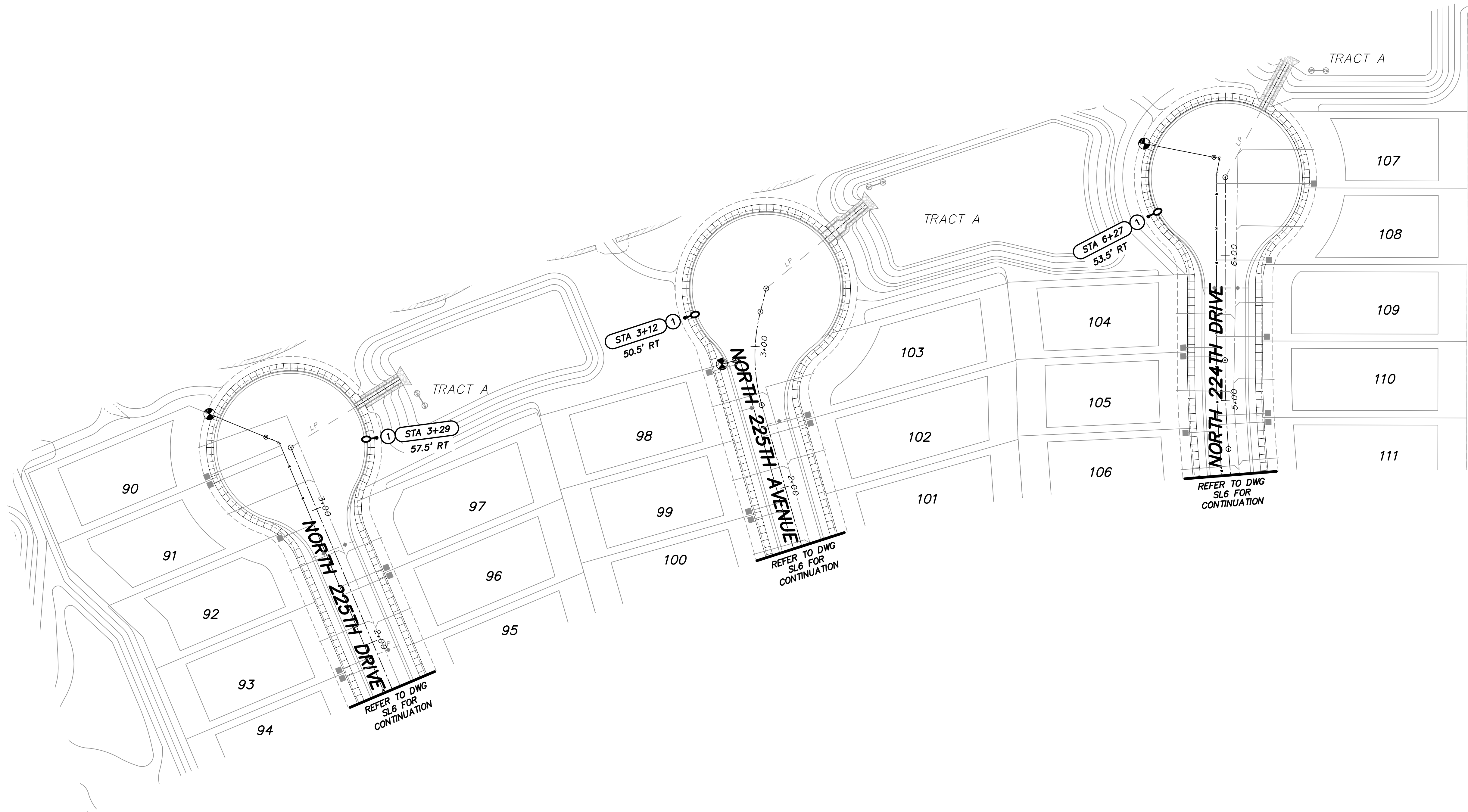
MESQUITE MOUNTAIN RANCH
PHASE 1
SURPRISE, ARIZONA

SHEET TITLE
STREET LIGHTING LAYOUT - VI

DATE DEC 2020	DESIGNED: RWB DRAWN: JG CHECKED: DAR	DWG No. SL7 PROJ No. 20020	SHEET 7 OF 12
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KEY NOTE

- ① INSTALL 41W, 3000K LED (4,800 LUMENS) BRONZE COBRAHEAD LUMINAIRE MOUNTED ON A 30'-6" DIRECT BURIED SQUARE STEEL POLE WITH A 2'-0" MAST ARM (25' MOUNTING HEIGHT). SEE APS STANDARD DETAIL 8030 AND APPLICABLE APS DETAILS ON SHEET SL10.

LEGEND

- PROPOSED 41W STREET LIGHT
- EXISTING OR PROPOSED STREET LIGHT (NOT IN CONTRACT)
- ⊕ FIRE HYDRANT

NOTE: ALL STREET LIGHTS TO BE 1' CLEAR OF SIDEWALKS



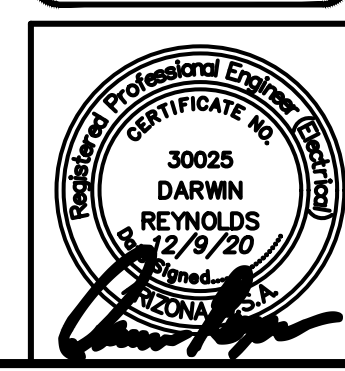
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**MESQUITE MOUNTAIN RANCH
PHASE 1
SURPRISE, ARIZONA**

