CITY OF SURPRISE
Regular City Council Meeting
16000 N. Civic Center Plaza
Surprise, AZ 85374
Tuesday, May 7, 2024 @ 6:00 PM
COUNCIL CHAMBERS

A. Call To Order

Any prayer or invocation that may be offered before the start of the Regular Council Meeting is a voluntary offering by a private resident of Surprise; has not been previously reviewed or approved by City Council or City staff; should not be considered an endorsement of any particular religion by the City or its officials, as the beliefs, viewpoint, and content are personal to the speaker; and no participation by any person in attendance is required. A list of volunteers is maintained by the office of the City Clerk and interested persons should contact the Clerk's Office for further information.

B. Roll Call

C. Pledge of Allegiance

D. Proclamation and Community Acknowledgements

National Military Appreciation Month

E. City Manager Report

The City Manager may present a brief summary of current events, including recognition of community members, employees, and programs, pursuant to A.R.S. § 38-431.02(K). The City Council will not discuss or take action on any matter within the City Manager Report.

F. City Clerk Report

6.	Internal	55th Annual Professional Municipal Clerks Week	Kristi Passarelli City Clerk

G. Call To The Public

INSTRUCTIONS: In order to address the City Council, you will need to fill out a Call to the Public Form available at the front counter, and then turn it in to the City Clerk before the meeting begins. You may also fill out the Call to the Public form online If submitting form electronically, please submit to City Clerk at least one hour before the meeting start time.

Note: A.R.S. 38-431.01(H)- During this time members of the public may address City Council only on issues within the jurisdiction of the City Council which are not an item on the agenda. At the conclusion of the open call, City Council may respond to criticism, may ask staff to review the matter or may ask that the matter be put on a future agenda. No discussion or action shall take place on any item raised.

Approval of items on the Consent Agenda – all items with an asterisk (*) are considered to be routine matters and will be enacted by one motion and one roll call vote to the City Council. There will be no separate discussion on these items unless a Councilmember requests, in which event the item will be removed from the consent agenda and considered in its normal sequence on the agenda.

Please be aware that Council Members may not discuss or respond to matters raised during call to the public that are not specifically identified on the agenda. Council Members may however, in their discretion, discuss or respond to relevant matters raised during a noticed public hearing or agenda item.

H. Regular City Council Meeting Agenda

CONSENT AGENDA:

1.	Internal	Consideration and action to approve the April 16, 2024 Regular City Council Meeting Minutes.	Kristi Passarelli City Clerk
2.	Citywide	Consideration and action pertaining to approval of a Fiscal Year 2024 budget amendment moving budget authority in the amount of $6,000 for overtime expenses and authorization to accept a grant award from the Governor's Office of Highway Safety (GOHS); Resolution #2024-63.	Benny Pina Police
3.	District 3	Consideration and action pertaining to the conditional acceptance and maintenance of certain streets and public utility improvements at Toll at Prasada Unit J, generally located at the northwest corner of West Peoria Road and North Cotton Lane; Resolution #2024-53.	Kristin Tytler Public Works
4.	District 1	Consideration and action pertaining to the conditional acceptance and maintenance of certain streets and public utility improvements at Austin Ranch West – North Copper Canyon Parcel 3.1, generally located at the southwest corner of West Pinnacle Peak Road and North 183rd Avenue; Resolution #2024-26.	Kristin Tytler Public Works
5.	District 3	Consideration and action pertaining to the immediate formation of a lighting improvement district known as City of Surprise, Arizona, SU-PrasadaCactus303211 pursuant to A.R.S. § 48-616 for the purpose of purchasing facilities and energy for lighting the public streets; Resolution #2024-59.	Kristin Tytler Public Works
6.	District 4	Consideration and action pertaining to the immediate formation of a lighting improvement district known as City of Surprise, Arizona, SU-ParadiseGarden213 pursuant to A.R.S. § 48-616 for the purpose of purchasing facilities and energy for lighting the public streets; Resolution #2024-57.	Kristin Tytler Public Works
7.	District 1	Consideration and action pertaining to the immediate formation of a lighting improvement district known as City of Surprise, Arizona, SU-DerVallyNCitrs199 pursuant to A.R.S. § 48-616 for the purpose of purchasing facilities and energy for lighting the public streets; Resolution #2024-61.	Kristin Tytler Public Works
8.	District 3	Consideration and action pertaining to the immediate formation of a lighting improvement district known as City of Surprise, Arizona, SU-PRASADAGTEWY207 pursuant to A.R.S. § 48-616 for the purpose of purchasing facilities and energy for lighting the public streets; Resolution #2024-55.	Kristin Tytler Public Works
9.	District 1	Consideration and action declaring the intent to enlarge an existing lighting improvement district known as City of Surprise, Arizona, SU-AsantePar4.5 pursuant to A.R.S. § 48-616 for the purpose of purchasing facilities and energy for lighting the public streets; Resolution #2024-52.	Kristin Tytler Public Works
10.	District 5	Consideration and action declaring the intent to enlarge an existing lighting improvement district known as City of Surprise, Arizona, SU-SurpriseCenter190 pursuant to	Kristin Tytler Public Works

		A.R.S. § 48-616 for the purpose of purchasing facilities and energy for lighting the public streets; Resolution #2024-51.	
11.	District 3	Consideration and action pertaining to the immediate formation of a lighting improvement district known as City of Surprise, Arizona, SU-PRASADASWTWATER210 pursuant to A.R.S. § 48-616 for the purpose of purchasing facilities and energy for lighting the public streets; Resolution #2024-64.	Kristin Tytler Public Works
12.	District 1	Consideration and action pertaining to the conditional acceptance and maintenance of certain streets and public utility improvements at Austin Ranch West – North Copper Canyon Parcel 3.2, generally located at the southwest corner of Pinnacle Peak Road and North 183rd Avenue; Resolution # 2024-27.	Kristin Tytler Public Works
13.	District 5	Consideration and action declaring the intent to enlarge an existing lighting improvement district known as City of Surprise, Arizona, Surprise Medical Plaza pursuant to A.R.S. § 48-616 for the purpose of purchasing facilities and energy for lighting the public streets; Resolution #2024-54.	Kristin Tytler Public Works
14.	District 1	Consideration and action pertaining to approval of the Final Plat entitled, “Windstone Ranch North” and received February 21, 2024, for property located at the northwest corner of Cottontail Lane and 151st Avenue; FS22-0807.	Chris Sexton Community Development
15.	District 1	Consideration and action pertaining to approval of the Plat entitled, “Southwest Gas Ops Center” and dated April 09, 2024, a site generally located on the southwest corner of Deer Valley Road and Grand Avenue; Case FS24-0102.	Leslie Carnie Community Development
16.	District 3	Consideration and action pertaining to approval of the Final Plat entitled, “Toll at Prasada, SWC Park Final Plat” and stamped January 23, 2024, a property located west of Cotton Lane, between Cactus Road and Peoria Avenue; Case FS23-0852.	Tanner Wessel Community Development
17.	District 1	Consideration and action pertaining to approval of the Final Plat entitled, “Asante Unit 3.6A and 3.6B” and dated February 20, 2024, a site generally located northeast of Happy Valley Road and Pat Tillman Boulevard; Case FS23-0841.	Leslie Carnie Community Development
18.	Citywide	Consideration and action pertaining to approval of a Fiscal Year 2024 budget amendment moving budget in the amount of $400,000 for increased Spring Training revenues; Resolution #2024-76	Kendra Pettis Sports and Tourism
19.	District 1	Consideration and action pertaining to approval of the North Jomax Water Development Agreement (Regional Improvements Overlay Agreement); Resolution #2024-77.	Michael Boule Community Development
	REGULAR AGENDA ITEM - PUBLIC HEARING:		
20.	District 4	Consideration and action pertaining to a recommendation to the Arizona Department of Liquor Licenses and Control (DLLC) on Application No. 287627,	Kristi Passarelli City Clerk

		requested by Rosa Maria Lara, for Bien Venido Al Buen Gusto Paisano for Series 10 Liquor License. Bien Venido Al Buen Gusto Paisano is located at 15601 N Greasewood St, Surprise, AZ 85378.	
21.	District 6	Consideration and action pertaining to a recommendation to the Arizona Department of Liquor Licenses and Control (DLLC) on Application No. 288522, requested by Jared Michael Repinski, for Real Thai & Sushi for Series 12 Liquor License. Real Thai & Sushi is located at 13749 N Litchfield Road, Surprise, AZ 85379.	Kristi Passarelli City Clerk
22.	District 5	Consideration and action pertaining to a recommendation to the Arizona Department of Liquor Licenses and Control (DLLC) on Application No. 286878, requested by Andrea Dahlman Lewkowitz, for Macayo's Mexican Food for Series 12 Liquor License. Macayo's Mexican Food is located at 15565 W Bell Road, Surprise, AZ 85374.	Kristi Passarelli City Clerk

REGULAR AGENDA ITEM - NON-PUBLIC HEARING:

23.	District 1	Consideration and action ordering the recording of a blank petition for the proposed annexation of approximately 4.07 acres generally known as the 162nd Drive Self Storage Project (Case FS23-0991); Resolution #2024-60.	Chris Sexton Community Development
24.	Citywide	Consideration and action pertaining to adoption of the tentative expenditure limitation budget for FY2025; directing publication of said tentative budget; and setting a public hearing for June 4, 2024, at 6:00pm at the City of Surprise Council Chambers, 16000 N. Civic Center Plaza, Surprise, Arizona; Resolution #2024-75.	Andrea Davis Finance

I. Other Business and Future Agenda Items

J. City Council Reports

K. Executive Session

For information Purposes; Upon a public majority vote of a quorum of the City Council, the Council may hold an executive session, which will not be open to the public, but for only the following purposes:

- discussion or consideration of personnel matters (A.R.S. §38-431.03 (A)(1));
- discussion or consideration of records exempt by law from public inspection (A.R.S. §38-401.03 (A)(2));
- discussion or consultation for legal advice with the city’s attorneys (A.R.S. §38-431.03 (A)(3));
- discussion or consultation with the city’s attorneys regarding the city’s position regarding contracts that are the subject of negotiations, in pending or contemplated litigation, or in settlement discussions conducted in order to avoid or resolve litigation (A.R.S.§38-431.03 (a)(4));
- discussion or consultation with designated representatives of the city in order to consider its position and instruct its representatives regarding negotiations with employee organizations (A.R.S. §38-431.03 (A)(5)); or
- discussion, consultation or consideration for international and interstate negotiations or for negotiations by a city or town, or its designated representatives, with members of a tribal council,

or its designated representatives, of an Indian reservation located within or adjacent to the city or town. A.R.S. §38-401.03 (A)(6)).

- discussing or consulting with designated representatives of the city in order to consider its position and instruct its representatives regarding negotiations for the purchase, sale or lease of real property (A.R.S. §38-431.03 (A)(7)).

Confidentiality Requirements Pursuant to A.R.S. §38-431.03(C)(D): Any person receiving executive session information pursuant to A.R.S. §38-431.02 shall not disclose that information except to the Attorney General or County Attorney by agreement of the City Council, or as otherwise ordered by a court of competent jurisdiction.

The council may vote to hold an executive session for the purpose of obtaining legal advice from the Board's attorney on any matter listed on the agenda pursuant to A.R.S. § 38-431.03(A)(3).

L. Adjournment

KRISTI PASSARELLI, CITY CLERK

POSTED: Thursday, May 2, 2024 @ 11:00am

SPECIAL NOTE: PERSONS WITH SPECIAL ACCESSIBILITY NEEDS, INCLUDING LARGE PRINT MATERIALS OR INTERPRETER, SHOULD CONTACT THE CITY CLERK'S OFFICE @ 623.222.1200 OR TTY 623.222.1002, BY NO LATER THAN 24 HOURS IN ADVANCE OF THE REGULAR SCHEDULED MEETING TIME.

CITY OF SURPRISE
Regular City Council Meeting

Council Meeting Date: May 7, 2024
Submitting Department: City Clerk
Staff Recommendations:

Contact Person:
District: Internal

Consent: No Regular: No Public Hearing: No Report/Discussion: No

Agenda Wording:
Invocation

Motion:

Background:

Objective Analysis:

Policy Compliant:

Financial Impact:

Budget Impact:
FTE Impact:

ATTACHMENTS:

CITY OF SURPRISE
Regular City Council Meeting

Council Meeting Date: May 7, 2024
Submitting Department: City Manager Office
Staff Recommendations: None

Contact Person:
District: Citywide

Consent: No Regular: Yes Public Hearing: No Report/Discussion: No

Agenda Wording:
National Military Appreciation Month

Motion:
N/A

Background:
N/A

Objective Analysis:
N/A

Policy Compliant:
N/A

Financial Impact:
There is no anticipated financial impact related to this item.

Budget Impact:
There is no anticipated budget impact related to this item.

FTE Impact:
This item does not have an impact on current staff levels.

ATTACHMENTS:

CITY OF SURPRISE
Regular City Council Meeting

Council Meeting Date: May 7, 2024
Submitting Department:
Staff Recommendations:

Contact Person:
District: Citywide

Consent: No Regular: No Public Hearing: No Report/Discussion: No

Agenda Wording:
City Manager sub-text

Motion:

Background:

Objective Analysis:

Policy Compliant:

Financial Impact:

Budget Impact:
FTE Impact:

ATTACHMENTS:

CITY OF SURPRISE
Regular City Council Meeting

Council Meeting Date: May 7, 2024
Submitting Department: City Clerk
Staff Recommendations:

Contact Person: Kristi Passarelli, City Clerk
District: Internal

Consent: No Regular: No Public Hearing: No Report/Discussion: No

Agenda Wording:
55th Annual Professional Municipal Clerks Week

Motion:

Background:

Objective Analysis:

Policy Compliant:

Financial Impact:

Budget Impact:
FTE Impact:

ATTACHMENTS:

CITY OF SURPRISE
Regular City Council Meeting

Council Meeting Date: May 7, 2024
Submitting Department: City Clerk
Staff Recommendations:

Contact Person: Kristi Passarelli, City Clerk
District: Internal

Consent: Yes Regular: No Public Hearing: No Report/Discussion: No

Agenda Wording:
Consideration and action to approve the April 16, 2024 Regular City Council Meeting Minutes.

Motion:
I move to approve the March 18, 2024 Regular City Council Meeting, and Work Session Minutes.

Background:

Objective Analysis:

Policy Compliant:

Financial Impact:

Budget Impact:
FTE Impact:

ATTACHMENTS:
1. 041624 Regular Meeting Minutes

CITY OF SURPRISE
Amended Regular City Council Meeting
16000 N. Civic Center Plaza
Surprise, AZ 85374
Tuesday, April 16, 2024 @ 6:00 PM
COUNCIL CHAMBERS
Amended on 4/12/24 (Item 9 Removed)*

A. Call To Order

Mayor Hall called the Regular Council Meeting of April 16, 2024 to order at 6:00 p.m., located at Surprise City Hall, 16000 N. Civic Center Plaza, Surprise, AZ. 85374.

1. Invocation

Mayor Hall led a Moment of Silence.

B. Roll Call

In attendance with Mayor Hall were Vice Mayor Nick Haney, Council members Chris Judd, Alyson Cline, Patrick Duffy, Ken Remley and Jack Hastings.

C. Pledge of Allegiance

Students from the Freedom Traditional school led the Pledge of Allegiance.

D. Proclamation and Community Acknowledgements

2. Fair Housing Mayoral Proclamation

Mayor Hall proclaimed that it was Fair Housing Month.

E. City Manager Report

3. City Manager sub-text

4. Reports

Adam Johnson came to introduce Layla from Freedom Traditional School. He also introduced Youth Council Member Mathew Arroya, from Dysart High School.

F. City Clerk Report

5. Reports

1. 2024 Elections Update

City Clerk, Kristi Passarelli, gave an Elections Update.

2. Consideration and action to appoint Hasan Reed to fill the vacancy on the Veterans, Disability and Human Services Commission with Term Expiration June 30, 2025.

Councilmember Cline talked about all of the interviews that occurred to fill the vacancies.

Motion: To Appoint
Initiated By: Aly Cline
Seconded By: Nick Haney

Yes: Aly Cline, Jack Hastings, Ken Remley, Patrick Duffy, Skip Hall, Chris Judd, Nick Haney
No: None
Abstain: None

Vote Result: Passed

3. Consideration and action to appoint Olivia Fryer to fill the Veterans, Disability and Human Services Commission vacancy Term Expiration June 30, 2027.

Motion: To Appoint
Initiated By: Aly Cline
Seconded By: Nick Haney

Yes: Aly Cline, Jack Hastings, Ken Remley, Patrick Duffy, Skip Hall, Chris Judd, Nick Haney
No: None
Abstain: None

Vote Result: Passed

4. Consideration and action to appoint Brad Stallings to fill the vacancy on the Parks & Recreation Committee with Term Expiration June 30, 2025

Motion: To Approve
Initiated By: Aly Cline
Seconded By: Nick Haney

Yes: Aly Cline, Jack Hastings, Ken Remley, Patrick Duffy, Skip Hall, Chris Judd, Nick Haney
No: None
Abstain: None

Vote Result: Passed

5. Consideration and action to appoint David Samaniego to fill the vacancy on the Parks & Recreation Committee with Term Expiration June 30, 2025

Motion: To Appoint
Initiated By: Aly Cline
Seconded By: Nick Haney

Yes: Aly Cline, Jack Hastings, Ken Remley, Patrick Duffy, Skip Hall, Chris Judd, Nick Haney
No: None
Abstain: None

Vote Result: Passed

City Clerk, Kristi Pasarelli, administered the oath of office for the appointed candidates.

G. Call To The Public

Alex Christ, a Surprise Resident, came to talk about the 2024 Elections.

H. Regular City Council Meeting Agenda

6. CONSENT AGENDA:

Motion: To Approve
Initiated By: Nick Haney
Seconded By: Aly Cline

Yes: Aly Cline, Jack Hastings, Ken Remley, Patrick Duffy, Skip Hall, Chris Judd, Nick Haney
No: None
Abstain: None

Vote Result: Passed

6. Consideration and action to approve the April 2, 2024 Regular City Council Meeting, and Work Session Minutes.

7. Consideration and action pertaining to acceptance of the Quit Claim Deed for Asante Well Site No. 4 from LCD Asante, LLC, near Pat Tillman Boulevard and 167th Avenue.

8. Consideration and action pertaining to approval of the funding priorities for the Community Development Block Grant Program Annual Action Plan for Program Year 2024-2025.

9. ~~*Consideration and action pertaining to acceptance of a donation of $50,000 from DCS Contracting, Inc. for funding of the before and after-school programming efforts provided through the City of Surprise Human Service & Community Vitality Department; Resolution # 2024-62.~~

7. REGULAR AGENDA ITEM - PUBLIC HEARING:

10. Consideration and action pertaining to a rezone of approximately 880 acres, generally located east of 219th Avenue and south of Pinnacle Peak Road, from Planned Area Development (PAD) to Traditional Neighborhood Development (TND). Ordinance # 2024-10.
Trever Fleetham, came to present this item. He gave a background about the location, overview of the region, and the proposed rezone and requested deviations. He further talked about Conceptual Open Space, Phasing Plan, Roadway Network, Luke AFB Density, Conceptual Site Plan, Commercial Illustration, Ford Proving Grounds, Outreach Meetings, and Recommendation.

    Michele Staples, a Surprise Resident, came to talk in opposition to this item. She talked about what it was like to live in the area.

    Joseph Virosteric, a Surprise Resident, came to talk in opposition to this item. He talked about working with the developer previously along with his concerns.

    Eddy Edens, a Surprise Resident, came to talk in opposition to this item. He talked about his fellow neighbors, and their common interests.

    Michael Kolb, Melissa Kolb, John Divita, Liana Divita, and Nelson Robles-Morales, Surprise Residents all voiced their unity with their neighbors for this item.

    Gennie Robles, a Surprise Resident, came to talk in opposition to this item. She voiced her concern about traffic in the area and safety concerns.

    Kimberly Dirostek, a Surprise Resident, came to talk in opposition to this item. She also talked about 219th ave.

    Ryan Pilota, a Surprise Resident, came to talk in opposition of this item. He talked about the area, and the potential impact of crime and traffic.

    Mercedes Person, a Surprise Resident, came to talk in opposition of this item. She voiced her concerns about public safety in the area.

    Rebekah Massie, a Surprise Resident, came to talk in opposition to this item. She voiced her concerns about the proposed development and public safety.

Jeffrey Blilie, spoke on behalf of the developer. He talked about the area and current zoning, traffic flow, and surrounding area. He talked about flooding and traffic in the area, and proposed changes and impact of Deer Valley Road. He talked about previous history of 219th ave and the previous approval. Jeff talked about the proposed changes to the PAD. Mayor Hall asked if 219th has four lanes? Jeff said it was a two median two. Mayor Hall asked if the rendering was 20 acres, Jeff said it was 20+ acres. He talked about the time it takes to develop commercial. He gave a background to developments they have done.

Councilmember Hastings, asked when was the original PAD approved? Jeff says it was 2001. Councilmember Hastings asked about what would happen if this was rejected? Jeff confirmed they could proceed to build 2000 units. Councilmember Hastings asked if the proposal was better or worse than what exists, and voiced his support for the project.

Vice-Mayor Haney, talked about working with citizens about this item. He talked about the previous history of the project. He talked about the resident's input, and asked about the buffer? Jeff said it would be a dense buffer. He asked if the developer could remove the commercial completely? Jeff said they would prefer not to, but would be willing to reduce it down if need be. Vice-Mayor Haney asked if they would be willing to move it? Jeff said they would prefer not to move it. Vice-Mayor Haney talked about the importance of involving residents, but was weary of changing the project too much. He talked about what he would like to see in the area. He said he would like to see it developed as fire station. Vice-Mayor Haney talked about his concerns about infrastructure, and what impact it would have on surrounding areas and what would happen if there was a bad accident in the area? Lloyd Abram's talked about potential detours in the event of an accident; he said there would be multiple ways in and out. Vice-Mayor Haney said he would like to get rid of the commercial and turn it into a fire station. He also said he would like to reduce the amount of the commercial for this project.

Councilmember Cline, asked about the one way in and out access and what would happen if the development continued? Jeff said that 219th would be developed. He said that they would also develop Deer Valley Road. He said 219th would be developed in two phases. Councilmember Cline asked how Pinnacle Peak would be impacted? Lloyd said that Pinnacle Peak isn't being touched at the moment. Councilmember Cline, asked where it ends up? Lloyd talked about where Deer Valley meets it. Councilmember Cline, asked if the council could delay the approval for 30 days? Jeff said he would prefer not to delay, and talked about the development phases. He further talked about what roads would be developed during which phases, he also talked about a willinginess to reduce the size of the commercial and designating a site for public safety. Councilmember Cline asked if it could be a substation instead of a fire station? Jeff said there was already a site designated for that. Councilmember Cline asked if the developer had talked to the Wickenburg School District and if this was the area where they wanted a school? Jeff said it was based on the districts input.

Councilmember Judd, asked about Tribly Wash and its importance for wildlife and asked about the plans impacting it? Jeff said they would be maintaining the trail in the proposal. Jeff said it would be a span and open. Councilmember Judd asked about the crossings and how they would accommodate wildlife? Jeff said they would have a bridge along with other trails. Councilmember Judd, asked where the trail would be? Jeff said it would be off to the side. Councilmember Judd asked about the trail in the middle? Jeff said it would be for the community to access the regional trail. Councilmember Judd said it looked like the park covers the wash, Jeff said that it does not. CouncilmemberJudd asked if it was in code? Trever said the way that it is, is fine. Councilmember Judd asked how much of this still has to happen? Trever said they could ask for stipulations and a native species analysis. Councilmember Judd, talked about the area getting designated as open space and how it has those protections in the LDL. He talked about how he didn't want to see commercial being reduced.

Councilmember Remely, talked about how this was a master plan community and development and the history of such plans in the City, specifically Marley Park. He talked about the length of time to develop the commercial zoning. He talked about developing the infrastructure as well. He

said he liked the design and when it was completed it should be nice.

Councilmember Duffy asked how much commercial is on the existing PAD? Jeff said they could either go commercial or residential. Councilmember Duffy asked if there could be no commercial at all? Jeff said there could be no commercial. Councilmember Duffy talked about the area and the proposal versus what it could be.

Councilmember Hastings, talked about a potential motion to continue. He talked about his desire to keep the commercial.

Vice-Mayor Haney showed support if a fire station could be included. Vice-Mayor Haney talked about putting roots in the community, and the involvement of the residents. Vice-Mayor Haney put forth a motion to approve with a stipulation to include a public safety portion of land, and reduce the number of commercial. Councilmember Haney asked if they reduced the commercial if the developer would increase the housing density. Jeff said they would not increase the number of housing units in the project and would incorporate any surplus land into the adjacent development. Vice-Mayor Haney wanted stipulations for sections F, D & E making changes to land use for public safety, parcel size, and having the applicant submitting a revised document within thirty days. City Attorney, Robert Wingo, provided a summary of the requested revisions and proposed stipulations. Jeff, said he agrees with those stipulations.

Councilmember Judd, said he did not agree with reducing the commercial and limiting the land to fire station only.

Motion: To Approve (With Stipulations)
Initiated By: Nick Haney
Seconded By: Aly Cline

Yes: Aly Cline, Jack Hastings, Ken Remley, Skip Hall, Nick Haney
No: Patrick Duffy, Chris Judd
Abstain: None

Vote Result: Passed

11. Consideration and action pertaining to a major PAD amendment to the Mesquite Mountain Ranch PAD, generally located south of Deer Valley Road and east of 231st Avenue, by removing approximately 55 acres of land to be incorporated into the Surprise Foothills PAD, updating the land use map, and changing the land use designation for approximately 9 acres from medium density residential to C-3 commercial; Ordinance # 2024-11.

Trever Fleetham, came to present this item. He talked about the Vicinity Map, Revised PAD Boundary, Existing Land Use Map,Summary of Changes, Roadways, outreach, and Recommendations.

Rebekah Massie, a Surprise Resident, came to talk in opposition of this item. She voiced concerns over the traffic of the area.

Kevin Perry, a Surprise Resident, came to talk about the project and expressed his support for this item.

Jeffrey Blilie, for the applicant, came to give a brief description of this proposal, and the traffic impact.

Councilmember Cline asked about the area marked excluded, and the proposed school site? Jeff

said they would talk about it as part of the next item.

Vice-Mayor Haney, asked about what was going in exactly? Jeff told him it was self storage.

Motion: To Approve
Initiated By: Nick Haney
Seconded By: Jack Hastings

Yes: Aly Cline, Jack Hastings, Ken Remley, Patrick Duffy, Skip Hall, Chris Judd, Nick Haney
No: None
Abstain: None

Vote Result: Passed

12. Consideration and action pertaining to a major PAD amendment to the Surprise Foothills PAD, generally located east and west of 231st Avenue, south of Pinnacle Peak Road, and north of Beardsley Road, incorporating approximately 55 acres removed from the Mesquite Mountain Ranch PAD, and revising the land use plan, development parcel configuration, and development standards; Ordinance # 2024-12.

Trever Fleetham, came to talk about this item. He talked about the Vicinity Map, Zoning Map, Existing Land Use Map, Proposed Land Use, Roadway Network, Roadways, Summary of Changes, Outreach, and Recommendation.

Rebekah Massie, a Surprise Resident, came to speak in opposition of this item.

Jeff Blilie, on behalf of the developer, gave a presentation. He talked about the history of the area and the project. He also talked about the proposed improvements for the area.

Councilmember Duffy, asked about the objective analysis, and how there was no commercial usage? Jeff said there is no commercial on the proposal. Jeff said overall there would be commercial for the entire project.

Councilmember Cline, asked about the school if the square footage was the same or increased? Jeff said it was the same. She further asked about the exception listed on the map? Jeff talked about the history of the project and the exception will come in the next coming months to be added to the project. She asked about the fire station and a mutual aid agreement with the Festival Area would help? Jeff said they would be the first responders for the area.

Motion: To Approve
Initiated By: Nick Haney
Seconded By: Patrick Duffy

Yes: Aly Cline, Jack Hastings, Ken Remley, Patrick Duffy, Skip Hall, Chris Judd, Nick Haney
No: None
Abstain: None

Vote Result: Passed

8. REGULAR AGENDA ITEM - NON-PUBLIC HEARING:

13. Presentation and discussion on the Out of the Park Music Fest

Sports and Tourism Director, Kendra Pettis, came to present this item. She talked about the Signature Event History, Event Overview, Statistics, Opportunities for Growth, and the Tourism Fund.

Councilmember Cline, talked about the event and her experience. She asked if Coffee/Coco could be included as well for a vendor? She also talked about the VIP tent, and feedback.

Councilmember Judd, talked about the event and thanked staff. He asked what would be a successful event financially speaking? Kendra said it takes years to build, she said they would like to break even. Councilmember Judd asked what the event would look like to break even? Kendra said it really comes down to attendance, and the max attendance. She talked about getting to that attendance and increasing ticket sales. Councilmember Judd said the City has to be careful about keeping the price too cheap. He asked about the VIP experience and the breakdown of the sales? Kendra said they did not break even, but they could work on making it more profitable. Councilmember Judd asked if the City got a cut of the food trucks? Kendra said they did not get a big cut from the vendors. Councilmember Judd asked if we were stuck with a particular third party, Kendra said they could look at options. Councilmember Judd asked about sponsors? Kendra said they didn't have a large amount but could grow it in the future. Councilmember Judd said he would like to get closer to breaking even but wanted to keep hosting these types of events.

Councilmember Remley, talked about budgeting, and the cost of this event and the return we're recovering. He asked if they were already planning next year? Kendra said they were. He said he felt there were revenue opportunities that were missed. He talked about the upcoming fund and what needed to be done to meet the standards. He talked about charging for parking, and ticket prices.

Councilmember Duffy, said he had a great time at the event. He talked about the challenges of putting it on the first time, and how the City came out of it.

Councilmember Hastings, said it was an awesome event. He talked about proficiency and growth, and how we did better than last year.

Vice-Mayor Haney, talked about the feedback from the community about this event.

Mayor Hall said that he felt like this would keep getting better and better and asked if they could set a financial goal for next year.

I. Other Business and Future Agenda Items

Councilmember Remely, talked about the Founder's Day Parade and asked if the coordinators of the event to come to the next meeting to be recognized. Councilmember Judd Seconded.

Councilmember Cline, asked if Eric Fitzer could give an update on Cellular outreach? Vice-Mayor Haney Seconded.

J. City Council Reports

Councilmember Judd, talked about April 22nd as White Tanks Wild Day.

Councilmember Hastings, talked about the dynamics of the council. He talked about his Meet and Greets.

Councilmember Remley, talked about the Founder's Day Parade, and Sherry Aguilar, former City Clerk, involvement with the event.

Councilmember Cline, talked about the Founder's Day event as well, and her experience there. She said she has a meeting Tuesday the 23rd from 10-12 at The Grand and Friday the 26th at AZ Traditions. She talked about a meeting she had with Eric Boyles about Grand Avenue and the 303.

Councilmember Duffy, talked about a meet and greet he had with Councilmember Judd.

Vice-Mayor Haney, said his next meeting is the 25th at Asante Library at 6:00 PM. He talked about the commission interviews and the participants. He also talked about the Founder's Day Event, and the Youth Leadership Summit.

Mayor Hall, talked about Public Safety Hero's and the role of the dispatchers, and thanked staff for their service. He also talked about meeting with Surprise Legislators and the growth of the City. He also thanked everyone who helped with the Founder's Day Event. He also thanked Staff for a recent tour at fire station and aquatic center.

K. Executive Session

9. Executive Session Items

10. Executive Disclaimer - Part 1

11. Executive Disclaimer - Part 2

12. Executive Disclaimer - Part 3

L. Adjournment

Motion: To Adjourn
Initiated By: Aly Cline
Seconded By: Patrick Duffy

Yes: Aly Cline, Jack Hastings, Ken Remley, Patrick Duffy, Skip Hall, Chris Judd, Nick Haney
No: None
Abstain: None

Vote Result: Passed

Meeting Adjourned at 8:59 PM

_____
Skip Hall, Mayor

ATTEST:

_____
Kristi Passarelli, City Clerk

CERTIFICATION:

I, Kristi Passarelli, City Clerk for the City of Surprise, Maricopa County, Arizona, do hereby verify that these are the true and correct minutes of the Regular City Council Meeting of **Tuesday, April 16, 2024.**

_____
Kristi Passarelli, City Clerk

CITY OF SURPRISE
Regular City Council Meeting

Council Meeting Date: May 7, 2024
Submitting Department: Police
Staff Recommendations:

Contact Person: Benny Pina, POLICE CHIEF
District: Citywide

Consent: Yes Regular: No Public Hearing: No Report/Discussion: No

Agenda Wording:
Consideration and action pertaining to approval of a Fiscal Year 2024 budget amendment moving budget authority in the amount of $6,000 for overtime expenses and authorization to accept a grant award from the Governor's Office of Highway Safety (GOHS); Resolution #2024-63.

Motion:
I move to approve Resolution #2024-63.

Background:
The Surprise Police Department will receive $6,000 from GOHS to cover overtime expenses associated with participation of one Surprise police officer in the "Buckle Up Arizona…It's the Law!" campaign from May 20, 2024, to June 2, 2024.

Objective Analysis:
Acceptance of this funding will provide reimbursement of overtime expenses for one Surprise police officer's participation in the activities of the "Buckle Up Arizona…It's the Law!" campaign. The Department will be responsible for the administrative effort required to monitor and adequately record the employee time spent in overseeing the grant and making regular reports back to the grantor.

Policy Compliant:
This action is consistent with City and Council Policy. The City regularly partners with other government entities when it is beneficial to do so.

Financial Impact:
This one-time funding is to be used solely for overtime incurred as a result of participation in the GOHS "Buckle Up Arizona…It's the Law!" campaign. There is no city-match requirement; however, all employee related expenses (ERE) associated with this overtime will be absorbed by the Police Department's current operating budget.

Budget Impact:
The FY2024 adopted budget did not include appropriations for revenue and expenses related to the GOHS grant award. Acceptance of this grant will require a movement of budget authority in the amount

of $6,000 from General Contingency to Project G31386 in the Grants Fund. This action represents a transfer of spending authority and does not increase or decrease the total adopted citywide expenditure budget.

FTE Impact:

This item does not have an impact on current staff levels.

ATTACHMENTS:

1. Buckle Up Enforcement Welcome Letter-2024041024
2. Surprise PD 2024 MOU Buckle Up041024
3. Res 2024-63 CLICK IT OR TICKET IT_final

Katie Hobbs
Governor

J.M. "Jesse" Torrez
DIRECTOR
GOVERNOR'S HIGHWAY SAFETY
REPRESENTATIVE

Buckle Up Arizona Enforcement National Campaign!
(Click it or Ticket)

April 2, 2024

Re: 2024 Buckle Up Arizona (CIOT) Enforcement Campaign

Agreement No.:	Agency:	Award Amount:
2024-405b-502	**Surprise Police Dept.**	**$6,000.00**

Dear Highway Safety Partner,

The Governor's Office of Highway Safety will like to inform you that your agency has been selected to participate in the 2024 Buckle Up Arizona (Click it or Ticket) Enforcement National Campaign. The enforcement week will take place on **May 20– June 2, 2024**. As part of the national Click It or Ticket seat belt enforcement campaign, law enforcement agencies across the state will be stepping up traffic enforcement patrols and increasing other enforcement efforts to drive home the message: **Buckle Up Arizona…It's the Law!**

You can find free marketing material at
https://www.trafficsafetymarketing.gov/get-materials/seat-belts/click-it-or-ticket/national-enforcement-mobilization

J.M. "Jesse" Torrez, Director
Governor's Office of Highway Safety Representative

KATIE HOBBS
GOVERNOR

J.M. "JESSE" TORREZ
DIRECTOR
GOVERNOR'S HIGHWAY SAFETY REPRESENTATIVE

MEMORANDUM OF UNDERSTANDING

GRANT AGREEMENT NUMBER: 2024-405b-502

PROGRAM AREA: 405b

PROJECT DIRECTOR: J.M. "Jesse" Torrez, Director

GOHS – CIOT Enforcement Wave

As part of the National Click It or Ticket Campaign, Arizona has developed and promoted the "Buckle Up Arizona… It's the Law!" program, which has been an effective enforcement message in a secondary law state.

This program unites state-wide law enforcement agencies to engage in aggressive traffic enforcement with a "zero tolerance" approach to seat belt and child safety seat violations. The goal is to sustain and increase seatbelt usage rates in the designated geographical areas of the participating agencies.

The mobilizations begin with earned media generated at the State and local level followed by a high visibility enforcement campaign lasting two weeks. Paid media phases in approximately one week later followed by high-visibility enforcement lasting for two weeks. Additional earned media conducted through the GOHS has been paramount in enhancing occupant protection message.

The purpose of the campaign is for the Surprise Police Dept. to engage in Occupant Protection traffic enforcement with a "zero tolerance" approach to seat belt and child safety seat violations. The goal is to sustain seatbelt usage rates in the designated geographical areas of the participating agencies.

The campaign will be supported by earned media to reinforce the occupant protection message. The agency will participate in other educational and public awareness activities to support the enforcement component.

GOALS/OBJECTIVES:

The Surprise Police Dept. is required to complete the following goals and objectives under the guidelines of the contract:

- Provide intensive traffic enforcement during designated period with zero tolerance for safety belt/child restraint laws

- Heighten enforcement visibility through news media contacts, safety belt/child seat inspections, and other public awareness and educational activities

- The Agency shall provide a written press release announcing the enforcement program to the local media affecting their respective areas (a copy of this press release shall be sent to the GOHS Director prior to the initiation of the enforcement campaign)

- The Agency is additionally encouraged to invite media representatives for live interviews and ride-a-longs during the enforcement activities

- The Agency shall develop and participate in some form of enforcement activity, such as saturation patrols, multi-agency enforcement task forces etc. related to respective areas with low restraint usage.

- The Agency shall submit a Final Enforcement Summary Report to GOHS no later than June 7, 2024.

- The Agency shall a Final Statement of Accomplishments Report including press releases, news stories, educational/public awareness activities, enforcement statistics and quality photographs by June 14, 2024.

- The Agency shall provide the names of top enforcement performers for possible future recognition by GOHS and their respective agency.

METHOD OF PROCEDURE:

The Surprise Police Dept. will make expenditures as follows to meet the outlined Program Goals/Objectives:

Personnel Services – To support Overtime for two-week Buckle Up Arizona Enforcement Campaign from May 20, 2024 through June 2, 2024

Employee Related Expenses – To support Employee Related Expenses for Agency Overtime

PROFESSIONAL AND TECHNICAL PERSONNEL:

Benny Piña, Chief, Surprise Police Dept., shall serve as Project Director.

Severin Hall, Sergeant, Surprise Police Dept., shall serve as Project Administrator.

Gabriela Gallegos, Occupant Protection Coordinator, Governor's Office of Highway Safety, shall serve as Project Coordinator.

REPORT OF COSTS INCURRED (RCI):

The Project Director shall submit a Report of Costs Incurred (RCI) with supporting documentation attached, to the Governor's Office of Highway Safety within thirty (30) days of the enforcement period in correlation with the required report.

RCIs shall be typed and submitted with appropriate supporting documentation to the Governor's Office of Highway Safety. **Electronically submitted RCIs will be accepted**.

The RCI template and instructions are available on the Governor's Office of Highway Safety website at http://www.azgohs.gov/grant-opportunities/. Failure to meet the reporting requirements may be cause to terminate the project.

FINAL ENFORCEMENT SUMMARY REPORT:

All participating agencies shall complete and submit total enforcement statistical data implementing the attached form no later than June 7, 2024, to the Governor's Office of Highway Safety**.**

FINAL STATEMENT OF ACCOMPLISHMENTS:

The Project Director shall complete and submit the attached Final Statement of Accomplishments Report no later than June 14, 2024, to the Governor's Office of Highway Safety. All agencies receiving funding are required to submit a Final Statement of Accomplishments Report. The report is a summary overview of the contracted project and is reviewed by the Governor's Office of Highway Safety project coordinator to determine the effectiveness of the project.

ESTIMATED COSTS:

I.	**Personnel Services (overtime)**	**$6,000.00**
II.	**Employee Related Expenses (0%)**	**$0.00**
Total Award:		**$6,000.00**

Signature of Project Director:

Benny Piña, Chief
Surprise Police Department

_____

_____
Date Telephone

Signature of Authorized Official of Governmental Unit:

Bob Wingenroth, City Manager
City of Surprise

_____

_____
Date Telephone

AUTHORITY & FUNDS

1. This Project is authorized by 23 U.S.C. **§405** and regulations promulgated there under, more particularly Volume 102, and if State funds are involved, this project is authorized by ARS § 28-602.

   The funds authorized for this Project have been appropriated and budgeted by the U.S. Department of Transportation. The expenses are reimbursable under Arizona's Highway Safety Plan Program Area **405b**, as approved for by the National Highway Traffic Safety Administration.

2. **A. EFFECTIVE DATE:** **B. FEDERAL FUNDS:**

   Authorization to Proceed Date **$6,000.00**

3. **AGREEMENT AND AUTHORIZATION TO PROCEED**
by State Official responsible to Governor for the
administration of the State Highway Safety Agency

_____ _____
J.M. "Jesse" Torrez, Director Approval Date
Governor's Office of Highway Safety

RESOLUTION # 2024-63

A RESOLUTION OF THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE, ARIZONA TO ACCEPT FUNDING FROM THE STATE OF ARIZONA GOVERNOR'S OFFICE OF HIGHWAY SAFETY (GOHS), DERIVED FROM A MEMORANDUM OF UNDERSTANDING TO COVER OVERTIME EXPENSE, AND AMENDING THE FISCAL YEAR 2024 BUDGET BY MOVING BUDGET AUTHORITY IN THE AMOUNT OF $6,000 FROM GENERAL CONTINGENCY TO PROJECT G31386 WITHIN THE GRANTS FUND.

WHEREAS, the City of Surprise Police Department wishes to participate in the Governor's Office of Highway Safety ("GOHS") "Buckle Up Arizona...It's the Law!" program which is part of the National Click IT or Ticket Campaign;

WHEREAS, the City of Surprise Police Department desires to accept the funding;

WHEREAS, the FY2024 budget was adopted by Council Resolution #2023-85 on June 6, 2023;

WHEREAS, this action will necessitate a budget amendment; and

WHEREAS, the City of Surprise Administrative Policies requires the approval of the Mayor and Council for budget amendments of this nature.

NOW, THEREFORE, BE IT RESOLVED by the Mayor and Council of the City of Surprise, Arizona, as follows.

Section 1. That the statements and schedules attached as *Exhibit A* and incorporated by reference are adopted, amending the budget of the City of Surprise, Arizona for the fiscal year July 1, 2023, through June 30, 2024.

Section 2. The City is hereby authorized to accept funding in the amount of $6,000 from the Governor's Office of Highway Safety for the City of Surprise Police Department to help fund overtime for its employee who assists in the "Buckle Up Arizona… It's the Law!" program which is part of the National Click It or Ticket Campaign

Section 3. The City Manager, or his designee, is hereby authorized to execute and submit all documents and other necessary or desirable instruments in connection with said grants and related agreements.

SIGNATURES ON FOLLOWING PAGE

APPROVED AND ADOPTED this _____day of _____, 2024.

Skip Hall, Mayor

Attest:

Kristi Passarelli, City Clerk

Approved as to form:

Robert Wingo, City Attorney

RESOLUTION # 2024-63
Exhibit A

1. Appropriation - The allocation below represents a movement of budget authority in the amount of $6,000 from General Contingency to project G31386 in the Grants Fund, to cover the projected expenditures associated with overtime for an officer to participate in the “Buckle Up AZ...It's the Law!” campaign. This action represents a transfer of spending authority and does not increase or decrease the total adopted citywide expenditure budget.

Fund	Department	Project/Category	Rev/ Exp	Current Budget	Increase/ (Decrease)	Amended Budget
Grants	Police	#G31386 FFY24 GOHS Buckle Up AZ	E	-	6,000	6,000
Grants	Police	#G31386 FFY24 GOHS Buckle Up AZ	R	-	6,000	6,000
Contingency	General Operations	Contingency	E	57,593,700	(6,000)	57,587,700
Contingency	General Operations	Other	R	74,702,900	(6,000)	74,696,900
			Expense Total	**57,593,700**	**-**	**57,593,700**
			Revenue Total	**74,702,900**	**-**	**74,702,900**

CITY OF SURPRISE
Regular City Council Meeting

Council Meeting Date: May 7, 2024
Submitting Department: Public Works
Staff Recommendations:

Contact Person: Kristin Tytler, Department Director
District: District 3

Consent: Yes Regular: No Public Hearing: No Report/Discussion: No

Agenda Wording:
Consideration and action pertaining to the conditional acceptance and maintenance of certain streets and public utility improvements at Toll at Prasada Unit J, generally located at the northwest corner of West Peoria Road and North Cotton Lane; Resolution #2024-53.

Motion:
I move to approve Resolution #2024-53.

Background:
The Public Works Department conducted the final inspection of the public improvements for Toll at Prasada Unit J on or about January 3, 2024, totaling approximately 3,938 LF and determined that the infrastructure was compliant and acceptable to the city. The infrastructure includes wastewater lines. Domestic water lines are located within the Epcor Water jurisdiction.

Objective Analysis:
The improvements to this property provide sewer lines to convey wastewater from the property to the city’s public system. This action will accept the required infrastructure. The domestic water serving the property is within Epcor Water's jurisdiction.

Policy Compliant:
The City Code generally requires development to install public infrastructure required to serve the development. Upon completion and acceptance of such infrastructure, the infrastructure becomes the property of the City. Acceptance of this infrastructure will officially transfer ownership and future maintenance to the City.

Financial Impact:
Acceptance of sewer infrastructure increases the city's asset base and adds to future maintenance commitments. The total acceptance value of the infrastructure included with this item is $318,925.05.

Budget Impact:
Funding for the infrastructure maintenance now and in the future will be supported by the city's wastewater operations. The anticipated incremental additional maintenance expense associated with the

acceptance of these infrastructure items will be incorporated into future years' budgets.

FTE Impact:

This item does not have an impact on current staff levels.

ATTACHMENTS:

1. 01 Resolution 2024-53 Infrastructure Acceptance Toll Unit J Accept Infra_BAC_final
2. 02_Notice of Completion Toll at Prasada Unit J
3. 03_Inspector Project Sign Off Form Toll Unit J
4. 04_Linear Foot Verification Toll Unit J

RESOLUTION # 2024-53

A RESOLUTION OF THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE, ARIZONA, TO CONDITIONALLY ACCEPT THE PUBLIC IMPROVEMENTS AND COMMENCE MAINTENANCE AFTER TWO YEAR WARRANTY AT TOLL AT PRASADA UNIT J, GENERALLY LOCATED AT THE NORTHWEST CORNER OF WEST PEORIA ROAD AND NORTH COTTON LANE.

WHEREAS, the Mayor and City Council of the City of Surprise approved a final plat entitled “Final Replat Toll at Prasada, Unit J – Phase 3” on, February 1, 2022;

WHEREAS, as a condition of the preliminary plat, approval of the final plat, and in compliance with the City Code, the developer installed certain public improvements, namely sewer lines. The sewer lines are referred to as “Public Improvements”;

WHEREAS, Toll Prasada, LLC the developer of Toll at Prasada Unit J, dedicated to the City the Public Improvements, generally located at the northwest corner of West Peoria Road and North Cotton Lane;

WHEREAS, on or about January 3, 2024, the City of Surprise Public Works Department Engineering Division completed an inspection of the Public Improvements described in this resolution and found the Public Improvements to be in substantial compliance with the approved plans and specifications;

WHEREAS, the City of Surprise notes that the two-year warranty period will commence upon conditional acceptance by the City; and

WHEREAS, after the conclusion of the two-year warranty period, the City of Surprise will release the warranty and begin maintenance of the Public Improvements.

NOW, THEREFORE, BE IT RESOLVED by the Mayor and Council of the City of Surprise, Arizona, as follows.

Section 1. The City of Surprise conditionally accepts the Public Improvements generally located as depicted on the map attached as Exhibit A and listed on Exhibit B.

Section 2. Upon final acceptance by the City Engineer, the City Council hereby directs the City to release warranty and begin maintenance of the Public Improvements.

SIGNATURES ON THE FOLLOWING PAGE

APPROVED AND ADOPTED this _____day of _____, 2024.

Skip Hall, Mayor

Attest:

Kristi Passarelli, City Clerk

Approved as to form:

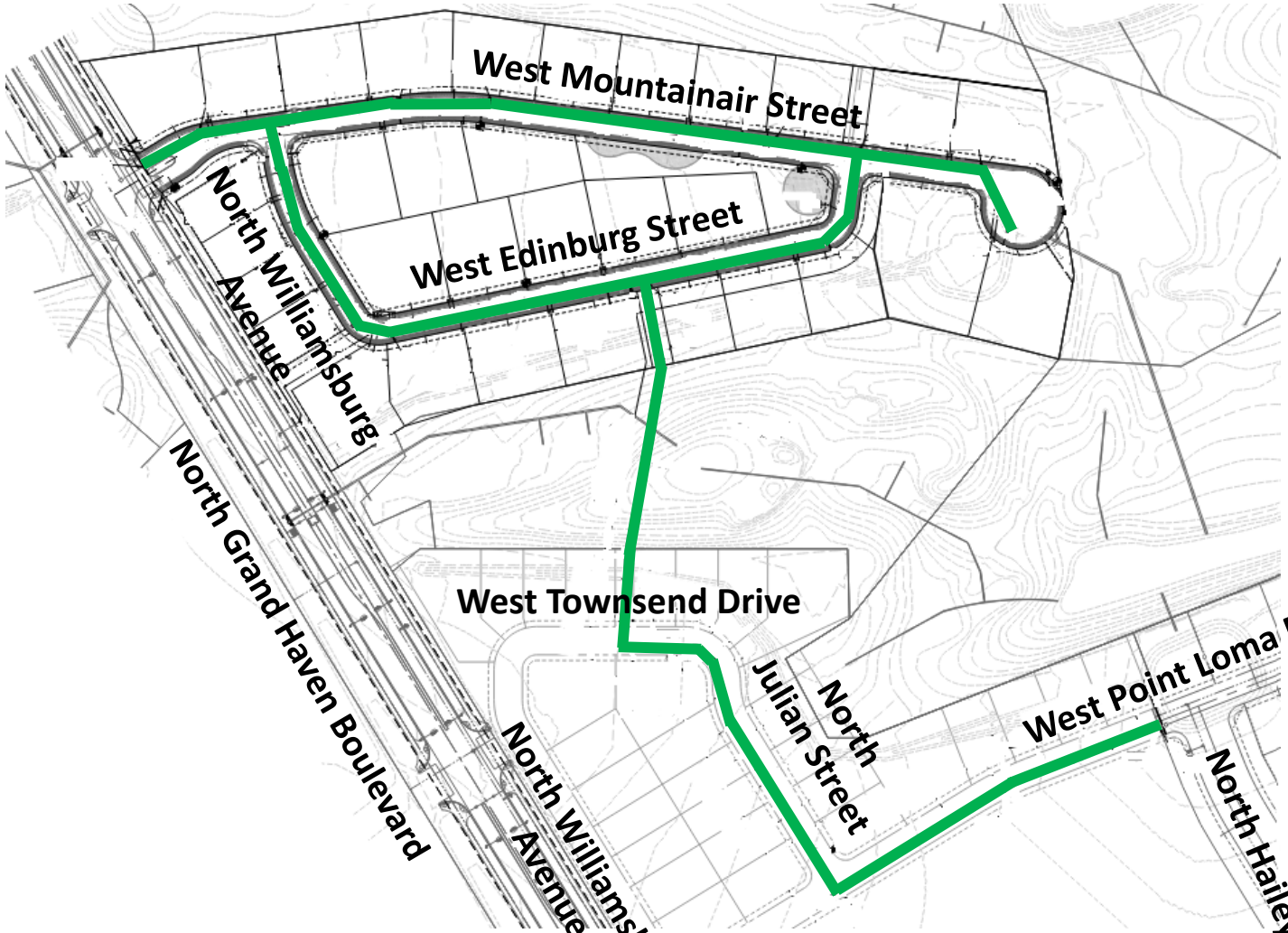
Robert Wingo, City Attorney

Exhibit A

Map of Infrastructure

EXHIBIT A

Toll at Prasada Unit J



INFRASTRUCTURE TO BE ACCEPTED:

SEWER

VICINITY MAP

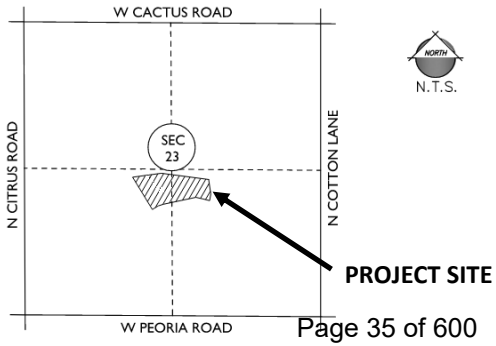


EXHIBIT B

List and Cost of Improvements

EXHIBIT B

ENGINEERING DIVISION
PUBLIC WORKS
CITY OF SURPRISE
16000 N. CIVIC CENTER PLAZA
SURPRISE, AZ 85374
T. 623·222·6150

Memorandum

To: City of Surprise City Council

From: Public Works – Engineering Services

Date: 03/25/2024

Re: Toll at Prasada Unit J

The public improvements for the above project have been completed and are tentatively scheduled for conditional acceptance by Council. The amounts for the infrastructure have been provided by a third party and not the City of Surprise. The following are the infrastructure improvements included with this acceptance and the corresponding valuation that the City will be accepting:

City Sewer	$318,925.05
Total	**$318,925.05**

SURPRISE
ARIZONA

PUBLIC WORKS
CITY OF SURPRISE
16000 N. CIVIC CENTER PLAZA
SURPRISE, AZ 85374
T. 623·222·6000

March 21, 2024

Toll Brothers
8767 E. Via de Ventura
Suite 390
Scottsdale, AZ 85258

RE: NOTICE OF COMPLETION AND COUNCIL ACTION REQUIREMENT FOR TOLL AT PRASADA UNIT J – FINAL PLAT– FS21-757

The City of Surprise Public Works Department has completed the inspection of the public utility improvements for the above referenced project. These improvements are in substantial compliance with the approved plans and specifications. Council action is required prior to conditional acceptance and the official beginning of the warranty period. The time frame for Council action is approximately 90 days after the following items have been submitted:

- A copy of all lien releases
- Actual construction cost for related civil permits issued
- Warranty assurance in a format acceptable by the City*

*For the Warranty Assurance, a notice of the required assurance amount and acceptable formats will be sent via email once actual construction costs have been submitted by the applicant.

The warranty period starts upon council acceptance for a period of two (2) years; please ensure warranty assurance will not expire prior to this date. The applicant will be notified of the council date as soon as it is scheduled and the warranty financial assurance is required to be submitted to the city 10 calendar days prior to the council date. If a warranty financial assurance is not received within 10 calendar days, council action and start of the warranty period will be delayed, at a minimum, an additional two (2) weeks.

A letter of conditional acceptance and notification that the warranty period has begun will be forwarded upon the completion of council acceptance. Also, a request to release the associated completion assurance will be made; notification will be sent when assurance document is available for pick up.

If you have any questions or concerns, you can reach me at 623-222-6130 or at ravi.sharma@surpriseaz.gov.

Sincerely,

Ravi Sharma

Ravi Sharma, P.E.
PW Engineering Manager

cc: Nuning Lemka, City Engineer
Eric Boyles, Transportation Director
Amanda Correia, Finance Senior Accountant
Warren Bert, GIS Manager
Robert Fields, PW Field Engineering Supervisor
Erick Martin, Finance Assistant Director
Michael Boule, Water Resource Management Director

SURPRISE
ARIZONA

PROJECT SIGN OFF FORM

PUBLIC WORKS - ENGINEERING SERVICES, INSPECTIONS

Date Submitted: 1/3/24 ____ Commercial ____ Commercial w/Offsite x Residential

x COMPLETION ACCEPTANCE (End of Construction) ____ FINAL ACCEPTANCE (End of Warranty)

7-27-23 Date of Punch-List Walk 9-4-23 Date Punch-List Completed

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Case Number: FS21-757

Project Name: Toll at Prasada Unit J

Project Developer/Builder: (Name/Email, Address)
Toll Brothers
8767 E Via De Ventura Suite 390 Scottsdale AZ 85258

Permit No:	E21P-1514	**Permit Type:**	City Sewer
Permit No:	E21P-1516	**Permit Type:**	Grading
Permit No:	E21P-1262	**Permit Type:**	SWPPP
Permit No:	E21P-1515	**Permit Type:**	Private Paving
Permit No:	E21P-1517	**Permit Type:**	Storm Drain
Permit No:	E21P-1518	**Permit Type:**	Private Concrete
Permit No:	E21P-1512	**Permit Type:**	Private Water
Permit No:	E21P-1513	**Permit Type:**	Traffic
Permit No:		**Permit Type:**	
Permit No:		**Permit Type:**	

Additional Comments:

SUPPORTING DOCUMENTATION REQUIRED:

- [x] Copy of Punch List
- [x] Final Certification Letter from Engineer of Record
- [x] Complete Geotechnical Testing Packet
- [x] Sewer Pressure Testing Results
- [x] Sewer Manhole Vacuum Testing Certification
- [x] Sewer Manhole Insecticide Certification
- [x] Sewer Videos with Operators Notes (inc. re-videos)
- [x] AOC
- [x] Asphalt Concrete Ticket w/ Name of Contractor
- [x] As built Documents (PDF copy)
- [x] Updated asbuilt CAD files
- [ ] Fireline Sign-off (commercial)

Other _____ (Specify)

APPROVAL:

Civil Inspector: James Marichalar **Date:** 1-3-24

Civil Engineering Supervisor: [signature] **Date:** 1/3/24

20C	INSTALL 16" DIP (1 MIN. COVER) MEGALUG RESTRAINED PER MAG. STD. DET. 303-2; P.E. WRAPPED PER MAG SEC. 610.6 & EPCOR STD. DET. 350-1 & 100-3	295 LF

1 SEWER NOTES

1A	8" PVC (SDR 35) SEWER LINE. TRENCH BACKFILL PER MAG STD DTL 200-1	3938 LF
2A	4' DIA SEWER MANHOLE MAG STD DTLS 420-1. 24" FRAME & COVER PER COS STD DTL 7-01	6 EA
2B	5' DIA SEWER MANHOLE MAG STD DTLS 420-1. 30" FRAME & COVER PER COS STD DTL 7-01; MANHOLE TO BE LINED WITH CITY APPROVED PRODUCT	17 EA

Toll at

CITY OF SURPRISE
Regular City Council Meeting

Council Meeting Date: May 7, 2024
Submitting Department: Public Works
Staff Recommendations:

Contact Person: Kristin Tytler, Department Director
District: District 1

Consent: Yes Regular: No Public Hearing: No Report/Discussion: No

Agenda Wording:
Consideration and action pertaining to the conditional acceptance and maintenance of certain streets and public utility improvements at Austin Ranch West – North Copper Canyon Parcel 3.1, generally located at the southwest corner of West Pinnacle Peak Road and North 183rd Avenue; Resolution #2024-26.

Motion:
I move to approve Resolution #2024-26.

Background:
The Public Works Department conducted the final inspection of the public improvements for Austin Ranch West – North Copper Canyon Parcel 3.1 on or about August 19, 2022, totaling 9,594 SY (approximately 3,084 LF) and determined that the infrastructure was compliant and acceptable to the city. The infrastructure includes asphalt pavement, storm drains and wastewater lines. Domestic water lines are located within the Liberty (formerly Beardsley) Water jurisdiction.

Objective Analysis:
The improvements to this property provide roadways for conveyance through the property, storm drains to convey stormwater to retention basins, and sewer lines to convey wastewater from the property to the city's public system. This action will accept the required infrastructure. The domestic water serving the property is within Liberty (formerly Beardsley) Water jurisdiction.

Policy Compliant:
The City Code generally requires development to install public infrastructure required to serve the development. Upon completion and acceptance of such infrastructure, the infrastructure becomes the property of the City. Acceptance of this infrastructure will officially transfer ownership and future maintenance to the City.

Financial Impact:
Acceptance of street, sewer and storm drain infrastructure increases the city's asset base and adds to future maintenance commitments. The total acceptance value of the infrastructure included with this item is $856,381.60.

Budget Impact:

Funding for the infrastructure maintenance now and in the future will be supported from the city's Transportation Operations, Wastewater Operations, and Stormwater Operations Funds. The anticipated incremental additional maintenance expense associated with the acceptance of these infrastructure items will be incorporated into future years' budgets.

FTE Impact:

This item does not have an impact on current staff levels.

ATTACHMENTS:

1. 01_Resolution 2024-26 Infrastructure Acceptance 2024 ARNCC3.1_FINAL
2. 02_Notice of Completion AusRanNorCopCanPar3.1
3. 03_Inspector Sign Off Form AusRanNorCopCanPar3.1
4. 04_Linear Foot Verification AusRanNorCopCanPar3.1

RESOLUTION # 2024-26

A RESOLUTION OF THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE, ARIZONA, TO CONDITIONALLY ACCEPT THE PUBLIC IMPROVEMENTS AND COMMENCE MAINTENANCE AFTER ONE YEAR WARRANTY AT AUSTIN RANCH WEST-NORTH COPPER CANYON PARCEL 3.1, GENERALLY LOCATED AT THE SOUTHWEST CORNER OF WEST PINNACLE PEAK ROAD AND NORTH 183RD AVENUE ROADS.

WHEREAS, the Mayor and City Council of the City of Surprise approved a final plat entitled “North Copper Canyon Parcel 3.1” on, January 5, 2021;

WHEREAS, as a condition of the preliminary plat, approval of the final plat, and in compliance with the City Code, the developer installed certain public improvements, including roadway improvements which consist of concrete sidewalks, curbs and gutters, as well as asphalt/paving, and the developer also installed sewer lines and drainage infrastructure. The roadway improvements, sewer lines and drainage infrastructure are all collectively referred to as “Public Improvements”;

WHEREAS, Landsea Homes the developer of Austin Ranch West – North Copper Canyon Parcel 3.1, dedicated to the City the Public Improvements, generally located at southwest corner of West Pinnacle Peak Road and North 183rd Avenue;

WHEREAS, on or about August 19, 2022, the City of Surprise Public Works Department Engineering Division completed an inspection of the Public Improvements described in this resolution and found the improvements to be in substantial compliance with the approved plans and specifications;

WHEREAS, the City of Surprise notes that the one-year warranty period will commence upon conditional acceptance by the City; and

WHEREAS, after the conclusion of the one-year warranty period, the City of Surprise will release the warranty and begin maintenance of the Public Improvements.

NOW, THEREFORE, BE IT RESOLVED by the Mayor and Council of the City of Surprise, Arizona, as follows.

Section 1. The City of Surprise conditionally accepts the Public Improvements generally located as depicted on the map attached as Exhibit A and listed on Exhibit B.

Section 2. Upon final acceptance by the City Engineer, the City Council hereby directs the City to release warranty and begin maintenance of the Public Improvements.

SIGNATURES ON THE FOLLOWING PAGE

APPROVED AND ADOPTED this _____day of _____, 2024.

Skip Hall, Mayor

Attest:

Kristi Passarelli, City Clerk

Approved as to form:

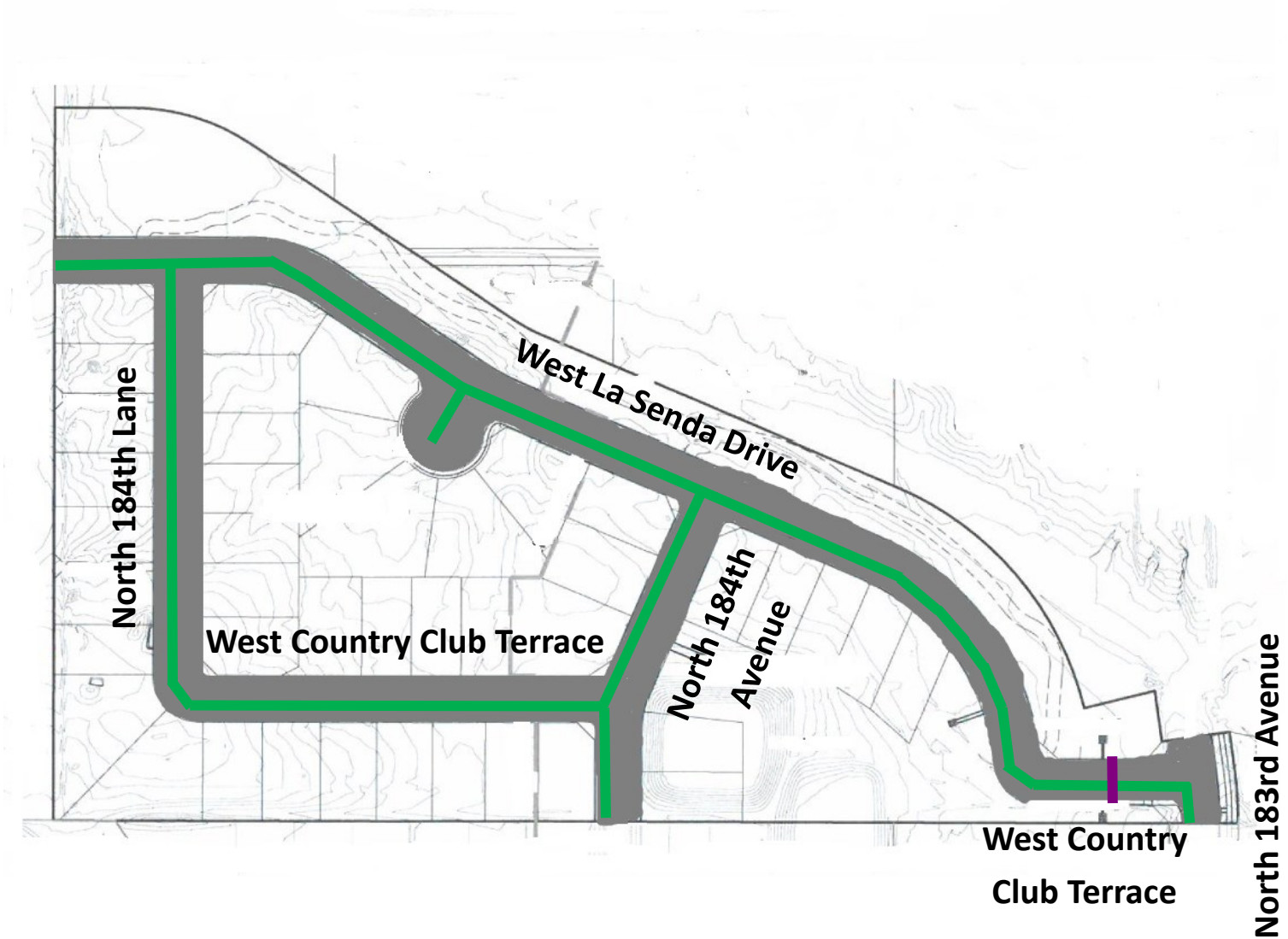
Robert Wingo, City Attorney

Exhibit A

Map of Infrastructure

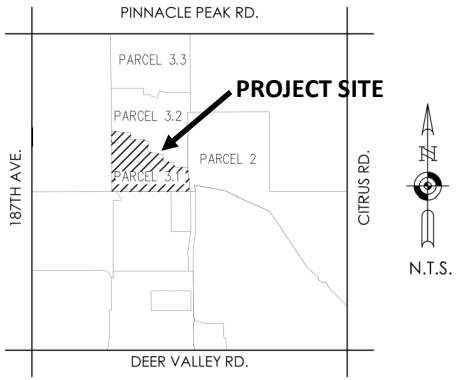
EXHIBIT A

Austin Ranch West-North Copper Canyon Parcel 3.1



INFRASTRUCTURE TO BE ACCEPTED:

- SEWER
- DRAINAGE
- ROADWAY
  Asphalt/Pavement, Concrete (Curb & Gutter, Sidewalk)



VICINITY MAP

EXHIBIT B

List and Cost of Improvements

EXHIBIT B

SURPRISE
ARIZONA

ENGINEERING DIVISION
PUBLIC WORKS
CITY OF SURPRISE
16000 N. CIVIC CENTER PLAZA
SURPRISE, AZ 85374
T. 623·222·6150

Memorandum

To: City of Surprise City Council

From: Public Works – Engineering Services

Date: 01/25/2024

Re: Austin Ranch West - North Copper Canyon Parcel 3.1

The public improvements for the above project have been completed and are tentatively scheduled for conditional acceptance by Council. The amounts for the infrastructure have been provided by a third party and not the City of Surprise. The following are the infrastructure improvements included with this acceptance and the corresponding valuation that the City will be accepting:

City Paving	$284,942.08
City Concrete	$346,442.52
City Sewer	$216,197.00
City Drainage	$ 8,800.00
Total	**$856,381.60**

SURPRISE
ARIZONA

PUBLIC WORKS
CITY OF SURPRISE
16000 N. CIVIC CENTER PLAZA
SURPRISE, AZ 85374
T. 623·222·6000

October 20, 2022

Landsea Homes
7600 E Doubletree Ranch Rd, Suite 240
Scottsdale, AZ 85258

RE: NOTICE OF COMPLETION AND COUNCIL ACTION REQUIREMENT FOR AUSTIN RANCH WEST (NCC) PARCEL 3.1 – FS20-207

The City of Surprise Public Works Department has completed the inspection of the public utility improvements for the above referenced project. These improvements are in substantial compliance with the approved plans and specifications. Council action is required prior to conditional acceptance and the official beginning of the warranty period. The time frame for Council action is approximately 90 days after the following items have been submitted:

- A copy of all lien releases or a title report
- Actual construction cost for related civil permits issued
- Warranty assurance in a format acceptable by the City

A notice of the required assurance amount and acceptable formats will be sent via email once actual construction costs have been submitted by the applicant. The warranty period starts upon council acceptance for a period of one (1) year; please ensure warranty assurance will not expire prior to this date. The applicant will be notified of the council date as soon as it is scheduled and the warranty financial assurance is required to be submitted to the city 10 calendar days prior to the council date. If a warranty financial assurance is not received within 10 calendar days, council action and start of the warranty period will be delayed, at a minimum, an additional two (2) weeks.

A letter of conditional acceptance and notification that the warranty period has begun will be forwarded upon the completion of council acceptance. Also, a request to release the associated completion assurance will be made; notification will be sent when assurance document is available for pick up.

If you have any questions or concerns, you can reach me at 623-222-3437 or at mark.dorsey@surpriseaz.gov.

Sincerely,

Mark R. Dorsey, P.E.
City Engineer

cc: Nuning Lemka, PW Engineering Manager
John McFarland, PW Streets Manager
Michael Boule, Water Resource Management
David Mobley, PW Field Engineering Supervisor
Amanda Correia, Finance
Warren Bert, GIS

SURPRISE
ARIZONA

PUBLIC WORKS
CITY OF SURPRISE
16000 N. CIVIC CENTER PLAZA
SURPRISE, AZ 85374
T. 623·222·6000

SURPRISE
ARIZONA

PROJECT SIGN OFF FORM

PUBLIC WORKS - ENGINEERING SERVICES, INSPECTIONS

Date Submitted: 8-23-2022 ___ Commercial ___ Commercial w/Offsite XX Residential

XX COMPLETION ACCEPTANCE (End of Construction) ___ FINAL ACCEPTANCE (End of Warranty)

6-14-2022 Date of Punch-List Walk 8-19-2022 Date Punch-List Completed

FS Number: FS20-207 **Permit Number(s):** E22P-0658, E20P-0760,0761,0418,075

Project Name: Austin Ranch West:N. Copper Canyon Parcel 3.1

Project Developer/Builder: (Name/Email, Address)

Landsea Homes/Michael Smith/msmith@landseahomes.com/7600 E DoubleTree Ranch Rd.

MAG TIP Reporting:

Street Name	Classification	Begin Limits	End Limits	# Lanes	Length to nearest ¼ mi.	Features
W Country CLub Terrace	Local	N.183 ave	sta 13+30	2	.25	
W La Senda Dr	Local	sta 13+30	sta 0+00	2	.25	
N 187th ave	Local	W La Senda Dr	W Country Club Terrace	2	.25	
W Country Club Terrace	Local	N 187th Ave	N 184th Ave	2	.25	
N 184th ave	Local	sta 147+50	W La send Dr	2	.25	

MATERIALS:

Asphalt: Vulcan Supplier 1.25 Total Lane Miles 10400 Total Square Yards

Water:	8" pvc	Size/Type	3157	Total LF		Size/Type		Total LF
		Size/Type		Total LF		Size/Type		Total LF
Sewer:	8" pvc	Size/Type	3157	Total LF		Size/Type		Total LF
		Size/Type		Total LF		Size/Type		Total LF
Storm:	24" RGRCP CL-V	Size/Type	80	Total LF		Size/Type		Total LF
		Size/Type		Total LF		Size/Type		Total LF
Fire Ln:		Size/Type		Total LF		Size/Type		Total LF

Additional Comments:

SUPPORTING DOCUMENTATION REQUIRED:

XX Copy of Punch List
n/a Final Certification Letter from Engineer of Record
XX Complete Geotechnical Testing Packet
XX Sewer Pressure Testing Results
XX Sewer Manhole Vacuum Testing Certification
XX Sewer Manhole Insecticide Certification
XX Sewer Videos with Operators Notes (inc. re-videos)
___ Other ___ (Specify)

XX AOC
XX Asphalt Concrete Ticket w/ Name of Contractor
XX Streetlight Energize Letter
XX As built Documents (PDF copy on CD)
n/a Updated asbuilt CAD base files (copy on CD)

APPROVAL:

Civil Inspector: [signature] **Date:** 8-23-22

Civil Engineering Supervisor: [signature] **Date:** 9-13-2022

	A	B	C	D	E	K	L	M	N	O	P	Q	R	
1	FS Case	Project Name	Private/Public	Classification	Roadway	Median Width (ft)	Length (ft)	Length (mile)	Length (Nearest 1/4 mile)	Lane Miles	Width (pavement)	Pavement Area (f	Pavement Area (S	Inspect
829	20-207	Austin Ranch North Copper Canyon Parcel 3.1	Public	Local	W. La Senda Drive	0	1355.2	0.26	0.25	0.51	28.0	37,946	4,216	8/19/
830	20-207	Austin Ranch North Copper Canyon Parcel 3.1	Public	Local	W. Country Club Terrace	0	508.7	0.10	0.25	0.19	28.0	14,244	1,583	8/19/
831	20-207	Austin Ranch North Copper Canyon Parcel 3.1	Public	Local	W. Country Club Terrace	0	199.2	0.04	0.25	0.08	28.0	5,578	620	8/19/
832	20-207	Austin Ranch North Copper Canyon Parcel 3.1	Public	Local	N. 184th Lane	0	502.3	0.10	0.25	0.19	28.0	14,064	1,563	8/19/
833	20-207	Austin Ranch North Copper Canyon Parcel 3.1	Public	Local	N. Robertson Court	0	108.7	0.02	0.25	0.04	28.0	3,044	338	8/19/
834	20-207	Austin Ranch North Copper Canyon Parcel 3.1	Public	Local	N. 184th Avenue	0	409.6	0.08	0.25	0.16	28.0	11,469	1,274	8/19/
945						**Total**	**3083.7**					**Total**	**9,594**	
946														
947														
948														

CITY OF SURPRISE
Regular City Council Meeting

Council Meeting Date: May 7, 2024
Submitting Department: Public Works
Staff Recommendations:

Contact Person: Kristin Tytler, Department Director
District: District 3

Consent: Yes Regular: No Public Hearing: No Report/Discussion: No

Agenda Wording:
Consideration and action pertaining to the immediate formation of a lighting improvement district known as City of Surprise, Arizona, SU-PrasadaCactus303211 pursuant to A.R.S. § 48-616 for the purpose of purchasing facilities and energy for lighting the public streets; Resolution #2024-59.

Motion:
I move to approve Resolution #2024-59.

Background:
The City has verified that the Petition for the proposed streetlight improvement district contains the signatures of all the real property owners in the district, exclusive of mortgage and other lien holders.

The City and Arizona Public Service Company ("APS") have approved the street layout and facilities design. The electric rates are established by APS tariff.

The lighting improvements are more than local or ordinary public benefits, and the expenses of the district will be paid for by the levy and collection of equal apportionment taxes based on the number and classification of properties within the District.

Objective Analysis:
A SLID is a neighborhood partnership and very common practice in which property owners in a defined area agree to pay the costs to operate and maintain their immediate area's streetlights through a property tax. All new developments in the City of Surprise require a SLID. This action will form the SLID boundary for the Cactus 303 Prasada East development.

Policy Compliant:
The surprise Municipal Code requires that street lighting that serves a defined area be paid for through revenues obtained from the specific area being served by such street lighting. In these instances, a Streetlight Improvement District (SLID) is formed. The city strives to assure that residents are subject to only one SLID and that the boundaries of each SLID accurately reflect the service area. This item is consistent with these objectives.

Financial Impact:

Once the SLID is illuminated, the City will begin levying the SLID to cover SLID expenses. At the current time, the SLID is not incurring any expense because the SLID lights have not been illuminated. Therefore, there is no current financial impact.

Budget Impact:

Since the SLID is not illuminated, there is no revenue or expense budgeted in FY2024 nor are there budgets planned for FY2025 for the SLID. If the SLID is illuminated in FY2024 or FY2025, expenses will be charged to the SLID and recouped with a future levy. A separate fund for this district will be created to track the revenue and expenses.

FTE Impact:

This item does not have an impact on current staff levels.

ATTACHMENTS:

1. 01 Res 2024-59 Cactus 303 SLID FS22-1358_BC_final
2. 02 PETITION
3. 03 Street Light Plans cactus 303
4. 04 Cactus 303_Exhibit Template SLIDS

RESOLUTION # 2024-59

A RESOLUTION OF THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE, ARIZONA, DECLARING ITS INTENTION TO ESTABLISH A STREET LIGHT IMPROVEMENT DISTRICT TO PURCHASE ENERGY FOR LIGHTING THE PUBLIC STREETS AND PARKS IN THE AREA WITHIN THE CORPORATE LIMITS OF THE CITY OF SURPRISE, ARIZONA DESCRIBED ON EXHIBIT A, ATTACHED HERETO; DECLARING SUCH IMPROVEMENTS TO BE OF MORE THAN LOCAL OR ORDINARY PUBLIC BENEFIT AND THAT THE EXPENSES THEREOF BE PAID FOR BY THE LEVY AND COLLECTION OF EQUAL APPORTIONMENT OF TAXES BASED ON THE NUMBER AND CLASSIFICATION OF PROPERTIES WITHIN THE DISTRICT TO BE KNOWN AS "CITY OF SURPRISE, ARIZONA, SU-PRASADACACTUS303211 LIGHTING IMPROVEMENT DISTRICT"; AND ORDERING THAT SUCH IMPROVEMENTS BE PROVIDED FOR UNDER THE PROVISIONS OF SECTION 48-572, ARIZONA REVISED STATUTES.

WHEREAS, the owners, exclusive of mortgagees and other lienholders, of all of the real property (hereinafter referred to as "Petitioner") in the hereinafter described District, acting pursuant to the provisions of Sections 48-615(A) and 48-617(A), Arizona Revised Statutes, have petitioned the Mayor and Council of the City of Surprise, Arizona (hereinafter referred to as "City"), to adopt a resolution of intention (hereinafter referred to as "Resolution") ordering the purchase of energy for the lighting of the public streets and parks (hereinafter referred to as "Improvements") for the real property legally described in Exhibit A (such area hereinafter referred to as the "District") with such boundaries as shown in the map in Exhibit B attached hereto pursuant to the provisions of Section 48-576, Arizona Revised Statutes, giving the City immediate jurisdiction to order the Improvements pursuant to the provisions of Section 48-581, Arizona Revised Statutes, without the necessity of the publications or posting of this Resolution provided for in Sections 48-578, Arizona Revised Statutes;

WHEREAS, the City has verified that Petitioner is the owner, exclusive of mortgagees and other lienholders, of all of the real property included within the boundaries of the District, and;

WHEREAS, the Mayor and Council of the City hereby find and determine that they have jurisdiction to adopt this Resolution to order the Improvements pursuant to the provisions of Section 48-576, Arizona Revised Statutes, and have immediate jurisdiction to adopt this Resolution ordering the Improvements pursuant to the provisions of Section 48-581, Arizona Revised Statutes without the necessity of publications and posting of this Resolution as provided for in Section 48-578, Arizona Revised Statutes;

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Surprise, Arizona, as follows.

Section 1. The City, after verifying ownership of the real property included within the boundaries of the District, hereby finds the Petitioner is the owner, exclusive of mortgagees and other lienholders, of all of the real property included within the boundaries of the District.

Section 2. The name of the District shall be "CITY OF SURPRISE, ARIZONA, SU-PRASADACACTUS303211 LIGHTING IMPROVEMENT DISTRICT."

Section 3. The District is formed, and shall exist, pursuant to the provisions of Title 48, Chapter 4, Article 2, Arizona Revised Statutes, and Section 48-616, Arizona Revised Statutes.

Section 4. The public interest or convenience requires, and it is the intention of the Mayor and Council of the City to order the Improvements as so described above.

Section 5. The Improvements, in the opinion of the Mayor and Council of the City, are of more than local or ordinary public benefit and are of special benefit to the respective lots, pieces and parcels of real property in the District, and the Mayor and Council of the City hereby make and order the expense of the Improvements payable from the levying and collection of an equal apportionment of taxes based on the number and classification of properties within the District to be known and designated as "CITY OF SURPRISE, ARIZONA, SU-PRASADACACTUS303211 LIGHTING IMPROVEMENT DISTRICT" and hereby declare that the District is as legally described on Exhibit A attached hereto with the boundaries as shown in the map in Exhibit B attached hereto. Any public street or alley within the District shall be omitted from the assessment. Any lot belonging to the United States, the State, a county, city, school district or political subdivision or institution of the state or county within the District shall be omitted from the assessment.

Section 6. The Superintendent of Streets or equivalent of the City shall not be required to post or cause to be posted notices of the Resolution of Intention. The Clerk of the City shall certify to the passage of this Resolution of Intention but shall not be required to cause the same to be published in a newspaper published and of general circulation in the City.

Section 7. The Mayor and Council of the City shall make annual statements and estimates of the expenses of the District, which shall be provided for by the levy and collection of equal apportionment of taxes based on the number and classification of properties within the District; shall publish notice thereof; shall have hearings thereon; and shall adopt them at the times and in the manner provided for incorporated cities and towns by the applicable portions of Section 42-17101, et seq., 42-17152, Arizona Revised Statutes. The Mayor and Council of the City shall, on or before the third Monday in August of each year, fix, levy, and assess the amount to be raised by an equal apportionment of taxes based on the number and classification of the properties within the District and collect, as Maricopa County, Arizona (the "County") taxes are collected, the amounts shown by the statements and estimates as adopted by the Mayor and Council of the City. All statutes providing for the levy and collection of State of Arizona and County taxes, shall be applicable to District taxes as provided to be levied under Section 48-616, Arizona Revised Statutes.

Section 8. The District shall not be authorized to issue bonds and no assessment for District purposes against the property within the District shall exceed One Dollar and Twenty Cents ($1.20) per each hundred dollars of taxable valuation thereof in any year.

Section 9. The District shall not engage in any activity other than as provided in Section 48-616, Arizona Revised Statutes, i.e., contracting for and purchasing of energy for street and public park lighting.

Section 10. The formation of the District shall not be considered as preventing the subsequent establishment of improvement districts for any other purpose authorized by law, including improvement districts for the purpose of construction street lighting facilities within any part or all of the same territory as the District.

Section 11. The type of lighting facilities to be installed in the District and the locations thereof shall consist of those lighting facilities and locations described in the petition submitted by Petitioner, or as may be approved by the City.

Section 12. The rate to be paid for purchasing the energy for the District shall be the rate described in the petition submitted by Petitioner, or as may be approved by the Arizona Public Service Company.

Section 13. Any resolutions or parts of resolutions in conflict with the provisions of this Resolution are hereby repealed.

APPROVED AND ADOPTED this _____day of _____, 2024.

Skip Hall, Mayor

Attest:

Kristi Passarelli, City Clerk

Approved as to form:

Robert Wingo, City Attorney

RECEIVED
04/20/2023

EXHIBIT "A"
STREET LIGHT IMPROVEMENT DISTRICT

A PARCEL OF LAND LYING WITHIN A PORTION OF THE SOUTHEAST QUARTER OF SECTION 13, TOWNSHIP 3 NORTH, RANGE 2 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF SAID SECTION 13, BEING A CITY OF SURPRISE BRASS CAP IN HANDHOLE, FROM WHICH THE SOUTH QUARTER CORNER OF SAID SECTION 13, BEING A MARICOPA COUNTY BRASS CAP IN HANDHOLE BEARS NORTH 89°44'33" WEST, A DISTANCE OF 2627.04 FEET;

THENCE NORTH 89° 44' 33" WEST, ALONG THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 13, A DISTANCE OF 2279.60 FEET;
THENCE NORTH 00° 05' 12" WEST A DISTANCE OF 98.00 FEET;
THENCE NORTH 12° 44' 59" WEST A DISTANCE OF 205.94 FEET;
THENCE NORTH 00° 24' 40" EAST A DISTANCE OF 101.37 FEET;
THENCE NORTH 05° 24' 54" WEST A DISTANCE OF 828.97 FEET;
THENCE NORTH 84° 03' 11" EAST A DISTANCE OF 147.54 FEET TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 650.25 FEET, AND WHOSE CHORD BEARS NORTH 57° 49' 21" EAST A CHORD DISTANCE OF 696.11 FEET;
THENCE NORTHEASTERLY ALONG SAID NON-TANGENT CURVE TO THE RIGHT THROUGH A CENTRAL ANGLE OF 64° 43' 24", AN ARC LENGTH OF 734.55 FEET, TO A POINT OF TANGENCY;
THENCE, SOUTH 89° 48' 57" EAST A DISTANCE OF 496.79 FEET;
THENCE, NORTH 00° 20' 31" EAST A DISTANCE OF 98.16 FEET;
THENCE, NORTH 90° 00' 00" EAST A DISTANCE OF 220.59 FEET;
THENCE, SOUTH 67° 30' 25" EAST A DISTANCE OF 398.52 FEET;
THENCE, NORTH 22° 34' 13" EAST A DISTANCE OF 68.63 FEET;
THENCE, SOUTH 67° 30' 25" EAST A DISTANCE OF 449.26 FEET;
THENCE, NORTH 38° 44' 01" EAST A DISTANCE OF 217.36 FEET;
THENCE, SOUTH 55° 09' 28" EAST A DISTANCE OF 545.80 FEET;
THENCE, SOUTH 34° 50' 36" WEST A DISTANCE OF 212.13 FEET TO THE BEGINNING OF A TANGENT CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 1800.00 FEET, AND WHOSE CHORD BEARS SOUTH 17° 37' 10" WEST, A CHORD DISTANCE OF 1065.98 FEET;
THENCE SOUTHERLY ALONG SAID TANGENT CURVE TO THE LEFT, THROUGH A CENTRAL ANGLE OF 34° 26' 52", AN ARC LENGTH OF 1082.21 FEET, TO A NON-TANGENT POINT;
THENCE SOUTH 00° 25' 22" WEST A DISTANCE OF 125.00 FEET TO THE POINT OF BEGINNING.

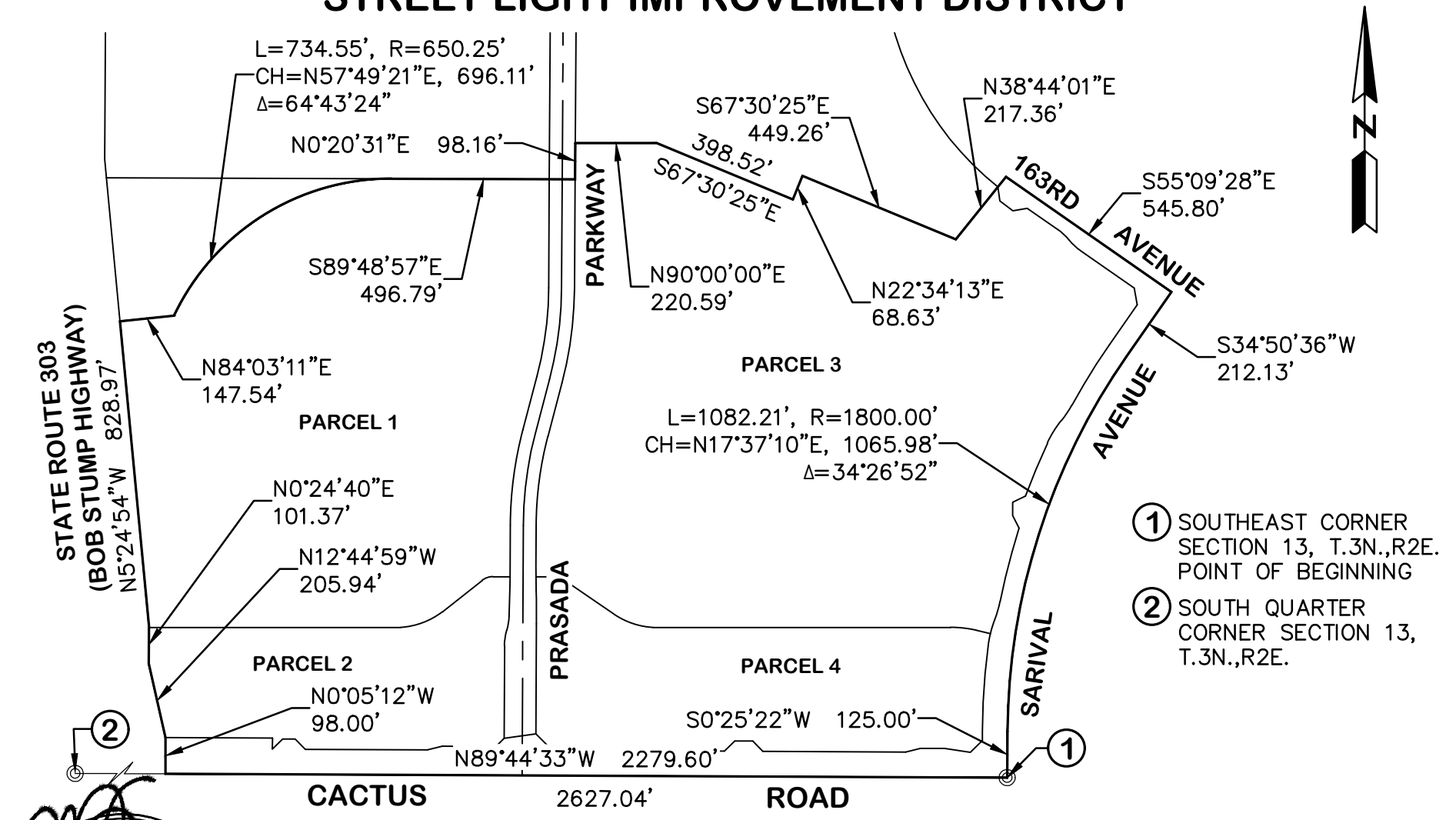
REGISTERED LAND SURVEYOR
CERTIFICATE NO.
45835
JERRY D.
HEATH JR.
4/19/23
Date Signed
ARIZONA U.S.A

TITLE:	XB04
SCALE:	N.T.S.
DATE:	4/19/23
DESC:	STREET LIGHT IMP. DISTRICT

HUNTER
ENGINEERING
CIVIL AND SURVEY
10450 N. 74TH ST., SUITE 200
SCOTTSDALE, AZ 85258
T 480 991 3985
F 480 991 3986

DWG.NO
BAKE003-XB04

EXHIBIT "B"
STREET LIGHT IMPROVEMENT DISTRICT



REGISTERED LAND SURVEYOR
CERTIFICATE NO.
45835
JERRY D.
HEATH JR.
Date Signed 4/19/23
ARIZONA U.S.A

TITLE:	**XB04**
SCALE:	1"=400'
DATE:	4/19/23
DESC:	STREET LIGHT IMP. DISTRICT

HUNTER
ENGINEERING | CIVIL AND SURVEY
10450 N. 74TH ST., SUITE 200
SCOTTSDALE, AZ 85258
T 480 991 3985
F 480 991 3986

DWG.NO
BAKE003–XB04

PAGE 1 OF 2

DocuSign Envelope ID: A51D2F91-7B8D-4525-93FF-2DC69FF726A5

STREET LIGHT IMPROVEMENT DISTRICT PETITION

TO THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE:

We, the undersigned, are all or a majority of the real property owners, exclusive of mortgagees and other lienholders, within the district named below. We petition the City Council of the City of Surprise, Arizona, to establish a street light improvement district under Arizona Revised Statutes (A.R.S.) §48-571 to 48-622, and any amendments, and specifically A.R.S. §48-615 to 48-617, to purchase electricity for lighting the public streets and/or parks within the district whose boundaries and area is described in Exhibits A and B attached hereto. This petition includes a charge for maintaining the lighting facilities.

It is hereby requested that, in compliance with the Arizona Revised Statutes, the City Council adopt a Resolution of Intention to order the proposed improvements, and that unless protests are received pursuant to A.R.S. §48-579 sufficient to bar further proceedings, the City Council proceed with the improvements petitioned for herein.

Expenses of the District (**PICK ONE)**

○ shall be paid by the levy and collection of ad valorem taxes upon assessed value of all property in the District

◉ shall be paid by the levy and collection of equal apportionment of taxes based on the number and classification of properties within the District.

Public convenience, necessity and welfare will be promoted by the establishment of the District and the real property within the District will be benefited by the District. Additional street lighting facilities may be installed and included in the District, at no investment cost to the District, as directed by the City and as approved by Arizona Public Service and the City Engineer.

WHEREFORE, we respectfully ask that this Petition be properly filed and that the Mayor and Council of the City adopt the Resolution and take such other action as is proper, necessary and appropriate to form the District and to fulfill the purposes for which the District is organized, as the Mayor and Council believe is proper and necessary.

The name of the proposed street light improvements district shall be:
SU-PrasadaCactus303211

(Leave Blank - to be assigned by City staff)

PETITIONERS: Please print and sign your name

PRINT BUSINESS/ PETITIONER'S NAME	ADDRESS OF PROPERTY OWNED WITHIN DISTRICT	ASSESSOR PARCEL #	SIGNATURE
TTRG AZ SURPRISE CACTUS RD LLC	not assigned	501-11-973B	DocuSigned by: Paul M. Thrift 4A4347461819431...
TTRG AZ SURPRISE CACTUS RD LLC	not assigned	501-11-973A	DocuSigned by: Paul M. Thrift 4A4347461819431...
TTRG AZ SURPRISE CACTUS RD LLC	not assigned	501-11-975	DocuSigned by: Paul M. Thrift 4A4347461819431...

STREET LIGHT IMPROVEMENT DISTRICT PETITION

TO THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE:

We, the undersigned, are all or a majority of the real property owners, exclusive of mortgagees and other lienholders, within the district named below. We petition the City Council of the City of Surprise, Arizona, to establish a street light improvement district under Arizona Revised Statutes (A.R.S.) §48-571 to 48-622, and any amendments, and specifically A.R.S. §48-615 to 48-617, to purchase electricity for lighting the public streets and/or parks within the district whose boundaries and area is described in Exhibits A and B attached hereto. This petition includes a charge for maintaining the lighting facilities.

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Expenses of the District (**PICK ONE)**

○ shall be paid by the levy and collection of ad valorem taxes upon assessed value of all property in the District

◉ shall be paid by the levy and collection of equal apportionment of taxes based on the number and classification of properties within the District.

Public convenience, necessity and welfare will be promoted by the establishment of the District and the real property within the District will be benefited by the District. Additional street lighting facilities may be installed and included in the District, at no investment cost to the District, as directed by the City and as approved by Arizona Public Service and the City Engineer.

WHEREFORE, we respectfully ask that this Petition be properly filed and that the Mayor and Council of the City adopt the Resolution and take such other action as is proper, necessary and appropriate to form the District and to fulfill the purposes for which the District is organized, as the Mayor and Council believe is proper and necessary.

The name of the proposed street light improvements district shall be:

SU-PrasadaCactus303211

(Leave Blank - to be assigned by City staff)

PETITIONERS: Please print and sign your name

PRINT BUSINESS/ PETITIONER'S NAME	ADDRESS OF PROPERTY OWNED WITHIN DISTRICT	ASSESSOR PARCEL #	SIGNATURE
Melrose Park Baker LLC/Melrose Park WHB LLC	none assigned	501-11-972	
Melrose Park Baker LLC/Melrose Park WHB LLC	none assigned	501-11-974	

AVAILABILITY

This rate schedule is applicable to those portions of cities, towns and unincorporated communities in which the Company does a general retail electric business and where the Company has installed a multiple or series street lighting system of adequate capacity for the service to be rendered after December 1, 2021.

DESCRIPTION

E-68 is a rate that is applicable for lighting public streets, alleys, thoroughfares, public parks and playgrounds from dusk to dawn by use of Company's facilities.

TIME PERIOD

Dusk: The time between sunset and full night when photocontrol senses the lack of sufficient sunlight and turns on the lights.

Dawn: The time between full night and sunrise when a photocontrol senses sufficient sunlight to turn off lights.

CHARGES

The monthly bill will consist of the fixture and energy charges, plus adjustments:

I. FIXTURES (Includes Mounting Arm, if applicable)

Fixture Equipment Class	Fixture Cost Range (per unit)	Investment by Company Monthly Rate	Investment by Others Monthly Rate
A	$ 1 - $ 430	$5.72	$1.75
B	$ 431 - $ 520	$6.97	$2.12
C	$ 521 - $ 640	$8.36	$2.60
D	$ 641 - $ 820	$9.99	$3.32
E	$ 821 - $ 910	$12.64	$3.68
F	$ 911 - $ 1,010	$14.07	$4.08
G	$ 1,011 - $ 1,110	$15.38	$4.49
H	$ 1,111 - $ 1,250	$17.44	$5.04
I	$ 1,251 - $ 1,520	$19.40	$6.12
J	$ 1,521 - $ 1,670	$23.65	$6.73
K	$ 1,671 - $ 1,850	$26.29	$7.45

Note: Equipment cost greater than $1,850 shall be Customer owned.

II. ENERGY (Includes Generation, T&D, RCS & SBC)

Monthly energy charges for new lighting fixtures will be determined by the Company using the following method:

kWh = Fixture Wattage x 344 Usage Hours

Generation = kWh per month x $ 0.06621

T&D, RCS, System Benefits = kWh per month x $ 0.02682

NOTES:

1. Investment by Company. These rates are applicable where the Company provides the initial investment to purchase and install all facilities necessary for street lighting service. The Company will own, operate, and maintain the street lighting system.

2. Investment by Others. These rates are applicable in those instances where the requesting entity or individual purchases and installs the street lighting facilities at their own expense and in accordance with Company specifications. These rates will also apply in the instance where the Customer provides a non-refundable advance to the Company to cover the Company's cost of purchasing and installing the street lighting system. The Company retains ownership of the street lighting system and provides operation and maintenance for all facilities.

3. Listed kWh reflects the assigned monthly energy usage for each type of fixture and are used to determine any applicable transmission, system benefit, distribution, energy, and adjustment charges.

4. kWh is determined by the company based on the rated wattage of the equipment and an established average hourly usage per month.

5. The monthly rate for all new poles includes up to 300 feet of overhead secondary wire, or up to 300 feet of underground secondary wire if the Customer provides earthwork and conduit (excluding the underground to overhead transition).

III. POLES

				CHARGES	
			Height	Investment by Company	Investment by Others
A. Anchor Base Mounted (Flush)	Round Steel	1 Simplex Adapter	12 ft.	$12.84	$1.77
			22 ft.	$14.45	$1.99
			25 ft.	$15.64	$2.16
			30 ft.	$17.96	$2.47
			32 ft.	$18.87	$2.50
		2 Simplex Adapters	12 ft.	$13.69	$1.89
			22 ft.	$15.73	$2.17
			25 ft.	$16.41	$2.26
			30 ft.	$19.07	$2.63
			32 ft.	$20.34	$2.81
	Square Steel	5"	13 ft.	$14.72	$2.02
			15 ft.	$13.15	$1.81
			23 ft.	$15.60	$2.15
			25 ft.	$17.15	$2.36
			28 ft.	$19.04	$2.62
			32 ft.	$18.93	$2.61
	Concrete		12 ft.	$43.87	$6.04
	Fiberglass		12 ft.	$37.15	$5.11
	Decorative Transit	4"	16 ft.	$36.22	$5.00
	Decorative Transit	6"	30 ft.	$69.93	$9.63
	Hinged Poles	Square	15 ft.	$13.92	$1.14
		Round	19 ft.	$12.59	$1.03
B. Anchor Base Mounted (Pedestal)	Round Steel	1 Simplex Adapter	12 ft.	$12.35	$1.69
			22 ft.	$13.97	$1.92
			25 ft.	$15.14	$2.09
			30 ft.	$17.48	$2.42
			32 ft.	$18.37	$2.53
		2 Simplex Adapters	12 ft.	$13.19	$1.81
			22 ft.	$14.74	$2.02
			25 ft.	$15.91	$2.18
			30 ft.	$18.58	$2.55
			32 ft.	$19.84	$2.73
		3 Bolt	32 ft.	$22.80	$3.13
	Square Steel	5"	13 ft.	$14.24	$1.97
			15 ft.	$14.56	$1.99
			23 ft.	$15.11	$2.09
			25 ft.	$16.67	$2.31
			28 ft.	$18.52	$2.55
			32 ft.	$19.23	$2.63

III. POLES (cont.)

				CHARGES	
			Height	Investment by Company	Investment by Others
C. Direct Bury	Round Steel		19 ft.	$19.43	$2.68
			30 ft.	$15.17	$2.81
			38 ft.	$18.51	$2.88
		Self	40 ft.	$22.80	$3.61
		Stepped	25 ft.	$52.45	$4.28
			32 ft.	$55.24	$4.51
			49 ft.	$68.57	$9.45
	Square Steel	4"	34 ft.	$16.74	$2.90
		5"	20 ft.	$15.90	$2.63
			30 ft.	$16.57	$2.73
			38 ft.	$17.98	$3.12
		8"	28 ft.	$30.01	$2.44
			32 ft.	$31.37	$2.57
	Decorative Transit		41 ft 6	$21.60	$3.17
	Decorative Transit		47 ft.	$26.91	$3.96
	Steel Distribution Pole (for lighting only)		35 ft.	$24.84	$3.27
D. Post Top	Decorative Transit Anchor Base		16 ft.	$37.00	$5.08
	Gray Steel/Fiberglass		23 ft.	$12.83	$2.11
	Black Steel		23 ft.	$14.14	$2.33
E. Existing distribution pole suitable for streetlight use				$1.56	--

IV. ANCHOR BASE

			CHARGES	
		Height	Investment by Company	Investment by Others
A. Flush		4 ft.	$10.45	$1.44
		6 ft.	$12.47	$2.16
B. Pedestal		8 ft.	$14.29	$2.49
	For 32' Round Steel Pole only	4 ft. 6"	$9.91	$1.71

V. CHARGES FOR OPTIONAL OR ADDITIONAL COMPANY OWNED EQUIPMENT

Underground Circuit Charges	
a. Per foot of cable, installed under paving	$0.16652
b. Per foot of cable, not installed under paving	$0.05877

TRIP CHARGE

A $150.00 trip charge per light will be charged when a Customer requests a disconnect or reconnect of service in order to accommodate the maintenance activities of the Customer or its designee(s) on their street lighting equipment.

ADJUSTMENTS

The bill will include the following adjustments:

1. The Renewable Energy Standard charge, Adjustment Schedule REAC-1.
2. The Power Supply Adjustment charges, Adjustment Schedule PSA-1.
3. The Transmission Cost Adjustment charge, Adjustment Schedule TCA-1.
4. The Environmental Improvement Surcharge, Adjustment Schedule EIS.
5. The Demand Side Management Adjustment charge, Adjustment Schedule DSMAC-1.
6. Direct Access Customers returning to Standard Offer service may be subject to a Returning Customer Direct Access Charge, Adjustment Schedule RCDAC-1.
7. The Tax Expense Adjustor Mechanism charge, Adjustment Schedule TEAM
8. Any applicable taxes and governmental fees that are assessed on APS's revenues, prices, sales volume, or generation volume.

SERVICE DETAILS

1. Street lighting facilities installed under this rate schedule are of the type currently being furnished by Company as standard at the time service is initially requested. Standard facilities are those listed in the Company's Transmission and Distribution Construction Standards book.

2. The Customer's bill will not be reduced due to photocontrol or cable repair or replacement outages.

3. Non-standard facilities (non-standard being defined as any facility not listed in the Company's Transmission and Distribution Construction Standards book) do not qualify for this rate schedule. At the Company's discretion, such facilities may be served under another of the Company's rate schedules.

4. The Company will extend its standard street lighting system up to a distance of 300 feet for each additional lighting installation without cost at the request of the Customer. When the extension is underground, the customer will provide earthwork as specified in the Company's Service Schedule 3, Conditions Governing Extensions of Electric Distribution Lines and Services; or, at the applicant's request, the Company will provide such earthwork and the applicant will be required to pay a non-refundable contribution in aid of construction equal to the cost of such earthwork. Any additional extension required (over and above the first 300 feet) will be provided by Company for a contribution in aid of construction equal to the cost of the additional extension.

    a. Extensions to isolated areas requiring a substantial extension of the electric distribution system, as opposed to an extension of the street lighting system, will require a special study to determine the terms and conditions under which the Company will undertake such an extension.

5. APS provides electric service under the Company's Service Schedules. These schedules provide details about how the Company serves its Customers, and they have provisions and charges that may affect the Customer's bill. In addition, service may be subject to special terms and conditions as provided for in a Customer contract, maintenance, or service agreement.

PRASADA PARKWAY
COVER SHEET

SECTION 16000

16000 – ELECTRICAL SPECIFICATIONS

1. It is the intent of the Specifications and drawings to call for finished work, tested and ready for operation. All work shall be performed in strict compliance with the latest edition of the NEC and all local codes. Any apparatus, appliance, material or work not shown on drawings, but mentioned in the specifications or vice versa, or any incidental accessories necessary to make the work complete and ready for operation, even if not particularly specified, shall be provided.

2. Electrical drawings are generally diagrammatic and location of outlets and equipment is approximate; exact routing of raceways, locations of outlets and equipment shall be governed by structural conditions and obstructions. This is not to be construed to permit system redesign. All outlets and equipment shall be interconnected as the Contract Documents indicate. Any relocation of outlets or equipment must be approved by the Contracting Officer.

3. Include minor details not usually shown or specified, but necessary for proper installation and operation of a system or piece of equipment in work and in bid price, the same as if specified or shown.

4. Arrange to visit and examine the premises and/or job site so as to ascertain the existing conditions before bidding. No extras will be allowed due to the lack of knowledge of these conditions.

5. All removed equipment shall remain the property of the Owner and stored on site as directed.

6. Include in work, labor, materials, services, apparatus, drawings (in addition to Contract Drawings and Documents) required to comply with applicable laws, ordinances, rules and regulations.

7. Repair and refinish finished surfaces scuffed or damaged by installation of work under this Division.

8. Install conduit, wire, manual motor protection switches, magnetic motor protection switches, remote pushbutton switches, etc., as required and make power connections to motors and equipment furnished under other divisions of the Specifications as noted on the drawings.

9. Minimum Size Conductor: Number 12 AWG. Minimum conduit size: 3/4 inch trade size unless noted otherwise on drawings.

10. Acceptable manufacturers of conduit, raceways and fittings are Allied Tube and Conduit Corp., Condux International, Inc., Carlon or Condux International, Inc., Anaconda or O/Z Gedney, Appleton Electric Co., Crouse Hinds Electrical Construction, Square D Co., Wiremold and Walker.

11. Electrical Metallic Tubing (EMT): Hot dipped galvanized steel. Coat conduit interior wall with a silicon epoxy–ester lubricant for easier wire pulling. Couplings and connectors shall be galvanized steel, compression type, rain and concrete tight. Indent, set screw or die cast fittings shall not be used. Bushings shall be plastic insulating type and locknuts shall be steel.

12. Plastic Conduit: Rigid Schedule 40 heavy wall polyvinyl chloride (PVC) rated 90 degrees C. Couplings and connectors shall be Schedule 40 solvent weld with threaded male and female adapters as required.

13. Flexible Metal Conduit: Hot dipped galvanized, continuous steel strip, spirally wound and interlocked. Connectors shall be galvanized steel clamp type.

14. General use junction boxes and pull boxes: Galvanized steel type for dry locations for use with EMT; cast metal, threaded hub type for wet or damp locations for use with rigid or intermediate metal conduit.

15. Minimum size box 4 inches square by 1–1/2 inches deep or larger to comply with NEC space requirements; with compatible extension or plaster rings for the intended use.

16. Acceptable manufacturers: Anaconda, Brand–Rex, Essex, General Electric, Okonite or Rome Cable.

    Insulated conductors for number 12 through number 6 AWG; Type THHN/THWN, 75 degree C rating.

    Insulated conductors for number 4 AWG and larger; Type XHHW, 75 degree C.

    Conductors number 8 AWG and larger: Shall be stranded copper.

    Conductors number 10 AWG and smaller: Shall be solid tinned copper.

17. Terminations (number 4 or larger): Compression solderless type of Ideal "Shur–lok".

    For circuit wiring connections to fixtures or devices or circuiting joints: Conductor sizes 12 through 8, threaded pressure type with insulator, Ideal "Wing–nut".

18. Provide empty conduits with a number 14 galvanized drag wire or approved nylon cord with 210 pound pulling strength.

19. Acceptable manufacturers: Square "D" Co., Cutler–Hammer, Siemens.,

    Dead–front type copper bus and molded case circuit breakers in the mains and branches; designed for 120/280 or 277/480 volt 3 phase 4 wire applications as indicated. Load center type panels are not permitted.

    Main circuit breakers: Trip ratings as indicated on the drawings or in schedules with a minimum interrupting capacity of 10,000 amperes symmetrical at 208 volts or 14,000 amperes symmetrical at 480 volts, unless noted otherwise on drawing schedules.

    Single pole branch circuit breakers (for use on 120 volt single phase systems): Trip ratings of 20 amperes with a minimum interrupting capacity of 10,000 amperes symmetrical, unless noted otherwise.

    Single pole breakers (for use on 277 volt single phase circuits): Trip ratings of 20 amperes with minimum interrupting capacity of 14,000 amperes symmetrical, unless noted otherwise.

    Two and three pole circuit breakers: Trip ratings as scheduled with interrupting capacities same as single pole devices.

    All panels and circuit breakers shall be fully rated per the single–line and panel schedules, unless a sereis rated system has been indicated.

20. The service entrance section and switchboard shall consist of completely dead front, dead rear, free standing vertical units which shall consist of incoming line pull section with bus detail to accommodate landing lugs, metering compartment with current transformer section and main service switch as indicated on the drawings.

    All bus bar shall be solid electrolytic copper, 98% minimum conductivity, sized at not more than 1000 amperes per square inch of cross section and plated for its entire length. The horizontal main bus bars shall be fully rated the entire length of the switchboard, and of sufficient cross–section to continuously conduct rated full load current with a maximum average temperature rise of 65 degrees C above and ambient of 40 degrees C.

    Reference brace ratings of main bus bars (RMS amperes) to required values indicated on one line diagram.

    All equipment, assemblies and devices shall be UL listed and each vertical section shall bear the UL label where applicable.

21. Bus bars shall be braced for the short circuit currents as indicated on the single–line distribution diagram. Branch devices shall have a minimum interrupting capacity of not less than the main bus rating unless noted otherwise on the drawings.

22. The neutral conductor of each and every low voltage, single and or polyphase system or distribution system, except special double insulated system, shall be solidly connected at one point only, preferably at the transformer neutral bushing or at the main switchboard, to the system ground and shall be sized for current carrying capacity not less than the following, which ever is larger:

    As shown or specified.

    As required by NEC.

END OF SECTION

GENERAL NOTES

1. THE CONTRACTOR WILL BE HELD TO HAVE EXAMINED THE PREMISES AND SATISFIED HIMSELF AS TO EXISTING CONDITIONS UNDER WHICH HE WILL BE OBLIGED TO PERFORM THIS WORK.
2. BY ENTERING INTO A CONTRACT WITH THE OWNER, OWNER'S REPRESENTATIVE OR GENERAL CONTRACTOR, THE ELECTRICAL CONTRACTOR ACKNOWLEDGES THAT HE/SHE HAS THOROUGHLY REVIEWED AND UNDERSTANDS THE INTENT OF THE DRAWINGS AND SPECIFICATIONS.
3. UTILITY COMPANY ROUTING IS ESTIMATED. ACTUAL ROUTING SHALL BE VERIFIED WITH UTILITIES, PRIOR TO INITIATION OF WORK. CONTRACTOR SHALL CONTACT "BLUESTAKE" PRIOR TO ANY NEW TRENCHING.
4. UNDERGROUND CONDUIT ROUTING IS ESTIMATED. ACTUAL ROUTING OF TRENCH SHALL BE VERIFIED WITH THE OWNER/ARCHITECT PRIOR TO BEGINNING WORK.
5. ALL UNDERGROUND WIRING SHALL BE 600V, LISTED FOR WET LOCATIONS.
6. ELECTRICAL CONTRACTOR SHALL INCLUDE IN HIS BASE BID ALL MATERIALS AND LABOR FOR CUTTING AND PATCHING EXISTING SIDE–WALKS, DRIVES AND WALLS/CEILINGS WHICH ARE AFFECTED BY NEW WORK.
7. TO AVOID CONFLICT, THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH OTHER TRADES FOR ALL EXISTING OR NEW WORK.
8. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH NEC CURRENT YEARS LOCAL EDITION AND ALL LOCAL CODES.
9. ALL WORK SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT (ADA).
10. ALL WIRING SHALL BE INSTALLED IN APPROVED RACEWAYS & CONDUITS. RACEWAYS SHALL BE APPROVED FOR USE INTENDED. ALL ELECTRICAL CONDUCTORS SHOWN ARE COPPER. MINIMUM SIZE CONDUCTOR IS NO. 12 AWG. INSULATION THWN FOR #4 AND SMALLER, XHHW FOR #3 AND LARGER, USE 75° C RATED CONDUCTOR FOR ALL EXTERIOR OR OUTDOOR WIRING.
11. ELECTRICAL METALLIC TUBING (EMT): ENTIRE INSTALLATION TO BE EMT PER ARTICLE 358–1 OF N.E.C. OR APPROVED EQUIVALENT FOR ABOVE GRADE INSTALLATION. USE PVC SCHEDULE 40 FOR UNDERGROUND INSTALLATION (MINIMUM SIZE SHALL BE 3/4" C.) ALL EMT SHALL CONTAIN A GROUND WIRE PER N.E.C. REQUIREMENTS.
12. ALL ELECTRICAL EQUIPMENT SHALL MAINTAIN 10'–0" CLEARANCE TO OVERHEAD ELECTRIC LINES AND A 30'–0" RADIUS FROM POWER POLE PER SRP REQUIREMENTS AND SPECIFICATIONS.
13. CONTRACTOR SHALL INSTALL A 2–1/2" E.C. TO SRP CONNECTION POINT PER SRP PLANS AND SPECIFICATIONS.
14. ALL EQUIPMENT TO BE APPROVED BY SRP PRIOR TO PURCHASING OF EQUIPMENT.
15. COORDINATE LOCATIONS OF EXISTING UTILITIES. CALL 602–263–100 FOR BLUE STAKE AND 273–8888 FOR SRP DISTRICT POLE BRACING, ELECTRIC SERVICE, OR CONSTRUCTION SCHEDULING.
16. THE ELECTRICAL / MAINTENANCE COSTS OF ALL STREET LIGHTS ON LOCAL AND COLLECTOR STREETS (TYPICALLY THE 100 WATT / 9,500 LUMEN AND THE 150 WATT / 16,000 LUMEN FIXTURES) ARE TO BE PAID BY THE ADJACENT DEVELOPMENT'S STREET LIGHT IMPROVEMENT DISTRICT (SLID). THE ELECTRICAL / MAINTENANCE COSTS OF ALL STREET LIGHTS ON ARTERIAL STREETS (TYPICALLY THE 250 WATT / 30,000 LUMEN FIXTURES) ARE TO BE BILLED TO THE CITY OF SURPRISE'S ENERGY BILL.

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 CONTRACTORS EXPENSE. THE CONTRACTOR SHALL COMPLY WITH ALL CURRENT ARIZONA UNDERGROUND FACILITIES LAWS (ARIZONA REVISED STATUTES TITLE 40, CHAPTOR 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 623-222-8150.
5. THE ENGINEER AND APPLICABLE AGENCY MUST APPROVE, PRIOR TO CONSTRUCTION, ANY ALTERATION OR VARIATION 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 623-222-7000.
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.

DATE REVISED: 1/2022	SURPRISE ARIZONA	GENERAL ENGINEERING NOTES

LIGHTING NOTES

1. THE CONTRACTOR SHALL COMPLY WITH STATE AND CITY STATUTES, AND MANUFACTURER'S RECOMMENDATIONS.
2. THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH ALL LICENSING REQUIREMENTS SET FORTH BY THE STATE REGISTRAR OF CONTRACTORS OFFICE TO PERFORM WORK RELATING TO STREET LIGHT INSTALLATION IN THE CITY RIGHT–OF–WAY.
3. CONTRACTOR SHALL OBTAIN AN UNDERGROUND UTILITIES (RIGHT–OF–WAY) PERMIT AND A STREET LIGHT PERMIT FOR THE PROJECT PRIOR TO CONSTRUCTION.
4. ACCEPTANCE OF THE COMPLETED IMPROVEMENTS WILL NOT BE GIVEN UNTIL RECORD DRAWINGS HAVE BEEN SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.
5. LIGHT POLES SHALL BE INSTALLED PLUMB, BE ADJUSTED TO PROVIDE PROPER ALIGNMENT TO THE ROADWAY BEING LIGHTED AND BE PROPERLY GROUNDED WHEN THE INSTALLATION IS COMPLETED. THE CONTRACTOR SHALL FURNISH AND INSTALL A NUMBER ON EACH LIGHT POLE. STREET LIGHT POLE IDENTIFICATION AND SPECIFICATIONS WILL BE PROVIDED BY CITY OF SURPRISE.
6. LUMINAIRES:
   - LUMINAIRES SHALL BE INSTALLED LEVEL AND INCLUDE A LAMP AND PHOTOCELL. CONTRACTOR SHALL ASSURE THAT THE LUMINAIRES SHALL BE FREE OF DUST, DIRT OR ANYTHING THAT WOULD IMPAIR THE OUTPUT OF THE LIGHT BEFORE HE/SHE LEAVES THE SITE.
   - LUMINAIRES FURNISHED WITH MULTI–TAP BALLASTS SHALL BE REWIRED OR RECONNECTED TO MATCH THE VOLTAGE SUPPLIED BY THE ELECTRIC UTILITY COMPANY.
7. THE FOLLOWING REQUIREMENTS SHALL APPLY:
   - A GROUND ROD SHALL BE INSTALLED IN PULL BOX IN UNDISTURBED SOIL AND A LEAD IN SOLID COPPER BARE BOND WIRE (#8) SHALL BE INSTALLED IN ONE INCH LIQUID–TIGHT FLEXIBLE STEEL CONDUIT WITH PVC JACKET FOR POLE GROUNDING.
   - SURPLUS EXCAVATION SHALL BE DISPOSED OF BY THE CONTRACTOR.
8. WIRING AND CONDUIT REQUIREMENTS ARE:
   - WIRING SHALL BE INSTALLED PER UTILITY STANDARDS.
   - CONDUIT SHALL BE INSTALLED AT THE DEPTH SPECIFIED ON THE PLANS. CONDUIT SHALL BE ONE INCH LIQUID–TIGHT FLEXIBLE STEEL CONDUIT WITH PVC JACKET. CONDUIT MUST BE UL RATED AND SUITABLE FOR UNDERGROUND USE.
9. CONNECTIONS AND GROUNDING:
   - CONNECTIONS SHALL BE PER UTILITY STANDARDS.
   - EACH POLE SHALL HAVE AN 8'–5/8" COPPER CLAD GROUND ROD DRIVEN BENEATH PULL BOX. A #8 BARE COPPER LEAD FROM THE GROUND ROD IN PULL BOX TO LANDING LUG IN STREET LIGHT HAND HOLE.
10. EXCAVATION FOR PULL BOXES AND MATERIAL SPECIFICATIONS SHALL BE PER THE ELECTRIC UTILITY COMPANY STANDARDS.
11. TRENCH SHALL BE INSTALLED PER UTILITY COMPANY STANDARDS. THE USE OF A COMMON ELECTRIC UTILITY TRENCH IS PERMITTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANY FOR COORDINATION OF THE TRENCHING AND THE INSTALLATION OF CONDUIT.
12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO RESTORE ALL PROPERTY, LANDSCAPING, PAVING AND DRIVEWAYS THAT ARE DISTURBED DURING STREET LIGHT CONSTRUCTION TO THEIR ORIGINAL CONDITION.
13. THE DEVELOPER SHALL BE RESPONSIBLE FOR FURNISHING ALL PERSONNEL AND EQUIPMENT TO SUCCESSFULLY PERFORM THE FOLLOWING TEST:
   - PRIOR TO ACCEPTANCE, THE DEVELOPER SHALL ENERGIZE AND OPERATE THE ENTIRE ROADWAY LIGHTING SYSTEM, 48 HOURS FOR 2 CONSECUTIVE DAYS WITHOUT INTERRUPTION OR FAILURE. IF AN LED SHOULD FAIL, IT SHALL BE IMMEDIATELY REPLACED.
14. FOR ALL ARTERIAL ROADWAYS, THE STREET LIGHTING SYSTEM WILL NEED TO INCLUDE FIBER OPTIC TRAFFIC SIGNAL INTERCONNECT CONDUITS AND PULL BOXES.
15. THE CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE CITY OF SURPRISE, AGAINST IMPERFECT WORKMANSHIP, FAILURE, MALFUNCTION OF MATERIALS AND/OR EQUIPMENT DUE TO FAULTY OR IMPERFECT WORKMANSHIP. THIS GUARANTEE IS TO BE IN WRITING TO THE CITY AT THE TIME OF THE ISSUING FINAL ACCEPTANCE. WORK FOUND TO BE DEFECTIVE WITHIN THE WARRANTY PERIOD SHALL BE REPLACED WITHOUT COST TO THE CITY.

NOTE

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

B. THE ELECTRICAL/ MAINTENANCE COST OF ALL STREET LIGHTS ON LOCAL AND COLLECTOR STREETS ARE TO BE PAID BY THE ADJACENT PROJECT OR THE ADJACENT DEVELOPMENT'S STREET LIGHT IMPROVEMENT DISTRICT (SLID). THE ELECTRICAL/ MAINTENANCE COST OF ALL STREET LIGHTS ON ARTERIAL STREETS ARE TO BE BILLED TO THE CITY OF SURPRISE'S ENERGY BILL.

LED NOTE

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 SPECIFICATIONS AT TIME OF BIDDING AND CONSTRUCTION.

APPROVALS

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

CONTACTS

DEVELOPER
MELROSE PARK BAKER
2222 N. ELSTON AVE.
CHICAGO, IL 60614
CONTACT: DAN SLACK 773.755.0600

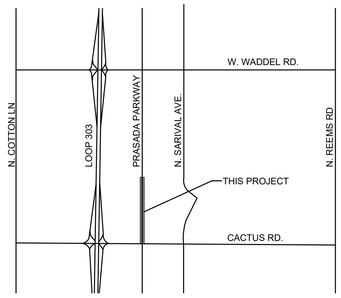
ELECTRICAL ENGINEER
MCGREW CONSULTING ENGINEERS, LLC
20045 N. 19TH AVE., BLDG 10, STE. 2
PHOENIX, AZ. 85027
PHONE: (602) 331–0114
CONTACT: RYAN MCGREW

DRAWING INDEX

SHEET #	DESCRIPTION
SL1	COVER SHEET
SL2	SITE PLAN
SL3	NORTH STREET LIGHTING PLAN
SL4	SOUTH STREET LIGHTING PLAN
SL5	NORTH PHOTOMETRIC PLAN
SL6	SOUTH PHOTOMETRIC PLAN
SL7	STREET LIGHTING DETAILS

SYMBOL LEGEND

⊸☀	NEW LED STREET LIGHT. (9 TOTAL)
□	PULL BOX



VICINITY MAP

NORTH

LIGHT FIXTURE SCHEDULE

MARK	MANUFACTURER	CATALOG NO.	LAMPS NO.	LAMPS TYPE	VOLTS	MOUNT	QUANTITY	REMARKS
A	GE LIGHTING	(ESTIMATE OF CITY STANDARD) ERLH_11C330_____	1	98W LED	277	POLE	9	EVOLVE LED ROADWAY STREETLIGHT–ERLH/ POLE MOUNT 32'11", 6' MAST ARM, 360° STAGGERED SPACING,11000 LUMENS PER SURPRISE SPEC.

Two working days before you dig CALL FOR THE BLUE STAKES (602) 263-1100 Blue Stake Center CALL COLLECT

REVISIONS	DATE
1	-
2	-
3	-
4	-
5	-
6	-

Professional Engineer (Electrical) CERTIFICATE NO. 23918 ROBERT D. McGREW 6-22-23 REGISTERED ARIZONA, U.S.A.

McGREW CONSULTING ENGINEERS, INC
20045 N. 19th AVE. BLDG 10, STE 2
PHOENIX, ARIZONA 85027
PHONE (602) 331–0114

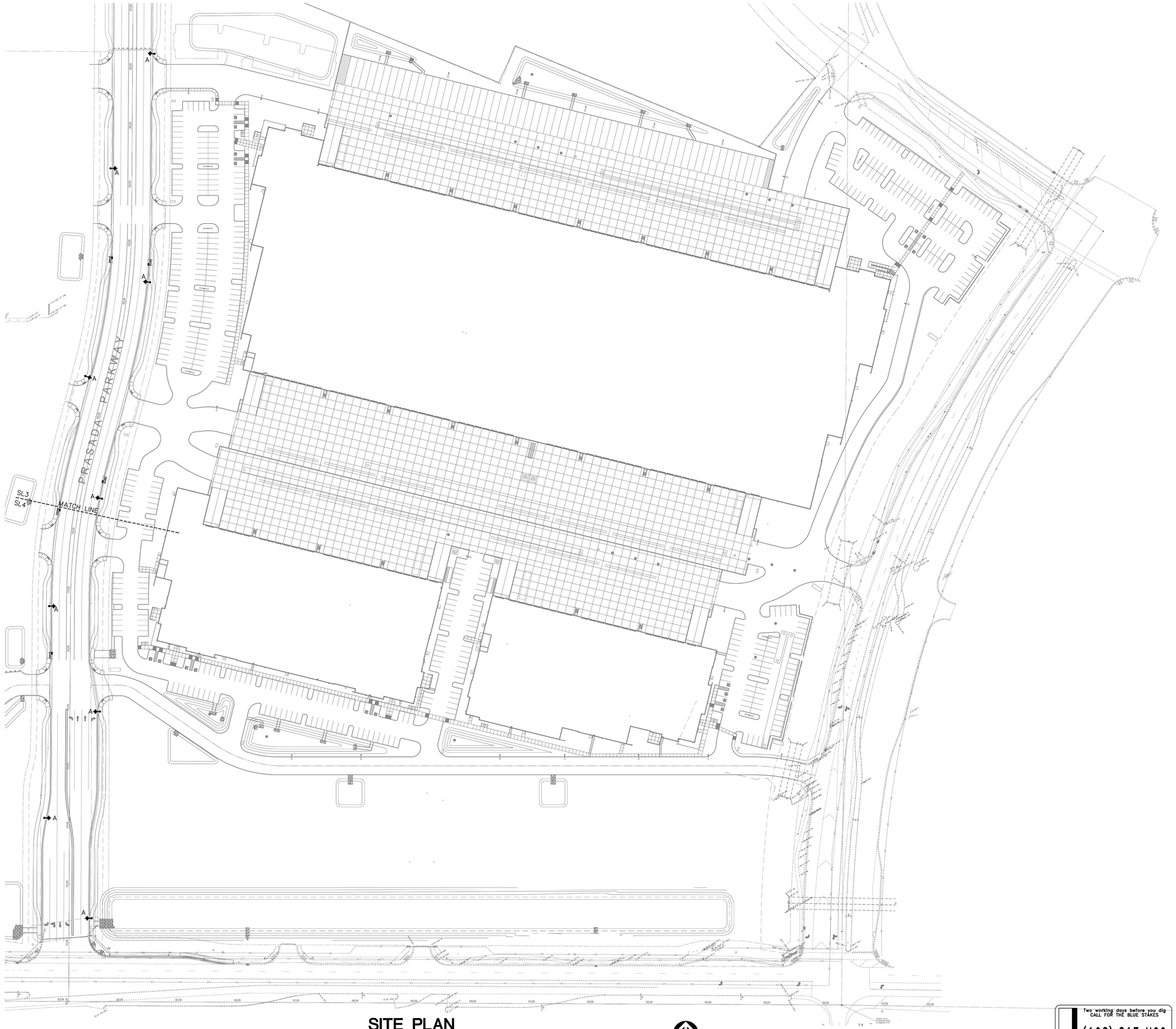
CACTUS 303 – PRASADA PARKWAY STREET LIGHTING
NEC LOOP 303 & CACTUS ROAD
SURPRISE, ARIZONA

SHEET TITLE: COVER SHEET

JOB NUMBER:	21099
DATE:	04/13/23
DRAWN BY:	MH
CHECKED BY:	RM
SCALE:	N.T.S

SL1

FS22–1534



SITE PLAN

SCALE: 1"=80'-0"

NORTH

Two working days before you dig
CALL FOR THE BLUE STAKES
(602) 263-1100
Blue Stake Center
CALL COLLECT

REVISIONS	DATE
1	-
2	-
3	-
4	-
5	-
6	-

Registered Professional Engineer (Electrical)
CERTIFICATE NO.
23918
ROBERT D.
McGREW
6-22-23
Date Signed
ARIZONA, U.S.A.

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PHONE (602) 331-0114

CACTUS 303 - PRASADA PARKWAY STREET LIGHTING

NEC LOOP 303 & CACTUS ROAD
SURPRISE, ARIZONA

SHEET TITLE:
SITE PLAN

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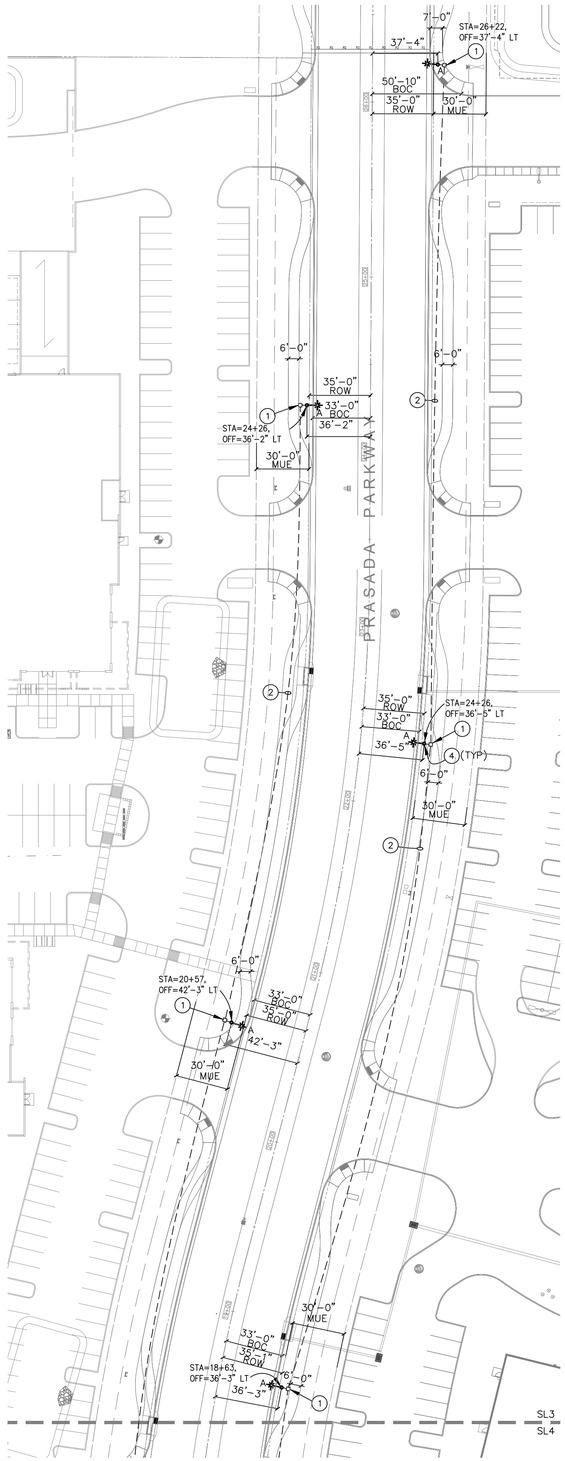
SCALE:	N.T.S

SL2

FS22-1534



STREET LIGHTING PLAN - NORTH

SCALE: 1"=40'-0"

NORTH

KEY NOTES

(1) PROVIDE NEW PULL BOX WITHIN 5' OF POLE BASE WITH 1" CARFLEX CONDUIT WITH 2-#6 THHN/THWN CONDUCTORS & 1-#12 COPPER BOND, & 1-#8 COPPER BOND (FOR GROUNDING) FROM PULL BOX TO POLE HAND HOLE, PER UTILITY REQUIREMENTS.

(2) PROVIDE (1) 2-1/2" E.C. FROM PULLBOX TO PULLBOX. ALL TRENCHING, CONDUIT, AND BACKFILL BY ELECTRICAL CONTRACTOR. PROVIDE PER CITY OF SURPRISE AND UTILITY COMPANY SPECIFICATIONS.

(3) CONNECT TO EXISTING STREET LIGHT FIXTURE.

(4) ALL STREET LIGHTS SHALL BE AT LEAST 2.5' FROM BACK OF CURB AND 1' FROM SIDEWALK.

GENERAL NOTES

1. STREET LIGHT CONDUITS SHOULD BE INSTALLED PRIOR TO DRIVEWAY INSTALLATIONS. IF STREETLIGHT CONDUIT IS INSTALLED AFTER DRIVEWAY INSTALLATION, CONTRACTOR SHALL BORE CONDUIT UNDER THE DRIVEWAY PER CITY OF SURPRISE DETAIL M-18. MEANDERING THE CONDUIT BEHIND THE DRIVEWAY ENTRANCE WILL NOT BE PERMITTED.
2. MATERIALS AND INSTALLATION OF THIS PROJECT SHALL COMPLY WITH THE CURRENT SURPRISE STANDARD DETAILS AND SPECIFICATION
3. THE CONTRACTOR SHALL HAVE AT LEAST AN IMSA-CERTIFIED LEVEL I (1) STREET LIGHT TECHNICIAN OR AN IMSA LEVEL I (1) TRAFFIC SIGNAL TECHNICIAN ON SITE DURING ALL PHASES OF ANY STREET LIGHT WORK. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE VERIFICATION OF THIS CERTIFICATION. IF A JOB SITE IS INSPECTED AND NO TECHNICIAN IS PRESENT ON SITE, ANY WORK ASSOCIATED WITH THE STREET LIGHTS WILL BE SUSPENDED.
4. ALL CONDUIT, CONDUCTORS, WIRE AND QUANTITIES SHALL BE MEASURED BY THE LINEAR FOOT HORIZONTALLY BETWEEN POLES, PULL BOXES AND CONTROL CABINETS. NO ADDITIONAL PAYMENT WILL BE MADE FOR SWEEPS AND VERTICAL RUNS, AS THEY SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND INCLUDED IN THE HORIZONTAL MEASUREMENT OF THE QUANTITIES.
5. AREAS WHERE 24" OF COVER IS NOT POSSIBLE SEE CHAPTER 9 OF THE CITY OF SURPRISE ENGINEERING & DESIGN STANDARDS; THESE AREAS SHALL BE IDENTIFIED ON PLANS. SUPPLY FULL CONFLICT DATA, INCLUDING TOP OF CURB, SIZE AND MATERIAL OF PIPE, INVERT ETC.
6. THE CONTRACTOR IS REQUIRED TO RETURN SALVAGED MATERIALS TO THE CITY OF SURPRISE, TO RETURN SALVAGED STREET LIGHT MATERIALS THE CONTRACTOR SHALL CONTACT THE STREET LIGHT FOREMAN FOR THE AREA WHERE THE WORK IS OCCURRING. ARRANGEMENTS TO DELIVER MATERIALS MUST BE MADE A MINIMUM OF 48 HOURS IN ADVANCE. THE CONTRACTOR IS RESPONSIBLE FOR UNLOADING AND STACKING ALL MATERIALS. A CITY OF SURPRISE STAFF MEMBER MUST BE PRESENT WHEN MATERIALS ARE DELIVERED TO GET CREDIT FOR THE SALVAGED MATERIALS.
7. ALL EXISTING CONCRETE DISTURBED OR DAMAGED DURING THE INSTALLATION STREET LIGHTING SYSTEMS SHALL BE REPLACED IN KIND. THE WORK IS TO BE COORDINATED WITH THE CITY OF SURPRISE ENGINEERING CONSTRUCTION INSPECTOR.
8. ALL EXISTING LANDSCAPE, HARDSCAPE OR SPRINKLER SYSTEMS DISTURBED OR DAMAGED DURING THE INSTALLATION OF STREET LIGHTING SYSTEMS SHALL BE REPLACED IN KIND. THE WORK IS TO BE COORDINATED WITH THE CITY OF SURPRISE ENGINEERING CONSTRUCTION INSPECTOR.
9. THE CONTRACTOR IS TO USE UTMOST CAUTION WHILE WORKING AROUND ALL OVERHEAD AND UNDERGROUND UTILITIES. SPECIFICALLY ELECTRIC, GAS, WATER, SEWER AND FIBER OPTIC LINES.
10. MINIMUM DEPTH FROM TOP OF CURB OR ROADWAY TO TOP OF CONDUIT SHALL BE TWENTY-FOUR (24) INCHES. MAXIMUM DEPTH SHALL BE FOURTY-EIGHT (48) INCHES, UNLESS OTHERWISE NOTED.
11. UNDERGROUND RACEWAYS SHALL BE SCHEDULE 40 RIGID PVC CONDUIT, UL APPROVED FOR ABOVE AND UNDERGROUND USE WITH 90 DEGREE C WIRE. WHERE TWENTY-FOUR (24) INCHES COVER IS NOT POSSIBLE, GALVANIZED RIGID STEEL CONDUIT (G.R.S.) SHALL BE USED. G.R.S. CONDUIT SHALL BE DOUBLE WRAPPED WITH 20-MIL TAPE TO SIX (6) INCHES PAST THE THREADED METAL COUPLING. COMPRESSION COUPLINGS ARE NOT ALLOWED. PRIOR APPROVAL IS NEEDED FOR ANY DESIGN USING G.R.S. CONDUIT.
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14. ALL FORTY-FIVE (45) AND NINETY (90) DEGREE BENDS OF CONDUIT SHALL HAVE A RADIUS OF NOT LESS THAN EIGHTEEN (18) INCHES. FACTORY BENDS ONLY SHALL BE USED.
15. ALL JOINTS BETWEEN PVC CONDUIT, COUPLINGS & FITTING SHALL BE PREPARED WITH PURPLE PRIMER AND CEMENTED TOGETHER WITH GRAY PVC CEMENT.
16. ALL STREET LIGHT POLES ARE TO BE NO CLOSER THAN 2-1/2' FROM THE BACK OF THE CURB AND 1' FROM THE BACK OF THE SIDEWALK.
17. ALL STREET LIGHT POLES, MAST ARMS, AND FIXTURE HEADS SHALL BE PAINTED WITH A POWDER COATED FINISH. FINAL PAINT/FINISH TO MATCH EXISTING ADJACENT FIXTURES.

CONTRACTOR NOTES

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B. THE EXISTING STREET LIGHTS ARE TO REMAIN OPERATIONAL DURING THE CONSTRUCTION PROCESS. THE CONTRACTOR IS TO ENSURE THERE SHALL BE NO OUTAGES.

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NOTE

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REVISIONS	DATE
#	-
#	-
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#	-
#	-

Registered Professional Engineer (Civil) CERTIFICATE NO. 23918 ROBERT D. McCREW 6-22-23 ARIZONA, U.S.A.

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PHOENIX, ARIZONA 85027
PHONE (602) 331-0114

CACTUS 303 - PRASADA PARKWAY STREET LIGHTING

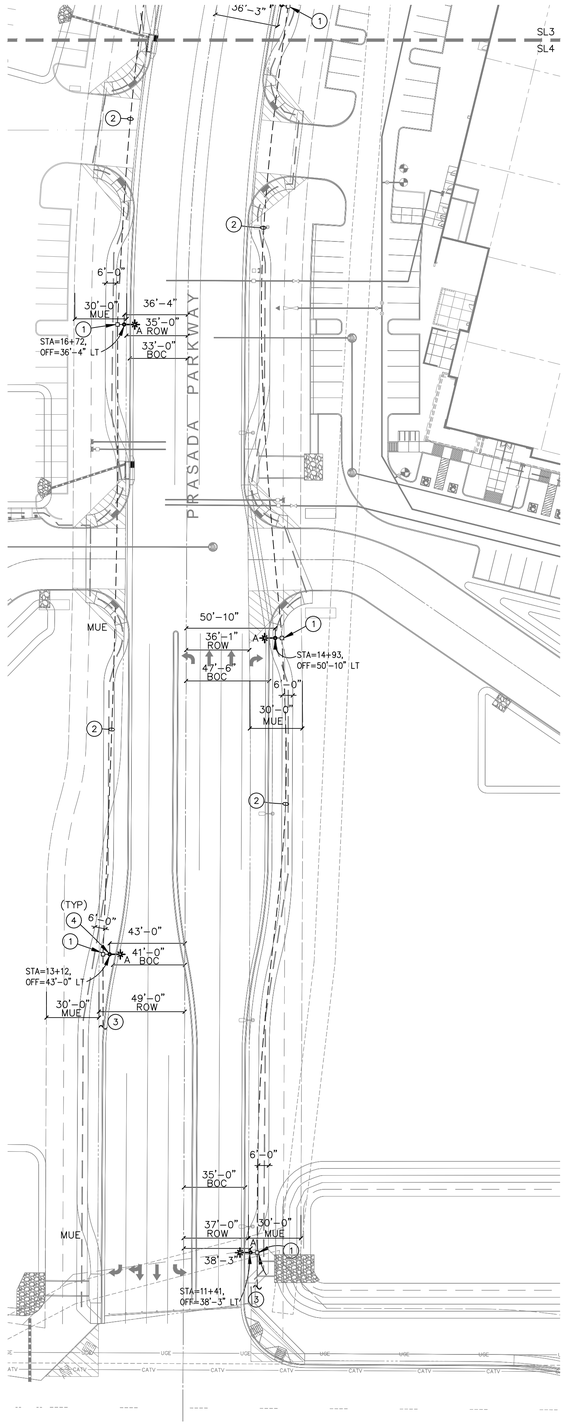
NEC LOOP 303 & CACTUS ROAD
SURPRISE, ARIZONA

SHEET TITLE: STREET LIGHTING PLAN - NORTH

JOB NUMBER:	21099
DATE:	04/13/23
DRAWN BY:	MH
CHECKED BY:	RM
SCALE:	1"= 40'-0"

SL3

FS22-1534



STREET LIGHTING PLAN - SOUTH

SCALE: 1"=40'-0"

NORTH

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(602) 263-1100
Blue Stake Center CALL COLLECT

REVISIONS		DATE
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#		-

Registered Professional Engineer (Civil) CERTIFICATE NO. 23918 ROBERT D. McCREW 6-22-23 ARIZONA, U.S.A.

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CACTUS 303 - PRASADA PARKWAY STREET LIGHTING

NEC LOOP 303 & CACTUS ROAD
SURPRISE, ARIZONA

SHEET TITLE: STREET LIGHTING PLAN - SOUTH

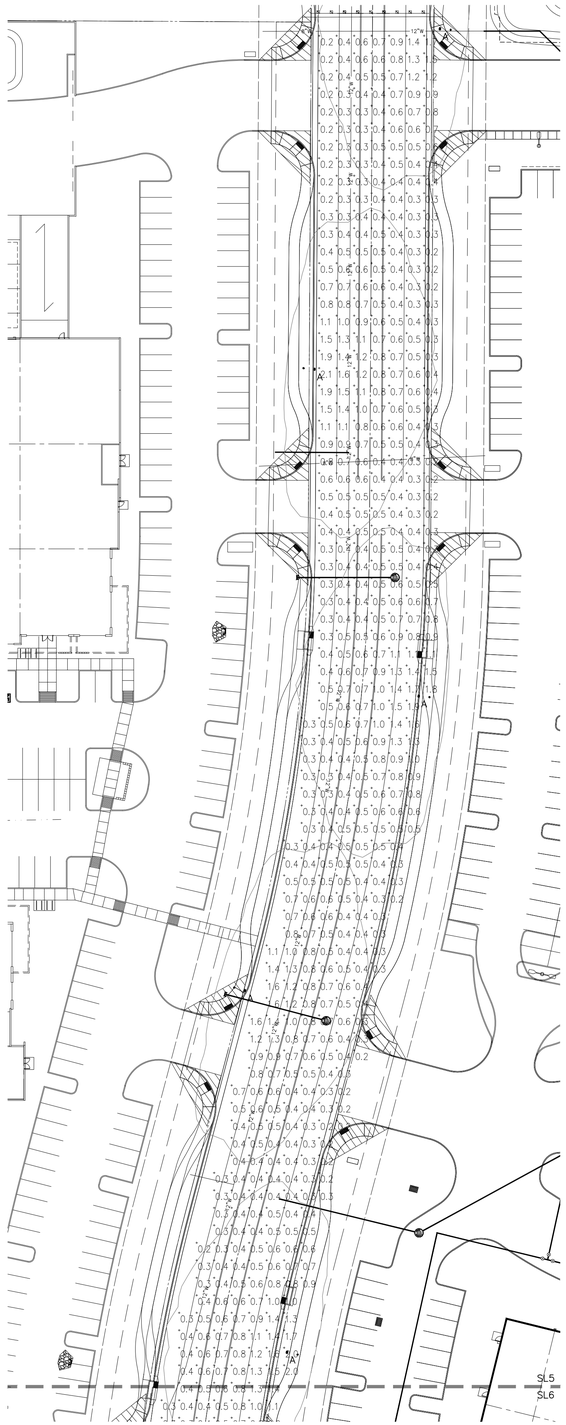
JOB NUMBER:	21099
DATE:	04/13/23
DRAWN BY:	MH
CHECKED BY:	RM
SCALE:	1"=40'-0"

SL4

FS22-1534

Schedule									
Symbol	Label	QTY	Manufacturer	Catalog	Description	Number Lamps	Lamp Output	LLF	Input Power
- .	A	9	GE LIGHTING SOLUTIONS	(ESTIMATE OF CITY STANDARD) ERLH_11C330_____	Evolve LED Roadway Streetlight-ERLH/ POLE MOUNT 32'11". 6' MAST ARM. 360' STAGGERED SPACING.11000 LUMENS PER SURPRISE SPEC.	1	11000	1	98

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
PRASADA PKWY	+	0.6 fc	2.1 fc	0.2 fc	10.5:1	3.0:1



PHOTOMETRIC PLAN - NORTH

SCALE: 1"=40'-0"

NORTH

REVISIONS	DATE
#	-
#	-
#	-
#	-
#	-
#	-

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NEC LOOP 303 & CACTUS ROAD
SURPRISE, ARIZONA

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SL5

FS22-1534

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CALL COLLECT

Schedule

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- .	A	9	GE LIGHTING SOLUTIONS	(ESTIMATE OF CITY STANDARD) ERLH_11C330_____	Evolve LED Roadway Streetlight-ERLH/ POLE MOUNT 32'11". 6' MAST ARM. 360' STAGGERED SPACING.11000 LUMENS PER SURPRISE SPEC.	1	11000	1	98

Statistics

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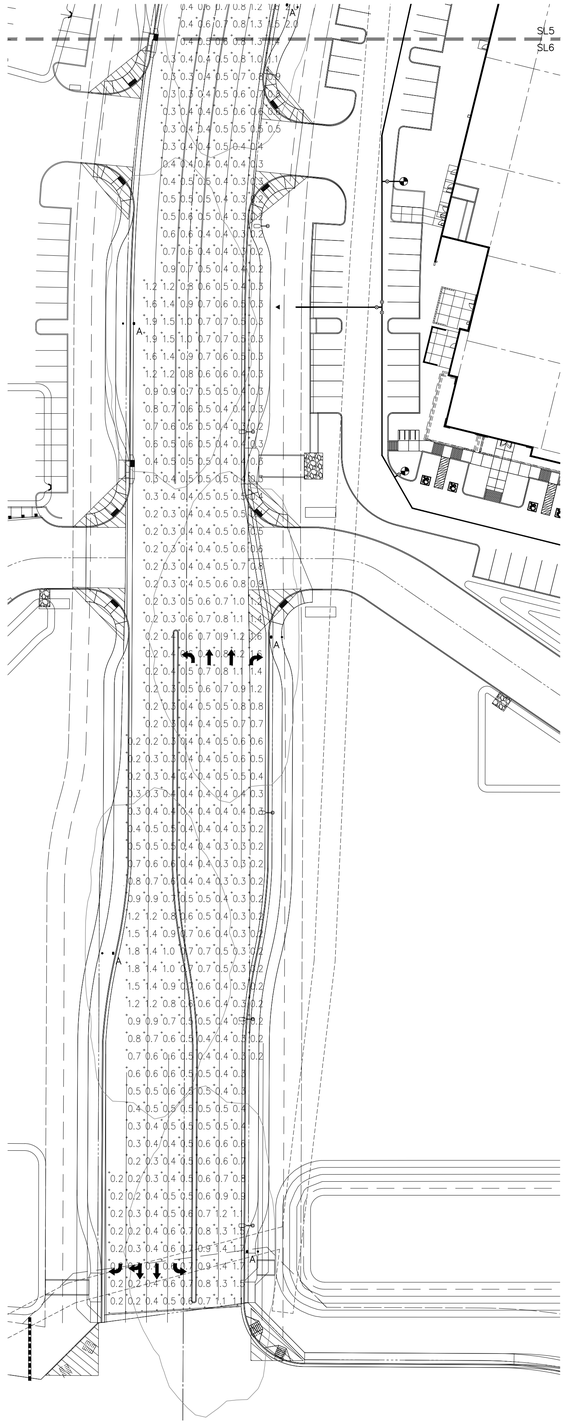
PRASADA PKWY	+	0.6 fc	2.1 fc	0.2 fc	10.5:1	3.0:1



PHOTOMETRIC PLAN - SOUTH

SCALE: 1"=40'-0"

NORTH

Two working days before you dig
CALL FOR THE BLUE STAKES
(602) 263-1100
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REVISIONS	DATE
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Registered Professional Engineer (Civil)
CERTIFICATE NO.
23918
ROBERT D. McCREW
6-22-23
EXPIRATION DATE
ARIZONA, U.S.A.

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CACTUS 303 - PRASADA PARKWAY STREET LIGHTING

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SL6

FS22-1534

EVOLVE

ERLC Cobra Head

LED Roadway Lighting



Project Name _____

Date _____ Type _____

Notes _____

The **Evolve**® LED Roadway ERLC Luminaire is optimized utilizing advanced LED reflective optical system for local, collector and major roadways. The modern design incorporates the heat sink directly into the unit for heat transfer to prolong LED life.

CONSTRUCTION

Housing:	Aluminum die cast enclosure casting integral heat sink for maximum heat transfer
Lens:	Impact resistant tempered glass
Paint:	Corrosion resistant powder paint, ≥ 2.0 mil thickness (RAL & custom colors available) Standard = Black, Dark Bronze, Gray, White Optional = Coastal Finish
Weight:	8.5 lbs (5.6 kgs)

OPTICAL SYSTEM

Lumens:	2,000 - 7,000
Distribution:	Type II Narrow, II/III[1], III, V
Efficacy:	110-143 LPW
CCT:	2700K, 3000K, 4000K & 5000K
CRI:	≥ 70

ELECTRICAL

Input Voltage:	120-277V (no 347-480V)
Input Frequency:	50/60Hz
Power Factor:	≥ 90% at rated watts
Total Harmonic Distortion:	≤ 20% at rated watts

SURGE PROTECTION*

Standard	Optional
☐ 10kV/5kA	☐ Secondary 10kV/5kA (R Option) or ☐ Secondary 20kV/10kA (T Option)

*Per ANSI C136.2-2018

LUMEN MAINTENANCE

Projected Lxx per IES TM-21-11 at 25°C

Lumen Codes	Distributions	LXX(10K) @ Hours		
		25,000 HR	50,000 HR	60,000 HR
02 ,03, 04, 05	A5, B5, C5	L97	L93	L92
06	A5, B5, C5	L96	L91	L89
07	A5, B5, C5	L95	L89	L87

Lumen Codes	Distributions	LXX(10K) @ Hours		
		25,000 HR	50,000 HR	60,000 HR
02 ,03, 04, 05	V4	L96	L93	L93
06	V4	L94	L90	L88

Note: Projected Lxx based on LM80 (≥ 10,000 hour testing). Accepted Industry tolerances apply to initial luminous flux and lumen maintenance measurements.

RATINGS

Operating Temperature:	-40°C to 50°C
Vibration:	3G per ANSI C136.31-2018
LM-79:	Testing in accordance with IES Standards

CONTROLS

Dimming:	Standard - 0-10V ☐ Optional - DALI (Option U) ☐
Sensors:	Photo Electric Sensors (PE) available LightGrid Compatible

WARRANTY

☐ 5 Year (Standard) ☐ 10 Year (Optional)

Not all product variations listed on this page are DLC qualified. Visit www.designlights.org/search to confirm qualifications.

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EVOLVE

ERL1 Cobra Head

LED Roadway Lighting

Spec Tables

Project Name _____

Date _____ Type _____

Notes _____

LUMEN OUTPUT	DIST.	LUMENS 4000K	LUMENS 3000K	LUMENS 2700K	WATTAGE 277V	WATTAGE 480V	BUG RATINGS 4000K	BUG RATINGS 3000K	BUG RATINGS 2700K
02	A3	2000	1900	1900	14	N/A	B1-U0-G1	B1-U0-G1	B1-U0-G1
	B3						B1-U0-G1	B1-U0-G1	B1-U0-G1
	C3						B1-U0-G1	B1-U0-G1	B1-U0-G1
	D3						B0-U0-G1	B0-U0-G1	B0-U0-G1
	E3						B1-U0-G1	B1-U0-G1	B1-U0-G1
03	A3	3000	2900	2800	22	26	B1-U0-G1	B1-U0-G1	B1-U0-G1
	B3						B1-U0-G1	B1-U0-G1	B1-U0-G1
	C3						B1-U0-G1	B1-U0-G1	B1-U0-G1
	D3						B1-U0-G1	B1-U0-G1	B1-U0-G1
	E3						B1-U0-G1	B1-U0-G1	B1-U0-G1
04	A3	4000	3900	3800	31	34	B1-U0-G1	B1-U0-G1	B1-U0-G1
	B3						B1-U0-G1	B1-U0-G1	B1-U0-G1
	C3						B1-U0-G1	B1-U0-G1	B1-U0-G1
	D3						B1-U0-G1	B1-U0-G1	B1-U0-G1
	E3						B1-U0-G1	B1-U0-G1	B1-U0-G1
05	A3	5000	4900	4700	39	43	B1-U0-G1	B1-U0-G1	B1-U0-G1
	B3						B1-U0-G1	B1-U0-G1	B1-U0-G1
	C3						B1-U0-G2	B1-U0-G2	B1-U0-G2
	D3						B1-U0-G1	B1-U0-G1	B1-U0-G1
	E3						B1-U0-G1	B1-U0-G1	B1-U0-G1
06	A3	6000	5800	5700	47	52	B2-U0-G2	B2-U0-G2	B2-U0-G2
	B3						B1-U0-G2	B1-U0-G2	B1-U0-G2
	C3						B1-U0-G2	B1-U0-G2	B1-U0-G2
	D3						B1-U0-G2	B1-U0-G2	B1-U0-G2
	E3						B2-U0-G2	B2-U0-G2	B2-U0-G2
07	A3	7000	6800	6600	58		B2-U0-G2	B2-U0-G2	B2-U0-G2
	B3						B1-U0-G2	B1-U0-G2	B1-U0-G2
	C3						B1-U0-G2	B1-U0-G2	B1-U0-G2
	D3						B1-U0-G2	B1-U0-G2	B1-U0-G2
	E3						B2-U0-G2	B2-U0-G2	B2-U0-G2
08	A3	8000	7800	7600	71		B2-U0-G2	B2-U0-G2	B2-U0-G2
	B3						B2-U0-G2	B2-U0-G2	B2-U0-G2
	C3						B1-U0-G2	B1-U0-G2	B1-U0-G2
	D3						B1-U0-G2	B1-U0-G2	B1-U0-G2
	E3						B2-U0-G2	B2-U0-G2	B2-U0-G2
09	A3	9000	8800	8500	84		B2-U0-G2	B2-U0-G2	B2-U0-G2
	B3						B2-U0-G2	B2-U0-G2	B2-U0-G2
	C3						B2-U0-G2	B2-U0-G2	B1-U0-G2
	D3						B1-U0-G2	B1-U0-G2	B1-U0-G2
	E3						B2-U0-G2	B2-U0-G2	B2-U0-G2
10	A3	9800	9600	9250	97		B2-U0-G2	B2-U0-G2	B2-U0-G2
	B3						B2-U0-G2	B2-U0-G2	B2-U0-G2
	C3						B2-U0-G2	B2-U0-G2	B2-U0-G2
	D3						B1-U0-G2	B1-U0-G2	B1-U0-G2
	E3						B2-U0-G2	B2-U0-G2	B2-U0-G2

For additional information on ERL1 IES files, please click one of the following links:

Non-Shielded Shielded

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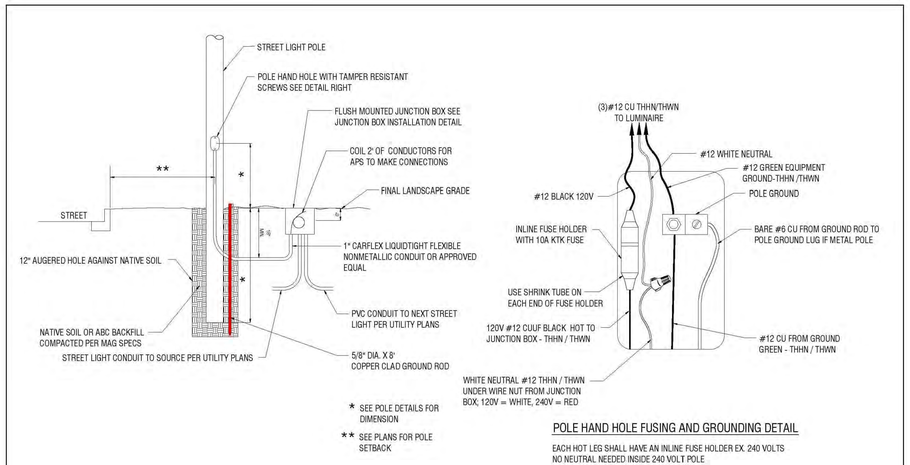
FIXTURE 'A'



POLE HAND HOLE FUSING AND GROUNDING DETAIL

EACH HOT LEG SHALL HAVE AN INLINE FUSE HOLDER EX. 240 VOLTS
NO NEUTRAL NEEDED INSIDE 240 VOLT POLE

	STREET LIGHT STANDARD STREET LIGHT WIRING AND GROUNDING DETAIL FOR APS/SRP SERVICE AREA	DETAIL NO. WG1

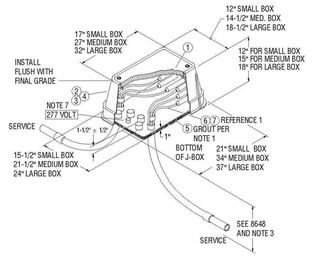
ARIZONA PUBLIC SERVICE (APS) NOTES

1. CONTRACTOR SHALL CONTACT APS INSPECTOR IDENTIFIED ON THE APS CONSTRUCTION DRAWING FOR PRE-CONSTRUCTION MEETING PRIOR TO ANY EXCAVATION.
2. CONTRACTOR TO SUPPLY ALL TRENCH AND CONDUIT, PER APS REQUIREMENTS, UNLESS OTHERWISE NOTED.
3. GRADE STAKE WILL BE SET WITHIN 2' OF J-BOX LOCATION.
4. CONTRACTOR WILL COORDINATE WITH APS AND CITY OF PHOENIX FOR DE-ENERGIZING OF STREETLIGHT CONDUCTOR.
5. GROUND ROD TO BE PROVIDED AND INSTALLED BY CONTRACTOR IN APS J-BOX AT EACH STREETLIGHT LOCATION.
6. IF THE CONTRACTOR INSTALLS THE POLE, THE BARE #6 COPPER GROUND WIRE SHALL BE CONNECTED FROM THE GROUND ROD IN THE APS J-BOX TO THE GROUND CONNECTION IN THE HAND-HOLE..
7. ALL TRENCH AND CONDUIT TO BE INSPECTED BY APS. DO NOT BACKFILL UNTIL INSPECTED.
8. APS CONSTRUCTION PRINT MUST BE USED AS A TRENCHING REFERENCE. TRENCHING VARIATIONS MUST HAVE WRITTEN APS CSR APPROVAL. FOLLOW DETAILS FOR CONSTRUCTION. VARIATIONS IN TRENCH ROUTE MAY RESULT IN A REDESIGN FEE.
9. CONTACT APS FOR ALL TRENCH AND CONDUIT SPECIFICATIONS AND REQUIREMENTS.
10. CONTRACTOR IS RESPONSIBLE FOR INTEGRITY OF ALL CONDUITS UNTIL APS HAS INSTALLED CONDUCTORS.
11. CONTRACTOR IS RESPONSIBLE FOR OBTAINING REQUIRED VARIANCES PRIOR TO SUBMITTING CIP DRAWINGS TO THE UTILITIES.
12. CONTRACTOR IS RESPONSIBLE FOR VERIFYING VERTICAL AND HORIZONTAL CLEARANCES TO EXISTING OVERHEAD LINES AND POLES WHEN PLACING NEW STREETLIGHTS.

CODE	JUNCTION BARS
A	THREE-POSITION MOLDS
B	FIVE-POSITION MOLDS
C	EIGHT-POSITION MOLDS
D	TWO-POSITION GEL PACKS
N	NO CONNECTORS

8655. _____ SEE NOTE 10 AND 11 SMALL BOX
8656. _____ SEE NOTE 10 AND 12 MEDIUM BOX
8657. _____ SEE NOTE 13 LARGE BOX

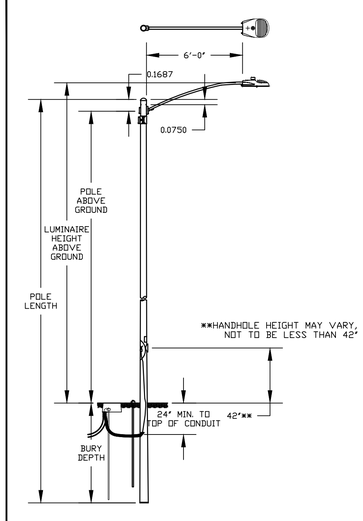
IF APPLICABLE G = APS GROUT APPROVED
IF APPLICABLE L = LIGHTS
SECONDARY WIRE CODES
JUNCTION BARS



NOTES:

1. CONCRETE GROUT SHALL BE PREMIX, APN 71301280 OR EQUIVALENT.
2. PENTA-HEAD BOLTS SHALL BE INSTALLED PRIOR TO ENERGIZING NEW UNDERGROUND SYSTEMS. LOST OR MISPLACED PENTA-HEAD BOLTS SHALL BE REPLACED WITH APN 71402608.
3. BRINGING ALL CABLE/CONDUITS AND GROUND ROD INTO THE SAME END OF THE BOX TO ENABLE CABLES TO BE RAISED AND LOWERED EASILY. CONDUIT SWEEPS SHALL BE POSITIONED AND ALIGNED SO THAT WHEN TWO AND FOUR POSITION JUNCTION BARS ARE S PECIFIED, THE ST. LT., SECONDARY AND SERVICE CONDUITS SHALL BE INSTALLED AS SHOWN IN DETAIL "A". WHEN SIX POSITION JUNCTION BARS ARE SPECIFIED, THE ST. LT., SECONDARY AND SERVICE CONDUITS SHALL BE INSTALLED AS SHOWN IN DETAIL "B".
4. COMPACTION BENEATH AND AROUND JUNCTION BOX SHALL BE A MINIMUM OF 85 PERCENT.
5. REPLACEMENT LID FOR MEDIUM PLASTIC JUNCTION BOX IS 33100981. PENTAHEAD BOLTS AND EMS MARKER MUST BE REUSED FROM OLD LID.
6. ADDITIONAL TRENCH DEPTH IS USUALLY REQUIRED AT ALL EQUIPMENT LOCATIONS. SEE 8648 FOR THE MINIMUM TRENCH DEPTHS AND THE DEGREE OF SLOPE ALLOWED AS THE TRENCH DEPTH CHANGES.
7. ON 277 VOLT STREET LIGHT CIRCUITS, INSTALL "277 VOLT" RED MICARTA TAG (APN 00080796) PROVIDED BY SPEC 8129.
8. TORQUE BOLTS TO 5 FT - LBS (60 IN - LBS).

ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS	SECTION SECTION/DESCRIPTION DESCRIPTION 3	SH 1 OF 1



1944.XXX

19 = 19' - 0" POLE SNG SIMPLEX
30 = 30' - 0" POLE SNG SIMPLEX
38 = 38' - 6" POLE SNG SIMPLEX
38X = 38' - 6" POLE DBL SIMPLEX
** SEE SPEC. NOTE

GENERAL NOTE:

1 PROVIDE APS STANDARD ROUND STEEL POLE WITH 6' MAST ARM. FINAL POLE LENGTH AND BURY DEPTH PER APS STANDARDS.

CONSTRUCTION NOTES:

1 ADJUST PHOTO EYE TO FACE NORTH

2 A GROUND ROD IS PROVIDED WITH THE JUNCTION BOX. WHERE A GROUND ROD CANNOT BE DRIVEN ALTERNATE GROUND SHALL BE USED. SEE 2449 THRU 2460 FOR APPROVED ALTERNATES.

3 THE 40'-0" SELF-SUPPORTING STEEL POLE AND ONE OF THE 38'-0", HAVE TWO, MANUFACTURED INSTALLED SIMPLEX FITINGS 180 APART FOR DOUBLE ARMS, SEE CHART.

4 APN 33701054 IS A POLE BAND ADAPTOR WITH A SIMPLEX FITTING. ADAPTOR IS REQUIRED FOR THE SECOND ARM IN DOUBLE ARM APPLICATIONS ON EXISTING PLES IN THE FIELD WITHOUT TWO SIMPLEX FITTINGS. SEE 8198 FOR AVAILABLE SIZES.

5 POLES THAT HAVE MORE THAN ONE LUMINAIRE REQUIRE A SEPARATE CIRCUIT WITH FUSING FROM THE J-BOX TO EACH LUMINAIRE.

ENGINEERING NOTES:

A THE LIGHT CODE PROVIDES TWO SAME WATTAGE LUMINAIRES WHEN DOUBLE ARM ARE SPECIFIED.

B SEE SPEC 8130 - 8131 FOR IN-LINE FUSE FOR UNDERGROUND FEEDS.

C SEE 8100 THRU 8107 FOR OVERHEAD ATTACHMENTS.

LIGHT CODE	COLOR	APN	TYPE	WATTS	MULTIVOLT	INITIAL LUMENS	PHOTOMETRIC CURVE
CL60	GRAY	00128329	LED	45	120/208/240/277 DRIVER	4,300	454669
CL61		00128330		60	120/208/240/277 DRIVER	5,400	454659
CL6X		00128331X		97	120/208/240/277 DRIVER	9,600	454677
CL63		00128332		113	120/208/240/277 DRIVER	10,400	454688
CL64		00128364		257	120/208/240/277 DRIVER	20,100	454942

POLE TYPE	POLE CODE	POLE LENGTH	BURY DEPTH	POLE ABOVE GROUND	POLE BUTT DIAMETER STEP	POLE BUTT DIAMETER TAPER	LUMINAIRE HEIGHT ABOVE GROUND ON ARM WEIGHT	20" X 6'	3' X 8'	8' X 8'
MINOR COLLECTOR	1944.30	30' - 6"	5' - 6"	25' - 0"	5-9/16"	7-5/16"	460	25' - 11"	27' - 3"	-

**FOR NON-STANDARD POLES, CONTACT THE STREET TRANSPORTATION STREETLIGHTING SECTION FOR INFORMATION.

	LIGHTS ROADWAY LUMINAIRE ON 20'X6', 3'X8' OR 8'X8' MAST ARMS ON 19'-0", 30'-0", 38'-0" OR 40'-6" STEEL POLES	8040

REVISIONS	DATE
# –	–
# –	–
# –	–
# –	–
# –	–
# –	–

Professional Engineer Certificate No. 23918 ROBERT D. McCREW 6-22-23 ARIZONA, U.S.A.

McCREW CONSULTING ENGINEERS, INC
20045 N. 19th AVE. BLDG 10, STE 2
PHOENIX, ARIZONA 85027
PHONE (602) 331-0114

CACTUS 303 – PRASADA PARKWAY STREET LIGHTING
NEC LOOP 303 & CACTUS ROAD
SURPRISE, ARIZONA

SHEET TITLE: DETAILS, NOTES & FIXTURE CUT SHEET

JOB NUMBER:	21099
DATE:	04/13/23
DRAWN BY:	MH
CHECKED BY:	RM
SCALE:	N.T.S

SL7

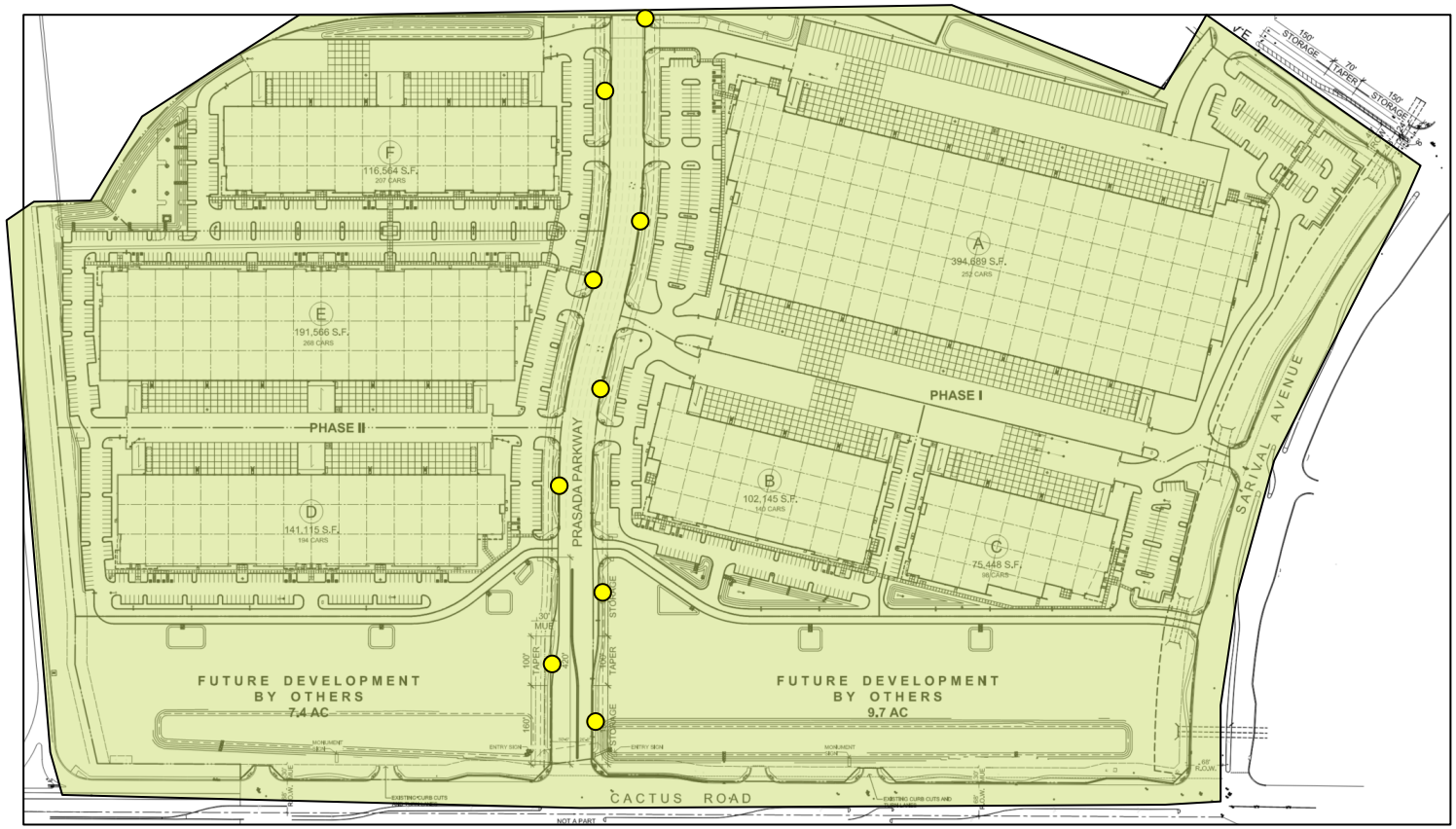
FS22-1534

Two working days before you dig CALL FOR THE BLUE STAKES (602) 263-1100 Blue Stake Center CALL COLLECT

Cactus 303 Prasada East

Street Lights:

- Street Light Pole
- 9 new poles
- SLID Boundary



CITY OF SURPRISE
Regular City Council Meeting

Council Meeting Date: May 7, 2024
Submitting Department: Public Works
Staff Recommendations:

Contact Person: Kristin Tytler, Department Director
District: District 4

Consent: Yes Regular: No Public Hearing: No Report/Discussion: No

Agenda Wording:
Consideration and action pertaining to the immediate formation of a lighting improvement district known as City of Surprise, Arizona, SU-ParadiseGarden213 pursuant to A.R.S. § 48-616 for the purpose of purchasing facilities and energy for lighting the public streets; Resolution #2024-57.

Motion:
I move to approve Resolution #2024-57.

Background:
The City has verified that the Petition for the proposed streetlight improvement district contains the signatures of all the real property owners in the district, exclusive of mortgagees and other lien holders.

The City and Arizona Public Service Company ("APS") have approved the street layout and facilities design. The electric rates are established by APS tariff.

The lighting improvements are more than local or ordinary public benefits, and the expenses of the district will be paid for by the levy and collection of equal apportionment taxes based on the number and classification of properties within the District.

Objective Analysis:
A SLID is a neighborhood partnership and very common practice in which property owners in a defined area agree to pay the costs to operate and maintain their immediate area's streetlights through a property tax. All new developments in the City of Surprise require a SLID. This action will form the SLID boundary for the Paradise Garden development.

Policy Compliant:
The surprise Municipal Code requires that street lighting that serves a defined area be paid for through revenues obtained from the specific area being served by such street lighting. In these instances, a Streetlight Improvement District (SLID) is formed. The city strives to assure that residents are subject to only one SLID and that the boundaries of each SLID accurately reflect the service area. This item is consistent with these objectives.

Financial Impact:

Once the SLID is illuminated, the City will begin levying the SLID to cover SLID expenses. At the current time, the SLID is not incurring any expense because the SLID lights have not been illuminated. Therefore, there is no current financial impact.

Budget Impact:

Since the SLID is not illuminated, there is no revenue or expense budgeted in FY2024 nor are there budgets planned for FY2025 for the SLID. If the SLID is illuminated in FY2024 or FY2025, expenses will be charged to the SLID and recouped with a future levy. A separate fund for this district will be created to track the revenue and expenses.

FTE Impact:

This item does not have an impact on current staff levels.

ATTACHMENTS:

1. 01 Res 2024-57 SLID Paradise Gardens_BAC_final
2. 02 Petition
3. 03 Streetlight plan Paradise Garden
4. 04 PARADISE GARDEN_Exhibit Template SLIDS

RESOLUTION # 2024-57

A RESOLUTION OF THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE, ARIZONA, DECLARING ITS INTENTION TO ESTABLISH A STREET LIGHT IMPROVEMENT DISTRICT TO PURCHASE ENERGY FOR LIGHTING THE PUBLIC STREETS AND PARKS IN THE AREA WITHIN THE CORPORATE LIMITS OF THE CITY OF SURPRISE, ARIZONA DESCRIBED ON EXHIBIT A, ATTACHED HERETO; DECLARING SUCH IMPROVEMENTS TO BE OF MORE THAN LOCAL OR ORDINARY PUBLIC BENEFIT AND THAT THE EXPENSES THEREOF BE PAID FOR BY THE LEVY AND COLLECTION OF EQUAL APPORTIONMENT OF TAXES BASED ON THE NUMBER AND CLASSIFICATION OF PROPERTIES WITHIN THE DISTRICT TO BE KNOWN AS "CITY OF SURPRISE, ARIZONA, SU-PARADISEGARDEN213 LIGHTING IMPROVEMENT DISTRICT"; AND ORDERING THAT SUCH IMPROVEMENTS BE PROVIDED FOR UNDER THE PROVISIONS OF SECTION 48-572, ARIZONA REVISED STATUTES.

WHEREAS, the owners, exclusive of mortgagees and other lienholders, of all of the real property (hereinafter referred to as "Petitioner") in the hereinafter described District, acting pursuant to the provisions of Sections 48-615(A) and 48-617(A), Arizona Revised Statutes, have petitioned the Mayor and Council of the City of Surprise, Arizona (hereinafter referred to as "City"), to adopt a resolution of intention (hereinafter referred to as "Resolution") ordering the purchase of energy for the lighting of the public streets and parks (hereinafter referred to as "Improvements") for the real property legally described in Exhibit A (such area hereinafter referred to as the "District") with such boundaries as shown in the map in Exhibit B attached hereto pursuant to the provisions of Section 48-576, Arizona Revised Statutes, giving the City immediate jurisdiction to order the Improvements pursuant to the provisions of Section 48-581, Arizona Revised Statutes, without the necessity of the publications or posting of this Resolution provided for in Sections 48-578, Arizona Revised Statutes;

WHEREAS, the City has verified that Petitioner is the owner, exclusive of mortgagees and other lienholders, of all of the real property included within the boundaries of the District, and;

WHEREAS, the Mayor and Council of the City hereby find and determine that they have jurisdiction to adopt this Resolution to order the Improvements pursuant to the provisions of Section 48-576, Arizona Revised Statutes, and have immediate jurisdiction to adopt this Resolution ordering the Improvements pursuant to the provisions of Section 48-581, Arizona Revised Statutes without the necessity of publications and posting of this Resolution as provided for in Section 48-578, Arizona Revised Statutes;

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Surprise, Arizona, as follows.

Section 1. The City, after verifying ownership of the real property included within the boundaries of the District, hereby finds the Petitioner is the owner, exclusive of mortgagees and other lienholders, of all of the real property included within the boundaries of the District.

Section 2. The name of the District shall be "CITY OF SURPRISE, ARIZONA, *SU-PARADISEGARDEN213* LIGHTING IMPROVEMENT DISTRICT."

Section 3. The District is formed, and shall exist, pursuant to the provisions of Title 48, Chapter 4, Article 2, Arizona Revised Statutes, and Section 48-616, Arizona Revised Statutes.

Section 4. The public interest or convenience requires, and it is the intention of the Mayor and Council of the City to order the Improvements as so described above.

Section 5. The Improvements, in the opinion of the Mayor and Council of the City, are of more than local or ordinary public benefit and are of special benefit to the respective lots, pieces and parcels of real property in the District, and the Mayor and Council of the City hereby make and order the expense of the Improvements payable from the levying and collection of an equal apportionment of taxes based on the number and classification of properties within the District to be known and designated as "CITY OF SURPRISE, ARIZONA, SU-PARADiSEGARDEN213 LIGHTING IMPROVEMENT DISTRICT" and hereby declare that the District is as legally described on Exhibit A attached hereto with the boundaries as shown in the map in Exhibit B attached hereto. Any public street or alley within the District shall be omitted from the assessment. Any lot belonging to the United States, the State, a county, city, school district or political subdivision or institution of the state or county within the District shall be omitted from the assessment.

Section 6. The Superintendent of Streets or equivalent of the City shall not be required to post or cause to be posted notices of the Resolution of Intention. The Clerk of the City shall certify to the passage of this Resolution of Intention but shall not be required to cause the same to be published in a newspaper published and of general circulation in the City.

Section 7. The Mayor and Council of the City shall make annual statements and estimates of the expenses of the District, which shall be provided for by the levy and collection of equal apportionment of taxes based on the number and classification of properties within the District; shall publish notice thereof; shall have hearings thereon; and shall adopt them at the times and in the manner provided for incorporated cities and towns by the applicable portions of Section 42-17101, et seq., 42-17152, Arizona Revised Statutes. The Mayor and Council of the City shall, on or before the third Monday in August of each year, fix, levy, and assess the amount to be raised by an equal apportionment of taxes based on the number and classification of the properties within the District and collect, as Maricopa County, Arizona (the "County") taxes are collected, the amounts shown by the statements and estimates as adopted by the Mayor and Council of the City. All statutes providing for the levy and collection of State of Arizona and County taxes, shall be applicable to District taxes as provided to be levied under Section 48-616, Arizona Revised Statutes.

Section 8. The District shall not be authorized to issue bonds and no assessment for District purposes against the property within the District shall exceed One Dollar and Twenty Cents ($1.20) per each hundred dollars of taxable valuation thereof in any year.

Section 9. The District shall not engage in any activity other than as provided in Section 48-616, Arizona Revised Statutes, i.e., contracting for and purchasing of energy for street and public park lighting.

Section 10. The formation of the District shall not be considered as preventing the subsequent establishment of improvement districts for any other purpose authorized by law, including improvement districts for the purpose of construction street lighting facilities within any part or all of the same territory as the District.

Section 11. The type of lighting facilities to be installed in the District and the locations thereof shall consist of those lighting facilities and locations described in the petition submitted by Petitioner, or as may be approved by the City.

Section 12. The rate to be paid for purchasing the energy for the District shall be the rate described in the petition submitted by Petitioner, or as may be approved by the Arizona Public Service Company.

Section 13. Any resolutions or parts of resolutions in conflict with the provisions of this Resolution are hereby repealed.

APPROVED AND ADOPTED this _____day of _____, 2024.

Skip Hall, Mayor

Attest:

Kristi Passarelli, City Clerk

Approved as to form:

Robert Wingo, City Attorney

LEGAL DESCRIPTION

THE EAST HALF OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 2, TOWNSHIP 3 NORTH, RANGE 1 WEST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA;

EXCEPT THE NORTH 180.00 FEET.

ENGINEER

BFH GROUP
3707 EAST SOUTHERN AVENUE
MESA, ARIZONA, 85206
PHONE: 480.734.1446
CONTACT: DAVID M. BOHN

SURVEYOR

HARVEY LAND SURVEYING, INC.
P.O. BOX 10772
CASA GRANDE, ARIZONA, 85130
PHONE: 520.876.4786
CONTACT: COLE HARVEY

DEVELOPER

AT PROPERTIES
2525 E CAMELBACK RD STE-1150
PHOENIX, AZ 85106

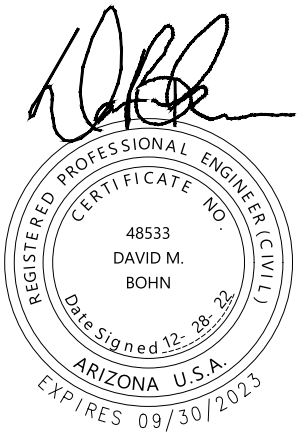
NOTE: OWNER INFORMATION WAS OBTAINED FROM COUNTY ASSESSOR AT THE TIME OF THE SURVEY AND MAY NOT REPRESENT CURRENT OWNERSHIP

BASIS OF BEARING

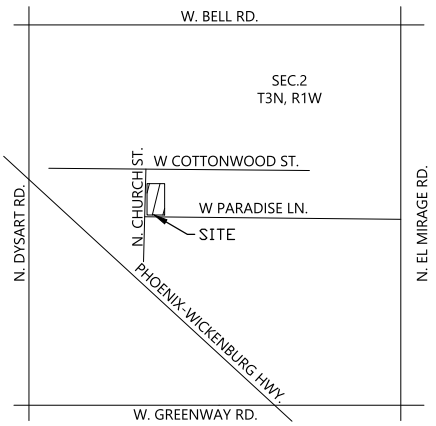
THE EAST LINE OF THE NORTHWEST QUARTER OF SECTION 2, TOWNSHIP 3 NORTH, RANGE 1 WEST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA BEARING S00°06'19"W. (ASSUMED BEARING)

LEGEND

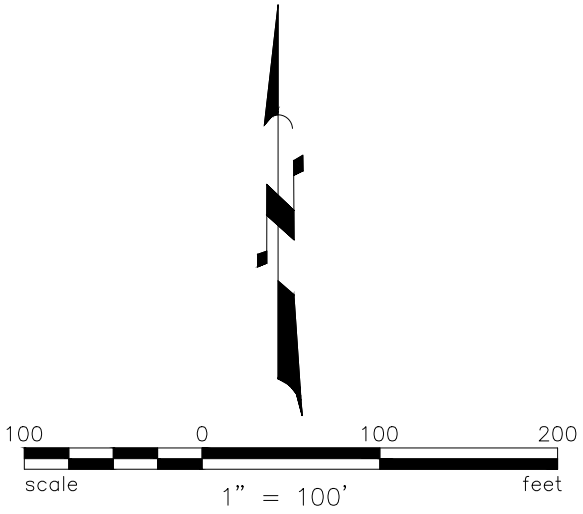
- ⦿ BRASS CAP (AS NOTED)
- ☒ GLUED TAG
- ◎ CONCRETE NAIL (AS NOTED)
- ◎ IRON PIPE
- ● REBAR PIN (AS NOTED)

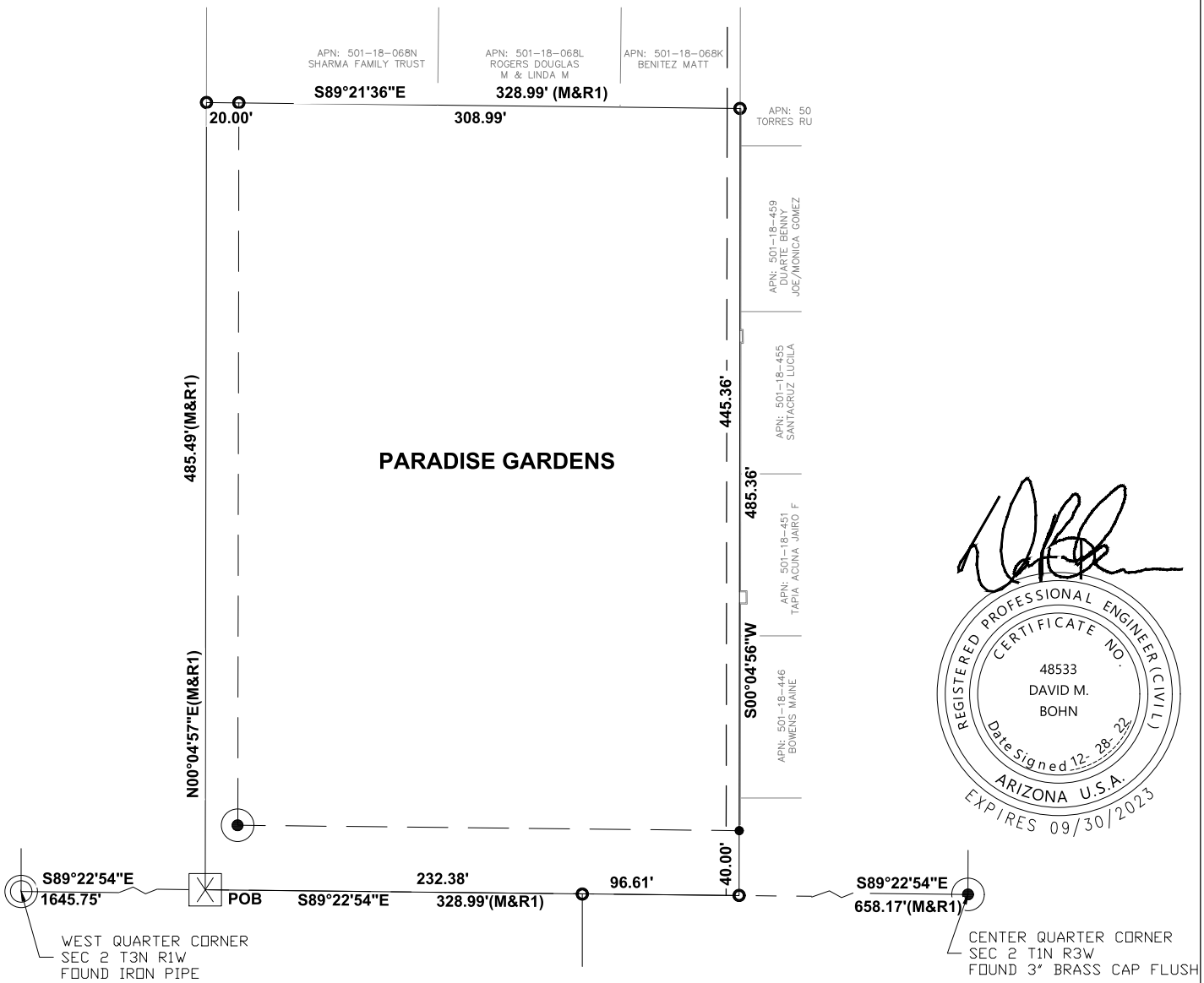


BFH GROUP 3707 EAST SOUTHERN AVENUE MESA, ARIZONA, 85206 PHONE: 480.734.1446	EXHIBIT B	
	"VILLAS AT PARADISE" 12838 W PARADISE LN SURPRISE, ARIZONA JOB #: 202110240	FIGURE 1



VICINITY MAP
N.T.S.





BFH GROUP 3707 EAST SOUTHERN AVENUE MESA, ARIZONA, 85206 PHONE: 480.734.1446	EXHIBIT B "VILLAS AT PARADISE" 12838 W PARADISE LN SURPRISE, ARIZONA JOB #: 202110240 FIGURE 1

Clear Form Print Form

STREET LIGHT IMPROVEMENT DISTRICT PETITION

TO THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE:

We, the undersigned, are all or a majority of the real property owners, exclusive of mortgagees and other lienholders, within the district named below. We petition the City Council of the City of Surprise, Arizona, to establish a street light improvement district under Arizona Revised Statutes (A.R.S.) §48-571 to 48-622, and any amendments, and specifically A.R.S. §48-615 to 48-617, to purchase electricity for lighting the public streets and/or parks within the district whose boundaries and area is described in Exhibits A and B attached hereto. This petition includes a charge for maintaining the lighting facilities.

It is hereby requested that, in compliance with the Arizona Revised Statutes, the City Council adopt a Resolution of Intention to order the proposed improvements, and that unless protests are received pursuant to A.R.S. §48-579 sufficient to bar further proceedings, the City Council proceed with the improvements petitioned for herein.

Expenses of the District (**PICK ONE)**

○ shall be paid by the levy and collection of ad valorem taxes upon assessed value of all property in the District

◉ shall be paid by the levy and collection of equal apportionment of taxes based on the number and classification of properties within the District.

Public convenience, necessity and welfare will be promoted by the establishment of the District and the real property within the District will be benefited by the District. Additional street lighting facilities may be installed and included in the District, at no investment cost to the District, as directed by the City and as approved by Arizona Public Service and the City Engineer.

WHEREFORE, we respectfully ask that this Petition be properly filed and that the Mayor and Council of the City adopt the Resolution and take such other action as is proper, necessary and appropriate to form the District and to fulfill the purposes for which the District is organized, as the Mayor and Council believe is proper and necessary.

The name of the proposed street light improvements district shall be:

SU-ParadiseGarden213

(Leave Blank - to be assigned by City staff)

PETITIONERS: Please print and sign your name

PRINT BUSINESS/ PETITIONER'S NAME	ADDRESS OF PROPERTY OWNED WITHIN DISTRICT	ASSESSOR PARCEL #	SIGNATURE
Paradise Church Business LLC	12838 W. PARADISE LANE	501-18-068P	

AVAILABILITY

This rate schedule is applicable to those portions of cities, towns and unincorporated communities in which the Company does a general retail electric business and where the Company has installed a multiple or series street lighting system of adequate capacity for the service to be rendered after December 1, 2021.

DESCRIPTION

E-68 is a rate that is applicable for lighting public streets, alleys, thoroughfares, public parks and playgrounds from dusk to dawn by use of Company's facilities.

TIME PERIOD

Dusk: The time between sunset and full night when photocontrol senses the lack of sufficient sunlight and turns on the lights.

Dawn: The time between full night and sunrise when a photocontrol senses sufficient sunlight to turn off lights.

CHARGES

The monthly bill will consist of the fixture and energy charges, plus adjustments:

I. FIXTURES (Includes Mounting Arm, if applicable)

Fixture Equipment Class	Fixture Cost Range (per unit)	Investment by Company Monthly Rate	Investment by Others Monthly Rate
A	$ 1 - $ 430	$5.72	$1.75
B	$ 431 - $ 520	$6.97	$2.12
C	$ 521 - $ 640	$8.36	$2.60
D	$ 641 - $ 820	$9.99	$3.32
E	$ 821 - $ 910	$12.64	$3.68
F	$ 911 - $ 1,010	$14.07	$4.08
G	$ 1,011 - $ 1,110	$15.38	$4.49
H	$ 1,111 - $ 1,250	$17.44	$5.04
I	$ 1,251 - $ 1,520	$19.40	$6.12
J	$ 1,521 - $ 1,670	$23.65	$6.73
K	$ 1,671 - $ 1,850	$26.29	$7.45

Note: Equipment cost greater than $1,850 shall be Customer owned.

II. ENERGY (Includes Generation, T&D, RCS & SBC)

Monthly energy charges for new lighting fixtures will be determined by the Company using the following method:

kWh = Fixture Wattage x 344 Usage Hours

Generation = kWh per month x $ 0.06621

T&D, RCS, System Benefits = kWh per month x $ 0.02682

NOTES:

1. Investment by Company. These rates are applicable where the Company provides the initial investment to purchase and install all facilities necessary for street lighting service. The Company will own, operate, and maintain the street lighting system.

2. Investment by Others. These rates are applicable in those instances where the requesting entity or individual purchases and installs the street lighting facilities at their own expense and in accordance with Company specifications. These rates will also apply in the instance where the Customer provides a non-refundable advance to the Company to cover the Company's cost of purchasing and installing the street lighting system. The Company retains ownership of the street lighting system and provides operation and maintenance for all facilities.

3. Listed kWh reflects the assigned monthly energy usage for each type of fixture and are used to determine any applicable transmission, system benefit, distribution, energy, and adjustment charges.

4. kWh is determined by the company based on the rated wattage of the equipment and an established average hourly usage per month.

5. The monthly rate for all new poles includes up to 300 feet of overhead secondary wire, or up to 300 feet of underground secondary wire if the Customer provides earthwork and conduit (excluding the underground to overhead transition).

III. POLES

				CHARGES	
			Height	Investment by Company	Investment by Others
A. Anchor Base Mounted (Flush)	Round Steel	1 Simplex Adapter	12 ft.	$12.84	$1.77
			22 ft.	$14.45	$1.99
			25 ft.	$15.64	$2.16
			30 ft.	$17.96	$2.47
			32 ft.	$18.87	$2.50
		2 Simplex Adapters	12 ft.	$13.69	$1.89
			22 ft.	$15.73	$2.17
			25 ft.	$16.41	$2.26
			30 ft.	$19.07	$2.63
			32 ft.	$20.34	$2.81
	Square Steel	5"	13 ft.	$14.72	$2.02
			15 ft.	$13.15	$1.81
			23 ft.	$15.60	$2.15
			25 ft.	$17.15	$2.36
			28 ft.	$19.04	$2.62
			32 ft.	$18.93	$2.61
	Concrete		12 ft.	$43.87	$6.04
	Fiberglass		12 ft.	$37.15	$5.11
	Decorative Transit	4"	16 ft.	$36.22	$5.00
	Decorative Transit	6"	30 ft.	$69.93	$9.63
	Hinged Poles	Square	15 ft.	$13.92	$1.14
		Round	19 ft.	$12.59	$1.03
B. Anchor Base Mounted (Pedestal)	Round Steel	1 Simplex Adapter	12 ft.	$12.35	$1.69
			22 ft.	$13.97	$1.92
			25 ft.	$15.14	$2.09
			30 ft.	$17.48	$2.42
			32 ft.	$18.37	$2.53
		2 Simplex Adapters	12 ft.	$13.19	$1.81
			22 ft.	$14.74	$2.02
			25 ft.	$15.91	$2.18
			30 ft.	$18.58	$2.55
			32 ft.	$19.84	$2.73
		3 Bolt	32 ft.	$22.80	$3.13
	Square Steel	5"	13 ft.	$14.24	$1.97
			15 ft.	$14.56	$1.99
			23 ft.	$15.11	$2.09
			25 ft.	$16.67	$2.31
			28 ft.	$18.52	$2.55
			32 ft.	$19.23	$2.63

III. POLES (cont.)

				CHARGES	
			Height	Investment by Company	Investment by Others
C. Direct Bury	Round Steel		19 ft.	$19.43	$2.68
			30 ft.	$15.17	$2.81
			38 ft.	$18.51	$2.88
		Self	40 ft.	$22.80	$3.61
		Stepped	25 ft.	$52.45	$4.28
			32 ft.	$55.24	$4.51
			49 ft.	$68.57	$9.45
	Square Steel	4"	34 ft.	$16.74	$2.90
		5"	20 ft.	$15.90	$2.63
			30 ft.	$16.57	$2.73
			38 ft.	$17.98	$3.12
		8"	28 ft.	$30.01	$2.44
			32 ft.	$31.37	$2.57
	Decorative Transit		41 ft 6	$21.60	$3.17
	Decorative Transit		47 ft.	$26.91	$3.96
	Steel Distribution Pole (for lighting only)		35 ft.	$24.84	$3.27
D. Post Top	Decorative Transit Anchor Base		16 ft.	$37.00	$5.08
	Gray Steel/Fiberglass		23 ft.	$12.83	$2.11
	Black Steel		23 ft.	$14.14	$2.33
E. Existing distribution pole suitable for streetlight use				$1.56	--

IV. ANCHOR BASE

			CHARGES	
		Height	Investment by Company	Investment by Others
A. Flush		4 ft.	$10.45	$1.44
		6 ft.	$12.47	$2.16
B. Pedestal		8 ft.	$14.29	$2.49
	For 32' Round Steel Pole only	4 ft. 6"	$9.91	$1.71

V. CHARGES FOR OPTIONAL OR ADDITIONAL COMPANY OWNED EQUIPMENT

Underground Circuit Charges	
a. Per foot of cable, installed under paving	$0.16652
b. Per foot of cable, not installed under paving	$0.05877

TRIP CHARGE

A $150.00 trip charge per light will be charged when a Customer requests a disconnect or reconnect of service in order to accommodate the maintenance activities of the Customer or its designee(s) on their street lighting equipment.

ADJUSTMENTS

The bill will include the following adjustments:

1. The Renewable Energy Standard charge, Adjustment Schedule REAC-1.
2. The Power Supply Adjustment charges, Adjustment Schedule PSA-1.
3. The Transmission Cost Adjustment charge, Adjustment Schedule TCA-1.
4. The Environmental Improvement Surcharge, Adjustment Schedule EIS.
5. The Demand Side Management Adjustment charge, Adjustment Schedule DSMAC-1.
6. Direct Access Customers returning to Standard Offer service may be subject to a Returning Customer Direct Access Charge, Adjustment Schedule RCDAC-1.
7. The Tax Expense Adjustor Mechanism charge, Adjustment Schedule TEAM
8. Any applicable taxes and governmental fees that are assessed on APS's revenues, prices, sales volume, or generation volume.

SERVICE DETAILS

1. Street lighting facilities installed under this rate schedule are of the type currently being furnished by Company as standard at the time service is initially requested. Standard facilities are those listed in the Company's Transmission and Distribution Construction Standards book.

2. The Customer's bill will not be reduced due to photocontrol or cable repair or replacement outages.

3. Non-standard facilities (non-standard being defined as any facility not listed in the Company's Transmission and Distribution Construction Standards book) do not qualify for this rate schedule. At the Company's discretion, such facilities may be served under another of the Company's rate schedules.

4. The Company will extend its standard street lighting system up to a distance of 300 feet for each additional lighting installation without cost at the request of the Customer. When the extension is underground, the customer will provide earthwork as specified in the Company's Service Schedule 3, Conditions Governing Extensions of Electric Distribution Lines and Services; or, at the applicant's request, the Company will provide such earthwork and the applicant will be required to pay a non-refundable contribution in aid of construction equal to the cost of such earthwork. Any additional extension required (over and above the first 300 feet) will be provided by Company for a contribution in aid of construction equal to the cost of the additional extension.

    a. Extensions to isolated areas requiring a substantial extension of the electric distribution system, as opposed to an extension of the street lighting system, will require a special study to determine the terms and conditions under which the Company will undertake such an extension.

5. APS provides electric service under the Company's Service Schedules. These schedules provide details about how the Company serves its Customers, and they have provisions and charges that may affect the Customer's bill. In addition, service may be subject to special terms and conditions as provided for in a Customer contract, maintenance, or service agreement.

VILLAS AT PARADISE

N CHURCH ST & W PARADISE LN

STREET LIGHT DESIGN

STREET LIGHTING REQUIREMENTS

5.00 GENERAL NOTES:

THE FOLLOWING INFORMATION IS PROVIDED TO EMPHASIZE CRITICAL WORK AND IS INTENDED TO SUPPLEMENT THE SPECIFICATIONS. SHOULD THERE BE A CONFLICT WITH THE SPECIFICATIONS, THIS DOCUMENT SHALL TAKE PRECEDENCE.

ALTERNATES SHALL BE PRE-APPROVED BY THE CITY ENGINEERING MANAGER. APPROVAL OF ALTERNATE PRODUCTS SHALL BE ON AN EQUAL BASIS WITH THE PRODUCT SPECIFIED AND SHALL BE SUBMITTED A MINIMUM OF TEN (10) DAYS PRIOR TO BID OPENING. STRUCTURAL CALCULATIONS SHALL BE FURNISHED FOR ALTERNATE PRODUCTS AND CERTIFIED BY A STRUCTURAL ENGINEER, REGISTERED IN THE STATE OF ARIZONA. LUMINAIRES AND LAMPS SHALL MEET OR EXCEED THE PHOTOMETRIC, ELECTRICAL, AND MECHANICAL REQUIREMENTS FOR THE SPECIFIED PRODUCTS.

THE CONTRACTOR SHALL COMPLY WITH STATE AND CITY STATUTES, AND MANUFACTURER'S RECOMMENDATIONS.

THE SUBMITTAL PACKAGE SHALL CONSIST OF THREE (3) COPIES OF EQUIPMENT/MATERIAL TO BE INSTALLED AND SHALL BE BOUND/STAPLED IN A FOLDER AND SUBMITTED AT THE TIME OF PERMIT APPLICATION.

PRIOR TO SUBMITTING A PROPOSAL, THE BIDDER SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS AND VISIT THE CONSTRUCTION SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL OPERATE AND WHICH WILL IN ANY WAY AFFECT THE WORK UNDER THE CONTRACT. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN THIS CONNECTION IN THE BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLIGENCE ON HIS PART.

PRIOR TO ORDERING ANY MATERIALS OR DOING ANY WORK, THE CONTRACTOR SHOULD VERIFY DIMENSIONS AT THE SITE. IMMEDIATELY REPORT DIFFERENCES TO THE ENGINEERING MGR. AND SHOULD NOT PROCEED WITH WORK UNTIL THE ENGINEERING MGR. RENDERS A DECISION. NO EXTRA CHARGES OR COMPENSATION WILL BE ALLOWED FOR DIFFERENCES IN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE DRAWINGS.

5.01 GENERAL:

THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH ALL LICENSING REQUIREMENTS SET FORTH BY THE STATE REGISTRAR OF CONTRACTORS OFFICE TO PERFORM WORK RELATING TO STREET LIGHT INSTALLATION IN THE CITY RIGHT-OF-WAY.

ONE PROJECT UNDERGROUND UTILITIES (RIGHT OF WAY) PERMIT AND ONE STREETLIGHT PERMIT FOR EACH STREET LIGHT POLE SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

5.02 WORKING / "AS BUILT" PLANS:

ACCEPTANCE OF THE COMPLETED IMPROVEMENTS WILL NOT BE GIVEN UNTIL 4 MIL PHOTO MYLAR REPRODUCIBLE "AS BUILT" PLANS HAVE BEEN SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

5.03 LIGHT POLES:

LIGHT POLES SHALL BE INSTALLED PLUMB, BE ADJUSTED TO PROVIDE PROPER ALIGNMENT TO THE ROADWAY BEING LIGHTED AND BE PROPERLY GROUNDED WHEN THE INSTALLATION IS COMPLETE.

5.04 EMBEDMENT:

DIRECT BURIED POLES SHALL BE SET IN A TWELVE (12) INCH AUGURED HOLE DEPTH AS SPECIFIED IN UNDISTURBED EARTH. POLE SHALL BE SET PLUMB IN TWO DIRECTIONS 90 DEGREES APART. HAND TAMPING OF ABC BACKFILL WITH PNEUMATIC OR VIBRATING EQUIPMENT IS THE ACCEPTABLE METHOD OF COMPACTION. BACKFILL SHALL BE COMPACTED TO 85% OF MAXIMUM DENSITY AS DEFINED BY ASTM D-2922 AND D-3017. A GROUND ROD SHALL BE INSTALLED ADJACENT TO PULL BOX IN UNDISTURBED SOIL AND A LEAD IN COPPER BOND WIRE (#6) SHALL BE INSTALLED IN 1" CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT (OR EQUAL) FOR POLE GROUNDING.

SURPLUS EXCAVATION SHALL BE DISPOSED OF BY THE CONTRACTOR.

5.05 LUMINAIRES:

LUMINAIRES SHALL BE INSTALLED LEVEL AND INCLUDE A LAMP AND PHOTOCELL. CONTRACTOR SHALL ASSURE THAT THE LUMINAIRES SHALL BE FREE OF DUST, DIRT OR ANYTHING THAT WOULD IMPAIR THE OUTPUT OF THE LIGHT BEFORE HE LEAVES THE SITE.

LUMINAIRES FURNISHED WITH MULTI-TAP BALLASTS SHALL BE REWIRED OR RECONNECTED TO MATCH THE VOLTAGE SUPPLIED BY THE ELECTRIC UTILITY COMPANY.

5.06 WIRING:

WIRING SHALL BE INSTALLED PER UTILITY STANDARDS.

5.07 GROUNDING:

EACH POLE SHALL HAVE A 8' X 5/8" COPPER CLAD GROUND ROD DRIVEN ADJACENT TO PULL BOX. A #6 BARE COPPER LEAD FROM THE GROUND ROD IN PULL BOX TO LANDING LUG IN STREET LIGHT POLE HAND HOLE.

5.08 PULL BOXES:

EXCAVATION FOR PULL BOXES AND MATERIAL SPECIFICATION SHALL BE PER THE ELECTRIC UTILITY COMPANY STANDARDS.

5.09 TRENCH

TRENCH SHALL BE INSTALLED PER THE UTILITY COMPANY STANDARDS.

THE USE OF A COMMON ELECTRIC UTILITY COMPANY TRENCH IS PERMITTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANY FOR COORDINATION OF TRENCHING AND THE INSTALLATION OF CONDUIT.

CONDUIT SHALL BE INSTALLED AT THE DEPTH SPECIFIED ON THE PLANS. CONDUIT SHALL BE 1 INCH CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT OR EQUAL. CONDUIT MUST BE UL RATED AND SUITABLE FOR UNDERGROUND USE.

CONNECTIONS SHALL BE PER UTILITY STANDARDS.

5.12 LIGHT POLE IDENTIFICATION:

THE CONTRACTOR SHALL FURNISH AND INSTALL A NUMBER ON EACH LIGHT POLE. STREET LIGHT POLE IDENTIFICATION AND SPECIFICATIONS WILL BE PROVIDED BY THE CITY OF SURPRISE.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO RESTORE ALL PROPERTY, LANDSCAPING, PAVING AND DRIVEWAYS THAT ARE DISTURBED DURING STREET LIGHT CONSTRUCTION TO THEIR ORIGINAL CONDITION IN CONFORMANCE WITH "MAG" SPECIFICATION SECTION 107.9.

THE DEVELOPER SHALL BE RESPONSIBLE FOR FURNISHING ALL PERSONNEL AND EQUIPMENT TO SUCCESSFULLY PERFORM THE FOLLOWING TEST.

PRIOR TO ACCEPTANCE, THE DEVELOPER SHALL ENERGIZE AND OPERATE THE ENTIRE ROADWAY LIGHTING SYSTEM, FROM SUNSET TO SUNRISE FOR TWO CONSECUTIVE DAYS WITHOUT INTERRUPTION OR FAILURE. IF A LAMP OR BALLAST SHOULD FAIL, IT SHALL BE IMMEDIATELY REPLACED.

THE CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE ENGINEERING MANAGER, AGAINST IMPERFECT WORKMANSHIP, FAILURE, MALFUNCTION OF MATERIALS AND/OR EQUIPMENT DUE TO FAULTY OR IMPERFECT WORKMANSHIP. THIS GUARANTEE IS TO BE IN WRITING TO THE CITY AT THE TIME OF ISSUING FINAL ACCEPTANCE. WORK FOUND TO BE DEFECTIVE WITHIN THE WARRANTY PERIOD SHALL BE REPLACED WITHOUT COST TO THE CITY.

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 REPLACEDIN 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.

CITY OF SURPRISE APPROVAL

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.

CITY OF SURPRISE ENGINEER **DATE**

UTILITIES WITHIN OR AFFECTED BY THE PROJECT	
UTILITY CONTACT	DATE SUBMITTED
ARIZONA PUBLIC SERVICE	5/24/2022
CENTURY LINK	5/24/2022
COX COMMUNICATIONS	5/24/2022
SOUTHWEST GAS	5/24/2022

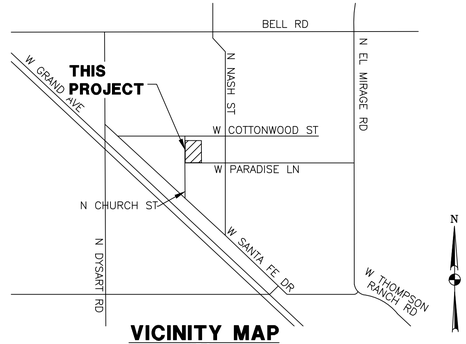
NOTE

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

B. THE ELECTRICAL/MAINTENANCE COSTS OF ALL STREET LIGHTS ON LOCAL AND COLLECTOR STREETS ARE TO BE PAID BY THE ADJACENT PROJECT OR THE ADJACENT DEVELOPMENT'S STREET LIGHT IMPROVEMENT DISTRICT (SLID). THE ELECTRICAL / MAINTENANCE COSTS OF ALL STREET LIGHTS ON ARTERIAL STREETS ARE TO BE BILLED TO THE CITY OF SURPRISE'S ENERGY BILL.

LED NOTE

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.



VICINITY MAP
N.T.S.

SHEET INDEX

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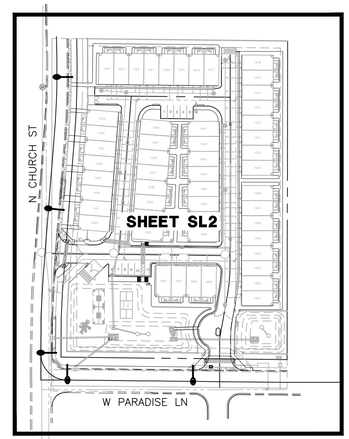

KEY MAP
N.T.S.

POWER CONDUIT NOTE

TRENCH & CONDUIT RUNS FROM STREET LIGHT PULL BOX TO POINT OF ELECTRICAL SERVICE WILL BE DESIGNED BY THE POWER COMPANY, AND ARE SHOWN ON POWER COMPANY PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THESE PLANS FROM DEVELOPER/OWNER, AND INCLUDE THESE RUNS IN THE BID. COORDINATE THIS WORK WITH THE POWER COMPANY.

CIVIL ENGINEER
BFH GROUP
3707 E. SOUTHERN AVE.
MESA, AZ 85206
PHONE: (480) 734-1446
CONTACT: DAVID BOHN

ELECTRICAL ENGINEER
WRIGHT ENGINEERING CORPORATION
165 EAST CHILTON DRIVE
CHANDLER, AZ 85225
PHONE: (480) 497-5829
CONTACT: CLIFF TOLMAN
EMAIL: CTOLMAN@WRIGHTENGINEERING.US

STREET LIGHTING (APS AREA)														
KEY NO.	SYMBOL	STREET TYPE	OFFSET BEHIND B/C	QUANTITY	POLE		MAST ARM	LUMINAIRE						
					POLE HEIGHT	FOUNDATION	SIZE	MOUNTING HEIGHT	LUMENS	WATTAGE	I.E.S. DIST.	VOLTAGE	TYPE	STYLE
(2)		LOCAL	PER PLANS	3	30'-6"	DIRECT BURY	3'X8'	27'-3"	4,800	43 W	TYPE 2	*	LED	ROADWAY GRAY
(3)		COLLECTOR	PER PLANS	2	38'-6"	DIRECT BURY	3'X8'	34'-3"	7,800	71 W	TYPE 3	*	LED	ROADWAY GRAY

*PER UTILITY COMPANY REQUIREMENTS

Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348) in Maricopa County: (602) 263-1100

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WRIGHT ENGINEERING PROJECT NO:
22247

DESIGN BY: NAM
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:

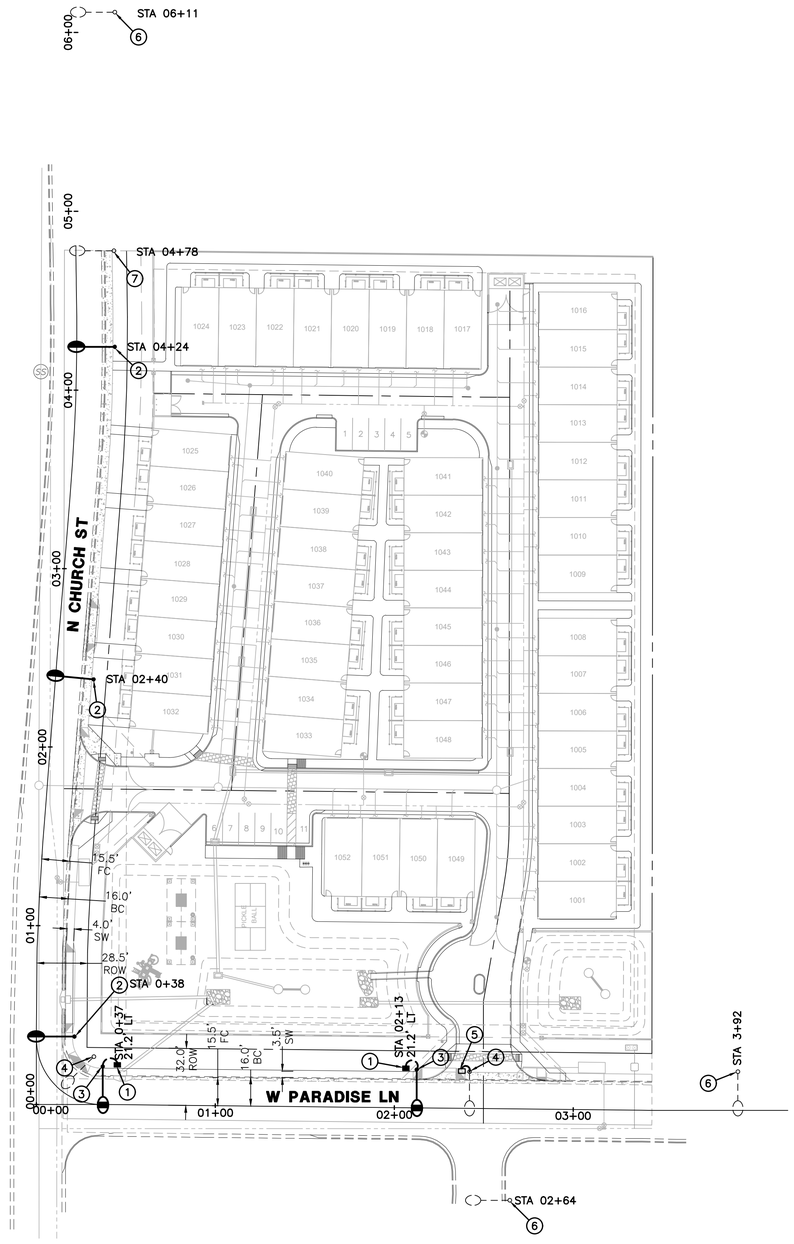
SURPRISE, ARIZONA
VILLAS AT PARADISE
N CHURCH ST & W PARADISE LN
STREET LIGHT COVER SHEET

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	3-9-23	1ST SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No. 57159
CLIFFORD M. TOLMAN
Date Signed 6-2-23
Expires 3-31-26

DRAWING NO:
SL1
OF 4

FS22-1248



LEGEND

- 4,800 LUMEN LED STREET LIGHT, ROUND POLE
- 7,800 LUMEN LED STREET LIGHT, ROUND POLE
- EXISTING STREET LIGHT
- PULL BOX
- NEW CONDUIT RUN
- FIRE HYDRANT
- EXISTING STREET LIGHT PULL BOX

CONSTRUCTION NOTES

1. INSTALL APS PULL BOX NEXT TO POLE. 1" CONDUIT WITH (2) #14 TYPE THHN/THWN & (1) #14 BARE BOND FROM PULL BOX TO FUSE HOLDER IN STREET LIGHT PER APS DETAILS & SPECIFICATIONS.
2. REMOVE EXISTING LUMINAIRE AND DISPOSE OF PROPERLY. REPLACE LUMINAIRE WITH NEW 43W LED (4,800 LUMEN) LUMINAIRE (SEE LUMINAIRE TABLE) AND REPLACE PHOTOCELL.
3. 71W LED (7,800 LUMEN) LUMINAIRE (SEE LUMINAIRE TABLE), PHOTOCELL, 38'-6" DIRECT BURIED POLE, 3' X 8' MAST ARM PER APS DETAIL 8040 (SEE SHEET SL3). (2) #14 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. WIRING, FUSING, & GROUNDING PER APS DETAILS & SPECIFICATIONS.
4. REMOVE EXISTING POLE AND FIXTURE AND SALVAGE TO OWNER. COORDINATE DISCONNECT OF POWER WITH APS
5. REMOVE EXISTING PULL BOX AND DISPOSE OF PROPERLY.
6. EXISTING STREET LIGHT TO REMAIN.
7. REMOVE EXISTING LUMINAIRE AND DISPOSE OF PROPERLY. COORDINATE DISCONNECT OF POWER WITH APS.

STREET LIGHTING (APS AREA)

KEY NO.	SYMBOL	STREET TYPE	OFFSET BEHIND B/C	QUANTITY	POLE		MAST ARM	LUMINAIRE						
					POLE HEIGHT	FOUNDATION	SIZE	MOUNTING HEIGHT	LUMENS	WATTAGE	I.E.S. DIST.	VOLTAGE	TYPE	STYLE
(2)		LOCAL	PER PLANS	3	30'-6"	DIRECT BURY	3'X8'	27'-3"	4,800	43 W	TYPE 2	*	LED	ROADWAY GRAY
(3)		COLLECTOR	PER PLANS	2	38'-6"	DIRECT BURY	3'X8'	34'-3"	7,800	71 W	TYPE 3	*	LED	ROADWAY GRAY

*PER UTILITY COMPANY REQUIREMENTS

GRAPHIC SCALE
40 20 0 20 40 80
1 INCH = 40 FEET

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ARIZONA 811
Arizona Blue Stake, Inc.
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in Maricopa County: (602) 263-1100

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WRIGHT ENGINEERING PROJECT NO:
22247

DESIGN BY: NAM
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:

SURPRISE, ARIZONA
VILLAS AT PARADISE
N CHURCH ST & W PARADISE LN

STREET LIGHT PLAN

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	3-9-23	1ST SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
57159
CLIFFORD M. TOLMAN
Date Signed 6-12-23
Expires 3-31-26

DRAWING NO:
SL2
OF 4

FS22-1248

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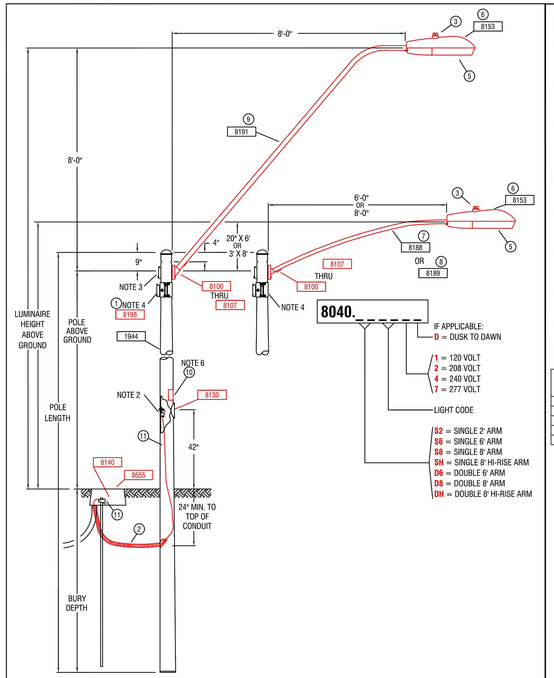

CONSTRUCTION NOTES:

1. ADJUST PHOTO EYE TO FACE NORTH.
2. A GROUND ROD IS PROVIDED WITH THE J-BOX. WHERE A GROUND ROD CAN NOT BE DRIVEN ALTERNATE GROUND SHALL BE USED. SEE 2449 THRU 2460 FOR APPROVED ALTERNATES.
3. THE 40'-6" SELF-SUPPORTING STEEL POLE AND ONE OF THE 38'-6", HAVE TWO, MANUFACTURER INSTALLED SIMPLEX FITTINGS 180° APART FOR DOUBLE ARMS, SEE CHART.
4. APN 33701054 IS A POLE BAND ADAPTOR WITH A SIMPLEX FITTING. ADAPTOR IS REQUIRED FOR THE SECOND ARM IN DOUBLE ARM APPLICATIONS ON EXISTING POLES IN THE FIELD WITHOUT TWO SIMPLEX FITTINGS. SEE 8198 FOR AVAILABLE SIZES.
5. THE BROWN PHOTO CONTROL IS A FAIL OFF CONTROL AND SHALL BE USED WITH ALL INDUCTION AND LED LUMINAIRES.
6. SIGN, "NOTICE THIS POLE IS OWNED AND MAINTAINED BY APS. DISCONNECT INSIDE," IS REQUIRED ON ALL DUSK-TO-DAWN AND AREA LIGHTING APPLICATIONS.
7. POLES THAT HAVE MORE THAN ONE LUMINAIRE REQUIRE A SEPARATE CIRCUIT WITH FUSING FROM THE J-BOX TO EACH LUMINAIRES.
8. THE LIGHT CODE PROVIDES TWO SAME WATTAGE LUMINAIRES WHEN DOUBLE ARMS ARE SPECIFIED.
9. SEE SPEC 9130-8140 FOR IN-LINE FUSE FOR UNDERGROUND FEEDS.
10. SEE 8100 THRU 8107 FOR OVERHEAD ATTACHMENTS.

POLE CODE	POLE LENGTH	BURY DEPTH	POLE ABOVE GROUND	LUMINAIRE HEIGHT ABOVE GROUND ON ARM		
				20' X 6'	9' X 8'	8' X 8'
1944.19	19'-0"	5'-0"	14'-0"	14'-11"	16'-3"	---
1944.30	30'-6"	5'-6"	25'-0"	25'-11"	27'-3"	---
1944.38	38'-6"	6'-6"	32'-0"	32'-11"	34'-3"	39'-3"
1944.38X	38'-6"	6'-6"	32'-0"	32'-11"	34'-3"	39'-3"
1944.40X	40'-6"	8'-6"	32'-0"	32'-11"	34'-3"	39'-3"

MATERIAL LIST

CODE	8040.S6	8040.S8	8040.SH	8040.D6	8040.D8	8040.DH	
ITEM	QTY	QTY	QTY	QTY	QTY	QTY	DESCRIPTION / APN
1	-	-	-	1	1	1	ADAPTER BAND W/ SIMPLEX 3" — 33701054
2	10	10	10	10	10	10	CONDUIT 1" PVC FLEX CORR — 32900891
3	1	1	1	2	2	2	CONTROL PHOTO MULTI BLACK — 00063965
4	VAR	VAR	VAR	VAR	VAR	VAR	CONTROL PHOTO MULTI BR-20 — 00073241
5	1	1	1	2	2	2	LAMP - SEE 8164 - 8171
6	1	1	1	2	2	2	LUMINAIRE - SEE CHART
7	1	-	-	2	-	-	MAST ARM ST LT 2" X 20" X 6' — 33701112
8	-	1	-	-	2	-	MAST ARM ST LT 2" X 9" X 8' — 33701124
9	-	-	1	-	-	2	MAST ARM ST LT 2" X 8" X 8' — 33701123
10	1	1	1	1	1	1	SIGN POLE OWNED BY APS — 00050092
11	10	10	10	10	10	10	WIRE BARE #6 SOLID CU — 33007580

ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS				
BY	LDR.	MGR.	DATE	REV.
KLS	B. BOOKER	D. LAMONTAGNE	11/2011	10

LIGHTS
ROADWAY LUMINAIRE ON
20' X 6', 3' X 8', OR 8' X 8' MAST ARM ON
19'-0", 30'-0", 38'-0" OR 40'-6" STEEL POLES

SH 1 OF 2

8040

ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS				
BY	LDR.	MGR.	DATE	REV.
KLS	B. McMINN	S. SIERRA	01/2007	9

LIGHTS
ROADWAY LUMINAIRE ON
20' X 6', 3' X 8' OR 8' X 8' MAST ARMS ON
19'-0", 38'-0" OR 40'-6" STEEL POLES

SH 2 OF 2

8040

LUMINAIRE TABLE

GRAY ROADWAY SCALEABLE LED 3000K

LIGHT CODE	COLOR	APN	WATTS	VOLTS	INITIAL LUMENS	CATALOG #
CL50	GRAY	00141040	32	120/208/240/277	3,900	ERLC004B430AGRAYGLRV1013
CL51		00141041	43	120/208/240/277	4,800	ERLC005A430AGRAYGLRV1013
CL52		00141043	71	120/208/240/277	7,800	ERL1008C330AGRAYGLRX162
CL53		00141045	96	120/208/240/277	11,000	ERLH011C330AGRAYGLV1108
CL54		00141046	174	120/208/240/277	20,100	ERL2021C330AGRAYGLR113

WRIGHT ENGINEERING PROJECT NO:
22247

DESIGN BY: NAM
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:

SURPRISE, ARIZONA
VILLAS AT PARADISE
N CHURCH ST & W PARADISE LN
STREET LIGHT DETAILS

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	3-9-23	1ST SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
57159
CLIFFORD M. TOLMAN
Date Signed 5-12-23
Expires 3-31-26

DRAWING NO:
SL3
OF 4

FS22-1248

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In Maricopa County: (602) 263-1100

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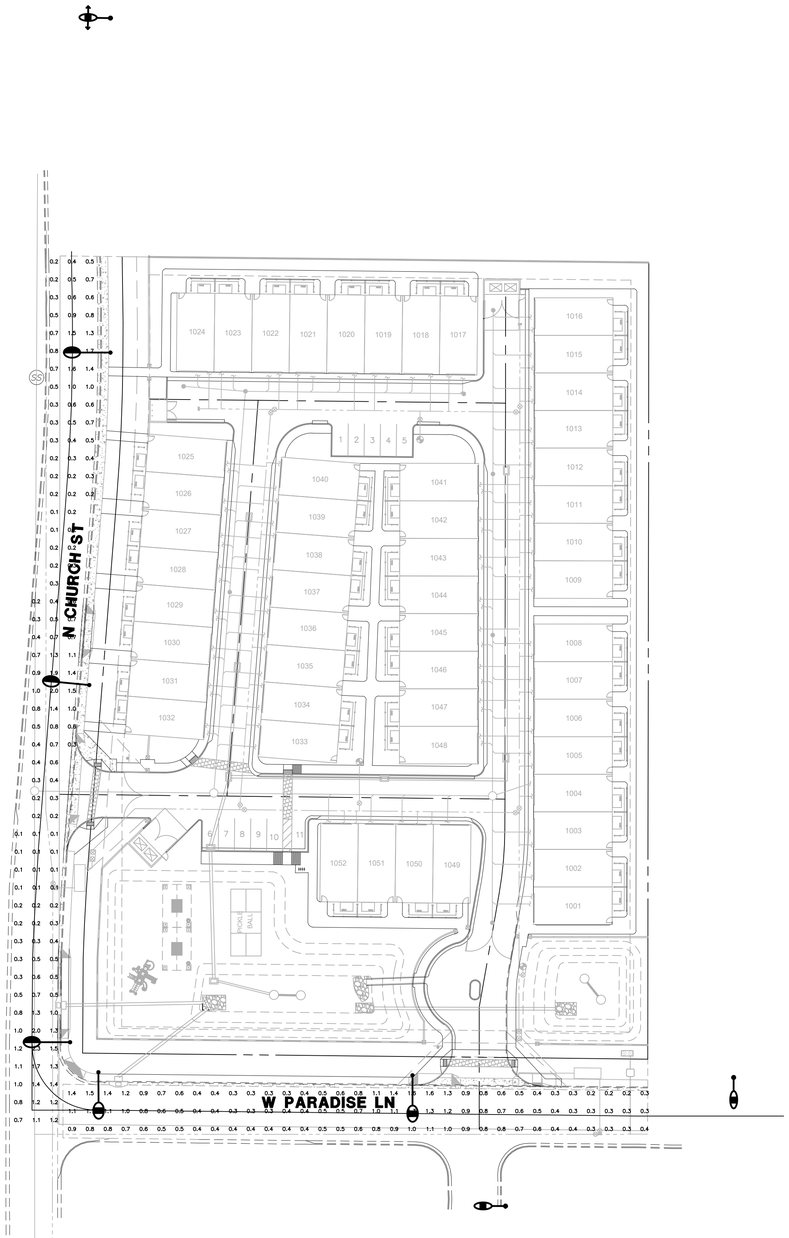

PHOTOMETRIC RESULTS

CHURCH ST
138 points at z=0, sp 10ft by 10ft
HORIZONTAL FOOTCANDLES

Average	0.6
Maximum	2.3
Minimum	0.1
Avg:Min	6.43
Max:Min	23.00
Coef Var	0.78
UnifGrad	2.50

PARADISE LN
99 points at z=0, sp 10ft by 10ft
HORIZONTAL FOOTCANDLES

Average	0.7
Maximum	1.6
Minimum	0.2
Avg:Min	3.30
Max:Min	8.00
Coef Var	0.54
UnifGrad	1.50

PHOTOMETRIC LEGEND

43W LED Street Light 27.25'
candela file 'ERLC_05A530_____-120-277V.IES'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 36
mounting height= 27.25 ft
number locations= 3, number luminaires= 3
kw all locations= 0.1

71W LED Street Light 34.25'
candela file 'ERL1_080330_____.IES'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 71
mounting height= 34.25 ft
number locations= 2, number luminaires= 2
kw all locations= 0.1

100W HPS Shoebox
Type II Distribution, 4' Mast arm (9,500 lumen)
candela file 'GE8596.IES'
1 lamp(s) per luminaire, 10000 initial lumens per lamp
Light Loss Factor = 0.810, watts per luminaire = 100
mounting height= 25 ft
number locations= 1, number luminaires= 1
kw all locations= 0.1

150W HPS Cobrahead
Type III Distribution, 3' X 8' Mast Arm
candela file 'GE7285.IES'
1 lamp(s) per luminaire, 16000 initial lumens per lamp
Light Loss Factor = 0.710, watts per luminaire = 150
mounting height= 34.25 ft
number locations= 2, number luminaires= 2
kw all locations= 0.3

GRAPHIC SCALE
40 20 0 20 40 80
1 INCH = 40 FEET

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ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
in Maricopa County: (602) 263-1100

WRIGHT ENGINEERING PROJECT NO:
22247
DESIGN BY: NAM
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:

SURPRISE, ARIZONA
VILLAS AT PARADISE
N CHURCH ST & W PARADISE LN

PHOTOMETRIC ANALYSIS

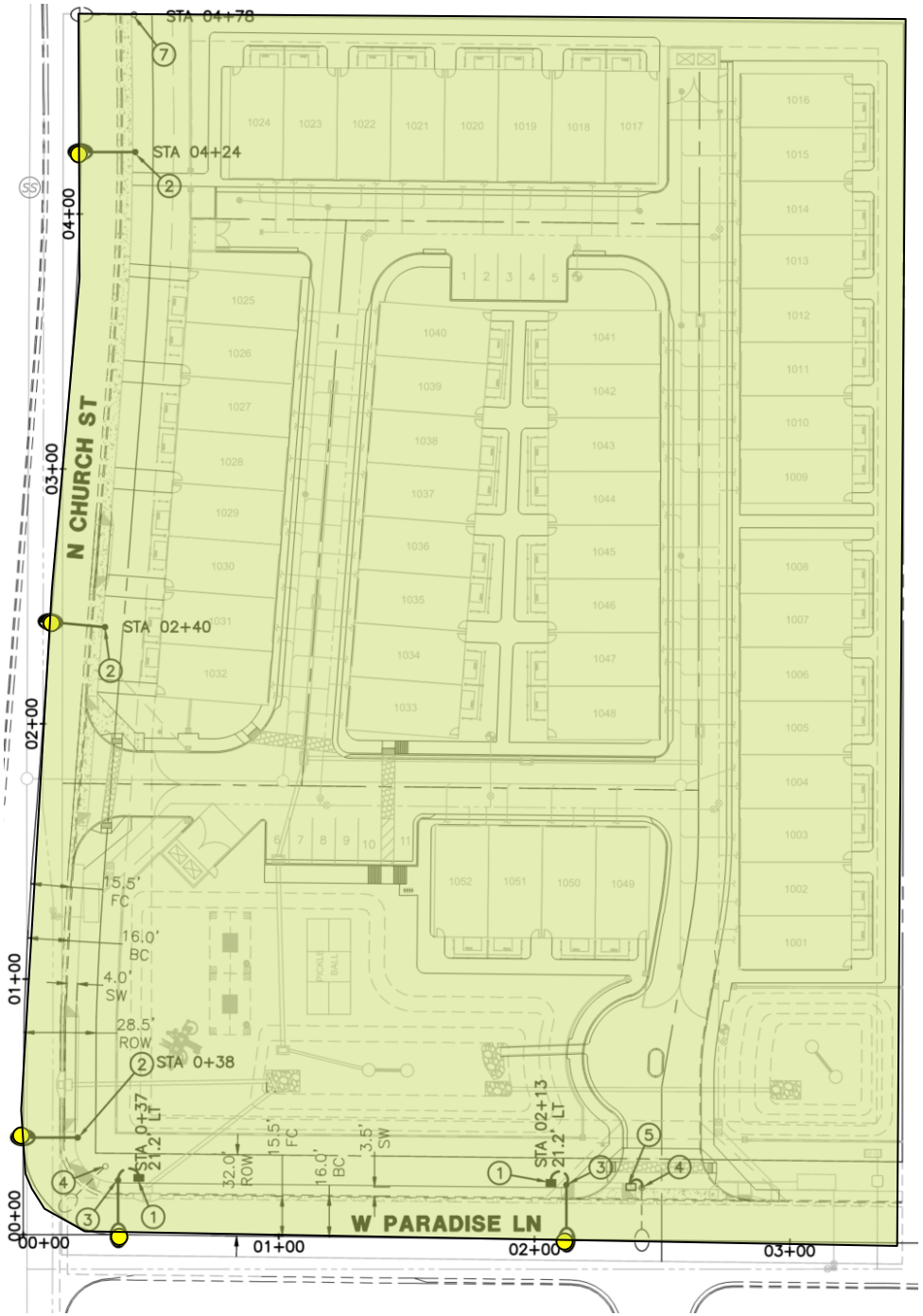
NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	3-9-23	1ST SUBMITTAL

Registered Professional Engineer (Electrical)
Certificate No.
57159
CLIFFORD M. TOLMAN
Date Signed 3-9-23
Expires 3-31-26

DRAWING NO:
SL4
OF 4

FS22-1248

PARADISE GARDEN



Street Lights:

- Street Light Pole
- 5 new poles
- SLID Boundary

CITY OF SURPRISE
Regular City Council Meeting

Council Meeting Date: May 7, 2024
Submitting Department: Public Works
Staff Recommendations:

Contact Person: Kristin Tytler, Department Director
District: District 1

Consent: Yes Regular: No Public Hearing: No Report/Discussion: No

Agenda Wording:
Consideration and action pertaining to the immediate formation of a lighting improvement district known as City of Surprise, Arizona, SU-DerVallyNCitrs199 pursuant to A.R.S. § 48-616 for the purpose of purchasing facilities and energy for lighting the public streets; Resolution #2024-61.

Motion:
I move to approve Resolution #2024-61.

Background:
The City has verified that the Petition for the proposed streetlight improvement district contains the signatures of all the real property owners in the district, exclusive of mortgagees and other lien holders.

The City and Arizona Public Service Company ("APS") have approved the street layout and facilities design. The electric rates are established by APS tariff.

The lighting improvements are more than local or ordinary public benefits, and the expenses of the district will be paid for by the levy and collection of ad valorem taxes based upon the assessed value of all property in the District.

Objective Analysis:
A SLID is a neighborhood partnership and very common practice in which property owners in a defined area agree to pay the costs to operate and maintain their immediate area's streetlights through a property tax. All new developments in the City of Surprise require a SLID. This action will form the SLID boundary for the Willow Trails Hometown development.

Policy Compliant:
The Surprise Municipal Code requires that street lighting that serves a defined area be paid for through revenues obtained from the specific area being served by such street lighting. In these instances, a Streetlight Improvement District (SLID) is formed. The city strives to assure that residents are subject to only one SLID and that the boundaries of each SLID accurately reflect the service area. This item is consistent with these objectives.

Financial Impact:

Once the SLID is illuminated, the City will begin levying the SLID to cover SLID expenses. At the current time, the SLID is not incurring any expense because the SLID lights have not been illuminated. Therefore, there is no current financial impact.

Budget Impact:

Since the SLID is not illuminated, there is no revenue or expense budgeted in FY2024 nor are there budgets planned for FY2025 for the SLID. If the SLID is illuminated in FY2024 or FY2025, expenses will be charged to the SLID and recouped with a future levy. A separate fund for this district will be created to track the revenue and expenses.

FTE Impact:

This item does not have an impact on current staff levels.

ATTACHMENTS:

1. 01 Res 2024-61 SLID Willow Trails FS21-380_BAC_final
2. 02 Petition
3. 03 Streetlights
4. 04 Willow trails_Exhibit Template SLIDS

RESOLUTION # 2024-61

A RESOLUTION OF THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE, ARIZONA, DECLARING ITS INTENTION TO ESTABLISH A STREET LIGHT IMPROVEMENT DISTRICT TO PURCHASE ENERGY FOR LIGHTING THE PUBLIC STREETS AND PARKS IN THE AREA WITHIN THE CORPORATE LIMITS OF THE CITY OF SURPRISE, ARIZONA, DESCRIBED ON EXHIBIT A, ATTACHED HERETO; DECLARING SUCH IMPROVEMENTS TO BE OF MORE THAN LOCAL OR ORDINARY PUBLIC BENEFIT AND THAT THE EXPENSES THEREOF BE PAID FOR BY THE LEVY AND COLLECTION OF AD VALOREM TAXES UPON THE ASSESSED VALUATION OF ALL REAL AND PERSONAL PROPERTY IN A CERTAIN DISTRICT TO BE KNOWN AS "CITY OF SURPRISE, ARIZONA, SU-DERVALLYNCITRS199 LIGHTING IMPROVEMENT DISTRICT"; AND ORDERING THAT SUCH IMPROVEMENTS BE PROVIDED FOR UNDER THE PROVISIONS OF SECTION 48-572, ARIZONA REVISED STATUTES.

WHEREAS, the owners, exclusive of mortgagees and other lienholders, of all of the real property (hereinafter referred to as "Petitioner") in the hereinafter described District, acting pursuant to the provisions of Sections 48-615(A) and 48-617(A), Arizona Revised Statutes, have petitioned the Mayor and Council of the City of Surprise, Arizona (hereinafter referred to as "City"), to adopt a resolution of intention (hereinafter referred to as "Resolution") ordering the purchase of energy for the lighting of the public street and parks (hereinafter referred to as "Improvements") for the real property legally described in Exhibit A (such area hereinafter referred to as the "District") with such boundaries as shown in the map in Exhibit B attached hereto pursuant to the provisions of Section 48-576, Arizona Revised Statutes, giving the City immediate jurisdiction to order the improvements pursuant to the provisions of Section 48-581, Arizona Revised Statutes, without the necessity of the publications or posting of this Resolution provided for in Sections 48-578, Arizona Revised Statutes;

WHEREAS, the City has verified that Petitioner is the owner, exclusive of mortgagees and other lienholders, of all of the real property included within the boundaries of the District, and;

WHEREAS, the Mayor and Council of the City hereby find and determine that they have jurisdiction to adopt this Resolution to order the Improvements pursuant to the provisions of Section 48-576, Arizona Revised Statutes, and have immediate jurisdiction to adopt this Resolution ordering the Improvements pursuant to the provisions of Section 48-581, Arizona Revised Statutes without the necessity of publications and posting of this Resolution as provided for in Section 48-578, Arizona Revised Statutes;

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Surprise, Arizona, as follows.

Section 1. The City, after verifying ownership of the real property included within the boundaries of the District, hereby finds the Petitioner is the owner, exclusive of mortgagees and other lienholders, of all of the real property included within the boundaries of the District.

Section 2. The name of the District shall be "CITY OF SURPRISE, ARIZONA, SU-DERVALLYNCITRS199 LIGHTING IMPROVEMENT DISTRICT."

Section 3. The District is formed, and shall exist, pursuant to the provisions of Title 48, Chapter 4, Article 2, Arizona Revised Statutes, and Section 48-616, Arizona Revised Statutes.

Section 4. The public interest or convenience requires, and it is the intention of the Mayor and Council of the City to order the Improvement as so described above.

Section 5. The Improvements, in the opinion of the Mayor and Council of the City, are of more than local or ordinary public benefit and are of special benefit to the respective lots, pieces and parcels of real property in the District, and the Mayor and Council of the City hereby make and order the expense of the Improvements payable from the levying and collection of ad valorem taxes upon the assessed value of all real and personal property in the District to be known and designated as "CITY OF SURPRISE, ARIZONA, SU-DERVALLYNCITRS199 LIGHTING IMPROVEMENT DISTRICT" and hereby declare that the District is as legally described on Exhibit A attached hereto with the boundaries as shown in the map in Exhibit B attached hereto. Any public street or alley within the District shall be omitted from the assessment. Any lot belonging to the United States, the State, a county, city, school district or political subdivision or institution of the state or county within the District shall be omitted from the assessment.

Section 6. The Superintendent of Streets or equivalent of the City shall not be required to post or cause to be posted notices of the Resolution of Intention. The Clerk of the City shall certify to the passage of this Resolution of Intention but shall not be required to cause the same to be published in a newspaper published and of general circulation in the City.

Section 7. The Mayor and Council of the City shall make annual statements and estimates of the expenses of the District, which shall be provided for by the levy and collection of ad valorem taxes upon the assessed value of all the real and personal property in the District; shall publish notice thereof; shall have hearings thereon; and shall adopt them at the times and in the manner provided for incorporated cities and towns by the applicable portions of Section 42-17101, et seq., 42-17152, Arizona Revised Statutes. The Mayor and Council of the City shall, on or before the third Monday in August of each year, fix, levy, and assess the amount to be raised by ad valorem taxes upon all of the property of the District and collect, as Maricopa County, Arizona (the "County") taxes are collected, the amounts shown by the statements and estimates as adopted by the Mayor and Council of the City. All statutes providing for the levy and collection of State of Arizona and County taxes, shall be applicable to District taxes as provided to be levied under Section 48-616, Arizona Revised Statutes.

Section 8. The District shall not be authorized to issue bonds and no assessment for District purposes against the property within the District shall exceed One Dollar and Twenty Cents ($1.20) per each hundred dollars of taxable valuation thereof in any year.

Section 9. The District shall not engage in any activity other than as provided in Section 48-616, Arizona Revised Statutes, i.e., contracting for and purchasing of energy for street and public park lighting.

Section 10. The formation of the District shall not be considered as preventing the subsequent establishment of improvement districts for any other purpose authorized by law, including improvement districts for the purpose of construction street lighting facilities within any part or all of the same territory as the District.

Section 11. The type of lighting facilities to be installed in the District and the locations thereof shall consist of those lighting facilities and locations described in the petition submitted by Petitioner, or as may be approved by the City.

Section 12. The rate to be paid for purchasing the energy for the District shall be the rate described in the petition submitted by Petitioner, or as may be approved by the Arizona Public Service Company.

Section 13. Any resolutions or parts of resolutions in conflict with the provisions of this Resolution are hereby repealed.

APPROVED AND ADOPTED this_____day of _____2024.

Skip Hall, Mayor

Attest:

Kristi Passarelli, City Clerk

Approved as to form:

Robert Wingo, City Attorney

EXHIBIT "A"
WILLOW TRAILS, PHASE 1 & 2
STREET LIGHT IMPROVEMENT DISTRICT
LEGAL DESCRIPTION

All that certain lot, tract, or parcel of land, situated in a portion of the West Half of the Northwest Quarter of Section 23, Township 4 North, Range 2 West of the Gila and Salt River Base and Meridian, Maricopa County, Arizona, and being more completely described as follows, to-wit:

COMMENCING at a found City of Surprise brass cap stamped "RLS# 19344, dated 2017" for the Northwest corner of said Section 23, from which a found 1 1/4" iron pipe with 1 3/4" cap stamped "14, 23" for the North Quarter corner of said Section 23 bears South 89 deg. 40 min. 37 sec. East (Basis of Bearings) - 2,619.97 feet, and from which a found 1/2" rebar with aluminum cap stamped "RLS# 21081" for the West Quarter corner of said Section 23 bears South 00 deg. 36 min. 01 sec. West - 2,640.07 feet;

THENCE South 00 deg. 36 min. 01 sec. West along the West line of the Northwest Quarter of said Section 23, at 60.01 feet to the **TRUE POINT OF BEGINNING**;

THENCE South 89 deg. 40 min. 37 sec. East departing said West line and being 60.01 feet South of and parallel with the North line of the Northwest Quarter of said Section 23, a distance of 936.77 feet to a Point of Curvature of a circular curve to the left, having a radius of 1,487.89 feet, a central angle of 14 deg. 32 min. 12 sec., and being subtended by a chord which bears North 83 deg. 03 min. 17 sec. East - 376.48 feet;

THENCE in an easterly direction along said curve to the left, a distance of 377.49 feet to the East line of the West Half of the Northwest Quarter of said Section 23;

THENCE South 00 deg. 32 min. 59 sec. West non-tangent to said curve and continue along said East line, a distance of 964.35 feet to a found 1/2" rebar with cap stamped "LS# 10846" for the most northerly corner of Maricopa County Flood Control parcel recorded in Document No. 1991-0274358 of Maricopa County Records (MCR);

THENCE South 24 deg. 28 min. 54 sec. West departing said East line and continue along said Northwest line, a distance of 1,822.90 feet to a found 1/2" rebar with cap stamped "LS# 10846" in the South line of the Northwest Quarter of said Section 23;

THENCE North 89 deg. 41 min. 04 sec. West along said South line, a distance of 572.84 feet to the before mentioned West Quarter corner of said Section 23;

TEXAS • 2405 Mustang Drive • Grapevine, TX 76051 • 817.329.4373 • TxSurv Firm #10021700
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TENNESSEE • 6074 Apple Tree Drive • Memphis, TN 38115 • 901.881.9188
COLORADO • 8400 E. Prentice Ave. • Greenwood Village, CO 80111 • 303.459.4861

THENCE North 00 deg. 36 min. 01 sec. East along the West line of the Northwest Quarter of said Section 23, a distance of 2,5800.06 feet to the **POINT OF BEGINNING**, containing 2,773,714 square feet or 63.676 acres of land, more or less.

EXCEPT FROM THEREOF:

A portion of the Northwest Quarter of Section 23, Township 4 North, Range 2 West of the Gila and Salt River Base and Meridian, Maricopa County, Arizona, and being more completely described as follows, to-wit:

COMMENCING at a found 1/2" rebar with aluminum cap stamped "RLS# 21081" for the West Quarter corner of said Section 23, from which a found City of Surprise brass cap in concrete for the Northwest corner of said Section 23 bears North 00 deg. 36 min. 01 sec. East - 2,640.07 feet;

THENCE North 00 deg. 36 min. 01 sec. East along the West line of the Northwest Quarter of said Section 23, a distance of 175.25 feet;

THENCE South 89 deg. 23 min. 59 sec. East departing said West line, a distance of 35.00 feet to the **TRUE POINT OF BEGINNING**;

THENCE North 00 deg. 36 min. 01 sec. East being 35.00 feet East of and parallel with the West line of the Northwest Quarter of said Section 23, a distance of 110.68 feet;

THENCE South 89 deg. 35 min. 08 sec. East, a distance of 83.91 feet;

THENCE South 00 deg. 14 min. 37 sec. West, a distance of 103.49 feet to the North line of a 150 foot Mead-Eastwing Transmission Line Easement recorded in Document No. 1993-0624247, of Maricopa County Records;

THENCE South 70 deg. 32 min. 09 sec. West along said North line, a distance of 20.61 feet;

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THENCE North 89 deg. 44 min. 46 sec. West along said North line, a distance of 65.20 feet to the **POINT OF BEGINNING**, containing 9,248 square feet or 0.212 acres of land, more or less.

CONTAINING A NET AREA OF 2,764,466 SQUARE FEET OR 63.464 ACRES OF LAND, MORE OR LESS

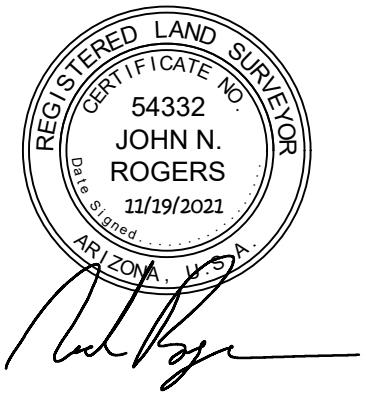

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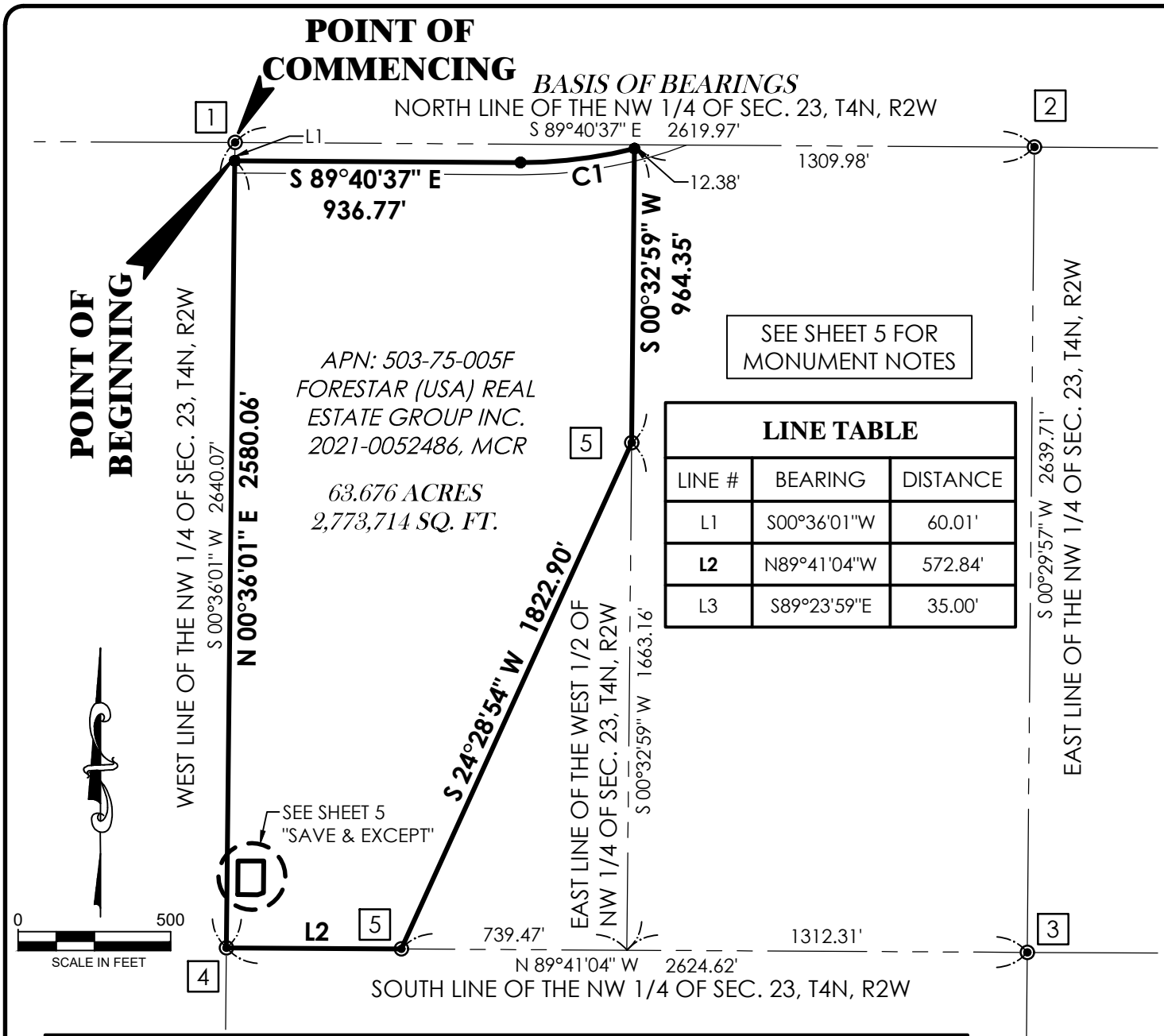
EXHIBIT "B"



LINE TABLE

LINE #	BEARING	DISTANCE
L1	S00°36'01"W	60.01'
L2	N89°41'04"W	572.84'
L3	S89°23'59"E	35.00'

CURVE TABLE

CURVE #	RADIUS	ARC LENGTH	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	1487.89'	377.49'	14°32'12"	N83°03'17"E	376.48'

EXHIBIT "B" MAP SHOWING METES & BOUNDS FOR WILLOW TRAILS STREET LIGHT IMPROVEMENT DISTRICT, SITUATED IN A PORTION OF THE WEST HALF OF THE NORTHWEST QUARTER OF SECTION 23, T4N, R2W OF THE G.&S.R.B.&M., MARICOPA COUNTY, ARIZONA

GOODWIN AND MARSHALL INC.
CIVIL ENGINEERS ~ PLANNERS ~ SURVEYORS
2705 S. Alma School Road, Suite 2
Chandler, Arizona 85044
(602) 218-7285

Scale:	1" = 500'
Date:	11/19/2021
Job No.:	10884A
Drafted:	L.J.C.
Checked:	J.N.R.