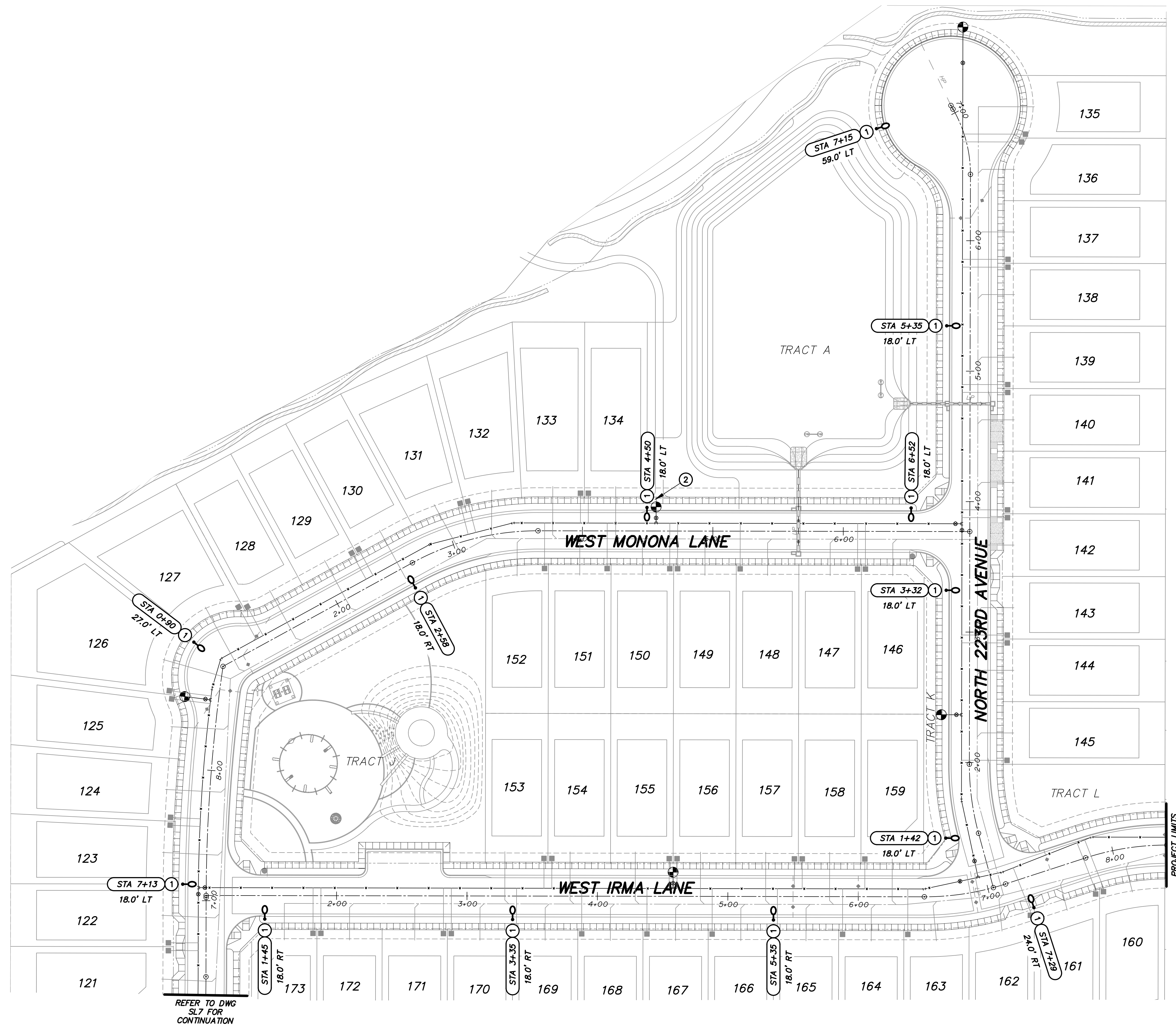
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STREET LIGHTING LAYOUT - VII

DATE DEC 2020	DESIGNED: RWB DRAWN: JG CHECKED: DAR	DWG No. SL8 PROJ No. 20020	SHEET 8 OF 12
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KEY NOTE

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- 2 MAINTAIN A MINIMUM OF 7' CLEARANCE FROM FIRE HYDRANT.

LEGEND

- PROPOSED 41W STREET LIGHT
- EXISTING OR PROPOSED STREET LIGHT (NOT IN CONTRACT)
- FIRE HYDRANT

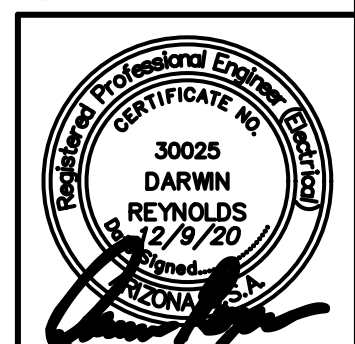
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MESQUITE MOUNTAIN RANCH
PHASE 1
SURPRISE, ARIZONA

SHEET TITLE
STREET LIGHTING LAYOUT - VIII

DATE DEC 2020	DESIGNED: RWB DRAWN: JG CHECKED: DAR	DWG No. SL9 PROJ No. 20020	SHEET 9 OF 12
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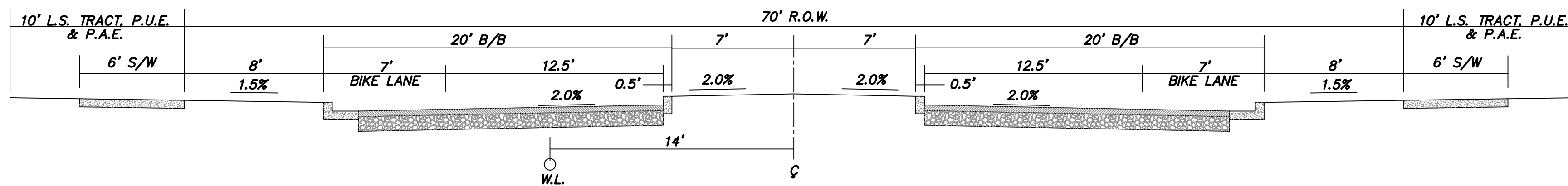
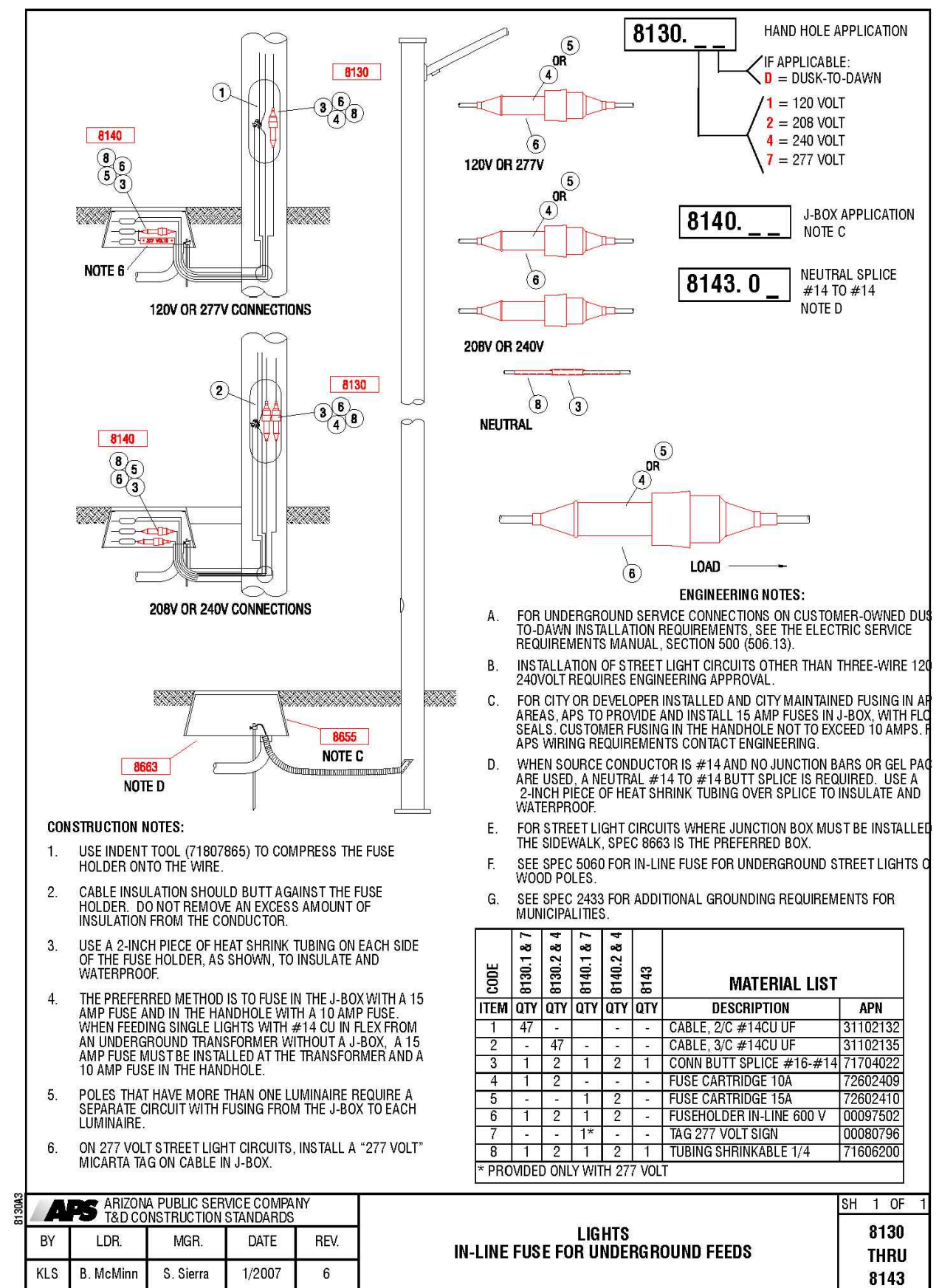
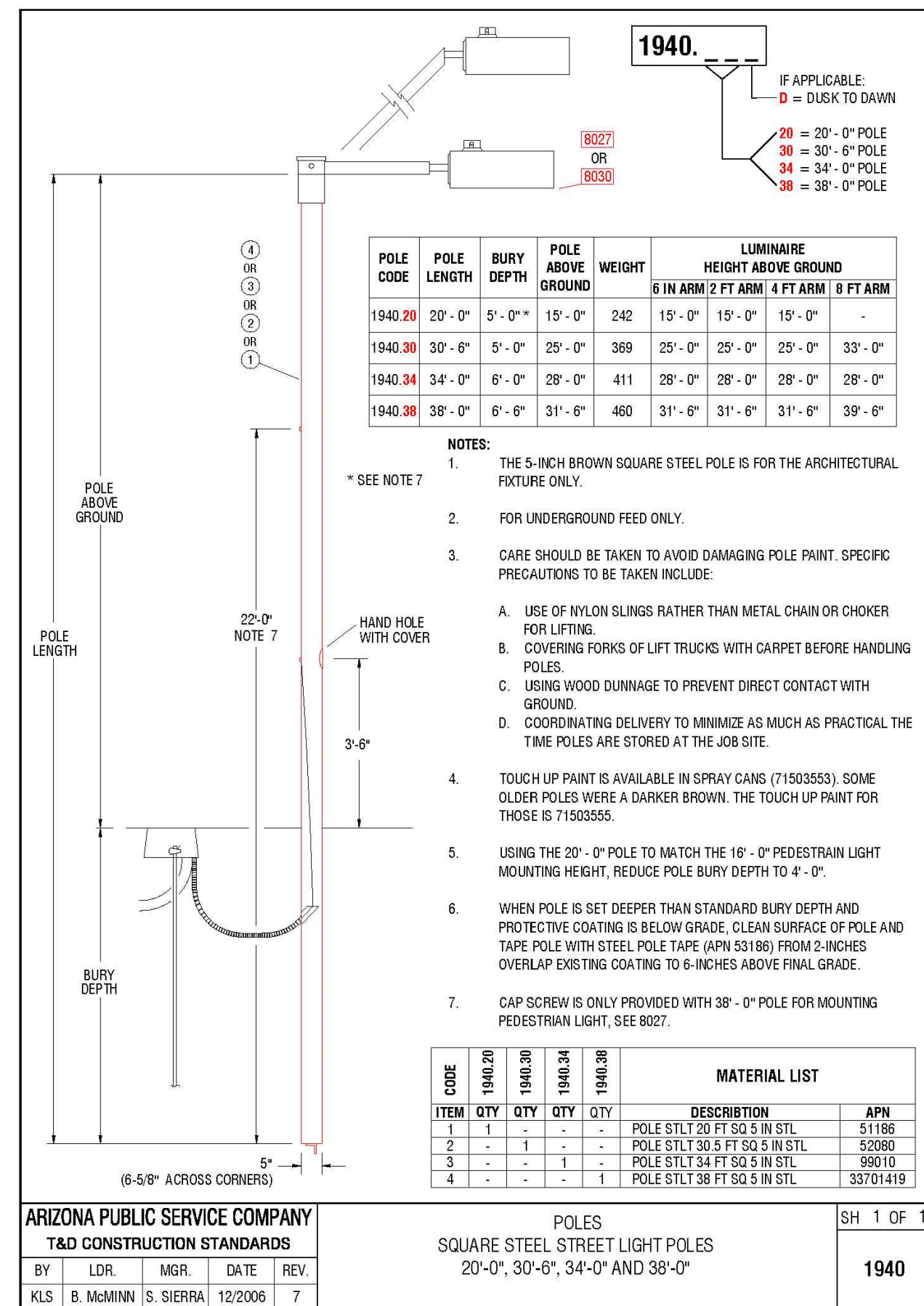