Sheet 4 of 5

REGISTERED LAND SURVEYOR
CERTIFICATE NO. 54332
JOHN N. ROGERS
Date Signed 11/19/2021
ARIZONA, U.S.A.

W:\10884A - Forestar_Austin Ranch Parcel E\COGO\FPLAT\SLID\10884A-SLID-METES & BOUNDS.dwg

MONUMENT NOTES

1. CITY OF SURPRISE BRASS CAP IN CONCRETE, NORTHWEST CORNER OF SECTION 23, T4N, R2W RLS# 19344 DATED 2017
2. 1 1/4" IRON PIPE WITH 1 3/4" CAP STAMPED "14 23", NORTH QUARTER OF SECTION 23, T4N, R2W
3. FOUND FCDMC ALUMINUM CAP ON ROD STAMPED "T4N R2W C1/4 S23 LS 3307 DATED 2012"
4. FOUND 1/2" REBAR WITH ALUMINUM CAP RLS# 21081, WEST QUARTER OF SECTION 23, T4N, R2W
5. FOUND 1/2" REBAR WITH CAP LS 10846

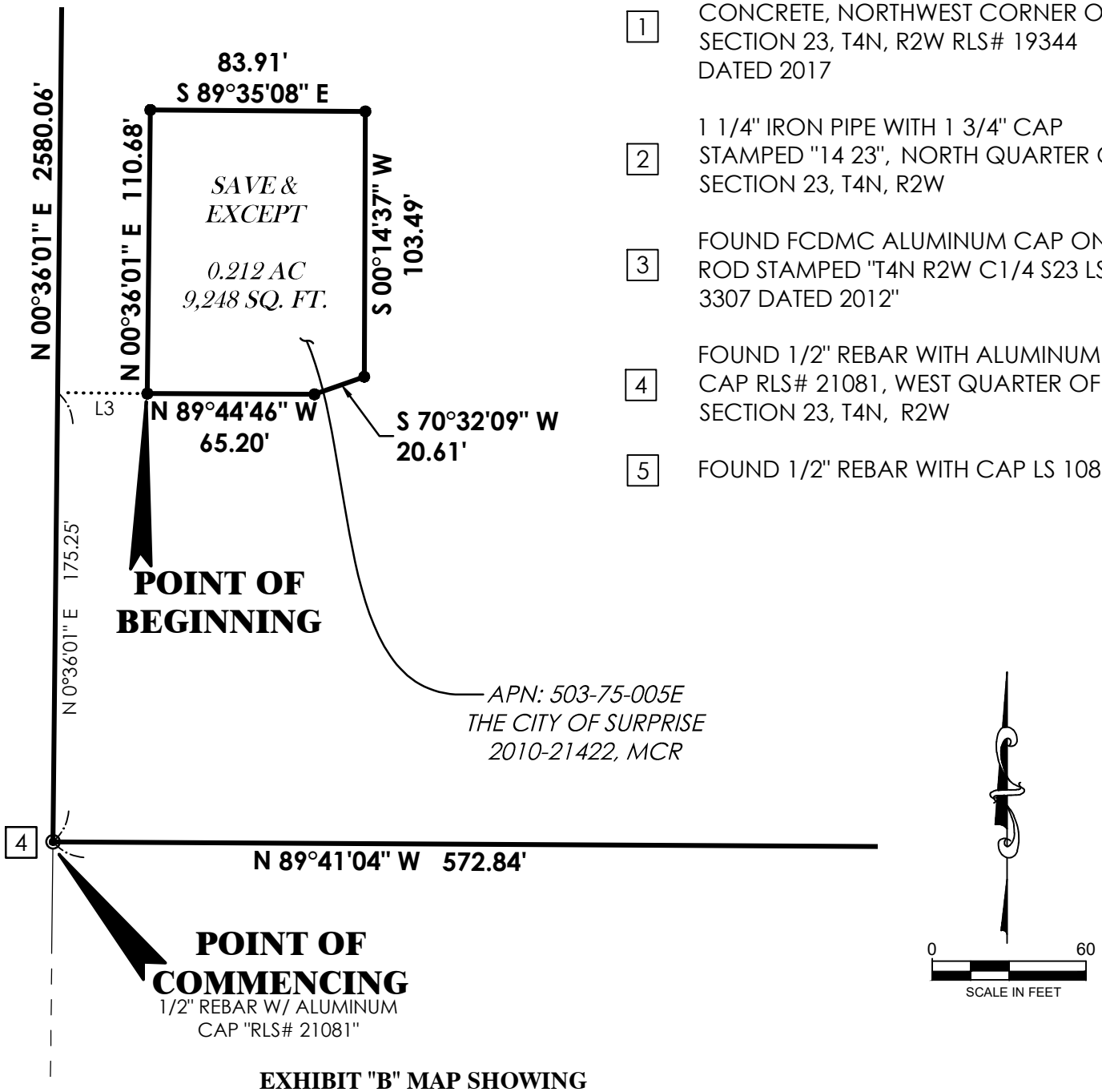


EXHIBIT "B" MAP SHOWING
METES & BOUNDS FOR WILLOW TRAILS
STREET LIGHT IMPROVEMENT DISTRICT,
SITUATED IN A PORTION OF THE WEST HALF
OF THE NORTHWEST QUARTER OF SECTION 23, T4N, R2W
OF THE G.&S.R.B.&M., MARICOPA COUNTY, ARIZONA

GOODWIN AND MARSHALL INC.
CIVIL ENGINEERS ~ PLANNERS ~ SURVEYORS
2705 S. Alma School Road, Suite 2
Chandler, Arizona 85044
(602) 218-7285

Scale:	1" = 60'
Date:	11/19/2021
Job No.:	10884A
Drafted:	L.J.C.
Checked:	J.N.R.

Sheet 5 of 5

REGISTERED LAND SURVEYOR
CERTIFICATE NO. 54332
JOHN N. ROGERS
Date Signed 11/19/2021
ARIZONA, U.S.A.

W:\10884A - Forestar_Austin Ranch Parcel E\COGO\FPLAT\SLID\10884A-SLID-METES & BOUNDS.dwg

Clear Form Print Form

STREET LIGHT IMPROVEMENT DISTRICT PETITION

TO THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE:

We, the undersigned, are all or a majority of the real property owners, exclusive of mortgagees and other lienholders, within the district named below. We petition the City Council of the City of Surprise, Arizona, to establish a street light improvement district under Arizona Revised Statutes (A.R.S.) §48-571 to 48-622, and any amendments, and specifically A.R.S. §48-615 to 48-617, to purchase electricity for lighting the public streets and/or parks within the district whose boundaries and area is described in Exhibits A and B attached hereto. This petition includes a charge for maintaining the lighting facilities.

It is hereby requested that, in compliance with the Arizona Revised Statutes, the City Council adopt a Resolution of Intention to order the proposed improvements, and that unless protests are received pursuant to A.R.S. §48-579 sufficient to bar further proceedings, the City Council proceed with the improvements petitioned for herein.

Expenses of the District (**PICK ONE)**

(●) shall be paid by the levy and collection of ad valorem taxes upon assessed value of all property in the District

( ) shall be paid by the levy and collection of equal apportionment of taxes based on the number and classification of properties within the District.

Public convenience, necessity and welfare will be promoted by the establishment of the District and the real property within the District will be benefited by the District. Additional street lighting facilities may be installed and included in the District, at no investment cost to the District, as directed by the City and as approved by Arizona Public Service and the City Engineer.

WHEREFORE, we respectfully ask that this Petition be properly filed and that the Mayor and Council of the City adopt the Resolution and take such other action as is proper, necessary and appropriate to form the District and to fulfill the purposes for which the District is organized, as the Mayor and Council believe is proper and necessary.

The name of the proposed street light improvements district shall be:

SU-DerVallyNCitrs199

(Leave Blank - to be assigned by City staff)

PETITIONERS: Please print and sign your name

PRINT BUSINESS/ PETITIONER'S NAME	ADDRESS OF PROPERTY OWNED WITHIN DISTRICT	ASSESSOR PARCEL #	SIGNATURE
Forestar (USA) Real Estate Group Inc.	SEC of Deer Valley Road and Citrus Road	503-75-005F	

AVAILABILITY

This rate schedule is applicable to those portions of cities, towns and unincorporated communities in which the Company does a general retail electric business and where the Company has installed a multiple or series street lighting system of adequate capacity for the service to be rendered after December 1, 2021.

DESCRIPTION

E-68 is a rate that is applicable for lighting public streets, alleys, thoroughfares, public parks and playgrounds from dusk to dawn by use of Company's facilities.

TIME PERIOD

Dusk: The time between sunset and full night when photocontrol senses the lack of sufficient sunlight and turns on the lights.

Dawn: The time between full night and sunrise when a photocontrol senses sufficient sunlight to turn off lights.

CHARGES

The monthly bill will consist of the fixture and energy charges, plus adjustments:

I. FIXTURES (Includes Mounting Arm, if applicable)

Fixture Equipment Class	Fixture Cost Range (per unit)	Investment by Company Monthly Rate	Investment by Others Monthly Rate
A	$ 1 - $ 430	$5.72	$1.75
B	$ 431 - $ 520	$6.97	$2.12
C	$ 521 - $ 640	$8.36	$2.60
D	$ 641 - $ 820	$9.99	$3.32
E	$ 821 - $ 910	$12.64	$3.68
F	$ 911 - $ 1,010	$14.07	$4.08
G	$ 1,011 - $ 1,110	$15.38	$4.49
H	$ 1,111 - $ 1,250	$17.44	$5.04
I	$ 1,251 - $ 1,520	$19.40	$6.12
J	$ 1,521 - $ 1,670	$23.65	$6.73
K	$ 1,671 - $ 1,850	$26.29	$7.45

Note: Equipment cost greater than $1,850 shall be Customer owned.

II. ENERGY (Includes Generation, T&D, RCS & SBC)

Monthly energy charges for new lighting fixtures will be determined by the Company using the following method:

kWh = Fixture Wattage x 344 Usage Hours

Generation = kWh per month x $ 0.06621

T&D, RCS, System Benefits = kWh per month x $ 0.02682

NOTES:

1. Investment by Company. These rates are applicable where the Company provides the initial investment to purchase and install all facilities necessary for street lighting service. The Company will own, operate, and maintain the street lighting system.

2. Investment by Others. These rates are applicable in those instances where the requesting entity or individual purchases and installs the street lighting facilities at their own expense and in accordance with Company specifications. These rates will also apply in the instance where the Customer provides a non-refundable advance to the Company to cover the Company's cost of purchasing and installing the street lighting system. The Company retains ownership of the street lighting system and provides operation and maintenance for all facilities.

3. Listed kWh reflects the assigned monthly energy usage for each type of fixture and are used to determine any applicable transmission, system benefit, distribution, energy, and adjustment charges.

4. kWh is determined by the company based on the rated wattage of the equipment and an established average hourly usage per month.

5. The monthly rate for all new poles includes up to 300 feet of overhead secondary wire, or up to 300 feet of underground secondary wire if the Customer provides earthwork and conduit (excluding the underground to overhead transition).

III. POLES

				CHARGES	
			Height	Investment by Company	Investment by Others
A. Anchor Base Mounted (Flush)	Round Steel	1 Simplex Adapter	12 ft.	$12.84	$1.77
			22 ft.	$14.45	$1.99
			25 ft.	$15.64	$2.16
			30 ft.	$17.96	$2.47
			32 ft.	$18.87	$2.50
		2 Simplex Adapters	12 ft.	$13.69	$1.89
			22 ft.	$15.73	$2.17
			25 ft.	$16.41	$2.26
			30 ft.	$19.07	$2.63
			32 ft.	$20.34	$2.81
	Square Steel	5"	13 ft.	$14.72	$2.02
			15 ft.	$13.15	$1.81
			23 ft.	$15.60	$2.15
			25 ft.	$17.15	$2.36
			28 ft.	$19.04	$2.62
			32 ft.	$18.93	$2.61
	Concrete		12 ft.	$43.87	$6.04
	Fiberglass		12 ft.	$37.15	$5.11
	Decorative Transit	4"	16 ft.	$36.22	$5.00
	Decorative Transit	6"	30 ft.	$69.93	$9.63
	Hinged Poles	Square	15 ft.	$13.92	$1.14
		Round	19 ft.	$12.59	$1.03
B. Anchor Base Mounted (Pedestal)	Round Steel	1 Simplex Adapter	12 ft.	$12.35	$1.69
			22 ft.	$13.97	$1.92
			25 ft.	$15.14	$2.09
			30 ft.	$17.48	$2.42
			32 ft.	$18.37	$2.53
		2 Simplex Adapters	12 ft.	$13.19	$1.81
			22 ft.	$14.74	$2.02
			25 ft.	$15.91	$2.18
			30 ft.	$18.58	$2.55
			32 ft.	$19.84	$2.73
		3 Bolt	32 ft.	$22.80	$3.13
	Square Steel	5"	13 ft.	$14.24	$1.97
			15 ft.	$14.56	$1.99
			23 ft.	$15.11	$2.09
			25 ft.	$16.67	$2.31
			28 ft.	$18.52	$2.55
			32 ft.	$19.23	$2.63

III. POLES (cont.)

				CHARGES	
			Height	Investment by Company	Investment by Others
C. Direct Bury	Round Steel		19 ft.	$19.43	$2.68
			30 ft.	$15.17	$2.81
			38 ft.	$18.51	$2.88
		Self	40 ft.	$22.80	$3.61
		Stepped	25 ft.	$52.45	$4.28
			32 ft.	$55.24	$4.51
			49 ft.	$68.57	$9.45
	Square Steel	4"	34 ft.	$16.74	$2.90
		5"	20 ft.	$15.90	$2.63
			30 ft.	$16.57	$2.73
			38 ft.	$17.98	$3.12
		8"	28 ft.	$30.01	$2.44
			32 ft.	$31.37	$2.57
	Decorative Transit		41 ft 6	$21.60	$3.17
	Decorative Transit		47 ft.	$26.91	$3.96
	Steel Distribution Pole (for lighting only)		35 ft.	$24.84	$3.27
D. Post Top	Decorative Transit Anchor Base		16 ft.	$37.00	$5.08
	Gray Steel/Fiberglass		23 ft.	$12.83	$2.11
	Black Steel		23 ft.	$14.14	$2.33
E. Existing distribution pole suitable for streetlight use				$1.56	--

IV. ANCHOR BASE

			CHARGES	
		Height	Investment by Company	Investment by Others
A. Flush		4 ft.	$10.45	$1.44
		6 ft.	$12.47	$2.16
B. Pedestal		8 ft.	$14.29	$2.49
	For 32' Round Steel Pole only	4 ft. 6"	$9.91	$1.71

V. CHARGES FOR OPTIONAL OR ADDITIONAL COMPANY OWNED EQUIPMENT

Underground Circuit Charges	
a. Per foot of cable, installed under paving	$0.16652
b. Per foot of cable, not installed under paving	$0.05877

TRIP CHARGE

A $150.00 trip charge per light will be charged when a Customer requests a disconnect or reconnect of service in order to accommodate the maintenance activities of the Customer or its designee(s) on their street lighting equipment.

ADJUSTMENTS

The bill will include the following adjustments:

1. The Renewable Energy Standard charge, Adjustment Schedule REAC-1.
2. The Power Supply Adjustment charges, Adjustment Schedule PSA-1.
3. The Transmission Cost Adjustment charge, Adjustment Schedule TCA-1.
4. The Environmental Improvement Surcharge, Adjustment Schedule EIS.
5. The Demand Side Management Adjustment charge, Adjustment Schedule DSMAC-1.
6. Direct Access Customers returning to Standard Offer service may be subject to a Returning Customer Direct Access Charge, Adjustment Schedule RCDAC-1.
7. The Tax Expense Adjustor Mechanism charge, Adjustment Schedule TEAM
8. Any applicable taxes and governmental fees that are assessed on APS's revenues, prices, sales volume, or generation volume.

SERVICE DETAILS

1. Street lighting facilities installed under this rate schedule are of the type currently being furnished by Company as standard at the time service is initially requested. Standard facilities are those listed in the Company's Transmission and Distribution Construction Standards book.

2. The Customer's bill will not be reduced due to photocontrol or cable repair or replacement outages.

3. Non-standard facilities (non-standard being defined as any facility not listed in the Company's Transmission and Distribution Construction Standards book) do not qualify for this rate schedule. At the Company's discretion, such facilities may be served under another of the Company's rate schedules.

4. The Company will extend its standard street lighting system up to a distance of 300 feet for each additional lighting installation without cost at the request of the Customer. When the extension is underground, the customer will provide earthwork as specified in the Company's Service Schedule 3, Conditions Governing Extensions of Electric Distribution Lines and Services; or, at the applicant's request, the Company will provide such earthwork and the applicant will be required to pay a non-refundable contribution in aid of construction equal to the cost of such earthwork. Any additional extension required (over and above the first 300 feet) will be provided by Company for a contribution in aid of construction equal to the cost of the additional extension.

    a. Extensions to isolated areas requiring a substantial extension of the electric distribution system, as opposed to an extension of the street lighting system, will require a special study to determine the terms and conditions under which the Company will undertake such an extension.

5. APS provides electric service under the Company's Service Schedules. These schedules provide details about how the Company serves its Customers, and they have provisions and charges that may affect the Customer's bill. In addition, service may be subject to special terms and conditions as provided for in a Customer contract, maintenance, or service agreement.

WILLOW TRAILS PHASE 1
STREETLIGHT PLANS
SURPRISE, ARIZONA

A PORTION OF THE NORTHWEST QUARTER OF SECTION 23, TOWNSHIP 4 NORTH, RANGE 2 WEST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, CITY OF SURPRISE, MARICOPA COUNTY, ARIZONA

ENGINEERS NOTES

1. A THOROUGH ATTEMPT HAS BEEN MADE TO SHOW THE LOCATIONS OF ALL UNDERGROUND OBSTRUCTIONS AND UTILITY LINES IN THE WORK AREA. HOWEVER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO OBSTRUCTIONS AND UTILITY LINES ENCOUNTERED DURING CONSTRUCTION AND SHALL DETERMINE THE EXACT LOCATION OF UTILITIES IN ADVANCE OF TRENCHING. THE ENGINEER AND/OR DEVELOPER WILL NOT GUARANTEE ANY ELEVATIONS OR LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THESE PLANS.
2. PRIOR TO BIDDING THE WORK, THE CONTRACTOR SHALL THOROUGHLY SATISFY HIMSELF AS TO THE ACTUAL CONDITIONS, REQUIREMENTS OF THE WORK AND EXCESS OF DEFICIENCY IN QUANTITIES, IF ANY. NO CLAIMS SHALL BE MADE AGAINST THE OWNER/DEVELOPER OR ENGINEER FOR ANY EXCESS OR DEFICIENCY THEREIN, ACTUAL OF RELATIVE.
3. THE ENGINEER WILL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS OR PROGRAMS UTILIZED IN CONNECTION WITH THE WORK, AND WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
4. ANY QUANTITIES SHOWN ARE THE BEST ESTIMATE OF THE ENGINEER. THE SUBCONTRACTOR SHALL MAKE HIS OWN INDEPENDENT ESTIMATE OF QUANTITIES AND BASE HIS BID THEREON.
5. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR COORDINATING THE RELOCATION OF UTILITIES, POWER POLES, ETC.
6. 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.
7. THE CONTRACTOR WILL MAKE FIELD AS-BUILT MEASUREMENTS OF THE WORK. THESE MEASUREMENTS WILL BE GIVEN TO THE ENGINEER IN WRITING SO THAT AS-BUILT PLANS CAN BE CREATED. IF THE CONTRACTOR DOES NOT TAKE AS-BUILT MEASUREMENTS OR FORWARD THESE MEASUREMENTS TO THE ENGINEER, THE ENGINEER WILL NOT BE RESPONSIBLE FOR PROVIDING ACCURATE AS-BUILT OF THE POLES, ETC.
8. AS-BUILT SUBMITTALS WILL NOT BE PERFORMED UNTIL ORDERED BY THE CLIENT OR HIS MEASUREMENTS.
9. HORNS CONSULTING LLC., IT'S OWNERS, OR EMPLOYEES WILL NOT BE HELD RESPONSIBLE FOR ANY DESTRUCTION OF PROPERTY CAUSED BY OTHERS. IDENTIFY ALL OTHER UTILITIES & CALL BLUE STAKE PRIOR TO DIGGING.
10. SIDEWALK TO MEANDER AROUND ALL STREET LIGHTS AND APS EQUIPMENT.

CITY OF SURPRISE 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 TO EXISTING UTILITIES SHALL BE REPAIRED AND OR REPLACED AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL COMPLY WITH ALL CURRENT BLUE STAKE LAWS. CALL BLUE STAKE FOR FIELD LOCATION AT (602) 263-1100.
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 SHOWN 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, IRRIGATION LINES, PROPERTY MONUMENTS, FENCING OR SURFACE FEATURES PRIOR TO CONSTRUCTION. ANYTHING DISTURBED DURING CONSTRUCTION SHALL BE REPLACED IN KIND AT THE CONTRACTORS 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) 222-7000.
11. TRAFFIC CONTROL SHALL BE MAINTAINED IN ACCORDANCE WITH MAG SPECFICATION 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.

CITY ADDITIONAL NOTES

1 THE ELECTRICAL / MAINTENANCE COST OF ALL STREET LIGHTS ON LOCAL AND COLLECTOR STREETS ARE TO BE PAID BY THE ADJACENT DEVELOPMENT'S STREET LIGHT IMPROVEMENT DISTRICT (SLID). THE ELECTRICAL / MAINTENANCE COST OF ALL STREET LIGHTS ON ARTERIAL STREETS ARE TO BE BILLED TO THE CITY OF SURPRISE'S ENERGY BILL.

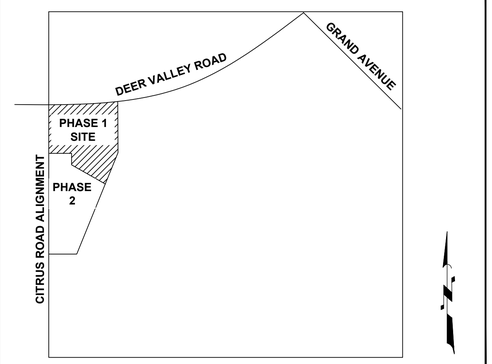
2 CONTRACTOR TO COORDINATE WITH APS AND UTILIZE THEIR CURRENT SPECIFICATION AT TIME OF BIDDING AND CONSTRUCTION.

LED NOTE:
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 SPECIFICATIONS AT THE TIME OF BIDDING AND CONSTRUCTION.

DETAILS AND LEGEND FOR STREETLIGHTS:

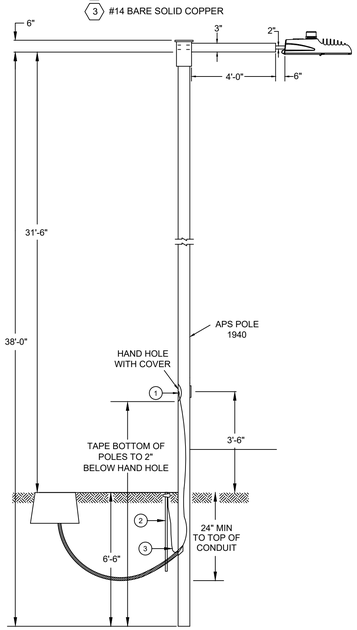
- 1A — INSTALL ONE 96W, 11500 LUMEN LED FIXTURES WITH PHOTOELECTRIC CONTROL ON A 38'-0" SQUARE POLE MOUNTED AT 31'-6" WITH ONE SINGLE 4'-0" MAST ARM, SEE DETAIL 1. POLE SHALL BE LOCATED 3.5' BACK OF CURB OR 1' BACK OF WALK FROM FACE OF POLE.
- 1 — INSTALL ONE 39W, 4900 LUMEN LED FIXTURES WITH PHOTOELECTRIC CONTROL ON A 30'-6" SQUARE POLE MOUNTED AT 25'-0" WITH ONE SINGLE 2'-0" MAST ARM, SEE DETAIL 1. POLE SHALL BE LOCATED 3.5' BACK OF CURB OR 1' BACK OF WALK FROM FACE OF POLE
- 2 — INSTALL 1" FLEX PVC W/2-#14 TYPE THHN/THWN AND 1-#14 BARE BOND FROM PULL BOX TO BUSSMAN FUSE HOLDER IN STREET LIGHT. SEE DETAIL 2.
- 3 — INSTALL AN APS JUNCTION BOX NEXT TO THE POLE (PER JUNCTION BOX DETAIL). SEE DETAIL 3.
- FUTURE / PROPOSED SINGLE LED FIXTURE ON SINGLE POLE AS SPECIFIED ON DESIGN. (NOT TO BE INSTALLED.)
- FIRE HYDRANT LOCATION PER CIVIL PLANS

VICINITY MAP
N.T.S.



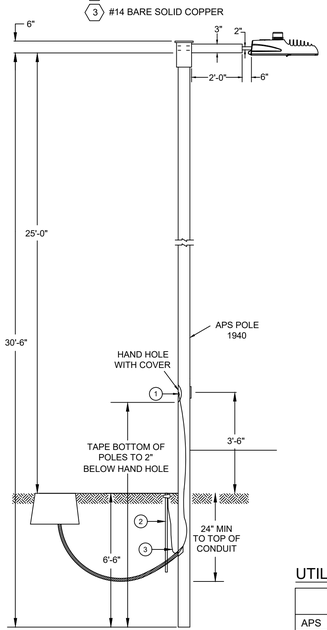
1A — 96W LED (APS 8030) DETAIL 1A

1. GROUND ATTACHMENT
2. ROD COPPERCLAD GRD., 5/8" x 8'
3. #14 BARE SOLID COPPER



1 — 39W LED (APS 8030) DETAIL 1

1. GROUND ATTACHMENT
2. ROD COPPERCLAD GRD., 5/8" x 8'
3. #14 BARE SOLID COPPER

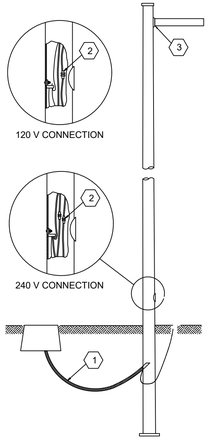


STREETLIGHT NOTE:
ENSURE THERE IS A 1' CLEARANCE FROM THE EDGE OF THE SIDE WALK TO THE FACE OF THE POLE.

2 — (APS 8130) DETAIL 2

TO BE USED IN CONJUNCTION WITH WITH LED LIGHTS AS SHOWN IN DETAILS #1

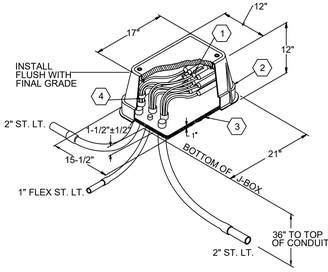
1. 1" FLEX CONDUIT
2. IN-LINE FUSE HOLDER WITH 15AMP FUSE
3. CONNECT BUTT-SPLICE #16-#14



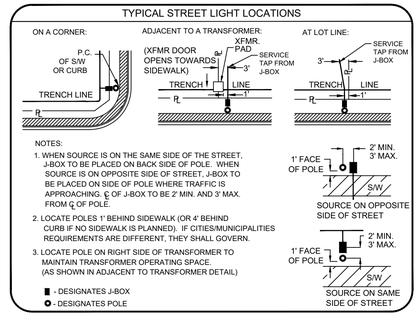
3 — (APS 8655) DETAIL 3

TO BE USED IN CONJUNCTION WITH WITH LED LIGHTS AS SHOWN IN DETAILS #1

1. SET SCREW INSULATED JUNCTION BAR
2. JUNCTION BOX 10"X15"X12"
3. CONCRETE GROUT PREMIX
4. I.D. RINGS (FEED, POLES)



TYPICAL STREET LIGHT LOCATIONS



UTILITY COORDINATION LIST

DESCRIPTION	REPRESENTATIVE	PHONE	DATE
APS	MONIQUE HOLLIDAY	(602) 250-1000	09-15-2021
CENTURY LINK	DEBBIE RAMSEY	(602) 630-0492	09-15-2021
SOUTHWEST GAS	ZACH STEVENSON	(602) 484-5270	09-15-2021
COX COMMUNICATIONS	TMC (TRAFFIC MANAGEMENT CENTER)	(623) 322-7215	09-15-2021

* CONFLICTS ARISING DURING THE COURSE OF CONSTRUCTION FROM UNFORSEEN CIRCUMSTANCES SHALL BE REPORTED TO THE INTERESTED UTILITY COMPANY AND BE RESOLVED BY THEM AND THE DESIGN ENGINEER.

EQUIPMENT LIST

** **LED NOTE:** 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 SPECIFICATIONS AT THE TIME OF BIDDING AND CONSTRUCTION.

ITEM #	SYMBOL	TYPE STREET:	QUANTITY	MOUNTING HEIGHT	POLE HEIGHT:	MAST ARM	LUMENS	TYPE	WATTAGE	VOLTAGE	C.C.T.	PHOTOMETRIC	LUMINAIRE
1A		COLLECTOR	5	31'-6"	38'-0"	4'-0"	11,500	LED	96W	120V	3000K	TYPE III	ERLH-0-11-C3-30-A-DKBZ
1		LOCAL	21	25'-0"	30'-6"	2'-0"	4,900	LED	39W	120V	3000K	TYPE II WIDE (18) TYPE IV (3)	ERL1-0-05-B3-30-A-DKBZ (18) ERL1-0-05-D3-30-A-DKBZ (3)
		ITEM DESCRIPTION											
2		1" FLEX PVC W/2-#14 TYPE THHN/THWN AND 1-#14 BARE BOND FROM PULL BOX TO BUSSMAN FUSE HOLDER IN STREET LIGHT.											
3		INSTALL AN APS JUNCTION BOX NEXT TO THE POLE PER JUNCTION BOX DETAIL.											

OWNER / DEVELOPER
FORESTAR
20410 N. 19TH AVENUE, SUITE 100
PHOENIX, ARIZONA 85027
PHONE: (480) 368-2357
CONTACT: BRIAN KONDERIK

CIVIL ENGINEER
GOODWIN & MARSHALL, INC
2705 S. ALMA SCHOOL ROAD, SUITE #2
CHANDLER, ARIZONA 85286
PHONE: (602) 218-7285
CONTACT: WARREN RUSSELL, P.E.

ELECTRICAL ENGINEER
HORNS CONSULTING, LLC
1243 E. MURIEL DRIVE
PHOENIX, ARIZONA 85022
PHONE: (602) 256-8990
CONTACT: DOUG HORNING & GREG LARSON, P.E.

CITY OF SURPRISE APPROVAL

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.

CITY OF SURPRISE ENGINEER _____ DATE _____

Horns Consulting, LLC
www.hornsconsulting.com
Phone: (602)256-8990
E-mail: doug@hornsconsulting.com
1243 E. Muriel Drive, Phoenix, Arizona 85022

Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

INDEX

1 ~ COVER SHEET
2 ~ LIGHTING LAYOUT
3 ~ LIGHTING LAYOUT
4 ~ PHOTOMETRICS
5 ~ PHOTOMETRICS

WILLOW TRAILS PHASE 1
COVERSHEET
STREET LIGHT PLANS

HORNS CONSULTING, LLC
1243 E. MURIEL DRIVE
PHOENIX, ARIZONA 85022
PHONE: (623) 256-8990
www.hornsconsulting.com

NO	REVISIONS	BY	DATE
7			
6			
5			
4			
3			
2	NAME CHANGE	DH	9-15-21
1	CITY COMMENTS	DH	8-19-21

Professional Engineer Registration CERTIFICATE NO. 28582 GREG D. LARSON Expires 6/30/22 Registered ARIZONA U.S.A.

SHEET 1 OF 5

Contact: Doug Horning/Greg Larson,P.E.

Horns Consulting Project #:	21SL082B
Designed By:	DH 04/05/2021
Drawn By:	DH 04/05/2021
Reviewed By:	GL 04/05/2021

FS21-380

WILLOW TRAILS PHASE 1
STREETLIGHT PLANS
SURPRISE, ARIZONA

DETAILS AND LEGEND FOR STREETLIGHTS:

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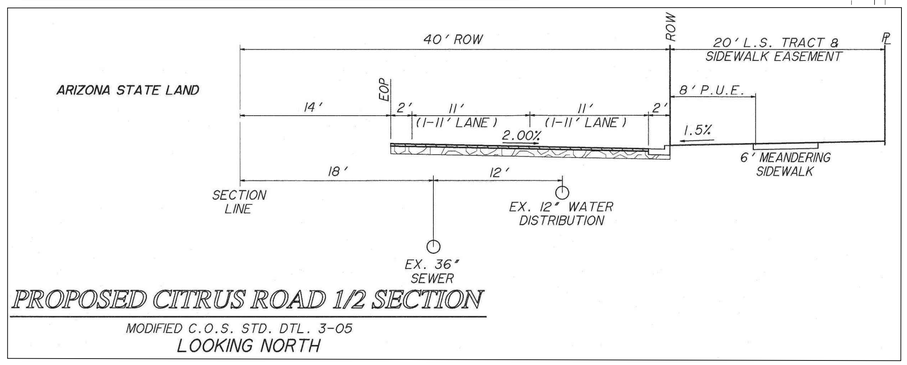
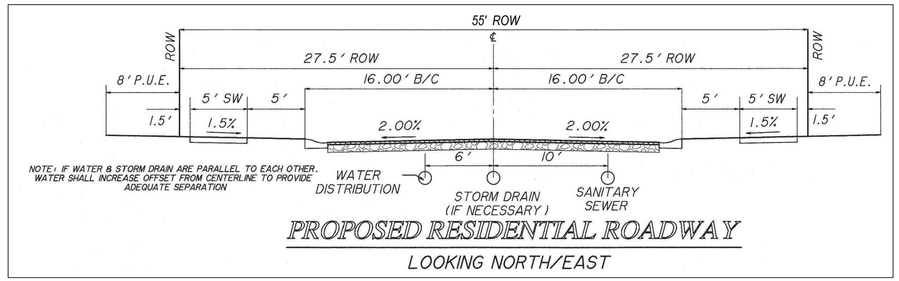


PROPOSED CITRUS ROAD 1/2 SECTION

MODIFIED C.O.S. STD. DTL. 3-05

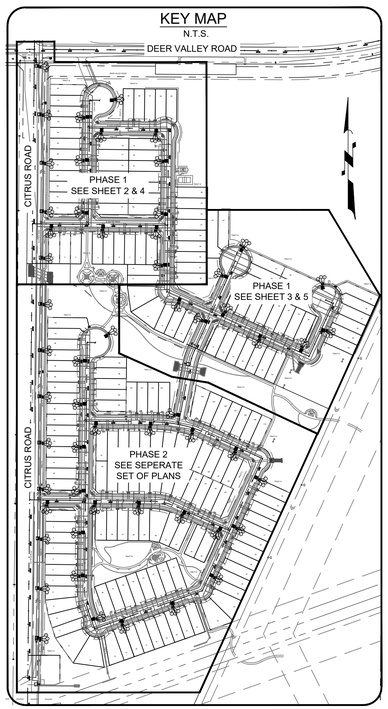
LOOKING NORTH

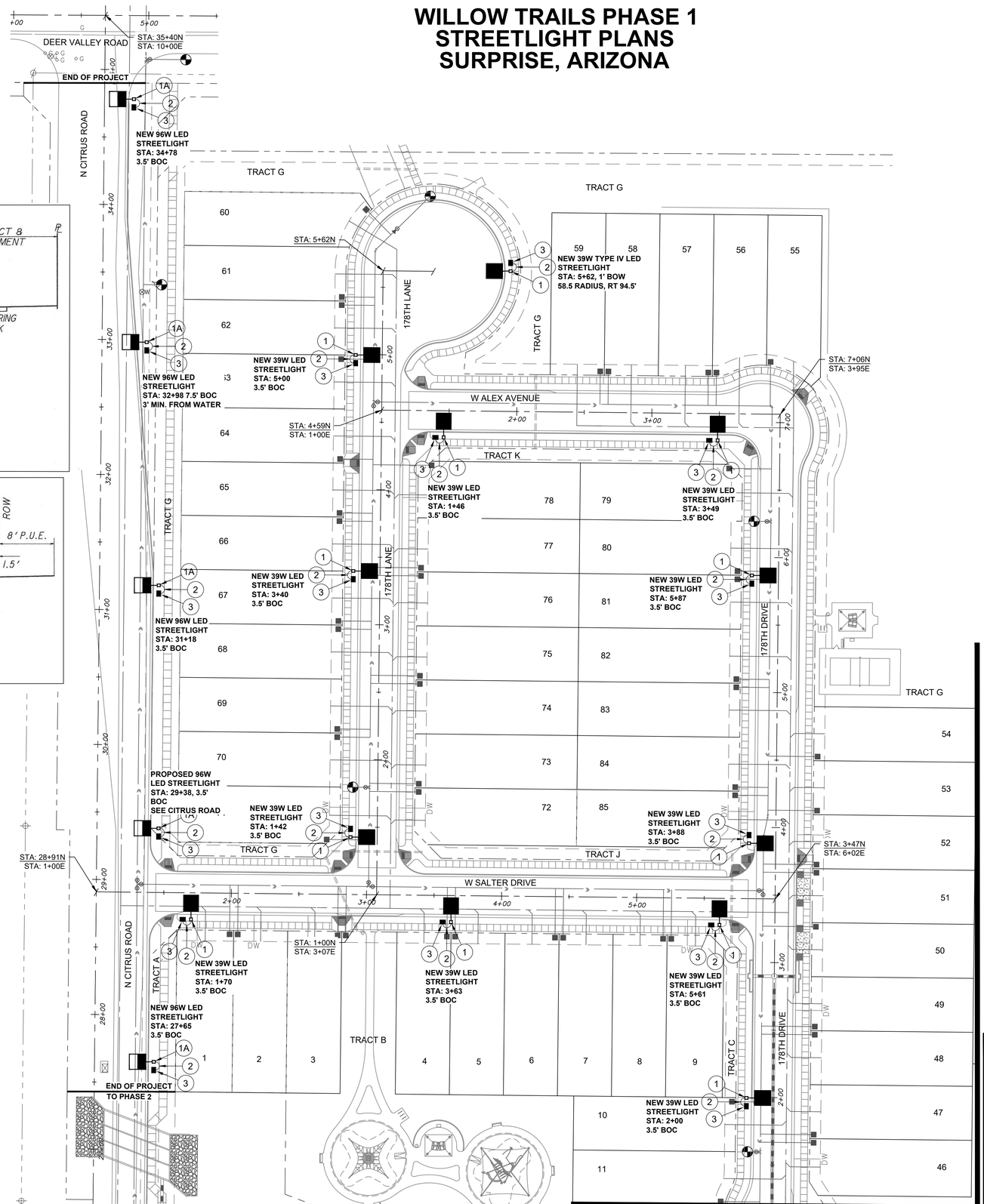


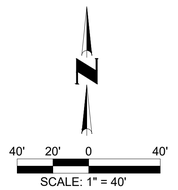
PROPOSED RESIDENTIAL ROADWAY

LOOKING NORTH/EAST

KEY MAP
N.T.S.







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NO.	REVISIONS	BY	DATE
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5			
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3			
2	NAME CHANGE	DH	9-15-21
1	CITY COMMENTS	DH	8-19-21

Registered Professional Engineer — CERTIFICATE NO. 28582 — GREG R. LARSON — Expires 09/30/2021 — ARIZONA, U.S.A.

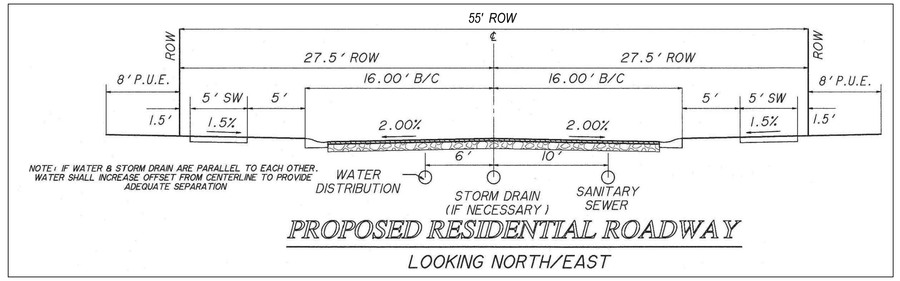
SHEET 2 OF 5

Contact: Doug Horning/Greg Larson,P.E.

Horns Consulting Project #:	21SL082B
Designed By:	DH 04/05/2021
Drawn By:	DH 04/05/2021
Reviewed By:	GL 04/05/2021

FS21-380

WILLOW TRAILS PHASE 1
STREETLIGHT PLANS
SURPRISE, ARIZONA



PROPOSED RESIDENTIAL ROADWAY

LOOKING NORTH/EAST

DETAILS AND LEGEND FOR STREETLIGHTS:

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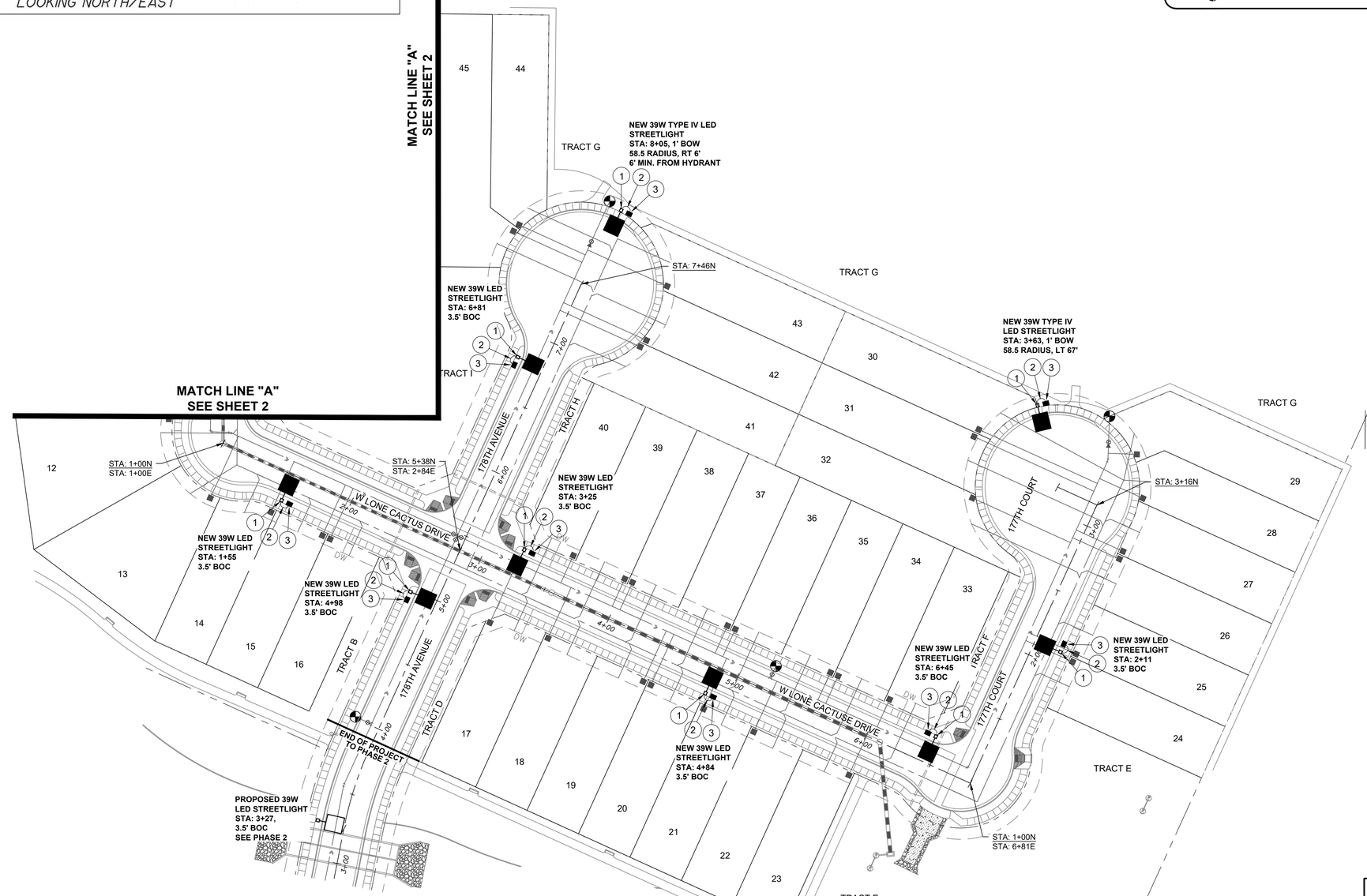
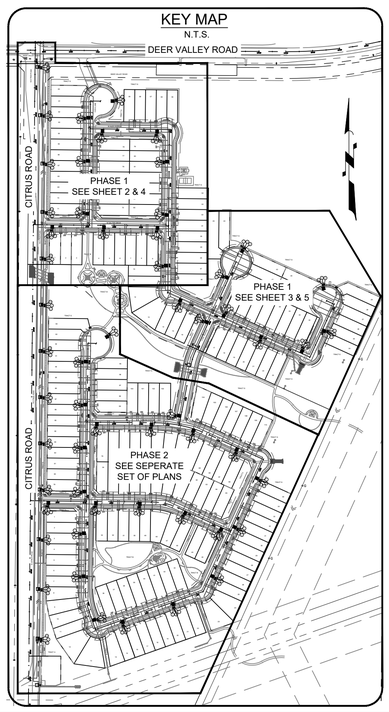


KEY MAP
N.T.S.



40' 20' 0 40'

SCALE: 1" = 40'

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STREET LIGHT PLANS

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1	CITY COMMENTS	DH	8-19-21

Professional Engineer (Electrical) CERTIFICATE NO 28582 GREG D LARSON Registered ARIZONA USA

SHEET 3 OF 5

Contact: Doug Horning/Greg Larson,P.E.

Horns Consulting Project #:		21SL082B
Designed By:	DH	04/05/2021
Drawn By:	DH	04/05/2021
Reviewed By:	GL	04/05/2021

FS21-380

WILLOW TRAILS PHASE 1
STREETLIGHT PLANS
SURPRISE, ARIZONA

PHOTOMETRICS STUDIES

(Studies results is in illuminace)

GE LIGHTING SOLUTIONS ERL1_05B330_____-120-277V
GE LIGHTING SOLUTIONS-EAST CLEVELAND OH USA test report no.
17040524 17040525 17040526 17040722 17040723 17040724
lamp(s): LEDs 757G-V1
candela file 'erl1_05b330_____-120-277v_tcm201-129086.ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 39
Outreach (from mounting axis to photometric center)= 30 in
mounting height= 25 ft
number locations= 18, number luminaires= 18
kw all locations= 0.6

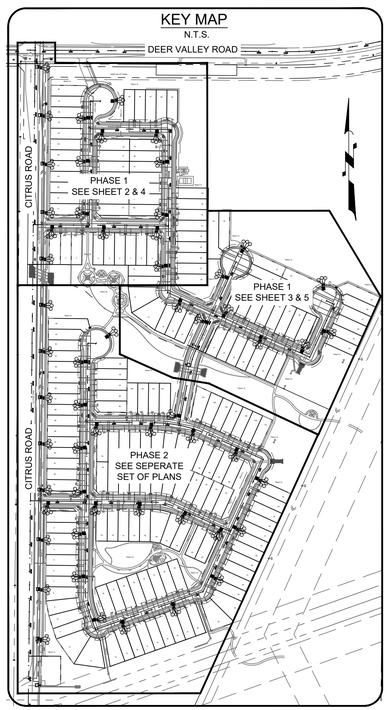
GE LIGHTING SOLUTIONS ERL1_05D330_____-120-277V
GE LIGHTING SOLUTIONS-HENDERSONVILLE NC USA test report no.
17072713 17072714 17072715
lamp(s): LEDs 757G-V1
candela file 'erl1_05d330_____-120-277v_tcm201-129098.ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 39
Outreach (from mounting axis to photometric center)= 30 in
mounting height= 25 ft
number locations= 3, number luminaires= 3
kw all locations= 0.15

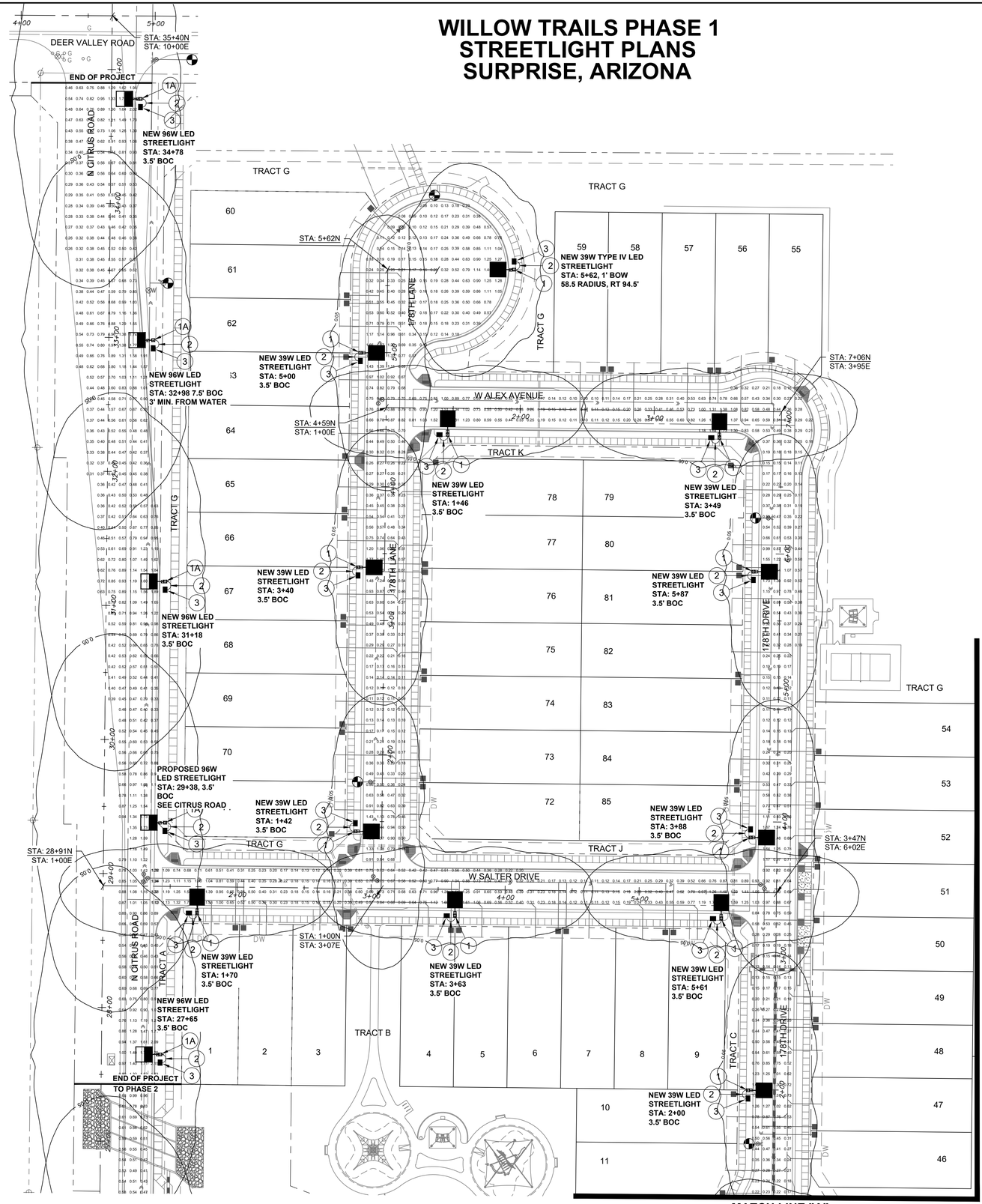
GE LIGHTING SOLUTIONS ERLH_11C330_____
GE LIGHTING SOLUTIONS-EAST CLEVELAND OH USA test report no.
17041221 17041321 17041322 17041323 17041324 17041325
lamp(s): LEDs E21A
candela file 'erlh_11c330_____tcm201-129274.ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 96
Outreach (from mounting axis to photometric center)= 48 in
mounting height= 31.5 ft
number locations= 5, number luminaires= 5
kw all locations= 0.5

Willow Trails Phase 1 (Overall)		Citrus Road	
1702 points at z=0, sp 8ft by 8ft		1082 points at z=0, sp 8ft by 8ft	
HORIZONTAL FOOTCANDLES		HORIZONTAL FOOTCANDLES	
Average	0.52	Average	0.81
Maximum	2.11	Maximum	2.27
Minimum	0.06	Minimum	0.26
Avg:Min	8.74	Avg:Min	3.11
Max:Min	35.17	Max:Min	8.73
Coef Var	0.78	Coef Var	0.51
UnifGrad	2.69	UnifGrad	1.56

KEY MAP

N.T.S.





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WILLOW TRAILS PHASE 1
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Registered Professional Engineer (Electrical) CERTIFICATE NO. 28582 GREG D. LARSON 07/31/2021 ARIZONA U.S.A.

NO.	REVISIONS	BY	DATE
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3			
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SHEET 4 OF 5

Contact: Doug Horning/Greg Larson,P.E.

Horns Consulting Project #:	21SL082B	
Designed By:	DH	04/05/2021
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STREETLIGHT PLANS
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number locations= 3, number luminaires= 3
kw all locations= 0.15

GE LIGHTING SOLUTIONS ERLH_11C330_____
GE LIGHTING SOLUTIONS-EAST CLEVELAND OH USA test report no. 17041221 17041321 17041322 17041323 17041324 17041325
lamp(s): LEDs E21A
candela file 'erlh_11c330_____tcm201-129274.ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 96
Outreach (from mounting axis to photometric center)= 48 in
mounting height= 31.5 ft
number locations= 5, number luminaires= 5
kw all locations= 0.5

Willow Trails Phase 1 (Overall)		Citrus Road	
1702 points at z=0, sp 8ft by 8ft		1082 points at z=0, sp 8ft by 8ft	
HORIZONTAL FOOTCANDLES		HORIZONTAL FOOTCANDLES	
Average	0.52	Average	0.81
Maximum	2.11	Maximum	2.27
Minimum	0.06	Minimum	0.26
Avg:Min	8.74	Avg:Min	3.11
Max:Min	35.17	Max:Min	8.73
Coef Var	0.78	Coef Var	0.51
UnifGrad	2.69	UnifGrad	1.56

DETAILS AND LEGEND FOR STREETLIGHTS:

- 1A — INSTALL ONE 96W, 11500 LUMEN LED FIXTURES WITH PHOTOELECTRIC CONTROL ON A 38'-0" SQUARE POLE MOUNTED AT 31'-6" WITH ONE SINGLE 4'-0" MAST ARM, SEE DETAIL 1. POLE SHALL BE LOCATED 3.5' BACK OF CURB OR 1' BACK OF WALK FROM FACE OF POLE.
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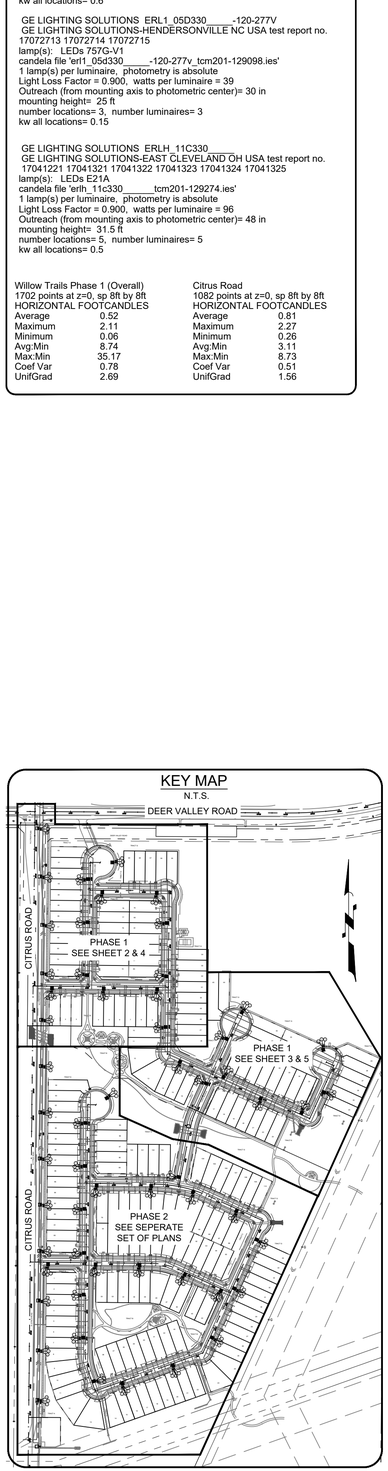
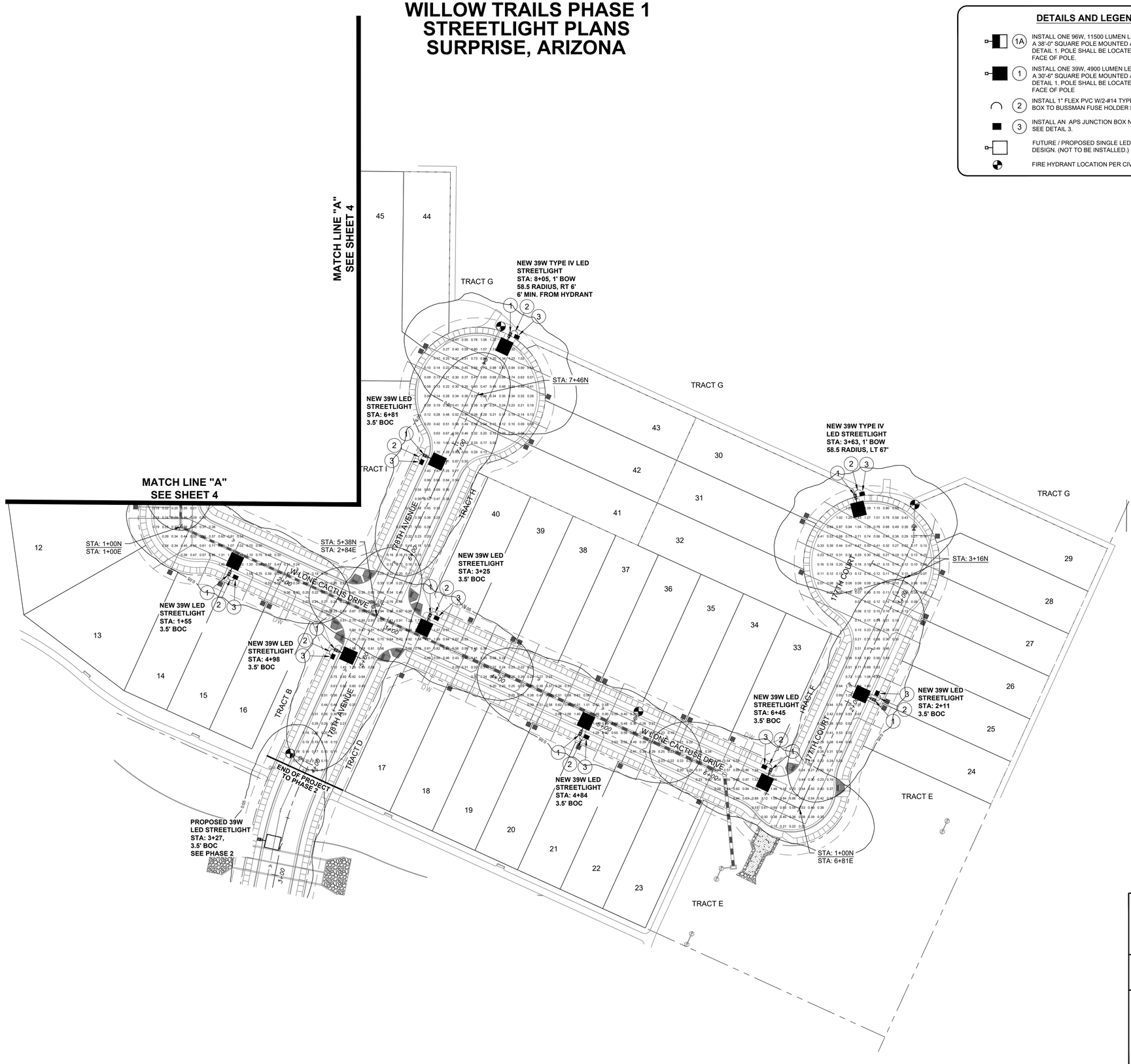
- FUTURE / PROPOSED SINGLE LED FIXTURE ON SINGLE POLE AS SPECIFIED ON DESIGN. (NOT TO BE INSTALLED.)
- FIRE HYDRANT LOCATION PER CIVIL PLANS





Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

WILLOW TRAILS PHASE 1
PHOTOMETRICS
STREET LIGHT PLANS

HORNS CONSULTING, LLC
1243 E. MURIEL DRIVE
PHOENIX, ARIZONA 85022
PHONE: (623) 256-8990
www.hornsconsulting.com

NO.	REVISIONS	BY	DATE
7.			
6.			
5.			
4.			
3.			
2.	NAME CHANGE	DH	9-15-21
1.	CITY COMMENTS	DH	8-19-21

Registered Professional Engineer (Electrical) CERTIFICATE NO. 28582 GREG D. LARSON Expires 09/30/2022 ARIZONA U.S.A.

SHEET 5 OF 5

Contact: Doug Horning/Greg Larson,P.E.

Horns Consulting Project #:		21SL082B
Designed By:	DH	04/05/2021
Drawn By:	DH	04/05/2021
Reviewed By:	GL	04/05/2021

FS21-380

WILLOW TRAILS PHASE 2
STREETLIGHT PLANS
SURPRISE, ARIZONA

A PORTION OF THE NORTHWEST QUARTER OF SECTION 23, TOWNSHIP 4 NORTH, RANGE 2 WEST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, CITY OF SURPRISE, MARICOPA COUNTY, ARIZONA

ENGINEERS NOTES

1. A THOROUGH ATTEMPT HAS BEEN MADE TO SHOW THE LOCATIONS OF ALL UNDERGROUND OBSTRUCTIONS AND UTILITY LINES IN THE WORK AREA. HOWEVER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO OBSTRUCTIONS AND UTILITY LINES ENCOUNTERED DURING CONSTRUCTION AND SHALL DETERMINE THE EXACT LOCATION OF UTILITIES IN ADVANCE OF TRENCHING. THE ENGINEER AND/OR DEVELOPER WILL NOT GUARANTEE ANY ELEVATIONS OR LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THESE PLANS.
2. PRIOR TO BIDDING THE WORK, THE CONTRACTOR SHALL THOROUGHLY SATISFY HIMSELF AS TO THE ACTUAL CONDITIONS, REQUIREMENTS OF THE WORK AND EXCESS OF DEFICIENCY IN QUANTITIES, IF ANY. NO CLAIMS SHALL BE MADE AGAINST THE OWNER/DEVELOPER OR ENGINEER FOR ANY EXCESS OR DEFICIENCY THEREIN, ACTUAL OF RELATIVE.
3. THE ENGINEER WILL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS OR PROGRAMS UTILIZED IN CONNECTION WITH THE WORK, AND WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
4. ANY QUANTITIES SHOWN ARE THE BEST ESTIMATE OF THE ENGINEER. THE SUBCONTRACTOR SHALL MAKE HIS OWN INDEPENDENT ESTIMATE OF QUANTITIES AND BASE HIS BID THEREON.
5. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR COORDINATING THE RELOCATION OF UTILITIES, POWER POLES, ETC.
6. 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.
7. THE CONTRACTOR WILL MAKE FIELD AS-BUILT MEASUREMENTS OF THE WORK. THESE MEASUREMENTS WILL BE GIVEN TO THE ENGINEER IN WRITING SO THAT AS-BUILT PLANS CAN BE CREATED. IF THE CONTRACTOR DOES NOT TAKE AS-BUILT MEASUREMENTS OR FORWARD THESE MEASUREMENTS TO THE ENGINEER, THE ENGINEER WILL NOT BE RESPONSIBLE FOR PROVIDING ACCURATE AS-BUILT OF THE POLES, ETC.
8. AS-BUILT SUBMITTALS WILL NOT BE PERFORMED UNTIL ORDERED BY THE CLIENT OR HIS MEASUREMENTS.
9. HORNS CONSULTING LLC., IT'S OWNERS, OR EMPLOYEES WILL NOT BE HELD RESPONSIBLE FOR ANY DESTRUCTION OF PROPERTY CAUSED BY OTHERS. IDENTIFY ALL OTHER UTILITIES & CALL BLUE STAKE PRIOR TO DIGGING.
10. SIDEWALK TO MEANDER AROUND ALL STREET LIGHTS AND APS EQUIPMENT.

CITY OF SURPRISE 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 TO EXISTING UTILITIES SHALL BE REPAIRED AND OR REPLACED AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL COMPLY WITH ALL CURRENT BLUE STAKE LAWS. CALL BLUE STAKE FOR FIELD LOCATION AT (602) 263-1100.
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 SHOWN 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, IRRIGATION LINES, PROPERTY MONUMENTS, FENCING OR SURFACE FEATURES PRIOR TO CONSTRUCTION. ANYTHING DISTURBED DURING CONSTRUCTION SHALL BE REPLACED IN KIND AT THE CONTRACTORS 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) 222-7000.
11. TRAFFIC CONTROL SHALL BE MAINTAINED IN ACCORDANCE WITH MAG SPECFICATION 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.

CITY ADDITIONAL NOTES

1 THE ELECTRICAL / MAINTENANCE COST OF ALL STREET LIGHTS ON LOCAL AND COLLECTOR STREETS ARE TO BE PAID BY THE ADJACENT DEVELOPMENT'S STREET LIGHT IMPROVEMENT DISTRICT (SLID). THE ELECTRICAL / MAINTENANCE COST OF ALL STREET LIGHTS ON ARTERIAL STREETS ARE TO BE BILLED TO THE CITY OF SURPRISE'S ENERGY BILL.

2 CONTRACTOR TO COORDINATE WITH APS AND UTILIZE THEIR CURRENT SPECIFICATION AT TIME OF BIDDING AND CONSTRUCTION.

Horns Consulting, LLC
www.hornsconsulting.com
Phone: (602)256-8990
E-mail: doug@hornsconsulting.com
1243 E. Muriel Drive, Phoenix, Arizona 85022

LED NOTE:
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 SPECIFICATIONS AT THE TIME OF BIDDING AND CONSTRUCTION.

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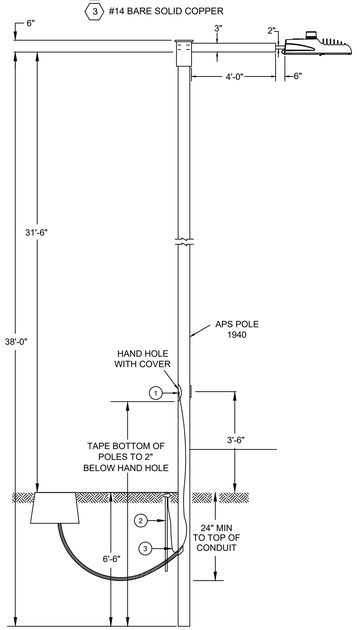
- FIRE HYDRANT LOCATION PER CIVIL PLANS

1A 96W LED (APS 8030) DETAIL 1A

1. GROUND ATTACHMENT
2. ROD COPPERCLAD GRD., 5/8" x 8'
3. #14 BARE SOLID COPPER



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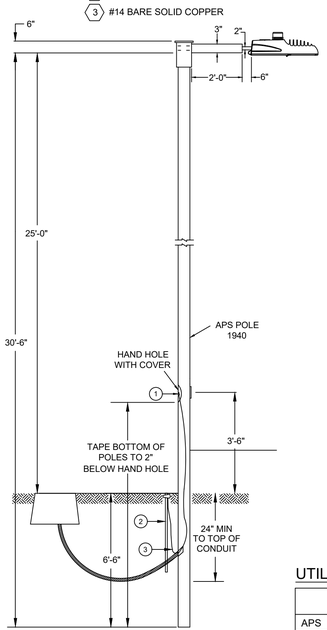
3. #14 BARE SOLID COPPER

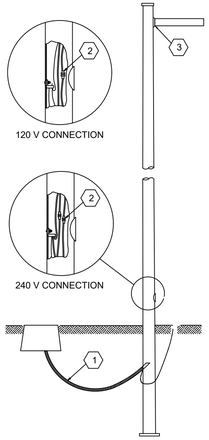


STREETLIGHT NOTE:
ENSURE THERE IS A 1' CLEARANCE FROM THE EDGE OF THE SIDE WALK TO THE FACE OF THE POLE.

2 (APS 8130) DETAIL 2

TO BE USED IN CONJUNCTION WITH WITH LED LIGHTS AS SHOWN IN DETAILS #1

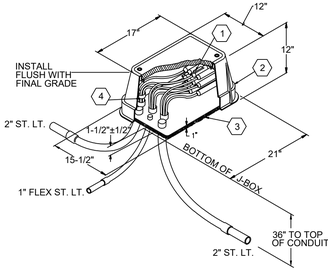
1. 1" FLEX CONDUIT
2. IN-LINE FUSE HOLDER WITH 15AMP FUSE
3. CONNECT BUTT-SPLICE #16-#14



3 (APS 8655) DETAIL 3

TO BE USED IN CONJUNCTION WITH WITH LED LIGHTS AS SHOWN IN DETAILS #1

1. SET SCREW INSULATED JUNCTION BAR
2. JUNCTION BOX 10"X15"X12"
3. CONCRETE GROUT PREMIX
4. I.D. RINGS (FEED, POLES)



UTILITY COORDINATION LIST

DESCRIPTION	REPRESENTATIVE	PHONE	DATE
APS	MONIQUE HOLLIDAY	(602) 250-1000	09-15-2021
CENTURY LINK	DEBBIE RAMSEY	(602) 630-0492	09-15-2021
SOUTHWEST GAS	ZACH STEVENSON	(602) 484-5270	09-15-2021
COX COMMUNICATIONS	TMC (TRAFFIC MANAGEMENT CENTER)	(623) 322-7215	09-15-2021

* CONFLICTS ARISING DURING THE COURSE OF CONSTRUCTION FROM UNFORSEEN CIRCUMSTANCES SHALL BE REPORTED TO THE INTERESTED UTILITY COMPANY AND BE RESOLVED BY THEM AND THE DESIGN ENGINEER.

EQUIPMENT LIST

** **LED NOTE:**
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 SPECIFICATIONS AT THE TIME OF BIDDING AND CONSTRUCTION.

ITEM #	SYMBOL	TYPE STREET:	QUANTITY	MOUNTING HEIGHT	POLE HEIGHT:	MAST ARM	LUMENS	TYPE	WATTAGE	VOLTAGE	C.C.T.	PHOTOMETRIC	LUMINAIRE
1A		COLLECTOR	9	31'-6"	38'-0"	4'-0"	11,500	LED	96W	120V	3000K	TYPE III	ERLH-0-11-C3-30-A-DKBZ
1		LOCAL	24	25'-0"	30'-6"	2'-0"	4,900	LED	39W	120V	3000K	TYPE II WIDE (23) TYPE IV (1)	ERL1-0-05-B3-30-A-DKBZ (23) ERL1-0-05-D3-30-A-DKBZ (1)
		ITEM DESCRIPTION											
2		1" FLEX PVC W/2-#14 TYPE THHN/THWN AND 1-#14 BARE BOND FROM PULL BOX TO BUSSMAN FUSE HOLDER IN STREET LIGHT.											
3		INSTALL AN APS JUNCTION BOX NEXT TO THE POLE PER JUNCTION BOX DETAIL.											

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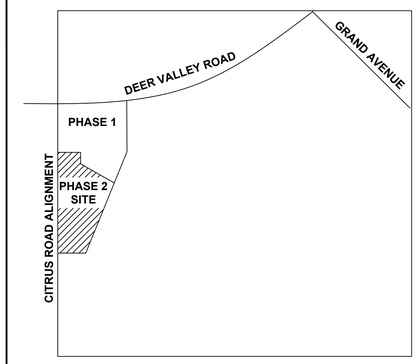
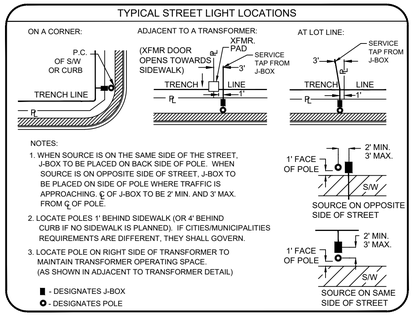
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

VICINITY MAP
N.T.S.



TYPICAL STREET LIGHT LOCATIONS



OWNER / DEVELOPER
FORESTAR
20410 N. 19TH AVENUE, SUITE 100
PHOENIX, ARIZONA 85027
PHONE: (480) 368-2357
CONTACT: BRIAN KONDERIK

CIVIL ENGINEER
GOODWIN & MARSHALL, INC
2705 S. ALMA SCHOOL ROAD, SUITE #2
CHANDLER, ARIZONA 85286
PHONE: (602) 218-7285
CONTACT: WARREN RUSSELL, P.E.

ELECTRICAL ENGINEER
HORNS CONSULTING, LLC
1243 E. MURIEL DRIVE
PHOENIX, ARIZONA 85022
PHONE: (602) 256-8990
CONTACT: DOUG HORNING & GREG LARSON, P.E.

CITY OF SURPRISE APPROVAL

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.

CITY OF SURPRISE ENGINEER _____ DATE _____

INDEX

1 ~ COVER SHEET
2 ~ LIGHTING LAYOUT
3 ~ LIGHTING LAYOUT
4 ~ PHOTOMETRICS
5 ~ PHOTOMETRICS

WILLOW TRAILS PHASE 2
COVERSHEET
STREET LIGHT PLANS

HORNS CONSULTING, LLC
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PHOENIX, ARIZONA 85022
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NO	REVISIONS	BY	DATE
7			
6			
5			
4			
3			
2	CITY COMMENTS	DH	9-15-21
1	CITY COMMENTS	DH	8-19-21

Professional Engineer Registration CERTIFICATE NO. 28582 GREG D. LARSON Expires 6/30/22 Registered ARIZONA U.S.A.

SHEET 1 OF 5

Contact: Doug Horning/Greg Larson,P.E.

Horns Consulting Project #:	21SL082C
Designed By:	DH 04/12/2021
Drawn By:	DH 04/12/2021
Reviewed By:	GL 04/12/2021

FS21-381

WILLOW TRAILS PHASE 2
STREETLIGHT PLANS
SURPRISE, ARIZONA

DETAILS AND LEGEND FOR STREETLIGHTS:

- 1A — INSTALL ONE 96W, 11500 LUMEN LED FIXTURES WITH PHOTOELECTRIC CONTROL ON A 38'-0" SQUARE POLE MOUNTED AT 31'-6" WITH ONE SINGLE 4'-0" MAST ARM, SEE DETAIL 1. POLE SHALL BE LOCATED 3.5' BACK OF CURB OR 1' BACK OF WALK FROM FACE OF POLE.
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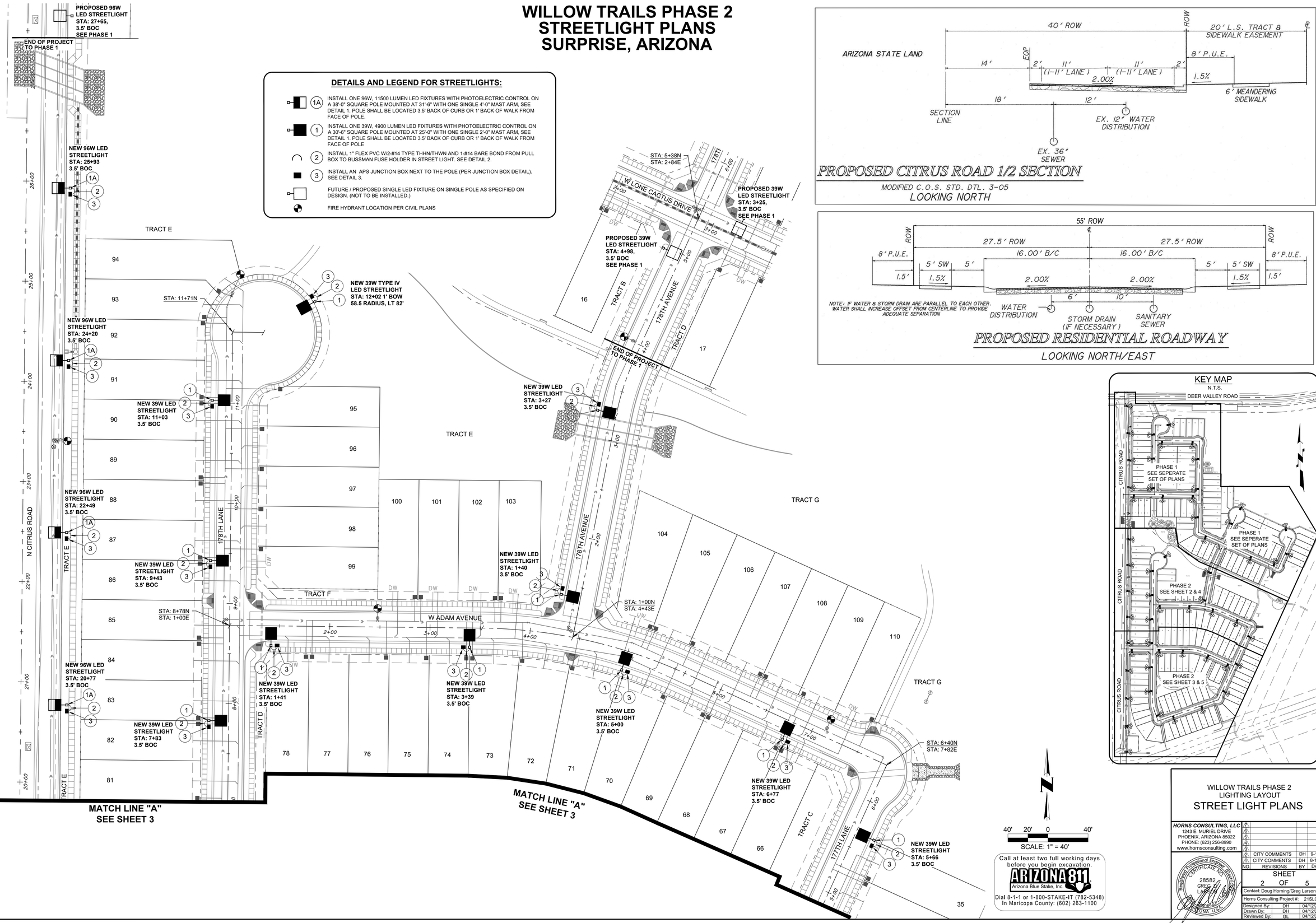

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WILLOW TRAILS PHASE 2
LIGHTING LAYOUT
STREET LIGHT PLANS

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NO	REVISIONS	BY	DATE
7			
6			
5			
4			
3			
2	CITY COMMENTS	DH	9-15-21
1	CITY COMMENTS	DH	8-19-21

Registered Professional Engineer (Civil) CERTIFICATE NO. 28582 GREG L. LARSON Expires 09/30/2022 STATE OF ARIZONA U.S.A.

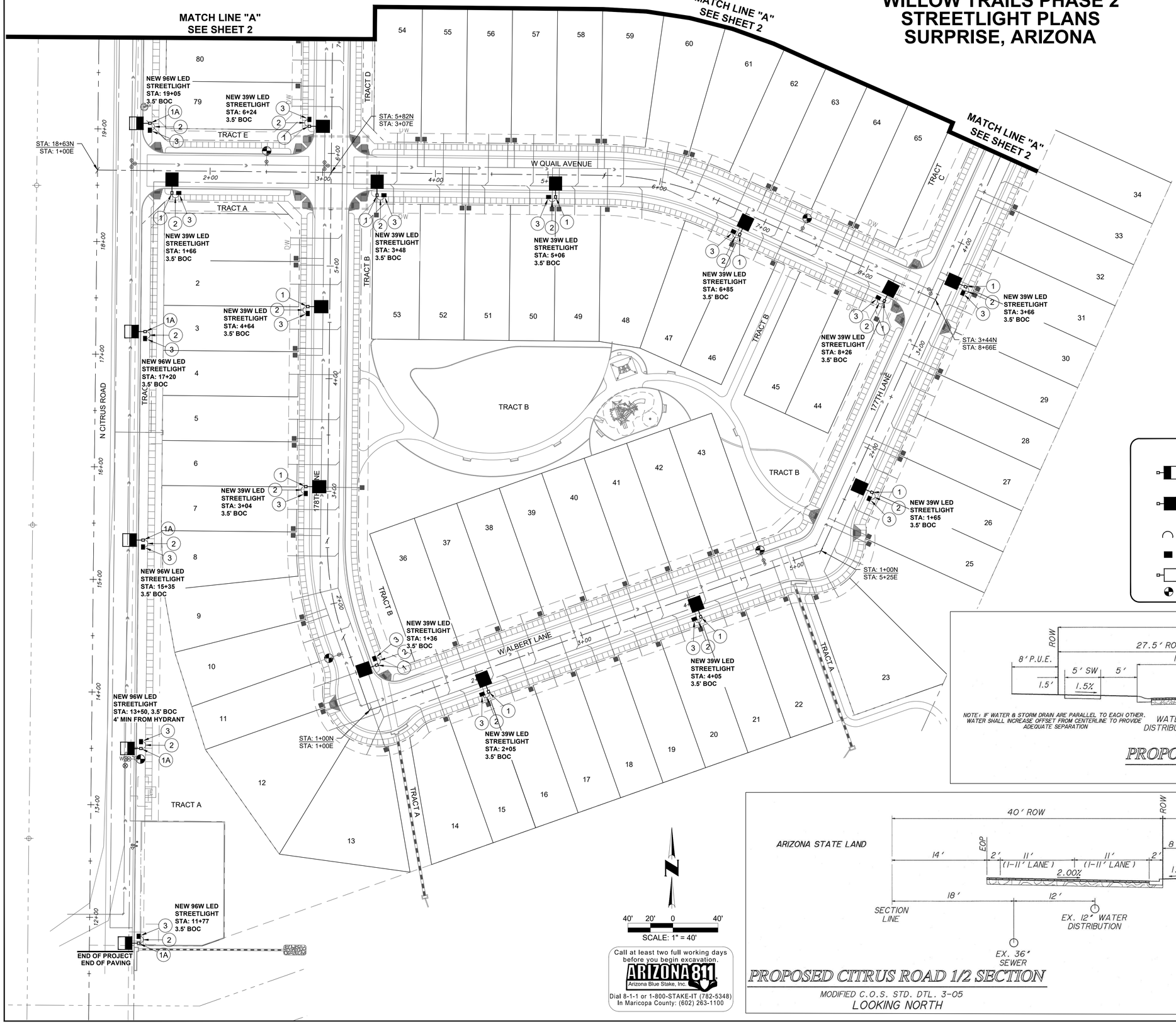
SHEET 2 OF 5

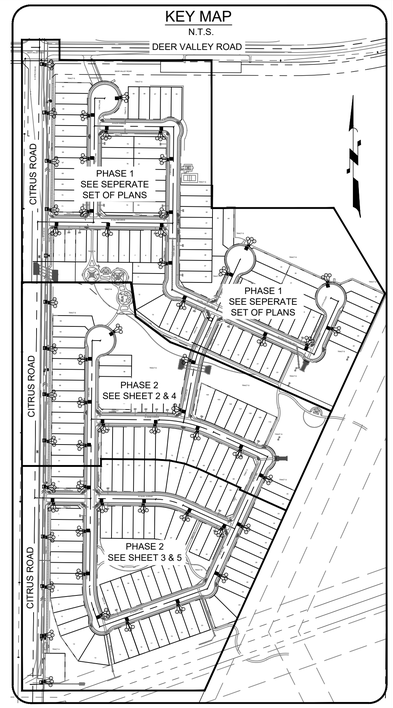
Contact: Doug Horning/Greg Larson,P.E.

Horns Consulting Project #:	21SL082C
Designed By:	DH 04/12/2021
Drawn By:	DH 04/12/2021
Reviewed By:	GL 04/12/2021

FS21-381

WILLOW TRAILS PHASE 2
STREETLIGHT PLANS
SURPRISE, ARIZONA





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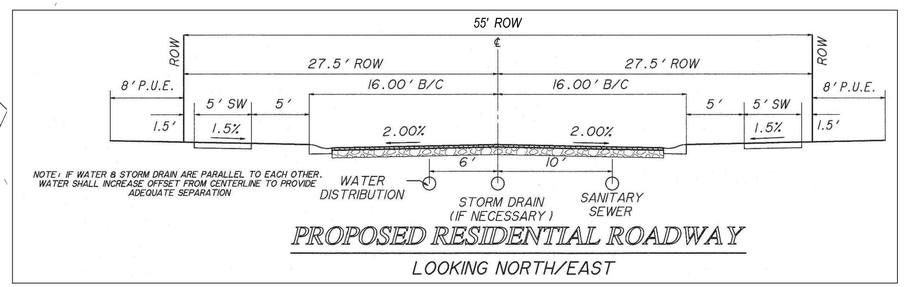

PROPOSED RESIDENTIAL ROADWAY

LOOKING NORTH/EAST

PROPOSED CITRUS ROAD 1/2 SECTION

MODIFIED C.O.S. STD. DTL. 3-05

LOOKING NORTH

40' 20' 0 40'

SCALE: 1" = 40'

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

WILLOW TRAILS PHASE 2
LIGHTING LAYOUT
STREET LIGHT PLANS

HORNS CONSULTING, LLC
1243 E. MURIEL DRIVE
PHOENIX, ARIZONA 85022
PHONE: (623) 256-8990
www.hornsconsulting.com

NO.	REVISIONS	BY	DATE
2	CITY COMMENTS	DH	9-15-21
1	CITY COMMENTS	DH	8-19-21

SHEET 3 OF 5

Contact: Doug Horning/Greg Larson,P.E.

Horns Consulting Project #:		21SL082C
Designed By:	DH	04/12/2021
Drawn By:	DH	04/12/2021
Reviewed By:	GL	04/12/2021

Professional Engineer CERTIFICATE NO. 28582 GREG D. LARSON Registered ARIZONA U.S.A.

FS21-381

WILLOW TRAILS PHASE 2
STREETLIGHT PLANS
SURPRISE, ARIZONA

PHOTOMETRICS STUDIES

(Studies results is in illuminace)

GE LIGHTING SOLUTIONS ERL1_05B330_____-120-277V
GE LIGHTING SOLUTIONS-EAST CLEVELAND OH USA test report no. 17040524 17040525 17040526 17040722 17040723 17040724
lamp(s): LEDs 757G-V1
candela file 'erl1_05b330_____-120-277v_tcm201-129086.ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 39
Outreach (from mounting axis to photometric center)= 30 in
mounting height= 25 ft
number locations= 23, number luminaires= 23
kw all locations= 0.8

GE LIGHTING SOLUTIONS ERL1_05D330_____-120-277V
GE LIGHTING SOLUTIONS-HENDERSONVILLE NC USA test report no. 17072713 17072714 17072715
lamp(s): LEDs 757G-V1
candela file 'erl1_05d330_____-120-277v_tcm201-129098.ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 39
Outreach (from mounting axis to photometric center)= 30 in
mounting height= 25 ft
number locations= 1, number luminaires= 1
kw all locations= 0.04

GE LIGHTING SOLUTIONS ERLH_11C330_____
GE LIGHTING SOLUTIONS-EAST CLEVELAND OH USA test report no. 17041221 17041321 17041322 17041323 17041324 17041325
lamp(s): LEDs E21A
candela file 'erlh_11c330_____tcm201-129274.ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 96
Outreach (from mounting axis to photometric center)= 48 in
mounting height= 31.5 ft
number locations= 9, number luminaires= 9
kw all locations= 0.9

Willow Trails Phase 2 (Overall)		Citrus Road	
1851 points at z=0, sp 8ft by 8ft		1082 points at z=0, sp 8ft by 8ft	
HORIZONTAL FOOTCANDLES		HORIZONTAL FOOTCANDLES	
Average	0.54	Average	0.81
Maximum	2.22	Maximum	2.27
Minimum	0.08	Minimum	0.26
Avg:Min	6.80	Avg:Min	3.11
Max:Min	27.75	Max:Min	8.73
Coef Var	0.77	Coef Var	0.51
UnifGrad	2.78	UnifGrad	1.56

DETAILS AND LEGEND FOR STREETLIGHTS:

- 1A — INSTALL ONE 96W, 11500 LUMEN LED FIXTURES WITH PHOTOELECTRIC CONTROL ON A 38'-0" SQUARE POLE MOUNTED AT 31'-6" WITH ONE SINGLE 4'-0" MAST ARM, SEE DETAIL 1. POLE SHALL BE LOCATED 3.5' BACK OF CURB OR 1' BACK OF WALK FROM FACE OF POLE.
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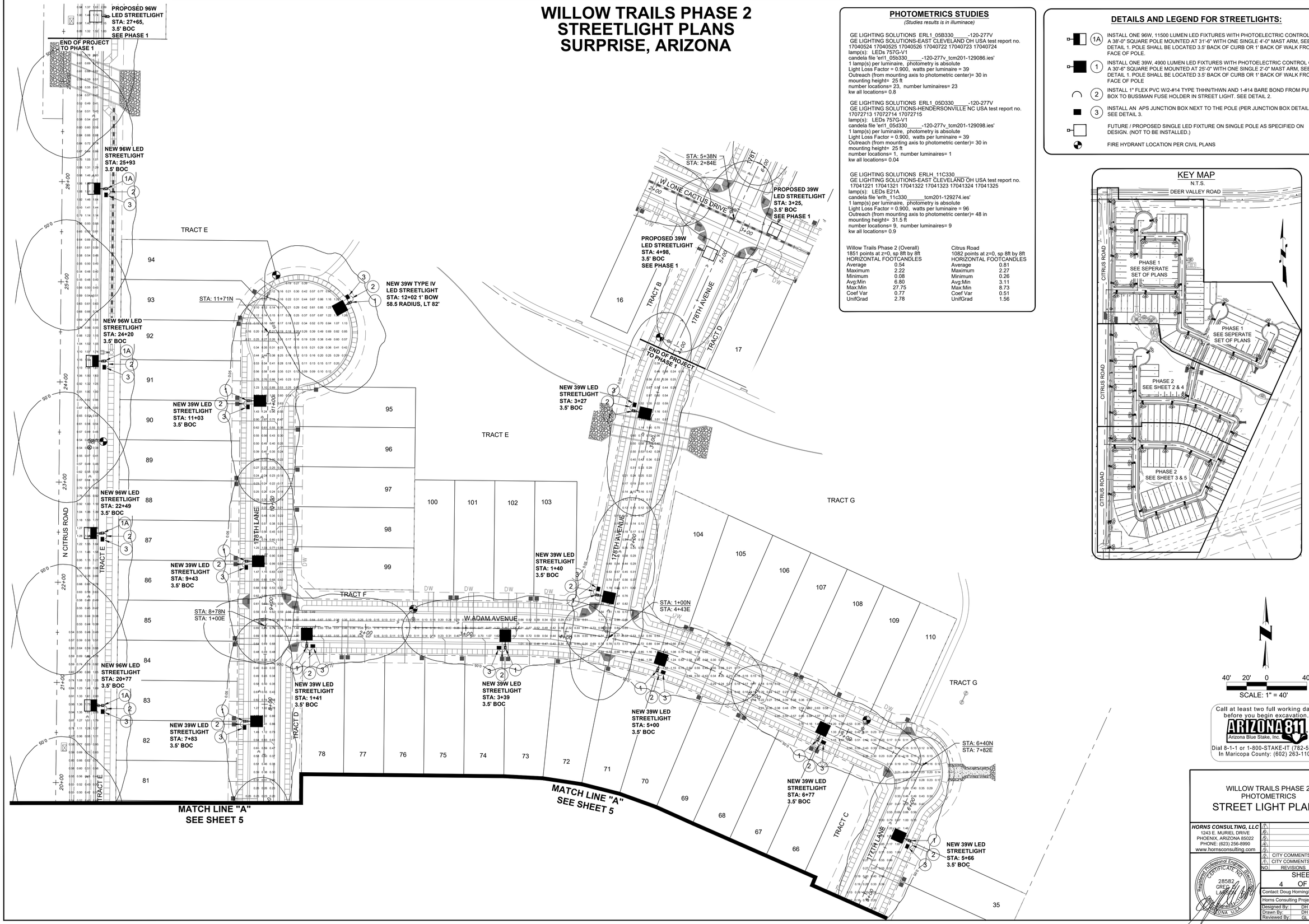

N

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Registered Professional Engineer (Electrical) CERTIFICATE NO. 28582 GREG S. LARSON Expires 09/30/2021 ARIZONA, U.S.A.

NO.	REVISIONS	BY	DATE
7			
6			
5			
4			
3			
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SHEET 4 OF 5

Contact: Doug Horning/Greg Larson,P.E.
Horns Consulting Project #: 21SL082C

Designed By:	DH	04/12/2021
Drawn By:	DH	04/12/2021
Reviewed By:	GL	04/12/2021

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MATCH LINE "A" SEE SHEET 4

MATCH LINE "A" SEE SHEET 4

MATCH LINE "A" SEE SHEET 4

NEW 96W LED STREETLIGHT STA: 19+05 3.5' BOC

NEW 39W LED STREETLIGHT STA: 6+24 3.5' BOC

STA: 18+63N STA: 1+00E

STA: 5+82N STA: 3+07E

W QUAIL AVENUE

NEW 39W LED STREETLIGHT STA: 1+66 3.5' BOC

NEW 39W LED STREETLIGHT STA: 3+48 3.5' BOC

NEW 39W LED STREETLIGHT STA: 5+06 3.5' BOC

NEW 39W LED STREETLIGHT STA: 6+85 3.5' BOC

NEW 39W LED STREETLIGHT STA: 4+64 3.5' BOC

NEW 96W LED STREETLIGHT STA: 17+20 3.5' BOC

NEW 39W LED STREETLIGHT STA: 8+26 3.5' BOC

NEW 39W LED STREETLIGHT STA: 3+66 3.5' BOC

STA: 3+44N STA: 8+66E

NEW 39W LED STREETLIGHT STA: 3+04 3.5' BOC

NEW 96W LED STREETLIGHT STA: 15+35 3.5' BOC

NEW 39W LED STREETLIGHT STA: 1+65 3.5' BOC

STA: 1+00N STA: 5+25E

NEW 39W LED STREETLIGHT STA: 1+36 3.5' BOC

NEW 39W LED STREETLIGHT STA: 4+05 3.5' BOC

NEW 96W LED STREETLIGHT STA: 13+50, 3.5' BOC 4' MIN FROM HYDRANT

STA: 1+00N STA: 1+00E

NEW 39W LED STREETLIGHT STA: 2+05 3.5' BOC

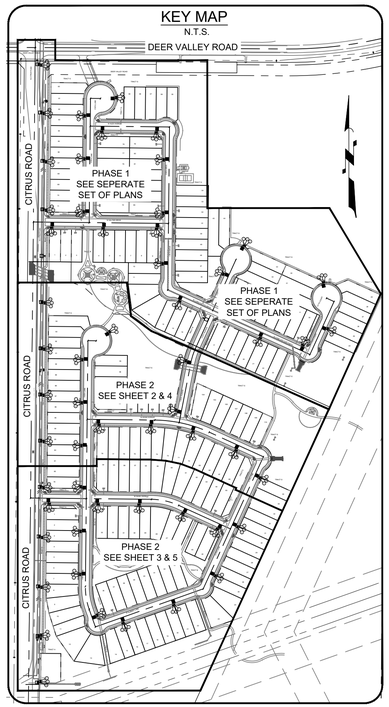
NEW 96W LED STREETLIGHT STA: 11+77 3.5' BOC

END OF PROJECT
END OF PAVING

TRACT A
TRACT B
TRACT C
TRACT D
TRACT E

N CITRUS ROAD
N ALBERT LANE
N 177TH LANE

KEY MAP
N.T.S.



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Registered Professional Engineer (Electrical) CERTIFICATE NO. 28582 GREG S. LARSON Expires 09/30/2022 ARIZONA U.S.A.

SHEET 5 OF 5

Contact: Doug Horning/Greg Larson,P.E.

Horns Consulting Project #:	21SL082C	
Designed By:	DH	04/12/2021
Drawn By:	DH	04/12/2021
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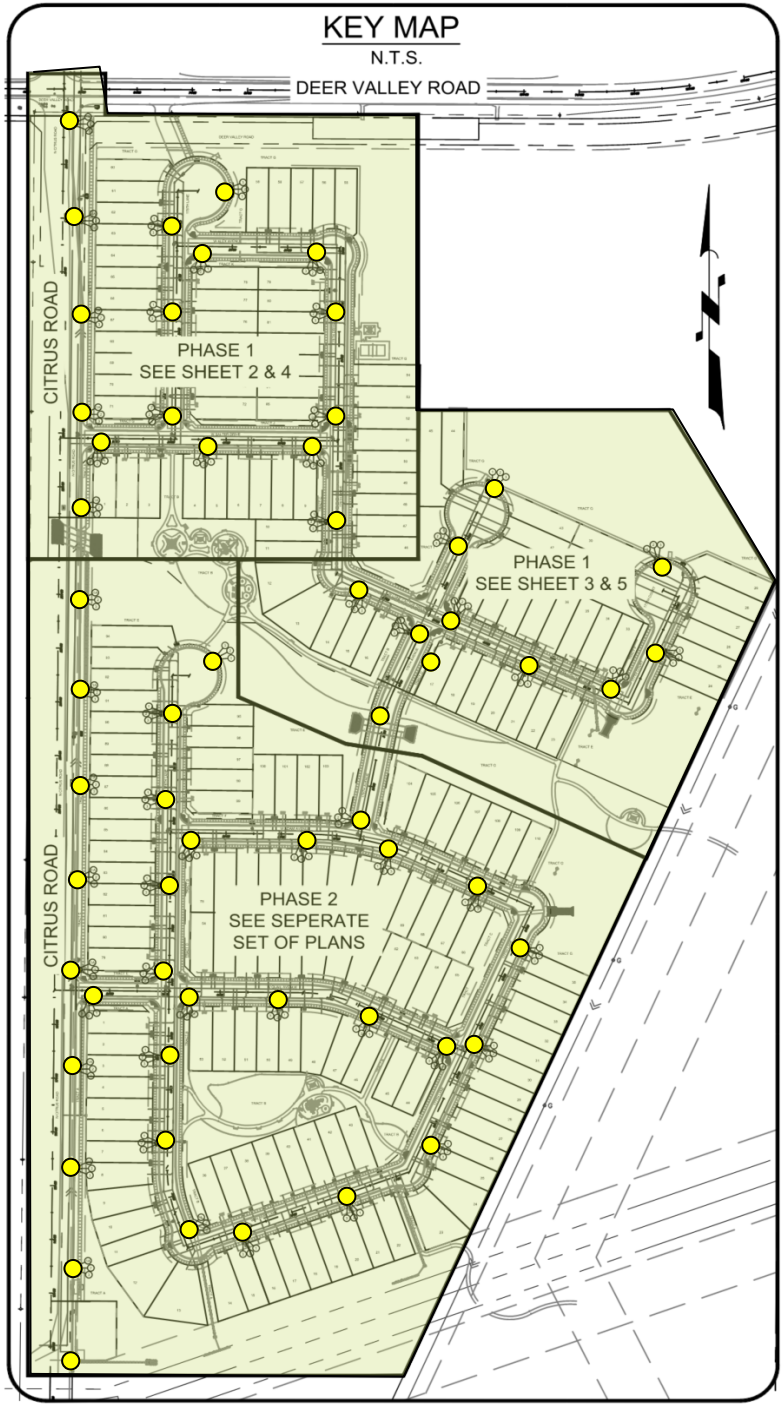
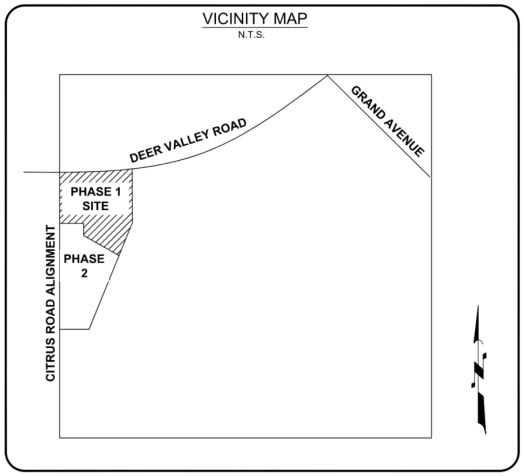
FS21-381



Street Lights:

- Street Light Pole
- 59 new poles
- SLID Boundary



CITY OF SURPRISE
Regular City Council Meeting

Council Meeting Date: May 7, 2024
Submitting Department: Public Works
Staff Recommendations:

Contact Person: Kristin Tytler, Department Director
District: District 3

Consent: Yes Regular: No Public Hearing: No Report/Discussion: No

Agenda Wording:
Consideration and action pertaining to the immediate formation of a lighting improvement district known as City of Surprise, Arizona, SU-PRASADAGTEWY207 pursuant to A.R.S. § 48-616 for the purpose of purchasing facilities and energy for lighting the public streets; Resolution #2024-55.

Motion:
I move to approve Resolution #2024-55.

Background:
The City has verified that the Petition for the proposed streetlight improvement district contains the signatures of all the real property owners in the district, exclusive of mortgagees and other lien holders.

The City and Arizona Public Service Company ("APS") have approved the street layout and facilities design. The electric rates are established by APS tariff.

The lighting improvements are more than local or ordinary public benefits, and the expenses of the district will be paid for by the levy and collection of ad valorem taxes based upon the assessed value of all property in the District.

Objective Analysis:
A SLID is a neighborhood partnership and very common practice in which property owners in a defined area agree to pay the costs to operate and maintain their immediate area's streetlights through a property tax. All new developments in the City of Surprise require a SLID. This action will form the SLID boundary for the Prasada Apartment development.

Policy Compliant:
The Surprise Municipal Code requires that street lighting that serves a defined area be paid for through revenues obtained from the specific area being served by such street lighting. In these instances, a Streetlight Improvement District (SLID) is formed. The city strives to assure that residents are subject to only one SLID and that the boundaries of each SLID accurately reflect the service area. This item is consistent with these objectives.

Financial Impact:
Once the SLID is illuminated, the City will begin levying the SLID to cover SLID expenses. At the current time, the SLID is not incurring any expense because the SLID lights have not been illuminated. Therefore, there is no current financial impact.

Budget Impact:
Since the SLID is not illuminated, there is no revenue or expense budgeted in FY2024 nor are there budgets planned for FY2025 for the SLID. If the SLID is illuminated in FY2024 or FY2025, expenses will be charged to the SLID and recouped with a future levy. A separate fund for this district will be created to track the revenue and expenses.

FTE Impact:
This item does not have an impact on current staff levels.

ATTACHMENTS:
1. 01 Res 2024-55 PRASADAGTEWY_final
2. 02 SLID PETITION FS22-0510 SLID
3. 03 Street Light Plan -Prasada Apts
4. 04 Prasada apt_Exhibit Template SLIDS

RESOLUTION # 2024-55

A RESOLUTION OF THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE, ARIZONA, DECLARING ITS INTENTION TO ESTABLISH A STREET LIGHT IMPROVEMENT DISTRICT TO PURCHASE ENERGY FOR LIGHTING THE PUBLIC STREETS AND PARKS IN THE AREA WITHIN THE CORPORATE LIMITS OF THE CITY OF SURPRISE, ARIZONA DESCRIBED ON EXHIBIT A, ATTACHED HERETO; DECLARING SUCH IMPROVEMENTS TO BE OF MORE THAN LOCAL OR ORDINARY PUBLIC BENEFIT AND THAT THE EXPENSES THEREOF BE PAID FOR BY THE LEVY AND COLLECTION OF AD VALOREM TAXES UPON THE ASSESSED VALUATION OF ALL REAL AND PERSONAL PROPERTY IN A CERTAIN DISTRICT TO BE KNOWN AS "CITY OF SURPRISE, ARIZONA, SU-PRASADAGTEWY207 LIGHTING IMPROVEMENT DISTRICT"; AND ORDERING THAT SUCH IMPROVEMENTS BE PROVIDED FOR UNDER THE PROVISIONS OF SECTION 48-572, ARIZONA REVISED STATUTES.

WHEREAS, the owners, exclusive of mortgagees and other lienholders, of all of the real property (hereinafter referred to as "Petitioner") in the hereinafter described District, acting pursuant to the provisions of Sections 48-615(A) and 48-617(A), Arizona Revised Statutes, have petitioned the Mayor and Council of the City of Surprise, Arizona (hereinafter referred to as "City"), to adopt a resolution of intention (hereinafter referred to as "Resolution") ordering the purchase of energy for the lighting of the public street and parks (hereinafter referred to as "Improvements") for the real property legally described in Exhibit A (such area hereinafter referred to as the "District") with such boundaries as shown in the map in Exhibit B attached hereto pursuant to the provisions of Section 48-576, Arizona Revised Statutes, giving the City immediate jurisdiction to order the improvements pursuant to the provisions of Section 48-581, Arizona Revised Statutes, without the necessity of the publications or posting of this Resolution provided for in Sections 48-578, Arizona Revised Statutes;

WHEREAS, the City has verified that Petitioner is the owner, exclusive of mortgagees and other lienholders, of all of the real property included within the boundaries of the District, and;

WHEREAS, the Mayor and Council of the City hereby find and determine that they have jurisdiction to adopt this Resolution to order the Improvements pursuant to the provisions of Section 48-576, Arizona Revised Statutes, and have immediate jurisdiction to adopt this Resolution ordering the Improvements pursuant to the provisions of Section 48-581, Arizona Revised Statutes without the necessity of publications and posting of this Resolution as provided for in Section 48-578, Arizona Revised Statutes;

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Surprise, Arizona, as follows.

Section 1. The City, after verifying ownership of the real property included within the boundaries of the District, hereby finds the Petitioner is the owner, exclusive of mortgagees and other lienholders, of all of the real property included within the boundaries of the District.

Section 2. The name of the District shall be "CITY OF SURPRISE, ARIZONA, SU-PRASADAGTEWY207 LIGHTING IMPROVEMENT DISTRICT."

Section 3. The District is formed, and shall exist, pursuant to the provisions of Title 48, Chapter 4, Article 2, Arizona Revised Statutes, and Section 48-616, Arizona Revised Statutes.

Section 4. The public interest or convenience requires, and it is the intention of the Mayor and Council of the City to order the Improvement as so described above.

Section 5. The Improvements, in the opinion of the Mayor and Council of the City, are of more than local or ordinary public benefit and are of special benefit to the respective lots, pieces and parcels of real property in the District, and the Mayor and Council of the City hereby make and order the expense of the Improvements payable from the levying and collection of ad valorem taxes upon the assessed value of all real and personal property in the District to be known and designated as "CITY OF SURPRISE, ARIZONA, SU-PRASADAGTEWY207 LIGHTING IMPROVEMENT DISTRICT" and hereby declare that the District is as legally described on Exhibit A attached hereto with the boundaries as shown in the map in Exhibit B attached hereto. Any public street or alley within the District shall be omitted from the assessment. Any lot belonging to the United States, the State, a county, city, school district or political subdivision or institution of the state or county within the District shall be omitted from the assessment.

Section 6. The Superintendent of Streets or equivalent of the City shall not be required to post or cause to be posted notices of the Resolution of Intention. The Clerk of the City shall certify to the passage of this Resolution of Intention but shall not be required to cause the same to be published in a newspaper published and of general circulation in the City.

Section 7. The Mayor and Council of the City shall make annual statements and estimates of the expenses of the district, which shall be provided for by the levy and collection of ad valorem taxes upon the assessed value of all the real and personal property in the District; shall publish notice thereof; shall have hearings thereon; and shall adopt them at the times and in the manner provided for incorporated cities and towns by the applicable portions of Section 42-17101, et seq., 42-17152, Arizona Revised Statutes. The Mayor and Council of the City shall, on or before the third Monday in August of each year, fix, levy and assess the amount to be raised by ad valorem taxes upon all of the property of the District and collect, as Maricopa County, Arizona (the "County") taxes are collected, the amounts shown by the statements and estimates as adopted by the Mayor and Council of the City. All statutes providing for the levy and collection of State of Arizona and County taxes, shall be applicable to District taxes as provided to be levied under Section 48-616, Arizona Revised Statutes.

Section 8. The District shall not be authorized to issue bonds and no assessment for District purposes against the property within the District shall exceed One Dollar and Twenty Cents ($1.20) per each hundred dollars of taxable valuation thereof in any year.

Section 9. The District shall not engage in any activity other than as provided in Section 48-616, Arizona Revised Statutes, i.e., contracting for and purchasing of energy for street and public park lighting.

Section 10. The formation of the District shall not be considered as preventing the subsequent establishment of improvement districts for any other purpose authorized by law, including improvement districts for the purpose of construction street lighting facilities within any part or all of the same territory as the District.

Section 11. The type of lighting facilities to be installed in the District and the locations thereof shall consist of those lighting facilities and locations described in the petition submitted by Petitioner, or as may be approved by the City.

Section 12. The rate to be paid for purchasing the energy for the District shall be the rate described in the petition submitted by Petitioner, or as may be approved by the Arizona Public Service Company.

Section 13. Any resolutions or parts of resolutions in conflict with the provisions of this Resolution are hereby repealed.

APPROVED AND ADOPTED this_____day of _____2024.

Skip Hall, Mayor

Attest:

Kristi Passarelli, City Clerk

Approved as to form:

Robert Wingo, City Attorney

EXHIBIT "A"

3engineering

planning civil engineering surveying

March 16, 2022
3 Engineering Job No. 1979

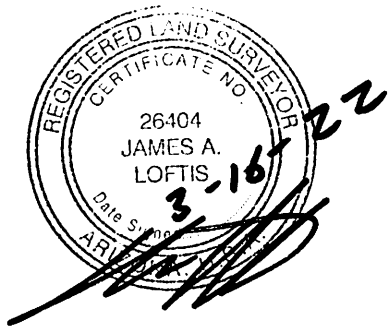
LEGAL DESCRIPTION

A portion of the Southwest quarter of Section 12, Township 3 North, Range 2 West of the Gila and Salt River Base and Meridian, Maricopa County, Arizona, more particularly described as follows;

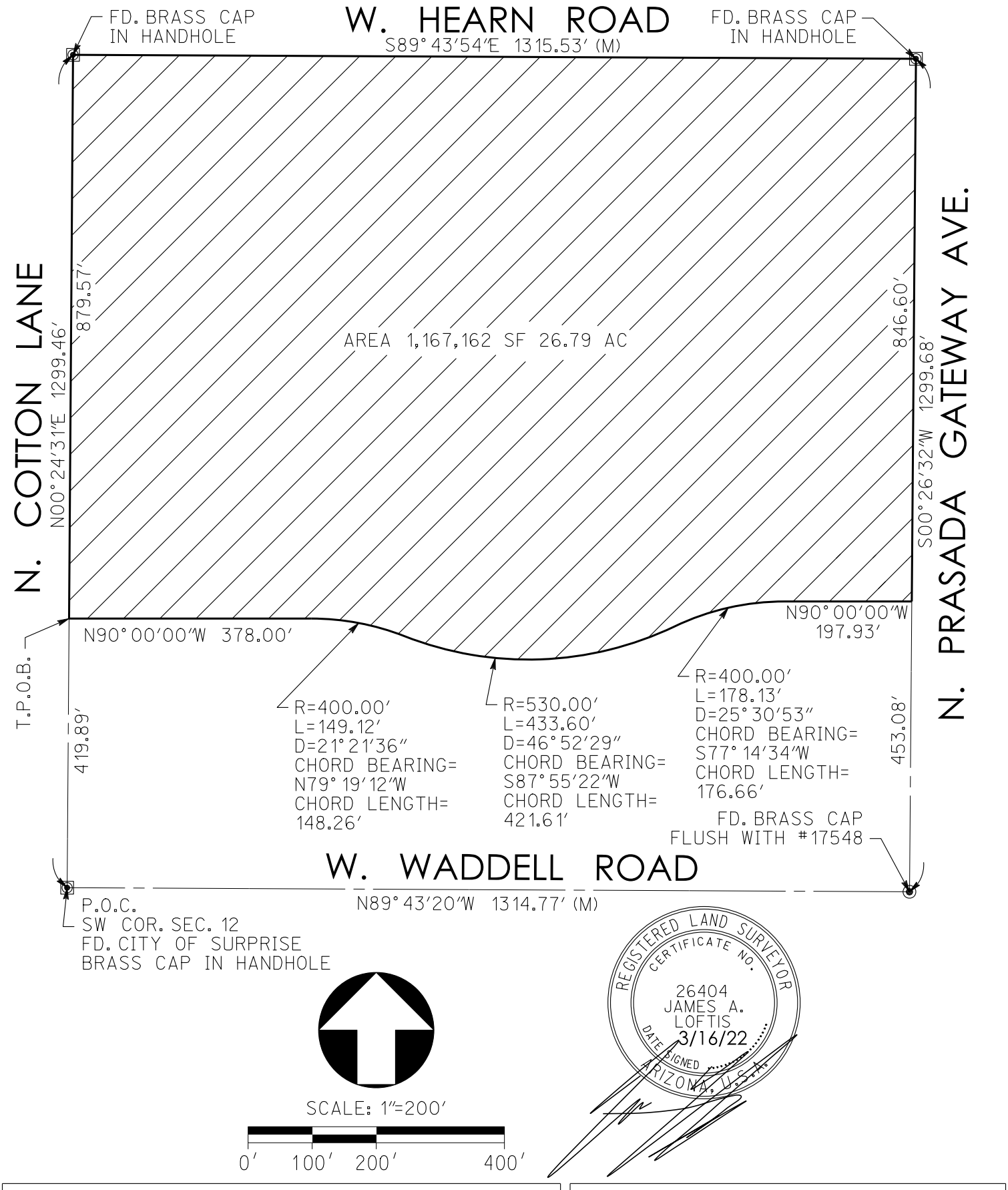
COMMENCING at the Southwest corner of said Section 12; Thence North 00 Degrees 24 Minutes 31 Seconds East along the West line of said Southwest quarter a distance of 419.89 feet to the **TRUE POINT OF BEGINNING**;

Thence continuing North 00 Degrees 24 Minutes 31 Seconds East a distance of 879.57 feet;
Thence South 89 Degrees 43 Minutes 54 Seconds East a distance of 1315.53 feet;
Thence South 00 Degrees 26 Minutes 32 Seconds West a distance of 846.60 feet;
Thence North 90 Degrees 00 Minutes 00 Seconds West a distance of 197.93 feet;
Thence along an arc 178.13 feet to the left, having a radius of 400.00 feet, the chord of which is South 77 Degrees 14 Minutes 34 Seconds West for a distance of 176.66 feet;
Thence along an arc 433.60 feet to the right, having a radius of 530.00 feet, the chord of which is South 87 Degrees 55 Minutes 22 Seconds West for a distance of 421.61 feet;
Thence along an arc 149.12 feet to the left, having a radius of 400.00 feet, the chord of which is North 79 Degrees 19 Minutes 12 Seconds West for a distance of 148.26 feet;
Thence North 90 Degrees 00 Minutes 00 Seconds West a distance of 378.00 feet to the **POINT OF BEGINNING**.

The above described parcel contains 26.794 acres (1,167,162 sq. ft.)



6370 E. Thomas Road, Suite #200, Scottsdale, Arizona 85251 · Phone (602) 334-4387 · Fax (602) 490-3230 · www.3engineering.com



REGISTERED LAND SURVEYOR
CERTIFICATE NO.
26404
JAMES A.
LOFTIS
3/16/22
DATE SIGNED
ARIZONA, U.S.A.

EXHIBIT "B"

3engineering
planning civil engineering surveying

STREET LIGHT IMPROVEMENT DISTRICT (SLID)

3 ENGINEERING, LLC
6370 E. THOMAS ROAD, SUITE # 200 - SCOTTSDALE, ARIZONA 85251
PHONE: (602) 334-4387 - FAX: (602) 490-3230
WWW.3ENGINEERING.COM

DATE:	PROJECT NO.
03/16/22	1979

C:\My SecuriSync\ Projects\ 1979_NextGen_Prasada_West_Apartments\ 1979_exb_SLID.dgn

COPYRIGHT 2022 3 ENGINEERING, LLC

STREET LIGHT IMPROVEMENT DISTRICT PETITION

TO THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE:

We, the undersigned, are all or a majority of the real property owners, exclusive of mortgagees and other lienholders, within the district named below. We petition the City Council of the City of Surprise, Arizona, to establish a street light improvement district under Arizona Revised Statutes (A.R.S.) §48-571 to 48-622, and any amendments, and specifically A.R.S. §48-615 to 48-617, to purchase electricity for lighting the public streets and/or parks within the district whose boundaries and area is described in Exhibits A and B attached hereto. This petition includes a charge for maintaining the lighting facilities.

It is hereby requested that, in compliance with the Arizona Revised Statutes, the City Council adopt a Resolution of Intention to order the proposed improvements, and that unless protests are received pursuant to A.R.S. §48-579 sufficient to bar further proceedings, the City Council proceed with the improvements petitioned for herein.

Expenses of the District (**PICK ONE)**

◉ shall be paid by the levy and collection of ad valorem taxes upon assessed value of all property in the District

○ shall be paid by the levy and collection of equal apportionment of taxes based on the number and classification of properties within the District.

Public convenience, necessity and welfare will be promoted by the establishment of the District and the real property within the District will be benefited by the District. Additional street lighting facilities may be installed and included in the District, at no investment cost to the District, as directed by the City and as approved by Arizona Public Service and the City Engineer.

WHEREFORE, we respectfully ask that this Petition be properly filed and that the Mayor and Council of the City adopt the Resolution and take such other action as is proper, necessary and appropriate to form the District and to fulfill the purposes for which the District is organized, as the Mayor and Council believe is proper and necessary.

The name of the proposed street light improvements district shall be:
SU-PrasadaGtewy207
(Leave Blank - to be assigned by City staff)

PETITIONERS: Please print and sign your name

PRINT BUSINESS/ PETITIONER'S NAME	ADDRESS OF PROPERTY OWNED WITHIN DISTRICT	ASSESSOR PARCEL #	SIGNATURE
Nextgen Apartments - Prasada LLC	Address not assigned	501-112-991	
Cotton & Waddell Commercial LLC	Address not assigned	501-12-990	

AVAILABILITY

This rate schedule is applicable to those portions of cities, towns and unincorporated communities in which the Company does a general retail electric business and where the Company has installed a multiple or series street lighting system of adequate capacity for the service to be rendered after December 1, 2021.

DESCRIPTION

E-68 is a rate that is applicable for lighting public streets, alleys, thoroughfares, public parks and playgrounds from dusk to dawn by use of Company's facilities.

TIME PERIOD

Dusk: The time between sunset and full night when photocontrol senses the lack of sufficient sunlight and turns on the lights.

Dawn: The time between full night and sunrise when a photocontrol senses sufficient sunlight to turn off lights.

CHARGES

The monthly bill will consist of the fixture and energy charges, plus adjustments:

I. FIXTURES (Includes Mounting Arm, if applicable)

Fixture Equipment Class	Fixture Cost Range (per unit)	Investment by Company Monthly Rate	Investment by Others Monthly Rate
A	$ 1 - $ 430	$5.72	$1.75
B	$ 431 - $ 520	$6.97	$2.12
C	$ 521 - $ 640	$8.36	$2.60
D	$ 641 - $ 820	$9.99	$3.32
E	$ 821 - $ 910	$12.64	$3.68
F	$ 911 - $ 1,010	$14.07	$4.08
G	$ 1,011 - $ 1,110	$15.38	$4.49
H	$ 1,111 - $ 1,250	$17.44	$5.04
I	$ 1,251 - $ 1,520	$19.40	$6.12
J	$ 1,521 - $ 1,670	$23.65	$6.73
K	$ 1,671 - $ 1,850	$26.29	$7.45

Note: Equipment cost greater than $1,850 shall be Customer owned.

II. ENERGY (Includes Generation, T&D, RCS & SBC)

Monthly energy charges for new lighting fixtures will be determined by the Company using the following method:

kWh = Fixture Wattage x 344 Usage Hours

Generation = kWh per month x $ 0.06621

T&D, RCS, System Benefits = kWh per month x $ 0.02682

NOTES:

1. Investment by Company. These rates are applicable where the Company provides the initial investment to purchase and install all facilities necessary for street lighting service. The Company will own, operate, and maintain the street lighting system.

2. Investment by Others. These rates are applicable in those instances where the requesting entity or individual purchases and installs the street lighting facilities at their own expense and in accordance with Company specifications. These rates will also apply in the instance where the Customer provides a non-refundable advance to the Company to cover the Company's cost of purchasing and installing the street lighting system. The Company retains ownership of the street lighting system and provides operation and maintenance for all facilities.

3. Listed kWh reflects the assigned monthly energy usage for each type of fixture and are used to determine any applicable transmission, system benefit, distribution, energy, and adjustment charges.

4. kWh is determined by the company based on the rated wattage of the equipment and an established average hourly usage per month.

5. The monthly rate for all new poles includes up to 300 feet of overhead secondary wire, or up to 300 feet of underground secondary wire if the Customer provides earthwork and conduit (excluding the underground to overhead transition).

III. POLES

				CHARGES	
			Height	Investment by Company	Investment by Others
A. Anchor Base Mounted (Flush)	Round Steel	1 Simplex Adapter	12 ft.	$12.84	$1.77
			22 ft.	$14.45	$1.99
			25 ft.	$15.64	$2.16
			30 ft.	$17.96	$2.47
			32 ft.	$18.87	$2.50
		2 Simplex Adapters	12 ft.	$13.69	$1.89
			22 ft.	$15.73	$2.17
			25 ft.	$16.41	$2.26
			30 ft.	$19.07	$2.63
			32 ft.	$20.34	$2.81
	Square Steel	5"	13 ft.	$14.72	$2.02
			15 ft.	$13.15	$1.81
			23 ft.	$15.60	$2.15
			25 ft.	$17.15	$2.36
			28 ft.	$19.04	$2.62
			32 ft.	$18.93	$2.61
	Concrete		12 ft.	$43.87	$6.04
	Fiberglass		12 ft.	$37.15	$5.11
	Decorative Transit	4"	16 ft.	$36.22	$5.00
	Decorative Transit	6"	30 ft.	$69.93	$9.63
	Hinged Poles	Square	15 ft.	$13.92	$1.14
		Round	19 ft.	$12.59	$1.03
B. Anchor Base Mounted (Pedestal)	Round Steel	1 Simplex Adapter	12 ft.	$12.35	$1.69
			22 ft.	$13.97	$1.92
			25 ft.	$15.14	$2.09
			30 ft.	$17.48	$2.42
			32 ft.	$18.37	$2.53
		2 Simplex Adapters	12 ft.	$13.19	$1.81
			22 ft.	$14.74	$2.02
			25 ft.	$15.91	$2.18
			30 ft.	$18.58	$2.55
			32 ft.	$19.84	$2.73
		3 Bolt	32 ft.	$22.80	$3.13
	Square Steel	5"	13 ft.	$14.24	$1.97
			15 ft.	$14.56	$1.99
			23 ft.	$15.11	$2.09
			25 ft.	$16.67	$2.31
			28 ft.	$18.52	$2.55
			32 ft.	$19.23	$2.63

III. POLES (cont.)

				CHARGES	
			Height	Investment by Company	Investment by Others
C. Direct Bury	Round Steel		19 ft.	$19.43	$2.68
			30 ft.	$15.17	$2.81
			38 ft.	$18.51	$2.88
		Self	40 ft.	$22.80	$3.61
		Stepped	25 ft.	$52.45	$4.28
			32 ft.	$55.24	$4.51
			49 ft.	$68.57	$9.45
	Square Steel	4"	34 ft.	$16.74	$2.90
		5"	20 ft.	$15.90	$2.63
			30 ft.	$16.57	$2.73
			38 ft.	$17.98	$3.12
		8"	28 ft.	$30.01	$2.44
			32 ft.	$31.37	$2.57
	Decorative Transit		41 ft 6	$21.60	$3.17
	Decorative Transit		47 ft.	$26.91	$3.96
	Steel Distribution Pole (for lighting only)		35 ft.	$24.84	$3.27
D. Post Top	Decorative Transit Anchor Base		16 ft.	$37.00	$5.08
	Gray Steel/Fiberglass		23 ft.	$12.83	$2.11
	Black Steel		23 ft.	$14.14	$2.33
E. Existing distribution pole suitable for streetlight use				$1.56	--

IV. ANCHOR BASE

			CHARGES	
		Height	Investment by Company	Investment by Others
A. Flush		4 ft.	$10.45	$1.44
		6 ft.	$12.47	$2.16
B. Pedestal		8 ft.	$14.29	$2.49
	For 32' Round Steel Pole only	4 ft. 6"	$9.91	$1.71

V. CHARGES FOR OPTIONAL OR ADDITIONAL COMPANY OWNED EQUIPMENT

Underground Circuit Charges	
a. Per foot of cable, installed under paving	$0.16652
b. Per foot of cable, not installed under paving	$0.05877

TRIP CHARGE

A $150.00 trip charge per light will be charged when a Customer requests a disconnect or reconnect of service in order to accommodate the maintenance activities of the Customer or its designee(s) on their street lighting equipment.

ADJUSTMENTS

The bill will include the following adjustments:

1. The Renewable Energy Standard charge, Adjustment Schedule REAC-1.
2. The Power Supply Adjustment charges, Adjustment Schedule PSA-1.
3. The Transmission Cost Adjustment charge, Adjustment Schedule TCA-1.
4. The Environmental Improvement Surcharge, Adjustment Schedule EIS.
5. The Demand Side Management Adjustment charge, Adjustment Schedule DSMAC-1.
6. Direct Access Customers returning to Standard Offer service may be subject to a Returning Customer Direct Access Charge, Adjustment Schedule RCDAC-1.
7. The Tax Expense Adjustor Mechanism charge, Adjustment Schedule TEAM
8. Any applicable taxes and governmental fees that are assessed on APS's revenues, prices, sales volume, or generation volume.

SERVICE DETAILS

1. Street lighting facilities installed under this rate schedule are of the type currently being furnished by Company as standard at the time service is initially requested. Standard facilities are those listed in the Company's Transmission and Distribution Construction Standards book.

2. The Customer's bill will not be reduced due to photocontrol or cable repair or replacement outages.

3. Non-standard facilities (non-standard being defined as any facility not listed in the Company's Transmission and Distribution Construction Standards book) do not qualify for this rate schedule. At the Company's discretion, such facilities may be served under another of the Company's rate schedules.

4. The Company will extend its standard street lighting system up to a distance of 300 feet for each additional lighting installation without cost at the request of the Customer. When the extension is underground, the customer will provide earthwork as specified in the Company's Service Schedule 3, Conditions Governing Extensions of Electric Distribution Lines and Services; or, at the applicant's request, the Company will provide such earthwork and the applicant will be required to pay a non-refundable contribution in aid of construction equal to the cost of such earthwork. Any additional extension required (over and above the first 300 feet) will be provided by Company for a contribution in aid of construction equal to the cost of the additional extension.

    a. Extensions to isolated areas requiring a substantial extension of the electric distribution system, as opposed to an extension of the street lighting system, will require a special study to determine the terms and conditions under which the Company will undertake such an extension.

5. APS provides electric service under the Company's Service Schedules. These schedules provide details about how the Company serves its Customers, and they have provisions and charges that may affect the Customer's bill. In addition, service may be subject to special terms and conditions as provided for in a Customer contract, maintenance, or service agreement.

PRASADA APARTMENTS
HEARN ROAD
STREET LIGHT DESIGN

STREET LIGHTING REQUIREMENTS

5.00 GENERAL NOTES:

THE FOLLOWING INFORMATION IS PROVIDED TO EMPHASIZE CRITICAL WORK AND IS INTENDED TO SUPPLEMENT THE SPECIFICATIONS. SHOULD THERE BE A CONFLICT WITH THE SPECIFICATIONS, THIS DOCUMENT SHALL TAKE PRECEDENCE.

ALTERNATES SHALL BE PRE-APPROVED BY THE CITY ENGINEERING MANAGER. APPROVAL OF ALTERNATE PRODUCTS SHALL BE ON AN EQUAL BASIS WITH THE PRODUCT SPECIFIED AND SHALL BE SUBMITTED A MINIMUM OF TEN (10) DAYS PRIOR TO BID OPENING. STRUCTURAL CALCULATIONS SHALL BE FURNISHED FOR ALTERNATE PRODUCTS AND CERTIFIED BY A STRUCTURAL ENGINEER, REGISTERED IN THE STATE OF ARIZONA. LUMINAIRES AND LAMPS SHALL MEET OR EXCEED THE PHOTOMETRIC, ELECTRICAL, AND MECHANICAL REQUIREMENTS FOR THE SPECIFIED PRODUCTS.

THE CONTRACTOR SHALL COMPLY WITH STATE AND CITY STATUTES, AND MANUFACTURER'S RECOMMENDATIONS.

THE SUBMITTAL PACKAGE SHALL CONSIST OF THREE (3) COPIES OF EQUIPMENT/MATERIAL TO BE INSTALLED AND SHALL BE BOUND/STAPLED IN A FOLDER AND SUBMITTED AT THE TIME OF PERMIT APPLICATION.

PRIOR TO SUBMITTING A PROPOSAL, THE BIDDER SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS AND VISIT THE CONSTRUCTION SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL OPERATE AND WHICH WILL IN ANY WAY AFFECT THE WORK UNDER THE CONTRACT. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN THIS CONNECTION IN THE BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLIGENCE ON HIS PART.

PRIOR TO ORDERING ANY MATERIALS OR DOING ANY WORK, THE CONTRACTOR SHOULD VERIFY DIMENSIONS AT THE SITE. IMMEDIATELY REPORT DIFFERENCES TO THE ENGINEERING MGR. AND SHOULD NOT PROCEED WITH WORK UNTIL THE ENGINEERING MGR. RENDERS A DECISION. NO EXTRA CHARGES OR COMPENSATION WILL BE ALLOWED FOR DIFFERENCES IN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE DRAWINGS.

5.01 GENERAL:

THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH ALL LICENSING REQUIREMENTS SET FORTH BY THE STATE REGISTRAR OF CONTRACTORS OFFICE TO PERFORM WORK RELATING TO STREET LIGHT INSTALLATION IN THE CITY RIGHT-OF-WAY.

ONE PROJECT UNDERGROUND UTILITIES (RIGHT OF WAY) PERMIT AND ONE STREETLIGHT PERMIT FOR EACH STREET LIGHT POLE SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

5.02 WORKING / "AS BUILT" PLANS:

ACCEPTANCE OF THE COMPLETED IMPROVEMENTS WILL NOT BE GIVEN UNTIL 4 MIL PHOTO MYLAR REPRODUCIBLE "AS BUILT" PLANS HAVE BEEN SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

5.03 LIGHT POLES:

LIGHT POLES SHALL BE INSTALLED PLUMB, BE ADJUSTED TO PROVIDE PROPER ALIGNMENT TO THE ROADWAY BEING LIGHTED AND BE PROPERLY GROUNDED WHEN THE INSTALLATION IS COMPLETE.

5.04 EMBEDMENT:

DIRECT BURIED POLES SHALL BE SET IN A TWELVE (12) INCH AUGURED HOLE DEPTH AS SPECIFIED IN UNDISTURBED EARTH. POLE SHALL BE SET PLUMB IN TWO DIRECTIONS 90 DEGREES APART. HAND TAMPING OF ABC BACKFILL WITH PNEUMATIC OR VIBRATING EQUIPMENT IS THE ACCEPTABLE METHOD OF COMPACTION. BACKFILL SHALL BE COMPACTED TO 85% OF MAXIMUM DENSITY AS DEFINED BY ASTM D-2922 AND D-3017. A GROUND ROD SHALL BE INSTALLED ADJACENT TO PULL BOX IN UNDISTURBED SOIL AND A LEAD IN COPPER BOND WIRE (#6) SHALL BE INSTALLED IN 1" CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT (OR EQUAL) FOR POLE GROUNDING.

SURPLUS EXCAVATION SHALL BE DISPOSED OF BY THE CONTRACTOR.

5.05 LUMINAIRES:

LUMINAIRES SHALL BE INSTALLED LEVEL AND INCLUDE A LAMP AND PHOTOCELL. CONTRACTOR SHALL ASSURE THAT THE LUMINAIRES SHALL BE FREE OF DUST, DIRT OR ANYTHING THAT WOULD IMPAIR THE OUTPUT OF THE LIGHT BEFORE HE LEAVES THE SITE.

LUMINAIRES FURNISHED WITH MULTI-TAP BALLASTS SHALL BE REWIRED OR RECONNECTED TO MATCH THE VOLTAGE SUPPLIED BY THE ELECTRIC UTILITY COMPANY.

5.06 WIRING:

WIRING SHALL BE INSTALLED PER UTILITY STANDARDS.

5.07 GROUNDING:

EACH POLE SHALL HAVE A 8' X 5/8" COPPER CLAD GROUND ROD DRIVEN ADJACENT TO PULL BOX. A #6 BARE COPPER LEAD FROM THE GROUND ROD IN PULL BOX TO LANDING LUG IN STREET LIGHT POLE HAND HOLE.

5.08 PULL BOXES:

EXCAVATION FOR PULL BOXES AND MATERIAL SPECIFICATION SHALL BE PER THE ELECTRIC UTILITY COMPANY STANDARDS.

5.09 TRENCH

TRENCH SHALL BE INSTALLED PER THE UTILITY COMPANY STANDARDS.

THE USE OF A COMMON ELECTRIC UTILITY COMPANY TRENCH IS PERMITTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANY FOR COORDINATION OF TRENCHING AND THE INSTALLATION OF CONDUIT.

CONDUIT SHALL BE INSTALLED AT THE DEPTH SPECIFIED ON THE PLANS. CONDUIT SHALL BE 1 INCH CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT OR EQUAL. CONDUIT MUST BE UL RATED AND SUITABLE FOR UNDERGROUND USE.

CONNECTIONS SHALL BE PER UTILITY STANDARDS.

5.12 LIGHT POLE IDENTIFICATION:

THE CONTRACTOR SHALL FURNISH AND INSTALL A NUMBER ON EACH LIGHT POLE. STREET LIGHT POLE IDENTIFICATION AND SPECIFICATIONS WILL BE PROVIDED BY THE CITY OF SURPRISE.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO RESTORE ALL PROPERTY, LANDSCAPING, PAVING AND DRIVEWAYS THAT ARE DISTURBED DURING STREET LIGHT CONSTRUCTION TO THEIR ORIGINAL CONDITION IN CONFORMANCE WITH "MAG" SPECIFICATION SECTION 107.9.

THE DEVELOPER SHALL BE RESPONSIBLE FOR FURNISHING ALL PERSONNEL AND EQUIPMENT TO SUCCESSFULLY PERFORM THE FOLLOWING TEST.

PRIOR TO ACCEPTANCE, THE DEVELOPER SHALL ENERGIZE AND OPERATE THE ENTIRE ROADWAY LIGHTING SYSTEM, FROM SUNSET TO SUNRISE FOR TWO CONSECUTIVE DAYS WITHOUT INTERRUPTION OR FAILURE. IF A LAMP OR BALLAST SHOULD FAIL, IT SHALL BE IMMEDIATELY REPLACED.

THE CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE ENGINEERING MANAGER, AGAINST IMPERFECT WORKMANSHIP, FAILURE, MALFUNCTION OF MATERIALS AND/OR EQUIPMENT DUE TO FAULTY OR IMPERFECT WORKMANSHIP. THIS GUARANTEE IS TO BE IN WRITING TO THE CITY AT THE TIME OF ISSUING FINAL ACCEPTANCE. WORK FOUND TO BE DEFECTIVE WITHIN THE WARRANTY PERIOD SHALL BE REPLACED WITHOUT COST TO THE CITY.

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 REPLACEDIN 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.

CITY OF SURPRISE APPROVAL

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.

CITY OF SURPRISE ENGINEER **DATE**

UTILITIES WITHIN OR AFFECTED BY THE PROJECT	
UTILITY CONTACT	DATE SUBMITTED
ARIZONA PUBLIC SERVICE	3/11/2022
CENTURY LINK	3/11/2022
COX COMMUNICATIONS	3/11/2022
SOUTHWEST GAS	3/11/2022
EPCOR	3/11/2022

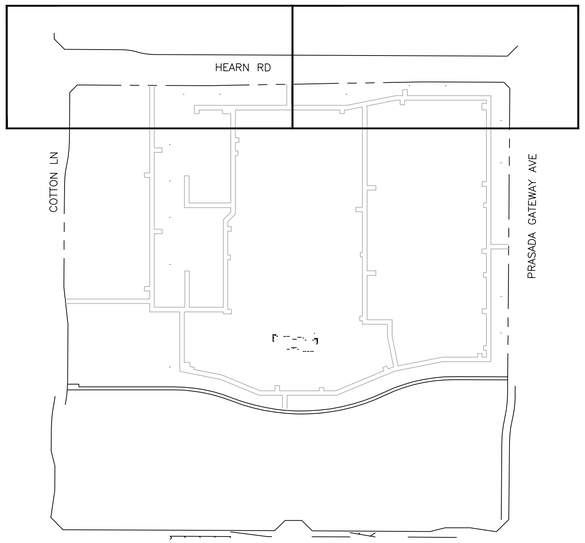
NOTE

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

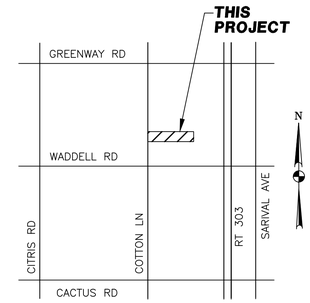
B. THE ELECTRICAL/MAINTENANCE COSTS OF ALL STREET LIGHTS ON LOCAL AND COLLECTOR STREETS ARE TO BE PAID BY THE ADJACENT PROJECT OR THE ADJACENT DEVELOPMENT'S STREET LIGHT IMPROVEMENT DISTRICT (SLID). THE ELECTRICAL / MAINTENANCE COSTS OF ALL STREET LIGHTS ON ARTERIAL STREETS ARE TO BE BILLED TO THE CITY OF SURPRISE'S ENERGY BILL.

LED NOTE

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.



KEY MAP
N.T.S.



VICINITY MAP
N.T.S.

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POWER CONDUIT NOTE

TRENCH & CONDUIT RUNS FROM STREET LIGHT PULL BOX TO POINT OF ELECTRICAL SERVICE WILL BE DESIGNED BY THE POWER COMPANY, AND ARE SHOWN ON POWER COMPANY PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THESE PLANS FROM DEVELOPER/OWNER, AND INCLUDE THESE RUNS IN THE BID. COORDINATE THIS WORK WITH THE POWER COMPANY.

CIVIL ENGINEER
3 ENGINEERING
6370 E THOMAS RD #200
SCOTTSDALE, AZ 85251
PHONE: (602) 334-4387
CONTACT: DAN MANN

OWNER
NEXTGEN APARTMENTS
16454 N 91ST STREET #103
SCOTTSDALE, AZ 85260
PHONE: (480) 219-3387
CONTACT: EVAN BILTON

Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348) in Maricopa County: (602) 263-1100

WRIGHT ENGINEERING PROJECT NO:
22013
DESIGN BY: DMH
DRAWN BY: DMH
CHECKED BY: AMB

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: SURPRISE, ARIZONA
PRASADA APARTMENTS
HEARN RD

TITLE: STREET LIGHT COVER SHEET

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	MAR 2022	1ST SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No. 46691
ADAM M. BOWERS
Date Signed 4-27-22
Expires 9-30-22

DRAWING NO: **SL1** OF 4

FS22-0510

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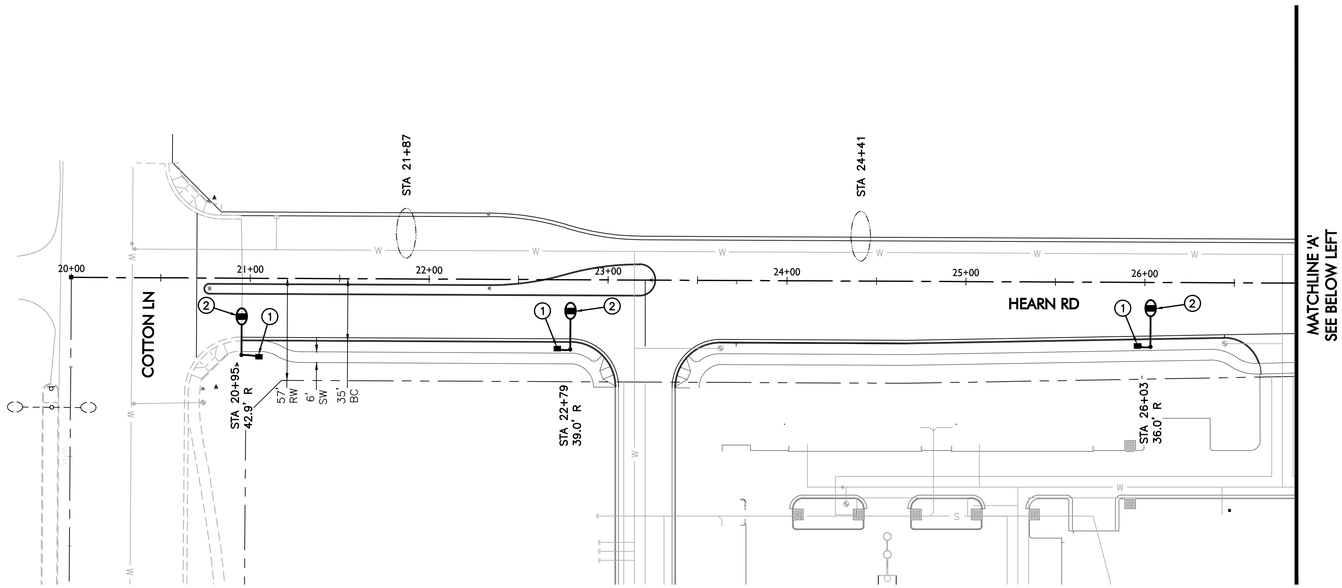

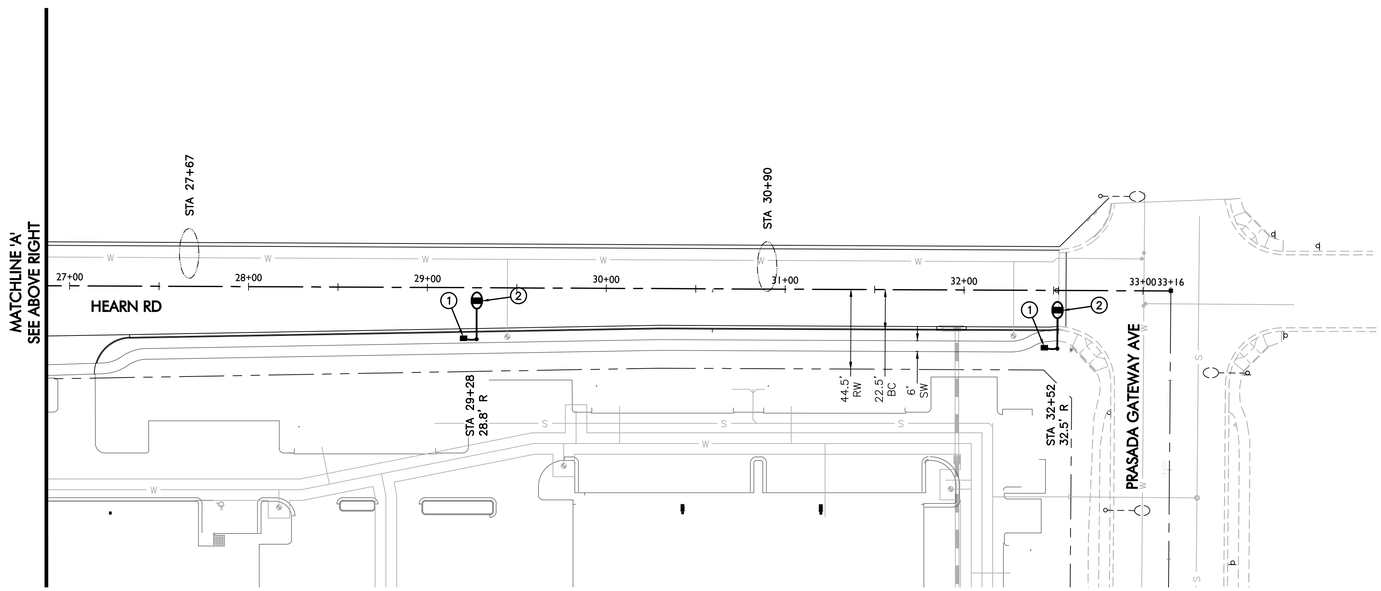

LEGEND

- 7,800 LUMEN LED STREET LIGHT, ROUND POLE
- EXISTING STREET LIGHT
- PULL BOX
- NEW CONDUIT RUN
- FIRE HYDRANT
- FUTURE STREET LIGHT

CONSTRUCTION NOTES

1. INSTALL APS PULL BOX NEXT TO POLE. 1" CONDUIT WITH (2) #14 TYPE THHN/THWN & (1) #14 BARE BOND FROM PULL BOX TO FUSE HOLDER IN STREET LIGHT PER APS DETAILS & SPECIFICATIONS.

2. 71W LED (7,800 LUMEN) LUMINAIRE (SEE LUMINAIRE TABLE), PHOTOCELL, 38'-6" DIRECT BURIED POLE, 3' X 8' MAST ARM PER APS DETAIL 8040 (SEE SHEET SL3). (2) #14 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. WIRING, FUSING, & GROUNDING PER APS DETAILS & SPECIFICATIONS.

GRAPHIC SCALE
40 20 0 20 40 80
1 INCH = 40 FEET

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
in Maricopa County: (602) 263-1100

WRIGHT ENGINEERING PROJECT NO:
22013

DESIGN BY: DMH
DRAWN BY: DMH
CHECKED BY: AMB

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:

SURPRISE, ARIZONA
PRASADA APARTMENTS
HEARN RD

STREET LIGHT PLAN

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	MAR 2022	1ST SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M. BOWERS
Date Signed 3-31-22
Expires 9-30-22

DRAWING NO:
SL2
OF 4

FS22-0510

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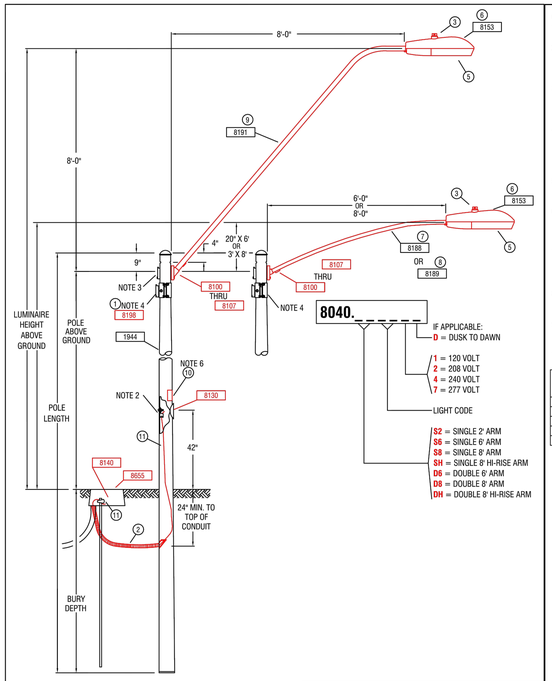

CONSTRUCTION NOTES:

1. ADJUST PHOTO EYE TO FACE NORTH.
2. A GROUND ROD IS PROVIDED WITH THE J-BOX. WHERE A GROUND ROD CAN NOT BE DRIVEN ALTERNATE GROUND SHALL BE USED. SEE 2449 THRU 2460 FOR APPROVED ALTERNATES.
3. THE 40'-6" SELF-SUPPORTING STEEL POLE AND ONE OF THE 38'-6", HAVE TWO, MANUFACTURER INSTALLED SIMPLEX FITTINGS 180° APART FOR DOUBLE ARMS, SEE CHART.
4. APN 33701054 IS A POLE BAND ADAPTOR WITH A SIMPLEX FITTING. ADAPTOR IS REQUIRED FOR THE SECOND ARM IN DOUBLE ARM APPLICATIONS ON EXISTING POLES IN THE FIELD WITHOUT TWO SIMPLEX FITTINGS. SEE 8198 FOR AVAILABLE SIZES.
5. THE BROWN PHOTO CONTROL IS A FAIL OFF CONTROL AND SHALL BE USED WITH ALL INDUCTION AND LED LUMINAIRES.
6. SIGN, "NOTICE THIS POLE IS OWNED AND MAINTAINED BY APS. DISCONNECT INSIDE," IS REQUIRED ON ALL DUSK-TO-DAWN AND AREA LIGHTING APPLICATIONS.
7. POLES THAT HAVE MORE THAN ONE LUMINAIRE REQUIRE A SEPARATE CIRCUIT WITH FUSING FROM THE J-BOX TO EACH LUMINAIRES.
8. THE LIGHT CODE PROVIDES TWO SAME WATTAGE LUMINAIRES WHEN DOUBLE ARMS ARE SPECIFIED.
9. SEE SPEC 9130-8140 FOR IN-LINE FUSE FOR UNDERGROUND FEEDS.
10. SEE 8100 THRU 8107 FOR OVERHEAD ATTACHMENTS.

POLE CODE	POLE LENGTH	BURY DEPTH	POLE ABOVE GROUND	LUMINAIRE HEIGHT ABOVE GROUND ON ARM		
				20" X 6'	3' X 8'	8' X 8'
1944.19	19'-0"	5'-0"	14'-0"	14'-11"	16'-3"	---
1944.30	30'-6"	5'-6"	25'-0"	25'-11"	27'-3"	---
1944.38	38'-6"	6'-6"	32'-0"	32'-11"	34'-3"	39'-3"
1944.38X	38'-6"	6'-6"	32'-0"	32'-11"	34'-3"	39'-3"
1944.40X	40'-6"	8'-6"	32'-0"	32'-11"	34'-3"	39'-3"

MATERIAL LIST

ITEM	CODE 8040.S6 QTY	8040.S8 QTY	8040.SH QTY	8040.D6 QTY	8040.D8 QTY	8040.DH QTY	DESCRIPTION	APN
1	-	-	-	1	1	1	ADAPTER BAND W/ SIMPLEX 3"	33701054
2	10	10	10	10	10	10	CONDUIT 1" PVC FLEX CORR	32900891
3	1	1	1	2	2	2	CONTROL PHOTO MULTI BLACK	00063965
4	VAR	VAR	VAR	VAR	VAR	VAR	CONTROL PHOTO MULTI BR-20	00073241
5	1	1	1	2	2	2	LAMP - SEE 8164 - 8171	
6	1	1	1	2	2	2	LUMINAIRE - SEE CHART	
7	1	-	-	2	-	-	MAST ARM ST LT 2" X 20" X 6'	33701112
8	-	1	-	-	2	-	MAST ARM ST LT 2" X 3" X 8'	33701124
9	-	-	1	-	-	2	MAST ARM ST LT 2" X 8" X 8'	33701123
10	1	1	1	1	1	1	SIGN POLE OWNED BY APS	00050092
11	10	10	10	10	10	10	WIRE BARE #6 SOLID CU	33007580

ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS				
BY	LDR.	MGR.	DATE	REV.
KLS	B. BOOKER	D. LAMONTAGNE	11/2011	10

LIGHTS
ROADWAY LUMINAIRE ON
20" X 6', 3' X 8', OR 8' X 8' MAST ARM ON
19'-0", 30'-0", 38'-0" OR 40'-6" STEEL POLES

SH 1 OF 2

8040

ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS				
BY	LDR.	MGR.	DATE	REV.
KLS	B. McMINN	S. SIERRA	01/2007	9

LIGHTS
ROADWAY LUMINAIRE ON
20" X 6', 3' X 8' OR 8' X 8' MAST ARMS ON
19'-0", 38'-0" OR 40'-6" STEEL POLES

SH 2 OF 2

8040

LUMINAIRE TABLE

GRAY ROADWAY SCALEABLE LED 3000K

LIGHT CODE	COLOR	APN	WATTS	VOLTS	INITIAL LUMENS	CATALOG #
CL50	GRAY	00141040	32	120/208/240/277	3,900	ERLC004B430AGRAYGLRV1013
CL51		00141041	43	120/208/240/277	4,800	ERLC005A430AGRAYGLRV1013
CL52		00141043	71	120/208/240/277	7,800	ERL1008C330AGRAYGLRX162
CL53		00141045	96	120/208/240/277	11,000	ERLH011C330AGRAYGLV1108
CL54		00141046	174	120/208/240/277	20,100	ERL2021C330AGRAYGLR113

WRIGHT ENGINEERING PROJECT NO:
22013

DESIGN BY: DMH
DRAWN BY: DMH
CHECKED BY: AMB

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: **SURPRISE, ARIZONA**
PRASADA APARTMENTS
HEARN RD

TITLE: **STREET LIGHT DETAILS**

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	MAR 2022	1ST SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M. BOWERS
Date Signed 8-3-22
Expires 9-30-22

DRAWING NO:
SL3
OF 4

FS22-0510

Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

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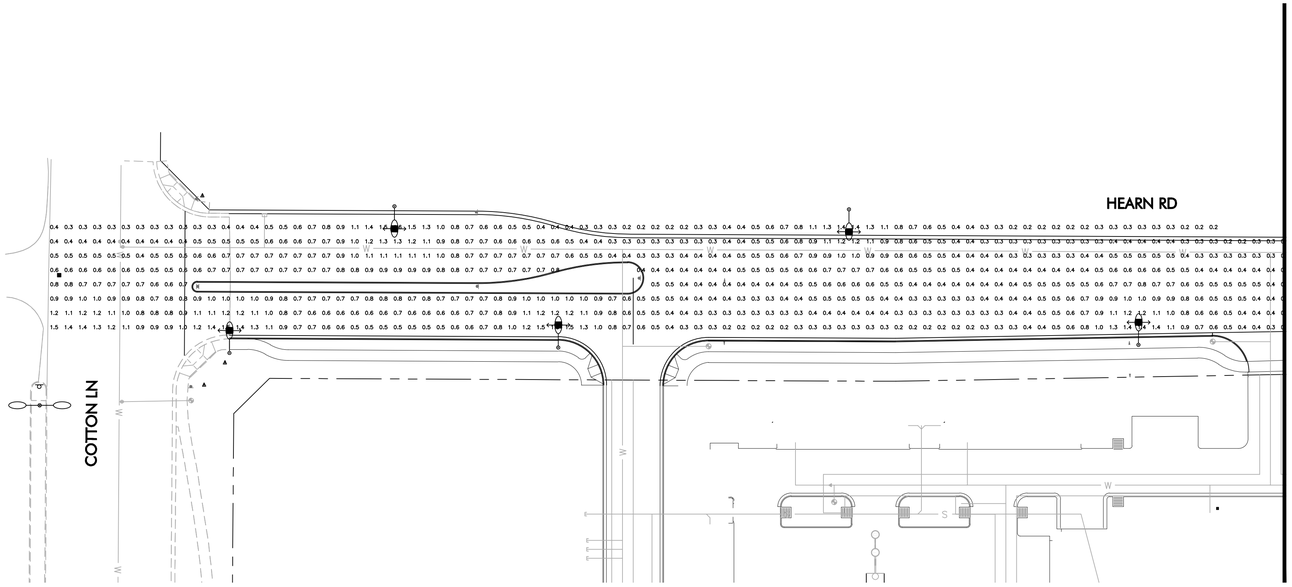


HEARN RD
981 points at z=0, sp 8ft by 8ft
HORIZONTAL FOOTCANDLES

Average	0.6
Maximum	1.6
Minimum	0.2
Avg:Min	2.98
Max:Min	8.00
Coef Var	0.47
UnifGrad	1.67

INTERSECT COTTON LN & HEARN RD
72 points at z=0, sp 8ft by 8ft
HORIZONTAL FOOTCANDLES

Average	0.7
Maximum	1.5
Minimum	0.3
Avg:Min	2.31
Max:Min	5.00
Coef Var	0.45
UnifGrad	1.43

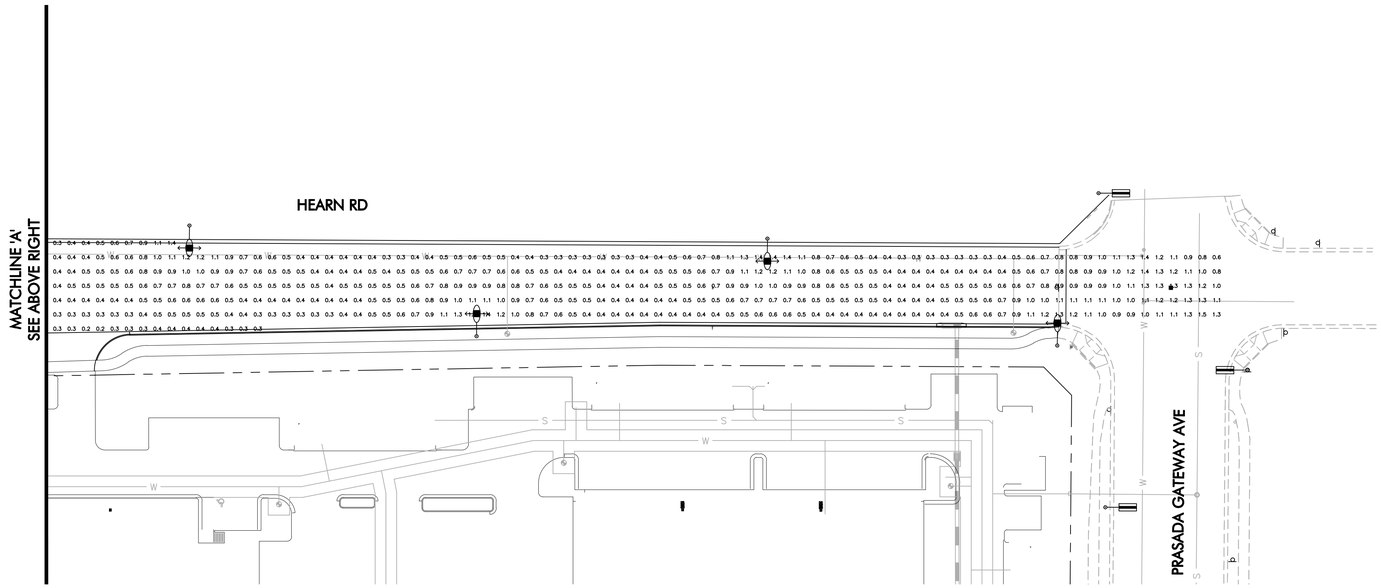
INTERSECT PRASADA GATEWAY AVE & HEARN
35 points at z=0, sp 8ft by 8ft
HORIZONTAL FOOTCANDLES

Average	1.1
Maximum	1.5
Minimum	0.6
Avg:Min	1.91
Max:Min	2.50
Coef Var	0.17
UnifGrad	1.33

150W HPS Pechina
Type III Distribution, 3' x 8' Mast Arm
candela file '102414.ies'
1 lamp(s) per luminaire, 16000 initial lumens per lamp
Light Loss Factor = 0.810, watts per luminaire = 0
mounting height= 34.25 ft
number locations= 4, number luminaires= 4
kw all locations= 0.0

7800 LUMEN LED
Type II Distribution, 3' X 8' Mast Arm
candela file 'ERL1_08C330_____.IES'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 71
mounting height= 34.25 ft
number locations= 9, number luminaires= 9
kw all locations= 0.6

250W HPS Cobrahead
Type III Distribution
candela file 'GE7323.IES'
1 lamp(s) per luminaire, 30000 initial lumens per lamp
Light Loss Factor = 0.810, watts per luminaire = 1
mounting height= 34 ft
number locations= 2, number luminaires= 2
kw all locations= 0.0



GRAPHIC SCALE
40 20 0 20 40 80
1 INCH = 40 FEET

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PROJECT: TITLE:

SURPRISE, ARIZONA
PRASADA APARTMENTS
HEARN RD

PHOTOMETRICS

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	MAR 2022	1ST SUBMITTAL

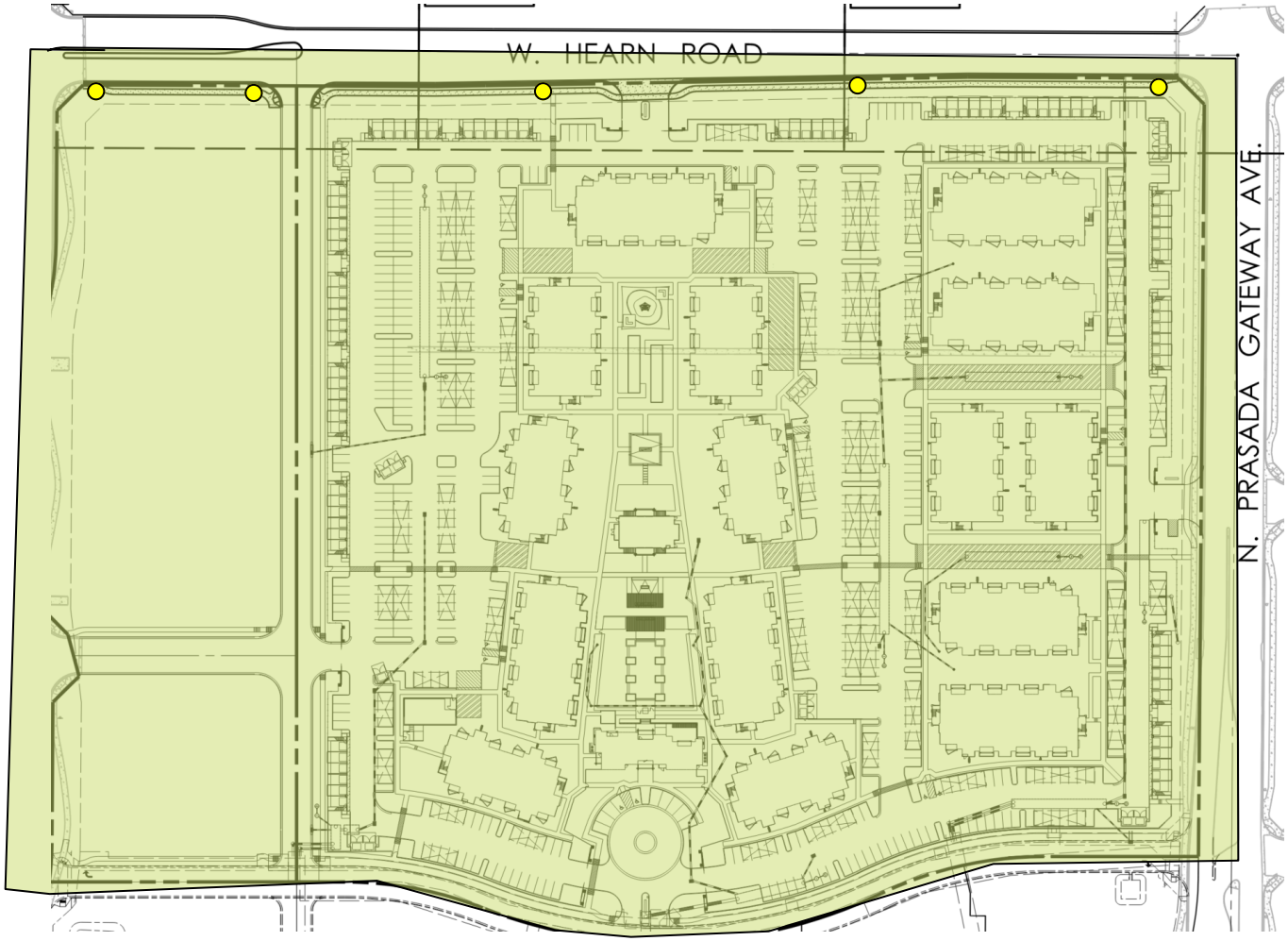
Registered Professional Engineer (Electrical)
Certificate No.
46691
ADAM M. BOWERS
Date Signed 4-21-22
Expires 9-30-22

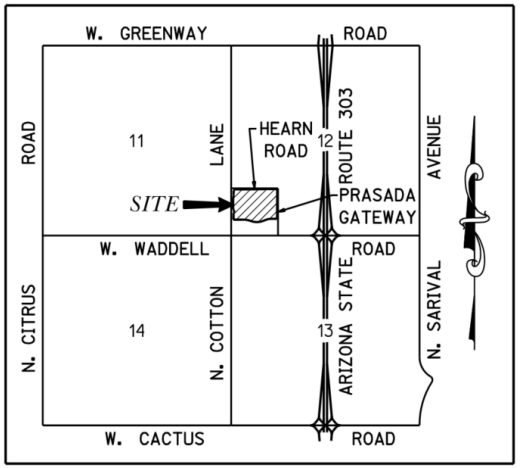
DRAWING NO:
SL4
OF 4

FS22-0510

Street Lights:

- Street Light Pole
- 5 new poles
- SLID Boundary





VICINITY MAP
N.T.S.

CITY OF SURPRISE
Regular City Council Meeting

Council Meeting Date: May 7, 2024
Submitting Department: Public Works
Staff Recommendations:

Contact Person: Kristin Tytler, Department Director
District: District 1

Consent: Yes Regular: No Public Hearing: No Report/Discussion: No

Agenda Wording:
Consideration and action declaring the intent to enlarge an existing lighting improvement district known as City of Surprise, Arizona, SU-AsantePar4.5 pursuant to A.R.S. § 48-616 for the purpose of purchasing facilities and energy for lighting the public streets; Resolution #2024-52.

Motion:
I move to approve Resolution #2024-52.

Background:
SU-AsantePar4.5 was formed on October 16, 2018 (Resolution 2018-151). Since the time of formation, new parcels have been formed in and around the original SLID boundary. We request enlarging the existing SLID to include the new parcels and extend existing boundaries to roadway centerlines. The city has verified that the Petition for the proposed street light improvement district enlargement contains the signatures of all the real property owners in the enlargement area of the district, exclusive of mortgagees and other lien holders. 331 (estimated) new lights 2 existing (if this is applicable) are proposed within this enlargement which are local and collector will be billed to the SU-AsantePar4.5 SLID. The arterial roads will be billed to the City's SLID account.

Objective Analysis:
A SLID is a neighborhood partnership and very common practice in which property owners in a defined area agree to pay the costs to operate and maintain their immediate area's streetlights through a property tax. All new developments in the City of Surprise require a SLID. This action will enlarge an existing SLID boundary to include the remainder of the parcels not within the SLID and extend existing boundaries to roadway centerlines. The District is paid for by the levy and collection of ad valorem of taxes based on the number and classification of properties within the District. The enlargement of the SLID will only affect the parcels joining into the District, as the valuation of the property may be increased.

Policy Compliant:
The Surprise Municipal Code requires that street lighting that serves a defined area be paid for through revenues obtained from the specific area being served by such street lighting. In these instances, a Street Light Improvement District (SLID) is formed. The city strives to assure that residents are subject to

only one SLID and that the boundaries of each SLID accurately reflect the service area. This item is consistent with these objectives.

Financial Impact:

Once the SLID enlargement is illuminated, the City will begin levying the SLID to cover the additional SLID expenses. At the current time, the SLID is not incurring any expense because the SLID lights have not been illuminated. Therefore, there is no current financial impact.

Budget Impact:

Since the SLID enlargement is not illuminated, there is no revenue or expense budgeted in FY2024 nor are there budgets planned for FY2025 for the SLID. If the enlargement to the SLID is illuminated in FY2024 or FY2025, expenses will be charged to the SLID and recouped with a future levy.

FTE Impact:

This item does not have an impact on current staff levels.

ATTACHMENTS:

1. 01 Res 2024-52 SLID Enlargement Asante pa3 4.10_BAC_final
2. 02 Petition- Final
3. 03 streetlight plan-REVISED
4. 04 streetlight asante-Final_Map
5. 05 Res 2018-151- SU-ASANTEPAR4.5

RESOLUTION # 2024-52

A RESOLUTION OF THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE, ARIZONA DECLARING ITS INTENT TO ENLARGE THE CITY OF SURPRISE, ARIZONA, SU-ASANTEPAR4.5 LIGHTING IMPROVEMENT DISTRICT AND ORDERING SUCH ENLARGEMENT.

WHEREAS, on October 16, 2018 the Mayor and City Council of the City of Surprise adopted Resolution No. 2018-151, ordering the formation of the CITY OF SURPRISE, ARIZONA, SU-ASANTEPAR4.5 LIGHTING IMPROVEMENT DISTRICT (the "District") for the purpose of purchasing energy for the lighting of the public streets and parks within the District;

WHEREAS, Ariz. Rev. Stat. § 48-616(M) permits the City to add new territory to an existing district, thereby enlarging the boundaries of an existing street lighting improvement district ("SLID") when proper notice has been given to the owners of property that will be added to the SLID in accordance with Ariz. Rev. Stat. Title 48, Chapter 4, Article 2;

WHEREAS, Ariz. Rev. Stat. § 48-617(A) gives the City immediate jurisdiction to adopt the resolution ordering the creation or enlargement of a SLID without the necessity of publication and posting of the resolution of intention when all owners of the real property being added to the SLID have petitioned the City to form or enlarge the SLID;

WHEREAS, the owners, exclusive of mortgagees and other lienholders, of parcels of property which adjoin the District (hereinafter referred to as "Petitioners") acting pursuant to the provisions of Ariz. Rev. Stat. §§ 48-616(M) and 48-617(A), have petitioned the City to enlarge the District to include said property legally described in Exhibit A to this resolution, with such boundaries as shown in the map in Exhibit B to this resolution; and

WHEREAS, the City has verified and finds that Petitioners are the owners, exclusive of mortgagees and other lienholders, of all of the real property being added to the boundary of the District.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Surprise, Arizona, as follows.

Section 1. *District Enlargement*. The CITY OF SURPRISE, ARIZONA, SU-ASANTEPAR4.5 LIGHTING IMPROVEMENT DISTRICT shall be enlarged by the addition of the property described in Exhibit A and shown in Exhibit B, which are incorporated by reference hereto into this Resolution. The annual tax levied upon the District will remain in full force and effect, and, commencing in fiscal year 2024/2025, will apply to the District as enlarged by this Resolution.

Section 2. *Recording and Filing of this Resolution.* A certified copy of this Resolution shall be recorded in the office of the Maricopa County Recorder. Certified copies of this Resolution shall also be filed with the Arizona Department of Revenue and the Maricopa County Assessor's office pursuant to Ariz. Rev. Stat. § 42-17257.

APPROVED AND ADOPTED this _____day of _____, 2024.

Skip Hall, Mayor

Attest:

Kristi Passarelli, City Clerk

Approved as to form:

Robert Wingo, City Attorney

EXHIBIT A

Legal Description

EXHIBIT "A"
ASANTE PLANNING AREA 3 BOUNDARY
STREET LIGHT IMPROVEMENT DISTRICT
LEGAL DESCRIPTION

Portions of the South Half of Section 1, the East Half of Section 2, and Section 12, Township 4 North, Range 2 West of the Gila and Salt River Meridian, Maricopa County, Arizona, being more particularly described as follows:

COMMENCING at a found 2 inch aluminum cap RLS 36562 accepted as the Northeast corner of said Section 12 from which a found 2-3/4 inch City of Surprise brass cap flush accepted as the East Quarter corner thereof bears South 00°44'56" West, 2634.27 feet;

Thence South 00°44'56" West, 70.16 feet along the east line of the Northeast Quarter of said Section 12 to the **POINT OF BEGINNING;**

Thence continuing along said east line, South 00°44'56" West, 130.00 feet;

Thence leaving said east line, North 89°20'59" West, 392.50 feet;

Thence North 00°44'56" East, 10.00 feet;

Thence North 89°20'59" West, 75.00 feet to the west line of the east 467.50 feet of the Northeast Quarter of said Section 12;

Thence South 00°44'56" West, 1181.54 feet along said west line to the northeast corner of Asante 4.5 – Parcel 2, as recorded in Book 1465, Page 3, Maricopa County Records, Arizona;

Thence North 89°45'19" West, 381.08 feet along the north line of said Asante 4.5 – Parcel 2,

Thence North 85°30'56" West, 338.15 feet continuing along the north line of said Asante 4.5 – Parcel 2 and the western extension thereof, and also being the north line of Asante 4.5 – Parcel 1, as recorded in Book 1465, Page 2, Maricopa County Records, Arizona;

Thence continuing along the north line of said Asante 4.5 – Parcel 1, the following two (2) courses:

Thence North 89°45'19" West, 1030.89 feet;

Thence North 86°42'42" West, 80.00 feet to the northwest corner of said Asante 4.5 – Parcel 1, being a non-tangent curve, concave southeasterly, having a radius of 1040.00 feet, the center of which bears South 86°42'42" East;

Thence along the west line of said Asante 4.5 – Parcel 1, and also being the west Right of Way line for N 166th Drive, the following eight (8) courses:

Thence southwesterly along said curve, through a central angle of 03°02'37", an arc length of 55.25 feet to a tangent line;

Thence South 00°14'41" West, 382.74 feet to the beginning of a tangent curve concave northwesterly, having a radius of 20.00 feet;

Thence southwesterly along said curve, through a central angle of 07°38'42", an arc length of 2.67 feet to the beginning of a reverse curve, concave southeasterly, having a radius of 205.00 feet;

Thence southwesterly along said curve, through a central angle of 07°38'42", an arc length of 27.35 feet to a tangent line;

Thence South 00°14'41" West, 113.00 feet;

Thence South 01°23'31" East, 70.03 feet;

Thence South 00°14'41" West, 551.26 feet;

Thence South 44°28'14" West, 42.99 feet to the northerly Right of Way line of W. Asante Boulevard as shown in the Map of Dedication for Asante Phase One recorded in Book 857 of Maps, Page 17, Maricopa County Records, Arizona, being a non-tangent curve, concave southeasterly, having a radius of 2035.00 feet, the center of which bears South 01°43'33" East;

Thence the following two (2) courses along said northerly Right of Way line:

Thence southwesterly along said curve, through a central angle of 11°16'46", an arc length of 400.62 feet to a non-tangent line;

Thence South 76°59'47" West, 1078.19 feet; to the westerly Right of Way line of Pat Tillman Boulevard as shown in the Map of Dedication for Asante Phase Two recorded in Book 885 of Maps, Page 46, Maricopa County Records, Arizona;

Thence the following eight (8) courses along said westerly Right of Way line:

Thence North 31°59'47" East, 42.44 feet;

Thence North 13°00'13" West, 1139.63 feet to the beginning of a tangent curve concave southwesterly, having a radius of 2132.50 feet;

Thence northwesterly along said curve, through a central angle of 33°28'26", an arc length of 1245.87 feet to a tangent line;

Thence North 46°28'39" West, 1698.99 feet;

Thence South 88°31'21" West, 42.43 feet;

Thence North 46°28'39" West, 70.01 feet;

Thence North 01°28'39" West, 42.43 feet;

Thence leaving said westerly Right of Way, North 41°24'05" East, 135.09 feet to the easterly Right of Way line for said Pat Tillman Boulevard;

Thence leaving said easterly line, North 46°38'19" West, 15.00 feet;

Thence North 88°27'44" East, 42.47 feet;

Thence North 43°31'21" East, 851.22 feet;

Thence North 01°28'39" West, 28.28 feet;

Thence North 39°26'13" East, 70.18 feet;

Thence North 88°31'21" East, 28.28 feet;

Thence North 43°31'21" East, 205.00 feet;

Thence South 46°28'39" East, 5.00 feet;

Thence North 43°31'21" East, 21.20 feet to the beginning of a tangent curve concave southeasterly, having a radius of 855.00 feet;

Thence northeasterly along said curve, through a central angle of 00°55'32", an arc length of 13.81 feet to a non-tangent line;

Thence North 00°41'27" West, 27.89 feet;

Thence North 46°28'39" West, 518.91 feet;

Thence South 88°31'21" West, 28.28 feet;

Thence North 46°28'39" West, 70.00 feet;

Thence North 01°28'39" West, 28.28 feet;

Thence North 46°28'39" West, 836.75 feet;

Thence South 88°31'21" West, 28.28 feet;

Thence North 46°28'39" West, 70.00 feet;

Thence North 01°28'39" West, 28.28 feet;

Thence North 46°28'39" West, 310.00 feet;

Thence North 43°31'21" East, 70.00 feet;

Thence South 46°28'39" East, 856.02 feet;

Thence North 88°31'21" East, 28.28 feet;

Thence South 46°28'39" East, 50.00 feet;

Thence South 01°28'39" East, 28.28 feet;

Thence South 46°28'39" East, 940.13 feet;

Thence South 87°43'01" East, 30.34 feet to a non-tangent curve, concave southeasterly, having a radius of 860.00 feet, the center of which bears South 38°12'02" East;

Thence northeasterly along said curve, through a central angle of 13°41'25", an arc length of 205.49 feet to a non-tangent line;

Thence South 24°30'37" East, 5.00 feet to a non-tangent curve, concave southeasterly, having a radius of 855.00 feet, the center of which bears South 24°30'37" East;

Thence northeasterly along said curve, through a central angle of 22°53'20", an arc length of 341.56 feet to a non-tangent line;

Thence North 44°31'41" East, 28.52 feet;

Thence North 85°54'22" East, 70.18 feet;

Thence South 45°00'00" East, 28.28 feet;

Thence North 90°00'00" East, 205.00 feet;

Thence South 00°00'00" East, 5.00 feet;

Thence North 90°00'00" East, 147.65 feet;

Thence North 44°42'35" East, 28.14 feet;

Thence North 85°54'42" East, 70.13 feet;

Thence South 45°17'25" East, 28.43 feet;

Thence North 90°00'00" East, 21.66 feet to the beginning of a tangent curve concave southwesterly, having a radius of 860.00 feet;

Thence southeasterly along said curve, through a central angle of 12°14'44", an arc length of 183.80 feet to a non-tangent line;

Thence South 12°14'44" West, 5.00 feet to a non-tangent curve, concave southwesterly, having a radius of 855.00 feet, the center of which bears South 12°14'44" West;

Thence southeasterly along said curve, through a central angle of 38°02'10", an arc length of 567.60 feet to a tangent line;

Thence South 39°43'06" East, 116.64 feet;

Thence South 84°43'06" East, 28.28 feet;

Thence South 43°48'14" East, 70.18 feet;

Thence South 05°16'54" West, 28.28 feet;

Thence South 39°43'06" East, 205.00 feet;

Thence South 50°16'54" West, 5.00 feet;

Thence South 39°43'06" East, 568.37 feet;

Thence South 84°43'06" East, 28.28 feet;

Thence South 43°48'14" East, 70.18 feet;

Thence South 05°16'54" West, 28.28 feet;

Thence South 39°43'06" East, 205.00 feet;

Thence South 50°16'54" West, 5.00 feet;

Thence South 39°43'06" East, 152.26 feet to the beginning of a tangent curve concave northeasterly, having a radius of 1345.00 feet;

Thence southeasterly along said curve, through a central angle of 06°58'54", an arc length of 163.89 feet to a non-tangent line;

Thence North 86°55'18" East, 27.82 feet;

Thence South 53°07'50" East, 70.18 feet;

Thence South 05°00'44" East, 27.82 feet to a non-tangent curve, concave northeasterly, having a radius of 1340.00 feet, the center of which bears North 38°36'15" East;

Thence southeasterly along said curve, through a central angle of 08°46'26", an arc length of 205.20 feet to a non-tangent line;

Thence South 29°49'49" West, 5.00 feet to a non-tangent curve, concave northeasterly, having a radius of 1345.00 feet, the center of which bears North 29°49'49" East;

Thence southeasterly along said curve, through a central angle of 29°10'47", an arc length of 684.99 feet to a tangent line;

Thence South 89°20'59" East, 528.52 feet;

Thence North 45°39'01" East, 28.28 feet;

Thence North 86°33'53" East, 70.18 feet;

Thence South 44°20'59" East, 28.28 feet;

Thence South 89°20'59" East, 205.00 feet;

Thence South 00°39'01" West, 5.00 feet;

Thence South 89°20'59" East, 112.55 feet;

Thence North 00°44'56" East, 10.00 feet;

Thence South 89°20'59" East, 179.18 feet to the **POINT OF BEGINNING**

The above described parcel contains a computed area of 13,158,853 sq. ft. (302.0857 acres) more or less and being subject to any easements, restrictions, rights-of-way of record or otherwise.

The description shown hereon is not to be used to violate any subdivision regulation of the state, county and/or municipality or any land division restrictions.

Prepared by: HILGARTWILSON, LLC
2141 E. Highland Avenue, Suite 250
Phoenix, AZ 85016
Project No. 1909
Date: May 2023

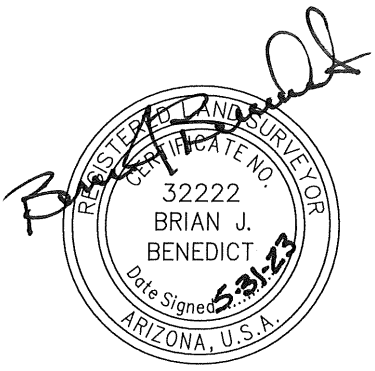


EXHIBIT B

Map



REGISTERED LAND SURVEYOR
CERTIFICATE NO.
32222
BRIAN J.
BENEDICT
Date Signed 5-31-23
ARIZONA, U.S.A.

COVER SHEET

PROJ.NO.:	1909
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ASANTE PLANNING AREA 3 BOUNDARY
STREET LIGHT IMPROVEMENT DISTRICT
SURPRISE, ARIZONA

EXHIBIT "B"

HILGARTWILSON
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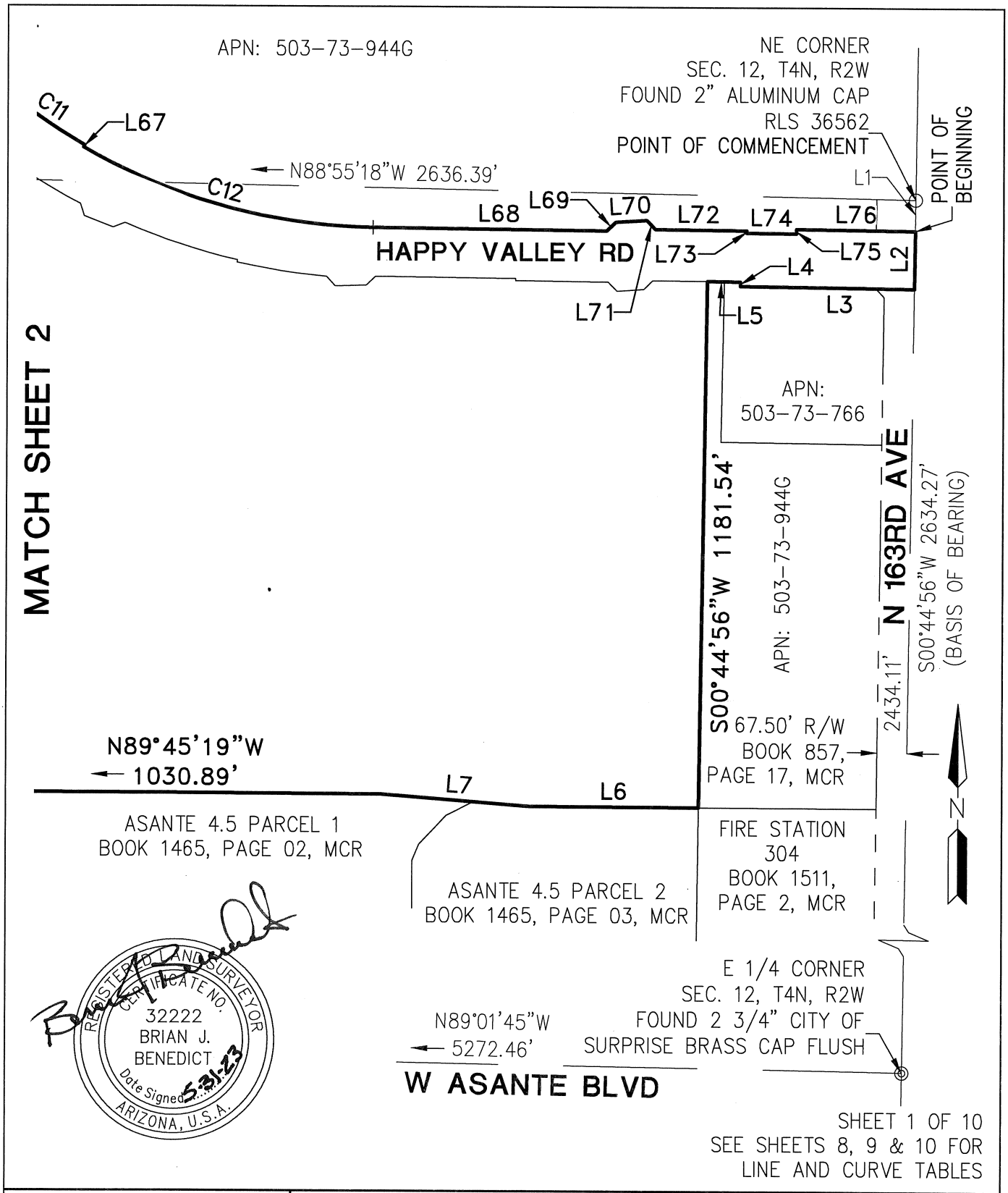

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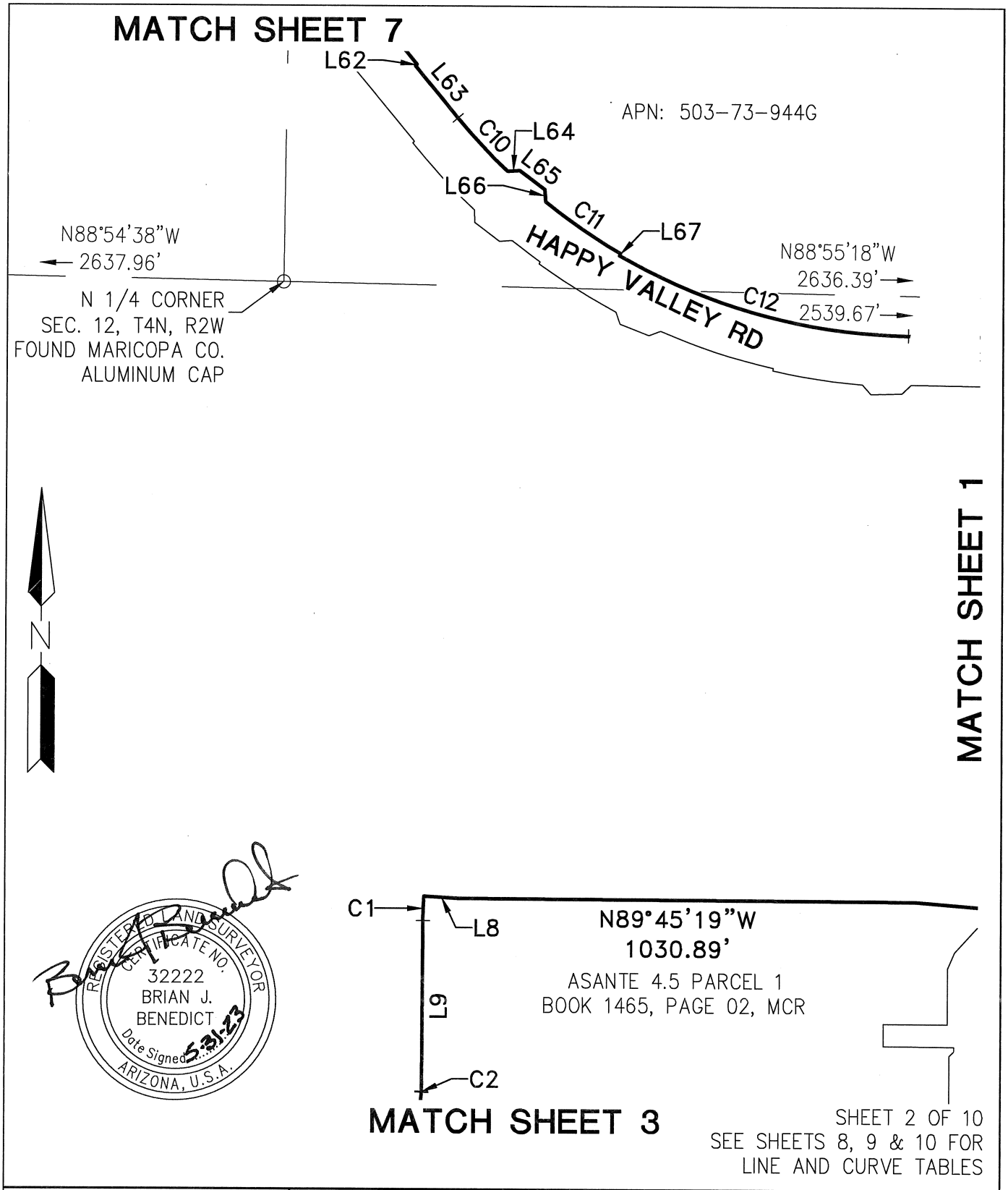

SHEET 2 OF 10
SEE SHEETS 8, 9 & 10 FOR
LINE AND CURVE TABLES

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ASANTE PLANNING AREA 3 BOUNDARY
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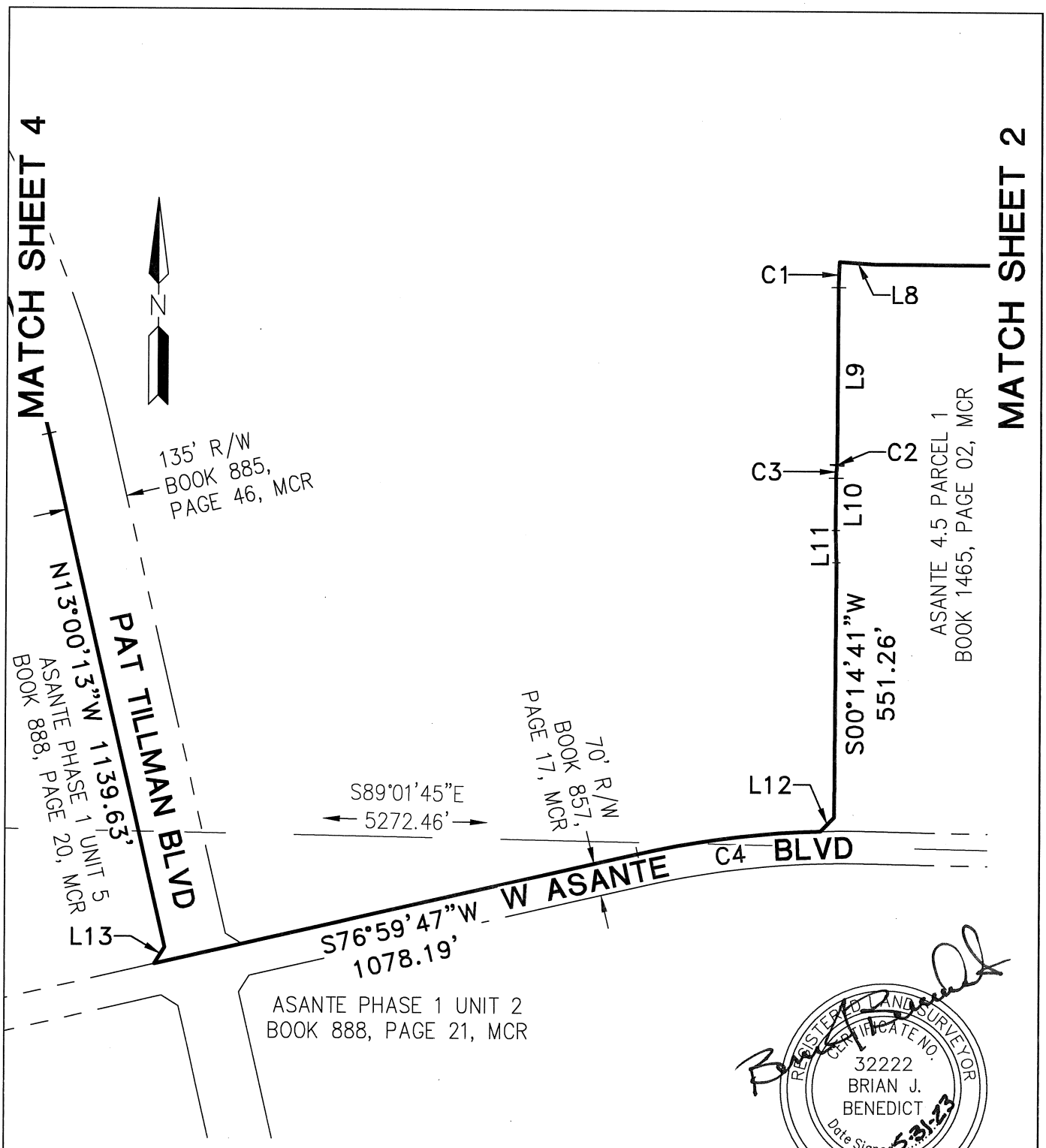

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SHEET 3 OF 10
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ASANTE PLANNING AREA 3 BOUNDARY
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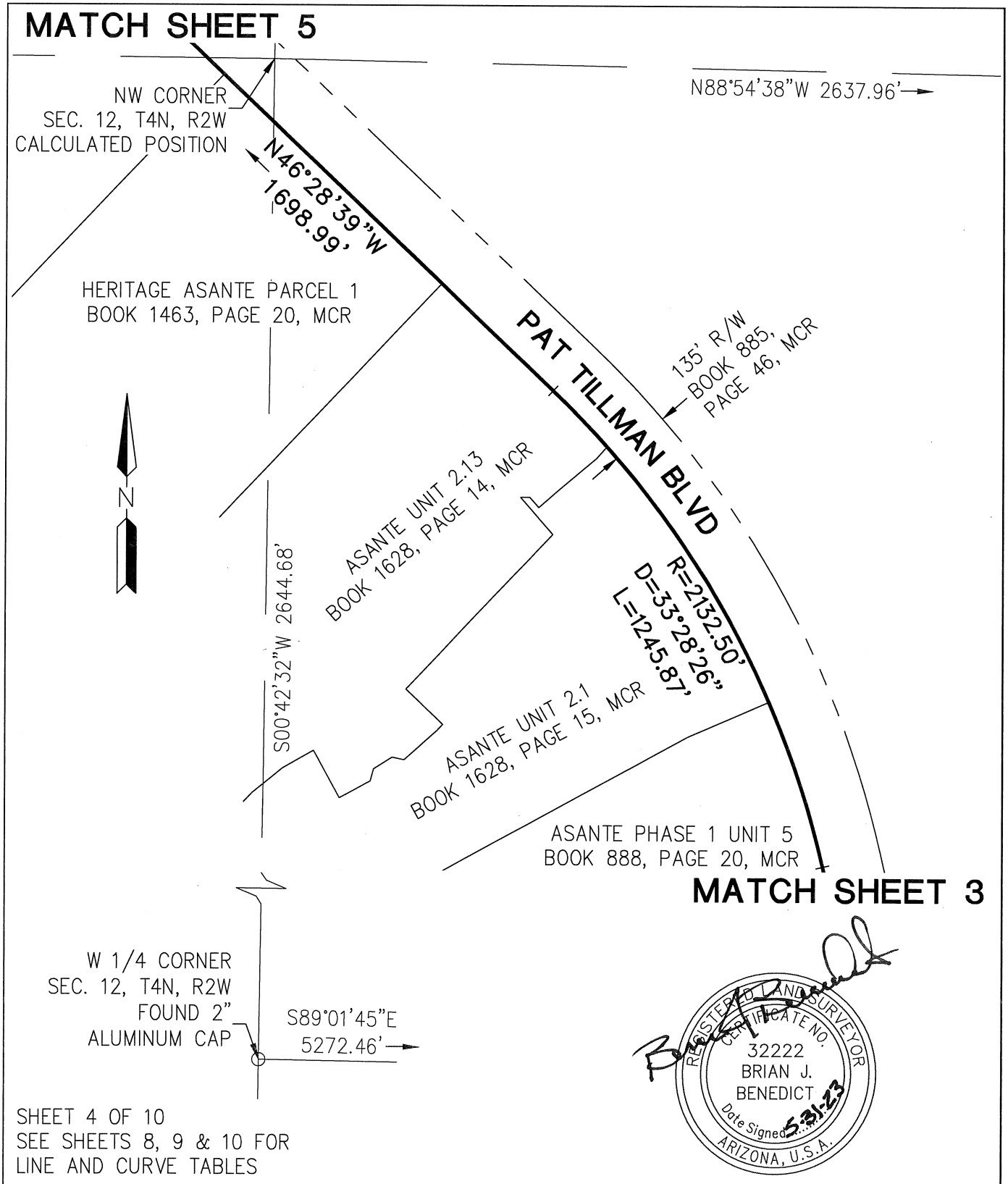

SHEET 4 OF 10
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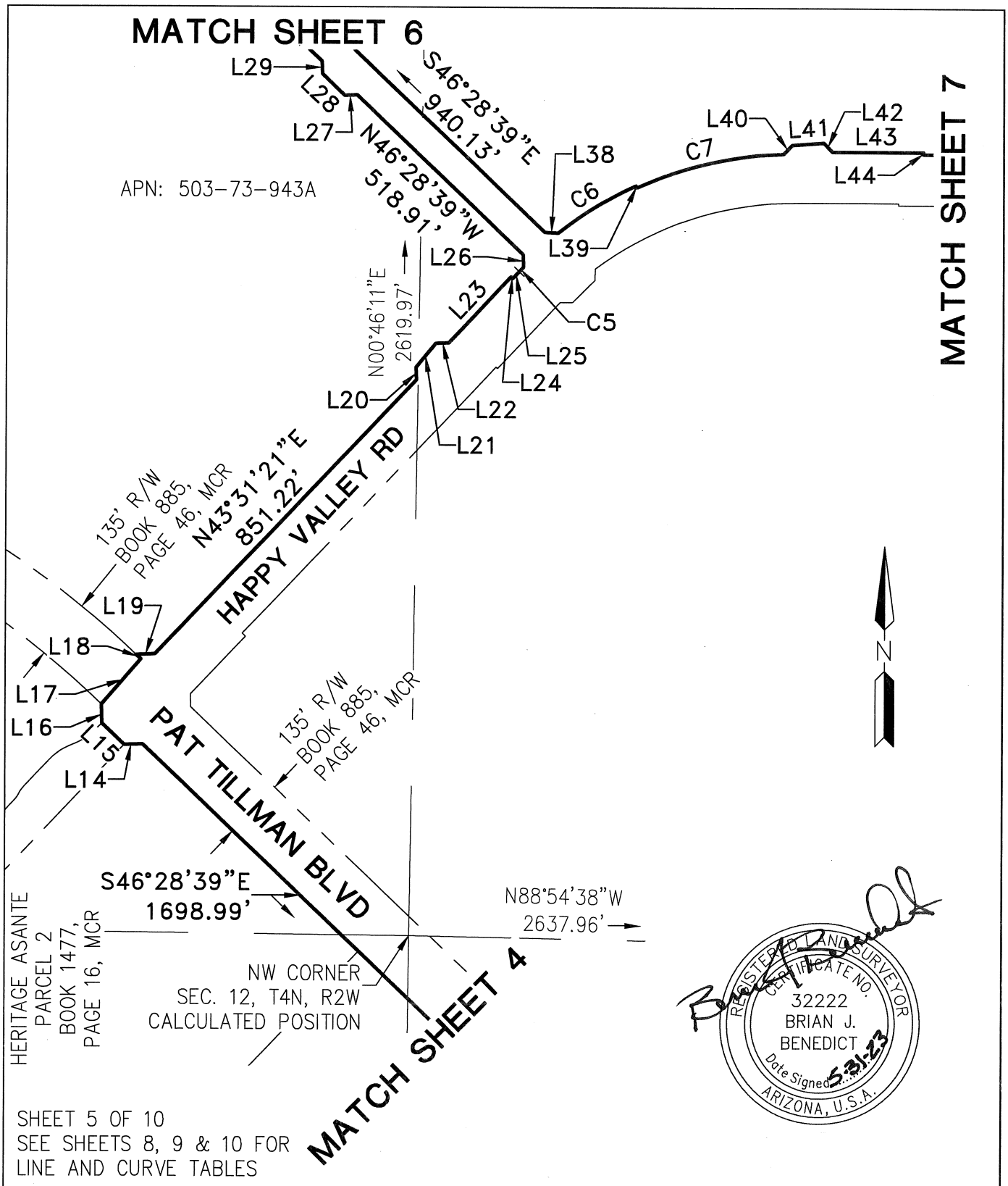

SHEET 5 OF 10
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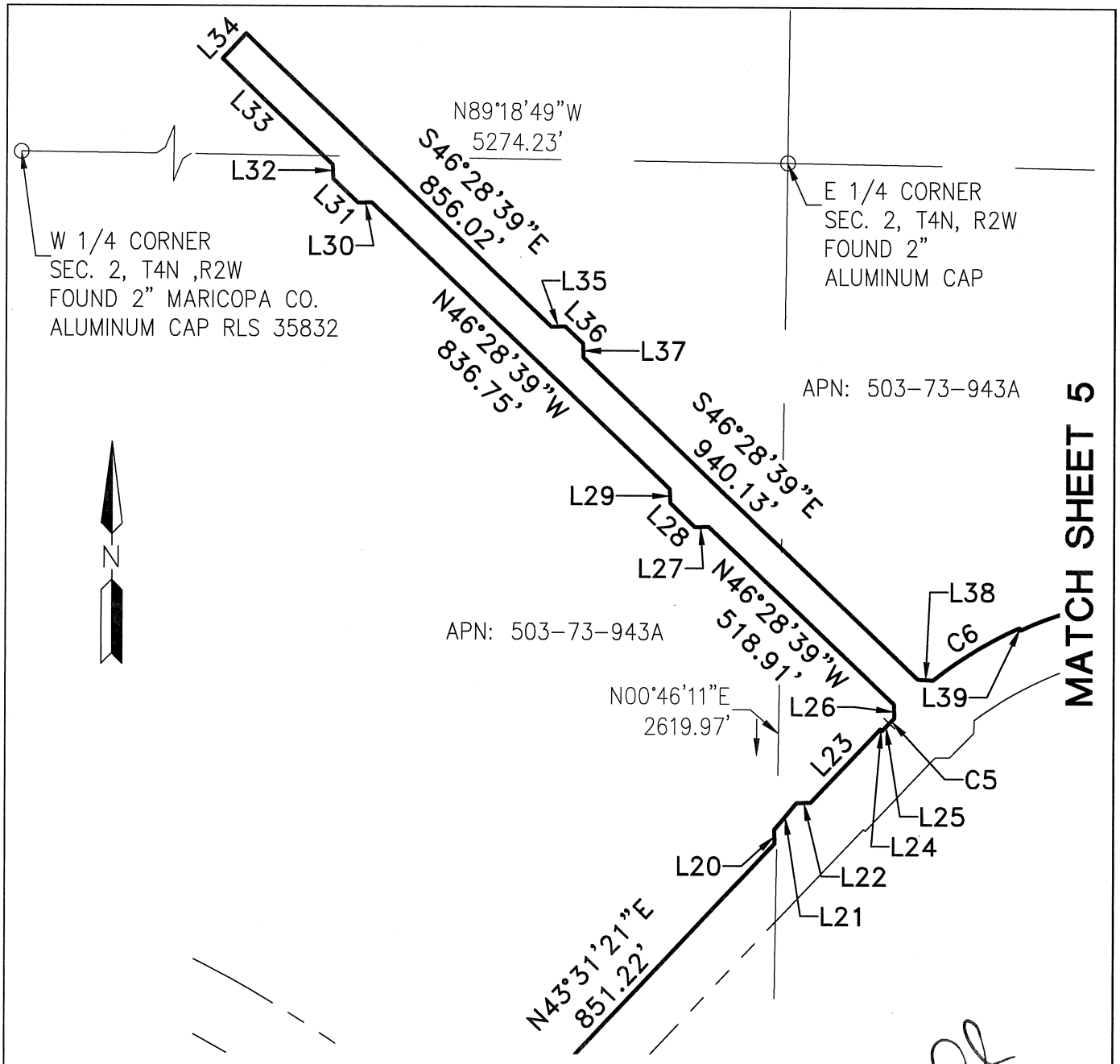

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ASANTE PLANNING AREA 3 BOUNDARY
STREET LIGHT IMPROVEMENT DISTRICT
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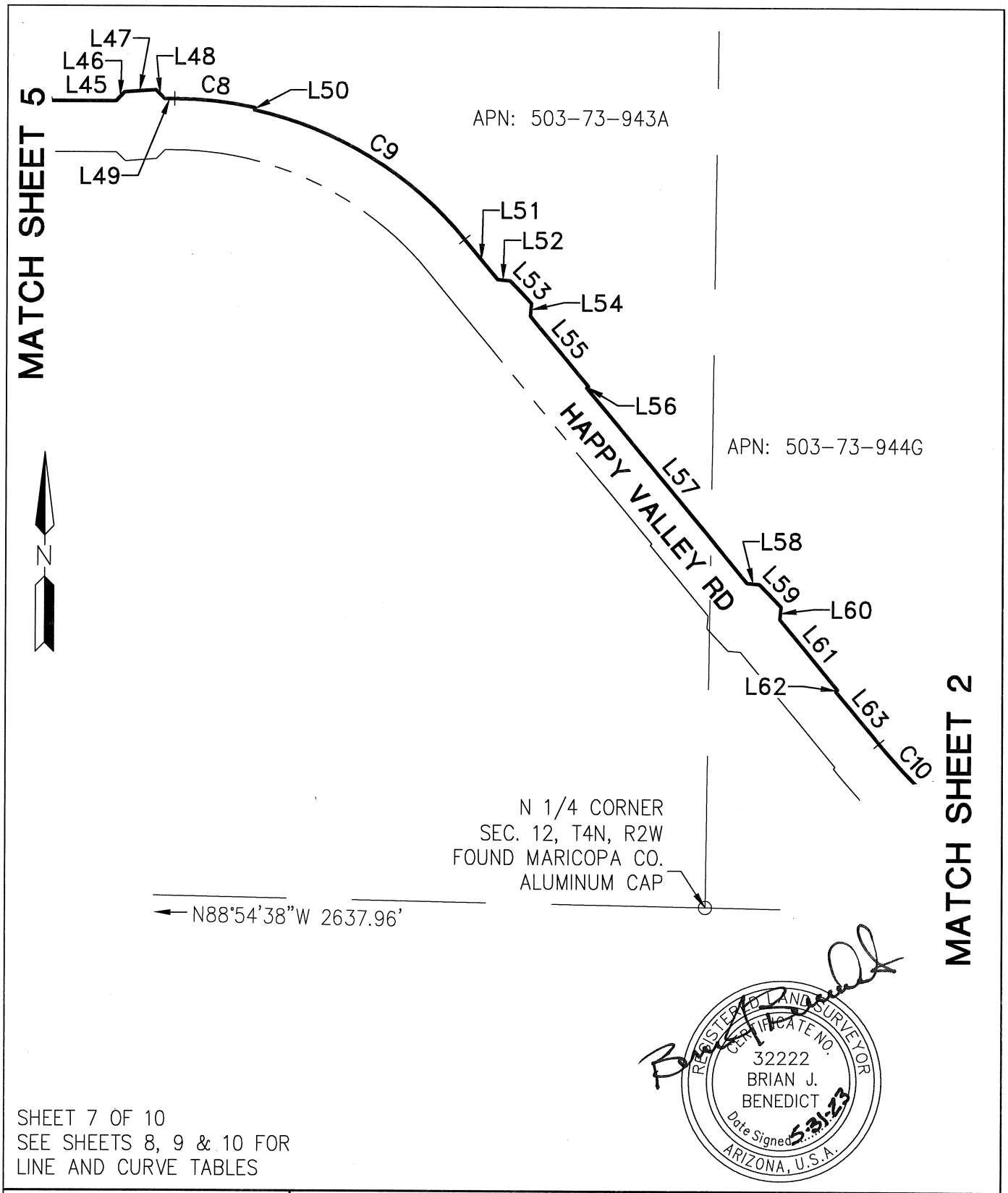

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SHEET 7 OF 10
SEE SHEETS 8, 9 & 10 FOR
LINE AND CURVE TABLES

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ASANTE PLANNING AREA 3 BOUNDARY
STREET LIGHT IMPROVEMENT DISTRICT
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LINE TABLE		
LINE NO.	DIRECTION	LENGTH
L1	S00°44'56"W	70.16'
L2	S00°44'56"W	130.00'
L3	N89°20'59"W	392.50'
L4	N00°44'56"E	10.00'
L5	N89°20'59"W	75.00'
L6	N89°45'19"W	381.08'
L7	N85°30'56"W	338.15'
L8	N86°42'42"W	80.00'
L9	S00°14'41"W	382.74'
L10	S00°14'41"W	113.00'
L11	S01°23'31"E	70.03'
L12	S44°28'14"W	42.99'
L13	N31°59'47"E	42.44'
L14	S88°31'21"W	42.43'
L15	N46°28'39"W	70.01'
L16	N01°28'39"W	42.43'
L17	N41°24'05"E	135.09'

LINE TABLE		
LINE NO.	DIRECTION	LENGTH
L18	N46°38'19"W	15.00'
L19	N88°27'44"E	42.47'
L20	N01°28'39"W	28.28'
L21	N39°26'13"E	70.18'
L22	N88°31'21"E	28.28'
L23	N43°31'21"E	205.00'
L24	S46°28'39"E	5.00'
L25	N43°31'21"E	21.20'
L26	N00°41'27"W	27.89'
L27	S88°31'21"W	28.28'
L28	N46°28'39"W	70.00'
L29	N01°28'39"W	28.28'
L30	S88°31'21"W	28.28'
L31	N46°28'39"W	70.00'
L32	N01°28'39"W	28.28'
L33	N46°28'39"W	310.00'
L34	N43°31'21"E	70.00'

REGISTERED LAND SURVEYOR
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Date Signed 5-31-23
ARIZONA, U.S.A.

PAGE 8 OF 10

PROJ.NO.:	1909
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ASANTE PLANNING AREA 3 BOUNDARY
STREET LIGHT IMPROVEMENT DISTRICT
SURPRISE, ARIZONA

EXHIBIT "B"

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LINE TABLE		
LINE NO.	DIRECTION	LENGTH
L35	N88°31'21"E	28.28'
L36	S46°28'39"E	50.00'
L37	S01°28'39"E	28.28'
L38	S87°43'01"E	30.34'
L39	S24°30'37"E	5.00'
L40	N44°31'41"E	28.52'
L41	N85°54'22"E	70.18'
L42	S45°00'00"E	28.28'
L43	N90°00'00"E	205.00'
L44	S00°00'00"E	5.00'
L45	N90°00'00"E	147.65'
L46	N44°42'35"E	28.14'
L47	N85°54'42"E	70.13'
L48	S45°17'25"E	28.43'
L49	N90°00'00"E	21.66'
L50	S12°14'44"W	5.00'
L51	S39°43'06"E	116.64'

LINE TABLE		
LINE NO.	DIRECTION	LENGTH
L52	S84°43'06"E	28.28'
L53	S43°48'14"E	70.18'
L54	S05°16'54"W	28.28'
L55	S39°43'06"E	205.00'
L56	S50°16'54"W	5.00'
L57	S39°43'06"E	568.37'
L58	S84°43'06"E	28.28'
L59	S43°48'14"E	70.18'
L60	S05°16'54"W	28.28'
L61	S39°43'06"E	205.00'
L62	S50°16'54"W	5.00'
L63	S39°43'06"E	152.26'
L64	N86°55'18"E	27.82'
L65	S53°07'50"E	70.18'
L66	S05°00'44"E	27.82'
L67	S29°49'49"W	5.00'
L68	S89°20'59"E	528.52'

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
32222
BRIAN J.
BENEDICT
Date Signed 5-31-23
ARIZONA, U.S.A.

PAGE 9 OF 10

PROJ.NO.:	1909
DATE:	MAY 2023
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ASANTE PLANNING AREA 3 BOUNDARY
STREET LIGHT IMPROVEMENT DISTRICT
SURPRISE, ARIZONA

EXHIBIT "B"

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CURVE TABLE				
CURVE NO.	RADIUS	DELTA	LENGTH	CHORD BEARING
C1	1040.00'	3°02'37"	55.25'	S1°46'00"W
C2	20.00'	7°38'42"	2.67'	N4°04'02"E
C3	205.00'	7°38'42"	27.35'	S4°04'02"W
C4	2035.00'	11°16'46"	400.62'	S82°38'04"W
C5	855.00'	0°55'32"	13.81'	S43°59'07"W
C6	860.00'	13°41'25"	205.49'	S58°38'40"W
C7	855.00'	22°53'20"	341.56'	S76°56'03"W
C8	860.00'	12°14'44"	183.80'	N83°52'38"W
C9	855.00'	38°02'10"	567.60'	N58°44'11"W
C10	1345.00'	6°58'54"	163.89'	S43°12'33"E
C11	1340.00'	8°46'26"	205.20'	S55°46'58"E
C12	1345.00'	29°10'47"	684.99'	S74°45'35"E

LINE TABLE		
LINE NO.	DIRECTION	LENGTH
L69	N45°39'01"E	28.28'
L70	N86°33'53"E	70.18'
L71	S44°20'59"E	28.28'
L72	S89°20'59"E	205.00'
L73	S00°39'01"W	5.00'
L74	S89°20'59"E	112.55'
L75	N00°44'56"E	10.00'
L76	S89°20'59"E	267.50'



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ASANTE PLANNING AREA 3 BOUNDARY
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SURPRISE, ARIZONA

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Clear Form Print Form

STREET LIGHT IMPROVEMENT DISTRICT PETITION ENLARGEMENT

TO THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE:

We, the undersigned, are all or a majority of the real property owners, exclusive of mortgagees and other lienholders, adjoining the district named below. We petition the City Council of the City of Surprise, Arizona, to enlarge the District to include said property legally described in Exhibit A with such boundaries as shown in the map in Exhibit B attached hereto. This petition includes a charge for maintaining the lighting facilities.

It is hereby requested that, in compliance with the Arizona Revised Statutes, the City Council adopt a Resolution of Intention to enlarge the existing District, and that unless protests are received pursuant to A.R.S. §48-579 sufficient to bar further proceedings, the City Council proceed with the improvements petitioned for herein.

Public convenience, necessity and welfare will be promoted by the establishment of the District and the real property within the District will be benefited by the District. Additional street lighting facilities may be installed and included in the District, at no investment cost to the District, as directed by the City and as approved by Arizona Public Service and the City Engineer.

WHEREFORE, we respectfully ask that this Petition be properly filed and that the Mayor and Council of the City adopt the Resolution and take such other action as is proper, necessary and appropriate to enlarge the District and to fulfill the purposes for which the District is organized, as the Mayor and Council believe is proper and necessary.

The name of the existing street light improvements district to be enlarged:
SU-ASANTEPAR4.5

(Leave Blank - to be assigned by City staff)

PETITIONERS: Please print and sign your name

PRINT BUSINESS/ PETITIONER'S NAME	ADDRESS OF PROPERTY OWNED WITHIN DISTRICT	ASSESSOR PARCEL #	SIGNATURE
Asante Development Partners, LLC	1665 W Alameda Dr, Ste 130 Tempe, AZ 85282	503-57-901 THROUGH 503-57-995	Jorge Villasenor Digitally signed by Jorge Villasenor DN: E=jorge.villasenor@lennar.com, CN=Jorge Villasenor, OU=Users, OU=PHX-DC01, OU=Phoenix, OU=Arizona, DC=Lennar, DC=LennarCorp, DC=com Date: 2024.04.12 11:08:00-07'00'
		503-58-822 THROUGH 503-58-968	Jorge Villasenor Digitally signed by Jorge Villasenor DN: E=jorge.villasenor@lennar.com, CN=Jorge Villasenor, OU=Users, OU=PHX-DC01, OU=Phoenix, OU=Arizona, DC=Lennar, DC=LennarCorp, DC=com Date: 2024.04.12 11:08:18-07'00'
		503-64-885 THROUGH 503-64-972	Jorge Villasenor Digitally signed by Jorge Villasenor DN: E=jorge.villasenor@lennar.com, CN=Jorge Villasenor, OU=Users, OU=PHX-DC01, OU=Phoenix, OU=Arizona, DC=Lennar, DC=LennarCorp, DC=com Date: 2024.04.12 11:08:35-07'00'
		503-70-926 THROUGH 503-70-991	Jorge Villasenor Digitally signed by Jorge Villasenor DN: E=jorge.villasenor@lennar.com, CN=Jorge Villasenor, OU=Users, OU=PHX-DC01, OU=Phoenix, OU=Arizona, DC=Lennar, DC=LennarCorp, DC=com Date: 2024.04.12 11:08:51-07'00'
		503-72-297 THROUGH 503-72-461	Jorge Villasenor Digitally signed by Jorge Villasenor DN: E=jorge.villasenor@lennar.com, CN=Jorge Villasenor, OU=Users, OU=PHX-DC01, OU=Phoenix, OU=Arizona, DC=Lennar, DC=LennarCorp, DC=com Date: 2024.04.12 11:09:07-07'00'
		503-72-693 THROUGH 503-72-933	Jorge Villasenor Digitally signed by Jorge Villasenor DN: E=jorge.villasenor@lennar.com, CN=Jorge Villasenor, OU=Users, OU=PHX-DC01, OU=Phoenix, OU=Arizona, DC=Lennar, DC=LennarCorp, DC=com Date: 2024.04.12 11:09:24-07'00'
		503-74-978 503-74-983 503-72-988	Jorge Villasenor Digitally signed by Jorge Villasenor DN: E=jorge.villasenor@lennar.com, CN=Jorge Villasenor, OU=Users, OU=PHX-DC01, OU=Phoenix, OU=Arizona, DC=Lennar, DC=LennarCorp, DC=com Date: 2024.04.12 11:09:43-07'00'

AVAILABILITY

This rate schedule is applicable to those portions of cities, towns and unincorporated communities in which the Company does a general retail electric business and where the Company has installed a multiple or series street lighting system of adequate capacity for the service to be rendered after December 1, 2021.

DESCRIPTION

E-68 is a rate that is applicable for lighting public streets, alleys, thoroughfares, public parks and playgrounds from dusk to dawn by use of Company's facilities.

TIME PERIOD

Dusk: The time between sunset and full night when photocontrol senses the lack of sufficient sunlight and turns on the lights.

Dawn: The time between full night and sunrise when a photocontrol senses sufficient sunlight to turn off lights.

CHARGES

The monthly bill will consist of the fixture and energy charges, plus adjustments:

I. FIXTURES (Includes Mounting Arm, if applicable)

Fixture Equipment Class	Fixture Cost Range (per unit)	Investment by Company Monthly Rate	Investment by Others Monthly Rate
A	$ 1 - $ 430	$5.72	$1.75
B	$ 431 - $ 520	$6.97	$2.12
C	$ 521 - $ 640	$8.36	$2.60
D	$ 641 - $ 820	$9.99	$3.32
E	$ 821 - $ 910	$12.64	$3.68
F	$ 911 - $ 1,010	$14.07	$4.08
G	$ 1,011 - $ 1,110	$15.38	$4.49
H	$ 1,111 - $ 1,250	$17.44	$5.04
I	$ 1,251 - $ 1,520	$19.40	$6.12
J	$ 1,521 - $ 1,670	$23.65	$6.73
K	$ 1,671 - $ 1,850	$26.29	$7.45

Note: Equipment cost greater than $1,850 shall be Customer owned.

II. ENERGY (Includes Generation, T&D, RCS & SBC)

Monthly energy charges for new lighting fixtures will be determined by the Company using the following method:

kWh = Fixture Wattage x 344 Usage Hours

Generation = kWh per month x $ 0.06621

T&D, RCS, System Benefits = kWh per month x $ 0.02682

NOTES:

1. Investment by Company. These rates are applicable where the Company provides the initial investment to purchase and install all facilities necessary for street lighting service. The Company will own, operate, and maintain the street lighting system.

2. Investment by Others. These rates are applicable in those instances where the requesting entity or individual purchases and installs the street lighting facilities at their own expense and in accordance with Company specifications. These rates will also apply in the instance where the Customer provides a non-refundable advance to the Company to cover the Company's cost of purchasing and installing the street lighting system. The Company retains ownership of the street lighting system and provides operation and maintenance for all facilities.

3. Listed kWh reflects the assigned monthly energy usage for each type of fixture and are used to determine any applicable transmission, system benefit, distribution, energy, and adjustment charges.

4. kWh is determined by the company based on the rated wattage of the equipment and an established average hourly usage per month.

5. The monthly rate for all new poles includes up to 300 feet of overhead secondary wire, or up to 300 feet of underground secondary wire if the Customer provides earthwork and conduit (excluding the underground to overhead transition).

III. POLES

				CHARGES	
			Height	Investment by Company	Investment by Others
A. Anchor Base Mounted (Flush)	Round Steel	1 Simplex Adapter	12 ft.	$12.84	$1.77
			22 ft.	$14.45	$1.99
			25 ft.	$15.64	$2.16
			30 ft.	$17.96	$2.47
			32 ft.	$18.87	$2.50
		2 Simplex Adapters	12 ft.	$13.69	$1.89
			22 ft.	$15.73	$2.17
			25 ft.	$16.41	$2.26
			30 ft.	$19.07	$2.63
			32 ft.	$20.34	$2.81
	Square Steel	5"	13 ft.	$14.72	$2.02
			15 ft.	$13.15	$1.81
			23 ft.	$15.60	$2.15
			25 ft.	$17.15	$2.36
			28 ft.	$19.04	$2.62
			32 ft.	$18.93	$2.61
	Concrete		12 ft.	$43.87	$6.04
	Fiberglass		12 ft.	$37.15	$5.11
	Decorative Transit	4"	16 ft.	$36.22	$5.00
	Decorative Transit	6"	30 ft.	$69.93	$9.63
	Hinged Poles	Square	15 ft.	$13.92	$1.14
		Round	19 ft.	$12.59	$1.03
B. Anchor Base Mounted (Pedestal)	Round Steel	1 Simplex Adapter	12 ft.	$12.35	$1.69
			22 ft.	$13.97	$1.92
			25 ft.	$15.14	$2.09
			30 ft.	$17.48	$2.42
			32 ft.	$18.37	$2.53
		2 Simplex Adapters	12 ft.	$13.19	$1.81
			22 ft.	$14.74	$2.02
			25 ft.	$15.91	$2.18
			30 ft.	$18.58	$2.55
			32 ft.	$19.84	$2.73
		3 Bolt	32 ft.	$22.80	$3.13
	Square Steel	5"	13 ft.	$14.24	$1.97
			15 ft.	$14.56	$1.99
			23 ft.	$15.11	$2.09
			25 ft.	$16.67	$2.31
			28 ft.	$18.52	$2.55
			32 ft.	$19.23	$2.63

III. POLES (cont.)

				CHARGES	
			Height	Investment by Company	Investment by Others
C. Direct Bury	Round Steel		19 ft.	$19.43	$2.68
			30 ft.	$15.17	$2.81
			38 ft.	$18.51	$2.88
		Self	40 ft.	$22.80	$3.61
		Stepped	25 ft.	$52.45	$4.28
			32 ft.	$55.24	$4.51
			49 ft.	$68.57	$9.45
	Square Steel	4"	34 ft.	$16.74	$2.90
		5"	20 ft.	$15.90	$2.63
			30 ft.	$16.57	$2.73
			38 ft.	$17.98	$3.12
		8"	28 ft.	$30.01	$2.44
			32 ft.	$31.37	$2.57
	Decorative Transit		41 ft 6	$21.60	$3.17
	Decorative Transit		47 ft.	$26.91	$3.96
	Steel Distribution Pole (for lighting only)		35 ft.	$24.84	$3.27
D. Post Top	Decorative Transit Anchor Base		16 ft.	$37.00	$5.08
	Gray Steel/Fiberglass		23 ft.	$12.83	$2.11
	Black Steel		23 ft.	$14.14	$2.33
E. Existing distribution pole suitable for streetlight use				$1.56	--

IV. ANCHOR BASE

			CHARGES	
		Height	Investment by Company	Investment by Others
A. Flush		4 ft.	$10.45	$1.44
		6 ft.	$12.47	$2.16
B. Pedestal		8 ft.	$14.29	$2.49
	For 32' Round Steel Pole only	4 ft. 6"	$9.91	$1.71

V. CHARGES FOR OPTIONAL OR ADDITIONAL COMPANY OWNED EQUIPMENT

Underground Circuit Charges	
a. Per foot of cable, installed under paving	$0.16652
b. Per foot of cable, not installed under paving	$0.05877

TRIP CHARGE

A $150.00 trip charge per light will be charged when a Customer requests a disconnect or reconnect of service in order to accommodate the maintenance activities of the Customer or its designee(s) on their street lighting equipment.

ADJUSTMENTS

The bill will include the following adjustments:

1. The Renewable Energy Standard charge, Adjustment Schedule REAC-1.
2. The Power Supply Adjustment charges, Adjustment Schedule PSA-1.
3. The Transmission Cost Adjustment charge, Adjustment Schedule TCA-1.
4. The Environmental Improvement Surcharge, Adjustment Schedule EIS.
5. The Demand Side Management Adjustment charge, Adjustment Schedule DSMAC-1.
6. Direct Access Customers returning to Standard Offer service may be subject to a Returning Customer Direct Access Charge, Adjustment Schedule RCDAC-1.
7. The Tax Expense Adjustor Mechanism charge, Adjustment Schedule TEAM
8. Any applicable taxes and governmental fees that are assessed on APS's revenues, prices, sales volume, or generation volume.

SERVICE DETAILS

1. Street lighting facilities installed under this rate schedule are of the type currently being furnished by Company as standard at the time service is initially requested. Standard facilities are those listed in the Company's Transmission and Distribution Construction Standards book.

2. The Customer's bill will not be reduced due to photocontrol or cable repair or replacement outages.

3. Non-standard facilities (non-standard being defined as any facility not listed in the Company's Transmission and Distribution Construction Standards book) do not qualify for this rate schedule. At the Company's discretion, such facilities may be served under another of the Company's rate schedules.

4. The Company will extend its standard street lighting system up to a distance of 300 feet for each additional lighting installation without cost at the request of the Customer. When the extension is underground, the customer will provide earthwork as specified in the Company's Service Schedule 3, Conditions Governing Extensions of Electric Distribution Lines and Services; or, at the applicant's request, the Company will provide such earthwork and the applicant will be required to pay a non-refundable contribution in aid of construction equal to the cost of such earthwork. Any additional extension required (over and above the first 300 feet) will be provided by Company for a contribution in aid of construction equal to the cost of the additional extension.

    a. Extensions to isolated areas requiring a substantial extension of the electric distribution system, as opposed to an extension of the street lighting system, will require a special study to determine the terms and conditions under which the Company will undertake such an extension.

5. APS provides electric service under the Company's Service Schedules. These schedules provide details about how the Company serves its Customers, and they have provisions and charges that may affect the Customer's bill. In addition, service may be subject to special terms and conditions as provided for in a Customer contract, maintenance, or service agreement.

ASANTE PLANNING AREA 3

UNIT 3.9

STREET LIGHT DESIGN

STREET LIGHTING REQUIREMENTS

5.00 GENERAL NOTES:

THE FOLLOWING INFORMATION IS PROVIDED TO EMPHASIZE CRITICAL WORK AND IS INTENDED TO SUPPLEMENT THE SPECIFICATIONS. SHOULD THERE BE A CONFLICT WITH THE SPECIFICATIONS, THIS DOCUMENT SHALL TAKE PRECEDENCE.

ALTERNATES SHALL BE PRE-APPROVED BY THE CITY ENGINEERING MANAGER. APPROVAL OF ALTERNATE PRODUCTS SHALL BE ON AN EQUAL BASIS WITH THE PRODUCT SPECIFIED AND SHALL BE SUBMITTED A MINIMUM OF TEN (10) DAYS PRIOR TO BID OPENING. STRUCTURAL CALCULATIONS SHALL BE FURNISHED FOR ALTERNATE PRODUCTS AND CERTIFIED BY A STRUCTURAL ENGINEER, REGISTERED IN THE STATE OF ARIZONA. LUMINAIRES AND LAMPS SHALL MEET OR EXCEED THE PHOTOMETRIC, ELECTRICAL, AND MECHANICAL REQUIREMENTS FOR THE SPECIFIED PRODUCTS.

THE CONTRACTOR SHALL COMPLY WITH STATE AND CITY STATUTES, AND MANUFACTURER'S RECOMMENDATIONS.

THE SUBMITTAL PACKAGE SHALL CONSIST OF THREE (3) COPIES OF EQUIPMENT/MATERIAL TO BE INSTALLED AND SHALL BE BOUND/STAPLED IN A FOLDER AND SUBMITTED AT THE TIME OF PERMIT APPLICATION.

PRIOR TO SUBMITTING A PROPOSAL, THE BIDDER SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS AND VISIT THE CONSTRUCTION SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL OPERATE AND WHICH WILL IN ANY WAY AFFECT THE WORK UNDER THE CONTRACT. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN THIS CONNECTION IN THE BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLIGENCE ON HIS PART.

PRIOR TO ORDERING ANY MATERIALS OR DOING ANY WORK, THE CONTRACTOR SHOULD VERIFY DIMENSIONS AT THE SITE. IMMEDIATELY REPORT DIFFERENCES TO THE ENGINEERING MGR. AND SHOULD NOT PROCEED WITH WORK UNTIL THE ENGINEERING MGR. RENDERS A DECISION. NO EXTRA CHARGES OR COMPENSATION WILL BE ALLOWED FOR DIFFERENCES IN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE DRAWINGS.

5.01 GENERAL:

THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH ALL LICENSING REQUIREMENTS SET FORTH BY THE STATE REGISTRAR OF CONTRACTORS OFFICE TO PERFORM WORK RELATING TO STREET LIGHT INSTALLATION IN THE CITY RIGHT-OF-WAY.

ONE PROJECT UNDERGROUND UTILITIES (RIGHT OF WAY) PERMIT AND ONE STREETLIGHT PERMIT FOR EACH STREET LIGHT POLE SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

5.02 WORKING / "AS BUILT" PLANS:

ACCEPTANCE OF THE COMPLETED IMPROVEMENTS WILL NOT BE GIVEN UNTIL 4 MIL PHOTO MYLAR REPRODUCIBLE "AS BUILT" PLANS HAVE BEEN SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

5.03 LIGHT POLES:

LIGHT POLES SHALL BE INSTALLED PLUMB, BE ADJUSTED TO PROVIDE PROPER ALIGNMENT TO THE ROADWAY BEING LIGHTED AND BE PROPERLY GROUNDED WHEN THE INSTALLATION IS COMPLETE.

5.04 EMBEDMENT:

DIRECT BURIED POLES SHALL BE SET IN A TWELVE (12) INCH AUGURED HOLE DEPTH AS SPECIFIED IN UNDISTURBED EARTH. POLE SHALL BE SET PLUMB IN TWO DIRECTIONS 90 DEGREES APART. HAND TAMPING OF ABC BACKFILL WITH PNEUMATIC OR VIBRATING EQUIPMENT IS THE ACCEPTABLE METHOD OF COMPACTION. BACKFILL SHALL BE COMPACTED TO 85% OF MAXIMUM DENSITY AS DEFINED BY ASTM D-2922 AND D-3017. A GROUND ROD SHALL BE INSTALLED ADJACENT TO PULL BOX IN UNDISTURBED SOIL AND A LEAD IN COPPER BOND WIRE (#6) SHALL BE INSTALLED IN 1" CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT (OR EQUAL) FOR POLE GROUNDING.

SURPLUS EXCAVATION SHALL BE DISPOSED OF BY THE CONTRACTOR.

5.05 LUMINAIRES:

LUMINAIRES SHALL BE INSTALLED LEVEL AND INCLUDE A LAMP AND PHOTOCELL. CONTRACTOR SHALL ASSURE THAT THE LUMINAIRES SHALL BE FREE OF DUST, DIRT OR ANYTHING THAT WOULD IMPAIR THE OUTPUT OF THE LIGHT BEFORE HE LEAVES THE SITE.

LUMINAIRES FURNISHED WITH MULTI-TAP BALLASTS SHALL BE REWIRED OR RECONNECTED TO MATCH THE VOLTAGE SUPPLIED BY THE ELECTRIC UTILITY COMPANY.

5.06 WIRING:

WIRING SHALL BE INSTALLED PER UTILITY STANDARDS.

5.07 GROUNDING:

EACH POLE SHALL HAVE A 8' X 5/8" COPPER CLAD GROUND ROD DRIVEN ADJACENT TO PULL BOX. A #6 BARE COPPER LEAD FROM THE GROUND ROD IN PULL BOX TO LANDING LUG IN STREET LIGHT POLE HAND HOLE.

5.08 PULL BOXES:

EXCAVATION FOR PULL BOXES AND MATERIAL SPECIFICATION SHALL BE PER THE ELECTRIC UTILITY COMPANY STANDARDS.

5.09 TRENCH

TRENCH SHALL BE INSTALLED PER THE UTILITY COMPANY STANDARDS.

THE USE OF A COMMON ELECTRIC UTILITY COMPANY TRENCH IS PERMITTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANY FOR COORDINATION OF TRENCHING AND THE INSTALLATION OF CONDUIT.

CONDUIT SHALL BE INSTALLED AT THE DEPTH SPECIFIED ON THE PLANS. CONDUIT SHALL BE 1 INCH CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT OR EQUAL. CONDUIT MUST BE UL RATED AND SUITABLE FOR UNDERGROUND USE.

CONNECTIONS SHALL BE PER UTILITY STANDARDS.

5.12 LIGHT POLE IDENTIFICATION:

THE CONTRACTOR SHALL FURNISH AND INSTALL A NUMBER ON EACH LIGHT POLE. STREET LIGHT POLE IDENTIFICATION AND SPECIFICATIONS WILL BE PROVIDED BY THE CITY OF SURPRISE.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO RESTORE ALL PROPERTY, LANDSCAPING, PAVING AND DRIVEWAYS THAT ARE DISTURBED DURING STREET LIGHT CONSTRUCTION TO THEIR ORIGINAL CONDITION IN CONFORMANCE WITH "MAG" SPECIFICATION SECTION 107.9.

THE DEVELOPER SHALL BE RESPONSIBLE FOR FURNISHING ALL PERSONNEL AND EQUIPMENT TO SUCCESSFULLY PERFORM THE FOLLOWING TEST.

PRIOR TO ACCEPTANCE, THE DEVELOPER SHALL ENERGIZE AND OPERATE THE ENTIRE ROADWAY LIGHTING SYSTEM, FROM SUNSET TO SUNRISE FOR TWO CONSECUTIVE DAYS WITHOUT INTERRUPTION OR FAILURE. IF A LAMP OR BALLAST SHOULD FAIL, IT SHALL BE IMMEDIATELY REPLACED.

THE CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE ENGINEERING MANAGER, AGAINST IMPERFECT WORKMANSHIP, FAILURE, MALFUNCTION OF MATERIALS AND/OR EQUIPMENT DUE TO FAULTY OR IMPERFECT WORKMANSHIP. THIS GUARANTEE IS TO BE IN WRITING TO THE CITY AT THE TIME OF ISSUING FINAL ACCEPTANCE. WORK FOUND TO BE DEFECTIVE WITHIN THE WARRANTY PERIOD SHALL BE REPLACED WITHOUT COST TO THE CITY.

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 REPLACEDIN 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.

CITY OF SURPRISE APPROVAL

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.

CITY OF SURPRISE ENGINEER **DATE**

UTILITIES WITHIN OR AFFECTED BY THE PROJECT	
UTILITY CONTACT	DATE SUBMITTED
ARIZONA PUBLIC SERVICE	11/30/2022
CENTURY LINK	11/30/2022
COX COMMUNICATIONS	11/30/2022
SOUTHWEST GAS	11/30/2022

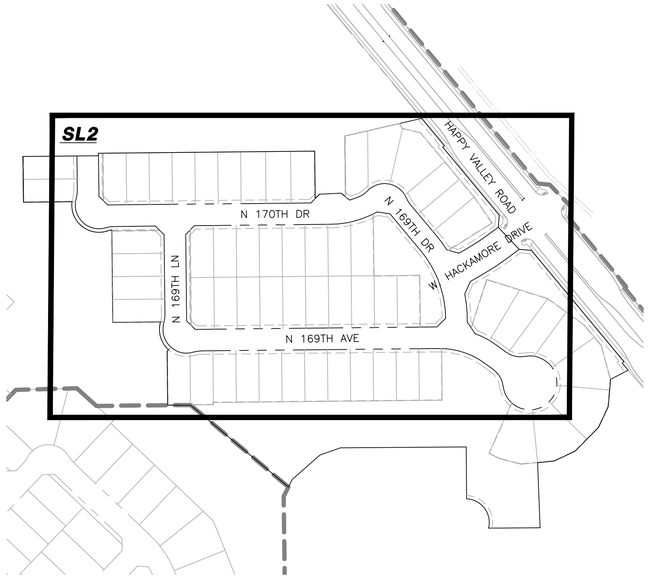
NOTE

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

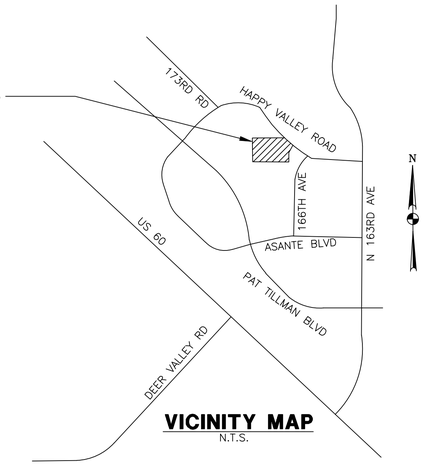
B. THE ELECTRICAL/MAINTENANCE COSTS OF ALL STREET LIGHTS ON LOCAL AND COLLECTOR STREETS ARE TO BE PAID BY THE ADJACENT PROJECT OR THE ADJACENT DEVELOPMENT'S STREET LIGHT IMPROVEMENT DISTRICT (SLID). THE ELECTRICAL / MAINTENANCE COSTS OF ALL STREET LIGHTS ON ARTERIAL STREETS ARE TO BE BILLED TO THE CITY OF SURPRISE'S ENERGY BILL.

LED NOTE

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.



KEY MAP
N.T.S.



VICINITY MAP
N.T.S.

SHEET INDEX

COVER SHEET	SL1
STREET LIGHT PLAN	SL2
DETAILS	SL3

POWER CONDUIT NOTE

TRENCH & CONDUIT RUNS FROM STREET LIGHT PULL BOX TO POINT OF ELECTRICAL SERVICE WILL BE DESIGNED BY THE POWER COMPANY, AND ARE SHOWN ON POWER COMPANY PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THESE PLANS FROM DEVELOPER/OWNER, AND INCLUDE THESE RUNS IN THE BID. COORDINATE THIS WORK WITH THE POWER COMPANY.

CIVIL ENGINEER
HILGART WILSON
2141 E HIGHLAND AVE, STE. 250
PHOENIX, AZ 85016
PHONE: (602) 490-0535
FAX: (602) 368- 2436
CONTACT: DIEGO ORTIZ, PE
EMAIL: DORTIZ@HILGARTWILSON.COM

OWNER
LENNAR COMMUNITIES DELEOPMENT, LLC
1665 W. ALMEDA DR STE 130
TEMPE, AZ 85282-3000
CONTACT: JORGE VILLASENOR

Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348) in Maricopa County: (602) 263-1100

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WRIGHT ENGINEERING PROJECT NO:
22359

DESIGN BY: BDS
DRAWN BY: BDS
CHECKED BY: AMB

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: SURPRISE, ARIZONA
ASANTE PLANNING AREA 3 UNIT 3.9

TITLE: STREET LIGHT COVER SHEET

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	NOV 2022	1ST SUBMITTAL
2	FEB 2023	2ND SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M. BOWERS
Date Signed 4-5-23
Expires 9-30-25

DRAWING NO:
SL1
OF 3

FS22-1631

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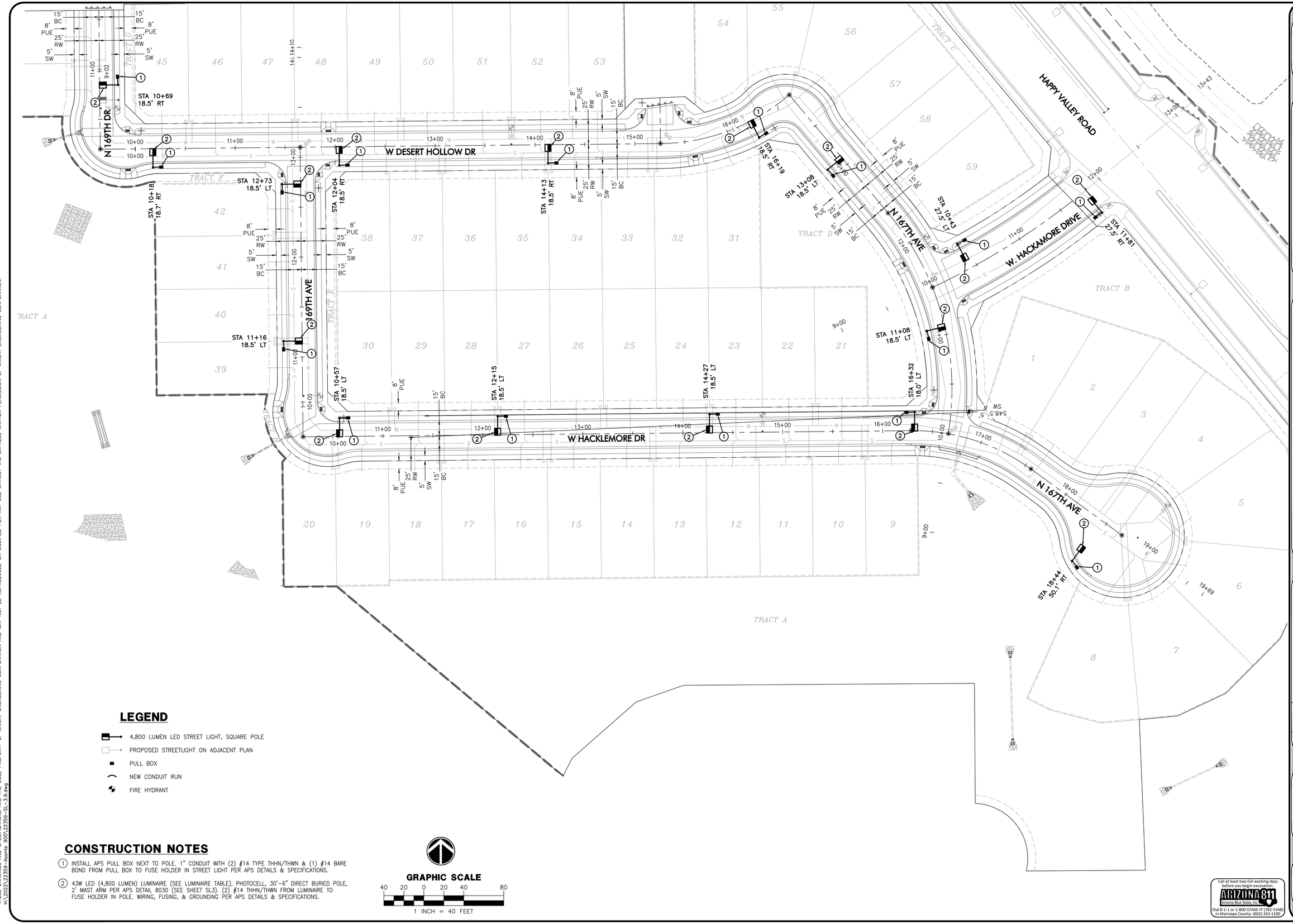

LEGEND

- 4,800 LUMEN LED STREET LIGHT, SQUARE POLE
- PROPOSED STREETLIGHT ON ADJACENT PLAN
- PULL BOX
- NEW CONDUIT RUN
- FIRE HYDRANT

CONSTRUCTION NOTES

1. INSTALL APS PULL BOX NEXT TO POLE. 1" CONDUIT WITH (2) #14 TYPE THHN/THWN & (1) #14 BARE BOND FROM PULL BOX TO FUSE HOLDER IN STREET LIGHT PER APS DETAILS & SPECIFICATIONS.
2. 43W LED (4,800 LUMEN) LUMINAIRE (SEE LUMINAIRE TABLE), PHOTOCELL, 30'-6" DIRECT BURIED POLE, 2' MAST ARM PER APS DETAIL 8030 (SEE SHEET SL3). (2) #14 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. WIRING, FUSING, & GROUNDING PER APS DETAILS & SPECIFICATIONS.

GRAPHIC SCALE

40 20 0 20 40 80

1 INCH = 40 FEET

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

WRIGHT PROJECT NO: 22359
DESIGN BY: BDS
DRAWN BY: BDS
CHECKED BY: AMB

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: SURPRISE, ARIZONA
ASANTE PLANNING AREA 3 UNIT 3.9

TITLE: STREET LIGHT PLAN

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	NOV 2022	1ST SUBMITTAL
2	FEB 2023	2ND SUBMITTAL

Registered Professional Engineer (Electrical)
Certificate No.
46691
ADAM M. BOWERS
Date Signed 4-5-23
Expires 9-30-25

DRAWING NO: SL2
OF 3

FS22-1631

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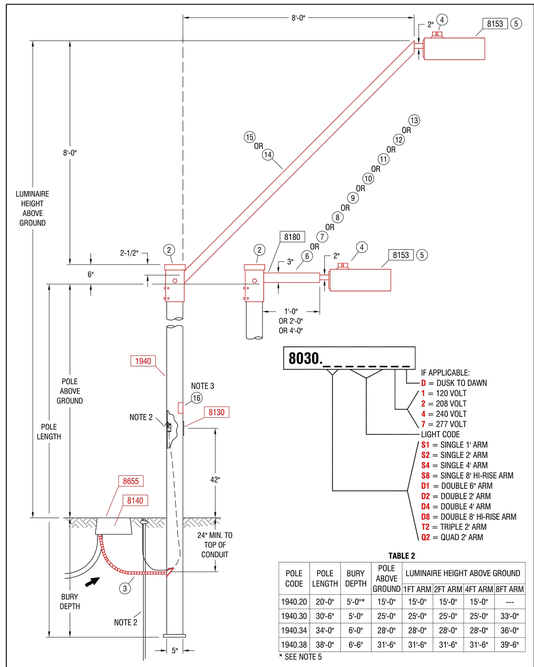


TABLE 2

POLE CODE	POLE LENGTH	BURY DEPTH	POLE ABOVE GROUND	LUMINAIRE HEIGHT ABOVE GROUND			
				1FT ARM	2FT ARM	4FT ARM	8FT ARM
1940.20	20'-0"	5'-0"*	15'-0"	15'-0"	15'-0"	15'-0"	----
1940.30	30'-6"	5'-0"	25'-0"	25'-0"	25'-0"	25'-0"	33'-0"
1940.34	34'-0"	6'-0"	28'-0"	28'-0"	28'-0"	28'-0"	36'-0"
1940.38	38'-0"	6'-6"	31'-6"	31'-6"	31'-6"	31'-6"	39'-6"

* SEE NOTE 5

NOTES:

1. ADJUST PHOTO EYE TO FACE NORTH.
2. A GROUND ROD IS PROVIDED WITH EACH STREET LIGHT POLE. WHERE A GROUND ROD CANNOT BE DRIVEN, ALTERNATE GROUND SHALL BE USED. SEE 2449 THRU 2460 FOR APPROVED ALTERNATES.
3. SIGN, "NOTICE THIS POLE IS OWNED AND MAINTAINED BY APS. DISCONNECT INSIDE", IS REQUIRED ON ALL DUSK-TO-DAWN AND AREA LIGHTING APPLICATIONS.
4. POLES THAT HAVE MORE THAN ONE LUMINAIRE REQUIRE A SEPARATE CIRCUIT WITH FUSING FROM THE J-BOX TO EACH LUMINAIRE.
5. USING THE 20'-0" POLE TO MATCH THE 16'-0" PEDESTRIAN LIGHT MOUNTING HEIGHT REDUCE POLE BURY DEPTH TO 4'-0".
6. THE BROWN PHOTO CONTROL IS A FAIL OFF CONTROL AND SHALL BE USED WITH ALL INDUCTION AND LED LUMINAIRES.
7. ON 277 VOLT STREET LIGHT CIRCUITS, INSTALL A "277 VOLT" MICARTA TAG ON CABLE IN J-BOX. TAG PROVIDED BY SPEC 8129.
8. THE LUMINAIRE SHOWN IS RECOMMENDED FOR THIS MOUNTING HEIGHT. SEE 8153 FOR ADDITIONAL BROWN ARCHITECTURAL LUMINAIRES.
9. THE TWO ARMED TENON BRACKET POSITIONS THE DOUBLE ARM 180 DEGREES APART.
10. TO ACCOMMODATE LESS THAT THE SPECIFIED LUMINAIRE MOUNTING HEIGHT, A SHOP ORDER IS REQUIRED TO HAVE A PORTION FROM THE TOP OF THE POLE CUT OFF. THE TENON ARM BRACKET SLIDES OVER AND COVERS THE CUT PORTION OF THE POLE.
11. IN-LINE FUSE FOR UNDERGROUND FEEDS, SEE 8130-8140.
12. FOR PEDESTRIAN ONLY APPLICATIONS SEE 8030.