FS20-373

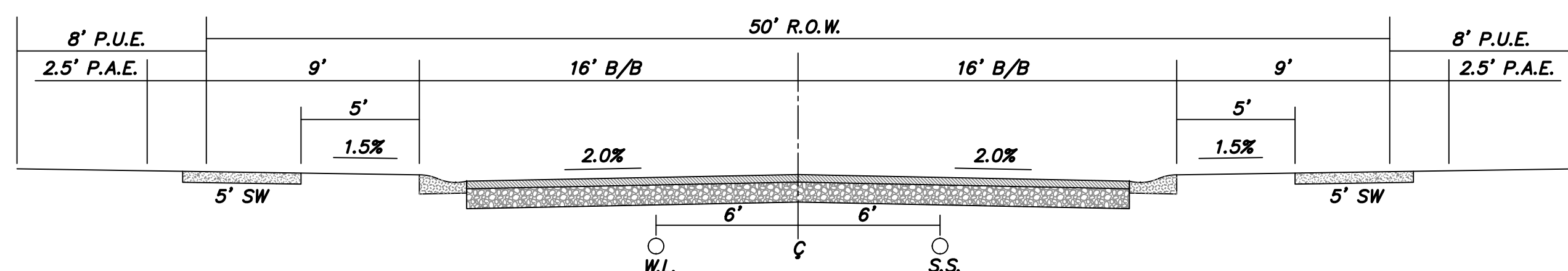
- | POLE
CODE | POLE
LENGHT | BURY
DEPTH | POLE
ABOVE
GROUND | LUMINAIRE HEIGHT ABOVE GROUND | | | |
|--------------|----------------|---------------|-------------------------|-------------------------------|---------|---------|---------|
| | | | | 6IN ARM | 2FT ARM | 4FT ARM | 8FT ARM |
| 194020 | 20'-0" | 5'-0" | 15'-0" | 15'-0" | 15'-0" | 15'-0" | --- |
| 194030 | 30'-0" | 5'-0" | 25'-0" | 25'-0" | 25'-0" | 25'-0" | 33'-0" |
| 194034 | 34'-0" | 6'-0" | 28'-0" | 28'-0" | 28'-0" | 28'-0" | 39'-6" |
| 194038 | 38'-0" | 6'-6" | 31'-6" | 31'-6" | 31'-6" | 31'-6" | 39'-6" |

[illegible]

 ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS		LIGHTS ARCHITECTURAL ON 5" SQUARE BROWN PAINTED STEEL POLE DIRECT BURY				SH 2 OF 2 8030
BY	MGR.	DIR.	DATE	REV.		
KLS	B. MCAMIN	B. SMITH	04/2010	9		