TABLE 1

LIGHT CODE	APN	WATTS	K	TYPE	VOLTS	INITIAL LUMENS	MOUNTING HEIGHT
AH18	00099450	100	2100	HPS	120/208/240/277	9,500	SEE TABLE 2
AH17	00099451	150			120/208/240/277	16,000	
AH18	00099452	250			120/208/240/277	30,000	
AH19	00099454	400			120/208/240/277	50,000	
RN40	00128258	55	2700	IND	120/208/240/277	5,600	
RN41	00128667	100	5000		120/208/240/277	9,400	
RN42	00132846	150			120/208/240/277	10,200	
RN43	00132850	150			120/208/240/277	13,000	
RN44	00121153	200			120/208/240/277	15,250	
RN45	00116527	250			120/208/240/277	22,500	
RL40	00141047	32	3000	LED S	120/208/240/277	3,800	
RL41	00141048	41			120/208/240/277	4,800	
RL42	00141049	88			120/208/240/277	8,200	
RL43	00141050	108			120/208/240/277	11,000	
RL44	00141051	162			120/208/240/277	19,000	
RL50	00128251	45	4000	LED S	120/208/240/277	4,300	
RL52	00126804	60			120/208/240/277	5,400	
RL53	00126805	95			120/208/240/277	8,600	
RL54	00126806	113			120/208/240/277	10,000	
RL56	00128365	257			120/208/240/277	19,200	
AL56	00113722	62	4000	LED M	120/208/240/277	7,100	
AL58	00129911	72			120/208/240/277	8,300	
AL60	00113723	119			120/208/240/277	12,900	
AL61	00116525	119R*			120/208/240/277	12,900	
AL62	00116526	119L*			120/208/240/277	12,900	
AL65	00107462	144			120/208/240/277	15,400	
AS20	33806772	55	1700	LPS	120/240	8,000	
AS21	33806774	90			120/240	13,500	
AS22	33806776	135			120/240	22,500	
AS23	33806778	180			120/240	33,000	

* CALL STANDARDS ENGINEERING FOR APPLICATION

MATERIAL LIST

ITEM	CODE	8030.S1 QTY	8030.S2 QTY	8030.S4 QTY	8030.S8 QTY	8030.D1 QTY	8030.D2 QTY	8030.D4 QTY	8030.D8 QTY	8030.T2 QTY	8030.Q2 QTY	DESCRIPTION	APN
1		-	-	-	-	-	-	-	1	-	-	BRACKET ARCH SLIP BOLTED	00092251
2		1	1	1	1	1	1	1	1	1	1	CAP STLT SQ-P 5.5" ARM	00100036
3		10	10	10	10	10	10	10	10	10	10	CONDUIT 1" PVC FLEX CORR	32900891
4		1	1	1	1	2	2	2	3	4		CONTROL PHOTO MULTI BR-20	00073241
5		1	1	1	1	2	2	2	3	4		LUMINAIRE - SEE TABLE 1	
6		-	-	-	-	1	-	-	-	-		MAST ARM STLT 3" SQ X 1' DBL	00121154
7		1	-	-	-	-	-	-	-	-		MAST ARM STLT 3"SQ X 1' SGL	00088370
8		-	-	-	-	-	1	-	-	-		MAST ARM STLT 3"SQ X 2' DBL	33701117
9		-	-	-	-	-	-	-	-	1		MAST ARM STLT 3"SQ X 2' QUAD	00052665
10		-	1	-	-	-	-	-	-	-		MAST ARM STLT 3"SQ X 2' SGL	33701116
11		-	-	-	-	-	-	-	-	1		MAST ARM STLT 3"SQ X 2' TPL	00052664
12		-	-	-	-	-	-	1	-	-		MAST ARM STLT 3"SQ X 4' DBL	00073267
13		-	-	1	-	-	-	-	-	-		MAST ARM STLT 3"SQ X 4' SGL	00061738
14		-	-	-	1	-	-	-	-	-		MAST ARM STLT 3"SQ X 8' SGL	33701120
15		-	-	-	-	-	-	2	-	-		MAST ARM STLT 8' BOLT-ON	00092252
16		1	1	1	1	1	1	1	1	1		SIGN POLE OWNED BY APS	00050092

aps	ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS				
BY	LDR.	MGR.	DATE	REV.	
KLS	B. BOOKER	R. CANDRA	02/2016	12	

LIGHTS ARCHITECTURAL ON 5" SQUARE BROWN PAINTED STEEL POLE DIRECT BURY

SH 1 OF 2

8030

aps ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS

BY | LDR. | MGR. | DATE | REV.
KLS | B. BOOKER | R. CANDRA | 02/2016 | 12

LIGHTS ARCHITECTURAL ON 5" SQUARE BROWN PAINTED STEEL POLE DIRECT BURY

8030

SH 2 OF 2

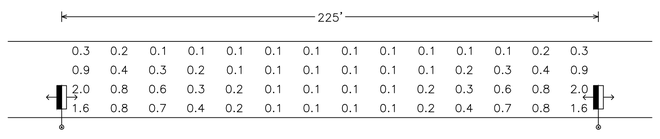
LUMINAIRE TABLE

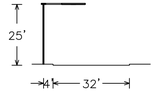
DARK BRONZE ROADWAY SCALEABLE LED 3000K

LIGHT CODE	COLOR	APN	WATTS	VOLTS	INITIAL LUMENS	CATALOG #
RL40	DKBZ	00141047	32	120/208/240/277	3,900	ERLC004B430ADKBZGLRV1013
RL41		00141048	43	120/208/240/277	4,800	ERLC005A430ADKBZGLRV1013
RL42		00141049	71	120/208/240/277	7,800	ERL1008C330ADKBZGLRX162
RL33		00141050	96	120/208/240/277	11,000	ERLH011C330ADKBZGLV1108
RL44		00141051	174	120/208/240/277	20,100	ERL2021C330ADKBZGLR113

TYPICAL LOCAL STREET CALCULATION

ILLUMINANCE METHOD







43W LED 4,800 LUMEN
Type II Distribution, 2' Mast arm
candela file 'ERLC_05A430_____-120-277V.IES'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 43
mounting height= 25 ft
number locations= 2, number luminaires= 2
kw all locations= 0.1

Roadway Grid
56 points at z=0, sp 16.071ft by 8ft
HORIZONTAL FOOTCANDLES

Average	0.4
Maximum	2.0
Minimum	0.1
Avg:Min	3.96
Max:Min	20.00
Coef Var	1.16
UnifGrad	2.50

WRIGHT ENGINEERING
PROJECT NO:
22359
DESIGN BY: BDS
DRAWN BY: BDS
CHECKED BY: AMB

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:

SURPRISE, ARIZONA
ASANTE PLANNING AREA 3
UNIT 3.9

STREET LIGHT DETAILS

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	NOV 2022	1ST SUBMITTAL
2	FEB 2023	2ND SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M. BOWERS
Date Signed 4-5-23
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DRAWING NO:
SL3
OF 3

FS22-1631

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

ASANTE PLANNING AREA 3

UNIT 3.10B

STREET LIGHT DESIGN

STREET LIGHTING REQUIREMENTS

5.00 GENERAL NOTES:

THE FOLLOWING INFORMATION IS PROVIDED TO EMPHASIZE CRITICAL WORK AND IS INTENDED TO SUPPLEMENT THE SPECIFICATIONS. SHOULD THERE BE A CONFLICT WITH THE SPECIFICATIONS, THIS DOCUMENT SHALL TAKE PRECEDENCE.

ALTERNATES SHALL BE PRE-APPROVED BY THE CITY ENGINEERING MANAGER. APPROVAL OF ALTERNATE PRODUCTS SHALL BE ON AN EQUAL BASIS WITH THE PRODUCT SPECIFIED AND SHALL BE SUBMITTED A MINIMUM OF TEN (10) DAYS PRIOR TO BID OPENING. STRUCTURAL CALCULATIONS SHALL BE FURNISHED FOR ALTERNATE PRODUCTS AND CERTIFIED BY A STRUCTURAL ENGINEER, REGISTERED IN THE STATE OF ARIZONA. LUMINAIRES AND LAMPS SHALL MEET OR EXCEED THE PHOTOMETRIC, ELECTRICAL, AND MECHANICAL REQUIREMENTS FOR THE SPECIFIED PRODUCTS.

THE CONTRACTOR SHALL COMPLY WITH STATE AND CITY STATUTES, AND MANUFACTURER'S RECOMMENDATIONS.

THE SUBMITTAL PACKAGE SHALL CONSIST OF THREE (3) COPIES OF EQUIPMENT/MATERIAL TO BE INSTALLED AND SHALL BE BOUND/STAPLED IN A FOLDER AND SUBMITTED AT THE TIME OF PERMIT APPLICATION.

PRIOR TO SUBMITTING A PROPOSAL, THE BIDDER SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS AND VISIT THE CONSTRUCTION SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL OPERATE AND WHICH WILL IN ANY WAY AFFECT THE WORK UNDER THE CONTRACT. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN THIS CONNECTION IN THE BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLIGENCE ON HIS PART.

PRIOR TO ORDERING ANY MATERIALS OR DOING ANY WORK, THE CONTRACTOR SHOULD VERIFY DIMENSIONS AT THE SITE. IMMEDIATELY REPORT DIFFERENCES TO THE ENGINEERING MGR. AND SHOULD NOT PROCEED WITH WORK UNTIL THE ENGINEERING MGR. RENDERS A DECISION. NO EXTRA CHARGES OR COMPENSATION WILL BE ALLOWED FOR DIFFERENCES IN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE DRAWINGS.

5.01 GENERAL:

THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH ALL LICENSING REQUIREMENTS SET FORTH BY THE STATE REGISTRAR OF CONTRACTORS OFFICE TO PERFORM WORK RELATING TO STREET LIGHT INSTALLATION IN THE CITY RIGHT-OF-WAY.

ONE PROJECT UNDERGROUND UTILITIES (RIGHT OF WAY) PERMIT AND ONE STREETLIGHT PERMIT FOR EACH STREET LIGHT POLE SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

5.02 WORKING / "AS BUILT" PLANS:

ACCEPTANCE OF THE COMPLETED IMPROVEMENTS WILL NOT BE GIVEN UNTIL 4 MIL PHOTO MYLAR REPRODUCIBLE "AS BUILT" PLANS HAVE BEEN SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

5.03 LIGHT POLES:

LIGHT POLES SHALL BE INSTALLED PLUMB, BE ADJUSTED TO PROVIDE PROPER ALIGNMENT TO THE ROADWAY BEING LIGHTED AND BE PROPERLY GROUNDED WHEN THE INSTALLATION IS COMPLETE.

5.04 EMBEDMENT:

DIRECT BURIED POLES SHALL BE SET IN A TWELVE (12) INCH AUGURED HOLE DEPTH AS SPECIFIED IN UNDISTURBED EARTH. POLE SHALL BE SET PLUMB IN TWO DIRECTIONS 90 DEGREES APART. HAND TAMPING OF ABC BACKFILL WITH PNEUMATIC OR VIBRATING EQUIPMENT IS THE ACCEPTABLE METHOD OF COMPACTION. BACKFILL SHALL BE COMPACTED TO 85% OF MAXIMUM DENSITY AS DEFINED BY ASTM D-2922 AND D-3017. A GROUND ROD SHALL BE INSTALLED ADJACENT TO PULL BOX IN UNDISTURBED SOIL AND A LEAD IN COPPER BOND WIRE (#6) SHALL BE INSTALLED IN 1" CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT (OR EQUAL) FOR POLE GROUNDING.

SURPLUS EXCAVATION SHALL BE DISPOSED OF BY THE CONTRACTOR.

5.05 LUMINAIRES:

LUMINAIRES SHALL BE INSTALLED LEVEL AND INCLUDE A LAMP AND PHOTOCELL. CONTRACTOR SHALL ASSURE THAT THE LUMINAIRES SHALL BE FREE OF DUST, DIRT OR ANYTHING THAT WOULD IMPAIR THE OUTPUT OF THE LIGHT BEFORE HE LEAVES THE SITE.

LUMINAIRES FURNISHED WITH MULTI-TAP BALLASTS SHALL BE REWIRED OR RECONNECTED TO MATCH THE VOLTAGE SUPPLIED BY THE ELECTRIC UTILITY COMPANY.

5.06 WIRING:

WIRING SHALL BE INSTALLED PER UTILITY STANDARDS.

5.07 GROUNDING:

EACH POLE SHALL HAVE A 8' X 5/8" COPPER CLAD GROUND ROD DRIVEN ADJACENT TO PULL BOX. A #6 BARE COPPER LEAD FROM THE GROUND ROD IN PULL BOX TO LANDING LUG IN STREET LIGHT POLE HAND HOLE.

5.08 PULL BOXES:

EXCAVATION FOR PULL BOXES AND MATERIAL SPECIFICATION SHALL BE PER THE ELECTRIC UTILITY COMPANY STANDARDS.

5.09 TRENCH

TRENCH SHALL BE INSTALLED PER THE UTILITY COMPANY STANDARDS.

THE USE OF A COMMON ELECTRIC UTILITY COMPANY TRENCH IS PERMITTED, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANY FOR COORDINATION OF TRENCHING AND THE INSTALLATION OF CONDUIT.

CONDUIT SHALL BE INSTALLED AT THE DEPTH SPECIFIED ON THE PLANS. CONDUIT SHALL BE 1 INCH CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT OR EQUAL. CONDUIT MUST BE UL RATED AND SUITABLE FOR UNDERGROUND USE.

CONNECTIONS SHALL BE PER UTILITY STANDARDS.

5.12 LIGHT POLE IDENTIFICATION:

THE CONTRACTOR SHALL FURNISH AND INSTALL A NUMBER ON EACH LIGHT POLE. STREET LIGHT POLE IDENTIFICATION AND SPECIFICATIONS WILL BE PROVIDED BY THE CITY OF SURPRISE.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO RESTORE ALL PROPERTY, LANDSCAPING, PAVING AND DRIVEWAYS THAT ARE DISTURBED DURING STREET LIGHT CONSTRUCTION TO THEIR ORIGINAL CONDITION IN CONFORMANCE WITH "MAG" SPECIFICATION SECTION 107.9.

THE DEVELOPER SHALL BE RESPONSIBLE FOR FURNISHING ALL PERSONNEL AND EQUIPMENT TO SUCCESSFULLY PERFORM THE FOLLOWING TEST.

PRIOR TO ACCEPTANCE, THE DEVELOPER SHALL ENERGIZE AND OPERATE THE ENTIRE ROADWAY LIGHTING SYSTEM, FROM SUNSET TO SUNRISE FOR TWO CONSECUTIVE DAYS WITHOUT INTERRUPTION OR FAILURE. IF A LAMP OR BALLAST SHOULD FAIL, IT SHALL BE IMMEDIATELY REPLACED.

THE CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE ENGINEERING MANAGER, AGAINST IMPERFECT WORKMANSHIP, FAILURE, MALFUNCTION OF MATERIALS AND/OR EQUIPMENT DUE TO FAULTY OR IMPERFECT WORKMANSHIP. THIS GUARANTEE IS TO BE IN WRITING TO THE CITY AT THE TIME OF ISSUING FINAL ACCEPTANCE. WORK FOUND TO BE DEFECTIVE WITHIN THE WARRANTY PERIOD SHALL BE REPLACED WITHOUT COST TO THE CITY.

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 REPLACEDIN 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.

CITY OF SURPRISE APPROVAL

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.

CITY OF SURPRISE ENGINEER **DATE**

UTILITIES WITHIN OR AFFECTED BY THE PROJECT	
UTILITY CONTACT	DATE SUBMITTED
ARIZONA PUBLIC SERVICE	11/30/2022
CENTURY LINK	11/30/2022
COX COMMUNICATIONS	11/30/2022
SOUTHWEST GAS	11/30/2022

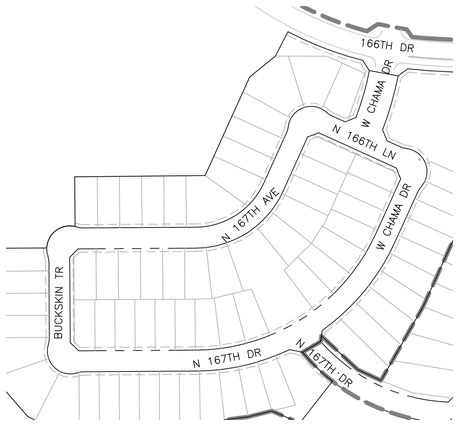
NOTE

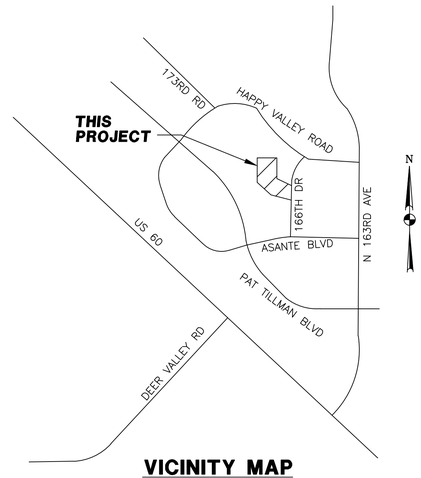
A. ENSURE THERE IS 1' CLEARANCE FROM EDGE OF SIDEWALK TO FACE OF POLE.

B. THE ELECTRICAL/MAINTENANCE COSTS OF ALL STREET LIGHTS ON LOCAL AND COLLECTOR STREETS ARE TO BE PAID BY THE ADJACENT PROJECT OR THE ADJACENT DEVELOPMENT'S STREET LIGHT IMPROVEMENT DISTRICT (SLID). THE ELECTRICAL / MAINTENANCE COSTS OF ALL STREET LIGHTS ON ARTERIAL STREETS ARE TO BE BILLED TO THE CITY OF SURPRISE'S ENERGY BILL.

LED NOTE

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.





VICINITY MAP
N.T.S.

SHEET INDEX

COVER SHEET	SL1
STREET LIGHT PLAN	SL2
DETAILS	SL3

KEY MAP
N.T.S.

POWER CONDUIT NOTE

TRENCH & CONDUIT RUNS FROM STREET LIGHT PULL BOX TO POINT OF ELECTRICAL SERVICE WILL BE DESIGNED BY THE POWER COMPANY, AND ARE SHOWN ON POWER COMPANY PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THESE PLANS FROM DEVELOPER/OWNER, AND INCLUDE THESE RUNS IN THE BID. COORDINATE THIS WORK WITH THE POWER COMPANY.

CIVIL ENGINEER
HILGART WILSON
2141 E HIGHLAND AVE, STE. 250
PHOENIX, AZ 85016
PHONE: (602) 490-0535
FAX: (602) 368- 2436
CONTACT: DIEGO ORTIZ, PE
EMAIL: DORTIZ@HILGARTWILSON.COM

OWNER
LENNAR COMMUNITIES DELEOPMENT, LLC
1665 W. ALMEDA DR STE 130
TEMPE, AZ 85282-3000
CONTACT: JORGE VILLASENOR

Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348) in Maricopa County: (602) 263-1100

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H:\2022\22359-Asante 900\22359-SL-3.10b.dwg

WRIGHT ENGINEERING PROJECT NO:
22359
DESIGN BY: BDS
DRAWN BY: BDS
CHECKED BY: AMB

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:

SURPRISE, ARIZONA
ASANTE PLANNING AREA 3
UNIT 3.10B

STREET LIGHT COVER SHEET

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	NOV 2022	1ST SUBMITTAL
2	FEB 2023	2ND SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M. BOWERS
Date Signed 2-23-23
Expires 9-30-25

DRAWING NO:
SL1
OF 3

FS22-1614

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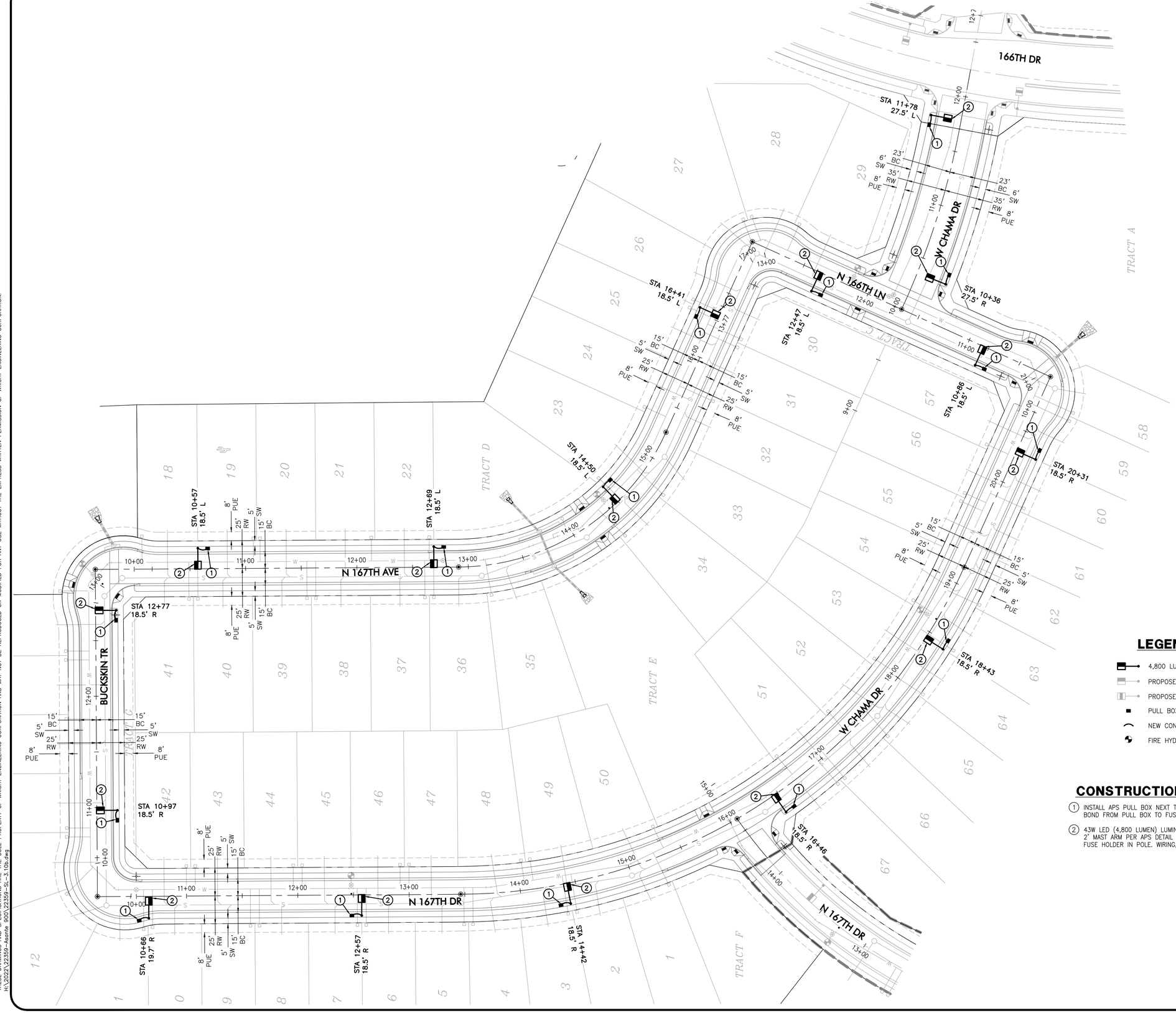

LEGEND

- 4,800 LUMEN LED STREET LIGHT, SQUARE POLE
- PROPOSED 4,800 LUMEN STREETLIGHT ON ADJACENT PLAN
- PROPOSED 11,000 LUMEN STREETLIGHT ON ADJACENT PLAN
- PULL BOX
- NEW CONDUIT RUN
- FIRE HYDRANT

CONSTRUCTION NOTES

1. INSTALL APS PULL BOX NEXT TO POLE. 1" CONDUIT WITH (2) #14 TYPE THHN/THWN & (1) #14 BARE BOND FROM PULL BOX TO FUSE HOLDER IN STREET LIGHT PER APS DETAILS & SPECIFICATIONS.
2. 43W LED (4,800 LUMEN) LUMINAIRE (SEE LUMINAIRE TABLE), PHOTOCELL, 30'-6" DIRECT BURIED POLE, 2' MAST ARM PER APS DETAIL 8030 (SEE SHEET SL3). (2) #14 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. WIRING, FUSING, & GROUNDING PER APS DETAILS & SPECIFICATIONS.

GRAPHIC SCALE
40 20 0 20 40 80
1 INCH = 40 FEET

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www.wrightengineering.us

PROJECT: **SURPRISE, ARIZONA**
ASANTE PLANNING AREA 3
UNIT 3.10B

TITLE: **STREET LIGHT PLAN**

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	NOV 2022	1ST SUBMITTAL
2	FEB 2023	2ND SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M. BOWERS
Date Signed 2-21-23
Expires 9-30-25

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SL2
OF 3

FS22-1614

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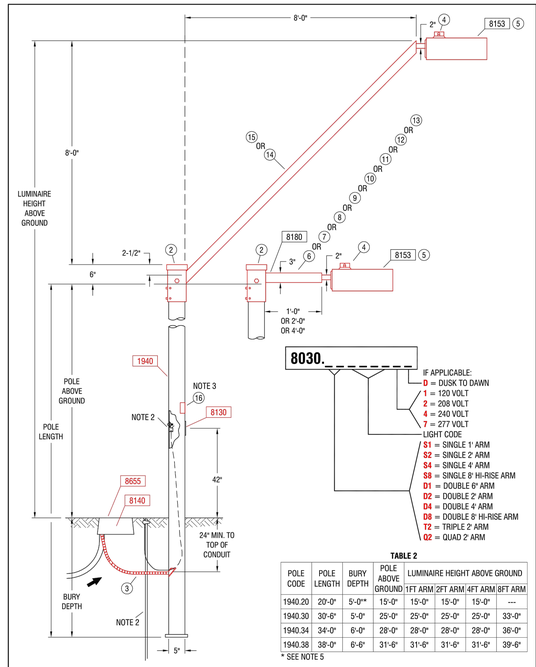


TABLE 2

POLE CODE	POLE LENGTH	BURY DEPTH	POLE ABOVE GROUND	LUMINAIRE HEIGHT ABOVE GROUND			
				1FT ARM	2FT ARM	4FT ARM	8FT ARM
1940.20	20'-0"	5'-0"*	15'-0"	15'-0"	15'-0"	15'-0"	---
1940.30	30'-6"	5'-0"	25'-0"	25'-0"	25'-0"	25'-0"	33'-0"
1940.34	34'-0"	6'-0"	28'-0"	28'-0"	28'-0"	28'-0"	36'-0"
1940.38	38'-0"	6'-6"	31'-6"	31'-6"	31'-6"	31'-6"	39'-6"

* SEE NOTE 5

aps ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS				
BY	LDR.	MGR.	DATE	REV.
KLS	B. BOOKER	R. CANDRA	02/2016	12

LIGHTS ARCHITECTURAL ON 5" SQUARE BROWN PAINTED STEEL POLE DIRECT BURY

SH 1 OF 2

8030

NOTES:

1. ADJUST PHOTO EYE TO FACE NORTH.
2. A GROUND ROD IS PROVIDED WITH EACH STREET LIGHT POLE. WHERE A GROUND ROD CANNOT BE DRIVEN, ALTERNATE GROUND SHALL BE USED. SEE 2449 THRU 2460 FOR APPROVED ALTERNATES.
3. SIGN, "NOTICE THIS POLE IS OWNED AND MAINTAINED BY APS. DISCONNECT INSIDE", IS REQUIRED ON ALL DUSK-TO-DAWN AND AREA LIGHTING APPLICATIONS.
4. POLES THAT HAVE MORE THAN ONE LUMINAIRE REQUIRE A SEPARATE CIRCUIT WITH FUSING FROM THE J-BOX TO EACH LUMINAIRE.
5. USING THE 20'-0" POLE TO MATCH THE 16'-0" PEDESTRIAN LIGHT MOUNTING HEIGHT REDUCE POLE BURY DEPTH TO 4'-0".
6. THE BROWN PHOTO CONTROL IS A FAIL OFF CONTROL AND SHALL BE USED WITH ALL INDUCTION AND LED LUMINAIRES.
7. ON 277 VOLT STREET LIGHT CIRCUITS, INSTALL A "277 VOLT" MICARTA TAG ON CABLE IN J-BOX. TAG PROVIDED BY SPEC 8129.
8. THE LUMINAIRE SHOWN IS RECOMMENDED FOR THIS MOUNTING HEIGHT. SEE 8153 FOR ADDITIONAL BROWN ARCHITECTURAL LUMINAIRES.
9. THE TWO ARMED TENON BRACKET POSITIONS THE DOUBLE ARM 180 DEGREES APART.
10. TO ACCOMMODATE LESS THAT THE SPECIFIED LUMINAIRE MOUNTING HEIGHT, A SHOP ORDER IS REQUIRED TO HAVE A PORTION FROM THE TOP OF THE POLE CUT OFF. THE TENON ARM BRACKET SLIDES OVER AND COVERS THE CUT PORTION OF THE POLE.
11. IN-LINE FUSE FOR UNDERGROUND FEEDS, SEE 8130-8140.
12. FOR PEDESTRIAN ONLY APPLICATIONS SEE 8030.

TABLE 1

LIGHT CODE	APN	WATTS	K	TYPE	VOLTS	INITIAL LUMENS	MOUNTING HEIGHT
AH16	00099450	100	2100	HPS	120/208/240/277	9,500	SEE TABLE 2
AH17	00099451	150			120/208/240/277	16,000	
AH18	00099452	250			120/208/240/277	30,000	
AH19	00099454	400			120/208/240/277	50,000	
RN40	00128258	55	2700	IND	120/208/240/277	5,600	
RN41	00128667	100	5000		120/208/240/277	9,400	
RN42	00132846	150			120/208/240/277	10,200	
RN43	00132850	150			120/208/240/277	13,000	
RN44	00121153	200			120/208/240/277	15,250	
RN45	00116527	250			120/208/240/277	22,500	
RL40	00141047	32	3000	LED S	120/208/240/277	3,800	
RL41	00141048	41			120/208/240/277	4,800	
RL42	00141049	88			120/208/240/277	8,200	
RL43	00141050	108			120/208/240/277	11,000	
RL44	00141051	162			120/208/240/277	19,000	
RL50	00128251	45	4000	LED S	120/208/240/277	4,300	
RL52	00126804	60			120/208/240/277	5,400	
RL53	00126805	95			120/208/240/277	8,600	
RL54	00126806	113			120/208/240/277	10,000	
RL56	00128365	257			120/208/240/277	19,200	
AL56	00113722	62	4000	LED M	120/208/240/277	7,100	
AL58	00129911	72			120/208/240/277	8,300	
AL60	00113723	119			120/208/240/277	12,900	
AL61	00116525	119R*			120/208/240/277	12,900	
AL62	00116526	119L*			120/208/240/277	12,900	
AL65	00107462	144			120/208/240/277	15,400	
AS20	33806772	55	1700	LPS	120/240	8,000	
AS21	33806774	90			120/240	13,500	
AS22	33806776	135			120/240	22,500	
AS23	33806778	180			120/240	33,000	

* CALL STANDARDS ENGINEERING FOR APPLICATION

CODE	8030.S1	8030.S2	8030.S4	8030.S8	8030.D1	8030.D2	8030.D4	8030.D8	8030.T2	8030.Q2	MATERIAL LIST	
ITEM	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	DESCRIPTION	APN
1	-	-	-	-	-	-	-	1	-	-	BRACKET ARCH SLIP BOLTED	00092251
2	1	1	1	1	1	1	1	1	1	1	CAP STLT SQ-P 5.5" ARM	00100036
3	10	10	10	10	10	10	10	10	10	10	CONDUIT 1" PVC FLEX CORR	32900891
4	1	1	1	1	2	2	2	3	4		CONTROL PHOTO MULTI BR-20	00073241
5	1	1	1	1	2	2	2	3	4		LUMINAIRE - SEE TABLE 1	
6	-	-	-	-	1	-	-	-	-	-	MAST ARM STLT 3" SQ X 1' DBL	00121154
7	1	-	-	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 1' SGL	00088370
8	-	-	-	-	-	1	-	-	-	-	MAST ARM STLT 3"SQ X 2' DBL	33701117
9	-	-	-	-	-	-	-	-	1	-	MAST ARM STLT 3"SQ X 2' QUAD	00052665
10	-	1	-	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 2' SGL	33701116
11	-	-	-	-	-	-	-	-	1	-	MAST ARM STLT 3"SQ X 2' TPL	00052664
12	-	-	-	-	-	-	1	-	-	-	MAST ARM STLT 3"SQ X 4' DBL	00073267
13	-	-	1	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 4' SGL	00061738
14	-	-	-	1	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 8' SGL	33701120
15	-	-	-	-	-	-	2	-	-	-	MAST ARM STLT 8' BOLT-ON	00092252
16	1	1	1	1	1	1	1	1	1	1	SIGN POLE OWNED BY APS	00050092

aps ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS				
BY	LDR.	MGR.	DATE	REV.
KLS	B. BOOKER	R. CANDRA	02/2016	12

LIGHTS ARCHITECTURAL ON 5" SQUARE BROWN PAINTED STEEL POLE DIRECT BURY

SH 2 OF 2

8030

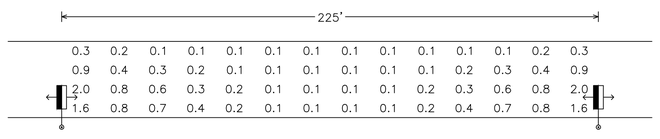
LUMINAIRE TABLE

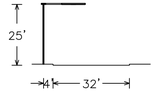
DARK BRONZE ROADWAY SCALEABLE LED 3000K

LIGHT CODE	COLOR	APN	WATTS	VOLTS	INITIAL LUMENS	CATALOG #
RL40	DKBZ	00141047	32	120/208/240/277	3,900	ERLC004B430ADKBZGLRV1013
RL41		00141048	43	120/208/240/277	4,800	ERLC005A430ADKBZGLRV1013
RL42		00141049	71	120/208/240/277	7,800	ERL1008C330ADKBZGLRX162
RL33		00141050	96	120/208/240/277	11,000	ERLH011C330ADKBZGLV1108
RL44		00141051	174	120/208/240/277	20,100	ERL2021C330ADKBZGLR113

TYPICAL LOCAL STREET CALCULATION

ILLUMINANCE METHOD







43W LED 4,800 LUMEN
Type II Distribution, 2' Mast arm
candela file 'ERLC_05A430_____-120-277V.IES'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 43
mounting height= 25 ft
number locations= 2, number luminaires= 2
kw all locations= 0.1

Roadway Grid
56 points at z=0, sp 16.071ft by 8ft
HORIZONTAL FOOTCANDLES

Average	0.4
Maximum	2.0
Minimum	0.1
Avg:Min	3.96
Max:Min	20.00
Coef Var	1.16
UnifGrad	2.50

WRIGHT ENGINEERING
PROJECT NO:
22359
DESIGN BY: BDS
DRAWN BY: BDS
CHECKED BY: AMB

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:

SURPRISE, ARIZONA
ASANTE PLANNING AREA 3
UNIT 3.10B

STREET LIGHT DETAILS

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	NOV 2022	1ST SUBMITTAL
2	FEB 2023	2ND SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M. BOWERS
Date Signed 4-27-23
Expires 9-30-25

DRAWING NO:
SL3
OF 3

FS22-1614

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ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

ASANTE PLANNING AREA 3

UNIT 3.11

STREET LIGHT DESIGN

STREET LIGHTING REQUIREMENTS

5.00 GENERAL NOTES:

THE FOLLOWING INFORMATION IS PROVIDED TO EMPHASIZE CRITICAL WORK AND IS INTENDED TO SUPPLEMENT THE SPECIFICATIONS. SHOULD THERE BE A CONFLICT WITH THE SPECIFICATIONS, THIS DOCUMENT SHALL TAKE PRECEDENCE.

ALTERNATES SHALL BE PRE-APPROVED BY THE CITY ENGINEERING MANAGER. APPROVAL OF ALTERNATE PRODUCTS SHALL BE ON AN EQUAL BASIS WITH THE PRODUCT SPECIFIED AND SHALL BE SUBMITTED A MINIMUM OF TEN (10) DAYS PRIOR TO BID OPENING. STRUCTURAL CALCULATIONS SHALL BE FURNISHED FOR ALTERNATE PRODUCTS AND CERTIFIED BY A STRUCTURAL ENGINEER, REGISTERED IN THE STATE OF ARIZONA. LUMINAIRES AND LAMPS SHALL MEET OR EXCEED THE PHOTOMETRIC, ELECTRICAL, AND MECHANICAL REQUIREMENTS FOR THE SPECIFIED PRODUCTS.

THE CONTRACTOR SHALL COMPLY WITH STATE AND CITY STATUTES, AND MANUFACTURER'S RECOMMENDATIONS.

THE SUBMITTAL PACKAGE SHALL CONSIST OF THREE (3) COPIES OF EQUIPMENT/MATERIAL TO BE INSTALLED AND SHALL BE BOUND/STAPLED IN A FOLDER AND SUBMITTED AT THE TIME OF PERMIT APPLICATION.

PRIOR TO SUBMITTING A PROPOSAL, THE BIDDER SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS AND VISIT THE CONSTRUCTION SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL OPERATE AND WHICH WILL IN ANY WAY AFFECT THE WORK UNDER THE CONTRACT. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN THIS CONNECTION IN THE BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLIGENCE ON HIS PART.

PRIOR TO ORDERING ANY MATERIALS OR DOING ANY WORK, THE CONTRACTOR SHOULD VERIFY DIMENSIONS AT THE SITE. IMMEDIATELY REPORT DIFFERENCES TO THE ENGINEERING MGR. AND SHOULD NOT PROCEED WITH WORK UNTIL THE ENGINEERING MGR. RENDERS A DECISION. NO EXTRA CHARGES OR COMPENSATION WILL BE ALLOWED FOR DIFFERENCES IN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE DRAWINGS.

5.01 GENERAL:

THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH ALL LICENSING REQUIREMENTS SET FORTH BY THE STATE REGISTRAR OF CONTRACTORS OFFICE TO PERFORM WORK RELATING TO STREET LIGHT INSTALLATION IN THE CITY RIGHT-OF-WAY.

ONE PROJECT UNDERGROUND UTILITIES (RIGHT OF WAY) PERMIT AND ONE STREETLIGHT PERMIT FOR EACH STREET LIGHT POLE SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

5.02 WORKING / "AS BUILT" PLANS:

ACCEPTANCE OF THE COMPLETED IMPROVEMENTS WILL NOT BE GIVEN UNTIL 4 MIL PHOTO MYLAR REPRODUCIBLE "AS BUILT" PLANS HAVE BEEN SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

5.03 LIGHT POLES:

LIGHT POLES SHALL BE INSTALLED PLUMB, BE ADJUSTED TO PROVIDE PROPER ALIGNMENT TO THE ROADWAY BEING LIGHTED AND BE PROPERLY GROUNDED WHEN THE INSTALLATION IS COMPLETE.

5.04 EMBEDMENT:

DIRECT BURIED POLES SHALL BE SET IN A TWELVE (12) INCH AUGURED HOLE DEPTH AS SPECIFIED IN UNDISTURBED EARTH. POLE SHALL BE SET PLUMB IN TWO DIRECTIONS 90 DEGREES APART. HAND TAMPING OF ABC BACKFILL WITH PNEUMATIC OR VIBRATING EQUIPMENT IS THE ACCEPTABLE METHOD OF COMPACTION. BACKFILL SHALL BE COMPACTED TO 85% OF MAXIMUM DENSITY AS DEFINED BY ASTM D-2922 AND D-3017. A GROUND ROD SHALL BE INSTALLED ADJACENT TO PULL BOX IN UNDISTURBED SOIL AND A LEAD IN COPPER BOND WIRE (#6) SHALL BE INSTALLED IN 1" CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT (OR EQUAL) FOR POLE GROUNDING.

SURPLUS EXCAVATION SHALL BE DISPOSED OF BY THE CONTRACTOR.

5.05 LUMINAIRES:

LUMINAIRES SHALL BE INSTALLED LEVEL AND INCLUDE A LAMP AND PHOTOCELL. CONTRACTOR SHALL ASSURE THAT THE LUMINAIRES SHALL BE FREE OF DUST, DIRT OR ANYTHING THAT WOULD IMPAIR THE OUTPUT OF THE LIGHT BEFORE HE LEAVES THE SITE.

LUMINAIRES FURNISHED WITH MULTI-TAP BALLASTS SHALL BE REWIRED OR RECONNECTED TO MATCH THE VOLTAGE SUPPLIED BY THE ELECTRIC UTILITY COMPANY.

5.06 WIRING:

WIRING SHALL BE INSTALLED PER UTILITY STANDARDS.

5.07 GROUNDING:

EACH POLE SHALL HAVE A 8' X 5/8" COPPER CLAD GROUND ROD DRIVEN ADJACENT TO PULL BOX. A #6 BARE COPPER LEAD FROM THE GROUND ROD IN PULL BOX TO LANDING LUG IN STREET LIGHT POLE HAND HOLE.

5.08 PULL BOXES:

EXCAVATION FOR PULL BOXES AND MATERIAL SPECIFICATION SHALL BE PER THE ELECTRIC UTILITY COMPANY STANDARDS.

5.09 TRENCH

TRENCH SHALL BE INSTALLED PER THE UTILITY COMPANY STANDARDS.

THE USE OF A COMMON ELECTRIC UTILITY COMPANY TRENCH IS PERMITTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANY FOR COORDINATION OF TRENCHING AND THE INSTALLATION OF CONDUIT.

CONDUIT SHALL BE INSTALLED AT THE DEPTH SPECIFIED ON THE PLANS. CONDUIT SHALL BE 1 INCH CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT OR EQUAL. CONDUIT MUST BE UL RATED AND SUITABLE FOR UNDERGROUND USE.

CONNECTIONS SHALL BE PER UTILITY STANDARDS.

5.12 LIGHT POLE IDENTIFICATION:

THE CONTRACTOR SHALL FURNISH AND INSTALL A NUMBER ON EACH LIGHT POLE. STREET LIGHT POLE IDENTIFICATION AND SPECIFICATIONS WILL BE PROVIDED BY THE CITY OF SURPRISE.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO RESTORE ALL PROPERTY, LANDSCAPING, PAVING AND DRIVEWAYS THAT ARE DISTURBED DURING STREET LIGHT CONSTRUCTION TO THEIR ORIGINAL CONDITION IN CONFORMANCE WITH "MAG" SPECIFICATION SECTION 107.9.

THE DEVELOPER SHALL BE RESPONSIBLE FOR FURNISHING ALL PERSONNEL AND EQUIPMENT TO SUCCESSFULLY PERFORM THE FOLLOWING TEST.

PRIOR TO ACCEPTANCE, THE DEVELOPER SHALL ENERGIZE AND OPERATE THE ENTIRE ROADWAY LIGHTING SYSTEM, FROM SUNSET TO SUNRISE FOR TWO CONSECUTIVE DAYS WITHOUT INTERRUPTION OR FAILURE. IF A LAMP OR BALLAST SHOULD FAIL, IT SHALL BE IMMEDIATELY REPLACED.

THE CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE ENGINEERING MANAGER, AGAINST IMPERFECT WORKMANSHIP, FAILURE, MALFUNCTION OF MATERIALS AND/OR EQUIPMENT DUE TO FAULTY OR IMPERFECT WORKMANSHIP. THIS GUARANTEE IS TO BE IN WRITING TO THE CITY AT THE TIME OF ISSUING FINAL ACCEPTANCE. WORK FOUND TO BE DEFECTIVE WITHIN THE WARRANTY PERIOD SHALL BE REPLACED WITHOUT COST TO THE CITY.

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 REPLACEDIN 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.

CITY OF SURPRISE APPROVAL

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.

CITY OF SURPRISE ENGINEER **DATE**

UTILITIES WITHIN OR AFFECTED BY THE PROJECT	
UTILITY CONTACT	DATE SUBMITTED
ARIZONA PUBLIC SERVICE	10/14/2022
CENTURY LINK	10/14/2022
COX COMMUNICATIONS	10/14/2022
SOUTHWEST GAS	10/14/2022

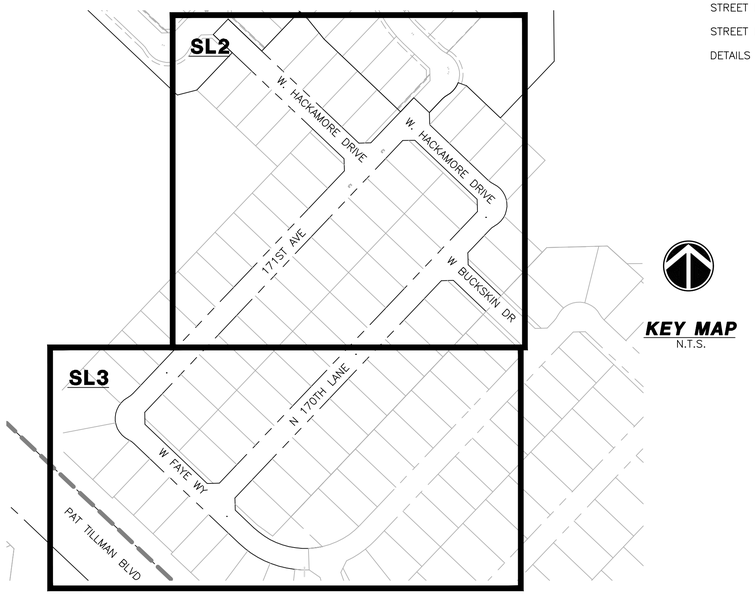
NOTE

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

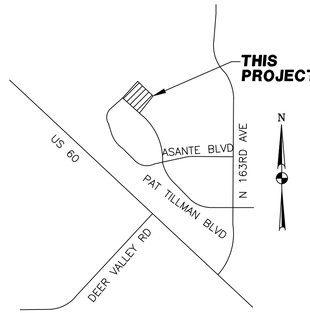
B. THE ELECTRICAL/MAINTENANCE COSTS OF ALL STREET LIGHTS ON LOCAL AND COLLECTOR STREETS ARE TO BE PAID BY THE ADJACENT PROJECT OR THE ADJACENT DEVELOPMENT'S STREET LIGHT IMPROVEMENT DISTRICT (SLID). THE ELECTRICAL / MAINTENANCE COSTS OF ALL STREET LIGHTS ON ARTERIAL STREETS ARE TO BE BILLED TO THE CITY OF SURPRISE'S ENERGY BILL.

LED NOTE

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.



KEY MAP
N.T.S.



VICINITY MAP
N.T.S.

SHEET INDEX

COVER SHEET	SL1
STREET LIGHT PLAN	SL2
STREET LIGHT PLAN	SL3
DETAILS	SL4

POWER CONDUIT NOTE

TRENCH & CONDUIT RUNS FROM STREET LIGHT PULL BOX TO POINT OF ELECTRICAL SERVICE WILL BE DESIGNED BY THE POWER COMPANY, AND ARE SHOWN ON POWER COMPANY PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THESE PLANS FROM DEVELOPER/OWNER, AND INCLUDE THESE RUNS IN THE BID. COORDINATE THIS WORK WITH THE POWER COMPANY.

CIVIL ENGINEER
HILGART WILSON
2141 E HIGHLAND AVE, STE. 250
PHOENIX, AZ 85016
PHONE: (602) 490-0535
FAX: (602) 368- 2436
CONTACT: DIEGO ORTIZ, PE
EMAIL: DORTIZ@HILGARTWILSON.COM

OWNER
LENNAR COMMUNITIES DELEOPMENT, LLC
1665 W. ALMEDA DR STE 130
TEMPE, AZ 85282-3000
CONTACT: JORGE VILLASENOR

Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

THESE DRAWINGS AND SPECIFICATIONS ARE THE SOLE PROPERTY OF WRIGHT ENGINEERING CORPORATION AND MAY NOT BE REPRODUCED OR MODIFIED FOR ANY USE WITHOUT THE EXPRESS WRITTEN PERMISSION OF WRIGHT ENGINEERING CORPORATION.

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WRIGHT ENGINEERING PROJECT NO: **22359**

DESIGN BY: AJA
DRAWN BY: AJA
CHECKED BY: AMB

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: SURPRISE, ARIZONA
ASANTE PLANNING AREA 3
UNIT 3.11

TITLE: STREET LIGHT COVER SHEET

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	OCT 2022	1ST SUBMITTAL
2	FEB 2023	2ND SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M. BOWERS
Date Signed 4-5-23
Expires 9-30-25

DRAWING NO: **SL1**
OF 4

FS22-1525

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LEGEND

- 4,800 LUMEN LED STREET LIGHT, SQUARE POLE
- EXISTING STREET LIGHT
- PULL BOX
- NEW CONDUIT RUN
- FIRE HYDRANT
- PROPOSED STREET LIGHT PER ADJACENT PLAN SET

CONSTRUCTION NOTES

1. INSTALL APS PULL BOX NEXT TO POLE. 1" CONDUIT WITH (2) #14 TYPE THHN/THWN & (1) #14 BARE BOND FROM PULL BOX TO FUSE HOLDER IN STREET LIGHT PER APS DETAILS & SPECIFICATIONS.
2. 43W LED (4,800 LUMEN) LUMINAIRE (SEE LUMINAIRE TABLE), PHOTOCELL, 30'-6" DIRECT BURIED POLE, 2' MAST ARM PER APS DETAIL 8030 (SEE SHEET SL4). (2) #14 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. WIRING, FUSING, & GROUNDING PER APS DETAILS & SPECIFICATIONS.

GRAPHIC SCALE
40 20 0 20 40 80
1 INCH = 40 FEET

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
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WRIGHT ENGINEERING PROJECT NO:
22359
DESIGN BY: AJA
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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: SURPRISE, ARIZONA
ASANTE PLANNING AREA 3
UNIT 3.11

TITLE: STREET LIGHT PLAN

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	OCT 2022	1ST SUBMITTAL
2	FEB 2023	2ND SUBMITTAL

Registered Professional Engineer (Technical)
Certificate No.
46691
ADAM M. BOWERS
Date Signed 9-30-23
Expires 9-30-25

DRAWING NO:
SL2
OF 4

FS22-1525

LEGEND

- 4,800 LUMEN LED STREET LIGHT, SQUARE POLE
- EXISTING STREET LIGHT
- PULL BOX
- NEW CONDUIT RUN
- FIRE HYDRANT
- PROPOSED STREET LIGHT PER ADJACENT PLAN SET

CONSTRUCTION NOTES

1. INSTALL APS PULL BOX NEXT TO POLE. 1" CONDUIT WITH (2) #14 TYPE THHN/THWN & (1) #14 BARE BOND FROM PULL BOX TO FUSE HOLDER IN STREET LIGHT PER APS DETAILS & SPECIFICATIONS.
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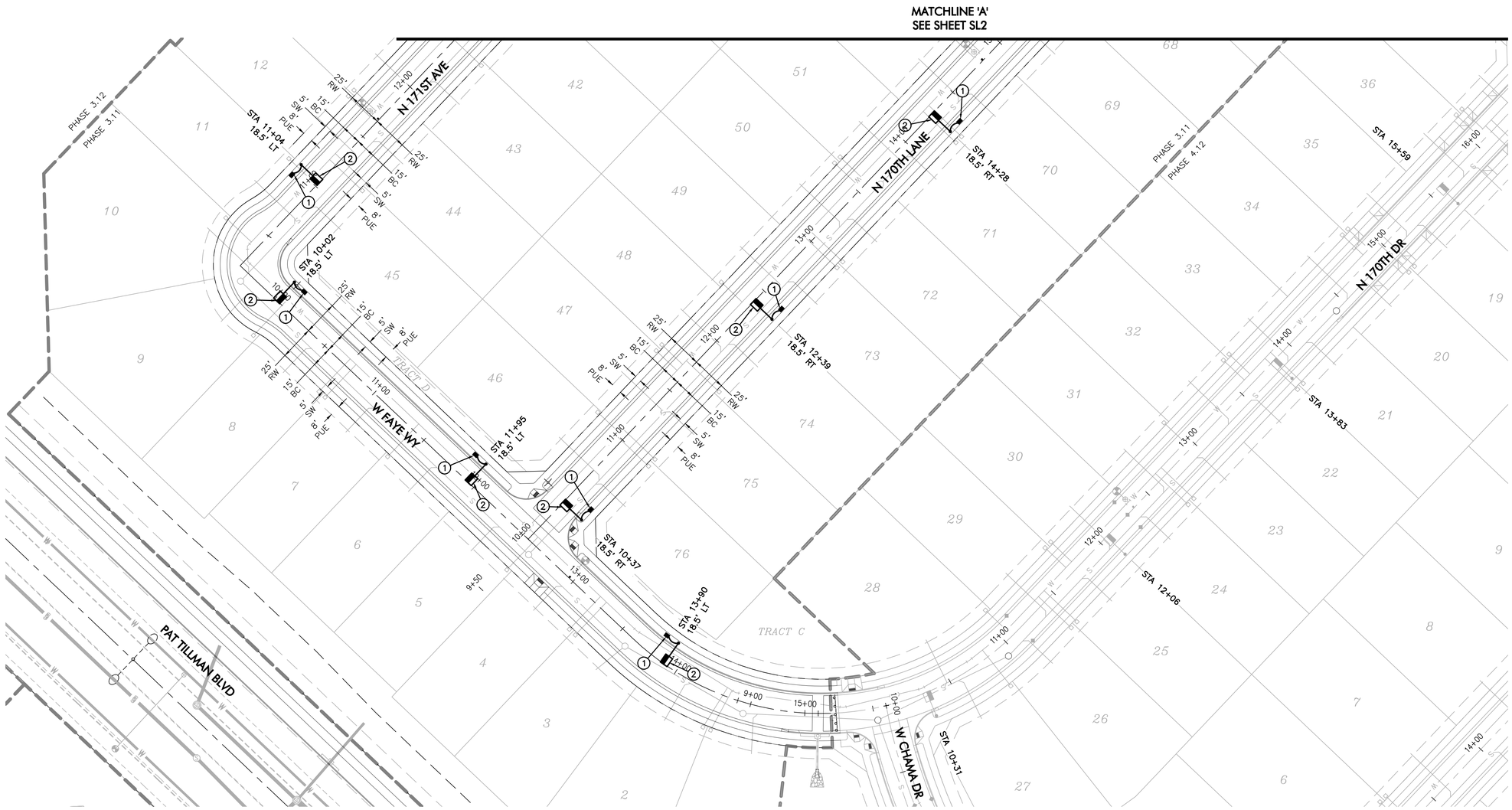

GRAPHIC SCALE

40 20 0 20 40 80

1 INCH = 40 FEET

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PROJECT: TITLE:

SURPRISE, ARIZONA
ASANTE PLANNING AREA 3
UNIT 3.11

STREET LIGHT PLAN

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	OCT 2022	1ST SUBMITTAL
2	FEB 2023	2ND SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M. BOWERS
Date Signed 4-5-23
Expires 9-30-25

DRAWING NO:
SL3
OF 4

FS22-1525

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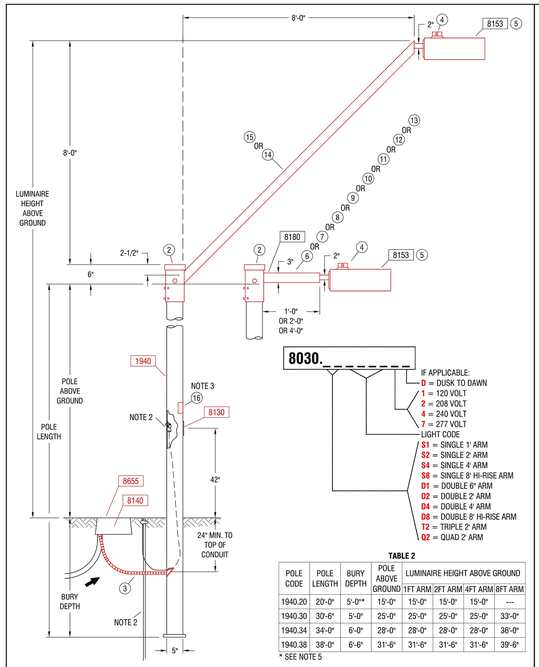


TABLE 2

POLE CODE	POLE LENGTH	BURY DEPTH	POLE ABOVE GROUND	LUMINAIRE HEIGHT ABOVE GROUND			
				1FT ARM	2FT ARM	4FT ARM	8FT ARM
1940.20	20'-0"	5'-0"*	15'-0"	15'-0"	15'-0"	15'-0"	---
1940.30	30'-6"	5'-0"	25'-0"	25'-0"	25'-0"	25'-0"	33'-0"
1940.34	34'-0"	6'-0"	28'-0"	28'-0"	28'-0"	28'-0"	36'-0"
1940.38	38'-0"	6'-6"	31'-6"	31'-6"	31'-6"	31'-6"	39'-6"

* SEE NOTE 5

NOTES:

1. ADJUST PHOTO EYE TO FACE NORTH.
2. A GROUND ROD IS PROVIDED WITH EACH STREET LIGHT POLE. WHERE A GROUND ROD CANNOT BE DRIVEN, ALTERNATE GROUND SHALL BE USED. SEE 2449 THRU 2460 FOR APPROVED ALTERNATES.
3. SIGN, "NOTICE THIS POLE IS OWNED AND MAINTAINED BY APS. DISCONNECT INSIDE", IS REQUIRED ON ALL DUSK-TO-DAWN AND AREA LIGHTING APPLICATIONS.
4. POLES THAT HAVE MORE THAN ONE LUMINAIRE REQUIRE A SEPARATE CIRCUIT WITH FUSING FROM THE J-BOX TO EACH LUMINAIRE.
5. USING THE 20'-0" POLE TO MATCH THE 16'-0" PEDESTRIAN LIGHT MOUNTING HEIGHT REDUCE POLE BURY DEPTH TO 4'-0".
6. THE BROWN PHOTO CONTROL IS A FAIL OFF CONTROL AND SHALL BE USED WITH ALL INDUCTION AND LED LUMINAIRES.
7. ON 277 VOLT STREET LIGHT CIRCUITS, INSTALL A "277 VOLT" MICARTA TAG ON CABLE IN J-BOX. TAG PROVIDED BY SPEC 8129.
8. THE LUMINAIRE SHOWN IS RECOMMENDED FOR THIS MOUNTING HEIGHT. SEE 8153 FOR ADDITIONAL BROWN ARCHITECTURAL LUMINAIRES.
9. THE TWO ARMED TENON BRACKET POSITIONS THE DOUBLE ARM 180 DEGREES APART.
10. TO ACCOMMODATE LESS THAT THE SPECIFIED LUMINAIRE MOUNTING HEIGHT, A SHOP ORDER IS REQUIRED TO HAVE A PORTION FROM THE TOP OF THE POLE CUT OFF. THE TENON ARM BRACKET SLIDES OVER AND COVERS THE CUT PORTION OF THE POLE.
11. IN-LINE FUSE FOR UNDERGROUND FEEDS, SEE 8130-8140.
12. FOR PEDESTRIAN ONLY APPLICATIONS SEE 8030.

TABLE 1

LIGHT CODE	APN	WATTS	K	TYPE	VOLTS	INITIAL LUMENS	MOUNTING HEIGHT
AH18	00099450	100	2100	HPS	120/208/240/277	9,500	SEE TABLE 2
AH17	00099451	150			120/208/240/277	16,000	
AH18	00099452	250			120/208/240/277	30,000	
AH19	00099454	400			120/208/240/277	50,000	
RN40	00128258	55	2700	IND	120/208/240/277	5,000	
RN41	00128667	100	5000		120/208/240/277	8,400	
RN42	00132846	150			120/208/240/277	10,200	
RN43	00132850	150			120/208/240/277	13,000	
RN44	00121153	200			120/208/240/277	15,250	
RN45	00116527	250			120/208/240/277	22,500	
RL40	00141047	32	3000	LED S	120/208/240/277	3,800	
RL41	00141048	41			120/208/240/277	4,800	
RL42	00141049	88			120/208/240/277	8,200	
RL43	00141050	108			120/208/240/277	11,000	
RL44	00141051	162			120/208/240/277	19,000	
RL50	00128251	45	4000	LED S	120/208/240/277	4,300	
RL52	00126804	60			120/208/240/277	5,400	
RL53	00126805	95			120/208/240/277	8,600	
RL54	00126806	113			120/208/240/277	10,000	
RL56	00128365	257			120/208/240/277	19,200	
AL56	00113722	62	4000	LED M	120/208/240/277	7,100	
AL58	00129911	72			120/208/240/277	8,300	
AL60	00113723	119			120/208/240/277	12,900	
AL61	00116525	119R*			120/208/240/277	12,900	
AL62	00116526	119L*			120/208/240/277	12,900	
AL65	00107462	144			120/208/240/277	15,400	
AS20	33806772	55	1700	LPS	120/240	8,000	
AS21	33806774	90			120/240	13,500	
AS22	33806776	135			120/240	22,500	
AS23	33806778	180			120/240	33,000	

* CALL STANDARDS ENGINEERING FOR APPLICATION

MATERIAL LIST

ITEM	CODE	8030.S1 QTY	8030.S2 QTY	8030.S4 QTY	8030.S8 QTY	8030.D1 QTY	8030.D2 QTY	8030.D4 QTY	8030.D8 QTY	8030.T2 QTY	8030.Q2 QTY	DESCRIPTION	APN
1		-	-	-	-	-	-	-	1	-	-	BRACKET ARCH SLIP BOLTED	00092251
2		1	1	1	1	1	1	1	1	1	1	CAP STLT SQ-P 5.5" ARM	00100036
3		10	10	10	10	10	10	10	10	10	10	CONDUIT 1" PVC FLEX CORR	32900891
4		1	1	1	1	2	2	2	2	3	4	CONTROL PHOTO MULTI BR-20	00073241
5		1	1	1	1	2	2	2	2	3	4	LUMINAIRE - SEE TABLE 1	
6		-	-	-	-	1	-	-	-	-	-	MAST ARM STLT 3" SQ X 1' DBL	00121154
7		1	-	-	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 1' SGL	00088370
8		-	-	-	-	-	1	-	-	-	-	MAST ARM STLT 3"SQ X 2' DBL	33701117
9		-	-	-	-	-	-	-	-	-	1	MAST ARM STLT 3"SQ X 2' QUAD	00052665
10		-	1	-	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 2' SGL	33701116
11		-	-	-	-	-	-	-	-	1	-	MAST ARM STLT 3"SQ X 2' TPL	00052664
12		-	-	-	-	-	-	1	-	-	-	MAST ARM STLT 3"SQ X 4' DBL	00073267
13		-	-	1	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 4' SGL	00061738
14		-	-	-	1	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 8' SGL	33701120
15		-	-	-	-	-	-	2	-	-	-	MAST ARM STLT 8' BOLT-ON	00092252
16		1	1	1	1	1	1	1	1	1	1	SIGN POLE OWNED BY APS	00050092

aps ARIZONA PUBLIC SERVICE COMPANY
T&D CONSTRUCTION STANDARDS

BY	LDR.	MGR.	DATE	REV.
KLS	B. BOOKER	R. CANDRA	02/2016	12

LIGHTS
ARCHITECTURAL ON
5" SQUARE BROWN PAINTED STEEL POLE
DIRECT BURY

SH 1 OF 2

8030

aps ARIZONA PUBLIC SERVICE COMPANY
T&D CONSTRUCTION STANDARDS

BY	LDR.	MGR.	DATE	REV.
KLS	B. BOOKER	R. CANDRA	02/2016	12

LIGHTS
ARCHITECTURAL ON
5" SQUARE BROWN PAINTED STEEL POLE
DIRECT BURY

SH 2 OF 2

8030

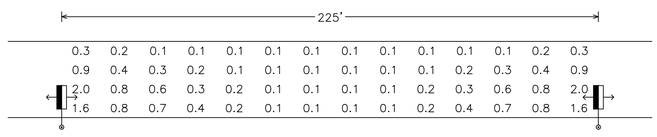
LUMINAIRE TABLE

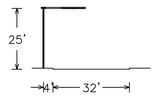
DARK BRONZE ROADWAY SCALEABLE LED 3000K

LIGHT CODE	COLOR	APN	WATTS	VOLTS	INITIAL LUMENS	CATALOG #
RL40	DKBZ	00141047	32	120/208/240/277	3,900	ERLC004B430ADKBZGLRV1013
RL41		00141048	43	120/208/240/277	4,800	ERLC005A430ADKBZGLRV1013
RL42		00141049	71	120/208/240/277	7,800	ERL1008C330ADKBZGLRX162
RL33		00141050	96	120/208/240/277	11,000	ERLH011C330ADKBZGLV1108
RL44		00141051	174	120/208/240/277	20,100	ERL2021C330ADKBZGLR113

TYPICAL LOCAL STREET CALCULATION

ILLUMINANCE METHOD







43W LED 4,800 LUMEN
Type II Distribution, 2' Mast arm
candela file 'ERLC_05A430_____-120-277V.IES'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 43
mounting height= 25 ft
number locations= 2, number luminaires= 2
kw all locations= 0.1

Roadway Grid
56 points at z=0, sp 16.071ft by 8ft
HORIZONTAL FOOTCANDLES

Average	0.4
Maximum	2.0
Minimum	0.1
Avg:Min	3.96
Max:Min	20.00
Coef Var	1.16
UnifGrad	2.50

WRIGHT ENGINEERING
PROJECT NO:
22359
DESIGN BY: AJA
DRAWN BY: AJA
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WRIGHT engineering corporation
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165 EAST CHILTON DRIVE • CHANDLER, ARIZONA 85225
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PROJECT: TITLE:

SURPRISE, ARIZONA
ASANTE PLANNING AREA 3
UNIT 3.11

STREET LIGHT DETAILS

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	OCT 2022	1ST SUBMITTAL
2	FEB 2023	2ND SUBMITTAL

Registered Professional Engineer (Retired)
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ASANTE PLANNING AREA 3

UNIT 3.12

STREET LIGHT DESIGN

STREET LIGHTING REQUIREMENTS

5.00 GENERAL NOTES:

THE FOLLOWING INFORMATION IS PROVIDED TO EMPHASIZE CRITICAL WORK AND IS INTENDED TO SUPPLEMENT THE SPECIFICATIONS. SHOULD THERE BE A CONFLICT WITH THE SPECIFICATIONS, THIS DOCUMENT SHALL TAKE PRECEDENCE.

ALTERNATES SHALL BE PRE-APPROVED BY THE CITY ENGINEERING MANAGER. APPROVAL OF ALTERNATE PRODUCTS SHALL BE ON AN EQUAL BASIS WITH THE PRODUCT SPECIFIED AND SHALL BE SUBMITTED A MINIMUM OF TEN (10) DAYS PRIOR TO BID OPENING. STRUCTURAL CALCULATIONS SHALL BE FURNISHED FOR ALTERNATE PRODUCTS AND CERTIFIED BY A STRUCTURAL ENGINEER, REGISTERED IN THE STATE OF ARIZONA. LUMINAIRES AND LAMPS SHALL MEET OR EXCEED THE PHOTOMETRIC, ELECTRICAL, AND MECHANICAL REQUIREMENTS FOR THE SPECIFIED PRODUCTS.

THE CONTRACTOR SHALL COMPLY WITH STATE AND CITY STATUTES, AND MANUFACTURER'S RECOMMENDATIONS.

THE SUBMITTAL PACKAGE SHALL CONSIST OF THREE (3) COPIES OF EQUIPMENT/MATERIAL TO BE INSTALLED AND SHALL BE BOUND/STAPLED IN A FOLDER AND SUBMITTED AT THE TIME OF PERMIT APPLICATION.

PRIOR TO SUBMITTING A PROPOSAL, THE BIDDER SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS AND VISIT THE CONSTRUCTION SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL OPERATE AND WHICH WILL IN ANY WAY AFFECT THE WORK UNDER THE CONTRACT. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN THIS CONNECTION IN THE BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLIGENCE ON HIS PART.

PRIOR TO ORDERING ANY MATERIALS OR DOING ANY WORK, THE CONTRACTOR SHOULD VERIFY DIMENSIONS AT THE SITE. IMMEDIATELY REPORT DIFFERENCES TO THE ENGINEERING MGR. AND SHOULD NOT PROCEED WITH WORK UNTIL THE ENGINEERING MGR. RENDERS A DECISION. NO EXTRA CHARGES OR COMPENSATION WILL BE ALLOWED FOR DIFFERENCES IN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE DRAWINGS.

5.01 GENERAL:

THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH ALL LICENSING REQUIREMENTS SET FORTH BY THE STATE REGISTRAR OF CONTRACTORS OFFICE TO PERFORM WORK RELATING TO STREET LIGHT INSTALLATION IN THE CITY RIGHT-OF-WAY.

ONE PROJECT UNDERGROUND UTILITIES (RIGHT OF WAY) PERMIT AND ONE STREETLIGHT PERMIT FOR EACH STREET LIGHT POLE SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

5.02 WORKING / "AS BUILT" PLANS:

ACCEPTANCE OF THE COMPLETED IMPROVEMENTS WILL NOT BE GIVEN UNTIL 4 MIL PHOTO MYLAR REPRODUCIBLE "AS BUILT" PLANS HAVE BEEN SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

5.03 LIGHT POLES:

LIGHT POLES SHALL BE INSTALLED PLUMB, BE ADJUSTED TO PROVIDE PROPER ALIGNMENT TO THE ROADWAY BEING LIGHTED AND BE PROPERLY GROUNDED WHEN THE INSTALLATION IS COMPLETE.

5.04 EMBEDMENT:

DIRECT BURIED POLES SHALL BE SET IN A TWELVE (12) INCH AUGURED HOLE DEPTH AS SPECIFIED IN UNDISTURBED EARTH. POLE SHALL BE SET PLUMB IN TWO DIRECTIONS 90 DEGREES APART. HAND TAMPING OF ABC BACKFILL WITH PNEUMATIC OR VIBRATING EQUIPMENT IS THE ACCEPTABLE METHOD OF COMPACTION. BACKFILL SHALL BE COMPACTED TO 85% OF MAXIMUM DENSITY AS DEFINED BY ASTM D-2922 AND D-3017. A GROUND ROD SHALL BE INSTALLED ADJACENT TO PULL BOX IN UNDISTURBED SOIL AND A LEAD IN COPPER BOND WIRE (#6) SHALL BE INSTALLED IN 1" CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT (OR EQUAL) FOR POLE GROUNDING.

SURPLUS EXCAVATION SHALL BE DISPOSED OF BY THE CONTRACTOR.

5.05 LUMINAIRES:

LUMINAIRES SHALL BE INSTALLED LEVEL AND INCLUDE A LAMP AND PHOTOCELL. CONTRACTOR SHALL ASSURE THAT THE LUMINAIRES SHALL BE FREE OF DUST, DIRT OR ANYTHING THAT WOULD IMPAIR THE OUTPUT OF THE LIGHT BEFORE HE LEAVES THE SITE.

LUMINAIRES FURNISHED WITH MULTI-TAP BALLASTS SHALL BE REWIRED OR RECONNECTED TO MATCH THE VOLTAGE SUPPLIED BY THE ELECTRIC UTILITY COMPANY.

5.06 WIRING:

WIRING SHALL BE INSTALLED PER UTILITY STANDARDS.

5.07 GROUNDING:

EACH POLE SHALL HAVE A 8' X 5/8" COPPER CLAD GROUND ROD DRIVEN ADJACENT TO PULL BOX. A #6 BARE COPPER LEAD FROM THE GROUND ROD IN PULL BOX TO LANDING LUG IN STREET LIGHT POLE HAND HOLE.

5.08 PULL BOXES:

EXCAVATION FOR PULL BOXES AND MATERIAL SPECIFICATION SHALL BE PER THE ELECTRIC UTILITY COMPANY STANDARDS.

5.09 TRENCH

TRENCH SHALL BE INSTALLED PER THE UTILITY COMPANY STANDARDS.

THE USE OF A COMMON ELECTRIC UTILITY COMPANY TRENCH IS PERMITTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANY FOR COORDINATION OF TRENCHING AND THE INSTALLATION OF CONDUIT.

CONDUIT SHALL BE INSTALLED AT THE DEPTH SPECIFIED ON THE PLANS. CONDUIT SHALL BE 1 INCH CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT OR EQUAL. CONDUIT MUST BE UL RATED AND SUITABLE FOR UNDERGROUND USE.

CONNECTIONS SHALL BE PER UTILITY STANDARDS.

5.12 LIGHT POLE IDENTIFICATION:

THE CONTRACTOR SHALL FURNISH AND INSTALL A NUMBER ON EACH LIGHT POLE. STREET LIGHT POLE IDENTIFICATION AND SPECIFICATIONS WILL BE PROVIDED BY THE CITY OF SURPRISE.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO RESTORE ALL PROPERTY, LANDSCAPING, PAVING AND DRIVEWAYS THAT ARE DISTURBED DURING STREET LIGHT CONSTRUCTION TO THEIR ORIGINAL CONDITION IN CONFORMANCE WITH "MAG" SPECIFICATION SECTION 107.9.

THE DEVELOPER SHALL BE RESPONSIBLE FOR FURNISHING ALL PERSONNEL AND EQUIPMENT TO SUCCESSFULLY PERFORM THE FOLLOWING TEST.

PRIOR TO ACCEPTANCE, THE DEVELOPER SHALL ENERGIZE AND OPERATE THE ENTIRE ROADWAY LIGHTING SYSTEM, FROM SUNSET TO SUNRISE FOR TWO CONSECUTIVE DAYS WITHOUT INTERRUPTION OR FAILURE. IF A LAMP OR BALLAST SHOULD FAIL, IT SHALL BE IMMEDIATELY REPLACED.

THE CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE ENGINEERING MANAGER, AGAINST IMPERFECT WORKMANSHIP, FAILURE, MALFUNCTION OF MATERIALS AND/OR EQUIPMENT DUE TO FAULTY OR IMPERFECT WORKMANSHIP. THIS GUARANTEE IS TO BE IN WRITING TO THE CITY AT THE TIME OF ISSUING FINAL ACCEPTANCE. WORK FOUND TO BE DEFECTIVE WITHIN THE WARRANTY PERIOD SHALL BE REPLACED WITHOUT COST TO THE CITY.

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 REPLACEDIN 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.

CITY OF SURPRISE APPROVAL

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.

CITY OF SURPRISE ENGINEER **DATE**

UTILITIES WITHIN OR AFFECTED BY THE PROJECT	
UTILITY CONTACT	DATE SUBMITTED
ARIZONA PUBLIC SERVICE	11/11/2022
CENTURY LINK	11/11/2022
COX COMMUNICATIONS	11/11/2022
SOUTHWEST GAS	11/11/2022

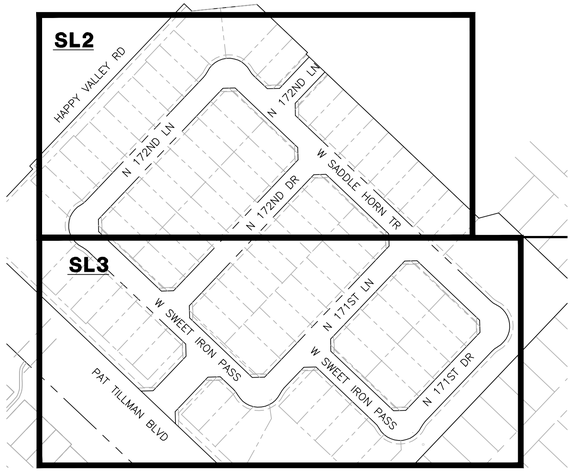
NOTE

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

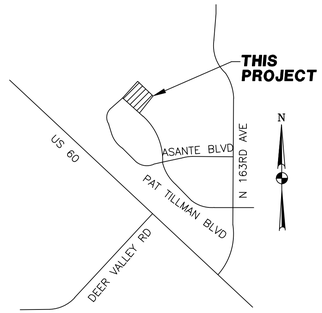
B. THE ELECTRICAL/MAINTENANCE COSTS OF ALL STREET LIGHTS ON LOCAL AND COLLECTOR STREETS ARE TO BE PAID BY THE ADJACENT PROJECT OR THE ADJACENT DEVELOPMENT'S STREET LIGHT IMPROVEMENT DISTRICT (SLID). THE ELECTRICAL / MAINTENANCE COSTS OF ALL STREET LIGHTS ON ARTERIAL STREETS ARE TO BE BILLED TO THE CITY OF SURPRISE'S ENERGY BILL.

LED NOTE

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.



KEY MAP
N.T.S.



VICINITY MAP
N.T.S.

SHEET INDEX

COVER SHEET	SL1
STREET LIGHT PLAN	SL2
STREET LIGHT PLAN	SL3
DETAILS	SL4

POWER CONDUIT NOTE

TRENCH & CONDUIT RUNS FROM STREET LIGHT PULL BOX TO POINT OF ELECTRICAL SERVICE WILL BE DESIGNED BY THE POWER COMPANY, AND ARE SHOWN ON POWER COMPANY PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THESE PLANS FROM DEVELOPER/OWNER, AND INCLUDE THESE RUNS IN THE BID. COORDINATE THIS WORK WITH THE POWER COMPANY.

CIVIL ENGINEER
HILGART WILSON
2141 E HIGHLAND AVE, STE. 250
PHOENIX, AZ 85016
PHONE: (602) 490-0535
FAX: (602) 368- 2436
CONTACT: DIEGO ORTIZ, PE
EMAIL: DORTIZ@HILGARTWILSON.COM

OWNER
LENNAR COMMUNITIES DELEOPMENT, LLC
1665 W. ALMEDA DR STE 130
TEMPE, AZ 85282-3000
CONTACT: JORGE VILLASENOR

Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

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WRIGHT ENGINEERING PROJECT NO: **22359**

DESIGN BY: BDS
DRAWN BY: BDS
CHECKED BY: AMB

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: SURPRISE, ARIZONA
ASANTE PLANNING AREA 3
UNIT 3.12

TITLE: STREET LIGHT COVER SHEET

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	NOV 2022	1ST SUBMITTAL
2	FEB 2023	2ND SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M. BOWERS
Date Signed 4-5-23
Expires 9-30-25

DRAWING NO: **SL1**
OF 4

FS22-1552

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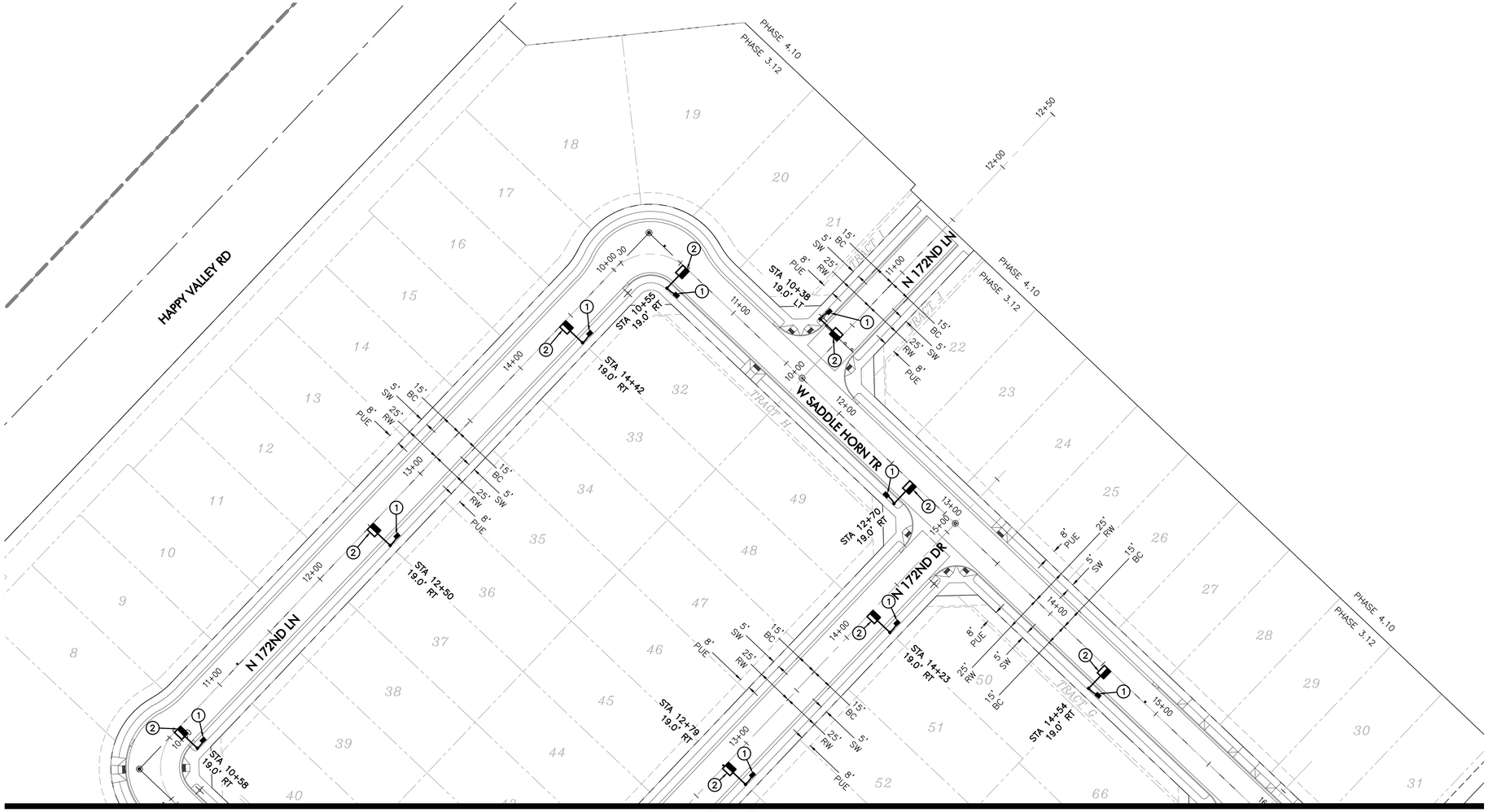

MATCHLINE 'A'
SEE SHEET SL2

LEGEND

- 4,800 LUMEN LED STREET LIGHT, SQUARE POLE
- EXISTING STREET LIGHT
- PULL BOX
- NEW CONDUIT RUN
- FIRE HYDRANT

CONSTRUCTION NOTES

1. INSTALL APS PULL BOX NEXT TO POLE. 1" CONDUIT WITH (2) #14 TYPE THHN/THWN & (1) #14 BARE BOND FROM PULL BOX TO FUSE HOLDER IN STREET LIGHT PER APS DETAILS & SPECIFICATIONS.
2. 43W LED (4,800 LUMEN) LUMINAIRE (SEE LUMINAIRE TABLE), PHOTOCELL, 30'-6" DIRECT BURIED POLE, 2' MAST ARM PER APS DETAIL 8030 (SEE SHEET SL4). (2) #14 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. WIRING, FUSING, & GROUNDING PER APS DETAILS & SPECIFICATIONS.

GRAPHIC SCALE
40 20 0 20 40 80
1 INCH = 40 FEET

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
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In Maricopa County: (602) 263-1100

WRIGHT ENGINEERING PROJECT NO:
22359
DESIGN BY: BDS
DRAWN BY: BDS
CHECKED BY: AMB

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: **SURPRISE, ARIZONA**
ASANTE PLANNING AREA 3
UNIT 3.12

TITLE: **STREET LIGHT PLAN**

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	NOV 2022	1ST SUBMITTAL
2	FEB 2023	2ND SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M. BOWERS
Date Signed 4-5-23
Expires 9-30-25

DRAWING NO:
SL2
OF 4

FS22-1552

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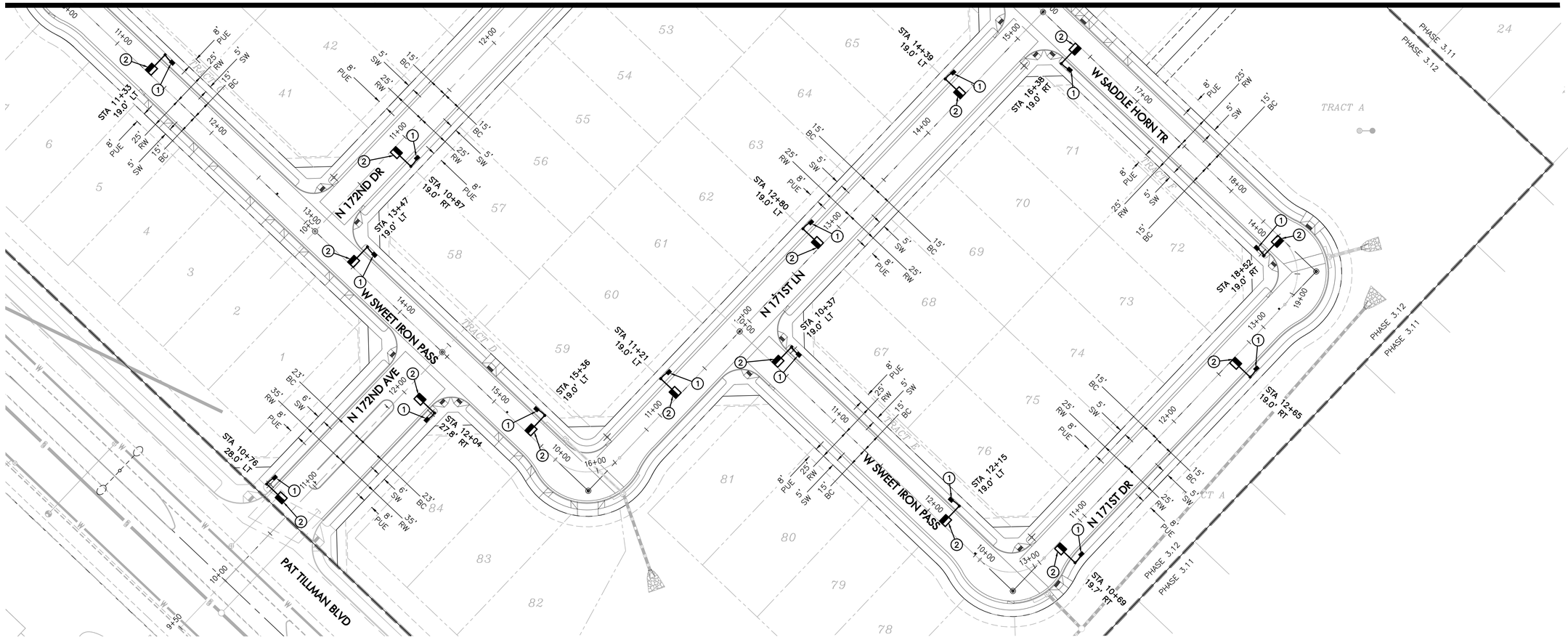
MATCHLINE 'A'
SEE SHEET SL3



LEGEND

- 4,800 LUMEN LED STREET LIGHT, SQUARE POLE
- EXISTING STREET LIGHT
- PULL BOX
- NEW CONDUIT RUN
- FIRE HYDRANT

CONSTRUCTION NOTES

1. INSTALL APS PULL BOX NEXT TO POLE. 1" CONDUIT WITH (2) #14 TYPE THHN/THWN & (1) #14 BARE BOND FROM PULL BOX TO FUSE HOLDER IN STREET LIGHT PER APS DETAILS & SPECIFICATIONS.
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WRIGHT ENGINEERING PROJECT NO:
22359
DESIGN BY: BDS
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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: **SURPRISE, ARIZONA**
ASANTE PLANNING AREA 3 UNIT 3.12

TITLE: **STREET LIGHT PLAN**

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	NOV 2022	1ST SUBMITTAL
2	FEB 2023	2ND SUBMITTAL

Registered Professional Engineer (Electrical)
Certificate No.
46691
ADAM M. BOWERS
Date Signed 9-2-23
Expires 9-30-25

DRAWING NO:
SL3
OF 4

FS22-1552

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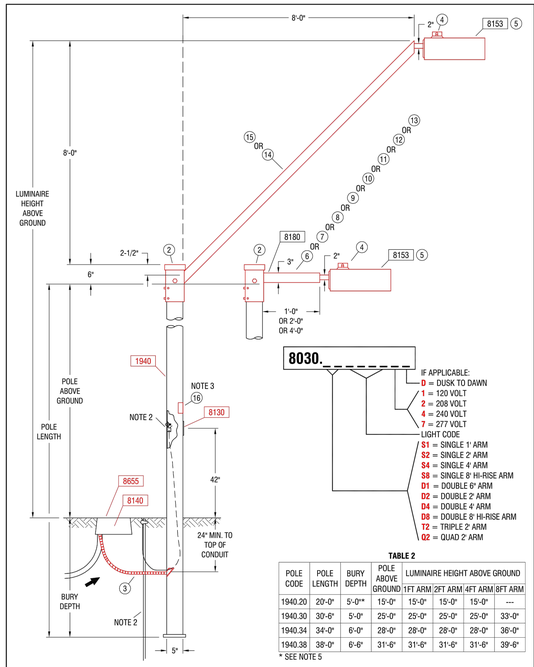


TABLE 2

POLE CODE	POLE LENGTH	BURY DEPTH	POLE ABOVE GROUND	LUMINAIRE HEIGHT ABOVE GROUND			
				1FT ARM	2FT ARM	4FT ARM	8FT ARM
1940.20	20'-0"	5'-0"*	15'-0"	15'-0"	15'-0"	15'-0"	----
1940.30	30'-6"	5'-0"	25'-0"	25'-0"	25'-0"	25'-0"	33'-0"
1940.34	34'-0"	6'-0"	28'-0"	28'-0"	28'-0"	28'-0"	36'-0"
1940.38	38'-0"	6'-6"	31'-6"	31'-6"	31'-6"	31'-6"	39'-6"

* SEE NOTE 5

NOTES:

1. ADJUST PHOTO EYE TO FACE NORTH.
2. A GROUND ROD IS PROVIDED WITH EACH STREET LIGHT POLE. WHERE A GROUND ROD CANNOT BE DRIVEN, ALTERNATE GROUND SHALL BE USED. SEE 2449 THRU 2460 FOR APPROVED ALTERNATES.
3. SIGN, "NOTICE THIS POLE IS OWNED AND MAINTAINED BY APS. DISCONNECT INSIDE", IS REQUIRED ON ALL DUSK-TO-DAWN AND AREA LIGHTING APPLICATIONS.
4. POLES THAT HAVE MORE THAN ONE LUMINAIRE REQUIRE A SEPARATE CIRCUIT WITH FUSING FROM THE J-BOX TO EACH LUMINAIRE.
5. USING THE 20'-0" POLE TO MATCH THE 16'-0" PEDESTRIAN LIGHT MOUNTING HEIGHT REDUCE POLE BURY DEPTH TO 4'-0".
6. THE BROWN PHOTO CONTROL IS A FAIL OFF CONTROL AND SHALL BE USED WITH ALL INDUCTION AND LED LUMINAIRES.
7. ON 277 VOLT STREET LIGHT CIRCUITS, INSTALL A "277 VOLT" MICARTA TAG ON CABLE IN J-BOX. TAG PROVIDED BY SPEC 8129.
8. THE LUMINAIRE SHOWN IS RECOMMENDED FOR THIS MOUNTING HEIGHT. SEE 8153 FOR ADDITIONAL BROWN ARCHITECTURAL LUMINAIRES.
9. THE TWO ARMED TENON BRACKET POSITIONS THE DOUBLE ARM 180 DEGREES APART.
10. TO ACCOMMODATE LESS THAT THE SPECIFIED LUMINAIRE MOUNTING HEIGHT, A SHOP ORDER IS REQUIRED TO HAVE A PORTION FROM THE TOP OF THE POLE CUT OFF. THE TENON ARM BRACKET SLIDES OVER AND COVERS THE CUT PORTION OF THE POLE.
11. IN-LINE FUSE FOR UNDERGROUND FEEDS, SEE 8130-8140.
12. FOR PEDESTRIAN ONLY APPLICATIONS SEE 8030.

TABLE 1

LIGHT CODE	APN	WATTS	K	TYPE	VOLTS	INITIAL LUMENS	MOUNTING HEIGHT
AH18	00099450	100	2100	HPS	120/208/240/277	9,500	SEE TABLE 2
AH17	00099451	150			120/208/240/277	16,000	
AH18	00099452	250			120/208/240/277	30,000	
AH19	00099454	400			120/208/240/277	50,000	
RN40	00128258	55	2700	IND	120/208/240/277	5,600	
RN41	00128667	100	5000		120/208/240/277	9,400	
RN42	00132846	150			120/208/240/277	10,200	
RN43	00132850	150			120/208/240/277	13,000	
RN44	00121153	200			120/208/240/277	15,250	
RN45	00116527	250			120/208/240/277	22,500	
RL40	00141047	32	3000	LED S	120/208/240/277	3,800	
RL41	00141048	41			120/208/240/277	4,800	
RL42	00141049	88			120/208/240/277	8,200	
RL43	00141050	108			120/208/240/277	11,000	
RL44	00141051	162			120/208/240/277	19,000	
RL50	00128251	45	4000	LED S	120/208/240/277	4,300	
RL52	00126804	60			120/208/240/277	5,400	
RL53	00126805	95			120/208/240/277	8,600	
RL54	00126806	113			120/208/240/277	10,000	
RL56	00128365	257			120/208/240/277	19,200	
AL56	00113722	62	4000	LED M	120/208/240/277	7,100	
AL58	00129911	72			120/208/240/277	8,300	
AL60	00113723	119			120/208/240/277	12,900	
AL61	00116525	119R*			120/208/240/277	12,900	
AL62	00116526	119L*			120/208/240/277	12,900	
AL65	00107462	144			120/208/240/277	15,400	
AS20	33806772	55	1700	LPS	120/240	8,000	
AS21	33806774	90			120/240	13,500	
AS22	33806776	135			120/240	22,500	
AS23	33806778	180			120/240	33,000	

* CALL STANDARDS ENGINEERING FOR APPLICATION

MATERIAL LIST

ITEM	CODE	8030.S1 QTY	8030.S2 QTY	8030.S4 QTY	8030.S8 QTY	8030.D1 QTY	8030.D2 QTY	8030.D4 QTY	8030.D8 QTY	8030.T2 QTY	8030.Q2 QTY	DESCRIPTION	APN
1		-	-	-	-	-	-	-	1	-	-	BRACKET ARCH SLIP BOLTED	00092251
2		1	1	1	1	1	1	1	1	1	1	CAP STLT SQ-P 5.5" ARM	00100036
3		10	10	10	10	10	10	10	10	10	10	CONDUIT 1" PVC FLEX CORR	32900891
4		1	1	1	1	2	2	2	3	4		CONTROL PHOTO MULTI BR-20	00073241
5		1	1	1	1	2	2	2	3	4		LUMINAIRE - SEE TABLE 1	
6		-	-	-	-	1	-	-	-	-	-	MAST ARM STLT 3" SQ X 1' DBL	00121154
7		1	-	-	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 1' SGL	00088370
8		-	-	-	-	-	1	-	-	-	-	MAST ARM STLT 3"SQ X 2' DBL	33701117
9		-	-	-	-	-	-	-	-	-	1	MAST ARM STLT 3"SQ X 2' QUAD	00052665
10		-	1	-	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 2' SGL	33701116
11		-	-	-	-	-	-	-	-	1	-	MAST ARM STLT 3"SQ X 2' TPL	00052664
12		-	-	-	-	-	-	1	-	-	-	MAST ARM STLT 3"SQ X 4' DBL	00073267
13		-	-	1	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 4' SGL	00061738
14		-	-	-	1	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 8' SGL	33701120
15		-	-	-	-	-	-	-	2	-	-	MAST ARM STLT 8' BOLT-ON	00092252
16		1	1	1	1	1	1	1	1	1	1	SIGN POLE OWNED BY APS	00050092

aps	ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS			
BY	LDR.	MGR.	DATE	REV.
KLS	B. BOOKER	R. CANDRA	02/2016	12

LIGHTS ARCHITECTURAL ON 5" SQUARE BROWN PAINTED STEEL POLE DIRECT BURY

SH 1 OF 2

8030

aps ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS

BY | LDR. | MGR. | DATE | REV.
KLS | B. BOOKER | R. CANDRA | 02/2016 | 12

LIGHTS ARCHITECTURAL ON 5" SQUARE BROWN PAINTED STEEL POLE DIRECT BURY

8030

SH 2 OF 2

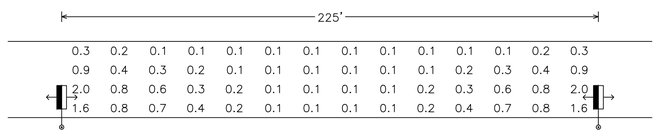
LUMINAIRE TABLE

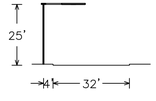
DARK BRONZE ROADWAY SCALEABLE LED 3000K

LIGHT CODE	COLOR	APN	WATTS	VOLTS	INITIAL LUMENS	CATALOG #
RL40	DKBZ	00141047	32	120/208/240/277	3,900	ERLC004B430ADKBZGLRV1013
RL41		00141048	43	120/208/240/277	4,800	ERLC005A430ADKBZGLRV1013
RL42		00141049	71	120/208/240/277	7,800	ERL1008C330ADKBZGLRX162
RL33		00141050	96	120/208/240/277	11,000	ERLH011C330ADKBZGLV1108
RL44		00141051	174	120/208/240/277	20,100	ERL2021C330ADKBZGLR113

TYPICAL LOCAL STREET CALCULATION

ILLUMINANCE METHOD







43W LED 4,800 LUMEN
Type II Distribution, 2' Mast arm
candela file 'ERLC_05A430_____-120-277V.IES'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 43
mounting height= 25 ft
number locations= 2, number luminaires= 2
kw all locations= 0.1

Roadway Grid
56 points at z=0, sp 16.071ft by 8ft
HORIZONTAL FOOTCANDLES

Average	0.4
Maximum	2.0
Minimum	0.1
Avg:Min	3.96
Max:Min	20.00
Coef Var	1.16
UnifGrad	2.50

WRIGHT ENGINEERING
PROJECT NO:
22359
DESIGN BY: BDS
DRAWN BY: BDS
CHECKED BY: AMB

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:

SURPRISE, ARIZONA
ASANTE PLANNING AREA 3
UNIT 3.12

STREET LIGHT DETAILS

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	NOV 2022	1ST SUBMITTAL
2	FEB 2023	2ND SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M. BOWERS
Date Signed 4-5-23
Expires 9-30-25

DRAWING NO:
SL4
OF 4

FS22-1552

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

ASANTE PLANNING AREA 3

UNIT 3.13

STREET LIGHT DESIGN

STREET LIGHTING REQUIREMENTS

5.00 GENERAL NOTES:

THE FOLLOWING INFORMATION IS PROVIDED TO EMPHASIZE CRITICAL WORK AND IS INTENDED TO SUPPLEMENT THE SPECIFICATIONS. SHOULD THERE BE A CONFLICT WITH THE SPECIFICATIONS, THIS DOCUMENT SHALL TAKE PRECEDENCE.

ALTERNATES SHALL BE PRE-APPROVED BY THE CITY ENGINEERING MANAGER. APPROVAL OF ALTERNATE PRODUCTS SHALL BE ON AN EQUAL BASIS WITH THE PRODUCT SPECIFIED AND SHALL BE SUBMITTED A MINIMUM OF TEN (10) DAYS PRIOR TO BID OPENING. STRUCTURAL CALCULATIONS SHALL BE FURNISHED FOR ALTERNATE PRODUCTS AND CERTIFIED BY A STRUCTURAL ENGINEER, REGISTERED IN THE STATE OF ARIZONA. LUMINAIRES AND LAMPS SHALL MEET OR EXCEED THE PHOTOMETRIC, ELECTRICAL, AND MECHANICAL REQUIREMENTS FOR THE SPECIFIED PRODUCTS.

THE CONTRACTOR SHALL COMPLY WITH STATE AND CITY STATUTES, AND MANUFACTURER'S RECOMMENDATIONS.

THE SUBMITTAL PACKAGE SHALL CONSIST OF THREE (3) COPIES OF EQUIPMENT/MATERIAL TO BE INSTALLED AND SHALL BE BOUND/STAPLED IN A FOLDER AND SUBMITTED AT THE TIME OF PERMIT APPLICATION.

PRIOR TO SUBMITTING A PROPOSAL, THE BIDDER SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS AND VISIT THE CONSTRUCTION SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL OPERATE AND WHICH WILL IN ANY WAY AFFECT THE WORK UNDER THE CONTRACT. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN THIS CONNECTION IN THE BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLIGENCE ON HIS PART.

PRIOR TO ORDERING ANY MATERIALS OR DOING ANY WORK, THE CONTRACTOR SHOULD VERIFY DIMENSIONS AT THE SITE. IMMEDIATELY REPORT DIFFERENCES TO THE ENGINEERING MGR. AND SHOULD NOT PROCEED WITH WORK UNTIL THE ENGINEERING MGR. RENDERS A DECISION. NO EXTRA CHARGES OR COMPENSATION WILL BE ALLOWED FOR DIFFERENCES IN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE DRAWINGS.

5.01 GENERAL:

THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH ALL LICENSING REQUIREMENTS SET FORTH BY THE STATE REGISTRAR OF CONTRACTORS OFFICE TO PERFORM WORK RELATING TO STREET LIGHT INSTALLATION IN THE CITY RIGHT-OF-WAY.

ONE PROJECT UNDERGROUND UTILITIES (RIGHT OF WAY) PERMIT AND ONE STREETLIGHT PERMIT FOR EACH STREET LIGHT POLE SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

5.02 WORKING / "AS BUILT" PLANS:

ACCEPTANCE OF THE COMPLETED IMPROVEMENTS WILL NOT BE GIVEN UNTIL 4 MIL PHOTO MYLAR REPRODUCIBLE "AS BUILT" PLANS HAVE BEEN SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

5.03 LIGHT POLES:

LIGHT POLES SHALL BE INSTALLED PLUMB, BE ADJUSTED TO PROVIDE PROPER ALIGNMENT TO THE ROADWAY BEING LIGHTED AND BE PROPERLY GROUNDED WHEN THE INSTALLATION IS COMPLETE.

5.04 EMBEDMENT:

DIRECT BURIED POLES SHALL BE SET IN A TWELVE (12) INCH AUGURED HOLE DEPTH AS SPECIFIED IN UNDISTURBED EARTH. POLE SHALL BE SET PLUMB IN TWO DIRECTIONS 90 DEGREES APART. HAND TAMPING OF ABC BACKFILL WITH PNEUMATIC OR VIBRATING EQUIPMENT IS THE ACCEPTABLE METHOD OF COMPACTION. BACKFILL SHALL BE COMPACTED TO 85% OF MAXIMUM DENSITY AS DEFINED BY ASTM D-2922 AND D-3017. A GROUND ROD SHALL BE INSTALLED ADJACENT TO PULL BOX IN UNDISTURBED SOIL AND A LEAD IN COPPER BOND WIRE (#6) SHALL BE INSTALLED IN 1" CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT (OR EQUAL) FOR POLE GROUNDING.

SURPLUS EXCAVATION SHALL BE DISPOSED OF BY THE CONTRACTOR.

5.05 LUMINAIRES:

LUMINAIRES SHALL BE INSTALLED LEVEL AND INCLUDE A LAMP AND PHOTOCELL. CONTRACTOR SHALL ASSURE THAT THE LUMINAIRES SHALL BE FREE OF DUST, DIRT OR ANYTHING THAT WOULD IMPAIR THE OUTPUT OF THE LIGHT BEFORE HE LEAVES THE SITE.

LUMINAIRES FURNISHED WITH MULTI-TAP BALLASTS SHALL BE REWIRED OR RECONNECTED TO MATCH THE VOLTAGE SUPPLIED BY THE ELECTRIC UTILITY COMPANY.

5.06 WIRING:

WIRING SHALL BE INSTALLED PER UTILITY STANDARDS.

5.07 GROUNDING:

EACH POLE SHALL HAVE A 8' X 5/8" COPPER CLAD GROUND ROD DRIVEN ADJACENT TO PULL BOX. A #6 BARE COPPER LEAD FROM THE GROUND ROD IN PULL BOX TO LANDING LUG IN STREET LIGHT POLE HAND HOLE.

5.08 PULL BOXES:

EXCAVATION FOR PULL BOXES AND MATERIAL SPECIFICATION SHALL BE PER THE ELECTRIC UTILITY COMPANY STANDARDS.

5.09 TRENCH

TRENCH SHALL BE INSTALLED PER THE UTILITY COMPANY STANDARDS.

THE USE OF A COMMON ELECTRIC UTILITY COMPANY TRENCH IS PERMITTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANY FOR COORDINATION OF TRENCHING AND THE INSTALLATION OF CONDUIT.

CONDUIT SHALL BE INSTALLED AT THE DEPTH SPECIFIED ON THE PLANS. CONDUIT SHALL BE 1 INCH CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT OR EQUAL. CONDUIT MUST BE UL RATED AND SUITABLE FOR UNDERGROUND USE.

CONNECTIONS SHALL BE PER UTILITY STANDARDS.

5.12 LIGHT POLE IDENTIFICATION:

THE CONTRACTOR SHALL FURNISH AND INSTALL A NUMBER ON EACH LIGHT POLE. STREET LIGHT POLE IDENTIFICATION AND SPECIFICATIONS WILL BE PROVIDED BY THE CITY OF SURPRISE.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO RESTORE ALL PROPERTY, LANDSCAPING, PAVING AND DRIVEWAYS THAT ARE DISTURBED DURING STREET LIGHT CONSTRUCTION TO THEIR ORIGINAL CONDITION IN CONFORMANCE WITH "MAG" SPECIFICATION SECTION 107.9.

THE DEVELOPER SHALL BE RESPONSIBLE FOR FURNISHING ALL PERSONNEL AND EQUIPMENT TO SUCCESSFULLY PERFORM THE FOLLOWING TEST.

PRIOR TO ACCEPTANCE, THE DEVELOPER SHALL ENERGIZE AND OPERATE THE ENTIRE ROADWAY LIGHTING SYSTEM, FROM SUNSET TO SUNRISE FOR TWO CONSECUTIVE DAYS WITHOUT INTERRUPTION OR FAILURE. IF A LAMP OR BALLAST SHOULD FAIL, IT SHALL BE IMMEDIATELY REPLACED.

THE CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE ENGINEERING MANAGER, AGAINST IMPERFECT WORKMANSHIP, FAILURE, MALFUNCTION OF MATERIALS AND/OR EQUIPMENT DUE TO FAULTY OR IMPERFECT WORKMANSHIP. THIS GUARANTEE IS TO BE IN WRITING TO THE CITY AT THE TIME OF ISSUING FINAL ACCEPTANCE. WORK FOUND TO BE DEFECTIVE WITHIN THE WARRANTY PERIOD SHALL BE REPLACED WITHOUT COST TO THE CITY.

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 REPLACEDIN 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.

CITY OF SURPRISE APPROVAL

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.

CITY OF SURPRISE ENGINEER **DATE**

UTILITIES WITHIN OR AFFECTED BY THE PROJECT	
UTILITY CONTACT	DATE SUBMITTED
ARIZONA PUBLIC SERVICE	12/28/2022
CENTURY LINK	12/28/2022
COX COMMUNICATIONS	12/28/2022
SOUTHWEST GAS	12/28/2022

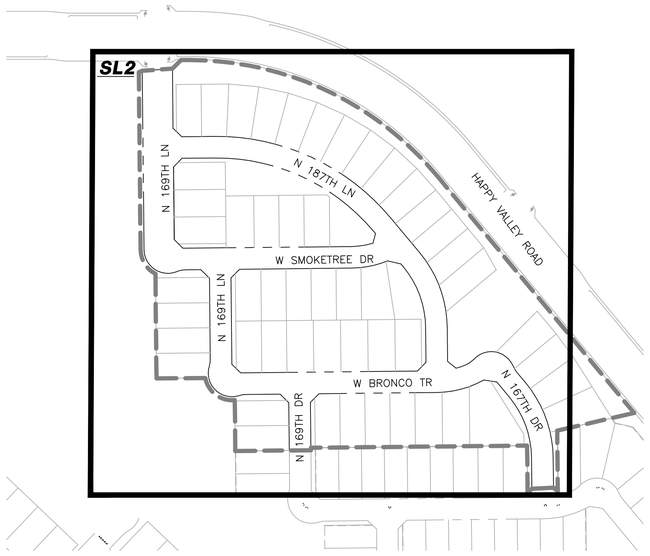
NOTE

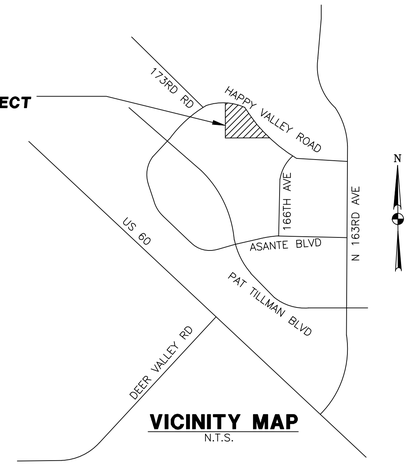
A. ENSURE THERE IS 1' CLEARANCE FROM EDGE OF SIDEWALK TO FACE OF POLE.

B. THE ELECTRICAL/MAINTENANCE COSTS OF ALL STREET LIGHTS ON LOCAL AND COLLECTOR STREETS ARE TO BE PAID BY THE ADJACENT PROJECT OR THE ADJACENT DEVELOPMENT'S STREET LIGHT IMPROVEMENT DISTRICT (SLID). THE ELECTRICAL / MAINTENANCE COSTS OF ALL STREET LIGHTS ON ARTERIAL STREETS ARE TO BE BILLED TO THE CITY OF SURPRISE'S ENERGY BILL.

LED NOTE

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.





VICINITY MAP
N.T.S.

SHEET INDEX

COVER SHEET	SL1
STREET LIGHT PLAN	SL2
DETAILS	SL3

KEY MAP
N.T.S.

POWER CONDUIT NOTE

TRENCH & CONDUIT RUNS FROM STREET LIGHT PULL BOX TO POINT OF ELECTRICAL SERVICE WILL BE DESIGNED BY THE POWER COMPANY, AND ARE SHOWN ON POWER COMPANY PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THESE PLANS FROM DEVELOPER/OWNER, AND INCLUDE THESE RUNS IN THE BID. COORDINATE THIS WORK WITH THE POWER COMPANY.

CIVIL ENGINEER
HILGART WILSON
2141 E HIGHLAND AVE, STE. 250
PHOENIX, AZ 85016
PHONE: (602) 490-0535
FAX: (602) 368- 2436
CONTACT: DIEGO ORTIZ, PE
EMAIL: DORTIZ@HILGARTWILSON.COM

OWNER
LENNAR COMMUNITIES DELEOPMENT, LLC
1665 W. ALMEDA DR STE 130
TEMPE, AZ 85282-3000
CONTACT: JORGE VILLASENOR

Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348) in Maricopa County: (602) 263-1100

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H:\2022\22359-Asante 900\22359-SL-3.13.dwg

WRIGHT ENGINEERING PROJECT NO:
22359
DESIGN BY: BDS
DRAWN BY: BDS
CHECKED BY: AMB

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: ASANTE PLANNING AREA 3 UNIT 3.13 SURPRISE, ARIZONA

TITLE: STREET LIGHT COVER SHEET

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	DEC 2022	1ST SUBMITTAL
2	MAR 2023	2ND SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M. BOWERS
Date Signed 1-7-23
Expires 9-30-25

DRAWING NO:
SL1
OF 3

FS23-0038

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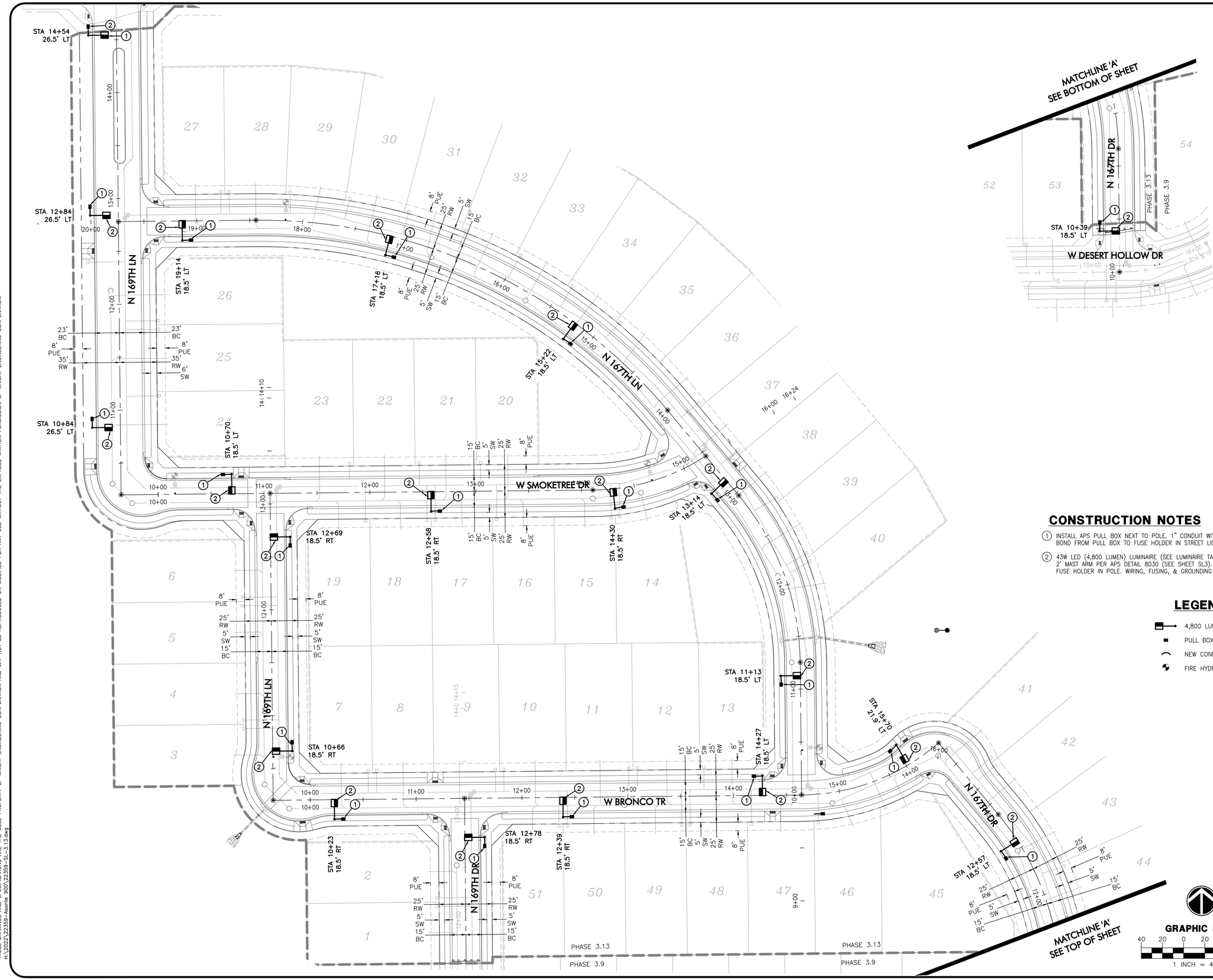

CONSTRUCTION NOTES

1. INSTALL APS PULL BOX NEXT TO POLE. 1" CONDUIT WITH (2) #14 TYPE THHN/THWN & (1) #14 BARE BOND FROM PULL BOX TO FUSE HOLDER IN STREET LIGHT PER APS DETAILS & SPECIFICATIONS.
2. 43W LED (4,800 LUMEN) LUMINAIRE (SEE LUMINAIRE TABLE), PHOTOCELL, 30'-6" DIRECT BURIED POLE, 2' MAST ARM PER APS DETAIL 8030 (SEE SHEET SL3). (2) #14 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. WIRING, FUSING, & GROUNDING PER APS DETAILS & SPECIFICATIONS.

LEGEND

- 4,800 LUMEN LED STREET LIGHT, SQUARE POLE
- PULL BOX
- NEW CONDUIT RUN
- FIRE HYDRANT

GRAPHIC SCALE
40 20 0 20 40 80
1 INCH = 40 FEET

Call at least two full working days before you begin excavation.
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Arizona Blue Stake, Inc.
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In Maricopa County: (602) 263-1100

WRIGHT ENGINEERING PROJECT NO:
22359

DESIGN BY: BDS
DRAWN BY: BDS
CHECKED BY: AMB

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:

SURPRISE, ARIZONA
ASANTE PLANNING AREA 3
UNIT 3.13

STREET LIGHT PLAN

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	DEC 2022	1ST SUBMITTAL
2	MAR 2023	2ND SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M. BOWERS
3-7-23
Date Signed
Expires 9-30-25

DRAWING NO:
SL2
OF 3

FS23-0038

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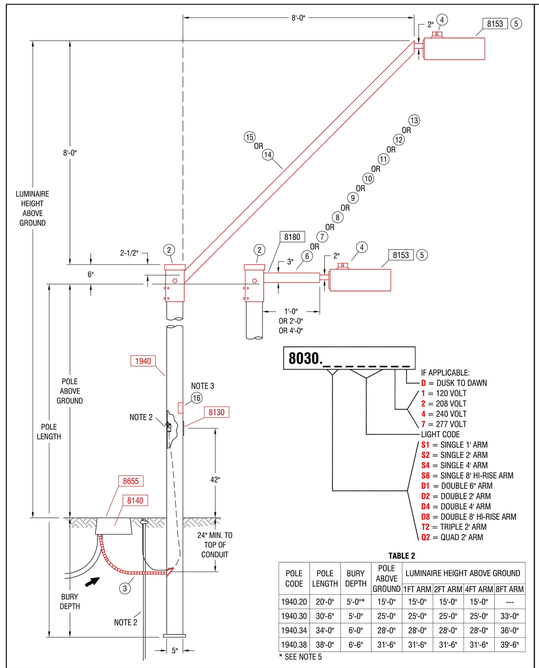


TABLE 2

POLE CODE	POLE LENGTH	BURY DEPTH	POLE ABOVE GROUND	LUMINAIRE HEIGHT ABOVE GROUND			
				1FT ARM	2FT ARM	4FT ARM	8FT ARM
1940.20	20'-0"	5'-0"*	15'-0"	15'-0"	15'-0"	15'-0"	---
1940.30	30'-6"	5'-0"	25'-0"	25'-0"	25'-0"	25'-0"	33'-0"
1940.34	34'-0"	6'-0"	28'-0"	28'-0"	28'-0"	28'-0"	36'-0"
1940.38	38'-0"	6'-6"	31'-6"	31'-6"	31'-6"	31'-6"	39'-6"

* SEE NOTE 5

NOTES:

1. ADJUST PHOTO EYE TO FACE NORTH.
2. A GROUND ROD IS PROVIDED WITH EACH STREET LIGHT POLE. WHERE A GROUND ROD CANNOT BE DRIVEN, ALTERNATE GROUND SHALL BE USED. SEE 2449 THRU 2460 FOR APPROVED ALTERNATES.
3. SIGN, "NOTICE THIS POLE IS OWNED AND MAINTAINED BY APS. DISCONNECT INSIDE", IS REQUIRED ON ALL DUSK-TO-DAWN AND AREA LIGHTING APPLICATIONS.
4. POLES THAT HAVE MORE THAN ONE LUMINAIRE REQUIRE A SEPARATE CIRCUIT WITH FUSING FROM THE J-BOX TO EACH LUMINAIRE.
5. USING THE 20'-0" POLE TO MATCH THE 16'-0" PEDESTRIAN LIGHT MOUNTING HEIGHT REDUCE POLE BURY DEPTH TO 4'-0".
6. THE BROWN PHOTO CONTROL IS A FAIL OFF CONTROL AND SHALL BE USED WITH ALL INDUCTION AND LED LUMINAIRES.
7. ON 277 VOLT STREET LIGHT CIRCUITS, INSTALL A "277 VOLT" MICARTA TAG ON CABLE IN J-BOX. TAG PROVIDED BY SPEC 8129.
8. THE LUMINAIRE SHOWN IS RECOMMENDED FOR THIS MOUNTING HEIGHT. SEE 8153 FOR ADDITIONAL BROWN ARCHITECTURAL LUMINAIRES.
9. THE TWO ARMED TENON BRACKET POSITIONS THE DOUBLE ARM 180 DEGREES APART.
10. TO ACCOMMODATE LESS THAT THE SPECIFIED LUMINAIRE MOUNTING HEIGHT, A SHOP ORDER IS REQUIRED TO HAVE A PORTION FROM THE TOP OF THE POLE CUT OFF. THE TENON ARM BRACKET SLIDES OVER AND COVERS THE CUT PORTION OF THE POLE.
11. IN-LINE FUSE FOR UNDERGROUND FEEDS, SEE 8130-8140.
12. FOR PEDESTRIAN ONLY APPLICATIONS SEE 8030.

TABLE 1

LIGHT CODE	APN	WATTS	K	TYPE	VOLTS	INITIAL LUMENS	MOUNTING HEIGHT
AH18	00099450	100	2100	HPS	120/208/240/277	9,500	SEE TABLE 2
AH17	00099451	150			120/208/240/277	16,000	
AH18	00099452	250			120/208/240/277	30,000	
AH19	00099454	400			120/208/240/277	50,000	
RN40	00128258	55	2700	IND	120/208/240/277	5,000	
RN41	00128667	100	5000		120/208/240/277	8,400	
RN42	00132846	150			120/208/240/277	10,200	
RN43	00132850	150			120/208/240/277	13,000	
RN44	00121153	200			120/208/240/277	15,250	
RN45	00116527	250			120/208/240/277	22,500	
RL40	00141047	32	3000	LED S	120/208/240/277	3,800	
RL41	00141048	41			120/208/240/277	4,800	
RL42	00141049	88			120/208/240/277	8,200	
RL43	00141050	108			120/208/240/277	11,000	
RL44	00141051	162			120/208/240/277	19,000	
RL50	00128251	45	4000	LED S	120/208/240/277	4,300	
RL52	00126804	60			120/208/240/277	5,400	
RL53	00126805	95			120/208/240/277	8,600	
RL54	00126806	113			120/208/240/277	10,000	
RL56	00128365	257			120/208/240/277	19,200	
AL56	00113722	62	4000	LED M	120/208/240/277	7,100	
AL58	00129911	72			120/208/240/277	8,300	
AL60	00113723	119			120/208/240/277	12,900	
AL61	00116525	119R*			120/208/240/277	12,900	
AL62	00116526	119L*			120/208/240/277	12,900	
AL65	00107462	144			120/208/240/277	15,400	
AS20	33806772	55	1700	LPS	120/240	8,000	
AS21	33806774	90			120/240	13,500	
AS22	33806776	135			120/240	22,500	
AS23	33806778	180			120/240	33,000	

* CALL STANDARDS ENGINEERING FOR APPLICATION

MATERIAL LIST

ITEM	CODE	8030.S1 QTY	8030.S2 QTY	8030.S4 QTY	8030.S8 QTY	8030.D1 QTY	8030.D2 QTY	8030.D4 QTY	8030.D8 QTY	8030.T2 QTY	8030.Q2 QTY	DESCRIPTION	APN
1		-	-	-	-	-	-	-	1	-	-	BRACKET ARCH SLIP BOLTED	00092251
2		1	1	1	1	1	1	1	1	1	1	CAP STLT SQ-P 5.5" ARM	00100036
3		10	10	10	10	10	10	10	10	10	10	CONDUIT 1" PVC FLEX CORR	32900891
4		1	1	1	1	2	2	2	3	4		CONTROL PHOTO MULTI BR-20	00073241
5		1	1	1	1	2	2	2	3	4		LUMINAIRE - SEE TABLE 1	
6		-	-	-	-	1	-	-	-	-	-	MAST ARM STLT 3" SQ X 1' DBL	00121154
7		1	-	-	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 1' SGL	00088370
8		-	-	-	-	-	1	-	-	-	-	MAST ARM STLT 3"SQ X 2' DBL	33701117
9		-	-	-	-	-	-	-	-	-	1	MAST ARM STLT 3"SQ X 2' QUAD	00052665
10		-	1	-	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 2' SGL	33701116
11		-	-	-	-	-	-	-	-	1	-	MAST ARM STLT 3"SQ X 2' TPL	00052664
12		-	-	-	-	-	-	1	-	-	-	MAST ARM STLT 3"SQ X 4' DBL	00073267
13		-	-	1	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 4' SGL	00061738
14		-	-	-	1	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 8' SGL	33701120
15		-	-	-	-	-	-	2	-	-	-	MAST ARM STLT 8' BOLT-ON	00092252
16		1	1	1	1	1	1	1	1	1	1	SIGN POLE OWNED BY APS	00050092

aps ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS				
BY	LDR.	MGR.	DATE	REV.
KLS	B. BOOKER	R. CANDRA	02/2016	12

LIGHTS ARCHITECTURAL ON 5" SQUARE BROWN PAINTED STEEL POLE DIRECT BURY

SH 1 OF 2

8030

aps ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS

BY	LDR.	MGR.	DATE	REV.
KLS	B. BOOKER	R. CANDRA	02/2016	12

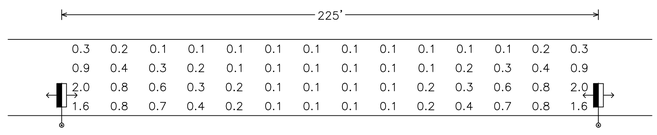
LIGHTS ARCHITECTURAL ON 5" SQUARE BROWN PAINTED STEEL POLE DIRECT BURY

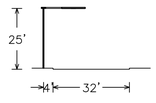
SH 2 OF 2

8030

TYPICAL LOCAL STREET CALCULATION

ILLUMINANCE METHOD







43W LED 4,800 LUMEN
Type II Distribution, 2' Mast arm
candela file 'ERLC_05A430_____-120-277V.IES'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 43
mounting height= 25 ft
number locations= 2, number luminaires= 2
kw all locations= 0.1

Roadway Grid
56 points at z=0, sp 16.071ft by 8ft
HORIZONTAL FOOTCANDLES

Average	0.4
Maximum	2.0
Minimum	0.1
Avg:Min	3.96
Max:Min	20.00
Coef Var	1.16
UnifGrad	2.50

LUMINAIRE TABLE

DARK BRONZE ROADWAY SCALEABLE LED 3000K

LIGHT CODE	COLOR	APN	WATTS	VOLTS	INITIAL LUMENS	CATALOG #
RL40	DKBZ	00141047	32	120/208/240/277	3,900	ERLC004B430ADKBZGLRV1013
RL41		00141048	43	120/208/240/277	4,800	ERLC005A430ADKBZGLRV1013
RL42		00141049	71	120/208/240/277	7,800	ERL1008C330ADKBZGLRX162
RL33		00141050	96	120/208/240/277	11,000	ERLH011C330ADKBZGLV1108
RL44		00141051	174	120/208/240/277	20,100	ERL2021C330ADKBZGLR113

WRIGHT ENGINEERING
PROJECT NO:
22359
DESIGN BY: BDS
DRAWN BY: BDS
CHECKED BY: AMB

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:

SURPRISE, ARIZONA
ASANTE PLANNING AREA 3
UNIT 3.13

STREET LIGHT DETAILS

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	DEC 2022	1ST SUBMITTAL
2	MAR 2023	2ND SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M. BOWERS
3-7-23
Date Signed
Expires 9-30-25

DRAWING NO:
SL3
OF 3

FS23-0038

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

ASANTE PLANNING AREA
UNIT 4.9
STREET LIGHT DESIGN

STREET LIGHTING REQUIREMENTS

5.00 GENERAL NOTES:

THE FOLLOWING INFORMATION IS PROVIDED TO EMPHASIZE CRITICAL WORK AND IS INTENDED TO SUPPLEMENT THE SPECIFICATIONS. SHOULD THERE BE A CONFLICT WITH THE SPECIFICATIONS, THIS DOCUMENT SHALL TAKE PRECEDENCE.

ALTERNATES SHALL BE PRE-APPROVED BY THE CITY ENGINEERING MANAGER. APPROVAL OF ALTERNATE PRODUCTS SHALL BE ON AN EQUAL BASIS WITH THE PRODUCT SPECIFIED AND SHALL BE SUBMITTED A MINIMUM OF TEN (10) DAYS PRIOR TO BID OPENING. STRUCTURAL CALCULATIONS SHALL BE FURNISHED FOR ALTERNATE PRODUCTS AND CERTIFIED BY A STRUCTURAL ENGINEER, REGISTERED IN THE STATE OF ARIZONA. LUMINAIRES AND LAMPS SHALL MEET OR EXCEED THE PHOTOMETRIC, ELECTRICAL, AND MECHANICAL REQUIREMENTS FOR THE SPECIFIED PRODUCTS.

THE CONTRACTOR SHALL COMPLY WITH STATE AND CITY STATUTES, AND MANUFACTURER'S RECOMMENDATIONS.

THE SUBMITTAL PACKAGE SHALL CONSIST OF THREE (3) COPIES OF EQUIPMENT/MATERIAL TO BE INSTALLED AND SHALL BE BOUND/STAPLED IN A FOLDER AND SUBMITTED AT THE TIME OF PERMIT APPLICATION.

PRIOR TO SUBMITTING A PROPOSAL, THE BIDDER SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS AND VISIT THE CONSTRUCTION SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL OPERATE AND WHICH WILL IN ANY WAY AFFECT THE WORK UNDER THE CONTRACT. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN THIS CONNECTION IN THE BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLIGENCE ON HIS PART.

PRIOR TO ORDERING ANY MATERIALS OR DOING ANY WORK, THE CONTRACTOR SHOULD VERIFY DIMENSIONS AT THE SITE. IMMEDIATELY REPORT DIFFERENCES TO THE ENGINEERING MGR. AND SHOULD NOT PROCEED WITH WORK UNTIL THE ENGINEERING MGR. RENDERS A DECISION. NO EXTRA CHARGES OR COMPENSATION WILL BE ALLOWED FOR DIFFERENCES IN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE DRAWINGS.

5.01 GENERAL:

THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH ALL LICENSING REQUIREMENTS SET FORTH BY THE STATE REGISTRAR OF CONTRACTORS OFFICE TO PERFORM WORK RELATING TO STREET LIGHT INSTALLATION IN THE CITY RIGHT-OF-WAY.

ONE PROJECT UNDERGROUND UTILITIES (RIGHT OF WAY) PERMIT AND ONE STREETLIGHT PERMIT FOR EACH STREET LIGHT POLE SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

5.02 WORKING / "AS BUILT" PLANS:

ACCEPTANCE OF THE COMPLETED IMPROVEMENTS WILL NOT BE GIVEN UNTIL 4 MIL PHOTO MYLAR REPRODUCIBLE "AS BUILT" PLANS HAVE BEEN SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

5.03 LIGHT POLES:

LIGHT POLES SHALL BE INSTALLED PLUMB, BE ADJUSTED TO PROVIDE PROPER ALIGNMENT TO THE ROADWAY BEING LIGHTED AND BE PROPERLY GROUNDED WHEN THE INSTALLATION IS COMPLETE.

5.04 EMBEDMENT:

DIRECT BURIED POLES SHALL BE SET IN A TWELVE (12) INCH AUGURED HOLE DEPTH AS SPECIFIED IN UNDISTURBED EARTH. POLE SHALL BE SET PLUMB IN TWO DIRECTIONS 90 DEGREES APART. HAND TAMPING OF ABC BACKFILL WITH PNEUMATIC OR VIBRATING EQUIPMENT IS THE ACCEPTABLE METHOD OF COMPACTION. BACKFILL SHALL BE COMPACTED TO 85% OF MAXIMUM DENSITY AS DEFINED BY ASTM D-2922 AND D-3017. A GROUND ROD SHALL BE INSTALLED ADJACENT TO PULL BOX IN UNDISTURBED SOIL AND A LEAD IN COPPER BOND WIRE (#6) SHALL BE INSTALLED IN 1" CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT (OR EQUAL) FOR POLE GROUNDING.

SURPLUS EXCAVATION SHALL BE DISPOSED OF BY THE CONTRACTOR.

5.05 LUMINAIRES:

LUMINAIRES SHALL BE INSTALLED LEVEL AND INCLUDE A LAMP AND PHOTOCELL. CONTRACTOR SHALL ASSURE THAT THE LUMINAIRES SHALL BE FREE OF DUST, DIRT OR ANYTHING THAT WOULD IMPAIR THE OUTPUT OF THE LIGHT BEFORE HE LEAVES THE SITE.

LUMINAIRES FURNISHED WITH MULTI-TAP BALLASTS SHALL BE REWIRED OR RECONNECTED TO MATCH THE VOLTAGE SUPPLIED BY THE ELECTRIC UTILITY COMPANY.

5.06 WIRING:

WIRING SHALL BE INSTALLED PER UTILITY STANDARDS.

5.07 GROUNDING:

EACH POLE SHALL HAVE A 8' X 5/8" COPPER CLAD GROUND ROD DRIVEN ADJACENT TO PULL BOX. A #6 BARE COPPER LEAD FROM THE GROUND ROD IN PULL BOX TO LANDING LUG IN STREET LIGHT POLE HAND HOLE.

5.08 PULL BOXES:

EXCAVATION FOR PULL BOXES AND MATERIAL SPECIFICATION SHALL BE PER THE ELECTRIC UTILITY COMPANY STANDARDS.

5.09 TRENCH

TRENCH SHALL BE INSTALLED PER THE UTILITY COMPANY STANDARDS.

THE USE OF A COMMON ELECTRIC UTILITY COMPANY TRENCH IS PERMITTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANY FOR COORDINATION OF TRENCHING AND THE INSTALLATION OF CONDUIT.

CONDUIT SHALL BE INSTALLED AT THE DEPTH SPECIFIED ON THE PLANS. CONDUIT SHALL BE 1 INCH CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT OR EQUAL. CONDUIT MUST BE UL RATED AND SUITABLE FOR UNDERGROUND USE.

CONNECTIONS SHALL BE PER UTILITY STANDARDS.

5.12 LIGHT POLE IDENTIFICATION:

THE CONTRACTOR SHALL FURNISH AND INSTALL A NUMBER ON EACH LIGHT POLE. STREET LIGHT POLE IDENTIFICATION AND SPECIFICATIONS WILL BE PROVIDED BY THE CITY OF SURPRISE.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO RESTORE ALL PROPERTY, LANDSCAPING, PAVING AND DRIVEWAYS THAT ARE DISTURBED DURING STREET LIGHT CONSTRUCTION TO THEIR ORIGINAL CONDITION IN CONFORMANCE WITH "MAG" SPECIFICATION SECTION 107.9.

THE DEVELOPER SHALL BE RESPONSIBLE FOR FURNISHING ALL PERSONNEL AND EQUIPMENT TO SUCCESSFULLY PERFORM THE FOLLOWING TEST.

PRIOR TO ACCEPTANCE, THE DEVELOPER SHALL ENERGIZE AND OPERATE THE ENTIRE ROADWAY LIGHTING SYSTEM, FROM SUNSET TO SUNRISE FOR TWO CONSECUTIVE DAYS WITHOUT INTERRUPTION OR FAILURE. IF A LAMP OR BALLAST SHOULD FAIL, IT SHALL BE IMMEDIATELY REPLACED.

THE CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE ENGINEERING MANAGER, AGAINST IMPERFECT WORKMANSHIP, FAILURE, MALFUNCTION OF MATERIALS AND/OR EQUIPMENT DUE TO FAULTY OR IMPERFECT WORKMANSHIP. THIS GUARANTEE IS TO BE IN WRITING TO THE CITY AT THE TIME OF ISSUING FINAL ACCEPTANCE. WORK FOUND TO BE DEFECTIVE WITHIN THE WARRANTY PERIOD SHALL BE REPLACED WITHOUT COST TO THE CITY.

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 REPLACEDIN 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.

CITY OF SURPRISE APPROVAL

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.

CITY OF SURPRISE ENGINEER **DATE**

UTILITIES WITHIN OR AFFECTED BY THE PROJECT	
UTILITY CONTACT	DATE SUBMITTED
ARIZONA PUBLIC SERVICE	10/26/2022
CENTURY LINK	10/26/2022
COX COMMUNICATIONS	10/26/2022
SOUTHWEST GAS	10/26/2022

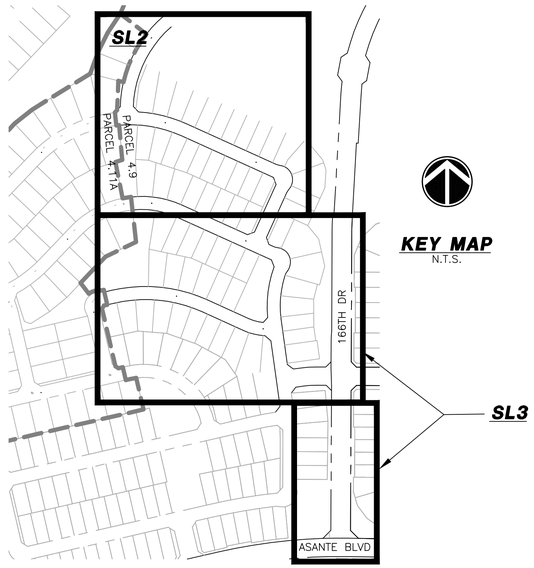
NOTE

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

B. THE ELECTRICAL/MAINTENANCE COSTS OF ALL STREET LIGHTS ON LOCAL AND COLLECTOR STREETS ARE TO BE PAID BY THE ADJACENT PROJECT OR THE ADJACENT DEVELOPMENT'S STREET LIGHT IMPROVEMENT DISTRICT (SLID). THE ELECTRICAL / MAINTENANCE COSTS OF ALL STREET LIGHTS ON ARTERIAL STREETS ARE TO BE BILLED TO THE CITY OF SURPRISE'S ENERGY BILL.

LED NOTE

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.



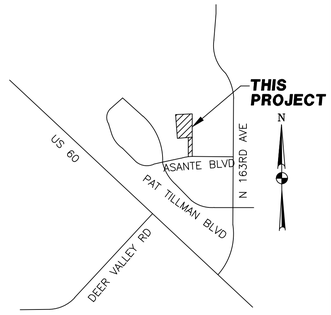
KEY MAP
N.T.S.

POWER CONDUIT NOTE

TRENCH & CONDUIT RUNS FROM STREET LIGHT PULL BOX TO POINT OF ELECTRICAL SERVICE WILL BE DESIGNED BY THE POWER COMPANY, AND ARE SHOWN ON POWER COMPANY PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THESE PLANS FROM DEVELOPER/OWNER, AND INCLUDE THESE RUNS IN THE BID. COORDINATE THIS WORK WITH THE POWER COMPANY.

CIVIL ENGINEER
HILGART WILSON
2141 E HIGHLAND AVE, STE. 250
PHOENIX, AZ 85016
PHONE: (602) 490-0535
FAX: (602) 368- 2436
CONTACT: DIEGO ORTIZ, PE
EMAIL: DORTIZ@HILGARTWILSON.COM

OWNER
LENNAR COMMUNITIES DELEOPMENT, LLC
1665 W. ALMEDA DR STE 130
TEMPE, AZ 85282-3000
CONTACT: JORGE VILLASENOR



VICINITY MAP
N.T.S.

SHEET INDEX

COVER SHEET	SL1
STREET LIGHT PLAN	SL2
STREET LIGHT PLAN	SL3
DETAILS	SL4

Call at least two full working days before you begin excavation. ARIZONA 811 Arizona Blue Stake, Inc. Dial 8-1-1 or 1-800-STAKE-IT (782-5348) In Maricopa County: (602) 263-1100

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H:\2022\22359-Asante 900\22359-SL-4.9.dwg

WRIGHT ENGINEERING PROJECT NO:
22359

DESIGN BY: AJA
DRAWN BY: AJA
CHECKED BY: AMB

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: SURPRISE, ARIZONA
ASANTE PLANNING AREA
UNIT 4.9

TITLE: STREET LIGHT COVER SHEET

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	OCT 2022	1ST SUBMITTAL
2	FEB 2022	2ND SUBMITTAL

Registered Professional Engineer (Retired) Certificate No. 46691 ADAM M. BOWERS 2-28-23 State of Arizona Expires 9-30-25

DRAWING NO:
SL1
OF 4

FS22-1541

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H:\2022\22359-Asante 900\22359-SL-4.9.dwg



MATCHLINE 'A'
SEE SHEET SL3

LEGEND

- 4,800 LUMEN LED STREET LIGHT, SQUARE POLE
- 7,800 LUMEN LED STREET LIGHT, SQUARE POLE
- EXISTING STREET LIGHT
- PULL BOX
- NEW CONDUIT RUN
- FIRE HYDRANT
- PROPOSED PER ADJACENT PLAN SET

CONSTRUCTION NOTES

1. INSTALL APS PULL BOX NEXT TO POLE. 1" CONDUIT WITH (2) #14 TYPE THHN/THWN & (1) #14 BARE BOND FROM PULL BOX TO FUSE HOLDER IN STREET LIGHT PER APS DETAILS & SPECIFICATIONS.
2. 43W LED (4,800 LUMEN) LUMINAIRE (SEE LUMINAIRE TABLE). PHOTOCELL, 30'-6" DIRECT BURIED POLE, 2' MAST ARM PER APS DETAIL 8030 (SEE SHEET SL4). (2) #14 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. WIRING, FUSING, & GROUNDING PER APS DETAILS & SPECIFICATIONS.
3. 71W LED (7,800 LUMEN) LUMINAIRE (SEE LUMINAIRE TABLE). PHOTOCELL, 38'-0" DIRECT BURIED POLE, 4' MAST ARM PER APS DETAIL 8030 (SEE SHEET SL3). (2) #14 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. WIRING, FUSING, & GROUNDING PER APS DETAILS & SPECIFICATIONS.
4. REMOVE EXISTING STREETLIGHT POLE AND SALVAGE TO CITY OF SURPRISE. COMPLETELY REMOVE FOUNDATION AND BACKFILL.

GRAPHIC SCALE
40 20 0 20 40 80
1 INCH = 40 FEET

Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

WRIGHT ENGINEERING PROJECT NO:
22359
DESIGN BY: AJA
DRAWN BY: AJA
CHECKED BY: AMB

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: **SURPRISE, ARIZONA**
ASANTE PLANNING AREA
UNIT 4.9

TITLE: **STREET LIGHT PLAN**

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	OCT 2022	1ST SUBMITTAL
2	FEB 2022	2ND SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No. 46691
ADAM M. BOWERS
Date Signed 1-31-23
Expires 9-30-25

DRAWING NO:
SL2
OF 4

FS22-1541

CONSTRUCTION NOTES

1. INSTALL APS PULL BOX NEXT TO POLE. 1" CONDUIT WITH (2) #14 TYPE THHN/THWN & (1) #14 BARE BOND FROM PULL BOX TO FUSE HOLDER IN STREET LIGHT PER APS DETAILS & SPECIFICATIONS.
2. 43W LED (4,800 LUMEN) LUMINAIRE (SEE LUMINAIRE TABLE), PHOTOCELL, 30'-6" DIRECT BURIED POLE, 2' MAST ARM PER APS DETAIL 8030 (SEE SHEET SL4). (2) #14 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. WIRING, FUSING, & GROUNDING PER APS DETAILS & SPECIFICATIONS.
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LEGEND

- 4,800 LUMEN LED STREET LIGHT, SQUARE POLE
- 7,800 LUMEN LED STREET LIGHT, SQUARE POLE
- EXISTING STREET LIGHT
- PULL BOX
- NEW CONDUIT RUN
- FIRE HYDRANT
- PROPOSED PER ADJACENT PLAN SET

GRAPHIC SCALE
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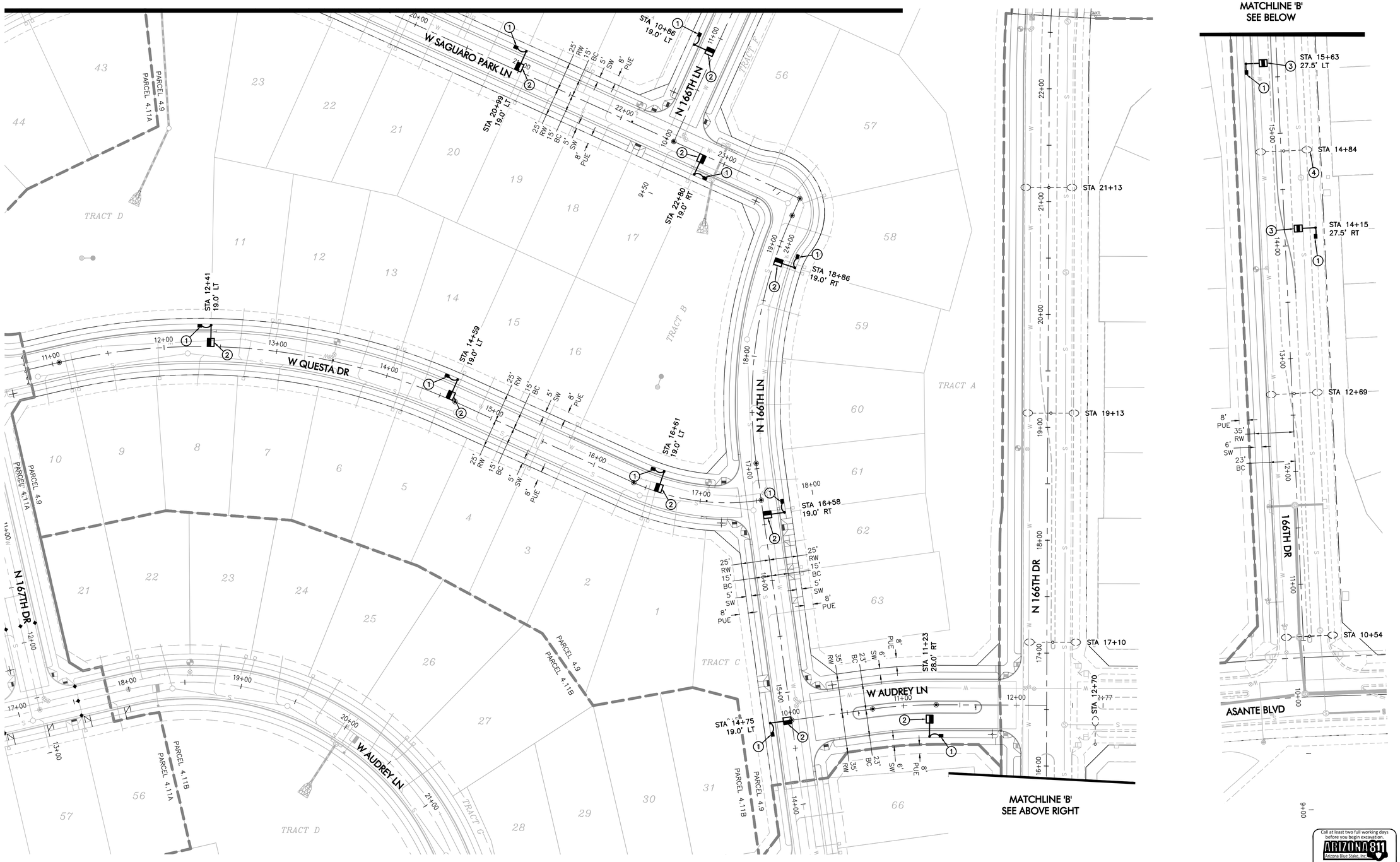
1 INCH = 40 FEET



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WRIGHT ENGINEERING PROJECT NO: **22359**
DESIGN BY: AJA
DRAWN BY: AJA
CHECKED BY: AMB

WRIGHT engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE • CHANDLER, ARIZONA 85225
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PROJECT: SURPRISE, ARIZONA
ASANTE PLANNING AREA
UNIT 4.9

TITLE: STREET LIGHT PLAN

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	OCT 2022	1ST SUBMITTAL
2	FEB 2022	2ND SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No. 46691
ADAM M. BOWERS
Date Planed 2-16-23
Expires 9-30-25

DRAWING NO: **SL3**
OF 4

FS22-1541

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in Maricopa County: (602) 263-1100

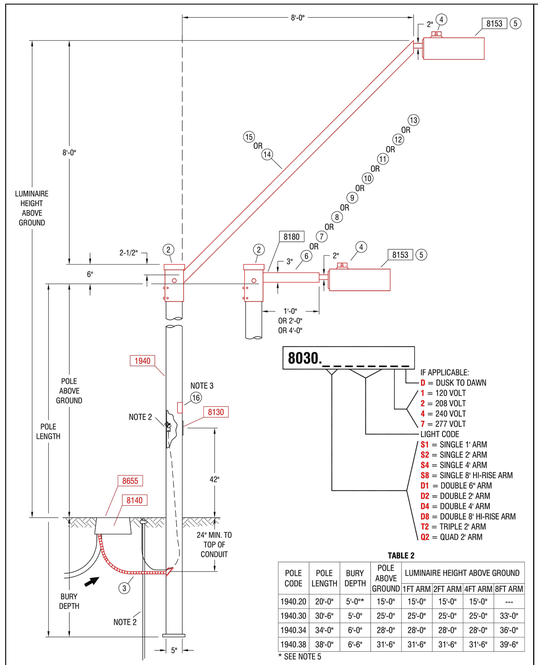


TABLE 2

POLE CODE	POLE LENGTH	BURY DEPTH	POLE ABOVE GROUND	LUMINAIRE HEIGHT ABOVE GROUND			
				1FT ARM	2FT ARM	4FT ARM	8FT ARM
1940.20	20'-0"	5'-0"*	15'-0"	15'-0"	15'-0"	15'-0"	---
1940.30	30'-6"	5'-0"	25'-0"	25'-0"	25'-0"	25'-0"	33'-0"
1940.34	34'-0"	6'-0"	28'-0"	28'-0"	28'-0"	28'-0"	36'-0"
1940.38	38'-0"	6'-6"	31'-6"	31'-6"	31'-6"	31'-6"	39'-6"

* SEE NOTE 5

NOTES:

1. ADJUST PHOTO EYE TO FACE NORTH.
2. A GROUND ROD IS PROVIDED WITH EACH STREET LIGHT POLE. WHERE A GROUND ROD CANNOT BE DRIVEN, ALTERNATE GROUND SHALL BE USED. SEE 2449 THRU 2460 FOR APPROVED ALTERNATES.
3. SIGN, "NOTICE THIS POLE IS OWNED AND MAINTAINED BY APS. DISCONNECT INSIDE", IS REQUIRED ON ALL DUSK-TO-DAWN AND AREA LIGHTING APPLICATIONS.
4. POLES THAT HAVE MORE THAN ONE LUMINAIRE REQUIRE A SEPARATE CIRCUIT WITH FUSING FROM THE J-BOX TO EACH LUMINAIRE.
5. USING THE 20'-0" POLE TO MATCH THE 16'-0" PEDESTRIAN LIGHT MOUNTING HEIGHT REDUCE POLE BURY DEPTH TO 4'-0".
6. THE BROWN PHOTO CONTROL IS A FAIL OFF CONTROL AND SHALL BE USED WITH ALL INDUCTION AND LED LUMINAIRES.
7. ON 277 VOLT STREET LIGHT CIRCUITS, INSTALL A "277 VOLT" MICARTA TAG ON CABLE IN J-BOX. TAG PROVIDED BY SPEC 8129.
8. THE LUMINAIRE SHOWN IS RECOMMENDED FOR THIS MOUNTING HEIGHT. SEE 8153 FOR ADDITIONAL BROWN ARCHITECTURAL LUMINAIRES.
9. THE TWO ARMED TENON BRACKET POSITIONS THE DOUBLE ARM 180 DEGREES APART.
10. TO ACCOMMODATE LESS THAT THE SPECIFIED LUMINAIRE MOUNTING HEIGHT, A SHOP ORDER IS REQUIRED TO HAVE A PORTION FROM THE TOP OF THE POLE CUT OFF. THE TENON ARM BRACKET SLIDES OVER AND COVERS THE CUT PORTION OF THE POLE.
11. IN-LINE FUSE FOR UNDERGROUND FEEDS, SEE 8130-8140.
12. FOR PEDESTRIAN ONLY APPLICATIONS SEE 8030.

TABLE 1

LIGHT CODE	APN	WATTS	K	TYPE	VOLTS	INITIAL LUMENS	MOUNTING HEIGHT
AH16	00099450	100	2100	HPS	120/208/240/277	9,500	SEE TABLE 2
AH17	00099451	150			120/208/240/277	16,000	
AH18	00099452	250			120/208/240/277	30,000	
AH19	00099454	400			120/208/240/277	50,000	
RN40	00128255	55	2700	IND	120/208/240/277	3,900	
RN41	00126667	100	5000		120/208/240/277	8,400	
RN42	00132846	150			120/208/240/277	10,200	
RN43	00132850	150			120/208/240/277	13,000	
RN44	00121153	200			120/208/240/277	15,250	
RN45	00116527	250			120/208/240/277	22,500	
RL40	00141047	32	3000	LED S	120/208/240/277	3,800	
RL41	00141048	41			120/208/240/277	4,800	
RL42	00141049	88			120/208/240/277	8,200	
RL43	00141050	108			120/208/240/277	11,000	
RL44	00141051	167			120/208/240/277	19,000	
RL50	00128251	45	4000	LED S	120/208/240/277	4,300	
RL52	00126804	60			120/208/240/277	5,400	
RL53	00126805	95			120/208/240/277	8,600	
RL54	00126806	113			120/208/240/277	10,000	
RL56	00128365	257			120/208/240/277	19,200	
AL56	00113722	82	4000	LED M	120/208/240/277	7,100	
AL58	00129911	72			120/208/240/277	8,300	
AL60	00113723	119			120/208/240/277	12,900	
AL61	00116525	119R*			120/208/240/277	12,900	
AL62	00116526	119L*			120/208/240/277	12,900	
AL65	00107462	144			120/208/240/277	15,400	
AS20	33806772	55	1700	LPS	120/240	8,000	
AS21	33806774	90			120/240	13,500	
AS22	33806776	135			120/240	22,500	
AS23	33806778	180			120/240	33,000	

* CALL STANDARDS ENGINEERING FOR APPLICATION

MATERIAL LIST

ITEM	CODE	8030.S1 QTY	8030.S2 QTY	8030.S4 QTY	8030.S8 QTY	8030.D1 QTY	8030.D2 QTY	8030.D4 QTY	8030.D8 QTY	8030.T2 QTY	8030.Q2 QTY	DESCRIPTION	APN
1		-	-	-	-	-	-	-	-	1	-	BRACKET ARCH SLIP BOLTED	00092251
2		1	1	1	1	1	1	1	1	1	1	CAP STLT SQ-P 5.5" ARM	00100036
3		10	10	10	10	10	10	10	10	10	10	CONDUIT 1" PVC FLEX CORR	32900891
4		1	1	1	1	2	2	2	2	3	4	CONTROL PHOTO MULTI BR-20	00073241
5		1	1	1	1	2	2	2	2	3	4	LUMINAIRE - SEE TABLE 1	
6		-	-	-	-	1	-	-	-	-	-	MAST ARM STLT 3" SQ X 1' DBL	00121154
7		1	-	-	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 1' SGL	00088370
8		-	-	-	-	-	1	-	-	-	-	MAST ARM STLT 3"SQ X 2' DBL	33701117
9		-	-	-	-	-	-	-	-	-	1	MAST ARM STLT 3"SQ X 2' QUAD	00052665
10		-	1	-	-	-	-	-	-	1	-	MAST ARM STLT 3"SQ X 2' SGL	33701116
11		-	-	-	-	-	-	-	-	1	-	MAST ARM STLT 3"SQ X 2' TPL	00052664
12		-	-	-	-	-	-	1	-	-	-	MAST ARM STLT 3"SQ X 4' DBL	00073267
13		-	-	1	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 4' SGL	00061738
14		-	-	-	1	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 8' SGL	33701120
15		-	-	-	-	-	-	-	2	-	-	MAST ARM STLT 8' BOLT-ON	00092252
16		1	1	1	1	1	1	1	1	1	1	SIGN POLE OWNED BY APS	00050092

aps ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS				
BY	LDR.	MGR.	DATE	REV.
KLS	B. BOOKER	R. CANDRA	02/2016	12

LIGHTS ARCHITECTURAL ON 5" SQUARE BROWN PAINTED STEEL POLE DIRECT BURY

SH 1 OF 2 — 8030

aps ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS

BY | LDR. | MGR. | DATE | REV.
KLS | B. BOOKER | R. CANDRA | 02/2016 | 12

LIGHTS ARCHITECTURAL ON 5" SQUARE BROWN PAINTED STEEL POLE DIRECT BURY

SH 2 OF 2 — 8030

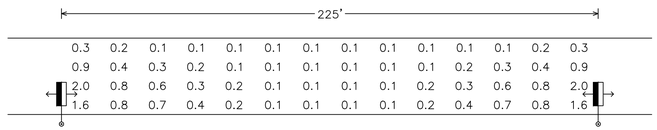
LUMINAIRE TABLE

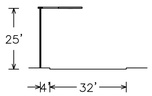
DARK BRONZE ROADWAY SCALEABLE LED 3000K

LIGHT CODE	COLOR	APN	WATTS	VOLTS	INITIAL LUMENS	CATALOG #
RL40	DKBZ	00141047	32	120/208/240/277	3,900	ERLC004B430ADKBZGLRV1013
RL41		00141048	43	120/208/240/277	4,800	ERLC005A430ADKBZGLRV1013
RL42		00141049	71	120/208/240/277	7,800	ERL1008C330ADKBZGLRX162
RL33		00141050	96	120/208/240/277	11,000	ERLH011C330ADKBZGLV1108
RL44		00141051	174	120/208/240/277	20,100	ERL2021C330ADKBZGLR113

TYPICAL LOCAL STREET CALCULATION

ILLUMINANCE METHOD







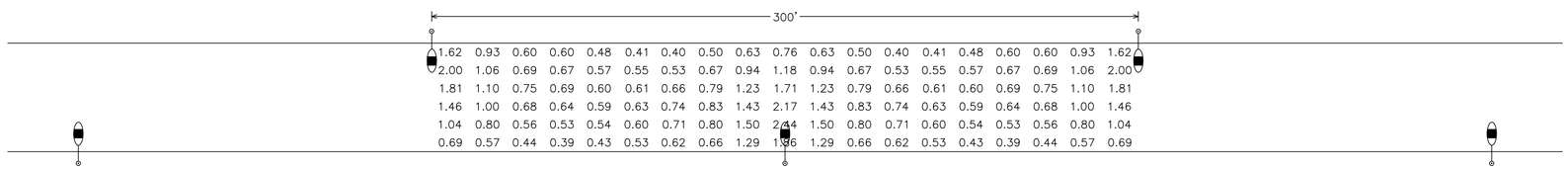
43W LED 4,800 LUMEN
Type II Distribution, 2' Mast arm
candela file 'ERLC_05A430_____-120-277V.IES'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 43
mounting height= 25 ft
number locations= 2, number luminaires= 2
kw all locations= 0.1

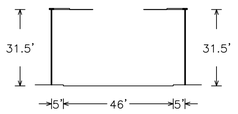
Roadway Grid
56 points at z=0, sp 16.071ft by 8ft
HORIZONTAL FOOTCANDLES

Average	0.4
Maximum	2.0
Minimum	0.1
Avg:Min	3.96
Max:Min	20.00
Coef Var	1.16
UnifGrad	2.50

TYPICAL COLLECTOR STREET CALCULATION

ILLUMINANCE METHOD





7800 LUMEN
Type 3 Distribution
4' Mast Arm
candela file 'ERL1_09B330_____.IES'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 71
mounting height= 31.5 ft
number locations= 5, number luminaires= 5
kw all locations= 0.4

Roadway Grid
114 points at z=0, sp 15.789ft by 7.667ft
HORIZONTAL FOOTCANDLES

Average	0.84
Maximum	2.44
Minimum	0.39
Avg:Min	2.15
Max:Min	6.26
Coef Var	0.51
UnifGrad	1.95

WRIGHT ENGINEERING PROJECT NO: **22359**

DESIGN BY: AJA
DRAWN BY: AJA
CHECKED BY: AMB

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165 EAST CHILTON DRIVE • CHANDLER, ARIZONA 85225
PHONE 480.497.5829 • FAX 480.497.5807
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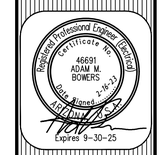
PROJECT: SURPRISE, ARIZONA
ASANTE PLANNING AREA UNIT 4.9

TITLE: STREET LIGHT DETAILS

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	OCT 2022	1ST SUBMITTAL
2	FEB 2022	2ND SUBMITTAL



DRAWING NO: **SL4** OF 4

FS22-1541

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ASANTE PLANNING AREA 3

UNIT 4.10

STREET LIGHT DESIGN

STREET LIGHTING REQUIREMENTS

5.00 GENERAL NOTES:

THE FOLLOWING INFORMATION IS PROVIDED TO EMPHASIZE CRITICAL WORK AND IS INTENDED TO SUPPLEMENT THE SPECIFICATIONS. SHOULD THERE BE A CONFLICT WITH THE SPECIFICATIONS, THIS DOCUMENT SHALL TAKE PRECEDENCE.

ALTERNATES SHALL BE PRE-APPROVED BY THE CITY ENGINEERING MANAGER. APPROVAL OF ALTERNATE PRODUCTS SHALL BE ON AN EQUAL BASIS WITH THE PRODUCT SPECIFIED AND SHALL BE SUBMITTED A MINIMUM OF TEN (10) DAYS PRIOR TO BID OPENING. STRUCTURAL CALCULATIONS SHALL BE FURNISHED FOR ALTERNATE PRODUCTS AND CERTIFIED BY A STRUCTURAL ENGINEER, REGISTERED IN THE STATE OF ARIZONA. LUMINAIRES AND LAMPS SHALL MEET OR EXCEED THE PHOTOMETRIC, ELECTRICAL, AND MECHANICAL REQUIREMENTS FOR THE SPECIFIED PRODUCTS.

THE CONTRACTOR SHALL COMPLY WITH STATE AND CITY STATUTES, AND MANUFACTURER'S RECOMMENDATIONS.

THE SUBMITTAL PACKAGE SHALL CONSIST OF THREE (3) COPIES OF EQUIPMENT/MATERIAL TO BE INSTALLED AND SHALL BE BOUND/STAPLED IN A FOLDER AND SUBMITTED AT THE TIME OF PERMIT APPLICATION.

PRIOR TO SUBMITTING A PROPOSAL, THE BIDDER SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS AND VISIT THE CONSTRUCTION SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL OPERATE AND WHICH WILL IN ANY WAY AFFECT THE WORK UNDER THE CONTRACT. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN THIS CONNECTION IN THE BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLIGENCE ON HIS PART.

PRIOR TO ORDERING ANY MATERIALS OR DOING ANY WORK, THE CONTRACTOR SHOULD VERIFY DIMENSIONS AT THE SITE. IMMEDIATELY REPORT DIFFERENCES TO THE ENGINEERING MGR. AND SHOULD NOT PROCEED WITH WORK UNTIL THE ENGINEERING MGR. RENDERS A DECISION. NO EXTRA CHARGES OR COMPENSATION WILL BE ALLOWED FOR DIFFERENCES IN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE DRAWINGS.

5.01 GENERAL:

THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH ALL LICENSING REQUIREMENTS SET FORTH BY THE STATE REGISTRAR OF CONTRACTORS OFFICE TO PERFORM WORK RELATING TO STREET LIGHT INSTALLATION IN THE CITY RIGHT-OF-WAY.

ONE PROJECT UNDERGROUND UTILITIES (RIGHT OF WAY) PERMIT AND ONE STREETLIGHT PERMIT FOR EACH STREET LIGHT POLE SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

5.02 WORKING / "AS BUILT" PLANS:

ACCEPTANCE OF THE COMPLETED IMPROVEMENTS WILL NOT BE GIVEN UNTIL 4 MIL PHOTO MYLAR REPRODUCIBLE "AS BUILT" PLANS HAVE BEEN SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

5.03 LIGHT POLES:

LIGHT POLES SHALL BE INSTALLED PLUMB, BE ADJUSTED TO PROVIDE PROPER ALIGNMENT TO THE ROADWAY BEING LIGHTED AND BE PROPERLY GROUNDED WHEN THE INSTALLATION IS COMPLETE.

5.04 EMBEDMENT:

DIRECT BURIED POLES SHALL BE SET IN A TWELVE (12) INCH AUGURED HOLE DEPTH AS SPECIFIED IN UNDISTURBED EARTH. POLE SHALL BE SET PLUMB IN TWO DIRECTIONS 90 DEGREES APART. HAND TAMPING OF ABC BACKFILL WITH PNEUMATIC OR VIBRATING EQUIPMENT IS THE ACCEPTABLE METHOD OF COMPACTION. BACKFILL SHALL BE COMPACTED TO 85% OF MAXIMUM DENSITY AS DEFINED BY ASTM D-2922 AND D-3017. A GROUND ROD SHALL BE INSTALLED ADJACENT TO PULL BOX IN UNDISTURBED SOIL AND A LEAD IN COPPER BOND WIRE (#6) SHALL BE INSTALLED IN 1" CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT (OR EQUAL) FOR POLE GROUNDING.

SURPLUS EXCAVATION SHALL BE DISPOSED OF BY THE CONTRACTOR.

5.05 LUMINAIRES:

LUMINAIRES SHALL BE INSTALLED LEVEL AND INCLUDE A LAMP AND PHOTOCELL. CONTRACTOR SHALL ASSURE THAT THE LUMINAIRES SHALL BE FREE OF DUST, DIRT OR ANYTHING THAT WOULD IMPAIR THE OUTPUT OF THE LIGHT BEFORE HE LEAVES THE SITE.

LUMINAIRES FURNISHED WITH MULTI-TAP BALLASTS SHALL BE REWIRED OR RECONNECTED TO MATCH THE VOLTAGE SUPPLIED BY THE ELECTRIC UTILITY COMPANY.

5.06 WIRING:

WIRING SHALL BE INSTALLED PER UTILITY STANDARDS.

5.07 GROUNDING:

EACH POLE SHALL HAVE A 8' X 5/8" COPPER CLAD GROUND ROD DRIVEN ADJACENT TO PULL BOX. A #6 BARE COPPER LEAD FROM THE GROUND ROD IN PULL BOX TO LANDING LUG IN STREET LIGHT POLE HAND HOLE.

5.08 PULL BOXES:

EXCAVATION FOR PULL BOXES AND MATERIAL SPECIFICATION SHALL BE PER THE ELECTRIC UTILITY COMPANY STANDARDS.

5.09 TRENCH

TRENCH SHALL BE INSTALLED PER THE UTILITY COMPANY STANDARDS.

THE USE OF A COMMON ELECTRIC UTILITY COMPANY TRENCH IS PERMITTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANY FOR COORDINATION OF TRENCHING AND THE INSTALLATION OF CONDUIT.

CONDUIT SHALL BE INSTALLED AT THE DEPTH SPECIFIED ON THE PLANS. CONDUIT SHALL BE 1 INCH CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT OR EQUAL. CONDUIT MUST BE UL RATED AND SUITABLE FOR UNDERGROUND USE.

CONNECTIONS SHALL BE PER UTILITY STANDARDS.

5.12 LIGHT POLE IDENTIFICATION:

THE CONTRACTOR SHALL FURNISH AND INSTALL A NUMBER ON EACH LIGHT POLE. STREET LIGHT POLE IDENTIFICATION AND SPECIFICATIONS WILL BE PROVIDED BY THE CITY OF SURPRISE.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO RESTORE ALL PROPERTY, LANDSCAPING, PAVING AND DRIVEWAYS THAT ARE DISTURBED DURING STREET LIGHT CONSTRUCTION TO THEIR ORIGINAL CONDITION IN CONFORMANCE WITH "MAG" SPECIFICATION SECTION 107.9.

THE DEVELOPER SHALL BE RESPONSIBLE FOR FURNISHING ALL PERSONNEL AND EQUIPMENT TO SUCCESSFULLY PERFORM THE FOLLOWING TEST.

PRIOR TO ACCEPTANCE, THE DEVELOPER SHALL ENERGIZE AND OPERATE THE ENTIRE ROADWAY LIGHTING SYSTEM, FROM SUNSET TO SUNRISE FOR TWO CONSECUTIVE DAYS WITHOUT INTERRUPTION OR FAILURE. IF A LAMP OR BALLAST SHOULD FAIL, IT SHALL BE IMMEDIATELY REPLACED.

THE CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE ENGINEERING MANAGER, AGAINST IMPERFECT WORKMANSHIP, FAILURE, MALFUNCTION OF MATERIALS AND/OR EQUIPMENT DUE TO FAULTY OR IMPERFECT WORKMANSHIP. THIS GUARANTEE IS TO BE IN WRITING TO THE CITY AT THE TIME OF ISSUING FINAL ACCEPTANCE. WORK FOUND TO BE DEFECTIVE WITHIN THE WARRANTY PERIOD SHALL BE REPLACED WITHOUT COST TO THE CITY.

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 REPLACEDIN 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.

CITY OF SURPRISE APPROVAL

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.

CITY OF SURPRISE ENGINEER **DATE**

UTILITIES WITHIN OR AFFECTED BY THE PROJECT	
UTILITY CONTACT	DATE SUBMITTED
ARIZONA PUBLIC SERVICE	12/30/2022
CENTURY LINK	12/30/2022
COX COMMUNICATIONS	12/30/2022
SOUTHWEST GAS	12/30/2022

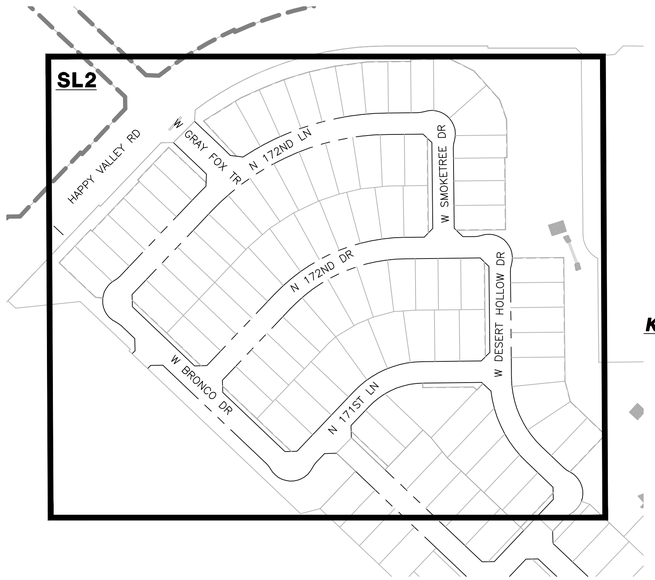
NOTE

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

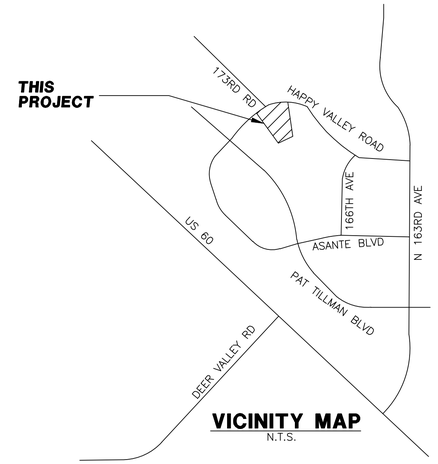
B. THE ELECTRICAL/MAINTENANCE COSTS OF ALL STREET LIGHTS ON LOCAL AND COLLECTOR STREETS ARE TO BE PAID BY THE ADJACENT PROJECT OR THE ADJACENT DEVELOPMENT'S STREET LIGHT IMPROVEMENT DISTRICT (SLID). THE ELECTRICAL / MAINTENANCE COSTS OF ALL STREET LIGHTS ON ARTERIAL STREETS ARE TO BE BILLED TO THE CITY OF SURPRISE'S ENERGY BILL.

LED NOTE

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.



KEY MAP
N.T.S.



VICINITY MAP
N.T.S.

SHEET INDEX

COVER SHEET	SL1
STREET LIGHT PLAN	SL2
DETAILS	SL3

POWER CONDUIT NOTE

TRENCH & CONDUIT RUNS FROM STREET LIGHT PULL BOX TO POINT OF ELECTRICAL SERVICE WILL BE DESIGNED BY THE POWER COMPANY, AND ARE SHOWN ON POWER COMPANY PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THESE PLANS FROM DEVELOPER/OWNER, AND INCLUDE THESE RUNS IN THE BID. COORDINATE THIS WORK WITH THE POWER COMPANY.

CIVIL ENGINEER
HILGART WILSON
2141 E HIGHLAND AVE, STE. 250
PHOENIX, AZ 85016
PHONE: (602) 490-0535
FAX: (602) 368- 2436
CONTACT: DIEGO ORTIZ, PE
EMAIL: DORTIZ@HILGARTWILSON.COM

OWNER
LENNAR COMMUNITIES DELEOPMENT, LLC
1665 W. ALMEDA DR STE 130
TEMPE, AZ 85282-3000
CONTACT: JORGE VILLASENOR

Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348) in Maricopa County: (602) 263-1100

THESE DRAWINGS AND SPECIFICATIONS ARE THE SOLE PROPERTY OF WRIGHT ENGINEERING CORPORATION AND MAY NOT BE REPRODUCED OR MODIFIED FOR ANY USE WITHOUT THE EXPRESS WRITTEN PERMISSION OF WRIGHT ENGINEERING CORPORATION.

H:\2022\22359-Asante 900\22359-SL-4.10.dwg

WRIGHT ENGINEERING PROJECT NO:
22359
DESIGN BY: BDS
DRAWN BY: BDS
CHECKED BY: AMB

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: SURPRISE, ARIZONA
ASANTE PLANNING AREA 3
UNIT 4.10

TITLE: STREET LIGHT COVER SHEET

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	DEC 2022	1ST SUBMITTAL
2	MAR 2023	2ND SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M. BOWERS
Date Signed 1-27-23
Expires 9-30-25

DRAWING NO:
SL1
OF 3

FS23-0086

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LEGEND

- 4,800 LUMEN LED STREET LIGHT, SQUARE POLE
- EXISTING STREET LIGHT
- PULL BOX
- NEW CONDUIT RUN
- FIRE HYDRANT
- PROPOSED STREET LIGHT PER ADJACENT PLAN SET

CONSTRUCTION NOTES

1. INSTALL APS PULL BOX NEXT TO POLE. 1" CONDUIT WITH (2) #14 TYPE THHN/THWN & (1) #14 BARE BOND FROM PULL BOX TO FUSE HOLDER IN STREET LIGHT PER APS DETAILS & SPECIFICATIONS.
2. 43W LED (4,800 LUMEN) LUMINAIRE (SEE LUMINAIRE TABLE), PHOTOCELL, 30'-6" DIRECT BURIED POLE, 2' MAST ARM PER APS DETAIL 8030 (SEE SHEET SL3). (2) #14 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. WIRING, FUSING, & GROUNDING PER APS DETAILS & SPECIFICATIONS.

HAPPY VALLEY ROAD
W GRAY FOX TR
N 172ND LN
W SMOKETREE DR
W DESERT HOLLOW DR
N 172ND DR
W BRONCO TR
W HACKMORE DR
N 171ST LN
N 171ST AVE
TRACT F
PHASE 4.10
PHASE 3.11

STA 10+87 27.5' RT
STA 16+60 18.5' RT
STA 18+52 18.5' RT
STA 12+48 18.5' LT
STA 14+57 26.5' RT
STA 12+71 18.5' RT
STA 10+37 18.5' LT
STA 15+51 18.5' RT
STA 17+78 18.5' RT
STA 14+84 18.5' LT
STA 10+57 18.5' RT
STA 13+15 18.5' RT
STA 10+73 18.5' RT
STA 10+90 18.5' RT
STA 15+03 18.5' LT
STA 12+93 18.5' LT
STA 12+73 18.5' RT
STA 11+18 18.5' LT
STA 10+45 18.5' RT
STA 14+82 18.5' RT
STA 12+71 18.5' RT
STA 10+64 18.5' RT
STA 20+53 18.5' LT

MATCHLINE 'A' SEE BELOW
MATCHLINE 'A' SEE ABOVE

GRAPHIC SCALE
40 20 0 20 40 80
1 INCH = 40 FEET

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WRIGHT ENGINEERING PROJECT NO: **22359**
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www.wrightengineering.us

PROJECT: **SURPRISE, ARIZONA**
ASANTE PLANNING AREA 3
UNIT 4.10

TITLE: **STREET LIGHT PLAN**

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	DEC 2022	1ST SUBMITTAL
2	MAR 2023	2ND SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No. 46691
ADAM M. BOWERS
Date Signed 3-23-23
Expires 9-30-25

DRAWING NO: **SL2**
OF 3

FS23-0086

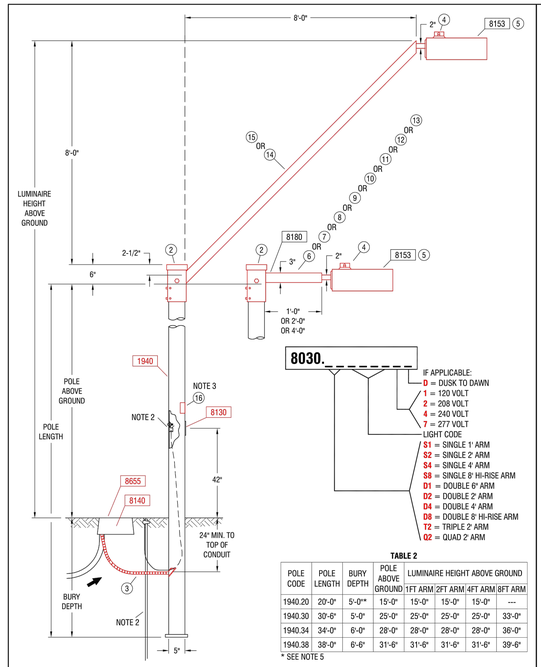


TABLE 2

POLE CODE	POLE LENGTH	BURY DEPTH	POLE ABOVE GROUND	LUMINAIRE HEIGHT ABOVE GROUND			
				1FT ARM	2FT ARM	4FT ARM	8FT ARM
1940.20	20'-0"	5'-0"*	15'-0"	15'-0"	15'-0"	15'-0"	----
1940.30	30'-6"	5'-0"	25'-0"	25'-0"	25'-0"	25'-0"	33'-0"
1940.34	34'-0"	6'-0"	28'-0"	28'-0"	28'-0"	28'-0"	36'-0"
1940.38	38'-0"	6'-6"	31'-6"	31'-6"	31'-6"	31'-6"	39'-6"

* SEE NOTE 5

NOTES:

1. ADJUST PHOTO EYE TO FACE NORTH.
2. A GROUND ROD IS PROVIDED WITH EACH STREET LIGHT POLE. WHERE A GROUND ROD CANNOT BE DRIVEN, ALTERNATE GROUND SHALL BE USED. SEE 2449 THRU 2460 FOR APPROVED ALTERNATES.
3. SIGN, "NOTICE THIS POLE IS OWNED AND MAINTAINED BY APS. DISCONNECT INSIDE", IS REQUIRED ON ALL DUSK-TO-DAWN AND AREA LIGHTING APPLICATIONS.
4. POLES THAT HAVE MORE THAN ONE LUMINAIRE REQUIRE A SEPARATE CIRCUIT WITH FUSING FROM THE J-BOX TO EACH LUMINAIRE.
5. USING THE 20'-0" POLE TO MATCH THE 16'-0" PEDESTRIAN LIGHT MOUNTING HEIGHT REDUCE POLE BURY DEPTH TO 4'-0".
6. THE BROWN PHOTO CONTROL IS A FAIL OFF CONTROL AND SHALL BE USED WITH ALL INDUCTION AND LED LUMINAIRES.
7. ON 277 VOLT STREET LIGHT CIRCUITS, INSTALL A "277 VOLT" MICARTA TAG ON CABLE IN J-BOX. TAG PROVIDED BY SPEC 8129.
8. THE LUMINAIRE SHOWN IS RECOMMENDED FOR THIS MOUNTING HEIGHT. SEE 8153 FOR ADDITIONAL BROWN ARCHITECTURAL LUMINAIRES.
9. THE TWO ARMED TENON BRACKET POSITIONS THE DOUBLE ARM 180 DEGREES APART.
10. TO ACCOMMODATE LESS THAT THE SPECIFIED LUMINAIRE MOUNTING HEIGHT, A SHOP ORDER IS REQUIRED TO HAVE A PORTION FROM THE TOP OF THE POLE CUT OFF. THE TENON ARM BRACKET SLIDES OVER AND COVERS THE CUT PORTION OF THE POLE.
11. IN-LINE FUSE FOR UNDERGROUND FEEDS, SEE 8130-8140.
12. FOR PEDESTRIAN ONLY APPLICATIONS SEE 8030.

TABLE 1

LIGHT CODE	APN	WATTS	K	TYPE	VOLTS	INITIAL LUMENS	MOUNTING HEIGHT
AH18	00099450	100	2100	HPS	120/208/240/277	9,500	SEE TABLE 2
AH17	00099451	150			120/208/240/277	16,000	
AH18	00099452	250			120/208/240/277	30,000	
AH19	00099454	400			120/208/240/277	50,000	
RN40	00128258	55	2700	IND	120/208/240/277	5,600	
RN41	00128667	100	5000		120/208/240/277	9,400	
RN42	00132846	150			120/208/240/277	10,200	
RN43	00132850	150			120/208/240/277	13,000	
RN44	00121153	200			120/208/240/277	15,250	
RN45	00116527	250			120/208/240/277	22,500	
RL40	00141047	32	3000	LED S	120/208/240/277	3,800	
RL41	00141048	41			120/208/240/277	4,800	
RL42	00141049	88			120/208/240/277	8,200	
RL43	00141050	108			120/208/240/277	11,000	
RL44	00141051	162			120/208/240/277	19,000	
RL50	00128251	45	4000	LED S	120/208/240/277	4,300	
RL52	00126804	60			120/208/240/277	5,400	
RL53	00126805	95			120/208/240/277	8,600	
RL54	00126806	113			120/208/240/277	10,000	
RL56	00128365	257			120/208/240/277	19,200	
AL56	00113722	82	4000	LED M	120/208/240/277	7,100	
AL58	00129911	72			120/208/240/277	5,300	
AL60	00113723	119			120/208/240/277	8,900	
AL61	00116525	119R*			120/208/240/277	12,900	
AL62	00116526	119L*			120/208/240/277	12,900	
AL65	00107462	144			120/208/240/277	15,400	
AS20	33806772	55	1700	LPS	120/240	8,000	
AS21	33806774	90			120/240	13,500	
AS22	33806776	135			120/240	22,500	
AS23	33806778	180			120/240	33,000	

* CALL STANDARDS ENGINEERING FOR APPLICATION

MATERIAL LIST

ITEM	CODE	8030.S1 QTY	8030.S2 QTY	8030.S4 QTY	8030.S8 QTY	8030.D1 QTY	8030.D2 QTY	8030.D4 QTY	8030.D8 QTY	8030.T2 QTY	8030.Q2 QTY	DESCRIPTION	APN
1		-	-	-	-	-	-	-	1	-	-	BRACKET ARCH SLIP BOLTED	00092251
2		1	1	1	1	1	1	1	1	1	1	CAP STLT SQ-P 5.5" ARM	00100036
3		10	10	10	10	10	10	10	10	10	10	CONDUIT 1" PVC FLEX CORR	32900891
4		1	1	1	1	2	2	2	2	3	4	CONTROL PHOTO MULTI BR-20	00073241
5		1	1	1	1	2	2	2	2	3	4	LUMINAIRE - SEE TABLE 1	
6		-	-	-	-	1	-	-	-	-	-	MAST ARM STLT 3" SQ X 1' DBL	00121154
7		1	-	-	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 1' SGL	00088370
8		-	-	-	-	-	1	-	-	-	-	MAST ARM STLT 3"SQ X 2' DBL	33701117
9		-	-	-	-	-	-	-	-	-	1	MAST ARM STLT 3"SQ X 2' QUAD	00052665
10		-	1	-	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 2' SGL	33701116
11		-	-	-	-	-	-	-	-	1	-	MAST ARM STLT 3"SQ X 2' TPL	00052664
12		-	-	-	-	-	-	1	-	-	-	MAST ARM STLT 3"SQ X 4' DBL	00073267
13		-	-	1	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 4' SGL	00061738
14		-	-	-	1	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 8' SGL	33701120
15		-	-	-	-	-	-	-	2	-	-	MAST ARM STLT 8' BOLT-ON	00092252
16		1	1	1	1	1	1	1	1	1	1	SIGN POLE OWNED BY APS	00050092

aps ARIZONA PUBLIC SERVICE COMPANY
T&D CONSTRUCTION STANDARDS

BY	LDR.	MGR.	DATE	REV.
KLS	B. BOOKER	R. CANDRA	02/2016	12

LIGHTS ARCHITECTURAL ON 5" SQUARE BROWN PAINTED STEEL POLE DIRECT BURY

SH 1 OF 2

8030

aps ARIZONA PUBLIC SERVICE COMPANY
T&D CONSTRUCTION STANDARDS

BY	LDR.	MGR.	DATE	REV.
KLS	B. BOOKER	R. CANDRA	02/2016	12

LIGHTS ARCHITECTURAL ON 5" SQUARE BROWN PAINTED STEEL POLE DIRECT BURY

SH 2 OF 2

8030

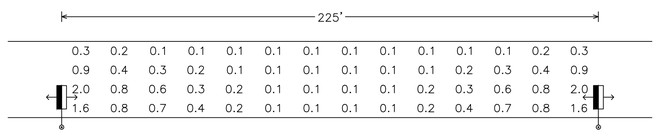
LUMINAIRE TABLE

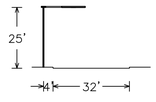
DARK BRONZE ROADWAY SCALEABLE LED 3000K

LIGHT CODE	COLOR	APN	WATTS	VOLTS	INITIAL LUMENS	CATALOG #
RL40	DKBZ	00141047	32	120/208/240/277	3,900	ERLC004B430ADKBZGLRV1013
RL41		00141048	43	120/208/240/277	4,800	ERLC005A430ADKBZGLRV1013
RL42		00141049	71	120/208/240/277	7,800	ERL1008C330ADKBZGLRX162
RL33		00141050	96	120/208/240/277	11,000	ERLH011C330ADKBZGLV1108
RL44		00141051	174	120/208/240/277	20,100	ERL2021C330ADKBZGLR113

TYPICAL LOCAL STREET CALCULATION

ILLUMINANCE METHOD







43W LED 4,800 LUMEN
Type II Distribution, 2' Mast arm
candela file 'ERLC_05A430_____-120-277V.IES'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 43
mounting height= 25 ft
number locations= 2, number luminaires= 2
kw all locations= 0.1

Roadway Grid
56 points at z=0, sp 16.071ft by 8ft
HORIZONTAL FOOTCANDLES

Average	0.4
Maximum	2.0
Minimum	0.1
Avg:Min	3.96
Max:Min	20.00
Coef Var	1.16
UnifGrad	2.50

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WRIGHT ENGINEERING PROJECT NO:
22359
DESIGN BY: BDS
DRAWN BY: BDS
CHECKED BY: AMB

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:

SURPRISE, ARIZONA
ASANTE PLANNING AREA 3
UNIT 4.10

STREET LIGHT DETAILS

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	DEC 2022	1ST SUBMITTAL
2	MAR 2023	2ND SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M. BOWERS
1-27-23
Date Signed
Expires 9-30-25

DRAWING NO:
SL3
OF 3

FS23-0086

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

ASANTE PLANNING AREA 4

UNIT 4.11a

STREET LIGHT DESIGN

STREET LIGHTING REQUIREMENTS

5.00 GENERAL NOTES:

THE FOLLOWING INFORMATION IS PROVIDED TO EMPHASIZE CRITICAL WORK AND IS INTENDED TO SUPPLEMENT THE SPECIFICATIONS. SHOULD THERE BE A CONFLICT WITH THE SPECIFICATIONS, THIS DOCUMENT SHALL TAKE PRECEDENCE.

ALTERNATES SHALL BE PRE-APPROVED BY THE CITY ENGINEERING MANAGER. APPROVAL OF ALTERNATE PRODUCTS SHALL BE ON AN EQUAL BASIS WITH THE PRODUCT SPECIFIED AND SHALL BE SUBMITTED A MINIMUM OF TEN (10) DAYS PRIOR TO BID OPENING. STRUCTURAL CALCULATIONS SHALL BE FURNISHED FOR ALTERNATE PRODUCTS AND CERTIFIED BY A STRUCTURAL ENGINEER, REGISTERED IN THE STATE OF ARIZONA. LUMINAIRES AND LAMPS SHALL MEET OR EXCEED THE PHOTOMETRIC, ELECTRICAL, AND MECHANICAL REQUIREMENTS FOR THE SPECIFIED PRODUCTS.

THE CONTRACTOR SHALL COMPLY WITH STATE AND CITY STATUTES, AND MANUFACTURER'S RECOMMENDATIONS.

THE SUBMITTAL PACKAGE SHALL CONSIST OF THREE (3) COPIES OF EQUIPMENT/MATERIAL TO BE INSTALLED AND SHALL BE BOUND/STAPLED IN A FOLDER AND SUBMITTED AT THE TIME OF PERMIT APPLICATION.

PRIOR TO SUBMITTING A PROPOSAL, THE BIDDER SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS AND VISIT THE CONSTRUCTION SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL OPERATE AND WHICH WILL IN ANY WAY AFFECT THE WORK UNDER THE CONTRACT. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN THIS CONNECTION IN THE BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLIGENCE ON HIS PART.

PRIOR TO ORDERING ANY MATERIALS OR DOING ANY WORK, THE CONTRACTOR SHOULD VERIFY DIMENSIONS AT THE SITE. IMMEDIATELY REPORT DIFFERENCES TO THE ENGINEERING MGR. AND SHOULD NOT PROCEED WITH WORK UNTIL THE ENGINEERING MGR. RENDERS A DECISION. NO EXTRA CHARGES OR COMPENSATION WILL BE ALLOWED FOR DIFFERENCES IN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE DRAWINGS.

5.01 GENERAL:

THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH ALL LICENSING REQUIREMENTS SET FORTH BY THE STATE REGISTRAR OF CONTRACTORS OFFICE TO PERFORM WORK RELATING TO STREET LIGHT INSTALLATION IN THE CITY RIGHT-OF-WAY.

ONE PROJECT UNDERGROUND UTILITIES (RIGHT OF WAY) PERMIT AND ONE STREETLIGHT PERMIT FOR EACH STREET LIGHT POLE SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

5.02 WORKING / "AS BUILT" PLANS:

ACCEPTANCE OF THE COMPLETED IMPROVEMENTS WILL NOT BE GIVEN UNTIL 4 MIL PHOTO MYLAR REPRODUCIBLE "AS BUILT" PLANS HAVE BEEN SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

5.03 LIGHT POLES:

LIGHT POLES SHALL BE INSTALLED PLUMB, BE ADJUSTED TO PROVIDE PROPER ALIGNMENT TO THE ROADWAY BEING LIGHTED AND BE PROPERLY GROUNDED WHEN THE INSTALLATION IS COMPLETE.

5.04 EMBEDMENT:

DIRECT BURIED POLES SHALL BE SET IN A TWELVE (12) INCH AUGURED HOLE DEPTH AS SPECIFIED IN UNDISTURBED EARTH. POLE SHALL BE SET PLUMB IN TWO DIRECTIONS 90 DEGREES APART. HAND TAMPING OF ABC BACKFILL WITH PNEUMATIC OR VIBRATING EQUIPMENT IS THE ACCEPTABLE METHOD OF COMPACTION. BACKFILL SHALL BE COMPACTED TO 85% OF MAXIMUM DENSITY AS DEFINED BY ASTM D-2922 AND D-3017. A GROUND ROD SHALL BE INSTALLED ADJACENT TO PULL BOX IN UNDISTURBED SOIL AND A LEAD IN COPPER BOND WIRE (#6) SHALL BE INSTALLED IN 1" CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT (OR EQUAL) FOR POLE GROUNDING.

SURPLUS EXCAVATION SHALL BE DISPOSED OF BY THE CONTRACTOR.

5.05 LUMINAIRES:

LUMINAIRES SHALL BE INSTALLED LEVEL AND INCLUDE A LAMP AND PHOTOCELL. CONTRACTOR SHALL ASSURE THAT THE LUMINAIRES SHALL BE FREE OF DUST, DIRT OR ANYTHING THAT WOULD IMPAIR THE OUTPUT OF THE LIGHT BEFORE HE LEAVES THE SITE.

LUMINAIRES FURNISHED WITH MULTI-TAP BALLASTS SHALL BE REWIRED OR RECONNECTED TO MATCH THE VOLTAGE SUPPLIED BY THE ELECTRIC UTILITY COMPANY.

5.06 WIRING:

WIRING SHALL BE INSTALLED PER UTILITY STANDARDS.

5.07 GROUNDING:

EACH POLE SHALL HAVE A 8' X 5/8" COPPER CLAD GROUND ROD DRIVEN ADJACENT TO PULL BOX. A #6 BARE COPPER LEAD FROM THE GROUND ROD IN PULL BOX TO LANDING LUG IN STREET LIGHT POLE HAND HOLE.

5.08 PULL BOXES:

EXCAVATION FOR PULL BOXES AND MATERIAL SPECIFICATION SHALL BE PER THE ELECTRIC UTILITY COMPANY STANDARDS.

5.09 TRENCH

TRENCH SHALL BE INSTALLED PER THE UTILITY COMPANY STANDARDS.

THE USE OF A COMMON ELECTRIC UTILITY COMPANY TRENCH IS PERMITTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANY FOR COORDINATION OF TRENCHING AND THE INSTALLATION OF CONDUIT.

CONDUIT SHALL BE INSTALLED AT THE DEPTH SPECIFIED ON THE PLANS. CONDUIT SHALL BE 1 INCH CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT OR EQUAL. CONDUIT MUST BE UL RATED AND SUITABLE FOR UNDERGROUND USE.

CONNECTIONS SHALL BE PER UTILITY STANDARDS.

5.12 LIGHT POLE IDENTIFICATION:

THE CONTRACTOR SHALL FURNISH AND INSTALL A NUMBER ON EACH LIGHT POLE. STREET LIGHT POLE IDENTIFICATION AND SPECIFICATIONS WILL BE PROVIDED BY THE CITY OF SURPRISE.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO RESTORE ALL PROPERTY, LANDSCAPING, PAVING AND DRIVEWAYS THAT ARE DISTURBED DURING STREET LIGHT CONSTRUCTION TO THEIR ORIGINAL CONDITION IN CONFORMANCE WITH "MAG" SPECIFICATION SECTION 107.9.

THE DEVELOPER SHALL BE RESPONSIBLE FOR FURNISHING ALL PERSONNEL AND EQUIPMENT TO SUCCESSFULLY PERFORM THE FOLLOWING TEST.

PRIOR TO ACCEPTANCE, THE DEVELOPER SHALL ENERGIZE AND OPERATE THE ENTIRE ROADWAY LIGHTING SYSTEM, FROM SUNSET TO SUNRISE FOR TWO CONSECUTIVE DAYS WITHOUT INTERRUPTION OR FAILURE. IF A LAMP OR BALLAST SHOULD FAIL, IT SHALL BE IMMEDIATELY REPLACED.

THE CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE ENGINEERING MANAGER, AGAINST IMPERFECT WORKMANSHIP, FAILURE, MALFUNCTION OF MATERIALS AND/OR EQUIPMENT DUE TO FAULTY OR IMPERFECT WORKMANSHIP. THIS GUARANTEE IS TO BE IN WRITING TO THE CITY AT THE TIME OF ISSUING FINAL ACCEPTANCE. WORK FOUND TO BE DEFECTIVE WITHIN THE WARRANTY PERIOD SHALL BE REPLACED WITHOUT COST TO THE CITY.

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 REPLACEDIN 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.

CITY OF SURPRISE APPROVAL

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.

CITY OF SURPRISE ENGINEER **DATE**

UTILITIES WITHIN OR AFFECTED BY THE PROJECT	
UTILITY CONTACT	DATE SUBMITTED
ARIZONA PUBLIC SERVICE	11/8/2022
CENTURY LINK	11/8/2022
COX COMMUNICATIONS	11/8/2022
SOUTHWEST GAS	11/8/2022

NOTE

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

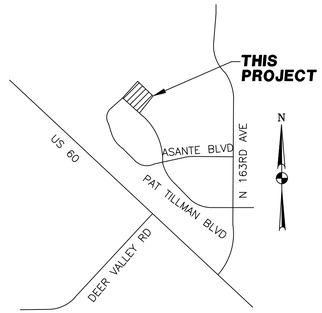
B. THE ELECTRICAL/MAINTENANCE COSTS OF ALL STREET LIGHTS ON LOCAL AND COLLECTOR STREETS ARE TO BE PAID BY THE ADJACENT PROJECT OR THE ADJACENT DEVELOPMENT'S STREET LIGHT IMPROVEMENT DISTRICT (SLID). THE ELECTRICAL / MAINTENANCE COSTS OF ALL STREET LIGHTS ON ARTERIAL STREETS ARE TO BE BILLED TO THE CITY OF SURPRISE'S ENERGY BILL.

LED NOTE

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.



KEY MAP
N.T.S.



VICINITY MAP
N.T.S.

SHEET INDEX

COVER SHEET	SL1
STREET LIGHT PLAN	SL2
STREET LIGHT PLAN	SL3
DETAILS	SL4

POWER CONDUIT NOTE

TRENCH & CONDUIT RUNS FROM STREET LIGHT PULL BOX TO POINT OF ELECTRICAL SERVICE WILL BE DESIGNED BY THE POWER COMPANY, AND ARE SHOWN ON POWER COMPANY PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THESE PLANS FROM DEVELOPER/OWNER, AND INCLUDE THESE RUNS IN THE BID. COORDINATE THIS WORK WITH THE POWER COMPANY.

CIVIL ENGINEER
HILGART WILSON
2141 E HIGHLAND AVE, STE. 250
PHOENIX, AZ 85016
PHONE: (602) 490-0535
FAX: (602) 368- 2436
CONTACT: DIEGO ORTIZ, PE
EMAIL: DORTIZ@HILGARTWILSON.COM

OWNER
LENNAR COMMUNITIES DELEOPMENT, LLC
1665 W. ALMEDA DR STE 130
TEMPE, AZ 85282-3000
CONTACT: JORGE VILLASENOR

Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

THESE DRAWINGS AND SPECIFICATIONS ARE THE SOLE PROPERTY OF WRIGHT ENGINEERING CORPORATION AND MAY NOT BE REPRODUCED OR MODIFIED FOR ANY USE WITHOUT THE EXPRESS WRITTEN PERMISSION OF WRIGHT ENGINEERING CORPORATION.

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WRIGHT ENGINEERING PROJECT NO: 22359

DESIGN BY: BDS
DRAWN BY: BDS
CHECKED BY: AMB

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: SURPRISE, ARIZONA
ASANTE PLANNING AREA 4
UNIT 4.11a

TITLE: STREET LIGHT COVER SHEET

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	NOV 2022	1ST SUBMITTAL
1	FEB 2023	2ND SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M. BOWERS
Date Signed 2-15-23
Expires 9-30-25

DRAWING NO: SL1
OF 4

FS22-1544



MATCHLINE 'A'
SEE SHEET SL3

LEGEND

- 4,800 LUMEN LED STREET LIGHT, SQUARE POLE
- EXISTING STREET LIGHT
- PULL BOX
- NEW CONDUIT RUN
- FIRE HYDRANT
- PROPOSED STREET LIGHT PER ADJACENT PLAN SET

CONSTRUCTION NOTES

1. INSTALL APS PULL BOX NEXT TO POLE. 1" CONDUIT WITH (2) #14 TYPE THHN/THWN & (1) #14 BARE BOND FROM PULL BOX TO FUSE HOLDER IN STREET LIGHT PER APS DETAILS & SPECIFICATIONS.
2. 43W LED (4,800 LUMEN) LUMINAIRE (SEE LUMINAIRE TABLE), PHOTOCELL, 30'-6" DIRECT BURIED POLE, 2' MAST ARM PER APS DETAIL 8030 (SEE SHEET SL4). (2) #14 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. WIRING, FUSING, & GROUNDING PER APS DETAILS & SPECIFICATIONS.

GRAPHIC SCALE
40 20 0 20 40 80
1 INCH = 40 FEET

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WRIGHT ENGINEERING PROJECT NO:
22359
DESIGN BY: BDS
DRAWN BY: BDS
CHECKED BY: AMB

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:

SURPRISE, ARIZONA
ASANTE PLANNING AREA 4
UNIT 4.11a
STREET LIGHT PLAN

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	NOV 2022	1ST SUBMITTAL
1	FEB 2023	2ND SUBMITTAL

Registered Professional Engineer (Attached)
Certificate No. 46691
ADAM M. BOWERS
Date Signed 2-17-23
Expires 9-30-25

DRAWING NO:
SL2
OF 4

FS22-1544

LEGEND

- 4,800 LUMEN LED STREET LIGHT, SQUARE POLE
- EXISTING STREET LIGHT
- PULL BOX
- NEW CONDUIT RUN
- FIRE HYDRANT
- PROPOSED STREET LIGHT PER ADJACENT PLAN SET

CONSTRUCTION NOTES

(1) INSTALL APS PULL BOX NEXT TO POLE. 1" CONDUIT WITH (2) #14 TYPE THHN/THWN & (1) #14 BARE BOND FROM PULL BOX TO FUSE HOLDER IN STREET LIGHT PER APS DETAILS & SPECIFICATIONS.

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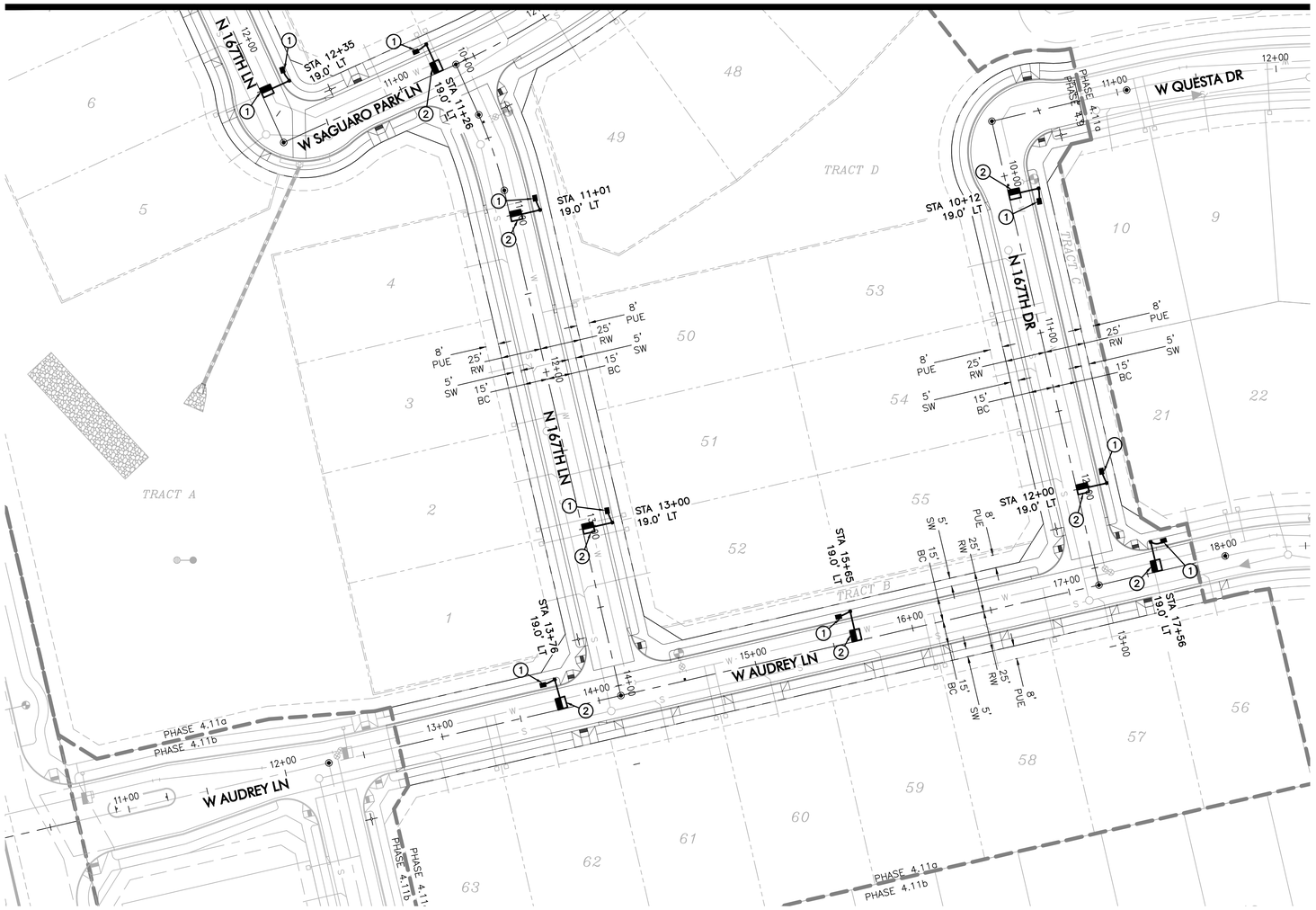
MATCHLINE 'A'
SEE SHEET SL2



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PROJECT: TITLE:

SURPRISE, ARIZONA
ASANTE PLANNING AREA 4
UNIT 4.11a

STREET LIGHT PLAN

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	NOV 2022	1ST SUBMITTAL
1	FEB 2023	2ND SUBMITTAL

Registered Professional Engineer (Attached)
Certificate No.
46691
ADAM M. BOWERS
Date Signed
1-19-23
Expires 9-30-25

DRAWING NO:
SL3
OF 4

FS22-1544

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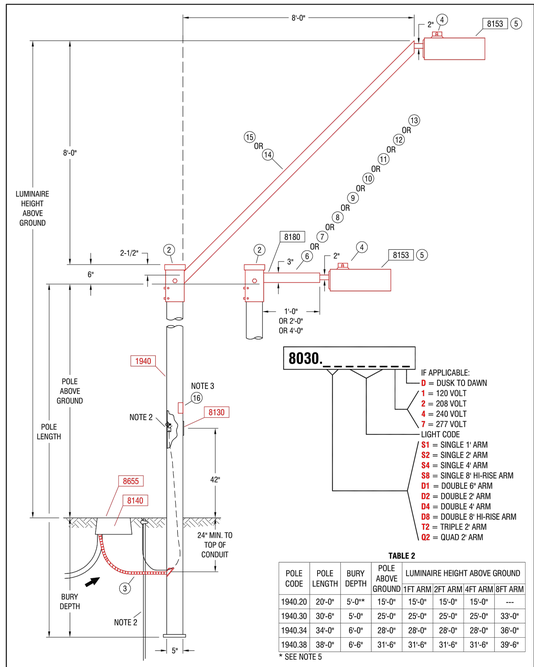


TABLE 2

POLE CODE	POLE LENGTH	BURY DEPTH	POLE ABOVE GROUND	LUMINAIRE HEIGHT ABOVE GROUND			
				1FT ARM	2FT ARM	4FT ARM	8FT ARM
1940.20	20'-0"	5'-0"*	15'-0"	15'-0"	15'-0"	15'-0"	----
1940.30	30'-6"	5'-0"	25'-0"	25'-0"	25'-0"	25'-0"	33'-0"
1940.34	34'-0"	6'-0"	28'-0"	28'-0"	28'-0"	28'-0"	36'-0"
1940.38	38'-0"	6'-6"	31'-6"	31'-6"	31'-6"	31'-6"	39'-6"

* SEE NOTE 5

NOTES:

1. ADJUST PHOTO EYE TO FACE NORTH.
2. A GROUND ROD IS PROVIDED WITH EACH STREET LIGHT POLE. WHERE A GROUND ROD CANNOT BE DRIVEN, ALTERNATE GROUND SHALL BE USED. SEE 2449 THRU 2460 FOR APPROVED ALTERNATES.
3. SIGN, "NOTICE THIS POLE IS OWNED AND MAINTAINED BY APS. DISCONNECT INSIDE", IS REQUIRED ON ALL DUSK-TO-DAWN AND AREA LIGHTING APPLICATIONS.
4. POLES THAT HAVE MORE THAN ONE LUMINAIRE REQUIRE A SEPARATE CIRCUIT WITH FUSING FROM THE J-BOX TO EACH LUMINAIRE.
5. USING THE 20'-0" POLE TO MATCH THE 16'-0" PEDESTRIAN LIGHT MOUNTING HEIGHT REDUCE POLE BURY DEPTH TO 4'-0".
6. THE BROWN PHOTO CONTROL IS A FAIL OFF CONTROL AND SHALL BE USED WITH ALL INDUCTION AND LED LUMINAIRES.
7. ON 277 VOLT STREET LIGHT CIRCUITS, INSTALL A "277 VOLT" MICARTA TAG ON CABLE IN J-BOX. TAG PROVIDED BY SPEC 8129.
8. THE LUMINAIRE SHOWN IS RECOMMENDED FOR THIS MOUNTING HEIGHT. SEE 8153 FOR ADDITIONAL BROWN ARCHITECTURAL LUMINAIRES.
9. THE TWO ARMED TENON BRACKET POSITIONS THE DOUBLE ARM 180 DEGREES APART.
10. TO ACCOMMODATE LESS THAT THE SPECIFIED LUMINAIRE MOUNTING HEIGHT, A SHOP ORDER IS REQUIRED TO HAVE A PORTION FROM THE TOP OF THE POLE CUT OFF. THE TENON ARM BRACKET SLIDES OVER AND COVERS THE CUT PORTION OF THE POLE.
11. IN-LINE FUSE FOR UNDERGROUND FEEDS, SEE 8130-8140.
12. FOR PEDESTRIAN ONLY APPLICATIONS SEE 8030.

TABLE 1

LIGHT CODE	APN	WATTS	K	TYPE	VOLTS	INITIAL LUMENS	MOUNTING HEIGHT
AH18	00099450	100	2100	HPS	120/208/240/277	9,500	SEE TABLE 2
AH17	00099451	150			120/208/240/277	16,000	
AH18	00099452	250			120/208/240/277	30,000	
AH19	00099454	400			120/208/240/277	50,000	
RN40	00128258	55	2700	IND	120/208/240/277	3,600	
RN41	00128667	100	5000		120/208/240/277	8,400	
RN42	00132846	150			120/208/240/277	10,200	
RN43	00132850	150			120/208/240/277	13,000	
RN44	00121153	200			120/208/240/277	15,250	
RN45	00116527	250			120/208/240/277	22,500	
RL40	00141047	32	3000	LED S	120/208/240/277	3,800	
RL41	00141048	41			120/208/240/277	4,800	
RL42	00141049	88			120/208/240/277	8,200	
RL43	00141050	108			120/208/240/277	11,000	
RL44	00141051	162			120/208/240/277	19,000	
RL50	00128251	45	4000	LED S	120/208/240/277	4,300	
RL52	00126804	60			120/208/240/277	5,400	
RL53	00126805	95			120/208/240/277	8,600	
RL54	00126806	113			120/208/240/277	10,000	
RL56	00128365	257			120/208/240/277	19,200	
AL56	00113722	62	4000	LED M	120/208/240/277	7,100	
AL58	00129911	72			120/208/240/277	8,300	
AL60	00113723	119			120/208/240/277	12,900	
AL61	00116525	119R*			120/208/240/277	12,900	
AL62	00116526	119L*			120/208/240/277	12,900	
AL65	00107462	144			120/208/240/277	15,400	
AS20	33806772	55	1700	LPS	120/240	8,000	
AS21	33806774	90			120/240	13,500	
AS22	33806776	135			120/240	22,500	
AS23	33806778	180			120/240	33,000	

* CALL STANDARDS ENGINEERING FOR APPLICATION

CODE	8030.S1	8030.S2	8030.S4	8030.S8	8030.D1	8030.D2	8030.D4	8030.D8	8030.T2	8030.Q2	MATERIAL LIST	
ITEM	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	DESCRIPTION	APN
1	-	-	-	-	-	-	-	1	-	-	BRACKET ARCH SLIP BOLTED	00092251
2	1	1	1	1	1	1	1	1	1	1	CAP STLT SQ-P 5.5" ARM	00100036
3	10	10	10	10	10	10	10	10	10	10	CONDUIT 1" PVC FLEX CORR	32900891
4	1	1	1	1	2	2	2	3	4		CONTROL PHOTO MULTI BR-20	00073241
5	1	1	1	1	2	2	2	3	4		LUMINAIRE - SEE TABLE 1	
6	-	-	-	-	1	-	-	-	-	-	MAST ARM STLT 3" SQ X 1' DBL	00121154
7	1	-	-	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 1' SGL	00088370
8	-	-	-	-	-	1	-	-	-	-	MAST ARM STLT 3"SQ X 2' DBL	33701117
9	-	-	-	-	-	-	-	-	1	-	MAST ARM STLT 3"SQ X 2' QUAD	00052665
10	-	1	-	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 2' SGL	33701116
11	-	-	-	-	-	-	-	-	1	-	MAST ARM STLT 3"SQ X 2' TPL	00052664
12	-	-	-	-	-	-	1	-	-	-	MAST ARM STLT 3"SQ X 4' DBL	00073267
13	-	-	1	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 4' SGL	00061738
14	-	-	-	1	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 8' SGL	33701120
15	-	-	-	-	-	-	2	-	-	-	MAST ARM STLT 8' BOLT-ON	00092252
16	1	1	1	1	1	1	1	1	1	1	SIGN POLE OWNED BY APS	00050092

aps	ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS			
BY	LDR.	MGR.	DATE	REV.
KLS	B. BOOKER	R. CANDRA	02/2016	12

LIGHTS ARCHITECTURAL ON 5" SQUARE BROWN PAINTED STEEL POLE DIRECT BURY

SH 1 OF 2

8030

aps ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS

BY | LDR. | MGR. | DATE | REV.
KLS | B. BOOKER | R. CANDRA | 02/2016 | 12

LIGHTS ARCHITECTURAL ON 5" SQUARE BROWN PAINTED STEEL POLE DIRECT BURY

8030

SH 2 OF 2

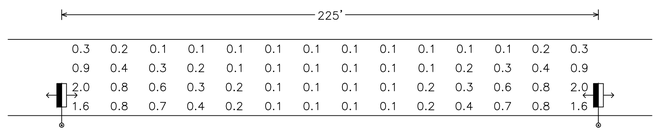
LUMINAIRE TABLE

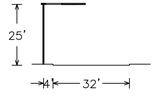
DARK BRONZE ROADWAY SCALEABLE LED 3000K

LIGHT CODE	COLOR	APN	WATTS	VOLTS	INITIAL LUMENS	CATALOG #
RL40	DKBZ	00141047	32	120/208/240/277	3,900	ERLC004B430ADKBZGLRV1013
RL41		00141048	43	120/208/240/277	4,800	ERLC005A430ADKBZGLRV1013
RL42		00141049	71	120/208/240/277	7,800	ERL1008C330ADKBZGLRX162
RL33		00141050	96	120/208/240/277	11,000	ERLH011C330ADKBZGLV1108
RL44		00141051	174	120/208/240/277	20,100	ERL2021C330ADKBZGLR113

TYPICAL LOCAL STREET CALCULATION

ILLUMINANCE METHOD







43W LED 4,800 LUMEN
Type II Distribution, 2' Mast arm
candela file 'ERLC_05A430_____-120-277V.IES'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 43
mounting height= 25 ft
number locations= 2, number luminaires= 2
kw all locations= 0.1

Roadway Grid
56 points at z=0, sp 16.071ft by 8ft
HORIZONTAL FOOTCANDLES

Average	0.4
Maximum	2.0
Minimum	0.1
Avg:Min	3.96
Max:Min	20.00
Coef Var	1.16
UnifGrad	2.50

WRIGHT ENGINEERING
PROJECT NO:
22359
DESIGN BY: BDS
DRAWN BY: BDS
CHECKED BY: AMB

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:

SURPRISE, ARIZONA
ASANTE PLANNING AREA 4
UNIT 4.11a

STREET LIGHT DETAILS

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	NOV 2022	1ST SUBMITTAL
1	FEB 2023	2ND SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M. BOWERS
Date Signed
1-19-23
Expires 9-30-25

DRAWING NO:
SL4
OF 4

FS22-1544

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

ASANTE 900
PHASE 4.11B
STREET LIGHT DESIGN

STREET LIGHTING REQUIREMENTS

5.00 GENERAL NOTES:

THE FOLLOWING INFORMATION IS PROVIDED TO EMPHASIZE CRITICAL WORK AND IS INTENDED TO SUPPLEMENT THE SPECIFICATIONS. SHOULD THERE BE A CONFLICT WITH THE SPECIFICATIONS, THIS DOCUMENT SHALL TAKE PRECEDENCE.

ALTERNATES SHALL BE PRE-APPROVED BY THE CITY ENGINEERING MANAGER. APPROVAL OF ALTERNATE PRODUCTS SHALL BE ON AN EQUAL BASIS WITH THE PRODUCT SPECIFIED AND SHALL BE SUBMITTED A MINIMUM OF TEN (10) DAYS PRIOR TO BID OPENING. STRUCTURAL CALCULATIONS SHALL BE FURNISHED FOR ALTERNATE PRODUCTS AND CERTIFIED BY A STRUCTURAL ENGINEER, REGISTERED IN THE STATE OF ARIZONA. LUMINAIRES AND LAMPS SHALL MEET OR EXCEED THE PHOTOMETRIC, ELECTRICAL, AND MECHANICAL REQUIREMENTS FOR THE SPECIFIED PRODUCTS.

THE CONTRACTOR SHALL COMPLY WITH STATE AND CITY STATUTES, AND MANUFACTURER'S RECOMMENDATIONS.

THE SUBMITTAL PACKAGE SHALL CONSIST OF THREE (3) COPIES OF EQUIPMENT/MATERIAL TO BE INSTALLED AND SHALL BE BOUND/STAPLED IN A FOLDER AND SUBMITTED AT THE TIME OF PERMIT APPLICATION.

PRIOR TO SUBMITTING A PROPOSAL, THE BIDDER SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS AND VISIT THE CONSTRUCTION SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL OPERATE AND WHICH WILL IN ANY WAY AFFECT THE WORK UNDER THE CONTRACT. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN THIS CONNECTION IN THE BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLIGENCE ON HIS PART.

PRIOR TO ORDERING ANY MATERIALS OR DOING ANY WORK, THE CONTRACTOR SHOULD VERIFY DIMENSIONS AT THE SITE. IMMEDIATELY REPORT DIFFERENCES TO THE ENGINEERING MGR. AND SHOULD NOT PROCEED WITH WORK UNTIL THE ENGINEERING MGR. RENDERS A DECISION. NO EXTRA CHARGES OR COMPENSATION WILL BE ALLOWED FOR DIFFERENCES IN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE DRAWINGS.

5.01 GENERAL:

THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH ALL LICENSING REQUIREMENTS SET FORTH BY THE STATE REGISTRAR OF CONTRACTORS OFFICE TO PERFORM WORK RELATING TO STREET LIGHT INSTALLATION IN THE CITY RIGHT-OF-WAY.

ONE PROJECT UNDERGROUND UTILITIES (RIGHT OF WAY) PERMIT AND ONE STREETLIGHT PERMIT FOR EACH STREET LIGHT POLE SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

5.02 WORKING / "AS BUILT" PLANS:

ACCEPTANCE OF THE COMPLETED IMPROVEMENTS WILL NOT BE GIVEN UNTIL 4 MIL PHOTO MYLAR REPRODUCIBLE "AS BUILT" PLANS HAVE BEEN SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

5.03 LIGHT POLES:

LIGHT POLES SHALL BE INSTALLED PLUMB, BE ADJUSTED TO PROVIDE PROPER ALIGNMENT TO THE ROADWAY BEING LIGHTED AND BE PROPERLY GROUNDED WHEN THE INSTALLATION IS COMPLETE.

5.04 EMBEDMENT:

DIRECT BURIED POLES SHALL BE SET IN A TWELVE (12) INCH AUGURED HOLE DEPTH AS SPECIFIED IN UNDISTURBED EARTH. POLE SHALL BE SET PLUMB IN TWO DIRECTIONS 90 DEGREES APART. HAND TAMPING OF ABC BACKFILL WITH PNEUMATIC OR VIBRATING EQUIPMENT IS THE ACCEPTABLE METHOD OF COMPACTION. BACKFILL SHALL BE COMPACTED TO 85% OF MAXIMUM DENSITY AS DEFINED BY ASTM D-2922 AND D-3017. A GROUND ROD SHALL BE INSTALLED ADJACENT TO PULL BOX IN UNDISTURBED SOIL AND A LEAD IN COPPER BOND WIRE (#6) SHALL BE INSTALLED IN 1" CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT (OR EQUAL) FOR POLE GROUNDING.

SURPLUS EXCAVATION SHALL BE DISPOSED OF BY THE CONTRACTOR.

5.05 LUMINAIRES:

LUMINAIRES SHALL BE INSTALLED LEVEL AND INCLUDE A LAMP AND PHOTOCELL. CONTRACTOR SHALL ASSURE THAT THE LUMINAIRES SHALL BE FREE OF DUST, DIRT OR ANYTHING THAT WOULD IMPAIR THE OUTPUT OF THE LIGHT BEFORE HE LEAVES THE SITE.

LUMINAIRES FURNISHED WITH MULTI-TAP BALLASTS SHALL BE REWIRED OR RECONNECTED TO MATCH THE VOLTAGE SUPPLIED BY THE ELECTRIC UTILITY COMPANY.

5.06 WIRING:

WIRING SHALL BE INSTALLED PER UTILITY STANDARDS.

5.07 GROUNDING:

EACH POLE SHALL HAVE A 8' X 5/8" COPPER CLAD GROUND ROD DRIVEN ADJACENT TO PULL BOX. A #6 BARE COPPER LEAD FROM THE GROUND ROD IN PULL BOX TO LANDING LUG IN STREET LIGHT POLE HAND HOLE.

5.08 PULL BOXES:

EXCAVATION FOR PULL BOXES AND MATERIAL SPECIFICATION SHALL BE PER THE ELECTRIC UTILITY COMPANY STANDARDS.

5.09 TRENCH

TRENCH SHALL BE INSTALLED PER THE UTILITY COMPANY STANDARDS.

THE USE OF A COMMON ELECTRIC UTILITY COMPANY TRENCH IS PERMITTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANY FOR COORDINATION OF TRENCHING AND THE INSTALLATION OF CONDUIT.

CONDUIT SHALL BE INSTALLED AT THE DEPTH SPECIFIED ON THE PLANS. CONDUIT SHALL BE 1 INCH CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT OR EQUAL. CONDUIT MUST BE UL RATED AND SUITABLE FOR UNDERGROUND USE.

CONNECTIONS SHALL BE PER UTILITY STANDARDS.

5.12 LIGHT POLE IDENTIFICATION:

THE CONTRACTOR SHALL FURNISH AND INSTALL A NUMBER ON EACH LIGHT POLE. STREET LIGHT POLE IDENTIFICATION AND SPECIFICATIONS WILL BE PROVIDED BY THE CITY OF SURPRISE.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO RESTORE ALL PROPERTY, LANDSCAPING, PAVING AND DRIVEWAYS THAT ARE DISTURBED DURING STREET LIGHT CONSTRUCTION TO THEIR ORIGINAL CONDITION IN CONFORMANCE WITH "MAG" SPECIFICATION SECTION 107.9.

THE DEVELOPER SHALL BE RESPONSIBLE FOR FURNISHING ALL PERSONNEL AND EQUIPMENT TO SUCCESSFULLY PERFORM THE FOLLOWING TEST.

PRIOR TO ACCEPTANCE, THE DEVELOPER SHALL ENERGIZE AND OPERATE THE ENTIRE ROADWAY LIGHTING SYSTEM, FROM SUNSET TO SUNRISE FOR TWO CONSECUTIVE DAYS WITHOUT INTERRUPTION OR FAILURE. IF A LAMP OR BALLAST SHOULD FAIL, IT SHALL BE IMMEDIATELY REPLACED.

THE CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE ENGINEERING MANAGER, AGAINST IMPERFECT WORKMANSHIP, FAILURE, MALFUNCTION OF MATERIALS AND/OR EQUIPMENT DUE TO FAULTY OR IMPERFECT WORKMANSHIP. THIS GUARANTEE IS TO BE IN WRITING TO THE CITY AT THE TIME OF ISSUING FINAL ACCEPTANCE. WORK FOUND TO BE DEFECTIVE WITHIN THE WARRANTY PERIOD SHALL BE REPLACED WITHOUT COST TO THE CITY.

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 REPLACEDIN 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.

CITY OF SURPRISE APPROVAL

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.

CITY OF SURPRISE ENGINEER **DATE**

UTILITIES WITHIN OR AFFECTED BY THE PROJECT	
UTILITY CONTACT	DATE SUBMITTED
ARIZONA PUBLIC SERVICE	09/30/2022
CENTURY LINK	09/30/2022
COX COMMUNICATIONS	09/30/2022
SOUTHWEST GAS	09/30/2022

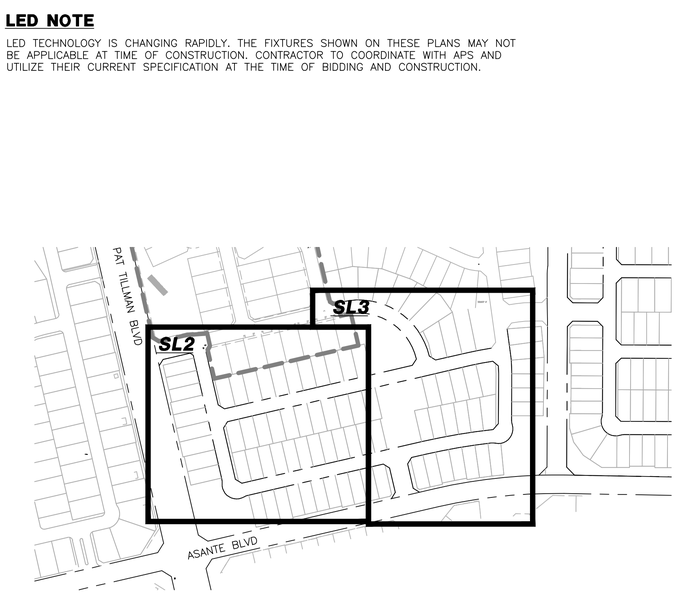
NOTE

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

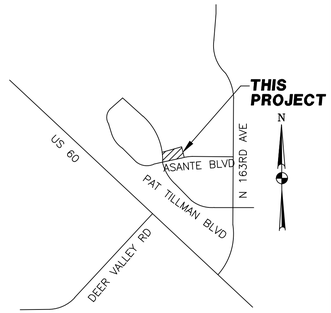
B. THE ELECTRICAL/MAINTENANCE COSTS OF ALL STREET LIGHTS ON LOCAL AND COLLECTOR STREETS ARE TO BE PAID BY THE ADJACENT PROJECT OR THE ADJACENT DEVELOPMENT'S STREET LIGHT IMPROVEMENT DISTRICT (SLID). THE ELECTRICAL / MAINTENANCE COSTS OF ALL STREET LIGHTS ON ARTERIAL STREETS ARE TO BE BILLED TO THE CITY OF SURPRISE'S ENERGY BILL.

LED NOTE

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.



KEY MAP
N.T.S.



VICINITY MAP
N.T.S.

SHEET INDEX

COVER SHEET	SL1
STREET LIGHT PLAN	SL2
STREET LIGHT PLAN	SL3
DETAILS	SL4

POWER CONDUIT NOTE

TRENCH & CONDUIT RUNS FROM STREET LIGHT PULL BOX TO POINT OF ELECTRICAL SERVICE WILL BE DESIGNED BY THE POWER COMPANY, AND ARE SHOWN ON POWER COMPANY PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THESE PLANS FROM DEVELOPER/OWNER, AND INCLUDE THESE RUNS IN THE BID. COORDINATE THIS WORK WITH THE POWER COMPANY.

CIVIL ENGINEER
HILGART WILSON
2141 E HIGHLAND AVE, STE. 250
PHOENIX, AZ 85016
PHONE: (602) 490-0535
FAX: (602) 368- 2436
CONTACT: DIEGO ORTIZ, PE
EMAIL: DORTIZ@HILGARTWILSON.COM

OWNER
LENNAR COMMUNITIES DELEOPMENT, LLC
1665 W. ALMEDA DR STE 130
TEMPE, AZ 85282-3000
CONTACT: JORGE VILLASENOR

Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348) in Maricopa County: (602) 263-1100

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H:\2022\22359-Asante 900\22359-SL-4.11b.dwg

WRIGHT ENGINEERING PROJECT NO:
22359

DESIGN BY: AJA
DRAWN BY: AJA
CHECKED BY: AMB

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:

SURPRISE, ARIZONA
ASANTE 900
PHASE 4.11B
STREET LIGHT COVER SHEET

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	SEP 2022	1ST SUBMITTAL
2	FEB 2023	2nd SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No. 46691
ADAM M. BOWERS
9-5-23
Date Planned
Expires 9-30-25

DRAWING NO:
SL1
OF 4

FS22-1517

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LEGEND

- 4,800 LUMEN LED STREET LIGHT, SQUARE POLE
- EXISTING STREET LIGHT
- PULL BOX
- NEW CONDUIT RUN
- FIRE HYDRANT

CONSTRUCTION NOTES

1. INSTALL APS PULL BOX NEXT TO POLE. 1" CONDUIT WITH (2) #14 TYPE THHN/THWN & (1) #14 BARE BOND FROM PULL BOX TO FUSE HOLDER IN STREET LIGHT PER APS DETAILS & SPECIFICATIONS.
2. 43W LED (4,800 LUMEN) LUMINAIRE (SEE LUMINAIRE TABLE), PHOTOCELL, 30'-6" DIRECT BURIED POLE, 2' MAST ARM PER APS DETAIL 8030 (SEE SHEET SL4). (2) #14 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. WIRING, FUSING, & GROUNDING PER APS DETAILS & SPECIFICATIONS.

GRAPHIC SCALE

40 20 0 20 40 80

1 INCH = 40 FEET

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WRIGHT ENGINEERING PROJECT NO: **22359**

DESIGN BY: AJA
DRAWN BY: AJA
CHECKED BY: AMB

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:

SURPRISE, ARIZONA
ASANTE 900
PHASE 4.11B

STREET LIGHT PLAN

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	SEP 2022	1ST SUBMITTAL
2	FEB 2023	2nd SUBMITTAL

Registered Professional Engineer (Retired) Certificate No. 46691 ADAM M. BOWERS Date Signed 1-9-23 Expires 9-30-25

DRAWING NO: **SL2** OF 4

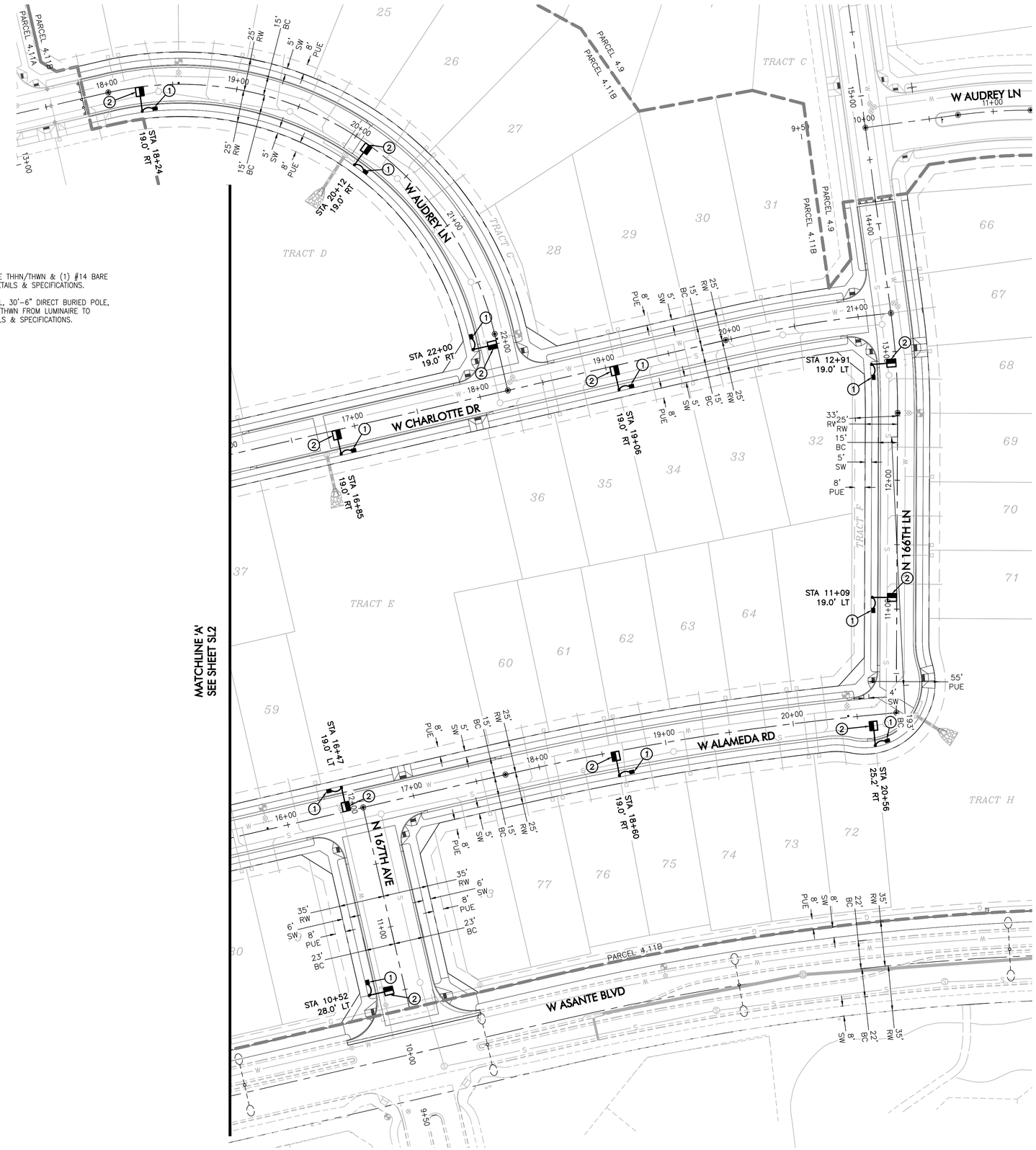
FS22-1517

LEGEND

- 4,800 LUMEN LED STREET LIGHT, SQUARE POLE
- EXISTING STREET LIGHT
- PULL BOX
- NEW CONDUIT RUN
- FIRE HYDRANT

CONSTRUCTION NOTES

1. INSTALL APS PULL BOX NEXT TO POLE. 1" CONDUIT WITH (2) #14 TYPE THHN/THWN & (1) #14 BARE BOND FROM PULL BOX TO FUSE HOLDER IN STREET LIGHT PER APS DETAILS & SPECIFICATIONS.
2. 43W LED (4,800 LUMEN) LUMINAIRE (SEE LUMINAIRE TABLE), PHOTOCELL, 30'–6" DIRECT BURIED POLE, 2' MAST ARM PER APS DETAIL 8030 (SEE SHEET SL4). (2) #14 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. WIRING, FUSING, & GROUNDING PER APS DETAILS & SPECIFICATIONS.



GRAPHIC SCALE

40 20 0 20 40 80

1 INCH = 40 FEET

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WRIGHT ENGINEERING PROJECT NO:
22359

DESIGN BY: AJA
DRAWN BY: AJA
CHECKED BY: AMB

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:

SURPRISE, ARIZONA
ASANTE 900
PHASE 4.11B

STREET LIGHT PLAN

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	SEP 2022	1ST SUBMITTAL
2	FEB 2023	2nd SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
45691
ADAM M. BOWERS
State Planned Area
Expires 9–30–25

DRAWING NO:
SL3
OF 4

FS22–1517

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In Maricopa County: (602) 263-1100

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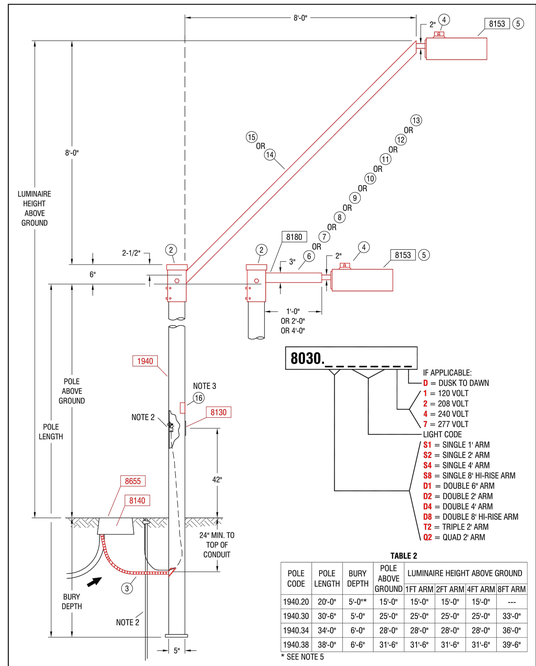


TABLE 2

POLE CODE	POLE LENGTH	BURY DEPTH	POLE ABOVE GROUND	LUMINAIRE HEIGHT ABOVE GROUND			
				1FT ARM	2FT ARM	4FT ARM	8FT ARM
1940.20	20'-0"	5'-0"*	15'-0"	15'-0"	15'-0"	15'-0"	---
1940.30	30'-6"	5'-0"	25'-0"	25'-0"	25'-0"	25'-0"	33'-0"
1940.34	34'-0"	6'-0"	28'-0"	28'-0"	28'-0"	28'-0"	36'-0"
1940.38	38'-0"	6'-6"	31'-6"	31'-6"	31'-6"	31'-6"	39'-6"

* SEE NOTE 5

NOTES:

1. ADJUST PHOTO EYE TO FACE NORTH.
2. A GROUND ROD IS PROVIDED WITH EACH STREET LIGHT POLE. WHERE A GROUND ROD CANNOT BE DRIVEN, ALTERNATE GROUND SHALL BE USED. SEE 2449 THRU 2460 FOR APPROVED ALTERNATES.
3. SIGN, "NOTICE THIS POLE IS OWNED AND MAINTAINED BY APS. DISCONNECT INSIDE", IS REQUIRED ON ALL DUSK-TO-DAWN AND AREA LIGHTING APPLICATIONS.
4. POLES THAT HAVE MORE THAN ONE LUMINAIRE REQUIRE A SEPARATE CIRCUIT WITH FUSING FROM THE J-BOX TO EACH LUMINAIRE.
5. USING THE 20'-0" POLE TO MATCH THE 16'-0" PEDESTRIAN LIGHT MOUNTING HEIGHT REDUCE POLE BURY DEPTH TO 4'-0".
6. THE BROWN PHOTO CONTROL IS A FAIL OFF CONTROL AND SHALL BE USED WITH ALL INDUCTION AND LED LUMINAIRES.
7. ON 277 VOLT STREET LIGHT CIRCUITS, INSTALL A "277 VOLT" MICARTA TAG ON CABLE IN J-BOX. TAG PROVIDED BY SPEC 8129.
8. THE LUMINAIRE SHOWN IS RECOMMENDED FOR THIS MOUNTING HEIGHT. SEE 8153 FOR ADDITIONAL BROWN ARCHITECTURAL LUMINAIRES.
9. THE TWO ARMED TENON BRACKET POSITIONS THE DOUBLE ARM 180 DEGREES APART.
10. TO ACCOMMODATE LESS THAT THE SPECIFIED LUMINAIRE MOUNTING HEIGHT, A SHOP ORDER IS REQUIRED TO HAVE A PORTION FROM THE TOP OF THE POLE CUT OFF. THE TENON ARM BRACKET SLIDES OVER AND COVERS THE CUT PORTION OF THE POLE.
11. IN-LINE FUSE FOR UNDERGROUND FEEDS, SEE 8130-8140.
12. FOR PEDESTRIAN ONLY APPLICATIONS SEE 8030.

TABLE 1

LIGHT CODE	APN	WATTS	K	TYPE	VOLTS	INITIAL LUMENS	MOUNTING HEIGHT
AH18	00099450	100	2100	HPS	120/208/240/277	9,500	SEE TABLE 2
AH17	00099451	150			120/208/240/277	16,000	
AH18	00099452	250			120/208/240/277	30,000	
AH19	00099454	400			120/208/240/277	50,000	
RN40	00128258	55	2700	IND	120/208/240/277	5,600	
RN41	00128667	100	5000		120/208/240/277	9,400	
RN42	00132846	150			120/208/240/277	10,200	
RN43	00132850	150			120/208/240/277	13,000	
RN44	00121153	200			120/208/240/277	15,250	
RN45	00116527	250			120/208/240/277	22,500	
RL40	00141047	32	3000	LED S	120/208/240/277	3,800	
RL41	00141048	41			120/208/240/277	4,800	
RL42	00141049	88			120/208/240/277	8,200	
RL43	00141050	108			120/208/240/277	11,000	
RL44	00141051	162			120/208/240/277	19,000	
RL50	00128251	45	4000	LED S	120/208/240/277	4,300	
RL52	00126804	60			120/208/240/277	5,400	
RL53	00126805	95			120/208/240/277	8,600	
RL54	00126806	113			120/208/240/277	10,000	
RL56	00128365	257			120/208/240/277	19,200	
AL56	00113722	62	4000	LED M	120/208/240/277	7,100	
AL58	00129911	72			120/208/240/277	8,300	
AL60	00113723	119			120/208/240/277	12,900	
AL61	00116525	119R*			120/208/240/277	12,900	
AL62	00116526	119L*			120/208/240/277	12,900	
AL65	00107462	144			120/208/240/277	15,400	
AS20	33806772	55	1700	LPS	120/240	8,000	
AS21	33806774	90			120/240	13,500	
AS22	33806776	135			120/240	22,500	
AS23	33806778	180			120/240	33,000	

* CALL STANDARDS ENGINEERING FOR APPLICATION

MATERIAL LIST

ITEM	CODE	8030.S1 QTY	8030.S2 QTY	8030.S4 QTY	8030.S8 QTY	8030.D1 QTY	8030.D2 QTY	8030.D4 QTY	8030.D8 QTY	8030.T2 QTY	8030.Q2 QTY	DESCRIPTION	APN
1		-	-	-	-	-	-	-	1	-	-	BRACKET ARCH SLIP BOLTED	00092251
2		1	1	1	1	1	1	1	1	1	1	CAP STLT SQ-P 5.5" ARM	00100036
3		10	10	10	10	10	10	10	10	10	10	CONDUIT 1" PVC FLEX CORR	32900891
4		1	1	1	1	2	2	2	2	3	4	CONTROL PHOTO MULTI BR-20	00073241
5		1	1	1	1	2	2	2	2	3	4	LUMINAIRE - SEE TABLE 1	
6		-	-	-	-	1	-	-	-	-	-	MAST ARM STLT 3" SQ X 1' DBL	00121154
7		1	-	-	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 1' SGL	00088370
8		-	-	-	-	-	1	-	-	-	-	MAST ARM STLT 3"SQ X 2' DBL	33701117
9		-	-	-	-	-	-	-	-	-	1	MAST ARM STLT 3"SQ X 2' QUAD	00052665
10		-	1	-	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 2' SGL	33701116
11		-	-	-	-	-	-	-	-	1	-	MAST ARM STLT 3"SQ X 2' TPL	00052664
12		-	-	-	-	-	-	1	-	-	-	MAST ARM STLT 3"SQ X 4' DBL	00073267
13		-	-	1	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 4' SGL	00061738
14		-	-	-	1	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 8' SGL	33701120
15		-	-	-	-	-	-	-	2	-	-	MAST ARM STLT 8' BOLT-ON	00092252
16		1	1	1	1	1	1	1	1	1	1	SIGN POLE OWNED BY APS	00050092

aps ARIZONA PUBLIC SERVICE COMPANY
T&D CONSTRUCTION STANDARDS

BY	LDR.	MGR.	DATE	REV.
KLS	B. BOOKER	R. CANDRA	02/2016	12

LIGHTS ARCHITECTURAL ON 5" SQUARE BROWN PAINTED STEEL POLE DIRECT BURY

SH 1 OF 2

8030

aps ARIZONA PUBLIC SERVICE COMPANY
T&D CONSTRUCTION STANDARDS

BY	LDR.	MGR.	DATE	REV.
KLS	B. BOOKER	R. CANDRA	02/2016	12

LIGHTS ARCHITECTURAL ON 5" SQUARE BROWN PAINTED STEEL POLE DIRECT BURY

SH 2 OF 2

8030

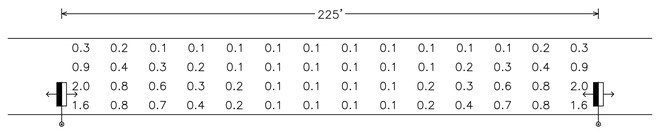
LUMINAIRE TABLE

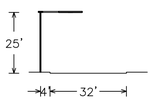
DARK BRONZE ROADWAY SCALEABLE LED 3000K

LIGHT CODE	COLOR	APN	WATTS	VOLTS	INITIAL LUMENS	CATALOG #
RL40	DKBZ	00141047	32	120/208/240/277	3,900	ERLC004B430ADKBZGLRV1013
RL41		00141048	43	120/208/240/277	4,800	ERLC005A430ADKBZGLRV1013
RL42		00141049	71	120/208/240/277	7,800	ERL1008C330ADKBZGLRX162
RL33		00141050	96	120/208/240/277	11,000	ERLH011C330ADKBZGLV1108
RL44		00141051	174	120/208/240/277	20,100	ERL2021C330ADKBZGLR113

TYPICAL LOCAL STREET CALCULATION

ILLUMINANCE METHOD







43W LED 4,800 LUMEN
Type II Distribution, 2' Mast arm
candela file 'ERLC_05A430_____-120-277V.IES'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 43
mounting height= 25 ft
number locations= 2, number luminaires= 2
kw all locations= 0.1

Roadway Grid
56 points at z=0, sp 16.071ft by 8ft
HORIZONTAL FOOTCANDLES

Average	0.4
Maximum	2.0
Minimum	0.1
Avg:Min	3.96
Max:Min	20.00
Coef Var	1.16
UnifGrad	2.50

WRIGHT ENGINEERING
PROJECT NO:
22359
DESIGN BY: AJA
DRAWN BY: AJA
CHECKED BY: AMB

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:

SURPRISE, ARIZONA
ASANTE 900
PHASE 4.11B

STREET LIGHT DETAILS

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	SEP 2022	1ST SUBMITTAL
2	FEB 2023	2nd SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M.
BOWERS
Date Signed
2-23-23
Expires 9-30-25

DRAWING NO:
SL4
OF 4

FS22-1517

Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
in Maricopa County: (602) 263-1100

ASANTE 900

PHASE 4.12

STREET LIGHT DESIGN

STREET LIGHTING REQUIREMENTS

5.00 GENERAL NOTES:

THE FOLLOWING INFORMATION IS PROVIDED TO EMPHASIZE CRITICAL WORK AND IS INTENDED TO SUPPLEMENT THE SPECIFICATIONS. SHOULD THERE BE A CONFLICT WITH THE SPECIFICATIONS, THIS DOCUMENT SHALL TAKE PRECEDENCE.

ALTERNATES SHALL BE PRE-APPROVED BY THE CITY ENGINEERING MANAGER. APPROVAL OF ALTERNATE PRODUCTS SHALL BE ON AN EQUAL BASIS WITH THE PRODUCT SPECIFIED AND SHALL BE SUBMITTED A MINIMUM OF TEN (10) DAYS PRIOR TO BID OPENING. STRUCTURAL CALCULATIONS SHALL BE FURNISHED FOR ALTERNATE PRODUCTS AND CERTIFIED BY A STRUCTURAL ENGINEER, REGISTERED IN THE STATE OF ARIZONA. LUMINAIRES AND LAMPS SHALL MEET OR EXCEED THE PHOTOMETRIC, ELECTRICAL, AND MECHANICAL REQUIREMENTS FOR THE SPECIFIED PRODUCTS.

THE CONTRACTOR SHALL COMPLY WITH STATE AND CITY STATUTES, AND MANUFACTURER'S RECOMMENDATIONS.

THE SUBMITTAL PACKAGE SHALL CONSIST OF THREE (3) COPIES OF EQUIPMENT/MATERIAL TO BE INSTALLED AND SHALL BE BOUND/STAPLED IN A FOLDER AND SUBMITTED AT THE TIME OF PERMIT APPLICATION.

PRIOR TO SUBMITTING A PROPOSAL, THE BIDDER SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS AND VISIT THE CONSTRUCTION SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL OPERATE AND WHICH WILL IN ANY WAY AFFECT THE WORK UNDER THE CONTRACT. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN THIS CONNECTION IN THE BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLIGENCE ON HIS PART.

PRIOR TO ORDERING ANY MATERIALS OR DOING ANY WORK, THE CONTRACTOR SHOULD VERIFY DIMENSIONS AT THE SITE. IMMEDIATELY REPORT DIFFERENCES TO THE ENGINEERING MGR. AND SHOULD NOT PROCEED WITH WORK UNTIL THE ENGINEERING MGR. RENDERS A DECISION. NO EXTRA CHARGES OR COMPENSATION WILL BE ALLOWED FOR DIFFERENCES IN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE DRAWINGS.

5.01 GENERAL:

THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH ALL LICENSING REQUIREMENTS SET FORTH BY THE STATE REGISTRAR OF CONTRACTORS OFFICE TO PERFORM WORK RELATING TO STREET LIGHT INSTALLATION IN THE CITY RIGHT-OF-WAY.

ONE PROJECT UNDERGROUND UTILITIES (RIGHT OF WAY) PERMIT AND ONE STREETLIGHT PERMIT FOR EACH STREET LIGHT POLE SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

5.02 WORKING / "AS BUILT" PLANS:

ACCEPTANCE OF THE COMPLETED IMPROVEMENTS WILL NOT BE GIVEN UNTIL 4 MIL PHOTO MYLAR REPRODUCIBLE "AS BUILT" PLANS HAVE BEEN SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

5.03 LIGHT POLES:

LIGHT POLES SHALL BE INSTALLED PLUMB, BE ADJUSTED TO PROVIDE PROPER ALIGNMENT TO THE ROADWAY BEING LIGHTED AND BE PROPERLY GROUNDED WHEN THE INSTALLATION IS COMPLETE.

5.04 EMBEDMENT:

DIRECT BURIED POLES SHALL BE SET IN A TWELVE (12) INCH AUGURED HOLE DEPTH AS SPECIFIED IN UNDISTURBED EARTH. POLE SHALL BE SET PLUMB IN TWO DIRECTIONS 90 DEGREES APART. HAND TAMPING OF ABC BACKFILL WITH PNEUMATIC OR VIBRATING EQUIPMENT IS THE ACCEPTABLE METHOD OF COMPACTION. BACKFILL SHALL BE COMPACTED TO 85% OF MAXIMUM DENSITY AS DEFINED BY ASTM D-2922 AND D-3017. A GROUND ROD SHALL BE INSTALLED ADJACENT TO PULL BOX IN UNDISTURBED SOIL AND A LEAD IN COPPER BOND WIRE (#6) SHALL BE INSTALLED IN 1" CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT (OR EQUAL) FOR POLE GROUNDING.

SURPLUS EXCAVATION SHALL BE DISPOSED OF BY THE CONTRACTOR.

5.05 LUMINAIRES:

LUMINAIRES SHALL BE INSTALLED LEVEL AND INCLUDE A LAMP AND PHOTOCELL. CONTRACTOR SHALL ASSURE THAT THE LUMINAIRES SHALL BE FREE OF DUST, DIRT OR ANYTHING THAT WOULD IMPAIR THE OUTPUT OF THE LIGHT BEFORE HE LEAVES THE SITE.

LUMINAIRES FURNISHED WITH MULTI-TAP BALLASTS SHALL BE REWIRED OR RECONNECTED TO MATCH THE VOLTAGE SUPPLIED BY THE ELECTRIC UTILITY COMPANY.

5.06 WIRING:

WIRING SHALL BE INSTALLED PER UTILITY STANDARDS.

5.07 GROUNDING:

EACH POLE SHALL HAVE A 8' X 5/8" COPPER CLAD GROUND ROD DRIVEN ADJACENT TO PULL BOX. A #6 BARE COPPER LEAD FROM THE GROUND ROD IN PULL BOX TO LANDING LUG IN STREET LIGHT POLE HAND HOLE.

5.08 PULL BOXES:

EXCAVATION FOR PULL BOXES AND MATERIAL SPECIFICATION SHALL BE PER THE ELECTRIC UTILITY COMPANY STANDARDS.

5.09 TRENCH

TRENCH SHALL BE INSTALLED PER THE UTILITY COMPANY STANDARDS.

THE USE OF A COMMON ELECTRIC UTILITY COMPANY TRENCH IS PERMITTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANY FOR COORDINATION OF TRENCHING AND THE INSTALLATION OF CONDUIT.

CONDUIT SHALL BE INSTALLED AT THE DEPTH SPECIFIED ON THE PLANS. CONDUIT SHALL BE 1 INCH CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT OR EQUAL. CONDUIT MUST BE UL RATED AND SUITABLE FOR UNDERGROUND USE.

CONNECTIONS SHALL BE PER UTILITY STANDARDS.

5.12 LIGHT POLE IDENTIFICATION:

THE CONTRACTOR SHALL FURNISH AND INSTALL A NUMBER ON EACH LIGHT POLE. STREET LIGHT POLE IDENTIFICATION AND SPECIFICATIONS WILL BE PROVIDED BY THE CITY OF SURPRISE.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO RESTORE ALL PROPERTY, LANDSCAPING, PAVING AND DRIVEWAYS THAT ARE DISTURBED DURING STREET LIGHT CONSTRUCTION TO THEIR ORIGINAL CONDITION IN CONFORMANCE WITH "MAG" SPECIFICATION SECTION 107.9.

THE DEVELOPER SHALL BE RESPONSIBLE FOR FURNISHING ALL PERSONNEL AND EQUIPMENT TO SUCCESSFULLY PERFORM THE FOLLOWING TEST.

PRIOR TO ACCEPTANCE, THE DEVELOPER SHALL ENERGIZE AND OPERATE THE ENTIRE ROADWAY LIGHTING SYSTEM, FROM SUNSET TO SUNRISE FOR TWO CONSECUTIVE DAYS WITHOUT INTERRUPTION OR FAILURE. IF A LAMP OR BALLAST SHOULD FAIL, IT SHALL BE IMMEDIATELY REPLACED.

THE CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE ENGINEERING MANAGER, AGAINST IMPERFECT WORKMANSHIP, FAILURE, MALFUNCTION OF MATERIALS AND/OR EQUIPMENT DUE TO FAULTY OR IMPERFECT WORKMANSHIP. THIS GUARANTEE IS TO BE IN WRITING TO THE CITY AT THE TIME OF ISSUING FINAL ACCEPTANCE. WORK FOUND TO BE DEFECTIVE WITHIN THE WARRANTY PERIOD SHALL BE REPLACED WITHOUT COST TO THE CITY.

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 REPLACEDIN 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.

CITY OF SURPRISE APPROVAL

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.

CITY OF SURPRISE ENGINEER **DATE**

UTILITIES WITHIN OR AFFECTED BY THE PROJECT	
UTILITY CONTACT	DATE SUBMITTED
ARIZONA PUBLIC SERVICE	09/23/2022
CENTURY LINK	09/23/2022
COX COMMUNICATIONS	09/23/2022
SOUTHWEST GAS	09/23/2022

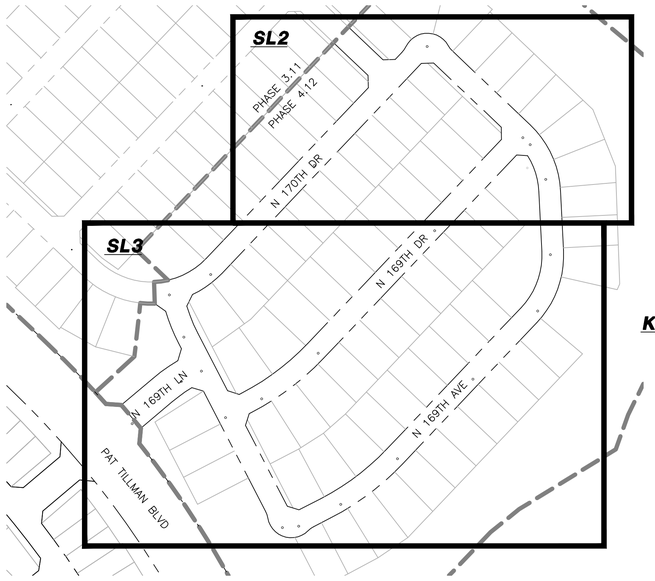
NOTE

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

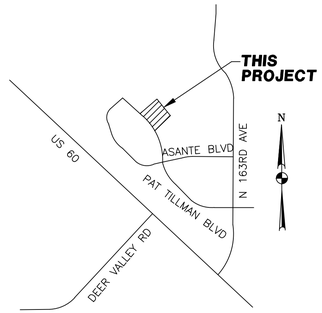
B. THE ELECTRICAL/MAINTENANCE COSTS OF ALL STREET LIGHTS ON LOCAL AND COLLECTOR STREETS ARE TO BE PAID BY THE ADJACENT PROJECT OR THE ADJACENT DEVELOPMENT'S STREET LIGHT IMPROVEMENT DISTRICT (SLID). THE ELECTRICAL / MAINTENANCE COSTS OF ALL STREET LIGHTS ON ARTERIAL STREETS ARE TO BE BILLED TO THE CITY OF SURPRISE'S ENERGY BILL.

LED NOTE

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.



KEY MAP
N.T.S.



VICINITY MAP
N.T.S.

SHEET INDEX

COVER SHEET	SL1
STREET LIGHT PLAN	SL2
STREET LIGHT PLAN	SL3
DETAILS	SL4

POWER CONDUIT NOTE

TRENCH & CONDUIT RUNS FROM STREET LIGHT PULL BOX TO POINT OF ELECTRICAL SERVICE WILL BE DESIGNED BY THE POWER COMPANY, AND ARE SHOWN ON POWER COMPANY PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THESE PLANS FROM DEVELOPER/OWNER, AND INCLUDE THESE RUNS IN THE BID. COORDINATE THIS WORK WITH THE POWER COMPANY.

CIVIL ENGINEER
HILGART WILSON
2141 E HIGHLAND AVE, STE. 250
PHOENIX, AZ 85016
PHONE: (602) 490-0535
FAX: (602) 368- 2436
CONTACT: DIEGO ORTIZ, PE
EMAIL: DORTIZ@HILGARTWILSON.COM

OWNER
LENNAR COMMUNITIES DELEOPMENT, LLC
1665 W. ALMEDA DR STE 130
TEMPE, AZ 85282-3000
CONTACT: JORGE VILLASENOR

Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348) in Maricopa County: (602) 263-1100

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WRIGHT ENGINEERING PROJECT NO: **22359**

DESIGN BY: AJA
DRAWN BY: AJA
CHECKED BY: AMB

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: SURPRISE, ARIZONA
ASANTE 900
PHASE 4.12

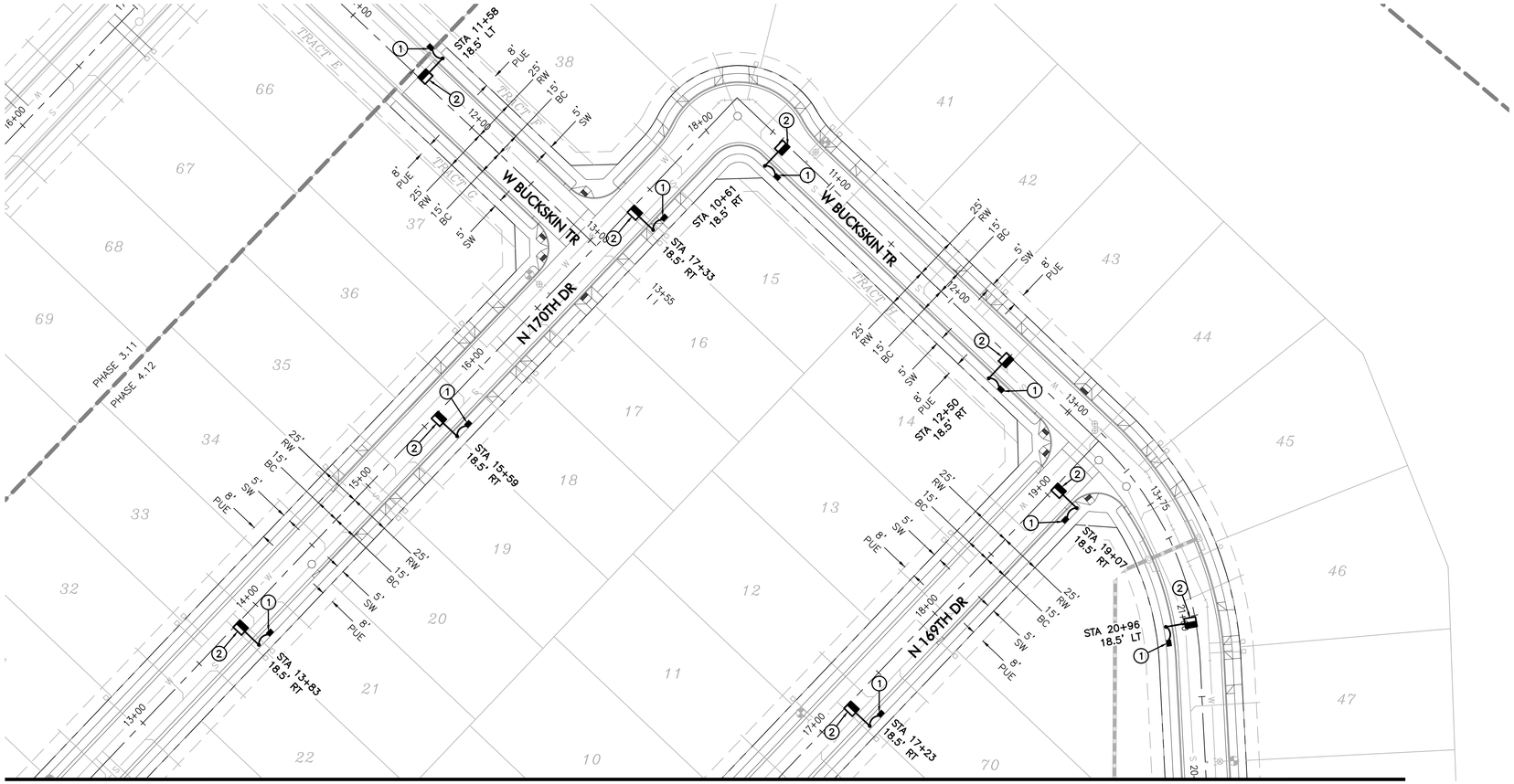
TITLE: STREET LIGHT COVER SHEET

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	SEP 2022	1ST SUBMITTAL
2	FEB 2023	2ND SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M. BOWERS
Date Signed 2-13-23
Expires 9-30-25

DRAWING NO: **SL1**
OF 4

FS22-1530



MATCHLINE 'A'
SEE SHEET SL3

LEGEND

- 4,800 LUMEN LED STREET LIGHT, SQUARE POLE
- EXISTING STREET LIGHT
- PULL BOX
- NEW CONDUIT RUN
- FIRE HYDRANT
- FUTURE STREET LIGHT

CONSTRUCTION NOTES

1. INSTALL APS PULL BOX NEXT TO POLE. 1" CONDUIT WITH (2) #14 TYPE THHN/THWN & (1) #14 BARE BOND FROM PULL BOX TO FUSE HOLDER IN STREET LIGHT PER APS DETAILS & SPECIFICATIONS.
2. 43W LED (4,800 LUMEN) LUMINAIRE (SEE LUMINAIRE TABLE), PHOTOCELL, 30'-6" DIRECT BURIED POLE, 2' MAST ARM PER APS DETAIL 8030 (SEE SHEET SL6). (2) #14 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. WIRING, FUSING, & GROUNDING PER APS DETAILS & SPECIFICATIONS.

GRAPHIC SCALE
40 20 0 20 40 80
1 INCH = 40 FEET

Call at least two full working days before you begin excavation.
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ELECTRICAL ENGINEERING AND DESIGN
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PHONE 480.497.5829 • FAX 480.497.5807
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PROJECT: TITLE:

SURPRISE, ARIZONA
ASANTE 900
PHASE 4.12

STREET LIGHT PLAN

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	SEP 2022	1ST SUBMITTAL
2	FEB 2023	2ND SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M.
BOWERS
3-17-23
Date Signed
Arizona U.S.A.
Expires 9-30-25

DRAWING NO:
SL2
OF 4

FS22-1530

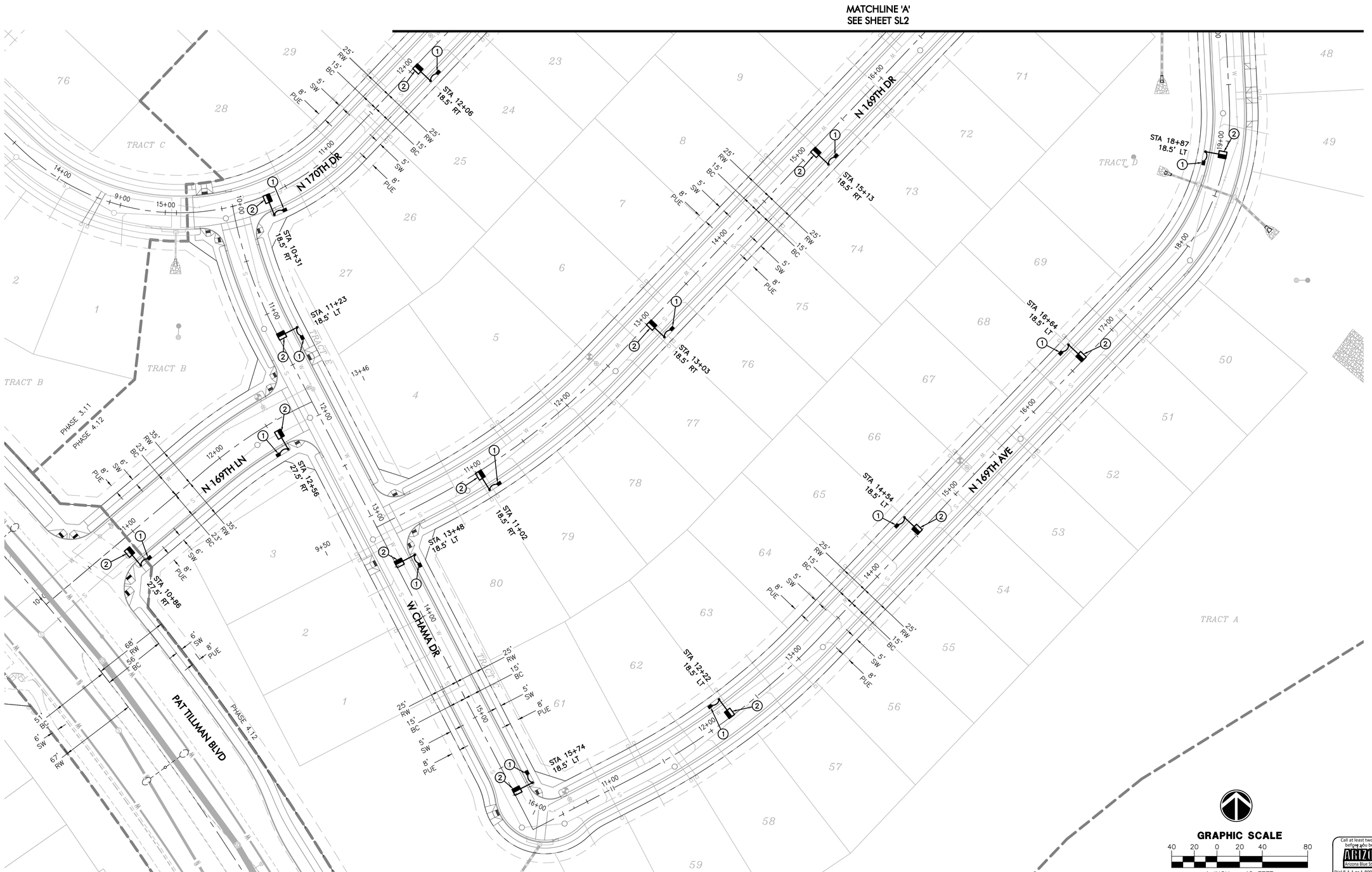
LEGEND

- 4,800 LUMEN LED STREET LIGHT, SQUARE POLE
- EXISTING STREET LIGHT
- PULL BOX
- NEW CONDUIT RUN
- FIRE HYDRANT
- FUTURE STREET LIGHT

CONSTRUCTION NOTES

(1) INSTALL APS PULL BOX NEXT TO POLE. 1" CONDUIT WITH (2) #14 TYPE THHN/THWN & (1) #14 BARE BOND FROM PULL BOX TO FUSE HOLDER IN STREET LIGHT PER APS DETAILS & SPECIFICATIONS.

(2) 43W LED (4,800 LUMEN) LUMINAIRE (SEE LUMINAIRE TABLE), PHOTOCELL, 30'-6" DIRECT BURIED POLE, 2' MAST ARM PER APS DETAIL 8030 (SEE SHEET SL6). (2) #14 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. WIRING, FUSING, & GROUNDING PER APS DETAILS & SPECIFICATIONS.



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PROJECT: TITLE:

SURPRISE, ARIZONA
ASANTE 900
PHASE 4.12

STREET LIGHT PLAN

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	SEP 2022	1ST SUBMITTAL
2	FEB 2023	2ND SUBMITTAL

Registered Professional Engineer (Electrical)
Certificate No.
46691
ADAM M. BOWERS
3-31-23
Date Signed
Arizona U.S.A.
Expires 9-30-25

DRAWING NO:
SL3
OF 4

FS22-1530

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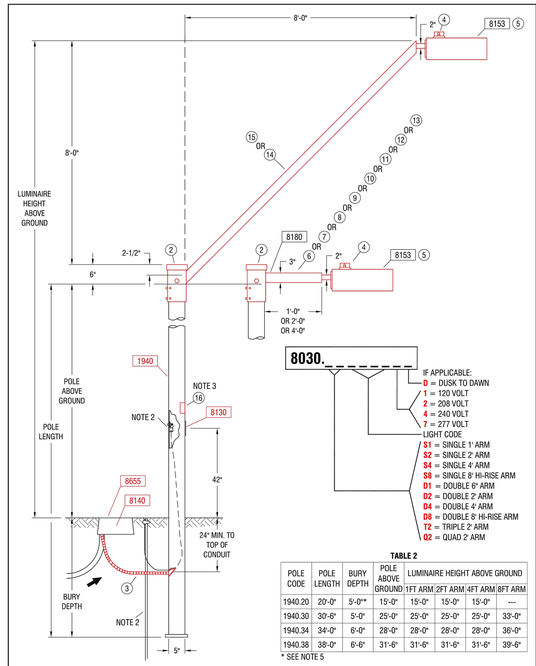


TABLE 2

POLE CODE	POLE LENGTH	BURY DEPTH	POLE ABOVE GROUND	LUMINAIRE HEIGHT ABOVE GROUND			
				1FT ARM	2FT ARM	4FT ARM	8FT ARM
1940.20	20'-0"	5'-0"*	15'-0"	15'-0"	15'-0"	15'-0"	----
1940.30	30'-6"	5'-0"	25'-0"	25'-0"	25'-0"	25'-0"	33'-0"
1940.34	34'-0"	6'-0"	28'-0"	28'-0"	28'-0"	28'-0"	36'-0"
1940.38	38'-0"	6'-6"	31'-6"	31'-6"	31'-6"	31'-6"	39'-6"

* SEE NOTE 5

NOTES:

1. ADJUST PHOTO EYE TO FACE NORTH.
2. A GROUND ROD IS PROVIDED WITH EACH STREET LIGHT POLE. WHERE A GROUND ROD CANNOT BE DRIVEN, ALTERNATE GROUND SHALL BE USED. SEE 2449 THRU 2460 FOR APPROVED ALTERNATES.
3. SIGN, "NOTICE THIS POLE IS OWNED AND MAINTAINED BY APS. DISCONNECT INSIDE", IS REQUIRED ON ALL DUSK-TO-DAWN AND AREA LIGHTING APPLICATIONS.
4. POLES THAT HAVE MORE THAN ONE LUMINAIRE REQUIRE A SEPARATE CIRCUIT WITH FUSING FROM THE J-BOX TO EACH LUMINAIRE.
5. USING THE 20'-0" POLE TO MATCH THE 16'-0" PEDESTRIAN LIGHT MOUNTING HEIGHT REDUCE POLE BURY DEPTH TO 4'-0".
6. THE BROWN PHOTO CONTROL IS A FAIL OFF CONTROL AND SHALL BE USED WITH ALL INDUCTION AND LED LUMINAIRES.
7. ON 277 VOLT STREET LIGHT CIRCUITS, INSTALL A "277 VOLT" MICARTA TAG ON CABLE IN J-BOX. TAG PROVIDED BY SPEC 8129.
8. THE LUMINAIRE SHOWN IS RECOMMENDED FOR THIS MOUNTING HEIGHT. SEE 8153 FOR ADDITIONAL BROWN ARCHITECTURAL LUMINAIRES.
9. THE TWO ARMED TENON BRACKET POSITIONS THE DOUBLE ARM 180 DEGREES APART.
10. TO ACCOMMODATE LESS THAT THE SPECIFIED LUMINAIRE MOUNTING HEIGHT, A SHOP ORDER IS REQUIRED TO HAVE A PORTION FROM THE TOP OF THE POLE CUT OFF. THE TENON ARM BRACKET SLIDES OVER AND COVERS THE CUT PORTION OF THE POLE.
11. IN-LINE FUSE FOR UNDERGROUND FEEDS, SEE 8130-8140.
12. FOR PEDESTRIAN ONLY APPLICATIONS SEE 8030.

TABLE 1

LIGHT CODE	APN	WATTS	K	TYPE	VOLTS	INITIAL LUMENS	MOUNTING HEIGHT
AH18	00099450	100	2100	HPS	120/208/240/277	9,500	SEE TABLE 2
AH17	00099451	150			120/208/240/277	16,000	
AH18	00099452	250			120/208/240/277	30,000	
AH19	00099454	400			120/208/240/277	50,000	
RN40	00128258	55	2700	IND	120/208/240/277	5,600	
RN41	00128667	100	5000		120/208/240/277	8,400	
RN42	00132846	150			120/208/240/277	10,200	
RN43	00132850	150			120/208/240/277	13,000	
RN44	00121153	200			120/208/240/277	15,250	
RN45	00116527	250			120/208/240/277	22,500	
RL40	00141047	32	3000	LED S	120/208/240/277	3,800	
RL41	00141048	41			120/208/240/277	4,800	
RL42	00141049	88			120/208/240/277	8,200	
RL43	00141050	108			120/208/240/277	11,000	
RL44	00141051	162			120/208/240/277	19,000	
RL50	00128251	45	4000	LED S	120/208/240/277	4,300	
RL52	00126804	60			120/208/240/277	5,400	
RL53	00126805	95			120/208/240/277	8,600	
RL54	00126806	113			120/208/240/277	10,000	
RL56	00128365	257			120/208/240/277	19,200	
AL56	00113722	62	4000	LED M	120/208/240/277	7,100	
AL58	00129911	72			120/208/240/277	8,300	
AL60	00113723	119			120/208/240/277	12,900	
AL61	00116525	119R*			120/208/240/277	12,900	
AL62	00126526	119L*			120/208/240/277	12,900	
AL65	00107462	144			120/208/240/277	15,400	
AS20	33806772	55	1700	LPS	120/240	8,000	
AS21	33806774	90			120/240	13,500	
AS22	33806776	135			120/240	22,500	
AS23	33806778	180			120/240	33,000	

* CALL STANDARDS ENGINEERING FOR APPLICATION

CODE	8030.S1	8030.S2	8030.S4	8030.S8	8030.D1	8030.D2	8030.D4	8030.D8	8030.T2	8030.Q2	MATERIAL LIST	
ITEM	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	DESCRIPTION	APN
1	-	-	-	-	-	-	-	1	-	-	BRACKET ARCH SLIP BOLTED	00092251
2	1	1	1	1	1	1	1	1	1	1	CAP STLT SQ-P 5.5" ARM	00100036
3	10	10	10	10	10	10	10	10	10	10	CONDUIT 1" PVC FLEX CORR	32900891
4	1	1	1	1	2	2	2	2	3	4	CONTROL PHOTO MULTI BR-20	00073241
5	1	1	1	1	2	2	2	2	3	4	LUMINAIRE - SEE TABLE 1	
6	-	-	-	-	1	-	-	-	-	-	MAST ARM STLT 3" SQ X 1' DBL	00121154
7	1	-	-	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 1' SGL	00088370
8	-	-	-	-	-	1	-	-	-	-	MAST ARM STLT 3"SQ X 2' DBL	33701117
9	-	-	-	-	-	-	-	-	-	1	MAST ARM STLT 3"SQ X 2' QUAD	00052665
10	-	1	-	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 2' SGL	33701116
11	-	-	-	-	-	-	-	-	1	-	MAST ARM STLT 3"SQ X 2' TPL	00052664
12	-	-	-	-	-	-	1	-	-	-	MAST ARM STLT 3"SQ X 4' DBL	00073267
13	-	-	1	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 4' SGL	00061738
14	-	-	-	1	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 8' SGL	33701120
15	-	-	-	-	-	-	-	2	-	-	MAST ARM STLT 8' BOLT-ON	00092252
16	1	1	1	1	1	1	1	1	1	1	SIGN POLE OWNED BY APS	00050092

aps	ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS				
BY	LDR.	MGR.	DATE	REV.	
KLS	B. BOOKER	R. CANDRA	02/2016	12	

LIGHTS ARCHITECTURAL ON 5" SQUARE BROWN PAINTED STEEL POLE DIRECT BURY

SH 1 OF 2

8030

aps ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS

BY | LDR. | MGR. | DATE | REV.
KLS | B. BOOKER | R. CANDRA | 02/2016 | 12

LIGHTS ARCHITECTURAL ON 5" SQUARE BROWN PAINTED STEEL POLE DIRECT BURY

SH 2 OF 2

8030

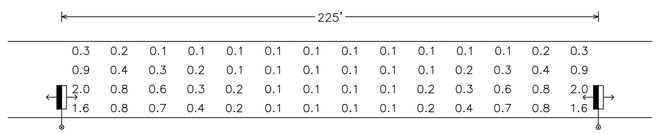
LUMINAIRE TABLE

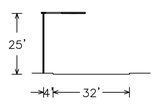
DARK BRONZE ROADWAY SCALEABLE LED 3000K

LIGHT CODE	COLOR	APN	WATTS	VOLTS	INITIAL LUMENS	CATALOG #
RL40	DKBZ	00141047	32	120/208/240/277	3,900	ERLC004B430ADKBZGLRV1013
RL41		00141048	43	120/208/240/277	4,800	ERLC005A430ADKBZGLRV1013
RL42		00141049	71	120/208/240/277	7,800	ERL1008C330ADKBZGLRX162
RL33		00141050	96	120/208/240/277	11,000	ERLH011C330ADKBZGLV1108
RL44		00141051	174	120/208/240/277	20,100	ERL2021C330ADKBZGLR113

TYPICAL LOCAL STREET CALCULATION

ILLUMINANCE METHOD







43W LED 4,800 LUMEN
Type II Distribution, 2' Mast arm
candela file 'ERLC_05A430_____-120-277V.IES'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 43
mounting height= 25 ft
number locations= 2, number luminaires= 2
kw all locations= 0.1

Roadway Grid
56 points at z=0, sp 16.071ft by 8ft
HORIZONTAL FOOTCANDLES

Average	0.4
Maximum	2.0
Minimum	0.1
Avg:Min	3.96
Max:Min	20.00
Coef Var	1.16
UnifGrad	2.50

WRIGHT ENGINEERING
PROJECT NO:
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PROJECT: TITLE:

SURPRISE, ARIZONA
ASANTE 900
PHASE 4.12

STREET LIGHT DETAILS

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	SEP 2022	1ST SUBMITTAL
2	FEB 2023	2ND SUBMITTAL

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ASANTE PLANNING AREA 3

166TH DRIVE

STREET LIGHT DESIGN

STREET LIGHTING REQUIREMENTS

5.00 GENERAL NOTES:

THE FOLLOWING INFORMATION IS PROVIDED TO EMPHASIZE CRITICAL WORK AND IS INTENDED TO SUPPLEMENT THE SPECIFICATIONS. SHOULD THERE BE A CONFLICT WITH THE SPECIFICATIONS, THIS DOCUMENT SHALL TAKE PRECEDENCE.

ALTERNATES SHALL BE PRE-APPROVED BY THE CITY ENGINEERING MANAGER. APPROVAL OF ALTERNATE PRODUCTS SHALL BE ON AN EQUAL BASIS WITH THE PRODUCT SPECIFIED AND SHALL BE SUBMITTED A MINIMUM OF TEN (10) DAYS PRIOR TO BID OPENING. STRUCTURAL CALCULATIONS SHALL BE FURNISHED FOR ALTERNATE PRODUCTS AND CERTIFIED BY A STRUCTURAL ENGINEER, REGISTERED IN THE STATE OF ARIZONA. LUMINAIRES AND LAMPS SHALL MEET OR EXCEED THE PHOTOMETRIC, ELECTRICAL, AND MECHANICAL REQUIREMENTS FOR THE SPECIFIED PRODUCTS.

THE CONTRACTOR SHALL COMPLY WITH STATE AND CITY STATUTES, AND MANUFACTURER'S RECOMMENDATIONS.

THE SUBMITTAL PACKAGE SHALL CONSIST OF THREE (3) COPIES OF EQUIPMENT/MATERIAL TO BE INSTALLED AND SHALL BE BOUND/STAPLED IN A FOLDER AND SUBMITTED AT THE TIME OF PERMIT APPLICATION.

PRIOR TO SUBMITTING A PROPOSAL, THE BIDDER SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS AND VISIT THE CONSTRUCTION SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL OPERATE AND WHICH WILL IN ANY WAY AFFECT THE WORK UNDER THE CONTRACT. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN THIS CONNECTION IN THE BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLIGENCE ON HIS PART.

PRIOR TO ORDERING ANY MATERIALS OR DOING ANY WORK, THE CONTRACTOR SHOULD VERIFY DIMENSIONS AT THE SITE. IMMEDIATELY REPORT DIFFERENCES TO THE ENGINEERING MGR. AND SHOULD NOT PROCEED WITH WORK UNTIL THE ENGINEERING MGR. RENDERS A DECISION. NO EXTRA CHARGES OR COMPENSATION WILL BE ALLOWED FOR DIFFERENCES IN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE DRAWINGS.

5.01 GENERAL:

THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH ALL LICENSING REQUIREMENTS SET FORTH BY THE STATE REGISTRAR OF CONTRACTORS OFFICE TO PERFORM WORK RELATING TO STREET LIGHT INSTALLATION IN THE CITY RIGHT-OF-WAY.

ONE PROJECT UNDERGROUND UTILITIES (RIGHT OF WAY) PERMIT AND ONE STREETLIGHT PERMIT FOR EACH STREET LIGHT POLE SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

5.02 WORKING / "AS BUILT" PLANS:

ACCEPTANCE OF THE COMPLETED IMPROVEMENTS WILL NOT BE GIVEN UNTIL 4 MIL PHOTO MYLAR REPRODUCIBLE "AS BUILT" PLANS HAVE BEEN SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

5.03 LIGHT POLES:

LIGHT POLES SHALL BE INSTALLED PLUMB, BE ADJUSTED TO PROVIDE PROPER ALIGNMENT TO THE ROADWAY BEING LIGHTED AND BE PROPERLY GROUNDED WHEN THE INSTALLATION IS COMPLETE.

5.04 EMBEDMENT:

DIRECT BURIED POLES SHALL BE SET IN A TWELVE (12) INCH AUGURED HOLE DEPTH AS SPECIFIED IN UNDISTURBED EARTH. POLE SHALL BE SET PLUMB IN TWO DIRECTIONS 90 DEGREES APART. HAND TAMPING OF ABC BACKFILL WITH PNEUMATIC OR VIBRATING EQUIPMENT IS THE ACCEPTABLE METHOD OF COMPACTION. BACKFILL SHALL BE COMPACTED TO 85% OF MAXIMUM DENSITY AS DEFINED BY ASTM D-2922 AND D-3017. A GROUND ROD SHALL BE INSTALLED ADJACENT TO PULL BOX IN UNDISTURBED SOIL AND A LEAD IN COPPER BOND WIRE (#6) SHALL BE INSTALLED IN 1" CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT (OR EQUAL) FOR POLE GROUNDING.

SURPLUS EXCAVATION SHALL BE DISPOSED OF BY THE CONTRACTOR.

5.05 LUMINAIRES:

LUMINAIRES SHALL BE INSTALLED LEVEL AND INCLUDE A LAMP AND PHOTOCELL. CONTRACTOR SHALL ASSURE THAT THE LUMINAIRES SHALL BE FREE OF DUST, DIRT OR ANYTHING THAT WOULD IMPAIR THE OUTPUT OF THE LIGHT BEFORE HE LEAVES THE SITE.

LUMINAIRES FURNISHED WITH MULTI-TAP BALLASTS SHALL BE REWIRED OR RECONNECTED TO MATCH THE VOLTAGE SUPPLIED BY THE ELECTRIC UTILITY COMPANY.

5.06 WIRING:

WIRING SHALL BE INSTALLED PER UTILITY STANDARDS.

5.07 GROUNDING:

EACH POLE SHALL HAVE A 8' X 5/8" COPPER CLAD GROUND ROD DRIVEN ADJACENT TO PULL BOX. A #6 BARE COPPER LEAD FROM THE GROUND ROD IN PULL BOX TO LANDING LUG IN STREET LIGHT POLE HAND HOLE.

5.08 PULL BOXES:

EXCAVATION FOR PULL BOXES AND MATERIAL SPECIFICATION SHALL BE PER THE ELECTRIC UTILITY COMPANY STANDARDS.

5.09 TRENCH

TRENCH SHALL BE INSTALLED PER THE UTILITY COMPANY STANDARDS.

THE USE OF A COMMON ELECTRIC UTILITY COMPANY TRENCH IS PERMITTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANY FOR COORDINATION OF TRENCHING AND THE INSTALLATION OF CONDUIT.

CONDUIT SHALL BE INSTALLED AT THE DEPTH SPECIFIED ON THE PLANS. CONDUIT SHALL BE 1 INCH CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT OR EQUAL. CONDUIT MUST BE UL RATED AND SUITABLE FOR UNDERGROUND USE.

CONNECTIONS SHALL BE PER UTILITY STANDARDS.

5.12 LIGHT POLE IDENTIFICATION:

THE CONTRACTOR SHALL FURNISH AND INSTALL A NUMBER ON EACH LIGHT POLE. STREET LIGHT POLE IDENTIFICATION AND SPECIFICATIONS WILL BE PROVIDED BY THE CITY OF SURPRISE.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO RESTORE ALL PROPERTY, LANDSCAPING, PAVING AND DRIVEWAYS THAT ARE DISTURBED DURING STREET LIGHT CONSTRUCTION TO THEIR ORIGINAL CONDITION IN CONFORMANCE WITH "MAG" SPECIFICATION SECTION 107.9.

THE DEVELOPER SHALL BE RESPONSIBLE FOR FURNISHING ALL PERSONNEL AND EQUIPMENT TO SUCCESSFULLY PERFORM THE FOLLOWING TEST.

PRIOR TO ACCEPTANCE, THE DEVELOPER SHALL ENERGIZE AND OPERATE THE ENTIRE ROADWAY LIGHTING SYSTEM, FROM SUNSET TO SUNRISE FOR TWO CONSECUTIVE DAYS WITHOUT INTERRUPTION OR FAILURE. IF A LAMP OR BALLAST SHOULD FAIL, IT SHALL BE IMMEDIATELY REPLACED.

THE CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE ENGINEERING MANAGER, AGAINST IMPERFECT WORKMANSHIP, FAILURE, MALFUNCTION OF MATERIALS AND/OR EQUIPMENT DUE TO FAULTY OR IMPERFECT WORKMANSHIP. THIS GUARANTEE IS TO BE IN WRITING TO THE CITY AT THE TIME OF ISSUING FINAL ACCEPTANCE. WORK FOUND TO BE DEFECTIVE WITHIN THE WARRANTY PERIOD SHALL BE REPLACED WITHOUT COST TO THE CITY.

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 REPLACEDIN 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.

CITY OF SURPRISE APPROVAL

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.

CITY OF SURPRISE ENGINEER **DATE**

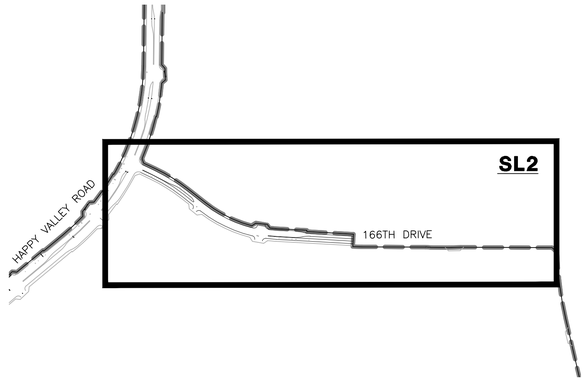
NOTE

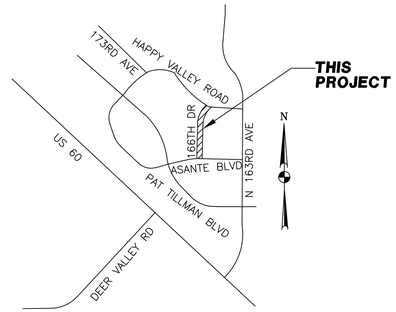
A. ENSURE THERE IS 1' CLEARANCE FROM EDGE OF SIDEWALK TO FACE OF POLE.

B. THE ELECTRICAL/MAINTENANCE COSTS OF ALL STREET LIGHTS ON LOCAL AND COLLECTOR STREETS ARE TO BE PAID BY THE ADJACENT PROJECT OR THE ADJACENT DEVELOPMENT'S STREET LIGHT IMPROVEMENT DISTRICT (SLID). THE ELECTRICAL / MAINTENANCE COSTS OF ALL STREET LIGHTS ON ARTERIAL STREETS ARE TO BE BILLED TO THE CITY OF SURPRISE'S ENERGY BILL.

LED NOTE

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.





VICINITY MAP
N.T.S.

SHEET INDEX

COVER SHEET	SL1
STREET LIGHT PLAN	SL2
DETAILS	SL3

KEY MAP
N.T.S.

POWER CONDUIT NOTE

TRENCH & CONDUIT RUNS FROM STREET LIGHT PULL BOX TO POINT OF ELECTRICAL SERVICE WILL BE DESIGNED BY THE POWER COMPANY, AND ARE SHOWN ON POWER COMPANY PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THESE PLANS FROM DEVELOPER/OWNER, AND INCLUDE THESE RUNS IN THE BID. COORDINATE THIS WORK WITH THE POWER COMPANY.

UTILITIES WITHIN OR AFFECTED BY THE PROJECT	
UTILITY CONTACT	DATE SUBMITTED
ARIZONA PUBLIC SERVICE	11/23/2022
CENTURY LINK	11/23/2022
COX COMMUNICATIONS	11/23/2022
SOUTHWEST GAS	11/23/2022

ELECTRICAL ENGINEER:
WRIGHT ENGINEERING CORPORATION
165 EAST CHILTON DRIVE
CHANDLER, AZ 85225
PHONE: (480) 497-5829
FAX: (480) 497-5807
CONTACT: ADAM BOWERS
ABOWERS@WRIGHTENGINEERING.US

CIVIL ENGINEER
HILGART WILSON
2141 E HIGHLAND AVE, STE. 250
PHOENIX, AZ 85016
PHONE: (602) 490-0535
FAX: (602) 368- 2436
CONTACT: DIEGO ORTIZ, PE
EMAIL: DORTIZ@HILGARTWILSON.COM

OWNER
LENNAR COMMUNITIES DELEOPMENT, LLC
1665 W. ALMEDA DR STE 130
TEMPE, AZ 85282-3000
CONTACT: JORGE VILLASENOR

Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348) in Maricopa County: (602) 263-1100

THESE DRAWINGS AND SPECIFICATIONS ARE THE SOLE PROPERTY OF WRIGHT ENGINEERING CORPORATION AND MAY NOT BE REPRODUCED OR MODIFIED FOR ANY USE WITHOUT THE EXPRESS WRITTEN PERMISSION OF WRIGHT ENGINEERING CORPORATION.

H:\2022\22359-Asante 90\22359-SL-166th Dr.dwg

WRIGHT ENGINEERING PROJECT NO:
22359

DESIGN BY: BDS
DRAWN BY: BDS
CHECKED BY: AMB

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: ASANTE PLANNING AREA 3 166TH DRIVE SURPRISE, ARIZONA

TITLE: STREET LIGHT COVER SHEET

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	NOV 2022	1ST SUBMITTAL
2	MAR 2023	2ND SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No. 46691
ADAM M. BOWERS
Date Signed: 3-31-23
Expires 9-30-25

DRAWING NO:
SL1
OF 3

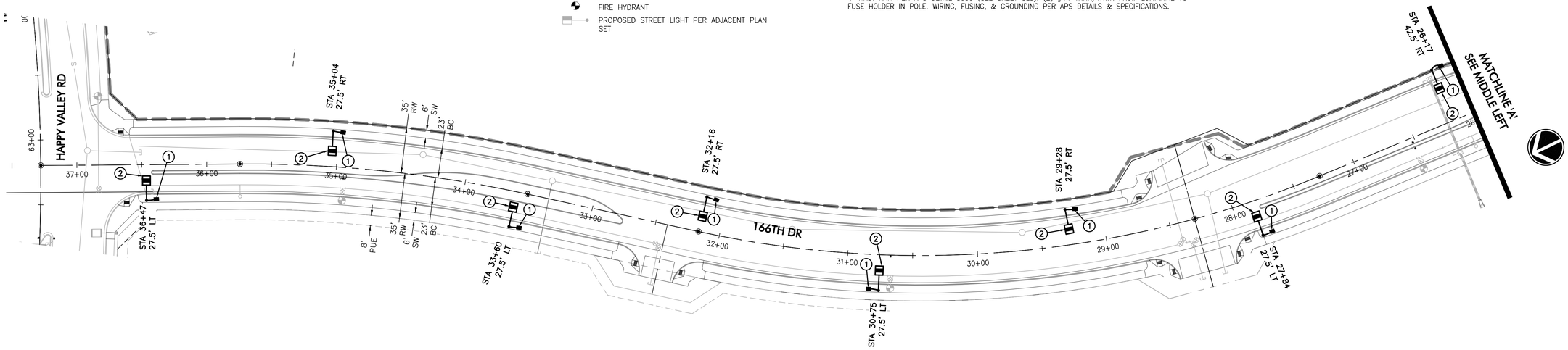
FS23-0024

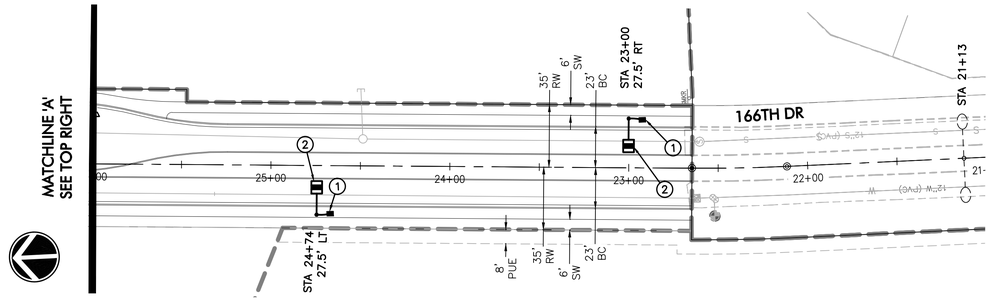
LEGEND

- 7,800 LUMEN LED STREET LIGHT, SQUARE POLE
- EXISTING STREET LIGHT
- PULL BOX
- NEW CONDUIT RUN
- FIRE HYDRANT
- PROPOSED STREET LIGHT PER ADJACENT PLAN SET

CONSTRUCTION NOTES

1. INSTALL APS PULL BOX NEXT TO POLE. 1" CONDUIT WITH (2) #14 TYPE THHN/THWN & (1) #14 BARE BOND FROM PULL BOX TO FUSE HOLDER IN STREET LIGHT PER APS DETAILS & SPECIFICATIONS.
2. 71W LED (7,800 LUMEN) LUMINAIRE (SEE LUMINAIRE TABLE), PHOTOCELL, 38'-0" DIRECT BURIED POLE, 4' MAST ARM PER APS DETAIL 8030 (SEE SHEET SL3). (2) #14 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. WIRING, FUSING, & GROUNDING PER APS DETAILS & SPECIFICATIONS.





GRAPHIC SCALE

40 20 0 20 40 80

1 INCH = 40 FEET

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H:\2022\22359-Asante 900\22359-SL-166th Dr.dwg

WRIGHT ENGINEERING PROJECT NO:
22359

DESIGN BY: BDS
DRAWN BY: BDS
CHECKED BY: AMB

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:

SURPRISE, ARIZONA
ASANTE PLANNING AREA 3
166TH DRIVE

STREET LIGHT PLAN

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	NOV 2022	1ST SUBMITTAL
2	MAR 2023	2ND SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M. BOWERS
State Arizona
Expires 9-30-25

DRAWING NO:
SL2
OF 3

FS23-0024

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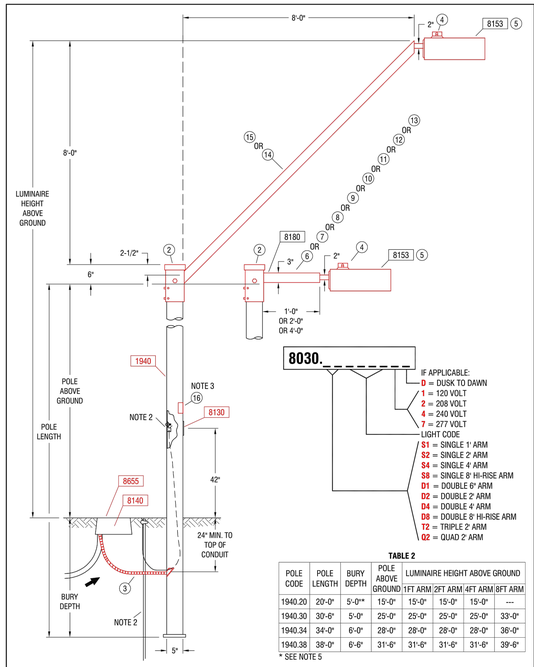
H:\2022\22359-Asante 90\22359-SL-166th Dr.dwg



8030.

IF APPLICABLE:
- D = DUSK TO DAWN
- 1 = 120 VOLT
- 2 = 208 VOLT
- 4 = 240 VOLT
- 7 = 277 VOLT

LIGHT CODE
- S1 = SINGLE 1' ARM
- S2 = SINGLE 2' ARM
- S4 = SINGLE 4' ARM
- S8 = SINGLE 8' HI-RISE ARM
- D1 = DOUBLE 6' ARM
- D2 = DOUBLE 2' ARM
- D4 = DOUBLE 4' ARM
- D8 = DOUBLE 8' HI-RISE ARM
- T2 = TRIPLE 2' ARM
- Q2 = QUAD 2' ARM

TABLE 2

POLE CODE	POLE LENGTH	BURY DEPTH	POLE ABOVE GROUND	LUMINAIRE HEIGHT ABOVE GROUND			
				1FT ARM	2FT ARM	4FT ARM	8FT ARM
1940.20	20'-0"	5'-0"*	15'-0"	15'-0"	15'-0"	15'-0"	----
1940.30	30'-6"	5'-0"	25'-0"	25'-0"	25'-0"	25'-0"	33'-0"
1940.34	34'-0"	6'-0"	28'-0"	28'-0"	28'-0"	28'-0"	36'-0"
1940.38	38'-0"	6'-6"	31'-6"	31'-6"	31'-6"	31'-6"	39'-6"

* SEE NOTE 5

aps ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS				
BY	LDR.	MGR.	DATE	REV.
KLS	B. BOOKER	R. CANDRA	02/2016	12

LIGHTS ARCHITECTURAL ON 5" SQUARE BROWN PAINTED STEEL POLE DIRECT BURY

SH 1 OF 2

8030

NOTES:

1. ADJUST PHOTO EYE TO FACE NORTH.
2. A GROUND ROD IS PROVIDED WITH EACH STREET LIGHT POLE. WHERE A GROUND ROD CANNOT BE DRIVEN, ALTERNATE GROUND SHALL BE USED. SEE 2449 THRU 2460 FOR APPROVED ALTERNATES.
3. SIGN, "NOTICE THIS POLE IS OWNED AND MAINTAINED BY APS. DISCONNECT INSIDE", IS REQUIRED ON ALL DUSK-TO-DAWN AND AREA LIGHTING APPLICATIONS.
4. POLES THAT HAVE MORE THAN ONE LUMINAIRE REQUIRE A SEPARATE CIRCUIT WITH FUSING FROM THE J-BOX TO EACH LUMINAIRE.
5. USING THE 20'-0" POLE TO MATCH THE 16'-0" PEDESTRIAN LIGHT MOUNTING HEIGHT REDUCE POLE BURY DEPTH TO 4'-0".
6. THE BROWN PHOTO CONTROL IS A FAIL OFF CONTROL AND SHALL BE USED WITH ALL INDUCTION AND LED LUMINAIRES.
7. ON 277 VOLT STREET LIGHT CIRCUITS, INSTALL A "277 VOLT" MICARTA TAG ON CABLE IN J-BOX. TAG PROVIDED BY SPEC 8129.
8. THE LUMINAIRE SHOWN IS RECOMMENDED FOR THIS MOUNTING HEIGHT. SEE 8153 FOR ADDITIONAL BROWN ARCHITECTURAL LUMINAIRES.
9. THE TWO ARMED TENON BRACKET POSITIONS THE DOUBLE ARM 180 DEGREES APART.
10. TO ACCOMMODATE LESS THAT THE SPECIFIED LUMINAIRE MOUNTING HEIGHT, A SHOP ORDER IS REQUIRED TO HAVE A PORTION FROM THE TOP OF THE POLE CUT OFF. THE TENON ARM BRACKET SLIDES OVER AND COVERS THE CUT PORTION OF THE POLE.
11. IN-LINE FUSE FOR UNDERGROUND FEEDS, SEE 8130-8140.
12. FOR PEDESTRIAN ONLY APPLICATIONS SEE 8030.

TABLE 1

LIGHT CODE	APN	WATTS	K	TYPE	VOLTS	INITIAL LUMENS	MOUNTING HEIGHT
AH18	00099450	100	2100	HPS	120/208/240/277	9,500	SEE TABLE 2
AH17	00099451	150			120/208/240/277	16,000	
AH18	00099452	250			120/208/240/277	30,000	
AH19	00099454	400			120/208/240/277	50,000	
RN40	00128258	55	2700	IND	120/208/240/277	5,000	
RN41	00128667	100	5000		120/208/240/277	8,400	
RN42	00132846	150			120/208/240/277	10,200	
RN43	00132850	150			120/208/240/277	13,000	
RN44	00121153	200			120/208/240/277	15,250	
RN45	00116527	250			120/208/240/277	22,500	
RL40	00141047	32	3000	LED S	120/208/240/277	3,800	
RL41	00141048	41			120/208/240/277	4,800	
RL42	00141049	88			120/208/240/277	8,200	
RL43	00141050	108			120/208/240/277	11,000	
RL44	00141051	162			120/208/240/277	19,000	
RL50	00128251	45	4000	LED S	120/208/240/277	4,300	
RL52	00126804	60			120/208/240/277	5,400	
RL53	00126805	95			120/208/240/277	8,600	
RL54	00126806	113			120/208/240/277	10,000	
RL56	00128365	257			120/208/240/277	19,200	
AL56	00113722	62	4000	LED M	120/208/240/277	7,100	
AL58	00129911	72			120/208/240/277	8,300	
AL60	00113723	119			120/208/240/277	12,900	
AL61	00116525	119R*			120/208/240/277	12,900	
AL62	00116526	119L*			120/208/240/277	12,900	
AL65	00107462	144			120/208/240/277	15,400	
AS20	33806772	55	1700	LPS	120/240	8,000	
AS21	33806774	90			120/240	13,500	
AS22	33806776	135			120/240	22,500	
AS23	33806778	180			120/240	33,000	

* CALL STANDARDS ENGINEERING FOR APPLICATION

MATERIAL LIST

ITEM	CODE	8030.S1 QTY	8030.S2 QTY	8030.S4 QTY	8030.S8 QTY	8030.D1 QTY	8030.D2 QTY	8030.D4 QTY	8030.D8 QTY	8030.T2 QTY	8030.Q2 QTY	DESCRIPTION	APN
1		-	-	-	-	-	-	-	1	-	-	BRACKET ARCH SLIP BOLTED	00092251
2		1	1	1	1	1	1	1	1	1	1	CAP STLT SQ-P 5.5" ARM	00100036
3		10	10	10	10	10	10	10	10	10	10	CONDUIT 1" PVC FLEX CORR	32900891
4		1	1	1	1	2	2	2	2	3	4	CONTROL PHOTO MULTI BR-20	00073241
5		1	1	1	1	2	2	2	2	3	4	LUMINAIRE - SEE TABLE 1	
6		-	-	-	-	1	-	-	-	-	-	MAST ARM STLT 3" SQ X 1' DBL	00121154
7		1	-	-	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 1' SGL	00088370
8		-	-	-	-	-	1	-	-	-	-	MAST ARM STLT 3"SQ X 2' DBL	33701117
9		-	-	-	-	-	-	-	-	-	1	MAST ARM STLT 3"SQ X 2' QUAD	00052665
10		-	1	-	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 2' SGL	33701116
11		-	-	-	-	-	-	-	-	1	-	MAST ARM STLT 3"SQ X 2' TPL	00052664
12		-	-	-	-	-	-	1	-	-	-	MAST ARM STLT 3"SQ X 4' DBL	00073267
13		-	-	1	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 4' SGL	00061738
14		-	-	-	1	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 8' SGL	33701120
15		-	-	-	-	-	-	-	2	-	-	MAST ARM STLT 8' BOLT-ON	00092252
16		1	1	1	1	1	1	1	1	1	1	SIGN POLE OWNED BY APS	00050092

aps ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS				
BY	LDR.	MGR.	DATE	REV.
KLS	B. BOOKER	R. CANDRA	02/2016	12

LIGHTS ARCHITECTURAL ON 5" SQUARE BROWN PAINTED STEEL POLE DIRECT BURY

SH 2 OF 2

8030

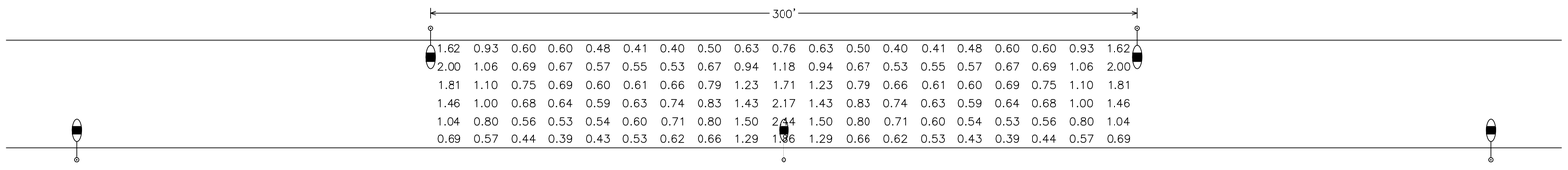
LUMINAIRE TABLE

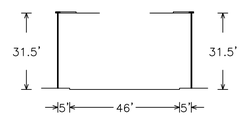
DARK BRONZE ROADWAY SCALEABLE LED 3000K

LIGHT CODE	COLOR	APN	WATTS	VOLTS	INITIAL LUMENS	CATALOG #
RL40	DKBZ	00141047	32	120/208/240/277	3,900	ERLC004B430ADKBZGLRV1013
RL41		00141048	43	120/208/240/277	4,800	ERLC005A430ADKBZGLRV1013
RL42		00141049	71	120/208/240/277	7,800	ERL1008C330ADKBZGLRX162
RL33		00141050	96	120/208/240/277	11,000	ERLH011C330ADKBZGLV1108
RL44		00141051	174	120/208/240/277	20,100	ERL2021C330ADKBZGLR113

TYPICAL COLLECTOR STREET CALCULATION

ILLUMINANCE METHOD





7800 LUMEN
Type 3 Distribution
4' Mast Arm
candela file 'ERL1_09B330_____.IES'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 71
mounting height= 31.5 ft
number locations= 5, number luminaires= 5
kw all locations= 0.4

Roadway Grid
114 points at z=0, sp 15.789ft by 7.667ft
HORIZONTAL FOOTCANDLES

Average	0.84
Maximum	2.44
Minimum	0.39
Avg:Min	2.15
Max:Min	6.26
Coef Var	0.51
UnifGrad	1.95

WRIGHT ENGINEERING PROJECT NO:

22359

DESIGN BY: BDS
DRAWN BY: BDS
CHECKED BY: AMB

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:

ASANTE PLANNING AREA 3
166TH DRIVE
SURPRISE, ARIZONA

STREET LIGHT DETAILS

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	NOV 2022	1ST SUBMITTAL
2	MAR 2023	2ND SUBMITTAL

Registered Professional Engineer (Attached)
Certificate No.
46691
ADAM M. BOWERS
Date Signed 4-21-23
Adam M. Bowers
Expires 9-30-25

DRAWING NO:

SL3

OF 3

FS23-0024

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

ASANTE PLANNING AREA 3

W COTTONTAIL LANE

STREET LIGHT DESIGN

STREET LIGHTING REQUIREMENTS

5.00 GENERAL NOTES:

THE FOLLOWING INFORMATION IS PROVIDED TO EMPHASIZE CRITICAL WORK AND IS INTENDED TO SUPPLEMENT THE SPECIFICATIONS. SHOULD THERE BE A CONFLICT WITH THE SPECIFICATIONS, THIS DOCUMENT SHALL TAKE PRECEDENCE.

ALTERNATES SHALL BE PRE-APPROVED BY THE CITY ENGINEERING MANAGER. APPROVAL OF ALTERNATE PRODUCTS SHALL BE ON AN EQUAL BASIS WITH THE PRODUCT SPECIFIED AND SHALL BE SUBMITTED A MINIMUM OF TEN (10) DAYS PRIOR TO BID OPENING. STRUCTURAL CALCULATIONS SHALL BE FURNISHED FOR ALTERNATE PRODUCTS AND CERTIFIED BY A STRUCTURAL ENGINEER, REGISTERED IN THE STATE OF ARIZONA. LUMINAIRES AND LAMPS SHALL MEET OR EXCEED THE PHOTOMETRIC, ELECTRICAL, AND MECHANICAL REQUIREMENTS FOR THE SPECIFIED PRODUCTS.

THE CONTRACTOR SHALL COMPLY WITH STATE AND CITY STATUTES, AND MANUFACTURER'S RECOMMENDATIONS.

THE SUBMITTAL PACKAGE SHALL CONSIST OF THREE (3) COPIES OF EQUIPMENT/MATERIAL TO BE INSTALLED AND SHALL BE BOUND/STAPLED IN A FOLDER AND SUBMITTED AT THE TIME OF PERMIT APPLICATION.

PRIOR TO SUBMITTING A PROPOSAL, THE BIDDER SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS AND VISIT THE CONSTRUCTION SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL OPERATE AND WHICH WILL IN ANY WAY AFFECT THE WORK UNDER THE CONTRACT. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN THIS CONNECTION IN THE BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLIGENCE ON HIS PART.

PRIOR TO ORDERING ANY MATERIALS OR DOING ANY WORK, THE CONTRACTOR SHOULD VERIFY DIMENSIONS AT THE SITE. IMMEDIATELY REPORT DIFFERENCES TO THE ENGINEERING MGR. AND SHOULD NOT PROCEED WITH WORK UNTIL THE ENGINEERING MGR. RENDERS A DECISION. NO EXTRA CHARGES OR COMPENSATION WILL BE ALLOWED FOR DIFFERENCES IN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE DRAWINGS.

5.01 GENERAL:

THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH ALL LICENSING REQUIREMENTS SET FORTH BY THE STATE REGISTRAR OF CONTRACTORS OFFICE TO PERFORM WORK RELATING TO STREET LIGHT INSTALLATION IN THE CITY RIGHT-OF-WAY.

ONE PROJECT UNDERGROUND UTILITIES (RIGHT OF WAY) PERMIT AND ONE STREETLIGHT PERMIT FOR EACH STREET LIGHT POLE SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

5.02 WORKING / "AS BUILT" PLANS:

ACCEPTANCE OF THE COMPLETED IMPROVEMENTS WILL NOT BE GIVEN UNTIL 4 MIL PHOTO MYLAR REPRODUCIBLE "AS BUILT" PLANS HAVE BEEN SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

5.03 LIGHT POLES:

LIGHT POLES SHALL BE INSTALLED PLUMB, BE ADJUSTED TO PROVIDE PROPER ALIGNMENT TO THE ROADWAY BEING LIGHTED AND BE PROPERLY GROUNDED WHEN THE INSTALLATION IS COMPLETE.

5.04 EMBEDMENT:

DIRECT BURIED POLES SHALL BE SET IN A TWELVE (12) INCH AUGURED HOLE DEPTH AS SPECIFIED IN UNDISTURBED EARTH. POLE SHALL BE SET PLUMB IN TWO DIRECTIONS 90 DEGREES APART. HAND TAMPING OF ABC BACKFILL WITH PNEUMATIC OR VIBRATING EQUIPMENT IS THE ACCEPTABLE METHOD OF COMPACTION. BACKFILL SHALL BE COMPACTED TO 85% OF MAXIMUM DENSITY AS DEFINED BY ASTM D-2922 AND D-3017. A GROUND ROD SHALL BE INSTALLED ADJACENT TO PULL BOX IN UNDISTURBED SOIL AND A LEAD IN COPPER BOND WIRE (#6) SHALL BE INSTALLED IN 1" CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT (OR EQUAL) FOR POLE GROUNDING.

SURPLUS EXCAVATION SHALL BE DISPOSED OF BY THE CONTRACTOR.

5.05 LUMINAIRES:

LUMINAIRES SHALL BE INSTALLED LEVEL AND INCLUDE A LAMP AND PHOTOCELL. CONTRACTOR SHALL ASSURE THAT THE LUMINAIRES SHALL BE FREE OF DUST, DIRT OR ANYTHING THAT WOULD IMPAIR THE OUTPUT OF THE LIGHT BEFORE HE LEAVES THE SITE.

LUMINAIRES FURNISHED WITH MULTI-TAP BALLASTS SHALL BE REWIRED OR RECONNECTED TO MATCH THE VOLTAGE SUPPLIED BY THE ELECTRIC UTILITY COMPANY.

5.06 WIRING:

WIRING SHALL BE INSTALLED PER UTILITY STANDARDS.

5.07 GROUNDING:

EACH POLE SHALL HAVE A 8' X 5/8" COPPER CLAD GROUND ROD DRIVEN ADJACENT TO PULL BOX. A #6 BARE COPPER LEAD FROM THE GROUND ROD IN PULL BOX TO LANDING LUG IN STREET LIGHT POLE HAND HOLE.

5.08 PULL BOXES:

EXCAVATION FOR PULL BOXES AND MATERIAL SPECIFICATION SHALL BE PER THE ELECTRIC UTILITY COMPANY STANDARDS.

5.09 TRENCH

TRENCH SHALL BE INSTALLED PER THE UTILITY COMPANY STANDARDS.

THE USE OF A COMMON ELECTRIC UTILITY COMPANY TRENCH IS PERMITTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANY FOR COORDINATION OF TRENCHING AND THE INSTALLATION OF CONDUIT.

CONDUIT SHALL BE INSTALLED AT THE DEPTH SPECIFIED ON THE PLANS. CONDUIT SHALL BE 1 INCH CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT OR EQUAL. CONDUIT MUST BE UL RATED AND SUITABLE FOR UNDERGROUND USE.

CONNECTIONS SHALL BE PER UTILITY STANDARDS.

5.12 LIGHT POLE IDENTIFICATION:

THE CONTRACTOR SHALL FURNISH AND INSTALL A NUMBER ON EACH LIGHT POLE. STREET LIGHT POLE IDENTIFICATION AND SPECIFICATIONS WILL BE PROVIDED BY THE CITY OF SURPRISE.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO RESTORE ALL PROPERTY, LANDSCAPING, PAVING AND DRIVEWAYS THAT ARE DISTURBED DURING STREET LIGHT CONSTRUCTION TO THEIR ORIGINAL CONDITION IN CONFORMANCE WITH "MAG" SPECIFICATION SECTION 107.9.

THE DEVELOPER SHALL BE RESPONSIBLE FOR FURNISHING ALL PERSONNEL AND EQUIPMENT TO SUCCESSFULLY PERFORM THE FOLLOWING TEST.

PRIOR TO ACCEPTANCE, THE DEVELOPER SHALL ENERGIZE AND OPERATE THE ENTIRE ROADWAY LIGHTING SYSTEM, FROM SUNSET TO SUNRISE FOR TWO CONSECUTIVE DAYS WITHOUT INTERRUPTION OR FAILURE. IF A LAMP OR BALLAST SHOULD FAIL, IT SHALL BE IMMEDIATELY REPLACED.

THE CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE ENGINEERING MANAGER, AGAINST IMPERFECT WORKMANSHIP, FAILURE, MALFUNCTION OF MATERIALS AND/OR EQUIPMENT DUE TO FAULTY OR IMPERFECT WORKMANSHIP. THIS GUARANTEE IS TO BE IN WRITING TO THE CITY AT THE TIME OF ISSUING FINAL ACCEPTANCE. WORK FOUND TO BE DEFECTIVE WITHIN THE WARRANTY PERIOD SHALL BE REPLACED WITHOUT COST TO THE CITY.

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 REPLACEDIN 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.

CITY OF SURPRISE APPROVAL

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.

CITY OF SURPRISE ENGINEER **DATE**

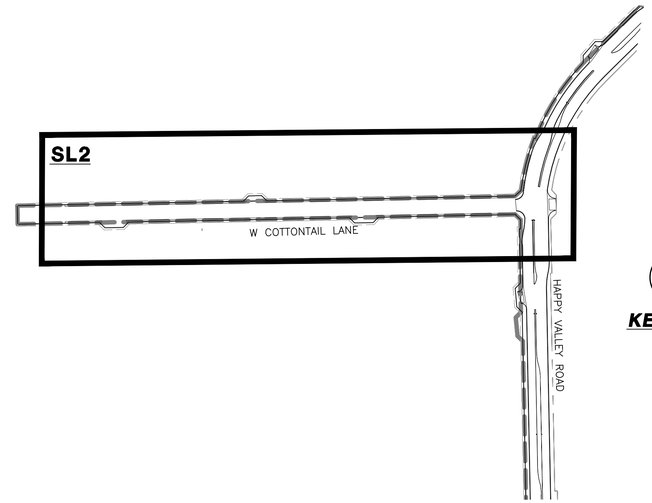
NOTE

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

B. THE ELECTRICAL/MAINTENANCE COSTS OF ALL STREET LIGHTS ON LOCAL AND COLLECTOR STREETS ARE TO BE PAID BY THE ADJACENT PROJECT OR THE ADJACENT DEVELOPMENT'S STREET LIGHT IMPROVEMENT DISTRICT (SLID). THE ELECTRICAL / MAINTENANCE COSTS OF ALL STREET LIGHTS ON ARTERIAL STREETS ARE TO BE BILLED TO THE CITY OF SURPRISE'S ENERGY BILL.

LED NOTE

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.



KEY MAP
N.T.S.

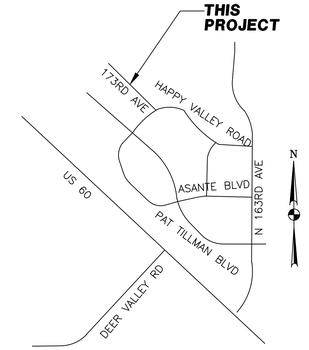
UTILITIES WITHIN OR AFFECTED BY THE PROJECT	
UTILITY CONTACT	DATE SUBMITTED
ARIZONA PUBLIC SERVICE	11/23/2022
CENTURY LINK	11/23/2022
COX COMMUNICATIONS	11/23/2022
SOUTHWEST GAS	11/23/2022

POWER CONDUIT NOTE

TRENCH & CONDUIT RUNS FROM STREET LIGHT PULL BOX TO POINT OF ELECTRICAL SERVICE WILL BE DESIGNED BY THE POWER COMPANY, AND ARE SHOWN ON POWER COMPANY PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THESE PLANS FROM DEVELOPER/OWNER, AND INCLUDE THESE RUNS IN THE BID. COORDINATE THIS WORK WITH THE POWER COMPANY.

STREET LIGHTING (APS AREA)														
KEY NO.	SYMBOL	STREET TYPE	OFFSET BEHIND B/C	QUANTITY	POLE		MAST ARM	LUMINAIRE						
					POLE HEIGHT	FOUNDATION	SIZE	MOUNTING HEIGHT	LUMENS	WATTAGE	I.E.S. DIST.	VOLTAGE	TYPE	STYLE
(1)		COLLECTOR	PER PLANS	12	38'-0"	DIRECT BURY	4'-0"	31'-6"	7,800	71 W	TYPE 3	*	LED	ARCHITECTURAL DARK BRONZE

*PER UTILITY COMPANY REQUIREMENTS



VICINITY MAP
N.T.S.

SHEET INDEX

COVER SHEET	SL1
STREET LIGHT PLAN & DETAILS	SL2

CIVIL ENGINEER
HILGART WILSON
2141 E HIGHLAND AVE, STE. 250
PHOENIX, AZ 85016
PHONE: (602) 490-0535
FAX: (602) 368- 2436
CONTACT: DIEGO ORTIZ, PE
EMAIL: DORTIZ@HILGARTWILSON.COM

OWNER
LENNAR COMMUNITIES DELEOPMENT, LLC
1665 W. ALMEDA DR STE 130
TEMPE, AZ 85282-3000
CONTACT: JORGE VILLASENOR

WRIGHT ENGINEERING PROJECT NO: **22359**

DESIGN BY: BDS
DRAWN BY: BDS
CHECKED BY: AMB

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: ASANTE PLANNING AREA 3 W COTTONTAIL LANE SURPRISE, ARIZONA

TITLE: STREET LIGHT COVER SHEET

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	DEC 2022	1ST SUBMITTAL
2	APR 2023	1ND SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM W. BOWERS
Date Signed 4-3-23
Expires 9-30-25

DRAWING NO: **SL1** OF 2

FS23-0100

Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

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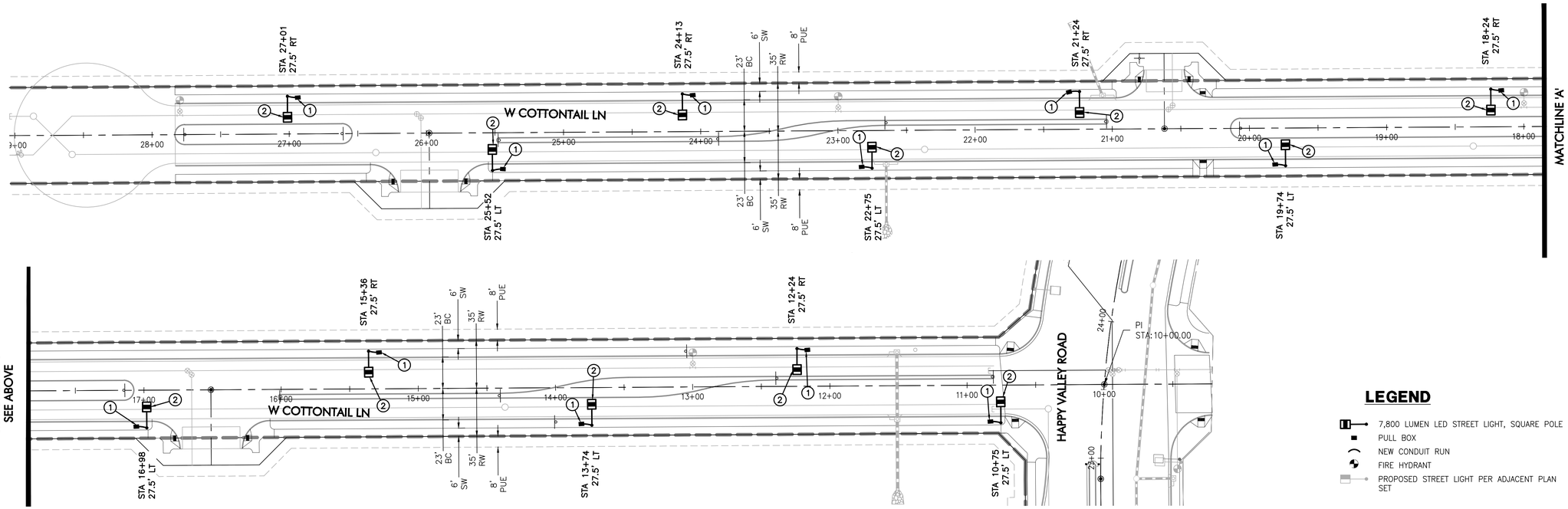
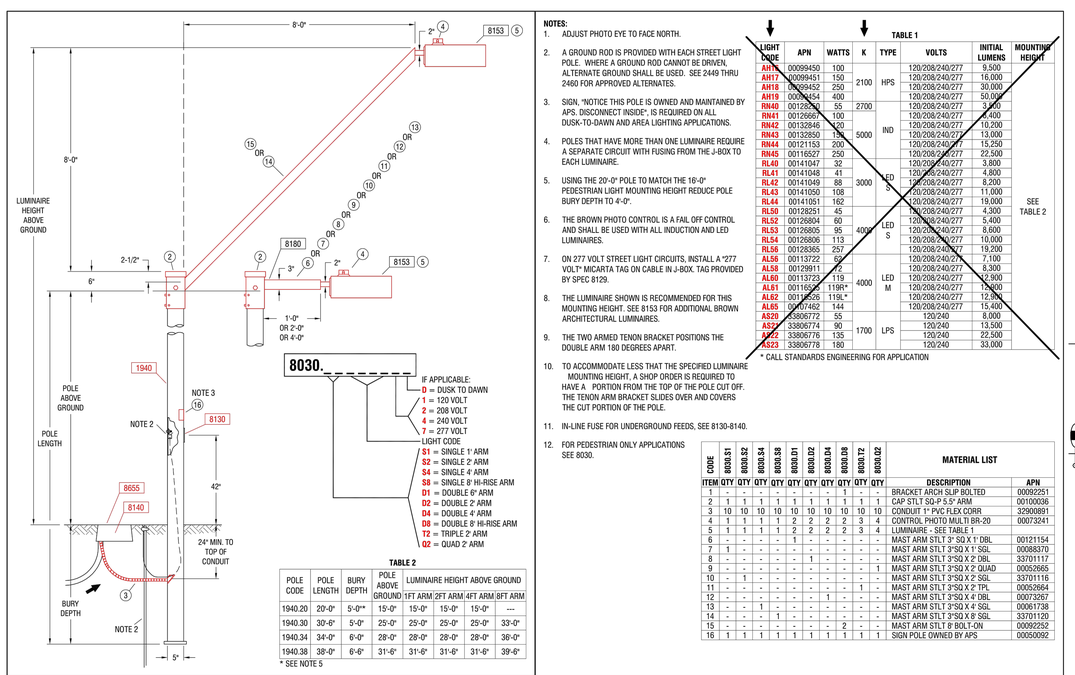


LEGEND

- 7,800 LUMEN LED STREET LIGHT, SQUARE POLE
- PULL BOX
- NEW CONDUIT RUN
- FIRE HYDRANT
- PROPOSED STREET LIGHT PER ADJACENT PLAN SET



IF APPLICABLE:
0 = DUSK TO DAWN
1 = 120 VOLT
2 = 208 VOLT
4 = 240 VOLT
7 = 277 VOLT

LIGHT CODE:
S1 = SINGLE 1' ARM
S2 = SINGLE 2' ARM
S4 = SINGLE 4' ARM
S8 = SINGLE 8' HI-RISE ARM
D1 = DOUBLE 6' ARM
D2 = DOUBLE 2' ARM
D4 = DOUBLE 4' ARM
D8 = DOUBLE 8' HI-RISE ARM
T2 = TRIPLE 2' ARM
Q2 = QUAD 2' ARM

TABLE 2

POLE CODE	POLE LENGTH	BURY DEPTH	POLE ABOVE GROUND	LUMINAIRE HEIGHT ABOVE GROUND			
				1FT ARM	2FT ARM	4FT ARM	8FT ARM
1940.20	20'-0"	5'-0"*	15'-0"	15'-0"	15'-0"	15'-0"	---
1940.30	30'-6"	5'-0"	25'-0"	25'-0"	25'-0"	25'-0"	33'-0"
1940.34	34'-0"	6'-0"	28'-0"	28'-0"	28'-0"	28'-0"	36'-0"
1940.38	38'-0"	6'-6"	31'-6"	31'-6"	31'-6"	31'-6"	39'-6"

* SEE NOTE 5

NOTES:

1. ADJUST PHOTO EYE TO FACE NORTH.
2. A GROUND ROD IS PROVIDED WITH EACH STREET LIGHT POLE. WHERE A GROUND ROD CANNOT BE DRIVEN, ALTERNATE GROUND SHALL BE USED. SEE 2449 THRU 2460 FOR APPROVED ALTERNATES.
3. SIGN, "NOTICE THIS POLE IS OWNED AND MAINTAINED BY APS. DISCONNECT INSIDE", IS REQUIRED ON ALL DUSK-TO-DAWN AND AREA LIGHTING APPLICATIONS.
4. POLES THAT HAVE MORE THAN ONE LUMINAIRE REQUIRE A SEPARATE CIRCUIT WITH FUSING FROM THE J-BOX TO EACH LUMINAIRE.
5. USING THE 20'-0" POLE TO MATCH THE 16'-0" PEDESTRIAN LIGHT MOUNTING HEIGHT REDUCE POLE BURY DEPTH TO 4'-0".
6. THE BROWN PHOTO CONTROL IS A FAIL OFF CONTROL AND SHALL BE USED WITH ALL INDUCTION AND LED LUMINAIRES.
7. ON 277 VOLT STREET LIGHT CIRCUITS, INSTALL A "277 VOLT" MICARTA TAG ON CABLE IN J-BOX. TAG PROVIDED BY SPEC 8129.
8. THE LUMINAIRE SHOWN IS RECOMMENDED FOR THIS MOUNTING HEIGHT. SEE 8153 FOR ADDITIONAL BROWN ARCHITECTURAL LUMINAIRES.
9. THE TWO ARMED TENON BRACKET POSITIONS THE DOUBLE ARM 180 DEGREES APART.
10. TO ACCOMMODATE LESS THAT THE SPECIFIED LUMINAIRE MOUNTING HEIGHT, A SHOP ORDER IS REQUIRED TO HAVE A PORTION FROM THE TOP OF THE POLE CUT OFF. THE TENON ARM BRACKET SLIDES OVER AND COVERS THE CUT PORTION OF THE POLE.
11. IN-LINE FUSE FOR UNDERGROUND FEEDS, SEE 8130-8140.
12. FOR PEDESTRIAN ONLY APPLICATIONS SEE 8030.

TABLE 1

LIGHT CODE	APN	WATTS	K	TYPE	VOLTS	INITIAL LUMENS	MOUNTING HEIGHT
AH75	00099450	100	2100	HPS	120/208/240/277	9,500	SEE TABLE 2
AH77	00099451	150			120/208/240/277	16,000	
AH78	00099452	250			120/208/240/277	30,000	
AH79	00099454	400			120/208/240/277	50,000	
RN40	00132850	55	2700	IND	120/208/240/277	3,900	
RN41	00126667	100	5000		120/208/240/277	8,400	
RN42	00132846	120			120/208/240/277	10,200	
RN43	00132850	150			120/208/240/277	13,000	
RN44	00121153	200			120/208/240/277	15,250	
RN45	00116527	250			120/208/240/277	22,500	
RL40	00141047	32	3000	LED S	120/208/240/277	3,900	
RL41	00141048	41			120/208/240/277	4,800	
RL42	00141049	88			120/208/240/277	8,200	
RL43	00141050	108			120/208/240/277	11,000	
RL44	00141051	162			120/208/240/277	19,000	
RL50	00128251	45	4000	LED S	120/208/240/277	4,300	
RL52	00126804	60			120/208/240/277	5,400	
RL53	00126805	95			120/208/240/277	8,600	
RL54	00126806	113			120/208/240/277	10,000	
RL56	00128365	257			120/208/240/277	19,200	
AL56	00113722	69	4000	LED M	120/208/240/277	7,100	
AL58	00129911	72			120/208/240/277	8,300	
AL60	00113723	119			120/208/240/277	12,900	
AL61	00116526	119R*			120/208/240/277	12,900	
AL62	00116526	119L*			120/208/240/277	12,900	
AL65	00107462	144			120/208/240/277	15,400	
AS20	33806772	55	1700	LPS	120/240	8,000	
AS21	33806774	90			120/240	13,500	
AS22	33806776	135			120/240	22,500	
AS23	33806778	180			120/240	33,000	

* CALL STANDARDS ENGINEERING FOR APPLICATION

CODE	8030.S1	8030.S2	8030.S4	8030.S8	8030.D1	8030.D2	8030.D4	8030.D8	8030.T2	8030.Q2	MATERIAL LIST	
ITEM	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	DESCRIPTION	APN
1	-	-	-	-	-	-	1	-	-		BRACKET ARCH SLIP BOLTED	00092251
2	1	1	1	1	1	1	1	1	1	1	CAP STLT SQ-P 5.5" ARM	00100036
3	10	10	10	10	10	10	10	10	10	10	CONDUIT 1" PVC FLEX CORR	32900891
4	1	1	1	1	2	2	2	2	3	4	CONTROL PHOTO MULTI BR-20	00073241
5	1	1	1	1	2	2	2	2	3	4	LUMINAIRE - SEE TABLE 1	
6	-	-	-	1	-	-	-	-	-	-	MAST ARM STLT 3" SQ X 1' OBL	00121154
7	1	-	-	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 1' SGL	00088370
8	-	-	-	-	1	-	-	-	-	-	MAST ARM STLT 3"SQ X 2' OBL	33701117
9	-	-	-	-	-	-	-	1	-	-	MAST ARM STLT 3"SQ X 2' QUAD	00052665
10	-	1	-	-	-	-	1	-	-	-	MAST ARM STLT 3"SQ X 2' SGL	33701116
11	-	-	-	-	-	-	-	-	1	-	MAST ARM STLT 3"SQ X 2' TPL	00052664
12	-	-	-	-	-	1	-	-	-	-	MAST ARM STLT 3"SQ X 4' OBL	00073267
13	-	-	1	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 4' SGL	00061738
14	-	-	-	1	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 8' SGL	33701120
15	-	-	-	-	-	-	-	2	-	-	MAST ARM STLT 8' BOLT-ON	00092252
16	1	1	1	1	1	1	1	1	1	1	SIGN POLE OWNED BY APS	00050092

aps ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS				
BY	LDR.	MGR.	DATE	REV.
KLS	B. BOOKER	R. CANDRA	02/2016	12

LIGHTS ARCHITECTURAL ON 5" SQUARE BROWN PAINTED STEEL POLE DIRECT BURY

SH 1 OF 2 — **8030**

aps ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS

LIGHTS ARCHITECTURAL ON 5" SQUARE BROWN PAINTED STEEL POLE DIRECT BURY

SH 2 OF 2 — **8030**

LUMINAIRE TABLE

DARK BRONZE ROADWAY SCALEABLE LED 3000K

LIGHT CODE	COLOR	APN	WATTS	VOLTS	INITIAL LUMENS	CATALOG #
RL40	DKBZ	00141047	32	120/208/240/277	3,900	ERLC004B430ADKBZGLRV1013
RL41		00141048	43	120/208/240/277	4,800	ERLC005A430ADKBZGLRV1013
RL42		00141049	71	120/208/240/277	7,800	ERL1008C330ADKBZGLRX162
RL33		00141050	96	120/208/240/277	11,000	ERLH011C330ADKBZGLV1108
RL44		00141051	174	120/208/240/277	20,100	ERL2021C330ADKBZGLR113

CONSTRUCTION NOTES

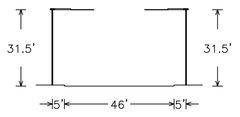
1. INSTALL APS PULL BOX NEXT TO POLE. 1" CONDUIT WITH (2) #14 TYPE THHN/THWN & (1) #14 BARE BOND FROM PULL BOX TO FUSE HOLDER IN STREET LIGHT PER APS DETAILS & SPECIFICATIONS.
2. 71W LED (7,800 LUMEN) LUMINAIRE (SEE LUMINAIRE TABLE), PHOTOCELL, 38'-0" DIRECT BURIED POLE, 4' MAST ARM PER APS DETAIL 8030 (SEE SHEET SL2). (2) #14 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. WIRING, FUSING, & GROUNDING PER APS DETAILS & SPECIFICATIONS.

TYPICAL COLLECTOR STREET CALCULATION

ILLUMINANCE METHOD

300'

1.62	0.93	0.60	0.60	0.48	0.41	0.40	0.50	0.63	0.76	0.63	0.50	0.40	0.41	0.48	0.60	0.60	0.93	1.62
2.00	1.06	0.69	0.67	0.57	0.55	0.53	0.67	0.94	1.18	0.94	0.67	0.53	0.55	0.57	0.67	0.69	1.06	2.00
1.81	1.10	0.75	0.69	0.60	0.61	0.66	0.79	1.23	1.71	1.23	0.79	0.66	0.61	0.60	0.69	0.75	1.10	1.81
1.46	1.00	0.68	0.64	0.59	0.63	0.74	0.83	1.43	2.17	1.43	0.83	0.74	0.63	0.59	0.64	0.68	1.00	1.46
1.04	0.80	0.56	0.53	0.54	0.60	0.71	0.80	1.50	2.44	1.50	0.80	0.71	0.60	0.54	0.53	0.56	0.80	1.04
0.69	0.57	0.44	0.39	0.43	0.53	0.62	0.66	1.29	1.86	1.29	0.66	0.62	0.53	0.43	0.39	0.44	0.57	0.69



7800 LUMEN
Type 3 Distribution
4' Mast Arm
candela file 'ERL1_09B330_____.IES'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 71
mounting height= 31.5 ft
number locations= 5, number luminaires= 5
kw all locations= 0.4

Roadway Grid
114 points at z=0, sp 15.789ft by 7.66'
HORIZONTAL FOOTCANDLES

Average	0.84
Maximum	2.44
Minimum	0.39
Avg:Min	2.15
Max:Min	6.26
Coef Var	0.51
UnifGrad	1.95

GRAPHIC SCALE

40 20 0 20 40 80

1 INCH = 40 FEET

Call at least two full working days before you begin excavation. ARIZONA 811 Arizona Blue Stake, Inc. Dial 8-1-1 or 1-800-STAKE-IT (782-5348) in Maricopa County: (602) 263-1100

WRIGHT ENGINEERING PROJECT NO: **22359**

DESIGN BY: BDS
DRAWN BY: BDS
CHECKED BY: AMB

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: **SURPRISE, ARIZONA**
ASANTE PLANNING AREA 3
W COTTONTAIL LANE

TITLE: **STREET LIGHT PLAN**

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	DEC 2022	1ST SUBMITTAL
2	APR 2023	2ND SUBMITTAL

Registered Professional Engineer (Retired) Certificate No. 16691 ADAM M. BOWERS State of Arizona Expires 9-30-25

DRAWING NO: **SL2** OF 2

FS23-0100

HERITAGE ASANTE, NORTH PAT TILLMAN BLVD
STREETLIGHT RELOCATION PLANS
SURPRISE, ARIZONA

A PORTION OF THE SOUTHEAST QUARTER OF SECTION 2, THE EAST HALF OF SECTION 11 AND NORTHWEST QUARTER OF SECTION 12, ALL OF TOWNSHIP 4 NORTH, RANGE 2 WEST OF THE GILA AND SALT RIVER MERIDIAN, CITY OF SURPRISE, MARICOPA COUNTY, ARIZONA

OWNER/DEVELOPER	CIVIL ENGINEER	ELECTRICAL ENGINEER
LENNAR CORPORATION 890 W. ELLIOTT ROAD, SUITE 101 GILBERT, ARIZONA 85233 PHONE: (480) 476-8449 CONTACT: TODD SKORO	HILGART WILSON, LLC 2141 E. HIGHLAND AVENUE, SUITE 250 PHOENIX, ARIZONA 85016 PHONE: (602) 490-0535 CONTACT: ZACH HILGART, PE	HORNS CONSULTING, LLC 1243 E. MURIEL DRIVE PHOENIX, ARIZONA 85022 PHONE: (602) 256-8990 CONTACT: DOUG HORNING & GREG LARSON, PE

ENGINEERS NOTES

1. A THOROUGH ATTEMPT HAS BEEN MADE TO SHOW THE LOCATIONS OF ALL UNDERGROUND OBSTRUCTIONS AND UTILITY LINES IN THE WORK AREA. HOWEVER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO OBSTRUCTIONS AND UTILITY LINES ENCOUNTERED DURING CONSTRUCTION AND SHALL DETERMINE THE EXACT LOCATION OF UTILITIES IN ADVANCE OF TRENCHING. THE ENGINEER AND/OR DEVELOPER WILL NOT GUARANTEE ANY ELEVATIONS OR LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THESE PLANS.
2. PRIOR TO BIDDING THE WORK, THE CONTRACTOR SHALL THOROUGHLY SATISFY HIMSELF AS TO THE ACTUAL CONDITIONS, REQUIREMENTS OF THE WORK AND EXCESS OF DEFICIENCY IN QUANTITIES, IF ANY. NO CLAIMS SHALL BE MADE AGAINST THE OWNER/DEVELOPER OR ENGINEER FOR ANY EXCESS OR DEFICIENCY THEREIN, ACTUAL OF RELATIVE.
3. THE ENGINEER WILL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS OR PROGRAMS UTILIZED IN CONNECTION WITH THE WORK, AND WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
4. ANY QUANTITIES SHOWN ARE THE BEST ESTIMATE OF THE ENGINEER. THE SUBCONTRACTOR SHALL MAKE HIS OWN INDEPENDENT ESTIMATE OF QUANTITIES AND BASE HIS BID THEREON.
5. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR COORDINATING THE RELOCATION OF UTILITIES, POWER POLES, ETC.
6. 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.
7. THE CONTRACTOR WILL MAKE FIELD AS-BUILT MEASUREMENTS OF THE WORK. THESE MEASUREMENTS WILL BE GIVEN TO THE ENGINEER IN WRITING SO THAT AS-BUILT PLANS CAN BE CREATED. IF THE CONTRACTOR DOES NOT TAKE AS-BUILT MEASUREMENTS OR FORWARD THESE MEASUREMENTS TO THE ENGINEER, THE ENGINEER WILL NOT BE RESPONSIBLE FOR PROVIDING ACCURATE AS-BUILT OF THE POLES, ETC.
8. AS-BUILT SUBMITTALS WILL NOT BE PERFORMED UNTIL ORDERED BY THE CLIENT OR HIS MEASUREMENTS.
9. HORNS CONSULTING LLC., IT'S OWNERS, OR EMPLOYEES WILL NOT BE HELD RESPONSIBLE FOR ANY DESTRUCTION OF PROPERTY CAUSED BY OTHERS. IDENTIFY ALL OTHER UTILITIES & CALL BLUE STAKE PRIOR TO DIGGING.
10. SIDEWALK TO MEANDER AROUND ALL STREET LIGHTS AND APS EQUIPMENT.

CITY OF SURPRISE 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 TO EXISTING UTILITIES SHALL BE REPAIRED AND OR REPLACED AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL COMPLY WITH ALL CURRENT BLUE STAKE LAWS. CALL BLUE STAKE FOR FIELD LOCATION AT (602) 263-1100.
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 SHOWN 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, IRRIGATION LINES, PROPERTY MONUMENTS, FENCING OR SURFACE FEATURES PRIOR TO CONSTRUCTION. ANYTHING DISTURBED DURING CONSTRUCTION SHALL BE REPLACED IN KIND AT THE CONTRACTORS 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) 222-7000.
11. TRAFFIC CONTROL SHALL BE MAINTAINED IN ACCORDANCE WITH MAG SPECFICATION 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.

CITY ADDITIONAL NOTES

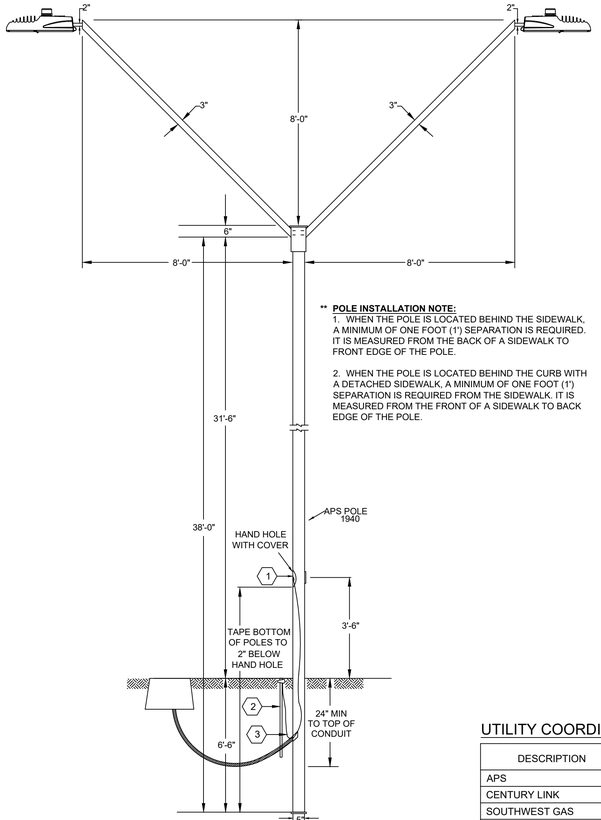
1 THE ELECTRICAL / MAINTENANCE COST OF ALL STREET LIGHTS ON LOCAL AND COLLECTOR STREETS ARE TO BE PAID BY THE ADJACENT DEVELOPMENT'S STREET LIGHT IMPROVEMENT DISTRICT (SLID). THE ELECTRICAL / MAINTENANCE COST OF ALL STREET LIGHTS ON ARTERIAL STREETS ARE TO BE BILLED TO THE CITY OF SURPRISE'S ENERGY BILL.

2 CONTRACTOR TO COORDINATE WITH APS AND UTILIZE THEIR CURRENT SPECIFICATION AT TIME OF BIDDING AND CONSTRUCTION.

Horns Consulting, LLC
www.hornsconsulting.com
Phone: (623)256-8990
E-mail: doug@hornsconsulting.com
1243 E. Muriel Drive, Phoenix, Arizona 85022

1 174W LED (APS 8030) DETAIL 1

1. GROUND ATTACHMENT
2. ROD COPPERCLAD GRD., 5/8" x 8'
3. #14 BARE SOLID COPPER



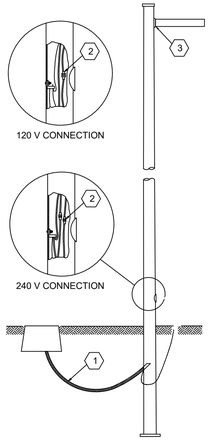
** **POLE INSTALLATION NOTE:**
1. WHEN THE POLE IS LOCATED BEHIND THE SIDEWALK, A MINIMUM OF ONE FOOT (1') SEPARATION IS REQUIRED. IT IS MEASURED FROM THE BACK OF A SIDEWALK TO FRONT EDGE OF THE POLE.

2. WHEN THE POLE IS LOCATED BEHIND THE CURB WITH A DETACHED SIDEWALK, A MINIMUM OF ONE FOOT (1') SEPARATION IS REQUIRED FROM THE SIDEWALK. IT IS MEASURED FROM THE FRONT OF A SIDEWALK TO BACK EDGE OF THE POLE.

2 (APS 8130) DETAIL 2

TO BE USED IN CONJUNCTION WITH WITH LED LIGHTS AS SHOWN IN DETAILS #1

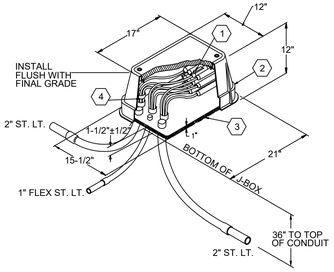
1. 1" FLEX CONDUIT
2. IN-LINE FUSE HOLDER WITH 15AMP FUSE
3. CONNECT BUTT-SPLICE #16-#14



3 (APS 8655) DETAIL 3

TO BE USED IN CONJUNCTION WITH WITH LED LIGHTS AS SHOWN IN DETAILS #1

1. SET SCREW INSULATED JUNCTION BAR
2. JUNCTION BOX 10"X15"X12"
3. CONCRETE GROUT PREMIX
4. I.D. RINGS (FEED, POLES)



LED NOTE:
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 SPECIFICATIONS AT THE TIME OF BIDDING AND CONSTRUCTION.

STREETLIGHT NOTE:
ENSURE THERE IS A 1' CLEARANCE FROM THE EDGE OF THE SIDE WALK TO THE FACE OF THE POLE.

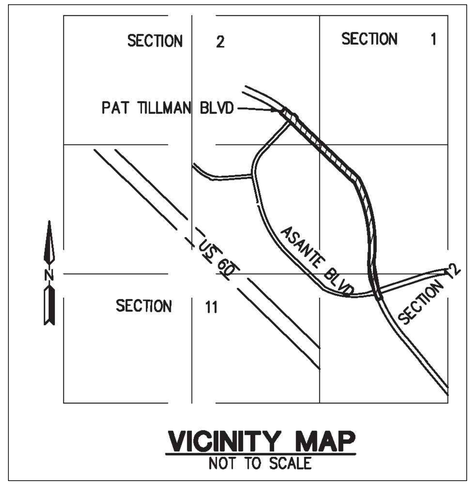
UTILITY COORDINATION LIST

DESCRIPTION	REPRESENTATIVE	PHONE	DATE
APS	MONIQUE HOLLIDAY	(602) 250-1000	12-14-2022
CENTURY LINK	DEBBIE RAMSEY	(602) 630-0492	12-14-2022
SOUTHWEST GAS	ZACH STEVENSON	(602) 484-5270	12-14-2022
COX COMMUNICATIONS	TMC (TRAFFIC MANAGEMENT CENTER)	(623) 322-7215	12-14-2022

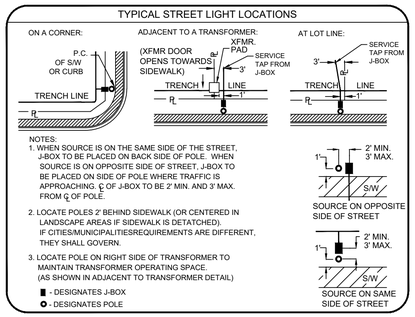
* CONFLICTS ARISING DURING THE COURSE OF CONSTRUCTION FROM UNFORSEEN CIRCUMSTANCES SHALL BE REPORTED TO THE INTERESTED UTILITY COMPANY AND BE RESOLVED BY THEM AND THE DESIGN ENGINEER.

EQUIPMENT LIST

ITEM #	SYMBOL	TYPE STREET:	QUANTITY	MOUNTING HEIGHT	POLE HEIGHT:	MAST ARM	LUMENS	TYPE	WATTAGE	VOLTAGE	C.C.T.	PHOTOMETRIC	LUMINAIRE
1		ARTERIAL	2 RELOCATED	39'-6"	38'-0"	8' X 8'	20,100	LED	174W	240V	3000K	TYPE C3	ERL2-0-21-C3-30-A-DKBZ
		ITEM DESCRIPTION											
2		1" FLEX PVC W/2-#14 TYPE THHN/THWN AND 1-#14 BARE BOND FROM PULL BOX TO BUSSMAN FUSE HOLDER IN STREET LIGHT.											
3		INSTALL AN APS JUNCTION BOX NEXT TO THE POLE PER JUNCTION BOX DETAIL.											



VICINITY MAP
NOT TO SCALE



Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

DETAILS AND LEGEND FOR STREETLIGHTS:

1. INSTALL (2) 174W, 20,100 LUMEN LED FIXTURES WITH PHOTOELECTRIC CONTROL ON A 38'-0" SQUARE POLE MOUNTED AT 39'-6" WITH ONE SINGLE 8' X 8' MAST ARM, SEE DETAIL 1. POLE SHALL BE LOCATED IN CENTER OF MEDIAN. ALL ORIGINALLY APPROVED LOCATIONS TO REMAIN. RELOCATE APPROVED STREETLIGHTS AS NOTED
2. INSTALL 1" FLEX PVC W/2-#14 TYPE THHN/THWN AND 1-#14 BARE BOND FROM PULL BOX TO BUSSMAN FUSE HOLDER IN STREET LIGHT. SEE DETAIL 2.
3. INSTALL AN APS JUNCTION BOX NEXT TO THE POLE (PER JUNCTION BOX DETAIL). SEE DETAIL 3.

FUTURE / PROPOSED LED FIXTURE ON POLE AS SPECIFIED ON DESIGN. (NOT TO BE INSTALLED OR RELOCATED.)

FIRE HYDRANT LOCATION PER CIVIL PLANS

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.

CITY OF SURPRISE ENGINEER _____ DATE _____

INDEX

1 ~ COVER SHEET
2 ~ SITE PLANS & PHOTOMETRICS

HERITAGE ASANTE, N. PAT TILLMAN BLVD
COVER SHEET
STREET LIGHT RELOCATIONS

HORNS CONSULTING, LLC
5223 W.DESPERADO WAY
PHOENIX, ARIZONA 85083
PHONE: (623) 256-8990
www.hornsconsulting.com

Registered Professional Engineer
CERTIFICATE NO. 28582
GREGORY D. LARSON
ARIZONA U.S.A.

NO	REVISIONS	BY	DATE
7			
6			
5			
4			
3			
2			
1	CITY COMMENTS	DH	12/14/22

SHEET 1 OF 2

Contact: Doug Horning/Greg Larson,P.E.

Horns Consulting Project #:	22SL258	
Designed By:	DH	09/06/2022
Drawn By:	DH	09/06/2022
Reviewed By:	GL	09/06/2022

FS22-1263

HERITAGE ASANTE, NORTH PAT TILLMAN BLVD
STREETLIGHT RELOCATION PLANS
SURPRISE, ARIZONA

DETAILS AND LEGEND FOR STREETLIGHTS:

1. INSTALL (2) 174W, 20,100 LUMEN LED FIXTURES WITH PHOTOELECTRIC CONTROL ON A 38'-0" SQUARE POLE MOUNTED AT 39'-6" WITH ONE SINGLE 8' X 8' MAST ARM, SEE DETAIL 1. POLE SHALL BE LOCATED IN CENTER OF MEDIAN. ALL ORIGINALLY APPROVED LOCATIONS TO REMAIN. RELOCATE APPROVED STREETLIGHTS AS NOTED

2. INSTALL 1" FLEX PVC W/2-#14 TYPE THHN/THWN AND 1-#14 BARE BOND FROM PULL BOX TO BUSSMAN FUSE HOLDER IN STREET LIGHT. SEE DETAIL 2.

3. INSTALL AN APS JUNCTION BOX NEXT TO THE POLE (PER JUNCTION BOX DETAIL). SEE DETAIL 3.

FUTURE / PROPOSED LED FIXTURE ON POLE AS SPECIFIED ON DESIGN. (NOT TO BE INSTALLED OR RELOCATED.)

FIRE HYDRANT LOCATION PER CIVIL PLANS

PHOTOMETRICS STUDIES

(Studies results is in illuminace)

GE LIGHTING SOLUTIONS ERL2_21C330_____-120-277V
GE LIGHTING SOLUTIONS-EAST CLEVELAND OH USA test report no. 17041221 17041321 17041322 17041323 17041324 17041325
lamp(s): LEDs E21A
2 luminaires per location, candela file 'erl2_21c330_____-120-277v_tcm201-129206.ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 174
Outreach (from mounting axis to photometric center)= 96 in
mounting height= 39.5 ft
number locations= 10, number luminaires= 20
kw all locations= 3.5

PAT TILLMAN BLVD (SITE "A")		PAT TILLMAN BLVD (SITE "B")	
622 points at z=0, sp 8ft by 8ft		590 points at z=0, sp 8ft by 8ft	
HORIZONTAL FOOTCANDLES		HORIZONTAL FOOTCANDLES	
Average	0.94	Average	0.99
Maximum	3.12	Maximum	2.97
Minimum	0.40	Minimum	0.47
Avg:Min	2.36	Avg:Min	2.11
Max:Min	7.80	Max:Min	6.32
Coef Var	0.57	Coef Var	0.51
UnifGrad	1.41	UnifGrad	1.42

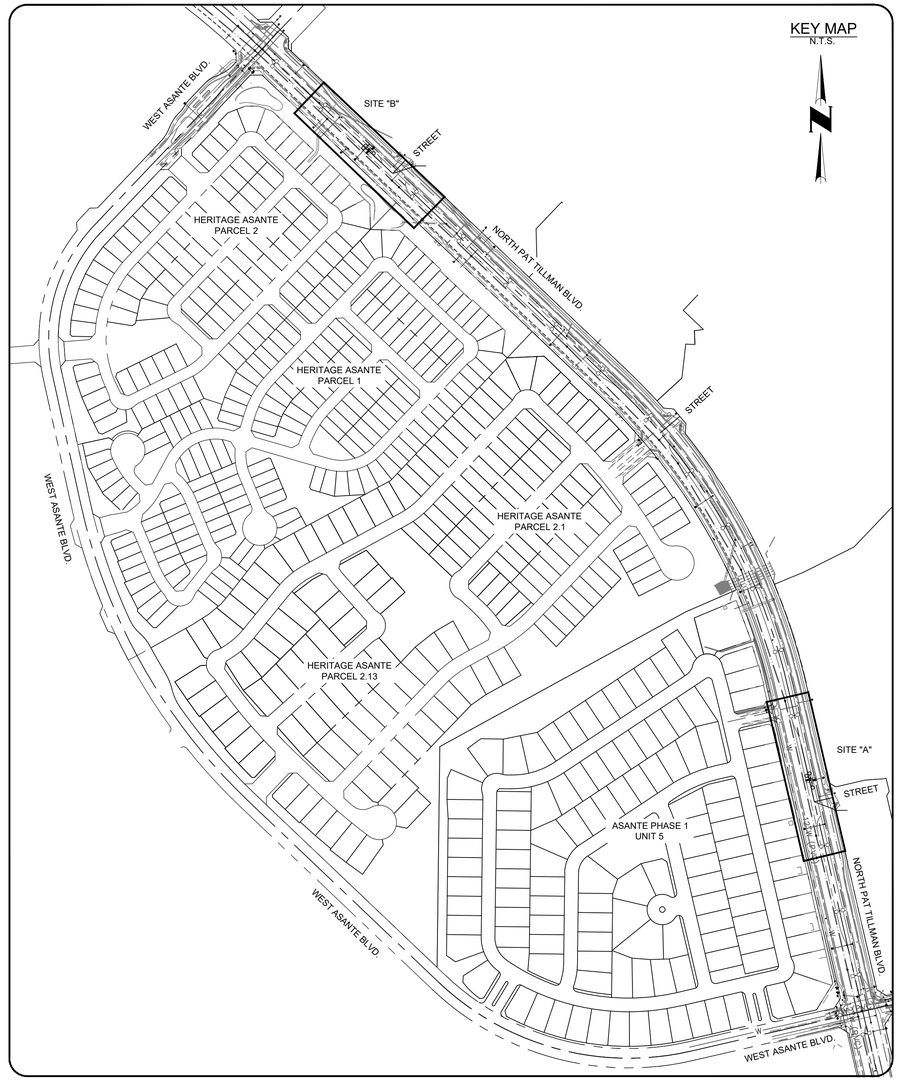
SITE "A"



SITE "B"



KEY MAP
N.T.S.



40' 20' 0 40'
SCALE: 1" = 40'

Call at least two full working days before you begin excavation.
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HERITAGE ASANTE, N. PAT TILLMAN BLVD
SITE PLANS & PHOTOMETRICS
STREET LIGHT RELOCATIONS

HORNS CONSULTING, LLC
5223 W. DESPERADO WAY
PHOENIX, ARIZONA 85083
PHONE: (623) 256-8990
www.hornsconsulting.com

Registered Professional Engineer Certificate No. 28582 GREG E. LARSON Expires 12-31-2023 ARIZONA U.S.A.

NO.	REVISIONS	BY	DATE
7			
6			
5			
4			
3			
2			
1	CITY COMMENTS	DH	12/14/22

SHEET 2 OF 2

Contact: Doug Horning/Greg Larson,P.E.

Horns Consulting Project #:	22SL258	
Designed By:	DH	09/06/2022
Drawn By:	DH	09/06/2022
Reviewed By:	GL	09/06/2022

FS22-1263

ASANTE PLANNING AREA 3

HAPPY VALLEY ROAD

STREET LIGHT DESIGN

STREET LIGHTING REQUIREMENTS

5.00 GENERAL NOTES:

THE FOLLOWING INFORMATION IS PROVIDED TO EMPHASIZE CRITICAL WORK AND IS INTENDED TO SUPPLEMENT THE SPECIFICATIONS. SHOULD THERE BE A CONFLICT WITH THE SPECIFICATIONS, THIS DOCUMENT SHALL TAKE PRECEDENCE.

ALTERNATES SHALL BE PRE-APPROVED BY THE CITY ENGINEERING MANAGER. APPROVAL OF ALTERNATE PRODUCTS SHALL BE ON AN EQUAL BASIS WITH THE PRODUCT SPECIFIED AND SHALL BE SUBMITTED A MINIMUM OF TEN (10) DAYS PRIOR TO BID OPENING. STRUCTURAL CALCULATIONS SHALL BE FURNISHED FOR ALTERNATE PRODUCTS AND CERTIFIED BY A STRUCTURAL ENGINEER, REGISTERED IN THE STATE OF ARIZONA. LUMINAIRES AND LAMPS SHALL MEET OR EXCEED THE PHOTOMETRIC, ELECTRICAL, AND MECHANICAL REQUIREMENTS FOR THE SPECIFIED PRODUCTS.

THE CONTRACTOR SHALL COMPLY WITH STATE AND CITY STATUTES, AND MANUFACTURER'S RECOMMENDATIONS.

THE SUBMITTAL PACKAGE SHALL CONSIST OF THREE (3) COPIES OF EQUIPMENT/MATERIAL TO BE INSTALLED AND SHALL BE BOUND/STAPLED IN A FOLDER AND SUBMITTED AT THE TIME OF PERMIT APPLICATION.

PRIOR TO SUBMITTING A PROPOSAL, THE BIDDER SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS AND VISIT THE CONSTRUCTION SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL OPERATE AND WHICH WILL IN ANY WAY AFFECT THE WORK UNDER THE CONTRACT. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN THIS CONNECTION IN THE BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLIGENCE ON HIS PART.

PRIOR TO ORDERING ANY MATERIALS OR DOING ANY WORK, THE CONTRACTOR SHOULD VERIFY DIMENSIONS AT THE SITE. IMMEDIATELY REPORT DIFFERENCES TO THE ENGINEERING MGR. AND SHOULD NOT PROCEED WITH WORK UNTIL THE ENGINEERING MGR. RENDERS A DECISION. NO EXTRA CHARGES OR COMPENSATION WILL BE ALLOWED FOR DIFFERENCES IN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE DRAWINGS.

5.01 GENERAL:

THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH ALL LICENSING REQUIREMENTS SET FORTH BY THE STATE REGISTRAR OF CONTRACTORS OFFICE TO PERFORM WORK RELATING TO STREET LIGHT INSTALLATION IN THE CITY RIGHT-OF-WAY.

ONE PROJECT UNDERGROUND UTILITIES (RIGHT OF WAY) PERMIT AND ONE STREETLIGHT PERMIT FOR EACH STREET LIGHT POLE SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

5.02 WORKING / "AS BUILT" PLANS:

ACCEPTANCE OF THE COMPLETED IMPROVEMENTS WILL NOT BE GIVEN UNTIL 4 MIL PHOTO MYLAR REPRODUCIBLE "AS BUILT" PLANS HAVE BEEN SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

5.03 LIGHT POLES:

LIGHT POLES SHALL BE INSTALLED PLUMB, BE ADJUSTED TO PROVIDE PROPER ALIGNMENT TO THE ROADWAY BEING LIGHTED AND BE PROPERLY GROUNDED WHEN THE INSTALLATION IS COMPLETE.

5.04 EMBEDMENT:

DIRECT BURIED POLES SHALL BE SET IN A TWELVE (12) INCH AUGURED HOLE DEPTH AS SPECIFIED IN UNDISTURBED EARTH. POLE SHALL BE SET PLUMB IN TWO DIRECTIONS 90 DEGREES APART. HAND TAMPING OF ABC BACKFILL WITH PNEUMATIC OR VIBRATING EQUIPMENT IS THE ACCEPTABLE METHOD OF COMPACTION. BACKFILL SHALL BE COMPACTED TO 85% OF MAXIMUM DENSITY AS DEFINED BY ASTM D-2922 AND D-3017. A GROUND ROD SHALL BE INSTALLED ADJACENT TO PULL BOX IN UNDISTURBED SOIL AND A LEAD IN COPPER BOND WIRE (#6) SHALL BE INSTALLED IN 1" CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT (OR EQUAL) FOR POLE GROUNDING.

SURPLUS EXCAVATION SHALL BE DISPOSED OF BY THE CONTRACTOR.

5.05 LUMINAIRES:

LUMINAIRES SHALL BE INSTALLED LEVEL AND INCLUDE A LAMP AND PHOTOCELL. CONTRACTOR SHALL ASSURE THAT THE LUMINAIRES SHALL BE FREE OF DUST, DIRT OR ANYTHING THAT WOULD IMPAIR THE OUTPUT OF THE LIGHT BEFORE HE LEAVES THE SITE.

LUMINAIRES FURNISHED WITH MULTI-TAP BALLASTS SHALL BE REWIRED OR RECONNECTED TO MATCH THE VOLTAGE SUPPLIED BY THE ELECTRIC UTILITY COMPANY.

5.06 WIRING:

WIRING SHALL BE INSTALLED PER UTILITY STANDARDS.

5.07 GROUNDING:

EACH POLE SHALL HAVE A 8' X 5/8" COPPER CLAD GROUND ROD DRIVEN ADJACENT TO PULL BOX. A #6 BARE COPPER LEAD FROM THE GROUND ROD IN PULL BOX TO LANDING LUG IN STREET LIGHT POLE HAND HOLE.

5.08 PULL BOXES:

EXCAVATION FOR PULL BOXES AND MATERIAL SPECIFICATION SHALL BE PER THE ELECTRIC UTILITY COMPANY STANDARDS.

5.09 TRENCH

TRENCH SHALL BE INSTALLED PER THE UTILITY COMPANY STANDARDS.

THE USE OF A COMMON ELECTRIC UTILITY COMPANY TRENCH IS PERMITTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANY FOR COORDINATION OF TRENCHING AND THE INSTALLATION OF CONDUIT.

CONDUIT SHALL BE INSTALLED AT THE DEPTH SPECIFIED ON THE PLANS. CONDUIT SHALL BE 1 INCH CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT OR EQUAL. CONDUIT MUST BE UL RATED AND SUITABLE FOR UNDERGROUND USE.

CONNECTIONS SHALL BE PER UTILITY STANDARDS.

5.12 LIGHT POLE IDENTIFICATION:

THE CONTRACTOR SHALL FURNISH AND INSTALL A NUMBER ON EACH LIGHT POLE. STREET LIGHT POLE IDENTIFICATION AND SPECIFICATIONS WILL BE PROVIDED BY THE CITY OF SURPRISE.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO RESTORE ALL PROPERTY, LANDSCAPING, PAVING AND DRIVEWAYS THAT ARE DISTURBED DURING STREET LIGHT CONSTRUCTION TO THEIR ORIGINAL CONDITION IN CONFORMANCE WITH "MAG" SPECIFICATION SECTION 107.9.

THE DEVELOPER SHALL BE RESPONSIBLE FOR FURNISHING ALL PERSONNEL AND EQUIPMENT TO SUCCESSFULLY PERFORM THE FOLLOWING TEST.

PRIOR TO ACCEPTANCE, THE DEVELOPER SHALL ENERGIZE AND OPERATE THE ENTIRE ROADWAY LIGHTING SYSTEM, FROM SUNSET TO SUNRISE FOR TWO CONSECUTIVE DAYS WITHOUT INTERRUPTION OR FAILURE. IF A LAMP OR BALLAST SHOULD FAIL, IT SHALL BE IMMEDIATELY REPLACED.

THE CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE ENGINEERING MANAGER, AGAINST IMPERFECT WORKMANSHIP, FAILURE, MALFUNCTION OF MATERIALS AND/OR EQUIPMENT DUE TO FAULTY OR IMPERFECT WORKMANSHIP. THIS GUARANTEE IS TO BE IN WRITING TO THE CITY AT THE TIME OF ISSUING FINAL ACCEPTANCE. WORK FOUND TO BE DEFECTIVE WITHIN THE WARRANTY PERIOD SHALL BE REPLACED WITHOUT COST TO THE CITY.

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 REPLACEDIN 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.

CITY OF SURPRISE APPROVAL

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.

CITY OF SURPRISE ENGINEER **DATE**

UTILITIES WITHIN OR AFFECTED BY THE PROJECT	
UTILITY CONTACT	DATE SUBMITTED
ARIZONA PUBLIC SERVICE	11/15/2022
CENTURY LINK	11/15/2022
COX COMMUNICATIONS	11/15/2022
SOUTHWEST GAS	11/15/2022

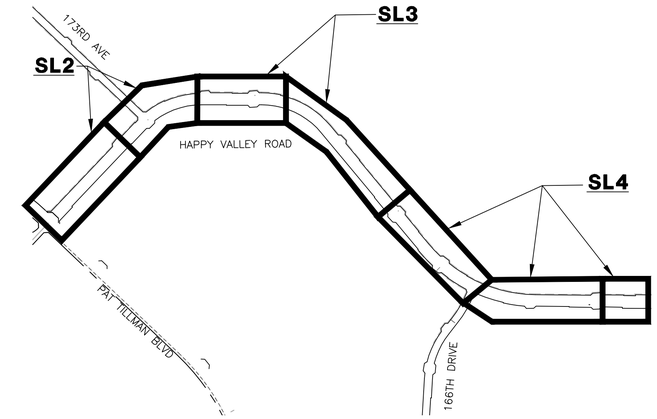
NOTE

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

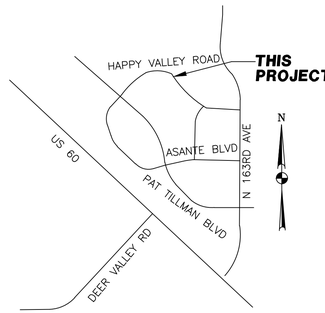
B. THE ELECTRICAL/MAINTENANCE COSTS OF ALL STREET LIGHTS ON LOCAL AND COLLECTOR STREETS ARE TO BE PAID BY THE ADJACENT PROJECT OR THE ADJACENT DEVELOPMENT'S STREET LIGHT IMPROVEMENT DISTRICT (SLID). THE ELECTRICAL / MAINTENANCE COSTS OF ALL STREET LIGHTS ON ARTERIAL STREETS ARE TO BE BILLED TO THE CITY OF SURPRISE'S ENERGY BILL.

LED NOTE

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.



KEY MAP
N.T.S.



VICINITY MAP
N.T.S.

SHEET INDEX

COVER SHEET	SL1
STREET LIGHT PLAN	SL2
STREET LIGHT PLAN	SL3
STREET LIGHT PLAN	SL4
DETAILS	SL5

POWER CONDUIT NOTE

TRENCH & CONDUIT RUNS FROM STREET LIGHT PULL BOX TO POINT OF ELECTRICAL SERVICE WILL BE DESIGNED BY THE POWER COMPANY, AND ARE SHOWN ON POWER COMPANY PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THESE PLANS FROM DEVELOPER/OWNER, AND INCLUDE THESE RUNS IN THE BID. COORDINATE THIS WORK WITH THE POWER COMPANY.

CIVIL ENGINEER
HILGART WILSON
2141 E HIGHLAND AVE, STE. 250
PHOENIX, AZ 85016
PHONE: (602) 490-0535
FAX: (602) 368- 2436
CONTACT: DIEGO ORTIZ, PE
EMAIL: DORTIZ@HILGARTWILSON.COM

OWNER
LENNAR COMMUNITIES DELEOPMENT, LLC
1665 W. ALMEDA DR STE 130
TEMPE, AZ 85282-3000
CONTACT: JORGE VILLASENOR

Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348) in Maricopa County: (602) 263-1100

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WRIGHT ENGINEERING PROJECT NO:
22359

DESIGN BY: BDS
DRAWN BY: BDS
CHECKED BY: AMB

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:

SURPRISE, ARIZONA
ASANTE PLANNING AREA 3
HAPPY VALLEY ROAD
STREET LIGHT COVER SHEET

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	NOV 2022	1ST SUBMITTAL
2	MAR 2023	2ND SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M. BOWERS
Date Signed 3-17-23
Expires 9-30-25

DRAWING NO:
SL1
OF 5

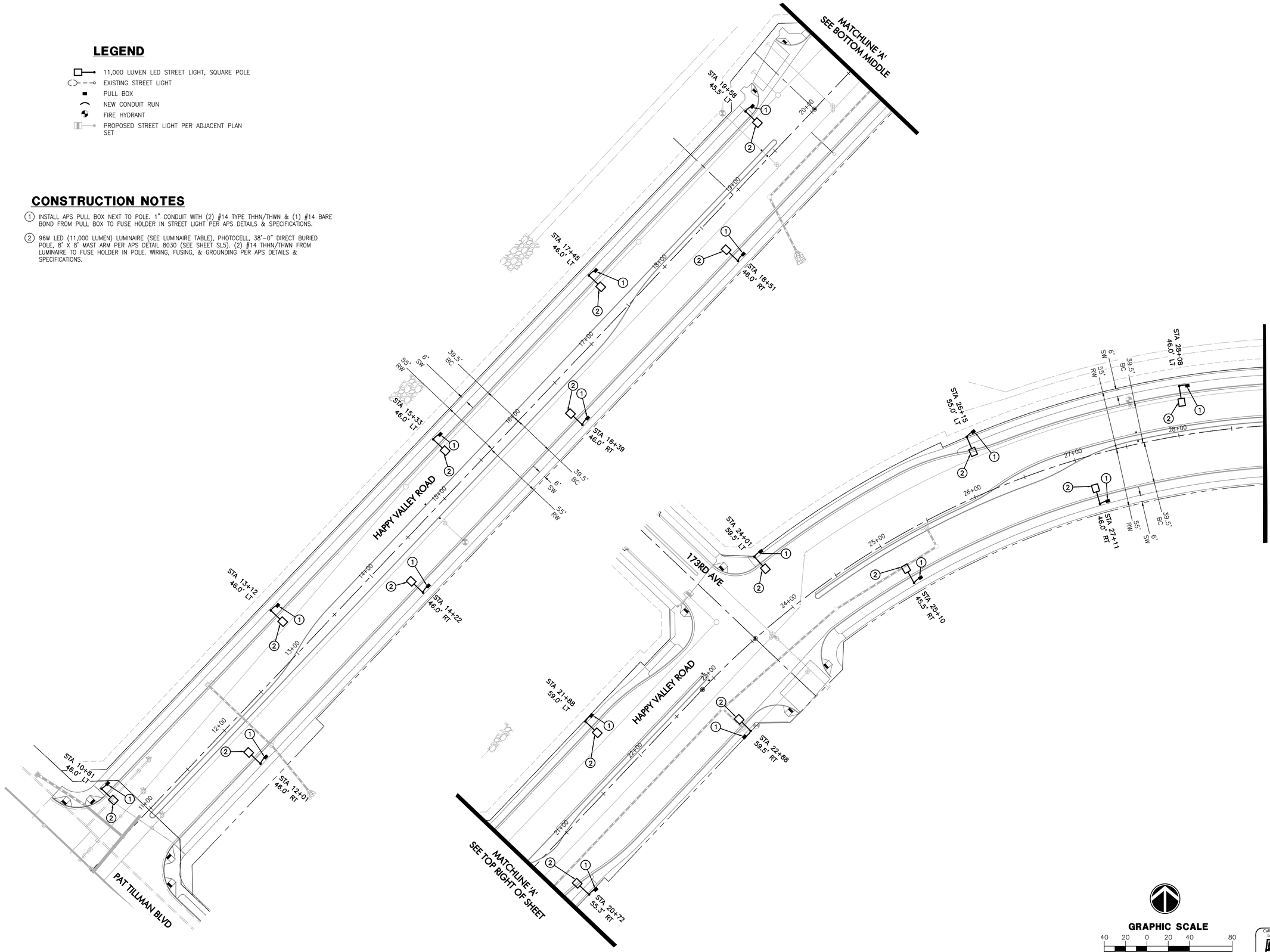
FS23-0063

LEGEND

- 11,000 LUMEN LED STREET LIGHT, SQUARE POLE
- EXISTING STREET LIGHT
- PULL BOX
- NEW CONDUIT RUN
- FIRE HYDRANT
- PROPOSED STREET LIGHT PER ADJACENT PLAN SET

CONSTRUCTION NOTES

1. INSTALL APS PULL BOX NEXT TO POLE. 1" CONDUIT WITH (2) #14 TYPE THHN/THWN & (1) #14 BARE BOND FROM PULL BOX TO FUSE HOLDER IN STREET LIGHT PER APS DETAILS & SPECIFICATIONS.
2. 96W LED (11,000 LUMEN) LUMINAIRE (SEE LUMINAIRE TABLE), PHOTOCELL, 38'–0" DIRECT BURIED POLE, 8' X 8' MAST ARM PER APS DETAIL 8030 (SEE SHEET SL5). (2) #14 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. WIRING, FUSING, & GROUNDING PER APS DETAILS & SPECIFICATIONS.



GRAPHIC SCALE
40 20 0 20 40 80
1 INCH = 40 FEET

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PROJECT: TITLE:

SURPRISE, ARIZONA
ASANTE PLANNING AREA 3
HAPPY VALLEY ROAD

STREET LIGHT PLAN

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FS23-0063

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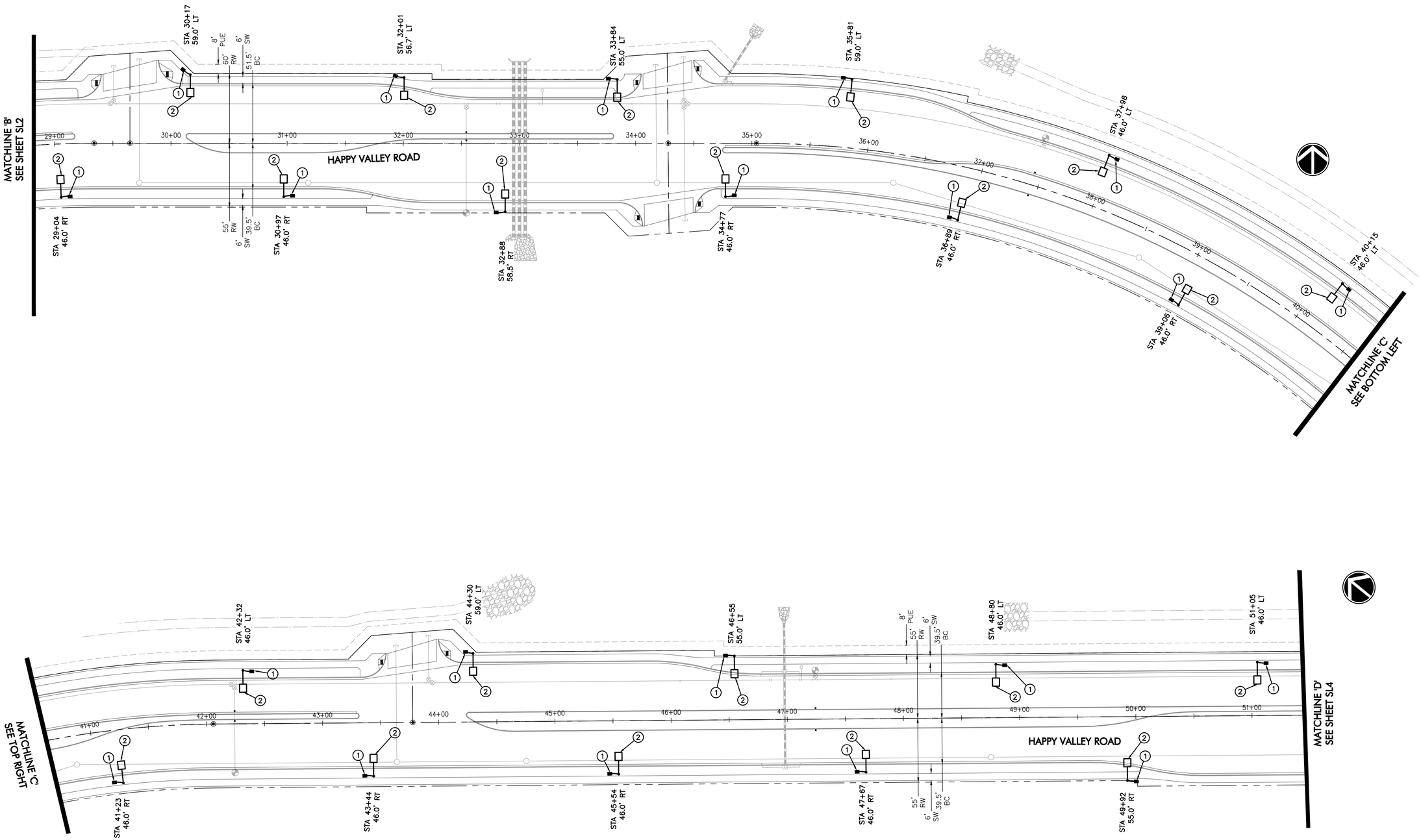

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PROJECT: TITLE:

SURPRISE, ARIZONA
ASANTE PLANNING AREA 3
HAPPY VALLEY ROAD

STREET LIGHT PLAN

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	NOV 2022	1ST SUBMITTAL
2	MAR 2023	2ND SUBMITTAL

Registered Professional Engineer (Retired)
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Date Signed 3-17-23
Expires 9-30-25

DRAWING NO:
SL3
OF 5

FS23-0063

LEGEND

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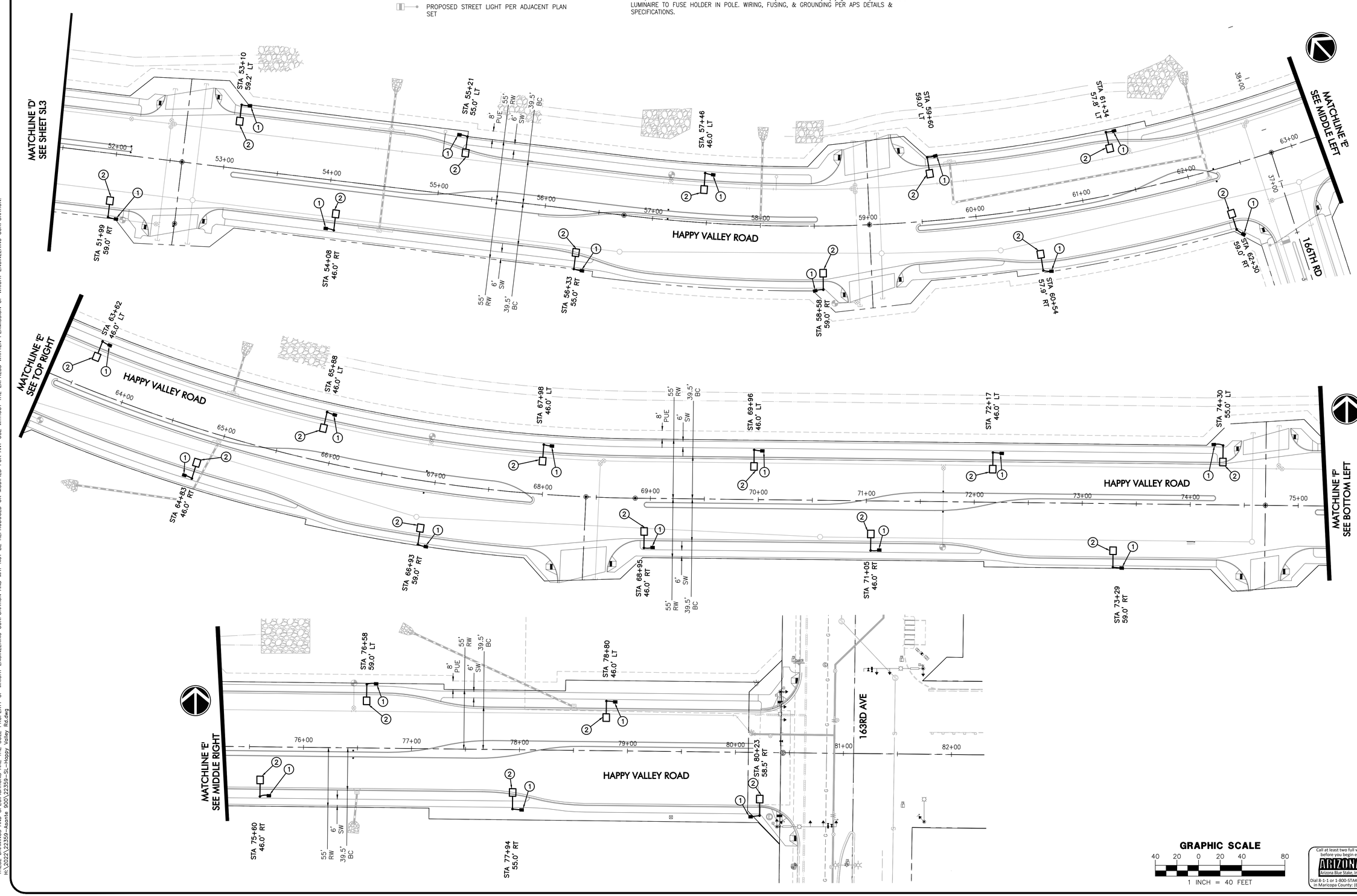

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Registered Professional Engineer (Retired)
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46691
ADAM M. BOWERS
Date Retired 9-27-21
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OF 5

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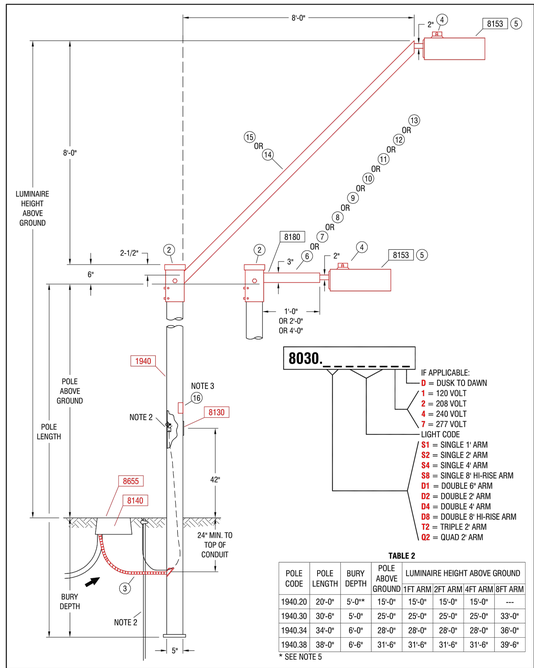


TABLE 2

POLE CODE	POLE LENGTH	BURY DEPTH	POLE ABOVE GROUND	LUMINAIRE HEIGHT ABOVE GROUND			
				1FT ARM	2FT ARM	4FT ARM	8FT ARM
1940.20	20'-0"	5'-0"*	15'-0"	15'-0"	15'-0"	15'-0"	---
1940.30	30'-6"	5'-0"	25'-0"	25'-0"	25'-0"	25'-0"	33'-0"
1940.34	34'-0"	6'-0"	28'-0"	28'-0"	28'-0"	28'-0"	36'-0"
1940.38	38'-0"	6'-6"	31'-6"	31'-6"	31'-6"	31'-6"	39'-6"

* SEE NOTE 5

aps ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS				
BY	LDR.	MGR.	DATE	REV.
KLS	B. BOOKER	R. CANDRA	02/2016	12

LIGHTS ARCHITECTURAL ON 5" SQUARE BROWN PAINTED STEEL POLE DIRECT BURY

SH 1 OF 2

8030

NOTES:

1. ADJUST PHOTO EYE TO FACE NORTH.
2. A GROUND ROD IS PROVIDED WITH EACH STREET LIGHT POLE. WHERE A GROUND ROD CANNOT BE DRIVEN, ALTERNATE GROUND SHALL BE USED. SEE 2449 THRU 2460 FOR APPROVED ALTERNATES.
3. SIGN, "NOTICE THIS POLE IS OWNED AND MAINTAINED BY APS. DISCONNECT INSIDE", IS REQUIRED ON ALL DUSK-TO-DAWN AND AREA LIGHTING APPLICATIONS.
4. POLES THAT HAVE MORE THAN ONE LUMINAIRE REQUIRE A SEPARATE CIRCUIT WITH FUSING FROM THE J-BOX TO EACH LUMINAIRE.
5. USING THE 20'-0" POLE TO MATCH THE 16'-0" PEDESTRIAN LIGHT MOUNTING HEIGHT REDUCE POLE BURY DEPTH TO 4'-0".
6. THE BROWN PHOTO CONTROL IS A FAIL OFF CONTROL AND SHALL BE USED WITH ALL INDUCTION AND LED LUMINAIRES.
7. ON 277 VOLT STREET LIGHT CIRCUITS, INSTALL A "277 VOLT" MICARTA TAG ON CABLE IN J-BOX. TAG PROVIDED BY SPEC 8129.
8. THE LUMINAIRE SHOWN IS RECOMMENDED FOR THIS MOUNTING HEIGHT. SEE 8153 FOR ADDITIONAL BROWN ARCHITECTURAL LUMINAIRES.
9. THE TWO ARMED TENON BRACKET POSITIONS THE DOUBLE ARM 180 DEGREES APART.
10. TO ACCOMMODATE LESS THAT THE SPECIFIED LUMINAIRE MOUNTING HEIGHT, A SHOP ORDER IS REQUIRED TO HAVE A PORTION FROM THE TOP OF THE POLE CUT OFF. THE TENON ARM BRACKET SLIDES OVER AND COVERS THE CUT PORTION OF THE POLE.
11. IN-LINE FUSE FOR UNDERGROUND FEEDS, SEE 8130-8140.
12. FOR PEDESTRIAN ONLY APPLICATIONS SEE 8030.

TABLE 1

LIGHT CODE	APN	WATTS	K	TYPE	VOLTS	INITIAL LUMENS	MOUNTING HEIGHT
AH18	00099450	100	2100	HPS	120/208/240/277	9,500	SEE TABLE 2
AH17	00099451	150			120/208/240/277	16,000	
AH18	00099452	250			120/208/240/277	30,000	
AH19	00099454	400			120/208/240/277	50,000	
RN40	00128258	55	2700	IND	120/208/240/277	3,900	
RN41	00128667	100	5000		120/208/240/277	8,400	
RN42	00132846	150			120/208/240/277	10,200	
RN43	00132850	150			120/208/240/277	13,000	
RN44	00121153	200			120/208/240/277	15,250	
RN45	00116527	250			120/208/240/277	22,500	
RL40	00141047	32	3000	LED S	120/208/240/277	3,800	
RL41	00141048	41			120/208/240/277	4,800	
RL42	00141049	88			120/208/240/277	8,200	
RL43	00141050	108			120/208/240/277	11,000	
RL44	00141051	162			120/208/240/277	19,000	
RL50	00128251	45	4000	LED S	120/208/240/277	4,300	
RL52	00126804	60			120/208/240/277	5,400	
RL53	00126805	95			120/208/240/277	8,600	
RL54	00126806	113			120/208/240/277	10,000	
RL56	00128365	257			120/208/240/277	19,200	
AL56	00113722	62	4000	LED M	120/208/240/277	7,100	
AL58	00129911	72			120/208/240/277	8,300	
AL60	00113723	119			120/208/240/277	12,900	
AL61	00116525	119R*			120/208/240/277	12,900	
AL62	00116526	119L*			120/208/240/277	12,900	
AL65	00107462	144			120/208/240/277	15,400	
AS20	33806772	55	1700	LPS	120/240	8,000	
AS21	33806774	90			120/240	13,500	
AS22	33806776	135			120/240	22,500	
AS23	33806778	180			120/240	33,000	

* CALL STANDARDS ENGINEERING FOR APPLICATION

MATERIAL LIST

ITEM	CODE	8030.S1 QTY	8030.S2 QTY	8030.S4 QTY	8030.S8 QTY	8030.D1 QTY	8030.D2 QTY	8030.D4 QTY	8030.D8 QTY	8030.T2 QTY	8030.Q2 QTY	DESCRIPTION	APN
1		-	-	-	-	-	-	-	1	-	-	BRACKET ARCH SLIP BOLTED	00092251
2		1	1	1	1	1	1	1	1	1	1	CAP STLT SQ-P 5.5" ARM	00100036
3		10	10	10	10	10	10	10	10	10	10	CONDUIT 1" PVC FLEX CORR	32900891
4		1	1	1	1	2	2	2	2	3	4	CONTROL PHOTO MULTI BR-20	00073241
5		1	1	1	1	2	2	2	2	3	4	LUMINAIRE - SEE TABLE 1	
6		-	-	-	-	1	-	-	-	-	-	MAST ARM STLT 3" SQ X 1' DBL	00121154
7		1	-	-	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 1' SGL	00088370
8		-	-	-	-	-	1	-	-	-	-	MAST ARM STLT 3"SQ X 2' DBL	33701117
9		-	-	-	-	-	-	-	-	-	1	MAST ARM STLT 3"SQ X 2' QUAD	00052665
10		-	1	-	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 2' SGL	33701116
11		-	-	-	-	-	-	-	-	1	-	MAST ARM STLT 3"SQ X 2' TPL	00052664
12		-	-	-	-	-	-	1	-	-	-	MAST ARM STLT 3"SQ X 4' DBL	00073267
13		-	-	1	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 4' SGL	00061738
14		-	-	-	1	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 8' SGL	33701120
15		-	-	-	-	-	-	-	2	-	-	MAST ARM STLT 8' BOLT-ON	00092252
16		1	1	1	1	1	1	1	1	1	1	SIGN POLE OWNED BY APS	00050092

aps ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS				
BY	LDR.	MGR.	DATE	REV.
KLS	B. BOOKER	R. CANDRA	02/2016	12

LIGHTS ARCHITECTURAL ON 5" SQUARE BROWN PAINTED STEEL POLE DIRECT BURY

SH 2 OF 2

8030

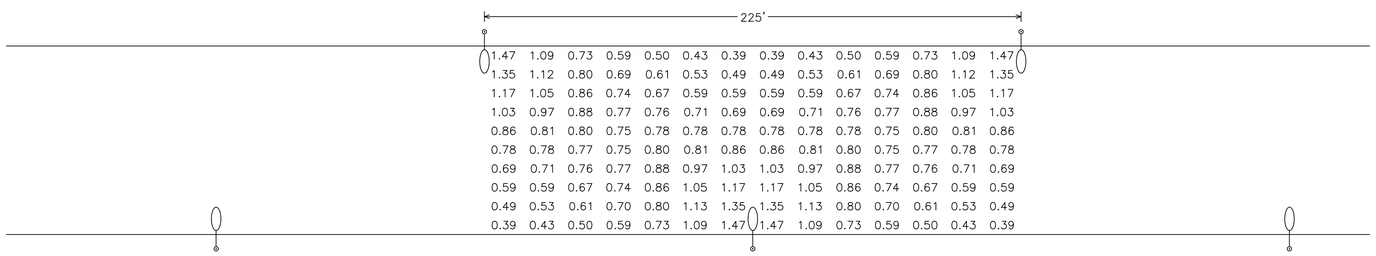
LUMINAIRE TABLE

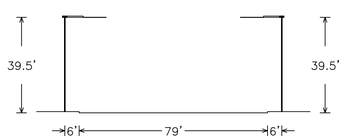
DARK BRONZE ROADWAY SCALEABLE LED 3000K

LIGHT CODE	COLOR	APN	WATTS	VOLTS	INITIAL LUMENS	CATALOG #
RL40	DKBZ	00141047	32	120/208/240/277	3,900	ERLC004B430ADKBZGLRV1013
RL41		00141048	43	120/208/240/277	4,800	ERLC005A430ADKBZGLRV1013
RL42		00141049	71	120/208/240/277	7,800	ERL1008C330ADKBZGLRX162
RL33		00141050	96	120/208/240/277	11,000	ERLH011C330ADKBZGLV1108
RL44		00141051	174	120/208/240/277	20,100	ERL2021C330ADKBZGLR113

TYPICAL LOCAL STREET CALCULATION

ILLUMINANCE METHOD





11,000 LUMEN
Type 3 Distribution
8'x8' Mast Arm
candela file 'ERL1_11C530_____.IES'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 87
mounting height= 39.5 ft
number locations= 7, number luminaires= 7
kw all locations= 0.6

Roadway Grid
140 points at z=0, sp 16.071ft by 7.9ft
HORIZONTAL FOOTCANDLES

Average	0.80
Maximum	1.47
Minimum	0.39
Avg:Min	2.04
Max:Min	3.77
Coef Var	0.30
UnifGrad	1.49

WRIGHT ENGINEERING
PROJECT NO:
22359
DESIGN BY: BDS
DRAWN BY: BDS
CHECKED BY: AMB

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:

SURPRISE, ARIZONA
ASANTE PLANNING AREA 3
HAPPY VALLEY ROAD
STREET LIGHT DETAILS

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	NOV 2022	1ST SUBMITTAL
2	MAR 2023	2ND SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M. BOWERS
Date Signed 3-17-23
Expires 9-30-25

DRAWING NO:
SL5
OF 5

FS23-0063

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
in Maricopa County: (602) 263-1100

ASANTE PLANNING AREA 2 - UNIT 4.4/4.7

W HAPPY VALLEY RD & N 163RD AVE

STREET LIGHT DESIGN

STREET LIGHTING REQUIREMENTS

5.00 GENERAL NOTES:

THE FOLLOWING INFORMATION IS PROVIDED TO EMPHASIZE CRITICAL WORK AND IS INTENDED TO SUPPLEMENT THE SPECIFICATIONS. SHOULD THERE BE A CONFLICT WITH THE SPECIFICATIONS, THIS DOCUMENT SHALL TAKE PRECEDENCE.

ALTERNATES SHALL BE PRE-APPROVED BY THE CITY ENGINEERING MANAGER. APPROVAL OF ALTERNATE PRODUCTS SHALL BE ON AN EQUAL BASIS WITH THE PRODUCT SPECIFIED AND SHALL BE SUBMITTED A MINIMUM OF TEN (10) DAYS PRIOR TO BID OPENING. STRUCTURAL CALCULATIONS SHALL BE FURNISHED FOR ALTERNATE PRODUCTS AND CERTIFIED BY A STRUCTURAL ENGINEER, REGISTERED IN THE STATE OF ARIZONA. LUMINAIRES AND LAMPS SHALL MEET OR EXCEED THE PHOTOMETRIC, ELECTRICAL, AND MECHANICAL REQUIREMENTS FOR THE SPECIFIED PRODUCTS.

THE CONTRACTOR SHALL COMPLY WITH STATE AND CITY STATUTES, AND MANUFACTURER'S RECOMMENDATIONS.

THE SUBMITTAL PACKAGE SHALL CONSIST OF THREE (3) COPIES OF EQUIPMENT/MATERIAL TO BE INSTALLED AND SHALL BE BOUND/STAPLED IN A FOLDER AND SUBMITTED AT THE TIME OF PERMIT APPLICATION.

PRIOR TO SUBMITTING A PROPOSAL, THE BIDDER SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS AND VISIT THE CONSTRUCTION SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL OPERATE AND WHICH WILL IN ANY WAY AFFECT THE WORK UNDER THE CONTRACT. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN THIS CONNECTION IN THE BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLIGENCE ON HIS PART.

PRIOR TO ORDERING ANY MATERIALS OR DOING ANY WORK, THE CONTRACTOR SHOULD VERIFY DIMENSIONS AT THE SITE. IMMEDIATELY REPORT DIFFERENCES TO THE ENGINEERING MGR. AND SHOULD NOT PROCEED WITH WORK UNTIL THE ENGINEERING MGR. RENDERS A DECISION. NO EXTRA CHARGES OR COMPENSATION WILL BE ALLOWED FOR DIFFERENCES IN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE DRAWINGS.

5.01 GENERAL:

THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH ALL LICENSING REQUIREMENTS SET FORTH BY THE STATE REGISTRAR OF CONTRACTORS OFFICE TO PERFORM WORK RELATING TO STREET LIGHT INSTALLATION IN THE CITY RIGHT-OF-WAY.

ONE PROJECT UNDERGROUND UTILITIES (RIGHT OF WAY) PERMIT AND ONE STREETLIGHT PERMIT FOR EACH STREET LIGHT POLE SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

5.02 WORKING / "AS BUILT" PLANS:

ACCEPTANCE OF THE COMPLETED IMPROVEMENTS WILL NOT BE GIVEN UNTIL 4 MIL PHOTO MYLAR REPRODUCIBLE "AS BUILT" PLANS HAVE BEEN SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

5.03 LIGHT POLES:

LIGHT POLES SHALL BE INSTALLED PLUMB, BE ADJUSTED TO PROVIDE PROPER ALIGNMENT TO THE ROADWAY BEING LIGHTED AND BE PROPERLY GROUNDED WHEN THE INSTALLATION IS COMPLETE.

5.04 EMBEDMENT:

DIRECT BURIED POLES SHALL BE SET IN A TWELVE (12) INCH AUGURED HOLE DEPTH AS SPECIFIED IN UNDISTURBED EARTH. POLE SHALL BE SET PLUMB IN TWO DIRECTIONS 90 DEGREES APART. HAND TAMPING OF ABC BACKFILL WITH PNEUMATIC OR VIBRATING EQUIPMENT IS THE ACCEPTABLE METHOD OF COMPACTION. BACKFILL SHALL BE COMPACTED TO 85% OF MAXIMUM DENSITY AS DEFINED BY ASTM D-2922 AND D-3017. A GROUND ROD SHALL BE INSTALLED ADJACENT TO PULL BOX IN UNDISTURBED SOIL AND A LEAD IN COPPER BOND WIRE (#6) SHALL BE INSTALLED IN 1" CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT (OR EQUAL) FOR POLE GROUNDING.

SURPLUS EXCAVATION SHALL BE DISPOSED OF BY THE CONTRACTOR.

5.05 LUMINAIRES:

LUMINAIRES SHALL BE INSTALLED LEVEL AND INCLUDE A LAMP AND PHOTOCELL. CONTRACTOR SHALL ASSURE THAT THE LUMINAIRES SHALL BE FREE OF DUST, DIRT OR ANYTHING THAT WOULD IMPAIR THE OUTPUT OF THE LIGHT BEFORE HE LEAVES THE SITE.

LUMINAIRES FURNISHED WITH MULTI-TAP BALLASTS SHALL BE REWIRED OR RECONNECTED TO MATCH THE VOLTAGE SUPPLIED BY THE ELECTRIC UTILITY COMPANY.

5.06 WIRING:

WIRING SHALL BE INSTALLED PER UTILITY STANDARDS.

5.07 GROUNDING:

EACH POLE SHALL HAVE A 8' X 5/8" COPPER CLAD GROUND ROD DRIVEN ADJACENT TO PULL BOX. A #6 BARE COPPER LEAD FROM THE GROUND ROD IN PULL BOX TO LANDING LUG IN STREET LIGHT POLE HAND HOLE.

5.08 PULL BOXES:

EXCAVATION FOR PULL BOXES AND MATERIAL SPECIFICATION SHALL BE PER THE ELECTRIC UTILITY COMPANY STANDARDS.

5.09 TRENCH

TRENCH SHALL BE INSTALLED PER THE UTILITY COMPANY STANDARDS.

THE USE OF A COMMON ELECTRIC UTILITY COMPANY TRENCH IS PERMITTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANY FOR COORDINATION OF TRENCHING AND THE INSTALLATION OF CONDUIT.

CONDUIT SHALL BE INSTALLED AT THE DEPTH SPECIFIED ON THE PLANS. CONDUIT SHALL BE 1 INCH CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT OR EQUAL. CONDUIT MUST BE UL RATED AND SUITABLE FOR UNDERGROUND USE.

CONNECTIONS SHALL BE PER UTILITY STANDARDS.

5.12 LIGHT POLE IDENTIFICATION:

THE CONTRACTOR SHALL FURNISH AND INSTALL A NUMBER ON EACH LIGHT POLE. STREET LIGHT POLE IDENTIFICATION AND SPECIFICATIONS WILL BE PROVIDED BY THE CITY OF SURPRISE.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO RESTORE ALL PROPERTY, LANDSCAPING, PAVING AND DRIVEWAYS THAT ARE DISTURBED DURING STREET LIGHT CONSTRUCTION TO THEIR ORIGINAL CONDITION IN CONFORMANCE WITH "MAG" SPECIFICATION SECTION 107.9.

THE DEVELOPER SHALL BE RESPONSIBLE FOR FURNISHING ALL PERSONNEL AND EQUIPMENT TO SUCCESSFULLY PERFORM THE FOLLOWING TEST.

PRIOR TO ACCEPTANCE, THE DEVELOPER SHALL ENERGIZE AND OPERATE THE ENTIRE ROADWAY LIGHTING SYSTEM, FROM SUNSET TO SUNRISE FOR TWO CONSECUTIVE DAYS WITHOUT INTERRUPTION OR FAILURE. IF A LAMP OR BALLAST SHOULD FAIL, IT SHALL BE IMMEDIATELY REPLACED.

THE CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE ENGINEERING MANAGER, AGAINST IMPERFECT WORKMANSHIP, FAILURE, MALFUNCTION OF MATERIALS AND/OR EQUIPMENT DUE TO FAULTY OR IMPERFECT WORKMANSHIP. THIS GUARANTEE IS TO BE IN WRITING TO THE CITY AT THE TIME OF ISSUING FINAL ACCEPTANCE. WORK FOUND TO BE DEFECTIVE WITHIN THE WARRANTY PERIOD SHALL BE REPLACED WITHOUT COST TO THE CITY.

THESE DRAWINGS AND SPECIFICATIONS ARE THE SOLE PROPERTY OF WRIGHT ENGINEERING CORPORATION AND MAY NOT BE REPRODUCED OR MODIFIED FOR ANY USE WITHOUT THE EXPRESS WRITTEN PERMISSION OF WRIGHT ENGINEERING CORPORATION.
H:\2022\22376-Asante Development Partners - Planning Area 2\22376-SL_4.4 and 4.7.dwg

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 REPLACEDIN 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.

CITY OF SURPRISE APPROVAL

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.

CITY OF SURPRISE ENGINEER **DATE**

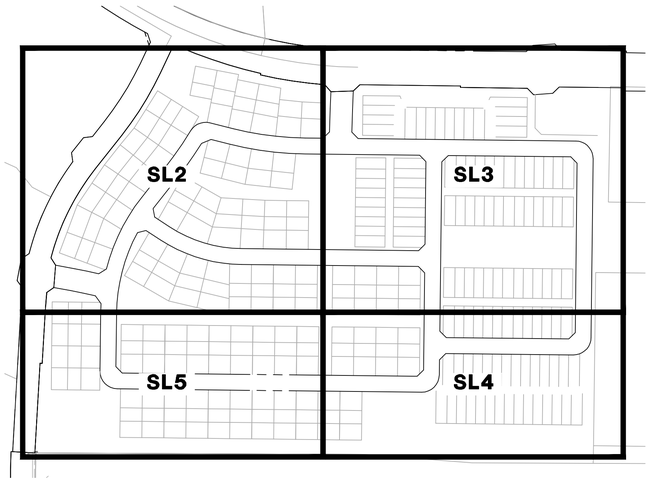
NOTE

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

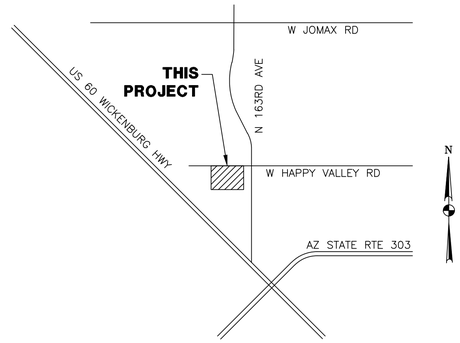
B. THE ELECTRICAL/MAINTENANCE COSTS OF ALL STREET LIGHTS ON LOCAL AND COLLECTOR STREETS ARE TO BE PAID BY THE ADJACENT PROJECT OR THE ADJACENT DEVELOPMENT'S STREET LIGHT IMPROVEMENT DISTRICT (SLID). THE ELECTRICAL / MAINTENANCE COSTS OF ALL STREET LIGHTS ON ARTERIAL STREETS ARE TO BE BILLED TO THE CITY OF SURPRISE'S ENERGY BILL.

LED NOTE

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.



KEY MAP
N.T.S.



VICINITY MAP
N.T.S.

SHEET INDEX

COVER SHEET	SL1
STREET LIGHT PLAN	SL2
STREET LIGHT PLAN	SL3
STREET LIGHIT PLAN	SL4
STREET LIGHT PLAN	SL5
STREET LIGHT DETAILS	SL6

POWER CONDUIT NOTE

TRENCH & CONDUIT RUNS FROM STREET LIGHT PULL BOX TO POINT OF ELECTRICAL SERVICE WILL BE DESIGNED BY THE POWER COMPANY, AND ARE SHOWN ON POWER COMPANY PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THESE PLANS FROM DEVELOPER/OWNER, AND INCLUDE THESE RUNS IN THE BID. COORDINATE THIS WORK WITH THE POWER COMPANY.

CIVIL ENGINEER
ATWELL, LLC.
4700 E SOUTHERN AVE
MESA, AZ 85206
PHONE: (480) 218-8831
CONTACT: SCOTT STAMAN
EMAIL: SSTAMAN@ATWELL-GROUP.COM

OWNER
ASANTE DEVELOPMENT PARTNERS LLC.
1665 W ALAMEDA DR, STE. 130
TEMPE, AZ 85282
CONTACT: JEFF GUNDERSON
EMAIL: JEFF.GUNDERSON@LENNAR.COM

UTILITIES WITHIN OR AFFECTED BY THE PROJECT	
UTILITY CONTACT	DATE SUBMITTED
ARIZONA PUBLIC SERVICE	11/07/2023
CENTURY LINK	11/07/2023
COX COMMUNICATIONS	11/07/2023
SOUTHWEST GAS	11/07/2023

STREET LIGHTING (APS AREA)

KEY NO.	SYMBOL	STREET TYPE	OFFSET BEHIND B/C	QUANTITY	POLE		MAST ARM	LUMINAIRE						
					POLE HEIGHT	FOUNDATION	SIZE	MOUNTING HEIGHT	LUMENS	WATTAGE	I.E.S. DIST.	VOLTAGE	TYPE	STYLE
(1)		LOCAL	PER PLANS	32	30'-6"	DIRECT BURY	2'-0"	25'-0"	4,900	43 W	TYPE 2	*	LED	ARCHITECTURAL DARK BRONZE

*PER UTILITY COMPANY REQUIREMENTS

Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

WRIGHT ENGINEERING PROJECT NO: 22376
DESIGN BY: BKM
DRAWN BY: BKM
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: SURPRISE, ARIZONA
ASANTE PLANNING AREA 2 - UNIT 4.4/4.7
W HAPPY VALLEY RD & N 163RD AVE

TITLE: STREET LIGHT COVER SHEET

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	9-8-23	1ST SUBMITTAL
2	11-7-23	2ND SUBMITTAL

Registered Professional Engineer (Electrical) Certificate No. 57159 CLIFFORD W. TOLMAN 11-7-23 Date Signed
Expires 3-31-26

FS23-0831

DRAWING NO: SL1
OF 6

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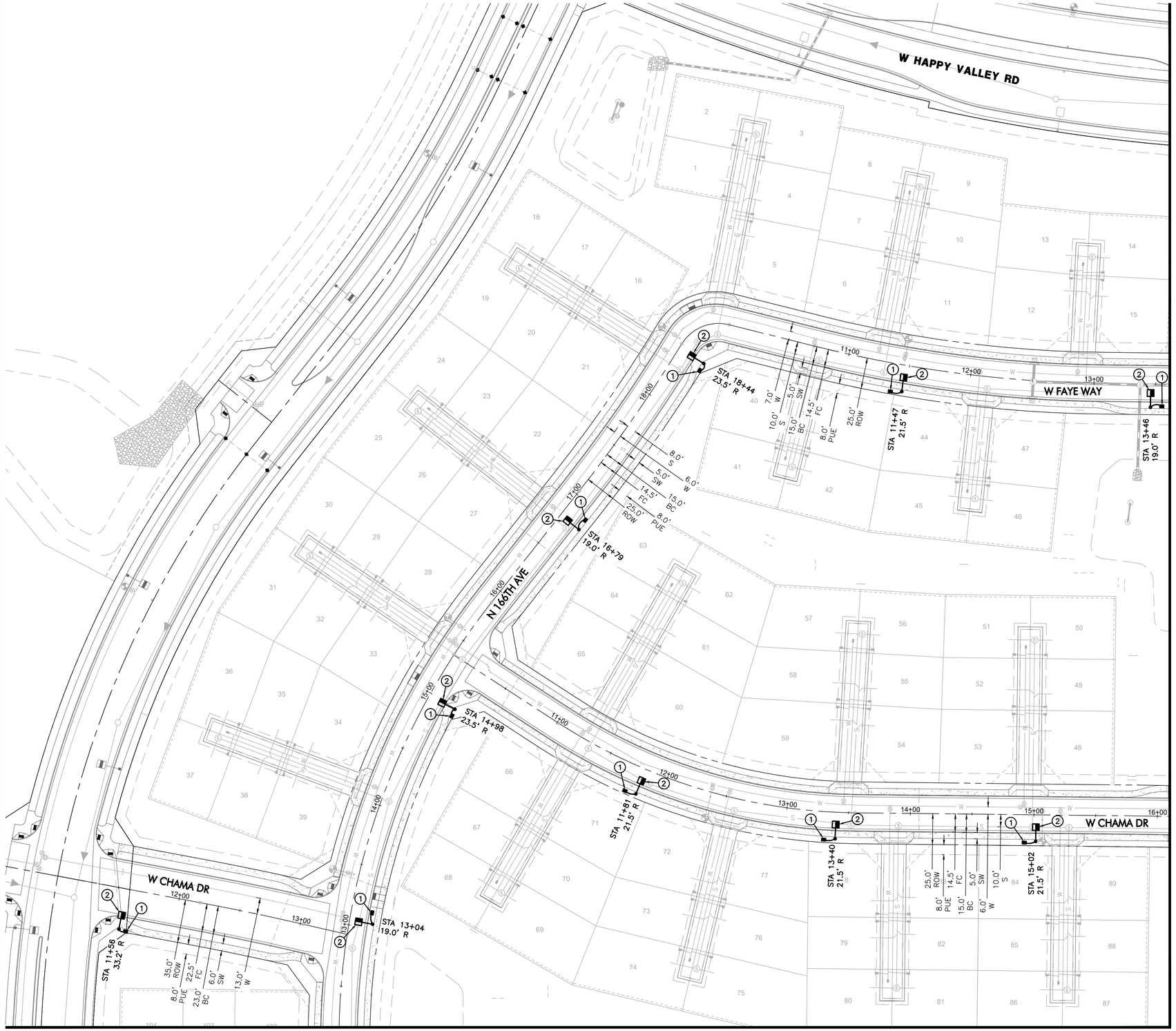

CONSTRUCTION NOTES

1. INSTALL APS PULL BOX NEXT TO POLE. 1" CONDUIT WITH (2) #14 TYPE THHN/THWN & (1) #14 BARE BOND FROM PULL BOX TO FUSE HOLDER IN STREET LIGHT PER APS DETAILS & SPECIFICATIONS.
2. 37W LED (4,900 LUMEN) LUMINAIRE (SEE LUMINAIRE TABLE), PHOTOCELL, 30'–6" DIRECT BURIED POLE, 2' MAST ARM PER APS DETAIL 8030 (SEE SHEET SL5). (2) #14 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. WIRING, FUSING, & GROUNDING PER APS DETAILS & SPECIFICATIONS.

LEGEND

- 4,900 LUMEN LED STREET LIGHT, SQUARE POLE
- PULL BOX
- NEW CONDUIT RUN
- FIRE HYDRANT

GRAPHIC SCALE

40 20 0 20 40 80

1 INCH = 40 FEET

Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

WRIGHT ENGINEERING PROJECT NO:
22376

DESIGN BY: BKM
DRAWN BY: BKM
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: **ASANTE PLANNING AREA 2 - UNIT 4.4/4.7**
SURPRISE, ARIZONA
W HAPPY VALLEY RD & N 163RD AVE

TITLE: **STREET LIGHT PLAN**

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	9-8-23	1ST SUBMITTAL
2	11-7-23	2ND SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
57159
CLIFFORD M. TOLMAN
11-7-23
Date Signed
Expires 3-31-26

DRAWING NO: **SL2**
OF 6

FS23-0831

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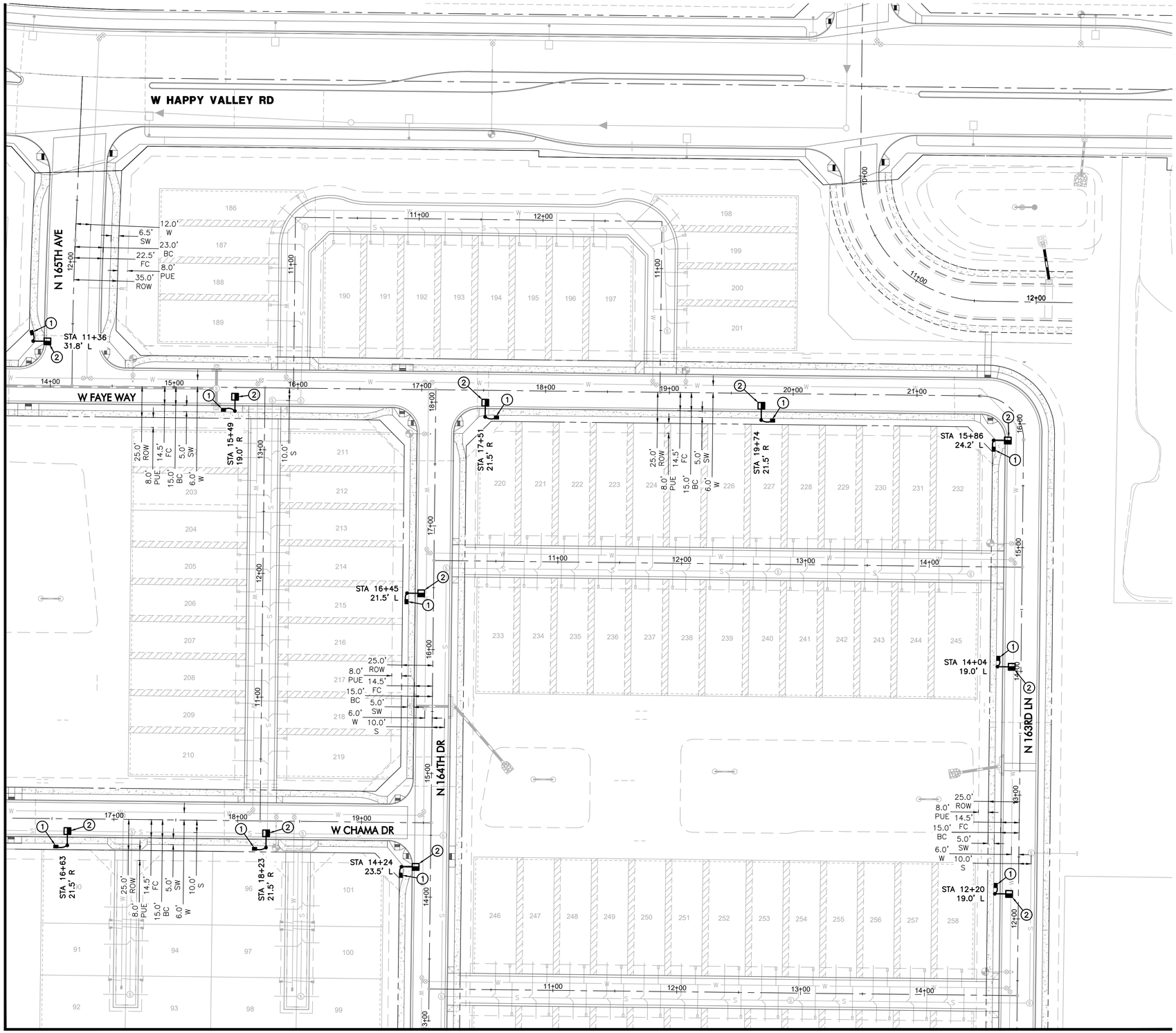

MATCHLINE 'A', SEE SL2

MATCHLINE 'B', SEE SL4

CONSTRUCTION NOTES

1. INSTALL APS PULL BOX NEXT TO POLE. 1" CONDUIT WITH (2) #14 TYPE THHN/THWN & (1) #14 BARE BOND FROM PULL BOX TO FUSE HOLDER IN STREET LIGHT PER APS DETAILS & SPECIFICATIONS.
2. 37W LED (4,900 LUMEN) LUMINAIRE (SEE LUMINAIRE TABLE), PHOTOCELL, 30'–6" DIRECT BURIED POLE, 2' MAST ARM PER APS DETAIL 8030 (SEE SHEET SL5). (2) #14 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. WIRING, FUSING, & GROUNDING PER APS DETAILS & SPECIFICATIONS.

LEGEND

- 4,900 LUMEN LED STREET LIGHT, SQUARE POLE
- PULL BOX
- NEW CONDUIT RUN
- FIRE HYDRANT

GRAPHIC SCALE

40 20 0 20 40 80

1 INCH = 40 FEET

Call at least two full working days before you begin excavation. ARIZONA 811 Arizona Blue Stake, Inc. Dial 8-1-1 or 1-800-STAKE-IT (782-5348) In Maricopa County: (602) 263-1100

WRIGHT ENGINEERING PROJECT NO: 22376

DESIGN BY: BKM
DRAWN BY: BKM
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: SURPRISE, ARIZONA
ASANTE PLANNING AREA 2 - UNIT 4.4/4.7
W HAPPY VALLEY RD & N 163RD AVE

TITLE: STREET LIGHT PLAN

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	9-8-23	1ST SUBMITTAL
2	11-7-23	2ND SUBMITTAL

Registered Professional Engineer (Electrical) Certificate No. 57159 CLIFFORD M. TOLMAN 11-7-23 Date Signed
Expires 3-31-26

DRAWING NO: SL3
OF 6

FS23-0831

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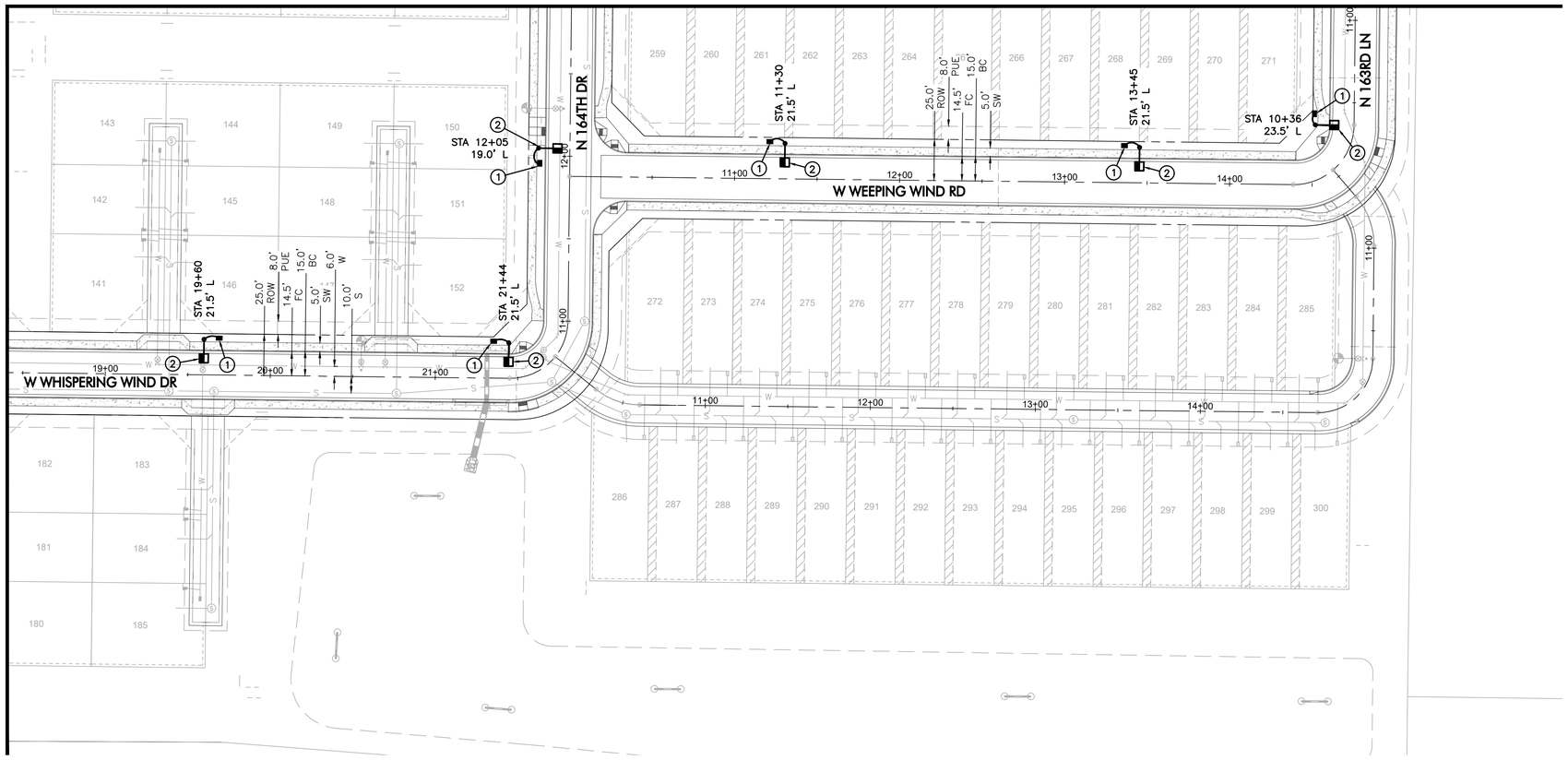
MATCHLINE 'B', SEE SL3

MATCHLINE 'C', SEE SL5



CONSTRUCTION NOTES

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LEGEND

- 4,900 LUMEN LED STREET LIGHT, SQUARE POLE
- PULL BOX
- NEW CONDUIT RUN
- FIRE HYDRANT

GRAPHIC SCALE

40 20 0 20 40 80

1 INCH = 40 FEET

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ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

WRIGHT ENGINEERING PROJECT NO:
22376

DESIGN BY: BKM
DRAWN BY: BKM
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:

ASANTE PLANNING AREA 2 - UNIT 4.4/4.7
W HAPPY VALLEY RD & N 163RD AVE
SURPRISE, ARIZONA

STREET LIGHT PLAN

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	9-8-23	1ST SUBMITTAL
2	11-7-23	2ND SUBMITTAL

Registered Professional Engineer (Electrical)
Certificate No.
57159
CLIFFORD M. TOLMAN
11-7-23
Date Signed
Expires 3-31-26

DRAWING NO:
SL4
OF 6

FS23-0831

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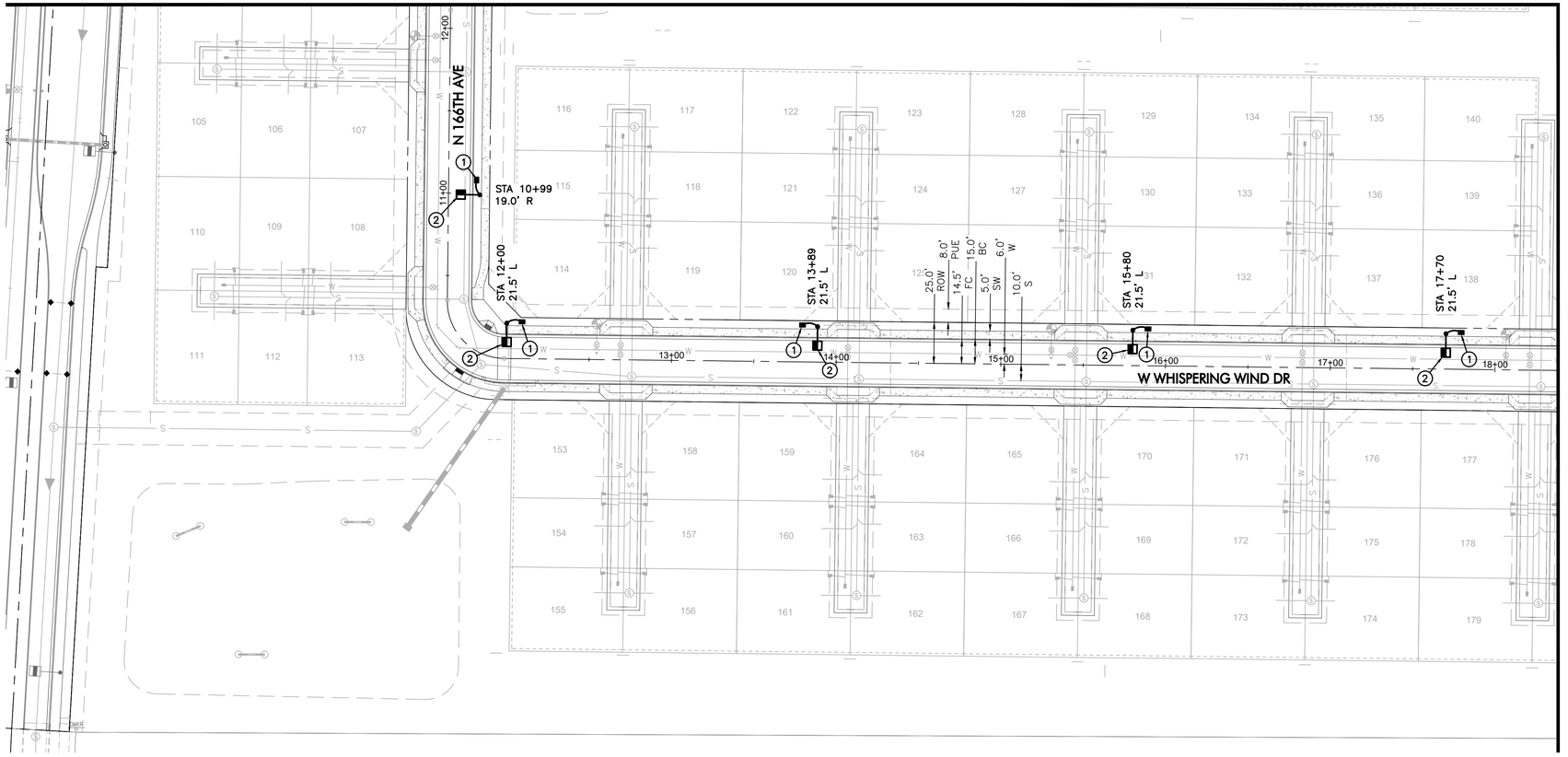
MATCHLINE 'D', SEE SL2



MATCHLINE 'C', SEE SL4

CONSTRUCTION NOTES

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LEGEND

- 4,900 LUMEN LED STREET LIGHT, SQUARE POLE
- PULL BOX
- NEW CONDUIT RUN
- FIRE HYDRANT

GRAPHIC SCALE

40 20 0 20 40 80

1 INCH = 40 FEET

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22376

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PROJECT: TITLE:

ASANTE PLANNING AREA 2 - UNIT 4.4/4.7
W HAPPY VALLEY RD & N 163RD AVE

STREET LIGHT PLAN

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	9-8-23	1ST SUBMITTAL
2	11-7-23	2ND SUBMITTAL

Registered Professional Engineer (Electrical)
Certificate No.
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CLIFFORD M. TOLMAN
11-7-23
Date Signed
Expires 3-31-26

DRAWING NO:
SL5
OF 6

FS23-0831

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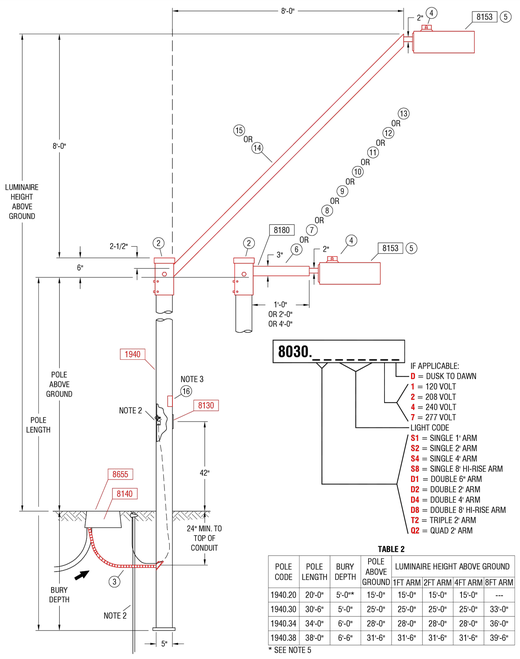


TABLE 2

POLE CODE	POLE LENGTH	BURY DEPTH	POLE ABOVE GROUND	LUMINAIRE HEIGHT ABOVE GROUND			
				1FT ARM	2FT ARM	4FT ARM	8FT ARM
1940.20	20'-0"	5'-0"*	15'-0"	15'-0"	15'-0"	15'-0"	---
1940.30	30'-6"	5'-0"	25'-0"	25'-0"	25'-0"	25'-0"	33'-0"
1940.34	34'-0"	6'-0"	28'-0"	28'-0"	28'-0"	28'-0"	36'-0"
1940.38	38'-0"	6'-6"	31'-6"	31'-6"	31'-6"	31'-6"	39'-6"

* SEE NOTE 5

NOTES:

1. ADJUST PHOTO EYE TO FACE NORTH.
2. A GROUND ROD IS PROVIDED WITH EACH STREET LIGHT POLE. WHERE A GROUND ROD CANNOT BE DRIVEN, ALTERNATE GROUND SHALL BE USED. SEE 2449 THRU 2460 FOR APPROVED ALTERNATES.
3. SIGN, "NOTICE THIS POLE IS OWNED AND MAINTAINED BY APS. DISCONNECT INSIDE", IS REQUIRED ON ALL DUSK-TO-DAWN AND AREA LIGHTING APPLICATIONS.
4. POLES THAT HAVE MORE THAN ONE LUMINAIRE REQUIRE A SEPARATE CIRCUIT WITH FUSING FROM THE J-BOX TO EACH LUMINAIRE.
5. USING THE 20'-0" POLE TO MATCH THE 16'-0" PEDESTRIAN LIGHT MOUNTING HEIGHT REDUCE POLE BURY DEPTH TO 4'-0".
6. THE BROWN PHOTO CONTROL IS A FAIL OFF CONTROL AND SHALL BE USED WITH ALL INDUCTION AND LED LUMINAIRES.
7. ON 277 VOLT STREET LIGHT CIRCUITS, INSTALL A "277 VOLT" MICARTA TAG ON CABLE IN J-BOX. TAG PROVIDED BY SPEC 8129.
8. THE LUMINAIRE SHOWN IS RECOMMENDED FOR THIS MOUNTING HEIGHT. SEE 8153 FOR ADDITIONAL BROWN ARCHITECTURAL LUMINAIRES.
9. THE TWO ARMED TENON BRACKET POSITIONS THE DOUBLE ARM 180 DEGREES APART.
10. TO ACCOMMODATE LESS THAT THE SPECIFIED LUMINAIRE MOUNTING HEIGHT, A SHOP ORDER IS REQUIRED TO HAVE A PORTION FROM THE TOP OF THE POLE CUT OFF. THE TENON ARM BRACKET SLIDES OVER AND COVERS THE CUT PORTION OF THE POLE.
11. IN-LINE FUSE FOR UNDERGROUND FEEDS, SEE 8130-8140.
12. FOR PEDESTRIAN ONLY APPLICATIONS SEE 8030.

TABLE 1

LIGHT CODE	APN	WATTS	K	TYPE	VOLTS	INITIAL LUMENS	MOUNTING HEIGHT
AH16	00099450	100	2100	HPS	120/208/240/277	9,500	SEE TABLE 2
AH17	00099451	150			120/208/240/277	16,000	
AH18	00099452	250			120/208/240/277	30,000	
AH19	00099454	400			120/208/240/277	50,000	
RN40	00128250	55	5000	IND	120/208/240/277	3,000	
RN41	00126687	100			120/208/240/277	6,400	
RN42	00132846	150			120/208/240/277	10,200	
RN43	00132850	150			120/208/240/277	13,000	
RN44	00121153	200			120/208/240/277	15,250	
RN45	00116527	250			120/208/240/277	22,500	
RL40	00141047	32	3000	LED S	120/208/240/277	3,800	
RL41	00141048	41			120/208/240/277	4,800	
RL42	00141049	88			120/208/240/277	8,200	
RL43	00141050	108			120/208/240/277	11,000	
RL44	00141051	162			120/208/240/277	19,000	
RL50	00128251	45	4000	LED S	120/208/240/277	4,300	
RL52	00126804	60			120/208/240/277	5,400	
RL53	00126805	95			120/208/240/277	8,600	
RL54	00126806	113			120/208/240/277	10,000	
RL56	00128365	257			120/208/240/277	19,200	
AL56	00113722	57	4000	LED M	120/208/240/277	7,100	
AL58	00129911	72			120/208/240/277	8,300	
AL60	00113723	119			120/208/240/277	12,900	
AL61	00116525	119R*			120/208/240/277	12,300	
AL62	00116526	119L*			120/208/240/277	12,300	
AL65	00107462	144			120/208/240/277	15,400	
AS20	33806772	55	1700	LPS	120/240	8,000	
AS21	33806774	90			120/240	13,500	
AS22	33806776	135			120/240	22,500	
AS23	33806778	180			120/240	33,000	

* CALL STANDARDS ENGINEERING FOR APPLICATION

CODE	8030.S1	8030.S2	8030.S4	8030.S8	8030.D1	8030.D2	8030.D4	8030.D8	8030.T2	8030.Q2	MATERIAL LIST	
ITEM	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	DESCRIPTION	APN
1	-	-	-	-	-	-	-	1	-	-	BRACKET ARCH SLIP BOLTED	00092251
2	1	1	1	1	1	1	1	1	1	1	CAP STLT SQ-P 5.5" ARM	00100036
3	10	10	10	10	10	10	10	10	10	10	CONDUIT 1" PVC FLEX CORR	32500891
4	1	1	1	1	2	2	2	3	3	4	CONTROL PHOTO MULTI BR-20	00073241
5	1	1	1	1	2	2	2	3	4		LUMINAIRE - SEE TABLE 1	
6	-	-	-	-	1	-	-	-	-		MAST ARM STLT 3" SQ X 1' DBL	00121154
7	1	-	-	-	-	-	-	-	-		MAST ARM STLT 3"SQ X 1' SGL	00088370
8	-	-	-	-	-	1	-	-	-		MAST ARM STLT 3"SQ X 2' DBL	33701117
9	-	-	-	-	-	-	-	-	-	1	MAST ARM STLT 3"SQ X 2' QUAD	00052665
10	-	1	-	-	-	-	-	-	-		MAST ARM STLT 3"SQ X 2' SGL	33701116
11	-	-	-	-	-	-	-	-	1	-	MAST ARM STLT 3"SQ X 2' TPL	00052664
12	-	-	-	-	-	-	1	-	-	-	MAST ARM STLT 3"SQ X 4' DBL	00073267
13	-	-	1	-	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 4' SGL	00061738
14	-	-	-	1	-	-	-	-	-	-	MAST ARM STLT 3"SQ X 8' SGL	33701120
15	-	-	-	-	-	-	-	2	-	-	MAST ARM STLT 8' BOLT-ON	00092252
16	1	1	1	1	1	1	1	1	1	1	SIGN POLE OWNED BY APS	00050092

aps ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS				
BY	LDR.	MGR.	DATE	REV.
KLS	B. BOOKER	R. CANDRA	02/2016	12

LIGHTS ARCHITECTURAL ON 5" SQUARE BROWN PAINTED STEEL POLE DIRECT BURY

SH 1 OF 2

8030

aps ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS

BY | LDR. | MGR. | DATE | REV.
KLS | B. BOOKER | R. CANDRA | 02/2016 | 12

LIGHTS ARCHITECTURAL ON 5" SQUARE BROWN PAINTED STEEL POLE DIRECT BURY

SH 2 OF 2

8030

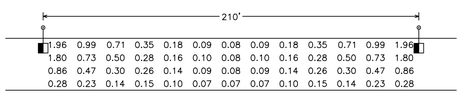
LUMINAIRE TABLE

DARK BRONZE ROADWAY SCALEABLE LED 3000K

LIGHT CODE	COLOR	APN	WATTS	VOLTS	INITIAL LUMENS	CATALOG #
RL40	DKBZ	00141048	31	120/208/240/277	3,800	ERLC005A530ADKBZGLRV1013 DIALED TO 7**
RL41		00141048	36	120/208/240/277	4,900	ERLC005A530ADKBZGLRV1013
RL42		00141050	69	120/208/240/277	7,600	ERL1011C530ADKBZGLRV1279 DIALED TO 7**
RL33		00141050	87	120/208/240/277	10,500	ERL1011C530ADKBZGLRV1279
RL44		00141051	160	120/208/240/277	20,100	ERL2021C530ADKBZGLR113

NOTE:

ALL CALCULATIONS BASED ON ILLUMINANCE METHOD





25' 37W LED T2
candela file 'ERLC_05A530_____-120-277V.ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 36
mounting height= 25 ft
number locations= 2, number luminaires= 2
kw all locations= 0.1

Roadway Grid
52 points at z=0, sp 16.154ft by 7.25ft
HORIZONTAL FOOTCANDLES

Average	0.43
Maximum	1.96
Minimum	0.07
Avg:Min	6.10
Max:Min	28.00
Coef Var	1.15
UnifGrad	2.47

WRIGHT ENGINEERING PROJECT NO:

22376

DESIGN BY: BKM
DRAWN BY: BKM
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
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PROJECT: TITLE:

ASANTE PLANNING AREA 2 - UNIT 4.4/4.7
W HAPPY VALLEY RD & N 163RD AVE
SURPRISE, ARIZONA

STREET LIGHT DETAILS

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	9-8-23	1ST SUBMITTAL
2	11-7-23	2ND SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
57159
CLIFFORD M. TOLMAN
Date Signed 11-7-23
Expires 3-31-26

DRAWING NO:

SL6

OF 6

FS23-0831

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Arizona Blue Stake, Inc.
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in Maricopa County: (602) 263-1100

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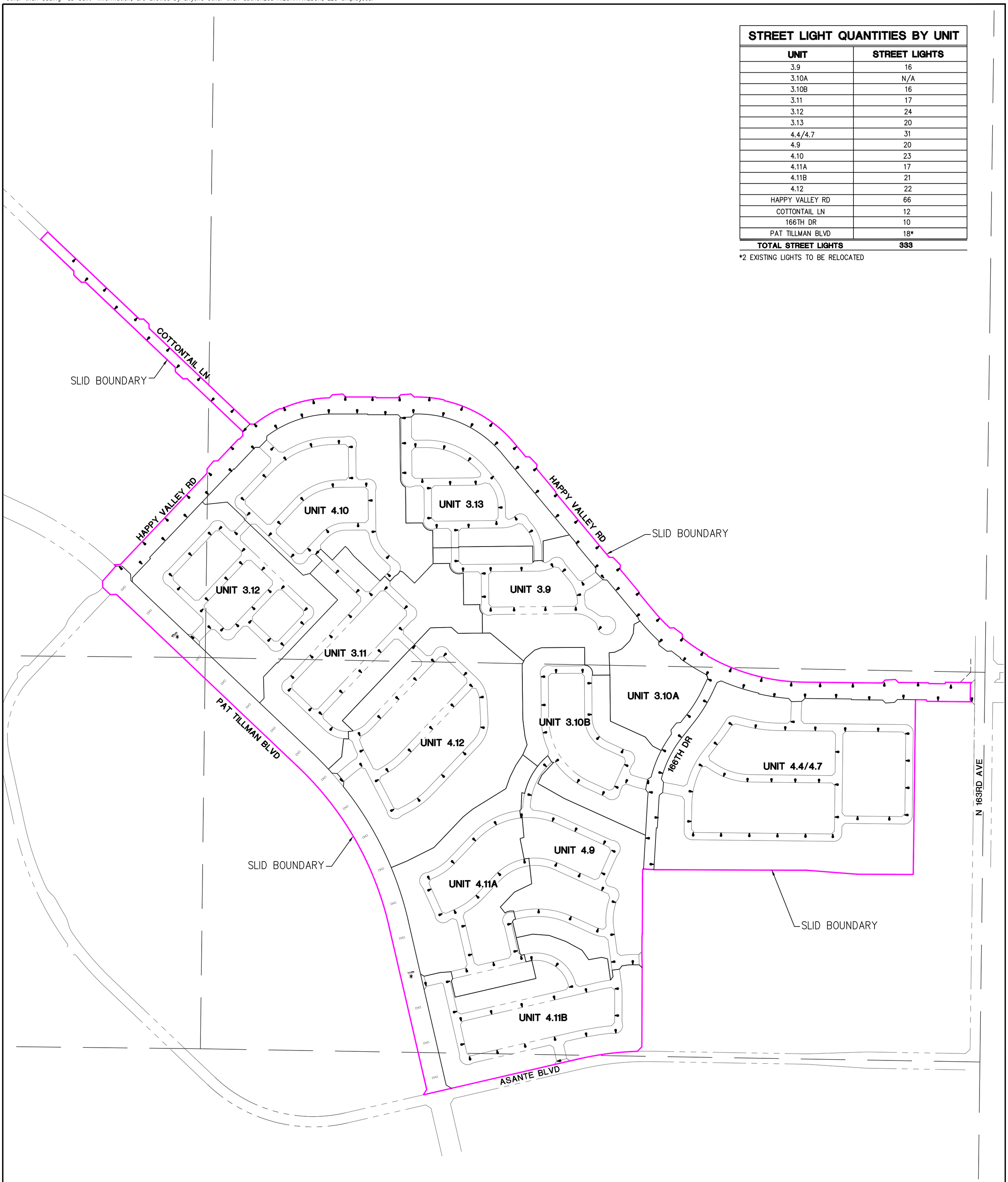
STREET LIGHT QUANTITIES BY UNIT

UNIT	STREET LIGHTS
3.9	16
3.10A	N/A
3.10B	16
3.11	17
3.12	24
3.13	20
4.4/4.7	31
4.9	20
4.10	23
4.11A	17
4.11B	21
4.12	22
HAPPY VALLEY RD	66
COTTONTAIL LN	12
166TH DR	10
PAT TILLMAN BLVD	18*
TOTAL STREET LIGHTS	**333**

*2 EXISTING LIGHTS TO BE RELOCATED



LEGEND

STREET LIGHT

N

300 150 0 300 600

SCALE: 1" = 300'

HILGARTWILSON

PROJ NO.:	1909
DATE:	APR 2024
SCALE:	1" = 300'
DRAWN:	HW
DESIGNED:	HW
APPROVED:	DO

DWG. NO. 1 SHT. 1 OF 1

ASANTE PLANNING AREA 3

ASANTE BOULEVARD AND PAT TILLMAN BOULEVARD
SURPRISE, ARIZONA

STREETLIGHT QUANTITIES

HILGARTWILSON
ENGINEER | PLAN | SURVEY | MANAGE
2141 E. HIGHLAND AVE., STE. 250 | P: 602.490.0535 / F: 602.368.2436
PHOENIX, AZ 85016 | www.hilgartwilson.com

REV.:

U:\1900\1909\ENGR\ASANTE 900\Planning Area 3\EXHIBITS\1909-PA3-STREET LIGHT QTY.dwg 4/12/2024 12:12 PM

OFFICIAL RECORDS OF
MARICOPA COUNTY RECORDER
ADRIAN FONTES
20180792878 10/23/2018 02:45
ELECTRONIC RECORDING

SLIDReso18151-8-1-1--
Garciac

Recording requested by:

City of Surprise
City Clerk's Office
16000 N Civic Center Plaza
Surprise, Arizona 85374

RESOLUTION 2018-151

SU-ASANTEPAR4.5

STREET LIGHTING IMPROVEMENT DISTRICT

RESOLUTION # 2018-151

A RESOLUTION OF THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE, ARIZONA, DECLARING ITS INTENTION TO ESTABLISH A STREET LIGHT IMPROVEMENT DISTRICT TO PURCHASE ENERGY FOR LIGHTING THE PUBLIC STREETS AND PARKS IN THE AREA WITHIN THE CORPORATE LIMITS OF THE CITY OF SURPRISE, ARIZONA DESCRIBED ON EXHIBIT A, ATTACHED HERETO; DECLARING SUCH IMPROVEMENTS TO BE OF MORE THAN LOCAL OR ORDINARY PUBLIC BENEFIT AND THAT THE EXPENSES THEREOF BE PAID FOR BY THE LEVY AND COLLECTION OF AD VALOREM TAXES UPON THE ASSESSED VALUATION OF ALL REAL AND PERSONAL PROPERTY IN A CERTAIN DISTRICT TO BE KNOWN AS "CITY OF SURPRISE, ARIZONA, SU-ASANTEPAR4.5 LIGHTING IMPROVEMENT DISTRICT"; AND ORDERING THAT SUCH IMPROVEMENTS BE PROVIDED FOR UNDER THE PROVISIONS OF SECTION 48-572, ARIZONA REVISED STATUTES.

WHEREAS, the owners, exclusive of mortgagees and other lienholders, of all of the real property (hereinafter referred to as "Petitioner") in the hereinafter described District, acting pursuant to the provisions of Sections 48-615(A) and 48-617(A), Arizona Revised Statutes, have petitioned the Mayor and Council of the City of Surprise, Arizona (hereinafter referred to as "City"), to adopt a resolution of intention (hereinafter referred to as "Resolution") ordering the purchase of energy for the lighting of the public street and parks (hereinafter referred to as "Improvements") for the real property legally described in Exhibit A (such area hereinafter referred to as the "District") with such boundaries as shown in the map in Exhibit B attached hereto pursuant to the provisions of Section 48-576, Arizona Revised Statutes, giving the City immediate jurisdiction to order the improvements pursuant to the provisions of Section 48-581, Arizona Revised Statutes, without the necessity of the publications or posting of this Resolution provided for in Sections 48-578, Arizona Revised Statutes;

WHEREAS, the City has verified that Petitioner is the owner, exclusive of mortgagees and other lienholders, of all of the real property included within the boundaries of the District, and;

WHEREAS, the Mayor and Council of the City hereby find and determine that they have jurisdiction to adopt this Resolution to order the Improvements pursuant to the provisions of Section 48-576, Arizona Revised Statutes, and have immediate jurisdiction to adopt this Resolution ordering the Improvements pursuant to the provisions of Section 48-581, Arizona Revised Statutes without the necessity of publications and posting of this Resolution as provided for in Section 48-578, Arizona Revised Statutes;

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Surprise, Arizona, as follows.

Section 1. The City, after verifying ownership of the real property included within the boundaries of the District, hereby finds the Petitioner is the owner, exclusive of mortgagees and other lienholders, of all of the real property included within the boundaries of the District.

Section 2. The name of the District shall be "CITY OF SURPRISE, ARIZONA, SU-ASANTEPAR4.5 LIGHTING IMPROVEMENT DISTRICT."

Section 3. The District is formed, and shall exist, pursuant to the provisions of Title 48, Chapter 4, Article 2, Arizona Revised Statutes, and Section 48-616, Arizona Revised Statutes.

Section 4. The public interest or convenience requires, and it is the intention of the Mayor and Council of the City to order the Improvement as so described above.

Section 5. The Improvements, in the opinion of the Mayor and Council of the City, are of more than local or ordinary public benefit and are of special benefit to the respective lots, pieces and parcels of real property in the District, and the Mayor and Council of the City hereby make and order the expense of the Improvements payable from the levying and collection of ad valorem taxes upon the assessed value of all real and personal property in the District to be known and designated as "City of Surprise, Arizona SU-AsantePar4.5 Lighting Improvement District" and hereby declare that the District is as legally described on Exhibit A attached hereto with the boundaries as shown in the map in Exhibit B attached hereto. Any public street or alley within the District shall be omitted from the assessment. Any lot belonging to the United States, the State, a county, city, school district or political subdivision or institution of the state or county within the District shall be omitted from the assessment.

Section 6. The Superintendent of Streets or equivalent of the City shall not be required to post or cause to be posted notices of the Resolution of Intention. The Clerk of the City shall certify to the passage of this Resolution of Intention but shall not be required to cause the same to be published in a newspaper published and of general circulation in the City.

Section 7. The Mayor and Council of the City shall make annual statements and estimates of the expenses of the district, which shall be provided for by the levy and collection of ad valorem taxes upon the assessed value of all the real and personal property in the District; shall publish notice thereof; shall have hearings thereon; and shall adopt them at the times and in the manner provided for incorporated cities and towns by the applicable portions of Section 42-17101, et seq., 42-17152, Arizona Revised Statutes. The Mayor and Council of the City shall, on or before the third Monday in August of each year, fix, levy and assess the amount to be raised by ad valorem taxes upon all of the property of the District and collect, as Maricopa County, Arizona (the "County") taxes are collected, the amounts shown by the statements and estimates as adopted by the Mayor and Council of the City. All statutes providing for the levy and collection of State of Arizona and County taxes, shall be applicable to District taxes as provided to be levied under Section 48-616, Arizona Revised Statutes.

Section 8. The District shall not be authorized to issue bonds and no assessment for District purposes against the property within the District shall exceed One Dollar and Twenty Cents ($1.20) per each hundred dollars of taxable valuation thereof in any year.

Section 9. The District shall not engage in any activity other than as provided in Section 48-616, Arizona Revised Statutes, i.e., contracting for and purchasing of energy for street and public park lighting.

Section 10. The formation of the District shall not be considered as preventing the subsequent establishment of improvement districts for any other purpose authorized by law, including improvement districts for the purpose of construction street lighting facilities within any part or all of the same territory as the District.

Section 11. The type of lighting facilities to be installed in the District and the locations thereof shall consist of those lighting facilities and locations described in the petition submitted by Petitioner, or as may be approved by the City.

Section 12. The rate to be paid for purchasing the energy for the District shall be the rate described in the petition submitted by Petitioner, or as may be approved by the Arizona Public Service Company.

Section 13. Any resolutions or parts of resolutions in conflict with the provisions of this Resolution are hereby repealed.

APPROVED AND ADOPTED this 16th day of October, 2018.

Sharon R. Wolcott, Mayor

Attest:

Sherry Aguilar, City Clerk

Approved as to form:

Robert Wingo, City Attorney

Resolution #2018-151
RFLS #6457
Rev 01/18

EXHIBIT "A"
STREET LIGHT IMPROVEMENT DISTRICT
ASANTE - PARCEL 4.5
LEGAL DESCRIPTION

A portion of that parcel of land being described as Parcel 4 in that certain document entitled "Special Warranty Deed" as filed in Document No. 2009-0486171 records of Maricopa County, Arizona being situated within a portion of the Northeast Quarter of Section 12, Township 4 North, Range 2 West of the Gila and Salt River Meridian, Maricopa County, Arizona, being more particularly described as follows:

COMMENCING at a found brass cap flush accepted as the East Quarter corner of said Section 12 from which a found aluminum cap accepted as the Northeast corner of said Section 12 thereof bears North 00°44'56" East, 2634.27 feet;

Thence North 00°44'56" East, 355.85 feet along the east line of the Northeast Quarter of said Section 12 to the easterly prolongation of the north line of Tract C as shown on the Subdivision Plat of Asante Phase One as filed in Book 938, Page 32 records of Maricopa County, Arizona being the **POINT OF BEGINNING**;

THE FOLLOWING FOUR (4) COURSES ALONG SAID NORTH LINE;

Thence North 89°15'04" West, 217.50 feet;

Thence South 00°44'56" West, 150.00 feet;

Thence North 89°01'45" West, 349.49 feet;

Thence South 00°58'15" West, 150.00 feet to the north Right-of-Way of Asante Boulevard of said Section 12;

Thence North 89°01'45" West, 199.71 feet along said north Right-of-Way;

Thence continuing along said north Right-of-Way, South 88°06'38" West, 400.78 feet;

Thence continuing along said north Right-of-Way, North 89°01'45" West, 1053.98 feet to the beginning of a tangent curve concave southerly, having a radius of 2035.00 feet;

Thence continuing along said north Right-of-Way, westerly along said curve, through a central angle of 00°43'34", an arc length of 25.79 feet to a non-tangent line being on the centerline of 166TH Drive;

Thence leaving said north Right-of-Way, North 00°14'41" East, 1176.54 feet along the center of 166th Drive to the beginning of a tangent curve, concave easterly, having a radius of 1,000.00 feet;

Thence along said centerline and northerly along said curve, through a central angle of 03°02'37", an arc length of 53.12 feet to a non-tangent line;

THENCE THE FOLLOWING FOUR (4) COURSES ALONG SAID NORTH LINE;

Thence leaving said centerline, South 86°42'42" East, 40.00 feet;

Thence South 89°45'19" East, 1030.89 feet;

Thence South 85°30'56" East, 338.15 feet;

Thence South 89°45'19" East, 381.08 feet;

Thence leaving said north line, South 00°44'56" West, 471.82 feet;

Thence South 89°15'04" East, 467.50 feet to a point on the east line of the Northeast Quarter of said Section 12;

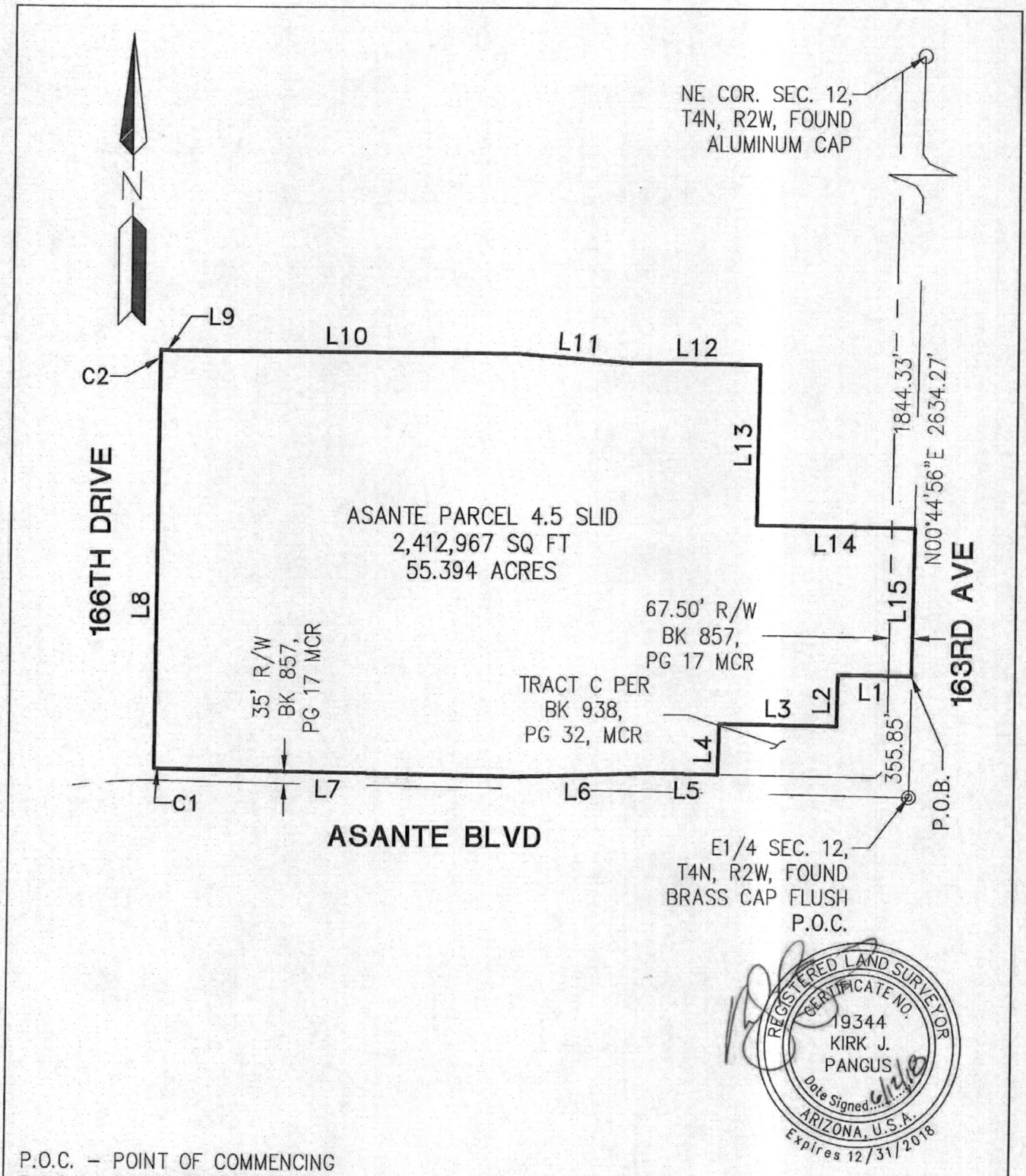
Thence South 00°44'56" West, 434.09 feet along said east line to the **POINT OF BEGINNING**.

The above described parcel contains a computed area of 2,412,967 sq. ft. (55.394 acres) more or less and being subject to any easements, restrictions, rights-of-way of record or otherwise.

The description shown hereon is not to be used to violate any subdivision regulation of the state, county and/or municipality or any land division restrictions.

Prepared by: HILGARTWILSON, LLC
2141 E. Highland Avenue, Suite 250
Phoenix, AZ 85016
Project No. 1909
Date: June 2018





REGISTERED LAND SURVEYOR
CERTIFICATE NO.
19344
KIRK J.
PANGUS
Date Signed 6/12/18
ARIZONA, U.S.A.
Expires 12/31/2018

P.O.C. – POINT OF COMMENCING
P.O.B. – POINT OF BEGINNING

PAGE 3 OF 4

PROJ.NO.:	1909
DATE:	JUNE 2018
SCALE:	NTS
DRAWN BY:	DSP/GS
CHECKED BY:	RAJ

ASANTE
PARCEL 4.5 SLID
ASANTE BLVD & 163RD AVE

EXHIBIT "B"

HILGARTWILSON
2141 E. HIGHLAND AVE., STE. 250
PHOENIX, AZ 85016
P: 602.490.0535 / F: 602.368.2436

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LINE TABLE		
LINE NO.	DIRECTION	LENGTH
L1	N89°15'04"W	217.50'
L2	S00°44'56"W	150.00'
L3	N89°01'45"W	349.49'
L4	S00°58'15"W	150.00'
L5	N89°01'45"W	199.71'
L6	S88°06'38"W	400.78'
L7	N89°01'45"W	1053.98'
L8	N00°14'41"E	1176.54'
L9	S86°42'42"E	40.00'
L10	S89°45'19"E	1030.89'
L11	S85°30'56"E	338.15'
L12	S89°45'19"E	381.08'
L13	S00°44'56"W	471.82'
L14	S89°15'04"E	467.50'
L15	S00°44'56"W	434.09'

CURVE TABLE			
CURVE NO.	RADIUS	DELTA	LENGTH
C1	2035.00'	0°43'34"	25.79'
C2	1000.00'	3°02'37"	53.12'

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
19344
KIRK J.
PANGUS
Date Signed 6/4/18
ARIZONA, U.S.A.
Expires 12/31/2018

PROJ.NO.:	1909
DATE:	JUNE 2018
SCALE:	NONE
DRAWN BY:	DSP/GS
CHECKED BY:	RAJ

ASANTE
PARCEL 4.5 SLID
ASANTE BLVD & 163RD AVE
EXHIBIT "B"

HILGARTWILSON
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STREET LIGHT IMPROVEMENT DISTRICT PETITION

TO THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE:

We, the undersigned, are all or a majority of the real property owners, exclusive of mortgagees and other lienholders, within the district named below. We petition the City Council of the City of Surprise, Arizona, to establish a street light improvement district under Arizona Revised Statutes (A.R.S.) §48-571 to 48-622, and any amendments, and specifically A.R.S. §48-615 to 48-617, to purchase electricity for lighting the public streets and/or parks within the district whose boundaries and area is described in Exhibits A and B attached hereto. This petition includes a charge for maintaining the lighting facilities.

It is hereby requested that, in compliance with the Arizona Revised Statutes, the City Council adopt a Resolution of Intention to order the proposed improvements, and that unless protests are received pursuant to A.R.S. §48-579 sufficient to bar further proceedings, the City Council proceed with the improvements petitioned for herein.

Expenses of the District shall be paid by the levy and collection of ad valorem taxes upon assessed value of all property in the District.

Public convenience, necessity and welfare will be promoted by the establishment of the District and the real property within the District will be benefited by the District. Additional street lighting facilities may be installed and included in the District, at no incvestment cost to the District, as directed by the City and as approved by Arizona Public Service and the City Engineer.

WHEREFORE, we respectfully ask that this Petition be properly filed and that the Mayor and Council of the City adopt the Resolution and take such other action as is proper, necessary and appropriate to form the District and to fulfill the purposes for which the District is organized, as the Mayor and Council believe is proper and necessary.

The name of the proposed street light improvements district shall be:

SU-ASANTEPAR4.5

PETITIONERS: Please print and sign your name

PRINT BUSINESS/ PETITIONERS NAME	ADDRESS OF PROPERTY OWNED WITHIN DISTRICT	ASSESSOR PARCEL #
LCD Asante, LLC a Delaware LLC Jeff Gunderson	1725 W. Greentree Dr., Ste. 114 Tempe, AZ 85284	503-73-944A
PRINT NAME	**SIGNATURE**	**DATE**
Jeff Gunderson		6/26/18

AVAILABILITY

This rate schedule is applicable to those portions of cities, towns and unincorporated communities in which the Company does a general retail electric business and where the Company has installed a multiple or series street lighting system of adequate capacity for the service to be rendered.

DESCRIPTION

E-58 is a rate that is applicable for lighting public streets, alleys, thoroughfares, public parks and playgrounds from dusk to dawn by use of Company's facilities.

TIME PERIODS

Dusk: Time between sunset and full night when photocontrol senses the lack of sufficient sunlight and turns on the lights.

Dawn: The time between full night and sunrise when a photocontrol senses sufficient sunlight to turn off lights.

CHARGES

The monthly bill will consist of the following charges, plus adjustments.

I. FIXTURES (Includes Mounting Arm, if Applicable)

				CHARGES	
	Lumen	Watts	kWh	Investment by Company	Investment by Others
A. Acorn	3,835 LED	75	26	$21.63	$7.59
	4,796 LED	75	26	$17.38	$6.46
	5,003 LED	100	35	$23.45	$8.71
	5,904 LED	100	35	$23.03	$8.60
	6000 IND	85	29	$19.24	$5.14
B. Architectural	6,200 IND	85	29	$10.13	$3.93
	8,400 IND	100	34	$10.69	$4.36
	10,200 IND	120	41	$11.75	$4.99
	13,000 IND	150	52	$12.98	$5.93
	20,500 IND	200	69	$14.78	$7.37
	22,500 IND	265	91	$17.63	$9.28
	3,300 LED	43	15	$10.24	$3.79
	3,800 LED	32	12	$7.73	$2.92
	3,900 LED	32	12	$9.96	$3.51
	4,050 LED	63	22	$18.63	$6.52
	4,100 LED	45	16	$10.34	$3.89
	4,800 LED	41	15	$8.27	$3.27
	5,000 LED	41	15	$9.61	$3.62

				CHARGES	
	Lumen	Watts	kWh	Investment by Company	Investment by Others
	5,100 LED	60	21	$10.18	$4.19
	5,300 LED	67	24	$10.47	$4.48
	5,800 LED	94	32	$17.81	$5.16
	5,890 LED	89	31	$20.56	$7.66
	6,000 LED	62	22	$18.63	$6.52
	6,000 LED	67	24	$19.89	$6.99
	6,400 LED	89	31	$17.89	$5.10
	6,810 LED	101	35	$18.89	$7.50
	7,100 LED	62	22	$19.70	$6.80
	7,400 LED	127	44	$20.42	$6.34
	7,500 LED	73	26	$20.08	$7.18
	7,700 LED	86	30	$18.41	$7.02
	8,200 LED	88	31	$10.45	$4.97
	8,200 LED	95	33	$11.87	$5.48
	8,300 LED	72	25	$17.93	$6.54
	8,300 LED	106	37	$12.45	$5.91
	8,500 LED	88	31	$11.69	$5.30
	9,020 LED	139	48	$22.94	$9.47
	9,200 LED	139	48	$25.60	$7.30
	9,900 LED	130	45	$13.82	$6.84
	10,000 LED	93	32	$21.43	$7.96
	10,000 LED	113	39	$13.26	$6.28
	10,600 LED	126	44	$22.56	$9.09
	11,100 LED	108	38	$12.76	$6.07
	11,500 LED	108	38	$13.16	$6.18
	12,300 LED	203	70	$25.48	$8.85
	12,900 LED	119	41	$22.31	$8.82
	13,260 LED	202	70	$27.11	$12.12
	13,620 LED	202	70	$28.49	$9.24
	14,000 LED	171	59	$26.07	$11.08
	15,000 LED	136	47	$24.93	$9.94
	15,400 LED	144	50	$25.21	$10.22
	18,300 LED	162	56	$16.13	$8.22
	19,200 LED	257	89	$26.87	$13.38
	20,000 LED	258	89	$26.87	$13.38
	20,300 LED	193	67	$17.17	$9.26
	21,000 LED	193	67	$24.77	$11.28
C. Cobra	6,200 IND	75	26	$10.54	$3.77
	6,400 IND	85	29	$8.97	$3.78
	8,000 IND	88	30	$10.47	$4.04
	8,400 IND	100	34	$9.70	$4.24
	10,200 IND	120	41	$10.44	$4.81

					CHARGES	
		Lumen	Watts	kWh	Investment by Company	Investment by Others
C. Cobra		13,000 IND	150	52	$11.50	$5.73
		15,250 IND	200	69	$13.86	$7.25
		22,500 IND	250	86	$18.55	$9.06
	Gray/Bronz	3,500 IND	55	19	$10.50	$3.27
		6,000 LED	95	33	$17.05	$5.13
		8,700 LED	142	49	$19.17	$6.53
		9,600 LED	157	54	$20.40	$7.04
		11,600 B-LED	181	62	$19.03	$7.44
	Gray/Bronz	3,300 LED	43	15	$9.00	$2.79
	Gray/Bronz	5,300 LED	67	23	$10.45	$3.54
	Gray/Bronz	8,300 LED	106	37	$13.55	$4.94
	Gray/Bronz	10,500 LED	130	45	$15.08	$5.69
	Gray/Bronz	20,000 LED	258	89	$26.21	$10.27
D. Decorative Transit		5,300 LED	75	26	$28.44	$6.12
		8,300 LED	100	34	$30.45	$6.97
		8,147 LED	75	26	$35.76	$11.36
		9,522 LED	100	35	$36.14	$12.09
		10,500 LED	150	52	$32.69	$8.52
		14,896 LED	150	52	$39.98	$14.29
	Double	8,147 LED	75	26	$64.74	$18.96
	Double	9,522 LED	100	35	$64.67	$19.58
	Double	14,896 LED	100	52	$70.67	$22.32
	Copper	6,000 IND	85	29	$18.87	$5.09
	Gray/Black	8,000 IND	88	30	$14.86	$4.62
	Gray/Black	4,350 LED	86	30	$13.48	$4.44
E. Flood		14,470 LED	148	51	$23.93	$9.95
		16,000 LED	125	43	$23.17	$9.19
F. Pendant		8,678 LED	75	26	$26.36	$8.85
		13,964 LED	100	35	$27.84	$9.88
G. Post Top		4,350 LED	86	30	$13.43	$5.69
		6,400 LED	30	30	$13.43	$5.69
		6,600 LED	83	29	$13.33	$5.59
H. Roadway		3,300 LED	43	15	$9.46	$3.58
		3,800 LED	32	12	$7.24	$2.79
		3,900 LED	32	12	$9.18	$3.30
		4,100 LED	45	16	$9.56	$3.68
		4,800 LED	41	15	$7.76	$3.13
		5,000 LED	41	15	$9.12	$3.49
		5,100 LED	60	21	$9.69	$4.06
		5,300 LED	67	24	$9.98	$4.35
		8,200 LED	88	31	$9.72	$4.77

	8,200 LED	95	33	$11.36	$5.34
	8,300 LED	106	37	$11.74	$5.72
	8,500 LED	88	31	$11.18	$5.16
	9,900 LED	130	45	$13.31	$6.70
	10,000 LED	113	39	$12.75	$6.14
	11,100 LED	108	38	$12.03	$5.88
	11,500 LED	108	38	$12.65	$6.04
	18,300 LED	162	56	$15.23	$7.98
	19,200 LED	257	89	$19.11	$11.32
	20,000 LED	258	89	$19.11	$11.32
	20,300 LED	193	67	$16.27	$9.02
	21,000 LED	193	67	$17.01	$9.22
FROZEN	4,000 INC	295	103	$10.54	$5.89
	7,000 MV	175	73	$13.65	$7.83
	11,000 MV	250	96	$17.09	$10.43
	20,000 MV	400	150	$26.84	$15.21
FROZEN ACORN	9,500 HPS	100	41	$29.14	$9.93
	16,000 HPS	150	69	$32.35	$12.55
FROZEN ARCHITECTURAL	9,500 HPS	100	41	$16.56	$7.90
	16,000 HPS	150	69	$19.77	$19.34
	30,000 HPS	250	99	$22.95	$13.57
	50,000 HPS	400	153	$28.32	$19.53
	14,000 MH	175	72	$23.17	$12.70
	21,000 MH	250	101	$26.31	$15.66
	36,000 MH	400	159	$32.89	$21.54
	8,000 LPS	55	30	$24.08	$10.58
	13,500 LPS	90	50	$28.39	$12.76
	22,500 LPS	135	72	$32.43	$15.56
	33,000 LPS	180	90	$39.01	$18.33
FROZEN COBRA ROADWAY	5,800 HPS	70	29	$9.40	$5.56
	9,500 HPS	100	41	$11.07	$6.81
	16,000 HPS	150	69	$13.86	$9.50
	30,000 HPS	250	99	$16.72	$12.35
FROZEN COBRA ROADWAY	50,000 HPS	400	153	$22.69	$17.63
	14,000 MH	175	72	$16.12	$10.99
	21,000 MH	250	101	$18.84	$13.67
	36,000 MH	400	159	$24.81	$18.99
	8,000 FL	100	38	$18.53	$5.43
FROZEN DECORATIVE TRANSIT	9,500 HPS	100	41	$39.95	$11.96
	16,000 HPS	150	69	$39.72	$13.36
	30,000 HPS	250	99	$45.74	$17.26
FROZEN FLOOD	30,000 HPS	250	99	$22.20	$13.79
	50,000 HPS	400	153	$27.53	$19.14
	21,000 MH	250	101	$23.69	$14.58
	36,000 MH	400	159	$28.89	$19.76
FROZEN Colonial Gray	8,000 FL	100	38	$19.97	$5.64

FROZEN

POST TOP	Colonial Gray	9,500 HPS	100	41	$11.42	$7.16
	Colonial Black	9,500 HPS	100	41	$13.15	$7.41
	Decorative	9,500 HPS	100	41	$34.97	$11.03

NOTES:

1. Investment by Company. These rates are applicable where the Company provides the initial investment to purchase and install all facilities necessary for street lighting service. The Company will own, operate, and maintain the street lighting system.

2. Investment by Others. These rates are applicable in those instances where the requesting entity or individual purchases and installs the street lighting facilities at their own expense and in accordance with Company specifications. These rates will also apply in the instance where the Customer provides a non-refundable advance to the Company to cover the Company's cost of purchasing and installing the street lighting system. The Company retains ownership of the street lighting system and provides operation and maintenance for all facilities.

3. Listed kWhs reflect the assigned monthly energy usage for each type of fixture and are used to determine any applicable transmission, system benefit, distribution, energy, and adjustment charges.

4. HPS = High Pressure Sodium

5. MH = Metal Halide

6. LPS = Low Pressure Sodium

7. FL = Fluorescent

8. INC = Incandescent. Incandescent lighting charges are applicable and available only to those Customers being served and those installations in service on November 1, 1986.

9. MV = Mercury Vapor. Mercury Vapor lighting charges are applicable and available only to those Customers being served and those installation in service on November 1, 1986 in accordance with A.R.S. §49-1104(A).

10. LED = Light Emitting Diode

11. IND = Induction

II. POLES

				CHARGES	
			Height	Investment by Company	Investment by Others
A. Anchor Base Mounted (Flush)	Round Steel	1 Simplex Adapter	12 ft.	$13.11	$1.81
			22 ft.	$14.75	$2.03
			25 ft.	$15.97	$2.21
			30 ft.	$18.34	$2.52
			32 ft.	$19.27	$2.55
		2 Simplex Adapters	12 ft.	$13.98	$1.93
			22 ft.	$16.06	$2.22
			25 ft.	$16.75	$2.31
			30 ft.	$19.47	$2.68
			32 ft.	$20.77	$2.87
	Square Steel	5"	13 ft.	$15.03	$2.06
			15 ft.	$13.43	$1.85
			23 ft.	$15.93	$2.19
			25 ft.	$17.51	$2.41
			28 ft.	$19.44	$2.67
			32 ft.	$19.33	$2.66
	Concrete		12 ft.	$44.79	$6.17
	Fiberglass		12 ft.	$37.93	$5.22
	Decorative Transit	4"	16 ft.	$36.98	$5.10
	Decorative Transit	6"	30 ft.	$71.39	$9.83
	Hinged Poles	Square	15 ft.	$14.21	$1.16
		Round	19 ft.	$12.85	$1.05
B. Anchor Base Mounted (Pedestal)	Round Steel	1 Simplex Adapter	12 ft.	$12.61	$1.73
			22 ft.	$14.26	$1.96
			25 ft.	$15.46	$2.13
			30 ft.	$17.85	$2.47
			32 ft.	$18.75	$2.58
		2 Simplex Adapters	12 ft.	$13.47	$1.85
			22 ft.	$15.05	$2.06
			25 ft.	$16.24	$2.23
			30 ft.	$18.97	$2.60
			32 ft.	$20.26	$2.79
		3 Bolt	32 ft.	$23.28	$3.20
	Square Steel	5"	13 ft.	$14.54	$2.01
			15 ft.	$14.86	$2.03
			23 ft.	$15.43	$2.13
			25 ft.	$17.02	$2.36
			28 ft.	$18.91	$2.60
			32 ft.	$19.63	$2.69

II POLES (cont)

				CHARGES	
			Height	Investment by Company	Investment by Others
C. Direct Bury	Round Steel		19 ft.	$19.84	$2.74
			30 ft.	$15.49	$2.87
			38 ft.	$18.90	$2.94
		Self	40 ft.	$23.28	$3.69
		Stepped	25 ft.	$53.55	$4.37
			32 ft.	$56.40	$4.60
			49 ft.	$70.00	$9.65
	Square Steel	4"	34 ft.	$17.09	$2.96
		5"	20 ft.	$16.23	$2.68
			30 ft.	$16.92	$2.79
			38 ft.	$18.36	$3.19
		8"	28 ft.	$30.64	$2.49
			32 ft.	$32.03	$2.62
	Decorative Transit		41 ft 6	$22.05	$3.24
	Decorative Transit		47 ft.	$27.47	$4.04
	Steel Distribution Pole (for lighting only)		35 ft.	$25.36	$3.34
D. Post Top	Decorative Transit Anchor Base		16 ft.	$37.77	$5.19
	Gray Steel/Fiberglass		23 ft.	$13.10	$2.15
	Black Steel		23 ft.	$14.44	$2.38
E. Existing distribution pole suitable for streetlight use				$1.59	--
F. FROZEN	~~Wood Poles~~ FROZEN		30 ft.	~~$9.64~~	~~$1.67~~
			35 ft.	~~$9.64~~	~~$1.59~~

NOTE: The monthly rate for all new poles includes up to 300 feet of overhead secondary wire, or up to 300 feet of underground secondary wire if the Customer provides earthwork and conduit (excluding the underground to overhead transition).

III. ANCHOR BASE

			CHARGES	
		Height	Investment by Company	Investment by Others
A. Flush		4 ft.	$10.67	$1.47
		6 ft.	$12.73	$2.21
B. Pedestal		8 ft.	$14.59	$2.54
	For 32' Round Steel Pole only	4 ft. 6"	$10.12	$1.75

IV. CHARGES FOR OPTIONAL OR ADDITIONAL EQUIPMENT

	CHARGE Company Owned
Underground Circuit Charges:	
a. Per foot of cable, installed under paving	$0.17000
b. Per foot of cable, not installed under paving	$0.06000

FROZEN

V. DETERMINATION OF CHARGES FOR NEW EQUIPMENT

Monthly charges for new lighting fixtures, poles and other equipment not included in Sections I, II, or III above will be determined by the Company using the following method:

Step 1 Determination of Charges for each Charge Type

Charge Type	Monthly Charge		Cost Inputs		PV Factor		Monthly Fixed Charge Rate
1	Carrying Cost (fixtures)	=	Equipment Cost (installed)	x	NA	x	1.518%
2	Carrying Cost (poles)	=	Equipment Cost (installed)	x	NA	x	1.296%
3	Fixture Replacement Cost	=	Equipment Cost (installed)	x	0.257	x	1.518%
4	Pole, Anchor Replacement Cost	=	Equipment Cost (installed)	x	0.110	x	1.296%
5	Lighting O&M	=	O&M Cost (lifecycle)	x	0.427	x	1.518%

Charge Type	Monthly Charge		kWh Input		$/kWh
6	Generation	=	kWh per month	x	0.06760
7	T&D, RCS, SB	=	kWh per month	x	0.02738

Step 2 Determination of Total Monthly Charge

The total monthly charge will be the summation of the charges for each applicable charge type

Equipment	Charge Type
Fixture - IBC	1,5,6,7
Fixture - IBO	3,5,6,7
Pole, Anchor Base - IBC	2
Pole, Anchor Base - IBO	4

TRIP CHARGE

A $100.00 trip charge per light will be charged when a Customer requests a disconnect or reconnect of service in order to accommodate the maintenance activities of the Customer or its designee(s) on their street lighting equipment.

ADJUSTMENTS

The bill will include the following adjustments:

1. The Renewable Energy Standard charge, Adjustment Schedule REAC-1.
2. The Power Supply Adjustment charges, Adjustment Schedule PSA-1.
3. The Transmission Cost Adjustment charge, Adjustment Schedule TCA-1.
4. The Environmental Improvement Surcharge, Adjustment Schedule EIS.
5. The Demand Side Management Adjustment charge, Adjustment Schedule DSMAC-1.
6. The Lost Fixed Cost Recovery Adjustment charge, Adjustment Schedule LFCR.
7. Direct Access Customers returning to Standard Offer service may be subject to a Returning Customer Direct Access Charge, Adjustment Schedule RCDAC-1.
8. Any applicable taxes and governmental fees that are assessed on APS's revenues, prices, sales volume, or generation volume.

SERVICE DETAILS

1. Street lighting facilities installed under this rate schedule are of the type currently being furnished by Company as standard at the time service is initially requested. Standard facilities are those listed in the Company's Transmission and Distribution Construction Standards book.

2. The Customer will be responsible for notifying the Company when the streetlighting facilities are not operating as intended. The Company will use reasonable efforts to complete normal maintenance (replacement of lamps, photocontrols or fixtures) within ten (10) working days from notification by Customer. If the maintenance requires cable replacement or repairs, the Company will use reasonable efforts to complete said repairs within twenty (20) working days.

3. The Customer's bill will not be reduced due to lamp, photocontrol or cable repair or replacement outages.

4. Lighting equipment which is not specified in this rate schedule will be billed at the rates corresponding to the most similar equipment, as determined by the Company.

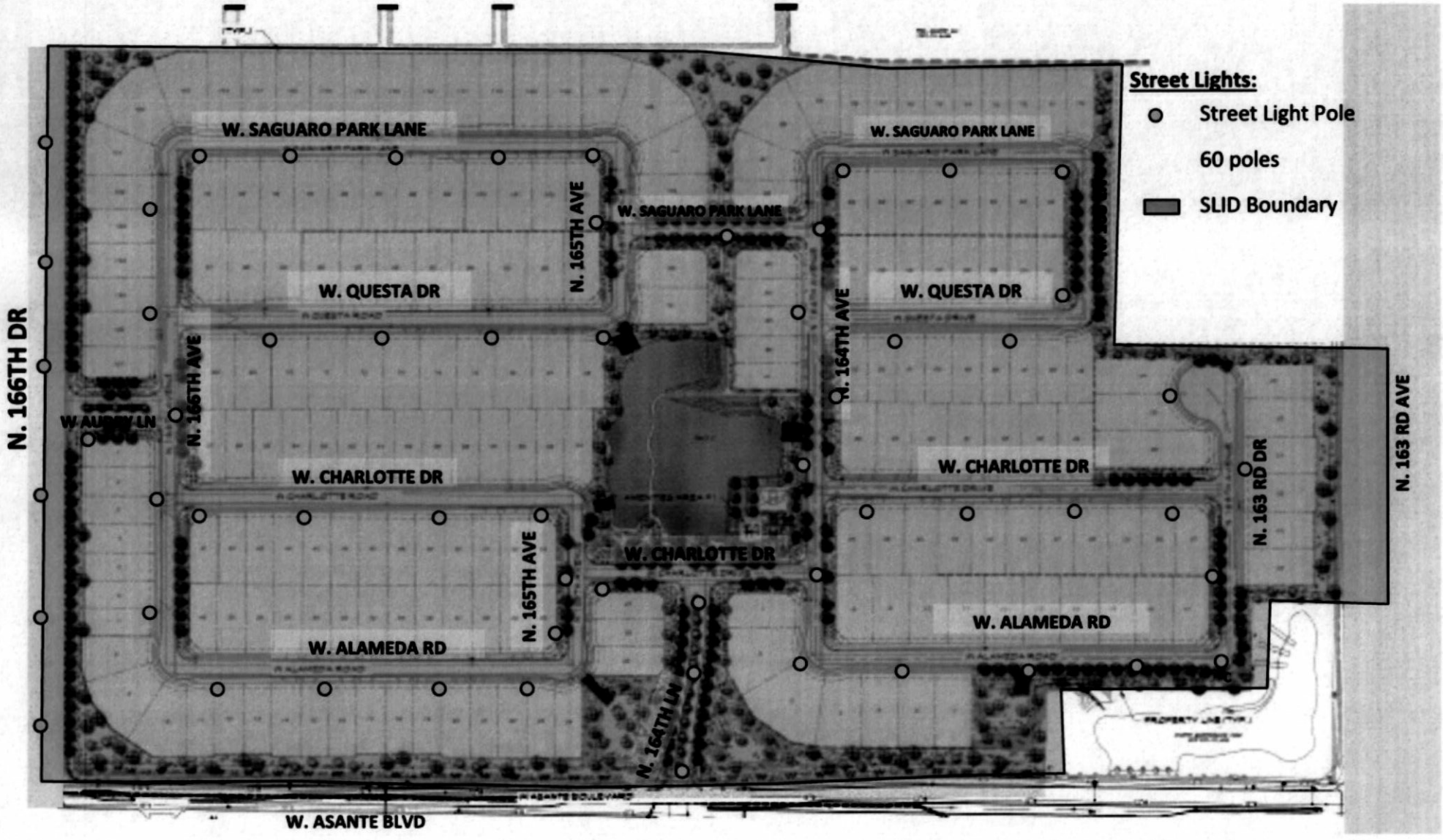
5. Non-standard facilities (non-standard being defined as any facility not listed in the Company's Transmission and Distribution Construction Standards book) do not qualify for this rate schedule. At the Company's discretion, such facilities may be served under another of the Company's rate schedules.

6. The Company will extend its standard street lighting system up to a distance of 300 feet for each additional lighting installation without cost at the request of the Customer. When the extension is underground the customer will provide earthwork as specified in the Company's Service Schedule 3, Conditions Governing Extensions of Electric Distribution Lines and Services; or, at the applicant's request, the Company will provide such earthwork and the applicant will be required to pay a non-refundable contribution in aid of construction equal to the cost of such earthwork. Any additional extension required (over and above the first 300 feet) will be provided by Company for a contribution in aid of construction equal to the cost of the additional extension.

   a. Extensions to isolated areas requiring a substantial extension of the electric distribution system, as opposed to an extension of the street lighting system, will require a special study to determine the terms and conditions under which the Company will undertake such an extension.

7. APS provides electric service under the Company's Service Schedules. These schedules provide details about how the Company serves its Customers, and they have provisions and charges that may affect the Customer's bill. In addition, service may be subject to special terms and conditions as provided for in a Customer contract or service agreement.

Asante Parcel 4.5



SURPRISE
ARIZONA

CITY OF SURPRISE
Regular City Council Meeting

October 16, 2018 @ 6:00:00 PM

Back Print

Council Meeting Date:	October 16, 2018	Contact Person:	Karl Zook, Public Works Department
Submitting Department:	Public Works	District:	1
Staff Recommendations:	None		

Consent	x	Regular	Public Hearing	Report/Discussion

Agenda Wording:

Consideration and action declaring the City's intention to create the, "SU-ASANTEPAR4.5" Street Light Improvement District pursuant to A.R.S. 48-616; Resolution #2018-151.

Motion:

I move to approve Resolution #2018-151.

Background:

The City has verified that the Petition for the proposed street light improvement district contains the signatures of all of the real property owners in the district, exclusive of mortgages and other lien holders. The City and Arizona Public Service Company ("APS") have approved the street layout and facilities design. The electric rates are established by APS tariff. The lighting improvements are more than local or ordinary public benefit and the expenses of the district will be paid for by the levy and collection or ad valorem taxes based upon the assessed value of all property in the District.

Objective Analysis:

A SLID is a neighborhood partnership and very common practice in which property owners in a defined area agree to pay the costs to operate and maintain their immediate area's street lights through a property tax. All new developments in the City of Surprise require a SLID. This action will form the SLID boundary for the Asante Parcel 4.5 development.

Policy Compliant:

Surprise Municipal Code requires that street lighting that serves a defined area be paid for through revenues obtained from the specific area being served by such street lighting. In these instances, a Street Light Improvement District (SLID) is formed. The city strives to assure that residents are subject to only one SLID and that the boundaries of each SLID accurately reflect the service area. This item is consistent with these objectives.

Financial Impact:

Any financial impact on the City is anticipated to be minimal, as the Developer and District will be bearing the costs and expenses of the District and street light improvement facilities.

Budget Impact:

Funding was not included as part of the FY2019 adopted budget. A separate fund will be created to track revenue and expenses once the city starts receiving electric bills from APS for this particular SLID. If the SLID incurs expenses during FY2019, staff will return to request a budget amendment to appropriate the new fund. Regardless, the city will be unable to collect property taxes for this SLID until FY2020, at the earliest.

FTE Impact:

This action does not change the full time equivalent count.

ATTACHMENTS:

Click to download

- ☐ Resolution 2018-151
- ☐ SLID Petition
- ☐ Street Light Plans Parcel 1A
- ☐ Street Light Plans Parcel 1B
- ☐ Street Light Plans Parcel 2
- ☐ Street Light Exhibit

CITY OF SURPRISE
Regular City Council Meeting

Council Meeting Date: May 7, 2024
Submitting Department: Public Works
Staff Recommendations:

Contact Person: Kristin Tytler, Department Director
District: District 5

Consent: Yes Regular: No Public Hearing: No Report/Discussion: No

Agenda Wording:
Consideration and action declaring the intent to enlarge an existing lighting improvement district known as City of Surprise, Arizona, SU-SurpriseCenter190 pursuant to A.R.S. § 48-616 for the purpose of purchasing facilities and energy for lighting the public streets; Resolution #2024-51.

Motion:
I move to approve Resolution #2024-51.

Background:
SU-SurpriseCenter190 was formed on October 17, 2019 (Resolution 2019-112). Since the time of formation, new parcels have been formed in and around the original SLID boundary. We request enlarging the existing SLID to include the new parcels and extend existing boundaries to roadway centerlines. The city has verified that the Petition for the proposed street light improvement district enlargement contains the signatures of all the real property owners in the enlargement area of the district, exclusive of mortgagees and other lien holders. 19 (estimated) new lights are proposed within this enlargement, which are local, will be billed to the SU-SurpriseCenter190 SLID.

Objective Analysis:
A SLID is a neighborhood partnership and very common practice in which property owners in a defined area agree to pay the costs to operate and maintain their immediate area's streetlights through a property tax. All new developments in the City of Surprise require a SLID. This action will enlarge an existing SLID boundary to include the remainder of the parcels not within the SLID and extend existing boundaries to roadway centerlines. The District is paid for by the levy and collection of equal apportionment of taxes based on the number and classification of properties within the District. The enlargement of the SLID will only affect the parcels joining into the District, as the valuation of the property may be increased.

Policy Compliant:
The Surprise Municipal Code requires that street lighting that serves a defined area be paid for through revenues obtained from the specific area being served by such street lighting. In these instances, a Street Light Improvement District (SLID) is formed. The city strives to assure that residents are subject to only one SLID and that the boundaries of each SLID accurately reflect the service area. This item is

consistent with these objectives.

Financial Impact:

Once the SLID enlargement is illuminated, the City will begin levying the SLID to cover the additional SLID expenses. At the current time, the SLID is not incurring any expense because the SLID lights have not been illuminated. Therefore, there is no current financial impact.

Budget Impact:

Since the SLID enlargement is not illuminated, there is no revenue or expense budgeted in FY2024 nor are there budgets planned for FY2025 for the SLID. If the enlargement to the SLID is illuminated in FY2024 or FY2025, expenses will be charged to the SLID and recouped with a future levy.

FTE Impact:

This item does not have an impact on current staff levels.

ATTACHMENTS:

1. 01 Res 2024-51 SLID Enlargement Elm Street_final
2. 02 FS23-0081 - Signed SLID Petition
3. 03 STREETLIGHT plan elm
4. 04 FS23-0081- Streetlight Elm
5. 05 Res 2019-112- SU-SURPRISECENTER190

RESOLUTION # 2024-51

A RESOLUTION OF THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE, ARIZONA DECLARING ITS INTENT TO ENLARGE THE CITY OF SURPRISE, ARIZONA, SU-SURPRISECENTER190 LIGHTING IMPROVEMENT DISTRICT AND ORDERING SUCH ENLARGEMENT.

WHEREAS, on *October 17, 2019*, the Mayor and City Council of the City of Surprise adopted Resolution No. 2019-112, ordering the formation of the CITY OF SURPRISE, ARIZONA, *SU-SURPRISECENTER190* LIGHTING IMPROVEMENT DISTRICT (the "District") for the purpose of purchasing energy for the lighting of the public streets and parks within the District;

WHEREAS, Ariz. Rev. Stat. § 48-616(M) permits the City to add new territory to an existing district, thereby enlarging the boundaries of an existing street lighting improvement district ("SLID") when proper notice has been given to the owners of property that will be added to the SLID in accordance with Ariz. Rev. Stat. Title 48, Chapter 4, Article 2;

WHEREAS, Ariz. Rev. Stat. § 48-617(A) gives the City immediate jurisdiction to adopt the resolution ordering the creation or enlargement of a SLID without the necessity of publication and posting of the resolution of intention when all owners of the real property being added to the SLID have petitioned the City to form or enlarge the SLID;

WHEREAS, the owners, exclusive of mortgagees and other lienholders, of parcels of property which adjoin the District (hereinafter referred to as "Petitioners") acting pursuant to the provisions of Ariz. Rev. Stat. §§ 48-616(M) and 48-617(A), have petitioned the City to enlarge the District to include said property legally described in Exhibit A to this resolution, with such boundaries as shown in the map in Exhibit B to this resolution; and

WHEREAS, the City has verified and finds that Petitioners are the owners, exclusive of mortgagees and other lienholders, of all of the real property being added to the boundary of the District.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Surprise, Arizona, as follows.

Section 1. *District Enlargement*. The CITY OF SURPRISE, ARIZONA, SU-SURPRISECENTER190 LIGHTING IMPROVEMENT DISTRICT shall be enlarged by the addition of the property described in Exhibit A and shown in Exhibit B, which are incorporated by reference hereto into this Resolution. The annual tax levied upon the District will remain in full force and effect, and, commencing in fiscal year 2024/2025, will apply to the District as enlarged by this Resolution.

Section 2. *Recording and Filing of this Resolution.* A certified copy of this Resolution shall be recorded in the office of the Maricopa County Recorder. Certified copies of this Resolution shall also be filed with the Arizona Department of Revenue and the Maricopa County Assessor's office pursuant to Ariz. Rev. Stat. § 42-17257.

APPROVED AND ADOPTED this _____day of _____, 2024.

Skip Hall, Mayor

Attest:

Kristi Passarelli, City Clerk

Approved as to form:

Robert Wingo, City Attorney

EXHIBIT A

Legal Description

EXHIBIT 'A'

LEGAL DESCRIPTION

A PORTION OF SECTION 4, TOWNSHIP 3 NORTH, RANGE 1 WEST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 4, FROM WHICH THE NORTH QUARTER CORNER OF SAID SECTION 4 BEARS SOUTH 89 DEGREES 22 MINUTES 42 SECONDS EAST, A DISTANCE OF 2,638.93 FEET;

THENCE SOUTH 89 DEGREES 22 MINUTES 42 SECONDS EAST ALONG THE NORTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION, A DISTANCE OF 1,263.40 FEET;

THENCE DEPARTING SAID NORTH LINE, SOUTH 00 DEGREES 37 MINUTES 18 SECONDS WEST, A DISTANCE OF 65.00 FEET TO THE POINT OF BEGINNING;

THENCE SOUTH 89 DEGREES 22 MINUTES 42 SECONDS EAST, A DISTANCE OF 711.47 FEET;

THENCE SOUTH 00 DEGREES 37 MINUTES 17 SECONDS WEST, A DISTANCE OF 585.12 FEET;

THENCE NORTH 89 DEGREES 22 MINUTES 46 SECONDS WEST, A DISTANCE OF 14.00 FEET;

THENCE SOUTH 00 DEGREES 37 MINUTES 17 SECONDS WEST, A DISTANCE OF 80.01 FEET;

THENCE NORTH 89 DEGREES 56 MINUTES 34 SECONDS WEST, A DISTANCE OF 1880.34 FEET;

THENCE SOUTH 45 DEGREES 07 MINUTES 16 SECONDS WEST, A DISTANCE OF 28.32 FEET;

THENCE NORTH 00 DEGREES 11 MINUTES 05 SECONDS EAST , A DISTANCE OF 120.00 FEET;

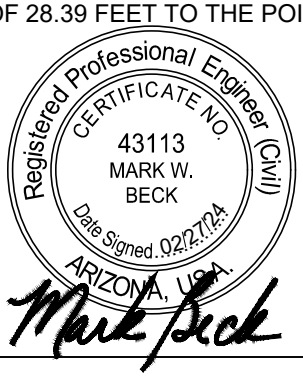
THENCE SOUTH 45 DEGREES 52 MINUTES 44 SECONDS EAST, A DISTANCE OF 28.25 FEET;

THENCE SOUTH 89 DEGREES 56 MINUTES 34 SECONDS EAST, A DISTANCE OF 1187.95 FEET;

THENCE NORTH 45 DEGREES 07 MINUTES 16 SECONDS EAST, A DISTANCE OF 28.32 FEET;

THENCE NORTH 00 DEGREES 11 MINUTES 05 SECONDS EAST, A DISTANCE OF 551.77 FEET;

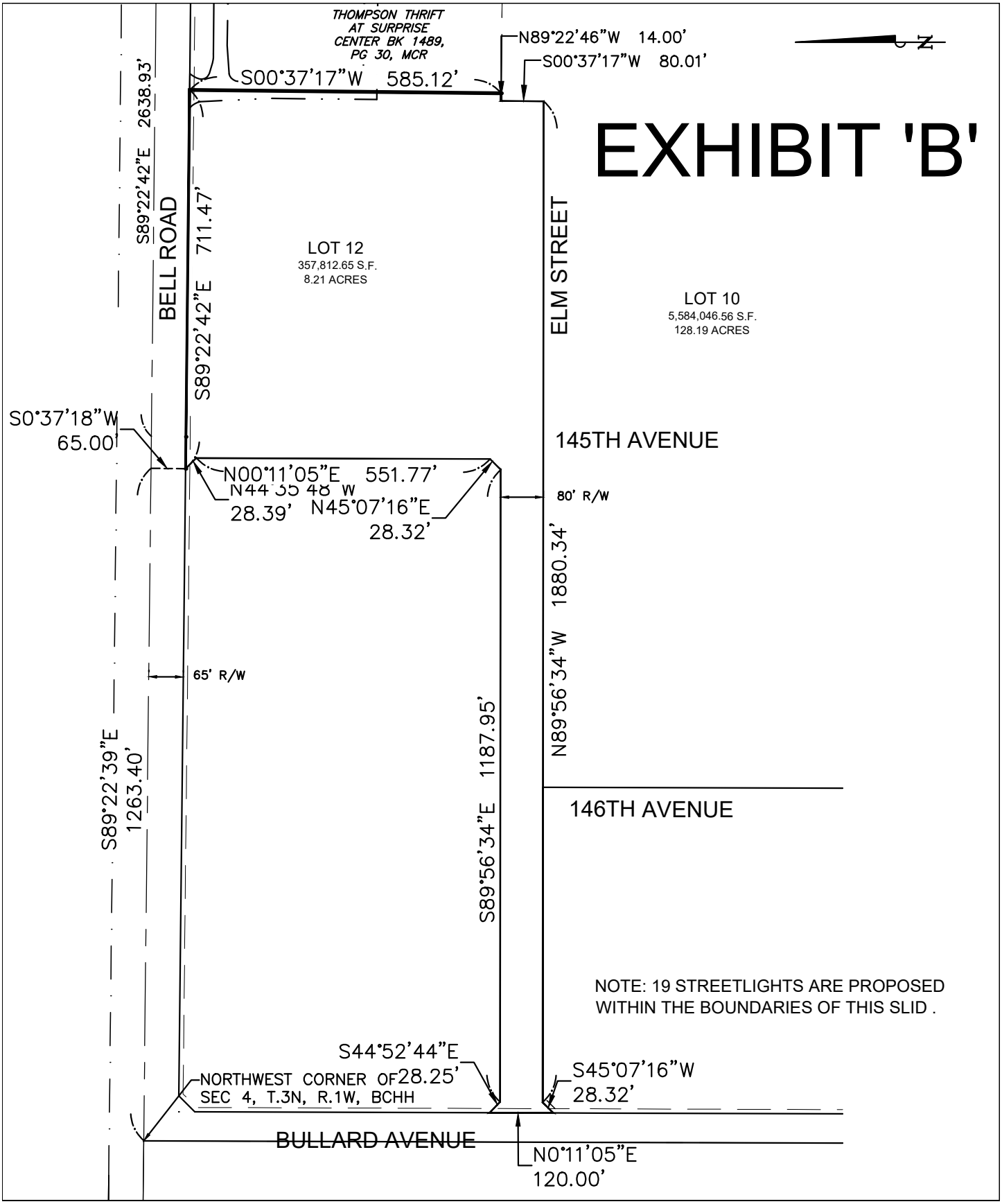
THENCE NORTH 44 DEGREES 35 MINUTES 48 SECONDS WEST, A DISTANCE OF 28.39 FEET TO THE POINT OF BEGINNING.



beck consulting engineers	PROJECT: SIMONCRE AT SURPRISE CENTER	DATE : 01/14/2023	SHEET EX-A
	JOB NO.: 228001	SCALE: NTS	

EXHIBIT B

Map



beck
consulting engineers

PROJECT: SIMONCRE AT SURPRISE CENTER	DATE : 01/14/2023
JOB NO.: 228001	SCALE: 1"=200'

SHEET
EX-B

Clear Form Print Form

STREET LIGHT IMPROVEMENT DISTRICT PETITION ENLARGEMENT

TO THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE:

We, the undersigned, are all or a majority of the real property owners, exclusive of mortgagees and other lienholders, adjoining the district named below. We petition the City Council of the City of Surprise, Arizona, to enlarge the District to include said property legally described in Exhibit A with such boundaries as shown in the map in Exhibit B attached hereto. This petition includes a charge for maintaining the lighting facilities.

It is hereby requested that, in compliance with the Arizona Revised Statutes, the City Council adopt a Resolution of Intention to enlarge the existing District, and that unless protests are received pursuant to A.R.S. §48-579 sufficient to bar further proceedings, the City Council proceed with the improvements petitioned for herein.

Public convenience, necessity and welfare will be promoted by the establishment of the District and the real property within the District will be benefited by the District. Additional street lighting facilities may be installed and included in the District, at no investment cost to the District, as directed by the City and as approved by Arizona Public Service and the City Engineer.

WHEREFORE, we respectfully ask that this Petition be properly filed and that the Mayor and Council of the City adopt the Resolution and take such other action as is proper, necessary and appropriate to enlarge the District and to fulfill the purposes for which the District is organized, as the Mayor and Council believe is proper and necessary.

The name of the existing street light improvements district to be enlarged:
SU-SURPRISECENTER190
(Leave Blank - to be assigned by City staff)

PETITIONERS: Please print and sign your name

PRINT BUSINESS/ PETITIONER'S NAME	ADDRESS OF PROPERTY OWNED WITHIN DISTRICT	ASSESSOR PARCEL #	SIGNATURE
City Center Surprise LL	SEC Bell Rd & 145th Ave	501-18-690	

AVAILABILITY

This rate schedule is applicable to those portions of cities, towns and unincorporated communities in which the Company does a general retail electric business and where the Company has installed a multiple or series street lighting system of adequate capacity for the service to be rendered.

DESCRIPTION

E-58 is a rate that is applicable for lighting public streets, alleys, thoroughfares, public parks and playgrounds from dusk to dawn by use of Company's facilities.

TIME PERIODS

Dusk: Time between sunset and full night when photocontrol senses the lack of sufficient sunlight and turns on the lights.

Dawn: The time between full night and sunrise when a photocontrol senses sufficient sunlight to turn off lights.

CHARGES

The monthly bill will consist of the following charges, plus adjustments.

I. FIXTURES (Includes Mounting Arm, if Applicable)

				CHARGES	
	Lumen	Watts	kWh	Investment by Company	Investment by Others
A. Acorn	3,835 LED	75	26	$21.63	$7.59
	4,796 LED	75	26	$17.38	$6.46
	5,003 LED	100	35	$23.45	$8.71
	5,904 LED	100	35	$23.03	$8.60
	6000 IND	85	29	$19.24	$5.14
B. Architectural	6,200 IND	85	29	$10.13	$3.93
	8,400 IND	100	34	$10.69	$4.36
	10,200 IND	120	41	$11.75	$4.99
	13,000 IND	150	52	$12.98	$5.93
	20,500 IND	200	69	$14.78	$7.37
	22,500 IND	265	91	$17.63	$9.28
	3,300 LED	43	15	$10.24	$3.79
	3,800 LED	32	12	$7.73	$2.92
	3,900 LED	32	12	$9.96	$3.51
	4,050 LED	63	22	$18.63	$6.52
	4,100 LED	45	16	$10.34	$3.89
	4,800 LED	41	15	$8.27	$3.27
	5,000 LED	41	15	$9.61	$3.62

				CHARGES	
	Lumen	Watts	kWh	Investment by Company	Investment by Others
	5,100 LED	60	21	$10.18	$4.19
	5,300 LED	67	24	$10.47	$4.48
	5,800 LED	94	32	$17.81	$5.16
	5,890 LED	89	31	$20.56	$7.66
	6,000 LED	62	22	$18.63	$6.52
	6,000 LED	67	24	$19.89	$6.99
	6,400 LED	89	31	$17.89	$5.10
	6,810 LED	101	35	$18.89	$7.50
	7,100 LED	62	22	$19.70	$6.80
	7,400 LED	127	44	$20.42	$6.34
	7,500 LED	73	26	$20.08	$7.18
	7,700 LED	86	30	$18.41	$7.02
	8,200 LED	88	31	$10.45	$4.97
	8,200 LED	95	33	$11.87	$5.48
	8,300 LED	72	25	$17.93	$6.54
	8,300 LED	106	37	$12.45	$5.91
	8,500 LED	88	31	$11.69	$5.30
	9,020 LED	139	48	$22.94	$9.47
	9,200 LED	139	48	$25.60	$7.30
	9,900 LED	130	45	$13.82	$6.84
	10,000 LED	93	32	$21.43	$7.96
	10,000 LED	113	39	$13.26	$6.28
	10,600 LED	126	44	$22.56	$9.09
	11,100 LED	108	38	$12.76	$6.07
	11,500 LED	108	38	$13.16	$6.18
	12,300 LED	203	70	$25.48	$8.85
	12,900 LED	119	41	$22.31	$8.82
	13,260 LED	202	70	$27.11	$12.12
	13,620 LED	202	70	$28.49	$9.24
	14,000 LED	171	59	$26.07	$11.08
	15,000 LED	136	47	$24.93	$9.94
	15,400 LED	144	50	$25.21	$10.22
	18,300 LED	162	56	$16.13	$8.22
	19,200 LED	257	89	$26.87	$13.38
	20,000 LED	258	89	$26.87	$13.38
	20,300 LED	193	67	$17.17	$9.26
	21,000 LED	193	67	$24.77	$11.28
C. Cobra	6,200 IND	75	26	$10.54	$3.77
	6,400 IND	85	29	$8.97	$3.78
	8,000 IND	88	30	$10.47	$4.04
	8,400 IND	100	34	$9.70	$4.24
	10,200 IND	120	41	$10.44	$4.81

					CHARGES	
		Lumen	Watts	kWh	Investment by Company	Investment by Others
C. Cobra		13,000 IND	150	52	$11.50	$5.73
		15,250 IND	200	69	$13.86	$7.25
		22,500 IND	250	86	$18.55	$9.06
	Gray/Bronz	3,500 IND	55	19	$10.50	$3.27
		6,000 LED	95	33	$17.05	$5.13
		8,700 LED	142	49	$19.17	$6.53
		9,600 LED	157	54	$20.40	$7.04
		11,600 B-LED	181	62	$19.03	$7.44
	Gray/Bronz	3,300 LED	43	15	$9.00	$2.79
	Gray/Bronz	5,300 LED	67	23	$10.45	$3.54
	Gray/Bronz	8,300 LED	106	37	$13.55	$4.94
	Gray/Bronz	10,500 LED	130	45	$15.08	$5.69
	Gray/Bronz	20,000 LED	258	89	$26.21	$10.27
D. Decorative Transit		5,300 LED	75	26	$28.44	$6.12
		8,300 LED	100	34	$30.45	$6.97
		8,147 LED	75	26	$35.76	$11.36
		9,522 LED	100	35	$36.14	$12.09
		10,500 LED	150	52	$32.69	$8.52
		14,896 LED	150	52	$39.98	$14.29
	Double	8,147 LED	75	26	$64.74	$18.96
	Double	9,522 LED	100	35	$64.67	$19.58
	Double	14,896 LED	100	52	$70.67	$22.32
	Copper	6,000 IND	85	29	$18.87	$5.09
	Gray/Black	8,000 IND	88	30	$14.86	$4.62
	Gray/Black	4,350 LED	86	30	$13.48	$4.44
E. Flood		14,470 LED	148	51	$23.93	$9.95
		16,000 LED	125	43	$23.17	$9.19
F. Pendant		8,678 LED	75	26	$26.36	$8.85
		13,964 LED	100	35	$27.84	$9.88
G. Post Top		4,350 LED	86	30	$13.43	$5.69
		6,400 LED	30	30	$13.43	$5.69
		6,600 LED	83	29	$13.33	$5.59
H. Roadway		3,300 LED	43	15	$9.46	$3.58
		3,800 LED	32	12	$7.24	$2.79
		3,900 LED	32	12	$9.18	$3.30
		4,100 LED	45	16	$9.56	$3.68
		4,800 LED	41	15	$7.76	$3.13
		5,000 LED	41	15	$9.12	$3.49
		5,100 LED	60	21	$9.69	$4.06
		5,300 LED	67	24	$9.98	$4.35
		8,200 LED	88	31	$9.72	$4.77

	8,200 LED	95	33	$11.36	$5.34
	8,300 LED	106	37	$11.74	$5.72
	8,500 LED	88	31	$11.18	$5.16
	9,900 LED	130	45	$13.31	$6.70
	10,000 LED	113	39	$12.75	$6.14
	11,100 LED	108	38	$12.03	$5.88
	11,500 LED	108	38	$12.65	$6.04
	18,300 LED	162	56	$15.23	$7.98
	19,200 LED	257	89	$19.11	$11.32
	20,000 LED	258	89	$19.11	$11.32
	20,300 LED	193	67	$16.27	$9.02
	21,000 LED	193	67	$17.01	$9.22
FROZEN	4,000 INC	295	103	$10.54	$5.89
	7,000 MV	175	73	$13.65	$7.83
	11,000 MV	250	96	$17.09	$10.43
	20,000 MV	400	150	$26.84	$15.21
FROZEN ACORN	9,500 HPS	100	41	$29.14	$9.93
	16,000 HPS	150	69	$32.35	$12.55
FROZEN ARCHITECTURAL	9,500 HPS	100	41	$16.56	$7.90
	16,000 HPS	150	69	$19.77	$19.34
	30,000 HPS	250	99	$22.95	$13.57
	50,000 HPS	400	153	$28.32	$19.53
	14,000 MH	175	72	$23.17	$12.70
	21,000 MH	250	101	$26.31	$15.66
	36,000 MH	400	159	$32.89	$21.54
	8,000 LPS	55	30	$24.08	$10.58
	13,500 LPS	90	50	$28.39	$12.76
	22,500 LPS	135	72	$32.43	$15.56
	33,000 LPS	180	90	$39.01	$18.33
FROZEN COBRA ROADWAY	5,800 HPS	70	29	$9.40	$5.56
	9,500 HPS	100	41	$11.07	$6.81
	16,000 HPS	150	69	$13.86	$9.50
	30,000 HPS	250	99	$16.72	$12.35
FROZEN COBRA ROADWAY	50,000 HPS	400	153	$22.69	$17.63
	14,000 MH	175	72	$16.12	$10.99
	21,000 MH	250	101	$18.84	$13.67
	36,000 MH	400	159	$24.81	$18.99
	8,000 FL	100	38	$18.53	$5.43
FROZEN DECORATIVE TRANSIT	9,500 HPS	100	41	$39.95	$11.96
	16,000 HPS	150	69	$39.72	$13.36
	30,000 HPS	250	99	$45.74	$17.26
FROZEN FLOOD	30,000 HPS	250	99	$22.20	$13.79
	50,000 HPS	400	153	$27.53	$19.14
	21,000 MH	250	101	$23.69	$14.58
	36,000 MH	400	159	$28.89	$19.76
FROZEN Colonial Gray	8,000 FL	100	38	$19.97	$5.64

FILED

POST TOP	Colonial Gray	9,500 HPS	100	41	$11.42	$7.16
	Colonial Black	9,500 HPS	100	41	$13.15	$7.41
	Decorative	9,500 HPS	100	41	$34.97	$11.03

NOTES:

1. Investment by Company. These rates are applicable where the Company provides the initial investment to purchase and install all facilities necessary for street lighting service. The Company will own, operate, and maintain the street lighting system.