RESIDENTIAL COLLECTOR ROADWAY SECTION
FACING NORTH & EAST
NTS

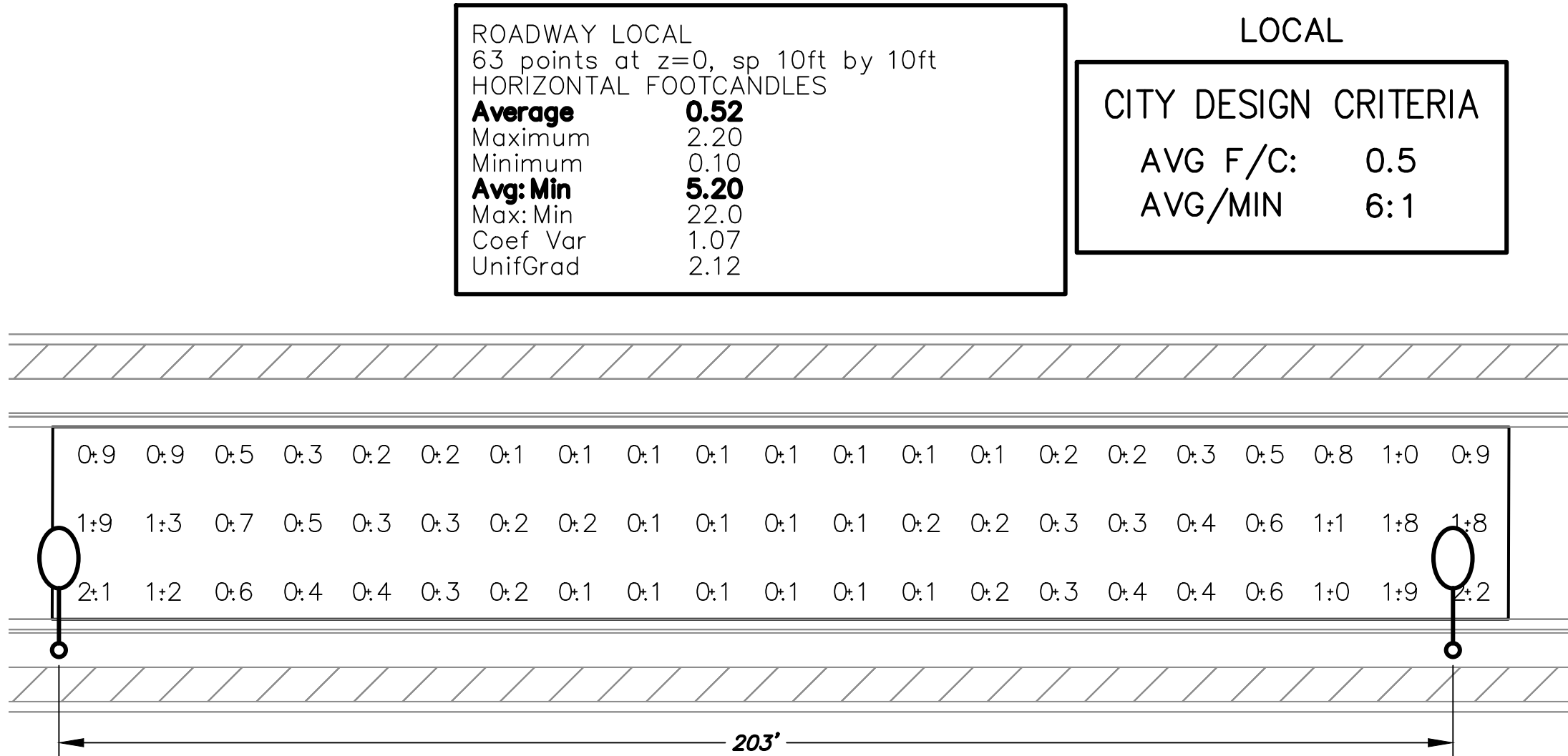


RESIDENTIAL LOCAL ROADWAY SECTION
FACING NORTH & EAST
NTS

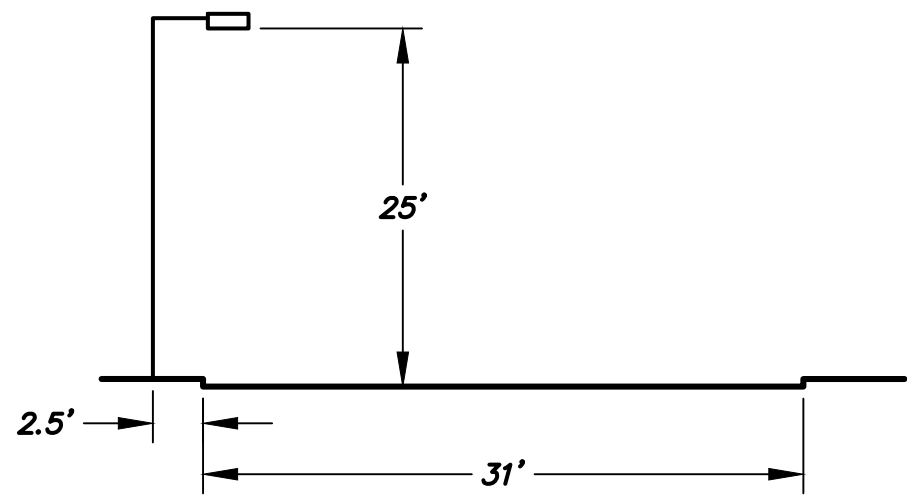
NOTE:
DETAILS ON THIS SHEET
HAVE BEEN PREPARED
AND PROVIDED BY APS

 DARCOR ELECTRICAL CONSULTING ENGINEERS	22801 N. 16TH ST. SUITE 240 PHOENIX, AZ 85027 Ph: (602) 796-2899 WWW.DARCORINC.COM		
MESQUITE MOUNTAIN RANCH PHASE 1 SURPRISE, ARIZONA			
SHEET TITLE STREET LIGHTING DETAILS			
DATE DEC 2020	DESIGNED: RWB DRAWN: JG	DWG No. SL10	SHEET 10
SCALE NONE	CHECKED: DAR	PROJ No. 20020	OF 12