2. Investment by Others. These rates are applicable in those instances where the requesting entity or individual purchases and installs the street lighting facilities at their own expense and in accordance with Company specifications. These rates will also apply in the instance where the Customer provides a non-refundable advance to the Company to cover the Company's cost of purchasing and installing the street lighting system. The Company retains ownership of the street lighting system and provides operation and maintenance for all facilities.

3. Listed kWhs reflect the assigned monthly energy usage for each type of fixture and are used to determine any applicable transmission, system benefit, distribution, energy, and adjustment charges.

4. HPS = High Pressure Sodium

5. MH = Metal Halide

6. LPS = Low Pressure Sodium

7. FL = Fluorescent

8. INC = Incandescent. Incandescent lighting charges are applicable and available only to those Customers being served and those installations in service on November 1, 1986.

9. MV = Mercury Vapor. Mercury Vapor lighting charges are applicable and available only to those Customers being served and those installation in service on November 1, 1986 in accordance with A.R.S. §49-1104(A).

10. LED = Light Emitting Diode

11. IND = Induction

II. POLES

				CHARGES	
			Height	Investment by Company	Investment by Others
A. Anchor Base Mounted (Flush)	Round Steel	1 Simplex Adapter	12 ft.	$13.11	$1.81
			22 ft.	$14.75	$2.03
			25 ft.	$15.97	$2.21
			30 ft.	$18.34	$2.52
			32 ft.	$19.27	$2.55
		2 Simplex Adapters	12 ft.	$13.98	$1.93
			22 ft.	$16.06	$2.22
			25 ft.	$16.75	$2.31
			30 ft.	$19.47	$2.68
			32 ft.	$20.77	$2.87
	Square Steel	5"	13 ft.	$15.03	$2.06
			15 ft.	$13.43	$1.85
			23 ft.	$15.93	$2.19
			25 ft.	$17.51	$2.41
			28 ft.	$19.44	$2.67
			32 ft.	$19.33	$2.66
	Concrete		12 ft.	$44.79	$6.17
	Fiberglass		12 ft.	$37.93	$5.22
	Decorative Transit	4"	16 ft.	$36.98	$5.10
	Decorative Transit	6"	30 ft.	$71.39	$9.83
	Hinged Poles	Square	15 ft.	$14.21	$1.16
		Round	19 ft.	$12.85	$1.05
B. Anchor Base Mounted (Pedestal)	Round Steel	1 Simplex Adapter	12 ft.	$12.61	$1.73
			22 ft.	$14.26	$1.96
			25 ft.	$15.46	$2.13
			30 ft.	$17.85	$2.47
			32 ft.	$18.75	$2.58
		2 Simplex Adapters	12 ft.	$13.47	$1.85
			22 ft.	$15.05	$2.06
			25 ft.	$16.24	$2.23
			30 ft.	$18.97	$2.60
			32 ft.	$20.26	$2.79
		3 Bolt	32 ft.	$23.28	$3.20
	Square Steel	5"	13 ft.	$14.54	$2.01
			15 ft.	$14.86	$2.03
			23 ft.	$15.43	$2.13
			25 ft.	$17.02	$2.36
			28 ft.	$18.91	$2.60
			32 ft.	$19.63	$2.69

II POLES (cont)

				CHARGES	
			Height	Investment by Company	Investment by Others
C. Direct Bury	Round Steel		19 ft.	$19.84	$2.74
			30 ft.	$15.49	$2.87
			38 ft.	$18.90	$2.94
		Self	40 ft.	$23.28	$3.69
		Stepped	25 ft.	$53.55	$4.37
			32 ft.	$56.40	$4.60
			49 ft.	$70.00	$9.65
	Square Steel	4"	34 ft.	$17.09	$2.96
		5"	20 ft.	$16.23	$2.68
			30 ft.	$16.92	$2.79
			38 ft.	$18.36	$3.19
		8"	28 ft.	$30.64	$2.49
			32 ft.	$32.03	$2.62
	Decorative Transit		41 ft 6	$22.05	$3.24
	Decorative Transit		47 ft.	$27.47	$4.04
	Steel Distribution Pole (for lighting only)		35 ft.	$25.36	$3.34
D. Post Top	Decorative Transit Anchor Base		16 ft.	$37.77	$5.19
	Gray Steel/Fiberglass		23 ft.	$13.10	$2.15
	Black Steel		23 ft.	$14.44	$2.38
E. Existing distribution pole suitable for streetlight use				$1.59	--
F. FROZEN	~~Wood Poles~~ FROZEN		~~30 ft.~~	~~$9.64~~	$1.67
			~~35 ft.~~	~~$9.64~~	$1.59

NOTE: The monthly rate for all new poles includes up to 300 feet of overhead secondary wire, or up to 300 feet of underground secondary wire if the Customer provides earthwork and conduit (excluding the underground to overhead transition).

III. ANCHOR BASE

			CHARGES	
		Height	Investment by Company	Investment by Others
A. Flush		4 ft.	$10.67	$1.47
		6 ft.	$12.73	$2.21
B. Pedestal		8 ft.	$14.59	$2.54
	For 32' Round Steel Pole only	4 ft. 6"	$10.12	$1.75

IV. CHARGES FOR OPTIONAL OR ADDITIONAL EQUIPMENT

	CHARGE Company Owned
Underground Circuit Charges:	
a. Per foot of cable, installed under paving	$0.17000
b. Per foot of cable, not installed under paving	$0.06000

FROZEN

V. DETERMINATION OF CHARGES FOR NEW EQUIPMENT

Monthly charges for new lighting fixtures, poles and other equipment not included in Sections I, II, or III above will be determined by the Company using the following method:

Step 1 Determination of Charges for each Charge Type

Charge Type	Monthly Charge		Cost Inputs		PV Factor		Monthly Fixed Charge Rate
1	Carrying Cost (fixtures)	=	Equipment Cost (installed)	x	NA	x	1.518%
2	Carrying Cost (poles)	=	Equipment Cost (installed)	x	NA	x	1.296%
3	Fixture Replacement Cost	=	Equipment Cost (installed)	x	0.257	x	1.518%
4	Pole, Anchor Replacement Cost	=	Equipment Cost (installed)	x	0.110	x	1.296%
5	Lighting O&M	=	O&M Cost (lifecycle)	x	0.427	x	1.518%
Charge Type	Monthly Charge		kWh Input		$/kWh		
6	Generation	=	kWh per month	x	0.06760		
7	T&D, RCS, SB	=	kWh per month	x	0.02738		

Step 2 Determination of Total Monthly Charge

The total monthly charge will be the summation of the charges for each applicable charge type

Equipment	Charge Type
Fixture - IBC	1,5,6,7
Fixture - IBO	3,5,6,7
Pole, Anchor Base - IBC	2
Pole, Anchor Base - IBO	4

TRIP CHARGE

A $100.00 trip charge per light will be charged when a Customer requests a disconnect or reconnect of service in order to accommodate the maintenance activities of the Customer or its designee(s) on their street lighting equipment.

ADJUSTMENTS

The bill will include the following adjustments:

1. The Renewable Energy Standard charge, Adjustment Schedule REAC-1.
2. The Power Supply Adjustment charges, Adjustment Schedule PSA-1.
3. The Transmission Cost Adjustment charge, Adjustment Schedule TCA-1.
4. The Environmental Improvement Surcharge, Adjustment Schedule EIS.
5. The Demand Side Management Adjustment charge, Adjustment Schedule DSMAC-1.
6. The Lost Fixed Cost Recovery Adjustment charge, Adjustment Schedule LFCR.
7. Direct Access Customers returning to Standard Offer service may be subject to a Returning Customer Direct Access Charge, Adjustment Schedule RCDAC-1.
8. Any applicable taxes and governmental fees that are assessed on APS's revenues, prices, sales volume, or generation volume.

SERVICE DETAILS

1. Street lighting facilities installed under this rate schedule are of the type currently being furnished by Company as standard at the time service is initially requested. Standard facilities are those listed in the Company's Transmission and Distribution Construction Standards book.

2. The Customer will be responsible for notifying the Company when the streetlighting facilities are not operating as intended. The Company will use reasonable efforts to complete normal maintenance (replacement of lamps, photocontrols or fixtures) within ten (10) working days from notification by Customer. If the maintenance requires cable replacement or repairs, the Company will use reasonable efforts to complete said repairs within twenty (20) working days.

3. The Customer's bill will not be reduced due to lamp, photocontrol or cable repair or replacement outages.

4. Lighting equipment which is not specified in this rate schedule will be billed at the rates corresponding to the most similar equipment, as determined by the Company.

5. Non-standard facilities (non-standard being defined as any facility not listed in the Company's Transmission and Distribution Construction Standards book) do not qualify for this rate schedule. At the Company's discretion, such facilities may be served under another of the Company's rate schedules.

6. The Company will extend its standard street lighting system up to a distance of 300 feet for each additional lighting installation without cost at the request of the Customer. When the extension is underground the customer will provide earthwork as specified in the Company's Service Schedule 3, Conditions Governing Extensions of Electric Distribution Lines and Services; or, at the applicant's request, the Company will provide such earthwork and the applicant will be required to pay a non-refundable contribution in aid of construction equal to the cost of such earthwork. Any additional extension required (over and above the first 300 feet) will be provided by Company for a contribution in aid of construction equal to the cost of the additional extension.

   a. Extensions to isolated areas requiring a substantial extension of the electric distribution system, as opposed to an extension of the street lighting system, will require a special study to determine the terms and conditions under which the Company will undertake such an extension.

7. APS provides electric service under the Company's Service Schedules. These schedules provide details about how the Company serves its Customers, and they have provisions and charges that may affect the Customer's bill. In addition, service may be subject to special terms and conditions as provided for in a Customer contract or service agreement.

SIMONCRE AT SURPRISE CENTER
SEC BELL RD & 145TH AVE
STREET LIGHT DESIGN

STREET LIGHTING REQUIREMENTS

5.00 GENERAL NOTES:

THE FOLLOWING INFORMATION IS PROVIDED TO EMPHASIZE CRITICAL WORK AND IS INTENDED TO SUPPLEMENT THE SPECIFICATIONS. SHOULD THERE BE A CONFLICT WITH THE SPECIFICATIONS, THIS DOCUMENT SHALL TAKE PRECEDENCE.

ALTERNATES SHALL BE PRE-APPROVED BY THE CITY ENGINEERING MANAGER. APPROVAL OF ALTERNATE PRODUCTS SHALL BE ON AN EQUAL BASIS WITH THE PRODUCT SPECIFIED AND SHALL BE SUBMITTED A MINIMUM OF TEN (10) DAYS PRIOR TO BID OPENING. STRUCTURAL CALCULATIONS SHALL BE FURNISHED FOR ALTERNATE PRODUCTS AND CERTIFIED BY A STRUCTURAL ENGINEER, REGISTERED IN THE STATE OF ARIZONA. LUMINAIRES AND LAMPS SHALL MEET OR EXCEED THE PHOTOMETRIC, ELECTRICAL, AND MECHANICAL REQUIREMENTS FOR THE SPECIFIED PRODUCTS.

THE CONTRACTOR SHALL COMPLY WITH STATE AND CITY STATUTES, AND MANUFACTURER'S RECOMMENDATIONS.

THE SUBMITTAL PACKAGE SHALL CONSIST OF THREE (3) COPIES OF EQUIPMENT/MATERIAL TO BE INSTALLED AND SHALL BE BOUND/STAPLED IN A FOLDER AND SUBMITTED AT THE TIME OF PERMIT APPLICATION.

PRIOR TO SUBMITTING A PROPOSAL, THE BIDDER SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS AND VISIT THE CONSTRUCTION SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL OPERATE AND WHICH WILL IN ANY WAY AFFECT THE WORK UNDER THE CONTRACT. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN THIS CONNECTION IN THE BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLIGENCE ON HIS PART.

PRIOR TO ORDERING ANY MATERIALS OR DOING ANY WORK, THE CONTRACTOR SHOULD VERIFY DIMENSIONS AT THE SITE. IMMEDIATELY REPORT DIFFERENCES TO THE ENGINEERING MGR. AND SHOULD NOT PROCEED WITH WORK UNTIL THE ENGINEERING MGR. RENDERS A DECISION. NO EXTRA CHARGES OR COMPENSATION WILL BE ALLOWED FOR DIFFERENCES IN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE DRAWINGS.

5.01 GENERAL:

THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH ALL LICENSING REQUIREMENTS SET FORTH BY THE STATE REGISTRAR OF CONTRACTORS OFFICE TO PERFORM WORK RELATING TO STREET LIGHT INSTALLATION IN THE CITY RIGHT-OF-WAY.

ONE PROJECT UNDERGROUND UTILITIES (RIGHT OF WAY) PERMIT AND ONE STREETLIGHT PERMIT FOR EACH STREET LIGHT POLE SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

5.02 WORKING / "AS BUILT" PLANS:

ACCEPTANCE OF THE COMPLETED IMPROVEMENTS WILL NOT BE GIVEN UNTIL 4 MIL PHOTO MYLAR REPRODUCIBLE "AS BUILT" PLANS HAVE BEEN SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

5.03 LIGHT POLES:

LIGHT POLES SHALL BE INSTALLED PLUMB, BE ADJUSTED TO PROVIDE PROPER ALIGNMENT TO THE ROADWAY BEING LIGHTED AND BE PROPERLY GROUNDED WHEN THE INSTALLATION IS COMPLETE.

5.04 EMBEDMENT:

DIRECT BURIED POLES SHALL BE SET IN A TWELVE (12) INCH AUGURED HOLE DEPTH AS SPECIFIED IN UNDISTURBED EARTH. POLE SHALL BE SET PLUMB IN TWO DIRECTIONS 90 DEGREES APART. HAND TAMPING OF ABC BACKFILL WITH PNEUMATIC OR VIBRATING EQUIPMENT IS THE ACCEPTABLE METHOD OF COMPACTION. BACKFILL SHALL BE COMPACTED TO 85% OF MAXIMUM DENSITY AS DEFINED BY ASTM D-2922 AND D-3017. A GROUND ROD SHALL BE INSTALLED ADJACENT TO PULL BOX IN UNDISTURBED SOIL AND A LEAD IN COPPER BOND WIRE (#6) SHALL BE INSTALLED IN 1" CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT (OR EQUAL) FOR POLE GROUNDING.

SURPLUS EXCAVATION SHALL BE DISPOSED OF BY THE CONTRACTOR.

5.05 LUMINAIRES:

LUMINAIRES SHALL BE INSTALLED LEVEL AND INCLUDE A LAMP AND PHOTOCELL. CONTRACTOR SHALL ASSURE THAT THE LUMINAIRES SHALL BE FREE OF DUST, DIRT OR ANYTHING THAT WOULD IMPAIR THE OUTPUT OF THE LIGHT BEFORE HE LEAVES THE SITE.

LUMINAIRES FURNISHED WITH MULTI-TAP BALLASTS SHALL BE REWIRED OR RECONNECTED TO MATCH THE VOLTAGE SUPPLIED BY THE ELECTRIC UTILITY COMPANY.

5.06 WIRING:

WIRING SHALL BE INSTALLED PER UTILITY STANDARDS.

5.07 GROUNDING:

EACH POLE SHALL HAVE A 8' X 5/8" COPPER CLAD GROUND ROD DRIVEN ADJACENT TO PULL BOX. A #6 BARE COPPER LEAD FROM THE GROUND ROD IN PULL BOX TO LANDING LUG IN STREET LIGHT POLE HAND HOLE.

5.08 PULL BOXES:

EXCAVATION FOR PULL BOXES AND MATERIAL SPECIFICATION SHALL BE PER THE ELECTRIC UTILITY COMPANY STANDARDS.

5.09 TRENCH

TRENCH SHALL BE INSTALLED PER THE UTILITY COMPANY STANDARDS.

THE USE OF A COMMON ELECTRIC UTILITY COMPANY TRENCH IS PERMITTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANY FOR COORDINATION OF TRENCHING AND THE INSTALLATION OF CONDUIT.

CONDUIT SHALL BE INSTALLED AT THE DEPTH SPECIFIED ON THE PLANS. CONDUIT SHALL BE 1 INCH CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT OR EQUAL. CONDUIT MUST BE UL RATED AND SUITABLE FOR UNDERGROUND USE.

CONNECTIONS SHALL BE PER UTILITY STANDARDS.

5.12 LIGHT POLE IDENTIFICATION:

THE CONTRACTOR SHALL FURNISH AND INSTALL A NUMBER ON EACH LIGHT POLE. STREET LIGHT POLE IDENTIFICATION AND SPECIFICATIONS WILL BE PROVIDED BY THE CITY OF SURPRISE.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO RESTORE ALL PROPERTY, LANDSCAPING, PAVING AND DRIVEWAYS THAT ARE DISTURBED DURING STREET LIGHT CONSTRUCTION TO THEIR ORIGINAL CONDITION IN CONFORMANCE WITH "MAG" SPECIFICATION SECTION 107.9.

THE DEVELOPER SHALL BE RESPONSIBLE FOR FURNISHING ALL PERSONNEL AND EQUIPMENT TO SUCCESSFULLY PERFORM THE FOLLOWING TEST.

PRIOR TO ACCEPTANCE, THE DEVELOPER SHALL ENERGIZE AND OPERATE THE ENTIRE ROADWAY LIGHTING SYSTEM, FROM SUNSET TO SUNRISE FOR TWO CONSECUTIVE DAYS WITHOUT INTERRUPTION OR FAILURE. IF A LAMP OR BALLAST SHOULD FAIL, IT SHALL BE IMMEDIATELY REPLACED.

THE CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE ENGINEERING MANAGER, AGAINST IMPERFECT WORKMANSHIP, FAILURE, MALFUNCTION OF MATERIALS AND/OR EQUIPMENT DUE TO FAULTY OR IMPERFECT WORKMANSHIP. THIS GUARANTEE IS TO BE IN WRITING TO THE CITY AT THE TIME OF ISSUING FINAL ACCEPTANCE. WORK FOUND TO BE DEFECTIVE WITHIN THE WARRANTY PERIOD SHALL BE REPLACED WITHOUT COST TO THE CITY.

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 REPLACEDIN 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.

CITY OF SURPRISE APPROVAL

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.

CITY OF SURPRISE ENGINEER **DATE**

UTILITIES WITHIN OR AFFECTED BY THE PROJECT	
UTILITY CONTACT	DATE SUBMITTED
ARIZONA PUBLIC SERVICE	08/16/2023
CENTURY LINK	08/16/2023
COX COMMUNICATIONS	08/16/2023
SOUTHWEST GAS	08/16/2023

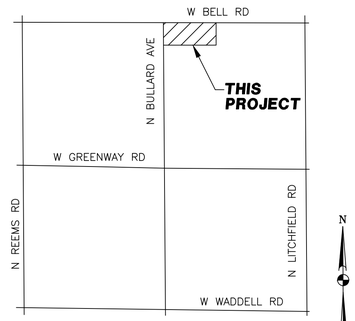
NOTE

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

B. THE ELECTRICAL/MAINTENANCE COSTS OF ALL STREET LIGHTS ON LOCAL AND COLLECTOR STREETS ARE TO BE PAID BY THE ADJACENT PROJECT OR THE ADJACENT DEVELOPMENT'S STREET LIGHT IMPROVEMENT DISTRICT (SLID). THE ELECTRICAL / MAINTENANCE COSTS OF ALL STREET LIGHTS ON ARTERIAL STREETS ARE TO BE BILLED TO THE CITY OF SURPRISE'S ENERGY BILL.

LED NOTE

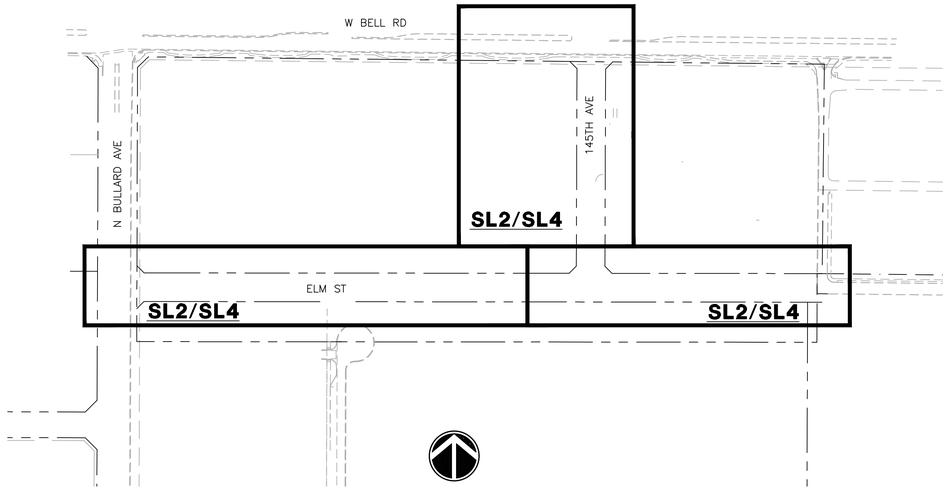
LED TECHNOLOGY IS CHANGING RAPIDLY. THE FIXTURES SHOWN ON THESE PLANS MAY NOT BE APPLICABLE AT TIME OF CONSTRUCTION. CONTRACTOR TO COORDINATE WITH APS AND UTILIZE THEIR CURRENT SPECIFICATION AT THE TIME OF BIDDING AND CONSTRUCTION.



VICINITY MAP
N.T.S.

SHEET INDEX

STREET LIGHT COVER SHEET	SL1
STREET LIGHT PLAN	SL2
STREET LIGHT DETAILS	SL3
STREET LIGHT PHOTOMETRICS	SL4



KEY MAP
N.T.S.

POWER CONDUIT NOTE

TRENCH & CONDUIT RUNS FROM STREET LIGHT PULL BOX TO POINT OF ELECTRICAL SERVICE WILL BE DESIGNED BY THE POWER COMPANY, AND ARE SHOWN ON POWER COMPANY PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THESE PLANS FROM DEVELOPER/OWNER, AND INCLUDE THESE RUNS IN THE BID. COORDINATE THIS WORK WITH THE POWER COMPANY.

CIVIL ENGINEER
BECK CONSULTING ENGINEERS, INC.
2942 N. 24TH ST, SUITE 114
PHOENIX, AZ 85016
PHONE: (602) 943-6200
CONTACT: MARK BECK, P.E.

DEVELOPER
SIMON CRE
6900 E 2ND ST
SCOTTSDALE, AZ 85251
PHONE: (480) 566-8664
CONTACT: BEN MILLICK

Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348) in Maricopa County: (602) 263-1100

WRIGHT ENGINEERING PROJECT NO:
23050
DESIGN BY: GRB
DRAWN BY: GRB
CHECKED BY: AMB

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: SIMONCRE AT SURPRISE CENTER
SEC BELL RD & 145TH AVE
SURPRISE, ARIZONA

TITLE: STREET LIGHT COVER SHEET

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M. BOWERS
Date Planed 7-14-23
Expires 9-30-25

DRAWING NO:
SL1
OF 4

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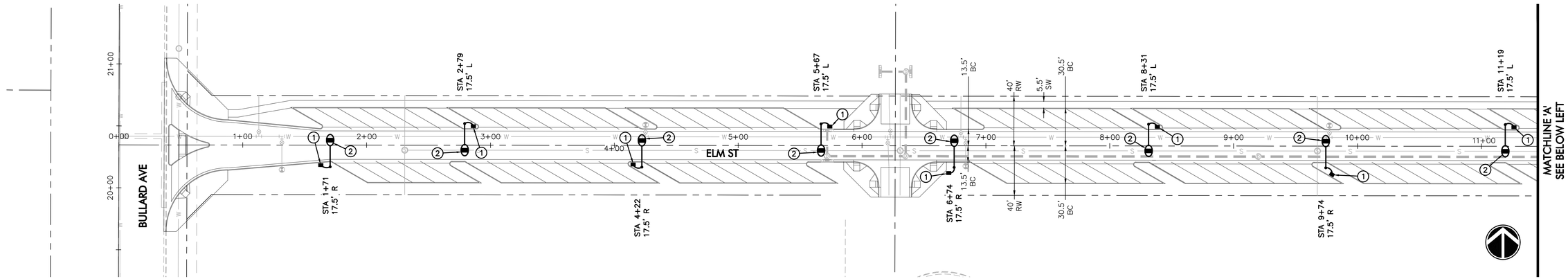

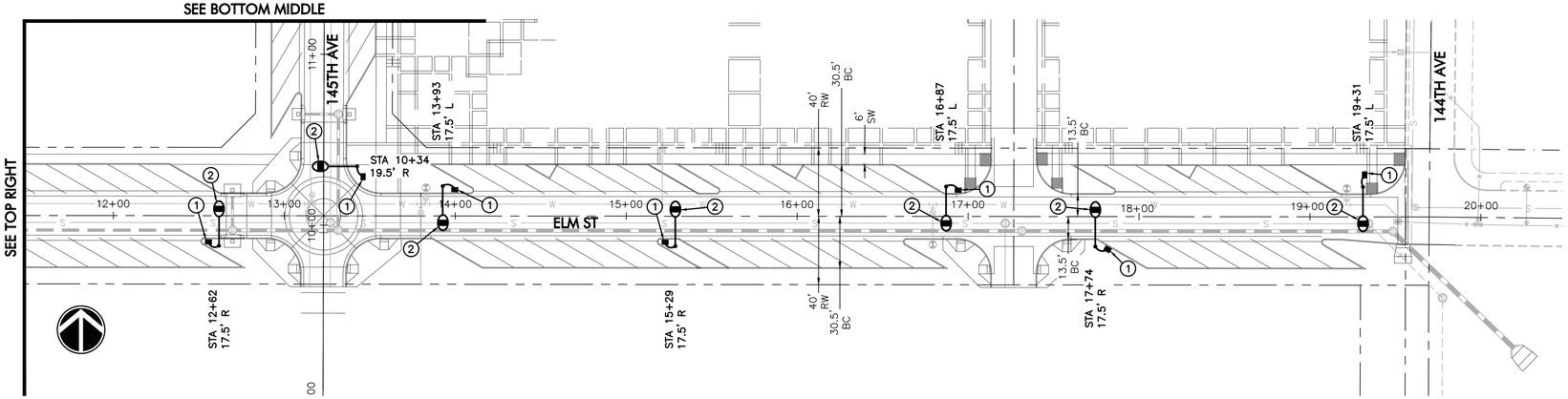

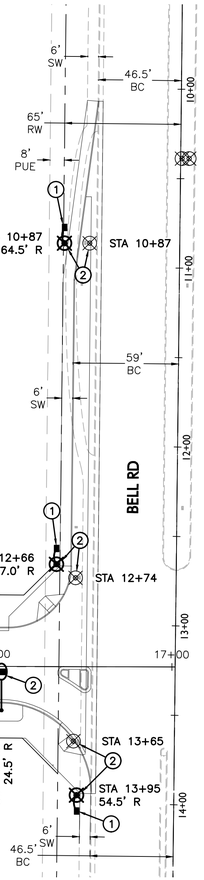

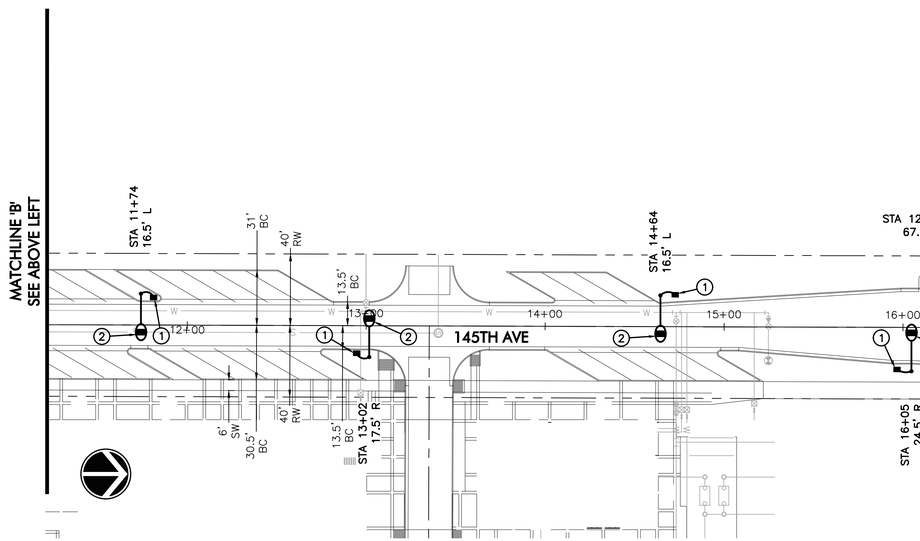

LEGEND

- 9,700 LUMEN LED DECORATIVE STREET LIGHT
- RELOCATED PEDESTRIAN STREET LIGHT
- EXISTING PEDESTRIAN STREET LIGHT
- PULL BOX
- NEW CONDUIT RUN
- FIRE HYDRANT

CONSTRUCTION NOTES

1. INSTALL APS PULL BOX NEXT TO POLE. 1" CONDUIT WITH (2) #14 TYPE THHN/THWN & (1) #14 BARE BOND FROM PULL BOX TO FUSE HOLDER IN STREET LIGHT PER APS DETAILS & SPECIFICATIONS.
2. INSTALL ONE 75W LED (9,700 LUMEN) FIXTURE WITH PHOTOELECTRIC CONTROL ON A 30' FOUNDATION MOUNTED POLE WITH 27'-9" MOUNTING HEIGHT AND A 2'-0" ARM PER APS DETAIL 8048 (SEE SHEET SL3). POLE SHALL BE CENTERED PER STATION AND OFFSET SHOWN ON PLANS. INSTALL (2) #14 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. ALL WIRING, FUSING, FOUNDATION AND GROUNDING PER APS DETAILS AND SPECIFICATIONS.
3. RELOCATE EXISTING PEDESTRIAN STREET LIGHT TO NEW LOCATION SHOWN ON PLANS. RE-USE EXISTING POLE AS DEEMED SUITABLE BY CITY INSPECTOR. ANY DAMAGE TO EXISTING STREET LIGHTS, PULL BOXES OR CONDUIT AND WIRE RUNS SHALL BE REPLACED IN KIND. FOUNDATION PER APS DETAIL 8048 PEDESTRIAN POLE.

GRAPHIC SCALE

40 20 0 20 40 80

1 INCH = 40 FEET

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WRIGHT ENGINEERING PROJECT NO: **23050**

DESIGN BY: GRB
DRAWN BY: GRB
CHECKED BY: AMB

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: **SURPRISE, ARIZONA**
SIMONCRE AT SURPRISE CENTER
SEC BELL RD & 145TH AVE

TITLE: **STREET LIGHT PLAN**

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)

Registered Professional Engineer (Electrical)
Certificate No.
46691
ADAM M. BOWERS
Date Signed 9-16-25
Expires 9-30-25

DRAWING NO: **SL2**
OF 4

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ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100



K830 EL MIRAGE - LED

The K830 El Mirage is a solid, bold pendant with a shroud, designed to increase roadway performance while providing superior spacing. Suitable for off roadway applications as well, this time-less design can be used in both contemporary and historical settings.

King Luminaire

PRODUCT SPECIFICATIONS

LED ENGINE
Light engine shall include an array of 60 or 84 solid state Cree X-Series high power LEDs (light emitting diodes). The emitters shall be mounted to a metal core circuit board using SMT technology. The LEDs and circuit boards shall then be mounted to a high performance heat sink which is vented to the outside ambient air to provide dynamic airflow for cooling the system.

OPTICS
External light control shall consist of high precision refractive lenses mounted above the LED emitter arrays in such a way to achieve optimum uplight control. The lenses shall also control horizontal light distribution so that Type II, III, IV or V IESNA distribution patterns are achieved.

DECORATIVE BODY
The luminaire shall consist of a heavy Grade A319 cast aluminum housing that acts as the enclosure for the engine and is of adequate thickness to give structural rigidity. The engine must be affixed to the inside of the housing with stainless steel screws.

The bottom decorative portion of the K830 El Mirage fixture is comprised of a one-piece spun aluminum alloy with a minium thickness of 0.09". The spinning is permanently affixed to the cast housing with the use of stainless steel hardware.

DRIVER
The LED universal dimmable driver will be class 2 and capable of 120 - 277V or 347 - 480V input voltage, greater than 0.9 power factor, less than 20% total harmonic distortion. The case temperature of the driver can range from -40°C to 70°C. Each LED system comes with a standard surge protection designed to withstand up to 20kV/10kA of transient line surge as per IEEE C62.41.2 C High. An in-line ferrite choke is utilized to provide protection against EFT's. The driver assembly will be mounted on a heavy duty fabricated aluminum bracket to allow complete tool-less maintenance.

PHOTOMETRICS
Fixtures are tested to IESNA LM79 specifications. These reports are available upon request.

CHROMATICITY
High output LEDs come standard at 3000K & 4000K (+/- 300K) with a minimum nominal 70 CRI. Additional CCT emitters are available upon request.

LUMEN MAINTENANCE
Reported (TM21) and Calculated (L70) reports are available upon request with a minimum calculated value of 100,000 hrs.

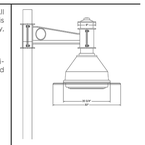
WIRING
All internal wiring and connections shall be completed so that it will be necessary only to attach the incoming supply connectors to Mate-N-Lok connectors or to a terminal block. Mate-N-Lok shall be certified for 600V operation. Internal wire connectors shall be crimp connector only and rated at 1000V and 150°C. All wiring to be CSA certified and/or UL listed, type SFF-2, SEWF-2, or SEW-2 No. 14 gauge, 150°C, 600V, and color coded for the required voltage.

THERMALS
Fixtures tested to DOE sanctioned standards to determine the maximum in-situ solder-point or junction-point temperatures of the LED emitters. This report is available upon request.

FINISH
Housing is finished with a 13 step KingCoat™ SuperDurable polyester TGIC powder coat. Standard colors include strobe white, brown metal, marina blue, gate gray, Chicago bronze, standard gold, standard black, federal green and rain forest. Please see our website for a complete list of colors. RAL and custom color matches are available.

MISCELLANEOUS
All exterior hardware and fasteners, wholly or partly exposed, shall be stainless steel alloy. All internal fasteners are stainless steel or zinc coated steel. All remaining internal hardware is stainless steel, aluminum alloy, or zinc coated steel.

WARRANTY
The K830 El Mirage LED luminaire comes with a 7 year limited warranty.



CERTIFICATION:
CSA US Listed
Suitable for wet locations
ISO 9001
IP66
ARRA Compliant
LM79 / LM80 Compliant

DRIVER INFO:
>0.9 Power Factor
<20% Total Harmonic Distortion
120 - 277V & 347 - 480V
-40°C Min. Case Temperature
70°C Max. Case Temperature
Surge Protection: ANSI C136.2 extreme level 20kV/10kA

EPA:

Flat Lens:	0.92 sq.ft
4.00 Arm	1.24 sq.ft
5.56 Arm	1.30 sq.ft

FIXTURE WEIGHT:

Flat Lens:	40 lbs

Contact King Luminaire for product specifications that are exempt from C&A Certification
© KE-2020

LIGHT FIXTURES AND POLES ON LUKE PKWY TO HAVE BLACK FINISH COLOR

King Luminaire

Features & Benefits

- Precision optics with up to 135 lumens per watt providing enhanced light quality and control, improved spacing and high efficacy
- Zero uplight with no lens luminaires for Dark Sky Friendly specifications
- Efficient LED optical system provides energy savings and reduced maintenance costs
- Long operational life due to efficient thermal management
- Includes a dimmable driver and optional wattage selector available
- Offering 3000K and 4000K (+/- 300K) CCT and minimum 70 CRI
- Manufactured to CSA and UL standards and includes a 7 year warranty

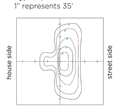
Performance

Specific photometric files can be found using an IES File Search tool on our website and additional TM21 reports are available upon request.

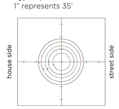
Optical System	Nominal Wattage	Input Wattage	IES Distribution	CCT	Lumens	Efficacy (L/W)	BUG	Uplight
P4 8060	40	40.6	III	4000K	5481	135	1-0-1	0%
P4 8060	60	60.2	III	4000K	7269	120	2-0-2	0%
P4 8060	75	74.3	III	4000K	8731	117	2-0-2	0%
P4 8060	100	100.1	III	4000K	11613	116	2-0-2	0%
P4 8060	120	120.6	III	4000K	13599	112	2-0-2	0%
P4 8084	150	155.4	III	4000K	17123	110	3-0-3	0%
P4 8084	200	197.0	III	4000K	18728	95	3-0-3	0%
P4 8060	40	42.3	V	4000K	5128	121	2-0-1	0%
P4 8060	60	60.9	V	4000K	7452	122	2-0-1	0%
P4 8060	75	75.1	V	4000K	8922	118	3-0-1	0%
P4 8060	100	103.9	V	4000K	11797	113	3-0-1	0%
P4 8060	120	120.6	V	4000K	13599	112	2-0-2	0%
P4 8084	150	150.2	V	4000K	16859	112	4-0-1	0%
P4 8084	200	193.0	V	4000K	19696	102	4-0-2	0%

3000K 9700

Type III, 100W at 28' Mount
1' represents 35'



Type V, 100W at 28' Mount
1' represents 35'



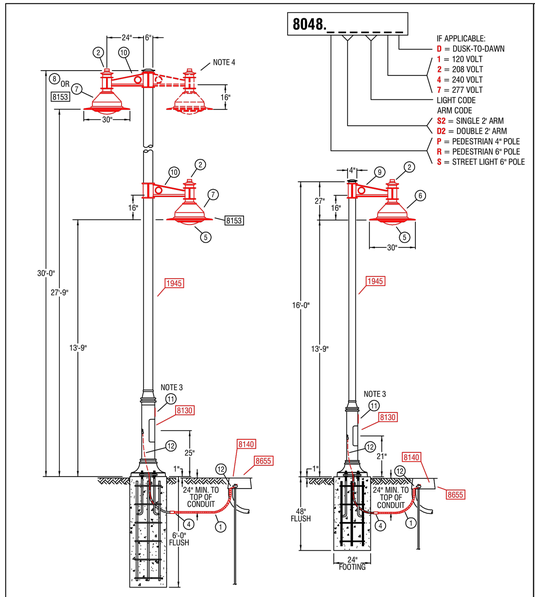
Photometric testing completed with K800 Series, non shrouded, no lens luminaires
Further photometric evaluation is suggested to analyze specific applications and achieve desired objectives

1-21-2020

StressCrete GROUP

www.scgrp.com

King Luminaire



LIGHT CODE	POLE DIA	APN	WATTS	TYPE	VOLTS	PINTAIL LUMENS	MOUNTING HEIGHT
TE	4" OR 6"	00074497	100		120/280/240/277	9500	13'-9"
TG	6"	00085973	150	HPS	120/280/240/277	16000	27'-9"
TH	6"	00074025	250		120/280/240/277	30000	27'-9"

NOTES:
1. ADJUST PHOTO EYE TO FACE NORTH.
2. A GROUND ROD IS PROVIDED WITH THE J-BOX. WHERE A GROUND ROD CAN NOT BE DRIVEN ALTERNATE GROUND SHALL BE USED. SEE 2449 THRU 2460 FOR APPROVED ALTERNATES.
3. SIGN, "NOTICE THIS POLE IS OWNED AND MAINTAINED BY APS. DISCONNECT INSIDE", IS REQUIRED ON ALL DUSK-TO-DAWN AND AREA LIGHTING APPLICATIONS.
4. POLE THAT HAVE MORE THAN ONE LUMINAIRE REQUIRE A SEPARATE CIRCUIT WITH FUSING FROM THE J-BOX TO EACH LUMINAIRE.
5. THE LIGHT CODE PROVIDES TWO SAME WATTAGE LUMINAIRES WHEN DOUBLE ARM IS SPECIFIED.
6. BROWN PHOTO CONTROL IS A FAIL OFF CONTROL AND SHALL BE USED WITH ALL INDUCTION AND LED LUMINAIRES.
6. SEE SPEC 8130 THRU 8040 FOR IN-LINE FUSE FOR UNDERGROUND FEEDS.
7. BASE MOUNTED POLES ARE DESIGNED FOR UNDERGROUND FEED ONLY.

ITEM	CODE 8048 PSTD	8048 PSTD_D QTY	8048 RS2TE QTY	8048 SSSTG QTY	8048 SSSTH QTY	8048 SD2TH QTY	MATERIAL LIST DESCRIPTION	APN
1	5	5	5	5	5	5	CONDUIT PLAST FLEX 2"	32900862
2	1	1	1	1	1	2	CONTROL PHOTO MULTI BLACK	00063965
3	VAR	VAR	VAR	VAR	VAR	VAR	CONTROL PHOTO MULTI BR-20	00073241
4	1	1	1	1	1	1	COUPLING 2" PVC	32900990
5	1	1	1	1	1	2	LAMP - SEE 8164 - 8171	
6	1	1	1	-	-	-	LUMINAIRE 100WHPS TRANSIT R	00074497
7	-	-	-	1	-	-	LUMINAIRE 150WHPS TRANSIT S	00085973
8	-	-	-	-	1	2	LUMINAIRE 250WHPS TRANSIT S	00074025
9	1	1	-	-	-	-	MAST ARM STLT 2' TRANSIT 4"	00074026
10	-	-	1	1	1	2	MAST ARM STLT 2' TRANSIT 6"	00074496
11	1	1	1	1	1	1	SIGN POLE OWNED BY APS	00050092
12	10	10	10	10	10	10	WIRE BARE #6 SOLID CU	33007580

APS ARIZONA PUBLIC SERVICE COMPANY
T&D CONSTRUCTION STANDARDS

BY	LDR.	MGR.	DATE	REV.
KLS	B. MCMINN	S. SIERRA	01/2007	5

LIGHTS
DECORATIVE TRANSIT LUMINAIRE ON 16'-0" AND 30'-0" ALUMINUM BASE MOUNTED POLES WITH 2'-0" ARM WITH PEDESTRIAN OPTION

SH 1 OF 2
8048

APS ARIZONA PUBLIC SERVICE COMPANY
T&D CONSTRUCTION STANDARDS

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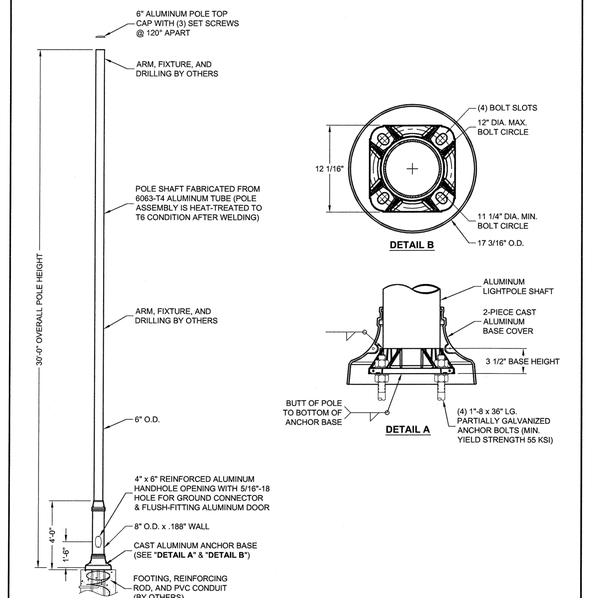
LIGHTS
DECORATIVE TRANSIT LUMINAIRE ON 16'-0" AND 30'-0" ALUMINUM BASE MOUNTED POLES WITH 2'-0" ARM WITH PEDESTRIAN OPTION

SH 2 OF 2
8048



DO NOT SCALE

valmont

Valmont Industries, Inc. Structures Division
20805 Eaton Ave Farmington, Minnesota 55024-7932
Phone: (651) 463-8990 (800) 899-7577
Fax: (651) 463-3349

****CONFIDENTIAL****
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TITLE:	S DORCHESTER SERIES LIGHTPOLE	QTY:	8
MODEL NO.:	30006080618	DWN BY:	SLF
MATERIAL:	ALUMINUM ALLOY	CHK'D BY:	
FINISH:	POWDER PAINT VALMONT BLACK	APPR BY:	
PROJECT:	SURPRISE MED CENTER	DATE:	12/05/11
SOLD TO:	BROWN WHOLESALE	DWG NO.	LH33771
SHIP TO:		PAGE:	1 / 1
P.O. NO:	7539083797		
REP:	CLARK ELEC SALES		

REV	DATE	REVISION DESCRIPTION	BY
1			
2			
3			

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WRIGHT ENGINEERING PROJECT NO:
23050
DESIGN BY: GRB
DRAWN BY: GRB
CHECKED BY: AMB

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: **SIMONCRE AT SURPRISE CENTER SEC BELL RD & 145TH AVE SURPRISE, ARIZONA**

TITLE: **STREET LIGHT DETAILS**

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)



DRAWING NO:
SL3
OF 4

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
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in Maricopa County: (602) 263-1100

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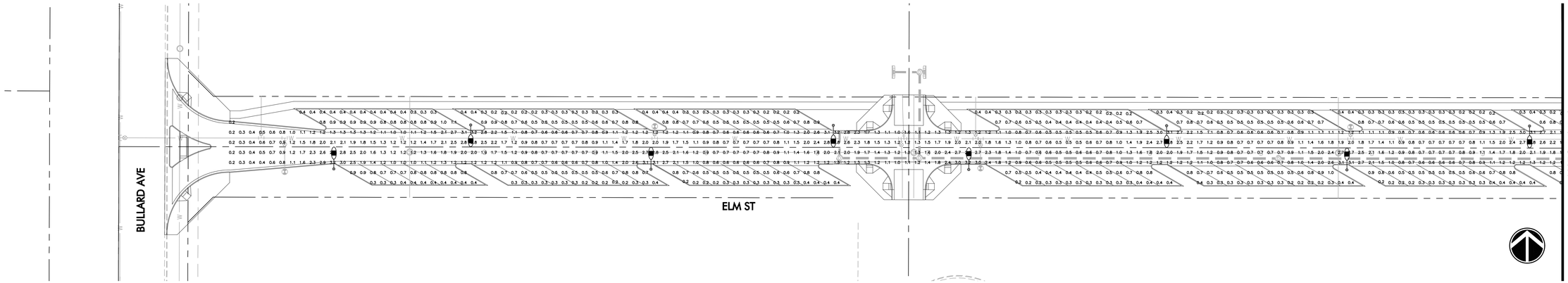

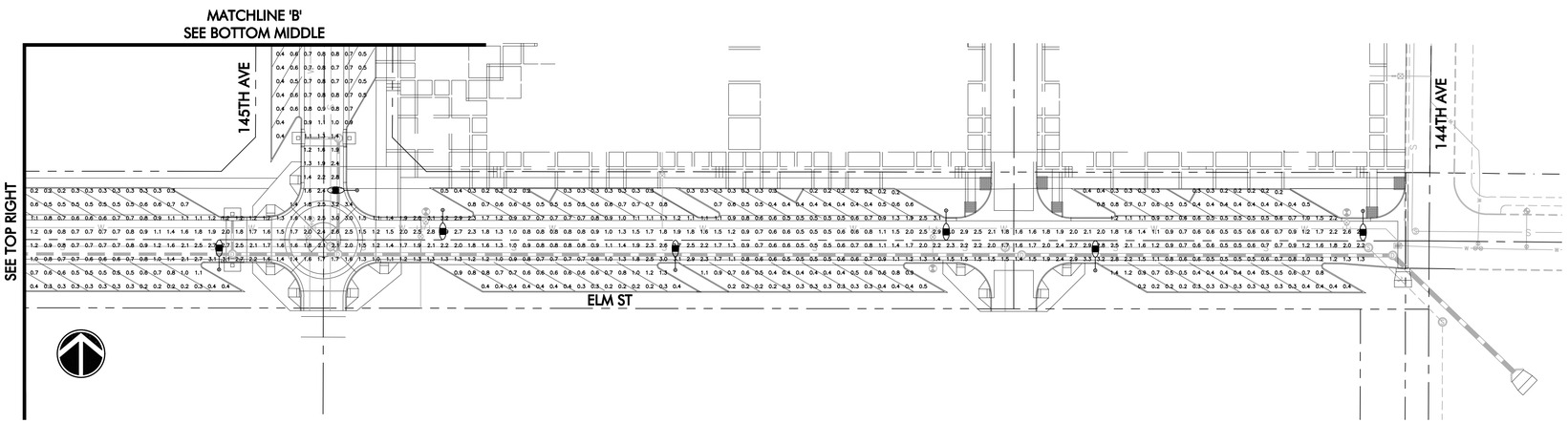

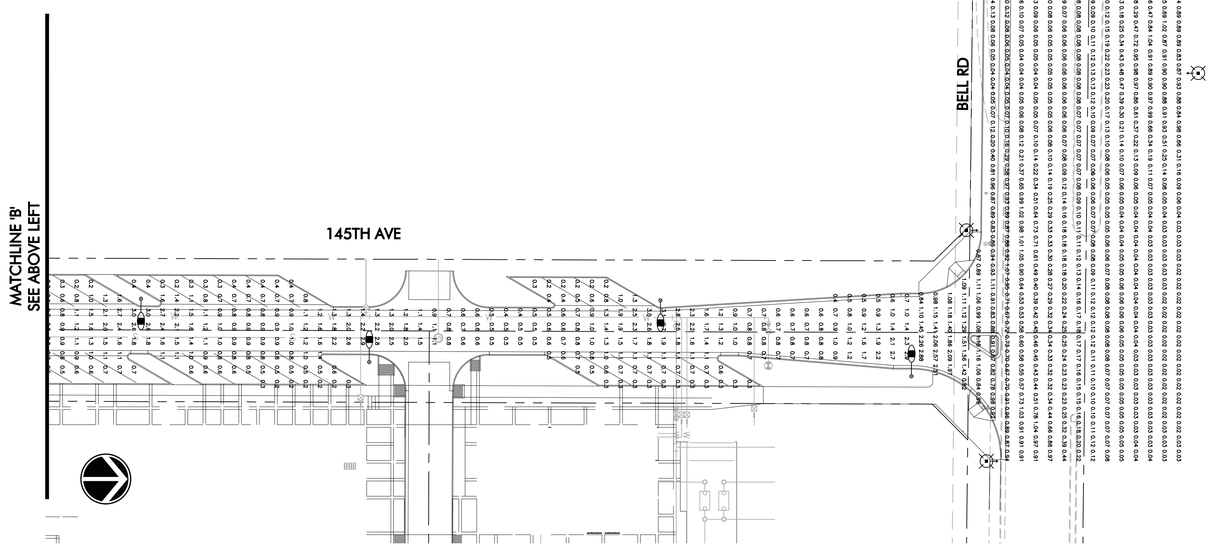

10,000 LUMEN LED ACORN POST TOP
TYPE V DISTIBUTION
candela file '0424nt1ar5x07540xxs.ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 74
mounting height= 15 ft
number locations= 12, number luminaires= 12
kw all locations= 0.9

KING LUMINAIRE TRANSIT
K803-P4FL-III-75(SSL)-8060
Type 3 Distribution
2' Mast Arm
candela file '0800SP4FL3X07540XXD.IES'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 79
mounting height= 27.75 ft
number locations= 19, number luminaires= 19
kw all locations= 1.5

ELM ST
1497 points
HORIZONTAL FOOTCANDLES
Average 1.0
Maximum 3.3
Minimum 0.2
Avg:Min 4.89
Max:Min 16.50
Coef Var 0.72

INT ELM & 145TH
20 points at z=0, sp 8ft by 8ft
HORIZONTAL FOOTCANDLES
Average 2.0
Maximum 3.0
Minimum 1.4
Avg:Min 1.46
Max:Min 2.14
Coef Var 0.23
UnifGrad 1.32

145TH AVE
384 points at z=0, sp 8ft by 8ft
HORIZONTAL FOOTCANDLES
Average 1.0
Maximum 3.4
Minimum 0.2
Avg:Min 5.23
Max:Min 17.00
Coef Var 0.64
UnifGrad 7.00

BELL RD
709 points at z=0, sp 8ft by 8ft
HORIZONTAL FOOTCANDLES
Average 0.56
Maximum 2.88
Minimum 0.02
Avg:Min 27.93
Max:Min 144.00
Coef Var 1.07
UnifGrad 2.27

GRAPHIC SCALE

40 20 0 20 40 80

1 INCH = 40 FEET

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PHONE 480.497.5829 • FAX 480.497.5807
www.wrightengineering.us

PROJECT: TITLE:

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SIMONCRE AT SURPRISE CENTER
SEC BELL RD & 145TH AVE

STREET LIGHT PHOTOMETRICS

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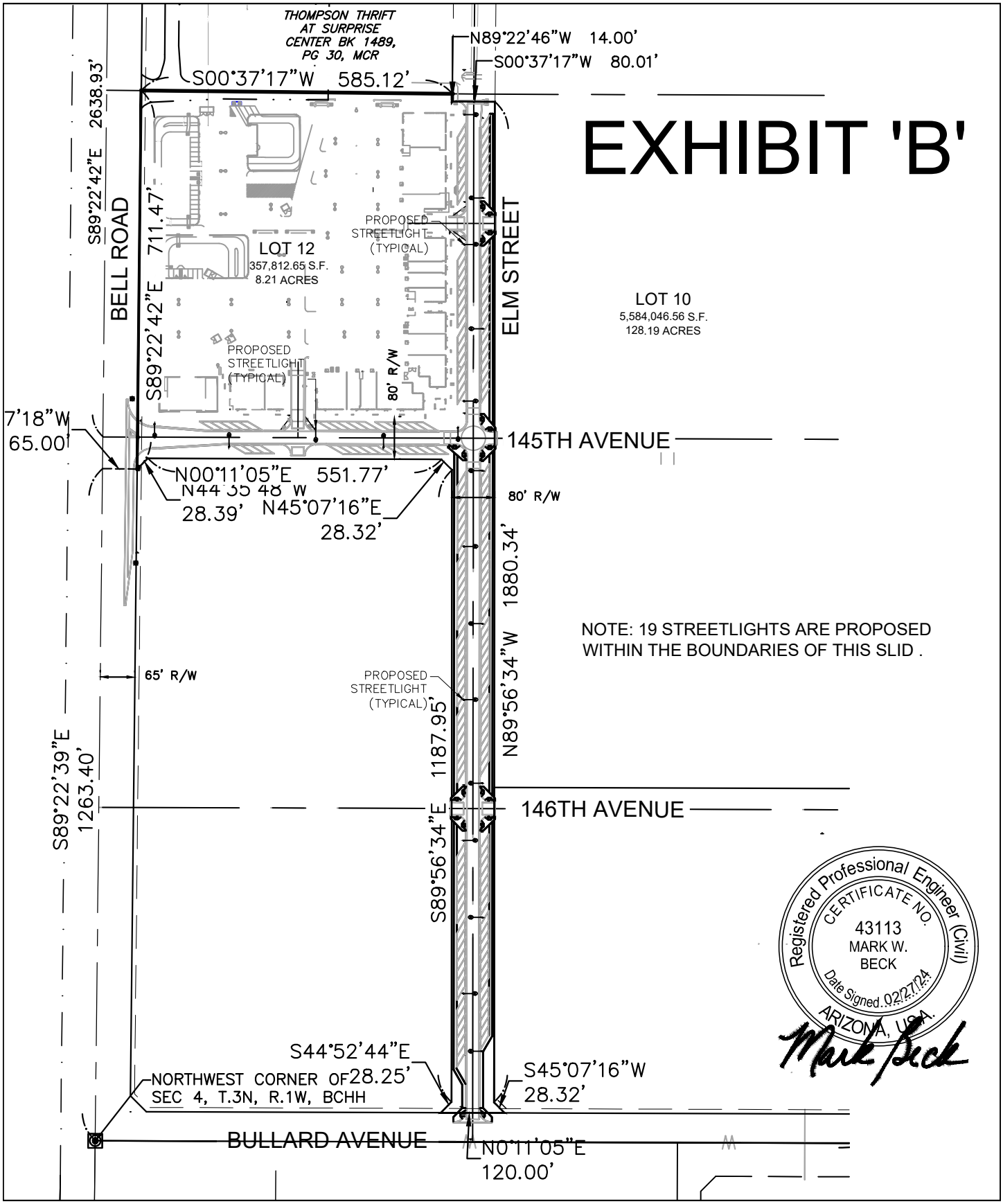
DRAWING NO:
SL4
OF 4



beck consulting engineers	PROJECT: SIMONCRE AT SURPRISE CENTER	DATE : 01/14/2023	SHEET EX-B
	JOB NO.: 228001	SCALE: 1"=200'	

OFFICIAL RECORDS OF
MARICOPA COUNTY RECORDER
ADRIAN FONTES
20190834250 10/18/2019 02:47
ELECTRONIC RECORDING

SLIDReso2019112-6-1-1--
Garciac

Recording requested by:

City of Surprise
City Clerk's Office
16000 N Civic Center Plaza
Surprise, Arizona 85374

RESOLUTION 2019-112

SU-SURPRISE CENTER NORTH 190

LIGHTING IMPROVEMENT DISTRICT

RESOLUTION # 2019-112

A RESOLUTION OF THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE, ARIZONA, DECLARING ITS INTENTION TO ESTABLISH A STREET LIGHT IMPROVEMENT DISTRICT TO PURCHASE ENERGY FOR LIGHTING THE PUBLIC STREETS AND PARKS IN THE AREA WITHIN THE CORPORATE LIMITS OF THE CITY OF SURPRISE, ARIZONA DESCRIBED ON EXHIBIT A, ATTACHED HERETO; DECLARING SUCH IMPROVEMENTS TO BE OF MORE THAN LOCAL OR ORDINARY PUBLIC BENEFIT AND THAT THE EXPENSES THEREOF BE PAID FOR BY THE LEVY AND COLLECTION OF EQUAL APPORTIONMENT OF TAXES BASED ON THE NUMBER AND CLASSIFICATION OF PROPERTIES WITHIN THE DISTRICT TO BE KNOWN AS "CITY OF SURPRISE, ARIZONA, SU-SURPRISE CENTER 190 LIGHTING IMPROVEMENT DISTRICT"; AND ORDERING THAT SUCH IMPROVEMENTS BE PROVIDED FOR UNDER THE PROVISIONS OF SECTION 48-572, ARIZONA REVISED STATUTES.

WHEREAS, the owners, exclusive of mortgagees and other lienholders, of all of the real property (hereinafter referred to as "Petitioner") in the hereinafter described District, acting pursuant to the provisions of Sections 48-615(A) and 48-617(A), Arizona Revised Statutes, have petitioned the Mayor and Council of the City of Surprise, Arizona (hereinafter referred to as "City"), to adopt a resolution of intention (hereinafter referred to as "Resolution") ordering the purchase of energy for the lighting of the public streets and parks (hereinafter referred to as "Improvements") for the real property legally described in Exhibit A (such area hereinafter referred to as the "District") with such boundaries as shown in the map in Exhibit B attached hereto pursuant to the provisions of Section 48-576, Arizona Revised Statutes, giving the City immediate jurisdiction to order the Improvements pursuant to the provisions of Section 48-581, Arizona Revised Statutes, without the necessity of the publications or posting of this Resolution provided for in Sections 48-578, Arizona Revised Statutes;

WHEREAS, the City has verified that Petitioner is the owner, exclusive of mortgagees and other lienholders, of all of the real property included within the boundaries of the District, and;

WHEREAS, the Mayor and Council of the City hereby find and determine that they have jurisdiction to adopt this Resolution to order the Improvements pursuant to the provisions of Section 48-576, Arizona Revised Statutes, and have immediate jurisdiction to adopt this Resolution ordering the Improvements pursuant to the provisions of Section 48-581, Arizona Revised Statutes without the necessity of publications and posting of this Resolution as provided for in Section 48-578, Arizona Revised Statutes;

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Surprise, Arizona, as follows.

Section 1. The City, after verifying ownership of the real property included within the boundaries of the District, hereby finds the Petitioner is the owner, exclusive of mortgagees and other lienholders, of all of the real property included within the boundaries of the District.

Section 2. The name of the District shall be "CITY OF SURPRISE, ARIZONA, SU-SURPRISE CENTER 190 LIGHTING IMPROVEMENT DISTRICT."

Section 3. The District is formed, and shall exist, pursuant to the provisions of Title 48, Chapter 4, Article 2, Arizona Revised Statutes, and Section 48-616, Arizona Revised Statutes.

Section 4. The public interest or convenience requires, and it is the intention of the Mayor and Council of the City to order the Improvements as so described above.

Section 5. The Improvements, in the opinion of the Mayor and Council of the City, are of more than local or ordinary public benefit and are of special benefit to the respective lots, pieces and parcels of real property in the District, and the Mayor and Council of the City hereby make and order the expense of the Improvements payable from the levying and collection of an equal apportionment of taxes based on the number and classification of properties within the District to be known and designated as "City of Surprise, Arizona SU-Surprise Center 190 Lighting Improvement District" and hereby declare that the District is as legally described on Exhibit A attached hereto with the boundaries as shown in the map in Exhibit B attached hereto. Any public street or alley within the District shall be omitted from the assessment. Any lot belonging to the United States, the State, a county, city, school district or political subdivision or institution of the state or county within the District shall be omitted from the assessment.

Section 6. The Superintendent of Streets or equivalent of the City shall not be required to post or cause to be posted notices of the Resolution of Intention. The Clerk of the City shall certify to the passage of this Resolution of Intention but shall not be required to cause the same to be published in a newspaper published and of general circulation in the City.

Section 7. The Mayor and Council of the City shall make annual statements and estimates of the expenses of the district, which shall be provided for by the levy and collection of equal apportionment of taxes based on the number and classification of properties within the District; shall publish notice thereof; shall have hearings thereon; and shall adopt them at the times and in the manner provided for incorporated cities and towns by the applicable portions of Section 42-17101, et seq., 42-17152, Arizona Revised Statutes. The Mayor and Council of the City shall, on or before the third Monday in August of each year, fix, levy and assess the amount to be raised by an equal apportionment of taxes based on the number and classification of the properties within the District and collect, as Maricopa County, Arizona (the "County") taxes are collected, the amounts shown by the statements and estimates as adopted by the Mayor and Council of the City. All statutes providing for the levy and collection of State of Arizona and County taxes, shall be applicable to District taxes as provided to be levied under Section 48-616, Arizona Revised Statutes.

Section 8. The District shall not be authorized to issue bonds and no assessment for District purposes against the property within the District shall exceed One Dollar and Twenty Cents ($1.20) per each hundred dollars of taxable valuation thereof in any year.

Section 9. The District shall not engage in any activity other than as provided in Section 48-616, Arizona Revised Statutes, i.e., contracting for and purchasing of energy for street and public park lighting.

Section 10. The formation of the District shall not be considered as preventing the subsequent establishment of improvement districts for any other purpose authorized by law, including improvement districts for the purpose of construction street lighting facilities within any part or all of the same territory as the District.

Section 11. The type of lighting facilities to be installed in the District and the locations thereof shall consist of those lighting facilities and locations described in the petition submitted by Petitioner, or as may be approved by the City.

Section 12. The rate to be paid for purchasing the energy for the District shall be the rate described in the petition submitted by Petitioner, or as may be approved by the Arizona Public Service Company.

Section 13. Any resolutions or parts of resolutions in conflict with the provisions of this Resolution are hereby repealed.

APPROVED AND ADOPTED this 17th day of Oct, 2019.

Skip Hall, Mayor

Attest:

Sherry Aguilar, City Clerk

Approved as to form:

Robert Wingo, City Attorney

Resolution #2019-112
RFLS #6949
Rev 08/19

LEGAL DESCRIPTION

FOR

STREET LIGHT IMPROVEMENT DISTRICT (SLID)

A PORTION OF THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 3 NORTH, RANGE 1 WEST, OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA;

COMMENCING AT A BRASS CAP MARKING THE NORTH QUARTER CORNER OF SAID SECTION 4, FROM WHICH THE BRASS CAP MARKING THE CENTER QUARTER CORNER OF SAID SECTION 4 BEARS SOUTH 00°11'28" EAST, 2,760.25 FEET;

THENCE SOUTH 00°11'28" EAST, ALONG THE NORTH–SOUTH MIDSECTION LINE OF SAID SECTION 4 A DISTANCE OF 473.54 FEET TO THE POINT OF BEGINNING (P.O.B.);

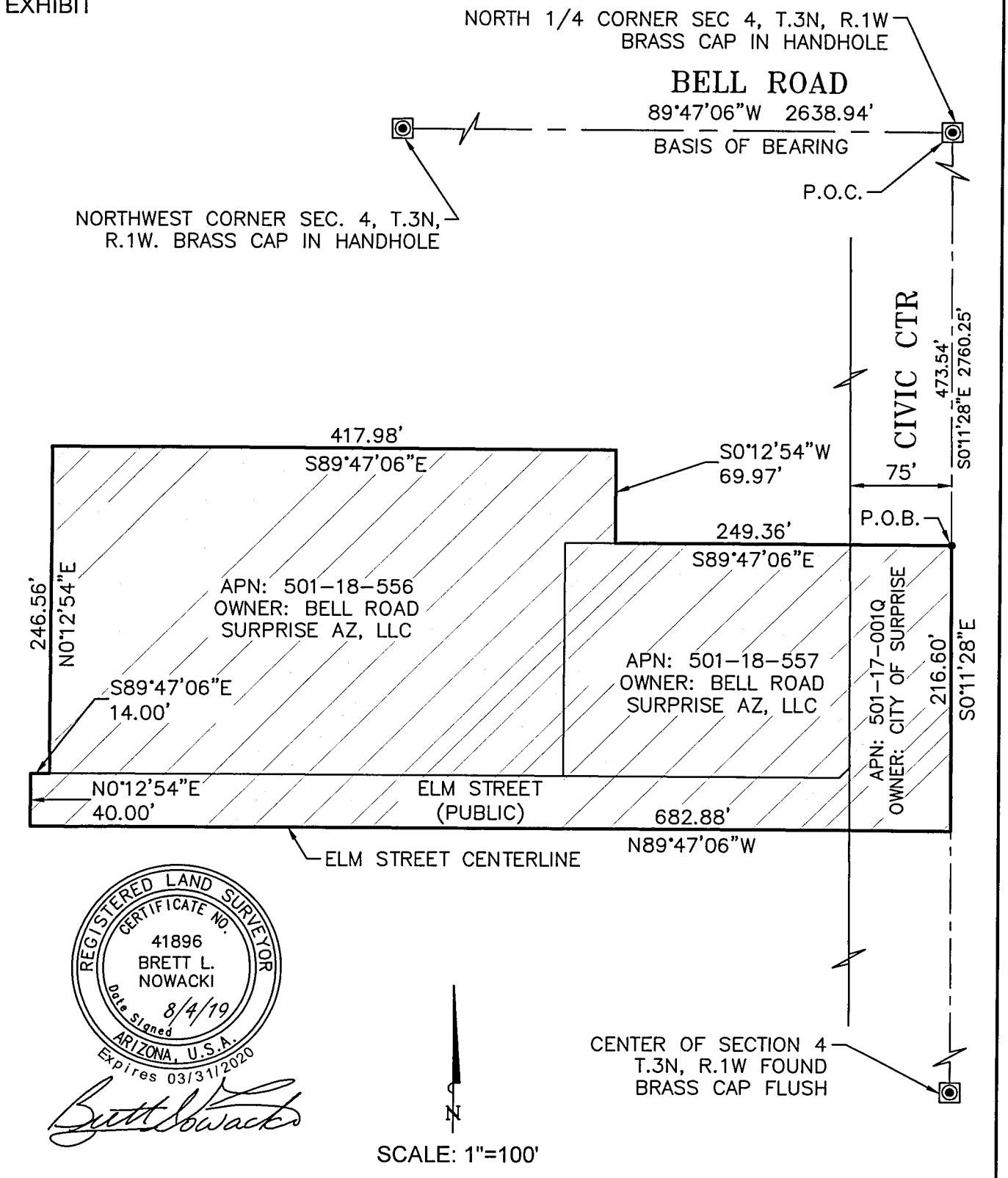
THENCE SOUTH 00°11'28" EAST, 216.60 FEET;
THENCE NORTH 89°47'06" WEST, 682.88 FEET;
THENCE NORTH 00°12'54" EAST, 40.00 FEET;
THENCE SOUTH 89°47'06" EAST, 14.00 FEET;
THENCE NORTH 00°12'54" EAST, 246.56 FEET;
THENCE SOUTH 89°47'06" EAST, 417.98 FEET;
THENCE SOUTH 00°12'54" WEST, 69.97 FEET;
THENCE SOUTH 89°47'06" EAST, 249.36 FEET TO THE POINT OF BEGINNING.

CONTAINING 174,514.57 SQUARE FEET OR 4.00 ACRES, MORE OR LESS.



TITLE:	SU-SURPRISE CENTER 190 SLID - Legal Description	PROJECT #: FS19-363 DATE: 8-4-19 PAGE: 1 OF 2

EXHIBIT



REGISTERED LAND SURVEYOR
CERTIFICATE NO.
41896
BRETT L.
NOWACKI
Date Signed 8/4/19
ARIZONA, U.S.A.
Expires 03/31/2020

Brett Nowacki

TITLE:	SU-SURPRISE CENTER 190 SLID - EXHIBIT	PROJECT #: FS19-363 DATE: 8-4-19 PAGE: 2 OF 2

AVAILABILITY

This rate schedule is applicable to those portions of cities, towns and unincorporated communities in which the Company does a general retail electric business and where the Company has installed a multiple or series street lighting system of adequate capacity for the service to be rendered.

DESCRIPTION

E-58 is a rate that is applicable for lighting public streets, alleys, thoroughfares, public parks and playgrounds from dusk to dawn by use of Company's facilities.

TIME PERIODS

Dusk: Time between sunset and full night when photocontrol senses the lack of sufficient sunlight and turns on the lights.

Dawn: The time between full night and sunrise when a photocontrol senses sufficient sunlight to turn off lights.

CHARGES

The monthly bill will consist of the following charges, plus adjustments.

I. FIXTURES (Includes Mounting Arm, if Applicable)

				CHARGES	
	Lumen	Watts	kWh	Investment by Company	Investment by Others
A. Acorn	3,835 LED	75	26	$21.63	$7.59
	4,796 LED	75	26	$17.38	$6.46
	5,003 LED	100	35	$23.45	$8.71
	5,904 LED	100	35	$23.03	$8.60
	6000 IND	85	29	$19.24	$5.14
B. Architectural	6,200 IND	85	29	$10.13	$3.93
	8,400 IND	100	34	$10.69	$4.36
	10,200 IND	120	41	$11.75	$4.99
	13,000 IND	150	52	$12.98	$5.93
	20,500 IND	200	69	$14.78	$7.37
	22,500 IND	265	91	$17.63	$9.28
	3,300 LED	43	15	$10.24	$3.79
	3,800 LED	32	12	$7.73	$2.92
	3,900 LED	32	12	$9.96	$3.51
	4,050 LED	63	22	$18.63	$6.52
	4,100 LED	45	16	$10.34	$3.89
	4,800 LED	41	15	$8.27	$3.27
	5,000 LED	41	15	$9.61	$3.62

				CHARGES	
	Lumen	Watts	kWh	Investment by Company	Investment by Others
	5,100 LED	60	21	$10.18	$4.19
	5,300 LED	67	24	$10.47	$4.48
	5,800 LED	94	32	$17.81	$5.16
	5,890 LED	89	31	$20.56	$7.66
	6,000 LED	62	22	$18.63	$6.52
	6,000 LED	67	24	$19.89	$6.99
	6,400 LED	89	31	$17.89	$5.10
	6,810 LED	101	35	$18.89	$7.50
	7,100 LED	62	22	$19.70	$6.80
	7,400 LED	127	44	$20.42	$6.34
	7,500 LED	73	26	$20.08	$7.18
	7,700 LED	86	30	$18.41	$7.02
	8,200 LED	88	31	$10.45	$4.97
	8,200 LED	95	33	$11.87	$5.48
	8,300 LED	72	25	$17.93	$6.54
	8,300 LED	106	37	$12.45	$5.91
	8,500 LED	88	31	$11.69	$5.30
	9,020 LED	139	48	$22.94	$9.47
	9,200 LED	139	48	$25.60	$7.30
	9,900 LED	130	45	$13.82	$6.84
	10,000 LED	93	32	$21.43	$7.96
	10,000 LED	113	39	$13.26	$6.28
	10,600 LED	126	44	$22.56	$9.09
	11,100 LED	108	38	$12.76	$6.07
	11,500 LED	108	38	$13.16	$6.18
	12,300 LED	203	70	$25.48	$8.85
	12,900 LED	119	41	$22.31	$8.82
	13,260 LED	202	70	$27.11	$12.12
	13,620 LED	202	70	$28.49	$9.24
	14,000 LED	171	59	$26.07	$11.08
	15,000 LED	136	47	$24.93	$9.94
	15,400 LED	144	50	$25.21	$10.22
	18,300 LED	162	56	$16.13	$8.22
	19,200 LED	257	89	$26.87	$13.38
	20,000 LED	258	89	$26.87	$13.38
	20,300 LED	193	67	$17.17	$9.26
	21,000 LED	193	67	$24.77	$11.28
C. Cobra	6,200 IND	75	26	$10.54	$3.77
	6,400 IND	85	29	$8.97	$3.78
	8,000 IND	88	30	$10.47	$4.04
	8,400 IND	100	34	$9.70	$4.24
	10,200 IND	120	41	$10.44	$4.81

					CHARGES	
		Lumen	Watts	kWh	Investment by Company	Investment by Others
C. Cobra		13,000 IND	150	52	$11.50	$5.73
		15,250 IND	200	69	$13.86	$7.25
		22,500 IND	250	86	$18.55	$9.06
	Gray/Bronz	3,500 IND	55	19	$10.50	$3.27
		6,000 LED	95	33	$17.05	$5.13
		8,700 LED	142	49	$19.17	$6.53
		9,600 LED	157	54	$20.40	$7.04
		11,600 B-LED	181	62	$19.03	$7.44
	Gray/Bronz	3,300 LED	43	15	$9.00	$2.79
	Gray/Bronz	5,300 LED	67	23	$10.45	$3.54
	Gray/Bronz	8,300 LED	106	37	$13.55	$4.94
	Gray/Bronz	10,500 LED	130	45	$15.08	$5.69
	Gray/Bronz	20,000 LED	258	89	$26.21	$10.27
D. Decorative Transit		5,300 LED	75	26	$28.44	$6.12
		8,300 LED	100	34	$30.45	$6.97
		8,147 LED	75	26	$35.76	$11.36
		9,522 LED	100	35	$36.14	$12.09
		10,500 LED	150	52	$32.69	$8.52
		14,896 LED	150	52	$39.98	$14.29
	Double	8,147 LED	75	26	$64.74	$18.96
	Double	9,522 LED	100	35	$64.67	$19.58
	Double	14,896 LED	100	52	$70.67	$22.32
	Copper	6,000 IND	85	29	$18.87	$5.09
	Gray/Black	8,000 IND	88	30	$14.86	$4.62
	Gray/Black	4,350 LED	86	30	$13.48	$4.44
E. Flood		14,470 LED	148	51	$23.93	$9.95
		16,000 LED	125	43	$23.17	$9.19
F. Pendant		8,678 LED	75	26	$26.36	$8.85
		13,964 LED	100	35	$27.84	$9.88
G. Post Top		4,350 LED	86	30	$13.43	$5.69
		6,400 LED	30	30	$13.43	$5.69
		6,600 LED	83	29	$13.33	$5.59
H. Roadway		3,300 LED	43	15	$9.46	$3.58
		3,800 LED	32	12	$7.24	$2.79
		3,900 LED	32	12	$9.18	$3.30
		4,100 LED	45	16	$9.56	$3.68
		4,800 LED	41	15	$7.76	$3.13
		5,000 LED	41	15	$9.12	$3.49
		5,100 LED	60	21	$9.69	$4.06
		5,300 LED	67	24	$9.98	$4.35
		8,200 LED	88	31	$9.72	$4.77

	8,200 LED	95	33	$11.36	$5.34
	8,300 LED	106	37	$11.74	$5.72
	8,500 LED	88	31	$11.18	$5.16
	9,900 LED	130	45	$13.31	$6.70
	10,000 LED	113	39	$12.75	$6.14
	11,100 LED	108	38	$12.03	$5.88
	11,500 LED	108	38	$12.65	$6.04
	18,300 LED	162	56	$15.23	$7.98
	19,200 LED	257	89	$19.11	$11.32
	20,000 LED	258	89	$19.11	$11.32
	20,300 LED	193	67	$16.27	$9.02
	21,000 LED	193	67	$17.01	$9.22
FROZEN	4,000 INC	295	103	$10.54	$5.89
	7,000 MV	175	73	$13.65	$7.83
	11,000 MV	250	96	$17.09	$10.43
	20,000 MV	400	150	$26.84	$15.21
FROZEN ACORN	9,500 HPS	100	41	$29.14	$9.93
	16,000 HPS	150	69	$32.35	$12.55
FROZEN ARCHITECTURAL	9,500 HPS	100	41	$16.56	$7.90
	16,000 HPS	150	69	$19.77	$19.34
	30,000 HPS	250	99	$22.95	$13.57
	50,000 HPS	400	153	$28.32	$19.53
	14,000 MH	175	72	$23.17	$12.70
	21,000 MH	250	101	$26.31	$15.66
	36,000 MH	400	159	$32.89	$21.54
	8,000 LPS	55	30	$24.08	$10.58
	13,500 LPS	90	50	$28.39	$12.76
	22,500 LPS	135	72	$32.43	$15.56
	33,000 LPS	180	90	$39.01	$18.33
FROZEN COBRA ROADWAY	5,800 HPS	70	29	$9.40	$5.56
	9,500 HPS	100	41	$11.07	$6.81
	16,000 HPS	150	69	$13.86	$9.50
	30,000 HPS	250	99	$16.72	$12.35
FROZEN COBRA ROADWAY	50,000 HPS	400	153	$22.69	$17.63
	14,000 MH	175	72	$16.12	$10.99
	21,000 MH	250	101	$18.84	$13.67
	36,000 MH	400	159	$24.81	$18.99
	8,000 FL	100	38	$18.53	$5.43
FROZEN DECORATIVE TRANSIT	9,500 HPS	100	41	$39.95	$11.96
	16,000 HPS	150	69	$39.72	$13.36
	30,000 HPS	250	99	$45.74	$17.26
FROZEN FLOOD	30,000 HPS	250	99	$22.20	$13.79
	50,000 HPS	400	153	$27.53	$19.14
	21,000 MH	250	101	$23.69	$14.58
	36,000 MH	400	159	$28.89	$19.76
FROZEN Colonial Gray	8,000 FL	100	38	$19.97	$5.64

FILED

POST TOP	Colonial Gray	9,500 HPS	100	41	$11.42	$7.16
	Colonial Black	9,500 HPS	100	41	$13.15	$7.41
	Decorative	9,500 HPS	100	41	$34.97	$11.03

NOTES:

1. Investment by Company. These rates are applicable where the Company provides the initial investment to purchase and install all facilities necessary for street lighting service. The Company will own, operate, and maintain the street lighting system.

2. Investment by Others. These rates are applicable in those instances where the requesting entity or individual purchases and installs the street lighting facilities at their own expense and in accordance with Company specifications. These rates will also apply in the instance where the Customer provides a non-refundable advance to the Company to cover the Company's cost of purchasing and installing the street lighting system. The Company retains ownership of the street lighting system and provides operation and maintenance for all facilities.

3. Listed kWhs reflect the assigned monthly energy usage for each type of fixture and are used to determine any applicable transmission, system benefit, distribution, energy, and adjustment charges.

4. HPS = High Pressure Sodium

5. MH = Metal Halide

6. LPS = Low Pressure Sodium

7. FL = Fluorescent

8. INC = Incandescent. Incandescent lighting charges are applicable and available only to those Customers being served and those installations in service on November 1, 1986.

9. MV = Mercury Vapor. Mercury Vapor lighting charges are applicable and available only to those Customers being served and those installation in service on November 1, 1986 in accordance with A.R.S. §49-1104(A).

10. LED = Light Emitting Diode

11. IND = Induction

II. POLES

				CHARGES	
			Height	Investment by Company	Investment by Others
A. Anchor Base Mounted (Flush)	Round Steel	1 Simplex Adapter	12 ft.	$13.11	$1.81
			22 ft.	$14.75	$2.03
			25 ft.	$15.97	$2.21
			30 ft.	$18.34	$2.52
			32 ft.	$19.27	$2.55
		2 Simplex Adapters	12 ft.	$13.98	$1.93
			22 ft.	$16.06	$2.22
			25 ft.	$16.75	$2.31
			30 ft.	$19.47	$2.68
			32 ft.	$20.77	$2.87
	Square Steel	5"	13 ft.	$15.03	$2.06
			15 ft.	$13.43	$1.85
			23 ft.	$15.93	$2.19
			25 ft.	$17.51	$2.41
			28 ft.	$19.44	$2.67
			32 ft.	$19.33	$2.66
	Concrete		12 ft.	$44.79	$6.17
	Fiberglass		12 ft.	$37.93	$5.22
	Decorative Transit	4"	16 ft.	$36.98	$5.10
	Decorative Transit	6"	30 ft.	$71.39	$9.83
	Hinged Poles	Square	15 ft.	$14.21	$1.16
		Round	19 ft.	$12.85	$1.05
B. Anchor Base Mounted (Pedestal)	Round Steel	1 Simplex Adapter	12 ft.	$12.61	$1.73
			22 ft.	$14.26	$1.96
			25 ft.	$15.46	$2.13
			30 ft.	$17.85	$2.47
			32 ft.	$18.75	$2.58
		2 Simplex Adapters	12 ft.	$13.47	$1.85
			22 ft.	$15.05	$2.06
			25 ft.	$16.24	$2.23
			30 ft.	$18.97	$2.60
			32 ft.	$20.26	$2.79
		3 Bolt	32 ft.	$23.28	$3.20
	Square Steel	5"	13 ft.	$14.54	$2.01
			15 ft.	$14.86	$2.03
			23 ft.	$15.43	$2.13
			25 ft.	$17.02	$2.36
			28 ft.	$18.91	$2.60
			32 ft.	$19.63	$2.69

II POLES (cont)

				CHARGES	
			Height	Investment by Company	Investment by Others
C. Direct Bury	Round Steel		19 ft.	$19.84	$2.74
			30 ft.	$15.49	$2.87
			38 ft.	$18.90	$2.94
		Self	40 ft.	$23.28	$3.69
		Stepped	25 ft.	$53.55	$4.37
			32 ft.	$56.40	$4.60
			49 ft.	$70.00	$9.65
	Square Steel	4"	34 ft.	$17.09	$2.96
		5"	20 ft.	$16.23	$2.68
			30 ft.	$16.92	$2.79
			38 ft.	$18.36	$3.19
		8"	28 ft.	$30.64	$2.49
			32 ft.	$32.03	$2.62
	Decorative Transit		41 ft 6	$22.05	$3.24
	Decorative Transit		47 ft.	$27.47	$4.04
	Steel Distribution Pole (for lighting only)		35 ft.	$25.36	$3.34
D. Post Top	Decorative Transit Anchor Base		16 ft.	$37.77	$5.19
	Gray Steel/Fiberglass		23 ft.	$13.10	$2.15
	Black Steel		23 ft.	$14.44	$2.38
E. Existing distribution pole suitable for streetlight use				$1.59	--
F. FROZEN	~~Wood Poles~~ FROZEN		~~30 ft.~~	~~$9.64~~	$1.67
			~~35 ft.~~	~~$9.64~~	$1.59

NOTE: The monthly rate for all new poles includes up to 300 feet of overhead secondary wire, or up to 300 feet of underground secondary wire if the Customer provides earthwork and conduit (excluding the underground to overhead transition).

III. ANCHOR BASE

			CHARGES	
		Height	Investment by Company	Investment by Others
A. Flush		4 ft.	$10.67	$1.47
		6 ft.	$12.73	$2.21
B. Pedestal		8 ft.	$14.59	$2.54
	For 32' Round Steel Pole only	4 ft. 6"	$10.12	$1.75

IV. CHARGES FOR OPTIONAL OR ADDITIONAL EQUIPMENT

	CHARGE Company Owned
Underground Circuit Charges:	
a. Per foot of cable, installed under paving	$0.17000
b. Per foot of cable, not installed under paving	$0.06000

FROZEN

V. DETERMINATION OF CHARGES FOR NEW EQUIPMENT

Monthly charges for new lighting fixtures, poles and other equipment not included in Sections I, II, or III above will be determined by the Company using the following method:

Step 1 Determination of Charges for each Charge Type

Charge Type	Monthly Charge		Cost Inputs		PV Factor		Monthly Fixed Charge Rate
1	Carrying Cost (fixtures)	=	Equipment Cost (installed)	x	NA	x	1.518%
2	Carrying Cost (poles)	=	Equipment Cost (installed)	x	NA	x	1.296%
3	Fixture Replacement Cost	=	Equipment Cost (installed)	x	0.257	x	1.518%
4	Pole, Anchor Replacement Cost	=	Equipment Cost (installed)	x	0.110	x	1.296%
5	Lighting O&M	=	O&M Cost (lifecycle)	x	0.427	x	1.518%
Charge Type	Monthly Charge		kWh Input		$/kWh		
6	Generation	=	kWh per month	x	0.06760		
7	T&D, RCS, SB	=	kWh per month	x	0.02738		

Step 2 Determination of Total Monthly Charge

The total monthly charge will be the summation of the charges for each applicable charge type

Equipment	Charge Type
Fixture - IBC	1,5,6,7
Fixture - IBO	3,5,6,7
Pole, Anchor Base - IBC	2
Pole, Anchor Base - IBO	4

TRIP CHARGE

A $100.00 trip charge per light will be charged when a Customer requests a disconnect or reconnect of service in order to accommodate the maintenance activities of the Customer or its designee(s) on their street lighting equipment.

ADJUSTMENTS

The bill will include the following adjustments:

1. The Renewable Energy Standard charge, Adjustment Schedule REAC-1.
2. The Power Supply Adjustment charges, Adjustment Schedule PSA-1.
3. The Transmission Cost Adjustment charge, Adjustment Schedule TCA-1.
4. The Environmental Improvement Surcharge, Adjustment Schedule EIS.
5. The Demand Side Management Adjustment charge, Adjustment Schedule DSMAC-1.
6. The Lost Fixed Cost Recovery Adjustment charge, Adjustment Schedule LFCR.
7. Direct Access Customers returning to Standard Offer service may be subject to a Returning Customer Direct Access Charge, Adjustment Schedule RCDAC-1.
8. Any applicable taxes and governmental fees that are assessed on APS's revenues, prices, sales volume, or generation volume.

SERVICE DETAILS

1. Street lighting facilities installed under this rate schedule are of the type currently being furnished by Company as standard at the time service is initially requested. Standard facilities are those listed in the Company's Transmission and Distribution Construction Standards book.

2. The Customer will be responsible for notifying the Company when the streetlighting facilities are not operating as intended. The Company will use reasonable efforts to complete normal maintenance (replacement of lamps, photocontrols or fixtures) within ten (10) working days from notification by Customer. If the maintenance requires cable replacement or repairs, the Company will use reasonable efforts to complete said repairs within twenty (20) working days.

3. The Customer's bill will not be reduced due to lamp, photocontrol or cable repair or replacement outages.

4. Lighting equipment which is not specified in this rate schedule will be billed at the rates corresponding to the most similar equipment, as determined by the Company.

5. Non-standard facilities (non-standard being defined as any facility not listed in the Company's Transmission and Distribution Construction Standards book) do not qualify for this rate schedule. At the Company's discretion, such facilities may be served under another of the Company's rate schedules.

6. The Company will extend its standard street lighting system up to a distance of 300 feet for each additional lighting installation without cost at the request of the Customer. When the extension is underground the customer will provide earthwork as specified in the Company's Service Schedule 3, Conditions Governing Extensions of Electric Distribution Lines and Services; or, at the applicant's request, the Company will provide such earthwork and the applicant will be required to pay a non-refundable contribution in aid of construction equal to the cost of such earthwork. Any additional extension required (over and above the first 300 feet) will be provided by Company for a contribution in aid of construction equal to the cost of the additional extension.

   a. Extensions to isolated areas requiring a substantial extension of the electric distribution system, as opposed to an extension of the street lighting system, will require a special study to determine the terms and conditions under which the Company will undertake such an extension.

7. APS provides electric service under the Company's Service Schedules. These schedules provide details about how the Company serves its Customers, and they have provisions and charges that may affect the Customer's bill. In addition, service may be subject to special terms and conditions as provided for in a Customer contract or service agreement.

TIRE WORKS
STREET LIGHTING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
XX	ARIZ.			

DON TULEY PE
(480) 626-1841
ARDEBILI ENGINEERING, LLC.
8100 E INDIAN SCHOOL ROAD., STE 205
SCOTTSDALE, AZ 85251

DR: | DES: | CK: | DATE: 5.22.19

STREET LIGHTING GENERAL NOTES

THE FOLLOWING INFORMATION IS PROVIDED TO EMPHASIZE CRITICAL WORK AND IS INTENDED TO SUPPLEMENT THE SPECIFICATIONS.

1. THE CONTRACTOR SHALL COMPLY WITH STATE AND CITY STATUTES AND ORDINANCES.
2. PRIOR TO SUBMITTAL, THE STREET LIGHT DESIGNER SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS AND VISIT THE CONSTRUCTION SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL OPERATE AND WHICH WILL IN ANY WAY AFFECT THE WORK UNDER THE CONTRACT.
3. THE STREET LIGHT DESIGNER SHOULD VERIFY DIMENSIONS AT THE SITE AND IMMEDIATELY REPORT DIFFERENCES TO THE DEVELOPER'S CONSTRUCTION MANAGER AND NOT PROCEED WITH WORK UNTIL THE CONSTRUCTION MANAGER RENDERS A DECISION.
4. THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH ALL LICENSING REQUIREMENTS SET FORTH BY THE STATE REGISTRAR OF CONTRACTORS OFFICE TO PERFORM WORK RELATING TO STREET LIGHT INSTALLATION IN CITY OF PHOENIX RIGHT-OF-WAY.
5. ONE DRY UTILITY PERMIT FOR EACH CITY OF SURPRISE STREET LIGHT PROJECT SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
6. LIGHT POLES SHALL BE INSTALLED PLUMB, BE ADJUSTED TO PROVIDE PROPER ALIGNMENT TO THE ROADWAY BEING LIGHTED AND BE PROPERLY GROUNDED WHEN THE INSTALLATION IS COMPLETED.
7. STREET LIGHTS ARE INSPECTED BY THE CITY OF SURPRISE STREET LIGHTING INSPECTOR, WHEN ACCEPTED AND ENERGIZED THE CONTRACTOR WILL INSTALL POLE NUMBERS PRIOR TO INSPECTION.
8. LUMINAIRES SHALL BE INSTALLED LEVEL AND INCLUDE A LAMP AND PHOTOCELL. THE LUMINAIRES SHALL BE FREE OF DUST, DIRT OR ANYTHING THAT WOULD IMPAIR THE OUTPUT OF THE LIGHT.
9. LUMINAIRES FURNISHED WITH MULTI-TAP DRIVERS SHALL BE REWIRED OR RECONNECTED TO MATCH THE VOLTAGE SUPPLIED BY THE ELECTRIC UTILITY COMPANY.
10. POLE SHALL BE SET PLUMB IN TWO DIRECTIONS, NINETY (90) DEGREES APART.
11. SURPLUS EXCAVATION SHALL BE DISPOSED OF BY THE CONTRACTOR.

STREET LIGHTING GENERAL NOTES (CONTINUED)

12. WIRING SHALL BE INSTALLED PER SERVING UTILITY COMPANY STANDARDS. CONDUIT SHALL BE INSTALLED AT THE DEPTH SPECIFIED ON THEIR PLANS.
13. CONDUIT MUST BE LISTED AND LABELED AND SUITABLE FOR UNDERGROUND USE.
14. CONNECTIONS SHALL BE PER SERVING UTILITY COMPANY STANDARDS. EACH POLE SHALL HAVE A 8' X 5/8" COPPER CLAD GROUND ROD DRIVEN BENEATH PULL BOX. A #6 BARE COPPER LEAD FROM THE GROUND ROD IN PULL BOX TO LANDING LUG IN STREET LIGHT POLE HAND HOLE IS REQUIRED.
15. EXCAVATION FOR PULL BOXES AND MATERIAL SPECIFICATIONS SHALL BE PER SERVING UTILITY COMPANY STANDARDS.
16. TRENCH SHALL BE INSTALLED PER SERVING UTILITY COMPANY STANDARDS. THE USE OF A COMMON ELECTRIC UTILITY COMPANY TRENCH IS PERMITTED.
17. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANY FOR COORDINATION OF THE TRENCHING AND THE INSTALLATION OF CONDUIT.
18. IT IS THE CONTRACTOR'S RESPONSIBILITY TO RESTORE ALL PROPERTY, LANDSCAPING, PAVING AND DRIVEWAYS THAT ARE DISTURBED DURING STREET LIGHT CONSTRUCTION TO THEIR ORIGINAL CONDITION IN CONFORMANCE WITH MAG SPECIFICATION SECTION 107.9.
19. IF A FIXTURE SHOULD FAIL, IT SHALL BE IMMEDIATELY REPLACED. THE DEVELOPER SHALL BE RESPONSIBLE FOR FURNISHING ALL PERSONNEL AND EQUIPMENT NECESSARY TO SUCCESSFULLY REPAIR THE FIXTURE.
20. THE CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE ENGINEERING MANAGER, AGAINST IMPERFECT WORKMANSHIP, FAILURE, MALFUNCTION OF MATERIALS AND/OR EQUIPMENT DUE TO FAULTY OR IMPERFECT WORKMANSHIP.
21. THIS GUARANTEE IS TO BE IN WRITING TO THE CITY AT THE TIME OF ISSUING FINAL ACCEPTANCE. MATERIALS AND WORKMANSHIP FOUND TO BE DEFECTIVE WITHIN THE WARRANTY PERIOD SHALL BE REPLACED WITHOUT COST TO THE CITY.

ARIZONA PUBLIC SERVICE (APS) NOTES

1. CONTRACTOR SHALL CONTACT APS INSPECTOR IDENTIFIED ON THE APS CONSTRUCTION DRAWING FOR PRE-CONSTRUCTION MEETING PRIOR TO ANY EXCAVATION.
2. CONTRACTOR TO SUPPLY ALL TRENCH AND CONDUIT, PER APS REQUIREMENTS, UNLESS OTHERWISE NOTED.
3. GRADE STAKE WILL BE SET WITHIN 2' OF J-BOX LOCATION.
4. CONTRACTOR WILL COORDINATE WITH APS AND CITY OF SURPRISE FOR DE-ENERGIZING OF STREETLIGHT CONDUCTOR.
5. GROUND ROD TO BE PROVIDED AND INSTALLED BY CONTRACTOR IN APS J-BOX AT EACH STREETLIGHT LOCATION.
6. IF THE CONTRACTOR INSTALLS THE POLE, THE BARE #6 COPPER GROUND WIRE SHALL BE CONNECTED FROM THE GROUND ROD IN THE APS J-BOX TO THE GROUND CONNECTION IN THE HAND-HOLE.
7. ALL TRENCH AND CONDUIT TO BE INSPECTED BY APS, DO NOT BACKFILL UNTIL INSPECTED.
8. APS CONSTRUCTION PRINT MUST BE USED AS A TRENCHING REFERENCE. TRENCHING VARIATIONS MUST HAVE WRITTEN APS CSR APPROVAL. FOLLOW DETAILS FOR CONSTRUCTION. VARIATIONS IN TRENCH ROUTE MAY RESULT IN A REDESIGN FEE.
9. CONTACT APS FOR ALL TRENCH AND CONDUIT SPECIFICATIONS AND REQUIREMENTS.
10. CONTRACTOR IS RESPONSIBLE FOR INTEGRITY OF ALL CONDUITS UNTIL APS HAS INSTALLED CONDUCTORS.
11. CONTRACTOR IS RESPONSIBLE FOR OBTAINING REQUIRED VARIANCES PRIOR TO SUBMITTING QIP DRAWINGS TO THE UTILITIES.
12. CONTRACTOR IS RESPONSIBLE FOR VERIFYING VERTICAL AND HORIZONTAL CLEARANCES TO EXISTING OVERHEAD LINES AND POLES WHEN PLACING NEW STREETLIGHTS.

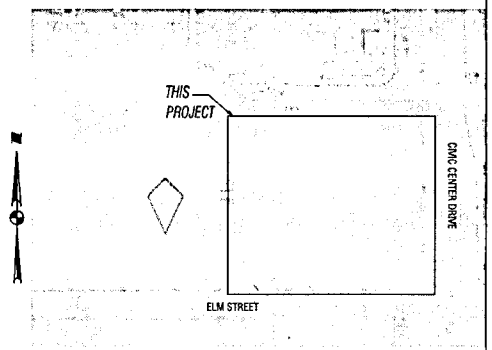
LED STREETLIGHT NOTES

COLLECTOR

1 INSTALL ONE 80W LED (8,964 LUMEN) FIXTURE WITH PHOTOELECTRIC CONTROL ON A 39'-6" POLE WITH A 6' MAST ARM PER APS DETAIL AND SPECIFICATIONS. FOUNDATION AND GROUNDING PER APS STANDARDS AND SPECIFICATIONS. POLE SHALL BE CENTERED 1'-0" BEHIND BACK OF SIDEWALK OR 4' BEHIND BACK OF CURB. INSTALL (2) #12 THWN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. INSTALL APS PULL BOX ADJACENT POLE WITH 1" FLEX CONDUIT TO POLE PER APS SPECIFICATIONS AND REQUIREMENTS. ALL WIRING, FUSING, AND GROUNDING PER APS DETAILS AND SPECIFICATIONS.

Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description
	1	EX	SINGLE	29000	0.810	SIGNIFY LUMEC 250HPS-TR20-SCB3M (EXISTING)
	1	NW	SINGLE	N.A.	0.950	SIGNIFY LUMEC TR20-80W48LED4K-G2-LE2F

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
ELM ST	Illuminance	Fc	0.80	2.8	0.2	4.00	14.00



VICINITY MAP
N.T.S.

NOTE

THE ELECTRICAL/MAINTENANCE COSTS OF ALL STREET LIGHTS ON LOCAL AND COLLECTOR STREETS ARE TO BE PAID BY THE ADJACENT PROJECT OR THE ADJACENT DEVELOPMENT'S STREET LIGHT IMPROVEMENT DISTRICT (SLID). THE ELECTRICAL/MAINTENANCE COSTS OF ALL STREET LIGHTS ON ARTERIAL STREETS ARE TO BE BILLED TO THE CITY OF SURPRISE'S ENERGY BILL.

LED NOTE

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.

CLEARANCE NOTE

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

OWNER
THOMAS THRIFT
3131 E. CAMELBACK RD. SUITE 115
PHOENIX, CA 85016
CONTACT ANGIE GRENDAHL
PHONE: 602.313.8635
AGRENDAHL@THOMPSONTHRIFT.COM

CIVIL ENGINEER
BECK CONSULTING ENGINEER, INC.
JUSTIN EVINGER
DESK: (602) 810.2975
JUSTIN.EVINGER@BECKCON.COM

DEVELOPER'S INFORMATION
THOMPSON THRIFT RETAIL GROUP
ANGIE GRENDAHL
DESK: (602) 313.8635
CELL: (602) 478.4236

SHEET INDEX

COVER SHEET	SL-1
PHOTOMETRIC PLAN SHEET	SL-2
DETAIL SHEET	SL-3
ELECTRICAL SITE PLAN SHEET	SL-4

LEGEND

NEW LED LUMINAIRE
STAND ALONE STREET LIGHT POLE
NEW #5 PULLBOX

CITY OF SURPRISE APPROVAL

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 LAWS OR ORDINANCES

CITY OF SURPRISE ENGINEER _____ DATE

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA
Call 811 or click Arizona811.com

STREET LIGHTS
CITY OF SURPRISE, ARIZONA

TIRE WORKS-SURPRISE
ELM ST. NEAR NWC OF BELL AND CIVIC CENTER DR.
SURPRISE, ARIZONA
APN 501-18-557
MARICOPA COUNTY, ARIZONA

PROJECT #:			FILE NO:	
DR:	DES:	CK:	SHEET NO:	TOTAL SHEETS
DATE:	DATE:	DATE:		
SCALE AS NOTED		QS #:	1	4

GENERAL ENGINEERING NOTES:

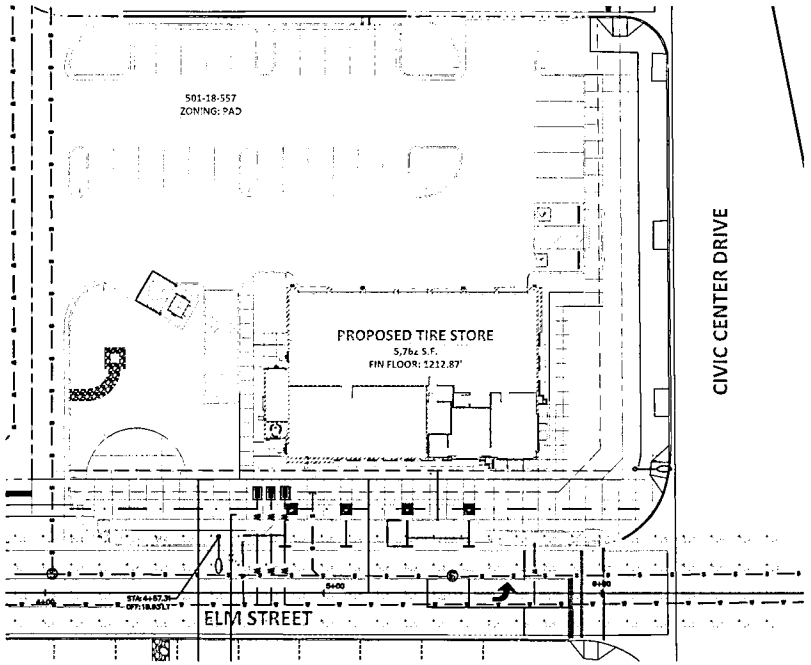
1. ALL CONSTRUCTION MUST CONFORM TO MARICOPA ASSOCIATION OF GOVERNMENT (MAG) SPECIFICATIONS AND DETAILS AND LATEST REVISIONS UNLESS OTHERWISE STATED ON PLANS.
2. THE ENGINEER WILL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES OR FOR SAFETY PRECAUTIONS OR PROGRAMS 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 8.3, 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 623-222-8150.
5. THE ENGINEER AND APPLICABLE AGENCY MUST APPROVE, PRIOR TO CONSTRUCTION, ANY ALTERATION OR VARIATION 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 OR 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 623-222-8000.
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

DATE REVISED: 8/2018	SURPRISE ARIZONA	GENERAL ENGINEERING NOTES	DETAIL NO. 2-04
APPROVED FOR DISTRIBUTION (SIGNATURE ON FILE)			SHEET 1 OF 2

GENERAL ENGINEERING NOTES (CONTINUED):

13. EMERGENCY VEHICLE ACCESS (EVA) MUST BE PROVIDED BY THE DEVELOPER/CONTRACTOR THROUGHOUT THE PROJECT SITE. EVA 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.

DATE REVISED: 8/2018	SURPRISE ARIZONA	GENERAL ENGINEERING NOTES	DETAIL NO. 2-04
APPROVED FOR DISTRIBUTION (SIGNATURE ON FILE)			SHEET 2 OF 2



1 PHOTOMETRIC STREET PLAN
SCALE: 1" = 20'-0"

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
XX	ARIZ.			

DON TULEY PE
(480) 626-1841
ARDEBU ENGINEERING, LLC.
8100 E INDIAN SCHOOL ROAD., STE 205
SCOTTSDALE, AZ 85251

DR:	DES:	CK:	DATE: 5.22.19

UTILITY REVIEW

THESE PLANS HAVE BEEN SUBMITTED TO THE FOLLOWING UTILITY COMPANIES. WHERE THE WORK TO BE DONE CONFLICTS WITH ANY OF THESE UTILITIES, THE CONFLICTS SHALL BE RESOLVED AS SPECIFIED IN THE SPECIAL PROVISIONS AND/OR AS OTHERWISE NOTED ON THESE PLANS. CONFLICTS ARISING DURING THE COURSE OF CONSTRUCTION FROM UNFORSEEN CIRUMSTANCES SHALL BE REPORTED TO THE INTERESTED UTILITY COMPANY AND BE RESOLVED BY THEM AND THE DESIGN ENGINEER.

SOUTHWEST GAS (602) 484-5649	JEREMY ELSER COMPANY REPRESENTATIVE	DATE: 5-22-19
COX CABLE (623) 328-3514	ROBERT GIBBS COMPANY REPRESENTATIVE	DATE: 5-22-19
APS ELECTRIC (623) 975-5808	CLAUDIO RIOS COMPANY REPRESENTATIVE	DATE: 5-22-19
CENTURY LINK (602) 630-1393	ANDRÉ HATCHER COMPANY REPRESENTATIVE	DATE: 5-22-19

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)

aps
Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811
Call 811 or click Arizona811.com

STREET LIGHTS
CITY OF SURPRISE, ARIZONA

TIRE WORKS-SURPRISE
ELM ST. NEAR NWC OF BELL AND CIVIC CENTER DR.
SURPRISE, ARIZONA
APN 501-18-557
MARICOPA COUNTY, ARIZONA

PROJECT #			FILE NO.	
DR:	DES:	CK:	SHEET NO:	TOTAL SHEETS
DATE:	DATE:	DATE:		
SCALE: AS NOTED		OS #:	2	4

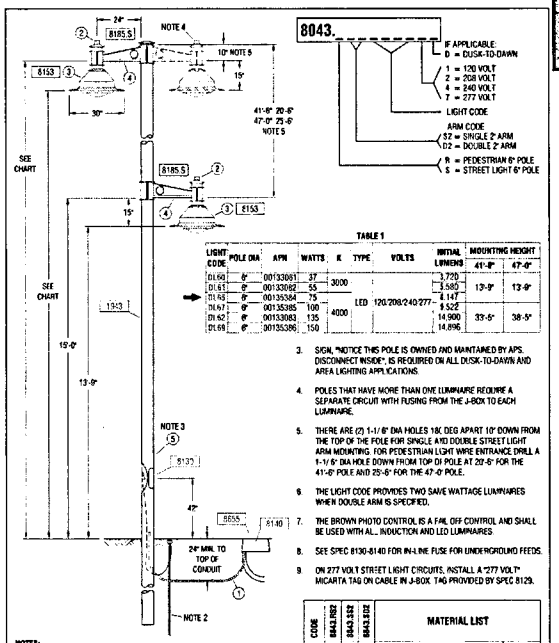


TABLE 1

LIGHT CODE	POLE DIA	APN	WATTS	K	TYPE	VOLTS	INITIAL LUMENS	MOUNTING HEIGHT 41'-0"	MOUNTING HEIGHT 47'-0"
DL60	8"	00133081	37	3000	LED	120/208/240/277~	3,720	13'-9"	13'-9"
DL61	8"	00133082	55				5,580		
DL63	8"	00135384	75				8,147		
DL67	8"	00135385	100	4000			9,522	33'-5"	38'-5"
DL62	8"	00133083	135				14,900		
DL68	8"	00135386	150				14,896		

3. SIGN, "NOTICE THIS POLE IS OWNED AND MAINTAINED BY APS. DISCONNECT INSIDE", IS REQUIRED ON ALL DUSK-TO-DAWN AND AREA LIGHTING APPLICATIONS.
4. POLES THAT HAVE MORE THAN ONE LUMINAIRE REQUIRE A SEPARATE CIRCUIT WITH FUSING FROM THE J-BOX TO EACH LUMINAIRE.
5. THERE ARE (2) 1-1/ 8" DIA HOLES 18' DEG APART 10" DOWN FROM THE TOP OF THE POLE FOR SINGLE AND DOUBLE STREET LIGHT ARM MOUNTING. FOR PEDESTRIAN LIGHT WIRE ENTRANCE DRILL A 1-1/ 6" DIA HOLE DOWN FROM TOP OF POLE AT 29'-5" FOR THE 41'-0" POLE AND 25'-5" FOR THE 47'-0" POLE.
6. THE LIGHT CODE PROVIDES TWO SAVE WATTAGE LUMINAIRES WHEN DOUBLE ARM IS SPECIFIED.
7. THE BROWN PHOTO CONTROL IS A FAIL OFF CONTROL AND SHALL BE USED WITH ALL INDUCTION AND LED LUMINAIRES.
8. SEE SPEC 8130-8140 FOR IN-LINE FUSE FOR UNDERGROUND FEEDS.
9. ON 277 VOLT STREET LIGHT CIRCUITS, INSTALL A "277 VOLT" MICARTA TAG ON CABLE IN J-BOX. TAG PROVIDED BY SPEC 8129.

NOTES:
1. ADJUST PHOTO EYE TO FACE NORTH.
2. A GROUND ROD IS PROVIDED WITH EACH STREET LIGHT POLE WHERE A GROUND ROD CANNOT BE DRIVEN, ALTERNATE GROUND SHALL BE USED. SEE 2449 THRU 2460 FOR APPROVED ALTERNATES.

CODE	8043.XXX	8043.XXX	MATERIAL LIST	
ITEM	QTY	QTY	DESCRIPTION	APN
1	10	10	CONDUIT 1" PVC FLEX CORR	32900891
2	VAR	VAR	CONTROL PHOTO MULTI BR-20	00073241
3	1	1	LUMINAIRE - SEE TABLE 1	
4	1	1	MAST ARM S TILT 2 TRANSIT 8' S	00074496
5	1	1	SIGN POLE OWNED BY APS	00050092

ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS				
BY	LDR.	MGR.	DATE	REV.
KLS	J. HORMELL	R. CANCRA	11/2018	7

LIGHTS
DECORATIVE TRANSIT LUMINAIRE ON
41'-0" AND 47'-0" STEEL DIRECT BURIED POLES WITH 2'-0" ARM WITH PEDESTRIAN OPTION

SH 1 OF 1

8043



The versatility and character of Lumec Transit LED post top and pendant luminaires is clear. Combining stunning industrial looks with outstanding photometric performance, the Transit luminaires blend modern and traditional style with leading-edge engineering that have made Lumec luminaires the perfect choice for effective urban area lighting.

TR20-80W48LED4K-G2-LE3F-UNV-DMG-RCD7-BKTX

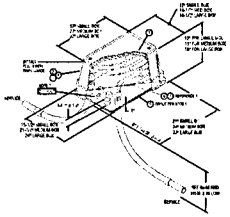
Ordering guide — example: TR20-80W48LED4K-G2-ACDR-LE3F-120-DMG-GRO-GMSTX

Series	LED module	Gen.	Globe	Optical system	Voltage	Driver options	Luminaire options	Poles/Brackets	Finish
TR20		62							
TR20	3000K 35W52LED3K[1] 55W52LED3K[1] 55WH4LED3K 72W52LED3K 80W48LED3K 4000K 35W52LED4K[1] 55W52LED4K[1] 55WH4LED4K 72W52LED4K 80W48PLF04K	G2 Gen.2	ACDR Acrylic Globe	LE2A[3] Type II (ASYM) w/globe LE3A[3] Type III (ASYM) w/globe LE4A[3] Type IV (ASYM) w/globe LE2F Type II (ASYM) w/flat glass lens LE2S Type II (ASYM) w/sag glass lens LE3F Type III (ASYM) w/flat glass lens LE3S Type III (ASYM) w/sag glass lens LE4F Type IV (ASYM) w/flat glass lens LE4S Type IV (ASYM) w/sag glass lens LE5F[1] Type V (SYMM) w/flat glass lens LE5S[1] Type V (SYMM) w/sag glass lens	120 208 240 277 347 480 UNV	AST[1] Pre-set driver for progressive start-up CSMGE25[1] 8 hrs. 25% reduction CSMGE50[1] 8 hrs. 50% reduction CSMGE75[1] 8 hrs. 75% reduction CSMGME25[1] 6 hrs. 25% reduction CSMGME50[1] 6 hrs. 50% reduction CSMGME75[1] 6 hrs. 75% reduction CSMGS25[1] 4 hrs. 25% reduction CSMGS50[1] 4 hrs. 50% reduction CSMGS75[1] 4 hrs. 75% reduction CSMGP[1] Dimming level determined by the user CLO[1] Pre-set driver to manage lumens depreciation DMG 0-10V DTL[1] Pre-set driver to signal end of life of the lamp	GRD Decorative Guard HS House Side Shield SPD 20kV/20kA Surge Protector (optional)	Consult with signify.com/outdoor/luminaires for details and the complete line of Signify poles and brackets.	Textured BKTX Black BATX Bronze GMATX Blue Green GNETX Forest Green GNSTX Dark Forest Green GNTX Green GYSTX Medium Grey RDTX Burgundy RD4TX Scarlet WHTX White Other GR Gray Sandtex RP Natural Aluminum TG Hammertone Gold

1 Not available in 347-480 volt
2 Globe Material ACDR is required with this color fit system
3 Not available with HS option

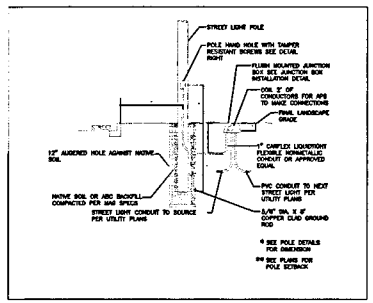
TR20-Transit-LED-spec 01/19 page 1 of 6





APS J-BOX DETAIL
1/4"=1'-0"

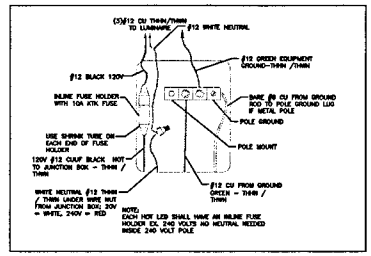
NOTES:
1. CONCRETE GROUT SHALL BE PREMIX APN 71301290 OR EQUIVALENT.
2. PENTA-HEAD BOLTS SHALL BE INSTALLED PRIOR TO ENERGIZING NEW UNDERGROUND SYSTEMS. LOST OR MISPLACED PENTA-HEAD BOLTS SHALL BE REPLACED WITH APN 71402608.
3. BRINGING ALL CABLES/CONDUITS AND GROUND ROD INTO THE SAME END OF THE BOX TO ENABLE CABLES TO BE RAISED AND LOWERED EASILY. CONDUIT SWEEPS SHALL BE POSITIONED AND ALIGNED SO THAT WHEN TWO AND FOUR POSITION JUNCTION BARS ARE SPECIFIED. THE ST, LT., SECONDARY AND SERVICE CONDUITS SHALL BE INSTALLED AS SHOWN IN DETAIL "A". WHEN SIX POSITION JUNCTION BARS ARE SPECIFIED, THE ST, LT., SECONDARY AND SERVICE CONDUITS SHALL BE INSTALLED AS SHOWN IN DETAIL "B".
4. COMPACTION BENEATH AND AROUND JUNCTION BOX SHALL BE A MINIMUM OF 95 PERCENT.
5. REPLACEMENT LID FOR MEDIUM PLASTIC JUNCTION BOX IS 33100981, PENTAHEAD BOLTS AND EMS MARKER MUST BE REUSED FROM OLD LID.
6. ADDITIONAL TRENCH DEPTH IS USUALLY REQUIRED AT ALL EQUIPMENT LOCATIONS. SEE 8048 FOR THE MINIMUM TRENCH DEPTHS AND THE DEGREE OF SLOPE ALLOWED AS THE TRENCH DEPTH CHANGES.
7. ON 277 VOLT STREET LIGHT CIRCUITS, INSTALL "277 VOLT" RED MICARTA TAG (APN 00050796) PROVIDED BY SPEC 8129.
8. TORQUE BOLTS TO 5 FT - LBS (60 IN - LBS).



POLE HAND HOLE FUSING DETAIL
3/16"=1'-0"

ELECTRICAL REQUIREMENTS FOR NEW POLE INSTALLATION

1. JUNCTION BOXES SHALL MEET UTILITY COMPANY STANDARDS.
2. CONDUIT, CONDUCTORS, AND FUSE HOLDERS SHALL BE LISTED AND LABELED FOR USE IN A WET LOCATION WHEN USED IN A JUNCTION BOX, NEC300.5(B), 310.8(C).
3. IN-LINE FUSE HOLDER USED IN HAND HOLE OR SERVICE DROP SHALL BE CONSIDERED AS DISCONNECTING MEANS. FUSE HOLDERS 0 BE RATED AT 22.000 A/C MINIMUM, NEC 240.40.
4. ELECTRICAL CONNECTION-CONDUCTORS OF DISSIMILAR METALS SHALL NOT BE INTERMIXED IN A TERMINAL OR SPLICING CONNECTOR WHERE PHYSICAL CONTACT OCCURS BETWEEN DISSIMILAR CONDUCTORS, (COPPER, ALUMINUM UNLESS THE DEVISE IS IDENTIFIED FOR THE PURPOSE AND CONDITIONS OF USE. NEC 110.14
5. ELECTRICAL CONNECTION OR SPLICES IN AN UNDERGROUND INSTALLATION SHALL BE APPROVED FOR WET LOCATIONS, NEC 300.5
6. NON CURRENT CARRYING CONDUCTIVE MATERIALS ENCLOSING ELECTRICAL CONDUCTORS OR EQUIPMENT, OR FORMING PART OF SUCH EQUIPMENT, SHALL BE CONNECTED TO EARTH IN A MANNER THAT WILL LIMIT THE VOLTAGE IMPOSED BY LIGHTING OR UNINTENTIONAL VOLTAGE DUE TO SHORT CIRCUITS AND LIMIT THE VOLTAGE TO GROUND ON THESE MATERIALS. NEC 250.4(B) (GROUND RODS)
7. AN EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED FROM THE GROUND LUG IN THE HAND-HOLE TO THE LUMINAIRE WITH THE CURRENT CARRYING CONDUCTORS. NEC 410.3(B)(3).
8. CONNECTION TO THE GROUND ROD AND THE GROUNDING ELECTRODE SHALL BE LISTED AND LABELED FOR USE. NEC 250.8
9. CONNECT #6 BARE COPPER WIRE FROM THE GROUND ROD ADJACENT TO THE POLE OR IN JUNCTION BOX TO THE GROUND LUG IN THE POLE.



GROUNDING DETAIL
3/16"=1'-0"

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)

Contact Arizona 811 at least two full working days before you begin excavation
Call 811 or click Arizona811.com

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
XX	ARIZ.			

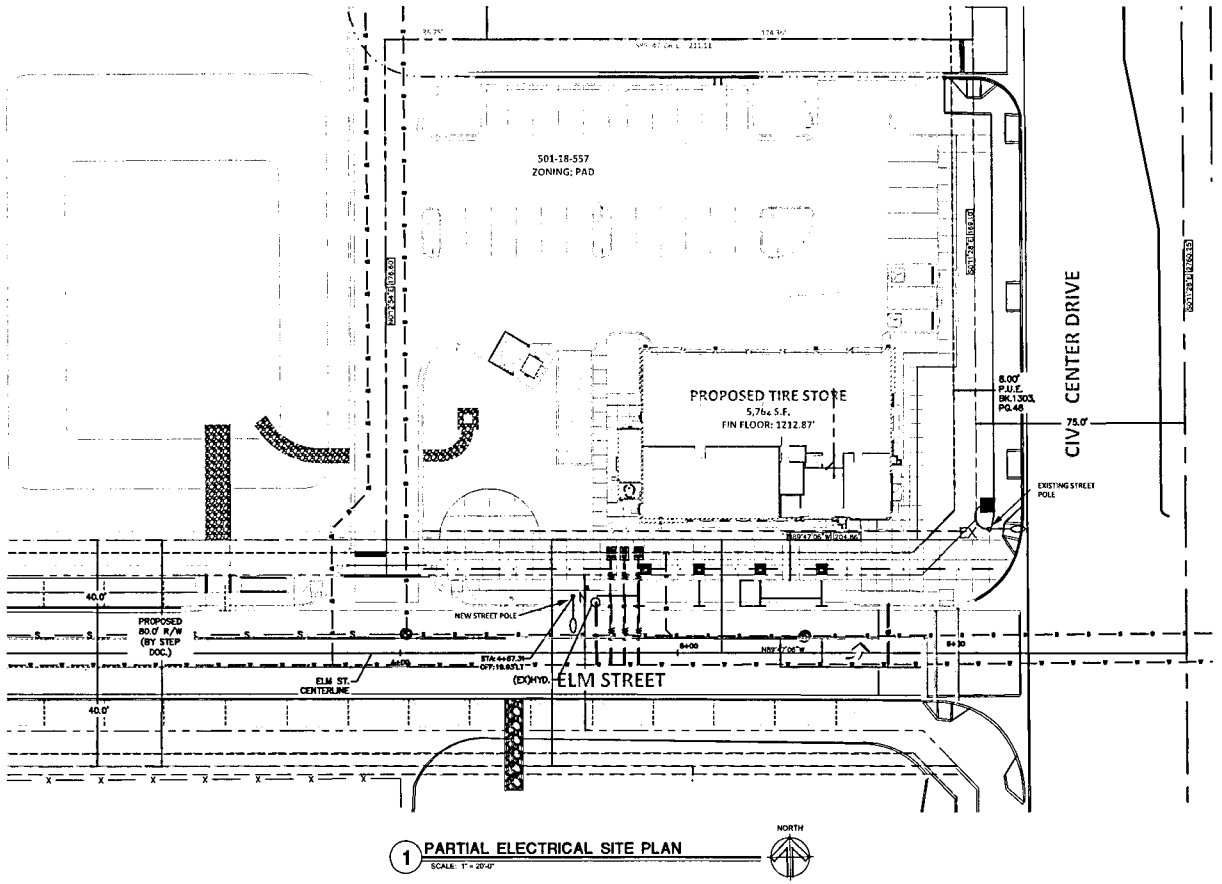
DON TULEY PE
(480) 626-1841
ARDEBILI ENGINEERING, LLC.
8100 E INDIAN SCHOOL ROAD., STE 205
SCOTTSDALE, AZ 85251

DR: | DES: | CK: | DATE: 5.22.19

STREET LIGHTS
CITY OF SURPRISE, ARIZONA

TIRE WORKS-SURPRISE
ELM ST. NEAR NWC OF BELL AND CIVIC CENTER DR.
SURPRISE, ARIZONA
APN 501-18-557
MARICOPA COUNTY, ARIZONA

PROJECT #			FILE NO.	
DR.	DES.	CK.	SHEET NO.	TOTAL SHEETS
DATE:	DATE:	DATE:		
SCALE: AS NOTED		DS. #:	3	4



1 PARTIAL ELECTRICAL SITE PLAN
SCALE: 1" = 20'-0"

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
XX	ARIZ.			

DON TULEY PE
(480) 626-1841
ARDEBILI ENGINEERING, LLC.
8100 E INDIAN SCHOOL ROAD., STE 205
SCOTTSDALE, AZ 85251

DR: | DES: | CK: | DATE: 5.22.19

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)

aps

Contact Arizona 811 at least two full working days before you begin excavation
AZ811
Call 811 or click Arizona811.com

STREET LIGHTS
CITY OF SURPRISE, ARIZONA

TIRE WORKS-SURPRISE
ELM ST. NEAR NWC OF BELL AND CIVIC CENTER DR.
SURPRISE, ARIZONA
APN 501-18-557
MARICOPA COUNTY, ARIZONA

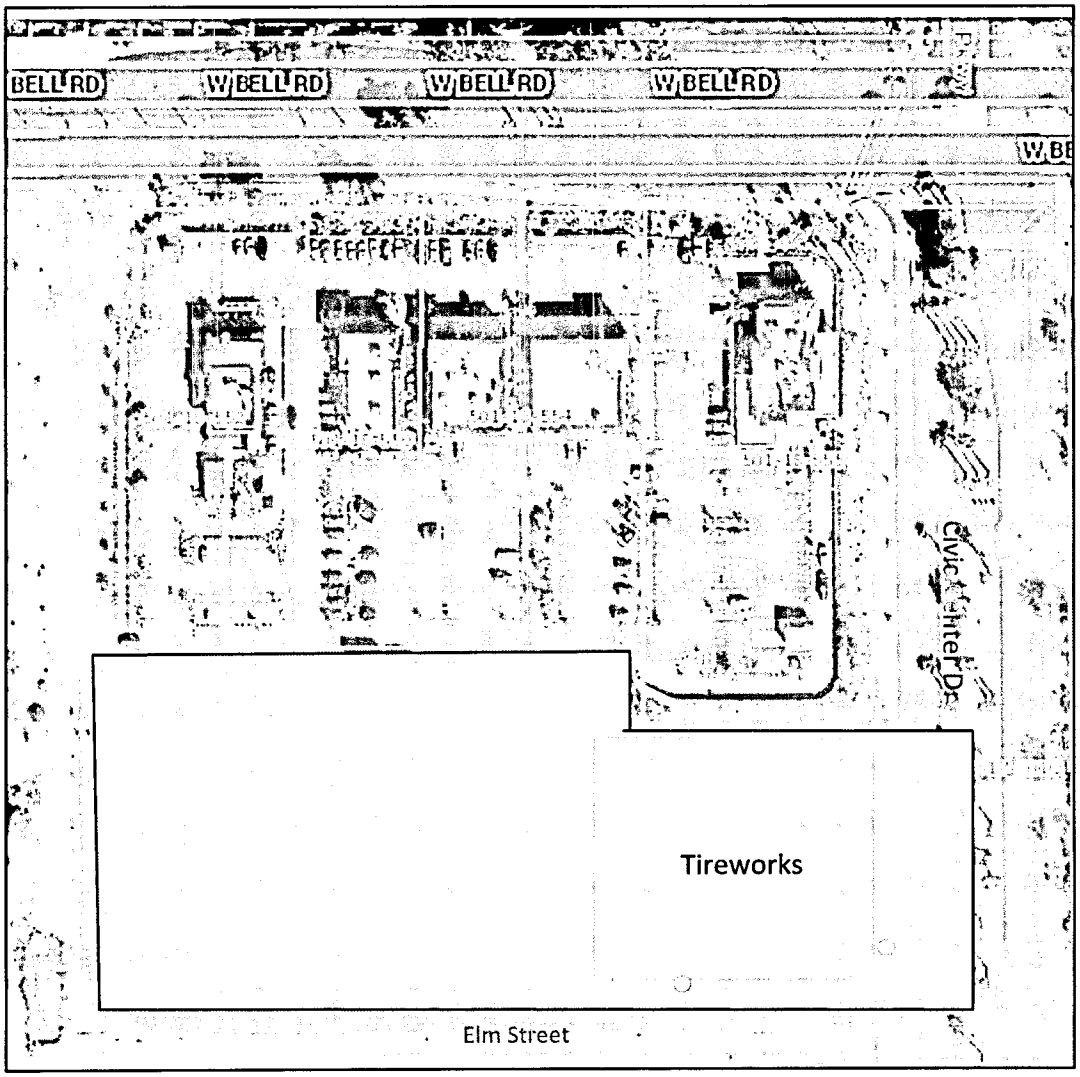
PROJECT #			FILE NO.	
DR.	DES.	CK.	SHEET NO.	TOTAL SHEETS
DATE	DATE	DATE		
SCALE: AS NOTED		QS. #	4	4

SURPRISE CENTER 190

Street Lights:

Street Light Pole

- 1 new poles
- 1 existing poles
- SLID Boundary



#5

CITY OF SURPRISE
Regular City Council Meeting

SURPRISE
ARIZONA

Council Meeting Date: October 15, 2019
Submitting Department: Public Works
Staff Recommendations: None

Contact Person: Mike Gent, DIRECTOR - PW
District: District 5

Consent: Yes Regular: No Public Hearing: No Report/Discussion: No

Agenda Wording:
Consideration and action declaring the intent to establish a street light improvement district entitled, "City of Surprise, Arizona, SU-Surprise Center 190 Lighting Improvement District" pursuant to A.R.S. § 48-616 for the purpose of purchasing facilities and energy for lighting the public streets and parks; Resolution #2019-112.

Motion:
I move to approve Resolution No. 2019-112

Background:
The City has verified that the Petition for the proposed street light improvement district contains the signatures of all of the real property owners in the district, exclusive of mortgages and other lien holders.

The City and Arizona Public Service Company ("APS") have approved the street layout and facilities design. The electric rates are established by APS tariff.

The lighting improvements are more than local or ordinary public benefit and the expenses of the district will be paid for by the levy and collection of equal apportionment taxes based on the number and classification of properties within the district.

Objective Analysis:
A SLID is a neighborhood partnership and very common practice in which property owners in a defined area agree to pay the costs to operate and maintain their immediate area's street lights through a property tax. All new developments in the City of Surprise require a SLID. This action will form the SLID boundary for the Tireworks development.

Policy Compliant:
Surprise Municipal Code requires that street lighting that serves a defined area be paid for through revenues obtained from the specific area being served by such street lighting. In these instances, a Street Light Improvement District (SLID) is formed. The city strives to assure that residents are subject to

only one SLID and that the boundaries of each SLID accurately reflect the service area. This item is consistent with these objectives.

Financial Impact:

Any financial impact on the City is anticipated to be minimal, as the Developer and District will be bearing the costs and expenses of the District and street light improvement facilities.

Budget Impact:

Funding was not included as part of the FY2020 adopted budget. A separate fund will be created to track revenue and expenses once the city starts receiving electric bills from APS for this particular SLID. If the SLID incurs expenses during FY2020, staff will return to request a budget amendment to appropriate the new fund. Regardless, the city will be unable to collect property taxes for this SLID until FY2021, at the earliest.

FTE Impact:

This action does not change the full time equivalent count.

ATTACHMENTS:

1. 01 Res 2019-112 SLID for Surprise Center 190.final
2. 02 SLID Petition - Approved
3. 03 Streetlight Plan - Approved
4. 04 Tirework Council Map

CITY OF SURPRISE
Regular City Council Meeting

Council Meeting Date: May 7, 2024
Submitting Department: Public Works
Staff Recommendations:

Contact Person: Kristin Tytler, Department Director
District: District 3

Consent: Yes Regular: No Public Hearing: No Report/Discussion: No

Agenda Wording:
Consideration and action pertaining to the immediate formation of a lighting improvement district known as City of Surprise, Arizona, SU-PRASADASWTWATER210 pursuant to A.R.S. § 48-616 for the purpose of purchasing facilities and energy for lighting the public streets; Resolution #2024-64.

Motion:
I move to approve Resolution #2024-64.

Background:
The City has verified that the Petition for the proposed street light improvement district contains the signatures of all the real property owners in the district, exclusive of mortgagees and other lien holders.

The City and Arizona Public Service Company ("APS") have approved the street layout and facilities design. The electric rates are established by APS tariff.

The lighting improvements are more than local or ordinary public benefits, and the expenses of the district will be paid for by the levy and collection of ad valorem taxes based upon the assessed value of all property in the District.

Objective Analysis:
A SLID is a neighborhood partnership and very common practice in which property owners in a defined area agree to pay the costs to operate and maintain their immediate area's streetlights through a property tax. All new developments in the City of Surprise require a SLID. This action will form the SLID boundary for the Prasada 3-story development.

Policy Compliant:
The Surprise Municipal Code requires that street lighting that serves a defined area be paid for through revenues obtained from the specific area being served by such street lighting. In these instances, a Street Light Improvement District (SLID) is formed. The city strives to assure that residents are subject to only one SLID and that the boundaries of each SLID accurately reflect the service area. This item is consistent with these objectives.

Financial Impact:

Once the SLID is illuminated, the City will begin levying the SLID to cover SLID expenses. At the current time, the SLID is not incurring any expense because the SLID lights have not been illuminated. Therefore, there is no current financial impact.

Budget Impact:

Since the SLID is not illuminated, there is no revenue or expense budgeted in FY2024 nor are there budgets planned for FY2025 for the SLID. If the SLID is illuminated in FY2024 or FY2025, expenses will be charged to the SLID and recouped with a future levy. A separate fund for this district will be created to track the revenue and expenses.

FTE Impact:

This item does not have an impact on current staff levels.

ATTACHMENTS:

1. 01 Res 2024-64 PRASADASWTWATER210_final
2. 02 Petition
3. 03 streetlight plan
4. 04 council map

RESOLUTION # 2024-64

A RESOLUTION OF THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE, ARIZONA, DECLARING ITS INTENTION TO ESTABLISH A STREET LIGHT IMPROVEMENT DISTRICT TO PURCHASE ENERGY FOR LIGHTING THE PUBLIC STREETS AND PARKS IN THE AREA WITHIN THE CORPORATE LIMITS OF THE CITY OF SURPRISE, ARIZONA DESCRIBED ON EXHIBIT A, ATTACHED HERETO; DECLARING SUCH IMPROVEMENTS TO BE OF MORE THAN LOCAL OR ORDINARY PUBLIC BENEFIT AND THAT THE EXPENSES THEREOF BE PAID FOR BY THE LEVY AND COLLECTION OF AD VALOREM TAXES UPON THE ASSESSED VALUATION OF ALL REAL AND PERSONAL PROPERTY IN A CERTAIN DISTRICT TO BE KNOWN AS "CITY OF SURPRISE, ARIZONA, SU-PRASADASWTWATER210 LIGHTING IMPROVEMENT DISTRICT"; AND ORDERING THAT SUCH IMPROVEMENTS BE PROVIDED FOR UNDER THE PROVISIONS OF SECTION 48-572, ARIZONA REVISED STATUTES.

WHEREAS, the owners, exclusive of mortgagees and other lienholders, of all of the real property (hereinafter referred to as "Petitioner") in the hereinafter described District, acting pursuant to the provisions of Sections 48-615(A) and 48-617(A), Arizona Revised Statutes, have petitioned the Mayor and Council of the City of Surprise, Arizona (hereinafter referred to as "City"), to adopt a resolution of intention (hereinafter referred to as "Resolution") ordering the purchase of energy for the lighting of the public street and parks (hereinafter referred to as "Improvements") for the real property legally described in Exhibit A (such area hereinafter referred to as the "District") with such boundaries as shown in the map in Exhibit B attached hereto pursuant to the provisions of Section 48-576, Arizona Revised Statutes, giving the City immediate jurisdiction to order the improvements pursuant to the provisions of Section 48-581, Arizona Revised Statutes, without the necessity of the publications or posting of this Resolution provided for in Sections 48-578, Arizona Revised Statutes;

WHEREAS, the City has verified that Petitioner is the owner, exclusive of mortgagees and other lienholders, of all of the real property included within the boundaries of the District, and;

WHEREAS, the Mayor and Council of the City hereby find and determine that they have jurisdiction to adopt this Resolution to order the Improvements pursuant to the provisions of Section 48-576, Arizona Revised Statutes, and have immediate jurisdiction to adopt this Resolution ordering the Improvements pursuant to the provisions of Section 48-581, Arizona Revised Statutes without the necessity of publications and posting of this Resolution as provided for in Section 48-578, Arizona Revised Statutes;

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Surprise, Arizona, as follows.

Section 1. The City, after verifying ownership of the real property included within the boundaries of the District, hereby finds the Petitioner is the owner, exclusive of mortgagees and other lienholders, of all of the real property included within the boundaries of the District.

Section 2. The name of the District shall be "CITY OF SURPRISE, ARIZONA, SU-PRASADASWTWATER210 LIGHTING IMPROVEMENT DISTRICT."

Section 3. The District is formed, and shall exist, pursuant to the provisions of Title 48, Chapter 4, Article 2, Arizona Revised Statutes, and Section 48-616, Arizona Revised Statutes.

Section 4. The public interest or convenience requires, and it is the intention of the Mayor and Council of the City to order the Improvement as so described above.

Section 5. The Improvements, in the opinion of the Mayor and Council of the City, are of more than local or ordinary public benefit and are of special benefit to the respective lots, pieces and parcels of real property in the District, and the Mayor and Council of the City hereby make and order the expense of the Improvements payable from the levying and collection of ad valorem taxes upon the assessed value of all real and personal property in the District to be known and designated as "CITY OF SURPRISE, ARIZONA SU-PRASADASWTWATER210 LIGHTING IMPROVEMENT DISTRICT" and hereby declare that the District is as legally described on Exhibit A attached hereto with the boundaries as shown in the map in Exhibit B attached hereto. Any public street or alley within the District shall be omitted from the assessment. Any lot belonging to the United States, the State, a county, city, school district or political subdivision or institution of the state or county within the District shall be omitted from the assessment.

Section 6. The Superintendent of Streets or equivalent of the City shall not be required to post or cause to be posted notices of the Resolution of Intention. The Clerk of the City shall certify to the passage of this Resolution of Intention but shall not be required to cause the same to be published in a newspaper published and of general circulation in the City.

Section 7. The Mayor and Council of the City shall make annual statements and estimates of the expenses of the district, which shall be provided for by the levy and collection of ad valorem taxes upon the assessed value of all the real and personal property in the District; shall publish notice thereof; shall have hearings thereon; and shall adopt them at the times and in the manner provided for incorporated cities and towns by the applicable portions of Section 42-17101, et seq., 42-17152, Arizona Revised Statutes. The Mayor and Council of the City shall, on or before the third Monday in August of each year, fix, levy and assess the amount to be raised by ad valorem taxes upon all of the property of the District and collect, as Maricopa County, Arizona (the "County") taxes are collected, the amounts shown by the statements and estimates as adopted by the Mayor and Council of the City. All statutes providing for the levy and collection of State of Arizona and County taxes, shall be applicable to District taxes as provided to be levied under Section 48-616, Arizona Revised Statutes.

Section 8. The District shall not be authorized to issue bonds and no assessment for District purposes against the property within the District shall exceed One Dollar and Twenty Cents ($1.20) per each hundred dollars of taxable valuation thereof in any year.

Section 9. The District shall not engage in any activity other than as provided in Section 48-616, Arizona Revised Statutes, i.e., contracting for and purchasing of energy for street and public park lighting.

Section 10. The formation of the District shall not be considered as preventing the subsequent establishment of improvement districts for any other purpose authorized by law, including improvement districts for the purpose of construction street lighting facilities within any part or all of the same territory as the District.

Section 11. The type of lighting facilities to be installed in the District and the locations thereof shall consist of those lighting facilities and locations described in the petition submitted by Petitioner, or as may be approved by the City.

Section 12. The rate to be paid for purchasing the energy for the District shall be the rate described in the petition submitted by Petitioner, or as may be approved by the Arizona Public Service Company.

Section 13. Any resolutions or parts of resolutions in conflict with the provisions of this Resolution are hereby repealed.

APPROVED AND ADOPTED this_____day of _____2024.

Skip Hall, Mayor

Attest:

Kristi Passarelli, City Clerk

Approved as to form:

Robert Wingo, City Attorney

Exhibit A
Street Light Improvement District

That portion of the Northeast quarter of Section 13, Township 3 North, Range 2 West of the Gila and Salt River Meridian, Maricopa County, Arizona, being more particularly described as follows:

COMMENCING at the East Quarter corner of said Section 13 from which the Northeast corner of said Section 13 bears North 00 degrees 26 minutes 48 seconds West, a distance of 2635.23 feet;

THENCE North 89 degrees 45 minutes 42 seconds West, along the east-west mid-section line of said Section 13 and the centerline of Sweetwater Avenue, as shown on the Final Plat for Prasada – Phase 1B South, as recorded in Book 954, Page 50, Maricopa County Records (MCR), a distance of 316.08 feet to the TRUE POINT OF BEGINNING;

THENCE North 89 degrees 45 minutes 42 seconds West, a distance of 899.88 feet to the centerline of Prasada Parkway, as shown on the Final Plat of Village at Prasada, as recorded in Book 1628, Page 16, MCR;

THENCE leaving said east-west mid-section line and the centerline of Sweetwater Avenue, North 00 degrees 14 minutes 18 seconds East, along said centerline of Prasada Parkway, a distance of 1063.16 feet to the beginning of a tangent curve to the left;

THENCE along said curve to the left through a central angle of 12 degrees 21 minutes 27 seconds, having a radius of 1200.00 feet, an arc length of 258.81 feet, and whose long chord bears North 05 degrees 56 minutes 26 seconds West, a distance of 258.31 feet to said curve's end;

THENCE North 12 degrees 07 minutes 09 seconds West, a distance of 99.68 feet to the centerline of Alexandria Way, as shown on the Replat of Lot 5, as recorded in Book 1584, Page 22, MCR;

THENCE leaving said centerline of Prasada Parkway, North 77 degrees 52 minutes 51 seconds East, along said centerline of Alexandria Way, a distance of 136.03 feet to the beginning of a tangent curve to the left;

THENCE along said curve to the left through a central angle of 09 degrees 55 minutes 16 seconds, having a radius of 397.00 feet, an arc length of 68.74 feet, and whose long chord bears North 72 degrees 55 minutes 13 seconds East, a distance of 68.66 feet to said curve's end;

THENCE North 67 degrees 57 minutes 35 seconds East, a distance of 533.35 feet to the centerline of 163rd Drive, as shown on said Final Plat of Prasada – Phase 1B South;

THENCE leaving said centerline of Alexandria Way, South 22 degrees 02 minutes 25 seconds East, along said centerline of 163rd Drive, a distance of 489.16 feet to the beginning of a tangent curve to the right;

THENCE along said curve to the right through a central angle of 22 degrees 29 minutes 13 seconds, having a radius of 1000.00 feet, an arc length of 392.47 feet, and whose long chord bears South 10 degrees 47 minutes 48 seconds East, a distance of 389.96 feet to said curve's end;

THENCE South 00 degrees 26 minutes 48 seconds West, a distance of 833.71 feet to the TRUE POINT OF BEGINNING.

Containing 1,343,816 square feet or 30.850 acres, more or less.

Subject to existing right-of-way and easements.

Robert S. Unger, R.L.S.
Registered Land Surveyor
Arizona Registration No. 35306

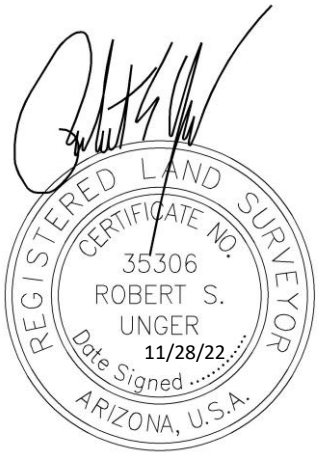
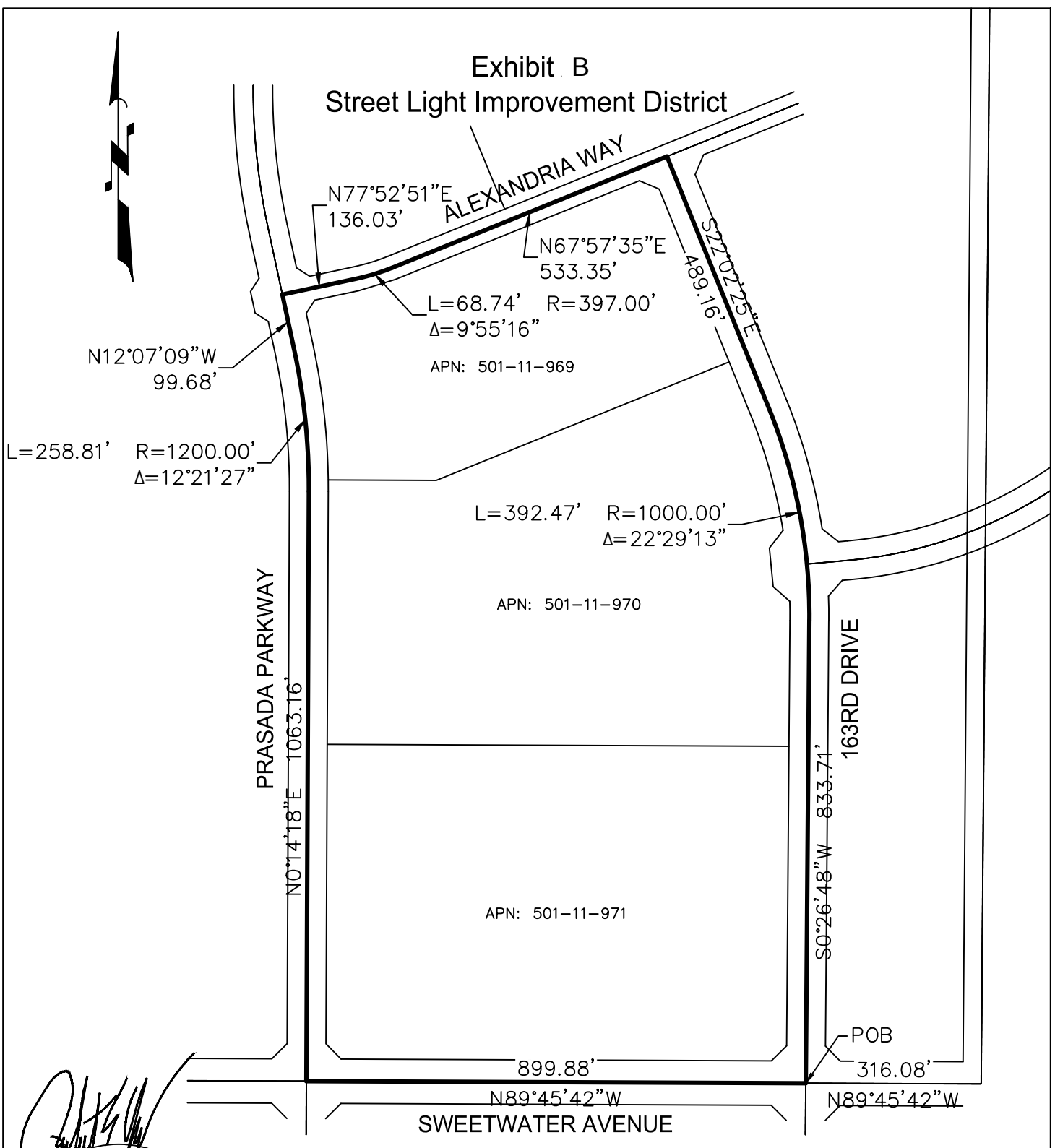


Exhibit B
Street Light Improvement District



REGISTERED LAND SURVEYOR
CERTIFICATE NO.
35306
ROBERT S.
UNGER
Date Signed 11/28/22
ARIZONA, U.S.A.

TITLE:	PRASADA
DATE:	11/28/22
DESC:	STREET LIGHT IMPROVEMENT DISTRICT

SYNERGY GEOMATICS
2125 E. 5th STREET, #101
TEMPE, AZ 85281
PH: (480) 406-3648
EMAIL: rob@syn-geo.com

STREET LIGHT IMPROVEMENT DISTRICT PETITION

TO THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE:

We, the undersigned, are all or a majority of the real property owners, exclusive of mortgagees and other lienholders, within the district named below. We petition the City Council of the City of Surprise, Arizona, to establish a street light improvement district under Arizona Revised Statutes (A.R.S.) §48-571 to 48-622, and any amendments, and specifically A.R.S. §48-615 to 48-617, to purchase electricity for lighting the public streets and/or parks within the district whose boundaries and area is described in Exhibits A and B attached hereto. This petition includes a charge for maintaining the lighting facilities.

It is hereby requested that, in compliance with the Arizona Revised Statutes, the City Council adopt a Resolution of Intention to order the proposed improvements, and that unless protests are received pursuant to A.R.S. §48-579 sufficient to bar further proceedings, the City Council proceed with the improvements petitioned for herein.

Expenses of the District (**PICK ONE)**

- ✓ shall be paid by the levy and collection of ad valorem taxes upon assessed value of all property in the District
- ○ shall be paid by the levy and collection of equal apportionment of taxes based on the number and classification of properties within the District.

Public convenience, necessity and welfare will be promoted by the establishment of the District and the real property within the District will be benefited by the District. Additional street lighting facilities may be installed and included in the District, at no investment cost to the District, as directed by the City and as approved by Arizona Public Service and the City Engineer.

WHEREFORE, we respectfully ask that this Petition be properly filed and that the Mayor and Council of the City adopt the Resolution and take such other action as is proper, necessary and appropriate to form the District and to fulfill the purposes for which the District is organized, as the Mayor and Council believe is proper and necessary.

The name of the proposed street light improvements district shall be:
SU-PrasadsaSwtwater210
(Leave Blank - to be assigned by City staff)

PETITIONERS: Please print and sign your name

PRINT BUSINESS/ PETITIONER'S NAME	ADDRESS OF PROPERTY OWNED WITHIN DISTRICT	ASSESSOR PARCEL #	SIGNATURE
Prasada Land JST, LLC	NEC of Sweetwater and Prasada Parkway	501-11-970	
Prasada Land JST, LLC	NEC of Sweetwater and Prasada Parkway	501-11-971	
Prasada Land JST, LLC	NEC of Sweetwater and Prasda Parkway	501-11-969	

AVAILABILITY

This rate schedule is applicable to those portions of cities, towns and unincorporated communities in which the Company does a general retail electric business and where the Company has installed a multiple or series street lighting system of adequate capacity for the service to be rendered after December 1, 2021.

DESCRIPTION

E-68 is a rate that is applicable for lighting public streets, alleys, thoroughfares, public parks and playgrounds from dusk to dawn by use of Company's facilities.

TIME PERIOD

Dusk: The time between sunset and full night when photocontrol senses the lack of sufficient sunlight and turns on the lights.

Dawn: The time between full night and sunrise when a photocontrol senses sufficient sunlight to turn off lights.

CHARGES

The monthly bill will consist of the fixture and energy charges, plus adjustments:

I. FIXTURES (Includes Mounting Arm, if applicable)

Fixture Equipment Class	Fixture Cost Range (per unit)	Investment by Company Monthly Rate	Investment by Others Monthly Rate
A	$ 1 - $ 430	$5.72	$1.75
B	$ 431 - $ 520	$6.97	$2.12
C	$ 521 - $ 640	$8.36	$2.60
D	$ 641 - $ 820	$9.99	$3.32
E	$ 821 - $ 910	$12.64	$3.68
F	$ 911 - $ 1,010	$14.07	$4.08
G	$ 1,011 - $ 1,110	$15.38	$4.49
H	$ 1,111 - $ 1,250	$17.44	$5.04
I	$ 1,251 - $ 1,520	$19.40	$6.12
J	$ 1,521 - $ 1,670	$23.65	$6.73
K	$ 1,671 - $ 1,850	$26.29	$7.45

Note: Equipment cost greater than $1,850 shall be Customer owned.

II. ENERGY (Includes Generation, T&D, RCS & SBC)

Monthly energy charges for new lighting fixtures will be determined by the Company using the following method:

kWh = Fixture Wattage x 344 Usage Hours

Generation = kWh per month x $ 0.06621

T&D, RCS, System Benefits = kWh per month x $ 0.02682

NOTES:

1. Investment by Company. These rates are applicable where the Company provides the initial investment to purchase and install all facilities necessary for street lighting service. The Company will own, operate, and maintain the street lighting system.

2. Investment by Others. These rates are applicable in those instances where the requesting entity or individual purchases and installs the street lighting facilities at their own expense and in accordance with Company specifications. These rates will also apply in the instance where the Customer provides a non-refundable advance to the Company to cover the Company's cost of purchasing and installing the street lighting system. The Company retains ownership of the street lighting system and provides operation and maintenance for all facilities.

3. Listed kWh reflects the assigned monthly energy usage for each type of fixture and are used to determine any applicable transmission, system benefit, distribution, energy, and adjustment charges.

4. kWh is determined by the company based on the rated wattage of the equipment and an established average hourly usage per month.

5. The monthly rate for all new poles includes up to 300 feet of overhead secondary wire, or up to 300 feet of underground secondary wire if the Customer provides earthwork and conduit (excluding the underground to overhead transition).

III. POLES

				CHARGES	
			Height	Investment by Company	Investment by Others
A. Anchor Base Mounted (Flush)	Round Steel	1 Simplex Adapter	12 ft.	$12.84	$1.77
			22 ft.	$14.45	$1.99
			25 ft.	$15.64	$2.16
			30 ft.	$17.96	$2.47
			32 ft.	$18.87	$2.50
		2 Simplex Adapters	12 ft.	$13.69	$1.89
			22 ft.	$15.73	$2.17
			25 ft.	$16.41	$2.26
			30 ft.	$19.07	$2.63
			32 ft.	$20.34	$2.81
	Square Steel	5"	13 ft.	$14.72	$2.02
			15 ft.	$13.15	$1.81
			23 ft.	$15.60	$2.15
			25 ft.	$17.15	$2.36
			28 ft.	$19.04	$2.62
			32 ft.	$18.93	$2.61
	Concrete		12 ft.	$43.87	$6.04
	Fiberglass		12 ft.	$37.15	$5.11
	Decorative Transit	4"	16 ft.	$36.22	$5.00
	Decorative Transit	6"	30 ft.	$69.93	$9.63
	Hinged Poles	Square	15 ft.	$13.92	$1.14
		Round	19 ft.	$12.59	$1.03
B. Anchor Base Mounted (Pedestal)	Round Steel	1 Simplex Adapter	12 ft.	$12.35	$1.69
			22 ft.	$13.97	$1.92
			25 ft.	$15.14	$2.09
			30 ft.	$17.48	$2.42
			32 ft.	$18.37	$2.53
		2 Simplex Adapters	12 ft.	$13.19	$1.81
			22 ft.	$14.74	$2.02
			25 ft.	$15.91	$2.18
			30 ft.	$18.58	$2.55
			32 ft.	$19.84	$2.73
		3 Bolt	32 ft.	$22.80	$3.13
	Square Steel	5"	13 ft.	$14.24	$1.97
			15 ft.	$14.56	$1.99
			23 ft.	$15.11	$2.09
			25 ft.	$16.67	$2.31
			28 ft.	$18.52	$2.55
			32 ft.	$19.23	$2.63

III. POLES (cont.)

				CHARGES	
			Height	Investment by Company	Investment by Others
C. Direct Bury	Round Steel		19 ft.	$19.43	$2.68
			30 ft.	$15.17	$2.81
			38 ft.	$18.51	$2.88
		Self	40 ft.	$22.80	$3.61
		Stepped	25 ft.	$52.45	$4.28
			32 ft.	$55.24	$4.51
			49 ft.	$68.57	$9.45
	Square Steel	4"	34 ft.	$16.74	$2.90
		5"	20 ft.	$15.90	$2.63
			30 ft.	$16.57	$2.73
			38 ft.	$17.98	$3.12
		8"	28 ft.	$30.01	$2.44
			32 ft.	$31.37	$2.57
	Decorative Transit		41 ft 6	$21.60	$3.17
	Decorative Transit		47 ft.	$26.91	$3.96
	Steel Distribution Pole (for lighting only)		35 ft.	$24.84	$3.27
D. Post Top	Decorative Transit Anchor Base		16 ft.	$37.00	$5.08
	Gray Steel/Fiberglass		23 ft.	$12.83	$2.11
	Black Steel		23 ft.	$14.14	$2.33
E. Existing distribution pole suitable for streetlight use				$1.56	--

IV. ANCHOR BASE

			CHARGES	
		Height	Investment by Company	Investment by Others
A. Flush		4 ft.	$10.45	$1.44
		6 ft.	$12.47	$2.16
B. Pedestal		8 ft.	$14.29	$2.49
	For 32' Round Steel Pole only	4 ft. 6"	$9.91	$1.71

V. CHARGES FOR OPTIONAL OR ADDITIONAL COMPANY OWNED EQUIPMENT

Underground Circuit Charges	
a. Per foot of cable, installed under paving	$0.16652
b. Per foot of cable, not installed under paving	$0.05877

TRIP CHARGE

A $150.00 trip charge per light will be charged when a Customer requests a disconnect or reconnect of service in order to accommodate the maintenance activities of the Customer or its designee(s) on their street lighting equipment.

ADJUSTMENTS

The bill will include the following adjustments:

1. The Renewable Energy Standard charge, Adjustment Schedule REAC-1.
2. The Power Supply Adjustment charges, Adjustment Schedule PSA-1.
3. The Transmission Cost Adjustment charge, Adjustment Schedule TCA-1.
4. The Environmental Improvement Surcharge, Adjustment Schedule EIS.
5. The Demand Side Management Adjustment charge, Adjustment Schedule DSMAC-1.
6. Direct Access Customers returning to Standard Offer service may be subject to a Returning Customer Direct Access Charge, Adjustment Schedule RCDAC-1.
7. The Tax Expense Adjustor Mechanism charge, Adjustment Schedule TEAM
8. Any applicable taxes and governmental fees that are assessed on APS's revenues, prices, sales volume, or generation volume.

SERVICE DETAILS

1. Street lighting facilities installed under this rate schedule are of the type currently being furnished by Company as standard at the time service is initially requested. Standard facilities are those listed in the Company's Transmission and Distribution Construction Standards book.

2. The Customer's bill will not be reduced due to photocontrol or cable repair or replacement outages.

3. Non-standard facilities (non-standard being defined as any facility not listed in the Company's Transmission and Distribution Construction Standards book) do not qualify for this rate schedule. At the Company's discretion, such facilities may be served under another of the Company's rate schedules.

4. The Company will extend its standard street lighting system up to a distance of 300 feet for each additional lighting installation without cost at the request of the Customer. When the extension is underground, the customer will provide earthwork as specified in the Company's Service Schedule 3, Conditions Governing Extensions of Electric Distribution Lines and Services; or, at the applicant's request, the Company will provide such earthwork and the applicant will be required to pay a non-refundable contribution in aid of construction equal to the cost of such earthwork. Any additional extension required (over and above the first 300 feet) will be provided by Company for a contribution in aid of construction equal to the cost of the additional extension.

    a. Extensions to isolated areas requiring a substantial extension of the electric distribution system, as opposed to an extension of the street lighting system, will require a special study to determine the terms and conditions under which the Company will undertake such an extension.

5. APS provides electric service under the Company's Service Schedules. These schedules provide details about how the Company serves its Customers, and they have provisions and charges that may affect the Customer's bill. In addition, service may be subject to special terms and conditions as provided for in a Customer contract, maintenance, or service agreement.

RESIDENCES AT PRASADA

ARIZONA HIGHYWAY 303 AND WADDELL RD

STREET LIGHT DESIGN

STREET LIGHTING REQUIREMENTS

5.00 GENERAL NOTES:

THE FOLLOWING INFORMATION IS PROVIDED TO EMPHASIZE CRITICAL WORK AND IS INTENDED TO SUPPLEMENT THE SPECIFICATIONS. SHOULD THERE BE A CONFLICT WITH THE SPECIFICATIONS, THIS DOCUMENT SHALL TAKE PRECEDENCE.

ALTERNATES SHALL BE PRE-APPROVED BY THE CITY ENGINEERING MANAGER. APPROVAL OF ALTERNATE PRODUCTS SHALL BE ON AN EQUAL BASIS WITH THE PRODUCT SPECIFIED AND SHALL BE SUBMITTED A MINIMUM OF TEN (10) DAYS PRIOR TO BID OPENING. STRUCTURAL CALCULATIONS SHALL BE FURNISHED FOR ALTERNATE PRODUCTS AND CERTIFIED BY A STRUCTURAL ENGINEER, REGISTERED IN THE STATE OF ARIZONA. LUMINAIRES AND LAMPS SHALL MEET OR EXCEED THE PHOTOMETRIC, ELECTRICAL, AND MECHANICAL REQUIREMENTS FOR THE SPECIFIED PRODUCTS.

THE CONTRACTOR SHALL COMPLY WITH STATE AND CITY STATUTES, AND MANUFACTURER'S RECOMMENDATIONS.

THE SUBMITTAL PACKAGE SHALL CONSIST OF THREE (3) COPIES OF EQUIPMENT/MATERIAL TO BE INSTALLED AND SHALL BE BOUND/STAPLED IN A FOLDER AND SUBMITTED AT THE TIME OF PERMIT APPLICATION.

PRIOR TO SUBMITTING A PROPOSAL, THE BIDDER SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS AND VISIT THE CONSTRUCTION SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL OPERATE AND WHICH WILL IN ANY WAY AFFECT THE WORK UNDER THE CONTRACT. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN THIS CONNECTION IN THE BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLIGENCE ON HIS PART.

PRIOR TO ORDERING ANY MATERIALS OR DOING ANY WORK, THE CONTRACTOR SHOULD VERIFY DIMENSIONS AT THE SITE. IMMEDIATELY REPORT DIFFERENCES TO THE ENGINEERING MGR. AND SHOULD NOT PROCEED WITH WORK UNTIL THE ENGINEERING MGR. RENDERS A DECISION. NO EXTRA CHARGES OR COMPENSATION WILL BE ALLOWED FOR DIFFERENCES IN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE DRAWINGS.

5.01 GENERAL:

THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH ALL LICENSING REQUIREMENTS SET FORTH BY THE STATE REGISTRAR OF CONTRACTORS OFFICE TO PERFORM WORK RELATING TO STREET LIGHT INSTALLATION IN THE CITY RIGHT-OF-WAY.

ONE PROJECT UNDERGROUND UTILITIES (RIGHT OF WAY) PERMIT AND ONE STREETLIGHT PERMIT FOR EACH STREET LIGHT POLE SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

5.02 WORKING / "AS BUILT" PLANS:

ACCEPTANCE OF THE COMPLETED IMPROVEMENTS WILL NOT BE GIVEN UNTIL 4 MIL PHOTO MYLAR REPRODUCIBLE "AS BUILT" PLANS HAVE BEEN SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

5.03 LIGHT POLES:

LIGHT POLES SHALL BE INSTALLED PLUMB, BE ADJUSTED TO PROVIDE PROPER ALIGNMENT TO THE ROADWAY BEING LIGHTED AND BE PROPERLY GROUNDED WHEN THE INSTALLATION IS COMPLETE.

5.04 EMBEDMENT:

DIRECT BURIED POLES SHALL BE SET IN A TWELVE (12) INCH AUGURED HOLE DEPTH AS SPECIFIED IN UNDISTURBED EARTH. POLE SHALL BE SET PLUMB IN TWO DIRECTIONS 90 DEGREES APART. HAND TAMPING OF ABC BACKFILL WITH PNEUMATIC OR VIBRATING EQUIPMENT IS THE ACCEPTABLE METHOD OF COMPACTION. BACKFILL SHALL BE COMPACTED TO 85% OF MAXIMUM DENSITY AS DEFINED BY ASTM D-2922 AND D-3017. A GROUND ROD SHALL BE INSTALLED ADJACENT TO PULL BOX IN UNDISTURBED SOIL AND A LEAD IN COPPER BOND WIRE (#6) SHALL BE INSTALLED IN 1" CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT (OR EQUAL) FOR POLE GROUNDING.

SURPLUS EXCAVATION SHALL BE DISPOSED OF BY THE CONTRACTOR.

5.05 LUMINAIRES:

LUMINAIRES SHALL BE INSTALLED LEVEL AND INCLUDE A LAMP AND PHOTOCELL. CONTRACTOR SHALL ASSURE THAT THE LUMINAIRES SHALL BE FREE OF DUST, DIRT OR ANYTHING THAT WOULD IMPAIR THE OUTPUT OF THE LIGHT BEFORE HE LEAVES THE SITE.

LUMINAIRES FURNISHED WITH MULTI-TAP BALLASTS SHALL BE REWIRED OR RECONNECTED TO MATCH THE VOLTAGE SUPPLIED BY THE ELECTRIC UTILITY COMPANY.

5.06 WIRING:

WIRING SHALL BE INSTALLED PER UTILITY STANDARDS.

5.07 GROUNDING:

EACH POLE SHALL HAVE A 8' X 5/8" COPPER CLAD GROUND ROD DRIVEN ADJACENT TO PULL BOX. A #6 BARE COPPER LEAD FROM THE GROUND ROD IN PULL BOX TO LANDING LUG IN STREET LIGHT POLE HAND HOLE.

5.08 PULL BOXES:

EXCAVATION FOR PULL BOXES AND MATERIAL SPECIFICATION SHALL BE PER THE ELECTRIC UTILITY COMPANY STANDARDS.

5.09 TRENCH

TRENCH SHALL BE INSTALLED PER THE UTILITY COMPANY STANDARDS.

THE USE OF A COMMON ELECTRIC UTILITY COMPANY TRENCH IS PERMITTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANY FOR COORDINATION OF TRENCHING AND THE INSTALLATION OF CONDUIT.

CONDUIT SHALL BE INSTALLED AT THE DEPTH SPECIFIED ON THE PLANS. CONDUIT SHALL BE 1 INCH CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT OR EQUAL. CONDUIT MUST BE UL RATED AND SUITABLE FOR UNDERGROUND USE.

CONNECTIONS SHALL BE PER UTILITY STANDARDS.

5.12 LIGHT POLE IDENTIFICATION:

THE CONTRACTOR SHALL FURNISH AND INSTALL A NUMBER ON EACH LIGHT POLE. STREET LIGHT POLE IDENTIFICATION AND SPECIFICATIONS WILL BE PROVIDED BY THE CITY OF SURPRISE.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO RESTORE ALL PROPERTY, LANDSCAPING, PAVING AND DRIVEWAYS THAT ARE DISTURBED DURING STREET LIGHT CONSTRUCTION TO THEIR ORIGINAL CONDITION IN CONFORMANCE WITH "MAG" SPECIFICATION SECTION 107.9.

THE DEVELOPER SHALL BE RESPONSIBLE FOR FURNISHING ALL PERSONNEL AND EQUIPMENT TO SUCCESSFULLY PERFORM THE FOLLOWING TEST.

PRIOR TO ACCEPTANCE, THE DEVELOPER SHALL ENERGIZE AND OPERATE THE ENTIRE ROADWAY LIGHTING SYSTEM, FROM SUNSET TO SUNRISE FOR TWO CONSECUTIVE DAYS WITHOUT INTERRUPTION OR FAILURE. IF A LAMP OR BALLAST SHOULD FAIL, IT SHALL BE IMMEDIATELY REPLACED.

THE CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE ENGINEERING MANAGER, AGAINST IMPERFECT WORKMANSHIP, FAILURE, MALFUNCTION OF MATERIALS AND/OR EQUIPMENT DUE TO FAULTY OR IMPERFECT WORKMANSHIP. THIS GUARANTEE IS TO BE IN WRITING TO THE CITY AT THE TIME OF ISSUING FINAL ACCEPTANCE. WORK FOUND TO BE DEFECTIVE WITHIN THE WARRANTY PERIOD SHALL BE REPLACED WITHOUT COST TO THE CITY.

THESE DRAWINGS AND SPECIFICATIONS ARE THE SOLE PROPERTY OF WRIGHT ENGINEERING CORPORATION AND MAY NOT BE REPRODUCED OR MODIFIED FOR ANY USE WITHOUT THE EXPRESS WRITTEN PERMISSION OF WRIGHT ENGINEERING CORPORATION.
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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 REPLACEDIN 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.

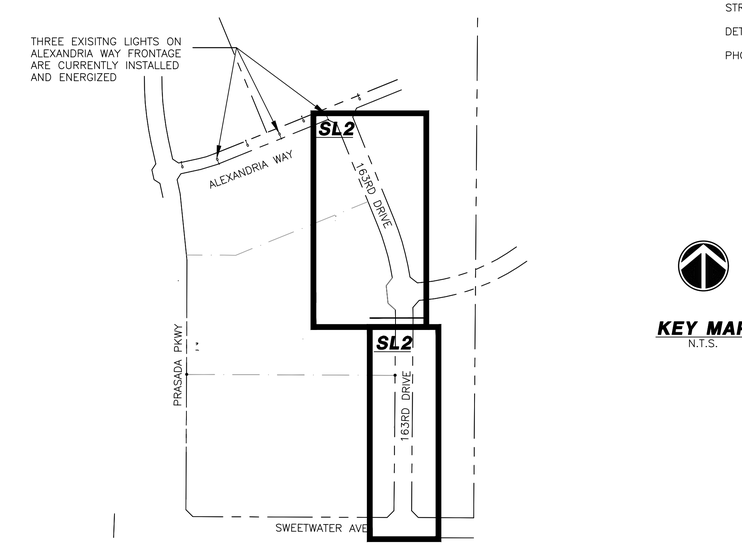
NOTE

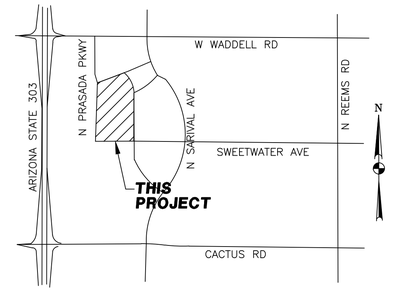
A. ENSURE THERE IS 1' CLEARANCE FROM EDGE OF SIDEWALK TO FACE OF POLE.

B. THE ELECTRICAL/MAINTENANCE COSTS OF ALL STREET LIGHTS ON LOCAL AND COLLECTOR STREETS ARE TO BE PAID BY THE ADJACENT PROJECT OR THE ADJACENT DEVELOPMENT'S STREET LIGHT IMPROVEMENT DISTRICT (SLID). THE ELECTRICAL / MAINTENANCE COSTS OF ALL STREET LIGHTS ON ARTERIAL STREETS ARE TO BE BILLED TO THE CITY OF SURPRISE'S ENERGY BILL.

LED NOTE

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.





VICINITY MAP
N.T.S.

KEY MAP
N.T.S.

SHEET INDEX

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STREET LIGHT PLAN	SL2
DETAILS	SL3
PHOTOMETRICS	SL4

STREET LIGHTING (APS AREA)

KEY NO.	SYMBOL	STREET TYPE	OFFSET BEHIND B/C	QUANTITY	POLE		MAST ARM	LUMINAIRE						
					POLE HEIGHT	FOUNDATION	SIZE	MOUNTING HEIGHT	LUMENS	WATTAGE	I.E.S. DIST.	VOLTAGE	TYPE	STYLE
(1)		COLLECTOR	PER PLANS	7	38'-6"	DIRECT BURY	3'X8'	34'-3"	7,800	71 W	TYPE 3	*	LED	ROADWAY GRAY

*PER UTILITY COMPANY REQUIREMENTS

CITY OF SURPRISE APPROVAL

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.

CITY OF SURPRISE ENGINEER **DATE**

UTILITIES WITHIN OR AFFECTED BY THE PROJECT	
UTILITY CONTACT	DATE SUBMITTED
ARIZONA PUBLIC SERVICE	6/29/2022
CENTURY LINK	6/29/2022
COX COMMUNICATIONS	6/29/2022
SOUTHWEST GAS	6/29/2022

POWER CONDUIT NOTE

TRENCH & CONDUIT RUNS FROM STREET LIGHT PULL BOX TO POINT OF ELECTRICAL SERVICE WILL BE DESIGNED BY THE POWER COMPANY, AND ARE SHOWN ON POWER COMPANY PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THESE PLANS FROM DEVELOPER/OWNER, AND INCLUDE THESE RUNS IN THE BID. COORDINATE THIS WORK WITH THE POWER COMPANY.

CIVIL ENGINEER
LARSON DESIGN GROUP
2390 E CAMELBACK RD, SUITE 130
PHOENIX, AZ 85016
PHONE: (480) 358-8352
CONTACT: MICHAEL HREHA
EMAIL: MHREHA@LARSONDESIGNGROUP.COM

OWNER
PRASADA LAND, LLC
2398 E CAMELBACK ROAD SUITE 690
PHOENIX, AZ 85016
EMAIL: DHESS@HCW.US
CONTACT: DAVID HESS

Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

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

WRIGHT ENGINEERING PROJECT NO:
22344

DESIGN BY: AJA
DRAWN BY: AJA
CHECKED BY: AMB

PROJECT: SURPRISE, ARIZONA
RESIDENCES AT PRASADA
AZ HIGHWAY 303 & WADDELL RD

TITLE: STREET LIGHT COVER SHEET

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	JUN 2022	1ST SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M. BOWERS
Date Signed 4-28-22
Expires 9-30-25

DRAWING NO:
SL1
OF 4

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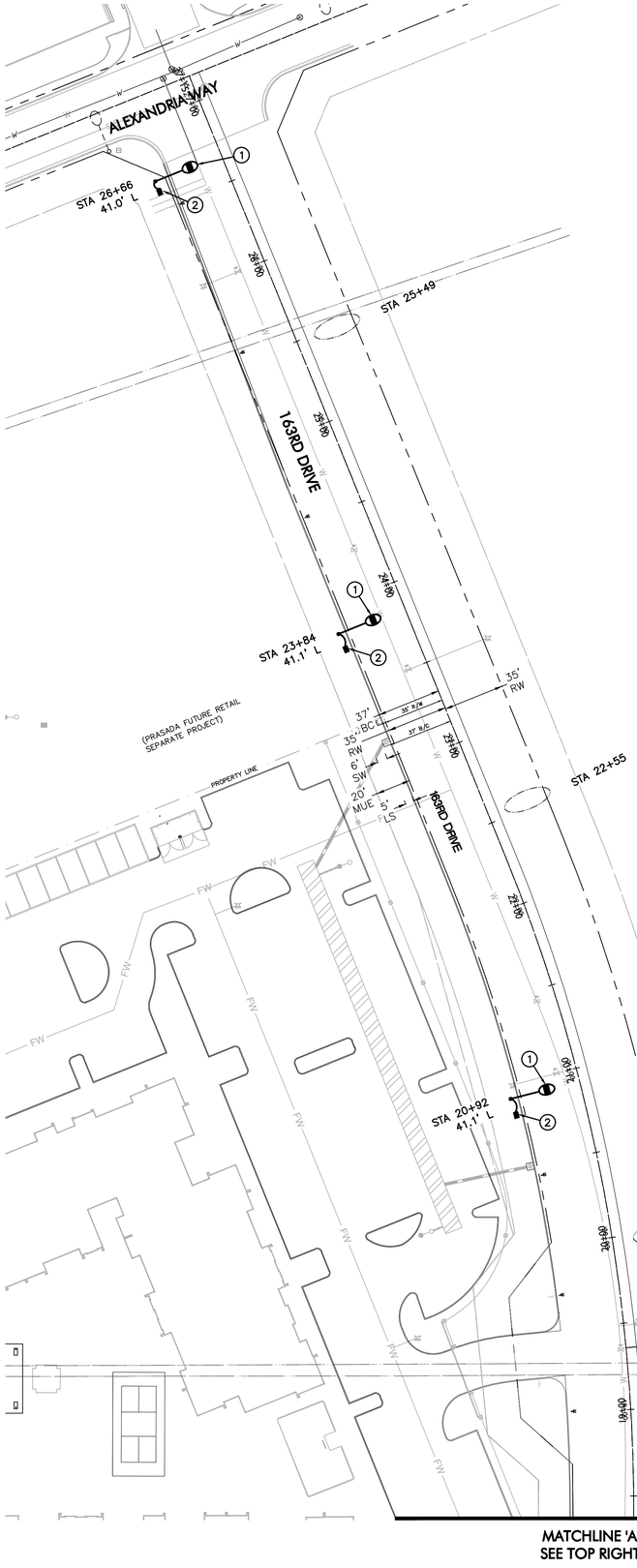

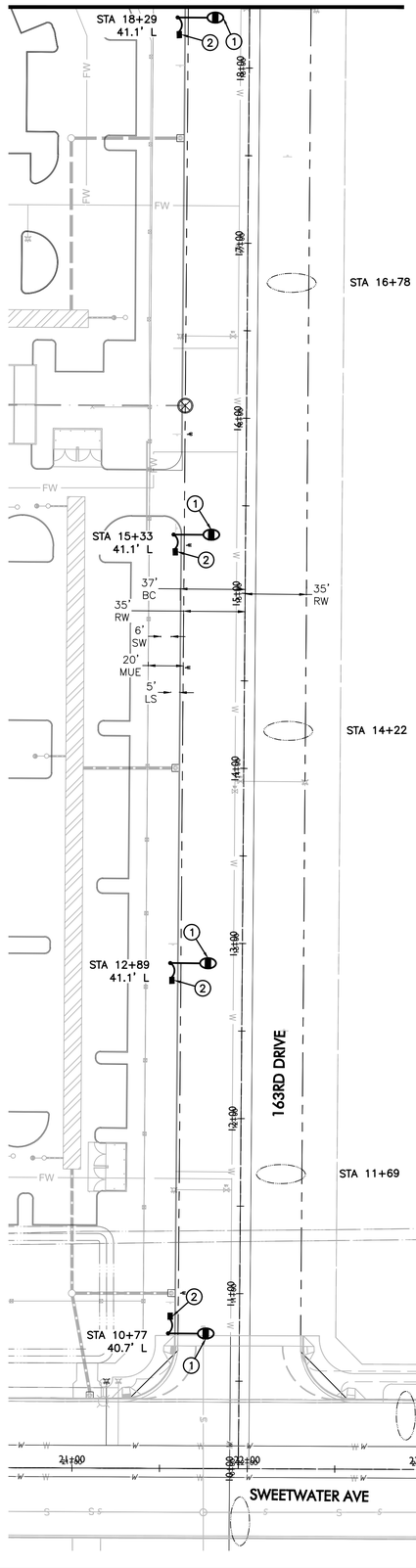

LEGEND

- 7,800 LUMEN LED STREET LIGHT, ROUND POLE
- EXISTING STREET LIGHT
- PULL BOX
- NEW CONDUIT RUN
- FIRE HYDRANT
- FUTURE STREET LIGHT

CONSTRUCTION NOTES

1. 71W LED (7,800 LUMEN) LUMINAIRE (SEE LUMINAIRE TABLE), PHOTOCELL, 38'-6" DIRECT BURIED POLE, 3' X 8' MAST ARM PER APS DETAIL 8040 (SEE SHEET SL3). (2) #14 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. WIRING, FUSING, & GROUNDING PER APS DETAILS & SPECIFICATIONS.
2. INSTALL APS PULL BOX NEXT TO POLE. 1" CONDUIT WITH (2) #14 TYPE THHN/THWN & (1) #14 BARE BOND FROM PULL BOX TO FUSE HOLDER IN STREET LIGHT PER APS DETAILS & SPECIFICATIONS.

GRAPHIC SCALE
40 20 0 20 40 80
1 INCH = 40 FEET

Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
in Maricopa County: (602) 263-1100

WRIGHT ENGINEERING PROJECT NO:
22344

DESIGN BY: AJA
DRAWN BY: AJA
CHECKED BY: AMB

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:

SURPRISE, ARIZONA
RESIDENCES AT PRASADA
AZ HIGHWAY 303 & WADDELL RD

STREET LIGHT PLAN

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	JUN 2022	1ST SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M. BOWERS
Date Signed 1-24-22
Expires 9-30-25

DRAWING NO:
SL2
OF 4

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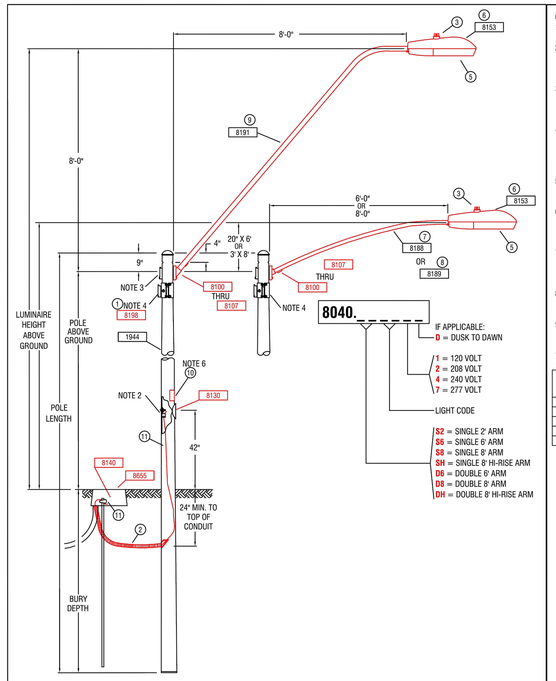

CONSTRUCTION NOTES:

1. ADJUST PHOTO EYE TO FACE NORTH.
2. A GROUND ROD IS PROVIDED WITH THE J-BOX. WHERE A GROUND ROD CAN NOT BE DRIVEN ALTERNATE GROUND SHALL BE USED. SEE 2449 THRU 2460 FOR APPROVED ALTERNATES.
3. THE 40'-6" SELF-SUPPORTING STEEL POLE AND ONE OF THE 38'-6", HAVE TWO, MANUFACTURER INSTALLED SIMPLEX FITTINGS 180° APART FOR DOUBLE ARMS, SEE CHART.
4. APN 33701054 IS A POLE BAND ADAPTOR WITH A SIMPLEX FITTING. ADAPTOR IS REQUIRED FOR THE SECOND ARM IN DOUBLE ARM APPLICATIONS ON EXISTING POLES IN THE FIELD WITHOUT TWO SIMPLEX FITTINGS. SEE 8198 FOR AVAILABLE SIZES.
5. THE BROWN PHOTO CONTROL IS A FAIL OFF CONTROL AND SHALL BE USED WITH ALL INDUCTION AND LED LUMINAIRES.
6. SIGN, "NOTICE THIS POLE IS OWNED AND MAINTAINED BY APS. DISCONNECT INSIDE," IS REQUIRED ON ALL DUSK-TO-DAWN AND AREA LIGHTING APPLICATIONS.
7. POLES THAT HAVE MORE THAN ONE LUMINAIRE REQUIRE A SEPARATE CIRCUIT WITH FUSING FROM THE J-BOX TO EACH LUMINAIRES.
8. THE LIGHT CODE PROVIDES TWO SAME WATTAGE LUMINAIRES WHEN DOUBLE ARMS ARE SPECIFIED.
9. SEE SPEC 9130-8140 FOR IN-LINE FUSE FOR UNDERGROUND FEEDS.
10. SEE 8100 THRU 8107 FOR OVERHEAD ATTACHMENTS.

POLE CODE	POLE LENGTH	BURY DEPTH	POLE ABOVE GROUND	LUMINAIRE HEIGHT ABOVE GROUND ON ARM		
				20' X 6'	3' X 8'	8' X 8'
1944.19	19'-0"	5'-0"	14'-0"	14'-11"	16'-3"	---
1944.30	30'-6"	5'-6"	25'-0"	25'-11"	27'-3"	---
1944.38	38'-6"	6'-6"	32'-0"	32'-11"	34'-3"	39'-3"
1944.38X	38'-6"	6'-6"	32'-0"	32'-11"	34'-3"	39'-3"
1944.40X	40'-6"	8'-6"	32'-0"	32'-11"	34'-3"	39'-3"

CODE	8040.S6	8040.S8	8040.SH	8040.D6	8040.D8	8040.DH	MATERIAL LIST	
ITEM	QTY	QTY	QTY	QTY	QTY	QTY	DESCRIPTION	APN
1	-	-	-	1	1	1	ADAPTER BAND W/ SIMPLEX 3"	33701054
2	10	10	10	10	10	10	CONDUIT 1" PVC FLEX CORR	32900891
3	1	1	1	2	2	2	CONTROL, PHOTO MULTI BLACK	00063965
4	VAR	VAR	VAR	VAR	VAR	VAR	CONTROL PHOTO MULTI BR-20	00073241
5	1	1	1	2	2	2	LAMP - SEE 8164 - 8171	
6	1	1	1	2	2	2	LUMINAIRE - SEE CHART	
7	1	-	-	2	-	-	MAST ARM ST LT 2" X 20' X 6'	33701112
8	-	1	-	-	2	-	MAST ARM ST LT 2" X 3' X 8'	33701124
9	-	-	1	-	-	2	MAST ARM ST LT 2" X 8' X 8'	33701123
10	1	1	1	1	1	1	SIGN POLE OWNED BY APS	00050092
11	10	10	10	10	10	10	WIRE BARE #6 SOLID CU	33007580

ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS					LIGHTS ROADWAY LUMINAIRE ON 20" X 6', 3' X 8', OR 8' X 8' MAST ARM ON 19'-0", 30'-0", 38'-0" OR 40'-6" STEEL POLES	SH 1 OF 2
BY	LDR.	MGR.	DATE	REV.		8040
KLS	B. BOOKER	D. LAMONTAGNE	11/2011	10		

ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS					LIGHTS ROADWAY LUMINAIRE ON 20" X 6', 3' X 8' OR 8' X 8' MAST ARMS ON 19'-0", 38'-0" OR 40'-6" STEEL POLES	SH 2 OF 2
BY	LDR.	MGR.	DATE	REV.		8040
KLS	B. McMINN	S. SIERRA	01/2007	9		

LUMINAIRE TABLE

GRAY ROADWAY SCALEABLE LED 3000K

LIGHT CODE	COLOR	APN	WATTS	VOLTS	INITIAL LUMENS	CATALOG #
CL50	GRAY	00141040	32	120/208/240/277	3,900	ERLC004B430AGRAYGLRV1013
CL51		00141041	43	120/208/240/277	4,800	ERLC005A430AGRAYGLRV1013
➡ CL52		00141043	71	120/208/240/277	7,800	ERL1008C330AGRAYGLRX162
CL53		00141045	96	120/208/240/277	11,000	ERLH011C330AGRAYGLV1108
CL54		00141046	174	120/208/240/277	20,100	ERL2021C330AGRAYGLR113

WRIGHT ENGINEERING PROJECT NO:

22344

DESIGN BY: AJA
DRAWN BY: AJA
CHECKED BY: AMB

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

PROJECT: TITLE:

SURPRISE, ARIZONA
RESIDENCES AT PRASADA
AZ HIGHWAY 303 & WADDELL RD

STREET LIGHT DETAILS

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	JUN 2022	1ST SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M. BOWERS
Date Signed 1-24-23
Expires 9-30-25

DRAWING NO:

SL3

OF 4

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

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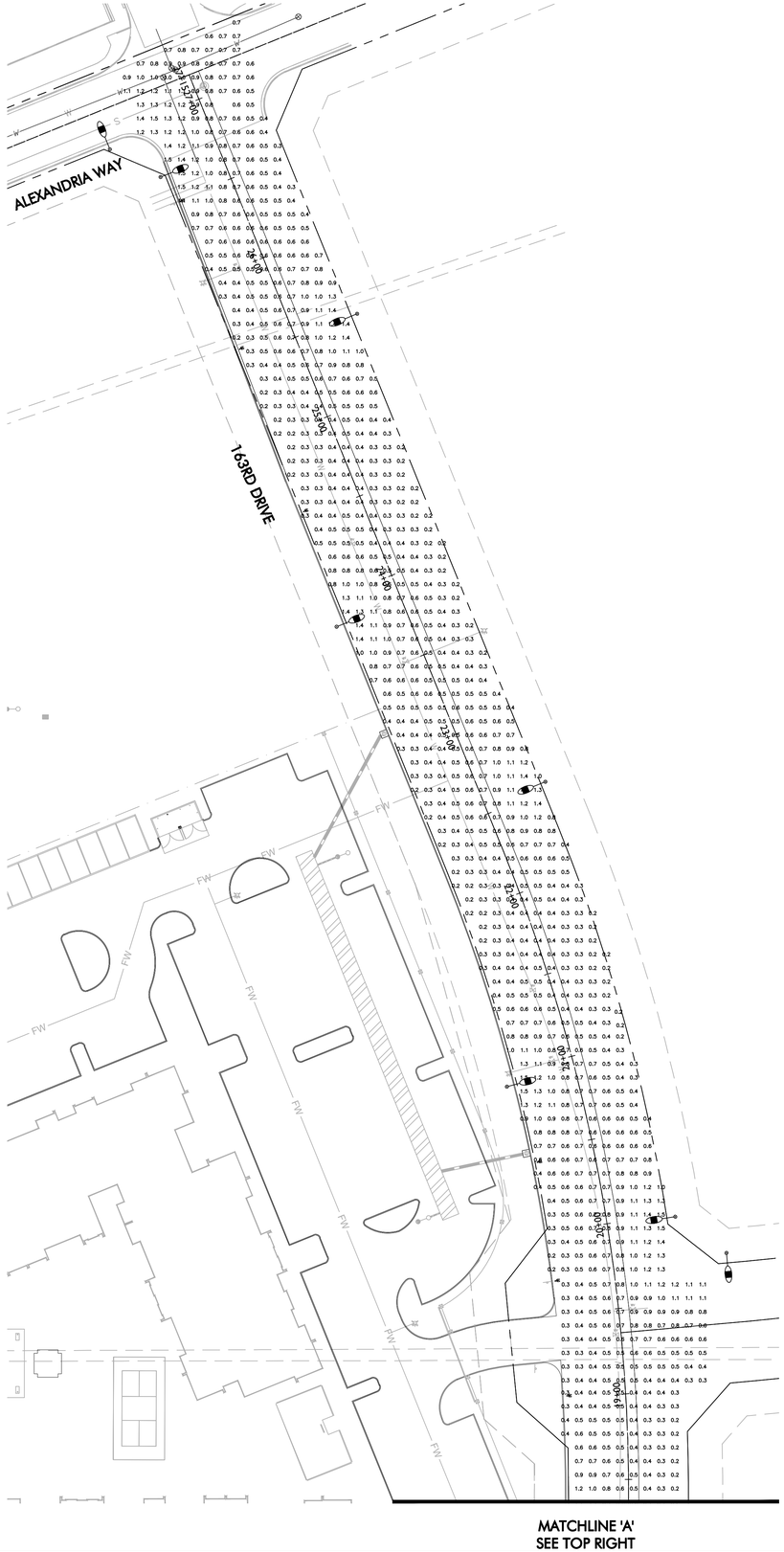

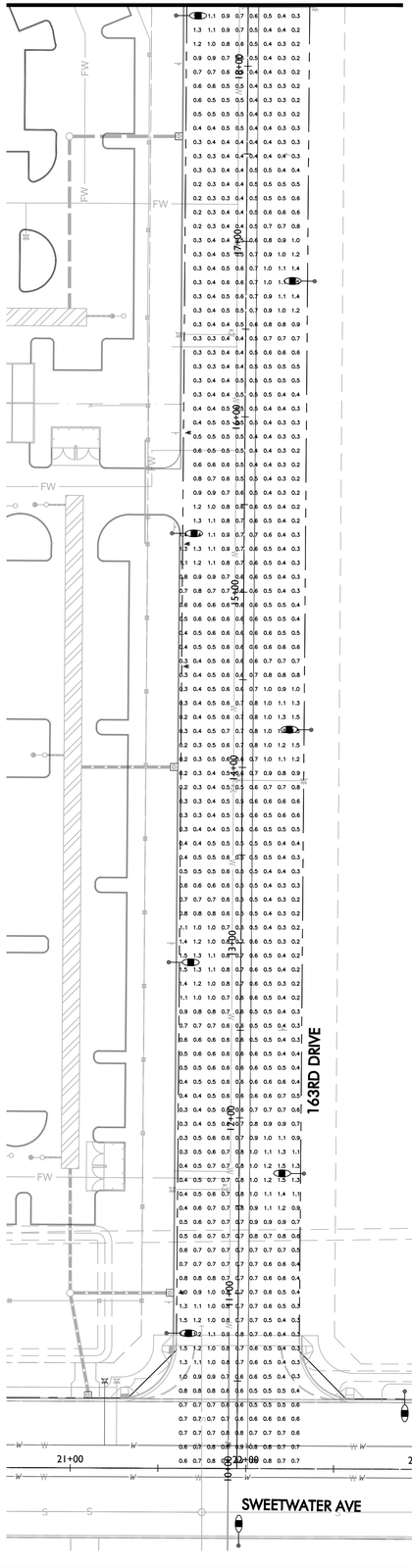

LEGEND

71W LED COBRA HEAD, 3K
Type III Distribution, 3'X8' Mast arm (7,800 lumen)
candela file 'ERL1_08C330_____.IES'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 71
mounting height= 34 ft
number locations= 19, number luminaires= 19
kw all locations= 1.3

INT– 163RD AVE & N PRASADA PKWY
50 points at z=0, sp 8ft by 8ft
HORIZONTAL FOOTCANDLES

Average	0.9
Maximum	1.5
Minimum	0.5
Avg:Min	1.80
Max:Min	3.00
Coef Var	0.27
UnifGrad	1.43

INT– ENTRANCE & 163RD
88 points at z=0, sp 8ft by 8ft
HORIZONTAL FOOTCANDLES

Average	0.6
Maximum	1.2
Minimum	0.3
Avg:Min	2.01
Max:Min	4.00
Coef Var	0.41
UnifGrad	1.40

INT– SWEETWATER AVE & 163RD AVE
62 points at z=0, sp 8ft by 8ft
HORIZONTAL FOOTCANDLES

Average	0.7
Maximum	1.0
Minimum	0.4
Avg:Min	1.71
Max:Min	2.50
Coef Var	0.19
UnifGrad	1.50

163rd Ave
1692 points
HORIZONTAL FOOTCANDLES

Average	0.6
Maximum	1.6
Minimum	0.2
Avg:Min	2.97
Max:Min	8.00
Coef Var	0.47

GRAPHIC SCALE
40 20 0 20 40 80
1 INCH = 40 FEET

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RESIDENCES AT PRASADA
AZ HIGHWAY 303 & WADDELL RD

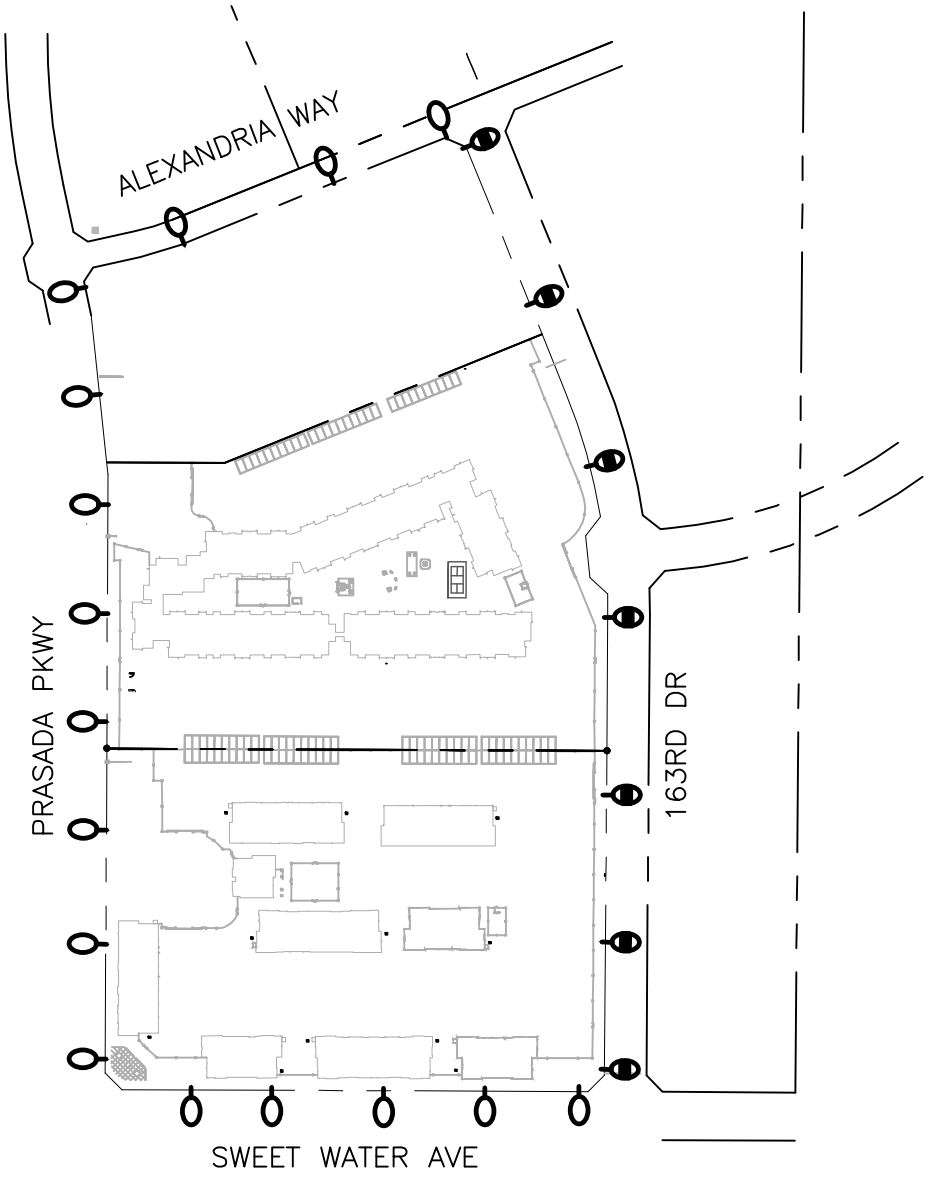
PHOTOMETRICS

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	JUN 2022	1ST SUBMITTAL

Registered Professional Engineer (Electrical)
Certificate No.
46691
ADAM M. BOWERS
Date Signed 1-24-23
Expires 9-30-25

DRAWING NO:
SL4
OF 4

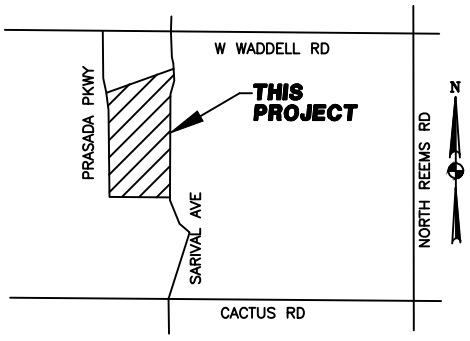
ASSESSMENT DIAGRAM FOR PRASADA PARKWAY
STREET LIGHT IMPROVEMENT DISTRICT # _____ NO. 2023-_____



Registered Professional Engineer (Electrical)
Certificate No.
46691
ADAM M.
BOWERS
Date Signed 2-7-23
ARIZONA U.S.A.

7,800 LUMEN LED STREET LIGHT, ROUND POLE

11,000 LUMEN LED STREET LIGHT, ROUND POLE



VICINITY MAP
N.T.S.

APPROVAL

CITY OF SURPRISE
ENGINEERING MANAGER

DATE

CITY OF SURPRISE
Regular City Council Meeting

Council Meeting Date: May 7, 2024
Submitting Department: Public Works
Staff Recommendations:

Contact Person: Kristin Tytler, Department Director
District: District 1

Consent: Yes Regular: No Public Hearing: No Report/Discussion: No

Agenda Wording:
Consideration and action pertaining to the conditional acceptance and maintenance of certain streets and public utility improvements at Austin Ranch West – North Copper Canyon Parcel 3.2, generally located at the southwest corner of Pinnacle Peak Road and North 183rd Avenue; Resolution # 2024-27.

Motion:
I move to approve Resolution #2024-27.

Background:
The Public Works Department conducted the final inspection of the public improvements for Austin Ranch West – North Copper Canyon Parcel 3.2 on or about January 30, 2023, totaling 22,282 SY (approximately 6,901 LF) and determined that the infrastructure was compliant and acceptable to the city. The infrastructure includes asphalt pavement, storm drains and wastewater lines. Domestic water lines are located within the Liberty (formerly Beardsley) water jurisdiction.

Objective Analysis:
The improvements to this property provide roadways for conveyance through the property, storm drains to convey stormwater to retention basins, and sewer lines to convey wastewater from the property to the city's public system. This action will accept the required infrastructure. The domestic water serving the property is within Liberty (formerly Beardsley) water jurisdiction.

Policy Compliant:
The City Code generally requires development to install public infrastructure required to serve the development. Upon completion and acceptance of such infrastructure, the infrastructure becomes the property of the City. Acceptance of this infrastructure will officially transfer ownership and future maintenance to the City.

Financial Impact:
Acceptance of street, sewer and storm drain infrastructure increases the city's asset base and adds to future maintenance commitments. The total acceptance value of the infrastructure included with this item is $1,805,327.06.

Budget Impact:

Funding for the infrastructure maintenance now and in the future will be supported by the city's Transportation Operations, Wastewater Operations and Stormwater Operations Funds. The anticipated incremental additional maintenance expense associated with the acceptance of these infrastructure items will be incorporated into future years' budgets.

FTE Impact:

This item does not have an impact on current staff levels.

ATTACHMENTS:

1. 01_Resolution 2024-27 Infrastructure Acceptance AustinRanch W Par3.2.final
2. 02_Notice of Completion AusRanWPar3.2
3. 03_Inspector Project Sign Off AusRanWPar3.2
4. 04_Linear Foot Verification AusRanPar3.2

RESOLUTION # 2024-27

A RESOLUTION OF THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE, ARIZONA, TO CONDITIONALLY ACCEPT THE PUBLIC IMPROVEMENTS AND COMMENCE MAINTENANCE AFTER ONE YEAR WARRANTY AT AUSTIN RANCH WEST – NORTH COPPER CANYON PARCEL 3.2, GENERALLY LOCATED AT THE SOUTHWEST CORNER OF WEST PINNACLE PEAK ROAD AND NORTH 183RD AVENUE ROADS.

WHEREAS, the Mayor and City Council of the City of Surprise approved a final plat entitled "Final Plat for North Copper Canyon Parcel 3.2" on, December 1, 2021 and a final plat entitled "Final Plat for North Copper Canyon Parcel 3.2" on, December 7, 2021;

WHEREAS, as a condition of the preliminary plat, approval of the final plat, and in compliance with the City Code, the developer installed certain public improvements, including roadway improvements which consist of concrete sidewalks, curbs and gutters, as well as asphalt/paving, sewer lines and drainage infrastructure. The roadway improvements, sewer lines and drainage infrastructure are all collectively referred to as "Public Improvements";

WHEREAS, Landsea Homes, the developer of Austin Ranch West Parcel 3.2, dedicated to the City the Public Improvements, generally located at the southwest corner of West Pinnacle Peak Road and North 183rd Avenue;

WHEREAS, on or about January 30, 2023, the City of Surprise Public Works Department Engineering Division completed an inspection of the Public Improvements described in this resolution and found the improvements to be in substantial compliance with the approved plans and specifications;

WHEREAS, the City of Surprise notes that the one-year warranty period will commence upon conditional acceptance by the City; and

WHEREAS, after the conclusion of the one-year warranty period, the City of Surprise will release the warranty and begin maintenance of the Public Improvements.

NOW, THEREFORE, BE IT RESOLVED by the Mayor and Council of the City of Surprise, Arizona, as follows.

Section 1. The City of Surprise conditionally accepts the Public Improvements generally located as depicted on the map attached as Exhibit A and listed on Exhibit B.

Section 2. Upon final acceptance by the City Engineer, the City Council hereby directs the City to release warranty and begin maintenance of the Public Improvements.

APPROVED AND ADOPTED this _____day of _____, 2024.

Skip Hall, Mayor

Attest:

Kristi Passarelli, City Clerk

Approved as to form:

Robert Wingo, City Attorney

Exhibit A

Map of Infrastructure

EXHIBIT A

Austin Ranch West-North Copper Canyon Parcel 3.2

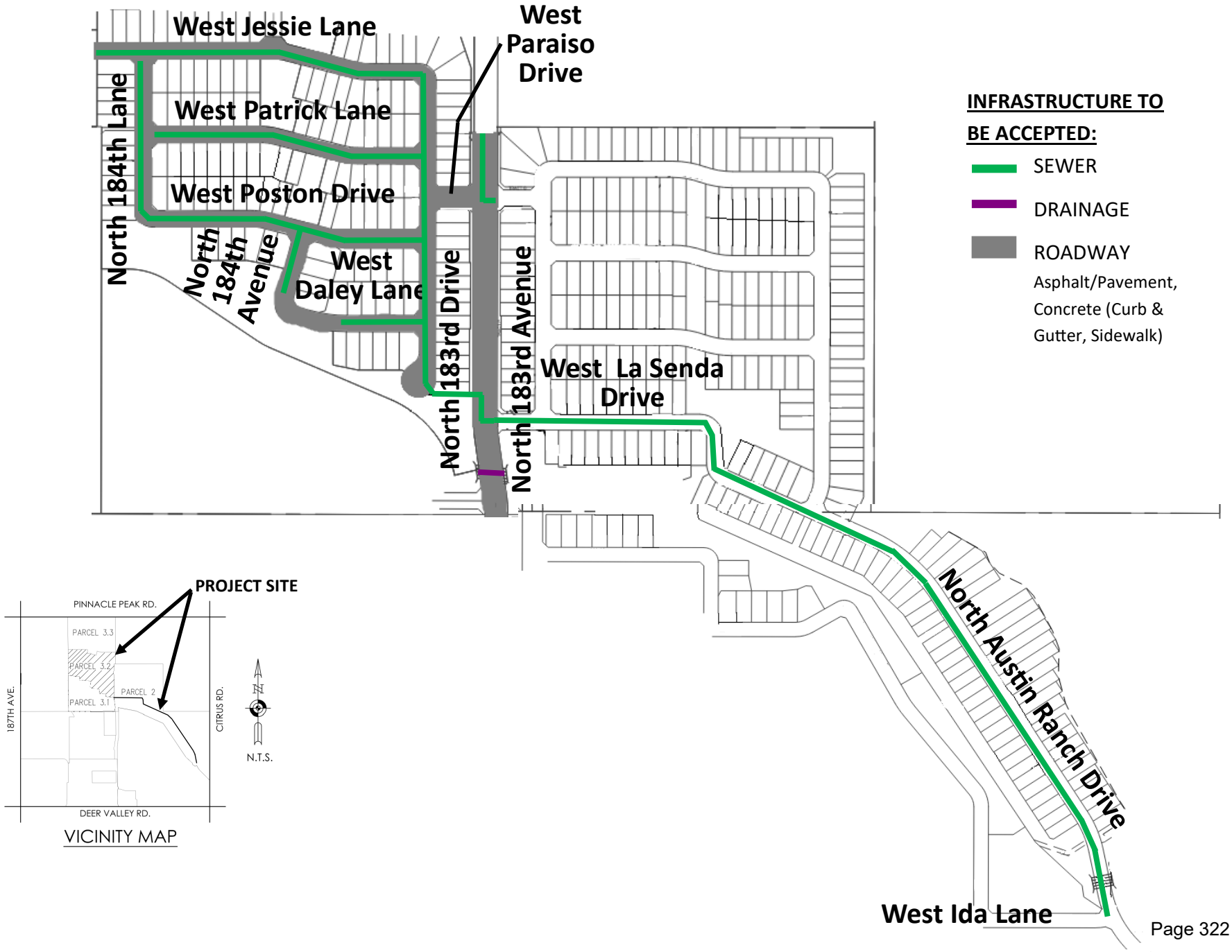


EXHIBIT B

List and Cost of Improvements

EXHIBIT B

ENGINEERING DIVISION
PUBLIC WORKS
CITY OF SURPRISE
16000 N. CIVIC CENTER PLAZA
SURPRISE, AZ 85374
T. 623·222·6150

Memorandum

To: City of Surprise City Council

From: Public Works – Engineering Services

Date: 01/22/2024

Re: Austin Ranch West Parcel 3.2

The public improvements for the above project have been completed and are tentatively scheduled for conditional acceptance by Council. The amounts for the infrastructure have been provided by a third party and not the City of Surprise. The following are the infrastructure improvements included with this acceptance and the corresponding valuation that the City will be accepting:

City Paving	$559,114.60
City Concrete	$716,912.62
City Sewer	$522,339.84
City Drainage	$ 6,960.00
Total	**$1,805,327.06**

SURPRISE
ARIZONA

PUBLIC WORKS
CITY OF SURPRISE
16000 N. CIVIC CENTER PLAZA
SURPRISE, AZ 85374
T. 623·222·6000

April 5, 2023

Landsea Homes
7600 E. Double Tree Ranch Rd., Suite 240
Scottsdale, AZ 85258

RE: NOTICE OF COMPLETION AND COUNCIL ACTION REQUIREMENT FOR AUSTIN RANCH PARCEL 3.2 – FS20-435

The City of Surprise Public Works Department has completed the inspection of the public utility improvements for the above referenced project. These improvements are in substantial compliance with the approved plans and specifications. Council action is required prior to conditional acceptance and the official beginning of the warranty period. The time frame for Council action is approximately 90 days after the following items have been submitted:

- A copy of all lien releases or a title report
- Actual construction cost for related civil permits issued
- Warranty assurance in a format acceptable by the City*

*For the Warranty Assurance, a notice of the required assurance amount and acceptable formats will be sent via email once actual construction costs have been submitted by the applicant.

The warranty period starts upon council acceptance for a period of one (1) year; please ensure warranty assurance will not expire prior to this date. The applicant will be notified of the council date as soon as it is scheduled and the warranty financial assurance is required to be submitted to the city 10 calendar days prior to the council date. If a warranty financial assurance is not received within 10 calendar days, council action and start of the warranty period will be delayed, at a minimum, an additional two (2) weeks.

A letter of conditional acceptance and notification that the warranty period has begun will be forwarded upon the completion of council acceptance. Also, a request to release the associated completion assurance will be made; notification will be sent when assurance document is available for pick up.

If you have any questions or concerns, you can reach me at 623-222-6148 or at nuning.lemka@surpriseaz.gov.

Sincerely,

Nuning Lemka

Nuning Lemka, P.E.
City Engineer

cc: Rob Fields, PW Field Engineering Supervisor
Amanda Correia, Finance
Michael Boule, Water Resource Management
John McFarland, PW Streets Manager
Warren Bert, GIS

SURPRISE
ARIZONA

PROJECT SIGN OFF FORM

PUBLIC WORKS - ENGINEERING SERVICES, INSPECTIONS

Date Submitted: 12-07-2022 ___ Commercial ___ Commercial w/Offsite XX Residential

XX COMPLETION ACCEPTANCE (End of Construction) ___ FINAL ACCEPTANCE (End of Warranty)

8-11-2022 Date of Punch-List Walk 12-06-2022 Date Punch-List Completed

FS Number: FS20-435 **Permit Number(s):** E22P-0657, 1306, 1642, E21P-0003,00

Project Name: North Copper Canyon Parcel 3.2.

Project Developer/Builder: (Name/Email, Address)

Landsea Homes: Michael Smith/msmith@landseahomes.com/7600 E DoubleTree Ranch Rd Ste 240 Scottsda

Sheet 1 of 2

MAG TIP Reporting:

Street Name	Classification	Begin Limits	End Limits	# Lanes	Length to nearest ¼ mi.	Features
N.183 Dr	Local	W Jessie Ln	Cul va sac	2	.5	
W Jessie Ln	Local	Sta 1+00	N 183 rd Drive	2	.5	
184th Lane	Local	W Jessie Ln	W Poston Dr	2	.5	
W Patrick Lane	Local	184th Lane	183 Dr	2	.5	
W Poston Dr	Local	184th Lane	183 Dr	2	.5	

MATERIALS:

Asphalt: Vulcan Supplier 3.5 Total Lane Miles 20668 Total Square Yards

Water:	8" C900	Size/Type	5700	Total LF	___	Size/Type	___	Total LF
	12" C900	Size/Type	61	Total LF	___	Size/Type	___	Total LF
Sewer:	8" SDR 35	Size/Type	5561	Total LF	___	Size/Type	___	Total LF
	12" SDR 35	Size/Type	3454	Total LF	___	Size/Type	___	Total LF
Storm:	18"RGRCP CL III	Size/Type	77	Total LF	___	Size/Type	___	Total LF
	___	Size/Type	___	Total LF	___	Size/Type	___	Total LF
Fire Ln:	n/a	Size/Type	___	Total LF	___	Size/Type	___	Total LF

Additional Comments:

SUPPORTING DOCUMENTATION REQUIRED:

XX Copy of Punch List
n/a Final Certification Letter from Engineer of Record
XX Complete Geotechnical Testing Packet
XX Sewer Pressure Testing Results
XX Sewer Manhole Vacuum Testing Certification
XX Sewer Manhole Insecticide Certification
XX Sewer Videos with Operators Notes (inc. re-videos)
___ Other ___ (Specify)

XX AOC
XX Asphalt Concrete Ticket w/ Name of Contractor
XX Streetlight Energize Letter
XX As built Documents (PDF copy on CD)
n/a Updated asbuilt CAD base files (copy on CD)

APPROVAL:

Civil Inspector: [signature] **Date:** 12-7-2022

Civil Engineering Supervisor: [signature] **Date:** 1/30/23

SURPRISE
ARIZONA

PROJECT SIGN OFF FORM

PUBLIC WORKS - ENGINEERING SERVICES, INSPECTIONS

Date Submitted: 12-07-2022 ___ Commercial ___ Commercial w/Offsite XX Residential

XX COMPLETION ACCEPTANCE (End of Construction) ___ FINAL ACCEPTANCE (End of Warranty)

08-11-2022 Date of Punch-List Walk 12-06-2022 Date Punch-List Completed

FS Number: FS20-0435 **Permit Number(s):** E22P-0657, 1306, 1642, E21P-0003,00

Project Name: North Copper Canyon Parcel 3.2

Project Developer/Builder: (Name/Email, Address)

Landsea Homes: Michael Smith/msmith@landseahomes.com/7600 E DoubleTree Ranch Rd Ste 240 Scottsda

2 of 2

MAG TIP Reporting:

Street Name	Classification	Begin Limits	End Limits	# Lanes	Length to nearest ¼ mi.	Features
184th Ave	Local	W Poston Dr	W Daily Lane	2	.5	
W Daily Lane	Local	184th Ave	183rd Drive	2	.5	
183 ave	Collector	Sta 28+28	Sta 40+45	2	.5	
W. Paraiso Dr	Local	N.184 Dr	N 183 ave	2	.5	

MATERIALS:

Asphalt: Sheet 1 Supplier ___ Total Lane Miles ___ Total Square Yards

Water:	Sheet 1	Size/Type	___	Total LF	___	Size/Type	___	Total LF
	___	Size/Type	___	Total LF	___	Size/Type	___	Total LF
Sewer:	Sheet 1	Size/Type	___	Total LF	___	Size/Type	___	Total LF
	___	Size/Type	___	Total LF	___	Size/Type	___	Total LF
Storm:	Sheet 1	Size/Type	___	Total LF	___	Size/Type	___	Total LF
	___	Size/Type	___	Total LF	___	Size/Type	___	Total LF
Fire Ln:	n/a	Size/Type	___	Total LF	___	Size/Type	___	Total LF

Additional Comments:

SUPPORTING DOCUMENTATION REQUIRED:

n/a Copy of Punch List
n/a Final Certification Letter from Engineer of Record
n/a Complete Geotechnical Testing Packet
n/a Sewer Pressure Testing Results
n/a Sewer Manhole Vacuum Testing Certification
n/a Sewer Manhole Insecticide Certification
n/a Sewer Videos with Operators Notes (inc. re-videos)
___ Other ___ (Specify)

n/a AOC
n/a Asphalt Concrete Ticket w/ Name of Contractor
n/a Streetlight Energize Letter
n/a As built Documents (PDF copy on CD)
n/a Updated asbuilt CAD base files (copy on CD)

APPROVAL:

Civil Inspector: [signature] **Date:** 12-07-22

Civil Engineering Supervisor: Signature on File **Date:** ___

FS Case	Project Name	Private/Public	Classification	Roadway	Median Width (ft)	Length (ft)	Length (mile)	Length (Nearest 1/4 mile)	Lane Miles	Width (pavement)	Pavement Area (ft	Pavement Area (S	Inspecto
20-435	Austin Ranch West Parcel 3.2	Public	Local	W. Jessie Lane	0	1116.7	0.21	0.25	0.75	28.0	31,268	3,474	1/30/2
20-435	Austin Ranch West Parcel 3.2	Public	Local	W. Patrick Lane	0	973.0	0.18	0.25	0.75	28.0	27,244	3,027	1/30/2
20-435	Austin Ranch West Parcel 3.2	Public	Local	W. Poston Drive	0	956.7	0.18	0.25	0.75	28.0	26,788	2,976	1/30/2
20-435	Austin Ranch West Parcel 3.2	Public	Local	W. Daley Lane	0	496.9	0.09	0.25	0.75	28.0	13,913	1,546	1/30/2
20-435	Austin Ranch West Parcel 3.2	Public	Local	N. 184th Lane	0	568.5	0.11	0.25	0.75	28.0	15,918	1,769	1/30/2
20-435	Austin Ranch West Parcel 3.2	Public	Local	N. 184th Avenue	0	277.4	0.05	0.25	0.75	28.0	7,767	863	1/30/2
20-435	Austin Ranch West Parcel 3.2	Public	Local	N. 183rd Drive	0	1099.9	0.21	0.25	0.75	28.0	30,797	3,422	1/30/2
20-435	Austin Ranch West Parcel 3.2	Public	Local	W. Paraiso Drive	0	197.5	0.04	0.25	0.75	28.0	5,530	614	1/30/2
20-435	Austin Ranch West Parcel 3.2	Public	Collector	N. 183rd Avenue	0	1215.0	0.23	0.25	0.75	34.0	41,310	4,590	1/30/2
					Total	6901.6					Total	22,282	

CITY OF SURPRISE
Regular City Council Meeting

Council Meeting Date: May 7, 2024
Submitting Department: Public Works
Staff Recommendations:

Contact Person: Kristin Tytler, Department Director
District: District 5

Consent: Yes Regular: No Public Hearing: No Report/Discussion: No

Agenda Wording:
Consideration and action declaring the intent to enlarge an existing lighting improvement district known as City of Surprise, Arizona, Surprise Medical Plaza pursuant to A.R.S. § 48-616 for the purpose of purchasing facilities and energy for lighting the public streets; Resolution #2024-54.

Motion:
I move to approve Resolution #2024-54.

Background:
Surprise Medical Plaza was formed on January 27, 2011 (Resolution 2011-013) and an amendment was formed on May 17, 2022 (Resolution 2022-046). Since the time of formation, new parcels have been formed in and around the original SLID boundary. We request enlarging the existing SLID to include the new parcels and extend existing boundaries to roadway centerlines. The city has verified that the Petition for the proposed street light improvement district enlargement contains the signatures of all the real property owners in the enlargement area of the district, exclusive of mortgagees and other lien holders. 11 (estimated) new lights 4 existing are proposed within this enlargement which are local will be billed to the Surprise Medical Plaza SLID. The arterial roads will be billed to the City's SLID account.

Objective Analysis:
A SLID is a neighborhood partnership and very common practice in which property owners in a defined area agree to pay the costs to operate and maintain their immediate area's streetlights through a property tax. All new developments in the City of Surprise require a SLID. This action will enlarge an existing SLID boundary to include the remainder of the parcels not within the SLID and extend existing boundaries to roadway centerlines. The District is paid for by the levy and collection of ad valorem of taxes based on the number and classification of properties within the District. The enlargement of the SLID will only affect the parcels joining into the District, as the valuation of the property may be increased.

Policy Compliant:
The Surprise Municipal Code requires that street lighting that serves a defined area be paid for through revenues obtained from the specific area being served by such street lighting. In these instances, a Street

Light Improvement District (SLID) is formed. The city strives to assure that residents are subject to only one SLID and that the boundaries of each SLID accurately reflect the service area. This item is consistent with these objectives.

Financial Impact:

Once the SLID enlargement is illuminated, the City will begin levying the SLID to cover the additional SLID expenses. At the current time, the SLID is not incurring any expense because the SLID lights have not been illuminated. Therefore, there is no current financial impact.

Budget Impact:

Since the SLID enlargement is not illuminated, there is no revenue or expense budgeted in FY2024 nor are there budgets planned for FY2025 for the SLID. If the enlargement to the SLID is illuminated in FY2024 or FY2025, expenses will be charged to the SLID and recouped with a future levy.

FTE Impact:

This item does not have an impact on current staff levels.

ATTACHMENTS:

1. 01 Res 2024-54 SLID Enlargement Surprise Medical Plaza_final
2. 02 Petition
3. 03 streetlight plan
4. 04 council map
5. 05 Res 2011-013- Original Surprise Medical Center
6. 06 Res 2022-046-Surprise Medical Plaza

RESOLUTION # 2024-54

A RESOLUTION OF THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE, ARIZONA DECLARING ITS INTENT TO ENLARGE THE CITY OF SURPRISE, ARIZONA, SURPRISE MEDICAL PLAZA LIGHTING IMPROVEMENT DISTRICT AND ORDERING SUCH ENLARGEMENT.

WHEREAS, on January 27, 2011, the Mayor and City Council of the City of Surprise adopted Resolution No. 2011-13, ordering the formation of the CITY OF SURPRISE, ARIZONA, SURPRISE MEDICAL PLAZA LIGHTING IMPROVEMENT DISTRICT (the "District") for the purpose of purchasing energy for the lighting of the public streets and parks within the District;

WHEREAS, Ariz. Rev. Stat. § 48-616(M) permits the City to add new territory to an existing district, thereby enlarging the boundaries of an existing street lighting improvement district ("SLID") when proper notice has been given to the owners of property that will be added to the SLID in accordance with Ariz. Rev. Stat. Title 48, Chapter 4, Article 2;

WHEREAS, Ariz. Rev. Stat. § 48-617(A) gives the City immediate jurisdiction to adopt the resolution ordering the creation or enlargement of a SLID without the necessity of publication and posting of the resolution of intention when all owners of the real property being added to the SLID have petitioned the City to form or enlarge the SLID;

WHEREAS, the owners, exclusive of mortgagees and other lienholders, of parcels of property which adjoin the District (hereinafter referred to as "Petitioners") acting pursuant to the provisions of Ariz. Rev. Stat. §§ 48-616(M) and 48-617(A), have petitioned the City to enlarge the District to include said property legally described in Exhibit A to this resolution, with such boundaries as shown in the map in Exhibit B to this resolution; and

WHEREAS, the City has verified and finds that Petitioners are the owners, exclusive of mortgagees and other lienholders, of all of the real property being added to the boundary of the District.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Surprise, Arizona, as follows.

Section 1. *District Enlargement*. The CITY OF SURPRISE, ARIZONA, SURPRISE MEDICAL PLAZA LIGHTING IMPROVEMENT DISTRICT shall be enlarged by the addition of the property described in Exhibit A and shown in Exhibit B, which are incorporated by reference hereto into this Resolution. The annual tax levied upon the District will remain in full force and effect, and, commencing in fiscal year 2024/2025 will apply to the District as enlarged by this Resolution.

Section 2. *Recording and Filing of this Resolution.* A certified copy of this Resolution shall be recorded in the office of the Maricopa County Recorder. Certified copies of this Resolution shall also be filed with the Arizona Department of Revenue and the Maricopa County Assessor's office pursuant to Ariz. Rev. Stat. § 42-17257.

APPROVED AND ADOPTED this _____day of _____, 2024.

Skip Hall, Mayor

Attest:

Kristi Passarelli, City Clerk

Approved as to form:

Robert Wingo, City Attorney

EXHIBIT A

Legal Description

EXHIBIT 'A'

LEGAL DESCRIPTION

A PORTION OF SECTION 4, TOWNSHIP 3 NORTH, RANGE 1 WEST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 4, FROM WHICH THE EAST QUARTER CORNER OF SAID SECTION 4 BEARS SOUTH 00 DEGREES 13 MINUTES 27 SECONDS WEST A DISTANCE OF 2,777.12 FEET;

THENCE SOUTH 00 DEGREES 13 MINUTES 27 SECONDS WEST ALONG THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION, A DISTANCE OF 1661.43 FEET TO THE POINT OF BEGINNING;

THENCE CONTINUING ALONG SAID EAST LINE, SOUTH 00 DEGREES 13 MINUTES 27 SECONDS WEST, A DISTANCE OF 726.63 FEET;

THENCE DEPARTING SAID EAST LINE, NORTH 89 DEGREES 46 MINUTES 01 SECONDS WEST, A DISTANCE OF 723.94 FEET;

THENCE NORTH 00 DEGREES 13 MINUTES 59 SECONDS EAST, A DISTANCE OF 724.04 FEET;

THENCE SOUTH 89 DEGREES 58 MINUTES 20 SECONDS EAST, A DISTANCE OF 723.84 FEET TO THE POINT OF BEGINNING.

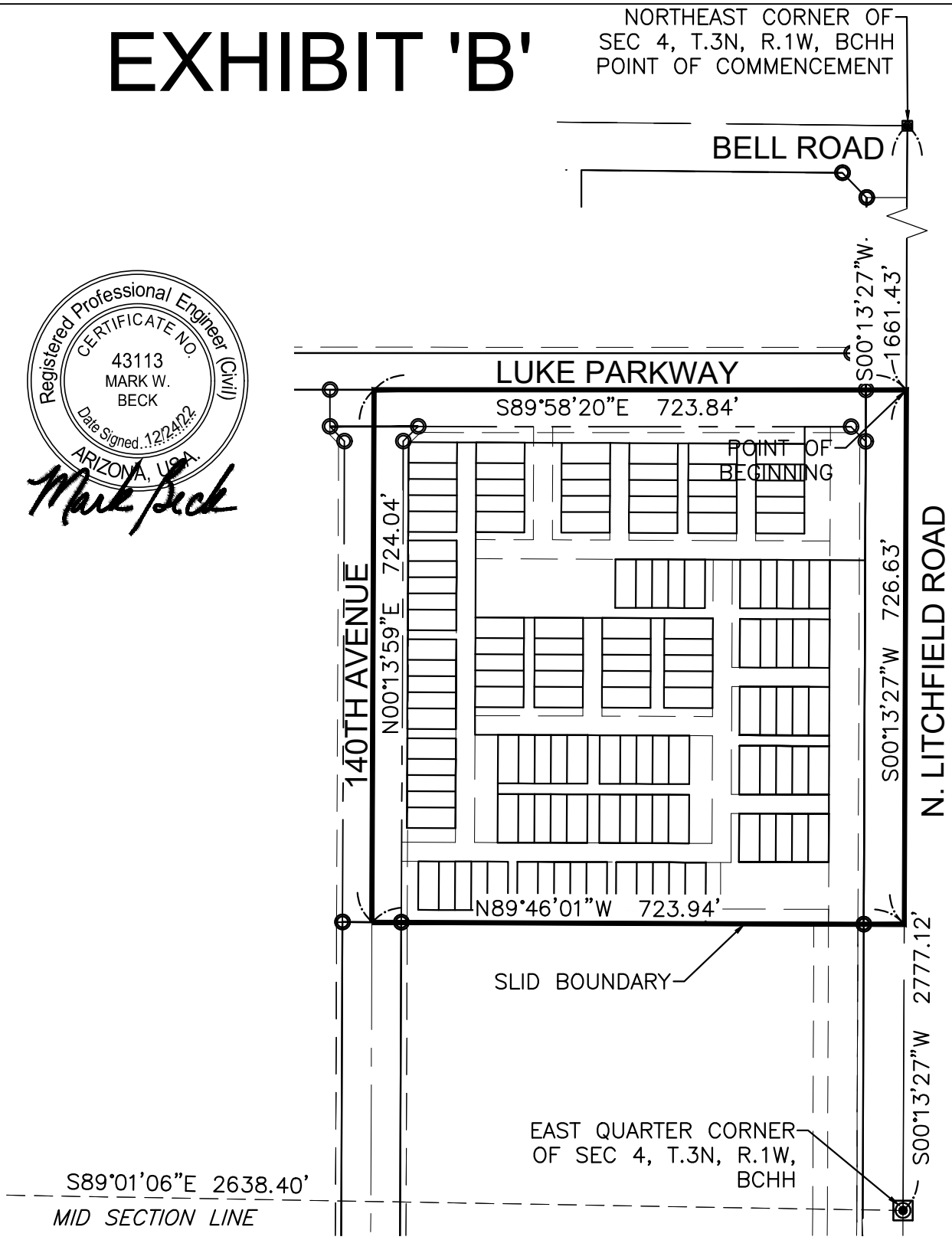


beck consulting engineers	PROJECT: GEHAN SURPRISE	DATE : 08/18/2022	SHEET EX-A
	JOB NO.: 223001	SCALE: NTS	

EXHIBIT B

Map

EXHIBIT 'B'



Registered Professional Engineer (Civil)
CERTIFICATE NO.
43113
MARK W.
BECK
Date Signed 12/24/22
ARIZONA, U.S.A.

Mark Beck

beck consulting engineers	PROJECT: GEHAN SURPRISE	DATE : 08/18/2022
	JOB NO.: 223001	SCALE: 1"=200'

SHEET
EX-B

STREET LIGHT IMPROVEMENT DISTRICT PETITION ENLARGEMENT

TO THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE:

We, the undersigned, are all or a majority of the real property owners, exclusive of mortgagees and other lienholders, adjoining the district named below. We petition the City Council of the City of Surprise, Arizona, to enlarge the District to include said property legally described in Exhibit A with such boundaries as shown in the map in Exhibit B attached hereto. This petition includes a charge for maintaining the lighting facilities.

It is hereby requested that, in compliance with the Arizona Revised Statutes, the City Council adopt a Resolution of Intention to enlarge the existing District, and that unless protests are received pursuant to A.R.S. §48-579 sufficient to bar further proceedings, the City Council proceed with the improvements petitioned for herein.

Public convenience, necessity and welfare will be promoted by the establishment of the District and the real property within the District will be benefited by the District. Additional street lighting facilities may be installed and included in the District, at no investment cost to the District, as directed by the City and as approved by Arizona Public Service and the City Engineer.

WHEREFORE, we respectfully ask that this Petition be properly filed and that the Mayor and Council of the City adopt the Resolution and take such other action as is proper, necessary and appropriate to enlarge the District and to fulfill the purposes for which the District is organized, as the Mayor and Council believe is proper and necessary.

The name of the existing street light improvements district to be enlarged:
Surprise Medical Plaza

(Leave Blank - to be assigned by City staff)

PETITIONERS: Please print and sign your name

PRINT BUSINESS/ PETITIONER'S NAME	ADDRESS OF PROPERTY OWNED WITHIN DISTRICT	ASSESSOR PARCEL #	SIGNATURE
Surprise Center Development Co., Inc.	SWC Luke Parkway and Litchfield Road	501-18-674A (a portion)	

AVAILABILITY

This rate schedule is applicable to those portions of cities, towns and unincorporated communities in which the Company does a general retail electric business and where the Company has installed a multiple or series street lighting system of adequate capacity for the service to be rendered.

This rate schedule is frozen as of December 1, 2021. This means a Customer that was already taking service under this rate schedule before that date may continue service under this rate schedule, but no Customers connecting service after that date will be eligible to be served under this rate schedule.

FROZEN

DESCRIPTION

E-58 is a rate that is applicable for lighting public streets, alleys, thoroughfares, public parks and playgrounds from dusk to dawn by use of Company's facilities.

TIME PERIODS

Dusk: Time between sunset and full night when photocontrol senses the lack of sufficient sunlight and turns on the lights.

Dawn: The time between full night and sunrise when a photocontrol senses sufficient sunlight to turn off lights.

CHARGES

The monthly bill will consist of the following charges, plus adjustments.

I. FIXTURES (Includes Mounting Arm, if Applicable)

				CHARGES	
	Lumen	Watts	kWh	Investment by Company	Investment by Others
A. Acorn	3,835 LED	75	26	$21.19	$7.43
	4,796 LED	75	26	$17.02	$6.33
	5,003 LED	100	35	$22.97	$8.53
	5,904 LED	100	35	$22.56	$8.42
	6000 IND	85	29	$18.85	$5.03
B. Architectural	6,200 IND	85	29	$9.92	$3.85
	8,400 IND	100	34	$10.47	$4.27
	10,200 IND	120	41	$11.51	$4.89
	13,000 IND	150	52	$12.71	$5.81
	20,500 IND	200	69	$14.48	$7.22

				CHARGES	
	Lumen	Watts	kWh	Investment by Company	Investment by Others
B. Architectural (cont)	22,500 IND	265	91	$17.27	$9.09
	3,300 LED	43	15	$10.03	$3.71
	3,800 LED	32	12	$7.57	$2.86
	3,900 LED	32	12	$9.76	$3.44
	4,050 LED	63	22	$18.25	$6.39
	4,100 LED	45	16	$10.13	$3.81
	4,800 LED	41	15	$8.10	$3.20
	5,000 LED	41	15	$9.41	$3.55
	5,100 LED	60	21	$9.97	$4.10
	5,300 LED	67	24	$10.26	$4.39
	5,800 LED	94	32	$17.44	$5.05
	5,890 LED	89	31	$20.14	$7.50
	6,000 LED	62	22	$18.25	$6.39
	6,000 LED	67	24	$19.48	$6.85
	6,400 LED	89	31	$17.52	$5.00
	6,810 LED	101	35	$18.50	$7.35
	7,100 LED	62	22	$19.30	$6.66
	7,400 LED	127	44	$20.00	$6.21
	7,500 LED	73	26	$19.67	$7.03
	7,700 LED	86	30	$18.03	$6.88
	8,200 LED	88	31	$10.24	$4.87
	8,200 LED	95	33	$11.63	$5.37
	8,300 LED	72	25	$17.56	$6.41
	8,300 LED	106	37	$12.19	$5.79
	8,500 LED	88	31	$11.45	$5.19
	9,020 LED	139	48	$22.47	$9.28
	9,200 LED	139	48	$25.08	$7.15
	9,900 LED	130	45	$13.54	$6.70
	10,000 LED	93	32	$20.99	$7.80
	10,000 LED	113	39	$12.99	$6.15
	10,600 LED	126	44	$22.10	$8.90
	11,100 LED	108	38	$12.50	$5.95
	11,500 LED	108	38	$12.89	$6.05
	12,300 LED	203	70	$24.96	$8.67
	12,900 LED	119	41	$21.85	$8.64
	13,260 LED	202	70	$26.55	$11.87
	13,620 LED	202	70	$27.91	$9.05
	14,000 LED	171	59	$25.54	$10.85
	15,000 LED	136	47	$24.42	$9.74
	15,400 LED	144	50	$24.69	$10.01
	18,300 LED	162	56	$15.80	$8.05
	19,200 LED	257	89	$26.32	$13.11
	20,000 LED	258	89	$26.32	$13.11

FROM FILE

					CHARGES	
		Lumen	Watts	kWh	Investment by Company	Investment by Others
B. Architectural (cont)		20,300 LED	193	67	$16.82	$9.07
		21,000 LED	193	67	$24.26	$11.05
C. Cobra		6,200 IND	75	26	$10.32	$3.69
		6,400 IND	85	29	$8.79	$3.70
		8,000 IND	88	30	$10.26	$3.96
		8,400 IND	100	34	$9.50	$4.15
		10,200 IND	120	41	$10.23	$4.71
		13,000 IND	150	52	$11.26	$5.61
		15,250 IND	200	69	$13.58	$7.10
		22,500 IND	250	86	$18.17	$8.87
	Gray/Bronze	3,500 IND	55	19	$10.28	$3.20
		6,000 LED	95	33	$16.70	$5.02
		8,700 LED	142	49	$18.78	$6.40
		9,600 LED	157	54	$19.98	$6.90
		11,600 B-LED	181	62	$18.64	$7.29
	Gray/Bronze	3,300 LED	43	15	$8.82	$2.73
	Gray/Bronze	5,300 LED	67	23	$10.24	$3.47
	Gray/Bronze	8,300 LED	106	37	$13.27	$4.84
	Gray/Bronze	10,500 LED	130	45	$14.77	$5.57
	Gray/Bronze	20,000 LED	258	89	$25.67	$10.06
D. Decorative Transit		5,300 LED	75	26	$27.86	$5.99
		8,300 LED	100	34	$29.83	$6.83
		8,147 LED	75	26	$35.03	$11.13
		9,522 LED	100	35	$35.40	$11.84
		10,500 LED	150	52	$32.02	$8.35
		14,896 LED	150	52	$39.16	$14.00
	Double	8,147 LED	75	26	$63.41	$18.57
	Double	9,522 LED	100	35	$63.34	$19.18
	Double	14,896 LED	100	52	$69.22	$21.86
	Copper	6,000 IND	85	29	$18.48	$4.99
	Gray/Black	8,000 IND	88	30	$14.56	$4.53
	Gray/Black	4,350 LED	86	30	$13.20	$4.35
E. Flood		14,470 LED	148	51	$23.44	$9.75
		16,000 LED	125	43	$22.70	$9.00
F. Pendant		8,678 LED	75	26	$25.82	$8.67
		13,964 LED	100	35	$27.27	$9.68
G. Post Top		4,350 LED	86	30	$13.15	$5.57
		6,400 LED	30	30	$13.15	$5.57
		6,600 LED	83	29	$13.06	$5.48
H. Roadway		3,300 LED	43	15	$9.27	$3.51
		3,800 LED	32	12	$7.09	$2.73
		3,900 LED	32	12	$8.99	$3.23

FROZEN

				CHARGES	
	Lumen	Watts	kWh	Investment by Company	Investment by Others
	4,100 LED	45	16	$9.36	$3.60
	4,800 LED	41	15	$7.60	$3.07
	5,000 LED	41	15	$8.93	$3.42
	5,100 LED	60	21	$9.49	$3.98
	5,300 LED	67	24	$9.78	$4.26
	8,200 LED	88	31	$9.52	$4.67
	8,200 LED	95	33	$11.13	$5.23
	8,300 LED	106	37	$11.50	$5.60
	8,500 LED	88	31	$10.95	$5.05
	9,900 LED	130	45	$13.04	$6.56
	10,000 LED	113	39	$12.49	$6.01
	11,100 LED	108	38	$11.78	$5.76
	11,500 LED	108	38	$12.39	$5.92
	18,300 LED	162	56	$14.92	$7.82
	19,200 LED	257	89	$18.72	$11.09
	20,000 LED	258	89	$18.72	$11.09
	20,300 LED	193	67	$15.94	$8.84
	21,000 LED	193	67	$16.66	$9.03
Acorn	4,000 INC	295	103	$10.32	$5.77
	7,000 MV	175	73	$13.37	$7.67
	11,000 MV	250	96	$16.74	$10.22
	20,000 MV	400	150	$26.29	$14.90
	9,500 HPS	100	41	$28.54	$9.73
	16,000 HPS	150	69	$31.69	$12.29
Architectural	9,500 HPS	100	41	$16.22	$7.74
	16,000 HPS	150	69	$19.36	$18.94
	30,000 HPS	250	99	$22.48	$13.29
	50,000 HPS	400	153	$27.74	$19.13
	14,000 MH	175	72	$22.70	$12.44
	21,000 MH	250	101	$25.77	$15.34
	36,000 MH	400	159	$32.22	$21.10
	8,000 LPS	55	30	$23.59	$10.36
	13,500 LPS	90	50	$27.81	$12.50
	22,500 LPS	135	72	$31.77	$15.24
	33,000 LPS	180	90	$38.21	$17.95
Cobra	5,800 HPS	70	29	$9.21	$5.45
	9,500 HPS	100	41	$10.84	$6.67
Roadway	16,000 HPS	150	69	$13.58	$9.31
	30,000 HPS	250	99	$16.38	$12.10

FROZEN

		Lumen	Watts	kWh	CHARGES Investment by Company	CHARGES Investment by Others
Cobra Roadway		50,000 HPS	400	153	$22.22	$17.27
		14,000 MH	175	72	$15.79	$10.76
		21,000 MH	250	101	$18.45	$13.39
		36,000 MH	400	159	$24.30	$18.60
		8,000 FL	100	38	$18.15	$5.32
Decorative Transit		9,500 HPS	100	41	$39.13	$11.71
		16,000 HPS	150	69	$38.91	$13.09
		30,000 HPS	250	99	$44.80	$16.91
Flood		30,000 HPS	250	99	$21.74	$13.51
		50,000 HPS	400	153	$26.97	$18.75
		21,000 MH	250	101	$23.20	$14.28
		36,000 MH	400	159	$28.30	$19.35
Post Top	Colonial Gray	8,000 FL	100	38	$19.56	$5.52
	Colonial Gray	9,500 HPS	100	41	$11.19	$7.01
	Colonial Black	9,500 HPS	100	41	$12.88	$7.26
	Decorative	9,500 HPS	100	41	$34.25	$10.80

The following lamps will be available for 90 days following the effective date of revision 55. At that time these lamps will be frozen consistent with all other elements of this schedule.

	Lumens	Watts	kWh	CHARGES Investment by Company	CHARGES Investment by Others
ARCHITECTURAL/RW BRONZE	4,300 LED	45	16	$10.34	$3.89
	20,100 LED	174	60	$16.51	$8.60
	21,000 LED	174	60	$24.11	$10.62
COBRA/GRAY	20,100 LED	174	60	$15.61	$8.36
	21,000 LED	174	60	$16.35	$8.56
ROADWAY/GRAY	4,300 LED	45	16	$9.79	$3.74
	5,400 LED	60	21	$9.69	$4.06
ROADWAY	8,600 LED	95	33	$11.36	$5.34
POST TOP/SALEM BLACK	6,400 LED	83	29	$12.49	$5.36
	4,350 LED	86	30	$12.59	$5.46
TOWN AND COUNTRY/GRAY	5,600 LED	56	20	$9.16	$3.86
TOWN AND COUNTRY/BLACK	5,600 LED	56	20	$9.16	$3.86

FROZEN

DECORATIVE TRANSIT/SINGLE	3,720 LED	37	13	$38.81	$11.27
ROADWAY ARCHITECTURAL -BRONZE	3,408 LED	31	11	$8.38	$3.02
	4,800 LED	43	15	$8.76	$3.40
	4,900 LED	43	15	$8.61	$3.36
	7,810 LED	68	24	$11.21	$4.68
	8,165 LED	68	24	$11.20	$4.68
	11,000 LED	96	34	$12.19	$5.64
	11,500 LED	98	34	$12.15	$5.63
COBRA ROADWAY/GRAY	3,408 LED	31	11	$7.75	$2.85
	4,800 LED	43	15	$8.13	$3.23
	4,900 LED	43	15	$8.18	$3.24
	7,810 LED	68	24	$10.41	$4.47
	8,165 LED	68	24	$10.60	$4.51
	11,000 LED	96	34	$11.39	$5.42
	11,500 LED	96	34	$11.29	$5.40
FLOOD	14,500 LED	96	34	$14.71	$6.31

FROZEN

NOTES:

1. Investment by Company. These rates are applicable where the Company provides the initial investment to purchase and install all facilities necessary for street lighting service. The Company will own, operate, and maintain the street lighting system.

2. Investment by Others. These rates are applicable in those instances where the requesting entity or individual purchases and installs the street lighting facilities at their own expense and in accordance with Company specifications. These rates will also apply in the instance where the Customer provides a non-refundable advance to the Company to cover the Company's cost of purchasing and installing the street lighting system. The Company retains ownership of the street lighting system and provides operation and maintenance for all facilities.

3. Listed kWhs reflect the assigned monthly energy usage for each type of fixture and are used to determine any applicable transmission, system benefit, distribution, energy, and adjustment charges.

4. HPS = High Pressure Sodium

5. MH = Metal Halide

6. LPS = Low Pressure Sodium

7. FL = Fluorescent

8. INC = Incandescent. Incandescent lighting charges are applicable and available only to those Customers being served and those installations in service on November 1, 1986.

9. MV = Mercury Vapor. Mercury Vapor lighting charges are applicable and available only to those Customers being served and those installation in service on November 1, 1986 in accordance with A.R.S. §49-1104(A).

10. LED = Light Emitting Diode

11. IND = Induction

II. POLES

				CHARGES	
			Height	Investment by Company	Investment by Others
A. Anchor Base Mounted (Flush)	Round Steel	1 Simplex Adapter	12 ft.	$12.84	$1.77
			22 ft.	$14.45	$1.99
			25 ft.	$15.64	$2.16
			30 ft.	$17.96	$2.47
			32 ft.	$18.87	$2.50
		2 Simplex Adapters	12 ft.	$13.69	$1.89
			22 ft.	$15.73	$2.17
			25 ft.	$16.41	$2.26
			30 ft.	$19.07	$2.63
			32 ft.	$20.34	$2.81
	Square Steel	5"	13 ft.	$14.72	$2.02
			15 ft.	$13.15	$1.81
			23 ft.	$15.60	$2.15
			25 ft.	$17.15	$2.36
			28 ft.	$19.04	$2.62
			32 ft.	$18.93	$2.61
	Concrete		12 ft.	$43.87	$6.04
	Fiberglass		12 ft.	$37.15	$5.11
	Decorative Transit	4"	16 ft.	$36.22	$5.00
	Decorative Transit	6"	30 ft.	$69.93	$9.63
	Hinged Poles	Square	15 ft.	$13.92	$1.14
		Round	19 ft.	$12.59	$1.03

FROZEN

				CHARGES	
			Height	Investment by Company	Investment by Others
B. Anchor Base Mounted (Pedestal)	Round Steel	1 Simplex Adapter	12 ft.	$12.35	$1.69
			22 ft.	$13.97	$1.92
			25 ft.	$15.14	$2.09
			30 ft.	$17.48	$2.42
			32 ft.	$18.37	$2.53
		2 Simplex Adapters	12 ft.	$13.19	$1.81
			22 ft.	$14.74	$2.02
			25 ft.	$15.91	$2.18
			30 ft.	$18.58	$2.55
			32 ft.	$19.84	$2.73
		3 Bolt	32 ft.	$22.80	$3.13
	Square Steel	5"	13 ft.	$14.24	$1.97
			15 ft.	$14.56	$1.99
			23 ft.	$15.11	$2.09
			25 ft.	$16.67	$2.31
			28 ft.	$18.52	$2.55
			32 ft.	$19.23	$2.63
C. Direct Bury	Round Steel		19 ft.	$19.43	$2.68
			30 ft.	$15.17	$2.81
			38 ft.	$18.51	$2.88
		Self	40 ft.	$22.80	$3.61
		Stepped	25 ft.	$52.45	$4.28
			32 ft.	$55.24	$4.51
			49 ft.	$68.57	$9.45
	Square Steel	4"	34 ft.	$16.74	$2.90
		5"	20 ft.	$15.90	$2.63
			30 ft.	$16.57	$2.73
			38 ft.	$17.98	$3.12
		8"	28 ft.	$30.01	$2.44
			32 ft.	$31.37	$2.57
	Decorative Transit		41 ft 6	$21.60	$3.17
	Decorative Transit		47 ft.	$26.91	$3.96
	Steel Distribution Pole (for lighting only)		35 ft.	$24.84	$3.27
D. Post Top	Decorative Transit Anchor Base		16 ft.	$37.00	$5.08
	Gray Steel/Fiberglass		23 ft.	$12.83	$2.11
	Black Steel		23 ft.	$14.14	$2.33
E. Existing distribution pole suitable for streetlight use				$1.56	
F. FROZEN Wood Poles			30 ft.	$9.44	$1.64
			35 ft.	$9.44	$1.56

FROZEN

NOTE: The monthly rate for all new poles includes up to 300 feet of overhead secondary wire, or up to 300 feet of underground secondary wire if the Customer provides earthwork and conduit (excluding the underground to overhead transition).

III. ANCHOR BASE

	Height	CHARGES	
		Investment by Company	Investment by Others
A. Flush	4 ft.	$10.45	$1.44
	6 ft.	$12.47	$2.16
B. Pedestal	8 ft.	$14.29	$2.49
For 32' Round Steel Pole only	4 ft. 6"	$9.91	$1.71

IV. CHARGES FOR OPTIONAL OR ADDITIONAL EQUIPMENT

	CHARGE
	Company Owned
Underground Circuit Charges:	
a. Per foot of cable, installed under paving	$0.16652
b. Per foot of cable, not installed under paving	$0.05877

FROZEN

V. DETERMINATION OF CHARGES FOR NEW EQUIPMENT

Monthly charges for new lighting fixtures, poles and other equipment not included in Sections I, II, or III above will be determined by the Company using the following method:

Step 1 Determination of Charges for each Charge Type

Charge Type	Monthly Charge		Cost Inputs		PV Factor		Monthly Fixed Charge Rate
1	Carrying Cost (fixtures)	=	Equipment Cost (installed)	x	NA	x	1.518%
2	Carrying Cost (poles)	=	Equipment Cost (installed)	x	NA	x	1.296%
3	Fixture Replacement Cost	=	Equipment Cost (installed)	x	0.257	x	1.518%
4	Pole, Anchor Replacement Cost	=	Equipment Cost (installed)	x	0.110	x	1.296%
5	Lighting O&M	=	O&M Cost (lifecycle)	x	0.427	x	1.518%

Charge Type	Monthly Charge		kWh Input		$/kWh
6	Generation	=	kWh per month	x	$0.06621
7	T&D, RCS, SB	=	kWh per month	x	$0.02682

Step 2 Determination of Total Monthly Charge

The total monthly charge will be the summation of the charges for each applicable charge type

Equipment	Charge Type
Fixture - IBC	1,5,6,7
Fixture - IBO	3,5,6,7
Pole, Anchor Base - IBC	2
Pole, Anchor Base - IBO	4

TRIP CHARGE

A $100.00 trip charge per light will be charged when a Customer requests a disconnect or reconnect of service in order to accommodate the maintenance activities of the Customer or its designee(s) on their street lighting equipment.

PROPOSED

ADJUSTMENTS

The bill will include the following adjustments:

1. The Renewable Energy Adjustment Charge, Adjustment Schedule REAC-1.

2. The Power Supply Adjustment charges, Adjustment Schedule PSA-1.

3. The Transmission Cost Adjustment charge, Adjustment Schedule TCA-1.

4. The Environmental Improvement Surcharge, Adjustment Schedule EIS.

5. The Demand Side Management Adjustment Charge, Adjustment Schedule DSMAC-1.

6. The Tax Expense Adjustor Mechanism charge, Adjustment Schedule TEAM.

7. Direct Access Customers returning to Standard Offer service may be subject to aReturning Customer Direct Access Charge, Adjustment Schedule RCDAC-1.

8. Any applicable taxes and governmental fees that are assessed on APS's revenues, prices, sales volume, or generation volume.

SERVICE DETAILS

1. Street lighting facilities installed under this rate schedule are of the type currently being furnished by Company as standard at the time service is initially requested. Standard facilities are those listed in the Company's Transmission and Distribution Construction Standards book.

2. The Customer will be responsible for notifying the Company when the streetlighting facilities are not operating as intended. The Company will use reasonable efforts to complete normal maintenance (replacement of lamps, photocontrols or fixtures) within ten (10) working days from notification by Customer. If the maintenance requires cable replacement or repairs, the Company will use reasonable efforts to complete said repairs within twenty (20) working days.

3. The Customer's bill will not be reduced due to lamp, photocontrol or cable repair or replacement outages.

4. Lighting equipment which is not specified in this rate schedule will be billed at the rates corresponding to the most similar equipment, as determined by the Company.

PROPOSED

5. Non-standard facilities (non-standard being defined as any facility not listed in the Company's Transmission and Distribution Construction Standards book) do not qualify for this rate schedule. At the Company's discretion, such facilities may be served under another of the Company's rate schedules.

6. The Company will extend its standard street lighting system up to a distance of 300 feet for each additional lighting installation without cost at the request of the Customer. When the extension is underground the customer will provide earthwork as specified in the Company's Service Schedule 3, Conditions Governing Extensions of Electric Distribution Lines and Services; or, at the applicant's request, the Company will provide such earthwork and the applicant will be required to pay a non-refundable contribution in aid of construction equal to the cost of such earthwork. Any additional extension required (over and above the first 300 feet) will be provided by Company for a contribution in aid of construction equal to the cost of the additional extension.

7. Extensions to isolated areas requiring a substantial extension of the electric distribution system, as opposed to an extension of the street lighting system, will require a special study to determine the terms and conditions under which the Company will undertake such an extension.

8. APS provides electric service under the Company's Service Schedules. These schedules provide details about how the Company serves its Customers, and they have provisions and charges that may affect the Customer's bill (for example, service connection charges).

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GEHAN AT SURPRISE CENTER

140TH AVE & LUKE PKWY

STREET LIGHT DESIGN

STREET LIGHTING REQUIREMENTS

5.00 GENERAL NOTES:

THE FOLLOWING INFORMATION IS PROVIDED TO EMPHASIZE CRITICAL WORK AND IS INTENDED TO SUPPLEMENT THE SPECIFICATIONS. SHOULD THERE BE A CONFLICT WITH THE SPECIFICATIONS, THIS DOCUMENT SHALL TAKE PRECEDENCE.

ALTERNATES SHALL BE PRE-APPROVED BY THE CITY ENGINEERING MANAGER. APPROVAL OF ALTERNATE PRODUCTS SHALL BE ON AN EQUAL BASIS WITH THE PRODUCT SPECIFIED AND SHALL BE SUBMITTED A MINIMUM OF TEN (10) DAYS PRIOR TO BID OPENING. STRUCTURAL CALCULATIONS SHALL BE FURNISHED FOR ALTERNATE PRODUCTS AND CERTIFIED BY A STRUCTURAL ENGINEER, REGISTERED IN THE STATE OF ARIZONA. LUMINAIRES AND LAMPS SHALL MEET OR EXCEED THE PHOTOMETRIC, ELECTRICAL, AND MECHANICAL REQUIREMENTS FOR THE SPECIFIED PRODUCTS.

THE CONTRACTOR SHALL COMPLY WITH STATE AND CITY STATUTES, AND MANUFACTURER'S RECOMMENDATIONS.

THE SUBMITTAL PACKAGE SHALL CONSIST OF THREE (3) COPIES OF EQUIPMENT/MATERIAL TO BE INSTALLED AND SHALL BE BOUND/STAPLED IN A FOLDER AND SUBMITTED AT THE TIME OF PERMIT APPLICATION.

PRIOR TO SUBMITTING A PROPOSAL, THE BIDDER SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS AND VISIT THE CONSTRUCTION SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL OPERATE AND WHICH WILL IN ANY WAY AFFECT THE WORK UNDER THE CONTRACT. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN THIS CONNECTION IN THE BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLIGENCE ON HIS PART.

PRIOR TO ORDERING ANY MATERIALS OR DOING ANY WORK, THE CONTRACTOR SHOULD VERIFY DIMENSIONS AT THE SITE. IMMEDIATELY REPORT DIFFERENCES TO THE ENGINEERING MGR. AND SHOULD NOT PROCEED WITH WORK UNTIL THE ENGINEERING MGR. RENDERS A DECISION. NO EXTRA CHARGES OR COMPENSATION WILL BE ALLOWED FOR DIFFERENCES IN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE DRAWINGS.

5.01 GENERAL:

THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH ALL LICENSING REQUIREMENTS SET FORTH BY THE STATE REGISTRAR OF CONTRACTORS OFFICE TO PERFORM WORK RELATING TO STREET LIGHT INSTALLATION IN THE CITY RIGHT-OF-WAY.

ONE PROJECT UNDERGROUND UTILITIES (RIGHT OF WAY) PERMIT AND ONE STREETLIGHT PERMIT FOR EACH STREET LIGHT POLE SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

5.02 WORKING / "AS BUILT" PLANS:

ACCEPTANCE OF THE COMPLETED IMPROVEMENTS WILL NOT BE GIVEN UNTIL 4 MIL PHOTO MYLAR REPRODUCIBLE "AS BUILT" PLANS HAVE BEEN SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

5.03 LIGHT POLES:

LIGHT POLES SHALL BE INSTALLED PLUMB, BE ADJUSTED TO PROVIDE PROPER ALIGNMENT TO THE ROADWAY BEING LIGHTED AND BE PROPERLY GROUNDED WHEN THE INSTALLATION IS COMPLETE.

5.04 EMBEDMENT:

DIRECT BURIED POLES SHALL BE SET IN A TWELVE (12) INCH AUGURED HOLE DEPTH AS SPECIFIED IN UNDISTURBED EARTH. POLE SHALL BE SET PLUMB IN TWO DIRECTIONS 90 DEGREES APART. HAND TAMPING OF ABC BACKFILL WITH PNEUMATIC OR VIBRATING EQUIPMENT IS THE ACCEPTABLE METHOD OF COMPACTION. BACKFILL SHALL BE COMPACTED TO 85% OF MAXIMUM DENSITY AS DEFINED BY ASTM D-2922 AND D-3017. A GROUND ROD SHALL BE INSTALLED ADJACENT TO PULL BOX IN UNDISTURBED SOIL AND A LEAD IN COPPER BOND WIRE (#6) SHALL BE INSTALLED IN 1" CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT (OR EQUAL) FOR POLE GROUNDING.

SURPLUS EXCAVATION SHALL BE DISPOSED OF BY THE CONTRACTOR.

5.05 LUMINAIRES:

LUMINAIRES SHALL BE INSTALLED LEVEL AND INCLUDE A LAMP AND PHOTOCELL. CONTRACTOR SHALL ASSURE THAT THE LUMINAIRES SHALL BE FREE OF DUST, DIRT OR ANYTHING THAT WOULD IMPAIR THE OUTPUT OF THE LIGHT BEFORE HE LEAVES THE SITE.

LUMINAIRES FURNISHED WITH MULTI-TAP BALLASTS SHALL BE REWIRED OR RECONNECTED TO MATCH THE VOLTAGE SUPPLIED BY THE ELECTRIC UTILITY COMPANY.

5.06 WIRING:

WIRING SHALL BE INSTALLED PER UTILITY STANDARDS.

5.07 GROUNDING:

EACH POLE SHALL HAVE A 8' X 5/8" COPPER CLAD GROUND ROD DRIVEN ADJACENT TO PULL BOX. A #6 BARE COPPER LEAD FROM THE GROUND ROD IN PULL BOX TO LANDING LUG IN STREET LIGHT POLE HAND HOLE.

5.08 PULL BOXES:

EXCAVATION FOR PULL BOXES AND MATERIAL SPECIFICATION SHALL BE PER THE ELECTRIC UTILITY COMPANY STANDARDS.

5.09 TRENCH

TRENCH SHALL BE INSTALLED PER THE UTILITY COMPANY STANDARDS.

THE USE OF A COMMON ELECTRIC UTILITY COMPANY TRENCH IS PERMITTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANY FOR COORDINATION OF TRENCHING AND THE INSTALLATION OF CONDUIT.

CONDUIT SHALL BE INSTALLED AT THE DEPTH SPECIFIED ON THE PLANS. CONDUIT SHALL BE 1 INCH CARFLEX LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT OR EQUAL. CONDUIT MUST BE UL RATED AND SUITABLE FOR UNDERGROUND USE.

CONNECTIONS SHALL BE PER UTILITY STANDARDS.

5.12 LIGHT POLE IDENTIFICATION:

THE CONTRACTOR SHALL FURNISH AND INSTALL A NUMBER ON EACH LIGHT POLE. STREET LIGHT POLE IDENTIFICATION AND SPECIFICATIONS WILL BE PROVIDED BY THE CITY OF SURPRISE.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO RESTORE ALL PROPERTY, LANDSCAPING, PAVING AND DRIVEWAYS THAT ARE DISTURBED DURING STREET LIGHT CONSTRUCTION TO THEIR ORIGINAL CONDITION IN CONFORMANCE WITH "MAG" SPECIFICATION SECTION 107.9.

THE DEVELOPER SHALL BE RESPONSIBLE FOR FURNISHING ALL PERSONNEL AND EQUIPMENT TO SUCCESSFULLY PERFORM THE FOLLOWING TEST.

PRIOR TO ACCEPTANCE, THE DEVELOPER SHALL ENERGIZE AND OPERATE THE ENTIRE ROADWAY LIGHTING SYSTEM, FROM SUNSET TO SUNRISE FOR TWO CONSECUTIVE DAYS WITHOUT INTERRUPTION OR FAILURE. IF A LAMP OR BALLAST SHOULD FAIL, IT SHALL BE IMMEDIATELY REPLACED.

THE CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE ENGINEERING MANAGER, AGAINST IMPERFECT WORKMANSHIP, FAILURE, MALFUNCTION OF MATERIALS AND/OR EQUIPMENT DUE TO FAULTY OR IMPERFECT WORKMANSHIP. THIS GUARANTEE IS TO BE IN WRITING TO THE CITY AT THE TIME OF ISSUING FINAL ACCEPTANCE. WORK FOUND TO BE DEFECTIVE WITHIN THE WARRANTY PERIOD SHALL BE REPLACED WITHOUT COST TO THE CITY.

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 REPLACEDIN 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.

CITY OF SURPRISE APPROVAL

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.

CITY OF SURPRISE ENGINEER **DATE**

UTILITIES WITHIN OR AFFECTED BY THE PROJECT	
UTILITY CONTACT	DATE SUBMITTED
ARIZONA PUBLIC SERVICE	11/15/2022
CENTURY LINK	11/15/2022
COX COMMUNICATIONS	11/15/2022
SOUTHWEST GAS	11/15/2022

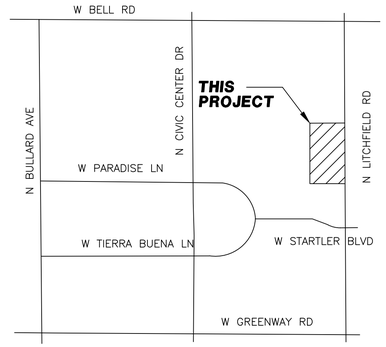
NOTE

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

B. THE ELECTRICAL/MAINTENANCE COSTS OF ALL STREET LIGHTS ON LOCAL AND COLLECTOR STREETS ARE TO BE PAID BY THE ADJACENT PROJECT OR THE ADJACENT DEVELOPMENT'S STREET LIGHT IMPROVEMENT DISTRICT (SLID). THE ELECTRICAL / MAINTENANCE COSTS OF ALL STREET LIGHTS ON ARTERIAL STREETS ARE TO BE BILLED TO THE CITY OF SURPRISE'S ENERGY BILL.

LED NOTE

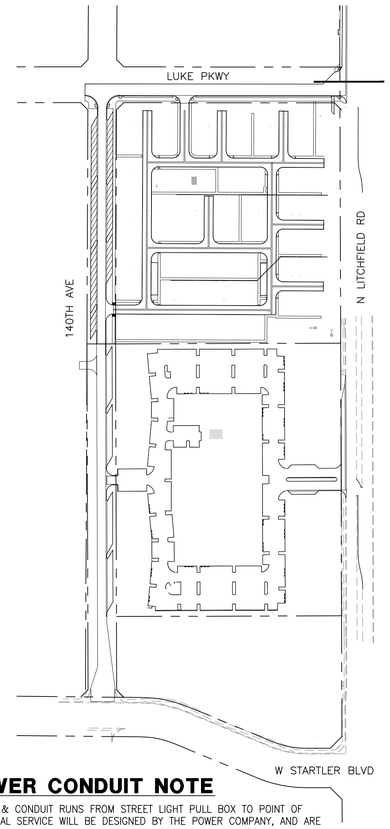
LED TECHNOLOGY IS CHANGING RAPIDLY. THE FIXTURES SHOWN ON THESE PLANS MAY NOT BE APPLICABLE AT TIME OF CONSTRUCTION. CONTRACTOR TO COORDINATE WITH APS AND UTILIZE THEIR CURRENT SPECIFICATION AT THE TIME OF BIDDING AND CONSTRUCTION.



VICINITY MAP
N.T.S.

SHEET INDEX

COVER SHEET	SL1
STREET LIGHT PLAN	SL2
STREET LIGHT DETAILS	SL3
STREET LIGHT PHOTOMETRICS	SL4



KEY MAP
N.T.S.

POWER CONDUIT NOTE

TRENCH & CONDUIT RUNS FROM STREET LIGHT PULL BOX TO POINT OF ELECTRICAL SERVICE WILL BE DESIGNED BY THE POWER COMPANY, AND ARE SHOWN ON POWER COMPANY PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THESE PLANS FROM DEVELOPER/OWNER, AND INCLUDE THESE RUNS IN THE BID. COORDINATE THIS WORK WITH THE POWER COMPANY.

CIVIL ENGINEER
BECK CONSULTING ENGINEER, INC.
2942 N. 24TH ST, STE 114
PHOENIX, AZ 85016
PHONE: (602) 943-6200
CONTACT: MARK BECK, P.E.

OWNER
GEHAN HOMES
1501 W. FOUNTAINHEAD PKWY
TEMPE, AZ 85282
PHONE: (480) 646-5955
CONTACT: BRIAN FRAME

FS22-1295

Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348) in Maricopa County: (602) 263-1100

WRIGHT ENGINEERING PROJECT NO:
22567
DESIGN BY: GRB
DRAWN BY: GRB
CHECKED BY: AMB

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: GEHAN AT SURPRISE CENTER
140TH AVE & LUKE PKWY
SURPRISE, ARIZONA

TITLE: STREET LIGHT COVER SHEET

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	NOV 2022	1ST SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No. 46691
ADAM M. BOWERS
11-22
Expires 9-30-25

DRAWING NO: SL1
OF 4

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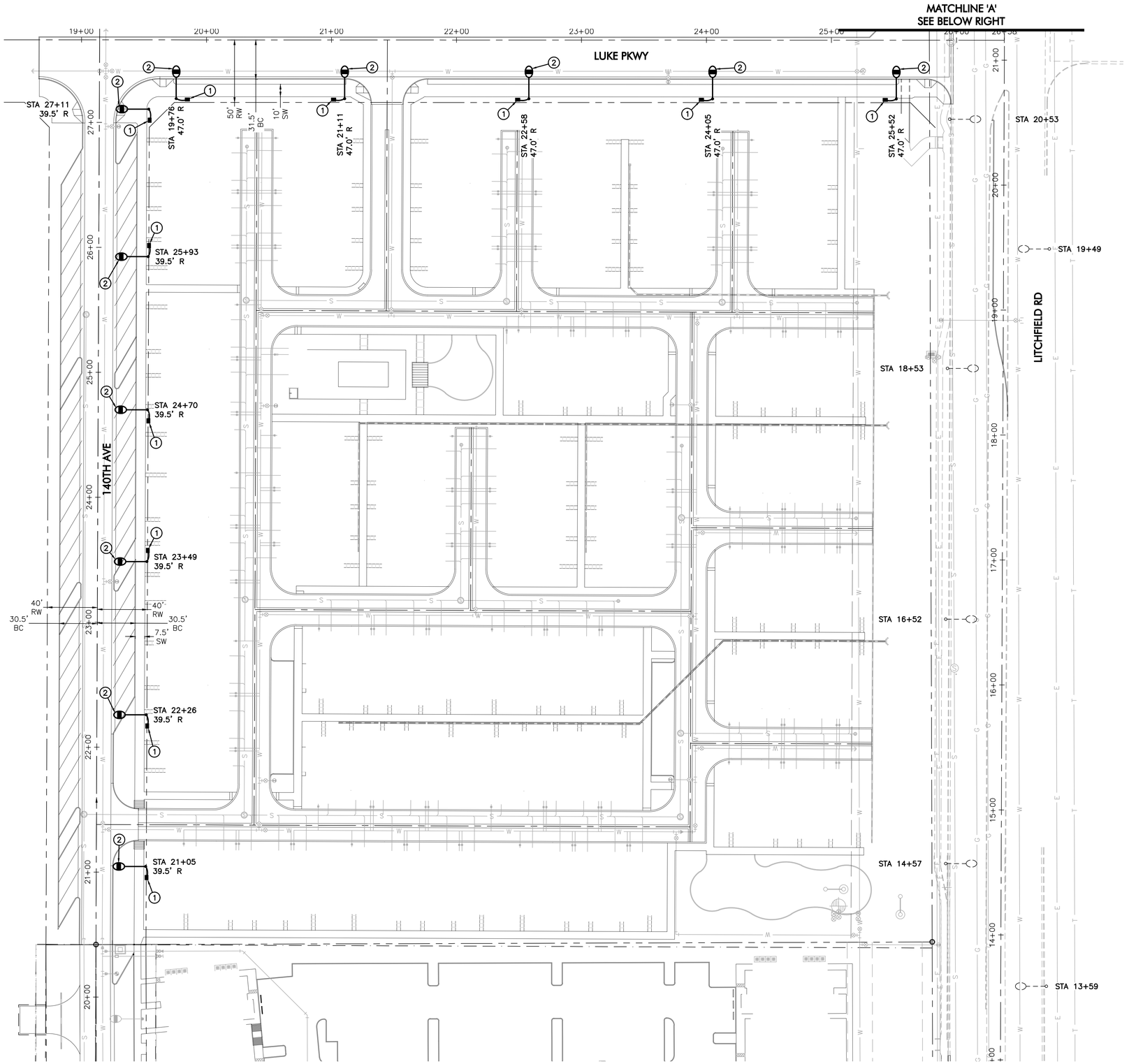

LEGEND

- 9,700 LUMEN LED STREET LIGHT, ROUND POLE
- 11,000 LUMEN LED STREET LIGHT, ROUND POLE
- EXISTING STREET LIGHT
- PULL BOX
- NEW CONDUIT RUN
- FIRE HYDRANT
- STREET LIGHT PER ADJACENT PLAN SET

CONSTRUCTION NOTES

1. INSTALL APS PULL BOX NEXT TO POLE. 1" CONDUIT WITH (2) #14 TYPE THHN/THWN & (1) #14 BARE BOND FROM PULL BOX TO FUSE HOLDER IN STREET LIGHT PER APS DETAILS & SPECIFICATIONS.
2. INSTALL ONE 75W LED (9,700 LUMEN) FIXTURE WITH PHOTOELECTRIC CONTROL ON A 26'-1" FOUNDATION MOUNTED POLE WITH 24'-0" MOUNTING HEIGHT AND A 2'-0" ARM PER APS DETAIL 8048 (SEE SHEET SL3). POLE SHALL BE CENTERED PER STATION AND OFFSET SHOWN ON PLANS. INSTALL (2) #14 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. ALL WIRING, FUSING, FOUNDATION AND GROUNDING PER APS DETAILS AND SPECIFICATIONS.
3. RELOCATE EXISTING STREET LIGHT TO NEW LOCATION SHOWN ON PLANS. RE-USE EXISTING POLE AND MAST ARM AS DEEMED SUITABLE BY CITY INSPECTOR. ANY DAMAGE TO EXISTING STREET LIGHTS, PULL BOXES OR CONDUIT AND WIRE RUNS SHALL BE REPLACED IN KIND. REPLACE EXISTING 250W LUMENAIRE WITH A 11,000 LUMEN LUMENAIRE (SEE LIGHTING SCHEDULE).

GRAPHIC SCALE

40 20 0 20 40 80

1 INCH = 40 FEET

FS22-1295

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

WRIGHT ENGINEERING PROJECT NO:
22567

DESIGN BY: GRB
DRAWN BY: GRB
CHECKED BY: AMB

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:

GEHAN AT SURPRISE CENTER
140TH AVE & LUKE PKWY
SURPRISE, ARIZONA

STREET LIGHT PLAN

NO.	DATE	SUBMITALS/REVISIONS (DESCRIPTIONS)
1	NOV 2022	1ST SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M. BOWERS
11-16-22
Date Signed
Expires 9-30-25

DRAWING NO:
SL2
OF 4

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H:\2022\22567-Gehan at Surprise Center SL\22567-SL.dwg

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K830 EL MIRAGE - LED

The K830 El Mirage is a solid, bold pendant with a shroud, designed to increase roadway performance while providing superior spacing. Suitable for off roadway applications as well, this time-less design can be used in both contemporary and historical settings.

King Luminaire

PRODUCT SPECIFICATIONS

LED ENGINE
Light engine shall include an array of 60 or 84 solid state Cree X-Series high power LEDs (light emitting diodes). The emitters shall be mounted to a metal core circuit board using SMT technology. The LEDs and circuit boards shall then be mounted to a high performance heat sink which is vented to the outside ambient air to provide dynamic airflow for cooling the system.

OPTICS
External light control shall consist of high precision refractive lenses mounted above the LED emitter arrays in such a way to achieve optimum uplight control. The lenses shall also control horizontal light distribution so that Type II, III, IV or V IESNA distribution patterns are achieved.

DECORATIVE BODY
The luminaire shall consist of a heavy Grade A319 cast aluminum housing that acts as the enclosure for the engine and is of adequate thickness to give structural rigidity. The engine must be affixed to the inside of the housing with stainless steel screws.

The bottom decorative portion of the K830 El Mirage fixture is comprised of a one-piece spun aluminum alloy with a minium thickness of 0.09". The spinning is permanently affixed to the cast housing with the use of stainless steel hardware.

DRIVER
The LED universal dimmable driver will be class 2 and capable of 120 - 277V or 347 - 480V input voltage, greater than 0.9 power factor, less than 20% total harmonic distortion. The case temperature of the driver can range from -40°C to 70°C. Each LED system comes with a standard surge protection designed to withstand up to 20kV/10kA of transient line surge as per IEEE C62.41.2 C High. An in-line ferrite choke is utilized to provide protection against EFT's. The driver assembly will be mounted on a heavy duty fabricated aluminum bracket to allow complete tool-less maintenance.

PHOTOMETRICS
Fixtures are tested to IESNA LM79 specifications. These reports are available upon request.

CHROMATICITY
High output LEDs come standard at 3000K & 4000K (+/- 300K) with a minimum nominal 70 CRI. Additional CCT emitters are available upon request.

LUMEN MAINTENANCE
Reported (TM21) and Calculated (L70) reports are available upon request with a minimum calculated value of 100,000 hrs.

WIRING
All internal wiring and connections shall be completed so that it will be necessary only to attach the incoming supply connectors to Mate-N-Lok connectors or to a terminal block. Mate-N-Lok shall be certified for 600V operation. Internal wire connectors shall be crimp connector only and rated at 1000V and 150°C. All wiring to be CSA certified and/or UL listed, type SFF-2, SEWF-2, or SEW-2 No. 14 gauge, 150°C, 600V, and color coded for the required voltage.

THERMALS
Fixtures tested to DOE sanctioned standards to determine the maximum in-situ solder-point or junction-point temperatures of the LED emitters. This report is available upon request.

FINISH
Housing is finished with a 13 step KingCoat™ SuperDurable polyester TGIC powder coat. Standard colors include strobe white, brown metal, marina blue, gate gray, Chicago bronze, standard gold, standard black, federal green and rain forest. Please see our website for a complete list of colors. RAL and custom color matches are available.

MISCELLANEOUS
All exterior hardware and fasteners, wholly or partly exposed, shall be stainless steel alloy. All internal fasteners are stainless steel or zinc coated steel. All remaining internal hardware is stainless steel, aluminum alloy, or zinc coated steel.

WARRANTY
The K830 El Mirage LED luminaire comes with a 7 year limited warranty.



CERTIFICATION:
CSA US Listed
Suitable for wet locations
ISO 9001
IP66
ARRA Compliant
LM79 / LM80 Compliant

DRIVER INFO:
>0.9 Power Factor
<20% Total Harmonic Distortion
120 - 277V & 347 - 480V
-40°C Min. Case Temperature
70°C Max. Case Temperature
Surge Protection: ANSI C136.2 extreme level 20kV/10kA

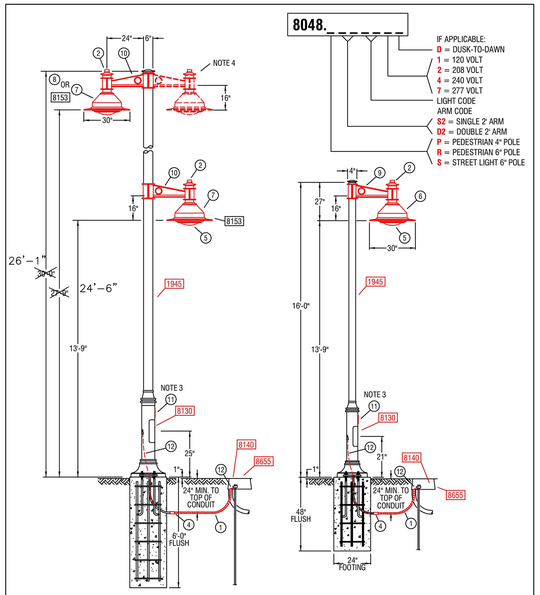
EPA:

Flat Lens:	0.92 sq.ft
4.00 Arm	1.24 sq.ft
5.56 Arm	1.30 sq.ft

FIXTURE WEIGHT:

Flat Lens:	40 lbs

Contact King Luminaire for product specifications that are exempt from CSA Certification.
7-9-2020



LIGHT CODE	POLE DIA	APN	WATTS	TYPE	VOLTS	PINTAIL LUMENS	MOUNTING HEIGHT
TE	4" OR 6"	00074497	100		120/280/240/277	9500	13'-9"
TG	6"	00085973	150	HPS	120/280/240/277	16000	27'-9"
TH	6"	00074025	250		120/280/240/277	30000	27'-9"

APS ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS				
BY	LDR.	MGR.	DATE	REV.
KLS	B. MCMINN	S. SIERRA	01/2007	5

LIGHTS
DECORATIVE TRANSIT LUMINAIRE ON 16'-0" AND 30'-0"
ALUMINUM BASE MOUNTED POLES WITH 2'-0" ARM
WITH PEDESTRIAN OPTION

SH 1 OF 2
8048

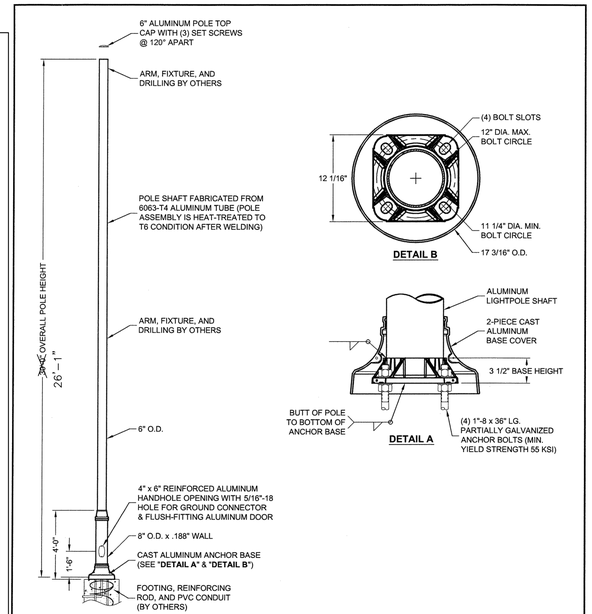
NOTES:
1. ADJUST PHOTO EYE TO FACE NORTH.
2. A GROUND ROD IS PROVIDED WITH THE J-BOX. WHERE A GROUND ROD CAN NOT BE DRIVEN ALTERNATE GROUND SHALL BE USED. SEE 2449 THRU 2460 FOR APPROVED ALTERNATES.
3. SIGN, "NOTICE THIS POLE IS OWNED AND MAINTAINED BY APS. DISCONNECT INSIDE", IS REQUIRED ON ALL DUSK-TO-DAWN AND AREA LIGHTING APPLICATIONS.
4. POLE THAT HAVE MORE THAN ONE LUMINAIRE REQUIRE A SEPARATE CIRCUIT WITH FUSING FROM THE J-BOX TO EACH LUMINAIRE.
5. THE LIGHT CODE PROVIDES TWO SAME WATTAGE LUMINAIRES WHEN DOUBLE ARM IS SPECIFIED.
6. BROWN PHOTO CONTROL IS A FAIL OFF CONTROL AND SHALL BE USED WITH ALL INDUCTION AND LED LUMINAIRES.
6. SEE SPEC 8130 THRU 8040 FOR IN-LINE FUSE FOR UNDERGROUND FEEDS.
7. BASE MOUNTED POLES ARE DESIGNED FOR UNDERGROUND FEED ONLY.

CODE	8048.P52TD	8048.P52TD_D	8048.R52TE	8048.S53TG	8048.S52TH	8048.S52TH	MATERIAL LIST	
ITEM	QTY	QTY	QTY	QTY	QTY	QTY	DESCRIPTION	APN
1	5	5	5	5	5	5	CONDUIT PLAST FLEX 2"	32900862
2	1	1	1	1	1	2	CONTROL PHOTO MULTI BLACK	00063965
3	VAR	VAR	VAR	VAR	VAR	VAR	CONTROL PHOTO MULTI BR-20	00073241
4	1	1	1	1	1	1	COUPLING 2" PVC	32900990
5	1	1	1	1	1	2	LAMP - SEE 8164 - 8171	
6	1	1	1	-	-	-	LUMINAIRE 100WHPS TRANSIT R	00074497
7	-	-	-	1	-	-	LUMINAIRE 150WHPS TRANSIT S	00085973
8	-	-	-	-	1	2	LUMINAIRE 250WHPS TRANSIT S	00074025
9	1	1	-	-	-	-	MAST ARM STLT 2' TRANSIT 4"	00074026
10	-	-	1	1	1	2	MAST ARM STLT 2' TRANSIT 6"	00074496
11	1	1	1	1	1	1	SIGN POLE OWNED BY APS	00050092
12	10	10	10	10	10	10	WIRE BARE #6 SOLID CU	33007580

APS ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS				
BY	LDR.	MGR.	DATE	REV.
KLS	B. MCMINN	S. SIERRA	01/2007	5

LIGHTS
DECORATIVE TRANSIT LUMINAIRE ON 16'-0" AND 30'-0"
ALUMINUM BASE MOUNTED POLES WITH 2'-0" ARM
WITH PEDESTRIAN OPTION

SH 2 OF 2
8048



DO NOT SCALE

valmont

Valmont Industries, Inc. Structures Division
20805 Eaton Ave Farmington, Minnesota 55024-7932
Phone: (651) 463-8990 (800) 899-7577
Fax: (651) 463-3349

****CONFIDENTIAL****
The information contained in this drawing is privileged and confidential, and may be protected from disclosure. Please be aware that any use or dissemination of this drawing may be subject to legal restriction or sanction.

TITLE:	S DORCHESTER SERIES LIGHTPOLE
MODEL NO.:	30006080SJS
MATERIAL:	ALUMINUM ALLOY
FINISH:	POWDER PAINT VALMONT BLACK
PROJECT:	SURPRISE MED CENTER
SOLD TO:	BROWN WHOLESALE
SHIP TO:	
P.O. NO:	7539263797
REP:	CLARK ELEC SALES

QTY:	8
DWN BY:	SLF
CHK'D BY:	
APPR'D BY:	
DATE:	12/05/11
DWG NO:	LH33771
PAGE:	1 / 1

REV	DATE	REVISION DESCRIPTION	BY
1			
2			
3			

LIGHT FIXTURES AND POLES ON LUKE PKWY TO HAVE BLACK FINISH COLOR

King Luminaire

Features & Benefits

- Precision optics with up to 135 lumens per watt providing enhanced light quality and control, improved spacing and high efficacy
- Zero uplight with no lens luminaires for Dark Sky Friendly specifications
- Efficient LED optical system provides energy savings and reduced maintenance costs
- Long operational life due to efficient thermal management
- Includes a dimmable driver and optional wattage selector available
- Offering 3000K and 4000K (+/- 300K) CCT and minimum 70 CRI
- Manufactured to CSA and UL standards and includes a 7 year warranty

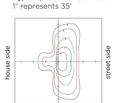
Performance

Specific photometric files can be found using an IES File Search tool on our website and additional TM21 reports are available upon request.

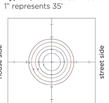
Optical System	Nominal Wattage	Input Wattage	IES Distribution	CCT	Lumens	Efficacy (L/W)	BUG	Uplight
P4 8060	40	40.6	III	4000K	5481	135	1-0-1	0%
P4 8060	60	60.2	III	4000K	7269	120	2-0-2	0%
P4 8060	75	74.3	III	4000K	8731	117	2-0-2	0%
P4 8060	100	100.1	III	4000K	11613	116	2-0-2	0%
P4 8060	120	120.6	III	4000K	13599	112	2-0-2	0%
P4 8084	150	155.4	III	4000K	17123	110	3-0-3	0%
P4 8084	200	197.0	III	4000K	18728	95	3-0-3	0%
P4 8060	40	42.3	V	4000K	5128	121	2-0-1	0%
P4 8060	60	60.9	V	4000K	7452	122	2-0-1	0%
P4 8060	75	75.1	V	4000K	9522	118	3-0-1	0%
P4 8060	100	103.9	V	4000K	11791	113	3-0-1	0%
P4 8060	120	120.6	V	4000K	13599	112	2-0-2	0%
P4 8084	150	150.2	V	4000K	16859	112	4-0-1	0%
P4 8084	200	193.0	V	4000K	19696	102	4-0-2	0%

3000K 9700

Type III, 100W at 28' Mount
1° represents 35'



Type V, 100W at 28' Mount
1° represents 35'



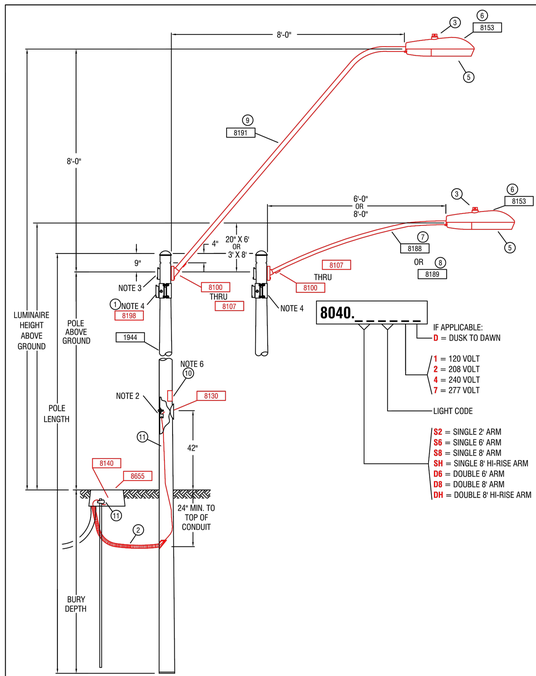
Photometric testing completed with K800 Series, non shrouded, no lens luminaires
Further photometric evaluation is suggested to analyze specific applications and achieve desired objectives

1-21-2020

StressCrete GROUP

www.scgrp.com

King Luminaire



CONSTRUCTION NOTES:
1. ADJUST PHOTO EYE TO FACE NORTH.
2. A GROUND ROD IS PROVIDED WITH THE J-BOX. WHERE A GROUND ROD CAN NOT BE DRIVEN ALTERNATE GROUND SHALL BE USED. SEE 2449 THRU 2460 FOR APPROVED ALTERNATES.
3. THE 40'-6" SELF-SUPPORTING STEEL POLE AND ONE OF THE 38'-6", HAVE TWO, MANUFACTURER INSTALLED SIMPLEX FITTINGS 180° APART FOR DOUBLE ARMS, SEE CHART.
4. APN 33701054 IS A POLE BAND ADAPTOR WITH A SIMPLEX FITTING. ADAPTOR IS REQUIRED FOR THE SECOND ARM IN DOUBLE ARM APPLICATIONS ON EXISTING POLES IN THE FIELD WITHOUT TWO SIMPLEX FITTINGS. SEE 8188 FOR AVAILABLE SIZES.
5. THE BROWN PHOTO CONTROL IS A FAIL OFF CONTROL AND SHALL BE USED WITH ALL INDUCTION AND LED LUMINAIRES.
6. SIGN, "NOTICE THIS POLE IS OWNED AND MAINTAINED BY APS. DISCONNECT INSIDE," IS REQUIRED ON ALL DUSK-TO-DAWN AND AREA LIGHTING APPLICATIONS.
7. POLES THAT HAVE MORE THAN ONE LUMINAIRE REQUIRE A SEPARATE CIRCUIT WITH FUSING FROM THE J-BOX TO EACH LUMINAIRES.
8. THE LIGHT CODE PROVIDES TWO SAME WATTAGE LUMINAIRES WHEN DOUBLE ARMS ARE SPECIFIED.
9. SEE SPEC 9130-8140 FOR IN-LINE FUSE FOR UNDERGROUND FEEDS.
10. SEE 8100 THRU 8107 FOR OVERHEAD ATTACHMENTS.

POLE CODE	POLE LENGTH	BURY DEPTH	POLE ABOVE GROUND	LUMINAIRE HEIGHT ABOVE GROUND ON ARM		
				20' X 6'	3' X 8'	8' X 8'
1944.19	19'-0"	5'-0"	14'-0"	14'-11"	16'-3"	---
1944.30	30'-6"	5'-6"	25'-0"	25'-11"	27'-3"	---
1944.38	38'-6"	6'-6"	32'-0"	32'-11"	34'-3"	39'-3"
1944.38X	38'-6"	6'-6"	32'-0"	32'-11"	34'-3"	39'-3"
1944.40X	40'-6"	8'-6"	32'-0"	32'-11"	34'-3"	39'-3"

CODE	8040.SS	8040.S8	8040.SH	8040.D6	8040.D8	8040.DH	MATERIAL LIST	
ITEM	QTY	QTY	QTY	QTY	QTY	QTY	DESCRIPTION	APN
1	-	-	-	1	1	1	ADAPTER BAND W/ SIMPLEX 3"	33701054
2	10	10	10	10	10	10	CONDUIT 1" PVC FLEX CORR	32900891
3	1	1	1	2	2	2	CONTROL PHOTO MULTI BLACK	00063965
4	VAR	VAR	VAR	VAR	VAR	VAR	CONTROL PHOTO MULTI BR-20	00073241
5	1	1	1	2	2	2	LAMP - SEE 8164 - 8171	
6	1	1	1	2	2	2	LUMINAIRE - SEE CHART	
7	1	-	-	2	-	-	MAST ARM ST LT 2" X 20' X 6'	33701112
8	-	1	-	-	2	-	MAST ARM ST LT 2" X 3' X 8'	33701124
9	-	-	1	-	-	2	MAST ARM ST LT 2" X 8' X 8'	33701123
10	1	1	1	1	1	1	SIGN POLE OWNED BY APS	00050092
11	10	10	10	10	10	10	WIRE BARE #6 SOLID CU	33007580

APS ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS				
BY	LDR.	MGR.	DATE	REV.
KLS	B. BOOKER	D. LAMONTAGNE	11/2011	10

LIGHTS
ROADWAY LUMINAIRE ON
20" X 6', 3' X 8', OR 8' X 8' MAST ARM ON
19'-0", 30'-0", 38'-0" OR 40'-6" STEEL POLES

SH 1 OF 2
8040

ARIZONA PUBLIC SERVICE COMPANY T&D CONSTRUCTION STANDARDS				
BY	LDR.	MGR.	DATE	REV.
KLS	B. McMINN	S. SIERRA	01/2007	9

LIGHTS
ROADWAY LUMINAIRE ON
20' X 6', 3' X 8' OR 8' X 8' MAST ARMS ON
19'-0", 38'-0" OR 40'-6" STEEL POLES

SH 2 OF 2
8040

LUMINAIRE TABLE

GRAY ROADWAY SCALEABLE LED 3000K

LIGHT CODE	COLOR	APN	WATTS	VOLTS	INITIAL LUMENS	CATALOG #
CL50	GRAY	00141040	32	120/208/240/277	3,900	ERLC004B430AGRAYGLRV1013
CL51		00141041	43	120/208/240/277	4,800	ERLC005A430AGRAYGLRV1013
CL52		00141043	71	120/208/240/277	7,800	ERL1008C330AGRAYGLRX162
CL53		00141045	96	120/208/240/277	11,000	ERLH011C330AGRAYGLV1108
CL54		00141046	174	120/208/240/277	20,100	ERL2021C330AGRAYGLR113

FS22-1295

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

WRIGHT ENGINEERING PROJECT NO:
22567
DESIGN BY: GRB
DRAWN BY: GRB
CHECKED BY: AMB

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:
GEHAN AT SURPRISE CENTER
140TH AVE & LUKE PKWY
SURPRISE, ARIZONA
STREET LIGHT DETAILS

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	NOV 2022	1ST SUBMITTAL

Registered Professional Engineer (Retired)
Certificate No.
46691
ADAM M. BOWERS
11-14-22
Expires 9-30-25

DRAWING NO:
SL3
OF 4

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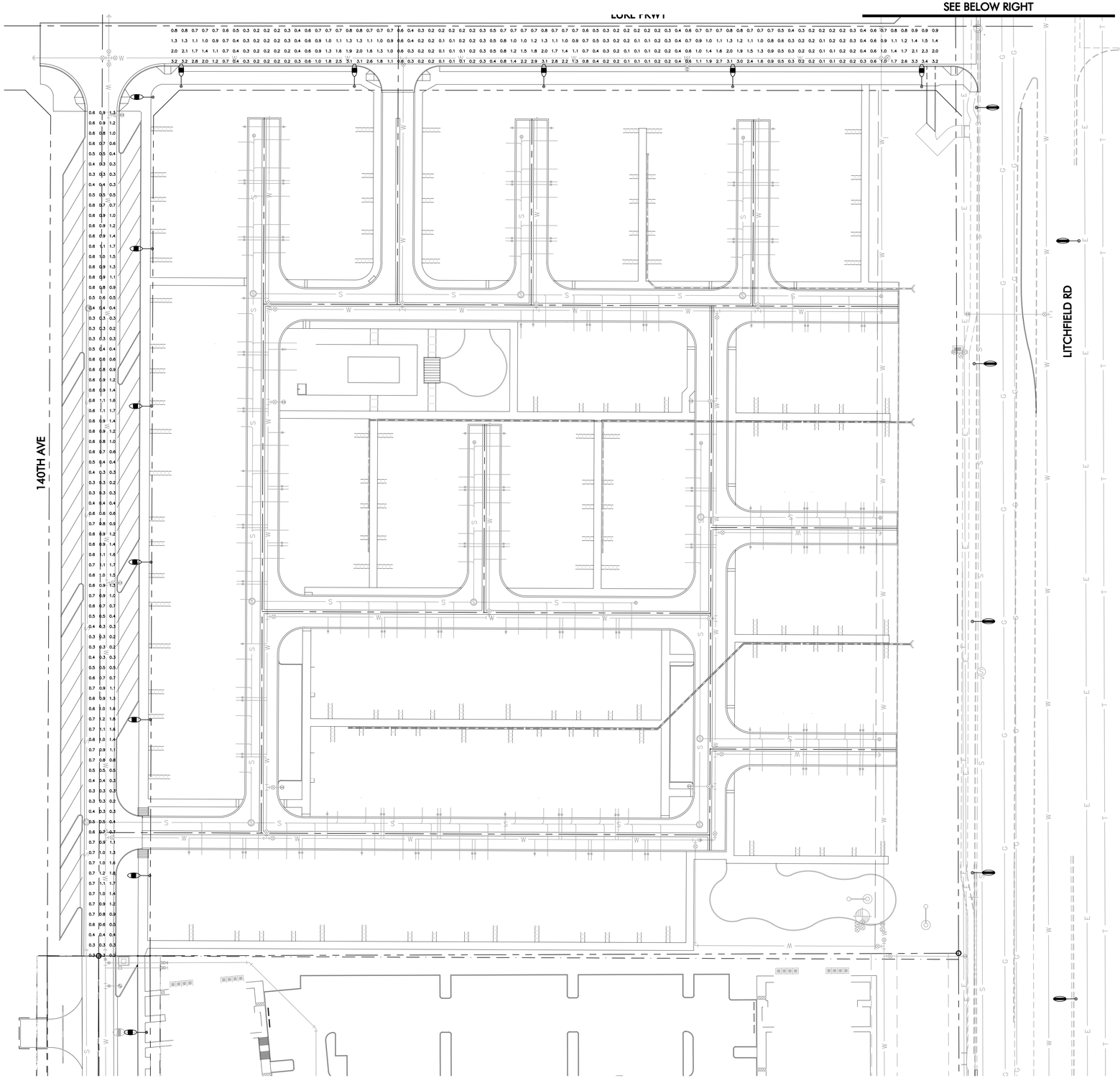


LITCHFIELD RD
307 points at z=0, sp 8ft by 8ft
HORIZONTAL FOOTCANDLES

Average	1.0
Maximum	2.6
Minimum	0.5
Avg:Min	1.96
Max:Min	5.20
Coef Var	0.41
UnifGrad	1.44

140TH AVE
249 points at z=0, sp 8ft by 8ft
HORIZONTAL FOOTCANDLES

Average	0.7
Maximum	1.8
Minimum	0.2
Avg:Min	3.52
Max:Min	9.00
Coef Var	0.52
UnifGrad	1.83

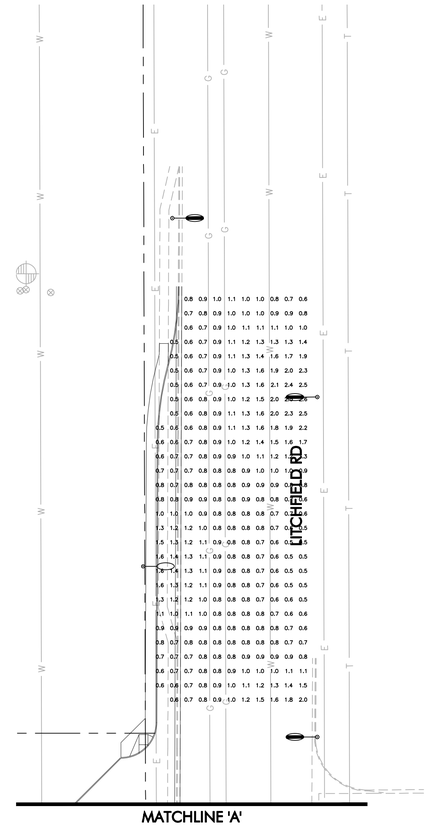
LUKE PKWY
300 points at z=0, sp 8ft by 8ft
HORIZONTAL FOOTCANDLES

Average	0.8
Maximum	3.4
Minimum	0.1
Avg:Min	8.19
Max:Min	34.00
Coef Var	0.91
UnifGrad	2.00

9,700 LUMEN LED DECORATIVE LIGHT
Type III Distribution, 2' Mast Arm
candela file '0800sp4fl4x07540xxd.ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 73
mounting height= 24 ft
number locations= 12, number luminaires= 12
kw all locations= 0.9

11,000 LUMEN LED
Type III Distribution, 8' X 8' Mast Arm
candela file 'ERLH_11C330_____.IES'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 98
mounting height= 39.25 ft
number locations= 1, number luminaires= 1
kw all locations= 0.1

EXISTING 250W HPS
candela file 'GE7323.IES'
1 lamp(s) per luminaire, 30000 initial lumens per lamp
Light Loss Factor = 0.710, watts per luminaire = 336
mounting height= 39.25 ft
number locations= 12, number luminaires= 12
kw all locations= 4.0



FS22-1295

GRAPHIC SCALE
40 20 0 20 40 80
1 INCH = 40 FEET

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

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22567
DESIGN BY: GRB
DRAWN BY: GRB
CHECKED BY: AMB

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:

SURPRISE, ARIZONA
GEHAN AT SURPRISE CENTER
140TH AVE & LUKE PKWY
STREET LIGHT PHOTOMETRICS

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	NOV 2022	1ST SUBMITTAL

Registered Professional Engineer (Retired)
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ADAM M. BOWERS
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Date Signed
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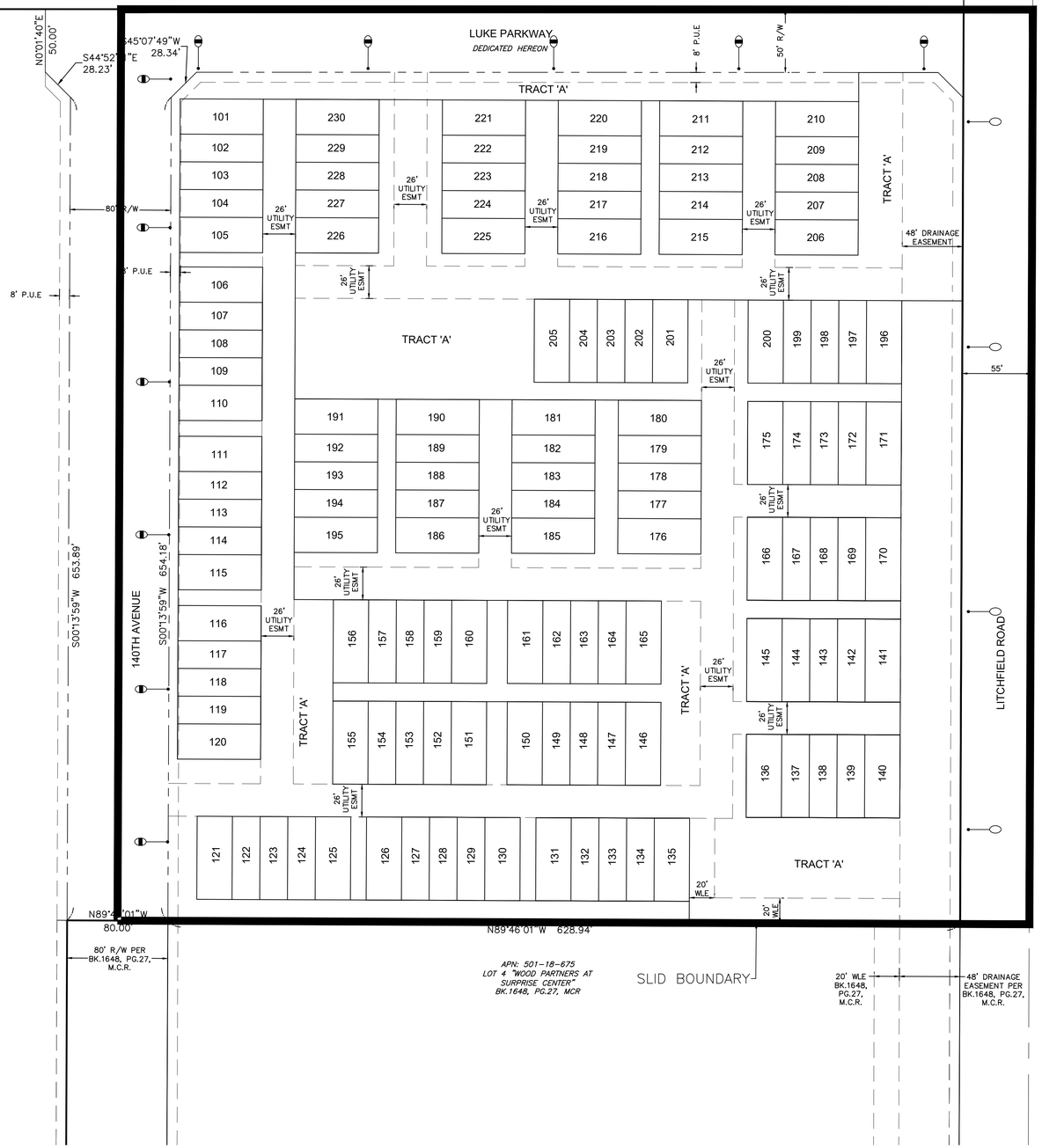
DRAWING NO:
SL4
OF 4



N

GRAPHIC SCALE

50 0 25 50 100

(IN FEET)

NOTES

A TOTAL OF ELEVEN (11) NEW STREETLIGHTS AND FOUR (4) EXISTING STREETLIGHTS ARE TO BE ADDED TO EXISTING SLID AS A PART OF THIS PROJECT.

LEGEND

NEW STREETLIGHT

EXISTING STREETLIGHT

FS22-1295

Contact Arizona 811 at least two full working days before you begin excavation

ARIZONA811 BLUE STAKE, INC. 1-STOP

Call 811 or click Arizona811.com

beck consulting engineers
9034 N. 23RD AVENUE
SUITE #5
PHOENIX, AZ 85021
PHONE: (602) 943-6200
FAX: (602) 943-6201

SCALE (H): 1"=50'
SCALE (V):
DESIGNED BY: HV
DRAWN BY: HV
CHECKED BY: MB
DATE: 07/06/2022

SLID EXHIBIT

GEHAN AT SURPRISE CENTER

SEC LUKE PARKWAY AND LITCHFIELD ROAD
SURPRISE, ARIZONA

NO.	REVISION	BY	DATE	APPR.

Registered Professional Engineer (Civil)
CERTIFICATE NO.
43113
MARK W. BECK
Date Signed 09/12/23
ARIZONA
Mark Beck

PROJECT NO.
223000

C.6 OF 16

Recording requested by:

City of Surprise
City Clerk's Office
16000 N Civic Center Plaza
Surprise, Arizona 85374

OFFICIAL RECORDS OF
MARICOPA COUNTY RECORDER
HELEN PURCELL
20110131969,02/14/2011 09:59
ELECTRONIC RECORDING
Reso201113-6-1-1--,N

Resolution No. 2011-13
Surprise Medical Plaza
Lighting Improvement District

RESOLUTION # 2011-13

A RESOLUTION OF THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE, ARIZONA, DECLARING ITS INTENTION TO ESTABLISH A STREET LIGHT IMPROVEMENT DISTRICT TO PURCHASE ENERGY FOR LIGHTING THE PUBLIC STREETS AND PARKS IN THE AREA WITHIN THE CORPORATE LIMITS OF THE CITY OF SURPRISE, ARIZONA DESCRIBED ON EXHIBIT A, ATTACHED HERETO; DECLARING SUCH IMPROVMENTS TO BE OF MORE THAN LOCAL OR ORDINARY PUBLIC BENEFIT AND THAT THE EXPENSES THEREOF BE PAID FOR BY THE LEVY AND COLLECTION OF AD VALOREM TAXES UPON THE ASSESSED VALUATION OF ALL REAL AND PERSONAL PROPERTY IN A CERTAIN DISTRICT TO BE KNOWN AS "CITY OF SURPRISE, ARIZONA, SURPRISE MEDICAL PLAZA LIGHTING IMPROVEMENT DISTRICT"; AND ORDERING THAT SUCH IMPROVEMENTS BE PROVIDED FOR UNDER THE PROVISIONS OF SECTION 48-572, ARIZONA REVISED STATUTES

WHEREAS, the owners, exclusive of mortagagees and other lienholders, of all of the real property (hereinafter referred to as "Petitioner") in the hereinafter described District, acting pursuant to the provisions of Sections 48-615(A) and 48-617(A), Arizona Revised Statutes, have petitioned the Mayor and Council of the City of Surprise, Arizona (hereinafter referred to as "City"), to adopt a resolution of intention (hereinafter referred to as "Resolution") ordering the purchase of energy for the lighting of the public street and parks (hereinafter referred to as "Improvements") for the real property legally described in Exhibit A (such area hereinafter referred to as the "District") with such boundaries as shown in the map in Exhibit B attached hereto pursuant to the provisions of Section 48-576, Arizona Revised Statutes, giving the City immediate jurisdiction to order the improvements pursuant to the provisions of Section 48-581, Arizona Revised Statutes, without the necessity of the publications or posting of this Resolution provided for in Sections 48-578, Arizona Revised Statutes, and;

WHEREAS, the City has verified that Petitioner is the owner, exclusive of mortagagees and other lienholders, of all of the real property included within the boundaries of the District, and;

WHEREAS, the Mayor and Council of the City hereby find and determine that they have jurisdiction to adopt this Resolution to order the Improvements pursuant to the provisions of Section 48-576, Arizona Revised Statutes, and have immediate jurisdiction to adopt this Resolution ordering the Improvements pursuant to the provisions of Section 48-581, Arizona Revised Statutes without the necessity of publications and posting of this Resolution as provided for in Section 48-578, Arizona Revised Statutes;

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Surprise, Arizona, as follows.

Section 1. The City, after verifying ownership of the real property included within the boundaries of the District, hereby finds the Petitioner is the owner, exclusive of

mortgagees and other lienholders, of all of the real property included within the boundaries of the District.

Section 2. The name of the District shall be "CITY OF SURPRISE, ARIZONA, SURPRISE MEDICAL PLAZA LIGHTING IMPROVEMENT DISTRICT."

Section 3. The District is formed, and shall exist, pursuant to the provisions of Title 48, Chapter 4, Article 2, Arizona Revised Statutes, and Section 48-616, Arizona Revised Statutes.

Section 4. The public interest or convenience requires, and it is the intention of the Mayor and Council of the City to order the Improvement as so described above.

Section 5. The Improvements, in the opinion of the Mayor and Council of the City, are of more than local or ordinary public benefit and are of special benefit to the respective lots, pieces and parcels of real property in the District, and the Mayor and Council of the City hereby make and order the expense of the Improvements payable from the levying and collection of ad valorem taxes upon the assessed value of all real and personal property in the District to be known and designated as "City of Surprise, Arizona Surprise Medical Plaza Lighting Improvement District" and hereby declare that the District is as legally described on Exhibit A attached hereto with the boundaries as shown in the map in Exhibit B attached hereto. Any public street or alley within the District shall be omitted from the assessment. Any lot belonging to the United States, the State, a county, city, school district or political subdivision or institution of the state or county within the District shall be omitted from the assessment.

Section 6. The Superintendent of Street or equivalent of the City shall not be required to post or cause to be posted notices of the Resolution of Intention. The Clerk of the City shall certify to the passage of this Resolution of Intention but shall not be required to cause the same to be published in a newspaper published and of general circulation in the City.

Section 7. The Mayor and Council of the City shall make annual statements and estimates of the expenses of the district, which shall be provided for by the levy and collection of ad valorem taxes upon the assessed value of all the real and personal property in the District; shall publish notice thereof; shall have hearings thereon; and shall adopt them at the times and in the manner provided for incorporated cities and towns by the applicable portions of Section 42-17101, et seq., 42-17152, Arizona Revised Statutes. The Mayor and Council of the City shall, on or before the third Monday in August of each year, fix, levy and assess the amount to be raised by ad valorem taxes upon all of the property of the District and collect, as Maricopa County, Arizona (the "County") taxes are collected, the amounts shown by the statements and estimates as adopted by the Mayor and Council of the City. All statutes providing for the levy and collection of State of Arizona and County taxes, shall be applicable to District taxes as provided to be levied under Section 48-616, Arizona Revised Statutes.

Section 8. The District shall not be authorized to issue bonds and no assessment for District purposes against the property within the District shall exceed One Dollar and Twenty Cents ($1.20) per each hundred dollars of taxable valuation thereof in any year.

Section 9. The District shall not engage in any activity other than as provided in Section 48-616, Arizona Revised Statutes, i.e., contracting for and purchasing of energy for street and public park lighting.

Section 10. The formation of the District shall not be considered as preventing the subsequent establishment of improvement districts for any other purpose authorized by law, including improvement districts for the purpose of construction street lighting facilities within any part or all of the same territory as the District.

Section 11. The type of lighting facilities to be installed in the District and the locations thereof shall consist of those lighting facilities and locations described in the petition submitted by Petitioner, or as may be approved by the City.

Section 12. The rate to be paid for purchasing the energy for the District shall be the rate described in the petition submitted by Petitioner, or as may be approved by the Arizona Public Service Company.

Section 13. Any resolutions or parts of resolutions in conflict with the provisions of this Resolution are hereby repealed.

APPROVED AND ADOPTED this 27 day of January, 2011.

L.E. Truitt, Mayor

Attest:

Sherry Aguilar, City Clerk

Approved as to form:

Michael D. Bailey, City Attorney

Yeas: Mayor Truitt, Vice Mayor Hall, Council Members; Alton, Wolcott, Williams, Villanueva and Hall

Nays: _____

EXHIBIT "B"

LINE TABLE

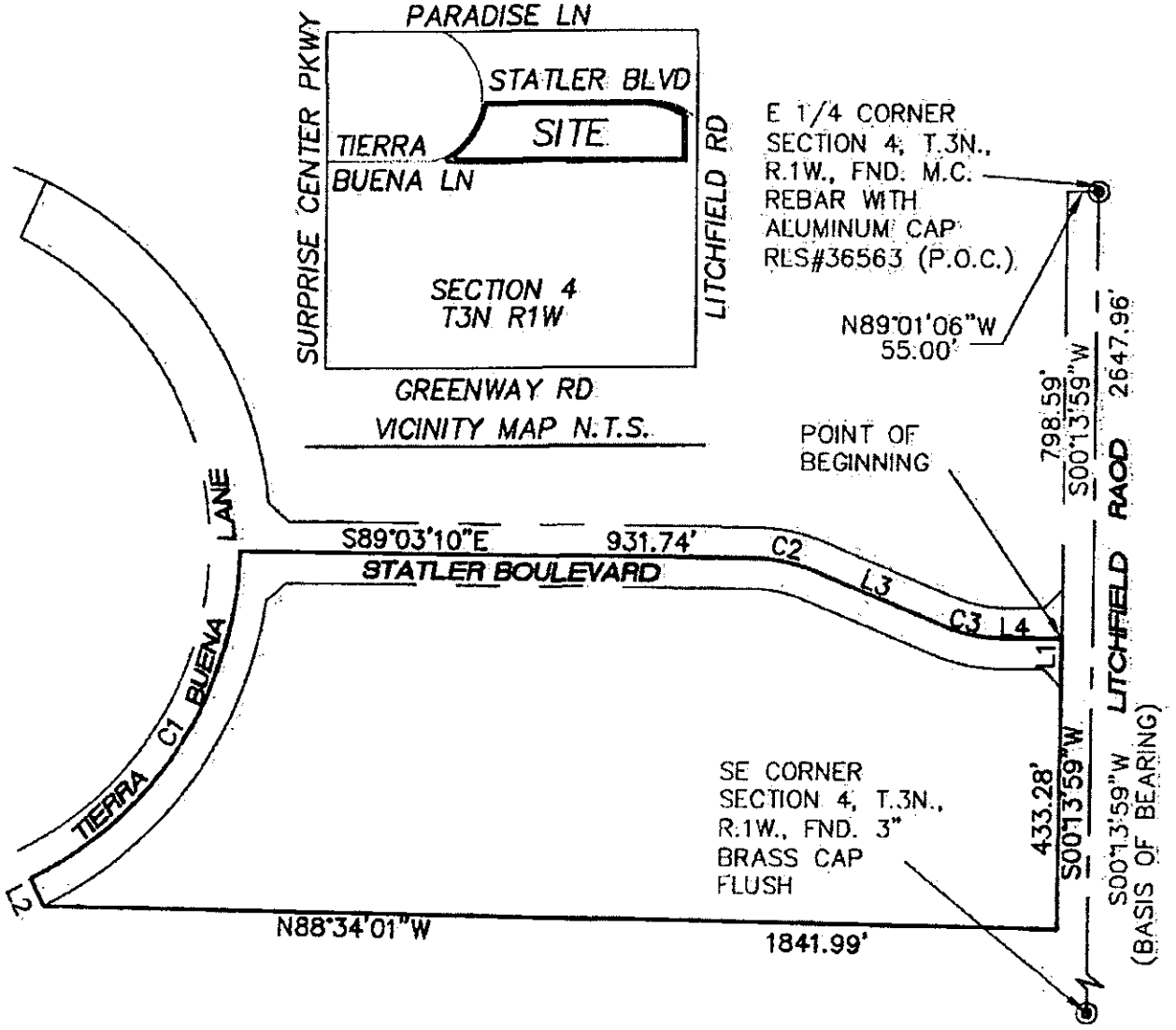
LINE	BEARING	LENGTH
L1	S00°13'59"W	88.00
L2	N25°39'40"W	55.00
L3	S67°06'27"E	252.48
L4	S89°46'01"E	99.98

CURVE TABLE

CURVE	LENGTH	RADIUS	DELTA
C1	733.81	663.25	63°23'30"
C2	114.91	300.00	21°56'43"
C3	118.64	300.00	22°39'34"

NORTH

1 inch = 300' ft.



rlf Consulting, llc
Land Survey & Mapping Solutions
6197 South Rural Road, Suite, 101
Tempe, AZ 85283
p. 480.510.3868 | f. 480.839.0200
www.rlfconsulting.com

Desc.: SURPRISE MEDICAL PLAZA AT THE CITY, STREET LIGHT IMPROVEMENT DISTRICT (SLID)

Project No: 09003012

Date: 08/31/10

Page: 2 OF 2

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
44007
RYAN L.
FIDLER
Date Signed 12/02/10
ARIZONA, U.S.A.

EXPIRES 03/31/12

EXHIBIT "A"

DESCRIPTION

SURPRISE MEDICAL PLAZA AT THE CITY

STREET LIGHT IMPROVEMENT DISTRICT (SLID)

THAT PORTION OF SECTION 4, TOWNSHIP 3 NORTH, RANGE 1 WEST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, DESCRIBED AS FOLLOWS:

COMMENCING AT A FOUND REBAR WITH ALUMINUM CAP, RLS#36563, MARKING THE EAST QUARTER CORNER OF SAID SECTION 4 FROM WHICH A FOUND BRASS CAP FLUSH BEARS SOUTH 00°13'59" WEST, 2647.96 FEET; THENCE NORTH 89°01'06" WEST, 55.00 FEET ALONG THE NORTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 4, TO THE WESTERLY RIGHT-OF-WAY LINE OF LITCHFIELD ROAD; THENCE SOUTH 00°13'59" WEST, 798.59 FEET ALONG THE WESTERLY RIGHT-OF-WAY LINE OF SAID LITCHFIELD ROAD TO A POINT BEING 55.00 WEST OF THE EAST LINE OF SAID SOUTHEAST QUARTER & THE CENTERLINE OF STATLER BOULEVARD AS DESCRIBED IN DOCUMENT 2006-1100434, MARICOPA COUNTY RECORDS, SAID POINT BEING THE POINT OF BEGINNING; THENCE CONTINUING SOUTH 00°13'59" WEST, 88.00 FEET ALONG THE WESTERLY RIGHT-OF-WAY LINE OF SAID LITHCFIELD ROAD TO THE SOUTH RIGHT-OF-WAY LINE OF SAID STATLER ROAD; THENCE CONTINUING SOUTH 00°13'59" WEST, 433.28 FEET ALONG THE WESTERLY RIGHT-OF-WAY LINE OF SAID LITCHFIELD ROAD TO THE SOUTHEAST CORNER OF THAT PARCEL DESCRIBED IN DOCUMENT RECORDS 2001-1142975, MARICOPA COUNTY RECORDS; THENCE NORTH 88°34'01" WEST, 1841.99 FEET TO THE EAST RIGHT-OF-WAY LINE OF TIERRA BUENA LANE AS DESCRIBED IN DOCUMENT 2006-1100434, MARICOPA COUNTY RECORDS; THENCE NORTH 25°39'40" WEST, 55.00 FEET TO THE CENTERLINE OF SAID TIERRA BUENA LANE AND BEGINNING OF A NON-TANGENT CURVE CONCAVE NORTHWESTERLY FROM WHICH THE RADIUS POINT BEARS NORTH 25°39'40" WEST, 663.25 FEET; THENCE NORTHERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 63°23'30", AN ARC LENGTH OF 733.81 FEET TO THE CENTERLINE INTERSECTION OF SAID TIERRA BUENA LANE AND SAID STATLER BOULEVARD; THENCE SOUTH 89°03'10" EAST, 931.74 FEET ALONG THE CENTERLINE OF SAID STATLER BOULEVARD TO THE BEGINNING OF A TANGENT CURVE TO THE RIGHT HAVING A RADIUS OF 300.00 FEET; THENCE, EASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 21°56'43", AN ARC LENGTH OF 114.91 FEET; THENCE SOUTH 67°06'27" EAST, 252.48 FEET ALONG THE CENTERLINE OF SAID STATLER BOULEVARD TO THE BEGINNING OF A TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 300 FEET; THENCE EASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 22°39'34", AN ARC LENGTH OF 118.64 FEET; THENCE SOUTH 89°46'01" EAST, 99.98 FEET ALONG THE CENTERLINE OF SAID STATLER BOULEVARD TO THE POINT OF BEGINNING.

CONTAINING 1,008,764 S.F., 23.16 ACRES MORE OR LESS.

Attached is Exhibit "B" and by this reference is made a part hereof.

End of description



EXPIRES 03-31-2012

STREET LIGHT IMPROVEMENT DISTRICT PETITION

TO THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE:

We, the undersigned, are all or a majority of the real property owners, exclusive of mortgagees and other lienholders, within the district named below. We petition the City Council of the City of Surprise, Arizona, to establish a street light improvement district under Arizona Revised Statutes (A.R.S.) §48-571 to 48-622, and any amendments, and specifically A.R.S. §48-615 to 48-617, to purchase electricity for lighting the public streets and/or parks within the district whose boundaries and area is described in Exhibits A and B attached hereto. This petition includes a charge for maintaining the lighting facilities.

It is hereby requested that, in compliance with the Arizona Revised Statutes, the City Council adopt a Resolution of Intention to order the proposed improvements, and that unless protests are received pursuant to A.R.S. §48-579 sufficient to bar further proceedings, the City Council proceed with the improvements petitioned for herein.

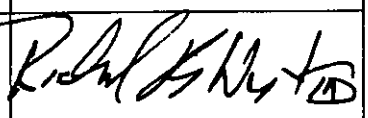
Expenses of the District shall be paid by the levy and collection of ad valorem taxes upon assessed value of all property in the District.

Public convenience, necessity and welfare will be promoted by the establishment of the District and the real property within the District will be benefited by the District. Additional street lighting facilities may be installed and included in the District, at no investment cost to the District, as directed by the City and as approved by Arizona Public Service and the City Engineer.

WHEREFORE, we respectfully ask that this Petition be properly filed and that the Mayor and Council of the City adopt the Resolution and take such other action as is proper, necessary and appropriate to form the District and to fulfill the purposes for which the District is organized, as the Mayor and Council believe is proper and necessary.

The name of the proposed street light improvements district shall be:
Surprise Medical Plaza

PETITIONERS: Please print and sign your name

PRINT BUSINESS/ PETITIONER'S NAME	ADDRESS OF PROPERTY OWNED WITHIN DISTRICT	ASSESSOR PARCEL #	SIGNATURE
Surprise Center Development Company LLC – Richard B. West, III	SW Corner of Statler Blvd and Tierra Buena Lane	501-17-971	

#4

SURPRISE
ARIZONA

CITY OF SURPRISE
Main Agenda

January 27, 2011 @ 6:00:00 PM

← Back Print

Council Meeting Date:	January 27, 2011	Contact Person:	Robert Beckley, Public Works
Submitting Department:	Public Works	District:	5
Staff Recommendations:	Approve		

Consent x	Regular	Public Hearing	Report/Discussion

Agenda Wording:

Consideration and action on Resolution No. 2011-13, a Resolution of the Mayor and Council of the City of Surprise, Arizona, declaring its intention to create a lighting improvement district pursuant to A.R.S. § 48-616 for the purpose of purchasing facilities and energy for lighting the public streets and parks for the Surprise Medical Plaza Lighting Improvement District.

Motion:

I move to approve Resolution No. 2011-13

Background:

The City has verified that the Petition for the proposed street light improvement district contains the signatures of all the real property owners in the district, exclusive of mortgages and other lien holders. The City and Arizona Public Service Company ("APS") have approved the street layout and facilities design. The electric rates are established by APS tariff. The lighting improvements are more than local or ordinary public benefit and the expenses of the district will be paid for by the levy and collection of ad valorem taxes upon the assessed valuation within the district.

Financial Impact Statement:

Any financial impact on the City is anticipated to be minimal, as the Developer and District will be bearing the costs and expenses of the District and street light improvement facilities.

ATTACHMENTS:

Click to download

- ☐ Resolution #2011-13
- ☐ SLID Map
- ☐ SLID Legal Discription
- ☐ SLID Signed Petition

External Attachment Links:

Meeting Requirements:

Powerpoint x Video White Board Other x

Presentation Speaker Names (spelling and titles for TV captions):

Nick Mascia

City Clerk's Office only

Council Action

Motion/Second:

Truitt	
Wolcott	
Alton	
Williams	M
Villanueva	
Woodard	
Hall	5

Results:

For	7
Against	0
Passed	✓
Failed	
Continue	
Tabled	
Absent	

OFFICIAL RECORDS OF
MARICOPA COUNTY RECORDER
STEPHEN RICHER
20220459229 05/27/2022 02:50
ELECTRONIC RECORDING

Res202246SLID-34-1-1--
Hoyp

Recording requested by:

City of Surprise
City Clerk's Office
16000 N Civic Center Plaza
Surprise, Arizona 85374

RESOLUTION #2022-46

INTENT TO ENLARGE THE CITY OF SURPRISE, ARIZONA

SU-SURPRISE MEDICAL PLAZA

AND ORDERING SUCH ENLARGEMENT

RESOLUTION # 2022-46

A RESOLUTION OF THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE, ARIZONA DECLARING ITS INTENT TO ENLARGE THE CITY OF SURPRISE, ARIZONA SU-SURPRISE MEDICAL PLAZA AND ORDERING SUCH ENLARGEMENT.

WHEREAS, on *January 27, 2011* the Mayor and City Council of the City of Surprise adopted Resolution No. 2011-13, ordering the formation of the City of Surprise, Arizona *Surprise Medical Plaza* (the "District") for the purpose of purchasing energy for the lighting of the public streets and parks within the District;

WHEREAS, Ariz. Rev. Stat. § 48-616(M) permits the City to add new territory to an existing district, thereby enlarging the boundaries of an existing street lighting improvement district ("SLID") when proper notice has been given to the owners of property that will be added to the SLID in accordance with Ariz. Rev. Stat. Title 48, Chapter 4, Article 2;

WHEREAS, Ariz. Rev. Stat. § 48-617(A) gives the City immediate jurisdiction to adopt the resolution ordering the creation or enlargement of a SLID without the necessity of publication and posting of the resolution of intention when all owners of the real property being added to the SLID have petitioned the City to form or enlarge the SLID;

WHEREAS, the owners, exclusive of mortgagees and other lienholders, of parcels of property which adjoin the District (hereinafter referred to as "Petitioners") acting pursuant to the provisions of Ariz. Rev. Stat. §§ 48-616(M) and 48-617(A), have petitioned the City to enlarge the District to include said property legally described in Exhibit A to this resolution, with such boundaries as shown in the map in Exhibit B to this resolution; and

WHEREAS, the City has verified and finds that Petitioners are the owners, exclusive of mortgagees and other lienholders, of all of the real property being added to the boundary of the District.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Surprise, Arizona, as follows.

Section 1. *District Enlargement*. The City of Surprise, Arizona *Surprise Medical Plaza* shall be enlarged by the addition of the property described in Exhibit A and shown in Exhibit B, which are incorporated by reference hereto into this Resolution. The annual tax levied upon the District will remain in full force and effect, and, commencing in fiscal year 2022/2023 will apply to the District as enlarged by this Resolution.

Section 2. *Recording and Filing of this Resolution.* A certified copy of this Resolution shall be recorded in the office of the Maricopa County Recorder. Certified copies of this Resolution shall also be filed with the Arizona Department of Revenue and the Maricopa County Assessor's office pursuant to Ariz. Rev. Stat. § 42-17257.

APPROVED AND ADOPTED this 17th day of May, 2022.

Skip Hall, Mayor

Attest:

Sherry Aguilar, City Clerk

Approved as to form:

Robert Wingo, City Attorney

Resolution No. 2022-46
RFLS #8268
Rev 04/22

EXHIBIT A

Legal Description

EXHIBIT 'A'

LEGAL DESCRIPTION

A PORTION OF SECTION 4, TOWNSHIP 3 NORTH, RANGE 1 WEST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 4, FROM WHICH THE EAST QUARTER CORNER OF SAID SECTION 4 BEARS SOUTH 00 DEGREES 13 MINUTES 27 SECONDS WEST A DISTANCE OF 2,777.12 FEET;

THENCE SOUTH 00 DEGREES 13 MINUTES 27 SECONDS WEST ALONG THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION, A DISTANCE OF 2,388.06 FEET TO THE POINT OF BEGINNING;

THENCE CONTINUING ALONG SAID EAST LINE, SOUTH 00 DEGREES 13 MINUTES 27 SECONDS WEST, A DISTANCE OF 389.06 FEET TO THE EAST QUARTER CORNER OF SAID SECTION;

THENCE ALONG THE EAST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION, SOUTH 00 DEGREES 13 MINUTES 58 SECONDS WEST, A DISTANCE OF 797.87 FEET TO THE CENTERLINE OF STATLER BOULEVARD;

THENCE ALONG SAID CENTERLINE , NORTH 89 DEGREES 46 MINUTES 01 SECONDS WEST, A DISTANCE OF 154.96 FEET TO THE BEGINNING OF A TANGENT CURVE, CONCAVE NORTHERLY, HAVING A RADIUS OF 300.00 FEET;

THENCE WESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 22 DEGREES 39 MINUTES 34 SECONDS, A DISTANCE OF 96.89 FEET;

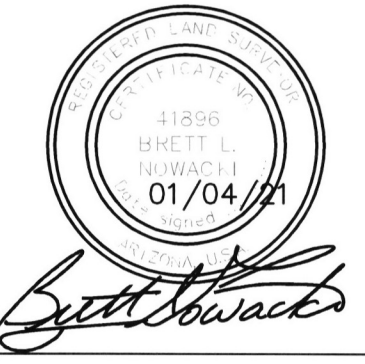
THENCE NORTH 67 DEGREES 06 MINUTES 27 SECONDS WEST, A DISTANCE OF 252.48 FEET TO THE BEGINNING OF A CURVE CONCAVE SOUTHERLY, HAVING A RADIUS OF 300.00 FEET;

THENCE WESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 21 DEGREES 56 MINUTES 43 SECONDS, A DISTANCE OF 114.90 FEET;

THENCE NORTH 89 DEGREES 03 MINUTES 10 SECONDS WEST, A DISTANCE OF 108.63 FEET;

THENCE DEPARTING SAID CENTERLINE, NORTH 00 DEGREES 13 MINUTES 59 SECONDS EAST, A DISTANCE OF 1,042.10 FEET;

THENCE SOUTH 89 DEGREES 46 MINUTES 01 SECONDS EAST, A DISTANCE OF 723.94 FEET TO THE POINT OF BEGINNING.



INFINITY ENGINEERING SERVICES, LTD.
P.O. BOX 88034
PHOENIX, AZ 85080
PHONE: (602) 670-8635

beck consulting engineers	PROJECT: ALTA SURPRISE	DATE : 10/13/2021
	JOB NO.: 999001	SCALE: NTS

SHEET
EX-A

EXHIBIT B

Map

EXHIBIT 'B'



INFINITY ENGINEERING SERVICES, LTD.
P.O. BOX 88034
PHOENIX, AZ 85080
PHONE: (602) 670-8635

NORTHEAST CORNER OF
SEC 4, T.3N, R.1W, BCHH
POINT OF COMMENCEMENT

BELL ROAD

S00°13'27"W
2388.06'

S89°46'01"E 723.94'

POINT OF
BEGINNING

S00°13'27"W
389.06'

S00°13'27"W 2777.12'

EAST QUARTER CORNER
OF SEC 4, T.3N, R.1W,
BCHH

S89°01'06"E 2638.40'

MID SECTION LINE

140TH AVENUE

N00°13'59"E 1042.01'

LOT 4

55'

LOT 5

S00°13'59"W 797.87'

N. LITCHFIELD ROAD

N89°03'10"W
108.63'

R=300.00'
L=114.90'

R=300.00'
L=118.64'

(PUBLIC)

STATLER BOULEVARD

N67°06'27"W
252.48'

N89°46'01"W
154.98'

beck consulting engineers	PROJECT: ALTA SURPRISE	DATE : 10/13/2021	SHEET EX-B
	JOB NO.: 999001	SCALE: 1"=200'	

STREET LIGHT IMPROVEMENT DISTRICT PETITION

TO THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE:

We, the undersigned, are all or a majority of the real property owners, exclusive of mortgagees and other lienholders, within the district named below. We petition the City Council of the City of Surprise, Arizona, to establish a street light improvement district under Arizona Revised Statutes (A.R.S.) §48-571 to 48-622, and any amendments, and specifically A.R.S. §48-615 to 48-617, to purchase electricity for lighting the public streets and/or parks within the district whose boundaries and area is described in Exhibits A and B attached hereto. This petition includes a charge for maintaining the lighting facilities.

It is hereby requested that, in compliance with the Arizona Revised Statutes, the City Council adopt a Resolution of Intention to order the proposed improvements, and that unless protests are received pursuant to A.R.S. §48-579 sufficient to bar further proceedings, the City Council proceed with the improvements petitioned for herein.

Expenses of the District shall be paid by the levy and collection of ad valorem taxes upon assessed value of all property in the District.

Public convenience, necessity and welfare will be promoted by the establishment of the District and the real property within the District will be benefited by the District. Additional street lighting facilities may be installed and included in the District, at no investment cost to the District, as directed by the City and as approved by Arizona Public Service and the City Engineer.

WHEREFORE, we respectfully ask that this Petition be properly filed and that the Mayor and Council of the City adopt the Resolution and take such other action as is proper, necessary and appropriate to form the District and to fulfill the purposes for which the District is organized, as the Mayor and Council believe is proper and necessary.

The name of the proposed street light improvements district shall be:

SU-Surprise Medical Plaza

PETITIONERS: Please print and sign your name

PRINT BUSINESS/ PETITIONER'S NAME	ADDRESS OF PROPERTY OWNED WITHIN DISTRICT	ASSESSOR PARCEL #	SIGNATURE
Surprise Center Development Co. - Scott Phillips	Northwest corner of Statler Street and Litchfield Road	501-18-570	

AVAILABILITY

This rate schedule is applicable to those portions of cities, towns and unincorporated communities in which the Company does a general retail electric business and where the Company has installed a multiple or series street lighting system of adequate capacity for the service to be rendered.

This rate schedule is frozen as of December 1, 2021. This means a Customer that was already taking service under this rate schedule before that date may continue service under this rate schedule, but no Customers connecting service after that date will be eligible to be served under this rate schedule.

FROZEN

DESCRIPTION

E-58 is a rate that is applicable for lighting public streets, alleys, thoroughfares, public parks and playgrounds from dusk to dawn by use of Company's facilities.

TIME PERIODS

Dusk: Time between sunset and full night when photocontrol senses the lack of sufficient sunlight and turns on the lights.

Dawn: The time between full night and sunrise when a photocontrol senses sufficient sunlight to turn off lights.

CHARGES

The monthly bill will consist of the following charges, plus adjustments.

I. FIXTURES (Includes Mounting Arm, if Applicable)

				CHARGES	
	Lumen	Watts	kWh	Investment by Company	Investment by Others
A. Acorn	3,835 LED	75	26	$21.19	$7.43
	4,796 LED	75	26	$17.02	$6.33
	5,003 LED	100	35	$22.97	$8.53
	5,904 LED	100	35	$22.56	$8.42
	6000 IND	85	29	$18.85	$5.03
B. Architectural	6,200 IND	85	29	$9.92	$3.85
	8,400 IND	100	34	$10.47	$4.27
	10,200 IND	120	41	$11.51	$4.89
	13,000 IND	150	52	$12.71	$5.81
	20,500 IND	200	69	$14.48	$7.22

				CHARGES	
	Lumen	Watts	kWh	Investment by Company	Investment by Others
B. Architectural (cont)	22,500 IND	265	91	$17.27	$9.09
	3,300 LED	43	15	$10.03	$3.71
	3,800 LED	32	12	$7.57	$2.86
	3,900 LED	32	12	$9.76	$3.44
	4,050 LED	63	22	$18.25	$6.39
	4,100 LED	45	16	$10.13	$3.81
	4,800 LED	41	15	$8.10	$3.20
	5,000 LED	41	15	$9.41	$3.55
	5,100 LED	60	21	$9.97	$4.10
	5,300 LED	67	24	$10.26	$4.39
	5,800 LED	94	32	$17.44	$5.05
	5,890 LED	89	31	$20.14	$7.50
	6,000 LED	62	22	$18.25	$6.39
	6,000 LED	67	24	$19.48	$6.85
	6,400 LED	89	31	$17.52	$5.00
	6,810 LED	101	35	$18.50	$7.35
	7,100 LED	62	22	$19.30	$6.66
	7,400 LED	127	44	$20.00	$6.21
	7,500 LED	73	26	$19.67	$7.03
	7,700 LED	86	30	$18.03	$6.88
	8,200 LED	88	31	$10.24	$4.87
	8,200 LED	95	33	$11.63	$5.37
	8,300 LED	72	25	$17.56	$6.41
	8,300 LED	106	37	$12.19	$5.79
	8,500 LED	88	31	$11.45	$5.19
	9,020 LED	139	48	$22.47	$9.28
	9,200 LED	139	48	$25.08	$7.15
	9,900 LED	130	45	$13.54	$6.70
	10,000 LED	93	32	$20.99	$7.80
	10,000 LED	113	39	$12.99	$6.15
	10,600 LED	126	44	$22.10	$8.90
	11,100 LED	108	38	$12.50	$5.95
	11,500 LED	108	38	$12.89	$6.05
	12,300 LED	203	70	$24.96	$8.67
	12,900 LED	119	41	$21.85	$8.64
	13,260 LED	202	70	$26.55	$11.87
	13,620 LED	202	70	$27.91	$9.05
	14,000 LED	171	59	$25.54	$10.85
	15,000 LED	136	47	$24.42	$9.74
	15,400 LED	144	50	$24.69	$10.01
	18,300 LED	162	56	$15.80	$8.05
	19,200 LED	257	89	$26.32	$13.11
	20,000 LED	258	89	$26.32	$13.11

FROM FILE

					CHARGES	
		Lumen	Watts	kWh	Investment by Company	Investment by Others
B. Architectural (cont)		20,300 LED	193	67	$16.82	$9.07
		21,000 LED	193	67	$24.26	$11.05
C. Cobra		6,200 IND	75	26	$10.32	$3.69
		6,400 IND	85	29	$8.79	$3.70
		8,000 IND	88	30	$10.26	$3.96
		8,400 IND	100	34	$9.50	$4.15
		10,200 IND	120	41	$10.23	$4.71
		13,000 IND	150	52	$11.26	$5.61
		15,250 IND	200	69	$13.58	$7.10
		22,500 IND	250	86	$18.17	$8.87
	Gray/Bronze	3,500 IND	55	19	$10.28	$3.20
		6,000 LED	95	33	$16.70	$5.02
		8,700 LED	142	49	$18.78	$6.40
		9,600 LED	157	54	$19.98	$6.90
		11,600 B-LED	181	62	$18.64	$7.29
	Gray/Bronze	3,300 LED	43	15	$8.82	$2.73
	Gray/Bronze	5,300 LED	67	23	$10.24	$3.47
	Gray/Bronze	8,300 LED	106	37	$13.27	$4.84
	Gray/Bronze	10,500 LED	130	45	$14.77	$5.57
	Gray/Bronze	20,000 LED	258	89	$25.67	$10.06
D. Decorative Transit		5,300 LED	75	26	$27.86	$5.99
		8,300 LED	100	34	$29.83	$6.83
		8,147 LED	75	26	$35.03	$11.13
		9,522 LED	100	35	$35.40	$11.84
		10,500 LED	150	52	$32.02	$8.35
		14,896 LED	150	52	$39.16	$14.00
	Double	8,147 LED	75	26	$63.41	$18.57
	Double	9,522 LED	100	35	$63.34	$19.18
	Double	14,896 LED	100	52	$69.22	$21.86
	Copper	6,000 IND	85	29	$18.48	$4.99
	Gray/Black	8,000 IND	88	30	$14.56	$4.53
	Gray/Black	4,350 LED	86	30	$13.20	$4.35
E. Flood		14,470 LED	148	51	$23.44	$9.75
		16,000 LED	125	43	$22.70	$9.00
F. Pendant		8,678 LED	75	26	$25.82	$8.67
		13,964 LED	100	35	$27.27	$9.68
G. Post Top		4,350 LED	86	30	$13.15	$5.57
		6,400 LED	30	30	$13.15	$5.57
		6,600 LED	83	29	$13.06	$5.48
H. Roadway		3,300 LED	43	15	$9.27	$3.51
		3,800 LED	32	12	$7.09	$2.73
		3,900 LED	32	12	$8.99	$3.23

FROZEN

				CHARGES	
	Lumen	Watts	kWh	Investment by Company	Investment by Others
	4,100 LED	45	16	$9.36	$3.60
	4,800 LED	41	15	$7.60	$3.07
	5,000 LED	41	15	$8.93	$3.42
	5,100 LED	60	21	$9.49	$3.98
	5,300 LED	67	24	$9.78	$4.26
	8,200 LED	88	31	$9.52	$4.67
	8,200 LED	95	33	$11.13	$5.23
	8,300 LED	106	37	$11.50	$5.60
	8,500 LED	88	31	$10.95	$5.05
	9,900 LED	130	45	$13.04	$6.56
	10,000 LED	113	39	$12.49	$6.01
	11,100 LED	108	38	$11.78	$5.76
	11,500 LED	108	38	$12.39	$5.92
	18,300 LED	162	56	$14.92	$7.82
	19,200 LED	257	89	$18.72	$11.09
	20,000 LED	258	89	$18.72	$11.09
	20,300 LED	193	67	$15.94	$8.84
	21,000 LED	193	67	$16.66	$9.03
Acorn	4,000 INC	295	103	$10.32	$5.77
	7,000 MV	175	73	$13.37	$7.67
	11,000 MV	250	96	$16.74	$10.22
	20,000 MV	400	150	$26.29	$14.90
	9,500 HPS	100	41	$28.54	$9.73
	16,000 HPS	150	69	$31.69	$12.29
Architectural	9,500 HPS	100	41	$16.22	$7.74
	16,000 HPS	150	69	$19.36	$18.94
	30,000 HPS	250	99	$22.48	$13.29
	50,000 HPS	400	153	$27.74	$19.13
	14,000 MH	175	72	$22.70	$12.44
	21,000 MH	250	101	$25.77	$15.34
	36,000 MH	400	159	$32.22	$21.10
	8,000 LPS	55	30	$23.59	$10.36
	13,500 LPS	90	50	$27.81	$12.50
	22,500 LPS	135	72	$31.77	$15.24
	33,000 LPS	180	90	$38.21	$17.95
Cobra	5,800 HPS	70	29	$9.21	$5.45
	9,500 HPS	100	41	$10.84	$6.67
Roadway	16,000 HPS	150	69	$13.58	$9.31
	30,000 HPS	250	99	$16.38	$12.10

FROZEN

		Lumen	Watts	kWh	CHARGES Investment by Company	CHARGES Investment by Others
Cobra Roadway		50,000 HPS	400	153	$22.22	$17.27
		14,000 MH	175	72	$15.79	$10.76
		21,000 MH	250	101	$18.45	$13.39
		36,000 MH	400	159	$24.30	$18.60
		8,000 FL	100	38	$18.15	$5.32
Decorative Transit		9,500 HPS	100	41	$39.13	$11.71
		16,000 HPS	150	69	$38.91	$13.09
		30,000 HPS	250	99	$44.80	$16.91
Flood		30,000 HPS	250	99	$21.74	$13.51
		50,000 HPS	400	153	$26.97	$18.75
		21,000 MH	250	101	$23.20	$14.28
		36,000 MH	400	159	$28.30	$19.35
Post Top	Colonial Gray	8,000 FL	100	38	$19.56	$5.52
	Colonial Gray	9,500 HPS	100	41	$11.19	$7.01
	Colonial Black	9,500 HPS	100	41	$12.88	$7.26
	Decorative	9,500 HPS	100	41	$34.25	$10.80

The following lamps will be available for 90 days following the effective date of revision 55. At that time these lamps will be frozen consistent with all other elements of this schedule.

	Lumens	Watts	kWh	CHARGES Investment by Company	CHARGES Investment by Others
ARCHITECTURAL/RW BRONZE	4,300 LED	45	16	$10.34	$3.89
	20,100 LED	174	60	$16.51	$8.60
	21,000 LED	174	60	$24.11	$10.62
COBRA/GRAY	20,100 LED	174	60	$15.61	$8.36
	21,000 LED	174	60	$16.35	$8.56
ROADWAY/GRAY	4,300 LED	45	16	$9.79	$3.74
	5,400 LED	60	21	$9.69	$4.06
ROADWAY	8,600 LED	95	33	$11.36	$5.34
POST TOP/SALEM BLACK	6,400 LED	83	29	$12.49	$5.36
	4,350 LED	86	30	$12.59	$5.46
TOWN AND COUNTRY/GRAY	5,600 LED	56	20	$9.16	$3.86
TOWN AND COUNTRY/BLACK	5,600 LED	56	20	$9.16	$3.86

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DECORATIVE TRANSIT/SINGLE	3,720 LED	37	13	$38.81	$11.27
ROADWAY ARCHITECTURAL -BRONZE	3,408 LED	31	11	$8.38	$3.02
	4,800 LED	43	15	$8.76	$3.40
	4,900 LED	43	15	$8.61	$3.36
	7,810 LED	68	24	$11.21	$4.68
	8,165 LED	68	24	$11.20	$4.68
	11,000 LED	96	34	$12.19	$5.64
	11,500 LED	98	34	$12.15	$5.63
COBRA ROADWAY/GRAY	3,408 LED	31	11	$7.75	$2.85
	4,800 LED	43	15	$8.13	$3.23
	4,900 LED	43	15	$8.18	$3.24
	7,810 LED	68	24	$10.41	$4.47
	8,165 LED	68	24	$10.60	$4.51
	11,000 LED	96	34	$11.39	$5.42
	11,500 LED	96	34	$11.29	$5.40
FLOOD	14,500 LED	96	34	$14.71	$6.31

FROZEN

NOTES:

1. Investment by Company. These rates are applicable where the Company provides the initial investment to purchase and install all facilities necessary for street lighting service. The Company will own, operate, and maintain the street lighting system.

2. Investment by Others. These rates are applicable in those instances where the requesting entity or individual purchases and installs the street lighting facilities at their own expense and in accordance with Company specifications. These rates will also apply in the instance where the Customer provides a non-refundable advance to the Company to cover the Company's cost of purchasing and installing the street lighting system. The Company retains ownership of the street lighting system and provides operation and maintenance for all facilities.

3. Listed kWhs reflect the assigned monthly energy usage for each type of fixture and are used to determine any applicable transmission, system benefit, distribution, energy, and adjustment charges.

4. HPS = High Pressure Sodium

5. MH = Metal Halide

6. LPS = Low Pressure Sodium

7. FL = Fluorescent

8. INC = Incandescent. Incandescent lighting charges are applicable and available only to those Customers being served and those installations in service on November 1, 1986.

9. MV = Mercury Vapor. Mercury Vapor lighting charges are applicable and available only to those Customers being served and those installation in service on November 1, 1986 in accordance with A.R.S. §49-1104(A).

10. LED = Light Emitting Diode

11. IND = Induction

II. POLES

				CHARGES	
			Height	Investment by Company	Investment by Others
A. Anchor Base Mounted (Flush)	Round Steel	1 Simplex Adapter	12 ft.	$12.84	$1.77
			22 ft.	$14.45	$1.99
			25 ft.	$15.64	$2.16
			30 ft.	$17.96	$2.47
			32 ft.	$18.87	$2.50
		2 Simplex Adapters	12 ft.	$13.69	$1.89
			22 ft.	$15.73	$2.17
			25 ft.	$16.41	$2.26
			30 ft.	$19.07	$2.63
			32 ft.	$20.34	$2.81
	Square Steel	5"	13 ft.	$14.72	$2.02
			15 ft.	$13.15	$1.81
			23 ft.	$15.60	$2.15
			25 ft.	$17.15	$2.36
			28 ft.	$19.04	$2.62
			32 ft.	$18.93	$2.61
	Concrete		12 ft.	$43.87	$6.04
	Fiberglass		12 ft.	$37.15	$5.11
	Decorative Transit	4"	16 ft.	$36.22	$5.00
	Decorative Transit	6"	30 ft.	$69.93	$9.63
	Hinged Poles	Square	15 ft.	$13.92	$1.14
		Round	19 ft.	$12.59	$1.03

FROZEN

				CHARGES	
			Height	Investment by Company	Investment by Others
B. Anchor Base Mounted (Pedestal)	Round Steel	1 Simplex Adapter	12 ft.	$12.35	$1.69
			22 ft.	$13.97	$1.92
			25 ft.	$15.14	$2.09
			30 ft.	$17.48	$2.42
			32 ft.	$18.37	$2.53
		2 Simplex Adapters	12 ft.	$13.19	$1.81
			22 ft.	$14.74	$2.02
			25 ft.	$15.91	$2.18
			30 ft.	$18.58	$2.55
			32 ft.	$19.84	$2.73
		3 Bolt	32 ft.	$22.80	$3.13
	Square Steel	5"	13 ft.	$14.24	$1.97
			15 ft.	$14.56	$1.99
			23 ft.	$15.11	$2.09
			25 ft.	$16.67	$2.31
			28 ft.	$18.52	$2.55
			32 ft.	$19.23	$2.63
C. Direct Bury	Round Steel		19 ft.	$19.43	$2.68
			30 ft.	$15.17	$2.81
			38 ft.	$18.51	$2.88
		Self	40 ft.	$22.80	$3.61
		Stepped	25 ft.	$52.45	$4.28
			32 ft.	$55.24	$4.51
			49 ft.	$68.57	$9.45
	Square Steel	4"	34 ft.	$16.74	$2.90
		5"	20 ft.	$15.90	$2.63
			30 ft.	$16.57	$2.73
			38 ft.	$17.98	$3.12
		8"	28 ft.	$30.01	$2.44
			32 ft.	$31.37	$2.57
	Decorative Transit		41 ft 6	$21.60	$3.17
	Decorative Transit		47 ft.	$26.91	$3.96
	Steel Distribution Pole (for lighting only)		35 ft.	$24.84	$3.27
D. Post Top	Decorative Transit Anchor Base		16 ft.	$37.00	$5.08
	Gray Steel/Fiberglass		23 ft.	$12.83	$2.11
	Black Steel		23 ft.	$14.14	$2.33
E. Existing distribution pole suitable for streetlight use				$1.56	
F. FROZEN Wood Poles			30 ft.	$9.44	$1.64
			35 ft.	$9.44	$1.56

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NOTE: The monthly rate for all new poles includes up to 300 feet of overhead secondary wire, or up to 300 feet of underground secondary wire if the Customer provides earthwork and conduit (excluding the underground to overhead transition).

III. ANCHOR BASE

	Height	CHARGES	
		Investment by Company	Investment by Others
A. Flush	4 ft.	$10.45	$1.44
	6 ft.	$12.47	$2.16
B. Pedestal	8 ft.	$14.29	$2.49
For 32' Round Steel Pole only	4 ft. 6"	$9.91	$1.71

IV. CHARGES FOR OPTIONAL OR ADDITIONAL EQUIPMENT

	CHARGE
	Company Owned
Underground Circuit Charges:	
a. Per foot of cable, installed under paving	$0.16652
b. Per foot of cable, not installed under paving	$0.05877

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V. DETERMINATION OF CHARGES FOR NEW EQUIPMENT

Monthly charges for new lighting fixtures, poles and other equipment not included in Sections I, II, or III above will be determined by the Company using the following method:

Step 1 Determination of Charges for each Charge Type

Charge Type	Monthly Charge		Cost Inputs		PV Factor		Monthly Fixed Charge Rate
1	Carrying Cost (fixtures)	=	Equipment Cost (installed)	x	NA	x	1.518%
2	Carrying Cost (poles)	=	Equipment Cost (installed)	x	NA	x	1.296%
3	Fixture Replacement Cost	=	Equipment Cost (installed)	x	0.257	x	1.518%
4	Pole, Anchor Replacement Cost	=	Equipment Cost (installed)	x	0.110	x	1.296%
5	Lighting O&M	=	O&M Cost (lifecycle)	x	0.427	x	1.518%

Charge Type	Monthly Charge		kWh Input		$/kWh
6	Generation	=	kWh per month	x	$0.06621
7	T&D, RCS, SB	=	kWh per month	x	$0.02682

Step 2 Determination of Total Monthly Charge

The total monthly charge will be the summation of the charges for each applicable charge type

Equipment	Charge Type
Fixture - IBC	1,5,6,7
Fixture - IBO	3,5,6,7
Pole, Anchor Base - IBC	2
Pole, Anchor Base - IBO	4

TRIP CHARGE

A $100.00 trip charge per light will be charged when a Customer requests a disconnect or reconnect of service in order to accommodate the maintenance activities of the Customer or its designee(s) on their street lighting equipment.

PROPOSED

ADJUSTMENTS

The bill will include the following adjustments:

1. The Renewable Energy Adjustment Charge, Adjustment Schedule REAC-1.

2. The Power Supply Adjustment charges, Adjustment Schedule PSA-1.

3. The Transmission Cost Adjustment charge, Adjustment Schedule TCA-1.

4. The Environmental Improvement Surcharge, Adjustment Schedule EIS.

5. The Demand Side Management Adjustment Charge, Adjustment Schedule DSMAC-1.

6. The Tax Expense Adjustor Mechanism charge, Adjustment Schedule TEAM.

7. Direct Access Customers returning to Standard Offer service may be subject to aReturning Customer Direct Access Charge, Adjustment Schedule RCDAC-1.

8. Any applicable taxes and governmental fees that are assessed on APS's revenues, prices, sales volume, or generation volume.

SERVICE DETAILS

1. Street lighting facilities installed under this rate schedule are of the type currently being furnished by Company as standard at the time service is initially requested. Standard facilities are those listed in the Company's Transmission and Distribution Construction Standards book.

2. The Customer will be responsible for notifying the Company when the streetlighting facilities are not operating as intended. The Company will use reasonable efforts to complete normal maintenance (replacement of lamps, photocontrols or fixtures) within ten (10) working days from notification by Customer. If the maintenance requires cable replacement or repairs, the Company will use reasonable efforts to complete said repairs within twenty (20) working days.

3. The Customer's bill will not be reduced due to lamp, photocontrol or cable repair or replacement outages.

4. Lighting equipment which is not specified in this rate schedule will be billed at the rates corresponding to the most similar equipment, as determined by the Company.

PROPOSED

5. Non-standard facilities (non-standard being defined as any facility not listed in the Company's Transmission and Distribution Construction Standards book) do not qualify for this rate schedule. At the Company's discretion, such facilities may be served under another of the Company's rate schedules.

6. The Company will extend its standard street lighting system up to a distance of 300 feet for each additional lighting installation without cost at the request of the Customer. When the extension is underground the customer will provide earthwork as specified in the Company's Service Schedule 3, Conditions Governing Extensions of Electric Distribution Lines and Services; or, at the applicant's request, the Company will provide such earthwork and the applicant will be required to pay a non-refundable contribution in aid of construction equal to the cost of such earthwork. Any additional extension required (over and above the first 300 feet) will be provided by Company for a contribution in aid of construction equal to the cost of the additional extension.

7. Extensions to isolated areas requiring a substantial extension of the electric distribution system, as opposed to an extension of the street lighting system, will require a special study to determine the terms and conditions under which the Company will undertake such an extension.

8. APS provides electric service under the Company's Service Schedules. These schedules provide details about how the Company serves its Customers, and they have provisions and charges that may affect the Customer's bill (for example, service connection charges).

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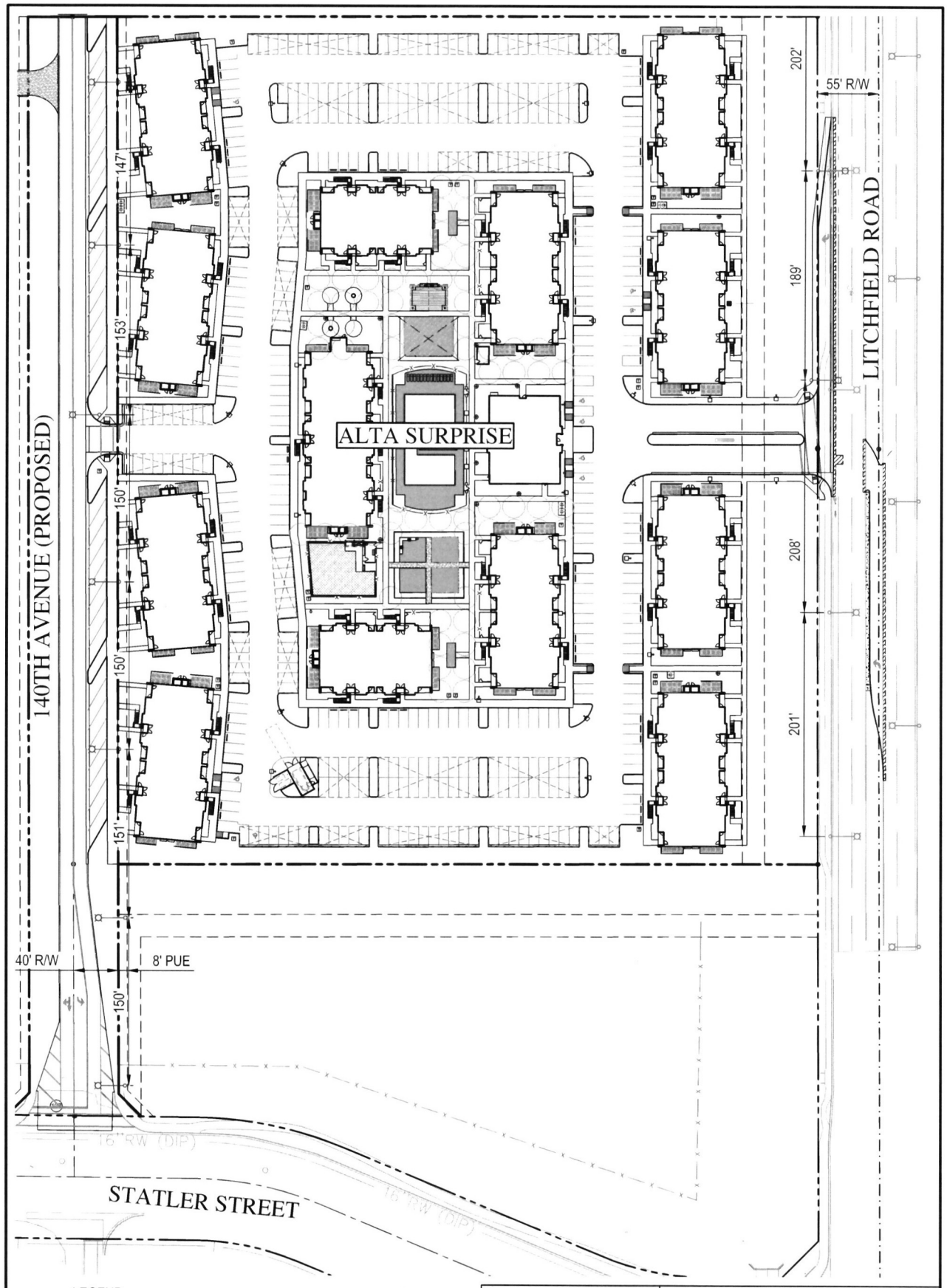

FS21-607

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Recording requested by:

City of Surprise
City Clerk's Office
16000 N Civic Center Plaza
Surprise, Arizona 85374

OFFICIAL RECORDS OF
MARICOPA COUNTY RECORDER
HELEN PURCELL
20110131969,02/14/2011 09:59
ELECTRONIC RECORDING
Reso201113-6-1-1--,N

Resolution No. 2011-13
Surprise Medical Plaza
Lighting Improvement District

RESOLUTION # 2011-13

A RESOLUTION OF THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE, ARIZONA, DECLARING ITS INTENTION TO ESTABLISH A STREET LIGHT IMPROVEMENT DISTRICT TO PURCHASE ENERGY FOR LIGHTING THE PUBLIC STREETS AND PARKS IN THE AREA WITHIN THE CORPORATE LIMITS OF THE CITY OF SURPRISE, ARIZONA DESCRIBED ON EXHIBIT A, ATTACHED HERETO; DECLARING SUCH IMPROVMENTS TO BE OF MORE THAN LOCAL OR ORDINARY PUBLIC BENEFIT AND THAT THE EXPENSES THEREOF BE PAID FOR BY THE LEVY AND COLLECTION OF AD VALOREM TAXES UPON THE ASSESSED VALUATION OF ALL REAL AND PERSONAL PROPERTY IN A CERTAIN DISTRICT TO BE KNOWN AS "CITY OF SURPRISE, ARIZONA, SURPRISE MEDICAL PLAZA LIGHTING IMPROVEMENT DISTRICT"; AND ORDERING THAT SUCH IMPROVEMENTS BE PROVIDED FOR UNDER THE PROVISIONS OF SECTION 48-572, ARIZONA REVISED STATUTES

WHEREAS, the owners, exclusive of mortagagees and other lienholders, of all of the real property (hereinafter referred to as "Petitioner") in the hereinafter described District, acting pursuant to the provisions of Sections 48-615(A) and 48-617(A), Arizona Revised Statutes, have petitioned the Mayor and Council of the City of Surprise, Arizona (hereinafter referred to as "City"), to adopt a resolution of intention (hereinafter referred to as "Resolution") ordering the purchase of energy for the lighting of the public street and parks (hereinafter referred to as "Improvements") for the real property legally described in Exhibit A (such area hereinafter referred to as the "District") with such boundaries as shown in the map in Exhibit B attached hereto pursuant to the provisions of Section 48-576, Arizona Revised Statutes, giving the City immediate jurisdiction to order the improvements pursuant to the provisions of Section 48-581, Arizona Revised Statutes, without the necessity of the publications or posting of this Resolution provided for in Sections 48-578, Arizona Revised Statutes, and;

WHEREAS, the City has verified that Petitioner is the owner, exclusive of mortagagees and other lienholders, of all of the real property included within the boundaries of the District, and;

WHEREAS, the Mayor and Council of the City hereby find and determine that they have jurisdiction to adopt this Resolution to order the Improvements pursuant to the provisions of Section 48-576, Arizona Revised Statutes, and have immediate jurisdiction to adopt this Resolution ordering the Improvements pursuant to the provisions of Section 48-581, Arizona Revised Statutes without the necessity of publications and posting of this Resolution as provided for in Section 48-578, Arizona Revised Statutes;

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Surprise, Arizona, as follows.

Section 1. The City, after verifying ownership of the real property included within the boundaries of the District, hereby finds the Petitioner is the owner, exclusive of

mortgagees and other lienholders, of all of the real property included within the boundaries of the District.

Section 2. The name of the District shall be "CITY OF SURPRISE, ARIZONA, SURPRISE MEDICAL PLAZA LIGHTING IMPROVEMENT DISTRICT."

Section 3. The District is formed, and shall exist, pursuant to the provisions of Title 48, Chapter 4, Article 2, Arizona Revised Statutes, and Section 48-616, Arizona Revised Statutes.

Section 4. The public interest or convenience requires, and it is the intention of the Mayor and Council of the City to order the Improvement as so described above.

Section 5. The Improvements, in the opinion of the Mayor and Council of the City, are of more than local or ordinary public benefit and are of special benefit to the respective lots, pieces and parcels of real property in the District, and the Mayor and Council of the City hereby make and order the expense of the Improvements payable from the levying and collection of ad valorem taxes upon the assessed value of all real and personal property in the District to be known and designated as "City of Surprise, Arizona Surprise Medical Plaza Lighting Improvement District" and hereby declare that the District is as legally described on Exhibit A attached hereto with the boundaries as shown in the map in Exhibit B attached hereto. Any public street or alley within the District shall be omitted from the assessment. Any lot belonging to the United States, the State, a county, city, school district or political subdivision or institution of the state or county within the District shall be omitted from the assessment.

Section 6. The Superintendent of Street or equivalent of the City shall not be required to post or cause to be posted notices of the Resolution of Intention. The Clerk of the City shall certify to the passage of this Resolution of Intention but shall not be required to cause the same to be published in a newspaper published and of general circulation in the City.

Section 7. The Mayor and Council of the City shall make annual statements and estimates of the expenses of the district, which shall be provided for by the levy and collection of ad valorem taxes upon the assessed value of all the real and personal property in the District; shall publish notice thereof; shall have hearings thereon; and shall adopt them at the times and in the manner provided for incorporated cities and towns by the applicable portions of Section 42-17101, et seq., 42-17152, Arizona Revised Statutes. The Mayor and Council of the City shall, on or before the third Monday in August of each year, fix, levy and assess the amount to be raised by ad valorem taxes upon all of the property of the District and collect, as Maricopa County, Arizona (the "County") taxes are collected, the amounts shown by the statements and estimates as adopted by the Mayor and Council of the City. All statutes providing for the levy and collection of State of Arizona and County taxes, shall be applicable to District taxes as provided to be levied under Section 48-616, Arizona Revised Statutes.

Section 8. The District shall not be authorized to issue bonds and no assessment for District purposes against the property within the District shall exceed One Dollar and Twenty Cents ($1.20) per each hundred dollars of taxable valuation thereof in any year.

Section 9. The District shall not engage in any activity other than as provided in Section 48-616, Arizona Revised Statutes, i.e., contracting for and purchasing of energy for street and public park lighting.

Section 10. The formation of the District shall not be considered as preventing the subsequent establishment of improvement districts for any other purpose authorized by law, including improvement districts for the purpose of construction street lighting facilities within any part or all of the same territory as the District.

Section 11. The type of lighting facilities to be installed in the District and the locations thereof shall consist of those lighting facilities and locations described in the petition submitted by Petitioner, or as may be approved by the City.

Section 12. The rate to be paid for purchasing the energy for the District shall be the rate described in the petition submitted by Petitioner, or as may be approved by the Arizona Public Service Company.

Section 13. Any resolutions or parts of resolutions in conflict with the provisions of this Resolution are hereby repealed.

APPROVED AND ADOPTED this 27 day of January, 2011.

L.E. Truitt, Mayor

Attest:

Sherry Aguilar, City Clerk

Approved as to form:

Michael D. Bailey, City Attorney

Yeas: Mayor Truitt, Vice Mayor Hall, Council Members: Alton, Wolcott, Williams, Villanueva and Hall

Nays: _____

EXHIBIT "B"

LINE TABLE

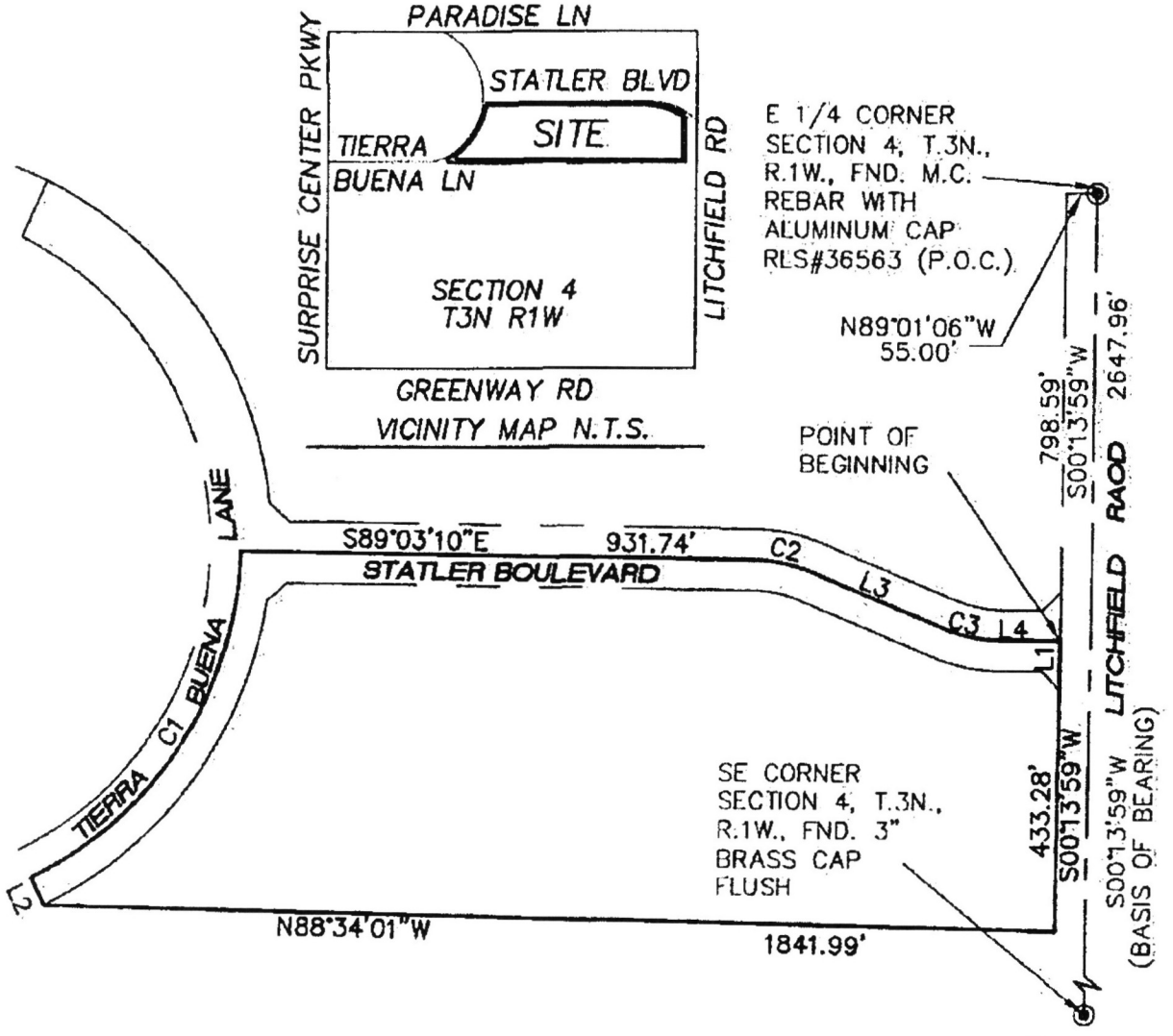
LINE	BEARING	LENGTH
L1	S00°13'59"W	88.00
L2	N25°39'40"W	55.00
L3	S67°06'27"E	252.48
L4	S89°46'01"E	99.98

CURVE TABLE

CURVE	LENGTH	RADIUS	DELTA
C1	733.81	663.25	63°23'30"
C2	114.91	300.00	21°56'43"
C3	118.64	300.00	22°39'34"

NORTH

1 Inch = 300' ft.



rlf
Consulting, llc
Land Survey & Mapping Solutions
6197 South Rural Road, Suite, 101
Tempe, AZ 85283
p. 480.510.3868 | f. 480.839.0200
www.rlfconsulting.com

Desc.: SURPRISE MEDICAL PLAZA AT THE CITY, STREET LIGHT IMPROVEMENT DISTRICT (SLID)

Project No: 09003012

Date: 08/31/10

Page: 2 OF 2

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
44007
RYAN L.
FIDLER
Date Signed 12/02/10
ARIZONA, U.S.A.

EXPIRES 03/31/12

EXHIBIT "A"

DESCRIPTION

SURPRISE MEDICAL PLAZA AT THE CITY

STREET LIGHT IMPROVEMENT DISTRICT (SLID)

THAT PORTION OF SECTION 4, TOWNSHIP 3 NORTH, RANGE 1 WEST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, DESCRIBED AS FOLLOWS:

COMMENCING AT A FOUND REBAR WITH ALUMINUM CAP, RLS#36563, MARKING THE EAST QUARTER CORNER OF SAID SECTION 4 FROM WHICH A FOUND BRASS CAP FLUSH BEARS SOUTH 00°13'59" WEST, 2647.96 FEET; THENCE NORTH 89°01'06" WEST, 55.00 FEET ALONG THE NORTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 4, TO THE WESTERLY RIGHT-OF-WAY LINE OF LITCHFIELD ROAD; THENCE SOUTH 00°13'59" WEST, 798.59 FEET ALONG THE WESTERLY RIGHT-OF-WAY LINE OF SAID LITCHFIELD ROAD TO A POINT BEING 55.00 WEST OF THE EAST LINE OF SAID SOUTHEAST QUARTER & THE CENTERLINE OF STATLER BOULEVARD AS DESCRIBED IN DOCUMENT 2006-1100434, MARICOPA COUNTY RECORDS, SAID POINT BEING THE POINT OF BEGINNING; THENCE CONTINUING SOUTH 00°13'59" WEST, 88.00 FEET ALONG THE WESTERLY RIGHT-OF-WAY LINE OF SAID LITHCFIELD ROAD TO THE SOUTH RIGHT-OF-WAY LINE OF SAID STATLER ROAD; THENCE CONTINUING SOUTH 00°13'59" WEST, 433.28 FEET ALONG THE WESTERLY RIGHT-OF-WAY LINE OF SAID LITCHFIELD ROAD TO THE SOUTHEAST CORNER OF THAT PARCEL DESCRIBED IN DOCUMENT RECORDS 2001-1142975, MARICOPA COUNTY RECORDS; THENCE NORTH 88°34'01" WEST, 1841.99 FEET TO THE EAST RIGHT-OF-WAY LINE OF TIERRA BUENA LANE AS DESCRIBED IN DOCUMENT 2006-1100434, MARICOPA COUNTY RECORDS; THENCE NORTH 25°39'40" WEST, 55.00 FEET TO THE CENTERLINE OF SAID TIERRA BUENA LANE AND BEGINNING OF A NON-TANGENT CURVE CONCAVE NORTHWESTERLY FROM WHICH THE RADIUS POINT BEARS NORTH 25°39'40" WEST, 663.25 FEET; THENCE NORTHERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 63°23'30", AN ARC LENGTH OF 733.81 FEET TO THE CENTERLINE INTERSECTION OF SAID TIERRA BUENA LANE AND SAID STATLER BOULEVARD; THENCE SOUTH 89°03'10" EAST, 931.74 FEET ALONG THE CENTERLINE OF SAID STATLER BOULEVARD TO THE BEGINNING OF A TANGENT CURVE TO THE RIGHT HAVING A RADIUS OF 300.00 FEET; THENCE, EASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 21°56'43", AN ARC LENGTH OF 114.91 FEET; THENCE SOUTH 67°06'27" EAST, 252.48 FEET ALONG THE CENTERLINE OF SAID STATLER BOULEVARD TO THE BEGINNING OF A TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 300 FEET; THENCE EASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 22°39'34", AN ARC LENGTH OF 118.64 FEET; THENCE SOUTH 89°46'01" EAST, 99.98 FEET ALONG THE CENTERLINE OF SAID STATLER BOULEVARD TO THE POINT OF BEGINNING.

CONTAINING 1,008,764 S.F., 23.16 ACRES MORE OR LESS.

Attached is Exhibit "B" and by this reference is made a part hereof.

End of description



EXPIRES 03-31-2012

STREET LIGHT IMPROVEMENT DISTRICT PETITION

TO THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE:

We, the undersigned, are all or a majority of the real property owners, exclusive of mortgagees and other lienholders, within the district named below. We petition the City Council of the City of Surprise, Arizona, to establish a street light improvement district under Arizona Revised Statutes (A.R.S.) §48-571 to 48-622, and any amendments, and specifically A.R.S. §48-615 to 48-617, to purchase electricity for lighting the public streets and/or parks within the district whose boundaries and area is described in Exhibits A and B attached hereto. This petition includes a charge for maintaining the lighting facilities.

It is hereby requested that, in compliance with the Arizona Revised Statutes, the City Council adopt a Resolution of Intention to order the proposed improvements, and that unless protests are received pursuant to A.R.S. §48-579 sufficient to bar further proceedings, the City Council proceed with the improvements petitioned for herein.

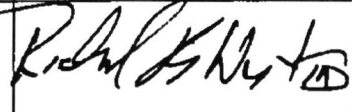
Expenses of the District shall be paid by the levy and collection of ad valorem taxes upon assessed value of all property in the District.

Public convenience, necessity and welfare will be promoted by the establishment of the District and the real property within the District will be benefited by the District. Additional street lighting facilities may be installed and included in the District, at no investment cost to the District, as directed by the City and as approved by Arizona Public Service and the City Engineer.

WHEREFORE, we respectfully ask that this Petition be properly filed and that the Mayor and Council of the City adopt the Resolution and take such other action as is proper, necessary and appropriate to form the District and to fulfill the purposes for which the District is organized, as the Mayor and Council believe is proper and necessary.

The name of the proposed street light improvements district shall be:
Surprise Medical Plaza

PETITIONERS: Please print and sign your name

PRINT BUSINESS/ PETITIONER'S NAME	ADDRESS OF PROPERTY OWNED WITHIN DISTRICT	ASSESSOR PARCEL #	SIGNATURE
Surprise Center Development Company LLC – Richard B. West, III	SW Corner of Statler Blvd and Tierra Buena Lane	501-17-971	

#4

SURPRISE
ARIZONA

CITY OF SURPRISE
Main Agenda

January 27, 2011 @ 6:00:00 PM

Back Print

Council Meeting Date:	January 27, 2011	Contact Person:	Robert Beckley, Public Works
Submitting Department:	Public Works	District:	5
Staff Recommendations:	Approve		

Consent x	Regular	Public Hearing	Report/Discussion

Agenda Wording:

Consideration and action on Resolution No. 2011-13, a Resolution of the Mayor and Council of the City of Surprise, Arizona, declaring its intention to create a lighting improvement district pursuant to A.R.S. § 48-616 for the purpose of purchasing facilities and energy for lighting the public streets and parks for the Surprise Medical Plaza Lighting Improvement District.

Motion:

I move to approve Resolution No. 2011-13

Background:

The City has verified that the Petition for the proposed street light improvement district contains the signatures of all the real property owners in the district, exclusive of mortgages and other lien holders. The City and Arizona Public Service Company ("APS") have approved the street layout and facilities design. The electric rates are established by APS tariff. The lighting improvements are more than local or ordinary public benefit and the expenses of the district will be paid for by the levy and collection of ad valorem taxes upon the assessed valuation within the district.

Financial Impact Statement:

Any financial impact on the City is anticipated to be minimal, as the Developer and District will be bearing the costs and expenses of the District and street light improvement facilities.

ATTACHMENTS:

Click to download

- ☐ Resolution #2011-13
- ☐ SLID Map
- ☐ SLID Legal Discription
- ☐ SLID Signed Petition

External Attachment Links:

Meeting Requirements:

Powerpoint x Video White Board Other x

Presentation Speaker Names (spelling and titles for TV captions):

Nick Mascia

City Clerk's Office only

Council Action

Motion/Second:

Truitt	
Wolcott	
Alton	
Williams	M
Villanueva	
Woodard	
Hall	3

Results:

For	7
Against	0 ✓
Passed	
Failed	
Continue	
Tabled	
Absent	

EXHIBIT A

Legal Description

EXHIBIT 'A'

LEGAL DESCRIPTION

A PORTION OF SECTION 4, TOWNSHIP 3 NORTH, RANGE 1 WEST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 4, FROM WHICH THE EAST QUARTER CORNER OF SAID SECTION 4 BEARS SOUTH 00 DEGREES 13 MINUTES 27 SECONDS WEST A DISTANCE OF 2,777.12 FEET;

THENCE SOUTH 00 DEGREES 13 MINUTES 27 SECONDS WEST ALONG THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION, A DISTANCE OF 2,388.06 FEET TO THE POINT OF BEGINNING;

THENCE CONTINUING ALONG SAID EAST LINE, SOUTH 00 DEGREES 13 MINUTES 27 SECONDS WEST, A DISTANCE OF 389.06 FEET TO THE EAST QUARTER CORNER OF SAID SECTION;

THENCE ALONG THE EAST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION, SOUTH 00 DEGREES 13 MINUTES 58 SECONDS WEST, A DISTANCE OF 797.87 FEET TO THE CENTERLINE OF STATLER BOULEVARD;

THENCE ALONG SAID CENTERLINE , NORTH 89 DEGREES 46 MINUTES 01 SECONDS WEST, A DISTANCE OF 154.96 FEET TO THE BEGINNING OF A TANGENT CURVE, CONCAVE NORTHERLY, HAVING A RADIUS OF 300.00 FEET;

THENCE WESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 22 DEGREES 39 MINUTES 34 SECONDS, A DISTANCE OF 96.89 FEET;

THENCE NORTH 67 DEGREES 06 MINUTES 27 SECONDS WEST, A DISTANCE OF 252.48 FEET TO THE BEGINNING OF A CURVE CONCAVE SOUTHERLY, HAVING A RADIUS OF 300.00 FEET;

THENCE WESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 21 DEGREES 56 MINUTES 43 SECONDS, A DISTANCE OF 114.90 FEET;

THENCE NORTH 89 DEGREES 03 MINUTES 10 SECONDS WEST, A DISTANCE OF 108.63 FEET;

THENCE DEPARTING SAID CENTERLINE, NORTH 00 DEGREES 13 MINUTES 59 SECONDS EAST, A DISTANCE OF 1,042.10 FEET;

THENCE SOUTH 89 DEGREES 46 MINUTES 01 SECONDS EAST, A DISTANCE OF 723.94 FEET TO THE POINT OF BEGINNING.



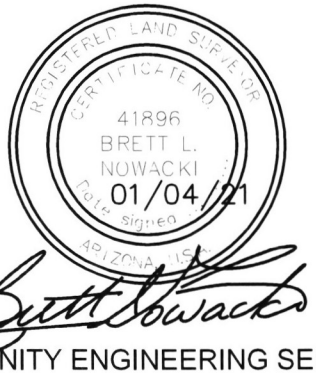
INFINITY ENGINEERING SERVICES, LTD.
P.O. BOX 88034
PHOENIX, AZ 85080
PHONE: (602) 670-8635

beck consulting engineers	PROJECT: ALTA SURPRISE	DATE : 10/13/2021	SHEET EX-A
	JOB NO.: 999001	SCALE: NTS	

EXHIBIT B

Map

EXHIBIT 'B'



INFINITY ENGINEERING SERVICES, LTD.
P.O. BOX 88034
PHOENIX, AZ 85080
PHONE: (602) 670-8635

NORTHEAST CORNER OF SEC 4, T.3N, R.1W, BCHH POINT OF COMMENCEMENT

BELL ROAD

S00°13'27"W 2388.06'

S89°46'01"E 723.94'

POINT OF BEGINNING

S00°13'27"W 389.06'

S00°13'27"W 2777.12'

EAST QUARTER CORNER OF SEC 4, T.3N, R.1W, BCHH

S89°01'06"E 2638.40'

MID SECTION LINE

140TH AVENUE

N00°13'59"E 1042.01'

LOT 4

55'

LOT 5

S00°13'59"W 797.87'

N. LITCHFIELD ROAD

N89°03'10"W 108.63'

R=300.00' L=114.90'

R=300.00' L=118.64'

N67°06'27"W 252.48'

N89°46'01"W 154.98'

(PUBLIC)

STATLER BOULEVARD

beck consulting engineers	PROJECT: ALTA SURPRISE	DATE : 10/13/2021	SHEET EX-B
	JOB NO.: 999001	SCALE: 1"=200'	

#4

CITY OF SURPRISE
Regular City Council Meeting

SURPRISE
ARIZONA

Council Meeting Date: May 17, 2022
Submitting Department: Public Works
Staff Recommendations: None

Contact Person:
District: District 5

Consent: Yes Regular: No Public Hearing: No Report/Discussion: No

Agenda Wording:
Consideration and action declaring the intent to enlarge the existing street lighting improvement district known as, "City of Surprise, Arizona, Surprise Medical Plaza" pursuant to A.R.S. § 48-616 for the purpose of purchasing facilities and energy for lighting the public streets and parks; Resolution # 2022-46.

Motion:
I move to approve Resolution # 2022-46.

Background:
Surprise Medical Plaza was formed on 01/27/2011 (Resolution 2011-13). Since the time of formation, new parcels have been formed in and around the original SLID boundary. We request enlarging the existing SLID to include the new parcels and extend existing boundaries to roadway centerlines. The city has verified that the Petition for the proposed streetlight improvement district enlargement contains the signatures of all the real property owners in the enlargement area of the district, exclusive of mortgages and other lien holders. Seven new and nine existing lights are proposed within this enlargement which are local and arterial roads and will be billed to the Surprise Medical Plaza SLID.

Objective Analysis:
A SLID is a neighborhood partnership and very common practice in which property owners in a defined area agree to pay the costs to operate and maintain their immediate area's street lights through a property tax. All new developments in the City of Surprise require a SLID. This action will enlarge an existing SLID boundary to include the remainder of the parcels not within the SLID and extend existing boundaries to roadway centerlines. The District is paid for by the levy and collection of ad valorem of taxes based on the number and classification of properties within the District. The enlargement of the SLID will only affect the parcels joining into the District, as the valuation of the property may be increased.

Policy Compliant:
Surprise Municipal Code requires that street lighting that serves a defined area be paid for through revenues obtained from the specific area being served by such street lighting. In these instances, a Street

Light Improvement District (SLID) is formed. The city strives to assure that residents are subject to only one SLID and that the boundaries of each SLID accurately reflect the service area. This item is consistent with these objectives.

Financial Impact:

Any financial impact on the City is anticipated to be minimal, as the ratio of the new lights to existing lights is very small.

Budget Impact:

This is an enlargement of an existing SLID, therefore no impact to the budget is anticipated. A separate fund for this District is currently in place to track the revenue and expenses.

FTE Impact:

This action does not change the full time equivalent count.

ATTACHMENTS:

1. 02- FS21-607- Alta at Surprise SLID Petition
2. 03-FS21-607- Alta at Surprise- council map
3. 05-SLIDRes 2011-013-012711
4. Res 2022-46 Alta SLID Enlargement

CITY OF SURPRISE
Regular City Council Meeting

Council Meeting Date: May 7, 2024 Contact Person: Chris Sexton
Submitting Department: Community Development District: District 1
Staff Recommendations:

Consent: Yes Regular: No Public Hearing: No Report/Discussion: No

Agenda Wording:
Consideration and action pertaining to approval of the Final Plat entitled, "Windstone Ranch North" and received February 21, 2024, for property located at the northwest corner of Cottontail Lane and 151st Avenue; FS22-0807.

Motion:
I move to approve the Final Plat entitled, "Windstone Ranch North" and received February 21, 2024.

Background:
Kent Xander of Xander Lander, LCC and Redleaf Holding, LLC seek approval of a Final Plat for the Windstone Ranch North subdivision. The applicants seek to subdivide the subject property into 61 single-family residential lots over 16.22 net acres, for a density of 3.76 DU/Ac.

Objective Analysis:
Approval of the proposed Final Plat will allow the applicant the ability to subdivide the property as proposed.

Policy Compliant:
This proposed Final Plat is consistent with the Surprise General Plan 2035 and the Land Development Ordinance (LDO).

Financial Impact:
While this item does not have an immediate or direct financial impact, ongoing development activity in the City will inevitably have a future financial impact as additional resources are needed to provide city services.

Budget Impact:
There is no anticipated budget impact related to this item.

FTE Impact:
This item does not have an impact on current staff levels.

ATTACHMENTS:

1. 00-FS22-0807 Windstone Ranch North Final Plat - Staff Report
2. 01 - FS22-0807 Windstone Ranch North Final Plat - Vicinity Map
3. 02 - FS22-0807 Windstone Ranch North Final Plat - Zoning Map
4. 03 - FS22-0807 Windstone Ranch North - Final Plat - Final Plat
5. 04 - FS22-0807 Windstone Ranch North - Final Plat - Landscape Plan
6. 05 - FS22-0807 Windstone Ranch North - Final Plat - Wall Plan
7. 06 - FS22-0807 Windstone Ranch North - Final Plat - Wall Details
8. 07 - FS22-0807 Windstone Ranch North Final Plat - Luke AFB Letter
9. FS22-0807 Windstone Ranch North - Final Plat - Powerpoint

FINAL PLAT

REPORT TO THE CITY COUNCIL

Case:	**FS22-0807**
Project Name:	Windstone Ranch North – Final Plat
Council District:	1 - Acacia
City Council Date:	**May 7, 2024**
Planner:	Chris Sexton, Planner II
Owner:	Xander Lander, LLC and Red Leaf Holding, LLC
Applicant:	Kent Xander of Xander Lander, LLC
Request:	Final Plat for 61 single-family residential lots
Site Location:	Generally located at the northwest corner of Cottontail Lane and 151st Avenue
Site Size:	16.22 net acres (approx.)
Density:	3.76 DU/Ac
General Plan Conformance:	The proposal is consistent with the Surprise General Plan 2035

Findings:

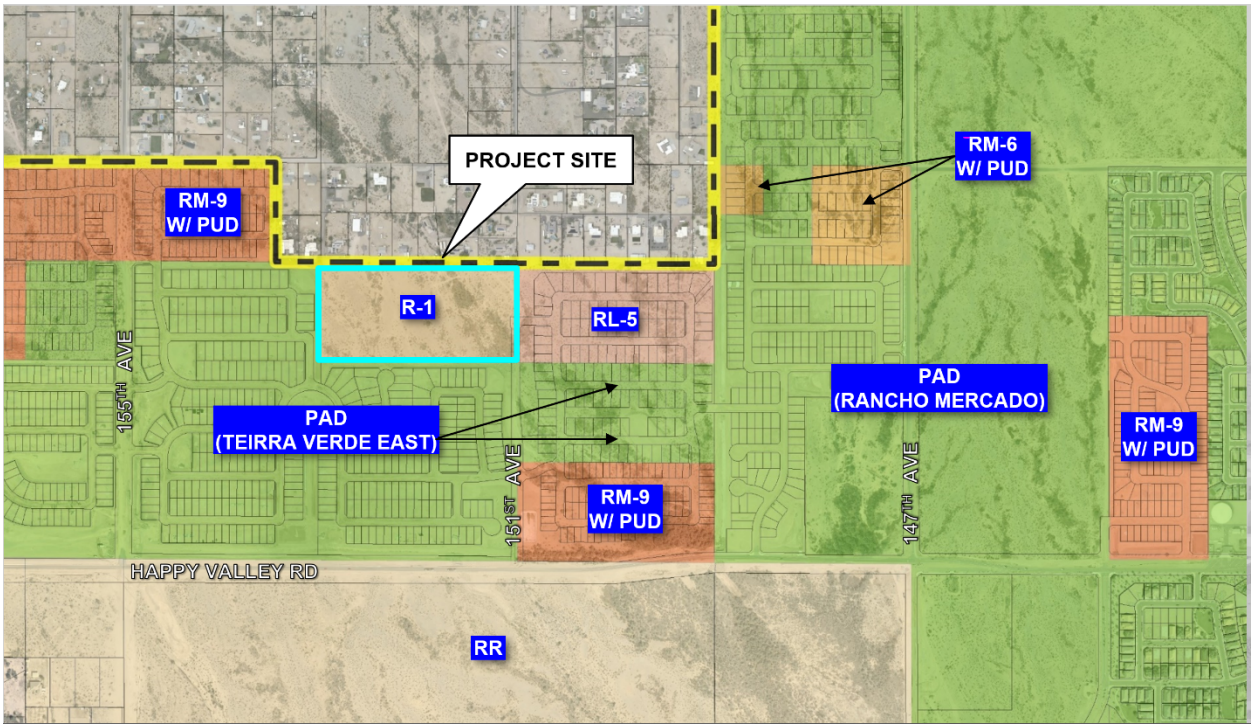
- The proposed Final Plat is consistent with the Preliminary Plat approved under case, FS21-955.
- The proposed Final Plat is consistent with the applicable City of Surprise regulations.
- The reviewing agencies have indicated no objections to the request.

PROJECT DESCRIPTION:

Kent Xander of Xander Lander, LLC seeks approval of a Final Plat for the Windstone Ranch North subdivision. The applicant seeks to subdivide the subject property into 61 single-family residential lots over approximately 16.22 net acres, for a density of 3.76 DU/Ac. The parcel is located at the northwest corner of Cottontail Lane and 151st Avenue.

SURROUNDING LAND ZONING:

The following map depicts the existing zoning of the subject site and its surrounds:



RM-9 w/PUD	Maricopa County RU-43	Maricopa County RU-43
Tierra Verde East PAD	**Residential Low Density (R-1)**	RL-5
Tierra Verde East PAD	Tierra Verde East PAD	RM-9 w/PUD

BACKGROUND:

October 19, 2021: The subject parcel was annexed into the City of Surprise under Ordinance 2021-20, case FS21-208.

October 19, 2021: The Mayor and City Council approved a rezone from Rural Residential (RR) to Residential Low Density (R-1), under case FS21-208.

June 6, 2022: The applicant filed a request for the subject final plat under subject case, FS22-0807.

June 21, 2022: The Mayor and City Council approved the preliminary plat under case, FS21-955.

ANALYSIS AND DISCUSSION:

The proposal involves a Final Plat to develop 61 residential single-family lots. The development standards follow the Residential Low Density (R-1), Lot Category A, with respect to setbacks and lot areas; however, the proposed lots include lot widths more commonly found in Lot Category B with typical lot dimensions of 60' x 125' and 70' x 125.'

Table 106-2c - Residential Low Density (R-1) Zoning district

Lot Categories	A [3]	B	C	D	E	F
General Plan Compatibility	Suburban	Suburban	Suburban	Suburban and Rural	Rural	Rural
Lot Area (sf)	4950-7,999	8,000-11,999	12,000-17,999	18,000-27,999	28,000-43,559	≥ 43,560
Min Lot Width (sf)	45	60	80	90	100	130
Min. Front setback [1] (ft)	12	12	15	20	20	30
Max. Front setback (ft)	25	25	30	35		
Min. Rear setback [1] (ft)	15	20	20	25	30	30
Min. Side setback [1] (ft)	5 & 8	5 & 10	10	10 & 15	20	20
Min. Street side setback [1] (ft)	15	15	15	15	20	20
Max. Bldg. Height (ft)	35	35	35	35	35	35
Max Lot coverage		45%	40%	30%	30%	25%
Open space (% of gross area of residential development) [3]	20%	20%	20%	15%	15%	10%

Notes:

1. *Garage* face and embellishments shall be *setback* a minimum of twenty feet (20') measured from any opposing property line; except rear *alley* loaded *garages*, which shall be *setback* six feet (6') from edge of *alley* line.
2. The City requires *open space* on a development/subdivision basis rather than on a *lot*-by-*lot* basis. Subdivisions with more than one lot category will provide the higher percentage of open space.
3. Residential projects shall contain no more than fifty percent (50%) of lots less than forty-eight feet (48') wide as calculated across whole subdivisions or preliminary plat and will include mitigating designs outline in Chapter 108 of this ordinance.

Access

Primary access to this development will primarily come from 151st Avenue via Happy Valley Road. A secondary point of access will be provided through a 20-foot emergency access easement between lots 23 and 24.

Open Space & Landscaping

Open space not less than 20% is required of the project (per the Land Development Ordinance [LDO]), and as proposed 24% open space is provided thereby exceeding the minimum standard. Of that, 2.00 acres will be active open space and 2.77 acres will be passive open space for a total of 4.77%. The amenity area will include a ramada, seating area, and tot lot area that is centrally located within the subdivision for the convenience of all residents. A trail system is proposed internally from the site out to 151st Avenue via Cottontail Lane. The site will be well landscaped and meet all applicable standards of the City codes.

Walls

Theme walls located around a majority of the project perimeter will consist of 6.5' tall split-face CMU panels with a precast concrete cap, punctuated by masonry columns finished with stone veneer. The view fence along the westerly perimeter of the project will be a combination of wrought iron with CMU columns. Dooley walls will consist of 6'-4" tall columns, 6-foot walls, and will be painted smooth face block.

Conformance with Adopted Plans:

The proposed Final Plat was reviewed against the goals, polices, recommendations, and guidelines of the City of Surprise General Plan 2035 and was found to be consistent with the General Plan as follows:

- The subject property is within the Neighborhood Character Area of the General Plan, which supports residential development up to 8.0 DU/Ac or more.

- This project maintains compatibility with the quality of existing land uses in the surrounding area in that it continues the residential development pattern established in the vicinity of this parcel.

Reviewing Agencies:

In addition to the standard City reviewing agencies, who indicate no objections to the requests, Luke Air Force Base, Maricopa Water District, and Maricopa County Department of Transportation (MCDOT) were included in the routing of this case. These agencies also indicate no objections.

Summary:

The Final Plat meets the requirements of the R-1 development standards of the LDO, in addition to other applicable requirements. All city reviewing departments have reviewed the request and expressed no concerns.

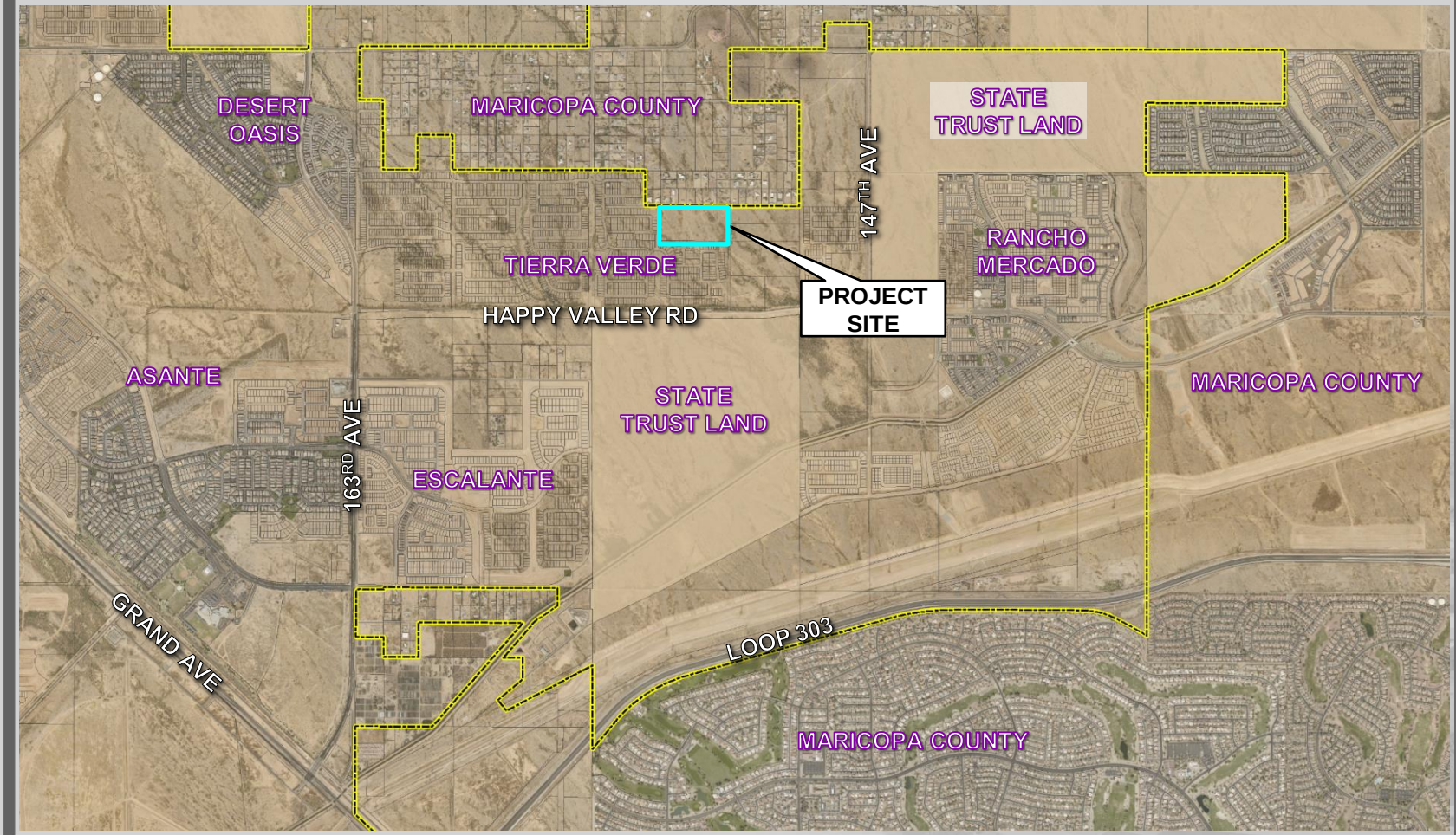
Findings:

- The proposed Final Plat is consistent with the Preliminary Plat approved under case FS21-955.
- The proposed Final Plat is consistent with the applicable City of Surprise regulations.

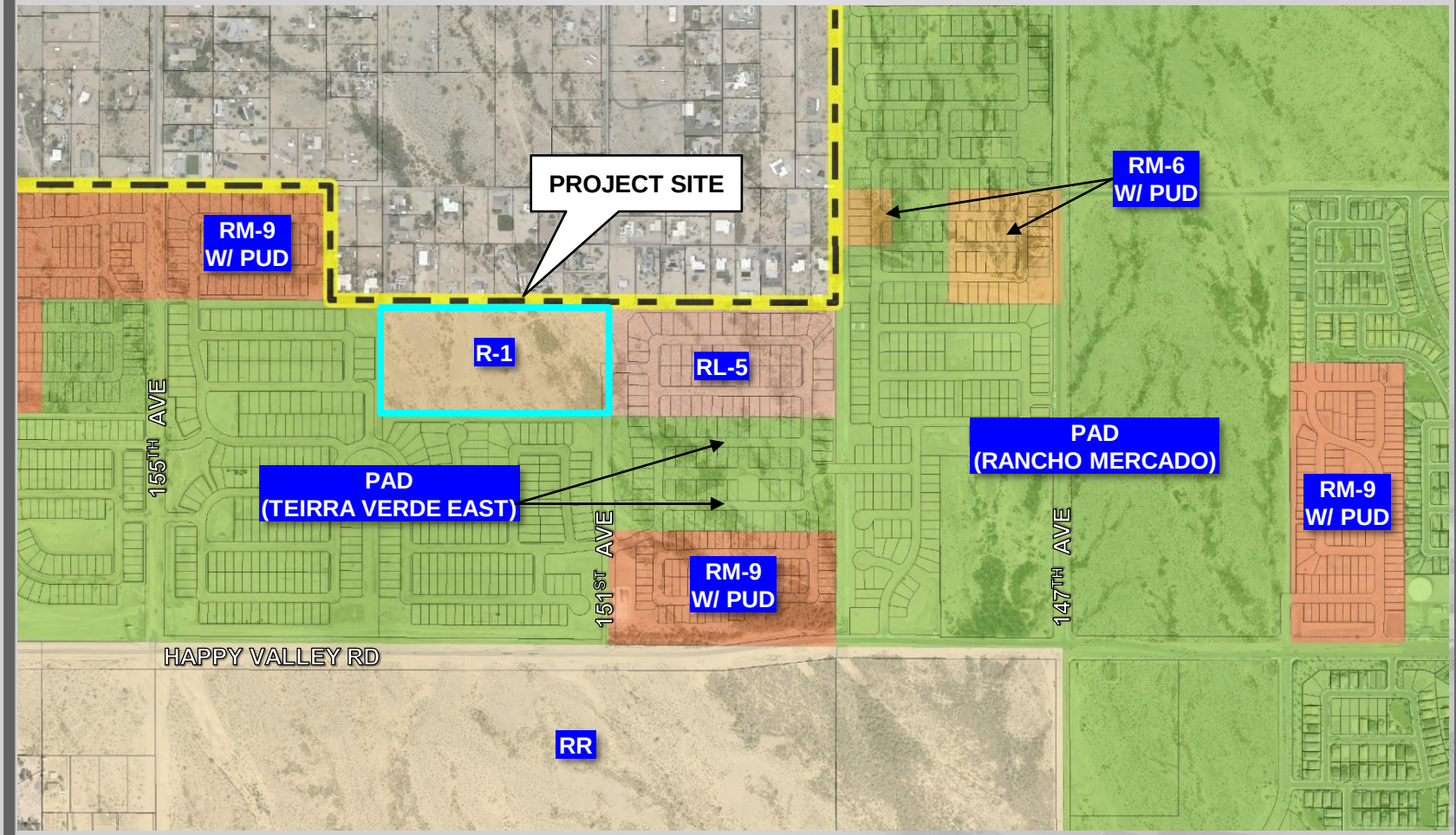
- The reviewing agencies have indicated no objections to the request.

Attachments:

01 Vicinity Map
02 Zoning Map
03 Final Plat
04 Landscape Plan
05 Wall Plan
06 Wall Plan Details
07 Luke AFB Letter
08 PPT



FS22-0807 VICINITY MAP



FS22-0807 ZONING MAP

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FINAL PLAT
OF
"WINDSTONE RANCH NORTH"
A PORTION OF THE SOUTHWEST QUARTER OF SECTION 5, TOWNSHIP 4 NORTH, RANGE 1 WEST, OF THE GILA AND SALT RIVER BASE AND MERIDIAN, CITY OF SURPRISE, MARICOPA COUNTY, ARIZONA

DEDICATION

STATE OF ARIZONA:)
) SS
COUNTY OF MARICOPA:)

KNOW ALL PERSONS BY THESE PRESENTS:

1. THAT XANDER LANDER, LLC, AN ARIZONA LIMITED LIABILITY COMPANY, AS TO AN UNDIVIDED 50% INTEREST AND RED LEAF HOLDINGS, LLC, AN ARIZONA LIMITED LIABILITY COMPANY, AS TO AN UNDIVIDED 50% INTEREST, HEREINAFTER "OWNERS", HAS SUBDIVIDED UNDER THE NAME "WINDSTONE RANCH NORTH", LOCATED WITHIN A PORTION OF THE SOUTHWEST QUARTER OF SECTION 5, TOWNSHIP 4 NORTH, RANGE 1 WEST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, CITY OF SURPRISE, MARICOPA COUNTY, ARIZONA AS SHOWN AND PLATTED HEREON AND HEREBY PUBLISHES THIS PLAT AS AND FOR THE PLAT OF "WINDSTONE RANCH NORTH" AND DECLARES THAT THIS PLAT SETS FORTH THE LOCATION AND GIVES THE DIMENSIONS OF EACH LOT, TRACT, STREET, AND EASEMENT CONSTITUTING SAME, AND THAT EACH LOT, TRACT, STREET, AND EASEMENT SHALL BE KNOWN BY THE NUMBER, LETTER, AND/OR NAME GIVEN TO EACH RESPECTIVELY AS SHOWN ON THIS FINAL PLAT.
2. "OWNER" HEREBY DEDICATES TO THE CITY OF SURPRISE FEE TITLE TO ALL PUBLIC RIGHTS–OF–WAY AS SHOWN ON THE FINAL PLAT.
3. ALL IMPROVEMENTS, FOR STREETS AND PUBLIC UTILITIES OWNED AND OPERATED BY THE CITY, INSTALLED OR CONSTRUCTED BY "OWNER" WITHIN THE PUBLIC RIGHTS–OF–WAY, THE EASEMENTS, OR ANY TRACTS OR PARCELS HEREBY DEDICATED TO THE CITY OF SURPRISE SHALL BE DEEMED TO HAVE BEEN DEDICATED BY OWNER TO THE CITY UPON THEIR COMPLETION; HOWEVER, SUCH TRANSFER SHALL NOT OCCUR UNTIL THE CITY COUNCIL FOR THE CITY OF SURPRISE MANIFESTS ITS ACCEPTANCE BY SEPARATE FORMAL COUNCIL ACTION.
4. OWNER HEREBY GRANTS TO THE CITY OF SURPRISE A PERPETUAL NON–EXCLUSIVE EASEMENT OVER, UNDER, UPON, AND ACROSS ALL AREAS DESIGNATED ON THE PLAT AS WATER/SEWER LINES, MANHOLES, FIRE HYDRANTS AND WATER METERS FOR THE PURPOSE OF INSTALLING, CONSTRUCTING, MAINTAINING, REPAIRING, REPLACING, AND UTILIZING THE WATER/SEWER LINES, MANHOLES, FIRE HYDRANTS AND WATER METERS.
5. "OWNER" HEREBY GRANTS TO THE UNITED STATES OF AMERICA DEPARTMENT OF THE AIR FORCE ("USAF") AN AVIGATION EASEMENT OVER AND ACROSS THIS FINAL PLAT AND EVERY LOT AND PARCEL THEREOF, WHICH EASEMENT SHALL INCLUDE, BUT NOT BE LIMITED TO, THE RIGHT OF FLIGHT OF AIRCRAFT OVER THIS FINAL PLAT, TOGETHER WITH ITS ATTENDANT NOISE, VIBRATIONS, FUMES, DUST, FUEL AND LUBRICANT PARTICLES, AND ALL OTHER EFFECTS THAT MAY BE CAUSED BY THE OPERATION OF AIRCRAFT LANDING AT, OR TAKING OFF FROM, OR OPERATING AT OR ON LUKE AIR FORCE BASE AND/OR AUXILIARY FIELD.
6. "OWNER" HEREBY GRANTS TO THE CITY OF SURPRISE AN ODOR EASEMENT OVER, UPON AND ACROSS THIS FINAL PLAT AND EVERY LOT AND PARCEL THEREOF, WHICH EASEMENT SHALL INCLUDE, BUT NOT BE LIMITED TO, THE RIGHT TO INVADE WITH ODORS, FUMES, SMELLS, AND PHYSICAL AIRBORNE PARTICULATES CAUSED BY THE OPERATION AND MAINTENANCE OF THE CITY'S WATER RECLAMATION FACILITY.
7. THE EASEMENTS GRANTED WITHIN THIS DEDICATION ARE PERMANENT AND PERPETUAL AND SHALL RUN WITH THE LAND AND BE BINDING UPON OWNER AND ITS HEIRS, ASSIGNS, AND SUCCESSORS IN INTEREST TO THIS FINAL PLAT OR ANY PARCEL THEREOF.
8. "OWNER" HEREBY WARRANTS AND REPRESENTS TO THE CITY OF SURPRISE THAT IT IS THE SOLE OWNER OF THE PROPERTY COVERED BY THIS FINAL PLAT, AND THAT EVERY LENDER, EASEMENT HOLDER OR OTHER PERSON OR ENTITY HAVING ANY INTEREST THAT IS ADVERSE TO OR INCONSISTENT WITH THE FOREGOING DEDICATION, OR ANY OTHER REAL PROPERTY INTEREST CREATED OR TRANSFERRED BY THIS FINAL PLAT, HAS CONSENTED TO OR JOINED IN THIS FINAL PLAT AS EVIDENCED BY INSTRUMENTS WHICH ARE RECORDED WITH THE MARICOPA COUNTY RECORDERS OFFICE OR WHICH OWNER WILL RECORD NOT LATER THAN THE DATE ON WHICH THIS FINAL PLAT IS RECORDED.
9. "OWNER" HEREBY GRANTS TO THE CITY OF SURPRISE A PERPETUAL NON–EXCLUSIVE EASEMENT OVER, UPON AND ACROSS THE AREAS DESIGNATED AS SIGHT VISIBILITY TRIANGLES FOR THE PURPOSE OF ENSURING THAT THESE AREAS REMAIN FREE OF SIGHT VISIBILITY OBSTRUCTIONS.
10. THE VEHICULAR NON ACCESS EASEMENTS " VNAE " ARE HEREBY DEDICATED TO THE "WINDSTONE RANCH NORTH" COMMUNITY ASSOCIATION, ITS SUCCESSORS AND ASSIGNS AND IS INTENDED TO PREVENT VEHICULAR TRAFFIC BETWEEN TRACTS AND LOTS WITH THE EXCEPTION OF PUBLIC UTILITY USES. SAID " VNAE " AS DEDICATED HEREON WILL CROSS PUBLIC UTILITY EASEMENTS "PUE" ALSO GRANTED HEREON, IN MULTIPLE LOCATIONS. THESE " VNAE " ARE NOT INTENDED TO PREVENT AUTHORIZED AGENTS OF THE PUBLIC UTILITY COMPANIES FROM CROSSING SAID " VNAE " DURING THE COURSE OF INSTALLATION, USE, MAINTENANCE AND REPAIR OF THE UTILITIES LOCATED IN SAID PUBLIC UTILITY EASEMENT "PUE".
11. ALL TRACTS ARE NOT DEDICATED TO THE PUBLIC, BUT ARE PLATTED AS COMMON PROPERTY FOR THE USE AND ENJOYMENT OF THE "WINDSTONE RANCH NORTH" COMMUNITY ASSOCIATION, AS MORE FULLY SET FORTH IN THE DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS.
12. TRACTS PLATTED HEREON ARE DEDICATED FOR THE PURPOSES AS NOTED IN THE TRACT TABLE ON THIS FINAL PLAT AND SHALL BE MAINTAINED BY "WINDSTONE RANCH NORTH" COMMUNITY ASSOCIATION.
13. "OWNER" HEREBY GRANTS TO THE CITY OF SURPRISE A PERPETUAL CROSS ACCESS EASEMENT ACROSS THE FINAL PLAT INCLUDING ROADS AND STREETS, OPEN SPACES, COMMUNITY FACILITIES, TRACTS, SIDEWALKS, DRAINAGE BASINS AND ANY PROPERTY WITHIN THE PLAT OWNED BY THE HOMEOWNERS ASSOCIATION FOR THE PURPOSE OF PROVIDING CONTINUOUS AND UNINTERRUPTED INGRESS AND EGRESS FOR EMERGENCY VEHICLES.
14. "OWNER" HEREBY GRANTS TO THE CITY OF SURPRISE A PERPETUAL EASEMENT ACROSS THE FINAL PLAT INCLUDING ROADS AND STREETS, OPEN SPACES, COMMUNITY FACILITIES, TRACTS, SIDEWALKS, DRAINAGE BASINS AND ANY PROPERTY WITHIN THE FINAL PLAT OWNED BY THE HOMEOWNERS ASSOCIATION FOR THE PURPOSE OF PROVIDING CONTINUOUS AND UNINTERRUPTED INGRESS AND EGRESS FOR TRASH COLLECTION VEHICLES.
15. "OWNER" HEREBY GRANTS TO THE CITY OF SURPRISE A PERPETUAL NON–EXCLUSIVE PEDESTRIAN ACCESS AND SIDEWALK CONSTRUCTION AND MAINTENANCE EASEMENT OVER, UPON, AND ACROSS THE AREAS DESIGNATED AS SIDEWALK EASEMENTS AS SHOWN ON THE PLAT.
16. "OWNER" HEREBY GRANTS TO THE PUBLIC A PERPETUAL NON–EXCLUSIVE EASEMENT IN, UPON, OVER, UNDER, THROUGH, AND ACROSS THE AREAS DESIGNATED AS PUBLIC UTILITY EASEMENTS AS SHOWN ON THE PLAT FOR THE PURPOSE OF ACCESSING, INSTALLING, CONSTRUCTING, MAINTAINING, REPAIRING,AND UTILIZING PUBLIC UTILITIES.
17. OWNER HEREBY GRANTS TO THE CITY OF SURPRISE A PERPETUAL CROSS ACCESS EASEMENT ACROSS THE PLAT INCLUDING ROADS AND STREETS, OPEN SPACES, COMMUNITY FACILITIES, TRACTS, SIDEWALKS, DRAINAGE BASINS AND ANY PROPERTY WITHIN THE PLAT OWNED BY THE HOMEOWNERS ASSOCIATION FOR THE PURPOSE OF PROVIDING CONTINUOUS AND UNINTERRUPTED INGRESS AND EGRESS FOR EMERGENCY VEHICLES.

IN WITNESS WHEREOF, OWNER HAS HEREUNTO CAUSED ITS CORPORATE NAME TO BE SIGNED AND ITS CORPORATE SEAL TO BE AFFIXED BY THE UNDERSIGNED, DULY AUTHORIZED OFFICER THIS_____ DAY OF_____, 2024.

_____

BY: _____

ITS: _____

NOTARY ACKNOWLEDGEMENT

STATE OF _____)
) SS
COUNTY OF _____)

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS_____ DAY OF_____, 2024,
BY _____, THE _____ OF _____,
ON BEHALF OF THE COMPANY.

BY: _____ MY COMMISSION EXPIRES _____
NOTARY PUBLIC

"WINDSTONE RANCH NORTH" COMMUNITY ASSOCIATION RATIFICATION

BY THIS RATIFICATION, _____, DULY ELECTED PRESIDENT OF THE "WINDSTONE RANCH NORTH" COMMUNITY ASSOCIATION ACKNOWLEDGES THE RESPONSIBILITIES DEDICATED HEREON.

BY: _____ ITS _____

NOTARY ACKNOWLEDGEMENT

STATE OF ARIZONA:)
) SS
COUNTY OF MARICOPA:)

ON THIS _____ DAY OF _____, 2024, _____ PERSONALLY APPEARED BEFORE ME, THE UNDERSIGNED NOTARY PUBLIC, WHO ACKNOWLEDGED HIMSELF/HERSELF TO BE THE _____ OF THE "WINDSTONE RANCH NORTH" COMMUNITY ASSOCIATION, AND THAT HE/SHE, AS _____, EXECUTED THIS INSTRUMENT FOR THE PURPOSES HEREIN CONTAINED.

IN WITNESS WHEREOF, I HEREUNTO SET MY HAND AND OFFICIAL SEAL.

BY: _____ MY COMMISSION EXPIRES _____
NOTARY PUBLIC DATE

APPROVALS

CITY OF SURPRISE ENGINEER APPROVAL

DATA ON THIS PLAT REVIEWED AND APPROVED THIS _____ DAY OF _____, 2024, BY THE CITY ENGINEER OF SURPRISE, ARIZONA.

APPROVED_____ _____
CITY ENGINEER DATE

CITY OF SURPRISE COUNCIL APPROVAL

APPROVED BY THE CITY COUNCIL OF THE CITY OF SURPRISE, ARIZONA.
THIS _____ DAY OF _____, 2024.

ATTEST:

_____ _____
MAYOR DATE

_____ _____
CITY CLERK DATE

AREA CALCULATIONS

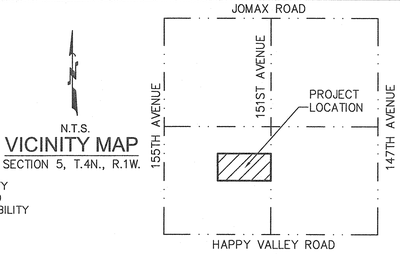
TRACTS	207,732 SQ.FT.	4.77 AC
LOTS = 61	498,551 SQ.FT.	11.45 AC
RIGHT OF WAY	146,430 SQ.FT.	3.36 AC
TOTAL	852,713 SQ.FT.	19.58 AC

SHEET INDEX

DESCRIPTION	SHEET NO
COVER SHEET	1
KEY MAP, LEGAL DESCRIPTION	2
PLAT SHEETS	3–4

PUBLIC NOTICE

THE LOTS DEPICTED ON THIS PLAT ARE LOCATED WITHIN THE VICINITY OF LUKE AIR FORCE BASE AND MAY BE SUBJECT TO OVERFLIGHTS BY JET AIRCRAFT. ALL STRUCTURES WITHIN THIS PLAT SHALL BE CONSTRUCTED IN COMPLIANCE WITH THE SOUND ATTENUATION STANDARDS ADOPTED BY THE CITY OF SURPRISE. A MAP DEPICTING THE MOST CURRENT ADOPTED MAG NOISE CONTOURS IN RELATION TO THIS PLAT SHALL BE DISPLAYED IN ALL SALES OFFICES. ADDITIONAL INFORMATION MAY BE OBTAINED BY CONTACTING THE CITY OF SURPRISE COMMUNITY DEVELOPMENT DEPARTMENT.



N.T.S.
VICINITY MAP
SECTION 5, T.4N., R.1W.

OWNER

XANDER LANDER, LLC, AN ARIZONA LIMITED LIABILITY COMPANY, AS TO AN UNDIVIDED 50% INTEREST AND
RED LEAF HOLDINGS, LLC, AN ARIZONA LIMITED LIABILITY COMPANY, AS TO AN UNDIVIDED 50% INTEREST
9290 E. THOMPSON PEAK PKWY., SUITE 227
SCOTTSDALE, AZ 85255
CONTACT: KENT XANDER
PHONE: 602–499–9305

RELEASE OF LIABILITY

1. XANDER LANDER, LLC, AN ARIZONA LIMITED LIABILITY COMPANY, AS TO AN UNDIVIDED 50% INTEREST AND RED LEAF HOLDINGS, LLC, AN ARIZONA LIMITED LIABILITY COMPANY, AS TO AN UNDIVIDED 50% INTEREST, "OWNERS" DOES HEREBY (1) RELEASE AND DISCHARGE THE UNITED STATES OF AMERICA DEPARTMENT OF THE AIR FORCE (USAF) AND THE CITY OF SURPRISE, AND (2) INDEMNIFY, DEFEND, AND HOLD HARMLESS THE USAF AND THE CITY OF SURPRISE, OF AND FROM ANY LIABILITY FOR ANY AND ALL CLAIMS FOR DAMAGES OF ANY KIND TO PERSONS OR PROPERTY THAT MAY ARISE AT ANY TIME IN THE FUTURE OVER, OR IN CONNECTION WITH AIRCRAFT OVERFLIGHTS FROM AIRCRAFT UTILIZING LUKE AIR FORCE BASE, WHETHER SUCH DAMAGE SHALL ORIGINATE FROM NOISE, VIBRATION, FUMES, DUST, FUEL AND LUBRICANT PARTICLES, AND ALL OTHER EFFECTS THAT MAY BE CAUSED BY THE OPERATION OF AIRCRAFT LANDING AT, OR TAKING OFF FROM, OR OPERATING AT OR ON LUKE AIR FORCE BASE AND ITS AUXILIARY FIELDS. THIS INSTRUMENT SHALL RUN WITH THE LAND AND BE BINDING UPON OWNER AND ITS HEIRS, ASSIGNS, AND SUCCESSORS IN INTEREST TO THIS PLAT OR ANY PARCEL OR LOT THEREOF. THIS INSTRUMENT DOES NOT RELEASE THE USAF FROM LIABILITY FOR DAMAGE OR INJURY TO PERSON OR PROPERTY CAUSED BY FALLING AIRCRAFT OR FALLING PHYSICAL OBJECTS FROM AIRCRAFT, EXCEPT AS STATED HEREIN WITH RESPECT TO NOISE, FUMES, DUST, FUEL, AND LUBRICANT PARTICLES.
2. XANDER LANDER, LLC, AN ARIZONA LIMITED LIABILITY COMPANY, AS TO AN UNDIVIDED 50% INTEREST AND RED LEAF HOLDINGS, LLC, AN ARIZONA LIMITED LIABILITY COMPANY, AS TO AN UNDIVIDED 50% INTEREST, "OWNERS" HEREBY FURTHER AGREES TO INDEMNIFY, DEFEND, AND HOLD HARMLESS THE CITY OF SURPRISE FROM ANY AND ALL CLAIMS FOR DAMAGES OF ANY KIND TO PERSONS OR PROPERTY THAT MAY ARISE IN CONNECTION WITH THE USE OF THE SIDEWALKS LOCATED WITHIN THE RIGHT OF WAY, UNTIL SUCH TIME THE CITY OF SURPRISE HAS ACCEPTED THE SIDEWALKS.
3. XANDER LANDER, LLC, AN ARIZONA LIMITED LIABILITY COMPANY, AS TO AN UNDIVIDED 50% INTEREST AND RED LEAF HOLDINGS, LLC, AN ARIZONA LIMITED LIABILITY COMPANY, AS TO AN UNDIVIDED 50% INTEREST, "OWNERS" DOES HEREBY (1) RELEASE AND DISCHARGE THE CITY OF SURPRISE, (2) INDEMNIFY, DEFEND, AND HOLD HARMLESS THE CITY OF SURPRISE, OF AND FROM ANY LIABILITY FOR ANY AND ALL CLAIMS FOR DAMAGES OF ANY KIND TO PERSONS OR PROPERTY THAT MAY ARISE AT ANY TIME IN THE FUTURE OVER, OR IN CONNECTION WITH THE AREAS LOCATED WITHIN THE NEWLY DEDICATED RIGHT–OF–WAY AS DEPICTED ON THIS PLAT UNTIL SUCH TIME THE RIGHT–OF–WAY IS IMPROVED TO CITY STANDARDS AND THOSE IMPROVEMENTS ARE APPROVED AND ACCEPTED BY THE CITY COUNCIL. THE MAINTENANCE OF THE AREA WITHIN ANY NEWLY DEDICATED RIGHT–OF–WAY AS SHOWN ON THIS PLAT SHALL BE THE RESPONSIBILITY OF THE ADJACENT OWNER/OR SUBSEQUENT ADJACENT OWNERS WITHIN THE BOUNDARY OF SAID PLAT UNTIL SUCH TIME THAT THE AREA WITHIN THE RIGHT–OF WAY IS IMPROVED TO CITY STANDARD AND ACCEPTED BY THE CITY OF SURPRISE.

100 YEAR ASSURED WATER SUPPLY LANGUAGE

THE AREA PLATTED HEREON LIES WITHIN THE DOMESTIC WATER SERVICE AREA OF CITY OF SURPRISE DESERT OASIS PUBLIC WATER SYSTEM 0407–523 WHICH IS DESIGNATED AS HAVING AN ASSURED WATER SUPPLY PURSUANT A.R.S. § 45–576.

GENERAL NOTES

1. IN ACCORDANCE WITH A.R.S. § 9–461.07, THE CITY OF SURPRISE HAS DETERMINED THAT ALL DEDICATIONS OCCURRING WITH THIS FINAL PLAT ARE IN CONFORMANCE WITH THE CITY OF SURPRISE GENERAL PLAN.
2. PURSUANT TO A.R.S. § 42–11102, THE CITY OF SURPRISE, A POLITICAL SUBDIVISION OF THE STATE OF ARIZONA, IS EXEMPT FROM ALL TAXES AND ASSESSMENTS BASED ON ASSESSED VALUE EXCEPT FOR SPECIAL DISTRICTS #14751 AND #14710, WHEN APPLICABLE.
3. NO ON–SITE GRADING OR EXCAVATION SHALL OCCUR WITHOUT FIRST OBTAINING A PERMIT FROM THE CITY OF SURPRISE.
4. HAPPY VALLEY ROAD WILL BECOME A 6 LANE MAJOR ARTERIAL AT SOME FUTURE POINT.
5. SPRINKLERS ARE REQUIRED IN ALL ONE AND TWO FAMILY DWELLINGS BUILT IN AREAS WHICH DO NOT HAVE AN ADEQUATE WATER SUPPLY OF 2000 GPM @ 2 HOURS @ 20 PSI RESIDUAL.
6. THIS FINAL PLAT IS IN SUBSTANTIAL CONFORMANCE WITH THE PRELIMINARY PLAT APPROVED BY THE CITY OF SURPRISE UNDER CASE FS21–955 AND OUTLINES THE ZONING REQUIREMENTS FOR EACH LOT.
7. A PORTION OF THE PROPERTY IS LOCATED WITHIN AN AREA HAVING FLOOD ZONES "X", "A" AND"AE", BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, ON FLOOD INSURANCE RATE MAPS NO. 04013C1210L AND NO. 04013C1230L, WITH A DATE OF IDENTIFICATION OF OCTOBER 16, 2013, FOR COMMUNITY NO. 040053, IN MARICOPA COUNTY, STATE OF ARIZONA, WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH SAID PROPERTY IS SITUATED.
8. THE MAINTENANCE OF LANDSCAPING WITHIN THE OPEN SPACES, LANDSCAPED TRACTS, RETENTION BASINS, AND PARKS SHALL BE THE RESPONSIBILITY OF THE OWNER OR THE HOMEOWNERS' ASSOCIATION FORMED BY THE OWNER.
9. THE MAINTENANCE OF LANDSCAPING WITHIN THE ADJACENT PUBLIC RIGHTS–OF–WAY, INCLUDING LANDSCAPED MEDIANS WITHIN COLLECTORS AND LOCAL STREETS, AND LANDSCAPED AREAS BETWEEN THE CURB AND THE DETACHED SIDEWALK, SHALL BE THE RESPONSIBILITY OF THE ADJACENT PROPERTY OWNER OR THE HOMEOWNERS' ASSOCIATION FORMED BY THE ADJACENT PROPERTY.
10. DEVELOPMENT STANDARDS ARE PER CITY OF SURPRISE CASE NO. FS21–955 OR AS SUBSEQUENTLY AMENDED
11. LANDSCAPING MAINTENANCE OF THE MEDIANS WITHIN THE PUBLIC RIGHT–OF–WAY WITHIN ANY ARTERIAL OR PARKWAY STREET CLASSIFICATION SHALL BE THE RESPONSIBILITY OF THE CITY OF SURPRISE AFTER ACCEPTANCE.

BASIS OF BEARING

THE WEST–EAST, MID–SECTION LINE OF SECTION 4, TOWNSHIP 4 NORTH, RANGE 1 WEST, OF THE GILA AND SALT RIVER MERIDIAN WHICH BEARS S89°46'48"E A DISTANCE OF 5255.54'
THIS POSITION WAS DERIVED FROM THE ESTABLISHED NGS POINTS DV0080 & AJ3867.
PROJECT THEN SCALED TO GROUND AT A COMBINED SCALE FACTOR OF 1.00013766895 AND VERIFIED AGAINST GDACS BOOK 834, PG 1. HORIZONTAL ERROR = (0.04') ANGLE ERROR = (00°00'01")

SURVEYOR'S CERTIFICATION

I, JAMES G. SPRING, PLS 22282, HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR IN THE STATE OF ARIZONA; THAT THIS PLAT CONSISTING OF FOUR SHEETS REPRESENTS A SURVEY PREPARED UNDER MY SUPERVISION DURING THE MONTH OF FEBUARY, 2024; THAT THE SURVEY IS CORRECT AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF; THAT THE EXTERIOR BOUNDARY MONUMENTS ACTUALLY EXIST AS SHOWN AND ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED.

JAMES G. SPRING, PLS 22282
ATWELL, LLC
4700 EAST SOUTHERN AVENUE
MESA, ARIZONA 85206

PROFESSIONAL LAND SURVEYOR – CERTIFICATE NO. 22282 – JAMES G. SPRING – Date Signed 2/21/24 – ARIZONA, U.S.A.

NOTE:
A.R.S. § 32–151 STATES THAT THE USE OF THE WORD "CERTIFY" OR "CERTIFICATION" BY A PERSON OR FIRM THAT IS REGISTERED OR CERTIFIED BY THE BOARD IS AN EXPRESSION OF PROFESSIONAL OPINION REGARDING FACTS OR FINDINGS THAT ARE SUBJECT OF THE CERTIFICATION AND DOES NOT CONSTITUTE AN EXPRESS OR IMPLIED WARRANTY OR GUARANTEE.

ATWELL
866.850.4200 www.atwell-group.com
4700 E. SOUTHERN AVENUE
MESA, AZ 85206
480.218.8831

COUNTY: MARICOPA
SECTION: 5
TOWNSHIP: 4 NORTH
RANGE: 1 WEST

FINAL PLAT
WINDSTONE RANCH "NORTH"
CITY OF SURPRISE, ARIZONA

FEBUARY 2024

REVISIONS:

ATWELL

PM. J. SPRING
DR. R. GILES
JOB NO. 21000561
N.T.S.
21000561 WINDSTONE NORTH FP.DWG
SHEET NO. 1 OF 4

K:\21000561 – WINDSTONE RANCH NORTH\DWG\SURVEY\FINAL PLAT\21000561 WINDSTONE NORTH FP.DWG SAVEDATE:2/7/2024 12:59 PM PLOTDATE:2/21/2024 9:08 AM

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LEGAL DESCRIPTION

LOCATED WITHIN A PORTION OF THE SOUTHWEST QUARTER OF SECTION 5, TOWNSHIP 4 NORTH, RANGE 1 WEST, OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA.

MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A FOUND PK NAIL WITH TAG PLS 22282, ACCEPTED AS THE SOUTHWEST CORNER OF SECTION 5, TOWNSHIP 4 NORTH, RANGE 1 WEST FROM WHICH A FOUND ALUMINUM CAP STAMPED MARICOPA COUNTY 2003 LS 35832, ACCEPTED AS THE WEST QUARTER CORNER OF SECTION 5, TOWNSHIP 4 NORTH, RANGE 1 WEST, THEREOF BEARS N00°08'48"E A DISTANCE OF 2639.64 FEET;

THENCE N00°08'48"W ALONG THE WEST LINE OF THE SOUTHWEST QUARTER A DISTANCE OF 2639.64 FEET TO THE WEST QUARTER CORNER OF SAID SECTION 5;

THENCE, ALONG THE WEST–EAST MID–SECTION LINE OF SAID SECTION 5, S89°40'55"E A DISTANCE OF 2619.36 FEET TO THE CENTER OF SAID SECTION 5;

THENCE, LEAVING THE WEST–EAST MID–SECTION LINE OF SAID SECTION 5, S00°02'31"W A DISTANCE OF 660.52 FEET TO THE POINT OF BEGINNING;

THENCE, S00°01'59"W A DISTANCE OF 355.61 FEET;

THENCE, N89°39'09"W A DISTANCE OF 47.65 FEET;

THENCE, S00°14'13"W A DISTANCE OF 67.11 FEET;

THENCE, S44°48'35"E A DISTANCE OF 11.19 FEET;

THENCE, S00°01'59"W A DISTANCE OF 229.99 FEET;

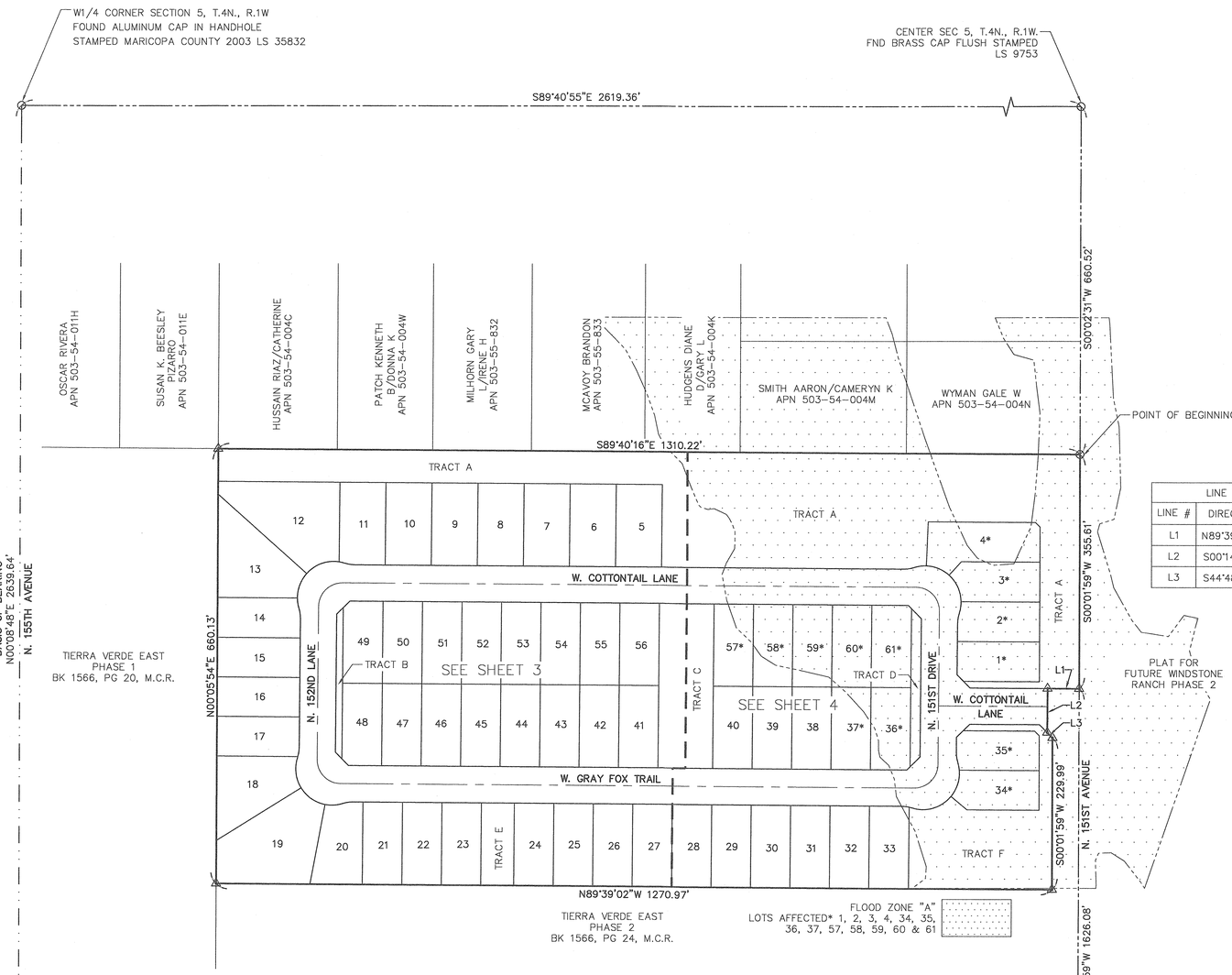
THENCE, N89°39'02"W A DISTANCE OF 1270.97 FEET;

THENCE, N00°05'54"E A DISTANCE OF 660.13 FEET;

THENCE, S89°40'16"E A DISTANCE OF 1310.22 FEET TO THE POINT OF BEGINNING.

TRACT TABLE

TRACT TABLE			
TRACT	AREA SQ FT	AREA ACRES	USAGES
TRACT A	144,950	3.33	DRAINAGE, RETENTION, LANDSCAPING & PUE
TRACT B	2,200	0.05	LANDSCAPING & PUE
TRACT C	20,768	0.48	RETENTION & PUE
TRACT D	3,375	0.08	LANDSCAPING & PUE
TRACT E	6,250	0.14	LANDSCAPING, UTILITIES, ACCESS & PUE
TRACT F	30,191	0.69	RETENTION, LANDSCAPING & PUE
TOTAL	207,732	4.77	



LINE TABLE		
LINE #	DIRECTION	LENGTH
L1	N89°39'09"W	47.65'
L2	S00°14'13"W	67.11'
L3	S44°48'35"E	11.19'

LEGEND

	SUBDIVISION BOUNDARY
	RIGHT OF WAY LINE
	EXISTING RIGHT OF WAY LINE
	CENTERLINE
	EXISTING EASEMENT LINE
	PROPOSED EASEMENT LINE
	SECTION LINE
	ALIQUOT SECTION LINE
⧋	SUBDIVISION CORNER TO BE SET
○	FOUND MONUMENT AS NOTED
◉	CENTERLINE MONUMENT (TO BE SET BY CITY OF SURPRISE STANDARDS)
①	30'x30' SIGHT VISIBILITY EASEMENT
VNAE	VEHICULAR NON–ACCESS EASEMENT
PUE	PUBLIC UTILITY EASEMENT
M.O.D.	MAP OF DEDICATION
M.C.R.	MARICOPA COUNTY RECORDER
R/W	RIGHT–OF–WAY
FBSL	FRONT BUILDING SETBACK LINE
D	DELTA
C1	CURVE TABLE NUMBER
L1	LINE TABLE NUMBER
Ⓡ	RADIAL BEARING
FP	FINAL PLAT
DOC.	DOCUMENT

OPEN SPACE TABLE		
TYPE	ACREAGE	PERCENTAGE OF TOTAL OPEN SPACE
ACTIVE	2.00	42.0%
PASSIVE	2.77	58.0%
TOTAL	4.77	100.0%

SITE DATA

GROSS SITE AREA	19.58 ACRES
RIGHT OF WAY	3.36 ACRES
NET SITE AREA	16.22 ACRES
NUMBER OF LOTS	61 LOTS
NET DENSITY	3.76 DU/AC
ARTERIAL RIGHT OF WAY	0.00 ACRES
ZONING	R–1

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COUNTY: MARICOPA
SECTION: 5
TOWNSHIP: 4 NORTH
RANGE: 1 WEST

FINAL PLAT
WINDSTONE RANCH "NORTH"
CITY OF SURPRISE, ARIZONA

FEBUARY 2024

REVISIONS:

ATWELL

PM. J. SPRING
DR. R. GILES
JOB NO. 21000561
SCALE 0 50 100
1" = 100 FEET
21000561 WINDSTONE NORTH FP.DWG
SHEET NO. 2 OF 4

PROFESSIONAL LAND SURVEYOR CERTIFICATE NO. 22282 JAMES G. SPRING Date Signed 2/21/24 ARIZONA U.S.A.

FS22-0807

K:\21000561 – WINDSTONE RANCH NORTH\DWG\SURVEY\FINAL PLAT\21000561 WINDSTONE NORTH FP.DWG SAVEDATE:2/7/2024 12:59 PM PLOTDATE:2/21/2024 9:08 AM

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LOT TABLE\WIDTH BASED ON FBSL				LOT TABLE\WIDTH BASED ON FBSL			
LOT	AREA SQ FT	AREA ACRES	WIDTH	LOT	AREA SQ FT	AREA ACRES	WIDTH
5	8750	0.20	70.0'	25	7500	0.17	60.0'
6	8750	0.20	70.0'	26	7500	0.17	60.0'
7	8750	0.20	70.0'	27	7500	0.17	60.0'
8	8750	0.20	70.0'	41	7500	0.17	60.0'
9	8750	0.20	70.0'	42	7500	0.17	60.0'
10	8750	0.20	70.0'	43	7500	0.17	60.0'
11	8707	0.20	70.0'	44	7500	0.17	60.0'
12	16896	0.39	66.3'	45	7500	0.17	60.0'
13	12768	0.29	58.2	46	7500	0.17	60.0'
14	7560	0.17	60.5'	47	7500	0.17	60.0'
15	7558	0.17	60.0'	48	7512	0.17	60.5'
16	7542	0.17	60.0'	49	7512	0.17	60.5'
17	7579	0.17	60.5'	50	7500	0.17	60.0'
18	10940	0.25	58.7'	51	7500	0.17	60.0'
19	16950	0.39	57.6'	52	7500	0.17	60.0'
20	8403	0.19	59.6'	53	7500	0.17	60.0'
21	7500	0.17	60.0'	54	7500	0.17	60.0'
22	7500	0.17	60.0'	55	7500	0.17	60.0'
23	7500	0.17	60.0'	56	7500	0.17	60.0'
24	7500	0.17	60.0'				

LINE TABLE		
LINE #	DIRECTION	LENGTH
L1	N89°39'38"W	25.00'
L2	N00°05'54"E	12.00'
L3	N45°20'58"E	28.28'
L4	N44°39'02"W	28.28'
L5	N00°20'58"E	125.00'
L6	N00°20'58"E	125.00'
L7	N00°20'58"E	125.00'

CURVE TABLE			
CURVE #	LENGTH	RADIUS	DELTA
C1	16.65'	55.00'	017°20'29"
C2	119.69'	55.00'	124°40'58"
C3	16.65'	55.00'	017°20'29"
C4	56.55'	36.00'	090°00'00"
C5	16.65'	55.00'	017°20'29"
C6	119.69'	55.00'	124°40'58"
C7	16.65'	55.00'	017°20'29"
C8	56.55'	36.00'	090°00'00"

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480.218.8831

COUNTY: MARICOPA
SECTION: 5
TOWNSHIP: 4 NORTH
RANGE: 1 WEST

FINAL PLAT
WINDSTONE RANCH "NORTH"
CITY OF SURPRISE, ARIZONA

FEBUARY 2024

REVISIONS:

ATWELL

PM. J. SPRING
DR. R. GILES
JOB NO. 21000561
SCALE 0 20 40
1" = 40 FEET
21000561 WINDSTONE NORTH FP.DWG
SHEET NO. 3 OF 4

PROFESSIONAL LAND SURVEYOR
CERTIFICATE NO.
22282
JAMES G. SPRING
Date Signed 2/21/24
ARIZONA U.S.A.

FS22-0807

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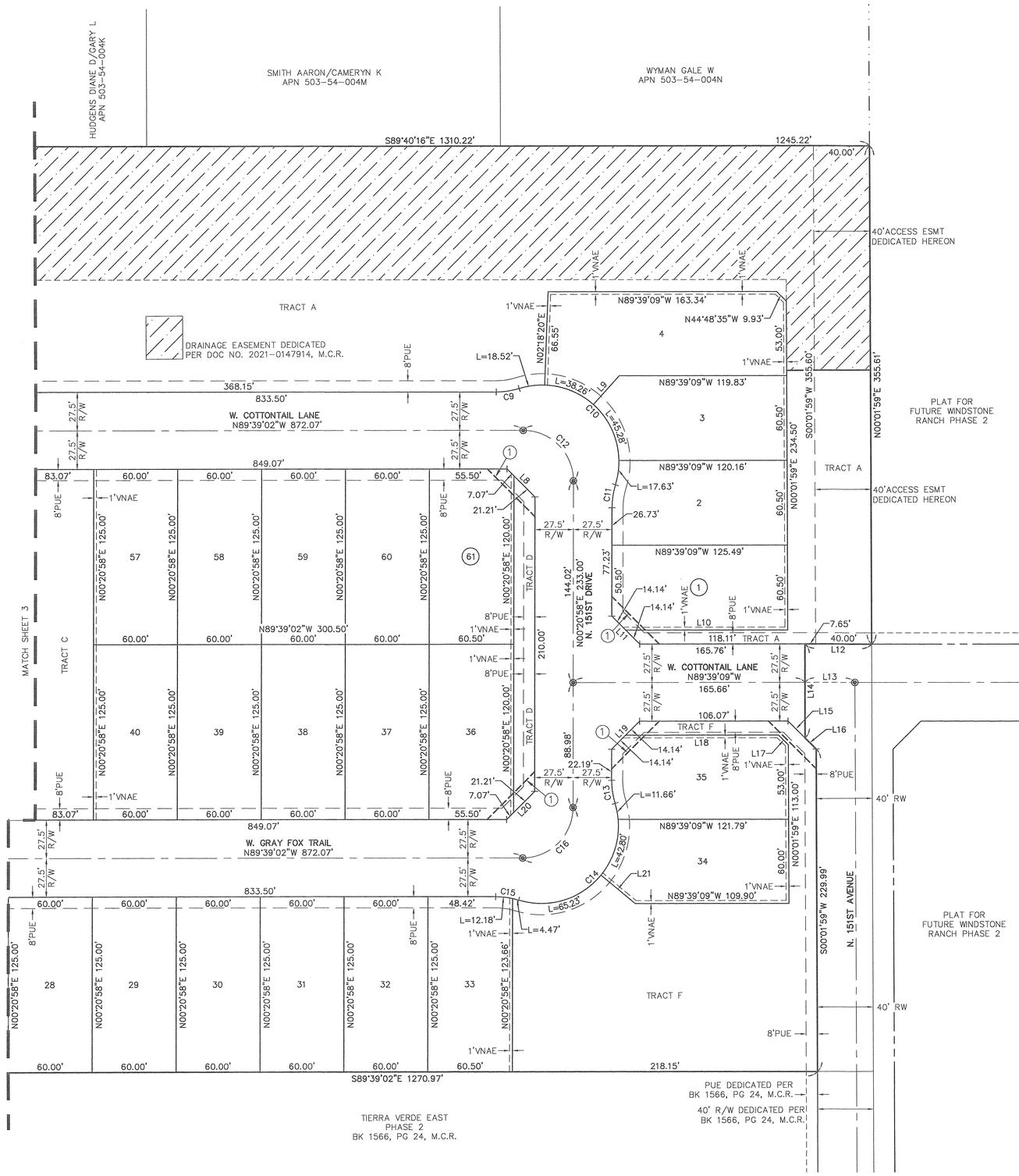

LOT TABLE\WIDTH BASED ON FBSL				LOT TABLE\WIDTH BASED ON FBSL			
LOT	AREA SQ FT	AREA ACRES	WIDTH	LOT	AREA SQ FT	AREA ACRES	WIDTH
1	7552	0.17	60.5'	35	7452	0.17	60.0'
2	7495	0.17	60.5'	36	7550	0.17	60.5'
3	7678	0.18	60.5'	37	7500	0.17	60.0'
4	10841	0.25	60.0'	38	7500	0.17	60.0'
28	7500	0.17	60.0'	39	7500	0.17	60.0'
29	7500	0.17	60.0'	40	7500	0.17	60.0'
30	7500	0.17	60.0'	57	7500	0.17	60.0'
31	7500	0.17	60.0'	58	7500	0.17	60.0'
32	7500	0.17	60.0'	59	7500	0.17	60.0'
33	7557	0.17	60.5'	60	7500	0.17	60.0'
34	7447	0.17	58.4'	61	7550	0.17	60.5'

LINE TABLE			LINE TABLE		
LINE #	DIRECTION	LENGTH	LINE #	DIRECTION	LENGTH
L8	N44°39'02"W	28.28'	L15	N44°48'35"W	17.17'
L9	N42°09'32"E	27.49'	L16	S44°48'35"E	11.19'
L10	N89°39'09"W	115.82'	L17	N44°48'35"W	9.93'
L11	N44°39'06"W	28.28'	L18	N89°39'09"W	109.24'
L12	N89°39'09"W	47.65'	L19	S45°20'54"W	28.28'
L13	N89°39'25"W	35.75'	L20	N45°20'58"E	28.28'
L14	S00°14'13"W	67.11'	L21	N50°15'35"W	31.70'

CURVE TABLE			
CURVE #	LENGTH	RADIUS	DELTA
C9	16.65'	55.00'	017°20'29"
C10	119.69'	55.00'	124°40'58"
C11	16.65'	55.00'	017°20'29"
C12	56.55'	36.00'	090°00'00"
C13	16.65'	55.00'	017°20'29"
C14	119.69'	55.00'	124°40'58"
C15	16.65'	55.00'	017°20'29"
C16	56.55'	36.00'	090°00'00"

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COUNTY: MARICOPA
SECTION: 5
TOWNSHIP: 4 NORTH
RANGE: 1 WEST

FINAL PLAT
WINDSTONE RANCH "NORTH"
CITY OF SURPRISE, ARIZONA

FEBUARY 2024

REVISIONS:

ATWELL

PM. J. SPRING
DR. R. GILES
JOB NO. 21000561
SCALE 0 20 40
1" = 40 FEET
21000561 WINDSTONE NORTH FP.DWG
SHEET NO. 4 OF 4

PROFESSIONAL LAND SURVEYOR CERTIFICATE NO. 22282 JAMES G. SPRING 2/21/24 Date Signed ARIZONA U.S.A.

FS22-0807

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Aerial Photography Date: March 22

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WINDSTONE RANCH NORTH • **MASTERPLAN**

- SURPRISE, ARIZONA
- 03/07/2022
- # 21000482
- KAX GROUP

EXPIRES 12/31/22

REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO.
55247
SHAWN
BYRON
ARIZONA, U.S.A.

0 20' 40' 80'
SCALE: 1" = 40'-0"

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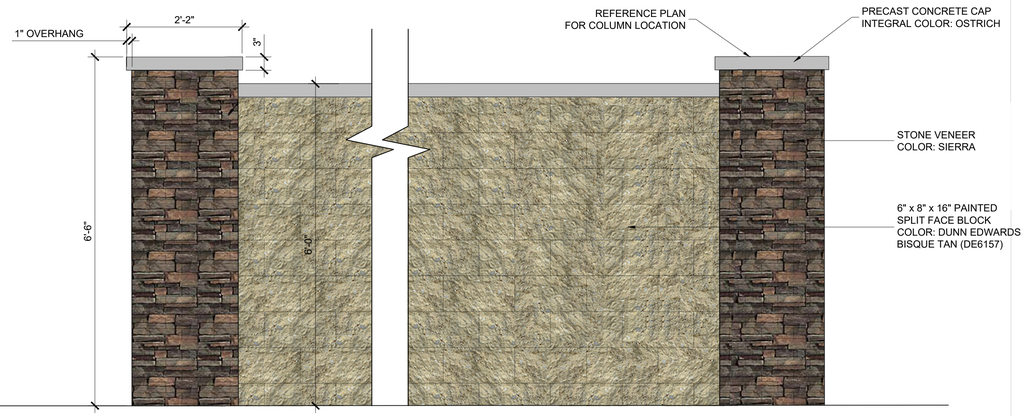
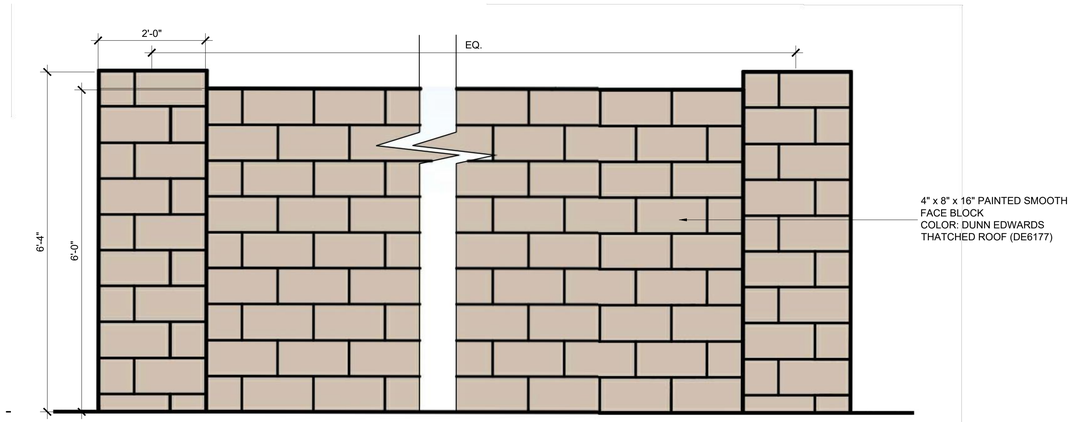
CASE NUMBER: FS21-955

L:\21000482-WINDSTONE NORTH\6-2-7000482-LANDSCAPE\1-SD\4-SHEETS\L0.00 COVER.dwg



1 Theme Wall

SCALE: 3/4" = 1'-0"



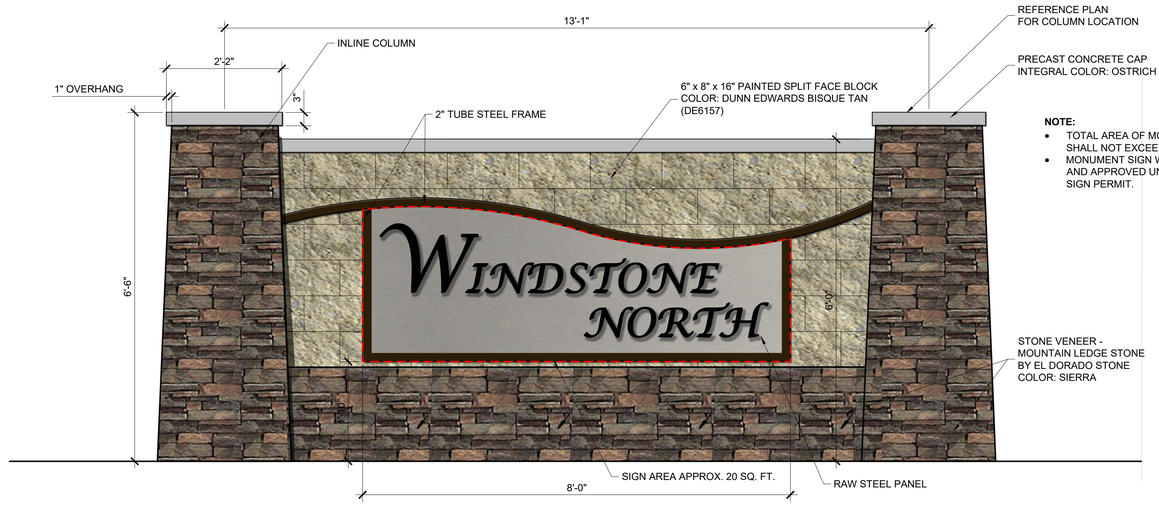
2 Dooley Wall

SCALE: 3/4" = 1'-0"



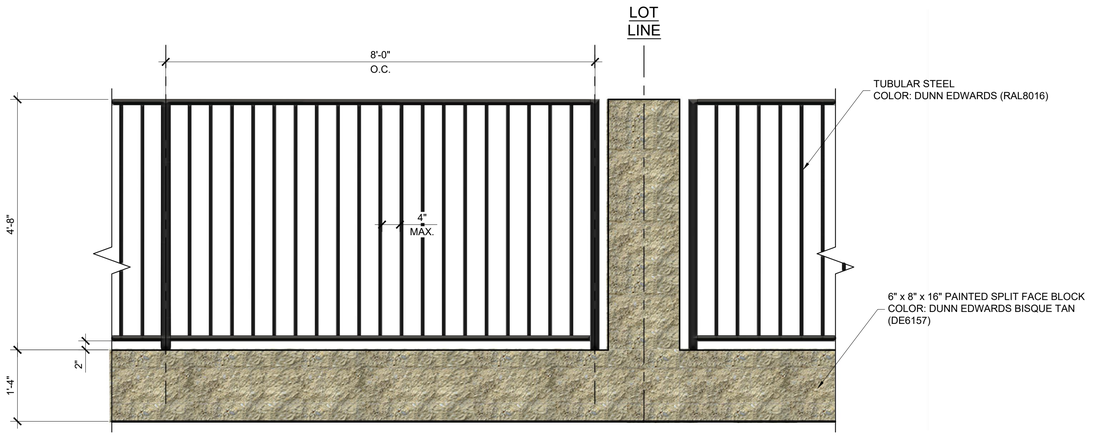
3 Mailbox

SCALE: 3/4" = 1'-0"



4 Entry Monument

SCALE: 3/4" = 1'-0"



5 Partial View Wall

SCALE: 3/4" = 1'-0"

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WINDSTONE RANCH NORTH • **DETAIL ELEVATIONS**

SURPRISE, ARIZONA
02/08/2022
21000482
KAX GROUP

EXPIRES 12/31/22
REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO.
55247
SHAWN
BYRON
DATE SIGNED 02/08/2022
ARIZONA U.S.A.

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L:\21000482-WINDSTONE NORTH\6-210004824-LANDSCAPE\1-SD\4-SHEETS\4.01 DETAIL ELEVATIONS.dwg



LEGEND

- THEME WALL
- DOOLEY WALL
- PARTIAL VIEW WALL
- RETAINING WALLS**
- THEME WALL COLUMN
- ENTRY MONUMENT
- MAILBOX LOCATION

**NOTE: REFERENCE GRADING PLANS FOR FINAL RETAINING WALL HEIGHTS. ALL RETAINING WALL SHALL NOT EXCEED A HEIGHT OF 2FT.

L:\21000482-WINDSTONE NORTH\6-210004821-LANDSCAPE\1-SD\4-SHEETS\L1.00 WALL.dwg

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WINDSTONE RANCH NORTH • **WALL PLAN**

- SURPRISE, ARIZONA
- 02/08/2022
- # 21000482
- KAX GROUP

EXPIRES 12/31/22

REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO.
55247
SHAWN
BYRON
Date signed 02/08/2022
ARIZONA U.S.A.

0 25' 50' 100'
SCALE: 1" = 50'-0"

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WINDSTONE RANCH NORTH

PRELIMINARY LANDSCAPE SUBMITTAL

SURPRISE, ARIZONA

CONTACT INFO

OWNER
KAX GROUP
10973 N. 138th Way
Scottsdale, Arizona 85259
602.499.9305
Contact: Kent Xander

LANDSCAPE ARCHITECT
RVi PLANNING + LANDSCAPE ARCHITECTURE
120 S. Ash Avenue
Tempe, Arizona 85281
480.994.0994
Contact: Shawn Byron, PLA.

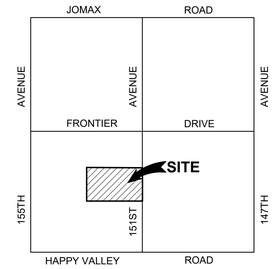
CIVIL ENGINEER
ATWELL
4700 E. Southern Avenue
Mesa, Arizona 85206
480.218.8831
Contact: Mike Park, P.E.

SUBMITTAL HISTORY

1ST SUBMITTAL	07/20/2021
2ND SUBMITTAL	02/08/2022



VICINITY MAP



SITE DATA

PROJECT SIZE: 19.87 ACRES (865,537 sq. ft)
PROPOSED LOTS: 61 total Lots
PROPOSED DENSITY: 3.07 DU/AC
PROPOSED OPEN SPACE: 4.77 ACRES (207,781 sq. ft)
PERCENT OPEN SPACE: 24.0%
PROPOSED TURF AREA: 0.68 ACRES (29,700 sq. ft)
PROPOSED PERCENT TURF: 14.3%
TURF PEAK SEASON DEMAND (GPM): 13 GPM (PEAK DAILY FLOW MONTH OF JUNE)
NON-TURF PEAK SEASON DEMAND (GPM): 17 GPM (PEAK DAILY FLOW MONTH OF JUNE)
ANNUAL TOTAL DEMAND (GALLONS): 3,997,461 GALLONS

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WINDSTONE RANCH NORTH • **COVER**

SURPRISE, ARIZONA
02/08/2022
21000482
KAX GROUP

EXPIRES 12/31/22
REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO.
55247
SHAWN
BYRON
Date signed 02/08/2022
ARIZONA U.S.A.

0 50' 100' 200'
SCALE: 1" = 100'-0"

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L:\21000482-WINDSTONE NORTH\6-21000482-LANDSCAPE\1-SD\4-SHEETS\L0.00 COVER.dwg



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WINDSTONE RANCH NORTH • **MASTERPLAN**

- SURPRISE, ARIZONA
- 02/08/2022
- # 21000482
- KAX GROUP

EXPIRES 12/31/22

REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO.
55247
SHAWN
BYRON
Date signed 02/08/2022
ARIZONA U.S.A.

0 20' 40' 80'
SCALE: 1" = 40'-0"

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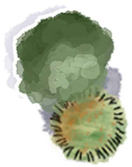
L:\21000482-WINDSTONE NORTH\E-21000482-LAND\SCAPE\1-SD\4-SHEETS\L0.00 COVER.dwg

LANDSCAPE MATERIAL SCHEDULE



DESERT TREE PALETTE

ITEM	SIZE
Acacia spp. ACACIA	24" BOX
Chilopsis spp. DESERT WILLOW	24" BOX
Parkinsonia spp. PALO VERDE	24" BOX
Prosopis spp. MESQUITE	24" BOX
Olneya tesota IRONWOOD	24" BOX

DESERT SHRUB PALETTE

ITEM	SIZE
Agave spp. AGAVE	5 GAL.
Aloe spp. ALOE	5 GAL.
Asclepias subulata DESERT MILKWEED	5 GAL.
Bouteloua spp. GRAMA GRASS	5 GAL.
Caesalpinia spp. BIRD OF PARADISE	5 GAL.
Carnegia gigantea SAGUARO	SPEAR
Cordia parvifolia LITTLE LEAF CORDIA	5 GAL.
Dalea spp. DALEA	5 GAL.
Dasylirion spp. DESERT SPOON	5 GAL.
Dodonaea viscosa HOPBUSH	5 GAL.
Encelia farinosa BRITTLEBUSH	1 GAL.
Eremophila ssp. EMU BUSH	5 GAL.
Ericameria laricifolia 'Aguirre™ TURPENTINE BUSH	5 GAL.
Esclepias subulata DESERT MILKWEED	5 GAL.
Euphorbia spp. GOPHER PLANT	5 GAL.
Ferocactus spp. BARRELL CACTUS	
Fouquieria splendens OCOTILLO	10' HT.
Hesperaloe spp. RED YUCCA	3 GAL.
Justicia californica CHUPAROSA	5 GAL.
Larrea tridentata CREOSOTE	5 GAL.
Leucophyllum spp. SAGE	5 GAL.
Muhlenbergia spp. MUHLY GRASS	5 GAL.
Nolina spp. BEAR GRASS	5 GAL.
Opuntia spp. PRICKLY PEAR	5 GAL.
Simmondsia chinensis JOJOBA	5 GAL.
Sphaeralcea ambigua GLOBEMALLOW	5 GAL.
Yucca spp. YUCCA	5 GAL.

GROUNDCOVERS

ITEM	SIZE
Acacia spp. ACACIA	1 GAL.
Eremophila spp. EMU BUSH	1 GAL.
Lantana spp. LANTANA	1 GAL.
Verbena spp. VERBENA	1 GAL.



AMENITY TREE PALETTE

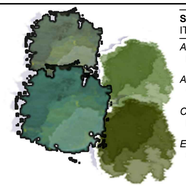
ITEM	SIZE
Acacia spp. ACACIA	24" BOX
Chilopsis spp. DESERT WILLOW	24" BOX
Eucalyptus spp. EUCALYPTUS	24" BOX
Fraxinus spp. ASH	24" BOX
Fraxinus velutina ARIZONA ASH	24" BOX
Parkinsonia spp. PALO VERDE	24" BOX
Platanus wrightii ARIZONA SYCAMORE	24" BOX
Prosopis spp. MESQUITE	24" BOX

AMENITY SHRUB PALETTE

ITEM	SIZE
Agave spp. AGAVE	5 GAL.
Aloe spp. ALOE	5 GAL.
Calliandra spp. FAIRY DUSTER	5 GAL.
Caesalpinia spp. BIRD OF PARADISE	5 GAL.
Cordia parvifolia LITTLE LEAF CORDIA	5 GAL.
Dalea spp. DALEA	5 GAL.
Dodonaea viscosa HOPBUSH	5 GAL.
Eremophila ssp. EMU BUSH	5 GAL.
Euphorbia spp. GOPHER PLANT	5 GAL.
Hesperaloe spp. RED YUCCA	3 GAL.
Justicia californica CHUPAROSA	5 GAL.
Larrea tridentata CREOSOTE	5 GAL.
Leucophyllum spp. SAGE	5 GAL.
Muhlenbergia spp. MUHLY GRASS	5 GAL.
Nolina spp. BEAR GRASS	5 GAL.
Simmondsia chinensis JOJOBA	5 GAL.
Vauquelinia californica ARIZONA ROSEWOOD	5 GAL.

GROUNDCOVERS

ITEM	SIZE
Acacia spp. ACACIA	1 GAL.
Eremophila spp. EMU BUSH	1 GAL.
Lantana spp. LANTANA	1 GAL.
Verbena spp. VERBENA	1 GAL.



STREET TREE PALETTE

ITEM	SIZE
Acacia aneura MULGA	24" BOX
Acacia salicina WILLOW ACACIA	24" BOX
Chilopsis linearis DESERT WILLOW	24" BOX
Eucalyptus papuana GHOST GUM	24" BOX

STREET SHRUB PALETTE

ITEM	SIZE
Aloe spp. ALOE	5 GAL.
Calliandra spp. FAIRY DUSTER	5 GAL.
Dalea spp. DALEA	5 GAL.
Eremophila ssp. EMU BUSH	5 GAL.
Euphorbia spp. GOPHER PLANT	5 GAL.
Hesperaloe spp. RED YUCCA	3 GAL.
Justicia californica CHUPAROSA	5 GAL.
Muhlenbergia spp. MUHLY GRASS	5 GAL.

GROUNDCOVERS

ITEM	SIZE
Acacia spp. ACACIA	1 GAL.
Eremophila spp. EMU BUSH	1 GAL.
Lantana spp. LANTANA	1 GAL.

PLANTING AREA LEGEND

- Native Desert Planting
- Hydroseed
- Amenity Planting
- Street Planting

HYDROSEED SHRUB MIX SCHEDULE

BOTANICAL NAME	COMMON NAME	LBS/AC.	BOTANICAL NAME	COMMON NAME	LBS/AC.
ACACIA CONSTRICTA	WHITETHORN ACACIA	1.5	LARREA TRIDENTATA	CREOSOTE	4.0
ACACIA GREGGII	CATCLAW ACACIA	3.0	LUPINUS SPARSIFLORUS	DESERT LUPINE	2.0
AMBROSIA DELTOIDEA	BURSAGE	4.0	LYCIUM EXSERTUM	THORNBUSH	0.25
ARISTIDA PURPUREA	PURPLE THREE-AWN	1.0	PARKINSONIA FLORIDUM	BLUE PALO VERDE	3.0
ATRIPLEX CANESCENS	FOURWING SALTBUSH	1.0	PARKINSONIA MICROPHYLLUM	FOOTHILL PALO VERDE	3.0
BAILEYA MULTIRADIATA	DESERT MARIGOLD	1.0	OLNEYA TESOTA	IRONWOOD	2.0
BOUTELOUA ARISTIDOIDES	DROPSEED GRAMA GRASS	1.0	PENSTEMON PARRYI	PARRY'S PENSTEMON	0.5
CASSIA COVESII	DESERT SENNA	1.0	PHACELIA CAMPANULARIA	DESERT BLUEBELL	0.5
ENCELIA FARINOSA	BRITTLEBUSH	0.5	PROSOPIS VELUTINA	VELVET MESQUITE	1.0
ERICAMERIA LARICIFOLIA	TURPENTINE BUSH	0.5	PLANTAGO INSULARIS	INDIAN WHEAT	5.0
ERIOGONUM FASICULATUM	FLAT-TOP BUCKWHEAT	0.5	SPHAERALCEA AMBIGUA	GLOBEMALLOW	1.0
ESCHOLTZIA MEXICANA	MEXICAN POPPY	1.0	VIGUIERA DELTOIDEA	GOLDENEYE	0.25

NOTE:

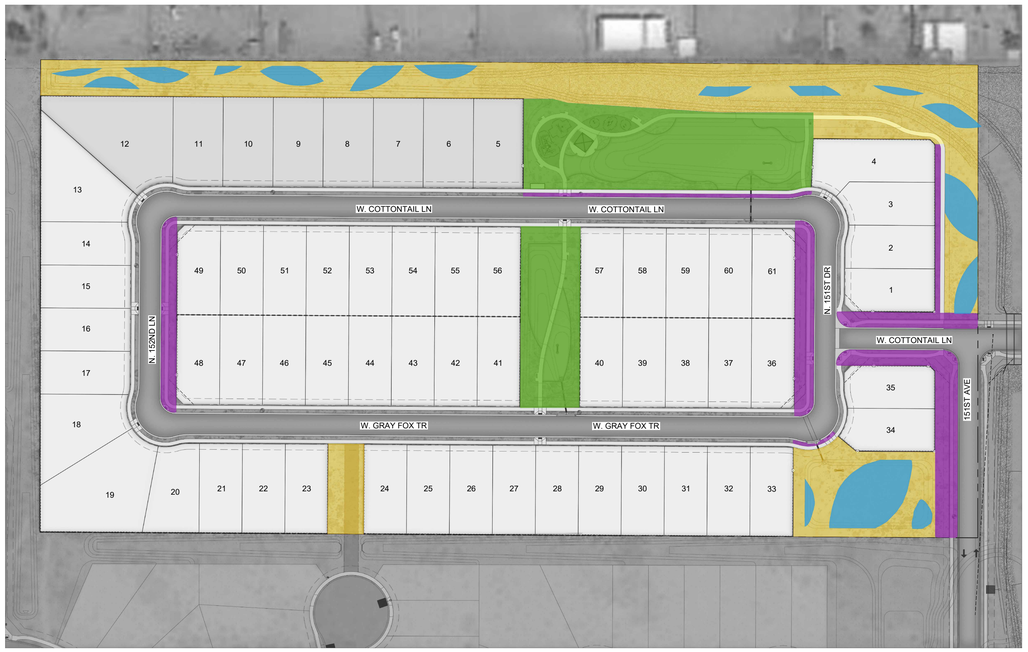
SEED MIX SHALL BE PURE LIVE SEED. HYDRO MULCH SHALL BE GRADE A FIBER (NO PAPER) CONSISTING OF A SPECIALLY PREPARED VIRGIN WOOD FIBER PROCESSED TO CONTAIN NO GROWTH OR GERMINATION INHIBITING FACTORS. FURTHER, THE MULCH SHALL BE MANUFACTURED AND PROCESSED SO THE WOOD CELLULOSE FIBERS WILL REMAIN IN UNIFORM SUSPENSION IN WATER UNDER AGITATION AND WILL BLEND WITH SEED, 16-20-0 FERTILIZER (250 LBS./AC.), TACKIFIER (60 LBS./AC.), AND OTHER ADDITIVES TO FORM A HOMOGENOUS SLURRY. THE PROPOSED MULCH MATERIAL SHALL HAVE CHARACTERISTICS TO FORM A BLOTTER-LIKE GROUND COVER UPON APPLICATION, WITH MOISTURE AND PERCOLATION PROPERTIES AND THE ABILITY TO COVER AND HOLD SEED IN CONTACT WITH THE SOIL. HYDRO MULCH SHALL BE APPLIED AT 1,500 LBS./AC.

SONORAN DESERT WILDFLOWER MIX

BOTANICAL NAME	COMMON NAME	LBS/AC.	BOTANICAL NAME	COMMON NAME	LBS/AC.
ABRONIA VILLOSA	DESERT SAND VERBENA	0.5	LESQUERELLA GORDONII	GORDON'S BLADDERPOD	0.5
BAILEYA MULTIRADIATA	DESERT MARIGOLD	1.0	LUPINUS SUCCULENTUS	ARROYO LUPINE	2.0
CASSIA COVESII	DESERT SENNA	1.0	PENSTEMON EATONII	FIRECRACKER PENSTEMON	0.5
ENCELIA FARINOSA	BRITTLEBUSH	0.5	PENSTEMON PARRYI	PARRY'S PENSTEMON	0.5
ERICAMERIA LARICIFOLIA	TURPENTINE BUSH	0.5	PERITYLE EMORYI	EMORY'S ROCKDAISY	0.5
ESCHOLTZIA MEXICANA	MEXICAN POPPY	1.0	PHACELIA CAMPANULARIA	DESERT BLUEBELL	0.5
GAILLARDIA SP.	BLANKET FLOWER	1.0	SPHAERALCEA AMBIGUA	GLOBEMALLOW	1.0

NOTE:

SEED MIX SHALL BE PURE LIVE SEED. HYDRO MULCH SHALL BE GRADE A FIBER (NO PAPER) CONSISTING OF A SPECIALLY PREPARED VIRGIN WOOD FIBER PROCESSED TO CONTAIN NO GROWTH OR GERMINATION INHIBITING FACTORS. FURTHER, THE MULCH SHALL BE MANUFACTURED AND PROCESSED SO THE WOOD CELLULOSE FIBERS WILL REMAIN IN UNIFORM SUSPENSION IN WATER UNDER AGITATION AND WILL BLEND WITH SEED, 16-20-0 FERTILIZER (250 LBS./AC.), TACKIFIER (60 LBS./AC.), AND OTHER ADDITIVES TO FORM A HOMOGENOUS SLURRY. THE PROPOSED MULCH MATERIAL SHALL HAVE CHARACTERISTICS TO FORM A BLOTTER-LIKE GROUND COVER UPON APPLICATION, WITH MOISTURE AND PERCOLATION PROPERTIES AND THE ABILITY TO COVER AND HOLD SEED IN CONTACT WITH THE SOIL. HYDRO MULCH SHALL BE APPLIED AT 1,500 LBS./AC.



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Aerial Photography Date: February 22

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WINDSTONE RANCH NORTH • **PLANT PALETTE**

SURPRISE, ARIZONA
02/08/2022
21000482
KAX GROUP

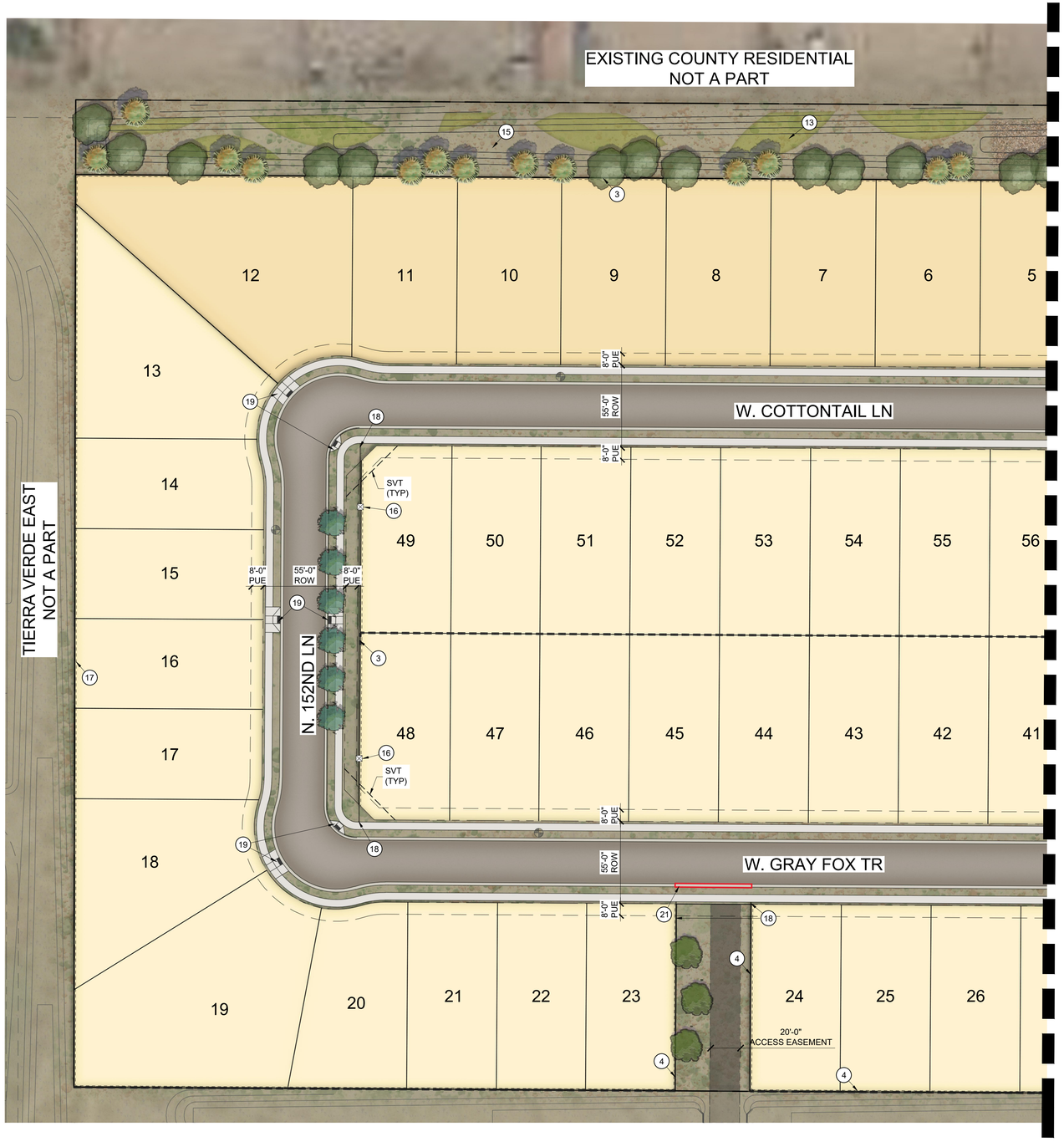
EXPIRES 12/31/22

REGISTERED LANDSCAPE ARCHITECT · CERTIFICATE NO. · 55247 · SHAWN BYRON · Date signed 02/08/2022 · ARIZONA U.S.A.

0 50' 100' 200'
SCALE: 1" = 100'-0"

For Illustrative purposes only. Subject to change without notice.

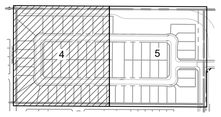
L:\21000482-WINDSTONE NORTH\6-21000482-LAND\SCAPE\1-SD\4-SHEETS\L0.00 COVER.dwg



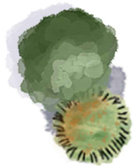
LANDSCAPE NOTES

1. SIGHT DISTANCE REQUIREMENTS ON ARTERIALS AND COLLECTORS WILL ADHERE TO SURPRISE DETAIL 4-01. SIGHT VISIBILITY WITH THE UNOBSTRUCTED VIEW EASEMENT AREA AND IN FRONT OF STOP SIGNS MUST MEET OR EXCEED REQUIREMENTS IN SURPRISE DETAILS 4-01 AND 4-02.
2. TREES, SHRUBS AND OTHER LANDSCAPING ARE PERMITTED WITHIN THE SIGHT VISIBILITY TRIANGLE PROVIDED LIMBS, LEAVES, NEEDLES OR OTHER FOLIAGE ARE KEPT BELOW 30 INCHES OR ABOVE 84 INCHES, PER SURPRISE EDS DETAIL 4-01.
3. DEEP ROOT BARRIERS SHALL BE INSTALLED FOR ALL TREES BETWEEN THE SIDEWALK AND CURB AND FOLLOW CITY OF SURPRISE DETAIL EDS 8-14.
4. TREE PLANTING ALONG XXX ROAD AND 151ST AVE SHALL MATCH AND BE CONSISTENT WITH THE TREES AT TIERRA VERDE EAST. XXX ROAD SHALL BE DESERT WILLOW AS THE STREET TREE AND A DESERT TREE PALETTE BEHIND THE PUE. 151ST AVE SHALL HAVE A STREET TREE OF MULGA.
5. OPEN SPACE LIGHTING AND ELECTRICAL SHALL BE PROVIDED AT FINAL PLAT AND BE CONSISTENT WITH ALL CITY OF SURPRISE CODES AND ORDINANCES.
6. DOG WASTE STATIONS WILL BE PROVIDED ADJACENT TO TURF AREAS THROUGHOUT THE PROJECT AT THE TIME OF FINAL PLAT.
7. LIGHTING INTENSITY ALONG LOTS TO THE WEST, SOUTH, AND NORTH OF THE OPEN SPACE AMENITY SHALL MEASURE 0.0 FOOT CANDLES.

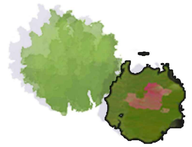
KEY MAP



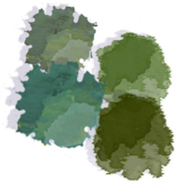
PLANT PALETTE



DESERT TREE PALETTE	
ITEM	SIZE
Acacia spp. ACACIA	24" BOX
Chilopsis spp. DESERT WILLOW	24" BOX
Parkinsonia spp. PALO VERDE	24" BOX
Prosopis spp. MESQUITE	24" BOX
Olneya tesota IRONWOOD	24" BOX



AMENITY TREE PALETTE	
ITEM	SIZE
Acacia spp. ACACIA	24" BOX
Chilopsis spp. DESERT WILLOW	24" BOX
Eucalyptus spp. EUCALYPTUS	24" BOX
Fraxinus spp. ASH	24" BOX
Fraxinus velutina ARIZONA ASH	24" BOX
Parkinsonia spp. PALO VERDE	24" BOX
Platanus wrightii ARIZONA SYCAMORE	24" BOX
Prosopis spp. MESQUITE	24" BOX



STREET TREE PALETTE	
ITEM	SIZE
Acacia aneura MULGA	24" BOX
Acacia salicina WILLOW ACACIA	24" BOX
Chilopsis linearis DESERT WILLOW	24" BOX
Eucalyptus papuana GHOST GUM	24" BOX

LANDSCAPE KEYNOTES

1. PRIMARY ENTRY MONUMENT
2. PLAYGROUND
3. THEME WALL
4. PAINTED CMU BLOCK WALL
5. DETENTION AREA
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7. BENCH
8. DRAINAGE CHANNEL
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13. HYDROSEED
14. TRAIL CONNECTION
15. NATURAL DESERT PLANTING
16. DECORATIVE COLUMN
17. PARTIAL VIEW WALL
18. CONCRETE HEADER
19. ADA RAMP
20. PET WASTE STATION
21. MOUNTABLE CURB

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WINDSTONE RANCH NORTH • **LANDSCAPE PLAN**

SURPRISE, ARIZONA
02/08/2022
21000482
KAX GROUP

EXPIRES 12/31/22

REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO.
55247
SHAWN
BYRON
09/09/2022
ARIZONA U.S.A.

0 20' 40' 80'
SCALE: 1"= 40'-0"

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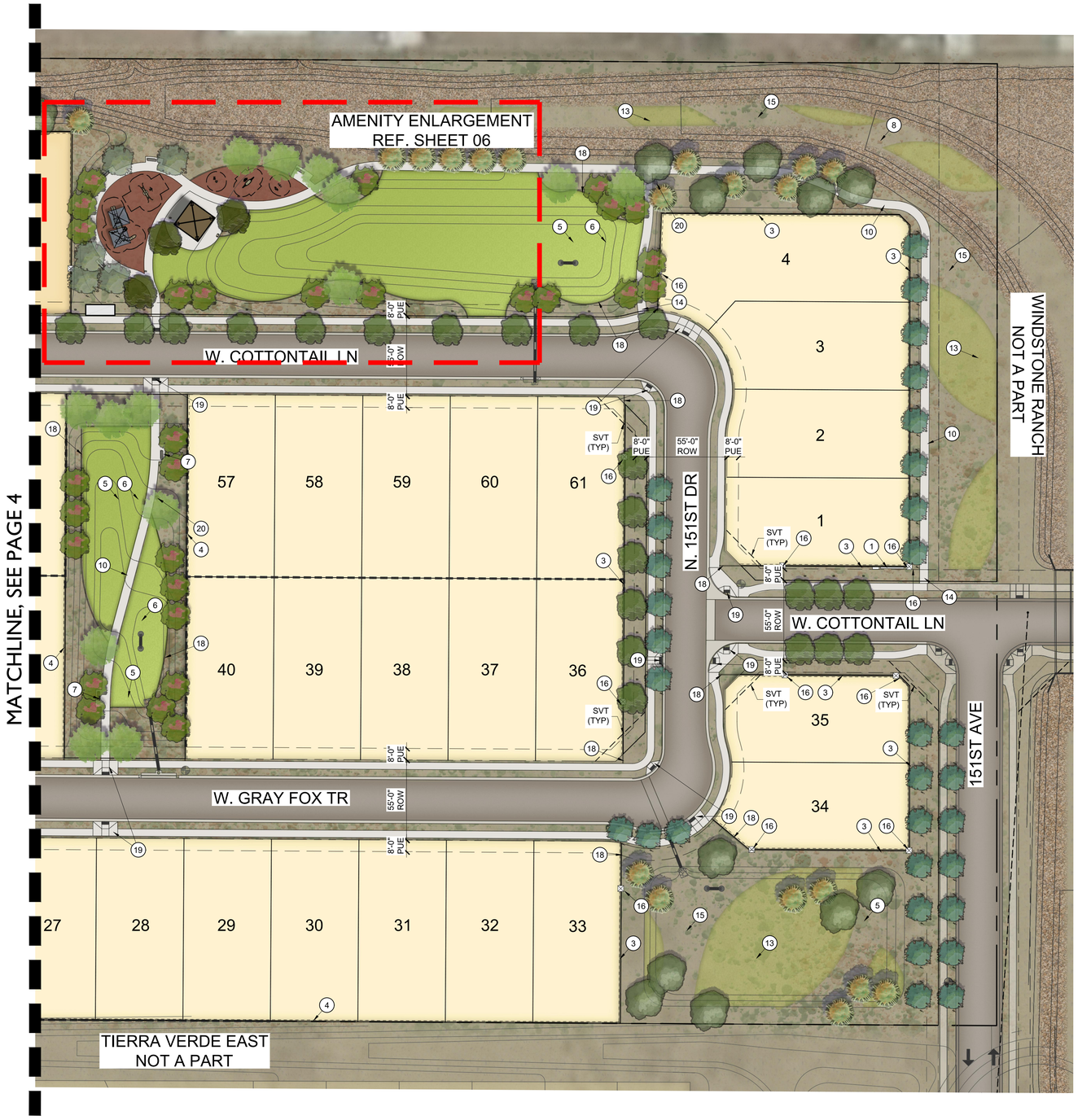
L:\21000482-WINDSTONE NORTH\6-21000482-LANDSCAPE\1-SD\4-SHEETS\L2 01 LANDSCAPE PLAN.dwg



LANDSCAPE NOTES

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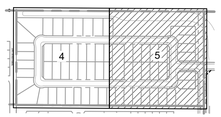
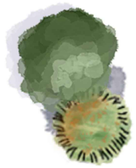
KEY MAP



PLANT PALETTE



DESERT TREE PALETTE

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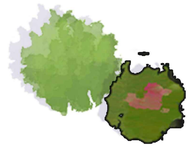

AMENITY TREE PALETTE

ITEM	SIZE
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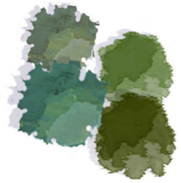

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LANDSCAPE KEYNOTES

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17. PARTIAL VIEW WALL
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19. ADA RAMP
20. PET WASTE STATION
21. MOUNTABLE CURB

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WINDSTONE RANCH NORTH • **LANDSCAPE PLAN**

SURPRISE, ARIZONA
02/08/2022
21000482
KAX GROUP

EXPIRES 12/31/22

REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO.
55247
SHAWN
BYRON
DATE SIGNED 02/08/2022
ARIZONA U.S.A.

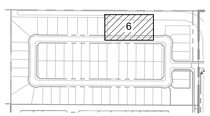
0 20' 40' 80'
SCALE: 1'= 40'-0"

For Illustrative purposes only. Subject to change without notice.

L:\21000482-WINDSTONE NORTH\6-21000482-LANDSCAPE\1-SD\4-SHEETS\L2 01 LANDSCAPE PLAN.dwg



KEY MAP



LANDSCAPE KEYNOTES

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LANDSCAPE NOTES

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WINDSTONE RANCH NORTH • **PARK ENLARGEMENT**

SURPRISE, ARIZONA
02/08/2022
21000482
KAX GROUP

REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO.
55247
SHAWN
BYRON
Date signed 02/08/2022
EXPIRES 12/31/22
ARIZONA U.S.A.

0 5' 10' 20'
SCALE: 1" = 10'-0"

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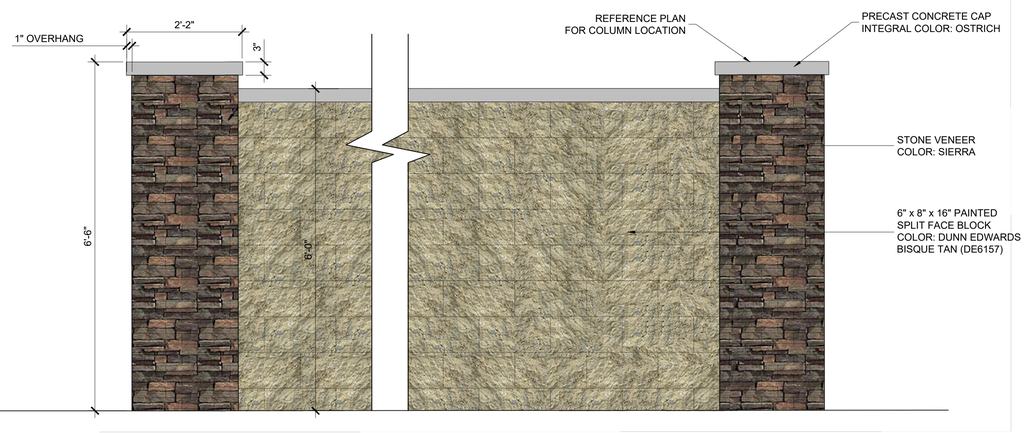
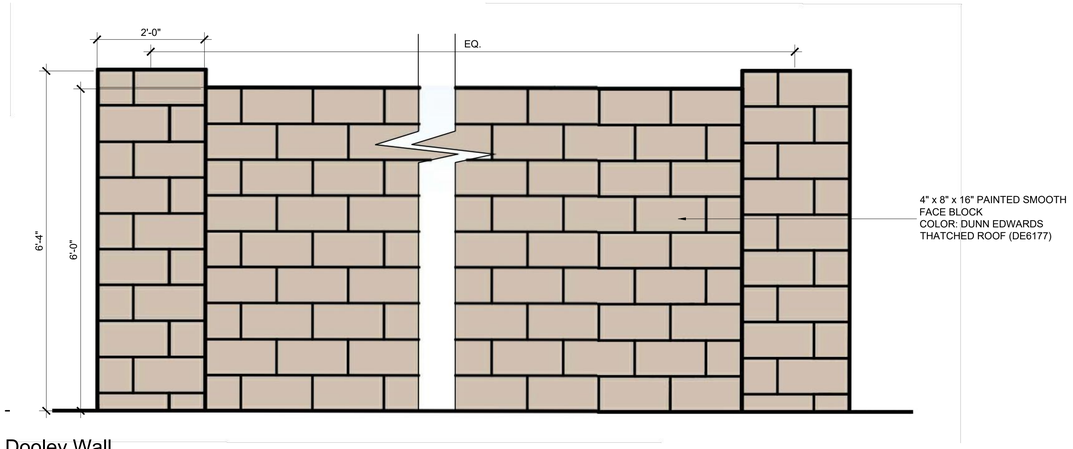


1 Theme Wall

SCALE: 3/4" = 1'-0"



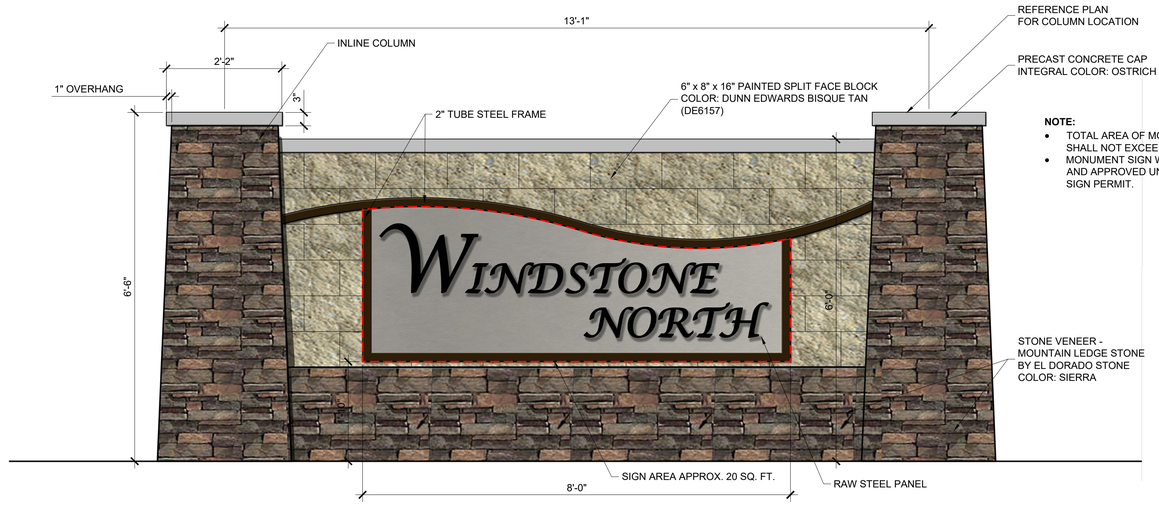
2 Dooley Wall

SCALE: 3/4" = 1'-0"



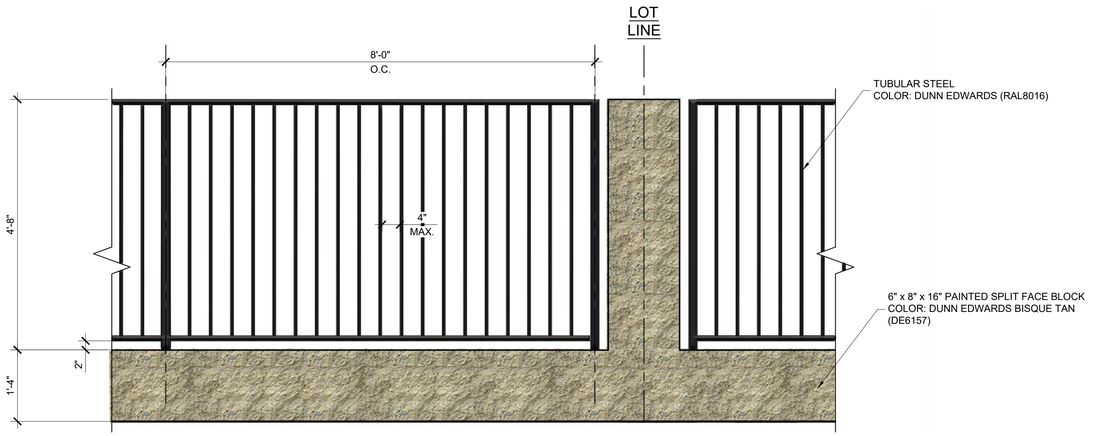
3 Mailbox

SCALE: 3/4" = 1'-0"



4 Entry Monument

SCALE: 3/4" = 1'-0"



5 Partial View Wall

SCALE: 3/4" = 1'-0"

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WINDSTONE RANCH NORTH • **DETAIL ELEVATIONS**

SURPRISE, ARIZONA
02/08/2022
21000482
KAX GROUP

EXPIRES 12/31/22
REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO.
55247
SHAWN
BYRON
DATE SIGNED 02/08/2022
ARIZONA U.S.A.

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L:\21000482-WINDSTONE NORTH\6-210004824-LANDSCAPE\1-SD\4-SHEETS\4.01 DETAIL ELEVATIONS.dwg



LEGEND

- THEME WALL
- DOOLEY WALL
- PARTIAL VIEW WALL
- RETAINING WALLS**
- THEME WALL COLUMN
- ENTRY MONUMENT
- MAILBOX LOCATION

**NOTE: REFERENCE GRADING PLANS FOR FINAL RETAINING WALL HEIGHTS. ALL RETAINING WALL SHALL NOT EXCEED A HEIGHT OF 2FT.

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Aerial Photography Date: February 22

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WINDSTONE RANCH NORTH • **WALL PLAN**

- SURPRISE, ARIZONA
- 02/08/2022
- # 21000482
- KAX GROUP

EXPIRES 12/31/22

REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO.
55247
SHAWN
BYRON
Date signed 02/08/2022
ARIZONA U.S.A.

0 25' 50' 100'
SCALE: 1" = 50'-0"

For Illustrative purposes only. Subject to change without notice.



LEGEND

- 6' PEDESTRIAN CONCRETE TRAIL
- AMENITY

L:\21000482-WINDSTONE NORTH\6-2100048212-LANDSCAPE\1-SD\4-SHEETS\L1.00 WALL.dwg

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Aerial Photography Date: February 22

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WINDSTONE RANCH NORTH • **TRAILS PLAN**

- SURPRISE, ARIZONA
- 02/08/2022
- # 21000482
- KAX GROUP

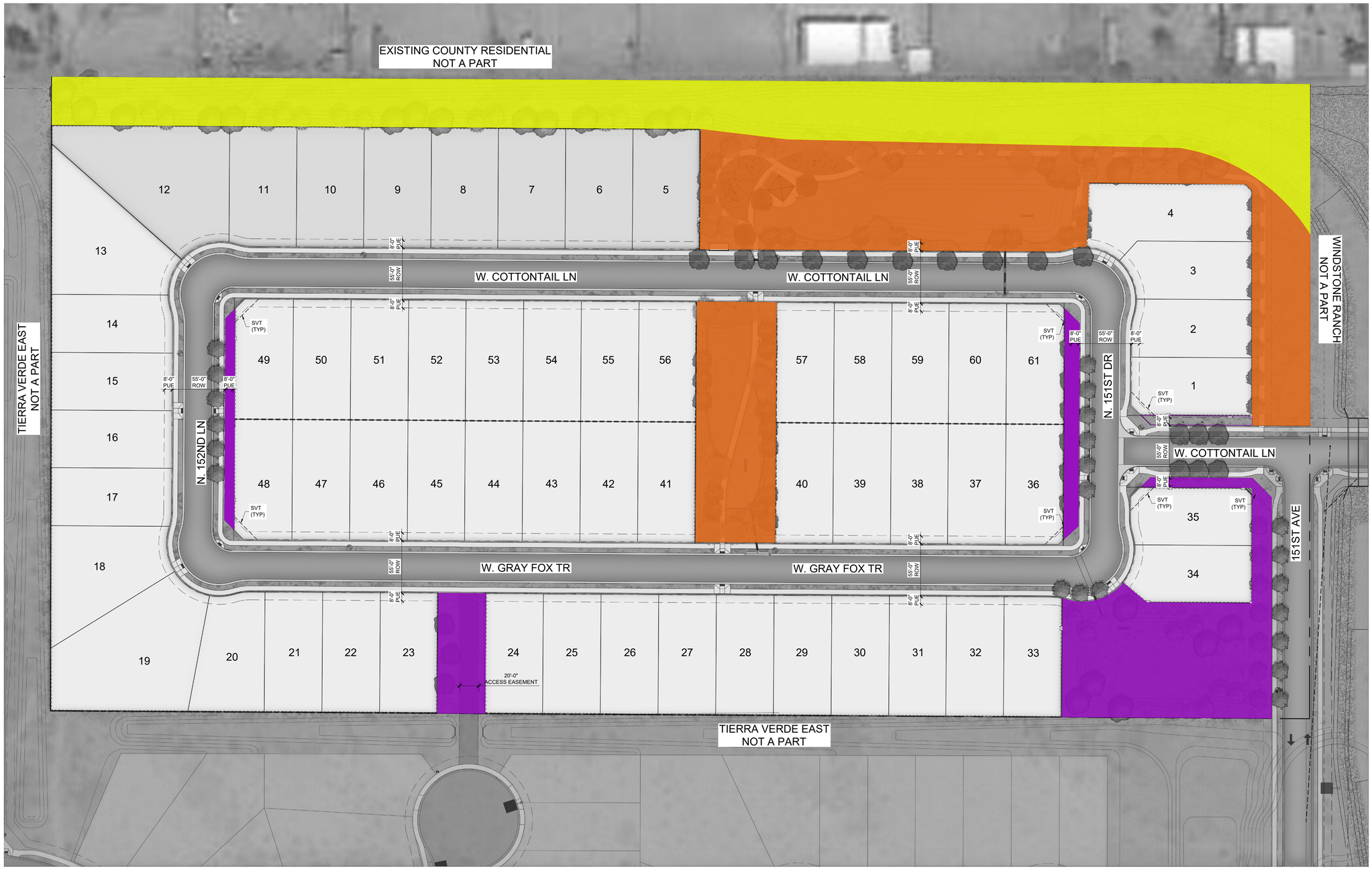
EXPIRES 12/31/22
REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO.
55247
SHAWN
BYRON
DATE SIGNED 02/08/2022
ARIZONA U.S.A.

0 25' 50' 100'
SCALE: 1" = 50'-0"

For Illustrative purposes only. Subject to change without notice.

LEGEND

ACTIVE OPEN SPACE	86,880 SF	42%
PASSIVE OPEN SPACE	42,870 SF	21%
NATURAL OPEN SPACE	77,840 SF	37%



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WINDSTONE RANCH NORTH • **OPEN SPACE PLAN**

- SURPRISE, ARIZONA
- 02/08/2022
- # 21000482
- KAX GROUP

EXPIRES 12/31/22

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DATE SIGNED 02/08/22
ARIZONA U.S.A.

0 25' 50' 100'
SCALE: 1" = 50'-0"

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L:\21000482-WINDSTONE NORTH\6-2100048214-LANDSCAPE\1-SD\4-SHEETS\L1.00 WALL.dwg

Christina Sexton

From: JAMES, MARK C GS-12 USAF AETC 56 FW/CVE <mark.james.14@us.af.mil>
Sent: Tuesday, June 14, 2022 10:27 AM
To: Tierney Farago
Cc: 56 FW/CIT Community Initiative
Subject: RE: FS22-0807 Windstone Ranch North New Digital Submittal 06.07.22
Attachments: smime.p7s; ATT00001.txt; ATT00002.htm

Follow Up Flag: Follow up
Flag Status: Flagged

Tierney,

Thank you for allowing Luke AFB to make comments on the Windstone Ranch North application. The site is located approximately 4.7 miles outside the Luke AFB Aux-1 JLUS 65 Ldn, "high noise or accident potential zone" as defined by A.R.S. § 28-8461 and is inside the "territory in the vicinity of
a military airport" also defined by A.R.S. § 28-8461.

As described in the application, this request will not have a negative impact on Luke AFB Flight Operations. Since the site will be located inside the "territory in the vicinity of a military airport," it will be subjected to approximately 165 over flights per day. We recommend you review the sound attenuation requirements found in A.R.S. § 28-8482. In addition, a strong notification program on the part of the applicant is essential to inform the tenant about Luke AFB operations.