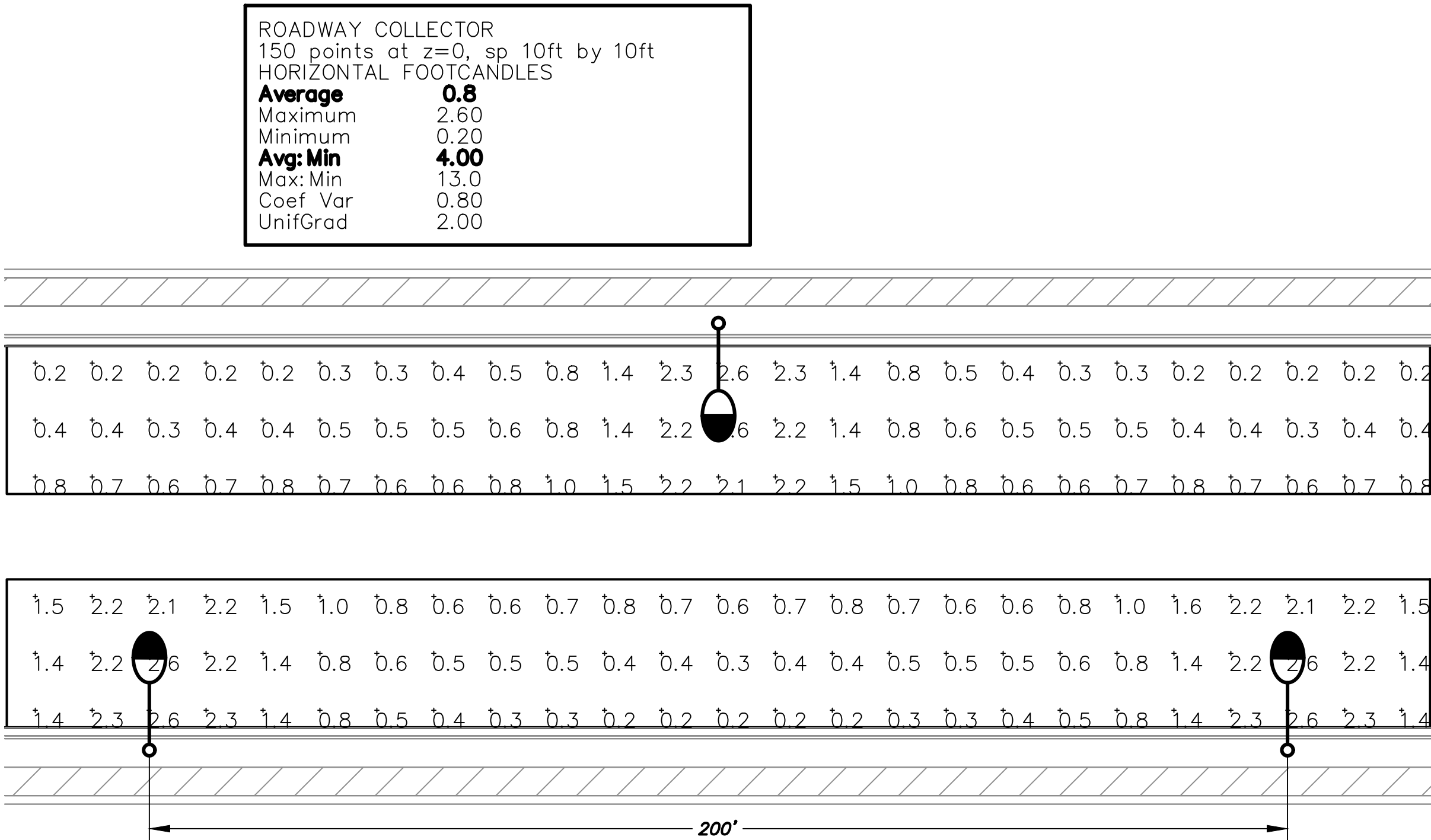
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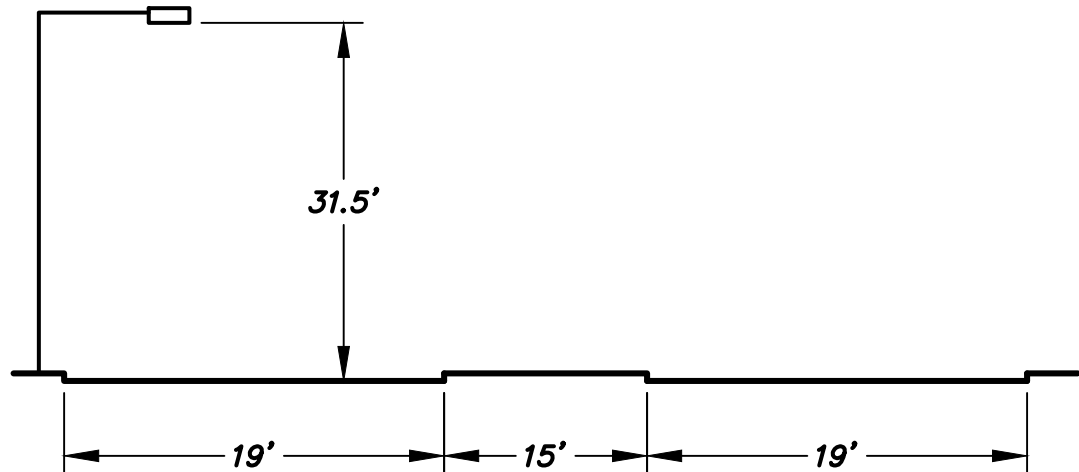
WORST CASE SPACING FOR 31' WIDE ROADWAY
(LOCAL) (41W) (25' H)



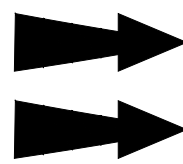
LUMINAIRE INPUT DATA
GE Lighting Solutions
lamp(s): LED
candela file 'ERL1_05E130-120-277V.IES'
1 lamp(s) per luminaire, 4,800 initial lumens per lamp
Light Loss Factor = 0.9, watts per luminaire = 41
Outreach (from mounting axis to photometric center)= 30 in
mounting height= 25 ft



WORST CASE SPACING FOR 53' WIDE ROADWAY
(COLLECTOR) (88W) (31.5' H)