Respectfully,

Mark James
Planning Manager, Community Initiatives Team Luke AFB AZ 85309
Office: 623-856-9981
DSN: 896-9981

-----Original Message-----
From: Tierney Farago <Tierney.Farago@surpriseaz.gov>
Sent: Tuesday, June 7, 2022 5:09 PM
To: 56 FW/CIT Community Initiative <56FW.CIT.CommunityInitiative@us.af.mil>;
Afshin Ahouraiyan (Maricopa) <Afshin.Ahouraiyan@Maricopa.Gov>; Alex Garza - MAG <AGarza@azmag.gov>; Bob Woodring - TEMPX <Bob.Woodring@mail.maricopa.gov>; Chris Cain - MWD <chrisc@mwdaz.com>; Daniel Trujillo <Daniel.Trujillo@surpriseaz.gov>; Debbie Trasancos - MWD <debbiet@mwdaz.com>; Ernest (USPS) <Ernest.L.James@usps.gov>; Eva Pierce <eva.pierce@dysart.org>; Greg Welch <greg.welch@surpriseaz.gov>; Ibeth - USPS <Ibeth.L.Roman@usps.gov>; Jerome Choy - ADOT <jchoy@azdot.gov>; Kevin Shipman <kevin.shipman@dysart.org>; Leslie - MWD <lesliej@mwdaz.com>; Lynndsay O'Neill, AICP, CFM <lynndsay.oneill@maricopa.gov>; Mark Frago <fragom@mail.maricopa.gov>; Mary Orta - Surprise Chamber <mary.orta@surpriseregionalchamber.com>; Peter Hughes - FCDX <PeterHughes@mail.maricopa.gov>; Raoul Sada - Surprise Chamber <raoul@surpriseregionalchamber.com>; Victor.Schaum <Victor.Schaum@cox.com>; Yvonne Aguirre <yvonne.aguirre@swgas.com>
Cc: Nichole Flores <Nichole.Flores@surpriseaz.gov>
Subject: [Non-DoD Source] FS22-0807 Windstone Ranch North New Digital Submittal 06.07.22

Good afternoon,

SURPRISE
ARIZONA

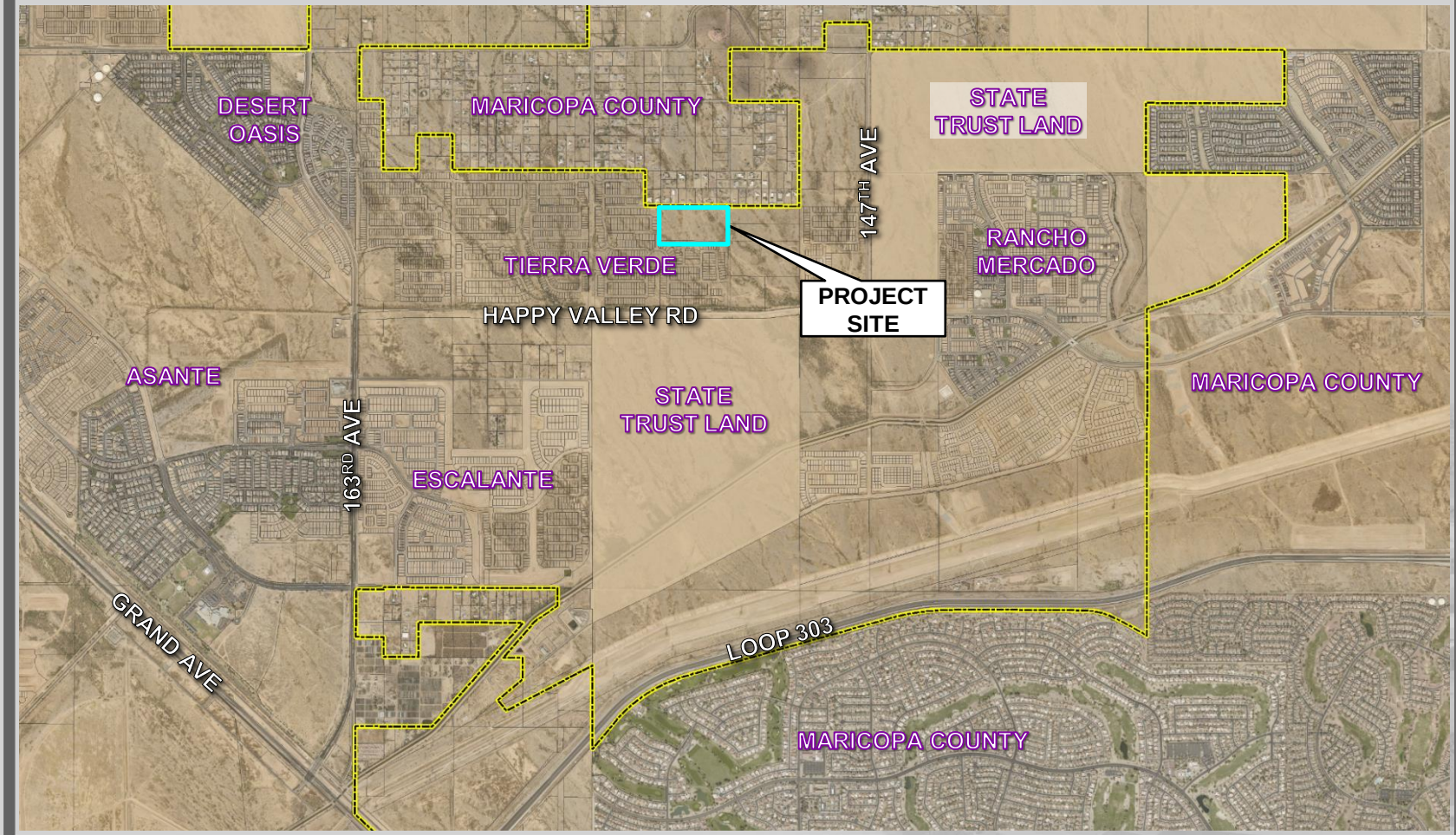
FS22-0807
Windstone Ranch North
Final Plat

City Council

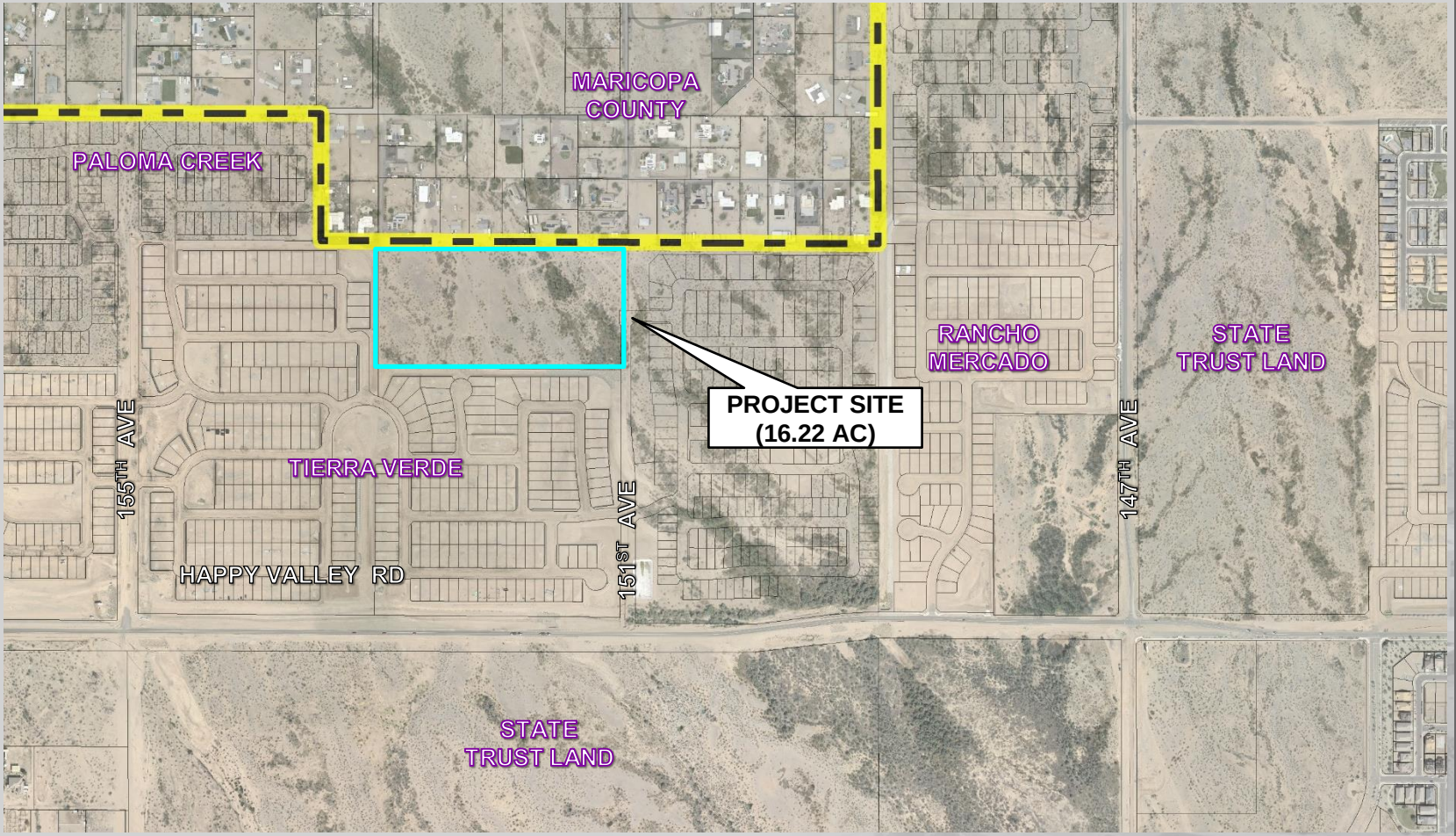
May 7, 2024

BACKGROUND

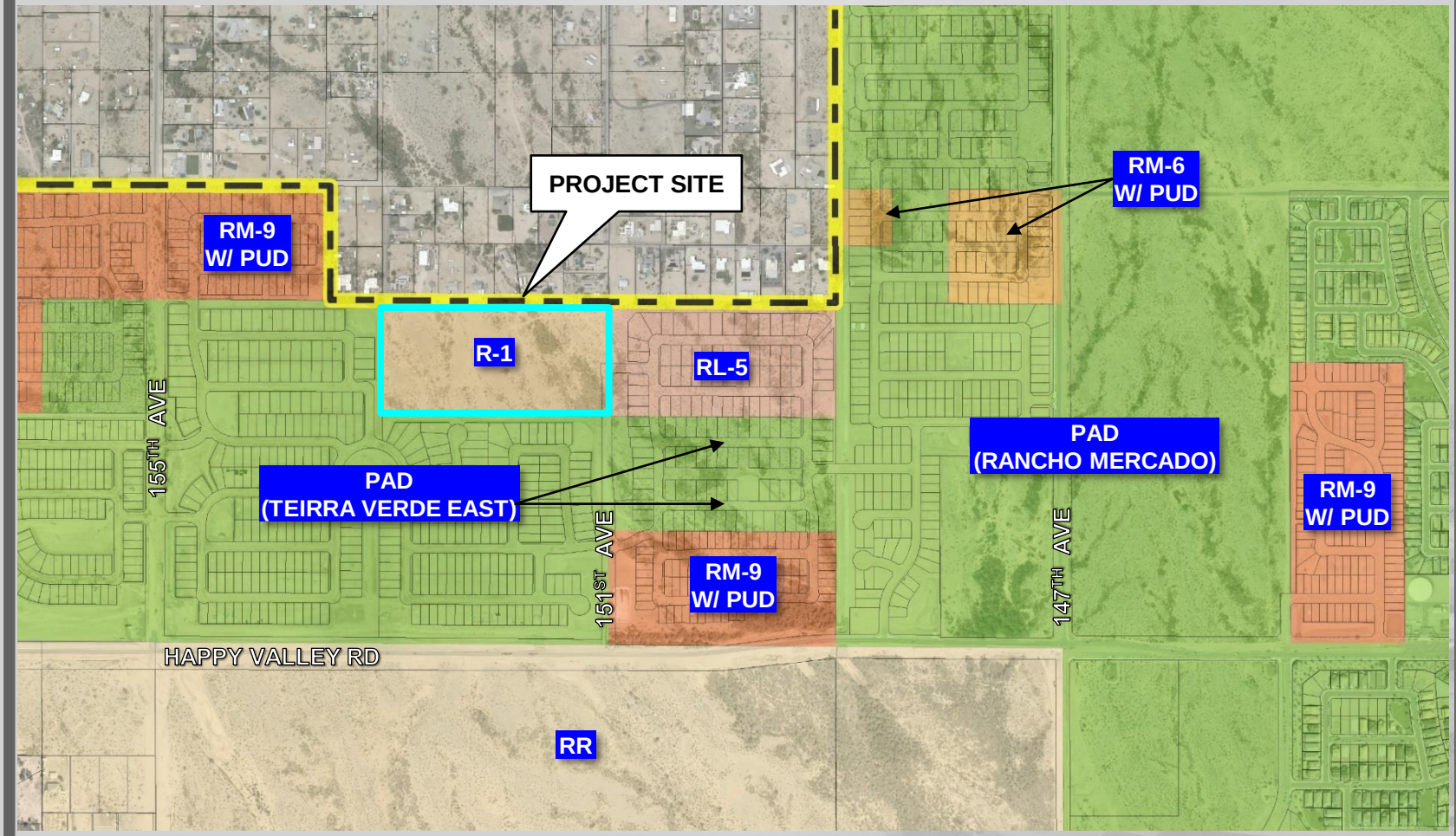
- **October 19, 2021:** The subject parcel was annexed into the City under Ordinance 2021-20.
- **October 19, 2021:** City Council approved a rezone from Rural Residential to Residential Low Density.
- **June 6, 2022:** The applicant filed a request for final plat.
- **June 21, 2022:** The Mayor and City Council approved the preliminary plat.



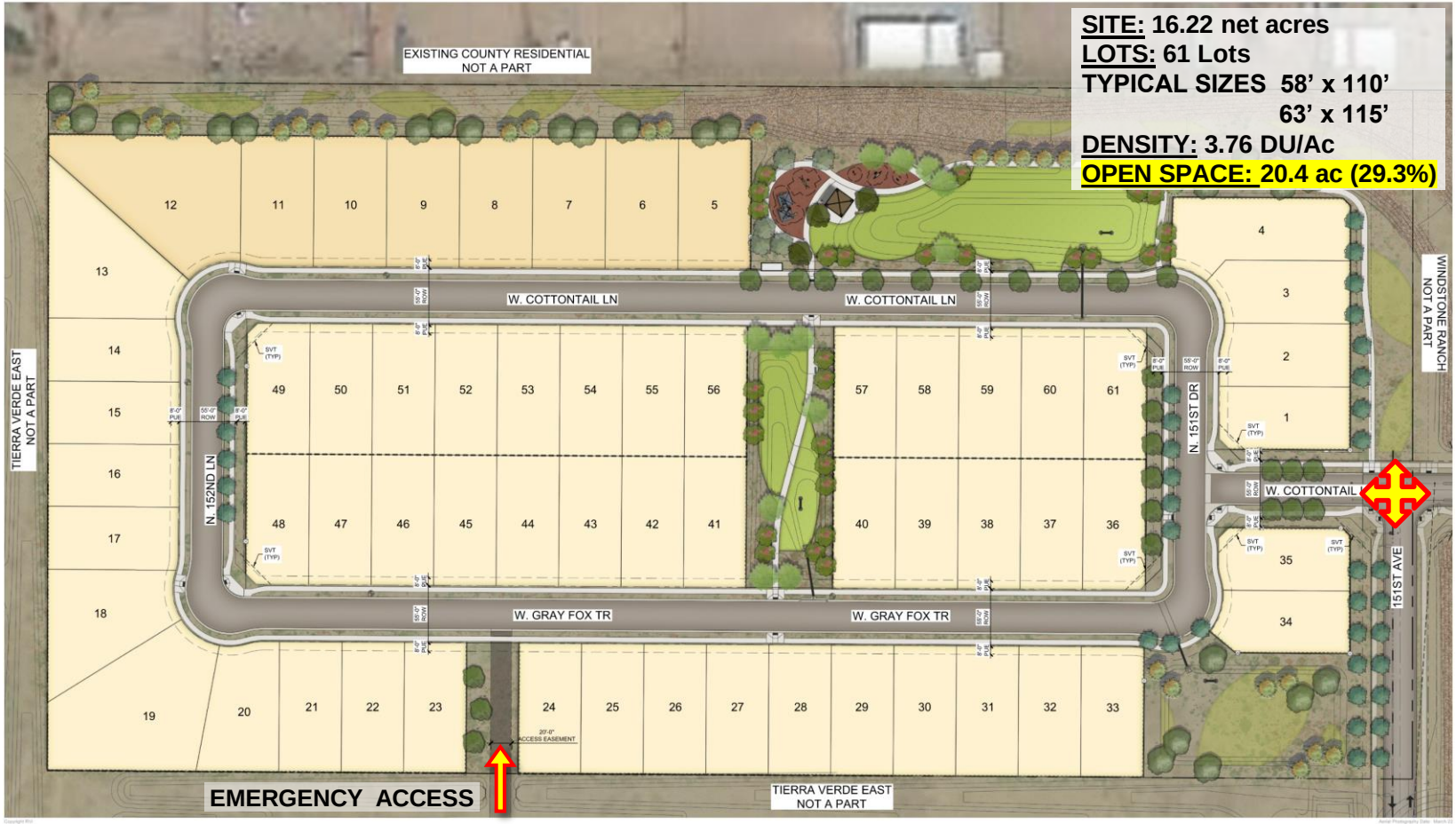
FS22-0807 VICINITY MAP



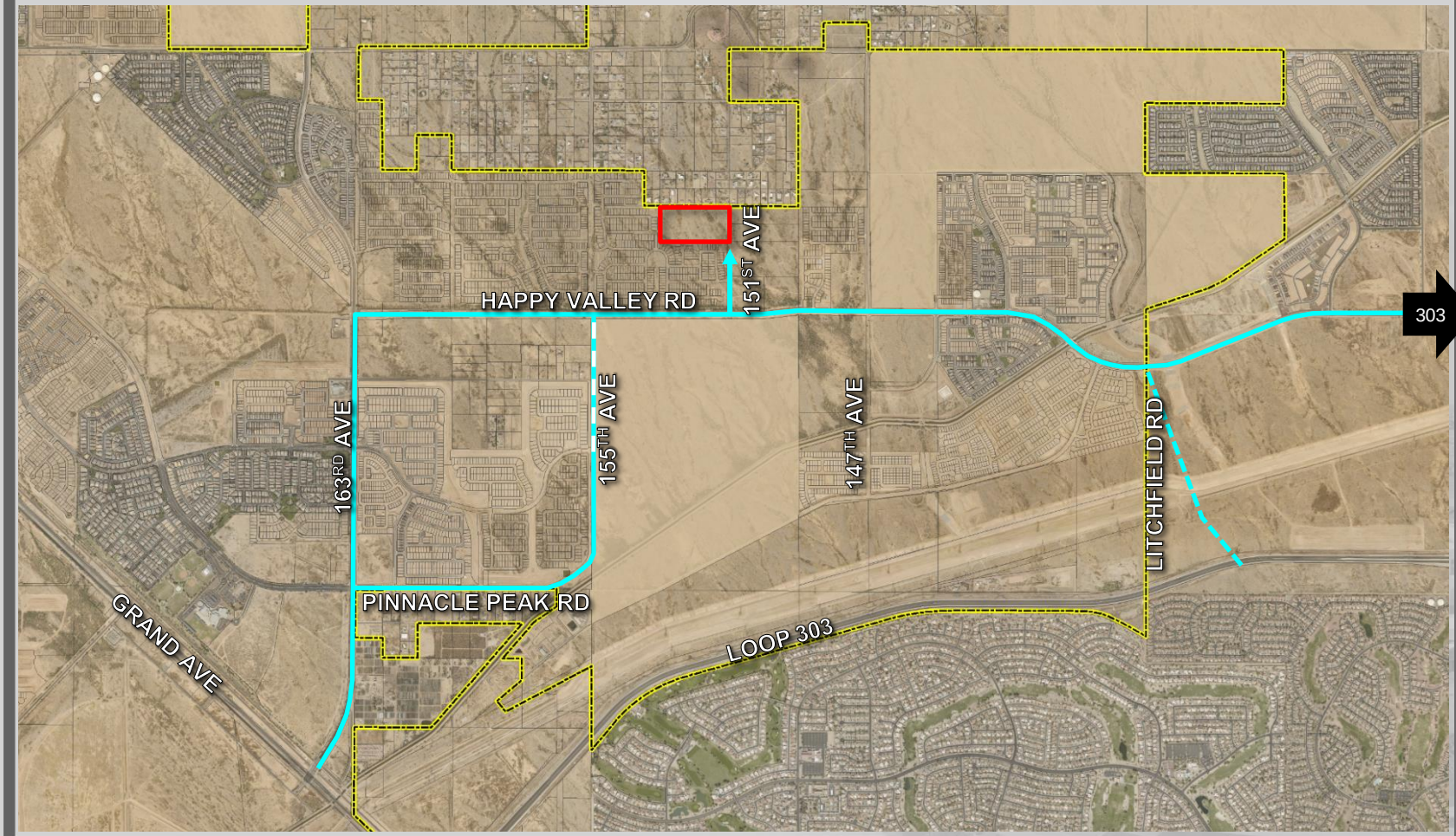
FS22-0807 VICINITY MAP



FS22-0807 ZONING MAP



FS22-0807 FINAL PLAT



FS22-0807 TRAFFIC MAP

FS22-0807 OPEN SPACE

Total Open Space:
4.77 acres

Active Open Space:
2.00 Acres

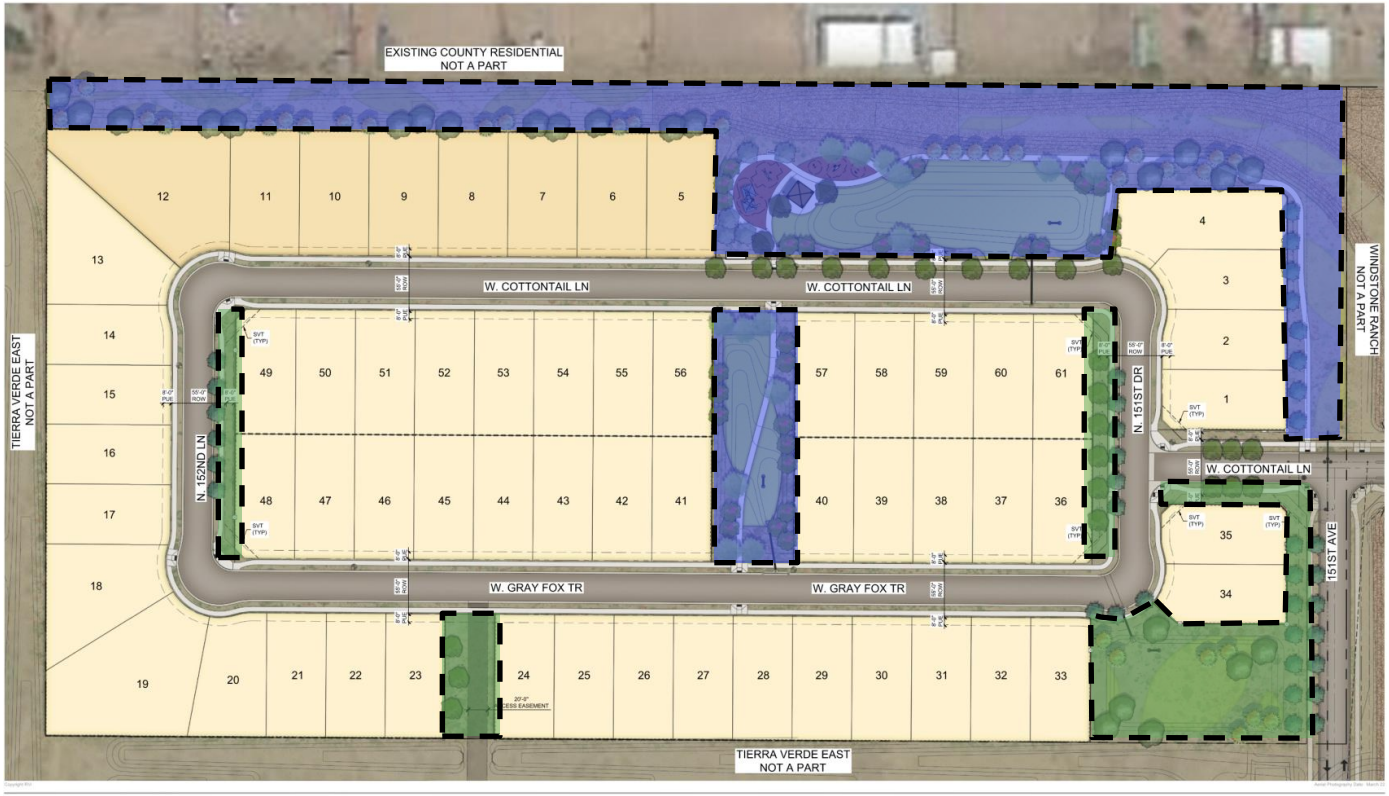
Passive Open Space:
2.77 Acres

<u>Amenity Site:</u>

Tot Lot Area

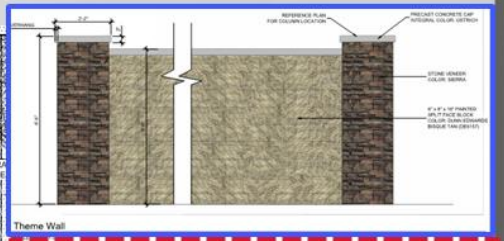
Ramada

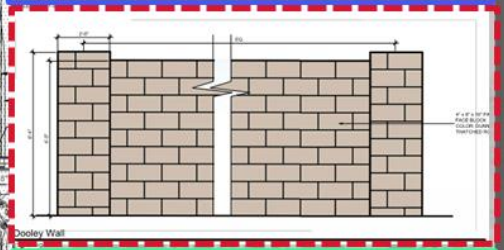
Seating Area

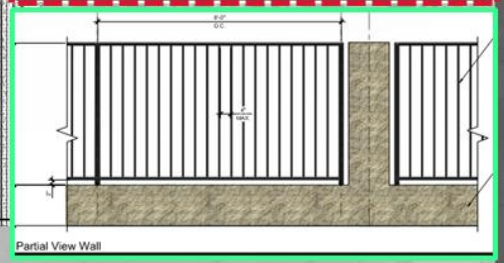


Walls


EROSION HAZARD SETBACK
4" ROLL CURB IN FRONT OF ACCESS DRIVE
20' UNRESTRICTED ACCESS /UTILITY EASEMENT
CONNECT TO EXISTING 8" WATER
503-54-004A XANDER LANDER / RED LEAF HOLDINGS LLC


Theme Wall


Dooley Wall


Partial View Wall

SURPRISE
ARIZONA

QUESTIONS OR COMMENTS?

Thank You

CITY OF SURPRISE
Regular City Council Meeting

Council Meeting Date: May 7, 2024 Contact Person: Leslie Carnie
Submitting Department: Community Development District: District 1
Staff Recommendations:

Consent: Yes Regular: No Public Hearing: No Report/Discussion: No

Agenda Wording:
Consideration and action pertaining to approval of the Plat entitled, "Southwest Gas Ops Center" and dated April 09, 2024, a site generally located on the southwest corner of Deer Valley Road and Grand Avenue; Case FS24-0102.

Motion:
I move to approve the Plat entitled, "Southwest Gas Ops Center" and dated April 09, 2024.

Background:
Mark Petsch, with Vedelago Petsch Architects, seeks approval of a Final Plat for Southwest Gas Corporation. The proposed Final Plat combines two parcels to create one approximately 7.27 gross acre parcel, on a site generally located on the southwest corner of Deer Valley Road and Grand Avenue, to allow for the development of a Southwest Gas Operations Center.

Objective Analysis:
The subject Final Plat meets the requirements of the BP zoning district, in addition to other requirements as set forth in the Municipal Code. All city reviewing departments have reviewed the request and have expressed no concerns.

Policy Compliant:
This proposed Final Plat is consistent with the Surprise General Plan 2035, R-3 zoning district and the Land Development Ordinance.

Financial Impact:
While this item does not have an immediate or direct financial impact, ongoing development activity in the city will inevitably have a future financial impact as additional resources are needed to provide city services.

Budget Impact:
There is no anticipated budget impact related to this item.

FTE Impact:

This item does not have an impact on current staffing levels.

ATTACHMENTS:

1. 00- FS24-0102 Southwest Gas Opertations Center Final Plat - Staff Report 05.07.24
2. 01 – FS24-0102 Southwest Gas Operations Center Final Plat – Vicinity Map
3. 02 – FS24-0102 Southwest Gas Operations Center Final Plat – Zoning Map
4. 03 – FS24-0102 Southwest Gas Operations Center Final Plat – Final Plat
5. 04 – FS24-0102 Southwest Gas Operations Center Final Plat – Luke AFB Comments
6. FS24-0102 Southwest Gas Operations Center Final Plat - PowerPoint

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FINAL PLAT

REPORT TO THE CITY COUNCIL

Case: FS24-0102

Project Name: Southwest Gas Operations Center

Council District: 1 – Palo Verde

City Council Date: May 07, 2024

Planner: Leslie Carnie, Planner II

Owner: Southwest Gas Corporation

Applicant: Mark Petsch with Vedelago Petsch Architects

Request: A Final Plat to combine two parcels to create one approx. 7.27 gross acre parcel. Case FS24-0102.

Site Location: Generally located on the southwest corner of Deer Valley Road and Grand Avenue.

Site Size: 7.27 Gross Acres (approx.)

Findings:

- The proposed Final Plat is consistent with the Surprise General Plan 2035.
- The proposed Final Plat is consistent with the BP zoning district and the Land Development Ordinance (LDO).
- The reviewing agencies have indicated no objections to the request.

Alternative Actions:

Approve – Approval of the proposed Final Plat will allow the applicant the ability to subdivide the property as proposed.

Deny – Denial of the requested Final Plat will prevent the applicant from subdividing the property as proposed.

Project Description:

Mark Petsch, with Vedelago Petsch Architects, seeks approval of a Final Plat for Southwest Gas Corporation. The proposed Final Plat combines two parcels to create one approx. 7.27 gross acre parcel, on a site generally located on the southwest corner of Deer Valley Road and Grand Avenue.

Background:

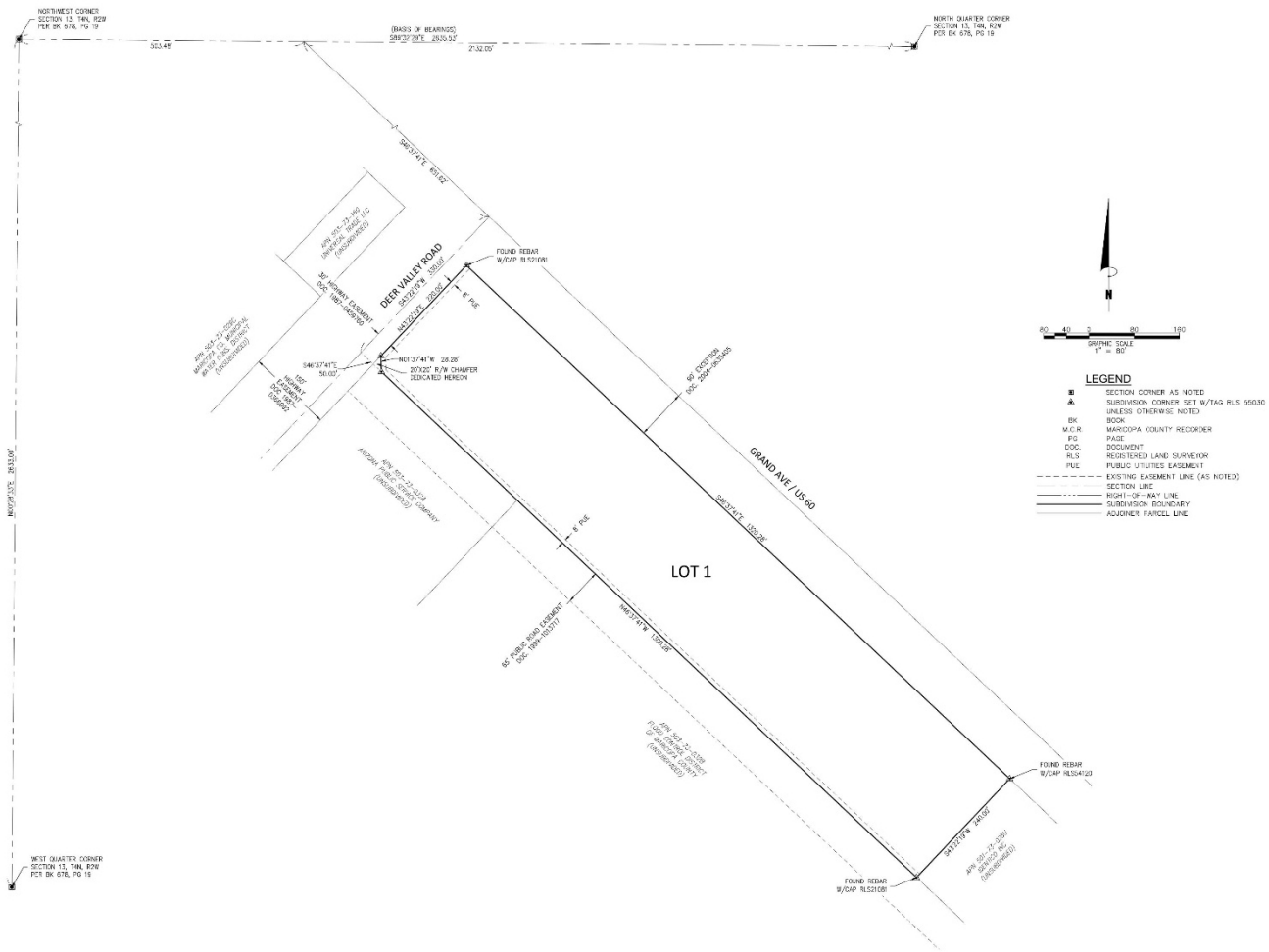
May 23, 1987: The subject site was annexed into the City of Surprise.

October 12, 2023: The applicant was provided with Concept Review comments under case CR23-0845.

January 26, 2024: The applicant filed a request for the subject Final Plat under case FS23-0552.

Analysis and Discussion:

Two parcels on the (approx.) 7.274 gross acre site are being assembled to create one 7.269 net acre parcel and dedicate a 200 sq ft ROW chamfer to accommodate the development of a new Southwest Gas Operations Center. The site is accessed from a frontage road along the southwest boundary of the parcel via Deer Valley Road. The proposed Final Plat provides an 8' PUE along the Deer Valley Road and the frontage road boundaries of the parcel.



The area for each parcel is shown below:

- LOT 1 – approximately 7.269 net acres

The proposed Final Plat dedicates the following:

- 20’x 20’ ROW Chamfer
  Dedicated to the City

- 8’ Public Utility Easement (PUE)

General Plan Conformance:

The proposed Final Plat was reviewed against the goals, polices, recommendations, and guidelines of the City of Surprise General Plan 2035. The proposed Final Plat is consistent with the General Plan in some of the following ways:

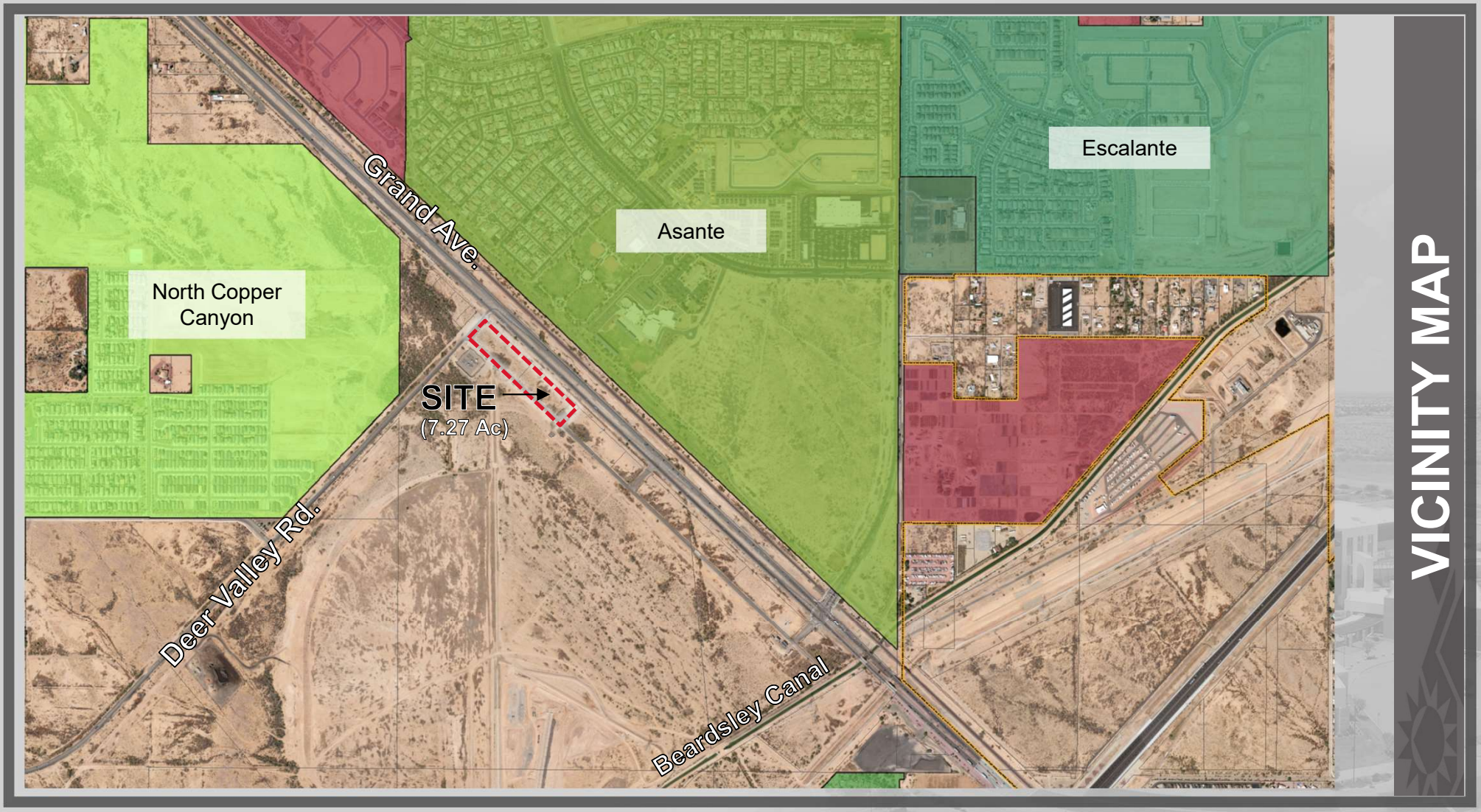
This project is located within the Employment Character Area of the General Plan. The proposed project adheres to the design guidelines of the character area which allows for development of office buildings and utility service yards. The site is appropriately orientated along a State Highway and minor arterial road.

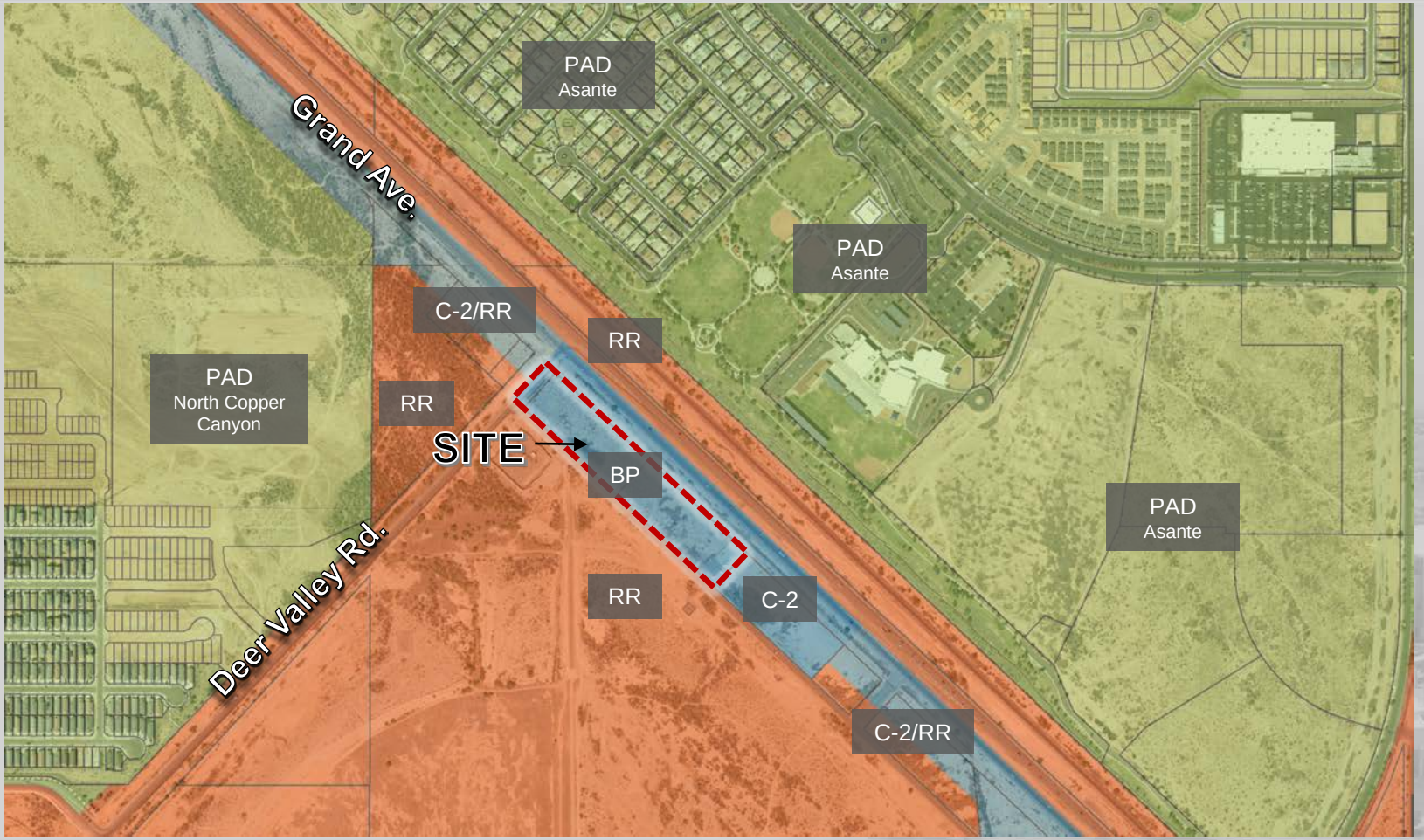
Reviewing Agencies:

In addition to the standard internal city reviewing departments and Luke Air Force Base, the Maricopa Water District, and ADOT were included in the routing of this request. None of the reviewing agencies indicated any concerns over the request.

Attachments:

01 Vicinity Map
02 Zoning Map
03 Final Plat
04 Luke AFB Comments
06 Power Point Presentation
PPT

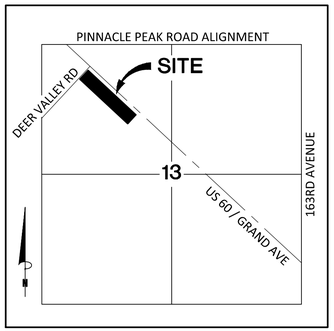

Grand Ave.
Asante
Escalante
North Copper Canyon
SITE
(7.27 Ac)
Deer Valley Rd.
Beardsley Canal
VICINITY MAP


PAD
Asante
Grand Ave.
PAD
Asante
C-2/RR
RR
PAD
North Copper
Canyon
RR
SITE
BP
PAD
Asante
Deer Valley Rd.
RR
C-2
C-2/RR

ZONING MAP

FINAL PLAT OF
SOUTHWEST GAS OPS CENTER

LOCATED IN THE NORTHWEST QUARTER OF SECTION 13,
TOWNSHIP 4 NORTH, RANGE 2 WEST,
OF THE GILA AND SALT RIVER BASE AND MERIDIAN,
MARICOPA COUNTY, ARIZONA.



VICINITY MAP
N.T.S.

DEDICATION

STATE OF ARIZONA)
) SS
COUNTY OF MARICOPA)

SOUTHWEST GAS CORPORATION, A CALIFORNIA CORPORATION ("OWNER"), HAS SUBDIVIDED UNDER THE NAME "SOUTHWEST GAS OPS CENTER", A SUBDIVISION LOCATED IN THE NORTHWEST QUARTER OF SECTION 13, TOWNSHIP 4 NORTH, RANGE 2 WEST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA AS SHOWN AND PLATTED HEREON AND DO HEREBY PUBLISH THIS PLAT AS AND FOR THE PLAT OF "SOUTHWEST GAS OPS CENTRE", AND DECLARE THAT THIS PLAT SETS FORTH THE LOCATION AND GIVES THE DIMENSIONS OF EACH LOT, AND THAT EACH LOT SHALL BE KNOWN BY THE NUMBER, LETTER, AND/OR NAME GIVEN TO EACH RESPECTIVELY AS SHOWN ON THIS PLAT.

OWNERS HEREBY DEDICATE TO THE CITY OF SURPRISE, FEE TITLE TO ALL PUBLIC RIGHTS-OF-WAY AS SHOWN ON THIS PLAT.

OWNERS HEREBY GRANT TO THE CITY OF SURPRISE A PERPETUAL NON-EXCLUSIVE EASEMENT OVER, UNDER, UPON AND ACROSS ALL AREAS DESIGNATED ON THE PLAT AS SEWER LINES, AND MANHOLES FOR THE PURPOSE OF INSTALLING, CONSTRUCTING, MAINTAINING, REPAIRING, REPLACING, AND UTILIZING THE SEWER LINES AND MANHOLES

OWNERS HEREBY GRANT TO THE CITY OF SURPRISE A PERPETUAL EASEMENT ACROSS THE PLAT INCLUDING ROADS AND STREETS, OPEN SPACES, COMMUNITY FACILITIES, TRACTS, SIDEWALKS, DRAINAGE BASINS, AND ANY PROPERTY WITHIN THE PLAT OWNED BY THE PROPERTY OWNERS' ASSOCIATION FOR THE PURPOSE OF PROVIDING CONTINUOUS AND UNINTERRUPTED INGRESS AND EGRESS FOR TRASH COLLECTION VEHICLES.

OWNER HEREBY GRANTS TO THE CITY OF SURPRISE A NON-EXCLUSIVE EASEMENT OVER, UPON AND ACROSS THE AREAS DESIGNATED AS SIGHT VISIBILITY TRIANGLES FOR THE PURPOSE OF ENSURING THAT THESE AREAS REMAIN FREE OF SIGHT VISIBILITY OBSTRUCTIONS.

ANY PARTY WITH RIGHTS TO ANY WATER OR SEWER EASEMENT THAT OVERLAPS ANOTHER WATER OR SEWER EASEMENT SHALL HAVE THE RIGHT TO INSTALL, CONSTRUCT, MAINTAIN, REPAIR, REPLACE, AND UTILIZE THE WATER/SEWER LINES/WATER METERS IN SUCH EASEMENTS THAT OVERLAP IN AN EMERGENCY SITUATION WITHOUT THE CONSENT OF ALL PARITIES WITH RIGHTS TO SUCH EASEMENTS. IN SUCH AREAS THAT OVERLAP, IN A NON-EMERGENCY SITUATION ALL PARTIES SHALL CONSENT PRIOR TO ALLOWING ANY OTHER PARTY TO PERFORM ANY INSTALLATION, CONSTRUCTION, MAINTENANCE, REPAIR, OR REPLACEMENT WORK WITHIN THE EASEMENT.

ALL IMPROVEMENTS, FOR STREETS AND PUBLIC UTILITIES OWNED AND OPERATED BY THE CITY, INSTALLED OR CONSTRUCTED BY OWNER WITHIN THE PUBLIC RIGHTS-OF-WAY, THE EASEMENTS, OR ANY TRACTS OR PARCELS HEREBY DEDICATED TO THE CITY OF SURPRISE SHALL BE DEEMED TO HAVE BEEN DEDICATED BY OWNER TO THE CITY UPON THEIR COMPLETION; HOWEVER, SUCH TRANSFER SHALL NOT OCCUR UNTIL THE CITY COUNCIL FOR THE CITY OF SURPRISE MANIFESTS ITS ACCEPTANCE BY SEPARATE FORMAL COUNCIL ACTION.

OWNERS HEREBY GRANT TO THE UNITED STATES OF AMERICA DEPARTMENT OF THE AIR FORCE ("USAF") AN AVIGATION EASEMENT OVER AND ACROSS THIS PLAT AND EVERY LOT AND PARCEL THEREOF, WHICH EASEMENT SHALL INCLUDE, BUT NOT BE LIMITED TO, THE RIGHT OF FLIGHT OF AIRCRAFT OVER THIS PLAT, TOGETHER WITH ITS ATTENDANT NOISE, VIBRATIONS, FUMES, DUST, FUEL AND LUBRICANT PARTICLES, AND ALL OTHER EFFECTS THAT MAY BE CAUSED BY THE OPERATION OF AIRCRAFT LANDING AT, OR TAKING OFF FROM, OR OPERATING AT OR ON LUKE AIR FORCE BASE AND/OR AUXILIARY FIELD.

OWNERS HEREBY GRANT TO THE CITY OF SURPRISE AN ODOR EASEMENT OVER, UPON AND ACROSS THIS PLAT AND EVERY LOT AND PARCEL THEREOF, WHICH EASEMENT SHALL INCLUDE, BUT NOT BE LIMITED TO, THE RIGHT TO INVADE WITH ODORS, FUMES, SMELLS, AND PHYSICAL AIRBORNE PARTICLES CAUSED BY THE OPERATION AND MAINTENANCE OF THE CITY'S WATER RECLAMATION FACILITIES.

THE EASEMENTS GRANTED WITHIN THIS DEDICATION ARE PERMANENT AND PERPETUAL AND SHALL RUN WITH THE LAND AND BE BINDING UPON OWNER AND ITS HEIRS, ASSIGNS AND SUCCESSORS IN INTEREST TO THIS PLAT OR ANY PARCEL OR LOT THEREOF.

IN WITNESS WHEREOF:
SOUTHWEST GAS CORPORATION, A CALIFORNIA CORPORATION, AS OWNER, HAS HEREBY CAUSED THEIR NAME TO BE AFFIXED AND THE SAME ATTESTED BY THE SIGNATURE OF THE UNDERSIGNED OFFICER.

SOUTHWEST GAS CORPORATION, A CALIFORNIA CORPORATION

BY: _____

NAME: _____

ITS: _____

ACKNOWLEDGMENT

STATE OF ARIZONA)
) S.S.
COUNTY OF MARICOPA)

ON THIS _____ DAY OF _____, 2024, BEFORE ME, THE UNDERSIGNED,
PERSONALLY APPEARED _____ OF _____,
AND WHO EXECUTED THE FOREGOING INSTRUMENT FOR THE PURPOSES THEREIN CONTAINED.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND OFFICIAL SEAL.

_____
NOTARY PUBLIC DATE

MY COMMISSION EXPIRES: _____

LEGAL DESCRIPTION

PARCEL NO. 1:
THAT PORTION OF. SECTION 13, TOWNSHIP 4 NORTH, RANGE 2 WEST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SECTION 13;

THENCE NORTH" 87° 51' EAST, ALONG THE NORTH LINE OF SECTION 13, A DISTANCE OF 502.18 FEET TO THE SOUTHWESTERLY RIGHT OF WAY LINE OF U.S. ROUTE NO. 60, 70, 89;

THENCE SOUTH 47° 13' EAST ALONG SAID RIGHT OF WAY LINE A DISTANCE OF 650.00 FEET TO THE POINT OF BEGINNING;

THENCE CONTINUING SOUTH 47" 13' EAST ALONG SAID RIGHT OF WAY LINE, A DISTANCE OF 675.14 FEET;

THENCE SOUTH 42° 47' WEST, A DISTANCE OF 330.00 FEET;

THENCE NORTH 47° 13' WEST, A DISTANCE OF 675.14 FEET;

THENCE NORTH 42° 47' EAST, A DISTANCE OF 330.00 FEET TO THE POINT OF BEGINNING;

EXCEPT THAT PORTION OF THE FOLLOWING DESCRIBED PROPERTY WHICH LIES WITHIN PARCEL NO. 1 ABOVE, DESCRIBED AS FOLLOWS:

COMMENCING AT A 1 INCH SQUARE IRON BAR MARKING THE NORTHWEST CORNER OF SECTION 13, TOWNSHIP 4 NORTH, RANGE 2 WEST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, FROM WHICH A 5/8 INCH REBAR MARKING THE NORTH QUARTER CORNER OF SAID SECTION 13 BEARS SOUTH 89° 32' 29" EAST, 2635.53 FEET;

THENCE SOUTH 89° 32' 29" EAST, 503.48 FEET TO A POINT ON THE SOUTHWESTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY 60-70-89 (WICKENBURG-PHOENIX HIGHWAY);

THENCE SOUTH 47° 01' 45" EAST ALONG SAID RIGHT-OF-WAY LINE, 650.00 FEET TO THE TRUE POINT OF BEGINNING;

THENCE CONTINUING SOUTH 47° 01' 45" EAST, ALONG SAID RIGHT-OF-WAY LINE, 30.00 FEET;

THENCE SOUTH 42° 58' 1511 WEST 330 FEET; THENCE NORTH 47° 01' 4511 WEST 30.00 FEET;

THENCE NORTH 42° 58' 15" EAST 330.00 FEET TO THE TRUE POINT OF BEGINNING.

PARCEL NO. 2:
THAT PORTION OF SECTION 13, TOWNSHIP 4 NORTH, RANGE 2 WEST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SECTION 13;

THENCE NORTH 89° 51' EAST, ALONG THE NORTH LINE OF SECTION 13, A DISTANCE OF 502.18 FEET TO THE SOUTHWESTERLY RIGHT OF WAY LINE OF U.S. ROUTE NO. 60, 70, 89;

THENCE SOUTH 47° 13' EAST ALONG SAID RIGHT OF WAY LINE A DISTANCE OF 1325.14 FEET TO THE POINT OF BEGINNING;

THENCE SOUTH 4 T 13' EAST ALONG SAID RIGHT OF WAY LINE A DISTANCE OF 675.14 FEET;

THENCE SOUTH 42° 47' WEST, A DISTANCE OF 330.00 FEET;

THENCE NORTH 47° 13' WEST, A DISTANCE OF 675.14 FEET;

THENCE NORTH 42° 47' EAST, A DISTANCE OF 330.00 FEET TO THE POINT OF BEGINNING;

EXCEPT THAT PORTION OF THE FOLLOWING DESCRIBED PROPERTY WHICH LIES WITHIN PARCEL NO. 2 ABOVE, DESCRIBED AS FOLLOWS:

COMMENCING AT A 1 INCH SQUARE IRON BAR MARKING THE NORTHWEST CORNER OF SECTION 13, TOWNSHIP 4 NORTH, RANGE 2 WEST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, FROM WHICH A 5/8 INCH REBAR MARKING THE NORTH QUARTER CORNER OF SAID SECTION 13 BEARS SOUTH 89° 32' 29" EAST, 2635.53 FEET;

THENCE SOUTH 89° 32' 29" EAST, 503.48 FEET ALONG THE NORTH LINE OF SAID SECTION 13 TO THE EXISTING WESTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY 60-70-89 (WICKENBURG-PHOENIX HIGHWAY);

THENCE DEPARTING SAID NORTH LINE, SOUTH 46° 37' 41 11 EAST, 650.00 FEET ALONG SAID WESTERLY RIGHT OF WAY LINE TO THE MOST NORTHEASTERLY CORNER OF THE ABOVE DESCRIBED PROPERTY AND THE POINT OF BEGINNING;

THENCE CONTINUING SOUTH 46° 37' 41" EAST, 1350.28 FEET ALONG SAID WESTERLY RIGHT OF WAY LINE TO THE MOST EASTERLY CORNER OF SAID PROPERTY;

THENCE DEPARTING SAID WESTERLY RIGHT OF WAY LINE, SOUTH 43-22' 19" WEST, 90.00 FEET ALONG THE SOUTHEASTERLY LINE OF SAID PROPERTY TO A LINE PARALLEL WITH AND 90.00 FEET SOUTHWESTERLY TO SAID WESTERLY RIGHT OF WAY LINE;

THENCE DEPARTING SAID SOUTHEASTERLY LINE, NORTH 46° 37' 41" WEST, 1350.28 FEET ALONG SAID PARALLEL LINE TO THE MOST NORTHWESTERLY LINE OF SAID PROPERTY;

THENCE DEPARTING SAID PARALLEL LINE NORTH 43-22' 1911 EAST, 90.00 FEET; ALONG SAID NORTHWESTERLY LINE TO THE POINT OF BEGINNING, BY FINAL ORDER OF CONDEMNATION RECORDED JUNE 4, 2004 IN INSTRUMENT NO. 20040635405, RECORDS OF MARICOPA COUNTY, ARIZONA.

NOTES

1. NO ON-SITE GRADING OR EXCAVATION SHALL OCCUR WITHOUT FIRST OBTAINING A PERMIT FROM THE CITY OF SURPRISE.

2. THE ROADS DESIGNATED AS "PRIVATE" AND ANY APPURTENANCES INCLUDING BUT NOT LIMITED TO ROAD SIGNS, STRIPING, CURB AND GUTTER, AND SIDEWALKS ARE PRIVATE: SUCH ROADS AND APPURTENANCES ARE OWNED, MAINTAINED, AND REPAIRED BY OWNER OR HOMEOWNER'S ASSOCIATION FORMED BY OWNER. THE CITY OF SURPRISE SHALL NOT MAINTAIN OR REPAIR ANY ROAD DESIGNATED AS "PRIVATE."

3. IN ACCORDANCE WITH A.R.S. § 9-461.07; THE CITY OF SURPRISE HAS DETERMINED THAT ALL DEDICATIONS OCCURRING WITH THIS PLAT ARE IN CONFORMANCE WITH THE CITY OF SURPRISE GENERAL PLAN.

4. PURSUANT TO A.R.S, § 42-11102, THE CITY OF SURPRISE, A POLITICAL SUBDIVISION OF THE STATE OF ARIZONA, IS EXEMPT FROM ALL TAXES AND ASSESSMENTS BASED ON ASSESSED VALUE EXCEPT FOR SPECIAL DISTRICTS #14750 AND 14710, WHEN APPLICABLE.

5. THE MAINTENANCE OF LANDSCAPING WITHIN THE OPEN SPACES, LANDSCAPED TRACTS, RETENTION BASINS, AND PARKS SHALL BE THE RESPONSIBILITY OF THE OWNER OR THE PROPERTY OWNERS' ASSOCIATION FORMED BY THE OWNER. THE MAINTENANCE OF LANDSCAPING WITHIN THE ADJACENT PUBLIC RIGHTS-OF-WAY, INCLUDING LANDSCAPED MEDIANS WITHIN COLLECTORS AND LOCAL STREETS, AND LANDSCAPED AREAS BETWEEN THE CURB AND THE DETACHED SIDEWALK, SHALL BE THE RESPONSIBILITY OF THE ADJACENT PROPERTY OWNER OR THE PROPERTY OWNERS' ASSOCIATION FORMED BY THE ADJACENT PROPERTY. LANDSCAPING MAINTENANCE OF THE MEDIANS WITHIN THE PUBLIC RIGHT-OF-WAY WITHIN ANY ARTERIAL OR PARKWAY STREET CLASSIFICATION SHALL BE RESPONSIBILITY OF THE CITY OF SURPRISE AFTER ACCEPTANCE.

6. COMPLIANCE WITH ALL APPLICABLE LAWS IS REQUIRED, INCLUDING BUT NOT LIMITED TO A.R.S. §§ 45-576 AND 32-2101. PLEASE BE ADVISED, IF AN ADDITIONAL PARCEL SPLIT RESULTING IN SIX OR MORE TOTAL LOTS FROM THE ORIGINAL LOT OCCURS WITHIN 10 YEARS OF THIS PLAT RECORDATION, THE CITY WILL REQUIRE THE SUBDIVISION TO PROVIDE PROOF OF RECEIVING A CAWS. CONTACT THE ARIZONA DEPARTMENT OF WATER RESOURCES FOR INFORMATION ON OBTAINING A CAWS.

RELEASE OF LIABILITY

SOUTHWEST GAS CORPORATION, A CALIFORNIA CORPORATION ("OWNER") DOES HEREBY (1) RELEASE AND DISCHARGE THE UNITED STATES OF AMERICA DEPARTMENT OF THE AIR FORCE (USAF) AND THE CITY OF SURPRISE, AND (2) INDEMNIFY, DEFEND, AND HOLD HARMLESS THE USAF AND THE CITY OF SURPRISE, OF AND FROM ANY LIABILITY FOR ANY AND ALL CLAIMS FOR DAMAGES OF ANY KIND TO PERSONS OR PROPERTY THAT MAY ARISE AT ANY TIME IN THE FUTURE OVER, OR IN CONNECTION WITH AIRCRAFT OVERFLIGHTS FROM AIRCRAFT UTILIZING LUKE AIR FORCE BASE, WHETHER SUCH DAMAGE SHALL ORIGINATE FROM NOISE, VIBRATION, FUMES, DUST, FUEL AND LUBRICANT PARTICLES AND ALL OTHER EFFECTS THAT MAY BE CAUSED BY THE OPERATION OF AIRCRAFT LANDING AT, OR TAKING OFF FROM, OR OPERATING AT OR ON LUKE AIR FORCE BASE AND/OR ITS AUXILIARY FIELDS. THIS INSTRUMENT SHALL RUN WITH THE LAND AND BE BINDING UPON OWNER AND ITS HEIRS, ASSIGNS, AND SUCCESSORS IN INTEREST TO THIS PLAT OR ANY PARCEL OR LOT THEREOF. THIS INSTRUMENT DOES NOT RELEASE THE USAF FROM LIABILITY FOR DAMAGE OR INJURY TO PERSON OR PROPERTY CAUSED BY FALLING AIRCRAFT OR FALLING PHYSICAL OBJECTS FROM AIRCRAFT, EXCEPT AS STATED HEREIN WITH RESPECT TO NOISE, FUMES, DUST, FUEL, AND LUBRICANT PARTICLES

SOUTHWEST GAS CORPORATION, A CALIFORNIA CORPORATION ("OWNER") DOES HEREBY (1) RELEASE AND DISCHARGE THE CITY OF SURPRISE, (2) INDEMNIFY, DEFEND, AND HOLD HARMLESS THE CITY OF SURPRISE, OF AND FROM ANY LIABILITY FOR ANY AND ALL CLAIMS FOR DAMAGES OF ANY KIND TO PERSONS OR PROPERTY THAT MAY ARISE AT ANY TIME IN THE FUTURE OVER, OR IN CONNECTION WITH THE AREAS LOCATED WITHIN THE NEWLY DEDICATED RIGHT-OF-WAY AS DEPICTED ON THIS PLAT UNTIL SUCH TIME THE RIGHT-OF-WAY IS IMPROVED TO CITY STANDARDS AND THOSE IMPROVEMENTS ARE APPROVED AND ACCEPTED BY THE CITY COUNCIL. THE MAINTENANCE OF THE AREA WITHIN ANY NEWLY DEDICATED RIGHT-OF-WAY AS SHOWN ON THIS PLAT SHALL BE THE RESPONSIBILITY OF THE ADJACENT OWNER/OR SUBSEQUENT ADJACENT OWNERS WITHIN THE BOUNDARY OF SAID PLAT UNTIL SUCH TIME THAT THE AREA WITHIN THE RIGHT-OF-WAY IS IMPROVED TO CITY STANDARD AND ACCEPTED BY THE CITY OF SURPRISE.

OWNER HEREBY FURTHER AGREES TO INDEMNIFY, DEFEND, AND HOLD HARMLESS THE CITY OF SURPRISE FROM ANY AND ALL CLAIMS FOR DAMAGES OF ANY KIND TO PERSONS OR PROPERTY THAT MAY ARISE IN CONNECTION WITH THE USE OF THE SIDEWALKS LOCATED WITHIN THE RIGHT-OF-WAY, UNTIL SUCH TIME THE CITY OF SURPRISE HAS ACCEPTED THE SIDEWALKS.

PUBLIC NOTICE

THE LOTS DEPICTED ON THIS PLAT ARE LOCATED WITHIN THE VICINITY OF LUKE AIR FORCE BASE AND MAY BE SUBJECT TO OVERFLIGHTS BY JET AIRCRAFT. ALL STRUCTURES WITHIN THIS PLAT SHALL BE CONSTRUCTED IN COMPLIANCE WITH THE SOUND ATTENUATION STANDARDS ADOPTED BY THE CITY OF SURPRISE. A MAP DEPICTING THE MOST CURRENT ADOPTED MAG NOISE CONTOURS IN RELATION TO THIS PLAT SHALL BE DISPLAYED IN ALL SALES OFFICES. ADDITIONAL INFORMATION MAY BE OBTAINED BY CONTACTING THE CITY OF SURPRISE COMMUNITY DEVELOPMENT DEPARTMENT

FLOOD PLAIN DESIGNATION

THE PROPERTY IS LOCATED WITHIN AN AREA HAVING FLOOD ZONE "SHADED X": BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, ON FLOOD INSURANCE RATE MAP NO. 04013C1660L, WITH A DATE OF IDENTIFICATION OF SEPTEMBER 30, 2005, FOR COMMUNITY NO. 040053, IN MARICOPA COUNTY, STATE OF ARIZONA, WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH SAID PROPERTY IS SITUATED.

SHEET INDEX

1 COVER, NOTES, DEDICATION, SITE DATA, CERTIFICATIONS
2 FINAL PLAT MAP

SITE DATA

EXISTING ZONING	BP
NUMBER OF LOTS	1
GROSS AREA	316,867 SQ.FT. / 7.2743 ACRES
NET AREA	316,667 SQ.FT. / 7.2697 ACRES

OWNER

SOUTHWEST GAS CORPORATION
8360 S DURANGO DRIVE
LAS VEGAS, NV 89113

SURVEYOR

BOWMAN
1600 N. DESERT DRIVE, SUITE 210
TEMPE, AZ 85281
PHONE: (480) 629-8830
CONTACT: DOUG TONEY
EMAIL: dtoney@bowman.com

BASIS OF BEARINGS

SOUTH 89°32'29" EAST ALONG THE NORTH LINE OF THE NORTHWEST QUARTER OF SECTION 13, TOWNSHIP 4 NORTH, RANGE 2 WEST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, ACCORDING TO BOOK 678 OF MAPS, PAGE 19, MARICOPA COUNTY RECORDS.

CITY OF SURPRISE ENGINEER APPROVAL

DATA ON THIS PLAT REVIEWED AND APPROVED THIS _____ DAY OF _____ 2024, BY THE CITY ENGINEER OF SURPRISE, ARIZONA.

APPROVED _____
CITY ENGINEER DATE

CITY OF SURPRISE COUNCIL APPROVAL

APPROVED BY THE CITY COUNCIL OF THE CITY OF SURPRISE, ARIZONA THIS _____ DAY OF _____, 2024.

ATTEST:

_____
MAYOR DATE

_____
CITY CLERK DATE

SURVEYOR'S CERTIFICATION

I, DOUGLAS B. TONEY, HEREBY CERTIFY THAT I AM A REGISTERED LAND SURVEYOR IN THE STATE OF ARIZONA; THAT THIS PLAT CORRECTLY REPRESENTS A SURVEY MADE UNDER MY DIRECTION DURING THE MONTH OF MARCH 2024; THAT THE SURVEY IS TRUE AND CORRECT AS SHOWN; THAT ALL MONUMENTS ACTUALLY EXIST; THAT SAID MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED.

_____ 3/28/24
DOUGLAS B. TONEY
REGISTERED LAND SURVEYOR NO. 55030
BOWMAN
1600 N. DESERT DRIVE, SUITE 210
TEMPE, ARIZONA 85288

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
55030
DOUGLAS B.
TONEY
Date Signed 3/28/24
ARIZONA, U.S.A.

NOTE:
A.R.S. 32-151 STATES THAT THE USE OF THE WORD "CERTIFY" OR "CERTIFICATION" BY A PERSON OR FIRM THAT IS REGISTERED OR CERTIFIED BY THE BOARD IS AN EXPRESSION OF PROFESSIONAL OPINION REGARDING FACTS OR FINDINGS THAT ARE SUBJECT OF THE CERTIFICATION AND DOES NOT CONSTITUTE AN EXPRESS OR IMPLIED WARRANTY OR GUARANTEE.

Bowman CONSULTING
Bowman Consulting Group, Ltd.
1600 N Desert Drive, #210
Tempe, AZ 85288
Phone: (480) 629-8830
Fax: (480) 629-8841
www.bowman.com

FINAL PLAT OF
SOUTHWEST GAS OPS CENTER
SURPRISE, ARIZONA

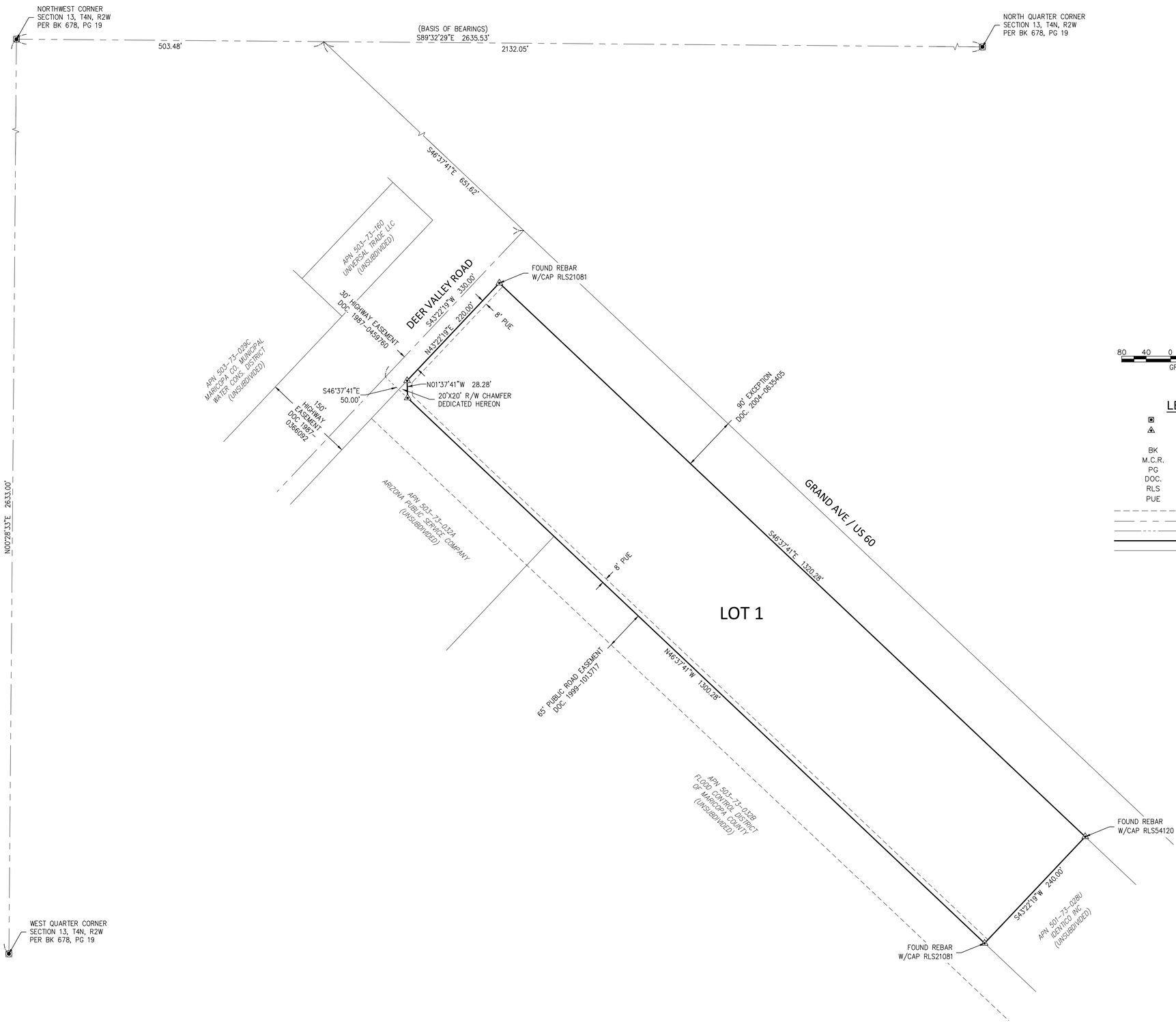
REVISION	DATE

© Bowman Consulting Group, Ltd.

DATE: 3/28/24
PROJ NO: 051568-02
TASK NUM: 001
DRAWN BY: FDT
CHECKED:
QUALITY:
CLIENT NO:
SCALE
N.T.S.

FS24-0102

Plot: K:\051568 - SWG Surprise Ops Center\051568-02-001 (SUR) - SWG\Survey\Dwg\051568-02 Plot.dwg Plotted: Mar 28, 2024



N

80 40 0 80 160

GRAPHIC SCALE
1" = 80'

LEGEND

◙	SECTION CORNER AS NOTED
◬	SUBDIVISION CORNER SET W/TAG RLS 55030 UNLESS OTHERWISE NOTED
BK	BOOK
M.C.R.	MARICOPA COUNTY RECORDER
PG	PAGE
DOC.	DOCUMENT
RLS	REGISTERED LAND SURVEYOR
PUE	PUBLIC UTILITIES EASEMENT
– – – – –	EXISTING EASEMENT LINE (AS NOTED)
———	SECTION LINE
———	RIGHT-OF-WAY LINE
———	SUBDIVISION BOUNDARY
———	ADJOINER PARCEL LINE

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REGISTERED LAND SURVEYOR
CERTIFICATE NO.
55030
DOUGLAS B.
TONEY
Date Signed 3/28/24
ARIZONA, U.S.A.

FINAL PLAT OF SOUTHWEST GAS OPS CENTER SURPRISE, ARIZONA

REVISION	DATE

© Bowman Consulting Group, Ltd.

DATE: 3/28/24
PROJ NO: 051568-02
TASK NUM: 001
DRAWN BY: FDT
CHECKED:
QUALITY:
CLIENT NO:
SCALE
1" = 80'

2 OF 2

FS24-0102

Dwg: V:\051568 - SWG Surprise Ops Center\051568-02-001 (SUR) - SWG\Survey_Dwg\051568-02 Plat.dwg Plotted: Mar 28, 2024

From: RAHN, JENNIFER L CIV USAF AETC 56 FW/CVE
To: Tierney Farago
Cc: 56 FW/CIT Community Initiative
Subject: RE: CR23-0845 Southwest Gas Corporation Surprise Az Operations Center
Date: Wednesday, September 20, 2023 3:39:00 PM

Good afternoon Ms. Farago,

Thank you for allowing Luke AFB to make comments on the Southwest Gas Corporation Surprise, AZ Operations Center application. This concept review proposes the construction of a new operations building, vehicle maintenance building, radio tower and service yards. The radio tower and height is not pictured on the site plan provided. The site is located on 7.27 acres at Grand Avenue and Deer Valley Road in Surprise, AZ. It is approximately 2.61 miles outside the Luke AFB Aux-1 2004 JLUS 65 Ldn, "high noise or accident potential zone" as defined by A.R.S. § 28-8461 and is inside the "territory in the vicinity of a military airport" also defined by A.R.S. § 28-8461.

Luke AFB follows A.R.S. § 28-8481 when evaluating compatible land use within the "territory in the vicinity of a military airport. Subject to the results of an FAA Obstruction Evaluation/Airport Airspace and Spectrum Analysis for the proposed communication tower, this request, as described in the narrative, will not negatively impact the flying and base operations at Luke AFB. Should the tower receive a negative airspace and spectrum analysis from the FAA, we would request to review those results for additional comment. Since the development will be located within the "territory in the vicinity of a military airport," it will be subjected to approximately 170 over flights a day. We recommend a strong notification program on the part of the applicant is essential to inform the applicant about Luke AFB operations.

Respectfully,

Jenn Rahn
Senior Planner, Community Initiatives Team
56th Fighter Wing
Luke AFB AZ 85309
Office: 623-856-9981
DSN: 896-9981

-----Original Appointment-----
From: Tierney Farago <Tierney.Farago@surpriseaz.gov>
Sent: Monday, September 18, 2023 2:35 PM
To: Alyssa Carpenter; Amanda Lacey; Amy Peterson; Armando Lopez; Carl Montgomery; Chris Tovar; Christina Sexton; Christopher Thomas; Dana Owsiany; Eric Boyles; Gustavo Garcia; Hobie Wingard; Ivan Lopez; Jacob Moreno; James Stewart; Jamie Sullivan; Jani Wertin; Jason Moquin; Jeffrey Murray; Jennifer Sandusky; Jessica Brinton; John McFarland; Johnathan Futch; Joseph Zak; Joshua Vig; Kathleen Crutchfield; Keith Tanner; Kirsten Hall; Kristin Tytler; Lana Collins; LariBeth Kirkendall; Leslie Carnie; Leticia Hodnett; Lloyd Abrams; Luis Lopez; Maolin Zheng; Marcia Sorensen; Michael Boule; Michael Knihnisky; Nichole Flores; Nuning Lemka; Paul Frie; Randy De La Garza; Ravi Sharma;

Ron Dry; Russell Baker; Shirley Phan; Sophie Cole; Stephen Chang; Steven Faraclas; Tanner Wessel; Tiffany Copp; Tito Solis; Tracie Busby; Tracy Mills; Travis Samuelson; Trever Fleetham; Warren Bert
Cc: 56 FW/CIT Community Initiative; Afshin Ahouraiyan (Flood Control District of Maricopa County); Alex Garza (Maricopa Assoc of Governments); Aspasia Angelou (Nadaburg School District); Barbara J Remondini, Ph.D. (Wickenburg School District); Bryce Christo (bchristo@cityofelmirage.org); Chris Cain (Maricopa Water District); Darren Gerard; Debbie Trasancos (Maricopa Water District); Douglas Kirkland (Epcor); Ernest (USPS); Eva Pierce; Ibeth - USPS; Jerome Choy (ADOT); John Willett (City of Buckeye); Jorge Gastelum (City of El Mirage); Judy Lopez - Beardsley Water Company; Kevin Shipman; Leslie - MWD; Mark Frago; Mary Orta - Surprise Chamber; MCDOT; Raoul Sada - Surprise Chamber; Rovell Foggy (Liberty Utilities); Victor.Schaum; Yvonne Aguirre
Subject: [Non-DoD Source] CR23-0845 Southwest Gas Corporation Surprise Az Operations Center
When: Thursday, October 12, 2023 10:15 AM-11:00 AM (UTC-07:00) Arizona.
Where: #Conference Room - CH 1F N1-150 Lobby; https://surpriseaz.webex.com/surpriseaz/j.php?MTID=m98817a0227a0c4588d034a1bfdcfed72

CR23-0845 Southwest Gas Corporation Surprise Az Operations Center
Southern Corner Of Grand Ave & Deer Valley Rd
APN: 503-73-161 and 503-73-162

SCOPE

- The Southwest Gas Corporation is proposing the development of this site to accommodate a new Operations Center. The Facility will include an Office / Warehouse Building & a Service Building for vehicle maintenance & welding shop. Also, the complex will house a radio tower for emergency communications.

QUESTIONS

- Requirements for Communications Tower & information on related entities that will need to be included in approval process.

-~-

-- Do not delete or change any of the following text. --

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https://surpriseaz.webex.com/surpriseaz/j.php?MTID=m98817a0227a0c4588d034a1bfdcfed72

Join by meeting number

Meeting number (access code): 2496 423 8499

Meeting password: MeFz9nmyG83

Tap to join from a mobile device (attendees only)

+1-408-418-9388,,24964238499## United States Toll
+1-602-666-0783,,24964238499## United States Toll (Phoenix)

Join by phone

+1-408-418-9388 United States Toll
+1-602-666-0783 United States Toll (Phoenix)
Global call-in numbers

Join from a video system or application

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You can also dial 173.243.2.68 and enter your meeting number.

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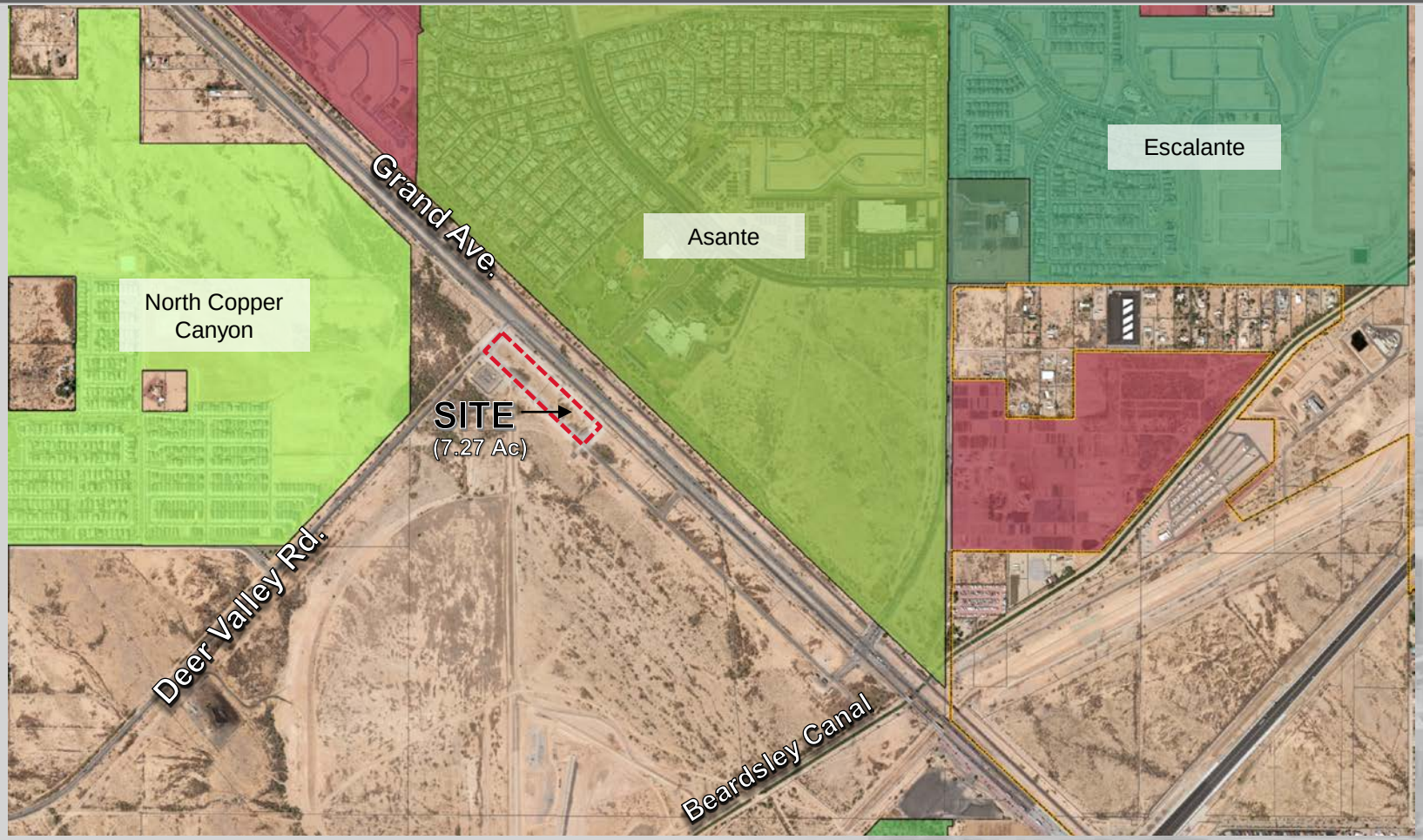
SURPRISE
ARIZONA

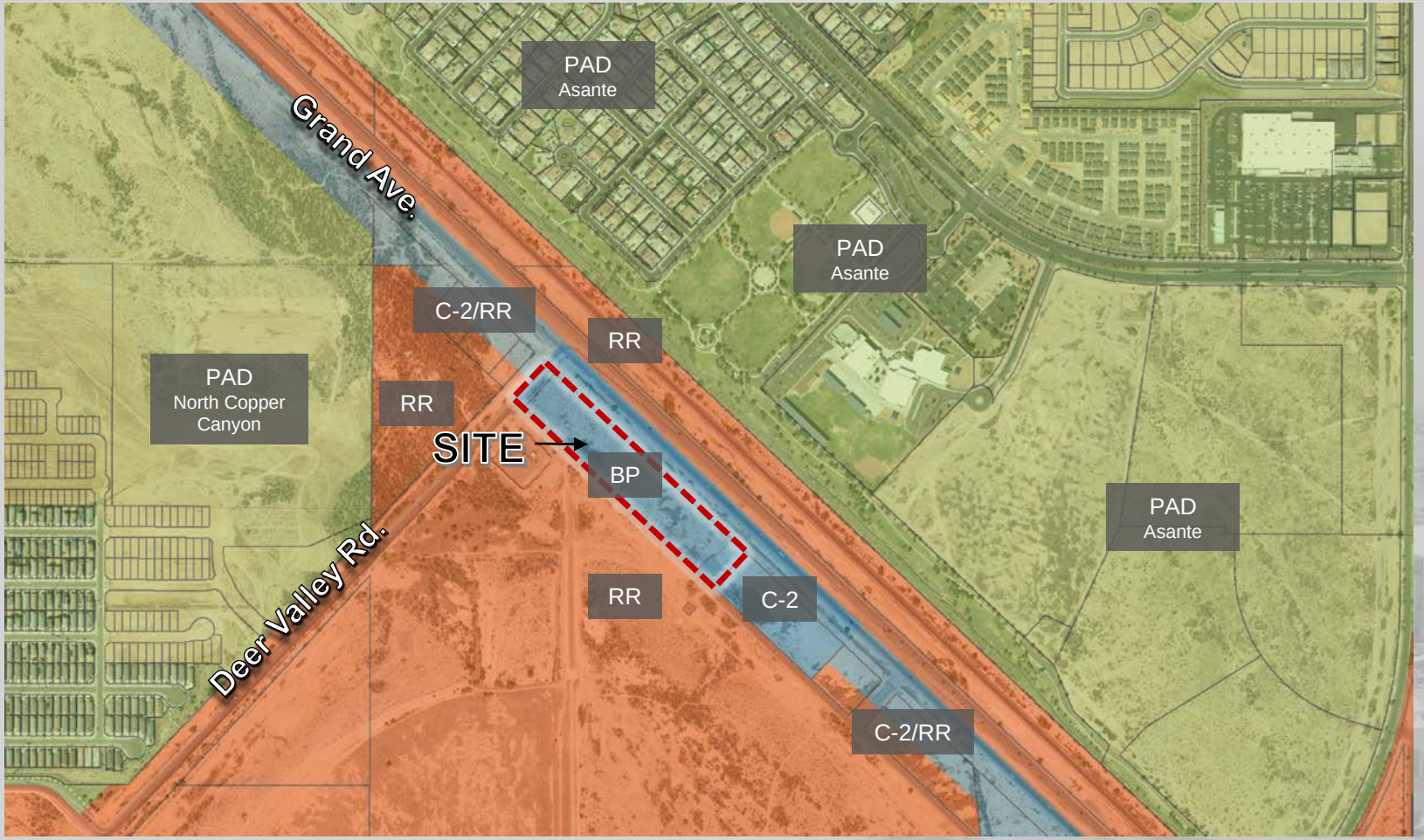
FS24-0102
Southwest Gas Operations Center
Final Plat

City Council

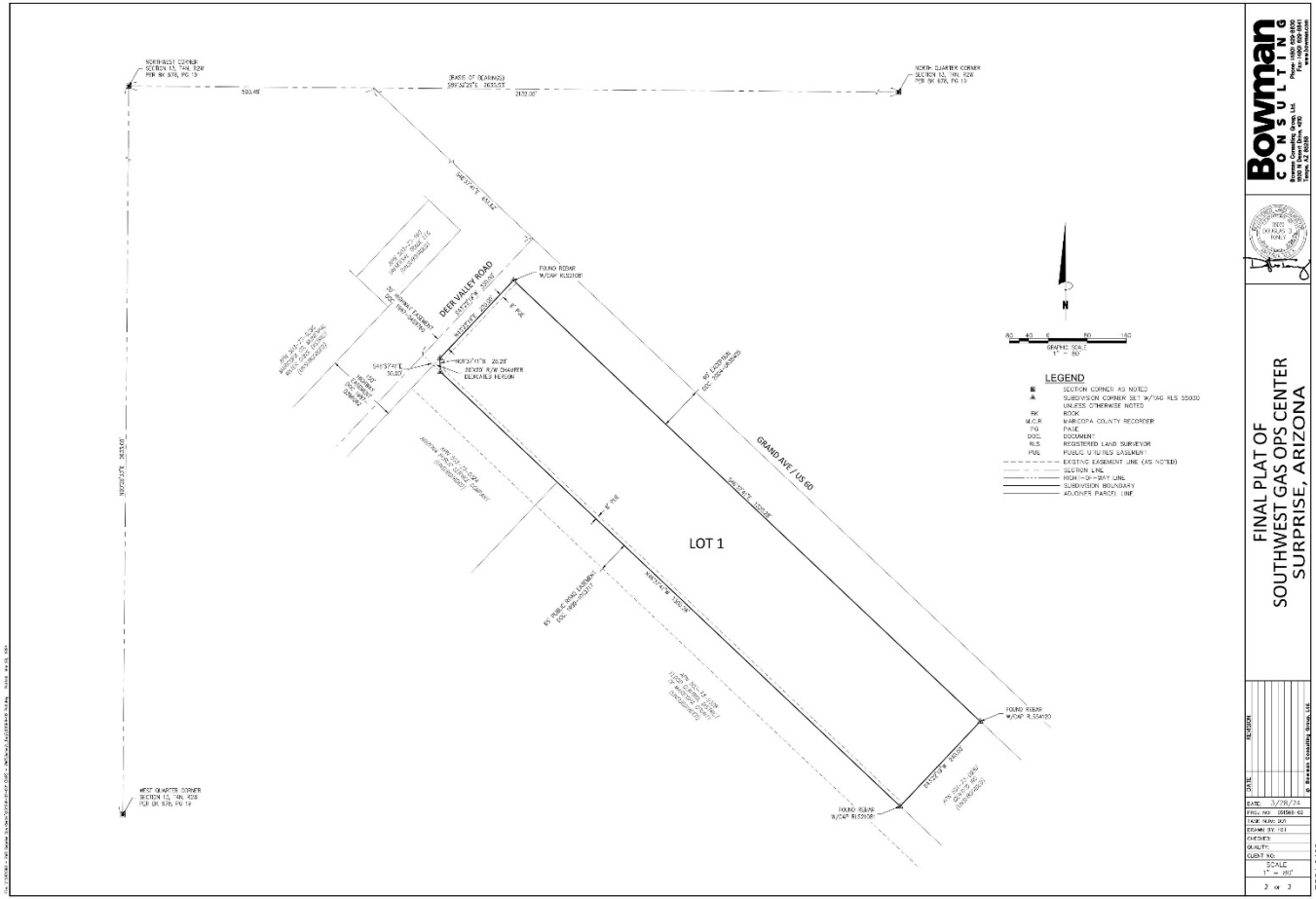
May 07, 2024



VICINITY MAP


PAD
Asante
Grand Ave.
PAD
Asante
C-2/RR
RR
PAD
North Copper
Canyon
RR
SITE
BP
PAD
Asante
Deer Valley Rd.
RR
C-2
C-2/RR

ZONING MAP


NORTHWEST CORNER
SECTION 13, T4N, R2W
FND BK 878, PG 19
(BASIS OF BEARINGS)
S89°34'25"E 2631.53'
2632.30'
NORTH QUARTER CORNER
SECTION 13, T4N, R2W
FND BK 878, PG 19
S00.48'
S00°25'35"E 1320.44'
DEER VALLEY ROAD
SECTION LINE
N89°34'25"W 2630.05'
40' PUBLIC ROAD EASEMENT
DOC. 1999-0000000
FOUND REBAR
W/CAP ILLEGIBLE
8" PVE
N89°37'41"W 20.29'
DEVIATE R/W CHAMFER
ELEVATED RIDGEON
S44°37'41"E
30.00'
40' PUBLIC ROAD EASEMENT
DOC. 1999-0000000
40' ELECTRIC
DOC. 1994-0000000
GRAND AVE / US 60
HIGHWAY R/W LINE
LOT 1
8" PVE
40' PUBLIC ROAD EASEMENT
DOC. 1999-0000000
SECTION R/W LINE
FOUND REBAR
W/CAP RLS 35420
FOUND REBAR
W/CAP ILLEGIBLE
WEST QUARTER CORNER
SECTION 13, T4N, R2W
FCR BK 878, PG 19
N
GRAPHIC SCALE
1" = 80'
LEGEND
SECTION CORNER AS NOTED
SUBDIVISION CORNER SET W/"AG RLS 35030
UNLESS OTHERWISE NOTED
BK BOOK
M.C.R. MARICOPA COUNTY RECORDER
PG PAGE
DOC. DOCUMENT
RLS REGISTERED LAND SURVEYOR
PUE PUBLIC UTILITIES EASEMENT
EXISTING EASEMENT LINE (AS NOTED)
SECTION LINE
HIGH-O-WAY LINE
SUBDIVISION BOUNDARY
ADJOINER PARCEL LINE
Bowman CONSULTING
Bowman Consulting Group, Ltd.
1295 W. Washington, Suite 108
Tempe, AZ 85281
Phone (480) 629-8830
Fax (480) 629-8851
www.bowmanconsulting.com
FINAL PLAT OF
SOUTHWEST GAS OPS CENTER
SURPRISE, ARIZONA
DATE
REVISION
© Bowman Consulting Group, Ltd.
DATE 3/28/24
PROJ. NO. 220565-02
TASK NUM. 001
DRAWN BY TEI
CHECKED
QUALITY
CLIENT NO.
SCALE
1" = 80'
2 OF 2
FS24-0102

FINAL PLAT

SURPRISE
ARIZONA

QUESTIONS OR COMMENTS?

Thank You

CITY OF SURPRISE
Regular City Council Meeting

Council Meeting Date: May 7, 2024 Contact Person: Tanner Wessel
Submitting Department: Community Development District: District 3
Staff Recommendations:

Consent: Yes Regular: No Public Hearing: No Report/Discussion: No

Agenda Wording:
Consideration and action pertaining to approval of the Final Plat entitled, "Toll at Prasada, SWC Park Final Plat" and stamped January 23, 2024, a property located west of Cotton Lane, between Cactus Road and Peoria Avenue; Case FS23-0852.

Motion:
I move to approve the Final Plat entitled, "Toll at Prasada, SWC Park Final Plat" and stamped January 23, 2024.

Background:
James Rogers of EPS Group Inc. seeks approval of a Final Plat for the proposed park located near the southwest corner of the Sterling Grove development (AKA Toll at Prasada). This Final Plat proposes adjusting the parcel boundaries of two (2) parcels and adjusting existing easements to align with future development plans for the proposed park.

Objective Analysis:
Approval of the proposed Final Plat will allow the applicant the ability to subdivide the property as proposed.

Policy Compliant:
The proposed Final Plat is consistent with the Surprise General Plan 2035 and the City of Surprise Land Development Ordinance.

Financial Impact:
While this item does not have an immediate or direct financial impact, ongoing development activity in the city will inevitably have a future financial impact as additional resources are needed to provide city services.

Budget Impact:
There is no anticipated budget impact related to this item.

FTE Impact:

This item does not have an impact on current staffing levels.

ATTACHMENTS:

1. 00-FS23-0852 Toll at Prasada Southwest Corner Park - Staff Report
2. 01-FS23-0852 Toll at Prasada Southwest Corner Park - Vicinity Map
3. 02-FS23-0852 Toll at Prasada Southwest Corner Park - Zoning Map
4. 03-FS23-0852 Toll at Prasada Southwest Corner Park - Final Plat
5. 04-FS23-0852 Toll at Prasada Southwest Corner Park - Final Plat Exhibit
6. FS23-0852 Toll at Prasada Southwest Corner Park - CC Presentation

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SURPRISE
ARIZONA

FINAL PLAT

REPORT TO THE CITY COUNCIL

Case:	**FS23-0852**
Project Name:	Toll at Prasada Southwest Corner Park
Council District:	3 – Mesquite
Meeting Date:	**May 7, 2024**
Planner:	Tanner Wessel, Planner II

Owner:	Toll Prasada, LLC
Applicant:	James Rogers of EPS Group Inc
Request:	Final Plat to adjust the parcel boundaries of two (2) parcels located near the southwest corner of the Sterling Grove development located within the Prasada PAD.
Site Location:	Generally located west of Cotton Lane, between Cactus Road and Peoria Avenue
Site Size:	Approximately 1.21 gross acres
General Plan Conformance:	The proposal is consistent with the Surprise General Plan 2035

Findings:

- The proposed Final Plat is consistent with the Prasada PAD.
- The proposed Final Plat is consistent with the applicable City of Surprise regulations.
- The reviewing agencies have indicated no objections to the request.

Alternative Actions:

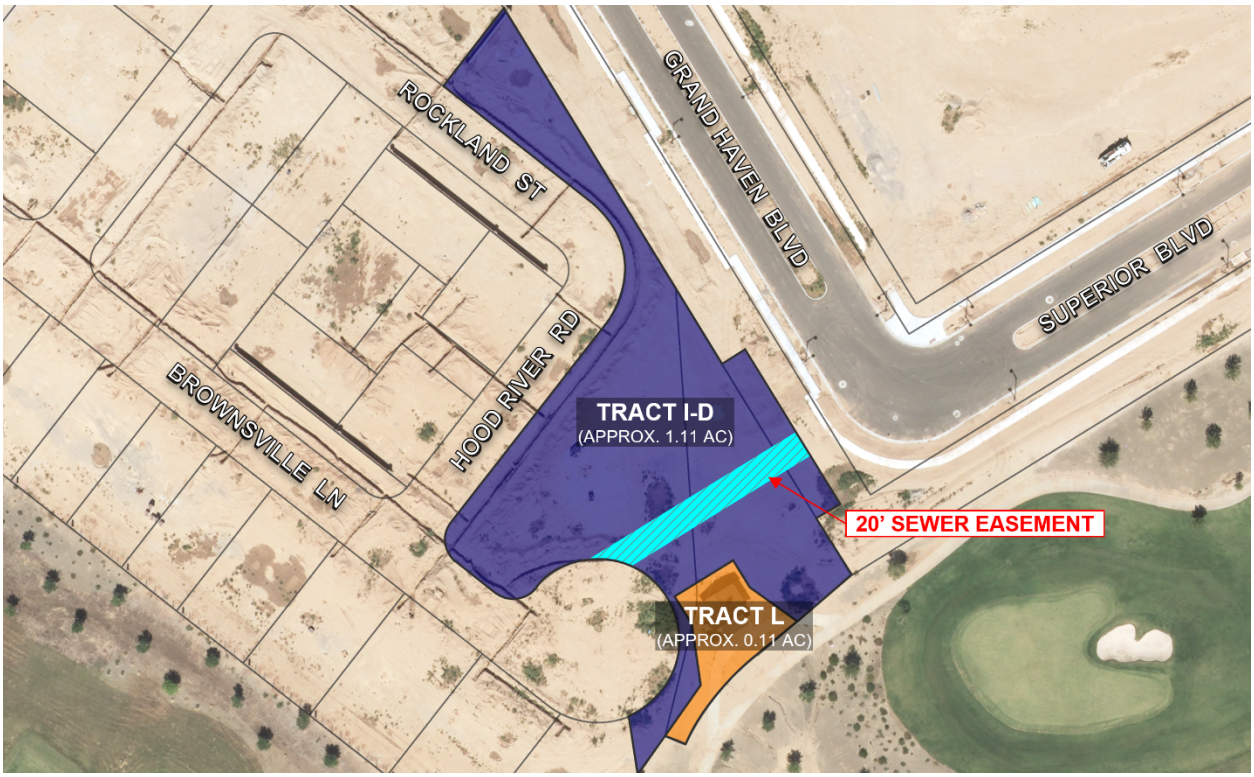
Approve – Approval of the proposed Final Plat will allow the applicant the ability to subdivide the property as proposed.

Deny – Denial of the requested Final Plat will prevent the applicant from subdividing the property as proposed.

ADDITIONAL INFORMATION

James Rogers of EPS Group requests approval of a Final Plat entitled "Toll at Prasada, SWC Park Final Plat", stamped January 23, 2024. The subject parcel is zoned Planned Area Development (PAD) – Prasada and is located near the southwest corner of Grand Haven Boulevard and Superior Boulevard within the Sterling Grove development (AKA Toll at Prasada). This Final Plat proposes adjusting the parcel boundaries of "Tract I-D" of Unit I and "Tract L" which was originally part of the Toll at Prasada Phase 2 Golf Plat to align with future development plans for the proposed park.

This Final Plat does not propose any right-of-way dedications. However, a 20-foot sewer easement is proposed across Tract I-D (see exhibit below).



The area for each parcel is shown below:

- Tract I-D – approximately 1.11 acres
- Tract L – approximately 0.11 acres

The proposed Final Plat dedicates the following:

- 20-foot sewer easement across Tract I-D

UTILITY AND SERVICES TABLE:

Electric:	Arizona Public Service
Water:	EPCOR
Wastewater:	City of Surprise
Natural Gas:	Southwest Gas
Irrigation:	Maricopa Water District
Schools:	Dysart USD

CONFORMANCE WITH ADOPTED PLANS:

The proposed final plat was reviewed against the goals, polices, recommendations, and guidelines of the City of Surprise General Plan 2035. The proposed final plat is consistent with the General Plan in some of the following ways:

This project is located within the neighborhood character area of the General Plan. The proposed plat adheres to the design guidelines of the character area which allows for both residential and open space development.

This project maintains compatibility with the quality of existing land uses in the surrounding area in that it continues the development pattern established in the vicinity of this parcel.

REVIEWING AGENCIES:

In addition to the standard city reviewing agencies, Luke Air Force Base and the Maricopa Water District, were included in the routing of this request. None of the reviewing agencies indicated any concerns over the request.

SUMMARY:

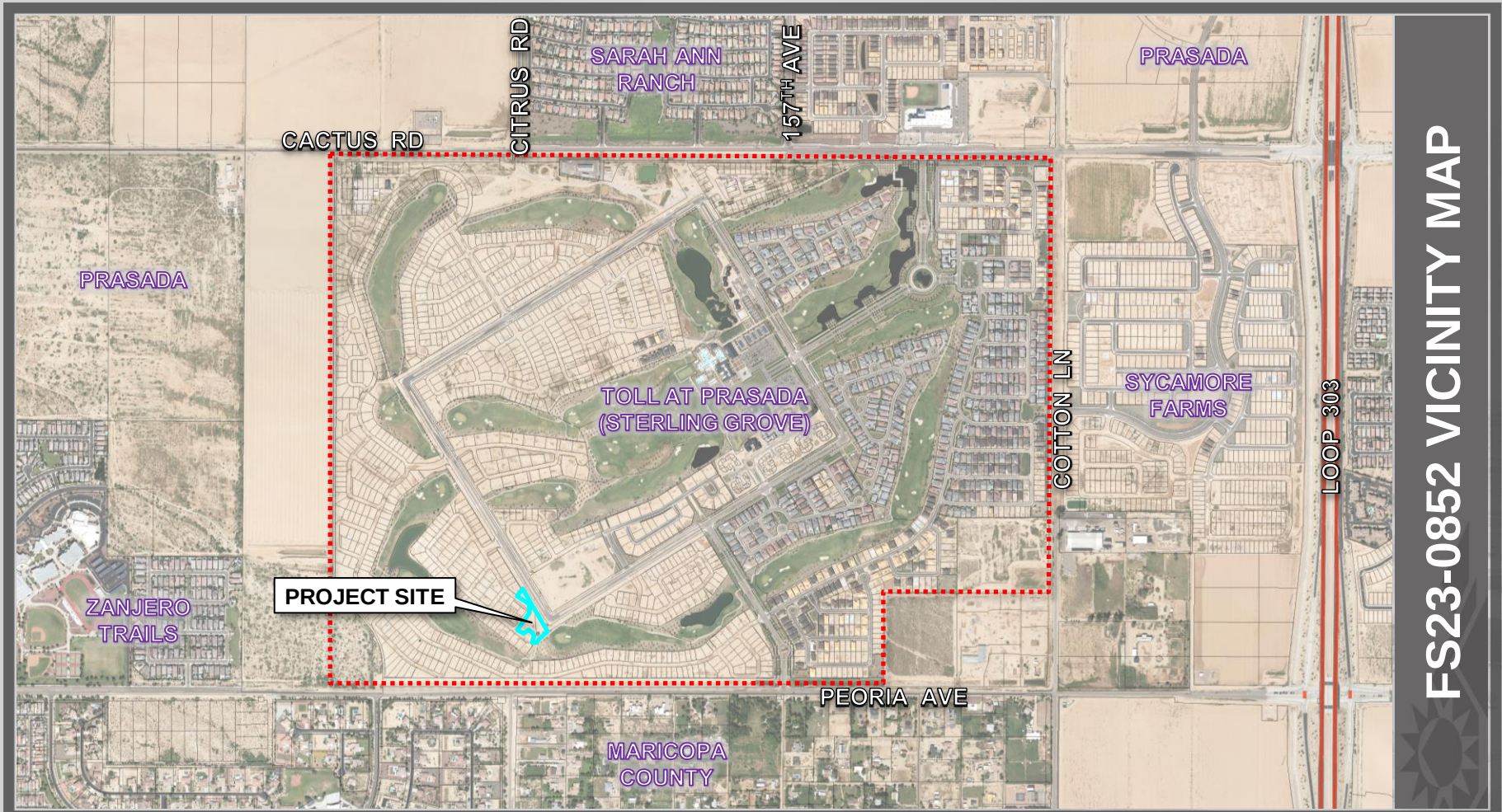
Staff concludes the subject Final Plat is consistent with the Prasada PAD and the applicable requirements of the City of Surprise Land Development Ordinance. All city reviewing departments have reviewed the request and expressed no concerns.

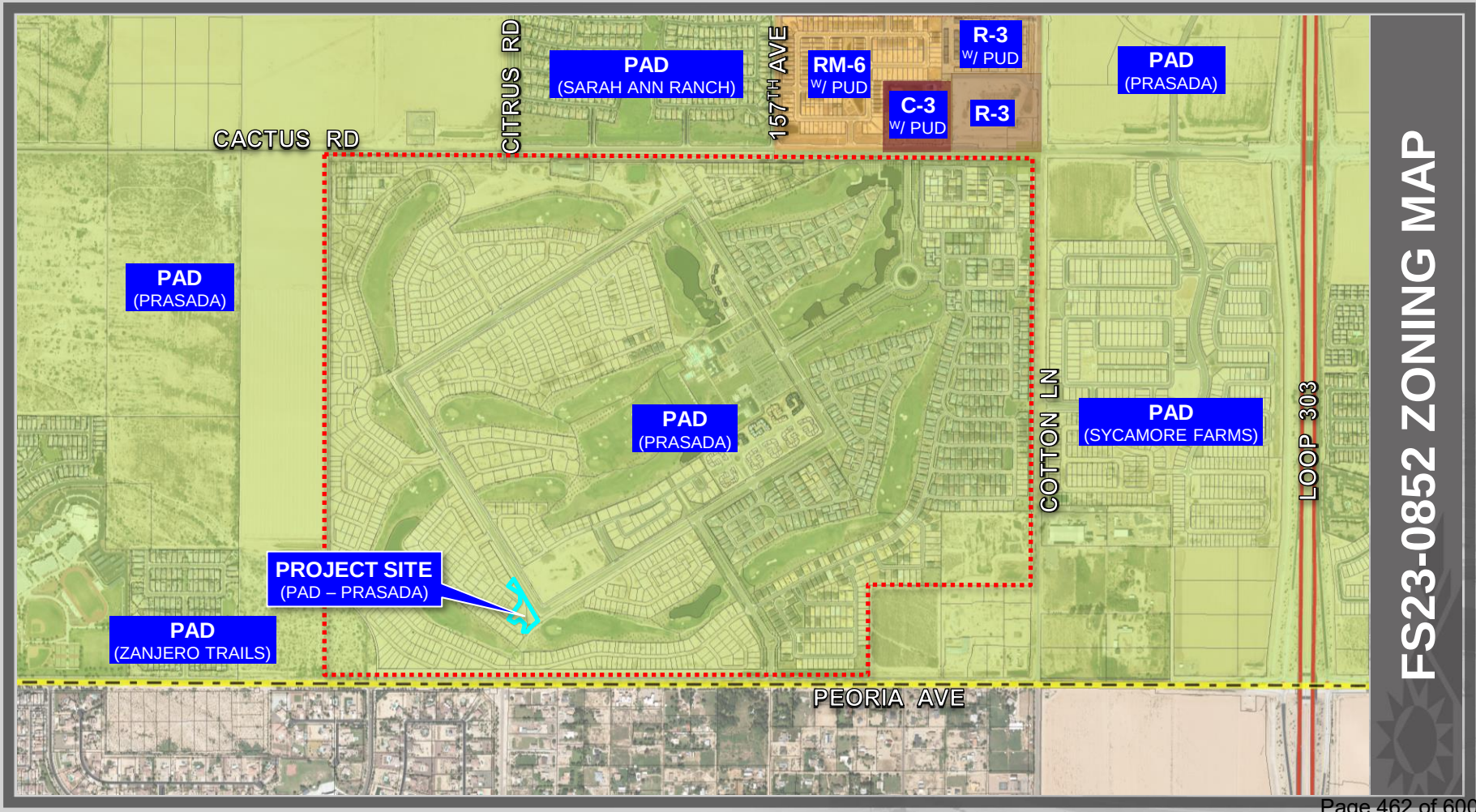
FINDINGS:

- The proposed Final Plat is consistent with the Surprise General Plan 2035.
- The proposed Final Plat is consistent with the Prasada PAD.
- The reviewing agencies have indicated no objections.

ATTACHMENTS:

01 Vicinity Map
02 Zoning Map
03 Final Plat
04 Final Plat Exhibit
PowerPoint


FS23-0852 VICINITY MAP
CACTUS RD
CITRUS RD
SARAH ANN RANCH
157TH AVE
PRASADA
PRASADA
TOLL AT PRASADA (STERLING GROVE)
COTTON LN
SYCAMORE FARMS
LOOP 303
PROJECT SITE
ZANJERO TRAILS
PEORIA AVE
MARICOPA COUNTY


FS23-0852 ZONING MAP
CACTUS RD
CITRUS RD
157TH AVE
COTTON LN
LOOP 303
PEORIA AVE
PAD
(SARAH ANN RANCH)
RM-6
W/ PUD
R-3
W/ PUD
C-3
W/ PUD
R-3
PAD
(PRASADA)
PAD
(PRASADA)
PAD
(PRASADA)
PAD
(SYCAMORE FARMS)
PROJECT SITE
(PAD – PRASADA)
PAD
(ZANJERO TRAILS)

FINAL RE-PLAT

Toll at Prasada, SWC Park Final Plat

BEING A RE-PLAT OF A PORTION OF TRACT C, TOLL AT PRASADA, PHASE 2 MASTER PLAT AS RECORDED IN BOOK 1576 OF MAPS, PAGE 33, M.C.R., TRACT I-D, TOLL AT PRASADA, UNIT I – PHASE 3 AS RECORDED IN BOOK 1644 OF MAPS, PAGE 22, M.C.R., AND TRACT L, TOLL AT PRASADA, PHASE 2 GOLF RE-PLAT AS RECORDED IN BOOK 1698 OF MAPS, PAGE 39, M.C.R. SITUATED IN A PORTION OF THE SOUTHWEST QUARTER OF SECTION 23, TOWNSHIP 3 NORTH, RANGE 2 WEST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA

DEDICATION

STATE OF ARIZONA }
SS
COUNTY OF MARICOPA }

KNOW ALL PERSONS BY THESE PRESENTS: THAT TOLL PRASADA LLC, AN ARIZONA LIMITED LIABILITY COMPANY, "OWNER", HAS SUBDIVIDED UNDER THE NAME TOLL AT PRASADA, SWC PLAT FINAL PLAT, BEING A RE-PLAT OF A PORTION OF TRACT C, TOLL AT PRASADA, PHASE 2 MASTER PLAT AS RECORDED IN BOOK 1576 OF MAPS, PAGE 33, M.C.R., TRACT I-D, TOLL AT PRASADA, UNIT I – PHASE 3 AS RECORDED IN BOOK 1644 OF MAPS, PAGE 22, M.C.R., AND TRACT L, TOLL AT PRASADA, PHASE 2 GOLF RE-PLAT AS RECORDED IN BOOK 1698 OF MAPS, PAGE 39, M.C.R. SITUATED IN A PORTION OF THE SOUTHWEST QUARTER OF SECTION 23, TOWNSHIP 3 NORTH, RANGE 2 WEST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, AS SHOWN AND PLATTED HEREON AND DOES HEREBY PUBLISH THIS PLAT AS AND FOR THE PLAT OF TOLL AT PRASADA, SWC PLAT FINAL PLAT AND DECLARES THAT THIS PLAT SETS FORTH THE LOCATION AND GIVES THE DIMENSIONS OF EACH LOT, TRACT, STREET AND EASEMENT CONSTITUTING THE SAME, AND THAT EACH LOT, TRACT, STREET AND EASEMENT SHALL BE KNOWN BY THE NUMBER, LETTER, AND/OR AND NAME GIVEN TO EACH RESPECTIVELY AS SHOWN ON THIS PLAT.

OWNER HEREBY GRANTS TO THE CITY OF SURPRISE A PERPETUAL NON-EXCLUSIVE EASEMENT OVER, UNDER, UPON, AND ACROSS ALL AREAS DESIGNATED ON THE PLAT AS APPLICABLE: SEWER LINES AND MANHOLES, FOR THE PURPOSE OF INSTALLING, CONSTRUCTING, MAINTAINING, REPAIRING, REPLACING, AND UTILIZING THE SEWER LINES AND MANHOLES.

OWNER HEREBY GRANTS TO THE CITY OF SURPRISE A PERPETUAL EASEMENT ACROSS THE PLAT INCLUDING ROADS AND STREETS, OPEN SPACES, COMMUNITY FACILITIES, TRACTS, SIDEWALKS, DRAINAGE BASINS, AND ANY PROPERTY WITHIN THE PLAT OWNED BY THE HOMEOWNERS ASSOCIATION FOR THE PURPOSE OF PROVIDING CONTINUOUS AND UNINTERRUPTED INGRESS AND EGRESS FOR TRASH COLLECTION VEHICLES AND EMERGENCY VEHICLES.

OWNER HEREBY GRANTS TO THE PUBLIC A PERPETUAL NON-EXCLUSIVE EASEMENT IN, UPON, OVER, UNDER, THROUGH, AND ACROSS THE AREAS DESIGNATED AS PUBLIC UTILITY EASEMENTS AS SHOWN ON THE PLAT FOR THE PURPOSE OF ACCESSING, INSTALLING, CONSTRUCTING, MAINTAINING, REPAIRING, REPLACING, AND UTILIZING PUBLIC UTILITIES.

OWNER HEREBY GRANTS TO THE CITY OF SURPRISE A PERPETUAL NON-EXCLUSIVE EASEMENT OVER, UPON, AND ACROSS THE AREAS DESIGNATED AS SIGHT VISIBILITY TRIANGLES FOR THE PURPOSE OF ENSURING THAT THESE AREAS REMAIN FREE OF SIGHT VISIBILITY OBSTRUCTIONS.

OOWNER HEREBY GRANTS TO THE UNITED STATES OF AMERICA DEPARTMENT OF THE AIR FORCE ("USAF") AN AVIGATION EASEMENT OVER AND ACROSS THIS PLAT AND EVERY LOT AND PARCEL THEREOF, WHICH EASEMENT SHALL INCLUDE, BUT NOT BE LIMITED TO, THE RIGHT OF FLIGHT OF AIRCRAFT OVER THIS PLAT, TOGETHER WITH ITS ATTENDANT NOISE, VIBRATIONS, FUMES, DUST, FUEL AND LUBRICANT PARTICLES, AND ALL OTHER EFFECTS THAT MAY BE CAUSED BY THE OPERATION OF AIRCRAFT LANDING AT, OR TAKING OFF FROM, OR OPERATING AT OR ON LUKE AIR FORCE BASE AND AUXILIARY FIELD.

THE EASEMENTS GRANTED WITHIN THIS DEDICATION ARE PERMANENT AND PERPETUAL AND SHALL RUN WITH THE LAND AND BE BINDING UPON OWNERS AND ITS HEIRS, ASSIGNS, AND SUCCESSORS IN INTEREST TO THIS PLAT OR ANY PARCEL OR LOT THEREOF.

ALL IMPROVEMENTS, FOR STREETS AND PUBLIC UTILITIES OWNED AND OPERATED BY THE CITY, INSTALLED OR CONSTRUCTED BY OWNER WITHIN THE PUBLIC RIGHTS-OF-WAY, THE EASEMENTS, OR ANY TRACTS OR PARCELS HEREBY DEDICATED TO THE CITY OF SURPRISE SHALL BE DEEMED TO HAVE BEEN DEDICATED BY OWNER TO THE CITY UPON THEIR COMPLETION; HOWEVER, SUCH TRANSFER SHALL NOT OCCUR UNTIL THE CITY COUNCIL FOR THE CITY OF SURPRISE MANIFESTS ITS ACCEPTANCE BY SEPARATE FORMAL COUNCIL ACTION.

OWNER HEREBY GRANTS TO THE PUBLIC A PERPETUAL NON-EXCLUSIVE PUBLIC UTILITY ACCESS IN, UPON, OVER, UNDER, THROUGH, AND ACROSS THE AREAS DESIGNATED AS PRIVATE STREET TRACTS.

TRACTS "I-D" AND "L" ARE NOT DEDICATED TO THE PUBLIC, BUT ARE PLATTED AS COMMON PROPERTY FOR THE USE AND ENJOYMENT OF THE HOMEOWNERS ASSOCIATION, AS MORE FULLY SET FORTH IN THE DECLARATION OF COVENANTS, CONDITIONS, AND RESTRICTIONS. SAID HOMEOWNERS ASSOCIATION IS RESPONSIBLE FOR MAINTAINING SAID TRACTS.

IN WITNESS WHEREOF, OWNER HAS HEREUNTO CAUSED ITS CORPORATE NAME TO BE SIGNED AND ITS CORPORATE SEAL TO BE AFFIXED BY THE UNDERSIGNED, DULY AUTHORIZED OFFICER THIS _____ DAY OF _____, 2024.

TOLL PRASADA LLC, AN ARIZONA LIMITED LIABILITY COMPANY

BY _____ DATE _____

ITS _____

ACKNOWLEDGMENT

STATE OF ARIZONA }
SS
COUNTY OF MARICOPA }

ON THIS _____ DAY OF _____, 2024 BEFORE ME, THE UNDERSIGNED, PERSONALLY APPEARED _____, WHO ACKNOWLEDGED HIMSELF TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE INSTRUMENT WITHIN, AND WHO EXECUTED THE FOREGOING INSTRUMENT FOR THE PURPOSES THEREIN CONTAINED.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND OFFICIAL SEAL.

_____
NOTARY PUBLIC DATE

_____
MY COMMISSION EXPIRES:

NOTICE OF PRASADA PRE-ANNEXATION DEVELOPMENT AGREEMENT

OWNER'S PREDECESSOR, SUBURBAN LAND RESERVE, INC., A UTAH CORPORATION, FULTON HOMES CORPORATION, AN ARIZONA CORPORATION, AND WESTCOR/SURPRISE LLC, AN ARIZONA LIMITED LIABILITY COMPANY HAVE ENTERED INTO A PRE-ANNEXATION1 DEVELOPMENT AGREEMENT DATED SEPTEMBER 12, 2006 ("AGREEMENT") WITH CITY OF SURPRISE, AN ARIZONA MUNICIPAL CORPORATION, FOR WHICH A MEMORANDUM OF AGREEMENT WAS RECORDED ON SEPTEMBER 19, 2006, AT THE MARICOPA COUNTY RECORDER'S OFFICE AT DOCUMENT NO. 20061238109. AGREEMENT WAS RECENTLY AMENDED AND RECORDED ON JULY 20, 2018, AT THE MARICOPA COUNTY RECORDER'S OFFICE DOCUMENT NO. 20180551464. THE PROPERTIES INVOLVED IN THIS PLAT ARE SUBJECT TO THIS AGREEMENT.

NOTICE OF INTERGOVERNMENTAL AGREEMENT

THE CITY OF SURPRISE ("CITY") AND MARICOPA COUNTY MUNICIPAL WATER CONSERVATION DISTRICT NUMBER ONE ("MWD") ENTERED INTO AN INTERGOVERNMENTAL AGREEMENT DATED APRIL 8, 1997, AND RECORDED IN THE MARICOPA COUNTY RECORDER'S OFFICE ON APRIL 9, 1997, UNDER DOCKET NO. 97-0231759 ("IGA"). CITY AND MWD HAVE FACILITIES AND PROPERTY INTERESTS DESCRIBED AND DELINEATED WITHIN CERTAIN SUBDIVISION PLATS OR, FOR LANDS NOT INCLUDED IN A SUBDIVISION PLAT, DECLARATIONS OF TURF LANDS OR DECLARATIONS OF URBANIZED AREA, THAT HAVE PRIOR AND SUPERIOR RIGHTS TO THE UTILITY SERVICE PROVIDERS, AS DEFINED IN THE IGA. THE IGA PROVIDES FOR THE CITY TO HAVE A PUBLIC UTILITY EASEMENT WITHIN CERTAIN MWD PROPERTY INTERESTS AND FOR MWD TO HAVE AN EASEMENT WITHIN CITY'S PUBLIC RIGHTS-OF-WAY. CITY AND MWD RIGHTS WITHIN THESE EASEMENTS ARE SUBJECT TO AND CONTROLLED BY THE TERMS AND CONDITIONS OF THE IGA

IN LOCATIONS WHERE APPLICABLE, INCLUDING ANY AND ALL DEDICATIONS WITHIN A SUBDIVISION PLAT, MWD'S PRIOR AND SUPERIOR RIGHTS OF ACCESS TO AND USE OF EXISTING AND FUTURE MWD FACILITIES AND PROPERTY INTERESTS, SHALL BE SUBJECT TO THE TERMS AND CONDITIONS OF THE IGA.

CITY SHALL HAVE THE RIGHT TO AUTHORIZE AND CONTROL THE UTILITY SERVICE PROVIDER'S USE AND OCCUPANCY OF THESE EASEMENTS. CITY REQUIRES THAT UTILITY SERVICE PROVIDERS CONSENT TO BE BOUND BY THE IGA PRIOR TO THE USE OR OCCUPANCY OF THE EASEMENTS GRANTED UNDER THE IGA. SUCH USE OR OCCUPANCY OF THE EASEMENTS CONSTITUTES CONSENT OF THE UTILITY SERVICE PROVIDERS TO BE BOUND BY THE IGA.

PUBLIC NOTICE

THE LOTS DEPICTED ON THIS PLAT ARE LOCATED WITHIN THE VICINITY OF LUKE AIR FORCE BASE AND MAY BE SUBJECT TO OVERFLIGHTS BY JET AIRCRAFT. ALL STRUCTURES WITHIN THIS PLAT SHALL BE CONSTRUCTED IN COMPLIANCE WITH THE SOUND ATTENUATION STANDARDS ADOPTED BY THE CITY OF SURPRISE. A MAP DEPICTING THE MOST CURRENT ADOPTED MAG NOISE CONTOURS IN RELATION TO THIS PLAT SHALL BE DISPLAYED IN ALL SALES OFFICES. ADDITIONAL INFORMATION MAY BE OBTAINED BY CONTACTING THE CITY OF SURPRISE COMMUNITY DEVELOPMENT DEPARTMENT.

RELEASE OF LIABILITY

TOLL PRASADA LLC, AN ARIZONA LIMITED LIABILITY COMPANY ("OWNER") DOES HEREBY (1) RELEASE AND DISCHARGE THE UNITED STATES OF AMERICA DEPARTMENT OF THE AIR FORCE (USAF) AND THE CITY OF SURPRISE, AND (2) INDEMNIFY, DEFEND, AND HOLD HARMLESS THE USAF AND THE CITY OF SURPRISE, OF AND FROM ANY LIABILITY FOR ANY AND ALL CLAIMS FOR DAMAGES OF ANY KIND TO PERSONS OR PROPERTY THAT MAY ARISE AT ANY TIME IN THE FUTURE OVER, OR IN CONNECTION WITH AIRCRAFT OVERFLIGHTS FROM AIRCRAFT UTILIZING LUKE AIR FORCE BASE, WHETHER SUCH DAMAGE SHALL ORIGINATE FROM NOISE, VIBRATION, FUMES, DUST, FUEL AND LUBRICANT PARTICLES, AND ALL OTHER EFFECTS THAT MAY BE CAUSED BY THE OPERATION OF AIRCRAFT LANDING AT, OR TAKING OFF FROM, OR OPERATING AT OR ON LUKE AIR FORCE BASE AND ITS AUXILIARY FIELDS. THIS INSTRUMENT SHALL RUN WITH THE LAND AND BE BINDING UPON OWNER AND ITS HEIRS, ASSIGNS, AND SUCCESSORS IN INTEREST TO THIS PLAT OR ANY PARCEL OR LOT THEREOF. THIS INSTRUMENT DOES NOT RELEASE THE USAF FROM LIABILITY FOR DAMAGE OR INJURY TO PERSON OR PROPERTY CAUSED BY FALLING AIRCRAFT OR FALLING PHYSICAL OBJECTS FROM AIRCRAFT, EXCEPT AS STATED HEREIN WITH RESPECT TO NOISE, FUMES, DUST, FUEL, AND LUBRICANT PARTICLES.

OWNER HEREBY FURTHER AGREES TO INDEMNIFY, DEFEND, AND HOLD HARMLESS THE CITY OF SURPRISE FROM ANY AND ALL CLAIMS FOR DAMAGES OF ANY KIND TO PERSONS OR PROPERTY THAT MAY ARISE IN CONNECTION WITH THE USE OF THE SIDEWALKS LOCATED WITHIN THE RIGHT-OF-WAY.

EPCOR PLAT DEDICATION

EXCEPT AS TO ANY AREAS SUBJECT TO THE EASEMENT OR EASEMENTS GRANTED TO MARICOPA WATER DISTRICT, AS DEPICTED ON THIS PLAT AND RECORDED IN THE OFFICE OF THE RECORDER, MARICOPA COUNTY, ARIZONA, A PERPETUAL WATER EASEMENT AS DESCRIBED IN THIS PLAT IS GRANTED TO EPCOR WATER ARIZONA INC., AND ITS SUCCESSORS AND ASSIGNS (COLLECTIVELY "GRANTEE"), TO CONSTRUCT, OPERATE, AND MAINTAIN WATER LINES AND APPURTENANT FACILITIES (COLLECTIVELY, "FACILITIES") UPON, ACROSS, OVER AND UNDER THE SURFACE OF THE EASEMENTS, TOGETHER WITH THE RIGHT TO OPERATE, REPAIR, REPLACE, MAINTAIN, AND REMOVE THE FACILITIES FROM THE PREMISES; TO ADD OR TO ALTER THE FACILITIES, AND TO PROVIDE GRANTEE WITH REASONABLE INGRESS AND EGRESS TO THE FACILITIES. GRANTEE WILL HAVE UNRESTRICTED ACCESS TO THE EASEMENT FOR THE ACTIVITIES DESCRIBED ABOVE AND FORMAL NOTIFICATION OR APPROVAL BY ANY ASSOCIATION PRIOR TO ACCESSING THE EASEMENT WILL NOT BE REQUIRED.

GRANTOR SHALL NOT ERECT OR CONSTRUCT OR PERMIT TO BE ERECTED OR CONSTRUCTED ANY BUILDING, STRUCTURE OR SIMILAR IMPROVEMENT WITHIN THE LIMITS OF THE EASEMENT GRANTED HEREIN. GRANTOR SHALL NOT, NOR PERMIT, THE GRADE OVER GRANTEE'S FACILITIES TO BE SUBSTANTIALLY ALTERED WITHOUT, IN EACH INSTANCE, THE PRIOR WRITTEN CONSENT OF GRANTEE, AND GRANTOR AGREES THAT NO OTHER PIPES OR CONDUITS SHALL BE PLACED WITHIN THE PREMISES SUBJECT TO THE EASEMENT GRANTED HEREIN, EXCEPT PIPES CROSSING GRANTEE'S FACILITIES AT RIGHT ANGLES, IN WHICH CASE, A MINIMUM VERTICAL DISTANCE OF TWO (2) FEET (AS MEASURED FROM THE CLOSEST POINTS ON THE OUTSIDE EDGES) SHALL BE MAINTAINED BETWEEN GRANTEE'S FACILITIES AND SUCH OTHER PIPES OR CONDUITS. UNLESS GRANTEE EXPRESSLY CONSENTS IN WRITING OTHERWISE, ANY AND ALL SEWER PIPES CROSSING THE EASEMENT GRANTED HEREIN SHALL BE LAID BELOW GRANTEE'S FACILITIES. HOWEVER, GRANTOR SHALL HAVE THE RIGHT TO CONSTRUCT AND ERECT FENCES, TO INSTALL LANDSCAPING, PARKING FACILITIES AND DRIVEWAYS, AND TO ESTABLISH OTHER USES THAT ARE NOT INCONSISTENT WITH USES WITHIN THE LIMITS OF SAID EASEMENT IN A MANNER THAT WILL NOT UNREASONABLY INTERFERE WITH GRANTEE'S ACCESS TO THE FACILITIES.

GENERAL NOTES

1. SPRINKLERS ARE REQUIRED IN ALL ONE AND TWO FAMILY DWELLINGS BUILT IN AREAS WHICH DO NOT HAVE AN ADEQUATE WATER SUPPLY.
2. NO ON-SITE GRADING OR EXCAVATION SHALL OCCUR WITHOUT FIRST OBTAINING A PERMIT FROM THE CITY OF SURPRISE.
3. THE PROPERTY IS LOCATED WITHIN AN AREA HAVING FLOOD ZONE "ZONE X SHADED," BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, ON FLOOD INSURANCE RATE MAP NO. 04013C1655L, WITH A DATE OF IDENTIFICATION OF OCTOBER 16, 2013, FOR COMMUNITY NO. 040053, IN MARICOPA COUNTY, STATE OF ARIZONA, WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH SAID PROPERTY IS SITUATED.
4. THE ROADS DESIGNATED AS "PRIVATE" AND ANY APPURTENANCES INCLUDING BUT NOT LIMITED TO ROAD SIGNS, STRIPING, CURB AND GUTTER, AND SIDEWALKS ARE PRIVATE; SUCH ROADS AND APPURTENANCES ARE OWNED, MAINTAINED AND REPAIRED BY OWNER OR THE HOMEOWNER'S ASSOCIATION FORMED BY OWNER. THE CITY OF SURPRISE SHALL NOT MAINTAIN OR REPAIR ANY ROAD DESIGNATED AS "PRIVATE."
5. IN ACCORDANCE WITH ARS § 9-461.07, THE CITY OF SURPRISE HAS DETERMINED THAT ALL DEDICATIONS OCCURRING WITH THIS PLAT ARE IN CONFORMANCE WITH THE SURPRISE GENERAL PLAN.
6. PURSUANT TO A.R.S. § 42-11102, THE CITY OF SURPRISE, A POLITICAL SUBDIVISION OF THE STATE OF ARIZONA, IS EXEMPT FROM ALL TAXES AND ASSESSMENTS BASED ON ASSESSED VALUE EXCEPT FOR SPECIAL DISTRICTS #14751 AND 14710, WHEN APPLICABLE.
7. THE MAINTENANCE OF LANDSCAPING WITHIN THE OPEN SPACES, LANDSCAPED TRACTS, RETENTION BASINS, AND PARKS SHALL BE THE RESPONSIBILITY OF THE OWNER OR THE HOMEOWNERS' ASSOCIATION FORMED BY THE OWNER.
8. THE MAINTENANCE OF LANDSCAPING WITHIN THE ADJACENT PUBLIC RIGHTS-OF-WAY, INCLUDING LANDSCAPED MEDIANS WITHIN COLLECTORS AND LOCAL STREETS, AND LANDSCAPED AREAS BETWEEN THE CURB AND THE DETACHED SIDEWALK, SHALL BE THE RESPONSIBILITY OF THE ADJACENT PROPERTY OWNER OR THE PROPERTY HOMEOWNERS' ASSOCIATION FORMED BY THE ADJACENT PROPERTY
9. LANDSCAPING MAINTENANCE OF THE MEDIANS WITHIN THE PUBLIC RIGHT-OF-WAY WITHIN ANY ARTERIAL OR PARKWAY STREET CLASSIFICATION SHALL BE RESPONSIBILITY OF THE CITY OF SURPRISE AFTER ACCEPTANCE.
10. ZONING OF THE PROPERTY IS PER SURPRISE ZONING CASE FS17-587 OR AS SUBSEQUENTLY AMENDED.
11. THIS FINAL PLAT IS IN SUBSTANTIAL CONFORMANCE WITH THE PRELIMINARY PLATS AS APPROVED UNDER CITY OF SURPRISE CASE FS17-394 & FS21-252.

AREA SUMMARY TABLE

DESCRIPTION	AREA (SF)	AREA (ACRES)
LOTS (0 LOTS)	0	0.0000
TRACTS I-D & L	52,912	1.2147
PRIVATE STREETS	0	0.0000
GROSS AREA	52,912	1.2147

100 YEAR ASSURED WATER SUPPLY

THE SUBDIVIDER HAS OBTAINED A CERTIFICATE OF 100 YEAR ASSURED WATER SUPPLY FROM THE DEPARTMENT OF WATER RESOURCES.

27-701007.0000 — CERTIFICATE NUMBER
11/14/2018 — DATE

BASIS OF BEARING

THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 23, TOWNSHIP 3 NORTH, RANGE 2 WEST OF THE GILA AND SALT RIVER MERIDIAN, BEING SOUTH 89°59'55" WEST AS MEASURED AND BEING SOUTH 89°59'47" WEST AS SHOWN ON MARICOPA COUNTY GDACS SURVEY RECORDED IN BOOK 661, PAGE 18, MARICOPA COUNTY RECORDS.

NOTICE OF TOLL AT PRASADA DEVELOPMENT AND WATER DELIVERY AGREEMENT

LANDOWNER ENTERED INTO THE TOLL AT PRASADA DEVELOPMENT AND WATER DELIVERY AGREEMENT DATED JANUARY 2, 2019 ("AGREEMENT") WITH MARICOPA COUNTY MUNICIPAL WATER CONSERVATION DISTRICT NUMBER ONE ("MWD") FOR WHICH A MEMORANDUM OF AGREEMENT WAS RECORDED ON JANUARY 3, 2019, AT THE MARICOPA COUNTY RECORDERS' OFFICE AT 2019-0002436. THE PROPERTIES INVOLVED IN THIS PLAT ARE SUBJECT TO THIS AGREEMENT. THE AGREEMENT AND THIS PLAT, INCLUDING ANY AND ALL DEDICATIONS THEREIN, HEREBY PRESERVE MWD'S PRIOR AND SUPERIOR RIGHTS OF ACCESS TO AND USE OF EXISTING AND FUTURE MWD FACILITIES AND MWD PROPERTY INTERESTS, AS SUCH TERMS ARE DEFINED IN THE AGREEMENT, TO ENABLE MWD TO ACCOMPLISH ALL OF MWD'S PURPOSES, INCLUDING, BUT NOT LIMITED TO, THE TRANSMISSION AND DISTRIBUTION OF WATER, WASTEWATER, POWER AND COMMUNICATIONS, AND TO CONSTRUCT, RECONSTRUCT, OPERATE, MAINTAIN AND REPLACE THOSE MWD FACILITIES AND MWD PROPERTY INTERESTS. THE AGREEMENT IS ON FILE AT THE OFFICES OF TOLL PRASADA LLC, AND MAY BE REVIEWED AS TO ALL DETAILS, WITH PARTICULAR REFERENCE TO SECTION 7 AND SECTION 9, UPON REASONABLE REQUEST.

DATED THIS _____ DAY OF _____, 2024.

MARICOPA COUNTY MUNICIPAL WATER CONSERVATION DISTRICT NUMBER ONE, A POLITICAL SUBDIVISION OF THE STATE OF ARIZONA

ATTEST:

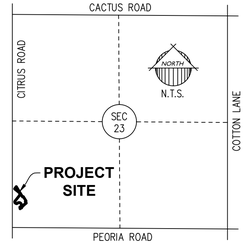
BY: _____ CHRISTINE CAIN
ITS: PROPERTY & CONTRACTS MANAGER

BY: _____ GLEN VORTHERMS
ITS: ASSISTANT SECRETARY

TOLL PRASADA LLC, AN ARIZONA LIMITED LIABILITY COMPANY

BY: _____ _____

ITS: _____



VICINITY MAP

OWNER/DEVELOPER

TOLL BROTHERS
8767 E VIA DE VENTURA, SUITE 390
SCOTTSDALE, AZ 85258
TEL: (602) 999-5684
CONTACT: AARON INSCO

ENGINEER

EPS GROUP, INC.
1130 N. ALMA SCHOOL ROAD, STE. 120
MESA, ARIZONA 85201
TEL: (480)-503-2250
FAX: (480)-503-2258
CONTACT: JAMES ROGERS, P.E.

SHEET INDEX

1 COVER SHEET
2 LOT AREA TABLE, TRACT AREA & USAGE TABLE, CURVE TABLE, LINE TABLE & FINAL PLAT PLAN SHEET

HOMEOWNERS ASSOCIATION RATIFICATION

KNOW ALL MEN BY THESE PRESENTS: THAT STERLING GROVE COMMUNITY ASSOCIATION, INC., AN ARIZONA NON-PROFIT CORPORATION, HEREBY RATIFIES, AFFIRMS AND APPROVES THIS PLAT FOR "TOLL AT PRASADA, SWC PARK FINAL PLAT" AND THE RESPONSIBILITIES IMPOSED UPON IT UNDER THIS PLAT.

IN WITNESS WHEREOF, STERLING GROVE COMMUNITY ASSOCIATION, INC. HAS CAUSED ITS NAME TO BE AFFIXED BY THE UNDERSIGNED, DULY AUTHORIZED OFFICER THIS _____ DAY OF_____, 2024.

STERLING GROVE COMMUNITY ASSOCIATION, INC.,
AN ARIZONA NON-PROFIT CORPORATION

BY: _____

ITS: _____

ACKNOWLEDGMENT

STATE OF ARIZONA }
SS
COUNTY OF MARICOPA }

ON THIS _____ DAY OF _____, 2024 BEFORE ME, THE UNDERSIGNED, PERSONALLY APPEARED _____, WHO ACKNOWLEDGED HIMSELF TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE INSTRUMENT WITHIN, AND WHO EXECUTED THE FOREGOING INSTRUMENT FOR THE PURPOSES THEREIN CONTAINED.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND OFFICIAL SEAL.

_____
NOTARY PUBLIC DATE

_____
MY COMMISSION EXPIRES:

CITY OF SURPRISE ENGINEER APPROVAL

DATA ON THIS PLAT REVIEWED AND APPROVED THIS _____ DAY OF _____, 2024, BY THE CITY ENGINEER OF SURPRISE, ARIZONA.

APPROVED _____ _____
CITY ENGINEER DATE

CITY OF SURPRISE COUNCIL APPROVAL

APPROVED BY THE CITY COUNCIL OF THE CITY OF SURPRISE, ARIZONA, THIS _____ DAY OF _____, 2024.

ATTEST:

_____ _____
MAYOR DATE

_____ _____
CITY CLERK DATE

CERTIFICATION

I, ROBERT A. JOHNSTON, HEREBY CERTIFY THAT I AM A REGISTERED LAND SURVEYOR IN THE STATE OF ARIZONA; THAT THIS PLAT CORRECTLY REPRESENTS A SURVEY MADE UNDER MY DIRECTION DURING THE MONTH OF JUNE, 2023; THAT THE SURVEY IS TRUE AND CORRECT AS SHOWN; THAT ALL MONUMENTS ACTUALLY EXIST OR WILL BE SET AS SHOWN; THAT SAID MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED.

ROBERT A. JOHNSTON, RLS 37495
EPS GROUP, INC.
1130 N. ALMA SCHOOL ROAD, STE. 120
MESA, ARIZONA 85201
PHONE: (480) 503-2250
FAX: (480) 503-2258

DATE OF PREPARATION: 06/22/23 (REVISED SEPTEMBER 11, 2023 & REVISED JANUARY 23, 2024)

REGISTERED LAND SURVEYOR — CERTIFICATE NO. 37495 — ROBERT A. JOHNSTON — Date Signed

CASE NUMBER: FS23-0852

1130 N Alma School Rd., Suite 120
Mesa, AZ 85201 | T:480.503.2250 | F:480.503.2258
www.epsgroupinc.com
EPS GROUP

Project: Toll at Prasada, SWC Park Final Plat — SURPRISE, ARIZONA

FINAL RE-PLAT

Revisions:
1/23/2024 CITY TST REVIEW COMMENTS

Designer: RAJ
Drawn by: TJP

Job No. 16-339
FP01
Sheet No. 1 of 2

tprotonentis Jan 23, 2024 2:29pm S:\Projects\2016\16-339\Legal Survey\Dwgs\Final Plats\Phase 3\SWC Park Re-plat\16-339 - Ph3 - Tract Replat.dwg

LEGAL DESCRIPTION

A PORTION OF THE SOUTHEAST QUARTER OF SECTION 22 AND A PORTION OF THE SOUTHWEST QUARTER OF SECTION 23, TOWNSHIP 3 NORTH, RANGE 2 WEST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A FOUND REBAR AT THE SOUTHWEST CORNER OF SAID SECTION 23, FROM WHICH A PIPE AT THE SOUTH QUARTER CORNER OF SAID SECTION 23 BEARS SOUTH 89 DEGREES 59 MINUTES 55 SECONDS WEST, 2644.60 FEET;

THENCE ALONG THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 23, NORTH 89 DEGREES 59 MINUTES 55 SECONDS EAST, 189.88 FEET TO A POINT ON SAID SOUTH LINE;

THENCE, DEPARTING SAID SOUTH LINE NORTH 0 DEGREES 00 MINUTES 05 SECONDS WEST, 460.01 FEET TO THE POINT OF BEGINNING;

THENCE NORTH 8 DEGREES 23 MINUTES 47 SECONDS WEST, 42.33 FEET TO THE BEGINNING OF A NON-TANGENT CURVE TO THE LEFT, CONCAVE SOUTHWEST, FROM WHICH THE RADIUS POINT BEARS NORTH 22 DEGREES 08 MINUTES 27 SECONDS WEST A DISTANCE OF 58.00 FEET;

THENCE NORTHWESTERLY 210.90 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 208 DEGREES 20 MINUTES 19 SECONDS TO A POINT OF REVERSE CURVATURE OF A CURVE HAVING A RADIUS OF 20.00 FEET;

THENCE SOUTHWESTERLY 30.90 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 88 DEGREES 31 MINUTES 53 SECONDS;

THENCE NORTH 51 DEGREES 56 MINUTES 56 SECONDS WEST, 36.12 FEET TO THE BEGINNING OF A CURVE, CONCAVE NORTHEAST, HAVING A RADIUS OF 20.00 FEET;

THENCE NORTHWESTERLY 31.42 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 90 DEGREES 00 MINUTES 00 SECONDS;

THENCE NORTH 38 DEGREES 03 MINUTES 04 SECONDS EAST, 180.00 FEET TO THE BEGINNING OF A CURVE, CONCAVE SOUTHWEST, HAVING A RADIUS OF 60.00 FEET;

THENCE NORTHWESTERLY 94.25 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 90 DEGREES 00 MINUTES 00 SECONDS;

THENCE NORTH 51 DEGREES 56 MINUTES 56 SECONDS WEST, 135.18 FEET;

THENCE NORTH 38 DEGREES 03 MINUTES 04 SECONDS EAST, 70.00 FEET;

THENCE SOUTH 31 DEGREES 34 MINUTES 54 SECONDS EAST, 296.73 FEET;

THENCE NORTH 58 DEGREES 25 MINUTES 06 SECONDS EAST, 18.68 FEET;

THENCE SOUTH 31 DEGREES 34 MINUTES 54 SECONDS EAST, 129.00 FEET;

THENCE SOUTH 58 DEGREES 25 MINUTES 06 SECONDS WEST, 18.68 FEET;

THENCE SOUTH 31 DEGREES 34 MINUTES 54 SECONDS EAST, 46.50 FEET;

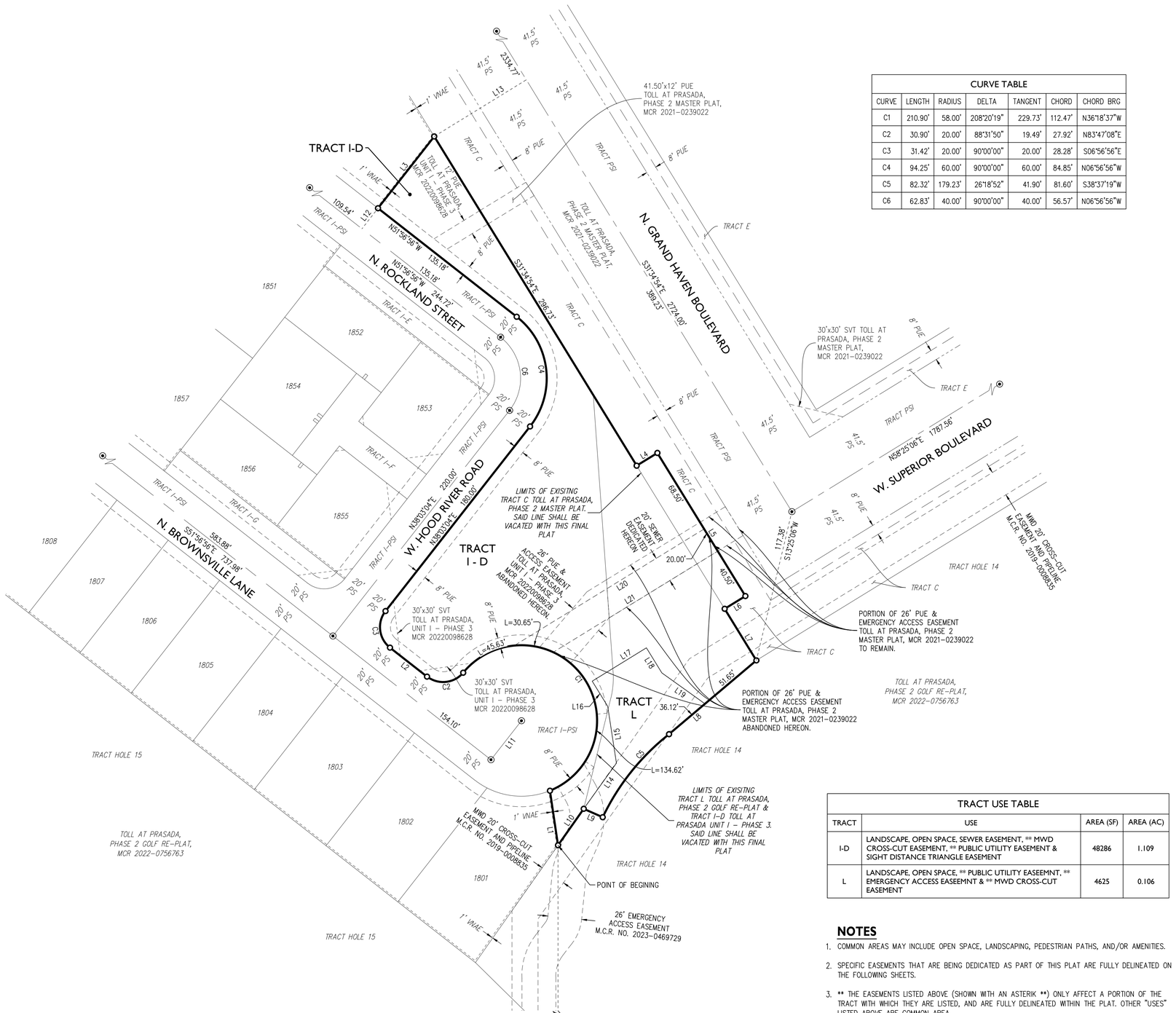
THENCE SOUTH 49 DEGREES 48 MINUTES 01 SECONDS WEST, 87.77 FEET TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE SOUTHEAST, FROM WHICH THE RADIUS POINT BEARS SOUTH 38 DEGREES 13 MINUTES 14 SECONDS EAST A DISTANCE OF 179.23 FEET;

THENCE SOUTHWESTERLY 82.32 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 26 DEGREES 18 MINUTES 52 SECONDS;

THENCE ON A NON-TANGENT LINE NORTH 66 DEGREES 03 MINUTES 15 SECONDS WEST, 15.95 FEET;

THENCE SOUTH 35 DEGREES 09 MINUTES 22 SECONDS WEST, 34.28 FEET TO THE POINT OF BEGINNING.

CONTAINS 1.2147 ACRES, MORE OR LESS.



CURVE TABLE						
CURVE	LENGTH	RADIUS	DELTA	TANGENT	CHORD	CHORD BRG
C1	210.90'	58.00'	208°20'19"	229.73'	112.47'	N36°18'37"W
C2	30.90'	20.00'	88°31'50"	19.49'	27.92'	N83°47'08"E
C3	31.42'	20.00'	90°00'00"	20.00'	28.28'	S06°56'56"E
C4	94.25'	60.00'	90°00'00"	60.00'	84.85'	N06°56'56"W
C5	82.32'	179.23'	26°18'52"	41.90'	81.60'	S38°37'19"W
C6	62.83'	40.00'	90°00'00"	40.00'	56.57'	N06°56'56"W

LINE TABLE		
LINE	BEARING	LENGTH
L1	N08°23'47"W	42.33'
L2	N51°56'56"W	36.12'
L3	N38°03'04"E	70.00'
L4	N58°25'06"E	18.68'
L5	S31°34'54"E	129.00'
L6	S58°25'06"W	18.68'
L7	S31°34'54"E	46.50'
L8	S49°48'01"W	87.77'
L9	N66°03'15"W	15.95'
L10	S35°09'22"W	34.28'
L11	N38°03'04"E	38.00'
L12	N38°03'04"E	20.00'
L13	N58°25'06"E	83.00'
L14	N35°37'56"E	43.10'
L15	N08°45'13"W	44.20'
L16	N31°34'54"W	22.65'
L17	N58°25'06"E	48.83'
L18	S31°34'54"E	22.65'
L19	S54°24'35"E	40.72'
L20	S58°25'06"W	170.98'
L21	S58°25'06"W	148.23'

TRACT USE TABLE			
TRACT	USE	AREA (SF)	AREA (AC)
I-D	LANDSCAPE, OPEN SPACE, SEWER EASEMENT, ** MWD CROSS-CUT EASEMENT, ** PUBLIC UTILITY EASEMENT & SIGHT DISTANCE TRIANGLE EASEMENT	48286	1.109
L	LANDSCAPE, OPEN SPACE, ** PUBLIC UTILITY EASEEMNT, ** EMERGENCY ACCESS EASEEMNT & ** MWD CROSS-CUT EASEMENT	4625	0.106

NOTES

1. COMMON AREAS MAY INCLUDE OPEN SPACE, LANDSCAPING, PEDESTRIAN PATHS, AND/OR AMENITIES.
2. SPECIFIC EASEMENTS THAT ARE BEING DEDICATED AS PART OF THIS PLAT ARE FULLY DELINEATED ON THE FOLLOWING SHEETS.
3. ** THE EASEMENTS LISTED ABOVE (SHOWN WITH AN ASTERIK **) ONLY AFFECT A PORTION OF THE TRACT WITH WHICH THEY ARE LISTED, AND ARE FULLY DELINEATED WITHIN THE PLAT. OTHER "USES" LISTED ABOVE ARE COMMON AREA.

LEGEND

▣	FOUND MONUMENT, AS NOTED
○	CORNER OF SUBDIVISION
⊙	BRASS CAP TO BE SET AT CONSTRUCTION
R/W	RIGHT-OF-WAY
M.C.R.	MARICOPA COUNTY RECORDER
PS	PRIVATE STREET
SVT	SIGHT VISIBILITY TRIANGLE EASEMENT
PUE	PUBLIC UTILITY EASEMENT

CASE NUMBER: FS23-0852

EPS GROUP
1130 N Alma School Rd., Suite 120
Mesa, AZ 85201
T:480.503.2250 | F:480.503.2258
w w w . e p s g r o u p i n c . c o m

Toll at Prasada,
SWC Park Final Plat
SURPRISE, ARIZONA

FINAL RE-PLAT

Project:

Revisions:
1/25/2024 CITY 1ST REVIEW COMMENTS

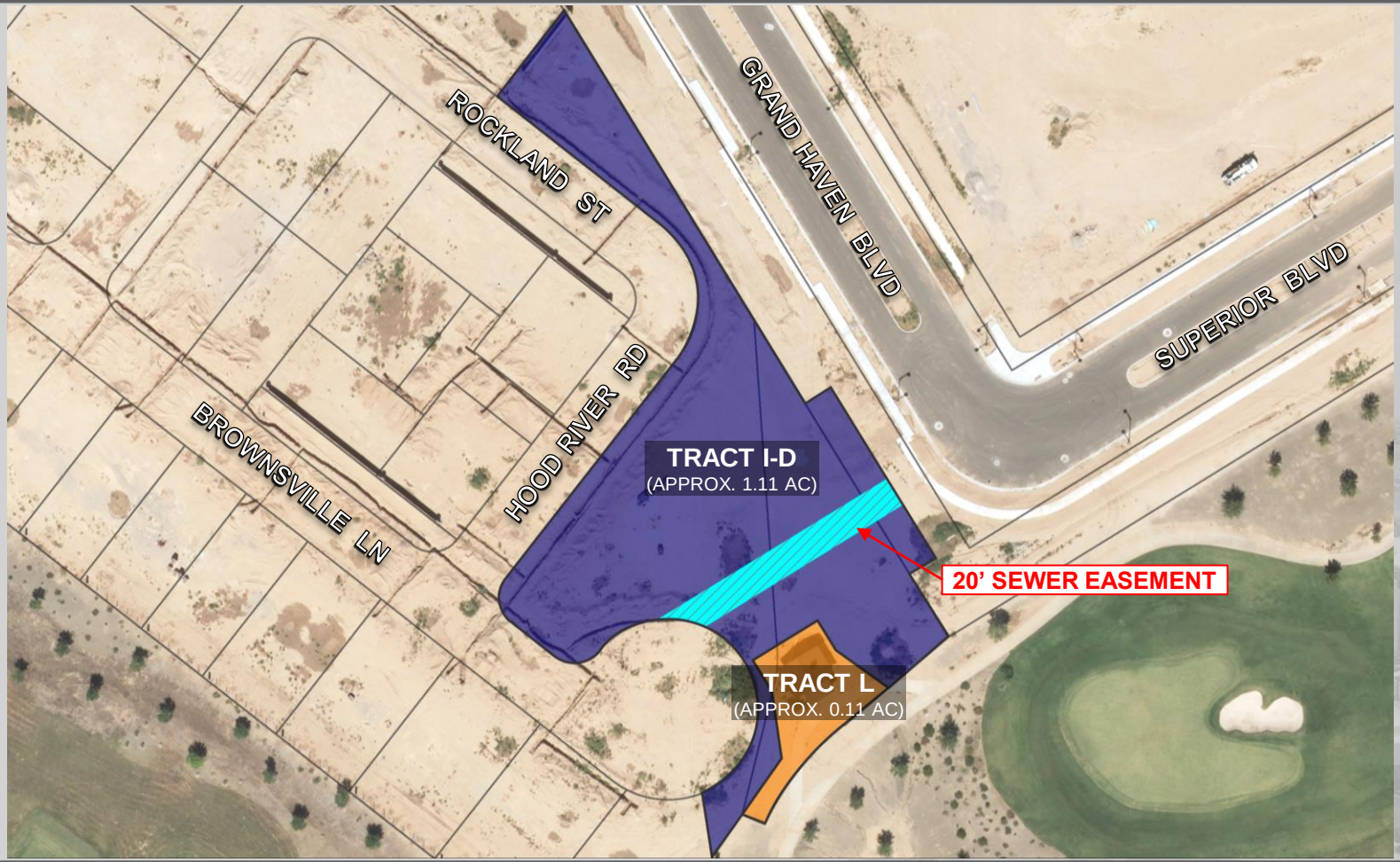
Designer: RAJ
Drawn by: TJP

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
37495
ROBERT A.
JOHNSTON
Date Signed 6/30/2025

Job No.
16-339
FP02

Sheet No.
2
of 2

tpratonentis Jan 23, 2024 2:29pm S:\Projects\2016\16-339\Legal Survey\Dwgs\Final Plats\Phase 3\SWC Park Re-plat\16-339 - Ph3 - Tract Replat.dwg



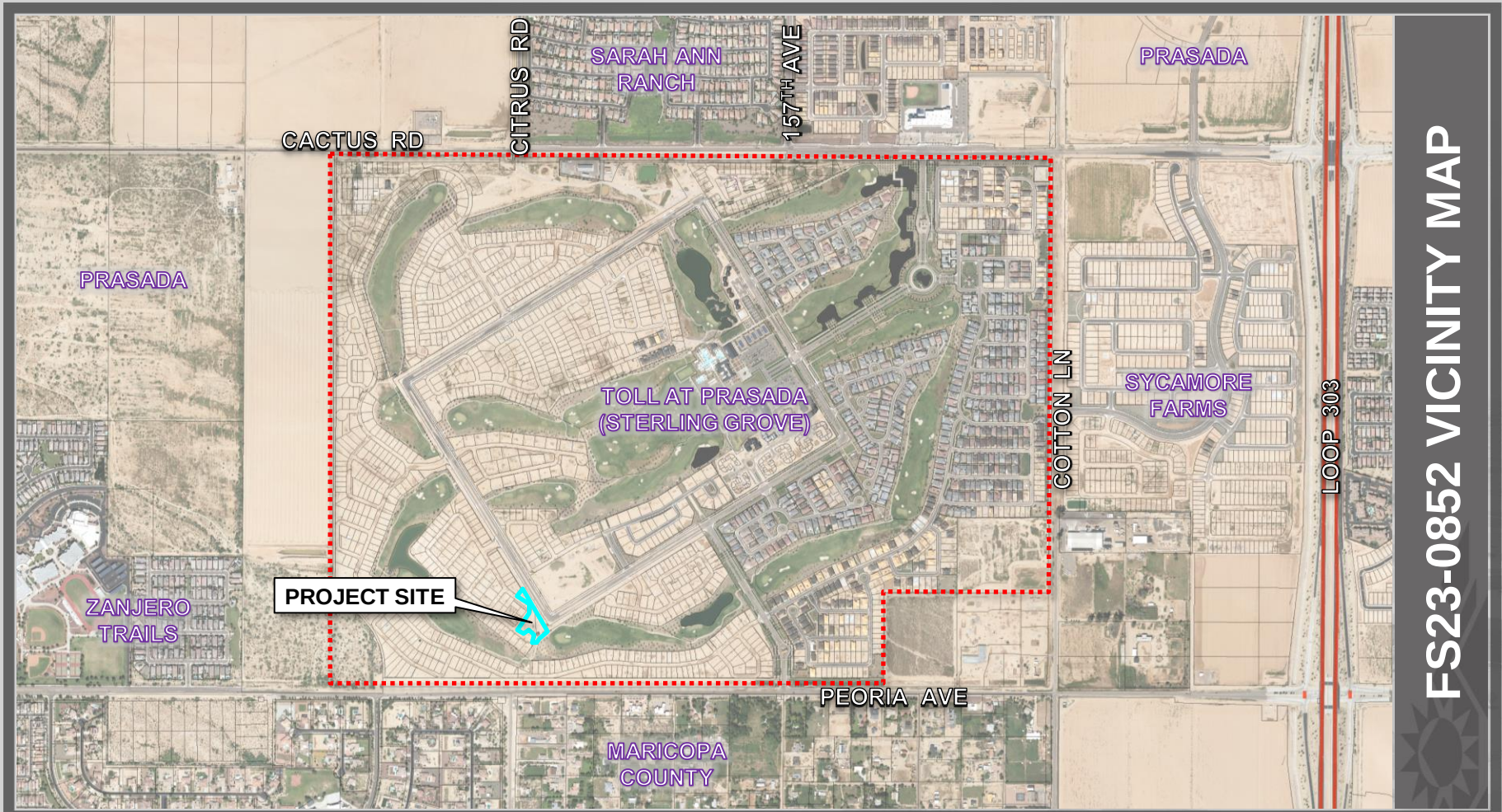
FS23-0852 PLAT EXHIBIT

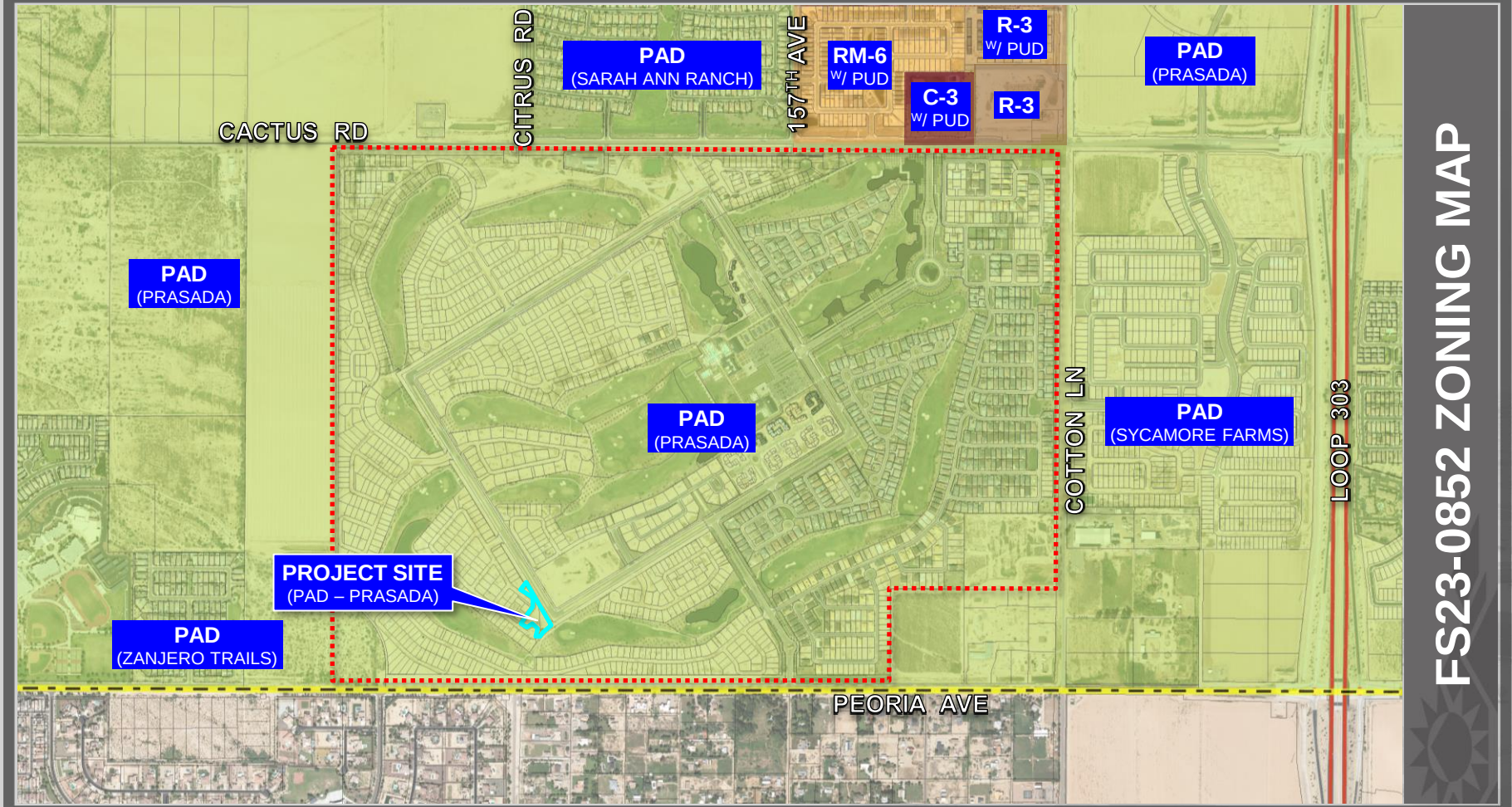
SURPRISE
ARIZONA

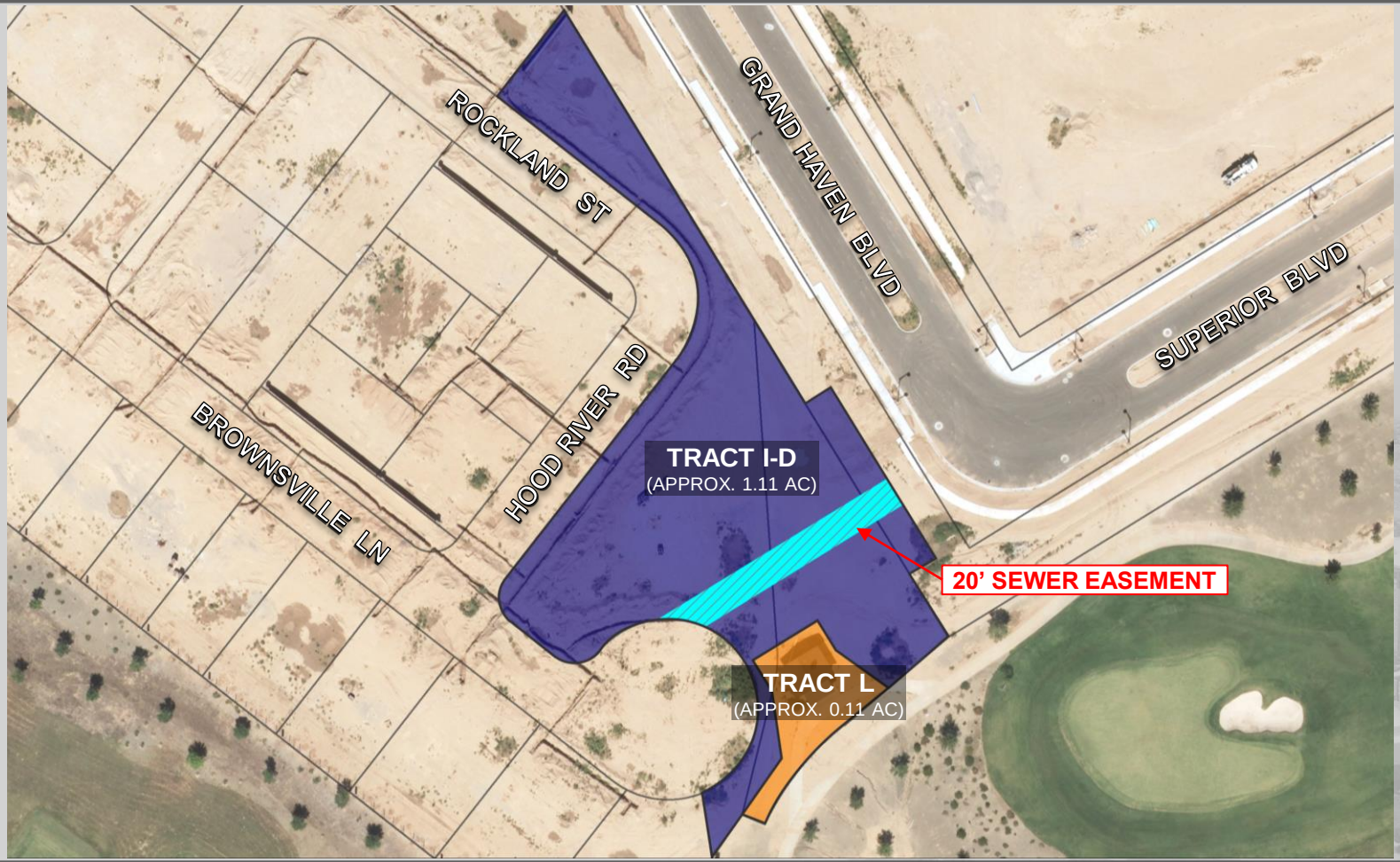
FS23-0852
Toll at Prasada Southwest Corner Park
Final Plat

City Council

May 7, 2024


FS23-0852 VICINITY MAP
CACTUS RD
CITRUS RD
SARAH ANN RANCH
157TH AVE
PRASADA
PRASADA
TOLL AT PRASADA (STERLING GROVE)
COTTON LN
SYCAMORE FARMS
LOOP 303
PROJECT SITE
ZANJERO TRAILS
PEORIA AVE
MARICOPA COUNTY


FS23-0852 ZONING MAP
CACTUS RD
CITRUS RD
157TH AVE
COTTON LN
LOOP 303
PEORIA AVE
PAD
(SARAH ANN RANCH)
RM-6
W/ PUD
R-3
W/ PUD
C-3
W/ PUD
R-3
PAD
(PRASADA)
PAD
(PRASADA)
PAD
(PRASADA)
PAD
(SYCAMORE FARMS)
PROJECT SITE
(PAD – PRASADA)
PAD
(ZANJERO TRAILS)



FS23-0852 PLAT EXHIBIT

FINAL RE-PLAT

Toll at Prasada, SWC Park Final Plat

BEING A RE-PLAT OF A PORTION OF TRACT C, TOLL AT PRASADA, PHASE 2 MASTER PLAT AS RECORDED IN BOOK 1576 OF MAPS, PAGE 33, M.C.R., TRACT I–D, TOLL AT PRASADA, UNIT I – PHASE 3 AS RECORDED IN BOOK 1644 OF MAPS, PAGE 22, M.C.R., AND TRACT L, TOLL AT PRASADA, PHASE 2 GOLF RE-PLAT AS RECORDED IN BOOK 1698 OF MAPS, PAGE 39, M.C.R. SITUATED IN A PORTION OF THE SOUTHWEST QUARTER OF SECTION 23, TOWNSHIP 3 NORTH, RANGE 2 WEST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA

DEDICATION

STATE OF ARIZONA } SS
COUNTY OF MARICOPA }

KNOW ALL PERSONS BY THESE PRESENTS: THAT TOLL PRASADA LLC, AN ARIZONA LIMITED LIABILITY COMPANY, "OWNER", HAS SUBDIVIDED UNDER THE NAME TOLL AT PRASADA, SWC PLAT FINAL PLAT, BEING A RE-PLAT OF A PORTION OF TRACT C, TOLL AT PRASADA, PHASE 2 MASTER PLAT AS RECORDED IN BOOK 1576 OF MAPS, PAGE 33, M.C.R., TRACT I–D, TOLL AT PRASADA, UNIT I – PHASE 3 AS RECORDED IN BOOK 1644 OF MAPS, PAGE 22, M.C.R., AND TRACT L, TOLL AT PRASADA, PHASE 2 GOLF RE-PLAT AS RECORDED IN BOOK 1698 OF MAPS, PAGE 39, M.C.R. SITUATED IN A PORTION OF THE SOUTHWEST QUARTER OF SECTION 23, TOWNSHIP 3 NORTH, RANGE 2 WEST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, AS SHOWN AND PLATTED HEREON AND DOES HEREBY PUBLISH THIS PLAT AS AND FOR THE PLAT OF TOLL AT PRASADA, SWC PLAT FINAL PLAT AND DECLARES THAT THIS PLAT SETS FORTH THE LOCATION AND GIVES THE DIMENSIONS OF EACH LOT, TRACT, STREET AND EASEMENT CONSTITUTING THE SAME, AND THAT EACH LOT, TRACT, STREET AND EASEMENT SHALL BE KNOWN BY THE NUMBER, LETTER, AND/OR AND NAME GIVEN TO EACH RESPECTIVELY AS SHOWN ON THIS PLAT.

OWNER HEREBY GRANTS TO THE CITY OF SURPRISE A PERPETUAL, NON-EXCLUSIVE EASEMENT OVER, UNDER, UPON, AND ACROSS ALL AREAS DESIGNATED ON THE PLAT AS APPLICABLE SEWER LINES AND MANHOLES, FOR THE PURPOSE OF INSTALLING, CONSTRUCTING, MAINTAINING, REPAIRING, REPLACING, AND UTILIZING THE SEWER LINES AND MANHOLES.

OWNER HEREBY GRANTS TO THE CITY OF SURPRISE A PERPETUAL EASEMENT ACROSS THE PLAT INCLUDING ROADS AND STREETS, OPEN SPACES, COMMUNITY FACILITIES, TRACTS, SIDEWALKS, DRAINAGE BASINS, AND ANY PROPERTY WITHIN THE PLAT OWNED BY THE HOMEOWNERS ASSOCIATION FOR THE PURPOSE OF PROVIDING CONTINUOUS AND UNINTERRUPTED INGRESS AND EGRESS FOR TRASH COLLECTION VEHICLES AND EMERGENCY VEHICLES.

OWNER HEREBY GRANTS TO THE PUBLIC A PERPETUAL NON-EXCLUSIVE EASEMENT IN, UPON, OVER, UNDER, THROUGH, AND ACROSS THE AREAS DESIGNATED AS PUBLIC UTILITY EASEMENTS AS SHOWN ON THE PLAT FOR THE PURPOSE OF ACCESSING, INSTALLING, CONSTRUCTING, MAINTAINING, REPAIRING, REPLACING, AND UTILIZING PUBLIC UTILITIES.

OWNER HEREBY GRANTS TO THE CITY OF SURPRISE A PERPETUAL, NON-EXCLUSIVE EASEMENT OVER, UPON, AND ACROSS THE AREAS DESIGNATED AS SIGHT VISIBILITY TRIANGLES FOR THE PURPOSE OF ENSURING THAT THESE AREAS REMAIN FREE OF SIGHT VISIBILITY OBSTRUCTIONS.

OWNER HEREBY GRANTS TO THE UNITED STATES OF AMERICA DEPARTMENT OF THE AIR FORCE ("USAF") AN AVIGATION EASEMENT OVER AND ACROSS THIS PLAT AND EVERY LOT AND PARCEL THEREOF, WHICH EASEMENT SHALL INCLUDE, BUT NOT BE LIMITED TO, THE RIGHT OF FLIGHT OF AIRCRAFT OVER THIS PLAT, TOGETHER WITH ITS ATTENDANT NOISE, VIBRATIONS, FUMES, DUST, FUEL AND LUBRICANT PARTICLES, AND ALL OTHER EFFECTS THAT MAY BE CAUSED BY THE OPERATION OF AIRCRAFT LANDING AT, OR TAKING OFF FROM, OR OPERATING AT OR ON LUKE AIR FORCE BASE AND ITS AUXILIARY FIELD.

THE EASEMENTS GRANTED WITHIN THIS DEDICATION ARE PERMANENT AND PERPETUAL AND SHALL RUN WITH THE LAND AND BE BINDING UPON OWNERS AND ITS HEIRS, ASSIGNS, AND SUCCESSORS IN INTEREST TO THIS PLAT OR ANY PARCEL OR LOT THEREOF.

ALL IMPROVEMENTS, FOR STREETS AND PUBLIC UTILITIES OWNED AND OPERATED BY THE CITY, INSTALLED OR CONSTRUCTED BY OWNER WITHIN THE PUBLIC RIGHTS-OF-WAY, THE EASEMENTS, OR ANY TRACTS OR PARCELS HEREBY DEDICATED TO THE CITY OF SURPRISE SHALL BE DEEMED TO HAVE BEEN DEDICATED BY OWNER TO THE CITY UPON THEIR COMPLETION. HOWEVER, SUCH TRANSFER SHALL NOT OCCUR UNTIL THE CITY COUNCIL FOR THE CITY OF SURPRISE MANIFESTS ITS ACCEPTANCE BY SEPARATE FORMAL COUNCIL ACTION.

OWNER HEREBY GRANTS TO THE PUBLIC A PERPETUAL NON-EXCLUSIVE PUBLIC UTILITY ACCESS IN, UPON, OVER, UNDER, THROUGH, AND ACROSS THE AREAS DESIGNATED AS PRIVATE STREET TRACTS.

TRACTS "I–D" AND "L" ARE NOT DEDICATED TO THE PUBLIC, BUT ARE PLATTED AS COMMON PROPERTY FOR THE USE AND ENJOYMENT OF THE HOMEOWNERS ASSOCIATION, AS MORE FULLY SET FORTH IN THE DECLARATION OF COVENANTS, CONDITIONS, AND RESTRICTIONS. SAID HOMEOWNERS ASSOCIATION IS RESPONSIBLE FOR MAINTAINING SAID TRACTS.

IN WITNESS WHEREOF, OWNER HAS HEREUNTO CAUSED ITS CORPORATE NAME TO BE SIGNED AND ITS CORPORATE SEAL TO BE AFFIXED BY THE UNDERSIGNED, DULY AUTHORIZED OFFICER THIS _____ DAY OF _____, 2024.

TOLL PRASADA LLC, AN ARIZONA LIMITED LIABILITY COMPANY

BY: _____ DATE: _____

ITS: _____

ACKNOWLEDGMENT

STATE OF ARIZONA } SS
COUNTY OF MARICOPA }

ON THIS _____ DAY OF _____, 2024 BEFORE ME, THE UNDERSIGNED, PERSONALLY APPEARED _____ WHO ACKNOWLEDGED HIMSELF TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE INSTRUMENT WITHIN, AND WHO EXECUTED THE FOREGOING INSTRUMENT FOR THE PURPOSES THEREIN CONTAINED.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND OFFICIAL SEAL.

_____ _____
NOTARY PUBLIC DATE

_____
MY COMMISSION EXPIRES:

NOTICE OF PRASADA PRE-ANNEXATION DEVELOPMENT AGREEMENT

OWNER'S PREDECESSOR, SUBURBAN LAND RESERVE, INC., A UTAH CORPORATION, FULTON HOMES CORPORATION, AN ARIZONA CORPORATION, AND MESTCOR/SURPRISE LLC, AN ARIZONA LIMITED LIABILITY COMPANY HAVE ENTERED INTO A PRE-ANNEXATION DEVELOPMENT AGREEMENT DATED SEPTEMBER 13, 2006 ("AGREEMENT") WITH CITY OF SURPRISE, AN ARIZONA MUNICIPAL CORPORATION, FOR WHICH A MEMORANDUM OF AGREEMENT WAS RECORDED ON SEPTEMBER 19, 2006, AT THE MARICOPA COUNTY RECORDER'S OFFICE AT DOCUMENT NO. 2006-1281016. AGREEMENT WAS RECENTLY AMENDED AND RECORDED ON JULY 20, 2018, AT THE MARICOPA COUNTY RECORDER'S OFFICE DOCUMENT NO. 20180551464. THE PROPERTIES INVOLVED IN THIS PLAT ARE SUBJECT TO THIS AGREEMENT.

NOTICE OF INTERGOVERNMENTAL AGREEMENT

THE CITY OF SURPRISE ("CITY") AND MARICOPA COUNTY MUNICIPAL WATER CONSERVATION DISTRICT NUMBER ONE ("MWD") ENTERED INTO AN INTERGOVERNMENTAL AGREEMENT DATED APRIL 8, 1997, AND RECORDED IN THE MARICOPA COUNTY RECORDER'S OFFICE ON APRIL 9, 1997, UNDER DOCKET NO. 97-0231759 ("IGA"). CITY AND MWD HAVE FACILITIES AND PROPERTY INTERESTS DESCRIBED AND DELINEATED WITHIN CERTAIN SUBDIVISION PLATS OR, FOR LANDS NOT INCLUDED IN A SUBDIVISION PLAT, DECLARATIONS OF TURF LANDS OR DECLARATIONS OF ORBANKED AREA, THAT HAVE PRIOR AND SUPERIOR RIGHTS TO THE UTILITY SERVICE PROVIDERS; AS DEFINED IN THE IGA. THE IGA PROVIDES FOR THE CITY TO HAVE A PUBLIC UTILITY EASEMENT WITHIN CERTAIN MWD PROPERTY INTERESTS AND FOR MWD TO HAVE AN EASEMENT WITHIN CITY'S PUBLIC RIGHTS-OF-WAY. CITY AND MWD RIGHTS WITHIN THESE EASEMENTS ARE SUBJECT TO AND CONTROLLED BY THE TERMS AND CONDITIONS OF THE IGA

IN LOCATIONS WHERE APPLICABLE, INCLUDING ANY AND ALL DEDICATIONS WITHIN A SUBDIVISION PLAT, MWD'S PRIOR AND SUPERIOR RIGHTS OF ACCESS TO AND USE OF EXISTING AND FUTURE MWD FACILITIES AND PROPERTY INTERESTS, SHALL BE SUBJECT TO THE TERMS AND CONDITIONS OF THE IGA.

CITY SHALL HAVE THE RIGHT TO AUTHORIZE AND CONTROL THE UTILITY SERVICE PROVIDER'S USE AND OCCUPANCY OF THESE EASEMENTS. CITY REQUIRES THAT UTILITY SERVICE PROVIDERS CONSENT TO BE BOUND BY THE IGA PRIOR TO THE USE OR OCCUPANCY OF THE EASEMENTS GRANTED UNDER THE IGA. SUCH USE OR OCCUPANCY OF THE EASEMENTS CONSTITUTES CONSENT OF THE UTILITY SERVICE PROVIDERS TO BE BOUND BY THE IGA.

PUBLIC NOTICE

THE LOTS DEPICTED ON THIS PLAT ARE LOCATED WITHIN THE VICINITY OF LUKE AIR FORCE BASE AND MAY BE SUBJECT TO OVERFLIGHTS BY JET AIRCRAFT. ALL STRUCTURES WITHIN THIS PLAT SHALL BE CONSTRUCTED IN COMPLIANCE WITH THE SOUND ATTENUATION STANDARDS ADOPTED BY THE CITY OF SURPRISE. A MAP DEPICTING THE MOST CURRENT ADOPTED MAG NOISE CONTOURS IN RELATION TO THIS PLAT SHALL BE DISPLAYED IN ALL SALES OFFICES. ADDITIONAL INFORMATION MAY BE OBTAINED BY CONTACTING THE CITY OF SURPRISE COMMUNITY DEVELOPMENT DEPARTMENT.

RELEASE OF LIABILITY

TOLL PRASADA LLC, AN ARIZONA LIMITED LIABILITY COMPANY ("OWNER") DOES HEREBY (1) RELEASE AND DISCHARGE THE UNITED STATES OF AMERICA DEPARTMENT OF THE AIR FORCE (USAF) AND THE CITY OF SURPRISE, AND (2) INDEMNIFY, DEFEND, AND HOLD HARMLESS THE USAF AND THE CITY OF SURPRISE, OF AND FROM ANY LIABILITY FOR ANY AND ALL CLAIMS FOR DAMAGES OF ANY KIND TO PERSONS OR PROPERTY THAT MAY ARISE AT ANY TIME IN THE FUTURE OVER, ON IN CONNECTION WITH AIRCRAFT OVERFLIGHTS FROM AIRCRAFT UTILIZING LUKE AIR FORCE BASE, WHETHER SUCH DAMAGE SHALL ORIGINATE FROM NOISE, VIBRATION, FUMES, DUST, FUEL AND LUBRICANT PARTICLES, AND ALL OTHER EFFECTS THAT MAY BE CAUSED BY THE OPERATION OF AIRCRAFT LANDING AT, OR TAKING OFF FROM, OR OPERATING AT OR ON LUKE AIR FORCE BASE AND ITS AUXILIARY FIELDS. THIS INSTRUMENT SHALL RUN WITH THE LAND AND BE BINDING UPON OWNER AND ITS HEIRS, ASSIGNS, AND SUCCESSORS IN INTEREST TO THIS PLAT OR ANY PARCEL OR LOT THEREOF. THIS INSTRUMENT DOES NOT RELEASE THE USAF FROM LIABILITY FOR DAMAGE OR INJURY TO PERSON OR PROPERTY CAUSED BY FAILING AIRCRAFT OR FALLING PHYSICAL OBJECTS FROM AIRCRAFT, EXCEPT AS STATED HEREIN WITH RESPECT TO NOISE, FUMES, DUST, FUEL, AND LUBRICANT PARTICLES.

OWNER HEREBY FURTHER AGREES TO INDEMNIFY, DEFEND, AND HOLD HARMLESS THE CITY OF SURPRISE FROM ANY AND ALL CLAIMS FOR DAMAGES OF ANY KIND TO PERSONS OR PROPERTY THAT MAY ARISE IN CONNECTION WITH THE USE OF THE SIDEWALKS LOCATED WITHIN THE RIGHT-OF-WAY.

EPCOR PLAT DEDICATION

EXCEPT AS TO ANY AREAS SUBJECT TO THE EASEMENT OR EASEMENTS GRANTED TO MARICOPA WATER DISTRICT, AS DEPICTED ON THIS PLAT AND RECORDED IN THE OFFICE OF THE RECORDER, MARICOPA COUNTY, ARIZONA, A PERPETUAL WATER EASEMENT AS DESCRIBED IN THIS PLAT IS GRANTED TO EPCOR WATER ARIZONA INC., AND ITS SUCCESSORS AND ASSIGNS (COLLECTIVELY "GRANTEE"), TO CONSTRUCT, OPERATE, AND MAINTAIN WATER LINES AND APPURTENANT FACILITIES (COLLECTIVELY "FACILITIES") UPON, ACROSS, OVER AND UNDER THE SURFACE OF THE EASEMENTS, TOGETHER WITH THE RIGHT TO OPERATE, REPAIR, REPLACE, MAINTAIN, AND REMOVE THE FACILITIES FROM THE PREMISES; TO ADD OR TO ALTER THE FACILITIES, AND TO PROVIDE GRANTEE WITH REASONABLE INGRESS AND EGRESS TO THE FACILITIES. GRANTEE WILL HAVE UNRESTRICTED ACCESS TO THE EASEMENT FOR THE ACTIVITIES DESCRIBED ABOVE AND FORMAL NOTIFICATION OR APPROVAL BY ANY ASSOCIATION PRIOR TO ACCESSING THE EASEMENT WILL NOT BE REQUIRED.

GRANTOR SHALL NOT ERECT OR CONSTRUCT OR PERMIT TO BE ERECTED OR CONSTRUCTED ANY BUILDING, STRUCTURE OR SIMILAR IMPROVEMENT WITHIN THE LIMITS OF THE EASEMENT GRANTED HEREIN. GRANTOR SHALL NOT, NOR PERMIT, THE GRADE OVER GRANTEE'S FACILITIES TO BE SUBSTANTIALLY ALTERED WITHOUT, IN EACH INSTANCE, THE PRIOR WRITTEN CONSENT OF GRANTEE, AND GRANTOR AGREES THAT NO OTHER PIPES OR CONDUITS SHALL BE PLACED WITHIN THE PREMISES SUBJECT TO THE EASEMENT GRANTED HEREIN, EXCEPT PIPES CROSSING GRANTEE'S FACILITIES AT RIGHT ANGLES, IN WHICH CASE, A MINIMUM VERTICAL DISTANCE OF TWO (2) FEET (AS MEASURED FROM THE CLOSEST POINTS ON THE OUTSIDE EDGES) SHALL BE MAINTAINED BETWEEN GRANTEE'S FACILITIES AND SUCH OTHER PIPES OR CONDUITS. UNLESS GRANTEE EXPRESSLY CONSENTS IN WRITING OTHERWISE, ANY AND ALL SOMER PIPES CROSSING THE EASEMENT GRANTED HEREIN SHALL BE LAID BELOW GRANTEE'S FACILITIES. HOWEVER, GRANTOR SHALL HAVE THE RIGHT TO CONSTRUCT AND ERECT FENCES, TO INSTALL LANDSCAPING, PARKING FACILITIES AND DRIVEWAYS, AND TO ESTABLISH OTHER USES THAT ARE NOT INCONSISTENT WITH USES WITHIN THE LIMITS OF SAID EASEMENT IN A MANNER THAT WILL NOT UNREASONABLY INTERFERE WITH GRANTEE'S ACCESS TO THE FACILITIES.

GENERAL NOTES

1. SPRINKLERS ARE REQUIRED IN ALL ONE AND TWO FAMILY DWELLINGS BUILT IN AREAS WHICH DO NOT HAVE AN ADEQUATE WATER SUPPLY.
2. NO ON-SITE GRADING OR EXCAVATION SHALL OCCUR WITHOUT FIRST OBTAINING A PERMIT FROM THE CITY OF SURPRISE.
3. THE PROPERTY IS LOCATED WITHIN AN AREA HAVING FLOOD ZONE "ZONE X SHADED," BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, ON FLOOD INSURANCE RATE MAP NO. 04013C1655L, WITH A DATE OF IDENTIFICATION OF OCTOBER 16, 2013, FOR COMMUNITY NO. 040053, IN MARICOPA COUNTY, STATE OF ARIZONA, WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH SAID PROPERTY IS SITUATED.
4. THE ROADS DESIGNATED AS "PRIVATE" AND ANY APPURTENANCES INCLUDING BUT NOT LIMITED TO ROAD SIGNS, STRIPING, CURB AND GUTTER, AND SIDEWALKS ARE PRIVATE, SUCH ROADS AND APPURTENANCES ARE OWNED, MAINTAINED AND REPAIRED BY OWNER OR THE HOMEOWNER'S ASSOCIATION FORMED BY OWNER. THE CITY OF SURPRISE SHALL NOT MAINTAIN OR REPAIR ANY ROAD DESIGNATED AS "PRIVATE."
5. IN ACCORDANCE WITH ARS § 9-461.07, THE CITY OF SURPRISE HAS DETERMINED THAT ALL DEDICATIONS OCCURRING WITH THIS PLAT ARE IN CONFORMANCE WITH THE SURPRISE GENERAL PLAN.
6. PURSUANT TO A.R.S. § 42-11102, THE CITY OF SURPRISE, A POLITICAL SUBDIVISION OF THE STATE OF ARIZONA, IS EXEMPT FROM ALL TAXES AND ASSESSMENTS BASED ON ASSESSED VALUE EXCEPT FOR SPECIAL DISTRICTS (PATSY AND YATH). WHEN APPLICABLE.
7. THE MAINTENANCE OF LANDSCAPING WITHIN THE OPEN SPACES, LANDSCAPED TRACTS, RETENTION BASINS, AND PARKS SHALL BE THE RESPONSIBILITY OF THE OWNER OR THE HOMEOWNERS' ASSOCIATION FORMED BY THE OWNER OR THE IGA. SUCH USE OR OCCUPANCY OF THE EASEMENTS CONSTITUTES
8. THE MAINTENANCE OF LANDSCAPING WITHIN THE ADJACENT PUBLIC RIGHTS-OF-WAY, INCLUDING LANDSCAPED MEDIANS WITHIN COLLECTORS AND LOCAL STREETS, AND LANDSCAPED AREAS BETWEEN THE CURB AND THE DETACHED SIDEWALK, SHALL BE THE RESPONSIBILITY OF THE ADJACENT PROPERTY OWNER OR THE PROPERTY HOMEOWNERS' ASSOCIATION FORMED BY THE ADJACENT PROPERTY.
9. LANDSCAPING MAINTENANCE OF THE MEDIANS WITHIN THE PUBLIC RIGHT-OF-WAY WITHIN ANY ARTERIAL OR PARKWAY STREET CLASSIFICATION SHALL BE RESPONSIBILITY OF THE CITY OF SURPRISE AFTER ACCEPTANCE.
10. ZONING OF THE PROPERTY IS PER SURPRISE ZONING CASE FS17-587 OR AS SUBSEQUENTLY AMENDED.
11. THIS FINAL PLAT IS IN SUBSTANTIAL CONFORMANCE WITH THE PRELIMINARY PLATS AS APPROVED UNDER CITY OF SURPRISE CASE FS17-394 & FS21-252.

AREA SUMMARY TABLE

DESCRIPTION	AREA (SF)	AREA (ACRES)
LOTS (0 LOTS)	0	0.0000
TRACTS I–D & L	52,912	1.2147
PRIVATE STREETS	0	0.0000
GROSS AREA	52,912	1.2147

100 YEAR ASSURED WATER SUPPLY

THE SUBDIVIDER HAS OBTAINED A CERTIFICATE OF 100 YEAR ASSURED WATER SUPPLY FROM THE DEPARTMENT OF WATER RESOURCES.

27-701007.0000 — CERTIFICATE NUMBER
11/14/2008 — DATE

BASIS OF BEARING

THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 23, TOWNSHIP 3 NORTH, RANGE 2 WEST OF THE GILA AND SALT RIVER MERIDIAN, BEING SOUTH 89°59'05" WEST AS MEASURED AND BEING SOUTH 89°59'41" WEST AS SHOWN ON MARICOPA COUNTY DOACS SURVEY RECORDED IN BOOK 661, PAGE 18, MARICOPA COUNTY RECORDS.

NOTICE OF TOLL AT PRASADA DEVELOPMENT AND WATER DELIVERY AGREEMENT

LANDOWNER ENTERED INTO THE TOLL AT PRASADA DEVELOPMENT AND WATER DELIVERY AGREEMENT DATED JANUARY 2, 2019 ("AGREEMENT") WITH MARICOPA COUNTY MUNICIPAL WATER CONSERVATION DISTRICT NUMBER ONE ("MWD") FOR WHICH A MEMORANDUM OF AGREEMENT WAS RECORDED ON JANUARY 3, 2019, AT THE MARICOPA COUNTY RECORDERS' OFFICE AT 2019-0002436. THE PROPERTIES INVOLVED IN THIS PLAT ARE SUBJECT TO THIS AGREEMENT. THE AGREEMENT AND THIS PLAT, INCLUDING ANY AND ALL DEDICATIONS THEREIN, HEREBY PRESERVE MWD'S PRIOR AND SUPERIOR RIGHTS OF ACCESS TO AND USE OF EXISTING AND FUTURE MWD FACILITIES AND MWD PROPERTY INTERESTS, AS SUCH TERMS ARE DEFINED IN THE AGREEMENT, TO ENABLE MWD TO ACCOMPLISH ALL OF MWD'S PURPOSES, INCLUDING, BUT NOT LIMITED TO, THE TRANSMISSION AND DISTRIBUTION OF WATER, WASTEWATER, POWER AND COMMUNICATIONS, AND TO CONSTRUCT, RECONSTRUCT, OPERATE, MAINTAIN AND REPLACE THOSE MWD FACILITIES AND MWD PROPERTY INTERESTS. THE AGREEMENT IS ON FILE AT THE OFFICES OF TOLL PRASADA LLC, AND MAY BE REVIEWED AS TO ALL DETAILS, WITH PARTICULAR REFERENCE TO SECTION 7 AND SECTION 9, UPON REASONABLE REQUEST.

DATED THIS _____ DAY OF _____, 2024.

MARICOPA COUNTY MUNICIPAL WATER CONSERVATION DISTRICT NUMBER ONE, A POLITICAL SUBDIVISION OF THE STATE OF ARIZONA

ATTEST:

BY: _____
CHRISTINE CAIN
ITS: PROPERTY & CONTRACTS MANAGER

BY: _____
GLEN VORTHERMS
ITS: ASSISTANT SECRETARY

TOLL PRASADA LLC, AN ARIZONA LIMITED LIABILITY COMPANY

BY: _____ _____
ITS: _____

CASE NUMBER: FS23-0852



VICINITY MAP

OWNER/DEVELOPER

TOLL BROTHERS
8767 E VIA DE VENTURA, SUITE 390
SCOTTSDALE, AZ 85258
TEL: (602) 999-5684
CONTACT: AARON INGOO

ENGINEER

EPS GROUP, INC.
1130 N. ALMA SCHOOL ROAD, STE. 120
MESA, ARIZONA 85201
TEL: (480) 503-2250
FAX: (480) 503-2258
CONTACT: JAMES ROGERS, P.E.

SHEET INDEX

1 COVER SHEET
2 LOT AREA TABLE, TRACT AREA & USAGE TABLE, CURVE TABLE, LINE TABLE & FINAL PLAT PLAN SHEET

HOMEOWNERS ASSOCIATION RATIFICATION

KNOW ALL MEN BY THESE PRESENTS: THAT STERLING GROVE COMMUNITY ASSOCIATION, INC., AN ARIZONA NON-PROFIT CORPORATION, HEREBY RATIFIES, AFFIRMS AND APPROVES THIS PLAT FOR "TOLL AT PRASADA, SWC PARK FINAL PLAT" AND THE RESPONSIBILITIES IMPOSED UPON IT UNDER THIS PLAT.

IN WITNESS WHEREOF, STERLING GROVE COMMUNITY ASSOCIATION, INC HAS CAUSED ITS NAME TO BE AFFIXED BY THE UNDERSIGNED, DULY AUTHORIZED OFFICER THIS _____ DAY OF _____, 2024.

STERLING GROVE COMMUNITY ASSOCIATION, INC., AN ARIZONA NON-PROFIT CORPORATION

BY: _____

ITS: _____

ACKNOWLEDGMENT

STATE OF ARIZONA } SS
COUNTY OF MARICOPA }

ON THIS _____ DAY OF _____, 2024 BEFORE ME, THE UNDERSIGNED, PERSONALLY APPEARED _____ WHO ACKNOWLEDGED HIMSELF TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE INSTRUMENT WITHIN, AND WHO EXECUTED THE FOREGOING INSTRUMENT FOR THE PURPOSES THEREIN CONTAINED.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND OFFICIAL SEAL.

_____ _____
NOTARY PUBLIC DATE

_____
MY COMMISSION EXPIRES:

CITY OF SURPRISE ENGINEER APPROVAL

DATA ON THIS PLAT REVIEWED AND APPROVED THIS _____ DAY OF _____, 2024, BY THE CITY ENGINEER OF SURPRISE, ARIZONA.

APPROVED: _____ _____
CITY ENGINEER DATE

CITY OF SURPRISE COUNCIL APPROVAL

APPROVED BY THE CITY COUNCIL OF THE CITY OF SURPRISE, ARIZONA, THIS _____ DAY OF _____, 2024.

ATTEST:

_____ _____
MAYOR DATE

_____ _____
CITY CLERK DATE

CERTIFICATION

I, ROBERT A. JOHNSTON, HEREBY CERTIFY THAT I AM A REGISTERED LAND SURVEYOR IN THE STATE OF ARIZONA; THAT THIS PLAT CORRECTLY REPRESENTS A SURVEY MADE UNDER MY DIRECTION DURING THE MONTH OF JUNE, 2023; THAT THE SURVEY IS TRUE AND CORRECT AS SHOWN; THAT ALL MONUMENTS ACTUALLY EXIST OR WILL BE SET AS SHOWN; THAT SAID MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED.

ROBERT A. JOHNSTON, RLS 37495
EPS GROUP, INC.
1130 N. ALMA SCHOOL ROAD, STE. 120
MESA, ARIZONA 85201
PHONE: (480) 503-2250
FAX: (480) 503-2258

DATE OF PREPARATION: 06/22/23 (REVISED SEPTEMBER 11, 2023 & REVISED JANUARY 23, 2024)

EXPIRES 09/30/2024

1130 N Alma School Rd., Suite 120
Mesa, AZ 85201
T 480.503.2250 | F 480.503.2258
WWW.EPSGROUP.COM

EPS GROUP

Toll at Prasada, SWC Park Final Plat
SURPRISE, ARIZONA

FINAL RE-PLAT

Project

Revisions

CITY/COUNTY OF RECORD SUBMITTAL

Designer: RAJ
Drawn by: TJP

Job No.
16-339
FP01

Sheet No.
1
of 2

FS23-0852 FINAL PLAT

LEGAL DESCRIPTION

A PORTION OF THE SOUTHEAST QUARTER OF SECTION 22 AND A PORTION OF THE SOUTHWEST QUARTER OF SECTION 23, TOWNSHIP 3 NORTH, RANGE 2 WEST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A FOUND REBAR AT THE SOUTHWEST CORNER OF SAID SECTION 23, FROM WHICH A PIPE AT THE SOUTH QUARTER CORNER OF SAID SECTION 23 BEARS SOUTH 89 DEGREES 59 MINUTES 55 SECONDS WEST, 2644.60 FEET;

THENCE ALONG THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 23, NORTH 89 DEGREES 59 MINUTES 55 SECONDS EAST, 189.88 FEET TO A POINT ON SAID SOUTH LINE;

THENCE, DEPARTING SAID SOUTH LINE NORTH 0 DEGREES 00 MINUTES 05 SECONDS WEST, 460.01 FEET TO THE POINT OF BEGINNING;

THENCE NORTH 8 DEGREES 23 MINUTES 47 SECONDS WEST, 42.33 FEET TO THE BEGINNING OF A NON-TANGENT CURVE TO THE LEFT, CONCAVE SOUTHWEST, FROM WHICH THE RADIUS POINT BEARS NORTH 22 DEGREES 08 MINUTES 27 SECONDS WEST A DISTANCE OF 58.00 FEET;

THENCE NORTHWESTERLY 210.90 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 208 DEGREES 20 MINUTES 19 SECONDS TO A POINT OF REVERSE CURVATURE OF A CURVE HAVING A RADIUS OF 20.00 FEET;

THENCE SOUTHWESTERLY 30.90 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 88 DEGREES 31 MINUTES 53 SECONDS;

THENCE NORTH 51 DEGREES 56 MINUTES 56 SECONDS WEST, 36.12 FEET TO THE BEGINNING OF A CURVE, CONCAVE NORTHEAST, HAVING A RADIUS OF 20.00 FEET;

THENCE NORTHWESTERLY 31.42 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 90 DEGREES 00 MINUTES 00 SECONDS;

THENCE NORTH 38 DEGREES 03 MINUTES 04 SECONDS EAST, 180.00 FEET TO THE BEGINNING OF A CURVE, CONCAVE SOUTHWEST, HAVING A RADIUS OF 60.00 FEET;

THENCE NORTHWESTERLY 94.25 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 90 DEGREES 00 MINUTES 00 SECONDS;

THENCE NORTH 51 DEGREES 56 MINUTES 56 SECONDS WEST, 135.18 FEET;

THENCE NORTH 38 DEGREES 03 MINUTES 04 SECONDS EAST, 70.00 FEET;

THENCE SOUTH 31 DEGREES 34 MINUTES 54 SECONDS EAST, 296.73 FEET;

THENCE NORTH 58 DEGREES 25 MINUTES 06 SECONDS EAST, 18.68 FEET;

THENCE SOUTH 31 DEGREES 34 MINUTES 54 SECONDS EAST, 129.00 FEET;

THENCE SOUTH 58 DEGREES 25 MINUTES 06 SECONDS WEST, 18.68 FEET;

THENCE SOUTH 31 DEGREES 34 MINUTES 54 SECONDS EAST, 46.50 FEET;

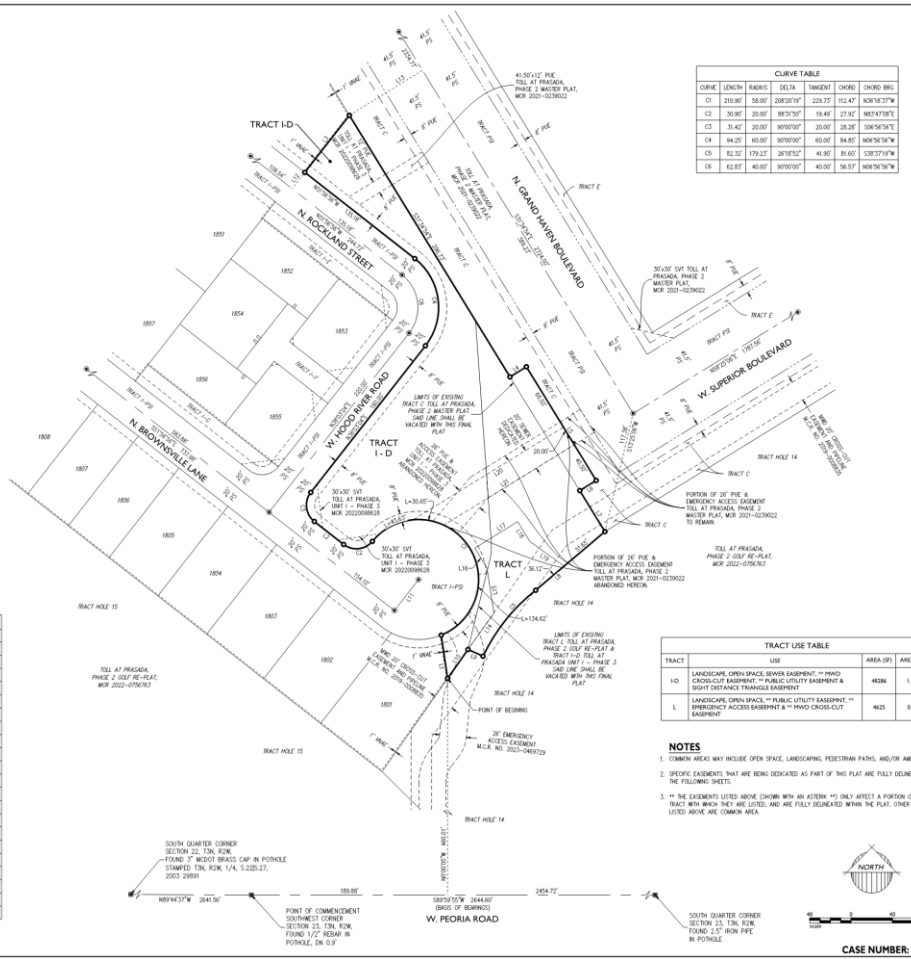
THENCE SOUTH 49 DEGREES 48 MINUTES 01 SECONDS WEST, 87.77 FEET TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE SOUTHEAST, FROM WHICH THE RADIUS POINT BEARS SOUTH 38 DEGREES 13 MINUTES 14 SECONDS EAST A DISTANCE OF 179.23 FEET;

THENCE SOUTHWESTERLY 82.32 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 26 DEGREES 18 MINUTES 52 SECONDS;

THENCE ON A NON-TANGENT LINE NORTH 66 DEGREES 03 MINUTES 15 SECONDS WEST, 15.95 FEET;

THENCE SOUTH 35 DEGREES 09 MINUTES 22 SECONDS WEST, 34.28 FEET TO THE POINT OF BEGINNING.

CONTAINS 1.2147 ACRES, MORE OR LESS.



CURVE TABLE						
CURVE	LENGTH	RADIUS	DELTA	TANGENT	CHORD	CHORD BRG
C1	210.90'	58.00'	208°20'19"	229.73'	112.47'	N36°18'23"W
C2	30.90'	20.00'	88°31'50"	19.49'	27.92'	N83°47'08"E
C3	31.42'	20.00'	90°00'00"	20.00'	28.28'	S06°56'56"E
C4	94.25'	60.00'	90°00'00"	60.00'	84.85'	N06°56'56"W
C5	82.32'	179.23'	26°18'52"	41.90'	81.60'	S38°57'19"W
C6	62.83'	40.00'	90°00'00"	40.00'	56.57'	N06°56'56"W

LINE TABLE		
LINE	BEARING	LENGTH
L1	N08°23'47"W	42.33'
L2	N51°56'56"W	36.12'
L3	N38°03'04"E	70.00'
L4	N58°25'06"E	18.68'
L5	S31°34'54"E	129.00'
L6	S58°25'06"W	18.68'
L7	S31°34'54"E	46.50'
L8	S49°48'01"W	87.77'
L9	N66°03'15"W	15.95'
L10	S35°09'22"W	34.28'
L11	N38°03'04"E	38.00'
L12	N38°03'04"E	20.00'
L13	N58°25'06"E	83.00'
L14	N35°37'56"E	43.10'
L15	N08°45'13"W	44.20'
L16	N31°34'54"W	22.65'
L17	N58°25'06"E	48.82'
L18	S31°34'54"E	22.65'
L19	S54°24'35"E	40.72'
L20	S58°25'06"W	170.98'
L21	S58°25'06"W	148.27'

TRACT USE TABLE			
TRACT	USE	AREA (SF)	AREA (AC)
I-D	LANDSCAPE, OPEN SPACE, SEWER EASEMENT, ** MWD CROSS-CUT EASEMENT, ** PUBLIC UTILITY EASEMENT & SIGHT DISTANCE TRIANGLE EASEMENT	48286	1.109
L	LANDSCAPE, OPEN SPACE, ** PUBLIC UTILITY EASEMENT, ** EMERGENCY ACCESS EASEMENT & ** MWD CROSS-CUT EASEMENT	4625	0.106

NOTES

1. COMMON AREAS MAY INCLUDE OPEN SPACE, LANDSCAPING, PEDESTRIAN PATHS, AND/OR AMENITIES.
2. SPECIFIC EASEMENTS THAT ARE BEING DEDICATED AS PART OF THIS PLAT ARE FULLY DELINEATED ON THE FOLLOWING SHEETS.
3. ** THE EASEMENTS LISTED ABOVE (SHOWN WITH AN ASTERIK **) ONLY AFFECT A PORTION OF THE TRACT WITH WHICH THEY ARE LISTED, AND ARE FULLY DELINEATED WITHIN THE PLAT. OTHER "USES" LISTED ABOVE ARE COMMON AREA.

LEGEND

▣	FOUND MONUMENT, AS NOTED
●	CORNER OF SUBDIVISION
⊕	BRASS CAP TO BE SET AT CONSTRUCTION
R/W	RIGHT-OF-WAY
M.C.R.	MARICOPA COUNTY RECORDER
PS	PRIVATE STREET
SVT	SIGHT VISIBILITY TRIANGLE EASEMENT
PUE	PUBLIC UTILITY EASEMENT

EPS GROUP
1130 N Alma School Rd., Suite 120
Mesa, AZ 85201
P 480.503.2250
www.epsgroupinc.com

Project: Toll at Prasada
SWC Park Final Plat
FINAL RE-PLAT

Revisions:

CASA GRANDE

Designer: KAJ
Drawn by: TJP

Job No. 16-339
FP02
Sheet No. 2 of 2

FS23-0852 FINAL PLAT

SURPRISE
ARIZONA

QUESTIONS OR COMMENTS?

Thank You

CITY OF SURPRISE
Regular City Council Meeting

Council Meeting Date: May 7, 2024 Contact Person: Leslie Carnie
Submitting Department: Community Development District: District 1
Staff Recommendations:

Consent: Yes Regular: No Public Hearing: No Report/Discussion: No

Agenda Wording:
Consideration and action pertaining to approval of the Final Plat entitled, “Asante Unit 3.6A and 3.6B” and dated February 20, 2024, a site generally located northeast of Happy Valley Road and Pat Tillman Boulevard; Case FS23-0841.

Motion:
I move to approve the Final Plat entitled, "Asante Unit 3.6A and 3.6B” and dated February 20, 2024.

Background:
Zach Hilgart, with Hilgart Wilson, seeks approval of a Final Plat of Asante Planning Area 4 Units 3.6A and 3.6B. The proposed Final Plat includes the subdivision of approximately 34.49 gross acres into 123 single-family lots and approximately 6.90 acres of ROW for a net density of 4.5 DU/Ac.

Objective Analysis:
The subject Final Plat meets the requirements of the Asante PAD, in addition to other requirements as set forth in the Surprise Municipal Code. All city reviewing departments have reviewed the request and expressed no concerns.

Policy Compliant:
This proposed Final Plat is consistent with the Surprise General Plan 2035, Asante PAD, and the Land Development Ordinance.

Financial Impact:
While this item does not have an immediate or direct financial impact, ongoing development activity in the city will inevitably have a future financial impact as additional resources are needed to provide city services.

Budget Impact:
There is no anticipated budget impact related to this item.

FTE Impact:
This item does not have an impact on current staffing levels.

ATTACHMENTS:

1. 00- FS23-0841 Asante PA4 Units 3.6A and 3.6B Final Plat - Staff Report
2. 01 – FS23-0841 Asante PA4 Units 3.6A and 3.6B Final Plat – Vicinity Map
3. 02 – FS23-0841 Asante PA4 Units 3.6A and 3.6B Final Plat – Zoning Map
4. 03 – FS23-0841 Asante PA4 Units 3.6A and 3.6B Final Plat – Final Plat
5. 04 – FS23-0841 Asante PA4 Units 3.6A and 3.6B Final Plat – Luke AFB Letter
6. FS23-0841 Asante PA4 Units 3.6A and 3.6B - Presentation

SURPRISE
ARIZONA

FINAL PLAT

REPORT TO CITY COUNCIL

Case:	**FS23-0841**
Project Name:	Asante PA 4 Units 3.6A and 3.6B – Final Plat
Council District:	1 - Acacia
City Council Date:	May 07, 2024
Planner:	Leslie Carnie, Planner II
Owner:	Asante Development Partners, LLC
Applicant:	Zach Hilgart of Hilgart Wilson
Request:	Final Plat to subdivide approximately 34.49 gross acres into 123 single-family residential lots and approx. 6.90 acres of ROW.
Site Location:	Generally located northeast of Happy Valley Road and Pat Tillman Boulevard.
Site Size:	Approximately 34.49 Acres (Gross)
Net Density:	4.5 DU/Ac (Net)
General Plan Conformance:	The proposed Final Plat is consistent with the Surprise General Plan 2035.

Findings:

- The proposed Final Plat is consistent with the Asante PAD.
- The proposed Final Plat is consistent with the Preliminary Plat, case FS23-0141.
- The proposed Final Plat is consistent with the applicable City of Surprise regulations.
- The reviewing agencies have indicated no objections to the request.

Alternative Actions:

Approve – Approval of the proposed Final Plat will allow the applicant the ability to subdivide the property as proposed.

Deny – Denial of the requested Final Plat will prevent the applicant from subdividing the property as proposed.

PROJECT DESCRIPTION:

Zach Hilgart, with Hilgart Wilson, seeks approval of a Final Plat of Asante Planning Area 4 Units 3.6A and 3.6B. The proposed Final Plat includes the subdivision of approximately 34.49 gross acres into 123 single-family lots and approx. 6.90 acres of ROW for a net density of 4.5 DU/Ac

SURROUNDING LAND ZONING:

The following map depicts the existing zoning of the subject site and its surrounds:



RM-9 PUD	PAD - Asante	PAD – Desert Oasis
PAD - Asante	**PAD – Asante**	PAD – Asante
RM-9 PUD	PAD – Asante	PAD – Asante

BACKGROUND:

November 3, 1988: City Council approved the annexation (Ordinance 88-24) of the subject property.

November 24, 2004: City Council approved Ordinance 04-41 for the Asante Planned Area Development under case PAD04-124.

August 29, 2022: A minor amendment to the Asante PAD was approved administratively under case FS22-0756 to modify street alignments, school and amenity site locations, and development standards.

September 07, 2023: The Planning and Zoning Commission approved a Preliminary Plat for Asante Planning Area 4 under case FS23-0141.

September 15, 2023: The applicant filed the subject case, FS23-0841

ANALYSIS AND DISCUSSION:

The subject request includes a Final Plat for Planning Area 4, Units 3.6A and 3.6B within the Asante PAD. The 123 single-family residential lots created by this plat fall under the Lot Categories “A” (48’ x 110’) and “F” (70’ x 120’). Seven lots from Unit 3.4B are also included in this plat to allow for the completion of 171st Drive and El Cortez Place.

Access

Access to the site is provided via Happy Valley Road to the south and Cottontail Lane to the west.

Open Space & Landscaping

The Asante PAD requires 10% open space for low-density residential developments. The subject plat includes a total of 7.52 acres dedicated to open space, which equates to 21.8% of the overall gross area. Within these open spaces is a network of trails, pocket parks, stormwater retention areas, and landscaping. The site is to be landscaped with native and low water use plants allowed by the PAD and consistent with the overall Asante development.

Residents within Planning Area 4 have access to the clubhouse planned for Unit 3.10A within Asante Planning Area 3.

Utility and Services Table:

Water:	City of Surprise
Wastewater:	City of Surprise
School District:	Dysart Unified School District

Conformance with Adopted Plans:

The Surprise General Plan shows the subject property as lying within the Neighborhood Character Area, which supports residential development of up to 8 DU/Ac or more. At a net density of 4.5 DU/Ac, this development is consistent with the General Plan in this regard.

This request is also consistent with the General Plan in that it promotes connectivity to existing and future development within the Asante PAD for a range of mobility options.

Reviewing Agencies:

In addition to the standard city reviewing agencies, who indicate no objections to the request, Luke Air Force Base and the Maricopa Water District were included in the routing of the case and indicate no objections.

Summary:

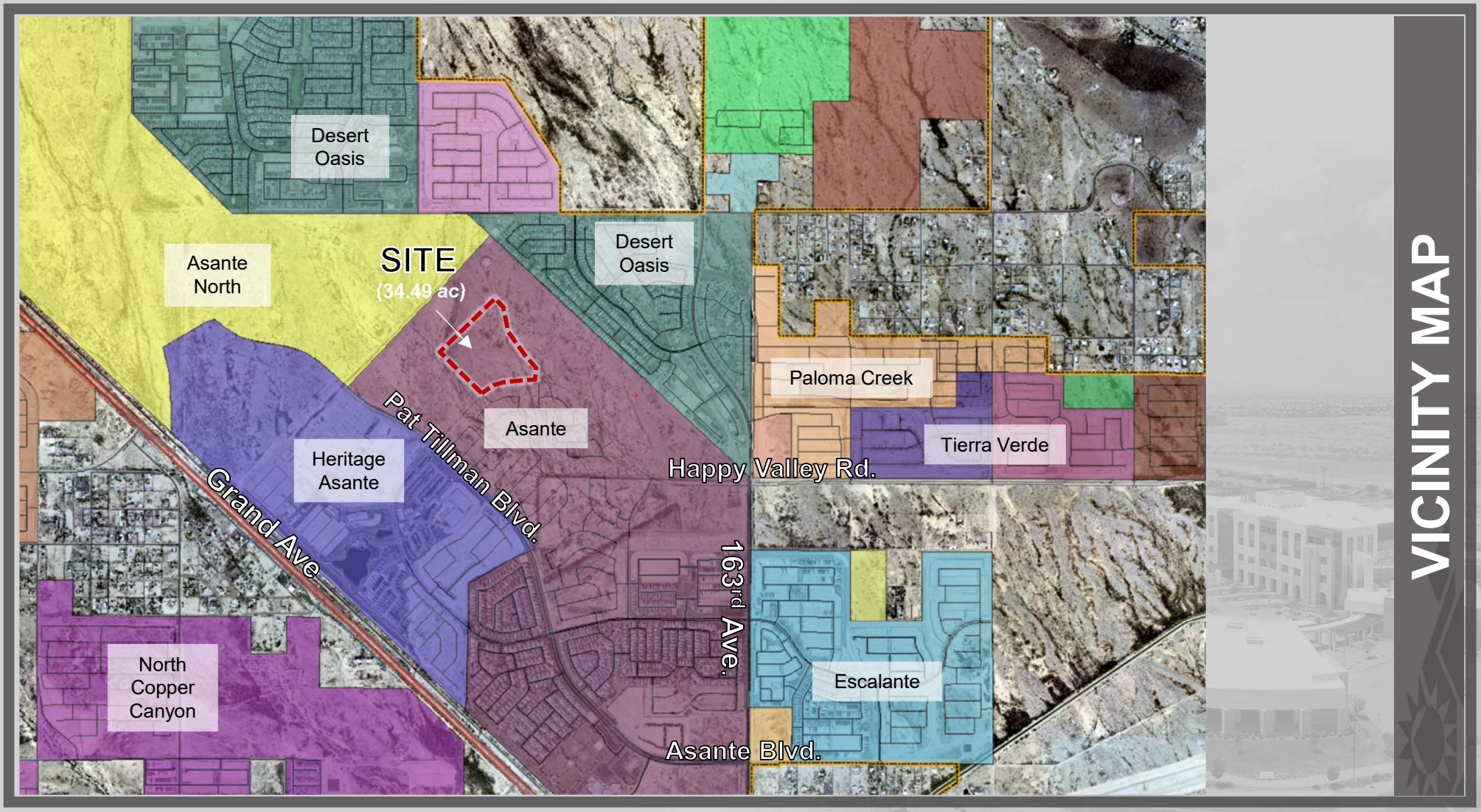
The subject Final Plat meets the requirements of the Asante PAD, in addition to other applicable requirements. All city reviewing departments have reviewed the request and expressed no concerns.

Findings:

- The proposed Final Plat is consistent with the Asante PAD.
- The proposed Final Plat is consistent with the Preliminary Plat, case FS23-0141.
- The proposed Final Plat is consistent with the applicable City of Surprise regulations.
- The reviewing agencies have indicated no objections to the request.

Attachments:

01 Vicinity Map
02 Zoning Map
03 Final Plat
04 Luke AFB Letter
PPT


Desert Oasis
Asante North
SITE
(34.49 ac)
Desert Oasis
Paloma Creek
Tierra Verde
Asante
Heritage Asante
Pat Tillman Blvd.
Grand Ave.
Happy Valley Rd.
163rd Ave.
North Copper Canyon
Escalante
Asante Blvd.
VICINITY MAP


RM-9
PUD
RM-9
PUD
PAD
Asante
PAD
Desert Oasis
RM-9
PUD
RM-6
PUD
PAD
Asante
RM-9
PUD
Pat Tillman Blvd.
Grand Ave
Happy Valley Rd.
PAD
Asante
163rd Ave.
Asante Blvd.
ZONING MAP

FINAL PLAT
OF
ASANTE - UNIT 3.6A AND UNIT 3.6B
SURPRISE, ARIZONA
A PORTION OF THE WEST HALF OF SECTION 1 AND EAST HALF OF SECTION 2, TOWNSHIP 4 NORTH, RANGE 2 WEST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA

DEDICATION

STATE OF ARIZONA)
) SS
COUNTY OF MARICOPA)

KNOW ALL PERSONS BY THESE PRESENTS:
THAT **ASANTE DEVELOPMENT PARTNERS, LLC, A DELAWARE LIMITED LIABILITY COMPANY,** AS OWNER, OF A SUBDIVISION WITHIN THE COUNTY OF MARICOPA, HAS SUBDIVIDED UNDER THE NAME OF **"ASANTE – UNIT 3.6A AND UNIT 3.6B"**, A PORTION OF THE WEST HALF OF SECTION 1 AND EAST HALF OF SECTION 2, TOWNSHIP 4 NORTH, RANGE 2 WEST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, AS SHOWN AND PLATTED HEREON AND DOES HEREBY PUBLISH THIS PLAT AS AND FOR THE PLAT OF SAID **"ASANTE – UNIT 3.6A AND UNIT 3.6B"** AND DECLARES THAT THIS PLAT SETS FORTH THE LOCATION AND GIVES THE DIMENSIONS OF EACH LOT, TRACT, STREET, AND EASEMENT CONSTITUTING SAME, AND THAT EACH LOT, TRACT AND STREET SHALL BE KNOWN BY THE NUMBER, LETTER, AND/OR NAME GIVEN TO EACH RESPECTIVELY AS SHOWN ON THIS PLAT.

OWNER HEREBY DEDICATES TO THE CITY OF SURPRISE FEE TITLE TO ALL PUBLIC RIGHTS–OF–WAY AS SHOWN ON THIS FINAL PLAT.

OWNER HEREBY GRANTS TO THE PUBLIC A PERPETUAL NON–EXCLUSIVE EASEMENT IN, UPON, OVER, UNDER, THROUGH, AND ACROSS THE AREAS DESIGNATED AS PUBLIC UTILITY EASEMENTS AS SHOWN ON THE PLAT FOR THE PURPOSE OF ACCESSING, INSTALLING, CONSTRUCTING, MAINTAINING, REPAIRING, REPLACING AND UTILIZING PUBLIC UTILITIES.

OWNER HEREBY GRANTS TO THE CITY OF SURPRISE A PERPETUAL NON–EXCLUSIVE EASEMENT OVER, UPON AND ACROSS THE AREAS DESIGNATED AS SIGHT VISIBILITY TRIANGLES FOR THE PURPOSE OF ENSURING THAT THESE AREAS REMAIN FREE OF SIGHT VISIBILITY OBSTRUCTIONS.

OWNER HEREBY GRANTS TO THE UNITED STATES OF AMERICA DEPARTMENT OF THE AIR FORCE ("USAF") AN AVIGATION EASEMENT OVER AND ACROSS THIS PLAT AND EVERY LOT AND PARCEL THEREOF, WHICH EASEMENT SHALL INCLUDE, BUT NOT BE LIMITED TO, THE RIGHT OF FLIGHT OF AIRCRAFT OVER THIS PLAT, TOGETHER WITH ITS ATTENDANT NOISE, VIBRATIONS, FUMES, DUST, FUEL AND LUBRICANT PARTICLES, AND ALL OTHER EFFECTS THAT MAY BE CAUSED BY THE OPERATION OF AIRCRAFT LANDING AT, OR TAKING OFF FROM, OR OPERATING AT OR ON LUKE AIR FORCE BASE AND/OR AUXILIARY FIELD.

OWNER HEREBY GRANTS TO THE CITY OF SURPRISE A PERPETUAL NON–EXCLUSIVE CROSS ACCESS EASEMENT ACROSS THE PLAT INCLUDING ROADS AND STREETS, OPEN SPACES, COMMUNITY FACILITIES, TRACTS, SIDEWALKS, DRAINAGE BASINS AND ANY PROPERTY WITHIN THE PLAT OWNED BY THE HOMEOWNERS ASSOCIATION FOR THE PURPOSES OF PROVIDING CONTINUOUS AND UNINTERRUPTED INGRESS AND EGRESS FOR EMERGENCY VEHICLES.

OWNER HEREBY GRANTS TO THE CITY OF SURPRISE A PERPETUAL NON–EXCLUSIVE EASEMENT ACROSS THE PLAT INCLUDING ROADS AND STREETS, OPEN SPACES, COMMUNITY FACILITIES, TRACTS, SIDEWALKS, DRAINAGE BASINS AND ANY PROPERTY WITHIN THE PLAT OWNED BY THE HOMEOWNERS ASSOCIATION FOR THE PURPOSE OF PROVIDING CONTINUOUS AND UNINTERRUPTED INGRESS AND EGRESS FOR TRASH COLLECTION VEHICLES.

OWNER HEREBY GRANTS TO THE CITY OF SURPRISE AN ODOR EASEMENT OVER, UPON AND ACROSS THIS PLAT AND EVERY LOT AND PARCEL THEREOF, WHICH EASEMENT SHALL INCLUDE, BUT NOT BE LIMITED TO, THE RIGHT TO INVADE WITH ODORS, FUMES, SMELLS, AND PHYSICAL AIRBORNE PARTICULATES CAUSED BY THE OPERATION AND MAINTENANCE OF THE CITY'S WATER RECLAMATION FACILITIES.

ALL IMPROVEMENTS, FOR STREETS AND PUBLIC UTILITIES OWNED AND OPERATED BY THE CITY, INSTALLED OR CONSTRUCTED BY OWNER WITHIN THE PUBLIC RIGHTS–OF–WAY, THE EASEMENTS, OR ANY TRACTS OR PARCELS HEREBY DEDICATED TO THE CITY OF SURPRISE SHALL BE DEEMED TO HAVE BEEN DEDICATED BY OWNER TO THE CITY UPON THEIR COMPLETION; HOWEVER, SUCH TRANSFER SHALL NOT OCCUR UNTIL THE CITY COUNCIL FOR THE CITY OF SURPRISE MANIFESTS ITS ACCEPTANCE BY SEPARATE FORMAL COUNCIL ACTION.

THE EASEMENTS GRANTED WITHIN THIS DEDICATION ARE PERMANENT AND PERPETUAL AND SHALL RUN WITH THE LAND AND BE BINDING UPON OWNER AND ITS HEIRS, ASSIGNS, AND SUCCESSORS IN INTEREST TO THIS PLAT OR ANY PARCEL OR LOT THEREOF.

OWNER HEREBY GRANTS TO THE CITY OF SURPRISE A PERPETUAL NON–EXCLUSIVE EASEMENT OVER, UNDER, UPON, AND ACROSS ALL AREAS DESIGNATED ON THE PLAT AS WATER/SEWER LINES, MANHOLES, FIRE HYDRANTS AND WATER METERS] FOR THE PURPOSE OF INSTALLING, CONSTRUCTING, MAINTAINING, REPAIRING, REPLACING, AND UTILIZING THE WATER/SEWER LINES, MANHOLES, FIRE HYDRANTS AND WATER METERS.

IN WITNESS WHEREOF:

ASANTE DEVELOPMENT PARTNERS, LLC, A DELAWARE LIMITED LIABILITY COMPANY, AS OWNER, HAS HEREUNTO CAUSED ITS CORPORATE NAME TO BE SIGNED AND ITS CORPORATE SEAL TO BE AFFIXED BY THE UNDERSIGNED DULY AUTHORIZED OFFICER THIS _____ DAY OF _____, 2024.

ASANTE DEVELOPMENT PARTNERS, LLC, A DELAWARE LIMITED LIABILITY COMPANY

BY: **LENNAR COMMUNITIES DEVELOPMENT, LLC, A DELAWARE LIMITED LIABILITY COMPANY**
ITS: MANAGER

BY: _____

NAME: **JEFF GUNDERSON**

TITLE: **VICE PRESIDENT**

ACKNOWLEDGMENT

ON THIS, THE _____ DAY OF _____, 2024 BEFORE ME, PERSONALLY APPEARED **JEFF GUNDERSON,** WHO ACKNOWLEDGED HIMSELF TO BE THE **VICE PRESIDENT** OF **LENNAR COMMUNITIES DEVELOPMENT, LLC, A DELAWARE LIMITED LIABILITY COMPANY,** THE MANAGER OF **ASANTE DEVELOPMENT PARTNERS, LLC, A DELAWARE LIMITED LIABILITY COMPANY,** AND ACKNOWLEDGED THAT HE, AS SUCH **OFFICER**, BEING DULY AUTHORIZED TO DO SO, EXECUTED THE FOREGOING INSTRUMENT FOR THE PURPOSES CONTAINED THEREIN.

IN WITNESS WHEREOF, I HEREBY SET MY HAND AND OFFICIAL SEAL:

_____ _____
NOTARY PUBLIC MY COMMISSION EXPIRES

COMMUNITY ASSOCIATION RATIFICATION

BY THIS RATIFICATION, _____, AS THE _____OF THE ASANTE PHASE 2 COMMUNITY ASSOCIATION, AN ARIZONA NONPROFIT CORPORATION, ACKNOWLEDGES THE RESPONSIBILITIES OF SAID ASSOCIATION AS SET FORTH HEREIN.

ASANTE PHASE 2 COMMUNITY ASSOCIATION, AN ARIZONA NONPROFIT CORPORATION

BY: _____

NAME: _____

TITLE: _____

ACKNOWLEDGMENT FOR RATIFICATION

ON THIS, THE _____ DAY OF _____, 2024 BEFORE ME, PERSONALLY APPEARED _____, WHO ACKNOWLEDGED HIMSELF/HERSELF TO BE THE _____OF ASANTE PHASE 2 COMMUNITY ASSOCIATION, AN ARIZONA NONPROFIT CORPORATION, AND ACKNOWLEDGED THAT HE/SHE, AS SUCH _____, BEING DULY AUTHORIZED TO DO SO, EXECUTED THE FOREGOING INSTRUMENT FOR THE PURPOSES CONTAINED THEREIN.

IN WITNESS WHEREOF, I HEREBY SET MY HAND AND OFFICIAL SEAL:

_____ _____
NOTARY PUBLIC MY COMMISSION EXPIRES

LENDERS' CONSENT

THE UNDERSIGNED, WHICH IS THE BENEFICIARY AND ADMINISTRATIVE AGENT ON BEHALF OF ITSELF AND OTHER LENDERS AS DEFINED IN THE LOAN AGREEMENT OF EVEN DATE WITH THE DEED OF TRUST ('LENDERS'), UNDER THAT CERTAIN CONSTRUCTION DEED OF TRUST AND FIXTURE FILING (WITH ASSIGNMENT OF LEASES AND RENTS AND SECURITY AGREEMENT) RECORDED ON NOVEMBER 10, 2022, AT DOCUMENT NO. 20220831563 IN THE OFFICE OF THE COUNTY RECORDER OF MARICOPA COUNTY, ARIZONA (**"DEED OF TRUST"**) AS A FIRST LIEN ON THE PROPERTY DESCRIBED IN THE DEED OF TRUST (**"LENDERS' LIEN"**), FOR AND ON BEHALF OF THE LENDERS AND THEIR SUCCESSORS AND ASSIGNS, HEREBY (A) CONSENTS TO THE RECORDATION OF THIS FINAL PLAT (**"FINAL PLAT"**), AND EACH AND EVERY DEDICATION, EASEMENT, RIGHT–OF–WAY, COVENANT, CONDITION AND RESTRICTION MORE SPECIFICALLY SET FORTH IN THIS FINAL PLAT; (B) AGREES THAT, UPON THE RECORDATION OF THIS FINAL PLAT, THE LENDERS' LIEN WITH RESPECT TO THE PROPERTY DESCRIBED IN THIS FINAL PLAT IS HEREBY DEEMED SUBJECT AND SUBORDINATE TO THIS FINAL PLAT; WITH LENDERS' LIEN CONTINUING IN EFFECT AGAINST SUCH PROPERTY AS SUCH LEGAL DESCRIPTION HAS BEEN MODIFIED BY RECORDATION OF THIS FINAL PLAT; AND (C) AGREES THAT UPON THE RECORDATION OF THIS FINAL PLAT ALL PROPERTY DEDICATED TO THE CITY OF SURPRISE HEREUNDER IS RELEASED FROM THE LENDERS' LIEN.

DATED: _____, 2024.

ZIONS BANCORPORATION, N.A. DBA CALIFORNIA BANK & TRUST

BY: _____

NAME: _____

ITS: _____

ACKNOWLEDGMENT FOR LENDERS' CONSENT

A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY, OR VALIDITY OF THAT DOCUMENT.

STATE OF CALIFORNIA
COUNTY OF _____

ON _____ BEFORE ME, _____, PERSONALLY APPEARED _____, WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/THEY EXECUTED THE SAME IN HIS/HER/THEIR AUTHORIZED CAPACITY(IES), AND THAT BY HIS/HER/THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S), OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.
WITNESS MY HAND AND OFFICIAL SEAL.

SIGNATURE _____. (SEAL)

PUBLIC NOTICE:

THE LOTS DEPICTED ON THIS PLAT ARE LOCATED WITHIN THE VICINITY OF LUKE AIR FORCE BASE AND MAY BE SUBJECT TO OVERFLIGHTS BY JET AIRCRAFT. ALL STRUCTURES WITHIN THIS PLAT SHALL BE CONSTRUCTED IN COMPLIANCE WITH THE SOUND ATTENUATION STANDARDS ADOPTED BY THE CITY OF SURPRISE. A MAP DEPICTING THE MOST CURRENT ADOPTED MAG NOISE CONTOURS IN RELATION TO THIS PLAT SHALL BE DISPLAYED IN ALL SALES OFFICES. ADDITIONAL INFORMATION MAY BE OBTAINED BY CONTACTING THE CITY OF SURPRISE COMMUNITY DEVELOPMENT DEPARTMENT.

RELEASE OF LIABILITY

ASANTE DEVELOPMENT PARTNERS, LLC, A DELAWARE LIMITED LIABILITY COMPANY, "OWNER" DOES HEREBY (1) RELEASE AND DISCHARGE THE UNITED STATES OF AMERICA DEPARTMENT OF THE AIR FORCE (USAF) AND THE CITY OF SURPRISE, AND (2) INDEMNIFY, DEFEND, AND HOLD HARMLESS THE USAF AND THE CITY OF SURPRISE, OF AND FROM ANY LIABILITY FOR ANY AND ALL CLAIMS FOR DAMAGES OF ANY KIND TO PERSONS OR PROPERTY THAT MAY ARISE AT ANY TIME IN THE FUTURE OVER, OR IN CONNECTION WITH AIRCRAFT OVERFLIGHTS FROM AIRCRAFT UTILIZING LUKE AIR FORCE BASE, WHETHER SUCH DAMAGE SHALL ORIGINATE FROM NOISE, VIBRATION, FUMES, DUST, FUEL AND LUBRICANT PARTICLES, AND ALL OTHER EFFECTS THAT MAY BE CAUSED BY THE OPERATION OF AIRCRAFT LANDING AT, OR TAKING OFF FROM, OR OPERATING AT OR ON LUKE AIR FORCE BASE AND/OR ITS AUXILIARY FIELDS. THIS INSTRUMENT SHALL RUN WITH THE LAND AND BE BINDING UPON OWNER AND ITS HEIRS, ASSIGNS, AND SUCCESSORS IN INTEREST TO THIS PLAT OR ANY PARCEL OR LOT THEREOF. THIS INSTRUMENT DOES NOT RELEASE THE USAF FROM LIABILITY FOR DAMAGE OR INJURY TO PERSON OR PROPERTY CAUSED BY FALLING AIRCRAFT OR FALLING PHYSICAL OBJECTS FROM AIRCRAFT, EXCEPT AS STATED HEREIN WITH RESPECT TO NOISE, FUMES, DUST, FUEL, AND LUBRICANT PARTICLES.

ASANTE DEVELOPMENT PARTNERS, LLC, A DELAWARE LIMITED LIABILITY COMPANY, ("OWNER"), DOES HEREBY (1) RELEASE AND DISCHARGE THE CITY OF SURPRISE, AND (2) INDEMNIFY, DEFEND, AND HOLD HARMLESS THE CITY OF SURPRISE, OF AND FROM ANY LIABILITY FOR ANY AND ALL CLAIMS FOR DAMAGES OF ANY KIND TO PERSONS OR PROPERTY THAT MAY ARISE AT ANY TIME IN THE FUTURE OVER, OR IN CONNECTION WITH THE AREAS LOCATED WITHIN THE NEWLY DEDICATED RIGHT–OF–WAY AS DEPICTED ON THIS PLAT UNTIL SUCH TIME THE RIGHT–OF–WAY IS IMPROVED TO CITY STANDARDS AND THOSE IMPROVEMENTS ARE APPROVED AND ACCEPTED BY THE CITY COUNCIL. THE MAINTENANCE OF THE AREA WITHIN ANY NEWLY DEDICATED RIGHT–OF–WAY AS SHOWN ON THIS PLAT SHALL BE THE RESPONSIBILITY OF THE ADJACENT OWNER/OR SUBSEQUENT ADJACENT OWNERS WITHIN THE BOUNDARY OF SAID PLAT UNTIL SUCH TIME THAT THE AREA WITHIN THE RIGHT–OF–WAY IS IMPROVED TO CITY STANDARD AND ACCEPTED BY THE CITY OF SURPRISE.

OWNER HEREBY FURTHER AGREES TO INDEMNIFY, DEFEND, AND HOLD HARMLESS THE CITY OF SURPRISE FROM ANY AND ALL CLAIMS FOR DAMAGES OF ANY KIND TO PERSONS OR PROPERTY LOCATED WITHIN THE RIGHT OF WAY THAT MAY ARISE IN CONNECTION WITH THE USE OF THE SIDEWALKS LOCATED WITHIN THE RIGHT–OF–WAY, UNTIL SUCH TIME THE CITY OF SURPRISE HAS ACCEPTED THE SIDEWALKS.

100 YEAR ASSURED WATER SUPPLY

THE AREA PLATTED HEREON LIES WITHIN THE DOMESTIC WATER SERVICE AREA OF CITY OF SURPRISE DESERT OASIS PUBLIC WATER SYSTEM 04–07–523 WHICH IS DESIGNATED AS HAVING AN ASSURED WATER SUPPLY PURSUANT A.R.S. § 45–576.

OWNER

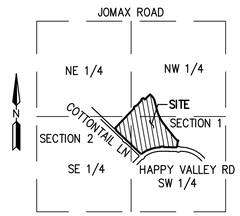
ASANTE DEVELOPMENT PARTNERS, LLC
1665 W. ALAMEDA DRIVE, SUITE 130
TEMPE, ARIZONA 85282

SURVEYOR

HILGARTWILSON, LLC
2141 E. HIGHLAND AVE., STE. 250
PHOENIX, ARIZONA 85016
PHONE: (602) 490–0535
CONTACT: BRIAN J. BENEDICT , RLS

SHEET INDEX

FP01	COVER SHEET
FP02	LEGAL DESCRIPTION, SHEET INDEX MAP, NOTES, AREA TABLES & VISIBILITY DETAIL
FP03–FP07	FINAL PLAT SHEETS



VICINITY MAP
NOT TO SCALE

BASIS OF BEARING

BASIS OF BEARING IS SOUTH 89°40'45" EAST ALONG THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 36, TOWNSHIP 5 NORTH, RANGE 2 WEST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, BETWEEN THE MONUMENTS AS SHOWN HEREON.

NOTES

1. NO PERMANENT STRUCTURE OF ANY KIND SHALL BE CONSTRUCTED ON, OVER OR PLACED WITHIN EASEMENTS. IT SHALL BE FURTHER UNDERSTOOD THAT THE CITY OF SURPRISE SHALL NOT BE REQUIRED TO REPLACE ANY OBSTRUCTIONS OR PLANTING THAT MUST BE REMOVED DURING THE COURSE OF MAINTENANCE, CONSTRUCTION, OR RECONSTRUCTION OF CITY UTILITIES.
2. ALL NEW OR RELOCATED UTILITIES WILL BE PLACED UNDERGROUND.
3. ALL STRUCTURES AND LANDSCAPING WITHIN THE 30'x30' VISIBILITY TRIANGLE ALONG THE PROPERTY LINES AT LOT CORNERS SHALL BE MAINTAINED AT A MAXIMUM HEIGHT OF 30" ABOVE GROUND LEVEL. (SEE DETAIL SHEET 2)
4. ALL EXTERIOR SUBDIVISION BOUNDARY CORNERS ARE AS SHOWN PER THIS PLAT IN CONFORMANCE WITH ARIZONA STATUTE. ALL INTERIOR CORNERS AND MONUMENTS ARE TO BE SET BY THE SURVEYOR RESPONSIBLE FOR THE CONSTRUCTION SURVEY AND STAKING OF THIS PROJECT AND MUST BE IN CONFORMANCE WITH SAID ARIZONA STATUTORY REQUIREMENTS.
5. PROVISIONS SHALL BE MADE FOR DEVELOPMENT AND MAINTENANCE OF STREET LIGHTS THROUGH THE CREATION OF A STREET LIGHT IMPROVEMENT DISTRICT (S.L.I.D.).
6. NO ON–SITE GRADING OR EXCAVATION SHALL OCCUR WITHOUT FIRST OBTAINING A PERMIT FROM THE CITY OF SURPRISE.
7. IN ACCORDANCE WITH ARS § 9–461.07, THE CITY OF SURPRISE HAS DETERMINED THAT ALL DEDICATIONS OCCURRING WITH THIS PLAT ARE IN CONFORMANCE WITH THE SURPRISE GENERAL PLAN.
8. PURSUANT TO A.R.S. § 42–1102, THE CITY OF SURPRISE, A POLITICAL SUBDIVISION OF THE STATE OF ARIZONA, IS EXEMPT FROM ALL TAXES AND ASSESSMENTS BASED ON ASSESSED VALUE EXCEPT FOR SPECIAL DISTRICTS # 14751 AND 14710, WHEN APPLICABLE.
9. THE MAINTENANCE OF LANDSCAPING WITHIN THE OPEN SPACES, LANDSCAPED TRACTS, RETENTION BASINS, AND PARKS SHALL BE THE RESPONSIBILITY OF THE OWNER OR THE HOMEOWNERS' ASSOCIATION FORMED BY THE OWNER.
10. THE MAINTENANCE OF LANDSCAPING WITHIN THE ADJACENT PUBLIC RIGHTS–OF–WAY, INCLUDING LANDSCAPED MEDIANS WITHIN COLLECTORS AND LOCAL STREETS, AND LANDSCAPED AREAS BETWEEN THE CURB AND THE DETACHED SIDEWALK, SHALL BE THE RESPONSIBILITY OF THE ADJACENT PROPERTY OWNER OR THE HOMEOWNERS' ASSOCIATION FORMED BY THE ADJACENT PROPERTY.
11. LANDSCAPING MAINTENANCE OF THE MEDIANS WITHIN THE PUBLIC RIGHT–OF–WAY WITHIN ANY ARTERIAL OR PARKWAY STREET CLASSIFICATION SHALL BE RESPONSIBILITY OF THE CITY OF SURPRISE AFTER ACCEPTANCE.
12. THIS FINAL PLAT IS IN SUBSTANTIAL CONFORMANCE WITH THE PRELIMINARY PLAT APPROVED BY THE CITY OF SURPRISE UNDER CASE FS23–0141.
13. DEVELOPMENT STANDARDS ARE PER THE CITY OF SURPRISE ZONING CASE FS22–0756 OR AS SUBSEQUENTLY AMENDED.

CITY OF SURPRISE ENGINEER APPROVAL:

DATA ON THIS PLAT REVIEWED AND APPROVED THIS_____ DAY OF _____, 2024, BY THE CITY ENGINEER OF SURPRISE, ARIZONA.

APPROVED_____
CITY ENGINEER

CITY OF SURPRISE COUNCIL APPROVAL:

APPROVED BY THE CITY COUNCIL OF THE CITY OF SURPRISE, ARIZONA.

THIS _____ DAY OF _____, 2024.

ATTEST:

_____
MAYOR DATE

_____
CITY CLERK DATE

CERTIFICATION

THIS IS TO CERTIFY THAT THE SURVEY AND SUBDIVISION OF THE PREMISES DESCRIBED AND PLATTED HEREON WAS MADE UNDER MY DIRECTION DURING THE MONTH OF SEPTEMBER, 2023; THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN; THAT THE EXTERIOR BOUNDARY MONUMENTS SHOWN ACTUALLY EXIST OR WILL BE SET AS SHOWN; THAT THEIR POSITIONS ARE CORRECTLY SHOWN; AND THAT SAID MONUMENTS ARE SUFFICIENT TO ENABLE THIS SURVEY TO BE RETRACED.

BRIAN J. BENEDICT
RLS 32222
HILGARTWILSON, LLC
2141 E. HIGHLAND AVE., STE. 250
PHOENIX, ARIZONA 85016
P: 602.490.0535
bbenedict@hilgartwilson.com



NOTE:
A.R.S. 32–151 STATES THAT THE USE OF THE WORD "CERTIFY" OR "CERTIFICATION" BY A PERSON OR FIRM THAT IS REGISTERED OR CERTIFIED BY THE BOARD IS AN EXPRESSION OF PROFESSIONAL OPINION REGARDING FACTS OR FINDINGS THAT ARE SUBJECT OF THE CERTIFICATION AND DOES NOT CONSTITUTE AN EXPRESS OR IMPLIED WARRANTY OR GUARANTEE.

HILGARTWILSON
HAS JOINED COLLIERS ENGINEERING & DESIGN
2141 E. HIGHLAND AVE., STE. 250 | P: 602.490.0535 / F: 602.368.2436
PHOENIX, AZ 85016 www.hilgartwilson.com

ASANTE - UNIT 3.6A AND UNIT 3.6B
ASANTE BOULEVARD & PAT TILLMAN BOULEVARD
SURPRISE, ARIZONA

FINAL PLAT

STATUS:
PROJ. NO.: 1909
DATE: FEB 2024
SCALE: NONE
DRAWN: GS
APPROVED: BJB

MUNICIPAL TRACKING NO:

DWG. NO.
FP01
SHT. 1 OF 7

FS23-0841

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U:\1900\1909\SURVEY\PLAT\ASANTE 900\PLANNING AREA 4\ASANTE UNIT 3.6A AND UNIT 3.6B\1909-AU3.6A-FP01.dwg 2/12/2024 1:30 PM

LEGAL DESCRIPTION

A PORTION OF THE WEST HALF OF SECTION 1 AND EAST HALF OF SECTION 2, TOWNSHIP 4 NORTH, RANGE 2 WEST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A FOUND 2" ALUMINUM CAP ACCEPTED AS THE SOUTHWEST CORNER OF SECTION 36, TOWNSHIP 5 NORTH, RANGE 2 WEST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, FROM WHICH A FOUND GLO BRASS CAP ACCEPTED AS THE SOUTH QUARTER CORNER OF SAID SECTION 36 BEARS SOUTH 89°40'45" EAST, 2639.49 FEET;
THENCE SOUTH 89°40'45" EAST, 907.94 FEET ALONG THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 36 TO THE NORTHWEST CORNER OF SAID SECTION 1;
THENCE LEAVING SAID SOUTH LINE, SOUTH 00°46'45" WEST, 1968.83 FEET ALONG THE WEST LINE OF THE NORTHWEST QUARTER OF SAID SECTION 1;
THENCE LEAVING SAID WEST LINE, SOUTH 89°13'15" EAST, 74.70 FEET TO THE **POINT OF BEGINNING;**
THENCE NORTH 43°31'21" EAST, 50.00 FEET;
THENCE NORTH 88°31'21" EAST, 28.28 FEET;
THENCE NORTH 43°31'21" EAST, 210.00 FEET;
THENCE NORTH 01°28'39" WEST, 28.28 FEET;
THENCE NORTH 43°31'21" EAST, 50.00 FEET;
THENCE NORTH 88°31'21" EAST, 28.28 FEET;
THENCE SOUTH 44°39'59" EAST, 50.02 FEET;
THENCE NORTH 43°31'21" EAST, 62.09 FEET TO THE BEGINNING OF A TANGENT CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 375.00 FEET;
THENCE NORTHEASTERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 05°34'50", AN ARC LENGTH OF 36.52 FEET TO A TANGENT LINE;
THENCE NORTH 49°06'11" EAST, 111.00 FEET;
THENCE SOUTH 35°58'23" EAST, 17.30 FEET;
THENCE SOUTH 45°10'19" EAST, 50.95 FEET;
THENCE SOUTH 37°45'38" EAST, 49.43 FEET;
THENCE SOUTH 29°39'43" EAST, 49.43 FEET;
THENCE SOUTH 21°33'48" EAST, 49.43 FEET;
THENCE SOUTH 14°52'12" EAST, 51.88 FEET;
THENCE SOUTH 14°14'19" EAST, 159.00 FEET;
THENCE SOUTH 14°21'09" EAST, 54.51 FEET;
THENCE SOUTH 16°29'06" EAST, 58.59 FEET;
THENCE SOUTH 19°24'16" EAST, 58.59 FEET;
THENCE SOUTH 22°19'26" EAST, 58.59 FEET;
THENCE SOUTH 25°02'30" EAST, 50.50 FEET;
THENCE SOUTH 28°02'06" EAST, 69.64 FEET;
THENCE SOUTH 31°30'18" EAST, 69.64 FEET;
THENCE SOUTH 34°58'31" EAST, 69.64 FEET;
THENCE SOUTH 38°17'41" EAST, 444.15 FEET;
THENCE SOUTH 39°22'59" EAST, 68.91 FEET;
THENCE SOUTH 43°49'50" EAST, 71.35 FEET;
THENCE SOUTH 67°16'01" EAST, 40.14 FEET TO A NON-TANGENT CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 360.00 FEET, THE CENTER OF WHICH BEARS SOUTH 67°16'01" EAST;
THENCE SOUTHWESTERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 23°18'50", AN ARC LENGTH OF 146.49 FEET TO A TANGENT LINE;
THENCE SOUTH 00°34'51" EAST, 25.18 FEET TO THE NORTHERLY RIGHT OF WAY LINE OF HAPPY VALLEY ROAD AS SHOWN ON THE MASTER PLAT FOR ASANTE PLANNING AREA 3 RECORDED IN BOOK 1733, PAGE 2, MARICOPA COUNTY RECORDS;
THENCE THE FOLLOWING ELEVEN (11) COURSES ALONG SAID NORTHERLY RIGHT OF WAY LINE:
THENCE SOUTH 44°42'35" WEST, 28.14 FEET;
THENCE NORTH 90°00'00" WEST, 147.65 FEET;
THENCE NORTH 00°00'00" EAST, 5.00 FEET;
THENCE NORTH 90°00'00" WEST, 205.00 FEET;
THENCE NORTH 45°00'00" WEST, 28.28 FEET;
THENCE SOUTH 85°54'22" WEST, 70.18 FEET;
THENCE SOUTH 44°31'41" WEST, 28.52 FEET TO A NON-TANGENT CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 855.00 FEET, THE CENTER OF WHICH BEARS SOUTH 01°37'17" EAST;
THENCE SOUTHWESTERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 22°53'20", AN ARC LENGTH OF 341.56 FEET TO A NON-TANGENT LINE;
THENCE NORTH 24°30'37" WEST, 5.00 FEET TO A NON-TANGENT CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 860.00 FEET, THE CENTER OF WHICH BEARS SOUTH 24°30'37" EAST;
THENCE SOUTHWESTERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 13°41'25", AN ARC LENGTH OF 205.49 FEET TO A NON-TANGENT LINE;
THENCE NORTH 87°43'01" WEST, 30.34 FEET TO THE NORTHERLY RIGHT OF WAY LINE OF COTTONTAIL LANE OF SAID MASTER PLAT;
THENCE THE FOLLOWING THREE (3) COURSES ALONG SAID NORTHERLY RIGHT OF WAY LINE:
THENCE NORTH 46°28'39" WEST, 940.13 FEET;
THENCE NORTH 01°28'39" WEST, 28.28 FEET;
THENCE NORTH 46°28'39" WEST, 50.00 FEET;
THENCE LEAVING SAID NORTHERLY RIGHT OF WAY LINE, NORTH 43°31'21" EAST, 770.64 FEET;
THENCE NORTH 01°28'39" WEST, 28.28 FEET TO THE **POINT OF BEGINNING.**

LOT TABLE		
LOT NO.	AREA (SQ.FT)	AREA (ACRES)
LOT : 1	5748	0.1319
LOT : 2	5760	0.1322
LOT : 3	5760	0.1322
LOT : 4	5760	0.1322
LOT : 5	5760	0.1322
LOT : 6	5760	0.1322
LOT : 7	5760	0.1322
LOT : 8	5760	0.1322
LOT : 9	8188	0.1880
LOT : 10	8180	0.1878
LOT : 11	8124	0.1865
LOT : 12	8055	0.1849
LOT : 13	7877	0.1808
LOT : 14	8099	0.1859
LOT : 15	7765	0.1783
LOT : 16	7136	0.1638
LOT : 17	7400	0.1699
LOT : 18	7651	0.1756
LOT : 19	6395	0.1468
LOT : 20	5760	0.1322

LOT TABLE		
LOT NO.	AREA (SQ.FT)	AREA (ACRES)
LOT : 21	5760	0.1322
LOT : 22	5981	0.1373
LOT : 23	6034	0.1385
LOT : 24	6034	0.1385
LOT : 25	5932	0.1362
LOT : 26	5760	0.1322
LOT : 27	5760	0.1322
LOT : 28	5977	0.1372
LOT : 29	6397	0.1469
LOT : 30	7584	0.1741
LOT : 31	8806	0.2022
LOT : 32	6382	0.1465
LOT : 33	6187	0.1420
LOT : 34	6138	0.1409
LOT : 35	6184	0.1420
LOT : 36	6225	0.1429
LOT : 37	6224	0.1429
LOT : 38	6211	0.1426
LOT : 39	6284	0.1443
LOT : 40	6353	0.1458

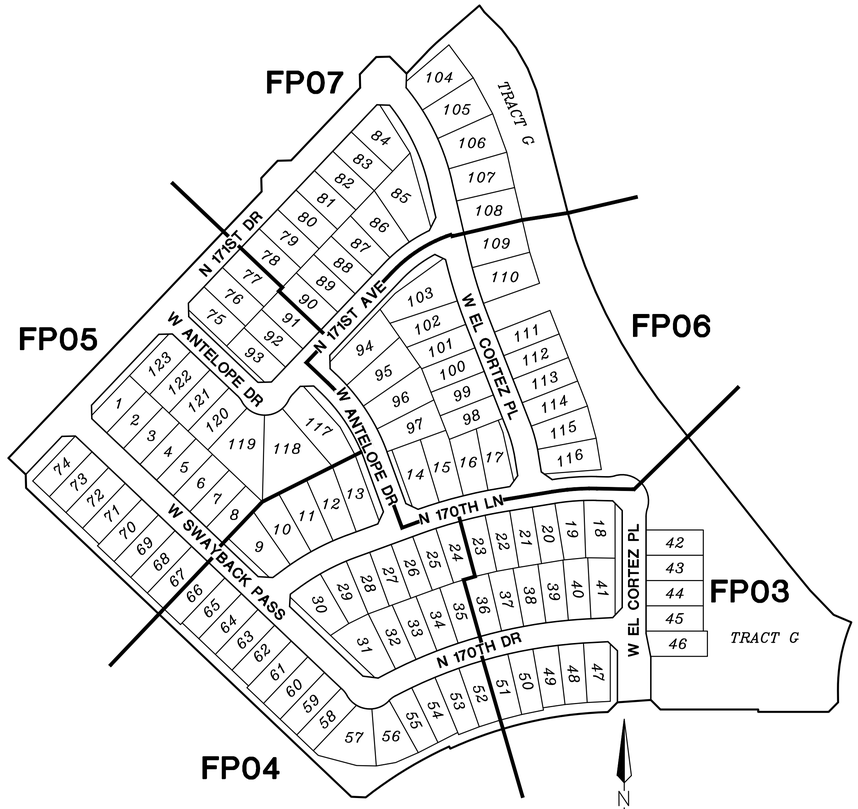
LOT TABLE		
LOT NO.	AREA (SQ.FT)	AREA (ACRES)
LOT : 41	6789	0.1559
LOT : 42	6360	0.1460
LOT : 43	6360	0.1460
LOT : 44	6360	0.1460
LOT : 45	6360	0.1460
LOT : 46	6585	0.1512
LOT : 47	6547	0.1503
LOT : 48	6267	0.1439
LOT : 49	6267	0.1439
LOT : 50	6500	0.1492
LOT : 51	6500	0.1492
LOT : 52	6500	0.1492
LOT : 53	6500	0.1492
LOT : 54	6327	0.1452
LOT : 55	6407	0.1471
LOT : 56	8058	0.1850
LOT : 57	10455	0.2400
LOT : 58	6342	0.1456
LOT : 59	6480	0.1488
LOT : 60	6480	0.1488

LOT TABLE		
LOT NO.	AREA (SQ.FT)	AREA (ACRES)
LOT : 61	6480	0.1488
LOT : 62	6240	0.1433
LOT : 63	6240	0.1433
LOT : 64	6240	0.1433
LOT : 65	6240	0.1433
LOT : 66	6480	0.1488
LOT : 67	6480	0.1488
LOT : 68	6480	0.1488
LOT : 69	6480	0.1488
LOT : 70	6480	0.1488
LOT : 71	6240	0.1433
LOT : 72	6240	0.1433
LOT : 73	6240	0.1433
LOT : 74	6240	0.1433
LOT : 75	6842	0.1571
LOT : 76	6720	0.1543
LOT : 77	6720	0.1543
LOT : 78	6720	0.1543
LOT : 79	6720	0.1543
LOT : 80	6720	0.1543

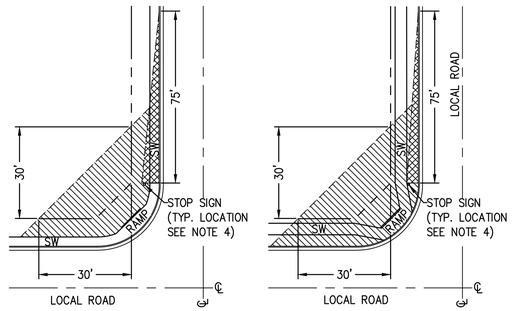
LOT TABLE		
LOT NO.	AREA (SQ.FT)	AREA (ACRES)
LOT : 81	6720	0.1543
LOT : 82	6720	0.1543
LOT : 83	6720	0.1543
LOT : 84	8161	0.1874
LOT : 85	11216	0.2575
LOT : 86	7721	0.1772
LOT : 87	6659	0.1529
LOT : 88	6360	0.1460
LOT : 89	6360	0.1460
LOT : 90	6360	0.1460
LOT : 91	6360	0.1460
LOT : 92	6360	0.1460
LOT : 93	6310	0.1449
LOT : 94	10035	0.2304
LOT : 95	9624	0.2209
LOT : 96	9076	0.2084
LOT : 97	7955	0.1826
LOT : 98	6360	0.1460
LOT : 99	6360	0.1460
LOT : 100	6360	0.1460

LOT TABLE		
LOT NO.	AREA (SQ.FT)	AREA (ACRES)
LOT : 101	6713	0.1541
LOT : 102	7848	0.1802
LOT : 103	10662	0.2448
LOT : 104	9586	0.2201
LOT : 105	9630	0.2211
LOT : 106	9630	0.2211
LOT : 107	9099	0.2089
LOT : 108	8761	0.2011
LOT : 109	8954	0.2056
LOT : 110	9202	0.2112
LOT : 111	6625	0.1521
LOT : 112	6625	0.1521
LOT : 113	6625	0.1521
LOT : 114	6799	0.1561
LOT : 115	7484	0.1718
LOT : 116	7436	0.1707
LOT : 117	10959	0.2516
LOT : 118	16042	0.3683
LOT : 119	12733	0.2923
LOT : 120	7025	0.1613

LOT TABLE		
LOT NO.	AREA (SQ.FT)	AREA (ACRES)
LOT : 121	6875	0.1578
LOT : 122	7000	0.1607
LOT : 123	7237	0.1662



SHEET INDEX MAP
N.T.S.



LOCAL STREET
SIGHT VISIBILITY TRIANGLES

NOTES:

1. SIGNS, FENCES, WALLS, UTILITY BOXES, STRUCTURES, SHRUBS, HEDGES OR OTHER PLANTS, BUT EXCLUDING TREES OVER 30 INCHES IN HEIGHT SHALL NOT BE PERMITTED WITHIN THE RESTRICTED AREAS.

2. PLANTING WITHIN THE R/W IN VIEW EASEMENTS SHALL BE PER THE APPROVED TYPES AND DIMENSIONS AND SHALL NOT ENCROACH WITHIN THE SIGHT TRIANGLE PER AASHTO GUIDELINES.

3. TREES ARE PERMITTED WITHIN THE RESTRICTED AREAS PROVIDED:

   A. NO LIMBS, LEAVES, NEEDLES OR OTHER FOLIAGE ABOVE 30 INCHES OR BELOW 84 INCHES ARE PERMITTED.

   B. TREES SHALL NOT OBSTRUCT MORE THAN 20% OF THE VISIBILITY WHEN COMBINED WITH OTHER OBSTRUCTIONS PRESENT.

4. STOP SIGN SHALL BE INSTALLED AT 2' MINIMUM BEHIND BACK OF CURB.

UNOBSTRUCTED VIEW EASEMENT AREA (SEE NOTE #3)

NO VEGETATION OVER 30 INCHES IN HEIGHT

FLOOD ZONE DESIGNATION

THE FOLLOWING FLOOD PLAIN DESIGNATION AND ASSOCIATED COMMENTS ARE COPIED DIRECTLY FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) WEBSITE. HILGARTWILSON, LLC AND THE UNDERSIGNED REGISTERED PROFESSIONAL LAND SURVEYOR MAKE NO STATEMENT AS TO THE ACCURACY OR COMPLETENESS OF THE FOLLOWING FLOOD ZONE DESIGNATION STATEMENT.

THE SUBJECT PROPERTY LIES WITHIN SHADED ZONE "X" WITH A DEFINITION OF: 0.2-PERCENT-ANNUAL-CHANCE FLOODPLAIN, AREAS OF 1-PERCENT-ANNUAL-CHANCE (BASE FLOOD) SHEET FLOW FLOODING WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT, AREAS OF BASE FLOOD STREAM FLOODING WITH A CONTRIBUTING DRAINAGE AREA OF LESS THAN 1 SQUARE MILE, OR AREAS PROTECTED FROM THE BASE FLOOD BY LEVEES. NO BFES OR DEPTHS ARE SHOWN IN THIS ZONE, AND INSURANCE PURCHASE IS NOT REQUIRED. DESIGNATION DETERMINED BY FEMA FLOOD ZONE MAP 04013C1210L, PANEL NUMBER 1210 OF 4425, EFFECTIVE DATE OCTOBER 16, 2013.

AREAS

ROW AREA =	300,703 SQ. FT.	6.9032 ACRES
TRACTS A-L AREA =	327,593 SQ. FT.	7.5205 ACRES
LOT AREA =	873,941 SQ. FT.	20.0629 ACRES
GROSS AREA =	1,502,238 SQ. FT.	34.4866 ACRES
NET AREA =	1,201,534 SQ. FT.	27.5834 ACRES
DENSITY (GROSS) =		3.6 D.U. / ACRE
DENSITY (NET) =		4.5 D.U. / ACRE

TRACT TABLE		
TRACT	AREA (ACRES)	USE
TRACT A	0.0758	COMMON AREA
TRACT B	0.0381	COMMON AREA
TRACT C	0.1175	COMMON AREA
TRACT D	0.0299	COMMON AREA
TRACT E	0.0340	COMMON AREA
TRACT F	0.0753	COMMON AREA
TRACT G	5.9786	COMMON AREA & DRAINAGE
TRACT H	0.0787	COMMON AREA
TRACT I	0.8415	COMMON AREA
TRACT J	0.0482	COMMON AREA
TRACT K	0.1106	COMMON AREA
TRACT L	0.0921	COMMON AREA

1. COMMON AREAS MAY INCLUDE OPEN SPACE, LANDSCAPING, PEDESTRIAN PATHS AND/OR AMENITIES.
2. SPECIFIC EASEMENTS THAT ARE BEING DEDICATED AS PART OF THIS PLAT ARE FULLY DELINEATED ON THE FOLLOWING SHEETS.
3. THE USES SHOWN IN THE TRACT TABLE ABOVE DO NOT INTEND TO GRANT EASEMENTS THAT ARE BLANKET IN NATURE OVER THE ENTIRE TRACT.

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
32222
BRIAN J.
BENEDICT
2/13/24
Date Signed
ARIZONA, U.S.A.

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PHOENIX, AZ 85016 www.hilgartwilson.com

ASANTE - UNIT 3.6A AND UNIT 3.6B
ASANTE BOULEVARD & PAT TILLMAN BOULEVARD
SURPRISE, ARIZONA

FINAL PLAT

STATUS:
PROJ. NO.: 1909
DATE: FEB 2024
SCALE: NONE
DRAWN: GS
APPROVED: BJB
MUNICIPAL TRACKING NO:

DWG. NO.
FP02
SHT. 2 OF 7

FS23-0841

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CURVE TABLE			
CURVE NO.	RADIUS	DELTA	LENGTH
C2	360.00'	23°18'50"	146.49'
C4	500.00'	10°27'07"	91.21'
C6	1000.00'	10°47'00"	188.20'
C11	55.00'	123°31'23"	118.57'
C12	55.00'	17°20'29"	16.65'

LINE TABLE		
LINE NO.	DIRECTION	LENGTH
L24	S39°22'59"E	68.91'
L25	S43°49'50"E	71.35'
L26	S67°16'01"E	40.14'
L27	S00°34'51"E	25.18'
L28	S44°42'35"W	28.14'
L29	N00°00'00"E	5.00'
L30	N45°00'00"W	28.28'
L31	S85°54'22"W	70.18'
L32	S44°31'41"W	28.52'
L61	S44°25'12"E	28.57'
L62	N43°30'00"E	29.01'
L63	N46°30'00"W	27.53'
L64	N11°18'36"W	50.99'
L66	N73°28'01"E	24.79'

LEGEND

○	FOUND MONUMENT AS NOTED
⊡	FOUND BRASS CAP IN HAND HOLE
⊙	FOUND BRASS CAP FLUSH
◉	BRASS CAP, FLUSH PER MAG STD DTL 120 TYPE "B"
●	SET 1/2" REBAR W/ CAP, RLS 32222 OR AS NOTED
———	BOUNDARY LINE
—— —— ——	SECTION LINE
——— – ———	CENTER LINE
—— – – – ——	RIGHT OF WAY
———	PARCEL LINE
– – – – – –	EASEMENT LINE
R/W	RIGHT-OF-WAY
PUE	PUBLIC UTILITY EASEMENT
VNAE	VEHICLE NON-ACCESS EASEMENT
MCR	MARICOPA COUNTY RECORDS
RLS	REGISTERED LAND SURVEYOR
APN	ASSESSOR PARCEL NUMBER
P.O.B.	POINT OF BEGINNING
P.O.C.	POINT OF COMMENCEMENT
①	30'X30' SIGHT VISIBILITY TRIANGLE EASEMENTS (SEE NOTE 3, PAGE 1)
◇1	BOOK 1733, PAGE 2, MCR

MATCH SHEET 6

MATCH SHEET 4

MATCH SHEET 4

N 170TH LN

N 170TH DR

W EL CORTEZ PL

W HAPPY VALLEY RD

TRACT F

TRACT I

TRACT G

S35°17'41"E 444.15'

(UNSUBDIVIDED)
ASANTE DEVELOPMENT PARTNERS, LLC
DOC. NO. 2022-0438304, MCR

(UNSUBDIVIDED)
ASANTE DEVELOPMENT PARTNERS, LLC
DOC. NO. 2022-0438304, MCR

R=1000.00' D=27°48'45" L=485.42'

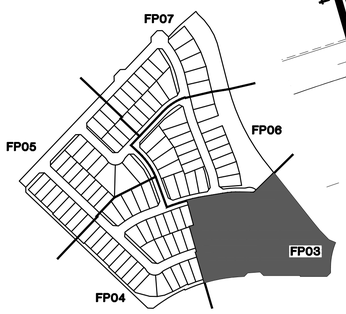
R=855.00' D=22°53'20" L=341.56'

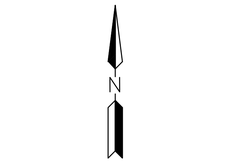
N90°00'00"W 205.00'

N90°00'00"W 147.65'

S01°37'17"E RADIAL

S67°16'01"E RADIAL







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ASANTE - UNIT 3.6A AND UNIT 3.6B
ASANTE BOULEVARD & PAT TILLMAN BOULEVARD
SURPRISE, ARIZONA

FINAL PLAT

STATUS:
PROJ. NO.: 1909
DATE: FEB 2024
SCALE: AS SHOWN
DRAWN: GS
APPROVED: BJB
MUNICIPAL TRACKING NO:

DWG. NO.
FP03
SHT. 3 OF 7

FS23-0841

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LINE TABLE		
LINE NO.	DIRECTION	LENGTH
L33	N24°30'37"W	5.00'
L34	N87°43'01"W	30.34'
L55	S86°28'39"E	30.64'
L56	N03°31'21"E	25.71'
L57	N24°55'28"E	28.28'
L65	S82°50'04"E	32.21'

LEGEND

○	FOUND MONUMENT AS NOTED
⊡	FOUND BRASS CAP IN HAND HOLE
◎	FOUND BRASS CAP FLUSH
◉	BRASS CAP, FLUSH PER MAG STD DTL 120 TYPE "B"
●	SET 1/2" REBAR W/ CAP, RLS 32222 OR AS NOTED
	BOUNDARY LINE
	SECTION LINE
	CENTER LINE
	RIGHT OF WAY
	PARCEL LINE
	EASEMENT LINE
R/W	RIGHT-OF-WAY
PUE	PUBLIC UTILITY EASEMENT
VNAE	VEHICLE NON-ACCESS EASEMENT
MCR	MARICOPA COUNTY RECORDS
RLS	REGISTERED LAND SURVEYOR
APN	ASSESSOR PARCEL NUMBER
P.O.B.	POINT OF BEGINNING
P.O.C.	POINT OF COMMENCEMENT
①	30'X30' SIGHT VISIBILITY TRIANGLE EASEMENTS (SEE NOTE 3, PAGE 1)
◇1	BOOK 1733, PAGE 2, MCR

CURVE TABLE			
CURVE NO.	RADIUS	DELTA	LENGTH
C5	400.00'	26°24'07"	184.32'
C6	1000.00'	10°47'00"	188.20'
C13	55.00'	18°21'25"	17.62'
C14	55.00'	107°02'02"	102.75'
C15	55.00'	17°20'29"	16.65'

N

40 20 0 40 80

SCALE: 1" = 40'

REGISTERED LAND SURVEYOR
CERTIFICATE NO. 32222
BRIAN J. BENEDICT
2/13/24
Date Signed
ARIZONA, U.S.A.

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ASANTE - UNIT 3.6A AND UNIT 3.6B

ASANTE BOULEVARD & PAT TILLMAN BOULEVARD
SURPRISE, ARIZONA

FINAL PLAT

STATUS:

MUNICIPAL TRACKING NO:

PROJ. NO.: 1909
DATE: FEB 2024
SCALE: AS SHOWN
DRAWN: GS
APPROVED: BJB

DWG. NO.
FP04
SHT. 4 OF 7

FS23-0841

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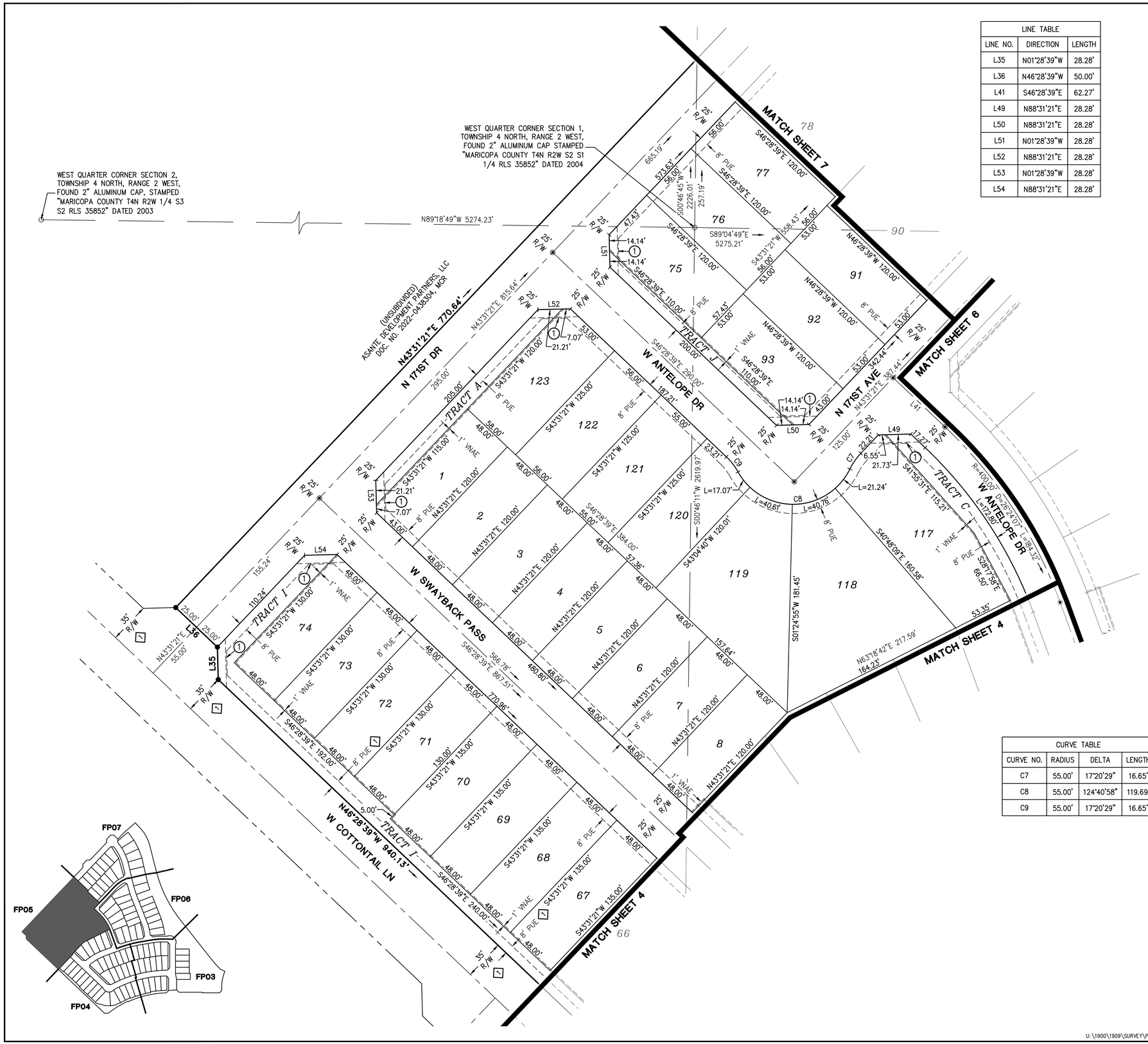

LINE TABLE		
LINE NO.	DIRECTION	LENGTH
L35	N01°28'39"W	28.28'
L36	N46°28'39"W	50.00'
L41	S46°28'39"E	62.27'
L49	N88°31'21"E	28.28'
L50	N88°31'21"E	28.28'
L51	N01°28'39"W	28.28'
L52	N88°31'21"E	28.28'
L53	N01°28'39"W	28.28'
L54	N88°31'21"E	28.28'

LEGEND

- FOUND MONUMENT AS NOTED
- FOUND BRASS CAP IN HAND HOLE
- FOUND BRASS CAP FLUSH
- BRASS CAP, FLUSH PER MAG STD DTL 120 TYPE "B"
- SET 1/2" REBAR W/ CAP, RLS 32222 OR AS NOTED
- BOUNDARY LINE
- SECTION LINE
- CENTER LINE
- RIGHT OF WAY
- PARCEL LINE
- EASEMENT LINE
- R/W — RIGHT-OF-WAY
- PUE — PUBLIC UTILITY EASEMENT
- VNAE — VEHICLE NON-ACCESS EASEMENT
- MCR — MARICOPA COUNTY RECORDS
- RLS — REGISTERED LAND SURVEYOR
- APN — ASSESSOR PARCEL NUMBER
- P.O.B. — POINT OF BEGINNING
- P.O.C. — POINT OF COMMENCEMENT
- 30'X30' SIGHT VISIBILITY TRIANGLE EASEMENTS (SEE NOTE 3, PAGE 1)
- BOOK 1733, PAGE 2, MCR

N

40 20 0 40 80

SCALE: 1" = 40'

CURVE TABLE			
CURVE NO.	RADIUS	DELTA	LENGTH
C7	55.00'	17°20'29"	16.65'
C8	55.00'	124°40'58"	119.69'
C9	55.00'	17°20'29"	16.65'

REGISTERED LAND SURVEYOR
CERTIFICATE NO. 32222
BRIAN J. BENEDICT
Date Signed 2/13/24
ARIZONA, U.S.A.

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ASANTE BOULEVARD & PAT TILLMAN BOULEVARD
SURPRISE, ARIZONA

FINAL PLAT

STATUS:

MUNICIPAL TRACKING NO:

PROJ. NO.: 1909
DATE: FEB 2024
SCALE: AS SHOWN
DRAWN: GS
APPROVED: BJB

DWG. NO.
FP05
SHT. 5 OF 7

FS23-0841

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LINE TABLE		
LINE NO.	DIRECTION	LENGTH
L17	S16°29'06"E	58.59'
L18	S19°24'16"E	58.59'
L19	S22°19'26"E	58.59'
L20	S25°02'30"E	50.50'
L21	S28°02'06"E	69.64'
L22	S31°30'18"E	69.64'
L23	S34°58'31"E	69.64'
L41	S46°28'39"E	62.27'
L42	N69°55'28"E	32.53'
L43	N13°00'51"W	43.12'
L47	S64°27'03"E	24.95'
L48	N01°28'39"W	28.28'
L58	N65°00'21"W	28.32'
L59	N35°42'28"E	28.28'
L60	N54°42'58"W	28.09'

LEGEND

○	FOUND MONUMENT AS NOTED
⊡	FOUND BRASS CAP IN HAND HOLE
◎	FOUND BRASS CAP FLUSH
◉	BRASS CAP, FLUSH PER MAG STD DTL 120 TYPE "B"
●	SET 1/2" REBAR W/ CAP, RLS 32222 OR AS NOTED
———	BOUNDARY LINE
— — —	SECTION LINE
———	CENTER LINE
———	RIGHT OF WAY
———	PARCEL LINE
- - - - -	EASEMENT LINE
R/W	RIGHT-OF-WAY
PUE	PUBLIC UTILITY EASEMENT
VNAE	VEHICLE NON-ACCESS EASEMENT
MCR	MARICOPA COUNTY RECORDS
RLS	REGISTERED LAND SURVEYOR
APN	ASSESSOR PARCEL NUMBER
P.O.B.	POINT OF BEGINNING
P.O.C.	POINT OF COMMENCEMENT
①	30'X30' SIGHT VISIBILITY TRIANGLE EASEMENTS (SEE NOTE 3, PAGE 1)
◇1	BOOK 1733, PAGE 2, MCR

CURVE TABLE			
CURVE NO.	RADIUS	DELTA	LENGTH
C3	300.00'	12°06'25"	63.39'
C4	500.00'	10°27'07"	91.21'
C10	55.00'	17°20'29"	16.65'
C11	55.00'	123°31'23"	118.57'

EAST QUARTER CORNER
SECTION 1, TOWNSHIP 4
NORTH, RANGE 2 WEST,
NOTHING FOUND, NOTHING SET
(CALCULATED POSITION)

(UNSUBDIVIDED)
ASANTE DEVELOPMENT PARTNERS, LLC
DOC. NO. 2022-0438304, MCR

SCALE: 1" = 40'

32222
BRIAN J.
BENEDICT
2/13/24
Date Signed
REGISTERED LAND SURVEYOR
CERTIFICATE NO.
ARIZONA, U.S.A.

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ASANTE - UNIT 3.6A AND UNIT 3.6B
ASANTE BOULEVARD & PAT TILLMAN BOULEVARD
SURPRISE, ARIZONA

FINAL PLAT

STATUS:
PROJ. NO.: 1909
DATE: FEB 2024
SCALE: AS SHOWN
DRAWN: GS
APPROVED: BJB
MUNICIPAL TRACKING NO:

DWG. NO.
FP06
SHT. 6 OF 7

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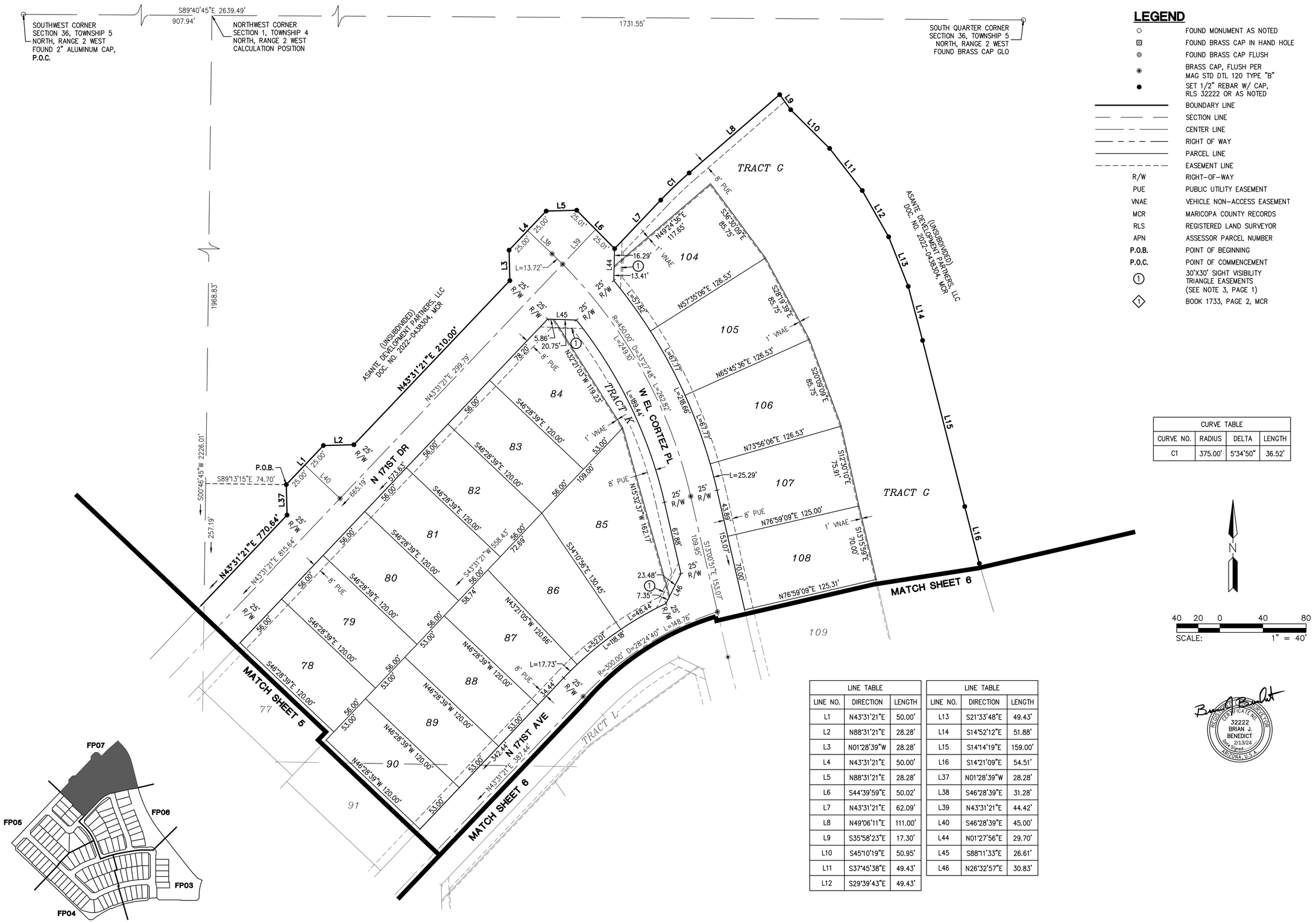

LEGEND

○	FOUND MONUMENT AS NOTED
▣	FOUND BRASS CAP IN HAND HOLE
◎	FOUND BRASS CAP FLUSH
◉	BRASS CAP, FLUSH PER MAG STD DTL 120 TYPE "B"
●	SET 1/2" REBAR W/ CAP, RLS 32222 OR AS NOTED
———	BOUNDARY LINE
— —— —	SECTION LINE
——— – ———	CENTER LINE
—— – – – ——	RIGHT OF WAY
———	PARCEL LINE
– – – – – –	EASEMENT LINE
R/W	RIGHT–OF–WAY
PUE	PUBLIC UTILITY EASEMENT
VNAE	VEHICLE NON–ACCESS EASEMENT
MCR	MARICOPA COUNTY RECORDS
RLS	REGISTERED LAND SURVEYOR
APN	ASSESSOR PARCEL NUMBER
P.O.B.	POINT OF BEGINNING
P.O.C.	POINT OF COMMENCEMENT
①	30'X30' SIGHT VISIBILITY TRIANGLE EASEMENTS (SEE NOTE 3, PAGE 1)
◇1	BOOK 1733, PAGE 2, MCR

CURVE TABLE			
CURVE NO.	RADIUS	DELTA	LENGTH
C1	375.00'	5°34'50"	36.52'

LINE TABLE		
LINE NO.	DIRECTION	LENGTH
L1	N43°31'21"E	50.00'
L2	N88°31'21"E	28.28'
L3	N01°28'39"W	28.28'
L4	N43°31'21"E	50.00'
L5	N88°31'21"E	28.28'
L6	S44°39'59"E	50.02'
L7	N43°31'21"E	62.09'
L8	N49°06'11"E	111.00'
L9	S35°58'23"E	17.30'
L10	S45°10'19"E	50.95'
L11	S37°45'38"E	49.43'
L12	S29°39'43"E	49.43'

LINE TABLE		
LINE NO.	DIRECTION	LENGTH
L13	S21°33'48"E	49.43'
L14	S14°52'12"E	51.88'
L15	S14°14'19"E	159.00'
L16	S14°21'09"E	54.51'
L37	N01°28'39"W	28.28'
L38	S46°28'39"E	31.28'
L39	N43°31'21"E	44.42'
L40	S46°28'39"E	45.00'
L44	N01°27'56"E	29.70'
L45	S88°11'33"E	26.61'
L46	N26°32'57"E	30.83'

40 20 0 40 80
SCALE: 1" = 40'

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
32222
BRIAN J.
BENEDICT
2/13/24
Date Signed
ARIZONA, U.S.A.

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ASANTE - UNIT 3.6A AND UNIT 3.6B
ASANTE BOULEVARD & PAT TILLMAN BOULEVARD
SURPRISE, ARIZONA

FINAL PLAT

STATUS:
PROJ. NO.: 1909
DATE: FEB 2024
SCALE: AS SHOWN
DRAWN: CS
APPROVED: BJB
MUNICIPAL TRACKING NO:

DWG. NO.
FP07
SHT. 7 OF 7

FS23-0841

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DEPARTMENT OF THE AIR FORCE
AIR EDUCATION AND TRAINING COMMAND

25 September 2023

Mr. Christopher P. Toale
Director, Community Initiatives Team
56th Fighter Wing
14185 W. Falcon Street
Luke AFB AZ 85309-1629

Ms. Tierney Farago
Planning Project Coordinator
City of Surprise – Community Development
16000 N Civic Center Plaza
Surprise, AZ 85374

RE: FS23-0841; Asante Planning Area 4 (APN: 503-74-977)

Dear Ms. Farago

Thank you for the opportunity to comment on the final site application for Asante Planning Area 4, Unit 3.6A & Unit 3.6B. The site sits on approximately 34.5 acres and is located at Cottontail Lane and Happy Valley Road in Surprise, AZ. The request is to plat 123 single-family lots. The parcel is located approximately 2.5 miles outside the Luke AFB Aux-1 2004 65 Ldn, "high noise or accident potential zone", as identified by A.R.S. § 28-8461 and is outside the "territory in the vicinity of a military airport" also defined by A.R.S. § 28-8461. However, the location is unique due to the fact that it lies between the intersection of the "territory in the vicinity of a military airport" for both Luke AFB and Aux-1.

In an effort to promote a more compatible co-existence, Luke AFB follows the guidelines in the Graduated Density Concept (GDC). The GDC proposes, in the absence of a more restrictive state, county or municipal general or comprehensive plan, graduating densities away from the 65 Ldn as follows: a maximum of 2 du/ac from the 65 Ldn to 1/2 mile, a maximum of 4 du/ac from 1/2 to 1 mile, and a maximum of 6 du/ac from 1 to 3 miles. This request for 123 units with a proposed density of 3.57 du/ac meets the GDC.

Since the parcel is located within the "territory in the vicinity of a military airport," it will be subjected to approximately 170 over flights a day. A strong notification program on the part of the applicant is essential to inform potential occupants about Luke AFB operations.

If you have any questions, please contact Senior Planner, Ms. Jenn Rahn at (623) 856-9981.

Sincerely

TOALE.CHRISTOPHER.P.1039696165 Digitally signed by TOALE.CHRISTOPHER.P.1039696165 Date: 2023.09.25 13:37:02 -07'00'

CHRISTOPHER P. TOALE

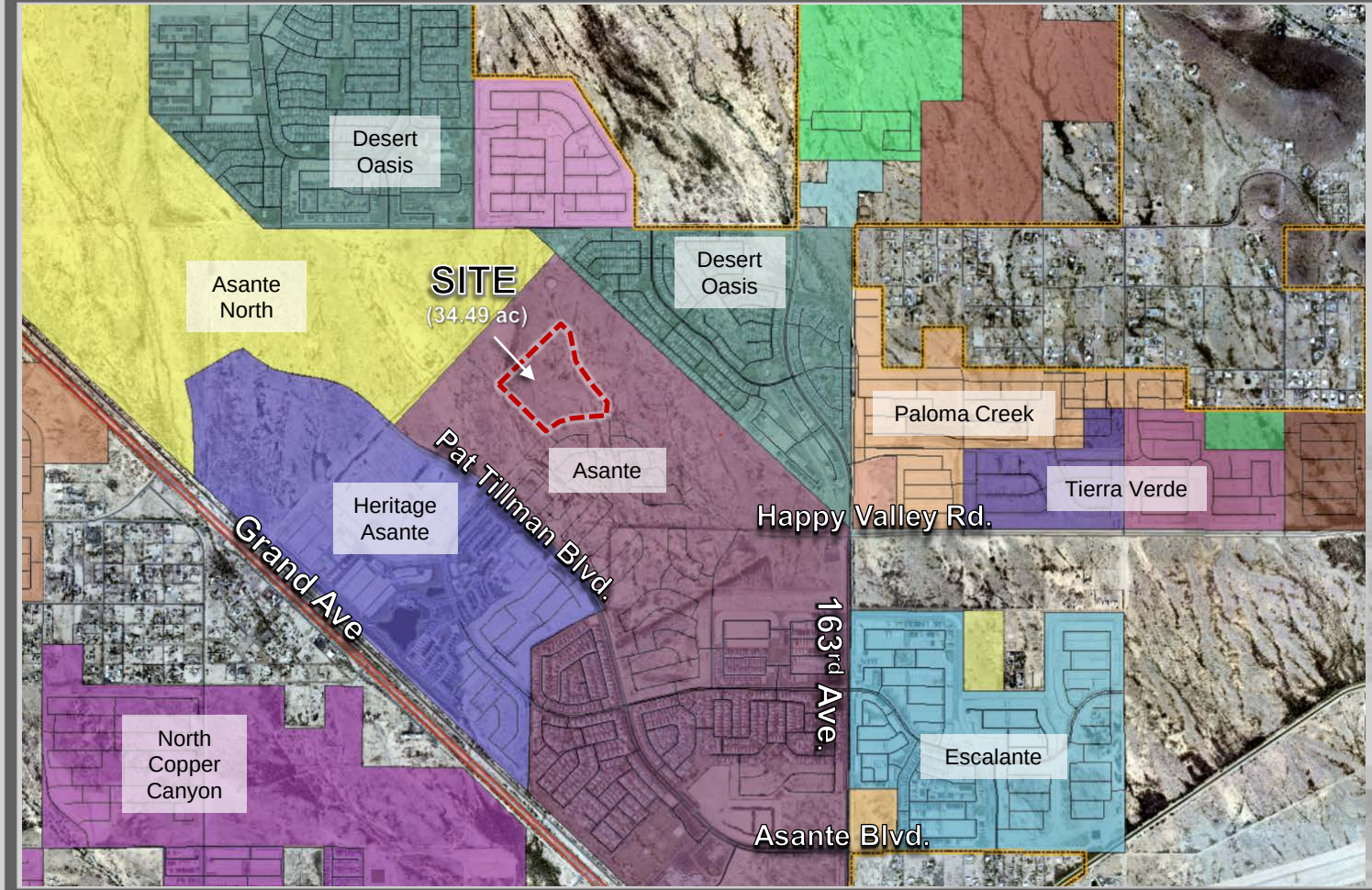
cc:
Colonel Keagan L. McLeese, Deputy Commander, 56th Fighter Wing
Ms. Demetria Themistocles, General Law Attorney, 56th Fighter Wing

SURPRISE
ARIZONA

FS23-0841
Asante PA4 Units 3.6A and 3.6B
Final Plat

City Council

May 07, 2024



VICINITY MAP


RM-9
PUD
PAD
Desert Oasis
PAD
Asante
RM-9
PUD
RM-9
PUD
RM-6
PUD
PAD
Asante
RM-9
PUD
Pat Tillman Blvd.
Grand Ave
Happy Valley Rd.
PAD
Asante
163rd Ave.
Asante Blvd.

ZONING MAP

LEGAL DESCRIPTION

A PORTION OF THE WEST HALF OF SECTION 1 AND EAST HALF OF SECTION 2, TOWNSHIP 4 NORTH, RANGE 2 WEST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A FOUND 2" ALUMINUM CAP ACCEPTED AS THE SOUTHWEST CORNER OF SECTION 36, TOWNSHIP 5 NORTH, RANGE 2 WEST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, FROM WHICH A FOUND G.L.O. BRASS CAP ACCEPTED AS THE SOUTH QUARTER CORNER OF SAID SECTION 36 BEARS SOUTH 89°40'45" EAST, 2639.49 FEET;
THENCE SOUTH 89°40'45" EAST, 997.94 FEET ALONG THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 36 TO THE NORTHWEST CORNER OF SAID SECTION 1;
THENCE LEAVING SAID SOUTH LINE, SOUTH 00°46'45" WEST, 1968.83 FEET ALONG THE WEST LINE OF THE NORTHWEST QUARTER OF SAID SECTION 1;
THENCE LEAVING SAID WEST LINE, SOUTH 89°13'15" EAST, 74.70 FEET TO THE **POINT OF BEGINNING**;
THENCE NORTH 43°31'21" EAST, 50.00 FEET;
THENCE NORTH 89°31'21" EAST, 28.28 FEET;
THENCE NORTH 43°31'21" EAST, 210.00 FEET;
THENCE NORTH 01°28'39" WEST, 28.28 FEET;
THENCE NORTH 43°31'21" EAST, 50.00 FEET;
THENCE NORTH 88°31'21" EAST, 28.28 FEET;
THENCE SOUTH 44°28'39" EAST, 50.92 FEET;
THENCE NORTH 43°31'21" EAST, 61.01 FEET TO THE BEGINNING OF A TANGENT CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 325.00 FEET;
THENCE NORTHEASTERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 05°34'50", AN ARC LENGTH OF 31.52 FEET TO A TANGENT LINE;
THENCE NORTH 49°06'11" EAST, 111.30 FEET;
THENCE SOUTH 30°58'25" EAST, 17.33 FEET;
THENCE SOUTH 43°59'19" EAST, 50.98 FEET;
THENCE SOUTH 37°45'24" EAST, 49.43 FEET;
THENCE SOUTH 29°39'43" EAST, 49.43 FEET;
THENCE SOUTH 21°33'48" EAST, 49.43 FEET;
THENCE SOUTH 14°52'12" EAST, 51.88 FEET;
THENCE SOUTH 11°14'19" EAST, 156.00 FEET;
THENCE SOUTH 14°31'09" EAST, 54.51 FEET;
THENCE SOUTH 16°59'06" EAST, 58.59 FEET;
THENCE SOUTH 19°24'16" EAST, 58.59 FEET;
THENCE SOUTH 21°49'26" EAST, 58.59 FEET;
THENCE SOUTH 23°02'35" EAST, 50.30 FEET;
THENCE SOUTH 28°02'08" EAST, 69.64 FEET;
THENCE SOUTH 31°30'16" EAST, 89.64 FEET;
THENCE SOUTH 34°58'21" EAST, 89.64 FEET;
THENCE SOUTH 38°17'41" EAST, 444.16 FEET;
THENCE SOUTH 39°22'58" EAST, 68.97 FEET;
THENCE SOUTH 43°49'50" EAST, 71.35 FEET;
THENCE SOUTH 67°16'01" EAST, 45.14 FEET TO A NON-TANGENT CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 360.00 FEET, THE CENTER OF WHICH BEARS SOUTH 67°16'01" EAST;
THENCE SOUTHWESTERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 23°55'07", AN ARC LENGTH OF 150.29 FEET TO A TANGENT LINE;
THENCE SOUTH 00°24'51" EAST, 25.18 FEET TO THE NORTHERLY RIGHT OF WAY LINE OF HAPPY VALLEY ROAD AS SHOWN ON THE MASTER PLAT FOR ASANTE PLANNING AREA 3 RECORDED IN BOOK 1233, PAGE 2, MARICOPA COUNTY RECORDS;
THENCE THE FOLLOWING ELEVEN (11) COURSES ALONG SAID NORTHERLY RIGHT OF WAY LINE;
THENCE NORTH 44°43'35" WEST, 28.14 FEET;
THENCE NORTH 00°00'00" WEST, 147.65 FEET;
THENCE NORTH 00°00'00" EAST, 5.03 FEET;
THENCE NORTH 90°00'00" WEST, 205.00 FEET;
THENCE NORTH 45°00'00" WEST, 28.28 FEET;
THENCE SOUTH 90°54'27" WEST, 70.16 FEET;
THENCE SOUTH 44°24'41" WEST, 28.52 FEET TO A NON-TANGENT CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 835.00 FEET, THE CENTER OF WHICH BEARS SOUTH 01°37'17" EAST;
THENCE SOUTHWESTERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 22°53'20", AN ARC LENGTH OF 333.56 FEET TO A NON-TANGENT LINE;
THENCE NORTH 21°30'27" WEST, 5.00 FEET TO A NON-TANGENT CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 860.00 FEET, THE CENTER OF WHICH BEARS SOUTH 24°30'37" EAST;
THENCE SOUTHWESTERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 13°41'05", AN ARC LENGTH OF 205.49 FEET TO A NON-TANGENT LINE;
THENCE NORTH 87°47'01" WEST, 30.34 FEET TO THE NORTHERLY RIGHT OF WAY LINE OF COTTONTAIL LANE OF SAID MASTER PLAT;
THENCE THE FOLLOWING THREE (3) COURSES ALONG SAID NORTHERLY RIGHT OF WAY LINE;
THENCE NORTH 45°28'39" WEST, 840.13 FEET;
THENCE NORTH 01°28'39" WEST, 28.28 FEET;
THENCE NORTH 45°28'39" WEST, 50.00 FEET;
THENCE LEAVING SAID NORTHERLY RIGHT OF WAY LINE, NORTH 43°31'21" EAST, 770.64 FEET;
THENCE NORTH 01°28'39" WEST, 28.28 FEET TO THE **POINT OF BEGINNING**.

FLOOD ZONE DESIGNATION

THE FOLLOWING FLOOD PLAIN DESIGNATION AND ASSOCIATED COMMENTS ARE COPIED DIRECTLY FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) WEBSITE. HILGARTWILSON, LLC AND THE UNDERSIGNED REGISTERED PROFESSIONAL LAND SURVEYOR MAKE NO STATEMENT AS TO THE ACCURACY OR COMPLETENESS OF THE FOLLOWING FLOOD ZONE DESIGNATION STATEMENT.

THE SUBJECT PROPERTY LIES WITHIN SHADED ZONE "X" WITH A DEFINITION OF: 0.2-PERCENT-ANNUAL-CHANCE FLOODPLAIN, AREAS OF 1-PERCENT-ANNUAL-CHANCE (BASE FLOOD) SHEET FLOW FLOODING WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT, AREAS OF BASE FLOOD STREAM FLOODING WITH A CONTRIBUTING DRAINAGE AREA OF LESS THAN 1 SQUARE MILE, OR AREAS PROTECTED FROM THE BASE FLOOD BY LEVEES. NO SPEC OR DEPTHS ARE SHOWN IN THIS ZONE, AND INSURANCE PURCHASE IS NOT REQUIRED. DESIGNATION DETERMINED BY FEMA FLOOD ZONE MAP 04013C1210L, PANEL NUMBER 1210 OF 4425, EFFECTIVE DATE OCTOBER 16, 2013.

LOT TABLE		
LOT NO.	AREA (SQ.FT)	AREA (ACRES)
LOT : 1	5748	0.1319
LOT : 2	5760	0.1322
LOT : 3	5760	0.1322
LOT : 4	5760	0.1322
LOT : 5	5760	0.1322
LOT : 6	5760	0.1322
LOT : 7	5760	0.1322
LOT : 8	5760	0.1322
LOT : 9	8188	0.1880
LOT : 10	8180	0.1878
LOT : 11	8124	0.1865
LOT : 12	8055	0.1849
LOT : 13	7877	0.1808
LOT : 14	8099	0.1859
LOT : 15	7765	0.1783
LOT : 16	7136	0.1638
LOT : 17	7430	0.1699
LOT : 18	7651	0.1756
LOT : 19	6395	0.1468
LOT : 20	5760	0.1322

LOT TABLE		
LOT NO.	AREA (SQ.FT)	AREA (ACRES)
LOT : 21	5760	0.1322
LOT : 22	5681	0.1273
LOT : 23	6034	0.1385
LOT : 24	6034	0.1385
LOT : 25	5932	0.1362
LOT : 26	5760	0.1322
LOT : 27	5760	0.1322
LOT : 28	5977	0.1372
LOT : 29	6397	0.1468
LOT : 30	7564	0.1741
LOT : 31	8806	0.2022
LOT : 32	6362	0.1465
LOT : 33	6187	0.1420
LOT : 34	6126	0.1406
LOT : 35	6184	0.1420
LOT : 36	6225	0.1429
LOT : 37	6224	0.1429
LOT : 38	6211	0.1426
LOT : 39	6284	0.1443
LOT : 40	6353	0.1458

LOT TABLE		
LOT NO.	AREA (SQ.FT)	AREA (ACRES)
LOT : 41	6789	0.1559
LOT : 42	6360	0.1460
LOT : 43	6360	0.1460
LOT : 44	6360	0.1460
LOT : 45	6360	0.1460
LOT : 46	6585	0.1512
LOT : 47	6547	0.1503
LOT : 48	6267	0.1439
LOT : 49	6267	0.1439
LOT : 50	6500	0.1492
LOT : 51	6500	0.1492
LOT : 52	6500	0.1492
LOT : 53	6500	0.1492
LOT : 54	6327	0.1452
LOT : 55	6407	0.1471
LOT : 56	8058	0.1850
LOT : 57	13455	0.2400
LOT : 58	6342	0.1456
LOT : 59	6480	0.1488
LOT : 60	6480	0.1488

LOT TABLE		
LOT NO.	AREA (SQ.FT)	AREA (ACRES)
LOT : 61	6480	0.1488
LOT : 62	6240	0.1433
LOT : 63	6240	0.1433
LOT : 64	6240	0.1433
LOT : 65	6240	0.1433
LOT : 66	6480	0.1488
LOT : 67	6480	0.1488
LOT : 68	6480	0.1488
LOT : 69	6480	0.1488
LOT : 70	6480	0.1488
LOT : 71	6240	0.1433
LOT : 72	6240	0.1433
LOT : 73	6240	0.1433
LOT : 74	6240	0.1433
LOT : 75	6842	0.1571
LOT : 76	6720	0.1543
LOT : 77	6720	0.1543
LOT : 78	6720	0.1543
LOT : 79	6720	0.1543
LOT : 80	6720	0.1543

LOT TABLE		
LOT NO.	AREA (SQ.FT)	AREA (ACRES)
LOT : 81	6720	0.1543
LOT : 82	6723	0.1543
LOT : 83	6723	0.1543
LOT : 84	8161	0.1874
LOT : 85	11216	0.2575
LOT : 86	7721	0.1772
LOT : 87	6659	0.1529
LOT : 88	6360	0.1460
LOT : 89	6360	0.1460
LOT : 90	6360	0.1460
LOT : 91	6360	0.1460
LOT : 92	6360	0.1460
LOT : 93	6310	0.1449
LOT : 94	10035	0.2304
LOT : 95	9624	0.2209
LOT : 96	9376	0.2084
LOT : 97	7955	0.1826
LOT : 98	6360	0.1460
LOT : 99	6360	0.1460
LOT : 100	6360	0.1460

LOT TABLE		
LOT NO.	AREA (SQ.FT)	AREA (ACRES)
LOT : 101	6713	0.1541
LOT : 102	7348	0.1802
LOT : 103	10662	0.2448
LOT : 104	9686	0.2209
LOT : 105	9630	0.2211
LOT : 106	9630	0.2211
LOT : 107	9399	0.2159
LOT : 108	8761	0.2011
LOT : 109	8954	0.2056
LOT : 110	9202	0.2112
LOT : 111	6525	0.1521
LOT : 112	6525	0.1521
LOT : 113	6525	0.1521
LOT : 114	5799	0.1561
LOT : 115	7494	0.1718
LOT : 116	7435	0.1707
LOT : 117	10559	0.2536
LOT : 118	16042	0.3683
LOT : 119	12733	0.2923
LOT : 120	7325	0.1913

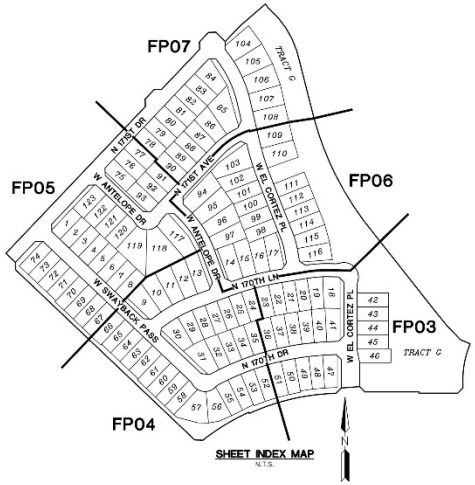
LOT TABLE		
LOT NO.	AREA (SQ.FT)	AREA (ACRES)
LOT : 121	6875	0.1578
LOT : 122	7030	0.1607
LOT : 123	7237	0.1662

TRACT TABLE		
TRACT	AREA (ACRES)	USE
TRACT A	0.0756	COMMON AREA
TRACT B	0.0381	COMMON AREA
TRACT C	0.1175	COMMON AREA
TRACT D	0.0299	COMMON AREA
TRACT E	0.0340	COMMON AREA
TRACT F	0.0753	COMMON AREA
TRACT G	5.9786	COMMON AREA & DRAINAGE
TRACT H	0.0787	COMMON AREA
TRACT I	0.8415	COMMON AREA
TRACT J	0.0462	COMMON AREA
TRACT K	0.1106	COMMON AREA
TRACT L	0.0921	COMMON AREA

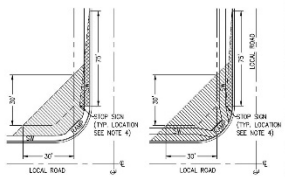
1. COMMON AREAS MAY INCLUDE OPEN SPACE, LANDSCAPING, PEDESTRIAN PATHS AND/OR AMENITIES.
2. SPECIFIC EASEMENTS THAT ARE BEING DEDICATED AS PART OF THIS PLAT ARE FULLY DELINEATED ON THE FOLLOWING SHEETS.
3. THE USES SHOWN IN THE TRACT TABLE ABOVE DO NOT INTEND TO GRANT EASEMENTS THAT ARE BLANKET IN NATURE OVER THE ENTIRE TRACT.

AREAS

ROW AREA =	350,763 SQ. FT.	8.0532 ACRES
TRACTS A-L AREA =	327,582 SQ. FT.	7.5205 ACRES
LOT AREA =	873,941 SQ. FT.	20.0629 ACRES
GROSS AREA =	1,552,286 SQ. FT.	34.4866 ACRES
NET AREA =	1,201,524 SQ. FT.	27.5834 ACRES
DENSITY (GROSS) =		3.6 D.U. / ACRE
DENSITY (NET) =		4.5 D.U. / ACRE



SHEET INDEX MAP
N.T.S.



LOCAL STREET
SIGHT VISIBILITY TRIANGLES

NOTES:

1. SIGNS, FENCES, WALLS, UTILITY BOXES, STRUCTURES, SHRUBS, HEDGES OR OTHER PLANTS, BUT EXCLUDING TREES OVER 30 INCHES IN HEIGHT SHALL NOT BE PERMITTED WITHIN THE RESTRICTED AREAS.
2. PLANTING WITHIN THE R/W IN VIEW EASEMENTS SHALL BE PER THE APPROVED TYPES AND DIMENSIONS AND SHALL NOT ENCROACH WITHIN THE SIGHT TRIANGLE PER AASHTO GUIDELINES.
3. TREES ARE PERMITTED WITHIN THE RESTRICTED AREAS PROVIDED:
   A. NO LIMBS, LEAVES, NEEDLES OR OTHER FOLIAGE ABOVE 30 INCHES OR BELOW 84 INCHES ARE PERMITTED.
   B. TREES SHALL NOT OBSTRUCT MORE THAN 20% OF THE VISIBILITY WHEN COMBINED WITH OTHER OBSTRUCTIONS PRESENT.
4. STOP SIGN SHALL BE INSTALLED 4' 0" MINIMUM BEHIND BACK OF CURB.

UNOBSTRUCTED VIEW EASEMENT AREA (SEE NOTE #3)

NO VEGETATION OVER 30 INCHES IN HEIGHT

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ASANTE - UNIT 3.6A AND UNIT 3.6B

ASANTE BOULEVARD & PAT TILLMAN BOULEVARD
SURPRISE, ARIZONA

FINAL PLAT

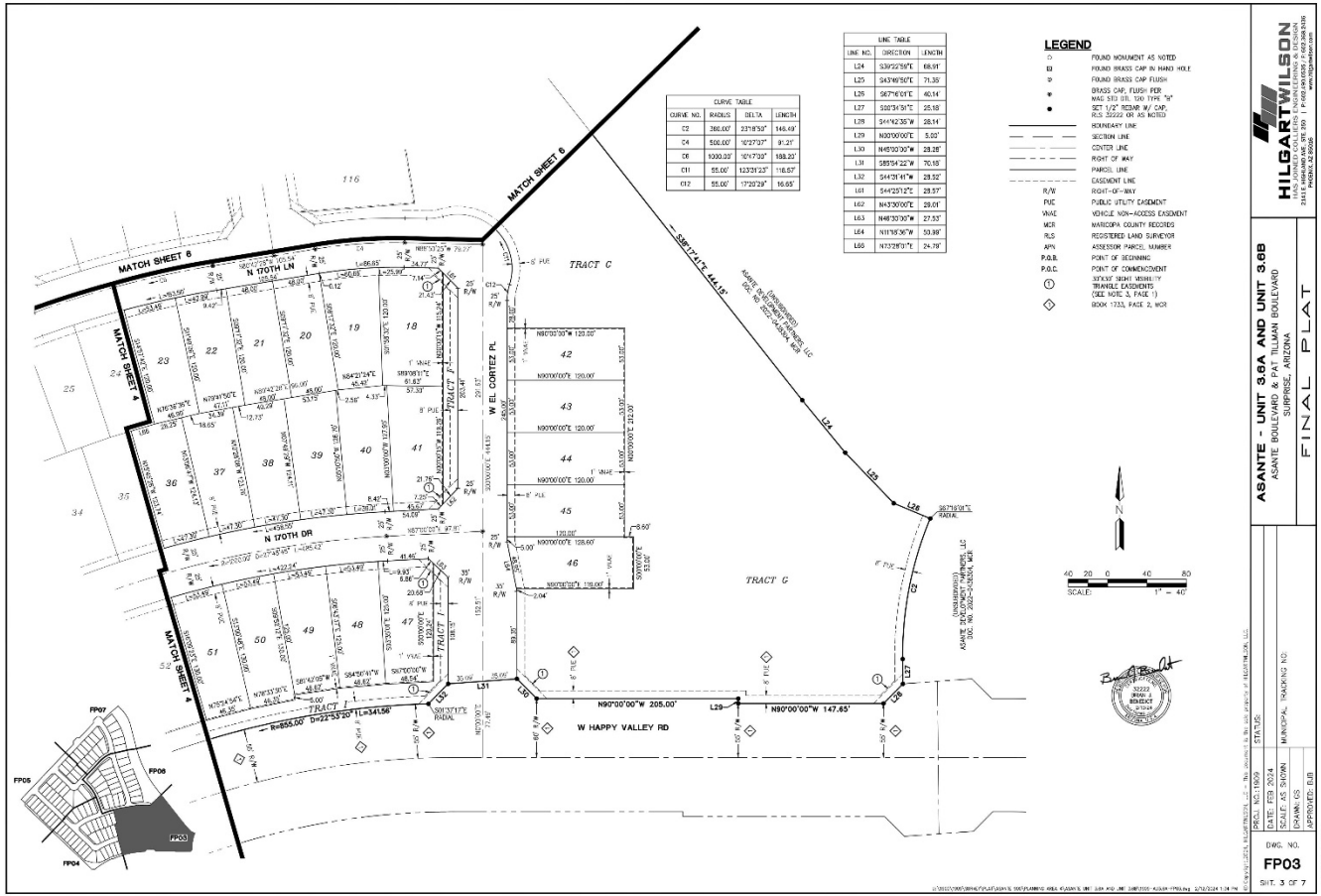
PROJ. NO.: 19008
STATUS:
DATE: FEB 2024
SCALE: NONE
DRAWN BY:
APPROVED BY:

MUNICIPAL TRACKING NO.

DWG. NO.
FP02
SHT. 2 OF 7

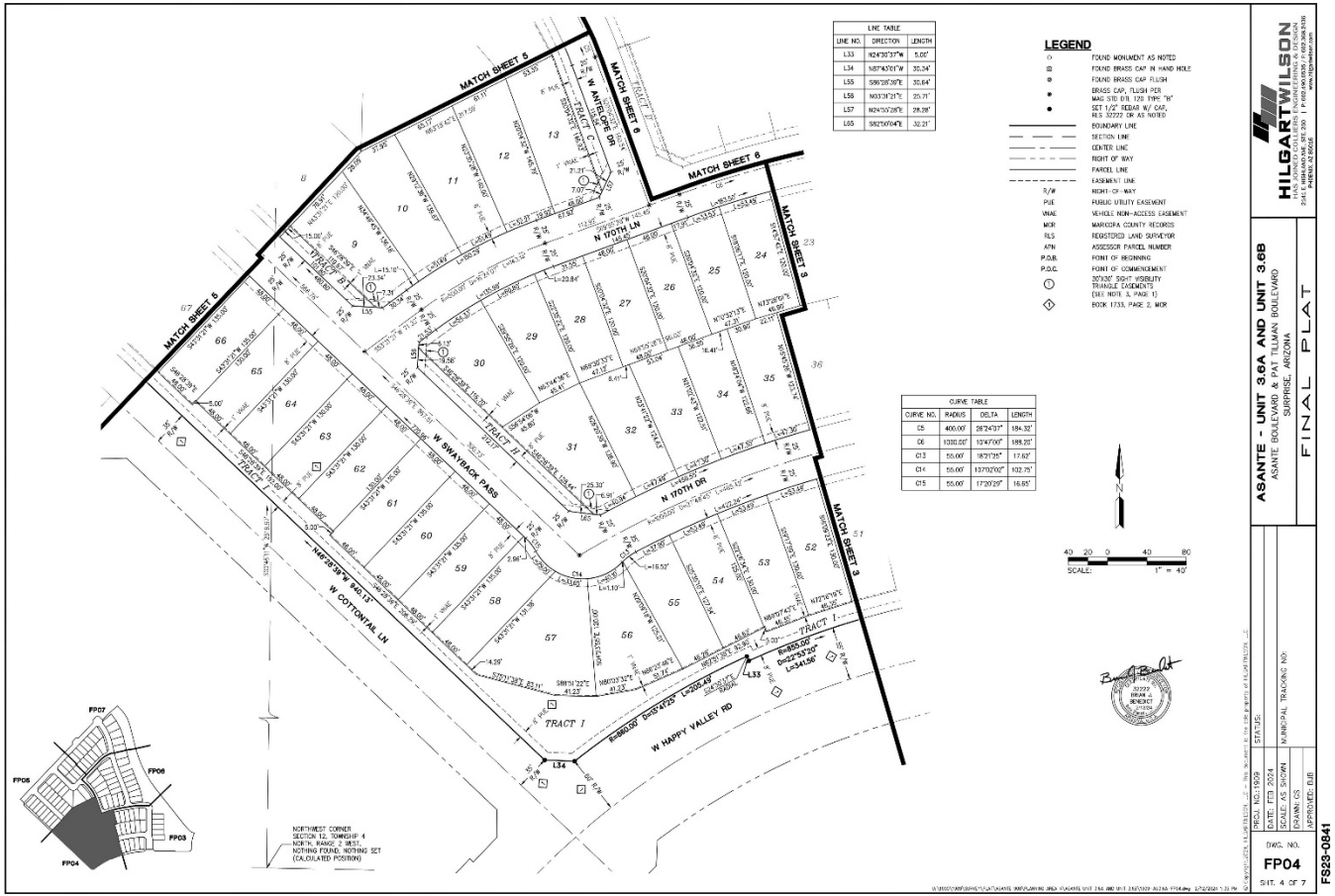
F823-0841

FINAL PLAT



CURVE TABLE			
CURVE NO.	RADIUS	DELTA	LENGTH
C2	360.00'	23°18'53"	146.49'
C4	500.00'	10°27'07"	91.21'
C6	1000.00'	10°47'03"	188.20'
C11	55.00'	123°31'23"	116.57'
C12	55.00'	17°20'29"	16.65'

LINE TABLE		
LINE NO.	DIRECTION	LENGTH
L24	S39°22'59"E	68.91'
L25	S43°49'50"E	71.35'
L26	S67°16'01"E	40.14'
L27	S00°34'51"E	25.18'
L28	S44°42'35"W	28.14'
L29	N00°00'00"E	5.00'
L30	N45°00'00"W	28.28'
L31	S85°54'22"W	70.18'
L32	S44°31'41"W	28.52'
L61	S44°25'12"E	28.57'
L62	N43°30'00"E	29.01'
L63	N48°30'00"W	27.53'
L64	N11°18'06"W	50.99'
L65	N73°28'01"E	24.79'



LINE TABLE		
LINE NO.	DIRECTION	LENGTH
L33	N24°30'37"W	5.00'
L34	N87°43'01"W	30.34'
L55	S86°28'39"E	30.64'
L56	N03°31'21"E	25.71'
L57	N24°55'28"E	28.28'
L65	S82°50'04"E	32.21'

CURVE TABLE			
CURVE NO.	RADIUS	DELTA	LENGTH
C5	400.00'	26°24'03"	184.32'
C6	1030.00'	10°47'00"	188.20'
C13	55.00'	18°21'25"	17.62'
C14	55.00'	107°02'02"	102.75'
C15	55.00'	17°20'29"	16.65'

LEGEND

- FOUND MONUMENT AS NOTED
- FOUND BRASS CAP IN HAND HOLE
- FOUND BRASS CAP FLUSH
- BRASS CAP, FLUSH PER MAG STD DTL 120 TYPE "B"
- SET 1/2" REBAR W/ CAP, RLS 32222 OR AS NOTED
- BOUNDARY LINE
- SECTION LINE
- CENTER LINE
- RIGHT OF WAY
- PARCEL LINE
- EASEMENT LINE
- R/W RIGHT-OF-WAY
- PUE PUBLIC UTILITY EASEMENT
- VNAE VEHICLE NON-ACCESS EASEMENT
- MCR MARICOPA COUNTY RECORDS
- RLS REGISTERED LAND SURVEYOR
- APN ASSESSOR PARCEL NUMBER
- P.O.B. POINT OF BEGINNING
- P.O.C. POINT OF COMMENCEMENT
- 30'x30' SIGHT VISIBILITY TRIANGLE EASEMENTS (SEE NOTE 3, PAGE 1)
- BOOK 1733, PAGE 2, MCR

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www.hilgartwilson.com

ASANTE - UNIT 3.6A AND UNIT 3.6B
ASANTE BOULEVARD & PAT TILLMAN BOULEVARD
SURPRISE, ARIZONA

FINAL PLAT

STATUS:
MUNICIPAL TRACKING NO:

PROJ. NO.: 1909
DATE: FEB 2024
SCALE: AS SHOWN
DRAWN: GS
APPROVED: BJB

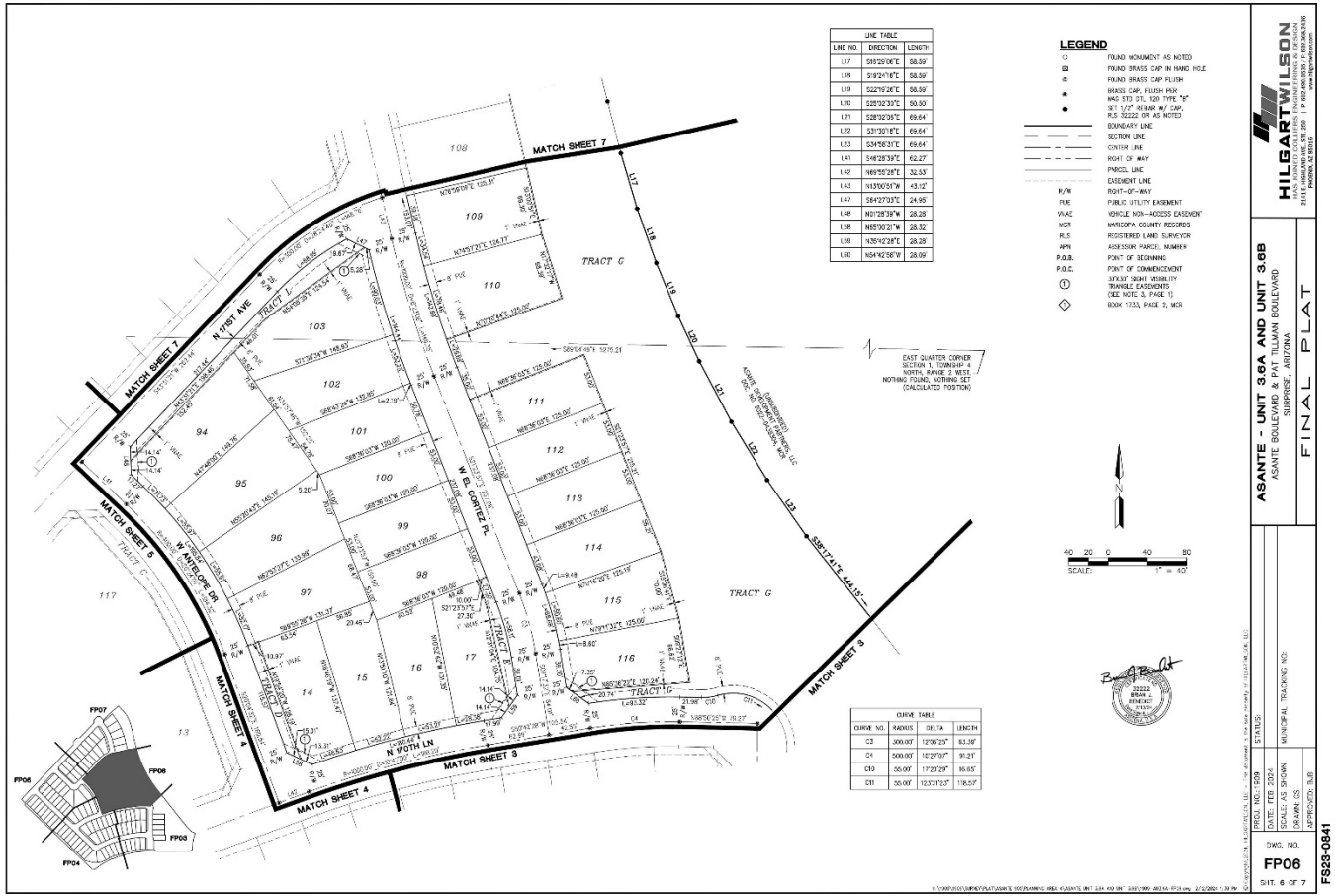
DWG. NO.
FP04
SHT. 4 OF 7

FS23-0841

FINAL PLAT


WEST QUARTER CORNER SECTION 1, TOWNSHIP 4 NORTH, RANGE 2 WEST, FOUND 2" ALUMINUM CAP STAMPED "MARICOPA COUNTY 1/4 R2W S2 S1 1/4 RLS 35802" DATED 2004
WEST QUARTER CORNER SECTION 2, TOWNSHIP 4 NORTH, RANGE 2 WEST, FOUND 3" ALUMINUM CAP, STAMPED "MARICOPA COUNTY T4N R2W 1/4 S2 S1 RLS 35852" DATED 2003
N89°04'40"E 5271.23'
N89°04'40"E 5278.27'
N 1ST DR
N 1ST AVE
W ANTELOPE DR
W SHAYBACK PASS
W COTTONTAIL LN
MATCH SHEET 7
MATCH SHEET 6
MATCH SHEET 4
MATCH SHEET 4
TRACT A
TRACT B
TRACT C
TRACT I
TRACT J
LOT 1
LOT 2
LOT 3
LOT 4
LOT 5
LOT 6
LOT 7
LOT 8
LOT 66
LOT 67
LOT 68
LOT 69
LOT 70
LOT 71
LOT 72
LOT 73
LOT 74
LOT 75
LOT 76
LOT 77
LOT 78
LOT 90
LOT 91
LOT 92
LOT 93
LOT 117
LOT 118
LOT 119
LOT 120
LOT 121
LOT 122
LOT 123
ASANTE, LOT RESERVATION, LLC DOC. NO. 2022-0430509, MCR
LINE TABLE
LINE NO. | DIRECTION | LENGTH
L35 | N01°28'39"W | 28.28'
L36 | N88°28'39"W | 50.00'
L41 | S46°28'39"E | 63.27'
L49 | N88°31'21"E | 28.28'
L50 | N88°31'21"E | 28.28'
L51 | N01°28'39"W | 28.28'
L52 | N88°31'21"E | 28.28'
L53 | N01°28'39"W | 28.28'
L54 | N88°31'21"E | 28.28'
CURVE TABLE
CURVE NO. | RADIUS | DELTA | LENGTH
C7 | 55.00' | 17°20'29" | 16.65'
C8 | 55.00' | 124°40'58" | 119.69'
C9 | 55.00' | 17°20'29" | 16.65'
LEGEND
FOUND MONUMENT AS NOTED
FOUND BRASS CAP IN HAND HOLE
FOUND BRASS CAP FLUSH
BRASS CAP, FLUSH PER MAG STD DTL 120 TYPE "B"
SET 1/2" REBAR W/ CAP, RLS 32222 OR AS NOTED
BOUNDARY LINE
SECTION LINE
CENTER LINE
RIGHT OF WAY
PARCEL LINE
EASEMENT LINE
R/W RIGHT-OF-WAY
PUE PUBLIC UTILITY EASEMENT
VNAE VEHICLE NON-ACCESS EASEMENT
MCR MARICOPA COUNTY RECORDS
RLS REGISTERED LAND SURVEYOR
APN ASSESSOR PARCEL NUMBER
P.O.B. POINT OF BEGINNING
P.O.C. POINT OF COMMENCEMENT
30'X30' SIGHT VISIBILITY TRIANGLE EASEMENTS (SEE NOTE 3, PAGE 1)
BOOK 1733, PAGE 2, MCR
N
SCALE: 1" = 40'
FP04
FP05
FP06
FP07
FP08
HILGARTWILSON
ASANTE - UNIT 3.6A AND UNIT 3.6B
ASANTE BOULEVARD & PAT TILLMAN BOULEVARD
SURPRISE, ARIZONA
FINAL PLAT
PROJ. NO.: 19009
DATE: FEB 2024
SCALE: AS SHOWN
DRAWN: GS
APPROVED: BJB
STATUS:
MUNICIPAL TRACKING NO:
DWG. NO.
FP05
SHT. 5 OF 7
FS23-0841

FINAL PLAT



LINE TABLE		
LINE NO.	DIRECTION	LENGTH
L17	S89°29'06"E	58.99'
L18	S19°24'16"E	58.99'
L19	S22°19'24"E	58.99'
L20	S28°32'33"E	50.50'
L21	S28°32'39"E	69.64'
L22	S31°30'16"E	69.64'
L23	S34°56'31"E	69.64'
L41	S46°28'39"E	62.27'
L42	N69°55'28"E	32.53'
L43	N13°00'51"W	43.12'
L47	S64°27'03"E	24.95'
L48	N01°28'39"W	28.28'
L58	N65°00'21"W	28.32'
L59	N30°42'28"E	28.28'
L60	N54°42'56"W	28.09'

CURVE TABLE			
CURVE NO.	RADIUS	DELTA	LENGTH
C3	300.00'	12°06'25"	63.38'
C4	500.00'	10°27'07"	91.21'
C10	55.00'	17°20'29"	16.65'
C11	55.00'	123°21'23"	118.43'

LEGEND

- FOUND MONUMENT AS NOTED
- FOUND BRASS CAP IN HAND HOLE
- FOUND BRASS CAP FLUSH
- BRASS CAP, FLUSH PER MAG STD DT, 120 TYPE "B"
- SET 1/2" REBAR W/ CAP, RLS 35222 OR AS NOTED
- BOUNDARY LINE
- SECTION LINE
- CENTER LINE
- RIGHT OF WAY
- PARCEL LINE
- EASEMENT LINE
- R/W — RIGHT-OF-WAY
- PUE — PUBLIC UTILITY EASEMENT
- VNAE — VEHICLE NON-ACCESS EASEMENT
- MCR — MARICOPA COUNTY RECORDS
- RLS — REGISTERED LAND SURVEYOR
- APN — ASSESSOR PARCEL NUMBER
- P.O.B. — POINT OF BEGINNING
- P.O.C. — POINT OF COMMENCEMENT
- 30'X30' SIGHT VISIBILITY TRIANGLE EASEMENTS (SEE NOTE 3, PAGE 1)
- BOOK 1733, PAGE 3, MCR

PROJ. NO.: 209	STATUS:
DATE: FEB 2024	
SCALE: AS SHOWN	MUNICIPAL TRACKING NO:
DRAWN: KS	
APPROVED: BJB	

FINAL PLAT



LEGEND

- FOUND MONUMENT AS NOTED
- FOUND BRASS CAP IN HAND HOLE
- FOUND BRASS CAP FLUSH
- BRASS CAP, FLUSH PER MAG STD DTL 120 TYPE "B"
- SET 1/2" REBAR W/ CAP, R.L.S. 32222 OR AS NOTED
- BOUNDARY LINE
- SECTION LINE
- CENTER LINE
- RIGHT OF WAY
- PARCEL LINE
- EASEMENT LINE
- R/W RIGHT-OF-WAY
- PUE PUBLIC UTILITY EASEMENT
- VNAE VEHICLE NON-ACCESS EASEMENT
- MCR MARICOPA COUNTY RECORDS
- RLS REGISTERED LAND SURVEYOR
- APN ASSESSOR PARCEL NUMBER
- P.O.B. POINT OF BEGINNING
- P.O.C. POINT OF COMMENCEMENT
- 30'X30' SIGHT VISIBILITY TRIANGLE EASEMENTS (SEE NOTE 3, PAGE 1)
- BOOK 1723, PAGE 2, MCR

CURVE TABLE			
CURVE NO.	RADIUS	DELTA	LENGTH
C1	375.00'	5°34'50"	36.52'

LINE TABLE		
LINE NO.	DIRECTION	LENGTH
L1	N43°31'21"E	50.00'
L2	N89°31'21"E	28.28'
L3	N01°28'39"W	28.28'
L4	N43°31'21"E	50.00'
L5	N89°31'21"E	28.28'
L6	S44°28'39"E	50.00'
L7	N43°31'21"E	62.09'
L8	N49°06'11"E	110.00'
L9	S35°58'23"E	17.30'
L10	S45°10'19"E	50.95'
L11	S37°45'38"E	49.43'
L12	S29°39'43"E	49.43'

LINE TABLE		
LINE NO.	DIRECTION	LENGTH
L13	S21°33'48"E	49.43'
L14	S14°27'12"E	51.88'
L15	S14°14'49"E	159.00'
L16	S14°21'39"E	54.51'
L37	N01°28'39"W	28.28'
L38	S44°28'39"E	31.28'
L39	N43°31'21"E	44.42'
L40	S45°28'39"E	45.00'
L44	N01°27'56"E	29.70'
L45	S88°11'33"E	26.61'
L46	N28°32'57"E	32.83'

SCALE: 1" = 40'

HILGARTWILSON
HILGARTWILSON LLC ENGINEERING & PLANNING
2141 E. HIGHLAND AVE., STE 250 | P: 602.490.1000 | F: 602.368.9280
PHOENIX, AZ 85016
www.hilgartwilson.com

ASANTE - UNIT 3.6A AND UNIT 3.6B
ASANTE BOULEVARD & PAT TILLMAN BOULEVARD
SURPRISE, ARIZONA

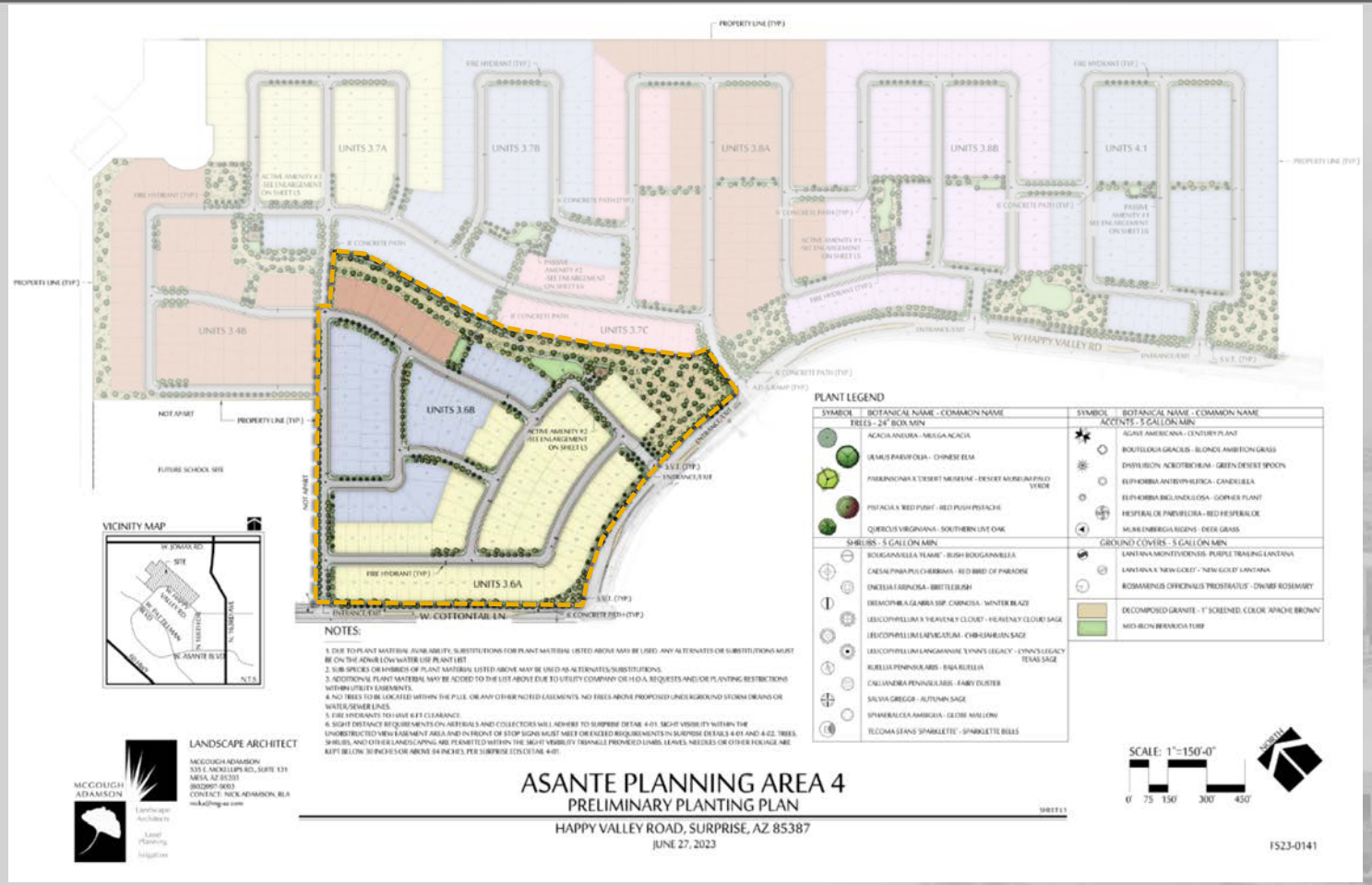
FINAL PLAT

PROJ. NO.: 11609
DATE: FEB 2024
SCALE: AS SHOWN
DRAWN: DS
APPROVED: BJB
STATUS:
MUNICIPAL TRACKING NO.:

DWG. NO.
FP07
SHT. 7 OF 7

FS23-0841

FINAL PLAT



LANDSCAPE PLAN

SURPRISE
ARIZONA

QUESTIONS OR COMMENTS?

Thank You

CITY OF SURPRISE
Regular City Council Meeting

Council Meeting Date: May 7, 2024

Contact Person: Kendra Pettis, DIR - SPORTS/TOURISM

Submitting Department: Sports and Tourism

District: Citywide

Staff Recommendations: None

Consent: Yes Regular: No Public Hearing: No Report/Discussion: No

Agenda Wording:

Consideration and action pertaining to approval of a Fiscal Year 2024 budget amendment moving budget in the amount of $400,000 for increased Spring Training revenues; Resolution #2024-76

Motion:

I move to approve Resolution #2024-76.

Background:

The 2024 Spring Training season had increased attendance and revenues. Due to the increased revenues, the City of Surprise will have a larger annual payout to the Kansas City Royals and Texas Rangers for their percentage of the revenues. The Sports and Tourism department will receive increased revenues to offset the increased expenses.

Objective Analysis:

The City of Surprise is contractually obligated to pay the Kansas City Royals and Texas Rangers an annual Spring Training payout based on the revenues brought in each season. The objective of this budget amendment is to be able to pay the teams the appropriate amount, which is higher in 2024 due to higher attendance and increased revenues.

Policy Compliant:

This action is compliant with City and Council policies.

Financial Impact:

There is no financial impact related to this item due to revenue received that will offset the expenses.

Budget Impact:

Approval of this item will amend the FY2024 budget by moving budget authority in the amount of $400,000 from General Contingency in the General Fund to the Sports and Tourism Fund. This action represents a transfer of spending authority and does not increase or decrease the total adopted citywide expenditure budget.

FTE Impact:

This item does not have an impact on current staff levels.

ATTACHMENTS:

1. Res 2024-76_Spring Training Team Payouts Bdgt Amndmnt

RESOLUTION # 2024-76

A RESOLUTION OF THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE, ARIZONA, AMENDING THE FISCAL YEAR 2024 BUDGET BY MOVING BUDGET AUTHORITY IN THE AMOUNT OF $400,000 FROM GENERAL CONTINGENCY IN THE GENERAL FUND TO THE SPORTS AND TOURISM FUND TO SUPPORT THE INCREASED ANNUAL SPRING TRAINING PAYOUTS TO THE KANSAS CITY ROYALS AND TEXAS RANGERS, DUE TO INCREASED REVENUES FOR THE 2024 SPRING TRAINING SEASON.

WHEREAS, the FY2024 budget was adopted by Council Resolution #2023-85 on June 6, 2023;

WHEREAS, due to increased attendance and revenues for the 2024 Spring Training season, additional expenses are being incurred to make the annual payout to the Kansas City Royals and Texas Rangers; and

WHEREAS, the Sports and Tourism Department is receiving additional revenue to offset the increased expenses; and

WHEREAS, this action will necessitate a budget amendment; and

WHEREAS, the City of Surprise Administrative Policies requires the approval of the Mayor and Council for budget amendments of this nature.

NOW, THEREFORE, BE IT RESOLVED by the Mayor and Council of the City of Surprise, Arizona, as follows:

Section 1. That the statements and schedules attached as *Exhibit A* and incorporated by reference are adopted, amending the budget of the City of Surprise, Arizona for the fiscal year July 1, 2023, through June 30, 2024.

APPROVED AND ADOPTED this _____day of _____, 2024.

Skip Hall, Mayor

Attest:

Kristi Passarelli, City Clerk

Approved as to form:

Robert Wingo, City Attorney

RESOLUTION # 2024-76
Exhibit A

1. Appropriation - The allocation listed below represents a movement of budget authority in the amount of $400,000 from General Contingency in the General Fund to services within the Sports and Tourism Fund. Due to an increase in attendance for the 2024 Spring Training season, the Sports and Tourism Department is requesting additional spending authority to support the annual 2024 Spring Training payout to the Kansas City Royals and Texas Rangers. Additional revenues collected from the increased attendance will offset the increase in expenses. This action represents a transfer of spending authority and does not increase or decrease the total adopted citywide expenditure budget.

Fund	Department	Project/Category	Rev/ Exp	Current Budget	Increase/ (Decrease)	Amended Budget
Contingency	General Operations	Contingency	E	56,896,000	(400,000)	56,496,000
Sports and Tourism Fund	Sports and Tourism	Services	E	2,360,900	400,000	2,760,900
			Expense Total	**59,256,900**	**-**	**59,256,900**

CITY OF SURPRISE
Regular City Council Meeting

Council Meeting Date: May 7, 2024 Contact Person: Michael Boule, Director
Submitting Department: Community Development District: District 1
Staff Recommendations:

Consent: Yes Regular: No Public Hearing: No Report/Discussion: No

Agenda Wording:
Consideration and action pertaining to approval of the North Jomax Water Development Agreement (Regional Improvements Overlay Agreement); Resolution #2024-77.

Motion:
I move to approve Resolution #2024-77.

Background:
North Jomax Water Coordinator, LLC (NJWC) desires to enter into this Overlay Agreement for the purpose of providing a "wet water" solution for the Nobella and Marisol Ranch developments, and to allow NJWC to obtain potable water service to the Benefited Properties by causing the construction of the Regional Improvements. On NJWC causing the Regional Improvements to be built pursuant to the terms of this Overlay Agreement, the City will have the right and ability to pump groundwater from a well with a Well Registration Number of 55-238921 ("DOW4") located on land owned by NJWC ("DOW4 Parcel", Maricopa County Assessor's Parcel No. ("APN") 503-51-186B). Further, NJWC acknowledges that it also holds title to land, APN 503-51-184A, ("DOW5 Parcel") that will allow NJWC or a successor or assignee to develop infrastructure to provide the City with the right and ability to pump groundwater from a well with a Well Registration Number of 55-238920 ("DOW5").

Objective Analysis:
The City owns two wells in Special Planning Area 2 ("SPA 2") that are currently located in, or in close proximity to, City right of way. For purposes of this Agreement, the wells will be referred to as Desert Oasis Well No. 4 ("DOW4") and Desert Oasis Well No. 5 ("DOW5"). Accordingly, neither DOW4 or DOW5 is currently capable of being used as municipal water supply well. In order to operate DOW4 and DOW5 as municipal water supply wells, the wells will need to be replaced in approximately the same location, but outside of the City's right of way. The Benefited Properties include Nobella and Marisol Ranch, which are required to obtain a cumulative water production capacity of 1,200 gallons per minute to satisfy their maximum day demands pursuant to City standards. Upon execution of this agreement and NWJC's fulfillment of its obligations set forth in this agreement, the NJWC will convey DOW4 and associated transmission mains to the City, thereby creating additional production capacity and operational redundancy to the City's existing Desert Oasis Water Supply Facility.

Policy Compliant:
This item is policy compliant as it relates to the execution of a development agreement and growth paying for itself.

Financial Impact:
While this item does not have an immediate or direct financial impact, ongoing development activity in the City will inevitably have a future financial impact as additional resources are needed to provide city services.

Budget Impact:
There is no anticipated budget impact related to this item.

FTE Impact:
This item does not have an impact on current staffing levels.

ATTACHMENTS:

1. Reso_2024-77
2. 2024-04-23_North Jomax Water DA (NJWC Signed)
3. FS23-1003 -North Jomax Water Development Agreement Presentation

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RESOLUTION # 2024-77

A RESOLUTION OF THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE, ARIZONA, APPROVING THE NORTH JOMAX WATER DEVELOPMENT AGREEMENT

WHEREAS, pursuant to A.R.S. § 9-500.05 et seq., the City of Surprise is authorized to enter into this Development Agreement;

WHEREAS, in order to provide water to two proposed master-planned communities located within Special Planning Area 2 (SPA 2) and Special Planning Area 4 (SPA 4), namely Nobella and Marisol, respectively, North Jomax Water Coordinator, LLC, (NJWC) desires to enter into this Development Agreement to address the design and construction of regional water production and transmission infrastructure improvements ("Regional Improvements");

WHEREAS, the City currently owns two wells located in Special Planning Area 2 that are currently undevelopable as municipal water supply wells due to being in or near city right of way;

WHEREAS, NJWC has acquired and owns two parcels of land located within 660 feet of the original wells, respectively, and seeks to replace the City's two wells in approximately the same location in accordance with the rules set forth in the Arizona Administrative Code ("**A.A.C.**"), specifically R12-15-1301 through R12-15-1308;

WHEREAS, NJWC will be the party responsible for causing the design, construction, and installation of the Regional Improvements;

WHEREAS, the Parties' agreement is documented in the North Jomax Water Development Agreement ("Agreement"), attached hereto as ***Exhibit A***;

NOW, THEREFORE, BE IT RESOLVED by the Mayor and Council of the City of Surprise, Arizona, as follows:

Section 1. The North Jomax Water Development Agreement with North Jomax Water Coordinator, LLC, attached hereto as ***Exhibit A***, is hereby approved.

Section 2. The Mayor is hereby authorized to execute the Agreement on behalf of the City and to take all further actions necessary to implement the Agreement.

SIGNATURES ON FOLLOWING PAGE

APPROVED AND ADOPTED this _____day of _____, 2024.

Skip Hall, Mayor

Attest:

Kristi Passarelli, City Clerk

Approved as to form:

Robert Wingo, City Attorney

Resolution #
RFLS #
Rev

When recorded, return to:

City Clerk
City of Surprise, Arizona
16000 N. Civic Center Plaza
Surprise, Arizona, 85374-7470

NORTH JOMAX WATER DEVELOPMENT AGREEMENT (Regional Improvements Overlay Agreement)

THIS **NORTH JOMAX WATER DEVELOPMENT AGREEMENT** ("**Overlay Agreement**") is entered into by and between the CITY OF SURPRISE, an Arizona municipal corporation, ("**City**") and NORTH JOMAX WATER COORDINATOR, LLC, an Arizona limited liability company, ("**NJWC**") and is effective as of the date the last party signs and dates this Overlay Agreement and this Overlay Agreement is recorded in the Official Records of Maricopa County, Arizona ("**Effective Date**").

RECITALS

A. City and NJWC desire to enter into this Overlay Agreement to address the design and construction of regional water production and transmission infrastructure improvements (the "**Regional Improvements**" as more fully defined below) that they deem necessary to facilitate the development of the Benefited Properties (defined below).

B. NJWC will be the party responsible for causing the design, construction, and installation of the Regional Improvements, therefore the City and NJWC are the only parties to this Overlay Agreement as of the Effective Date. The City and NJWC may individually be referred to as "Party" or collectively as "Parties."

C. The City owns two wells in Special Planning Area 2 ("**SPA 2**") that currently are located in, or in close proximity to, City right of way. For purposes of this Agreement, the wells will be referred to as Desert Oasis Well No. 4 ("**DOW4**") and Desert Oasis Well No. 5 ("**DOW5**"). Accordingly, neither DOW4 nor DOW5 currently is capable of being used as municipal water supply well. To operate DOW4 and DOW5 as municipal water supply wells, the wells will need to be replaced in approximately the same location, but outside of the City's right of way.

D. Rather than abandon or replace these wells in a new location, the Parties intend to replace these wells in approximately the same location in accordance with the rules set forth in the Arizona Administrative Code ("**A.A.C.**"), specifically R12-15-1301 through R12-15-1308. The replacement of DOW 4 and DOW 5 in approximately the same location will provide the City with operational flexibility and redundancy in the City's larger Desert Oasis Public Water System.

D. NJWC has acquired and owns two parcels of land located within 660 feet of the original wells, respectively. The City has filed a Notice of Intent to Construct a Replacement Non-exempt Well (form DWR 55-41) with the Arizona Department of Water Resources, and has listed the NJWC parcels as the proposed location for the replacement wells.

E. On NJWC causing the Regional Improvements to be built pursuant to the terms of this Overlay Agreement, the City will have the right and ability to pump groundwater from a well with a Well Registration Number of 55-238921 ("**DOW4**") located on land owned by NJWC ("**DOW4 Parcel**", Maricopa County Assessor's Parcel No. ("APN") 503-51-186B). Further, NJWC acknowledges that it also holds title to land, APN 503-51-184A, ("**DOW5 Parcel**") that will allow NJWC or a successor or assignee to develop infrastructure to provide the City with the right and ability to pump groundwater from a well with a Well Registration Number of 55-238920 ("**DOW5**").

F. As of the Effective Date, the Benefited Properties shall include Nobella, a master planned community owned by Nobella Surprise Owner, LP, ("**Hines**"), which is located north of Jomax Road, south of Dynamite Boulevard and bounded by 163rd Avenue on the west and 155th Avenue on the east ("**Nobella**"), and Marisol Ranch Master Planned communities created by Montage Acquisitions, LLC, as agent for First Corner Corp. and Three Quarters Corp. ("**Montage**") bounded by 155th Avenue to the east, 163rd Avenue to the west, Dove Valley Road to the north, and White Wing Road to the south ("**Marisol**"). To develop Marisol, Marisol will be required to have its own, separate water solution. As a Benefited Party (defined below) to this Overlay Agreement, Marisol is provided with 850 GPM of well production capacity to ensure a safe, adequate water supply to Marisol.

G. NJWC desires to enter into this Overlay Agreement for the purpose of providing a "wet water" solution for Nobella and for Marisol, and to allow NJWC to obtain potable water service to the Benefited Properties (defined below) by causing the construction of the Regional Improvements. Notwithstanding the foregoing, there may be other conditions to receiving approval of the development of any such property, including but not limited to zoning requirements, land use and building permit review and approval, and obtaining water and wastewater treatment.

H. This Overlay Agreement is intended to be a Development Agreement within the meaning of A.R.S. § 9-500.05, and outlines and sets forth certain obligations and commitments for the Regional Improvements. Pursuant to A.R.S. § 9-500.05(D), the burdens of this Overlay Agreement are binding on, and the benefits of the Overlay Agreement inure to, the Parties and to all their successors in interest and assigns.

In consideration of the foregoing Recitals, the mutual promises set forth in this Overlay Agreement, and other good and valuable consideration, the receipt and sufficiency of which the Parties hereby acknowledge, the Parties state, confirm, and agree as follows:

AGREEMENT

1. **Regional Improvements.** NJWC shall cause to be designed, constructed, and installed (collectively "**implement**") those regional improvements (individually, a "**Regional Improvement**" and collectively, the "**Regional Improvements**") more fully described in **Exhibit A** and depicted on **Exhibit B**.

1.1 DOW4 Replacement Well. NJWC will cause the DOW4 Replacement Well to be implemented to replace the well commonly known as Desert Oasis Well No. 4 (well

registration number 55-617007) located on APN 503-63-460, including drilling and casing, pursuant to the design standards prescribed by the City of Surprise Water Facility Guidelines and Standards. NJWC will cause DOW4 to be equipped with electrical connections, pump, valves, meters, and all equipment required by City for operation of the DOW4 Replacement Well as municipal production well pursuant to the City of Surprise Water Facility Guidelines and Standards. Further, in implementing DOW4, with registration number 55-238921, NJWC will replace DOW4 in approximately the same location onto the DOW4 Parcel, APN 503-51-186B.

1.2 DOW5 Replacement Well. City acknowledges that DOW5 will replace, in approximately the same location, Desert Oasis Well No. 5 (well registration number 55-617008), and the allocation of water that could have been pumped by Desert Oasis Well No. 5 will be available to DOW5 upon implementation of DOW5. The Parties acknowledge that if NJWC implements DOW5 pursuant to this Agreement, NJWC will have the first right to such water that may be withdrawn from DOW5. Further, in implementing DOW5, with registration number 55-238920, NJWC will cause DOW5 to be located on Parcel 503-51-184A. NJWC's commitments under this Section 1.2 do not constitute part of the Regional Improvements.

1.3 Transmission Lines. NJWC will implement transmission lines connecting DOW4 to the existing Desert Oasis Water Supply Facility ("City Water Treatment Plant"). As part of this implementation, NJWC shall cause such transmission lines also to be capable of servicing flow to and from DOW5 and the existing City Water Treatment Plant. These transmission lines will be designed and constructed pursuant to the City of Surprise Engineering Design Guidelines and Standards, and the City of Surprise Water Facility Guidelines and Standards.

2. **Design and Construction Costs.** The term "Costs" as defined in Surprise Municipal Code 42-3, means the actual cost of: (1) Right-of-way or easement acquisition. (2) Construction of the special public improvements as determined by the actual costs, such construction to include, but shall not be limited to construction and installation of water lines, reclaim water lines, sewer lines, storm sewer lines and systems, asphaltic and concrete paving, curb, gutter and sidewalks, street lights, traffic signals and public landscaping. (3) Inspection, testing and permit fees. (4) Engineering and design fees required for preparation of plans and specifications. (5) Incidental fees, expenses and charges, including but not limited to capitalized interest required to complete the improvements. (6) Financing costs to city, where applicable.

2.1 Capacity Estimate; City Assured Delta. The City and NJWC acknowledge that the initial estimate of the water production capacity of the Regional Improvements is 1,200 GPM based on the Clear Creek hydrologic evaluation dated October, 2022 (the "**Initial Estimated Improvement Capacity**"). The City agrees that the City will assure and provide the difference between (i) the lesser of the approved capacity of and the amount actually produced by DOW4 and (ii) twelve hundred (1200) GPM for allocation under this Overlay Agreement (the "**City Assured Delta**") until completion of DOW5 as set forth in Section 2.1.1.

2.1.1 Additional Sourcing. The City and NJWC acknowledge that DOW4 is anticipated to provide twelve hundred (1200) GPM for allocation under this Overlay Agreement, but the Parties acknowledge that DOW4 may not produce at the amount anticipated. In such event that DOW4 does not generate at least one thousand and two hundred (1200) GPM of permitted

production capacity at an acceptable water quality (as determined by the City), then, within five (5) years of the execution of this Overlay Agreement, NJWC shall develop and cause to be into service DOW5, to ensure on completion of DOW5 that there is no permanent shortfall of water required for the properties served by DOW4.

2.1.2 Contingent Excess Capacity. Because the City and NJWC anticipate that the Nobella and Marisol will absorb all or substantially all of the currently estimated available EDUs of the Regional Improvements, the Parties do not anticipate that there will be any excess capacity. If there is excess capacity resulting from the Regional Improvements, NJWC shall be entitled to sell, transfer, and/or convey such excess capacity to other properties located within the SPA 2 and SPA 4 service areas.

2.2 Assured Water Supply. The property comprising Nobella and the property comprising Marisol are within the water service area of the City (the "Served Property"). The City is designated as having an assured water supply pursuant to Arizona Revised Statutes Section 45-575. Subject to water availability on a first-come, first-served basis and the City maintaining its designation of assured water supply, at the time when any final plat or building permit for any portion of the Served Property is issued, the City may certify that said Served Property has an assured water supply for every use of the Served Property for which an assured water supply is required by law, including without limitation, each residential lot subject to a City-issued building permit.

2.3 Water Related Development Fees. The Regional Improvements funded by way of this Overlay Agreement may be eligible for water system impact fees credits if the improvements are included in the City's Infrastructure Improvement Plan ("**Fee Credits**").

2.4 Completion of Regional Improvements. NJWC shall cause the work on the Regional Improvements, including any City inspections and proper conveyance of the completed Regional Improvements as inspected, approved, and accepted by the City, to be completed prior to the issuance of building permits within the Nobella development and, except for lots pre-approved by the City to receive water from any separate well on or serving Marisol, within the Marisol Ranch development.

2.5 Conveyance. Upon causing the completion of the Regional Improvements and the City's determination of the capacity, performance, and the quality of water from DOW4 (and DOW5 if constructed), including that the production amounts and quality of water produced meets all City standards, NJWC will convey the Regional Improvements and the DOW4 Parcel to City via a quit claim deed and bill of sale to the City in the forms set forth on **Exhibit C** and **Exhibit D**, respectively.

2.6 Tax Form Completion. Upon Conveyance of the Regional Improvements and DOW4 Parcel as set forth above, NJWC will prepare for the City's review and completion, an IRS Tax Form 8283. NJWC shall be responsible for all fees and costs incurred in preparing, complying with, and filing said Tax Form 8283 with the IRS, including all appraisal costs and environmental assessment fees. The City makes no statements, commitments, or promises, and provides no tax or legal advice, regarding NJWC's eligibility to use and/or rely on IRS Tax Form 8283. Upon

receipt of title to the Regional Improvements and the DOW4 Parcel, City will complete its portion of IRS Tax Form 8283.

2.7 Conveyance on Default or Noncompletion of Regional Improvements. If NJWC defaults on any obligation under this Overlay Agreement or does not complete the required Regional Improvements, NJWC will immediately convey to the City, upon written demand, a quit claim deed to the City for title to the DOW4 Parcel and all completed portions of the Regional Improvements (including, without limitation, the land upon which the Regional Improvements are located to the extent owned by NJWC). As part of the requirements identified in Section 4 of this Overlay Agreement, NJWC will be required to cause the posting of a payment and performance bond associated with work performed in the City's rights-of-way to construct the Regional Improvements.

2.8 City Water Treatment Plant Fees. NJWC acknowledges that it and/or its successors and assigns, shall be subject to any further agreements the City enters for the expansion of the City's Water Treatment Plant. Said plant expansion is necessary to ensure that the City's Water Treatment Plant will continue to be able to process the water generated and supplied by the Regional Improvements (the "**SPA 2 Water Expansion Agreement**"). NJWC does hereby acknowledge and agree to be subject to such SPA 2 Water Expansion Agreement. Further, to the extent permitted by law, the City intends that any property located within the area benefited by such expansion and that receives resulting service from such plant expansion shall also be subject to such SPA 2 North Water Expansion Agreement and the costs associated with such expansion will be allocated to such properties thereafter receiving service from the resulting plant expansion (the "**Plant Expansion Fees**").

2.9 DOW4 Replacement Well Site. NJWC affirms that APN 503-51-186B is within 660 feet of the original Desert Oasis Well No. 4, and City acknowledges that NJWC intends to use of APN 503-51-186B as the site of DOW4 as such Parcel was acquired by NJWC pursuant to that Special Warranty Deed recorded at Document No. 2021-0703014, Official Records of Maricopa County, Arizona.

3. **Term.** This Overlay Agreement shall become effective on the Effective Date and shall automatically terminate ten (10) years after the Effective Date.

4. **Public Bidding.** The requirements of Arizona Revised Statutes, Title 34, and Surprise City Code Section 42-5(d) for public bidding shall apply with respect to any Regional Improvements for which NJWC will be seeking reimbursement through crediting of impact fees.

5. **Indemnification and Defense of the City by NJWC.** To the fullest extent permitted by law, NJWC shall indemnify, defend (with counsel acceptable to the City), protect, and hold harmless the City, and its elected officials, appointed officials, employees, and agents for, from, and against any and all liability, loss, damage, expense, and legal fees or costs, arising from or related to any claim or action, including but not limited to, claims or actions for takings or constitutionally impermissible exactions, brought by any person or entity in connection with NJWC's performance of the duties imposed and the rights granted to NJWC by this Overlay Agreement and any amendments thereto. The scope of this duty to indemnify, defend, protect, and hold harmless shall include, but not be limited to, any claim or cause of action that may be asserted

by any original party or successor party to the Overlay Agreement. Additionally, NJWC shall defend the validity of this Overlay Agreement and its amendments in the event of any proceeding or litigation arising from its terms or implementation that names the City as a party and that challenges the validity of the Overlay Agreement or the authority of the City to enter into or perform any of its obligations under this Overlay Agreement. NJWC's obligations and liabilities under this Section shall survive the termination of this Overlay Agreement.

6. **Takings/Exactions.** Nothing in this Overlay Agreement shall require the City to affect a taking, administrative or otherwise, or constitutionally impermissible exaction. To the extent that any provision of this Overlay Agreement is held to be a taking, a constitutionally impermissible exaction, or otherwise unlawful by a court of competent jurisdiction, that provision shall be void and the City shall be released from performance of any obligation under that provision.

7. **Notices and Filings.** All notices, filings, consents, approvals, and other communications provided for herein or given in connection herewith shall be validly given, filed, made, delivered, or served if in writing and delivered personally, emailed, or sent by first-class United States Mail to:

City:	City of Surprise 16000 N. Civic Center Plaza Surprise, AZ 85374 Phone: 623.222.3230
With Copy to:	City of Surprise 16000 N. Civic Center Plaza Surprise, AZ 85374 Attn: City Attorney Email: Robert.Wingo@surpriseaz.gov Phone: 623.222.1124
NJWC:	North Jomax Water Coordinator, LLC C/O Hines Interests Limited Partnership 2375 E. Camelback Road, Suite 150 Phoenix, AZ 85016 Attn: Chris Anderson chris.anderson@hines.com Attn: Brandon Dillingham brandon.dillingham@hines.com
With Copy to:	Hines Legal Department 845 Texas Avenue, Suite 3300 Houston, TX 77002 Attn: Corporate Counsel corporate.legal@hines.com

or to such other address or addresses as may hereafter be specified by notice given by any of the above for itself to the others. Any notice or other communication directed to either party shall

become effective upon the earliest of the following: (a) actual receipt by that party; or (b) three (3) days after deposit with the United States Postal Service, addressed to the party.

8. **Default.** Failure or unreasonable delay by either party to perform or otherwise act in accordance with any term or provision hereof shall constitute a breach of this Overlay Agreement. Any breach not cured within thirty (30) days after written notice is received from a non-breaching party, shall constitute a default under this Overlay Agreement; provided, however, that if the failure is such that more than thirty (30) days would reasonably be required to perform such action or comply with any term or provision hereof, then the breaching party shall have such additional time as may be necessary to perform or comply as long as the breaching party commences performance or compliance within said thirty (30) day period and diligently proceeds to complete such performance or fulfill such obligation. Any notice of a breach shall specify the nature of the alleged breach and the manner in which said breach may be satisfactorily cured, if possible. The thirty (30) day period shall not apply where an ordinance or statute requires City to perform or otherwise act in a period in excess of thirty (30) days. If a breach remains uncured following the thirty (30) day period, the only remedy permitted shall be specific performance, and the City shall not be responsible, liable, or obligated to pay any monetary damages, except as specifically allowed within this Overlay Agreement.

9. **Dispute Resolution.** If there is a dispute hereunder that the Parties cannot resolve between themselves, the Parties agree that there shall be a forty-five (45) day moratorium on litigation during which time the Parties agree to attempt to settle the dispute by nonbinding mediation before commencement of litigation. The mediation may be held under the commercial mediation rules of the American Arbitration Association, or other applicable rules as required by the Parties' selected mediator. The matter in dispute shall be submitted to a mediator mutually selected by the Parties. If the Parties cannot agree on the selection of a mediator within seven (7) days, then within three (3) days thereafter, the Parties shall request the presiding judge of the Superior Court in and for the County of Maricopa, Arizona, to appoint an independent mediator. The mediator selected shall have at least five (5) years' experience in mediating or arbitrating disputes relating to development of municipal infrastructure, if available. The cost of any such mediation shall be divided equally between the Parties. The results of the mediation shall be nonbinding on the Parties, and either Party shall be free to initiate litigation subsequent to the moratorium.

10. **Choice of Law, Venue and Attorneys' Fees.** Any dispute, controversy, claim or cause of action arising out of or related to this Overlay Agreement shall be governed by Arizona law. The venue for any such dispute shall be Maricopa County, Arizona, and each Party waives the right to object to venue in Maricopa County for any reason. No Party shall be entitled to recover any of its attorneys' fees nor other costs from any other party incurred in any such dispute, controversy, claim, or cause of action, but each Party shall bear its own attorneys' fees and costs, whether the same is resolved through mediation, arbitration, litigation in a court, or otherwise.

11. **Good Standing and Authority.** Each Party represents and warrants that it is duly formed and validly existing under applicable law and that the individual executing this Overlay Agreement on behalf of such Party is authorized and empowered to bind the Party on whose behalf such individual is signing.

12. **Assignment.** The provisions of this Overlay Agreement are binding upon and shall inure to the benefit of the Parties, and all their successors in interest and assigns. This Overlay Agreement may be assigned in whole or in part by NJWC with written notice of the assignment provided to the City. In the event of a complete or partial assignment by NJWC, all or a portion of NJWC's rights and obligations hereunder shall terminate effective upon the assumption by NJWC's assignee of such rights and obligations, provided written notice of the partial or entire assignment has been provided to the City.

13. **Third Parties.** It is not intended by this Overlay Agreement to, and nothing contained in this Overlay Agreement shall, create any partnership, joint venture, or other agreement between the Parties. The owners of the Benefited Properties, and their successors and assigns, are hereby declared as intended third-party beneficiaries of this Overlay Agreement. Except with respect to the above stated third-party beneficiaries, no term or provision of this Overlay Agreement is intended to, or shall, be for the benefit of any person or entity not a party hereto and no such other person or entity shall have any right or cause of action hereunder.

14. **Waiver.** No delay in exercising any right or remedy shall constitute a waiver thereof; and no waiver of any breach shall be construed as a waiver of any preceding or succeeding breach of the same or any other covenant, or condition of this Overlay Agreement. No waiver shall be effective unless it is in writing and is signed by the party asserted to have granted such waiver.

15. **Further Documentation.** The parties agree in good faith to execute such further or additional instruments and documents and to take such further acts as may be necessary or appropriate to fully carry out the intent and purpose of this Overlay Agreement.

16. **Fair Interpretation.** The parties have been represented by counsel in the negotiation and drafting of this Overlay Agreement and this Overlay Agreement shall be construed according to the fair meaning of its language. The rule of construction that ambiguities shall be resolved against the party who drafted a provision shall not be employed in interpreting this Overlay Agreement.

17. **Headings.** The headings of this Overlay Agreement are for purposes of reference only and shall not limit or define the meaning of any provision of this Overlay Agreement.

18. **Counterparts.** This Overlay Agreement may be executed in any number of counterparts, each of which shall be an original but all of which shall constitute one and the same instrument. The signature pages from one or more counterparts may be removed from such counterparts and such signature pages all attached to a single instrument so that the signatures of all parties may be physically attached to a single document.

19. **Computation of Time.** Any reference to a "day" in this Overlay Agreement shall mean City of Surprise business day unless otherwise noted. In computing any period of time under this Overlay Agreement, the date of the act or event from which the designated period of time begins to run shall not be included. The last day of the period so completed shall be included unless it is a Saturday, Sunday, or legal holiday, in which event the period shall run until the end of the next day which is not a Saturday, Sunday or legal holiday. The time for performance of any obligation or taking any action under this Overlay Agreement shall be deemed to expire at 5:00 p.m. (Arizona time) on the last day of the applicable time period provided herein.

20. **Conflict of Interest.** This Overlay Agreement is subject to the terms of ARS § 38-511.

21. **Entire Agreement.** This Overlay Agreement, together with the following Exhibits attached hereto (which are incorporated herein by this reference) constitutes the entire Overlay Agreement between the parties.

a. Exhibit A Description of Regional Improvements
b. Exhibit B Depiction of Regional Improvements
c. Exhibit C City Form of Quit Claim Deed
d. Exhibit D Bill of Sale

22. **Recitals**. The Recitals are incorporated as if fully set forth herein.

IN WITNESS WHEREOF, the parties have executed this Overlay Agreement on the date(s) written below.

CITY:
CITY OF SURPRISE
an Arizona municipal corporation

By:_____
Skip Hall, Mayor

ATTEST:

_____
Kristi Passarelli, City Clerk

APPROVED AS TO FORM:

_____
Robert Wingo, City Attorney

STATE OF ARIZONA
County of Maricopa

On this_____ day of _____ 2024, before me personally appeared Skip Hall, the Mayor of the City of Surprise, an Arizona municipal corporation, for and on behalf thereof, whose identity was proven to me on the basis of satisfactory evidence to be the person who he claims to be, and acknowledged that he signed the above/attached document.

_____
Notary Public

NORTH JOMAX WATER COORDINATOR, LLC
an Arizona limited liability company

By: _____

STATE OF ARIZONA
County of Maricopa

On this 23rd day of April 2024, before me personally appeared Brandon Dillingham, the Managing Member of North Jomax Water Coordinator, LLC, an Arizona limited liability company, for and on behalf thereof, whose identity was proven to me on the basis of satisfactory evidence to be the person who he claims to be, and acknowledged that he signed the above/attached document.

_____
Notary Public:

Lindy Martins
Notary Public
Maricopa County, Arizona
My Comm. Expires 01-29-28
Commission No. 664066

Exhibit A

Description of Regional Improvements

The Regional Improvements generally shall comprise the East Well and well site and the raw water line from the East Well to the City of Surprise Water Treatment Plant (known as the City Water Campus). The raw water line shall run from the Well Parcel along the north side of West Patton Road/Dynamite Boulevard, south along 171st Avenue to Jomax Road, east along Jomax Road to the City of Surprise Water Campus, comprising the East Well, associated equipment and approximately 12,000 lineal feet of watermain.

Exhibit B

Depiction of Regional Improvements

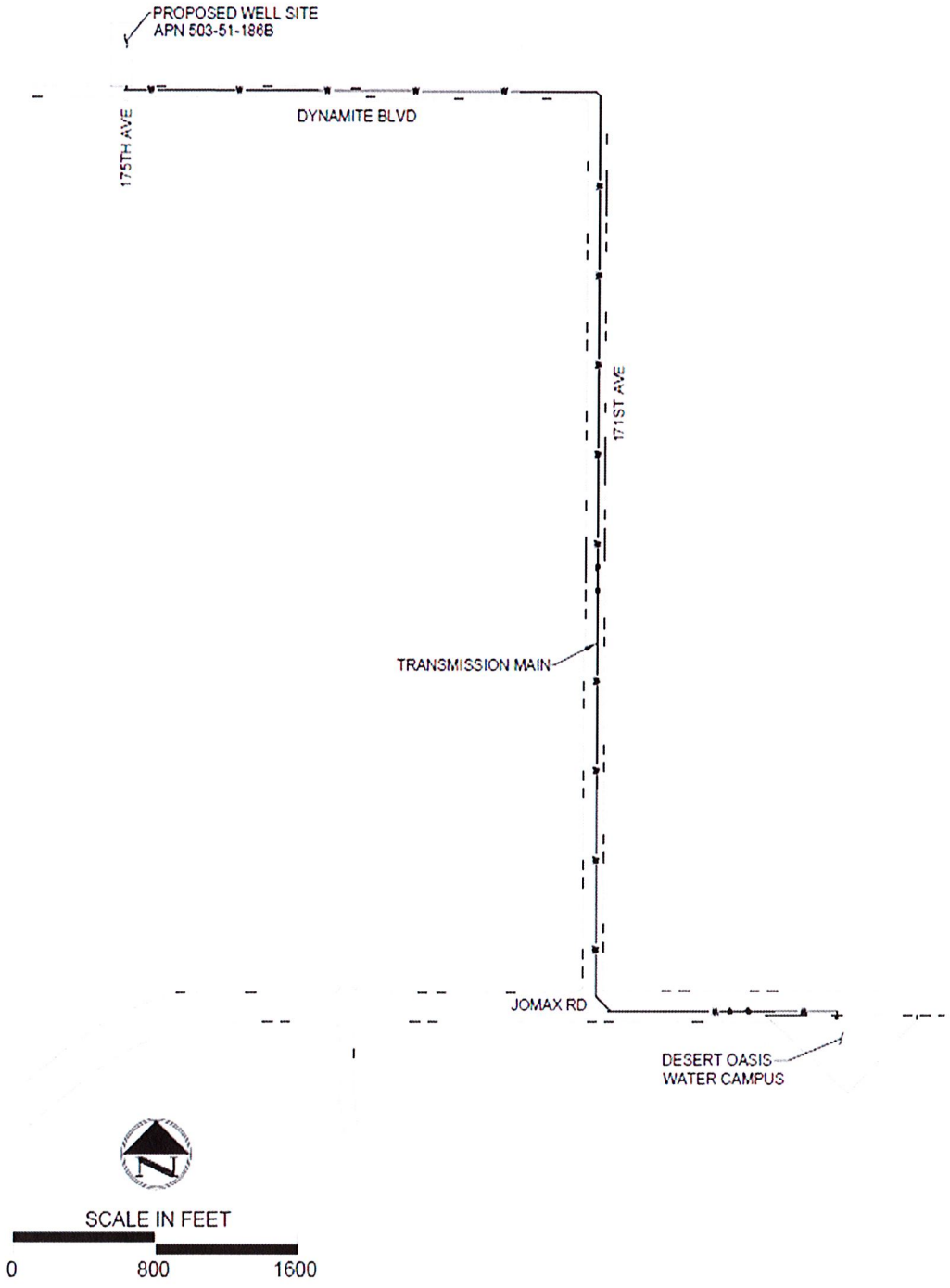


Exhibit C

City Form of Quit Claim Deed

When Recorded Mail To:

City Clerk
City of Surprise
16000 N Civic Center Plaza
Surprise, AZ 85374

Exempt from filing an
Affidavit of legal value
A.R.S. §11-1134(A)(3)

QUIT CLAIM DEED

For the consideration of One Dollar ($1.00) and other valuable consideration, the receipt and sufficiency of which is hereby acknowledged, North Jomax Water Coordinator, LLC, an Arizona limited liability company **("Grantor")**

Does hereby quitclaim to the City of Surprise, an Arizona municipal corporation, all of Grantor's right, title, and interest in the real property as legally described in Exhibit A and depicted in Exhibit B.

Dated this _____ day of _____, 2024.

GRANTOR:
NORTH JOMAX WATER COORDINATOR, LLC
an Arizona limited liability company

By: _____

STATE OF ARIZONA)
)ss.
County of Maricopa)

This instrument was acknowledged and executed before me this ____ day of,_____, 2024, by _____ of North Jomax Water Coordinator, LLC, an Arizona limited liability company _____.

My Commission Expires:

_____
Notary Public

GRANTEE:

CITY OF SURPRISE,
An Arizona municipal corporation

By: _____
Skip Hall
Its: Mayor

Attest:

_____
Kristi Passarelli, City Clerk

STATE OF ARIZONA)
)SS.
County of Maricopa)

The foregoing instrument was acknowledged before me this ____ day of _____, 2024, by Skip Hall, known by my as the Mayor of the City of Surprise an Arizona municipal corporation.

_____
Notary Public

My Commission Expires:

Exhibit C

Exhibit D

Bill of Sale

BILL OF SALE AND ASSIGNMENT

FOR VALUABLE CONSIDERATION, receipt and adequacy of which is hereby acknowledged, the undersigned NORTH JOMAX WATER COORDINATOR, LLC, an Arizona limited liability company, ("Assignor") hereby sells, transfers, assigns and conveys to the CITY OF SURPRISE, an Arizona municipal corporation, ("Assignee") all of Assignor's right, title and interest in the following located on the real property legally described on Exhibit A (the "DOW4 Parcel"): (a) all structures, buildings, improvements and fixtures, including, but not limited to, the well site, associated equipment, and the raw water lines running from and/or appurtenant to the DOW4 Parcel to the Assignee's Desert Oasis Water Campus (collectively, the "Improvements"); and (b) to the extent assignable, all intangible property owned by Assignor and used in connection with the DOW4 Parcel and the Improvements (collectively, the "Intangible Property"), including specifically, without limitation, all right, title and interest of Assignor in the following: (i) all plans and specifications, if any, in the possession of Assignor pertaining to the construction of any Improvements; (ii) all licenses, permits, approvals, consents, variances and waivers from any governmental or quasi-governmental agency, department, board, commission, bureau or other entity now in effect with respect to the DOW4 Parcel or the Improvements; and (iii) all warranties and guaranties, if any, assignable by Assignor and issued to Assignor in connection with the Improvements. All capitalized terms not defined herein shall have the respective definitions set forth in that certain North Jomax Water Development Agreement (Overlay Agreement) dated as of _____ __, 2024, as amended, by and between Assignor and Assignee.

Assignor will, at no cost to Assignee, execute, acknowledge, and deliver such assignments, transfers, conveyances, confirmations, and instruments of further assurance as Assignee may reasonably request of the assets conveyed and transferred hereby or intended so to be conveyed or transferred by this document, subject to Assignor's approval as to form and content.

IN WITNESS WHEREOF, Assignor has executed this Bill of Sale and Assignment as of _____ __, 202_.

ASSIGNOR:

NORTH JOMAX WATER COORDINATOR, LLC
an Arizona limited liability company

By: _____

Name: _____

Its: _____

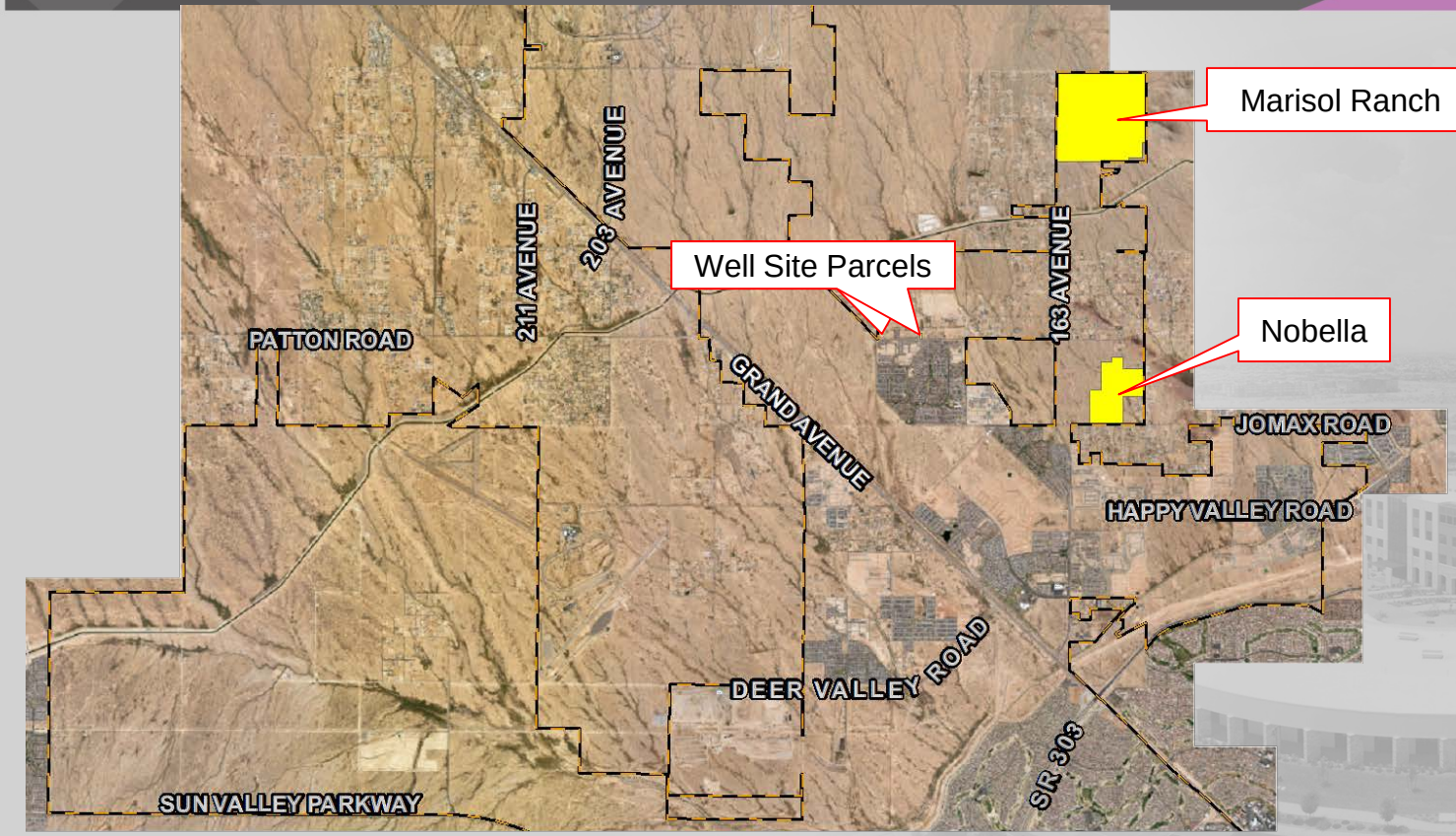
SURPRISE
ARIZONA

Resolution 2024-77 North Jomax Water Development Agreement, FS23-1003

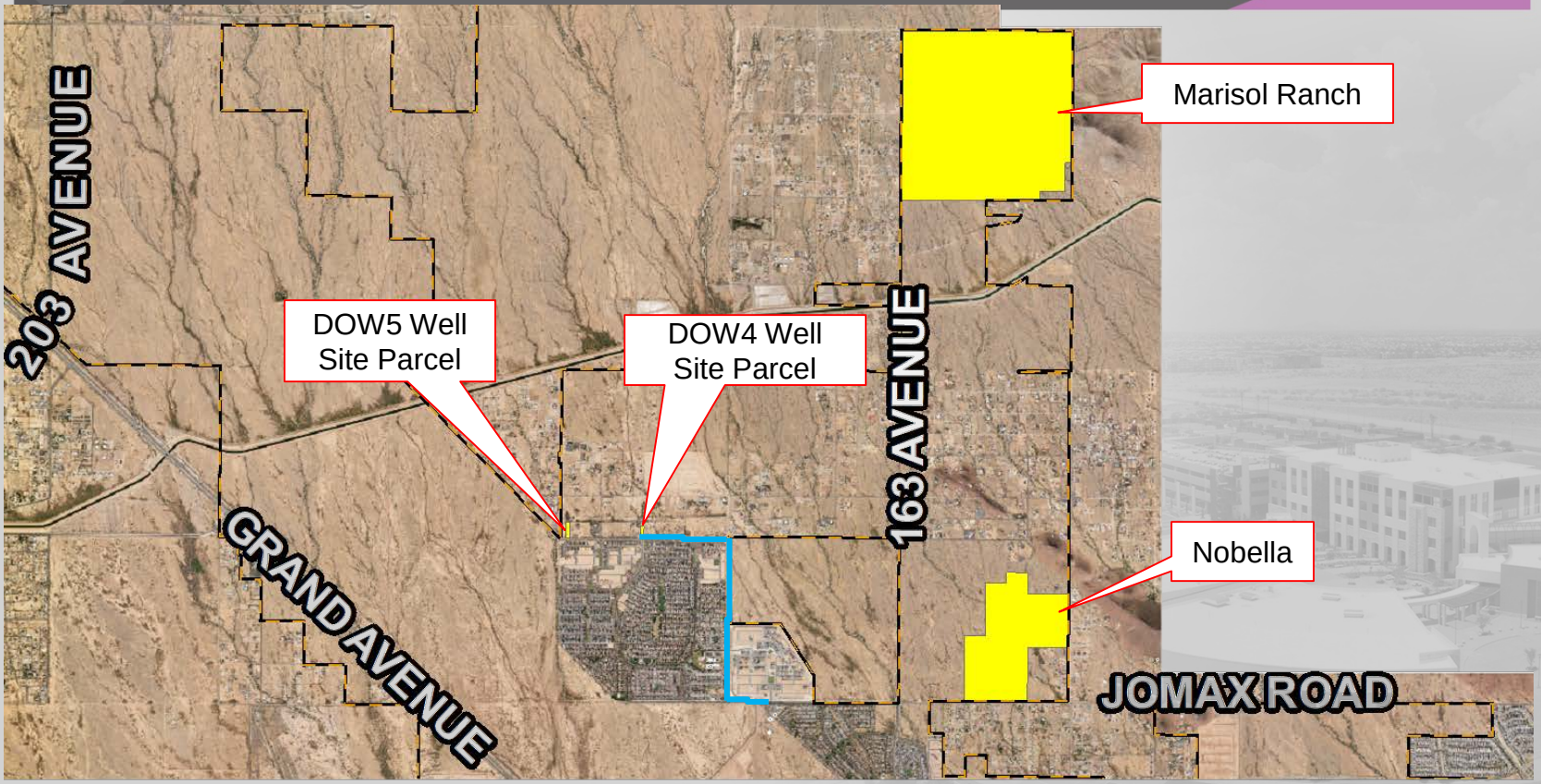
City Council

May 7, 2024

North Jomax Water Vicinity Map



North Jomax Water Location Map



Well & Water Line Improvements

The Developer Obligations

- Design and construct well site DOW4
- Construct approximately 12,000 feet of water main line

The City Obligations

- Accept and maintain the dedicated water infrastructure

SURPRISE
ARIZONA

QUESTIONS OR COMMENTS?

Thank You

CITY OF SURPRISE
Regular City Council Meeting

Council Meeting Date: May 7, 2024
Submitting Department: City Clerk
Staff Recommendations:

Contact Person: Kristi Passarelli, City Clerk
District: District 4

Consent: No Regular: No Public Hearing: Yes Report/Discussion: No

Agenda Wording:
Consideration and action pertaining to a recommendation to the Arizona Department of Liquor Licenses and Control (DLLC) on Application No. 287627, requested by Rosa Maria Lara, for Bien Venido Al Buen Gusto Paisano for Series 10 Liquor License. Bien Venido Al Buen Gusto Paisano is located at 15601 N Greasewood St, Surprise, AZ 85378.

Motion:
I move to recommend approval of application No. 287627 to the Arizona Department of Liquor Licenses and Control.

Background:
The City has received an application for a new Series 10 liquor license for Bien Venido Al Buen Gusto Paisano is located at 15601 N Greasewood St, Surprise, AZ 85378. The City Clerk's Office has posted the appropriate notice as required by law. No written arguments in favor of or opposed to the issuance of the license have been received by the Clerk's Office within the twenty days after the date of posting the notice.

The application has also been disseminated to the Community Development Department, Finance Department, Surprise Police Department, and Surprise Fire and Medical Department for review. Those departments have submitted memoranda which are attached to this item.

Objective Analysis:
Pursuant to state law, the City Council shall enter an order recommending approval or disapproval within sixty days after the filing of the application and shall file a certified copy of the order with the director. If the City Council recommends approval of the license a hearing before the state Liquor License Board is not required unless the director, the board or any aggrieved party requests a hearing on the grounds that the public convenience and the best interest of the community will not be substantially served if a license is issued. If the recommendation is for disapproval, a statement of the specific reasons containing a summary of the testimony or other evidence supporting the recommendation for disapproval shall be attached to the order and the state Liquor License Board will hold a hearing.

Policy Compliant:

The Liquor License process is controlled by state law. The steps taken by the City Clerk's Office and this public hearing comply with, and fulfill the City's legal obligation under, applicable state law.

Financial Impact:

None

Budget Impact:

None

FTE Impact:

None

ATTACHMENTS:

1. Finance - Bienvenido Al Buen Gusto Paisano - 15601 N Greasewood St
2. CD - Bien Venido Al Buen Gusto Paisano REPORT
3. Fire - 15601 N Greasewood St Bien Venido Al Buen Gusto Paisano
4. PD - Bien Venida Al Buen Gusto Paisano - Series 6
5. Bien Venido Al Buen Gusto Paisano Map

SURPRISE
ARIZONA

MEMO

Date: 3/29/2024

To: Kristi Passarelli, City Clerk

Charles Vasquez, Deputy City Clerk

From: Courtnee Chavez, Business Compliance Specialist

RE: Liquor License Application – BIENVENIDO AL BUEN GUSTO PAISANO

15601 N GREASEWOOD ST

Business License Status:

☐ Application link emailed on .

☑ License # 1026240 , current and valid for 12/31/24 .

☐ Applied for license but is still pending and waiting on customer to provide additional information or documents.

BUSINESS LICENSE

CITY OF SURPRISE

16000 N. Civic Center Plaza
Surprise, AZ 85374-7470

Business Name: Bienvenido Al Buen Gusto Paisano Llc

Business Location: 15601 N Greasewood St Surprise, Az 85378-4124

Description: RETAIL

SURPRISE
ARIZONA

Bienvenido Al Buen Gusto Paisano Llc

Bienvenido Al Buen Gusto Paisano Llc
15601 N Greasewood St
Surprise, Az 85378-4124

BUSINESS LICENSE NUMBER: 1026240

Effective Date: 07/01/2024

Expiration Date: 12/31/2024

TO BE POSTED IN A CONSPICUOUS PLACE

NOT TRANSFERABLE

COMMUNITY DEVELOPMENT DEPARTMENT

SURPRISE
ARIZONA

Date: April 18, 2024

To: Kristi Passarelli, City Clerk

From: Lloyd Abrams, Community Development Director
James Stewart, Zoning Specialist

Re: Liquor License Application for:

Agent, Rosa Maria Lara
Bein Venido Al Buen Gusto Paisano
15601 N. Greasewood St.
SURPRISE, AZ. 85378

Series 10 (New Application – Beer and Wine Store)- Application # 287627

The number and series of licenses in close proximity to the subject site are:

1. Fresh & Easy Neighborhood Market (Series 10) – 13015 W. Greenway Rd., El Mirage (Expired)
2. Cindy's Mini Market (Series 10) – 12865 W. Grand Ave.
3. Circle K # 1184 (Series 10) – 12707 W. Grand Ave.
4. Cindy's Mini Market #2 (Series 10) – 15444 N. Greasewood St.
5. Bubba's Drive Thru (Series 10) – 15445 N. Greasewood St.

The immediate area is comprised of residential zoning in the Surprise Heritage District. The property is zoned SHD-RO)Surprise Heritage District- Residential Overlay which allows this use as a legal non-conforming site.

Growth is expected to remain static.

If managed properly, the effects of granting this liquor license on surrounding residences will be minimal. This license will have little to no effect on parking in the area. Staff believes that granting this liquor license will not directly impact the surrounding business and residential areas in a negative way.

Surprise Fire-Medical Department
14250 W. Statler Plaza Ste. 101
Surprise, AZ 85374-7479
Phone: 623-222-5000
Fax: 623-222-5001

April 1, 2024

To: Charles Vasquez, Deputy City Clerk

From: Keith Tanner, Fire Marshal

Subject: Liquor License Application

Applicant: Bien Venido Al Buen Gusto Paisano
15601 N Greasewood St

On April 1, 2024, an annual fire inspection was conducted at the above referenced location to ensure compliance with the applicable fire codes within the tenant space.

This tenant space has some outstanding fire code violations that will need to be corrected however they will be handled through the normal channels and will not interfere with the liquor license application.

Therefore we have no comment on the application at this time.

If you have any questions feel free to contact me.

Keith Tanner, Fire Marshal
Fire Prevention Division
Surprise Fire-Medical Department

S U R P R I S E P O L I C E D E P A R T M E N T
L I Q U O R L I C E N S E A P P L I C A T I O N R E V I E W

REFERENCE: DATE: April 22, 2024

Application Number- 287627
New Series #10

APPLICANT:
Bien Venido Al Buen Gusto Paisano
15601 N. Greasewood St.
Surprise, Arizona 85378

FINDINGS:

1) ***Evidence concerning the nature of the proposed business, its potential market, and its likely customers.***
Bien Venido is opening after the previous occupants closed their previous business more than five years ago in February 2019. The business has been vacant during that time. Bien Venido is a small convenience store that will serve the general community.

2) ***Effect of vehicular traffic in close proximity.***
There should be no altering effect of traffic. It's a small market in the middle of the community.

3) ***The history for the past five years of liquor violations and reported criminal activity at the proposed premises provided that the applicant has received a detailed report of such activity at least 20 days before the hearing.***
Since May 2019, there have been four calls relating to vagrancy/trespassing, two calls of criminal damage, where a window was damaged, and four calls for suspicious persons/activity.

4) ***Comparison of hours of operation of the proposed premises to the existing businesses in proximity.***
Bien Venido's hours of operation will be 6:30 AM to 11 AM every day. There is Bubba's Drive Thru liquor store (Series 10) across the street to the south. Bubba's closes at 11 PM on weekdays, at 10 PM on Sundays, and at midnight on Fridays and Saturdays. There is also Cindy's Market #2 (Series 10) catty-corner to Bien Venido's, and it is open from 7 AM to Midnight every day of the week.

5) Appropriateness of series license requested.
This series license #10 request appears appropriate for Bien Venido Al Buen Gusto Paisano.

Submitted by Officer C. E. Tovar #2059

BEIN VENIDO AL BUEN GUSTO PAISANO

SHD-CO

SHD-RO

SHD-CO

SHD-CO

SITE

CITY OF EL MIRAGE

W COTTONWOOD ST

W AMY DR

W CHURCH ST

W PARADISE LN

W RIMROCK ST

W CENTRAL ST

W TARA LN

W SAHUARO LN

W DESERT LNW DESERT LN

W GREENWAY RD

W SUNSET RD

W HOPI RD

W NAVAJO RD

W CANYON RD

W TONTO RD

W RAINBOW RD

W MARSHALL DR

W IRONWOOD ST

W OCOTILLO ST

W SAGUARO LN

W DESERT LN

W THOMPSON RANCH RD

N DYSART RD

N CHURCH ST

N SUNNY LN

N DESERT SAGE ST

N NASH ST

N HOLLYHOCK ST

N VERDE ST

N GREASEWOOD ST

N FACTORY ST

N JERRY ST

N EL MIRAGE RD

N FOX HILL DR

N 123 DR

N ALPINE GOLD LN

N BUTTERCUP LN

N CARNATION LN

N DAISY LN

N EDELWEISS LN

N FAIRYBELL LN

N CACTUS LN

N FLETCHER ST

N MAIN ST

N ALTO ST

NORMA LN

W SANTA FE DR

W GRAND AV

W MARKET ST

NW GRAND AV

N GRAND AV

CITY OF SURPRISE
Regular City Council Meeting

Council Meeting Date: May 7, 2024
Submitting Department: City Clerk
Staff Recommendations:

Contact Person: Kristi Passarelli, City Clerk
District: District 6

Consent: No Regular: No Public Hearing: Yes Report/Discussion: No

Agenda Wording:
Consideration and action pertaining to a recommendation to the Arizona Department of Liquor Licenses and Control (DLLC) on Application No. 288522, requested by Jared Michael Repinski, for Real Thai & Sushi for Series 12 Liquor License. Real Thai & Sushi is located at 13749 N Litchfield Road, Surprise, AZ 85379.

Motion:
I move to recommend approval of application No. 288522 to the Arizona Department of Liquor Licenses and Control.

Background:
The City has received an application for a new Series 12 liquor license for Real Thai & Sushi is located at 13749 N Litchfield Road, Surprise, AZ 85379. The City Clerk's Office has posted the appropriate notice as required by law. No written arguments in favor of or opposed to the issuance of the license have been received by the Clerk's Office within the twenty days after the date of posting the notice.

The application has also been disseminated to the Community Development Department, Finance Department, Surprise Police Department, and Surprise Fire and Medical Department for review. Those departments have submitted memoranda which are attached to this item.

Objective Analysis:
Pursuant to state law, the City Council shall enter an order recommending approval or disapproval within sixty days after the filing of the application and shall file a certified copy of the order with the director. If the City Council recommends approval of the license a hearing before the state Liquor License Board is not required unless the director, the board or any aggrieved party requests a hearing on the grounds that the public convenience and the best interest of the community will not be substantially served if a license is issued. If the recommendation is for disapproval, a statement of the specific reasons containing a summary of the testimony or other evidence supporting the recommendation for disapproval shall be attached to the order and the state Liquor License Board will hold a hearing.

Policy Compliant:
The Liquor License process is controlled by state law. The steps taken by the City Clerk's Office and

this public hearing comply with, and fulfill the City's legal obligation under, applicable state law.

Financial Impact:
None

Budget Impact:
None

FTE Impact:
None

ATTACHMENTS:
1. Fire - 13749 N Litchfield Rd 109 Real Thai and Sushi Liquor License
2. PD - Real Thai & Sushi
3. Business - Real Thai and Sushi - 13749 N Litchfield Rd
4. CD - Real Thai & Sushi Report
5. Real Thai & Sushi MAP

Surprise Fire-Medical Department
14250 W. Statler Plaza Ste. 101
Surprise, AZ 85374-7479
Phone: 623-222-5000
Fax: 623-222-5001

April 1, 2024

To: Charles Vasquez, Deputy City Clerk

From: Keith Tanner, Fire Marshal

Subject: Liquor License Application

Applicant: Real Thai & Sushi
13749 N Litchfield Rd, #109
Surprise, AZ 85374

The Surprise Fire-Medical Department recently conducted a fire inspection at the above referenced location within the last 12 months to ensure compliance with the applicable fire codes within the tenant space and building. There are no known fire code violations at this time.

Therefore fire has no comment on the application at this time.

If you have any questions feel free to contact me.

Keith Tanner

Keith Tanner, Fire Marshal
Fire Prevention Division
Surprise Fire-Medical Department

S U R P R I S E P O L I C E D E P A R T M E N T
L I Q U O R L I C E N S E A P P L I C A T I O N R E V I E W

REFERENCE: DATE: April 18, 2024

New Application # – 288522
New Series #12 – New License

APPLICANT:
Real Thai & Sushi
13749 N. Litchfield Road #G-109
Surprise, Arizona 85379

FINDINGS:

1) ***Evidence concerning the nature of the proposed business, its potential market and its likely customers.***
Real Thai & Sushi is replacing a previous Vietnamese restaurant at this location, with a full-service Tahi & Sushi restaurant. Their market is open to all ages and demographics. There is seating for 96 inside with no designated bar area. There is no live entertainment scheduled, but there are five televisions in the restaurant.

2) ***Effect of vehicular traffic in close proximity.***
This new license should have no effect on vehicular traffic at this already existing location.

3) ***The history for the past five years of liquor violations and reported criminal activity at the proposed premises provided that the applicant has received a detailed report of such activity at lest 20 days before the hearing.***
In 2020, there was a report of a theft from the previous Song Lynn Restaurant.

4) ***Comparison of hours of operation of the proposed premises to the existing businesses in close proximity.***
Real Thai & Sushi is open every day from 11 AM to 9 PM during the week and from Noon to 9 PM on Saturday and Sunday. Uptown Alley is in the same retail plaza on the opposite side, has a series 6, bar license. It is open until 2AM on the weekends. In closer proximity, across the parking lot is another bar/restaurant, Under Review, which is open late until early morning as well on the weekends. The local AMC movie theater is open until approximately midnight when the last movie ends, and it too has a liquor license. There is also AZ Diner on another end of the plaza with a series 12 license as well, that closes most days by 3 PM, with the exception of Fridays, when it closes by 8 PM.

5) ***Appropriateness of series license requested.***
A series 12 license is appropriate and applicable for Real Thai & Sushi, per state guidelines for restaurants.

Submitted by Officer Chris Tovar #2059

SURPRISE
ARIZONA

MEMO

Date: 3/29/2024

To: Kristi Passarelli, City Clerk

Charles Vasquez, Deputy City Clerk

From: Courtnee Chavez, Business Compliance Specialist

RE: Liquor License Application – REAL THAI AND SUSHI - 13749 N LITCHFIELD RD

Business License Status:

☐ Application link emailed on .

☑ License # 1026245 , current and valid for 12/31/24 .

☐ Applied for license but is still pending and waiting on customer to provide additional information or documents.

BUSINESS LICENSE

CITY OF SURPRISE

16000 N. Civic Center Plaza
Surprise, AZ 85374-7470

Business Name: Real Thai & Sushi

Description: RESTAURANT

Business Location: 13749 N Litchfield Rd G109 Surprise, Az 85379-4271

SURPRISE
ARIZONA

Real Thai Llc

Real Thai & Sushi
16038 W Ocotillo Ln
Surprise, Az 85374-7808

BUSINESS LICENSE NUMBER: **1026245**

Effective Date: 03/04/2024

Expiration Date: 12/31/2024

TO BE POSTED IN A CONSPICUOUS PLACE

NOT TRANSFERABLE

COMMUNITY DEVELOPMENT DEPARTMENT

SURPRISE
ARIZONA

Date: April 18, 2024

To: Kristi Passarelli, City Clerk

From: Lloyd Abrams, Community Development Director
James Stewart, Zoning Specialist

Re: Liquor License Application for:

AGENT, Jared Michael Repinski
Real Thai & Sushi
13749 N. Litchfield Road #109
Surprise, Arizona 85379

NEW SERIES 12 (New Application – Restaurant) – Application # 288522

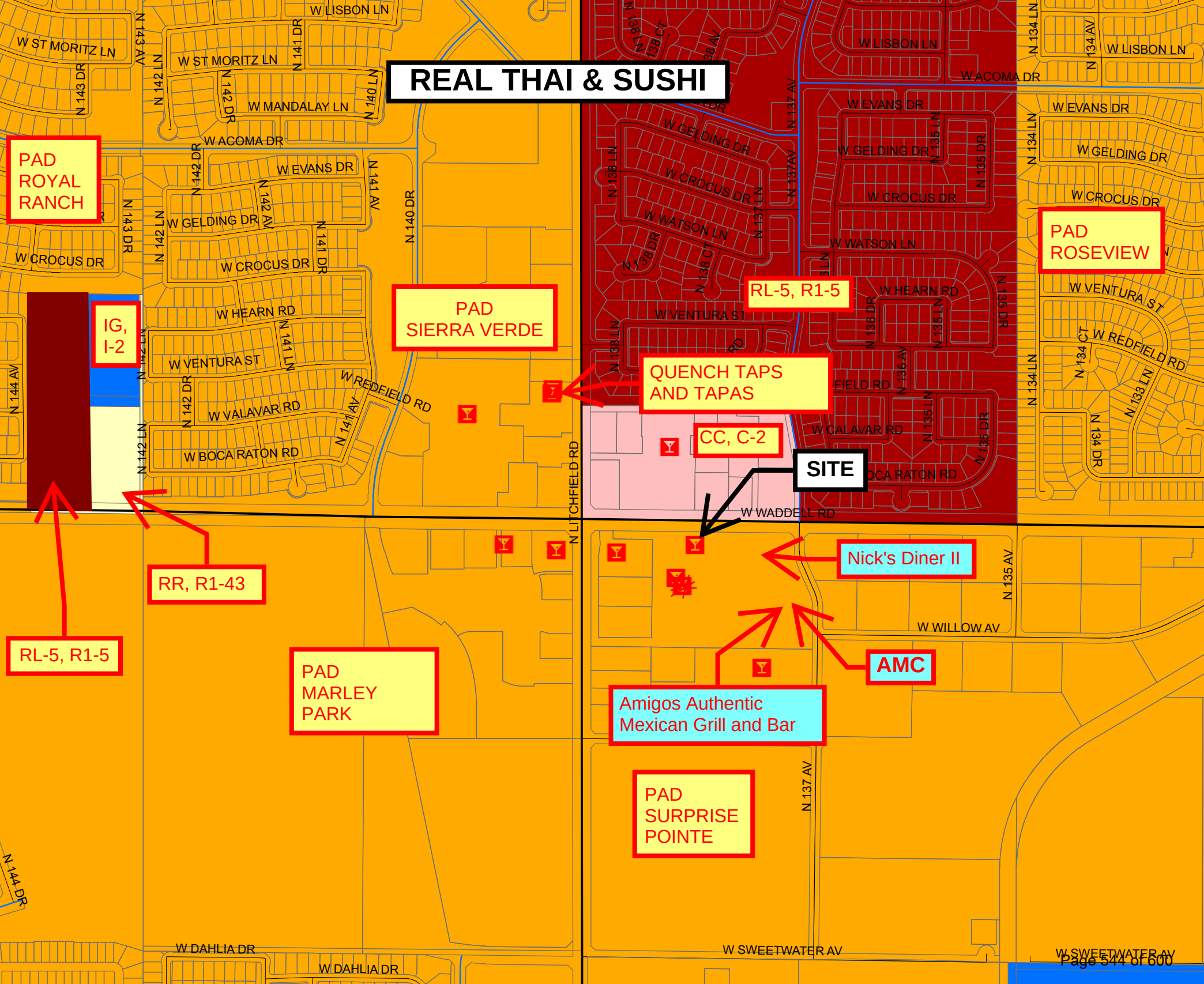
The number and series of licenses in close proximity to the subject site are:

1. Quench Taps and Tapas (Series 12) – 14010 N. Litchfield Rd.#212
2. Fry's Marketplace #674 (Series 9) – 13982 W. Waddell Rd.
3. Safeway Food & Drug # 2699 (Series # 9) – 13828 W Waddell Rd.
4. Native Grill & Wings (Series 12) – 13929 W. Waddell Rd.
5. Quiktrip #466 (Series 10) – 14057 W. Waddell Rd. (Expired)
6. Walgreen's #12087 (Series 10) – 13723 N. Litchfield Rd.
7. Tap House Sports Grill (Series 12) – 13699 N. Litchfield Rd.
8. Uptown Alley II (Series 6) – 13525 N. Litchfield Rd.
9. Amigos Authentic Mexican Grill and Bar (Series 12) – 13621 N. Litchfield Rd. (Not Shown)
10. AMC Surprise Pointe 14 (Series 6) – 13649 N. Litchfield Rd. (Not Shown)
11. Nicks Diner II (Series 12) – 13765 N. Litchfield Rd. (Not Shown)

The immediate area is comprised of commercial establishments. The property is zoned PAD C-2 which is consistent with the proposed use.

Commercial and residential growth is expected to remain static.

If managed properly, the effects of granting this liquor license on surrounding residences will be minimal. This license will have little to no affect on parking in the area. Staff believes that granting this liquor license will not directly impact the surrounding business and residential areas in a negative way.


REAL THAI & SUSHI
PAD ROYAL RANCH
IG, I-2
PAD SIERRA VERDE
RL-5, R1-5
QUENCH TAPS AND TAPAS
CC, C-2
SITE
PAD ROSEVIEW
RR, R1-43
RL-5, R1-5
PAD MARLEY PARK
Nick's Diner II
AMC
Amigos Authentic Mexican Grill and Bar
PAD SURPRISE POINTE
W LISBON LN
W ST MORITZ LN
W MANDALAY LN
W ACOMA DR
W EVANS DR
W GELDING DR
W CROCUS DR
W WATSON LN
W HEARN RD
W VENTURA ST
W REDFIELD RD
W VALAVAR RD
W BOCA RATON RD
W CALAVAR RD
W WADDELL RD
W WILLOW AV
W DAHLIA DR
W SWEETWATER AV
N LITCHFIELD RD
N 137 AV
N 135 AV
N 140 DR
N 141 AV
N 142 AV
N 142 LN
N 143 AV
N 143 DR
N 144 AV
N 144 DR
N 134 LN
N 134 AV
N 134 DR
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N 136 DR
N 136 AV
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N 138 CT
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N 144 DR

CITY OF SURPRISE
Regular City Council Meeting

Council Meeting Date: May 7, 2024
Submitting Department: City Clerk
Staff Recommendations:

Contact Person: Kristi Passarelli, City Clerk
District: District 5

Consent: No Regular: No Public Hearing: Yes Report/Discussion: No

Agenda Wording:
Consideration and action pertaining to a recommendation to the Arizona Department of Liquor Licenses and Control (DLLC) on Application No. 286878, requested by Andrea Dahlman Lewkowitz, for Macayo's Mexican Food for Series 12 Liquor License. Macayo's Mexican Food is located at 15565 W Bell Road, Surprise, AZ 85374.

Motion:
I move to recommend approval of application No. 286878 to the Arizona Department of Liquor Licenses and Control.

Background:
The City has received an application for a new Series 12 liquor license for Macayo's Mexican Food is located at 15565 W Bell Road, Surprise, AZ 85374. The City Clerk's Office has posted the appropriate notice as required by law. No written arguments in favor of or opposed to the issuance of the license have been received by the Clerk's Office within the twenty days after the date of posting the notice.

The application has also been disseminated to the Community Development Department, Finance Department, Surprise Police Department, and Surprise Fire and Medical Department for review. Those departments have submitted memoranda which are attached to this item.

Objective Analysis:
Pursuant to state law, the City Council shall enter an order recommending approval or disapproval within sixty days after the filing of the application and shall file a certified copy of the order with the director. If the City Council recommends approval of the license a hearing before the state Liquor License Board is not required unless the director, the board or any aggrieved party requests a hearing on the grounds that the public convenience and the best interest of the community will not be substantially served if a license is issued. If the recommendation is for disapproval, a statement of the specific reasons containing a summary of the testimony or other evidence supporting the recommendation for disapproval shall be attached to the order and the state Liquor License Board will hold a hearing.

Policy Compliant:
The Liquor License process is controlled by state law. The steps taken by the City Clerk's Office and

this public hearing comply with, and fulfill the City’s legal obligation under, applicable state law.

Financial Impact:
None

Budget Impact:
None

FTE Impact:
None

ATTACHMENTS:
1. Finance - Macayo's Mexican Food - 15565 W BELL RD
2. Fire - 15565 W Bell Rd Macayos Liquor License
3. PD -Macayo's '24
4. CD - Macayo's Restaurant Report 2024
5. Mayaco's Map

SURPRISE
ARIZONA

MEMO

Date: 4/18/2024

To: Kristi Passarelli, City Clerk

Charles Vasquez, Deputy City Clerk

From: Courtnee Chavez, Business Compliance Specialist

RE: Liquor License Application – Macayo's Mexican Food - 15565 W Bell RD

Business License Status:

☐ Application link emailed on .

☑ License # 1026410 , current and valid for 12/31/24 .

☐ Applied for license but is still pending and waiting on customer to provide additional information or documents.

BUSINESS LICENSE

CITY OF SURPRISE

16000 N. Civic Center Plaza
Surprise, AZ 85374-7470

Business Name: Macayo'S Mexican Food

Business Location: 15565 W Bell Rd Surprise, Az 85374-3437

Description: RESTAURANT

SURPRISE
ARIZONA

Macayo Restaurant Group Llc

Macayo'S Mexican Food
207 S Siesta Ln
Tempe, Az 85288-3041

BUSINESS LICENSE NUMBER: **1026410**

Effective Date: 03/29/2024

Expiration Date: 12/31/2024

TO BE POSTED IN A CONSPICUOUS PLACE

NOT TRANSFERABLE

Surprise Fire-Medical Department
14250 W. Statler Plaza Ste. 101
Surprise, AZ 85374-7479
Phone: 623-222-5000
Fax: 623-222-5001

April 3, 2024

To: Charles Vasquez, Deputy City Clerk

From: Keith Tanner, Fire Marshal

Subject: Liquor License Application

Applicant: Macayo's Restaurant
15565 W Bell Rd

The Surprise Fire-Medical Department recently conducted a fire inspection at the above referenced location within the last 12 months to ensure compliance with the applicable fire codes within the tenant space and building. There are no known fire code violations at this time.

Therefore fire has no comment on the application at this time.

If you have any questions feel free to contact me.

Keith Tanner

Keith Tanner, Fire Marshal
Fire Prevention Division
Surprise Fire-Medical Department

S U R P R I S E P O L I C E D E P A R T M E N T
L I Q U O R L I C E N S E A P P L I C A T I O N R E V I E W

REFERENCE: DATE: April 18, 2024

Application #286878
Existing License #12070006311

APPLICANT:

Macayo's Restaurant
15565 W. Bell Road
Surprise, Arizona 85374

FINDINGS:

1) ***Evidence concerning the nature of the proposed business, its potential market and its likely customers.***
Macayo's is an existing full-service family restaurant, serving Mexican cuisine and is open to the public of Surprise and the surrounding Northwest Valley. There is interior seating for 270 persons, including 60 in a separate bar area.

2) ***Effect of vehicular traffic in close proximity.***
No change.

3) ***The history for the past five years of liquor violations and reported criminal activity at the proposed premises provided that the applicant has received a detailed report of such activity at lest 20 days before the hearing.***
In the last five years, there have been two reported assaults where and employee assaulted another employee and a second where a food delivery worker assaulted a restaurant employee. One adult male customer was also arrested for verbally harassing up to five females. There was also a report of an apparent intoxicated customer who was trespassed for being disorderly. There was also one report of a theft where a person stole another person's back back inside the restaurant.

4) ***Comparison of hours of operation of the proposed premises to the existing businesses in close proximity.***
Macayo's is open every day of the week from 11 AM to 9:30 PM, with the exception of Fridays and Saturdays, when it closes at 10 PM. Macayo's is in an average sized retail plaza, which contains three other restaurant/bar establishments, which all have Series 12, restaurant liquor licenses. There are also various other retail businesses, which usually close no later than 10 PM, including a yogurt shop. Tailgaters & Il Primo Surprise is open until Midnight every day except Fridays and Saturdays, when it closes at 2 AM. Booty's Wings, Burgers, and Beer is open until 10 PM every night, except for Friday and Saturday nights, when it closes at 11 PM. The third restaurant with a liquor license is Richi's Diner, which is open from 7 AM until 8 PM every day, except Sundays when it closes at 2 PM. Additionally, there is a Planet Fitness gym, which is open 24 hours every day. There is also a Chevron Four Sons gas and convenience store just east of Macayo's, which has a series 6 liquor license. It is open 24 hours a day as well.

5) ***Appropriateness of series license requested.***
A series 12 license is appropriate and applicable for the Macayo's per state guidelines for restaurants.

Submitted by Officer Chris Tovar #2059

SURPRISE
ARIZONA

COMMUNITY DEVELOPMENT DEPARTMENT

Date: April 18, 2024

To: Kristi Passarelli, City Clerk

From: Lloyd Abrams, Community Development Director
James Stewart, Zoning Specialist

Re: Liquor License Application for:

AGENT, Andrea Dahlman Lewkowitz
Macayo's Mexican Food
15565 W. Bell Road
Surprise, Arizona 85374
New Series 12 (New Application – Restaurant) - Application # 286878

The number and series of licenses in close proximity to the subject site are:

1. Richi's Diner (Series 12) – 15609 W. Bell Rd. #100
2. Booty's (Series 12) – 15557 W. Bell Rd. # 404, 405 & 406
3. Tailgaters Sports Grill (Series 12) – 15529 W. Bell Rd.
4. 4 Sons Food Store # 604 (Series 10) – 15505 W. Bell Rd.
5. Luv 2 Play (Series 7) – 15495 W. Bell Rd. # 104 (Not shown)
6. New York Flavor (Series 12) – 15170 W. Bell rd. # 103 (Expired)
7. Brookside II (Series 6) – 15170 W. Bell Rd. #115
8. AZFRYGUY (Series 12) – 15226 W. Bell Rd # 100 (Expired)
9. Bonfire Craft Kitchen and Tap House (Series 12) – 15332 W. Bell Rd. # 101 & 102
10. Walgreens # 04620 (Series 10) – 15490 W. Bell Rd.
11. Lucky's Pizza # 3 (Series # 12) – 15508 W. Bell Rd. # 107
12. Fry's Marketplace #61 (Series 9) – 15510 W. Bell Rd.

The immediate area is comprised of commercial establishments. The property is zoned PAD C-2 which is consistent with the proposed use.

Commercial and residential growth is expected to remain static.

If managed properly, the effects of granting this liquor license on surrounding residences will be minimal. This license will have little to no affect on parking in the area. Staff believes that granting this liquor license will not directly impact the surrounding business and residential areas in a negative way.

MACAYO'S MEXICAN FOOD

SITE

LUV 2 PLAY

W GOLDWATER RIDGE DR
N SOMERSET DR
N EAGLE CREST DR
N EL DORADO WY
N HAVASUPAI DR
W ARROWHEAD DR
W GOLDENROD DR
W STAR VIEW LN
W BRIDGEWOOD DR
W SAGE TR
W LINKSVIEW DR
N HAVEN DR
W ENCANTADA DR
W LA SALINAS LN
W LAS VERDES WY
W OAKRIDGE CT
N STONE HAVEN DR
N AUGUSTA LN
N FIRESTONE LN
N REEMS RD
W MELISSA LN
W EUREKA TR
W ELKO DR
W EVENING STAR TR
W HONEYSUCKLE LN
W MEMORY LN
N ELKO DR
N CASSI DR
N CHANCE DR
W JILL LN
W BROOKSIDE LN
N MELISSA LN
N EUREKA TR
W LEA LN
W MONDELL RD
W BELL RD
N 160 DR
N 160 AV
W SMOKEY DR
W ELM ST
N 159 AV
W LUNDBERG ST
N 159 DR
N MOUNTAIN VISTA BLVD
N 158 AV
N 157 AV
W YOUNG ST
W POST DR
N VISTA RANCH RD
N 161 DR
N 159 DR
COTTONWOOD ST
W ELM CIR
N 151 LN
W BOLA DR
N 152 AV
N 153 DR
W POST CIR
N 152 CT
N 152 LN

CITY OF SURPRISE
Regular City Council Meeting

Council Meeting Date: May 7, 2024 Contact Person: Chris Sexton
Submitting Department: Community Development District: District 1
Staff Recommendations:

Consent: No Regular: Yes Public Hearing: No Report/Discussion: No

Agenda Wording:
Consideration and action ordering the recording of a blank petition for the proposed annexation of approximately 4.07 acres generally known as the 162nd Drive Self Storage Project (Case FS23-0991); Resolution #2024-60.

Motion:
I move to approve Resolution #2024-60.

Background:
David Hughes with EPS Group, Inc., representing the property owner, seeks annexation of undeveloped land generally located south of the southeast corner of 163rd Avenue and 162nd Drive. The annexation proposal is for one (1) parcel, consisting of approximately 4.07 acres of unincorporated land with Maricopa County zoning district, Community Commercial with Commercial Plan of Development Overlay Zone (C-3 CUPD). If annexed, the property will assume the similar zoning district of Regional Commercial (C-3) as outlined in the Land Development Ordinance (LDO). The owner applied for a rezone request (under case FS23-0992) for Regional Commercial with a PUD overlay (C-3 w/PUD). The Resolution for the Intent to Annex directs City Staff to begin the annexation process pursuant to A.R.S. § 9-471. The applicant held one Neighborhood Outreach Meeting on January 17, 2024. Advertisements were posted in two of the local newspapers and three (3) signs were posted within the subject property. There were four (4) attendees who had inquiries regarding the project.

Objective Analysis:
Positive impacts include adding additional property to the incorporated City limits which will generate additional property and potential development fees for the City. Negative impacts could include providing services to a 4.07 acre area the City did not have to previously serve.

Policy Compliant:
If the City Council moves forward to annex property into the City limits, the annexation would be deemed policy compliant by expanding the range of influence of the City.

Financial Impact:
At this time, there are no financial impacts associated with this item. If the City Council moves forward

to annex property into the City limits there could be financial impacts to the City to provide services to an area that the City did not serve in the past. If the area is annexed that could result in future development fees, and sales and property tax revenues.

Budget Impact:

At this time, there are no budget impacts associated with this item. If the City Council moves forward to annex property into the City limits there could be budget impacts to the City to provide services to an area that the City did not serve in the past. If the area is annexed that could result in future development fees, and sales and property tax revenues.

FTE Impact:

At this time, there would be no additional FTEs associated with this item. If the City Council moves forward to annex property into the City limits staff does not believe any future FTEs would be needed based on the potential annexation.

ATTACHMENTS:

1. 01 - FS23-0991 162nd Drive Self Storage - Annexation Discussion Resolution
2. 02 - FS23-0991 162nd Self Storage Annexation - Legal Description
3. 03 - FS23-0991 - 162nd Drive Self-Storage Annexation - Vicinity Map
4. FS23-0991 - 162nd Drive Self-Storage Annexation - Intent to Annexation - PowerPoint

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RESOLUTION # 2024-60

A RESOLUTION OF THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE, ARIZONA DIRECTING THE RECORDING OF A BLANK PETITION FOR ANNEXATION PURSUANT TO A.R.S. § 9-471 TO INITIATE THE PROCESS OF ANNEXING CERTAIN PROPERTY THAT ADJOINS AND IS CONTIGUOUS TO THE CITY OF SURPRISE CONSISTING OF APPROXIMATELY 4.07 ACRES LOCATED SOUTH OF THE SOUTHEAST CORNER OF 163RD AVENUE AND 162ND DRIVE IN MARICOPA COUNTY, ARIZONA

WHEREAS, it has been proposed that the City of Surprise annex certain property of the north half of the north half of Lot 3 (northwest quarter of the southwest quarter) of Section 18, Township 4 North, Range 1 West of the Gila and Salt River Base and Meridian, Maricopa County, Arizona, more particularly described in the attached ***Exhibit A***;

WHEREAS, the area to be annexed adjoins the exterior boundary of the City of Surprise for at least 300 feet and is otherwise contiguous to the City; and

WHEREAS, A.R.S. § 9-471(A)(1) requires that the City file, in the office of the Maricopa County, Arizona Recorder, a blank petition setting forth the legal description, attached hereto as ***Exhibit A***, and an accurate map of the exterior boundaries of the territory proposed to be annexed, attached hereto as ***Exhibit B***.

NOW, THEREFORE, BE IT RESOLVED by the Mayor and Council of the City of Surprise, Arizona, as follows.

Section 1. The City Clerk shall record with the Office of the Maricopa County Recorder a blank annexation petition containing the legal description of the property, attached hereto as ***Exhibit A***, and an accurate map of the exterior boundaries of the territory proposed to be annexed, attached hereto as ***Exhibit B***. The City Clerk shall also record a sworn affidavit verifying that no part of the territory proposed to be annexed is already subject to an earlier filing for annexation.

Section 2. The City Clerk shall call a public hearing for the purpose of consideration of the proposed annexation, said hearing to be noticed for a date between twenty (20) to thirty (30) days after filing the blank annexation petition, in accordance with A.R.S. § 9-471 (A)(3).

[SIGNATURES TO FOLLOW ON THE NEXT PAGE]

APPROVED AND ADOPTED this _____day of _____, 2024.

Skip Hall, Mayor

Attest:

Kristi Passarelli, City Clerk

Approved as to form:

Robert Wingo, City Attorney

EXHIBIT "A"
162ND DRIVE SURPRISE STORAGE
ANNEXATION
LEGAL DESCRIPTION

Job No. 23-0035 NOVEMBER 13, 2023

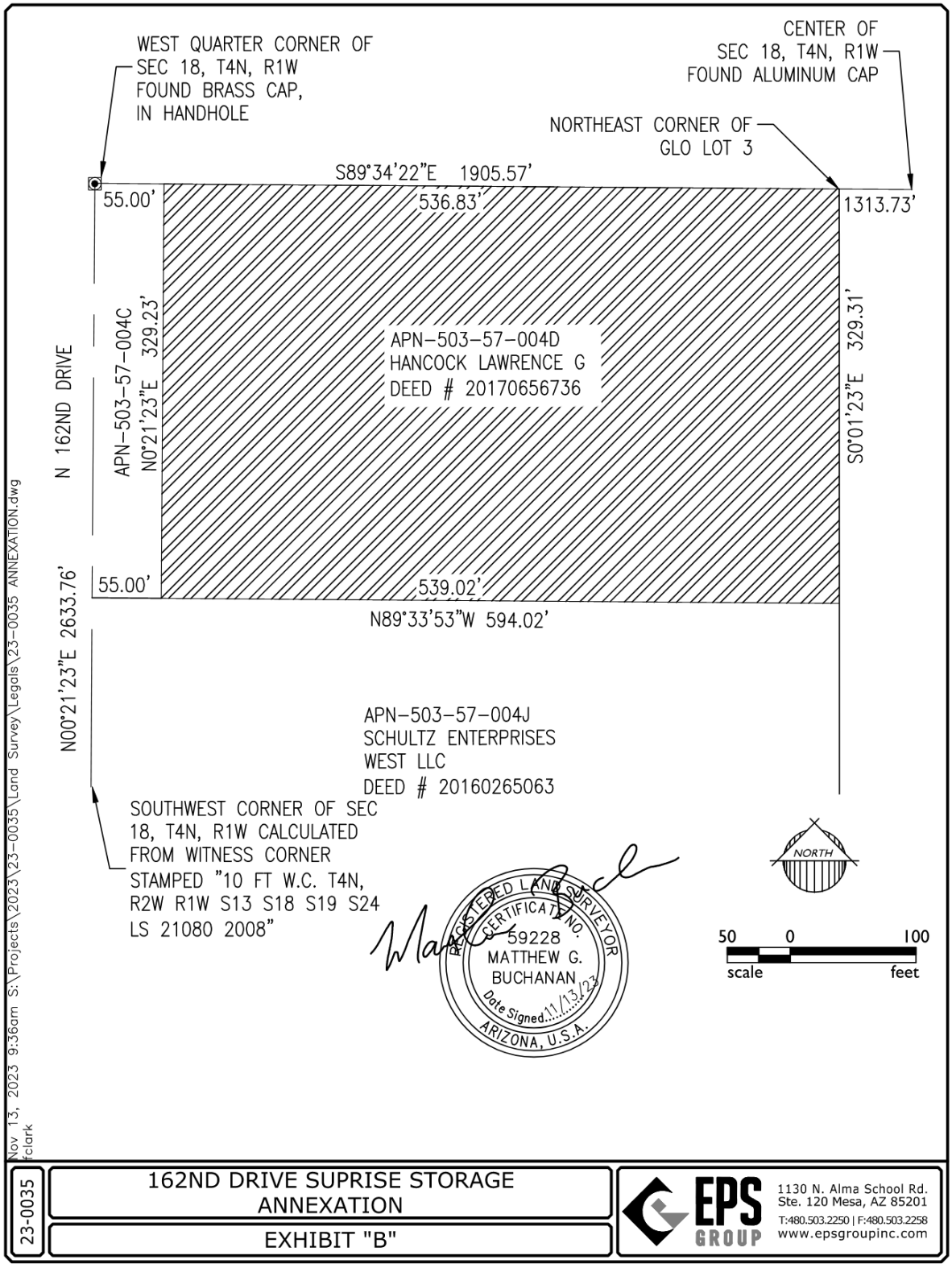
THE NORTH HALF OF THE NORTH HALF OF LOT 3 (NORTHWEST QUARTER OF THE SOUTHWEST QUARTER) OF SECTION 18, TOWNSHIP 4 NORTH, RANGE 1 WEST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA.

EXCEPT THE WEST 55 FEET THEREOF.

SAID PORTION OF LAND CONTAINING 177,120 SQUARE FEET, OR 4.0661 ACRES, MORE OR LESS, AND BEING SUBJECT TO ANY EASEMENTS, RESTRICTIONS, AND/OR RIGHTS-OF-WAYS OF RECORD OR OTHERWISE.

THIS DESCRIPTION SHOWN HEREON IS NOT TO BE USED TO VIOLATE SUBDIVISION REGULATIONS OF THE STATE, COUNTY AND/OR MUNICIPALITY, OR ANY OTHER LAND DIVISION RESTRICTIONS.





Resolution #2024-60
RFLS #9391
Rev. 5/23

EXHIBIT "A"
162ND DRIVE SURPRISE STORAGE
ANNEXATION
LEGAL DESCRIPTION

Job No. 23-0035 NOVEMBER 13, 2023

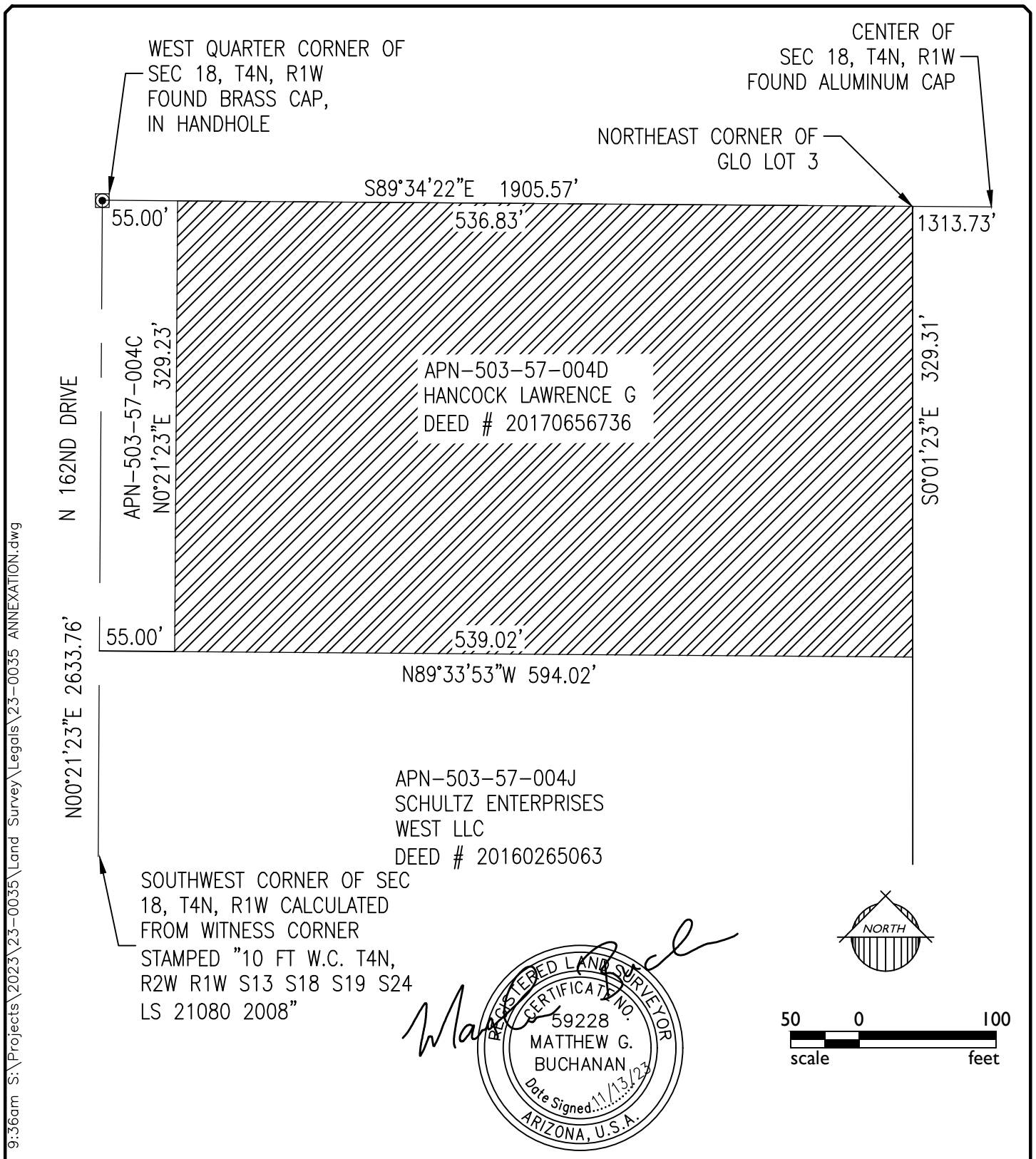
THE NORTH HALF OF THE NORTH HALF OF LOT 3 (NORTHWEST QUARTER OF THE SOUTHWEST QUARTER) OF SECTION 18, TOWNSHIP 4 NORTH, RANGE 1 WEST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA.

EXCEPT THE WEST 55 FEET THEREOF.

SAID PORTION OF LAND CONTAINING 177,120 SQUARE FEET, OR 4.0661 ACRES, MORE OR LESS, AND BEING SUBJECT TO ANY EASEMENTS, RESTRICTIONS, AND/OR RIGHTS-OF-WAYS OF RECORD OR OTHERWISE.

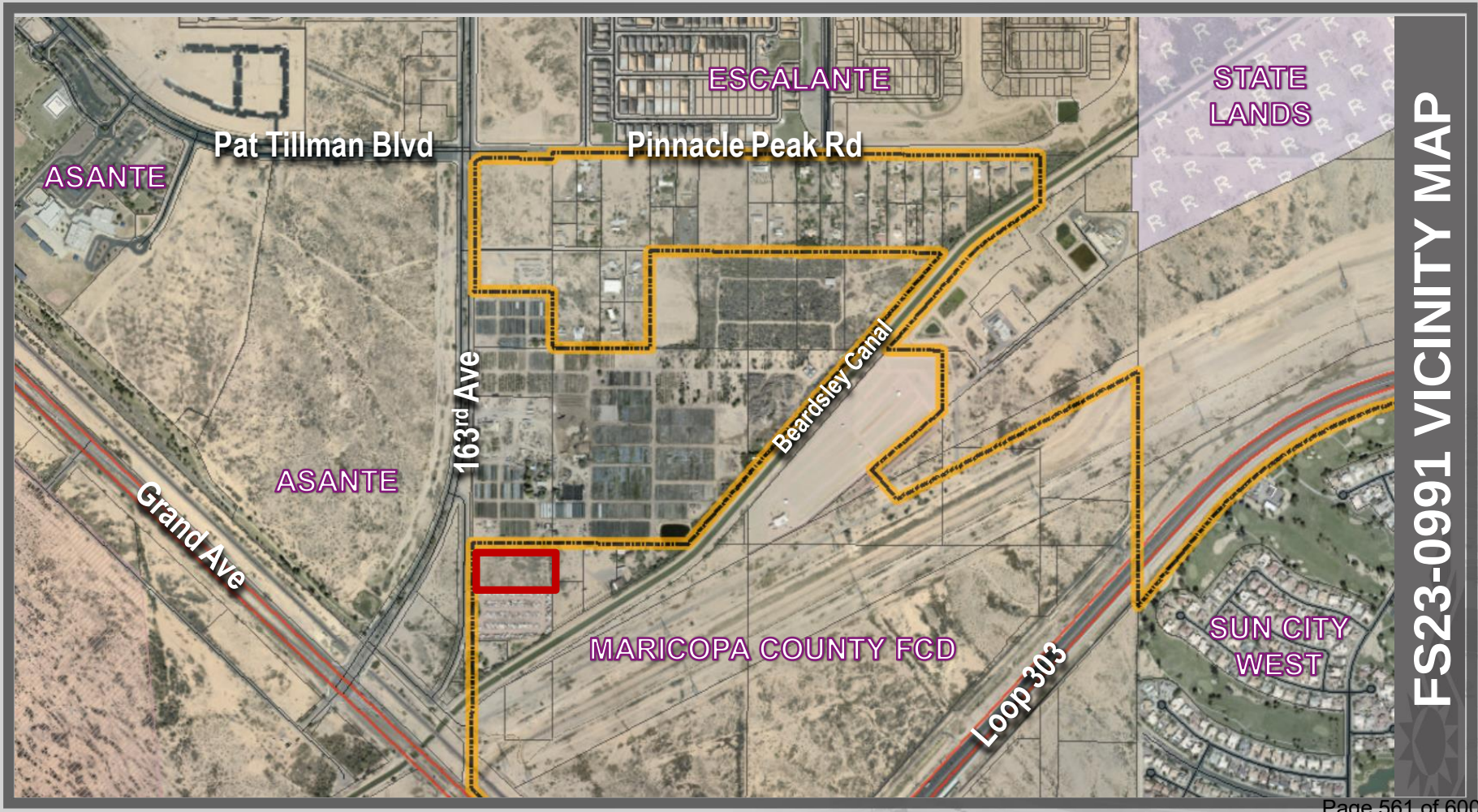
THIS DESCRIPTION SHOWN HEREON IS NOT TO BE USED TO VIOLATE SUBDIVISION REGULATIONS OF THE STATE, COUNTY AND/OR MUNICIPALITY, OR ANY OTHER LAND DIVISION RESTRICTIONS.





Nov 13, 2023 9:36am S:\Projects\2023\23-0035\Land Survey\Legals\23-0035 ANNEXATION.dwg
fclark

23-0035	162ND DRIVE SUPRISE STORAGE ANNEXATION	EPS GROUP 1130 N. Alma School Rd. Ste. 120 Mesa, AZ 85201 T:480.503.2250 | F:480.503.2258 www.epsgroupinc.com
	EXHIBIT "B"	


ESCALANTE
STATE LANDS
Pat Tillman Blvd
Pinnacle Peak Rd
ASANTE
163rd Ave
Beardsley Canal
ASANTE
Grand Ave
MARICOPA COUNTY FCD
Loop 303
SUN CITY WEST
FS23-0991 VICINITY MAP

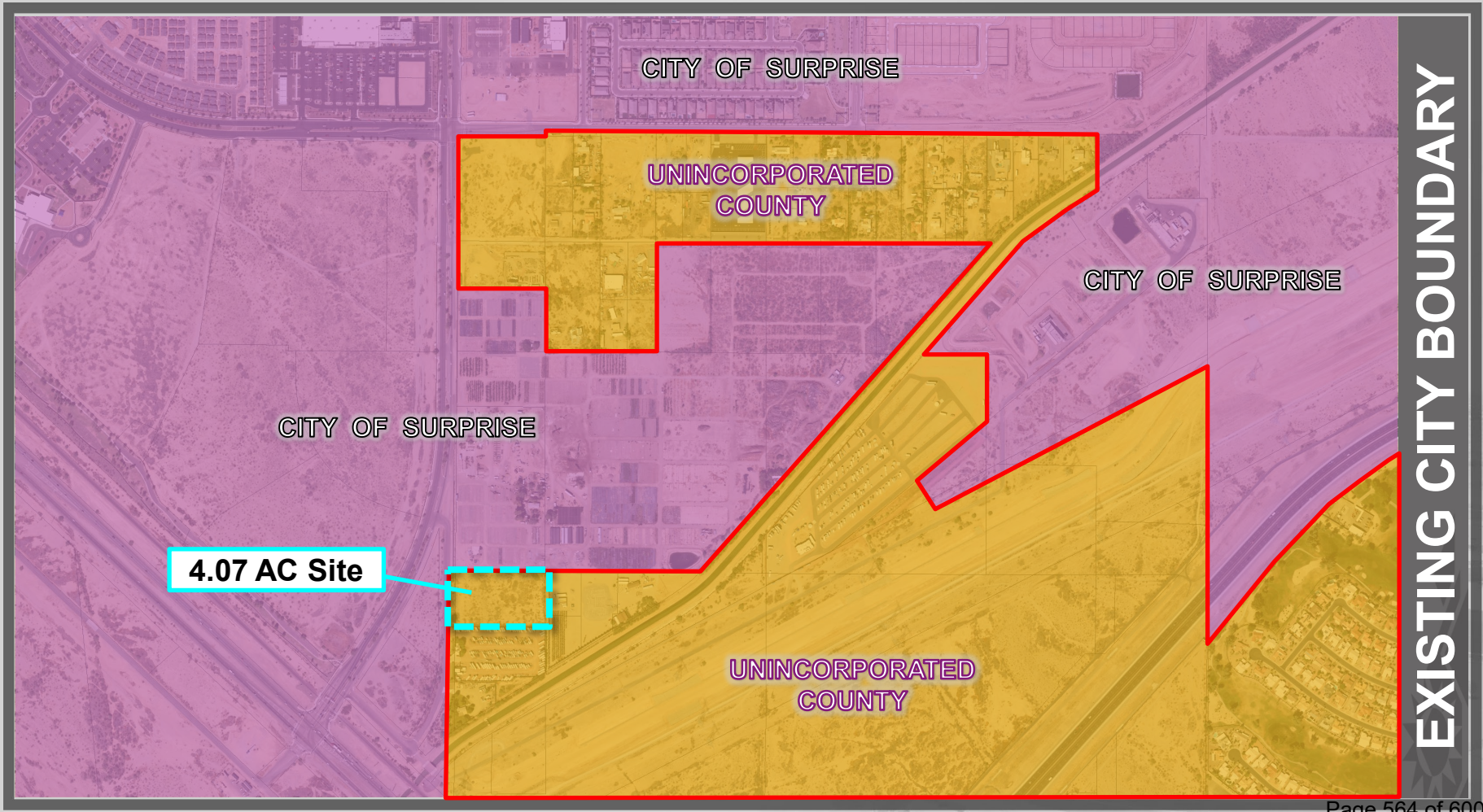
SURPRISE
ARIZONA

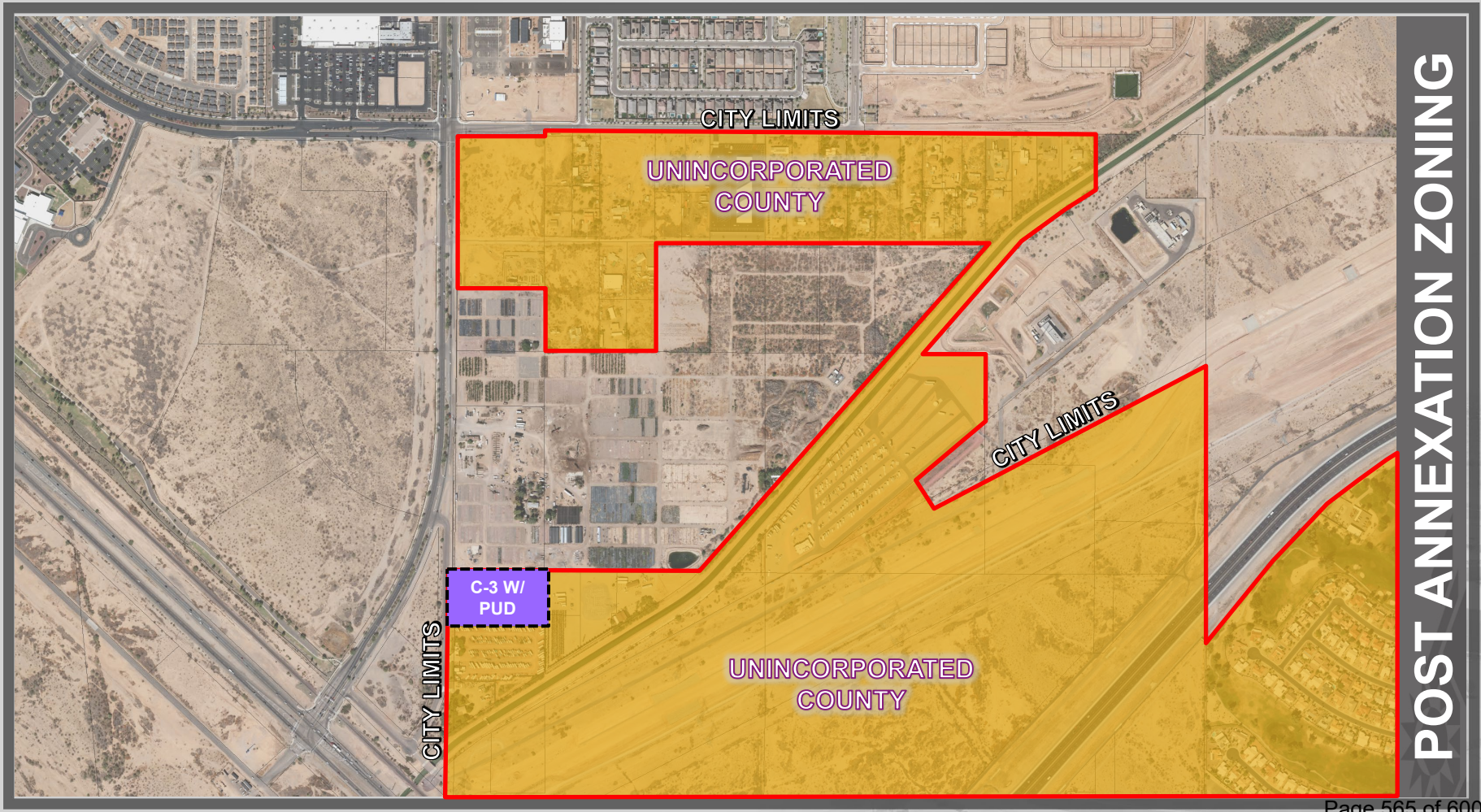
FS23-0991
162nd Drive Self Storage Annexation

City Council

May 7, 2024


ESCALANTE
PAT TILLMAN BLVD
PINNACLE PEAK RD
ASANTE
163RD AVE
BEARDSLEY CANAL
MARICOPA COUNTY FCD
Project Site
GRAND AVE
ASANTE
LOOP 303
SUN CITY WEST
FS23-0991 VICINITY MAP


CITY OF SURPRISE
UNINCORPORATED COUNTY
CITY OF SURPRISE
CITY OF SURPRISE
4.07 AC Site
UNINCORPORATED COUNTY
EXISTING CITY BOUNDARY


CITY LIMITS
UNINCORPORATED COUNTY
CITY LIMITS
C-3 W/ PUD
CITY LIMITS
UNINCORPORATED COUNTY
POST ANNEXATION ZONING

Annexation Steps

Resolution for the Intent to Annex

- Approve Resolution for Blank Petition
- City Council meeting – June 20, 2023

File Blank Petition:

- Begins 30-day waiting period
- Reach out to County Assessor and Dept of Revenue
- July 17, 2023 – petition filed

Public Hearing:

- City council holds public hearing to discuss the annexation ← **Tonight**

Obtain signatures on annexation petitions

- Applicant has 1 year to complete petition
- City Council adopts annexation ordinance

Concurrent Cases

Planning and Zoning Commission and City Council

- **FS23-0992 Rezone:**
  - ✓ Rezoning: Upon Annexation – From Regional Commercial (C-3) to Regional Commercial with a PUD overlay (C-3 w/PUD).

SURPRISE
ARIZONA

QUESTIONS OR COMMENTS?

Thank You

CITY OF SURPRISE
Regular City Council Meeting

Council Meeting Date: May 7, 2024

Contact Person: Andrea Davis, DIRECTOR - FINANCE

Submitting Department: Finance

District: Citywide

Staff Recommendations: None

Consent: No Regular: Yes Public Hearing: No Report/Discussion: No

Agenda Wording:

Consideration and action pertaining to adoption of the tentative expenditure limitation budget for FY2025; directing publication of said tentative budget; and setting a public hearing for June 4, 2024, at 6:00pm at the City of Surprise Council Chambers, 16000 N. Civic Center Plaza, Surprise, Arizona; Resolution #2024-75.

Motion:

I move to approve Resolution #2024-75.

Background:

The adoption of the tentative budget is the first in a series of three actions by the Mayor and Council that will establish the FY2025 budget and property tax levy amount. The tentative budget sets the maximum expenditure limit for FY2025. After it is adopted, the total expenditures cannot be modified to a higher amount, but can be reduced. The budget forms that serve as Exhibit A to the resolution will be published twice prior to a public hearing and adoption of the final budget that is scheduled to occur on June 4th. The final step of the FY2025 budget process is adopting the property tax levy on June 18, 2024.

Objective Analysis:

This is the first formal step in the process of adopting and finalizing the FY2025 budget.

Policy Compliant:

This resolution is compliant with City and Council policy, as well as the requirements of Arizona state law.

Financial Impact:

Not applicable; however, items discussed may have an impact on future operations.

Budget Impact:

This action will set the maximum expenditure limit for FY2025. Revisions can be made to decrease, but not increase the total expenditure amount for the final budget.

FTE Impact:

Adoption of the tentative budget may increase the number of FTEs in the FY2025 budget.

ATTACHMENTS:

1. Res 2024-75_FY25 Tentative Budget_COS

RESOLUTION # 2024-75

A RESOLUTION OF THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE, ARIZONA, SETTING FORTH THE TENTATIVE BUDGET IN CONFORMANCE WITH THE EXPENDITURE LIMITATION FOR THE CITY OF SURPRISE FOR FISCAL YEAR 2025.

WHEREAS, pursuant to the provisions of the laws of the State of Arizona, the Mayor and Council of the City of Surprise is required to adopt a budget; and

WHEREAS, the City Manager has prepared and filed with the City Council the City Manager's tentative budget and estimates of expenses for the fiscal year beginning July 1, 2024 and ending June 30, 2025.

NOW, THEREFORE, BE IT RESOLVED by the Mayor and Council of the City of Surprise, Arizona, as follows:

Section 1. That the statements and schedules attached hereto as Exhibit A and incorporated herein by reference are hereby adopted as the City's official tentative budget and estimates of expenses for the fiscal year beginning July 1, 2024, and ending June 30, 2025, in conformance with the expenditure limitation.

Section 2. That upon approval of the City Council a summary of such official tentative budget and estimates of expenses shall be published in the Daily Independent or other newspaper of general circulation, once a week for two consecutive weeks.

Section 3. That a public hearing shall be held beginning at or after 6:00 p.m. on June 4, 2024, at the Surprise City Council Chambers, 16000 N. Civic Center Plaza, Surprise, Arizona 85374, at which time any taxpayer may appear and be heard in favor of or against any proposed expenditure or tax levy.

SIGNATURES ON THE FOLLOWING PAGE

APPROVED AND ADOPTED this _____day of _____, 2024.

Skip Hall, Mayor

Attest:

Kristi Passarelli, City Clerk

Approved as to form:

Robert Wingo, City Attorney

EXHIBIT “A”

Fiscal Year 2025 Budget Statements and Schedules

CITY OF SURPRISE
Summary Schedule of Estimated Revenues and Expenditures/Expenses
Fiscal Year 2025

Fiscal Year		Sch		FUNDS							
				General Fund	Special Revenue Fund	Debt Service Fund	Capital Projects Fund	Permanent Fund	Enterprise Funds Available	Internal Service Funds	Total All Funds
2024	Adopted/Adjusted Budgeted Expenditure/Expenses*	E	1	194,009,900	134,854,600	9,930,600	217,901,700	0	174,372,800	40,007,300	771,076,900
2024	Actual Expenditures/Expenses**	E	2	176,835,500	31,646,800	8,737,600	27,797,800	0	48,365,400	25,036,500	318,419,600
2025	Beginning Fund Balance/(Deficit) or Net Position/ (Deficit) at July 1***		3	93,529,900	50,737,400	1,427,800	223,997,200	0	124,530,300	19,093,500	513,316,100
2025	Primary Property Tax Levy	B	4	9,816,600	0	0	0		0	0	9,816,600
2025	Secondary Property Tax Levy	B	5	0	1,560,000	6,690,400	0		0	0	8,250,400
2025	Estimated Revenues Other than Property Taxes	C	6	217,382,600	129,513,100	0	52,139,200	0	82,067,600	29,615,100	510,717,600
2025	Other Financing Sources	D	7	0	0	0	51,566,400	0	32,842,100	0	84,408,500
2025	Other Financing (Uses)	D	8	0	0	0	0	0	0	0	0
2025	Interfund Transfers In	D	9	9,477,500	7,447,400	1,587,600	22,591,100	0	25,811,100	0	66,914,700
2025	Interfund Transfers (Out)	D	10	(29,355,700)	(958,400)	0	(1,312,000)	0	(35,288,600)	0	(66,914,700)
2025	Line 11: Reduction for Fund Balance Reserved for Future Budget Year Expenditures										
LESS:	Maintained for Future Debt Retirement										
	Maintained Future Capital Projects		11								
	Maintained for Future Financial Stability										
2025	Total Financial Resources Available		12	300,850,900	188,299,500	9,705,800	348,981,900	0	229,962,500	48,708,600	1,126,509,200
2025	Budgeted Expenditures/Expenses	E	13	222,036,300	143,849,500	9,276,300	339,207,300	0	198,402,400	48,708,600	961,480,400

	EXPENDITURE LIMITATION COMPARISON	2024	2025
1	Budgeted expenditure/expenses	$ 771,076,900	$ 961,480,400
2	Add/subtract: estimated net reconciling items	0	0
3	Budgeted expenditures/expenses adjusted for reconciling items	771,076,900	961,480,400
4	Less: estimated exclusions	0	0
5	Amount subject to the expenditure limitation	$ 771,076,900	$ 961,480,400
6	EEC expenditure limitation	$ 1,478,748,668	$ 1,572,829,021

☐ The city/town does not levy property taxes and does not have special assessment districts for which property taxes are levied. Therefore, Schedule B has been omitted.

* Includes Expenditure/Expense Adjustments Approved in the current year from Schedule E.
** Includes actual amounts as of the date the proposed budget was prepared, adjusted for estimated activity for the remainder of the fiscal year.
*** Amounts on this line represent Fund Balance/(Deficit) or Net Position/(Deficit) amounts except for nonspendable amounts (e.g., prepaids and inventories) or amounts legally or contractually required to be maintained intact (e.g., principal of a permanent fund).

City of Surprise
Tax levy and tax rate information
Fiscal year 2025

		2024	2025
1.	Maximum allowable primary property tax levy. A.R.S. §42-17051(A)	$ 12,863,596	$ 13,785,971
2.	Amount received from primary property taxation in the **current year** in excess of the sum of that year's maximum allowable primary property tax levy. A.R.S. §42-17102(A)(18)	$	
3.	Property tax levy amounts		
A.	Primary property taxes	$ 11,789,000	$ 9,816,600
	Property tax judgment		
B.	Secondary property taxes	8,686,100	8,250,400
	Property tax judgment		
C.	Total property tax levy amounts	$ 20,475,100	$ 18,067,000
4.	Property taxes collected*		
A.	Primary property taxes		
	(1) **Current** year's levy	$ 11,789,000	
	(2) Prior years' levies	139,000	
	(3) Total primary property taxes	$ 11,928,000	
B.	Secondary property taxes		
	(1) **Current** year's levy	$ 8,685,900	
	(2) Prior years' levies		
	(3) Total secondary property taxes	$ 8,685,900	
C.	Total property taxes collected	$ 20,613,900	
5.	Property tax rates		
A.	City/Town tax rate		
	(1) Primary property tax rate	0.7591	0.5693
	Property tax judgment		
	(2) Secondary property tax rate	0.3880	0.3880
	Property tax judgment		
	(3) Total city/town tax rate	1.1471	0.9573

B. Special assessment district tax rates

Secondary property tax rates—As of the date the proposed budget was prepared, the city/town was operating 136 special assessment districts for which secondary property taxes are levied. For information pertaining to these special assessment districts and their tax rates, please contact the city/town.

* Includes actual property taxes collected as of the date the proposed budget was prepared, plus estimated property tax collections for the remainder of the fiscal year.

CITY OF SURPRISE
Revenues Other Than Property Taxes
Fiscal Year 2025

SOURCE OF REVENUES	ESTIMATED REVENUES 2024	ACTUAL REVENUES 2024*	ESTIMATED REVENUES 2025
GENERAL FUND			
Charges for Services			
City Clerk	$ 209,300	$ 174,600	$ 202,400
City Court	885,200	791,800	724,500
Community Development	12,926,600	16,974,700	17,208,300
Economic Development	417,300	280,100	429,300
Finance	69,700	117,300	68,400
Fire - Medical	87,600	81,400	9,221,300
General Operations	266,600	164,700	152,600
Human Svcs and Comm Vitality	118,400	77,100	63,700
Parks and Recreation	2,605,000	2,709,300	3,311,200
Police	533,200	1,536,900	2,032,700
Public Works	6,934,000	6,435,800	7,234,000
	$ 25,052,900	$ 29,343,700	$ 40,648,400
Franchise Fees & Licenses			
APS Franchise Revenue	$ 3,624,800	$ 4,199,000	$ 3,624,800
Business License Revenue	486,400	480,000	465,000
Cable TV Franchise Revenue	1,096,500	981,200	894,200
Right-of-Way Telecom Fee	12,000	12,000	12,000
Sanitation Haulers License Rev	111,100	125,000	127,200
Southwest Gas Franchise Rev	582,400	580,000	611,500
Water Franchise Revenue	616,600	635,400	667,100
	$ 6,529,800	$ 7,012,600	$ 6,401,800
Intergovernmental			
Auto Lieu Tax (VLT)-County	$ 7,564,600	$ 7,801,900	$ 7,882,700
Non-Grant Intergovtl Rev-Local	319,900	191,000	317,300
Non-Grant Intergovtl Rev-State	100	100	100
Non-Grant IntergovtlRev-County	0	65,300	0
State Fire Ins Premium Tax Rev	400,000	606,900	729,600
State Shared Income Tax Rev	40,008,000	40,861,300	33,115,700
State Shared Sales Tax Rev	25,658,900	22,574,300	23,526,700
	$ 73,951,500	$ 72,100,800	$ 65,572,100
Local Sales Tax			
Bed Tax Revenue	$ 351,900	$ 351,900	$ 363,000
Local Sales Tax Revenue	85,782,600	85,782,600	100,984,800
	$ 86,134,500	$ 86,134,500	$ 101,347,800
Other			
	$ 735,100	$ 3,008,900	$ 3,412,500
General Fund Total	$ 192,403,800	$ 197,600,500	$ 217,382,600

* Includes actual revenues recognized on the modified accrual or accrual basis as of the date the proposed budget was prepared, plus estimated revenues for the remainder of the fiscal year.

CITY OF SURPRISE
Revenues Other Than Property Taxes
Fiscal Year 2025

SOURCE OF REVENUES	ESTIMATED REVENUES 2024	ACTUAL REVENUES 2024*	ESTIMATED REVENUES 2025
SPECIAL REVENUE FUND			
Arizona Office of Tourism			
Non-Grant Intergovtl Rev-State	$ 230,000	$ 147,300	$ 230,000
Charges for Services/Other	0	2,000	0
	$ 230,000	$ 149,300	$ 230,000
Contingency			
Charges for Services/Other	$ 80,798,300	$ 0	$ 79,703,100
	$ 80,798,300	$ 0	$ 79,703,100
Donations			
Charges for Services/Other	$ 240,300	$ 85,000	$ 50,000
	$ 240,300	$ 85,000	$ 50,000
Grants			
Area Agency on Aging-Federal	$ 0	$ 92,000	$ 0
County Grant Revenue	95,000	0	250,000
Federal Grant Revenue	25,594,500	2,183,000	26,871,600
State Grant Revenue	0	348,500	291,100
Charges for Services/Other	10,900	153,600	33,800
	$ 25,700,400	$ 2,777,100	$ 27,446,500
Ground Ambulance Capital Fund			
Charges for Services/Other	$ 3,100	$ 3,100	$ 0
	$ 3,100	$ 3,100	$ 0
Ground Ambulance Service			
Charges for Services/Other	$ 5,977,900	$ 7,258,800	$ 0
	$ 5,977,900	$ 7,258,800	$ 0
Highway User Revenue			
Charges for Services/Other	9,800	0	9,800
Highway User Tax Revenue-State	12,213,500	11,724,500	11,819,000
	$ 12,223,300	$ 11,724,500	$ 11,828,800
LTAF II/ALF			
State Shared Lottery Tax Rev	$ 400,000	$ 365,000	$ 364,200
	$ 400,000	$ 365,000	$ 364,200
Municipal Art Fund			
Charges for Services/Other	$ 0	$ 28,800	$ 0
	$ 0	$ 28,800	$ 0
Municipal Court Enhancement			
Charges for Services/Other	$ 74,400	$ 74,400	$ 74,400
	$ 74,400	$ 74,400	$ 74,400

* Includes actual revenues recognized on the modified accrual or accrual basis as of the date the proposed budget was prepared, plus estimated revenues for the remainder of the fiscal year.

CITY OF SURPRISE
Revenues Other Than Property Taxes
Fiscal Year 2025

SOURCE OF REVENUES	ESTIMATED REVENUES 2024	ACTUAL REVENUES 2024*	ESTIMATED REVENUES 2025
Municipal Court FARE			
Non-Grant Intergovtl Rev-State	$ 2,000	$ 2,000	$ 2,000
	$ 2,000	$ 2,000	$ 2,000
Municipal Court JCEF			
Charges for Services/Other	$ 16,000	$ 16,000	$ 16,000
	$ 16,000	$ 16,000	$ 16,000
Municipal Court MFTG			
Non-Grant Intergovtl Rev-State	$ 9,400	$ 9,400	$ 9,400
	$ 9,400	$ 9,400	$ 9,400
Neighborhood Revitalization			
Federal Grant Revenue	$ 1,694,500	$ 409,400	$ 1,874,900
Grant Revenue-Program Income	1,056,600	550,000	586,600
	$ 2,751,100	$ 959,400	$ 2,461,500
Net Premium Seating			
Charges for Services/Other	25,800	22,700	30,900
	$ 25,800	$ 22,700	$ 30,900
SB1398 Fines			
Charges for Services/Other	18,200	24,700	18,200
	$ 18,200	$ 24,700	$ 18,200
SLIDs			
Charges for Services/Other	11,900	34,100	7,600
Special Improvement District	0	0	0
	$ 11,900	$ 34,100	$ 7,600
Smart & Safe Fire-Medical			
State Shared Smart & Safe Rev	$ 400,000	$ 400,000	$ 400,000
	$ 400,000	$ 400,000	$ 400,000
Smart & Safe Police			
State Shared Smart & Safe Rev	$ 400,000	$ 400,000	$ 400,000
	$ 400,000	$ 400,000	$ 400,000
SPD RICO			
Charges for Services/Other	$ 268,000	$ 268,000	$ 268,000
	$ 268,000	$ 268,000	$ 268,000
SPD Towing			
Charges for Services/Other	26,000	29,700	31,300
	$ 26,000	$ 29,700	$ 31,300

* Includes actual revenues recognized on the modified accrual or accrual basis as of the date the proposed budget was prepared, plus estimated revenues for the remainder of the fiscal year.

CITY OF SURPRISE
Revenues Other Than Property Taxes
Fiscal Year 2025

SOURCE OF REVENUES	ESTIMATED REVENUES 2024	ACTUAL REVENUES 2024*	ESTIMATED REVENUES 2025
Sports and Tourism Fund			
Charges for Services/Other	2,652,500	2,925,100	3,072,100
	$ 2,652,500	$ 2,925,100	$ 3,072,100
Spring Trng Ticket Surcharge			
Charges for Services/Other	689,000	699,000	695,000
	$ 689,000	$ 699,000	$ 695,000
Stadium Improvements			
Charges for Services/Other	$ 137,200	$ 137,300	$ 137,200
	$ 137,200	$ 137,300	$ 137,200
Tourism			
Charges for Services/Other	$ 500,000	$ 500,000	$ 275,000
Local Sales Tax	1,238,500	1,238,500	1,277,800
	$ 1,738,500	$ 1,738,500	$ 1,552,800
Wildland Fire			
Non-Grant Intergovtl Rev-State	$ 711,700	$ 711,700	$ 714,100
	$ 711,700	$ 711,700	$ 714,100
Special Revenue Fund Total	$ 135,505,000	$ 30,843,600	$ 129,513,100
DEBT SERVICE FUND			
Stadium Gov Debt Service 2015			
Charges for Services/Other	$ 1,000	$ 1,000	$ 0
	$ 1,000	$ 1,000	$ 0
Debt Service Fund Total	$ 1,000	$ 1,000	$ 0
CAPITAL PROJECTS FUND			
163rd Ave Dev 2014 Law			
Charges for Services/Other	$ 100	$ 0	$ 0
	$ 100	$ 0	$ 0
Fire/EMS Dev Fee 2020			
Charges for Services/Other	2,747,300	2,747,800	2,547,400
	$ 2,747,300	$ 2,747,800	$ 2,547,400
General Capital Projects Fund			
Local Sales Tax	$ 23,034,700	$ 23,034,700	$ 25,338,200
Charges for Services/Other	1,202,100	2,203,400	2,357,200
	$ 24,236,800	$ 25,238,100	$ 27,695,400

* Includes actual revenues recognized on the modified accrual or accrual basis as of the date the proposed budget was prepared, plus estimated revenues for the remainder of the fiscal year.

CITY OF SURPRISE
Revenues Other Than Property Taxes
Fiscal Year 2025

SOURCE OF REVENUES	ESTIMATED REVENUES 2024	ACTUAL REVENUES 2024*	ESTIMATED REVENUES 2025
General Govt Dev Fee			
Charges for Services/Other	734,700	743,500	645,500
	$ 734,700	$ 743,500	$ 645,500
Park & Rec Dev Fee			
Charges for Services/Other	$ 13,000	$ 40,500	$ 0
	$ 13,000	$ 40,500	$ 0
Parks/Rec Dev Fee 2020			
Charges for Services/Other	3,031,400	3,687,800	3,341,000
	$ 3,031,400	$ 3,687,800	$ 3,341,000
Police Dev Fee			
Charges for Services/Other	1,513,300	1,341,100	1,205,700
	$ 1,513,300	$ 1,341,100	$ 1,205,700
Transportation Improvement			
Local Sales Tax	$ 15,705,500	$ 15,705,500	$ 16,019,600
Charges for Services/Other	298,400	573,700	684,600
	$ 16,003,900	$ 16,279,200	$ 16,704,200
Capital Projects Fund Total	$ 48,280,500	$ 50,078,000	$ 52,139,200
ENTERPRISE FUNDS			
Sewer Operations			
Charges for Services/Other	22,490,600	23,540,900	26,694,400
	$ 22,490,600	$ 23,540,900	$ 26,694,400
Sewer System Dev Impact Fees			
Charges for Services/Other	3,086,600	3,807,800	3,463,400
	$ 3,086,600	$ 3,807,800	$ 3,463,400
Sewer Utility Capital			
Charges for Services/Other	$ 50,800	$ 979,500	$ 50,800
	$ 50,800	$ 979,500	$ 50,800
Solid Waste Capital			
Charges for Services/Other	$ 18,700	$ 154,800	$ 18,700
	$ 18,700	$ 154,800	$ 18,700
Solid Waste Operations			
Charges for Services/Other	14,181,400	14,304,500	16,880,400
	$ 14,181,400	$ 14,304,500	$ 16,880,400
Stormwater Capital			
Charges for Services/Other	$ 3,100	$ 190,500	$ 3,100
	$ 3,100	$ 190,500	$ 3,100

* Includes actual revenues recognized on the modified accrual or accrual basis as of the date the proposed budget was prepared, plus estimated revenues for the remainder of the fiscal year.

CITY OF SURPRISE
Revenues Other Than Property Taxes
Fiscal Year 2025

SOURCE OF REVENUES	ESTIMATED REVENUES 2024	ACTUAL REVENUES 2024*	ESTIMATED REVENUES 2025
Stormwater Operations			
Charges for Services/Other	3,006,100	3,005,300	3,387,300
	$ 3,006,100	$ 3,005,300	$ 3,387,300
Water Operations			
Charges for Services/Other	22,501,300	23,944,400	24,649,200
Groundwater Savings Facility	130,000	130,000	130,000
Non-Grant Intergovtl Rev-Local	0	1,072,200	0
	$ 22,631,300	$ 25,146,600	$ 24,779,200
Water Resource Dev Impact Fees			
Charges for Services/Other	$ 10,500	$ 0	$ 0
	$ 10,500	$ 0	$ 0
Water System Dev Impact Fees			
Charges for Services/Other	5,076,800	3,345,900	3,133,600
	$ 5,076,800	$ 3,345,900	$ 3,133,600
Water Utility Capital			
Charges for Services/Other	$ 40,000	$ 816,000	$ 40,000
	$ 40,000	$ 816,000	$ 40,000
Wtr Res Dev Fee 2020			
Charges for Services/Other	3,316,400	3,607,700	3,616,700
	$ 3,316,400	$ 3,607,700	$ 3,616,700
Enterprise Funds Total	$ 73,912,300	$ 78,899,500	$ 82,067,600
INTERNAL SERVICE FUND			
Employee Healthcare - Int Svc			
Charges for Services/Other	19,746,800	20,294,800	23,554,700
	$ 19,746,800	$ 20,294,800	$ 23,554,700
Risk Management - Int Svc Fd			
Charges for Services/Other	4,753,300	4,866,400	4,753,300
	$ 4,753,300	$ 4,866,400	$ 4,753,300
Workers' Compensation			
Charges for Services/Other	2,560,800	1,338,000	1,307,100
	$ 2,560,800	$ 1,338,000	$ 1,307,100
Internal Service Fund Total	$ 27,060,900	$ 26,499,200	$ 29,615,100
TOTAL ALL FUNDS	$ 477,163,500	$ 383,921,800	$ 510,717,600

* Includes actual revenues recognized on the modified accrual or accrual basis as of the date the proposed budget was prepared, plus estimated revenues for the remainder of the fiscal year.

CITY OF SURPRISE
Other Financing Sources/<Uses> and Interfund Transfers
Fiscal Year 2025

FUND	OTHER FINANCING 2025 SOURCES	OTHER FINANCING 2025 <USES>	INTERFUND TRANSFERS 2025 IN	INTERFUND TRANSFERS 2025 <OUT>
GENERAL FUND				
General Fund (Cost Allocation)	$	$	$ 8,010,000	$
General Fund (PILOT)			538,300	
General Fund (Franchise Fee In Lieu)			929,200	
General Fund (Debt)				(1,473,200)
General Fund (Other Transfers)				(27,882,500)
Total General Fund	$	$	$ 9,477,500	$ (29,355,700)
SPECIAL REVENUE FUND				
Municipal Art Fund (Other Transfers)	$	$	$ 1,312,000	$
Net Premium Seating (Other Transfers)			127,300	
Public Safety Pension Fund (Other Transfers)			2,000,000	
Sports and Tourism Fund (Other Transfers)			4,008,100	
Tourism (Debt)				(958,400)
Total Special Revenue Fund	$	$	$ 7,447,400	$ (958,400)
CAPITAL PROJECTS FUND				
Arts Culture Library Asset Rep (Other Transfers)	$	$	$ 313,600	$
Communications Asset Repl (Other Transfers)			210,000	
Facilities Asset Replacement (Other Transfers)			4,382,700	
General Capital Projects Fund (Other Transfers)			1,050,000	(1,059,400)
GO Bond Series 2024 (Bond Proceeds)	51,566,400			
HSCV Asset Replacement (Other Transfers)			112,000	
IT Asset Replacement (Other Transfers)			2,590,000	
Parks & Recreation Asset Repl (Other Transfers)			2,376,000	
Sports and Tourism Asset Repl (Other Transfers)			4,510,000	
Transportation Improvement (Other Transfers)				(252,600)
Vehicle Replacement (Other Transfers)			7,046,800	
Total Capital Projects Fund	$ 51,566,400	$	$ 22,591,100	$ (1,312,000)
DEBT SERVICE FUND				
Stadium Gov Debt Service 2015 (Debt)	$	$	$ 1,587,600	$
Total Debt Service Fund	$	$	$ 1,587,600	$

CITY OF SURPRISE
Other Financing Sources/<Uses> and Interfund Transfers
Fiscal Year 2025

FUND	OTHER FINANCING 2025 SOURCES	OTHER FINANCING 2025 <USES>	INTERFUND TRANSFERS 2025 IN	INTERFUND TRANSFERS 2025 <OUT>
ENTERPRISE FUNDS				
Sewer Loan 2023 (Bond Proceeds)	$ 32,842,100	$	$	$
Sewer Operations (Franchise Fee In Lieu)				(448,600)
Sewer Operations (Cost Allocation)				(2,073,600)
Sewer Operations (PILOT)				(335,500)
Sewer Operations (Other Transfers)				(15,149,300)
Sewer System Dev Impact Fees (Debt)				(2,150,300)
Sewer Utility Capital (Other Transfers)			15,149,300	
Solid Waste Operations (PILOT)				(13,400)
Solid Waste Operations (Cost Allocation)				(2,474,800)
Solid Waste Operations (Franchise Fee In Lieu)				(34,000)
Sr Util. Refund Oblig Ser 2018 (Debt)			2,150,300	
Stormwater Capital (Other Transfers)			1,226,000	
Stormwater Operations (Cost Allocation)				(306,400)
Stormwater Operations (PILOT)				(13,500)
Stormwater Operations (Other Transfers)				(1,226,000)
Water Operations (Franchise Fee In Lieu)				(446,600)
Water Operations (PILOT)				(175,900)
Water Operations (Other Transfers)				(7,285,500)
Water Operations (Cost Allocation)				(3,155,200)
Water Utility Capital (Other Transfers)			7,285,500	
Total Enterprise Funds	$ 32,842,100	$	$ 25,811,100	$ (35,288,600)
TOTAL ALL FUNDS	$ 84,408,500	$	$ 66,914,700	$ (66,914,700)

CITY OF SURPRISE
Expenditures/Expenses by Fund
Fiscal Year 2025

FUND/DEPARTMENT	ADOPTED BUDGETED EXPENDITURES/ EXPENSES 2024	EXPENDITURE/ EXPENSE ADJUSTMENTS APPROVED 2024	ACTUAL EXPENDITURES/ EXPENSES 2024*	BUDGETED EXPENDITURES/ EXPENSES 2025
GENERAL FUND				
General Fund				
Arts, Culture & Library	$ 4,508,300	$ (475,700)	$ 3,688,600	$ 3,938,400
City Attorney	3,262,700		3,056,000	3,378,700
City Auditor	484,600		485,900	538,900
City Clerk	1,100,000		1,107,200	1,507,300
City Court	3,347,000		2,905,000	3,469,800
City Manager	2,405,700		2,317,200	2,475,800
Community Development	8,239,000	(2,700)	7,347,200	8,917,100
Contingency	6,057,300	(351,200)		6,156,400
Economic Development	2,634,900	(2,100)	2,328,000	2,440,100
Finance	7,384,100	6,900	6,466,400	7,477,200
Fire - Medical	37,779,400	1,201,600	39,357,500	49,112,400
General Operations	15,896,600		13,108,000	24,518,000
Human Resources	3,203,400	(600)	3,065,700	3,356,500
Human Svcs and Comm Vitality	2,947,700	132,400	2,701,700	3,172,300
Information Technology	8,560,000	452,200	8,864,300	11,034,500
Marketing and Communications	1,657,600		1,587,700	1,708,100
Mayor and Council	784,600		593,100	958,900
Parks and Recreation	13,018,000	218,200	12,643,600	16,732,300
Police	45,301,600	3,443,600	48,005,600	49,621,900
Public Works	13,285,500	1,230,500	11,164,100	14,370,800
Transportation	6,438,300	(139,500)	6,042,700	7,150,900
General Fund Total	$ 188,296,300	$ 5,713,600	$ 176,835,500	$ 222,036,300
SPECIAL REVENUE FUND				
Arizona Office of Tourism				
Sports and Tourism	$ 361,900	$	$ 144,000	$ 230,000
Contingency				
Contingency	$ 80,454,600	$ (23,558,600)	$	$ 79,703,100
Donations				
Arts, Culture & Library	$ 23,000	$	$ 3,500	$ 14,300
Contingency	100,300			
Economic Development	30,000		31,100	21,200
Fire - Medical	10,300		1,700	9,400
Human Svcs and Comm Vitality	144,500		69,600	32,200
Parks and Recreation	189,500		181,700	12,800
Police	85,600		49,700	128,700
Sports and Tourism			6,000	

CITY OF SURPRISE
Expenditures/Expenses by Fund
Fiscal Year 2025

FUND/DEPARTMENT	ADOPTED BUDGETED EXPENDITURES/ EXPENSES 2024	EXPENDITURE/ EXPENSE ADJUSTMENTS APPROVED 2024	ACTUAL EXPENDITURES/ EXPENSES 2024*	BUDGETED EXPENDITURES/ EXPENSES 2025
Grants				
City Attorney	$	$ 4,200	$ 4,200	$
Contingency	4,000,000	298,100		
Fire - Medical	97,400	657,400	280,200	385,000
Human Svcs and Comm Vitality	25,078,100	3,259,500	2,011,100	26,130,400
Parks and Recreation	600	231,300	2,300	229,500
Police	406,600	625,000	394,200	514,700
Sports and Tourism	120,000	(120,000)		
Water Resource Management		189,100		189,100
Ground Ambulance Capital Fund				
Contingency	$	$ 23,500	$	$
Fire - Medical	550,000			
Public Works	796,000	(23,500)	573,900	
Ground Ambulance Service				
Fire - Medical	$ 6,764,600	$ (423,300)	$ 6,132,500	$
General Operations	19,100			
Highway User Revenue				
Contingency	$	$ 2,181,200	$	$
General Operations	27,000			41,700
Transportation	13,568,900	(2,181,200)	7,205,800	15,064,200
Highway User Revenue Capital				
Public Works	$	$	$ 10,900	$
LTAF II/ALF				
Transportation	$ 400,000	$	$ 364,200	$ 366,300
Municipal Art Fund				
Arts, Culture & Library	$ 451,000	$ 669,000	$ 223,500	$ 1,604,500
Contingency		186,000		1,148,300
Municipal Court Enhancement				
City Court	$ 225,000	$	$	$ 225,000
Neighborhood Revitalization				
Human Svcs and Comm Vitality	$ 2,751,100	$ (177,100)	$ 959,400	$ 2,461,500
Net Premium Seating				
Sports and Tourism	$ 302,200	$	$ 272,700	$ 286,000
Program 1033 Auction Proceeds				
Police	$ 6,400	$	$	$ 6,700
Proposition 400				
Public Works	$	$	$ 500	$
SB1398 Fines				
Police	$ 30,500	$	$ 23,500	$ 73,000

CITY OF SURPRISE
Expenditures/Expenses by Fund
Fiscal Year 2025

FUND/DEPARTMENT	ADOPTED BUDGETED EXPENDITURES/ EXPENSES 2024	EXPENDITURE/ EXPENSE ADJUSTMENTS APPROVED 2024	ACTUAL EXPENDITURES/ EXPENSES 2024*	BUDGETED EXPENDITURES/ EXPENSES 2025
SLIDs				
Contingency	$ 184,800	$	$	$
General Operations	3,498,400		2,382,100	2,737,900
Smart & Safe Fire-Medical				
Fire - Medical	$ 1,197,000	$	$ 647,000	$ 959,100
Smart & Safe Police				
Police	$ 1,207,500	$	$ 1,207,500	$ 414,800
SPD DEA				
Police	$	$	$	$ 17,300
SPD RICO				
Police	$ 510,800	$	$ 643,900	$ 1,191,700
SPD Towing				
Police	$ 71,100	$	$ 37,800	$ 39,000
Sports and Tourism Fund				
General Operations	$ 2,500	$	$	$ 23,300
Sports and Tourism	6,723,300	149,500	5,991,900	7,056,900
Spring Trng Ticket Surcharge				
Sports and Tourism	$ 689,000	$	$ 689,000	$ 695,500
Tourism				
Sports and Tourism	$ 595,000	$ 130,000	$ 509,900	$ 730,000
Unclaimed Property Disposal				
Police	$ 2,900	$	$	$ 4,000
Wildland Fire				
Fire - Medical	$ 1,058,000	$	$ 591,500	$ 1,090,400
General Operations				12,000
Special Revenue Fund Total	$ 152,734,500	$ (17,879,900)	$ 31,646,800	$ 143,849,500
DEBT SERVICE FUND				
GO Bond Debt Service				
General Operations	$ 6,494,300	$	$ 5,302,200	$ 7,688,700
Refunded Gov Debt Service 2015				
General Operations	$ 1,850,300	$	$ 1,850,300	$
Stadium Gov Debt Service 2015				
General Operations	$ 1,586,000	$	$ 1,585,100	$ 1,587,600
Debt Service Fund Total	$ 9,930,600	$	$ 8,737,600	$ 9,276,300

CITY OF SURPRISE
Expenditures/Expenses by Fund
Fiscal Year 2025

FUND/DEPARTMENT	ADOPTED BUDGETED EXPENDITURES/ EXPENSES 2024	EXPENDITURE/ EXPENSE ADJUSTMENTS APPROVED 2024	ACTUAL EXPENDITURES/ EXPENSES 2024*	BUDGETED EXPENDITURES/ EXPENSES 2025
CAPITAL PROJECTS FUND				
163rd Ave Dev 2014 Law				
Contingency	$	$ 94,900	$	$
Transportation	100,600	(94,900)	100	
Arts Culture Library Asset Rep				
Arts, Culture & Library	$	$	$	$ 105,000
Communications Asset Repl				
Contingency	$ 118,700	$	$	$
Marketing and Communications	281,500	(55,400)	61,600	339,500
Facilities Asset Replacement				
Public Works	$ 4,904,400	$ (932,500)	$ 1,266,600	$ 9,588,300
Fire/EMS Dev Fee 2020				
Fire - Medical	$ 15,360,200	$ (306,900)	$ 2,019,100	$ 15,074,800
General Operations	13,300	306,900	13,100	1,300
FS Package Replacement Reserve				
Fire - Medical	$ 93,000	$	$	$ 95,100
General Capital Projects Fund				
Arts, Culture & Library	$	$	$	$ 65,400
City Court	135,000			135,000
City Manager	5,763,800	(359,400)	328,100	12,807,300
Community Development	398,800	(39,900)		558,900
Contingency		5,072,200		12,931,600
Economic Development	512,600	(10,600)	42,900	1,098,000
Finance				800,000
Fire - Medical	5,533,100	625,000	77,500	12,026,000
Human Svcs and Comm Vitality	2,387,400	998,300	29,700	3,354,000
Information Technology	671,900	404,800	454,100	9,751,000
Parks and Recreation	37,988,900	(1,914,300)	5,524,200	31,317,700
Police	1,602,800	(260,400)	163,300	8,536,200
Public Works	256,400	(9,100)	135,700	2,738,200
Sports and Tourism	3,688,000	(82,400)	256,700	3,348,900
Transportation	41,828,500	10,409,300	3,176,600	62,862,500
Water Resource Management	117,000	(15,700)	22,300	143,200
General Govt Dev Fee				
General Operations	$ 1,484,900	$	$	$
GO Bond Series 2024				
Fire - Medical	$	$	$	$ 4,966,400
Police				15,200,000
Transportation				31,400,000

CITY OF SURPRISE
Expenditures/Expenses by Fund
Fiscal Year 2025

FUND/DEPARTMENT	ADOPTED BUDGETED EXPENDITURES/ EXPENSES 2024	EXPENDITURE/ EXPENSE ADJUSTMENTS APPROVED 2024	ACTUAL EXPENDITURES/ EXPENSES 2024*	BUDGETED EXPENDITURES/ EXPENSES 2025
HSCV Asset Replacement				
Human Svcs and Comm Vitality	$ 31,000	$ (6,600)	$	$ 46,400
IT Asset Replacement				
Contingency	$ 570,000	$	$	$
Information Technology	3,990,200	(397,200)	479,600	4,004,100
Park & Rec Dev Fee				
Parks and Recreation	$ 1,336,800	$	$ 1,093,000	$ 279,200
Parks & Recreation Asset Repl				
Parks and Recreation	$ 2,698,600	$ (556,800)	$ 650,400	$ 3,667,400
Parks/Rec Dev Fee 2020				
General Operations	$ 3,116,700	$ 33,800	$ 194,600	$ 3,558,800
Parks and Recreation	6,838,100	(33,800)	375,600	9,219,700
Police Dev Fee				
General Operations	$ 5,058,000	$ 5,000	$ 13,100	$ 1,300
Police	2,197,400	(5,000)	183,200	8,060,200
Public Works	83,500		83,500	83,500
Sports and Tourism Asset Repl				
Sports and Tourism	$ 4,126,700	$ (618,000)	$ 2,170,200	$ 5,004,500
Transportation Improvement				
Contingency	$ 7,067,400	$ 700,200	$	$ 500,000
Finance	2,300		200	2,300
General Operations	134,900			134,900
Transportation	35,205,500	(700,200)	5,464,700	52,031,500
Vehicle Replacement				
Contingency	$	$ 573,700	$	$
Fire - Medical	2,847,200	(8,900)	2,403,600	4,943,200
Public Works	7,105,300	(564,800)	1,114,500	8,426,000
Capital Projects Fund Total	$ 205,650,400	$ 12,251,300	$ 27,797,800	$ 339,207,300
ENTERPRISE FUNDS				
Refund Sewer Debt Service 2015				
General Operations	$ 803,100	$	$ 803,100	$
Sewer Loan 2023				
Water Resource Management	$ 34,980,000	$ (85,000)	$ 2,077,500	$ 32,817,500

CITY OF SURPRISE
Expenditures/Expenses by Fund
Fiscal Year 2025

FUND/DEPARTMENT	ADOPTED BUDGETED EXPENDITURES/ EXPENSES 2024	EXPENDITURE/ EXPENSE ADJUSTMENTS APPROVED 2024	ACTUAL EXPENDITURES/ EXPENSES 2024*	BUDGETED EXPENDITURES/ EXPENSES 2025
Sewer Operations				
Contingency	$ 5,447,300	$ 14,400	$	$ 5,639,800
Finance	2,059,300	(14,400)	1,267,400	2,182,300
General Operations	3,969,400		327,400	1,337,400
Information Technology	59,600		46,000	47,800
Marketing and Communications	40,800		40,700	42,300
Public Works	351,800		334,200	358,000
Water Resource Management	11,378,400		10,569,700	14,265,900
Sewer System Dev Impact Fees				
General Operations	$ 1,553,800	$	$ 26,200	$ 2,657,000
Water Resource Management	300,000			300,000
Sewer Utility Capital				
City Manager	$ 100,100	$ (45,200)	$ 45,600	$ 9,300
Contingency	7,370,600	(179,200)		7,185,000
Public Works	1,229,800	(58,900)	49,800	1,986,100
Transportation	964,100	(6,900)		957,200
Water Resource Management	13,031,400	290,200	2,055,900	16,337,200
Solid Waste Capital				
Contingency	$ 508,000	$ 414,900	$	$ 278,800
Public Works	3,765,200	(414,900)		4,266,000
Solid Waste Operations				
City Manager	$ 400	$	$	$ 400
Contingency	3,528,000	153,100		4,177,500
Finance	873,300	(6,000)	516,400	924,800
General Operations	104,800			177,300
Information Technology	25,100		19,100	20,000
Public Works	10,928,800	(147,100)	9,939,700	13,170,600
Sr Util. Refund Oblig Ser 2018				
General Operations	$ 3,224,700	$	$ 2,152,300	$ 2,150,300
Stormwater Capital				
Contingency	$ 365,100	$ 143,400	$	$ 286,200
Information Technology	75,000			75,000
Transportation	1,361,700	(143,400)	306,600	911,700
Water Resource Management				1,500,000
Stormwater Operations				
Contingency	$ 375,200	$ 1,400	$	$ 436,200
Finance	221,800	(1,400)	121,300	234,300
General Operations	2,700			11,100
Information Technology	6,000		4,300	4,800
Transportation	506,200		480,900	525,700
Water Resource Management	659,800		621,200	871,500

CITY OF SURPRISE
Expenditures/Expenses by Fund
Fiscal Year 2025

FUND/DEPARTMENT	ADOPTED BUDGETED EXPENDITURES/ EXPENSES 2024	EXPENDITURE/ EXPENSE ADJUSTMENTS APPROVED 2024	ACTUAL EXPENDITURES/ EXPENSES 2024*	BUDGETED EXPENDITURES/ EXPENSES 2025
Water Operations				
City Manager	$ 4,000	$	$	$ 4,000
Contingency	4,888,000	36,700		5,368,800
Finance	3,443,700	(11,800)	2,749,300	3,866,000
General Operations	352,200			384,400
Information Technology	49,700		38,100	39,500
Marketing and Communications	40,800		40,700	42,300
Public Works	789,400	(24,900)	580,100	772,700
Water Resource Management	10,984,700		10,812,900	12,385,500
Water Resource Dev Impact Fees				
General Operations	$ 510,800	$ 3,600	$	$ 515,400
Water Resource Management	604,900	(3,600)		601,300
Water System Dev Impact Fees				
General Operations	$ 5,672,000	$	$ 431,600	$ 10,762,500
Water Resource Management	11,182,800	2,000,300	4,700	6,066,500
Water Utility Capital				
City Manager	$ 99,900	$ (45,200)	$ 44,500	$ 10,200
Contingency	3,846,000	642,700		4,688,600
Finance	232,300	(173,500)	31,800	250,000
Public Works	93,800			438,800
Water Resource Management	8,740,600	(1,251,400)	1,813,300	17,603,400
Wtr Res Dev Fee 2020				
General Operations	$ 10,430,500	$ 577,200	$ 13,100	$ 1,300
Water Resource Management	2,320,400	(1,750,100)		18,456,200
Enterprise Funds Total	$ 174,457,800	$ (85,000)	$ 48,365,400	$ 198,402,400
INTERNAL SERVICE FUND				
Employee Healthcare - Int Svc				
Contingency	$ 4,554,300	$	$	$ 6,920,900
General Operations				100
Human Resources	19,745,400		20,000,100	23,554,600
Risk Management - Int Svc Fd				
City Attorney	$ 7,111,400	$ (7,111,400)	$	$
Contingency	2,667,600			750,000
General Operations				300
Human Resources	94,200	7,111,400	3,248,900	12,848,600

CITY OF SURPRISE
Expenditures/Expenses by Fund
Fiscal Year 2025

FUND/DEPARTMENT	ADOPTED BUDGETED EXPENDITURES/ EXPENSES 2024	EXPENDITURE/ EXPENSE ADJUSTMENTS APPROVED 2024	ACTUAL EXPENDITURES/ EXPENSES 2024*	BUDGETED EXPENDITURES/ EXPENSES 2025
Workers' Compensation				
Contingency	$ 3,000,000	$	$	$ 3,318,000
General Operations				100
Human Resources	2,834,400		1,787,500	1,316,000
Internal Service Fund Total	$ 40,007,300	$	$ 25,036,500	$ 48,708,600
TOTAL ALL FUNDS	$ 771,076,900	$	$ 318,419,600	$ 961,480,400

* Includes actual expenditures/expenses recognized on the modified accrual or accrual basis as of the date the proposed budget was prepared, plus estimated expenditures/expenses for the remainder of the fiscal year.

CITY OF SURPRISE
Expenditures/Expenses by Department
Fiscal Year 2025

DEPARTMENT/FUND	ADOPTED BUDGETED EXPENDITURES/ EXPENSES 2024	EXPENDITURE/ EXPENSE ADJUSTMENTS APPROVED 2024	ACTUAL EXPENDITURES/ EXPENSES 2024*	BUDGETED EXPENDITURES/ EXPENSES 2025
ARTS, CULTURE & LIBRARY				
Arts Culture Library Asset Rep	$	$	$	$ 105,000
Donations	23,000		3,500	14,300
General Capital Projects Fund				65,400
General Fund	4,508,300	(475,700)	3,688,600	3,938,400
Municipal Art Fund	451,000	669,000	223,500	1,604,500
Department Total	$ 4,982,300	$ 193,300	$ 3,915,600	$ 5,727,600
CITY ATTORNEY				
General Fund	$ 3,262,700	$	$ 3,056,000	$ 3,378,700
Grants		4,200	4,200	
Risk Management - Int Svc Fd	7,111,400	(7,111,400)		
Department Total	$ 10,374,100	$ (7,107,200)	$ 3,060,200	$ 3,378,700
CITY AUDITOR				
General Fund	$ 484,600	$	$ 485,900	$ 538,900
Department Total	$ 484,600	$	$ 485,900	$ 538,900
CITY CLERK				
General Fund	$ 1,100,000	$	$ 1,107,200	$ 1,507,300
Department Total	$ 1,100,000	$	$ 1,107,200	$ 1,507,300
CITY COURT				
General Capital Projects Fund	$ 135,000	$	$	$ 135,000
General Fund	3,347,000		2,905,000	3,469,800
Municipal Court Enhancement	225,000			225,000
Department Total	$ 3,707,000	$	$ 2,905,000	$ 3,829,800
CITY MANAGER				
General Capital Projects Fund	$ 5,763,800	$ (359,400)	$ 328,100	$ 12,807,300
General Fund	2,405,700		2,317,200	2,475,800
Sewer Utility Capital	100,100	(45,200)	45,600	9,300
Solid Waste Operations	400			400
Water Operations	4,000			4,000
Water Utility Capital	99,900	(45,200)	44,500	10,200
Department Total	$ 8,373,900	$ (449,800)	$ 2,735,400	$ 15,307,000

CITY OF SURPRISE
Expenditures/Expenses by Department
Fiscal Year 2025

DEPARTMENT/FUND	ADOPTED BUDGETED EXPENDITURES/ EXPENSES 2024	EXPENDITURE/ EXPENSE ADJUSTMENTS APPROVED 2024	ACTUAL EXPENDITURES/ EXPENSES 2024*	BUDGETED EXPENDITURES/ EXPENSES 2025
COMMUNITY DEVELOPMENT				
General Capital Projects Fund	$ 398,800	$ (39,900)	$	$ 558,900
General Fund	8,239,000	(2,700)	7,347,200	8,917,100
Department Total	$ 8,637,800	$ (42,600)	$ 7,347,200	$ 9,476,000
CONTINGENCY				
163rd Ave Dev 2014 Law	$	$ 94,900	$	$
Communications Asset Repl	118,700			
Contingency	80,454,600	(23,558,600)		79,703,100
Donations	100,300			
Employee Healthcare - Int Svc	4,554,300			6,920,900
General Capital Projects Fund		5,072,200		12,931,600
General Fund	6,057,300	(351,200)		6,156,400
Grants	4,000,000	298,100		
Ground Ambulance Capital Fund		23,500		
Highway User Revenue		2,181,200		
IT Asset Replacement	570,000			
Municipal Art Fund		186,000		1,148,300
Risk Management - Int Svc Fd	2,667,600			750,000
Sewer Operations	5,447,300	14,400		5,639,800
Sewer Utility Capital	7,370,600	(179,200)		7,185,000
SLIDs	184,800			
Solid Waste Capital	508,000	414,900		278,800
Solid Waste Operations	3,528,000	153,100		4,177,500
Stormwater Capital	365,100	143,400		286,200
Stormwater Operations	375,200	1,400		436,200
Transportation Improvement	7,067,400	700,200		500,000
Vehicle Replacement		573,700		
Water Operations	4,888,000	36,700		5,368,800
Water Utility Capital	3,846,000	642,700		4,688,600
Workers' Compensation	3,000,000			3,318,000
Department Total	$ 135,103,200	$ (13,552,600)	$	$ 139,489,200
ECONOMIC DEVELOPMENT				
Donations	$ 30,000	$	$ 31,100	$ 21,200
General Capital Projects Fund	512,600	(10,600)	42,900	1,098,000
General Fund	2,634,900	(2,100)	2,328,000	2,440,100
Department Total	$ 3,177,500	$ (12,700)	$ 2,402,000	$ 3,559,300

CITY OF SURPRISE
Expenditures/Expenses by Department
Fiscal Year 2025

DEPARTMENT/FUND	ADOPTED BUDGETED EXPENDITURES/ EXPENSES 2024	EXPENDITURE/ EXPENSE ADJUSTMENTS APPROVED 2024	ACTUAL EXPENDITURES/ EXPENSES 2024*	BUDGETED EXPENDITURES/ EXPENSES 2025
FINANCE				
General Capital Projects Fund	$	$	$	$ 800,000
General Fund	7,384,100	6,900	6,466,400	7,477,200
Sewer Operations	2,059,300	(14,400)	1,267,400	2,182,300
Solid Waste Operations	873,300	(6,000)	516,400	924,800
Stormwater Operations	221,800	(1,400)	121,300	234,300
Transportation Improvement	2,300		200	2,300
Water Operations	3,443,700	(11,800)	2,749,300	3,866,000
Water Utility Capital	232,300	(173,500)	31,800	250,000
Department Total	$ 14,216,800	$ (200,200)	$ 11,152,800	$ 15,736,900
FIRE - MEDICAL				
Donations	$ 10,300	$	$ 1,700	$ 9,400
Fire/EMS Dev Fee 2020	15,360,200	(306,900)	2,019,100	15,074,800
FS Package Replacement	93,000			95,100
General Capital Projects Fund	5,533,100	625,000	77,500	12,026,000
General Fund	37,779,400	1,201,600	39,357,500	49,112,400
GO Bond Series 2024				4,966,400
Grants	97,400	657,400	280,200	385,000
Ground Ambulance Capital Fund	550,000			
Ground Ambulance Service	6,764,600	(423,300)	6,132,500	
Smart & Safe Fire-Medical	1,197,000		647,000	959,100
Vehicle Replacement	2,847,200	(8,900)	2,403,600	4,943,200
Wildland Fire	1,058,000		591,500	1,090,400
Department Total	$ 71,290,200	$ 1,744,900	$ 51,510,600	$ 88,661,800

CITY OF SURPRISE
Expenditures/Expenses by Department
Fiscal Year 2025

DEPARTMENT/FUND	ADOPTED BUDGETED EXPENDITURES/ EXPENSES 2024	EXPENDITURE/ EXPENSE ADJUSTMENTS APPROVED 2024	ACTUAL EXPENDITURES/ EXPENSES 2024*	BUDGETED EXPENDITURES/ EXPENSES 2025
GENERAL OPERATIONS				
Employee Healthcare - Int Svc	$	$	$	$ 100
Fire/EMS Dev Fee 2020	13,300	306,900	13,100	1,300
General Fund	15,896,600		13,108,000	24,518,000
General Govt Dev Fee	1,484,900			
GO Bond Debt Service	6,494,300		5,302,200	7,688,700
Ground Ambulance Service	19,100			
Highway User Revenue	27,000			41,700
Parks/Rec Dev Fee 2020	3,116,700	33,800	194,600	3,558,800
Police Dev Fee	5,058,000	5,000	13,100	1,300
Refund Sewer Debt Service 2015	803,100		803,100	
Refunded Gov Debt Service 2015	1,850,300		1,850,300	
Risk Management - Int Svc Fd				300
Sewer Operations	3,969,400		327,400	1,337,400
Sewer System Dev Impact Fees	1,553,800		26,200	2,657,000
SLIDs	3,498,400		2,382,100	2,737,900
Solid Waste Operations	104,800			177,300
Sports and Tourism Fund	2,500			23,300
Sr Util. Refund Oblig Ser 2018	3,224,700		2,152,300	2,150,300
Stadium Gov Debt Service 2015	1,586,000		1,585,100	1,587,600
Stormwater Operations	2,700			11,100
Transportation Improvement	134,900			134,900
Water Operations	352,200			384,400
Water Resource Dev Impact Fees	510,800	3,600		515,400
Water System Dev Impact Fees	5,672,000		431,600	10,762,500
Wildland Fire				12,000
Workers' Compensation				100
Wtr Res Dev Fee 2020	10,430,500	577,200	13,100	1,300
Department Total	$ 65,806,000	$ 926,500	$ 28,202,200	$ 58,302,700
HUMAN RESOURCES				
Employee Healthcare - Int Svc	$ 19,745,400	$	$ 20,000,100	$ 23,554,600
General Fund	3,203,400	(600)	3,065,700	3,356,500
Risk Management - Int Svc Fd	94,200	7,111,400	3,248,900	12,848,600
Workers' Compensation	2,834,400		1,787,500	1,316,000
Department Total	$ 25,877,400	$ 7,110,800	$ 28,102,200	$ 41,075,700

CITY OF SURPRISE
Expenditures/Expenses by Department
Fiscal Year 2025

DEPARTMENT/FUND	ADOPTED BUDGETED EXPENDITURES/ EXPENSES 2024	EXPENDITURE/ EXPENSE ADJUSTMENTS APPROVED 2024	ACTUAL EXPENDITURES/ EXPENSES 2024*	BUDGETED EXPENDITURES/ EXPENSES 2025
HUMAN SVCS AND COMM VITALITY				
Donations	$ 144,500	$	$ 69,600	$ 32,200
General Capital Projects Fund	2,387,400	998,300	29,700	3,354,000
General Fund	2,947,700	132,400	2,701,700	3,172,300
Grants	25,078,100	3,259,500	2,011,100	26,130,400
HSCV Asset Replacement	31,000	(6,600)		46,400
Neighborhood Revitalization	2,751,100	(177,100)	959,400	2,461,500
Department Total	$ 33,339,800	$ 4,206,500	$ 5,771,500	$ 35,196,800
INFORMATION TECHNOLOGY				
General Capital Projects Fund	$ 671,900	$ 404,800	$ 454,100	$ 9,751,000
General Fund	8,560,000	452,200	8,864,300	11,034,500
IT Asset Replacement	3,990,200	(397,200)	479,600	4,004,100
Sewer Operations	59,600		46,000	47,800
Solid Waste Operations	25,100		19,100	20,000
Stormwater Capital	75,000			75,000
Stormwater Operations	6,000		4,300	4,800
Water Operations	49,700		38,100	39,500
Department Total	$ 13,437,500	$ 459,800	$ 9,905,500	$ 24,976,700
MARKETING AND COMMUNICATIONS				
Communications Asset Repl	$ 281,500	$ (55,400)	$ 61,600	$ 339,500
General Fund	1,657,600		1,587,700	1,708,100
Sewer Operations	40,800		40,700	42,300
Water Operations	40,800		40,700	42,300
Department Total	$ 2,020,700	$ (55,400)	$ 1,730,700	$ 2,132,200
MAYOR AND COUNCIL				
General Fund	$ 784,600	$	$ 593,100	$ 958,900
Department Total	$ 784,600	$	$ 593,100	$ 958,900
PARKS AND RECREATION				
Donations	$ 189,500	$	$ 181,700	$ 12,800
General Capital Projects Fund	37,988,900	(1,914,300)	5,524,200	31,317,700
General Fund	13,018,000	218,200	12,643,600	16,732,300
Grants	600	231,300	2,300	229,500
Park & Rec Dev Fee	1,336,800		1,093,000	279,200
Parks & Recreation Asset Repl	2,698,600	(556,800)	650,400	3,667,400
Parks/Rec Dev Fee 2020	6,838,100	(33,800)	375,600	9,219,700
Department Total	$ 62,070,500	$ (2,055,400)	$ 20,470,800	$ 61,458,600

CITY OF SURPRISE
Expenditures/Expenses by Department
Fiscal Year 2025

DEPARTMENT/FUND	ADOPTED BUDGETED EXPENDITURES/ EXPENSES 2024	EXPENDITURE/ EXPENSE ADJUSTMENTS APPROVED 2024	ACTUAL EXPENDITURES/ EXPENSES 2024*	BUDGETED EXPENDITURES/ EXPENSES 2025
POLICE				
Donations	$ 85,600	$	$ 49,700	$ 128,700
General Capital Projects Fund	1,602,800	(260,400)	163,300	8,536,200
General Fund	45,301,600	3,443,600	48,005,600	49,621,900
GO Bond Series 2024				15,200,000
Grants	406,600	625,000	394,200	514,700
Police Dev Fee	2,197,400	(5,000)	183,200	8,060,200
Program 1033 Auction Proceeds	6,400			6,700
SB1398 Fines	30,500		23,500	73,000
Smart & Safe Police	1,207,500		1,207,500	414,800
SPD DEA				17,300
SPD RICO	510,800		643,900	1,191,700
SPD Towing	71,100		37,800	39,000
Unclaimed Property Disposal	2,900			4,000
Department Total	$ 51,423,200	$ 3,803,200	$ 50,708,700	$ 83,808,200
PUBLIC WORKS				
Facilities Asset Replacement	$ 4,904,400	$ (932,500)	$ 1,266,600	$ 9,588,300
General Capital Projects Fund	256,400	(9,100)	135,700	2,738,200
General Fund	13,285,500	1,230,500	11,164,100	14,370,800
Ground Ambulance Capital Fund	796,000	(23,500)	573,900	
Highway User Revenue Capital			10,900	
Police Dev Fee	83,500		83,500	83,500
Proposition 400			500	
Sewer Operations	351,800		334,200	358,000
Sewer Utility Capital	1,229,800	(58,900)	49,800	1,986,100
Solid Waste Capital	3,765,200	(414,900)		4,266,000
Solid Waste Operations	10,928,800	(147,100)	9,939,700	13,170,600
Vehicle Replacement	7,105,300	(564,800)	1,114,500	8,426,000
Water Operations	789,400	(24,900)	580,100	772,700
Water Utility Capital	93,800			438,800
Department Total	$ 43,589,900	$ (945,200)	$ 25,253,500	$ 56,199,000

CITY OF SURPRISE
Expenditures/Expenses by Department
Fiscal Year 2025

DEPARTMENT/FUND	ADOPTED BUDGETED EXPENDITURES/ EXPENSES 2024	EXPENDITURE/ EXPENSE ADJUSTMENTS APPROVED 2024	ACTUAL EXPENDITURES/ EXPENSES 2024*	BUDGETED EXPENDITURES/ EXPENSES 2025
SPORTS AND TOURISM				
Arizona Office of Tourism	$ 361,900	$	$ 144,000	$ 230,000
Donations			6,000	
General Capital Projects Fund	3,688,000	(82,400)	256,700	3,348,900
Grants	120,000	(120,000)		
Net Premium Seating	302,200		272,700	286,000
Sports and Tourism Asset Repl	4,126,700	(618,000)	2,170,200	5,004,500
Sports and Tourism Fund	6,723,300	149,500	5,991,900	7,056,900
Spring Trng Ticket Surcharge	689,000		689,000	695,500
Tourism	595,000	130,000	509,900	730,000
Department Total	$ 16,606,100	$ (540,900)	$ 10,040,400	$ 17,351,800
TRANSPORTATION				
163rd Ave Dev 2014 Law	$ 100,600	$ (94,900)	$ 100	$
General Capital Projects Fund	41,828,500	10,409,300	3,176,600	62,862,500
General Fund	6,438,300	(139,500)	6,042,700	7,150,900
GO Bond Series 2024				31,400,000
Highway User Revenue	13,568,900	(2,181,200)	7,205,800	15,064,200
LTAF II/ALF	400,000		364,200	366,300
Sewer Utility Capital	964,100	(6,900)		957,200
Stormwater Capital	1,361,700	(143,400)	306,600	911,700
Stormwater Operations	506,200		480,900	525,700
Transportation Improvement	35,205,500	(700,200)	5,464,700	52,031,500
Department Total	$ 100,373,800	$ 7,143,200	$ 23,041,600	$ 171,270,000
WATER RESOURCE MANAGEMENT				
General Capital Projects Fund	$ 117,000	$ (15,700)	$ 22,300	$ 143,200
Grants		189,100		189,100
Sewer Loan 2023	34,980,000	(85,000)	2,077,500	32,817,500
Sewer Operations	11,378,400		10,569,700	14,265,900
Sewer System Dev Impact Fees	300,000			300,000
Sewer Utility Capital	13,031,400	290,200	2,055,900	16,337,200
Stormwater Capital				1,500,000
Stormwater Operations	659,800		621,200	871,500
Water Operations	10,984,700		10,812,900	12,385,500
Water Resource Dev Impact Fees	604,900	(3,600)		601,300
Water System Dev Impact Fees	11,182,800	2,000,300	4,700	6,066,500
Water Utility Capital	8,740,600	(1,251,400)	1,813,300	17,603,400

CITY OF SURPRISE
Expenditures/Expenses by Department
Fiscal Year 2025

DEPARTMENT/FUND	ADOPTED BUDGETED EXPENDITURES/ EXPENSES 2024	EXPENDITURE/ EXPENSE ADJUSTMENTS APPROVED 2024	ACTUAL EXPENDITURES/ EXPENSES 2024*	BUDGETED EXPENDITURES/ EXPENSES 2025
WATER RESOURCE MANAGEMENT				
Wtr Res Dev Fee 2020	2,320,400	(1,750,100)		18,456,200
Department Total	$ 94,300,000	$ (626,200)	$ 27,977,500	$ 121,537,300
Total All Departments	$ 771,076,900	$	$ 318,419,600	$ 961,480,400

* Includes actual expenditures/expenses recognized on the modified accrual or accrual basis as of the date the proposed budget was prepared, plus estimated expenditures/expenses for the remainder of the fiscal year.

CITY OF SURPRISE
Full-Time Employees and Personnel Compensation
Fiscal Year 2025

FUND	Full-time Equivalent (FTE) 2025	Employee Salaries and Hourly Costs 2025	Retirement Costs 2025	Healthcare Costs 2025	Other Benefit Costs 2025	Total Estimated Personnel Compensation 2025
GENERAL FUND	1046.20	$ 100,511,300	$ 25,032,700	$ 17,027,700	$ 7,870,400	= $ 150,442,100
SPECIAL REVENUE FUND						
Grants		$ 683,800	$	$	$	$ 683,800
Highway User Revenue	4.90	465,800	62,600	111,500	60,300	700,200
Neighborhood Revitalization		415,200				415,200
Smart & Safe Fire-Medical		257,700	90,400		11,000	359,100
Smart & Safe Police		267,100	104,800		28,100	400,000
SPD Towing	0.50	26,600	4,500	4,900	2,200	38,200
Sports and Tourism Fund	42.50	2,599,800	286,700	466,100	226,700	3,579,300
Wildland Fire		701,800	246,600		30,000	978,400
Total Special Revenue Fund	47.90	$ 5,417,800	$ 795,600	$ 582,500	$ 358,300	= $ 7,154,200
ENTERPRISE FUNDS						
Sewer Operations	59.00	$ 4,669,500	$ 623,300	$ 1,068,500	$ 425,700	$ 6,787,000
Solid Waste Operations	51.30	3,623,600	487,700	956,000	399,500	5,466,800
Stormwater Operations	8.70	648,500	87,700	140,300	64,100	940,600
Water Operations	50.30	4,126,800	556,300	938,200	370,000	5,991,300
Total Enterprise Funds	169.30	$ 13,068,400	$ 1,755,000	$ 3,103,000	$ 1,259,300	= $ 19,185,700
INTERNAL SERVICE FUND						
Employee Healthcare - Int	1.00	$ 147,400	$ 19,700	$ 23,300	$ 10,600	$ 201,000
Risk Management - Int Svc	3.00	314,900	42,400	71,700	22,800	451,800
Workers' Compensation	1.00	99,600	13,400	24,200	7,800	145,000
Total Internal Service Fund	5.00	$ 561,900	$ 75,500	$ 119,200	$ 41,200	= $ 797,800
TOTAL ALL FUNDS	1268.40	$ 119,559,400	$ 27,658,800	$ 20,832,400	$ 9,529,200	= $ 177,579,800