LUMINAIRE INPUT DATA
GE Lighting Solutions
lamp(s): LED
candela file 'ERL1_08E130-120-277V.IES'
1 lamp(s) per luminaire, 8,200 initial lumens per lamp
Light Loss Factor = 1.0, watts per luminaire = 88
Outreach (from mounting axis to photometric center)= 54 in
mounting height= 31.5 ft



APS APPROVED LED STREET LIGHTS								
AS OF 3-15-18								
APN	LIGHT CODE	LAMP	WATTS	LUMENS	CCT	COLOR	G.E. MODEL NUMBER	IES CURVE NUMBER
141047	RL41	LED	32	3,800	3000K	DK BRONZE	ERL1004B130ADKBZGRX	ERL1_04B130-120-277V.IES
141048	RL41	LED	41	4,800	3000K	DK BRONZE	ERL1005E130ADKBZGRX	ERL1_05E130-120-277V.IES
141049	RL42	LED	88	8,200	3000K	DK BRONZE	ERL1008E130ADKBZGRX	ERL1_08E130.IES
141050	RL43	LED	108	11,100	3000K	DK BRONZE	ERLH011E130ADKBZGRX	ERLH_11E130.IES
141040	CL50	LED	32	3,800	3000K	GRAY	ERL1004B130AGRAYGRX	ERL1_04B130-120-277V.IES
141041	CL51	LED	41	4,800	3000K	GRAY	ERL1005E130AGRAYGRX	ERL1_05E130-120-277V.IES
141043	CL52	LED	88	8,200	3000K	GRAY	ERL1008E130AGRAYGRX	ERL1_08E130.IES
141045	CL53	LED	108	11,100	3000K	GRAY	ERLH011E130AGRAYGRX	ERLH_11E130.IES
128251	RL50	LED	32	3,900	4000K	DK BRONZE	ERL1004B140ADKBZGRX	ERL1_04B140-120-277V.IES
126804	RL51	LED	41	5,000	4000K	DK BRONZE	ERL1005E140ADKBZGRX	ERL1_05E140-120-277V.IES
126805	RL52	LED	88	8,500	4000K	DK BRONZE	ERL1008E140ADKBZGRX	ERL1_08E140.IES
	RL53	LED	108	11,500	4000K	DK BRONZE	ERLH011E140ADKBZGRX	ERLH_11E140.IES
128329	CL60	LED	32	3,900	4000K	GRAY	ERL1004B140AGRAYGRX	ERL1_04B140-120-277V.IES
128330	CL61	LED	41	5,000	4000K	GRAY	ERL1005E140AGRAYGRX	ERL1_05E140-120-277V.IES
128331	CL62	LED	88	8,500	4000K	GRAY	ERL1008E140AGRAYGRX	ERL1_08E140.IES
128332	CL63	LED	108	11,500	4000K	GRAY	ERLH011E140AGRAYGRX	ERLH_11E140.IES

ALL PHOTOMETRIC CALCULATIONS ON THESE
PLANS REPRESENT ILLUMINANCE VALUES

22001 N. 16TH ST.
SUITE 240
PHOENIX, AZ 85027
Ph: (602) 798-8899
WWW.DARCORINC.COM

DARCOR
ELECTRICAL CONSULTING ENGINEERS

Check Arizona EIT or EIT seal has not expired date
before you begin consultation
ARIZONA
Call EIT or click: Arizonaeit.com

30025
DARWIN
REYNOLDS
12/9/20
Professional Engineer
State of Arizona

DATE
DEC 2020

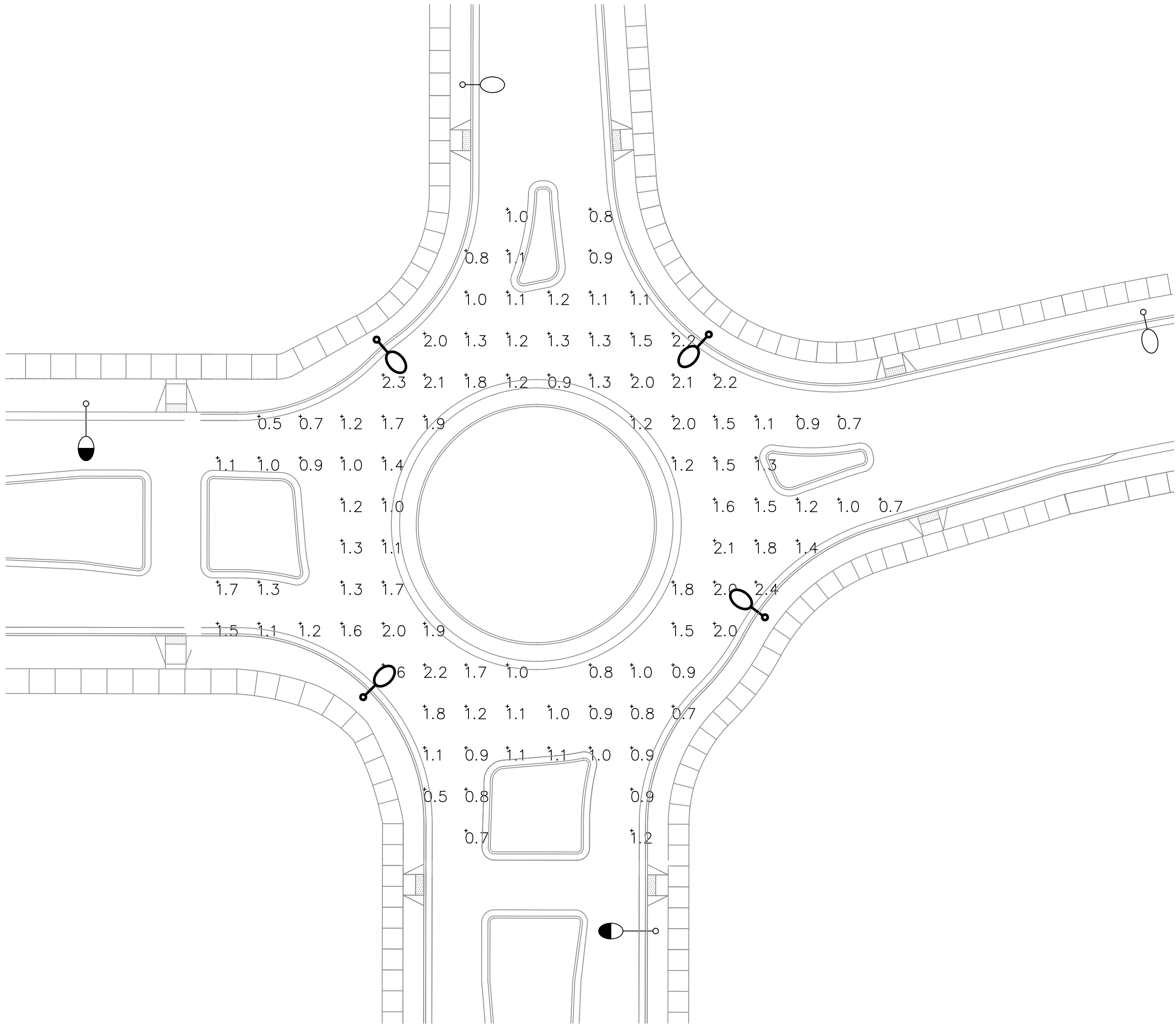
DESIGNED: RWB
DRAWN: JG
CHECKED: DAR

DWG No.
P1
PROJ No.
20020

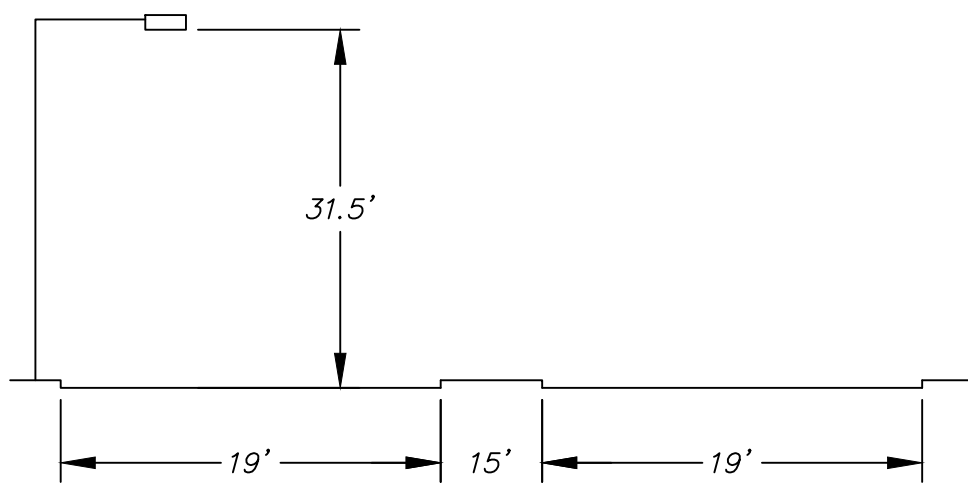
SHEET
11
OF
12

ROADWAY PHOTOMETRIC
CALCULATIONS - I

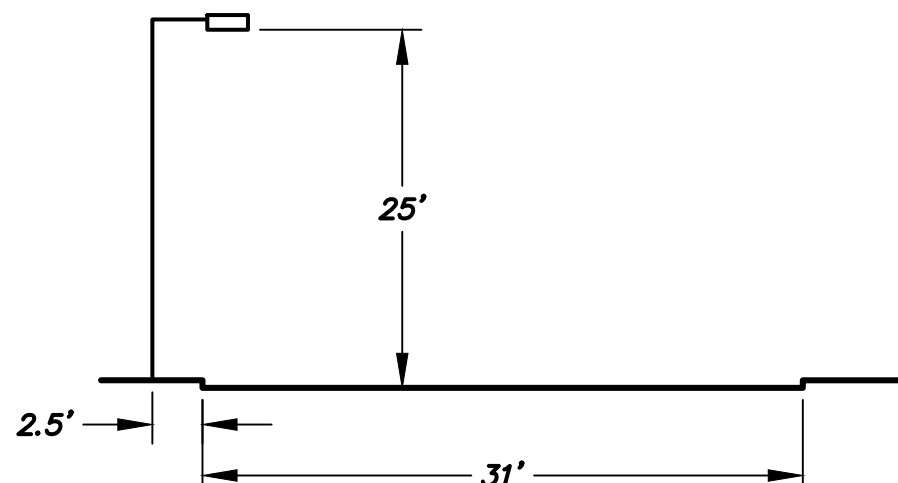
ROADWAY LOCAL	
97 points at z=0, sp 10ft by 10ft	
HORIZONTAL FOOTCANDLES	
Average	1.32
Maximum	2.60
Minimum	0.50
Avg: Min	2.64
Max: Min	5.20
Coef Var	0.35
UnifGrad	2.20



ROUNDABOUT



COLLECTOR ROADWAY STREET LIGHT



LOCAL ROADWAY STREET LIGHT

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ALL PHOTOMETRIC CALCULATIONS ON THESE
PLANS REPRESENT ILLUMINANCE VALUES



22801 N. 16TH ST.
SUITE 240
PHOENIX, AZ 85027
Ph: (602) 798-8899
WWW.DARCORINC.COM

MESQUITE MOUNTAIN RANCH
PHASE 1
SURPRISE, ARIZONA

SHEET TITLE
ROADWAY PHOTOMETRIC
CALCULATIONS - II

DATE DEC 2020	DESIGNED: RWB	DWG No. P2	SHEET 12
SCALE NONE	DRAWN: JG	PROJ No. 20020	OF 12
CHECKED: DAR			